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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. JANUARY 4, 1917. ** NO. 1.

Work Stock---Can the Farm Raise Its Own?

Many Farmers Say Yes; Many Say No; but All Agree It Is a Problem to Be Faced

BELIEVING the work horse problem to be one of increasing concern to the farming industry, The Farmer some time ago sent out a list of questions to representative farmers throughout the northwest with a view to helping solve the problem. Beginning with the accompanying article The Farmer will publish portions of the many replies received, certain of the arguments made and deductions that may be drawn from them.

"I raise colts every year. If I figure feed and pasture, I can just as cheaply buy them, but I raise plenty of feed and find it a good and profitable way to turn feed into money."—D. van der Griend, Lynden, Wash.

"It stands as a proverb in the Kuna country that all work on the farm should be done by brood mares and geldings under five years old. In a proper ratio, the brood mare will produce larger returns than any other animal on the farm in southern Idaho."—D. R. Hubbard, Kuna, Idaho.

"In canvassing the country over you will find the farmers most prosperous where they keep a few good brood mares, raise a few colts and have a team to turn off every year or two. This beats digging into their pockets to buy a new team every few years."—A. C. Ruby, Gresham, Oregon.

It costs an average of $115 to raise a colt to four years old on the farms of the northwest. Sixty-five per cent of the farmers raise their own work horses. Thirty-five per cent buy at least two-thirds of the horses that make up their farm teams.



At 5 years old, 1400 weight, a team like this costs from $350 to $500. Is it practicable to raise them on the farm? Is it practicable not to?

The above figures are arrived at by averaging a large number of estimates and calculations given by farmers of the four northwestern states in reply to a series of questions sent to them by The Farmer some time ago.

The series of questions were based on a desire to learn whether a work horse can be raised on the average farm as cheaply as he can be bought, and if not, why not? A great variety of opinion was expressed by those replying, but in the main there was a uniformity on vital points. Among the questions asked were the following:

(1) What proportion of farmers in your vicinity buy their work horses at an age ready for work, and what proportion raise them from colts by mares on the farm? (The replies indicated that approximately two-thirds raise their own, one-third buying).

(2) From your own personal experience and observation, do you believe that a farmer can buy a four-year-old horse more cheaply than he can raise him? (Of the replies, one out of every four said he could be bought as cheaply as raised).

(3) Who, if anybody, can raise a colt more cheaply than the farmer? (Nearly all agreed that nobody could, except where there was open range.)

(Continued on page three.)

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Grab It! And Your Winning It Does Not Depend on Either Skill or Luck, but on Accuracy and Patience **Grab It!**

They're Coming!

Answers to Figure Problem Pouring In and Old and New Subscribers grab the Special Subscription Offer of This Paper

3 Years for $1.50

BEGIN ADDING RIGHT NOW AND SEND IN YOUR TOTAL

Don't Guess Add 'Em Up!

"7000!" writes some one, just like that, but the Contest Editor is inclined to think that "Some One" is guessing.

Remember, this is not a guessing contest. The winner is sure to be a subscriber who has carefully footed up the total of the figures in the chart.

Simply take a few spare evenings and count slowly and send your total to the Contest Editor, with either $1 or $1.50 on subscription. It will pay you, however, to send $1.50 instead of $1, thereby giving you the advantage of the big special offer of

Three Years, $1.50

This special offer will last only during the life of this contest. And, besides, winners of the first four prizes will profit in dividends in addition to the fixed prizes according to the amount paid in on subscriptions. **See dividend plan.**

Contest Closes March 17, 1917

In submitting your solution always use the registration blank on this page. Read it carefully and fill in blank spaces. Then cut it out, following border closely, and send it in with the amount you wish to pay.

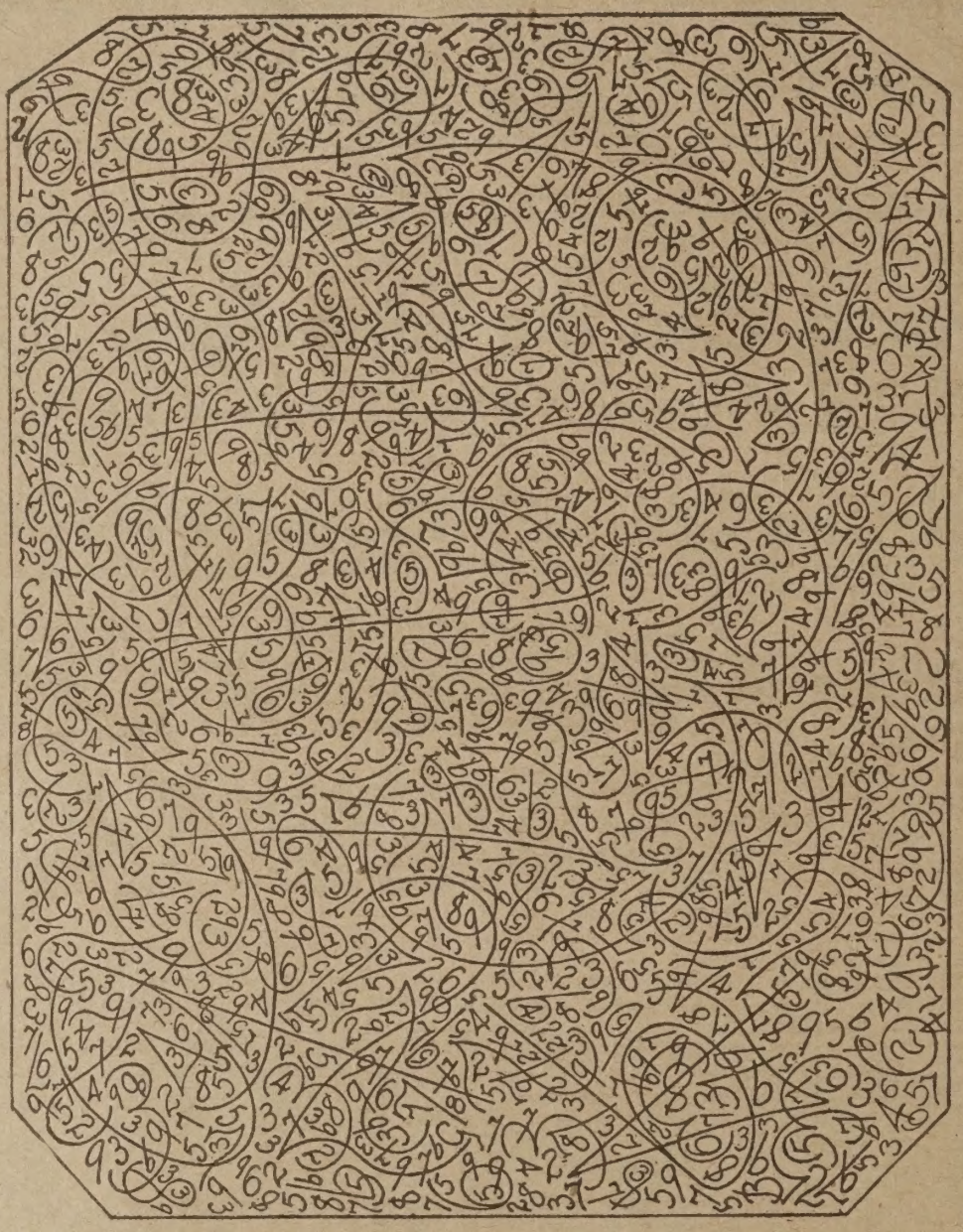
TAKE NOTICE — You can not lose in this contest, because, should you fail to receive one of the cash prizes, you will get full value for every cent expended in the form of a paid-up subscription to the Farmer. Where you pay $1.50 it means that you get this paper for three years.

Notice!

Solutions unaccompanied by cash payment on subscription will not be registered. Use registration blank on this page.

Employes Barred

Employes of this paper or members of their families are not eligible to enter this contest.



Here's How

Simply add up the figures in the puzzle chart as if they were in one long column.

Your success depends on the accuracy of your total thus obtained.

Figures run from two to nine, and there are no double figures or characters which are not figures. The tail of the "6" has a decided curve, while the tail of the "9" is straight. All other figures have the usual characteristics, allowing no question as to the identity of any figure

In event that no one submits the correct total, prizes will be awarded for the next nearest solutions.

This contest is restricted to persons residing in the states of Washington, Idaho, Oregon and Montana.

A payment of $1 to $1.50 on subscription to the Farmer entitles the subscriber to enter the contest.

The money paid will be credited on subscription to the Farmer. The advantage of paying $1.50 instead of $1 is that the winner of any of the first four prizes receives additional prize dividends proportioned liberaly on the amount paid in on subscription, besides the fact that $1.50 during this contest pays for a three-year subscription to the paper, while $1 pays for only one year.

More than one solution may be submitted by any contestant, by an additional subscription payment of not less than $1 nor more than $1.50. It is not necessary to pay the same amount with each solution if more than one is submitted.

As many prizes will be reserved as there are people tied before any prizes are awarded to those sending in less correct solutions.

While the winning of a prize does not depend upon the time a solution is registered, it is best to begin counting at once and send in your solution as soon as you have finished, and if later you find that you have made a mistake you can send in another solution if accompanied by an additional payment.

You can send in a subscription for some one other than yourself and have the solution registered in your own name. Remember, that by paying $1.50 instead of $1 on subscription, the larger will be your dividends if you win one of the four leading prizes; but not more than $1.50 will be received with one solution.

$750—Thirty-Two Prizes—$750

FIRST PRIZE, $200,
to which will be added 50 times the amount paid by the subscriber with the winning solution. For example, if you pay $1.50 on subscription, this prize will be worth $275.

SECOND PRIZE, $100,
to which will be added 30 times the amount paid by the subscriber with the winning solution. This prize may be worth $145.

THIRD PRIZE, $60,
to which will be added 20 times the amount paid by the subscriber with the winning solution. This prize may be worth $90.

FOURTH PRIZE, $50,
to which will be added 10 times the money paid by the subscriber with the winning solution. This prize may be worth $65.

FIFTH PRIZE, $40.

SIXTH AND SEVENTH PRIZES, Each $20.

EIGHTH TO SIXTEENTH PRIZES, Each $7.

SEVENTEENTH TO THIRTY-SECOND PRIZES, Each $2.

Examine This Dividend Plan

The following table shows what amount will be added to the first, second, third and fourth prizes by subscription payments of $1 or $1.50.

First Prize

$1.00 on sub. wins.....$50.00
$1.50 on sub. wins.....$75.00

Second Prize

$1.00 on sub. wins $30.00
$1.50 on sub. wins..... $45.00

Third Prize

$1.00 on sub. wins $20.00
$1.50 on sub. wins.....$30.00

Fourth Prize

$1.00 on sub. wins.....$10.00
$1.50 on sub. wins $15.00

REGISTRATION BLANK

Cut out this blank closely around the border and send it in with your solution and money.

To The Washington Farmer Contest Editor:

Date sent.....191..

I enclose $.....!... for.....subscription to The Washington Farmer.

Name .....

Town .....

State .....

SOLUTION AND PAYMENTS.

The following spaces provide for three solutions, with the payments you desire to make with them. You may submit one or as many different solutions as you wish. You can subscribe for one or three years as per printed schedule, with each solution, as provided for in "The Conditions."

Solution.	Amount Paid.
.....	$.....
.....	$.....
.....	$.....

Answer this question: Are you now a subscriber? .....

If you wish paper sent elsewhere, fill in name and address.

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Be Sure to Address All Solutions and Inquiries to The Washington Farmer CONTEST EDITOR, Review Building, SPOKANE, WASHINGTON

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 1 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF January 4, 1917

Pacific Northwest Farm Loan Bank

To Be Located in Spokane to Serve the Farmers of the Four States

Uncle Sam now stands ready to serve the farmers of the Pacific northwest—if they want land mortgage service.

The federal farm loan board has divided the country into 12 districts and named the cities that are to have the 12 federal farm loan banks.

Washington, Idaho, Oregon and Montana are made a district, and the federal bank for that district will be Spokane.

The board's next important step will be the appointment of five directors, who will temporarily manage the business of the farm loan bank in this district.

When these five directors have organized and appointed their working force the bank will be ready to do business with the farmer who wants a long-time loan at a low rate of interest.

Local Association.

But the farmer can not do business as an individual with these federal farm loan banks. He must put in his application for a loan through a local farm loan association, and must himself be a member of that association. He and his neighbors can organize a local association.

It is now up to the farmers to volunteer their support and cooperation. Exactly to the extent that they shall organize or fail to organize their own farm loan associations the system will flourish or it will fail.

Some say the farmers lack the cooperative spirit and ability to make this new system a success. They say that rather than go to the bother of organizing associations the great bulk of the farmers of the United States will go on borrowing money through the old mortgage channels.

There is too much of the cooperative spirit among the farmers, dairymen and fruit growers of the Pacific northwest to warrant a fear that the new system will fail in these four progressive northwestern states.

A Point of Confusion.

When the federal farm loan act was passed the Farmer expressed serious doubt of the wisdom of that feature of the law which permits the organization of private joint stock land banks in competition with the farmers' cooperative organizations. The following letter from a Twin Falls, Idaho, reader shows the confusion resulting from this conflicting provision:

"I have been watching the Idaho Farmer for all the information I could get in regard to the farm loan act," writes Ed Vance. "I would like to join a loan company if there is one in this part of the country. A few days ago a couple of men were here claiming to be organizing a farm bank loan association under the federal law. They were supposed to represent a Salt Lake concern. Had they or any bank the right to make such claims? They are running around the country in a car getting farmers to buy stock. I wish you would put me on the right track."

Apparently these men are agents for a proposed "joint stock land bank." If their methods are proper they are within their rights under the law, but they ought to make it clear to every farmer solicited to subscribe stock in their company that they are not organizing a national farm loan association.

By N. W. DURHAM

Chairman Spokane Committee on Federtal Land Banks.

Distinctly Cooperative.

National farm loan associations are distinctly cooperative. They are local organizations of farmers wanting to borrow under the new system. They do not peddle stock. Only farmers can join them. They are the foundation of the federal farm loan system.

On the other side, joint stock land banks are corporations "for carrying on the business of lending on farm mortgage security and issuing farm loan bonds." They may be organized by any and all classes of people—by bankers, by merchants, by miners, by speculators, by money loaners.

The law provides that "no joint stock land bank shall be authorized to do business until capital stock to the amount of at least $250,000 has been subscribed, one-half thereof paid in cash and the balance subject to call by the board of directors, and a charter has been issued to it by the federal farm loan board."

Our advice to Mr. Vance and all other farmers is to go slowly in doing business with organizers of these joint stock land banks. Some of them are doubtless proceeding in good faith and are financially and morally responsible. But unfortunately the law makes it possible for irresponsible men to work the farmers.

Under no circumstance should a farmer go into one of these ventures unless he knows of his own knowledge, or is advised by some one in whom he has complete confidence, that the men asking him to take stock are both honest and capable. Men soliciting subscriptions for one of these joint stock land banks may be swindlers; or, if honest, they may lack the business capacity to make a success of the venture, and in that case the subscribing farmer would lose his money.

Our further advice to Mr. Vance is to circulate among his neighbors and get them to take steps to organize their own local national farm loan association. The government of the United States will be back of that and they can not lose. The government is not back of stock in joint stock land banks.

A national farm loan association may be organized in any community where 10 citizens owning land desire to borrow an aggregate of not less than $20,000. The land must be unincumbered or the proceeds of the loan must be used, in part, to remove any lien. Loans may be as small as $100 or as large as $10,000.

Let it be plainly understood that farmers can organize at once, but they can not borrow money until the federal land banks are established.

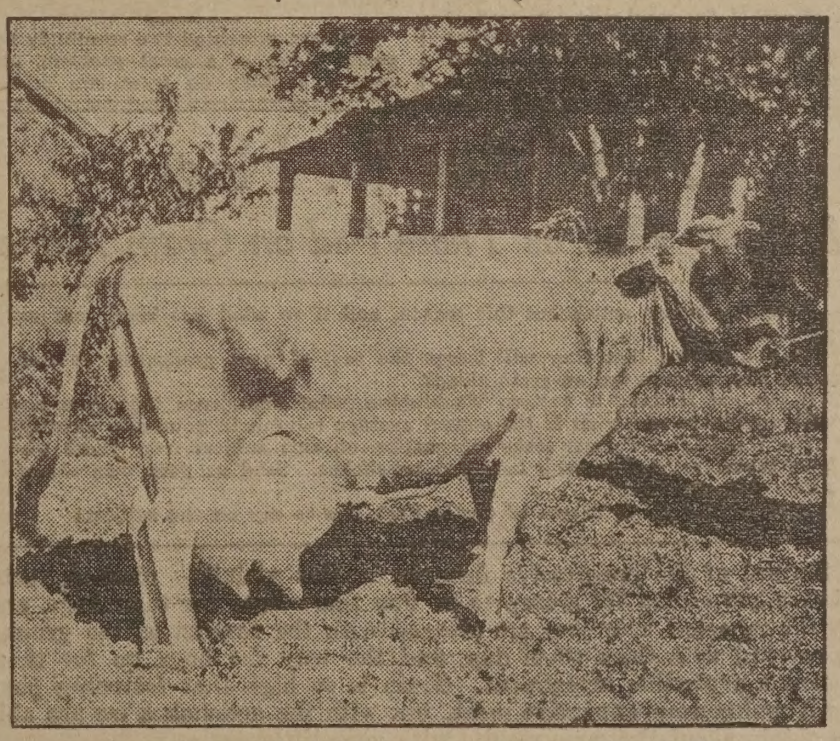
The national farm loan associations are not limited as to the number of their members. After one is organized it may serve an entire neighborhood by receiving new members.

Big Bend Farmer Would Join.

R. V. Jones, writing from the Hotel Nelson, 2013 Second avenue, Seattle, says: "My son and I own land in Lincoln county—nine miles north of Irby, 16 miles northwest of Odessa, 20 miles south of Wilbur—and would like to join some farm loan association. Do you know of any forming in our locality or near there? If so, how can I get their names?"

Can any reader of the Farmer give Mr. Jones the desired information?

Over 700 Pounds of Butter



The above is a photograph of Melia's Laurie of Albany, No. 234432.

R. B. Sanford of Ashland, Ore., her owner, writes: She gave, as a 5-year-old, 11,372 pounds 3 ounces of milk and made 707.08 pounds of butter, 85 per cent fat in 365 days, with ordinary farm feed, consisting of pasture only in summer, what mixed hay she would consume with 40 pounds Mongold beets and eight quarts bran per day in winter, with some green sweet corn stalks in fall to supplement short pasture.

At present she is 8 years old and weighs 905 pounds and is giving 15,921 pounds milk per year, which at her average test of 5 per cent would make 990 pounds of butter in 365 days.

Work Stock

Can the Farm Supply Own Needs?

(Continued from page one.)

(4) How are horses selling in your locality, and how do these prices compare with those paid five years ago? (Replies indicate great differences in local markets, but generally high prices, in excess of five years ago.)

(5) Do yearlings and 2-year-olds sell in your community for prices relatively as high as horses of work age? (This question, together with No. 1, developed a situation so contradictory on the face of it that another article dealing with those two questions alone will be given next week in the Farmer).

(6) In your locality, to what extent have horses been supplanted for farm work by tractor engines? (The replies indicate that the tractor is yet a novelty in almost every community, if in use at all).

(7) From your experience, what would you say it costs to raise a colt from breeding to four years old, the mother a common good work animal and the sire a purebred? (Estimates ranged from $50 to $250, which an average of approximately $115).

(8) Are there any, and how many, purebred stallions and mares in your community? (The replies indicated a reasonable number of purebred sires, but very few purebred mares).

Must Be Adapted.

C. E. B. Roberts of Rupert, Idaho, recommends that the farmer raise horses, but that if he goes into it with a view to selling on the market he must be specially prepared for that kind of business. He says:

"While most any farmer can raise to advantage horses enough for his own supply, I doubt if the average farmer should raise horses for the market. It is a department of farming that requires special adaptation and facilities.

"A breeder should have mares well above the average, as well as good sires, if he expects to raise horses to sell."

Should Raise Only a Few.

W. J. Sutton of Cheney, Wash., adds the following comment to his replies to the questions asked:

"On a wheat farm a few colts can be raised each year at a very low cost. The brood mares can be used for the light work until weaning time. Mares with colts can not stand work in big plow teams and other heavy work and the colts would be stunted in their growth. For this reason, one can not afford to raise many colts in one season for he would be forced to buy more work animals. But enough can be raised to take the place of animals that die or are disabled."

For Home Use Only.

W. L. Sheard of Dayton, Ore., says that the average farm is not a good place to raise horses for the market, but that the average farmer should raise the stock he needs for farm use. "It costs me about $125 to raise a colt to four years old and raise it right," he says, "feeding some grain all the time. The colt earns his own feed after two and a half years old.

"A farmer that has good mares that suit him can better afford to raise his own work horses than to buy, as a rule, as he can expect the colts to be what he wants. It is sometimes hard to buy just the kind that he is looking for. As for raising horses for the market at the present prices, that depends entirely on how a farmer is situated for business."

Depleting Lands at a Scandalous Rate

American Farmer Might Be Likened to Foolish Spendthrift With Kind and Indulgent Father

William J. Tod, the writer of the following letter is one of the vice presidents of the National Live Stock associations:

Mr. Tod's Letter.

To the Editor of The Washington Farmer: With great pleasure I have read the article by Dr. E. A. Bryan in the copy of The Washington Farmer which you were kind enough to send me.

The article from beginning to end is altogether excellent and I heartily indorse every word Dr. Bryan says. The deeper he thinks on the subject the more I am sure Dr. Bryan can have to say. The article is sound and logical, but he has only touched on the great question.

There is one great subject which Dr. Bryan does not even allude to; viz, during the many years when all farm products were selling so low we were then depleting our lands at a scandalous rate. We were not living, as prudent people should, on our income, but were rioting on our capital. Dr. Bryan is no doubt aware of the steady but rapid reduction in the yield per acre of wheat all over the eastern states. In great districts over the east and south the lands became so exhausted by continous cropping, with nothing returned to maintain fertility, that these lands became practically worthless. The poor devil of a farmer had to scratch for a living. Bacon and beans seemed the height of his ambition. His whole intellect and energy were taken up in trying to clothe and feed his family and overworked wife. He could give no time or thought to preserving his soil, he had to eat the goose to keep alive. As the brightest of his sons grew up they heard of the millions of acres of virgin soil still free in the glorious west, and the exhausted lands were disposed of at such a sacrifice that it might be called abandonment.

The American people had the 6-cent to 10-cent eggs, the 5-cent milk and the 1-cent flour at the expense of the land with the work of the farmer and his wife and family thrown in; in short, we were draining the life blood of the nation. Our American farmer might be likened to the foolish spendthrift son with the kind indulgent father. The first gift was a handsome one, but it was run through. The old man gave him another start in the middle states, and now he has a third start away out west. The old man has got to about the end of the rope, and it behooves Dr. Bryan and others like him to remind the foolish one that he must live within his income or trouble is ahead. All Dr. Bryan says is sound and good, and he has lots more to say, and I am sure we shall all be glad to hear more from him again.

WILLIAM J. TOD.

Maple Hill, Kansas.

Hits the Nail on the Head.

The following letter is from T. W. Tomlinson, the well-konwn secretary of the American National Live Stock association:

To the Editor of the Washington Farmer: I have received your letter of November 30 enclosing clipping of an article by Dr. E. A. Bryan. Mr. Bryan has hit the nail on the head. The era of low prices for farm products and live stock has passed and never will return, in my judgment. It is better for the entire country that the farmer and stockman are finally coming into their own. T. W. TOMLINSON.

Denver, Colo.

Says It's a Mistake.

A. E. De Ricqules is general manager of the American Live Stock and Loan company of Denver, and is also a member of the executive committee of the American Live Stock association:

To the Editor of The Washington Farmer: Thank you for your favor of the 30th ult. enclosing copy of statement by Dr. Bryan. So far as the high cost of living is concerned there is quite a mistaken notion around the country just now as to what it really costs. For example, we find by investigating the question quite carefully that the retail price of beef in cities like Washington and New York is only about 2 cents a pound more than last year, and that in fact beef is the cheapest food one can get today, when you continually hear a howl about the high cost of beef. Fat cattle from the northwest have sold for less money than they did last year or in 1914. Wholesale dressed meat is about the same as for the last two years.

A. E. D'RICQULES.

Denver, Colo.

> Herewith are reproduced two paragraphs from Dr. E. A. Bryan's article in the issue of The Washington Farmer of November 30.
>
> "A universal scream greets the rise in the price of farm products, until eggs retailed at 40 and 50 cents a dozen, butter at 40 cents a pound, potatoes at 2 cents a pound and flour at 4 and 5 cents a pound, seem out of all reason. But, as a matter of fact, the American public has been so long accustomed to prices of farm products that were unreasonably low, that it is largely by contrast that present prices seem so outrageously high. There was a day when eggs at 10 to 15 cents a dozen and butter at from 20 to 25 cents a pound and milk at 5 cents per quart delivered at the door and the choicest cuts of beef at 15 cents a pound and flour at a cent a pound were accepted by the consuming public with complacency, regardless of the fact that the producers of these commodities toiled early and late without fair or equitable return for their labor.
>
> "The farmer alone has no recourse for redress until enough of them are pushed out of that occupation so that high prices are inevitable. And high price is the remedy for the depletion of our agricultural classes. And high prices and profitable employment must precede abundant supply and a lower cost of living for the consuming public. The high cost of living is a Godsend to the American nation. Only thus will the tide be turned."

Agrees With Every Word.

Robert Graham, the writer of the following letter, is president of the Nebraska Stock Growers' association, and is also a member of the executive committee of the American National Live Stock association:

To the Editor of The Washington Farmer: Your letter of recent date received enclosing clipping from The Washington Farmer, and asking my opinion on an article by Dr. Bryan relative to the boom in prices of foodstuffs.

In reply will say that I heartily agree with every word of Dr. Bryan's and I am sure that the circulation of such articles will have a salutary effect on the real tillers of the soil and those engaged in producing the meat supply of the nation. The producer for many years past have not been getting a fair share of the prosperity abroad in the land and it is about time that the producers of the nation cease to be the hewers of wood and drawers of water for the balance of the people. From the viewpoint of a cattle producer I will say that the industry is at present in our state barely paying interest and running expenses caused from the necessity of owning our own lands and the added cost of production. I heartily agree with the wage-earner that he is entitled to a higher wage and better working conditions, but I would like to know who labors under worse conditions than the agriculturist, neither heat nor cold, rain or shine is taken into consideration in his work, he must work at all seasons and under all conditions, depriving himself of many of the comforts of modern civilization, and yet when the pinch of high prices is felt he is the one who must be deprived of a fair recompense for his toil. As an illustration of the unfairness of the clamor of a portion of our people that an embargo be placed on foodstuffs so as to cut down the prices that the farmer is receiving for his products, I might cit you to conditions as prevailing in my own community; round steak is selling at wholesale in Denver, Colo., at 12 1-2 cents per pound, the freight charges to Alliance, Neb., are 65 cents cwt., allowing another 1-2 cent for drayage, it reaches the retail butchers' block at a trifle over 14 1-2 cents per pound, yet when it reaches the table of the housewife's kitchen it costs 25 cents per pound, or in other words the beef raiser, the packer and the railroad receives 14 cents for three years labor and the retailer receives 11 cents for not over two hours' labor, and yet the retailer claims that he is not making an excessive profit on the transaction, caused by the increased cost in delivery, etc. ROBERT GRAHAM.

Alliance, Neb.

Buys Wheat Farm.

A deal has just been completed during the past month whereby Emory and Malcolm McCown, well-known Waitsburg farmers, acquire what is known as the "Columbia Center" stock and wheat farm, located nine miles south of Pomeroy, Wash. The consideration was about $50,000, or $40 per acre. Part of the land is wheat land and part is grazing land.

Calamity or Blessing?

Which Would Large 1917 Wheat Crop Prove to Nation?

"We ought to raise such big crops that circumstances like the present can never occur."—President Wilson in a recent address touching upon the high cost of living and the problems that it has created.

"While it is the duty of farmers adequately to supply the national larder, overproduction would visit upon the nation an unwarranted calamity, and the farmers should save the country from such a predicament. . . . . The greatest peril which confronts American agriculture today is abnormal increase in acreage and yield of crops." —Henry N. Pope, president of the Association of State Farmers' Union Presidents in a formal statement recently issued.

Here are presented two seemingly opposite views of a great problem, and coming as they do from two of the foremost men of the nation they command the consideration of the wheat producers of the northwest. Should the farmer put forth his effort to produce large grain crops next season? Or should he be careful lest he produce too much? Do large crops and low prices necessarily go hand in hand, or small crops and high prices? And if so, which is best for the farmers, the large crop and low prices or the small crop and high price? The opinions so pointedly stated by President Wilson and Mr. Pope naturally lead to such questions. In part Mr. Pope's statement reads:

"At the beginning of 1916 we had a surplus of approvimately 160,000,000 bushels of wheat in the granaries and elevators of the United States. This surplus added to our 1916 production of 607,000,000 bushels gives us over 100,000,000 bushels above domestic consumption this year. While it is likely that we will begin our 1917 harvest with empty granaries we must not forget that the warring nations have increased their combined wheat areas since the beginning of the war almost 20 per cent and this year's production, taken as a whole, is 92 per cent of normal, although it is 72 per cent below that of last year, which was an abnormal year.

"The wheat farmers of this country, taken as a whole, have had a bad year, as the following statistics taken from the Crop Reporter, issued by the federal agricultural department, show: The 1916 wheat crop will bring the farmers in the United States at least $200,000,000 less than the 1915 crop and $100,000,000 less than the 1914 crop. In 1915 we harvested 59,989,000 acres of wheat yielding 1,011,505,000 bushels, for which the farmer received $930,302,000. In 1916 our average was reduced to 50,871,000, yielding 607,000,000 bushels, and to date 75 per cent of the crop has been sold off the farms at an average price of $1.18 per bushel.

"While it is the duty of the farmer adequately to supply the national larder, overproduction would visit upon the nation an unwarranted calamity and the farmers should save the country from such a predicament. There is more poverty in 6-cent cotton and 50-cent wheat than in any condition that can be surmised. The greatest peril which confronts American agriculture today is abnormal increase in acreage and abnormal yield of crops."

Artichokes for Hogs

Look as Well as Those Fed on Grain Alone

Have you grown artichokes this season, and if so what has been your experience?

Do you believe that they will lessen the cost of pork production as compared with animals fed on grain alone?

If you are farming in eastern Washington what experience have you had with artichokes and what is the annual average rainfall in your own vicinity?

The Washington Farmer seeks information on this subject from those who have grown artichokes, who have fed artichokes. Send us your own experiences with artichokes.

Here is what C. C. Brown of Castle Rock has to say on the subject:

Several of the progressive farmers in this vicinity planted artichokes last spring for a crop to be dug this winter for their hogs, and by the reports I hear they are pleased with the results, as the ground is covered with them when dug, and the way the hogs go for them makes a profitable investment. Grain is so high that fattening pork on it makes very expensive meat, but with the artichokes we are able to obtain about the same results with very little grain.

I find that my artichoke hogs look as well as those of my neighbor's that are fed on grain alone. Later on I will turn the brood sows for a few hours each day in the artichoke field to root out what they want. It will give them exercise and feed at the same time.

My opinion is that this tuber has not been grown as much as it should have been by the farmers, as nearly all stock will eat them and the cultivation is easy compared with other crops. The yield, as a rule, is large. My half acre will average 500 sacks.

Uncle Sam, Middleman

Wide Call for National Market Conference

A nation-wide conference is to be held in New York city in April, with a view to establishing a great national market, through which food products, both for consumption in that city and shipment abroad, would be handled under governmental supervision.

The object is to work out plans, if possible, for the elimination of the middleman as an economic factor.

The conference is called by Joseph Hartigan, New York's commissioner of weights and measures, who took a prominent part in the recent New York dairy strike, and is said to have the approval of Mayor Mitchel of that city. Mr. Hartigan says he has assurances that the conference will be attended by leading producers and shippers from every state, as well as official representatives appointed by the governors, to take up practical details of the plans.

The outcome of this conference will be awaited with interest. Past efforts to cut out the middlemen have usually ended in failure, but previous efforts were private and not public in nature. It is now proposed to call in the cooperation of the government. Some want Uncle Sam to become their middleman. Others think state action the thing. And yet others would have the cities go in for publicly-owned markets and publicly-owned stores of all kinds.

This movement puts a new issue before the American people. Some of its critics say it is but an entering wedge for socialism. After the government had gone into the business of distribution, they say, the socialists would soon call for government ownership and operation of the various industries of the nation—for government production.

We think this is a subject for farmers and their wives to ponder upon during the long winter evenings and snowy days, for it is apparent that the country is on the verge of a new and stupendous issue.

MIX STRAW WITH ALFALFA

According to the Omak Chronicle.

Orchardists are laying in a big supply of fine reservation straw to mix with their alfalfa hay as a winter feed. The sale of all of their straw was a nice little pickup for the reservation this year.

Farm Loan Association.

Forty farmers gathered at the Independent Grange hall in Okanogan, Wash., and took the initial steps toward the organization of a national farm loan association, under the provisions of the new farm loan law, with a charter membership of 25, the desired loans totaling about $25,000. After a discussion of the provisions of the new law a list of nine directors to handle the work was selected, as follows: U. E. Fries, C. D. Norton, George Hosier, John Durham, F. P. Boan, Edward Barker, A. R. Murray, Frank Carleton and John Sampson. The directors later chose the following officers for the local unit: A. R. Murray, president; C. D. Norton, secretary-treasurer; F. P. Boan, U. E. Fries and George Hosier, executive committee.

Alder Logs in Demand.

Several thousand feet of alder logs have been gotten out on the Kalama river, Washington, recently to fill an order. Alder is used extensively in the manufacture of furniture, and is also used to some extent in the pulley industry. Experts say that pulleys made from it stand greater strain and are not easily split.

crepancies in the communication of A. W. Landon in the issue of The Idaho Farmer bearing the date of December 14.

First, "You can not get something for nothing out of the old cow." Now, if Mr. Langdon will get just a common dairy cow, Ayreshire breed preferred, and turn her loose in the morning she will go out along the highways, byways, hedges and ditches and gather up the waste and come home at night bringing four gallons of milk and one and one-half pounds of butter, worth about six bits, and by his own figures it would cost but six cents. That is so near something for nothing that you might as well call it clear gain. The trouble is we have too many "managers of dairies." The profit is managed out of a good many dairies.

According to Mr. Langdon the average production of the dairy cow in Washington is 180 pounds of butter fat. He says that a large number of dairymen are producing 300 pounds per cow, but it takes a 300-pound man to make them do it. Well, then, there must be a lot of dairymen producing a good deal less than 180 pounds per cow and by the same token the man must weigh a lot less than 180 pounds.

Now I will bet a quart of buttermilk that there is more clear profit made on dairy cows that produce 180 pounds of butter fat or less than there is on cows that produce more than that, for the reasons I have already intimated.

In support of this very unusual and unbelieved, if not unbelievable, assertion I want to call attention to an instance well known to the editor and readers of the Idaho Farmer. Not many years ago one George Leighton, well

(Continued on page nine.)

Optional Commission.

At the tri-county convention of the farmers' union of Garfield, Colville and Walla Walla counties in Washington the recommendations of a committee were adopted that the farmers' union submit a bill at the coming session of the legislature, providing for a law which will authorize an optional commission form of government for counties so voting.

Prunes Are Profitable.

That purnes are paying growers well this year in localities that produce them successfully is indicated by the report from Clarke county, Wash., where C. J. Nichols of Felida reports a harvest of 36,000 pounds from five acres. His crop brought him over $2300.

Diversify Farm Crops.

Diversify on farms and save trouble on the marketing end, was the advice given by Professor W. S. Thornber, head of the extension department of Washington State college, who opened the 1916 short course for farmers at North Yakima. "Much of the difficulty experienced is not from overproduction, but from poor distribution, and until we can adjust these factors permanently we must adapt farm conditions to marketing limitations," he said. "Every acre, every unit, whether horse, cow or tree, must be a producer if success is to be obtained. Every farm of considerable size must be diversified. The one-crop system not only robs the soil, but also the producer. Intelligent diversification offers a solution for many problems now confronting orchardists."

George Warren Ranch.

The sale of the well-known George W. Warren ranch of 1400 acres on the Palix, near Bay Center, Pacific county, is reported to have been practically concluded. At least one California man is interested in the purchase with an object of colonizing the land and tracts of 40 acres. The tract contains 900 acres of fine dike tide land and the balance wooded upland.

It is interesting to note that Mr. Warren recently purchased between 160 and 180 acres, not far from his old ranch and proposes to develop on it a fine Guernsey herd. He has recently purchased a fine Guernsey bull from the herd of A. L. Gile and is taken up with the idea of a cross between the Guernsey and the Holstein.

Okanogan Pomona Grange.

At its last regular meeting at Malott, the Okanogan County Pomona grange elected the following officers: Master, F. C. Graham; overseer, Mrs. J. L. Freeman; lecturer, Arthur Wells; secretary, J. L. Freeman; treasurer, W. T. Beals; steward, Ben Garigen; assistant steward, Mr. Willetts; chaplain, Mrs. Jennie Wells; gatekeeper, U. E. Fries; ceres, Mrs. W. C. Ostenberg; flora, Mrs. George Rudolph; pomona, Mrs. U. E. Fries; lady assistant steward, Mrs. Ambrose Murray.

Hender to Run Farm.

R. Hender has purchased a 420-acre farm north of Pomeroy, Wash., from Jesse Morris, and, having sold his town residence and furnishings to John Keatts, will move on the farm and run it in the spring.

Takes a Squint at Dairying

And Finds Ordinary, Not Fancy, Cows Are Profitmakers

A Payette reader takes a squint this week at the dairy problem from a new angle. He contends that the real profits are found in the ordinary cow rather than in the high-priced fancy herds. One need not agree with all that Mr. Ainey says to realize the force of his reminder that if the advice of the specialists were taken literally and generally applied, and only the top notch producers kept in the dairy herds of the United States, "that would reduce the dairy products of the United States fully 75 per cent."

In this connection it is pertinent also to say that prices of dairy products must be sufficiently high to enable the man of ordinary ability and industry to make a fair living. In dairying, as in all other occupations, the average man is very largely in the majority. If standards of regulation and prices are made so difficult that only the exceptional dairyman can survive, the dairy industry as a whole will be in danger of destruction.

Prices of dairy products should be high enough to let the average producer earn a fair living at least. Then the exceptional dairyman will have his exceptional reward, and that is as it should be, for the general tendency will be toward a gradual uplifting of the dairy industry of the nation.

We are sure our readers, whether dairymen or not, will be interested in Mr. Ainy's letter given herewith:

Mr. Ainy's Letter.

To the Editor of the Farmer: I have been reading the discussion in the dairy business in the Farmer with much interest. Some of the letters published are interesting, some instructive, some amusing and some misleading. I often feel like putting in an oar, but I remember that I have had about 45 years more experience in the dairy business than I have in writing for publication. I presume the reverse is true of some of those who have been writing for the Farmer. In this letter I want to call attention to some dis-

A ton of butter removes from the soil less than a dollar's worth of fertilizing elements, is the statement of Secretary of Agriculture D. F. Houston in his annual report.

Will Not Suppress News

Of Importance to Farmers of Pacific Northwest

The Farmer has received several letters from eastern manufacturers of farm machinery, objecting to its recent publication of news of a confidential conference at Chicago of representatives of various agricultural machinery houses.

The news article in question was given news prominence because it carried information of intense interest to every farmer in the United States. It began with this parapraph:

"A conference of farm machinery manufacturers, held behind closed doors in Chicago a few days ago, gives rise to a fear that a great trust is in process of formation, and that the farmers may shortly be called upon to pay still higher prices for the machinery that is so necessary to the modern production and harvesting of crops."

The Farmer feels that it owes a duty to its readers to give them the news of such important events as the close conference of manufacturers at Chicago. At the same time it felt that fairness required it to print such explanations as the manufacturers might offer for the advance in prices of farm machinery, and the news article against which complaint is lodged carried this statement from the manager of the International Harvester company at Spokane:

"I should not be surprised to see an additional advance before next spring. (The company had recently announced an advance of prices in harvester machinery of about 15 per cent.) The increases are due to the high prices of bar steel, pig iron, cloths and leather used in our industry. Bar steel has gone up about 130 per cent in 18 months, pig iron is up 80 per cent or more and leather and cloth that we use in harvester machines are out of sight. A seven-foot binder that cost the farmer $165 a few weeks ago will cost him about $180 now. The increase to the wholesaler has been about 15 per cent, but I believe the retail price is advanced only about 10 per cent."

The Farmer could better answer the complaining letters if the writers had been more specific in their criticism. Do they mean to deny that the Chicago conference was held, and behind closed doors? We think not. Do they deny that the manufacturers in that conference discussed price advances and decided to require cash payments from farmers, instead of accepting long time credits and instalments, the present practice? Probably not.

The Farmer wants the facts and nothing but the facts. If the Chicago conference was not held to bring the manufacturers into an agreement, express or implicit, formal or informal, to advance prices, we should gladly publish any proofs to that end.

But the Farmer can not and will not suppress news of deep importance to the agricultural producers of the Pacific northwest.

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Cultivate the Foreign Students

There are about six thousand foreign students attending American colleges, which include about 1500 Chinese, 1000 Japanese and 500 from the Philippines. The possibilities, economic, social and political, through this source, can hardly be overestimated.

In the main, foreign students represent influential families, and still more important, they will, on the average, constitute an influential element in the business and political world. Most of these students pursue technical courses. Their knowledge of materials and processes will be based on American conditions, and this can not but form a basis for larger trade with America in the future. The personal friendships formed, the understanding of our political arrangements, their sympathy with our people and their aspirations is of transcendant importance in our future international relationships.

These students are, in a very true sense, the "guests of the nation," and this point of view should be kept in view by institutions and by states. Our last legislature, with narrow and imperfect vision, wanted to charge foreign students double tuition, though the added cost of their attendance is insignificant.

We, of this state, with our close proximity to the orient, should never miss an opportunity, even if we were prompted by purely business considerations, of cultivating the closest friendships, and showing the largest measure of courtesy to foreign students.

E. A. BRYAN.

Mr. Houston's Report

The report of Secretary Houston of the department of agriculture has been received and read with a good deal of interest. A few words may not come amiss about some of the outstanding things in the report.

Since 1913 beef production has increased instead of diminishing; sheep have declined in numbers in some sections; swine have increased. The grazing capacity of the national forest ranges has been increased through systematic regulation from 15 to 30 per cent. He recommends the more extensive raising of sheep for both meat and wool.

He is more cautious than the president regarding increased production. He says: "It is highly desirable further to broaden the areas for the production of staple crops as far as experience and sound economics may warrant."

Considerable space was devoted to marketing and rural finance, principally relating what has been done. Not a little attention is given to the various live stock and plant industries under their separate heads.

There are not many recommendations in the report. He does ask authority to inspect factories producing foods, as no authority exists. This is important.

As a whole, the tone of the report is cheerful and optimistic.

Use All the Land

There are very few farms in the northwest that do not have some waste land—land not worthless, but merely uncultivated. It lies in the fence corners, along the ditches or around old buildings or barnyards. Very often it is the best land on the place, at least after having lain idle for years. It ought to be put to work. There is profit in it; there is loss if it is not utilized. It might be made use of a year or two while some over-worked acre was being given a rest, or it might be put into a regular, systematic scheme of crop rotation and made to add revenue to the farm operation.

John Bright's Advice

John Bright, live stock commissioner to the dominion of Canada's royal commission at Ottawa, is quoted as follows:

"Get Canada all set to jump in and corner the cattle trade at the end of the war by bolstering the farmer now, so that he may have an advance stock of cattle in hand and be ready to stand up for big demands."

We believe this to be most excellent advice for Canada. Does it mean anything to people of the United States? Unprecedented things are going to happen with the close of the war. European countries are going to be in a peculiar condition. They will not be heavier buyers than necessary, for they are impoverished already. They must make the best of what they have. Some things they are bound to seek here, but only what they can afford and the very best for the money.

The nation and people which profits by this business will be the one which has the goods needed at the right price. It is worth thinking about right away—worth serious preparation at once, without delay.

Show Farms

Every once in a while some rich man decides he will be a farmer. He buys many acres of land, hires a superintendent, and starts to establish a great plant, quite frequently deciding to become a breeder. Some of them have succeeded, too, but it took more than money to bring success and profit. Before any measure of success came they had to spend time and thought and get experience.

The farmer who is hard up for capital enough to make those improvements he knows he needs is apt to sneer at the "show farm." "Yes, I could have a fine herd myself if I could spend a million dollars on it."

That is true enough, but merely purchasing a lot of fine animals does not make one a great breeder. Maybe he's only a sucker.

However, that isn't what concerns us. If a rich man wants to farm or breed animals, there's no law to prevent him, so he will do it anyhow. The question is, how will it affect others around him?

There are possibilities both good and bad in the show farm. If the wealthy man is really in earnest his place may be of a good deal of help to his poorer neighbors. He can afford to experiment in some lines and test out promising theories. To a limited extent his place is an experiment station. But if he is merely playing with a hobby he is apt to do harm. He puts in a very expensive and utterly needless equipment, let us say. Others see it and think that they must do the same. The result is loss, not only for the rich man, but for those who can ill afford it.

In the east there are notable examples of the millionaire riding a hobby. In the northwest there may be some, but we have several whose work is of real value to agriculture. Let us pray for more of the latter class.

Practical Organization

R. B. Coglon, state leader of county agents in Washington, is trying to persuade the various rural organizations to include marketing in their activities, no matter what may be the primary objects of their existence. This he regards as far better than to form new organizations.

This is very true. We have plenty of organizations already; to multiply them is to add burdens to the farmers, and the result will be a lessening in the membership of all. We have the organizations now. Let them assume the work of marketing cooperation.

The Function of the Dreamer

Back in the days when our antediluvian ancestors sat around the mouths of their prehistoric caves and ate their meat raw and conversed in grunts and squeaks, the man who sat and dreamed of better things was sneered at as practical. Why, he spent his time in thinking of how much nicer it would be to build houses, or cook food, or make improved weapons, or weave grass garments—impractical fellow! Why didn't he go out and throw rocks at the mastodons and bring home some meat?

Don't despise the dreamer, for not a soul ever made a step in advance without a dream. The pursuit of ideals higher than our lives leads to better things. The dreamer without any practicality may be a failure, but he is of more use than the worker who has no dreams, for at least he may inspire others.

To grow two fruits or vegetables where only one grew before is the purpose of an experiment by the state college of Pennsylvania. It succeeded in producing half a dozen tomatoes of reported good quality on a potato plant, at the same time allowing the potatoes of the same plant to grow and mature. The tomatoes were grown on a shoot from a tomato plant grafted onto the potato plant.

Washington Gleanings

Practical road construction and road maintenance will be one of the subjects treated at the winter school of the state college next month.

The honey bees of the Yakima valley produced their owners a profit of $75,000 during the past season, according to the reports made recently at the meeting of the state beekeepers' association.

The Portland engineer who has been making investigations concerning the possibility of irrigating the Horse Heaven project in central Washington has reported that the plan is a feasible one.

The Utah-Idaho Sugar company has closed contracts with over 700 farmers in the Yakima valley to grow beets for next year's use in the new sugar factory at North Yakima. The total acreage will be between 6000 and 7000 acres.

Superintendent Kern of the Walla Walla schools has recommended that the course given in agriculture in the schools be broadened to require actual cultivation of a plot of ground by each student.

George D. Conger, superintendent of the Washington branch of the Anti-Saloon league, expresses confidence that the legislature this session will enact a "bone dry" prohibition measure to replace the present law under which liquor may be shipped in by securing permits.

What Others Say

Agricultural Journal: Away with inferior seed and scrub sires.

Farm Life: We rejoice evey time a new state goes dry.

American Swineherd: Among the forage crops tested for pork production alfalfa stands at the top.

California Cultivator: San Joaquin valley farmers are planting from 25 to 30 per cent more wheat this year than last.

Prairie Farmer: There is much in the way of community betterment and recreation that a ladies' aid society or a woman's club might do.

Ship In Wood Cooperatively

One Man Gets Over a Dollar Each for His Hens and Has His Best Left for the Coming Year—He Sells Eggs at 55 Cents.



Yakima County, Wash.—Farmers club together and ship wood by the carload into the Grandview district.

Klickitat County, Wash.—Darrington man cleared $1.03 per hen when he culled out his 2-year-old flock and sent the "culls" to the Seattle market.

Club Together.

GRANDVIEW, Yakima County, Wash., Dec. 23.—A good many potatoes and cabbages have been frozen. Fuel is plentiful. Farmers in this vicinity club together and buy wood by the carload and then divide. The only work farmers do here in the winter is regular farm chores. Both spring and fall pigs are raised. I think early spring pigs are best. The hogs are sold on foot. We have a good grange here. We have a little snow, but not very cold weather as yet. A few orchards will be taken out and seeded to alfalfa for the coming season. E. H. FAULKNER.

Hens a Dollar Each.

DARRINGTON, Klickitat County, Wash., Dec. 22.—But little damage was done by the severe frost of October and November in this section. Some of the mangels were damaged to some extent, but if fed to the stock right away there will be little loss. Owing to the frost the plowing had to be postponed until next spring. Not much attention is being paid to chickens by most of the farmers, but with good care and proper housing some profit can be made with a flock of good blooded chickens, providing you can raise some of the feed. I culled out my flock of 2-year-old chickens and got $1.03 per hen in the Seattle market, clear of expenses. I sold eggs up to last week at 55 cents per dozen. At present eggs are 45 cents per dozen, butterfat 46 cents, native hay $25 per ton. Farmers are busy with the stock and cutting their winter's wood. The social life consists of dancing and other entertainments.

C. B. NEIDERPRUM.

"Don't Hang Together."

BICKLETON, Klickitat County, Wash., Dec. 25.—The weather is somewhat cold and stormy. Snow is about six inches deep, with very little frost in the ground. Fall wheat did not come in sight, but most of it is sprouted in the ground. Farmers are optimistic, as we had nearly the same conditions a year ago and had a big crop. There has been no fall plowing done on account of very late rains. Almost every one is well prepared for winter and fuel is plentiful and the usual price. There will not be much work done this winter; some will log a little, others will keep the stoves going and feed their stock. Not very many fall pigs are raised here. I do not consider them a source of profit as they are nearly always in the way, underfoot of other stock and have not good green feed to grow on. The majority ship their hogs to Portland alive, as our local butcher does not pay enough dressed. The usual social affairs are going on this winter. This is rather a poor section for organizations; the farmers do not seem to hang together very well. Prices on all products are good. Barley and oats are $35 per ton, spuds two cents a pound and hay $20 per ton. BERT H. FAULKNER.

Raise Only Spring Pigs.

METHOW, Okanogan County, Wash., Dec. 26.—We were not altogether prepared for the cold snap and quite a few potatoes and apples got frozen, but no harm to the stock. The handicap of the fall work was the ground being too dry to plow—not the cold weather. The firewood is the same price, and lots of it on the government land yet. It is $1 per rick in the woodyard or $2 hauled. The only profitable work farmers can do is to take care of the stock and rustle firewood for the present and next summer. Mostly spring pigs are kept, as they are the most profitable. The fall pigs seem to get stunted with the winter cold. The farmers dress the hogs for what few they sell to the local butcher. The big per cent is shipped to Seattle in carload lots alive. The Civic league is the only social organization here outside of the lodges. The other organizations are of a religious nature.

CHARLES GRANT.

Have Done Pruning.

OMAK, Okanogan County, Wash., Dec. 23.—The Okanogan valley has not been visited with severe weather so far this fall, and the snow has not been deep enough to interfere with pasturage. A larger percentage of pruning has been done this year compared to last year at this time. There has been no hindrance to traffic of any kind. Pigs and chickens have been sold a little close on account of high-priced feed. The grange country club and other social organizations keep up social life to a good standard. J. O. WOODS.

Discouraged on Hogs.

ZILLAH, Yakima County, Wash., Dec. 25.—Farmers were generally better prepared as regards feed than in previous winters, owing in part to the fact that they have not the amount of stock to carry over the winter that they had a year ago. There are not nearly so many hogs and feed is more plentiful. The dry fall handicapped fall work, and unless our snow melts under proper conditions the ground will be very dry for spring work. As yet there is no shortage of fuel. Good heating coal is being delivered for $5.75 per ton. Discouraged by the low prices of the fall of 1915, the ranchers who had been raising a few hogs have practically quit the hog business. Under conditions as they are in this vicinity there has never been a fortune in the hog business, but there is no question but that the rancher who was able to get his summer or fall pigs through the winter on some cheap feed made more money. The inconveniences of city inspection have deprived the rancher of the privilege of selling in many of our city markets. And unless equipped with proper facilities for butchering I have found it just as profitable to sell on foot.

F. J. M'CURDY.

Declares Dividends.

RUPERT, Minidoka County, Idaho, Dec. 27.—We have had a strenuous fall. Sugar beet growers suffered especially from shortage of help, and many farmers have lost heavily from beets being frozen. Insufficient delivery facilitates increased the difficulties, and the growers have felt the need of a good organization. The old organization is now being developed. The Producers' association has increased their lumber department and added groceries and hardware. They have declared a dividend of 10 per cent on shares of stock and 7 1-2 per cent patronage dividend or rebate on purchases. It is understood that the Cooperative Creamery company expect to declare a dividend shortly. A new grange is being organized near here, and increased activity is being shown among older granges. The number of fall pigs have been decreasing each year for a few years, as it has not been as profitable, as a rule, to raise them. There is an increase in dressing of hogs and cattle on the farm, and it has produced a friction with the meat dealers in town. One farmer is erecting a slaughter house to stand state inspection. There is an increasing amount of beef to sell, but no ready market at reasonable prices. Home canning of meat in the winter for summer use seems likely to gain in favor.

G. E. B. ROBERTS.

Will Sow Spring Wheat.

FOSSIL, Wheeler County, Ore., Dec. 24.—The weather has been very unfavorable for either plowing or seeding. There has been a little snow, rain and frost alternately for the last two months. Very little seeding has been done so that farm work is away behind and most of this section will have to put in spring grain. Nearly every farmer has been hauling his grain to Condon, our nearest railroad, 20 miles off, and some have been hauling from 30 miles south of Fossil, making a 50-mile haul, getting $1.50 to $1.60 a bushel for their wheat in Condon, while others sold for $1 to $1.25 here at the granary. The road has become impassable, and it takes four good horses to haul an ordinary two-horse load. We voted $80,000 bonds to help build the state highway through here, and work will begin right after New Year's. I understand the 640-acre homestead law has passed, so that it is only a question of a short time when all the range will be taken up. Several carloads of Holstein and Jersey cattle, full bloods and grades, have been shipped in here in the last two or three months. It looks as if dairying ought to pay here, as we have to ship in most of the butter used in this district. Several of the farmers are talking silos, but each seems to be waiting for the other to make a start. A number of registered Shorthorns have been brought in. There are some small herds here now that are hard to beat. Our county fair was a success in every way. We had over 90 head of registered stock shown, which was pretty good for this sparsely settled county. Our farms and garden exhibits filled the courthouse from "turret to foundation stone." Our vegetables and grain were shown in the basement, and fresh and canned fruits, bread, cakes, pies and all women's work upstairs. Potatoes are selling here from $1 to $1.25 a hundred. Butter is 80 cents a two-pound roll, eggs 50 cents per dozen and hens $5 a dozen. Hay is selling at $12 a ton.

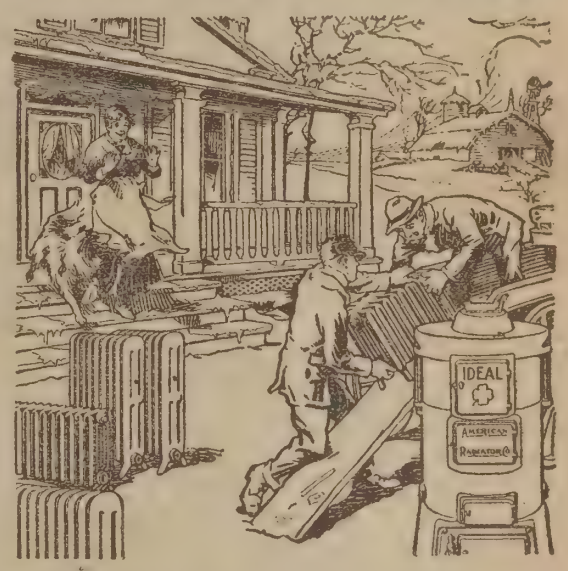
JOHN STEWART.

Woolen Factories.

Chile has two woolen factories.

Don't wait to put in IDEAL heating!

It is a mistaken idea to think that you have to wait until warm weather to put in an IDEAL Boiler and AMERICAN Radiator outfit.

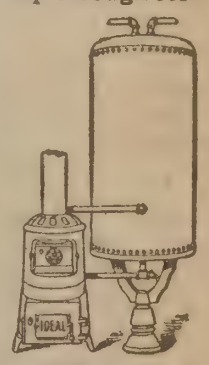


An IDEAL Boiler and AMERICAN Radiators can be put in your building just as quickly and easily in January as in August. The AMERICAN Radiators come all assembled for placing in the rooms; the IDEAL Boiler sections are easily carried in and made up into a complete boiler in basement or sideroom. The piping connecting the IDEAL Boiler with AMERICAN Radiators is readily run up through corners of the rooms, closets or out-of-the-way places, and the outfit may be completed in a few days to your utmost satisfaction. You will then notice the striking contrast between the chills and cold of old, wasteful methods, and the sure, economical heat aplenty from the IDEAL-AMERICAN outfit, making you glow all over with satisfaction.

AMERICAN RADIATORS & IDEAL BOILERS



A No. 4-19-W IDEAL Boiler and 270 ft. of 38-in. AMERICAN Radiators, costing the owner $200, were used to heat this farm house. At this price the goods can be bought of any reputable, competent Fitter. This did not include cost of labor, pipe, valves, freight, etc., which vary according to climatic and other conditions.



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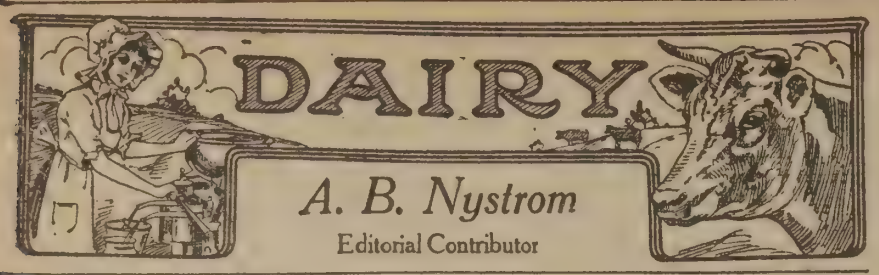
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Dairy Questions

Are Answered by A. B. Nystrom

I have a cow which just came fresh and is now giving bloody milk. Can you give the cause and remedy for the trouble? I have been feeding her on oat hay and rolled oats and apples, giving her one gallon of oats twice a day, two gallons of apples once a day, and all the hay she will eat. Then I turn them in the stubble field and they graze on timothy patches in the field.
F. W. B., Tekoa.

We sometimes find blood in the milk when the udder has been injured, also when it is congested and inflammed as when the circulation through it has been seuddenly increased by richer and more abundant feed, or when the cow is under the excitement of heat. Again we find that the deposit of tubercles or tumors in the udder may be sufficient causes, the irritation caused by milking contributing to drawing the blood; and again if the cow eats certain plants she may have blood in the milk. If the milk becomes red after it is drawn it may be found that it is due to the presence of micro-organisms which cause red milk. If the gland is congested the following treatment is suggested by the United States department of agriculture: One pound of Epsom salts and daily thereafter one-half ounce of saltpeter with a dram of chlorate of potassium. The udder should be bathed with hot or cold water and rubbed with camphorated lard. If the feed is too rich or abundant it must be reduced. Induration of the udder may be met by rubbing with a combination of iodine ointment, one part, and soft soap, two parts, or mercurial ointment and soap may also be used. It is imperative that the milking be done carefully.

I do not think that the feeding is at fault unless the cow has not been accustomed to getting an abundance of food previous to this. If you suspect tuberculosis I would by all means have the cow tested at once.

Drying Up Cows.

I have a Guernsey heifer 3 years old. She had her first calf at 22 months and gave 10 quarts a day. I dried her about four weeks ago, figuring she should come fresh January 4, but instead she came the 8th of December. Her udder had not begun to fill and she has not as yet come to her full flow of milk. I am letting the calf run with her now. Can you give me any reason for her not having any milk?
E. S. H., Spokane.

I do not know why your cow is not giving as much milk as she should, but I believe that the fact that you did not have this cow dry sufficiently long is partly responsible for her low milk production. We figure that it is absolutely necessary to have a cow dry at least six weeks, and preferably eight weeks, before freshening. She should be fed well for four or five weeks after she is dry, and then the feeding should consist largely of laxative feeds just previous to freshening. This tends to build up a cow's system so that she can stand the heavy strain of the next lactation period.

Butter From Pasteurized Cream.

Is there any difference in taste, texture and body between butter made from pasteurized cream and unpasteurized cream? Is there much demand for butter made from pasteurized cream?
H. J. F., Steptoe.

The principal difference between butter made from pasteurized cream and unpasteurized cream is that the pasteurized cream butter keeps longer. The texture is practically the same if the pasteurization is perfect, and there will be no difference in the taste if you compare it with butter made from good quality unpasteurized cream.

The trend is to have all cream for butter making pasteurized and I think the state will soon pass a law compelling all butter to be made from pasteurized cream. This is a matter of safeguard from disease and also to make the butter have better keeping qualities.

Record of Over 400 Pounds Butterfat

Figures of interest are brought out in the first annual report of the Buhl Pioneer Cow Testing Association of Twin Falls county, Idaho, for the year from September 30, 1915, to October 1, 1916. Gustav Kunze is president of the association, C. E. Long is secretary, and O. T. Koster is the official tester. The honor roll of cows includes 33 animals producing more than 400 pounds of butter fat during the year. This list is led by a Jersey five years old belonging to C. E. Long and is credited with the production of 10,910 pounds of milk with 569.1 pounds of butter fat. A. A. Stauffacher has a Holstein cow five years old producing 13,000 pounds of milk with 545 pounds of butter fat. The third cow in the honor roll belongs to A. Carlson, a Jersey six years old, producing 9569 pounds of milk with 498.2 pounds of butter fat. Eleven cows in all produced over 450 pounds of butter fat.

Ten Highest Cows for Butter Fat Production.

Owner	Name of Cow	Breed	Age	Lbs. Milk	Lbs. B. F.	Value of Product	Cost of Feed	Profit above fd.	Loss
C. E. Long,	Castilian Lady, 266,628	Jersey	5	10,910	569.1	$156.05	$70.15	$85.90	
A. A. Stauffacher,	Nig	Holstein	5	13,000	545.0	148.56	53.45	95.11	
A. Carlson,	Ebony	Jersey	6	9,569	498.2	136.01	34.75	101.26	
A. A. Stauffacher,	Nubbins	Holstein	4	14,623	483.9	126.85	55.82	71.03	
C. E. Long,	Faustine Masurier, 266,627	Jersey	5	8,331	478.2	129.19	60.65	68.54	
A. A. Stauffacher,	Fortune	Holstein	3	13,020	477.9	123.56	50.46	73.10	
A. A. Stauffacher,	Speck	Holstein	5	14,663	477.4	130.00	53.59	76.41	
Geo. A. Childs,	Jinny Helena, 270,216	Jersey	5	9,412	473.6	128.12	38.44	89.68	
C. E. Long,	Lads Bright Light, 266,609	Jersey	6	9,706	468.7	128.36	65.55	62.81	
H. H. Stiyer,	Alban Salma De Kol, 155,927	Holstein	5	14,071	461.8	124.51	53.29	71.22	
Average				11,710	493.3	$133.12	$53.61	$79.50	

Ten Lowest Cows for Butter Fat Production.

	Name and No. of Cow.	Breed	Age	Lbs. Milk	Lbs. B. F.	Value of Product	Cost of Feed	Profit above fd.	Loss
1.	Queen	Holstein	2	2,367	82.1	$ 23.08	$36.63		$13.55
2.	Jones 3rd	Holstein	2	4,195	146.2	41.76	51.98		10.22
3.	Guernsey H.	Guernsey	5	3,748	159.1	42.83	43.70		.87
4.	Number Thirteen	Jersey	2	4,639	168.5	44.86	35.02	$ 9.84	
5.	Buelah	Jersey	3	4,163	178.7	49.44	30.04	19.40	
6.	Queen	Holstein	2	4,882	179.6	50.08	50.98		.90
7.	Rose	Holstein	2	4,770	187.5	50.13	38.99	11.14	
8.	Leaky	Holstein	7	6,558	188.7	50.74	36.67	14.07	
9.	Dinah	Holstein	2	4,573	190.5	53.68	41.85	11.83	
10.	Number Twelve	Hereferd	2	5,986	193.5	55.82	38.14	17.68	
Average				4,588	167.4	$46.24	$40.40	$ 5.84	

Association Averages.

Number of cows	473.7
Pounds butter fat	304.8
Pounds milk	20387.0
Average test	3.76 per cent
Returns per cow	$83.21
Cost of feed per cow	$43.69
Profit per cow	$39.52
Returns for $1.00 expended for feed	$1.90
Cost per pound butter fat	14.3 cents
Cost per 100 pounds milk	53.7 cents

Summary.

Twenty-four herds with a total of 337 cows completed the year's work.

The total number of cows on the records throughout the year was 681, while at the close of the year the records contained the names of 504 cows.

Seven pure bred sires have been purchased by members to replace grades throughout the year.

Fourteen pure bred cows and heifers have been purchased by members during the year.

At the beginning of the year's work 10 herds in the association had pure bred cattle, at the close of the year's work 13 herds had representations of pure breds.

Members of the association tested 6 cows for A. R. O. records during the year.

The average skim milk test for the month of September was .0200 of 1 per cent, this was one 1-100 of one per cent higher than the test for six months, the cause for this being that since the new system of cream grading has gone into effect the tendency has been to skim a heavier cream, thus resulting in some cases in the separator throwing over some butter fat.

The highest 2-year-old for butter fat production was Helen's Glory 305,227, a pure bred Jersey owned by George A. Childs, her production was 402.1 pounds butter fat.

The highest 3-year-old for butter fat production was Fortune, a grade Holstein owned by A. A. Stauffacher, with 477.9 pounds butter fat to her credit.

The highest cow for milk production was Nubbins, a grade Holstein, her production being 14,623 pounds milk.

The highest average butter fat test was that of Waters, a grade Guernsey owned by H. B. Sherman, with an average test of 6.71 per cent.

Give and Take

Is Idea of New Dairy Association

With a view to betterment through increased and dependable revenues and general stabilizing of their industry, the dairymen of Skagit county, Wash., some 150 strong, have formed an organization known as the Skagit Valley Dairymen's association.

The central aim of the organization is to secure from the company purchasing their product a guarantee of a fixed price for a period of three months, in return for which concession all members agree to sell all their milk except that needed for home use to the company so contracting with them. The price which the association is now attempting to secure for the quarter, January-March, 1917, is $2.50 per hundred pounds, an increase from $2, as now being received.

In order to secure specific and binding action the association has drawn up an agreement, already signed by almost all of the members, placing the management of this work of the association in the hands of a "price committee." This committee is authorized to enter into agreement with any reliable concern to supply the milk of all the members who sign the agreement to such concern, and, if they fail in this attempt, to undertake to establish a factory or condensery for the purpose of handling the dairy products of the association.

One feature of the agreement among the dairymen is that it shall not be binding unless 6500 cows are signed up. A penalty of $10 per cow is fixed for any member who, having signed the agreement, fails to live up to its terms.

Longer Period

New Idea Enters Cow Testing

A new idea is fast taking root in forming cow testing associations—that of organizing for a longer period than one year, says J. E. Dorman of the U. S. department of agriculture. The Buhl Pioneer Cow Testing association of Buhl, Idaho, which made an average production of 304 pounds of butter fat per cow during the first year, has taken the lead in this respect and has just reorganized for a period of three years with 25 of the 28 members remaining in the association for the three-year period. Other associations are considering this plan, and it is expected that when the time comes for reorganization they will adopt the plan in force at Buhl.

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Cow Testing

Progress in the Western States

Dairymen in the western state are to be congratulated for their progressiveness, as shown in the manner they have taken up the cow testing association idea, says J. E. Dorman in charge of the western dairy investigations of the U. S. department of agriculture. Four years ago there were only two active associations in this territory. On December 1, 1916, there were 42 strong associations with a membership of about 1100 dairymen and with approximately 21,500 cows on test.

Following is a list of the number of active associations in each of the western states on December 1, 1916:

Oregon	17	Montana	1
Washington	16	Wyoming	1
Idaho	2	Colorado	1
Arizona	2	Utah	1
Nevada.	1		

The dairy division of the bureau of animal industry, U. S. department of agriculture, reports that the number of associations in the United States on July 1, 1916, was 346, and that the number of associations during the year ending July 1, 1916, increased 164 per cent over the year before. The reports show that the increase in the western states was 228.5 per cent.

While the greatest number of associations are in Oregon and Washington, the other western states are fast becoming interested. Of the seven states in the United States that organized their first associations during the past year, three were western states, namely, Idaho, Montana and Arizona. Since July 1 Wyoming has organized one association. It is interesting to note that the state of Washington has increased the number of associations from one to 16 during the past year.

Dairying

Sees Increase in Morrow County

The Morrow County creamery at Heppner, Ore., opened last May, with J. M. Morgan, a graduate of the O. A. C., who already had working experience in a creamery, in charge. Mr. Morgan reports a slow, but steady increase in dairying ever since the creamery opened, although there is some decrease in the output with winter weather. A few of the largest dairymen receive cream checks of $75 or more each month, but far more have small dairies, bringing about $25 a month. Mr. Morgan says dairy cows do well in both the valley and on the uplands, and while not decrying wheat growing, especially during these times of high prices, he predicts that dairying is bound to grow. Many dairymen now disk in wheat or bald barley with their alfalfa each season. The disking is good for the alfalfa, and the crop makes an almost perfect ration if fed liberally, which it is sometimes hard to get new dairymen to do. H. A.

Bitter Milk

Sterilizing Small Quantities

To the Editor of the Farmer: Quite frequently I have noticed requests for a remedy for bitter milk and so thought I would tell you what my experience has been. When one has a large amount of milk to sterlize it would be quite on inconvenience, I fancy, but with one or two cows it causes little or no trouble. We were troubled in the same way as A. O. S., Oroville, Wash., November 16 issue. We were living in the city and our cow was a beautiful Jersey. We could seem to do nothing to change the bitter milk. It did not seem to be bitter, however, until standing a short time and the cream was so bitter we could not use it. We tried change of feed and every thing, but it did no good, so one day I set the pail with the milk in it on the stove and heated it almost to the boiling point, then strained it. The bitterness was all gone. I kept it up and had no more trouble with either milk or butter. The butter came quickly. As I have received so many good things and valuable suggestion in the veterinary columns of your splendid paper I felt as though if these few words can relieve some one I would be glad to submit them.

MRS. J. W. GREER.

Sunnyside, Wash.

AN OREGON JERSEY.



This grade Jersey cow belongs to A. C. Westcott of Washington county, Oregon. She has made over 700 pounds of butterfat in a year of testing. If "handsome is as handsome does," she certainly is a beauty.

Takes a Squint

At Dairying; Favors Common Cow

(Continued from page five.)

known in this community, was engaged in the dairy business near Boise. He had plenty of capital and large experience in business and live stock industry. He bought the best dairy stock to be had. His cows were record breakers. He furnished his dairy with modern equipment and we know George Leighton is thorough in all he undertakes. Well, he has sold his dairy and quit because it did not pay.

A little more than a year ago Pfaffel and Fulkerson of Meridian closed out one of the biggest and best equipped dairies in southern Idaho. The men I have mentioned are all of the 300-pound class, but they were failures in the dairy business.

We have a 400-pounder here in the Payette valley in the person of Mr. Boomer, who recently stated in the columns of this paper that his dairy does not pay.

Now, I visited a dairy in Oregon not long ago where a man is milking 30 common range cows. I don't believe there is a cow in the bunch that will produce 180 pounds of butter fat—he has never tested them—but his bank account is growing. I can mention a dozen dairymen who are making money with ordinary cows. It may be a question of education and it may be a question of common sense.

Mr. Langdon estimates the value of the labor incident to the keeping of a 20-cow dairy at $730 a year. He surely doesn't expect to use a man with much "gumption." If Mr. Langdon can hire "300-pounds" men in Washington for $730 a year they are cheaper than they are in Idaho.

Well, to resume, Mr. Langdon says "It does not pay to keep a cow that does not produce at least 300 pounds of fat." If 180 pounds is the average there must be a lot of cows below the 300-pound notch. What does he propose to do with the "boarders?" Sell them to his neighbors? Surely not. He must mean to send them to the shambles. That would reduce the dairy products of the country fully 75 per cent. Milk and butter and cheese are already pretty high. What would be the price if production were cut 75 per cent? Fine philosophy these educated dairy managers are advocating. I would say a better thing to do is for the man who can not make anything less than a 300-pound cow pay to go out of the business and turn their stock over to men with less education and more knowledge.

Now, dear reader and patient editor, maybe I have made a mess of this letter. I am sorry we have not more 300-pound cows in the hands of practical men, but they are not very plentiful, there are not enough to go around. We can not afford to kill off the cows we have until we can replace them with better ones. The man who advises you to kill old "Brindle" doesn't intend to furnish you milk for the babies any cheaper than old Brindle is doing it. If you kill off your common cows your high-toned neighbor with pedigreed cows won't reduce the price of milk. Get all the education you can, but don't forsake wisdom.

D. W. AINEY.

Payette, Idaho.

One Good Farm Paper.

Speaking of the sale of the Northwest Farmer, and its consolidation to The Washington Farmer, the Mount Vernon Argus says:

"One of the ills of the farm publication business, it is pointed out, is the multitude of papers endeavoring to cover the same field and do the same work. Farmers and dairymen become burdened with so many publications, all of the same or of similar character, that they find time to read but few of them. With Washington's sparsely settled rural districts, one good farm paper, carefully and intelligently edited, should be sufficient to answer all requirements."

Apple Crop Is All Stored.

W. L. Mason, an upper valley orchardist of Hood River, Ore., who has been handling the fruit of a number of neighbors, says that practically the entire crop of the upper valley district has been moved either to market or to local storage terminals.

New Church for Pullman.

The construction of a new church edifice is being considered by the federated church at Pullman, Wash., and already $6000 toward the $10,000 required has been subscribed. No steps will be taken toward the construction of the building until the entire amount is available, but it is thought that no trouble will be encountered in raising the remaining $4000. The church heads plan for a building that can be used for a community social center, to be open at all times for the use of its membership and others.

Chinese Eggs Arrive.

Chinese eggs have begun to arrive at Seattle. The shipment consists of 500 cases and is a part of a large consignment received at Vancouver, B. C. As soon as delivered on the dock at Seattle this shipment fell into the hands of Uncle Sam's alert pure food officer, who is reported to have given the eggs a passable reputation.

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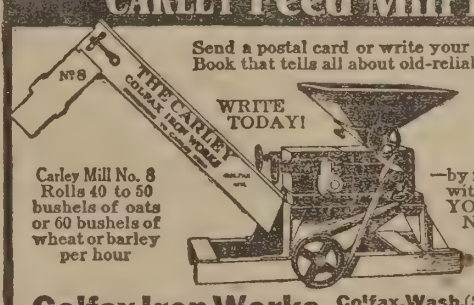
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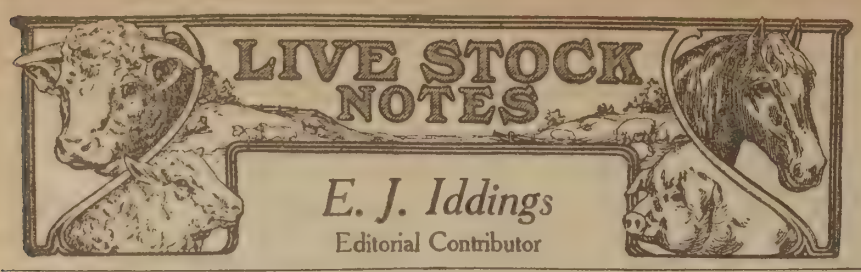
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Young Hogs

Dressed Out 247 Pounds Each

T. J. Matlock of Heppner, Ore., on December 15 killed two pure-bred Poland China barrows and two sows, all farrowed April 2, that averaged 247 pounds dressed. The largest one dressed 272 pounds. At the same time Mr. Matlock killed twenty-one good, high-grade Poland Chinas, a little over a year old, that did not dress quite so heavy. Mr. Matlock bought as his foundation stock two sows from Thomas Brunk, the well-known Salem breeder, that had won first and second prize in their class two years in succession at the Oregon state fair. They also were in the herd that won first for get of sire and produce of sow. Added to this show ring record is the fact that they were personally selected by W. O. Minor, than whom there is no better judge of Poland Chinas, even if he is best known as a Shorthorn breeder.

Mr. Matlock was fortunate in having a litter of 11 from each sow the first time, so that his herd has built up rapidly. Mr. Matlock's pigs have had plenty of skim milk, along with other feeds that have grown them well, and he now has a lot of young stock, both boars and sows, that any breeder in the northwest might be proud of. He has recently purchased a new boar—one that Mr. Brunk had selected to show. Being not related to his present herd, Mr. Matlock will breed him on his young sows and keep the quality of the herd up to its present standard or even better, if possible.

Mr. Matlock was for many years a breeder of horses. He does not expect extremely quick sales or big prices now, but believes it will not be very long until the hog business is again showing big profit. By having pure-bred or high-grade of the best quality for killers he expects to show a profit both from the breeding and market end of the business. H. A.

Cost $9,000,000

Last of Foot and Mouth Disease

During the fiscal year the United States bureau of animal industry succeeded in stamping out the last of the foot and mouth disease remaining in the country from the outbreak of the fall of 1914. This outbreak cost the federal government and the states approximately $9,000,000 for the expenses of the campaign against the disease and the reimbursement of owners for cattle slaughtered. Large as this amount is, however, says the report, it is trivial compared with the colossal damage that would have been inflicted if the disease had escaped control and had become permanently established in the United States as it has in some other countries. Perhaps the most important step needed to complete the preparation of the whole country against possible future outbreaks of this or other contagious diseases, it is pointed out, is for all the states that have not already done so to pass laws, create or improve organizations, and make appropriations for dealing effectively with contagious diseases of animals.

Veterinary

Dr. S. B. Nelson

I feed my pigs cooked offal from a slaughter house with an occasional feed of shorts. They grow to weigh about 150 pounds and then get lame in their hind parts and in a day or two are unable to walk and soon die. Their hind parts seemed to be paralyzed. Is there something short in their feed? They get plenty of fern roots and grass. A. D.

Buckley, Wash.

Supposing that you try taking your pigs off the fern roots and if necessary feed them alfalfa hay as roughage instead, also giving them the opportunity to get grass as before. I do not know that there is anything in the well cooked offal from slaughter houses which would cause the trouble. I think you would get better results if you give them a certain amount daily instead of giving them an occasional feed of shorts. I do not believe that that is the proper way to feed the pigs. The fact that you do not have any trouble until they reach about 150 pounds would indicate that the trouble is a chronic one growing slightly worse day by day, and you not noticing anything about it until it gets so bad that it shows itself in the lameness which you mention.

Please advise me whether ground gentian root is a good condition powder. I have been told that for horses that are run down in condition that it is excellent. B. S. G.

Govan, Wash.

Ground gentian root is a very good adjunct to a condition powder. You should add other ingredients to it as gentian root is only a very mild liver tonic. Supposing that you use four drams of gentian root, one dram of powdered iron, five grains of powdered nux vomica, two drams of powdered ginger and four drams of powdered fenugreek. This is sufficient for one powder and should be given once daily for from 30 to 60 days.

I have a colt coming two in the spring that has a large swollen place in his left hock. I suppose it was strained in some way. It has been there for about three months. G. R. B.

Touchet, Wash.

Your description of the colt's trouble is not clear, whether the swelling is on the inside and just at the lower part of the joint, it might mean a blood spavin. If it is behind and above the hock, under the tendon, it would be a thoroughpin. If it is as I suppose, a trouble with the joint membrane, it is rather a serious matter and I would advise you to consult one of your local Walla Walla veterinarians, because I think that you will get better satisfaction from their advice after they have seen it than I can give you.

Would like to know how to get rid of warts on heifer's teat that will come fresh in May. Two of the warts are very large; can not tie a thread around them. F. S.

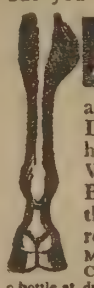
La Center, Wash.

Apply the following prescription after milking, morning and evening, to the warts on the teats: Chloral hydrate, 1 1-2 drams; acetic acid, absolute, 1 1-2 drams; salicylic acid, 1 dram; spirit of ether, 1 dram; collodian, 4 drams.

Many Women Sailors.

There are many women sailors among the Finns and Norwegians.

YOU CAN'T CUT OUT A
Bog Spavin or Thoroughpin
but you can clean them off promptly with



ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.

and you work the horse same time. **Does not blister or remove the hair. $2.00 per bottle, delivered. Will tell you more if you write. Book 4 M free. ABSORBINE, JR.,** the antiseptic liniment for mankind, reduces Varicose Veins, Ruptured Muscles or Ligaments, Enlarged Glands, Wens, Cysts. Allays pain quickly. Price $1 and $2 a bottle at druggists or delivered. Made in the U. S. A. by W. F. YOUNG, P.D.F., 371 Temple St., Springfield, Mass.

With Rig or Saddle Horse

We feel sure there are many of our readers who would like to earn some extra cash during the winter months.

We will pay salary to farmers with rig, saddle horse or automobile.

We will not consider an applicant who does not live on a farm.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good hard licks for good pay. This work isn't easy; but you can do it and earn a good salary during the winter months, without neglecting your farm chores—without being away from home more than a few hours each day.

We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade.

There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

If we get two or more applications from one neighborhood, the first will be given the preference in making our appointment.

If you want a good salary proposition for the rest of the winter, don't wait till tomorrow to write us, but send your application today.

If not interested personally in the above proposition, why not get some neighbor or friend in touch with us at once who you think will appreciate an opportunity to make several hundred dollars during the winter months. You will be doing both him and us a favor.

Address your letter to Publisher The Washington Farmer, Review Building, Spokane, Wash.

Get Rid of Worms!

Many animals, especially hogs, are troubled with worms. When your hogs are unthrifty, you hear a little cough now and then, suspect worms.

Dr. Hess Stock Tonic

Keeps Hogs Healthy **Expels Worms**

So sure am I that Dr. Hess Stock Tonic will keep your hogs healthy and expel the worms, that I have authorized my dealer in your town to supply you with enough Tonic for your hogs and, if it does not do all I claim, just return the empty packages and get your money back.

My Stock Tonic is not a feed, but a true conditioner and tonic, highly concentrated, which contains blood purifiers, laxatives and drugs which are powerful worm expellers. Feed in small quantities, watch your hogs improve.

NEVER PEDDLED. SOLD ONLY BY DEALERS.
28,000 reliable dealers in U. S. handle it. Why pay the peddler twice my price?

25-lb. Pail, $2.25; 100-lb. Sack, $7.00

Smaller packages as low as 65c. Valuable stock book mailed free, if you write for it.

DR. HESS & CLARK, Ashland, Ohio



Dr. Hess Poultry Pan-a-ce-a conditions fowls, makes hens lay and is a great help at moulting time. Valuable for chicks, for pullets starting to lay and for all grown fowls. Costs a penny for 30 fowls per day. 1½ lbs., 25c; 3 lbs., 50c; 7 lbs., $1.00; 25-lb. pail, $3.00. *Guaranteed.*

Dr. Hess Instant Louse Killer A reliable lice killer, very quick acting. For use on poultry and stock. Use by dusting and sprinkling. Destroys bugs on cucumber vines, cabbage worms, slugs on roses. In handy sifting-top cans, 1 lb., 25c; 3 lbs., 60c. *Guaranteed.*

Write Dr. Hess about any sick animal or live stock trouble, enclosing 2c stamp. He will advise you free.

The Motor Car
On the Farm

Care for the Tires in Winter.

Tires can be ruined just as easily in your own garage as when they are rolling merrily along the highways. Along about this time of the year a great many motorists take their cars out of commission and store them away until spring arrives. Letting a car rest on the tires during the winter storage period is the most reckless way of throwing away good money. If you decide to put your car away, it will pay you to take a few simple precautions that will save the cost of a good set of tires.

Firts of all, remove the tires from the wheels and thoroughly wash the outside of the casings with soap and water. This will remove all traces of oil. Then examine both the inside and outside of tires for bruises and injuries. After making what repairs are needed, wrap the tires carefully in a clean cloth—or perferably black paper—and then lay them flat in a cool, dark room. Then, too, the inner tubes should be removed from the casings, carefully cleaned off—then laid flat on a shelf in a dark place. Chemists lay great stress on the importance of keeping light away from tires.

If you decide to leave the tires on the wheels, then by all means, jack up the car enough to take the weight off the tires and leave just enough air in them to keep them tight and in shape.

Following these simple precautions will save you a lot of grief on the road when you start to drive again next spring.

Show Your Number Plate.

The laws of most states are very strict as to the placing of number plates on automobiles where they may readily be seen and read. This is for the protection largely of the scrupulous driver, and every driver or owner of a car should see to it that his number is plainly visible. Of course, if you violate the law and your number is not plainly visible, there is a greater chance that you will not get caught, but if you are a lawabiding citizen keep it in sight and help compel the nonlawabiding citizen to do the same.

Don't Stop Too Suddenly.

When you are running on foot as fast as you can, do you stop suddenly? Not by a jug full. You stop gradually. Do the same with your auto. Remember that the auto has bones and ligaments and muscles in one form or another that may be strained by sudden application of the brake. Bring your car to a stop slowly.

SERVES HOT LUNCH
Sumas School Adopts New Plan.

After considering the matter for some time the school authorities of Sumas, Wash., have adopted the plan of serving a hot lunch at noon to those pupils who are obliged to bring their lunches from home. The meals will be cooked and served by the domestic science department. Those who are able will pay 3 cents per meal, and those who are not able to pay will be served free. Tickets will be given to all pupils so that no one will know whether any child is or is not paying for his meal. As the law does not permit the school board to use funds for this purpose an appeal is made to the friends of the school to donate potatoes, carrots, cabbage, turnips, parsnips, celery, tomatoes, corn and peas.

Cost of Irrigation.

The total cost of operation and maintaining the Sunnyside irrigation project for the fiscal year ended December 1 was $73,465, according to a statement by Project Manager R. K. Tiffany. This is $214 less than the total for 1915 and the canals carried water for an additional plant unit. The Sunnyside canal this year delivered water to 73,000 acres, as against 68,000 for 1915, and the cost for operation and maintenance was practically $1 per acre.

Corn Silage
How Many Tons Raised Per Acre

A. L. Russel of Walla Walla does not believe all the stories he hears about corn silage yields.

"When they begin talking 75 tons to the acre, as I've heard some men from west of the mountains do, I have to reserve my opinion," says Mr. Russel. "We've tried it out down on our place, and planting the corn as thick as it could be planted and worked well, with corn that ran better than 10 feet high and as high as 15, we didn't get a third that much. I should say that 25 tons of corn silage to the acre was a great big yield.

"Of course, there is one thing to consider," continued Mr. Russel, returning again to the yields on Puget sound. "Vegetation over there is more luxuriant in a way—it has more sap in it. But I believe that those big yields, overlooking for a moment their exact tonnage to the acre, are apt to produce a pretty acid ensilage; there is too much moisture and too little real grain in the mixture. I would want to have considerable grain to feed with that kind of roughage."

There are 20 cows in the Russel herd at present, their feed being principally good corn silage and alfalfa hay. Some grain is raised for market.

In answer to the question as to dairy profits, Mr. Russel stated that he believed that at present prices for milk the average farmer could keep cows at a profit. He says that in his part of the state a dairymen's association, formed for the exclusive purpose of securing better milk prices, has proved very successful.

"There is perfect harmony between the association members and the dealers," he explains, "but our joining together has enabled us to induce these retailers to raise the price to us, and so to their customers. They would not have done this without associated effort on our part."

BUYS 70 ACRES
Will Raise Wheat and Potatoes.

Henry Loomis of Ford's prairie has purchased 70 acres of the 140 acres owned by E. Goodrich, at the mouth of Lincoln creek, and will raise wheat and potatoes on the land. This piece of land is one of the choice tracts of that fertile section. Mr. Loomis has 54 acres, mostly in berries, in his home farm. Mr. Loomis is one of the progressive farmers of the county.

Guianan Fishing.

Instead of using nets or the conventional hook and line, the natives of Guiana shoot fish with bow and arrows. The arrow used is designed especially for this purpose and is about five feet in length, with no feathers.

Get All the Cream



YOU cannot expect to get all the profit from your cows unless you have a separator that skims clean. Why don't you make up your mind here and now to buy a **Primrose** or **Lily cream separator?** Then if your checks are not big enough, you will know that the trouble is with the cows, not with the separator.

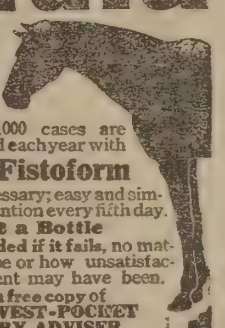
The president of the Iowa Federation of Cow Testing Association says that of all the separators in use in his association, and they are many, the **Primrose** skims closest. It leaves less than one-hundreth of one per cent of the cream in the milk. The **Lily** skims just as close. Neither one wastes any cream. With prices of everything as high as they are now, to waste cream is little short of a crime.

Yes, you can buy separators for less money. You can also pay more. But you cannot buy a closer skimming machine, one that runs easier, or one that will skim clean for a longer time. Do not delay. The longer you put off buying a **Primrose** or **Lily** cream separator, the more you lose. Get one of these machines, and your separator troubles will disappear as if by magic. Drop us a card for catalogues and full information.

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(Incorporated)

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Approximately 10,000 cases are successfully treated each year with
Fleming's Fistoform
No experience necessary; easy and simple; just a little attention every fifth day.
Price $2 a Bottle
Your money refunded if it fails, no matter how old the case or how unsatisfactory other treatment may have been.
Write for a free copy of
FLEMING'S VEST-POCKET VETERINARY ADVISER
which you will value for the information it gives upon diseases of horses and cattle. 192 pages, 67 illustrations, bound in leatherette covers.
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251 Union Stock Yards, Chicago, Ill.

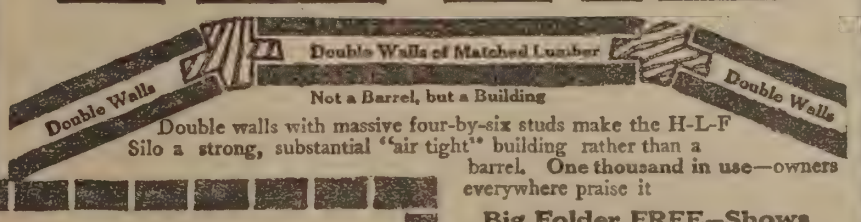
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Here's Your Silo

Double Wall—"Air Tight"
Very Strong—Low in Price



Double walls with massive four-by-six studs make the H-L-F Silo a strong, substantial "air tight" building rather than a barrel. **One thousand in use**—owners everywhere praise it

Hewitt-Lea-Funck Co.
558 **Funck St., Sumner, Wash.**

Gentlemen:—Send me your big folder showing prices, terms, full information about H-L-F Silo and your special FREE ROOF offer.

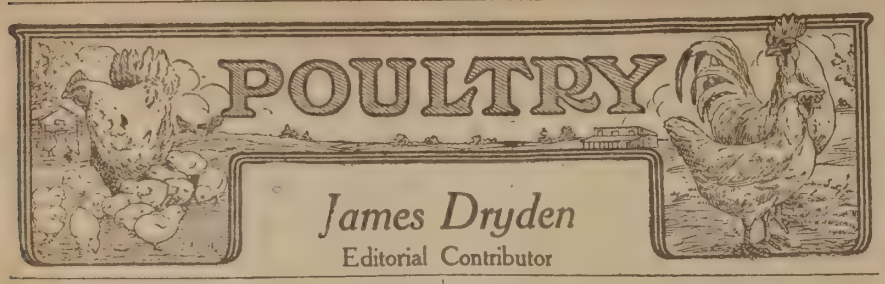
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Town.....
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Big Folder FREE—Shows Freight-Paid Prices

Single silos at carload prices—already starting to assemble cars for early spring delivery. **Silo actually costs you less than the common stave silos—many letters actually prove it positively prevents frozen silage.** Send now for big folder which gives all facts, letters from owners, names of owners near you. FREE ROOF with early orders. Learn now about this wonderful silo—coupon at left brings you the folder.

Hewitt-Lea-Funck Co.
558 **Funck Street, Sumner, Wash**





Idaho Poultry

Bring Profit to Their Owners

By D. R. HUBBARD.

The turkey industry has proven quite profitable to the people of the Kuna country, Idaho. A. W. Nelson sold $165 worth of turkeys, raised from three hen turkeys. Mrs. W. R. Gillen sold $294.23 worth of turkeys, own raising. Mrs. C. W. Green reports $295.44 from 140 eggs set. Mrs. T. W. Whitworth sold $275.75 worth of turkeys from four hens. Mrs. C. P. Langs sold $245 worth from four hens.

Chickens Also pay.

L. S. Randall reports $319 from sale of eggs on consumers' market in 12 months from 125 White Leghorns.

Mrs. H. Achenbach sold $313.73 worth of eggs from 125 Brown Leghorn hens during the same time.

The month of heaviest production was March. The lightest was June. February was second in cash receipts.

Live stock is increasing, sheep, beef cattle and dairy cows.

The country is settling up rapidly, farmers coming here from the middle west.

To Utilize Peat.

Spain is studying its large deposits of peat, with a view of utilizing the material for the production of both gas and electricity.

Loss of Chicks

Often Caused by White Diarrhea

By JAMES DRYDEN.

A large part of the great annual loss in brooder chicks is due to what is now known as bacillary white diarrhea or bacterium pullorum. This germ disease is transmitted from the hen through the egg to the chick. The ovaries of the hen become infected and there is no known cure, either for the infected hen or the chick. There is, however, a method of testing the hens to find out whether they are infected or not, and the test seems to be very accurate. One infected hen in the breeding flock may infect one chick, and that one chick may spread the disease among all the chicks in the brooder. The test can not very well be made by individual poultrymen, as it requires some bacteriological work which can best be done in the laboratory. The test, however, is simple and inexpensive, and it is believed that poultry breeders can well afford to have their flocks tested. If the breeding hens are free from the disease there should be no brooder mortality from it. This, therefore, removes one of the terrors in the rearing of chicks. Those who buy eggs for hatching and day old chicks would do well to buy, if possible, from tested flocks.

To assist the poultry raisers of the state, C. C. Lamb, extension specialist of the poultry department of the Oregon Agricultural college, will make tests of breeding flocks, under certain conditions, during the months of November, December, January and February. Poultrymen wishing to have this work done should write to him at once.

200-Egg Hen and Flock.

The unexpected is happening about as often in the poultry world as in any other world. Less than 10 years ago many poultry writers looked with skepticism upon the 200-egg hen. She was at least a freak and was worthless as a breeder. But since then we have had the 300-egg hen produced by a 200-egg hen, as was the case at the Oregon station. When the first 300-egger was announced she got a cold reception from these same skeptics—there was no such animal. Not many years ago it was published in books that 600 eggs was the limit of production of a hen in a lifetime; she couldn't lay any more. The Oregon station has four hens that have laid more than 1000 eggs and are still in condition to lay more. No one has yet acknowledged openly that a 200-egg flock or strain of hens is a possibility. A pen of Oregons at the Missouri laying contest last year averaged 231.8 eggs and each of the hens laid more than 200. Four other pens, sisters to the Missouri pen, from 10 to 25 in a pen, all averaged over 200 eggs. Pens of 50 and 60 at the Oregon station have averaged better than 220 eggs. If not an actual reality, the 200-egg flock is at least a possibility.

J. D.

Another Laying Contest.

T. E. Quisenberry, formerly director of the Missouri poultry station, has issued the first month's reports (November) of the American egg laying contest, which he is conducting as a private enterprise at Leavenworth, Kan., There as 120 pens entered. The following paragraph occurs in this report, which is worth considering: "Will the poultry breeders of the country never learn that they must hatch their pullets reasonably early if they are to lay high priced, winter eggs? There have been 120 pens entered in the American egg laying contest. The large majority of these birds are undeveloped and will not lay for 30 days or more. If those who are specializing in market eggs expect to make the most of their business their chicks should be hatched early enough so the pullets would begin to lay by November 1, or before. One pullet may not lay as many as another, but if the first lays eggs in winter she will likely be more profitable than the latter."

J. D.

Eggs in Cold Storage.

Reports from 238 cold storages show that their rooms contain 2,103,869 cases of eggs as compared with 3,984,534 cases in 254 storages on November 1. The 193 storages that reported holdings of December 1 of this year and last show a present stock of 1,794,740 cases as compared with 2,737,802 cases last year, a difference of 993,062 cases or 35.6 per cent. The reports of 215 storages show that the holdings decreased 40.6 per cent during November as compared with the decrease of 25.1 per cent during October, shown in our last report. Last year the holdings decreased 20.0 per cent during October and 31.2 per cent during November.

Pig and Poultry Clubs.

The pig clubs and poultry clubs organized among the boys and girls have shown remarkable growth and have contributed largely to the increase in the number of pigs and chickens in some states. The membership of the pig clubs is over 21,000 and that of the poultry clubs over 8500, both having more than doubled during the year.

Feeding Brooder Chicks

Successful Methods on an Oregon Poultry Farm

By JAMES DRYDEN

I have received a little folder on "How We Feed and Brood Baby Chicks" from the Walnut Crest farm, Newberg, Ore., owned by M. C. Wire & Son. Accompanying the circular was a note from Mrs. M. C. Wire, in which it is said: "I am sending you in this my first and only contribution to poultry literature." A good many of us could wish that our last, as well as first, contribution to poultry literature had as much merit. I have visited the Wire poultry farm several times and can vouch for the success of the methods of breeding followed on the farm, and I have understood that Mrs. Wire was responsible for this branch of the work. During the past season some 1400 good pullets were raised on this farm. The room brooder system is used, but the methods of feeding are applicable under different systems.

The following is taken from the little folder:

Nursery Food.

Nursery food is prepared as follows:

Dried bread crumbs, two parts.

Rolled oats, two parts.

Hard boiled egg, one part.

Into this mixture put a little buttermilk, just enough to moisten the crumbs slightly, not enough to wet them. Add a little sand and fine ground bone. The bread may be saved for months, dried, ground and kept in tight pails. The eggs should be cooked just before using, and ground, shell and all, in a grinder. A cheap quality of rolled oats may be obtained.

First day.—When the room is at the proper temperature, 90 degrees, the buttermilk and boards in place, and the birds 48 hours old, they may be put around the stove.

Soon the chicks begin drinking the buttermilk, and this is their first feed. In about an hour papers may be laid around and a little nursery food scattered upon them.

We feed the chicks five times a day.

Second day.—A little chick food should be mixed with the nursery food, also a little scattered in the straw. This should be done every day to teach them to scratch.

Third and fourth days.—Put a little more chick food into the nursery food.

Fifth day.—One feed may be entirely of chick food scattered in the straw.

Sixth day.—Give two feeds of chick food.

Thereafter all but the morning feed may be of chick food. Use the nursery food in the morning as long as your eggs hold out. The longer it is used the better.

Water.

Some fountains of water should be put into the room the second day and always thereafter. While the birds are small care should be taken to take the chill from the drinking water.

How Much to Feed.

Give at one time only as much nursery food as the birds will eat in two or three minutes. Half a thimbleful of chick food for each bird is enough to feed at a meal for the first week. A slight increase should be made from the beginning of the second week. After two weeks gradually substitute corn, cracked fine, cracked wheat and broken oat groats for the chick food.

Dry Mash.

Little troughs three to five feet long should be made. Into these, from the very first, put bran and a little granulated chick charcoal. Gradually add to the bran fine ground meal of oats, barley, wheat or corn or a combination of any two. A very little salt should be put in. The finely granulated bone, which is very important, may be fed in this dry mash. Care should be taken not to increase too rapidly the ground meals in the mash.

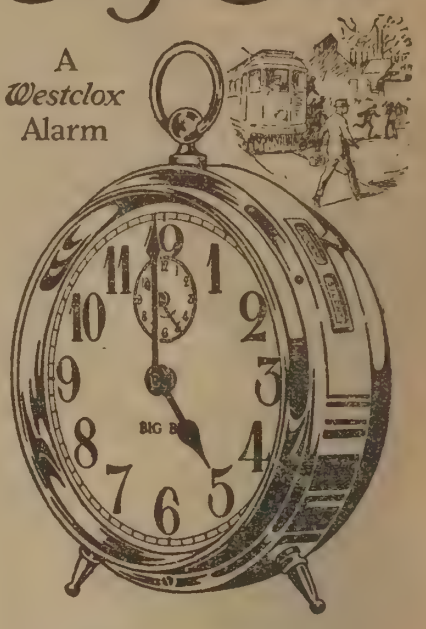
The first day mash consists of bran. The dry mash for the birds on range after six weeks is composed of

Six parts bran.
One part wheat and oats, ground fine.
One part corn meal.
One part soy bean meal, or oil meal.
A little salt.
Charcoal.

The heavier part of the mash may be gradually increased for the first six weeks up to the limit given in the above formula.

Big Ben

A Westclox Alarm



FIVE A. M. for factory men who beat the time clock at the works.

Big Ben gives 'em their breakfast call long before the whistle toots. They used to pound the pillow right up to the last dot—until they learned a better way—as the paymaster soon found out.

Give Big Ben a trial, *yourself;* make *your* roll-over-time pay.

You'll like him face to face. He's seven inches tall, spunky, neighborly—downright good.

At your jeweler's, $2.50 in the United States, $3.50 in Canada. Sent postpaid on receipt of price if your jeweler doesn't stock him.

Western Clock Co.

La Salle, Ill., U. S. A. Makers of *Westclox*

Other Westclox: Baby Ben, Pocket Ben, Bingo, America, Sleep-Meter, Lookout and Ironclad

BIG TREE LUMBER

DIRECT FROM HEADQUARTERS

Big Tree Lumber—Old-growth yellow fir and red cedar cut from trees six feet thick. Send carpenter's list today for freight-paid price.

Hewitt-Lea-Funck, 458 Funck St., Sumner, Wash.

Egg-o-hatch applied to eggs during incubation strengthens the chick and weakens the shell. It supplies free oxygen, absorbs carbon dioxide and makes brittle and porous the anima l matter of the shell. The biggest thing ever offered to poultrymen. 50 test hatches show average of 96 per cent for Egg-o-hatch eggs and 81 per cent for eggs not treated, **right in same machine.** Send 10 cents for sample, for 50 to 100 eggs. Full size package, for 600 eggs, 50 cents postpaid. Booklet free.

GEO. H. LEE CO., 253 Lee Bldg., Omaha, Neb.



PFILE'S 65 VARIETIES farm-raised Land and Water-Fowls. Eggs in season. Incubators. Illus. Catalog and "Grower's Guide," 2c. An honest deal. Write today. HENRY PFILE, Farmer-Poultryman, Box 720 Freeport, Ill.

In answering advertisements don't fail to mention this paper.

WHEAT, ALFALFA

and other grains yield more where a perfect seed bed is prepared. The **Western** pulverizes, packs and mulches—makes a perfect seed bed at one operation. Saves seed, time and horse power. Is especially adapted for breaking crust on winter wheat or other grain or in orchards after irrigation or packing rains. It forms the hardest crust into a granular mulch without hurting the grain, and prevents evaporation.



Western Pulverizer, Packer and Mulcher 3 Machines in 1 made in 8 sizes, 1 and 3 sections, prices $20 and up. We want every farmer to have our free catalog before buying a roller or packer. It proves we can save you money and have far the best machine. Contains full description, price direct to you, letters from many farmers proving its advantages over other makes, and much other valuable information. Send for it today.

WESTERN LAND ROLLER CO., Hastings, Nebr. Box 200

Bees in Yakima Valley

Net Profit of $75,000 From 25,000 Colonies

By D. G. SUTHERLAND

The twenty-seventh annual meeting of the Washington State Beepeepers association met in the commercial club room at North Yakima. About 75 people were in attendance. The annual address was delivered by the president, J. B. Ramage of North Yakima. It was shown that there were 25,000 colonies of bees in the Yakima valley alone, bringing in a net profit of $75,000 per year. It was estimated there were 100,000 colonies in the state. For the last five years the average yield per year for the entire state was 30 pounds per colony.

The following officers were elected for the ensuing year: J. B. Ramage, North Yakima, president; J. B. Espey, Chehalis, vice president; G. W. Bolin, White Swan, secretary; L. H. Hart, North Yakima, treasurer, and W. H. Tucker of Prosser, corresponding secretary. It was voted to buy a membership in the commercial club and William Johnson of North Yakima was named as their representative in the club.

State Association.

Anson S. White in his paper stated that this was one of the first states in the west to organize an association, being in the year 1894. He was one of the pioneer members and Legh R. Freeman, for many years publisher of the Freeman Farmer, was its first secretary. Mrs. Freeman, his wife and present publisher, was present and is still an active member. It was interesting to note the changes in the industry.

From the time the bees had to depend largely on wild flowers for their existence the Yakima valley now has one of the greatest alfalfa and fruit growing districts in the world, making it an ideal place for bee culture.

William Johnson, foreman of the Congdon orchards, spoke on bees in the orchard. He considered them an absolute necessity to the best yield of fruit. He did not believe they were responsible for the spread of blight as was generally supposed. He said bees never gather nectar from the blight. He recommended the delay of the first arsenate spray till the petals of the blossoms had mostly fallen, that gives the bees a chance to pollenize the bloom and the later spray was as good for the trees and no injury would occur to the bees.

G. W. Bolin of White Swan spoke on honey plants, touching the different varieties of bee food available in this state.

Marketing Honey.

An interesting paper was read, written by Frank C. Pellett, inspector of apiaries from Iowa, on the question of marketing. He said the bee men were largely to blame for the high freight rates on honey. It was on account of leaky packages which made the railroad company liable not only for loss of honey but other goods damaged. He cited one instance where a valuable consignment of silks was completely ruined by the leakages of honey, making the railroad company pay not only for the honey but for the silk as well. He believed whenever the railroad company knew honey would be so packed as to relieve them of the danger of damage, then the rate could be reduced. The size of the package must fit the trade. Neatness, attractive package and absolute cleanliness were the big factors.

H. C. Lucas, president of the Yakima Trust bank, North Yakima, gave a talk on bee keeping from a commercial standpoint.

Like Human Family.

Representative Mrs. Wallis Williams of North Yakima spoke on legislation needed. Both she and Representative W. P. Sawyer and Senator D. V. Northland assured the association that if they could get together and frame such a law that would protect them from foul brood they could not see anything in way of the passage of any reasonable and just law. One of the reasons why a woman should keep bees is that she needs something to break the monotony. A woman has the same things to do over and over again, one day after another. She needs something to take her mind off her household duties. If she goes out to hive a swarm of bees her mind is as completely taken off her household duties as if she had taken a trip to Europe. You can learn practical lessons from bees. They remind you of the human family. They are good housekeepers, they have their regular nurses, they tend strictly to business and like the human family the female does the work.

The association voted unanimously asking the county of Yakima to appoint a county agriculturist. The federal government has set aside $15 for the aid of bee culture.

Professor W. S. Thornber assured the association that they should have their share of assistance from the department whenever occasion demanded it. It was voted to establish a bureau of information for the purpose of getting a more uniform system of selling and to keep posted on supply and demand.

Receives High Honor.



Ruel Chandlee, a 15-year-old student at the Ridgefield grammar school, received high honors from T. J. Newbill, state organizer of boys and girls' clubs, as having the best garden of any club member in the state of Washington.

While inspecting young Chandlee's garden late last summer, prior to the Clarke County Industrial School Fair, Professor Newbill and W. E. Dudley, country school superintendent, secured a number of photographs of his garden for the agricultural department at Washington, D. C., and for the State college at Pullman, Wash.

Ruel entered a number of his garden products in the first Clarke County Industrial School fair, which was held at Ridgefield September 15, and as a result captured five prizes.

Fur Is Valuable

Winter Season Is Time to Trap

This is the season when furs are best, and therefore will bring most profit to the trapper or hunter. Not only is this true, but it is the season of the year when there is more time to be given to trapping and hunting, which may, if properly done, be made to pay in both money and sport.

So varied are the natural conditions in the northwest that many fur bearing animals of widely differing classes may be found, from bear to weasel. There are wildcats, lynx, mink, skunks, muskrats, coyotes, bear and others, some one at least in almost any community.

The muskrat is most common, probably, and is in fact a fur bearing animal of value. There are fun and pocket money to more boys in trapping the muskrat than any other one animal in the northwest. And he is easily caught. There are many ways to take him.

One plan recommended is to sink a barrel in the ground just a few inches from the water's edge where muskrats are known to live. Fill the barrel to within about eight inches of the top with water and place pieces of carrots or other like bait on floating shingles in the barrel. Also scatter similar bait about outside to attract the muskrat and lead him to the barrel. Trappers report success by this method. They declare the muskrat will go into the barrel after the bait and find himself unable to climb out.

A more common and less troublesome method is to use the common steel trap. Set it in the shallow water where the rats live. Place the bait on an inconspicuous stick about five inches above the water at the side of the trap. The rat will undertake to get the bait and get onto the trap while doing so.

Care should be taken to skin the animal without cutting the skin. It also should be stretched like a mitten over a board just the size and shape to hold it in its natural shape. The value of fur depends to a great extent on the condition it is in.

Seed Grain

Supply for Sowing Next Spring

In order to insure themselves a supply of good seed grain for sowing next spring, farmers are advised by the United States department of agriculture to bear in mind that the seed crop of 1916 in the spring wheat states of the upper Mississippi valley was badly injured by rust and other diseases. Such grain is not good for seed purposes.

In the states of Washington, Oregon and Idaho the spring wheat crop was large and the grain of excellent quality. The tempting prices for wheat should not induce the farmers to sell what should be kept for seed because no seed varieties adapted to this section can be obtained elsewhere.

The barley crop for the past season in the United States was for the most part of very good quality and no unusual methods of precaution need be taken in seeding the 1917 crop except in parts of the northern Mississippi valley.

Apple-Growing in Brazil.

According to reports there are only eight acres in Brazil planted to apples. The fruit is selling there now at $1 per dozen. The Brazilian government gets busy and has selected eight fruit experts from the Pacific coast to establish the apple industry in that country, offering a salary of $2400 a year with transportation and expenses. O. F. Clawson, late Chelan county Washington fruit inspector, is one of the chosen experts, and accompanied by his wife, will sail from New York in a few weeks for Rio De Janeiro, Brazil.

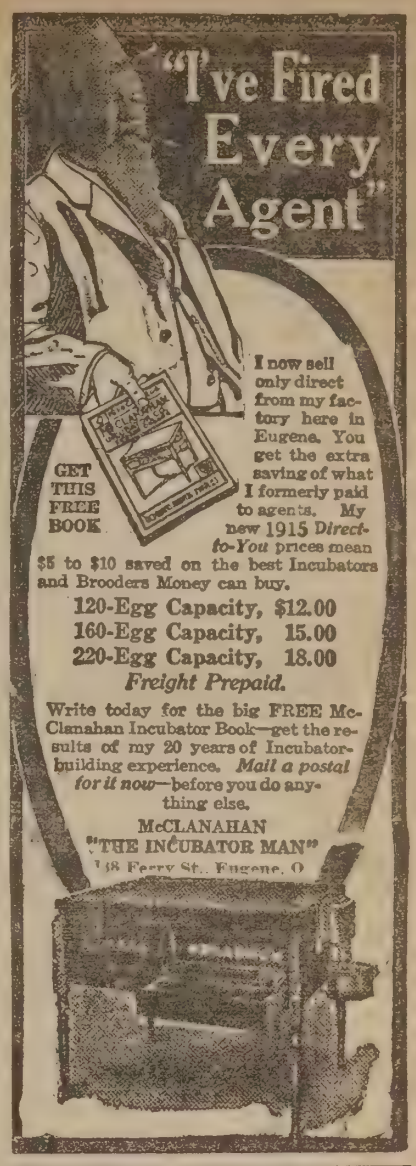
Buy Land for Fair.

The trustees of the Wahkiakum Fair association, at a meeting held at Skamokawa, decided to purchase an acre of land from Alex. Moe for $300, to claim the same at once and begin the erection of a two-story building 30x80 feet, with 16 feet studding. The lower story will be used for the vegetable exhibit and the upper room for the school exhibit and fine arts.

The officers elected are: President, H. L. Wiester; vice president, Chris Sorenson; secretary, M. S. Hougen; treasurer, M. Gorman, reelected.

Coming Events.

January 8-9—Idaho Honey Producers' association, Twin Falls.
January 10-13—Interstate Poultry club, Hillyard, Wash.
January 8-17—Idaho State Seed Growers' association, Pocatello.
January 8-17—Idaho State Dairy association, Pocatello.
January 8-17—Idaho State Swine Breeders' association, Pocatello.
January 8-17—Idaho State Live Stock association, Pocatello.
January 17—Idaho State Cattle and Horse Breeders' association, Boise.
January 18-20—Madison County Poultry and Pet Stock Show, Rexburg, Idaho.
January 22-27—Annual farmers' week, University of Idaho, Moscow.
January 30-February 1—Idaho State Horticultural Association, Boise.



The Life of Chilean Nitrate Deposits

A. D. 1917

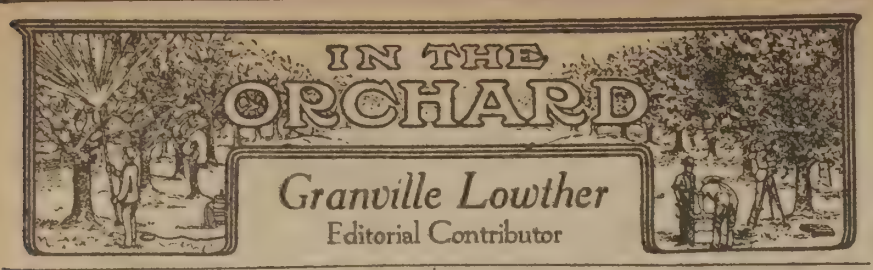
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Better Families

More Desirable Than Better Fruit

BY GRANVILLE LOWTHER.

We are not wrong in our efforts to grow better fruit, but we are wrong if we think the growing of better fruit is the chief end to be desired by the orchardist. It is not fruit, it is life for which we are struggling. It is not better crops, better poultry, hogs, cows or horses, but human life that we are here to bring to perfection. Of course, the word "perfection" is a relative term, but I am using it in the sense in which the farmer uses it in relation to his products. Some of us learned an old catechism which taught that the chief end of man is to fear God and keep his commandments. This may be true in so far as it concerns a means to an end, but it is not the end within itself—all labor and study and struggle and acquirements and religions are helpful as they aid us to reach the chief end of life, which is the development of character or of life itself. The ends for which all civilization exist is better life—more intelligent, greater, truer, better adapted to grapple with the conditions of the present—with unbounded ambitions and hopes for the future.

The president of the Washington state university is right in the contention with the football crew, that character is the aim of college and university life. This is just as true of farm life, mercantile life, professional life or any other honest occupation as it is of colleges and universities.

Better poultry, better hogs, better sheep, cows, horses and crops, larger farms and a larger business are so many contributions that should lead to better living. If they do not, we have missed the mark. Better living in the truest sense means better families and ultimately better men and women.

What Is Better Living?

I do not mean by better living that there is to be more of the frivolities of life, more card parties, dances and fashionable dinners. Whatever of amusement, recreation and pleasure these gatherings may furnish, they are not of much value as developers of character. I mean better houses, better conveniences about the house; better books, better pictures on the wall, better furniture, better music, better means of travel, better clothes, better country schools, better country churches, with a higher tyye of ministers in their pulpits; better social conditions among farmers and their families—all of which will result in better environments for the bringing up of children.

No college or university equals in its influence of three to six years the influences of the home for the rest of life. No Sunday school teacher can do for the child in one hour on Sunday what the mother can do in a week. Of course, we need better teachers, but more than all, we need better fathers and mothers. We have given considerable attention to the improvement of conditions in our penitentiaries, charitable and penal institutions. But better than this is to have better conditions in the homes, which will tend to make these institutions less necessary.

Is life a struggle to grow more fruit? To make more money? To buy more land on which to grow more fruit, to make more money? To buy more land? To grow more fruit? To make more money to buy more land? If, then, we have spent our lives toiling, saving and slaving, depriving ourselves and our families of the comforts they have earned, we die and leave it all, how much are we ahead?

If there is a future life it is probably conditional—not on what we leave behind us, but on what we take with us. Now what do we take—except our characters, ourselves? If we take a life shriveled, stunted and dwarfed we can not enjoy what we would if we were educated, disciplined, developed, and able to appreciate the best things. How can one who has not learned to enjoy the best things in this life enjoy better things in the future life?

A man said to me some time since: "I know I am making a slave of myself in order to enlarge my business, but some day I am going to stop and take it easy, and enjoy life." Enjoy what? Enjoy literature—he is losing his taste for it every day by not giving himself time to read. Enjoy music? He has never developed a love for any kind of music except ragtime. Enjoy society? His manners are so uncouth and his etiquette so bad that his friends are ashamed of him. Enjoy art? He would not know a production of the old masters from a chromo. Enjoy travel? He will have lost all his interest in things not related to the business to which he has given his life. Enjoy rest? Observe the unrest of the old men who have left their farms and moved to town to spend their remaining years. I would not waste money nor spend it unwisely, but money invested in making better homes and better families is invested in the highest things.

There are many good and bad institutions in this world depending largely on how we use them; for they are all designed for our good; but the home more nearly touches the extremes of happiness and misery, which we generally call heaven and hell, than any institution on earth.

A Million-Dollar Waste

"Revive some of our old enthusiasm," is the advice of a Cashmere orchardist, who believes the fruitgrower is losing his grip, and that the industry is suffering heavy losses as a consequence.

This is the fourth article summarizing the addresses and discussions at the apple conference held in connection with the ninth annual apple show in Spokane.

How to save a million dollars to the fruit industry each year in the northwest was the subject treated by J. F. Sprague, an orchardist of Cashmere, Wash. He declared that through careless methods in caring for trees and the fruit, both before and after picking, waste had increased from not more than 5 per cent a few years ago to 10 or 15 per cent now, running to as high as 25 per cent in individual orchards.

While his treatment of the subject was primarily for the benefit of the commercial orchardist, the remedies he offered apply as readily to the home orchard, and in the latter the waste is believed by many to be even greater proportionately than in the commercial orchards.

"Let's begin at the beginning," he said. "Revive some of our old enthusiasm by more attention to our apples and less to our automobiles, get a fresh grip on our courage and we can lessen this waste."

His paper on the subject in part follows:

"Elimination of waste must commence in the spring and be kept up during your growing season. The principal causes for rejection of our fruit from the extra fancy grade are as follows: Worms, scale, scab and physical injuries caused by careless handling during the growing and harvesting period.

Spray Systematically.

"There is only one way to eliminate worms, scale, scab and other diseases, and that is by careful and frequent spraying. In the Wenatchee valley in the last six years the character of the attention given to the growing crop has deteriorated with the resulting effect that our percentage of culls or waste fruit has increased several hundred per cent. In 1910 the crop of the whole section might have averaged two to three per cent culls. Today from 10 to 15 per cent would be a fair average.

"Another cause for our many defects is physical injury. Increasing acreage and decreasing prices has meant an undue hurry in the picking and unnecessary violence in the handling of our whole product. In 1910 a grower would consider that if the laborer picked from 50 to 80 boxes a day he was doing a good day's work. Today people expect 80 to 100 boxes per day and 125 to 175 have been picked. The result of too much haste in picking means bruised fruit, stem punctures, broken skins, etc., all of which are defects that increase our waste and decrease our profits.

Pruning and Propping—"These two necessary procedures occur at widely different periods of the year, but they bear a close relationship one to the other. Neglected pruning or too light pruning means willowy trees, unable to carry a proper load." This means increased propping and every prop you put in an orchard means bruised and scarred fruit. By this I do not mean to say that propping should not be done, but I do think that a tree can be pruned so as to carry a fair load and that the result would mean less propping and that the tree would produce crops running into a higher percentage of high grade fruit.

Thinning—"The rancher's heart is very weak during the thinning season. He can not make up his mind to pull off those little, green promises of wealth to come. Light and inefficient thinning is responsible for limb rubs, bruised and poorly sprayed fruit. Two apples on one spur invariably mean an imperfect coating of spray to both apples, and one more little codling moth comes around as he will come and there is no safer spot for him to take than where the two apples touch.

"I do not mean to say that all waste can be eliminated by careful orchard practice, but I feel sure that the larger percentage of defects that cause waste occur during the growing period and that in all cases, prevention rather than cure is what we are looking for.

"We now come to physical injuries: One cause is sun scald. I have no documentary evidence to go by, but I have seldom seen a tree suffer from sun scald that was not too heavily laden. A load of fruit heavier than the wood can bear, pulls down the branch and exposes the fruit, which has no protection from the leaves, consequently sun scald. The cure is pruning, thinning and propping early, center propping preferred. Sun scald is an enormous injury in some sections, particularly to Spitzenburgs and Jonathans.

Careful Picking.

"No crew of pickers should be turned loose in an orchard without a good foreman, owner preferred, to watch and correct their mistakes. A waste that can certainly be corrected is caused by rough handling and careless or malicious picking. Where possible, picking should be done with gloves. Finger bruises, nail marks, deliberate or accidental, will in this way be eliminated.

"The only damage the fruit can receive during the haul from orchard to packing shed is from bruise or stem punctures. To eliminate these two causes in addition to careful handling get good springs on your wagons and have good roads. Good roads are of prime importance, and my advice to the orchardist who lives in a community that has not enough money to spare to make roads is to go out and do it yourself. The money and time is put in on the public road, but the benefit comes direct to your product.

"When I first entered into the apple game we hauled 75 boxes per load, two trips a day. Now, with practically the same equipment, we haul 140 boxes per trip, three and sometimes four trips a day.

Need Byproducts Plant.

"I am willing to admit that with the utmost care there will still be damaged fruit. Wind storms and hail storms occur; worms can not be altogether eradicated. Misshapen and poorly colored, undersized fruit will still be present, and the only way to tackle this situation is by the erection of a central byproducts plant supported by a whole community, irrespective of what their other affiliations may be. The railroads of the country by granting nominal assembling rates to a central point can make this profitable. They can do this with an easy conscience, as the manufactured product, whatever it may be, will increase their long-haul tonnage. Given this outlet, there will be no necessity of throwing away bruised or wormy apples nor to store at a loss overripe or undersized fruit that only becomes more and more unsaleable as time goes on. Also the temptation, which is at this time very evident, to lower the standard of our grades can be overcome. Evaporated apples, vinegar, cider and concentrated apple juice offer a wide field yet to be developed, and I believe a profitable future for the developer. To my mind it is not the waste now existing that is so appalling. The apathy and indifference displayed toward this condition are more appalling by far."

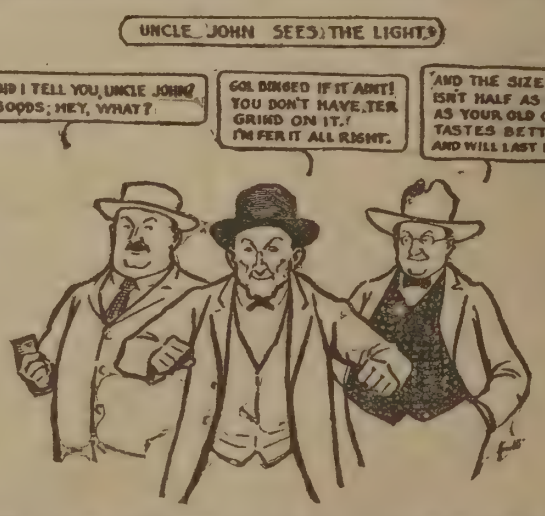
More School Grounds in Whitman.

Over half a block has just been added to the grade school grounds in Garfield, Whitman county, at an expense of $4000. Three residences upon the land will be removed and as a further enlargement of the school plot the city has taken the preliminary steps to vacate the street between the present school site and the newly acquired property. This will enlarge the school property practically a block.

Puyallup Pig Club.

The Puyallup Commercial club in western Washington will aid in organizing pig clubs for the boys and girls in the valley.


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Washington State Lagging Behind

Few Realize Importance of Sane and Progressive Irrigation Code

By GRANVILLE LOWTHER

There are few who realize the importance of a sane, equitable and progressive irrigation code in its relations to the wealth and development of the state of Washington. The legislatures of the states of Idaho, Oregon, Montana and Wyoming have so modified the old laws under which water was formerly appropriated as to meet the modern conditions of irrigation and the reclamation and settlement of their arid lands, while Washington still holds the old laws inequitable, antiquated and unadapted to the new conditions of western development.

Riparian Rights.

One impediment is the old riparian rights law, enacted in England several centuries ago and incorporated into the statutes of the United States in its early history. In this law it is provided that a person who owns land "bordering on a stream of water has a right to have the stream flow naturally and without changing it in quantity or quality or otherwise. Such owner is the proprietor of the bed of the river which adjoins his land and has a right to the use of the water flowing in the stream."

This statute was well adapted to the conditions that prevailed in England at the time of its adoption by that country. It may have been well adapted to the conditions that prevailed in this country at the time it was transferred to our statute books. These periods were before the days of large industrial or commercial interests. At that time business was transacted in a small way and mostly by individuals. It was before the days of large corporate interests; before the building of railroads, telegraph lines, transcontinental traffic, interstate commerce, large manufacturing interests, electric power or the irrigation of vast areas of arid lands. It is just as reasonable to operate the farm machinery of that early period in competition with modern machinery as to try to adapt these old laws to modern conditions. It is the ox-cart and neap hook civilization instead of the steam and electric. Yet the Washington legislature, in order to preserve rights that are based upon tradition rather than equity, has held up any progressive legislation on this question.

How Rights Were Obtained.

A few men with imagination and a keen scent for speculative values saw that the future development in this country would depend upon irrigation and electric power generated in the streams. They therefore "pussyfooted" it around in the mountains, canyons, gorges and rocky cliffs and purchased at a mere nominal sum lands adjoining the streams where it was easy to build dams, reservoirs and power plants. They also filed on the water flowing in the streams so that they became possessors for merely the filing fees, which in this state would not be more than $1 for each filing, of waters many times more valuable than the lands. In order to be sure that they got all the water they filed on more than the streams would carry. Professor Waller says that "If all the water on which filings have been made in the Yakima valley could be delivered it would cover the whole state of Washington 600 feet deep. Therefore the state gave them the water, without which the land of the irrigated or irrigable sections are of no value. I can buy lands not irrigated for $1 per acre. After development under irrigation I must pay from $100 to $200 per acre. The water is the thing of value and that was given away.

Holding Water Out of Use.

Not all riparian owners are alike. Some are using the water for beneficial purposes; against these there is no complaint. Others are preparing to use it in the near future and there is no disposition to interfere with their plans. Some of the power companies are using the water and others are preparing to do so. The complaint is against those who hold the water out of use, and hold up the development of the country until such time as the necessities of the people have been so great that they will pay the highest prices for the use of water the land with the water will bear.

The Oregon Code.

Oregon enacted a code similar to that we desire. It was attacked by the power companies and riparian interests and carried to the supreme court of the United States. Justice Brewer rendered the decision for that body as follows:

"A state may change its common law rule to permit the appropriation of flowing waters as it may deem fit." 174 U. S. 702-702.

The same judge said in 206 U. S. 94: "The state may determine for itself whether the common rule in respect to riparian rights or that doctrine which obtains in the arid region of the west, of the appropriation of waters for purposes of irrigation, shall control."

There is only one exception to this, and that is in case of navigable streams where the sovereign power is vested in the United States government instead of the state.

Wealth of Irrigated Lands.

President Benson in his address at the irrigation institute that met at North Yakima November 14 and 15, said: "The capitalized property in the state of Washington created by irrigation approximates $500,000,000." It is conceded that this is only a small per cent of the land of this state that could under a proper system and proper legislation be irrigated. Washington could be made productive and wealthy beyond dreams of fancy. It will be so; but the question is whether the toilers, the real farmers and homemakers shall pay most of that wealth into the hands of persons who have done little or nothing to create it, and have simply gotten possession of the natural sources of wealth to enrich themselves at the expense of the masses; or whether it shall go to those who perform the labor and make the sacrifices to build a country.

What Shall We Do About It?

It seems to me that every one who is interested in the progressive development of this country; who desires to see its resources utilized as rapidly as the natural currents of immigration westward will appropriate them; who would like to see the state of Washington rank with our sister states in making easy terms for settlers and homebuilders, should interview his representative in the next legislature, and see if he can not exercise an influence that will overcome the influence of those opposed and obtain the needed legislation.

Factory Planned for North Yakima



The above is a picture of the sugar beet factory at West Jordan, Utah, 15 miles west of Salt Lake.

The North Yakima plant is to be a reproduction of this one. The capacity will be 600 tons of beets per day and will cost $1,000,000. In addition there will be erected a pulp drier to cost an additional $50,000.

Public Meetings

Learning How to Conduct Them

To the Editor of the Washington Farmer: It has often occurred to me that many of our farm boys, good, bright fellows, that can direct the work on a large farm have a very limited knowledge or none at all in the proper conducting or managing of a public gathering. We are making an effort in our vicinity to partially overcome this by keeping up a regular old time literary society. It is a source of genuine pleasure and also of great benefit to a community. There may be a gathering of 20 of the representative farmers meet and out of that 20 there may be two or three that can preside at the meeting with a semblance of parliamentary knowledge, the balance would make a mess of it. Such should not be the case. It is true we can't all be leaders, but more of us can get a smattering at least of rules of order. Our legislature has a lamentable scarcity of farmers, but whose fault is it? The very backbone of our nation comes from the agricultural districts, our brightest, strongest statesmen are invariably farm boys, who at one time took part in some country literary. We could urge more farm boys and girls, too, to get busy and form a literary in your district and see how much you may improve during the winter. Try it and you will never be sorry. A. O. LEE.

Othello, Wash.

Grange Extension School.

Baw Faw grange's first farm extension school in Chehalis county, Washington, has been reported to have been a big success. The attendance reached 250. It was held during a farm school at Chehalis, the instructors being carried between Chehalis and the grange hall every day in automobiles of President D. W. Noble and Cashier Arthur S. Cory of the Chehalis National bank. Glen O. Roundtree, master of the Baw Faw grange, J. A. Keener, W. G. Foster and J. A. Roundtree are entitled to much credit for the school's success, they having handled the arrangements.

Big Farm Brings $84,150.

What is said to have been the largest real estate deal made in Garfield county this season was closed when the J. M. Williams ranch of 935 acres on Pataha flat, Pomeroy, was sold to John Keatts for $84,150, or $90 an acre.



Edison Electric Light In Your Home

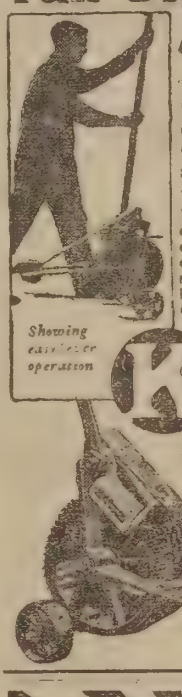
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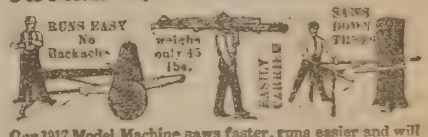
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Spirit of Cooperation Grips Dairymen

McInnes of Dungeness Tells Washington Association How Milk Producers Fought and Won

By PAUL E. TRIEM

Among the outstanding features of the annual meeting of the Washington State Dairymen's association, held at Auburn, December 28 and 29, were the following:

The amalgamation of the young and virile Northwestern Dairymen's association with the older Washington State Dairymen's association.

Passage of a resolution favoring trade reprisal against those cities, notably Seattle and Tacoma, where the producer has not been given just consideration. The recently organized boycotts against farm products was the direct incentive to this action.

Passage of a resolution demanding legislation forbidding the use of anything but pure, whole milk in the manufacture of condensed milk, and also providing for the designation on the label of the exact contents of the can, and the plan of manufacture.

Fred J. Mess of Orillia was reelected to the presidency.

Mrs. Ada D. Miller, Seattle, reelected secretary.

W. H. Tierney was appointed state organizer.

D. McInnes of Dungeness was one of the outstanding figures at the annual meeting of the Washington State Dairy association. He spoke several times and on each occasion he gripped his audience as only a strong personality, fired by genuine enthusiasm and faith, can do. In introducing the resolution passed by the Clallam association and referred by them to the state organization (this resolution was in the nature of reprisal against those cities which have used the boycott against producers), Mr. McInnes said:

"If you touch the pocket book of the city business man you will get action—and not till then. Expect no sympathy from city people. You will get nothing from them—absolutely nothing—until you are in a position to demand it. If the dairymen of this state, with their three or four thousand members, can touch the pocket book of the business men in Seattle and Tacoma, they will win!"

Mr. McInnes told the association something of the results attained by organized effort among dairymen in Illinois. At the beginning of this movement the combined pay of the farmer and his family was less than 5 cents an hour. A milk producers' association was formed, a milk strike initiated and within 10 days the city dealers had had enough. Incidentally, the producers had been wise enough to locate all the houses containing babies or invalids, and had insured to all of these an abundant supply of pure milk.

Organization along similar lines followed in New York, and the strike there was successful within one week. Following up these first victories in Illinois and New York the producers are at this time beginning to build their own creameries, condensaries and cheese factories.

"If farmers can't raise money on their assets for these purposes, I should like to know who under the heaven can do it," Mr. McInnes commented. "A great many people say that the farmer can't do his own business, but I want to tell you, gentlemen, that he can do it, and that all he has got to do is to get a hustle on."

Importance of Dairying.

Between 100 and 150 delegates and visiting dairymen attended the first day's session of the annual meeting, held in the high school building at Auburn. W. H. Paulhamus, who delivered one of the significant addresses, commented upon this by saying that there should be just 10 times as many in attendance, when the importance of dairying to the northwest is considered.

"The trouble with dairymen has been their indifference to their own interests," Mr. Paulhamus declared.

He went on to point out the general tendency of the policy followed by the condensors to eliminate competition, putting the milk producer completely in their hands. In the matter of financial reform, the speaker pointed out the possibility of saving by buying hay in large quantities at the season when it could be obtained most reasonably, and then storing it in warehouses till needed. In reply to a question concerning the method of financing this rather imposing undertaking, Mr. Paulhamus remined his hearers that upon their warehouse receipts for the hay their bankers would be glad to advance them money. In this way the hay would again become "liquid capital" until needed.

Feeding Dairy cattle.

Professor A. B. Nystrom of Washington State college went into the practical science of feeding dairy cattle.

"Years ago, before much study was given to the composition and digestibility of our feeds," Professor Nystrom explained, "It was thought that no matter what kind of hay or grain the cow consumed she would be able to manufacture milk economically from it. Today, however, we know that different combinations of feeds give different results."

This fact and the need of study implied accounted, in part at least, the speaker thought, for the failure to make a profit on dairying complained of over so wide an area. "The fact that a cow eats freely of the feeds she has been given is no proof that it is what she needs. Perhaps she is craving one element, only small quantities of which are found in the foodstuffs before her."

Professor Nystrom spoke highly of the value of ensilage, and pointed out the relative advantage of sugar beets, with their percentage of digestible carbohydrates, over other roots, all of which he ranked high in feeding value. He concluded by advising his hearers not to attempt highly technical problems in feeding, but to study the principles of food values and apply these principles and common sense in feeding their cows.



Dr. H. T. Graves.

D. Griffiths of Auburn presented the reports of the resolutions committee Friday morning. These resolutions, all of which were adopted, expressed the sympathy of the association with the family of the late D. S. Troy in their bereavement.

A request by the state Butter Makers' association that the meetings of the two associations be held at the same time and in the same place hereafter, to facilitate cooperative action in the various matters affecting both industries, was acted favorably upon.

State College Indorsed.

The work of the Washington State college was indorsed and protest was expressed against any attempt to limit the present scope of this work.

The value of the work at the western Washington experiment station at Puyallup was also recognized. The association recommends to the legislature that a dairying building be erected on the state college campus for the furtherance of education along industrial lines and as an aid to the business in Washington. It urges also that the work of the college be enlarged rather than narrowed.

A slight addition to the present by-laws was made to make possible the merging of the two dairy associations previously referred to.

Bovine Tuberculosis.

Dr. H. T. Graves of the state department of agriculture told the association about the work of his department, particularly as it touched upon the investigation and suppression of bovine tuberculosis. Emphasizing the importance of this problem, at any rate as viewed by his department, Dr. Graves pointed out that "If the average usefulness of one cow extends through only three lactation periods, because of the ravages within her system of tuberculosis, the burden of her lost productivity falls upon every cow and every cow owner in the business."

"The milk consuming public demands, and will continue to demand, milk free from the taint of this disease," declared the speaker. "And in this connection our department recognizes the unmistakable fact that pure milk can not be sold at the price at which dirty or unsanitary milk is sold, and that the commonwealth must come to the assistance of the producer."

After describing the early history of the present methods of detecting tuberculosis, due largely to the investigations of Dr. Koch, Dr. Graves described the typical symptoms of the disease in dairy animals. Among the more striking of these are general unthriftiness, large glands, lumps in the udder and cough. He added that all of these symptoms were sometimes associated with other ailments, and that the only reliable test was that in which tuberculin was employed. This means of diagnosis, the speaker said, had been found 98 per cent accurate by the federal government. This statement came up for farther consideration later in the day.

Dr. Graves concluded by recommendign various sanitary measures in connection with the housing and care of cows; among these were the use of concrete for floors, walls free from unnecessary projection, and smoothly finished; ample air space and ventilation; clean food and feeding methods; plenty of sunlight and good drainage.

McInnes Fires a Shot.

Mr. McInnes' principal address was one in rebuttal of that delivered by Dr. Graves. His opening volley was a telling one.

"If you gentlemen seated in this room were not farmers," said Mr. McInnes, "it would be safe to predict that if the tuberculin test were given you, 80 per cent of you would be reactors. As it is, in spite of your open air lives, probably 40 per cent of you would react. And you don't need to worry about yourselves either—as long as you eat your three meals with enjoyment and sleep fairly well, you needn't think about these things."

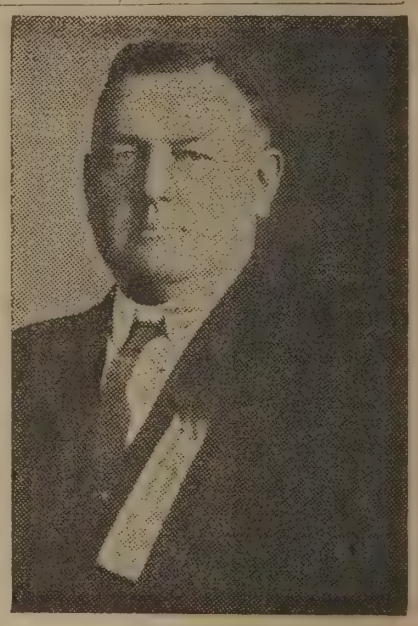
The speaker declared that 80 per cent of the royal guard in the Austrian army had been reactors. "Yet these men were picked for their fine physiques. And they were not sick—any more than a reacting cow is sick."

The findings of the Illinois legislative committee were quoted freely by the dairyman from Dungeness. "That committee made the most thorough investigation ever made in this country, or in any other country," he affirmed, "and they rendered a report that the tuberculin test was not only not needed, but that if continued it would wipe out the dairy herds and industry of Illinois."

While it is only fair to Dr. Graves to explain that he was not present when this address was delivered, it is doubtful if any speaker in the country could have done much to modify the enthusiasm of those who applauded Mr. McInnes. Even after proper allowance is made for the effect of the personality of a masterful speaker, it would seem that the producing dairymen of the state of Washington are not really convinced of the value of the tuberculin test.

Organizing Dairymen.

W. H. Tierney, whose strong resemblance in the general cast of his features to President Wilson was commented upon by many of the audience, told the association something about the work of organizing the Northwest Dairymen's association. The real seed of this organization was sowed by the condensaries themselves, when they offered the farmers in Skagit county a premium on Holstein milk. Afterwards this premium was discontinued, and the milk producers decided to organize. Seven hundred men paid in their annual dues and signed an agreement, backed by a forfeit of $10 per cow, to sell only through the organization. Forty thousand dollars was subscribed for a condensary—and the condensary which had been buying, re-



Fred J. Mess.

established the premium. More than that they raised the price of milk from time to time. And as the condensary kept raising the price of milk the milk producers kept on organizing, till Skagit, Snohomish and Whatcom counties were solidly knit together.

Two points of great significance in relation to this work of organizaing were brought out by Mr. Tierney: First, it is useless to try to get dairymen to attend meetings. They won't even come to picnics. The second fact is that when milk prices are tending upward, the enthusiasm of association members for the machine which has brought them financial recognittion tends to grow cooler. But in spite of these disintegrative forces Mr. Tierney predicted that no great difficulty would be encountered in organizing the 15 counties of Washington and Oregon which are really fitted for dairying.

Richards Buys Farm.

What is known as the Rogers farm on Butler creek has been purchased by Thomas Richards and sons of Stanfield, Ore. There are 480 acres of land in this farm and the consideration paid was $32,000.

Of the 480 acres there are 230 acres of alfalfa land and the rest is bottom land that can be irrigated when there is a surplus of water and which will grow good barley without irrigation.

Farmers' School

Well Known Educators Interested

Professor W. H. Olin, whose enthusiasm in the cause of better farming made him a well-known figure in the Pacific northwest a few years ago, is now connected, as professor of irrigation, with the American Farmers' school at Minneapolis, devoted to teaching farming by mail.

Professor Olin has had varied experience; born and brought up on farms in California, northern Ohio and eastern Kansas, he became a public school teacher, and later professor in various agricultural colleges and was director of agricultural extension work at the University of Idaho in 1911.

The interest in farm education is shown by the large number of well-known educators who are included in the faculty of this farm correspondence school. Such men as Professor H. H. Kildee of Iowa, Professor Thomas B. Cooper of North Dakota, Dr. John A. Widstoe of Utah, Professor A. N. Ten Eyck of Kansas and many others are identified with the school.

YAKIMA CROPS

Big Increase Over Last Year.

The total crop production for the Yakima valley for the last year is $5,000,000 greater than the total for 1915, according to figures compiled from the most authentic sources. In round numbers the total for the last year is $14,600,000. The greatest increase came in the returns from apples and potatoes, but increased prices all along the line have brought more money from almost every source. The greatest gain is in potatoes. Here both the yield and the price are greater than last year, the price being practically double that of last season. The crop this year was 37,500 tons and the average price $25 a ton, bringing the total on this product alone to nearly $1,000,000.

SUNNYSIDE PROJECT

Water for 5000 Acres More Land.

The total cost of operation and maintenance on the Sunnyside project in the Yakima valley is $73,465 for the fiscal year ending December 31, according to figures compiled for a report by Project Manager R. K. Tiffany. This is $214 less than the total for 1915 and the canals have carried water for 5000 acres more, the increase representing the amount of land under the Outlook pumping plant. The Sunnyside canal carried water this year for distribution to 73,000 acres and the cost for operation and maintenance is practically $1 per acre for the land served.

TICHACEK RANCH

Moses Lake's Pioneer Homestead.

The purchase of the well-known Tichacek ranch near Neppel, Grant county, by Henry M. White, United States commissioner of immigration at the port of Seattle, and John H. Sargent, first assistant of the immigration department in that city, recalls the fact that this is the pioneer homestead of Moses lake. Mr. Tichacek purchased the place in 1906 of Mr. Lewis, the original homestead entryman. The ranch is highly improved under irrigation. There are 30 acres of old orchard, 20 acres of 3-year-old orchard and 25 acres in alfalfa.

NORMAL SCHOOL

Ellensburg Institution, $280,000.

President G. H. Black and the trustees of the state normal school at Ellensburg want $280,000 from the legislature for new land, buildings and repairs. The aim of President Black and the trustees is to have all the buildings and equipment standardized and put on the same basis for all three normal schools. They only normal in this state which has a modern plant is the school at Cheney.

FARM LOAN BOARD

Will Name Salaried Officials.

The national farm loan board has informed Representative Dill that soon four salaried officials of the Spokane Farm Land bank will be named, a president at $6000, a registrar at $4000 and secretary-treasurer at $3500 each. It is planned to select one of these officials each from Oregon, Washington, Idaho and Montana, the states embraced in the northwest district.

Man Kills 906 Rabbits.

The jack rabbit bounty law recently enacted by the initiative in Crook county, Oregon, is getting results with a vengeance as was indicated one day last week when Oscar Cruse, a homesteader of near Brothers, this vicinity, came to Prineville with the scalps of 906 jack rabbits, which he had killed within the past week. He received $45.30 bounty from County Clerk Warren Brown.

Wheat and Vetch.

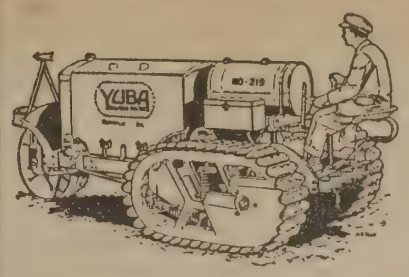
R. L. Schroeder of Burlington is one of the successful farmers of Skagit county, who has changed the common combination of oats and vetch to wheat and vetch. He says that he finds the latter combination much more satisfactory because the wheat matures at the same time as the vetch. He urges early spring sowing.

Potato Digging Crew



To the Editor of The Washington Farmer: This is a picture of my spud crew of last fall. They are Yakima Indians. I couldn't get them to face the camera, so I took a cigar box partly filled with silver to pay them, as I am through digging. I told them to see if there was enough "muck-er-muck," or money, to pay them off. Even at that one threw herself backward on the pit and the other quickly turned. I am sitting on one knee, with the cigar box in my right hand and my left on my left knee, facing the Indians.

Outlook, Wash. W. F. NASS.



Price Advance

January 15

1917

THE rising cost of material used in the construction of the Yuba Ball Tread Tractors has reached such a point that we are no longer able to maintain the prices heretofore charged.

It has been our hope that the increased output, the utilizing of improved mechanical devices in the manufacturing, the introduction of greater efficiency, the standardizing of factory practice, would enable us to continue supplying the tractors at the present prices.

But recent sharp increases in the price of steel necessitate an advance of 5% to 6% on each model.

All orders received before January 15, 1917, will be accepted at the present prices

The Yuba Construction Company
433 California Street, San Francisco
Factory at Marysville, California
Models 12-20 and 20-35

The Yuba Construction Company
433 California Street
Department C304
San Francisco, California

Gentlemen:—I have been thinking of buying a Tractor some time—possibly next year—but may decide to buy before the advance.

Please send me your Catalogue. I have_____acres. Yours truly,

_____

_____

LILLY'S SEEDS

Better Seeds

—because every precaution is taken by us to give you the best. Plant only the best—cheap seed is poor economy.

BEST FOR THE WEST

Sold by dealers everywhere. Look for the LILLY'S trade mark on the bag and the package if you want Better Seeds.

Write LILLY'S, Seattle, for 1917 Annual.

160 ACRE FARMS IN WESTERN CANADA FREE

Canadian Farmers Profit From Wheat

The war's devastation of European crops has caused an unusual demand for grain from the American Continent. The people of the world must be fed and wheat near $2 a bushel offers great profits to the farmer. Canada's invitation is therefore especially attractive. She wants settlers to make money and happy, prosperous homes for themselves by helping her raise immense wheat crops.

You can get a Homestead of 160 acres FREE and other lands at remarkably low prices. During many years Canadian wheat fields have averaged 20 bushels to the acre—many yields as high as 45 bushels to acre. Wonderful crops also of **Oats, Barley and Flax.**

Mixed farming as profitable an industry as grain raising. The excellent grasses full of nutrition are the only food required for beef or dairy purposes. Good schools, churches, markets convenient, climate excellent.

Military service is not compulsory in Canada, but there is an extra demand for farm labor to replace the many young men who have volunteered for the war. The Government is urging farmers to put extra acreage into grain. Write for literature and particulars as to reduced railway rates to Supt. of Immigration, Ottawa, Canada, or

J. N. GRIEVE,
Cor. 1st and Post Sts., Spokane, Wash.
Canadian Gov't Agt.

Douglas County Council

Composed of Thirty-Three Leading Farmers

The Douglas County Agricultural council has been organized to promote the agricultural welfare of the county. It is composed of 33 of the leading farmers in the county. It includes one representative from every community in the county, one county commissioner and three farmers appointed by the board of county commissioners and the county school superintendent. Each community chooses its own representative in the council and the county commissioner member is chosen by the board of county commissioners. The following representatives from the different communities in the county were chosen at meetings held the latter part of November and the first part of December:

Community	Name.	Address.
Rex	M. H. Brown	Delrio
Delrio	Albert Wyborney	Delrio
Delrio	E. Wagoner	Delrio
Leahy	Milan Snell	Leahy
Pearl Hollister	A. E. McLean	Pearl
Willow Spring	Pete Hanson	Withro
Mud Springs	Joe Dittert	Mansfield
Gordon	W. E. Mintzer	Gordon
Mansfield	Mike Leahy	Mansfield
Dyer	Stanley Priest	Mansfield
Mansfield	F. P. Martin	Mansfield
Mansfield	Garfield Cox	Mansfield
Nelson Farmer	T. E. Cope	Mansfield
Jamison	W. W. Proctor	Withrow
Jamison	William Engle	St. Andrews
St. Andrews	Carl Larson	Baird
Highland	Royal Carpenter	Bright
Mt. View	Joe Brown	Mold
Mold	O. I. Frederick	Withrow
Lamoine	Charles Olmstead	Waterville
Poplar Grove	John Gormley	Waterville
Sheehan Flat	Alex. Brett	Wenatchee
Beaver Creek	Henry Goll	
Orondo	C. R. Bond	Orondo
Rock Island	E. Gaut	Wenatchee
Wide West	C. J. Olson	Wenatchee
Waterville	John McKay	Waterville
Bridgeport	R. E. Darling	Bridgeport
Co. Supt.	L. L. Sellers	Waterville
Co. Com.	Joe Sanders	Mansfield

Three farmers appointed by the county commisioners:

T. S. Hedges	Alstown
D. W. Tomlinson	Mansfield
C. N. Campbell	Pearl

The duties of these representatives will be to cooperate with the Washington State college, the United States department of agriculture and the county agricultural agent in outlining the work for this office. Each representative will advise with this office in regard to the work to be done in his community by this office. All of the representatives will meet one or more times each year to help plan the work of the office for the whole county.

The first meeting of the agricultural council was held at Mansfield, December 8; was called to order by the county agricultural agent and Royal Carpenter acted as temporary chairman.

F. P. Martin, Mansfield, was elected president; O. I. Frederick, Mold, vice president; and Garfield Cox, Mansfield, secretary.

President Martin took the chair and called upon each representative present to tell what he considered the most important problems in his community and what lines of work he thought the county agricultural agent should do to help solve these problems.

Charles Olmstead, Lamoine, said that he was afraid no one system of farming could be generally adopted for the whole county on account of soil and climatic conditions varying so much. It was explained that the marked variations in soil, rainfall, machinery best adapted, etc., was one of the main reasons for having a representative from each community.

Royal Carpenter, Highland, said that smut and the maintaining the fertility of the land were two of their most serious problems. He said that the burning of the stubble was altogether too common, and should be discouraged whenever there was an opportunity at meetings or elsewhere.

Milan Snell, Leahy, said the things that he would like to see improved were the roads, methods of cultivation and the weed problem solved.

O. I. Frederick, Mold, said they needed a better variety of winter wheat, better roads and the weed problem solved.

Joe Brown, Mt. View, spoke very highly of the work done in his community, Washington State college specialists in home economics, poultry and live stock and wanted to see more of the same kind of meetings held. He emphasized the importance of live stock in the county and said he would like to hear some of the specialists from the Washington Statte college discuss the common diseases of farm animals and tell how to control them. He said the land hogs and the weeds were two of their worst problems.

John McKay, Waterville, said he thought demonstrations were one of the most important lines of work to be done, that is, having some good farmer practice the best known methods and let his work serve as an example for the community. How to prepare the best seed bed in the spring, control of wire worms, kinds of tillage implements and machinery, farm help, marketing, roads and the use of only the best varieties of wheat and pure seed were among the problems mentioned by him.

Garfield Cox, Mansfield, said he would like to see something done to improve the farm homes so people would have a feeling of permanency and not want to be moving away. He said this was as good a place to live as they would find and many of them would live and die here and should feel that it was home.

Pete Hanson, Willow Springs, said they would be glad to have meetings on any subject because it would all be new and helpful to them.

William Engle, Jamison, said it was difficult for them to get people out to meetings, but would do all he could to work up interest in any meetings arranged for there.

Fred Fachnie, Lamoine, said he believed one of the best things to encourage was the raising of sheep on the farms and stated that he had 50 head of old ones and 37 lambs. The old ones averaged over $2 worth of wool apiece this spring, were no trouble to take care of and that they were the best weeders on the market. He also said the roads should be improved.

D. W. Tomlinson, Mansfield, said that the growing of mixed varieties of grain was causing the farmers as much loss as smut. He said that encouraging the growing of pure wheat and fighting smut were two of the most important problems to be worked on in the Mansfield country.

C. J. Olson, East Wenatchee, said they needed instruction on the storage of fruits and on the care of live stock, especially in handling diseases. He said something should be done to maintain the fertility of the soil.

Mike Leahy, Mansfield, said he believed that one of the most important things that could be done was to encourage interest in the federal farm loan bill.

Irving Vestal, Palisades, said they would like to have any help they could get in the fruit business and mentioned pruning demonstrations, instructions regarding the control of insects and diseases, and instructions on making vinegar, raising poultry and road work.

Stanley Priest, Mansfield, said too many of the farmers were moving to town, and that the main way to interest them was to increase the yield of wheat. He said the women were more interested in improving conditions than the men.

County Superintendent Sellers said he was interested more from an educational standpoint and to that end would like to see more farm meetings conducted so the school children could attend them. He said on account of so many teachers coming from outside the county and not being familiar with agricultural conditions in the county it was necessary for the county agriculturist to help with the agriculture in the schools by visiting the schools and giving talks to the pupils on the agriculture of the county, especially when the talks could be illustrated with pictures taken to illustrate different methods of farming in the county. He said club work and the community fairs were important factors in the education of the boys and girls, and that cooperation of the two offices was necessary to carry on the work.

The following lines of work were discussed and adopted by vote of the council: A booklet on the agriculture of the county to be writtten by the county agricultural agent for use in the schools and for general distribution; a farmers' exchange; an auto excursion to the Washington State college next spring and another auto excursion in the county; to encourage interest in the wheat convention and the farmers' short course at the Washington State college; to encourage pure seed wheat and fight smut; and to give more publicity to the work.

The meeting adjourned until called again by the president.

Pomona Grange

County Agent and Farm Loans

By MRS. R. R. WILLIAMS, Shelton, Wash.

At the annual meeting of Mason County Pomona No. 20, on December 19, a public discussion was held on the advisability of securing a county agent for Mason county and also on the forming of a national farm loan association in Mason county.

Three of the five subordinate granges in the county had reported favorably to Pomona on the county agriculturist question, and a committee is to be appointed from the five subordinate granges, with one member from Pomona grange, to meet with the county commissioners at their meeting early in February and urge them to take action at once to provide funds for the next year to meet the expense from the county for a county agriculturist.

The forming of a loan association was left to a temporary committee of three, who are to receive applications until enough have been recorded to form an association and elect officers. The committee is composed of Messrs. King, Hayes and Huston, all of Shelton. Subscriptions amounting to $12,500 were taken at once, although many present at the discussion were obliged to leave before any action had been taken. The committee is confident that there will be no difficulty in making up the required amount to form an association within a short time.

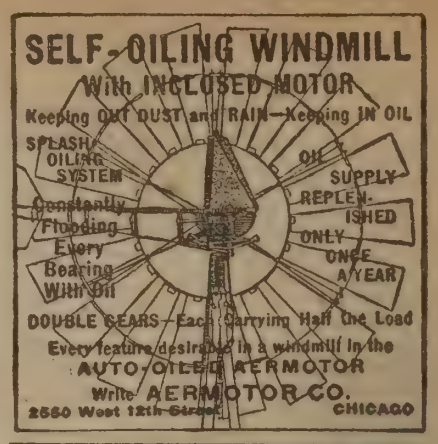
Community Advertising on a Big Scale

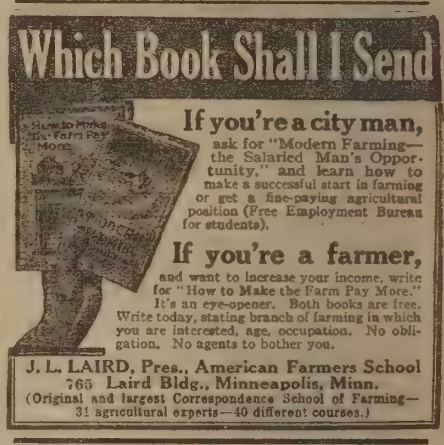
Lawrence H. Brown, secretary of the Washington State Good Roads association, told the delegates to the recent convention in Centralia, Wash., something about the trip which he and some other northwest boosters took in an automobile this summer, crossing the country from Chicago to Tacoma and preaching the doctrine of the big northwest as the nation's summer playground as they journeyed. Mr. Brown told his hearers that the citizens of the northwest must get away from sectionalism, in their boosting, and must realize that this corner of the country is a geographical unit, so closely united by natural and inevitable ties that no section can wax fat at the expense of its fellows.

"We must get away from our little neighborhood squabbling, and realize that while California may be a good place to spend the winter, the northwest has absolutely no competition when it comes to a national playground for the summer months."

Mr. Brown concluded by telling his audience that some of the worst roads encountered on the entire trip were met with between Spokane and Seattle, on the last lap of the journey.

"We have no right," he declared, "to get visitors out here by our advertising, and then force them to travel over such roads as these. Sooner or later we must have a cross state highway usable 12 months in the year, and from what we have heard at this convention I believe the North Bank highway is the most logical location for such a year-'round road."

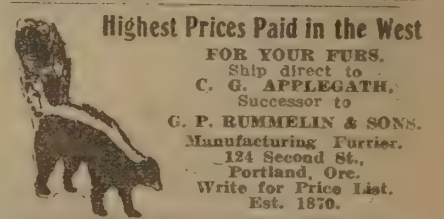


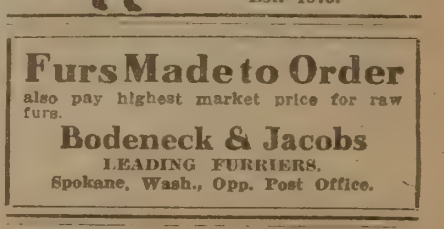












In answering advertisements don't fail to mention this paper.

Yakima Woman Makes Good

The Best Friend of the Stockmen Is Her Title

By SOESTER I. ANTHON

"The best friend of the stockmen in the Yakima valley" is the pet title all the stockmen of central Washington have for Mrs. Legh Freeman, who for the past two years has been editor in fact of Freeman's Farmer, as she was editor in all but name for the previous seven years. And when the stockmen speak in such glowing terms of the quiet, sad-faced woman who holds so high a place in their esteem, they do it with the confidence which comes from many trials and tests. Mrs. Freeman has never failed them.

For a woman to edit a farm journal is unusual enough, but when she adds to this the capacity to run a printing office, in which she can do everything from figuring on jobs to setting a stick or two herself, it becomes even more unusual. With all this Mrs. Freeman has a knowledge of farm problems, and particularly of the problems with which the stockmen deal, so that she is recognized as an authority by them.

Mrs. Freeman, who looks as though she should be peacefully reading in front of a fireplace instead of wrestling with the difficulties of the business world, is the first person consulted when the stockmen wish to have an event out of the ordinary. She is the first person invited to their meetings and no person's opinions are heard with more respect. To be sure, she is also the first person invited to head their subscription lists and she never fails them.

When Mr. Freeman, after running a farm paper for 50 years, died two years ago and left his widow with a young daughter in her teens and a printing plant on her hands, most persons shook their heads sadly. It never entered their heads that Mrs. Freeman would attempt to run the plant herself. When she first suggested it to her friends they either held up their hands in horror or begged her not to make a fool of herself. What woman could secure material and write of such earthy problems as the proper rations for cattle in winter, the benefits of silage, the problems of subirrigation, methods of avoiding alkali and all the technical difficulties of farmers in an irrigated district? As for running the printing presses and directing men—union men, at that—it simply couldn't be done.

During all the discussion Mrs. Freeman said little but, as is characteristic, she thought much and to good effect. There came a day when her mind was made up. With a firmness which left no doubt, she announced that she would operate the plant and edit the paper. She had ambitions to enlarge the farm journal and increase the printing plant to make matters worse. The ambitions have been partly fulfilled and are in a fair way to be entirely fulfilled.

Mrs. Freeman and her daughter, Miss Varina, took entire charge of the farm journal. The daughter, still a mere slip of a girl, solicits advertising, helps with the business end of the office and can do everything about it, even managing the intricate mechanism of the presses. Mrs. Freeman herself edits the paper, plans its contents month by month and improves each issue to a remarkable extent.

In the two years which have elapsed Mrs. Freeman has done more than make a business success. She has gained a place in the life of North Yakima which is held by no other woman. At the recent school board election period she was urged to become a candidate for the school board. During the campaign to contract acreage to enable the valley to secure a beet sugar factory, Mrs. Freeman's support was the first solicited and the most cheerfully given. Before the community more than realized that the beet sugar factory was a possibility and before the farmers had any idea of what it might mean, Mrs. Freeman printed a "sugar beet" issue of her journal. Amply illustrated and filled with facts about the growing of sugar beets and the returns to be expected, it helped induce many farmers to sign up for his share of the needed acreage. During the recent convention of the walnut growers of the Pacific northwest Mrs. Freeman did her share in pointing out the future of the industry in North Yakima and reprinted many of the papers read at the convention for the benefit of the valley farmers, who already have 300 acres in walnut groves.

When Mrs. Freeman enters a convention hall or a stockman's meeting she is a demure little woman who is given to seeking the first seat and listening intently to what is going on. But when she is called upon to give her opinions she gives them with the quiet assurance which goes with a clear knowledge of the matter at hand. It is when she discusses her pet journal that she is most thoroughly roused.

"Mrs. Freeman has certainly stood by the stockmen and we stand by her," explains E. B. Marks, the owner of the famous Marks herd of Holsteins. "Whenever the stock business needs a boost of any kind we ask her. We always get what we need. She knows the stock business and her work for the stock industry of the valley has been worth more than most persons realize."

"She is a worker for whatever seems to her to be for the advantage of the farmer. She has helped the boys' and girls' club work. She has done her share and more for the state fair and the Cascade International. She does her share by everything. The stockmen of this valley, as well as the general farmers, owe her a debt they can never pay."

Italian Prunes

Culture in Western Washington

By J. F. CASS, Mount Vernon, Wash.

Some 20 years or more ago considerable orchard planting activity was manifested in western Washington. Also in the Willamette valley of Oregon. It was found that many varieties of the apple could be profitably grown on this northwest Coast. Among the other tree fruits planted largely at that time in the Puget sound region was the Italian prune. The writer remembers particularly one large orchard of some 50 acres in the vicinity of East Sound, on Orcas island, owned by a syndicate of Seattle capitalists. Also another of about the same area just north of the international boundary in British Columbia, near Blaine, owned by the Mogridge Bros., a couple of young aristocratic Englishmen. And just south of that at Custer, Whatcom county, a fine orchard of the Italian prune, C. H. Stoltenberg owner, was in full bearing some 15 years ago. Mr. Stoltenberg at about that time erected one of the best patent dryers of that era to care for his crop. Many fine orchards of five to 10 acres of this fruit could be found at the same time in this country also upon the lands of the Skagit valley proper. The trees of most of these, however, were afterwards pulled out, and it is needless to say through the short-sighted policy of the owners. At that time there were no canneries and little market for the fruit, the drying process little understood and as it is yet in the present time. Thus the growers became discouraged.

The planting of prune orchards in eastern Washington and in Idaho is now becoming a rage as was the case of the planting of the apple a few years ago. And the publishing by our agricultural papers of such items as the following may yet lead to great disappointment to many:

"Five acres in the Felida district of Clarke county are reported to have produced a yield of prunes this year valued at over $20,000."

Our own orchard here on the north fork of the Skagit, of a little less than five acres, has during the last 10 years averaged a yield of 50 to 60 tons of the green fruit a year, equal to 12 to 15 tons of the dried product. Still it must be said that most of the conditions obtaining in this orchard are absolutely ideal for the best production. Situated upon the higher alluvial soil of the river bank, with subirrigation from the annual summer raise of the same, and with freedom from frost effects because of the warm current of air from the open sea a few miles west, no failure of crop results. In but few points east of the mountains, it may as well be said, can such yields be counted upon; and in the state of Idaho the present season there has been a total failure of the prune crop from frost.

The soil of our orchard has never been cultivated, except the first two years from planting; and has furnished pasturage for stock during nine months of the year. The Italian prune tree requires little care in the way of pruning, and still less of spraying, it being almost immune of insect attacks. Planting some 30 years ago the orchard seems at the present time to be yet in its prime of growth. Of late years it has been giving a return of about $200 per acre.

Corn

Made Good Silage, Though Frozen

To the Editor of the Washington Farmer: In your issue of December 21 you mentioned that C. J. Nelson of Kent lost his crop of silage corn by frost.

Last May I planted two and three-fourths acres of King Philip flint corn in check rows 30 inches by 26 inches, and dropped six kernels in each hill. Owing to the wet and cold summer, the growth was slow until the dry fall set in, then the corn grew rapidly and reached a height of nine feet and for thickness resembled a southern cornbrake.

Before it reached roasting ear stage three heavy frosts occurred, freezing the tender ears solid each time. It was 14 days after the frost before I could obtain a cutter, and filled the silo, 14 by 32, in two days.

No water was used, but the silage was cut in one-half inch lengths and was firmly tramped.

When finished, the top was covered with finely cut straw to the depth of nine inches, over which was emptied 100 gallons of water.

The yield from the two and three-fourths acres was 80 tons..

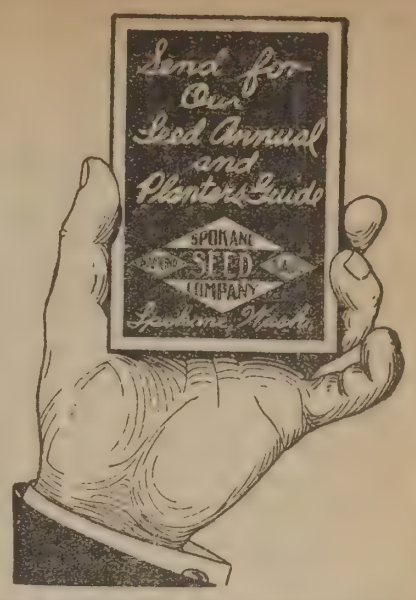
When the silo was opened there was only a crust of mold an inch thick and the silage below was bright and clear, without further sign of mold.

The cows chose it in preference to carrots when both were offered at the same time. W. A. PERRY.

Secure Farm Expert.

The Washington State Beekeepers' association went on record today at North Yakima favoring the employment of a county agriculturist. They want the commissioners to act at the earliest possible moment and bring the county into line with other parts of the northwest. The farmers' union and the grangers have already taken action favorable to the employment of an agriculturist, and indications are that the new board of commissioners will take early action in securing a farm expert for Yakima county.

On account of the great variation in local climatic conditions, moisture, soil, etc., it is up to the readers of The Washington Farmer always to remember that methods which prove successful in one locality may not work out in others. It is our aim to gather the experiences of farmers in every section of this state and pass these experiences on to our readers, that they may try out or adopt such as may be applicable to their locality and conditions.



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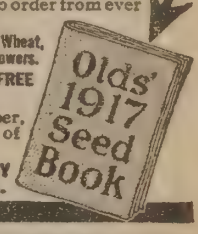
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For Large or Small Growers, 1 or 2 rows

Opens furrow, drops seed any distance or depth required, puts on fertilizer (if wanted), covers up, marks next row. Accurate, automatic and dependable. Operated by one man. Furrow is opened directly under axle and seed is dropped in plain sight of operator. Made of steel and malleable iron, assuring long life and few repairs.

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Over 700 illustrations of vegetables and flowers. Send yours and your neighbors' addresses.

R. H. SHUMWAY, Rockford, Ill.

In answering advertisements don't fail to mention this paper.

All-the-Year-Round Farm Labor

Sliding Scale of Wages for Periods of Greater and Lesser Demand

By E. A. BRYAN

Nothing is just now more important than the development of a system of all-the-year-round labor on the farm. One of the most serious obstacles to this is the fact that in the busy harvest season, when wages are high and labor is in great demand, the laborer who accepted the average wage gladly and worked contentedly during the slack season of low wages finds himself at work along side a poorer temporary laborer who is drawing much higher wages. He therefore jumps his job or becomes restless and dissatisfied.

I propose, therefore, a sliding scale for the all-year-around man. Suppose it is agreed that an average wage of $50 per month or $600 per year, the employe to board himself, is a fair wage, satisfactory alike to employer and employe, on a diversifiedf arm in the Inland Empire.

From the middle of June to the middle of October, four months, is the period of greatest demand and highest priced labor. Suppose we figure that four months at an average of $60 per month, or $240.

From the middle of March to the middle of June and again from the middle of October to the middle of November, four months, is medium in labor demand and wages. Let us figure that at $40 per month or $160. This makes a total of $600 for the year.

In addition to this use of a cottage and small garden and some fruit from the farm orchard and possibly a pig or two to be kept in a pen to consume the slops would add materially to the income of the employe's family and encourages thrift and personal interest in and loyalty to the business. It is far better than temporary and uncertain hire at much higher wages.

If the proposition is based on a lower rate as might well happen, with an agreement at an average wage of $40 per month or $480 per year, the problem would work itself out for the same months as follows: Four months at the $48, or $192; four months at $40, or $160; four months at $32, or $128; total, $480. If the value of cottage and garden were $12 per month this would make the real wage $60, $52 and $44 or $624 per year.

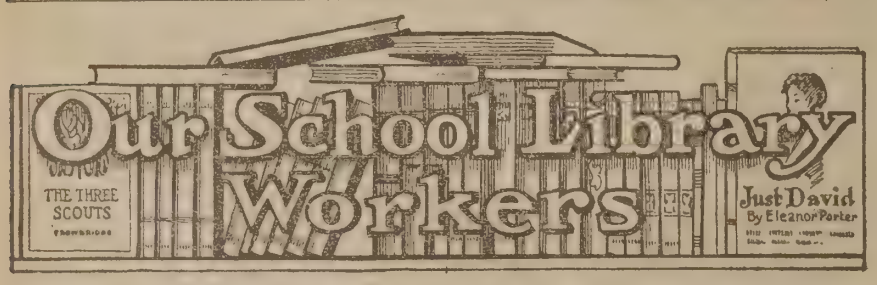
Perhaps, under our system it would be fair and advantageous to both parties if the payment of a portion of the spring and summer wages should be deferred until fall when the crops are realized. A bonus of from $20 to $40 at the end of the season is good policy.

I am satisfied that we can not move very fast or very far toward diversified farming until we have the all-year-around employment. I believe we can not have this without providing a cottage and a small garden for the employe.

The plan I have suggested makes for the stability of farming, for good relations between the farmer and his employe, wholesome opportunities for the tenant's family, better care of machinery, tools, live stock and soil, an increase in the population of the community and so better rural schools and in the end a larger number of land owners and smaller farms.

In connection with this article by Dr. Bryan, it is interesting to know that an investigation carried on in 1899, by the bureau of statistics of the United States department of agriculture, shows that less than 30 per cent of the day laborers on farms, working at monthly rates, kept at work during the entire year, the other 70 per cent, on the average, worked much less than one year.

In 1909 the average wage rate of outdoor labor of men on farms, per month, by the year, without board, was $18.05; ranging from $13.10 in south Atlantic states to $31.30 in the western states. In 1866 the average rate of wages was $10.09; in 1880 or 1881, $12.32; in 1889 or 1890, $13.29.



Here she is—the champion library worker of the northwest. Miss Mildred tell us in an excellent little letter just how she takes subscriptions. Of course she doesn't say one word about the bright and winning smile that you can see, with only half an eye, is a mighty big part of her equipment. And just among ourselves we haven't the least little bit of doubt that Miss Mildred knows just how to use those big, half-mischievous brown eyes very effectively, indeed.

Just listen to what she says about how she takes subscriptions: "It is very easy to take subscriptions for your paper, especially among farmers and stockmen. All I had to do was to tell them our school (Bossburg school) was trying to earn a library and none refused to subscribe, some taking three-year subscriptions. We have our library and for my own I choose 'Just David.'"

Isn't it easy and simple? Yes, it certainly sounds so the way Mildred modestly put it. But we still cling to the belief that much of her success was due to her winsomeness and cheery smile. Miss Mildred, we offer you our very best wishes for a Happy, Happy New Year, and we thank you heartily for the splendid example you have set for other school library workers in this state and in other states as well.



Miss Mildred Glasgow.

NEW SCHOOLS ENTER.

New schools to enter actively into the work of securing a library are:

Harrah School	F. G. Bennett, teacher
Parker Bottom School	Clara M. Johnson, teacher
Excelsior School	O. Agnes Wiley, teacher
Sunnyside School	J. G. King, teacher
Deno School	Margaret Spicer, teacher
Malloy Prairie School	Beryl McCabe, teacher
Bonser School	Margaret F. White, teacher
Grandview School	Mabel S. Preston, teacher
Granite Lake School	Sada Fox, teacher
Groebli School	Margaret A. Nash, teacher
Four Corners School	Cordelia Griffith, teacher
Outlook School	A. W. Curtis, teacher
Beaver Creek School	Marvel D. Miller, teacher
Central School	H. C. Vesper, teacher
Cowiche School	S. S. Busch, teacher
Springdale School	John Dempsey, teacher

HONOR ROLL.

Greenwood School—Harold Cline, Margaret Silver and Hazel Cline.

Wiley City School—Isabella Besancon, Julia Boone, Madge Carpenter, George Langworthy, Alice Wingard, Mildred Parker, Lila C. Draper, Constance Wiley, Malcolm Wiley, Elsie Young and Marion Hughes.

Hunter Creek School—Harriet Johnston, Lillian Cornwell, Marjorie McCanna, Franklin Cornwell and Mark Mills.

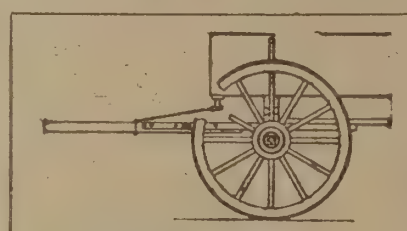
Logan School—Ida Michaels and David Michaels.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

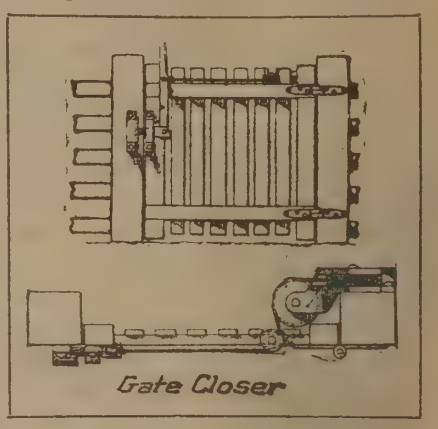
Tongue Support.

It is claimed for this support that it takes the weight of the tongue from the horses and yet does not interfere with the turning of the wagon. It is a chain and stout spring attached to the tongue and to a pulley which travels on a strongly braced rod.



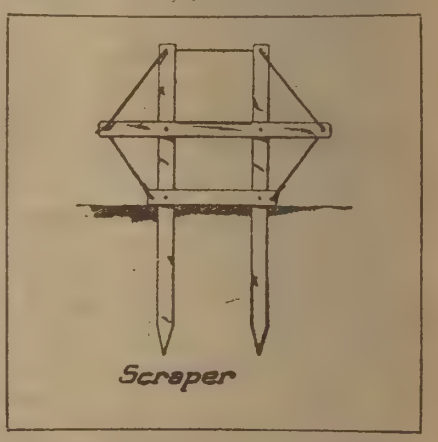
Gate Latching Device.

The rope of this device is attached to a weight at one end and to the latch handle at the other. The weight closes the gate and forces the latch out so that it engages the keeper.



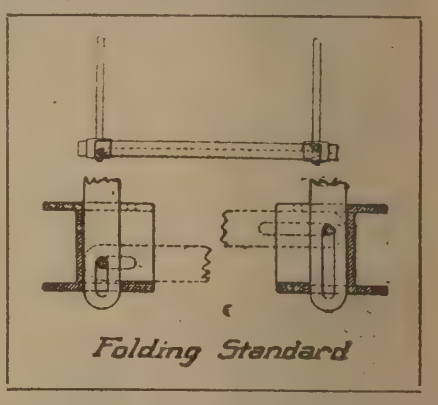
Scraper.

The scraper shown here is made of wood or of metal; the bars are used to clean the soles of the shoes and the wires to clean the uppers. It is driven into the ground at any convenient place near the door.



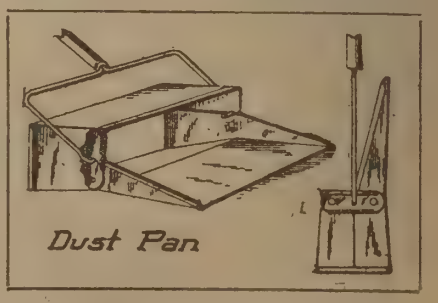
Folding Standard.

These wagon standards are attached by means of a bolt which passes through a slot near the bottom. This arrangement permits them to be folded as shown. This idea might be applied in many ways.



Dust Pan.

There is a long handle on this dust pan, which makes it unnecessary to stoop to take up the dust. The notches at the side hold the handle in four different positions.



Electric Steel Furnaces.

Illustrating the growth of electric steel making, there are at present a total of 72 Heroult electric furnaces either in operation for the manufacture of steel, in the course of building, or authorized, in the United States and Canada, and arrangements for a large number of additional furnaces have been made.

All the World's a Stage, and All the Men and Women Merely Players

The Greatest Safeguards Against Temptation



What may be best calculated to keep young people, both young men and young women, out of trouble wherever they may be? These are questions which have been puzzling parents and those interested in the welfare of the young pople all over the country for many, many years. Dr. Fred Winslow Adams of St. Andrew's church in New York has been sending to many prominent men and women in different parts of the country, asking them their opinion on this subject, and the following are some of the answers which Dr. Adams has received:

Andrew Carnegie believes high aims to be the greatest safeguard against temptation. Rabindranath Tagore, the Hindu poet, answers, "A healthy interest in good things." Arthur Brisbane says that education, knowledge alone, protects us. Oscar S. Straus thinks we must have the will to resist. Henrietta Crosman says we must recognize God as a present and practical help. Dr. Adams, welding the replies he had received into a composite, declared the real answer to be: "Association with the best as revealed in Christ."

Good Samaritan Buys In "Cop's" Horse



When Mounted Policeman John L. Wendell of the New York police force heard that the department was to auction off "Loughlin," the horse which had served as his mount for a good part of 25 years, he felt as if he had lost his last friend. But now Wendell is happy, and so is "Loughlin," for a good samaritan appeared, bought "Loughlin" and gave him to the policeman as a Christmas present. Loughlin now will lead a life of ease to the end of his days. As the day of auction approached Wendell mourned so much that the story came to be circulated about. E. P. Crissman, a retired real estate dealer, heard it and came to the rescue. Many other old horses were saved from falling into the hands of junk dealers and fruit pedlers by the Bide-a-Week Home society, which purchased them and sent them to a farm to loaf away the rest of their days. A plain is on foot to have the city pension its aged horses of the fire, police and other departments.

Urge Big Army for U. S.



ABOVE - MAJ-GEN. HUGH L. SCOTT.
BELOW - MAJ-GEN. LEONARD WOOD.

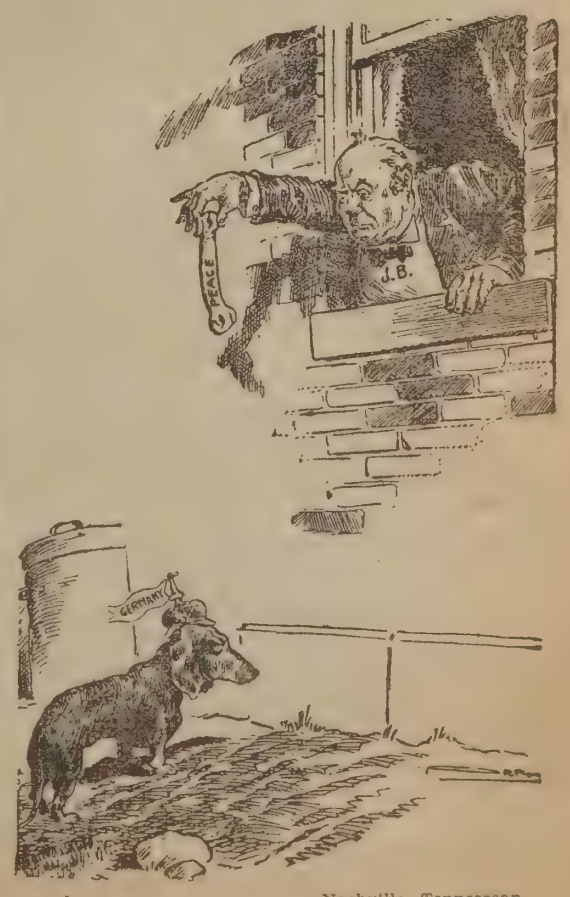
General Hugh L. Scott, chief of the general staff, and General Leonard Wood, commander of the department of the east, say that 3,000,000 fully trained troops should be available within 90 days after the outbreak of any war involving this country.

Blessing Instruments of Death



Here a priest of the Greek church is shown blessing the shells that are to open an artillery offensive. The Serbian soldiers believe that shells so blessed never fail to inflict dire losses on the enemy.

"Beg!"



Nashville Tennessean.

THE SON OF THE WOLF

.....BY.....
JACK LONDON

(Concluded From Last Week.)

Mocasins were crunching the snow without. Mackenzie threw his rifle to cock, and loosened the twin Colts in his belt.

"Grant, O chief!"

"And yet will my people say no."

"Grant, and the wealth is thine. Then shall I deal with thy people after."

"The Wolf will have it so. I will take his tokens—but I would warn him."

Mackenzie passed over the goods, taking care to clog the rifle's ejector, and capping the bargain with a kaleidoscopic silkerchief. The Shaman and half a dozen young braves entered, but he shouldered boldly among them and passed out.

"Pack!" was his laconic greeting to Zariska as he passed her lodge and hurried to harness his dogs. A few minutes later he swept into the council at the head of the team, the woman by his side. He took his place at the upper end of the oblong, by the side of the chief. To his left, a step to the rear, he stationed Zarinska—her proper place. Besides, the time was ripe for mischief, and there was need to guard his back.

On either side, the men crouched to the fire, their voices lifted in a folk-chant out of the forgotten past. Full of strange, halting cadences and haunting recurrences, it was not beautiful. "Fearful" may inadequately express it. At the lower end, under the eye of the Shaman, danced half a score of women. Stern were his reproofs to those who did not wholly abandon themselves to the ecstasy of the rite. Half hidden in their heavy masses of raven hair, all disheveled and falling to their waists, they slowly swayed to and fro, their forms rippling to an ever-changing rhythm.

It was a weird scene; an anachronism. To the south, the 19th century was reeling off the few years of its last decade; here flourished man primeval, a shade removed from the prehistoric cave-dweller, a forgotten fragment of the Elder World. The tawny wolf-dogs sat between their skin-clad masters or fought for room, the firelight cast backward from their red eyes and shavered fangs. The woods, in ghostly shroud, slept on unheeding. The White Silence, for the moment driven to the rimming forest, seemed ever crushing inward; the stars danced with great leaps, as is their wont in the time of the Great Cold; while the Spirits of the Pole trailed their robes of glory athwart the heavens.

Scruff Mackenzie dimly realized the wild grandeur of the setting as his eyes ranged down the fur-fringed sides in quest of missing faces. They rested for a moment on a newborn babe, suckling at its mother's naked breast. It was 40 below—70 and odd degree of frost. He thought of the tender women of his own race, and smiled grimly. Yet from the loins of some such tender woman had he sprung with a kingly inheritance—an inheritance which gave to him and his dominance over the land and sea, over the animals and the peoples of all the zones. Single-handed against fivescore, girt by the arctic winter, far from his own, he left the prompting of his heritage, the desire to possess, the wild danger-love, the thrill of battle, the power to conquer or to die.

The singing and the dancing ceased, and the Shaman flared up in rude eloquence. Through the sinuosities of their vast mythology, he worked cunningly upon the credulity of his people. The case was strong. Opposing the creative principles as embodied in the Crow and the Raven, he stigmatized Mackenzie as the Wolf, the fighting and the destructive principle. Not only was the combat of these forces spiritual, but men fought, each to his totem. They were the children of Jelchs, the Raven, the Promethean firebringer; Mackenzie was the child of the Wolf, or, in other words, the Devil. For them to bring a truce to this perpetual warfare, to marry their daughters to the arch-enemy, were treason and blasphemy of the highest order. No phrase was harsh, nor figure vile, enough in branding Mackenzie as a sneaking interloper and emissary of Satan. There was a subdued, savage roar in the deep chests of his listeners as he took the swing of his peroration.

"Ay, my brothers, Jelchs is all-powerful! Did he not bring heaven-born fire that we might be warm? Did he not draw the sun, moon, and stars from their holes that we might see? Did he not teach us that we might fight the Spirits of Famine and of Frost? But now Jelchs is angry with his children, and they are grown to a handful, and he will not help. For they have forgotten him, and done evil things, and trod bad trails, and taken his enemies into their lodges to sit by their fires. And the Raven is sorrowful at the wickedness of his children; but when they shall rise up and show they have come back, he will come out of the darkness to aid them. O brothers! the Fire-Bringer has whispered messages to thy Shaman; the same shall ye hear. Let the young men take the young women to their lodges; let them fly at the throat of the Wolf; let them be undying in their enmity! Then shall their women become fruitful, and they shall multiply into a mighty people! And the Raven shall lead great tribes of their fathers and their fathers' fathers from out of the North; and they shall beat back the Wolves till they are as last year's campfires; and they shall again come to rule over all the land! 'Tis the message of Jelchs, the Raven."

This foreshadowing of the Messiah's coming brought a hoarse howl from the Sticks as they leaped to their feet. Mackenzie slipped the thumbs of his mittens, and waited. There was a clamor for the Fox, not to be stilled till one of the young men stepped forward to speak.

"Brothers! The Shaman has spoken wisely. The Wolves have taken our women, and our men are childless. We are grown to a handful. The Wolves have taken our warm furs, and given for them evil spirits which dwell in bottles, and clothes which come not from the beaver or the lynx, but are made from the grass. And they are not warm, and our men die of strange sicknesses. I, the Fox, have taken no woman to wife; and why? Twice have the maidens which pleased me gone to the camps of the Wolf. Even now have I laid by skins of the beaver, of the moose, of the cariboo, that I might win favor in the eyes of Thling-Tinneh, that I might marry Zarinska, his daughter. Even now are her snowshoes bound to her feet, ready to break trail for the dogs of the Wolf. Nor do I speak for myself alone. As I have done, so has the Bear. He, too, had fain been the father of her children, and many skins has he cured thereto. I speak for all the young men who know not wives. The Wolves are ever hungry. Always do they take the choice meat at the killing. To the Ravens are left the leavings.

"There is Gugkla!" he cried, brutally pointing out one of the women, who was a cripple. "Her legs are bent like the ribs of a birch canoe. She can not gather wood nor carry the meat of the hunters. Did the Wolves choose her?"

"Ai! ai!" vociferated his tribesmen.

"There is Moyri, whose eyes are crossed by the evil spirit. Even the babes are affrighted when they gaze upon her, and it is said the bald-faced gives her the trail. Was she chosen?"

Again the cruel applause rang out.

"And there sits Pischet. She does not hearken to my words. Never has she heard the cry of the chit-chat, the voice of her husband, the babble of her child. She lives in the white silence. Cared the wolves aught for her? No! Theirs is the choice of the kill; ours is the leavings.

"Brothers, it shall not be! No more shall the wolves slink among our campfires. The time is come."

A great streamer of fire, the aurora borealis, purple, green and yellow, shot across the zenith, bridging horizon to horizon. With head thrown back and arms extended, he swayed to his climax.

"Behold! The spirits of our fathers have arisen and great deeds are afoot this night!"

He stepped back, and another young man somewhat diffidently came forward, pushed on his comrades. He towered a full head above them, his broad chest defiantly bared to the frost. He swung tentatively from one foot to the other. Words halted upon his tongue, and he was ill at ease. His face was horrible to look upon, for it had at one time been half torn away by some terrific blow. At last he struck his breast with his clenched fist, drawing sound as from a drum, and his voice rumbled forth as the surf from an ocean cavern.

"I am the Bear—the Silver-Tip and the Son of the Silver-Tip! When my voice was yet as a girl's I slew the lynx, the moose and the cariboo; when it whistled like the wolverines from under a cache, I crossed the Mountains of the South and slew three of the White Rivers; when it became as the roar of the Chinook, I met the bald-faced grizzly, but gave no trail."

At this he paused, his hand significantly sweeping across his hideous scars.

"I am not as the Fox. My tongue is frozen like the river. I can not make great talk. My words are few. The Fox says great deeds are afoot this night. Good! Talk flows from his tongue like the freshets of the spring, but he is chary of deeds. This night shall I do battle with the Wolf. I shall slay him, and Zarinska shall sit by my fire. The Bear has spoken."

Though pandemonium raged about him, Scruff Mackenzie held his ground. Aware how useless was the rifle at close quarters, he slipped both holsters to the fore, ready for action, and drew his mittens till his hands were barely shielded by the elbow gauntlets. He knew there was no hope in attack en masse, but true to his boast was prepared to die with teeth fast-locked. But the bear restrained his comrades, beating back the more impetuous with his terrible fists. As the tumult began to die away, Mackenzie shot a glance in the direction of Zarinska. It was a superb picture. She was leaning forward on her snowshoes, lips apart and nostrils quivering, like a tigress about to spring. Her great black eyes were fixed upon her tribesmen, in fear and in defiance. So extreme the tension she had forgotten to breathe. With one hand pressed spasmodically against her breast and the other as tightly gripped about the dogwhip, she was as turned to stone. Her muscles loosened; with a heavy sigh she settled back, giving him a look of more than love.

Thling-Tinneh was trying to speak, but his people drowned his voice. Then Mackenzie strode forward. The Fox opened mouth to a piercing yell, but so savagely did Mackenzie whirl upon him that he shrank back, his larynx all a-gurgle with suppressed sound. His discomfiture was greeted with roars of laughter, and served to soothe his fellows to a listening mood.

"Brothers! The white man, whom ye have chosen to call the Wolf, came among you with fair words. He was not like the Innuit, he spoke not lies. He came as a friend, as one who would be a brother. But your men have had their say, and the time for soft words is past. First, I will tell you that the Shaman has an evil tongue and is a false prophet, that the messages he spake are not those of the Fire-Bringer. His ears are locked to the voice of the Raven, and out of his own head reweaves cunning fancies, and he has made fools of you. He has no power. When the dogs were killed and eaten, and your stomachs were heavy with untanned hide and strips of moccasins; when the old men died, and the old women died, and the babes at the dry dugs of the mothers died; when the land was dark, and ye perished as do the salmon in the fall; ay, when the famine was upon you, did the Shaman bring reward to your hunters? did the Shaman put meat in your bellies? Again I say, the Shaman is without power. Thus! I spit upon his face!"

Though taken aback by the sacrilege, there was no uproar. Some of the women were even frightened, but among the men there was an uplifting, as though in preparation or anticipation of the miracle. All eyes were turned upon the two central figures. The priest realized the crucial moment, felt his power tottering, opened his mouth in denunciation, but fled backward before the truculent advance; upraised fist, and flashing eyes of Mackenzie. He sneered and resumed.

"Was I stricken dead? Did the lightning burn me? Did the stars fall from the sky and crush me? Pish! I have done with the dog. Now will I tell you of my people, who are the mightiest of all the people, who rule in all the lands. At first we hunt as I hunt, alone. After that we hunt in packs; and at last, like the cariboo-run, we sweep across all the land. Those whom we take into our lodges live; those who will not come die. Zarinska is a comely maiden, full and strong, fit to become the mother of Wolves. Though I die, such shall she become; for my brothers are many, and they will follow the scent of my dogs. Listen to the Law of the Wolf. Whoso taketh the life of one Wolf, the forfeit shall ten of his people pay. In many lands has the price been paid; in many lands shall it yet be paid.

"Now will I deal with the Fox and the Bear. It seems they have cast eyes upon the maiden. So? Behold, I have bought her; Thling-Tinneh leans upon the rifle; the goods of purchase are by his fire. Yet will I be fair to the young men. The Fox, whose tongue is dry with many words, will I give of tobacco five long plugs. Thus will his mouth be wetted that he may make much noise in the council. But to the Bear, of whom I am well proud, will I give of blankets two; of flour, 20 cups; of tobacco, double that of the Fox; and if he fare with me over the mountains of the east, then will I give him a rifle, mate to Thling-Hinneh's. If not? Good! The Wolf is weary of speech. Yet once again will he say the Law: Whoso taketh the life of one

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THE WASHINGTON FARMER
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Wolf, the forfeit shall ten of his people pay."

Mackenzie smiled as he stepped back to his old position, but at heart he was full of trouble. The night was dark. The girl came to his side, and he listened closely as she told of the Bear's battle-tricks with the knife.

The decision was for war. In a trice scores of moccasins were widening the space of beaten snow by the fire. There was much chatter about the seeming defeat of the Shamm; some averred he had but withheld his power; while others conned past events and agreed with the Wolf. The Bear came to the center of the battleground, a long naked hunting knife of Russian make in his hand. The Fox called attention to Mackenzie's revolvers; so he stripped his belt, buckling it about Zarinska, into whose hands he also intrusted his rifle. She shook her head that she could not shoot—small chance had a woman to handle such previous things.

"Then, if danger come by my back, cry aloud, 'My husband!' No; this, 'My husband!' "

He laughed as she repeated it, pinched her cheek, and reentered the circle. Not only in reach and stature had the Bear the advantage of him, but his blade was longer by a good two inches. Scruff Mackenzie had looked into the eyes of men before, and he knew it was a man who stood against him; yet he quickened to the glint of light on the steel, to the dominant pulse of his race.

Time and again he was forced to the edge of the fire or the deep snow, and time and again, with the foot tactics of the pugilist, he worked back to the center. Not a voice was lifted in encouragement, while his antagonist was heartened with applause, suggestions and warnings. But his teeth only shut the tighter as the knives clashed together, and he thrust or eluded with a coolness born of conscious strength. At first he felt compassion for his enemy; but this fled before the primal instinct of life, which in turn gave way to the lust of slaughter. The 10,000 years of culture fell from him, and he was a vace-dweller, doing battle for his female.

Twice he pricked the Bear, getting away unscathed; but the third time caught, and to save himself, free hands closed on fighting hands, and they came together. Then did he realize the tremendous strength of his opponent. His muscles were knotted in painful lumps, and cords and tendons threatened to snap with the strain; yet nearer and nearer came the Russian steel. He tried to break away, but only weakened himself. The fur-clad circle closed in, certain of and anxious to see the final stroke. But with wrestler's trick, swinging partly to the side, he struck at his adversary with his head. Involuntarily the Bear leaned back, disturbing the center of gravity. Simultaneous with this, Mackenzie tripped properly and threw his whole weight forward, hurling him clear through the circle into the deep snow. The Bear floundered out and came back full tilt.

"O my husband!" Zarinska's voice rang out, vibrant with danger.

To the twang of a bow-string, Mackenzie swept low to the ground, and a bone-barbed arrow passed over him into the Bear, whose momentum carried him over his crouching foe. The next instant Mackenzie was up and about. The Bear lay motionless, but across the fire was the Shaman, drawing a second arrow.

Mackenzie's knife leaped short in the air. He caught the heavy blade by the point. There was a flash of light as it spanned the fire. Then the Shaman, the hilt alone appearing without his throat, swayed a moment and pitched forward into the glowing embers.

Click! click!—the Fox had possessed himself of Thling-Tinneh s rifle and was vainly trying to throw a shell into place. But he dropped it at the sound of Mackenzie's laughter.

"So the Fox has not learned the way of the plaything? He is yet a woman. Come! Bring it, that I may show thee!"

The Fox hesitated.

"Come, I say!"

He slouched forward like a beaten cur.

"Thus, and thus; so the thing is done." A shell flew into place and the trigger was at cock as Mackenzie brought it to shoulder.

"The Fox has said great deeds were afoot this night, and he spoke true. There have been great deeds, yet least among them were those of the Fox. Is he still intent to take Zarinska to his lodge? Is minded to tread the trail already broken by the Shaman and the Bear? No? Good!"

Mackenzie turned contemptuously and drew his knife from the priest's throat.

"Are any of the young men so minded? If so the Wolf will take them by two and three till none are left. No? Good! Thling-Tinneh, I now give thee this rifle a second time. If in the days to come thou shouldst journey to the country of the Yukon, know thou that there shall always be a place and much food by the fire of the Wolf. The night is now passing into the day. I go, but I may come again. And for the last time, remember the law of the Wolf!"

He was supernatural in their sight as he rejoined Zarinska. She took her place at the head of the team and the dogs swung into motion. A few moments later they were swallowed up by the ghostly forest. Till now Mackenzie had waited; he slipped into his snowshoes to follow.

"Has the Wolf forgotten the five long plugs?"

Mackenzie turned upon the Fox angrily; then the humor of it struck him.

"I will give thee one short plug."

"As the Wolf sees fit," meekly responded the Fox, stretching out his hand.

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Buy Victrola for Community.

At a community center meeting held recently at the Bruce school house of Othello, Wash., a box supper was held, the proceeds of which amounted to $83.40, which will be used in purchasing a Victrola and records for the school. There is one inch of snow on the ground, while the ground underneath is perfectly dry, a thing that never happened here before. Stock is going into winter quarters and is looking fine. A. O. LEE.

Homework for Pupils.

Superintendent W. M. Kern of the Walla Walla schools announced plans for the enlarging of the agricultural department of the high school to include extensive home work as essential to graduation in the course. Superintendent Kern wants each pupil to put in a year's actual work in some line of agriculture upon a small plot of ground, at his home or somewhere in the city, in connection with his regular course at the high school.

Necessities

Let Them Go to Highest Price

Mr. Perkins, the writer of the following letter, is a member of the executive committee of the American National Live Stock association. We are glad to publish this letter continuing the discussion of the great problem of the high cost of living:

Mr. Perkins Letter.

To the Editor of the Washington Farmer: I have yours relative to the high cost of living. I note what Dr. E. A. Bryan says regarding the matter. He is right as far as he goes. We have too many consumers and not enough producers. A large per cent of the people have moved to the towns and cities where they can see the sights and do not produce anything. Yet they want those who do produce something to sell it cheap so they can remain in the town. There is one way to stop this trouble and that is to let necessities of life go to the highest. Price them so a man will have to have a good income or go to the country and produce the greater part of his living. We have too many people in town and we have a large per cent of men that tell the people to move out in the country and raise their families in the country, yet they remain in town with their own families.

I want to see the trade remain open. Let those that think the cost of living is too high get out and produce something to live on. Let the producers get all they can for what they have for sale. All of this howl about the high cost of living is from people that do not produce anything to live on.

M. A. PERKINS.

Puntenney, Arizona.

Class in Road Building.

Instruction in methods of better road building will be given at the state college at Pullman this winter, under the supervision of L. V. Edwards, professor of railway and highway engineering at the college.



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Alice W. Barland
Editorial Contributor

Words

Fit Thoughts of Men and Women

Words are found or words are made to fit the thoughts of men and women. When thoughts are shallow, words describing them are shallow; when thoughts strike into the very issues of life, words clothing those thoughts will be very much alive.

Words fall into wayside minds and the fowls come and devour them. Words fall upon stony places and forthwith shallow thoughts spring up and when the sun arrives they are scorched, and because they have not root they wither away. Some words fall among thorns and the thorns spring up and choke them. Thoughts also fall into good ground and bring forth fruit, some a hundredfold, some sixtyfold, some thirtyfold, and these are the words that live among men.

"They are never alone that are accompanied with noble thoughts," is expressive of Sir Philip Sidney's life.

This from Shakespeare: "The miserable have no other medicine, only hope."

With Bacon look back into the past: "Cato said the best way to keep good actions in memory was to refresh them with new."

Thomas Heywood: "I hold he loves me best who calls me Tom."

I am now thinking of the man who is managing editor of one of the greatest daily newspapers on the Pacific coast. I knew him many years ago when he was working on a newspaper in the state of Maine. One day he told me of his boyhood experiences. His father died and he was helping out the family income by cleaning out the spittoons and doing every sort of chore in the business place of a grasping New England Yankee. Those were hard days for the young lad. He said the only thing that kept up his courage was to repeat over and over again to himself that line from Longfellow, "Learn to labor and to wait."

Now, what is the quotation or what are the words which have helped you in the journey of life?

Is it a phrase from some famous author or was it the words from some neighborly soul who helped you over a hard place and left you the invaluable legacy of a life motto?

What are your favorite motto, your favorite quotation, your favorite words?

Send them to the Editor of the Farmer and let those words help another which have helped you.

Bread

Condition of Yeast Important

The condition of the yeast used in bread making is more important than the kind of yeast, according to Miss Addie D. Root of the Missouri College of Agriculture. If yeast is allowed to stand in a dusty place or is put into an unsterilized vessel, it will collect bacteria and the bread will have a sour, unpleasant taste. All utensils and liquids should be scalded before using.

Yeasts are small plants which need air. Flour, therefore, should be added slowly and beaten into the liquid thoroughly to incorporate air. Sugar is food for the yeast plant and if given to it will hasten its growth.

If dough it too stiff, a harsh, crumbly bread results. The least amount of flour possible to avoid a sticky dough gives the best bread.

Kneading.

The quick even stroke in kneading counts for more than the strength put into it. A thorough kneading distributes the yeast plants evenly throughout the dough and results in bread of the best texture as the gas bubbles rise evenly. Dough should be kneaded until it has a smooth velvety surface. If kneaded longer than 30 minutes the elastic quality is completely destroyed.

Yeast plants thrive at a temperature of from 79 to 95 degrees Fahrenheit. When dough is set to rise it should be placed in a clean bowl. If the bowl is covered tightly and an even temperature maintained, it is not necessary either to oil or moisten the surface to prevent a crust from forming. If the temperature is too high, the bread will be dark, coarse and sour. If the dough is chilled while rising, the volume will be smaller, the texture rubbery and an undesirable crust will form. Best results are obtained when dough is kept at a gentle, warm, even temperature until it is twice its bulk, and then worked.

Baking requires as much care as mixing, kneading and rising. The temperature of the oven should be 360 degrees Fahrenheit when the bread is placed in it. It should be allowed to rise after 15 minutes and lowered after 30 minutes. The bread should begin to brown in patches during the first 15 minutes and should have an even brown surface after 30 minutes. It the dough is not twice its original bulk or as light as desired, it may be allowed to finish rising in the oven.

Boy Nature

Has Not Radically Changed

Boy nature has not changed radically through the years. Civilization has tempered it, but has not eradicated it.

The boy on the farm 40 years ago can be duplicated when it comes to essentials by the boy on the farm in this year of our Lord 1917.

While this is true, yet it is just as true that environments have changed and that there is no single factor which molds and develops or distorts and arrests the development of the boy, as does environment.

All this is merely calling attention to the fact that the particulars in the treatment of the boy a half century ago on the farm and the particulars of the treatment of the boy today on the farm are not identical, but are widely different.

Give the boy a square deal is the exhortation of the Pittsburg Dispatch, which says:

One of the more practical of the psychologists directs the attention of fathers to the fact that ought not to need pointing out, that there is too much difference between the social environment of today and that of 40 years ago to make it possible for the boy of today to be much like the boy of that time, or that the man of today trying to gage the tendencies of his boy-time with that of now need be depressed because convinced something serious is wrong with his boys. Forcing the doings of the boy of 1916 to square up with the boy of 1870 is unfair to the boys of today.

The same principle applies to the girls of today as compared with the girls of 40 years years ago. Times change and the sources of encouragement and inspiration change with them.

Foods

Correct Combinations for Dinner

Some foods are high in only one kind of food material and so serve only one or possibly two bodily needs, says Edna E. Walker of the Washington State college. They may be good foods, but should be combined with other foods to make a balanced meal.

With beef steak: Fried onions, French fried potatoes, mushrooms, string beans, stewed carrots.

With Roast beef: Mashed potatoes, corn, tomatoes, carrots, cabbage or greens.

With pot roast or boiled beef: Cream horseradish sauce, boiled potatoes, stewed tomatoes, cabbage.

Swedish Milkmen.

Swedish milkmaids are being displaced by men who are taking up work that was formerly regarded as purely for women.

Popular Crochet Designs

By WINIFRED WORTH



Nun's Pattern.

This novel pattern is much used by the nuns, who thus put their time to good use while in seclusion.

1st row—Ch. 8, join in ring with sl. st., 3 t. in ring, ch. 3, 3 t. in same ring, 4 knot st. (to make pt. st, draw st. on needle out of one-fourth inch, thread over needle, pull through, catch needle through lower of three threads on loop, thread over needle and pull through, leaving 2 sts on needle, thread over and pull through both sts., ch, one, tighten to knot), repeat until 4 sts. have been made, ch. 6, fasten by sl. st. in last kt. made, 3 t. in ch. of 6, ch. 3, 3 t. in same ch., turn.

2nd row—Ch. 3, 3 t., 3 ch., 3 t. make kt. st. 1, fasten in last kt. st. made, repeat until 4 kts. sts. have been made, 3 t. in ch. of 1st shell, ch. 3, 3 t. in same ch., ch. 3, turn.

3rd row—Shell in shell, make kt. st., fasten by 3 dc. in top of kt. st. Make kt. st. and dc. in 1st of center kt. of group, ch. 5 and sl. st. in last st. of center group. Make kt. and shell in shell, ch. 3, turn.

4th row—Shell in shell, repeat kt. st. until center ch. of 5, 15 t. in center ch. of 5, repeat kt. st., shell in shell, ch. 3, turn.

5th row—Repeat 4th row to center 15 t., 5 t. in 1st 5 t., 2 kt. sts. 5 t. in 2nd 5 t. of 15, 2 kt. sts., 5 t. in 5 last tr. of 15, repeat 4th row to end, ch. 3, turn.

6th row—Shell in shell, thread 3 times over needle, go into 1st st. of last group of 5, knit off 2 at a time until 2 remain on needle, repeat and go into 2nd t., knit off, leaving 3 sts. off needle, thread over twice into 3rd t., knit off, leaving 4 sts. on needle, repeat, leaving 5 on needle, thread over once and into 5 t., knit off 2 at a time, leaving 1 st. on needle, make kt. and repeat twice more. Shell into shell, ch. 3, turn.

7th row—Same as 3rd, repeat from 3rd row for desired length.

Bedbugs

Use of Cyanide Is Dangerous

In response to requests coming to the state experiment station regarding the use of cyanide in fumigating for bedbugs, Dr. A. L. Melander, entomologist, gives the following pointed advice:

First of all do not use cyanide fumigation unless the case is so aggravated as to warrant the risk, for cyanide is a most subtle and subtly diffusive poison. Because its gas is colorless and virtually odorless the danger attending its use is often not appreciated and if it is carelessly employed it might have as disastrous results on the people living in the house as on the bugs.

The commonest prescription for bedbugs is a mixture of one ounce of corrosive sublimate in a pint of alcohol to which is sometimes added four ounces of turpentine. This liquid may be squirted by means of a small syringe into cracks around the beds, around mopboards, in back of picture frames or other hiding places where the bugs live.

Fashion Hints.

An attractive yet conservative sports costume is a steel-gray Angora sweater, which clings to the body, the novel feature of which is the front of the self fabric, but having large coin spots of Alice blue. The back and sleeves are of plain gray, and with it is worn a gray mixed tweed sports skirt and scarf of Alice blue silk jersey. The sweater has two breast and two hip pockets of mannish style.

Serge and Flannel for Trimming.

It appears to be so much cheaper to make cotton velvet than wool fabrics that we are prepared to see the new frocks and suits of bright colored velveteens piped and bound with bits of blue and red serge. A fashion expert in New York, a man who designs as many dresses as he discusses, is leading his patrons to the idea of silk and cotton frocks trimmed with flannel, of even khaki-kool brought out two months before its time and togged with heavy trimmings to appease the season.

The Latest Addition to the "Set."

The newest sets of hats and scarfs include long mittens with gauntlet-shaped wrist portion.

Fats as Food.

The number of edible fats in use has been greatly increased in recent years, a bulletin of the United States department of agriculture points out. Formerly butter, cream, and lard, and perhaps "meat drippings" were the only edible animal fats known to the average housewife. Now numerous cooking fats are made from vegetable oils or mixtures of vegetable and animal fats. The development of methods of treating liquid oils to harden them by the addition of hydrogen has added a number of cooking fats of the approximate consistency of lard to the fats available for home use. Among the edible vegetable fats mentioned by the bulletin, which are used for food purposes, are olive oil, cottonseed oil, peanut oil, cocoanut oil, corn oil, soy bean oil and nut oils.

Apple Sauce Cake.

The following recipe requires no milk or eggs:

One cup of apple sauce, one teaspoonful soda stirred in sauce, one cup sugar, one cup raisins, one-half cup of butter or lard (if lard use a pinch of salt), two tablespoons of cocoa or chocalate, one teaspoonful each of cinnamon, cloves and nutmeg.

The batter should be more stiff than ordinary cake. Bake in a moderate oven. This amount makes a small loaf. If allowed to age a couple of weeks it will have a nicer flavor and when covered with a white icing makes a good dark cake for the holidays. E. Q.

Irish Laborers' Acts.

In addition to the administration of the poor relief law and the public health acts, the local government board of Ireland has administered oversight of the so-called laborers' acts, the purpose of which is to put Irish laborers into possession of agricultural holdings, assist them by means of money grants for the purchase of holdings, provide them with cottages, assist them in agricultural operations, etc.

Patterns

1915—Ladies' Apron—Cut in three sizes: Small, medium and large. Medium size requires four and one-eighth yards of 36-inch material. Price, 10 cents.

1929—Ladies' Kimono or Lounging Robe—Cut in four sizes: 34, 38, 42 and 46 inches bust measure. It requires seven and one-eighth yards of 36-inch material for a 38-inch size. Price, 10 cents.

1472—Girls' Dress. Cut in four sizes: 4, 6, 8 and 10 years. It requires three yards of 56-inch material for a 6-year size. Price, 10 cents.

1918—Child's Rompers—Cut in three



sizes: 2, 4 and 6 years. It requires three yards of 36-inch material for a 4-year size. Price, 10 cents.

1628—Ladies' Corset Cover and Drawers. Cut in 3 sizes: Small, medium and large. It requires three and one-half yards for a medium size, in 36-inch material. Price, 10 cents.

1942-1943—Ladies' Costume. Waist 1942 cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt, 1943, cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. To make the entire dress of 44-inch serge will require six and three-quarter yards. The skirt measures about three and three-quarters yards at the foot. Two separate patterns, 10 cents for each pattern.

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BE SURE TO GIVE NUMBER AND SIZE.

Invalids

Some Dishes That May Attract

In the selection and serving of foods for the invalid, cleanliness in the extreme is of first importance, says Nora K. Andrew in the women's institute of the British Columbia department of agriculture. We all know how unpleasant it is to find some foreign matter in our food, but such an incident is many times worse for one who is ill. Foods that are eaten raw should be chosen because of their quality, such as fruits, celery, lettuce, oysters, etc., and they should be particularly well washed, for they are not sterilized by cooking as other foods. Milk and its products must be unquestionably fresh and free of taint, and meats, fish and eggs are to be rejected if there is any doubt as to their freshness. Food that has been contaminated by foreign odors is to be avoided, as an invalid is very sensitive to such things. We all know, at least all who have been ill in bed, that the time is very long and that meals are breaks in the long days, so the meals should be made as appetizing as possible and served in an attractive manner. The dishes should be well washed, the glass and silver be polished, and the traycloth and serviette clean beyond a doubt. When the dishes are returned, they should be washed with hot water and soap, not merely soaked, and if the case is infectious they should be disinfected in a solution of carbolic acid or formalin and then rinsed in clean hot water. As an invalid finds the time passing slowly, so a change of dishes often affords some diversion by studying the pattern, as one gets tired of counting the cracks in the ceiling or tracing out the pattern on the wall paper.

The following are some dishes that should appeal to the invalid:

Albumen Water.

One white of egg well beaten in a tumbler, 1-2 tablespoon of sugar, juice of one lemon. Fill tumbler with water, beat well, strain and serve.

Gruel.

One-quarter cup oatmeal, 1 quart water, 1 teaspoon salt. Cook two hours in double boiler, strain and serve as desired, with white of egg beaten or cream.

Malted Milk and Currant Jelly.

One tablespoon Horlick's malted milk, 1-4 cup hot water, 1 tablespoon currant jelly, 3-4 cup cold water, cracked ice. Mix the malted milk powder with a little of the boiling water to make a smooth paste; add the jelly and the rest of the water and stir till the jelly is dissolved. Add the cold water and ice, strain and serve.

Salisbury Steak.

One-half pound steak. Scrape on both sides until nothing is left but tough fiber. Mould the scraped meat into a little cake and broil it over coals until hot, not too long. Season and serve on toast. Often scraped beef on toast is good.

Junket Egg-Nog.

One egg, 3-4 tablespoon sugar, speck salt, 3-4 cup milk, 1 tablespoon brandy or wine. Beat egg, add sugar, salt and milk, shake well, add stimulant and serve.

Toast Water.

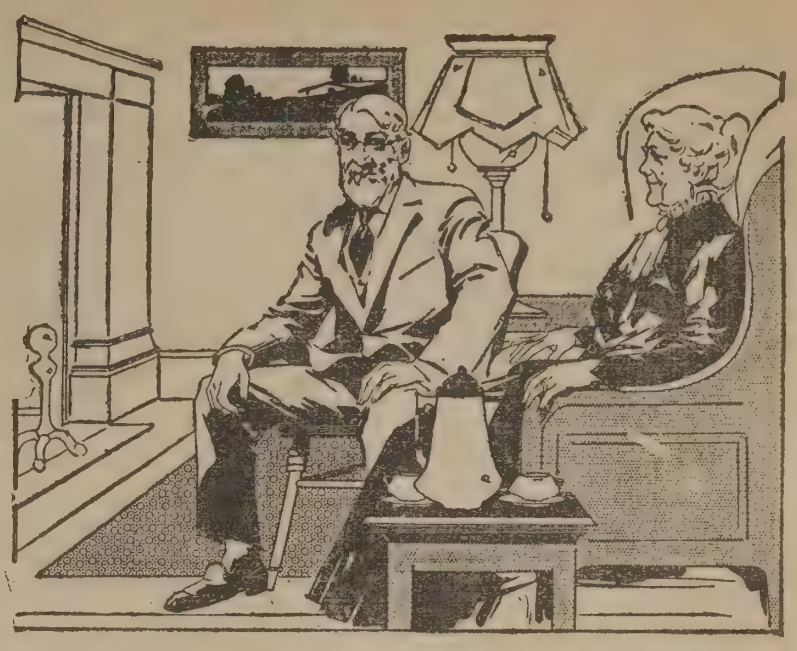
One cup toast, salt, 1 cup boiling water. Toast well in oven, break and measure, add water, let stand 1 hour, rub through strainer, serve hot; milk or cream may be added. Rice water is made the same.

Coddled Eggs.

Put eggs in a pan of boiling water, remove from stove, let stand for 10 minutes, serve. Eggs poached in boiling milk with butter and seasoning in makes a nice change.

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Girls, join our Lavalliere club and get a beautiful solid gold diamond set, pearl pendant lavalliere. Nothing is required but a little of your time. Write Washington Farmer, Room 37 Review building, Spokane, Wash.—Adv.



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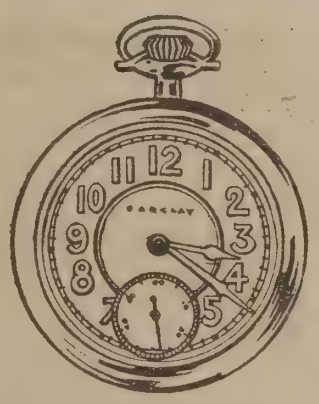
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Neutrals Favor Peace

Smaller Nations Give Wilson Support

The eyes of all the world, which have been centered on the battles of the European war for the last two and a half years, are now watching the movement toward peace even more interestedly. A few notable incidents in the peace propaganda have been recorded during the last few days.

President Wilson's note, asking that the warring nations make known the terms that they would require before peace could be restored, brought from Germany an immediate reply that she favored a peace conference at once, and that on the first day of such conference would present her definite peace terms. There have been hints that such terms will be delivered confidentially to President Wilson for his own information in his movements to bring peace. The president has, however, indicated that until there is some further development in the situation, he will not take further formal action.

The entente allies (England, France, Russia and Italy) continue to show no willingness to consider peace on any other terms than those largely favorable to them. The Spectator, a London publication, gave what it considered the entente allies' terms in an issue last week, such terms including four specially vital features: (1) That Germany and her allies restore all the territory taken during the war, and also Alsace-Lorraine to France. (2) That Germany and her allies pay a full money indemnity for all destruction done by their armies and navies. (3) That Constantinople and the Dardanelles be placed under Russian control. (4) That the German navy be virtually dismantled or distributed among the entente allies.

Since these terms would mean a virtual annihilation of Germany, the Spectator's article might appear a step away from rather than toward peace.

Another significant incident of the week was the sending by the Scandinavian nations—Norway, Sweden and Denmark—of notes strongly supporting President Wilson's plea for consideration of peace terms by the belligerents.

During the week also the government of Spain sent a vigorous protest to the German government against alleged illegal and inhuman destruction of property at sea.

U. S. Exports Heavy.

During the year just closed the United States has exported foodstuffs to Europe at the rate of $60,000,000 a month, making the total for the year something like $700,000,000. Of these exports, breadstuffs formed the major part, totaling about $400,000,000 in value. Meat and dairy products totaled over $240,000,000.

Bank Resources Large.

The resources of the national banks in the United States now approximate $15,500,000,000,000, an increase of more than $4,000,000,000 over two years ago. These resources are almost equal to those of all the other similar banking systems in the world.

No Coal From Canada.

The Canadian government has placed an embargo on shipments of coal. This means that until it is lifted there will be no more coal shipped into the Unitedo States from Canada, and may tend to aggravate the fuel shortage situation.

Wage Law Situation.

The railroad officials and the representatives of the trainmen involved in the wage controversy which brought about the passage last fall of the "eight-hour" law by congress, have failed to agree on the payment of the wages provided by the law. What has something the appearance of a wide split between the two parties occurred at a New York conference last week, when the railroads declared they would not under any circumstances pay the increased wages until the supreme court had passed upon the constitutionality of the law. The court is now considering the measure, attempting to render an early decision on it.

In the meantime the railroads have agreed to keep a record of the employes affected by the law, so that, if it is held to be valid, they may receive back pay from the date the law was intended to become effective to the date of the supreme court's coming decision.

Talk is still heard of a strike similar to that threatened last fall, when the trainmen's threat caused President Wilson to rush the so-called eight-hour bill through congress.

Less People on the Farms.

A large percentage of the people of Australia lives in the principal cities of the different states.

Sydney, with a population of 763,000, represents over 40 per cent of the people of New South Wales.

Perth, with a population of 122,000, represents 38 per cent of the inhabitants of Western Australia.

Brisbane, with 162,000, represents nearly 24 per cent of the people of Queensland.

Hobart, with 40,000, has under 20 per cent of the people of Tasmania.

Melbourne, with a population of 684,000, contains 48 per cent of the total population of Victoria.

Adelaide, with 205,000, has over 46 percent of the people of South Australia.

Dining Car Potatoes.

Old alfalfa ground in Benton county, Wash., near White Bluffs, proved its value in raising fancy potatoes for the railroad dining car use. W. H. Keal planted 12 sacks on approximately two acres and is reported to have harvested a trifle over 700 sacks that averaged between 110 and 115 pounds. He sold the bulk of them for $30 per ton, but has saved out better than a hundred sacks of the best for seed for himself and neighbors.

School Has Basket Social.

Word comes from Hoper in Whitman county that the Daisy school broke all local records with a basket social which brought in $81.

Good Roads

Advocates Concrete Foundation

During the last few years $250,000,000 has been provided for road building and road improvement in New York state. Of the last $50,000,000 bonds issued for highway construction some $20,000,000 remains to be expended. With regard to the expenditure of these vast sums and as to the character of the roads upon which they can be most profitably spent Professor Arthur H. Blanchard, of the highway engineering department of Columbia university, says:

"In my opinion, in the construction in the future of main trunk highways in this state, the foundation should be of concrete. A well constructed broken stone foundation costs practically as much as concrete and has nowhere the strength. It has recently been recommended to the governor that all trunk highways be constructed of concrete."

Edwin Duffy, New York state commissioner of highways, says: "All the counties want roads. If we listen to all these demands we would build roads at a cost of $5000 a mile that would not last a year," adding: "In the 7000 miles of state highways we unfortunately have only 700 miles of cement pavement construction, but we are building more of it."

Elks Damage Fruit Trees.

R. B. Miller of Startup, in Snohomish county, the other day shot and killed an elk, a so-called ward of the county, while it was in his orchard damaging his trees. During the past few years elks have caused damage to his orchard and crops of not less than $2000 and not being able to get relief from the county "Bob" decided to see what the courts would do for him. He pleaded guilty to having killed the elk and after a trial in justice court in Everett was fined $20 and costs. The case will be carried to the state supreme court if necessary so that a final decision may be had on the matter in this state.

Waterproof Knapsacks.

Waterproof knapsacks made of horse hair have been invented by a Japanese army officer.

When Knighthood Was in Flower

Watch for the opening chapters of the next serial, "When Knighthood Was in Flower," in The Washington Farmer of January 18.

You will surely regret it if you do not read this thrilling story of the olden days. Your neighbors and friends will be asking you about it.

Here are two or three paragraphs from chapter I.

It sometimes happens, Sir Edwin says, that when a woman will she won't, and when she won't she will; but usually in the end the adage holds good. That sentence may not be luminous with meaning, but I will give you an illustration.

I think it was in the spring of 1509, at any rate soon after the death of the "Modern Solomon," as Queen Catherine called her old father-in-law, the late King Henry VII., that his august majesty Henry VIII., "the vndubitate flower and very heire of both the sayd linages," came to the throne of England, and tendered me the honorable position of Master of the Dance at his sumptuous court.

As to "worldly goods," as some of the new religionists call wealth, I was very comfortably off; having inherited from my father, one of the counselors of Henry VII., a very competent fortune, indeed. How my father contrived to save from the greedy hand of that rich old miser so great a fortune, I am sure I can not tell. He was the only man of my knowledge who did it; for the old king had a reach as long as the kingdom, and, upon one pretext or another, appropriated to himself everything on which he could lay his hands. My father, however, was himself pretty shrewd at money matters, having inherited along with his fortune a rare knack for keeping it. His father was a goldsmith in the time of King Edward, and enjoyed the marked favor of that puissant prince.

Being thus in a position of affluence, I cared nothing for the fact that little or no emolument went with the office; it was the honor which delighted me. Besides, I was thereby an inmate of the king's palace, and brought into intimate relations with the court, and, above all, with the finest ladies of the land—the best company a man can keep, since it ennobles his mind with better thoughts, purifies his heart with cleaner motives, and makes him gentle without detracting from his strength. It was an office any lord of the kingdom might have been proud to hold.

The Washington Farmer congratulates its host of readers on securing the rights for the publication of this serial, bright, historical, thrilling—treating of the romantic era in the world's history when

"There lived a knight, when knighthood was in flow'r,
Who charmed alike the tilt-yard and the bow'r."

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GUESSES ABOUT THE SIZES AND AGES OF THE COUSINS

Dear Aunt Nellie: I have a little The Farmer and I have been reading the Children's Corner. I enjoy it very much now, but first when I started reading it I thought that every one wrote the same thing. Now I read the letters slowly and guess about the size and about the eyes and hair of the girl or boy. I don't really know what I would do now if I didn't have the Corner. I am a girl of 12 years and I live on a 30-acre farm. I have light hair, blue eyes, and I weigh somewhere in the nineties. We have nine head of cattle, two horses and over a hundred chickens. I haven't any dog or cat for my pets, but I have two pet hens that I can carry around as much as I want to. When they were small I used to catch them in a corner of the barn and let them eat wheat from my hand, and finally they became so tame that I could pick them up and carry them around. One of my pets is 4 years old and the other is 2. Their names are Pretty and Blackie. I have much fun with them. I haven't any brothers or sisters, but there are a lot of girls around here that I can go to see, so I am not lonesome. I like the farm and I wouldn't trade with any city girl. I have only one mile to go to school. I walk to school every day when it is nice, but in the winter I sometimes ride in a sled when it is snowy. The schoolhouse is very large and there are six rooms in the building. In my room there are 39 pupils, 18 in the fifth grade and 21 in the sixth. I'm in the fifth grade and my teacher's name is Miss Haycox. I like her very much. My favorite studies are reading, spelling and arithmetic. We had two families over for Thanksgiving dinner and there was a man over that was jolly and he made us laugh. I have an organ and I'm taking music lessons every Saturday. My music teacher's name is Miss Clara James. I can tat and crochet, and I help mama by sweeping, dusting and washing dishes. I would like to correspond with my twin Fernie Park and with Esther Carslin if they will write, or any other girl of my age. I hope all the girls of the Children's Corner had a good time Thanksgiving.—Agnes Lund, R. 1, Rochester, Wash.

LILLIAN WOTTON BECOMES A MEMBER OF THE CORNER

Dear Aunt Nellie: I have never written to the Children's Corner before, and I want to join the Corner. I will write and tell you about my schoolhouse. It has only one room and it has an anteroom where we children keep our lunches and coats. We also have a filter in the anteroom. There are about 24 desks and the stove is in the middle of the room. There is a platform on the left of the door as you go in. The teacher's desk stands on it. We have an organ at our school. I walk one-quarter of a mile to school. I am 11 years old and have three brothers and did have three sisters older than I, but one is dead. I have auburn hair and blue eyes and a light complexion. My father has a Metz car and we also have two work horses named Myrtle and Jumbo and one pony named Pet, one colt named Babe. We also have a polly parrot and two canary birds. I live on a 120-acre farm.

LILLIAN AMANDA WOTTON.
Friday Harbor, Wash.

CHELAN GIRL WISHES TO CORRESPOND WITH IDA DILIO

Dear Aunt Nellie: I have never written to the Children's Corner before. I like the letters very much. Every time the Farmer comes I am very anxious to read the letters in the Corner. I am 12 years old and in the seventh grade. My birthday was December 9. I would like to correspond with Ida Dilio. We have three horses and 18 head of cattle, six milch cows, and five calves and seven young stock. I live on a farm of 160 acres. We have two large cats and four little cute kittens. I have a brown and black dog called Rex. I have three sisters and one brother. I have a very nice little niece. She is two years old now. She can talk some and is very pretty. Her name is Elizabeth Jane O'Neal. I shall describe our schoolroom. It is large with the blackboard on the north side. It has an organ and the teacher's desk. There are eight windows in the schoolroom. There also are two halls. One is for the coats and caps, the other one is for the teacher. Her name is Miss Burklund.—Elizabeth Lucas, Chelan, Wash.

GIRLS SERVE HOT LUNCHES AT FRED MICHAEL'S SCHOOL

Dear Aunt Nellie: My papa takes The Farmer and I have been reading the children's letters. I like them very much. This is the first time I have ever written to the Children's Corner. I was 8 the eighth of last March. I have a pony and papa paid for it. I have two brothers and a sister and their names are Ella, Charles and Warren. Ella is 7 years old. Charles is 5 and Warren is 3. We built a new schoolhouse. They built a cottage for the teacher. There are 19 scholars in school. The girls serve hot lunches in the winter. I live three miles from school. I am in the fourth grade.—Fred Michael, Davenport, Wash.

NINE-YEAR-OLD ELIZABETH HAS BLACK AND WHITE CAT

Dear Aunt Nellie: I have been reading the letters of the Children's Corner and I have enjoyed them very much. I was nine years old October 26. I have three sisters. The oldest one's name is Katherine and the other one's name is Margaret. The smaller one's name is Helen. I have two brothers. The oldest one is four years old and is named Robert. The smaller one's name is Ray. My sister and I have a pet pig. We call him Sandy. I also have a pet cat. She is black and white. I am in the third grade. I would like to win a prize, but I don't know what to do.—Elizabeth Bowen, Oroville, Wash.

HAS A PET ROOSTER THAT EATS WHEAT FROM HER LAP

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have read every letter that I have seen in The Farmer. I walk two miles to school every day. I am 11 years old and in the fourth grade. My teacher's name is Miss Ruth Wilson. I have two pet dogs and their names are Teddie and Rover. I have a pet Rooster. When I go to feed the chickens it jumps up on my lap and tips my pail over and eats all the wheat. I have a little nephew. He is eight months old and his name is Alvin.—Marie Anderson, R. F. D. No. 1, Kalama, Wash.

TAKES CARE OF THE HORSE; HELPS MOTHER IN MANY WAYS

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but hope it is not the last time. I live on a 40-acre farm two and a half miles west of Winlock. We have seven milch cows, one heifer, one calf and a pig. We have a horse named Dick. When father works at the mill I have to take care of our horse and help mama in many ways. I am in the sixth grade at school, and 10 years old, or will be 11 on June 25. I have a sister and her name is Viola. She is 7 years old and is in the second grade. Our teacher's name is Miss Emma Viste. We go three-quarters of a mile to school. I have seen only Mary Roppert's letter from Winlock.—Warner Payhonen, Box 152, Winlock, Wash.

KTHERINE IS A HALLOWE'EN GIRL; HAS SHE A TWIN?

Dear Aunt Nellie: I am a Hallowe'en girl. I was eight years old last Hallowe'en. Have I a twin? My sister and I have about 90 White Leghorn chickens. We have five horses, one Jersey cow and 15 hogs on the ranch. This is a 100-acre orchard tract. My papa is foreman here. We have a car and we enjoy it very much. I like to go to school. My teacher's name is Mr. Fellmey. I live a half mile from school. There are nine pupils in our school.—Katherine Bowen, Oroville, Wash.

ELLA SHARP HAS SEVEN BANTAMS FOR HER PETS

Dear Aunt Nellie: I am 9 years old and will be 10 March 8. I am in the fourth grade. I have two sisters going to school. The older one is in the seventh grade and the other one is in the fifth grade. I have a pet dog, and his name is Jack. I have seven pet Bantams, and they lay in the summer and winter time. I have a horse, and her name is Muggens. She is a buckskin.—Ella Sharp, Malaga, Wash.

PUPILS AT REARDAN HAVE FUN WITH A FOOTBALL

Dear Aunt Nellie: It is a long time since I have written to The Farmer. I am 11 years old. I am going to tell you about my school. There are 10 new desks and five old desks in it. One stove is in one corner. We have a football and have lots of fun playing football. We have two swings, one pair of trapeze. There are 14 children going to school. There are six boys.—Herbert Cone, Reardan, Wash.

FAY IS OLDEST OF FAMILY AND ONLY ONE IN SCHOOL

Dear Aunt Nellie: I am 9 years old and my birthday was September 5. Have I a twin? I have two sisters and their names are Doris and Lois, and besides them there is Homer. I am the oldest in the family and the only one that goes to school. I am in the fifth grade and there is one other in my class. There are eight pupils at school. My teacher's name is Miss Elida Smallwood. I have a mile and a half to walk to school. We have 60 horses and 60 head of cattle, 11 pigs and 70 chickens.—Fay Johnson, Quincy, Wash.

LOIS WRITES TO US FROM WAY UP IN THE MOUNTAINS

Dear Aunt Nellie: I live way up in the mountains. We have about a hundred chickens, and they are laying nicely now. We have three horses and one cow and a calf. We raised both of them from a little calf. I am in the third grade in school and there are three in my class. I have two brothers. One is 7 and one 3. We have some people working for us. My teacher was here for dinner Thanksgiving. Well I will close now for it is bed time.—Lois Manchester, Lyle, Wash.

MABEL WOULD LIKE TO HEAR FROM THE COUSINS

Dear Aunt Nellie: One of my school chums, Clara Olson, wrote to the Corner, so I thought I would write. We live on a farm and I have to walk nearly two miles to school. We have a big schoolroom with 43 pupils. Our teacher's name is Miss Lucy C. Smith. She is a very nice teacher and the girls love her very dearly. The principal's name is Mr. Simans. I would like to hear from some of the cousins very much.—Mabel Nicholson, Box 331, Bothell, Wash.

MINNIE ELLISON'S BEST PET IS HER BLACK CALF

Dear Aunt Nellie: My papa takes The Farmer and I like to read the Children's Corner very much. I am 10 years old and am in the fourth grade. I have three brothers and no sisters. I have one of the cunningest little kittens. They play a while, then they eat and sleep. One is white and yellow, the other is white and yellow and gray. I have a dog named May. The best pet of all is my black calf and his name is Blackey.—Minnie Ellison, New Kamilche, Wash.

EMILY IS TRYING FOR A PRIZE IN SPELLING AT SCHOOL

Dear Aunt Nellie: I like to read the children's letters very much. I go to the Firwood school. I am 8 years old and in the second grade. My teacher's name is Mrs. Kerr and I like her very much. I am trying to win a prize in spelling this month and my sister won the prize last month in spelling. She got a thimble for her prize. I have four sisters and one brother.

EMILY SCHOENBAECHLER.
Box 84, Tacoma, Wash.

WE ARE GLAD TO HEAR FROM YOU—WRITE AGAIN, DOROTHY

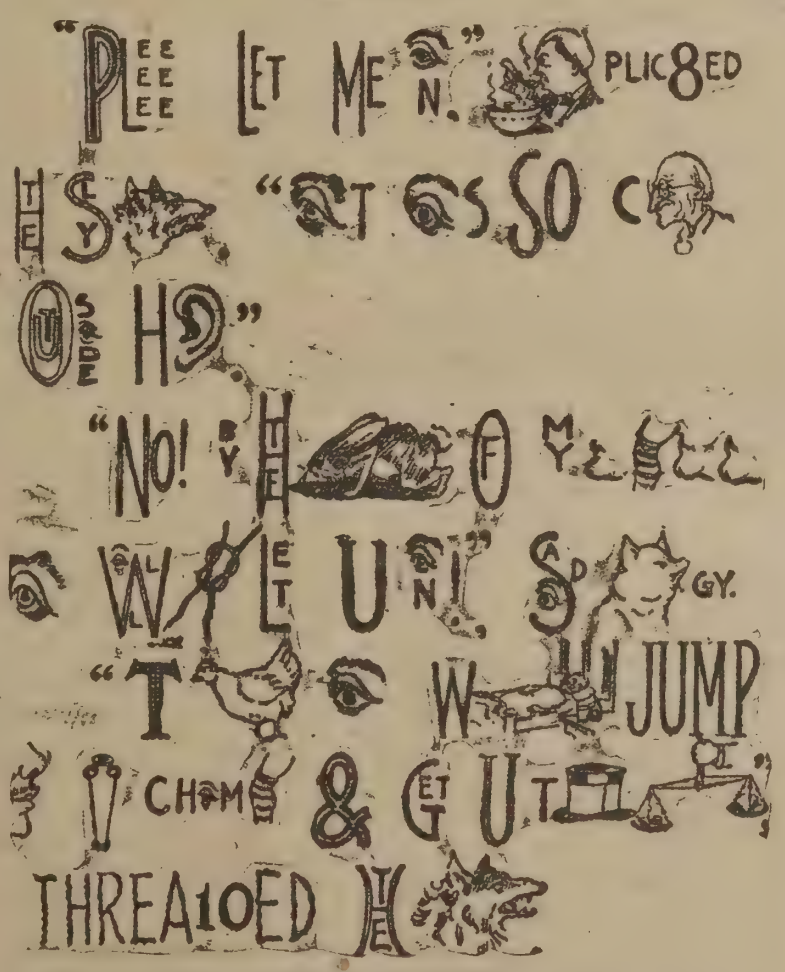
Dear Aunt Nellie: I do not live on a farm, but we take The Farmer and will write to you any way. I am 9 years old. I am in the third grade and my teacher's name is Miss Gould. I take music lessons. I was born in Garfield, Wash., August 28. I have two brothers, whose names are Fred and Byron. My brother Avery is not living. I have one married sister, who has a little girl 1 year old.—Dorothy Genevieve Howard, Garfield, Wash.

EDITH WHITE TELLS US ABOUT HER MANY PETS

Dear Aunt Nellie: I will tell you about my pets. I have a puppy, two pigs, three calves, a horse and some cats. The puppy's name is Bab, the calves' names are Fairy, Topsy and Nancy. The horse's name is Dolly. I go to school and am in the fourth grade. My teacher's name is Miss Eva Hane. I have a brother and he is in the second grade. His teacher's name is Miss Mason.—Edith White, Curlew, Wash.

Story of the Three Little Pigs

CHAPTER XI.



Concluded next week.

SOLUTION TO LAST WEEK'S CHAPTER.

Instantly the wolf determined to devour the little pig, and started to conjure up in his brain some way to go about it.

"Nothing can keep me from it," he cried. "You are my meat!"

"Is that so?" responded the pugnacious, diminutive porker.

WHAT TIME IS IT?

What—no watch? Write to the Washington Farmer Circulation Department. We'll tell you how to earn one. Address the Washington Farmer, Room 37 Review building, Spokane, Wash.—Adv.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Dec. 30.—Notable jumps in prices marked the close of the year in wheat trade. Speculators who at the last found themselves unable to make deliveries on December contracts bid the market up 7 cents a bushel in some cases. Signs of improved shipping conditions led to brisk advances, too, on more deferred deliveries. The close was nervous, 2 3-4 to 4 cents net higher with May at $1.74 1-4 to $1.74 1-2 and July at $1.41 1-8 to $1.48 1-4.

Corn gained 3-4 to 3c and oats 5-8 to 1 1-4@1 3-8c. Provisions finished unchanged to 25c higher.

Pacific Northwest Grain.

PORTLAND, Ore., Dec. 30.—Wheat—Strong, no trading. Spot bids unchanged to 2c higher. Bluestem, $1.53; fortyfold, $1.46; club, $1.42; red Russion, $1.40.

Barley unchanged.

TACOMA, Wash., Dec. 30.—Wheat—Bluestem, $1.50; fortyfold, $1.48; club and red fife, $1.43; red Russian, $1.38.

SEATTLE, Dec. 30.—Wheat—Bluestem, $1.51; turkey red, $1.53; fortyfold, $1.47; club, $1.47; fife, $1.47; red Russian, $1.25.

Barley—$37.25 per ton.

WILBUR, Wash., Dec. 30.—Bluestem, $1.35; club, $1.30. Oats, $33. Barley $33. No activity in the market.

WALLA WALLA, Wash., Dec. 30.—Club wheat, $1.32; bluestem, $1.38; barley, $38.

San Francisco Grain.

SAN FRANCISCO, Dec. 30.—Barley—May, $2.15 bid, $2.20 asked.

Minneapolis Grain.

MINNEAPOLIS, Dec. 30.—Continued export demand strengthened wheat prices. May closed 3c higher, and July finished 2 1-4c up. Corn and oats steady. Wheat receipts, 146 cars; compared with holiday a year ago.

Wheat—May opened $1.76 to $1.76 1-2; high, $1.80 1-8; low, $1.76; close, $1.79 1-8 to $1.79 3-8. July opened $1.69 1-2; high, $1.72 3-4; low, $1.69 1-2; closed, $1.72.

Cash—No. 1 hard, $1.80 1-4@1.85 1-4; No. 1 northern, $1.77 1-4@1.80 1-4; to arrive, $1.76 1-4@1.78 1-4; No. 2 northern, $1.73 1-4@1.79 1-4; No. 3 wheat, $1.64 1-4@1.75 1-4.

No. 1 durum, $1.73 7-8@1,87 7-8; No. 2 hard Montana, $1.73 1-4@1.75 1-4.

Corn—No. 3 yellow, 88@88 1-2c.

Oats—No. 3 white, 49 1-2@50c.

Flax—$2.82 3-4@2.86 3-4.

Flour—Fancy patents, 10c higher, quoted at $9.30. Other grades unchanged. Shipments, 43,749 barrels.

Barley—79c@$1.12.

Rye—$1.33@1.34.

Bran—$26@26.50.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at coast points for the fiscal year beginning July 1 up to Saturday night for 1916-17 and 1915-16 were as follows:

Seattle.	Wheat.	Oats.	Barley.	Hay.
1916-17	3479	732	240	2367
1915-16	6225	649	1050	2482
Portland.				
1916-17	3311	1310	111	1153
1915-16	8666	739	1221	1286
Total.				
1916-17	6790	2042	351	3500
1915-16	14891	1388	2271	3768

Seattle Market.

SEATTLE, Wash., Dec. 30.—The local ranch egg market has tightened perceptibly for the close of the week, with all dealers quoting 42c. There is considerable of a scarcity. Wholesalers report that they never before enjoyed so heavy a run of fresh ranch eggs to Alaska at this time of the year, and this is contributing to the unexpected shortage. Storage egg holdings are light at 32c, but jobbers expect that they will be cleaned up by January 15.

Butter is running "close to the churn." There is no surplus, and at the same time no outlook for an advance. Exporters are not active on this market, and it is thought that prices are too high for them to operate.

BUYING PRICES.

Unless otherwise stated the following prices are fixed, upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 36@38c per dozen.

Poultry—Live hens, fat, over 4 lbs., 17c per lb.; do, 3 lbs. and under, 12c; old roosters, 10c per lb.; springs, 17c per lb.; ducks, 71c per lb.; squabs, large, $3.50 per dozen; geese, fat, 12c lb.; turkeys, live, 24c.

Butterfat—42c lb.; dairy butter, 27c pound.

Beef—Buying price: Prime beef steers, 8c per lb.; cows, fat, 5@6c per pound.

Hogs—Light, 11 1-2@12c per lb.; do, heavy, 10@11c per lb.

Veal—Fancy light, 12 1-2@13c per lb.; do, heavy, 9@10c per lb.

Hides—Salted, 19@20c per lb.; salt kip, 24c per lb.; salted calf, 30@35c per lb.; green hides, 16@17c per lb.; salted bulls, 16c per lb.; dry hides (short trim), 32@33c per lb.; dry calf (under six lbs.), 38c per lb.; bull and dry salts, 4c per lb. less; green bulls, 13c per lb.; dry butcher full wool sheep pelts, 20@23c per lb.

Washington Crop Report.

A summary of estimates of November crop production and prices for the state of Washington, compiled by the bureau of crop estimates and transmitted through the weather bureau, United States department of agriculture, is as follows:

Corn—Acreage this year, 38,000; last year, 39,000; production this year, 1,406,000 bushels; last year, 1,053,000 bushels.

Winter wheat—Acreage this year, 690,000; last year, 1,300,00; production this year, 18,285,000 bushels; last year, 35,880,000 bushels.

Spring wheat—Acreage this year, 900,000; last year, 700,000; production this year, 19,350,000 bushels; last year, 15,540,000 bushels.

All wheat—Acreage this year, 1,590,000; last year, 2,000,000; production this year, 37,635,000 bushels; last year, 51,420,000 bushels.

Oats—Acreage this year, 275,000; last year, 275,000; production this year, 14,300,000 bushels; last year, 13,750,000 bushels.

Barley—Acreage this year, 165,000; last year, 175,000; production this year, 6,814,000 bushels; last year, 7,263,000 bushels.

Rye—Acreage this year, 7000; last year, 8000; production this year, 102,000 bushels; last year, 146,000 bushels.

Potatoes—Acreage this year, 60,000; last year, 61,000; production this year, 9,900,000 bushels; last year, 8,235,000 bushels.

Hay—Acreage this year, 836,000; last year, 812,000; production this year, 2,006,000 tons; last year, 1,868,000 tons.

Prices—The first price given below is the average on December 1 of this year, the second the average on December 1, last year: Corn, $1 and 77c per bushel. Winter wheat, all wheat and spring wheat, $1.43 and 82c per bushel. Oats, 51c and 37c per bushel. Barley, 84c and 56c per bushel. Rye, $1.11 and 75c per bushel. Potatoes, 98c and 53c per bushel. Hay, $13.80 and $10.80 per ton.

Seattle Wheat.

SEATTLE, Dec. 30.—There has been a brisk demand on the north coast this week for club wheat, a grade that was used principally for export when milling conditions were normal. Local mills are grinding heavily on this to fill orders for flour for export, but there has been a strong movement by rail to the Atlantic seaboard for shipment to the united kingdom. Millers have been both manufacturers of flour and exporters of grain. It is generally believed that considerable of this wheat was listed in the 4,000,000-bushel purchase during December for Europe. All purchases, however, have been made subject to delay by the car shortage.

Farmers are not selling. Only a few loads have changed hands during the week, and this in an indifferent way. Country bids have been $1.35 for bluestem, $1.37 for turkey red and $1.30 to $1.33 for fife. The beginning of the new year is expected to steady prices to some extent. Should the market again touch $1.50, as is expected, Washington farmers will begin selling at a heavy rate. This is the situation in the country as outlined by millers.

San Francisco Produce Market.

SAN FRANCISCO, Dec. 30.—Butter—Fresh extras, 35c; prime firsts, 34c; fresh firsts, 33c.

Eggs—Fresh extras, 38½c; pullets, 32c.

Cheese—New, 17c; California fancy, 16½c; Young Americas, 21c.

Poultry—Hens, 19@20c; old roosters, 11@12c; fryers, 22@23c; broilers, 27@30c; large 22@23c; squabs, $2@2.50; pigeons, $1.25@1.75; ducks, 13@14c; geese, 15@17c; turkeys, 20@21c.

Vegetables—Lettuce, 75c@$1.00 per crate; fancy, $1.35@1.50; peas, southern, fancy, large, 10@11c; summer squash, 85c@$1 crate; cream squash, 85c@$1.25 box; tomatoes, southern, $1.50@1.75; fancy, $2; eggplant, 7@10c; green peppers, 10@15c; fancy small, 3@8c; garlic, 4@6c; celery, $3.25@3.50 crate; rhubarb, $1@1.25; marrowfat and hubbard squash, 85c@$1.

Potatoes—River, $2@2.25; sweet potatoes, $2.75.

Prussian Insane Asylum.

By allowing its occupants practical freedom and employing them at useful occupations a Prussian insane asylum effects about 20 per cent of cures annually.

Life Stock Quotations.

At Chicago.

CHICAGO, Dec. 30.—Hogs—Receipts, 21,000; slow, 5c to 10c under yesterday's average. Bulk, $10.05@10.40; light, $9.55@10.20; mixed, $9.90@10.50; heavy, $10@10.50; rough, $10@10.15; pigs, $7.50@9.20.

Cattle—Receipts, 400; steady. Native beef cattle, $7.25@11.80; western steers, $7.25@10; stockers and feeders, $5.25@8.25; cows and heifers, $4.25@10; calves, $9@13.

Sheep—Receipts, 3000; steady. Wethers, $9.10@10.25; lambs, $11.25@13.50.

At Omaha.

OMAHA, Neb., Dec. 30.—Hogs—Receipts, 8300; lower. Heavy, $9.90@10.25; light, $9.50@10.10; pigs, $7.75@9.25; bulk of sales, $5.65@10.

Cattle—Receipts, 200; steady. Native steers, $7.50@11.50; cows and heifers; $6@8.50; western steers, $6.50@9.25; Texas steers, $6@7.50; stockers and feeders, $6@8.30.

Sheep—Receipts, 100; steady. Yearlings, $9.25@11.25; wethers, $8.50@11; lambs, $12.10@13.25.

At St. Paul.

SOUTH ST. PAUL, Minn., Dec. 30.—Estimated receipts at the Union Stock Yards today: Cattle, 275; calves, 25; hogs, 1700; sheep, 100; cars 31.

Cattle—New records in receipts were established today when the local market closed for the year. Today's small run put the year's receipts of cattle at, approximately, 756,800, and calves at 184,400, exceeding all previous years.

Hogs—Ten cents was cut off the price lists in the hog market today, when a light run was estimated. The sag put top hogs at $9.90 and bulk between $9.80 and $9.85. The downward tendency of the past two days has removed considerable of the bloom which the trade enjoyed during the week and right now prices are 10c to 15c above the close a week ago.

Sheep—Hardly enough stuff to afford a line on the market was in the section today, the few bunches which were cashed reflected no change in the situation, which has remained the same as at the close a week ago all during the week. Prices being paid at the close of the year are higher than ever before and prospects are that these rates will be held in force for some time.

At Portland.

PORTLAND, Dec. 30.—Hogs—Steady; receipts, 137. Bulk of packing grades, $9.75@9.85; heavy packing, $9.85@9.95; heavy butchers, $9.85@9.95; light packing, $9.70@9.80; rough heavies, $8.50@9; pigs and skips, $8@8.50; stock hogs, $6.50@8.25; cripples, $8.

Cattle—Steady; receipts, 90. Steers, prime light, $8@8.25; prime heavy, $8@8.25; good, $7.50@7.85; cows, choice, $6.50@6.75; medium to good, $6@6.25; ordinary to fair, $5.25@5.75; heifers, $6.25@7; bulls, $3.50@5; calves, $5@7.

Sheep—Steady; receipts, 18. Lambs, east of mountains, no offers. Lambs, valley, $10@10.50; lambs, common, $9@9.50; choice yearling wethers, $8.50@9; good yearlings, $8@8.50; choice light ewes, $7.25@7.75; heavy ewes, $6.75@7.25.

At Seattle.

SEATTLE, Dec. 30.—Receipts, 373 hogs, 92 cattle.

Cattle—Higher. Prime steers, $8.25; medium to choice, $7@7.25; common, $5.50@6.75; best cows and heifers, $6.75@7; medium to choice, $5.50@5.75; common bulls, $3.50@4; calves, $7@8.50.

Hogs—Prime light, $9.95@10; medium to choice, $9.50@9.80; smooth heavies, $9.15@9.50; rough heavies, $8.65@9; pigs, $8.25@9.

Sheep—Prime lambs, $8.50@9; yearlings, $7@7.70; wethers, $6.50@7; ewes, $6@6.50.

Spokane Union Stockyards.

Cattle—No receipts; market strong for good butcher grades. Prime light steers, $7.25@7.75; prime heavy steers, $7.25@8; good streers, $6.50@7; feeders, $5.25@6; prime cows, $5.75@6.25; good cows, $5.25@5.65; prime heifers, $6@6.50; bulls $3.50@4.75; calves, $5.75@6.75.

Hogs—Market strong on prime butcher and packer grades. Prime light, $9.60@9.80; prime heavy, $9.50@9.75; good light, $9.50@9.75; rough heavy, $8.50@9; stockers, $6.50@7.50.

Sheep—No receipts, market strong. Prime lambs, $9.25@9.75; common lambs, $8@8.75; choice yearlings, $7.50@8.25; good yearlings, $7.25@7.50; choice ewes, $6.25@7.25.

Wool.

BOSTON, Dec. 29.—The Commercial Bulletin will say tomorrow:

"This week has been comparatively quiet in the wool markets, and while the upward trend of prices has stopped the market is nevertheless firm. Manufacturers have taken some wool at full rates, but a considerable proportion of the week's trade appears to have been confined to dealers.

"Manufacturers are busy on old contracts and stock taking, and new business seems to have been rather light in the west. Contracting goes on slowly at full recent prices."

Wool, scoured basis:

Texas fine, 12 months, 95@$1.00; fine 8 months, 85@88c.

California northern, 85@90c; middle county, 80@82c; southern, 68@70c.

Oregon eastern, No. 1 staple, $1@1.05; eastern clothing, 94@95c; valley, No. 1, 90@92c.

Territory fine staple, $1.10@1.12; half-blood combing, $1@1.05; blood combing, 90@92c; fine clothing, 90@92c; fine medium clothing, 85@87c.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—Potatoes, $2@2.20 cwt; new potatoes, 15c lb; sweet potatoes, $3.

Apples—Washington apples, cooking, 60c@85c; eating, $1@1.25; Wageners, $1.25@1.35 box; Jonathans, $1.25@1.35 box; Winter Bananas, 80c box; Kings, $1 box; Spitzenburgs, $2 box; Baldwins, 90c box; Delicious, large, $1.75@2.25 box; Rome Beauties, $1.25 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Coin, 36c lb; Gold Leaf, 40c lb; Better butter, 40c lb; Hazelwood, 40c lb; Peerless, 38c lb; Jersey Belle, 39c lb; Attalia, 40c lb; Diadem, 40c lb; Jersey, 38c lb.

Cheese—Wisconsin full cream, twins, 23c; triplets, 28½c; Wisconsin limburger, 28c lb; brick cheese, 28c lb; domestic Swiss, 30c lb; western cream, Idaho or Oregon twin or triplets, 24c lb; Young Americas, 22c lb.

Eggs—Fresh local ranch eggs, $13@14; fresh eastern eggs, $13 case; eastern storage eggs, $10@10.50; white fillers, $11 a case.

Cattle—Prime steers, $7@7.50 cwt; heifers, $6.50@7; cows, $5.50@6.

Sheep—Wethers, $9@9.50 cwt; ewes, $8@8.50 cwt; lambs, $10@11 cwt.

Hogs—Heavy hogs, $9 cwt; light hogs, $9.50@10.

Live Poultry—Springs, 12@13c lb; hens, 12@13c lb; old roosters, 6@7c lb; young ducks, 11@13c lb; geese, 10c lb; turkeys, 20@25c.

Portland Market.

PORTLAND, Ore., Dec. 30.—There was still some inquiry from the east yesterday for milling bluestem, but in a general way the demand flattened out in consequence of the reversal in the speculative markets. With the falling off in eastern interest, buying operations in the northwest, which for several days had been moderately active, came to a stop.

At the Merchants' Exchange prices were allowed to sag, bids for bluestem being 1 cent under those of Thursday, and for fortyfold 2 cents less. Club offers were unchanged and red wheat was 1 cent lower. Oats bids were scaled down a quarter.

Butter—Cubes, extras, 35c; prime firsts, 34c; firsts, 33c. Jobbing prices: Prime extras, 37@38c; cartons, 1c extra; butterfat, No. 1, 38c; No. 2, 36c, Portland.

Cheese—Jobbers' buying price, f. o. b. dock, Portland: Tillamook triplets, 20c; Young Americas, not quoted.

Eggs—Oregon ranch, current receipts, 40c per dozen; Oregon ranch, candled, 43c per dozen; Oregon ranch, selects, 45c.

Poultry—Hens, 14@17c; springs, 16c per pound; turkeys, live, 23@25c; dressed, 30@31c; ducks, 15@16c; geese, 12 1-2c.

Portland Wheat.

PORTLAND, Ore., Dec. 30.—The wheat market in the closing week of the year was on a firm basis. There was a good demand from the east and south most of the time and the knowledge that stocks in the country were light caused dealers to bid up in order to get supplies. Farmers, however, were not disposed to let go freely at any time. Closing bids for January wheat at the merchants 'exchange were: Bluestem, $1.53; fortyfold, $1.46; club, $1.42; red Russian, $1.40.

Statistics compiled by the merchants' exchange show the following local receipts in the last year: Wheat, 6,871,800 bushels; barley, 15,540 tons; oats, 43,600 tons; flour, 673,600 barrels; hay, 30,720 tons.

LARGER ACREAGE
Give Project Figures for 1917.

The productive acreage of the Yakima valley under government project will be increased by 800 acres next crop season, according to data furnished by the project managers, who say it may be raised to 10,000 under favorable conditions. Superintendent L. M. Holt of the Indian reclamation service expects to furnish water for 3000 additional acres and Manager R. K. Tiffany of the Yakima project looks for an increase of 5000.

Community Club Organized.

The Hood View Community club has just been organized for the purpose of fostering the interests of the district lying between the town of White Salmon, Wash., and the White Salmon river; also to cooperate in effort for the welfare of the White Salmon valley. The officers are: Elwood Peck, president; Floyd Martin, vice president; J. E. Cox, secretary and treasurer. A road committee composed of C. W. J. Reckers, Elwood Peck and F. O. Childs was appointed. The matter of building a community packing house was discussed and a committee appointed to investigate the matter and make a report at an early date.

Commercial Age

Are We Over "Commercialized"?

The Farmer is constantly receiving interesting expressions of personal opinions from its readers which it is glad to pass on to others. Below is one such interesting article.

If it were not far the commercialized system of doing things today we might get better results from our products. The fruit business is commercialized to death and the daily menu of even the farmer class is minus fruit. We sell our wheat and buy flour, or more properly, bread. We sell our beef to the drover and pay 25 cents per pound for our beefsteak, and we sell hogs to men who are laying up money by traveling over the country buying and selling such things, and the spareribs, pigs feet, and sausage of long ago do not enter into the daily bill of fare. We sell our milk to buy butter and sell wool to the highest bidder at the wool sale and go with cold feet the next winter in thin cotton socks, in fact, we sell everything we raise in its cheapest form and buy it back after a half dozen men have made a living off our labor and then put our whole set of officers at Washington, from President Wilson down, on the job, hunting up the cause of the high cost of living. We ride in our automobiles and let the taxes go delinquent. We are a great people and live in a great age. We are too busy to go with the wife to visit our next door neighbor and be sociable. A. P. CLARK.
Madras, Ore.

Pest Parasite Wanted.

George H. Hecke, California state commissioner of horticulture, announced today he would accept an offer made by men engaged in the beet sugar inquiry in California to contribute $2000 toward sending an expedition to Australia in search for a parasite needed to combat the beet leaf hopper. This pest is believed to have done $1,000,000 worth of damage to the state's sugar beet crop this year.

Want Ads

HELP WANTED—MALE 8

STEADY EMPLOYMENT, PLEASANT, profitable work; day and night classes; few months learning; position secured. Watchmaking-Engraving School, 218 Commonwealth bldg., 6th and Ankeny, Portland, Ore.

BE AN AUTO AND TRACTOR EXPERT. $75 to $200 a month—learn in six weeks. Thousands of successful graduates. Catalog free. Hahe's Auto School, 532 East 11th st., Kansas City, Mo.

WANTED—COMPETENT MARRIED MAN for farm work and stock; state wages expected. Address Box 92, R. 1, Mt. Vernon, Wash.

SITUATION WANTED—Male 21

CAN SUPPLY FIRST-CLASS RANCH hands and other male help on short notice. Lewis Labor Agency, Chas. Lewis, Mgr. N211 Stevens, Spokane. Phone Main 3252.

MARRIED COUPLE WANT FARM WORK; experienced; wife good cook. P. O. Box 1024, Spokane.

SITUATION WANTED—General 24

MAN AND WIFE, FIRST CLASS ORCHARD and farmers, would like to care for ranch, no children. Call Main 3591 or write J. M. Pinnell, N111½ Howard st., Spokane.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER!

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors, $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

BUILDING MATERIAL AT WHOLSALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MISCELLANEOUS—FOR SALE 60 Continued.

SASH AND DOORS.
Order your sash and doors direct from O. B. WILLIAMS CO. We operate our own mill, and ship direct to any one, anywhere, at factory prices. Safe delivery guaranteed to destination. Send for our big, complete catalogue No. 27. Mailed free, postpaid, on request.

5 cross panel doors	$ 1.33
Craftsman 4-panel doors	1.75
Craftsman glass doors	2.75
24x28 2-light window	1.33
36x40x16 cottage front window	2.63
Bungalow casement sash	.56 up
3x6 hotbed sash	2.25
Cupboard glass doors	1.00
Cupboard panel doors	.85
3-ply slash grain panels, square foot	.05½
1-ply Gold Seal roofing	1.35
Knock-down window frames	1.00
4 and 5 foot floor and ceiling, 1000 feet	11.00
8 to 9 foot flooring and ceiling, 1000 feet	14.00

O. B. WILLIAMS CO.
1943 FIRST AVE. SO. SEATTLE, WASH.

STRAWBERRY BOXES.
We have all kinds of berry boxes and crates, butter and egg cases. TRY OUR CEDAR SHINGLES. HEDLUND BOX & SHINGLE CO., SPOKANE.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

BEES—560 COLONIES FOR SALE; THE big game as a bargain. John Ruyts, Buhl, Idaho.

MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

LIGHTING EQUIPMENT 74

NIXON-KIMMEL CO.—EDISON STORAGE battery and farm light plant distributors. Sell or repair everything electrical. Spokane.

AUCTIONEERS 75

JAS. M'KAY, AUCTIONEER. FARM AND auction sales. 312 6th ave., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174

BEST EGG STRAIN S. C. R. I. REDS in Pacific northwest. Guaranteed pure Lester Thompson strain. A few splendid breeding cocks and cockerels at remarkably low prices for quick sale. Baumheim Poultry Farm, R. 4, Spokane, Wash. Phone Main 8634.

MAMMOTH BRONZE TURKEY. BEST IN the west. Unrelated stock. Mrs. H. J. Cortner & Mrs. C. R. Lowery, Payette, Ida.

50,000 HUSKY, LIVABLE CHICKS FOR 1917. White Leghorns. Freshlaid Farm, Colfax, Wash.

LIVE STOCK 177

50 BRED SOWS AND GILTS, 50 OF TRUE Berkshire type and quality, bred to grand champion boars, are included in our private sale list now ready for mailing. Write for it today. Silver Birch Farms, Bx. R, Newport, Wash.

WAIKIKI FARM JERSEYS.
We offer several young bulls and heifers of excellent breeding. Send for descriptions and photos. Waikiki Farm, R. 7, Spokane, Wn.

REGISTERED GUERNSEY BULL, WITH HIGH PEDIGREE, FIRST CHECK FOR $200 GETS HIM, 2 YRS. OLD FEB. WRITE G. N. HESGARD, NEWBERG, ORE.

COLTS FROM 8 MONTHS TO 3 YEARS old, or work horses to trade for a good registered shire mare. Box 606, Ritzville, Wash.

17 HEAD OF VERY CHOICE REGISTERED red roan and white yearling Shorthorn bulls. Wm. Mulhall, Fenn, Ida.

HARNESS and SADDLERY 189

H. A. BOSTWICK, HARNESS AND HARness repairing. Postage paid on mail orders. N624 Monroe, Spokane.

GROCERIES 222

3 LBS. EXTRA FINE COFFEE, ROASTED fresh daily, by parcel post, for $1. Martin Marks Coffee Co., Portland, Ore.

FURNITURE—FOR SALE 264

SAVE 50 PER CENT.
We buy up bankrupt stocks from all parts of Inland Empire and can save you money on new and used furniture, rugs, etc. Write for price list.
AMBER FURNITURE CO., Spokane, Wash.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

RUBBER STAMPS, SEALS, STENCILS, daters, inks and pads. Mail orders promptly attended to. Nampa Stamp Works. H. L. Nickels & Co., Nampa, Idaho.

TAXIDERMISTS 426

FUR RUG MOUNTING A SPECIALTY. Heads, animals and birds mounted. Withers Bros., 822 Sprague, Spokane, Wash.

FURRIERS 429



THIS CLASSIFICATION AFFORDS AN opportunity for the fur buyer and the fur seller to get together. If you have furs of any kind to dispose of it will pay you to get in touch with the advertisers in this department. If you wish to get in touch with trappers and hunters, space below will enable you to do so at low cost. These "want" ads are read in more than 50,000 homes every week.

WM. N. M'CARTY, WHOLESALE AND retail dealer in hides, pelts, wool and furs; always in market at top prices. Wire or write for prices. P. O. Box 135. Phone 308. Pocatello, Idaho.

BISSINGER & CO., DEALERS IN HIDES, pelts, wool, tallow and furs; consignments solicited; prompt remittance. P. O. Box 1553. Phone 503. Warehouse, 26th and R. R. st., Boise, Idaho.

MIDWIVES 486

DR. EMILY SIEGEL—MOST SUCCESSFUL specialist; graduate New York city hospital; 25 yrs.' exp. 811½ Riverside, Spokane, over 5 and 10c store. Main 6275; res. M. 6903.

ARCHITECTS 558

ADDRESS L. M. STARR FOR PLANS AND specifications. E1218 12th ave., Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.
In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.
If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.
It will pay those who want good, acclimated seed to watch for offers under this classification.

LIMITED SUPPLY FINE SEED CORN, on cob, yellow and white dent. Yellow took 1st prize, white 4th prize at first dist. natl. corn show, St. Paul. None shipped testing under 90 per cent. Price 10c per lb., prepaid. L. F. Pourtales, Oroville, Wash.

FARM SEEDS, COMPLETE STOCK OF red and alsike clover, timothy, vetch grass seeds, seed grain, garden seeds. Send for free catalog.
D. A. WHITE & SONS,
SEEDSMEN, SALEM, ORE.

SEEDS—THE KIND THAT GROW. YOU can't keep them in the ground. Send for catalog.
BUTZER'S SEED STORE,
188-190 FRONT ST., PORTLAND, ORE.

ALFALFA SEED IN LOTS FROM ONE TO one hundred bushels at $8.50, f. o. b. Clements, Kan. Samples on request. H. H. Stephenson, Clements, Kan.

WRITE FOR CATALOUGE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEND US YOUR NAME
For Our New Seed Catalog.
SEATTLE SEED CO., SEATTLE.

NURSERY STOCK 621

PRUNE TREES; THOUSANDS; GRAFTED walnuts. Trees of all kinds. Buy direct and save 50 per cent. No agents. Our prices sell. Write for planters' catalog and price list. 26 years in business. Carlton Nursery Co., Carlton, Ore.

"WE WANT YOU" TO REPRESENT US in your locality in the sale of our pedigreed, Idaho grown nursery stock; large profits; easy work. Write us asking for our selling proposition. Kimberly Nursery Co., Kimberly, Idaho.

HOMEST'DS, RELINQ'M'TS 642

FREE BOOKLET, STATE AND U. S. land. Maps. Bargains. Write Jos. Clark, Sacramento, Cal.

FARM LANDS—FOR SALE 651

SACRIFICE 1400 ACRES; FINEST FARM in county; wheat, alfalfa; railroad station on place; near high school; stock, implements. Easy terms. Photo. Box 135, Ione, Ore.

SEE US IF YOU WANT TO BUY OR SELL farm lands. J. F. DEALY & CO., Spokane.

FARM LANDS—FOR SALE 651 Continued.

EXTRA WHEAT FARMS AT SPECIAL FIGURES.
These places are the best values on the market.
1920 acres, with 1150 in cultivation and leases covering 350 more; 600 acres are now in summer fallow. Price of $57,000 includes all stock and equipment complete. Terms, $25,000 cash, balance to be secured by the land.
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COME AND SEE THESE BARGAINS. No trades.
H. M. MOFFATT, WINONA, WASH.

MONTANA GRAIN AND DIVERSIFIED farm land in Judith Basin, Shields River Valley, Great Falls District and other good districts. Prices $7 per acre and up for stock farms; $20 to $40 per acre for good grain land; small cash payment—balance easy terms and 6 per cent interest. Have a few places on which the owners will take some good Washington property as part payment—time on balance. Call or write for Montana land list and see us before you go. We can give you some pointers that will cost you nothing and will probably save you a lot of time and worry later. HEGE & SCHIFFNER CO., 715-17 Paulsen bldg., Spokane.

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Our business is loaning money on farm and city property. Occasionally we have properties for sale which have come into our possession on account of foreclosure of loans. These we offer at practically the net cost to us, which is far below their real value, a small payment down, the balance on easy terms with low rates of interest. Send for list.
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BOX SIX, SPOKANE, WASH.

GREAT NORTHERN LAND CO.
A non-resident needs money and directs us to sell 640 acres raw land with 500 acres of excellent wheat land, in a neighborhood where wheat yields from 25 to 35 bushels per acre; shipping point only three miles distant; at the give-away price of $9 per acre, one-half cash, balance to suit. This should be good value at $15.
For farm land come to headquarters.
G. N. LAND CO., COR HOWARD AND 1ST.

40-ACRE DAIRY FARM NEAR BOISE; mile from Interurban line and cheese factory; 24 acres of pasture and alfalfa; 10 acres a little too high for gravity water, balance under plow. Cross fenced. Ridenbaugh water right. Family orchard; plastered house; barn 40x33; silo. Price $4500; good terms. Hub Realty Company, Boise, Idaho.

CALDWELL, IDAHO.
We make a specialty of farm lands under the Boise (government) project. The most favored spot in the west — soil, climate, social conditions and markets considered. terms.
MADDEN & BURNS, Caldwell, Idaho.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

120-ACRE DAIRY FARM; 80 A. TILLable; 12 acres cultivated; 35 acres ready for plow; 5-room house, barn and outbuildings; 1 mile to town; price, including 9 milk cows, $4000; terms. O. V. Manring Investment Co., 22 Symons blk., Spokane.

1200-ACRE STOCK AND DAIRY RANCH, western Ore., near coast; well equipped; 280 in cultivation; finest kind soil; am offering best bargain in world; half cash, balance to suit buyer. For details address owner, Emil T. Raddant, Siletz, Ore.

154 A., ½ M. R. R., 35 M. SPOKANE, only $30 per a.; 90 a. natural black prairie, cult., bal. not cult.; just as good; large barn; no house; fenced; this is $60 land; ask why the sacrifice. Baldwin & Pfile, Lindelle blk.

RAW LAND, SPECIALLY SUITED TO poultry raising and dairying. Ask for our 1916 offer and monthly payment plan. Office Wall and Post sts., near Post street bridge. Phoenix Lumber Co., Dept. A, Spokane, Wash.

MONTANA LANDS OF ALL KINDS, small payment; long time on balance. Can take good farm lands as part payment. Robert A. Hopkins, 617 First ave., Spokane.

FARM LANDS—WANTED 654

WE WANT TO SELL YOUR FARM.
We have right now three cash buyers for farms, two of them want 160 to 320 for wheat raising, and the other wants a diversified dairy or stock ranch. If you want to sell, write or come in and tell us about yours, as these men mean business.
ARTHUR D. JONES & CO.
ARTHUR D. JONES BLDG., SPOKANE.

LIST YOUR FARM WITH US—WE SELL land.
G. N. LAND CO., Cor. Howard and First, Spokane.

FOR SALE OR EXCHANGE 702

MR. FARMER.
If you have any farm land or city property that you wish to sell or exchange for other property, write us for full particulars. We handle property in all parts of the northwest.
MAUSER & MAUSER,
JAMIESON BLDG., SPOKANE.

FOR SALE OR TRADE—$75 SIMPLEX cream separator for $60. A No. 1 skimmer, in first-class condition. Exchange for good, young brood sows with pigs, or for young pigs. A. H. Craven, Monmouth, Ore.

IF YOU HAVE FARMS FOR SALE OR exchange write us full particulars.
J. MELVIN THOMAS & CO.
EXCHANGE BANK BLDG., SPOKANE.

TO EXCHANGE—REAL EST. 705

WANTED—GOOD REAL ESTATE IN eastern Washington, as first payment on a few good farms in Montana. Call or write and tell us what you have, but put your price at its cash value. Hege & Schiffner Co., 717 Paulsen bldg., Spokane.

20 ACRES NEAR KENNEWICK; GOOD IMprovements. Price $7000. Trade for larger farm. Pacific Invest Co., Eagle blk., Spokane.

SEE US FOR ALL KINDS OF TRADES if your property does not suit you. Rogers & Rogers, Spokane.

NEWS FOR BREEDERS

Two Duroc Jersey Prize Winners



Pacific Queen 2d and Pacific Queen 3d, two Duroc Jersey sows which won first and second at the Oregon State fair, 1916. They were 14 months old and showed and won against 18-months-old hogs. They are bred and owned by Doerfler Brothers of Silverton, Ore.

STOCK RAISING IN THE SOUTH.

Experiments by the department, in cooperation with the state experiment stations, have shown conclusively that the south is well adapted to economical beef and pork production, says Secretary of Agriculture D. F. Houston, in his annual report just submitted to the president. It is beginning to take its place with other sections as a stock raising territory. Numerous breeding herds are being established. The leading beef cattle breeders' associations are featuring the southern trade, and two of them are holding sales in cooperation with the department. Cattle from southern herds have won the highest honors in northern show rings, and steers from southern feed lots, after being properly fattened, now command good prices in northern markets. This work is not for the benefit of one section alone; the entire country will profit from the extension of meat production into new territory.

PEARL'S FERN RIDGE KING.



Guernseys are gaining in favor among the dairymen west of the Cascades and every year sees a few important additions to the purebred herds in that section.

The herd of A. J. Sinnes of Mount Vernoon, while not large in numbers, carries some of the best blood in the west and Mr. Sinnes has recently added to his herd one of the best Guernsey bull is tne west—Pearl's Fern Ridge King, shown above, purchased from A. L. Giles' Chicona farm herd at Chinook, Wash. This bull has made a remarkable record on the western show circuit and at the head of the Sinnes herd should give a good record of himself as a sire.

CUBANS BUY FINE STOCK.

Rudolph Rojas, who owns an extensive cattle ranch; Thomas Towns, a progressive planter and stockman, and R. F. Kendall, manager of the Rolando Fruit company, all of Holquin, Cuba, have been in Lexington, Ky., and have made the following purchases of the Cook farms: Mr. Rojas bought a few head of fine sheep, the 4-year-old saddle stallion, MacDonald Boy No. 5882, by MacDonald Chief, No. 1451, dam King's Girl, by King, and the 3-year-old gelding, Beauty Boy, by Dandy Jim II., dam Black Beauty II., and three other Cuban gaited geldings; Mr. Towns bought the 2-year-old registered Percheron stallion, Major, and a pair of fancy 2-year-old mules. Mr. Kendall bought the 2-year-old registered jack, Kentucky Colonel, and 35 yearling mules and 15 2-year-old mules. These young mules are the first that have been shipped out of Kentucky to Cuba. The animals in this shipment cost about $10,000. These gentlemen are extensive planters and stockmen of Oriente province.

IMPORTANT AYRSHIRE SALE.

An important sale in the annals of the Ayrshire breed was conducted at Vargenoc, Drongan, Ayrshire, when the bull calves from John Logan's herd of Ayrshire cattle were disposed of recently, according to the London Live Stock Journal. Bidding was of a sensational nature at times, resulting in a fine price of 380 guineas, or about $1900, being obtained, while 17 bulls averaged about $455.

Bargenoch Bright Star, the bull which made $1900, is a thick, stylish son of Magnificent, and his dam has a record of 915 gallons at 3.91 per cent butterfat in 29 weeks. He was knocked down to Mr. Mair, Carston, Ochiltree. This figure constittues a record for the breed at an auction sale, the previous best being $850 at Lanark in 1915 for a young bull, and $1000 for an old bull at Lochfergus sale in 1913.

HOLSTEINS IN ARIZONA.

A shipment of 350 grade Holstein cattle has just been made from Mount Vernon, Wash., to Phoenix, Ariz. These will be distributed among the dairymen of that section.

C. T. Hirst, the Arizona man who is responsible for this shipment, himself owns a large ranch and declares that the Salt river valley now has 225,000 acres of land under cultivation, all watered by the Roosevelt dam project.

COW TESTING ASSOCIATIONS.

Cow testing associations have been organized under the direction of C. Farr, county agriculturist of Snohomish county at Stanwood and Arlington. Will H. Henry, Ellensburg, a state college graduate, has been appointed tester in charge of the Stanwood association and Bryan Jordal, of Waikiki Farms, Spokane, will go to the Arlington association.

AT FARMERS' SALE.

Over 30 head of cattle were sold at the second farmers' public sale at Puyallup, Wash. The highest brought $127, another $100 and a third $97, while several sold for over $80. Six head of pigs sold for over $34. The sale is reported a success in every particular.

RESERVE JUNIOR CHAMPION.



The above is a photo of Topsy 4th, the Shorthorn senior heifer calf that won first prize in her class and was made reserve junior champion at the Pacific International Live Stock show. Topsy has a sweet feminine head, as the picture shows, a very straight top, broad back and rump, a good front, popular color and is in every way a very superior specimen of the Shorthorn breed. She is owned by Day & Rothrock of Sprague, Wash., who exhibited a small herd of young stock at the above-mentioned show.

Paid $500 for Calf.

Dwight A. Smith of Tendoy, Idaho, is a believer in milking Shorthorns. He attended the Milking Shorthorn association at St. Paul last fall and was reelected director for a term of three years. While there he bought from the Otis herd a dark roan calf which cost $500. The calf is out of Fairholm Red Rose 38th, got by Jeweler 378128. Jemeles is considered by Mr. Otis as his best show bull. He was first senior yearling and grand champion bull at New York State fair in 1913. Last year he took first prize and championship honors at four state fairs.

Fairholk Red Rose 38th 16332 has a record of 10,225 pounds, was first in her class for cows in milk at the 1910 International.

Value of Show

Impresses State College Expert

To the Editor of the Washington Farmer: The Pacific International exposition in Portland, Ore., may be correctly heralded as the best assemblage of live stock ever seen in the Pacific northwest. The coveted blue, red and purple ribbons were hard to win because of the strong competition. The tops in each class were superlative in form, quality and condition. To win a premium in such company is a feat worthy of the mettle of our best breeders.

The animal husbandry division of agriculture at the State College of Washington won the following list of awards in open competition:

Champion Clydesdale mare on "Colony Nancy;" champion Percheron mare on "Black Beauty;" champion grade steer on the Shorthorn "Silver King;" champion Hampshire ewe on "Eldora;" 1st prize Hereford-Galloway calf on "Alaska Maid;" 1st prize grade steer herd of three animals; 2nd prize grade steer on the Shorthorn "Hercules Hero;" 2nd prize Shorthorn senior bull calf on "Village Excelsior;" 3rd prize Shorthorn senior yearling heifer on "Maxwalton Foxglove 5th;" 5th prize Hereford 2-year-old Hereford heifer on "Discretion's Verona;" 1st prize Clydesdale stallion on "Imperial Guest;" 3rd prize Shropshire ewe on "Carlton;" 3rd prize pen of three yearling wethers; 4th prize on Hereford steer calf "Sweetwater Pride."

The fat steers and wethers were sold for Christmas beef to leading Portland hotels patronized by stockmen. "Hercules Hero," weight 1320 pounds, sold for $25.50 per 100 pounds. He was bought by the Portland hotel for a total of $346.80. "Silver King," weight 1520 pounds, brought $14.50 per 100 pounds on the hoof. "Sweetwater Pride," weight 900 pounds, brought $15 per 100 pounds or a total of $144 on foot. Three yearling wethers sold for $13.75 per 100 pounds and fetched $82.50.

To any one not directly in touch with the fitting and management of a herd, flock or stud of exhibition stock it must be said that much of the credit for the winnings should go to the herdsmen who prepare the beasts for the showing. Alex McAllister, who is horseman at the college, and Richard Hanna, beef and sheep herdsman, deserve the greater part of the honor for their consistent and careful work.

WILLIAM HISLOP,
Professor of animal husbandry, State College of Washington.

PENRITH SHORTHORN BREEDERS.

Presiding at the annual meeting of the Penrith Association of Shorthorn Breeders, E. O. Bolton said the association had had a remarkably successful year, while at their three sales unprecedented prices were realized. The top-price bull was sold for $4750, while the average rose from $165 last year to $220. They had an entry of 565 animals and 491 were sold, while in every section and at all three sales the demand for the best Cumberland and Westmoriand bred Shorthorns proved that these animals had gained a popularity in all parts of the country, which they well merited. J. H. Toppin was elected president for the year and John Handley vice president.

Rancher Heads Church.

D. B. Eby, a rancher of the Sunnyside vicinity, has accepted the call to become pastor of an Olympia church.

Fattening Hogs

Question of Feeding Alfalfa

By E. L. Potter.

The question has arisen as to whether hogs should be allowed access to alfalfa during the fattening period. The value of alfalfa during the growing period is admitted by all, but a few are inclined to believe that during the final fattening the hogs will do better if confined in a dry lot and fed only grain. In answer to this the eastern Oregon experiment station has conducted several tests and their results have been very emphatically in favor of the use of alfalfa pasture in fattening, but in connection with the self feeders. In all of the experimental work that has been carried on by both the Corvallis and the eastern Oregon stations the lowest feed cost in fattening has been obtained at the eastern Oregon station an barley in a self feeder in connection with good alfalfa pasture. If dry lot fattening is for any reason necessary the grain must be supplemented with skim milk, tankage or something of that nature.

Alfalfa hay for fattening has much less value than the pasture, but even then it helps providing the hogs are given all the grain they wish and are not forced to eat more alfalfa hay than they really wish. They will eat but a very little of the hay, but that little will help materially. Cut or ground alfalfa will go further than the long hay on account of less waste, but the gain will be no greater. Mixing cut hay with grain is not desirable for fattening purposes since it tends to lessen the amount of grain eaten although for this very reason it may be just the thing for growing pigs or brood sows. A good supplement for grain for fattening pigs must increase rather than decrease the amount of grain consumed.

Study Live Stock.

Beginning with the school year last fall, a class of 22 boys in the Colville high school in Stevens county spent two hours every afternoon (when the weather permitted) of the first month of school judging dairy cattle, horses, swine, sheep and beef cattle and in becoming acquainted in general with different breeds of live stock. To do this trips were made to neighboring farms and the farmers themselves proved only too glad to do what they could for the high school boys. Class work was not begun in the school room until after the Stevens County Live Stock show.

A study of the horse has been made, the discussion covering description, history and importance of the draft breeds, Clydesdale, Percheron, Shire and Belgian; also of the light horses, as the thoroughbred, standard bred, German and French coach and American saddler and trotter; the care of the horse, unsoundness, as splints, spavins, etc., effects of poor conformation, care of teeth, etc.; feeding of horses, computing simple rations, value of local feeds and kindred matters.

BUY YOUR POULTRY

From Breeders of

Prize Winners

EGGS, BREEDERS AND DAY-OLD CHICKS IN SEASON. PRICES RIGHT.

This publication guarantees every subscriber against loss through dishonesty or swindle by any advertiser in this directory of THE IDAHO STATE POULTRY AND PET STOCK ASSOCIATION, INC.:

Utility and Exhibtion Barred Rocks and S. C. Black Minorcas, Wilber Clayton, R. R. No. 1, Payette, Idaho.

Silver Laced Wyandottes, G. G. Wherry, licensed poultry judge, Payette, Idaho.

Anconas and Black Orpingtons, John Demond, Boise, Idaho, R. D. No. 1, Box 191.

Rose Comb Rhode Island Reds, Mrs. Melvin H. Shirley, Blackfoot, Idaho, Box 634.

S. C. White Leghorns, Fred Demond, Boise, Idaho, R. D. No. 2, Box 184.

All Breeds of Chickens and Ducks, L. V. Patch, Payette, Idaho.

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S. C. White Leghorns, Archie M. Larson, Weiser, Idaho, Route No. 3.

S. C. Rhode Island Reds, Mrs. B. Silversmith, secretary of the association, Box 1034, Boise, Idaho.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XI. JANUARY 11, 1917. ** NO. 2.

Would Compel Threshermen to Do Better Work

Wheat Convention Instructs Committee to Frame Standardization Law

By FRED W. CLEMENS

The convention of the Washington State Grain Growers, Shippers and Millers association held at Pullman last week almost exceeded the speed of the last night of a legislative session at Olympia, when the matter of the need of cleaner grain came up. Richard I. Stephens of the Stephens-Smith Grain company of Spokane had just finished his address on the subject, in which he talked of the law in effect in Canada requiring threshermen to clean grain in accordance with a specified standard.

C. B. Kegley arose and suggested that this state should have some such law, and that the convention should appoint a committee to prepare it for presentation to the present state legislature. President Rogers said a motion to that effect would be proper if such a move were desired. Mr. Kegley made the motion, including the provision that the president, Mr. Rogers, should be chairman of the committee, which he also should appoint. The motion was seconded.

Like a judge disqualified because of personal interest in a case, President Rogers hesitated. Mr. Kegley assumed control. "You have heard the motion, gentlemen. Those in favor say aye." A few voices voted aye. "Those opposed say no." There were no noes. "The motion is carried."

With almost no discussion the convention had authorized a committee of its members to prepare and ask the legislature to adopt a law regulating a vital phase of the grain-growing industry.

Clean or Dirty Wheat.

Mr. Stephens treated the subject, "Clean Versus Dirty Wheat," instructively and entertainingly. He said that threshermen were responsible for unclean wheat, and recommended that a cleaner and a smutter be attached to every thresher. This should be done not alone to take the weed seed, cracked grain, smut balls, cobs and the like out of the wheat to give it a higher grade and prevent dockage, but to permit of the weed seed and the smut being destroyed as a part of the campaign against these two pests. He also cited figures to show that large amounts of money were paid out annually in freight on foreign matter in the wheat shipped, thus producing a double loss to the grower. He said also that much of the cleanings were valuable if kept on the farm for hog feed, though useless if taken out after the grain had been shipped away. He advocated a standardization of grain from the standpoint of its freedom from foreign matter.

Mutual Problems Discussed.

Four elements that in the not very distant past have manifested at times considerable antagonism toward each other, sometimes to the extent of bickerings, misunderstandings, and even enmities, met in this, the eleventh annual grain convention, and discussed together their mutual problems. They were the wheat farmer, the grain market man, the railroad man and the miller. It is not improbable that next year's convention will see a fifth, the baker, present, a suggestion to that effect having been agreeably received by last week's convention.

A remarkable spirit of harmony prevailed, but not to the extent that the four factors in the production of bread fully agreed the one with the other on all the issues involved. The harmony was most manifest in the willingness of practically all those present to admit that there were two sides to most questions, and to listen to the presentation of the other fellow's view.

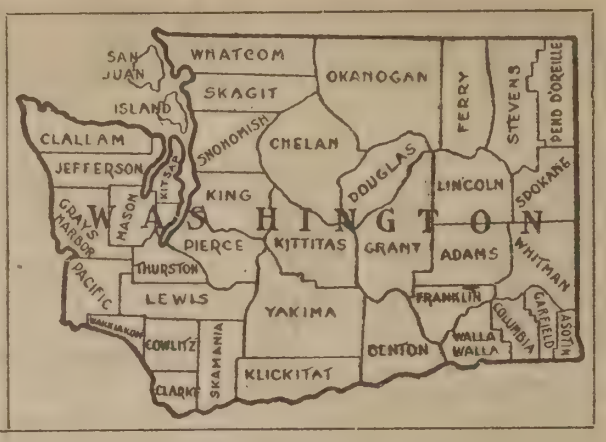
The only noticeable exception to this rule was the attack made by C. B. Kegley, master of the state grange, and L. C. Crow,

(Continued on page three.)

The committee that will draw up the measure for presentation to the legislature was chosen as follows: A. L. Rogers, chairman in accordance with the motion passed; R. J. Stephens of Spokane, and Ira D. Cardiff of Pullman.

Railroad Improves Business

Railroads and Automobiles a Big Factor in the Upbuilding of Community Life Both Financially and From a Social Point of View.



Clallam County, Wash.—New railroad built into the county has added an impetus to farming operations and dairying. A new irrigation project promises to prove profitable.

Lewis County, Wash.—The automobile is one of the most potent social factors in the rural districts, enabling farmers and their families to make more frequent visits and attend meetings more generally.

Whitman County, Wash.—"This section has had, without a doubt, the most prosperous year in its history."

Railroad Improves Business.

PORT ANGELES, Clallam County, Wash., Dec. 27.—There has been a general impetus in farming since the advent of the railroad into Clallam county two years ago and, while the increase in grain products has been small, I should think that the increase in dairy products has been from 15 to 20 per cent. There are many signs of new clearings, houses and barns going up and in the eastern part of the county a new irrigation project is under foot, the Happy Valley Irrigation project, which will add to our intrinsic wealth. At present we have a cold spell, but there is no danger of damage to grain or crops.

J. P. CHRISTENSEN.

A Social Factor.

CHEHALIS, Lewis County, Wash., Dec. 30.—This community is increasing its production of dairy products and Holstein cattle. The roads in this county are noticeably improving, hence more automobiles, which makes for sociability, more visiting from farm to farm, and greater interest in farmers' schools, grange and public gatherings for the betterment of the community. There is a steady increase in the building of modern houses in the country and of good barns and silos. The fall grain has not been damaged by the cold and the prospects for grain are favorable. J. C. BUSH.

A Prosperous Year.

LA CROSSE, Whitman County, Wash., Jan. 1.—While wheat is the main crop raised here many farmers are improving their herds of live stock by getting the best breeding stock that money can buy. This section has had, without a doubt, the most prosperous year in its existence. The rainfall for 1916 was above normal and helped to produce the biggest crop ever harvested here. Winter wheat prospects hardly more than 50 per cent of the acreage seeded in the fall on account of the dryness, and the germination was poor, so very few fields had a good stand. Consequently most of the farmers are planning to reseed in the spring. Stock is wintering in good condition. Not more than five per cent of the usual plowing was done this fall. M. E. SCHRECK.

Library Is Maintained.

HUNTERS, Stevens County, Wash., Dec. 28.—The cold weather in November was the cause of some loss by freezing of apples not yet picked. A good many farmers who did not have strawstacks or stubble fields for their cattle to run in had to begin feeding early. Some did not need to start feeding hay until the first week in December. The weather in December has been only moderately cold and stock is therefore doing well. There was some fall plowing done early in November, as the ground was then getting into fair condition for plowing, due to rain, but the cold snap stopped this work. The work on the farms in winter consists chiefly of caring for the stock. Those located in the timber engage to some extent in cutting wood on their own places or in delivering wood in town, where the demand is good at $2 per rick. Wood is not particularly plentiful. Both spring and fall pigs are being raised here. The spring pigs are turned off when about nine months old, while the fall pigs, as a rule, must be kept nearly twelve months. There is a divergence of opinion among farmers as to which are the more profitable, though it would seem that the spring pigs should be. There are a number of clubs in this community which, though not social in purpose, yet afford sociability. Among these are the Mothers' club and the Dorcas society. The latter organization maintains a library at Hunters, the expenses of which are taken care of by the charging of a small fee for the use of books. Other organizations are a fair association, commercial club, brass band and an orchestra.

ELIAS NELSON.

Ship Live Stock.

PROSSER, Benton County, Wash., Dec. 27.—The cold weather caught some of the farmers with their potatoes in the ground. Stock did not suffer any, as most of the stock is on the range. Fall work was handicapped some, as the farmers did not get all their plowing done. Fuel is plentiful, but much higher in price than last year. Spring pigs are raised here, as it costs too much to winter fall pigs. The farmers dress their own hogs for home consumption. There have been five cars of hogs and two cars of mixed stock shipped from Prosser in the last eight weeks. The Grange is the only community organization here.

G. W. WILGUS.

Working for Grange Hall.

MALAGA, Chelan County, Wash., Dec. 28.—This community was pretty well prepared for the cold weather and the stock are looking well for this time of the year. Fall work was handicapped by lack of help. Some apples were lost by the early frost. Fuel is plentiful here. The winter work consists of feeding stock, pruning orchards and hauling hay to market. Most of the farmers raise spring pigs and sell on foot. We are working very hard to get a grange hall, as our grange is the only community organization here. MRS. O. ALLENBAUGH.

Marketing Union Is Aid.

KENNEWICK, Benton County, Wash., Dec. 28.—Stock has not suffered particularly from the recent cold weather. Fall work in the wheat section was decidedly handicapped because of no rainfall. Many of the orchardists are now busy pruning their trees. Nearly all of the hog raisers in this section produce two crops of pigs in a year. The spring pigs are more profitable in practically all cases. Most of the hogs are sold on foot. Practically every community in the county has a local farmers' organization. In most all communities it is a local grange. These organizations are active and especially well attended in the fall and winter. Some of them have literary and musical entertainments. Nearly all of them have a number of discussions during the winter on practical farm problems. The Kennewick-Richland Marketing Union, which marketed 95 per cent of this year's strawberry crop, has its plans well under way for the marketing of the 1917 crop of strawberries, asparagus and early potatoes. A large per cent of those crops are now signed up with the cooperative association. LEE M. LAMPSON.

Are More Silos.

CASTLE ROCK, Cowlitz County, Wash., Dec. 29.—The ground is covered with snow, for the first time this season. As a rule the farmers were nicely prepared for the cold snap and snow storm. The stock was in from the range, the buildings were filled with hay and grain, and the silo feed had been well preserved and is opening up fine. There are many silos in this county, which is one of the noticeable improvements on the farms here. New farm buildings are also going up and the old ones are being repaired, which shows that some progress is being made. The potato crop was good in this section. Thirty carloads of potatoes have been shipped, some to eastern points, but most of them to California, and I am told that at least 15 carloads are being held for the spring market. Compared with last year there has been an increase in this product. Grain was about the same with the exception of wheat. It has been demonstrated that we can not raise wheat on our high-proiced land to compete with the eastern Washington grower. Most of the grain was put in the ground in the spring, so did not suffer from fall rains and sleet. Prospects for the new year are good.

C. C. BROWN.

Are After Grain Money.

LITTLE ROCK, Thurston County, Wash., Dec. 29.—This community is trying to increase the production of nearly everything, but on account of high grain that seems to be the leading thing they are trying to produce. There has been too great a demand for grain to bother very much in increasing the live stock. The main improvement is clearing the land. Some building of houses, barns and silos is noticeable but mostly silos. So far no damage has been noticed to the fall grain from cold weather, but it is early yet for a prediction of the next crop.

LEE KEGLEY.

Want a Meeting Place.

RAINIER, Thurston County, Wash., Jan. 2.—This community is increasing its production in dairy products and the raising of more cows and hay. The farmers must keep stock to keep up the fertility of the land. The one big improvement made here in recent years is the good roads, and what we now lack for the community is a good hall for community gatherings. A grange has been organized here recently. The prospects in grain for next year are not very bright, as the fall was too dry, so very little could be sown. Stock is wintering very well so far.

L. F. DAVIS.

Raise No Pigs.

FINLEY, Benton County, Wash., Jan. 1.—On account of the late freeze farm work has been postponed for a couple of weeks. Fuel has been a little scarce, but at present is plentiful and is higher in price than last year. There is the regular farm work being done during the winter. Some are pruning and making cement pipe for irrigating in the spring. We raise no pigs in this vicinity. We have a good, live grange organization and a parent-teacher organization here. F. A. SMITH.

Teachers Form Club.

BURLEY, Cassia County, Idaho, Dec. 12.—This community was not prepared for the recent cold weather, so the stock suffered considerably and the fall work was handicapped. A large acreage of sugar beets were frozen in the ground as well as many potatoes. At this date some are hauling beets, that is, the growers who were fortunate enough to get them out during the recent mild weather, and have since topped them. The farmers are kept busy feeding hogs, sheep and dairy stock, through the winter. Mostly spring pigs are grown here. Very few hogs are dressed by the farmer for market. There has been no social life in this community aside from the various church and lodge organizations. The teachers of the public school are, however, beginning to organize clubs and we think before long we will have live, progressive community organizations here. VICTOR SMITH.

Fall Pigs Profitable.

SHEDDS, Linn County, Ore., Dec. 30.—The cold weather did no harm and the stock did not suffer much. The fall work was well done. Fuel is plentiful and reasonable. We raise both spring and fall pigs and fall pigs seem to be the most profitable on account of the green feed. They sell mostly on foot. The Grange is the only organization we have. J. B. CORNETT.



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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 2 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF January 11, 1917

Would Require Cleaner Threshing

Wheat Convention Authorizes Committee to Frame Standardization Law

(Continued from page one.)

former president of the farmers' union, upon the Minneapolis Chamber of Commerce, which is the Minneapolis grain exchange, and which was represented at the convention by its secretary, John G. McHugh. The latter explained the exchange as a necessary feature of the grain business, conducted privately, vitally essential to the grain grower and wholly friendly toward him.

Master Kegley and former President Crow challenged the assertions of Mr. McHugh, declaring the Minneapolis exchange to be a monopolistic organization through which the grain growers of Minneapolis and the Dakotas were compelled to dispose of their product. Mr. Crow asked if it were not a fact that, as had been claimed by North Dakota growers, the latter had lost $15,000,000 one season because compelled to sell through the Minneapolis exchange, this loss having been due largely to improper grading of grain. Mr. McHugh ridiculed the idea, and said that the grain exchange had nothing whatever to do with the grading of the grain purchased or sold through it, but that a state regulated commission handled all that work. Mr. Kegley read from a magazine and a college bulletin wherein Professor Ladd of the agricultural department of the North Dakota Agricultural college classed the exchange as a monopoly.

Convention Divided in Sentiment.

The McHugh-Kegley-Crow affair was a no-decision bout; sentiment in the convention was divided on the character and worth of grain exchanges; but McHugh's address was roundly applauded, and delegates to the convention were free in expressing their appreciation of the enlightenment on the grain exchange question that he had brought.

There was considerable expression of sentiment in the convention favorable to holding the next meeting in Spokane, owing to its greater accessibility and better accommodations for entertaining such a gathering. But the college town won on the vote taken. The attendance at Pullman was cut down heavily this year because of the disagreeable weather. Snow and rain fell during most of the session, and a snow averaging two feet deep and badly drifted in many sections mantled the surrounding country. Notwithstanding these conditions, however, every considerable wheat growing district in the state was represented.

Those in Attendance.

Among those attending the convention were the following:

J. M. Grein, Cheney; L. M. Daniel, Lind; George Ausman, Asotin; W. J. Blanchett, Quincy; W. G. Cordiner, Walla Walla; B. L. Dickinson, Dayton; A. L. Rogers, J. M. Friel, Charles V. Slusser, and M. Malfa of Waterville; Walter J. Gray, Hooper; W. H. Stevens and R. E. Peter, Zumwalt, Ore.; C. B. Kegley, Palouse; J. Vankiren, Bluestem; T. T. Kerl, Coeur d'Alene, Idaho; G. I. Toevs, Samuel Glasgow, R. T. Lord of Spokane; Clarke E. Rathke, Molson; W. J. Jordan, Lewiston, Idaho; R. D. Jarboe, Tacoma; H. E. Goldsworthy, Rosalia; Robert Gunning, Davenport; M. A. McCall, Lind; R. C. McCroskey Jr., Garfield; F. W. Graham, Seattle; M. Harshman, Reardan; W. C. Halsey, Jerry; William Haupt, Colton; R. L. Ireland, Wheeler; E. P. Hinderu, Douglas; George King, Creston; J. P. Cleweno, Colfax; John Kramer, Colton; Joe Kramer, Johnson; W. E. McCaw, Prescott; F. W. Hoggman, Albion; Martin Harter, Albion; O. V. Patton, Walla Walla; George Ruply and F. P. McGuire, Los Vegas, Cal.; J. H. McCroskey, Garfield; George Druffel, Colton; Stanley Rinker, Davenport; C. W. Kitch, Troy, Idaho; H. M. Smith, Walkerton, Ind.; William Banhler, Colfax; R. V. Peringer, Belmont; Otto Pronge, Farmer; M. E. Shreck, La Crosse; F. H. Sharkiel, North Yakima; W. C. Theda, Wenatchee; Edgar Williams, Mohler; and E. A. Bryan, Guy Wolfe, Edward McGuire, Arthur Cole, J. S. Klemgard, F. Stearns, Ed Nagle, L. W. Dawson, W. F. M. Ricketts, J. W. McAllister, A. J. Hosler, E. D. Alvord, Thomas Hayes, S. Bachmann, I. D. Cardiff, E. F. Gaines, George Olson, D. F. Heald, L. G. Thayer, William Hislop, H. Holtz, J. D. Carson and L. C. Crow of Pullman.

Officers elected by the grain association for 1917 were as follows:

President, R. J. Stephens of Spokane; vice president, Thomas T. Kerl of Coeur d'Alene, Idaho; secretary-treasurer, E. G. Shaffer of Pullman.

Executive committee: A. L. Rogers, Waterville; J. M. Friel, Waterville; Steve Halsey, Asotin; F. W. Graham, Seattle; G. I. Toevs, Spokane; R. C. McCroskey Jr., Garfield.

FARM MUST ATTRACT

Financial Success Not Enough.

President A. L. Rogers of the Washington State Grain Growers, Shippers and Millers' association, in his annual address before that organization at Pullman, Wash., last week, sounded what may be termed the keynote of the convention when he said: "All agricultural pursuits must be made attractive and profitable or the balance of the world will go hungry, and this is the reason why thinking people are taking such deep interest in the farmer and his troubles."

Throughout the entire three-day session the idea that country life must become attractive as well as profitable—that neither attractiveness nor profitableness alone can make it successful in the full meaning of the word—continually found expression. Referring to the early movement toward life betterment, President Rogers continued:

Great Awakenings.

"Through these great awakenings the American farmers are fast coming into their own. They are studying the scientific and economic side of their calling. They the sending their sons and daughters to agricultural high schools and colleges. They are beginning to understand the power of organization and cooperation. They are reading the best up-to-date literature. Their farm papers and news journals are edited by the brightest men in our country. They are eliminating waste and cutting down overhead expenses. They are taking great interest in social betterment, sanitation, good schools and good roads. They also are taking time to broaden their vision on the possibilities and responsibilities of the human race as a whole and the vital part they have to play in the game.

"They admire President Wilson's stand on the humanitarian side of many of the civic issues that pertain to agricultural interests and rural life developments. While he is not the originator of these movements, his extended vision along altruistic and ethical lines of the human side has done much towards better cooperation in giving government aid and support to the farming classes by establishing district rural credit banks and rural credit association, by extending government aid in giving better opportunities to the individual farmer in the way of up-to-date methods in the growing of crops through the help of federal and county farm directors, experiment stations and agricultural colleges and by establishing federal trade commissions and giving the farmer a better understanding of supply and demand, markets and prices. All this is commendable and in the right direction, and, gentlemen, do not forget that the inspiration back of all this ground work for agricultural betterments is in the interest of humanity at large as well as for the farmer as a class, because our whole social and business structure rests upon agriculture as its foundation."

The subjects discussed at the grain convention at Pullman were so numerous and the discussions so lengthy that it is impossible to give a full report in one issue of the Farmer. Further features of the meeting will be treated from time to time in subsequent issues.

IRA D. CARDIFF.



Director Cardiff of the state college experiment station at Pullman is confident that victory will be won against smut.

Fictitious Land Values.

President Rogers criticized the placing of "fictitious values" on farm land. He said in reference to the high and ever-increasing price of farm land generally that if the time should come when the farmer demanded prices for his products sufficient to pay dividends on "these watered land values" the interstate commerce commission likely would be called upon to bring public relief from such demands as it has in the past been called upon to bring relief from excessive freight rates due to watered railroad stocks.

Lest he be misunderstood as making undue attack on the railroads by the reference, President Rogers said that "the public must not forget that Americans enjoy the best railroad service in the world and get this service at a lower cost per ton mile and passenger mile than any other people on earth." He added: "We must not tie their hands by too drastic laws and harassing commission, making it impossible for them to adjust themselves under abnormal conditions to the needs of the country."

Among other points made by the president were:

That farming had not been as profitable as we generally supposed.

That "in no other occupation do men go up against so many chances, meet with so many reverses and still exist."

That such meetings as the convention he was addressing had unified sentiment until even grain growers, shippers and millers could meet together in harmony to work for the common good instead of working at cross purposes as they used to do.

That the prospect for continued good prices for farm products is good.

That real progress is made slowly.

That therefore there must not be injected too much revolutionary spirit into the movement for farm betterment.

The speaker brought a roar of applause when making the following reference to concerns manufacturing breakfast foods:

Cost of High Living.

"In justice to our milling friends I want to say right here, that they deny any relationship to the breakfast food industries whose milling plants consist principally of printing presses and lithograph machines. These gentlemen buy much of their product that is offal from standard grades of flour at $20 to $30 per ton. They haul to other buildings and put it into artistic packages. Upon the inside are nicely folded letters treating on health and dietetics, telling how strong and vigorous men do physical and mental labor and wax fat on brand hash, cereal coffees and tule teas. On the outside of these packages are the faces of colored gentlemen and fat cooks and such suggestive words as sweet, delicious and luscious that start the gastric juices of the dear public and they smilingly and graciously hand the package to the good people at 25 and 30 cents per pound.

"Now, my friends, any miller will gladly sell you bran, shorts, middlings, rolled wheat and oats in less quantities than ton lots at 2 and 3 cents per pound, providing you furnish your own sacks.

"Our old friend, J. J. Hill's remark still ring true, 'It is not the high cost of living, but the cost of high living that raises the deuce with our bank accounts.'"

FERTILITY OF SOIL

Is Foundation of Agriculture.

Agriculture is the foundation of our industrial life; soil fertility is the foundation of agriculture; therefore, live stock. This more or less logical idea was the central thought in the address of Thomas T. Kerl of Coeur d'Alene, Idaho. Therefore, also, and probably more important than live stock because necessary to live stock farming in the view of Mr. Kerl, rotate crops.

"To maintain the fertility of the soil is one of the farmer's biggest problems," he said, and followed with a telling argument in favor of a system

(Continued on page five.)

"I Am in the Game for Keeps"

Two Logged-Off Land Dairymen Are Glad They Went Into the Business

This week The Farmer presents the views of two successful dairy farmers—one operating on a logged-off land place near Springdale, Stevens county, in eastern Washington, the other near Montesano in western Washington. No taint of pessimism runs through either of these articles. The writers optimistically declare that they are glad they are in the dairy business and intend to stay with it. The judgment of the eastern Washington dairyman is especially interesting from the fact that he went upon stump land seven years ago, and had never farmed before or had anything to do with stumps and brush. "The dairymen in this state can do as they please," says the writer, "but I am in the game for keeps. I can make a better living and feel more independent than when I was railroading."

Dairying in Eastern Washington.

To the Editor of The Washington Farmer: I have read with a great deal of interest the articles on dairying published in the Farmer and notice that the most of them are from large dairies. Now I for one would like to hear from the little fellows like myself. I bought the place I own now, four and one-half miles west of Springdale, in 1909, early in the spring. I had never farmed before or had anything to do with stumps and brush. There was about eight acres cleared on the 160 and I began to study what I could do to live. Finally I decided to milk cows, so I bought two cows and two heifers for a start. I can say that I have never regretted my decision. I never milked a cow in my life until I came here, and what I haven't had in the line of experience is not worth telling of. Last year I tested out and kept account of the feed and returns from five cows.

Cows No.	Weight	Feed	Butter	Cost per lb.
4	1029	$25.50	365	.710
1	1191	$23.88	237	.1006
3	889	$25.00	182	.1180
2	914	$26.71	171	.1300

I have had two grade bulls, and now own a registered Holstein, and that is another thing I am undecided about, whether it pays to pay a big fat price for a bull calf and after keeping him for two years sell him to the butcher for one-tenth of what he costs, remembering at the same time that I have to wait three years before I get any returns from him. It costs about $25 to raise a yearling, so I do not see how they are worth eight or 10 times that.

I raise my own hay and roots. I can bank on three tons of alfalfa to the acre and 30 tons of carrots. I have always had to buy a little hay, but then I would rather buy than sell. On account of the manure I find that I raise just about double crops than when I started. I have lots of disappointments, but you get them whatever you are doing. I have a heifer fresh now that I banked on for a $100 cow, but she has turned out to be such a hard milker that she never will be any good.

The dairymen in this state can do as they please, but I am in the game for keeps. I can make a better living and feel more independent than when I was railroading. I now own 10 cows and heifers and the bull. My place is all clear of debt. I am kind of handicapped for water, but hope to make enough from the cows to remedy that some time. I want a big tank with heater in it in the corral in this weather. If I had that my cows would do better.

J. J. HAYES.

Dairying in Western Washington.

John H. Taylor, proprietor of Wynooche Home farm, Montesano, Wash.—Has been in the dairy business in the Pacific northwest for 25 years, and thinks the opportunities in his region are better than in the east, "by reason of the mild climate, easily available succulents and the best of markets." He has always sold cream and fed the skimmed milk. The cream goes to the Montesano creamery. He combines but little other farming with dairying, and thinks a cow should return $100 a year to enable the owner to earn good interest on his investment.

To the query, "Are dairymen justified in staying with it?" Mr. Taylor says: "Yes, because it furnishes interesting intensive employment all of the year, keeping up the farm in a high state of fertility."

Answering the question, "What kind of dairy farming do you consider best for your conditions?" Mr. Taylor says: "The kind I am following until some concentrated, cooperative condensery, creamery and cheese plant can be installed that is worthy of the name.

"Wynooche Home farm herd," Mr. Taylor adds, "has just finished the first year in the Montesano cow testing association, with the following average for the herd: Milk, 8757 pounds; butter fat, 495.3 pounds; feed cost, $66.86; value of product, $182.02; profit, $115.15. The year averaged 270 days milking period. Average test for the herd for the year, 5.92. Cost 11 cents to produce a pound of butter fat."



The dairy home of J. H. Taylor of Montesano, Wash., who says dairying is "a year-round job.

Curing Meat

Dry Salting and Sugar Cure

At the "short course" held under the auspices of the Washington State college at North Yakima recently, Professor Thornber gave suggestions on curing meat on the farm.

Dry salting is best for hot weather for preserving small pieces of meat without smoking. Use 16 pounds of salt, four pounds sugar, six ounces of saltpeter per 100 pounds of meat. Rub this into the meat every day for a week, afterward once a week. After each rubbing cover the meat with the salt mixture. Two weeks should be enough for bacon, five or six weeks for hams.

As to the sugar cure let the meat cool a day, then rub a mixture of one part brown sugar to four parts salt into it. Let it lie a day. Then pack into a barrel and weight the meat down. Make a brine of 16 pounds of fine dairy salt, four pounds sugar or molasses, and, if you wish, six ounces of saltpeter per 100 pounds of meat.

Put enough water into this to float an egg. Pour the brine into the barrel. In two weeks the smaller pieces will be ready. The larger ones take five or six weeks. Hang the meat in the smokehouse and build a fire under it. Use apple wood, juniper or corncobs for smoking. After a week take out and hang up. Do not let any water touch the meat after it is smoked.

KANSAS WHEAT

Third Largest Acreage Seeded.

Wheat area sown in Kansas for the 1917 crop is 8,887,077, an increase of 2.8 per cent over the area sown a year ago. The record area sown was 9,447,987 acres two years ago. This year's area is the third largest. The condition of wheat December 1 averaged 75.9. It is 12.5 points lower than a year ago and the lowest in five years.

Here Is Puzzle in Horse Problem

Yearlings and Two-Year-Olds Undervalued—Mature Work Stock High

The following is the second in a series of articles based on replies received from a large number of farmers in response to a questionaire regarding the practicability of raising work horses on the farm. The first article, appearing last week, indicated the average cost of raising a colt to four years to be $115, and that about two-thirds of the farmers of the northwest raise their own work stock.

What seems a statement of facts hard to reconcile with sound business management in the matter of securing horses for the work on the farm, appeared in a considerable number of the replies received by the Farmer in its questionaire on the work horse problem.

Two of the questions asked were in substance: Can a farmer buy his work horses as cheaply as he can raise them? Do yearlings and 2-year-olds sell for relatively as high prices as do mature work stock? The contradiction appeared in this:

Seventy per cent of those replying say horses can be raised more cheaply than they can be bought. Fifty per cent say that yearlings and 2-year-olds do not sell in their communities for prices relatively as high as work horses.

The situation is still more marked by this fact:

Of those who reply that young stock do not sell as high relatively as mature horses, three out of four say horses can be raised from breeding to maturity more cheaply than they can be bought.

A Peculiar Condition.

There are two items in the cost of raising a colt that may be classed as initial expenses: An average of $15 sire service fee and a loss of time to the mother of an average of 30 days, according to opinions of breeders. This loss of time, at 50 cents a day, adds $15, making the initial cost of the colt $30. Thus, at the age of one month the colt has cost his owner $30, or slightly more than one-fourth of the total average cost of raising him to 4 years old, as indicated by the estimates and calculations of those answering the Farmer's inquiries.

At the time of birth and during the first year of his life are the times of risk to the colt. Then the chance of injury or loss is greatest, with the possible exception of breaking time. Assuming that the average cost of raising him to 4 years of $115 is approximately correct, as indicated in last week's article in this series, and deducting the $30 initial cost, there remains $85 for his maintenance during the four years, or $21.25 a year average.

Thus, at the age of 1 year he has cost $51.25; at the age of 2 years, $72.50; at the age of 3 years, $93.75, and at the age of 4 years, $115.

In other words, at 1 year old he has cost 45 per cent of his total cost. At 2 he has cost 63 per cent of his total cost and at 3 he has cost 81 per cent.

These figures would make it seem that a colt 1 year old should bring on the market 45 per cent of what he would be worth at maturity; that at the age of 2 years he would bring 63 per cent of his worth at maturity. Figuring that the period of risk is passed (and also the period of greatest trouble making about the farm), he should bring a higher relative price than this if it pays to raise a horse on the farm at all which the large majority agree it is.

Although no question was included as to the value of the work that an immature horse might do on the farm, several farmers said that after reaching the ago of two and a half years a colt could earn his own keep by taking part in light farm work. Some questioned the advisability of working him under three and a half years. Others expressed the opinion that he was better for it if not subjected to heavy, straining work.

If, as indicated, a colt from 2 to 4 years old can pay all of his way or even a part of it, it becomes all the more interesting that he could not bring a relatively high price when offered for sale at that age.

The probable explanation of the unnatural condition, which it seems undeniably does exist, lies in the fact that the average farmer does not like to put his money into something that does not offer an immediate return in service or cash. If he raises colts from breeding, as it is shown two-thirds of the farmers of the northwest do, he is induced to do so partially because it does not appear on the face of it to require a real cash outlay—because the colt becomes just a part of the routine of the farm. On the other hand the 2-year-old or yearling colt which, in from one to three years will be a full-fledged work horse worth from $150 to $250, according to size and breeding, is likely to appeal to the farmer who may need him later as a call for cash that might better be put into something immediately profitable. And frequently even at less than half what he will be worth when mature he goes begging.

On account of the great variation in local climatic conditions, moisture, soil, etc., it is up to the readers of The Washington Farmer always to remember that methods which prove successful in one locality may not work out in others. It is our aim to gather the experiences of farmers in every section of this state and pass these experiences on to our readers, that they may try out or adopt such as may be applicable to their locality and conditions.

FOR TEMPERANCE

Governor Whitman on Band Wagon.

Governor Whitman of New York has climbed aboard the prohibition band wagon. He has boldly announced that he is in accord with the general temperance sentiment, but he does not say what prohibition measure, statewide, local option or "optional prohibition remonstrance," he will personally and officially support.

Would Require Cleaner Grain

Wheat Convention Wants Grain Standardization Law

(Continued from page three.)

of crop rotation that would both keep the soil in good condition and supply feeds which would demand the keeping of live stock, which would doubly insure the fertility of the soil.

Mr. Kerl told of his own experience with a crop rotation as follows:

Barley.

Clover, sown with the barley for crop the following year.

Oats.

Peas.

Wheat.

Further rotation could be followed successfully if desired with such additional crops as potatoes and alfalfa. He also declared that rotation was a most likely smut eradicator.

"Smut feeds and thrives on one certain thing," he said "Throw in new crops, thereby destroying the food supply of smut, and it seems reasonable that you will kill it."

Hogs on Grain Farm.

Hogs are the one sure profit maker on the common grain farm, according to Mr. Kerl. Sheep are next. Cattle can not be produced on any grain farm under present price and production conditions. He said it takes 56 pounds of a grain equivalent to corn to make from 12 to 16 pounds of pork; 8.4 pounds of grain and 4 pounds of alfalfa hay to put one pound of beef on a 1000-pound steer; and 2.6 pounds of grain and 5 pounds of alfalfa to put one pound of mutton on a 60-pound lamb.

THE SMUT PROBLEM

Gain Is Made Against Grain Pest.

"I personally feel very sanguine in regard to the whole smut problem, so much so that I think in half a dozen years smut may be almost a thing of the past."—Director Ira D. Cardiff of the state college experiment station.

Will very early or very late seeding of winter wheat prevent smut? This in a general way was the question around which discussions of the smut problem centered at the grain convention at Pullman. Director Ira D. Cardiff of the state college experiment station said that experience had seemed to prove the effectiveness of such program. R. C. McCroskey Jr. of Garfield, speaking on the subject while himself not convinced that early and late sowing was a sure smut preventive, said that the experiences of farmers with whom he had been in touch indicated smut reduction could be made by sowing either very early or very late, best results coming from very early sowing.

Some Give It Up.

The problem had been threshed over so many times in the past and the delegates were so familiar with most of the arguments presented that little or no open discussion of the subject was had. There was a sort of what's-the-use sentiment in the convention. One man was heard to say as he heaved a sigh: "I don't believe they will learn how to prevent smut." One little group of growers talking on the subject related experiences of results so diametrically opposite both as to time of sowing and method of treatment of the seed that a listener might well have doubted whether natural laws actually had anything to do with smut or not. But Director Cardiff is not one of the doubters.

Definite Progress.

"Happily we can state that definite progress has been made and tangible results obtained in our efforts to control smut," he said, referring to the work of the college experiment station. Points brought out in his address touching on the smut problem were:

Infection at Sprouting.

That wheat is subject to smut infection only at the time of sprouting; that if seed itself is cleansed of smut spores by formaldehyde or vitriol treatment and is placed in soil also free from smut during the sprouting period, no infection can occur.

He said that by means of "traps" set at many points during the threshing season it had been shown that smut spores to the number of many thousands per square inch settle all over the country from the dust created by the threshing machines. These smut spores, he said, as soon as worked into the ground in the process of cultivation or seeding of the land were ready to germinate, and that if seed were in the ground sprouting at the time of this smut germination, such sprouting grain would be infected.

Therefore, he argued, winter wheat should be seeded before threshing is done or long enough afterward to insure its sprouting either before the smut spores are present and germinating or after they have germinated and died.

One point he made doubly emphatic that treating of seed was not in itself sufficient; that in addition smut must be eradicated from the soil in which the seed was to be placed.

Director Cardiff said that the college station was experimenting with a view to producing a wheat with powers to resist smut infection, and that some progress was being made. He said that of the common varieties now grown some were much more susceptible to smutting than others. Turkey red is much more smut resistant than are red Russian and little club.

WHEAT AND THE WAR

Will Price Drop With War's End?

"No one expected wheat to stay up longer than the duration of the war," said F. W. Graham of the Great Northern railroad, addressing the grain convention at Pullman.

His assertion, though there was no discussion of it in the meeting, was the subject for some comment afterward. Some of the growers express the belief that wheat will fall to no low figure within the next year, even though the war should end immediately. They declare that with a poor prospect for the Argentine crop, as is reported, and with assurances from what many think to be reliable sources that the Russian supply is not great, even though it should become available, there is no reason to believe that the law of supply and demand would rule and keep the price high. Others take the other view, feeling that it is the abnormal demand caused by the war, together with inability to secure adequate water transportation while the warfare lasts, that keeps the price up around the $1.50 mark, and that with the cessation of the war it will fall to a dollar or below per bushel.

Transportation Problem.

Mr. Graham's address was in presentation of the railroad viewpoint in the joint convention. He declared that the car shortage that has handicapped shippers for the last several months was a very natural result of conditions. Grain this year was shipped eastward by rail instead of westward by water, he said, owing to conditions brought about by the war's interference with shipping, and that this required many more cars than usual and placed them on extremely long hauls. "If the roads had sufficient equipment for such abnormal conditions, an enormous percentage of it would necessarily be idle during normal times," he said.

He outlined the efforts of the railroads to be prepared to meet needs as they occurred, and urged the shippers to do all possible to assist the companies in handling the heavy traffic expeditiously and efficiently.

He said that there had been built in the United States during the last three years an average of only 1188 miles of line per year, the least since the civil war. For the 14-year period preceding 1913 the average built per year was 4500 miles. He said that in the state of Washington the railroads paid over one-tenth of all the taxes collected.

There are 10 things that must be in the soil as plant food. If one of them is absent or there is insufficient or unavailable quantity or form, plant life, meaning crops, suffer. Those 10 things are carbon, hydrogen, oxygen, calcium, potassium, magnesium, phosphorous, nitrogen, iron and sulphur.

FEDERAL GRAINS ACT

Is Indorsed by State Inspector.

At the instance of R. D. Jarboe, state grain inspector, the grain convention adopted a resolution urging upon the federal department of agriculture the adoption for the northwest of the system now in vogue in this state regarding discount in grain inspection.

Inspector Jarboe explained that the federal act provided for a uniform system of grading grain throughout the United States. He expressed high approval of the act. The measure was passed by the last congress, and the system and grades therefore have not yet been worked out. The resolution adopted by the convention at Pullman reads in part as follows:

"Resolved, that we favor the continuance of the present system of buying, selling and inspection of grain and respectfully request the representatives of the United States department of agriculture to continue the inspection system now in vogue as expressed by the grain inspection department of Washington and the rules governing same as promulgated by the state public service commission."

CORRUGATE THE FIELDS

Will Prevent Loss of Moisture.

Robert Gunning of Davenport, an extensive farmer of the Big Bend country, urged upon the grain farmers the conservation of moisture and fertilizer

(Continued on page twenty-six.)

Tops Hog Market

Choice Hogs at $10.25 in Spokane

In the words of Office Manager Ray B. Farrar of the Spokane Union stockyards, a carload of 82 head of hogs, bred, reared and finished by James Hayes & Sons of Waverly, Wash., "topped a top market" at the Spokane yards last Saturday. The swine averaged 222 pounds, and were bought by the Carstens Packing company, the highest of four competitive bidders, at $10.25 per hundred.

"To say these hogs 'topped a top market' expresses the actual condition this fine lot of hogs met in competition with other hogs produced in Montana, Idaho and other parts of Washington," said Mr. Farrar. "While much credit is due the particular section in which these hogs were raised, the kind of feed fed them, etc., too much can not be said of the efforts made by Mr. Hayes and his sons, beginning 10 years ago, to develop this hog of standard breed, solid color and strict conformity by crossing the Duroc Jersey and the Poland-China the first year, and thereafter breeding the female offspring of his first cross to the Duroc Jersey boar.

The Feed Question.

"After standardizing their breed of swine, they next turned their attention to the best variety of feed, and by practical experience found that the field pea not only excelled wheat or any other grain native to this section as a pork producer, but produced a class of pork even superior in flavor and compactness of flesh to the pork product of the eastern corn belt.

"Another profitable advantage in conection with pea feeding is the growing of the grain, eliminating entirely the costly process of summer fallow, for, unlike other grains, the pea inoculates the soil with nitrogen and after a number of crops have been harvested successively this same piece of land will produce a greater crop of wheat than would have been grown had the wheat been planted after a summer fallow.

"From the satisfaction manifested by numerous experienced hog growers on our market who have fattened and marketed their stock at a profitable figure in the face of high-priced wheat and other adverse conditions, we think that, with the advent of this new stock feed, the discouraged or half-discouraged grower who has quit or is quitting the business on account of putting more money into his hogs than he gets out of them, must confess that he owes his depression to his lack of knowledge of the industry."

Wool Growers

Washington State Association

By D. G. Sutherland.

At the annual meeting of the Washington Wool Growers' association, held in North Yakima January 3, the following officers were elected:

President, K. O. Kohler, Ellensburg; vice president, T. J. Drumheller, Walla Walla; secretary-treasurer, Dr. Robert Prior of North Yakima.

Advisory board—The officers and Duncan Dunn, Wapato; T. H. Smith and D. C. Goodman, North Yakima, and F. M. Rothrock, Spokane.

Transportation committee—H. L. Anderson, Ellensburg; E. Berg and Archie Prior of North Yakima.

Delegates to the National Wool Growers' association at Salt Lake—T. J. Drumheller, Walla Walla; Dr. Robert Prior, T. H. Smith, Alex McGee, William McGuffie of North Yakima, Anderson brothers, K. O. Kohler, Angus McPherson and John Smithson, Ellensburg; F. M. Rothrock, Spokane.

Committees reported on the mapping out of necessary trails between the winter range and the forest reserves for the purpose of having them withdrawn from entry under the 640-acre homestead law. These trails included the road from Barrel Springs to Leavenworth, the road from the table of Wenatchee mountain to Malaga on the Great Northern; from the "horn" of the Yakima northerly toward all the forest reserves. The report stated that the trail from Barrel Springs was annually used for the movement of over 100,000 sheep.

Thomas McKinzie of Portland, assistant district forester, spoke in regard to the changed attitude of the government toward the sheepmen. He said originally the forest reserve was created and managed with the sole object of preserving the timber and water supply.

The government has come to realize that, to be of the greatest benefit to the greatest number, the sheep men and cattlemen were a large factor, instead of spending all their funds in the prevention of forest fires they proposed to spend a good part of it for the building of trails, salt troughs, and in every way making the range accessible and convenient for the stockmen. A bill is now before congress asking for an annual appropriation for the sum of $100,000 to be used for range improvement. This state has asked for $20,000 of that amount to be set aside as her share.

Increase of Range.

G. F. Allen, supervisor of the Rainier reserve, said there is an ever increasing demand for range for both cattle and sheep. In area we have reached our limit; there are but two ways for a new man to get range, wait for some one to drop out or buy him out, or we must increase our capacity.

The latter can be done by careful management and a small expenditure of money, fully one-third.

Railroad Accommodations.

C. C. Reed, supervisor of the Colville reservation, said the great drawback to the industry in his locality was the high freight rates and the lack of corrals, feed and water at the stock yards. He said it greatly increased the liability to poisoning if the sheep were turned out on the range hungry and without water.

Dr. H. T. Graves of the state department of agriculture stated that, so far as the danger from dogs was concerned, he had the matter well under control, but there was still a great danger from coyotes, but that was beyond his control.

"Loss from Predatory Animals" was the subject discussed by E. T. Averill of the U. S. biological survey department.

Pure Clothing Law.

Bruce McGregor of Prosser said we have a pure food law, a pure drug law; why not have the same thing to apply to clothing.

State College Indorsed.

The work of the state college was unanimously indorsed and resolutions passed protesting against any effort to curtail or hamper its work.

Wreck Record of Baltic Sea.

The wreck record of the Baltic Sea is greater than that of any other part of the world.

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More Wholesome Living

It is the cheerful custom of our times to urge what amounts to improvidence and insist that the liberal spending of our money is for the best, not only for ourselves, but for everybody. Every effort to reduce living expenses is frowned on and considered as a mean and underhanded attack on some industry which ought to be encouraged. If we do not wear gold rings, we are not treating the gold miners right, nor are we giving the jewelers a fair shake in business. How can we expect the jeweler to buy our pork and sauerkraut if we do not buy his gold rings? We are hurried on to make more that we may spend more with others, so that they may spend more, and so on, and so on.

There is no end to this sort of thing, and there is no health in this kind of hectic existence. The principle of making more that we may spend it faster is not a worthy basis for our philosophy.

A little economy would be a wholesome thing for all of us and would help amazingly in the matter of the high cost of living.

Teaching "Frills and Fads"

The easiest thing in the world is to criticize, to knock, to find fault. That is just now our easily besetting sin. If we want to have what we say printed we "rap" somebody, or something.

The teachers and the public schools are good game for everybody. We can rap them with impunity. "Not half the teachers are fit to teach," says one.

The schools spend all their time on new "fads" and useless "frills" says another. "Let the scholars confine themselves to readin', 'ritin' and 'rithmetic like I used to do." When anything constructive is offered it is called a "fad."

Everybody grants the usefulness of those simple tools to be used in our education and in the business of life, namely, the use of language and numbers, and at least an elementary knowledge of men and places (history and geography). But elementary education means much more than this, and the struggle of modern education to coordinate our education with the life work which we are to do is deserving of all praise and appreciation.

We are just learning that we learn through our hands and eyes and ears as well as through words. We are acquiring the habit of studying the real thing instead of what somebody has said about it. So instead of decrying the newer methods and the newer substance of school work, instead of hammering the teacher over the head because he doesn't follow the parrotlike methods used when you were young, it would be better if you preserved the open mind, if you would duly consider the subject matter presented, the ends in view and the means to be employed in securing the highest efficiency.

In other words, you should maintain the attitude of sympathetic friend and helper, instead of that of a carping and self-sufficient critic. The schools are by no means perfect, nor has the final word been said of pedagogical means or ends; nor is the school the only instrument of education; but the knocks and kicks render to it a doubtful service. E. A. BRYAN.

Silos and Silage

While silos and silage are but just beginning to show what they can do in live stock production, and that there is not the least doubt in the world that silos will multiply rapidly throughout the Pacific northwest, yet there are doubtless limitations in the use of silage. For instance, here is C. H. Walters, cattle dealer and farmer, of Chehalis, in western Washington, who is not at all sure that silage is the best feed for his purpose.

"I've talked with a good many people who ought to know, and they all agree that it takes stock a little while to get used to silage," he says. "Now with us, the cattle we buy are fitted for market and resold, and, if during the time we have them on our hands they are going to be off their feed learning to eat silage, I don't believe a silo would pay us. For milk production the requirements are probably different."

Mr. Walters believes that the western Washington farmer who understands his business can raise all his feed. "With alsike clover, roots and grain he can finish cattle in good shape. Red clover also does well here, but is more apt to grow big and then fall down before it is cut than alsike. Wheat and oats do better around here than barley, while corn is still a good deal of a gamble."

He adds that a good many feeders are being shipped out of Chehalis, but as yet comparatively few finished cattle.

Great Fall Wheat Acreage

The American farmer shows a continued willingness to do his part to provide bread for a hungry and warring world. As shown by a recent report of the United States department of agriculture, he has put 40,090,000 acres into winter wheat, the greatest ever planted, with the exception of the 40,452,000 acres seeded two years ago, and 10 per cent greater than any seeding prior to the fall of 1914. The 1915 winter wheat acreage was 39,203,000.

This season's winter wheat seeding in the Pacific northwestern states, as compared with the acreage in 1915, are as follows:

	1916.	1915.
Washington	754,000	867,000
Idaho	346,000	364,000
Oregon	472,000	590,000
Montana	775,000	775,000
Total	2,347,000	2,596,000

It is thus seen that while the United States in general has put in a larger winter wheat acreage this fall than in 1915, the Pacific northwestern acreage has fallen off about 10 per cent.

But while the acreage is large, the condition of winter wheat is below normal. It is 2 per cent lower than last year at this time, and 4.5 per cent lower than the 10-year average. "The low condition," says the government report, "is almost uniformly ascribable to the lateness of planting, which has prevented wheat from attaining its usual growth at this time, and in some instances late seedings have not yet germinated. Little mention is made of the Hessian fly, although it is in evidence to some extent, particularly in Kansas.

"The high price for the present year's crop had encouraged an intention to plant a largely increased acreage, but the unusual dryness at seeding time throughout practically the entire winter wheat-producing territory largely prevented these intentions being realized."

A Shorthorn Sale

The Shorthorn breeders of the northwest have decided to hold a sale of breeding stock in Spokane early in April. Heretofore the sales of the association have been held in North Portland, Ore., and the last one was an excellent one. But there is a field for similar sales particularly in eastern Washington.

The Shorthorn men have studied the matter carefully and have come to the conclusion that this sale shall be chiefly of male stock. The date will be early enough to get the sires to the farms and ranches in time for the breeding season. An effort is to be made to interest the ranchers of eastern Washington, northern Idaho and western Montana in the excellent sires controlled and for sale by the members of the association, which embraces practically all Shorthorn breeders.

According to the records of cow-testing associations, fall freshening cows are more profitable than spring freshening cows. Whether this condition would continue if a majority of cows freshened in the fall is doubtful, for the difference is due to the price of fat.

The federal government is investigating the possibility of using shark skins for leather. Why not make it embrace the skins of all predatory animals, not forgetting to include gamblers and confidence men of all sorts?

Scientists say courage is a matter of temperature. Probably that explains the use of the term, "cold feet."

Washington Gleanings

Walla Walla's two Methodist churches have been consolidated into one.

Nine hundred and thirty-five acres of wheat land near Pomeroy in Garfield county have been sold for $84,000.

Wenatchee will have a fruit byproducts plant the coming season, and it will make cider, vinegar, jellies and evaporated fruit.

Three farms in the vicinity of Wilbur, in the Big Bend country, totaling 1036 acres, have been sold recently for a total of approximately $50,000.

The Clarke county prune crop of the last season amounted to seven and a half million pounds and is valued at more than half a million dollars.

The Washington State Bee Keepers' association has made formal recommendation to the Yakima county commissioners that a county agriculturist be employed.

The establishment of a large city market on the site of the National Apple show under the elevated tracks of the Milwaukee railroad, is being considered by Spokane.

The fancy prices being paid for fur are said to be doing much to discourage those who have been advocating increased bounties on coyotes, wildcats and the like.

One of the noticeable features of the postal service this year during the holidays was the shipment of large numbers of turkeys, geese and other dressed poultry by parcel post.

The prison jute mill at Walla Walla is manufacturing about 6000 grain bags daily. It is expected that the price next season will be fixed by the board of control at not less than 10 cents.

The Washington state board of finance has made recommendations to the legislature asking that over $20,000,000 be appropriated for the conduct of state affairs during the next two years.

What Others Say.

Dakota Farmer: The other fellow may be farming better than you are.

Farm Life: You can take figures and prove things that clearly are not true.

Country Gentleman: No set of rules that can be laid down will meet all circumstances.

Inland Farmer: The man who knows best how to manage a farm will eventually be the man who owns one.

Banker Farmer: Even today comparatively few persons realize the importance of fostering agriculture.

Hard to "Bear" Wheat

Outstanding Facts Are on the Side of the "Bulls"

All efforts by "bear" traders to beat down the price of wheat seem unavailing. The outstanding facts are with the "bulls," and it is certain that the world will not see cheap wheat before the next harvest, with strong indications that good prices will continue throughout 1917.

The International Agricultural institute of Rome, Italy, finds that the world wheat crop in 1916 was 25 per cent less than the crop of 1915, and authorative information from other sources bears out that calculation.

The official estimates of the Argentine wheat crop is given in a cable to the Northwestern Miller at 77,000,000 bushels, against 172,415,000 bushels last year.

The French National Millers' association is reported as estimating the French wheat crop at 56,999,000 quintals of 220.2 pounds per quintal, which with the stocks on hand represented a total of 63,841,000 quintals against requirements of 92,325,000 quintals. The deficit of 28,484,000 quintals, or 104,536,000 bushels, represents the requirements of foreign wheat. According to the commercial reports the French imports of wheat this season to November 27 were 44,000,000 bushels, against 15,000,000 bushels a year ago.

The Russian wheat crop this year estimated by the International institute at Rome at 594,000,000 bushels or 152,000,000 bushels less than last year, and compares with a five-year average of 624,000,000 bushels. Rye crop, 840,000,000, or 53,000,000 less than last year.

Throughout Europe farming conditions are very much run down as a result of the war. In the British isles, for example, shortage of labor for farm work and for the production of agricultural machinery seriously menaces crop production, the surveyor's institution declares in an appeal to the board of agriculture. The appeal says in part:

"The acreage under wheat this year was more than 250,000 acres less than in 1915, a loss which was not made good by a corresponding increase in the area under other cultivated crops, and, although the official estimate shows a decrease in the 1916 yield of nearly three bushels per acre compared with the 10 years' average, the threshing returns as they come in seem to point to a diminution in yield even greater than that estimate. Unless immediate steps are taken to enable the land to be prepared for next year's crops, not only will a full output fail to be attained, but results even less favorable than those of 1916 must follow.

"We fully appreciate the need of men for the army, but this does not blind our eyes to the fact that labor is urgently required for the manufacture of agricultural machinery and the proper cultivation of the soil.

"Should nothing be done to provide for these reqüirements, land can not fail to go out of cultivation for want of labor to till it, while that which remains under tillage will grow inferior crops owing to the impossibility, under existing conditions, of keeping it properly worked and manured, or of attending to such matters as drainage, ditching and cleaning, all of which have been largely neglected for the last two years, with the result that land is fast getting into a foul, waterlogged and unproductive state."

Undoubtedly similar and probably worse conditions exist in France, Russia, Italy, Austria-Hungary and the Balkan states, and to some extent, at least, in Canada and Australia. If the war goes on these adverse conditions will grow worse; and even if peace should soon be negotiated time will be required for the warring countries to put their agriculture back to normal production.

MADE MILLIONS
How Wealth Can Add to Itself.

It is a striking commentary on the way in which corporate wealth increases of itself that the Standard Oil holdings alone of the late Charles W. Harkness, who died May 1 last, increased in value $7,618,991 between that day and December 7, when the appraisal of his fortune was disclosed, says the Boston transcript. Between the man's death and the rounding up of his possessions, this one block of his $60,000,000 of property had grown by that enormous sum, and while the man himself lay in his grave.

"Let's Hope Hit Ain't So."

In "The Men of the Mountains," Arthur W. Spaulding quotes a touching little story of one of those isolated homes among the Appalachian hills whose occupants seldom hear the voice of prayer, have never seen a Bible and could not read it if they had it. A minister visiting the home for the first time told the little family the story of the cross. They followed him with rapt faces, and, when he had concluded, the mother, leaning toward him, whispered hoarsely:

"Stranger, you say all this happened a long time ago?"

"Yes," he said, "Almost 2000 years ago."

"And they nailed him to that thar tree when he hadn't done nothing to hurt' em; only jest loved 'em?"

"Yes."

She leaned farther and placed her hand impressively upon his knee. "Wal, stranger," she said, the tears standing in her eyes, "let's hope hit ain't so!"

School Lands

And Farm Loan Associations

O. C. Musgrove, secretary of the Elma, Wash., national farm loan association, writes that he has been "instructed by the association to ask your advice regarding a man on school land borrowing money on his improvements on said land."

The law seems clearly against a loan of that character. It provides "that no federal land bank shall make loans except upon the following terms and conditions," and the first condition is that "said loans shall be secured by duly recorded first mortgages on farm land within the land bank district in which the bank is situated."

Title in fee simple is made the essential qualification, and additional loans on improvements on land seem clearly incidental to this purpose of the law. On this point the act says: "No such loan shall exceed 50 per centum of the value of the land mortgaged and 20 per centum of the value of the permanent, insured improvements thereon."

LAND IN CANADA.
Stretches of Unknown Territory.

Within the borders of Ontario are three tracts of 6000 to 8000 square miles each that no white man has ever explored. It is estimated that east of Reindeer lake and Kasan river is a region of 73,000 square miles area, larger than New York, New Jersey, Connecticut and Massachusetts combined, which is yet to be explored. Altogether there is an aggregate of 901,000 square miles of country which should be represented on the map by whiteness, and this calculation does not include unexplored areas of less than 4000 square miles.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

BY EDWIN CASKODEN

Copyright, 1898, The Bobbs-Merrill Co.

You can not afford to miss the first chapters of this serial story, which will begin in the Farmer next week.

More Silos

Coos County Now Has About 250

In his report County Agricultural Agent J. L. Smith of Coos county, Ore., says:

The result of the county-wide campaign for more and better corn silage carried on by means of corn growing contests and shows is already apparent in better seed selection and an increase in acreage of at least 100 per cent in the last three years. While the chief object of growing corn in this county is for silage, it is very important to produce seed corn here at home which is acclimated to the peculiar climatic conditions of this section.

The increased acreage of good quality silage corn has resulted in the building of a large number of silos. There are now approximately 250 in the county, one-half of which were built within the last three years.

JUST A BRICKBAT
Flung at John Barleycorn's Jaw.

Sociologists, philosophers and Utopians of all sorts who have dreamed of abolishing poverty had better watch out or they will find their occupation gone, says the Kansas City Star. Practical, common-sense people are getting rid of a good share of poverty under their very noses and with no more elaborate machinery than a brickbat flung with unerring aim to the point of John Barleycorn's jaw. Oh, of course, there are other causes. But right at our door Kansas shows how important a part in preventable destitution is played by booze.

Soda Fountains on Trains.

Soda fountains are to be place in the dining and lounging cars of fast through trains on one of the western railways.

What Japanese Can Teach Us

Constantly on Watch to See How Others Work

C. Jorgensen, who has lived on his present farm near Renton, Wash, since the days of "blanket Indians," between 30 and 40 years, has something to say on the oriental help problem which throws a new light on Japanese characteristics.

"I was one of the first farmers in this neighborhood to employ a man solely for milking," said Mr. Jorgensen to a representative of the Farmer. "My milk business had grown to a point where I needed such a man, and I sent in to an employment agency in Seattle and was furnished with a white milker. For a week I got up every morning to show him how to handle the work. Then I turned the matter over to him and thought no more about it till one evening, when I came unexpectedly into the barn, I found him pounding one of the cows, which had accidentally switched him across the face. I asked him if that was his method for making a cow gentle, and he flew off in a temper. The result was that he quit that night.

"Next morning a Japanese boy, who had been sawing wood for me, came to me and asked if the new milker had quit. I told him he had.

"'Me try!' he said.

"I asked him if he could milk, and he said again, 'Me try!' I told him I would get up mornings and help him learn the ropes, as I had the white man, but he said he knew all about it. I got up anyhow, and found that he was telling the truth—while he had sawed wood, he had also been watching the way I did my work. Well, to make a long story short, that boy did my milking without a hitch, till he was ready to rent a place for himself. Then he brought me one of his countrymen, who was also a good milker, so that I had no trouble in the matter."

This is a typical instance of Mr. Jorgensen's experience with Japanese help. He has found the little brown men absolutely reliable, and has never known one to break his word in the slightest respect.

"I wish I could say as much for the white men I have employed," he adds. "That's what makes the Japanese problem so serious—in some respects, at least, these people are our superiors. Can we keep them down in the future, as we have in the past? Is it just for us to do so? Is it possible? I don't know what the answer is to these questions, have to face and solve them."

WEYERHAEUSERS
With Capital of $12,500,000.

The Weyerhaeuser Timber company, with a capital of $12,500,000, and with its head offices in Tacoma, has just filed articles of incorporation. The company is one of the largest, if not the largest, of its kind in the world. The officers and trustees are as follows: John P. Weyerhaeuser, Tacoma, president; F. S. Bell, Winona, Minn., viec president; George S. Long, Tacoma, secretary; F. E. Weyerhaeuser, St. Paul, Minn., treasurer; F. C. Denkmann, Rock Island, Ill.; William Carson, Burlington, Iowa; H. J. Richardson, St. Paul; H. H. Irvine, St. Paul; F. H. Thatcher, Winona, Minn.; W. L. McCormick, Tacoma; M. Musser, Muscatine, Iowa, all being trustees, including the officers.

Sheep Industry

Is Improved by Cooperative Plan

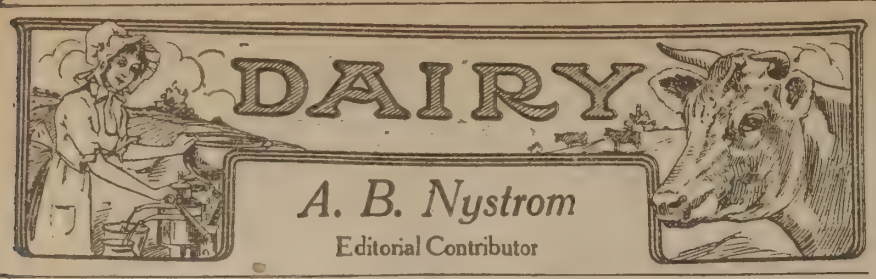
How the sheep industry in Gallatin county, Mont., was bettered by community cooperation is told by G. M. Lewis of Manhattan, Mont. For years sheep have been produced in that section, but large flocks only. In the year 1912, however, one of the large flocks was disbanded, owing to financial difficulties. Speaking of it, Mr. Lewis says:

"I bought 50 and the balance were scattered throughout the valley in bunches of from 15 to 50. The lambs thus raised about the farmers' dooryards were much superior and produced larger per centages, but these isolated farmers could not market their buck lambs in these small lots.

"We therefore formed the Gallatin Valley Sheep Breeders' association and have sold yearly every lamb of each member. We advertised in state farm papers and sent type car to our state fair each year. Here the sheep men bought most of the lists we had to offer. We buy our wool sacks and twine and pool our wool. We have a big annual meeting and a sheep show at Bozeman during college conference week. The best buck and ewe lamb prize is hard fought for each year."

LESS INSANE CASES
Dry Law Saves Men and Money.

Owing to the dry law, insanity cases from drunkenness received at the Washington state asylum at Steilacoom have fallen off over 300 per cent. As an illustration, in 1915 there were 38 men and six women received whose insanity was caused by drink. In 1916 there were only four men and one woman.



Municipial Dairy

Says Pennsylvania State Grange

By Richard Hamilton Byrd.

The Pennsylvania state grange, perhaps the most powerful state organization of the grange in the country, proposes the establishment in Pennsylvania cities of a municipal dairy which shall handle not only milk but also butter and eggs, establishing a direct relationship between the producer and the unified distribution system of the city.

The grand master of the state grange, John A. McSparran, made the report demanding these innovations. He used milk as the most impressive illustration of the injustice which present conditions impose on both the producer and the consumer, employing the same analysis and arguments that have been advanced months ago in Washington, when it was proposed to establish a municipal dairy; but he expanded the argument by showing that butter and eggs could and should properly be handled by the same municipal dairy organizations in order to relieve producer and consumer from the exactions of the "egg trust kings" and the "butter trust kings."

The Pennsylvania organization took steps toward a general investigation of the cost of producing and marketing these articles. Committees were authorized to effect a cooperation between the producers in the country and the organizations in the cities and towns, such as housewives' leagues. consumers' leagues and the like.

Bumper Crops.

That the farmer receives less money for his bumper crops than he gets for his lean ones, although the handling of the one involves infinitely more labor than the gathering and marketing of the other, is a statement made by William J. Showalter, a Washington economist, in a paper brought to the attention of the house of representatives by Representative Flood of Virginia in connection with the high cost of living issue. He shows how the farmers of the world received a billion dollars less for their bumper grain crop of 1912 than they got for the lean one of 1911, how those of the United States received $172,000,000 less for their bumper corn crop of 1912 than for their lean one of 1911, and how the wheat growers got $64,000,000 less for their bumper wheat crop of 1906 than they did for their lean one of 1907.

"While congress is considering the high cost of living from the standpoint of the city consumer," says Mr. Showalter, "it might also consider the high cost of universal bumper crops to the farmers who produce them. A study of the statistics of the department of agriculture will show that bumper crops, with all the extra labor they involve, bring the farmers shorter returns than the lean ones.

"All the world understands, of course, the law of supply and demand, and knows that big crops mean lower per bushel prices. But to take both world-wide, all-crop statistics and national single-crop statistics and to find that without exception the bumper crops bring less money in the aggregate to the farmer than the very lean one is to disclose a condition in the economics of food production that is at once surprising and important."

Plant Food Duties.

How many farmers have a definite, clear idea as to the exact mission of fertilizers? Professor Van Slyke of the New York station defines a fertilizer as being any substance which, added to the soil, will, under favorable conditions, produce a better growth of crops, whether by direct or indirect action on the crop or on the properties of the soil. Dr. A. D. Hall, late director of the famous English experiment station at Rothamsted, says that fertilizers are designed to supply deficiencies in the soil, and for all practical purposes are to be regarded as consisting of compounds of nitrogen, phosphoric acid and potash.

Quality

How to Secure in Dairy Products

In a recent address before the commercial club at North Yakima, Roy P. Bean of the U. S. department of agriculture said:

"It costs under local conditions from $45 to $60 per year to feed a cow alfalfa hay, silage, pasture and perhaps a little grain. This means that the average cow consumes the value of about 200 pounds of butter fat per year. Therefore the cow producing about 250 pounds of butter fat, the average cow of the state, is paying a net profit of approximately 50 pounds of butter fat which has an average value of 30 cents per pound. The cow producing 300 pounds of fat per year returns twice the net profit of the 250-pound cow on approximately the same investment of initial cost and feed bill. She is worth more than two of the 250-pound cows to the man who owns her and to the industry.

"This increase in quality can be secured in four ways:

"First—By buying only good cows.

"Second—By breeding for improvement.

"Third—By systematic milk and feed records.

"Fourth—By better care and management.

"The commercial club and its individual members can help develop the most important industry in the valley by assisting farmers to buy good cows. Do not understand me to say that all farmers should own cows—that is a too common mistake, for not all farmers are dairymen nor will they ever be successful at dairying. When I say "assisting the farmers to buy cows," I mean making it possible for them to borrow money at a reasonable interest rate and upon acceptable terms with both parties to the transaction properly protected."

Cow Testing

Snohomish Valley Association

The Washington Farmer is glad to receive from Chester C. Farr, county agricultural agent of Snohomish county, the report of the Snohomish County Cow Testing association for the seventh testing month. C. H. Bergstrom is the tester.

A grade Jersey, five years old, belonging to D. F. Sexton gave 815 pounds of milk testing 6.85 and producing 55.82 pounds of butter fat. A grade Holstein belonging to F. L. Krassis, 3 years old, gave 1314 pounds of milk testing 3. 95 and producing 51.89 pounds of butter fat. The third cow in the association producing more than 50 pounds of butter fat belonged to Shadinger Brothers, a Holstein, 3 years old, giving 1476 pounds of milk testing 3.4 and producing 50.18 pounds of butter fat. Ten cows in the association produced over 40 pounds of butter fat and the average value of the product of the 10 cows was $22.30, average feed cost per 100 pounds of milk, 89 cents. Ten other cows in the association produced between 30 and 40 pounds of butter fat giving an average value of products at $16.82 and an average feed cost per 100 pounds of milk at 90 cents. Comparison of these averages show that the 40-pound cow costs less than the 30-pound cow, while the 50-pounds animal is still less expensive a producer.

Stenographers.

According to the census reports 263,315 girl stenographers and typewriters are employed in the United States.

Dry Off Cows

Don't Cut Down on the Fuel

When some of the dairy experts got together for informal talks, during the meeting of the Washington State Dairy association, recently held at Auburn, the sparks of knowledge flew.

"How do you dry off your cows?" a breeder from Grays Harbor county demanded, addressing a King county man. "Starve them for a month? Well, that's the wrong way. Cut down the supply of succulent feeds a little, if you want to, but don't cut down on the real fuel and tissue formers; if you do, you'll weaken your animal and set her just that far behind.

"That matter of keeping vitality at a maximum all the time is one of the greatest importance," the speaker continued. "That's why it is that heifers are no longer being bred as early as they once were. If the Jersey drops her first calf when she is 26 months old, and the Holstein at 30 months, you will find that you will have a young cow rather than an undeveloped heifer for your first milking period. And the added vigor and vitality will show in cow and calf right from the start. Another thing: Don't imagine for a moment that you've got to keep the heifer lean at this critical time—let her get as fat as she will under generous feeding. She'll milk it all off soon enough, if she comes of a milking strain. A cow that has it in her to make a big milker will never put on too much beef. She simply can't do it."

Year's Work

Arlington Cooperative Creamery

The Washington Farmer has received from Chester C. Farr, agricultural agent of Snohomish county, a statement of the business done by the Arlington Cooperative association for the year ended November 30, 1916.

From these figures it appears that nearly a million and a half pounds of cream were received to make butter, and a million and a third pounds of milk to make cheese. The average price paid for butter fat was $.336; average cost of cream $.245; average cost to make butter $.034; profit per pound of butter $.01. The butter sold at an average price of 30 cents

This association made 126,191 pounds of cheese, selling $125,491 worth of cheese. The average price of cheese sold was $.164 and the cost of making $.029.

Dairying

U. S. Bureau of Animal Industry

Through the organization of cow-testing associations, bull associations and the extension of assistance in establishing the dairy manufacturing enterprises, the United States bureau of animal industry reports that it has helped to place dairying in many sections of the country on a more stable and profitable basis. Marked progress was made through demonstrations and assistance of field men in the building up of cheese manufacturing industries in the mountainous regions of the south, among the Rockies, and in the Pacific coast country. In cooperation with a number of cities, surveys of sources of milk supplies were made and suggestions offered for bettering sanitary conditions.



Raise Your Calves on

Blatchford's Calf Meal

and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.

Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Factory, Dept. 58 Waukegan, Ill

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Distributors.

Spokane, Wash.



—has the marvelous "Vortespoon" one piece skimming device.

Gets All The Cream

—can be cleaned in 3 minutes.

A leader for 20 years.

Ask for catalog No. 137.

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$16.95 Upward ON TRIAL

American FULLY GUARANTEED CREAM SEPARATOR

A Solid Proposition to send new, well made, easy running, perfect skimming separator for $16.95. Skims warm or cold milk; heavy or light cream. Different from picture, which shows larger capacity machines. See our plan of

MONTHLY PAYMENTS

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may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

Before You Buy, Investigate

Before buying an Ensilage Cutter, investigate thoroughly. Be sure your engine will run it; that it will elevate to the top of any silo; that it will run at low speed and save power. Choose carefully, and your judgment will lead you to decide on a



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SEND POSTAL FOR CATALOG

It tells about the wonderful new Papec patented self-feeding device that handles hay and other small growths as well as corn.

Dairy Machinery Company

Dealers in Dairy Machinery and Barn Equipment.

907 Western Ave. Seattle, Wash.

"Neutral" Fruit Grader

Is Advocated by Oregon Fruit Handler

George C. Gladden of the Pioneer Packing House of Hood River, Ore., told the growers attending the eleventh annual convention of the Washington State Horticultural association at North Yakima last week that an orchardist can hardly be trusted either to thin or to sort his own fruit. The orchardist, not the one who buys his fruit, is the loser, Mr. Gladden said, as the temptation to leave too many apples on the trees and to grade fruit too closely, thereby placing an inferior fruit on the market, is too great.

Community Packing House.

A community effort and a community packing house is the remedy offered. Such house should have an experienced, square-dealing superintendent, completely disinterested in the personnel of the fruit growers whose fruit he handles. This will tend to assure grading on the basis of quality only, and all those speaking at the convention said that the real problem in the northwest was to produce a grade of fruit so far superior to that produced in the east that it would command top place on the market and thereby overcome the handicap now existing as a result of the greater cost of production and marketing western fruit.

J. F. Sugrue of Cashmere said that eastern apples could be placed on the market at $1.50 a barrel, while it required $3.75 to place western apples on the same market. The problem, he agreed, was to produce a fruit whose superfine quality would overcome this differential.

Community Effort.

The conduct of orchard business through community effort has proved beneficial, said the Oregon packer, in enabling the orchardists to secure more capable help, in insuring more nearly uniform grades, in saving costs of hauling to the railroad and providing better buildings and equipment for picking, storing and packing. He cited one pertinent example of cases where auto trucks have been installed to gather up the fruit from the individual orchards and haul it to the central packing house, and thence to the shipping point.

Loren F. Dumas of Dayton urged the keeping of accurate accounts of costs and profits, especially the former. He recommended that a score of orchardists agree among themselves to keep exact accounts and outline their methods, regular reports to be filed with some one who would tabulate them and thus aid in arriving at a standardization of orchard cost.

Charles Uhden of Spokane told of his partially successful efforts to secure equitable freight rates and shipping service. He urged more unified support of this work by the growers.

Paul H. Weyrauch, president of the Fruit Growers' Agency association, outlined the work of that branch of the work, explaining that the object of the organization was "to stabilize the fruit industry of the northwest so as to secure for the grower and others interested a just and equitable return for their investment and their labor." He told in detail of the successful operation of the association.

Officers elected were: President, J. F. Sugrue, Cashmere; vice presidents, J. L. Dumas of Dayton and H. W. Des Granges of Kennewick; secretary, Luke Powell, Prosser; treasurer, Ed Remy, North Yakima.

Among the resolutions adopted were those favoring:

An irrigation experiment station in central Washington; federal law permitting apples to be stored in cold storage more than three months; anti-strike legislation; increased appropriation for the state college to be used in increased horticultural activity; barring from this state of seed from alfalfa infected with weevil, and the keeping of cost records by members of the association.

Dairy Output

Valued at $20,000,000 in Oregon

During the period covered by the records in the dairy and food commissioner's office there has been a marked increase in the amount of butter, cheese and condensed milk manufactured in Oregon.

The following tables show the increase in the number of creameries, cheese factories and condenseries, and the amount of butter, cheese and condensed milk manufactured:

Butter—

Year.	Number of Creameries.	Pounds of Butter M'f'd
1901	50	1,680,035
1903	70	4,500,000
1905	60	No record
1907	90	No record
1909	106	No record
1914	98	13,336,387
1915	100	13,643,728
1916	105	16,288,396

Cheese—

Year.	No. Cheese Factories	Pounds of Cheese M'f'd
1901	20	1,185,763
1903	40	2,500,000
1905	58	No record
1907	63	No record
1909	63	No record
1914	62	7,453,255
1915	68	6,896,887
1916	74	8,951,908

Condensed milk—

Year.	No. Condenseries	Lbs. Cond'd Milk M'f'd
1905	3	No record
1909	6	No record
1914	7	19,580,736
1915	7	21,270,900
1916	7	27,116,002

Every possible agency is being used at the present time to develop and build up the dairy industry, of which one of the most active is the Cooperative Cow Testing association. Our first association was organized early in 1911, and in 1912 we had one in operation, in 1913, one; 1914, 7; 1915, 11, and in 1916, 15. These are located as follows: Coos county, 5; Tillamook county, 1; Clatsop county, 1; Washington county, 1; Yamhill county, 1; Polk county, 1; Marion county, 1; Clackamas county, 1; Multnomah county, 1; Umatilla county, 1; Malheur county, 1.

We feel that we have reason to be proud of our dairy record for the year just ended, at the same time as we look into the future we find that we still lack much that is to be desired before we shall have reached that place in the rank of the foremost dairy states, to which we should aspire.

The greatest factor that we can name in achieving such place and results is the exercise of greater care upon the part of Oregon dairymen and creamery men in the production of good, clean-flavored cream and a higher quality of butter.

LESS LIVE STOCK

Sunnyside Irrigation Project.

The annual census of the Sunnyside irrigation project, just completed by J. G. Heinz, assistant project manager, shows a decrease in all farm animals except cattle. Good prices and the expense of feeding high-priced grain and hay are responsible for the selling of so many farm animals. Farm equipment has increased $52,218.

Only $2 Down
One Year to Pay!



$24 Buys the New Butterfly Jr. No. 2. Light running, easy cleaning, close skimming, durable. Guaranteed a lifetime. Skims 96 quarts per hour. Made also in five larger sizes up to No. 8 shown here.

30 Days' Free Trial Earns its own cost and more by what it saves in cream. Postal brings Free catalog, folder and "direct-from-factory" offer. Buy from the manufacturer and save money.

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100,000 Now in use

Purebred Registered Holstein Cattle.



During the fiscal year ending April 30, 1916, there were reported to the Advanced Registry Office of the Holstein-Friesian Association, 11,868 short time official records, over one-half of which were by heifers with first or second calves. The average seven-day production of these 11,868 animals was 401.1 lbs. of milk, containing 3.53 per cent of butterfat. These figures emphasize the fact that Holstein merit is based, not on individual records, but upon the wonderful uniformity of high productiveness of the purebred Holstein cow. There is big money in the big "Black and White" Holsteins.

Send for FREE Illustrated Descriptive Booklets. The Holstein-Friesian Association of America, F. L. Houghton, Sec'y, Box 205, Brattleboro, Vt.

Scours Lead Direct to Calf Cholera



And Calf Cholera kills thousands of calves. The digestive organs are paralyzed; food lies in an undigested mass in the stomach; it sours and ferments and decomposes. Do you wonder that so many calves die in a few hours after cholera strikes?

Dr. David Roberts' CALF CHOLERA REMEDY

overcomes the trouble by righting the digestive organs. It regulates the flow of gastric juice and soothes and heals the sore mucous membrane. It liquefies the poisonous gases already formed in the stomach and prevents fermentation. Digestion becomes normal and the disease is ended. Don't let the trouble go too far. Begin with Calf Cholera Remedy right away when scours appear. The disease is contagious.

Laxotonic relieves stoppage of the bowels, which, in seventy-five per cent. of cases, is due to paralysis of the digestive organs. Ordinarily, this animal disorder is treated for constipation, which oftentimes results in the animal's death. Laxotonic removes all risks.

Cow Cleaner helps cows at calving time. Cleans and removes the afterbirth naturally: leaves organs in healthy breeding condition. Use *Antiseptol* to soothe and heal soreness of genital organs.

Cow Tonic aids digestion, tones and conditions the cow system, keeps up appetite and prevents falling off of milk.

Breeding Tonic prepares and conditions for breeding. Calves are dropped naturally, complications are avoided. Use also for breeding mares, ewes and sows.

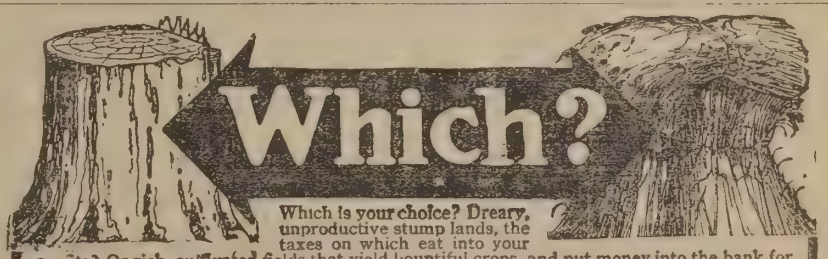
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Get Dr. Roberts' Live Stock Prescriptions at your drug store—nearly 4000 dealers in United States. Don't by any means accept any package of animal medicine that does not have Dr. Roberts' picture on the front. Look for it—it's your assurance of healthy, profitable stock. If you do not have Dr. Roberts' 184-page "Practical Home Veterinarian," treating all diseases of all live stock, enclose $1.00 and receive copy by mail. Address



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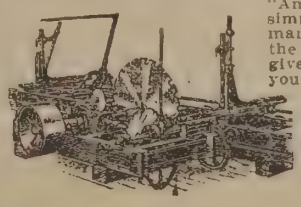
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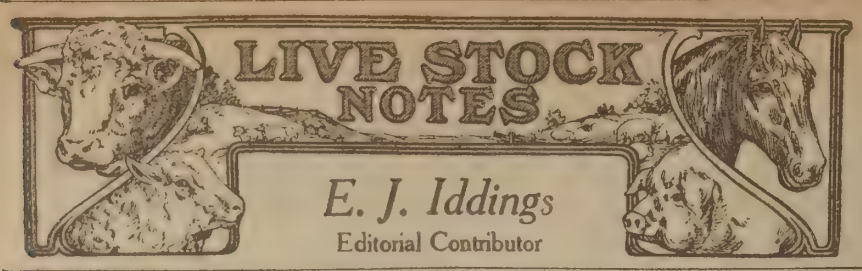
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Meats

Production and Marketing Of

By Richard Hamilton Byrd.

A most interesting study of the production and marketing of meat has been made by the bureau of animal industry, department of agriculture. It will be news to most people, that one-third of the hogs raised in this country are still killed on farms. "Hog killing time" is a period in which the farm in the east and south reverts to the primitive economics of colonial days; the hogs are killed, scalded, scraped, cut up, and then manufactured into their myriad products; the hams and bacons and shoulders are cured and finally smoked; the "country sausage" is flavored to the taste of the family epicure, who knows exactly what he wants and has small regard for the models of the big commercial packing institutions; head cheese, scrapple, "pud'n'," and all the rest of the seasonable delicacies are produced just to the fancy of the folks who are to consume them; and altogether it is quite the most interesting and entertaining operations of the old-fashioned farm.

Another statement is made that the great central markets of the country now handle four-fifths of the sheep, two-thirds of the hogs, and half the beef cattle of the country. Instead of a "big four" or "big five" of packing concerns handling the whole business, it appears that there are over 1200 great slaughtering and packing plants associated with the big centralized markets. The business is thus spread out very widely instead of being held in the tight grip of a closely-knit group.

It is stated that municipally owned or controlled abattoirs are becoming more and more important factors in the meat handling business.

A factor that is tending to reduce the costs of marketing meat is the development of cooperative stock selling associations. It is stated that 715 of these associations now exist in 15 states, one-third of them in Minnesota alone. They bring better prices to the farmers, and therefore tend ultimately to help the consumer get lower prices; for whatever eliminates waste tends to accomplish both these ends.

FED IN YAKIMA.

Estimate 10,000 to 12,000 Head.

It is estimated by leading Yakima stockmen that from 10,000 to 12,000 head of steers are being fed in the valley this winter with an idea of finishing them on grass. Most of these steers are from outside points.

Federal Meat Inspection.

More animals were slaughtered under federal inspection during the last fiscal year than in any previous year since meat inspection was begun. The total for the 12 months reached 62,304,522 animals. Nearly 7,500,000,000 pounds of meat and meat food products were prepared and processed under inspection. Certificates were issued for the export of over 510,000,000 pounds of beef and beef products, more than 1,373,000,000 pounds of pork and pork products, and about 12,344,000 pounds of mutton, or a total of 1,895,863,936 pounds.

TO FATTEN CALF

Prize to Thirteen-Year-Old Boy.

In Iowa's baby beef feeding contest, in which more than 1100 boys and girls were enrolled, Clement Rowe, 13 years old, of Glenwood, Mills county, was pronounced winner and statewide champion. The contest was conducted by the Iowa Beef Producers' association in cooperation with the agricultural extension department at Ames. A $100 trip to Washington or a trophy of the same value, donated by the Union Stock Yards and Transit company of Chicago, is Rowe's reward.

STOCK EXHIBITS

By Baltimore & Ohio Railroad.

The traffic and commercial development department of the Baltimore and Ohio railroad has completed arrangements for a special train of live stock exhibits which will be shown in southern Indiana and Illinois, starting from Cincinnati February 5. Lectures will be given by experts at each shop for the benefit of farmers, stockmen and dairymen.

Brazilian Wool Exports.

Although the greater part of Brazil is somewhat tropically situated ever to become a producer of wool, wool is grown in the southern part of the republic, notably in the state of Rio Grande do Sul, where the climate is more suitable. The port of Rio Grande in that state is today the chief outlet for Brazilian wool. The total quantity exported in 1915 reached the sum of 997,630 pounds, valued at $193,065. The Brazil Land and Cattle Development company is said to have had very remarkable success in raising sheep of the Romney March breed near Morongaba, state of Parana. In the interior of the state of Minas Geraes a colony of Uruguayans has been having like success with sheep of the same type, but is apparently not yet exporting wool in appreciable quantity.

Pure Seed and Pure Bred Stock

Many Reasons Why It Pays to Carry on These Two Lines of Work

By J. R. SHINN, Spokane, Wn.

During a conference a few days ago in Spokane, when the matter of a live stock convention and also that of a pure seed convention came up, to be held in the city this winter, it was proposed that these two conventions should be held in connection with one another during the same week. Some one remarked that these two lines of farm work were so different, had nothing in common, so that two separate conventions had better be held and further consideration of the proposed convention was dropped for the time being.

After reading the following article by Mr. Shinn, the Spokane county agriculturist, there would seem to be good reason for holding the two conventions together.

Hand in Hand.

There are many reasons why the pure seed business and the purebred stock business go hand in hand, therefore the simultaneous development of the two should receive attention from those promoting these enterprises in the northwest. The time seems to be ripe for the development of each of these lines of work, and it is only fitting that we should look at the points in common of each. To this end, answer to several questions shall be made. Is the man who breeds purebred stock sufficiently impressed by his experience with the stock to realize the importance of purebred seed? Does the stock business carry with it any byproducts that are of special advantage to the seed business And, does the seed business carry with it any byproducts that are of special advantage to the stock business?

The Stock Breeder a Natural Seed Grower.

Experience has shown that no farmer appreciates the value of purebred seed more than the man who breeds purebred stock. These men appreciate to the fullest extent the value of the pedigree in securing the proper kind of offspring. They have found it true with their cattle, horses, hogs, or sheep, that to be sure of getting the qualities desired in the offspring they must know precisely from where this offspring has come for several generations prior to its advent to the world. In consequence of this knowledge of animal life, they are also careful to see that it is applied to the plant life as well. There are very few breeders of purebred stock but who have as a side line some specially selected potatoes, corn, peas, oats or barley that they are developing on their place. Therefore, it is not a hard matter to interest these parties in the development of pure seed along with the development of purebred live stock.

Makes Good Soil for Seed Growing.

Another point of very great importance in developing the seed business is to have well manured land on which to grow the seed. Plants can not be depended upon to develop to their highest state unless the land on which they grow is highly fertilized. No fertilizer works quite so well as that which comes in the manure furnished by the live stock business. Not only will it be found that a byproduct in the shape of manure is a great help in the seed business, but the fact that most live stock will prove of decided benefit in keeping down the weeds on farms for the seed business. This is especially true of sheep. No other live stock can take the place of sheep as weed eradicators, so that in these two results which spring from the live stock business, admirably fit this line of work to go hand in hand with the seed business.

Cheap Feed for Live Stock.

The third point which should be taken into consideration is a very decidedly important one, when it is considered that byproducts of the seed business may be depended upon to furnish cheap feeding for the growth and development of live stock. After the seed crop has been threshed, there always remain the threshings, or straw, which may or may not be of value to the farmer. The value of these threshings will depend upon the farmer's ability or inability to make use of them in feeding live stock. Where the pea business has been best developed it has been found that the hog business goes hand in hand. Peas can not be harvested without shattering a lot of them in the field. These peas will be a waste unless some kinds of stock are provided which are capable of picking them from the ground. Hogs act as gleaners in the pea fields, and convert shattered peas into useful and profitable feeding.

As a byproduct of the pea business there is also the pea threshings, which make excellent roughage for sheep and young cattle. This same thing is true where clover is used for seed purposes also. Farmers who make a specialty of growing clover for seed purposes find that the threshings which come from the crop have a great feeding value when used for roughage to feed to cattle or sheep. The same thing is true of the alfalfa seed business and of other crops grown commonly in the garden. Furthermore, in the fanning and the rejection of inferior seeds of all classes of crops there is left behind large quantities of material admirably adapted to feeding stock.

The Inland Empire must be depended upon to supply a greater amount of garden seed each season, and this will necessarily develop more threshings to be consumed upon our farms. The quality of the seeds produced here are of first rank, and seed dealers are coming to recognize this fact more and more each year.

In conclusion, it may be stated that the breeder of live stock, because of his knowledge of pedigree, generally furnishes the best farmer to develop pure seed on his place; that the by-products of the stock business found in the manure and the eradication of weeds by the animals make a specially fitting combination with the seed farm, and lastly that the by-products of the seed business furnishing cheap feed, either as grain or as roughage, make the proper development of the seed business especially desirable in connection with live stock.



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LAWYER.

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Veterinary

Dr. S. B. Nelson

I have four dairy cows that came fresh about four months ago that have not come in heat as yet. These cows seemed to clean all right and look well and healthy. I have been washing them out with a 2 per cent solution of creolin for the last few days and they seem to have a whitish yellow discharge come from them a few hours after being washed out. I am feeding oat ensilage, some shorts and alfalfa hay.

C. C. D.

Auburn, Wash.

The fact that your cows do not come in heat would indicate that there is some ovarian disturbance. Just what that disturbance is I can not say. Possibly giving them a purge of one and one-half pounds of epsom salts in one gallon of warm water may bring about that condition. If after giving the purge menstruation does not occur I would recommend trying yohimbine in one grain doses once daily fer a few days. This is an expensive treatment, but it is reported as a very efficient one.

I have a cow five years old that freshened last October for the fourth time. After the second calf her udder got swollen and caked about every 10 days or two weeks for a couple of days. She dropped off on her milk to almost one-half and the milk was stringy. Then she would recover again to some extent, but does not give her usual amount. She is in good condition and eats well.

E. J. L.

Grandview, Wash.

Your cow is affected with mammitis or garget, and I would recommend that you give your cow one and a half pounds of Epsom salts in one gallon of water internally. Then inject into the caked part of the udder a quantity of 2 per cent solution of boracic acid. Dip the end of the teats into tincture of iodine before you make the injection. After the injection is made work the liquid about the udder to some extent and then milk it out. At the same time give her one ounce of fluid extract of poke root once daily for a few days.

What can I do for cats that have the distemper or something like it. It is very contagious as they all have it sooner or later. We have killed them and got new cats, but they get it too. They sneeze all the time with a discharge from the nose. Have given them pine tar, but it does no good.

L. R.

Wahkiacus, Wash.

Give your cats one-tenth of a grain of calomel once daily for a few days. At the same time give them from one-fourth to one-half of a grain of quinine in capsule morning and evening, the size of the dose depending on the size of the cat.

I have a sow that had six pigs, but five were born dead at different stages of growth. The sow was in pig when I got her. She had not been fed swill, but after I got her swill was all she got. Was the feed the cause of this?

W. F.

Lakeview, Wash.

Yes, I think your sow was not correctly fed. She should have had a fairly liberal grain diet of whichever grain or combination of grains you might have, wheat, oats, barley or peas. The swill might replace the roots of which a few would have been good for her. Alfalfa or clover hay makes a good roughage for her.

I have two cows giving milk and when separated it leaves a bloody substance in the separating cup. Both cows are in good condition and their first calf. One will be fresh in March.

E. N. P.

Prosser, Wash.

Try giving your cows each one teaspoonful of sodium hyposulphite in a pint of water once daily for a week. This has given splendid results in the hands of many dairymen.

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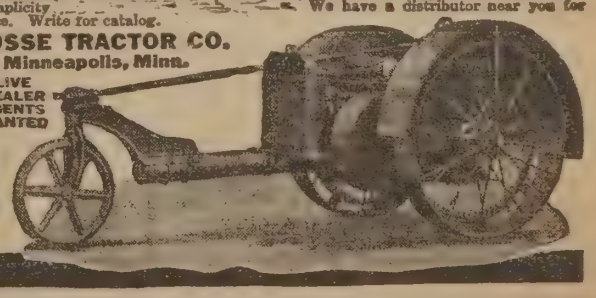
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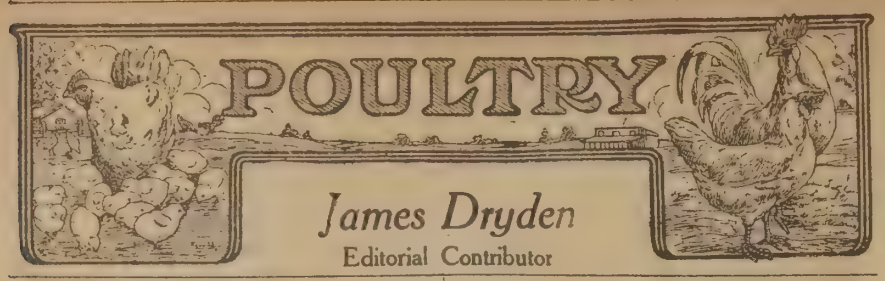
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Breeds Again

Bird Question That Never Downs

By James Dryden.

The breed question never downs. The breed heresy persists. At the rate inquiries are made in regard to the "best breed" it seems the poultryman or would-be poultryman is looking for some magic breed to solve all his problems. He can not be blamed very much, for when he goes to the poultry show he encounters 100 different breeds and varieties, each breed and variety being the best in the world, according to the particular breeder with whom he talks. They are all the best layers, and the breed that has the best talker usually wins in impressing the visitor with its superior excellence.

The commercial poultryman—the man who is producing eggs or meat or both—will make no mistake if he considers no other breeds than the Plymouth Rock or Leghorn. The former will furnish both eggs and meat; the latter eggs. If he wishes the combination he should choose the Plymouth Rock; if he wants to specialize in eggs he should take the Leghorn. Any other difference in breeds is almost altogether a difference in breeding or strain.

But after he has decided on one of those breeds his troubles are not necessarily ended; rather they have just begun. The name Plymouth Rock means very little to him when it comes to egg production. The trouble comes in selecting within the breed the particular family or strain that excels Selection must not end with the breed; it must be applied unsparingly to the individual strain of the breed. The country must be hunted over for the particular strain that will produce the eggs most abundantly. The only sure way is to go to the man who has been honestly trapnesting his hens for the more years the better and carefully breeding from the best layers each year and make his selection there. He may be able to find better looking Plymouth Rocks elsewhere, he may find some that have won prizes in the show at the same price; but as it is eggs he wants he must buy fowls that have been bred for eggs.

In making his selection he must, of course, also choose those that show good vigor. He wants both vigor and heredity.

There are good layers among the Plymouth Rocks, and this is not incompatible with good meat qualities. It takes feed, however, to make meat, just as it takes feed to make eggs; so that it takes more to feed a Plymouth Rock than it does a Leghorn. For that reason the Leghorn should be chosen where eggs are the only consideration, because it will produce eggs at less cost than the Plymouth Rock, providing, of course, that they produce the same number.

World's Cork Supply.

Seventy per cent of the world's cork supply is said to be produced in Spain and Portugal.

Mexican Railways.

Mexico has 15,000 miles of railway.

Wheat Bran

Is Something More Than "Sawdust"

By James Dryden.

We don't yet know all about the real feeding value of bran, but to say that bran has little more feeding value than sawdust, as I have seen it stated, is stating something that is not warranted by a study of its composition nor by a knowledge of the results secured from it by poultry keepers everywhere.

Wheat bran is almost universally used as a poultry food. It is used more than any other byproduct of the cereals. For young chicks and growing stock as well as laying hens it is an excellent food. Its cheapness is probably the main reason for its popularity. But it is rich in protein also compared with whole wheat or corn. In 100 pounds of bran there are some 14 pounds of protein, while wheat contains a little less than 12 pounds, and protein is the most valuable part of the feed. On the other hand bran is not so well digested as the whole wheat. According to the best available data, about 72 per cent of the protein of bran is digestible, while 75 per cent of the wheat is digestible when fed to poultry. Even at this, bran has the advantage over whole wheat. That is, there is more digestible protein in a hundred pounds of bran than in a hundred pounds of wheat.

Considering it from another point of view, bran has a relatively high ash content. It is known that certain compounds of ash, such as phosphoric acid, sulphur and iron, have an important part to play in hen nutrition. Experiments have shown that corn which is low in mineral matter produced hogs that were undersized and fine in bone and over fat, "characterized by proportionately small kidneys, lungs, heart, liver and muscles and by a high percentage of fat." Animals may live longer with no food at all than with food containing no mineral matter, a German investigator has asserted. It has been shown that the laxative condition produced by the feeding of bran is due to the minerals in it, not to a mechanical action due to its bulk.

Best Display of Cornish Fowls.

R. A. Lee of Olympia was awarded the $12 prize in the Thurston County Poultry and Pet Stock show for the best display of Cornish fowls and he also won the governor's cup offered for the best 10 birds shown in the show.

Fruit for Australia.

At a recent national conference of the Australasian fruit growers, which was held in Melbourne, a motion brought forward by the New South Wales Fruit Growers' union asking for increased duty on fruit entering Australia was defeated, and it was voted that no alteration in the tariff was necessary. This will have an important effect on the sale of American apples, oranges, lemons, etc., which are now being imported into Australia in large quantities. A further motion directed the secretary of the conference to bring to the attention of the authorities in the United States the motion of the organization that "California be urged to admit Australia fruits generally from districts free from fruit fly or other diseases."

Less New Zealand Wheat.

Consul General Alfred A. Winslow reports from Auckland, New Zealand, under date of November 7, that according to the latest published government estimate the area to be sown in wheat for the 1916-17 season will be about 218,877 acres against 335,423 acres last year, and the area to be sown in oats is estimated at about 548,526 acres, against 640,227 acres last year.

Small Tracts

Tells Best Methods of Handling

At the farmers' short course, recently held in North Yakima, under the auspices of the Washington State college, Professor Thornber gave suggestions as to the best methods of handling 5, 10, 20 and 40-acre tracts under irrigation.

With a fice acre orchard he suggested as side lines, poultry, hothouse and raising early garden truck. With a 10-acre tract, combine with the orchard, poultry, potatoes and tomatoes, or poultry, alfalfa and potatoes or dairy cows, root crops and alfalfa. With a 20-acre tract, 10 acres should be in orchard and 10 acres charred ground for the production of crops not profitable to be grown in the orchards. With a 40-acre tract, which he considered the most profitable to handle, one-half should be in orchard, the other in crops, and practice crop rotation.

Irrigation and Fruit Buds.

Professor Thornber also spoke on the effect of irrigation on fruit buds. Fruit buds are developed from June to the blooming period the following year, and are steadily growing all the time. Fall watering has a great deal to do with your next year's crop.

An ideal condition is to have the soil moist from early spring until the 1st of August, then slightly check the growth by withholding the water for two or three weeks, then water strong even as late as the first of December.

The liability to winter kill from late watering is not as great as from allowing your trees to get too dry.

Pruning.

Thornber said we are going to the extreme in pruning. More fruit is lost by over pruning than by the codling moth. In fact the removal of diseased and broken limbs, badly crossed limbs and the removal of water sprouts is all the pruning ordinarily necessary and should not cost more than $2 or $3 per acre for 8-year-old trees. Pruning can be done at four different seasons of the year. During the winter time we prune for wood, early summer pruning gives a moderate amount of wood, summer pruning, with proper irrigation, induces fruit production, fall pruning has the same effect as winter pruning.

He advocated cover crops, alfalfa and reduction in irrigation as the better way to control excessive growth than by excessive pruning. Seeding to alfalfa has been found to be an absolute cure for little leaf or rosette.

Back State Road No. 8.

The commercial club of Bingen, Wash., is backing a movement to have state road No. 8, known as the North Bank highway, transferred from the second class to the first class and the appropriation made sufficient to grade the part between Bingen and Major Creek, six miles. The matter will be presented to the legislature. This road is the only state highway in Klickitat county.



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If yours does not, write LILLY'S, Seattle.

Peace Note "Leak"?

Many Prominent Men Face Accusation

Something little short of sensational was sprung in the national capital last week when Representative Wood of Indiana, placed before the house rules committee a series of rumors and bits of hearsay information which he claimed indicated that certain prominent men had had inside information of the coming of President Wilson's recent peace note, and had made large sums of money dealing in stocks as a result. Among the names involved, but against which nothing but hearsay evidence was brought out by Representative Wood, were Joseph P. Tumulty, secretary to President Wilson, and a Mr. Bolling, brother of Mrs. Wilson. The reports were circulated in such a way as to cast suspicion on the White House administration, whether such reflection was intentional or not. Secretary Tumulty stoutly denied all the rumors that seemed to connect him with the alleged improper transaction, declaring that he knew absolutely nothing about the peace note until it was made public by President Wilson.

The charges made were to the effect that some one in close touch with President Wilson knew that his peace note was coming, passed the word to certain stock brokers and "friends" and with them conducted business on the stock exchange to their profit. It will be remembered that the stock market dropped phenomenally with the public announcement of the peace note.

Mexican Situation.

It is generally understood that the United States commission that has been in conference seeking a solution of the Mexican problem for the last several months is ready to admit its failure. Agreement with the Mexican government over the border troubles could not be reached, it is stated openly, and, while the commission has not yet formally ceased its efforts, it is felt that the situation is as far from settlement as at any time in the past.

Opinions differ as to what course the United States will pursue. The warfare still being waged by Villa and his adherents, uncontrolled by the Carranza soldiers, promises to bring about an acute situation at any time, and it is believed by many probable that President Wilson will be compelled to abandon his noninterference program and instruct the army to become active again toward the suppression of Villa operations. Others believe that the U. S. army, which has been in Mexico for many months, waiting orders to proceed or withdraw, will be withdrawn and the several factors in Mexico left to continue the struggle against each other.

Legislatures Convene.

The legislative season in the northwest is on. During the next several weeks the law making and law repealing bodies of Washington, Oregon and Idaho will be in session. The usual number of important matters are before them for consideration, though it is anticipated that the liquor question, which in the past has demanded so much attention in one form or another, will take a place of retirement, owing to the fact that all three states have tried prohibition and found it successful. Good roads will be one of the leading subjects for legislation in all three states. In the state of Washington, at least, the subject of constitutional revision will be acted upon, and it is not improbable that steps will be taken toward calling a constitutional convention to revise the entire document.

Peace Move Indorsed.

By a vote of nearly three to one the United States senate voted last week to indorse President Wilson's recent note to the warring nations of Europe suggesting that they state definitely the terms upon which they would be willing to make peace.

It is understood that President Wilson will not make any further moves toward peace until there are further developments.

That Germany is willing to state specifically her terms of peace is reported semi-officially, notwithstanding the emphatic note of England and her allies refusing to negotiate for peace at this time as proposed by Germany some time ago.

May Revise Tariff.

The federal treasury department is reported to be considering a restoration of tariff duties on certain leading commodities, including wool, coffee and rubber.

Salaries for Farmers

Widespread Interest Displayed in Plan

Since the announcement was made that this paper would pay salaries to farmers with rigs or saddle horses, scores of inquiries have been received. Many farmers are already at work for us and will be paid good salaries each month.

As there are still places open in many localities throughout the state we are repeating the details of our proposition.

We will not consider an applicant who does not live on a farm.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good hard licks for good pay. This work isn't easy; but you can do it and earn a good salary during the winter months, without neglecting your farm chores—without being away from home more than a few hours each day.

We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade.

There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

If we get two or more applications from one neighborhood, the first will be given the preference in making our appointment.

If you want a good salary proposition for the rest of the winter, don't wait till tomorrow to write us, but send your application today.

If not interested personally in the above proposition, why not get some neighbor or friend in touch with us at once who you think will appreciate an opportunity to make several hundred dollars during the winter months. You will be doing both him and us a favor.

Address your letter to Publisher The Washington Farmer, Review Building, Spokane, Wash.



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Pruning

As to Right Time and Methods

By GRANVILLE LOWTHER.

A. F. Vystrcil of Boise, Idaho, writes desiring to know the best time to prune apple trees of the varieties, Delicious, King David and Rome Beauty.

I presume there is no better time to prune, than in the spring after the frost is out of the wood, and just before the sap rises. However, where the orchards are large, and the pruning period is necessarily long, some of the work must be done either late in the autumn or winter. We prune some of our trees and will continue to prune all winter except in the coldest weather. We do not like to prune when the wood is solidly frozen, because we think it does not so readily heal. But we have to choose between doing some of the work when we do not think it is the best time, or hiring it done by incompetent men in a rush season in the spring. We prefer to do it ourselves, and do some of it at a time we do not consider the best time. Of what we consider two evils, we choose the lesser.

Some orchardists prune heavily in summer. This is done to check wood growth and develop fruit spurs. Winter and spring pruning is done to shape the head of the tree, and to promote wood growth.

No two persons will prune alike, nor have the same ideals about the ends to be accomplished, so it is more difficult to give general rules for pruning than for almost any other kind of orchard work.

Rules for Pruning.

No two trees need exactly the same treatment. No two conditions are exactly alike. No two persons have exactly the same ideals as to what end is to be reached by the pruning process. It is therefore difficult to give satisfactory rules to be followed; in fact, nearly all the rules should be violated under certain circumstances, and the pruner must use his common sense. If he has not a reasonable stock of common sense, he should hire some one else to do the pruning. But if he does hire some one else, he will probably hire some one who knows less than he knows himself; but who thinks he knows it all. I like a man who knows enough to know that there are many things he does not know.

Pruner a Surgeon.

I would not like to be assigned to a hospital where the surgeon cut off my legs, arms and removed organs according to rule without deciding each particular case on its own merits. It might be that I have pure blood, that I live abstemiously, and that I have vigor enough to overcome a difficulty without an operation, which in another man would require most skilful surgery. Cutting off the limbs of trees is not as serious as cutting off legs and arms from human bodies, but in many respects it is the same philosophy. In other respects it differs.

To Be Kept or Broken.

With the preliminaries already cited, I am going to give the following rules, to be kept or broken, as the pruner thinks better.

1. Remove all dead branches. They are no good, and in the process of decay they are likely to infect the living branches, or the main body of the tree.

2. Remove all diseased branches, unless there is hope of restoring them to health. The disease may be communicated to other parts of the tree.

3. Where two branches interfere with one another, and one of them must be sacrificed, take out the less desirable of the two.

4. Remove branches that tend to give the tree an undesirable shape. You may want a spreading top, therefore remove branches that intertwine. You may want to cultivate close to the trees, with a large team, if so you will have to remove the lower overhanging limbs. You may want the fruit where it is easily picked; therefore remove the leaders that tend to make a high top.

5. Remove branches that pull the top in the wrong direction. If the prevailing winds are in a certain direction, and the top of the tree leans, the branches that tend to pull it in an undesirable direction might possibly be removed.

6. Prune during the dormant period for wood growth, in the summer for fruit spurs. I mean prune in summer to produce fruit spurs. The amateur may cut off fruit spurs, thinking they are small limbs. No man should be permitted to prune, unless he knows a fruit spur from a limb.

7. Cut the limb, as nearly to the body of the trunk or branch to which it is attached, as possible, for then the wound heals over more readily.

Must Supplement the Orchard

Professor Thornber of the State College of Washington tells apple conference that orchards must be supported systematically by variety of crops if they are to be dependably profitable.

This is the fifth of a series of articles summarizing the addresses and the discussions of orchard problems at the apple conference at Spokane during the ninth annual apple show.

Intelligent variation of crops supplementing the orchard in the northwest will: (1) Save thousands of acres to the fruit industry that will otherwise be destroyed; (2) maintain homes in rural communities that must otherwise be sacrificed; (3) develop a better and more permanent fruit industry; (4) provide reasonable income for light crop or low-priced years; (5) make possible the profitable use of much that is now absolute waste, and (6) provide labor the year-round for at least part of the orchard farm help.

This is the declaration, summarized, of Professor W. S. Thornber of the State College of Washington at the apple conference in Spokane in treating the subject, "Orchard Diversification."

Professor Thornber outlined and discussed cropping systems for four classes of orchards, the five-acre, 10-acre, 20-acre and 40-acre. Below is given his paper in part:

THE FIVE-ACRE ORCHARD.

Home grounds, one-half acre; orchard, four and a half acres.

Most profitable crops under ordinary conditions:

1—Poultry.
   (a) eggs, (b) meat, (c) chicks.
2—Head lettuce.
3—Rhubarb.
   (a) early spring trade, (b) cellar forced winter trade.
4—Tomatoes.
   (a) fresh trade, (b) canned goods.
5—Cantaloups.

Disadvantages of plan: No stock to consume pomace and cull fruit; no manure for fertilizing orchard.

Is Suggestive Only.

Not more than two of these crops should be attempted at one time. If poultry is made the chief line then it might be advantageous to attempt to grow only succulent food, alfalfa and root crops even might prove to be the most satisfactory.

Head lettuce is an exceptional crop and, while certain growers, under very favorable conditions have found it profitable, it is one of the crops that is naturally limited to small local areas and skilful management.

Rhubarb is one of the abused crops of most farms and is rarely made of financial importance. However, when properly cared for under certain conditions it becomes a fairly profitable crop.

Tomatoes are rapidly becoming more and more profitable each year when handled in good market condition.

Cantaloups only occasionally are profitable and should be attempted only in very favorable districts where good quality can be produced.

THE TEN-ACRE ORCHARD.

Home grounds, half acre; orchard, nine and a half acres.

Most profitable crops under ordinary conditions:

1—Poultry: a. eggs, b. meat, c. chicks.

2—Potatoes: a. seed, b. market, c. feed.

3—Root crops: a. sugar beets, b. carrots, c. mangels.

4 — Tomatoes: a. fresh trade, b. canned goods.

5—Alfalfa: a. hay, b. silage, c. pasture.

6—Dairy cows: a. sweet cream, b. sour cream, c. milk.

Good Combinations.

Advantages of Plan: Financial returns monthly, manure for fertilizing orchard, labor year around.

Upon 10 acres there is a much greater opportunity for live stock, particularly dairy cows, and while local conditions will very largely govern this factor, it has many advantages over numerous other crops.

A few growers who have had the opportunity to give the problem a fair trial report that, with carefully selected cows and good management, they are able to secure profitable returns. However, they feel that the unit should produce all of the succulent feed needed for the cows. They feel that while they can afford to buy chop they can not afford to buy hay and roots. The addition of dairy cows brings a big asset in the form of manure for fertilizing purposes.

Potatoes is one of the crops that averages well over a series of years but is not a profitable one-year crop. No grower should attempt this crop who must have big returns each year.

Root Crops Profitable.

Root crops likewise offer splendid returns where the labor problem can be handled. The successful growers have in many districts ceased to handthin their carrots and are thereby able to produce the maximum yields at minimum cost. Mangels are considered profitable feed crops and become a very important factor where live stock can be fed profitably. Sugar beets are frequently suggested as a splendid intercrop and when used for feed purposes are found to be profitable. The shade of the trees will influence the quantity of sugar content, and so it is not considered advisable to use sugar beets intended for sugar purposes as an orchard intercrop.

Alfalfa is one of the most satisfac-



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tory crops grown in the orchard when cost of production, market and fertilizer value is considered. While it costs more to produce a ton of hay in the orchard than in the open, there is at market prices a profit in the crop and particularly so where it can be fed on the place.

THE TWENTY-ACRE ORCHARD.

Home grounds, one acre; clear, four acres; orchard, 15 acres.

Most profitable crops under ordinary conditions:

1.—Potatoes—(a) seed, (b) market, (c) feed.
2. Alfalfa—(a) hay, (b) silage, (c) pasture.
3. Root crops—(a) sugar beets, (b) carrots, (c) mangels.
4. Corn—(a) seed, (b) feed, (c) silage.
5. Canada peas—(a) seed, (b) to hog off.
6. Dairy cows, 10—(a) sweet cream, (b) sour cream, (c) milk.
7. Hogs—(a few).
8. Seed crops.

Good Combinations.

A—Alfalfa, corn, root crops, dairy cows.

B—Alfalfa, potatoes, Canada peas, root crops, hogs.

C—Alfalfa, corn, hogs, dairy cows.

Feed producable by combination A: 25 to 30 tons hay, 25 to 30 tons corn silage, 15 to 20 tons pomace, 25 to 35 tons roots.

Upon units of 20 acres or more there should be from four to 10 or even more acres of clear ground for the production of crops not profitably producable in the orchard.

If feed to be used as silage is desirable then a tall growing, heavy producing corn can be more profitably grown on clear land than in the orchard. If, however, it is desirable to produce seed corn, feed corn and some ensilage the more dwarf varieties will be found more adapted to the purpose.

Canada peas have been found to be an exceptionally profitable crop under many conditions in the orchard, especially where it is desirable to hog them off and save the cost of harvesting.

Under ordinary conditions it is easily possible to produce enough roughage for 10 cows on a 20-acre orchard diversification. A combination of this kind utilizes to the best advantage all of the byproducts and provides an at home market for much produce that would otherwise be wasted.

THE FORTY-ACRE ORCHARD.

Home grounds, 2 acres; clear, 10 acres; orchard, 28 acres.

Most profitable crops under ordinary conditions:

1. Potatoes—(a) seed, (b) market, (c) feed.
2. Alfalfa—(a) hay, (b) silage, (c) pasture.
3. Corn—(a) seed, (b) feed, (c) silage.
4. Canada peas—(a) seed, (b) to hog off.
5. Root crops—(a) sugar beets, (b) carrots, (c) mangels.
6. Dairy cows, 20—(a) sweet cream, (b) sour cream, (c) milk.
7. Hogs or sheep.
8. Seed crops.

Good Combinations.

A—Alfalfa, corn, root crops, dairy cows.

B—Potatoes, Canada peas, root crops, hogs or sheep.

Feed producable under combination A; 50 to 60 tons hay; 100 to 110 tons of corn silage, 25 to 35 tons roots, 20 to 25 tons pomace.

A plan of this kind carefully carried out in detail will provide an abundance of silage and hay feed for from 20 to 25 cows for the entire year. It will be necessary to buy only the grain feed.

It is understood that a grower will not attempt to diversify along the entire line of recommendations, but will confine has activities to a single line, making use of the various crops for the promotion of the main line of diversification.

British Root Crops.

The average yield of potatoes in England and Wales in 1916 is estimated at 5.85 tons per acre, or just one-third of a ton below the yield of 1915 and the 10 years' average; with a somewhat reduced acreage, the total production of two and a half million tons is about 350,000 tons less than last year, but only 180,000 tons below the average. Turnips and swedes have produced almost 13,000,000 tons, which is nearly 1,200,000 tons more than in 1915; the yield per acre (13.93 tons) is about one and a quarter tons more than in 1915, four-fifths of a ton above the average, and the best yield since 1910.

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CONTEST CLOSES MARCH 17, 1917

This Tells You Plan

Simply add up the figures in the puzzle chart as if they were in one long column. Your success depends on the accuracy of your total thus obtained.

Figures run from two to nine, and there are no double figures or characters which are not figures. The tail of the "6" has a decided curve, while the tail of the "9" is straight. All other figures have the usual characteristics, allowing no question as to the identity of any figure.

In event that no one submits the correct total, prizes will be awarded for the next nearest solutions.

This contest is restricted to persons residing in Washington, Idaho, Oregon and Montana.

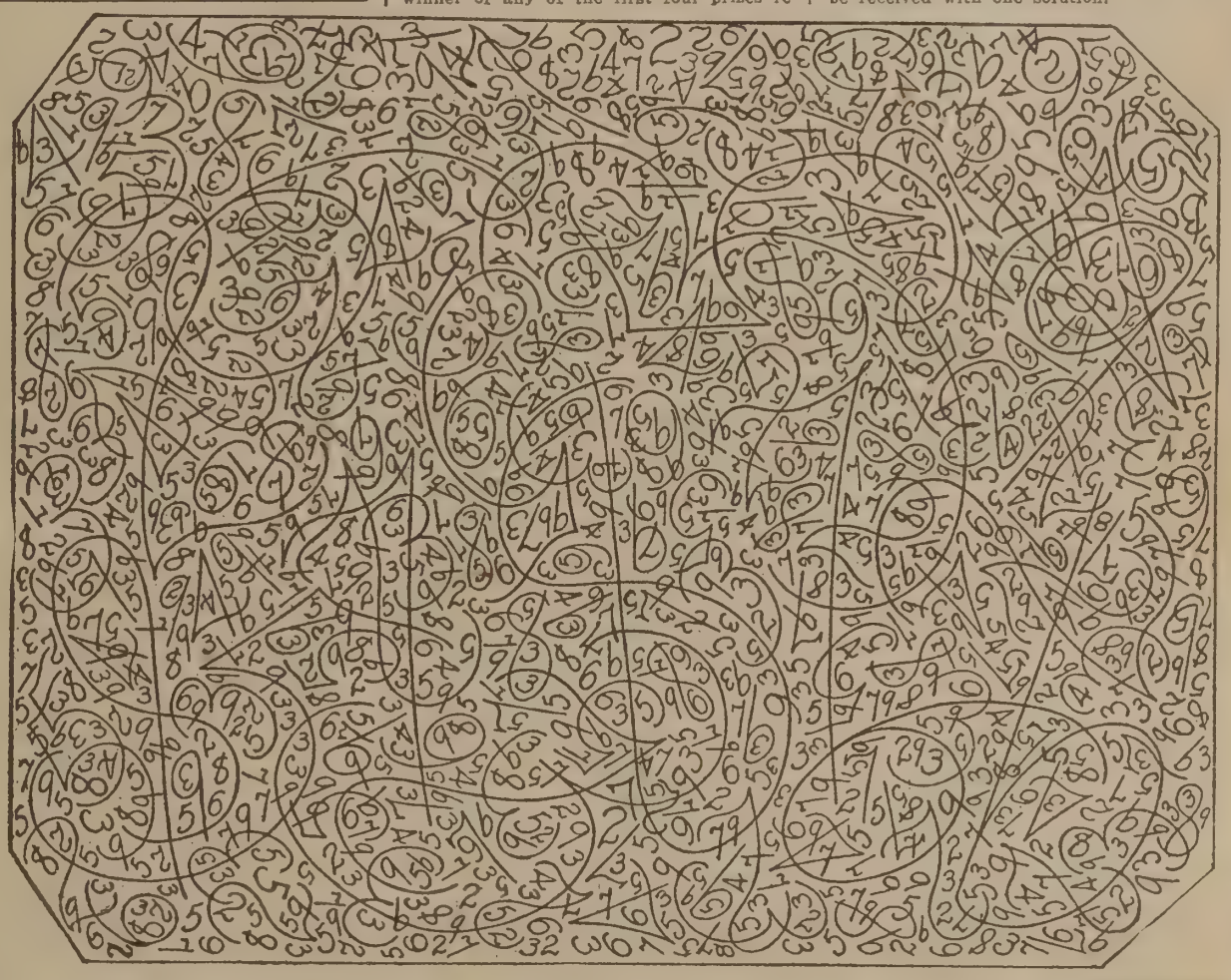
A payment of $1 to $1.50 on subscription to the Farmer entitles the subscriber to enter the contest.

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More than one solution may be submitter by any contestant, by an additional subscription payment of not less than $1 nor more than $1.50. It is not necessary to pay the same amount with each solution if more than one is submitted.

As many prizes will be reserved as there are people tied before any prizes are awarded to those sending in less correct solutions.

You can send in a subscription for some one other than yourself and have the solution registered in your own name. Remember that by paying $1.50 instead of $1 on subscription, the larger will be your dividends if you win one of the four leading prizes; but not more than $1.50 will be received with one solution.



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FIRST PRIZE, $200,
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to which will be added 30 times the amount paid by the subscriber with the winning solution. This prize may be worth $145.

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to which will be added 10 times the money paid by the subscriber with the winning solution. This prize may be worth $65.

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Bolivar Is Cracking

Famous Elephant, Stuffed, Is in Need of Doctor's Care

Bolivar, the mammoth elephant, whose mountainous form was a feast for eyes of young Philadelphians a decade ago, and who recently has been a main attraction at the Academy of Natural Sciences in the stuffed form, has showed signs of deterioration lately.

The thick skin, which stood Bolivar in good stead in many a jungle fight and could have resisted the leaden bullets of a hunter's gun, is now shrunken and cracked in many places.

David McCadden, taxidermist of the academy, has been working in an effort to forestall the ravages of time. Mr. McCadden believes he can patch up old Bolivar's form and make him presentable for several years to come.

Bolivar was presented to the Academy of Natural Sciences following his death in the zoological gardens in 1908. Mr. McCadden undertook the work of mounting the immense body in the summer of that year, and completed it in January, 1909.

Before the beast was cut up Mr. McCadden, who had recently introduced a new method in mounting animals, made accurate measurements of Bolivar's body. From these figures he constructed a plaster-of-paris cast, over which

He wandered the face of the globe as a feature of the Adam Forepaugh circus.

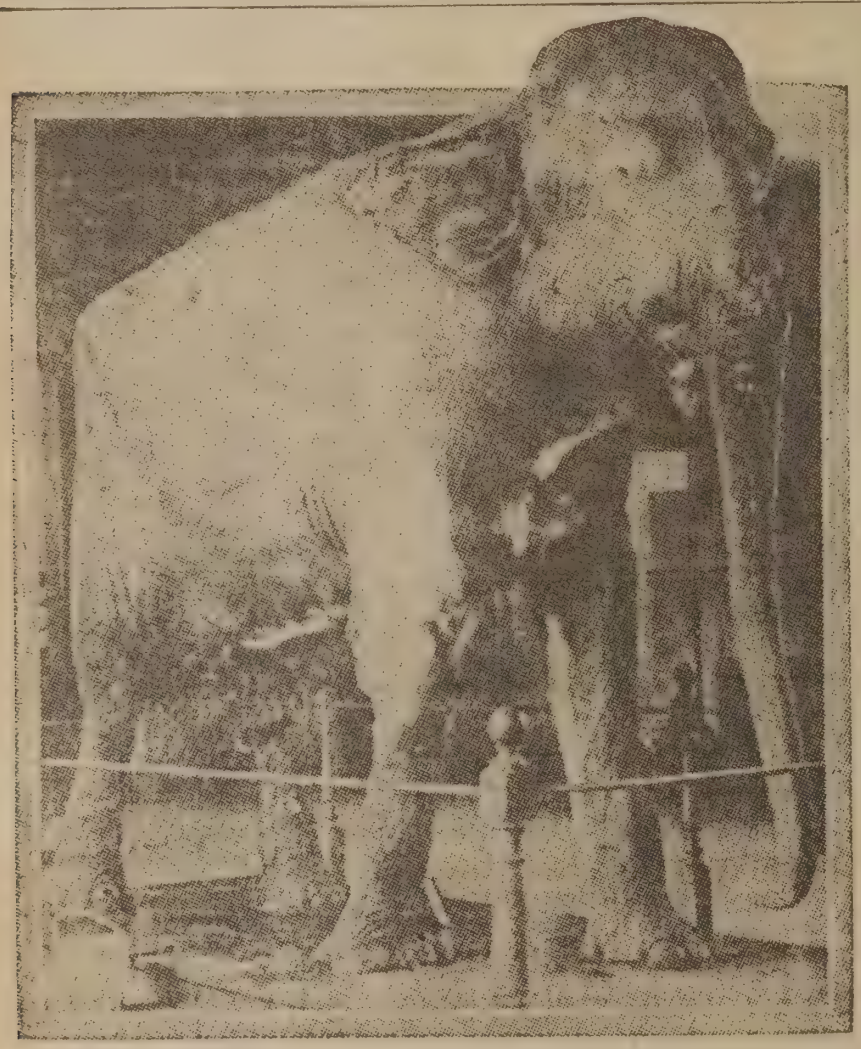
Adam Forepaugh bought Bolivar for $10,000 while his circus was playing in Europe. Bolivar came from India. He was widely advertised upon his arrival in this country. He was then about 40 years old.

One night Bolivar became agitated at his keeper and trampled him to death. After this he was not used in the ring, but he killed another keeper before Mr. Forepaugh decided to dispose of him. In 1888 he presented Bolivar to the zoological society.

Bolivar was placed in a big cage in the elephant house. His legs were manacled with heavy chains to prevent his roaming about. Keeper George Harrison is the only man who could go into his cage.

But Bolivar gave no evidence of his ferociousness to the hundreds who daily stopped in front of his cage. The sale of peanuts increased greatly with Bolivar's arrival at the zoo.

Gradually old age began to get in its work, and Bolivar became very quiet and morose. On July 31 he lay down and died. When brought to America Bolivar weighed close to seven tons,



Famous elephant at Academy of N atural Sciences gets doctor's care.

the elephant's skin was stretched. The result was a perfect likeness of Bolivar alive.

Bolivar has since stood in the main corridor of the academy, facing the main entrance on Race street. He has been subjected to many drafts throughout the changing seasons, and this has been one of the causes for the breaking up of the skin.

Sections of the right foreleg, the under part of the neck and a large space on the forehead have suffered most. One large hole, 10 inches square, has opened under the neck. The breaking of the skin on the forehead is due to Bolivar's having rubbed this section of his body against the massive iron bars at the zoo, causing a bad sore to develop there.

Bolivar. The name electrified boys and girls 15 years ago. Bolivar, the largest elephant that was ever in captivity. Everybody wanted to see him.

but at his death his weight was said to be little more than five tons.

"I think I will have the old boy in a presentable condition in a few days," declared Mr. McCadden, as he jammed a fistful of soft cement into Bolivar's mouth, a thing the huge beast would have resented in former years by picking up Mr. McCadden and hurling him half a block.—Philadelphia Ledger.

Alaskan Dogs.

Last winter the French authorities imported from Alaska and Canada several hundred trained dogs for drawing sleds in the Vosges mountains. They proved so useful that they have been employed during the summer in similar work, though they now draw the sleds on small railways. Eleven dogs with a couple of men can haul a load of a ton up some of the most precipitous slopes in the mountains. The Alaskan dog is the best, it is said. His courage never fails, and he will work till he drops.

Down and Out

Now He Is Working Like a Man

By D. G. SUTHERLAND.

At a hotel in Yakima valley where I was stopping late one evening a stranger came in. The night clerk stepped up and asked if he wanted a room. The reply was, "Yes, but I haven't the price. I am cold, would you mind if I sit in here where it is warm." He was told to take a seat. After all the guests had retired the clerk engaged him in a conversation.

"How long have you been here?"

"Came in tonight in a side-door palace."

"What have you been doing?"

"Oh, just anything I can get to do. It seems hard for me to get work. I am kind of down and out and no one wants me. It wasn't always that way, though. Until two years ago I always had plenty of work. I have a good trade, speak two languages and was always in demand, but business got slack and with a bunch of others was laid off. I was in Tacoma at the time and it was winter time when men were plenty and jobs were scarce. I tried every place for nearly three months, but could get no work. My savings were getting low and my family were disgusted with me. They said I could get work if I would only try and if I didn't do something they would leave me. I told them it was not necessary, that they could have what we had and I would step out. I have got a little work here and there, but haven't had a steady job since. It don't make much difference as no one cares whether I live or die."

The clerk said, "Do you know why you can't get a job? It is because you are dirty, slovenly, have no pride or confidence in yourself. Nobody wants to hire a man looking like you do. Have you any clean clothes and a razor?"

"Yes."

"Well what you need first is a bath, a shave and some clean clothes. Here are towels and a cake of soap. Get into that bath tub and scrub yourself as you never scrubbed before."

He did and the change was miraculous.

"Now here is a quarter, get something to eat. You are an Eagle in good standing. Go down to such a store. The proprietor is an Eagle and he knows people who need help. When you go in look him square in the eye, tell him who you are, that you want any kind of work at any price, that all you want is a chance to make good and say it like you meant it and you are sure of a job. When your day's work is over don't spend your evenings with a bunch of hobos in some low dive; come to the hotel, it is warm and we have daily papers and good people to associate with. You are welcome as long as you are clean and sober."

He took the advice, got a job the next day and has had steady work ever since. About two weeks later he asked the clerk for some writing paper and an envelope, and said he was going to write home, a thing he had not done for two years.

A few nights ago he confided in the clerk that he was hearing from home. They wanted him to come back and his brother said there was plenty of work and he could get him a job at his trade.

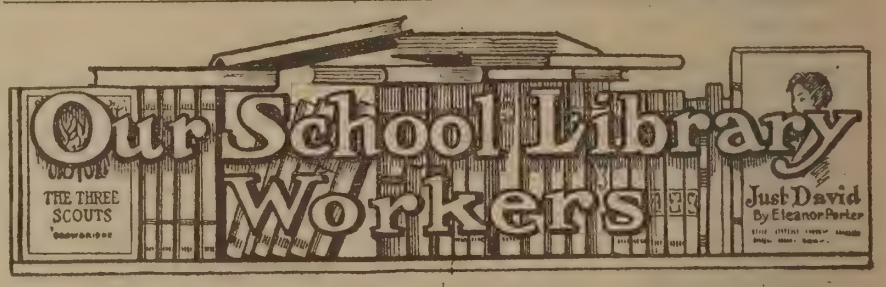
He said, "I am going, but I am going to make a stake here first."

Avoid Orphan Asylums.

Australia avoids orphan asylums by sending parentless children to private families, which are paid for their care until they are 14 years old.

Education.

After getting an education it is up to a young man to do things with the knowledge he acquires.



One of the most pleasing things connected with our school library work is an occasional personal visit from some of our teacher friends. It gives us an opportunity to get the teacher's viewpoint, which is valuable to us; and it permits the teacher to form a closer acquaintance with our work and ourselves.

Miss Florence Woodward, teacher of West Deep Creek school at Espanola, Wash., came in last week and brought enough subscriptions to more than half win a library. She also brought a big lot of good, fresh ideas and a most pleasing personality. Miss Woodward is very much alive and very enthusiastic toward her school work. And she is certainly determined to have one of our libraries in her school. She tells us that team spirit between the Reds and Blues is mighty keen—one team being in the lead one day, the other team the next day. Miss Woodward says this competition between her pupils is the best thing imaginable to keep up lively interest in all other departments of her school work.

We cordially invite all teachers to come in and have a chat with us whenever they come to Spokane.

How's this for a bit of encouragement to schools that are after libraries? During this week a number of subscriptions were brought into the office by subscribers in person who asked that their subscriptions be credited toward a library for some school.

This is the best kind of proof that though a subscription may be withheld today, it may come to you tomorrow either directly or through the office. So see everybody you can and the subscriptions for the library will surely come.

Hopewell school, at Everson, Wash., is still hammering away. Mrs. Clara Peterson is teacher and is keeping her contest moving right along. One of her hard workers is Millar Prariea, whose names appears again on this week's honor roll.

Narcisse school, at Colville, Wash., is doing nicely, too. Doris Sholund and Florence Stevens are apparently taking advantage of the holidays to add more subscriptions for that library. These girls are making the most of every opportunity—a good example which other live library workers will be sure to follow. Mrs. G. C. Lorenz is teacher at Narcisse school.

Miss Hattie Irons, teacher of Bay View school, Bayview, Wash., tells us in a nice, friendly letter that her pupils and herself have been so very busy with their holiday programs that, much as they want a library, they haven't been able as yet to get their contest into swing. Miss Irons' letter makes it clear, however, that Bay View school will soon be piling up subscriptions for a library, and with the best of the reading season just coming in the subscriptions will be easier to get and the library all the more enjoyable when won.

THIS WEEK'S HONOR ROLL.

West Deep Creek school—Mildred Abern, Vern Stevenson, Fay Lavender, Oscar Schulz, Robert McDonnell.

Narcisse school—Doris Sholund, Florence Stevens.

Hopewell school—Millard Prariea.

All the World's a Stage, and All the Men and Women Merely Players

Is a Viscountess.



In accordance with custom when there is a change in the government, the king has conferred honors on various persons recommended to him by the retiring prime minister, among them Sir Lewis Vernon Harcourt, who is made a viscount. His wife was Mary Ethel Burns of New York. Mrs. Lewis Vernon Harcourt, eldest daughter of the Walter H. Burns, and favorite niece of the late J. Pierpont Morgan, is one of the most popular leaders in Anglo-American society. Her mother was a sister of Mr. Morgan and her father for many years was head of the banking house of J. S. Morgan & Co. in London. Her marriage to the son of Sir William Vernon Harcourt at Westminster in 1899 was one of the most brilliant society events in London. Mrs. Harcourt had the honor of being the first hostess to entertain the prince of Wales when, in 1912, he was a guest at the Harcourt country house near Oxford. She is a close friend of Queen Mother Alexandra.

Give Millions to War Relief



Millions of dollars have been raised in the last few days for the relief of Jewish sufferers in Europe from the effects of the war. It is planned to raise $10,000,000 altogether, and already more than $3,000,000 has been contributed. Among the largest single contributors were Jacob H. Schiff and Julius Rosenwald, who gave $100,000 each; Nathan Straus and Felix M. Warburg both sent checks for $50,000.

His Master Will Not Return



—(Photo from Underwood & Underwood, New York.)

This British official photograph shows a pathetic scene on the La Basse front. A handsome horse, the mount of a British officer, is standing at the edge of a dugout, where the British officer has gone, never to return. An unfamiliar hand will lead him away from the scene of his master's death. Many animals have been known to pine away in sorrow for their masters.

May Lose Morgan $400,000



Mrs. Yuki Kato Morgan, the Japanese widow of George D. Morgan, may not get the $400,000 fund which her husband left her when he died. The trustees of his estate have asked the courts to decide whether the terms should be carried out or whether the fund should be divided between the decedent's brother, Junius, and his sister, Caroline, explaining that Morgan received the fund in a trust left by his father to him, his sister and his brother.

President of Standard Oil



Alfred Coffin Bedford has been elected president of the Standard Oil company to fill the position left vacant by the death of the late John D. Archbold. It is said that in promoting him from the vice presidency the directors followed their own inclinations and the express desire of Mr. Archbold. The new president is 52 years old. He worked his way up from the very humblest sort of a position with one of the Standard Oil subsidiaries.

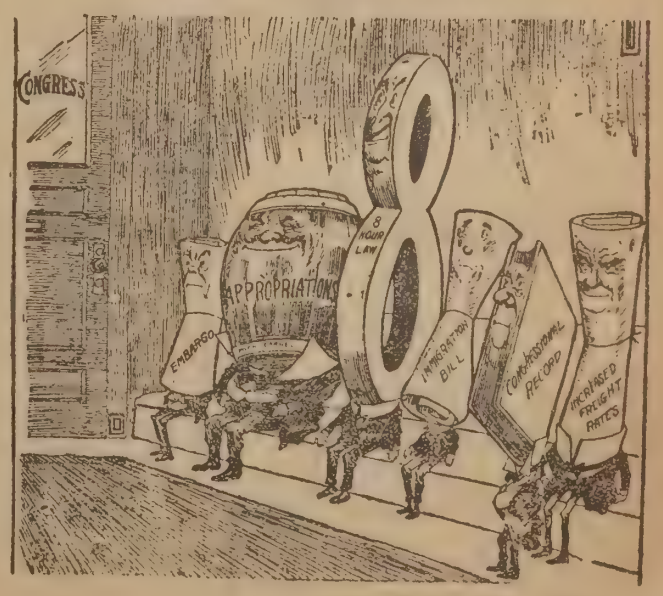
Rejected by U. S.; Bought by British.



Copyrighted by International Film Service.

This photograph shows United States army officers inspecting the famous Lewis machine gun. This gun was offered to the United States and rejected and afterward purchased for the British and Canadian armies. Secretary of War Baker, assuming full responsibility for the action of the war department in rejecting the gun, directs that the controversy among army officers, led by General Wood on one side and General Crozier, chief of ordnance, on the other, shall cease.

Waiting Their Turn



New York Evening Telegram.



NORAH

By

Gilbert Parker



From "Queen Mary's Gift Book."

It was as fine a churchful as you ever clapt an eye on;
Oh, the bells was ringin' gaily, and the sun was shinin' free;
There was singers, there was clargy— "Bless you both," says Father Tryon—
They was weddin' Mary Callaghan and me.

There was gatherin' of women, there was hush upon the stairway,
There was whisperin' and smilin,' but it was no place for me;
A little ship was comin' into harbour through the fairway—
It belongs to Mary Callaghan and me.

Shure, the longest day has endin', and the wildest storm has fallin'—
There's a young gossoon in yander, and he sits upon my knee;
There's a churchful for the christenin'—do you hear the imp a-callin'?
He's the pride of Mary Callaghan and me!

I.

It was a voice worth hearing, and the man was worth seeing, as, standing in a large paddock in front of a house, which for the prairie-country was a large one, he drove the colt he was breaking round a circle, at the end of a long leather rein. He had in his face the look of one who had lived life in more ways than one, and his shoulders had the straightness of one who had known the "Shun!" of the drill-sergeant, though he was over 40 years of age. In this perfect sunlight, with the gold-brown stubble of the reaped land stretching for scores of miles away, he seemed the true representative of a life of energy and happiness. His face was ruddy, his eye bright; but his hat, which usually was set back on his head, was now drawn forward. He seemed to keep his face turned towards the big clap-board house, outside which stood a buggy with a pair of horses.

Despite the lilt of the song, the air of triumph in it, the elation of the body engaged in a task suggestive of the pioneer-life—its roughness, its awkwardness, its undisciplined capacity, and its rugged, careless beauty, there was a curious watchfulness in the eyes, a smile of emotional expectancy at the lips—in a woman it would be called wistfulness. Indeed, there was something wistful in him, too, strong man as he was. He was Irish, and the magic of imagination, with its accompanying sadness, lying behind all mirth and playfulness, was his. Yet he was an incorrigible optimist.

There was a time when he had been an incorrigible idler, a stoic—a thoroughly useless man. Those were the days when, having stepped into old Larry Brennan's house out of the rain, he had stayed 10 years doing nothing, till a tragedy had roused him, brought him to his senses, set him upon the high road of energy, action apd success. Behind him, too, had been Norah Brennan and the young doctor—Norah, with such fine teeth in her head, though older than he when he married her, and the young doctor, with a pungent humor and good sense, which had stimulated and spurred him on.

Norah had not been his first love, but it seemed as though she would be his last one, for he had never looked right or left since he married her. The same old loyalty which had made him cling to the memory of the girl who threw him over long since at Enniskillen, in old Ireland, still made him weave round Norah's head a halo of beauty—one of the blessings of imagination, for Norah was no rose of Sharon.

Five years had gone since he had started the stage coach from Askatoon to Cowrie, and began to breed and deal in horses; and the world had gone very well with him. He and the young doctor were partners in the horse trading, and they had had as much fun as money out of the business.

He was thinking of the young doctor now, wondering why he did not come, protesting inwardly against the miserable delay, seething inwardly, though there was music on his tongue and a lilt to his voice. Round and round went the colt, growing more and more docile under the firm, quiet control of a born master of animals. Would the young doctor never come?

"There was gatherin' of women, there
was hush upon the stairway,
There was whisperin' and smilin',
but it was no place for me;
A little ship was comin' into horbor
through the fairway—
It belongs to Mary Callaghan and
me."

He had sung the verses over and over again—a dozen in all. It was like an obsession, and he was hardly aware of his own persistence—

"He's the pride of Mary Callaghan and me!"

Five years since his own wedding with Norah, and no child—he had not realized when he married that it would be a miracle if a child came to them. In truth, he had not thought at all about that. They had gone through so much together in the days of tragedy, that being man and wife was the only thought in his mind when they went to the altar. But, with marriage, had come the other instinct, and he had dwelt much upon it. He wanted a child as the hart desires the water springs; and Norah, knowing what was in his mind, willed it so with a will that was pathetic; for something, too, had been born in her which was not there before.

Marriage had made her see life with new eyes, and she had discovered many things hidden over 40 years. Perhaps it was her great will and stubborn purpose which had at last wrung from the great creating force assent to her diligent prayers, so that she was able to whisper something worth hearing into Nolan's ears one winter night, when the frost and ice outside were like a shrine for the warmth in their inflammable Irish souls.

Then the months of patient waiting had gone, with Nolan driving his four-horse—in the gaiety of his heart sometimes his six-horse—team, with his great red stage, and the coaching horn defying the distant railway with shrill bravery, and receiving the shy congratulations of women folk, and a hearty "Good luck to ye!" from men on every hand. He had become a figure in the west; and, having his millionaire brother-in-law, Terry Brennan, behind him, like a sounding board, his fame, of its kind, was loud and reached far.

There had been many bets as to whether Norah would fulfil the natural hope of man, and when the time came the prairie people were wide-eyed with interest—for Noah was over 40.

The day had arrived. Would the young doctor never come out of that clapboard house which soaked the sun like a sponge, and yet was cooled within by the fresh breezes from the prairie? Was the young doctor bungling the business? was he——?

A man's figure appeared in the doorway, stood for an instant, with head bent and eyes upon the ground, as though to consider something; then there was a quick step to where Nolan stood with the sweating high-bred colt, which he had mastered.

As the young doctor came nearer, Nolan's eyes searched his face, then, with a puzzled look, he turned to the colt. "Steady, now, ye bunch o' beauty!" he said. "We'll start ye soon. The trail's waitin' for ye."

"Nolan Doyle," said the young doctor, who understood the assumed indifference—that smooth, outer mask which holds the rough inner pain—"Nolan, you're wanted now."

"Did ye iver see a finer day!" said Nolan, not able to look the young doctor in the eyes, for he knew that trouble of some dark kind was come.

"Norah'll be glad it's a day like this—'Happy is the birth that the sun shines on,' happy are the dead that the rain rains on," he added; but his fingers trembled on the rein he held, as he quickly drew the colt nearer. "Ah, what is it, doctor, dear?" he suddenly burst out, with a note of agony in his voice. "Speak—what is it? Is all well? Is it over?"

The young doctor shook his head in negation and ruled his face to calmness.

"Then, what is it? Why are ye here? Doesn't she need you? Is it a thing to be done by any but you?"

"Be still, be still, Nolan," answered the other. "Keep a hand on yourself. You want a child—you want a child, I know——" he paused.

"God knows. What's to it all without a child? What should I be workin' for if it wasn't for a child? Well, then, the child, is it here?" he asked painfully.

"'Tis not here. She was no lass of 20. 'Tis not here." The young doctor came nearer and laid a hand on Nolan's arm. "Steady now, and choose which it shall be—mother or child. It can't be both. I can save one or the other, not both. Which shall it be? She was no lass. Which shall it be? 'Tis for you to say."

The young doctor's words fell like the roar of a waterfall on his ears—"Which shall it me—mother or child? It can't be both."

Was this, then the end—Norah or Norah's child? How greatly he had longed for "the little imp," as he had sung but now! How had he thought always of a little lad, with hand in his, riding on the box beside him! How had the soul of him rung with the note of fatherhood!

"If it's she that's to stay, there could never be another child," said the young doctor.

"Never another, if it's she that's to stay," Nolan murmured, as though hardly grasping the tragic significance of the fact. Yet his face was white and his eyes were dark with misery.

"You must say—now. There's no time. Is it to be the one you've not seen—or Norah?"

"What's that you're askin' me?" was the low, fierce reply. "God! don't you know? Go on, go on, and tell Norah that she's not to fret that it couldn't be. Go on—to Norah, man," he added, with a wild look in his eyes.

With swift steps the young doctor disappeared into the dark coolness of the house, leaving behind him the last bopes of a man whom he had helped in other days to set upon his feet and start again in life. "You couldn't be sure," he said to himself, as he entered the room where Norah struggled in that sea where man only stands upon the shore and watches till the storm goes down.

Heedless of the colt, which now ran about with the long rein trailing after it till a stable boy, seeing, made it captive, Nolan sat upon the corner of a water trough and looked at the house with eyes that saw only as through a dim gray atmosphere which stifled the brain and sense. Norah or the child! Did the young doctor believe him, then, the kind of man that* * *! But the thought of the little life that was his, his very own, which he had hoped to cheer him on, and make him work, and give him an end to aim at—it caught at his throat. And soon that little life would be lost, before the eyes had seen the sun, before the hands had reached out into the light of the world, before is voice had signalled back from sentient existence to the dim seas of being whence it had come, that it had found the shore.

In elementary understanding, he saw it all by virtue of the Celtic strain in him; and his brain swam on a flood of new impressions. He had leapt over vast spaces of life and experience in these few moments. How long he sat murmuring to himself, speaking Norah's name, bidding her not to mind—there were always the horses left!—he could not have told; but at last a woman came running from the house to-



Nolan sat upon the corner of a water trough.

ward him. She was fat and scant of breath, and ere she reached him had no voice. Words failing her, she could only beckon to him.

"Is she safe?" he asked in a hoarse voice. Why should women be fat and scant of breath?

The woman nodded.

"Was it a boy?" he asked.

"Ah, a wonderful boy!" she said, "with a body like—like a young colt," she added, seeing the young blooded horse led away.

"And the face of him?" he inquired anxiously.

The woman turned her head away. He understood. Life took its tribute through death, and, with a harsh hand, had destroyed its own.

"Norah is asking for you," the woman said. "There never was a braver. Ah, but there's a heart for you! No man deserves it. She would have gone and left the boy alive to you, if she'd known. She sez so. No man's worth it, that's my idee. But it wasn't to be, and it was flying in the face of Providence. But she did her best, poor dearie."

Nolan did not answer her, but he could have throttled her for the truths she had uttered.

Inside the darkened room a few moments later, he turned away from the little lost life which a woman made ready for its return to the nest of earth whence it had come. He bent over Norah's bed again.

"You're a fine woman, Norah," he said—"the very finest. Come, now, smile at me," he urged. "We've a long way to go together yet. Smile, Norah, girl. You're mack again from the Bad Lands. Smile!"

With clouded eyes, Norah faintly smiled.

"You've a fine tooth in your head, Norah," he exclaimed—"as good as one that's 20. I've broke the Inniskillen colt—a beauty," he added. "I'll bring him to your window tomorrow. You shall ride him nevt year. I'll give him to you. It's the best that's come from Queen of the Isles, tho' she's had 20. There now, kape aisy."

"Can ye forgive me then, Nolan?" she asked brokenly. "Lord knows I ought to have wint instead. You'll want some one by you as the years go on—some one, somethin' to live for."

"Sure, you'll be by me, Norah."

"Come away," said the young doctor. "She must be left alone."

As Nolan left the room, he said again, "I'll bring the young colt to your window tomorrow."

Her eyes searched the room for what she had lost.

II.

In vain. Norah had no comfort in the high-bred colt, no content in thinking that her own life had been spared. It seemed to her that, in spite of Nolan's cheery ways and whimsical talk and busy life, at the back of his eyes was a reproach; that in the tones of his voice was scorn of her, because she had failed to prove herself as good as any woman.

Norah never could realize, never had looked the fact in the face, that she was no longer a slip of a girl. Didn't her father and mother in the cottage under the Rise, whom she and Nolan, before they were married, had nursed back to life, and by which Nolan had paid the price of his 10 years living on them—didn't they always treat her as a child almost? Had not the young doctor always addressed her as "Nolan's girl"? Hadn't he always said, "And how is Nolan's girl today, Mrs. Doyle?" Who had a better right to be so familiar with her? And Nolan himself, night



"Nolan Doyle," said the young doctor.



A woman came running from the house.

2nd morning, wasn't it always, "Honey girl," and "Me child"?

How could she remember her age and the passing years? Her waist was little bigger than at 20, and her hair hung down to her knees. The wrinkles, did they not come from laughing at Nolan's jokes and her brother Shannon's whimsies? Did she not step as light as any lass that tripped to school? How could she remember her age? Yet in her heart of hearts there was no illusion.

There was a tiny grave just over the Rise, where an ash tree stood like a sentinel in the gold-brown prairie. Its top could be seen from the window of the great living-room, and her eyes were ever looking that way, while Nolan's head was ever turned from it. Or, if his eyes fell on the tree, a look came into them as though a veil were drawn over his sight.

He talked faster and bustled more at such times, making a fuss at whatever he might be doing at the moment—lighting his pipe, sharpening the carving knife, or mending a piece of harness. He never walked in that direction, if he could help it; but Norah stole away over the Rise to the whispering ash, every day in summer except a Sunday, when he was away with his stage-coach, or at a horse-fair, or buying or selling or training.

"Shure, 'tis not natural," said her father to her one bright, cold winter day, at the old man's cottage under the Rise; "'tis blasphemy to take on so, when it was the Lord's doin'. And it never lived at all—'twas held back from livin' by the hand o' God. Can't ye see? Are ye no Christian; are ye no philosopher, little girl?"

"I have no brains," she answered. "'Tis not what I was made for, studyin' out why this was done or wasn't. 'Tis enough to know 'twas done, an' what's come of its bein' done."

"And what's come of its bein' done, then—tell me that?" asked her mother,



"Smile, Norah, girl. You're back again from the Bad Lands. Smile!"

feebly lifting a cup of tea to her wrinkled mouth.

"Ah, what's come of it! Isn't he atin' his heart out—Nolan?"

"'Tis only your fancy. There never was a bolder tongue and a better man at table."

"Haven't I heard him singin'? 'Twas like a knife in me. Haven't I heard him talkin' in his sleep? 'Come on, then, me little lad. Up on the box wid ye!' and that kind of thing, he'd say. He's dreamin' now that never dreamt before out loud like that. 'Tisn't brains ye need to know truth. 'Tis a true heart and the quick ear of one that's got it."

"What was the song he sings that struck ye so?" asked her father. Her eyes took on a strange look as she recited Nolan's song:

"Sure, the longest day has endin', and
the wildest storm has fallin'—
There's a young gossoon in yander,
and he sits upon my knee;
There's a churchful for the christenin'
—do you hear the imp a-callin'?
He's the pride of Mary Callaghan and
me!"

"It's like a man singin' to hide his shame," she added.

"What's that ye're sayin', Norah?" asked her mother. "What's the shame y'are speakin' of, then?"

With a sharp cry Norah stretched out her hands. The barriers that clouded her view of the exact truth had broken down. She saw the whole elementary facts in one revealing moment.

"Oh, shame it is to him that he's denied what is the pride of man," she said. "I know—ah, shure, I know! I oughtn't to have married him. I made him do it—I made him. I drew him into it. 'Twas at the bedside of the two of ye that he ate the dish I made for him. I was never a wife for him—he that ought to have had a girl of twenty."

The true facts had possessed her at last. She saw herself, her vanity, her obtuseness, her self-deceit, her deception to him, laid bare.

"I'm older than him—I'm older," she went on. "I'm an old woman. I never was a wife for him, and he knows it, and he knew it from the first. And I couldn't carry it through with all my willin' and fightin'—'twas no matter for prayin' that, but just flyin' in the face of Providence. But the willin' and the fightin' come to nothin'; and now he's off, he's off to one that's twenty. He's gone to one that's what I was long since, with hair like a sheaf of wheat in the sun, and the rest of her——"

Her hands dropped in despair, she sat down helplessly, and rocked backwards and forwards in her misery.

"Who's that you're speakin' of?" said her father, with a furtive glance of understanding to her mother and a quick nod of comprehension. "Who's that with the harvest hair, and the rest of her——"

"A harvest for reapin'!" Norah broke in, with a passionate gesture.

"Hush, for shame on ye!" spoke her mother. "Have ye no price? The man's yours, and he knows he's yours; and what's to fear, I want to know?"

Norah gave a bitter laugh. "D'ye think all men are like your own husband?" she asked harshly. "Nolan's turned from me to her."

The old man got up and came over to her. "Who is she? Where does she live? Where does he see her, Norah girl?" he asked.

She sprang to her feet. "Don't call me girl again!" she cried. "I'm none o' that. I ought to have stayed with you. Shure, me spring was long since done. Me summer is that far gone, 'tis but a memory, and me winter's here. And it's cold—God knows it's cold!" she said drearily.

"Who is she?" urged her mother.

"'Tis the sister of Jacques Charron, that keeps the tavern at Pardon's Drive. Nolan passes every day. He never misses a day with his stage-coach now—one day in going, and one day in coming, and the long night between."

"Peace, woman!" said her father sharply. "Are ye mad?"



"Who's that you're speaking of?" said her father.

"Last night, in his sleep, he said her name. And today he's gone to her. 'Tis not the stage day. He sent Shannon with the stage yesterday. But he couldn't stay away, so he's gone to her."

She turned toward the window, and watched the first flurries of a snowstorm coming over the prairie. "Ah, wurra, wurra! I feel that I'd like the storm comin' there to swallow him up; and me with him—and me with him! There'd be peace if the storm would swallow us up together."

"Poor lad! that would be hard on him," said the old man dryly, "if so be it's true that ye made him marry ye."

"'Twas his duty to stay true," said the old woman. "There was the marriage lines."

"Can ye rule the blood by lines on a paper?" said Norah, with a voice so cheerless that her father sat down by her and stroked her hand.

"I heard something about it," he said gently, "and I spoke to the young doctor about it; but he said, 'Lave be,' he said. "Twill work itself out. The Charron girl yonder's a good girl, but only likin' to be noticed by a handsome man. Lave be, and he'll right himself,' he said. 'If he doesn't, ye can't cure it by interferin'"—that's what he said; and he's a man that's got more sinse than you or me, or any of us."

Norah rose. "Yes, we'll lave be," she said. "What's the good of not lavin' it be? If I kill him I've lost him just as sure as if he wint with the girl. I've thought of killin' us both," she added, with a quiet glitter of her eyes, "but he'd leave me in Hell just the same if I did. But if the storm would do it—ay, if the storm would do it—together——"

The drifts of snow softly rising in



Where an ash tree stood.

the distance seemed to fascinate her eyes.

"You'd better be goin', Norah," said her mother solicitously. "You'll only get home now before the storm gets goin' hard."

III.

Outside the door Norah turned and looked towards the barren arms of the ash-tree standing beside the grave of



"So. It is good. I tell them to leave you to me," the old woman said.

her baby that perished as it came. She made as if she would go to it through the snow, but changed her mind, and went down the slope to her house. Arrived there, she went straight to the barn and summoned one of the hands. A few minutes later, in the growing storm, with the wind becoming sharper every minute, she took the trail to Pardon's Drive alone.

A madness had seized her to go and bring Nolan back, or to go and take by the throat the girl that drew him away from her, or to die with him in the storm—in the soft, enfolding, quiet snow which had covered up so many tired pioneers of life.

She did not know quite why she went, but she felt that she must go. Some dark fascination of destiny was on her. The touch of the mystic in her Celtic blood stirred her, absorbed her. She was only conscious that she was driving, driving, and forever driving towards Pardon's Drive. How long it was, how cold it was, how still it was, this long road to Pardon's Drive! Did Nolan find it so long as he drove day after day? Ah, no! Nolan found it short, for there was some one waiting at the end—a flower of life to be plucked for his wearing!

Words Noland had sung in the days before their tragedy haunted her ears now, as the horses plunged through deeper and deeper snow, as the rugs on her knees became piled higher and higher with the soft flakes, as the drifts gathered heavier and heavier in the sleigh where she sat.

"It was as fine a churchful as you
ever clapt an eye on;
Oh, the bells was ringin' gaily, and
the sun was shinin' free;
There was singers, there was clargy—
'Bless you both,' says Father
Tryon—
They was weddin' Mary Callaghan
and me."

By and by it seemed that they made no progress. Heavily, with stupefying weariness, the horses plowed their way through the snow. How many hours had she been going? She did not know. Night was falling, and she had no idea where she was, nor did she much care. The cold was numbing, and her body seemed to grow less and less material. She was like one that was slowing withdrawing her soul's self from its mortal home, leaving that home desolate and still and nerveless.

But the horses know. They had been over this trail—how many hundred times! Their feet felt the true road under them—felt it, kept it. Their senses were concentrated on one thing—the end of the journey, rest, food, the warm stable at Pardon's Drive. Their tragedy would be in not getting there; Norah's tragedy might be—would it be?—in getting there.

None knows the silence of this world who has not been blanketed by falling snow and swept by drift. There is no universe, no time, nothing but this wheeling sphere of your own, in which you move alone—alone, the whole world dead but you.

Into this vast solitude, this silence, this dead world, a light suddenly pierced. It was the lantern hanging outside the door of Jacques Charron's tavern at Pardon's Drive.

Yet Norah did not move. She was like one who has lost consciousness of life and time.

They carried her in—it had not been

(Continued on page twenty-two.)



Just Like Boys

Men Folks and Kitchen Fixin's

By Laura Pearson Felton.

I made a trip out into the country with one of our state college extension specialists in home economics one evening. She was giving a lecture and demonstration which required the use of some of the more modern cooking utensils, all designed to show that real economy can be realized by their use.

After the demonstration the men and women gathered around the table to see the labor-saving and convenient devices the lecturer used. Do you know, those men acted just like boys over the things they saw? The improved egg beater, mechanically perfect, but not expensive, handy measuring cups and well shaped bowls, pots and pans, all were wonders to them. They really admired them and inquired about them in detail, even more than the women did. Why? Just because for the first time they had seen just how simple and interesting a woman's work can be when she is provided the right tools to work with. How many women try to interest the men in such things? Not many. Most farmers' wives go year after year with the mended kettle and the egg beater that skips a cog more often than it catches. It really isn't economy.

Economy is making the most of time as well as of money. Time really is more valuable than money. So many useless steps are taken and precious moments wasted that the wonder is that we accomplish as much as we really do.

Wash Dishes, Scrub Floors.

Many women, farm women especially, seem satisfied to let their lives mean just a routine existence of cooking, washing dishes and scrubbing floors. Their interest, in many cases, is bounded by the four walls of their kitchen and I know the average farm kitchen contains few conveniences and a great deal of work.

But sometimes I think we women have ourselves to blame for much of our drudgery. Several cases brought to my attention have led me to the conclusion that the men folks themselves would take interest and find pleasure in helping to make the kitchen convenient if the housewives would take time, or save time somewhere, to talk things over with their husbands and ask them to help them plan things so kitchen burdens might be lightened a little.

In the morning there are so many, many duties to be attended to. At noon the dinner work takes all the time and at night when the last supper dish is washed and put away and the kiddies are all tucked in, mother is just too weary to do anything but crawl off to bed.

Happy Words Scarce.

Father reads the farm paper and takes a glance at the markets and the war news if a daily paper is handy and then he follows his wife's example, and disappears in the direction of his bed. There has been little conversation of any character outside of the day's grind and every day is about the same as the day previous. Dishes and diapers, pigs and potatoes, chickens and chilblains, crops and the weather—these are the things the average farm woman has to think about these winter days. No wonder farm life grows monotonous and lacks what the city woman calls "color."

Head or Heels.

A friend of mine taught me a valuable lesson. She had three little children and a house which was not very conveniently arranged and heaps of work to do, yet she always found time to tidy herself up and rest awhile during the afternoon. I asked her how she managed and this is what she told me:

"I plan every move I make to accomplish just as much by that move as I can. When I go to put away the groceries just brought home from town I always open the cans of coffee, baking powder and such things then and there, because when I want to use them later I may not have the time to open them. Then, I never go upstairs without looking about to see what needs to be carried up. I try never to go empty handed up and downstairs. I find I save many hurried trips up the steps in this way. The same rule, or habit, I practice, when going down cellar or out to the milk house."

A very homely but true saying is, "What you haven't in your head, you must have in your heels." Which is the weariest at the end of the day, your head or your heels?"

Popular Crochet Designs

By WINIFRED WORTH



Shell Beading.

An attractive crochet that repeats well.

Chain 21.

First row—2 t. in 4th ch. from hook, ch. 2, 2 t. in same st., making shell, 1 t. in 7th ch., ch. 3, miss 7 st., 1 t. in next ch., miss 2 sts. make shell in next st., 1 t. in last st. of foundation chain, ch. 4, turn.

Second row—One shell in shell, 1 t. in next t., 10 t. over 8 ch., 1 t. in next t. 1 shell in shell, 1 t. in 4 ch. at end of shell, ch. 4, turn.

Third row—Repeat rows 1 and 2 until at end of 5th row, ch. 5, fasten in 1st loop of ch. 4, with sl. st. (for scallop), ch. 5, fasten in second loop of 5 ch. with sl. st. ch. 1, turn, 10 d. over ch. 5, 5 d over part of next 5 ch., ch. 5, turn, fasten back between 10 d. of scallop below with sl. st., ch. 1, turn, 5 d., 4 ch., 5 d. over last 5 ch. 5 d. over rest of 5 ch., fasten with sl. st. in top of last t. ch. 4. Make one row of work. At end of this make another scallop. Repeat to desired length.

Cloverleaf Insertion.

A pattern that never grows old and is very effective on a wide range of articles.

Chain 30.

First row—One t. in 4th st. from hook, 2 t. in next 2 ch., skip 2 ch., 1 t. in each of next 4 sts., ch. 6, t. in 6th ch., 3 in next 3 ch., ch. 2, 3 t., turn.

Second row—Chain 3, 2 t., ch. 2, 4 t. ch. 6 (1 d. 4 t., 1 d.) in each space of 2 ch., ch. 6, 4 t., ch. 2, 3 t., turn.

Third row—Chain 3, 2 t., ch. 2, 4 t., ch. 6, t. in center st. of middle petal, ch. 2 t. in same st., ch. 3 t. in same st., ch. 2 t. in same st., ch. 6, 4 t., ch. 2, 3 t., turn. Repeat 2nd and 3rd rows for length desired.

Never a Day.

There's never a day goes by, dear,
But it brings at the set of sun
A sense of peace and of joy, dear,
For all that the Father has done.

There's never a day that's dark, dear,
For each night I can truly say,
"There's one strong heart that has loved me
And will love me all the day."

There's never a day that's sad, dear,
For at night when the shadows fall
I thank God He gave me you, dear,
For in you He has given me all.
—Carrie L. Burton in Farmer's Mail and Breeze.

Wool Jersey Sport Coat.



This smartly cut little garment last season would have been called a wool jersey sport coat, but now, in Paris it is referred to as the stockinette service tunic. It is adapted to service in both town and country and perhaps on the whole the name is not inappropriate. Stockinette is a wool jersey of especially fine and smooth weave.—Kansas City Star.

A Twisted Vanity Bag.

Select a small, round mirror and a pair of monogram embroidery hoops, the smaller of which will just fit the mirror's rim, says the Kansas City Star. Cover the back of the mirror with a scented silk sachet, and around the small hoop plait a piece of heavy taffeta silk or ribbon. Press the plaits with a warm iron and sew up the bag. Then sew the plaits smoothly to the other hoop and twist the plaited silk until the opening is closed. Then slip the larger hoop over the smaller one and hold the silk near the steam from a boiling kettle. When it is slightly damp, rest the warm iron over the top until it is dry. This will produce a permanent twist to the plaited silk so that the bag will readily twist itself closed. Provide with a small powder bag and a puff and lay away in the gift box ready for Christmas.

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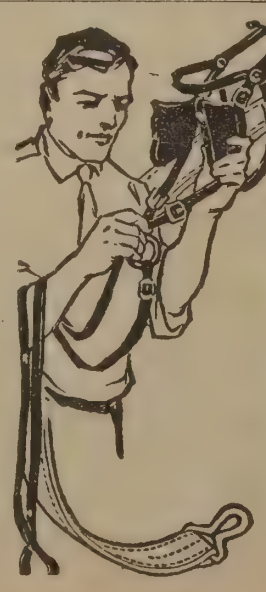


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Patterns

1930—Ladies' apron. Cut in three sizes: small, medium and large. It requires 4 7-8 yards of 36-inch material for a medium size. Price 10 cents.

1932—Ladies' house dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 7 yards of 36-inch material for a 36-inch size. The skirt measures about three yards at the hem. Price 10 cents.

1934—Boys' suit. Cut in four sizes: 3, 4, 5 and 6 years. It requires 3 1-8 yards of 36-inch material for a 5-year size. Price 10 cents.

1924—Child's dress. Cut in four sizes: 2, 4, 6 and 8 years. It requires 3 1-8 yards of 44-inch material for a 6-year size. Price 10 cents.

1920—Ladies' one-piece yoke dress.



with or without folds. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 1-2 yards of 44-inch material for a 36-inch size. The skirt measures about three yards at the foot. Price 10 cents.

1935-1916—Ladies' costume. Waist 1935 is cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 1916 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires 7 yards of 36-inch material for a 36-inch size, for the entire dress. The skirt measures about 2 7-8 yards at its lower edge. Two separate patterns, 10 cents for each pattern.

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Ingenuity

By Women Folks of Farm Home

At the farm school in Chehalis, Wash., Miss M. E. Sutherland of the extension department of the state college spoke at length upon the advisability of simple living and of living as cheaply as possible in this day when the cost of living is so very high. She said that 75 per cent of the men in the United States were making less than $600 and that the average income today was $459, and that we are an extravagant nation and that it is part of the woman's business to economize in every way possible in order to get the most out of what they have to do with. Every woman owes it to her family and herself to look and appear well at all times, and with just a little deftness of the fingers this is possible in matters of dress. Especially should the young girls and women of the family use ingenuity and make an attempt at taking the things they have at hand and seeing what they can make of them. Many times an attractive hat or some article of wearing apparel can be made with material we have at hand. Anyway, the willingness to try will many times result in a great deal of satisfaction. Miss Sutherland demonstrated all the steps in the making of a stylish hat, which any girl or woman could make. She tried to impress her audience with the importance of dressing in good taste and becomingness in a hat rather than in the prevailing style. The hat which she demonstrated could be made at home for the sum of $1.50 and was a good looking hat. She wished to impress upon the ladies the importance of individuality and distinctiveness in a hat, saying that those were the touches which really counted anyway, and any woman should be proud of the fact, when materials and living in general is so high, that she could make a good looking and a stylish hat or any article of wearing apparel. She showed how a good looking bunch of violets could be made from a 35-cent bolt of ribbon, which, if you were to buy them at the store, would cost anywhere from $1.50 to $3. She also showed how to make attractive roses of satin ribbon, and other ornaments at home.

Kitchen Devices.

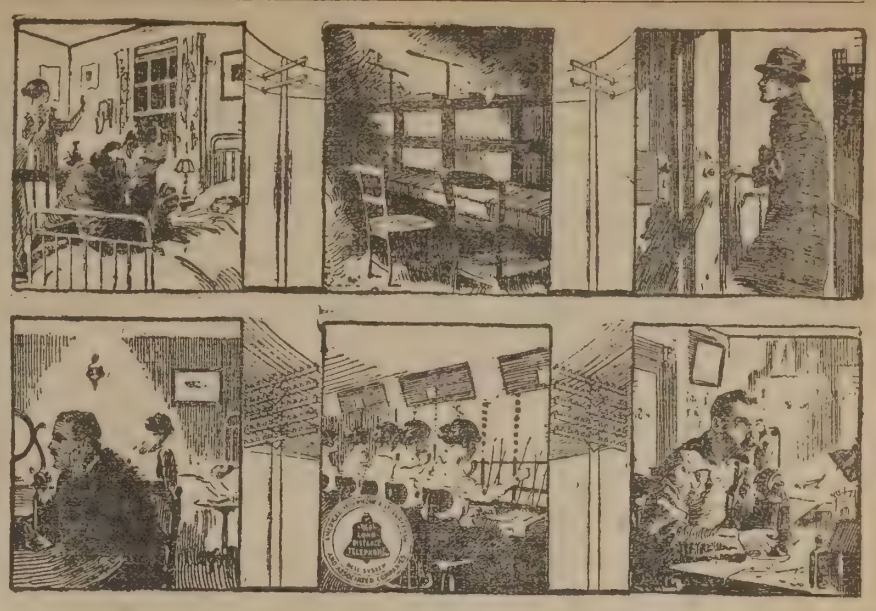
One afternoon she gave to "simple kitchen devices," which could be made at home by the woman herself if need be, in order to lighten the housework and make work in the kitchen more interesting. First of all, the kitchen should be as light and attractive a room as any room in the house, and even more so. It should have light walls, light colored woodwork, which is easily cleaned, neat curtains and be a place where one is anxious to stay rather than anxious to get away from. She spoke especially of the iceless refrigerator, made at home at almost no cost, the fireless cooker, and showed how indispensable the tea wagon is, and how one woman made one for the sum of 85 cents and finds it one of her greatest labor saving devices. This could be made from a small table, on casters, or the one which she described as costing but 85 cents was made from an old-fashioned washstand and the wheels of a baby buggy with a little white enamel, and she finds she saves a great many steps in carrying dishes and food to and from the kitchen. The average woman washes five acres of dishes in one year for a family of two.

WAR HITS DOGS

Less of Them Needed in England.

A movement has been started in England to reduce the canine population of the island. It is declared by economists that there is a large surplus of dogs and that keeping them is a luxury which the country should dispense with in a period of war time sacrifices.

It is pointed out by the foes of Tige and Sport that England has more dogs per capita than any other country in Europe, with less need of them than any other.



Best and Cheapest Service in the World

Here are some comparisons of telephone conditions in Europe and the United States just before the war.

Here we have:	*In Europe:*
Continuous service in practically all exchanges, so that the telephone is available day and night.	Nine-tenths of the exchanges are closed at night, and in many cases, at mealtime.
A telephone to one person in ten.	Not one person in a hundred has a telephone.
3,000,000 miles of interurban or long-distance wires.	Not one-eighth as many miles in proportion to population and territory.
Prompt connections, the speed of answer in principal cities averaging about 3½ seconds.	In the principal cities, it takes more than twice as long for the operator to answer.
Lines provided to give immediate toll and long-distance service.	No such provision made. Telephone users are expected to await their turn.

As to cost, long-distance service such as we have here was not to be had in Europe, even before the war, at any price. And exchange service in Europe, despite its inferior quality, cost more in actual money than here.

Bell Service is the criterion for all the world, and the Bell organization is the most economical as well as the most efficient servant of the people.

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THE WASHINGTON FARMER
Premium Dept., Room 37, Review Bldg., Spokane, Wash.

NORAH

.... BY ....

GILBERT PARKER

(Continued from page nineteen.)

easy to unloose her fingers from the reins. As she was laid down on a sofa she was only conscious of two things—the voice of a child, and the voice of Nolan. "Norah! Norah!" Nolan's voice called. It was so very far away.

At length she awoke, and it seemed to her that she had been asleep for years, so changed were her feelings, so peaceful was her mind. An old woman sat beside her, and leaned forward when her eyes opened.

"So. It is good. I tell them to leave you to me," the old woman said. "I have seen it, that cold. Bien sur! I have seen them all stiff. It was not so with you. You had no heart to fight that cold—so, like that." The quizzical, kindly eyes searched Norah's. "Bien, it is good to sleep.

"How long have I slept—where am I?" Norah asked.

"In Jacques Charron's house, so quiet and nice: voila!"

Again the old eyes searched Norah's face.

A cloud gathered in Norah's eyes. "Yes, I remember. 'Twas hard on the horses. 'Twas Nolan's best team. Are they all right? Nolan 'd not like to see them bad."

Her eyes went round the room eagerly, plaintively, yet not with the bitter passion, the hopeless pain of—



The golden haired girl.

when was it? How long was it since she came? What had happened? Where was Nolan? The child's voice she heard—was it all a dream?

Nolan's voice—had it been really Nolan's voice? Had she imagined that his arms were round her, laying her down, stroking her face?

"How long have I been here?" she asked.

"Quel heure? It was nine to the clock. Now it is 12. Certainement! They have gone to bed, all but you and me, and——"

A child's voice rose plaintively in the night—so near. Why did it pierce to Norah's heart, make her tremble so?

She raised herself on her elbow and turned in the direction of the small voice. The old woman opened a door softly, and made a gesture for her to see. Her heart stood still.

There, in a rocking chair in the next room, in the red light of a great fire, sat the girl "with hair like a sheaf of wheat," and in her arms, pressed to her breast, was an infant, to whom she was crooning softly.

As Norah gazed with eyes that almost started from her head, a wild passion seized her. It was like some ether poured through her veins. Life seemed suddenly to expand in her. She was in a palpitating atmosphere which inflamed her whole being. She saw Nolan rise from a couch near the fire, come forward to the golden-haired girl, and touch the child's soft cheek with a forefinger.

"Little darlin'," he said, with a note in his voice that she had never heard in all the days they had lived together.

Then she went mad.

Nolan stepped back, startled, as she rushed forward into the room. In the red light of the fire, with her eyes blazing, her arms outstretched, her fingers crooked like some bird of prey, she looked like an avenger in a Greek tragedy.

"'Tis as I thought!" she said in a whisper, her lips so dry with passion that she could scarcely speak. "'Tis as I said! 'Twas for this I was left alone yonder, while the wanton had her way!"

With a startled cry the Charron girl got to her feet with the child, and at first she trembled so that the babe almost fell from her arms; but presently a dark flush of indignation passed over her face, and she drew herself up with pride. If anger could have killed, Norah must have died there before her.

"Imbecile—fool!" she said, and when she opened her mouth a finer set of teeth showed than Norah had in her head, and that was saying much.

"Hush, hush—the baby!" said Nolan, and stepped forward towards it. Norah made as though she would come between, but Nolan's arm shot out before her.

"Wait! You will wake the child," he said quietly. He took it tenderly from the girl's arms and placed it in those of the old woman, who, entering with Norah, had stood with ironical humor watching the drama. She was so old that her pulses were not disturbed by the passions of others; but such scenes as these gave sensations which replaced the stirring episodes of youth and middle age. She took the child gently and put its fresh cheek to hers, quavering an old French chanson:

"J'ai faim, j'ai froid!
Pitie! noble dame;
J'ai faim, j'ai bien froid,
Prenez pitie de moi—
Prenez pitie de moi."

"Into the other room, Ma'am Charron!" said Nolan. "For a minute then —'tis not for a child's ears this."

He was very quiet, and his eyes dwelt on Norah's face with a look of command when he turned round again to the women standing in the light of the fire. Then he said to the girl:

"Sure, you had better go, Annette. There are things to say."

"Yes, there are things to say," interjected Norah, trembling. "And you had better stay—Annette!"

There was a scorn and an anger in the last word which made Annette's blood tingle.

"What have you to say to me?" she asked Norah fiercely. Her eyes seemed as red as the fire that burned on the hearth.

"Is there no shame in ye?" said Norah. "I'm his wife. Did ye need to stay and shame me with——"

"Madame, you are a liar, and you are a fool. If I was a man I would kill you." Annette Charron's fingers twitched.

"Ye flaunt the child in my face——" Norah burst out in a high-pitched voice, but got no further, for Nolan caught her arm with a grip that made her cry out.

"Be still, woman!" he said in a voice gone suddenly hard. "Would ye wake the dead? Can't ye let the dead lie in peace with the promise I made—with the promise I made!"

"What dead?" asked Norah in a trembling voice, for it came upon her all at once that she had blundered.

"Can't ye be kind"—Nolan protested —"you that's just back from the dead, Norah? A little longer out in the snow and you'd have been lyin' as she is lyin' in there." He jerked his head toward another room with a closed door.

"Who is lyin' in there?" Norah asked with trembling lips.

"The mother of that," he added, with a nod toward the child, which Madame Charron was crooning to sleep. "She was caught in the storm, too, but it was too strong for her. She gave the child all the warmth she had. And a fine boy it is, the finest iver was almost."

With a cry that came as though from a spirit released from prison, Norah swayed, then, fainting, she fell forward. Annette Charron caught her as she fell. She and Nolan laid her on the sofa, and together they set about restoring her, while the old woman watched from the doorway, irony still in her look.

"A good match it would have been," the old woman said to herself. "A fine man to see—that Nolan! If I had been Annette, I would have scratch' her eyes out," she added. "But Annette's a good girl of her kind," she murmured as an afterthought.

"You'll forgive her?" said Nolan gently to the girl. "'Twas a madness in her, shure."

The girl looked at him for a moment very steadily, and seemed about to speak, but instead she turned away for a moment and busied herself with adjusting Norah's head to the pillow.

"Then, don't you be hard on her—ever," she said presently, with meaning



Annette Charron caught her as she fell.

in her tone and a face grown pale again after the passion of the last few moments.

"Oh, I've never been hard on her, and never will," answered Nolan.

"M'sieu' Nolan, you are a fool," rejoined the girl sharply. * * * "There, she is coming to—make her understand the truth," she said grimly. "Make her understand—absolument. I am going to bed," she added, and before he could say more, she was gone.

In her place came the old woman with the child. "It was time Annette went to bed," she said dryly.

Presently Norah's eyes opened and rested on Nolan's face. Her hand was in his. There was that look in his eyes she had never seen before.

"Who was she?" asked Norah.

"Annette? You know—as good a girl as any, as——"

"No, the dead woman in there," she pointed feebly to the other room.

"'Twas a stranger, come from buryin' her man in the north. And now she's gone, poor woman."

Suddenly he leaned over Norah. "What made ye come here, Norah? What were ye after?"

"Where should a woman be but with her husband?" she answered evasively.

"Thrue for ye," he said, with a strange look. He knew that he had torn her heart. "Thrue for ye. Where should she be except with her husband —and the child?"

She stared at him. Her face grew white. "The child!" she repeated anxiously. "Shure, I have no head, Nolan. I don't see at all, at all. I am sorry I spoke so wild and bad to the girl, but there was something in me that drove me crazy. I don't understand, Nolan, dear."

"I've made the child me own, Norah —me own for iver and iver. I promised the dead woman I'd do it. I promised for you and for me. She was a fine woman, about your 'age"—ah, the incomparable liar!—"and she wint away at peace; for she saw in me the makin' of a fine father to her child. Are ye with me in this, Norah?"

Norah saw a light glimmer out of the dark, which would grow and grow to a wide radiance, would lighten all her world.

"Oh, give me the child!" she cried, all the mother hunger in her, her face glowing, her hands outstretched. The old woman put the babe in her arms. She pressed it to her breast passionately.

Nolan watched her with a wonderful look of pride and content in his face.

"We'll make-believe," he said gaily to her in a whisper.

"There's no make-believe,' she answered, with a look of fierceness almost. "It come to me out of the storm —'tis mine, 'tis mine!"

"Acushla," said Nolan gaily. "'tis yours then"; and he touched the child's cheek.

The next morning, when they left, Nolan's goodby and his gay wink and word to Annette, with the hair like a harvest of wheat in the sun, were careless enough for Norah to be sure that the farewell of its kind was final. And so it was. But Annette—who knows? The heart of a woman is a strange thing.

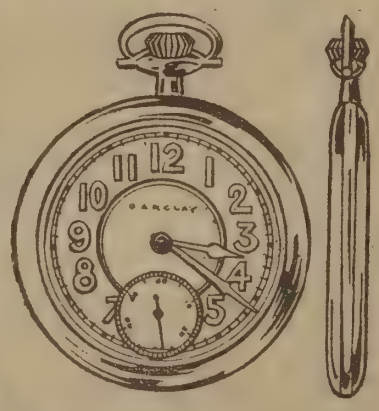
Coming Events.

January 10-13—Interstate Poultry club, Hillyard, Wash.
January 8-17—Idaho State Seed Growers' association, Pocatello.
January 8-17—Idaho State Dairy association, Pocatello.
January 8-17—Idaho State Swine Breeders' association, Pocatello.
January 8-17—Idaho State Live Stock association, Pocatello.
January 15-18. — Idaho State Grange, Nampa.
January 17—Idaho State Cattle and Horse Breeders' association, Boise.
January 18-20—Madison County Poultry and Pet Stock Show, Rexburg, Idaho.
January 22-27—Annual farmers' week, University of Idaho, Moscow.
January 30-February 1—Idaho State Horticultural association, Boise.

Ancient Honeycomb.

Two hundred and sixty-five feet below the surface in Oklahoma, a petrified honeycomb was found by zinc miners several days ago. Alex Findley took the specimen to Kansas City, Mo., to have it examined by zoologists. The cells which formerly contained honey are clearly outlined in the rock. Scientists say the bees built the comb more than 2000 years ago.

Other Boys Have Watches



Here's a Chance For You

Scores of bright, energetic farmer boys in Washington are making good in our watch club by making use of their spare moments. We will tell you how to secure one of these

Luminous "Daynite" Watches

They show exact time day or night at first glance. Thin model, seven-jewel, 10-year, gold-filled case.

Our present supply is limited and they are going fast. Don't put off writing if you want one of these beautiful watches.

THE WASHINGTON FARMER

Premium Dept., Room 37, Review Bldg., Spokane, Wash.



HAD A FINE CAMPING TRIP ALONG ELK RIVER IN OREGON

Dear Aunt Nellie: One Sunday, in Oregon, we were going on a camping trip. Papa hitched up Buck and Jumbo, our two horses, to the old buggy. Mamma put up a basket full of good things to eat, and we started very early for a long trip. First we went around an old mountain called Baldy, whose high top reached above the timber line. Then we followed Elk creek with the oaks, firs and dogwood on the mountainside above us. Papa got out and gathered the beautiful dogwood blossoms, which he gave to us until we had our arms full. Then we drove on down Elk creek until we came to a town called Drain. After going through town, we again followed Elk creek. About two miles below Drain, we passed a sawmill, then turning up a road we saw a water fall. All around we could see where the cable of a donkey engine had nearly sawed down giant trees. Soon we were over in a valley called Hard Scrabble. After going to the farther end of the valley we stopped to eat our dinner. We built a fire out of branches of trees, and rails of an old fence. After we had eaten our dinner we sat around the fire and watched the lizards play on the rails of the old fence. First they would run up one rail and then down another. When it was time to go home, we got back in the buggy and went home declaring that we had had a fine time. I was 10 years old August 29. Have I a twin? I am in the fifth grade at school. I never went to school until last April. Our teacher's name is Mr. Todd.—Albert Coffey, Hay, Wash.

CAT, PUPPIES AND A FEW CHICKENS ARE GRACE'S PETS

Dear Aunt Nellie: I am 9 years old. My birthday is September 5. Have I a twin? I live on a farm of 40 acres. I have quite a few pets such as a cat and some little puppies and a few chickens. I have three brothers younger than I. Their names are Lawrence, Robert and John. We call John Jack most of the time. Lawrence is seven years old, Robert is five and Jack is three years. Papa has four head of horses, ten head of cows and four heifers. All of our cows are Holsteins, excepting one and it is a Jersey. A young horse and a mule came here. There is a little creek running through our farm. We are completely surrounded by mountains. Our school house is white outside. It has large blackboards and it has a globe and a lot of good maps.—Grace Elizabeth Balsley, Enumclaw, Wash.

HAS TWO PLAYFUL KITTENS; LIKE TO SLEEP ON THE BED

Dear Aunt Nellie: I am a country girl 10 years old and four feet seven inches tall. I was 10 December 10. I go to school just a little ways. I am in the fifth grade. The hardest study for me is arithmetic. We have three cows, one calf, three horses and one little pig. Our cows' names are Beauty, Daisy and Floss, and the little pig's name is Molly. We have two little kittens. They are very smart little things. They will climb upon the couch and lie down and go to sleep. Our school teacher's name is Miss Ona Langlin. She boards with us. Sometimes the kittens get up on her bed and go to sleep. Our little kittens' names are Aaron and William. They like to get upon your shoulder and pull your hair and tease you. I can crochet and can milk the cow.—Freda Criswell, R. F. D. 1, Oakville, Wash.

DORA WISHES TO BECOME A MEMBER OF THE CORNER

Dear Aunt Nellie: I am 13 years old. My birthday is January 27. I like to go to school. I am in the eighth grade. My teacher's name is Mr. McCabe. I have a kitten named Snowball because she is white. We have a dog, two horses and about 18 head of cattle. I have an organ, but can not play it very well. We have six children in our family, four girls and two boys. My father takes The Farmer and I sure enjoy the Children's Corner. I want to be a member of it.—Dora Dunaway, Glenoma, Wash.

HAS A LITTLE COLT THAT WILL EAT TOBACCO LEAVES

Dear Aunt Nellie: I am 11 years old and my birthday is October 22. I and my brother go to school at Lone Pine. I am in the fifth grade. We only have a quarter of a mile to walk. We live on an 160-acre farm. We have 160 chickens and three geese. We have eight head of work horses and five colts. On little colt will eat tobacco. We have four cows. I have four brothers and two sisters.—Myrtle Goldie Ledbetter, St. John, Wash.

FLOSSIE IS ONE OF FIFTEEN PUPILS AT PENAWAWA SCHOOL

Dear Aunt Nellie: I am going to describe my schoolroom. There is a large United States flag in front and there are pictures on the wall. There are three windows on the east side and three on the west, and a large Waterbury heating plant in the corner by the door. There are 15 scholars going to my school. I am in the seventh grade. I was 13 November 8. I have blue eyes, golden hair, weigh 81 pounds and am four feet 11 inches tall. Have I a twin? I have a little sister, with blue eyes and brown, curly hair. Her name is Madeline. I also have two brothers. I am the oldest. We are planning on having a large program on Washington's birthday. We are boarding the teacher and like her fine. Her name is Georgia Saxon. I have a quarter of a mile to go to school.—Flossie Stevig, R. F. D. 1, Penawawa, Wash.

FUN TO PLAY IN THE GRAIN ON THE FARM DURING SUMMER

Dear Aunt Nellie: My subject is "Fun on the Farm." It is very much fun to play in the tall grain on the farm in the summer. I like to help my mama gather the eggs in the barn and chicken house. We milk cows and I think it's very nice to go hunt them in the summer time. They run on a nice pasture upon a hill. I go to school. I am in the fifth grade. We children walk about a mile and a half. I like to go to school very well. About 40 children go.—Rosey Johnson, Hassan, Wash.

IONE HELPS HER MOTHER WITH THE WORK BEFORE SCHOOL

Dear Aunt Nellie: There are 22 pupils in our school. There are three nice blackboards and five rows of desks and five windows. Our teacher's name is Miss Rice. She is very good to us. I am nine years old and in the fourth grade. There are two pupils beside myself. They are nine years old, too. My birthday is June 24. I would like to correspond with any girl my age. I have a baby sister. She is 18 months old. She has blue eyes and brown, curly hair. I have blue eyes and brown hair. I help my mother do the work before I go to school and after I get home from school—Ione Luce, R. F. D. 3, Stanwood, Wash.

PEARL ATTENDS THE STATE NORMAL SCHOOL AT BELLINGHAM

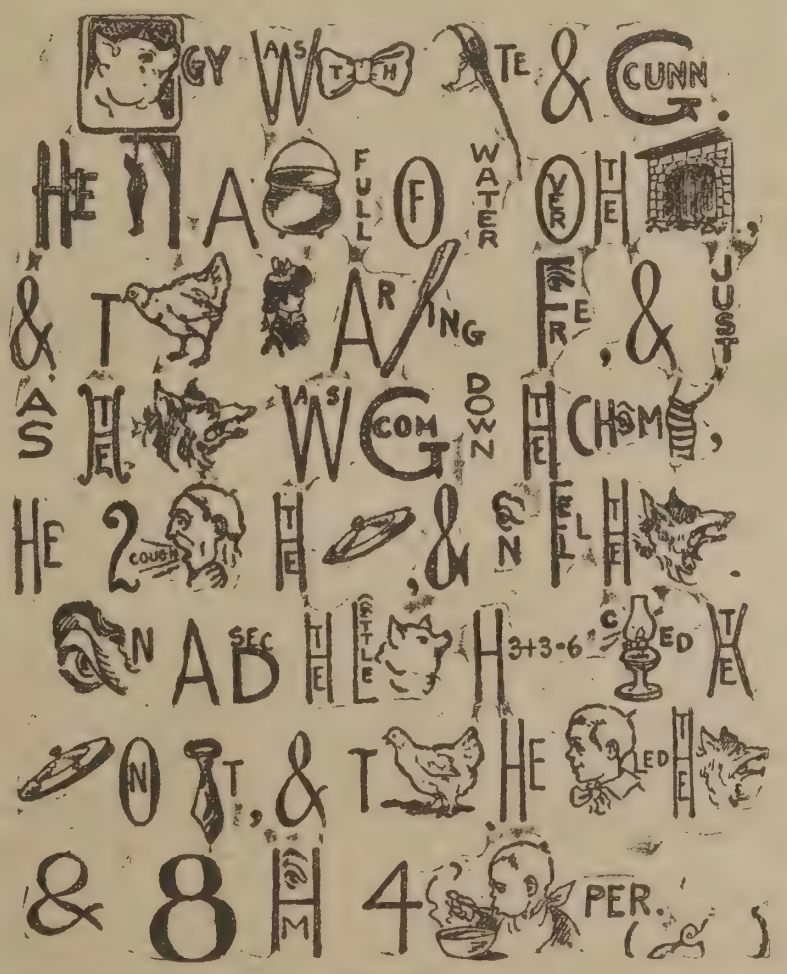
Dear Aunt Nellie: I am 12 years old and weigh about 90 pounds, and am five feet and seven inches tall. My birthday is May 30. Have I a twin? I am in the B6 grade. We have a teacher for each study, which is 14, and then we have a supervisor for each. There are 14 children in our room. There is only one class in a room and there is only half of the B6 class. The name is State normal school. I have many pets. I have a Spitz pup. His name is Spoke. I have three rabbits. Their names are Bill, Bell and Rag. Rag had nine little rabbits and they were all frozen to death. I have a pair of buff bantams. They have feathers all over their legs, which makes them look very queer. They are very tame. They are always about your feet. Their names are Fritz and Dolly. My brother has a pair and their names are Hans and Molly. We were offered $5 for the two roosters, but refused it. I have a cat name Tiger. My mother has six birds, five are singers and one female. One summer my mother raised 32 young birds. I did have some guinea pigs, but our bull dog killed them. He is dead now. A man shot him. I have some pigeons, too.—Pearl Bartruff, 1120 1-2 Dock street, Bellingham, Wash.

MISSED THE MOST OF THE TERM ON ACCOUNT OF SICKNESS

Dear Aunt Nellie: I am eight years old. My birthday is February 25. I have a calf whose birthday is on the same day that mine is. I am living in town. I go to school in town. I am in the third grade. I missed the most of the term on account of sickness.—Gustave Dlaughter, Mansfield, Wash.

Story of the Three Little Pigs

CHAPTER XII.



The end.

Solution to this chapter will appear in next week's issue of this paper.

SOLUTION TO LAST WEEK'S CHAPTER.

"Please let me in," supplicated the sly wolf. "It is so cold outside here."

"No! By the hair of my chinny-chin-chin, I will not let you in," said Piggy.

"Then I will jump down your chimney and get you that way," threatened the wolf.

ENJOYS THE FARM BECAUSE OF FRESH AIR AND EXERCISE

Dear Aunt Nellie: I enjoy farm life very much. It is interesting. Sometimes it is work, sometimes play. We are all at school and very busy with our books, so we do not have much time to write. One or two of my friends told me they have written and I am watching closely to see if I can see their letters. I have not seem them yet. On the farm there is very much fun. You can watch the men when they milk the cows or ride horseback. I think the Children's Corner is growing. We have taken The Farmer for some time. I have read the Children's Corner, too, every time the paper comes. We have 10 cows, and we have a little calf, too. On the farm you also can breathe pure fresh air and have all the exercise you want.—Clara Olson, Bothell, Wash.

ROLLAND IS 11 YEARS OLD. WRITES ON THE TYPEWRITER

Dear Aunt Nellie: We have been taking The Farmer for some time and I enjoy reading the letters in the Corner very much. I was 11 years old on December 2 and am in the fifth grade. I live half a mile from our schoolhouse. We have a nice school. I have three pets, a dog and two kittens. I have no small brothers or sisters and am the youngest in the family. I hope all the children in the Corner had a merry Christmas. I am just learning to use the typewriter.—Rolland Gillespie, R. F. D. No. 1, Monroe, Wash.

LIKES THE FARM; WOULD NOT CHANGE WITH A CITY GIRL

Dear Aunt Nellie: We have a horse and three cows and a heifer. The heifer is my pet. I have a little kitten and he is white. His name is Muff. We have a black and white cat too. The black and white cat's name is Buff. The horse's name is Duke, and the cows names are Fannie, Primrose, and Beauty, and the heifer's name is Daisy. There are five in our family. I have one brother and one sister. We live two miles from town. I am 10 years old and am in the fourth grade. I live about 50 yards from the school. We got a little dog and her name is Pup, and she is a white dog. She can do all kinds of tricks. She can shake hands and sit down, and bark when she wants food. We live on a farm of 12 acres. We have about 10 acres cleared. I do not like to go to school very much. I like to hear the birds sing in the summer time. There are two rooms in our school. We have about 56 children in our school. We had 25 turkeys. My mother raised 30 turkeys, but five of them died. I would not change with a city girl for I like to live on a farm. I forgot to tell you about our pig. He is a white pig. I like to go sleigh riding. Last year we had so much snow that we had to stop school. The Indians say that there is going to be 10 feet of snow this winter.—Aina Alexson.

RUBY HAS NOT BEEN ABSENT FROM SCHOOL THIS WINTER.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I like to read the little letters. I am a little girl 11 years old. My birthday was January 4. I am in the sixth grade. I have always made a grade a year. I have gone to school this winter so far without missing a day, nor have I been tardy. Our teacher's name is Miss Venna Patterson. I like her fine. We have an organ in our school. There are four rooms, one for the girls' cloaks, and one for the boys' cloaks, and a hall, and then the room which we study in. We have a nice big stove; just got it new winter before last. We have 24 single seats and four double seats. We have 29 pupils in our school. Our teacher had a Christmas entertainment and she had a time because our school has had the chickenpox.—Ruby Peterman, R. F. D. 3, Parma, Idaho.

DRIVES THE HORSES TO THE FIELD AND GOES AFTER HAY.

Dear Aunt Nellie: I am going to tell about fun on the farm. I am 9 years old and I go with father after hay. Claude, my brother, lets me drive the horses to the field; it is one mile. We went out squirrel hunting last summer. We live on a homestead of 320 acres. I help pick up potatoes and sugar beets and picked up potatoes for a neighbor for a half day and got 80 cents.—Derrell Fulwider, Small, Idaho.

ZELMA LOVES EVERYTHING BUT SNAKES AND BUGS.

Dear Aunt Nellie: I was 10 years old January 8. I love everything but snakes and bugs. For Christmas I got a book, a pitcher and some ribbon. I had a very merry time on Christmas, and hope all the cousins had a good time, too. I go to school. Our school had two weeks' Christmas vacation.—Zelma Kinney, Blackfoot, Idaho.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Jan. 6.—Emperor William's message to his troops that the war would continue acted as one of many elements today that forced a sharp advance in the price of wheat. After an extreme rise of 5 1-4 the market reacted, but closed strong, 2 to 4 3-8 net higher, with May, $1.84 1-8@1.85 1-8 and July, $1.51 1-8@1.51 3-8. Other staples, too, scored substantial gains, corn, 1 3-8 to 1 5-8, oats, 1 to 1 1-8, and provisions, 12c to 30c.

Besides the belligerent announcement of the German emperor the course of the senate in dealing with President Wilson's appeal to the European combatants appeared to have had special effect toward changing sentiment in favor of the bull side of the market.

Corn ascended to $1 a bushel, May deliveries, the highest price since 1892, and with that exception the topmost level in 40 years. Active European buying of futures seemed to be largely responsible. Oats shared the strength of other cereals.

Advancing quotations on hogs and grain caused free buying of provisions. Notice was taken also of the fact that the western receipts of hogs for the week totaled only 607,000, as against 978,000 a year ago.

Cash Quotations.

CHICAGO, Jan. 6.—Wheat—No. 2 and No. 3 red and No. 2 and No. 3 hard, nominal.

Corn—No. 2 yellow, nominal; No. 4 yellow, 95½@96c; No. 4 white, nominal.

Oats—No. 3 white, 56½@57c; standard, 56½@57¼c.

Rye—No. 2, nominal. Barley, 95c @$1.32.

Timothy, $3.50@5.50. Clover, $12@17.

Pacific Northwest Grain.

PORTLAND, Jan. 6.—January delivery: Wheat—Bluestem, $1.62; fortyfold, $1.57; club, $1.54; red Russian, $1.50. Oats—No. 1 white feed, $35.75. Barley—No. 1 feed, $39.

February delivery—Bluestem, $1.63; fortyfold, $1.58; club, $1.55; Russian, $1.52. Oats, $36. Barley, $39.

TACOMA, Wash., Jan. 6.—Wheat—Bluestem, $1.60; fortyfold, $1.57; club and red fife, $1.55; red Russian, $1.50.

SEATTLE, Jan. 6.—Wheat—Bluestem, $1.63; Turkey red, $1.64; fortyfold, $1.56; club, $1.55; fife, $1.55; red Russian $1.53.

Barley, $38.50 per ton.

WILBUR, Wash., Jan. 6.—Bluestem, $1.47; club, $1.42. Oats, $35. Barley, $35. The Graingrowers' Warehouse company bought 7000 bushels of bluestem at $1.50 this week.

WALLA WALLA, Wash., Jan. 6.—Club wheat, $1.42@1.43; bluestem, $1.49@1.50. Barley, $39@40.

San Francisco Grain.

SAN FRANCISCO, Jan. 6.—Wheat—Firm; no trading.

Barley—May, $2.35; December, unquoted.

Minneapolis Grain.

MINNEAPOLIS, Jan. 6.—After a weak opening wheat prices strengthened and the close was more than 3 cents higher. Corn and oats swayed with wheat. Wheat receipts, 262 cars, compared with 399 a year ago.

Wheat—May opened $1.86½ to $1.87; high, $1.90⅞; low, $1.86½; closed, $1.89⅞.

July opened $1.79; high, $1.82⅛; low, $1.79; closed, $1.82½.

Cash—No. 1 hard, $1.97⅞@1.98⅞; No. 1 northern, $1.90⅞@1.93⅞; to arrive, $1.89⅞@1.91⅞; No. 2 northern, $1.87⅞@1.93⅞; No. 3 wheat, $1.77⅞@1.89⅞; No. 2 durum, $1.89@1.96; No. 2 hard Montana, $1.88⅞@1.91⅞.

Corn—No. 3 yellow, 86@92c.

Oats—No. 3 white, 54@54½c.

Flax, $2.84@2.88½.

Flour unchanged; shipments, 49,719 barrels.

Barley, 90c@$1.20.

Rye, $1.41@1.42.

Bran, $27@27.50.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at coast points for the fiscal year beginning July 1, up to Saturday night were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1916-17	3605	750	252	2475
1915-16	6346	667	1069	2588
Portland—				
1916-17	3430	1412	121	1256
1915-16	8803	771	1270	1350
Total—				
1916-17	7035	2162	1321	3731
1915-16	15149	1438	2339	3936

San Francisco Produce Market.

SAN FRANCISCO, Jan. 6.—Butter—Fresh extras, 35½c; prime firsts, 34½c; fresh firsts, 33½c.

Eggs—Fresh extras, 38c; pullets, 37½c.

Cheese—New, 18c; Young Americas, 20½c.

Poultry—Hens, 24@25c; old roosters, 11@12c; fryers, 22@24c; broilers, 27@30c; large, 22@23c; squabs, $2.25@2.50; pigeons, $1.25@1.75; ducks, 13@14c; geese, 15@17c; turkeys, 22@26c.

Vegetables—Lettuce, Southern, 75c@$1; fancy, $1.15@1.25; peas, southern fancy, large, 10@11c; cream squash, 75c@$1.25; tomatoes, southern, $1.75@2.00; eggplant, 7@8c; green peppers, large, 10@15c; small, 5@10c; garlic, 3@6c; sweet potatoes, cellar stock, $2.75; celery, $4@4.75; rhubarb, $1.25@1.75; marrowfat and hubbard squash, $1@1.25.

Potatoes—Rivers, $2.25@2.35.

Onions—Car load, $3.75@4.

Seattle Market.

SEATTLE Jan. 6.—With growers quoting $38 f. o. b. shipping points selling levels of Yakima Gems are firm at $45. Futures throughout the month look very strong. Jobbers are buying only as needed, although through the excitement of buying and shipping Puget sound spuds wholesalers have been able to accumulate a few carloads and are holding for an advance.

The visible supply of Puget sound potatoes is dwindling rapidly, either because of large quantities sold or shrinkage. These spuds will depreciate heavily from now on as they are nearing the end of their keeping qualities. In addition, consumers with every sudden cold spell manifest a sharp demand for good baking stock and sales of No. 1 Yakima Gems will proceed to a considerable extent regardless of prices.

Oregon association men apparently control the onion situation, and they are vigorously toning up the market. Jobbers must pay 2 1-2 cents and 3 cents f. o. b., and are selling at 3 1-4 cents and 3 1-2 cents. Stocks here are not heavy, and a 4-cent market is in immediate prospect. The bulk of stock moved is of the smaller boiling variety, selling at 2 1-2 cents and 3 cents.

Apples are easy. Higher prices are not looked for, regardless of the action of the eastern markets, as stocks on hand locally are ample.

Local hothouse rhubarb at 10 cents per pound is in, and radishes and tomatoes will be offered within the next two or three weeks.

While the demand has fallen off, due in part to absence of sustaining orders from Alaska, receipts of eggs have increased, and with this situation the market is weak and falling. Some supreme effort will be required to pull this commodity out of the hole.

The make of fresh creamery butter is running ahead of the demand and is inclined to pile up. So pronounced has the weakness become that good off-color country creamery butter has been underselling June storage butter. Jobbers have been quoted 35 cents and 35 1-2 cents for a grade of country creamery butter that would be acceptable for table use almost anywhere, while storage is firm at 35 cents and 36 cents.

Poultry prices will be unchanged next week. Receipts have fallen to a slight excess over the demand, and the conditions are fairly healthy.

BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 36c per dozen.

Poultry—Live hens, fat, over 4 lbs., 17c per lb.; do, 3 lbs. and under, 15c; old roosters, 10c per lb.; springs, 18c per lb.; ducks, 19c per lb.; squabs, large, $3.50 per dozen; geese, fat, 12c lb.; turkeys, live, 24c.

Butterfat—42c lb.; dairy butter, 28c pound.

Beef—Buying price: Prime beef steers, 8c per lb.; cows, fat, 5@6c per pound.

Hogs—Light, 11½@12c per lb.; do, heavy, 10@11c per lb.

Veal—Fancy light, 12½@13c per lb.; do, heavy, 9@10c per lb.

Hides—Salted, 19c per lb.; salt kip, 22c per lb.; salted calf, 32@35c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 32@33c per lb.; dry calf, 12, under six lbs.), 36c per lb.; bull and dry salts, 4c per lb. less; green bulls, 18c per lb.; dry butcher full wool sheep pelts, 20@23c per lb.

Seattle Wheat.

SEATTLE, Wash., Jan. 6.—Taking the handicap of a shortage of cars, Eastern buyers have been active in Washington during the last week for wheat, and compelled Puget Sound millers to meet bids of $1.50 for bluestem and Turkey red and $1.45 for fife in the country. They got little grain, but forced prices up to the level fixed a month ago by farmers for selling. Country holders have now decided that they will not let go until the market goes higher and the talk of $2 May wheat in Chicago is being revived.

The car embargo is still operative on several of the transcontinental lines. The Milwaukee never had one on flour to Chicago and the Union Pacific lifted its 14-day prohibition yesterday.

Puget Sound millers have not been active in the wheat market as all are well stocked up. Such purchases as were made from this side of the Cascades were for export. While the grain markets suffered a setback for the week-end the average for the entire week has been a lift of 11c and bid prices are now within 10c of the peak of the season.

Puget sound millers have been asked for quotations this week on flour for the West Indies, the newest field for exploitation that the war has thrust upon them. They are investigating. The field is unexplored, and without regular steamship service millers are hesitating about opening accounts there unless some show for a permanent trade can be made.

Live Stock Quotations.

At Chicago.

CHICAGO, Jan. 6.—Hogs—Receipts, 17,000. Active, 10c above yesterday's average; bulk, $10.10@10.56; light, $9.70@10.40; mixed, $9.95@10.65; heavy, $10.15@10.60; rough, $10.15@10.25; pigs, $7.60@9.50.

Cattle—Receipts, 500; steady. Native beef cattle, $7.50@11.80; western steers, $7.35@10; stockers and feeders, $5.35@8.40; cows and heifers, $4.30@10; calves, $9@13.25.

Sheep—Receipts, 10,000. Steady. Wethers, $9.25@10.50; lambs, $11.40@13.75.

At Omaha.

OMAHA, Neb., Jan. 6.—Hogs—Receipts, 9700; higher. Heavy, $10.20@10.50; light, $9.85@10.40; pigs, $8@9.75; bulk of sales, $10@10.40.

Cattle—Receipts, 800. Steady. Native steers, $7.50@11.50; cows and heifers, $6.50@10.60; western steers, $6.50@9.25; Texas steers, $6@7.50; stockers and feeders, $6.25@8.60.

Sheep—Receipts, 600; steady. Yearlings, $9.25@11.25; wethers, $8.50@11; lambs, $12.10@13.25.

At St. Paul.

SOUTH ST. PAUL, Minn., Jan. 6.—Estimated receipts at the Union stock yards today: Cattle, 400; calves, 50; hogs, 1800; sheep, 40.

Cattle—Today's small run had no effect on values and for the week prices are 15c to 25c lower on all but canners, cutters, bulls and veal calves. A broadening out of receipts made it easier for packers to fill orders and they assumed a bearish attitude all week on everything above the cutter class.

Hogs—A light run of hogs on the market here today cashed at unchanged rates compared with Friday. Top hogs were bought at $10. There were few real good heavy hogs, light mixed hogs predominating again. Bulk of sales were made between $9.85 and $9.95. The few pigs which were offered changed hands at the same level as Friday, $8.25, taking the best strong weight sorts.

Sheep—Less than 100 sheep and lambs comprised today's offerings in this division. Unchanged rates were paid for the stuff shown. The week closes with best lambs up a quarter and best ewes about 50 cents higher than a week ago. Material has been scarce all week and with a good demand for everything sellers were able to extract better money for the best of their offerings.

At Portland.

PORTLAND, Ore., Jan. 6.—Hogs—Steady; receipts, 467. Bulk of packing grades, $10@10.20; heavy packing, $10.20@10.30; heavy butchers, $10@10.25; light packing, $10@10.20; rough heavy, $9@9.25; pigs and skips, $8.50@9.25; stock hogs, $8.25@8.75; cripples, $8@8.50.

Cattle—Steady; receipts, 176. Steers—Prime light, $8.25@8.50; prime heavy, $8.25@8.50; good, $7.75@8; cows, choice, $6.50@7.25; medium to good, $6.25@6.75; ordinary to fair, $5.50@6; heifers, $6.25@7; bulls, $3.50@5.25; calves, $5@7.

Sheep—Steady; receipts, 80. Lambs, east of mountains, $10.75@11; lambs, valley, $10.35@10.50; lambs, good, $9.75@10.25; choice yearling wethers, $9@10; good yearlings, $8.75@9; choice ewes, $7.75@8; heavy ewes, $6.75@7.50.

At Seattle.

SEATTLE, Jan. 6.—Receipts, 164 hogs, 128 cattle. Market strong.

Hogs—Higher. Prime light, $10.50@10.55; medium to choice, $10.15@10.25; heavies, $9@9.90; pigs, $8.25@9.40.

Cattle—Higher. Prime steers, $8.25; medium to choice, $7@7.25; common, $5.50@6.75; best cows and heifers, $6.75@7; medium to choice, $5.50@5.75; common bulls, $3.50@4; calves, $7@8.50.

Sheep—Prime lambs, $8.50@9; yearlings, $7@7.70; wethers, $6.50@7; ewes, $6@6.50.

Spokane Union Stock Yards.

Hogs—Receipts, 531; market steady. Bulk of sales, $9.75 to $10.10. Prime light, $9.85@10; prime heavy, $10@10.25; prime mixed, $9.40@9.65; rough heavy, $8@8.50; stockers, $6.50@8.

Cattle—Receipts, 3; market steady. Prime heavy steers, $8@8.25; prime light steers, $7.75@8; good steers, $7.50@7.75; feeders, $5.25@6; prime cows, $6.25@7; good cows, $5.75@6.25; best heifers, $6.50@7.25; bulls, $3.50@5; calves, $6@8.

Sheep—Receipts, 14; market strong. Prime lambs, $9@9.75; good lambs, $7.75@8.25; best yearlings, $8.75@9.50; good yearlings, $7.50@8.25; best mutton ewes, $6.75@7.75; good ewes, $5@6.

Household Novelty.

A household novelty is both a nut pick and bottle opener and can be used to hold an ear of corn when it is being eaten.

Portland Market.

PORTLAND, Ore., Jan. 6.—Egg prices went off sharply in the past week and at the close there was a 34 cent market. The trade bought only from hand-to-mouth on the falling market, and as the shipping outlet was poor, stocks piled up on the street.

Butter is holding at the prices, but the market is barely steady. Cheese is selling well on a 20-cent Tillamook basis.

Poultry prices ruled high during the week as the supply was far under the demand. Dressed meats also advanced with light receipts.

Potato buyers are paying up to $1.60 for choice stock and speculators are offering still more, evidently to boost the market. Onions are also tending upward.

Hop trading has been active during the week, low prices having stimulated buying by eastern brewers.

The hide market is steadier in response to somewhat better advices from the east.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $36.25 per ton.

Corn—Whole, $48; cracked, $49 per ton.

Millstuffs—Bran, $26.50 per ton; shorts, $30.50.

Barley—No. 1 feed, $38.50@39; brewing, nominal; rolled, $41@42.

Hay—Buying prices. Timothy, eastern Oregon, $18@21; alfalfa, $17@18; clover, $12.50; grain, $13@15.

Eggs—Oregon ranch, case count, 34@35c per dozen; candled, 37@40c.

Poultry—Hens, 15@17 1-2c; ducks, 16@18c; turkeys, live, 17 1-2c; dressed, 25@26c; geese, 11@12c.

Butter—City creamery, prints, 38@39c per pound; cubes, extras, 34 1-2@35c.

Cheese—Oregon triplets, 20c; Young Americas, not quoted.

Dressed meats—Veal, 14 1-2c; pork, 13c.

Hops—1916 crop, 6@9c.

Potatoes—Oregon, jobbing price, $1.75@2 per cwt.

Onions—Buying price, $3.10 for country points.

Wool—Eastern Oregon, fine, 24@30c; coarse, 33@36c; valley, 33@35c.

Beans—Small white, 11 1-4c; large white, $11.10 per 100 pounds.

Hides—Salted hides (25c lbs. and up), 19c; salted stags (50 lbs. and up), 15c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 28@30c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 13c; dry hides, 30c; dry salt hides, 25c; dry horse hides, $1 to $2; salt horse hides, $3 to $5.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—Potatoes, $2@2.25 cwt; new potatoes, 15c lb; sweet potatoes, $3.

Apples—Washington apples, cooking, 60c@85c; eating, $1@1.25; Wageners, $1.25@1.35 box; Jonathans, $1.25@1.35 box; Winter Bananas, 80c box; Kings, $1 box; Spitzenburgs, $2 box; Baldwins, 90c box; Delicious, large, $1.75@2.25 box; Rome Beauties, $1.25 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Coin, 36c lb; Gold Leaf, 40c lb; Better butter, 40c lb; Hazelwood, 40c lb; Peerless, 38c lb; Jersey Belle, 39c lb; Attalia, 40c lb; Diadem, 40c lb; Jersey, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 28½c; Wisconsin limburger, 28c lb; brick cheese, 28c lb; domestic Swiss, 30c lb; western cream, Idaho or Oregon twin or triplets, 24c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $13@14; fresh eastern eggs, $13 case; eastern storage eggs, $10@10.50 case.

Cattle—Prime steers, $5@6.50 cwt; heifers, $5@5.50; cows, $4@5.

Sheep—Wethers, $6@7 cwt; ewes, $5.50@6 cwt; lambs, $9 cwt.

Hogs—Heavy hogs, $9 cwt; light hogs, $9.50@10.

Live Poultry—Springs, 12@13c lb; hens, 12@13c lb; old roosters, 6@7c lb; young ducks, 11@13c lb; geese, 10c lb; turkeys, 20@25c lb.

Portland Wheat.

PORTLAND, Ore., Jan. 6.—Grain dealers here look forward to much higher wheat prices before the season is over. The advance of the last week has lifted the market to within 8 cents of the record price of the season and there is little doubt in their minds that the highest prices of last season will be exceeded. Private wires from the east predict a $2 market at Chicago and it would occasion no surprise if that mark were attained in the northwest.

Closing offers at the Merchants' exchange for January wheat were: Bluestem, $1.62; fortyfold, $1.57; club, $1.51; red Russian, $1.50.

Tractor

This Man Does Work for Others

That the tractor is not only profitable for the farmer for his own use, but frequently enables him to make a substantial return on his investment in doing work for others, is the statement of J. H. Algard of Watertown, S. D.

Last spring Mr. Algard took a Bull tractor out for his own use. The first thing he did with it was to haul a 40-inch separator weighing 8000 pounds 14 miles into the country and returned with another one the same day. The next thing he did with this tractor was to plow 22 1-2 acres in 26 1-2 hours. The next job was dragging roads. He took the Bull tractor and a King drag and dragged 100 miles of road to the entire satisfaction of the county road commissioner, for which he was paid 50 cents a mile, thus receiving a check for $50.

Oak Log Fortune Lost.

Somewhere at the bottom of East river, near Green Bay, Wis., is a fortune in oak logs. The lumber was lost in a storm about 45 years ago. Efforts to find the timber have been started. The logs were part of a big raft. Expert lumbermen say that in spite of being submerged the logs will still be sound.

Want Ads

HELP WANTED—MALE 3

LEARN AUTO AND TRACTOR EXPERT. $75 to $200 a month—learn in six weeks. Thousands of successful graduates. Catalog free. Rahe's Auto School, 532 East 11th st., Kansas City, Mo.

SITUATION WANTED—Male 21

A MAN NOW WITH THE STATE DEPARTment of agriculture who can put $s to the credit of your orchard account, wants to get in touch with an orchard owner who needs a manager of ability. B 11, Pacific Northwest Farm Trio, Spokane, Wash.

CAN SUPPLY FIRST-CLASS RANCH hands and other male help on short notice. Lewis Labor Agency, Chas. Lewis, Mgr. N211 Stevens, Spokane. Phone Main 3252.

MARRIED COUPLE WANT FARM WORK; experienced; wife good cook. P. O. Box 1024. Spokane.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER!

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors, $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

SASH AND DOORS.

Order your sash and doors direct from O. B. WILLIAMS CO. We operate our own mill, and ship direct to any one, anywhere, at factory prices. Safe delivery guaranteed to destination. Send for our big, complete catalogue No. 27. Mailed free, postpaid, on request.

5-cross panel doors	$ 1.33
Craftsman 4-panel doors	1.75
Craftsman glass doors	2.75
24x28 2-light window	1.33
36x40x16 cottage front window	2.63
Bungalow casement sash	.56 up
3x6 hotbed sash	2.25
Cupboard glass doors	1.00
Cupboard panel doors	.85
3-ply slash grain panels, square foot	.05½
1-ply Gold Seal roofing	1.35
Knock-down window frames	1.00
4 and 5 foot floor and ceiling, 1000 feet	11.00
8 to 9 foot flooring and ceiling, 1000 feet	14.00

O. B. WILLIAMS CO.
1943 FIRST AVE. SO. SEATTLE, WASH.

BUILDING MATERIAL AT WHOLSALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

STRAWBERRY BOXES.

We have all kinds of berry boxes and crates, butter and egg cases. TRY OUR CEDAR SHINGLES. HEDLUND BOX & SHINGLE CO., SPOKANE.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

BEES—560 COLONIES FOR SALE; THE big game as a bargain. John Ruyts, Buhl, Idaho.

FOR SALE—300 TONS CHOICE ALFALFA hay. Burbank Company, Burbank, Wash.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

LIGHTING EQUIPMENT 74

NIXON-KIMMEL CO.—EDISON STORAGE battery and farm light plant distributors. Sell or repair everything electrical. Spokane.

AUCTIONEERS 75

JAS. M'KAY, AUCTIONEER. FARM AND auction sales. 312 6th ave., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174



This classification introduces the person who wants to buy purebred poultry to the person who can fill his or her order satisfactorily. If you have breeding stock, hatching eggs or chicks to sell, now is the time to advertise.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please. $12—100. Free catalog. Fresblaid Farm, Colfax, Wash.

MAMMOTH BRONZE TURKEY. BEST IN the west. Unrelated stock. Mrs. H. J. Cortner & Mrs. C. R. Lowery, Payette, Ida.

WHITE WYANDOTTES, DUSTIN REGAL, heavy-laying strain; strong and vigorous. C. W. Bradford, Box 201, Roseburg, Ore.

LIVE STOCK 177

50 BRED SOWS AND GILTS, 50 OF TRUE Berkshire type and quality, bred to grand champion boars, are included in our private sale list now ready for mailing. Write for it today. Silver Birch Farms, Bx. R, Newport, Wash.

WAIKIKI FARM JERSEYS.

We offer several young bulls and heifers of excellent breeding. Send for descriptions and photos. Waikiki Farm, R. 7, Spokane, Wn.

COLTS FROM 8 MONTHS TO 3 YEARS old, or work horses to trade for a good registered shire mare. Box 606, Ritzville, Wash.

17 HEAD OF VERY CHOICE REGISTERED red roan and white yearling Shorthorn bulls. Wm. Mulhall. Fenn, Ida.

HARNESS and SADDLERY 189

H. A. BOSTWICK, HARNESS AND HARness repairing. Postage paid on mail orders. N624 Monroe, Spokane.

GROCERIES 222

3 LBS. EXTRA FINE COFFEE, ROASTED fresh daily, by parcel post, for $1. Martin Marks Coffee Co., Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

FUR RUG MOUNTING A SPECIALTY. Heads, animals and birds mounted. Withers Bros., 822 Sprague, Spokane, Wash.

FURRIERS 429



THIS CLASSIFICATION AFFORDS AN opportunity for the fur buyer and the fur seller to get together. If you have furs of any kind to dispose of it will pay you to get in touch with the advertisers in this department. If you wish to get in touch with trappers and hunters, space below will enable you to do so at low cost. These "want" ads are read in more than 50,000 homes every week.

BUSINESS OPPORTUNITIES 516

WANT A MAN WITH $5000; WILL PAY a bonus of 12 per cent for use of the money for one year and secure him with valuable real estate. B 12, Pacific Northwest Farm Trio, Spokane, Wash.

ARCHITECTS 558

ADDRESS L. M. STARR FOR PLANS AND specifications. E1218 12th ave., Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

LIMITED SUPPLY FINE SEED CORN, on cob, yellow and white dent. Yellow took 1st prize, white 4th prize at first dist. natl. corn show, St. Paul. None shipped testing under 90 per cent. Price 10c per lb., prepaid. L. F. Pourtales. Oroville, Wash.

FARM SEEDS, COMPLETE STOCK OF red and alsike clover, timothy, vetch grass seeds, seed grain, garden seeds. Send for free catalogue.
D. A. WHITE & SONS, Seedsmen,
SALEM, Ore.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. L. Moffet, Ellensburg, Wash.

ALFALFA SEED IN LOTS FROM ONE TO one hundred bushels at $8.50, f. o. b. Clements, Kan. Samples on request. H. H. Stephenson, Clements, Kan.

WRITE FOR CATALOUGE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEND US YOUR NAME
For Our New Seed Catalog.
SEATTLE SEED CO., SEATTLE.

CHOICE RECLEANED SEED MILLET, $1 per bu.; sacks extra. J. H. Kean, Bowdle, S. Dak.

NURSERY STOCK 621

PRUNE TREES; THOUSANDS; GRAFTED walnuts. Trees of all kinds. Buy direct and save 50 per cent. No agents. Our prices sell. Write for planters' catalog and price list. 26 years in business. Carlton Nursery Co., Carlton, Ore.

HOMEST'DS, RELINQ'M'TS 642

FREE BOOKLET, STATE AND U. S. land. Maps. Bargains. Write Jos. Clark, Sacramento, Cal.

FARM LANDS—FOR SALE 651

2120 ACRES OF WHEAT LAND IN WALLA WALLA COUNTY.

2120 acres and all in cultivation; 12 miles from Walla Walla; 640 acres summerfallowed; 2 wells of water with gas engines and windmills; 2 sets of buildings and plenty of granaries and machine sheds; railroad station right on the land. This is a large farm and is capable of making big money for its owner. The price of $85,000 is certainly way below what it should be, but even at this price some trade will be considered.

ARTHUR D. JONES & CO.
ARTHUR D. JONES BLDG.
SPOKANE, WASH.

YOUR CHANCE IS IN CANADA — RICH lands and business opportunities offer you independence. Farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry. 92 Ninth ave. Calgary, Alberta.

FOR SALE AT BARGAIN.

Two quarter sections fine wheat land, southern Idaho; close good town and school; cultivated and fenced; 120 acres in wheat; 40 acres ready for spring seeding; one-third goes; some cash, bal. terms. Act quick. Owner. Albert Pietz, Aberdeen, Idaho.

12 ACRES FOR SALE, ADJOINING TOWN of Greenleaf, Idaho, in Payette-Boise irrigation district, on Wilder branch Caldwell Traction Co. Leveled, fenced and cropped for a number of years. Running water on place. Write Preston Mills, Greenleaf, Idaho.

MONTANA LANDS OF ALL KINDS, small payment; long time on balance. Can take good farm lands as part payment. Robert A. Hopkins, 617 First ave., Spokane.

SEE US IF YOU WANT TO BUY OR SELL farm lands. J. F. DEALY & CO., Spokane.

FARM LANDS—FOR SALE 651 Continued.

MONTANA GRAIN AND DIVERSIFIED farm land in Judith Basin, Shields River Valley, Great Falls District and other good districts. Prices $7 per acre and up for stock farms; $20 to $40 per acre for good grain land; small cash payment—balance easy terms and 6 per cent interest. Have a few places on which the owners will take some good Washington property as part payment—time on balance. Call or write for Montana land list and see us before you go. We can give you some pointers that will cost you nothing and will probably save you a lot of time and worry later. HEGE & SCHIFFNER CO., 715-17 Paulsen bldg., Spokane.

BARGAINS IN FARM LAND.

Our business is loaning money on farm and city property. Occasionally we have properties for sale which have come into our possession on account of foreclosure of loans. These we offer at practically the net cost to us, which is far below their real value, a small payment down, the balance on easy terms with low rates of interest. Send for list.
THE PENNSYLVANIA MORTG. INV. CO.
BOX SIX, SPOKANE, WASH.

GREAT NORTHERN LAND CO.

A non-resident needs money and directs us to sell 640 acres raw land with 500 acres of excellent wheat land, in a neighborhood where wheat yields from 25 to 35 bushels per acre; shipping point only three miles distant; at the give-away price of $9 per acre, one-half cash, balance to suit. This should be good value at $15.

For farm land come to headquarters.
G. N. LAND CO., COR HOWARD AND 1ST.

253 ACRES OF NO. 1 RICE LAND FOR sale at $75 per acre. One good crop ought to pay for the land and all expenses. Water from 8 to 16 feet from surface, and canal running along side of land. $40 per acre cash; would take other property in exchange for balance, or on terms at 6 per cent. C. R. Suggett, College City, Calusa Co., California.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

120-ACRE DAIRY FARM; 80 A. TILLable; 12 acres cultivated; 35 acres ready for plow; 5-room house, barn and outbuildings; 1 mile to town; price, including 9 milk cows, $4000; terms. O. V. Manring Investment Co., 22 Symons blk., Spokane.

1200-ACRE STOCK AND DAIRY RANCH, western Ore., near coast; well equipped; 280 in cultivation; finest kind soil; am offering best bargain in world; half cash, balance to suit buyer. For details address owner, Emil T. Raddant, Siletz, Ore.

154 A., ½ M. R. R., 35 M. SPOKANE, only $30 per a.; 90 a. natural black prairie, cult., bal. not cult.; just as good; large barn; no house; fenced; this is $60 land; ask why the sacrifice. Baldwin & Pfile, Lindelle blk.

RAW LAND, SPECIALLY SUITED TO poultry raising and dairying. Ask for our 1916 offer and monthly payment plan. Office Wall and Post sts., near Post street bridge. Phoenix Lumber Co., Dept. A, Spokane, Wash.

WESTERN WHITMAN WHEAT AND PASture lands from $10 to $40 an acre. Values increasing. Write me about what you want. I shall try to locate you here. H. M. Moffatt, Winona, Wash.

NORTHERN PACIFIC RAILWAY LANDS in eastern Montana at $2.50 to $18 per a. Suitable for farming or grazing. Easy terms. For information write or see W. E. HOLT, MILES CITY, MONT.

SACRIFICE 1400 ACRES; FINEST FARM in county; wheat, alfalfa; railroad station on place; near high school; stock, implements. Easy terms. Photo. Box 135, Ione, Ore.

FARM LANDS—WANTED 654

MAYBE YOURS IS JUST THE PLACE WE ARE LOOKING FOR.

If you want to dispose of your ranch, please write us or better come in and tell us about it. We have several customers for wheat and stock farms. Perhaps yours is just the farm we want.
ARTHUR D. JONES & CO.
ARTHUR D. JONES BLDG.
SPOKANE, WASH.

WRITE US A DESCRIPTION OF YOUR farm if you wish to sell. We get the cash buyers.
HEGE & SCHIFFNER CO.
715-17 PAULSEN, SPOKANE.

LIST YOUR FARM WITH US—WE SELL land.
G. N. LAND CO., Cor. Howard and First, Spokane.

FOR SALE OR EXCHANGE 702

MR. FARMER.

If you have any farm land or city property that you wish to sell or exchange for other property, write us for full particulars. We handle property in all parts of the northwest.
MAUSER & MAUSER.
JAMIESON BLDG., SPOKANE.

FOR SALE OR TRADE—$75 SIMPLEX cream separator for $60. A No. 1 skimmer, in first-class condition. Exchange for good, young brood sows with pigs, or for young pigs. A. H. Craven, Monmouth, Ore.

IF YOU HAVE FARMS FOR SALE OR exchange write us full particulars.
J. MELVIN THOMAS & CO.
EXCHANGE BANK BLDG., SPOKANE.

TO EXCHANGE—REAL EST. 705

MEADOW FARM FOR TRADE.
15 COWS, HORSES, MACHINERY.

280 acres, nearly level; 145 acres now farmed; some clover and timothy; creek and well water; 120 acres timber; 2 miles to town, 70 to Spokane; good buildings; 15 cattle; 4 horses; feed and all farm tools. Price $75 acre; mortgaged $3600 at 7 per cent; want smaller farm with stock and etc., or money. Please give full description and price first letter.
SUBMIT YOUR TRADES.
PACIFIC INVESTMENT CO.
209 EAGLE BLK. SPOKANE, WASH.

WANTED—GOOD REAL ESTATE IN eastern Washington, as first payment on a few good farms in Montana. Call or write and tell us what you have, but put your price at its cash value. Hege & Schiffner Co., 717 Paulsen bldg., Spokane.

SEE US FOR ALL KINDS OF TRADES if your property does not suit you. Rogers & Rogers, Spokane.

Embargo on Wheat

Chicago Grain Man Tests Public Sentiment

Both in Washington and throughout the country talk of an embargo on farm products is fading away, and it now seems assured that no legislation of that character will be passed at this session of congress.

President Wilson's disapproval of the movement, and the danger that an embargo law might involve the United States in serious diplomatic controversy have had much weight with many congressmen who were at first inclined to look upon the plan with approval. It is pointed out that agents of foreign governments, particularly of the British allies, have contracted for large supplies of wheat and other cereals, canned salmon, vegetables and fruits, dried fruits and other food products, and the passage of a law prohibiting the fulfilment of these contracts would be resented as an act of unfriendliness on the part of the American government.

A Chicago grain man has been testing public sentiment on an embargo and his conclusions, as published in the Modern Miller, do not seem at all favorable to it. He put the following question to a large number of his correspondents:

"What do those in your community think about the agitation favoring an embargo on export shipments of wheat?" The answers may be summarized as follows:

Consumers are for it; producers are against it!

Town people are for it; country people are against it!

Laborers are for it; farmers are against it!

The "shorts" are for it; the "longs" are against it!

"Proposals to embargo shipments of foodstuffs from one country to another, or from one state to another," says the investigator in his inquiry, "have been topics of recurrent interest, discussion and legislative action ever since the days when the Pharaohs reigned in the fruitful valley of the River Nile.

"The first embargo to be established by our government was in 1794. There were various embargoes afterwards, enacted by congress upon recommendation by the president, between that period and 1815. While it is true the embargoes were instituted as retaliatory measures, yet history shows conclusively that the effects of the embargoes were contrary to the anticipations of the American people and the legislators, their utter futility being demonstrated.

"During the war between France and Great Britain, beginning in 1793, both countries ruthlessly seized our vessels bound for foreign ports. The depredations upon our commerce caused congress to place an embargo on export shipping, which prohibited trading with Great Britain and her colonies.

"If we are to judge what may happen in the future by what has actually occurred in the past, from an unbiased viewpoint, then our conclusion must be that the placing of an embargo upon foodstuffs by congress, would lead to commercial depression in agricultural products, and would not lower the price of bread—which is the issue—so materially that the working man, no matter what his daily pittance may be, would notice any difference in living costs whatsoever.

"A small loaf of bread today costs 7 cents retail. An average family in the United States, according to government figures, is composed of five. It is quite probable that five will eat two loaves of bread per day. For generations the family of five has paid 5 cents per loaf for bread. Today it is paying 7 cents. The question at issue then is:

"Whether or not this government should place an embargo upon wheat, thus reducing the cost for bread to the average American family from 14 cents per day to 10 cents, thereby effecting a saving of 4 cents per day, less than 1 cent for each member of the average family.

"Can the United States government afford to disrupt the channels of commerce; to lay us wide open to foreign retaliation; to reduce the value of the products of the farm millions of dollars; to take away the great opportunity of the American people to help those in other lands, simply to reduce the price of bread 4 cents per day for the average American family?"

Grain Convention

Wants Grain Standardization Act

(Continued from page five.)

elements in the soil. He branded the burning of stubble as harmful and wasteful, advocating the plowing under of the straw that it might become valuable humus in the soil.

Plow deep and corrugate the fields before the coming of winter were two points of his advice. He declared that much of the water that usually runs off during the melting periods could be held and put into the soil if the fields were properly corrugated before snowfall. Such system would also prevent much washing of the land, he added. In order to make this most effective, the corrugation should always be done around the hills, never up and down them. Any implement that would leave the surface rough and uneven would serve the purpose, though he advocated the use of a spring tooth harrow, with teeth about two inches wide. One good harrowing in the spring would, in most soils, put the field back in fine condition for holding the moisture during the dry season.

Eight inches is none too deep to plow, he argued. He said there should be a good soft seed bed two inches deep, and a well packed root bed below it of six or more inches.

"SWAT THE GRAIN SACK"

Bulk Handling Proves a Problem.

The bulk handling of grain occupied the attention of the grain convention one-half day's session. In the absence of G. Lansing Hurd of Oregon Agricultural college a paper on the subject written by him was read by Secretary Shaffer of the grain association.

Mr. Hurd said that in his opinion the handling of grain in bulk was inevitable, and very desirable. He said that experince had shown the system to be practical; that there had been built already 35 elevators in the Columbia river basin, and that by the 1917 harvest 100 more would be ready to handle grain. Admitting that the large number of varieties of grain grown in the northwest worked against the system, he advocated a reduction of the number of varieties produced, expressing the belief that it would be better from several viewpoints if only a few standard varieties were grown.

Smut Makes Trouble.

Opening the discussion of the subject, Huston McCroskey of Garfield said he considered that the smut problem affected the bulk handling problem vitally; that bulk handling required much mixing of wheat and that to mix a little smutty wheat with a lot of clean would reduce the grade of the whole seriously. Others present agreed with him that this was a big question, to be solved only through the solution of the smut problem itself.

R. T. Lord of Spokane spoke against the institution of bulk handling, declaring that grain could be handled just as cheaply in sacks. He produced figures showing that warehouse expense was less than elevator expense. His figures assumed that both the warehouse and the elevator could be emptied once during the season, but others present said that the elevator could be emptied and refilled several times, thus greatly increasing its actual capacity and thereby reducing the cost per bushel for storing and handling. Mr. Lord's figures, based on the assumption referred to, indicated that handling in sacks cost slightly less than 2 cents per bushel, while handling in bulk cost considerably over 2 1-2 cents.

Others who favored the bulk system said that he had overlooked the cost of sacks, which was one of the most important features, and that it far outweighed the saving which he claimed.

Boy's Corn Best

Judged as the Sweepstake Entry

Exhibits and prizes taken at the recent national corn show at St. Paul, Minn., will go far to refute the long maintained but mistaken nation that the Pacific northwest is "not a corn country."

Many prizes were awarded to exhibitors from Montana, Idaho, Washington and Oregon, and a notable feature was the judging of exhibit entered by W. E. Starkey of Prosser, Wash. His entry of 10 ears of Yellow Dent corn was considered by the judge to be the best sample at the show, and was given preference over all other entries, in both men's and boys' classes. The selection of 10 ears was made from corn grown on a 10-acre field which yielded more than 100 bushels to the acre. Master Starkey is but 13 years old, and the fact that he was honored by having his exhibit judged as the sweepstake entry over hundreds of others is a remarkable one.

While all parts of the Pacific northwest are not adapted by nature to the profitable growing of matured corn, there are extensive areas in the warm valleys of the Columbia and its tributaries where corn of the best quality and abundant yield may be profitably produced. That fact was well known to the earlier pioneers, but was lost to view in the subsequent settlement of the elevated regions like the Palouse country and the Big Bend. A memorial sent to congress by the Washington legislature in 1866 set forth the interesting fact that:

"The Walla Walla valley, including that portion which lies in the state of Oregon has produced this season 500,000 bushels of wheat, 250,000 of oats, 200,000 bushels of barley and 150,000 bushels of corn."

Fifty years ago corn growing was considered an important industry in the Walla Walla valley, and 75 years ago corn was grown extensively by the Hudson's Bay company at old Fort Colville in the Columbia valley.

The Washington Farmer was pleased to receive a call from C. A. Parker, teacher of the Valley Heights school, five miles from Prosser, in Benton county, where William E. Starkey is a pupil. Mr. Parker reports that he saw the telegram from the corn show authorities at St. Paul announcing that William E. Starkey had been awarded the sweepstakes entry and requesting a photograph of the lad to be immediately sent.

The father, E. E. Starkey, was awarded a second prize in the district, including Benton, Walla Walla and Yakima counties, while another son, Edward Starkey, was awarded a third prize.

Following is a list of winners in the men's contest from Washington state, giving the number of prize, name, town and county:

District No. 1.

1—J. J. McLaughlin, Oroville, Okanogan.
2—J. A. McGinty, Oroville, Okanogan.
3—C. M. Bottomley, Oroville, Okanogan.
4—John R. Wood, Oroville, Okanogan.

District No. 2.

1—Stubblefield Home, Walla Walla, Walla Walla.
2—E. E. Starkey, Prosser, Benton.
3—Simon Shafer, Outlook, Yakima.
4—Walton Terry, Sunnyside, Yakima.

District No. 3.

1—Shadinger Bros., Snohomish, Snohomish.
2—W. Caruthers, Tacoma, Pierce.
3—E. E. Burns, Mt. Vernon, Skagit.
4—J. W. Hall, Mt. Vernon, Skagit.

COWLITZ FARMERS

In Federal Loan Association.

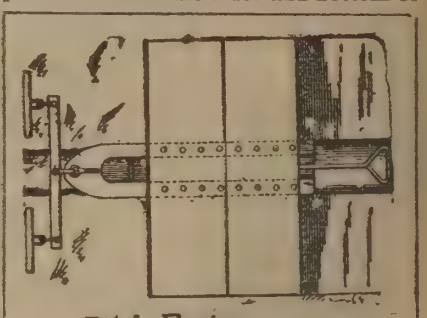
Organization of the Carrolls Federal Farm Loan association has been completed at a meeting of interested farmers of the Carrolls, Shanghai and Mount Pleasant districts at Kelso, Wash. The association will include members residing between Kelso and Kalama. Twenty-three members who have applied for loans aggregating $32,000 formed the charter organization. The directors were chosen as follows: H. D. Phillips and A. J. Lewis, Kelso; C. M. Woods, A. W. Rankin and W. T. McDaniel of Carrolls, and W. S. Carson and Harry Lee Lewis of Kalama.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Irrigation Ditch Packer.

The metal boat-like body of this packer smooths the sides and bottom of

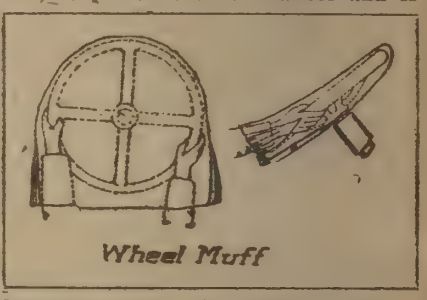


Ditch Packer

the irrigation ditch, the top planks smooth the surface on either side and keep the packer at a uniform depth. The resulting smooth ditch permits an even distribution of water.

Steering Wheel Muff.

This muff is made of warm cloth or fur; it passes over the wheel and is



Wheel Muff

buttoned around the steering post on the under side.

Calf Muzzle.

This muzzle is a bag made of interwoven iron rings and held open at the

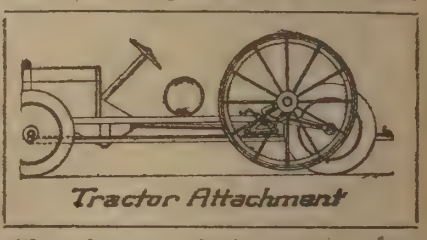


Calf Muzzle

bottom by a large ring. It permits the calf to feed on grass and shrubs, but prevents it from sucking its mother.

Tractor Attachment for Automobiles

The device is attached without altering the car in any way and it is so made that the operator can at will make

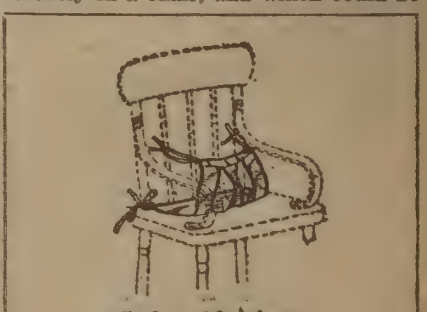


Tractor Attachment

either the rear wheels or the tractor wheels bear on the ground. Each rear wheel drives a pinion which in turn drives a tractor wheel.

Baby Holder.

Women with small babies will be interested in a device which holds a baby securely in a chair, and which could be



Baby Holder

made in a few minutes. It is an oblong piece of muslin with two leg slits near one end. It is bound with tape and has tapes at each corner for tying.

NEWS FOR BREEDERS

Shorthorns

Are the Big Favorites in Texas

By PAUL E. TRIEM.

William Seipp of North Yakima says that Washington is good enough for him. He has a 10-acre apple orchard and raises a few fine horses, and he knows that a "norther" is not going to blow down upon him and freeze him or a gulf storm come hurling inland and lay his crops low.

"When one of those blizzards from the north hits Texas," says Mr. Seipp, "the thermometer may drop as low as 20 above—and that's cold in Texas. A man won't go out in the field to work, and in fact he won't go out at all while the storm lasts, if he can help it. And the gulfs storms seem to be getting more frequent. I've had one of them blow my cotton so flat that we could hardly save any of the crop.

"But don't imagine for a moment that Texas is a wild and wooly country, filled with lean, long horned steers," continued the fruit farmer. "There are some mightly fine cattle in Texas now. The shorthorn is the big favorite, but the first shipment of bulls from the north came near being the last. There were close to 50 fine animals in it, and within a year of the time they landed from the car most of them had died. No one knows, to this day, what killed them, but for a long time it was supposed northern cattle couldn't live in our part of the country. Then is was noticed that the progeny of the bulls that had survived were enough better than anything else in the neighborhood to pay for taking the risk, and the native cattle were doomed from that day. You can travel for miles through Texas now and see nothing but herds of purebreds."

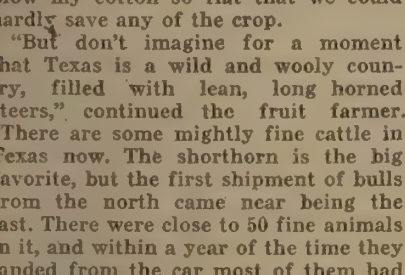
Sheep Fed at Washougal.

In the last year the largest sheep-feeding sheds in the northwest were built at Washougal, Wash., at a cost of nearly $7000 by Frank Russell and G. C. Sheppard. The sheds, six in all, adjoin the tracks of the Spokane, Portland & Seattle railroad, with a capacity of 12,000 sheep, and are fitted with a closed shipping platform which makes possible the loading of 15 carloads of sheep at once. Last winter 70 carloads of sheep were brought here from eastern Oregon and Washington and fattened for two months and placed on the Portland market. This year Mr. Russell is fattening 4000 lambs and sheep, which will be shipped next week to the Seattle stockyards.

Damages for Injured Bull.

J. J. Miller of near Sumner, Wash., has just been awarded a judgment of $250 for injuries inflicted last September on his registered Holstein bull by a bull owned by Santo Gardella, a neighbor. After Mr. Miller had sued for $1500 damages in the Pierce county courts, both neighbors agreed to settle the matter by a tribunal of cattle experts, including William Bishop of Jefferson county, George Gue of Yakima county and Judge E. R. Brady of Grays Harbor county.

PRIZE-WINNING HOLSTEIN.



The above is a photo, snapped by the Farmer camera, of Oregon Lundy Friesland, first prize two-year-old and senior and grand champion Holstein bull at the Pacific International Stock show, at Portland, Ore., December 4-9, 1916, and owned by P. A. Frakes, Scappoose, Ore.

Mr. Frakes is usually rated as the pioneer Holstein breeder of the northwest, because he has been in the business longer than any other man now breeding Holsteins. He used to make the show circuits and win a majority of the ribbons, but of late years has not exhibited Holsteins to any extent and other breeders have become as well or better known than "Daddy" Frakes. But in winning with Lundy Oregon Friesland, a bull strictly of his own breeding and a direct descendant of his old bull, Lundy Oregon De Kol, that was grand champion at the Lewis and Clark exposition in 1905, besides also winning a fair share of the other prizes, Mr. Frakes has proven that he can "come back." There is not a Holstein breeder in the northwest but likes to see Mr. Frakes win. His smile and jovial, kindly words make "Daddy" Frakes as popular as his Holsteins.—H. A.

Young Jersey Bull.

During Farmers' week at the Oregon Agricultural college, January 2-6, A. D. Gribble of Aurora, Ore., purchased the choice young Jersey bull Edith's Oxford Noble, from G. S. Hewitt of Monmouth, Ore., who bred him. The young bull was senior calf and headed the first prize herd at the Oregon State fair, 1916. His dam, Edith's Oxford Belle, was first prize senior yearling at the Oregon State fair, 1914, and has just completed a record of 525 pounds of butter with second calf. His sire, Golden Fern's Noble Jr., is sire of five in the Register of Merit and was first prize aged bull and senior champion at the Panama-Pacific stock show, 1915. He is a show bull and Mr. Gribble is to be congratulated on the purchase.

H. A.

Fine Belgian Mares.

E. M. Ackerman has taken from Salem, Ore., to the A. D. Sloan ranch near Pilot Rock his fine Belgian mares and stud. One of the mares is a direct importation from Belgium.

BRAZILIAN CATTLE EXPOSITION.

Writing from Rio de Janeiro under date of November 17, 1916, Consul General Alfred L. M. Gottschalk says that the Brazilion international cattle exposition is to be held in May, 1917, and in developing the project emphasis will be placed not only upon the fact that the cattle industry is important to Brazil's economic future, but also upon the view that the Brazilian herd may be improved and made to furnish types suitable for the export packing business by the introduction of foreign sires. American cattle raisers will find an opportunity to show clearlyy what types of American live stock would be suitable for Brazilians to import for the betterment of the native stock. Swine and sheep should receive attention as well as bovine stock.

That the Brazilian native stock already possesses some excellent types has been proven by the shipments of Brazilian meat that have gone abroad. They are from ancient Portuguese cattle, more degenerated in some parts of the country than in others, but furnishing some fine specimens, admirably adapted to the climate and pasture. The National society, at the same time it is working for a cattle exposition, is making preparations for a cattle congress to be held at the same time, at which lectures and debates and the interchange of opinions between cattle raisers from all parts of Brazil will be a feature.

Aberdeen Angus Is Champion.

Louden's Live Stock Journal: Smithfield week, with its excitement and its round of meetings, is just the same in days of Armageddon as in times of peace. Of the one hundred and eighteenth exhibition, just closing down as these lines are printed, it can be said that the wisdom of the council in going on with the show has been well proved, for although entries were fewer, the quality of the stock submitted to the judge was never better. There was a plethora of "tops"—for at least half a dozen good animals were worthy of winning outright the cattle championship—and an absence of "bottoms," the mediocre "also rans," so to speak, who pad out the stalls chiefly to catch the eye of the London butcher on the lookout for a Christmas carcase of some show repute. For the third time in his career John J. Cridlan won the cattle championship with an Aberdeen-Angus, a steer this time, against two victories in the past with heifers. So, since 1869, when this Smithfield battle of the breeds was first instituted, the Aberdeen-Angus has triumphed 17 times out of a possible 48, the Shorthorn still holding the lead with 20 victories, crossbred cattle having won on five occasions and Devons and Herefords on three occasions each.

Reports Good Stock Sale.

Auctioneer Bert Wilson reports to the Idaho Falls Register that the W. T. Riley sale is the best that he ever held. Everything sold well. The first five horses offered brought over $200 a piece, the first cow put up for sale sold for $200, a 7-year-old milk cow sold for $125, several others for $200 and over, and weaning calves sold for as high as $33. Nearly all of the sales were paid for in cash.

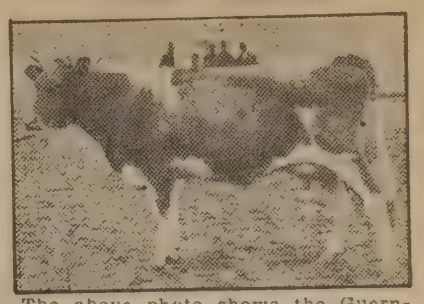
Holsteins for Hawaii.

The purchase of 20 head of registered Holsteins from the Carnation Farms in King county by Dr. Hobert Hind, a plantation owner of the Hawaaian Islands, is an indication of the reputation that Washington dairy stock has established in the country. Dr. Hind visited the United States with a commission from a number of friends and business associates to purchase registred Holsteins.

Famous Bull Dies.

The Shorthorn bull, Royal Master Donald, has died at Buenos Aires. He was sold there at auction for 55,000 Argentine dollars (about $22,200). The conditions ruling are that all animals sold must be handed over to their purchaser sound and free from disease. He was attacked by "aftosa," and this prevented the bull being accepted by his buyer.

A WINNING GUERNSEY.



The above photo shows the Guernsey 2-year-old cow, Algoma of Chicona, owned by A. L. Gile of Chinook, Wash., as she appeared to a Farmer staff artist shortly after winning first in her class and senior and grand championship at the Pacific International Stock show at North Portland, Ore., December 4-9, 1916. Along with her other good points, Algoma of Chicona has a sweet, almost perfect head, something not always found on a Guernsey cow. She is a good producer as well as a show animal and will in time be given an official record.

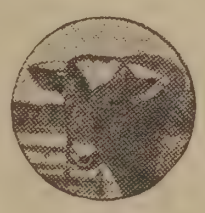
Mr. Gile has a large working herd on his Chicona farm at Chinook and most of his cows have advanced registry records.

Teach Art of Milking.

Rubber models of essential parts of cows have been invented in England to give girls who are learning to be milkmaids practical instruction.

Breeders' Department

SHORTHORN CATTLE



Gainsford Perfection 442173

Hercules Shorthorns

We can supply you with choice, well grown breeding stock. Your inspection of our herd is invited. Visitors always welcome.

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HOLSTEIN CATTLE

Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.

Write for pedigrees and terms.

H. R. BOOMER, New Plymouth, Ida.

Avalon Dairy

A splendid lot of Young Holstein Bulls for sale, sired by Hartwood Heilo Hengerveld (129524), first prize winner at Gem State Fair, 1916, and King Lyons Spofford 13th (99451). Prices reasonable—time payments at 6 per cent interest. Correspondence solicited.

AVALON DAIRY, Kuna, Idaho.

HOLSTEIN CATTLE

Young stock by richly bred grandson of King of the Pontiacs.

A. E. SMITH. Sumas, Wash.

BUFFALO DUKE DOEDE

(102228) Heads my herd. He is a half brother of world's record cow, Dutchess Skylark Ormsby, producing 1506 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.

H. H. STIYER. Buhl, Idaho.

WATERLOO HOLSTEIN FARM.

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje | King Segius 10th, Segius Walker, Pietertje 2d

C. F. JENNESS. Meridian, Idaho.

HOLSTEIN BULL CALVES FOR SALE.

From 4 to 10 months old. SIRED by ASH GROVE VILLA NETHERLAND. Prices very reasonable, quality considered. Correspondence Solicited.

F. O. JOHNSON, Meridian, Idaho, R. R. 2.

HOLSTEINS FOR SALE.

Pure-bred bulls of serviceable age, priced right. Correspondence solicited.

J. R. LONG, R. F. D. No. 4, Buhl, Idaho.

RED POLLED CATTLE

RED POLL FARM.

REGISTERED RED POLLED CATTLE. Grand champion bull and cow 1916 Gem State fair are producing some excellent stock. Bulls for sale.

William Welck, R. No. 5, Caldwell, Ida.

JERSEY CATTLE

JERSEY ISLE STOCK RANCH.

Imported Jersey Isle cattle. Young bulls and heifers for sale from sire and dams of choice Island breeding.

C. E. LONG, Prop., Buhl, Idaho.

HAMPSHIRE SWINE

HAMPSHIRE SWINE

Won first on boar 1 year and under 18 months. Won first on young boar and sweepstakes on same at southern Idaho fair, 1916. Young stock for sale. Fairview Stock Farm.

ANTON MACHACEK. R. 1, Buhl, Idaho.

POLAND CHINA SWINE

FRUITLAND STOCK FARM.

POLAND CHINA HOGS.

Herd headed by SUBERBIA JR. (241305), assisted by IDAHO EXPANSION (54305) AND SAMMY (79833).

TOP FOR SIZE AND QUALITY.

THE FARMER'S HOG.

Breeding stock for sale. Pedigrees furnished with all hogs sold.

Correspondence solicited.

J. M. ROYSTON ESTATE.

CHAS. C. ROYSTON, Mgr.

PAYETTE or FRUITLAND, IDAHO.

POULTRY

Highland Fruit and Poultry Ranch

Breeder of Standard Bred Rhode Island Reds and Rhode Island Whites, both combs. Eggs in season. Have fine dark red or pure white cockerels, both combs, good in type, $3.00 up. Bronze turkeys and Toulouse geese from Blue Ribbon stock. Belgian hares, $3.00 up. Airedale puppies.

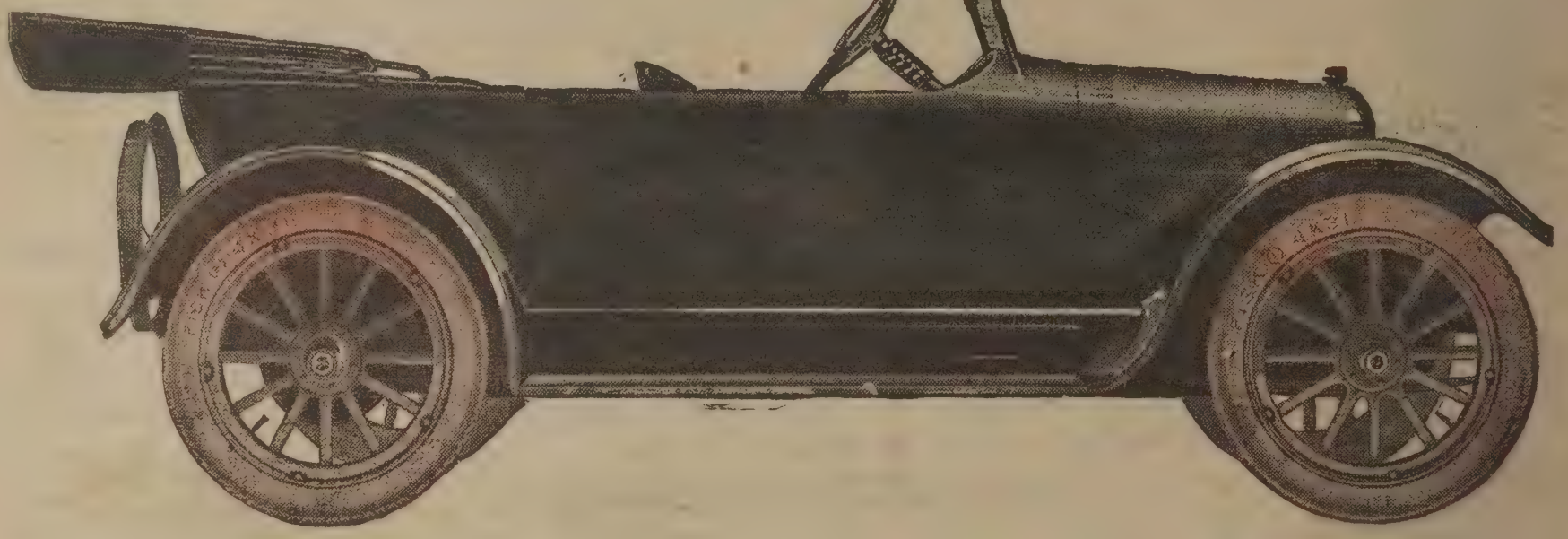
J. Nonnenmacher

R. F. D. 3, North Yakima, Wash.

The department editors of this paper are anxious to be of service to you Do not fail to write to us if they can be of help to you.

The Light Four
5 Passenger Touring
$665
f.o.b. Toledo

Overland
TRADE MARK REG.



A Complete Line of Automobiles
All New Values

From your point of view this announcement is most important.

For herein we set forth the achievement toward which this company has aimed for the last eight years.

This achievement in a word is the completion of our gigantic organization to a point where we could make and market a complete line of automobiles under one head.

One executive organization,
—*one* factory management,
—*one* purchasing unit,
—*one* sales expense,
—*one* group of dealers,
plan, produce and sell the entire line.

Buying power is concentrated. Costs are distributed over all these cars. The savings are tremendous.

As a result we are producing cars of exceptional quality—and marketing them at unusually low prices.

Every car is built to a rigid standard of performance, comfort and appearance.

The new Light Four at $665 is a striking example.

It has good style—built low with harmonious and full sweeping body lines. It is a beautiful car in every sense of the word.

The motor is powerful, quiet and of sturdy construction. The turning radius is short. The car has a quick acceleration and is built to tour safely and comfortably from the Atlantic to the Pacific.

And with all these good qualities *it rides beautifully.* The soft cushions, the long resilient cantilever rear springs, the large tires (31x4) and the proper balance in construction absorb all types of jolts—the choppy cobblestone, the cuppy macadam and the heavy ruts and thank-you-ma'ams of American highways.

Yet this is but one of the new Willys-Overland values.

Never before have the economies of vast production been available for buyers of every class of car.

And the Overland Policy of greater production, higher quality, lower price is exemplified in every model and type.



Two Passenger Roadster
Light Four, 104 in. wheelbase; $650



Four Seater Sport Model
The Country Club, 104 in. wheelbase, $750



Big Four Roadster, 112 in. wheelbase, $835
Light Six Roadster, 116 in. wheelbase, $970



Big Four Touring, 112 in. wheelbase; $850
Light Six Touring, 116 in. wheelbase, $985

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Manufacturers of Willys-Knight and Overland Automobiles
"Made in U. S. A."
All prices f. o. b. Toledo

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. JANUARY 18, 1917. ** NO. 3.

Lister Urges Absolute Prohibition Law

Asks Legislature to Prohibit Even Shipment of Liquor Into State of Washington

"I feel that our state ought to follow the lines adopted by the adjoining states of Oregon and Idaho, and its legislature pass a bill that will also make it illegal to import intoxicating liquors into the state. The benefit to the people is so apparent that I believe you will be acting wisely if you enact into law at this time a measure that will bring about absolute prohibition in the state."—From the governor's third biennial message.



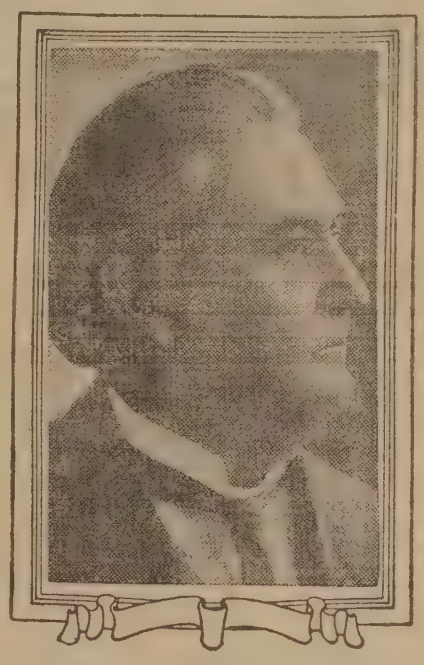
Governor Ernest Lister, shown above, has just begun his second term as chief executive. He is the only governor of Washington, other than John R. Rogers, who has ever been reelected.

This from the message of Governor Ernest Lister to the state legislature, together with two additional facts—that the legislature had already adopted almost unanimously a resolution asking congress to pass a nation-wide prohibition act, and that since that time a bill prohibiting intoxicants in this state absolutely has been introduced—indicates what may be expected of the Washington lawmakes this year on liquor matters. Indications point to the passage of a "bone dry" measure, which would place all three of the far northwestern states under absolute prohibition, Idaho and Oregon having already such laws.

Smaller Legislature.

Governor Lister also recommended that the legislature consider a reduction in its membership, suggesting that one house of 25 members might serve the needs of the state as well as the two houses of a total of 139 members do now.

He repeated his recommendation of two years ago that the legislature call a constitutional convention to revise thoroughly the present state constitution. Among his other recommendations are: That no new state highways be established until the present system is completed; that 25 per cent of the automobile license money collected be turned into the state highway fund to be used in repairing and maintaining highways already constructed; that the rate of interest on delinquent taxes be reduced from 15 per cent to 12 per cent; that the state militia be made smaller and more efficient rather than larger; that appropriations be held down to the lowest possible point consistent with proper conduct of the state's affairs; that the state tax commissioner be reduced from three members to one; that the governor be given greater power in deciding what appropriations of money should be made for the maintenance of the state government and be held correspondingly more responsible.



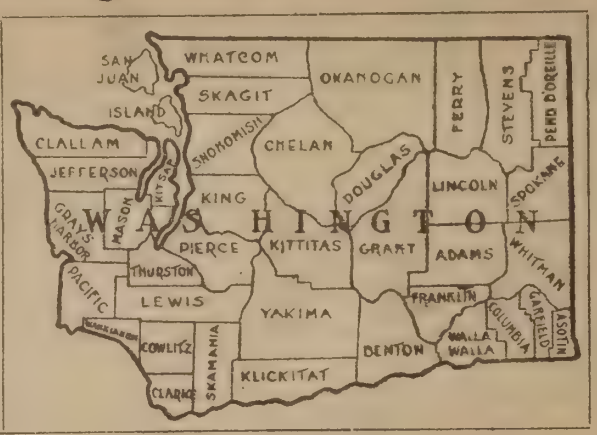
Lieutenant Governor Hart, the regular presiding officer of the Washington senate. He is a republican presiding over a body strongly of the same party. Both houses of the legislature have republican majorities.



Guy E. Kelly, republican, who was chosen speaker of the Washington house of representatives unanimously.

Are Building Cement Barns

Grant County Farmers Have Lower Parts of Barns Made of Cement to Protect Their Live Stock in All Kinds of Weather



Are Building Barns.

EPHRATA, Grant County, Wash., Jan. 11.—A number of farmers have built rather extensive barns the last fall; most of these barns have the lower part made of cement, built high enough for the stock, the upper part of the barn being constructed of wood. The high price of wheat the last two years has enabled the farmers to put in better farm buildings and to equip them with modern machinery. Every indication points to a large increase in the number of silos another year, as the dairying industry seems to be on the increase, as the grass stays green only a short time in the spring and silage is needed to help hold the flow of milk.

There has been practically no fall wheat sown in this county, as there was not enough moisture in the fall to get it up. H. W. REAUGH.

Cranberries Increase.

SOUTH BEND, Pacific County, Wash., Jan. 8.—Some farmers are planning to raise more potatoes next year; the present price is 2 1-4 cents a pound. There will be more silos built next year and this will increase the crop for ensilage. The growing of cranberries is increasing, also. We need better roads in our rural districts, although they are improving every year. We have had very little cold weather or snow. This county grows very little grain. Rye is up and green. Fuel is scarce. The county agriculturist, H. C. Wilcox, has arranged for a series of lectures to be given later in the month at four different towns in the county. The topics for discussion will be those of interest to the farmer.

MRS. WINNIFRED BUCKINGHAM.

Stock Winter Well.

STEVENSON, Skamania County, Wash., Jan. 7.—We have been having ideal winter weather so far, with plenty of rain, although everything is at a standstill at present on account of the rain and soft roads. Stock is wintering well. W. T. JACKSON.

Poultry Increase.

GIG HARBOR, Pierce County, Wash., Jan. 1.—The most marked increase in any one line of production among the small ranchers of this district is found in the line of poultry production—mainly for egg production. Even in these days of high-priced feeds, it remains fairly profitable. It is an industry that does not necessitate much team work and calls for no heavy transportation charges. It is the one steadily growing industry that offers a generous margin of profit to the careful and painstaking attendant. It is quite evident that this can never become a grain growing region. I do not know of a threshing machine on this side of the water. While a considerable quantity of oat hay is grown here and some other grains are allowed to ripen to be fed in the bundle, we can hardly signify this with the term of grain-growing.

Perhaps the most glaring lack in the lines of farm production is found in that of hay. While it is possible to raise excellent crops of clovers and vetches, our small ranchers are still buying heavily of the alfalfa and other feeds from the counties east of the Cascades. There is a slow but steady opening up of new ranches and enlarging of old ones. With the completion of the new ferry project this extension will no doubt be greatly accelerated.

W. D. BOYNTON.

Large Bean Acreage.

GILBERT, Clearwater County, Idaho, Jan. 6.—The farmers of this section are making a strong effort to raise better stock and do away with scrubs. The Shorthorn and Red Polled cattle are the leaders, as they are a good dual breed. There will be a considerable increase in the production of beans in this locality the coming season, due to the big price received last year, and good prospects for a higher price the coming year. Every available foot of tillable land will be planted to beans and grain. The most noticeable improvement in this community is the drilling for water on the farms. Several have been drilled, with the result that excellent water with a flow of two to three gallons per minute, at a depth of from 150 to 200 feet has been obtained. There have been many barns and silos built during the past year. Fall grain is not being damaged any at the present time, as it is sheltered by the covering of snow.

W. S. CUNNINGHAM.

Winter in California.

LEWISTON, Nez Perce County, Idaho, Jan. 5.—Many cattle have been shipped and on account of the high price of grain, very few hogs are left in the country. A great many of the farmers are spending the winter in California or Florida. No new buildings are being put up and but very few will be built the coming season, and as far as I know, no new silos. Automobile people seem to be about the only concerns that are interesting the farmer in this part of the country. Practically every farmer has now purchased a machine. We have had considerable snow the past 30 days; anywhere from 6 to 18 inches. This is a great benefit to fall grain, in view of the fact that the ground was not frozen since the snow fell. Practically all the moisture will soak in. W. J. JORDAN.

Are Building.

FERDINAND, Idaho County, Idaho, Jan. 6.—There is no noticeable increase in any one branch of farming. Dairying is very little carried on here. There are very few improvements made in this farm community; only a few barns were built, but the town of Ferdinand is growing constantly, and quite a few houses and barns were erected this winter. There are only two silos in existence in this community, and the owners speak well of them. The fall grain is considered to be safe so far, as it is covered with a heavy blanket of snow, but it is too early to pronounce it safe, for now it depends mostly on the weather.

H. W. UHLENKOTT.

Dairy Products Decrease.

WEIPPE, Clearwater County, Idaho, Jan. 9.—This country has increased in all its produce with the exception of dairy products, which are decreasing. Roads are the greatest improvement in this locality. We need the cooperation of the farmers here more than anything else in this community. A number of new buildings and silos were put up last summer. We have very deep snow at this time. C. W. SPACE.

Many Beets in Ground.

PRESTON, Franklin County, Idaho, Jan. 1.—The cold weather started earlier than usual this year. The farmers were not as well prepared as usual. The stock did not suffer to any great extent from the cold. There were several acres of beets left in the ground. Fuel has been rather scarce, but coal is only 50 cents a ton higher than usual. We raise both spring and fall pigs, but the spring pigs do better than the fall pigs, and the farmers, as a rule, sell them on foot. F. T. BENSON.

Stock Men Buy Bonds.

CHALLIS, Custer County, Idaho, Jan. 7.—There is nothing especially new in this district. All the sheep and cattle men have made and are making so much money that they spend their spare time looking for bond investments.

MILTON A. BROWN.

Farm Clubs Plan Plays.

MILES CITY, Custer County, Mont., Dec. 16.—Everybody was ready for the recent cold snap, except the coal men, who seem to have their troubles these days in getting cars. The weather has not been severe enough to cause any suffering of stock. Fall work was cleared away in good shape during the long period of mild weather of November. Very few fall pigs are grown in this county or this end of the state. Breeders generally are not prepared to take care of them, but those that have given attention to fall pigs as a rule have secured very favorable results. A good many farmers dress their own hogs, not so much since local buyers have commenced operating, but this practice usually brought as good or better prices for a limited quantity as selling them on foot. Several carloads of hogs shipped from this point this fall have brought very good prices on eastern markets, ranging from 8 1-2 cents to 9 1-2 cents. The county agent recently visited a number of the farm clubs, attending meetings and holding demonstrations. Several of the clubs are planning home-talent plays, festivals and short courses for the winter months in the way of entertainment.

J. C. TAYLOR.

Thirty Below Zero!

SULA, Ravalli County, Mont., Jan. 1.—The weather here has been cold during the holiday week, the thermometer remaining below zero most of the time, and in many places as low as 30 degrees below zero. All the ranchers are well prepared for the cold spell, however, with abundant fuel and sufficient food and shelter for all stock. Eight carloads of cattle have been sold out of here this fall, at good prices. Stock of all kinds are looking good. While this is a cattle country, there are a few sheep being raised here to good advantage. Some hogs are raised here for market. They are generally killed and dressed on the ranch. We are looking forward to an unusually prosperous season. More fall wheat is in the ground than any previous year, while more plowing and seeding will be done this coming spring than before. W. A. LYMAN.

Railroad Boosts Klamath.

KLAMATH FALLS, Klamath County, Ore., Jan. 8.—Quite a large number of the farmers of this county are stocking their farms with sheep. These farm herds seem to be the salvation of the small farmer. The grain acreage for next year will be increased somewhat, particularly that of oats and barley. There are no silos in Klamath county. Very few dwellings or barns are being erected. The heavy snows of this season protect the fall grain, and as yet no damage has been done. Lack of adequate transportation has been the big drawback to this county. This condition will be remedied in the near future by the building of the Strahorn railroad, which will give the county direct transportation to Portland and eastern markets. The completion of this line will mark the beginning of a new era here.

FRED PETERSON.

Have Open Winter.

CLEM, Gilliam County, Ore., Jan. 8.—Owing to a dry fall, about 90 per cent of the fallowed ground was unsown. The small acreage sown has not been damaged by cold, so far. While there has been some cold weather, the winter has been remarkably open, and live stock is doing well in pastures. Crops have been excellent in this part of the county and the prices good. No great amount of grain is in the hands of the farmers and much that has been sold is still in the warehouses awaiting cars in which to ship it.

S. C. DODSON.

Would Compete With Railroad.

MIKKALO, Gilliam County, Ore., Jan. 8.—There will have to be some reseeding done this spring, as some of the grain that was sown in the dust has rotted. This country needs most, at present, a hard-surfaced road to the Columbia river, which would enable us to put on automobile trucks and get our freight on the river bank, thus saving the high railroad rate which we have to pay. J. B. ASHENFELTER.

Want Meat Producers.

OPAL CITY, Jefferson County, Ore., Jan. 8.—This community is endeavoring to increase its products in every practical way, especially in grain, stock and dairying, also potatoes. More interest is being shown in dairy products, but the general sentiment is fast turning towards a beef strain of cattle and sheep, which will, undoubtedly, be put into effect in a very few years.

D. E. WHITE.

More Live Stock.

CANYON CITY, Grant County, Ore., Jan. 7.—This community is increasing its production in live stock, grain and dairying, raising the best breeds of live stock possible. The farmers are also raising more grain and hay every year. No fall grain was sown last fall on account of the dry weather. If the weather will permit in the spring, there will be more grain sown than ever before. F. M. FISK.

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Don't let bugs, worms, scale and blotch rob you of profits that should be yours. The Deming Spraying Catalog will show you an easy and inexpensive way to guard your crops. New 1917 edition (40 illustrated pages) showing over 25 types, free. Write
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The acres used and cultivated time and again, and the area to be gone over to get the fodder are the big items in Silage cost.
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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 3 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF January 18, 1917

State Marketing and Packing

Big Question Looms at Olympia and May Overshadow Legislature

Shall the state of Washington engage in the business of marketing and packing the products of its farms, orchards, dairies and packing plants?

That big question looms at Olympia and may become the overshadowing issue of this session.

It springs from a long-standing discontent among the producers of the Puget sound contry with their treatment by the commission houses of Seattle, but it is expected that the farming interests of the entire state will be organized back of the movement, and that it will be supported by the grange, the farmers' union, organized labor and clubwomen and other consumers in the cities, both east and west of the Cascade mountains.

A copy of the proposed bill to put the state into the commission business on a big scale has been received by the Spokane committee that was appointed at the recent city hall massmeeting. It proposes a state marketing commission of three members, to be appointed by the governor, to hold office for six years, and authorized to establish and maintain at least two offices, one in Seattle and the other in Spokane. This commission would have power "to organize, manage, control and carry on the business of receiving on consignment, selling and shipping to dealers and consumers within or without the state of Washington, all agricultural, horticultural, dairy and farm products and products manufactured or processed therefrom, which shall be grown, raised, produced, processed or manufactured within the state of Washington."

It further provides that the commission shall establish and maintain, as its judgment may direct, "receiving and distributing stations for such products and properly equip and provide the same with a sufficient force of officers, clerks and employes."

Other essential features of the measure are thus set forth:

"Said commission shall have power to rent, lease, occupy and use such lands and buildings as may be needed in the business of the commission, including warehouses, packing houses and any other buildings needed, and to use the same in the business of receiving, preserving, packing, selling, marketing, distributing and shipping the produce consigned to it as in this act provided.

"Said commission shall have power to rent, lease, purchase, hold, possess and use all equipment, material, tools, appliances, machines, machinery, horses, mules, trucks, wagons, automobiles and all supplies whatsoever necessary for the prosecution of said business.

"It shall be the duty of the commission to establish and maintain a bureau of information and correspondence for gathering and disseminating statistics and information on all subjects relating to the production, harvesting, storing, preserving, packing, marketing, shipping and distributing of all such products.

"It shall be the duty of the commission to make the business self-supporting as far as possible, and to charge, collect and receive from all producers taking benefit of this act such fees, charges and costs for services rendered by the commission as in its opinion may be just and reasonable.

"There is hereby appropriated out of any money in the state treasury not otherwise appropriated the sum of $100,000 to be used by the commission in establishing and carrying on the business provided by this act."

The commissioners are to give their entire time and exclusive services to the business and give bond in the sum of $50,000.

It is thus seen that the proposed law opens up almost limitless possibilities in the way of state marketing and packing. If the system were successful and farmers employed it extensively, it could grow into a plant representing millions of dollars, handling not only every product of the soil, but engaging in the manufacture of by-products.

That it will be vigorously resisted is a foregone conclusion, not only by commission men in the various cities, but also by firms and individuals engaged in the handling of apples and other fruits, grain buyers and many others whose business might seem to be endangered by the building up of a great state marketing agency.

"One of the shortest cuts to bankruptcy that I know is the raising of beef cattle on a wheat farm. You can't afford to feed a beef animal anything raised on a grain farm that can be sold at present prices."—Thomas T. Kerl, Coeur d'Alene, Idaho.

Alfalfa Records

Idaho Heads Northwest States

According to the crop report of the United States department of agriculture, the alfalfa hay output reached the total of 16,591,000 tons in 1916 as against 19,046,000 tons in 1915. Nebraska produces more alfalfa than any other state, being credited with 2,646,000 tons for the year 1916; then come California, 1,838,000 tons; Kansas, 1,588,000 tons; Colorado, 1,213,000 tons. Of the four states of the Pacific northwest, Idaho leads with 888,000 tons, followed by Montana, 715,000 tons; Washington, 441,000 tons and Oregon, 430,000 tons.

Steelhead Salmon Prices.

Prices for steelhead salmon have opened this season at 9 cents per pound, a higher level than for any previous year, is the report from Hoquiam. The steelhead salmon is a species of trout and is classed among the best food fishes.

Host of Sparrows and Robins.

Seattle reports a host of sparrows and robins speeding northward in dense clouds.

Four Public Markets

Spokane Will Try Out on School Grounds

Starting May 1, 1917, Spokane will try out four public markets on school grounds in four thickly populated residential sections. This plan, proposed by a joint committee of the Spokane county grange, representatives of organized labor and a massmeeting of consumers, has been approved by the Spokane school board and the city commissioners.

To these open markets the producers within hauling distance of the city will be invited to bring their vegetables, fruits, poultry and dairy products, hay and wood, back their wagons up to the curb and deal directly with consumers in the neighborhood. The markets will be free in every sense of the word, and there will be no charge on the farmer.

The committee hopes that the plan will be a success from the start, and is confident that if it has a fair trial the spring and summer months it will flourish in the fall, when consumers can deal directly with the producers for their winer supplies of potatoes, apples and other products.

This method of putting producers and consumers into close and inexpensive contact is said to have succeeded admirably at the national capital. Farmers from the surrounding country bring in their produce and back their wagons up against the curb at the school grounds. Many mothers, market basket on arm, take their small children to school in the morning and make their daily purchases direct from the farmers. Heavier purchases are left for the larger children to carry home after school, and boys take their hand wagons for sacks of potatoes, boxes of apples and vegetables in quantity.

In spokane a committee comprising Dr. J. E. Peterson, representing the grange; T. T. Kilbury, for organized labor, and N. W. Durham, of a committee named at a recent massmeeting of consumers and producers, presented the plan to the city commissioners, and the city government promptly adopted the following resolution:

"The council approves most heartily the plan of setting aside public school grounds and portions of the public streets near these grounds for the purpose of market areas. It will cooperate with the school board and the farmers to successfully establish such public market areas."

It is the desire of the committee that use of these market areas shall be restricted to actual producers, hucksters and middlemen to be excluded. It is expected that farmers will be allowed to bring any product to the markets, including wood, hay, feedstuffs, vegetables and fruits of all descriptions.

Advocates of this system say that it will give the farmers a shorter haul and enable them to market their produce more quickly. For the consumers it offers a nearby market without the time and expense of going to a central establishment.

"It seems to me," said a member of the committee, "that this plan offers an inexpensive method of testing out the question whether the Spokane consumers really want to deal directly with the producers. If they should fail to respond to this opportunity. I should

(Continued on page fourteen.)

Had $10.35 Left

School Puts in a Milk Tester

By U. I. TUCKER, Bossburg, Wash.

The readers of the Washington Farmer who read the account of the trip of the Bossburg school to the county fair will, perhaps, recollect that a balance of $10.35 was left in the school treasury after all expenses were paid.

The faculty and the students thought it a shame to have the money out of circulation. Therefore it was decided to invest part of it. After much argument, pro and con, and consulting of patrons it was decided to buy a Babcock milk tester with a portion of the funds.

The tester, four bottle size, complete and with a quart bottle of sulphuric acid, cost $4.70. In addition to the above outfit, a small pan and a can of separator oil were bought. This made the entire outfit cost $5.35. A quart bottle of acid will test about 27 samples. This makes the cost per cow a very small item.

During three weeks in December we tested 23 cows. We keep a record of each test showing the name of owner, the name of the cow, the test, and the date of the test. No charge is made for testing. The pupils and the patrons are interested in the work and we consider it a big success.

The tester is set up in the principal's room and tests are made every Wednesday and Thursday mornings. The work is given in place of the regular opening exercises. Each grade, from the fifth grade up, takes turns in testing the milk, under the supervision of the principal.

Farm Home in Big Bottom Country



The Big Bottom country in eastern Lewis county is becoming better known since the highway improvements through that district have been completed. This is a wonderfully fertile country well adapted to stock raising, dariying and diversified farming. Now with good roads giving access to markets, rapid development of this country is sure to follow.

The picture shows the farm home of August Snider near Lewis with Mt. Rainier in the distance, Mt. Tatoosh on the right and Mt. Dixon on the left.

Long Time Farm Loans

How They Can Help Out the Man on the Land

By N. W. DURHAM

Chairman Spokane Committe on Federal Land Banks

William Hoppe writes from Gervais, Ore.: "I have read the articles in regard to long time loans on farms. Can I take advantage of the same in my case? I bought 16 acres, well located in the way of school, good roads and other shipping facilities, in an all-around good neighborhood. I bought good land for $125 per acre. Have built a house, barn and other outbuildings, put a fence around it, have planted five acres of loganberries, some raspberries and strawberries, and a small orchard on both sides of the buildings, consisting of prunes, apples and others. I have paid down $350, with 6 per cent interest. It now stands: Principal, $2013; paid down, $350; present indebtedness, $1663. The land is all in cultivation."

Assuming that you have good title, you would be entitled, under the law, to borrow a sum to 50 per cent of the appraised value of your land as you have improved it plus 20 per cent of the value of the permanent insured improvements. If the appraisers found that sum to be equal to your present indebtedness of $1663, you could borrow that amount and pay off the present mortgage.

You say your present interest rate is 6 per cent. That is probably as well as you could do at first under a federal farm loan. The law says not more than 6 per cent may be charged, and it is thought the first loans will be on that rate. In changing, you would have the advantage, though, of a long-time loan—any period from 5 years to 40 years that you might choose, and the further important advantage of whittling down the principal with small annual payments.

Later, after five years, if the government's interest rate should be lowered, you could pay off your first federal farm loan mortgage and make another at the reduced rate of interest.

Authorities who have studied this system in European countries say the long-time feature and the amortization method of gradually wiping out the principal are very popular with farmers over there. They give the borrower, it is said, an ease of mind he can not enjoy when borrowing from private loan agencies, and feeling always the drawing round of the time when he will have to pay off his debt or secure a renewal, which may or may not be given him.

E. A. Beesley writes from Rexburg, Idaho: "I have been following your articles in the Farmer in regard to the federal farm loan banks. Several persons here are interested, and we would like to know if you can give us an outline in regard to the organization of a local farm loan association or other information concerning the same."

Lack of space prevents the Farmer repeating in detail the information sought by Mr. Beesley and his neighbors. By writing directly to the Federal Farm Loan Board, Washington, D. C., they will be supplied with official directions and the necessary blanks for organizing.

FARM LOAN

First Grant County Association.

The first organization of a Farm Loan association in Grant county was perfected at Neppell, Wash., January 6. This organization is to be known as the Moses lake Farm Loan association. The following directors were elected: Will E. Risk, Gloyd; F. M. Reynolds, Gloyd; Donald McDonald, Moses Lake; A. G. Shields, A. L. Pedigrew and Martin Penhallick of Neppell.

The appraisers were Will E. Fisk, A. L. Pedigrew and F. M. Reynolds. A. P. Romine was elected secretary. Nineteen persons applied for loans totaling $49,500.

H. W. Reaugh, county agriculturist, assisted in forming the organization.

The following is a list of members and several more will join later: J. B. Wilby, Jacob Secrest, J. C. White, Will Risk, A. J. Shields, Martin Penhallick, F. M. Reynolds, Fred Gailey, F. E. Lees, A. L. Pedigrew, Reuben Scott, Paul M. Smith, Donald McDonald, A. P. Romine, J. C. Garrison, W. R. Garrison, R. M. Garrison, Lee Houck and E. O. Garrison.

TWENTY FARMERS

Organize Farm Loan Association.

One of the first farm loan associations in the northwest under the new federal law was organized in Eugene. A meeting of 20 farmers of the county, most of them residing in and near Eugene, was held and directors and officers were elected. The directors chosen are George M. Miller, Henry Chezem, H. G. Conrad, Charles Emery, C. J. Schmitt, T. J. Neeley, R. E. Branham, C. C. Goodman and W. J. Scharen.

WITH 90 MEMBERS

Skamania County Association.

The Skamania County National Loan association, with 90 members was organized at Stevenson, Wash., January 6. The following officers were elected: R. E. Turk, Pleasant, president; A. J. Haynes, Underwood, vice president; A. D. Davison, Stevenson, secretary-treasurer, and A. J. Haynes, John Skaar of Stevenson, and J. E. Remion of Skamania on the loan committee. It was a very enthusiastic and energetic meeting. Applications were made for $105,000.

FARM LOAN SOCIETY

Form Organization at Vancouver.

The Clarke County National Farm Loan association has been formally organized at Vancouver. The new organization is to put in application for a loan of $114,500 for the region farm bank to be established in Spokane. William Kennedy, who lives on R. F. D. No. 3, out of this city, has been chosen president; W. D. Sappington of Washougal is vice president and E. J. O'Connell, secretary-treasurer. The trustees chosen were G. B. Clendening, A. L. Rounds, O. Nilson, R. A. Manary, C. K. Cochran, L. H. Strain, John Spurgeon, E. T. Cleary and William Kennedy.

TWENTY FARMERS

Sign for $40,000 Worth of Loans.

O. T. McWhorter, county agricultural agent of Clallam and Jefferson counties, in Washington, reports that the farmers in the country surrounding Port Angeles met at the county agriculturist's office at Port Angeles and made the preliminary step towards the organizing of a farm loan association. Twenty farmers have signed for loans aggregating $40,000. They selected the board of directors as follows: Willis Chambers, president; Dan Kelly, secretary-treasurer; Orin Babcock, Port Angeles; C. N. McLaughlin, Port Angeles; Albert Draper, Port Angeles.

ALMOST $10,000,000

For Roads in Washington State.

Almost $10,000,000 will be spent in the state of Washington this year for good roads purposes, according to figures of county engineers.

Spokane county alone will expend $391,740 for road building and upkeep during 1917. King county will spend $879,000 and Pierce county $452,680.

Nearly a million and a half dollars will be expended through the state permanent highway fund, while the forest roads will receive $91,739 from the state and the same from the forestry bureau.

Fruit By-Products

Must Become Source of Revenue

One of the prominent ideas expressed at the Washington state horticultural convention at North Yakima recently was the need of systematizing and developing the making of by-products from the orchards as something more than a merely incidental source of revenue.

W. H. Paulhamus of Puyallup, where there is located a large cannery and by-products factory, told of the operation and output of the plant and said that there was a movement contemplated for the establishing of similar plants in several other cities of the northwest, including North Yakima, Spokane, Hood River and Wenatchee.

Contract Prices.

He said that the Puyallup plant could now afford to contract for fruit next season at reasonable prices. Bartlett pears, tree ripened, were worth $20 a ton on contract, he said, as were also Elberta peaches. Royal Anne cherries would be contracted at 4 cents a pound. Black raspberries are worth the same.

Mr. Paulhamus said that the Puyallup plant could not supply the orders which it is receiving, and that he was certain there was a good field for other similar plants in the fruit districts.

Dr. J. S. Caldwell of Pullman indorsed the suggestions of Mr. Paulhamus as did others attending the meeting. Dr. Caldwell said that no longer was the by-product problem one of handling cull fruit only, but that it must be extended to take in much of the fruit that, for any cause, does not find ready sale at fair prices on the regular market.

Forest Improvements.

During the last fiscal year there were constructed on the national forests 227 miles of new road, 1975 miles of trails, 2124 miles of telephone line, 89 miles of fire lines, 81 lookout structures, 40 bridges, 222 miles of fence, 545 dwellings, barns and other structures, 17 corrals and 202 water improvements.

Community Development

Depends Largely Upon the Productivity of Soil

In boosting for your community do not overlook the part that soil productivity plays in its development, is the conclusion of Professor W. S. Thornber, director of extension work at the state college of Washington. He considers soil productivity first of seven factors in community development.

1. Productivity of Soil.
2. Market and Transportation Facilities.
3. Good Roads and Streets.
4. Good Schools and Churches.
5. An Intelligent Reading People.
6. Parks and Recreation Grounds.
7. Pleasant, Comfortable Homes.

Soil productivity very largely governs the land values. A close relationship exists between land values and the class of farmers that move to the community.

A series of crops that will work well into community activities, soil conditions and water supply should be selected. If there is a part of the land that is not adapted to regular crops it should be utilized to the best advantage with pasture crops. Soil fertility must be conserved and the land must constantly be built up and supplied with food for succeeding crops. If the land is in poor condition crops suitable for the community and of improving value to the land should be grown.

The soil is the rock upon which the community stands, and its possibilities for development hinge in a large measure on this factor. Improve the productivity of your soil. Go after any and all help that is available.

Get in touch with your county agricultural agent or your state college at Pullman. Have a profitable rotation of crops planned for your section; get methods of building up land and conserving its value.

Dynamite Plowing

Recommended as Very Practical

By O. P. KOENIG.

Cultivating the soil makes available plant food. It also enables the soil to store more moisture for plant growth. This is accomplished by plowing and harrowing, hence the advantage of deep plowing, that loosens the soil to a greater depth, admits the air and increases its capacity for storing moisture. Deep cultivation of the soil is impracticable around fruit trees as it destroys thousands of those little rootlets and yet trees need the deepest of cultivation.

A recent development of agricultural methods is the use of explosives in this deeper cultivation in orchards. By blasting one can get down in the ground farther and more economically than with machinery.

I have found that the root system of fruit trees in the northwest do not penetrate deep enough into the soil to bring the best results. The roots of fruit trees will not penetrate like the roots of wild trees. I have found that blasting either at the time of planting, or rejuvenating later, the trees will do better as they will get new areas of plant food.

The best method I have found for orchard rejuvenating is to place from one to three shots for every tree, five or six feet from the tree if the trees are of medium or small size. Should the trees be large I place one shot in the center of four trees. When I use three shots to a tree I have these shots very small. I use dynamite about 30 per cent, seven-eighths by eight-inch stick. From one-third to one-half of a stick will be sufficient for a shot. The holes are made at an angle of 45 degrees toward the tree, and three or four feet, seven-eights by eight-inch sticks will go about four sticks to the pound. I use No. 4 cap.

I first make a number of holes about three or four feet deep. I attach cap and fuse to the dynamite stick and drop it into these holes. I use about six inches of fuse as I drop these shots after I light them. The holes should be such that the charge will readily drop to the bottom in which case there is no need of tamping. If the dynamite goes down three of four feet the explosion will shatter the soil sufficiently all around the tree to a depth of eight feet.

The work should be done when the soil is fairly dry or in about the right condition for plowing, the earlier in the spring the better.

For large trees when placing the one shot in the square between every four trees, make the charges somewhat heavier, but it should not be any more than 20 per cent dynamite, as the slow dynamite is necessary in this case, shattering the soil to a greater radius.

All this is based on the principle that plant food lies dormant in the soil without air and moisture; that it is available for trees only as deep as the soil is loosened. The hole in the ground in which trees are planted may be likened to a tub, the roots gaining their food from the quantity of loosened soil; and when only the top soil is loosened, the roots of the tree keep in that loosened soil and have no depth.

It may be repeated that the holes should be made large enough so that the dynamite will easily drop to the bottom.

It will be well to make some test shots to determine the amount of dynamite required. Under no consideration should the explosion throw any dirt whatever. It is advisable to follow carefully the directions which always accompany the dynamite packages.

Kills Timber Wolves.

J. W. Fox, a government hunter near Hoagland, in the headquarters of the Umpqua river, reported to the United States biological survey office at Pendleton, Ore., Monday morning that he has killed five timber wolves during the month. Two were killed in a neighboring locality during October, making a total of seven for the fall. The northwest timber wolf is the most dangerous predatory animal in the west.

Crops With Eight Inches of Rainfall

Four Hundred-Acre Experiment Farm at Cunningham Gives a Handsome Profit During 1916

By THOMAS SHAW

This farm of 400 acres owned by W. W. Haile is located three miles northwest from Cunningham, Wash., on the main line of the Northern Pacific railway. It has been conducted as an experiment farm for the last three years. During two of these years the work was conducted under the auspices of a committee composed of leading business men of Spokane in conjunction with the Northern Pacific railway. The third year it was conducted under the auspices of the Northern Pacific railway. Two of the agricultural men representing that road, namely, E. A. Willson and the writer, counseled with Mr. Haile from time to time as to how the work should be done. The latter did all the work.

Preliminary Work.

The first year the work was largely preliminary and involved considerable expense for the necessary equipment. The second year, which ended September 1, 1915, the farm showed a net revenue of $1770, as stated in the report published in 1915. This did not include $640 allowed as interest at 8 per cent on 400 acres of land, valued at $20 an acre. It is legitimate to include this item in summing up the total net revenue of profit. This, therefore, was $2410. The items of food used and the groceries bought for the farm would about balance each other.

On September 1, 1915, the arrangement made by the Spokane committee terminated. The stock and implements on the farm which were owned by the committee were generously donated by the same to the new experiment farm established not far from Lind. The Northern Pacific retained its relation to the farm in the way indicated above, but made no grant of money in its support. Mr. Haile, therefore, at the date named had to buy all the stock and implements needed, also all the food wanted until such time as food would grow again.

In the inventory submitted at the opening of the farm year, September 1, 1915, these items are submitted at what was paid for them. In that relating to the close of the year, September 1, 1916, they are estimated at what they would bring at the time. The highest priced horses and cattle were set down at the prices offered for them and refused.

The annual precipitation as indicated by the rain gauge on the farm was less than eight inches for the year ending September 1, 1915. For the year ending September 1, 1916, it was just a trifle less than eight inches. The precipitation during the growing months was but 3.70 inches, which fell as follows:

March	1.05 inches
April	1.15 inches
May	.40 inches
June	.75 inches
July	.25 inches
August	.10 inches
	3.70

The experiments thus far have shown:

(1) That the soil can virtually be prevented from blowing if the farmers will cooperate in the work so as to keep their soil on their own land.

(2) That such crops as feterita, milo maize, sudan grass and kafir corn are not greatly serviceable under conditions that prevail at Cunningham.

(3) That the mission of the Lister plow is not greatly important under these conditions.

(4) That corn does not start well when listed, probably from lack of warmth in the furrows.

(5) That much may be done in keeping weeds at bay by the timely use of proper implements.

(6) That live stock can be profitably grown on these lands in the absence of grass pastures.

One of the finest results from the experiments is the outcome from growing live stock. The condition of the live stock at the present time would be a credit to any farm. The food since spring opened has consisted almost entirely of winter rye pasture and such food as can be obtained in the stubble fields. The profits from the stock well managed are excellent and sure. Mr. Haile stated that he would not continue to farm those lands in the absence of live stock.

Financial Statement.

The financial statement for the year is now submitted, and it is as follows:

Inventory, September 1, 1915.

Land, 400 acres at $25 per acre		$10,000.00
Livestock:		
7 head horses and colts	$ 900.00	
29 head cattle	1,110.00	
1 head swine	15.00	
120 head poultry	125.00	
		2,150.00
Machinery, harness, etc.		500.00
Automobile		1,170.00
Seed and feed on hand		1,330.75
Total		$15,150.75

Inventory, September 1, 1916.

Land, 400 acres at $25 per acre		$10,000.00
Livestock:		
7 head horses and colts	$1,125.00	
25 head cattle	1,090.00	
14 head swine	135.00	
125 head poultry	137.50	
		2,487.50
Machinery, harness, etc.		450.00
Automobile		1,100.00
Seed and feed on hand		1,100.00
Total		$15,137.50
Loss or depreciation		$ 13.25

Expenditures, September 1, 1915, to September 1, 1916.

Hired man and day labor	$ 320.00	
Harvesting labor	140.00	
Horse labor hired	75.00	
Rent on 160 acres pasture and horse labor in working same	92.00	
Threshing 3765 bushels wheat at 7 cents a bu.	263.55	
Sacks, 1624 at 13 cents each	211.12	
Miscellaneous expenses	215.00	
		$ 1,316.67
Taxes		85.00
Total		$ 1,401.67

Income or Receipts During Season.

Cattle, 17 head of various ages	$ 815.10	
Cream and butter	198.08	
Pork	40.00	
Poultry and eggs	175.09	
Wheat sold:		
500 bu. at 90 cents	450.00	
1000 bu. at 95 cents	950.00	
260 bu. at $1.25	325.00	
1500 bu. at $1	1,500.00	
		$ 4,453.27
Profit from farm, September 1, 1915, to September 1, 1916		$ 3,051.60
Loss or depreciation		13.25
Gross profit		$ 3,038.35
Interest on investment of $15,150.75 for one year at 8 per cent		1,212.06
Labor income from farm		$ 1,826.29

The grocery bill of $224.68 and the coal bill of $100 have not been included, as the living for the family that came from the farm would more than offset these items. If they are deducted, the profit will be reduced by that much, but in that case the farm should be credited with the food which it furnished for the table, flour, vegetables, milk, butter and eggs.

In the autumn of 1915 the first moisture that fell came as snow, on November 11, which meant that all autumn wheat sown that fall was virtually a failure. The crop grown was Early Bark spring wheat, that averaged approximately 21 bushels to the acre. It would seem fair to claim that the showing made by this farm the last season is highly encouraging when it is called to mind that it is an experiment farm. But it should be clearly understood that the results are to be placed largely to the credit of Mr. Haile and the wife who so loyally helps him.

During the year some hard windstorms occurred. Many farms in the neighborhood blew badly, but little damage was done by blowing on Mr. Haile's farm.

The Faulkner weeder is now rendering good service in preventing blowing on summer-fallow land when properly used. It should be given the attention which its importance demands. Weeds were more in evidence on the farm this year than in previous years, resulting in part from the crop being spring sown and in part from the absence of a suitable weeder.

The experiment work on this farm is by no means completed. The alfalfa and sweet clover crops have not yet proved entirely satisfactory. There is also a time in August and September when the pastures are too dry to meet the needs of milch cows. Corn to be pastured would fill the bill, but it has in the past been difficult to get a stand because of the depredations from mice, which feed on the young plants.

Cooperative Capitalization

Snohomish Association Works Out Finance

By PAUL E. TRIEM

The Snohomish County Fruit Growers' association is now three years old. It is a virile and aggressive organization, with upwards of 300 members. The trustees are Adolph Heck, W. J. Fortune, George Stocker, F. C. Fuchs and E. D. Deselle. Mr. Heck is president, Mr. Stocker, vice president; Mr. Deselle, secretary; and Mr. Martin Hokenstad is treasurer.

The annual meeting of the association, which was held in Snohomish January 9 and 10, was one of those resultful, dynamic gatherings characteristic of the new movement among farmers throughout the county. Talk is talk, but it takes money to finance any manufacturing business— and the farmer is a manufacturer.

Among the practical ideas started into execution at this meeting was one which promises to have a far reaching effect on the entire community. Experience has taught the association the necessity of having some sort of a working capital upon which to finance its buying operations. The man or the corporation with a satisfactory financial rating pays for his goods when he receives them. This means that during the time of transit, his capital is his own to use for other purposes. Without this established rating there is little hope of having an order filled unless it is accompanied with cash. Having learned this important fact by the convincing method of experience, the Snohomish association has set about remedying the difficulty in this way:

Personal Notes.

A note issue totaling $3000 is to be secured by having each member of the association who feels so disposed give his personal note for $25. These notes are withdrawable on 60 days' notice, and are to be used as collateral by the association. With the indorsement of the association, the local banks have expressed a willingness to accept this security.

These individual notes are to be used simply as collateral. When capital is needed the association will borrow as much as is required, giving in turn the usual 90-day commercial note. Interest will be paid on the money so borrowed for the time it is actually at the disposal of the association, and as the majority of operations involving the use of this community capital will be of short duration, it is believed that the interest charge will be low. The main advantage of the plan, indeed, is not so much the availability of this liquid capital, as the fact that the association will be assured a commercial rating, and will be relieved from the necessity of paying in advance for everything.

As an instance of the saving possible by this method, it is pointed out that if alfalfa had been bought last fall at $12 per ton and stored in the port of Seattle warhouse, it would cost, at the time of the annual meeting, about $14.45, interest, storage and insurance included, as against $19 a ton quoted by dealers at this same date. In other words, the community is now paying dealers about $4.50 on every ton of alfalfa, simply to do those things which the association can very well do for itself.

The experiment farm of the State College at Pullman, Wash., is never summerfallowed. Crop rotation is practiced on it so successfully as to prove the uselessness and the waste of a summerfallow system. The part of the farm that has been owned by the college since its foundation has not been summerfallowed for 15 years, and some parts not for 20 or more years.

Artichokes

Writer Likes Them for the Pigs

To the Editor of The Washington Farmer: Artichokes are good pig feed and are the best vegetable for chickens in the winter time to feed raw. One good thing about them is that they will not freeze. They can lay on top of the ground all winter and the frost will not hurt them.

If a pig gets a little grain and has all the artichokes he wants to root out, he will keep in good shape.

Artichokes need rich land. I think they will do well on the logged-off land, as they will grow between the stumps and they do not need any cultivating, and once they are planted, if they are not dug up too closely, will come up year after year.

They grow tops in the spring, and when the dry weather comes they stand still until the wet weather comes in the fall of the year, when they start to grow roots.

They should not be harvested until the middle of November. They keep better in the ground. When dug and kept like potatoes they are likely to rot.

C. L. RAWLINSON.

Spanaway, Pierce County, Wash.

WHEAT COUNTRY

Nearly Half Million Bushels.

The report of R. D. Jarboe, state grain inspector for the period from July 1, 1916, to November 1, 1916, indicates that 422,234 bushels of wheat and 359,774 bushels of oats were placed in the warehouse at Pullman, Armstrong, Busbey, Chambers, Kitzmiller, Sunshine, Staley and Whelan. Of that amount there remained on the latter date in storage 399,874 bushels of wheat. The following amounts of wheat and oats were received at the respective warehouses: Armstrong, wheat, 33,492 bushels; oats, 28,285 bushels; Busbey, wheat, 76,430; oats, 35,317; Chambers, wheat, 103,573; oats, 121,921; Kitzmiller, wheat, 54,366; oats, 13,353; Pullman, wheat, 71,028; oats, 63,666; Staley, wheat, 23,054; oats, 33,810; and Whelan, 35,063; oats, 37,076.

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Food for Thought

At a congress in New York of notable economists and men of science some highly instructive facts were brought out that should set to thinking those good people who are agitating the country for an embargo on farm products and boycotts on the farmers' wares.

Milton W. Harrison, secretary of the savings bank section of the American Bankers' association, quoted estimates prepared by Dr. Eliot, the famous ex-president of Harvard, to show that in 1915 the American people spent more money on such things as intoxicating liquors, tobacco, jewelry, chewing gum and similar needless indulgences than they spent on food. The figures were $5,303,000,000 for indulgences and $5.300,000,000 for food.

Indignant massmeetings innumerable have been held to whip up public sentiment for boycotts against turkeys, against butter, against eggs, against potatoes and other farm products. But the farmer has yet to hear of boycotts on tobacco, jewelry and chewing gum, or even a boycott on beer.

A Harvest Festival

The Cashmere Fruit Growers' union held a harvest festival last month. About 250 were present and there was a program of speaking and an enjoyable time.

Years and years ago the country had its forms of social amusement and meeting places. Today it has but few. Towns and cities have monopolized that sort of thing and improved methods of transportation have made it possible for rural people to go to town for their social life.

This is natural enough in the evolution of the times, but it is not altogether good. The farm is the foundation for our nation, and to have a part of its natural life given up and city amusements take its place is injurious to all concerned.

But within the last few years an effort has been made by those who have realized the danger and sought to prevent the consequences to see if we can not build up a country social life adequate to the needs and desires of country people. This will not be based on the country social life of 50 years ago, nor on the city social life of today. It will not leap, full grown, into existence—it must grow into being a little at a time.

Class Affiliation

The labor unions have appropriated that old motto, "United we stand; divided we fall." They realize that in union there is strength. It is very true indeed. If you have a million men demanding one thing, you are apt to get it.

However, isn't it a little bit dangerous to go out of your own occupation to get help? Isn't it apt to have evil effects? Take an example.

The farmers and the American Federation of Labor have worked together on a number of occasions, with a certain amount of success. And yet we see that the federation is strongly supporting an embargo on foodstuffs. An embargo is surely not in the interest of the farmer, nor, do we think, is it right.

And here are our allies urging and fighting for those things which are not for our best good. Why? Because they think it will help them. They should not be blamed for it—it is just human nature. But when farmers join hands with another class entirely they run the danger of having allies who will sooner or later turn traitor.

Our Beef Supply

In 1910 the first cry about our diminishing beef resources arose, and it has been sounding ever since then. Those who were most exercised about it suggested various solutions of the difficulty, among them being that famous one that every farmer should raise two steers.

This is idle talk. To begin with, we know of no figures which are dependable on the number of beef cattle in the United States. The government statistics are based on estimates, except in census years. Outside of an actual count there is no sure way of knowing the amount of beef cattle. Breeders tell us that there is an increased movement in breeding cattle, and this indicates that in a year or two the amount of stuff coming on the market will increase considerably.

However, with range diminishing, with land prices advancing, and with feed high, it is natural that beef cattle will have to bring more or they will not be produced. No farmer is going to produce two or one or any number of steers at a loss.

Treatment for Soil

E. E. Ware, who manages a farm leased by the Oak dairy of Chehalis, quotes his own experience to show the need for individual treatment of Washington farm lands.

"On this heavy, cold bottom land you can see the patches that have been well manured a quarter of a mile away," he says. "The soil is rich enough, but manure opens it up and makes it warmer. When I farmed over near Pasco, on the other hand, I used to find that manure could do as much damage as good if it wasn't managed right. Manure plowed in rather shallowly in the spring would bring the crops up quick and green, but later they seemed to burn easier and to dry out more than those that hadn't had manure. The light, volcanic ash soil we had there didn't need lightening."

Mr. Ware thinks this fact should be more commonly known, and should be emphasized in the literature sent east to prospective settlers.

"They hear about lumber and coal and gold and wheat and oats being produced out here," he explains, "and they get the idea the same piece of ground will produce the whole bunch. Then when they come out here they are disappointed. Farming here isn't like it is in Illinois or Iowa, where a whole section can be handled together."

"Yield Not to Temptation"

One of the greatest temptations that come to human beings is to find fault with other human beings. It is very easy to see their faults and failings, and it is a very human inclination which calls attention to them. It does not mean that we dislike the other fellow when we say that he does not pay his debts, or that his stock is not as good as it ought to be, or that he has been known to indulge in sharp practice. It is that we think these things are so and you can not resist the impulse to tell about it.

Really, there is no justification in doing any of these things. If a man does wrong he should be punished by the proper authorities, but never should he be the victim of sly whisperings and tales told under cover of a promise of secrecy.

First pluck out the mote. Let us be sure we have no fault before we begin to criticize the other fellow.

Keeping Track of Trees

At the last session of the New Zealand legislature an act was passed which authorized the department of agriculture to require every owner or resident on land which contains even one fruit tree to register the same. There is to be no charge for registration, the sole idea being to "keep cases" on fruit trees, to inspect them, to isolate disease, to destroy such as need destruction, and to protect the industry in general. How wise or practical is such legislation is questionable, but it is worth thinking about.

A would-be bridegroom returned his marriage license to the officer who issued it, with these words written across it: "The fuzzy has backed out." That was all the explanation given, but it was sufficient. A life attachment to a man who would call his intended wife a "fuzzy," even after she had rejected him, probably would not be any too pleasant.

Washington Gleanings

The Grant county commissioners have placed a bounty of $2.50 on all coyotes killed in that county during January.

Whitman college at Walla Walla has received a check for $1200, bequeathed to it from a Celia Thomas of Boston. The college authorities are unable to identify the donor.

State Superintendent Josephine Preston, together with other educators, including the county schoolteachers of Walla Walla, have indorsed military training in the public schools.

James Anest, who lives near Winona, in Whitman county, has been growing tobacco successfully, he reports. He says that the tobacco he grows is better flavored than that which he buys in the stores.

Farmers living west of Pullman are petitioning the city and county to cooperate in building a better road into Pullman from the west. At the present time the road, though well improved, is one of difficult grade.

There is much interest being manifested in the new 640-acre homestead law. Reports from all over the northwest indicate that many thousands of acres are being taken up by new or former homesteaders under the old law.

Pierce county, in which Tacoma is situated, has voted overwhemingly in favor of bonding the county for $2,000,000 to purchase a large tract of land at American lake, near Tacoma, for a site for the army division post as proposed by the war department.

Pend Oreille county has arranged for the services of a county agriculturist for the coming year. Thurston county is also installing an agriculturist after doing without one for a year, owing to failure of the commissioners to make the necessary appropriation.

Delegates to the National Woolgrowers' association convention at Salt Lake this month were: T. J. Drumheller, Dr. Robert Prior, T. H. Smith, Alex. McGee, Anderson brothers, K. O. Kohler, William McGuffir, Angus McPherson, John Smithson and F. M. Rothrock.

For probably the first time in the history of the Washington state legislature, both democrats and republicans caucused together in planning the organization of the senate. It was not until after a strenuous fight by the progressive element among the republicans that the democrats were admitted.

What Others Say.

Wallace's Farmer: Everything has gone up in price.

Hoard's Dairyman: Why don't more farmers keep mules?

Rural New Yorker: The thing to do is to get together now.

Dakota Farmer: Health is a deposit in the bank of nature.

Inland Farmer: Interest grows in the Federal Farm Loan system.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

BY EDWIN CASKODEN

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THE CASKODENS.

We Caskodens take great pride in our ancestry. Some persons, I know, hold all that to be totally un-Solomon-like and the height of vanity, but they, usually, have no ancestors of whom to be proud. The man who does not know who his great-grandfather was, naturally enough would not care what he was. The Caskodens have pride of ancertry because they know both who and what.

Even admitting that it is vanity at all, it is an impersonal sort of failing, which, like the excessive love of country, leans virtueward; for the man who fears to disgrace his ancestors is certainly less likely to disgrace himself. Of course there are a great many excellent persons who can go no further back than papa and mama, who, doubtless, eat and drink and sleep as well, and love as happily, as if they could trace an unbroken lineage clear back to Adam or Noah, or somebody of that sort. Nevertheless, we Caskodens are proud of our ancestry, and expect to remain so to the end of the chapter, regardless of whom it pleases or displeases.

We have a right to be proud, for there is an unbroken male line from William the Conqueror down to the present time. In this lineal list are 14 barons—the title lapsed when Charles I. fell—12 knights of the garter and 47 knights of Bath and other orders. A Caskoden distinguished himself by gallant service under the Great Norman and was given rich English lands and a fair Saxon bride, albeit an unwilling one, as his reward. With this fair, unwilling Saxon bride and her long plait of yellow hair goes a very pretty, pathetic story, which I may tell you at some future time if you take kindly to this. A Caskoden was seneschal to William Rufus, and sat at the rich, half barbaric banquets in the first great hall. Still another was one of the doughty barons who wrested from John the Great Charter, England's declaration of independence; another was high in the councils of Henry V. I have omitted one whom I should not fail to mention: Adjodika Caskoden, who was a member of the dunce parliament of Henry IV., so called because there were no lawyers in it.

It is true that in the time of Edward IV. a Caskoden did stoop to trade, but it was trade of the most dignified, honorable sort; he was a goldsmith, and his guild, as you know, were the bankers and international clearance house for people, king and nobles. Besides, it is stated on good authority that there was a great scandal wherein the goldsmith's wife was mixed up in an intrigue with the noble King Edward; so we learn that even in trade the Caskodens were of honorable position and basked in the smile of their prince. As for myself, I am not one of those who object so much to trade; and I think it contemptible in a man to screw his nose all out of place sneering at it, while enjoying every luxury of life from its profits.

This goldsmith was shrewd enough to turn what some persons might call his ill fortune, in one way, into gain in another. He was one of those happily constituted, thrifty philosophers who hold that even misfortune should not be wasted, and that no evil is so great but the alchemy of common sense can transmute some part of it into good. So he coined the smiles which the king shed upon his wife—he being powerless to prevent, for Edward smiled where he listed, and listed nearly everywhere—into nobles, crowns and pounds sterling, and left a glorious fortune to his son and to his son's son, until about the fourth generation, which was a ripe old age for a fortune, I think. How few of them live beyond the second, and fewer still beyond the third. It was during the third generation of this fortune that the events of the following history occurred.

Now, it has been the custom of the Caskodens for centuries to keep a record of events, as they have happened, both private and public. Some are in the form of diaries and journals like those of Pepys and Evelyn; others in letters like the Pastons; others again in verse and song like Chaucer and the Water Poet; and still others in the more pretentious line of memoir and chronicle. These records we always have kept jealously within our family, thinking it vulgar, like the Pastons, to submit our private affairs to public gaze.

There can, however, be no reason why those parts treating solely of outside matters should be so carefully guarded, and I have determined to choose for publication such portions as do not divulge family secrets nor skeletons, and which really redound to family honor.

For this occasion I have selected from the memoir of my worthy ancestor and namesake, Sir Edwin Caskoden—grandson of the goldsmith, and master of the dance to Henry VIII.—the story of Charles Brandon and Mary Tudor, sister to the king.

This story is so well known to the student of English history that I fear its repetition will lack that zest which attends the development of an unforeseen denouement. But it is of so great interest, and is so full, in its sweet, fierce manifestation, of the one thing insoluble by time, Love, that I will nevertheless rewrite it from old Sir Edwin's memoir. Not so much as an historical narrative, although I fear a little history will creep in, despite me, but simply as a picture of that olden long ago, which, try as we will to put aside the hazy, many-folded curtain of



A discovery that he cheated.

time, still retains its shadowy lack of sharp detail, toning down and mellowing the hard aspect of real life—harder and more unromantic even than our own—into the blending softness of an exquisite mirage.

I might give you the exact words in which Sir Edwin wrote, and shall now and then quote from contemporaneour chronicles in the language of his time, but should I so write it all, I fear the pleasure of perusal would but poorly pay for the trouble, as the English of the Bluff King is almost a foreign tongue to us. I shall, therefore, with a few exceptions, give Sir Edwin's memoir in words, spelling and idiom which his rollicking little old shade will probably repudiate as none of his whatsoever. So, if you happen to find sixteenth century thought hobnobing in the same sentence with nineteenth century English, be not disturbed; I did it: If the little old fellow grows grandiloquent or garrulous at the time—he did that. If you find him growing super-sentimental, remember that sentimentalism was the life-breath of chivalry just then approaching its absurdest climax in the bombastic conscientiousness of Bayard and the whole mental atmosphere laden with its pompous nonesense.

CHAPTER I.

It sometimes happens, Sir Edwin says, that when a woman will she won't, and when she won't she will; but usually in the end the adage holds good. That sentence may not be luminous with meaning, but I will give you an illustration.

I think it was in the spring of 1509, at any rate soon after the death of the "Modern Solomon," as Queen Catherine called her old father-in-law, the late King Henry VII., that his august majesty, Henry VIII., "The Vndubitate Flower and very Heire of both the sayd Linages," came to the throne of England, and tendered me the honorable position of Master of the Dance at his sumptuous court.

As to "worldly goods," as some of the new religionists call wealth, I was very comfortably off; having inherited from my father, one of the counselors of Henry VII., a very competent fortune indeed. How my worthy father contrived to save from the greedy hand of that rich old miser so great a fortune, I am sure I can not tell. He was the only man of my knowledge who did it; for the old king had a reach as long as the kingdom, and, upon one pretext or another, appropriated to himself everything on which he could lay his hands. My father, however, was himself pretty shrewed at money matters, having inherited along with his fortune a rare knack for keeping it. His father was a goldsmith in the time of King Edward, and enjoyed the marked favor of that puissant prince.

Being thus in a position of affluence I cared nothing for the fact that little or no emolument went with the office; it was the honor which delighted me. Besides, I was thereby an inmate of the king's palace, and brought into intimate relations with the court, and, above all, with the finest ladies of the land—the best company a man can keep, since it ennobles his mind with better thoughts, purifies his heart with cleaner motives, and makes him gentle without detracting from his strength. It was an office any lord of the kingdom might have been proud to hold.

Now, some four or five years after my induction to said honorable office, there same to court news of a terrible duel fought down in Suffolk, out of which only one of the four combatants had come alive—two, rather, but one of them was in a condition worse than death. The first survivor was a son of Sir William Brandon, and the second was a man called Sir Adam Judson. The story went that young Brandon, and his eldest brother, both just home from the continental wars, had met Judson at an Ipswich inn, where there had been considerable gambling among them. Judson had won from the brothers quite a large sum of money which they had brought home; for, notwithstanding their youth, the elder being but 26 and the younger about 24 years of age, they had gained great honor and considerable profit in the wars, especially the younger, whose name was Charles.

It is a little hard to fight for money and then lose it by a single spot upon the die, but such is the fate of him who plays, and a philosopher will swallow his ill luck and take to fighting for more. The Brandons could have done this easily enough, especially Charles, who was an offhand philosopher, rather fond of a good-humored fight, had it not been that in the course of play one evening the secret of Judson's winning had been disclosed by a discovery that he cheated. The Brandons waited until they were sure, and then trouble began, which resulted in a duel on the second morning following.

This Judson was a Scotch gentleman of whom very little was known, except that he was counted the most deadly and most cruel duelist of the time. He was called the "Walking Death," and it is said took pride in the appellation. He claimed to have fought 87 duels, in which he had killed 75 men, and it was considered certain death to meet him. I got the story of the duel afterwards from Brandon as I give it here.

John was the elder brother, and when the challenge came was entitled to fight first; a birthright out of which Charles tried in vain to talk him. The brothers told their father, Sir William Brandon, and at the appointed time father and sons repaired to the place of meeting, where they found Judson and his two seconds ready for the fight.

Sir William was still a vigorous man, with few equals in sword play, and the sons, especially the younger, were better men and more skilful than their father had ever been, yet they felt that this duel meant certain death, so great was Judson's fame for skill and cruelty. Notwithstanding they were so handicapped with this feeling of impending evil, they met their duty without a tremor; for the motto of their house was, "Malo Mori Quam Fedrai."

It was a misty morning in March. Brandon has told me since, that when his elder brother took his stand, it was at once manifest that he was Judson's superior, both in strength and skill, but after a few strokes the brother's blade bent double and broke off short at the hilt when it should have gone home. Thereupon, Judson, with a malignant smile of triumph, deliberately selected his opponent's heart and pierced it with his sword, giving the blade a twist as he drew it out in order to cut and mutilate the more.

In an instant Sir William's doublet was off, and he was in his dead son's tracks, ready to avenge him or die. Again the thrust which should have killed broke the sword, and the father died as the son had died.

After this, came young Charles, expecting, but, so great was his strong heart, not one whit fearing, to lie beside his dead father and brother. He knew he was the superior of both in strength and skill, and his knowledge of men and the noble art told him they had each been the superior of Judson; but the fellow's hand seemed to be the hand of death. An opening came through Judson's unskilful play, which gave young Brandon an opportunity for a thrust to kill, but his blade, like his father's and brothers', bent double without penetrating. Unlike the others, however, it did not break, and the thrust revealed the fact that Judson's skill as a duelist lay in a shirt of mail which it was useless to try to pierce. Aware of this, Brandon knew that victory was his, and that soon he would have avenged the murders that had gone before. He saw that his adversary was strong neither in wind nor arm, and had not the skill to penetrate his guard in a week's trying, so he determined to fight on the defensive until Judson's strength should wane, and then kill him when and how he chose.

After a time Judson began to breathe hard and his thrusts to lack force.

"Boy, I would spare you," he said; "I have killed enough of your tribe; put up your sword and call it quits."

Young Brandon replied: "Stand your ground, you coward; you will be a dead man as soon as you grow a little weaker; if you try to run I will thrust you through the neck as I would a cur. Listen how you snort. I shall soon have you; you are almost gone. You would spare me, would you? I could preach a sermon or dance a hornpipe while I am killing you. I will not break my sword against your coat of mail, but will wait until you fall from weakness and then—. Fight, you bloodhound!"

Judson was pale from exhaustion, and his breath was coming in gasps as he tried to keep the merciless sword from his throat. At last, by a dexterous twist of his blade, Brandon sent Judson's sword flying 30 feet away. The fellow started to run, but turned and fell upon his knees to beg for life. Brandon's reply was a flashing circle of steel, and his sword point cut lengthwise through Judson's eyes and the bridge of his nose, leaving him sightless and hideous for life. A revenge compared to which death would have been merciful.

The duel created quite a sensation throughout the kingdom, for, although little was known as to who Judson was, his fame as a duelist was as broad as the land. He had been at court upon several occasions and, at one time, upon the king's birthday, had fought in the royal lists. So the matter came in for its share of consideration by king and courtiers, and young Brandon became a person of interest. He became still more so when some gentlemen who had served with him in the continental wars told the court of his daring and bravery, and related stories of deeds at arms worthy of the best knight in Christendom.

He had an uncle at the court, Sir Thomas Brandon, the king's Master of Horse, who thought it a good opportunity to put his nephew forward and let him take his chance at winning royal favor. The uncle broached the subject to the king, with favorable issue, and Charles Brandon, led by the hand of fate, came to London Court, where that same fate had in keeping for him events such as seldom fall to the lot of man.

CHAPTER II.

When we learned that Brandon was coming to court every one believed he would soon gain the king's favor. How much that would amount to none

(Continued on the following page.)

Big Expense of Milk Distribution

Eats Up More Than Five of Nine Cents Paid by New York Consumer

The Wicks legislative committee appointed by Governor Whitman of New York to investigate the dairy industry in that state had its auditors analyze the books of the big distributors in New York City, in an effort to learn how the consumers' money is divided. The auditors' figures tend to bear out the contention of the distributors that the expenses of distribution eat up a large part of the 9 cents paid for a quart of milk by the average city consumer.

According to this analysis a little more than 6 cents goes to the producer and for delivery costs, and the remaining 3 cents is largely eaten up by country and city hauling, pasteurization, bottling, freight charges and overhead expenses. Here are the figures as turned in by the official auditors to the Wicks committee:

Paid producer	3.797c
Country hauling	.297c
City hauling	.294c
Pasteurization	.370c
Bottling	.241c
Delivery	3.384c
Freight charges	.934c
Administration, overhead and advertising	.319c
Total	8.636c
Profit per quart	.364c
Retail price	9.000c

The committee discussed the possibility of selling milk to New York's population solely through grocers and delicatessen stores. This would eliminate much of the expense of the present system of distribution and might result in a cheaper price for the consumer.

George W. Ward, counsel to the committee, intimated that the state would "go into the milk business" after the investigation.

Loton Horton, president of one of the large distributors, held up a pasteboard cap for a milk bottle and said:

"See this? How much do you think that has gone up in cost in the last nine months? We pay $13,000 more now.

"Many persons use milk drivers as alarm clocks. They ask our drivers to come at a certain hour, knock on the

(Continued on page ten.)

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from the preceding page.)

could tell, as the king's favorites were of many sorts and taken from all conditions of men. There was Master Wolsey, a butcher's son, whom he had first made almoner, then chief counselor and Bishop of Lincoln, soon to be Bishop of York, and cardinal of the holy Roman church.

From the other extreme of life came young Thomas, Lord Howard, heir to the Earl of Surrey, and my lord of Buckingham, premier peer of the realm. Then sometimes would the king take a yeoman of the guard and make him his companion in jousts and tournaments, solely because of his brawn and bone. There were others whom he kept close by him in the palace because of their wit and the entertainment they furnished; of which class was I, and, I flatter myself, no mean member.

To begin with, being in no way dependent on the king for money, I never drew a farthing from the royal treasury. This, you may be sure, did me no harm, for although the king sometimes delighted to give, he always hated to pay. There were other good reasons, too, why I should be a favorite with the king. Without meaning to be vain I think I may presume to say, with perfect truth, that my conversation and manners were far more pleasing and polished than were usual at that day in England, for I made it a point to spend several weeks each year in the noble French capital, the home and center of good breeding and politeness.

How Brandon Came to Court.

My appointment as master of the dance, I am sure, was owing entirely to my manner. My brother, the baron, who stood high with the king, was not friendly toward me because my father had seen fit to bequeath me so good a competency in place of giving it all to the first-born and leaving me dependent upon the tender mercies of an elder brother. So I had no help from him nor any one else. I was quite small of stature—that is lengthwise—and, therefore, unable to compete with lance and mace with bulkier men; but I would bet with any man, of any size, on any game, at any place and time, in any amount, and if I do say it, who perhaps should not, basked in the light of many a fair smile which larger men had sighed for in vain.

I did not know when Brandon first came to London. We had all remained in Greenwich while the king went up to Westminster to waste his time with matters of state and quarrel with the parliament, then sitting, over the amount of certain subsidies.

Mary, the king's sister, then some 18 or 19 years of age, a perfect bud, just blossoming into a perfect flower, had gone over to Windsor on a visit to her elder sister, Margaret of Scotland, and the palace was dull enough. Brandon, it seems, had been presented to Henry during this time, at Westminster, and had, to some extent at least, become a favorite before I met him. The first time I saw him was at a joust given by the king at Westminster in celebration of the fact that he had coaxed a good round subsidy out of parliament.

The queen and her ladies had been invited over, and it was known that Mary would be down from Windsor and come home with the king and the court to Greenwich when we should return. So we all went over to Westminster the night before the jousts, and were up bright and early next morning to see all that was to be seen.

[Here the editor sees fit to substitute a description of this tournament taken from the quaint old chronicler, Hall.]

"The morrow beyng after dynner, at tyme conuenenient, the quene with her ladyes repaired to see the Iustes, the trompettes blewe vp, and in came many a noble man and gentlema, rychely appeareiled, takynge vp thir horses, after whome folowed certayne lordes appareiled, they and thir horses, in cloth of golde and russet and tynsell; knyghtes in cloth of golde and russet veluet. And a greate nomber of gentlemen on fote, in russet satyn and yealow, and yomen in russet damaske and yealow, all the nether parte of euery mans hosen skarlet and yealow cappes.

Then came the kynge vnder a pauilion of golde and purpul veluet embroudered, the compass of the pauilion about, and valenced with a flat, gold beaten in wyre, with an imperiall croune in the top, of fyne golde, his bases and trapper of cloth of golde,



"Have I the honor to find the Princess?"

fretted with damask golde, the trapper pedant to the tail. A crane and chafron of stele, in the front of the chafro was a goddly plume set full of musers or trimbling spangles of golde. After folowed his three tydes, euery of them vnder a pauilion of crymosyn damaske & purple. The nomber of gentlemen and yomen a fote, appareiled in russet and yealow was clxviii. Then next these pauilions came xii. chyldren of honor, sitting euery one of them on a greate courser, rychely trapped and embroudered in seuerall deuises and facions, where lacked neither brouderies nor goldsmythes work, so that euery chyld and horse in deuice and fascion was contrary to the other, which was goodly to beholde.

"Then on the counter parte entered a straunger, fyrst on horseback in a long robe of russet satyne, like a recluse or a religious, and his horse trapped in the same sewte, without dromme or noyse of mynstrelsye, putting a byll of peticion to the quene, the effect whereof was, that if it would please her to license hym to runne in her presence he would do it gladly, and if not, then he would departe as he came. After his request was graunted, then he put off hys sayd habyte and was armed at all peces with ryche bases & horse, also rychely trapped, and so did runne his horse to the tylte end, where dieurs men on fote appareiled in russet satyn awaited on him. Thereupon the heraulds cryed an Oyez! and the grownd shoke with the trompe of rushynge stedes. Wonder it were to write of the dedes of armes that day toke place, where a man might haue seen many a horse raysed on highe with galop, turne and stoppe, maruaylous to behold. C. xiv. staves were broke the kynge being lusty he and the straunger toke the prices."

When the queen had given the stranger permission to run, and as he moved away there was a great clapping of hands and waving of trophies among the ladies, for he was of such noble mien and comely face as to attract the gaze of every one away from even the glittering person of his majesty the king.

His hair, worn in its natural length, fell in brown curls back from his forehead almost to the shoulder, a style just then new even in France. His eyes were a deep blue, and his complexion, though browned by exposure, held a tinge of beauty which the sun could not mar and a girl might envy. He wore neither mustachio nor beard, as men now disfigure their faces—since Francis I. took a scar on his chin—and his clear cut profile, dilating nostrils and mobile, though firm-set mouth gave pleasing assurance of tenderness, gentleness, daring and strength.

I was standing near the queen, who called to me: "Who is the handsome stranger that so gracefully asked our license to run?"

"I can not inform your majesty. I never saw him until now. He is the goodliest knight I have ever beheld."

"That he is," replied the queen; "and we should like very much to know him. Should we not, ladies?" There was a chorus of assent from a dozen voices, and I promised, after the running, to learn all about him and report.

It was at this point the heralds cried their "Oyes," and our conversation was at an end for the time.

As to height, the stranger was full six feet, with ample evidence of muscle, though no great bulk. He was grace itself, and the king afterwards said he had never seen such strength of arm and skill in the use of the lance—a sure harbinger of favor, if not of fortune, for the possessor.

After the jousting the Princess Mary asked me if I could yet give her an account of the stranger; and as I could not, she went to the king.

I heard her inquire:

"Who was your companian, brother?"

"That is a secret, sister. You will find out soon enough, and will be falling in love with him, no doubt. I have always looked upon you as full of trouble for me in that line; you will not so much as glance at any one I choose for you, but I suppose would be ready enough with your smiles for some one I should not want."

"Is the stranger one whom you would not want?" asked Mary, with a dimpling smile and a flash of her brown eyes.

"He most certainly is," returned the king.

"Then I will fall in love with him at once. In fact, I don't know but I have already."

"Oh, I have no doubt of that; if I wanted him, he might be Apollo himself and you would have none of him." King Henry had been compelled to refuse several very advantageous alliances because this fair, coaxing, self-willed sister would not consent to be a part of the moving consideration.

"But can you not tell me who he is,

(Continued on page twenty-one.)

To Be Posted

Read Over Programs and Ads

By Granville Lowther.

At the time of this writing the members of the Washington State Horticultural association are assembling to discuss some of the most important questions that have recently come before them. I am writing this not as an item of news, for before this reaches our readers the convention will have adjourned, I give it in order to show what subjects are considered by the growers of the northwest to be of vital interest to their industry.

If a man would keep step with the march of progress he must know what others are thinking. For this reason I study the programs of the different state conventions in the United States and in Canada. I read their year books and their reports. I read the bulletins of other experiment stations in order to know what the professors are discovering and thinking, and while much of it is not adapted to our conditions and therefore not enlightening. I, every now and then, find a nugget that more than pays me for my trouble. In fact, I sometimes take an hour or more to read the advertisements in the papers or magizines. This I do not because I expect to buy the things advertised, although sometimes I do so, but because I can learn what the commercial world is doing and thinking. What they do and think determines in a large degree what I must do and think in order to meet those changes in public sentiment which alone can insure success. Then, too, I read advertisements because in them I find some of the strongest, tersest expressions in the language. For instance, take as an example the following from the last issue of the Washington Farmer:

"Here's where it tells. It isn't a question of sentiment whether or not your cows are in the pink of condition, but it does make a difference in your bank account."

Another: "Gets all the cream, can be cleaned in three minutes, and lasts for 20 years."

Another: "No matter how old the case, how lame the horse, or what other treatment has failed."

Another: "A safe, speedy and positive cure."

Another: "Economical, durable, sensible and efficient."

Another: "Ready go! The contest is on right this very minute! Get into the running at once and rush your count to the contest editor!"

So I might multiply illustrations, but this is enough to show that I think the very best literature of a magazine is often in its advertisements. The shortest, the strongest, the best expressions are studied because it pays.

Now, when I say that a program, which is often thought of as a bare skeleton, is educational, eloquent and bright with hopes of the future, I think our readers will see my viewpoint.

Here are the subjects under discussion:

Report of the committee on transportation and markets.
Report of the committee on membership.
Report of the committee on better rates and shipping facilities.
Report of the committee on legislation.
The first year of the fruitgrowers' agency.
Keep your eye on the ball.
Cutting wisdom teeth and orchard costs.
Relation of the community packing house to the small grower.
Benefits of cold storage to the northwest fruit grower.
Irrigation legislation.
Our feathered orchard friends.
Need of more by-products plants.
Fruit by-products problem.
Nut growing.
Cherry growing.
Apple grade rules for 1917.
Relation of county agriculturist to the farmer.
What the county agriculturist has done for Benton county.
Diversification on a fruit ranch.
Subject selected.
Discarding prejudices and ill-feeling between the growers and others.
Codling moth conditions of 1916.
Spraying apple orchards, special reference to aphis control.
Nicotine sulphate and arsenate lead experiments for controlling codling moth.
Strawberry root weevil and its control.
Home manufacture lime sulphur.
Development of the fruit industry of British Columbia.
Auction system for selling northwest apples.
Why we should not use the auction system for selling northwest apples.
Transportation problems.

GIANT POWDERS
Lift them out



It will pay you to test Giant Farm Powders in competition with any other stumping powder.

In the last year more than 2,000,000 pounds of these Giant Powders were used for stump blasting in Washington and Oregon alone. The users included farmers in every county in both states, the largest lumber and development companies, and the United States Government. They use the Giant brands because they have found that

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

always give satisfaction and do their work at the lowest possible cost and in the most thorough manner.

In the Pacific Coast states the farmers require explosives that will disrupt, crack, split and heave the stumps and at the same time lift and loosen the roots for easy handling. Giant Farm Powders do this because they are made especially to suit western conditions. Because of their wider-spread force, they remove the stumps more economically than powders or dynamites that merely shatter and pulverize.

Test one case. Compare it with any explosive that you have ever used for stump blasting. After you have blasted a dozen stumps you will understand why farmers who have once used them always continue to use the Giant Farm Powders. Fill out and mail the coupon at the right, and we shall arrange with our nearest distributor to supply you promptly at the lowest market price.

There are two Giant Farm Powders—Giant Stumping Powder, used for blasting in wet soil, and Eureka Stumping Powder (which costs a little less) for blasting in dry soil. Both resist cold to a remarkable extent, seven days' exposure to a temperature of 32 degrees failing to freeze them. Ask your dealer for these brands.

THE GIANT POWDER CO., CONSOLIDATED — HOME OFFICE: SAN FRANCISCO — ESTABLISHED 1868

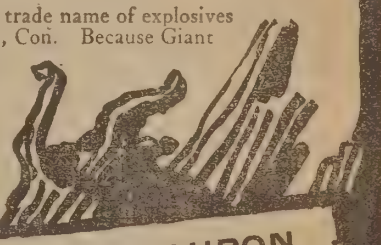
"Everything for Blasting"

BRANCH OFFICES: Seattle, Spokane, Portland, Salt Lake City, Denver

Have You Our Stump Book?

It is the most helpful and interesting book ever issued on Stump Blasting. It tells and shows how to save money and make land-clearing easier. It is written by Western men, from the Western viewpoint, and is full of pictures showing latest methods of blasting. Mark and mail the coupon and get it free. Other books—on boulder blasting, tree planting, ditching and subsoiling with explosives—also free on request. Mail the coupon *now*, before you lay this aside.

Warning. Giant Powder is the trade name of explosives manufactured by the Giant Powder Co., Con. Because Giant Powders are best known everywhere, many have assumed that all high explosives are Giant Powders. Insist upon having the genuine, made only by the Giant Powder Co., Con. If your dealer has only ordinary dynamite, write us and we will see that you get the genuine.



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The Giant Powder Co., Con.
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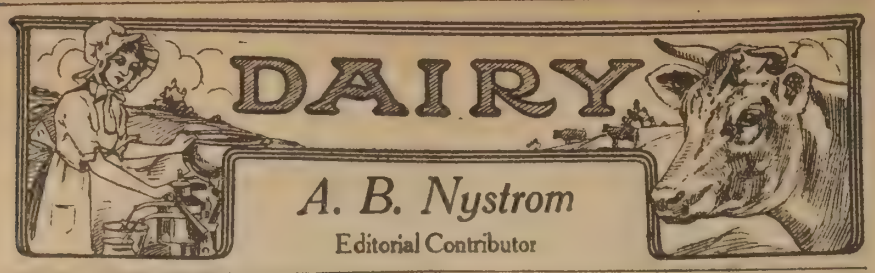
Send me your illustrated books on the subjects which I have marked X.

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Utility Points

Must Lie Back of Show Points

There may have been a time when the various types and standards by comparison with which an individual animal was judged were fixed by the caprice or personal preference of the judges, but if this was ever so the time is long past. Today there is a practical reason, a utility point, back of every show point demanded. The modern tendancy of judges to explain these utility points is one of the greatest educational factors in connection with our fairs and live stock shows.

A case illustrative of this practice occurred at the recent convention of the Washington State Dairy association, held at Auburn. The stock judging contest, participated in by a group of local school boys, was in charge of Professor William T. McDonald of Victoria, B. C., and after the decisions of the youthful judges had been handed in Professor McDonald went over the animals point by point, and told the crowd which stuck close to his sides just where each animal scored or failed to score.

Brightness, fullness and vivacity of eye was one of the first points touched upon. Illustrating his remarks by referring to the four-footed examples before him, the expert showed that his quality of eye demanded was not merely a show point, but that it was a direct indication of that supreme utility point, vitality. A cow with a lack-luster eye, sunken and half closed, is apt to be decidedly wanting in vitality, and hence in possibilities as a breeder or milk producer.

The texture and "feel" of the animal's hide was the next point touched upon. Not only the thriftiness of the coat, but pliability and motility over the ribs is demanded. Here again, Professor McDonald explained, we have a show point which is also an index of vitality.

Heart girth is another cardinal point in practical judging. The ribs must be well sprung, thus giving lungs and heart sufficient room in which to work to the best advantage.

A straight back is as much an indication of organic integrity and vigor as it is a "beauty line." The sway back colt or heifer is handicapped in the very beginning, and this undesirable trait has a tendancy to increase with the increasing age of the animal.

"Barrel room" is probably of equal importance with heart girth, and is a closely related feature; the animal with plenty of room for the digestive system will be able to stand up under the strain of high production; arrested development either here or in the region which houses lungs and heart is a fatal defect.

These are simply a few of the high lights touched upon by Professor McDonald. It is safe to say that long before he had concluded his talk, many of the crowd of spectators, who had heretofore looked with considerable indifference on the matter of stock judging, had been brought to see that utility is the basis upon which type is determined.

Shipping Chinese Eggs.

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Questions

Are Answered by A. B. Nystrom

Is there any remedy for "bitter milk?" My cow will be fresh in about three months and now the milk is getting so strong or bitter that we can not use it. She is in fine shape; is fed on alfalfa hay and bran, has plenty of fresh water and salt, and has a small lot to exercise in and a dandy, warm barn. She gives plenty of milk and it has a good cream. Her milk tasted the same last year at about three months before she was fresh, but never before that that we know of.
W. L. L., Wenatchee.

Regarding the remedy for bitter milk will state that so far as I know there is no absolute remedy. When cows are far advanced in lactation we find that there is often a change in the mineral constituents of the milk that give it a bitter taste. In addition to this we also find that when cows are fed on dry feeds principally, and when there is not a great deal of variety, we often get a change in the composition of the milk which makes it taste bitter.

Aside from this the cow's udder may be diseased, and this will also have a tendency to make the milk taste bitter.

The only suggestion that I could make would be to supply the cow with some succulent feed of some kind. Give her roots, apples, or some silage, if you have it.

It may be that the cow is overfed. In that case, cut down the feed to some extent. I refer to the alfalfa principally. In place of giving her bran alone, give her bran and ground oats, equal parts.

You do not state whether or not the milk is bitter immediately after it is produced, or whether it turns bitter after it stands awhile. If you find that the bitter taste is not present until 12 or 24 hours after the milk has been produced, it is probably due to the presence of organisms that gain entrance to the milk at some time during the production. Under such conditions I would suggest that you thoroughly boil all utensils and strainer cloths after they are used, and be careful to see that the barn is well ventilated.

Ration for Cows in Milk.

Please advise me how to feed dairy cows for milk production with the following feeds: Hay—mixed clover and timothy of good quality, bran, ground hulless barley, oil meal, mangels, and soy bean meal. If necessary I can get other feeds.
C. G. J.
Mt. Vernon.

You should be able to get an excellent ration out of the feed that you have mentioned, and I would suggest that you feed the cow all of the mixed clover and timothy hay that she will eat up clean. Feed also from 30 to 40 pounds of mangels per day, and it is better to cut these up or run them through a beet pulper before feeding. As a grain mixture to supplement this, mix three parts by weight of bran, three of ground barley, and one of soy bean meal. I feel sure that this will give you excellent results, and if you will feed your cows according to production you will be feeding economically. I would suggest that you feed the grain mixture at the rate of one pound of the mixture to three and one-half pounds of average milk. If the cows are giving rich milk, feed one to three, and if the milk is of poor quality, feed one to four.

A GRADE GUERNSEY.



This animal, "Polander," owned by the Montana Agricultural college, produced 14,822 ponnds of milk during the year 1915-16, making 806 pounds of butter. For five years she has averaged 11,490 pounds of milk and 604 pounds of butter.

Big Expense

Of Milk Distribution Is Problem

(Continued from page eight.)

door and wake them up. These people may live next door to one of our stores, could save money by going to the store for milk, but they would rather have the milkman come to the door."

Mr. Horton said he started in the business 46 years ago and was then content to earn $3 a day. Additional capital has made possible a more efficient distribution, he declared.

"But some people say you don't need capital to distribute milk," suggested Mr. Ward, "that the state, for instance, can have the milk come to the city from up the state and sell it from stores."

"Well, I'd like to see them in the milk business," replied Mr. Horton.

Referring to the idea of State Food Commissioner Dillon that the state could go into the milk business, Mr. Horton said:

"Why, I pay $60,000 taxes to the state and I don't want the state to gamble in my money and use it to cut my throat. Taxes are increasing with all those rainbowchasing ideas."

Aaron Sapiro, attorney for the state market commission of California, appeared as a witness, having come from San Francisco to explain the working of his department to the committee. There is now in preparation a state law for California, he said, whereby the state market department will have absolute control of the fish industry of the state.

Mr. Saprio related the experiences of the state of California, which, he said, had reached more advanced results than any other state in the Union. On the basis of past efforts, he said, the future remedy of the situation would be worked out in two directions:

1. Products in every line of food growing are to be organized in separate cooperative associations to grow better products and advertise to maintain prices and increase demand.

2. To have all products from these associations consigned to the state director of food and markets and sold by him at a number of state markets to be established.

Mr. Sapiro, in telling of California's success in state supervision of food distribution, said that each class of producers was organized separately, he said, whereby consumers paid less and fishermen got more money for their product.

"And how long did this last?" asked Judge Ward.

"Until somebody threw a monkey-wrench into the machinery," replied the witness. He explained that one large dealer, jealous of the fact that other dealers were making more money, disrupted the scheme by paying more for fresh fish than the commission.

Charles T. Howe, a dealer in byproducts of milk, said that large quantities of milk are made into casein, which is used extensively by paint manufacturers. It gives the paints a sticking quality. Leather manufacturers, he said, also use casein and a certain extensively advertised patent medicine is made up largely of it.

Chehalis Cow Testing.

For the month of December, the 11th month of testing in the Chehalis District Cow-Testing association, Official Tester W. F. Meyer reports an increased number of cows, 29 in all, on the honor roll. The honor roll includes cows which yielded 40 pounds or more of butterfat during the month.

Two grade Holsteins of the state training school herd head the list for the month, with a grade Holstein from H. W. A. Tramm's herd in third place. All three of these cows yielded more than 60 pounds of butterfat during the month. Nathan Hamilton's Butterfly and Frank Hamilton's Clothilde, both of which have tested high in recent months, are again near the head of the list.

What Is a Hawaiian?

A correspondent inquires whether it is proper to speak of a Hawaiian as a "Kanaka." The term is masculine. A "Kanaka" is a male Hawaiian. A "wahine" is an unmarried Hawaiian woman. A "wahine mare" is a married Hawaiian woman. These definitions are from the Hawaiian dictionary.—Bellingham (Wash.) American-Review.



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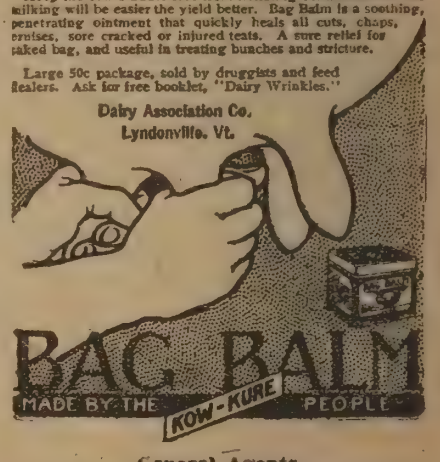
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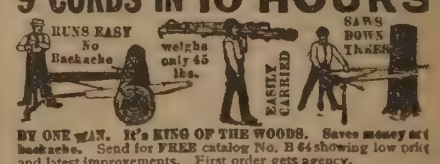


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LOOK THIS UP

The Breeders' Department in this issue contains the names of many prominent live stock breeders. Their offers are worthy your consideration.

Tanning Rabbit Hides

Early Indian Tribes Used a Simple Method

To the Editor of the Farmer: Kindly give me a way of tanning rabbit hides with the fur on; also, for dyeing same from the native color to black and brown. Mrs. C. E. W.

Blitzen, Ore.

In connection with the answer to this question at the State College at Pullman, J. L. Ashlock writes:

"I have always believed that there was some way of tanning a rabbit skin by simple, inexpensive means, and have had the notion that the Indians knew how. I ran onto the very thing I have been looking for for years in an old 1870 report of the Smithsonian institution. It could not be called practical tanning, but I believe it is the very thing a boy who shoots a rabbit wants to know."

The early Indian tribes of North America made use of a method of tanning which for extreme simplicity would be hard to duplicate. This method is described in a report of the Smithsonian institution, for the year 1870, by Titian R. Peale:

"The material used for the preservation of the skins is principally the brains of the animal from which they were taken. While the skins are fresh, or in their green state, they are stretched on the ground and scraped with an instrument of bone or stone, resembling an adze; the adhering portions of flesh are removed, and the surface is then plastered over with brains mixed in some cases with the liver, and on this is poured from time to time warm water in which the meat has been boiled. The whole is then suffered to dry, after which the skin is again subjected to the action of the brain and hot water, further stretched, and, while still wet, scraped and rubbed with stones until perfectly dry. It is further softened by rubbing and passing it backward and forward over a twisted sinew, stretched horizontally. The brain of an animal is sufficient to dress its skin; but in some cases, a less quantity is sufficient for the purpose. I have myself used this process in the preparation of skins, but have found animal brains inferior, as a suring material, to a mixture of saltpeter and alum. The Indian, however, has no choice and makes use of such materials as he can procure, and which probably from accidental discovery and subsequent experience, he has found to produce the desired effect."

Here is William T. Hornaday's recipe for making the salt and alum bath in which to cure skins:

Fore every gallon of water put in three-quarters of a pound of alum (one pint) and a pound and three-quarters of salt (about one quart) and heat the liquid to the boiling point, stirring occasionally, so that the salt and alum will dissolve. Then pour it into a wooden, earthern or glass vessel, or a tank lined with lead (zinc or galvanized iron will not answer), and when it is cool, or even milk warm, it is ready for use."

Immerse the skin in this bath, being sure that it is free from folds. Remember that the fluid must act on the inside of the skin, since the epidermis, or outside, is often impervious to the solution. Two or three days will be sufficient for a large, thick skin. Since rabbit skins are thin a day or perhaps two days of immersion would be sufficient.

Prior to immersion be sure that all meat is scraped from the inside of the skin. Its presence interferes with the action of the fluid.

Another way of curing the skin is to stretch it out, scrape the meat off, and then spread it out on a mass of hardwood ashes in a pan, which has been well moistened. Cover it over with wet hardwood ashes, and leave it there for a couple of days. The hair is then scraped off with a sharp knife. this method does not apply where one desires to keep the hair on.

The ashes or salt and alum bath accomplish only the "curing." After that, begin rubbing it with whatever device you choose, taking the Indian's way if you like. Rub it till it begins to get white and soft. Then roll it up and be careful that it does not get dry before you renew the rubbing and scraping. Tanner's knives or "skiving knives" are sometimes used for this. The rubbing is to break up the tissues of the skin, and must be done either by mechanical means or by hand, after the fashion of the North American Indian.

In dyeing the rabbit fur you could use any good quality dye, following the same general methods one would use in coloring woolen or cotton goods.

American Boot Exports.

Orders for American boots and shoes reaching a total of nearly $50,000 have been taken at Rangoon, Burma, recently by a representative of an American shoe concern. It is expected that this new demand will continue, as the Burmese find it almost impossible at present to get footwear from England, whence they have imported it in the past.

Dairy Barn and Herd of Holsteins



Dairy barn and herd of Holsteins on the P. A. Frakes stock farm, near Scappoose, Ore. The dairy barn on the Frakes place is one of the finest and most up-to-date in Oregon. Mr. Frakes and his son, George Frakes, conduct a business which has grown from humble beginning to considerable size and comfortable profits.

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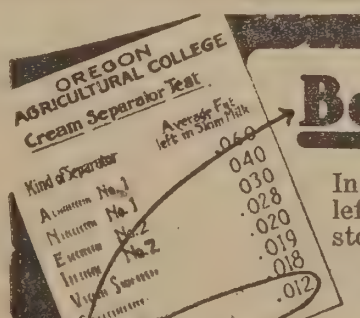


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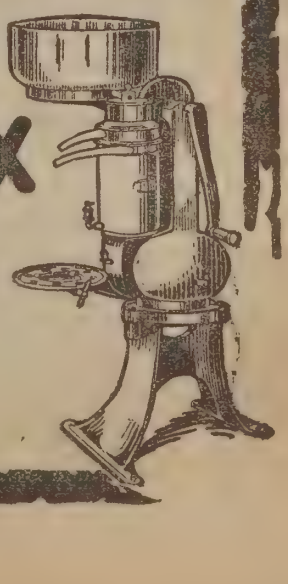
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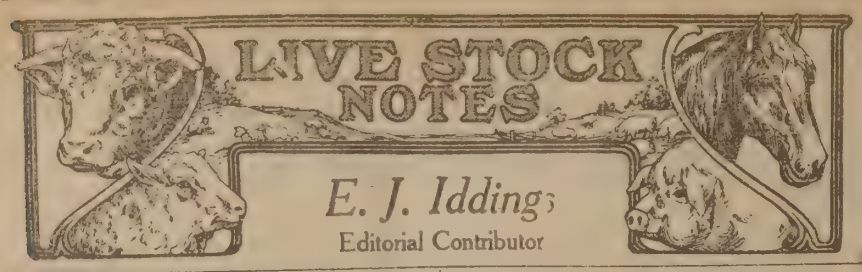
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Live Stock

Industry Is Helped by Shows

By E. J. IDDINGS.

Two remarkable live stock expositions were recently held in the Northwest Live Stock show at Lewiston and the Pacific International Live Stock show at Portland.

Both shows were special purpose events devoted to live stock upbuilding and improvement. Both were educational in nature and purpose, clean and free from fake or objectionable features of any kind. Both were distinctly successful in every way, especially from the point of view of attendance, interest, sales and financial management.

Many visitors who for the first time were this year visitors at Lewiston or Portland at first were at a loss to understand the wonderful interest and enthusiasm manifested without vaudeville, chance games and other fakes or devices for separating people from their money without giving anything substantial in return. Those who first came from suriosity and to be amused later became interested in the things for which these shows stand and remained to learn the lessons of live stock types and breeds, of live stock excellence, of animal breeding and of the essential place occupied by live stock production in any permanent scheme of agriculture.

The Lewiston show is remarkable first of all for the fact that it is staged in a comparatively small city and hundreds of people go there with the single purpose of spending one to six day at the show. Lewiston at show time offers no special entertainment except great and very fine displays of the various types and breeds of animals adapted to the northwestern state, live stock demonstrations, evenings for discussion of the live stock problems and an annual banquet and get-together meeting for live stock men and those interested in live stock improvement.

Method of Financing.

Another remarkable feature of the Northwest Live Stock show is the method of financing it. During the past year no state appropriation, county or city aid of any kind could be had. Some back debts, premiums for 1916 show, expenses of preparing for and staging of the show cost approximately $18,000. This was raised by popular subscription and by sale of annual and life memberships, with the exception of $2500 provided by the Idaho state live stock sanitary board given with the idea of assisting in sanitary features, health of the herds, etc. Approximately 1400 people contributed directly to the financing of the 1916 show and hold membership cards from the association. It is doubtful whether any other live stock association organized for the special purpose of putting on a show has such a large and widespread membership as indicated above.

As in former years there was a great interest in the various student stock judging contests. There were three college teams totaling 15 men in the col-

(Continued on following page.)

New Hog Barn at the Oregon College



By E. L. POTTER

Everything about the building is suitable for farm use.

Twenty-nine farrowing and dividing pens.

There are gates between pens so they may all be thrown together.

The feed may be put in the troughs from the outside without opening any gates.

The windows are so arranged that the maximum sunlight reaches the pens on March 1 and September 1.

Dipping vat is a model for small farm plant and is to be used for sheep as well as pigs.

New pen will be used in connection with the Hog Producers' week at the college January 2-6.

The Oregon Agricultural college has just completed a new hog barn and feed house that is probably the most modern to be found anywhere. Others are more elaborate, are better finished or more expensive, but none accomplish more in the way of providing comfortable and sanitary quarters for the pigs and in reducing the labor of feeding and handling.

While this house was planned especially for the needs of the college, everything about the building is suitable for farm use.

The house contains 29 farrowing pens besides weighing and dividing pens. The pens are eight by ten and have concrete floors and troughs. Each pen is also provided with drainage, although by placing the pens back to back one drain does for two pens. There are gates between pens so that they may all be thrown together. By an ingenious arrangement of the gates, two gates are made to do the work of three besides giving space for six and one-half feet of trough in pens only eight feet wide.

The feed may be put in the troughs from the outside without opening any gates or getting in with the pigs. One concrete water trough supplies two pens and the water is kept at a constant level by a float, one float regulating the water for all the troughs in the building.

The general style of the building is what is known as the Illinois plan. The house stands east and west and all the windows are on the south. The windows are so arranged that the maximum sunlight reaches the pens on March 1 and September 1. A little carrier is provided for, taking out the manure and carrying it direct to the manure pit. The drains are used only in flushing the pens with a hose. To the outside the house connects directly with eight pastures.

The experimental and class work of the college makes it necessary to do a great deal of weighing, separating and handling of the pigs. To facilitate this work dividing and weighing pens are provided so that the pigs may be weighed one at the time without having to drag them around by main strength.

A dipping vat is at a convenient distance from the house. This vat was built with a view to making a model small farm dipping plant and is to be used for sheep as well as pigs. The vat has a concrete drain floor, a settling basin to prevent manure and dirt from the drain floor from entering the vat, and chutes for driving the sheep or pigs into the vat.

A bed room is provided for the attendant. The room is so placed that a window overlooks one entire half of the farrowing pens.

In connection with the hog house is a feed house which will hold grain enough to last the entire year. There are three large storage bins two stories deep. Between these and the hog part is a driveway which also serves as a feed and mixing room. Over this feed room are six small hopper bottom bins of from 170 to 235 bushel capacity.

A simple bucket and belt elevator is placed in the center of the building and by means of a swinging spout in the attic, grain may be moved from any bin to any bin or to or from the scales or grinder. After the grain is emptied out of the wagon it may be elevated into any bin, ground, mixed, weighed and spouted into the feed cart without any manual labor of any kind. It is estimated that the saving in the handling of the grain and feed will pay interest on the investment in both the feed house and the hog barn. The college has had before no convenient place for the storage of feed and have had it piled in sacks in the barns, sheds and haymows.

The department of animal husbandry does not grow much of their grain since they have barely land enough to furnish the pasture. They do, however, buy the grain and hay directly from the neighboring farms and are thus able to get it at the minimum price. The new feed house will make it possible to store and handle this grain at almost no cost. Efficient business-like management has always been the policy of this department and in spite of the fact that a business administration is commonly considered impossible in a public institution and especially in a college, few commercial establishments can boast of getting more work or better work for their money.

This new hog barn will be used in connection with the hog producers' week to be held at the Oregon Agricultural college January 2 to 6. The department will devote all of its attention to hogs during this week and a thorough and interesting program has been prepared. Especial attention will be paid to methods of pork production that will put the hog on a more permanent basis than he is at present. The Oregon Swine Breeders' association will meet at Corvallis during the week. The slogan for the entire five days will be "Not more hogs, but more profit."

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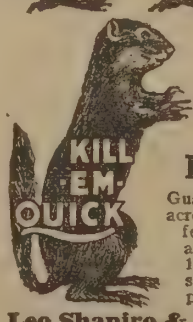
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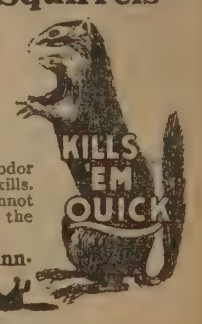
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said a banker. "Farmers who let squirrels ruin their crops have trouble paying their notes. Every pair costs them a bushel of grain a year. They can kill them for one cent an acre."

Kill-Em-Quick GOPHER AND SQUIRREL POISON

Guaranteed to kill 'em all or money back. Costs 1 cent an acre. Easy to use, simply stir into moistened oats, or ground feed and drop into burrows. Squirrels hunt for it, its odor attracts them, its sweet taste pleases, the tiniest particle kills. 100-acre size $1.00, 40-acre size 50c. If your local dealer cannot supply you, we express $1.00 size prepaid upon receipt of the price. Write for Free Squirrel Book.

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SPOKANE SEED CO., Distributors
Spokane, Wash.

Majority Says "Nobody"

Can Raise Horse as Cheaply as the Farmer

Who, if anybody, can raise a colt to maturity more cheaply than a farmer himself?

This is one question which the Farmer asked in its recent questionaire sent to a large number of practical farmers throughout the northwest. Overwhelmingly the reply was "Nobody," but there were frequently replies of this kind with "strings" attached. Several replies are that the range man can do it. Some believe that only the man who makes horse breeding his one principal business, making special preparation for it and special study of it in all its phases, can raise a work horse profitably, and that the common farmer is wiser when he buys from such a breeder rather than raise his own stock.

A Frank Answer.

H. C. Stockwell of Monroe in Western Washington is frank in his reply to the question above quoted. He says: "I don't know, but somebody evidently does."

Some express the opinion that in some sections the farmer can raise his own stock profitably, while other sections must import from the more favored sections.

Charles M. Talmadge of Newport, Wash., answers the question this way: "Range men in Montana, Idaho, Oregon and parts of Washington."

A. L. Rogers of Waterville, Wash., says that nobody can raise the horse more cheaply than the farmer, for "open ranges are a thing of the past."

A Variety of Opinions.

Here are a number of replies received to the question, some of them indicating possibilities and impossibilities in the horse business of the northwest:

Fred Grover, Hillsboro, Ore.—"Small farmers who have only light work for their teams."

W. H. Lytle, Salem, Ore.—"Nobody, unless it be range breeders handling small horses."

Jacob Alchenberger, Middleton, Idaho—"Nobody in the world."

J. H. McCroskey, Fishtrap, Wash.—"The horse breeder."

West Side View Point.

Thomas Carmichael, Gaston, Ore.—"Horses are raised more cheaply in eastern Oregon or Washington."

W. H. Verwe, Mt. Vernon, Wash.—"The only answer to this question is: Another farmer who likes horses."

W. F. Howard, Parma, Idaho—"Only the large breeder on the range."

J. C. Bush, Chehalis, Wash.—"No one. A farmer who knows how not to overwork a colt can get enough work out of him between the ages of 2 and 4 years to pay for raising from birth."

A. R. Hunter, Island City, Ore.—"The farmer who has pasture and raises hay."

A. H. Reppeto, Banks, Ore.—"The man who specializes in that line."

Veterinary

Dr. S. B. Nelson

I have a mare coming four years old with a splint on the inside of her front leg, pretty well forward. It does not seem to hurt her in any way. I have rubbed it and she does not flinch a bit. It is quite hard, feels like a bone would. Would you advise me to do any thing for it or leave it alone?

M. C.

Alderdale, Wash.

A splint is due primarily to an irritation of the ligaments between the large shin bone and the small inside shin bone. There are two or three reasons for this irritation: First, that the inside toe and quarter of the hoof is allowed to grow too long, which throws the ankle out and causes the bearing pressure to come on to the inside small shin or splint bone. In trying to support this extra weight nature throws the new bone tissue out between the two bones. Secondly, sometimes it is due to an insufficient amount of minerals in the food supply.

Treatments which have given the best results are first to level the foot and then take off just a little for a month or two months of the inside toe and quarter so as to throw the ankle in and take the bearing pressure off the inside splint bone. Following this I have frequently seen an animal become perfectly sound.

If there is a great deal of soreness apply a blister of one part of red odide of mercury, one part of powdered cantharides, six parts of lard and one part of beeswax rubbed on the splint, leaving about an eighth of an inch of the ointment on to blister. When the blister comes off paint the splint with tincture of iodine for a week or 10 days, which will frequently entirely remove the lump. About a week or 10 days after the blister has been applied is the time to begin with the tincture of iodine treatment. Of course, some splints will yield just to the tincture of iodine treatment after the foot has been leveled or even slightly taken off on the inside quarter, and it may not be necessary to blister. The blister I have given you will not leave a scar, at least it is very rarely that it leaves a scar, and then it is due to the animal getting its head down to where it can chew the blistered surface.

I would like to know what is good for mange on calves. S. B.

Harrington, Wash.

True mange is due to a small parasite which burrows itself in the skin and one of the good treatments is to wash the calf thoroughly with a lime and sulphur solution. One recommended by the United States government contains 16 pounds of unslaked lime and 21½ pounds of sulphur. Boil the two together after the lime has been slaked in just a little water until it is properly colored, then filter through a sack and add enough water to make a hundred gallons. Use any portion of this quantity that you want to use. Wash the calf all over with this solution and then repeat in five and 11 days. Another treatment is to wash the calf with a 3 per cent solution of any of the coal tar products repeating after five and 11 days.

Live Stock

Industry Is Helped by Shows

(Continued from preceding page.)

lege competition and 115 in various contests for young men and women from secondary and grade schools. Visiting farmers, stockmen and exhibitors followed the young people in their work with a great deal of interest and enthusiasm.

Another interesting and much appreciated feature was a series of parades and live stock demonstrations held at various times during the week. At one time the large tent erected to shelter the night show held a crowd of 2000 people who watched the parade of prize-winning drafters, beef and dairy cattle and listened attentively to the discussion of the various desirable and undesirable points of these animals and seemed to appreciate greatly the discussion of the adaptation of the various types and breeds to the northwest.

More and Better Stock.

Education directed toward more and better live stock on the farms of the northwest was the keynote of the week's exhibition at Lewiston.

The Pacific International at Portland, too, was distinctly educational in nature. The writer passed the entire week at the show and felt most deeply the real genuine aims and purposes of the show there and the influence it is certain to wield on the live stock development of the states contiguous to Oregon.

The sales at Portland were organized for the most part on a breed basis. The swine growers had a joint sale which was regarded as successful as an initial undertaking. Other sales were those of Guernsey cattle, Shorthorn cattle, Hereford cattle and Holstein-Friesian cattle. The Guernesys were not a uniformly high class lot and sold at rather low averages. The real enthusiasm was in the sales of the Shorthorns under the auspices of the Northwest Shorthorn association, of the Herefords under the direction of the American Hereford Cattle Breeders' association and the joint sale of Holsteins handled by George Gue.

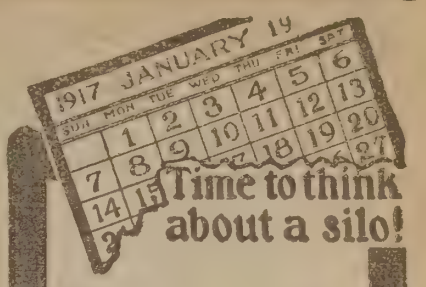
In the three sales mentioned above the practice of former years was continued and higher averages were realized as compared with former years. The Herefords were for most part bulls for the range trade with some offerings quite low in flesh. The average of 46 head was $363 as compared with $318 last year. The top price was paid for a 2-year-old bull offered by Henry Thiessen. Another 2-year-old consigned by the University of Idaho sold at $750. Eight heifers were sold and met with brisk demand. Chandler sold a yearling at $500 and Theissen a yearling at $435.

The Shorthorn sale was remarkable for the high average of $433 on an offering of approximately 70 head, few of which were in at all high flesh. Another interesting and significant feature was the large number of bidders and the wide territory represented by them. One bid might be from Oregon and in rapid succession bids would come from California, Idaho or Montana and Washington. The roan heifer sold by Frank Brown to W. J. Townley at $1320 was one of the most noteworthy events of the sale.

The Holstein men sold considerably over a hundred head at a splendid average, but the sensation in this camp and one of the notable events of the week was the sale of the bull to Von Herberg of Seattle at $21,500.

So firm is the faith of the men behind the Portland show in its great field of usefulness and its permanency that they have already launched a campaign for $100,000 to build a splendid amphitheater for adequately and handsomely housing it.

The two shows mentional did a notable work for the live stock industry of the west and have a wondrous work yet to do. May they live long and prosper exceedingly.

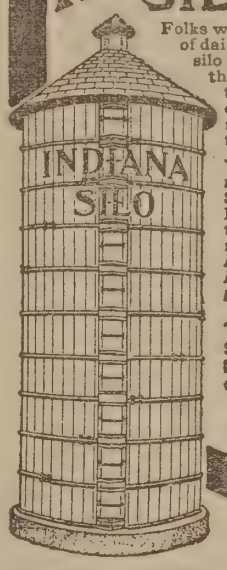


Time to think about a silo!

A lot of men will decide to order silos this month. They see how the high cost of hay and feed *puts a crimp* in their bank account.

Look around—talk with neighbors who have an

INDIANA SILO



Folks with a good herd of dairy cows and a silo are *living easy* this winter, and there's *no drudgery* connected with their feeding.

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We assert that our Oregon-Grown Seeds are superior. Try them and be convinced. That is why we give you 30c worth for 5c, just enough to pay for postage and packing.



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1 pkt. cabbage, Danish ball head; best solid winter sort	.05
1 pkt. beet, Early Model, tender, dark beet, extra early	.05
1 pkt. parsnip, Gill's Tender Heart; no hard core	.05
1 pkt. lettuce, New York Large; best head lettuce	.05
1 pkt. Spencer Sweet Peas, Progressive mixture	.10
	.30

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Let the Seeds Talk

Be an Auto Mechanic

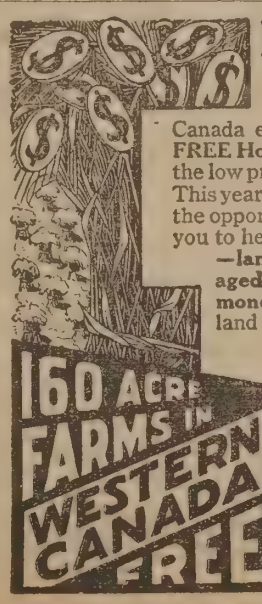
There are many fine positions waiting for the trained and skilled auto mechanic and tractor engineer.

The **Hawthorne Auto School**, established since 1907, the only **auto school** west of Kansas City maintaining a **gas tractor department** having **real tractors in the school** and their **demonstration field**, has been instrumental in placing more auto mechanics than any other school in the west.

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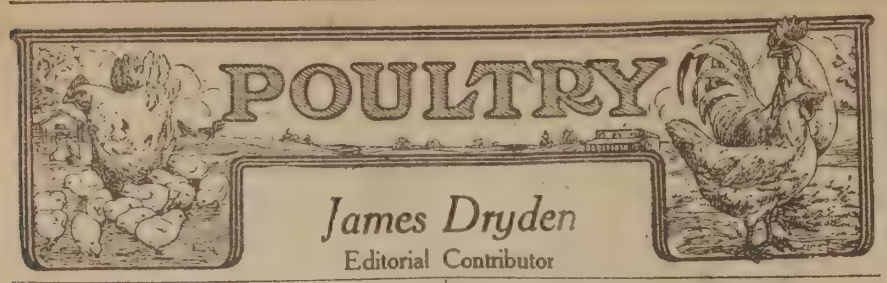


Raise High Priced Wheat on Fertile Canadian Soil

Canada extends to you a hearty invitation to settle on her **FREE Homestead lands of 160 acres each** or secure some of the low priced lands in **Manitoba, Saskatchewan and Alberta.** This year **wheat is higher** but **Canadian land just as cheap,** so the opportunity is more attractive than ever. Canada wants you to help **feed the world** by tilling some of her fertile soil **—land similar to that** which during many years **has averaged 20 to 45 bushels of wheat to the acre.** Think of the **money you can make** with wheat around **$2 a bushel** and land so easy to get. Wonderful yields also of **Oats, Barley and Flax. Mixed farming** in Western Canada is **as profitable an industry as grain growing.**

The Government this year is asking farmers to put increased acreage into grain. Military service is not compulsory in Canada but there is a great demand for farm labor to replace the many young men who have volunteered for service. The climate is healthful and agreeable, railway facilities excellent, good schools and churches convenient. Write for literature as to reduced railway rates to Supt. of Immigration, Ottawa, Can., or to

J. N. Grieve, cor. 1st and Post St., Spokane, Wn.
Canadian Government Agent.



James Dryden
Editorial Contributor

In making up breeding yards it should be remembered that the early laying pullets and the late molting hens are the best layers, on the average.

A generous supply of green food and exercise are necessary to get the best results from the breeding stock.

J. D.

Hogan Scores

More About Records at Pullman

By JAMES DRYDEN

During the poultry conferences of Farmers' week at the O. A. C. considerable interest was manifested in the Hogan scores at the Pullman laying contest. There is great interest in the question of how to select the layers. Some people have a notion that the poultryman, if he knows his business, must be able to select the good layer by an easier method than the trapnest. I am glad to see this interest. The poultry keepers are at last beginning to realize that there are differences in hens; that there are hens making a profit and other hens in the same flock and of the same breed that are not making a profit. The final result of all this discussion will pretty surebly be in a few years better layers and a larger and more profitable poultry industry.

A close watch is being kept on the Pullman contest, and it will be a disappointment if it should demonstrate that the Hogan system is not reliable. We are all looking for an easy way of selecting the layers. The results of the contest for the first month and a half do not seem to be favorable to the system. In most all the laying contests the pens that win or finish near the top, are among those that are near the top at the beginning of the contest. This accords with the demonstrated law that the early laying pullet is the best layer. From the report for November it is shown that among the 20 pens that were scored by Hogan to lay the most through the year, there are only two of them that appear in the list of the 20 pens that made the best records for the first month and a half. It is very certain from this that the 20 best at the end of the year will not be in the positions given by Hogan. The present indications are that the majority of the 20 best will not be among Hogan's best. But we will wait and see.

Petaluma Hens

Produce Eggs Valued at $4,000,000

By JAMES DRYDEN

The eggs produced in the Petaluma, Cal., district and shipped to market or hatched by the hatcheries amount to 15 to 16 million dozen a year, worth probably $4,000,000.

The poultry lectures and consultations at Farmers' week, Oregon Agricultural college, were well attended and a very strong interest was manifested in all the program. In addition to the talks made by members of the staff of the poultry department a number of highly valuable talks were made by practical and successful poultrymen. H. A. George of Petaluma, Cal., attended and discussed Petaluma methods in three lectures. His exposition of Petaluma methods was, I believe, the best that has ever been given, at any rate to my knowledge. C. M. Wilcox, Salem; W. M. Wire, Newberg, and W. H. Hart of Beaverton, gave practical talks as successful poultrymen.

Why Petalum Is Poultry Center.

Mr. George gave five reasons for the great growth of the industry there.

First, and probably foremost, a favorable climate. The average temperature is neither very high nor very low. In summer it ranges about 70 to 80 degrees and rarely over 90. The winter temperature ranges about 50 and 60, though occasionally there is a slight frost. There is a moderate rainfall and plenty of sunshine. The mildness of the climate makes the housing cost low. The colony houses that are characteristic of that country cost to build about $7.50 per hundren hens.

Second, feed at reasonable prices is possible on account of the great quantities that are handled. One dealer had done a business last year of $1,600,000 in feed, and his commission for handling it was only 3 per cent.

Third, cheap transportation for feed and supplies as well as for eggs on account of both rail and water transportation encouraged the industry.

Fourth, soil conditions are good.

Fifth, the credit given by local dealers is an important factor, a big help to the poultryman. The credit on the books of the merchants of Petaluma has amounted at times to $1,500,000. This has enabled many poultrymen to lay in supplies of feed in quantity and at a time when feed is cheap.

PROFIT IN TURKEYS

Runs His Fowl on Irrigated Farm.

A good record for turkeys was made by George C. Coe of Stanfield, Ore., this year. From 119 birds he cleared $260 over the cost of feed and keep and has about 25 birds left for the late market. This income was made despite the fact Mr. Coe lost a large number of young turkeys in the late spring last year. He runs his fowl on his irrigated farm here.

Public Markets

Will Be Tried Out at Schools

(Continued from page three.)

be doubtful of the wisdom of the city putting a larger sum into a central public market."

The chief merit of the plan lies in the elimination of overhead expense. In making the markets free Spokane is profiting from the mistake made in New York and other cities of charging such high rentals that the farmers were driven away.

Baltimore Free Markets.

President Marcus M. Marks of the borough of Manhattan, New York, discusses this feature of the marketing problem with great clearness and insight. He points out that in Baltimore, where free markets are a great success, there are over 5000 stalls in open public markets. In the city of New York, which, on the basis of population, should have 10 times as many, there are not one-tenth. Therefore, Baltimore has 100 times the facilities of New York in proportion to its size.

"My recent experience in connection with open public markets," says President Marks, "causes me to feel very keenly on this subject. Our citizens' committee of the borough of Manhattan aided me to select spaces which had never brought any revenue to the city, and which through use as open markets brought great advantage at the rate of $1.50 per square foot (at which rate $3750 a year would be the rent of 25x100 feet) has caused the markets to languish. Two-thirds of the tenants moved out when they saw they could not afford the rent and the others were bound to add to the selling price of their goods in order to protect themselves.

In New York City.

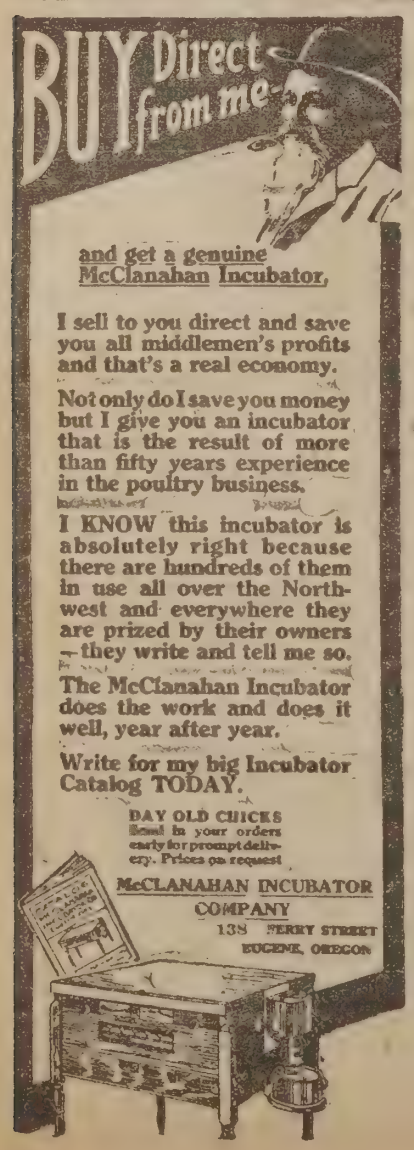
"The fact that as many as 100,000 people patronized the open markets in the borough of Manhattan in a single day two years ago proves that the demand exists and that there are many people who are willing to forego high-priced service in order to cut down the cost of their living. The city owes opportunity to these people. Those who desire comforts and services will patronize the stores."

In one important respect open markets in Spokane would have a better prospect of succeeding than open markets in New York. It is estimated by authorities that less than 5 per cent of the farm products consumed in New York are grown within hauling distance of the public markets. In Spokane there is sufficient land under tillage within easy hauling distance to more than supply in season the population's every need.

Believing that readers of the Farmer in all parts of the Pacific northwest will be keenly interested in the Spokane experiment, we shall keep a close watch on it and report progress from time to time.

Madison County Poultry Show.

The Madison County Poultry and Pet Stock association announces its second annual show at Rexburg, Idaho, January 18, 19, 20, 1917. At the initial show in 1916, 300 birds were shown and $150 in merchandise premiums was paid. This year more birds will be entered, ribbons and merchandise premiums will be given and cash prizes ranging from 50 cents to $5 will be awarded in all standard varieties. C. G. Wherry of Payette, Idaho, a licensed A. P. A. judge, will place the awards. Every bird will be scored.





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Don't pay a cent for any incubator until you have seen and examined the Pioneer Incubator. Send today for BIG FREE ILLUSTRATED CATALOGUE, showing large hatcheries that use these incubators, 540 size, $47.50; 252 size, $30.00. Freight allowances. Sold on easy payments. Write today.

THE PIONEER HATCHERY.
709-11 S. Main. Los Angeles, Calif.

Embargo Bill

Sees Two Sides to the Question

The Farmer is constantly receiving interesting expressions of personal opinions from its readers which it is glad to pass on to others.

To the Editor of the Farmer: There has been a good deal said about the pending embargo bill. It strikes me it is like most questions—there are two sides to it. In the first place, most of the products are out of the farmers hands and in the hands of the speculator, consequently it would not hurt the farmer to any great extent. Second, if a farmer who is holding for higher prices than have been offered still has his product on hand, he is very likely to be in circumstances such that a slump would not cause him to go hungry. Why not work in cooperation with our city brothers? We do not want them all to go to the farm; we need their product as well as they need ours. The slogan during the campaign just ended was "America first." Then if there is a surplus let the warring nations have it. If their food supply was uncertain in Europe, probably they would quit fighting long enough to raise something to eat. Why not have a general discussion of the question through the columns of the Farmer and see what the rank and file think of the proposed bill.

It is taken for granted that the editor is not desirous of molding opinion, but wishes to bring out the facts of the case.

Live and let live.

ED VANCE.

Twin Falls, Idaho.

The Motor Car

On the Farm

Government Road Building.

The federal aid soon to be given to road building throughout the United States is of more significance than it might at first appear to be. Under the special law authorizing it, there will be expended by the national government some $85,000,000 on roads throughout the states. This is to be expended only when the states receiving it provide an equal amount, and therefore means that sooner or later under provisions of the law there will be expended the sum of $170,000,000 for the betterment of roads.

An Auto Per Mile.

There are 2,500,000 miles of roads in the United States and there is an average of one auto per mile, or 2,500,000 autoes in the United States. It has been estimated by one of the leading manufacturers that the average value of automobiles in the United States is $1000, which, if true, would make the value of all of them $2,500,000,000. This may be high, but at even half of $1000 per car the total value would be $1,250,000,000, which in itself is quite a sackful of money.

Motor Vehicles in Oregon.

A statement prepared by Ben W. Olcott, secretary of state of Oregon, of the different transactions in the automobile department for the year 1916 shows the amounts and the various sources from which the receipts are obtained.

Total receipts are shown to be $146,232, derived from 46,006 different transactions, segregated as follows:

Thirty-three thousand nine hundred seventeen automobile registrations, $10,104; 4019 chauffeur licenses, $7342; $10,104; 4019 chauffeur licenses, 07342; 278 dealers' licenses, $2780; 389 duplicate motor vehicle plates, $389; 95 duplicate motorcycle plates, $95; two duplicate dealers' plates, $2; 61 duplicate chauffeur badges, $61; 252 additional dealers' plates, $630; 3625 transfers of motor vehicles and motorcycles, $3625.

The average fee received by the automobile department for all transactions is $3.17, while the average fee received for the registration of automobiles is $3.57. Inasmuch as registration fees for automobiles range from $3 for cars below 26 horsepower to $10 for cars above 40 horsepower, the fact that the average fee is but $3.57 shows to what extent the smaller cars predominate.

Elect Officers

Graham Heads Okanogan Pomona

At the recent meeting of the Okanogan County Pomona grange at Malott the following officers were elected:

Master, F. C. Graham, Independent Grange; overseer, Mrs. J. L. Freeman, Aeneas Lake; lecturer, Arthur Wells, Cloverleaf; secretary, J. L. Freeman, Aeneas Lake; treasurer, W. T. Beals, Cloverleaf; steward, Ben Garigen, Happy Hill; assistant steward, Mr. Willetts, Horse Spring Coulee; chaplain, Mrs. Jennie Wells,- Cloverleaf; gatekeeper, U. F. Fries, North Star; Ceres, Mrs. W. C. Ostenberg, Independent; Flora, Mrs. George Rudolph, Cherokee; Pomona, Mrs. U. E. Fries, North Star; lady assistant steward, Mrs. Ambrose Murray, Independent.

The matter of the new farm loan act recently passed by our national congress was thoroughly discussed and all information possible secured on that subject, and there is no doubt that quite a number of farmers of this section of the country will avail themselves of the new law to secure money at a cheaper rate than now prevailing to use for developing purposes.

GRAYFISH PALATABLE

Campaign to Convince Public.

The State University of Washington and the U. S. bureau of fisheries have united in a campaign to convince the public of the palatability of the grayfish, heretofore known and despised as the dogfish. Miss Mary Rausch of the home economics department of the university will devise a number of dishes in which grayfish is dominant. The government has satisfied itself of the desirability of the flesh of the grayfish, its abundance and cheapness, its canning qualities and its capacity to aid in reducing the cost of living.

Tokio's Population.

Tokio has 2,244,706 inhabitants.



Make Your Dairy Pay

EVEN though you have no more than three cows, there are many good reasons why you should have a **Lily** or **Primrose cream separator.** It is the only way to get all the cream. It gives you warm, wholesome skimmed milk to feed. It saves a lot of tiresome work. When you get your **Lily** or **Primrose** separator busy, you will wish you had done it when you first got your cows.

Lily and **Primrose** separators skim down to the last drop of cream in each gallon of milk. You can't beat them for close skimming. They turn easily. The bearings oil themselves as you run the machine. They don't get out of adjustment—that is important. By turning a screw on the outside of the separator once in six months or so, you keep the bowl at the correct height, and this is positively the only adjustment necessary.

Next time you go to town, drop in and see the obliging dealer who handles **Lily** or **Primrose** cream separators. In the meantime, drop us a line, and we will send you some interesting reading matter about separators.

International Harvester Company of America
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Portland, Ore. San Francisco, Cal. Spokane, Wash. Salt Lake City, Utah

In answering advertisements please mention this paper.

Young Man!

DON'T BE A GEWGAW
PLAY THE FIRST FIDDLE

Is your life going to be a flimsy, frothy, gimcrack existence, or will you make it one of the stirring, purposeful, dominant kind that will reward you with a gainful, happy and worth-while career? It's up to you.

With Our Plan You Can Carve Your Own Way

The Washington Farmer has enabled hundreds of bright, energetic young people to provide themselves with cash, an education and needed articles of merchandise. It is a mere matter of turning spare time into profit instead of letting it slip by, wasted and gone forever.

The work we give you is pleasant as well as profitable. It gives you business training, experience and money. But it isn't ALL roses. There's work to be done and we want to hear only from those presons who can look **Honest Labor** in the face and not be afraid.

If you're that sort we have a place for you today and would like to hear from you. Fill in this blank and mail it right now and we will explain our plan in detail.

The Washington Farmer

Premium Dept., Room 27, Review Building, Spokane, Wash.

Money-Making Plan

Mail this coupon to Washington Farmer, Premium Dept., Room 37, Review Bldg, Spokane, Wash.

Name .....

Age .....

Address ..... P. O.

..... R. F. D.

..... State

Occupation, if any .....

Are you now employed? .....

If so, by whom? .....

You are invited to write a personal letter, stating the reason for answering this advertisement.

White House Picketed

Suffrage Workers Flaunt Banners

So-called "sentinels" representing the Congressional Union for Woman Suffrage are picketing the White House, the home of President Wilson, in order to compel him to recognize them and the suffragist movement they represent. Twelve women walk back and forth before the White House so the president cannot leave or enter without seeing them and the banners they carry setting forth their "votes for women" demands. They declare they are going to keep up the picketing until March 4, the date upon which President Wilson will be inaugurated for his second term.

One cold, windy day last week, President Wilson expressed his sympathy for the shivering women by sending them an invitation to come into the White House and warm themselves, but his invitation was refused.

Harry Thaw Again.

Officers arrested Harry Thaw last week in Philadelphia on a warrant charging him with kidnapping a boy. This is the first time he has been arrested since his liberation from the insane asylum a year ago, after a fight covering years. He had been found guilty of murdering Stanford White, an artist. When arrested last week, Thaw was in a critical condition owing to his having tried to commit suicide by cutting hs throat and wrists.

Peace Gains No Ground.

President Wilson appears not yet convinced that all efforts to bring about peace in Europe will fail, notwithstanding the reply of England and her allies to the president's note of last month. While the reply expresses commendation of the motives that lie back of the president's attempt to restore peace, the allies declare that they cannot consider peace at this time. The terms which they state are: (1) The restoration of all land taken by Germany and her allies, (2) full reparation for losses incurred and (3) guarantee against future war in Europe. It is the consensus of opinion in Washington, D. C., that peace is still far off, but many express the belief that the door is open for continued conservative negotiations on the part of the United States that may ultimately bring the warring nations into agreement.

Germany has expressed strong resentment against the allies for their vigorous refusal to enter into peace negotiations, and Kaiser William has announced that the war will be prosecuted by his armies to the end. This attitude, together with the tone of the allies' reply to the German peace offer, indicate that the feeling between the warring factions is even more bitter and deadly than it has been during the past, and that something near complete exhaustion of one side or the other will be necessary before terms of peace can be agreed upon.

Buffalo Bill Dead.

William F. Cody, famous as Buffalo Bill, the scout, hunter, Indian fighter and wild west show man, died last week in Denver, Colo.

Insures Employes.

The Union Pacific Railroad company has just closed a contract with one of the large insurance companies whereby 40,000 of the railroad's employes are insured for a total of $30,000,000. The insurance is made at the company's expense, and provides for insurance of not to exceed $2500 on each employe who has been with the company one year or more. The insurance averages $750 per employe.

Mail by Aeroplane.

The experiment of carrying mail by airship is soon to be tried out by the postal authorities if present plans materialize. The trial route will be from San Francisco to Sacramento, Cal.

China Wants Peace.

The government of China has sent a note to President Wilson supporting his movement toward establishing peace in Europe. The Chinese note says that that government is suffering probably more from the war than any other neutral nation because it is in a period of reconstruction such as demands the assistance of the other nations of the world. This assistance is largely denied by the exigencies of the war.

Continue Peace Leak Probe.

Congress purposes to continue the investigation of the alleged "leak" of information concerning President Wilson's peace note of a few weeks ago before the note was delivered to the European countries. Thomas W. Lawson, financier, who was alleged to have profited by stock transactions on Wall Street as a result of the supposed leak, refused to testify before the committee of congress making the investigation, and that body has begun the necessary steps to enable it to compel him and other witnesses that will be summoned to tell fully what they know. It has been charged that some one who knew of the coming of the note "tipped off" Wall Street to its coming, thus enabling unscrupulous stock transactions to the immense profit of some traders and loss to others.

Wages Have Increased.

A recently made survey covering a large portion of the United States indicates that there is a general increase of wages to laboring men. Clothing factories, harvester machinery factories and mills in Chicago are shown to have increased wages recently from 10 per cent up. Similar increases have been made by manufacturers in Michigan and other middle western states. Railroad companies in some instances, the large corporations such as the steel corporation and many smaller concerns have voluntarily raised the pay of their lower paid employes. In practically all cases it is reorted that the increases are due to an attempt on the part of the corporations to help their employes meet the increased high cost of living demands.

Legislature Faces Task

Educational Problems Promise Trouble

Shall the tax levy for higher education (the university, the state college and the normal schools) be increased? If so, how much?

This is but one of the big educational questions confronting the Washington state legislature, and a bill has already been introduced by Representative Zednick of Seattle, providing for an increase from 1.05 mills to 1.9 mills. The former rate, which is the present levy, raises a little more than $1,000,000 annually for the institutions named. The latter levy would increase this approximately $900,000.

The Educational Survey.

The bill increasing the levy is one of 10 bills introduced by Representative Zednick with a view to putting into effect the recommendations made by the special commission which a year ago made a survey of the educational system of the state with the view to eliminating certain duplication of courses offered by the University of Washington and the state college, and also of reducing the cost of the entire higher educational system. The consideration of the bills in the legislature is reported to be taking much the form of a contest between friends of the university and college, who fear encroachments the one upon the other.

Define Courses Offered.

One of the 10 bills specifies exactly what courses shall be taught at the college and what at the university, it being contended by the friends of the college that if it is passed it will destroy much of the efficiency of the college at Pullman. Friends of the university, who are taking part in the consideration, claim that the college was intended originally to be a college of agriculture and applied science and not a college combining these functions with liberal arts education.

Those who oppose the changes are doing so on the ground that, while the college at Pullman does make and should continue to make agriculture and practical science its principal courses, they can not be given properly without the broader development of the more liberal arts subjects, such as languages, pure sciences and philosophies. They also declare that in the past these latter lines have been developed in Pullman in strict accordance with law based on the federal act creating the state college.

"Bone Dry" Measure.

With Mrs. Ina Willams of North Yakima, the only woman in the legislature, chairman of the public morals committee of the house of representatives, that committee is already wrestling with the proposed "bone dry" bill, which was introduced by Representative Halsey of Asotin county. While the legislature shows signs of favoring the passage of the bill, there is a strong sentiment in favor of passing it with a referendum clause attached by which it would not become effective until the people of the state had voted upon it at the next general election, which would be in 1918. It is argued that the people voted the present prohibition bill onto the statute books, and that it should not be changed without a vote of the people. Others are anxious to rush the measure through now, and since Governor Lister recommended its passage, it is believed that he would sign it and let it become a law immediately if it is passed.

Highway Questions.

The legislature is practically agreed to establish no new state highways until the present system is completed. This means that the state appropriations will be spent on only such trunk highways as the Pacific highway from the Canadian line to Vancouver, Wash., on the west side, the Sunset highway from Seattle across the state to Spokane; the Inland Empire highway from Spokane to North Yakima by way of Walla Walla, and other established routes of lesser extent. It is believed that the tax levy for good roads will remain the same as they are at present, 1 mill for the public highway fund and 1 1-2 mills for the permanent highway fund. The so-called public highway fund is the one which is expended in the building and maintenance of the main trunk highways by the state highway department. The permanent highway fund is the one expended by the county authorities, with the advice and approval of the state highway department, within the counties in which the money is raised.

Farmers' Union Elects.

At a meeting of the Colfax local of the Farmers' union the following officers were elected: President, F. B. Rogers; secretary, G. W. Perrine; vice president, S. W. Crumbaker. Discussion was had regarding the sack and twine question and the following committees were appointed: Twine committee—S. S. W. Crambaker, F. B. Rogers, B. F. Sherfey; sack committee—Edward Krueger, T. A. Sanders, John Bloom; auditing committee—Edward Krueger, F. B. Rogers, R. A. Hensle. The question of bulk grain handling was considered and the following committee was chosen to attend the county convention at Garfield, at which time the question of the future handling of grain will be disposed of: R. A. Hensle, B. T. Manchester, S. W. Crumbaker, and G. W. Perrine. The date of the next meeting of the Colfax local was fixed at January 14, at which time the newly elected officials will be installed.

Floating Bridges.

Two bridges in a city in India are supported on large metal tanks, which float on the water and accommodate themselves to its rise and fall.



California Excursion

VIA

UNION PACIFIC SYSTEM
SALT LAKE ROUTE

Tickets on sale one day only—January 29. Return limit, April 1.

Choice of routes, including steamship lines and one or both ways via SALT LAKE CITY. This is *The* California excursion opportunity of this season.

Information, tickets, reservations upon application to

W. S. ELLIOTT, D. F. & P. A., Spokane.
R. BURNS, D. F. & P. A., Walla Walla.
WM. M'MURRAY, General Passenger Agent, Portland.

Matrimony, Mathematics and Mazuma

Being a Candid Comment in Answer to the Questions of a Perplexed Young Woman

By the Contest Editor

I hate you grinnin' there:
Oh, Gawd, I love you so!
—Kipling.

My Dear Contest Editor: I have been keeping steady company with a young man for several months. He has seemed to think well of me and has always led me to believe him serious.

Recently he brought a copy of the Farmer to my home and called my attention to your Figure problem. Without asking me if I would marry him, he laid your advertisement in my lap and said he would marry me if I would solve your problem and win the first prize of $200. He said this would furnish our home and that the $75 additional that I could win by paying $1.50 for three years' subscription to the Farmer he would let me have for an engagement ring.

Just at that time I did not feel flattered and maybe I resented it too much. Losing control of my emotions, I sobbed out loud, "Henry I could hate you!" Was I hasty and do you think I am too sensible? What I really wish to know is, do you think he loves me, and would you advise me to apologize for not treating his proposition more kindly? He has big, blue eyes and beautiful hair—if anything, too much—and since he has been showing some indifference, I sometimes feel that I love him.

Do you think I should try to make myself worthy of him by solving your figure problem? Is that too much to pay for a husband, and will $200 furnish a house lovely, and is $75 enough for an engagement ring?

ESTELLE.

Estelle, my figure problem is easier than your questions. For me, anyway. I do not pretend to qualify as an expert on matrimony, and were it not that you mix my contest up with your love affairs your letter would promptly be referred to Laura Jean Libby or Beatrice Fairfax. The Contest Editor is a passe sort of philosopher who long since forgot all he knew about the psychology of love and the delicately shaded twitchings of the girlish heart.

The anguish of being dragged into moving pictures when he preferred the open air, and into tea shops where they serve birdseed and call it a square meal, all this, and much more, my dear little girl, has staunched youth's gushing flow d'amour until now he thinks of his own heart's pulsations in the cold, mechanical terms of "vibrations" rather than "throbs."

Unfortunately or otherwise, as the case may be, the Contest Editor finds his appetite dulled to those animated bon bons that come in Georgette crepe, wistaria and indestructible chiffon, or to those equally entrancing triumphs of nature done up in just plain calico prints and ruffled something—gingham, I think my mother used to call it.

Your letter, Estelle, pitches the Contest Editor headlong into reverie, and almost awakens within him the last lurking spark of those romantic grammar school days when he could gaze into the faces of his fair co-eds and throw all the feeling of a Romeo into the simple conjugation of the verb "love."

Your queries have fallen on an anemic soul sagged and satiated with the sin of loving too much, which, jostled and jilted, is plagued, purged and petrified. Those sentimental quakings which once generated the spirit that inspires the lovesick swain I fear have gone from me, Estelle, gone forever.

But now for the contest. Little girl, you are as welcome as the angels to enter this contest, but no cognizance can be taken of any motive which involves the purchase of a husband. That would be a lottery, and one of the conditions by which Uncle Sam lets this contest get by in his mails is that it shall be free of any taint of the element of chance.

Two hundred dollars would furnish a home more than good enough for any young man who demands that you work to win him, and as to the price of the engagement ring, I decline to commit myself. As a matter of personal policy, and just offhand, as a bachelor, I would say it's too much. Blue eyes are not an insurmountable objection. Too much hair is better than not enough.

Estelle, you are honest. You are human. I like you.

There are all kinds of questions coming in every day from persons who consider entering the figure contest. The Contest Editor is always glad to answer. Here are some of them:

E. S.—I am working on your figure problem, but am in doubt as to whether the sloping side of the figure "4" with the lower cross line forms a figure "7." Will you tell me the truth?

There are no trick figures and no catch characters of any kind in the design of the chart. Each figure should be added for its exact face value and be counted independently of every other figure.

J. W. S.—Would like to ask: Are there any double figures? That is, for example, would a 3 and a 9 together at any particular place in the chart be counted as "thirty-nine?"

No, there are no double figures.

This Is How to Do It

Simply add up the figures in the puzzle chart as if they were in one long column. Your success depends on the accuracy of your total thus obtained.

Figures run from two to nine, and there are no double figures or characters which are not figures. The tail of the "6" has a decided curve, while the tail of the "9" is straight. All other figures have the usual characteristics, allowing no question as to the identity of any figure.

In event that no one submits the correct total, prizes will be awarded for the next nearest solutions.

This contest is restricted to persons residing in Washington, Idaho, Oregon and Montana.

A payment of $1 to $1.50 on subscription to the Farmer entitles the subscriber to enter the contest.

The money paid will be credited on subscription to the Farmer. The advantage of paying $2.50 instead of $1 is that the winner of any of the first four prizes receives additional prize dividends apportioned on the amount paid in on subscription, besides the fact that $1.50 during this contest pays for a three-year subscription to the paper, while $1 pays for only one year.

More than one solution may be submitted by any contestant, by an additional subscription payment of not less than $1 nor more than $1.50. It is not necessary to pay the same amount with each solution if more than one is submitted.

As many prizes will be reserved as there are people tied before any prizes are awarded to those sending in less correct solutions.

You can send in a subscription for some one other than yourself and have the solution registered in your own name. Remember that by paying $1.50 instead of $1 on subscription, the larger will be your dividends if you win one of the four leading prizes; but not more than $1.50 will be received with one solution.

$750 = Prizes = $750

FIRST PRIZE, $200,
to which will be added 50 times the amount paid by the subscriber with the winning solution. For example, if you pay $1.50 on subscription, this prize will be worth $275.

SECOND PRIZE, $100,
to which will be added 30 times the amount paid by the subscriber with the winning solution. This prize may be worth $145.

THIRD PRIZE, $60,
to which will be added 20 times the amount paid by the subscriber with the winning solution. This prize may be worth $90.

FOURTH PRIZE, $50,
to which will be added 10 times the amount paid by the subscriber with the winning solution. This prize may be worth $65.

FIFTH PRIZE, $40.

SIXTH AND SEVENTH PRIZES, Each $20.

EIGHTH TO SIXTEENTH PRIZES, Each $7.

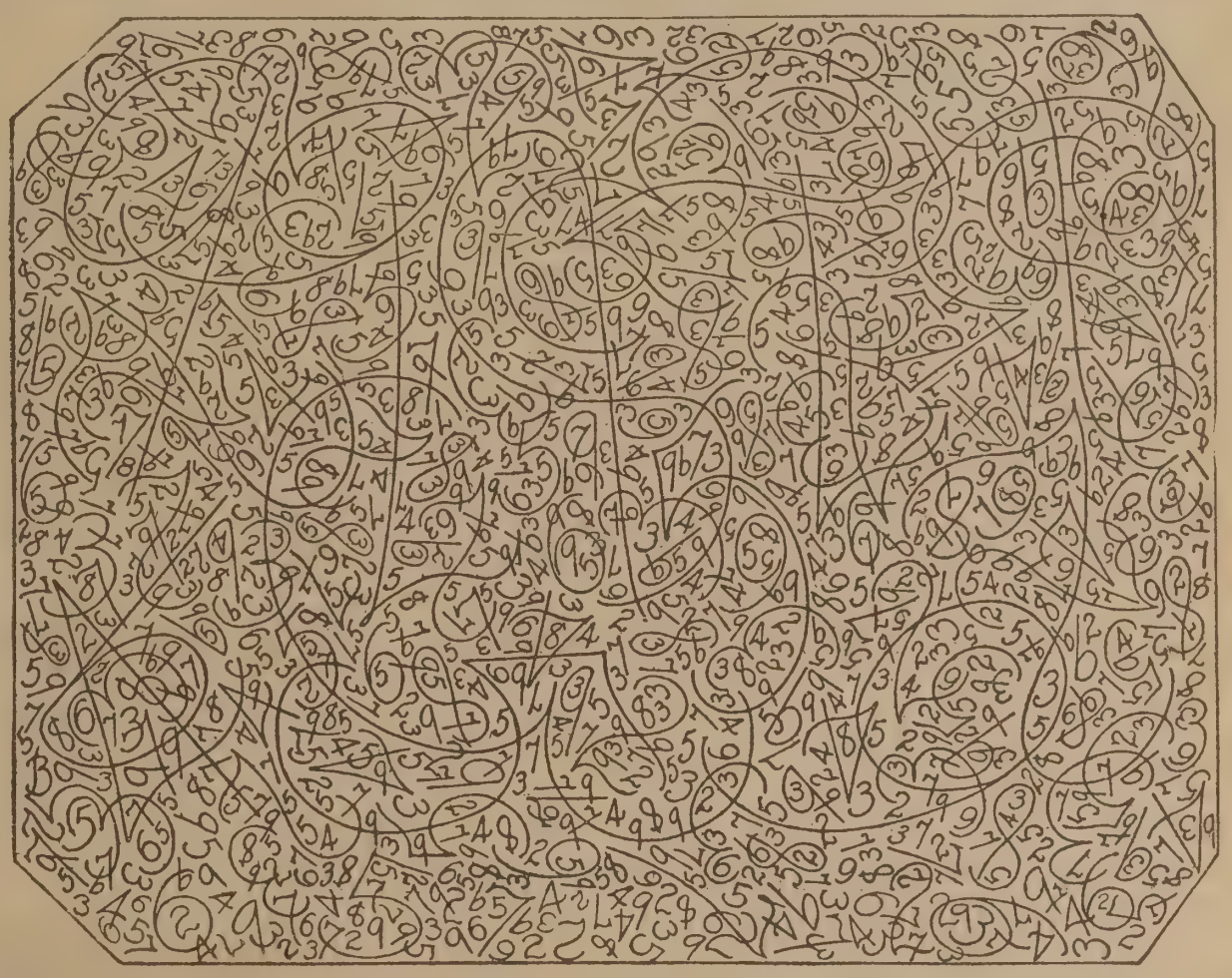
SEVENTEENTH TO THIRTY-SECOND PRIZES, Each $2.

CASH MUST ACCOMPANY.

Solutions unaccompanied by cash payment on subscription will not be registered. Use registration blank on this page. Employes of this paper or members of their families are not eligible to enter this contest.

Don't send in your charts and working papers unless called for by the Contest Editor. Simply write your solution in blank space provided in "Registration Blank."

Remember, the contest closes March 17, 1917.



REGISTRATION BLANK

Cut out this blank closely around the border and send it in with your solution and money.

To The Washington Farmer Contest Editor:

Date sent.....191..

I enclose $..... for..... subscription to The Washington Farmer.

Name .....

Town .....

State .....

SOLUTION AND PAYMENTS.

The following spaces provide for three solutions, with the payments you desire to make with them. You may submit one or as many different solutions as you wish. You can subscribe for one or three years, as per printed schedule, with each solution, as provided for in "The Conditions."

Solution. Amount Paid.

..... $.....

..... $.....

..... $.....

Answer this question: Are you now a subscriber? .....
If you wish paper sent elsewhere, fill in name and address.

.....

.....

You must address all inquiries and solutions to

The Washington Farmer Contest Editor

Review Building, Spokane, Wash.



Apples

When They Are in Best Flavor

To the Editor of The Farmer: Will you please republish that list showing when the different varieties of apples are best for use during the winter; that is, when they are ripe, and when they begin to decline in favor. J. R.

Chesaw, Wash.

The Answer.

October and November—Jonathan; brilliant red; a splendid family sort, juicy, rich and vinous.

October, November and December—Banana; clear, pale yellow with pinkish red blush; very tender, with faint aroma of banana. Grimes; golden yellow; an old-time favorite; tender and spicy with delightful aroma.

November, December and January—Spitzenburg; bright red; the aristocrat of apples; crisp, juicy, deliciously rich and fragant. Ortley; light, waxy yellow, fine grained and juicy; ideal for dessert. Delicious; dark red; the latest favorite; sweet, mildly touched with acid; fine and melting.

December, January and February—Stayman; rich red; an improved Winesap; very tender, with rich subacid.

January, February and March—Rome Beauty; red striped; the champion baker; sprightly and pleasant.

February, March and April—White Winter Pearmain; pale, favorite dessert apple. Yellow Newtown; greenish yellow; fine flesh, with refreshing high flavor; "The autocrat of the breakfast table."

March, April and May—Winesap; intensely rich red; subacid; very inviting.

April, May and June—Arkansas Black; mahogany red, nearly black, firm, fine grained, crisp and juicy, good keeper.

Too Much Farm Specialization

Fruit growing is only one part of farming, and except in rare instances should not be relied upon to produce all the necessities to support and maintain the home on the farm.

This is the sixth of a series of articles summarizing the addresses and the discussions of orchard problems at the apple conference held in connection with the ninth annual apple show at Spokane.

The tendency today is to get away from the extreme specialization in fruit that has marked the last few years, according to Professor O. M. Morris of the state college at Pullman, in an address delivered before the apple conference. Fruit growing is only one part of farming, he said., "If the farm ultimately reaches what it should, its own organization and character must be of the type to produce the necessities to support and maintain itself."

Professor Morris said that by correct farming a man could make a good, comfortable living, but that such a farmer seldom gets rich. The farmer who gets rich is one of two classes, what he called the speculator and the "miner." By the former he meant men with side lines or special lines, who used the farm only as a basis for their operation. By the latter he meant the man who has robbed the soil of his farm by taking out year after year its fertility by excessive cropping and inadequate building up of the soil through fertilization processes.

Soil Must Be Conserved.

"In a new country the soil and its fertility is looked upon as a thing found, costing very little and can consequently be dispensed with with equal freedom and it is not handled in the same conservative way that it is in the older sections of the world," said the speaker. "The crops that we are growing here in the northwest are plants that through time immemorial have developed on soil that had a reasonable proportion of decaying vegetation in it, yet we are trying to grow apples on soil almost devoid of humus. It is the same as it is with the live stock man. A good live stock man seldom calls in a veterinarian, but the man who does not take good care of his stock is always consulting one. It is good care that we need to give the soil. In that sense I want simply to impress this thought that there is no possibility of making our orchards in the northwest the best that it is possible for us to make them without a system of diversified farming whereby a continuous supply of decaying vegetation can be used to put back into that land. Nitrogen is a good thing to give your land a boost, but you must not overdo it."

Cost of Production.

"I have been interested in some charts published in Des Moines, Iowa, showing the relative profit and loss in certain farm products, during the last 12 years. During over half of that time hogs have sold below the cost of production—that is producing pork by the use of corn. There are men in Iowa who have been making money on hogs, but those men have been feeding something cheapter than corn. Another chart covering the last 140 months shows that fat steers during 70 of those months have sold below the cost of production. Things have not been all glorious for the special live stock man. Every special line has got into this kind of trouble. Take butter during the last 140 months. During only 49 of those months has it sold above the cost of production in the state of Iowa. Of all our crops here in the northwest I believe there is only one general crop that has sold above the cost of production for the last five years, and that is wheat, and I don't believe that has been if you will take into consideration the depletion of the land that has taken place. So long as we grow only one crop and that not nearly so cheap as they can produce apples in the state of New York, we can not hope to make a profit. The reason they can grow apples cheapter than we is that the orchard is simply a part of the farm development.

Year-Round Labor.

"Another thing in this northwest is the labor on the farm. We must recognize that so long as we have a specialized industry that has only one crop and that expects to import its labor for the season we are going to face just such conditions as the northwest has been facing the last summer. You can't get satisfactory help to work at one kind of a job for three months, and another kind for three months and still another kind for three months. We must have a system of farming that will occupy the labor of a district throughout the greater part of the year. It has been found that there is a very close relation between the quality of the labor and the continuity of the labor throughout the year."

Apples in Cold Storage.

Reports from 450 storages show their rooms contain 2,603,584 barrels and 3,913,290 boxes of apples. Holdings reported from 367 storages showed 2,421,954 barrels and 3,744,162 boxes on December 1 as compared with 4,213,203 barrels and 3,684,557 boxes on the same date a year ago, a difference of 32.6 per cent. The barreled apple holdings show a decrease of 42.5 per cent and the boxed apples an increase of 1.6 per cent as compared with those of last year. The holdings have increased 9.0 per cent since November 15 as compared with an increase of 9.0 per cent during the same period last year.

Her Suggestion.

She—Come to me in a month from now and I'll give you my answer.

He—But how can I stay away from you for a whole month?

She—Go and ask papa now and it will be a month before you will be able to get around.—Boston Transcript.

We Can Not Cheat Nature

Who Succeeds in Orcharding Must Study Nature

By GRANVILLE LOWTHER

Scientific orcharding is orcharding according to the laws that environ us, according to the nature of things. For instance, the man who is scientific, either in education or thought, would not try to grow oranges in Canada or apples in Florida. The conditions of climate in Florida are not adapted to apples, nor are the conditions in the north adapted to the growing of tropical fruits. To be scientific is to conform to the laws under which we are placed.

Ecology is that science which treats of the adaptation of plants to their environment. The fact that the Yellow Belle Flower is the best apple for California is no argument that it is the best for the Pacific northwest. The fact that the Baldwin is the best for New York is no reason why we should plant it in the state of Washington. The fact that the McIntosh Red has been considered the best for Bitter Root, Mont., is no reason why it should be planted in the vicinity of Spokane. (The McIntosh Red, which in the past was considered well adapted to Bitter Root, is now considered to be not well adapted.) The fact that the Wagener is a good apple, one of the best at Spokane, is no argument why it should be planted at North Yakima. In the earlier days of orcharding in this country people did the best they knew, but the fruits best adapted had to be learned by experience, and the experience is not all gained and the facts are not all in.

There is a law called inertia, which implies that any body continues in a state of rest unless it is impelled by force to change its state. There is also a law of gravitation, which no one can violate without suffering the results. People observe these laws without thinking of themselves as scientific, yet whoever does so is scientific in fact, whether he knows it or not.

So with scientific orcharding. Some men have a knowledge of the workings of nature who do not regard themselves as scientific, but who observe certain results as growing out of certain causes and adjust themselves to the conditions. A man may not know the chemical qualities of certain fertilizers, such as barnyard manure, nor the constituents of the soil to which he applies these fertilizers; but if he puts the manure on the land, and if it is what the soil needs, it will improve his crops as much as if he were a soil chemist. The man who stumbles onto a gold nugget and thereby discovers a rich deposit of ore is just as much a beneficiary of nature as the man who makes a similar discovery by means of the most careful study in the light of geological science. The only trouble is that they who do the right things without knowing why they do them are just as likely to do the wrong things and thereby lose what they acquired by the same law of ignorance which led them to acquire. Islands have been discovered by accident, but that does not argue that in sailing the seas the compass and chart are of no value.

Our old orchards were planted without regard to the adaptations of varieties to soil, climate and local environments, but that is no reason why we should continue the mistake of the pioneers who were guided by experiences acquired under different conditions.

To sum it all up, we can not cheat nature. Whoever would succeed must study nature's laws and keep them. The pathway of life is strewn with wrecks because of lack of adjustment to the forces that are in control.



Healthy Grain

Seeds grow faster and mature into good healthy grain when first freed from smuts by using

FORMALDEHYDE
The Farmer's Friend

This powerful disinfectant destroys grain smuts and fungus growth. Every up-to-date farmer should use Formaldehyde. It has the supreme endorsement of the U. S. Dept. of Agriculture. Our Formaldehyde in one pint bottles costs 35 cents and treats 40 bushels of grain. Big illustrated hand book sent free on request.

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White Southport Globe
The Great Commercial Onion.

Has yielded 500 bushels and more an acre; its color, shape and size give it great market value; its keeping qualities and productiveness make it very profitable. See our catalogue for full description and lowest prices. Our stock of all standard varieties of onion seed is unsurpassed as to quality and germination. We have a full line of Garden, Flower and Field seeds.

Our Seed Book is free. Write for your copy today; postal is as good as a letter.

Illinois Seed & Nursery Co.
167 Main St., Makanda, Ill.

1917

Our new 1917 Catalogue now ready.

Yours for the asking.

The Inland Seed Co.

Spokane, Wash.



GOOD SEEDS

GOOD AS CAN BE GROWN
Prices Below All Others

I will give a lot of new sorts free with every order I fill. Buy and test. Return if not O. K.—money refunded.

Big Catalog FREE

Over 700 illustrations of vegetables and flowers. Send yours and your neighbors' addresses.

R. H. SHUMWAY, Rockford, Ill.

Seed Wheat

Shortage Possible, Says Houston

Secretary Houston of the United States department of agriculture has issued a warning to the wheat growers of the United States that unless care is taken the country will find itself short of good seed grain for spring sowing. While Washington, Oregon and Idaho, the secretary says, will have seed wheat of excellent quality if our farmers do not sell short, the varieties grown here are not suited to the northern great plains states, and varieties adapted to this region can not be obtained elsewhere.

Summarized, the situation is outlined as follows by Secretary Houston:

"The wheat crop of 1916 in the spring wheat states of the upper Mississippi valley was very badly injured by rust and other diseases. Not only was the yield much reduced, but the quality of the grain was generally very poor. Much of the grain is light in weight and shrunken, and doubtless contains many diseased kernels. Such grain is not good for seed purposes. Although plants may be procured from such seed, they are not likely to be vigorous, and many of them may be diseased, and these diseases will either cause their death before maturity or be spread to other plants, or both.

"It is advisable, the secretary believes, for farmers in this region to make sure promptly of a sufficient supply of good, plump seed, of adapted varieties, which will grow when sown. If plump, healthy seed can not be obtained the seed that is available should be carefully screened and fanned to remove all those grains that are not good for sowing. In no case should the prevailing high prices tempt the farmer to part with his good seed wheat and cause him to rely upon shrunken and diseased seed for sowing. Such a course is likely, it is said, to result in disaster to next year's crop.

"In the states of Washington, Oregon and Idaho the spring wheat crop was large and the grain of excellent quality. The tempting prices for wheat should not induce the farmer to sell what should be kept for seed, it was pointed out, because no seed of varieties adapted to this section can be obtained elsewhere. The dry fall has curtailed the sowing of winter wheat and the acreage of spring wheat will be larger than usual, therefore, and the demand for seed increased accordingly."

CRANBERRY GROWERS
Putting 160 Barrels on Market.

W. E. Schimpff and C. N. Bennett of Astoria, cranberry growers, have been in Portland negotiating for the marketing of their output. They now have 100 acres of bog set to cranberries, but this season only a few acres have come into bearing. They have 160 barrels, however, which they are putting on the market.

UPPER SNAKE RIVER
Shipment of Grain by Steamer.

Steamer Spokane of the Oregon-Washington Railroad & Navigation company has resumed service between Lewiston and the upper Snake river points after having been tied up on account of ice floes. The steamer will be engaged in the movement of grain from the upper Snake river warehouses to the dock at Lewiston, where 60,000 bushels will be stored until cars are available for its movement to the markets.

On account of the great variation in local climatic conditions, moisture, soil, etc., it is up to the readers of The Washington Farmer always to remember that methods which prove successful in one locality may not work out in others. It is our aim to gather the experiences of farmers in every section of this state and pass these experiences on to our readers, that they may try out or adopt such as may be applicable to their locality and conditions.

Sugar Beets

Production of Domestic Seed

Sugar beet seed was grown commercially in this country during the past year in several state from Michigan to California. The crop of seed harvested in 1915 was so satisfactory—according to the report of the chief of the bureau of plant industry, U. S. department of agriculture—in each of the areas tested that a largely increased acreage was planted this year.

This bureau has assisted in an advisory way in growing, selecting and siloing the roots, planting them in the spring, harvesting and cleaning the seed, and, in general, endeavored to produce the largest amount of commercial seed possible at a minimum cost. Approximately 5000 acres are in beet seed in this country this year, while we require the product of at least 16,000 acres for a normal planting, not considering the natural expansion of the beet sugar industry. Each new mill will require an average of 200 acres in seed to meet its planting requirements. Seven new mills are in process of construction for this year.

In answer to a letter of inquiry from the Farmer, C. O. Townsend, pathologist in charge of sugar beet investigations of the U. S. department of agriculture, writes:

"In 1916 nearly 1000 acres of sugar beet seed was produced in Idaho; something over 2000 acres in Colorado, and a small acreage in Montana. There was also a small acreage in California and several hundred acres in Michigan. The seed in Idaho was grown for the most part in the vicinity of Idaho Falls; that of Colorado was grown in the vicinity of the sugar factories in the northeast part of the state and in the Arkansas valley; the Montana seed was grown near Billings and the Michigan seed near Blissfield."

AUTOS BLANKETED
Horses Are Left to Shiver.

An Emporia woman telephoned William Allen White the other day that she counted 12 blanketed motor cars and seven unblanketed horses in front of a church during service time the preceding Sunday morning, says the Kansas City Star. The motor cars were blanketed for the obvious reason that radiators freeze, and frozen radiators cost money. But a horse is constructed differently and consequently is not wrapped up so carefully. However, Mr. White believes a horse can do considerable shivering during church time, and he has a sneaking notion that a prayer which is started while the petitioner's horse is standing unblanketed outside may be lost in transit.

SAGER IS MASTER
Pleasant Valley Grange Elects.

At its last regular monthly meeting the Pleasant Valley grange in Multnomah county elected the following officers: G. N. Sager, master; Miss Hazel Berke, overseer; Mrs. Kate Poppleton, lecturer; Mrs. J. L. Johnson, chaplain; Mrs. Anna Lehman, secretary; Mrs. Isabel Masters, steward; Loyal Giese, assistant steward; Mrs. H. C. Restoff, treasurer; Albert Troge, gate keeper; Mrs. Effie Sager, lady assistant; Mrs. M. E. Donley, Ceres; Mrs. W. N. Moore, Pomona; Miss Edith Butler, Flora; Miss Hazel Stradley, musician; H. E. Poppleton and T. P. Campbell, trustees.

RECORD PRICES
Berry Growers Demand 4 Cents.

The best prices berry growers have ever received in Whatcom county for raspberries will be paid members of the Nooksack Valley Fruit Growers association, recently organized, in 1917. By holding out for better offers than were made them a month or two ago they have just secured 4 cents a pound, or three-fourths of a cent more than was paid them last summer for barreling stock. On this basis some of them have contracted for their next two years' crops and others for next year's only.

Attendance at Movies.

It is estimated that the daily attendance at the moving picture theaters in the United States is more than 25,000,000.

Alfalfa



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One-Story Implement Shed

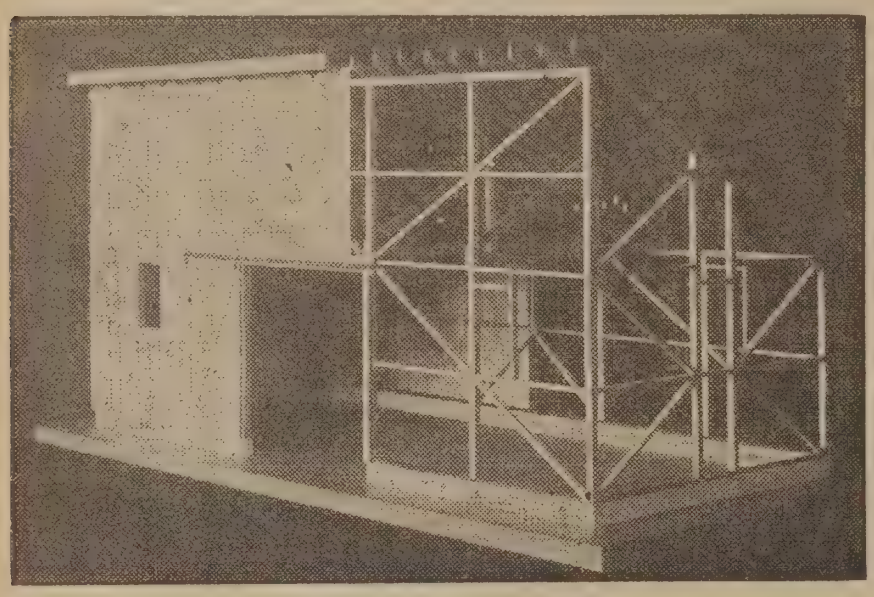
Can Be Made Simple, Artistic and Utilitarian

An attractively covered and amply illustrated pamphlet on implement sheds, written by Professor K. J. T. Ekblaw of the College of Agriculture of the University of Illinois, is the first of a series of bulletins on farm buildings being prepared by construction engineers for the National Lumber Manufacturers' association, the series of nine in all on various buildings about the farm.

The publication on Implement Sheds, like the others which follow it, goes deeply into the question of how to build buildings for the farm of sufficient strength and durability to prove of efficient service can be increased to 15 years providing proper care is given, and the machinery kept in sheds of proper type. It is almost equally safe to assume that the average life of uncared-for machinery will not be much more than five years.

He in part describes the one-story shed in the accompanying illustration, as follows:

The needs of the average farm for a cheap, easily built implement shed are met by the simple shed type. The framing consists of 6x6 posts set on a light 1:2 1-2:5 mixture concrete foundation at intervals of eight feet, the plate consisting of two 2x6's. Short diagonal braces can be set in underneath between the plate and the post in order to give the plate further support. The rafters for a span of 18 feet should be at least 2x6 and better 2x8, set not less than two feet apart on centers. The wall covering may consist of vertical siding, either 10 or 12 inch boards, with the cracks covered by ogee battens. For horizontal siding studs are necessary; these should be 2x4's, placed not over 3 feet apart. Either drop siding, German or novelty siding or ordinary weather boarding may be used satisfactorily, but the latter is somewhat light for a building of this kind and would probably not be as durable as the others mentioned.



Simple shed for implements.

in the highest degree economical for the builder.

The author in addition to his technical suggestions, lays down as a general proposition the advisability of painting the farm buildings, for preservation against weather, insects, or other destructive agencies, as well as to give the farm a prosperous appearance. He says also that an implement shed can be erected in such a manner as to be simple, artistic, and utilitarian. His pamphlet gives hints for the erection of open, simple, two-story and wide enclosed types.

Professor Eckblaw says:

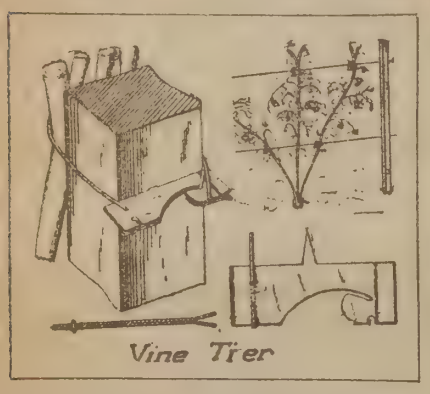
"To take 10 years as the average life of farm machinery is certainly to be considered conservative. It is entirely safe to assume that the average length

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Vine Tying Device.

The object here is to provide a simple means of tying vines to vertical posts and to horizontal wires. It is a piece of stamped metal bent on itself and flared at one end. The operator



Vine Tier

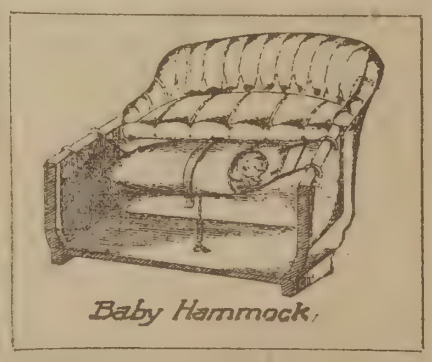
forces the spike into a post and passes the attached wire around the post and vines, or he forces the flared end over a horizontal wire and binds the vines in the same way.

The Mound Bird.

The mound bird of Australia makes a large mound sometimes 150 feet in circumference, and its eggs are deposited in it at a depth of five or six feet.

Baby Hammock.

The stretcher rod at each end of this hammock is supported by two springs

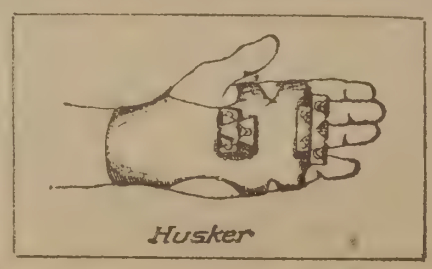


Baby Hammock

attached to spaced hooks. A fifth spring at the bottom prevents swinging and excessive motion.

Corn Husker.

The hooks of this husker are so placed, on the left hand, that they

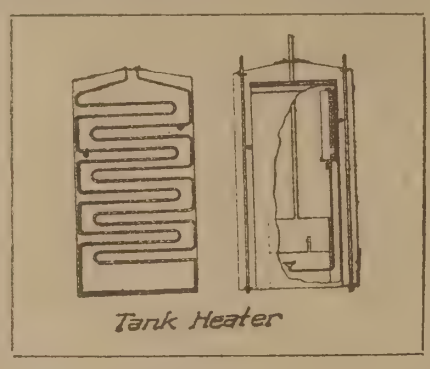


Husker

grasp the husk firmly when the hand is closed about the ear. A sharp blow by the right hand then separates the husk in one motion.

Tank Heater.

This invention is a heater which is placed inside a water tank, and which gives out enough heat to prevent the

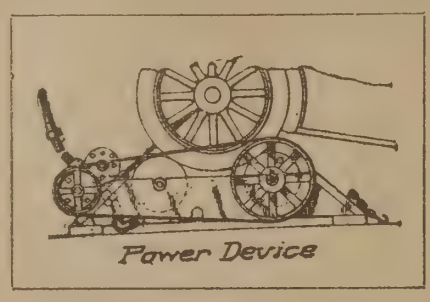


Tank Heater

water from freezing. The hot gases from the burning oil pass over a large surface before they escape.

Power Transmitter.

Each rear wheel of the automobile here rests on two broad-rimmed wheels and the power is taken from the axle



Power Device

of one pair by means of a pulley and belt. We show the device driving a rotary pump, but it can, it is claimed, drive many other machines.

Complete State Road Survey.

The county engineer has completed the survey and cross-section work on the proposed state road north from Sprague to Harrington. Over a part of the distance two routes have been surveyed and the definite route of the road will be established after the county engineer has gone over the estimates for the different surveys. The county commissioners have set aside $38,000 for construction work on this road for the coming year, which amount will be sufficient to surface, grade and gravel more than one-half of the distance between Sprague and Harrington. The new road will shorten the distance between the two towns about one and one-half miles and the maximum grade is not to exceed 5 per cent. The contract for construction work will probably be let early in March.

BUYS CLOUSE FARM

Barkhuff Pays $90 Per Acre.

G. P. Barkhuff, a well-known young farmer of Colton in Whitman county, has bought the R. E. Clouse farm near Johnson. This is one of the best improved farms in the Palouse country and besides it has a modern nine-room house, large barn, cement floor hog and chicken house. The farm land consists of 200 acres, of which 65 acres are in crops. The entire place is fenced and is well watered. The consideration was $90 per acre. Mr. Barkhuff is a former state college student.

Germ Theory.

The germ theory dates from 1863.

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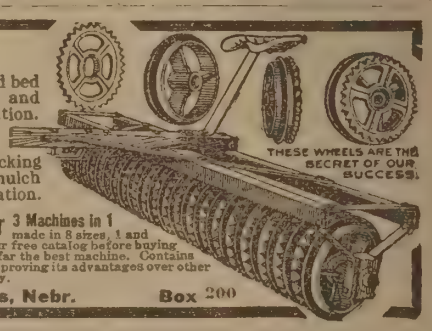
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HIDES
PELTS, WOOL, MOHAIR, CASCARA BARK

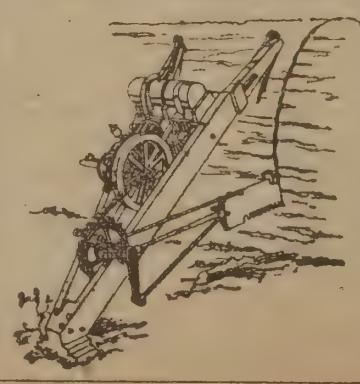
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When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from page eight.)

and what his degree?" went on Mary in a bantering tone.

"He has no degree; he is a plain untitled soldier, not even a knight; that is, not an English knight. I think he has a German or Spanish order of some sort."

"Not a duke; not an earl; not even a baron or knight? Now he has become interesting."

"Yes, I suppose so; but don't bother me."

"Will he be at the dance and banquet tonight?"

"No! No! Now I must go; don't bother me, I say." And the king moved away.

That night we had a grand banquet and dance at Westminster, and the next day we all, excepting Lady Mary, went back to Greenwich by boat, paying a farthing a head for our fare. This was just after the law fixing the boat fare, and the watermen were a quarreling lot, you may be sure. One farthing from Westminster to Greenwich! Eight miles. No wonder they were angry.

The next day I went back to London on an errand, and over to Wolsey's house to borrow a book. While there Master Cavendish, Wolsey's secretary, presented me to the handsome stranger and he proved to be no other than Charles Brandon, who had fought the terrible duel down in Suffolk. I could hardly believe that so mild-mannered and boyish a person could have taken the leading part in such a tragedy. But with all his gentleness there was an underlying dash of cool daring which intimated plainly enough that he was not all mildness.

We became friends at once, drawn together by the subtle human quality which makes one nature fit into another, resulting in friendship between men, and love between men and women. We soon found that we had many tastes in common, chief among which was the strongest of all congenial bonds, the love of books. In fact we had come to know each other through our common love of reading, for he also had gone to Master Cavendish, who had a fine library, to borrow some volumes to take with him down to Greenwich.

Brandon informed me he was to go to Greenwich that day, so we determined to see a little of London, which was new to him, and then take boat in time to be at the palace before dark.

That evening, upon arriving at Greenwich, we hunted up Brandon's uncle, the Master of Horse, who invited his nephew to stay with him for the night. He refused, however, and accepted an invitation to take a bed in my room.

The next day Brandon was installed as one of the captains of the king's guard, under his uncle, but with no particular duties, except such as should be assigned him from time to time. He was offered a good room on one of the lower floors, but asked, instead, to be lodged in the attic next to me. So we arranged that each had a room opening into a third, that served us alike for drawing-room and armory.

Here we sat and talked, and now and then one would read aloud some favorite passage, while the other kept his own place with finger between the leaves. Here we discussed everything from court scandal to religion, and settled to our own satisfaction, at least, many a great problem with which the foolish world is still wrestling.

We told each other all our secrets, too, for all the world like a pair of girls. Although Brandon had seen so much of life, having fought on the continent ever since he was a boy, and for all he was so much a man of the world, yet had he as fresh and boyish a heart as if he had just come from the clover fields and daisies. He seemed almost diffident, but I soon learned that his manner was but the cool gentleness of strength.

Of what use, let me ask, is a friend unless you can unload your heart upon him? It matters not whether the load be joy or sorrow; if the former, the need is all the greater, for joy has an expansive power, as some persons claim steam has, and must escape from the heart upon some one else.

So Brandon told me of his hopes and aspirations, chief among which was his desire to earn, and save, enough money to pay the debt against his father's estate, which he had turned over to his younger brother and sisters. He, as the eldest, could have taken it all, for his father had died without a will, but he said there was not enough to divide, so he had given it to them and hoped to leave it clear of debt; then for New Spain, glory and fortune, conquest and yellow gold. He had read of the voyage of the great Columbus, the Cabots, and a host of others, and the future was as rosy as a Cornish girl's cheek. Fortune held up her lips to him, but—there's often a sting in a kiss.

CHAPTER III.

Now, at that time Mary, the king's sister, was just ripening into her greatest womanly perfection. Her skin was like velvet; a rich, clear, rosy snow, with the hot young blood glowing through it like the faint red tinge we sometimes see on the inner side of a white rose leaf. Her hair was a very light brown, almost golden, and fluffy, soft and fine as a skein of Arras silk. She was of medium height, with a figure that Venus might have envied. Her feet and hands were small, and apparently made for the sole purpose of driving mankind distracted. In fact, that seemed to be the paramount object in her creation, for she had the world of men at her feet. Her greatest beauty was her glowing dark brown eyes, which shone with an ever-changing luster from beneath the shade of the longest, blackest upcurving lashes ever seen.

Her voice was soft and full, and, except when angry, which, alas, was not infrequent, had a low and coaxing little note that made it irresistible; she was a most adroit coaxer, and knew her power full well, although she did not always plead, having the Tudor temper and preferring to command—when she could. As before hinted, she coaxed her royal brother out of several proposed marriages for her, which would have been greatly to his advantage; and if you had only known Henry Tudor, with his vain, boisterous, stubborn violence, you could form some idea of Mary's powers by that achievement alone.

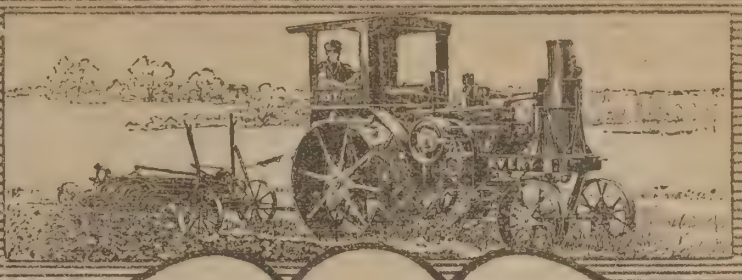
Will Sommers, the fool, one day spread through court an announcement that there would be a public exhibition in the main hall of the palace that evening, when the Princess Mary would perform the somewhat alarming, but, in fact, harmless, operation of wheedling the king out of his ears. This was just after she had coaxed him to annul a marriage contract which her father had made for her with Charles of Germany, then heir to the greatest inheritance that ever fell to the lot of one man: Spain, the Netherlands, Austria, and heaven only knows what else.

She had been made love to by so many men, who had lost their senses in the dazzling rays of her thousand perfections—of whom, I am ashamed to say, that I, for a time, had been insane enough to be one—that love had grown to be a sort of joke with her, and man, a poor, contemptible creature, made to grovel at her feet. Not that she liked to encourage it; for, never having been moved herself, she held love and its sufferings in utter scorn. Man's love was so cheap and plentiful that it had no value in her eyes, and it looked as if she would lose the best thing in life by having too much of it.

Such was the royal maid to whose tender mercies, I now tell you frankly, my friend Brandon was soon to be turned over. He, however, was a blade of very different temper from any she had known; and when I first saw signs of a growing intimacy between them I felt, from what little I had seen of Brandon, that the tables were very likely to be turned upon her ladyship. Then thought I, "God help her," for in a nature like hers, cahrged with latent force, strong and hot and fiery as the sun's stored rays, it needed but a flash to make it patent, when damage was sure to follow for somebody—probably Brandon.

Mary did not come home with us from Westminster the morning after the joustings, as we had expected, but followed some four or five days later, and Brandon had fairly settled himself at court before her arrival. As neither his duties nor mine were onerous, we had a great deal of time on our hands, which we employed walking and riding, or sitting in our common room reading and talking. Of course, as with most young men, that very attractive branch of natural history, feminology, was a favorite topic, and we accordingly discussed it a great deal; that is, to tell the exact truth, I did. Although Brandon had seen many an adventure during his life on the continent, which would not do to write down here, he was as little of a boaster as any man I ever met, and, while I am in the truth-telling business, I was as great a braggart of my inches as ever drew the long-bow—in that

(Continued on page twenty-six.)



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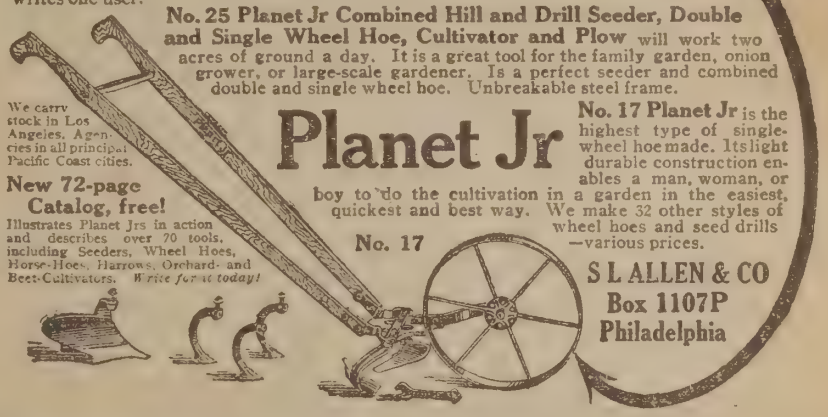
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These tools do the work of 3 to 6 men



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Illustrates Planet Jrs in action and describes over 70 tools, including Seeders, Wheel Hoes, Horse-Hoes, Harrows, Orchard- and Beet-Cultivators. *Write for it today!*

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No. 17 Planet Jr is the highest type of single-wheel hoe made. Its light durable construction enables a man, woman, or boy to do the cultivation in a garden in the easiest, quickest and best way. We make 32 other styles of wheel hoes and seed drills—various prices.

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POSTS Price List Free!

Genuine Red Cedar—they won't rot

Quit buying posts in small lots at high lumber yard prices. We ship direct from woods. FREE Price List shows sizes, prices, number in car.

Hewitt-Lea-Funck Co., 758 Funck St., Sumner, Wash.

Read the "Want Ads"

You will find it well worth while to read the "Want Ads" in each issue of this paper.

In answering advertisements don't fail to mention this paper.

Brown Portable Elevator Co.

of Chicago, Ill., and Portland, Ore.

Extends to its many friends the season's greetings and desires to announce its moving into more commodious quarters in the heart of Portland's wholesale district—46 Front street. Phone Broadway 1966—providing greater and better facilities for meeting the demand for the famous

BROWN PILER
and
"BROWN-PORTABLE"
Elevating and Conveying Machinery

Is Direct Legislation a Failure?

Is It to Be "Unless You Fully Understand the Measure, Kill It"?

By E. A. BRYAN, Pullman, Wash.

Is direct legislation a failure? Will every bill initiated or referended be defeated? Is the dictum, "Unless you fully understand the measure, kill it," to prevail? Is only destructive and not constructive legislation possible under the system?

The outlook is discouraging indeed, but not conclusive evidence of failure. Lately one great branch of the temperance party, intelligent, conscientious, constructive in its desires, attempted to initiate a temperance measure, the purpose of which was generally acceptable. Another great branch of the party, similarly intelligent, conscientious and constructive, employs a shrewd and experienced lawyer to examine the details and the working of the bill and announces that the lawyer pronounces it defective and dangerous to the ends in view. Forthwith, opposition is announced, and temperance people, either accepting the pronouncement of the lawyer as final, or discouraged as to the probability of success, drop the whole matter.

In either case the people were not trusting themselves on the matter of detail, but were trusting a few—a very few, or even a single person—to decide for them. There is the difficulty, therefore, under the system, that after all, the determination of proposed laws may be left in matters of detail to the leadership of the order or party, or group desiring to initiate the measure; and the followers give their support on their faith in their chosen leaders, rather than on their understanding and support of the proposed measure.

Nay, more, since groups sometimes combine in order to throw the united strength of their organization for certain measures, these measures may be merely the result of a compromise, and even the leaders may not be able to vouch for the measures of other allied organizations. The confusion of mind and the uncertainty thus arising, together with the difficulty on the part of the average voter in understanding legal phraseology leads to the very general conclusion, "I do not fully understand the measure, and therefore I am against it."

As a matter of fact, tens of thousands of voters never give even a single reading either to an initiated or referended measure. They decide either on the basis of their group leadership, the title or name of the measure, or on the principle, "Not understanding, I am against it." What, then, are the lessons thus far?

For initiated measures, it certainly is that they should be short and simple in their statement, and broad and constitutional in their character. Such questions as whether a state shall be wet or dry, whether we shall elect United States senators or president by popular vote or not, whether or not women shall be enfranchised, and similar simple, broad, fundamental questions may be successfully initiated. Complex, detailed statutes will be defeated. The referendum can be used much more broadly. The negative side will generally prevail. Perhaps on that very account the affirmative vote should be that "the will of the legislature shall not prevail."

"Safety first" is a good slogan, but it should not prevent the duty of thinking and of constructive legislation.

As yet then we have not achieved the ideal system. We have not escaped the necessity of leadership and delegated responsibility. We are, perhaps, groping toward the light, but we have not yet found it. We have escaped some of the dangers, but have encountered others. Let us hope that the light will appear.

Club of No Clique or Family

Community Meetings and Festivities in Rockies

By N. A. LYMAN, Sula, Mont.

Shut off in a fertile valley of the Rockies, until the automobile changed conditions, the valleys of Ross' Hole and French Basin developed a community life that has been one of the great pleasures of life in the valley. For years the community festivities and gatherings have been noted. Community dinners, dances and other amusements have been held and attended by all. As the population increased, the schoolhouse, which until the last few years had been the general meeting place, became too small and need was felt for some better accommodations, if the community spirit was to be fostered and strengthened. With this need in mind, the idea of the country life club and clubhouse took birth.

As a result of this need, in January, 1914, a country life club was organized, and plans made for building a suitable clubhouse.

It was decided that the epenxse of this be borne by the members of the community in proportion to their ability.

Each member was therefore asked to donate either money, material or labor in such proportion as he was able.

The work was pushed forward rapidly. In less than six months a substantial and comfortable clubhouse was erected and in use. It was located on an ample tract of land donated for the purpose, and, when finally completed, will have cost the community about $1200.

Much of this cost was given in direct donations at the start. Later, the ladies of the club, by basket socials, dinners and other social functions, raised much of the money needed to complete it, and have decorated it inside in a beautiful manner, secured a piano, chairs, tables, lamps and other furniture necessary to the use of a clubhouse, until it is now equipped for all the purposes of the club.

The clubhouse has now been in existence and in use for over a year and a half. During that time there have been many uses found for it. Every matter of business in which the community is interested is there discussed, and meetings of all kinds find it a convenient place for assemblage. Stock meetings, equity meetings and political rallies have been held there, and business of all kinds has been conducted in the clubhouse.

But more important than the use as a meeting house have been the festive gatherings of the community that the clubhouse has encouraged and made possible.

In its short history the clubhouse has already held a Fourth of July celebration, the Lewis and Clark picnic, a community Christmas tree, Washington's birthday party and a Thanksgiving dinner.

Besides these, there have been many dances and smaller social gatherings, and throughout, in all of these gatherings, the entire community has been welcome and expected. The club is the club of no clique or family, but the club of the entire community. It has been open to all, and a benefit and pleasure to all. It has meant much to the community.

The first officers of the club were: N. A. Lyman, president; Albert Wetzsteon, vice president; Mrs. N. A. Lyman, secretary; William Wetzsteon, treasurer; Edgar Blake, John Wetzsteon and George Wetzsteon, trustees.

The club has been prosperous throughout and has carried its activities even further than was at first anticipated. It is now planning on extending its activities.

There is a movement on foot to secure and preserve five acres near by, in one of the most beautiful canyons of the Rockies, as an amusement park, where ball games and all of the usual amusements can be enjoyed.

It has proved the greatest movement for the betterment of the community life that has come to the valley, and now, when the automobile has to a great extent come to change and disrupt the small community life, the Sula Country Club house has held the community together, and the small festivities that meant so much in the years of isolation are relished and enjoyed as in the days before the automobile came to annihilate distance.

"SIX FOR THE FEET."
Restaurant Order in Chicago.

"Six for the feet!" yelled William, the waiter.

"Coming up," came the echo from the kitchen.

Smilingly, Jean, the chef, placed half a dozen hard, inedible objects in the oven, says the Chicago Herald. Thirty minutes later he opened the door, and, wetting a forefinger, tapped one of them. There was a sizzle and a little puff of steam.

"Done to a turn," he mused.

The front door opened and six merry misses from the Monroe telephone exchange entered the restaurant.

William disappeared in the rear and reentered, struggling with a heavily laden tray, a broad grin on his face, which was red with exertion.

Beneath each small table he placed two hot bricks, which chased the chills from neat feet resting comfortably upon them.

"Some service," said the owners of these extremities, beaming thanks.

William's grin grew, and his whistling would have drawn a caustic comment from Jean—if Jean hadn't been whistling himself.

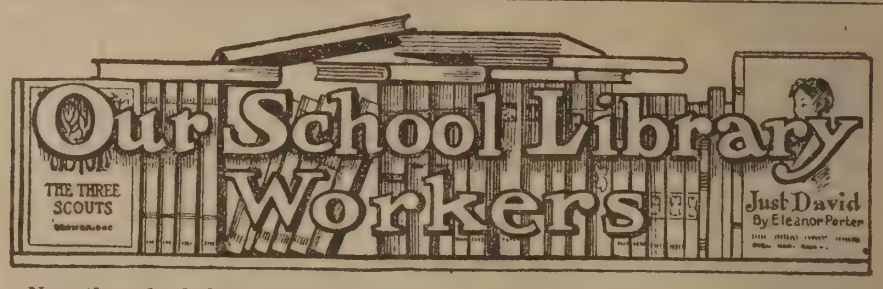
SIGHTS IN BERLIN
Women Do Much of the Work.

Under Friedrichstrasse they are building a big tunnel for the underground railway. Steam shovels and pile drivers are at work, dummy trains are running underground, carrying away the dirt which is being excavated.

If the visitor looked down one of the entrances or watched the workers come up for their noonday meal, he would see a change; 90 per cent of the workers are women, says a correspondent. Women run the little trains, dig the tunnels, shovel the dirt, run the steam shovels and do almost anything. And they are all big, healthy German women, who do the work almost as well as the men did it formerly.

Cooking Utensil Device.

A clip has been invented for holding a spoon on the edge of a cooking utensil or medicine glass.



Now that the holiday season is over and Santa Claus has retired into his castle in the land of Far Away to think what new presents to bring on his next trip, the boys and girls will be able to do a lot of good work for the Red and Blue library teams.

Bonser school has 11 loyal workers, who are letting every one in their district know they are out for a library and intend to get it. Margaret White, their teacher, tells us that the library teams are going to give a school entertainment in the near future, to which every one will be invited. This will greatly aid their library campaign. They are already having fine success, but the entertainment will give their efforts just the touch of local interest needed to secure a fine list of books.

Zillah school has its library campaign nicely under way. There are several rooms in this school, and the enthusiasm is universal. Helen L. Jenks, one of the teachers, reports a fine start has already been made by the third and fourth grades and they expect with the aid of two other rooms to send soon for their first unit of books.

Our 1917 "435 Book Special" school library announcement we know will interest you. The printed list of books should reach each school within the next few days. If they do not, notify us at once and the list will be sent. This list includes the famous works of the world's best literature. Scott, Irving, Corelli, Hawthorne, Byron, Dickens, Prescott, Longfellow, Browning, Cooper, Kipling, Emerson, Ebers, Dumas, Verne, Headley, Lamb and a score of other famous writers speak through this list.

Truly there will be a big army of boys and girls who will be delighted when the books arrive at their schools. The knowledge that each had a part in the work to obtain them will add to the interest in each book secured.

HONOR ROLL.

Bonser school—Lambert T. Goin, Marguerite Goin, Eva Wees.

Zillah school—George Brown, Eleanor Donelson, Walter Ware, Robert Faulron, Gertrude Johnson, Oliver McDonald, Winifred Sutter and Mabel Adams.

All the World's a Stage, and All the Men and Women Merely Players

Mourning Over Grave of Comrade



Copyrighted by International Film Service.

The above is just one illustration of the price that the Serbians are paying to win back their country from the hands of the Germans. Two Serbian soldiers are shown in the above picture, mourning over the newly made grave of a beloved companion who has just been placed in his last resting place. They can not help but wonder how soon they, too, will be called upon to give up their own lives for the sake of their country.

Plant Wizard and His Bride.



Luther Burbank, plant scientist of world-wide reputation, and his bride, formerly Miss Elizabeth Waters, who was his private secretary. Burbank is 67 years old and his bride 28 years of age. They were married in San Francisco on December 20.

In the Fire Signal Trench



Copyrighted by International Film Service.

The French soldier shown in one of the foremost trenches must fire signal rockets at night. His position offers a ready target for the enemy.

Gladys C. C. Fries.



E. Roland Harriman, one of the five heirs to the great fortune left by E. H. Harriman, financier and railroad owner, is to wed Gladys C. C. Fries of New York, one of the most beautiful young women of society. The wedding will take place after Harriman's graduation from Yale with the class of 1917. Like all the weddings of New York's social lights, especially those claiming relationship to persons of fame, the Fries-Harriman romance is attracting widespread interest, not only in New York, but also in New Haven.

German Emperor Visits Troops



The above photograph shows Kaiser William of Germany at the front. The kaiser frequently visits the various fronts and thus comes in personal contact with his troops. In this picture may be seen a German soldier who has brought distinction upon himself by his heroic conduct in action. He is being presented to the emperor.



—Pittsburg Dispatch.

What Momentous Happenings Will Be Recorded in the Coming Year?



Pie Making

Is No Longer Dreaded Task

By Alvara P. Williams.

Pie making is no longer the dreaded task it used to be with me since I have adopted a rule for pie crust which was given out by a domestic science expert in a western college. This rule makes crust for two pies or four crusts: Put three-fourth cup shortening in a mixing bowl, pour over this one-half cup boiling water, and beat until creamy. Add the sifted flour mixture—three cups flour, one teaspoon of salt and one teaspoon of baking powder; stir together and roll out. This seems too thin to work with when warm, but it hardens quickly and must be used as thin or soft as can be handled at first.

If only part of this rule is wanted, the remaining dough may be wrapped in paraffin paper or a moist cloth and kept until needed. The cold dough makes better crust than when hot. This is a rule used by professional pastry makers, and makes a very flaky crust in about half the time required for the old method.

When making berry pies, or any other kind which is very juicy, the juice can be kept in by putting on "pie bandages," made of a strip of cloth about one inch wide and a little longer than is needed to go around the edge of the pie; this is moistened in cold water and stretched tightly around the pie, lapping over a few inches. About one-half inch projecting above the edge of the pie tin keeps all juice in.

A pie browns quickly and evenly if cold water is sprinkled over it just before putting in the oven.

When all other pie filling fails, try sour milk pie and keep the family guessing what is in it. Take one egg, one cup of sugar, one cup of sour milk, one cup of raisins, one teaspoon of vinegar, one-half teaspoon of cloves, one teaspoon of cinnamon, pinch of salt and stir all together. Bake in two crusts. This needs no soda.

If you have some members of the family who object to meringue on pie or pudding, try beating the white of the egg stiff, as for meringue, and stirring it lightly into the pie mixture just before putting in the oven, baking in one crust, as usual. This may be done with any kind of pie calling for meringue.

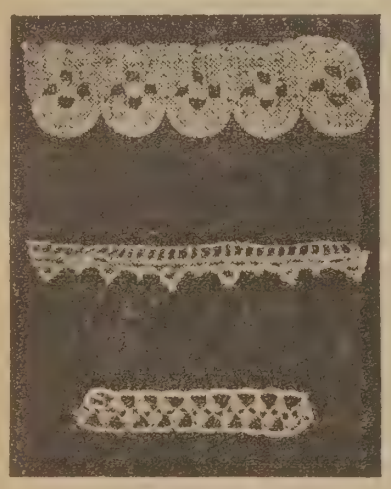
To Make Veal Loaf.

Veal Loaf (this dish may be served cold or hot)—Two and one-half pounds of veal, one-half pound of salt pork, two teaspoons of salt, one-half teaspoon of pepper, one teaspoon of chopped onion, one-half cup of cracker crumbs, one-fourth cup of water or stock, one egg, two tablespoons of butter, one-half teaspoon of sage. Chop the veal and pork very fine and add all the other ingredients except the butter. Mix all well together with the hands. Butter a small pan or deep pie tin and press the mixture into it like a loaf, making it about three inches high. Cook for two hours in a rather hot oven, basting with another half cup of water or stock in which the butter has been melted. Serve with the following sauce: Two tablespoons of butter, two tablespoons of flour, one cup of milk, salt and pepper to taste. Heat the butter hot and stir in the flour. When well brown, draw the pan back and slowly add the milk. Boil for three minutes, stirring all the time; add salt and pepper and set back to keep hot. Pour into the sauce the gravy that remains in the pan after baking the loaf, and having stirred the sauce well, turn it over the loaf and serve.

This may be served hot with sauce for dinner or cold for luncheon or supper.

Popular Crochet Designs

By WINIFRED WORTH



Novel Edging.

Looks something like the popular sea shell motif—just enough difference to make it charming and at the same time give you a different motif.

Chain 13.

1st Row—1 t. in 4th st. from hook, 5 t. in next 5 sts., ch. 2, skip 2 sts., 1 t. in next st.. turn.

2nd Row—Chain 6, 3 t. under 2 ch., ch. 2, skip 2 t., 4 t. in next 4 t., turn.

3rd Row—Chain 3, 1 t. in each of 4 t., 3 t. under 2 ch., 2 ch., 15 t. under 6 chain, 1 d. in last st. of foundation ch., turn.

4th Row—One d. in each of 15 t. (back loops), ch. 1, 2 t. under 2 ch., 1 t, in each of 6 t., turn.

5th Row—Chain 3, 1 t. in each of next 6 t., ch. 2, 1 t. in 1 ch. space before scallop, turn, and repeat from 2nd row, for length required, making the 1 d. at end of 15 t., in the ch. space before scallop.

Easy Edging.

Very dainty and narrow, but is quite durable for any purpose. Is very quickly made, and for that reason it appeals to some crochet workers.

Make chain desired length.

1st Row—1 t. in 4th st. from hook, ch. 2, miss 2 ch., 1 t. in next chain st., repeat length of chain.

2nd Row—Chain 1, 4 d. in each ch. of 2 of 1st row, turn.

3rd Row—Chain 4, fasten by sl. st. in 8th st. of d., repeat to end, turn.

4th Row—Chain 1, 8 d. in first ch. of 4, next the hook, 4 d. in next chain of 4 ch. 4, turn and fasten by sl. st. in top of first 8 d. made, ch. 1, turn, 4 d. in ch. first made, ch. 3 picot, 4 d. in same ch., 4 d. in other half of 2nd ch. of 4, repeat to end of work. Leave off ch., work one row of d. into goods, then follow directions from 1st row. You have fine edge without trouble of sewing on. This edge should be worked in fine thread, No. 90 Cordinnet is about right.

Butterfly Wings.

Makes up very prettily for any desired length. Will give finish and the much desired touch to any article on which it may be used.

Chain 6.

1st Row—4 t. in 5 st. from hook, ch. 2, 1 t., in same st., turn.

2nd Row—Ch. 3, 4 t under ch. of 2, 1 t. under same ch. of 2 and continue until desired length. Connect each wing by ch. of 5, and fill up with d. 6 in each space.

Recipes

Good Sauces for Various Meats

Celery Sauce (for boiled fowl)—Wash a head of celery thoroughly, cut in pieces and cook in boiling salted water until tender. Drain. Add enough hot water to that in which the celery was cooked to make a pint in all. Cut the celery in nice small pieces, half an inch in length. Now make a pint of drawn butter sauce, using the pint of water. Add the cooked celery and seasoning and serve.

Cider Sauce (for boiled ham)—Boil two cupfuls of cider five or six minutes, then add half a dozen peppercorns, two cloves, two teaspoonfuls minced onion, a tablespoonful of minced celery and a bit of bay leaf. Cook until reduced one-half, then strain.

Tomato Sauce—Add to one cupful of hot stewed and strained tomato one tablespoonful of butter rubbed with a teaspoonful of cornstarch. Stir until smooth and thickened, add one-half teaspoonful of salt, a few drops onion juice and a tablespoonful of Worcestershire sauce. If too thick, dilute with a little boiling water. A richer sauce is made by putting a pint can of tomatoes into a saucepan with a bunch of seasoning herbs, salt and pepper to taste; add one-half cup of water. Put over the fire, cook about three-quarters of an hour, stirring often. Put a tablespoonful and a half of butter in a saucepan over the fire with a scant tablespoonful flour. Add the strained pulp from the tomatoes and a small cup rich broth, graduating the amount to make the sauce the consistency required.

A Novel Fad.



One of the new fads is to hand knit a border on cape and muff; on the turban, too, if desired—Kansas City Star.

TREES.

I think that I shall never see
A poem lovely as a tree.

A tree whose hungry mouth is prest
Against the earth's sweet flowing breast;

A tree that looks at God all day,
And lifts her leafy arms to pray;

A tree that may in summer wear
A nest of robins in her hair;

Upon whose bosom snow has lain;
Who intimately lives with rain.

Poems are made by fools like me.
But only God can make a tree.
—Joyce Kilmer.

Windmills as Indicators.

Births, marriages and deaths are indicated in Holland by windmills. When a miller is married he stops his mill with the arms of the wheel in a slanting position and with the sails unfurled. His friends and guests frequently do likewise with their mills in token of the ceremony. To indicate a birth the wheel is stopped in a slanting position, but at a more acute angle than that of a marriage, and with the two upper sails unfurled. Should a miller die, the sails of a mill are all unfurled and the wheel is turned round until the arms form an upright cross, in which position they are left until after the funeral takes place.

Production of Camphor.

Forestry experts have found that a plant growing luxuriantly in the Philippines and heretofore thought to be a weed is used in other parts of the far east for the production of camphor.

Sidelights

Considerate of the Police.

"Hello, Police Department? Well, I don't wish to frighten you—but—er—the fact is, I'm sitting on a burglar."—Browning's Magazine.

To Our Credit.

"Now," said the Sunday school teacher, "can any of you tell me what sins of omission are?"

"Yes, ma'am," came the answer. "They are the sins we might have committed and didn't."

Soup Also High.

"My plate is damp," complained a traveler who was dining in a London hotel.

"Hush!" whispered his wife. "That's your soup. They serve small portions in war time."

A Dog's Life.

Elsie—Shall I put on my mackintosh and run out and post these letters, mother?

Mother—No, dear; it's not fit for a dog to be out a night like this. Let your father post them!—Toledo Blade.

His Part.

"You admit you overheard the quarrel between the defendant and his wife?"

"Yis, sor, I do," stoutly maintained the witness.

"Tell the court, if you can, what he seemed to be doing."

"He seemed to be doin' the listening."

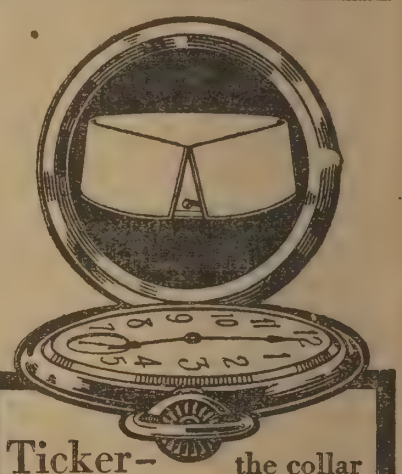
Proving Ma Wrong.

Freddy, with a determined look on his small countenance, marched into the front room and up to the ardent suitor of his pretty sister.

"What's them?" he demanded, thrusting out a grimy hand full of small white objects.

"What are those?" said the young man with an ingrating smile. "Those are beans."

"He does know 'em, ma," bawled Freddy triumphantly into the adjoining room. "You said he didn't."—Ladies' Home Journal.



Ticker- the collar for busy men—on in a second—perfect fitting, easy adjusting.

SLIDEWELL COLLARS

are all made with Patented Tie-Protecting Shield and Graduated Tie-Space. 15c each. $1.75 per doz.

Hall, Hartwell & Co., Makers, Troy, N.Y.

Mid-Winter Term

just starting with a large advance enrolment. Why waste the next three months? Plenty of time to get our short course in Bookkeeping, Business Arithmetic, Commercial Law, etc.

Special Farm Accounting set.

Our shorthand and bookkeeping graduates are always in demand.

Send for free catalog.

Northwestern Business College

M. M. HIGLEY, Pres., Spokane, Wash.

Patterns

1917 — Ladies' dressing or house sack. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires three yards of 44-inch material for a 36-inch size. Price 10 cents.

1521—Boys' suit. Cut in four sizes: 3, 4, 5 and 6 years. It requires two and three-eighths yards of 36-inch material for a 4-year size. Price 10 cents.

1940—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires two and a half yards of 44-inch material for the underwaist, and three and seven-eighths yards for the overdress, for a 36-inch size. The skirt measures three yards at its lower edge. Price 10 cents.



1921—Ladies' house dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires six and one-fourth yards of 44-inch material for a 36-inch size. The skirt measures about three yards at the foot. Price 10 cents.

1936—Girls' dress. Cut in five sizes: 4, 6, 8, 10 and 12 years. It requires three and one-fourth yards of 36-inch material for a 6-year size. Price 10 cents.

1939—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. Size 12 requires four and three-eighths yards of 44-inch material. Price 10 cents.

USE THIS COUPON FOR PATTERN ORDERS.

Enclosed find ..... cents, for which send me the following patterns:

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Name ....

.. .., ...

Postoffice .....

State ....., ...

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

Boys' and Girls'

Industrial Club Work Indorsed

The necessity of continuing the children's industrial club work in the state is strongly urged by Superintendent J. A. Churchill in a report just issued.

He declares it an important factor in the school work of the state and points out the success that it has achieved since its inception in Oregon.

Commenting upon this phase of school work the state superintendent says:

"The children's industrial club work, which is being promoted jointly by the state department of education, the Oregon Agricultural college and the federal government, is meeting with much success and should be continued. In order to stimulate interest on the part of the children and to induce them to take up this work, prizes are offered by the state, as well as by many of the counties and local districts. The reports of the industrial field workers show that literally thousands of Oregon school children are busily engaged during their spare moments at home in some one or more of the projects for which prizes are offered. The club projects number 14, and include corn growing, potato growing, pig feeding, dairy herd records keeping, seed grain selection, fruit growing, baking, canning and preserving, sowing, farm and home handicraft, rural home beautification and the agricultural club project.

Preparing Mangoes.

Mrs. C. H. Wright of Canfield, Idaho, very kindly sends to this department of our paper the following recipe for pickling mangoes. It seems that mangoes and mock oranges are two entirely different vegetables. Mrs. Wright says mangoes are very much like large, green peppers, but are larger and firmer. They are a tender vegetable and should be gathered before the early frosts. They may be put away for winter use as follows:

Cut the top clear around, keeping it in one piece and using later as a cap. Take equal parts of cabbage and green tomatoes and chop. Also chop onions, about one dozen large onions or 18 small ones to a bushel of mangoes. Less onions may be used if preferred. One dozen green sweet peppers chopped fine, salt to taste, a little black pepper, two small handfuls of mustard seed and a dash of cayenne pepper; mix all together, and, after removing the seed of the mangoes, fill the cavities with the mixture. Have ready a five-gallon stone jar; put a layer of the chopped mixture on the bottom and stand mangoes on the mixture with the caps on, putting the small end down. Fill all vacant places with the mixture. When the jar is nearly full cover the whole with vinegar, place a plate over the top and a stone on the plate to keep contents under the vinegar.

A. W. B.

A Bit of Wisdom.

Life is too short to fuss and fret!
To waste the hours in vain regret,
To fancy slights, to bother why
This listener gave a vague reply,
Or that one made some foolish threat.

And, though dull cares our way beset,
To court indifference and let
Each proffered bit of joy slip by—
Life is too short!

But put the world for mirth in debt,
And strive that odds be gaily met;
Humor in every cross espy,
And no least plea for cheer deny;
Then, for the friendliness we get,
Life is too short!
—Charlotte Becker in Life.

Correct Combinations.

In preparing a poultry or game dinner the following is suggested to secure balanced meal:

With poultry or game serve white or sweet potatoes, squash, rice, peas, asparagus, mushrooms, celery or cucumbers, cranberry sause, apple sauce, currant jelly.

With fish serve any of the common vegetables.

Why.

"Why is it that truth will rise again when crushed to earth?"

"Because of its elasticity, of course. Don't you know how easy it is to stretch the truth?"—Boston Transcript.



"Young man, the best tonic for you is the right kind of food. I suggest for Breakfast

Ghirardelli's Ground Chocolate



It's easily assimilated — it's extraordinarily nutritious — and it is supremely delicious."

It comes PROTECTED—as all chocolate should—in ½-lb., 1-lb. and 3-lb. hermetically sealed cans.

Since 1852 D. GHIRARDELLI CO. San Francisco



This house for $931.00

This house for $880.65

DO YOU WANT TO SAVE MONEY ON YOUR HOUSE?

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When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from page twenty-one.)

line, I mean. Gods! I flush up hot, even now, when I think of it. So I talked a great deal and found myself infinitely pleased with Brandon's conversational powers, which were rare; being no less than the capacity for saying nothing, and listening politely for an infinite deal of the same thing, in another form, from me.

I remember that I told him I had known the Princess Mary from a time when she was twelve years old, and how I had made a fool of myself about her. I fear I tried to convey the impression that it was her exalted rank only which made her look unfavorably upon my passion, and supressed the fact that she had laughed at me good humoredly, and put me off as she would have thrust a poodle from her lap. The truth is, she had always been kind and courteous to me, and had admitted me to a degree of intimacy much greater than I deserved. This, partly at least, grew out of the fact that I helped her along the thorny path to knowledge; a road she traveled at an eager gallop, for she dearly loved to learn—from curiosity perhaps.

I am sure she held me in her light, gentle heart as a dear friend, but while her heart was filled with this mild warmth for me, mine begun to burn with the flame that discolors everything, and I saw her friendliness in a very distorting light. She was much kinder to me than to most men, but I did not see that it was by reason of my absolute harmlessness; and, I suppose, because I was a vain fool, I gradually began to gather hope—which goes with every vain man's love—and what is more, actually climbed to the very apex of idiocy and declared myself. I well knew the infinite difference between us, but like every other man who came within the circle of this charming loadstone I lost my head, and, in short, made a greater fool of myself than I naturally was—which is saying a good deal for that time in my life, God knows!

I knew vaguely but did not fairly realize how utterly beyond my reach in every way she was until I opened the flood-gates of my passion—as I thought it—and saw her smile, and try to check the coming laugh. Then came a look of offended dignity, followed by a quick softening glance.

"Leave me oen friend, I pray you, Edwin. I value you too highly to lose, and esteem you too much to torment. Do not make of yourself one of those fools who feel, or pretend to feel, I care not which, such preference for me. You can not know in what contempt a woman holds a man who follows her though she despises him. No man can beg a woman's love; he must command it; do not join their ranks, but let us be good friends. I will tell you the plain truth; it would be no difference were we both of the same degree; even than I could not feel toward you as you think you wish, but I can be your friend, and will promise to be that always, if you will promise never again to speak of this to me."

I promised solemnly and have always kept my word, as this true, gracious woman, so full of faults and beauties, virtues and failings, has, ever since that day and moment, kept hers. It seemed that my love, or what I supposed was love, left my heart at once, frozen in the cold glint of her eyes as she smiled upon my first avowal: somewhat as disease may leave the sickened body upon a great shock. And in its place came the restful flame of a friend's love, which so softly warms without burning. But the burning! There is nothing in life worth having compared with it for all its pains and agonies. Is there?

"Now if you must love somebody," continued the princess, "there is Lady Jane Bolingbroke, who is beautiful and good, and admires you, and, I think, could learn to ——" but here the lady in question ran out from behind the draperies, where, I believe, she had been listening to it all, and put her hand over her mistress' mouth to silence her.

"Don't believe one word she says, Sir Edwin," cried Lady Jane; "if you do I never will like you." The emphasis on the "will" held out such involuntary promise in case I did not believe the princess, that I at once protested total want of faith in a single syllable she had said about her, and vowed that I knew it could not be true; that I dared not hope for such happiness.

You see, I had begun to make love to Jane almost before I was off my knees to Mary, and, therefore, I had not been much hurt in Mary's case. I had suffered merely a touch of the general epidemic, not the lingering, chronic disease that kills.

Then I knew that the best cure for the sting which lies in a luckless love is to love elsewhere, and Jane, as she stood there, so petite, so blushing and so fair, struck me as quite the most pleasing antidote I could possibly find, so I began at once to administer to myself the delightful counter-irritant. It was a happy thought for me; one of those which come to a man now and then, and for which he thanks his wits in every hour of his after life.

But the winning of Jane was not so easy a matter as my vanity had prompted me to think. I started with a handicap, since Jane had heard my declaration to Mary, and I had to undo all that before I could do anything else. Try the same thing yourself with a spirited girl, naturally laughter-loving and coy, if you think it a simple, easy undertaking. I began to fear I should need another antidote long before I heard her sweet soul-satisfying "yes." I do not believe, however, I could have found in the whole world an antidote to my love for Jane. You see I tell you frankly that I won her, and conceal nothing, so far as Jane and I are concerned, for the purpose of holding you in suspense. I have started out to tell you the history of two other persons—if I can ever come to it—but find a continual tendency on the part of my own story to intrude, for every man is a very impotrant personage to himself. I shall, however, try to keep it out.

In the course of my talk with Brandon I had, as I have said, told him the story of Mary, with some slight variations and coloring, or rather discoloring, to make it appear a little less to my discredit than the barefaced truth would have been. I told him also about Jane; and, I grieve and blush to say, expressed a confidence in that direction I little felt.

It had been perhaps a year since my adventure with Mary, and I had taken all that time trying to convince Jane that I did not mean a word I had said to her mistress, and that I was very earnest in everything I said to her. But Jane's ears would have heard just as much had they been the pair of beautiful little shells they so much resembled. This troubled me a great deal, and the best I could hope was that she held me on probation.

On the evening of the day Mary came home to Greenwich, Brandon asked: "Who and what on earth is this wonderful Mary I hear so much about? They say she is coming home today, and the court seems to have gone mad about it; I hear nothing but 'Mary is coming! Mary is coming! Mary! Mary!' from morning until night. They say Buckingham is beside himself for love of her. He has a wife at home, if I am right, and is old enough to be her father. Is he not?" I assented; and Brandon continued: "A man who will make such a fool of himself about a woman is woefully weak. The men of the court must be poor creatures."

He had much to learn about the power of womanhood. There is nothing on earth—but you know as much about it as I do.

"Wait until you see her," I answered, "and you will be one of them, also. I flatter you by giving you one hour with her to be heels over head in love. With an ordinary man it takes one-sixtieth of that time; so you see I pay a compliment to your strength of mind."

"Nonsense!" broke in Brandon. "Do you think I left all my wits down in Suffolk? Why, man, she is the sister of the king, and is sought by kings and emperors. I might as well fall in love with a twinkling star. Then, besides, my heart is not on my sleeve. You must think me a fool; a poor, enervated, simpering fool like—like—well, like one of these nobles of England. Don't put me down with them, Caskoden, if you would remain my friend."

We both laughed at this sort of talk, which was a little in advance of the time, for a noble, though an idiot, to the most of England was a noble still, God-created and to be adored.

Another great bond of sympathy between Brandon and myself was a community of opinion concerning certain theories as to the equality of men and tolerance of religious thought. We believed that these things would yet come, in spite of kingcraft and priestcraft, but wisely kept our pet theories to ourselves; that is, between ourselves.

Of what use is it to argue the equality of humankind to a man who honestly thinks that he is better than any one else, or to one who really believes that some one else is better than he; and why dispute about the various ways of saving one's soul when you are not even sure you have a soul to save? When I open my mouth for public utterance, the king is the best man in christendom, and his premier peer of the realm and next best. When the king is a Catholic, I go to mass; since, praised be the Lord, I have brains enough not to let my head interfere with the set ways of a stone wall.

(To be continued next week.)

Rollie Pollie

He Meets Mrs. White Leghorn

By Laura Pearson Felton.

Rollie Pollie was a little round, red piggie. He lived in a nice pig pen with his mother and brothers and sisters. He had four brothers and three sisters and they had many a big romp together.

Once a long time ago Rollie Pollie sneaked through a hole in the fence and got into a lot of trouble. Perhaps some of you heard about it. Rollie Pollie had a very curious disposition and a roving nature, which led him away from the pen to Rhode Island Red rooster's drinking pan, which he investigated to his sorrow.

You know Rhode Island Red roosters are very quick tempered and poor little Rollie Pollie received a terrible beating. You couldn't really blame Rhode Island Red Rooster, though, because Rollie Pollie did try to get four feet into the pan at once.

Well, after this tragedy, Rollie Pollie was quite a contented little piggie for several days. Then he grew restless again and began to wander around the pen and wish for something exciting to happen. And it happend. You know when we wish hard enough things generally do happen and sometimes we are sorry we wished so hard. Rollie Pollie was, I am sure.

Around and around the pen Rollie Pollie wandered, poking his little red nose into every tiny hole and rooting and grunting as hard as he could. Finally he found a place in the fence where a board was loose. He pushed and pried and grunted and at last squeezed his little fat sides through. My, how he grinned and grunted for joy! He was out in the clover pasture and just beyond was the barnyard with a little trickling, tinkling brook running through it. It was a warm day so Rollie Pollie decided he would go and get a cool drink and wade in the cool water. Down the little hill to the brook he trotted, grunting and trying to wag his little short, curly tail as he went.

Directly ahead of him was a pretty White Leghorn Biddy. She was squatting down on the ground in a funny way, Rollie Pollie thought. Besides being very curious Rollie Pollie was just chock full of mischief. He did love to chase the chickens and ducks and even liked to tease his sisters just to hear them squeal when he nipped their ears.

Now, Rollie Pollie could have turned aside and let Mrs. Biddy alone, but he didn't. Straight toward her he trotted. Mrs. Biddy began to make a funny, clucking sound, but Rollie Pollie never slackened his pace a bit. Then Mrs. Biddy clucked loudly, real cross-like, too, but Rollie Pollie ran straight along in her direction. Mrs. Biddy began to look so fluffy and puffy and to just cluck loud as anything. But Rollie Pollie wasn't afraid. He had made Mrs. Biddy fly from her nest once and he would make her jump up this time, he thought.

But, alas! Poor Rollie Pollie didn't know about the 12 little, fluffy, puffy yellow things Mrs. Biddy was hovering under her white feathers. Neither did he know enough about mother biddies to realize how they will fight to guard their babies. He was only a few feet away from Mrs. Biddy when all of a sudden he saw a big cloud of feathers and a very angry pair of eyes coming straight for him. Behind this bunch of fury Rollie Pollie saw a lot of little yellow puff balls roll around and then he gave a loud squeal and how he did run—past the clucking, spitting mamma biddy he ran—straight toward the creek. He didn't wait to pick his way down the bank, but pell mell he fell into the cold water. Down he went to the bottom, then up he came and floated down stream. He wiggled and kicked and tried to squeal, but the water made him sputter and choke, so he couldn't.

Along the bank Mrs. Biddy ran, all fluffy and clucking as cross as she could cluck. Then over the dam near the barn Rollie Pollie rolled, and down ker plop! into the trout hole where Jimmy came to fish. O, but he was wet and chokey and that water was deep. Poor little Rollie Pollie tried and tried to wiggle over to the bank, but he was weak and tired and scared and couldn't do a thing but just manage to keep his little pink nose above the water. Then he heard Mr. John laugh. That made Rollie Pollie mad, even though he was most too tired to care what happened. What was funny about his being there in the water, he'd like to know. Wasn't he about to drown? Why should Mr. John stand there in the barn door holding his sides and laughing till he was red in the face? Was Mr. John going to let him float past the barn and on out into the big creek?

Just as Rollie Pollie was about to give up in despair and had gone so far he began to see visions of pig heaven he felt Mr. John grab him. Mr. John shook him good and hard and laughed loudly. But Rollie Pollie didn't laugh. He just shivered and shook and coughed and wheezed and tried to get his little cold snout under Mr. John's arm where it was all warm and snugly. He was just beginning to feel a little better when, from around the corner of the barn, he heard a familiar, taunting "Cock-a-doodle-do-o-o!" It was his old enemy, Rhode Island Red Rooster, again, and Rollie Pollie's misery was complete.

OHIO STATE GRANGE

Comes Out for Nation-Wide Law.

At the Ohio State grange, in session at Nwark, the following resolutions were adopted:

Whereas, the governments of Europe have demonstrated that nation-wide prohibition laws are essential in maintaining the high level of military and economic efficiency;

Whereas, it is the sense of the Ohio State Grange that if nation-wide prohibition is necessary for the nations of Europe as a war measure, it is more essential in this time of peace in our own beloved country that we have nation-wide prohibition for the protection of our young manhood and womanhood.

Resolved, That Ohio State Grange indorses the movement now on foot for the resubmission to the electorate of Ohio of the state-wide prohibition amendment.

Resolved, That we favor the joint resolution which will be presented to the congress of the United States this session, calling for the submission to the several states for an amendment to the federal constitution prohibiting the manufacture and sale of intoxicating liquors as a beverage.

L. J. Taber of Belmont county was reelected worthy state master.

Dakotas Will Try Hemp.

Plans for the lease of 5000 acres of land in the Red river valley by the International Harvester company to demonstrate to farmers of the region the possibility of hemp raising is announced by representatives of the concern. The company also will lease a small tract near Aberdeen, S. D., for similar experiments.

Field Crops of England, 1916.

The preliminary estimate of the production of field crops in England and Wales, as issued by the English board of agriculture on November 1, shows that the total yield of wheat in England and Wales for 1916 is 55,540,472 bushels, of barley 41,740,592 bushels, of oats, 83,689,312 bushels, of beans 6,900,976 bushels, of peas 2,081,032 bushels, and of seeds and meadow hay 8,837,079 long tons, which is 2 1-4 million tons, or 24 per cent, more than last year. The production of wheat is about 12 million bushels less than last year, but greater than in 1912 or 1913. The yield per acre, 29.05 bushels, is about 2 bushels below that of 1915 and 2.84 bushels below the decennial average for 1906-16. Oats are only slightly below the average and are slightly better than last year. Barley, although about 1 1-2 bushel per acre below average, is better than last year, and, with the acreage increased, has given a total nearly 5,600,000 bushels in excess of 1915. Oats are only very slightly below the average, and slightly better than last year; the total production, 83,689,312 bushels, is the largest since 1910.



My Dear Children: I am so proud of you and glad that you wrote so many letters and did so well. It broke my heart almost not to be able to give so many nice letters a place of honor and we have had a great many letters—the Corner is growing fast. I wonder what the editor will do with us. We are like little boys and girls that outgrow their clothes—they have to have bigger ones, and so our cornrer is getting too big for its place.

There is not one of you who can not win a prize if you try real hard. Write on one or more of the subjects given; write on one side of the paper only; do your work neatly and try to spell the words correctly. Though many of our cousins are quite young in years, yet many of them write more beautiful letters than the older ones. Be sure that you sign your names and addresses.

I will have something very important and nice to tell you before very long, but I must not tell you yet—it is a secret.

The subjects for the new contest are:

My Best Friend.
The Worst Day.
My First Surprise.

The prize winners for November and December will be found below. AUNT NELLIE.

Prize Winners.

Berthold Conrad, Rt. 1, Box 44, Renton, Wash.

Helen Nitlack, Trinidad, Wash.

Enis Erickson, Rt. 2, Box 108, Lynden, Wash.

Roll of Honor.

Ida R. Dilio, Buckeye; Agnes Lund, Rochester; Albert Coffey, Hay; Lesle Bergman, Man Zanita; Inez Mildred Gagen, Mt. Vernon; Nellie McGrail, Sixprong; Frank Clinton Saeger, Shelton; Ruby Warren, Elma; Nellie Smith, Albion; Adolph Olsen, Langley; Clara Olsen, Bothell; Harney Norris, Goldendale; Berthile Evelyn Maxson, Walla Walla; Esther Carslin, Wilma Butorac, Northport; Velma Batie, Twisp.

KATHRINE AND FRIENDS RIDE TO SCHOOL IN AUTOMOBILE

Dear Aunt Nellie: I live on a 20-acre farm. I like the farm better than I do the city. I have been reading the Children's Corner every time I could. I read it when my father gets home with the paper. We live three miles from Satsop. We have an auto to take us to school and bring us home again. There are 17 children that go in the auto. We have four cows, six calves, two horses, eight pigs, 13 geese, 37 ducks and about 75 chickens, four canaries, one dog and one cat. We call the dog Laddy and the cat Tom. We also have about 150 rabbits, that are running loose. I like to ride on our horses. I have five brothers and one sister. My sister is the oldest of us children. My brothers are all younger than I. I did some of the garden work this summer. Mama calls me her baby girl, and my papa calls me his little boy. I worked in the hay field with my father. I will be 14 years old February 21. I am in the seventh grade at school. It snowed the other night till the ground was covered with it.—Katherine Borden, Satsop, Wash.

WILMA LIKES CHRISTMAS; GIVE AND RECEIVE PRESENTS

Dear Aunt Nellie: I read the letters in the Children's Corner and like them very much. I live on a 160-acre ranch about 12 miles from Northport. We have 20 head of cattle, two horses, two pigs, four kittens and some rabbits, some chickens, ducks and one dog. We get lots of present on Christmas eve, and we can also give lots of presents. I like them all. I am 11 years old.—Wilma Butoric, Northport, Wash.

THINKS THERE IS MORE FUN ON THE FARM THAN IN CITY

Dear Aunt Nellie: My schoolmate Velma Batie and I thought we would write to the Children's Corner and try to win a prize. My subject that I am going to write on is fun on the farm. I think the farm is the best place to live, although it is quite nice to live in town, too. On the farm we can ride horses, drive the cows to the range and go after them at night. When it is warm we go swimming and wading, which is excellent fun. When it is time for haying we have great fun romping about in the hay, sometimes driving a wagon. Most of us have gardens and flowers to attend to. In the winter we have lots of fun coasting and skating. In the long winter evenings we have lots of fun popping corn and making candy. We have lots more fun on the farm, but I can not recall it to memory at present. I am 14 years old and my birthday was January 11.—Maude Burns, Twisp, Wash.

DUCKS SWAM DOWN RIVER; WERE HARD TO GET BACK

Dear Aunt Nellie: I am a little girl 11 years old and in the fifth grade. I go to the Pleasant school. This is my second term of school. We have no school here on Snake river and I have to leave home to go to school. My teacher's name is Miss Rogers and I like her very much. There were 20 birds' nests in the trees around our house last summer. The reason we have so many birds is because we have no cats. In the summer we have lots of fun, swimming in the Snake river. We also go boat riding. I can row the boat. We raised 104 ducks. One day 60 of them went down the river and we had quite a time getting them back. I have two brothers and one sister. My brothers' names are Frank and Earl, and my sister's name is Marie. We have nine horses, six colts, two cows and three calves.—Clara Judkins, Pomeroy, Wash.

HAD TO CLOSE THE SCHOOL BECAUSE OF MEASLES

Dear Aunt Nellie: I am going to tell you what I can do. I can milk six cows. We have 20 cows and about 13 young stock. I can feed the calves, pigs, chickens, and am learning to cook, wash and iron, sweep and dust, and I go to school. It is about two miles. We ride in a wagon and sometimes I walk and also help mama with the dishes and carry in the water and wood. I am 10 years old and in the fifth grade and my birthday is May 20. There are 42 scholars in our room. There are 250 scholars in the school. School has been closed for some time on account of measles. I like to read the Children's Corner so much so I thought I would write. I have two sisters and one brother, I would like to win a prize.—Nellie May Francis, Clear Lake, Wash.

HAVE LOTS OF WHITE LEGHORN CHICKENS ON LUCILE'S FARM

Dear Aunt Nellie: I am 13 years old and am in the sixth grade. I live on a farm of 320 acres. It is six miles to the town of Othello. We have nine horses and four colts, one cow and calf, three cats, and 17 pigs. The horses' names are Ribbon, Lilly, Bessie, Rub, Mabel, Dick, Bird, Nellie and Queen. The colts' names are Pearl, Tony, Winnie and Buster. The cow's name is Daisy. We have not named the calf. The dogs' names are Don and Frisk. We have about 225 chickens. They are the White Leghorns. I have a horse to drive to school. I go one and a half miles to school. I like the farm. I can tat, crochet, knit and have made my own clothes. I have one brother and one sister. My brother's name is Charles and my sister's name is Helen. My sister is 16 years of age and my brother is 7 years. My birthday is October 4. I like my teacher fine. Her name is Miss Sylvia Miller.—Lucile Lee, box 76, Othello, Wash.

ALL OF THE SALVAGE GIRLS ATTEND SCHOOL EXCEPT BABY

Dear Aunt Nellie: I am 12 years old and in the fifth grade though I did not pass last year. My teacher's name is Mr. Gurnsey. I have four sisters and one brother. My sisters' names are Cora, Effie, Ethel and Gertie. Gertie is the baby, she is 19 months old. My brother's name is Victor. He is 19 years old. I live on an 80-acre farm two and a half miles from town. We have a cow and a calf. We have five sheep and three pigs, and two horses. Our horses' names are Dolly and Snip. All of us girls go to school except the baby. Our school is named Sunnyside. Cora is in the eighth grade. Effie is in the fourth grade, Ethel is in the second grade. It is three-quarters of a mile to our school. We walk to school. The baby is always glad to see us when we come home.—Nellie Salvage, Addy, Wash.

LEONARD WISHES THAT THE COUSINS WOULD WRITE HIM

Dear Aunt Nellie: I would like to correspond with Tommy Booker, and Leanard Christian. I read the letters and like them very much. I have a cat named Jim. His mother died last winter. My subject is school days. I like to go to school. It is fun to play marbles. We play tag. We have four cows and three heifers, nine pigs. I am nine years old now. September 7 was my birthday. My studies are arithmetic, spelling, geography, reading, language, writing and drawing. I have a gun. It is an air rifle. I like December because it is snowy on the ground. My teacher's name is Miss Gillstein. My sister got E in her studies.—Leonard Symington, Kangley, Wash.

LESTER BELONGS TO THE BAND OF MERCY AT SCHOOL

Dear Aunt Nellie: I am 10 years old and my birthday was December 12. I go to school about a quarter of a mile from here. I am in the fifth grade and have a very good teacher. Her name is Miss Jones. I like school for every Tuesday and Thursday we go to the basket ball grounds. There are 27 pupils in our room and 14 in our class. We have very good coasting and sometimes skating. I am a member of the Mercy Band. I am also a member of the school band.—Lester Greenwood, Creston, Wash.

MYRTLE ENJOYED THE BELL DRILL AT SCHOOL PROGRAM

Dear Aunt Nellie: I have four brothers and two sisters. We have eight cows and eight calves, three horses and one old mare. We have three pigs. I am 7 years old and in the third grade. My birthday is February 9. For Christmas we had a bell drill and I thought it was fun. My teacher's name is Mrs. Warren.—Myrtle McKeen, Republic, Wash.

All Ready for a Ride

The accompanying photo shows the little daughter of John G. Hoke of Baker, Ore., mounted and ready for a ride on her favorite "pony." Mr. Hoke is a prominent cattle man of Baker county and had cattle on the Portland market during the Pacific International Stock Show.



HELEN SINCLAIR CAN TAT AND ENJOYS IT VERY MUCH

Dear Aunt Nellie: I will write to the Children's Corner as I have been reading the letters every time we get the paper and have always wanted to join it. I am 12 years old and my birthday is March 8, and I am in the seventh grade at school. I walk to school in the summer, but in the winter I ride. We had a Christmas program and there is another school that joined us. I spoke a piece, "Christmas Has Come." There are only eight pupils in our school. I have three brothers and one sister. Their names are Hugh, Gus, Bailey and Frances. My sister's birthday is December 29. I hope that I win a prize. We have language, spelling, history, physiology, reading, arithmetis and geography. Our teacher's name is Mr. Hill and he is a good teacher. We have a nine-months' term of school. We do not have sewing in school though our teacher said that we would have sewing and manual training. I can tat and like it very much.—Helen Sinclair, Dot, Wash.

ROBERT'S SCHOOL AT THE CORNER OF HIS RANCH

Dear Aunt Nellie: We had 160 acres of land, but we sold some to the railroad and some town lots, so only have about 150 acres left. We have a fine schoolhouse here right at the corner of our land. It has four rooms and a basement under all. We have five teachers, a principal, high school teacher, and three grade teachers. My teacher's name is Miss Ramsey. I have no sisters or brothers. On our farm we have a span of horses that we raised. We have dairy cows, a few pigs, chickens and rabbits. I have a pet kitten named Buffkins. — Robert Davis, Rainier, Wash.

WELCOME LITTLE STRANGER WRITES TO US AGAIN

Dear Aunt Nellie: Here comes a little stranger. This is my first letter and I like to read the Children's Corner and like it very much. I live on a farm and we have 17 cows and 14 calves and yearlings. I go about half a mile to school. I have 10 chickens and they are just beginning to lay. My sister takes The Farmer. I will be 9 years old February 15.—Marie Johnson, Bow, Wash.

LITTLE IRENE WALKS ONE MILE TO SCHOOL EVERY DAY

Dear Aunt Nellie: I am 7 years old November 7. We have a little puppy and a cat who sits in the house all the time. We have seven mules and six horses, four cows, three colts, 12 hogs, and 70 chickens. We walk one mile to school. I am in the second grade. My teacher's name is Clara M. Conner.—Irene Martha Slaughter, Mansfield, Wash.

ATTENDS THE LARGEST NORMAL SCHOOL IN THE STATE

Dear Aunt Nellie: This is the first time I have written to you. My sister wrote to you last time so I thought I would write. I have 46 chickens, 25 pigeons, three rabbits and a dog. I live in the city of Bellingham. I am 11 years old and four feet tall. I go to the largest state normal school in Washington.—Lyle Bartruff, 1120 1-2 Dock St., Bellingham, Wash.

MINNIE HAS A PET ROOSTER, HIS NAME IS REDWING

Dear Aunt Nellie: I am going to write about my rooster. He is a large fellow. He is dark blue and green, the tips of his wings are red, so we call his Chief Redwing. He is as gentle as a kitten. I bring him in the house every morning so he can get his feet warm. He sits in my lap by the stove and never flies around.—Minnie Mullen, Elk City, Idaho.

LIVES CLOSE TO GRANDMA, CAN SEE HER EVERY DAY

Dear Aunt Nellie: I am a little girl 9 years old. I live on a farm of about 125 acres. My papa has two horses and 10 cows. I go to school every day. I am in the fourth grade. I live close to my grandma and I can go to see her every day.—Ruby Swearingen, Drain, Ore.

Solution to Last Chapter of "The Three Little Pigs"

Piggy was both cute and cunning. He hung a kettle full of water over the hearth, and then made a roaring fire, and just as the wolf was coming down the chimney, he took off the lid, and in fell the wolf.

In a second the little pig had clamped the lid on tight, and then he boiled the wolf and ate him for supper.

(End of Tale.)

Grain and Produce Markets

Chicago Grain.

CHICAGO, Jan. 13.—Expectation of a good sized decrease in the United States visible supply tended to uphold the wheat market today. The close, although unsettled, was the same as yesterday's finish to 5-8 off, with May at $1.84 3-8@1.84 1-2 and July, $1.49 3-4 @1.50. Corn gained 5-8 to 5-8@3-4; oats were unchanged to 1-2@5-8 down, and provisions varied from 2 1-2 decline to a rise of 30c.

Nervousness over an evident pause in export demand formed the chief offset to the prospect that the visible supply total on Monday would show a material shrinkage in the available domestic stock of wheat.

Corn had a firm tone throughout nearly the entire day.

Oats followed corn. Trade was local.

Provisions averaged higher owing to an advance in the hog market to the topmost level ever attained in January. A big drop in hog receipts next week is looked for.

Pacific Northwest Grain.

PORTLAND, Ore., Jan. 13.—Wheat—Bluestem, $1.65; fortyfold, $1.60; club, $1.58; red Russian, $1.55. Oats—No. 1, white feed, $36.50. Barley—No. 1 feed, $38.50.

Futures: February—Bluestem, $1.66; fortyfold, $1.61; club, $1.60; Russian, $1.56. Oats—$36.75. Barley—$39.

SEATTLE, Wash., Jan. 13.—Wheat—Bluestem, $1.63; Turkey red, $1.64; fortyfold, $1.60; club, $1.59; fife, $1.55; red Russian, $1.57.

Barley—$39 per ton.

TACOMA, Wash., Jan. 13.—Wheat—Bluestem, $1.63@@1.65; fortyfold, $1.60; club and fife, $1.58@1.59; red Russian, $1.56.

WALLA WALLA, Wash., Jan. 13.—Wheat—Club ,$1.47; bluestem, $1.52, Barley—$38@40.

WILBUR, Wash., Jan. 13.—Bluestem, $1.50; club, $1.45. Oats—$36. Barley—$36.

Farmers here sold 45,000 bushels of wheat the last week at $1.50 the bushel or better.

San Francisco Grain.

SAN FRANCISCO, Jan. 13.—Wheat firm; no trading.

Barley—May, $2.22 1-2 bid, $2.28 asked. December, $1.55 bid, $1.65 asked.

Wool.

LONDON, Jan. 13.—A miscellaneous selection amounting to 8300 bales was offered at the wool auction sales today. Good wools were steady, but inferior grades were slow. New South Wales and Queensland greasy merinos sold at 2s 11d.

BOSTON, Jan. 12.—The Commercial Bulletin will say tomorrow:

"There has been a fair demand for wool in the Boston market this week, both on account of the woolen and worsted manufacturers. Prices have been firm, with a tendency toward higher levels, although no marked advances have occurred. Current business at the mills is moderate. Advices from the west indicate that contracting of the new clip is proceeding slowly at slightly higher prices."

Scoured basis: Texas fine, 12 months, $1@1.05; fine 8 months, 88@90c; California northern, 95c@$1; middle county, 85@90c; southern, 70@75c; Oregon eastern No. 1 staple, $1.05@1.10; eastern clothing, 95@97c; valley, No. 1, 90@92c.

Territory, fine staple, $1.15; half-blood combing, $1.10; three-eighths blood combing, 92@94c; fine clothing, 95c@$1; fine medium clothing, 92@95c.

Pulled extra, $1.05@1.10; fine A, 98c @$1; AA, 90@95c; A supers, 83@85c.

LONDON, Jan. 12.—A good selection amounting to 9000 bales was offered at the wool auction sales today. The demand was quieter and prices were easy, owing to the authorities fixing maximum prices for tops.

Portland Wheat.

PORTLAND, Ore., Jan. 13.—The eastern demand for wheat is said to have been checked, yet buyers are still offering strong prices in the country. One lot of fancy bluestem was bought at an f. o. b. price equal to $1.72 here, which is a record price for wheat in the northwest. At the merchants' exchange closing bids for January wheat were: Bluestem, $1.65; fortyfold, $1.60; club, $1.58; red Russian, $1.55.

Oats also continue very firm. One hundred tons of February oats were sold on the board at the close of the week at $36.75. Barley is nominal, as practically nothing in the feed line is being offered here

The flour market is on a firm basis and a further advance is expected this week

Engaged to One.

Maud—To protect myself against burglars, I'm going to get a six-shooter.

Ethel—I'm going to get a six-footer. —Boston Transcript.

Portland Market.

PORTLAND, Ore., Jan. 13.—Onions were advanced to $5 a sack at country points at the close of the week. Strong outside demand is wholly responsible for the rise, as local jobbers are unable to get this price on the street.

Up to 2 cents a pound is still being offered to farmers for potatoes, and they are now selling freely at the price.

Vegetables of all kinds continue scarce and high. A car of rutabagas, said to be from British Columbia, arrived by way of Seattle.

The egg market has firmed up. Several cars of storage eggs have been shipped east from the northwestern cities and the fresh lay, while increasing, is still far below requirements.

Poultry prices are somewhat easier, but with meats high a cheap chicken market is not expected.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $36.75 per ton.

Corn—Whole, $47; cracked, $48 per ton.

Millstuffs—Bran, $26.50 per ton; shorts, $30.50.

Barley—No. 1 feed, $39; brewing, nominal; rolled, $41@42.

Hay—Buying prices. Timothy, eastern Oregon, $18@21; alfalfa, $17@18; clover, $12.50; grain, $13@15.

Eggs—Oregon ranch, case count, 36@37c per dozen; candled, 38@40c.

Poultry—Hens, 14@17c; ducks, 16@18c; turkeys, live, 20@22c; dressed, 25@26c; geese, 12@14c.

Butter—City creamery, prints, 38@39c per pound; cubes, extras, 35c.

Cheese—Oregon triplets, 20c; Young Americas, not quoted.

Dressed meats—Veal, 14 1-2c; pork, 13c.

Hops—1916 crop, 6@8 1-2c.

Potatoes—Oregon, jobbing price, $1.75@2.25 per cwt.

Onions—Buying price, $5 for country points.

Wool—Eastern Oregon, fine, 24@30c; coarse, 33@36c; valley, 33@35c.

Beans—Small white, 11 1-4c; large white, $11.10 per 100 pounds.

Hides—Salted hides (25c lbs. and up), 19c; salted stags (50 lbs. and up), 15c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 28@30c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 13c; dry hides, 30c; dry salt hides, 25c; dry horse hides, $1 to $2; salt horse hides, $3 to $5.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—Potatoes, $2@2.25 cwt; new potatoes, 15c lb; sweet potatoes, $5.

Apples—Washington apples, cooking, 60c@85c; eating, $1@1.25; Wageners, $1.25@1.35 box; Jonathans, $1.25@1.35 box; Winter Bananas, 80c box; Kings, $1 box; Spitzenburgs, $2 box; Baldwins, 90c box; Delicious, large, $1.75@2.25 box; Rome Beauties, $1.25 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Coin, 36c lb; Gold Leaf, 40c lb; Better butter, 40c lb; Hazelwood, 40c lb; Peerless, 38c lb; Jersey Belle, 39c lb; Attalia, 40c lb; Diadem, 40c lb; Jersey, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 28½c; Wisconsin limburger, 28c lb; brick cheese, 28c lb; domestic Swiss, 35c lb; western cream, Idaho or Oregon twin or triplets, 24c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $12@14; fresh eastern eggs, $12 case; eastern storage eggs, $9.50 case.

Cattle—Prime steers, $5@6.50 cwt; heifers, $5@5.50; cows, $4@5.

Sheep—Wethers, $6@7 cwt; ewes, $5.50@6 cwt; lambs, $9 cwt.

Hogs—Heavy hogs, $9 cwt; light hogs, $9.50@10.

Live Poultry—Springs, 12@13c lb; hens, 10@11c lb; old roosters, 6@7c lb; young ducks, 11@13c lb; geese, 10c lb; tom turkeys, 16c lb; hens, 20c lb; dressed tom turkeys, 28@30c lb.

Hide Quotations.

Green cows and steers—25 lbs. and up, 16½c; salted cured, 19c; green bulls and stags, 13c; salted cured, 15c; kip, 15 lbs. to 25 lbs., 21c; calf skins up to 15 lbs., 30c; dry flint hides, 32c; dry salted, 27c; dry calf skins, under seven lbs., 38c; dry sheep pelts, full wooled, 20-23c; dry shearlings, 10-75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2 each.

Seattle Wheat.

SEATTLE, Wash., Jan. 13.—Modification of the embargo by the railways this week, attuned to easier conditions in the car situation, has contributed greatly toward strengthening the wheat market of Washington. Exporters were advised early that the carriers would accept wheat for export, thereby rescinding the prohibitory measure invoked two weeks ago, and as a result considerable grain has started on its way east.

The tense, high market of the last week has been tempting to farmer holders and millers estimate that approximately 5 per cent of the 10 per cent of the crop of 1916 and hold over still remaining in the hands of the original holders has changed hands. The identity of the buyers, however, is lost. It is not known whether local or eastern millers or exporters have the grain. The bulk of the grain sold is of the club variety for which $1.50 was paid.

Less talk among farmers of holding for a $2 Seattle market is heard this week. A calmer view of futures is being taken and while it is felt certain that wheat will go higher the inclination to hold on is lessening. A few farmers will decline to part with their holdings until bids of $2 are made here, but this faction represents only a small percentage of what is left over.

Seattle Market.

SEATTLE, Wash., Jan. 13.—The week comes to a close with all the hopes and predictions of the bull crowd in full swing. Yakima gems are costing jobbers $48@50 on track, and this compels a selling level of $55 strong, with $60 promised for next week. Puget Sound spuds, although shrinking heavily and probably over the summit of their season's demand, are quoted firm at $45.

The east persists in keeping on this market for stock and is willing evidently to waive customary restrictions as to grading rules. From present indications, those who predicted levels of $70 per ton Seattle wholesale basis before the highest note was struck are going to be better prophets than they knew.

Onions are firm at 5@6c, but the demand has decreased with the price elevations.

Butter has apparently reached the peak of the season, as none of the large operators can find reasons for predicting an advance. The cream supply is adequate. Country creamery butter is being offered at prices that preclude the possibility of elevating the city markets, and only a small quantity of stock is required at this time to hold values stationary.

Cheese is quiet at 22c for Oregon and Washington triplets, but jobbers are expressing no anxiety as to their ability to clean up at a profit. There will be no new stock offered until spring and February and March are the customary months here for a brisk movement.

Ranch eggs conditions are firming slightly. Some of the houses boldly sold at 39@40c today, while the bulk was moved at 38c. Buying prices have gradually been warped up to 36@37c. There is no heavy outside demand and dealers are proceeding cautiously, determined to have something beside unwarranted fears or sentiment behind each elevation.

It is estimated that there are between 1500 and 1600 cases of storage eggs still in the hands of Western avenue jobbers and packers.

BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 35@37c per dozen.

Poultry—Live hens, fat, over 4 lbs., 17c per lb.; do, 3 lbs. and under, 15c; old roosters, 10c per lb.; springs, 18c per lb.; ducks, 19c per lb.; squabs, large, $3.50 per dozen; geese, fat, 12c lb.; turkeys, live, 24c.

Butterfat—42c lb.; dairy butter, 28c pound.

Beef—Buying price: Prime beef steers, 8c per lb.; cows, fat, 5@6c per pound.

Hogs—Light, 11 1-2@12c per lb.; do, heavy, 10@11c per lb.

Veal—Fancy light, 12 1-2@13c per lb.; do, heavy, 9@10c per lb.

Hides—Salted, 19c per lb.; salt kip, 22c per lb.; salted calf, 32@35c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 32@33c per lb.; dry calf, 12c (under six lbs.), 36c per lb.; bull and dry salts, 4c per lb. less; green bulls, 18c per lb.; dry butcher full wool sheep pelts, 20@23c per lb.

Butter and Eggs.

ELGIN, Jan. 13.—Butter, 35 tubs at 38 1-2c.

CHICAGO, Jan. 13.—Butter—Lower; creamery, 32@33c.

Eggs—Higher; receipts, 3071 cases; firsts, 46@48c; ordinary firsts, 38@42c; at mark, cases included, 39@47c.

Imports Eggs.

Cuba annually imports from 5,000,000 to 6,000,000 eggs, nearly all of them from the United States.

Live Stock Quotations.

At Chicago.

CHICAGO, Jan. 13.—Hogs—Receipts, 15,000; active, 10c to 15c above yesterday's average. Bulk, $10.60@10.80; light, $10.10@10.70; mixed, $10.40@10.85; heavy, $10.45@10.90; rough, $10.45@10.60; pigs, $7.85@9.75.

Cattle—Receipts, 500; steady. Native beef cattle, $7.75@11.80; western steers, $7.50@10; stockers and feeders, $5.50@8.85; cows and heifers, $4.40@10; calves, $9.75@14.25.

Sheep—Receipts, 6000; strong. Wethers, $9.50@10.65; ewes, $7.25@10.25; lambs, $11.60@14.15.

At Omaha.

OMAHA, Neb., Jan. 13.—Hogs—Receipts, 7700; higher. Heavy, $10.40@10.75; light, $10@10.60; pigs, $8.50@9.75; bulk of sales, $10.15@10.60.

Cattle—Receipts, 200; steady. Native steers, $7.50@11.50; cows and heifers, $6.50@8.50; western steers, $6.70@9.25; Texas steers, $6.25@7.65; stockers and feeders, $6.25@9.

Sheep—Receipts, 200; steady. Yearlings, $10@12; wethers, $9@10.25; lambs, $12.60@13.75.

At St. Paul.

SOUTH ST. PAUL, Minn., Jan. 13.—Estimated receipts at the Union stock yards today: Cattle, 200; calves, 25; hogs, 1600; sheep, 25.

Cattle—Prices on practically all grades of killing cattle at the close of the week were about steady with a week ago. Total receipts for the week were approximately 16,500, compared with 14,000 the previous week.

Hogs—Hogs on the final session of the week cashed at unchanged rates. There were only 1600 on hand, and the crop changed hands quickly. The range was from $10 to $10.35, and the bulk was between $10.20@10.30. Pigs held steady. Good hogs closed about 30 cents higher than a week ago, and other kinds were between 15 and 25 cents higher than the same time last week.

Sheep—With only a few head in the division prices were unchanged for sheep and lambs today. The week closes with prices higher than they ever have been before. Lambs were topping at $13.25, ewes at $9.25, wethers at $9.50 and breeding ewes up to $9.25. The lamb market is 25@50c higher for the week, while sheep, especially good ewes, look about a quarter higher than a week ago.

At Portland.

PORTLAND, Jan. 13.—Hogs—Steady; receipts, 310. Bulk of packing grades, $10.10@10.35; heavy packing, $10.40@10.50; heavy butchers, $10.25@10.35; light packing, $10.25@10.35; rough heavy, $9.25@9.50; pigs and skips, $9@9.40; stock hogs, $8.25@8.75; cripples, $8@9.

Cattle—Steady; receipts, 35. Steers, prime pulp fed, $9.50; prime heavy, $8.25@8.50; good, $7.75@8; cows, choice, $7@7.50; medium to good, $6.25@7.25; ordinary to fair, $5.50@6; heifers, $6.25@7.50; bulls, $4@6; calves, $6@10.

Sheep—Steady; receipts, 39. Lambs, east of mountains, $11@11.25; lambs, valley, $10.50@10.75; lambs, good, $9.75@10.25; choice yearling wethers, $9@10; good yearlings, $8.75@9; choice ewes, $8@8.25; heavy ewes, $6.75@7.50.

At Seattle.

SEATTLE, Jan. 13.—Receipts, 186 hogs, 82 cattle. Market strong.

Hogs—Prime light hogs, $10.60@10.75; medium to choice, $10.25@10.40; smooth heavy, $9.75@10.25; rough heavy, $9.25@9.75; pigs, under 150 lbs., $8.50@9.75.

Cattle—Prime light steers, $8.60@8.75; medium to choice, $8.25@8.50; common to good, $6.50@7.50; best cows and heifers, $7.60@7.75; medium to choice, $7@7.25; common to good, $5@6.50; best bulls, $5@5.75; common bulls, $2.50@4.50; calves, $7@9.

Sheep—Prime lambs, $10.25@10.50; good lambs, $9.75@10; wethers, $8.50@9; ewes, $6.50@8.

Spokane Stock Yards Saturday.

Cattle—Receipts 53; market steady. Prime heavy steers, $8@8.35; prime light steers, $7.75@8; good steers, $7.50@7.75; stockers and feeders, $5.25@6; prime cows, $6.50@7.25; good cows, $5.75@6.50; best heifers, $6.50@7.25; bulls, $3.50@5; calves, $6@8.

Hogs—Receipts, 277; market steady. Prime light, $9.85@10.10; prime heavy, $10.10@10.35; prime mixed, $9.40@9.65; rough heavy, $9@9.50; stockers, $6.50@8.

Sheep—Receipts, none; market steady. Prime lambs, $10@10.75; common lambs, $8.75@9.25; best yearlings, $8.75@9.50; good yearlings, $7.50@8.25; best mutton ewes, $6.75@7.75; good ewes, $5.50@6.50.

San Francisco Produce Market.

SAN FRANCISCO, Jan. 12.—Butter—Fresh extras, 35½c; prime firsts, 34½c; fresh firsts, 34c.

Eggs—Fresh extras, 40c; pullets, 38c.

Cheese—New, 18c; Young Americas, 20½c.

Poultry—Hens, 24@25c; old roosters, 11@12c; fryers, 25@28c; broilers, 27@30c; large, 26c; squabs, $2.25@2.50; pigeons, $1.25@1.75.

Potatoes—Rivers, $2.40@2.65; sweet potatoes, cellar stock, $2.75.

SAN FRANCISCO, Jan. 13.—Butter—Fresh extras, 35½c; prime firsts, 34½c; fresh firsts, 34c.

Eggs—Fresh extras, 40c; pullets, 38c.

Cheese—New, 18c; Young Americas, 20½c.

Poultry—Hens, 24@25c; old roosters, 11@12c; fryers, 25@28c; broilers, 27@30c; large, 26c; squabs, $2.25@2.50; pigeons, $1.25@1.75.

Commandeering Wool Crop.

London Live Stock Journal: A matter of vital interest to flock-owners has to do with the commandeering of the future wool crop. It is unfortunate that the administration should not have been uniform throughout the country. Sheep-breeders will, therefore, welcome most strongly the proposal of the National Sheep-Breeders' association to call together the agricultural representatives on the county advisory committees with a view to seeing whether or not some uniform scheme of administration can be instituted in regard to the 1917 clip. Naturally also the flock-owner feels considerably aggrieved at the price at which his wool has been commandeered.

Producers of wool must receive a price for their product in accordance with the cost of its production. Last year the price was based upon an increase of 35 per cent above that ruling for the 1914 clip. The resolution passed by the National Sheep-Breeders' association asks that, owing to the increased cost of production, the woolgrower should receive a substantially higher price for the 1917 clip than for the 1916. This is only reasonable, seeing the enormous appreciation that has taken place in connection with food, labor and cost of cultivation. This position, too, is fully justified by the action of the government in arrangement it has made in regard to the New Zealand wool clip.

It offered the government of New Zealand a price for the 1916 wool clip of 45 per cent above that ruling for 1913-1914 clip. This was refused, but finally the next season's crop of New Zealand has been secured by the home government at an increased price of 55 per cent above the prices ruling for the various qualities of wool clipped in 1913-1914. Therefore it appears not unreasonable that the same treatment should be given to home-growers for their 1917 clip.

Storage Battery Cars.

On some lines the Prussian state railways are using storage battery cars at less expense than steam locomotives or gasoline electric cars.

Want Ads

HELP WANTED—MALE 3

BE AN AUTO AND TRACTOR EXPERT. $75 to $200 a month—learn in six weeks. Thousands of successful graduates. Catalog free. Rahe's Auto School, 532 East 11th st., Kansas City, Mo.

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CAN SUPPLY FIRST-CLASS RANCH hands and other male help on short notice. Lewis Labor Agency, Chas. Lewis, Mgr. N211 Stevens, Spokane. Phone Main 3252.

MARRIED COUPLE WANT FARM WORK; experienced; wife good cook. P. O. Box 1024, Spokane.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER!

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors, $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

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SASH AND DOORS.

Order your sash and doors direct from O. B. WILLIAMS CO. We operate our own mill, and ship direct to any one, anywhere, at factory prices. Safe delivery guaranteed to destination. Send for our big, complete catalogue No. 27. Mailed free, postpaid, on request.

6 cross panel doors	$ 1.33
Craftsman 4-panel doors	1.75
Craftsman glass doors	2.75
24x28 2-light window	1.33
36x40x16 cottage front window	2.63
Bungalow casement sash	.56 up
3x6 hotbed sash	2.25
Cupboard glass doors	1.00
Cupboard panel doors	.85
3-ply slash grain panels, square foot	.05½
1-ply Gold Seal roofing	1.35
Knock-down window frames	1.00
4 and 5 foot floor and ceiling, 1000 feet	11.00
3 to 9 foot flooring and ceiling, 1000 feet	14.00

O. B. WILLIAMS CO.
1143 FIRST AVE. SO. SEATTLE, WASH.

STRAWBERRY BOXES.

We have all kinds of berry boxes and crates, butter and egg cases. TRY OUR CEDAR SHINGLES. HEDLUND BOX & SHINGLE CO., SPOKANE.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MISCELLANEOUS—FOR SALE 60 Continued.

TRACTOR ENGINE.

We have, in first-class condition, slightly used Minneapolis 22½-H. P. traction engine for sale at a sacrifice. This is a bargain if you can use it. Write for price and full details.

CONTRACTORS' EQUIPMENT CO.
18TH AND UPSHUR STS., PORTLAND, ORE.

BUILDING MATERIAL AT WHOLSALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

PEANUT BRITTLE CANDY EASILY made at home. Latest guaranteed instructions, 25c. Candy Kitchen, Sprague, Wash.

BEES—560 COLONIES FOR SALE; THE big game as a bargain. John Ruyts, Buhl, Idaho.

FOR SALE—300 TONS CHOICE ALFALFA hay. Burbank Company, Burbank, Wash.

MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

LIGHTING EQUIPMENT 74

NIXON-KIMMEL CO.—EDISON STORAGE battery and farm light plant distributors. Sell or repair everything electrical. Spokane.

AUCTIONEERS 75

JAS. M'KAY, AUCTIONEER. FARM AND auction sales. 312 6th ave., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

PATENTS—PICTURE OF PAT. OFFICE and 3-yr. calendar free. FitzGerald Co., pat. attys., 881 F. st., Wash., D. C. Est. 1880.

POULTRY 174



This classification introduces the person who wants to buy purebred poultry to the person who can fill his or her order satisfactorily. If you have breeding stock, hatching eggs or chicks to sell, now is the time to advertise.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please. $12—100. Free catalog. Freshlaid Farm, Colfax, Wash.

I HAVE PLYMOUTH ROCK COCKERELS, ready for service, at $2.50 each. GOOD-LAYING STRAIN. F. C. B. Zenith. J. P. Jorgenson, Zenith, Wash.

MAMMOTH BRONZE TURKEY, BEST IN the west. Unrelated stock. Mrs. H. J. Cortner & Mrs. C. R. Lowery, Payette, Ida.

LIVE STOCK 177

50 BRED SOWS AND GILTS, 50 OF TRUE Berkshire type and quality, bred to grand champion boars, are included in our private sale list now ready for mailing. Write for it today. Silver Birch Farms, Bx. R, Newport, Wash.

15 GUERNSEY COWS AND HEIFERS FOR sale, sire Langwater Emigrant 14076. Have to make room for our registered Guernseys. Most of them freshen in early spring. Middledale Farms, Gosher, Ore.

WAIKIKI FARM JERSEYS.

We offer several young bulls and heifers of excellent breeding. Send for descriptions and photos. Waikiki Farm, R. 7, Spokane, Wn.

17 HEAD OF VERY CHOICE REGISTERED red roan and white yearling Shorthorn bulls. Wm. Mulhall, Fenn, Ida.

HORSES and VEHICLES 183

ONE MIGHTY GOOD STALLION, 2 YRS. old, thoroughbred Shire colt, weighs about 1600 lbs. Will sell or trade. J. R. Barnes, Pullman, Wash.

HARNESS and SADDLERY 189

H. A. BOSTWICK, HARNESS AND HARness repairing. Postage paid on mail orders. N624 Monroe, Spokane.

GROCERIES 222

3 LBS. EXTRA FINE COFFEE, ROASTED fresh daily, by parcel post, for $1. Martin Marks Coffee Co., Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

FUR RUG MOUNTING A SPECIALTY. Heads, animals and birds mounted. Withers Bros., 822 Sprague, Spokane, Wash.

ARCHITECTS 558

ADDRESS L. M. STARR FOR PLANS AND specifications, E1218 12th ave., Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS.
VETCH OR "TARES,"

A Great Forage or Seed Crop.
RED CLOVER, ALSYKE,
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.

COMPLETE LINE OF FARM SEEDS.

We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.

CORVALLIS FLOURING MILLS,

Corvallis, Oregon,
Home of the Famous Oregon Agricultural College.

LIMITED SUPPLY FINE NORTHERN Okanogan valley grown yellow and white Dent seed corn, on cob or shelled. Yellow took first prize and White fourth for First district corn show in St. Paul. None shipped testing under 90 per cent. Price 10c per lb., prepaid. L. F. Pourtales, Oroville, Wash.

FARM SEEDS, COMPLETE STOCK OF red and alsike clover, timothy, vetch grass seeds, seed grain, garden seeds. Send for free catalogue.
D. A. WHITE & SONS, Seedsmen,
SALEM, Ore.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request. ROUTLEDGE SEED & FLORAL CO. 145-147 2D ST., PORTLAND, ORE.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

ALFALFA SEED IN LOTS FROM ONE TO one hundred bushels at $8.50, f. o. b. Clements, Kan. Samples on request. H. H. Stephenson, Clements, Kan.

WRITE FOR CATALOUGE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEND US YOUR NAME
For Our New Seed Catalog.
SEATTLE SEED CO., SEATTLE.

NURSERY STOCK 621

PRUNE TREES; THOUSANDS; GRAFTED walnuts. Trees of all kinds. Buy direct and save 50 per cent. No agents. Our prices sell. Write for planters' catalog and price list. 26 years in business. Carlton Nursery Co., Carlton, Ore.

FARM LANDS—FOR SALE 651

RAW LAND, SPECIALLY SUITED TO poultry raising and dairying. Ask for our 1916 offer and monthly payment plan. Office Wall and Post sts., near Post street bridge. Phoenix Lumber Co., Dept. A. Spokane, Wash.

MONTANA LANDS OF ALL KINDS, small payment; long time on balance. Can take good farm lands as part payment. Robert A. Hopkins, 617 First ave., Spokane.

FARM LANDS—FOR SALE 651 Continued.

2120 ACRES OF WHEAT LAND IN WALLA WALLA COUNTY.

2120 acres and all in cultivation; 12 miles from Walla Walla; 640 acres summerfallowed; 2 wells of water with gas engines and windmills; 2 sets of buildings and plenty of granaries and machine sheds; railroad station right on the land. This is a large farm and is capable of making big money for its owner. The price of $85,000 is certainly way below what it should be, but even at this price some trade will be considered.

ARTHUR D. JONES & CO.
ARTHUR D. JONES BLDG.
SPOKANE, WASH.

MONTANA GRAIN AND DIVERSIFIED farm land in Judith Basin, Shields River Valley, Great Falls District and other good districts. Prices $7 per acre and up for stock farms; $20 to $40 per acre for good grain land; small cash payment—balance easy terms and 6 per cent interest. Have a few places on which the owners will take some good Washington property as part payment—time on balance. Call or write for Montana land list and see us before you go. We can give you some pointers that will cost you nothing and will probably save you a lot of time and worry later. HEGE & SCHIFFNER CO., 715-17 Paulsen bldg., Spokane.

GREAT NORTHERN LAND CO.

5792—320 acres choice Palouse land, in a high state of cultivation; fair buildings and good water; two miles from town, and a crackerjack at $67.50 per acre; terms.

640 acres raw wheat land, 500 of which is choice soil, the remainder fine pasture; three miles from station; owned by a nonresident; goes at $9 per acre. This is very cheap. Terms.

If going to Montana, see us, as we can save you money. For farm land come to headquarters.

G. N. LAND CO., COR. HOWARD AND 1ST.

YOUR CHANCE IS IN CANADA — RICH lands and business opportunities offer you independence. Farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry. 92 Ninth ave. Calgary, Alberta.

253 ACRES OF NO. 1 RICE LAND FOR sale at $75 per acre. One good crop ought to pay for the land and all expenses. Water from 8 to 16 feet from surface, and canal running along side of land. $40 per acre cash; would take other property in exchange for balance, or on terms at 6 per cent. C. R. Suggett, College City, Calusa Co., California.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

120-ACRE DAIRY FARM; 80 A. TILLable; 12 acres cultivated; 35 acres ready for plow; 5-room house, barn and outbuildings; 1 mile to town; price, including 9 milk cows, $4000; terms. O. V. Manring Investment Co., 22 Symons blk., Spokane.

FOR SALE AT BARGAIN.

Two quarter sections fine wheat land, southern Idaho; close good town and school; cultivated and fenced; 120 acres in wheat; 40 acres ready for spring seeding; one-third goes; some cash, bal. terms. Act quick. Owner. Albert Pletz, Aberdeen, Idaho.

WESTERN WHITMAN WHEAT AND PASture lands from $10 to $40 an acre. Values increasing. Write me about what you want, I shall try to locate you here. H. M. Moffatt, Winona, Wash.

NORTHERN PACIFIC RAILWAY LANDS in eastern Montana at $2.50 to $18 per a. Suitable for farming or grazing. Easy terms. For information write or see W. E. HOLT, MILES CITY, MONT.

SEE US IF YOU WANT TO BUY OR SELL farm lands. J. F. DEALY & CO., Spokane.

FARM LANDS—WANTED 654

MAYBE YOURS IS JUST THE PLACE WE ARE LOOKING FOR.

If you want to dispose of your ranch, please write us or better come in and tell us about it. We have several customers for wheat and stock farms. Perhaps yours is just the farm we want.

ARTHUR D. JONES & CO.
ARTHUR D. JONES BLDG.
SPOKANE, WASH.

WRITE US A DESCRIPTION OF YOUR farm if you wish to sell. We get the cash buyers.
HEGE & SCHIFFNER CO.
715-17 PAULSEN, SPOKANE.

LIST YOUR FARM WITH US—WE SELL land.
G. N. LAND CO., Cor. Howard and First, Spokane.

FOR SALE OR EXCHANGE 702

MR. FARMER.

If you have any farm land or city property that you wish to sell or exchange for other property, write us for full particulars. We handle property in all parts of the northwest.

MAUSER & MAUSER,
JAMIESON BLDG., SPOKANE.

IF YOU HAVE FARMS FOR SALE OR exchange write us full particulars.
J. MELVIN THOMAS & CO.
EXCHANGE BANK BLDG., SPOKANE.

TO EXCHANGE—REAL EST. 705

PALOUSE FARM TO TRADE.

160 acres near Potlatch, Idaho, improved. Price $12,000. Also a 6-room house and 2 lots; a nice corner; in Spokane; and $1500 money. One or all for a large ranch, and assume; near Farmington preferred.

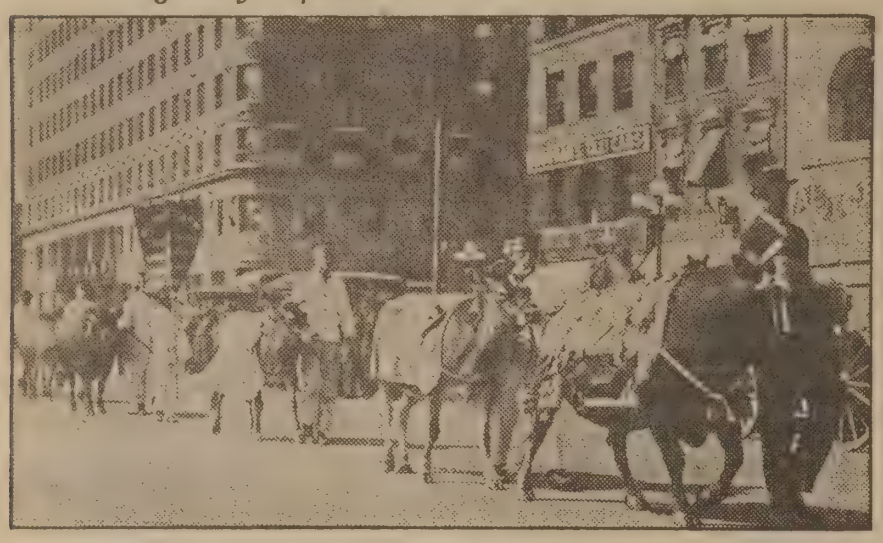
SEND US YOUR WANTS. We hustle and find your trades.
PACIFIC INVESTMENT CO.
209 EAGLE BLK., SPOKANE, WASH.

WANTED—GOOD REAL ESTATE IN eastern Washington, as first payment on a few good farms in Montana. Call or write and tell us what you have, but put your price at its cash value. Hege & Schiffner Co., 717 Paulsen bldg., Spokane.

SEE US FOR ALL KINDS OF TRADES if your property does not suit you. Rogers & Rogers, Spokane.

NEWS FOR BREEDERS

Jersey Special a Great Success



It becomes more and more apparent that the Jersey special train which left the grounds of the Waterloo-Iowa dairy cattle congress with more than 160 prize Jerseys on board bound for the national dairy show at Springfield, Mass., was a great success. It showed the east that the west can breed the best of stock. It gave to city dwellers an idea of the magnitude of the dairy industry and the progressiveness of the men engaged in it, and it blazed the trail for the advance of the dairy cow—the animal that the east must place her reliance upon if she wishes to rebuild her worn-out soils.

At the first stop of the train—Indianapolis—a great celebration was held in honor of the cattle. Following the parade through the main street of the city to the capitol, speeches were made by the governor and lieutenant governor of the state, acting United States secretary of agriculture, Hon. Carl Vrooman, and the dairy commissioners of three middlewestern states. A magnificant banquet followed in the evening. At Columbus, Ohio, the second stop, an even greater ovation was given the cattle and their owners. At Utica, N. Y., the last stop before the National Dairy Show at Springfield, Mass., a monster crowd of dairymen from all parts of the Empire state and New England were assembled. The governor of Vermont made the trip from his home state to extend to the prize herds of the west the welcome of the east. They arrived in Springfield in the pink of condition; and that they were none the worse for their long journey was shown by the fact that two of the herds won the premier breeders' and premier exhibitors' honors, respectively.

To Begin Official Testing.

Charles Ashton & Sons of Tangent, Ore., who purchased 11 head of heifers at the Pacific International Holstein sale, now have about 30 females in milk or soon to freshen. Their herd bull, by Prince Prelly Gelshe and out of a heifer with a good official record, is siring some nice calves. They will begin official testing in the early spring and hope to make some good records.

H. A.

GOLDEN FERN LAD BLOOD.

H. Thiesen & Sons of Milwaukie, Ore., report their cow, Larkwood's Buttercup, has completed a year's official test, producing in 12 months 8655 pounds of milk and 662.21 pounds of butter at the age of 2 years 9 months with second calf. This makes her record second highest in the state for a senior 2-year-old. The record is 9854 pounds of milk and 674 pounds of butter, now held by Stockwell's Larkwood Lady, also owned by the Thiesens. Another cow of the herd, Sightly's Pride, has completed a record as junior 2-year-old of 10,514 pounds of milk and 726.38 pounds of butter. The cows carry a good deal of Golden Fern Lad blood and are to be bred to a young bull with 50 per cent Golden Fern Lad blood.

KENNEDY'S $500 CALF.

Mal Anderson, one of the prosperous cattlemen of the Ashton country, was in Blackfoot and paid the stock farm of M. Kennedy a visit. He was in search of the best Hereford bull that Idaho possessed and was willing to pay the price. After a careful consideration and investigation, he concluded that the best was none too good for him and he bought the pride of the herd that was sired by Kennedy's big bull, that took first prize at the fair last year. The bull that Mr. Anderson bought will be two years next August.

FIRST PRIZE BERKSHIRE.



At the Smithfield Show.

REGISTERED JERSEY CATTLE.

E. H. Thompson has leased his fine farm just south of Chehalis, Wash., to Antone Adolphsen, a prominent dairyman, for a term of five years. Mr. Thompson will erect a new house and will continue to live on the place. Mr. Adolphsen will immediately stock the farm with registered Jersey cattle and registered Berkshire hogs. Mr. Thompson states that during the time the farm is under lease to Mr. Adolphsen many improvements in the place will be made, the fact that the farm management is off his hands giving Mr. Thompson more time to improve his property.

MEDALS FOR PERCHERONS.

C. A. Hunter of Wallowa, Ore., has received four medals from the Percheron Association of Chicago on the horses which he exhibited at the state fair at Salem. The medals are a little larger than a silver dollar, with the Percheron association on the outer circle and across the center is Mr. Hunter's name and class of horse for which the medal is given. They are as follows: Champion mare in open class; mare, three years old and over, bred and owned by exhibitor; champion mare, open class, and champion mare, bred and owned by exhibitor.

GIVING BOOST TO STOCK.

"When the president signed the 640-acre grazing homestead bill there was placed upon the statute books a law which it is believed will accomplish a great deal toward making homes for those who desire to engage in a small way in the live stock industry, and also meet the constantly decreasing supply of sheep and cattle in the public land states," remarked Congressman Addison T. Smith of Idaho in commenting on the provisions of the law.

FINE SOUTH DOWN EWES.

The University of Idaho flock of sheep has been strengthened by the purchase of two very fine South Down ewes and four very fine Lincoln ewes secured at the Portland Stock show from Oregon breeders.

Transportation of Cocoa.

An interesting spectacle in the Africa gold coast country is the transport of cocoa, the bulk of the inland produce being carried on by porters to the railway. Sometimes the roadways as far as the eye can see are one long line of cocoa bags on the heads of hundreds of carriers.

We Will Pay Salary

To Farmer With Rig or Saddle Horse

The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state during the winter months. We are going to pay good salaries to those who can do the work.

We have decided to offer these positions only to farm owners or renters.

We feel sure there are many of our readers who would like to earn some extra cash during the winter months when work around the place is slack.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good hard licks for good pay. For men or women with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary during the winter months, without neglecting your farm chores—without being away from home more than a few hours each day. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter. If we get two or more applications from one neighborhood, the first will be given the preference in making our appointment. If you want a good salary proposition for the rest of the winter, don't wait till tomorrow to write us, but send your application today.

If not interested personally in the above proposition, why not get some neighbor or friend in touch with us at once who you think will appreciate an opportunity to make several hundred dollars during the winter months. You will be doing both him and us a favor.

Address your letter to Publisher The Washington Farmer, Review Building, Spokane, Wash.

College of Agriculture
University of Illinois

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. JANUARY 25, 1917. NO. 4.

Eight Hundred Wool Growers Meet at Salt Lake

National Convention Asks Government for Cooperation With Industry

One of the greatest meetings from the standpoint of attendance in the history of the live stock industry of the United States was held at Salt Lake City, Utah, January 11-13, when the National Wool Growers' association met in convention. Eight hundred delegates were in attendance. Every state west of the Rocky mountains and all the live stock states in the entire union were represented. The state of Idaho led in attendance with the exception Utah, the home state of the convention. Idaho had 150 delegates, Montana 125, Oregon 50 and Washington slightly less than Oregon.



F. M. ROTHROCK.

One of the active delegates at the Salt Lake convention was F. M. Rothrock of Sprague, Wash., breeder of both sheep and cattle. He was elected a member of the executive committee of the association.



FRANK R. GOODING.

Former Governor Gooding of Idaho was one of the most prominent men attending the wool growers' convention. Owing to an indisposition on the part of President Hogenbarth, Mr. Gooding presided. He was formerly president of the association.

Urge National Fight on Wild Animals.

The convention discussed at length the problem of ridding the country of predacious animals, especially the coyote, and adopted a resolution asking congress to appropriate $300,000 as a fund to finance a campaign against these pests. Western state legislatures are also urged to take action looking toward the extermination of animals that prey upon sheep. This action was taken more enthusiastically in view of the spread of rabies throughout the country, it being believed that a large percentage of the coyotes on the ranges are affected. Nationwide uniformity in bounties was advocated.

Forest Grazing Fees Discussed.

President F. J. Hogenbarth, in his annual message to the growers, pointed out that the grazing fee collected by the government for forest reserve privileges granted to sheep men totaled now over a million and a quarter dollars annually, and that the proposed increases would practically double this amount.

Consider New Homestead Measure.

The 640-acre homestead law was also discussed largely, finding little favor with the sheep men, who in some cases expressed the belief that the injury done by it to the sheep industry was greater than the benefit that it would result in to the homesteader. They believed that in many instances lands were being taken up under the provisions of the act that were incapable of production sufficient to maintain a homesteader and his family.

Want Government Experimentation.

President Hogenbarth criticized the government for having refused to appropriate $30,000 asked for some time ago for a sheep breeding experiment station. An appropriation of $8500 was made, but this was declared to be insufficient. A station to experiment in sheep feeding is also desired.

Great Sale of Breeding Stock.

The association is planning a larger sale of breeding sheep this season than ever before. Last summer's sale consisted of 2455 head, the highest prices being paid for a Butterfield ram, which brought $1000. Others sold at from $300 to $800. The sale this year will include at least 4000 head, it is predicted, and in view of the unusually high prices of both sheep annd wool it is expected that some high sales will be recorded.

All the present officers were reelected, as follows: F. J. Hogenbarth, Salt Lake, president; S. W. McClure, Salt Lake, secretary; F. D. Miracle, Helena, Mont., treasurer. The executive committee consists of Hugh Cameron, Arizona; Fred Ellenwood, California; Pregor Miller, New Mexico; L. E. Thompson, Colorado; Hugh Woods, Idaho; O. E. Selway, Montana; J. C. Kinney, Wyoming; Thomas Austin, Utah; F. M. Rothrock, Washington; T. M. Burgess, Oregon; Mr. Kimball, Nevada.

(Continued on page four.)

Figures vs. Frivolity

Being an Earnest Appeal to Contestants to Stick to Figure Problem

By the Contest Editor

The Contest Editor is desirous that those who are interested in the Figure problem confine their questions as nearly as possible to points immediately concerning the contest. While he does pretend to know something about the kind of figures that relate to the solution of this problem, the Contest Editor is not an encyclopedia and knows little either of fads, fancies or history. It is his desire to be as courteous as he can well be with all contestants and will try to answer their questions on whatever subject, but again appeals to them to avoid irrelevant inquiries.

ANSWERS TO MAIL.

(It being physically impossible to write personal answers to all questions, this method is taken of replying briefly, with due apology to our contestants.—Contest Ed.)

G. Z.—Not the number of figures but the correct total of all the figures in the chart when added is the solution necessary in this contest.

MARMALADE—Immortelles for a bridal bouquet suggest a permanency of the marital contract which is the good luck most to be desired. No, the 13th is not an unlucky wedding day if the young man is the right sort of fellow and you are willing to do your part.

CONSTANCE—Personal friendship would be no valid excuse for my confiding to you the correct solution of figure problem. No, my recollection is that Catherine of Arragon, not Laura Jean Libby, was the sole surviving wife of Henry VIII.

JEWEL—The author of the following verse, submitted by you, is understood to be in hiding:

He met her in the meadow
  As the sun was sinking low;
They walked along together
  In the twilight's afterglow;
She waited until patiently
  He had lowered all the bars,
Her soft eyes bent upon him
  As radiant as the stars.
She neither smiled nor thanked him,
  In fact she knew not how,
For he was but a farmer's lad
  And she—a Jersey cow.

T. F.—Yes, if your subscription is already paid in advance, you can enter the solution by paying either $1 or $1.50, for which your subscription will be extended from the time to which it is now paid.

PERSIS—Decline to answer your qusetion about divorce. My business is addition, not subtraction.

F. M. R.—All prizes in the Figure contest will be paid in cash.

THANK YOU.

The Contest Editor is proud of the following letter from a subscriber at Lewiston, Idaho:

Dear Contest Editor:

I consider it a treat to have a chance to secure your most valuable Farm paper at three years for $1.50. I want to try for some of the prizes offered for best solution of figure chart.

I was born and raised on a farm, but find the paper very helpful. While I am only working for wages, it helps me to give my employer better service. I lived in Oklahoma 18 years and though the———Farmer the only farm paper, but like this paper better.

The adding up of the figures looks easy, but there may be some one who can't see well.

I wish to say I am a common laborer with a family and an aged father and mother to support and decided the prize worth while trying for, but I feel if I apply a good portion of the Farmer's suggestions, hard work and economy, I will win in Idaho.

Wishing you success with the best Farm paper in the west, I am,

$750—Prizes—$750

First Prize, $200

to which will be added 50 times the amount paid by the subscriber with the winning solution. For example, if you pay $1.50 on subscription, this prize will be worth $275.

Second Prize, $100

to which will be added 30 times the amount paid by the subscriber with the winning solution. This prize may be worth $145.

Third Prize, $60

to which will be added 20 times the amount paid by the subscriber with the winning solution. This prize may be worth $90.

Fourth Prize, $50

to which will be added 10 times the amount paid by the subscriber with the winning solution. This prize may be worth $65.

Fifth Prize, $40

Sixth and Seventh Prizes, Each $20

Eighth to Sixteenth Prizes, Each $7

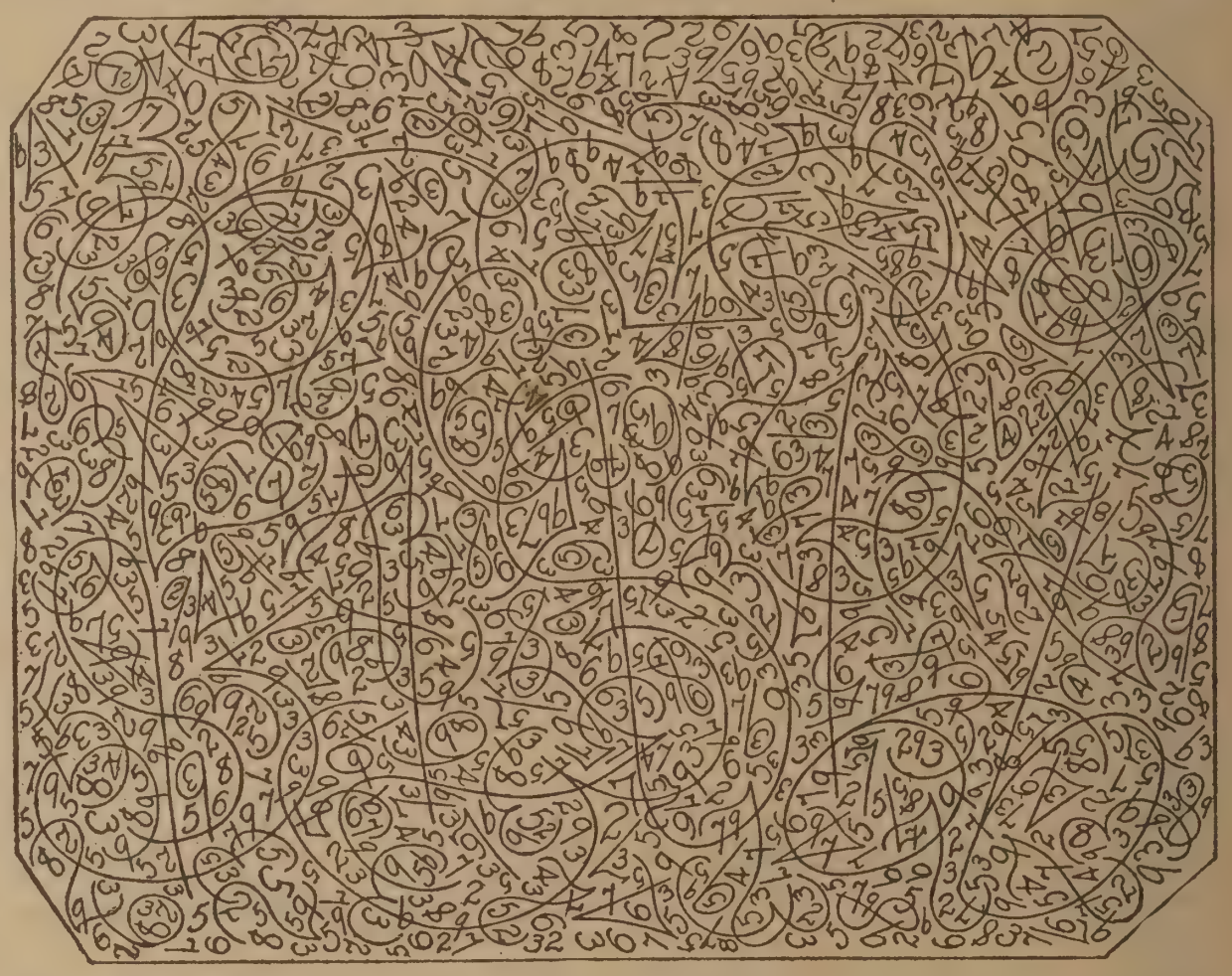
Seventeenth to Thirty-Second Prizes, Each $2

Cash Must Accompany

Solutions unaccompanied by cash payment on subscription will not be registered. Use registration blank on this page. Employes of this paper or members of their families are not eligible to enter this contest.

Don't send in your charts and working papers unless called for by the Contest Editor. Simply write your solution in blank space provided in "Registration Blank."

Remember, the contest closes March 17, 1917.



Read This!

Simply add up the figures in the puzzle chart as if they were in one long column. Your success depends on the accuracy of your total thus obtained.

Figures run from two to nine, and there are no double figures or characters which are not figures. The tail of the "6" has a decided curve, while the tail of the "9" is straight. All other fiugres have the usual characteristics, allowing no question as to the identity of any figure.

In event that no one submits the correct total, prizes will be awarded for the next nearest solutions.

This contest is restricted to persons residing in Washington, Idaho, Oregon and Montana.

A payment of $1 to $1.50 on subscription to the Farmer entitles the subscriber to enter the contest.

The money paid will be credited on subscription to the Farmer. The advantage of paying $2.50 instead of $1 is that the winner of any of the first four prizes receives additional prize dividends apportioned on the amount paid in on subscription, besides the fact that $1.50 during this contest pays for a three-year subscription to the paper, while $1 pays for only one year.

More than one solution may be submitted by any contestant, by an additional subscription payment of not less than $1 nor more than $1.50. It is not necessary to pay the same amount with each solution if more than one is submitted.

As many prizes will be reserved as there are people tied before any prizes are awarded to those sending in less correct solutions.

You can send in a subscription for some one other than yourself and have the solution registered in your own name. Remember that by paying $1.50 instead of $1 on subscription, the larger will be your dividends if you win one of the four leading prizes; but not more than $1.50 will be received with one solution.

REGISTRATION BLANK

Cut out this blank closely around the border and send it in with your solution and money.

To The Washington Farmer Contest Editor:

Date sent.....191..

I enclose $..... for..... subscription to **The Washington Farmer.**

Name .....

Town .....

State .....

SOLUTION AND PAYMENTS.

The following spaces provide for three solutions, with the payments you desire to make with them. You may submit one or as many different solutions as you wish. You can subscribe for one or three years, as per printed schedule, with each solution, as provided for in "The Conditions."

Solution.	Amount Paid.
.....	$.....
.....	$.....
.....	$.....

Answer this question: Are you now a subscriber? .....
If you wish paper sent elsewhere, fill in name and address.

.....

.....

You must address all inquiries and solutions to

The Washington Farmer Contest Editor

Review Building, Spokane, Wash.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 4 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF January 25, 1917

Two Million Dollar Deal On at Olympia

Extravagant Bills Would Spend Million on Militia and Double Higher Education Cost

With few exceptions farmers are more than willing to bear their fair share of taxes when taxation is for necessary and beneficial objects. But the farmer does object to an increase of taxes for unnecessary things.

Two bills now before the Washington legislature propose a very large and unnecessary increase in taxes—the military code and the bill nearly to double at a single stroke the sums now going into the state's institutions of higher learning—the University of Seattle, the state college at Pullman, and the normal schools at Bellingham, Ellensburg and Cheney.

Wildly Extravagant.

The militia bill is probably the wildest measure now before the legislature. At the last session a tax of two-tenths of a mill was levied for the national guard and returned about $200,000. It was a very liberal provision for the guard. Kansas, for example, with half million more population than Washington, expended on its guard in 1914 $72,000; Texas, with three and a half times our population, only $37,500; Indiana, with two and a half times as many people, expended $85,000.

But the military bill at Olympia proposes to increase the guard millage to a full mill and thereby raise nearly a million dollars for that purpose.

> If the militia bill is passed the taxpayers of Washington will have to pay more for the state militia than 25 states combined paid in 1914.

If we should put $1,000,000 into our national guard next year it would be more than 25 states spent in the aggregate on their guards in 1914. That fact is of official record in the files of the war department at Washington.

General A. L. Mills, U. S. A., chief of the division of militia affairs, when before the house committee last January, submitted a table showing the annual state appropriation for the support of the organized militia, as reported by the state adjutant generals in returns of December 31, 1914. The aggregate of 25 states was $934,940, and this list includes such populous states as Indiana, Kansas, Kentucky, Minnesota, Missouri, Nebraska, Tennessee, Texas and Virginia. It is as follows:

Alabama	$ 25,000
Colorado	30,000
Deleware	17,300
Florida	47,000
Georgia	25,000
Idaho	25,000
Indiana	85,000
Kansas	72,000
Kentucky	20,000
Louisiana	25,000
Maine	55,000
Minnesota	102,000
Mississippi	10,000
Missouri	66,000
Montana	1,500
Nebraska	38,840
New Mexico	14,900
North Dakota	30,000
Oklahoma	33,000
South Carolina	15,000
South Dakota	18,200
Tennessee	20,000
Texas	37,500
Virginia	78,000
Wyoming	20,700
Total	$934,940

Federal System Planned.

At the outside Washington should go no further this year than to "mark time" with its national guard. Evidence is convincing that the guard is disintegrating as a result of lessons learned in the recent mobilization on the Mexican border. The whole complicated and difficult problem is now before congress, with overwhelming and urgent advice from the country's military experts to abandon the state militia system and organize in its place a federalized citizen soldiery.

> The educational survey measure, if passed, will add at least $800,000 to the taxes that will have to be paid by the people of the state for colleges and normal schools.

The scheme to increase the revenues of the university, the state college and the normal schools 85 per cent over what they are now receiving is brought forward in what is called an "educational survey" of the public school system of Washington. This "survey" was made hastily last year by two "experts" brought out from the east. Their report is filled with admitted errors, and it is conceded that the time taken for the work was insufficient for the making of a balanced and intelligent report.

Increase Is Unwise.

A little thought should convince sensible people that a sudden increase of this extent could not lead to wise spending of the public funds. There would, indeed, be danger that the institutions would be injured more than they could be benefited. Washington has been very liberal with its institutions of higher learning, and they should be given future growth in keeping with the growth of population and taxable wealth. But every one knows that the influx of population has been light since 1910, and that property in general sells for less today than it would bring six or seven years ago.

There is grave danger that unless a sharp protest is heard from the people the forgoing plans will be carried out in whole or in part; that this state will plunge into a reckless expenditure of public funds on the national guard and an unwise doubling of its expenditures for higher learning.

These increases could only be made at the expense of the taxpayers. If made, the farmers of Washington will find that they will have to go down deeper into their pockets when they pay their taxes next year.

Should File Protest.

You can not do your family, your neighbors and your state better service than by writing immediately to your state senator and representatives at Oympia urging them to oppose with all their power any increased outlay at this time on the national guard, and to consent only to such appropriations for the colleges and normal schools as are necessary for their reasonable support.

> In order to defeat this combined deal, an emphatic protest should be made to the senators and representatives at Olympia. For the aid of those who may wish to file such protest, a list of the legislators, by counties, is given herewith.

Adams—Senator, Oliver T. Cornwell; representative, W. M. Anthony.

Asotin—Senator, E. V. Kuykendall; representative, E. E. Halsey.

Benton—Senator, D. V. Mortland; representative, G. C. Moores.

Chelan—Senator, John H. Ferryman; representative, S. O. Pool.

Clallam—Senator, A. A. Smith; representative, A. J. Cosser.

Clarke—Senator, Edward L. French; representatives, George McCoy, C. W. Ryan.

Columbia — Senator, Frank G. Barnes; representative, Dr. L. M. Sims.

Douglas—Senator, J. W. Faulkner; representative, James A. Cross.

Ferry—Senator, J. W. Faulkner; representative, A. L. Bradley.

Franklin—Senator, Oliver T. Cornwell; representative, L. L. Long.

Garfield—Senator, E. V. Kukendall; representative, J. T. Ledgerwood.

Grant—Senator, J. W. Faulkner; representative, John Urquhart.

Grays Harbor—Senator, E. E. Boner; representatives, A. E. Graham, G. W. Gauntlett, C. W. Hodgdon.

Island—Senator, A. A. Smith; representative, W. E. Terry.

Jefferson—Senator, A. A. Smith; representatives, William Bishop, H. B. Gardner.

King—Senators, Howard D. Taylor, Ralph D. Nichols, Dan Landon, William Wray, Dr. J. A. Ghent, Lincoln Davis, G. E. Steiner, E. B. Palmer; representatives, Fred Mess, W. J. Lunn, F. C. Nelson, Paul Houser, A. E. Fuller, Dr. W. T. Christensen, Frank E. Boyle, Victor Zednick, Ralph Knapp, Frank Manogue, Robert Dwyer, Robert Grass, Frank Renick, Fred Hastings, Stephen A. Hull, John R. Wilson, E. H. Guie.

Kitsap—Senator, Peter Iverson; representative, J. H. Shattuck.

Kittitas—Senator, John H. Ferryman; representatives, J. C. Hubbell, Dr. D. Kearby.

Lewis—Senator, A. C. Judd; representatives, J. S. Siler, H. H. Swofford, J. E. Lease.

Lincoln—Senator, Charles E. Myers; representatives, E. L. Farnsworth, J. J. Cameron.

Mason—Senator, Peter Iverson; representative, Mark E. Reed.

Okanogan—Senator, J. W. Faulkner; representative, E. F. Banker.

Pacific—Senator, John W. Kleeb; representative, Fred Hart.

Pend Oreille—Senator, C. R. McMillan; representative, H. H. Murray.

Pierce—Senators, William Karshner, Ralph Mitchell, Walter S. Davis, Wilburn Fairchild, Jesse S. Jones; representatives, E. E. Healey, Abe Morris, Guy E. Kelly, T. Peterson, J. H. Davis, W. C. Elliott, H. E. Washburn, G. W. Thompson, Dr. W. P. Groff, Claude A. Young.

San Juan—Senator, A. A. Smith; representative, N. A. Nash.

Skagit—Senator W. W. Wells; representatives, J. O. Rudené, J. M. Shields, Fred B. Fulton.

Skamania—Senator, J. M. Stevenson; representative, E. E. Shields.

Snohomish—Senators, Joseph H. Smith, James Burton; representatives, Thomas A. Swale, S. F. Spencer, M. G. Thomie, C. W. Gorham.

Spokane—Senators, H. H. Phipps, R. A. Hutchinson, E. Ben Johnson, Guy B. Groff, Frank A. Chase; representatives, I. Honefenger, L. L. Westfall, Albert A. Kelly, D. P. Reid, O. L. Olsen, A. R. Stratton, Maurice Smith, L. Frank Boyd, Fred A. Adams, John Anderson.

Stevens—Senator, C. F. McMillan; representatives, Z. E. Hayden, John Selmer.

Thurston—Senator, P. H. Carlyon; representatives, L. J. Morrison, C. C. Aspinwall.

Wahkiakum—Senator, John W. Kleeb; representative, Joe Girard.

Walla Walla—Senators, Oliver T. Cornwell, D. H. Cox; representatives, A. L. Roy, Dr. J. W. Summers, Dr. R. W. Butler.

Whatcom—Senators, Edward Brown, E. J. Cleary; representatives, Tom Brown, C. H. Hoff, Charles L. Roth, Fred Yale.

Whitman—Senators, Oliver Hall, Dr. W. W. Brand; representatives, C. E. Hoover, Roy Jones, C. W. McCall.

Yakima—Senator, D. V. Morthland; representatives, W. P. Sawyer, Mrs. Ina P. Williams.

WINTER BLUESTEM

Walla Walla County Experiments.

In Walla Walla county County Agent O. V. Patton has made much headway in the introduction of "winter bluestem" wheat, a state college hybrid. The average of the trials Mr. Patton has made with this variety in comparison with the varieties commonly grown shown winter bluestem to be equal in quality and about 4.5 bushels per acre superior in yield with the other wheats. Most of the wheat farms in Walla Walla county average 700 acres.

LIME FOR FARMERS

County Agent F. W. Rader Is Busy.

Efforts to secure lime for the farmers at low prices have been engaging the time of County Agent Rader of King county. Concerning the lime, he says:

"As a result of this work we now are able to have ground limestone laid down at any delivery point in King county, at $4 per ton in bulk; $5 per ton in nonreturnable sacks; or $6 a ton in returnable sacks, with $2 rebate on the return of the sacks. This is a reduction of $3.25 to $4.75 per ton over the best prices available in October, 1914, when the county agent began work.

PACKING APPLES

At a Cost of 14 1-2 Cents a Box.

Satisfaction is expressed among the fruit growers at Entiat, Wash., who belong to the Entiat Growers' league, and enjoy the benefits of the big central packing plant operated here for the first time last season. The cost of handling the fruit, from the time it was received at the doors until the packed boxes were stacked up in the storage rooms was just 14 1-2 cents a box. This cost includes receiving, floor work, sorting, packing, paper, nailing, overhead charges and miscellaneous. Receiving of fruit by weight was tried and the results have been satisfactory.

IRRIGATION OF PRAIRIE

Declared Feasible in Lewis County.

The proposed irrigation of Ford's and Waunch's prairies in Lewis county, Wash., by a system of ditches leading from the Skookumchuck river was pronounced feasible last week by Richard Rea, a consulting engineer of Portland, who was connected with the Ellensburg irrigation project and a similar project in Oregon. He advocated the including of the Grand Mound prarie in the proposed irrigation district, however, asserting that there is sufficient water available for all three prairies.

Harmony in Legislature?

Legislators and Governor More Peaceable

Notwithstanding that the Washington state legislature is largely republican, that Governor Lister is democratic, and that many of the things that one favors is disapproved by the other, there appears to be a greater tendency on the part of both to work in harmony this session than has been the case heretofore.

This is illustrated perhaps best by the action of the leaders in the lower house, who have agreed to have bills prepared in accordance with all the recommendations made by Governor Lister in his message to the legislature, and to have them come before the legislature strictly on their merits. This does not mean that all such recommendations are to receive the approval of the legislature, but that they will not be disregarded or smothered in committees as has been often the case in the past.

Constitutional Convention.

The most vital action of the legislature so far this session is the passing of a resolution by which the voters of the state will vote in 1918 on whether or not a constitutional convention will be called to revise the constitution. The passage of certain measures to carry out the provisions of the resolution will be necessary, but it is believed certain that they will be passed.

Dry Law Moves Slowly.

There seems no hurry on the part of the legislature in deciding on the "bone dry" law. The bill has been introduced, but no action taken yet. One of the dominant questions in this connection is whether the measure shall be passed outright or passed with a clause referring it to the people in 1918 for approval or disapproval. Many oppose the measure unless the people are allowed to vote on it, saying that the prohibition law now on the books should not be changed except by popular vote.

Rural Credits Bill.

Senator Iverson of Kitsap county has introduced into the senate a measure in the nature of a rural credit law. He proposed that the state issue bonds to be sold to provide a fund from which loans may be made to the farmers. Such bonds could not exceed in total amount 2 per cent of the last assessed valuation of all property in the state, which would at this time create a maximum fund of $20,000,000. A farmer could borrow from this fund an amount not to exceed one-half the valuation of his property as determined by a state board of appraisers, such loans to bear 5 per cent interest. Such loans could be expended by the farmer only in paying for his land, buying live stock or equipment or otherwise actually developing his farm.

This measure, which is in the form of a constitutional amendment, has received no action at the hands of the legislature and likely will not be definitely considered until late in the session.

School Controversy.

The controversy between the state college at Pullman and the university at Seattle over the transfer of courses from the former to the latter as recommended by the educational survey board appointed by the last legislature continues to be one of the tinder boxes of the session. Feeling is reported to be growing heated between the friends of the two institutions, and many hearings on the questions involved are being held. One of the features of the educational measures in question is an increase of the taxes for higher education from about $1,000,000 to nearly twice that amount.

ON SUMMER FALLOW

Peas Can Be Grown Profitably.

In Grant county County Agent H. W. Reaugh is giving a large proportion of his time to demonstrations of good summer fallow methods and the growing of crops adapted to dry conditions. He has succeeded in demonstrating that peas can be grown profitably in many districts as a substitute for summerfallow. In quite dry districts, some progress has been made with sweet clover. Among the insect pests of the country, the "coulee cricket" is one of the worst, and much of the county agent's time has been used in devising methods of controlling this insect. Ditching, fencing, grazing hogs and other means have been used to advantage. A beginning in the cooperative marketing of live stock has been made. Several carlots of live stock of 20,000 pounds each were shipped recently, the average increase in profit due to this means being about 50 cents a hundred.

Did you read the first instalment of "When Knighthood Was in Flower?" It appeared in last week's Farmer. The second appears in this issue. This story is too good for you to let go by. It is one of the world's masterpieces of fiction—a perfect story of those two fundamentals, love and adventure. The Farmer "throws it in" for good measure with all its regular news and informative features. If you did not read the first instalment, go back now and begin it before it is too late.

Yakima Birds

Score Higher Than In the Past

By D. G. SUTHERLAND.

About a month ago, at a called meeting of the Yakima Poultry association, it was decided that on account of so many quitting and others greatly decreasing the size of their flocks on account of the high price of feed and boycott on eggs, it was best not to hold their annual show this year.

A week later 18 of the breeders got together and decided a show was necessary if they remained in the business. The former action was reconsidered, the date fixed as January 15-20, inclusive, and everybody got busy. The result was 36 exhibitors with 401 birds, representing 28 different varieties. All the available floor space was filled. Harry H. Collier acted as judge.

Birds Score Well.

The average score of all birds was fully 25 per cent above that of former years. It shows the "boarder" bird is being eliminated the same as the boarder cow. The breeds leading in number were Rhode Islands, 56; Leghorns, 55; Plymouth Rocks, 42; Orpingtons, 35; Wyandottes and Minorcas, 23 each. Other breeds were fairly well represented. There was a goodly display of turkeys, ducks and geese. The song service was conducted by Mrs. White's canary choir. A pen of silver pheasants, exhibited by C. A. Marsh, was quite attractive.

The highest scores were made by Harold Paddock on a S. C. White Leghorn pullet and by J. A. Adams on a S. C. Black Minorca pullet, each scoring 94 1-2. Next came R. D. Walker with a S. C. White Leghorn pullet and Mrs. Fred Peterson with a White Rock cockerel, each making a score of 94. R. D. Walker and J. A. Adams on S. C. White Leghorn pullets and J. P. Thurston on a Buff Leghorn pullet, each making a score of 93 3-4.

USING AUTO TRUCK

More and More for Short Hauls.

By Edward Louis Sachtler.

Another late example of how the automobile truck is fast displacing the railroad and other means of transporting freight on short hauls was demonstrated here some time ago. The truck, owned by Olsen & Littler, liverymen at Ridgefield, was loaded at 10 a. m. with 21 porkers, one of which weighed 650 pounds. The trip was made to market, the Union Meat company's stockyards across the Columbia river from Vancouver, Wash., the hogs delivered and the truck returned to Ridgefield, reaching there about 4 p. m. the same day. The stockyards are located about 20 miles southeast of here. The porkers were taken from the Greely ranch, four miles east of Ridgefield and netted the raiser about $525.

Market Situation

In Meat Industry to Be Probed

The American National Live Stock association and the meat packers and market men have entered into a far-reaching agreement under which the meat and live stock market of the country will experience a government investigation within the near future. This was announced at the association's convention last week at Cheyenne, Wyo.

The meat packers were largely criticized by the stockmen and visiting men of note attending the convention. The association declared its purpose to be to insure for the future "fair and competitive markets," and declarations were made drastically in some instances that the packing concerns had been in control of the market situation and had dealt unfairly with the producers.

Incapacity Charged.

"The most amazing situations to the civilized world is the utter ignorance of the heads by inheritance of five of the nation's greatest packing concerns of the economic principles underlying the industries they direct" said Walter L. Fisher, former secretary of interior, commenting on the report of the market committee.

He added that these concerns were paying out thousands of dollars annually in advertising designed to convince the public that their methods were fair and equitable.

Secretary Houston Present.

Secretary David F. Houston of the U. S. department of agriculture was present attending the meeting, and declared that he saw no occasion for an honest concern to be afraid of the American people.

Next Meeting Place.

Salt Lake City, Utah, was decided upon for the convention next winter. The following officers were elected:

Isaac T. Pryor, San Antonio, president; vice presidents, John B. Kendrick, Sheridan, Wo.; C. M. O'Donnell, Bell Ranch, N. M.; M. K. Parson, Salt Lake City; Wallis Huidekoper, Walls, Mont.; Isaac Baer, Meeker, Col.; W. J. Tod, Maple Hill, Kan.; E. L. Burke, Omaha, John W. Springer, Denver, was elected treasurer and T. W. Tomlinson, Denver, secretary.

Wool Growers

Hold Convention at Salt Lake City

(Continued from page one.)

The resolutions declare for the standardizing of wool and ask the United States department of agriculture, if possible, to creat a standard.

On account of rabies as well as the direct losses an appropriation of $300,000 is asked of congress for the use of the biological survey in ridding the country of predatory animals, and legislatures of western states are also asked to make liberal appropriations; urge the United States bureau of animal industry to conduct experiments to determine the best methods of winter feeding of range sheep; condemn the action of the agricultural committee of the lower house of congress in cutting out an appropriation of $20,000 for an experimental sheep-feeding farm and ask the senate committee to restore the item; to recommend aid to the National Live Stock Shippers' league by the collection by commission agents of 5 cents for each car of sheep sold, the funds to be used toward presenting a case to the interstate commerce commission regarding rates for live stock, including the concentration paint question, and the commission is asked to restore the ten-car rate between ranges; urgently appeal all sheepmen to have wool graded at the shearing sheds; extends thanks to the National Wool Warehouse for its campaign of education; heartily pledge the secretary of the interior our cooperation in laying out trails and maintaining them; again go on record for a fair tariff, which will be needed when the war is over, to be determined by a nonpartizan tariff commission; indorse the United States department of agricultuture and thank Secretary Houston for his fair treatment of the wool industry.

State College Gives Industrial Education

Secretary Redfield, of the Cabinet, Says U. S. Must Have More of That Training After the War

Secretary Redfield of the United States department of commerce warns the American people that unless they provide industrial education the United States will find itself outstripped in the contest for home and world markets after the European war. Addressing the Philadelphia Chamber of Commerce this member of President Wilson's cabinet said:

"We usually ignore science in industry, and are apt to talk about a practical man as better than a scientific one. Meanwhile Germany builds up great industries, wholly based on scientific research, and England organizes a special government committee on industrial research. Industry must be wedded to science in this country if it is to compete with nations where science and industry go hand in hand.

"We have almost wholly lacked industrial education. It is not so in Germany. Make no mistake; it is not the wages of the German workman that make it hard to compete with him. It is his training.

"We are making a beginning in federal aid to industrial education. Sometimes I think we have a gift of ignoring the important and neglecting the obvious."

In Washington federal aid to industrial education is given through the state college at Pullman. That institution is working along the lines that Secretary Redfield says are essential to American progress in industry and commerce.

Men who would tear down the state college to build higher the state university at Seattle are out of touch with modern science, world progress and advanced thought. They know not what they do.

Dairy Business Not Philanthropy

Will Cows Producing 180 Pounds Pay? Idaho Man Can Not Believe It

Our dairy survey has started much interesting and instructive discussion, and in the following letter H. R. Boomer offers valuable thoughts regarding the relative merits of the scrub cow that grazes on the highways and picks up a precarious subsistence, and the highbred dairy cow that is fed and sheltered in a modern dairy.

CALDWELL, Idaho, Jan. 4.—Editor of the Farmer: My attention has been attracted by a letter from Mr. Ainy printed in your January 4 issue. Like Mr. Ainy, I have never posed as a correspondent, and have never written anything for publication unless requested to do so. If Mr. Ainy had not referred to me in somewhat flattering terms and later advised me to turn over my 300-pound cows to the 180-pound man I would allow the letter to go without comment.

In the first place I am sorry he did not go on and explain how he would make the 180-pound cow pay a profit In the first place the man who keeps two or three cows as a side line, letting them feed in the "highways and byways" or in short on other people's grass, can hardly be said to be in the dairy business, so we can leave him out of the argument.

I take it the dairy business is being discussed from a business standpoint and not as a philanthropy. Therefore, I do not see why anybody should keep his unprofitable producers for fear the product would go higher and cost the consumer more. It seems to me if production would be lowered 75 per cent by disposing of the cows under 300 pounds, there would surely be a profit for the cows still remaining. If Mr. Ainy was in the business 45 years I hardly think he was there for the purpose of reducing prices to the consumer by keeping all the poor cows he could. It seems as if this paragraph in his letter has no bearing on the question of the profitableness of the dairy business to those so employed.

Would Not Pay.

Taking the 20-cow dairy, which he mentions with a production of 180 pounds per head, the total would be 3600 pounds. He seems to think the labor of caring for this dairy should be worth more than $730, in which I agree with him. At any rate I am convinced it could earn more at something else; but this 3600 pounds at something over the average price since I have been in Idaho would bring about $1000 gross. The difference between this and the too low value of the labor is only $270. I don't think any dairyman would have to think long to know that other expenses besides labor are way above this sum. The cows have not been fed yet, nor has interest on the investment in cattle and land been paid. Taxes also amount to something and can not very well be dodged, and there is cost of machinery depreciation and interest on cost of machinery. In fact the $270 hardly makes a start toward paying the other expenses besides the labor, and how any business profit can be found in such a bunch of cows I am unable to figure out.

I will have no argument with Mr. Ainy about my management of my own herd. It may be overmanagement, but I am inclined to think it undermanagement. At any rate I can see many mistakes and much room for improvement in the management. I have not reached the point, however, where I will take the 180-pound cow in preference to the 300-pound cow if I can have my choice, and I would prefer the 500-pound cow.

During the past year the poorest producer in my herd has been a 2-year-old with a production of just about 250 pounds of fat, which is considerably above the average of the 20-cow dairy advocated, and the 2-year-olds in such a herd probably would not come up to the 180-pound average. I can not blame the good quality of my cows for the meagre profits. On the contrary it seems to me that the owner of the 180-pound bunch is in a considerably worse position than myself, and I have been observing a good many of them. Unless I am bliad they work unreasonable hours, and work their whole families, live very economically, make no real profit on management, and no interest on their investment. They merely earn low wages for themselves and family, and if they have a mortgage to pay interest on, or rent to pay, have to take these items out of their wages. They don't seem to be wedded to the 180-pound cow from choice, but would be glad to buy some 300-pounds cows if they could scare up the money to do it with. They keep on with the scrubs hoping somehow some day to get enough ahead to buy something better. Many have bettered their heards the past few years through the purchase of purebred sires, which is a slow process, but the only way to do it where capital is short, and many a farmer could have built up a good herd this way while waiting to make a profit out of the 180-pound cows. In short, it seems to me the figures above prove conclusively that the latter can't be done. That Mr. Ainy could show me where my management is faulty I haven't the slightest doubt, but the profit on the 180-pound cows is another story. I shall have to be shown.

Your respectfully,
H. R. Boomer.

Land Classification.

Since the passage in 1912 of the act providing funds for land classification, and as a direct result of the classification work, a total of 13,477,781 acres has been eliminated from the national forests. This includes an elimination of approximately 5,800,000 acres of land from the Chugach national forest in Alaska, which embraced lands of low value for any purpose other than mining.

Silos in Argentina.

Drouth and the ravages of locusts have so reduced pasturage and the available supplies of fodder in Argentina recently that the attention of planters and stockraisers has been focused on the feeding-stuff question and the advantages of silos are being discussed with new vigor.

Loan Bank Organization

Is a Task Requiring Time to Complete

By N. W. DURHAM

Chairman Spokane Committee on Federal Loan Bank.

As this article is written the organization of the Spokane federal farm loan bank, to serve the district embracing Washington, Idaho, Oregon and Montana, is still unannounced from Washington. Some impatience is felt at the delay, but it should be remembered that the national board is charged with the large task of organizing 12 such banks to cover the entire Union. It has the selection of five directors and a registrar for each institution—a total of 65 important appointments — from a field of several hundred applicants. It is vitally important that these places be filled with wise discretion, and the board is exercising necessary caution. It can not afford to endanger the whole broad system by yielding to haste at this juncture.

In the meanwhile farmers who are considering the organization of local national farm loan associations should write to W. W. Flanagan, secretary of the federal farm loan board, Washington, D. C., for free official blanks and instructions.

A Warning Is Issued.

To the Editor of the Farmer: In your issue of January 4 we note that reference is made to certain promoters claiming to be operating under the provisions of the federal farm loan act in Twin Falls county. We wish to say that we have met these gentlemen and that the farmers here have been warned to look out for them.

As the parties referred to seem to be operating over rather extensive territory, we submit a copy of a letter from the federal farm loan board which explains itself and which we trust will interest the farmers.

S. A. DICKEY.

Mr. Dickey encloses the following letter from Secretary W. W. Flanagan of the federal farm loan board, at Washington, D. C.:

Dear Sir: Your letter of December 28 was duly received, in which you enclosed some literature issued by the Inter-Mountain Rural Credit association.

If farmers purchase stock in that concern they do so at their own risk. It is not a government institution, and in all probability will not be chartered by the federal farm loan board.

A large number of letters have reached this bureau relating to this and other similar associations.

W. W. FLANAGAN,
Secretary Farm Loan Board.

Asks Information.

HELENA, Mont., Jan. 8.—Editor Farmer: There has been a great deal of talk of the farm loan proposition, but as yet I do not know of any farmers who have organized for this purpose. Many believe the law is of no benefit to the farmer who is really in need of help, for the reason that it permits a loan of only 50 per cent of the actual land valuation. There are a number who have already put improvements on land, and have loans of half the value of land and improvements together. Such farmers would be greatly benefited if they could shift the loan to the government and pay a smaller rate of interest.

Farmers who only wish a loan which equals half the valuation of the bare land have gilt edge security and can get a good loan without government assistance.

I have a piece of land with house and buildings on. I would like to change a $4000 loan to a less rate of interest if possible. The land alone would hardly be placed at $8000 valuation. Therefore, I can not get the benefit of this law. My understanding may be incorrect, but I am unable to see where a loan can be secured under these circumstances. H. F. ALPS.

We do not know whether Mr. Alps could get the desired loan on his land, as that is a matter that could be determined only by an official appraisal. In general, though, it can be said that the law contemplates the making of loans up to 50 per cent of the "farm value" of the land, and in determining that valuation the appraiser will naturally consider the productive value of the property as it has been improved by the owner. Such improvements as cultivation and fencing would be taken into consideration. In addition the landowner can borrow a sum equal to 20 per cent of the value of such insured improvements as dwellings, barns, etc.

Logged-Off Land Loans.

One of the most difficult problems that will puzzle the managers of the Spokane farm loan bank will be the granting of credit to owners of logged-off lands in the Pacific northwest. These lands are so varied in soil quality, ranging all the way from the highest fertility to practical worthlessness; and the moral risk fluctuates so widely with the industry and intelligence of the owner, that the making of mortgage loans will call for thorough investigation and the exercise of the wisest discretion. On many of these farms loans can be safely made and their owners will be entitled to all the benefits of the new system.

The following interesting letter from a subscriber bears so directly upon this problem that the Farmer is glad to print it in entirety:

To the Editor of The Farmer: I, for one, think the farm loan act is not going to work out as well as a good many think. I base my belief on what I have seen around me and what I have experienced in a residence of 23 years on the stump lands of Clarke county, Wash.

I can show any one within a distance of two miles of my place six or seven abandoned homes—people that had settled on small tracts of land, stayed from one to four or five years, cleared or tried to clear land, built houses, some of them good ones, and then moved away.

One man, J. Bobbins, moved on to 10 acres four years ago last November. He had $400, a wife and one child. His place was covered with stumps and brush. A small cabin, 10x12, was all there was on the place. He and his wife never lost a day the whole winter. He is just finishing up the clearing of the last three acres. He still owes $400, but has live stock enough to pay it off. He has a good barn, a young orchard started, and plenty of tools, team and a stump-puller.

But where you find one Bobbins you will find 10 others that will fail under the same conditions.

Take Mr. C., another neighbor about the same distance away from my place as Bobbins. (He died this fall.) He was an intelligent man. He had been keeping a grocery in Portland before coming upon his land. He went upon 10 acres, built a house, and by the way, his land was situated in an enclosed range of over 200 acres that had been logged off, burnt and seeded, and had in it the finest of feed and running water. Well, Mr. C. tried cows, he tried hogs, he tried goats, he tried sheep, poultry and geese. The place is vacant now, and I doubt very much whether his mother can get half what they paid for it, $150 per acre. There is only a little cleared on it.

We know this, that there are so many people that know nothing about farming or caring for live stock, but think if they can only get onto a piece of land the rest is easy; but they soon find out their mistake. Their money will be gone and the thrifty, hard-working members will have to make good their losses.

I think the government will have to take the risk and not the farmer.

H. S. STOCKFORD.

Vancouver, Wash.

Mr. Stockford has analyzed one phase of the matter with evident knowledge and sound conclusion; but his expectation that the government can take the risk of making hazardous loans on doubtful farms can not be safely adopted.

Once it became known, or even was suspected, that the federal land banks were going into the market in search of doubtful mortgage loans, the system would collapse like a punctured balloon. Farmers with credit would keep out of the farm loan associations, for membership means a personal liability on their part to the extent of 10 per cent of the individual borrowings. A farmer, for example, who borrowed $5000 would be liable to the extent of $500 if bad loans in his association had to be made good.

The success of the system is further dependent on public confidence in the farm loan bonds, sale of which is to provide the needed money to keep the system growing and going. Farm loan mortgages are the security for these bonds, and investors would leave them severely alone if they thought that the management was taking on doubtful mortgage assets.

The public should take a reasonable view of these matters and not demand the impossible. It is a problem of the greatest good to the greatest number, and the greatest good can only be given by building the new system on solid foundations.

BAKER COUNTY

Applications Exceed $150,000.

Permanent organization of the Baker County Farm Loan association has been perfected at Baker Ore., with M. S. Bond, president; J. F. James, vice president, and J. W. Riggins, secretary-treasurer. By the time loans are possible under the rural credits law, the local association will be ready with applications for loans in excess of $150,000 subscribers for stock already asking over $100,000. W. W. Lovelace, F. C. Heard, Archie J. Murray, C. L. Deardorff, J. F. James, Byron Vandecar, Hugh Dougherty, W. W. Willoughby, M. S. Bond, directors of the temporary organization effected some time ago, were made a permanent board. All are substantial representative farmers of various parts of the county.

RURAL CREDITS

Farm Loan Association at Emmett.

At the meeting held at Emmett, Idaho, in the Fruit Growers' Union building, the organization of a national farm loan association, to take advantage of the rural credits act, was completed. The following gentlemen were named as a board of directors: R. A. McCool, L. Dresser, F. W. Reed, R. J. Kraus and Sid Walker. Mr. McCool was also made president of the association and E. W. Brown is acting secretary. There were 23 applications filed for loans, but the amounts were all small.

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Crop Yield of Washington.

The government statistics for the state of Washington, while probably not absolutely correct, give a working basis for conclusion, and most of them are encouraging. For example, the high prices paid for wheat cut down the acreage of corn, and yet improved conditions made production of corn greater than in 1915. The wheat crop, on the other hand, although grown on more acres than in 1915, was not so large, due to unfavorable weather conditions, but the price was higher and made the crop as profitable.

The hay crop would seem an especially profitable one. The 1916 crop was larger and the price higher.

The potato crop of last year was larger than that of the previous twelvemonth, and the price was better.

Admitting the Truth.

People do not like to admit it when they are convinced of a new truth against which they have contended, but they usually do admit it by either word or deed.

Experimentation has proved conclusively the benefits to be gained by certain methods of soil treatment which were practically untried a few years ago. Many of us have clung to the old methods to our detriment rather than fall into line behind others and profit from their experiments. But, as a rule, we are getting over that. We are beginning to till our soil the way the man does who raises the best crops. We are beginning to grow fertilizer crops that we ridiculed a decade ago. We are beginning to return fertility to the land by raising live stock that a few years ago we thought we couldn't afford to be bothered with. Possibly we are forced to it, but we are admitting the truth that modern ways are better than the old.

From Range to Farm.

At a recent meeting of the Idaho Wool Growers' association one of the leading topics discussed was the range problem. Members of the association were free to admit that the problem was a serious one. The ranges are being fenced and developed into farms. The enlarged homestead acts, including that permitting the taking up of 640 acres, are reducing the open areas. The government is increasing the fees for grazing permits in the forest reserves. Said President Sproat of the association: "The next three years will determine the fate of the wool-growing industry."

The members did not say it openly—probably they do not believe it to be true—but it is not altogether illogical to draw the conclusion that the sheep must become a farm animal, not a ranger. If the ranges are being turned into farms there is no other place for him to go. This is not only fast becoming the sheep grower's one alternative, but the conditions which bring it about are placing before the small farmer the possibility of raising sheep for profit on the farm. The wool and mutton form a valuable "byproduct" of the farm where the small flock has been tried. The sheep converts weeds and waste into value, and in addition improves the land. The sheepman's dilemma is the farmer's opportunity.

State College Is the People's School

Prof. Suzzalo, the new president of the state university at Seattle, ambitious to build up that institution and make himself famous, wants to undermine the state college at Pullman. To that end hostile interests are conducting an active lobby at Olympia to deprive the state college of certain branches of study.

Friends of the state college are convinced that this scheme is but the entering wedge of a boldly designed plan to strip it down to the narrowed basis of an agricultural school. President Holland warns the people that if these plans are carried out at Olympia the Pullman institution will be reduced to a lower plane than the Oregon agricultural college at Corvallis or the Montana institution at Billings.

For a quarter of a century the state college has been serving well the agricultural, orchard, dairy, live stock and other industrial interests of all parts of Washington. The sacrifice, of course, is not necessary, but if the people of this state had to choose between the loss of one institution or the other they could far better lose the state university at Seattle.

The people will protest vigorously against these political schemes to cripple the splendid college at Pullman. The attack is an undemocratic effort to destroy the state college by setting up conditions that would place the young men and women in the Pullman institution on a lower plane than the students at Seattle.

Leave the state college alone! It is asking nothing from the state university. It only wants to continue on the firm foundations of state and national law. Its course of growth and service was plainly charted by the state law passed in 1891, and it has adhered scrupulously to that statute.

The state college is the people's college, and the people must defend it.

Beauty and Usefulness.

A cattle breeder is credited with the statement that he would rather sell beauty than butter. There is a certain amount of worldly wisdom in this attitude, for the big profits are made off things which are of no real use. However, a good many of us prefer to be of use, even though we make less, and the only difficulty is that sometimes the useful things do not pay any profit at all.

What Is This Time For?

The wise man said there is a time for singing and a time for weeping, and so on, including all that he could think of at the moment. In other words, he saw the importance and desirability of having a certain time to do things, and also that there were seasons when a certain thing might be appropriate and advisable and proper, when another time might not be suited for it.

What is this particular season and time best adapted for? Winter is quieter than other seasons on the general farm. There are no fields to plow or sow or cultivate, no crops to harvest. This period of slackness, if one can call it that, should be studied very carefully for employments so that we may be saved many moments and hours and days of time when other work presses.

Clearing Land.

There is much land in the northwest which is still uncleared. Some of it would produce excellent crops under cultivation. The owners, many of them farmers, do not hasten to its redemption, and once in a while somebody works up quite a little indignation over the fact that there is waste land.

It takes either a tremendous amount of labor or quite a bit of capital to clear land. Some of it is not worth what the clearing costs, figured as land values are now. By what right does anybody demand of farmers the clearing of land at a loss of years of life or hundreds of dollars?

We admit that more food products should be raised, but we insist that they will not be raised until the public generally realizes the fact that farming must be better rewarded, and goes to work to arrange for the reward.

Machinery, wagons and the like are damaged almost as much, if not quite as much, during their winter idleness as during their spring, summer and fall use unless they are kept in out of the rain and snow.

Washington Gleanings

Potatoes in Tacoma have been selling as high as $45 a ton, and dealers predict a yet higher figure.

There are 120 men and women attending the winter short course at the state college at Pullman.

The city of Aberdeen, on Grays Harbor, reports only 116 deaths during the past year, with 256 births.

Frogs are reported to be croaking in the pools of Clarke county, and prophets are predicting an early spring.

A number of real estate transactions are reported from the Cashmere country in which the price has been around $1000 an acre.

The Cowlitz Valley Development club has been formed at Chehalis for the purpose of furthering the development of the district.

The hop lands of the Yakima valley and in other parts of the state where hops have been grown are declared to be ideally fitted for growing sugar beets.

It is reported that Ervin Wickersham of Harwood, in Yakima county, has sold his onion crop at prices ranging from $50 to $75 a ton. He produced at the rate of 20 tons to the acre.

In the biggest coyote drive ever organized in central eastern Washington a large number of residents of the territory around Quincy killed more than 100 of the animals recently.

The Grays Harbor district is greatly pleased by the report that a railroad is to be constructed from Port Angeles to Aberdeen through the Olympic peninsula, thus opening up to markets the great timber and dairying possibilities of an immense undeveloped territory.

The federal government has denied a request that a survey of the Snake river from Asotin to its mouth be made with a view to dredging it to make it more readily navigable. The report of the government is that such dredging would be more expensive than the benefit would justify.

Arrangements have been made by the county commissioners of Franklin county for the building of an arterial highway through the town of Pasco, a portion of the state highway law permitting joint improvement of a highway within a town limits by the county and the town authorities.

Lumber mills in the Grays Harbor district have shipped 28,000 carloads of lumber during the past year, or 7000 more cars than in any other year in the history of the industry. This is specially significant in view of the fact that the lumbermen of western Washington largely closed their mills three years ago owing to lack of market, together with foreign competition. The 1916 business totaled approximately 800,000,000 feet.

What Others Say.

Inland Farmer: Every acre must be farmed enough, but not too much.

Southern Agriculturist: Try your own advice before you pass it on to others.

Hoard's Dairyman: The moment we enter upon a new way of doing things new problems arise.

Better Farming: An extravagant man is always talking to his wife about the necessity of economy.

Western Farm Life: The time has come for farmers to assume collective responsibility for the success of their communities.

Municipal Markets

Must Serve Special Need in Community

Charles J. Brand, chief of the United States office of markets ad rural organizations, discusses with keen insight the pros and cons of public markets. Now that this subject is a live one before the people of Washington, Oregon, Idaho and Montana, Mr. Brand's conclusions will be read with interest. Herewith is a discussion by Mr. Brand:

In order to correct any misconception on the part of those who may read this brief discussion, it is desired to state at the outset that, although the office of markets and rural organization has devoted considerable time to the study of the various types of municipally owned retail public markets, it is not advocating them in an unrestrained way to all cities, nor is it intimating that they are a panacea for the present weaknesses of our retail system. If a public market does not fill a specific need of the community, and if it does not render some definite service better than existing private agencies, then it would seem that a city is not justified in establishing or continuing such an institution.

There are, we believe, certain fundamental deficiencies in our system of retailing which in many cases a well-conducted muncipal public market can help correct. Conditions seem to warrant the general opinion that the customer who is willing to pay cash and possibly carry his goods home is given too scant consideration by the average retail dealer. That such a customer, in the prices he pays, should be made to contribute to cost of service for others seems both uneconomic and unfair. To some extent the cash chain store is remedying this condition, but in most cities such developments have been meager. Also, this type of store, in many instances, does not deal in perishable fruits, vegetables and fresh meats.

All considerations point to the fact that these products especially should be handled with great rapidity and that their distribution should be wide. It is quite evident that low prices, narrow margins of profit, a large volume of trade served at a low cost to the dealer, and specialized selling, all aid in attaining the ideal desired.

It is to furnish a trading center the primary object of which is to sell food products and not service, and to provide facilities and conditions which will allow and encourage dealers to operate under the above methods, that the office of markets and rural organization is suggesting modern city markets when the local situation seems to make such action advisable.

The comparatively small size and the limited trade of the average corner grocery and meat market necessarily restricts the quantity and assortment of perishable products which it can handle. Unless skilled hands are in charge, the meats and green groceries are very apt to be a source of much trouble and no little loss.

The successful public market furnishes a fresh, attractive and generous assortment of products from which the consumer likes to select. The large volume of trade which a good public market draws enables the live stall keeper to make quick turnovers with a minimum of waste and expense. The small size of the stall encourages specialization and proficiency in selling. These factors, together with low rentals, the absence of credit accounts, and a minimum of delivery expense, should combine in any municipal market worthy of the name to bring about lower retail prices.

In addition to the advantages which accrue to the consumer, such a policy should result in profits to the dealer which are as good or better than he receives under the credit-delivery system, and his business should be far more satisfactory in general. In many cities the majority of stalls in the municipal market are branches of established private stores, but they are conducted on the cash, and, in some cases, on the no-delivery, principle. Thus they are made to cater to that portion of the public who desire to save money on their food purchases, and who, in order to do so, are glad to go to market personally, select and inspect their purchases, pay cash, and either carry their goods home or pay for their delivery.

It is fully realized that comparatively few municipal markets are conducted in all respects according to this plan. It is true that many are insanitary, unattractive, poorly managed and of doubtful value to the consumer. The office of markets and rural organization is endeavoring to bring cities to a better realization of the definite service which a municipal market should afford. They must be disabused of the idea that a municipal market will benefit a city because it eliminates the middleman, and be made to understand the true functions which such an institution should perform. It seems evident that these markets will not displace the established trade, but rather supplement the service which is now given.

APPLES IN STORAGE

Decrease of Nearly 30 Per Cent.

Reports from 469 storages show that ther rooms contain 2,386,975 barrels and 3,807,857 boxes of apples. Holdings reported from 364 storages showed 2,204,-833 barrels and 3,542,322 boxes on January 1 as compared with 3,743,055 barrels and 3,209,503 boxes on the same date a year ago, a decrease of 29.7 per cent. The barreled apple holdings show a decrease of 41.1 per cent and the boxed apples an increase of 10.4 per cent as compared with those of last year. Our report of January 1 last year showed the amount stored to be 9.8 per cent greater than on January 1, 1915. The holdings have decreased 10.4 per cent since December 1 as compared with a decrease of 12.0 per cent during December, 1915, and 14.0 per cent during December, 1914.

ROADS AND TRIALS.

Pacific Northwest Allottment.

Secretary Houston has announced the amount allotted to each state from the million dollars to be spent during the fiscal year 1918 in constructing roads and trails within or partly within the national forests. This money is part of the $10,000,000 appropriated by the federal aid road act to assist development of the national forests, which becomes available at the rate of a million dollars a year for 10 years.

The amounts allotted to the four states of the Pacific northwest are as follows: Washington, $91,944; Oregon, $128,111; Idaho, $103,730, and Montana, $70,042.

Gets Trap Score.

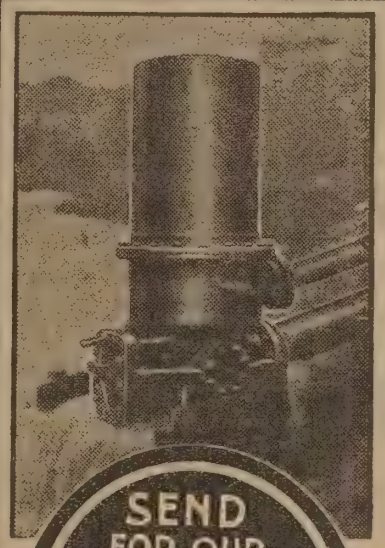
A black Orpington cockerel, owned by Mrs. H. H. Marshall of Walla Walla, has scored highest in the Walla Walla Poultry show so far. Judge H. H. Collier of Tacoma stated that if is the finest cockerel that he has seen in 10 years.

Grain Bags

Can Be Made From Palm Fiber

C. P. Stewart, speaking before the farmers' union at Walla Walla, Wash., recommended the use of the fiber of the banana palm, thousands of tons of which are wasted annually, as a substitute for jute in making grain bags. Bags from banana fiber would be three times as strong and last four times as long as jute bags, he said. Jute fiber is not as strong as it was 10 years ago and each year the crop is getting poorer, the reason being that natives of India are raising more than they can properly care for, the speaker said. Enough banana fiber is wasted in a day to make grain bags for Walla Walla for one year. Jute is raised in one country and bananas in 12. He predicted farmers will not be able to buy all the jute bags they need this year.

Warden Henry Drum of the Washington States prison recommended that Washington and California cooperate in experiments with the banana fiber. Small quantities of the banana palm fiber experimented with at the prison have been satisfactory. Sacks would be manufactured more cheaply with banana fiber than with jute.



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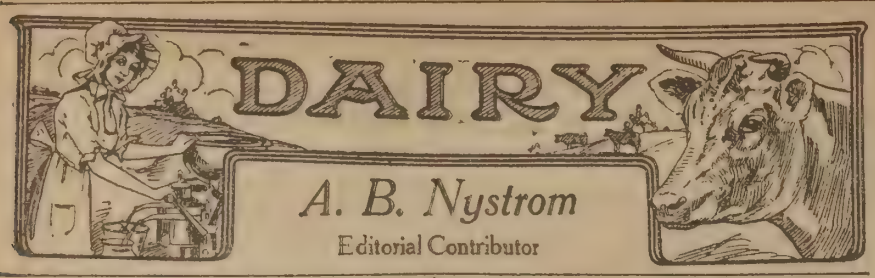
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6. *Quantity of water required to be pumped*.....
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8. *Remarks or additional data, as use for which water is intended, etc.*.....

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Cream

37 1-4 Pounds Bring $16.39

By Edward Louis Sachtler.

What is probably the largest check ever paid for a single can of cream in Clarke county, and perhaps southwest Washington, was received by James N. Hibbard, a dairyman and rancher about two miles east of Ridgefield, when he shipped a 10-gallon can of cream last month and in payment received a check amounting to $16.39. The can and cream together weighed 81 pounds, while the cream itself weighed 37 1-4 pounds, netting the dairyman 44 cents a pound. The cream was shipped to the Vancouver (Wash.) creamery, 17 miles southeast of here. The company claims that it was the biggest check ever issued by it for a single can of cream in all its experience in the creamery business.

Small Herd of Cows.

Mr. Hibbard has a small herd of choice dairy cattle of the celebrated Jersey and Guernsey breed and exercises particular pains in caring for his herd of "bread winners" and "mortgage lifters."

Honor Roll

Bred Up From High Producers

In the report of C. P. Dean, tester for the Jefferson county (Washington) Cow Testing association for December George Hendrick's herd of nine cows shows the highest average, having 49.13 pounds of butter fat as an average for the month.

Princess, a grade Holstein, owned by H. L. Hansen, was high cow in milk and butter fat production. This cow had over a ton of milk (2086 pounds), containing 76.26 pounds of butter fat, to her credit.

Fourteen cows made the "honor list" with a showing of 50 pounds of butter fat or better.

The following owners had cows producing between 40 and 50 pounds of butter fat:

Glendale Creamery Co.	2
Burt McConnoghy	4
H. Nisbet	1
Tony Stine	1
Fred Stutler	2
Miss Mamie Chase	1
H. L. Hansen	2

An inquiry, regarding the ancestry of these high producing cows, show that they have been bred up from "high producing ancestors." These cows also received a balanced ration which contained a variety of feeds, including hay, grain and succulent feed in the form of roots or silage. Every cow on the "roll of honor" received either silage or roots as a part of her ration.

Succulent feeds are one of the most important parts of the winter ration for dairy cows, as is well demonstrated by the results being obtained by the association members.

Cow Testing

Herd Averages 33.54 Pounds

The December record of the Boise Valley Cow Testing association shows that the test was administered to 416 cows, which produced an average of 25.7 pounds of butterfat each.

The report for December on the highest producing cows and the highest producing herds is as follows:

Highest producing cows of their breeds, for the month: Holstein, 54.4 pounds, A. Records; Guernsey, 52 pounds, H. A. Wines; Jersey, 52.8 pounds, S. Lee; Brown Swiss, 37.2 pounds, F. G. Amack; Shorthorn, 39.7 pounds, M. E. Pratt; Red Polled, 27.1 pounds, W. J. Potter.

Highest herds—A. Records, eight Holsteins, average fat 33.54 pounds; David Tate, three Jerseys, average fat 33.5 pounds; F. O. Johnson, 16 Holsteins, average fat, 33.26 pounds; E. G. Amack, 12 mixed, average fat, 32.91 pounds; S. Lee, eight Jerseys, average fat 32.45 pounds; D. W. Gray, four Jerseys, average fat 31.57 pounds; H. A. Wines, 10 Guernseys, average fat 30.85 pounds; W. J. Potter, 16 mixed, average fat, 30.14 pounds.

Questions

Are Answered by A. B. Nystrom

When there is no succulent feed raised on the farm, about how much grain feed can safely be fed to a cow per day? How many kinds of feed and how many pounds of each, and how many times a day, should be fed?

I. E. O., East Stanwood.

When you have no succulent feed I believe that it would be wise for you to get some dried beet pulp and soak it over night in four to five times its weight of water and feed that instead. You can use from five to seven pounds of the dried pulp and it will make from 25 to 35 pounds of the soaked pulp. Of course, a heavy grain ration will keep up the milk flow, but we find that grain is so high priced just now that it is not economical to feed much of it. Our method of feeding is usually that of feeding one pound of grain per day for each pound of fat that the cow produces in a week. It is much better to have a mixture of grain and if you will let me know what you have on hand and the prices for them, I shall be glad to make out a ration for you, or perhaps you will be able to get the information from the bulletin on "Feeding Dairy Cows" put out by the experiment station here at Pullman.

Feeding Before Freshening.

How long should a cow be fed on grain before coming fresh, and would it be advisable to feed as heavy before as after freshening?

I. E. O., East Stanwood.

After a cow is dried up she should be fed liberally for about four weeks and then the feeding should consist largely of laxative feeds, such as bran and oats, and assuming that the cow is dry for six weeks or more, the light ration should be fed the last two weeks. The cow's bowels must be in good condition previous to freshening or she is likely to have difficulty during calving time.

Feeding Wheat Hay.

I am thinking of going into a small dairy and beef cattle business as a side line on a wheat ranch. I have some rough land for pasture. I have a lot of wheat hay which I want to convert into cream, as butter fat is 40 cents per pound. What must I feed for best results with wheat hay? I can get beet pulp for $29, alfalfa meal for $30, and oil meal for $3.25 per cwt.

H. D. E., Columbia River.

I note that you are thinking of going into the dairy business in a small way. I have no doubt that you can make a success in that section, but you will have difficulty in getting the best results from the use of wheat hay. I think that wheat hay makes very good feed for other stock, including horses and beef cattle, but it does not seem to do so well for dairy cows. A small amount can be used as a filler, but as a rule it is not very palatable and does not contain a very high percentage of protein, which is a necessary part of the ration of every dairy. We always get better results from the legume hay, such as alfalfa, sweet clover, etc., but with what you have on hand I think you can get the best results by the following combination: Feed from 10 to 12 pounds of wheat hay per day to each cow, and in addition get some of the beet pulp and soak it over night in four to five times its weight of water. Feed five or six pounds of this dried pulp, which has been soaked over night, to each cow daily. You may get fair results by adding some alfala meal to this beet pulp and soaking it, but perhaps equally good results can be obtained by feeding the alfalfa meal dry. I would suggest that you mix alfalfa meal and oil meal in the proportion of four of the former to one of the latter, feeding this to the cows at the rate of one pound for each three to three and a half pounds of milk the cow produces. I think this is the best combination you can make out of the feed you have mentioned. If you can get some oats at a reasonable rate I would mix in some of this with your grain feed, and use some bran if you can get it. With these extra feeds added your mixture should be about as follows: Three parts of alfalfa meal, three of bran, two of oats and one of oil meal. If you find this to be a little too laxative you may cut down the oil meal to one-half.

SIXTY-FOUR POUNDS

Nine-Year-Old Jersey Makes Record.

James R. Greenlee, official tester, sends The Farmer the list of cows in the Washington county, Ore., Farmers' Cow Testing association, giving 40 or more pounds of milk during the month ending November 30, 1916. The highest producing cow is that of John Vandervelden, a 9-year-old Jersey, with a record of 1344 pounds of milk, 4.8 per cent, and a total of 64.51 pounds of butter fat. This was the only cow giving over 60 pounds of milk. The next highest producer was also one of John Vandervelden's, a 9-year-old Jersey, giving 1034 pounds of milk, 5.6 per cent, and total of 57.96 pounds of butter fat. Mr. Vandervelden had more than five cows producing more than 50 pounds of butter fat during the month. Charles Bamford had a great cow giving 1345 pounds of 4 per cent milk producing 54.60 pounds of butter fat. Fred Wilson's 7-year-old Jersey gave 1110 pounds of 5.1 per cent milk, producing 56.61 pounds of butter fat. A 6-year-old cow of C. J. James gave 901 pounds of 6.2 per cent milk which produced 55.80 pounds of butter fat.

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The "Simplex" will pay for itself in butterfat, will save repairs, and is built to last for years and years.

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Dealers in Dairy Machinery and Barn Equipment.
907 Western Ave., Seattle Wash.

Sisal Hemp Monopoly

American Bankers Financed Yucatan Growers

All grain growers know that the price of binding twine has gone up outrageously, but possibly not all of them know the reason for the advance.

Sisal hemp, the fiber from which binding twines are largely made, comes to this country almost entirely from the Mexican state of Yucatan. The Yucatan growers have organized a monopoly and a group of American bankers is financing them. Whether they can be reached through the laws of the United States is a question which a special committee of the United States senate confesses itself unable to answer. That question the committee has just referred to the attorney general of the United States.

Sisal consumption has grown to enormous volume in the United States. The senate committee says that in 1914 the International Harvester company alone used 584,000 tons, and other manufacturers imported about 200,000 tons.

The state prisons manufacturing twine, listed in the order of their consumption of sisal are:

Minnesota, 43,400 tons.
Michigan, 25,000 tons.
South Dakota, 11,300 tons.
Wisconsin, 8650 tons.
Indiana, 7500 tons.
North Dakota, 5700 tons.
Missouri, 2000 tons.

In its report the senate committee says:

"The committee feels that the facts set forth herein demonstrate that the American people are being forced to pay for one of the necessities of life many millions more than the fair value thereof, and it therefore refers this report to the state department, with the suggestion that the matter be taken up hrough diplomatic channels to see if some measure of relief can not be obtained.

"The committee urges the farmers of the country to make every effort to find a suitable substitute for sisal which can be grown within the United States at reasonable cost, in order that they may no longer be in the power of a foreign monopoly for so essential a product as binder twine. This report is referred to the department of agriculture with the recommendation that it make special investigations toward this end.

"It seems clear that the Comision Reguladora is an agency of the Yucatan government, and not such a person or corporation as is contemplated in our anti-trust statutes. Moreover, it is an association composed of agriculturalists instituted for mutual help, not having any capital stock and not conducted for corporate profit, its purpose being to enable its members, composed of all the sisal growers of Yucatan, to get better prices for their products.

"Beyond question this association is a monopoly formed for the purpose of controlling the sisal market which it is doing most effectively. But the combination to control the output of sisal, which constitutes the monopoly, was conceived and carried out in Yucatan by the Yucatan government and not in the United States. The offense, if there be one, does not consist in raising the price of sisal to 14 1-2 cents, but in the combination to get control of the sisal market and monopolize it with the resultant power to fix this exorbitant price. As this monopoly is beyond the territory of the United States, it is difficult to see how it can be reached, though possibly the actions of its agents in this country may come within the purview of our anti-trust laws."

The report says: "There was no evidence before the committee to show any combination of monopoly in the handling or manufacturing of sisal or binder twine in the United States during the years 1915 and 1916, except as stated herein. There was active competition both in the purchase of the raw material and in the manufacture and sale of binder twine during those years.

"No complaints were made about alleged monopolies or combinations in Manila hemp, or in regard to the manufactured product made from it. While there has been considerable advance in the price of Manila hemp during the last two years, and for the greater portion of the time it was relatively much higher than sisal, at the present time the two products are about on a parity.

"But whether or not our laws have been violated by the Comision Reguladora or its agents, there can be no question that its conduct is a most oppressive monopoly, which holds in its grasp our importations of sisal and which is costing American farmers many millions annually. The arbitrary power of the commission to fix the price of sisal is most dangerous, and its action in doubling that price since the hearings before this committee closed last April can not be too severely condemned. The committee will make certain recommendations in the hope that some relief may be afforded.

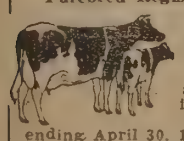
"The position of the Pan-American corporation is altogether different from that of the Comision Reguladora. The former is an American corporation, and amenable to our laws if they have been violated. The evidence shows very conclusively that the Comision Reguladora, which was created in 1912, exercised practically no influence upon the sisal market until the Pan-American corporation agreed to finance it and furnished the money necessary to carry out its operations.

"Almost immediately thereafter the comision assumed active charge and complete control of the sisal business, which it still retains. Without the aid of these American bankers, who keep $10,000,000 constantly at the disposal of the Comision Reguladora, it would have been unable to perfect and carry out its monopolistic combination to control the sisal market and fix the price regardless of the law of supply and demand and entirely at its own option. There can be no doubt that the Pan-American corporation gave real existence to the Comision Reguladora and was essential to its success."



Send for 36-page birds-eye on handling silage—a chapter from "Modern Silage Methods." 1917 edition of this book 25c. 264 pages. Answers all silage or silo questions. Ohio Silo Filler Catalog FREE.
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Purebred Registered Holstein Cattle.



Fifteen thousand dollars in prize money, for milk and butterfat production, was distributed among breeders of registered Holstein-Friesian cattle during the year ending April 30, 1916. The official supervision, by the Advanced Registry Office of the Holstein-Friesian Association, of all regularly conducted tests, and the award of liberal prize money have proven a mighty stimulus and an educational factor of great value, in the promotion of interest and progress in the breeding of Holstein cattle.

Send for FREE Illustrated Descriptive Booklets. The Holstein-Friesian Association of America, F. L. Houghton, Sec'y, Box 205, Brattleboro, Vt.

Alfalfa

As to Yellow-Flowered Variety

After eight years of experimentation with the yellow-flowered alfalfa known to botanists as **Medicago falcata**, plant specialists of the United States department of agriculture feel that the plant can not yet be re commended for general cultivation. They believe, however, that because of certain desirable characteristics, some strains of the species will be valuable for use in plant breeding and that from hybrids resulting from crossing this yellow-flowered alfalfa with the common alfalfa hardy types more valuable than any now cultivated should be developed. With this end in view the department specialists will continue their experiments.

The chief defects which make the species undesirable for general cultivation under present conditions are its failure to recover quickly after mowing, and its poor seeding habits. These characteristics, in most cases, make impossible the cutting of more than one crop of hay and make the harvesting of sufficient seed for planting purposes exceedingly difficult and costly.

Standing Merchantable Timber.

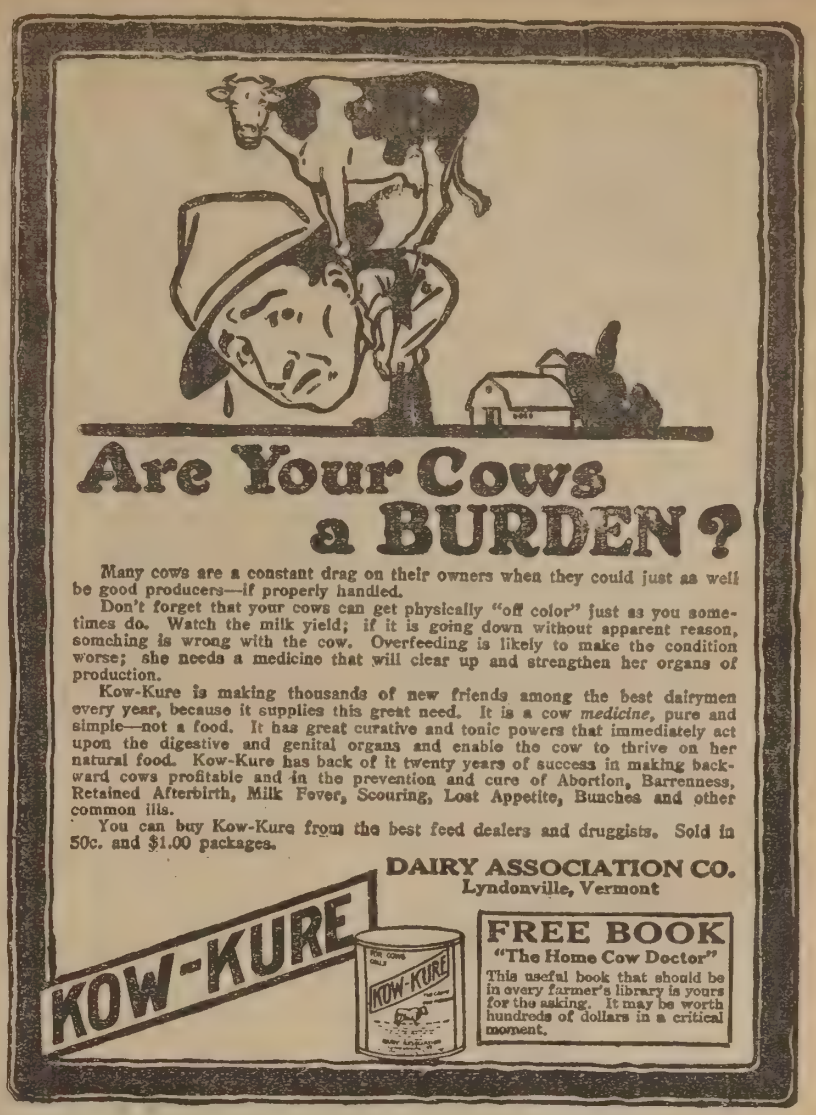
Revised estimates place the amount of standing merchantable timber in the United States at approximately 2767 billion board feet. Of this amount 1464 billion board feet, or 53 per cent of the total, is in California, Washington, Oregon, Idaho and Montana.

Marmalade Stock Ample.

Germany's supplies of marmalade are sufficient for the army and civil population until June, the Overseas News Agency says. The marmalade is being distributed to municipal authorities, by whom it will be retailed at 14 or 15 cents a pound.

Insect Trap.

An inventor has bought out an insect trap that can be screwed into the top of a fruit jar.



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The Hinman Milker in Operation at M. S. Alexander's, Owatonna, Minn.

TWO MEN MILK 33 COWS DAILY BESIDES CARE FOR 75 HEAD OF CATTLE, 15 HORSES, AND 100 HOGS

"My foreman on the farm and also the second man are very much pleased with the Hinman Milker. We are milking today 33 cows and have on this farm about 75 head of cattle, 15 horses and 100 hogs, and one man besides the foreman is doing the work. If it were not for the Hinman Milker, we would have to have at least one more man." M. S. ALEXANDER Feb.8, 1915.

HINMAN MILKERS

Mean Bigger Dairy Profits for M. S. Alexander. Save him at least one hire man. You can't save on feed without losing milk yield, therefore the sure way to more dairy profits is to save on hand labor. The Hinman is so simple, even a boy can milk 18 to 25 cows an hour. This simplicity also means low cost both to install and operate.

No complicated pulsating mechanism—no air pipe lines—no vacuum tanks. Just a simple combination of pump, vacuum in valve chamber in pail cover and natural action (not upward squeeze) teat cups.

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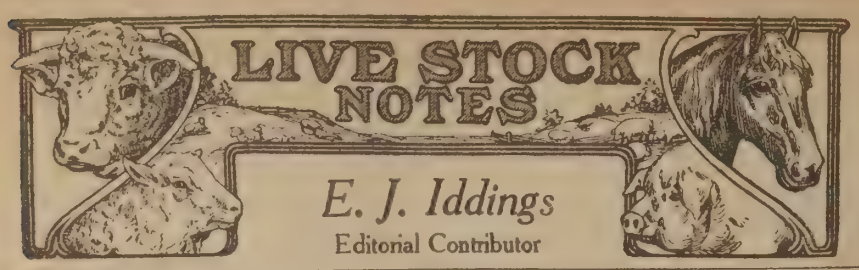
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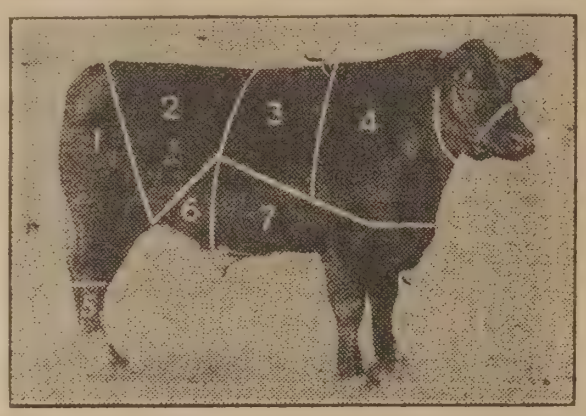
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E. J. Iddings
Editorial Contributor

Where the Cuts of Beef Come From

The accompanying photograph, while that of a famous steer which a few years ago was awarded the grand championship at the Chicago International Live Stock show, is designed to show where the various grades of beef come from in the case of any beef animal. The prices quoted are those compiled by Howard R. Smith of the First National Bank of St. Paul of date September 1, 1916, in his booklet, "Live Stock for the Northwest," from which they are taken.



The variance in price—from 8 cents to 26 cents per pound—indicates to some degree the possibility of developing beef cattle in such a way as to increase the relative weight of the valuable cuts of meat. The prices, together with weights of the various cuts of this grand champion steer, follow:

1. Round, 230 lbs. at.....15c
2. Loin, 170 lbs. at 26c
3. Rib, 90 lbs. at 19c
4. Chuck, 260 lbs. at.....12c
5. Shank, 40 lbs. at 6c
6. Flank, 40 lbs. at 9c
7. Plate, 130 lbs. at 8c

Suet, 40 lbs. at 8c

Hog Raisers

Railroad Transportation Charges

By J. H. BAISLEY, Baker, Ore.

What I consider a very fallacious report is now being heralded throughout the northwest relative to the exact reason why many growers are bidding farewell to the so-called "mortgage lifter," which name, to some hog raisers, may be a misnomer. We are informed by certain person, who are in a position to be in close touch with the situation, that the real cause of some quitting the game is the excessive transportation charges by the various railroads. This contention is no doubt true in some instances, especially where the producer is remotely situated as to the best available market, which, as to the shippers or growers in this immediate section, does not apply. We are but 357 miles from the Portland market, the freight rate being $89 per car of 20,000 pounds, which amounts to about 45 cents per hundred delivered at North Portland, the Union stock yards.

There is absolutely no serious question of doubt involved, under the claim of the long haul, that a very large per cent of the gross proceeds is consumed by the freight charges, but which proves a material factor of profit in favor of growers more proximately situated. This advantageous feature of location for the nearby producers, however, not enjoyed by their distant brothers, is a fixed condition not easily eliminated. The reduction of rates will inevitably inure pro rata to both alike; but, nevertheless, I express an unqualified opinion that rates can be amicably and equitably adjusted so that both railroad and producer will be greatly benefited thereby; as there are no two endeavors more conducive to the upbuilding of a country's internal resources than its railroad facilities and the growing of live stock.

We should, then, encourage the most harmonious cooperation to accomplish the desired results.

The growers, who are turning their faces against the hog industry in this section, are doing so for various expressed reasons. Some will say, "that there is absolutely nothing in the culture of swine; that the first cost of constructing hog-tight fences, necessary buildings and other equipment is prohibitive; that the fluctuating market prices of pork is decidedly discouraging and unprofitable; that the present high priced grain can not be fed without the grower sustains a loss. No one here, so far as my knowledge extends, has ever mentioned transportation rates, as they have never considered this a certain fixed charge.

The raising of swine, under the most favorable apparent condition, is not always profitable. There may be a present congestion created in the market. If hogs are coming in rapidly, finished or unfinished, there may be juggling among the respective buyers, as they usually know when to play their trump card, their one great ambition being to purchase as cheaply as possible. If one's hogs are finished at this particular time, regardless of cost of production, he is obliged to make a sacrifice in favor of the buyers, who will reap a rich harvest, the grower will sustain an irretrievable loss, and the consumer, who is unaware of the transaction, will pay the same old price for the meat he consumes. "Consistency, thou art a jewel," even though the supply of pork be normal. This is certainly a most critical time, if grain reaches a high level, for the grower who is raising hogs for profit, as his brother producer, because of the promising price of grain, immediately sacrifices his own hogs, his brother's hogs and paralyzes the market. This class of spasmodic swine dabblers should forever quit the field, choose a more congenial occupation and not suffer other growers to lose heavily by reason of their injudicious acts.

African Wool

Sale of Fine Clip of Merino

A very fine clip of Merino wool grown in the Somerset East District of South Africa was recently sold on the local market at record prices.

This clip consisted of 19 bales of super hoggets for which 38 cents per pound was paid; eight bales of ewes, six bales of wethers, and two bales of stud, all of which were sold at 37 cents per pound; three bales of 11 months selling for 32 cents, one bale of six months selling at 25 cents, eight bales of backs and bellies at 25 cents, and two bales of locks at 14 cents.

The clip was well prepared for market exhibit, was light in condition, well grown, of good length, and fine in quality. Local experts stated that this wool would compare favorably with the same class of wools grown in any part of the world.

Naturally this is gratifying from the standpoint of the South African wool grower, and shows the beneficial results of the efforts made in recent years to improve the quality of all South African wools.

Skagit County Fair.

During 1916 the Skagit County Fair association spent $5,117.22 for improvement of its grounds and still broke even financially.

Grain Still In Storage.

It is estimated that owing to the shortage of cars two-thirds of the 1916 grain crop in the locality of Albion, Wash., is still in the warehouses. Cars are becoming more plentiful, however.

Veterinary

Dr. S. B. Nelson

Can you recommend anything for removing black warts from a cow's teats? They grow for two or three weeks and then fall off. F. P.
Seattle, Wash.

I would recommend the application once a day or once every other day, of American oil to the type of warts which you describe affecting your cow. If you do not get good results from this treatment, write to Dr. S. B. Nelson, Pullman, Wash., and he will give further advice.

I have a horse that has pin worms. Have tried several remedies but they seemed to do as much harm as the worms and gave him no relief.
Othello, Wash. J. M. D.

I would recommend giving your horse two drams of powdered iron sulphate morning and evening for a week, then giving the following treatment: One quart of raw linseed with one ounce of turpentine well mixed with it. This treatment has given good results in many, many cases of this trouble. It is not a sure cure. It has never hurt a horse to my knowledge.

I have a mare that has enlargements just above the hoofs of her front feet. It does not seem to be sore when you touch it, yet she shows a little lameness when walking. I suppose it is ringbone or sidebone. O. J. C.
Outlook, Wash.

If the swelling that you describe is mostly in front of the hoof above the hoof then the chances are that the trouble may be ringbone. If the swelling, however, is back past the middle of the foot, and one on each side, then it is probably sidebone. For ringbone, the best treatment is to fire with a hot iron and blister with a severe blister. You should have a veterinarian do this work for you. If it is sidebone some good results have been obtained from the following treatment: Begin by placing on each side of the foot just below the side bones on the inside and outside quarters three creases, about one-half to three-quarters on an inch apart, just below the white growing tissue at the top of the hoof. Then follow the grain of the foot down to to the sole, making a crease with a hoof knife straight through the hoof until you get so that you nearly draw blood, cut through the outside of the hoof down in the white, through the soft part until you nearly draw blood. Do that in three creases on each side. Then treat the hoof morning and evening with the following treatment, applying it just at the hair line of the hoof; Lard, one part; pine tar, one part. Heat gently and mix; then let cool. The effect of this treatment is that it first causes the hoof to spread, and enlarging the hoof does away with the pain when the horse steps on the hoof. Secondly, the ointment softens the foot and causes it to grow more rapidly, and grows a larger hoof than the horse formerly had.

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We would say to all who buy it that it does not contain a particle of poisonous substance and therefore no harm can result from its external use. Persistent, thorough use will cure many old or chronic ailments and it can be used on any case that requires an outward application with perfect safety.
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Do you know HOW simply, comprehensively and authoritatively our FREE "Save-The-Horse BOOK" clinches the diagnosing and TREATMENT of all lameness?

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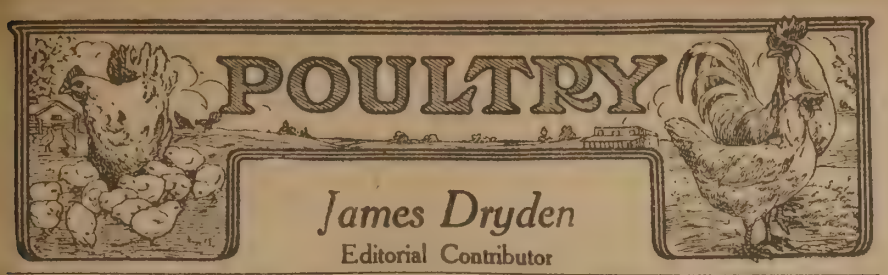
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LILLY'S CALF MEAL
All your calf-feeding problems are solved by LILLY'S Calf Meal. Not only feeds but feeds absolutely right, and cuts the cost one-half. All dealers sell it.
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After a hen has been mated with the male she will lay a fertile egg in two days, assuming that the hen is in normal condition and a perfect mating has occurred. However, it will be about a week before all the hens in the flock will show a good state of fertility. One may take a chance on them after the flock has been mated two or three days if for any special reason it is desired to hatch as many of them as possible.

It has been shown by experiment that eggs laid 20 days after a mating may be fertile. In the eggs taken from an entire flock, however, there would be few showing fertility after the male had been removed for 20 days. To insure infertility at least three weeks should elapse after the male has been removed. J. D.

Housing

Successful Methods at Petaluma

By James Dryden.

At the recent farmers' week at the Oregon Agricultural college, Mr. George of Petaluma, Cal., made the interesting statement that many of the colony houses on the successful poultry farms there had been built at a cost of 7 1-2 cents per hen. The house is 8x12 feet, usually, and cost to build $7.50, and in this house 100 hens were housed. The construction necessarily was cheap. There was no floor in it and no dropping boards and the nests were outside in a separate laying house or attached to the outside of the roosting place. In that climate the fowls are outdoors practically all the time, and where they have free range no scratching room is furnished.

Another surprising statement made by Mr. George was that he could clean out 40 such houses in an hour's time or less, with the help of a team of horses. The cleaning was done in the moving. There was no floor in the house, and the droppings were left behind on the ground where they fell to fertilize the ground. The work of cleaning was therefore accomplished by moving the house on to clean ground with a team of horses. If the droppings were to be scattered, that would entail extra time.

After that who will deny that the colony house has certain advantages in the saving of labor over the long stationary house with floors, dropping boards to clean, etc.

These methods, of course, could not be used in cold sections during the winter when snow covers the ground several months of the year.

Some of the poultry farmers at Petaluma, Mr. George stated, are now building large stationary houses. A few years ago on a visit there I discovered that the long stationary house was without friends. The large house was strongly condemned. It will be interesting to see after a few years trial whether the large house gives results as good as have been obtained there with the small colony house. Many changes have taken place in accepted opinions of various poultry keeping practices during the past 10 or 20 years, and the Petaluma poultry raiser will be excused if he too should change his opinions. The present improved condition of commercial poultry keeping has been brought about by changes of viewpoint. Sometimes the change has been for the worse. Let us hope that Petaulma may not be making progress backward if it changes the system of housing that has been one of the features, if not one of the main causes, of its great poultry development.



This Single Comb Rhode Island Red pullet won first place in her class at the 1917 show of the Idaho State association at Boise. She is owned by Mrs. Belle Silversmith of Boise.

State Aid

Is Suggested for Poultry Shows

Though the eighth annual poultry show at Boise, Idaho, under the auspices of the Idaho State Poultry and Pet Stock association, was the most successful ever held in that state from many standpoints, a plan is said to be under way looking toward securing aid from the the state in financing the two annual shows, one of which is to be held in northern Idaho and one in southern. The recent show at Boise was financed by the business interests of that city.

There were more than 500 birds exhibited, most of them by Idaho poultry raisers, but some from Oregon and Utah.

A feature of the show was an auction sale of birds donated by members of the association, the proceeds going into the treasury to help defray expenses. Twelve trios of birds were sold by Auctioneers Marsters and Stanley, bringing an average of $4 a trio.

William M. Coats of Vancouver gave excellent satisfaction as judge of the exhibits. This was his 23d show this season.

The poultry association proved to be live and active, and the following new members were added to the rolls during the show:

F. E. Newell, Caldwell; Eugene McGoldrick, Imbler, Ore.; A. F. Vystroil, Boise; Mrs. R. W. Barder, Boise; Mrs. W. P. Dinsley, Boise; W. D. Stanley, Boise; Mrs. George Gregory, Meridian; John Belcher, Boise; Mrs. Margaret Houck, Boise; Francis N. Nelson, Boise; Ira R. Aldrich, Boise.

In testimonial of their appreciation of her work as secretary of the association the fifty members who gathered about the annual banquet presented Mrs. Belle Silversmith with a beautiful basket bouquet.

Number of Hens to the Male.

The breeding season is now about here, and the question as to how many hens a male can serve is frequently asked. Ten to 15 hens to the male is usually recommended. The ferility of eggs will be as good with this number as with less. It is a question whether the number of hens may not be increased considerably with equally good results. I have mated three males to 75 hens with good results. It is a mistake to use too many males for several reasons. There should be a careful selection of males. The good breeder will limit the number of males as much as possible with the idea of breeding only from the best. It should be his aim to get not so much a high percentage of fertility as to secure high fecundity in the offspring. It he has 25 or 30 hens he wishes to breed from and two males, one of which is from a heavy laying strain and the other not, I would use the one good male and kill the other and take chances on getting lower fertility for the chance if not certainty of getting better laying qualities in the offspring. On the average farm there are more males than are necessary. They should be culled out to one to at least 15 hens. J. D.

Southwest Washington Fair.

The Southwest Fair association met in Chehalis and reelected F. B. Hubbard president, George R. Walker secretary. J. T. Bivin was elected chairman to succeed T. J. Long, the retiring member of the board. Secretary Walker was instructed to advertise for bids for the 1917 premium list.

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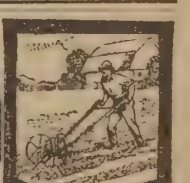
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Prune Outlook

Biggest Crop Moving Right Along

By Mrs. Thomas Carmichael, Gaston, Ore.

The prune situation in this part of the valley (Yamhill and Washington counties) has been very successful this year, all of the growers of the Gales Creek, David's Hill, Dilley, Forest Grove, Gaston and Wapato sections reporting a good full crop. Many small orchards which in former years were left untouched, received full attention this year and made good money for their owners. As prune picking did not begin until after hop picking was over, about September 20, the help question was not a difficult one, and with a ready market and good prices every farmer who had a prune orchard found it worth while to harvest his fruit. Most of the growers sold their dried fruit for from 6 to 7 cents a pounds.

John F. Forbis, the largest prune grower hereabouts, had a prune crop that would he hard to beat. From 50 acres of bearing trees he got 100 tons of dried fruit, for which he received 6 1-2 cents a pound. His drying capacity of three tons a day was not able to handle the crop and he had to build more driers.

Mr. Forbis and W. K. Newell, the well-known fruit grower of Seghers, had made all plans to ship a carload of fresh prunes to the eastern market when the threatened railroad strike made the venture too hazardous and the deal was called off. This would have opened up a new field for the Oregon prune and it is thought there will be no trouble to make it popular. These growers will probably try it again next year with better conditions.

Two small growers, who were well pleased with their prune harvest this fall, and who kept close records of expenditures and receipts, are John Blum of Wapato and Thomas Blum of the Gaston district.

John Blum realized $2000 from his five and a half acres, selling his dried fruit at 7 cents a pound. His harvest was 52 tons of green fruit and he took care of his own crop, his drier having a capacity of two tons a day. His harvest lasted 20 days and he employed three pickers. He also had three men in the drier and he himself put in full time.

Thomas Blum harvested 25 1-2 tons of prunes from his four-acre orchard, hauling the green fruit in bushel boxes by wagon to a drier at Yamhill, his check for the green fruit amounting to $640. The picking was done by small boys, and Mr. Blum figures the cost of harvesting his prunes at $33, not counting his own time and the hauling of 16 loads to Yamhill. His harvest lasted 17 days and he had no trouble to get help. This is a 20-year old orchard on the Newman farm in the Patton valley district weat of Gaston.

Finally, to quote one of the acknowledged authorities on prune growing in Oregon, W. K. Newell, who has kept in touch with the prune situation: "The biggest prune crop the northwest has ever produced is moving right along, and all to be consumed in the United States. One of the largest wholesale distributors in Portland (the Mason-Ehrman Co.) thought that with the European trade cut off prunes would go slowly, but every pound is spoken for and there is room for more."

Insects Not Always Enemies

Speaker before orchardists makes plea for propagation and preservation of certain insects that help the farmer and fruit grower destroy pests that annually do large damage in the northwest.

This is the seventh in a series of articles summarizing the addresses and the discussions of orchard problems at the apple conference held in Spokane in connection with the ninth annual apple show.

Somebody once said something like this: "Common fleas have little fleas upon their backs to bite 'em; these little fleas have smaller fleas, and so ad infinitum."

E. J. Newcomer of the U. S. department of agriculture applied this doctrine to insects found in the orchards and on the farms of the northwest in his address at the apple conference. He discussed three kinds of common insects which, by feeding upon other insects, made themselves one of the farmers' and orchardists' best helpers. They are the common ladybird, the Syrphus fly and the lace-wing fly. In part Mr. Newcomer's treatment of the subject follows:

"It is difficult to estimate the value of these beneficial insects. Their work depends entirely on the abundance of their hosts. If the pest they feed upon is scarce, they are correspondingly scarce, and when perhaps on account of this scarcity of the parasites, the pest begins to increase in numbers, the parasites will also increase. It is almost an axiom among entomologists that when we find a pest becoming alarmingly abundant in one season, we will find its parasites correspondingly abundant the next season, and the pest will practically disappear.

Import Ladybirds.

"In some instances, notably in California, it has been found expedient to rear artificially, or to collect these beneficial insects, and to distribute them to the farmers who need them. The horticultural commission of California annually sends literally tons of ladybirds to the melon growers of the Imperial valley, these ladybirds being collected in certain favored spots in the mountains where they winter in incredible numbers.

"Many of these parasites and predatory insects are of direct value to you who own orchards. The San Jose scale has some very minute parasites that help to control its numbers, and certain predaceous ladybirds feed upon it. The apple worm has an enemy, unfortunately not very common, a trim, black and brown wasp that pierces the cocoon and deposits an egg in the worm, so that in the spring, instead of a codling moth, another slim, black and brown wasp emerges from the cocoon to keep up the good work. The aphids, or plant lice, however, are the most beset with foes. There is a minute parasite wasp that lays its eggs in the green aphids, the larva from which feed upon the aphids and destroy them; there is an almost equally minute fly whose larva goes about sucking the blood from them; and there are long, gray and brown beetles that feed ravenously upon them. But I will limit my detailed account to three of the more important predaceous insects of the northwest. These are the ladybirds, the Syrphus flies, or hover flies, and the lacewing flies. All of these insects feed almost exclusively on the aphids or plant lice.

The Aphis Destroyer.

"Let us take the ladybirds first, since these are without question the most important, and are certainly known to all of you. These are the familiar, small, rounded, shining, red or orange beetles, usually decorated with small black spots. They feed voraciously, picking up aphis after aphis in their jaws, devouring the soft parts, and rejecting only the legs and wings. They deposit their eggs on the leaves or fruits or branches.

"The young larva of the ladybird is usually black, and as it grows older and larger, it becomes grayish, and various yellow or orange spots and markings appear on it. It is elongated, and provided with six very efficient legs, and is always actively searching about for aphids upon which to feed. It grows very rapidly, and in warm weather will become full-grown in two or three weeks.

"A single ladybird, during its life of a month or more, will deposit from 500 to 1500 eggs.

"A larva, when first hatched, will eat only two or three aphids a day, and when full-grown will dispose of from 50 to 100 daily. The average number eaten by a single larva during its two weeks of life is approximately 500 or 600 aphids. An adult beetle, during warm weather, will eat from 60 to 75 aphids daily, and since the beetles live from one to two months, a single beetle will consume during its life no less than 2000 or 3000 aphids.

Fly Less Effective.

"The Syrphus flies or hover flies, are also of great importance in an orchard. The adult flies are usually somewhat larger than the common house-fly, some of them being as large as a honey bee. Their bodies are mostly strikingly cross-striped with black and yellow, and their wings are transparent. They fly swiftly about, and have the characteristic habit of suddenly stopping and hovering motionless in mid air above or near a colony of aphids among which it is their intention to deposit eggs.

"These insects are not nearly as effective in destroying plant lice as are the ladybirds, for the simple reason that the adults do not feed on plant lice, and we have learned that the adult ladybirds consume many more aphids than do the larvae.

The Lace-Wing Fly.

"The lace-wing fly is a delicate insect, half an inch long or less, with large, lace-like wings, and long, slender feelers. Most of these are light green in color, with golden eyes, but some of the smaller species are brown. The eggs of the green species are laid in clusters, each egg upon a splender stalk, nearly half an inch long. This is supposed to be so that the hungry young larvae, upon hatching, will not eat up the unhatched eggs. The yellowish-brown larvae of the lace-wing fly, known as aphis-lions, are ferocious looking bugs, shaped something like the ladybird larvae, but with a pair of long, sickle-shaped jaws protruding in front. They wander about among the plant lice, seizing them with these terrible jaws, and holding them up with an air of great satisfaction, while the juice from the punctured victim runs down little grooves in the jaws into the mouths of the larvae.

Cannibal Insects.

"I have had a full-grown aphis-lion devour 350 aphids in a single day, by actual count, and during its short life of less than two weeks, it made away with 1400 of these pests. Unfortunately, the aphis-lion has a black side to his character that somewhat offsets his usefulness. If he happens across a young ladybird larvae, or even a smaller one of his own kind, he does not hesitate to attack it and destroy it. He makes no distinction between injurious and beneficial insects. The ladybird larvae will also occasionally but rarely devour one of its own kind.

Insects Only Help.

"Before I finish, let me say a word about the relation of this natural control of insect pests to artificial control. You might compare these beneficial insects to the fire extinguish-



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ers and sprinkler systems that you install in your houses and stores, and your spray outfits to the city fire department. Just because nearly every one in a city owns a fire extinguisher, you would not think of doing away with the fire department. It is necessary to control the fires that are too large or that get too much of a start for the small extinguishers. And so in your orchard. The parasites and other beneficial insects will control the smaller outbreaks of pests, and will do much to lessen the seriousness of the larger ones. But your spray outfit is necessary to combat the outbreaks that get away from the parasites. The parasites might eventually control the outbreak, just as your fire extinguisher might, in the end, control a fire, but in the meantime a great deal of damage is being done.

"The ladybirds and other insects will control your aphids only insofar as their numbers and their appetites allow them to do so. I have seen colonies of aphids completely wiped out by their enemies, but very often the aphids will multiply more rapidly than their foes, and when this occurs, you must step in and take a hand with your artificial means of control. Do not be afraid that the tobacco or other insecticide will destroy your insect friends. It may kill a few, especially the younger ones, but most of the winged adults will be able to fly away, and will doubtless find plenty of food in your neighbor's orchard, or on the wild plants by the roadside, and will return to your orchards if the aphids appear again."

The Motor Car
On the Farm

The Men Who Build Them.

It is calculated that there are 700,000 men employed in the automobile industry in this country. The city of Detroit, Mich., is the manufacturing center of the United States so far as automobiles are concerned, there being 29 factories there, including the Ford factory, which alone employes about 25,000.

Want Uniform Auto Law.

The American Automobile association is now working on a measure to present to the legislatures of all the states of the Union with a view of having uniformity all over the United States. The association declares that the laws of some of the states on the regulation of autos are bunglesome and difficult to understand and enforce, and that there are certain points of conflict between the states that should be eliminated.

Stop at the Crossings.

There is a nation-wide movement on foot looking toward the enactment of a law in every state requiring automobiles to come to a dead stop at every railroad crossing. Not only are the railroads working for the passing of such a law, but many of the auto associations and companies are taking part. It is argued that were such law in effect it would prevent a great many accidents on crossings where machines are now driven onto the tracks without proper assurance that there is no train approaching.

Oregon License Fund.

A total of $119,987.45 will be returned to the several counties of Oregon from the motor vehicle fund, according to a statement by E. G. Patterson, manager of the automobile department of the secretary of state's office.

WANT FREE FERRY
Across Columbia River at Entiat.

Petitions are being circulated both in Chelan and Douglas counties, asking the boards of county commissioners to consider the establishing of a free ferry across the Columbia river between Orondo and Entiat, and to make appropriations for the maintenance of the same. Entiat is the shipping point for a considerable portion of Douglas county, and ferry tolls impose a heavy expense on the ranchers, especially during harvest. It is understood that the commissioners of Douglas county favor the idea.

GAME BIRDS.
To Be Fed at White Bluffs.

In order that the quail, pheasants and other game birds in the White Bluffs-Hanford district, Benton county, may not die for lack of something to eat this winter, County Game Warden M. D. O'Connell has authorized Deputy Sheriff James Shepherd to make arrangements at stores at both places for feed, which will be paid for by the game commission.

Write to the Editor

The Washington Farmer will be glad to get a letter from any subscriber at any time.

If we are making a paper that you like, tell us so. If we are making a paper in any respect that you do not like, it is yet more important that you should tell us so.

Having thousands and thousands of subscribers, of course it is out of the question to make the paper just as each subscriber would like to have it in every particular. Folks are different and like different things in their reading. This makes it interesting. We try to have something of special interest to every subscriber before we get through with it. Sometimes it takes longer, sometimes shorter to get around to the particular thing you like. It may happen that many readers enjoy one kind of reading matter and only a few another kind, so we can not be expected to give as much space to the desires of the few as to the desires of the many.

You see that it is no simple problem to get up a farm paper for a large number of people.

Then write us about any question that interests you, or any question that troubles you. We may be able to help you. Remember, that the chief difficulty in answering any question is in having the question itself plainly and correctly stated. For instance, a general question regarding the law of boundary fences can be answered easily, while the question regarding your own line fence when there is a dispute between you and your adjoining neighbor may be so intricate and have so many things connected with it which only a trained attorney could answer, after a personal interview with you.

Write us any inquiry you desire to make and we will be glad to give you the best answer possible, whether it is a simple matter of statistics or a matter requiring the advice of experts.

We want your letter, for that is the only practicable way we can talk with most of our readers. Write us anything and everything you wish, and be sure that you will get a reply containing all the information that we have at hand or that we can obtain from people who do know with respect to the particular thing about which you want information.



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Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

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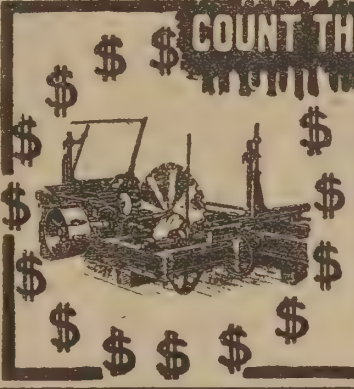
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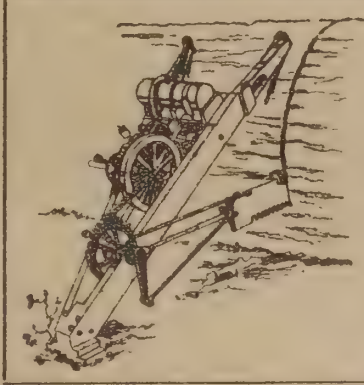
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THE MONTANA STOCK RANCHES of J. B. Long & Co. are now being subdivided and sold at retail. 20,000 acres in the **Famous Judith Basin.** In tracts of from 80 to 5000 acres. **Buy direct from the owners.** Save agents' commission. Prices lowest. Terms easiest. For full particulars and price lists write

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Practical instruction in shop work, demonstrations, repairs guaranteed. Lectures by practical men assured. WE USE NO BOOKS.

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ONE WEEK'S FREE TRIAL BEFORE ENROLMENT IF DESIRED.

Farmers Must Pay Tax

Wheat Prices Increase the Incomes

The high prices paid for wheat this season is putting many farmers into the class that pay income taxes. A force of special deputy tax collectors are working with a view to ferreting out the farmers whose incomes are large enough to make them subject to the law.

The law provides that every person whose "net annual income" is $3000, if he is a single man, or $4000 if head of a family, must voluntarily file a statement of such income with the federal authorities and pay a tax of one per cent on it. Thus, if a farmer's net income is $3000, he will be subject to a tax of $30. Next year, according to official announcement, this tax will be double, or two per cent. The law requires that persons subject to the law apply to the federal marshal, James McGovern, for income tax statement blanks to be filled out. Owing to the failure of many to do this, a force of collectors is constantly in the field checking up on the "prosperity" of the people.

Buy Munitions Abroad.

Secretary Daniels of the U. S. navy recently placed an order for a large number of shells for the navy, running up into hundreds of thousands of dollars, to a manufacturing concern in England. The English firm's bid for making the shells was about $200 per shell lower than that of the lowest American bid. Charges have been made that the contract was the result of political operations either in the United States or England, but Secretary Daniels denies the charges. It was said that the British firm was induced to place their bid low so as to throw a scare into the steel industry in America, and thereby reduce the price of steel so that the English allies might hereafter secure their munitions from this country more cheaply. This is emphatically denied.

German Raider Busy.

Twelve or more merchant ships belonging to England or her allies are lying in the ooze of the South Atlantic bottom as a result of the work of a German vessel operating as an open sea raider. The identity of the marauder has not been positively established. It appears that the crews operating the ships that have been sunk were saved, carried some time aboard the raider, and then transferred to a neutral ship met on the waters. The neutral ship has landed nearly 250 such persons, and others are reported to be safe. The activity of this German vessel almost equals that of the Emden, which, early in the war, wrought such havoc to allied shipping until destroyed by a British man of war.

Militiamen Come Back.

The federal government has ordered the return to their home states of a large part of the militia guard that has been on the Mexican border for the past several months. Over 25,000 have been ordered to return home. It is generally understood that the department of war plans also that General Pershing and his soldiers shall withdraw from Mexico, into which country they were sent nearly a year ago with instructions to capture Villa, the bandit marauder, "dead or alive." Out of this order and the operations of the Pershing forces arose the spirited controversy between the Carranza government and that of the United States that still threatens a complete break between the two governments.

Peace Goes Glimmering.

The German foreign minister has announced officially that the terms of England and her allies as outlined in their note to President Wilson makes it impossible for Germany to make any further moves toward peace at the present time, but that the war must be prosecuted by that country relentlessly.

Admiral Dewey Dies.

Admiral George Dewey, who won lasting fame when he destroyed the Spanish fleet in Manila bay early in the Spanish-American war, died at Washington, D. C., January 16, at the age of 80 years. He was the ranking officer of the U. S. navy, and will be succeeded to this position, it is unofficially stated, by Admiral W. S. Benson.

Danish West Indies.

All the formalities have been closed whereby the United States becomes the owner of the Danish West Indies. The purchase price was $25,000,000, and in addition the U. S. government relinquished whatever title it possessed in greenland, which title depended on discovery rights alone.

Yakima Valley

Production in 1916 of $16,000,000

By D. G. SUTHERLAND.

Total production in all lines for the year 1916 is $16,000,000, being an increase of $6,000,000 over the year 1915.

Estimated fruit yield 1916, 11,000 cars; on hand January 1, 1917, 2000 cars. Expressed in single shipments to relations and friends for Christmas presents, 3000 boxes.

As shown by the late U. S. census returns on the Sunnyside project, hogs have decreased in number from 32,656 in 1915 to 19,364 in 1916, over 40 per cent; cattle have increased in number 350, but decreased in value $48,000 from 1915; sheep have decreased in number 538; fowls have decreased in number 4000; there has been a total decrease in value of live stock and fowls of $84,772 from that of 1915. Increase in equipment, new silos built, $15,267, an increase of 46 2-3 per cent in value; other farm equipments $7000, a little less than 2 per cent increase in value; automobiles increased in number from 75 in 1915 to 485 in 1916, value $29,268, increase in numbers 546 2-3 per cent; Yakima county has one automobile for every 17 persons in the county.

The farmers' union, granges, beekeepers' association and farmers attending farmers' short course institute, representing in all over 100 of the leading farmers, have each passed resolutions asking the county commissioners to employ a county agriculturist for Yakima county. In the discussion of the subject it was shown that a man who now pays $100 per year taxes, by the employment of an agriculturist, would have to pay $100.03. But as the average rural taxpayer pays less than $50 per year tax the average increase would be less than 2 cents for each taxpayer.

It was shown that in counties where an agriculturist had been employed he saved the county each year, in increase of production and better prices, more than would be required to pay his salary for the next 10 years to come.

A $15,000 warehouse addition is being built by the Washington Fruit and Produce company in North Yakima. It will be of modern concrete and brick construction, two stories and basement; the cold storage temperature will be governed by an electrically operated refrigerating machine. The addition, together with their present building, will be 45 feet by 180 feet, with a capacity for storing 120 cars.

Yakima county has funds on hand showing balances aggregating $180,000, of which amount $93,000 is current expense fund, the balance road and bridge funds.

State fair will be held in North Yakima September 17 to 22.

W. W. Palmer, Bossburg, Wash.—Every man I have spoken to says The Washington Farmer is the best farm paper in the United States.

We Will Pay Salary

To Farmer With Rig or Saddle Horse

The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state during the winter months. We are going to pay good salaries to those who can do the work.

We have decided to offer these positions only to farm owners or renters.

We feel sure there are many of our readers who would like to earn some extra cash during the winter months when work around the place is slack.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good hard licks for good pay. For men or women with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary during the winter months, without neglecting your farm chores—without being away from home more than a few hours each day. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

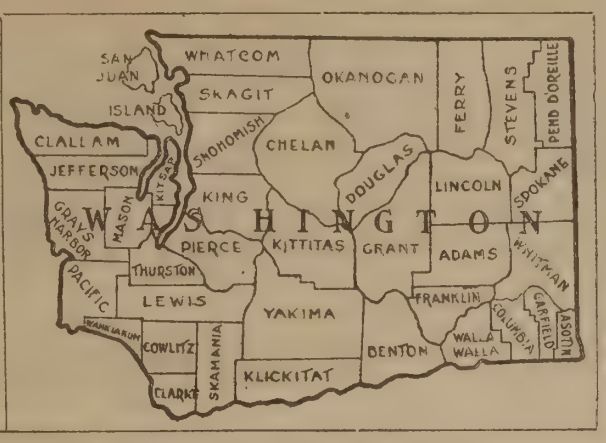
Give full details in your first letter. If we get two or more applications from one neighborhood, the first will be given the preference in making our appointment. If you want a good salary proposition for the rest of the winter, don't wait till tomorrow to write us, but send your application today.

If not interested personally in the above proposition, why not get some neighbor or friend in touch with us at once who you think will appreciate an opportunity to make several hundred dollars during the winter months. You will be doing both him and us a favor.

Address your letter to Publisher The Washington Farmer, Review Building, Spokane, Wash.

Farmers in "Grain Rut"?

Adams County Man Deplores Lack of More Variation in Farm Methods in His Locality; Wants an Agriculturist Employed.



Adams County, Wash.—"The farmers are in the grain rut. The commissioners dismissed the county agent and are expecting the farmers to cooperate with the experiment farm near Lind for advanced ideas and methods."

Whatcom County, Wash.—Employment of a county agriculturist is being considered by the commissioners of Whatcom county.

In Grain Rut.

OTHELLO, Adams County, Wash., Jan. 12.—Our community is not increasing its production in grain only, but in all lines in general, and the farmers are getting better results. I would like to see more diversification in farming, but the farmers are in the grain rut, and our commissioners dismissed our county agent and are expecting the farmers to cooperate with the experiment farm near Lind for advanced ideas and methods. Not much building is going on. No fall grain has been seeded. A. O. LEE.

Want Agriculturist.

FERNDALE, Whatcom County, Wash., Jan. 15.—We have had but one short cold spell and snowfall this winter and are now having fine weather. Cattle are doing better this winter than ever before on account of the mild winter and the large hay crop of last season, and because of smaller number of stock—just enough to conveniently take care of. The price for good dairy cows is increasing, which is shown by the prices paid at local auctions. Some of the farmers are finishing out their feed on cow-kale. Farmers sold most of their old hens last fall when wheat got so high, as wheat is not raised here. There is a good market for potatoes, but farmers are not yet eager to sell. On account of the high price of powder, not much land clearing is being done this winter. The farmers are in favor of a powder plant owned by the state, or some arrangement that will provide cheap powder for land clearing. As a majority of the farmers are in favor of an expert agriculturist, the county commissioners have made known their intention of employing one. The granges and Parent-Teachers' associations are the only organizations that keep up the social life in this community. CARL J. MENZE.

Dairying Increases.

MONTBORNE, Skagit County, Wash., Dec. 27.—The dairy industry is increasing and a large number of silos have been built the past year. A large number of settlers have been buying small homes during the last two years. Very little fall grain is planted here.

JOHN B. PETERSON.

Community Was Prepared.

TWISP, Okanogan County, Wash., Jan. 8.—This community got the spirit of preparedness early and neither people nor stock suffered much from the cold. Wood is one of our natural resources, and most of the farmers do their own cutting and hauling. Most of the farmers have some stock to feed and the majority are milking a few dairy cows. Some of the farmers are after the coyotes this winter and when successful enough to capture three or four they are well rewarded for the trouble by the high prices received for the fur. Both fall and spring pigs are raised, but the spring pigs seem to be the most profitable. Some dress their hogs, but in my experience I think more money is realized by selling on foot.

GEORGE LA RUE.

Good Year in Prospect.

CENTERVILLE, Pacific County, Wash., Jan. 13.—Winter wheat has come up since the snow has melted and is looking fine, as most of it has sprouted well. A good deal of hay has been changing hands recently, selling at $18 per ton and alfalfa for $15 per ton. The ground is in fine shape to plow when not frozen, as we are having warm weather at present. It is too warm in the Columbia river district for the fruit business, although the recent cold chilled the swelling buds. Very few hogs are ready for market and the cattle are in poor shape for butchering unless fed especially for market. Not much stock is in demand on account of the high price of hay. Business in general is looking toward a good year with very few idle at present.

C. A. LESTER.

Considerable Building.

RITZVILLE, Adams County, Wash., Jan. 10.—When the weather is suitable considerable building is going on both in the country and the town. I know of only one silo in the county. We had practically no fall rains and as a consequence there was no fall seeding, and the prospect for the next season's crop is not overly bright and will depend upon the coming season. There is nothing being done here toward organizing a farm loan association.

D. A. SCOTT.

Are Interested in Roads.

BOSSBURG, Stevens County, Wash., Jan. 12.—There is quite a lot of hauling being done this winter on account of the good sleighing. Farmers are delivering hay and grain and hauling wood. The cold weather has done no damage here except to freeze some apples that were left unpicked in November. There is plenty of feed in the county and all the stock is doing well. There was but little fall plowing done and very little fall seeding, as the weather was dry. There are fewer hogs this year than usual on account of the high price of grain. Most of the farmers only raise enough for home consumption and what they do sell are dressed on the farm and shipped to Colville, Northport, and Spokane. All farmers raising pigs claim there is more profit in spring pigs, but we think there is more profit in cattle and sheep than in hogs here. We have no grange here, so the only social life is in the church and school entertainments. We are all interested in good roads more than anything at present. A number from this locality attended the road meeting held at Northport recently.

W. W. PALMER.

Fear Grain Damage.

CAMAS, Sanders County, Mont., Jan. 13.—This vicinity will increase its spring grain acreage this year. Because of the exceedingly dry fall of last year, there was not as much fall grain sown as usual. On account of the sudden cold spell after a week of warm weather, we fear the grain has been damaged. There are many new buildings going up here. We would like to see a national farm loan association in this vicinity, but on account of being under the reclamation project I am afraid we can not get in on it.

W. W. PERKINS.

Marquis Wheat Favored.

MANHATTAN, Gallatin County, Mont., Jan. 14.—Our community is rapidly increasing its holdings of sheep, mostly pure bred. These have earned, in many instances, as high as $25 per head net, for their owner. We will have a county agent in this county, which will prove a great help to the valley. Fall grain is wintering fine. There has been a great change here in the past two year, as we used to raise 80 per cent of the fall grain, mostly Turkeys. There will be 70 per cent Marquis put in for wheat this spring.

G. M. LEWIS.

Build Pit Silos.

MILES CITY, Custer County, Mont., Jan. 16.—There are quite a large number of immigrants coming to Custer county, due to the fact that there is quite a lot of homestead land to be taken up. Last fall lots of the farmers put down pit silos and from what I hear they are well pleased with the time and money expended. It would be hard to state now the condition the fall grain is in, for the ground is covered with four or five inches of snow. All indications are that the fall grain so far is in ideal condition. Custer county will put out a larger acreage of corn next year than usual, also the interest in alfalfa seed production will be increased. C. M. YERRINGTON.

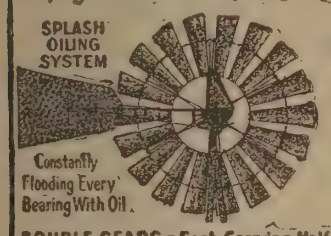
Churches Are Social.

BAKER, Baker County, Ore., Jan. 15.—The farmers' unions and churches furnish about all the social life in our community. The Pocahontas union is a very active little organization, meeting often, and having very entertaining times. We once organized a union at Wingville, a small hamlet, about one mile from my home, but it did not survive long. J. H. BAISLEY.

Wants Cooperation.

DUFUR, Wasco County, Ore., Jan. 12.—I think dairy products are the only thing on the increase unless it is fruit. Cherries and peaches are being raised a little more extensively each year. Better fences, barns, and hog houses are being built each year. What I would like to see most in this community is cooperation in shipping live stock and grain. It is hard to tell just how much damage is being done by the cold weather, but there seems to be plenty of moisture. J. A. TIDYMAN.

SELF-OILING WINDMILL
With INCLOSED MOTOR
Keeping OUT DUST and RAIN—Keeping IN OIL



DOUBLE GEARS—Each Carrying Half the Load
Every feature desirable in a windmill in the
AUTO-OILED AERMOTOR
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What's on the Fertilizer Bag?

Does your manufacturer print on the fertilizer bag, how much immediately available nitrogen (viz., Nitrates) it contains?
Many do not.
Home mixing is the safe, economical method. Mix your own fertilizers and know what you get.

My book "Home Mixing" free. Send post card for it, today.

WILLIAM S. MYERS
25 Madison Ave. New York

1842 The Seventy-Fifth Anniversary of 1917

P&O

LIGHT DRAFT PLOWS

Built for the Field Test.

Three-Quarters of a Century of "Knowing How" Hammered Into Every One of Them.

The product of the Parlin & Orendorff Co. has always been noted for simplicity of construction, great strength and ease of operation. It was upon such a basis that the founders of this business made their implements, established their reputation, and built their factory. It is upon the same foundation that the business has been carried on to this day, and in 1917 we celebrate our Diamond Jubilee; 75 years of practical experience gained through constantly striving to provide for the exacting requirements of three generations of American farmers.

For an even three-quarters of a century we have met the demand, and today we operate the largest and oldest permanently established plow factory in the whole world. "It's the way we build them."

P&O

Light Draft Plows, Harrows, Planters and Cultivators are made in all types and sizes, to meet the conditions in all sections, and are Backed by an Unqualified Guarantee.

We also make the most complete line of Traction Engine Plows produced, and we have a special catalog devoted to these famous plows.

The P&O Little Genius Engine Gang Plow

was the most popular plow shown at all points on the 1916 National Tractor Demonstration.

We will send P & O Catalogs to any address. While P & O Implements are sold only through established implement dealers, we welcome correspondence from farmers in all sections.

Ask Your Dealer or Write Us.

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Onions

Our Northern Grown, tested Onion Seeds produce BIG. Salzer's Prizetaker yielded 1800 bu. per acre. Our pedigreed strains are unexcelled for flavor, size and keeping qualities.



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Big Handsome Catalog

Miracle records in early maturity, uniformity and productiveness.

New 184-page catalog brimful of valuable information on everything for the farm and garden—field crops, vegetables, flowers.

Today is the time to send your dime. Do it NOW.

JOHN A. SALZER SEED CO.
Box 363 La Crosse, Wis.

Cherry and Pear Trees

We offer exceptionally fine trees at rock-bottom prices. Also a full line of other choice nursery stock at bargain prices. Write today.

Benedict Nursery Co.

185 E. 87th St. N. Portland, Oregon.

War Puts Farming to the Front

"Full Use of Soil Must Be Had at All Costs, Equally With Supply of Men and Material to Army"

(From the Experiment Station Record.)

Nothing in recent years has so emphasized and impressed the real importance of agriculture and agricultural institutions as the war in Europe. It has demonstrated dependence upon this art and has raised it to a preeminent position in the welfare of the country.

Ordinarily accepted without much thought or realization by the great body of people, it has suddenly sprung into an importance second only to that of the military activities. It has become, indeed, a recognized field of war service and one of the chief elements in the national defense. Its response and the resourcefulness and practical value which its institutions have shown have brought the present position of agriculture close home to the people as never before on so broad a scale.

The problem of maintaining, and in some cases increasing, the production of food for man and beast has been one of the large and difficult ones in the countries at war. It has taxed their skill and organization, and their ability to cooperate in the common good.

The way in which this extraordinary demand has been met has furnished a new realization of the great advances in every branch of farming. It has entitled agriculture to a regard and consideration which it has not always enjoyed before. If it has not actually raised it to a new position in the lives of nations, intelligent understanding of its position has greatly broadened.

And along with the rest this supreme test has furnished an impressive illustration of the great share which agricultural investiation, education and various forms of instruction have had in placing agriculture on a higher plane of efficiency and in making it more resourceful and adequate.

The response of agriculture is in no small measure a reflection of the steady work of various classes of agricultural institutions and organizations, which has been going on quietly and often with meager support or understanding. The measure of strength of these agencies, and the extent to which there has been some form of agricultural organization to assist, has been a large factor in meeting the unusual situation.

The first efforts in the various countries centered largely on providing the machinery for gathering in and saving the crops, and in this the assistance of the military was furnished to a limited degree. But as time went on the necessity became apparent of providing for the continuance of agriculture on the highest possible plane, of keeping up the fertility of the land, of preventing the depletion of live stock, of avoiding waste of all kinds, and often of discovering and utilizing new sources of supplies. Organized effort was therefore enlarged and increasing latitude extended in the temporary use of soldiers.

The attitude of cooperation between the military and civil authorities is well illustrated by the instructions of the French minister of agriculture in transferring to district commanders the assignment of soldiers to agricultural duties. He said:

"The regular, prompt, and (as far as possible) complete execution of agricultural work constitutes one of the essential elements of national resistance and consequently one of the principal forces of success. The full use of the soil must be obtained at all costs, equally with the supply of men and material to the army, or the supply of labor to factories engaged in national defense."

Soldiers were classified on the basis of farm experience, and opportunity given them to offer themselves for temporary work in the fields. In order to avoid unfavorable reflection upon such, the idea was widely disseminated that soldiers thus volunteering to assist in farm work were not to be regarded as "shirkers," but on the contrary as men doing a double patriotic duty by fighting and by keeping their brother fighters alive.

In Great Britain the measures and appeals of the government have shown no less appreciation of the importance of agricultural work. In directing public attention to the need of special efforts the president of the board of agriculture expressed the conviction that "if agriculture had made no more progress in Germany than it has in the United Kingdom during the period 1895-1915, the Germany Empire would have been at the end of its food resources long before the second year of the war;" and he explained further that the war was being fought by that country quite as much on an agricultural as on a military organization of the nation.

In an appeal to farmers for an increase in the food production of England Lord Selborne said: "You have something more on your shoulders than your own business today. You are no longer individual farmers making your own fortunes or losing them. You are trustees on your own land to do your best for England. You have your duty quite as clear and as definite as the captain of a cruiser or the colonel of a battalion. England has a claim on you farmers, men and women of every class, as clear as she has on our sons and husbands to go and serve in the trenches."

The force of the situation in Great Britain is illustrated by the fact that of the total area of cultivated land, two-thirds is in permanent grass and only one-third in cultivated crops, whereas in Germany the proportion is exactly reverse; and, furthermore, by the fact that even in 1915, when the wheat crop was the largest for many years, three-fourths of the wheat supply of Great Britain had to be imported. In 1915 the United Kingdom imported agricultural products valued at 276,803,000 pounds, whereas in the year before the war France spent only 60,000,000 pounds for imported food products.

Similarly, in Germany the need for the greatest possible production of food has been impressed upon the people. The thorough cultivation has been urged of every available piece of land on farms and in towns, and societies have been formed to take the work in hand. Efforts have been made, for example, by the Moor Culture Union to increase vegetable growing on moor land, the society announcing allowances to disabled soldiers settling on such lands.

The measures adopted by the various nations are of much interest. The French government early applied organization to the resumption of farming in affected areas and its continuance on an efficient basis elsewhere. To save the crops the small holdings were "pooled," the inhabitants of the villages who remained being grouped together for that purpose and the assistance of the military given when circumstances allowed. The government also took measures to prevent the wholesale slaughter of live stock, first suppressing the customs duty on practically all foodstuffs, including frozen meat, and then excluding from requisition for army purposes cows in milk or in calf, brood mare, premium sires, pedigreed stock, heifers and plow oxen. Similar measures were taken in Great Britain and Germany. In the districts of France that had been invaded, the peasants were in need of horses, implements, seeds, fertilizers, forage, etc. To provide these the government made advances to the peasants, and to prevent the credit banks from breaking down from demands upon them it loaned money to the Caisses Regionales de Credit Agricole, which in turn advanced money to the cooperative societies. Steps were taken to increase the amount of gardening carried on by putting the opportunity for cultivating gardens within reach of even the humblest.

The services of school masters were enlisted to instruct children in gardening and to carry on model gardens.

In Great Britain the organization for agriculture has been greatly extended and strengthened. War agricultural committees and borough war food societies have been organized extensively for the assistance of farmers and to secure further allotments of land for cultivation.

Attention has been turned to the utilization of land not ordinarily employed in agriculture, such as private parks, golf links, pleasure grounds, etc., as well as bringing more land into cultivated crops, employment of waste woodland for raising pigs, etc.

The farmers have been urged to plow up the poorer of the permanent pastures, shorten the period of grass and clover rotations, bring the remaining grass into the highest stage of production to enable it to carry more stock, reduce the acreage of bare fallow, and to cultivate more extensively crops for food and for animals.

The labor problem has been a difficult one in all the countries. In Great Britain persons employed in certain agricultural occupations have been exempted from military duty, but despite this, it is estimated that up to the middle of 1916, 320,000 men had been taken from the land. Special efforts have been made to secure labor at critical times, as during harvest, by a national volunteer movement, and women have been drawn into agricultural occupations as never before. In this they have shown marked adaptability and brought much favorable commendation on their services.

The various measures in aid of agriculture have presented fine examples of cooperation between national, state and local agencies. There has been cooperation between the civil and military branches, supported by a realization of the necessities of each, and between governmental and private organizations, often formed voluntarily for the purpose. The strength which this union of effort has given has enabled agriculture to maintain itself under most trying conditions.

But the measures for maintaining the food supply and other necessities have not stopped with the physical means of production. They have extended to advice and direction on the side of better farming, the conservation of supplies, and the utilization of new sources. The effort has tested ingenuity and resourcefulness to an unusual degree, and in this direction has led to new demands upon the various classes of agricultural institutions.

The war has gone a long way to impress upon governments and the public generally the vital position which production occupies and the advantages of the new agriculture. The supreme importance of scientific research in all branches has been impressed upon the countries of Europe by the most remarkable demonstrations ever furnished. In these demonstrations and convictions the indispensableness of science to an adequate agriculture has been given a new understanding, and in the general results the institutions and working forces charged with the prosecution of science and education in agriculture have richly shared.

Sidelights

Continuous Mortgage.

A motorist says: "I mortgaged my house to buy my automobile. Then I mortgaged my automobile to build a garage. Now I have mortgaged my garage to buy gasoline."

The Hired Man.

"Si Hubbard told me that he got a heap of work out of you when you was workin' fer him," said the farmer.

"Well, I allow he did," said the hired man.

"Yas. Fact is, I guess he jist about got it all."—Boston Transcript.

A Large Bedroom.

Easterner (after first day's work on a big western ranch)—Will you please show me where I can sleep tonight?

Rancher—Where you can sleep? Great Scott, man, here are 10,000 acres; jest pick out any blame spot that suits you and go to it.—New York Times.

A Parting Shot.

"But couldn't you learn to love me, Stella?" he pleaded.

"I don't think I could, Frank," she replied.

He stood erect, then quickly reached for his hat. "It is as I feared—you are too old to learn."—Everybody's Magazine.

Danger in Sight.

The cat settled himself luxuriously in front of the kitchen range and began to purr. Little Dolly, who was strange to the ways of cats, regarded her with horror.

"O gran'ma, gran'ma!" she cried. "Come here quick. The cat's begun to boil."—Christian Register.

Definite.

Stranger—How many machines pass here a day?

Farmer—I couldn't tell ye, exactly, sir!

Tourist——Oh, about how many?

Farmer—It all depends.

Tourist—Well, on the average?

Farmer—Wal, stranger, the average varies.

For the Needy.

The pastor announced that the collection of the day would be for the poor. The plate was passed to a man known to have plenty, but known also to be inclined to keep it. He did not contribute. The collector came around to him again. Again he did not contribute. Again, after a little, the plate was brought back. The rich man looked up at the collector and said: "Pass it on; I can't afford to give anything today."

"That's all right," replied the collector, still holding the plate before him. "Take out some. Didn't you hear the pastor say it was for the poor?"

All the World's a Stage, and All the Men and Women Merely Players

First Woman Dog Catcher



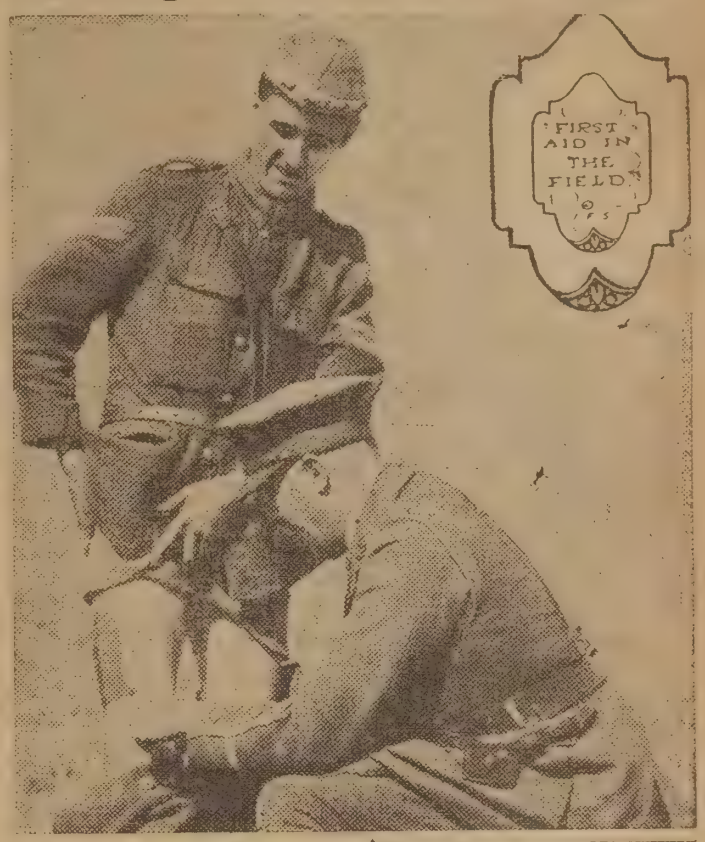
Milwaukee's latest municipal "wrinkle" is a woman dog catcher. Miss Ella Cawker has received official appointment to the position. She is the only woman dog catcher in the United States, it is said.

Late Admiral Dewey.



Admiral George Dewey, the nation's Spanish war hero, and by priority of grade the ranking naval officer of the world, died at his home in Washington, D. C., January 16, in his 80th year. A general breakdown was the cause of death.

Dressing a Wound in the Trenches



Unless an opportunity presents itself, the slightly wounded are not attended to at all while an engagement is taking place. The soldier shown in the picture, however, has been injured in a mild skirmish and is having his hurts cared for right on the scene.

Russia's New Premier.



Prince Golitzine, a member of the extremely conservative group in Russian politics, has succeeded General Trepoff as premier of Russia.

Niece of Carranza.



"The situation in Mexico is similar to that in Poland just before its fall—nobles and peans, with no backbone in the middle to hold them together."

This is the statement of Miss Oralia Carranza, a niece of General Venustiano Carranza, provisional president of Mexico. Miss Carranza thinks that what Mexico needs most just now is an extensive public school system which will produce a middle class, thus furnishing the backbone to hold the peons and nobles in contact. Miss Carranza is very anxious that Americans shall not believe all of her countrymen are bandits, and points out that Mexico City, Vera Cruz and other cities of her country have very much the same sort of social life that we have in any of our cities and towns. Miss Carranza has completed her education here and soon will return to Mexico.

Making Ready for an Offensive



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Preparing artillery, even though it be of light caliber, for an extensive attack is no small job. Here artillerymen are seen preparing the position for an artillery offensive against the German forces on the western front.

Belgian Infantry Taking a Hike



Copyrighted by International Film Service.

The opening of dikes and the flooding of the lowlands made it impossible for the Germans to move their lines close to the Belgians and the only actions in which the Belgians now take part are artillery bombardments, long marches and frequent maneuvering to keep in training. This picture shows a detachment of Belgian infantry on a hike.

On His Way, Where?



Los Angeles Times

Invents Artificial Hand

Performs Many Functions of a Real, Live Member

An artificial hand that may be a formidable competitor for the large prize offered by the French government—unless the fact that its inventor was financed by the German museum at Zurich, Switzerland, makes it ineligible—has just been invented. It was made by a M. Will, who has succeeded in producing a substitute that will perform a really remarkable number of the actions of a real living hand.

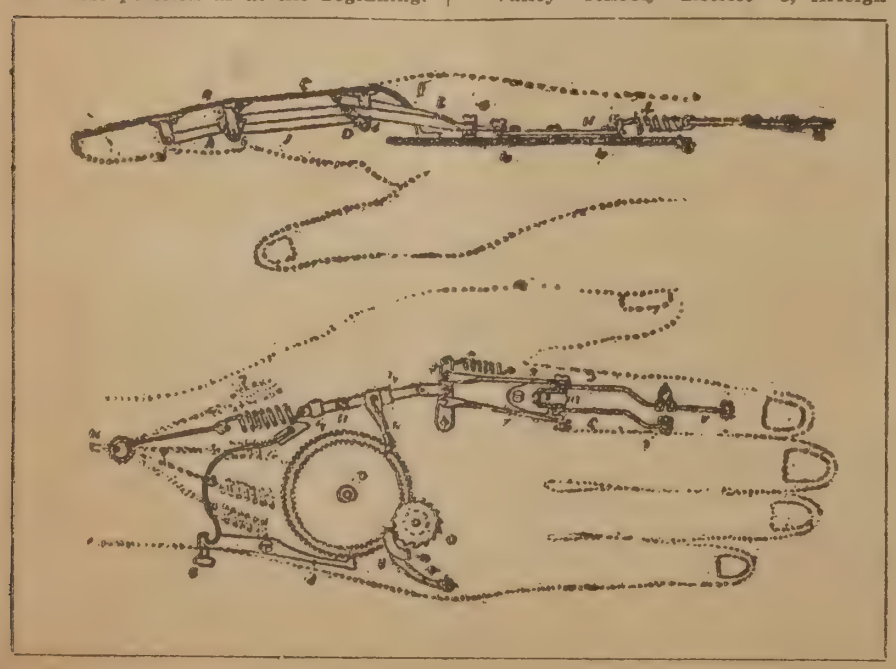
The chief duty of a hand is to grasp, This artificial hand grasps, and does it with the arm in any position. To make it ungrasp, open, let go, the wearer has only to press it upon a table or to press his upper arm against his body.

Each finger is composed of three joints, like the natural hand. The joints are connected with each other and to the palm of the hand by hinges. In the nail joint a lever (A) moves about a point of rotation (a). This lever terminates in the second joint in an angular piece (B), which turns on the point of rotation (b) and is operated by the lever (C), which in turn is extended into the third joint as far as the angular piece (D), moving around (d) by means of the levers (E), (F) and (G) and the guide (H). The guide (H) is placed in the bearings (h1) and (h2), attached to the back of the hand. This arrangement allows of the movement of the first joint. Arranged parallel to this transmission there is a second transmission which operates the middle joint. At the lower end of this and moving around the pivot (i) is attached the movable lever (J), which, like the lever (C), terminates in the angular piece (D). The lever (K) affects the movement of the third joint. This lever is joined to the guide (H) by means of the levers (F) and (C). By applying the arms of the levers of various lengths to the angular pieces (B) and (D), the closing of the hand is effected gradually, as in the case of the natural hand.

There is one of these arrangements for each finger. In order to simplify the diagrams the apparatus of only one finger is here shown.

On the guide (H) there is a spring (L) which is attached to a wire (M). The wire is connected by means of a little bracelet to the upper arm, just a little above the elbow. The guide (H) carries a click (N), which engages in a movable ratchet (O). A detent (P) holds the ratchet meshes with a lever wheel (Q) engaging with lever (R). When the wire (M) is pulled the movement is communicated to the spring (L) and then to the system of levers about the object to be grasped, while the click (N) passes over the ratchet (O) and when the pull ceases it engages in one of the teeth of the ratchet. The detent (P) ensures the maintenance of the [illegible] and at the same time releases the spring (L) from all draft or pressure. Upon pressing the button (S) the detent (P) is disengaged from the ratchet, which is then set free and can yield to the force exercised by the spring (T) on the lever (F). In this way the system of levers returns to the same position as at the beginning. In other words, the finger stretches out and the lever stop (R) prevents the finger from opening quickly, causing a gradual motion like that of the natural hand.

The number of movements may be extended considerably by varying the form of the teeth in the ratchet. The hand may be closed entirely, permitting the carrying of anything, the thumb pressing against the index finger. The interior surfaces of the fingers in the hand are provided with an elastic padding, allowing objects to be grasped gently.

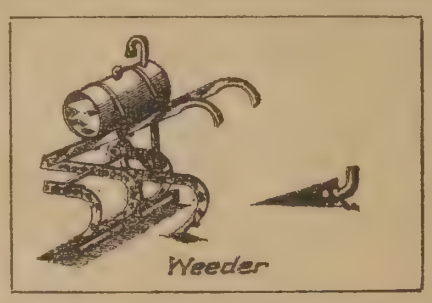


Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Weed Cutter and Sprayer.

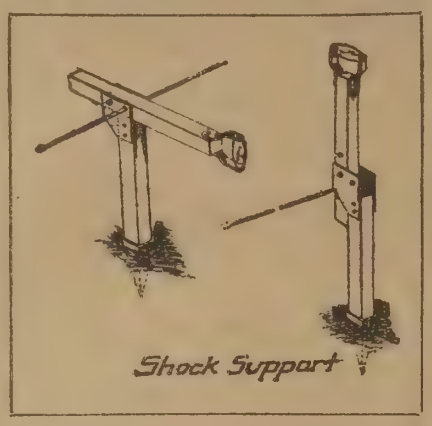
The new feature of this weeder is that the surface blade has a sprayer



attachment which discharges liquid beneath the surface of the ground to kill objectionable plants and larvae. The device can be attached to an ordinary cultivator.

Shock Support.

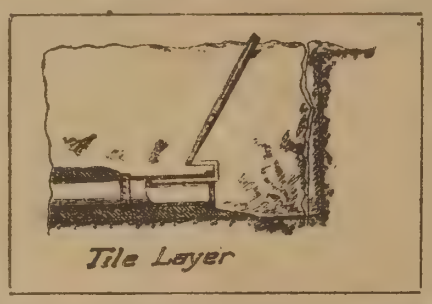
The support is set up where a shock is to be formed The corn is piled around



it and bound, then the rod is pulled out and the support is removed to the position for the next shock.

Tile Layer.

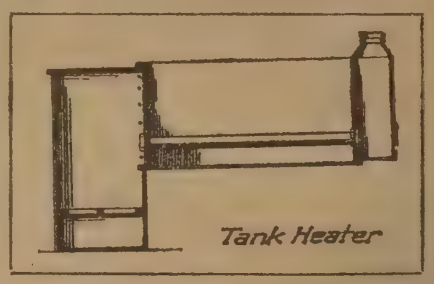
The title hook shown here is fastened



adjustably to the long handle by means of a bolt and thumb nut. It enables a man to lay drain tile without getting into the trench.

Tank Heater.

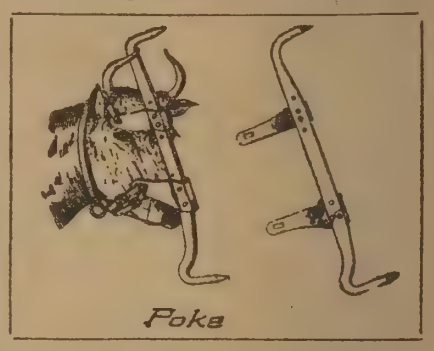
The water in this tank is heated by means of flues which pass through the tank from the furnace, on the left, to



the smoke box, on the right. The idea is to prevent the water from freezing in very cold weather.

Animal Poke.

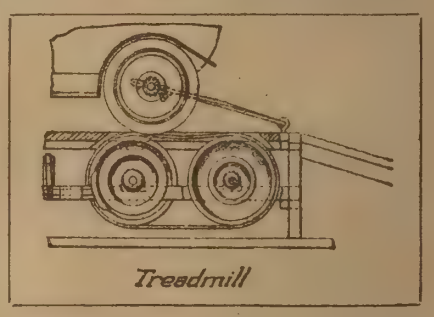
The advantages claimed for this poke are that it prevents a cow from going through, over or under a fence, and from eating stacked fodder, also that



it prevents a calf from sucking its mother. It consists of two hooked bars pivoted in front of the nose and attached by straps.

Automobile Tread Mill.

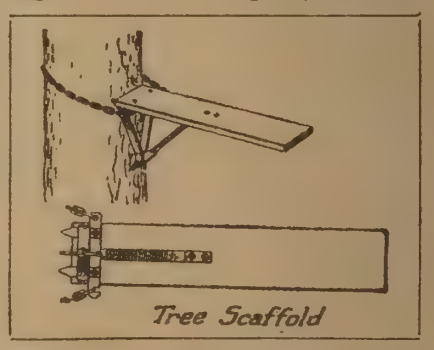
Each rear wheel of the car here rests on a belt just behind the forward pulley, and the power, used to drive other



machines, is taken from the axle of one pair of pulleys. The car is held stationary by a brace in the rear.

Tree Scaffold.

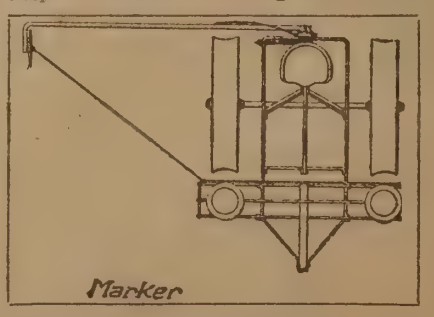
The object of this invention is to provide a scaffold to be used in felling trees. The chopper drives the spurs into the tree, with the board at an angle of about 45 degrees, and then



fastens the chains about the tree. His weight on the board drives the spurs farther into the tree and thus makes the scaffold secure.

Marker for Planters.

The special feature of this invention is a spring mechanism which helps the driver to swing the marker



from one side to the other. It is placed at the rear of the planter frame above the marker pivot.



The schools of Stevens county, Wash., are beginning to recognize the value of our free school library offer. Much of this interest is due to the indorsement of the plan by the County School Superintendent Elizabeth Stannard, who is untiring in her efforts to secure for each school in the county additional advantages.

Six more schools in this county have organized Red and Blue library teams for the purpose of obtaining books through our offer:

Union Flat school, district 40, Hazel A. Durham, teacher, 31 pupils.

Old Dominion school, district 137, Myrtle Donley, teacher, 37 pupils.

Lake school, district 4, Sudie L. Lee, teacher, 22 pupils.

Chewelah grade, district 22, A. D. Plum, principal, 35 pupils.

Chewelah grade, district 22, Muriel E. Sherwood, teacher, 38 pupils.

Valley school, district 3, Arleigh Hough, superintendent, 30 pupils.

Narcisse school, district 58, Daisy Lorenz, teacher, has been working for some time with a royal good will and have their library partially secured. But a little more help from friends and neighbors will be needed to complete their campaign. With the spirit they are working in they will get this, we are sure.

V. I. Tucker, Principal, Bossburg school, district 52, tells us that his pupils are enjoying their library of 25 books very much since they were obtained through our plan. Other teachers in that vicinity are interested and have made inquiries of him concerning our offer.

White Swan school, district88, Yakima county, C. A. Payne, principal, 45 pupils, organizes for a contest. Other schools already working in this county are reporting fine success.

Parents in each district of the state should take a keen interest in aiding their schools to obtain some of these books. Our offer includes a list of 540 books, suitable for the needs of lower, intermediate and higher grades, from which to make selections. All books are neatly bound in cloth, printed in clear type on a fine quality of paper. These books are not only of benefit to the pupils, but to the home folks as well, as they have the advantage of reading them when brought into the home by their children. If your school has not already taken advantage of our offer, an inquiry from yourself or the teacher of your district will afford us an opportunity to forward you full information as to our free school library plan.

Honor List.

Marguerite Wall, Hazel Taylor, May Greiner (6), George Cox, Perry Tripp, Dorothy Browne (2), Sidney Bernier, Elsie Johnson, Elizabeth Fogelquist, Laurel Miller and Lucile Howard of Selah school, Selah, Wash., R. D. No. 2; Willie Hall, Narcisse school, Colville, Wash., and Wayne Lewis and Howard Garber of River school, Almira, Wash.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

BY EDWIN CASKODEN

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SYNOPSIS.

Charles Brandon, who has neither wealth nor title, wins distinction for having defeated the heretofore unconquerable duelist, Judson. Brandon is installed as one of the captains of the guard of King Henry VIII. Edwin Caskoden (who tells the story) is Master of the Dance at London Court. The two young men become fast friends. Edwin tells Brandon of the willful, but adorable Mary Tudor, who had coaxed her royal brother Henry out of many proposed marriages which had been arranged for Henry's advantage. Edwin confesses that he, like scores of other men, had fallen in love with Mary, but upon Mary's refusal to marry him, he immediately became attracted to the good and beautiful Lady Jane Bolingbroke. He predicts that Brandon will soon fall a victim to Mary's charms.

CHAPTER III.—(Continued.)

Now, when Mary returned the whole court rejoiced, and I was anixious for Brandon to meet her and that they should become friends. There would be no trouble in bringing this meeting about, since, as you know, I was upon terms of intimate friendship with Mary and was the avowed, and, as I thought, at least hoped, all but accepted lover of her first lady in waiting and dearest friend, Lady Jane Bolingbroke. Brandon, it is true, was not noble; not even an English knight, while I was both knighted and noble; but he was of as old a family as England boasted, and near of kin to some of the best blood of the land. The meeting came about sooner than I expected, and was very near a failure. It was on the second morning after Mary's arrival at Greenwich. Brandon and I were walking in the palace park when we met Jane, and I took the opportunity to make these, my two best-loved friends, acquainted.

"How do you do, Master Brandon?" said Lady Jane, holding out her plump little hand, so white and soft, and dear to me. "I have heard something of you the last day or so from Sir Edwin, but had begun to fear he was not going to give me the pleasure of knowing you. I hope I may see you often now, and that I may present you to my mistress."

With this, her eyes, bright as overgrown dewdrops, twinkled with a mischievous little smile, as if to say: "Ah, another large, handsome fellow to make a fool of himself."

Brandon acquiesced in the wish she had made, and, after the interchange of a few words, Jane said her mistress was waiting at the other side of the grounds, and that she must go. She then ran off with a laugh and a courtesy, and was soon lost to sight behind the shrubbery at the turning of the walk.

In a short time we came to a summer house near the marble boat-landing, where he found the queen and some of her ladies awaiting the rest of their party for a trip down the river, which had been planned the day before. Brandon was known to the queen and several of the ladies, although he had not been formally presented at an audience. Many of the king's friends enjoyed a considerable intimacy with the whole court without ever receiving the public stamp of recognition socially, which goes with a formal presentation.

The queen, seeing us, sent me off to bring the king. After I had gone, she asked if any one had seen the Princess Mary, and Brandon told her Lady Jane had said she was at the other side of the grounds. Thereupon her majesty asked Brandon to find the princess and to say that she was wanted.

Brandon started off and soon found a bevy of girls sitting on some benches under a spreading oak, weaving spring flowers. He had never seen the princess, so could not positively know her. As a matter of fact, he did know her, as soon as his eyes rested on her, for she could not be mistaken among a thousand—there was no one like her or anything near it. Some stubborn spirit of opposition, however, prompted him to pretend ignorance. All that he had heard of her wonderful power over men, and the servile manner in which they fell before her, had aroused in him a spirit of antagonism, and had begotten a kind of distaste beforehand. He was wrong in this, because Mary was not a coquette in any sense of the word, and did absolutely nothing to attract men, except to be so beautiful, sweet and winning that they could not let her alone; for all of which surely the prince of fault-finders himself could in no way blame her.

She could not help it that God had seen fit to make her the fairest being on earth, and the responsibility would have to lie where it belonged—with God; Mary would have none of it. Her attractiveness was not a matter of volition or intention on her part. She was too young for deliberate snare-setting—though it often begins very early in life—and made no effort to attract men. Man's love was too cheap a thing for her to strive for, and I am sure, in her heart, she would infinitely have prefered to live without it—that is, until the right one should come. The right one is always on his way, and, first or last, is sure to come to every woman—sometimes, alas! too late—and when he comes, be it late or early, she crowns him, even though he be a long-eared ass. Blessed crown! and thrice-blessed blindness—else there were fewer coronations.

So Brandon stirred this antagonism and determined not to see her manifold perfections, which he felt sure were exaggerated; but to treat her as he would treat the queen—who was black and leathery enough to frighten a satyr—with all respect due to her rank, but with his own opinion of her, nevertheless, safely stored away in the back of his head.

Coming up to the group, Brandon took off his hat, and, with a graceful little bow that let the curls fall around his face, asked: "Have I the honor to find the Princess Mary among these ladies?"

Mary, whom I know you will at once say was thoroughly spoiled, without turning her face toward him, replied: "Is the Princess Mary a person of so little consequence about the court that she is not known to a mighty captain of the guard?"

He wore his guardsman's doublet, and she knew his rank by his uniform. She had not noticed his face.

Quick as a flash came the answer: "I can not say of what consequence the Princess Mary is about the court; it is not my place to determine such matters. I am sure, however, she is not here, for I doubt not she would have given a gentle answer to a message from the queen. I will continue my search." With this, he turned to leave, and the ladies, including Jane, who was there and saw it all and told me of it, awaited the bolt they knew would come, for they saw the lightning gathering in Mary's eyes.

Mary sprang to her feet with an angry flush in her face, exclaiming, "Insolent fellow, I am Princess Mary; if you have a message, deliver it and be gone." You may be sure this sort of treatment was such as the cool-headed, daring Brandon would repay with usury; so, turning upon his heel, and almost presenting his back to Mary, he spoke to Lady Jane:

"Will your ladyship say to her highness that her majesty, the queen, awaits her coming at the marble landing?"

"No need to repeat the message, Jane," cried Mary; "I have ears and can hear for myself." Then turning to Brandon: "If your insolence will permit you to receive a message from so insignificant a person as the king's sister, I beg you to say to the queen that I will be with her presently."

He did not turn his face toward Mary, but bowed again to Jane.

"May I ask your ladyship further to say for me that if I have been guilty of any discourtesy I greatly regret it. My failure to recognize the Princess Mary grew out of my misfortune in never having been allowed to bask in the light of her countenance. I can not believe the fault lies at my door, and hope for her own sake that her highness, upon second thought, will realize how ungentle and unkind some one has been." And with a sweeping courtesy he walked quickly down the path.

"The insolent wretch!" cried one.

"He ought to hold papers on the pillory," said another.

"Nothing of the sort,' broke in sensible, fearless little Jane; "I think the Lady Mary was wrong. He could not have known her by inspiration."

"Jane is right," exclaimed Mary, whose temper, if short, was also short-lived, and whose kindly heart always set her right if she but gave it a little time. Her faults were rather those of education than of nature. "Jane is right; it was what I deserved. I did not think when I spoke, and did not really mean it as it sounded. He acted like a man, and looked like one, too, when he defended himself. I warrant the pope at Rome could not run over him with impunity. For once I have found a real live man, full of manliness. I saw him in the lists at the Windsor a week ago, but the king said his name was a secret, and I could not learn it. He seemed to know you, Jane. Who is he? Now tell us all you know. The queen can wait."

And her majesty waited on a girls' curiosity.

I had told Jane all I knew about Brandon, so she was prepared, with full information, and gave it. She told the princess who he was; of his terrible duel with Judson; his bravery and adventures in the wars; his generous gift to his brother and sisters, and lastly, "Sir Edwin says he is the best-read man in the court, and the bravest, truest heart in Christendom."

After Jane's account of Brandon, they all started by a roundabout way for the marble landing. In a few moments whom did they see, coming toward them down the path, but Brandon, who had delivered his message and continued his walk. When he saw whom he was about to meet, he quietly turned in another direction. The Lady Mary had seen him, however, and told Jane to run forward and bring him to her. She soon overtook him and said:

"Master Brandon, the princess wishes to see you." Then, maliciously, "You will suffer this time. I assure you she is not used to such treatment. It was glorious, though, to see you resent such an affront. Men usually smirk and smile foolishly and thank her when she smites them."

Brandon was disinclined to return.

"I am not in her highness' command," he answered, "and do not care to go back for a reprimand when I am in no way to blame."

"Oh, but you must come; perhaps she will not scold this time," and she put her hand upon his arm, and laughingly drew him along. Brandon, of course, had to submit when led by so sweet a captor—anybody would. So fresh and fair, and lovable was Jane, that I am sure anything masculine must have given way.

Coming up to the princess and her ladies, who were waiting, Jane said, "Lady Mary, let me present Master Brandon, who, if he has offended in any way, humbly sues for pardon." That was the one thing Brandon had no notion on earth of doing, but he let it go as Jane had put it, and this was his reward:

"It is not Master Brandon who should sue for pardon," responded the princess, "it is I who was wrong. I blush for what I did and said. Forgive me, sir, and let us start anew." At this she stepped up to Brandon and offered him her hand, which he, dropping to his knee, kissed most gallantly.

"Your highness, you can well afford to offend when you have so sweet and gracious a talent for making amends; 'A wrong acknowledged,' as some one has said, becomes an obligation.'" He looked straight into the girl's eyes as he said this, and his gaze was altogether too strong for her, so the lashes fell. She flushed and said with a smile that brought the dimples:

"I thank you; that is a real compliment." Then laughingly: "Much better than extravagant comments on one's skin, and eyes, and hair. We are going to the queen at the marble landing; will you walk with us, sir?" And they strolled away together, while the other girls followed in a whispering, laughing group.

Was there ever so glorious a calm after such a storm?

"Then those mythological compliments," continued Mary, "don't you dislike them?"

"I cant' say that I have ever received many—none that I recall," replied Brandon, with a perfectly straight face, but with a smile trying its best to break out.

"Oh! you have not? Well! how would you like to have somebody always telling you that Apollo was humpbacked and misshapen compared with you; that Endymion would have covered his face had he but seen yours, and so on?"

"I don't know, but I think I should like it—from some persons," he replied, looking ever so innocent.

This savored of familiarity after so brief an acquanintance, and caused the princess to glance up in slight surprise; but only for the instant, for his innocent look disarmed her.

"I have a mind to see," she returned, laughing and throwing her head back, as she looked up at him out of the corner of her lustrous eyes. But I will pay you a better compliment. I positively thank you for the rebuke. I do many things like that, for which I am always sorry. Oh! you don't know how difficult it is to be a good princess." And she shook her head, with a gathering of little trouble-wrinkles in her forehead, as much as to say, "There is no getting away from it, though." Then she breathed a soft little sigh of tribulation as they walked on.

"I know it must be a task to be good when everybody flatters even one's shortcomings," said Brandon, and then continued in a way that, I am free to confess, was something priggish. "It is almost impossible for us to see our own faults, even when others are kind enough to point them out, for they are right ugly things and unpleasant to look upon. But lacking those outside monitors, one must all the more cultivate the habit of constant inlooking and self-examination. If we are only brave enough to confront our faults and look them in the face, ugly as they are, we shall be sure to overcome the worst of them. A striving toward good will achieve at least a part of it."

"Oh!" returned the princess, "but what is good and what is wrong? So often we can not tell them apart until we look back at what we have done, and then it is all too late. I truly wish to be good more than I desire anything else in the world. I am so ignorant and helpless, and have such strong inclinations to do wrong that sometimes I seem to be almost all wrong. The priests say so much, but tell us so little. They talk about St. Peter and St. Paul, and a host of other saints and holy fathers and what nots, but fail to tell us what we need every moment of our lives; that is, how to know the right when we see it, and how to do it; and how to know the wrong and how avoid it. They ask us to believe so much, and insist that faith is the sum of virtue, and the lack of it the sum of sin; that to faith all things are added; but we might believe every syllable of their whole disturbing creed, and then spoil it, all through blind ignorance of what is right and what is wrong.

"'As to knowing right and wrong," replied Brandon, "I think I can give you a rule which, although it may not cover the whole ground, is excellent for everyday use. It is this: Whatever makes others unhappy is wrong; whatever makes the world happier is good. As to how we are always to do this, I can not tell you. One has to learn that by trying. We can but try, and if we fail altogether, there is still virtue in even futile effort along the right."

Mary bent her head as she walked along in thought.

"What you have said is the only approach to a rule for knowing and doing the right, I have ever heard. (Now what do you think of me as a flatterer?) But it will do no good; the bad is in me too strong; it always does itself before I can apply any rule, or even realize what is coming." And again she shook her head with a bewitching little look of trouble.

"Pardon me, your highness; but there is no bad in you. It has been put on you by others, and is all on the outside; there is none of it in your heart at all. That evil which you think comes out of you, simply falls off you; your heart is all right, or I have greatly misjudged you." He was treating her almost as if she were a child.

"I fear, Master Brandon, you are the most adroit flatterer of all," said Mary, shaking her head and looking up at him with a side glance, "people have deluged me with all kinds of flattery—I have the different sorts listed and labeled—but no one has ever gone to the extravagant length of calling me good. Perhaps they think I do not care for that; but I like it best. I don't like the others at all. If I am beautiful or not, it is as God made me, and I have nothing to do with it, and desire no credit, but if I could only be good it might be my own doing, perhaps, and I ought to have praise. I wonder if there is really and truly any good in me, and if you have

(Continued on following page.)

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from preceding page.)

read me aright." Then looking up at him with a touch of consternation: "Or are you laughing at me?"

Brandon wisely let the last suggestion pass unnoticed.

"I am sure that I am right; you have glorious capacities for good, but alas! corresponding possibilities for evil. It will eventually depend upon the man you marry. He can make out of you a perfect woman, or the reverse." Again there was the surprised expression in Mary's face, but Brandon's serious look disarmed her.

"I fear you are right, as to the reverse, at any rate; and the worst of it is, I shall never be able to choose a man to help me, but shall sooner or later be compelled to marry the creature who will pay the greatest price."

"God forbid!" said Brandon reverently.

They were growing rather serious, so Mary turned the conversation again into the laughing mood, and said, with a half sigh: "Oh! I hope you are right about the possibilities for good, but you do not know. Wait until you have seen more of me."

"I certainly hope I shall not have long to wait."

The surprised eyes again glanced quickly up to the serious face, but the answer came: "That you shall not;—but here is the queen, and I suppose we must have the benediction." Brandon understood her hint—that the preaching was over—and taking it for his dismissal, playfully lifted his hands in imitation of the old bishop of Canterbury and murmured the first line of the Latin benediction. Then they both laughed and courtesied, and Brandon walked away.

CHAPTER IV.

I laughed heartily when Jane told me of the tilt between Brandon and Princess Mary, the latter of whom was in the habit of saying unkind things and being thanked for them.

Brandon was the wrong man to say them to, as Mary learned. He was not hot-tempered; in fact, just the reverse, but he was the last man to brook an affront, and the quickest to resent, in a cool-headed, dangerous way, an intentional offense.

He respected himself and made others do the same, or seem to do so, at least. He had no vanity—which is but an inordinate desire for those qualities that bring self-respect, and often the result of conscious demerit—but he knew himself, and knew that he was entitled to his own good opinion. He was every inch a man, strong, intelligent and brave to temerity, with a reckless disregard of consequences, which might have been dangerous had it not been tempered by a dash of prudence and caution that gave him ballast.

I was not surprised when I heard of the encounter: for I knew enough of him to be sure that Mary's high-handedness would meet its counterpart in my cool friend Brandon. It was, however, an unfortunate victory, and what all Mary's beauty and brightness would have failed to do, her honest, open acknowledgment of wrong, following so quickly upon the heels of her fault, accomplished easily. It drew him within the circle of her fatal attractions, and when Jane told me of it, I knew his fate was sealed, and that, sooner or later, his untouched heart and cool head would fall victim to the shafts that so surely winged all others.

It might, and probably would be, "later," since, as Brandon had said, he was not one of those who wore his heart upon his sleeve. Then he had that strong vein of prudence and caution, which, in view of Mary's unattainableness, would probably come to his help. But never was man's heart strong enough to resist Mary Tudor's smile for long.

There was this difference between Brandon and most others; he would be slow to love, but when love should once fairly take root in his intense nature, he would not do to trifle with.

That night after the meeting Mary cuddled up to Jane, who slept with her, and whispered, half bashfully:

"Tell me all about Brandon; I am interested in him. I believe if I knew more persons like him I should be a better girl, notwithstanding he is one of the boldest men I ever knew. He says anything he wishes and, with all his modest manner, is as cool with me as if I were a burgher's daughter. His modesty is all on the outside, but it is pretty, and pretty things must be on the outside to be useful. I wonder if Judson thought him modest?"

Jane talked of Brandon to Mary, who was in an excellent humor, until the girls fell asleep.

When Jane told me of this I became frightened; for the surest way to any woman's heart is to convince her that you make her better, and arouse in her breast purer impulses and higher aspirations. It would be bad enough should Brandon fall in love with the princess, which was almost sure to happen, but for them to fall in love with each other meant Brandon's head upon the block, and Mary's heart ruined, broken and empty for life. Her strong nature, filled to the brim with latent passion, was the stuff of which love makes a conflagration that burns to destruction; and should she learn to love Brandon, she would move heaven and earth to possess him.

She whose every desire from childhood up had been gratified, whose every whim seemed to her a paramount necessity, would stop at nothing when the dearest wish a woman's heart can coin was to be gained or lost. Brandon's element of prudence might help him, and might forestall any effort on his part to win her, but Mary had never heard of prudence, and man's caution avails but little when set against woman's daring. In case they both should love, they were sure to try for each other, and in trying were equally sure to find ruin and desolation.

A few evenings after this I met the princess in the queen's drawing room. She beckoned me to her and, resting her elbows on the top of a cabinet, her chin in her hands, said: "I met your friend, Captain Brandon, a day or two ago. Did he tell you?"

'No," I answered; "Jane told me, but he has not mentioned it."

It was true Brandon had not said a word of the matter, and I had not spoken of it, either. I wanted to see how long he would remain silent concerning an adventure that would have set most men of the court boasting away at a great rate. To have a tilt with the ever-victorious Mary, and to come off victor, was enough, I think, to loosen any tongue less given to bragging than Brandon's.

"So," continued Mary, evidently somewhat piqued, "he did not think his presentation to me a thing worth mentioning? We had a little passage-at-arms, and, to tell you the truth, I came off second best, and had to acknowledge it, too. Now what do you think of this new friend of yours? And he did not boast about having the better of me? After all there is more virtue in his silence than I at first thought." And she drew back her head, and clapped her hands and laughed with the most contagious little ripple you ever heard. She seemed not to grieve over her defeat, but dimpled as though it were a huge joke, the thought of which rather pleased her than otherwise. Victory had grown stale for her, although so young.

"What do I think of my new friend?" I repeated after her, and that gave me a theme upon which I could enlarge eloquently. I told her of his learning, nothwithstanding the fact that he had been in the continental wars ever since he was a boy. I repeated to her stories of his daring and bravery, that had been told to me by his uncle, the master of the horse, and others, and then I added what I knew Lady Jane had already said. I had expected to be brief, but to my surprise found a close and interested listener, even to the twice-told parts, and drew my story out a little, to the liking of us both.

"Your friend has an earnest advocate in you, Sir Edwin," said the princess.

"That he has," I replied. "There is nothing too good to say of him."

I knew that Mary, with her better, clearer brain, held the king almost in the palm of her hand, so I thought to advance Brandon's fortune by a timely word.

"I trust the king will see fit to favor him, and hope that you will speak a word in his behalf should the opportunity occur."

"What in the name of heaven have we to give him?" cried Mary, impatiently, for she kept an eye on things political, even if she were only a girl—"the king has given away everything that can be given, already, and now that the war is over and men are coming home there are hundreds waiting for more. My father's great treasure is squandered, to say nothing of the money collected from Empson, Dudley and the other commissioners. There is nothing to give unless it be the titles and estate of the late duke of Suffolk. Perhaps the king will give these to your paragon if you will paint him in as fair a light as you have drawn him for me." Then throwing back her head with a laugh, "Ask him."

"It would be none too much for his deserts," I replied, falling in with her humor.

"We will so arrange it then," went on Mary banteringly; "Captain Brandon no longer, but Charles Brandon, duke of Suffolk. How sounds it Master Caskoden?"

"Sweet in my ears," I replied.

"I really believe you would have the king's crown for him, you absurd man, if you could get it. We must have so interesting a person at court; I shall at least see that he is presented to the queen at once. I wonder if he dances. I suppose not. He has probably been too busy cutting and thrusting." And she laughed again at her own pleasantry.

When the mirth began to gather in her face and the dimples came responsive to her smiles; when she threw back her perfectly poised head, stretching her soft, white throat, so full and round and beautiful, half closing her big brown eyes till they shone again from beneath the shade of those long, black sweeping lashes; when her red lips parted, showing her teeth of pearl, and she gave the little clap of her hands—a sort of climax to the soft, low, rippling laugh—she made a picture of such exquisite loveliness that it is no wonder men were fools about her, and caught love as one catches a contagion. I had it once, as you already know, and had recovered. All that prevented a daily relapse was my fair sweet antidote, Jane, whose image rested in my heart, a lasting safeguard.

"I wonder if your prodigy plays cards; that is, such as we ladies play?" asked Mary. "You say he has lived much in France, where the game was invented, but I have no doubt he would scorn to waste his time at so frivolous a pursuit, when he might be slaughtering armies single-handed and alone."

"I do not know as to his dancing and card playing, but I dare venture a wager he does both," I replied, not liking her tone of sarcasm. She had yet to learn who Brandon was.

"I will hazard 10 crowns," said Mary quickly, for she loved a wager and was a born gambler.

"Taken," said I.

"We will try him on both tomorrow night in my drawing room," she continued. "You bring him up, but tell no one. I will have Jane there with her lute, which will not frighten you away I know, and we will try his step. I will have cards, too, and we shall see what he can do at triumph. Just we four—no one else at all. You and Jane, the new duke of Suffolk and I. Oh! I can hardly wait," and she fairly danced with joyous anticipation.

The thing had enough irregularity to give it zest, for while Mary often had a few young people in her drawing room the companies were never so small as two couples only, and the king and queen, to make up for greater faults, were wonderful sticklers in the matter of little proprieties.

The ten-crown wager, too, gave spice to it, but to do her justice she cared very little for that. The princess loved gambling purely for gambling's sake, and with her, the next best thing to winning was losing.

When I went to my room last night, I awakened Brandon and told him of the distinguished honor that waited him.

"Well! I'll be"— but he did not say what he would "be." He always halted before an oath, unless angry, which was seldom, but then beware!—he had learned to swear in Flanders. "How she did fly at me the other morning; I never was more surprised in all my life. For once I was almost caught with my guard down, and did not know how to parry the thrust. I mumbled over some sort of a lame retaliation and beat a retreat. It was so unjust and uncalled for that it made me angry; but she was so gracious in her amends that I was almost glad it happened. I like a woman who can be as savage as the very devil when it pleases her; she usually has in store an assortment of possibilities for the other extreme."

"She told me of your encounter," I returned, "but said she had come off second best, and seemed to think her overthrow a huge joke."

"The man who learns to know what a woman thinks and feels will have a great deal of valuable information," he replied; and then turned over for sleep, greatly pleased that one woman thought as she did.

I was not sure he would be so highly flattered if he knew that he had been invited to settle a wager, and to help Mary to a little sport.

As to the former, I had an interest there myself, although I dared not settle the question by asking Brandon if he played cards and danced; and, as to the matter of Mary's sport, I felt there was but little, if any, danger of her having too much of it at his expense, Brandon being well able to care for himself in that respect.

The next evening, at the appointed time, we wended our way, by an unfrequented route, and presented ourselves, as secretly as possible, at the drawing-room of the princess.

The door was opened by Lady Jane, and we met the two girls almost at the threshold. I had told Brandon of the bantering conversation about the title and estates of the late Duke of Suffolk, and he had laughed over it in the best of humor. If quick to retaliate for an intentional offense, he was not thin-skinned at a piece of pleasantry, and had none of that stiff, sensitive dignity, so troublesome to one's self and friends.

Now, Jane and Mary were always bantering me because I was short, and inclined to be—in fact—round, but I did not care. It made them laugh, and their laughing was so contagious, it made me laugh too, and we all enjoyed it. I would give a pound sterling any time for a good laugh: and that, I think, is why I have always been—round.

So, upon entering, I said:

"His Grace, the Duke of Suffolk, ladies."

They each made a sweeping courtesy, with hand on breast, and gravely saluted him:

"Your Grace, good even'."

Brandon's bow was as deep and graceful, if that were possible, as theirs, and when he moved on into the room it was with a little halt in his step, and a big blowing out of the cheeks, in ludicrous imitation of his late lamented predecessor, that sent

(Continued on page twenty-three.)

Acclimated Seed Wanted



Demand Can Be Reached Through Want Ads

Turn over to the "want" ad page of this issue and notice the seed classification.

Space in this department may be secured at a reasonable rate by those who are able to offer good, clean, acclimated seed.

These "want" ads will take your offer into more than 50,000 farm homes in the Pacific northwest. In a large proportion of these homes there is undoubtedly a demand for seed that has been tested out under the conditions and climate peculiar to this section.

We believe our seed classification will prove of real service both to those who have acclimated seed to sell and to those who want to buy and plant it.

If you have something in this line that you've tried out on your own place and know is good, let us hear from you.

The Washington Farmer
Review Bldg.
Spokane, Wash.



Unlimited Value

Every One Should Have a Purpose

By ALICE W. BARLAND.

I would like to emphasize what I have before expressed, the almost unlimited value of a purpose in life and a definite plan for working it out. Every community has people who make a fairly good start in life, but some way fall short of making a success of their undertakings.

In nine times out of ten, if one could arrive at the cause of their failure it would be lack of purpose, the absence of a definite plan of action. Some men and women, too, seem satisfied to live along from week to week, from month to month, and year to year with no definite plan to follow.

The kind of people of whom I am speaking never own a home, or if they do they usually acquire it some way other than earning it.

These purposeless people sometimes start out to buy a home and pay along for a time, then lose sight of the purpose and allow their payments and ambition both to lapse. By and by old age comes upon them; they have not saved anything against the time when they are past the earning period and everywhere we see them, in the county poor houses, unwelcome members in the families of relatives or wandering about looking for odd jobs.

They have all had youth, most of them health, every one opportunity, but lacking a steadfast purpose and definite plan of action they have failed to "get there."

Perhaps these words will come under the attentions of some young people—I hope so—and if they have not already formed the habit of finishing up what they begin let me urge them to form such a habit. Let me urge you young folks if you start to read a book, really start, read it through; if you start to build a hen coop finish it down to the last slat, if you start to embroider a pair of pillow slips finish them.

Now don't misunderstand me, please, I do not wish to convey the idea that having commenced come piece of work one should let every other duty wait till such piece is finished. One should mix common sense very liberally into his daily routine. The thought I would leave with you is this: Decide what you want to do, or if you do not want to do it what, in the line of your duty, you should do, and then do it, cheerfully and contendedly, if possible, but do it, finish it.

Tea Basque.



Of Hague blue crepe meteor is this very graceful and practical addition to the feminine wardrobe. The sleeves are of black satin and all round the edges are hand-stitched patterns in black, lemon, yellow and blue wool. Indeed, its charm lies in the dainty hand work and in the border of acorn tassels, yellow and black. Yet other tea basques are of Persian satin, also black sleeved and of heavy white Chinese crepe, the wrinkles of which almost amount to a twill. This basque is delicately embroidered on its edges with spider web filaments of tarnished gold and pale green picked out with an occasional crystal drop.—Kansas City Star.

Lumber Consumption.

St. Louis has one factory which will this year consume 100,000,000 feet of lumber.

The Fatal Admission.

"He's a failure!" said his neighbor,
But he wasn't one, you bet!
For he started out to labor
As he'd never labored yet;
And he did his daily duty with a grim, determined smile—
For a fellow's not a failure who keeps busy all the while.

He's a failure!" said his fellows,
But he wasn't—not just yet—
Though he had a leaky bellows
And a staggering load of debt.
"He's a failure!" said his father.
"He's an ornery, yellow pup!"
But a fellow's not a failure if he hasn't given up!

"He's a failure!" sighed his mother,
"He's a failure!" sobbed his wife;
There was never friend or brother
Who could help him back to life.
Then he murmured "I'm a failure!"
But he wasn't—not a bit.
Till that fatal moment came when he himself acknowledged it!

—Cleveland Plain Dealer.

Hospitality

Old-time Family Life Passing

In our day we seem to see the passing of that delightful phase of the old-time family life called hospitality. Many of us, perhaps, have been all unmindful of its departure, but some familiar, clusive flavor of life seems lacking. Something wholesome and satisfying is gone, says a writer in the Women's Institute Quarterly of the British Columbia department of agriculture.

One cause of the decline of hospitality arises from the efforts of many misguided folk to transplant it from its natural place to the unfriendly soil of a club. They do not have company at their houses any more. "We invite them to a club instead," they say; "it is so much less bother." It may be less bother; the club may possess a score of advantages in appointments and service; but it must always come far short in one particular, which to right-minded people outweighs them all—it is not a home.

Where true hospitality exists, every one is at ease and therefore at his best. The timid find they can talk. Under the genial atmosphere they can even venture to be witty. In the practice of successful hospitality people are let alone. Most women fuss over their guests too much. If they choose to talk, very well; if they prefer to be silent, pray do not force them to talk. If they want to depart, allow them to go without those insistent efforts to detain which many think a manifestation of hospitality, but which are really a great bore.

A Formidable Obstacle.

One formidable obstacle in the way of exercising hospitality arises from a false notion that things are necessary; things to eat, things to look at—carpets, furniture, silver, glass. "I can't invite any one until I get a new dining-room rug." "Our parlor chairs are too shabby to have any company." "I should like to ask them, but am not strong enough to get up a big dinner." Hospitality not only does not depend upon these things, but it is something far removed from them. Indeed, its finest flavor is often found amid the plainest surroundings.

If one desires to make hospitality famous, it is not necessary to plan elaborate meals or conjure up novel dishes. When people are away where they dare to be honest and naturel, the majority will confess a fondness for plain, hearty food. If you have a longing to make your home a popular place and not knowing quite how to do it, can you not, by patience and intelligent effort, learn to make some one thing so well as to create a reputation for it? It does not matter in the least what it is—chicken pie, or salad, or baked beans, or lemon pie. Any woman can absolutely master one thing. This phase of the matter has been dwelt upon not because the pleasures of the table form the chief element of successful hospitality, but because, though a woman may put forth many other objections, her reluctance to establish a gracious open-door policy arises mainly from wrong notions and absurd standards as to what she shall give her friends to eat.

Family Skeletons' Nasty Habits.

Another necessity for true hospitality is a happy home. Family skeletons have such an unpleasant habit of not staying decently shut up in their closets. They will peer out through a crack in the door, or will boldly come forth and stalk through the rooms. Guests are not deceived by mere pretense of happiness. The most stupid can tell whether love reigns in the home or not. Husbands and wives at variance with each other, or coolly indifferent, may entertain elaborately and successfully, but true hospitality is found only in a happy home.

Hospitality does not weigh its guests by the world's faulty scales, but asserts its right to enjoy friends for their worth, or congeniality of taste, or learning, or wit, quite apart from any consideration of their garments or gold or luck.

It would be well if young people who are just establishing a home would consider seriously what kind it shall be. If it be their good fortune to be of one mind in longing to exercise hospitality of the highest type, let them study the homes that most closely approach their ideals—they may catch the secret.

Household Hints.

I saw such a convenient thing recently to hold the ball of string for use in the kitchen. It was a small tin funnel. One can hang it on a hook from the wall by the tin ring and place the ball of string inside with the end drawn through the small end. It can be painted white or any color and even if not painted, but left in its natural state it would be much less annoying than to hunt for string.

When the birthday cake is finished and frosted ready for the tiny candles, arrange marshmallows on the top while the frosting is still soft, as many as the candles you wish to use, and insert a candle into each marshmallow. They hold the candles better than any way I know of.

If you spill grease on the stove or into the oven, put salt over it, the more grease you have burning the more salt you should use. I saved my house from taking fire once when a tin of melted butter was burning at such a rate that the flames were reaching the ceiling and a table next the stove was blazing. I threw a gallon of salt on the grease and it subsided instantly.

Take my advice dear women and don't keep house without three or four asbestos mats. They are such a help and make one feel so safe to leave food cooking on the stove when called to some distant part of the house. The kind with wire on one side last the longest, but if water is never spilled on them any kind will last for years. Some ovens are so hot on the bottom that everything burns, and sometimes just one place is hot. I have found a piece of plain asbestos, without the wire or tin binding, very useful to slip under anything baking too hard on the bottom. A. W. B.

Buttermilk Bran Muffins.

Three-quarters pint buttermilk, two cups bran, one cup white flour, one teaspoonful salt, one teaspoonful soda, one quarter cup molasses, one-half cup of dates. Stir the bran and white flour into the buttermilk, add salt, soda, molasses and finely chopped dates, which have been thoroughly dredged with flour. Bake 45 minutes in greased muffin rings or gem pans. Dissolve soda in a tablespoonful of hot water. Time in preparation, 25 minutes. Number of persons served, six.

Concrete Widely Used.

Concrete is being used almost exclusively for the gate structures of irrigation canals in this country, displacing wood for the purpose, despite the greater cost of concrete.

Patterns

1470—Girls' Dresses: Cut in four sizes, 6, 8, 10 and 12 years. It requires three and three-fourths yards of 36-inch material for an 8-year size. Price, 10 cents.

1925—Girls' Slip: Cut in five sizes, 2, 4, 6, 8 and 10 years. It requires for size 6, two yards of 36-inch material. Price, 10 cents.

1928—Ladies' Skirt: Cut in seven sizes, 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires five and



three-eighths yards of 27-inch material for a 24-inch size. The skirt measures about three and a quarter yards at its lower edge. Price, 10 cents.

1919—Ladies' Waist: Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires two and three-fourths yards of 36-inch material for a 36-inch size. Price, 10 cents.

1923—Coat Dress for Misses and Small Women: Cut in four sizes, 14, 16, 18 and 20 years. It requires five and a half yards of 44-inch material for a 16-year size. The skirt measures about three yards at the lower edge. Price, 10 cents.

1937—Junior Dress: Cut in three sizes, 12, 14 and 16 years. It requires three and a quarter yards for the dress, and three yards for the over blouse, for a 14-year size, in 27-inch material. Price, 10 cents.

USE THIS COUPON FOR PATTERN ORDERS.

Enclosed find ..... cents, for which send me the following patterns:

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Name ....

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R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

Nutritious Potato Bread

Palatable Food Product of Cull Potatoes

Excellent bread can be made by using 3 pounds of boiled and mashed potatoes and 2 1-4 pounds of good bread flour, according to the baking specialists of the U. S. department of agriculture. The bread so compounded has a rich, brown crust and tender and elastic crumb. It has an appetizing odor and a very agreeable taste, which is preferred by many to that of bread made wholly from flour. When made according to the directions given below, potato bread contains more mineral matter, fiber and moisture, but otherwise in composition and nutritive value is practically the same as ordinary bread. Its higher moisture content helps to keep it fresh several days longer than ordinary bread. In localities where there is a surplus of potatoes or where they are very cheap, potato bread costs less to make than all-flour bread, and, in general, is a good way in which to utilize cull potatoes in a palatable food product. Even, however, where the relative market prices of potatoes and flour are such that there is no economy in substituting potato for flour, the individual flavor and keeping quality of potato bread make it desirable as a variant in the family diet.

The following methods for making potato bread, worked out in the baking laboratory, are recommended:

Potato Bread—Straight Dough Method.

For four 1-pound loaves, the following ingredients are required:

3 pounds of boiled and peeled potatoes.
2¼ pounds of good bread flour.
3 level tablespoonfuls of sugar.
1½ level tablespoonfuls of salt.
2 cakes of compressed yeast.
4 tablespoonfuls of lukewarm water.

Wash thoroughly and boil in their skins about 12 potatoes of medium size. Cook them until they are very tender. Drain, peel, and mash them while hot, being careful to leave no lumps. Allow the mashed potato to cool in 86 degrees Fahreinheit, or until lukewarm. To 3 pounds (5 solidly packed 1-2-pint cupfuls) of the mashed potato, add the yeast, which has been rubbed smooth in a cup with 3 tablespoonfuls of lukewarm water. To get all the yeast, rinse the cup with the remaining tablespoonful of water and add this also to the potato. Next add the salt, the sugar, and about 4 ounces of the flour (1 scant half-pint of sifted flour. Mix thoroughly with the hand, but do not add any more water at this stage.

Cover the mixing bowl to avoid the formation of a crust on top and place out of the way of drafts to rise, where the temperature can not fall below 80 degrees Fahrenheit, or be much higher than 88 degrees Fahrenheit. Where the housewife has no thermometer, she should see that the dough in all the risings is kept moderately warm, but not up to blood heat. Any water used in mixing the dough should be moderately warm, but by no means hot. This sponge, if kept at the proper temperature, should, after two hours, become quite light.

To this well-risen sponge, which now will be found to be quite soft, add the remainder of the flour, kneading thoroughly until a smooth and elastic dough has been formed. The dough must be very stiff, since the boiled potato contains a large amount of water, which causes the dough to soften as it rises. Do not add water to the dough unless it is absolutely necessary to work in the flour. Set the dough back to rise again (temperature as about 86 degrees Fahrenheit) until it has trebled in volume, which will require another hour or two. Then divide the dough into four approximately equal parts, reserving a tiny lump weighing 2 or 3 ounces for an "indicator." Shape the sample into a ball and press it into the bottom of a tumbler with straight sides. The glass should be slightly warmed. Note the volume of the ball of dough in the tumbler and mark the glass at twice this volume.

Mold the four portions into loaves and place in greased pans which have been slightly warmed. Place the glass containing the "indicator" beside the pans and let all rise, under proper temperature, until the "indicator" shows that it has doubled in volume, then place the loaves in the oven and bake in a good, steady heat (400 degrees to 425 degrees Fahrenheit) for 45 minutes.

To Test Oven.

When no oven thermometer is at hand, a convenient test will be to put a teaspoonful of flour in an earthen dish in the oven. If this flour becomes light brown evenly throughout in 5 minutes' time, the oven is right for break baking. If the flour scorces in that time, the oven is too hot.

Potato Bread—Sponge Method.

For four 1-pound loaves are required:

3 pounds of boiled and peeled potatoes.
2¼ pounds of good bread flour.
3 level tablespoonfuls of sugar.
1½ level tablespoonfuls of salt.
1 cake of compressed yeast.
4 tablespoonfuls of water.

Boil, peel and mash the potatoes as directed in the straight dough method. In the evening take 1 1-2 pounds, or 2 1-2 solidly packed half-pint cupfuls, of the cool mashed potato, add to it the salt, 4 ounces of flour (1 scant half-oint cupful), and the yeast rubbed smooth with the water, reserving one spoonful to rinse the cup.

In the morning add the remainder of the potato, the sugar, and the rest of the flour, Knead thoroughly until a smooth, and very stiff dough is formed. After working the dough, set it to rise according to the directions given for the second rising under the straight dough method. Thereafter handle the dough exactly in the same way as is given under the straight dough method.

Instead of Baby Basket.

A sanitary substitute for the beribboned basket is a white enabeled oblong pan, which may be purchased anywhere at small cost. Have it large enough to hold all of the baby's toilet articles. It may be kept immaculate very easily, and, matching the tub, is very attractive.—Mother's Magazine.

Aluminum Nickel-Plated.

By a new French process aluminum can be so substantially nickel-plated that the metal can be hammered and bent without cracking.

If All Who Hate.

If all who hate would love us,
And all our loves were true,
The stars that swing above us
Would brighten in the blue;
If cruel words were kisses,
And every scowl a smile,
A better world than this is
Would hardly be worth while;
If purses would not tighten
To meet a brother's need,
The load we bear would lighten
Above the grave of greed.

If those who whine would whistle,
And those who languish laugh,
The rose would rout the thistle,
The grain outrun the chaff;
If hearts were only jolly,
If grieving were forgot
And tears of melancholy
Were things that now are not,
Then love would kneel to duty,
Then all the world would seem
A bridal bower of beauty,
A dream within a dream.

If men would cease to worry,
And women cease to sigh,
And all be glad to bury
Whatever has to die;
If neighbor spake to neighbor,
As love demands of all,
The rust would eat the saber,
The spear stay on the wall;
Then every way would glisten,
And every eye would shine,
And God would pause and listen,
And life would be divine.

—Washington Star.

Foods That Go Together.

To make a balanced meal the correct combinations of food must be used. With veal roast may be used tomato sause, peas, rice balls, asparagus, spinash, white or sweet potatoes.

With stewed veal dumplings, baked potatoes or tomatoes.

With veal loaf rice, peas, asparagus, scalloped or sweet potatoes.

With pork serve apple sauce, sour jelly, sweet potatoes, squash, kale, spinach, corn, beets. Fresh pork, apple sauce, boiled potatoes, squash, kale, spinach.

With leg of mutton serve caper or mint sauce, cabbage, creamed turnips, boiled rice. Mutton chops, creamed potatoes, peas, tomato sauce. Lamb, mint sauce, cucumbers, white or sweet potatoes, squash, parsnips, egg plant, peas or asparagus tips.

Popular Crochet Designs

By WINIFRED WORTH



Cross Bar Edging.

Is very durable and makes an ideal edging for towels made from No. 20 mercerized crochet cotton. Try it.

Chain 20.

1st Row—1t. in 5th st. from hook, ch. 2, skip 2 st. in ch., 1 t. in 3rd st., repeat twice; skip 2 st., 2 t. ch. 3, 2 t. in same st., forming shell, ch. 2, 1 t. in last st. of ch., turn.

2nd Row—Chain 4, 1 t. in last st. of shell, ch. 2, shell into shell, 1 t. in top of t. before shell, 1 space, 4 t. in next sp., 2 sp., turn.

3rd Row—Chain 4, 4 sp., shell into shell, ch. 2, 1 t. in last st. of 2nd shell, ch. 2, 1 t., repeat to end, making 3 sp. from shell, turn.

4th Row—Ch. 4, 4 sps., shell into shell, 1 sp., ch. 2, 4 t. in 2nd space, ch. 2, 1 t., repeat to end, turn.

5th Row—Chain 4, 4 sps., to shell, shell into shell, ch. 2, 4 sps., to end, turn.

6th Row—Chain 4, 6 spaces to shell, shell into shell, proceed as in 4th row, turn.

7th Row—Make same as 5th row to shell, shell in shell, 3 dc., into each sp. to point, 6 dc. in sp. at point, 3 dc., in remaining sps. to beginning ch., turn.

8th Row—Chain 4, 1 t. in 3rd st. of dc., ch. 2, 1 t. in next 3rd, repeat to shell, shell into shell, repeat 6th row, turn.

9th Row—Same as 7th row to end of shell, 1 t. in top of last t. before shell on 8th row, ch. 5, 1 dc. in center of 1st sp., repeat around whole point, turn.

10th Row—Chain 6, 1 picot, ch. 2, 1 dc. in center of last 5 ch., repeat to shell, shell into shell and repeat 8th row. This completes one point; proceed as in 1st row.

Cloverleaf Edging.

By following the instructions you can duplicate this dainty pattern which is favored by all crochet workers.

Chain 24.

1st Row—1 t. in 4th st. from hook 1 t. in next 2 sts., ch. 2, skip 2 sts., 1 t., ch. 2, skip 2 sts. 3 t. in next st., ch. 2, 3 t. in same st., forming shell, ch. 2, 1 t., ch. 2, 1 t., ch. 9, 1 t. in end of ch. 24, ch. 2, 1 t. in same place, repeat twice, turn.

2nd Row—Ch. 1, 1 dc. in first ch. of 2, 3 t. in same ch., 1 dc. in same, ch. repeat in the other 2 chs., ch. 9, 1 t. in 2nd st. of 1st ch. of ch. 2, shell into shell, ch. 2, 1 t., ch. 2, 3 t., turn.

Rows 3, 4, 5 and 6—Same as 2nd and 3rd, increasing spaces 1 each time.

Buying

Economy in Large Quantities

By ALVARA P. WILLIAMS, Shelton, Wash.

There is great temptation in these days of sky prices to buy groceries and meat in small quantities; even some retail grocers are advising it, due to their difficulty in securing full shipments of their orders. Yet with the certainity that it will be some time before prices will be normal again, the housewife who has to economize to the last inch will make every effort toward wholesale buying where she can.

Few women realize what a saving there is in the differences between the wholesale and retail prices of staple groceries. If they were told that they could earn from 10 per cent to 20 per cent on their money, if they had some to invest, would they hesitate, if it were a safe investment? Why should they hesitate to save this 10 per cent or more, when applied to the money they spend?

The arguments put forth for buying in small quantities should apply only to the city housekeeper with lack of storage space. The country housekeeper, unless within easy reach of free delivery groceries, is more apt to buy in larger quantities, but even then she seldom realizes what is the actual result of even larger quantities. The best training for this system of economy is to live, as I do, where supplies must be ordered for a month or two in advance, to avoid being in a constant state of upheaval because of mistakes on the part of the grocery clerk, the transportation, delay due to returning goods, etc. After a year of this it dawned on me that I could do even better by buying staple groceries and package goods by the dozen, instead of merely at jobbers' prices for single packages. A neighbor or two help fill out a respectably large order, with the additional saving of free freight.

Here are some of the items in average grocer lists, with retail and average jobbing prices in western Washington, with approximately percentages saved. Are they worth considering in your family?

Baking soda, usually 8 or 10 cents a package, 70 cents a dozen, 25 per cent.

Breakfast cereals selling at 25 cents a package, $2.50 a dozen, saving nearly 20 per cent.

Beans, 3 pounds for 25 cents, average 14 pounds for $1, about 15 per cent.

Gelatine, 15 cents a package, $1.35 a dozen, saving 25 per cent.

Soap, 5 cents a cake, from $4 to $4.50 a box, saving 25 per cent.

Cornstarch, 10 cents a package, $1 a dozen, 20 per cent.

Old Dutch Cleanser, 10 cents a package, 95 cents a dozen, 20 per cent.

Matches, 5 cents a package, 50 cents a dozen, 20 per cent.

Even those housewives who live beyond the reach of jobbing houses will find that the average retail grocer, for the sake of turning over his stock quickly, will be glad to quote wholesale prices nearly as low as these.

Some Don't.

An American just returned from Europe tells this story:

While riding from London to Liverpool in a railway coach it happened that he was alone in the compartment with an Englishman, who appeared to be deeply engrossed in the war news of one of the papers.

Thinking to start conversation, he said in good, old American slang, "Some fight, eh?"

"Yes, and some don't!" was the reply.—Exerbody's magazine.

Kept Their Word.

Mother—Children, I'm shocked! You each promised me you wouldn't eat your oranges till after dinner. You have deceived me.

Willie—No, mamma, we didn't eat our own oranges. Tommy ate mine and I ate his.—Boston Transcript.

Cross-Stitch Gathering.

The very full sleeves of a child's frock may be confined at the wrist by a double row of gathering over which is worked a band of cross-stitching in natural flower colors. When the canvas threads are pulled out the effect will be seen to be even prettier than smocking.

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from page twenty.)

the girls into peals of soft laughter and put us all at our ease immediately.

Ah! what a thing it is to look back upon; that time of life when one finds his heaven in a ready laugh!

"Be seated all," said the princess. "This is to be without ceremony, and only we four. No one knows a word of it. Did you tell anyone, Sir Edwin?"

"Perish the thought," I exclaimed.

She turned her face toward Brandon, "—but I know you did not. I've heard how discreet you were about another matter. Well, no one knows it then, and we can have a famous evening. You did not expect this, Master Brandon, after my reception of you the other morning? Were you not surprised when Sir Edwin told you?"

"I think I can safetly say that I was prepared not to be surprised at anything your highness might graciously conclude to do—after my first experience," he answered, smiling.

"Indeed?" returned Mary with elevated eyebrows, and a rising inflection on the last syllable of the word. It was now her turn for a little surprise. "Well, we'll try to find some way to surprise you one of these days;" and the time came when she was full of surprises for him. Mary continued: "But let us not talk about the other day. Of what use are 'other days' anyway? Before the evening is over Master Brandon, we want you to give us another sermon," and she laughed, setting off three other laughs as hearty and sincere as if she had uttered the rarest witticism on earth.

The princess had told Jane and Jane had told me of the "Sermon in the Park," as Mary called it.

"Jane needs it as much as I," said the princess.

"I can't believe that," responded Brandon, lookjng at Jane with a softening glance quite too admiring and commendatory to suit me; for I was a jealous little devil.

The eyebrows went up again.

"Oh! you think she doesn't? Well! in truth, Master Brandon, there is one failing that can not be laid at your door; you are no flatterer." For answer Brandon laughed and that gave us the cue, and away we went in a ripping chorus, all about nothing. Some persons may call our laughter foolish, but there are others who consider it the height of all wisdom. St. George! I'd give my garter for just one other hour of youth's dancing blood and glowing soul-warmth; of sweet, unconscious, happy heart-beat and paradise-creating joy in everything.

After a few minutes of gay conversation, in which we all joined, Mary asked: "What shall we do? Will one of you suggest something?"

Jane sat there looking so demure you would have thought mischief could not live within a league of her, but those very demure girls are nearly always dangerous. She said, oh! so innocently: "Would you like to dance? If so, I will play." And she reached for her lute which was by her side.

"Yes, that will be delightful. Master Brandon, will you dance with me?" asked the princess, with a saucy little laugh, her invitation meaning so much more to three of us than to Brandon. Jane and I joined in the laugh, and when Mary clapped her hands that set Brandon off too, for he thought it the quaintest, prettiest little gesture in the world, and was all unconscious that our laugh was at his expense.

Brandon did not answer Mary's invitation—the fit of laughter had probably put it out of his mind—so she, evidently anxious to win or lose her wager at once, again asked him if he danced.

"Oh, pardon me. Of course. Thank you." And he was on his feet beside her chair in an instant ready for the dance. This time the girl's laugh, though equally merry, had another tone, for she knew she had lost.

On they stepped upon the polished floor, he holding her hand in his, awaiting the pause in the music to take the step. I shall never forget the sight of those two standing there together—Mary, dark-eyed and glowing; Brandon, almost rosy, with eyes that held the color of a deep spring sky, and a wealth of flowing curls crowning his six feet of perfect manhood, strong and vigorous as a young lion. Mary, full of beauty-curves and graces, a veritable Venus in her teens, and Brandon, an Apollo, with a touch of Hercules, were a complement each to the other that would surely make a perfect one.

When the music started, off they went, heel and toe, bow and courtesy, a step forward and a step back, in perfect time and rhythm—a poem of human motion. Could Brandon dance? The princess had her answer in the first ten steps. Nothing could be more graceful than Brandon's dancing, unless it were Mary's. Her slightest movement was grace itself. When she would throw herself backward in thrusting out her toe, and then swing forward with her head a little to one side, her uplifted arm undulating like the white neck of a swan—for her sleeve, which was slit to the shoulder, fell back and left it bare—she was a sight worth a long journey to see. And when she looked up to Brandon with a laugh in her brown eyes, and a curving smile just parting her full, red lips, that a man would give his very luck to—but I had better stop.

"Was there ever a goodlier couple?" I asked of Jane, by whose side I sat.

"Never," she responded as she played, and, strange to say, I was jealous because she agreed with me. I was jealous because I feared it was Brandon's beauty to which she referred. That I thought would naturally appeal to her. Had he been less handsome I should perhaps have thought nothing of it, but I knew what my feelings were toward Mary, and I judged, or rather misjudged, Jane by myself. I supposed she would think of Brandon as I could not help thinking of Mary. Was anything in heaven or earth ever so beautiful as that royal creature, dancing there, daintily holding up her skirts with thumb and first finger just far enough to show a distracting little foot and ankle, and make one wish he had been born a sheep rather than a sentient man who had to live without Mary Tudor? Yet, strange as it may seem, I was really and wholly in love with Jane; in fact, I loved no one but Jane, and my feeling of intense admiration for Mary was but a part of man's composite inconstancy.

A woman—God bless her—if she really loves a man, has no thought of any other; one at a time is all-sufficient; but a man may love one woman with all the warmth of a simoon, and at the same time feel like a good healthy south wind toward a dozen others. That is the difference between a man and a woman—the difference between the good and the bad. One average woman has enough goodness in her to supply an army of men.

Mary and Brandon went on dancing long after Jane was tired of playing. It was plain to see that the firl was thoroughly enjoying it. They kept up a running fire of small talk, and laughed, and smiled, and bowed, and coutesied, all in perfect time and grace.

It is more difficult than you may think, if you have never tried, to keep up a conversation and dance La Galliard, at the same time—one is apt to balk the other—but Brandon's dancing was as easy to him as walking, and, although so small a matter, I could see it raised him vastly in the estimation of both girls.

"Do you play triumph?" I heard Mary ask in the midst of the dancing.

"Oh! yes," replied Brandon, much to my delight, as the princess threw a mischievous, knowing glance over her shoulder to see if I had heard. She at once saw I had, and this, of course, settled the wager.

"And," continued Brandon, "I also play the new game, 'honor and ruff,' which is more interesting than triumph."

"Oh! do you?" cried Mary. "That will more than compensate for the loss of my ten crowns. Let us sit down at once; I have been wishing to learn, but no one here seems to know it. In France, they say, it is the only game. I suppose there is where you learned it? Perhaps you know their new dances too! I have heard they are delightful."

"Yes, I know them," replied Brandon.

"Why, you are a perfect treasure; teach me at once. How now, Master of the Dance? Here is your friend outdoing you in your own line."

"I am glad to hear it," I returned.

"If Lady Jane will kindly play some lively air, written in the time of 'The Sailor Lass,' I will teach the Lady Mary the new dance," said Brandon.

Jane threw one plump little knee over the other and struck up "The Sailor Lass." After she had adjusted the playing to Brandon's suggestion, he stepped deliberately in front of Mary, and, taking her right hand in his left, encircled her waist with his right arm. The girl was startled at first and drew away. This nettled Brandon a little and he showed it plainly.

"I thought you wished me to teach you the new dance?" he said.

"I do, but—but I did not know it was danced that way," she replied with a fluttering little laugh, looking up into his face with a half shy, half apologetic manner, and then dropping her lashes before his gaze.

"Oh, well!" said Brandon, with a Frenchman's shrug of the shoulders, and then moved off as if about to leave the floor.

"But is that really the way you—they dance it? With your—their arm around my—a lady's waist?"

"I should not have dared venture upon such a familiarity otherwise," answered Brandon, with a glimmer of a smile playing around his lips and hiding in his eyes.

Mary saw this shadowy smile, and said: "Oh! I fear your modesty will cause you hurt; I am beginning to believe you would dare do anything you wish. I more than half suspect you are a very bold man, notwithstanding your smooth, modest manner."

"You do me foul wrong, I assure you. I am the soul of modesty, and grieve that you should think me bold," said Brandon, with a broadening smile.

Mary interrupted him. "Now, I do believe you are laughing at me—at my prudery, I suppose you think it."

Mary would rather have been called a fool than a prude, and I think she was right. Prudery is no more a sign of virtue than a wig is of hair. It is usually put on to hide a bald place.

(To be continued in the next issue.)

Jimmy's Descent.

Deacon Dryden was a bitter foe of the demon rum. His clerk, Jimmy Jetro, was, in secret, quite friendly with the horrid monster.

Jimmy roomed above a store. One Sunday morning, after a session at poker, Jimmy started to descend the stairs, which abutted on the street. An overload of whisky caused him to fall down the steps and roll to the middle of the sidewalk, just as the deason passed on his way home from church.

"Why, James!" exclaimed the startled deacon. "What is the matter?"

"N—othing—nothing at all," stammered Jimmy. "That's the w—way I always come down stairs." St. Louis Globe-Democrat.

Economy.

"What is this?" exclaimed the young husband, referring to the memorandum she had given him. "One dozen eggs, a pound of raisins, bottle of lemon extract, a tin of ground cinnamon and a half pound of sugar. What on earth do you want with all these things, Elsie?"

"I've got a stale loaf," replied the young wife, "that I am going to save by working up into a bread pudding. I never let anything go to waste, Henry—especially in war times!"—London Answers.

The Safety Kero Lamp



The Safety Kero Lamp makes its own gas from either common coal oil or gasoline. Turns night into day. Gives better light than gas, electricity of 18 ordinary lamps at one-tenth the cost. For Homes, Stores, Halls, Churches. Can be used for a hanging lamp or reading lamp. Absolutely safe.

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Standard Oil Company
(California)

"—and he is making good!"

THESE FIVE WORDS

finished a sentence in a letter sent from this office recently to the father of a farmer boy. The young man was then—and is now—following our Money Making Plan for boys on the Farm. His father was curious to know what we thought of his work, and we told him.

What a satisfaction to both father and son to have it said "—and he is making good!"

This case has many parallels—young men who know the real value of spare time and, with our Money-Making Plan, have been able to fight their way out of the jungles of uncertainty and make straight for the Highway of Success.

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If you want to give all or a part of your time to this work, send us a postal card and we will send you complete information immediately. Do it today.

Address

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Room 37, Circulation Dept.
Review Building.
Spokane, Wash.



My Dear Children: I am so pleased to get so many letters from my little nephews and nieces. I wish you could see the stack of them on my desk, just waiting to be published. If you have written a letter to Aunt Nellie and have not yet seen it in print, don't get discouraged—it is only waiting its turn. I am publishing them in the order they are received. Would you like to read the names of the little boys and girls who have sent in letters which we have as yet not had room to print? Here they are; maybe your name is here, or perhaps you will know some one mentioned in the following list, and the letters will be printed in the Children's Corner later on. AUNT NELLIE.

Emma Short, Lowden, Wash.; Mable Schlef, Oroville, Wash.; Grace Humbly, Friday Harbor, Wash.; Charles Lee, Othello, Wash.; Irene M. M. Glissler, Odessa, Wash.; Margaret Cox, Leahy, Wash.; Frank Clinton Saeger, Shelton, Wash.; Ruth Wagner, Gilmer, Wash.; Ethel Greely, Riverside, Wash.; Lucile Peterson, Foster, Wash.; Myrtle Sodorff, Johnson, Wash.; Flora Lamurs, Johnson, Wash.; Vera V. Gensel, Aeneas, Wash.; Maude Bailey, Malo, Wash.

Adolph Olsen, Langley, Wash.; Grant Armstrong, Globe, Wash.; Addie O'Rourke, Reardan, Wash.; Edith Holm, Olalla, Wash.; John Francis Hayden, Mold, Wash.; Ethel Duke, Alder, Wash.; Grace Deharte, Latah, Wash.; Alice Miller, Mayview, Wash.; Glyness Simenson, Corfu, Wash.; Goldie Miller, Mayview, Wash.; Jennie Peterson, Thomas, Wash.; Margaret Stephens, Willapa, Wash.

Claytone Beeson, Globe, Wash.; Leone Waldron, Clinton, Wash.; Velma Simpson, Elma, Wash.; Mary Limmer, Winlock, Wash.; Ethel Sandberg, Olalla, Wash.; Annie Van Dam, Oak Harbor, Wash.; Charles J. Maurer, Mohler, Wash.; Pearl Rubie, Johnson, Wash.; Robert Fisher, Colbert, Wash.; Yerda Johnson, Rochester, Wash.; Helen Beckes, Grandview, Wash.; Cecil Wayne Bramhall, Dayton, Wash.

Edith Crabb, Marengo, Wash.; Blanche Cantrell, Winlock, Wash.; Alma Lunn, Bothell, Wash.; Lee Rowe, Rochester, Wash.; Lorena Ross, Langley, Wash.; Stella Stuurmans, Lynden, Wash.; Albertha Capaan, Oak Harbor, Wash.; Edna Lehman, Paha, Wash.; Lillian A. Motton, Friday Harbor, Wash.; Edith James, Krupp, Wash.; Edna Smith, Riverside, Wash.; Lenore Fox, Washougal, Wash.; Myrtle Gooch, Uniontown, Wash.; Maybell Firth, Friday Harbor, Wash.

Ruth Zuaschka, Everson, Wash.; Alice Miller, Mayview, Wash.; Inza Staiff, Freeland, Wash.; Annie Mathews, Husum, Wash.; Exenia Matson, Shelton, Wash.; Ruth Friday, Puyallup, Wash.; Alvina Forsman, Rochester, Wash.; Honor Bonita Lovette, Mansfield, Wash.; Eunice Martin, Riverside, Wash.; Evalene K. Maurer, Mohler, Wash.; Waldemar Johnson, Rochester, Wash.; Lois Fay Wiseman, Colfax, Wash.; Vonda Boulden, Elma, Wash.

Rosa Sahli, Kent, Wash.; Myrtle Veronica Faye, Monroe, Wash.; Bertha Gamble, Bothell, Wash.; Virginia Brockmiller, Wheeler, Wash.; Ida R. Dillok, Buckeye, Wash.; Agnes Lauer, Pomeroy, Wash.; Ella Jane Love, Beebe, Wash.; Thelma and Alma Black, Everett, Wash.; Dorothy Pierson, Freeland, Wash.; Thelma and Alma Black, Everett, Wash.; Dorothy Pierson, Freeland, Wash.; Elsie Wiseman, Colfax, Wash.; Marie Anderson, Kalonia, Wash.

MARY GOT A BABY BROTHER FOR A CHRISTMAS GIFT

Dear Aunt Nellie: My Christmas gift was a baby brother born December 23. He has dark hair, blue eyes, and weighed 10 pounds. I just love him. We now have six in our family I have one sister and two brothers. I am the first girl. I am the oldest in our family. Leonard comes next, he is nine years, Margaret next. She is 7 and next comes my new brother. His name is William McDole Allen, but we call him Allen. I would not part with him for all the world. I also got a kewpie handkerchief and a fancy one, a doll and some hand crocheted caps, one red trimmed in white, one pink and one white trimmed in blue. I also got a clown and a crocheted collar and a doll bonnet. There was a little pink jacket too and it had fancy stitching on it. I got a candy rooster and candy, cookies, oranges, apples, nuts and fruit, and so may more things that I can not waste time to tell.—Mary Symington, Kangley, Wash.

WILL BE GLAD WHEN IN THE EIGHTH GRADE AT SCHOOL

Dear Aunt Nellie: I enjoy reading the letters of the other children and I thought they would enjoy reading a letter of mine. I am 9 years old. My birthday is July 24. We live on a ranch of 120 acres. We have one cow, one dog, four little kittens and one old one. I am the youngest one in the family. I have two sisters and two brothers. My brothers' names are Oades and Bruce. My sisters' names are Vonda and Orphia. We live about two miles from school. I walk to school with my sisters and brothers. I like my teacher very much. Her name is Miss Diskerll. We have a very nice schoolhouse. It is a large brick building. There are from the first to the 12th grades in the one building. The girls in the sixth and seventh grades take sewing and all the boys take manual training. The girls in the eighth grade take cooking. I am only in the fourth grade now but I will be glad when I get in the eighth grade so I can take cooking, for I enjoy it very much. I have one old black hen. I named her Fannie because by Aunt Fannie gave her to me for my birthday. Ruby Warren, a girl who wrote to the Corner some time ago, is one of my nearest neighbors.—Dora Boulden, R. F. D. 1, Box 2, Elma, Wash.

WHEN SUMMER COMES ALICE ALWAYS MISSES THE FARM

Dear Aunt Nellie: I am 12 years of age, and in the seventh grade. My teacher's name is Miss Tobie. I lived on the farm about nine years, when we moved to the town of Latah. I enjoy living in town, especially in the winter, but when summer comes I always miss the farm, because I often climbed the mountains and picked the lovely flowers. I have six sisters. One is married and has one of the sweetest babies I ever saw. She was one year old on Christmas day. We all think very much of her. Another one of my sisters is going to the Cheney normal. My birthday is August 15. I have two pet rabbits.—Alice Michel, box 46, Latah, Wash.

MELBA HAS A PONY AND RIDES HER A MILE TO SCHOOL

Dear Aunt Nellie: I am 8 years old and in the third grade. I will be 9 June 25. My teacher's name is Mrs. Alice Riplinger. She is a splendid teacher. There are only five scholars in our school. I have one brother and his name is Clifford. In the line of pets I have three dogs, one cat and lots of rabbits. We live on a farm and have pigs, cows, chickens, ducks and horses, as farmers usually do. I perfer the country life to the city. I used to live in Mount. Vernon. I have a pony and can ride her. I sometimes ride her to school. School is one mile from home.—Melba E. Adams, Cunningham, Wash.

LILLY HAD THE GRIPPE, BUT ONLY MISSED ONE DAY OF SCHOOL

Dear Aunt Nellie: We have about six or seven inches of snow here. I have a flexible flyer and will soon be coasting on it when a track is made. We had an entertainment at our school house December 3. Every one that was there got a sack of candy and an orange. I had the grippe about three weeks ago, but only missed one day of school. Last year I missed nine days of school with the grippe. I think I will tell you about my school house now. It is a small one; it is painted white on the outside and green on the inside. In it there are 15 seats, the teacher's desk and organ, a bookcase full of books, eight blackboards, a stove, two dictionaries, a globe, some pictures and maps on the wall. There are 14 pupils in our school now. We get pretty cold sometimes in winter when we go to school. We had a week's vacation at Thanksgiving and Christmas.—Lily Campbell, Wilbur, Wash.

MARIE AND BROTHERS RIDE FIVE MILES IN CART TO SCHOOL

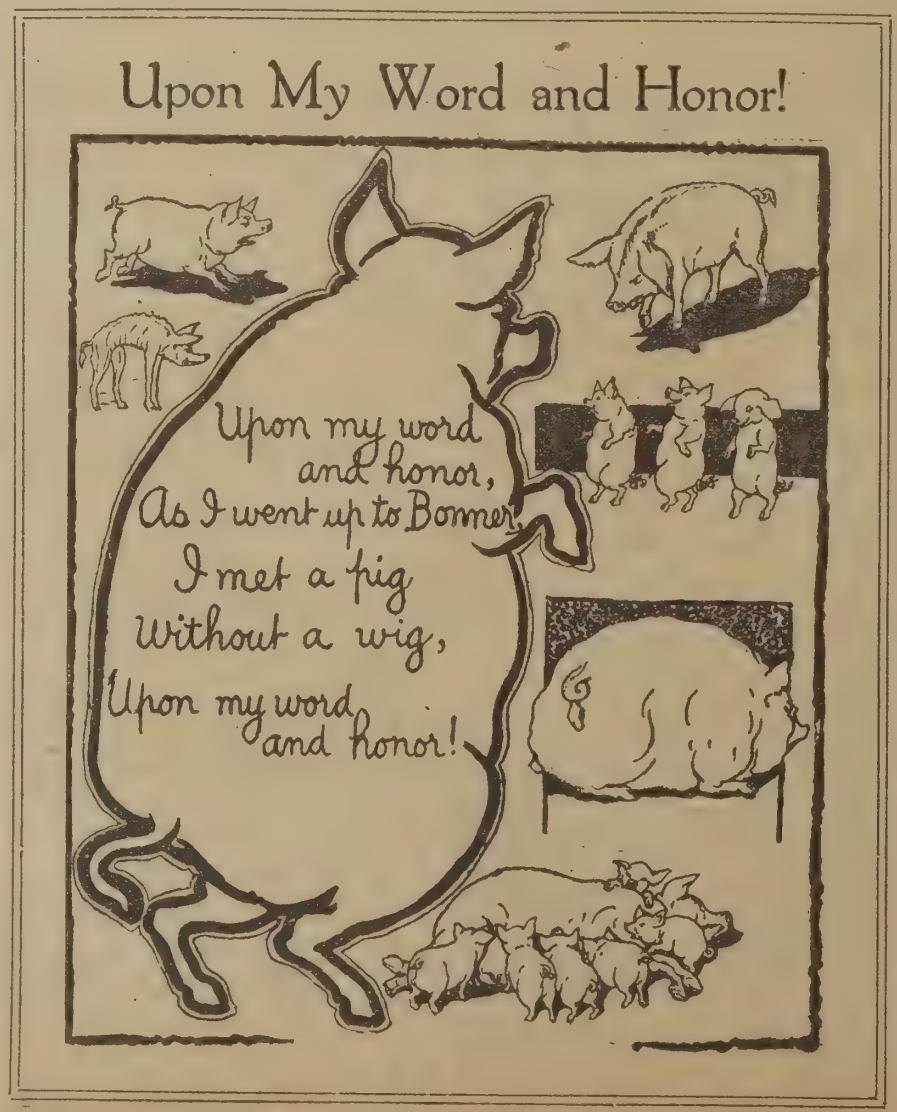
Dear Aunt Nellie: I was 11 years old January 8. I live on a 640-acre farm with papa, mama and my three brothers. My smallest brother is five years old and his name is Kenneth. He does not go to school yet. My brother Stanley is six years old and is in the first grade. My brother Melvin is nine years old and in the fifth grade. We ride five miles in a cart and drive a horse named Babe. My teacher's name is Miss Philips. She is a nice teacher. There are 12 pupils in the whole school, four are in my grade. I'm the only girl in the school. We are the only children that ride to school and have so far to go. The schoolhouse is at Bolles Junction. We have a hot dish to eat with our lunch. It is a nice schoolhouse. We have one cat named Bluebell and a cow named Bessie and nice flock of purebred chickens.—Marie Stewart, R. F. D. 3, Waitsburg, Wash.

LIKES THE SUMMER WHEN CHERRIES AND PEACHES ARE RIPE

Dear Aunt Nellie: I'm writing my first letter to the Children's Corner. I am 11 years old December 29. I'm in the fifth grade. My subject is "likes." I like everything the whole year through. I like spring when little birds build their nests and their sweet songs fill the air. I like the summer when the cherries are ripe and the peaches are so sweet and juicy and I like autumn when the trees lose their leaves. And I like winter best of all, when children coast down hill. I have a mile to go to school. My teacher's name is Mrs. Schold.—Hazel Saltmarsh, Coulee City, Wash.

HAVE TEN NEW SEATS IN SCHOOL BUT ARE ALL TOO SMALL

Dear Aunt Nellie: I am going to tell you about my school. There are 14 children. My teacher's name is Ina Barnard. We got 10 new seats and they are so small any body can hardly sit in them. One day some visitors came and they had to lift their feet up to get out of them. In the schoolhouse there is a stove in one corner and a library in another corner. I build the fires in the morning. I get $1.50 a month for it.—Herbert Cone, R. R. 1, Reardan, Wash.



IN THE SUMMER ELEANOR GOES BOATING AND WADING

Dear Aunt Nellie: I am going to start writing and I hope I never will quit. I have only read the Children's Corner twice and I enjoyed the letters of other children very much. I am nine years old and I am in the fourth grade. My birthday is July 9. I live on a farm of 21 acres. We have two calves, three horses, two cows, two cats, one dog, and quite a number of chickens. I have two sisters and two brothers. I have a brother and two sisters married. My brother that is married has three children. I go to school every day. I like to go to school and I like my teacher and playmates. There are 23 pupils in our room. Some of the children's paintings are up in front of the room. I like to live on a farm in the summer. I can go in bathing and pick pretty flowers. In the winter I can go skating on the ponds, and when it snows I can make snow men. That is my greatest pleasure. In the winter I just eat apples. I take music lessons on the piano. I like to take lessons. Santa Claus brought me a doll and a new ribbon, a new handkerchief, a new dress and coat and shoes.—Eleanor Dobers, Anacortes, Wash.

ALICE IS TEN YEARS OLD AND IS A GOOD COOK

Dear Aunt Nellie: I have been reading other little girls' letters that you have been printing. I am a little girl 10 years old. I have five sisters and one brother. I am in the fourth grade. I used to live on the farm and moved to town a few weeks ago. I will tell you what I did on the farm. In the summer we milked five cows and had the headers about the middle of the summer. I know how to bake cakes, pies, and wash dishes, and many other things. I get the cows in the summer.—Alice Reinbold, Star Route, Davenport, Wash.

NELLIE WISHES TO CORRESPOND WITH SOME OF HER COUSINS

Dear Aunt Nellie: I am 14 years old, and my birthday was January 7. Sallie Garry is a little older than I, but I am sure I would like to hear from her. I think she has done real well in the cattle business. I am attending school at Providenec academy in Vancouver, Wash., but was home for vacation. We live on a farm of 600 acres in eastern Washington. I have two horses of my own. Their names are Midget and John. I would like very much to correspond with some of my new friends in the Corner who are about my age.—Nellie McGrail, Sixprong, Wash.

MAY HAD HER TOOTH PULLED THE OTHER DAY AND IT HURT

Dear Aunt Nellie: We have 15 cows. I like to go to school. My teacher's name is Miss Knapp. I have three brothers, Basil, Bruce and Charles, who is the baby of the family. He is only 6 months old. My papa pulled my tooth the other day and it did hurt. We have lots of fun in summer at harvest time. I am 8 years old. My birthday is June 26.—May Millan, Menlo, Wash.

HENRY HAS A SHETLAND PONY AND TWO GEESE FOR PETS

Dear Aunt Nellie: I am going to tell you about our farm. I am 12 years old and I have a Shetland pony, and two geese. I have four brothers. We have four horses and four cows, and three calves. We have two dogs and we have about 50 chickens. I ride my pony to school. It is a mile and a half to our schoolhouse. I am in the third grade. My teacher's name is Mrs. Calley.—Henry Merrick, Fishtrap, Wash.

BASIL HAS A GUN AND GOES HUNTING DURING VACATION

Dear Aunt Nellie: I have a gun and went hunting during vacation. I am 11 years old. I am in the sixth grade. I would like to see Clayton Beason. He used to live in Menlo. We have 27 head of cattle, 15 cows and four yearlings, five little calves and three horses. We have a dog and her name is Dot and a cat.—Basil Millan, Menlo, Wash.

DOROTHY TOOMBS IS SEVEN AND IN THE FOURTH GRADE

Dear Aunt Nellie: I have been reading the letters in the Children's Corner and I am going to try to write a letter. I am going to tell you about the fun we have at school. I am seven years old and in the fourth grade. I have two sisters and three brothers. We have a little dog and his name is Happy. We have five cats. I live on a farm of 160 acres. We play all kinds of games at school. I hope to see my letter in print.—Dorothy Toombs, Wren, Ore.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Jan. 20.—Fear of German sea rovers put a stop to export of wheat today and caused a material sag in prices. The result was an unsettled close, 5-8c to 1 7-8c net lower, with May at $1.86 1-8 to $1.86 3-8 and July $1.51 1-2 to $1.51 5-8. Corn finished 5-8c to 7-8@1c down and oats off 3-8c to 1-2c. Provisions showed losses varying from 2 1-2c to 12 1-2c.

Depression ruled in the wheat pit right from the outset and there was at no time any important rally.

Canadian shipments of much low grade wheat to Minneapolis formed an additional element against the bulls. Other dispatches from the northwest said wheat in cars that could not go east was almost unsalable, even at discounts of 5 cents a bushel.

Corn fell with wheat. Oats had no independence and merely followed the descent of other cereals.

Weakness of hogs and grain eased down the provision market. Besides abnormal freight rates on the ocean were expected to curtail the outgo to Europe.

Pacific Northwest Grain.

PORTLAND, Ore., Jan. 20.—Grain: January delivery: Wheat—Bluestem, $1.67; fortyfold, $1.63; club, $1.62; red Russian, $1.58.

Oats—No. 1 white feed, $36.75.

Barley—No. 1 feed, $40.

Futures: February-March bluestem, $1.68; fortyfold, $1.63; club, $1.62; Russian, $1.58. Oats, $37.

Barley — February, $40; March, $40.50.

SEATTLE, Wash., Jan. 20.—Wheat—Bluestem, $1.66; Turkey red, $1.66; fortyfold, $1.63; club, $1.63; fife, $1.63; red Russian, $1.61.

Barley—$39 per ton.

TACOMA, Wash., Jan. 20.—Wheat—Bluestem, $1.70; fortyfold, club and red fife, $1.66; red Russian, $1.64.

WILBUR, Wash., Jan. 20:—Bluestem, $1.55; club, $1.50. Oats, $36. Barley, $36. The farmers of this vicinity sold 63,000 bushels of wheat here during the last week. The price ranged from $1.50 to $1.57.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—Potatoes, $2@2.25 cwt; new potatoes, 15c lb; sweet potatoes, $6.

Apples—Washington apples, cooking, 60c@$5c; eating, $1@1.25; Wageners, 85c@$1.35 box; Jonathans, $1.25@1.35 box; Winter Bananas, 80c box; Kings, $1 box; Spitzenburgs, $2 box; Baldwins, 90c box; Delicious, large, $1.75@2.25 box; Rome Beauties, $1.25 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Coin, 38c lb; Gold Leaf, 40c lb; Better butter, 40c lb; Hazelwood, 40c lb; Peerless, 38c lb; Jersey Belle, 39c lb; Attalia, 40c lb; Diadem, 40c lb; Jersey, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 28½c; Wisconsin limburger, 28c lb; brick cheese, 28c lb; domestic Swiss, 35c lb; western cream, Idaho or Oregon twin or triplets, 24c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $13@14; fresh eastern eggs, $13 case; eastern storage eggs $10 case.

Cattle—Prime steers, $5@6.50 cwt; heifers, $5@5.50; cows, $4@5.

Sheep—Wethers, $6@7 cwt; ewes, $5.50@6 cwt; lambs, $9 cwt.

Hogs—Heavy hogs, $9 cwt.

Live Poultry—Springs, 14c lb; hens, 13@14c lb; old roosters,6@7c lb; young ducks, 11@13c lb; geese, 10c lb; tom turkeys, 16c lb; hens, 17c lb; dressed tom turkeys, 28c lb.

Hide Quotations.

Green cows and steers—25 lbs. and up, 16½c; salted cured, 19c; green bulls and stags, 13c; salted cured, 15c; kip, 15 lbs. to 25 lbs., 21c; calf skins up to 15 lbs., 30c; dry flint hides, 32c; dry salted, 27c; dry calf skins, under seven lbs., 38c; dry sheep pelts, full wooled, 20-23c; dry shearlings, 10-75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2 each.

Oregon Fruits.

PORTLAND, Ore., Jan. 19.—Controlling interest in the Oregon Fruit company which operated 11 packing plants in Oregon, passed today to the Pacific Fruit and Produce company, for $50,000, it was announced. The Pacific company owns plants in Oregon, Washington and California.

Western Potatoes.

MINNEAPOLIS, Jan. 19.—What is said to be the highest price paid for potatoes in the Minneapolis or St. Paul markets in the last 30 years was reached here today. Western potatoes sold at $2.10 a bushel in carload lots, while Minnesota grown potatoes were quoted at $1.85.

Seattle Market.

SEATTLE, Jan. 20.—Casting of accounts for the week-end shows the potato market at $60, abnormally light sales in Seattle, and eastern buyers, who have caused the high prices, backing away to bids of $35. Futures are mere guess work, but few wholesalers on Western avenue are willing to say that prices will not go higher. One fact glimmers through the trade this winter, and that is that the Seattle market can do without Yakima gems when prices are high. Sales of gems here for the last month for local consumption will not average a car a day.

All who are interested in the trade are endeavoring to get at an accurate estimate of the holdings in the Yakima valley. Brokers here place them at 1200 cars. Growers insist that there are not more than 500 cars.

Yakima onions, due to their superior quality and ideal weather conditions last season, are in better demand than Oregons, and the price differential for the first time has been wiped out. Both are selling at 6c per pound.

The fresh ranch egg market has collapsed for the week-end. The sudden softening of the weather has done more for the bears than all other elements and influences combined, and while jobbers are quoting 43c@44c they are doing it in whispers, leaving the prospective buyer at liberty to offer a cent less, with fair prospect of a trade.

The butter make is right up to the churns, as creamerymen say when using up all the cream that is offered, with no surplus. The market is exceedingly stiff.

Holders of cheese are making no special effort to market their stock. Prices are none too firm, and February is the month of greatest demand. No new cheese can be secured, and jobbers believe that high beef and pork prices will cause a cleanup at safe margins of profits.

BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 36@39c per dozen.

Poultry—Live hens, fat, over 4 lbs., 18c per lb.; do, 3 lbs. and under, 15c; old roosters, 10c per lb.; springs, 18c per lb.; ducks, 19c per lb.; squabs, large, $3.50 per dozen; geese, fat, 12c per lb.; turkeys, live, 24c.

Butterfat—42c lb.; dairy butter, 28c per lb.

Beef—Buying price: Prime beef steers, 8c per lb.; cows, fat, 5@6c per lb.

Hogs—Light, 11 1-2@12c per lb.; do, heavy, 10@11c per lb.

Veal—Fancy light, 12 1-2@13c per lb.; do, heavy, 9@10c per lb.

Hides—Salted, 19c per lb.; salt kip, 22c per lb.; salted calf, 32@35c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 32@33c per lb., dry calf, 12c; (under six lbs.), 36c per lb.; bull and dry salts, 4c per lb. less; green bulls, 18c per lb.; dry butcher full wool sheep pelts, 20@23c per lb.

Seattle Wheat.

SEATTLE, Jan. 20.—It is admitted by farmers and buyers alike that the volume of wheat that has changed hands this week has been unusually heavy, bids having reached an altitude that appeals to all holders, and unless there are serious breaks the present movement is likely to continue to a cleanup. Bids of $1.55 and $1.57 for bluestem, $1.57 for turkey red and $1.52 for club have had their effect.

There has been considerable conjecture as to how much of the 1916 wheat and carry over still remains unsold in Washington. Millers and exporters here are positive that there is less than 10 per cent, but how much less is controversial. Some heavily producing localities are cleaned up entirely. Others have 10 per cent, a few hold more. Reports of 5 per cent of wheat are frequent. Millers have made a rather exhaustive survey of the country and none will claim that horizontally Washington farmers hold more than 10 per cent. Many believe it will not reach that amount.

Portland Wheat.

PORTLAND, Ore., Jan. 20.—The wheat market eased off at the close of the week in response to the declines at Chicago, but before the drop came there was fairly liberal buying for account of eastern millers and also some purchasing in exporters. The present depression is regarded as merely temporary, and buyers would take on more wheat if they could get it at consessions, but farmers are not of this mind. Closing January wheat bids at the exchange were: Bluestem, $1.67; forty fold, $1.63; club, $1.62; red Russian, $1.58.

Oats and barley were firm and quiet at the end of the week.

Live Stock Quotations.

At Chicago.

CHICAGO, Jan. 20.—Receipts, 21,000, estimated Monday, 65,000; weak at yesterday's average to 5c lower. Bulk, $10.80@11.05; light, $10.50@11.05; mixed, $10.65@11.15; heavy, $10.70@11.15; heavy, $10.70@10.85; pigs, $8.25@10.15.

Cattle — Receipts, 500; estimated Monday, 25,000; steady. Native beef cattle, $7.60@11.75; western steers, $7.70@10; stockers and feeders, $5.75@8.75; cows and heffers, $4.70@10.10; calves, $10@14.75.

Sheep — Receipts, 7000; steady. Wethers, $9.85@11; lambs, $11.85@14.40.

At Omaha.

OMAHA, Neb., Jan. 20. Hogs—Receipts, 12,300. Heavy $10.75@11.10; light, $10.40@10.85; pigs, $8.50@9.75; bulk, $10.60@10.90.

Cattle—Receipts, 500; steady. Native steers, $7.50@11; cows and heifers, $6.50@8.50; western steers, $6.50@9.50; Texas steers, $6@7.75; stockers and feeders, $6.25@9.25.

Sheep—Receipts, 800; steady. Yearlings, $10.25@12.25; lambs, $13@14.05; wethers, $9.50@10.50.

At St. Paul.

SOUTH ST. PAUL, Minn., Jan. 20.—Estimated receipts at the Union stock yards today: Cattle, 400; calves, 50; hogs, 1400; sheep, 10.

Cattle—Quality cattle were more in evidence for Saturday than usual with steers selling up to $9.25 and the she stock at $7@8.50. The half thousand supply was taken over by packers at unchanged rates. The week closes with prices on most killing cattle 15c to 25c higher.

Hogs—A run of 1400 hogs here today cleared on a steady market, notwithstanding the fact that at outside points lower levels were reached. The range today was from $10.60 to $10.80 and bulk was between $10.65@10.70.

Sheep—With only a handful of sheep offered them today packers turned to a feed lot for killing material. They bought about 300 78-pound yearling lambs at $11.90. The week has brought out moderate supplies again, though one string of Montana ewes helped the market materially.

At Portland.

PORTLAND, Ore., Jan. 20.—Hogs steady. Receipts, 262. Bulk of packing grades, $10.50@10.60; heavy packing, 215-250 pounds, $10.55@10.65; heavy butchers, $10.50@10.60; light packing, 170-170, $10.40@10.50; rough heavies, $9.25@10; pigs and skips, $9@9.25; stock hogs, $8.25@9; cripples, $8@9.

Cattle steady. Receipts, six steers; prime light, $8.35@8.50; prime heavy, $8@8.35; good, $7.75@8; cows, choice, $7.35@7.50; medium to good, $6.25@7; ordinary to fair, $5.75@6.25; heifers, $4@7.50; bulls, $3.50@5.50; calves, $6@10.

Sheep steady; receipts, 617; lambs, east of mountains, $11@11.50; lambs, valley, $10.75@11; lambs, good, $9.75@10.25; choice yearling wethers, $9.75@10; good yearlings, $9.50@9.75; choice ewes, $8@8.25; heavy ewes, $6.75@7.50.

At Seattle.

SEATTLE, Jan. 20.—Receipts, 1071; hogs, 112.

Hogs—Prime light hogs, $10.60@10.70; medium to choice, $10.25@10.40; smooth heavy, $9.75@10.25; rough heavy, $9.15@9.75; pigs, under 150 pounds, $8.50@9.75.

Cattle—Prime light steers, $8.60@8.75; medium to choice, $8.25@8.50; common to good, $6.50@7.75; medium to choice, $7@7.25; common to good, $5@6.50; best bulls, $5@5.75; common bulls, $3.50@4.50; calves, $7@9.

Sheep—Prime lambs, $10.25@10.50; good lambs, $9.75@10; wethers, $8.50@9; ewes, $6.50@8.

Spokane Stock Yards Saturday.

Hogs—Receipts, 9; market strong. Prime heavy, $10.50@10.65; prime light, $10.30@10.50; prime mixed, $9.75@10; rough heavy, $9.25@9.75; pigs, $9.25@9.50; stockers, $6@8.50.

Cattle and calves—Receipts, 92; market strong.

Prime heavy steers, $8.25@8.50; prime light steers, $7.85@8.10; good steers, $7.50@7.75; stockers and feeders, $5.50@6.25; prime cows, $6.75@7.25; good cows, $6@6.50; best heifers, $6.50@7.50; bulls, $3.50@5.25; calves, $6.50@9.

Sheep—Receipts, none; market strong. Prime lambs, $11@11.50; common lambs, $10@10.50; best yearlings, $9.50@10; good yearlings, $8@8.50; best mutton ewes, $7.75@8; common ewes, $6@7.50.

Butter and Eggs.

CHICAGO, Jan. 20.—Butter, unchanged.

Eggs—Lower; receipts, 2173 cases. Firsts, 36@37c; ordinary firsts, 33@35c; at mark, cases included, 33@36½c.

SAN FRANCISCO, Jan. 20.—Eggs—Fresh extras, 37½c; pullets, 35½c.

Cheese, new, 17½c.

ELGIN, Ill., Jan. 20.—Butter—One hundred tubs at 36½c; 25 tubs at 37c.

PORTLAND, Jan. 20.—Butter—Higher; city creamery prints, 39c; country prints, 38c.

Portland Market.

PORTLAND, Ore., Jan. 20.—Continued efforts have been made to contract for 1917 wool in Oregon. It was rumored that fine wools in the Bend section were secured at 30 cents and one grower reported he was offered 32 cents, but in general the attempts of buyers to get wool on the sheeps' back met with failure.

The egg market, after touching the high point of 41 cents during the cold spell, slid back at the close of the week. Buyers, anticipating a farther drop, bought only what they had to have and as a result nearly all dealers carried stock over until Monday.

The butter market has been gaining in strength with a broader demand. Cubes are 2 cents higher than a week ago, and prints were raised 1 cent. No change was made in the buying price of butter fat. Cheese continues firm with demand from the east.

Potato buyers are offering $2@2.25 at country points, but there is hardly any selling by farmers who are excited by the reports of extreme prices being paid for potatoes in Washington. Dealers think present prices are partly the result of manipulation, and they look for a break when Idaho and Colorado resume shipping. The jobbing price on the street is now $2.25 to $2.50

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $36.75 per ton.

Corn—Whole, $46; cracked, $47 per ton.

Millstuffs—Bran, $26.50 per ton; shorts, $30.50.

Barley—No. 1 feed. $40; brewing, nominal; rolled, $41@42.

Hay—Buying prices. Timothy, eastern Oregon, $18@21; alfalfa, $17@18; clover, $12.50; grain, $13@15.

Eggs—Oregon ranch, case count, 37@37c per dozen; candled, 40@42c.

Poultry—Hens, 14@17c; ducks, 16@18c; turkeys, live, 20@22c; dressed, 25@26c; geese, 12@14c.

Butter—City creamery, prints, 39@40c per pound; cubes, extras, 37c.

Cheese—Oregon triplets, 20c; Young Americas, not quoted.

Dressed meats—Veal, 15c; pork, 13c.

Hops—1916 crop, 5@9c.

Potatoes—Oregon, joobing price, $2.25@2.50 per cwt.

Onions—Buying price, $5 for country points.

Wool—Eastern Oregon, fine, 24@30c; coarse, 33@36c; valley, 33@35c.

Beans—Small white, 11 1-4c; large white, $11.10 per 100 pounds.

Hides—Salted hides (25c lbs. and up), 19c; salted stags (50 lbs. and up), 15c; green and salted kip (15 lbs. to 25 lbs.), 18c; green and salted calfskins (up to 15 lbs.), 27@28c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 13c; dry hides, 30c; dry salt hides, 25c; dry horse hides, $1 to $2; salt horse hides, $3 to $5.

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WOLF SKIN BOUNTY.
Hunter Lives on Thunder Creek.

Ben Mutcher, who makes his winter headquarters in Thunder creek, up near the pass that leads over into the Park creek country, was in Mount Vernon, Wash., with a wolf skin measuring 64 inches from tip to tip. Mutcher took his skin to the country auditor who made out a claim for him for the amount of the bounty, $15. The swarthy mountaineer said he had sold about $60 worth of skins at Sedro-Woolley and that this one was also sold.

Want Ads

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BE AN AUTO AND TRACTOR EXPERT. $75 to $200 a month—learn in six weeks. Thousands of successful graduates. Catalog free. Rahe's Auto School, 532 East 11th st., Kansas City, Mo.

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CAN SUPPLY FIRST-CLASS RANCH hands and other male help on short notice. Lewis Labor Agency, Chas. Lewis, Mgr. N211 Stevens, Spokane. Phone Main 3352.

MARRIED COUPLE WANT FARM WORK; experienced; wife good cook. P. O. Box 1024, Spokane.

MISCELLANEOUS—FOR SALE 60

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SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER!

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors, $1.00.
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Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

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SASH AND DOORS.
The best place to buy your sash and doors is from O. B. Williams Co. We not only sell for less, but will give you satisfaction, or money back. We own our own mill, make prompt shipments, and guarantee safe delivery. Send for our big, illustrated catalog, No. 27, mailed free, post paid, promptly on request.

5 cross panel doors, No. 1	$1.33
Craftsman doors	1.75
Glass doors, as low as	2.25
24x28, 2-light window	1.46
Bungalow casement sash	.56
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TRACTOR ENGINE.
We have, in first-class condition, slightly used Minneapolis 22½-H. P. traction engine for sale at a sacrifice. This is a bargain if you can use it. Write for price and full details.
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BUILDING MATERIAL AT WHOLSALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

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We have all kinds of berry boxes and crates, butter and egg cases. TRY OUR CEDAR SHINGLES. HEDLUND BOX & SHINGLE CO., SPOKANE.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

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MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

LIGHTING EQUIPMENT 74

NIXON-KIMMEL CO.—EDISON STORAGE battery and farm light plant distributors. Sell or repair everything electrical. Spokane.

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How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

POULTRY 174



This classification introduces the person who wants to buy purebred poultry to the person who can fill his or her order satisfactorily. If you have breeding stock, hatching eggs or chicks to sell, now is the time to advertise.

ORDER YOUR BABY CHICKS NOW FROM heavy laying strain; delivery guaranteed; our chicks please; R. I. Reds, March, $15 100; after Mar. $12. White Leghorns, March, $12 100; after March, $10. Maplebrook Poultry farm, Southworth, Wash., Box 3.

FAMOUS CARNATION WHITE LEGHORNS. Baby chicks; high-grade utility stock; birds of merit, quick maturing; heavy winter layers; free range. Breeding stock. Ernest Raush, Carnation Poultry Farm, Kent, Wn.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please. $12—100. Free catalog. Freshiald Farm, Colfax, Wash.

I HAVE PLYMOUTH ROCK COCKERELS, ready for service, at $2.50 each. GOOD-LAYING STRAIN. F. C. B. Zenith. J. P. Jorgenson, Zenith, Wash.

3 FINE R. C. R. I. RED CKLS., PRICED to sell quick; 1 "Bill Taft" strain, $7.50; 2 "Dolly Madison," $5 each. F. G. Wilde, 4727 70th st., Portland.

MAMMOTH BRONZE TURKEY, BEST IN the west. Unrelated stock. Mrs. H. J. Cortner & Mrs. C. R. Lowery, Payette, Ida.

LIVE STOCK 177

FOR SALE—29 COWS, GRADE; 1 AYRshire bull, Robin Hood stock; 18 to 20 cows, milk test 49 up to 55 at Monroe condensary; 9 heifers, yearling this spring; 2 horses, machinery, separator, cans.

123-acre farm to rent; land can not be beat; house of 5 rooms; buildings are comfortable.

Chas. J. Davies, R. 1, Tolt, King County, Wash.

50 BRED SOWS AND GILTS, 50 OF TRUE Berkshire type and quality, bred to grand champion boars, are included in our private sale list now ready for mailing. Write for it today. Silver Birch Farms, Bx. R, Newport, Wash.

15 GUERNSEY COWS AND HEIFERS FOR sale, sire Langwater Emigrant 14076. Have to make room for our registered Guernseys. Most of them freshen in early spring. Middledale Farms, Goshen, Ore.

WAIKIKI FARM JERSEYS.
We offer several young bulls and heifers of excellent breeding. Send for descriptions and photos. Waikiki Farm, R. 7, Spokane, Wn.

FOR SALE—2 GUERNSEY BULL CALVES, fine breeding. Price reasonable. G. K. Chaplin, 138 No. 73d st., Seattle.

12 HEAD OF VERY CHOICE REGISTERED red roan and white Jr. yearling Shorthorn bulls. Wm. Mulhall, Fenn, Ida.

HARNESS and SADDLERY 189

H. A. BOSTWICK, HARNESS AND HARness repairing. Postage paid on mail orders. N624 Monroe, Spokane.

GROCERIES 222

3 LBS. EXTRA FINE COFFEE, ROASTED fresh daily, by parcel post, for $1. Martin Marks Coffee Co., Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

FUR RUG MOUNTING A SPECIALTY. Heads, animals and birds mounted. Withers Bros., 822 Sprague, Spokane, Wash.

ARCHITECTS 558

ADDRESS L. M. STARR FOR PLANS AND specifications. E1218 12th ave., Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

LIMITED SUPPLY FINE NORTHERN Okanogan valley grown yellow and white Dent seed corn, on cob or shelled. Yellow took first prize and White fourth for First district corn show in St. Paul. None shipped testing under 90 per cent. Price 10c per lb., prepaid. L. F. Pourtales, Oroville, Wash.

WRITE FOR CATALOUGE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEND US YOUR NAME
For Our New Seed Catalog.
SEATTLE SEED CO., SEATTLE.

SEEDS 620 Continued.



ACCLIMATED SEED.
In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.
If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.
It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS,
VETCH OR "TARES,"

A Great Forage or Seed Crop.
RED CLOVER, ALSYKE,
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.

COMPLETE LINE OF FARM SEEDS.

We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.

CORVALLIS FLOURING MILLS.

Corvallis, Oregon,
Home of the Famous Oregon Agricultural College.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, ORE.

FARM SEEDS, COMPLETE STOCK OF red and alsike clover, timothy, vetch grass seeds, seed grain, garden seeds. Send for free catalogue.
D. A. WHITE & SONS, Seedsmen,
SALEM, Ore.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

ALFALFA SEED IN LOTS FROM ONE TO one hundred bushels at $8.50, f. o. b. Clements, Kan. Samples on request. H. H. Stephenson, Clements, Kan.

NURSERY STOCK 621

PRUNE TREES; THOUSANDS; GRAFTED walnuts. Trees of all kinds. Buy direct and save 50 per cent. No agents. Our prices sell. Write for planters' catalog and price list. 26 years in business. Carlton Nursery Co., Carlton, Ore.

FARM LANDS—FOR SALE 651

WHY GO TO MONTANA OR CANADA WHEN YOU CAN BUY BETTER WHEAT LAND IN WASHINGTON FOR $20 PER ACRE? EASY TERMS.

720 acres, or will divide into smaller farms. This land is in the famous Waterville-Mansfield district, where there is plenty of water and moisture and the soil is a good, dark loam, with a clay subsoil; produces 30 to 40 bushels of wheat per acre; part of it is in cultivation, and practically all tillable; it lies close to the railroad and near a good town where there are good schools, churches, stores and other conveniences. The climate is excellent, and plowing can be under way very early in the spring. No severe winters to combat. This section of the country produces a very hard wheat, which commands the top price. We can sell this land for ¼ down and the balance a long time, at 6 per cent. Did you ever hear of anything better?
ARTHUR D. JONES & CO., SPOKANE.
ARTHUR D. JONES BLDG.

MONTANA GRAIN AND DIVERSIFIED farm land in Judith Basin, Shields River Valley, Great Falls District and other good districts. Prices $7 per acre and up for stock farms; $20 to $40 per acre for good grain land; small cash payment—balance easy terms and 6 per cent interest. Have a few places on which the owners will take some good Washington property as part payment—time on balance. Call or write for Montana land list and see us before you go. We can give you some pointers that will cost you nothing and will probably save you a lot of time and worry later. HEGE & SCHIFFNER CO., 715-17 Paulsen bldg., Spokane.

RAW LAND, SPECIALLY SUITED TO poultry raising and dairying. Ask for our 1916 offer and monthly payment plan. Office Wall and Post sts., near Post street bridge. Phoenix Lumber Co., Dept. A. Spokane, Wash.

NORTHERN PACIFIC RAILWAY LANDS in eastern Montana at $2.50 to $18 per a. Suitable for farming or grazing. Easy terms. For information write or see W. E. HOLT, MILES CITY, MONT.

FARM LANDS—FOR SALE 651 Continued.

GREAT NORTHERN LAND CO.
5792—320 acres choice Palouse land, in a high state of cultivation; fair buildings and good water; two miles from town, and a crackerjack at $67.50 per acre; terms.
640 acres raw wheat land, 500 of which is choice soil, the remainder fine pasture; three miles from station; owned by a nonresident; goes at $9 per acre. This is very cheap. Terms.
If going to Montana, see us, as we can save you money. For farm land come to headquarters.
G. N. LAND CO., COR. HOWARD AND 1ST.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry. 92 Ninth ave. Calgary, Alberta.

BARGAINS IN FARM LAND.
Our business is loaning money on farm and city property. Occasionally we have properties for sale which have come into our possession on account of foreclosure of loans. These we offer at practically the net cost to us, which is far below their real value; a small payment down, the balance on easy terms, with low rates of interest. Send for list.
THE PENNSYLVANIA MORTGE. INV. CO.
BOX 6, SPOKANE, WASH.

253 ACRES OF NO. 1 RICE LAND FOR sale at $75 per acre. One good crop ought to pay for the land and all expenses. Water from 8 to 16 feet from surface, and canal running along side of land. $40 per acre cash; would take other property in exchange for balance, or on terms at 6 per cent. C. R. Suggett, College City, Caluza Co., California.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

120-ACRE DAIRY FARM; 80 A. TILLable; 12 acres cultivated; 35 acres ready for plow; 5-room house, barn and outbuildings; 1 mile to town; price, including 9 milk cows, $4000; terms. O. V. Manring Investment Co., 22 Symons blk., Spokane.

WESTERN WHITMAN WHEAT AND PASture lands from $10 to $40 an acre. Values increasing. Write me about what you want, I shall try to locate you here. H. M. Moffatt, Winona, Wash.

MONTANA LANDS OF ALL KINDS, small payment; long time on balance. Can take good farm lands as part payment. Robert A. Hopkins, 617 First ave., Spokane.

SEE US IF YOU WANT TO BUY OR SELL farm lands. J. F. DEALY & CO., Spokane.

FARM LANDS—WANTED 654

MAYBE YOURS IS JUST THE PLACE WE ARE LOOKING FOR.
If you want to dispose of your ranch, please write us or better come in and tell us about it. We have several customers for wheat and stock farms. Perhaps yours is just the farm we want.
ARTHUR D. JONES & CO.
ARTHUR D. JONES BLDG.
SPOKANE, WASH.

LIST YOUR FARM WITH US—WE SELL land.
G. N. LAND CO., Cor. Howard and First, Spokane.

ACRE TRACTS—FOR SALE 669

CALIFORNIA LANDS.
3½ miles from the Corning depot in MAYWOOD COLONY, CALIFORNIA, I offer a rare bargain, consisting of 60 acres of clear and practically level land, fenced and cross-fenced, with good 5-room house, bathroom and fireplace, horse and cow barn 40x60 feet, carriage house, chicken and brooder house, tankhouse, pumping plant and other outhouses; beautiful shade trees around house; public school 1½ miles distant; on splendid county road. Especially good for dairy, poultry or small stock and grain farm. Improvements cost about $3000. This place can be bought for $4000; terms if desired; 6 per cent interest on deferred payments. No kind of a trade considered.
W. N. WOODSON, Owner, CORNING, CAL.

SUBURBAN TRACTS—For Sale 672

SUBURBAN HOME FOR SALE.
On account of sickness a neighbor has moved to California and asked me to sell his suburban home of 20 acres, west of Spokane, near paved road and electric line; good buildings; alfalfa, clover, strawberries, raspberries and five acres commercial orchard; close to school; good neighbors; all under irrigation. This is a place your family will appreciate. Terms. D. M. Adams, R. D. 1, Spokane, Wash.

FOR SALE OR EXCHANGE 702

MR. FARMER.
If you have any farm land or city property that you wish to sell or exchange for other property, write us for full particulars. We handle property in all parts of the northwest.
MAUSER & MAUSER,
JAMIESON BLDG., SPOKANE.

IF YOU HAVE FARMS FOR SALE OR exchange write us full particulars.
J. MELVIN THOMAS & CO.
EXCHANGE BANK BLDG., SPOKANE.

TO EXCHANGE—REAL EST. 705

PALOUSE FARM TO TRADE.
160 acres near Potlatch, Idaho, improved. Price $12,000. Also a 6-room house and 2 lots; a nice corner; in Spokane; and $1500 money. One or all for a large ranch, and assume; near Farmington preferred.
SEND US YOUR WANTS. We hustle and find your trades.
PACIFIC INVESTMENT CO.
209 EAGLE BLK., SPOKANE, WASH.

WANTED—GOOD REAL ESTATE IN eastern Washington, as first payment on a few good farms in Montana. Call or write and tell us what you have, but put your price at its cash value. Hege & Schiffner Co., 717 Paulsen bldg., Spokane.

SEE US FOR ALL KINDS OF TRADES if your property does not suit you. Rogers & Rogers, Spokane.

NEWS FOR BREEDERS

A RECORD SHORTHORN YEAR.

The year 1916 will be written in history as a glorious one in the annals of the Shorthorn breed, says a writer in the London Live Stock Journal. Both the fashionably bred Scotch Shorthorn and the so-called dairy Shorthorn have upset all previous records, and although the blue riband of the Smithfield club has not this year gone to a specimen of the premier breed, yet adherents of both types of Shorthorn have every reason to feel thoroughly satisfied with themselves.

Is it not well, however, for the exponents of the two now almost distinct types to see whether they can not draw closer together instead of, as at present, drifting wider and wider apart? The conclusion to be drawn from the statistics of Shorthorn sales during this last year is that the boom in prices exists only in regard to animals of extreme types. The beef Shorthorn must be of the most fashionable Scotch blood and of the short-legged, thick, blocky type if it is to realize a fancy price, and, on the other hand, unless the good old English pedigrees are represented by animals with high milk records, or possess particularly good milk vessels, they fail to create much enthusiasm, and their market value is little, if any, above that of a good commercial cow with a good bag, many of which are fetching from $200 to $250 in local markets.

There was a time when a Shorthorn was a Shorthorn, and the only matter in question was as to whether the animal was of the Booth or Bates blood. Both sorts had good qualities and some bad ones, but there was not the vast difference in characteristics between the two sorts as there is between the beef and dairy types of today.

GRAND CHAMPION JERSEY.



Golden Fern's Noble, grand champion Jersey bull at the National Dairy show, 1916. One of the world's most famous sires.

FASHION IN BREEDING.

But since the days of Sittyton the pandering to fashion has steadily grown, and the onlooker can not help putting the question to himself whether we are not in danger of a "pure Cruickshank" craze which may carry us as far as the "Bates" craze of a former day, says J. R. Barclay in the London Live Stock Journal. It must be confessed that the catering for the foreign, and especially for the United States, market has led breeders far along the road to "fashion." There are no sticklers for pedigree like the United States breeders—a fact which has been seen quite as forcibly in Aberdeen-Angus as in Shorthorn matters. They scrutinize pedigrees with most critical closensss, becoming at times absurdly finical in their fads and fancies. Home breeders are not altogether free of this hypercritical taste.

OREGON HORSE BREEDERS.

It is the opinion of Professor Carl N. Kennedy, secretary to the Oregon Horse Breeders' association, that the best way to build up the horse business in the northwest is by the use of purebred sires and better methods of breeding.

The officers of this association are John Wells, Alisell, president; G. F. Burge, Albany, vice president; Carl N. Kennedy, Corvallis, secretary; Dr. J. W. Cook, Brownsville, treasurer. The directors are: J. P. Adkisson, Wasco; A. J. Eagan, Gervais; Gust Jaeger, Sherwood; William Ledbetter, Alisell; Clyde E. Niles, Grants Pass. The association publishes a list of purebred horses offered for sale by members of the association. This list can be obtained from the secretary, Carl N. Kennedy, Corvallis.

OREGON STOCK GROWERS.

La Grande, Ore., is making preparations for the meeting of the Oregon Stock Growers' Association April 24 and 25. This meeting is one that will draw stockmen from eastern Washington, Idaho and Oregon.

GROW OR BUY HORSES?

Farmers' Review:—It has been the constant recommendation of horse writers and speakers that farmers generally should keep mares and raise colts. It is certainly reasonable to argue that it is cheaper to keep mares and raise the colts than it is to buy them of some other farmer, paying a price that not only includes production cost but profit, and many examples can be presented of farmers who are making a very nice thing on growing colts. It has been our observation that farmers generally know what pays them best, and any practice of any considerable number of farmers, no matter how far wrong it may appear to the theorist, is worthy of our very serious consideration. In a communication from Secretary Dinsmore of the Percheron Society we find that "not more than 16 per cent of our farmers are raising colts." This leaves the colt raisers pretty sadly in the minority, and still we are told they are right, and that more farmers should raise colts. We don't say that the practice of the great majority of farmers in buying their work horses is correct, but nevertheless we do say the practice of any large number of farmers is worthy of our very serious consideration. Not all farmers who are not breeding mares are fixed so they can raise colts, but many of them are, and what we would like to know is, who's right?

HERO OF PERTH SHOW.

Veloz of Naemoor, the Shorthorn hero of the 1916 Perth show, realized $14,419 at Buenos Ayres, the buyer being Alberto Castell.

The sire of this 1915 bull is Edgecot Masterpiece, and his dam Newton Jealousy 4th, and he goes back on his madre's side to Jealousy, and on his padre's side to Lord Buckingham, Scarlet Velvet and Baron Warlaby. Duncan Stewart's King Cruishank, second prize winner at Perth, made $5939 to Senor A de Barry, and this bull boasts the blending of the brains and blood of such breeders as W. Duthie, W. S. Marr, A. M. Gordon, R. Chilton and Captain Barclay of Ury.

ASK LARGE PREMIUMS.

It is reported that a number of the leading livestock breeders of the northwest are considering asking fair associations to place larger premiums on exhibits next fair season.

Some of the breeders declare that it is impossible for them to go to the expense of fitting their stock for the shows without chance for a greater compensation in the form of premiums. Others express the opinion that the profit from the shows to the man who exhibits his live stock is in the advertising that he gets among those persons desiring to purchase good stock for breeding purposes.

NEW ZEALAND MEAT
British Contract for Exports.

Through the good offices of the New Zealand government the meat producers of New Zealand have entered into an agreement with the imperial British government for the entire exportable meat supply of this dominion from October 20 until at least three months after the close of the European war, at an advance price over that paid last year. The new prices, free on board steamer at port of shipment, are as follows, per pound:

	Cents
Wethers, first quality, 72 pounds and under	10¾
Wethers, first quality, over 72 pounds.	10¼
Wethers, second quality	10¼
Ewes, first quality, 72 pounds and under	9¾
Ewes, first quality, over 72 pounds..	9¼
Ewes, second quality	9¼
Lamb, first quality, 42 pounds and under	13
Lamb, first quality, 42 pounds and under	12¾
Lamb, first quality, over 42 pounds..	12¼
Lamb, second quality	12¼
Beef, prime ox	10
Beef, second and heifer	9½
Beef, boning, in quarters	8½
Beef, cow, prime	9½
Beef, cow, second	8½
Beef, boneless	10½
Mutton, legs	12¾
Mutton, shoulders	10¾
Mutton, loins	10¾

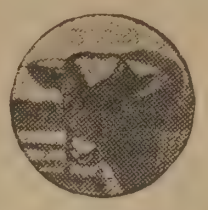
It is estimated that the increased price will mean about $5,000,000 per annum more for the meat producers of New Zealand, and this practically spot cash.

South African Paint Factory.

Earth pigments and ochers have been discovered near the Cape of Good Hope and South Africa's first paint factory has been opened.

Breeders' Department

SHORTHORN CATTLE



Gainsford Perfection 442173

Hercules Shorthorns

We can supply you with choice, well grown breeding stock. Your inspection of our herd is invited. Visitors always welcome.

Day & Rothrock

205 Exchange Bank Bldg., Spokane, Wash.

HOLSTEIN CATTLE

Avalon Dairy

A splendid lot of Young Holstein Bulls for sale, sired by Hartwood Hello Hengerveld (129524), first prize winner at Gem State Fair, 1916, and King Lyons Spofford 13th (99451). Prices reasonable—time payments at 6 per cent interest. Correspondence solicited.

AVALON DAIRY, Kuna, Idaho.

HOLSTEIN CATTLE

Young stock by richly bred grandson of King of the Pontiacs.

A. E. SMITH. Sumas, Wash.

HOLSTEIN BULL CALVES FOR SALE.

From 4 to 10 months old. SIRED by ASH GROVE VILLA NETHERLAND. Prices very reasonable, quality considered. Correspondence Solicited.

F. O. JOHNSON, Meridian, Idaho, R. R. 2.

BUFFALO DUKE DOEDE

(102228) heads my herd. He is a half brother of world's record cow, Dutchess Skylark Ormsby, producing 1506 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.

H. H. STIYER. Buhl, Idaho.

Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.

Write for pedigrees and terms.

H. R. BOOMER. New Plymouth, Ida.

Holsteins and O. I. C. Hogs

For Sale—Bulls and cows, good breeding, from tested dams. May gilts, either bred or open. I have some choice young pigs, about ready to wean.

E. C. SCHUMACHER, R. 1, Granger, Wn.

WATERLOO HOLSTEIN FARM.

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje | King Segius 10th Segius Walker Pietertje 2d

C. F. JENNESS. Meridian, Idaho.

HOLSTEINS FOR SALE.

Pure-bred bulls of serviceable age, priced right. Correspondence solicited.

J. R. LONG, R. F. D. No. 4, Buhl, Idaho.

JERSEY CATTLE

JERSEY ISLE STOCK RANCH.

Imported Jersey Isle cattle. Young bulls and heifers for sale from sire and dams of choice Island breeding.

C. E. LONG, Prop., Buhl, Idaho.

RED POLLED CATTLE

RED POLL FARM.

REGISTERED RED POLLED CATTLE. Grand champion bull and cow 1916 Gem State fair are producing some excellent stock. Bulls for sale.

William Welck, R. No. 5, Caldwell, Ida.

POULTRY

Highland Fruit and Poultry Ranch

Breeder of Standard Bred Rhode Island Reds and Rhode Island Whites, both combs. Eggs in season. Have fine dark red or pure white cockerels, both combs, good in type. $3.00 up. Bronze turkeys and Toulouse geese from Blue Ribbon stock. Belgian hares, $3.00 up. Airedale puppies.

J. Nonnenmacher

R. F. D. 3, North Yakima, Wash.

Stronghold

S. C. White Leghorn cockerels and pullets for sale. We specialize in day-old chicks. Orders filled in order they are received. For early hatches, order now.

STRONG BROS. Grandview, Wash.

ROSE COMB

Rhode Island White cock, first prize 1916, Spokane show, $10.

H. JEKLIN. N3120 Post St., Spokane.

HORSES

Percheron and Belgian Stallions for Sale

One registered Percheron, dark brown, weight 1800 pounds, price $400. One registered Belgian, blood bay, weight 1700 pounds, gentle to work, price $200.

This stock was taken in payment of a debt. I am engaged in other business, will take 25 per cent of their actual value or will trade for young work stock or cows.

R. D. INMAN. Grandview, Wn.

CLYDESDALE STALLION

FOR SALE—Highland Gallant, No. 18027, bay, weight 1800 pounds; stands 17 hands high; foaled April 20, 1913; sire Imp. Scarlet Pimpernel No. 15375; dam, Imp. Marietta, No. 16298, a sure foal getter.

O. I. TRICE, Grandview, Wash.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (541305) assisted by Superba Jr., (241305) and Sammy (79833). Top for size and quality. I have a few fall boars left. Now is the time to get in on spring orders. Correspondence solicited.

J. M. ROYSTON EST., C. ROYSTON, MGR. Payette or Fruitland, Idaho.

HAMPSHIRE SWINE

HAMPSHIRE SWINE

Won first on boar 1 year and under 18 months. Won first on young boar and sweepstakes on same at southern Idaho fair, 1916. Young stock for sale. Fairview Stock Farm.

ANTON MACHACEK. R. 1, Buhl, Idaho.

DUROC-JERSEY SWINE

REGISTERED DUROC JERSEYS

Prize winning animals, their progeny, boars, gilts and bred sows for sale.

L. SHELMAN. Springfield, Idaho.

Farm Trio Ads Please Poultryman

Southworth, Wash.
January 5, 1917.

The Pacific Northwest Farm Trio, Spokane, Wash.

Sirs: Enclosed find copy for "want ad" under the poultry column.

Our ad in the Farm Trio last season brought results which were very satisfactory.

Yours truly,
Maplebrook Poultry Farm,
By R. H. Rushton.

$7.50

Down *After*

30 Days Free Trial

Only $7.50 if satisfied after trial—then a few monthly payments

—and—

You Keep This Genuine Melotte

Write for catalog—it explains everything

Yes, sir, that is our offer on the world's greatest cream separator, the imported Belgian Melotte—the separator with the wonderful, self-balancing bowl. We are taking the lead. Let others follow if they will. Our catalogue explains. We say to you, "the world's greatest Melotte will give you *more cream*, bigger profits and greater satisfaction—*and*—it is up to us to prove it. You have a right to insist upon the proof when *anybody* makes claims for his separator." Read our offer.

Not a Cent in Advance

Just ask for a 30 day free trial. Then we ship the Melotte. No salesman, no agent calls; no one around to bother you or to influence you. You start using the machine according to every test you can think of. If you decide against it, all right—send it back *at our expense*. But—

If after thirty days you are convinced that the great Melotte is the cream separator for you, you can keep it on our rock bottom price offer—first payment is $7.50 after the thirty day trial, and thereafter just the same monthly payments. Send the coupon now for free catalog and full details of this offer.



Extra!

No Duty Now!

Save $15.25

The high tariff has been cut right off—the great Melotte comes in absolutely free of duty. Good for the American farmer! He gets the great Melotte Cream Separator at an extra reduction of $15.25!

The high tariff and patent arrangements have kept the Melotte out of reach of the American farmer. Now this handicap is off. You can get the world's greatest separator now without this excessive duty charge—and on our rock-bottom, direct offer

Wonderful Record

The Melotte has won more than 264 international prizes at Brussels, Vienna, London, Paris, Amsterdam, Milan, St. Louis, etc.

One Melotte has been running at Remincourt, Belgium, the equivalent of 54 years of actual work without appreciable wear.

Here is *one* great reason for Melotte superiority: The bowl is *self-balancing*—it hangs down from a single bearing and spins like a top. Can't get out of balance. The Melotte turns so easily that the bowl spins for 30 minutes after you stop cranking unless you apply brake. No other separator requires a brake to stop the spinning. *The Melotte is guaranteed for 15 years.*

Repairs—

are hardly ever needed on the Melotte on account of its self-balancing bowl—no repairs compared with other separators.

BUT—We have on hand repair parts for ten years ahead. That is the first thing we attended to, a huge stock of repairs when we introduced the Melotte in this country, and it has been a gratifying surprise that we are using hardly any of that stock.

Rock-Bottom Price!

Highest Grade Separator

WE offer you the Imported Belgian Melotte—the world's greatest cream separator—at the rock-bottom, before-the-war price: the same price charged in Belgium plus only $1.75 for water freight.

Seize this opportunity to get a highest grade separator on this astounding offer. You want a quality separator, one that you can be proud of all your life, one that will never bother you and that will always give you the maximum amount of cream without loss. So, we recommend to you the Imported Belgian Melotte—the separator with the wonderful self-balancing bowl that can not get out of balance and vibrate—especially now that we are making our rock-bottom offer. The Melotte is guaranteed for 15 years. Write at once, *while this offer lasts.*

Valuable Book Free

"Profitable Dairying". Send Coupon

The book is the work of B. H. Benkendorf, Wisconsin Dairy School-Agricultural College, Madison, Wis., and K. L. Hatch, Winnebago County Agricultural School, Winneconne, Wis. 88 pages. Contains no advertising whatever. A real, practical, commonsense treatise, telling everything about cows and dairying—how to feed and care for cattle—how to make more money out of your cows. Every farmer should have this book in his library. It is worth while getting now, even if you are not considering a cream separator at present.

We will send you this valuable book free upon receipt of the coupon. Also our new catalog describing fully the Melotte self-balancing bowl cream separator, and telling all about our rock bottom, 30 day free trial, easy payment offer. Send coupon while this offer lasts.

The Melotte Separator
H. B. BABSON
U. S. Manager
19th St. and California Ave.
Dept. 4341 Chicago, Ill., U.S.A.

Without any obligation on me send me free and prepaid your booklet, "Profitable Dairying," and your special free-tariff prices on the Imported Melotte Cream Separator. Also full details of your free-trial, monthly-payment, no-money-down offer.

Name .....

Address .....

The Melotte Separator
H. B. Babson, U. S. Manager
19th St. and California Avenue
Dept. 4341
Chicago, Ill.

Try Them All!

All the Makes on the Market

HERE'S a frank open suggestion:—

Have *every* manufacturer that is willing to give you a free trial, ship his separator to you.

If he is not willing to give you a 30 day free trial, ask him *why* he won't—get his *reason*.

Set them all up side by side, the Melotte and all the others, and then make the test. Keep a record of the results. See which skims the closest—which gives you the most cream. Figure out, on this basis, which will bring you the most profit. Notice which machine is easiest to operate—which is the least tiring. Then notice the construction. Which will stand the most wear? Which is most substantial?

We leave all this to your judgment. Look them all over. Analyze the results you get. Decide. Then keep the one which has proved best.

We're only *too glad* to have such a test of all machines together; then when you've bought the Melotte you'll be all the more a "booster" for us.

We are willing to abide by your judgment without a word. Remember the terms of our offer—if you want to return the Melotte, you may do so at our expense.

Don't buy any separator until after you have tried it 30 Days Free on your own farm.

Send the coupon at once for our Melotte catalog and the valuable book on dairying—no obligation.

College of ...
University ...

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. FEBRUARY 1, 1917. ** NO. 5.

Washington Wheat Brings Farmers Fifty Million Dollars

The farms of the state of Washington produced crops last year (1916) having a market value of $128,950,000, according to the report of the United States department of agriculture. This does not include the valuation of live stock produced, nor that of dairy products, poultry, apiaries, truck gardens and the like, which in themselves run up into many millions of dollars in value.

The department of agriculture's reports show interesting facts regarding the production of wheat in Washington, showing it to have brought considerably more than one-third of the total income from the farm crops in the state last year. The large valuation of the wheat crop ($53,818,000 as calculated on the basis of prices on December 1) was due, not to increased production, but to the almost unprecedented high prices. The following figures illustrate: Total wheat yield of the state in 1916 was 37,635,000 bushels, as against 51,420,000 bushels in 1915, which shows a decrease of nearly 14,000,000 bushels. But the value was much greater than in 1915, when it was $42,165,000, as against the $53,818,000 for 1916.

In the value of farm crops as indicated, Washington's output of $128,950,000 places the state twenty-eighth in rank among the states of the union. Montana, with a valuation of $121,055,000, crowded Washington closely, ranking twenty-ninth. Oregon ranked thirty-first, with $105,474,000 crop valuation, and Idaho thirty-sixth, with $75,136,000.

Texas led all the states of the nation with a farm crops

(Continued on page three.)

Beware, Take Care.

"Beware, young man, take care,
"She's foolin' you

In the old days of lottery tickets, if a man won a high prize, that fact was good for the sale of hundreds of tickets in the neighborhood.

Popular opinion to the contrary notwithstanding, there is no man of any profession, vocation, or occupation that is possessed of more native shrewdness than the American farmer. Yet he sometimes falls down.

With fine stories floating all about us of twenty-thousand dollar wheat checks, and hundred thousand dollar wheat checks and quarter million dollar wheat checks, the head of even a farmer begins to whirl and grow dizzy and he is tempted to enter the wheat gamble.

I don't mean the Chicago pit or the Minneapolis Wheat Exchange. I mean he is apt to want to put all his money into wheat land, and all his land and equipment and credit into the wheat crop, betting, as it were, against the weather, and the smut, and the insects and the war and shipping and the manipulated markets, with the hope that he, likewise, will win a capital prize.

Why milk the cows twice three hundred and sixty-five times a year? Why carry slop to the pigs? Why bend the back to pick up spuds? Why carry a petty egg basket to market? Why, if by one big stake in wheat, one may become independent in a single year?

Never was there a time when the temptation was greater to desert the little old standbys that have helped out in so many a pinch. Never were the risks of doing so, so great. The seasonal risk is always great for the farmer. Pests are always to be counted on.

The farmer has the labor problem also.

To these difficulties we now have added the chances of war, flush times, free trade in agricultural products, increased cost of production.

Beware, take care. It's foolin' you.

Don't put all the eggs into one basket just now. Keep the old sow, and the old mare and old Brindle, and the young hens. Plant some of the same old crops that have done so well so many times.

Let the California special depart without you, and let the big automobile flash by, and watch the new piano go into Jones's house without a pang of jealousy.

"The race is not always to the swift."

E. A. Bryan

Costs Nothing

Money cannot buy a better story than "When Knighthood Was in Flower." But you don't have to buy it. We give it to you. If you did not begin it January 18, go back and begin it now.

THE NEW DE LAVAL

A Bigger and Better Cream Separator for the Same Money



THE FARMER who buys a De Laval this year will get bigger and better value for his money than ever before.

Not only will he get a better machine, a simpler machine, a machine that will skim even closer than any previous De Laval, but he will get a machine of larger capacity.

And the price has not been increased one cent.

Just think what that means to cow owners in the face of rising prices on almost everything else the farmer has to buy, including other cream separators.

Only the tremendous volume of De Laval sales makes it possible to give the farmer more for his money when others are giving less.

The NEW De Laval is the culmination of nearly forty years of experience and development by the largest and oldest cream separator concern in the world. It represents

The greatest improvement in separator construction in the last thirty years

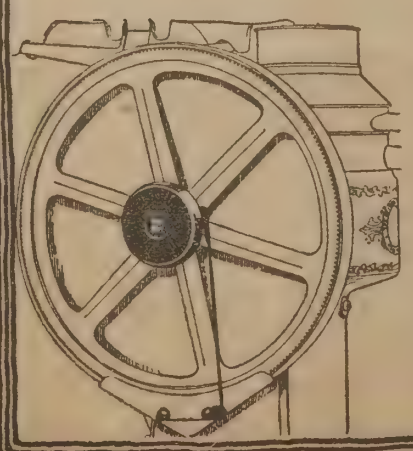
If you are trying to get along without a cream separator, or with a half-worn-out or unreliable machine, why not get a NEW De Laval NOW and stop your cream waste? You don't need to count the cost, because the De Laval will soon pay for itself.

There is a De Laval agent near you who will be glad to explain all the improvements and advantages of the NEW De Laval, and who will set and start a machine for you on your farm and let you try it for yourself.

If you haven't the spare cash right now, that need not stand in the way of your having the use of a NEW De Laval the rest of the winter. We have an arrangement with De Laval agents which makes it possible for any reputable farmer to secure a De Laval on the partial payment plan—a small payment at the time of purchase and the balance in several instalments—so that your De Laval will actually pay for itself while you are using it and getting the benefit from it.

Why not see the nearest De Laval agent at once? If you do not know him, writ to the nearest office for any desired information.

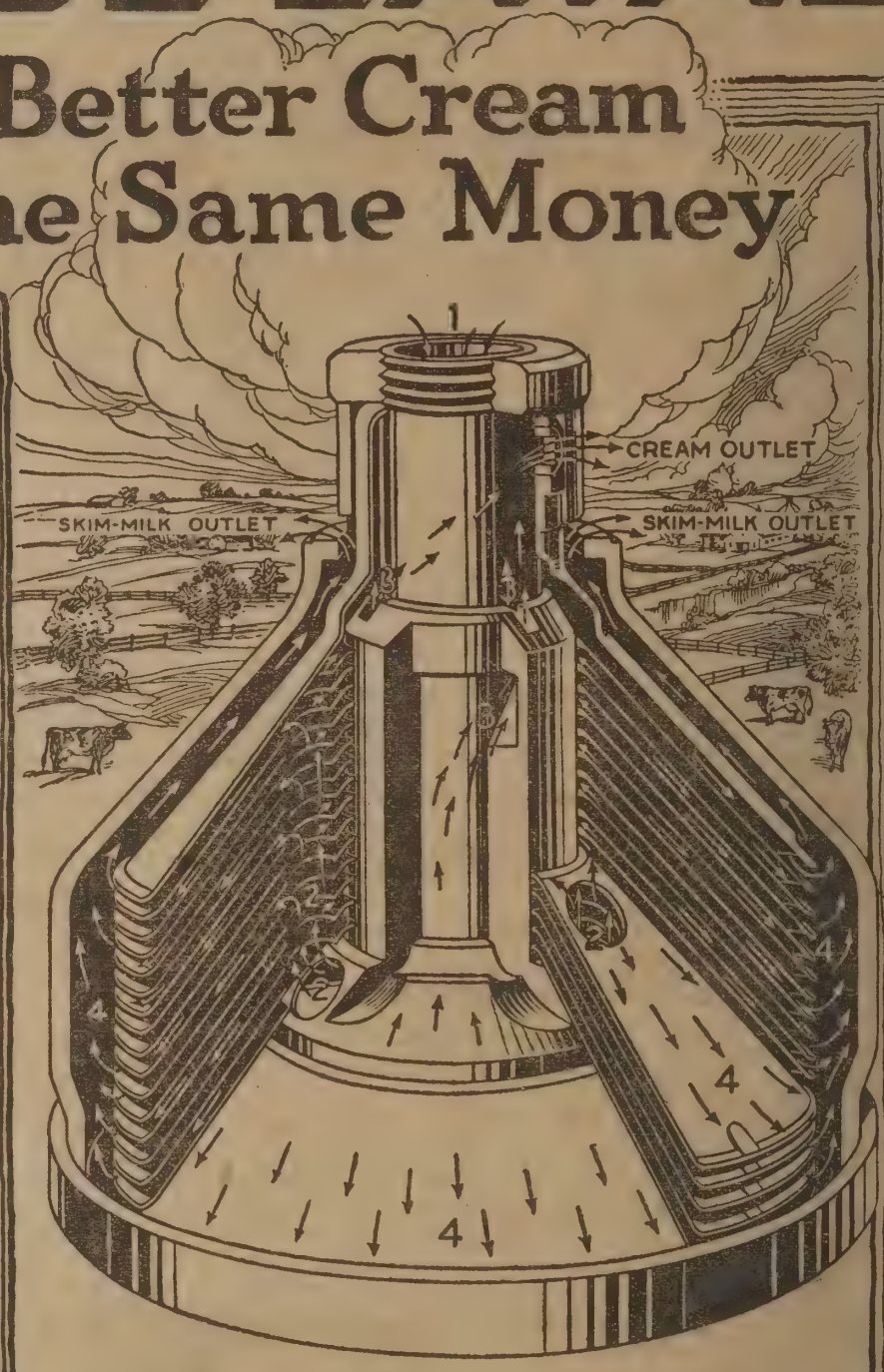
Every NEW DE LAVAL is now equipped with a Bell Speed-Indicator



The "Warning Signal" which insures proper speed and uniform cream

Because nine people out of ten turn the separator handle too slowly and because this always means loss of cream and cream of uneven thickness, every cream separator should be equipped with a reliable speed indicator.

Every NEW De Laval is now so equipped. The De Laval Bell Speed-Indicator is simple. It is accurate, it is reliable. There is nothing to wear out or get out of order. No matter who runs your De Laval, the "warning signal" will tell you when the speed is not right. You hear it and do not need to see it.



THE SELF-CENTERING DE LAVAL BOWL

Some of the points of superiority of the NEW DE LAVAL

The New De Laval bowl design and the new method of delivering the milk into the discs give increased capacity without increasing the weight or size of the bowl or increasing its speed. The incoming whole milk is delivered beyond the cream wall, and this, in conjunction with the improved design of the bowl, makes possible closer skimming than ever before, especially under the more difficult conditions of separation, such as skimming a very heavy cream or separating milk below usual temperature.

The much lower speed of the De Laval than other cream separators (in most cases from one-half to one-third less) insures minimum wear of gears and much longer life of the machine.

The New De Laval concave-bottom, self-centering bowl is so designed and so supported by the detached spindle that it will run true and do perfect work even after long wear, the great importance of which every separator user will appreciate.

There are fewer discs in the New De Laval bowl, and all disks are unnumbered and are interchangeable.

By reason of its simpler construction and the fewer number of discs, the New De Laval bowl is more easily washed and cleansed.

All New De Lavals are automatically oiled, every moving part of the machine being bathed in a constant film of oil. There are no oil holes anywhere on the machine, and the sight feed oil cup on the top of the frame provides for a constant supply of fresh oil.

The gears, pinions and other moving parts of the De Laval are exceedingly simple in arrangement, substantial in dimensions and always interchangeable.

The De Laval tinware is sturdy and heavily tinned, well suited for long and hard wear, and easy to clean.

The low speed of the De Laval bowl, in combination with greater capacity for a given size and weight of bowl than is found in other separators and the automatic De Laval oiling system, make the De Laval the easiest cream separator to turn.

New Catalogue will be mailed upon request

DE LAVAL DAIRY SUPPLY CO.

LARGEST DAIRY SUPPLY HOUSE ON THE PACIFIC COAST
101 DRUMM STREET, SAN FRANCISCO.
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 5 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF February 1, 1917

Trading Company Fraudulent?

Trial of Its Officials Is Begun in Federal Court in Spokane

With a jury sworn, including four farmers in its membership, the case of the United States against the five former officers of the Northwestern General Trading company began last week in Spokane. The specific charge against the five men is that they conspired to use the mails for fraudulent purposes, the alleged swindling of stockholders and prospective stockholders in the Trading company, the bulk of such holders being farmers of Washington and other states.

Defendants Well Known.

The defendants in the case are Gale Smith, original promoter and president of the Northwestern General Trading company; Olin C. Fowler, treasurer of the company; C. L. Davies, treasurer and later manager of the company's branch at Portland; S. T. Knudson, sales manager of the Northwestern and later in charge of stock sales of the Olympic Trading & Supply company, and John C. Lawrence, one time candidate for governor, former public service commissioner, and head of the organization department of the Northwestern General trading company when it went into bankruptcy.

What Letters Indicate.

Of special significance in the case against the former officials of the defunct Trading company was the reading into the court records of a series of letters which indicate the methods followed in selling stock and making collections for it. In most instances the letters were written by Frederick R. Sears of the company, since then deceased, to other officers or to stockholders.

In one letter to C. L. Davies, treasurer of the Trading company and now one of the defendants, Sears, apparently referring to the consolidation of the Trading company with the Farmers' Union Warehouse and Supply company of Spokane, wrote: "We certainly put over a big deal for the company last week." In another letter, referring to refusals of stockholders to pay for their stock on the ground that they had been induced fraudulently to subscribe for it, he said to Mr. Davies, whom he addressed as "Dear Clyde," "However, you know how we do it over here, make them toe the mark and come through with the dough."

Stockholders Threatened.

One letter written to a stockholder, who was about to refuse to pay for his stock, is cited as explanation of what the writer meant by making them "toe the mark." The letter threatens the stockholder with suit to enforce collection, and declares that if such suit should fail to bring sufficient judgment to meet the claimed obligation, statutory proceedings would be started involving both the stockholder and members of his family. This letter as made a part of the record at the time of the indictment against the Trading company officials reads as follows:

"Spokane, Wash., June 1, 1914, J. H. Anderson, Bigger, Sask., Canada: Evidently you did not appreciate the gravity of the situation existing in the above case, else you would have paid attention to our former letters. The papers in the case are even now with our attorney for action. The next notice, therefore, will be a summons from the court.

"The attorneys' instructions are to take whatever legal action is necessary to secure payment of this account, to begin suit in garnishment, attachment or otherwise, immediately. Reduce the claim to judgment and issue execution to the sheriff or constable commanding him to seize all property and dispose of it at auction and to apply the proceeds to satisfy said judgment.

"Should the sale of your goods fail to produce sufficient funds to liquidate the claim, he is instructed to follow with statutory proceedings in aid of execution, wherein you and members of your family are called as witnesses, and in open court put through a most rigorous cross-examination as to your belongings. Were it possible for these proceedings to fail of their purpose there is still left a national bankruptcy act, which the United States administers, and you know what that means.

"It is too late for promise unless accompanied by a payment and a definite arrangement for settling the balance. Should the said payment not reach the plaintiff until the date set for suit (10 days from date), he can stop action by telegram.

"Do not permit yourself to think we will let you escape the just penalties of your dilatory and indefensible action. It is well for you to know also that in order to protect its members against loss through bad accounts it is the rule of the association to place the names of those who refuse to pay their just debts upon a delinquent debtors' list and place this information at the disposal of all members of the association in the county where you reside."

Used Grange Indorsement.

A letter to an Idaho stockholder by Mr. Sears indicates the use made of the indorsement by a committee of the grange and farmers' union in furthering the work of the company. In this letter the assertion is made that the company is in flourishing condition during a time in which the government attorneys declare it was constantly losing money. The letter follows:

"SPOKANE, Nov. 10, 1914.—Mr. Crab, Saywer, Idaho.—You understand this is a cooperative company issuing catalogs to members only. The membership numbers at this time nearly 8000 of the most progressive and enterprising people of this Inland Empire. By far the greater portion of these people are trading with the company, buying their merchandise, clothing, hardware, groceries, shoes, farm implements, vehicles, wagons, etc., through the company and report a saving of from 25 to 35 per cent on practically all kinds of merchandise. The company has prospered very rapidly, and in five years the membership has grown to nearly 8000 and the total assets to a third of a million of dollars, and the stock is selling for $75, nearly four times its original value.

"You will notice by the enclosed circular the executive heads of the Washington Farmers' union have investigated the company, its management and system of business very thoroughly and have unanimously indorsed the proposition. This of itself is going to enhance the value of the stock and should double the membership. The state grange of Washington also took the same action and unanimously indorsed the company. Five shares is the most we can sell to one person and represents an outlay of only $375 and makes you a part owner in the Wholesale Mercantile company that is today in the foremost rank of any institution of its kind in the west and getting larger every day. Northwestern General Trading Co."

San Francisco Judge Presides.

United States District Attorney Garrecht, conducting the prosecution, is assisted by H. S. House, a special examiner for the department of justice, and J. S. Swenson, postoffice inspector. These men spent nearly a year on the books and files of the trading company.

Federal Judge William C. Van Fleet of San Francisco is hearing the case, which will probably occupy three weeks.

F. C. Robertson appears as counsel for all of the defendants, while P. W. Kimball appears for Lawrence alone.

Charges of Fraud.

District Attorney Garrecht opened the case in the federal court room by outlining the history of the Trading company from the date of its organization in 1909 to the time it went into bankruptcy in 1915, after preying upon the credulity of grange and farmers' union members and other farmers and individuals, according to the attorney's claims, to the extent of heavy losses to them.

He declared that the company lost money every year, but that it nevertheless sent out stock salesmen with

(Continued on page eighteen.)

Following is the personnel of of the jury which will decide the guilt or innocence of the men charged with fraud in connection with the operation of the Northwestern General Trading company:

John Cassaday, Ritzville, hardware merchant.

B. B. Gillespie, Ritzville, farmer.

P. L. Fowler, Ritzville, electrician.

William E. Hall, Spokane, with Ryan-Newton company.

J. W. Mackey, Spokane, accountant with Washington Water Power company.

Christ Haag, Ritzville, farmer.

Lou Hunt, Spokane, former proprietor of Lou Hunt's soft drink parlor.

David Gorman, Spokane, real estate broker.

A. E. Keaugh, Colville, farmer.

William Coddington, Spokane, with Fidelity National bank.

Henry Kimbel, Spokane, farmer.

A. P. Fassett, Spokane, retired.

E. F. BENSON.



Announcement has been made at Olympia that E. F. Benson of Tacoma has accepted the position of state commissioner of agriculture as offered some time ago by Governor Lister. Mr. Benson takes a place which has not been filled by a regular appointee since the resignation of J. H. Perkins of Ritzville two years ago. Since that time H. T. Graves, deputy commissioner of live stock in the department, has been acting commissioner. The newly appointed commissioner is one of the leading men of the state in farm development, especially in matters of irrigation and dairying.

Washington Wheat

Brings to Farmers Fifty Millions

(Continued from page one.)

total of over $684,000,000 or approximately one-thirteenth of that of the entire United States. Iowa was second with $516,000,000 and Illinois third with $478,000,0000.

The total farm crop valuation in the United States, exclusive of live stock, dairy, poultry and the so-called minor products, was last year approximately $8,934,000,000. The nation's live stock and live stock products, which include dairy and poultry, totaled about $4,338,000,000. These two enormous totals, together with the government's estimates on the many minor farm products, bring the grand total of value produced on the farms of the country in 1916 up to $13,449,000.000.

The following table shows the valuation of farm crops, which it must be remembered does not include live stock, dairy, poultry and the like, by states, showing also their rank from the standpoint of this valuation:

State:	Value. 1916.	Value. 1915.	Rank. '16.
Maine	$89,237,000	$58,076,000	32
New Hampshire	26,237,000	19,443,000	43
Vermont	42,782,000	39,262,000	40
Massachusetts	50,621,000	46,811,000	38
Rhode Island	5,408,000	5,102,000	48
Connecticut	42,192,000	30,832,000	41
New York	293,329,000	267,725,000	8
New Jersey	79,326,000	58,360,000	35
Pennsylvania	299,408,000	232,406,000	7
Delaware	17,847,000	12,362,000	46
Maryland	87,001,000	68,905,000	34
Virginia	215,886,000	152,703,000	21
West Virginia	87,262,000	68,945,000	33
North Carolina	274,435,000	197,185,000	11
South Carolina	192,468,000	148,627,000	22
Georgia	348,924,000	234,147,000	5
Florida	60,495,000	43,122,000	37
Tennessee	220,888,000	145,997,000	19
Alabama	158,469,000	158,260,000	27
Mississipp	190,674,000	150,327,000	23
Louisiana	182,845,000	112,940,000	25
Texas	684,851,000	412,826,000	1
Oklahoma	223,723,000	171,774,000	18
Arkansas	250,511,000	147,704,000	16
Ohio	281,223,000	259,059,000	10
Indiana	285,384,000	233,039,000	9
Illinois	478,102,000	408,882,000	3
Michigan	233,748,000	199,904,000	17
Wisconsin	254,599,000	175,220,000	15
Minnesota	269,874,000	241,948,000	13
Iowa	516,658,000	329,027,000	2
Missouri	260,049,000	239,399,000	14
North Dakota	167,544,000	222,924,000	26
South Dakota	190,343,000	168,215,000	24
Nebraska	390,515,000	246,459,000	4
Kansas	314,453,000	260,517,000	6
Kentucky	219,821,000	147,004,000	20
Montana	121,055,000	86,396,000	29
Wyoming	36,323,000	25,108,000	42
Colorado	106,453,000	71,973,000	39
New Mexico	22,670,000	15,376,000	44
Arizona	18,626,000	10,262,000	45
Utah	43,436,000	26,865,000	39
Nevada	17,148,000	12,988,000	47
Idaho	75,136,000	48,735,000	36
Washington	128,950,000	93,634,000	28
Oregon	105,474,000	70,679,000	31
California	371,668,000	264,747,000	12

More Credit for Farmers

How Federal Farm Loan System Can Help

The Farmer begins this week a second series of articles on the federal farm loan system. They will be written by N. W. Durham, chairman of the joint committee of representatives of the grange, the farmers' union and the chamber of commerce that presented Spokane's application for one of the 12 farm loan banks. These articles will explain in detail such phases of the law as—

Permanent organization of the federal land banks. At first they will be managed by five directors appointed by the national board. But a little later the management of each bank will pass to nine directors. The farmers, through their farm loan associations, will choose six and the government will name three.

Duties and powers of the officers of the farm loan associations.

How the loans will be made.

The amortization feature of the mortgages—the plan by which the borrower pays off a little of the principal every year and finds, when the final interest payment is made, that the principal of his debt has melted away.

How farm lands will be apraised for prospective loans.

Joint stock land banks. Should the law be amended to cut them out?

Farm loan bonds. How issued, how secured, and their attractiveness as investments for big investors and little savers, including the thrifty boys and girls out on the farm.

Incidentally many other provisions of the law will be discussed.

Interest Keen in Loan Bank

Appointment of Directors Anxiously Awaited

By N. W. DURHAM

This is the first article in Mr. Durham's second series on the organization and operation of the new federal farm loan banking system.

News is anxiously awaited of the appointment of the five directors who will organize the Spokane federal farm loan bank and start the business of making long-time, low-interest mortgage loans to the farmers of Washington, Oregon, Idaho and Montana.

Meanwhile farmers all over the country are showing keen interest in the operation of the new system. Many are seeking information, and the Farmer herewith begins a new series of farm loan articles that will cover much ground not previously worked.

Briefly speaking, there are three main divisions of the system:

1. The federal farm loan board of five members who were named by the president.

2. The 12 federal land banks scattered throughout the nation. Two of these banks have been placed upon the Pacific slope—at Spokane and at Berkeley, Cal.

3. The many national farm loan associations, each made up of 10 or more farmers, who propose borrowing from the federal land banks.

Each bank starts with a capital of $750,000, but it gets additional money for lending by automatic increases in the capital stock and by the sale of its bonds.

The system is organized to grow like a rolling snowball. A bank loans out its first $750,000. It then holds $750,000 in mortgages. With these mortgages for security it issues $750,000 in bonds and sells them in the open market to small and large investors. That gives it another $750,000 to loan out on more mortgages, and these additional mortgages are made the security for more bonds; and thus it rolls along like an endless chain, the only limitations being the number of farmers who want to do business with the system and the number of people who stand ready to buy the bonds.

Farmers contemplating the organization of local associations need not wait for the opening of the Spokane bank. They should write to W. W. Flanagan, secretary of the federal farm loan board, Washington, D. C., for definite instructions and the necessary organization blanks.

A farm loan association may be organized in any community where 10 citizens owning land desire to borrow an aggregate of not less than $20,000. The land must be unencumbered, or the proceeds of the loan must be used in part or in whole to remove any existing debt or lien. This means that if your farm is already mortgaged you can borrow money from the government system to lift the old mortgage.

Loans may be as small as $100 or as large as $10,000.

Let it be plainly understood that farmers can organize at once, but they can not borrow money until the land banks are established.

The national farm loan associations are not limited as to the number of their members. After one is organized it may serve an entire neighborhood by receiving new members.

No loan may be made except upon the security of first mortgage.

The amount of the mortgage can not exceed one-half the appraised value of the land and 20 per cent of the permanent insured improvements thereon.

The money thus borrowed from the farm loan bank must be used to pay off prior indebtedness or for productive purposes, such as the purchase of live stock, fertilizers, equipment and improvements.

Every mortgage must contain an agreement to pay off the debt (principal and interest) in fixed annual or semi-annual instalments.

The amount of each instalment may be fixed by the borrower, but can not be less than sufficient to pay off the debt in 40 years, nor greater than to pay it off in five years.

The rate of interest charged any borrower can not exceed 6 per cent per annum.

The borrower can not be called upon to pay the debt except by the instalments he originally fixes, unless he defaults, but after five years he may pay off the whole or any portion at his option at any instalment period.

The second article in this series will appear in next week's Farmer and will discuss the permanent organization of the farm loan bank.

AT EUGENE, OREGON
Lane County Loan Association.

The first national loan association of Lane county has been organized at Eugene. Its jurisdiction extends all over Lane, Lincoln, Benton, Linn, Deschutes, Klamath and Douglas counties. Application for loans are reported from all of these counties. It has seemed advisable to have one central organization for a large district with a salaried secretary-treasurer. It is expected that a dozen or more local organizations will be formed in these counties as soon as the farmers discover the advantages of the new financial system. The first national farm loan association is ready and willing to assist the farmers to organize nearest their homes. This association now has applications for farm loans aggregating above $200,000. Already a temporary organization has been formed at Florence, Lincoln county, with C. Buchanan, the postmaster, as president, and H. L. McKee, secretary-treasurer.

REDMOND FARMERS
Organize Farm Loan Body.

Twenty-three farmers recently gathered in the county agent's office at Redmond, Ore., to consider the matter of forming a national farm loan association.

A board of five directors was elected to carry on the preliminary work of the association, the election of officers being delayed until a later date. The directors were Earl Benton, F. A. Rice, W. T. Maddox; C. R. McLallin and J. E. Bourmaster, all of Redmond.

LONG TIME LOANS
Satsop Association Organized.

A national farm loan association has been organized at Satsop, Wash., with C. B. Sherwood, master of the local grange, as president; W. H. Hay, vice president, and E. L. Brewer, secretary-treasure. A number of additional farmers are expected to take advantage of this opportunity to get long time loans as soon as the association is in working order.

Difference of 45 Cents

How Many Leaders Ought Apple Tree to Have?

By PAUL E. TRIEM

If there is an average difference of 45 cents per box between C grades and extra fancies, how many leaders ought an apple tree to have? Perhaps at first glance there may seem to be no connection between these two sets of facts, but a little thought ought to show you that there is a close connection. Extra fancy apples come principally from the leader. This is because of the abundance of sunlight and air secured to the apples grown on this part of the tree. In the old days of apple culture, each apple tree was pruned with one leader, which formed the center and tip of the tree. According to this system of pruning, there could be but a limited number of fancy apples produced to the tree.

By substituting for this one leader system another in which from three to five leaders, equally disposed around the tree, are secured, the percentage of fancy and extra fancy fruit is greatly increased. This is the experience of many apple men, among them L. Maclean of Otis Orchards, Spokane county, Wash. Mr. Maclean believes in getting less and better fruit, for by this method he is able to make a satisfactory net profit with the least possible perplexity in regard to C grades and culls, which are always the most unsatisfactory apples to sell at a profit.

In carrying out this principle, the Maclean orchards are pruned twice each year. Mr. Maclean does not pay much attention to the theory that winter pruning encourages wood growth, while summer pruning increases the number of fruit spurs. He prunes a tree to free it from superfluous and unprofitable wood, keeping always in mind the fact that fancy and extra fancy fruit means plenty of open space in the tree, for the free entrance of air and sunlight.

Handling the Soil.

Another break with tradition in the Maclean cultural methods comes in connection with the handling of the soil. We have been told for years that the only scientific system was that of clean culture, which left a surface mulch and turned under every weed and spear of grass. Mr. Maclean admits that this sounds right and that such an orchard looks pretty, but after studying a comparison of two adjacent orchard tracts, each of ten acres, one of which was kept in dust mulch and the other in clover and alfalfa, which was allowed to lie on the ground, he has adopted the latter system. In the spring the alfalfa is chopped into the soil with a disk harrow. This furnishes a mulch, secures much nitrogen from the air and insures a liberal supply of humus.

"And with it all," Mr. Maclean admits, "the prospective orchardist should not expect to have a cent to spare during the first ten years. He should plan, rather, to put all his earnings back into his plant. The first ten years go to building up the manufacturing side of the fruit business—to getting sturdy, properly shaped and well fed trees, with great bearing capacity so distributed as to give a large percentage of fancy and extra fancy apples. The next ten years will have to be devoted to building up a distributing system. These facts are too often overlooked by the man who plunges into the apple business expecting to realize a cash profit almost from the start. If he handles his business in the right way, his surplus, his real earnings, will be represented largely by the increased productivity of his trees from year to year. If a leader which was a mere twig last year is as large as your thumb or even your wrist now, you have secured a profit, even though it isn't in the form of cash."

MORE WEED SEED
Samples Are Tested at Bozeman.

Farmers and grain dealers of Montana during the year 1915-16 submitted 5035 samples of seeds to the state grain laboratory at Bozeman to be tested for germination and purity, according to a report just made. The statement indicates that Montana agriculturists show greater interest in seed quality than farmers of most parts of the United States.

There are 63 such laboratories in the United States and their reports cover 800 to 1200 samples a year. Only one, the Minnesota state grain laboratory, handled more samples this year than did the Montana state laboratory.

The report of the Bozeman laboratory calls attention to the fact that the amount of weed seed found in seed samples has steadily increased during the last three years. Thus the percentage of alfalfa seed samples containing mustard seed increased from 7.6 per cent in 1915 to 8.8 per cent in 1915, and 17.2 per cent in 1916. The number of alfalfa seed samples containing Russian thistle seed increased from 34.9 per cent in 1914 to 45.6 per cents in 1916 and 62.1 per cent in 1916.

NEW ROAD OPENED
South Bend-Raymond Boulevard.

By Mrs. Winnifred Buckingham.

The South Bend-Raymond boulevard, in western Washington, which has been under construction for over three years, was opened for traffic in January. This road is level and follows the river, also the Northern Pacific railroad tracks for four miles between the two cities. It is surfaced with concrete. The opening of this road means a great deal to the valley farmers, for it enables them to go to South Bend, the county seat, as well as Raymond, to do their trading and to sell their produce. The old county road is circuitous and lies over high hills and needed repairing so badly that few farmers ventured over it during the past three or four years.

Live Farmers in Wahkiakum

Diking Under Cooperative Effort Redeems 3000 Acres of Richest Land

By H. H. BUSHNELL

Wahkiakum county is down along the lower reaches of the Columbia river. Because of the natural difficulties of building roads to the rest of the world, its communication with trade centers is chiefly by boat. It is an old county and a little bit isolated, but it has found within itself the inspiration of growth.

The first settlement in the county was probably Cathlamet. It is said that Lewis and Clark stopped there; at all events, the Hudson Bay company established a trading post and fort there, and the building still stands close to the water's edge. In later years Phil Sheridan was on duty at Cathlamet.

Cathlamet stands on the shoulder of the great hills which hem in the mighty river, and overlooks the expanse of water so rich in the treasure of fish—a treasure which has made many men rich and supports an army of workers.

Wahiakum county was the first county of the state to decide to have a county agriculturist, and it picked a good one and he suits, for he continues the work he started. George A. Nelson was born in California, came to Oregon a number of years ago, lived in a similar climate across the river, attended Oregon Agricultural college and is now in his fifth year of service in Wahkiakum county. He has a wife, three sturdy, rosy children, a Ford car and a farm which some day he will make blossom like the rose.

"Dairying is the principal industry of this county," said Mr. Nelson, "and so our main work is along the line of dairying."

The greatest achievement of the agriculturist here has been diking. Puget island, out in the river, but a part of the county, has been diked. The work will be completed in March probably and on this and a smaller adjoining island 3000 acres of land will be redeemed—the richest land in the world with the possible exception of beaverdam. Nobody can know the patience and hard work and argument and effort necessary to get the people affected to combine to do this work unless he has tried it. And yet Mr. Nelson did accomplish it. The expense of diking on the island is heavier than it would be on the mainland. It amounts to about $35 an acre. Most of the Puget island people are fishermen by calling, but it is likely that they will be farmers in the course of time. A larger project embracing land almost the entire distance from Cathlamet to Skamokawa is under way.

It was suggested to Mr. Nelson that this redeemed land would raise fine truck crops. He agreed that it would, but said that there was no sufficient market for such crops as yet—Portland is too far away for a sufficient market for as much as could be produced. For the present the land should be utilized for dairy operations.

Extension Work.

On the week commencing January 8, Miss Mary E. Sutherland and Professor James N. Price, both of the extension service of the state college at Pullman, visited the county and lectured through the county, visiting Rosburg, Grays River, Deep River, Cathlamet, Skamokawa and vicinity and Alokoman. Both had lectured here before and they were welcomed not only as experts in their line, but as friends.

I was able to attend a few of the meetings, among them the gatherings in West Valley and East Valley, out from Skamokawa. I presume they were fairly representative.

On Thursday of that week County Agent Nelson, Professor Price and the writer entered Mr. N's car and started from Cathlamet to Skamokawa. About a mile of the road had not been grav-

(Continued on page twenty-two.)



No. 1 shows the high school girls at Cathlamet. Miss Sutherland of the extension department of the Washington State college is at the extreme left in the second row.

No. 2 is the donkey engine at work on the Puget island project.

No. 3 shows the crowd at Miss Sutherland's lecture at the home of Mr. and Mrs. Strong of East Valley.

No. 4 gives a birdseye view of the Columbia, looking across from Cathlamet.

No. 5 is the dredge working on the Puget island diking project.

No. 6 is the Grays River Canning club. Mr. Nelson is standing at the right.

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Train the Boys for Business

The extension department of the Montana state college in a bulletin recently issued, urges upon the farmer and stockman the absolute necessity of training the boys systematically and scientifically that they may be able to continue the development of the industry started by their fathers and their fathers' fathers.

"In order to develop the live stock business as it should be developed," says the college statement, "boys should be trained and developed in live stock work.

"The foundation and starting point for the boy is live stock judging. This work teaches the type of market animal that will sell to the best advantage and why type or kind of animal is in most demand. It also teaches how to select the breeding animals to produce both breeding and market stock to the best advantage—the kind that will bring top prices; that will make most economical use of their food; and the kind that will give pleasure and satisfaction to the producer."

Production and Price

The Saturday Evening Post comments editorially on the fact that the production of grains in the United States in 1916, while a billion bushels less than in 1915, brought on the market about $800,000 more money, farm value. "That smaller production means more money to the producer is an old story," says the Post.

If that story is true, as well as old, it may seem that it behooves the farmer to cut down his acreage, eliminate the expense of tilling the soil and harvesting large crops, and get rich with small crops and little labor, the smaller the richer. Sometimes the story is true. Sometimes small crops and high prices go hand in hand, but sometimes they do not, and until human nature is completely revised the higher goes the price the the larger the acreage of the following year will become. No farmer is going to cut down his acreage to half because he believes by so doing he will double the price that he will receive. Recently President Wilson urged the farmers to increase their crops, and a prominent economic scientist of New York warned them against it. Both bits of advice are futile. Nature gives the only advice that will be heeded.

Ability Must Be the Test

The members of the federal farm loan bank board have laudably announced that politics will not be considered in the selection of officers in the newly authorized loan institutions, one of which is to be placed in Spokane for the service of the northwest.

"It may be stated without qualification these jobs will not be handed out as political plums. The only consideration which will be taken into account is that of merit, efficiency and ability. There is no division of opinion among the members of the board as to this principle," says a statement issued.

Too much criticism must not be heaped upon an administration for favoring those men who have been especially loyal to it. Such favor is but a manifestation of return loyalty. But the administration's duty is to the mass of the people first, and for this reason the bank board is right in declaring that "merit, efficiency and ability" will be the basis for selecting men to conduct the branch banks.

For each bank the board is to name fiye directors, from whom a president, secretary, treasurer and vice president will be chosen as managing officers. In addition, there will be for each bank a registrar to act as fiduciary agent of the government.

Should Examine Stock Schemes

Need of more vigilant state examination of stock-selling concerns and stronger safeguards for the investing public is the outstanding lesson of the wrecking of the Northwestern General Trading company of Spokane.

Officers and employes of that company are now on trial in the United States court at Spokane for conspiracy in the use of the mails by which 8000 stockholders, largely farmers of the Pacific northwest, suffered losses aggregating several hundred thousand dollars.

As these men are now on trial it might be improper for the Farmer to express an opinion as to their guilt or innocence, but the records as examined in open court do prove beyond question that even though no criminal intent existed, the company was managed on wrong and ruinous business methods. Although it was steadily losing money the managers went on boosting the price of the stock, paying large salaries and allowing big commissions to the agents who were out pedding stock.

By securing the official signed indorsement of the company and its methods from C. B. Kegley, master of the Washington state grange, and L. C. Crow, state president of the Farmers' union, the company was enabled to conduct an active stock-selling campaign among the farmers of the Pacific northwest. Granting that these officials of the grange and the union had no improper motives and honestly thought the concern was on a sound business basis, the need of a better system of state regulation and inspection becomes all the more apparent. For if these officials, with their exceptional opportunity of looking into the business, could be misled into thinking the stock was a safe investment to recommend to farmers, what possible chance existed for the individual investor to learn the facts?

It is fortunate that the federal government turned its searchlight on the methods of the Northwestern General Trading company. If Uncle Sam had not started an investigation it is probable that the facts would never have been brought to light, and the farmers of this section would have been lured into far greater losses.

Revel in Extravagant Habits

Senator McCumber of North Dakota gave the country some wholesome truths in a speech before the senate the other day. He spoke against the proposed embargo on farm products and took occasion to condemn the profligacy and extravagance of the American people that are driving many of them to whimpering when it comes to paying the farmer fair prices for the products of his toil.

The high cost of living, he said, is largely due to extravagance, and he cited figures to show that Americans spend $13,000,000,000 annually for liquor, tobacco, automobiles and other amusements.

The North Dakota senator is not alone in his arraignment of the nation's growing passion for display, indulgence, pleasure and entertainment. Former President Eliot of Harvard notes with concern the prevailing trend and calculates that the nation is spending more for liquors, tobacco, chewing gum, the "movies" and other indulgences than it is putting out for food.

"This revelry in extravagant habits," he said, "this unquenchable demand for amusements, for continuous mental intoxicants, is undermining the sturdiness of our younger generation. The American people seem obsessed with the idea that the main thing in life is amusement, play, entertainment."

In conclusion he said that an embargo on food, in view of present prices of farm, labor and articles used on the farm, in addition to land values, would be most unjust and class discrimination.

Peace and Good Will

This sounds like a Christmas subject, but it is a subject which might profitably be brought up at any time of the year.

It seems to us that no true peace can come without good will. Until we feel right toward our neighbors there can be no lasting amity. We may have armed neutrality, and the weaker party may fear to attack the stronger, but the basis of real peace is good will.

Washington Gleanings

The Pacific Fruit and Produce company has paid during the year $568,396 to growers of the Yakima valley, as against $302,284 last year.

The Clark county prune crop of the last season is said to have amounted to seven and a half million pounds and is valued at more than a half million dollars.

The Deer Park Lumber company has purchased the Coulette Ford timbered allotment on the former Spokane Indian reservation in the vicinity of Chamokane creek, near Miles, Wash.

The residents of the Touchet district have organized a good roads association. W. G. Cordiner has been named president. M. M. Gaiser, vice president and H. H. Hanson, secretary-treasurer.

The Kennewick-Richland marketing union reports that the berry and potato growers all over the valley are lining up nicely with even a better and more solid membership than it had last year.

Ralph Fenton, a big wheat rancher near Goldendale has offered to donate $10,000 toward the building of a hard surface road from his place to Golden, seven miles away, according to the White Salmon Enterprise.

Having met its obligation to sign 7500 acres for sugar beets for the Utah-Idaho Sugar company, the commercial club at North Yakima has set a new mark at 10,000 acres and will launch a campaign immediately to get the additional acreage.

The Sound dairymen, who formed a company and bought several hundred acres of land on the highlands west of Richland, are calling for bids from local people for grubbing, leveling and fluming 300 acres that will be planted to alfalfa in the spring.

The Sunnyside crop reports for 1916 shows that the project has broken all records both in total value of products and in the average returns per acre. The total of the 1916 crop is $4,341,940, making an average of $73 per acre for the 59,449 acres from which a crop was taken this year.

What Others Say.

Southern Agriculturist: Stand up; don't be a leaner.

Farmers' Review: Let town and country cooperate—not fight.

Farmers' Mail and Breeze: Clouds dark and lowering hang over this old world just now, but the sun, I think, is still shining somewhere behind them.

Hoard's Dairyman: We do not believe it is profitable for a farmer to equal his hired man in manual labor. He should take the time to manage his farm.

Wallace's Farmer: Ultimately, the United States will have to bear its share of the burden of this war, but very likely for a year, and possibly for two or three years, after the war ends, we will continue on the high tide of prosperity, to be followed by a period of depression lasting for a number of years.

Is Nation's Food Supply

Keeping Pace With the Growth of Population?

Interesting questions arise as to whether the domestic supply of the nation is keeping pace with the growth in population and as to what are the prospects for the future, says Secretary of Agriculture D. F. Houston, in his annual report. The following table in this connection is illuminating:

FOOD SUPPLY OF THE UNITED STATES.

Population.

June 1, 1900	75,994,575
June 1, 1910	92,174,515
June 1, 1916	101,882,479

Item.	Total Production.	Per capita.
Meats: Beef, veal, mutton and pork (pounds):		
1899	18,365,000,000	248.2
1909	19,712,000,000	213.9
1915	22,378,000,000	219.6
Dairy products: Milk (gallons)—		
1899	7,265,804,304	95.6
1909	7,466,406,384	81.0
1915 (estimated)	7,696,844,000	75.5
Butter and cheese (pounds)—		
1899	1,790,097,244	23.6
1909	1,942,378,069	21.1
1915 (no data available)		
Poultry products: Poultry raised — (number)—		
1899		
1909	488,500,000	5.3
1915 (estimated)	555,500,000	5.5
Eggs (dozens)—		
1899	1,294,000,000	17.0
1909	1,591,000,000	17.3
1915 (estimated)	1,811,000,000	17.8
Fish (pounds):		
1900-1904	989,275,000	12.5
1908	1,046,541,000	11.6
1915 (no data available		
Cereals: Corn, wheat and rice (bushels):		
1899	3,333,868,710	43.9
1909	3,257,407,468	35.3
1915	4,094,986,999	40.2
Potatoes (bushels):		
1899	273,318,167	3.6
1909	389,194,965	4.2
1915	359,103,000	3.5
Sweet potatoes (bushels):		
1899	42,517,412	.56
1909	59,232,070	.64
1915	74,295,000	.73
Citrus fruits: Oranges, lemons and grapefruit (boxes):		
1899	7,075,557	.093
1909	23,447,044	.254
1915 (estimated)	24,670,282	.272
Orchard fruits: Apples, peaches and pears (bushels):		
1899	197,455,620	2.6
1909	190,433,327	2.1
1915	304,686,000	3.0
Small fruits (quarts):		
1899	463,218,612	6.1
1909	426,565,863	4.6
1915 (no data available)		
Sugar (pounds):		
1899	486,006,871	6.4
1909	1,688,390,143	18.3
1915	2,025,680,000	19.9

These statistics cover the past 16 years, within this period the population of the nation has increased, in round numbers, 26,000,000, or 33 per cent. The articles dealt with cover the more important parts of the diet of the people. Meats and dairy products constitute 37 per cent of the average diet, fish 2 per cent, cereals 31 per cent, Irish and sweet potatoes 13 per cent, and other vegetables 8 per cent. It is notable that, notwithstanding the very rapid increase in population, the production per capita of the commodities indicated, with the exception of meats and dairy products, has remained approximately the same or has increased.

Similar statistics are not available for vegetables other than Irish and sweet potatoes, but it is reasonable to assume that there has been at least a proportionate increase in production. The figures for Irish potatoes may be taken as a fair index of the normal increase of vegetable products. The potato acreage increased from 2,938,778 in 1899 to 3,668,855 in 1909, or 24.8 per cent, while the value of the product increased during the same period from approximately $98,400,000 to approximately $166,400,000, or 69.2 per cent. The value of all other vegetables increased during the 10-year period from $120,000,000 to $216,000,000 and the acreage by over 600,000. The statistics regarding canned vegetables are significant. In 1899, 19,300,000 cases of canned vegetables, valued at approximately $28,700,000, were packed in the United States. In 1909, 32,800,000 cases, having a value of approximately $51,600,000 were packed.

The area from which vegetables are drawn constantly is increasing, and improved canning, marketing and transportation facilities have made it possible to supply our large markets with vegetables in greater variety throughout the year. It is a well-known fact the the consumption of fruits and vegetable has increased considerably in recent years and that they constitute a larger and more important part of the permanent diet of the people.

With all the agencies now available for improving agriculture there is ground for optimism as to the ability of the nation not only to supply itself with food, but increasingly to meet the needs of the world.

TWENTY-TWO SILOS

Built in Grays Harbor County.

Agent C. F. Monroe of Grays Harbor county is quoted as follows in regard to the introduction of silos:

"By means of published articles, interviews with reporters, meetings and private conferences with farmers, the advisability and desirability of the use of silos was put before the people. As the result of this campaign 22 silos have been built this year with an average capacity of 70 tons. From accurate figures kept by one of our most reliable dairymen last year, it was found that 40 pounds of silage would replace 20 pounds of hay, at the same time producing a better milk flow, due to the use of the silage. Figuring the cost of hay at $20 a ton, which was less than many paid for it last winter, and figuring the cost of silage at $4 per ton. I find that the 22 silos will save $14,630 by cheapening the ration. The increased production due to the use of the silage I would estimate at $1000, making a total of $15,630.

UNPROFITABLE COWS

Are Sold From Nineteen Herds.

In the cow testing work in Walla Walla county the past year by County Agent Patton 123 cows were discovered to be unprofitable and sold from 19 herds. Through the recently organized milk producers' organization in the Walla Walla valley, milk producers have secured an increase of 1 1-2 cents for their milk, amounting for all milk affected, to about $3000.

$1150 F. o. b. Racine
For Mitchell Junior—120-inch Wheelbase

Mitchell SIXES

$1460 F. o. b. Racine
For 7-Pass. Mitchell—127-inch Wheelbase

Now Also An $1150 Model

With Nearly All the Mitchell Extras
A Doubled Output to Meet a New Demand

Thousands of men have wanted a car with all the Mitchell extra features. But they did not want a car so big and impressive. They did not want a 7-passenger car.

We have built for them the Mitchell Junior—a Mitchell Six in little smaller size. Its 40 horsepower is ample for five passengers. Its 120-inch wheelbase gives plenty of room for five—more than most makers give.

The $1150 price gives all of the saving to the man who doesn't want extra power and size.

Last year we sent out thousands of these cars before announcing this new model. And Mitchell Junior has proved itself as perfect as the larger Mitchell. So we have more than doubled our factory capacity, to build as many Mitchell Juniors as we build of the 7-passenger Mitchells.

Hundreds of Extras

Both of the Mitchells embody hundreds of extras, paid for by factory savings. They give you at least 20 per cent extra value over other cars in their class. All because John W. Bate, the great efficiency expert, has cut our factory costs in two.

There are 31 extra features—things which other cars omit. On this year's output these extras alone will cost us about $4,000,000.

There is much added luxury. We have added 24 per cent to the cost of finish, upholstery and trimming. That is all paid for by savings made this year in our new body plant.

And there is now 100 per cent overstrength in every vital part. That is, every part is twice as strong as need be. The evidence is that this double strength makes the Mitchell a lifetime car.

Twice as Strong

The Mitchell standard for many years has been 50 per cent overstrength. Under that standard Mitchell cars have proved marvels of endurance.

Two Mitchells that we know of already have exceeded 200,000 miles each. Seven of them have averaged 175,000 miles each—over 30 years of ordinary service.

But in 1913 Mr. Bate spent a year in Europe. When he came back he started out to double our margins of safety—to more than match the highest European standards.

It has taken years to do this. But we announce this year this double strength in every vital part.

Over 440 parts are built of toughened steel. All parts which get a major strain are built of Chrome-Vanadium. We use steel alloys which cost us up to 15 cents per pound. And all the parts on which safety depends are made oversize.

One result shows in the Bate cantilever springs. We have used them for two years, on thousands of cars. And not one spring has broken.

That one fact will illustrate what this extra strength means in every vital part. For you know how springs break under shock.

Exclusive Values

These extra values are exclusive to Mitchell cars. No other factory in the world could include them at the Mitchell price.

This model plant, covering 45 acres, was built and equipped by John W. Bate. Every machine is adapted to build this one type economically. The methods employed here have cut our factory cost in two.

That is what pays for these extras. That is what pays for this vast overstrength.

Now a new body plant—building all Mitchell bodies—saves us a vast sum more. That goes into luxury—into heat-fixed finish, into rare-grade leather, into countless dainty details. The latest Mitchells are the handsomest cars under $2000.

Go see these extras, which are numbered by the hundreds. See what they mean in a car. You will not want a fine car which lacks them.

There are Mitchell dealers everywhere. If you don't know the nearest, ask us for his name.

MITCHELL MOTORS COMPANY, Inc.
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TWO SIZES

Mitchell —a roomy, 7-passenger Six, with 127-inch wheelbase. A high-speed, economical, 48-horsepower motor. Disappearing extra seats and 31 extra features included.

Price $1460, f. o. b. Racine

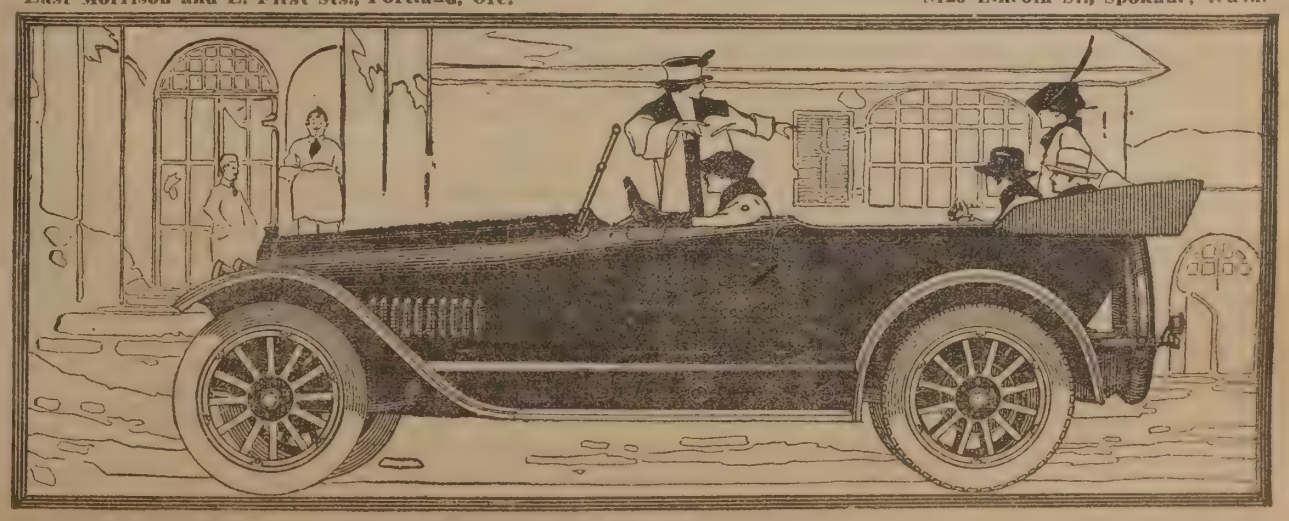
Mitchell Junior a 5-passenger Six on similar lines with 120-inch wheelbase. A 40-horsepower motor—¼-inch smaller bore than larger Mitchell.

Price $1150, f. o. b. Racine

Also all styles of enclosed and convertible bodies. Also demountable tops.

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$800---THIRTY-FIVE PRIZES---$800

First Prize $300 Given Away in Great $300 First Prize

FARM INFORMATION CONTEST

Big New Free-for-All Competition

Readers of this paper—and in fact all residents of Washington, Oregon, Idaho and Montana—are invited to enter our Farm Information Contest, which is believed to be the most fascinating contest ever offered to the farm homes of the northwest.

This contest includes 60 questions which every person should be able to answer. If you don't know the answers you should know them, and now is the time to learn. There is a definite answer for every question. Many of them are simple, yet it is not everybody who can answer them right off the reel.

At one time in your life you may have been able to answer practically every one of them, but when these questions are laid before you—simple as they are—you will probably discover that some of your general information of earlier years has gone from you. For this reason our CONTESTANT'S HELPFUL OUTFIT containing correct answers to the more difficult questions and guides against error has been prepared, as is told in the detailed plan of the contest which follows.

This contest will give every one an opportunity to refresh his memory and at the same time provide interesting entertainment for the readers of the Farmer, besides affording the opening for

Earning Good Sums of Money

We will positively give EIGHT HUNDRED DOLLARS in cash awards (and more in event of ties) to the winners. As explained in the rules which follow, there will be five questions run in every issue of the Farmer for 12 weeks. The last five questions will appear in the issue of April 19.

You Can Enter Without Cost

You do not even have to be a subscriber of the Farmer to enter. As has already been stated, any resident of Washington, Oregon, Idaho or Montana is eligible to compete in this contest.

Five Questions Each Issue

The contest will be composed of 60 questions. Five will be run in each issue of the Farmer for 12 issues.

Answers to each question except No. 45 can be given correctly in from one to 10 words and will be given a score of 100 if correct. Answers to question No. 45 will be limited to 100 words each, and will be graded as to the common sense and general knowledge of farm conditions shown by the contestant without regard to spelling, grammar or penmanship. As with the other 59 questions, a perfect answer to No. 45 will be scored 100.

Perfect Score Is 6,000

The contestant who comes nearest to a score of 6000 and complies with all the conditions of the contest will receive the first prize; the next nearest, second prize, and so on. In case of a tie each tying contestant will receive the full amount of the prize.

There are 35 prizes as follows:

$150 is amount of First Prize.
$100 is amount of Second Prize.
$50 is amount of Third Prize.
$20 is amount of Fourth Prize.
$10 is amount of Fifth Prize.
$5 each, Sixth to Tenth Prizes.
$4 each, Eleventh to Fifteenth Prizes.
$1 each, Sixteenth to Thirty-fifth Prizes.

Read the Rules—Answer These Questions

1. In getting up from the ground, what part of its body does a cow raise first? A horse?
2. How many upper front teeth has a cow?
3. What letter added to a common ailment of chickens will spell something generally used in smoking?
4. What piece of harness has the same name as a small boat used in pulling a larger vessel?
5. What weed very common in the northwest is named after a great railroad builder?

Five more questions will appear next week.

A Valuable Aid to Contestants

One complete CONTESTANT'S HELPFUL OUTFIT, including all of the 60 questions and instructions and helpful warnings as to answers which would be wrong, and the correct answers to some of the most difficult questions, will be sent to any public library free of charge, upon request.

To each contestant who sends in a new, renewal or an extension of his subscription at the time of registering for the contest, this complete CONTESTANT'S HELPFUL OUTFIT will be sent in combination.

We feel that those beginning on the contest will find these suggestions as to what to avoid distinctly useful. This equipment supplies in convenient form everything needed to enable you to apply your ability to the best advantage, and will contain information enabling you to answer the most difficult questions correctly.

Puts Questions in Reach of Children

This CONTESTANT'S HELPFUL OUTFIT puts the solution of the questions in the reach even of the children, it being the purpose to make it possible for everybody in Washington, Oregon, Idaho and Montana to compete. This outfit includes, besides general information about the plan of the contest, the following:

Guide against wrong answers, which includes either correct answers of more difficult questions or easy references as to where to find the correct answers; and blank forms on which to write your answers in such a way that there can be no confusion when your answers are taken up by the judge for scoring.

It will be worth considerable to you to be assured that your answers are reaching the Farm Information Editor in such form that he will know in every instance exactly what question you intended to answer. This CONTESTANT'S HELPFUL OUTFIT will make it possible for you to

Begin Work at Once

On account of the large number certain to send for our CONTESTANT'S HELPFUL OUTFIT, thus making it possible for them to answer the entire 60 questions without delay, it is deemed advisable to offer some special inducements to secure prompt returns from this particular class of contestants. By securing the early replies of those who are thus supplied with the entire 60 questions, we will be able to have their papers carefully scored before the final rush of answers toward the end of the contest.

Understand, it is not absolutely required that those who use our CONTESTANT'S HELPFUL OUTFIT send in their replies at once, but, in order to induce them to get in early, the following plan for enlarging the awards to those prize winners whose answers come in early is offered:

ENLARGED PRIZE LIST—$800 CAN BE WON—ENLARGED PRIZE LIST

For those who use our CONTESTANT'S HELPFUL OUTFIT.

Thirty-Five Prizes	Amt. of prize if winner sends in answers during 1st period, Feb. 1- Feb. 21	Amt. of prize if answers sends in winner during 2d period, Feb. 21 Mch. 14	Amt. of prize if winner sends in answers during 3d period, Mch. 14 April 5	Amt. of prize if winner sends in answers during 4th period, April 5 April 19	Amt. of Prize for winner who does not send in answers before April 19
First Prize	$300.00	$225.00	$200.00	$175.00	$150.00
Second Prize	200.00	175.00	125.00	110.00	100.00
Third Prize	100.00	87.50	62.50	55.00	50.00
Fourth Prize	40.00	35.00	30.00	22.00	20.00
Fifth Prize	20.00	17.50	15.00	11.00	10.00
6th to 10th 5 prizes each	10.00	8.75	7.50	5.50	5.00
11th to 15th 5 prizes each	4.00	3.75	3.00	2.20	2.00
16th to 35th 20 prizes each	3.00	2.50	2.00	1.50	1.00

To secure our CONTESTANT'S HELPFUL OUTFIT, fill out order coupon on this page and send it in to Farm Information Editor, with your personal check, money order or 2-cent stamps, for $1 for one year or $1.50 for three years.

Other Rules

The answers will be passed upon and graded by a fair-minded, thoroughly competent judge.

Two weeks will be allowed for sending in answers after April 19, 1917, date of the issue containing the last five questions.

Remember, your failure to answer all the questions will not necessarily exclude you from the contest. There are 60 questions to be answered and it is not reasonable to suppose that all our prize winners will attain a perfect score. Your answers must all be sent in at the same time. Do not send any answers until you have completed the full list or as many as you can answer.

Those who use our CONTESTANT'S HELPFUL OUTFIT will be able to send in their complete set of answers without delay, there being no need of their waiting for the questions as they appear in The Farmer from week to week down to the final issue of April 19. In order to get as prompt returns as possible from those contestants who use our CONTESTANT'S HELPFUL OUTFIT, extra inducement is made in the prize awards. SEE ENLARGED PRIZE LIST.

Announcement of prize winners will be made and prize checks mailed as soon after close of contest as possible.

If any point is not clear, do not hesitate to write the Farm Information Editor.

All answers must be mailed on or before midnight, May 3, 1917, as shown by post-office dating stamp on your envelope.

If your subscription is paid ahead, the time paid for herewith will begin at the date to which you are now paid.

FARM INFORMATION EDITOR,
Review Building, Spokane, Wash.
Enclosed find $1 for one year, or $1.50 for three years' subscription to

THE WASHINGTON FARMER.

and enter me as a contestant in the Farm Information Contest. I am also to receive at once the complete CONTESTANT'S HELPFUL OUTFIT, consisting of guide against wrong answers, reply blanks, rules and all information to aid me to win a reward.

Name .....

R. F. D. ..... Town .....

State .....

Notice—Amount of remittance to be either $1 for one year's subscription to the Farmer or $1.50 for three years' subscription.

For the purpose of this contest a central office has been opened at Spokane, to serve the convenience of all persons who wish to participate in this competition in Washington, Oregon, Idaho and Montana. Always address

Farm Information Editor, The Washington Farmer

REVIEW BUILDING, SPOKANE, WASHINGTON.

Hides Are Valuable

Valuable By-Product Is Often Neglected

By R. T. BEEBE, Seattle, Wash.

The writer of this article, Mr. Beebe, is manager of the H. F. Norton company, hide dealers, of Seattle, Wash., and his suggestions will be read with much interest by those who are becoming aware that profit in farming, like other branches of industry, depends to a very large extent on the by-products of the farm which can be cashed.

Probably no other article on a farm is given as little consideration for the actual value involved as the hides and skins of cattle, horses and calves killed or which have died from natural or other causes. A great many people believe that hides are valuable only when taken from animals slaughtered for beef. While a hide taken off in this manner usually is more attractive to a tanner, hides from dead animals if removed within a reasonable time command full value. Horse hides also bring a good price, although not as much as a cow hide as the leather can not be used for sole leather purposes.

When an animal dies it should be skinned as soon as possible, especially in warm weather.

Care in Skinning.

Care should be taken in skinning not to cut or score the hide any more than necessary, as each cut or score makes a damaged piece of leather and, as it costs no more to tan a good hide than a cut one, tanners naturally are more anxious to buy hides well taken off.

In skinning, a knife with a slightly curved blade should be used, the most practical one being about a seven-inch blade. The throat should be cut lengthwise, not crosswise, and in this way the entire head may be skinned out. Every bit of hide should be skinned off, skinning the legs down to the hoof. The ears and dew claws should be removed as they can not be made into leather. As calf skins are used only for upper leather and other fine grades the heads are not used and the head on these should be skinned out only to the ears.

Calf Skins.

Calf skins command at all time the highest price per pound and are classed as a calf skin only when the skin weighs 15 pounds or under in its green state. Heavy veals where the skin weighs over 15 pounds and under 25 pounds are classed as kip and command a slightly higher price than hides, being used mostly for heavy boot uppers. A hide weighing over 25 pounds, even though it may be taken from what in many cases would be called a veal is classed as a hide, as all hides over this weight are tanned into other than upper leather grades, such as light harness, strap, saddle, belting and sole leather stock.

After the hide has been removed it should be thoroughly salted on the flesh side, with coarse salt, if it is to be held for any length of time. Hides, it should be remembered, will spoil as easily as fresh meat and in warm weather especially should be given prompt attention. Salt to about one-third to one-half the weight of the hide should be used, leaving the hide lay flat on the floor until such time as it is disposed of. The salt should be cleaned off thoroughly before shipping and saved to be used again. If more than one hide is to be salted place them one on top of the other.

If the hide is to be shipped at once, and this as a rule is done, a small amount of salt should be put on the flesh side and the hide rolled up into a bundle and tied tightly with wire, or placed in a gunny sack. Hides can be rolled into a compact bundle by throwing the head in about a third of the length of the hide, turning in the two sides, one on top of the other, making the bundle about a foot wide and rolling tightly from the head end. Always bundle hides hair side out.

Where no salt is available, it is fairly safe to ship hides green, where they will not be in transit over one or two days and with the rapid transportation of today your returns should be received within the course of two or three days.

Hides are subject to damage by rats, dogs, etc., and should not be left lying around; direct shipment to some reliable hide dealer usually being more satisfactory than waiting for the junk man. Shipments of hides can be made by express, auto freight, freight or by parcel post. Of course, where shipment is made by parcel post hides must be thoroughly wrapped and free from any leakages.

There is a considerable natural shrinkage in green hides which should be taken into consideration in estimating the value of your shipment, the ordinary hide shrinkage in transit about two or three pounds. Hides should be salted for about two weeks to be classed as cured hides and will not, of course, shrink so much in transit, and while they command a higher price per pound than green hides they will shrink from 15 to 20 per cent in curing.

The hide markets today are, on account of the Europeon war, considerable above normal, green hides being quoted at from 15 to 16 cents per pound and cured hides 19 to 20 cents per pound, the normal price being around 10 to 12 cents. Bull hides, which always have a lower value than a cow or steer hide, on account of the thick, spongy neck and uneven thickness of the hide, are today bringing 12 to 13 cents green and 15 to 16 cents per pounds cured. Kip skins are valued at 18 to 20 cents per pound and calf skins usually quoted at 18 to 20 cents are realizing about 30 cents per pound. Horse hides on which the mane and tail should be left to bring top value are worth from three to five dollars per hide, being bought by the piece.

Even horse hair, which should be saved when trimming your horses' manes and tails has a value of from 15 to 25 cents per pound; the tail hair being the more valuable.

If you have not been saving your hides and skins, save the next ones, send them to some reliable dealer and benefit by the profits and tell your neighbor if it proves satisfactory. Your experience may be of value to him also.

Contagious Abortion.

In Snohomish county, Washington, Agent C. C. Farr has had some trouble with contagious abortion in the dairy herds. Many meetings were arranged throughout the county and outside help called, over 540 dairy farmers being reached and advised as to preventive measures in this way.

Hand Shaking Custom Old.

The custom of hand shaking dates back to Henry II. of England.

Radiator heating makes farm life ideal



The people who heat their homes with IDEAL Boilers and AMERICAN Radiators prove to themselves and to their friends, that winter in the country can be made most comfortable, enjoyable and profitable.

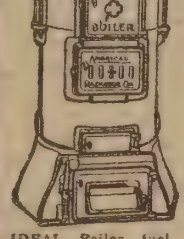
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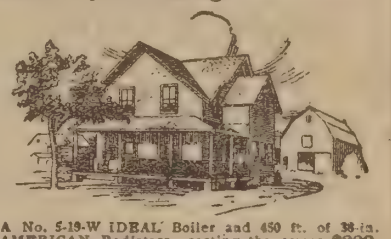
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A No. 5-19-W IDEAL Boiler and 450 ft. of 38-in. AMERICAN Radiators, costing the owner $200, were used to heat this farm house. At this price the goods can be bought of any reputable, competent Fitter. This did not include cost of labor, pipe, valves, freight, etc., which vary according to climatic and other conditions.

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"Corona Wool Fat is a sure cure for pulled shoulder, barb wire cuts, scratches. My horses were in bad shape from hard pulling, but CORONA cured them." Wm. E. Crain, Mt. Erie, Ill.



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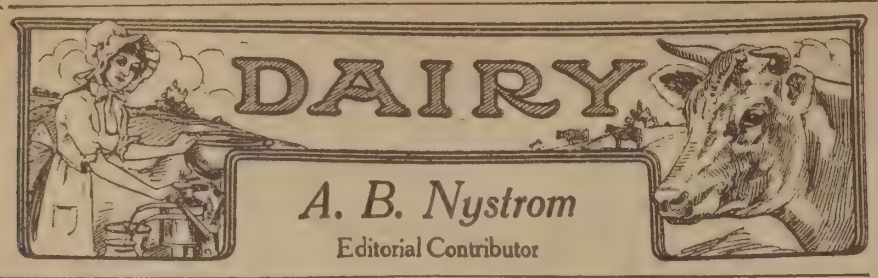
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(26)

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Shipping Cream

From San Francisco to Honolulu

By HORACE ADDIS.

Sweet cream is shipped from San Francisco to Honolulu. It is first pasteurized and then sealed in sterilized tin containers, after being cooled close to the freezing point. It is placed in storage on the ship, where the temperature is kept at about 33 or 34 degrees.

Mr. Dorman, who since 1913 has been in charge of the western office of the dairy division, U. S. department of agriculture, with headquarters at Salt Lake, asserts that, owing to the pure atmosphere, or something in the climate, or perhaps the skill of the dairymen, it is possible to produce milk in the western cities of a lower bacterial count and buttermilk than that produced in the eastern and middle states. This was shown when Portland won first and Los Angeles second on market milk at the national dairy show, in Springfield, Mass., with the western milk seven days old, while that from the east could be shown in 24 hours of the time it was milked. Tillamook cheese was also first and cheese from Idaho second.

It will thus be seen that the situation presents ever widening opportunities, with climate favoring, and, with dairymen doing their part, it would seem there is no reason why Portland and Seattle should not develop an export trade in milk and cream and that the states of the northwest should manufacture a superior quality of butter and cheese that would successfully compete anywhere in the markets of the world.

Good Records

Walla Walla Valley Association

By O. V. PATTON.

The figures of the Walla Walla Valley Cow Testing association for the month of December, 1916, show that the average production per cow is greater than for the same month in 1915 by 97 pounds of milk and 3.8 pounds of butterfat. Comparing the same two periods again, there are eight herds, comprising 118 cows, which average better than 30 pounds of butterfat per cow for last month, while a year ago there were only four herds, comprising 64 cows. There are also 51 cows on the honor list this month owned by 17 members as compared with 36 cows owned by 11 members for December a year ago.

On the 40-pound list this month there are 19 cows that produced better than 50 pounds of butterfat for the month, and 32 which produced between 40 and 50 pounds.

The same two cows that headed the list a year ago are again at the head of the list, both producing better than 80 pounds for the month. They are both registered Holsteins belonging to the Walla Walla college.

A list of cows producing better than 50 pounds of butterfat during the month of December, 1916, as shown by the figures submitted by the tester, Clarence Bixby, follows:

Owner.	Breeds	Lbs. of milk	Lbs of but. fat.
Walla Walla College	H	2421	87.2
Walla Walla college	H	2468	83.9
State Pen	H	1116	66.8
Walla Walla College	H	2220	66.6
State Pen	H	1643	62.4
Swegle Bros.	G	1073	62.2
State Pen	H	1288	61.8
Walla Walla College	H	1841	60.8
State Pen	H	1550	58.9
State Pen	H	1705	58.0
State Pen	H	1407	56.3
Burbank Co.	A	1085	55.3
Mrs. M. E. Lowden	D	1234	54.3
State Pen	H	1023	54.2
H. P. Vosberg	G	1085	52.1
State Pen	H	1096	52.1
A. Mauk	J	986	51.3
State Pen	H	1426	51.3
M. B. Signs	D	846	50.8
State Pen	D	1004	50.2

Questions

Are Answered by A. B. Nystrom

I would like to know about feeding moldy silage to milk cows. My silage is moldy about two feet all around the edge. I feed 30 to 40 pounds per day to 10 head and am down about six feet in the silo. The mold seems to be going away a little bit. I have had several fellows look at it and they said if the cows eat it to feed it to them, so I thought I would write to you and see what you thought about it.

B. R., Rochester.

In a recent issue of the Farmer I answered some inquiries regarding moldy silage. I do not believe it pays to feed moldy silage to cows. While it may not be injurious at all times, the fact still remains that moldy silage is injurious more or less to all animals and it is not well to take chances. If the silage shows moldy around the edge it shows that it has not been well trampled or that enough water had not been added when the silo was filled. Perhaps also the sides of the silo admit air. You should see that the silo is absolutely air tight and that plenty of water is added when filling and the silage is well tramped as it goes in.

Ration With Oat Hay.

I have nothing but oat hay to feed my cows. What kind of grain or grains or other feed should I give to make a balanced ration? Will it pay me to run my hay through a cutter? What kind of grain is best for calves with skim milk? J. A. M., Buckley.

If your oat hay is not especially palatable I believe that it would pay to run it through a cutter. I think that you will find that the cows would eat it up cleaner, although as a general rule we do not advise running palatable hay through any cutter. You need a succulent feed of some kind and I would advise you to get some roots if you can; or if these are not available, get some dried beet pulp and soak it over night in about three to four times its weight of water. Feed all of the oat hay the cows will eat up clean and from five to seven pounds of the dried beet pulp which has been soaked over night, and then in addition mix the following grain ration: Three parts by weight of bran, two of ground oats, and one of oil meal. Feed this to the cows in the proportion of one pound to every three and a half pounds of milk.

We have gotten good results by feeding ground oats to calves, and a mixture of ground oats and bran is not a bad combination. If you can grind corn I would prefer a mixture of equal parts of ground oats, ground corn and bran for calves in supplementing skim milk. As for the rest of the ration, give the calf some well cured hay, such as timothy and clover, or timothy alone, as soon as he will eat it, which will be when he is from three to four weeks old. Alfalfa in small quantities may be fed, but with this roughage there is danger of the calf's eating more than he can properly digest.

Feeding Soy Bean Hay.

Can you tell me anything about the soy bean for hay, mixed with oats, and with oats and vetch, for silage?

J. F. W., Sequim.

I have never used soy beans except as a meal, but if you can get a large enough yield I see no reason why it would not be just as good as peas or vetch because it is of the same nature. It could be mixed with oats, and oats and vetch, for silage, I believe, just the same as peas and vetch.

Frozen Sugar Beets and Mangels.

I have some frozen sugar beets and mangels and when thawed out they turn black and very watery. Please advise me if it is dangerous to feed them to cows. They eat them readily. I fed the tops while green, which was very good feed. Is there any way to preserve the tops without a silo?

E. C. L., Prosser.

I have not had a great deal of experience in feeding frozen root crops, but my impression would be that there would be no injurious effects from feeding these so log as they are fresh, or have just thawed out; but after they have been exposed to a warm temperature for some time they decompose rapidly and the decomposed roots are likely to cause indigestion. Aside from this the frozen roots will in a short time produce a very undesirable odor about your barn, and this may have a tendency to taint the milk to some extent.

Green beet tops and mangel tops make a good feed, and I have heard of its being used in the silo to good advantage, but I know of no other way to keep the tops in good condition so they may be used during the winter time. If you have no silo, perhaps you can dig a hole in the ground and then cover this with earth in such a way that the water from the rains will not drain into the hole. I have seen good silage made out of slough grass in this way and I have no doubt that the beet tops could be preserved in a similar manner. In reality this is a small silo, and the fermentation would be exactly the same as would take place in a silo.

TO EXTEND MARKET

Creameries of Coos and Curry.

The Coos and Curry County Creamery association in western Oregon has perfected plans for placing the products of the creameries which belong to the organization in the markets of the Coast. Fourteen creameries in the two counties have joined the association. Claude H. Giles, an attorney of Myrtle Point, has been employed as salesman and will travel from Spokane to Los Angeles through the Coast country. He will handle the marketing of the entire output of all of the creameries. Guy Ford has been employed as inspector and will each week inspect every factory included in the membership. J. E. Carl is president of the new association.



Raise Your Calves on
Blatchford's Calf Meal
and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk. Prevents scouring and insures the early maturity of sleek, handsome calves. It is steam-cooked and no trouble to prepare or use.

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You can now get one of these splendid money-making, labor-saving machines on a plan whereby it will earn its own cost and more before you pay. You won't feel the cost at all.

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No. 2 Junior—a light running, easy cleaning, close skimming, durable, lifetime guaranteed separator. Skims 95 quarts per hour. We also make five other sizes up to our big 800 lb. capacity machine shown here—all sold at similar low prices and on our liberal terms of only $2 down and a year to pay.

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30 DAYS' FREE TRIAL GUARANTEED A LIFETIME

You can have 30 days FREE trial and see for yourself how easily one of these splendid machines will earn its own cost and more before you pay. Try it alongside of any separator you wish. Keep it if pleased. If not you can return it at our expense and we will refund your $2 deposit and pay the freight charges both ways. You won't be out one penny. You take no risk. Postal brings Free Catalog Folder and direct from factory offer. Buy from the manufacturers and save money. Write TODAY.

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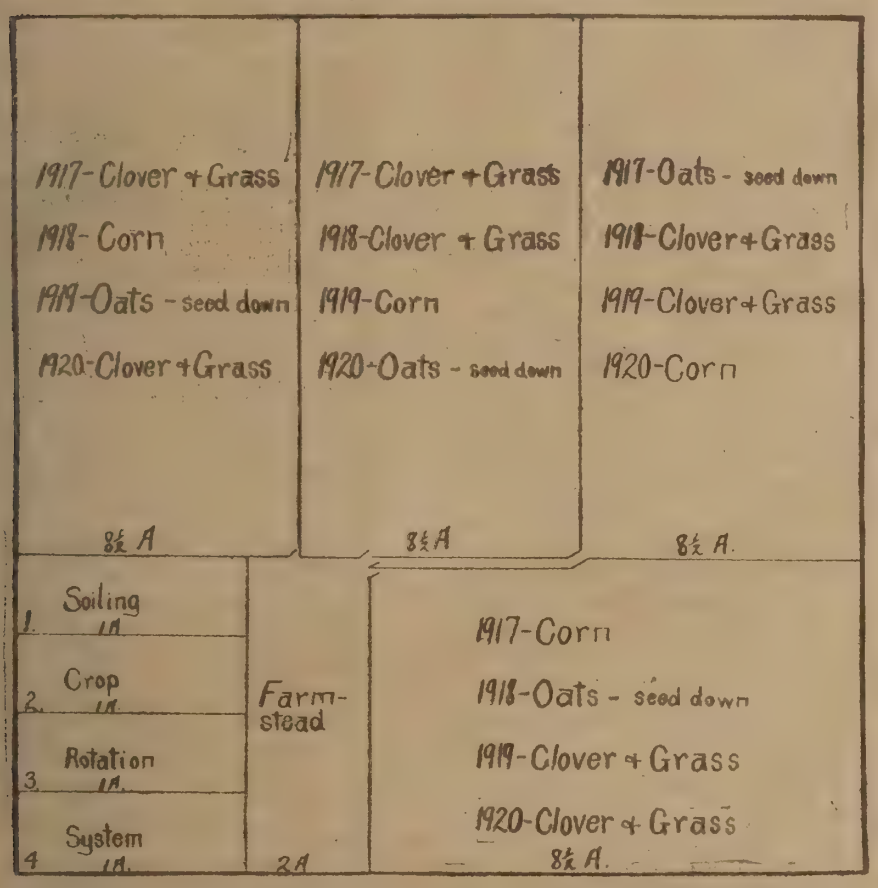
Dairy Farm Cropping System

Helps to Control Weeds, Insects and Plant Diseases

The cropping system on the dairy farm, be it large or small, should be so planned as to accomplish certain definite purposes. First, it should provide for a sufficient amount of the proper kind of feed; second, it should contribute toward the maintenance of crop yields, and third, it should be so arranged as to minimize labor and waste land, says E. B. Stookey of the Western Washington experiment station.

The contribution that a well planned crop rotation system makes toward maintaining or increasing crop yields is a big argument in its favor. When the other important factors which influence plant growth, viz., drainage, tillage, moisture, humus and plant food, are properly balanced, a good crop rotation system will aid in maintaining the physical condition and fertility of the soil and will help in controlling weeds, insects and plant diseases. The rotation should include both deep and shallow-rooted crops, humus-producing as well as humus-destroying crops, nitrogen-gathering as well as nitrogen-consuming crops, cultivated and non-cultivated crops, and they should be so varied in character as to hold insects and plant diseases in check. The use of crops on which insects and plant diseases do not thrive is a good way of controlling such pests. No single cropping or haphazard system can meet all of these requirements, but a definite system planned with these points in mind is necessary. The use of grass, cultivated and grain crops in rotation will be found to meet all of these requirements, and the number of different combinations of these crops is sufficiently great to be applicable to most conditions. Experiments and experience dating back hundreds of years show that rotations planned along these lines help greatly in maintaining crop yields.

PLAN OF CROP ROTATION



The main crop rotation may be changed to meet different soil conditions and the need for different crops. The following rotations make use of other crops

1. Clover and grass.
2. Clover and grass.
3. Potatoes.
4. Oats and peas or vetch.

1. Clover and grass.
2. Clover and grass.
3. Corn and potatoes.
4. Wheat and vetch, and oats and peas or vetch.

1. Clover and grass.
2. Clover and grass.
3. Corn.
4. Oats, peas, oats and peas or vetch.
5. Wheat.

1. Corn and potatoes.
2. Oats and peas or vetch.
3. Wheat—fall-seeded rye for green manure.

Patience First

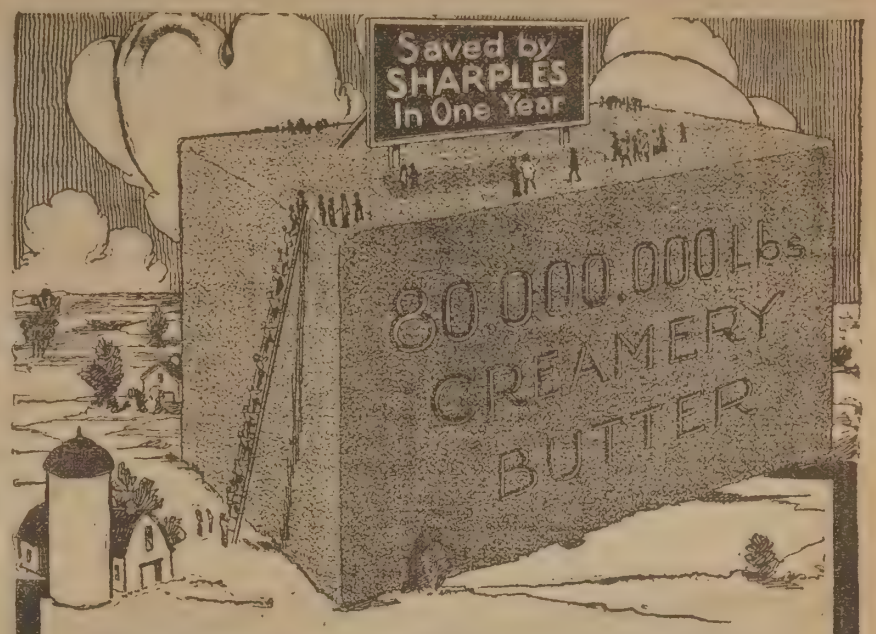
In Teaching the Calf to Drink

Take the calf away from its dam as soon as it has nursed, or it may be taken away and not allowed to nurse at all, says Professor James N. Price, in a Washington State college bulletin. It is better to let the calf nurse its first feed in order that it may get it warm. Anyone who has had experience in feeding a newly born calf its first feed from the pail knows that the milk gets cold before the operation is completed. The calf that is taken away from its mother the first day is much more easily taught to drink than the one that nurses for a week or more. It is important that the calf get the first (colostrum) from its mother. This milk is especially fitted to the needs of the calf at that time and has a laxative and stimulating effect on the digestive system.

One of the important characteristics in the makeup of a successful calf feeder is patience. In teaching a calf to drink far more may be accomplished by patience than by force. If the feeder will back the calf into a corner of the stall, get astride its neck, hold the pail firmly, let the calf have hold of two or three fingers of one hand, gently coax nose into the milk, then slowly slip the fingers out of its mouth, holding them on the nose; and each time the calf jerks his head out of the pail and sticks his head into the air, looking for something to suck, let him have the fingers and repeat the operation, the calf will learn to drink by the second or third day. But when the feeder sets the pail down, takes the calf by both ears, forces his nose to the bottom of the pail and holds it there until the calf "bellers" for air, all that is accomplished is that the feeder gets mad, likewise the calf, and together they spill the milk.

Bird Food.

According to American Forestry, the hairy woodpecker likes fat pork, while tree sparrows are very fond of dog biscuits. Mocking birds relish bread and milk.



The height of this print of 80,000,000 lbs. of butter is 90 feet —its length 180 feet. An average loss of 10 lbs. of butter per cow by all separators *except Sharples* causes this appalling yearly cream loss in the United States alone. If all separators were Sharples this immense pile would be *saved* annually. For this reason: Sharples is the *only* separator that skims clean regardless of speed. Look back over your past experience with separators. Many a day you determined to turn at top speed and not lose cream. But unconsciously, little by little, you slackened and *lost cream.* That separator was not a

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CREAM SEPARATOR

If it were you could have slowed down and still gotten every particle of cream. Sharples is the only separator that "meets the moods"—almost human in its adaptability to every day conditions. It's the separator that not only *can* do unequalled work, but *will* do it, regardless of unfavorable circumstances. Sharples is



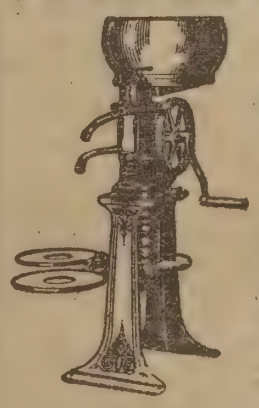
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LIVE STOCK NOTES

E. J. Iddings
Editorial Contributor

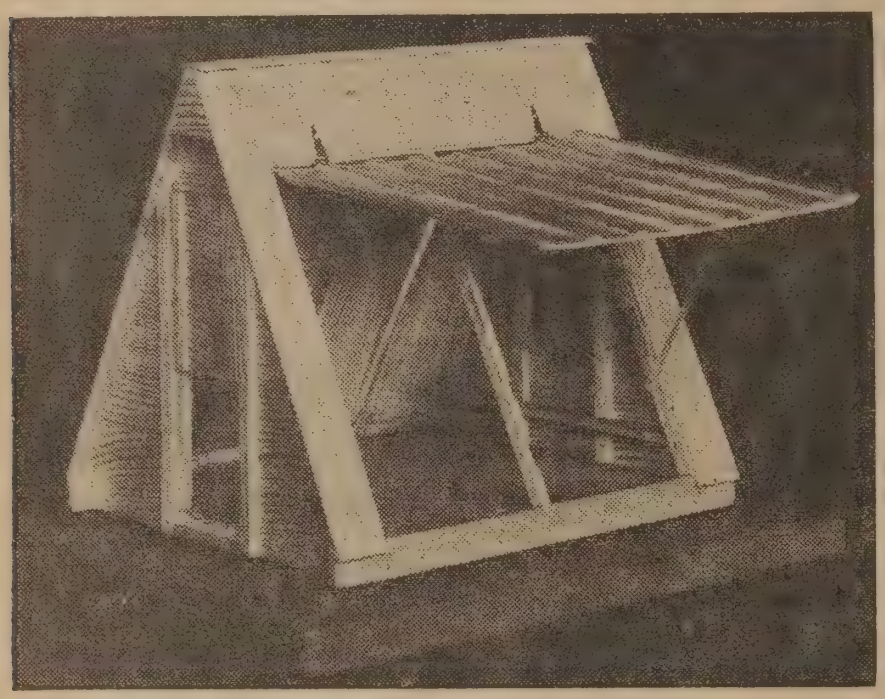
Practical Portable Hog House

"The old-fashioned idea that the hog is a tough, filthy animal still persists, and many farmers believe and act in the belief that anything is good enough for a hog," says Professor K. J. T. Ekblaw of the University of Illinois agricultural staff. "As an actual thing, there is no farm animal that needs care and protection more than the hog. The horse and cow are protected by a heavy coat of hair in the winter time; even the calf or colt will grow a good fur coat when exposed in winter. Chickens have a thick layer of fluffy insulating feathers which keep even their small bodies warm, but the hog has nothing except a sparse coat of stiff hair between his skin and the cold. Little pigs farrowed in cold temperature with no shelter generally die, and even if they live never thrive at all well.

"The 68 million swine in the United States on April 1, 1916, had a farm value of $571,890,000. In number, swine exced any farm animals; in value they are second only to cattle.

"The 'A' shape, shown in the accompanying illustration, is a type of swine house that is perhaps more widely used than any other, since its construction is very simple. The framing consists of 2x4's mounted upon a 1-inch floor nailed to 4x4 runners. An end doorway is provided, through which the swine may gain access to the interior of the house. On one of the sloping sides are set two doors which open to the side. These may be hinged at the top if desired. One disadvantage of the 'A' house is that there is but little choice in the selection of locations for the entrance door. It must necessarily be placed in the lower middle of the end. It is sometimes desirable to make the side doors double, that is, cut in two horizontally in the middle so that the lower portion can be closed."

The above is taken from a series of technical bulletins of the National Lumber Manufacturers' association, on the construction of farm buildings.



Type of hog house most widely used.

Veterinary

Dr. S. B. Nelson

Please tell me how to distinguish colic from clogged or straw pack in horses, and a remedy. The horse was first doctored for kidney trouble, and then it was thought he was packed. He lingered along two weeks and then died. The other one acted as though it was his kidneys, and was given nitre and soap-water injections several times, but it did no good. In the morning he was puffing as though he had been running, and died in a short time. He was on pasture, bunch grass; was sick 18 hours. When opened I found the intestines bursted and puffed as though full. H. C. W.
Ephrata, Wash.

Colic is just a name for the symptom of pain which animals like horses manifest when they have indigestion or spasms or some obstruction of the bowels. The pains or abdominal troubles are divided into many forms of colic—spasmodic copil, flatulent colic, where the intestines are filled with gas, and obstruction or obstructive colic. This obstructive colic may be due either to a twist of the intestines, to a slipping of the intestine into itself so that instead of having one wall it has three, or to food material clogging it. The indigestibility of straw will cause colicky symptoms at first. The animal will not yield to the usual treatment for colic, and after two or three days the disease lingers on and sometimes the animal will live for even a week or ten days. Horses very seldom have kidney trouble. In my experience as a practicing veterinarian covering nearly 30 years I have not seen a score of true inflammations of the kidneys. On account of the colicky symptoms causing spasms of the neck of the bladder, and when the spasm is over and the pain relaxes and the muscle at the neck of the bladder relaxes also and the animal is able to void his urine many people believe that it has been a kidney or bladder trouble. It is the other way—that the pain, that is, the abdominal pain, has caused the spasm of the neck of the bladder, which is relieved when the pain is gone.

I do not believe that your two horses suffered from quite the same disease. The first one seems to have been a true infection, while the second one was probably due to bursting of the intestines. The peculiar puffing that you speak of is a very strong positive symptom of such a condition in the intestines.

I am going to give you a simple treatment for this. It does not cure all cases, but it is one of the best that you can use at home. Give your horse, first when you notice that it is sick, a quart of raw linseed oil with one to one and a half ounces of turpentine in it. Follow this in the evening or the following morning with a pound of Epsom salts in two to three quarts of water, then alternate oil without the turpentine and salts night and morning for three or four days. Give the animal all the water that it wants to drink, in small quantities, often, until the thirst is gone, later offer water as usual. Do not give it anything to eat at all during the time it is sick or until the bowels have been pretty well emptied. Rectal injections of simple warm water in a large quantity, two, three or four gallons, as much as the posterior intestines will hold, will be of value. After the bowels are opened, which will take from four to seven days, then begin with very light feeding, giving just a handful to begin with.

We have a 10-months-old sow in good flesh that was slightly lame in one hind leg after being unloaded from a three-mile journey. Now both hind legs are very stiff and a trifle swollen. Her ration is mainly rolled oats and sweet clover. G. W. B.
Valley, Wash.

Try giving your sow from one to two ounces of castor oil in her feed. Then give her on her feed morning and evening 15 grains of potassium iodide for several days. Give her a comfortable place out of the draft to sleep. Do not let her sleep on a board floor where there are cracks in the floor. I think it would also be advisable if you would add a carbo-hydrate to her feed, such as corn or a little oil meal. I think her feed is pretty concentrated.

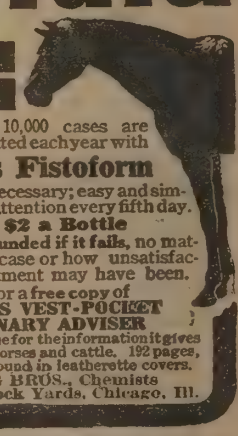
WONDERFUL RECORD
In Butter Production Announced.

That the Holstein cow, Segis Sayne Johanna, owned by Oliver Cabana Jr. of Elma Center, N. Y., recently made a record of 50.68 pounds of butter in seven days, thereby breaking the highest known world record for a week's production, is word received by interested dairymen in the northwest. She produced 722 pounds of milk, containing 40.53 pounds of butter fat in the seven days. She was bred by James Cortelyou of Somerville, N. J.



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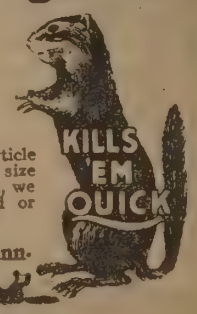
will reduce them and leave no blemishes. Stops lameness promptly. **Does not blister** or remove the hair, and horse can be worked. $2 a bottle delivered. **Book 6 M free.**
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Easy to use, simply stir into moistened oats or ground feed and drop into burrows. If it doesn't get 'em, we refund your money. Squirrels love its odor and taste. The tiniest particle kills. Cheap, 1 cent an acre, 100-acre size $1.00, 40-acre size 50c. Get it from your local dealer. If he can't supply you, we express $1.00 size prepaid upon receipt of the price. Send or Free Squirrel Book.



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Homesteads

Under New 640-Acre Tract Bill

"When the president signed the 640-acre grazing homestead bill there was placed upon the statute books a law which, it is believed, will accomplish a great deal toward making homes for those who desire to engage in a small way in the live stock industry, and also meet the constanly decreasing supply of sheep and cattle in the public land states," remarked Congressman Addison T. Smith in commenting on the provisions of the new law.

"This legislation," continued Mr. Smith, "has had strong advocates and opponents before the committee on public lands in both branches of congress during the last few years, and the bill has been materially changed from the form in which it was originally introduced. The opposition came from the large sheep and cattle men, but the bill as finally amended is now fairly satisfactory to them.

"The law authorizes the entry of 640 acres of semi-arid land more suitable for grazing than cultivation after the secretary of the interior has designated such areas. While the land may be selected prior to such designation and the application filed in the local office, no right to occupy such land shall be acquired by reason of said application until the lands have been designated by the secretary of the interior as stock grazing lands.

Three Years' Residence.

"In order to acquire title residence of three years is required with the usual leave of absence of five months in each year, and permanent improvements must be made to a value of not less than $1.25 per acre, one-half of which must be expended within three years after date of entry. No cultivation is required and commutation is not allowed.

"A personal examination of the land is required under this law before application can be made, as under the general homestead laws, and the regular fees and commissions must be paid. Additional entries are allowed in sufficient quantity within a radius of 20 miles from such former entry of grazing land not to exceed in the aggregate 640 acres, without residence on the additional entry, but improvements must be made equal to $1.25 for each acre.

"The government reserves the title to coal and other minerals in the lands entered under this act. It also provides that water holes shall be reserved and open to the public, and that the secretary of the interior shall withdraw from entry a sufficient quantity of land for driveways to watering places, shipping points and the summer and winter ranges."

COW TESTING

New Associations in Jefferson.

Working in Clallam and Jefferson counties, County Agent O. T. McWhorter reports two new cow testing associations for the year including over 900 cows, there being 5330 cows in the two counties, and for each cow, Mr. McWhorter estimates, that an average of $10 worth of hay is purchased each year. To save this $53,330 to the county is an object Agent McWhorter now has in view. He has demonstrated that it is possible to grow oats and vetch, or wheat and vetch profitably for both hay and silage, and that it is really unnecessary for dairymen of the county to ship in hay from the outside. In the same connection he has taken up the introduction of red and sweet Clover. Another project of the county agent is the organization of a 600-acre drainage district, on which the production has been increased by irrigation over 30 per cent.

University Steers Sell High.

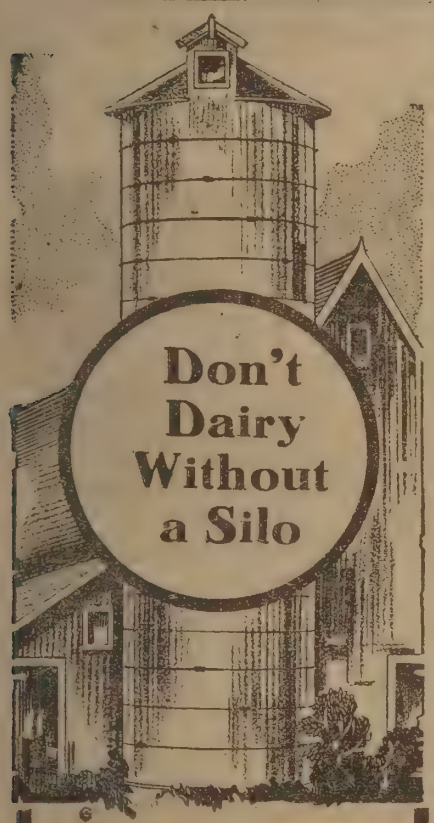
At the Pacific International Live Stock show at Portland the state university of Idaho has for five times in succession had the grand champion steer over all breeds and ages. The grand champion of this year, the university bred pure-bred Hereford Bonnie Lad, sold at auction for $747. The five Idaho Portland grand champions have belonged to the various breeds as follows:

1912, pure-bred Hereford.
1913, pure-bred Shorthorn.
1914, pure-bred Aberdeen Angus.
1915, pure-bred Shorthorn.
1916, pure-bred Hereford.

The five steers sold at public a ction have brought an average price of 55 4-5 cents per pound.

Clark Solves the Problem.

"If the high cost of living bothers you, do not wait for governmental remedies. Buy some laying hens, eat more corn products and rice," says Speaker Champ Clark of the house of representatives. "The food embargo bill may or may not pass," he declared. "I think the government can help lower food prices by legislation, but consumers can cut down expenses in other ways." He declared he would urge the enactment of a federal law prohibiting the killing of veal calves. He said speculators violate the law by holding eggs for a raise.



"I Would as Soon Dairy Without Cows as Without a Silo!"

said one of our dairymen friends, a pleased user of the **Weyerhaeuser Silo.** And he means every word he says.

He is one of those dairyman who saw the writing on the wall, and now he laughs at the high price of feed. He is making money.

The secret of low-cost feeding is the Silo. The secret of simplicity in feeding is the Silo. The secret of succulent, nutritious feeding, is the Silo. IF YOU HAVE NOT already POSTED YOURSELF on THIS FEED QUESTION let us hear from you—let us SEND YOU our FEED MANUAL. FREE TO YOU for the asking.

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A Hog At His Best

He's never at his best if he's wormy. Neither is your other stock. Worms distress animals, retard thrift, bring on contagious diseases. Get rid of worms.

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Expels Worms **Makes Stock Healthy**

I tell you it pays to condition your stock now, in midwinter. Use Dr. Hess Stock Tonic and clean out their systems, purify the blood, then they will eat with a relish and digest their food. Buy it from the local dealer—the man you know in your town.

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Costs you one-half less to buy and requires no more at a time to feed.

25-lb. Pail, $2.25; 100-lb. Sack, $7.00

Smaller packages as low as 65c.

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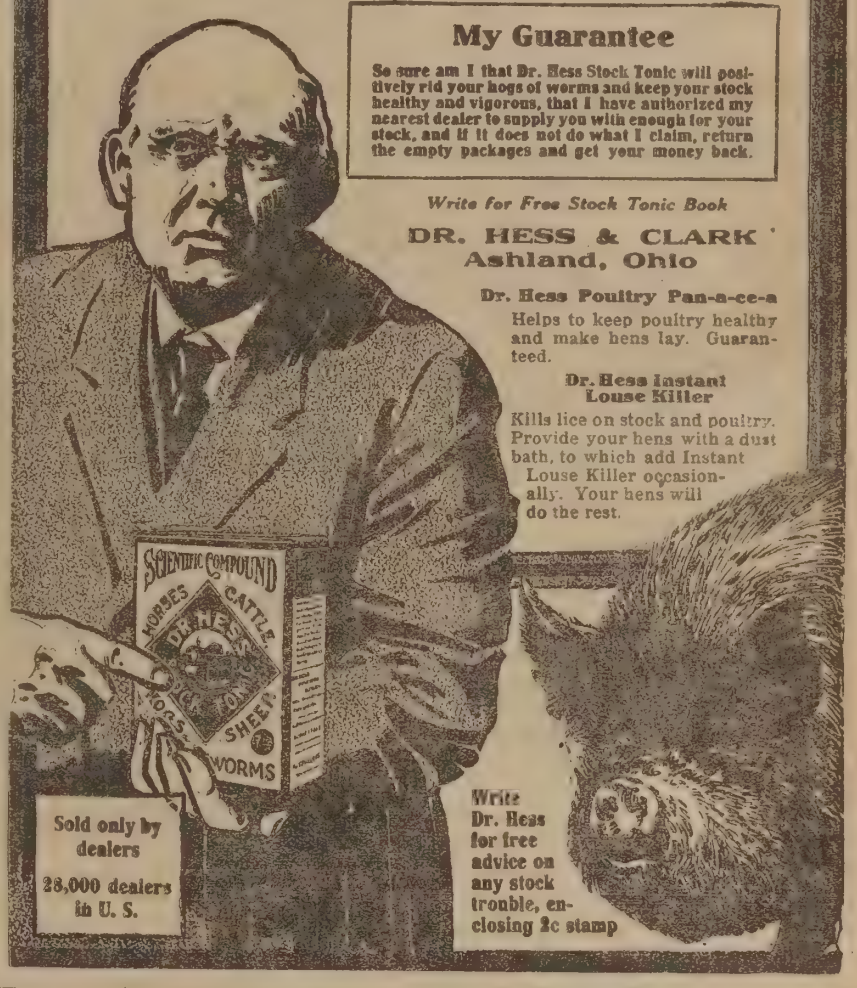
So sure am I that Dr. Hess Stock Tonic will positively rid your hogs of worms and keep your stock healthy and vigorous, that I have authorized my nearest dealer to supply you with enough for your stock, and if it does not do what I claim, return the empty packages and get your money back.

Write for Free Stock Tonic Book

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Dr. Hess Poultry Pan-a-ce-a
Helps to keep poultry healthy and make hens lay. Guaranteed.

Dr. Hess Instant Louse Killer
Kills lice on stock and poultry. Provide your hens with a dust bath, to which add Instant Louse Killer occasionally. Your hens will do the rest.



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Write Dr. Hess for free advice on any stock trouble, enclosing 2c stamp



CALF COST AT HALF COST

As proved by all those who have raised their calves on

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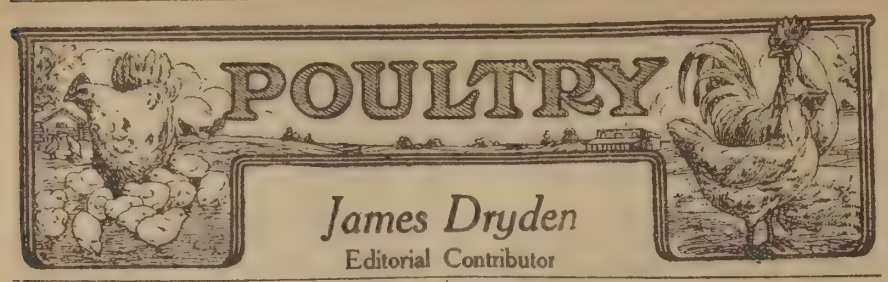
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Hogan System

M. Hakenstad Commends Method

The address of Mr. Hakenstad, as cited herewith, commends Mr. Hogan's system. There are a great many poultrymen who swear by this system, but is it not possible that judgment has been formed too hastily. The system is under investigation; it is on trial. Experiment stations are not infallible; they make mistakes, but none of them, so far as I know, have published or given out any data favorable to the system, nor have they published anything unfavorable, so far as I know. It is possible others have investigated it privately and thoroughly. It is possible that private breeders have gone into it more thoroughly than the stations have done. But evidence is not very conclusive. Mr. Hogan deserves credit for stimulating investigation along that line, even though his particular system may fail.—J. D.

Addressing an audience of practical poultrymen and farmers, Martin Hakenstad recently told the members of the Snohomish County Fruit Growers' association that there were just two important points in connection with handling the egg side of the poultry business at a profit. The first point is get the egg; and the second is like unto it—get the price.

Taking up the first essential, Mr. Hakenstad pointed out that it is as necessary to cull out the "boarders" in the poultry business as in dairying, although the weeding out process has perhaps received more attention in connection with cows than with hens. One of the difficulties in picking out the boarder hen has always been that we could not catch her "at the milk pail," and that without the use of the troublesome trap nest it was impossible to separate the producers from the loafers. Mr. Hakenstad, however, is of the opinion that the Hogan system in a large measure overcomes this old difficulty by making the detection of loafer hens largely a matter of scientific observation of the structure of the hen herself.

The Hogan system divides the chicken tribe into three classes: first come the egg type, which have the egg laying tendency so strongly impressed upon them that they will lay if it is at all possible. Next come the dual purpose chickens, corresponding somewhat to the dual purpose cow. The third class contains those hens which will produce meat, but few eggs.

"And these meat producers," Mr. Hakenstad explains, "will not lay eggs in profitable numbers no matter how they are fed. The only cure for their nonproductivity is the axe."

The principal point upon which the determination of type rests is the matter of the thickness of the pelvic bones. The thinner these bones the truer the individual runs to the egg type. At one extreme, for instance, may be a hen with pelvic bones one-sixteenth of an inch thick. At the other end is a big, "beefy" hen with inch thick pelvic bones. The one is a natural layer, and the other is not and never will be—her "machinery" is constructed for an entirely different purpose.

A second important point in connection with the physical structure of a chicken is its prepotency, or its ability to pass along its characteristics. Prepotency is largely a matter of vitality plus. The supremely vigorous hen probably will pass on to her descendants those characteristics, good or bad, which are conspicuously hers. And for this reason the chief index to prepotency is the formation of the head. The eyes should be invisible when looking at the hen from straight in front, and this is true because the vigorous hen's head will be too wide and round to show her eyes from this position. Those narrow-faced, "crow bill" chickens which come of degenerate stock or which received a severe set back in growth and vitality early in life, can be detected by this test.

Turning to the marketing end of his subject, Mr. Hakenstad stated that there are three ways of selling eggs: first, the egg farmer can sell them at the store, letting the store keeper make the price on the eggs and on the merchandise which he gives in exchange; second, eggs can be sold direct to the consumer; and third, they can be sold through the commission broker. The speaker admitted that he had at one time depended on the first of these methods, and had found it unsatisfactory. The third method he knew little about. The direct to the consumer method he finds wholly satisfactory, as it enables him to get the full retail price for his commodity and insures his customers a strictly fresh egg.

In conclusion Mr. Hakenstad called the association's attention to a government bulletin on selling through the local creamery. This plan has been worked out very thoroughly, and has proved satisfactory in at least one instance.



This bird is a high school student, residing on the Boise high school farm. He won second place in the White Rock cockerel class at the recent Idaho State Poultry show at Boise.

Hen Can Not Walk.

"I have a hen down in her legs and back. She eats all right but can not walk." W. M. S., Winlock, Wash.

Correspondents should be more explicit in describing symptoms. It would be impossible to say what the trouble was. Heavy feeding with lack of exercise will produce leg weakness. A fowl may become so fat and heavy from fat-producing foods and her legs weak from lack of exercise that she is unable to walk. It may be rheumatism. Again it may be due to a heavy male. That often causes a breaking down of the hen. If the hen is over-fat the ration should be reduced for a time and all grain foods fed in a deep litter of straw. Bran mashes should be fed with milk or buttermilk and green cut bone or meat scraps and all the green food the hen will eat. If no improvement results, the hen had better be killed.

J. D.

Poultry in Winter.

To the Editor: Poultry should have plenty of warm water during the cold period. Green feed, such as carrots, turnips, parings from potatoes and apples are fine for the laying hens, but sprouted oats, if one can have them, are better. The incubator should be started in February for the March hatch. MRS. C. A. WALSH.

English in Philippines.

The American public school system in the Philippine islands has so encouraged the use of English, which is the only language taught in the educational institutions established by the Americans, that a long step has been taken toward obliteration of the many languages and dialects among the various tribes, and English is fast becoming the common language for the islands as a whole.

Garden Planning

Profit by Your Past Experience

By Charles Andrews.

In planning your garden for 1917, it will be well to glance back over the last year or two and see wherein you were successful and wherein you failed. Did you have more weeds than vegetables? Did you have enough radishes one week to supply the whole neighborhood and none the rest of the season? Was your garden properly cultivated and fertilized? Ask yourself these questions and many others, and then determine to enlarge on and profit by your successes, and at least attempt to remedy your mistakes.

If you are a beginner at gardening, a few words about the location, soil, fertilizer and drainage may be of some help to you. The best soil for most vegetables is a sandy loam, but this can not always be had. If not, then whatever your soil may be, choose a piece of ground near enough to the dwelling as to be convenient for the housewife but far enough away to be inconvenient for the hens, ducks and geese. It should be a soil that does not bake nor leach, and should be well tilled.

New ground is not really desirable for gardening. If necessary to use new ground, it should be plowed deeply and thoroughly, worked down with harrow and plank harrow until you have a seed bed of well-pulverized soil. This is one of the things very essential to success.

Drainage Important.

Drainage also is an important factor. Sour soil spells ruin for the garden. Subirrigated soil is the most naturally fitted for the growing of any crop, and this is especially true of the garden. But whether you irrigate, have subirrigation or practice dry farming methods, your garden can be made a success if you will use the same care that you give to other crops. It is proven that any ground that will produce good wheat, oats, barley and rye will successfully produce most of the common vegetables. But the fertilizer is the power behind the little seeds that makes them wake up and show their colors. Above all things, don't use fresh horse manure and expect success. Your plants will come up readily enough, but they will mature too quickly and will never have the rich color nor the luxuriant growth and crispness they should have. Why? The fertilizer was too fresh and in the heating process of decomposition killed the tiny rootlets, or feeders, and left the plant to starve to death in a land of plenty. The farmer who does this will declare that it does not pay to raise a garden, and it certainly does not—that way. Had he used a generous coating of well-rotted fertilizer and followed the other principles necessary to success, he would undoubtedly be a devotee of the family garden instead of its enemy. As it turned out, he relin-

(Continued on the following page.)

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All Northwest Egg Contest

J. A. Hanson's Pen of Corvallis Again Wins

The report for the state college at Pullman egg laying contest for December shows that the same positions are held at the end of December by the first three pens as at the end of November. The pen of White Leghorns owned by J. A. Hanson of Corvallis, Ore., was again the winning pen for the month. The fourth pen in November, owned by J. D. Balmat of Spokane, dropped to tenth place in December, the fourth place being taken by the White Leghorn pen of the Oregon Agricultural college, which jumped from eleventh place. Paul B. Towne moved from sixth place in November to fifth place in December, while the Oregon Agricultural college pen of Barred Rocks rose from twelfth place to sixth.

Among the 20 best pens in November, five of them were replaced by new pens in December. The best pen record for December was tied by a Rhode Island Red pen owned by G. M. Brown of Spokane and a White Leghorn pen owned by Wyandotte ranch of Kiesling, Wash., each pen laying 78 eggs, an average of 15.6 eggs per hen.

The individual hen records, Paul B. Towne's White Leghorn hen No. 501 leads all hens with 61 eggs for full period of two and a half months. Oregon Agricultural college Barred Rock hen No. 1275 is second with 54 eggs. The highest individual record for December was made by a White Orpington hen No. 1271 owned by Mrs. W. T. Thompson of Bozeman, Mont., the second highest by a Rhode Island White hen entered by H. J. Kingsburg of Twin Falls, Idaho.

The total number of eggs laid by the 200 hens was 6955 eggs, compared with 6943 in November. Under normal conditions there should be a greater increase than this. The report explains the reason. The weather was cold and sickness or colds developed in the flock. The fact that 40 hens have already died would indicate that the managers have had a rather trying time of it. There is time yet for the hens to make good. Under the conditions of the contest where 10 different pens were put together in one pen, the trouble that overtook the flock last month was almost inevitable, even under the best of feeding and care.

Pens Making Highest Records.

Variety.	Owner's Name and Address.	No. of Eggs.
White Leghorns,	J. A. Hanson, Corvallis, Ore.	194
White Leghorns,	J. R. McRae, Milwaukee, Ore.	183
White Leghorns,	P. W. Harries, Seattle, Wash.	180
W. Leghorns,	Oregon Agricultural College, Corvallis, Ore.	171
White Leghorns,	Paul B. Towne, Tekoa, Wash.	169
Barred Rocks,	Oregon Agricultural College, Corvallis, Ore.	166
White Leghorns,	L. F. Solly, Westholme, B. C.	152
White Leghorns,	L. F. Solly, Westholme, B. C.	151
Barred Rocks,	Bliss & Bliss, Southworth, Wash.	150
White Leghorns,	J. D. Balmat, Route No. 1, Spokane, Wash.	149
S. C. R. I. Reds,	Abercrombie & Witbeck, Kerrisdale, B. C.	148
S. C. R. I. Reds,	Williams' Paystreak Reds, St. Helens, Ore.	147
White Wyandottes,	B. L. Garner, Wenatchee, Wash.	146
White Wyandottes,	L. F. Solly, Westholme, B. C.	145
White Leghorns,	C. H. Burnett Jr., Seattle, Wash.	145
S. C. R. I. Reds,	G. M. Brown, Spokane, Wash.	144
White Orpingtons,	Mrs. W. T. Thompson, Bozeman, Mont.	142
White Leghorns,	Wyandotte Ranch, Keisling, Wash.	141
White Rocks,	Mahjo Farm, Sacramento, Cal.	140
Barred Rocks,	Ili-a-Hee, Grants Pass, Ore.	139

The Hogan Scores.

The 20 hens scored highest by Hogan, ranging from 265 to 235 eggs each, are all lower down than the 20 best record hens for the full period. That is, none of the Hogan best 20 hens are among the 20 that have actually laid the most in trap nests. It would be almost a miracle now if Hogan's 20 best replaced by the end of the year those that are now leading. The report says that "Rhode Island Red hen owned by G. M. Brown of Spokane, Wash., has a total of 46 eggs to her credit since the date of her first egg, November 3. She has set out to utterly run the Hogan party at the all-northwest for Mr. Hogan scored her only 26 eggs in good condition for the year."

Further, when it comes to pens among the 20 highest Hogan pens only two of them appear among the 20 best record pens.

So far the results are not favorable to what is called the Hogan system of selection. As I have said before, it will be a disappointment to every one because we are all looking for an easy method of selecting the best. The best thing to do in the meantime is to withhold judgment.

New Spokane Incubators and Brooders

are sure hatchers. Built to suit Pacific northwest climate. Hot water or electric. Top raises like a lid, permitting turning of eggs without taking from machine. Seven styles and sizes. Prices, $7.50 up. Write for new catalog, which contains new ideas about chick hatching.

Spokane Incubator Company 8429 Haven St. Spokane, Wash.

Garden Planning

Profit by Your Past Experiences

(Continued from preceding page.)

quished his interests in the garden to his wife and declared the garden a nuisance. If your soil is a little sour, a little lime will work wonders with it. Red sorrel is an almost infallible sign of sour soil.

At this early date, however, the very important thing for every farmer contemplating raising a garden is the seed. Don't put this matter off until the last minute and then buy some nondescript seed that may grow and may be what you bought it for, with the chances good that it will at least prove unsatisfactory in some way. Send now for some good seed annual and carefully select the seeds your judgment will tell you are best adapted to your particular requirements. After choosing what you need, make up your list and send for them at once. You will enjoy making up your order now and will be less liable to overlook some of the most important items. When buying seed, do not aim to buy the cheapest, because the cheapest usually proves the most expensive in the end. It is not advisable to pick the highest-priced seeds, either, as they often represent new varieties whose reputation has not been established and which may or may not be any better than the older and well-known kinds.

The satisfaction derived from being able to manage your work so that everything will be done in its season and done well is a just cause for pride. So in planning your garden, keep in mind that it is worthy of your careful attention.

Catalogues.

For 40 years W. Atlee Burpee has conveyed his word of greeting to thousands who have sought information from his seed catalogue. He started out as a boy of 18 and worked faithfully until the end. He wrote last year's catalogue in his own hand and it had gone to press when he died, November 26, 1915. His sons are carrying on his work, assuring patrons of the same real service, in their own words, "A continuance of the policy laid by our father," and issued Burpee's Annual for 1917.

Pratts Positive Proof Offer

$1.85 Value For 50¢

Not a "bargain sale," but the most remarkable offer ever made by any reliable manufacturer of Poultry and Stock Regulators and Remedies. We are making it now—at tremendous cost to ourselves—in order *to give you positive, practical proof of the real merit of our goods.*

We want *you* to give Pratts Preparations a rigid, working test, right on *your own farm* with *your own poultry and live stock.* Thus we can prove to you, finally and conclusively, that it will *pay* YOU to use them regularly. If we did not have *full confidence* in our preparations, did not *know* that they *would* give satisfactory results IN YOUR HANDS, we would not dare make this offer.

Run a comparative test if possible. Handle some fowls and stock the Pratt way—the rest in the same manner as before. Then note the difference in results. When you see that your fowls and live stock are healthier and more vigorous, do better work, are more productive, pay bigger profits when you use

Pratts Standard Preparations For Poultry and Live Stock

you will be convinced because you will have the evidence right before you. The results of the test will carry conviction better than all the arguments or promises we might present. If you really wish to know how to *increase your profits,* just try this plan now.

Take the signed coupon and 50c to any Pratt dealer—there is one near you—and he will give you your choice of either assortment of Pratts Preparations as stated in the coupon.

Each assortment has a retail value of $1.85, but now costs you but 50c. We stand the greater part of the cost, since we credit the dealer with $1.35 for each coupon returned to us.

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NOTE: Pratts Preparations are put up in packages of many different sizes. The larger are more economical. The "best buy" in Poultry and Animal Regulators is 25 lb. pails or 100 lb. bags.

To Any Dealer in Pratt Food Co. Products—56

This is your authority to deliver to bearer, upon receipt of this coupon properly signed and 50c in cash, Pratts Preparations—either assortment No. 1 or No. 2 as listed herewith—to the value of $1.85. This offer is good only during February, 1917, and but one assortment is to be furnished each household. Forward the signed coupon to our Philadelphia office and we will credit you $1.35. Good only in the United States and Canada.

Assortment No._____ Goods received (date)_____

Buyer's Name_____

Address_____

Dealer's Name_____

Address_____



Orchard Pest

Is Described by U. S. Department

An apple pest which, in its attack on the fruit, somewhat resembles the codling moth is described in a new professional paper of the bureau of entomology, bulletin No. 265 of the United States department of agriculture, by E. J. Newcomer. This green worm, known as the dock false-worm, is found throughout the northern section of the United States and is noticeably prevalent in the northwest states. It feeds upon certain succulent plants, such as the docks, knotweeds and bindweeds. When these occur in an orchard the worm makes its way up the trunk of the tree and burrows into the fruit, causing it to rot. There can be little or no danger from this source in clean-cultivated orchards or in orchards where its food plants do not exist. However, where a perennial cover crop, such as alfalfa is grown, other control measures must be taken.

Efficient protection may be secured by banding the trees with cotton batting or with some sticky substance. The lower limbs of the trees should be kept well up from the ground, and any props used also should be banded. Bands should be put on in the latter part of August and left on until after the fruit is harvested.

Grow Alfalfa

In the Orchard If You Have Water

By GRANVILLE LOWTHER.

I have received a letter from Major W. H. Halling of Kennewick, Wash. Mr. Halling says: "I notice in the Farmer your letter about sowing alfalfa in orchards. I have got to do something of the kind, as my water does not get down to where needed most and I thought of sowing alfalfa; but was told, 'look out then for small apples.' I would ask if you sow it all over around the trees, etc., and about how thick?"

What Experience Shows.

My belief is that you are on the right track when you think of sowing alfalfa. This belief is based on experience and observation. My experience in our own orchard I have given in a former issue. My observation covers a period of years and a wide range of territory. The first orchard to which my attention was directed was that of Hon. W. P. Sawyer of Parker, in the Yakima valley. Mr. Sawyer had been for a number of years growing a superior quality of pears that commanded the highest prices in the markets. We all wanted to know how he did it; and a dozen or more went from North Yakima to see Mr. Sawyer's orchard. At that time the trees were 17 years old, and the orchard had been in alfalfa for several years, I do not remember the number, but it seems to me about eight. I have visited that orchard twice since, and I am more than ever convinced that the principal reason Mr. Sawyer excels his neighbors is on account of his alfalfa treatment.

Makes for Quality.

I visited Wenatchee and found there an orchard in which the alfalfa had been growing 16 years, and the quality of the fruit and health of the trees were superior to those in the same neighborhood, growing under similar conditions, except that the others had been given clean cultivation. In every case where orchards have had clean cultivation for a number of years, in this fine volcanic ash soil, they become rosetted, the leaves and branches take on a sickly yellowish appearance, and the fruit is of inferior quality.

I visited Hood River, and found the same results. The Oregon Agricultural college at Corvallis has issued a bulletin on the subject, with specific references to the conditions at Hood River. I visited Rogue River and found the same conditions, except where there was a sandy or gravelly base allowing the roots of the trees to penetrate to considerable depth.

The Same Observation.

I went from Rogue River to Grand Junction, Colorado, and found in every case where the trees had been rosetted on account of the puddling of the soil by irrigation and cultivation, that alfalfa, where it was being tried, was improving the orchards.

I visited orchards near Spokane, and found that in some cases there is a gravel subsoil, and there is no impediment to deep rooting. In other cases there is a hard pan which the alfalfa roots will break up. In others still, there is a substratum of rock not far from the surface, and the alfalfa will not penetrate the rocks, therefore, will not benefit the orchard, ecexpt as it nitrifies and fertilizes the soil.

I have been out over the country at Kennewick, Prosser, Mabton, etc., and I would sow alfalfa.

Will the apples be smaller? No, if you have water enough they will be larger. It takes more water for alfalfa and trees than it takes for trees alone, especially if the lower roots have not been watered; but it will pay in the quality of fruit, the health of the trees and the longer life of an orchard.

Seed It All Over.

I would seed it all over about as thick as if I were sowing for hay. The only exception to this would be in the growing of young trees. A young orchard can be planted in an alfalfa meadow by plowing a strip three or four feet wide in which to place the row of trees. Then each year the strip can be widened by one or two furrows as the roots extend. By the time the orchard comes into good bearing you have plowed up all your alfalfa, the roots have mostly decayed, the soil is fertilized and you have had in the mean time considerable hay. Then sow another crop.

We have nearly ruined some of our orchard in this country by clean cultivation. I would rather let an orchard grow up in weeds, provided every autumn the weeds could be plowed under and the seeds permitted to germinate for another crop of weeds the following year, than to give it clean cultivation.

G. L.

BLACKBERRIES

Advocated for Logged-Off Land.

The culture of Evergreen blackberries is being hailed by members of the Grays Harbor Realty association as an answer to the question of "How can a man make a living on his logged-off land while he is clearing it?" The Evergreen berry grows wild in this section and, when canned, a national market for it is readily found, according to W. H. Paulhamus, head of the Puyallup Fruit Growers' association.

President J. E. Calder of the Realty association has offered to donate 10 acres of logged-off land upon which the association may try the experiment.

Sing as They Fly.

The skylark and the woodlark are thought to be the only birds which sing as they fly.

Eugene Fruit Plant Succeeds

Manager J. O. Holt of the Eugene Fruit Growers' association outlines the work of that organization in handling the fruit and vegetables of the Eugene district through the cooperative plant.

This is the eighth in a series of articles summarizing the addresses and the discussions of orchard problems at the apple conference held in connection with the ninth annual apple show at Spokane in November.

The following is the paper, in part, as delivered by Manager J. O. Holt of the Eugene Fruitgrowers' association before the farmers and orchardists attending the apple conference in Spokane:

In January, 1908, about 80 of the fruitgrowers of Lane county came together and organized the Eugene Fruitgrowers' association, with a capital stock of $5000. The par value of stock was made $10, annual dividends limited to 10 per cent—in practice we pay 6 per cent—and a limit was placed on the number of shares any one person could hold.

Much time was spent studying cooperative fruit associations in the different parts of the country. I believe that the failures were studied more carefully than those which had been successful.

The time at my disposal will not permit a history of the development of our association from a little $5000 concern, with a membership of 80, to a $50,000 corporation with a membership of more than 600, and doing a $350,000 business.

I have known our board of directors to work all day and sometimes far into the night, over important problems confronting the association, yet I have never known them to adjourn until every member was behind the decision of the board.

Our policy has been conservative, we have had a definite plan from the beginning and we have followed it out, step by step, as we were able.

Our first aim is to handle all the fruit possible in the fresh state. When fruit is delivered, that part which is suitable for fresh shipment is sent direct to the packing department and that not suitable for that department finds its way to the place where it will bring the best money. Take apples, for instance, the best are delivered to the packing house, those sorted out here will go to the cannery, if of suitable size and variety, if not, they find their way to the dryer or, as a last resort, to the vinegar plant. The peelings and cores are used for making cider for vinegar, or jelly stock. All of these departments are either under the same roof, or connected by tramways so that transfer is made with the least possible expense.

Our canning department occupies about 20,000 square feet of floor space

Ancient Farming

Herodotus, in the year 450 B. C., said that good cultivation yielded two-hundredfold in the Valley of the Euphrates. Even in that land of Eden, poor cultivation yielded but fiftyfold.

In 1898, the average Wheat yield per acre in New York State was 21.2 bushels; in 1907, 17.3 bushels per acre; in 1912, but 16 bushels.

European yields are more than double.

Isn't it time for our farmers to get down to business methods? Home Mixed Fertilizers will help.

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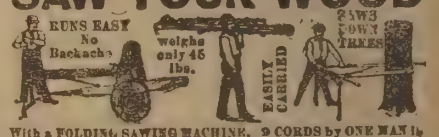
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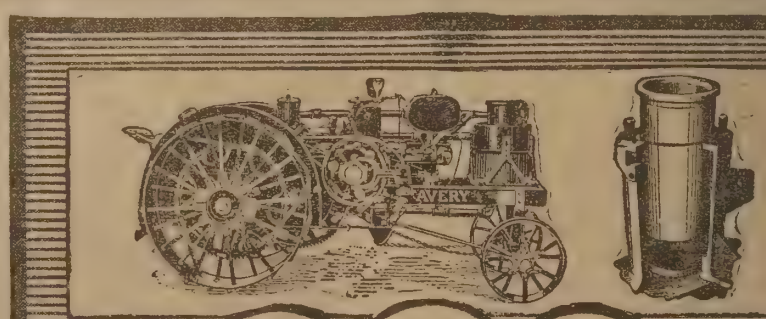
141 prize houses, cottages and bungalows. Most beautiful, convenient and economical homes in America. Write today for your free copy of this book. And get our big free building material book and money-saving prices on lumber. We save you from $100 to $2 000 on lumber alone. *Send for big Plan Book today.* Hewitt-Lea-Funck Co., 658 Funck St., Sumner, Wash.

Cherry and Pear Trees

We offer exceptionally fine trees at rock-bottom prices. Also a full line of other choice nursery stock at bargain prices. Write today.

Benedict Nursery Co.

185 E. 87th St. N. Portland, Oregon.



The Only Tractors With Renewable Inner Cylinder Walls

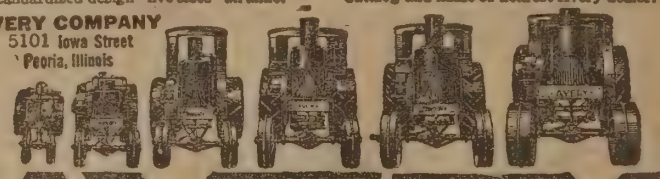
With an Avery Tractor if your cylinders become worn or scored all you have to do is to put in new cylinder walls. But with all other tractors you must have your old cylinders rebored and fitted with oversize pistons and rings or buy complete new cylinders, either of which is very expensive and causes serious loss of time.

OTHER THINGS YOU GET ONLY IN AN AVERY

Only Averys have sliding frame, two speed, all spur gear, four wheel, double drive transmission. Only Averys have no fan, no water pump, no fuel pump, no outside lubricator, no belts, no sprocket chains. Only Averys have a standardized design—five sizes—all alike.

The Avery line includes five regular size tractors—8-16, 12-25, 18-36, 25-50 and 40-80 h.p., and special 5-10 h.p. Plows and Threshers in all sizes—and Two-Row Motor Cultivator. Write for a free copy of the new 1917 Avery Catalog and name of nearest Avery dealer.

AVERY COMPANY
5101 Iowa Street
Peoria, Illinois



AVERY

Tractors and Plows—6 Sizes—Fit Any Size Farm

and has a capacity of 1000 cases of canned fruit per day during the busy season. The season opens at Eugene about the 15th of May with gooseberries and rhubarb, strawberries coming on the latter half of the month. By the first of July we will be canning, in addition to strawberries, red and black raspberries, Logan berries, red, black and Royal Ann cherries, and we will have a hundred women and 45 or 50 men employed. The dryer is started about this time on Logan berries. The latter half of July finds us busy with beets and first deliveries of string beans. Bartlett pears and blackberries begin to come in after the middle of August. September sees the last of the pears, string beans and plums. This is the month for shipping early apples and drying prunes. During October we are packing dried prunes, canning apples, tomatoes, pumpkin, shipping apples, and making cider, kraut, etc. The past season something was canned every month in the year.

Dried Fruit Department—Our evaporator is one of the largest in the state. It is of the tunnel type, having 39 tunnels holding about 4500 trays, and has a capacity of 1000 bushels per day. Although built primarily for prunes, it is used in July for Logan berries and sometimes late in the fall for apples.

The evaporator is connected by tramway with the dried fruit packing department. We handle here the products of several dryers of our members, as well as our own. This building is three stories high. The dried fruit is elevated to the third story where it is graded, each grade passing to bins on the second floor. From here it is run through the processor, where it is thoroughly sterilized and washed with live steam and hot water. It now goes back to the first floor where it is packed hot in tight boxes lined with oiled paper and is ready for the market. We market from $50,000 to $75,000 worth of evaporated fruit each season.

Cider, Juice and Vinegar Department—Our press room has a capacity of 2500 gallons of cider or 1500 gallons of Logan berry juice per day.

We made about 15,000 gallons of Logan berry juice the last season. This is put in containers of suitable size, sterilized and stored. Later it is prepared for the market, either as a beverage, concentrated, or fountain syrup.

We are not favorably situated to develop a large vinegar business on account of freight rates. Consequently we only make about 25,000 gallons a year. Cider for this is stored in large tanks for the alcoholic fermentation, and about the first of the year the generators are started and, of course, run night and day for the next six months. After the vinegar is made it is filtered and blended to standard before marketing.

The best cider is put on the market sweet, both canned and bottled. This is thoroughly filtered and sterilized and will keep indefinitely. We will dispose of something like 20,000 gallons of cider annually in this form.

Boiled cider, jelly and similar products are given some attention. Altogether we use about 400 tons of apples in these operations, which would otherwise be of little value.

Cannery—Our canning department occupies the largest amount of floor space and employes the largest number of people. It is operated almost every day from May to December and intermittently the remainder of the season.

The "peak of our load" comes about the 4th of July, canning raspberries, loganberries and cherries, when we will pack 25,000 cans a day.

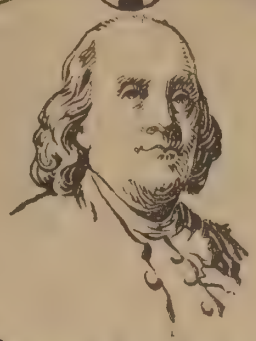
During the past season we canned 150,000 pounds of red raspberries, 400,000 pounds of loganberries, 500,000 pounds of cherries, 15,000 pounds of gooseberries, 250,000 pounds of blackberries, 400,000 pounds of pears, 30,000 pounds of plums, 25,000 pounds of rhubarb, 250,000 pounds of beans, 160,000 pounds of beets, etc.

The past season we used 1,000,000 tin cans, three cars of sugar, 50,000 boxes and several tons of salt. During our busy season our payroll is about $2000 per week.

We try to do a little experimenting and, if possible, add some new feature each season. We have done very little work with glass yet, but indications are that we will be forced to enlarge this department before long. The past two seasons we have bottled considerable loganberry juice and cider, both sweet and carbonated.

Spray Plant—We make our own lime-sulphur spray during the winter months when other departments are more or less idle. We have a small plant with a capacity of about 20 barrels of 30-degree test spray each day. Our people use 400 or 500 barrels each season.

We handled 30 different varieties of fruit and vegetables the past season and put it out in something like 100 different styles and grades.



"A Word to the Wise is Enough"

Benj. Franklin

AND when you're buying tires follow Poor Richard's advice and say only the one word, "Firestone." This word is not only the name of a tire foremost in quality, it is the name of a man who is personally responsible for that quality, which means safety, comfort, mileage, for you.

The vital strength of Firestone Tires makes them oppose equally the tug of rough roads or the test of friction when you "let her out" on smooth stretches.

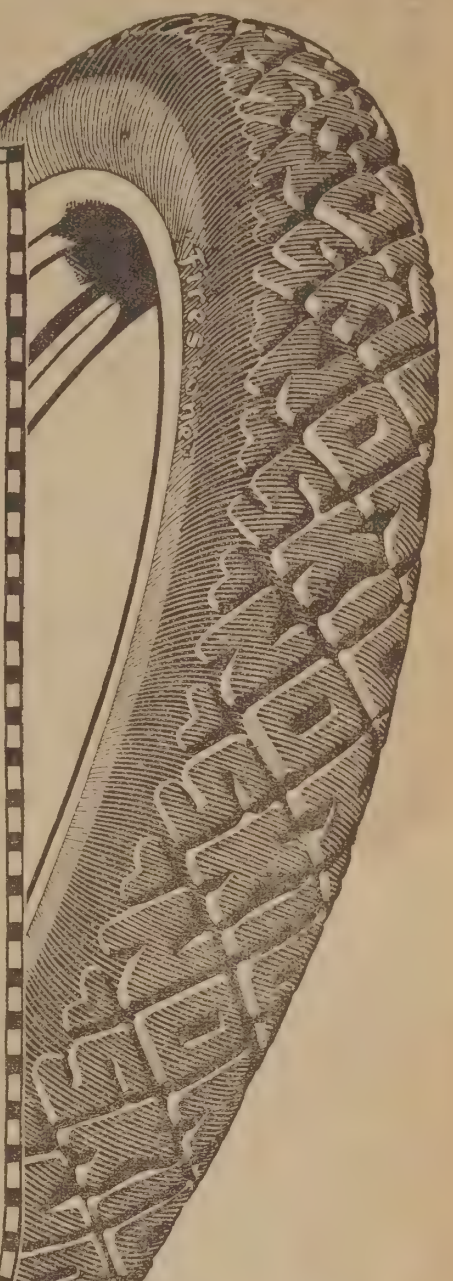
The Firestone Non-Skid Tread means extra rubber. Those angled letters not only hold the car true in slippery going and protect against skid, but there's "comfort value" in the added rubber piled onto the regular tread.

And because volume of sales (over 33,000,000 dollars last year) and efficient factory methods lower production cost, you get Firestone Tires at only average price.

Your dealer can supply you promptly. See him today.

Copy of booklet "Mileage Talks" No. 38, mailed free on request. Write for it.

FIRESTONE TIRE AND RUBBER COMPANY
Akron, Ohio. Branches and Dealers Everywhere



Firestone

Buyers' Guide The Advertising Columns of this paper make up a valuable guide for those who do the buying for the farm or the home. Our readers will confer a favor by mentioning this paper when writing advertisers.

"This is My Choice of Seven Makes,"

1000 in use

says A. J. Hurtig of Ogilvie, Minn.

Please read this letter—

"I am very much pleased with my silo. The material is good and plenty of it. No trouble to erect same. If farmers intending to build a silo had chance to see your frost-proof, am sure they would not buy any other make regardless of price. **I had a chance to investigate seven different makes before placing my order with you, but it did not take much time for me to decide after I had seen the merits of your frost-proof.**

"Yours truly, A. J. HURTIG, Ogilvie, Minn., Oct. 26, 1916."

Silage Can't Possibly Spoil!

Our patent double wall is the only type of wooden Silo that absolutely excludes air. Buy H-L-F Silos and you won't have a pound of spoiled silage around the edges. The free folder tells why.

Order Early. Get FREE ROOF

The H-L-F is sold direct from factory—*at factory prices.* You save at least $100. Big sales enable us to give carload price on single order. Order now for spring delivery and get FREE ROOF.

Mail coupon—big silo folder FREE

FREE folder gives details of air-tight feature, illustrates the everlastingly strong construction, tells names of nearby owners, explains how you will save *big money. Send coupon now—while it's handy.*

Hewitt-Lea-Funck Co.,
558 Funck Street, Sumner, Wash.

Gentlemen:—You may send me your big H-L-F Silo folder and FREE ROOF offer.

Name _____

Post Office _____

R. F. D. _____ State _____

Hewitt-Lea-Funck Co.
Capital $1,000,000 Not in Any Trust or Combine
558 Funck Street, Sumner, Wash.

Mail coupon—save $100

Farm Work Horse Values

Influence of Age as Shown by Estimates

of 147 estimates by owners, based on arbitrary values, showing the influence of age on values of farm work horses:

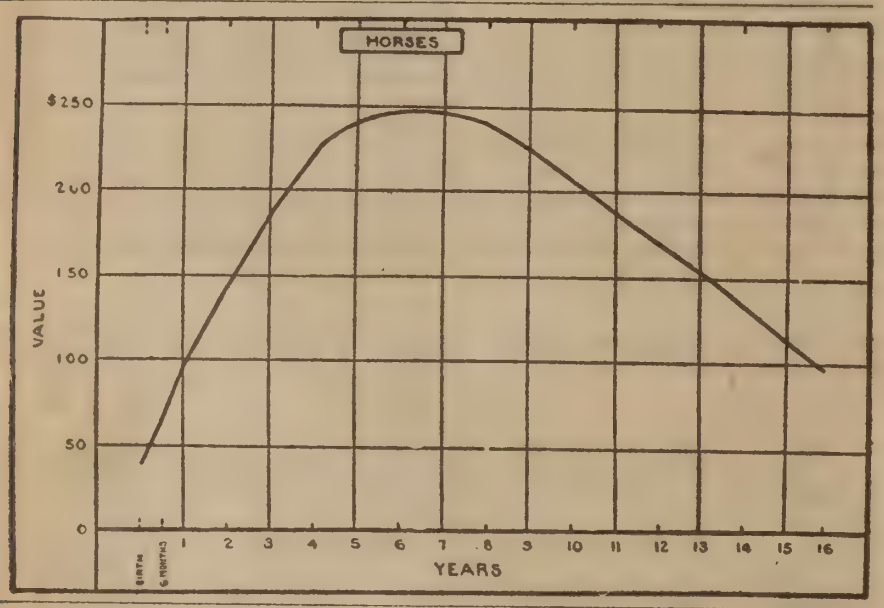
Age.	Maximum value, $250.	Pct. of maximum value.
Birth	$ 39	16
6 months	63	25
1 year	96	38
2 years	142	57
3 years	185	74
4 years	220	88
5 years	242	97
6 years	248	99
Maximum	250	100
7 years	247	99
8 years	241	96
9 years	227	91
10 years	209	84
11 years	190	76
12 years	174	70
13 years	154	62
14 years	137	55
15 years	119	48
16 years	101	40
No. of estimates...	147	....

Those who have occasion to buy or sell live stock are constantly confronted with the problem of weighing the money factors influencing the value of farm animals. Of these factors, the age of the animal is one that applies directly to the value of dairy cattle and farm work horses. While age is not the only factor affecting the value of these classes of animals, it is one of the most important. In determining the value of farm animals grown for meat only, which are ordinarily disposed of at an early age, this factor is comparatively unimportant.

By means of personal visits and through correspondence with many of our best informed farmers and live stock breeders, the office of farm management of the United States department of agriculture recently attempted to get reliable information concerning the influence of age on the values of dairy cows and farm work horses, says J. C. McDowell in a bulletin just issued. Farm management investigators have found that for farm data the average of a large number of estimates is almost as accurate as that of carefully kept records, provided the estimtes are given by men who thoroughly know the subject under consideration. In this case the estimates secured by correspondence agree very closely with those secured through personal visits. While figures concerning the values of dairy cows and farm work horses were obtained from nearly every important agricultural district in the United States, most of the estimates were secured from New York, Pennsylvania and the north central states. In this work appreciation and depreciation were based on age only. In order to eliminate everything except age, the animal was assumed to be in perfect health and to have a fixed value at a certain age. No attempt was made to find the actual value of animals belonging to any breed. Arbitrary values were assumed for a certain fixed age, merely to get a starting point from which to work.

The farm work horse was assumed to have a maximum value of $250 when in his prime, which is a fair price for a very good farm horse. Brood mares were excluded, as their value is not necessarily the same as that of animals kept for work only.

According to these figures, the farm work horse reaches his maximum value at some point between 6 and 7 years of age. If still in health, his value at 16 years is 40 per cent of his maximum value. At birth he is worth 16 per cent of his maximum value, and there is little change in value between the ages of 5 and 9. As compared with the values given for purebred dairy cows of about the same maximum value, the birth value of horses is considerably less, the age of maturity a little later, and the old-age value somewhat higher.



Trading Company

Officials on Trial in U. S. Court

(Continued from page three.)

glowing reports of its success. He cited the organization of a branch of the concern in Portland, Ore., and of the Inland Mercantile company and the Iowa Mercantile company as auxiliary or contributing companies in the alleged fraudulent scheme. He charged that under the stock selling plan a commission of 25 per cent was paid; that the concern represented that it always bought its merchandise for cash and sold for cash, while as a matter of fact it bought heavily on credit and at the time of its failure in 1915 had outstanding debts of $70,000, which had been accumulating during all the years of its existence.

Attorney Garrecht also stated that in 1914, the year before the trading company went into bankruptcy, its president, Gale Smith, one of the defendants, induced the farmers' union and the state grange to give its indorsement to the company, which they did through a committee of investigation, including State Master C. B. Kegley of the grange. John C. Lawrence, stated the attorney, was employed at a salary of $50 a week to go among the farmers and solicit their patronage of the concern in the way of stock buying, and one of the charges against Lawrence is that he knew at the time of such solicitation that the company was insolvent. It is further claimed that President Smith, who began at a salary of $60 a month in 1909, was raised to $500 a month shortly before the filing of bankruptcy proceedings.

Claims of the Defense.

Attorney Robertson of the defense, in stating his case, said that it would be shown that the company had been organized in good faith to fill a long felt need among the farmers for a mutual trading concern, and that at no time had the conduct of its affairs been carried on with fraudulent intent.



"The Bull with the Bull"

The Tractor That Does Things

Here's what a Big Bull Tractor is doing for Mr. Bert Hilke, Independence, Oregon:

"I must say that the Bull is O. K. in every way, as I can do my work at the proper time when it should be done, and more of it. * * *

"This spring I hauled a disc and 8-foot roller directly behind the disc, which gave the clods no chance to dry out and harden, as they would by working with horses.

"I also use the Bull for filling my 30-foot silo. A neighbor said if my Bull would pull his Blizzard, it would be the first tractor he ever saw do it—and he saw it. Now I have the job to fill his silo and earn enough to pay for filling mine."

Kerosene or Gasoline

You get, in the "Big Bull," a sturdy light-weight, self-steering tractor that delivers full 10 H. P. at the draw-bar and 20 H. P. at the belt, that is most economical in fuel and upkeep cost and is backed by a real service.

Don't wait till you "simply have to have" a "Big Bull." **Order it Now.** There is a distributor at your farm implement trade center.

FREE! Write for three months' subscription to the Monthly Tractor Bulletin.

BULL TRACTOR COMPANY

2754 University Ave. S. E. MINNEAPOLIS, MINN.

NORTHWEST BUICK CO.

Seattle and Spokane. Distributors for Washington.

HUGHSON & MERTON, INC.

330 Burnside Avenue, Portland, Distributors for Oregon.

Less work and bigger crops with Planet Jr. implements

"No gardener would do without a No. 4 Planet Jr if he would but try it. I would not take ten times its price and do without it," writes Isaac Kennedy, Owensboro, Ky.

Planet Jr implements are so well made that they not only do good work, but they last a lifetime. Fully guaranteed.

No. 4 Planet Jr Combined Hill and Drill Seeder, Wheel-Hoe, Cultivator and Plow does garden work so quickly, easily and thoroughly, that it pays for itself in a single season. Sows all garden seeds (in drills or hills) plows, opens furrows and covers them, hoes and cultivates all through the season. 32 other styles of seed drills and wheel-hoes—various prices.

Planet Jr **No. 8 Planet Jr Horse-Hoe and Cultivator** does a greater variety of work and does it more thoroughly than any other cultivator ever made. It has stronger, better construction. Its depth regulator and extra-long frame make it steady-running. Adaptable to deep or shallow cultivation and to different widths. 15 other styles of one-horse cultivators—various prices.

No. 4

S L ALLEN & CO Box 1107P Philadelphia

72-page Catalog, free!

Illustrates and describes over 70 tools for farm and garden including Seeders, Wheel-Hoes, Horse-Hoes, Harrows, Orchard-, Beet-, and Pivot-Wheel Riding Cultivators. Write postal for it today!

We carry stock in Los Angeles. Agencies in all principal Pacific Coast cities.

Gets Every Weed

Mulches and pulverizes, with greatest ease in handling and working. The

"Acme" Foot Lift Weeder

destroys all weeds, cutting deep as desired, and tills perfectly. It's knife edges, presented to the ground at a slicing angle, make draft easy. Foot lift lever clears off the weeds and lifts the blades for transportation. 5 sizes, cutting 5 ft. to 12 ft. wide. Write today for book, "*The Acme Way to Crops That Pay*". Describes the entire "Acme" line.

DUANE H. NASH INC., 343 E. Morrison St., Portland, Oregon.

When you write to advertisers, be sure to say that you saw their advertisement in this paper.

Wilson Startles World

Wants U. S. to Help Enforce Peace

President Wilson last week sprung the most sensational surprise of his administration in the view of many when he appeared in the United States senate and delivered an address in which he outlined what he conceived to be the part of this country in perpetuating peace when the European countries bring their colossal warfare to an end. It was a frank declaration of what he conceived to be the demand of all civilized peoples, a universal participation in a worldwide league to enforce peace. Four chief points stand out in the message which he gave to the world:

1. That a lasting peace in Europe can not be a peace of victory for either side.

2. That peace must be followed by a definite concert of power to assure the world that no catastrophe of war shall overhelm it again.

3. That in such a concert of power the United States can not withhold its participation to guarantee peace and justice throughout the world.

4. That before a peace is made the United States government should frankly formulate the conditions upon which it would feel justified in asking the American people for their formal and solemn adherence.

The president's address was received with a great variety of approval and of disapproval. His humanitarian declaration that peace must be a peace "without victory" stirred some of the foreign diplomats now empassioned by the prosecution of the war to vigorous denunciation and ridicule. Others of the belligerents commended his idealism, but declared it impracticable. Others expressed hope that it might see fulfillment.

In this country sentiment was as varied. The president's belief that the United States should take a leading part in the organization of a worldwide league to enforce peace found both favor and disfavor. Opponents of the plan declare that such a move would tend to place the United States in "entangling alliances" with European powers, which since the time of Washington have been avoided. They forecast the possibility that at some future time the armies and navy of this country might be called into service to force a peace broken by European countries who declined to abide by the terms of the league. On the other hand, many express the belief that the president's words of optimistic idealism will exercise an influence that will hasten the restablishment of peace, and go far toward bringing the nations of the world to a realization of the present possibility of joint acceptance of the terms of humanitarian civilization.

Railroad Case Still Waits.

The case in the United States supreme court over the constitutionality of the so-called eight-hour day law passed by congress last fall to avert the threatened railroad strike is still undecided. In the meantime, Representative Adamson, who drafted the original measure whose constitutionality is attacked, is working under the president's direction in the preparation of supplementary legislation designed to guarantee the nation against railroad strikes.

It is proposed to create a commission with power to settle disputes between the railroad companies and their employes. Another proposal, which, however, seems to be likely to fail of serious consideration, is the appointment of a commission madeup of railroad representatives and train operators, whose decisions should be binding upon both companies and operators. Legislation looking toward compulsory arbitration continues to be talked, but is not rapidly taking definite form.

Wages Are Increased.

Secretary Wilson of the U. S. department of labor has issued official statement that during November and December last 526 establishments doing business in 38 states increased the wages of their employes. Such increases ranged from 5 to 10 per cent, and affected more than a million workers. Of the companies which increased wages, 244 did so voluntarily, said the statement.

Charges of Bribery.

The grand jury sitting in Seattle, Wash., has returned indictments against Mayor Hiram Gill and other officials charging them with having conspired to violate the prohibition law. Bribery, or attempted bribery, is charged. The charges say that the officials conspired to admit quantities of intoxicating liquor to be acquired by Seattle individuals in violation of the law.

Mayor Gill yas once recalled by the people of Seattle when sensational charges were made against him at the time his chief of police, Wappenstein, was charged and found guilty of accepting bribes from immoral resorts in return for protection. He was later nominated and reelected to the position from which he had been recalled. He was talked of as a republican candidate for governor during the last campaign.

Army Coming Home.

General Pershing's army is coming home from Mexico, hither it was sent several months ago to capture Villa, the Mexican marauder bandit, "dead or alive." The U. S. Army was sent to Mexico following Villa's raid on the United States city, Columbus, when several American citizens were killed. Failure of the U. S. and the government of Mexico to reach agreement has resulted in the recall of Pershing and his troops.

COOPERATION
Is Given Attention in Okanogan.

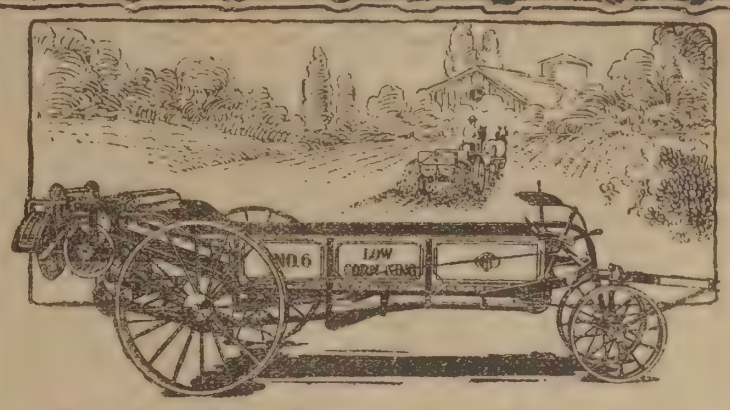
Cooperative creameries is a project which at present is occupying much of the time and attention of County Agent H. P. Smith of Okanogan. One has recently been started at Tonasket, and is running on a profitable basis, opening a market to the home dairymen of the district. Farmers are increasing their herds, and plans are under way for the opening of creameries at other points. Cooperative shipping of live stock is another Okanogan project of importance, one association during the past two months having netted an increased price for their stock totaling $3300 above what could have been secured through regular marketing channels.

CONDENSING PLANT
Largest of Its Kind in State.

A new milk condensing plant which, it is claimed, will be the largest institution of its kind in the state, will be erected at Mount Vernon, Skagit county, Wash., according to the Argus. Albert Daub, a former Alaskan, is a principal in a deal by which he has secured a tract of about three acres where the new condenser will stand. Mr. Daub also says that certain former directors and employes of the Borden company will be interested in the new concern.

Salmon Twine.

Gillnet salmon twine has reached $3 per pound, so the fish twine buyers inform us. This makes a gillnet equipment very costly, and the chances are favorable to a lessening of that class of gear and adoption of trolling.



Settle the Spreader Question

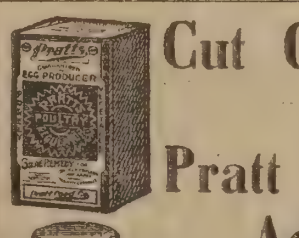
THE farmer who uses a **Low Cloverleaf, Low Corn King** or **Low 20th Century spreader** these days is the man who makes the most money. His land increases in value when regularly fertilized. His crops grow better in quality and larger in yield when supplied with available plant food. Of all the spreaders on the market, the **Low Cloverleaf, Low Corn King** and **Low 20th Century** come nearest to doing this work as it should be done.

It is a long jump from the ordinary machine to the modern low spreader with its double beater and wide spread. Every farmer who knows the value of good spreading is buying one of these wide spread machines. As a matter of fact, no farmer can afford to buy any other kind, because the saving of time and labor and the better job of spreading done by a **Low Cloverleaf, Low Corn King** or **Low 20th Century** makes them worth more than ordinary spreaders.

Complete information about these machines is worth money to you. Drop us a line at the address below and we will show you very plainly why it will pay you to buy a **Low Cloverleaf, Low Corn King** or **Low 20th Century** spreader.

International Harvester Company of America
(Incorporated)

Crawford, Neb. Denver, Colo. Helena, Mont. Los Angeles, Cal.
Portland, Ore. San Francisco, Cal. Spokane, Wash. Salt Lake City, Utah



Cut Out the Coupon in the Pratt Food Company Advertisement

appearing on another page

and Mail to Us

if your dealer can not supply you

$1.85 Worth of Stock Remedies for 50c

We carry a full line of the Pratt Food Co.'s products and will fill all orders when accompanied by the coupon from the Washington Farmer, Oregon Farmer or Idaho Farmer.

Asst. No. 1 weighs 8 lbs., Asst. No. 2 weighs 11 pounds. Add postage for parcel post zones.

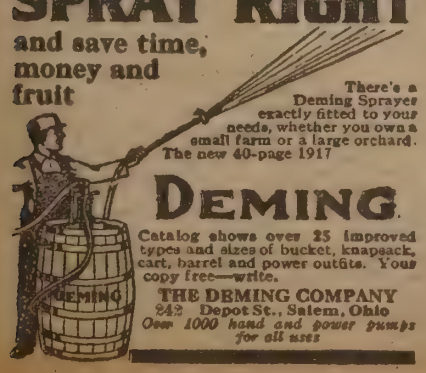


SPOKANE SEED CO., Spokane, Wash.

Poultry and Stock Remedies, Dairy Supplies, etc.

SPRAY RIGHT

and save time, money and fruit



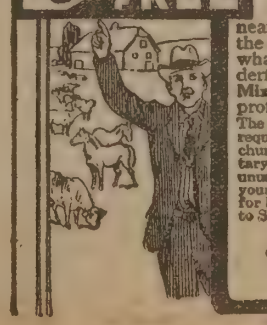
There's a Deming Sprayer exactly fitted to your needs, whether you own a small farm or a large orchard. The new 40-page 1917

DEMING

Catalog shows over 25 improved types and sizes of bucket, knapsack, cart, barrel and power outfits. Your copy free—write.

THE DEMING COMPANY
242 Depot St., Salem, Ohio
Over 1000 hand and power pumps for all uses

160 ACRE FARMS IN WESTERN CANADA FREE



Canada's Liberal Offer of Wheat Land to Settlers

is open to you—to every farmer or farmer's son who is anxious to establish for himself a happy home and prosperity. Canada's hearty invitation this year is more attractive than ever. Wheat is much higher but her fertile farm land just as cheap, and in the provinces of Manitoba, Saskatchewan and Alberta

160 Acre Homesteads Are Actually Free to Settlers and Other Land Sold at from $15 to $20 Per Acre

The great demand for Canadian Wheat will keep up the price. Where a farmer can get near $2 for wheat and raise 20 to 45 bushels to the acre he **is bound to make money**—that's what you can expect in Western Canada. Wonderful yields also of **Oats, Barley and Flax. Mixed Farming** in Western Canada is fully as profitable an industry as grain raising.

The excellent grasses, full of nutrition, are the only food required either for beef or dairy purposes. Good schools, churches, markets convenient, climate excellent. Military service is not compulsory in Canada but there is an unusual demand for farm labor to replace the many young men who have volunteered for the war. Write for literature and particulars as to reduced railway rates to Supt. of Immigration, Ottawa, Can., or to

J. N. GRIEVE,
Cor. 1st and Post St., Spokane, Wash.
Canadian Gov't Agt.



Why He Didn't Get Eggs

There Were a Lot of Chickens Sitting Around

By CHARLES HENRY STEVENSON

I was over to Mr. Mutting's place yesterday. He lives down by the river, 10 miles from me, and I do not see him very often. Among others things he has some very fine pears. They are the kind that my wife likes best. She says the kind that she likes best are those that have so much juice that it runs down her arm and drops off her elbow.

After eating all I could Mr. Mutting filled my pockets with pears to take home. Then, as I was going away, he wanted me to see a fat pig he had and after that we looked around the place a little.

As we walked through the orchard I noticed that it was an ideal place for poultry. It was so nicely protected by a high bluff to the north, and also by the trees.

There were a lot of chickens sitting round, so I asked Mr. Mutting what he fed his hens. He replied that he generally gave them a big, cold mash of shorts, sometime in the morning when he got around to it. When he was in a hurry or out of shorts he gave them rolled barley.

When I asked him what he fed at night he replied, "Nothing, they do not need anything when going to roost." I also learned that they roosted in the trees and that he had lost a number from having their feet frozen during the cold spell.

I did not need to ask if he got any eggs. I am not a poultry expert, but I think I know enough about hens to be sure that his way of feeding and caring for his hens would guarantee no eggs.

Mr. Mutting has his own ideas about things and, like a lot of us farmers, he is a little hard to convince against his will. One of his hobbies is the elimination of the middleman. He claims that the middleman is the farmers chief enemy and the principal cause of the high cost of living.

I knew better than to attempt to argue with Mr. Mutting, but during my ride home I got to wondering if we farmers did not make a mistake in not putting in more of our time in fighting some of our enemies nearer home.

Now, I get enough eggs, during the winter, to supply all our needs and have quite a few to sell. It does not take much time and does not cost much. In fact, I think there is most profit in our winter eggs.

Any farmer could have as good a chicken house as mine. It is 10x30 and has a shingle roof, for the hens must be kept dry. The walls are 1x12 rough and the cracks are not battened for my hen house is protected from the winds. If it were not I would batten the cracks and put in cheese cloth windows for hens need plently of fresh air, but no draft.

One-half of my hen house is really a shed, opened to the south. In feeding my horses and cows I do not force them to eat all the alfalfa stems. There is not much food value in those woody stems anyway, so I do not think it pays to make the animals eat them. I save all these alfalfa stems and once a week I clean out my scratching shed and put in about a foot of the clean stems.

Early in the morning I feed my hens a rather light feed of wheat. I just sow it all over the alfalfa stems and, of course, it nearly all disappears among the stems. But the hens go after that wheat for all they are worth, and there, protected from the wind and damp, they scratch all day in the deep litter for the wheat.

> I thought I would ask him just to see what he would say. He looked at me in amazement. "Eggs in the winter," he said. "I have 150 hens, and I don't get any eggs, but neither do I get any pears in the winter."

At night, if it is very cold, I give the hens a hot shorts mash. If it is not cold I give them some grain, but I always try to fill them up without having any left. I always see that they have clean, fresh water and warm water if the weather is cold.

I only keep 50 hens during the winter. I haven't time to take good care of more and I think 50 hens, well cared for, will pay a farmer better than 150 neglected.

During the spring and summer, when they are not much care, I raise a lot of chickens so we will have plenty to eat. Then, in the fall, when they can be fattened most cheaply, I fatten and sell all but 50 of the most promising.

Mr. Mutting believes that the only thing that prevents him getting eggs in the winter is the cold weather. I believe that his method of feeding and caring for his hens is the principal reason why he gets no eggs in the winter.

There is no mystery about getting hens to lay. In the spring there are lots of sprouting seeds of weeds and grains as well as bugs in the earth. The hens are very fond of this kind of feed and will scratch for it. This exercise is essential to a laying hen. There is usually enough of this feed so that the hen goes to roost with a full craw, which is natural for all fowls.

In the fall, when nature supplies most feed, all kinds of fowls put on fat for the reason that they do not have to hustle for their feed. It is Mother Nature's way of preparing them for winter. All animals are inclined to put on fat when they do not exercise.

So I think that if my neighbor would shut his hens up in the summer time so they could get no feed and then give them only a big shorts mash in the morning and at very irregular hours and let them go to roost with empty craws he would get very few eggs even in warm weather.

More Elevators

Are Needed to Handle Grain

Portland Oregonian: Public attention is directed to Portland's need of improved facilities for shipment of grain by Mr. Hegardt's report on the changes which are making in methods of grain handling. The days of sacked wheat stored in interior warehouses, shipped to the Coast in open cars, again stored in warehouses and then loaded in sacks on sailing ships for the long voyage around Cape Horn to Europe have passed away. Elevators are being built in the grain belt to handle wheat and other cereals in bulk, rail transportation in bulk has begun and elevators have been built at Seattle and Vancouver, B. C., for loading in bulk on board ships. The higher price of sacks and the difficulty of obtaining them have called the attention of farmers to the fact that, since the opening of the Panama canal and with the rapid passing of the sailing ship, sacking is no longer necessary and has become a needless expense.

Sacking of grain was made necessary by the manner in which it was exported. Grain was loaded on sailing vessels which were often becalmed for many days in the tropics, during which period the grain would "sweat." Thence the ships passed through the almost arctic seas of Cape Horn, where there was danger that storms would shift a bulk cargo, then northward to pass again through the tropics before they entered the temperate zone in the north Atlantic. Even had there been no danger of "sweating," methods of stowing cargo were not so well perfected that men were willing to risk loss of crew, cargo and vessel by the listing of the ship in a storm.

Change has at least minimized these considerations so greatly that they no longer control. The Panama canal has reduced the time which a ship spends in the tropics and has eliminated the perilous passage around Cape Horn. Grain is loaded more and more in steamships, which can proceed in calm or wind. Sailing ships are built with auxiliary engines, which keep them moving in calms. Shifting boards are used to make a bulk cargo safe. The transition from sack to bulk shipment is now mainly a matter of providing port facilities for loading grain and shipboard in the latter shape and of overcoming the proverbial conservation of the farmer. It is probable that the latter will abandon sacks as fast as the ports provide facilities for bulk shipment.

Percherons Raised on Alfalfa Hay

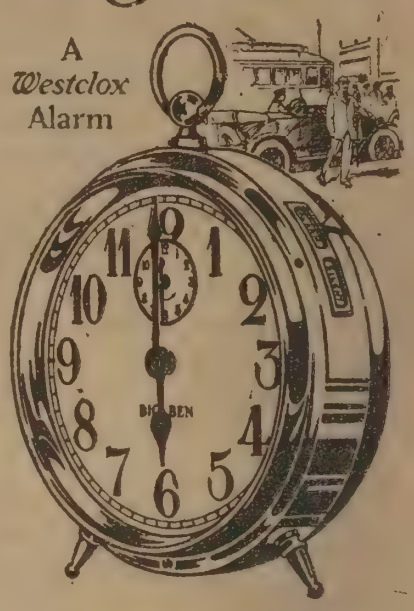


To the Editor of The Farmer: These are my Percheron mares. Their names are "Doll" and "Lill," aged 5 and 4 years, being full sisters. They weigh 3800 pounds and possess good life, action and quality and have been fed almost exclusively on alfalfa hay. They seldom get any grain and rough it in the corral when not in the harness. I find it cheaper to raise this kind than to buy them.

Parma, Idaho. W. J. SIMPSON.

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(Continued from page five.)

cled. and we learned literally what it means to "put our shoulder to the wheel. But there is much satisfaction in doing what everybody tells you can not be done.

Skamokawa in the Indian tongue means fog, and it is not hard to see where the town got its name. Behind it are two valleys, and up these valleys there must be a fog factory. At a distance, as the fog pours out, it is like a silent waterfall, or the steam from some mighty engine of nature. From Skamokawa we proceeded through a blanket of fog to the West Valley school and went on low most of the way there and back, for the sake of the lights.

The following families were represented at the meeting: Matt Hogan, Aaron Peterson, George Birell, George Constable, Otto Hampson, J. Lott, M. Kelley, J. W. Olson, Andrew Peterson, B. C. Bjornsgard, Mrs. E. L. Hampson. There were 24 present.

Professor Price was the speaker of the evening. His talk was informal and extremely practical. It was along the line to economical feeding for the dairyman, and he avoided technical terms and technicalities, sticking to actual work done and how it is done. The necessity of the balanced ration was made plain, and following this the importance of finding the constituents of the balanced ration in the feeds at hand. True economy is feeding not only the right elements in the right proportions, but in finding them in the feeds produced on the farm or inexpensive in cost and combining them in the right way. He dealt at some length with the feeding of calves, indicating how skim milk is introduced in their ration without injury and what to do for ailments of calves in some instances. After he finished his address some questions were asked and a short discussion took place.

The following afternoon the same party, augmented by Miss Sutherland, went from Cathlamet to Skamokawa and thence to East Valley, to the beautiful farm home of Mr. and Mrs. Strong. This home Miss Sutherland referred to later as one of the perfectly appointed homes she had found.

The following people gathered to hear Miss Sutherland speak: Misses Marion Morril, Emily Bjornsgard, Etta Eleason, Ella Benson, Christina Bergman, Blanche Martin, Gertrude Peterson, Hailie Patterson, Winnie Patterson, Ida McEvoy, Grace McIntyre, Esther H. Strong, E. Eleason, Loida McEvoy, Maybelle Andrews; Mesdames F. Koblitz, J. H. Johnson, Nels Peterson, Lillie Barnes; Messrs. Charles H. Strong, John McEvoy, Martin Peterson, W. J. Strong.

Those who attended the meeting in the East Valley at the evening meeting, besides those who attended in day time at J. W. Strong's residence, were Alex Campbell, Theodore Anderson, O. P. Bjornsgard, John Elleason, H. E. Elleason, Joseph Bergman, J. H. Martin, L. J. Johnson, Charles Strom, John Benson, A. Anderson and Simon Varnson.

Because carrying much equipment is difficult over rough and muddy roads, Miss Sutherland took as a subject, "Serving." She said that many people thought this a small and superficial thing, but it is not, for it gives to girls what they may lack otherwise—that poise which they seek, which comes with the sure knowledge of what is right and proper and which is present if one does not know. It is the difference between ease of manner and certainty of conduct and embarrassment. The proper appreciation of so-called little things is recognized by men and women of fame and standing. The proper appreciation and use of correct serving aids digestion and promotes long life. She explained that the tendency nowadays is toward simple ways of serving and the doing away with servants. Every correct rule for service is based on a sensible reason. While she spoke she spread a table and illustrated what she had to say.

Of course, the ladies were much interested, and it was noticed that the men crowded around the open doorway and listened intently.

Thursday afternoon Miss Sutherland spoke before the high school girls at Cathlamet, devoting her time to the art of millinery. It would be impossible to reproduce this talk, for her fingers were busy as she spoke and from them grew flowers and other hat ornaments, hat frames—illustrating what she said. Perhaps the keynote was this: Real art consists in producing with one's own hands those things of use or ornament, so made as to exactly suit the one they are made for. Thus study and practice can produce a hat which meets the highest requirements and at a very low cost, while a hat bought at a very high price from a millinery shop—a hat made for the general trade—can never express art so well.

Another thing which was manifest in both her lectures was that the little courtesies of life cultivate real kindness of heart and thoughtfulness for others.

State College

Appears Winner in Legislature.

One of the most significant developments in the legislature now in session at Olympia is the apparent defeat of the movement inaugurated by friends of the state university to transfer many of the courses now given at the state college at Pullman to the university at Seattle and at the same time add more than three quarters of a million dollars to the taxes levied to support these two institutions and the three normal school of the state.

A tremendous protest from all over the state is credited with having done much to defeat the proposed measures, which were fathered in the legislature by Representatives Victor Zednick of Seattle, a graduate of the university. Practically the entire state outside of King county, the home of Seattle, has spoken against the change which would have robbed the state college of much of its value and reduced it to a position of inferiority among the schools of the country. It seems practically certain now that the university propaganda will not succeed in any appreciable degree, and that the college at Pullman that has been doing a great work for the upbuilding of the life of the entire state, especially the farm life, will be permitted to continue to develop into an even greater field of usefulness.

Military Training.

The subject of military training has taken a prominent place in the consideration of the legislature. Conferences are being held with a view to determining the advisability of enacting a measure providing for military training in the high school. General Bell of the U. S. army recently addressed the legislature, and promised that if the state passed such law the government would provide an instructor in every high school having 100 or more able bodied students to take the military training required.

The proposal to add nearly a million dollars to the appropriation for the state militia department has aroused much opposition, and it appears probable that such appropriation will not be made, though only a concerted movement against it throughout the state is needed to insure its defeat.

The "bone dry" measure is still not acted upon, owing to differences of opinion both in the legislature and throughout the state. There are two factions at war over the measure: One wishes the measure passed and put into immediate effect; the other wishes it passed with a provision that before it goes into effect the people shall be allowed to vote upon it in 1918. There is practically no attempt to defeat the idea of prohibition itself.

Two Cougars Shot.

D. V. Dunham, a rancher living two miles from Cathlamet, shot a cougar the other day, the second within a week. The animals were a year old and each was five feet long. Mr. Dunham shot the first cougar as it was attempting to spring at him. He caught the last one in a trap and shot him. He will receive a bounty of $20 apiece.

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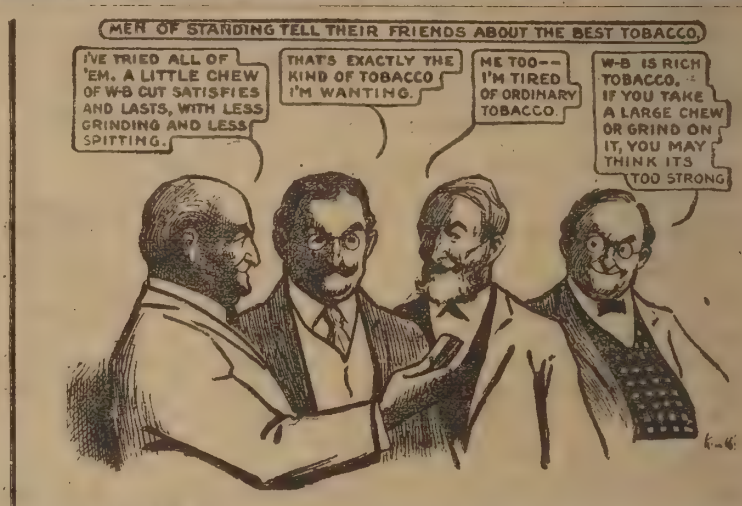
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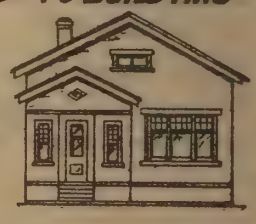
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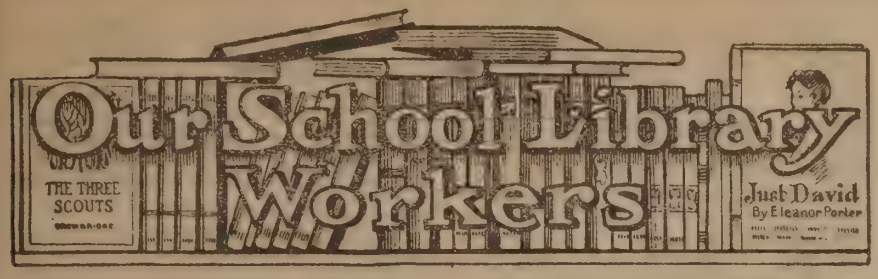
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Let the Seeds Talk



Girls and boys—boys and girls—teachers and parents—one and all—we are downright happy to think of how busy you have kept us this past week sending out books for school libraries. To us each book we send to a school is a reward of merit most gladly given. Each book represents the ambitious work of some sturdy chap or bright-eyed little lady on the one hand and the kindly cooperation of fathers and mothers, uncles and aunts, grownup brothers and sisters, cousins, friends and acquaintances—all willing to help add to the supply of good reading in the schools—on the other hand.

Libraries and books to supplement libraries have gone out this week to the following schools:

Ruth E. Rollins, Upper Hunter Creek school, Hunters, Wash.; Lillian Westley, Excelsior school, Blaine, Wash.; A. A. Strickler, Great Northern school, Spokane, Wash.; Mrs. Ocie Howard, Coulee school, Reardan, Wash.; Florence Woodward, Deep Creek school, Espanola, Wash.; W. Ivan Montanye, North Basin school, Orin, Wash.; Miss Franc De Graff, Selah school, Selah, Wash., and Milo Ball, Marshall school, Marshall, Wash.

Upper Hunters Creek school, under the able management of Miss Ruth E. Rollins, and with as ambitious a band of workers as can be found in the whole northwest, secured a full library long before the holidays. But they didn't stop——oh no—not by any means. They liked their library so well that they determined to have more books. So these boys and girls kept their contest going and as you have noticed from the above list have secured still more books—which makes the Upper Hunters Creek school library the largest that we have so far awarded.

If you want to know how wide open are the eyes of the boys and girls of Border school at Otis Orchards, taught by Miss Constance Blackman, just listen to this. The other day an automobile passing along the road near the school came upon a sharp turn, a hill and a piece of very bad road all at the same place and same time. The machine was stalled, and try as he might the driver, who was alone, found it impossible to proceed. So the members of Border school came to the rescue. But these boys and girls were working hard for a school library and the predicament of the motorist suggested a good chance to profit from the help they were able to give. So they told the driver (who owned a farm in the neighborhood) that if he would help them in their school library work by subscribing for the Farmer they would help him out. The gentleman admired the business-like manner of the proposition so much that he at first refused to subscribe just to see what effect it would have on the children. They showed him they weren't going to take unfair advantages and helped him out anyway. But after he was once more ready to go they reminded him again that one good turn deserves another and told him how hard they were working for a school library. When that man drove away he had become a subscriber to the Farmer and Border school had won another credit toward that library they are determined to have. Such are the fruits of making the most of every opportunity that comes along.

The following schools swung into the library contest ranks during the past week:

Ahtanum school, Yakima, Wash., F. C. Barker, teacher; Artesia school, Yakima, Wash., R. L. Dailey, principal.

Honor Roll.

Selah school: Marguerite Wall, Hazel Taylor, May Greiner, George Cox, Perry Tripp, Dorothy Browne, Sidney Bernier, Elsie Johnson, Elizabeth Fogelquist, Laurel Miller, Lucile Howard, Victor Johnson.

Narcisse school: Willie Hall.

River school: Wayne Lewis, Howard Garber.

Bonser school: Lambert T. Goin, Marguerite Goin.

Lower Naches: Eva Barnet.

Fruit Growers
Will Meet at Tacoma Next Week

The seventh annual meeting of the Western Washington Horticultural association will be held at Tacoma Commercial club Thursday and Friday, February 8 and 9.

Thursday morning's program includes "Small Fruits and Vegetables" by Fred Burglehaus, Sumner; discussion led by C. W. Orton, Sumner.

Thursday afternoon: "Fruit Byproducts" by W. H. Paulhamus, president of the Puyallup-Sumner Fruit Growers' association; "Fruit Pests in Western Washington" by T. O. Morrison, horticulturist, state department of agriculture, Olympia; "Commercial Pear Culture" by Robest B. Miller, Startup; discussion led by A. S. Caton, Olympia; "Nut Culture" by A. A. Quarnberg, Vancouver.

Thursday evening: "Rose Culture" by Carl F. Morisse, Tacoma; "Native Ornamentals" by Stepheen J. Harmeling, Vashon.

Friday morning: "Cooperation in Potato Growing" by H. M. Brayton, Alderton; "Growing Healthy Potatoes" by Arthur Frank, plant pathologist, western Washington experiment station, Puyallup; "Grading and Marketing Potatoes" by A. H. McLean, Tacoma; "Phases of the School Problem in Agriculture and Horticulture" by Mrs. R. A. Small, county superintendent of schools, Everett.

Friday afternoon: "Greenhouse Culture" by Lewis Beall; Vashon; "Future of the Fruit Industry" by Professor W. S. Thornber, director of extension department, Washington State college, Pullman; "Planting and Care of the Young Orchard" by C. A. Cole, agriculturist, Pierce county, Tacoma.

Finest Harbor.

The finest harbor in the world is said to be that of Rio de Janeiro, Brazil.

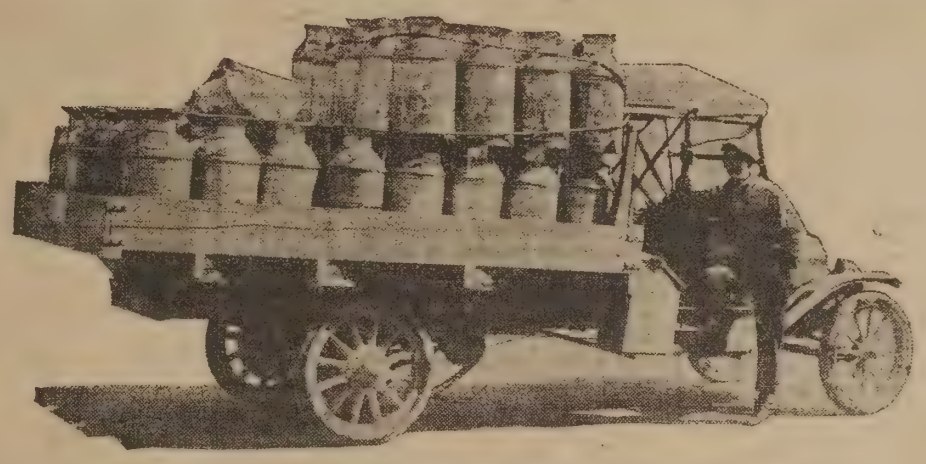
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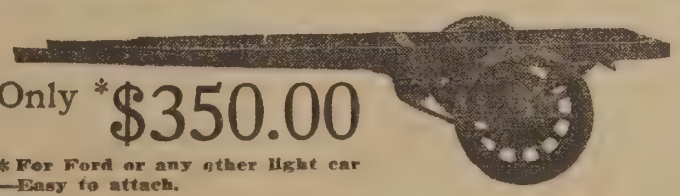
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W. F. 2-1-17

Raise Alfalfa Cooperatively

Dairymen in Western Part of the State Purchase Land on East Side to Raise Hay for Shipment to Dairies on Puget Sound.



Benton County, Wash.—A western Washington dairy association has purchased 385 acres near Richland, which will be irrigated and used to grow alfalfa hay for the dairy cattle on the West Side.

Klickitat County, Wash.—Success in storing corn without it spoiling is experienced when it is mixed with dry straw.

Hay Brings $12.

RICHLAND, Benton County, Wash., Jan. 16.—Hay at Richland is selling at $12 in the stack and many of the farmers will make a nice profit on it this year. Harry Van Horn has 200 tons, Patrick Costello over 75 tons and B. S. Wadsworth about 70 tons which they expect to dispose of this month. Many other farmers have from 10 to 40 tons for sale, as they can spare this amount and still have sufficient to carry their stock over. It is becoming more and more evident to the dairymen here that a great deal of hay is saved by cutting it up, as the cows then eat all the stems as well as leaves. Work will be started as soon as the weather permits on the largest individual body of dairy land in this part of the valley, when the 385 acres sold by the local irrigation company to a corporation of dairymen from the coast will be planted to alfalfa. A pump will be used to supply the necessary water for irrigation, and it is expected that this new and large acreage will be the means of interesting a great deal of outside capital in Richland. MRS. I. M. SAWYER.

Important to Organize.

TWISP, Okanogan County, Wash., Jan. 15.—A grange was organized at the Beaver Creek schoolhouse and will be known as the Beaver Creek Grange. Frank Thurlow is secretary. The Pipestone grange is the oldest farmers' organization in this neighborhood. C. L. Young is master at Pipestone. The farmers have a cooperative creamery at Twisp. E. F. McGee is manager and bookkeeper. Some of the farmers are beginning to feel the importance of being organized, while others want to be independent. GEORGE LA RUE.

Ship More Fruit.

OMAK, Okanogan County, Wash., Jan. 19.—There were about 200 more cars of fruit than last year shipped from Omak during the past season. We are having a mild winter and stock is coming through in good shape. Considerable building was done the past season. There will be an increased acreage of grain the coming season. There seems no reason why wheat should not come through all right. J. O. WOODS.

Stores Corn With Straw.

CENTERVILLE, Klickitat County, Wash., Jan. 23.—This community does not seem to be doing anything extra in the way of crops, as the land is practically all in cultivation that is farmable, but there is quite a little clearing of creek land to get it under cultivation for clover or other crops. The noticeable thing here at Goldendale is the organization of a farm loan association with a good membership. There is not much improvement by new buildings, as that is done mostly during the summer season. The corn crop, I should think, would be on the increase, as the fodder is coming in extra good use this winter, and it seems to me that we ought to still plant more, as there isn't any stock but helps to clean it up. Have had such good success with mixing it and straw together to keep the fodder from spoiling. The fall grain for the last three weeks has been without any protection. The crop prospect at present is maybe good and maybe not. It is very hard to tell at the present time. There seems to be a good supply of local alfalfa offered for sale here at present, with some of the sheep sold on the market it leaves an extra supply. D. A. LESTER.

Potato Acreage Increased.

PROSSER, Benton County, Wash., Jan. 22.—This community is not increasing in any one thing except potatoes, and some farmers are counting on planting a larger acreage this spring. Live stock men are selling off their young cattle and cows and keeping only the best grade. More silos are being built this year more than anything else here. I would like to see more corn planted as feed for the hogs. There was but little fall grain sown last fall, so wheat prospects will depend on the coming spring acreage.

G. W. WILGUS.

Stable Saddle Ponies.

LEAHY, Douglas County, Wash., Jan. 23.—There is no material change planned for this year's crop. Cattle and hogs are the most promising of live stock. All the live stock are going through the winter in fine shape. There has been fine weather, and so far plenty of feed. There is no direct to the consumer marketing in this locality, cattle and hogs are mostly sold to local buyers and then shipped. The improvements to our schoolhouse and grounds is a stable for scholars' horses, which was badly needed.

W. A. GRAY.

More Cooperation Needed.

GRANDVIEW, Yakima County, Wash., Jan. 18.—I think that there will be more corn than usual. I would like to see more cooperation for better marketing of farm products. There are a few new houses, two good ones. There was a few new silos last fall. There are a few small pieces of fall grain and they look very well. However, there is very little grain sown here, the farms being mostly all small orchards.

E. H. FAULKNER.

Land Clearing Noticeable.

SHELTON, Mason County, Wash., Jan. 16.—Perhaps the most noticeable improvement seen in Mason county is the clearing away of the forest by various logging enterprises, followed by the slow process of clearing away the stumps and undergrowth, and rendering the soil a farm producing factor. This is necessarily such a tremendous undertaking that the ordinary individual possessed of small capital can make but little showing of income or improvements in one year. Fall sown grain was slow in germinating. Much of it does not appear green. Though there has been unusual coldness this winter stock has done fairly well, but there will be a shortage of forage unless spring opens very early, still farmers are cheerful.

SCOTT HAYES.

Want Seed Potatoes.

KING HILL, Elmore County, Idaho, Jan. 10.—One carload of early potatoes was received by the King Hill farmers two weeks ago, and if the farmers get the seed there will be a bigger acreage in early potatoes this year. There was not much fall grain seeded but a little rye, which is doing well. Farmers are gradually getting more stock. Hogs have gradually lost their place. We would like to see the government take the ditch over and complete it, and settle the rest of the land. The spring seeding of grain will be about the same as last year.

WILLIAM A. DUNCAN.

Winter Wheat Safe.

CAMBRIDGE, Washington County, Idaho, Jan. 14.—This community is now in the grasp of severe cold weather, with about 18 inches of snow, which assures the winter wheat against winter kill. Stock is doing well. There has been quite a noticeable increase in cattle, especially in dairy stock. The farmers in general are breeding higher grade stock than in the past. Hogs are not as plentiful on account of the high price of grain. There has been no boom in the way of building in this community. The North and South highway is occupying our attention now more than anything else. Washington county has already bonded to the amount of $100,000 for the construction of a highway through that county, and Adams county will take action in the near future on a bond of $80,000. We are very proud of the new court house in Adams county.

S. N. YORK.

Union Saved $300.

SNOWBANK, Dawson County, Mont., Jan. 11.—Farmers are raising both spring and fall pigs, the spring pigs invariably doing the best. There is much pork dressed before selling, which does not pay well, aside from the home consumption of meats. We have a strong Farmers' Union here, having bought 54,000 feet of lumber, 25,000 pounds of flour, and 200 boxes of apples this season, which has resulted in savings close to $300.

NORMAN S. ROBERTSON.

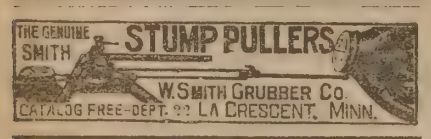
Farmers Are Building.

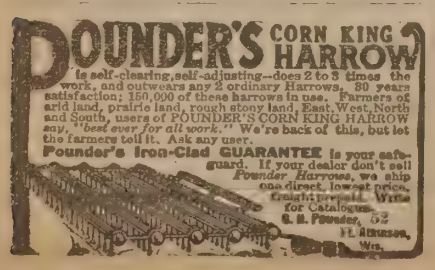
LEWISTOWN, Fergus County, Mont., Jan. 11.—Every farming industry, with the possible exception of sheep and hogs, is on the increase. With the high price of farm products received the last year the farmers are putting up considerable new buildings and modern equipment on the farm. The present prospects seem to indicate that the fall wheat is in good condition.

CARL H. PETERSON.

Cattle Increase.

AMERICAN FALLS, Rosebud County, Mont., Jan. 16.—We have more cattle now than we have ever had in previous years, but not so many hogs or sheep. Horses remain about the same. The farmers are putting up better buildings and some silos. We need good farmers in this community. Our county is short on fall grain, but the farmers expect to sow a large acreage of spring wheat. There will be more grain sown here next year than ever before, at least 40 per cent more. When it gets too late for other crops, then corn is planted and sometimes cultivated, and even then good crops are raised. T. E. HAMMOND.





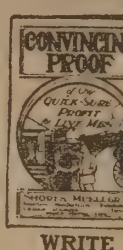
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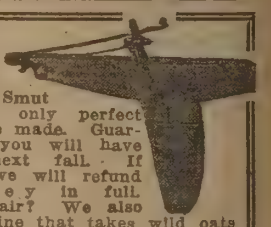
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Logged-Off Land Train

Will Be Run to Demonstrate Clearing Methods

What promises to open up a field of extension work hitherto only incidentally touched, but with far-reaching possibilities, is announced in the running in April this year of a special Great Northern train carrying every known practical implement and article for clearing stump land and experts to handle them and deliver lectures on the methods of logged-off land development.

The train now announced likely will touch only western Montana, northern Idaho and eastern Washington, but if it accomplishes what it is expected to there is little doubt that other stump land sections will be given similar demonstration later.

Dates for Special Train.

The land-clearing special will stop at the following points along the Great Northern: Eureka, Mont., April 17; Libby, Mont., April 19; Bonners Ferry, Idaho, April 21; Sandpoint, April 23; Newport, Wash., April 25; Elk, Wash., April 27; Deer Park, April 29; Springdale, May 1; Cheewlah, May 3; Addy, May 5, and Colville, May 7.

At 7:30 a. m. on the date announced for each town the equipment will be unloaded from the land-clearing special and moved to the stump land selected for the demonstrations. The crew with each machine will be assigned a tract to clear and will put in the full day getting out the stumps. The powder crews will have a place of their own to work and will break up some of the stumps for the machines to pull out.

Practical Discussions.

The noon hour and evening will be given to conferences with the owners of cut-over land and discussion of the way to solve the problem of clearing land. The schedule allows one day between demonstrations, to assemble the equipment and move to the next town.

To equip the train for practical demonstration of clearing stump land there will be assembled in Spokane all kinds of machines now in use, with crews to operate them at the points visited by the special, and a powder crew to show the efficiency of explosives. It is planned to include all kinds of devices, from a lever to pry out the stumps to the big, powerful stump pullers, and to show the advantages of using explosives in connection with the machinery. There will be a one-man stump puller, several horsepower stump puller, a caterpillar engine, a tractor, machines for drilling and burning stumps, a home-made tripod stump puller, a stump-sawing machine and demonstrations of the efficiency of different grades of blasting powder. There will be from 20 to 25 men in the party, including the men who will operate the equipment at every demonstration.

Representatives of the agricultural colleges will give illustrated talks in regard to working the soil in the cut-over districts, what crops will be most satisfatcory and the favorable conditions for dairying and raising live stock. Printed bulletins will be distributed that deal with soils, crops and land clearing problems..

Promoters of Plan.

Detailed arrangements for the land-clearing demonstration were made at a conference attended by Fred W. Graham, western immigration and industrial agent of the Great Northern; Dr. Ira D. Cardiff, director of the experiment station at the Washington State college; Professor C. H. Shattuck of the University of Idaho, County Agricultural Agent J. R. Shinn and his assistant; W. W. Skuse of Spokane, E. F. C. Van Dissel of Spokane, and H. F. Samuels of Samuels, Idaho. The following Great Northern officials were also present: George S. Stewart, assistant general superintendent; F. J. Gavin, superintendent of the Spokane division.

The possibilities of development through land clearing are well known to those who have visited logged-off sections. The pictures herewith might be duplicated many times in the northwest states.

The logged-off land demonstration train will have as its purpose not only the inspiration of landowners, but their education in methods of clearing land and placing it in condition for cropping.





One expert says there are five distinct methods of removing stumps—(1) By burning in the ground, (2) by destroying by chemicals, (3) digging out by manual labor, (4) by blasting and then burning, and (5) by pulling.

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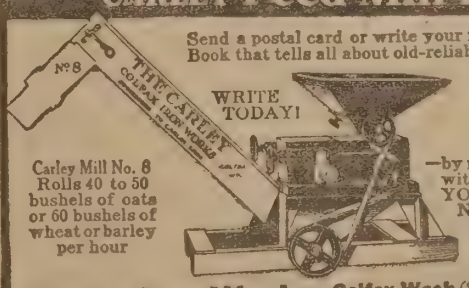
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Dairy Cow Has a Rival in Paris

Chinaman Operates Factory Producing "Milk" and Other Food Products From the Soya Bean

At last the dairy cow has a rival. In Paris they are marketing milk made from the soy or soya bean of China. A member of the family of the famous statesman Li Hung Chang, former Chinese minister to the United States, owns and operates the Paris factory, which not only produces soy milk, but many other food and industrial products from the same bean.

Astonishing claims are made of its almost universal usefulness. A British government report gives the following list of soya products:

"Vegetable food (like marrow fat peas), soups, meat substitute, chocolate substitute, macaroni preparation, flour, artificial milk, cheese, coffee substitute, artificial corn biscuit and food for diabetic patients, sauce, meal for cattle, oils, oil cake for fodder, fertilizer, bean cake."

The same report points out that the oil from the bean is used in the manufacture of dynamite and high explosives, soaps, linoleum, rubber substitute, margarine, paints, varnishes, toilet powder, waterproof cloth, paper umbrellas and lanterns, salad oil, lubricants, lamp oil, preservative for sardines, substitute for lard.

American interest in this remarkable bean will be stimulated by an official report just published from the United States consul at Changsha, China.

"Bean milk is made from the small yellow beans, the same variety from which the Chinese bean curd and chiang or soy are made," the consular report says. "The process appears to be a very simple one. The beans are soaked and then crushed between two stones. The crushed mass is allowed to run off into a tub and is then strained through cheesecloth and diluted with water. After boiling, it is again strained, and the white milk run off into bottles and sold.

"An analysis of the bean-curd milk shows that it has a specific gravity of 1.020 and a fat content of 3.125, contrasted with a specific gravity of 1.029 and a fat content of 3.9 for good average cow's milk in America.

"The factory referred to is a small one. The proprietors do all their work at night in order to have their milk fresh for delivery the following morning. The milk is ready and bottled by daylight.

"The room where the milk is made shows that no complicated machinery is necessary in the manufacture of the milk. At one end of the room were found two of the small stone mills in which the beans were ground. Large numbers of bottles were arranged on a rack near the wall, clean and ready to receive the morning's supply of milk. At the opposite end of the room there were three wooden vats built into a concrete foundation, which proved to be a furnace. The prepared product is poured into these vats and boiled, the furnace being supplied with fuel from a hole in the outside wall. On either side were two earthenware jars into which the boiled product is poured and from which it is allowed to run through stopcocks into the bottles.

"The manufacturers of this milk seem to be endeavoring to conduct their factory along hygienic lines. They invited inspection of their factory and expressed a desire to carry out the suggestions made by the inspecting physician. These suggestions related principally to the sterilization of the bottles before allowing the milk to run into them.

"To the eye the product looks exactly like unskimmed cow's milk. It has an odor of raw beans, and is said to be not unpleasant to the taste."

Although the Chinese have used the soya bean extensively for at least 2000 years the first important shipment to Europe was made in 1908 by a British firm. The Germans almost immediately began to experiment with it and five years later were using the major part of an importation, estimated at more than $200,000,000 a year.

Sweden uses large quantities of the bean cake as fol for milch cows; Denmark has a large pressiug factory at Copenhagen; France has a factory built in Paris by a Chinese firm, and South Africa has recently begun to grow the bean in competition to the Manchurian farmers. Germany in 1912 rescinded her former import duty and installed reduction plants for the far eastern vegetable product in all her oil mills, importing the beans directly from Vladivostok by the shipload.

Commercial Utilization.

During the last year notable progress has been made in bringing about the commercial utilization of soy bean seed for the manufacture of oil, meal and various more or less complex products, says Chief William A. Taylor of the United States bureau of plant industry in his annual report just submitted to Secretary Houston. The soy bean is well adapted to the whole cotton belt and indeed to the whole corn region. In the cotton belt it promises to be an important crop wherever the acreage of cotton has been reduced. The immature bean seeds make a very delicious vegetable and are canned with ease. Inasmuch as soy beans can be more cheaply produced than any other bean seed, it is believed that there is a large field for the canning of green soy beans. Efforts are now being made to induce canning factories to put the product on the market. In the growing of the soy bean and in manufacturing products therefrom the United States can compete successfully with the orient.

Many Varieties of the Soy Bean

The soy bean is especially adapted to the cotton belt and northward into the southern part of the corn belt, according to farmers' bulletin 372, United States department of agriculture. The early varieties mature in the northern part of the corn belt, but frequently do not make a sufficient yield to warrant growing them. Farther south, where the later and larger varieties can be grown, the yield is sufficient to make their extensive cultivation very profitable. Generally speaking, the soy bean requires about the same temperature as corn. It is, perhaps, even better adapted to a warm climate and does not do well in a cool climate.

According to a bulletin of the Ohio experiment station issued in 1912, it is declared that within the last 20 or 25 years the soy bean has gained considerable prominence in the agriculture of several states, notably Massachusetts and Kansas, into both of which states the seed was imported direct from Japan. The wide variation in different varieties as regards time of maturity, permit it to be grown pretty generally throughout the United States. Roughly speaking, the earliest varieties can be grown successfully as far north as corn. In Ohio the acreage at present is not large, but is rapidly increasing. The Ohio experiment station has been growing soy beans continuously in a small way since 1894.



Typical soy bean plant.

Sidelights

The peace-at-any-price advocate has solved an old, old problem: What will happen when an irresistible force encounters an immovable object? He recommends the application of the principle of arbitration to such cases.

On Grounds of Neglect.

Parson—Aren't you the same couple that I married last month?

Groom-elect—Yes—but Cally got a divorce for neglect because I forgot to kiss her while shaving.——Puck.

Father's Opinion.

"What is political economy, dad?"

"To to be perfectly candid, my son, I can't tell you. Sometimes I think there isn't any such thing."—Philadelphia Bulletin.

He Will.

Always live within your income,
For there's just this much about it—
If you do not live within it
You will some day live without it.
—Exchange.

Money No Object.

The judge was passing sentence on a very defiant-looking culprit.

"This is a sad case," his honor said. "You, who remained honest until you were 40, have tarnished your name and dishonored your family for the sake of three miserable dollars."

"Please be fair," said the prisoner. "Was it my fault there were so few?"

The Horrors of Law.

The man of great financial prominence had met with an accident.

"We'll have to probe," said the doctor.

Just at that moment the man recovered consciousness and exclaimed: "If it's a surgical operation, go ahead, but if it's another investigation, give me an anaesthetic."

Perhaps He Could.

Among the letters received by the editor of a "heart to heart" column in a certain paper was the following, writ-written by a young man:

"Please can you tell me why a girl always closes her eyes when a fellow kisses her?"

In a moment of fiendish frankness the man of the pen indited the following reply:

"Send me your photograph, and perhaps I can tell you."

By All Means, No.

The editor opened a letter and read:

"I am a widow, having lost three husbands. Another man proposed to me last night, however. Do you think I should accept him?"

The editor sighed wearily, dipped his pen into the ink and wrote: "No, indeed. If you have lost three already you are too careless to be intrusted with a fourth."

Community Development

Market and Transportation Facilities Count

It is useless to produce a crop for which there is no market or, even worse, no transportation facilities, says Professor Thornber, director of extension state college of Washington. Thus the market and transportation facilities have become possibly the most important factor in community development.

The value of the land is determined by the productivity of the soil and the marketing and transporting facilities. Most farm crops can not walk to market, but must be hauled. While a certain locality may have the most favorable conditions possible for the production of apples, wheat or corn, if transportation facilities are not good then it will be better to produce hogs, cattle, horses, or sheep, a crop that may be driven to market.

In the same way, even though a district may be adapted to the growing of perishable fruits and vegetables, if markets are not of easy access or close to the farm, the crops will be unprofitable. It would be much better to raise some crop that could be transported to market, but that would not deteriorate rapidly if not marketed promptly.

The market problem is a keen one and must be given consideration or failure is invited. It is not a problem for the farmer to solve alone, but it is one in which we are all interested

Seven factors of community development are:

1. Productivity of soil.
2. Market and transportation facilities.
3. Good roads and streets.
4. Good schools and churches.
5. An intelligent reading people.
6. Parks and recreation grounds.
7. Pleasant, comfortable homes.

BUCKSHOT SPRAY IS NEEDED

Something worse than the codling moth is reported from certain northwest orchard districts, especially that of southern Idaho. Game wardens rather than insecticide or fungicide boards are being called in to fight the pest, which is nothing other than willow grouse, called in some localities just plain prairie chicken. Deputy Game Warden Davie of Adams county, Idaho, declares that in that section these birds are a real pest, doing enormous damage to fruit trees through the destruction of fruit spurs, which make them a delightful food delicacy during the snowy days of winter. It is declared that there have been as many as 200 fruit spurs found in the crops of birds killed for examination. Some of these "exhibits" are to be sent to the federal authorities with a view to working out a scheme for the prevention of their depredations.

All the World's a Stage, and All the Men and Women Merely Players

Mentioned in the "Leak" Investigation



Distinguished statesmen and financiers involved by Thomas W. Lawson of Boston in the probe by the house rules committee of the alleged "leak" to Wall street in connection with the president's peace message. J. P. Morgan, H. P. Davison and Frank A. A. Vanderlip, leaders of American finance, were summoned to appear before the committee and testify. William G. McAdoo, secretary of the treasury; Joseph Tumulty, secretary to President Wilson, and Secretary of State Lansing, together with several prominent financiers, were directly named by Thomas W. Lawson in his testimony before the committee. They have entered denials of Lawson's charges.

Relish Dinner for a Dime



Richard E. Lyons, one of the members of the squad of 12 New York "rookie" policemen, who volunteered for the 25-cents-day dietary test, is shown consuming his first 10-cent dinner. Most of the "victims" of the dietary test appeared to relish their food and all said that they had quite sufficient to satisfy their appetites. The meal which Lyons is shown eating consisted of lamb stew with vegetables, stewed apricots, gingerbread and coffee. It is designed for the purpose of showing that men may remain well and strong on food not costing more than 25 cents a day.

Getting Sicker and Sicker.



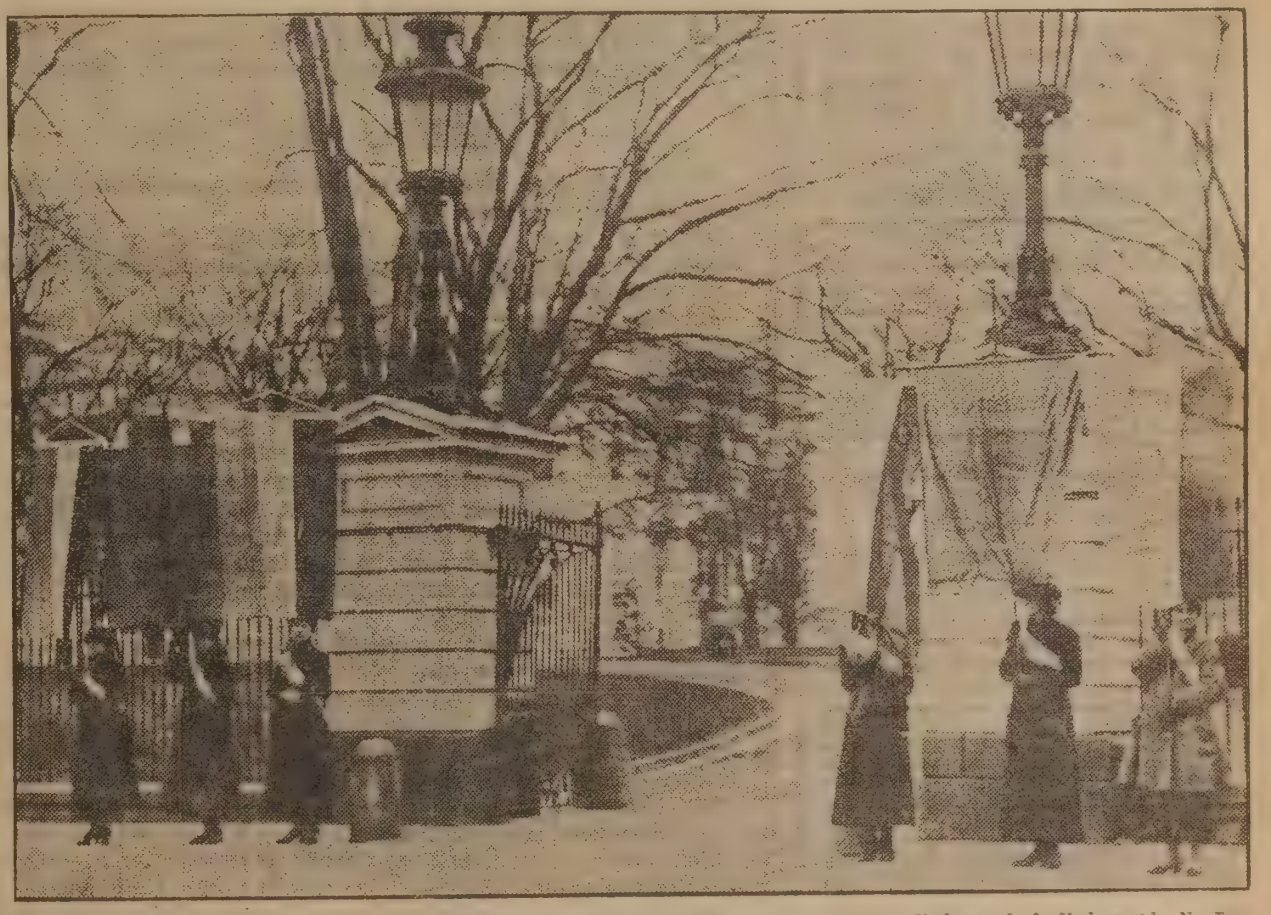
—Nashville Tennessean.

A Difficult Solo.



—Springfield Union.

Silent Sentinels at White House Gates.



(Photo by Clinedinst, Washington, D. C. From Underwood & Underwood, N. Y.

"Picketing the White House" is the latest activity of the members of the Congressional Union for Woman Suffrage in their strenuous efforts to force upon President Wilson and congress favorable consideration for the national woman suffrage amendment. It is now generally understood in suffrage circles as presaging the adoption of "military tactics" by the Congressional Union for Woman Suffrage.

Twice the president passed through one or the other of the gates in a motor car, but he merely smiled and said nothing, as he saw the silent sentinels and their banners. The women made no effort or attempt to obstruct his passage or to do anything more than display their big banners.

Freezing winds swept the White House grounds and forced the pickets to cling with both hands to the heavy tossing banners, while their lips turned blue and the tears came to their eyes with the cold. The custodian of the west entrance of the White House, acting upon orders from the president, came out and told the shivering women that they might come within the mansion and warm themselves whenever they wanted to, but requested them, when they did so, to leave their banners on the outside.

Hitching a Team

Well to Remember Safety First

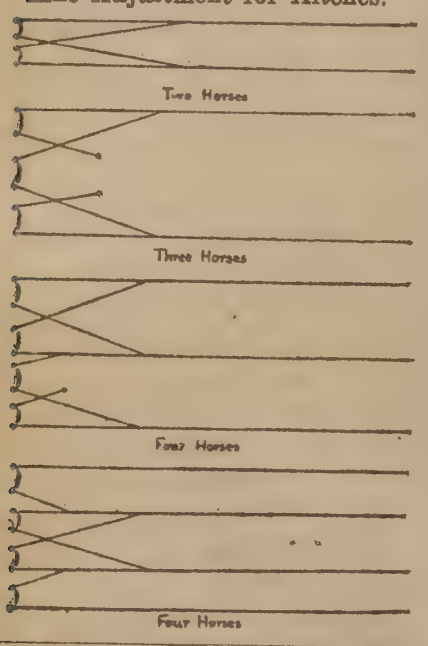
Safety, and speed with safety as the major point, is to be remembered in hitching a team, says a bulletin of the Washington State college. Many men report different methods in the hitching. A very good practice is a partial hitching of the team as the horses are led from the barn. When this is done, the horses are checked, the inside reins are then snapped to the bridles, thus coupling the horses. The outside rein of the off horse is then snapped and his rein undone. Then this line is carefully thrown across the back of the two horses. Next the outside rein of the near horse is snapped and his line unfastened. In coupling the horses be sure to put the coupling rein of the "freeest" horse above that of the other, and if one horse is higher headed, place his coupling rein above that of the other. This is done because there is no need of punishing the quiet horse, if the other is fiery or high headed. When the horses are coupled, they may have to be driven to the wagon. Put them in position for hitching by driving across the tongue from the side and rear. First fasten the neckyoke, slip the tongue into the neckyoke ring and then fasten the traces. The inside trace of the off horse may be fastened while working behind the near horse, and then fastening both traces of the near horse, and finally the outside trace of the off horse.

While fastening the traces, always have the lines drawn across the arm, as otherwise there is danger of the team becoming frightened and running away. These same rules may also be applied in unhitching the team.

The hitching of three or four horses abreast is similar except in the case of the lines. For the three-horse hitch, the three-horse evener should be used in all cases. The outside lines should be run from the two outside horses. The coupling lines should be attached to the middle horse and the outside horses should be "tied in" to the hames of inside horse. The length of the coupling reins and the tie reins is governed similarly to the length of the coupling reins discussed in a preceding paragraph.

In hitching four horses abreast, certain conditions control the use of the four-horse doubletree or the four-horse chain evener. Where the chain evener is used, three lines are all that are needed. In this case the "tongue"

Line Adjustment for Hitches.

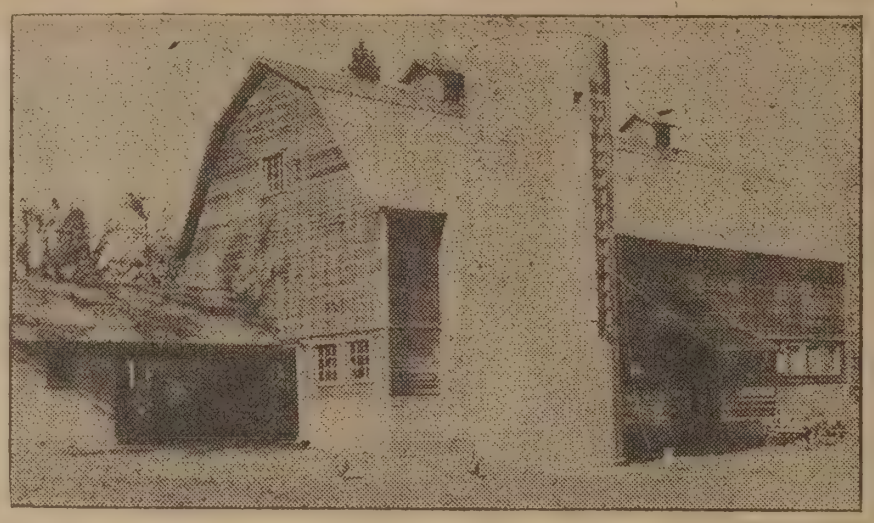


horses are hitched to one side or the other, depending on conditions. The outside horse or fourth horse is controlled by a third rein, the coupling rein being attached to the third horse.

In case the four-horse doubletree is used, the "tongue" horses are the middle pair. These are hitched as any team, and then a jerk rein is placed upon each outside horse. These outside horses are tied in to the middle pair. In this case the main lines and tie reins are adjusted as needs be, and the outside lines are used simply as jerk reins, so do not need any adjusting.

Barn Built to Save Labor

Feed Usually Chopped While the Separator is Running



New labor-saving dairy barn of W. O. Morrow, Independence, Ore.

The dairy barn shown above, recently completed by W. O. Morrow on his farm near Independence, Ore., was built primarily with the idea of saving labor, and it seems that the desire was well accomplished. The barn is 38 x80 feet high to the caves. It is well built, has concrete foundations and floors and the walls for four feet are of the same material. The floors of the stalls have planking above the concrete. There are 20 stanchions on one side and 10 box stalls on the other. Thirty-six-inch square windows, set close together, admit plenty of light. The home made swinging iron stanchions are carried on a long bar that slides, so all the stanchions can be closed or opened at once. Gas pipe, bent while cold, embedded and anchored in the cement of the floor and fastened to an upright iron bar, forms the division between the stalls. A gutter of ordinary width runs behind the stanchion stalls and a narrow drain next to the box stalls, all draining into a tank a short distance from the barn. Mr. Morrows plans for this liquid to form an important part of his manure.

The gate to each box stall is hung on a track that runs the entire length of the stalls. They are tight and easily run and do not get in the way like a gate swung on hinges. Five hay chutes each serve two box stalls, so there is no second handling of the hay and on the other side there are two hay chutes, so hay does not have to be carried more than 20 feet in either direction.

In the loft are bins for over 2000 bushels of grain. An ordinary elevator is used for elevating the grain and no other handling is required. The grain is drawn by gravity down either of two chutes to the chopper in the barn, and elevated again to the chop bin, from which it can be drawn out as wanted and comes down another chute ready to feed.

The silo is at one side near the end. It was this year filled with good corn that was put in before the early frost. The separator room is near the end of the barn and feed is usually chopped while the separator is running, to save time and fuel. The manure spreader can be driven through the barn and most of the manure is thus taken directly to the fields. H. A.

Peculiar Tree.

In Mexico there grows a tree called the "tree of little hands." It is thus called owing to the fact that its five peculiarly curved antlers look like the fingers of a child.

Write to the Editor

The Washington Farmer will be glad to get a letter from any subscriber at any time.

If we are making a paper that you like, tell us so. If we are making a paper in any respect that you do not like, it is yet more important that you should tell us so.

Having thousands and thousands of subscribers, of course it is out of the question to make the paper just as each subscriber would like to have it in every particular. Folks are different and like different things in their reading. This makes it interesting. We try to have something of special interest to every subscriber before we get through with it. Sometimes it takes longer, sometimes shorter to get around to the particular thing you like. It may happen that many readers enjoy one kind of reading matter and only a few another kind, so we can not be expected to give as much space to the desires of the few as to the desires of the many.

You see that it is no simple problem to get up a farm paper for a large number of people.

Then write us about any question that interests you, or any question that troubles you. We may be able to help you. Remember, that the chief difficulty in answering any question is in having the question itself plainly and correctly stated. For instance, a general question regarding the law of boundary fences can be answered easily, while the question regarding your own line fence when there is a dispute between you and your adjoining neighbor may be so intricate and have so many things connected with it which only a trained attorney could answer, after a personal interview with you.

Write us any inquiry you desire to make and we will be glad to give you the best answer possible, whether it is a simple matter of statistics or a matter requiring the advice of experts.

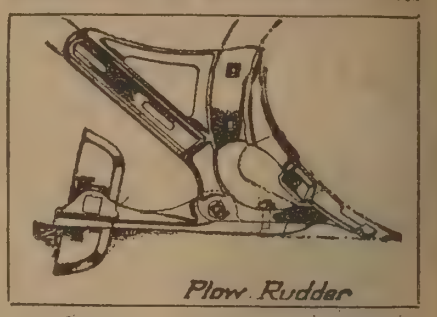
We want your letter, for that is the only practicable way we can talk with most of our readers. Write us anything and everything you wish, and be sure that you will get a reply containing all the information that we have at hand or that we can obtain from people who do know with respect to the particular thing about which you want information.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Plow Rudder.

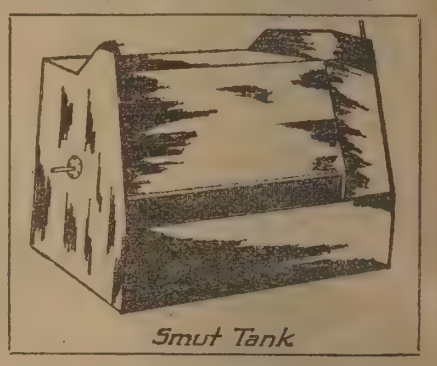
The rudder shown here is a thin metal bar which is attached to the under face of the standard, and resists



any lateral motion. It is designed particularly for cotton plows and middle buster plows.

Machine for Treating Grain.

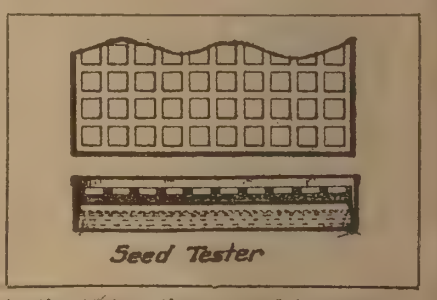
A solution of formaldehyde, or other disinfectant, is used to destroy the germs of smut and rust on seed grain. In this tank the solution in the inner chamber passes through the sieve, and



wets the grain in the outer chamber. When the tank is inverted the solution returns to the inner chamber and the treated grain is discharged into a suitable receptacle. The operation is then repeated with a fresh batch of grain.

Seed Tester.

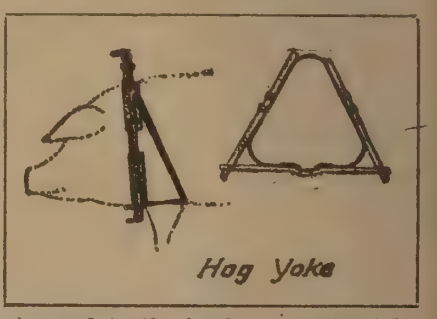
The new feature of this tester is the square absorbent pad which has 100 small depressions. It is moistened and placed on a support above the water



in the tester; then a seed is placed in each depression and the tester is covered. The number of seeds which sprout, out of the 100 tested, gives at once the per cent quality of the seed.

Neck Yoke.

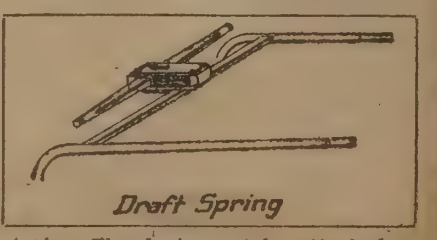
The tubular metal bars of this yoke are fastened to one another by cotter



pins and to the leather neck band by U shaped metal straps. The yoke is secured to the hog by means of ropes.

Cushion for Swingletrees.

The spring of this device relieves the shoulders of the horse from shocks and



strains. The device can be attached to any pair of shafts.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merrill Co.

SYNOPSIS.

Charles Brandon, who has neither wealth nor title, wins distinction for having defeated the heretofore unconquerable duelist, Judson. Brandon is installed as one of the captains of the guard of King Henry VIII. Edwin Caskoden (who tells the story) is Master of the Dance at London Court. The two young men become fast friends. Edwin tells Brandon of the willful, but adorable Mary Tudor, who had coaxed her royal brother Henry out of many proposed marriages which had been arranged for Henry's advantage. Edwin confesses that he, like scores of other men, had fallen in love with Mary, but upon Mary's refusal to marry him, he immediately became attracted to the good and beautiful Lady Jane Bolingbroke. He predicts that Brandon will soon fall a victim to Mary's charms.

At their first meeting, Mary and Brandon have a tilt, in which Mary comes off second best and acknowledges it. Wondering as to Brandon's social accomplishments, and to settle a wager with Sir Edwin that he could not dance, Mary invites Brandon, Edwin and Jane to her drawing room. To her surprise and Edwin's delight Brandon is perfectly at east and proves that he knows more about dancing than the Master of the Dance, himself. He offers to teach the Princess Mary one of the new French dances.

CHAPTER IV.—(Continued.)

The princess stood irresolute for a moment in evident hesitation and annoyance.

"You are grieving because I think you bold! And yet you stand there laughing at me to my face. I think so more than ever now. I know it. Oh, you make me angry! Don't! I do not like persons who anger me and then laugh at me." This turned Brandon's smile into a laugh which he could not hold back.

Mary's eyes shot fire, and she stamped her foot, exclaiming: "Sir, this goes beyond all bounds; I will not tolerate your boldness another moment." I thought she was going to dismiss him, but she did not. The time had come when he or she must be the master.

It was a battle royal between the forces on the floor, and I enjoyed it and felt that Brandon would come out all right.

He said good-humoredly: "What, shall you have all the laugh in your sleeve at my expense? Do you expect to bring me here to win a wager for you, made on the assumption of my stupidity and lack of social accomplishments, and then complain when it comes my turn to laugh? I think I am the one who should be offended, but you see I am not."

"Caskoden, did you tell him?" demanded Mary, evidently referring to the wager.

"He said not a word of it," broke in Brandon, answering for me; "I should have been a dullard, indeed, not to have seen it myself after what you said about the loss of your ten crowns, so let us cry quits and begin again."

Mary reluctantly struck her flag.

"Very well, I am willing," she said laughingly; "but as to your boldness, I still insist upon that; I forgive you, however, this time." Then, half apologetically, "After all, it is not such a grievous charge to make. I believe it never yet injured any man with a woman; they rather like it, I am afraid, however angry it makes them. Don't they, Jane?"

Jane, of course, "did not know," so we all laughed, as usual, upon the slightest pretext, and Mary, that fair bundle of contradictions and quick transitions, stepped boldly up to Brandon, with her colors flying in her cheeks, ready for the first lesson in the new dance.

She was a little frightened at his arm around her waist, for the embrace was new to her—the first touch of man—and was shy and coy, though willing, being determined to learn the dance. She was an apt pupil and soon glided softly and gracefully around the room with unfeigned delight; yielding to the new situation more easily as she became accustomed to it.

This dance was livelier exercise than La Galliard, and Mary could not talk much for lack of breath. Brandon kept the conversation going though, and she answered with glances, smiles, nods and monosyllables—a very good vocabulary in its way, and a very good way too, for that matter.

Once he said something to her, in a low voice, which brought a flush to her cheeks and caused her to glance quickly up into his face. By the time her answer came they were nearer us, and I heard her say: "I am afraid I shall have to forgive you again if you are not careful. Let me see an exhibition of that modesty you so much boast." But a smile and flash of the eyes went with the words, and took all the sting out of them.

After a time the dancers stopped, and Mary, with flushed face and sparkling eyes, sank into a chair, exclaiming: "The new dance is delightful, Jane. It is like flying; your partner helps you so. But what would the king say? And the queen? She would simply swoon with horror. It is delightful though." Then, with more confusion in her manner than I had ever before seen: "That is, it is delightful if one chooses her partner."

This only made matters worse, and gave Brandon an opportunity.

"Dare I hope?"—he asked, with a deferential bow.

"Oh, yes; you may hope. I tell you frankly it was delightful with you. Now, are you satisfied, my modest one? Jane, I see we have a forward body here; no telling what he will be at next," said Mary, with evident impatience, rapidly swaying her fan. She spoke almost sharply, for Brandon's attitude was more that of an equal than she was accustomed to, and her royal dignity, which was the artificial part of her, rebelled against it now and then in spite of her real inclinations. The habit of receiving only adulation, and living on a pinnacle above everybody else, was so strong from continued practice that it appealed to her as a duty to maintain that elevation. She had never before been called upon to exert herself in that direction, and the situation was new. The servile ones with whom she usually associated maintained it for her; so she now felt, whenever she thought of it, that she was in duty bound to clamber back, at least part of the way, to her dignity, however pleasant it was, personally, down below in the denser atmosphere of informality.

In her heart the princess preferred upon proper occasions, such as this, to abate her dignity, and often requested others to dispense with ceremony, as, in fact, she had done with us earlier in the evening. But Brandon's easy manner, although perfectly respectful and elegantly polite, was very different from anything she had ever known. She enjoyed it, but every now and then the sense of her importance and dignity—for you must remember she was the first princess of the blood royal—would supersede even her love of enjoyment, and the girl went down and the princess came up. Besides, she half feared that Brandon was amusing himself at her expense, and that, in fact, this was a new sort of masculine worm. Really, she sometimes doubted if it were a worm at all, and did not know what to expect, nor what she ought to do.

She was far more girl than princess, and would have preferred to remain merely girl and let events take the course they were going, for she liked it. But there was the other part of her which was princess, and which kept saying: "Remember who you are," so she was plainly at a loss between natural and artificial inclinations contending unconsciously within her.

Replying to Mary's remark over Jane's shoulder, Brandon said:

"Your highness asked us to lay aside ceremony for the evening, and if I have offended I can but make for my excuse my desire to please you. Be sure I shall offend no more." This was said so seriously that his meaning could not be misunderstood. He did not care whether he pleased so capricious a person or not.

Mary made no reply, and it looked as if Brandon had the worst of it.

We sat a few minutes talking, Mary wearing an air of dignity. Cards were proposed, and as the game progressed she gradually unbent again and became as affable and familiar as earlier in the evening. Brandon, however, was frozen. He was polite, dignified and deferential to the ladies, but the spirit of the evening was gone, since he had furnished it all with his free, off-hand manner, full of life and brightness.

After a short time, Mary's warming mood failing to thaw our frozen funmaker, and in her heart infinitely preferring pleasure to dignity, she said: "Oh, this is wearisome. Your game is far less entertaining than your new dance. Do something to make me laugh, Master Brandon."

"I fear you must call in Will Sommers," he replied, "if you wish to laugh. I can not please you in both ways, so will hold to the one which seems to suit the princess.

Mary's eyes flashed and she said ironically:

"That sounds very much as though you cared to please me in any way." Her lips parted and she evidently had something unkind ready to say; but she held the breath she had taken to speak it with, and, after one or two false starts in as many different lines, continued: "But perhaps I deserve it. I ask you to forgive me and hereafter desire you three, upon all proper occasions, when we are by ourselves, to treat me as one of you—as a woman—a girl, I mean. Where is the virtue of royalty if it only means being put upon a pinnacle above all the real pleasures of life, like foolish old Stylites on his column? The queen is always preaching to me about the strict maintenance of my 'dignity royal,' as she calls it, and perhaps she is right; but out upon 'dignity royal' say I; it is a terrible nuisance. Oh, you don't know how difficult it is to be a princess and not a fool. There!" And she sighed in apparent relief.

Then turning to Brandon, "You have taught me another good lesson, sir, and from this hour you are my friend, if you will be, so long as you are worthy—no, I do not mean that; I know you will always be worthy—but forever. Now we are at rights again. Let us try to remain so—that is, I will," and she laughingly gave him her hand, which he, rising to his feet, bowed low over and kissed, rather fervently and lingeringly, I thought.

Hand-kissing was new to us in England, excepting in case of the king and queen at public homage. It was a little startling to Mary, though she permitted him to hold her hand much longer than there was any sort of need—a fact she recognized, as I could easily see from her tell-tale cheeks, which were rosy with the thought of it.

So it is when a woman goes on the defensive prematurely and without cause; it makes it harder to apply the check when the real need comes.

After a little card-playing I expressed regret to Jane that I could not have a dance with her for lack of music.

"I will play, if the ladies permit," said Brandon; and he took Lady Jane's lute and played and sang some very pretty little love songs and some comic ones, too, in a style not often heard in England, so far away from the home of the troubadour and lute. He was full of surprises, this splendid fellow, with his accomplishments and graces.

When we had danced as long as we wished—that is, as Jane wished—as for myself, I would have been dancing yet—Mary again asked us to be seated. Jane having rested, Brandon offered to teach her the new dance, saying he could whistle an air well enough to give her the step. I at once grew uneasy with jealous suspense, for I did not wish Brandon to dance in that fashion with Jane, but to my great relief she replied:

"No; thank you; not tonight." Then shyly glancing toward me: "Perhaps Sir Edwin will teach me when he learns. It is his business, you know."

Would I? If a month, night and day, would conquer it, the new dance was as good as done for already. That was the first real mark of favor I ever had from Jane.

We now had some songs from Mary and Jane; then I gave one, and Brandon sang again at Mary's request. We had duets and quartets and solos, and the songs were all sweet, for they came from the heart of youth, and went to the soul of youth, rich in its God-given fresh delight in everything. Then we talked, and Mary, and Jane, too, with a sly, shy, soft little word now and then, drew Brandon out to tell of his travels and adventures. He was a pleasing talker, and had a smooth, easy flow of words, speaking always in a low, clear voice and with perfect composure. He had a way of looking first one auditor and then another straight in the eyes with a magnetic effect that gave to everything he said an added interest. Although at that time less that 25 years old, he was really a learned man, having studied at Barcelona, Salamanca and Paris. While there had been no system in his education, his mind was a sort of knowledge junk-shop, wherein he could find almost anything he wanted. He spoke German, French and Spanish, and seemed to know the literature of all these languages.

He told us he had left home at the early age of 16 as his uncle's esquire and had fought in France, then down in Holland with the Dutch; had been captured by the Spanish and had joined the Spanish army, as it mattered not where he fought, so that there was a chance for honorable achievement and a fair ransom now and then. He told

(Continued on the following page.)



Ready for the first lesson in the new dance.

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from preceding page.)

us how he had gone to Barcelona and Salamanca, where he had studied, and thence to Granada, among the Moors; of his fighting against the pirates of Barbary, his capture by them, his slavery and adventurous escape, and his regret that now drowsy peace kept him mewed up in a palace.

"It is true," he said, "there is a prospect of trouble with Scotland, but I would rather fight a pack of howling, starving wolves than the Scotch; they fight like very devils, which, of course, is well, but you have nothing after you have beaten them, not even a good whole wolf skin."

In an unfortunate moment Mary said: "Oh! Master Brandon, tell us of your duel with Judson."

Thoughful, considerate Jane frowned at the princess in surprise, and put her finger on her lips.

"Your ladyship, I fear I can not," he answered, and left his seat, going over to the window, where he stood, with his back toward us, looking out into the darkness. Mary saw what she had done, and her eyes grew moist, for, with all her faults, she had a warm, tender heart and a quick, responsive sympathy. After a few seconds of painful silence she went softly over to the window where Brandon stood.

"Sir, forgive me," seh said, putting her hand prettily upon his arm. "I should have known. Believe me, I would not have hurt you intentionally."

"Ah! my lady, the word was thoughtlessly spoken, and needs no forgiveness; but your heart shows itself in the asking, and I thank you; I wanted but a moment to throw off the thought of that terrible day." Then they came back together, and the princess, who had tact enough when she cared to use it, soon put matters right again.

I started to tell one of my best stories in order to cheer Brandon, but in the midst of it Mary, who I had noticed was restless and uneasy, full of blushes and hesitancy, and with a manner as new to her as the dawn of the first day was to the awakening world, abruptly asked Brandon to dance with her again. She had risen and was standing by her chair, ready to be led out.

"Gladly," answered Brandon as he sprung to her side and took her hand. "Which shall it be La Galliard or the new dance?" And Mary standing there, the picture of waiting, willing modesty, lifted her free hand to his shoulder, tried to raise her eyes to his, but failed, and softly said: "The new dance."

This time the dancing was more soberly done, and when Mary stopped it was with serious, thoughtful eyes, for she had felt the tingling of a new strange force in Brandon's touch. A man, not a worm, but a real man, with all the irresistible infinite attractions that a man may have for a woman—the subtle drawing of the lodestone or the passive iron—had come into her life. Doubly sweet it was to her intense, young virgin soul in that it first revealed the dawning of that two-edged bliss which makes a heaven or a hell of earth—of earth, which owes its very existence to love.

I do not mean that Mary was in love, but that she had met, and, for the first time felt the touch, yes, even the subtle, unconscious, dominating force so sweet to woman, of the man she could love, and had known the rarest of all God's perfect handiwork—a woman's heart—the throb that goes before—the John, the Baptist, as it were, of coming love.

It being after midnight Mary filled two cups of wine, from each of which she took a sip, and handed them to Brandon and me. She then paid me the 10 crowns, very soberly thanked us and said we were at liberty to go.

The only words Brandon ever spoke concerning that evening were just as we retired:

"Jesu! she is perfect. But you were wrong, Caskoden. I can still thank God I am not in love with her. I would fall upon my sword if I were."

I was upon the point of telling him she had never treated any other man as she had treated him, but I thought best to leave it unsaid. Trouble was apt to come of its own accord soon enough.

In truth I may as well tell you that when the princess asked me to bring Brandon to her that she might have a little sport at his expense she looked for a laugh, but found a sigh.

CHAPTER V.

A day or two after this, Brandon was commanded to an audience, and presented to the king and queen. He was now eligible to all palace entertainments, and would probably have many invitations, being a favorite with both their majesties. As to his standing with Mary, who was really the most important figure, socially, about the court, I could not exactly say. She was such a mixture of contradictory impulses and rapid transitions, and was so full of whims and caprice, the inevitable outgrowth of her blood, her rank and the adulation amid which she had always lived, that I could not predict for a day ahead her attitude toward any one. She had never shown so great favor to any man as to Brandon, but just how much of her condescension was a mere whim, growing out of the impulse of the moment, and subject to reaction, I could not tell. I believed, however, that Brandon stood upon a firmer foundation with this changing, shifting, quicksand of a girl than with either of their majesties.

In fact I thought he rested upon her heart itself. But to guess correctly what a girl of that sort will do, or think, or feel would require inspiration.

Of course most of the entertainments given by the king and queen included as guests nearly all the court, but Mary often had little fetes and dancing parties which were smaller, more select and informal. These parties were really with the consent and encouragement of the king, to avoid the responsibility of not inviting everybody. The larger affairs were very dull and smaller ones might give offense to those who were left out. The latter, therefore, were turned over to Mary, who cared very little who was offended or who was not, and invitations to them were highly valued.

In truth, I may as well tell you, that when the princess asked me to bring Brandon to her that she might have a little sport at his expense, she looked for a laugh, but found a sigh.

One afternoon, a day or two after Brandon's presentation, a message arrived from Mary, notifying me that she would have a little fete that evening in one of the smaller halls and directing me to be there as master of the dance. Accompanying the message was a note from no less a person than the princess herself, inviting Brandon.

This was an honor indeed—an autograph invitation from the hand of Mary! But the masterful rascal did not seem to consider it anything unusual, and when I handed him the note upon his return from the hunt, he simply read it carelessly over once, tore it in pieces and tossed it away. I believe the duke of Buckingham would have given 10,000 crowns to receive such a note, and would doubtless have show it to half the court in triumphant confidence before the middle of the night. To this great captian of the guard it was but a scrap of paper. He was glad to have it nevertheless, and, with all his self-restraint and stoicism, could not conceal his pleasure.



"My lord has dropped his sword."

Brandon at once accepted the invitation in a personal note to the princess. The boldness of this actually took my breath, and it seems at first to have startled Mary a little, also. As you must know by this time, her "dignity royal" was subject to alarms, and quite her most troublesome attribute—very apt to receive damage in her relations with Brandon.

Mary did not destroy Brandon's note, despite the fact that her sense of dignity had been disturbed by it, but after she had read it slipped off into her private room, read it again and put it on her escritoire. Soon she picked it up, re-read it, and, after a little hesitation, put it in her pocket. It remained in the pocket a moment or two, when out it came for another perusal, and then she unfastened her bodice and put it in her bosom. Mary had been so intent upon what she was doing that she had not seen Jane, who was sitting quietly in the window, and, when she turned and saw her, she was so angry she snatched the note from her bosom and threw it upon the floor, stamping her foot in embarrassment and rage.

"How dare you watch me, hussy?" she cried. "You lurk around as still as the grave, and I have to look into every nook and corner, wherever I go, or have you spying on me."

"I did not spy upon you, Lady Mary," said Jane quietly.

"Don't answer me; I know you did. I want you to be less silent after this. Do you hear? Cough, or sing, or stumble; do something, anything, that I may hear you."

Jane rose, picked up the note and offered it to her mistress, who snatched it with one hand, while she gave her a sharp slap with the other. Jane ran out, and Mary, full of anger and shame, slammed the door and locked it. The note, being the cause of all the trouble, she threw it to the floor again and went over to the window bench, where she threw herself down to pout. In the course of five minutes she turned her head for one fleeting instant and looked at the note, and then, after a little hesitation, stole over to where she had thrown it and picked it up. Going back to the light at the window, she held it in her hand a moment and then read it once, twice, thrice. The third time brought the smile, and the note nestled in the bosom again.

Jane did not come off so well, for her mistress did not speak to her until she called her in that evening to make her toilet. By that time Mary had forgotten about the note in her bosom; so when Jane began to array her for the dance it fell to the floor, whereupon both girls broke into a laugh and Jane kissed Mary's bare shoulder, and Mary kissed the top of Jane's head, and they were friends again.

So Brandon accepted Mary's invitation and went to Mary's dance, but his going made for him an enemy of the most powerful nobleman in the realm, and this was the way of it:

These parties of Mary's had been going on once or twice a week during the entire winter and spring, and usually included the same persons. It was a sort of coterie, whose members were more or less congenial, and most of them very jealous of interlopers. Strange as it may seem, uninvited persons often attempted to force themselves in, and all sorts of schemes and maneuvers were adopted to gain admission. To prevent this, two guardsmen with halberds were stationed at the door. Modesty, I might say, neither thrives nor is useful at court.

When Brandon presented himself at the door his entrance was barred, but he quickly pushed aside the halberds and entered. The duke of Buckingham, a proud, self-important individual, was standing near the door and saw it all. Now Buckingham was one of those unfortunate persons who never lose an opportunity to make a mistake, and being anxious to display his zeal on behalf of the princess stepped up to prevent Brandon's entrance.

"Sir, you will have to move out of this," he said pompously. "You are not at a jousting bout. You have made a mistake and have come to the wrong place."

"My lord of Buckingham is pleased to make rather more of an ass of himself than usual this evening," replied Brandon with a smile, as he started across the room to Mary, whose eye he had caught. She had seen and heard it all, but in place of coming to his relief stood there laughing to herself. At this Buckingham grew furious and ran around ahead of Brandon, valiantly drawing his sword.

"Now, by heaven! fellow, make but another step and I will run you through," he said.

I saw it all, but could hardly realize what was going on, it came so quickly and was over so soon. Like a flash Brandon's sword was out of its sheath, and Buckingham's blade was flying toward the ceiling. Brandon's sword was sheathed again so quickly that one could hardly believe it had been out at all, and, picking up Buckingham's, he said with a half-smothered laugh:

"My lord has dropped his sword." He then broke its point with his heel against the hard floor, saying: "I will dull the point, lest my lord, being unaccustomed to its use, wound himself." This brought peals of laughter from everybody, including the king. Mary laughed also, but as Brandon was handing Buckingham his blade, came up and demanded:

"My lord, is this the way you take it upon yourself to receive my guests? Who appointed you, let me ask, to guard my door? We shall have to omit your name from our next list, unless you take a few lessons in good manners." This was striking him hard, and the quality of the man will at once appear plain to you when I say that he had often received worse treatment, but clung to the girl's skirt all the more tenaciously. Turning to Brandon the princess said:



"How dare you watch me, hussy?"

"Master Brandon, I am right glad to see you, and regret exceedingly that our friend of Buckingham should so thirst for your blood." She then led him to the king and queen, to whom he made his bow, and the pair continued their walk about the room. Mary again alluded to the skirmish at the door, and said laughingly:

"I would have come to your help, but I knew you were amply able to take care of yourself. I was sure you would worst the duke in some way. It was better than a mummery, and I was glad to see it. I do not like him."

The king did not open these private balls, as he was supposed, at least, not to be their patron, and the queen, who was considerably older than Henry, was averse to such things. So the princess opened her own balls, dancing for a few minutes with the floor entirely to herself and partner. It was the honor of the evening to open the ball with her, and quite curious to see how men put themselves in her way and stood so as to be easily observed and perchance chosen. Brandon, after leaving Mary, had drifted into a corner of the room back of a group of people, and was talking to Wolsey—who was always very friendly to him—and to Master Cavendish, a quaint, quiet, easy little man, full of learning and kindness, and a warm friend of the Princess Mary.

It was time to open the ball, and, from my place in the musicians' gallery, I could see Mary moving about among the guests, evidently looking for a partner, while the men resorted to some very transparent and amusing expedients to attract her attention. The princess, however, took none of the bidders, and soon, I noticed, she espied Brandon standing in the corner with his back toward her. Something told me she was going to ask him to open the dance, and I regretted it, because I knew it would set every nobleman in the house against him, they being very jealous of the "low-born favorites," as they called the untitled friends of royalty. Sure enough, I was right. Mary at once began to make her way over to the corner, and I heard her say: "Master Brandon, will you dance with me?"

(To be continued in next issue.)

$275 WAITING TO BE WON

Being an Exhortation to Old and New Subscribers to Get Busy

By the Contest Editor

Only a few weeks remain of the big figure contest in which this paper is giving away $750 in 32 prizes, the largest to be $275 if the winner has paid $1.50 for three years' subscription to the Farmer.

The advantage of beginning your count now is that should you find your first solution to be wrong, you will have time to send in a corrected solution to the Contest Editor with another subscription payment as provided by the rules. A solution when once entered can not be changed.

Get into the contest now. Don't wait until the close when accuracy may have to be sacrificed to speed on account of lack of time.

Something to Know

This contest is given solely by the Northwest Pacific Farm Trio, which includes The Washington Farmer, The Idaho Farmer and The Oregon Farmer, and must not be confused with the subscription offers of any other newspapers or farm journals. Also remember that this is not a guessing contest.

To enter the Figure Contest it is necessary that you remit a new or renewal of subscription to the Farmer at the regular rate of $1 for one year or $1.50 for three years.

If you are already paid ahead on your subscription to the Farmer, your further subscription payments will be credited on an extension from the time to which you are now paid.

Answers to Mail

S. O. S.—Noah (surname not known) was the first man to combat leaks, and not Tom Lawson as you assert. There can be no leak in the Figure Contest because even the Contest Editor, who is the only person to know the correct solution, has locked the answer in a safety deposit vault and forgotten the exact figures. He remembers that the total is less than 10,000 which is worth knowing for some of our contestants who, notwithstanding frequent warnings, continue to find 29, 39, 49 and numerous other double formations, in the chart. Totals thus obtained run all the way from 20,000 to 40,000 and are as far from right as it is possible to go without adding in some figures that do not exist.

Gwen.—Count the figures and forget him. However, let us hope that he will always cherish such scruples against your working. If you win the first prize of $275 he will have more respect for your "unbridled energy," as you say he calls it.

F. K.—Do not know the number of "3's" or "9's" in puzzle chart, my sole information being the total of all the figures when added up as if they were in one long column.

B. G.—Thank you for the information that the author of the poem, "He Met Her in the Meadow," lives at Alexandria, Va. The other verse to which you refer was written by James Whitcomb Riley and reads:

I'm bin a-visitin 'bout a week
To my little cousin's at Nameless Creek,
An' I'm got the hives an' a new straw hat,
An' I'm come back where my beau lives at.

H. K.—All prizes in the figure contest will positively be paid in cash, checks going forward to prize winners just as soon as possible after the contest is decided. Relative to your question about prohibition, there will be 26 states in the dry column after the legislatures of Utah and Florida meet. There are several other states in which it is a long time between drinks and where prohibition is only a matter of a very short time, such as Minnesota, Kentucky, Maryland, New Hampshire and Texas. The success of national prohibition is dependent on the success of prohibition in 36 states, the ratification by the legislatures of three-fourths of the states being necessary to the adoption of an amendment to the federal constitution.

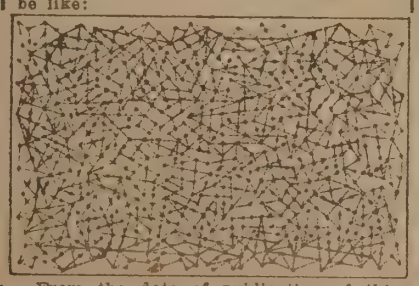
Deciding Ties

In the event of ties on the first problem, those tying will be required to solve a second puzzle, like the small illustration, only considerably larger. Only those tying on the first problem will be eligible to solve the second, or tie-breaking, problem.

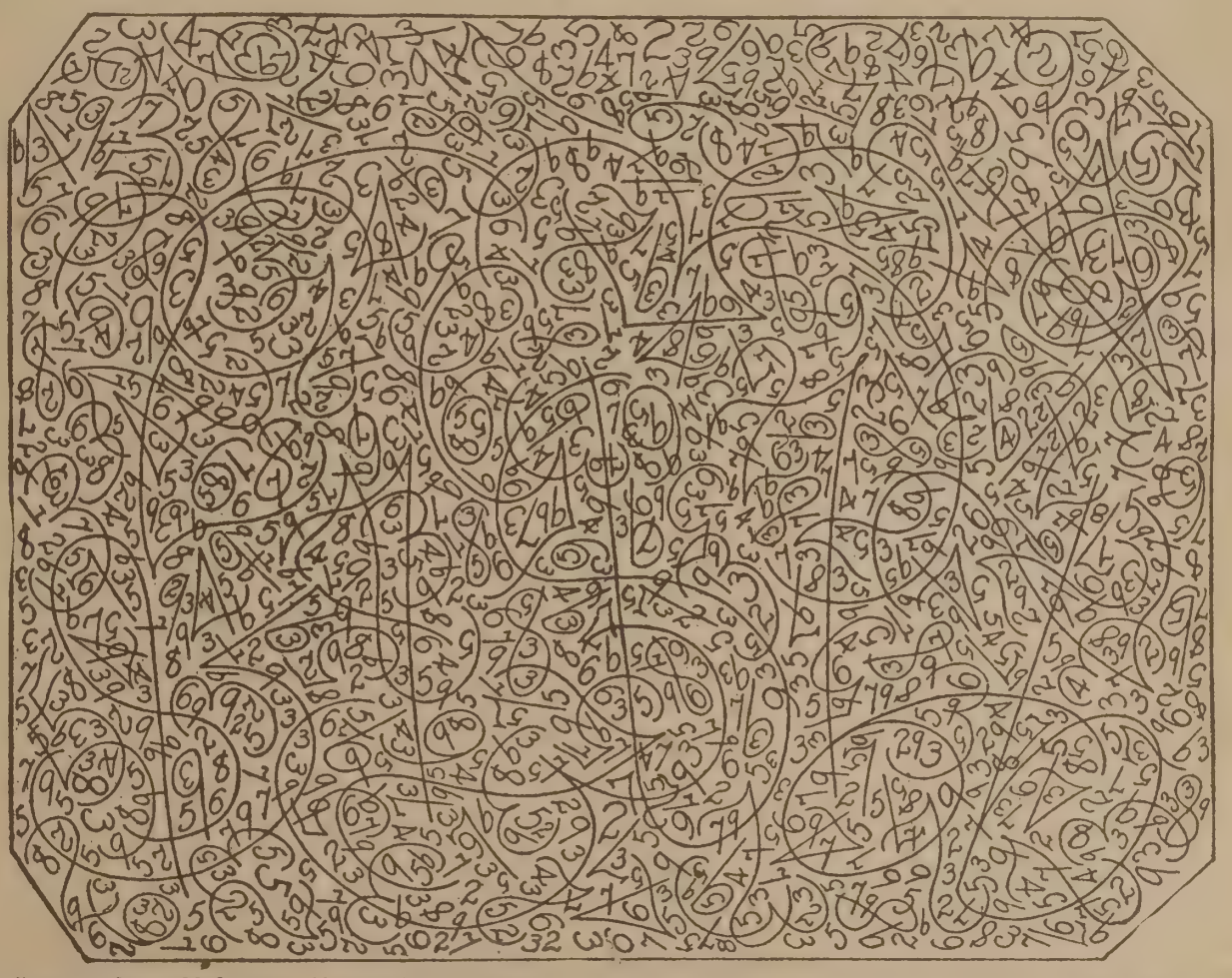
The second problem will involve drawing a continuous line through the greatest possible number of dots. Rules for solving the second problem will be published more fully in event that it becomes necessary to present it, and these rules, together with extra charts, will be mailed to each tying contestant just as soon as possible after all answers to the first puzzle have been received and registered. The small illustration simply gives an idea of the nature of the second problem, and nothing can be done toward solving it until it is determined whether there are any ties on the first puzzle, which will be known after March 17, 1917.

In case of ties on the second problem, the same problem will simply be rearranged and another solution asked from those tying on the second problem. If two or more persons tie for any prize on third solution, each will receive the full amount of the prize instead of a division being made of the prize money.

This is what the second problem will be like:



From the date of publication of this second problem one week will be given for its solution.



This Is How to Do It

Simply add up the figures in the puzzle chart as if they were in one long column. Your success depends on the accuracy of your total thus obtained.

Figures run from two to nine, and there are no double figures or characters which are not figures. The tail of the "6" has a decided curve, while the tail of the "9" is straight. All other figures have the usual characteristics, allowing no question as to the identity of any figure.

In event that no one submits the correct total, prizes will be awarded for the next nearest solutions.

This contest is restricted to persons residing in Washington, Idaho, Oregon and Montana.

A payment of $1 to $1.50 on subscription to the Farmer entitles the subscriber to enter the contest.

If your subscription is already paid in advance, your expiration date will be set ahead beyond this date to which you are now paid the full period for which you pay at this time. The advantage of paying $1.50 instead of $1 is that the winner of any of the first four prizes receives additional prize dividends apportioned on the amount paid in on subscription, besides the fact that $1.50 during this contest pays for a three-year subscription to the paper, while $1 pays for only one year.

More than one solution may be submitted by any contestant, by an additional subscription payment of not less than $1 nor more than $1.50. It is not necessary to pay the same amount with each solution if more than one is submitted.

You can send in a subscription for some one other than yourself and have the solution registered in your own name. Remember that by paying $1.50 instead of $1 on subscription, the larger will be your dividends if you win one of the four leading prizes; but not more than $1.50 will be received with one solution.

$750-Prizes-$750

FIRST PRIZE, $200,
to which will be added 50 times the amount paid by the subscriber with the winning solution. For example, if you pay $1.50 on subscription, this prize will be worth $275.

SECOND PRIZE, $100,
to which will be added 30 times the amount paid by the subscriber with the winning solution. This prize may be worth $145.

THIRD PRIZE, $60,
to which will be added 20 times the amount paid by the subscriber with the winning solution. This prize may be worth $90.

FOURTH PRIZE, $50,
to which will be added 10 times the amount paid by the subscriber with the winning solution. This prize may be worth $65.

FIFTH PRIZE, $40.

SIXTH AND SEVENTH PRIZES, Each $20.

EIGHTH TO SIXTEENTH PRIZES, Each $7.

SEVENTEENTH TO THIRTY-SECOND PRIZES, Each $2.

CASH MUST ACCOMPANY.

Don't send in your charts and working papers unless called for by the Contest Editor. Simply write your solution in blank space provided in "Registration Blank."

Remember, the contest closes March 17, 1917.

REGISTRATION BLANK

Cut out this blank closely around the border and send it in with your solution and money.

To the Farmer Contest Editor:

Date sent .....191..

I enclose $..... for..... subscription to **The Washington Farmer.**

Name .....

Town .....

State .....

SOLUTION AND PAYMENTS.

The following spaces provide for three solutions, with the payments you desire to make with them. You may submit one or as many different solutions as you wish. You can subscribe for one or three years as per printed schedule, with each solution, as provided for in "The Conditions."

Solution. Amount Paid.

..... $.....

..... $.....

..... $.....

Answer this question; Are you now a subscriber? .....
If you wish paper sent elsewhere, fill in name and address.

.....

.....

You must address all inquiries and solutions to

The Washington Farmer
Contest Editor
Review Building **Spokane, Washington**



Stiff Upper Lip

Advice Which Helped One Man

What is the quotation or what are the words which have helped you in the journey of life?

Is it a phrase from some famous author or was it the words from some neighborly soul who helped you over a hard place and left you the invaluable legacy of a life motto?

What are your favorite motto, your favorite quotation, your favorite words?

Send them to the editor of the Farmer and let those words help another which have helped you.

To the Editor of the Farmer: I will give you a quotation which was given to me a number of years ago by a business firm, to whom I had written about a bill I was owing them, and I wanted some extra time. Their answer was: "Keep a stiff upper lip and go ahead," which meant, go ahead and do the best you can.

I have always remembered that and have kept it in practice.

L. F. DAVIS.

Rainier, Wash.

Emergencies

Supplies That Should Be on Hand

By Alice W. Barland.

When my children were small there were a few things I always kept on hand and where I could find them without delay. These articles are necessities in every household. They are a package of court plaster, a package of surgeon's plaster, a five-yard package of sterlized gauze, which should be kept in a fruit can closely sealed, a bottle of boracic acid, a package of absorbent cotton, a bottle of alcohol or peroxide, and a bottle of olive oil.

In addition to these things I always kept a sack of old cotton cloth carefully washed and boiled and had always in it an old, worn sheet that would make long bandages. Many a time there has been a sudden frantic appeal to me for large bandages for a horse injured on the barbed wire fence.

We used to think it a part of the process of healing that the injured part should swell and go through a long period of supperation, but nowadays we have learned better and know if we keep the impurities out of a wound it will heal in a clean manner.

I should have added a bottle of camphor and a piece of alum to the list above. When one feels a "cold sore" swelling on the lips either camphor or alum, if applied at once, will heal it before it hardly starts.

Powered alum will usually stop excessive bleeding and sometimes seems to be the only thing that will stop it. Common baking soda covered over a burn will give instant relief.

Should you have a child taken with convulsions first place a silver spoon between the teeth to protect the tongue then without a moments delay place the child in a tub of warm water. Leave in the water only long enough to see the tense jerking motions relax, then lift out and roll in a flannel blanket. The child will go to sleep and awaken in a normal condition.

Convulsions are caused most frequently from indigestion, therefore one should be watchful of the diet of a child subject to convulsions, and above all prevent constipation.

Little Home Helps.

Did you ever sow a few parsley seeds in a plant can and grow in the window with the house plants? It is so nice to have a few leaves for winter garnishing.

Did you ever try lifting the cookies from bake-board to pan with your pancake turner? It is easier to keep them nice shaped that way, especially if you are making great, big ones.

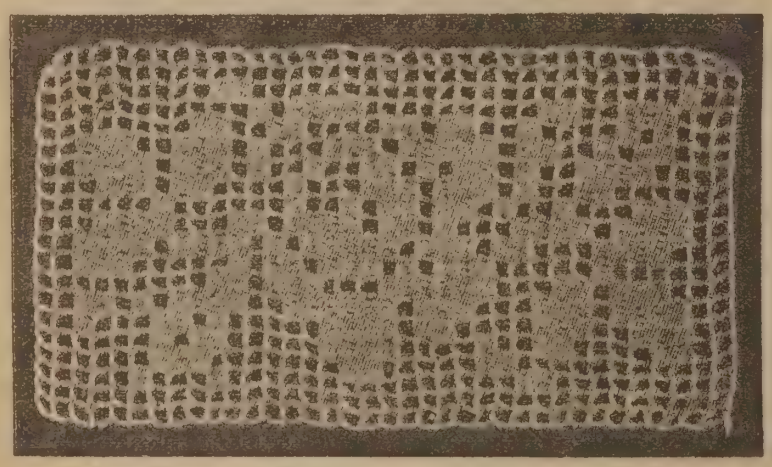
Did you ever slip a newspaper between the house plants and the window glass on cool nights? It is an easy way to keep the plants from chilling on nights not cold enough to warrant taking from the windows. E. Q.

To Test Woolen Goods.

To test woolen goods dissolve two rounded teaspoonfuls of common lye crystals in a cup of water. Boil for three or four minutes and the wool will become a pulp and any cotton threads present will be unaffected. Use two samples of equal size. Test one and use the other sample for comparison.

Popular Crochet Designs

By WINIFRED WORTH



Rose design for sash curtain.

All crochet workers will be glad to learn this practical design, as it is easily done if the given instructions are followed.

For the 20 open meshes chain 60.

First and second rows—Make 20 open meshes in each row, then follow design. The design as it appears measures 8 inches made from No. 3 cordinet, but would not measure so much made from finer thread. Be sure that the center of the rose comes in the center of the curtain. The remaining length can be either of open meshes or the pattern at each end and also the center.

School Lunch

Put Responsibility on Pupils

It is much better to have a child eat his lunch in a comfortable place than if he is permitted to eat a cold lunch on the school house door steps or on the wood pile, says Leila W. Hunt, assistant professor of foods and cookery at the Washington State college, in a bulletin entitled "The Hot Lunch for Rural School." Often such a cold lunch is made up simply of left-overs.

In adition to the better nutrition of the child, there may be learned lessons in courtesy, table manners and common social customs by using the hot school lunch. A lesson in the economy of time and material is worth while and may be taught. Other things that might be gained are the bringing of the school and home more closely together by interesting the mothers and fathers in the work. Girls could be taught lessons regarding the planning and serving of meals; boys may be interested in gardening.

The Plan.

All of the responsibility should not be placed upon the teacher, but the pupils also should share the work and the responsibility. Parents should be interested and should share their part of the burden. Mothers might be invited to the school and plans discussed with them. They might be induced to provide some food occasionally—such as baked beans, soup stock, milk or vegetables. Perhaps it will be necessary for the teacher to estimate and plan the bill of fare, furnishing at least one warm dish at noon. This can be provided at a small cost—say 3 cents, 4 cents or 5 cents a child and each one can bring a sandwich or two of bread and butter from home. The cost should be kept as low as possible. Usually milk and vegetables are in plenty and farmers are usually generous with these products, so a good plan is to ask them to donate such foods to the school. Sometimes the woman's club of the community will coperate by furnishing supplies and equipment in an enterprise of this kind. In a consolidated rural school one teacher might be selected to give a lesson in cooking to a few pupils every noon and to supervise the serving of the luncheon. Make this a community work.

Potato Recipes

Simple Directions for Preparing

The following recipes for potatoes, prepared by the office of home economics for club work of the department of agriculture, show a few of the many uses of the wholesome potato:

Stuffed Potatoes.

A nice way to vary baked potatoes is to cut a slice from the top of each and scrape out the inside. Mash, season with salt, pepper, chopped parsley (if liked), and butter and heat in a little hot milk; add two well-beaten whites of eggs. Refill the skins, sprinkle with grated cheese, and bake in a hot oven about six minutes.

French Fried Potatoes.

Wash, pare and cut into eighths lengthwise. Soak in cold water one hour; drain and dry between towels. Fry in deep fat, which must not be too hot. Drain on brown paper and sprinkle with salt.

Shoestring Potatoes.

Potatoes cut in long, narrow strips and prepared by the above recipe are called Julienne or shoestring potatoes.

Panned Potates.

Cut cold boiled potatoes into quarter-inch slices; dredge lightly with flour and fry in pan with a little butter. When light brown, heap on side of pan; let stand a few minutes, then loosen with a knife and turn out on a platter in much the same way that an omelet is taken out. Sprinkle with salt and serve at once.

Production of Peanut.

The peanut, or ground nut, although grown in places all over India, as a garden and even an occasional field crop, is produced on a commercial scale only in the Madras and Bombay presidencies, in Burma, and that part of French India (Pondicherry) that adjoins Madras.

Acclimated Seed Wanted



Demand Can Be Reached Through Want Ads

Turn over to the "want" ad page of this issue and notice the seed classification.

Space in this department may be secured at a reasonable rate by those who are able to offer good, clean, acclimated seed.

These "want" ads will take your offer into more than 50,000 farm homes in the Pacific northwest. In a large proportion of these homes there is undoubtedly a demand for seed that has been tested out under the conditions and climate peculiar to this section.

We believe our seed classification will prove of real service both to those who have acclimated seed to sell and to those who want to buy and plant it.

If you have something in this line that you've tried out on your own place and know is good, let us hear from you.

The Washington Farmer
Review Bldg.
Spokane, Wash.

Save Strength

By Keeping Work Done Ahead

What is the most helpful thing you have learned during the past year in your experience with housekeeping? Let us pass it along to other housekeepers.

To the Editor of the Farmer: What is the most helpful thing I have learned during the past year in my experience with housekeeping?

This is a hard question to answer as one learns something every day and I often wonder how we ever got our work done without the learning we get by experience.

I read all the papers and get many helps from them and often wish there were more recipes both in cooking and fancy work in the Washington Farmer.

Learn to conserve your strength by keeping your work done ahead. Take plenty of time to read and keep the mind on beautiful things and the body will never seem tired. This is the best thing I have learned.

MRS. W. C. BOWMAN.

Mondovi, Wash.

Patterns

1965-1816—Ladies' costume.

Waist 1965 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 1816 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 6 3-4 yards of 44-inch material for the entire dress for a medium size. Two separate patterns, 10 cents for each pattern.

1952—Ladies' house dress.

Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 6 1-8 yards of 44-inch material for a



36-inch size. The skirt measures about 3 yards at the foot. Price, 10 cents.

1963—Ladies' apron.

Cut in 4 sizes: 34, 38, 42 and 46 inches bust measure. Size 38 requires 5 1-4 yards of 36-inch material. Price, 10 cents.

1589—Girls' dress.

Cut in 4 sizes: 4, 6, 8 and 10 years. Size 8 years will require 1 3-4 yards of 36-inch material for the guimpe, with 2 1-8 yards for the dress. Price, 10 cents.

1951—Girls' slip, with or without envelope chemise finish.

Cut in 6 sizes: 4, 6, 8, 10, 12 and 14 years. It requires 2 1-2 yards of 36-inch material for a 10-year size. Price, 10 cents.

1973—Dress for misses and small women.

Cut in 3 sizes: 16, 18 and 20 years. It requires 5 5-8 yards of 44-inch material for an 18-year size. The skirt portion measures 2 3-4 yards at the lower edges. Price, 10 cents.

Kale

Makes a Good Winter Vegetable

This is the time of the year when the farmer's wife finds it hard to get enough fresh vegetables to make a variety in the daily menu. With onions this year at 4 cents a pound and cabbage, celery and rutabagas a poor crop, there isn't much left but carrots, parsnips and Hubbard squash.

I wonder how many of our countrywomen know that the young sprouts of the thousand-headed kale make delicious greens for the table. They are very wholsome and a good substitute for spinach and should be included in the diet of every family who is fortunate enough to have a field of kale on the farm. When properly gathered and properly cooked and served, it is sure to be liked by every one who likes greens.

It is a common dish in the British isles and if you have any Britishers in your family you will find they will give the kale greens a hearty welcome. In gathering them, remember that it is the young, new shoots that sprout at the joint of the big leaves on the main stalk that will make tender greens. When I have a large field to pick from I take just the heart of each plant, which includes three or four leaves, none larger than your hand. The plants keep on throwing out new sprouts for another month or so. The kale is at its best after the heavy fall frosts, and is at its best right new. It will begin to go to seed late in February and after that will not be tender and palatable.

For six or eight people gather a market basket full, then wash in several waters to shake out any worms or insects. Then put in a large kettle and cover with boiling, salted water; remove cover as soon as it boils up well and boil briskly 15 or 20 minutes, or until it is soft and tender, but not too long or it will be dark and watery. Put in a colander to drain and chop with a sharp, big knife or in a chopping bowl. Put in a hot, buttered dish and serve very hot with bits of butter laid on top and well salted. A tablespoonful of cream added to each dish as it is served adds a delicate, mellow flavor liked by many.

For variety a cream sauce with a chopped hard boiled egg in it, poured over the greens, makes the dish attractive and more nourishing, and appeals especially to children, who sometimes do not fancy greens at first.

These greens are especially appropriate with pork or any rich meat course. Like spinach, kale greens are considered healthful for their laxative effect and as a help in purifying the system.

MRS. T. C.

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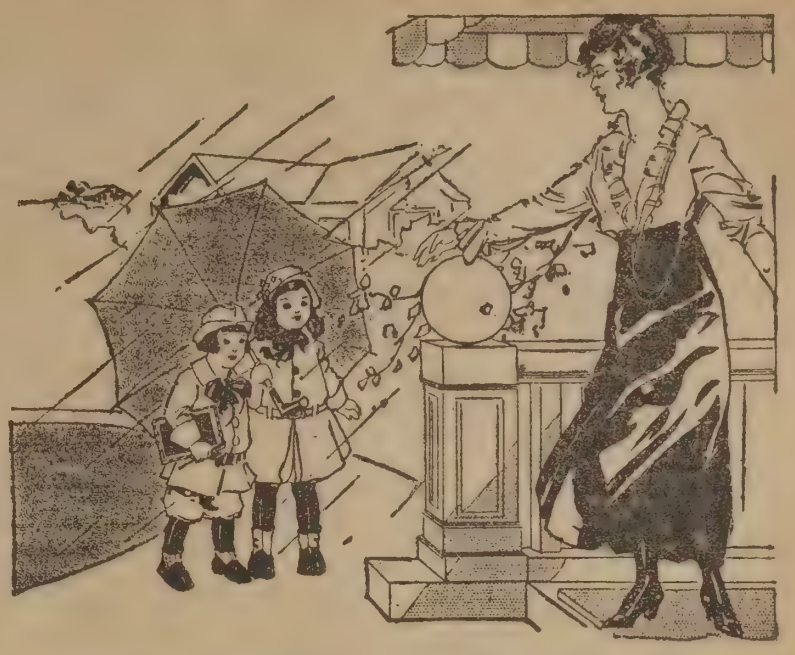
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"Hurry, children—I've got a real treat for you."

Ghirardelli's Ground Chocolate

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It comes PROTECTED—as all chocolate should—in ½-lb., 1-lb., and 3-lb. hermetically sealed cans.

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Free Hatching Eggs from Prize Winning Pens



Any thrifty boy or girl can get a start in purebred poultry by devoting a little time to pleasant work outside of school hours. We offer nothing but eggs from prize winners. Each setting contains 15 eggs and you can make your selection from the following breeds:

S. C. Reds, R. C. Reds, Barred Plymouth Rocks, White Rocks, White Wyandottes, Buff Orpington, Blue Orpington, Black Orpington, White Orpington, Light Brahmas, Anconas, S. C. Andalusians, R. C. Andalusians, R. C. Brown Leghorns, S. C. Leghorn, R. C. White Leghorn, S. C. White Leghorn, S. C. Buff Leghorn, Black Minorca, Bantam, Buttercup, Campine, Houdan.

Write today if you want to join the Poultry Club. You will want to have your eggs hatching before long, so don't delay.

Address:

Washington Farmer Room 37, Review Building Spokane, Wash.

Pictures

Seen by Little Jim in the Fire

By Laura Pearson Felton.

There was something strangely pathetic about the patches on the knees of the blue overalls and the holes in the toes of his stubby shoes as he lay in the glow of the fire from the hearth—something strangely pathetic about the way this man-child of nine summers pillowed his smooth cheek on the sleeve of his worn blouse.

There was a far-away look in his eyes as he listened to the steady creak of his mother's chair as she rocked and sewed. He only half heard the creak of the chair, for, mingled with it, he thought he could hear the shouts of the other boys as they rode by in a wagon for town and the "movies."

How he did want to go tonight! All the other fellows were going. There were to be pictures of the Pendleton roundup and most everybody would be there—everybody except mother and him.

A feeling of resentfulness came over him. Why must mother alawys sit in her chair and sew and why must he lie and listen to the creak, creak of the chair?

The other fellows got to go to town real often and had money to buy pop and ice cream cones. Yes, and their mothers didn't always sew, either. He guessed he knew. He had seen them reading or doing fancy work when he went on errands for mother. He had to go quite often to return some sewing mother had done for them, or some ironing or something.

The other fellows always said: "Aw, come on and play a while, Jim. That ironin' 'll keep," or, "Guess you've earned that nickel—sneak it and we'll go to town to the show." But the small head had always shaken and the lad had answered, "No," and would trudge off with his share of the work.

All these things little Jim pondered over as he lay looking into the fire and a feeling of rebellion crept into his heart.

Presently the firelight took on a softer glow and there came visions of the little mother always smiling, always working. Sometimes she was washing, sometimes ironing or baking. And always in the evening she sat in the low chair sewing—every evening except Sunday and then she would sit and read to little Jim as he lay by the fire. Sometimes, on rare occasions, she would make a plate of taffy and they would pull it and laugh when it stuck to their fingers. But always, in frolic or at work, Jim could see in his vision, a halo about his mother's head and he wondered vaguely what it meant.

As he gazed into the glowing embers he saw another picture of his mother as he came upon her unawares one day. She was sitting by the kitchen table, her head upon her arms, and he was not sure, but he thought he saw her sholders quiver. He had slipped away quietly and had been glad he had not sneaked the nickel as the fellows wanted him to.

Then he saw the little mother as she knelt beside the bed one night to pray. She thought he was asleep. He saw the slender mother-form in her white night gown as she knelt there and he heard her pray, "O God, make me brave; give me courage and strength. Keep my boy free from sickness, sin and all harm, dear Lord."

And again he had been glad that he had done his errands well and willingly.

The firelight flickered and he saw another picture. It was his mother's face as he had seen it when they brought his father home all bruised and still. Even then her thoughts had been not of herself, but of him, her boy, who would be without a father. O, how plainly he could see the pictures of the days that followed! As the logs of the fire shifted and rolled out on the hearth he could hear the dull thud of the clay as they dropped it in the open grave.

A dry sob chocked him. He felt a soft hand on his head and heard a sweet voice saying, "Come, little son; it is late and the fire has burned low. Did you know you had gone to sleep?"

How gentle her touch, how sweet her voice!

"Why, what's the matter, boy dear; you look as if you had seen a ghost?"

Little Jim swallowed a lump in his throat and said: "No, mother. I've been seeing moving pictures in the fire. They were wonderful pictures."

Little Jim understood the halo of the dream picture. To him it stood for courage, unselfishness, truth and love.

Scalloped Potatoes.

Wash and pare potatoes; let them soak for a half hour; and cut in one-fourth inch slices. Butter a baking dish, put in a layer of the sliced potatoes, sprinkle with salt and peper, dredge with flour and dot over with one-half tablespoon of butter. (A little grated cheese may be sprinkled over each layer if desired.) Repeat until the baking dish is nearly filled, then cover with hot milk. Bake one and one-fourth hours in a moderate oven, or place on the back of the stove and cook slowly.

The Motor Car

On the Farm

Road Map Sign.

A large board sign upon which has been painted a road map of the district has been erected near Roscoe, Cal., by the Automobile Club of Southern California.

How Much Do You Use?

The present gasoline consumption in this country amounts to 1,750,000,000 gallons per year. One-fifth of the gasoline products of this country have been shipped abroad for the last two years.

Dripping of Cylinder Oil.

Speaking of the benefits derived from such fine roads as the Pacific highway, E. E. Ware of Chehalis calls attention to the menace to teams from the constant dripping of cylinder oil. "Sooner or later, the roads will have to be sanded, or something of the kind," he predicts. "Even now they sometimes get too slippery for a team to get a good footing on them."

Gasoline for 138 Years.

A note of alarm concerning the gasoline supply of the country was sounded at the convention of the Society of Agriculture Engineers at Chicago by Dr. Oscar F. Bransky of the Standard Oil company.

He declared that production was not keeping pace with consumption and that exhaustion of the supply was drawing near. The tension was considerably relieved, however, when it was calculated that the estimated remaining supply of crude oil, visible and invisible would last 138 years at the 1916 rate of consumption.

Dr. Bransky said that next year there would be 3,000,000 automobiles in operation in the United States, or 750,000 more than this year. He estimated that castern oil fields are 75 per cent exhausted; midcontinental fields 50 per cent; Texas fields 80 per cent, and California fields 35 per cent exhausted.

BULLFROGS AND PUSSYWILLOWS.

The first genuine harbinger of spring has already arrived at this place despite it being somewhat early, which is believed to be the earliest for many years. The bullfrog chorus is getting in shape for the spring concerts. Real pussywillows are out in almost full force while lilac bushes and other shrubbery are showing signs of growth with buds swelling perceptibly. Wild Oregon grape is shooting out its green buds and violets are in the budding stage.

EDWARD LOUIS SACHTLER.

Ridgefield, Clarke County, Wash.

Spend More on Education

People of Washington Demand More, Get More

Former President Bryan of the State College of Washington reminds the people of Washington that if they are spending a great deal more money on education than they were spending per capita a decade or two ago, they are demanding more and getting more in return. Mr. Bryan says:

The excellent and useful tax articles of E. D. Cowen have one weak spot in their logic. Because the expenditure within the state for education has increased in the last 20 or 25 years faster than the population, or even the assessed valuation of the state, it does not necessarily follow that the expenditure is now too high. It may just as well follow that it was then too low.

In the case of higher education the state expended, about 1890, $5000 a year, which was undoubtedly too low. We can not assume that the expenditure was then correct and that all increases have been wrong. Then there were less than five standard four-year high schools in the state. Now there are over 150 accredited high schools. Of course these cost more than those, but our children have correspondingly better opportunities.

Without a doubt there have been mistakes and extravagances in school expenditures of all grades, and these ought to be corrected as far as possible. But merely because we have more and better educational facilities now and pay more for them than did our forebears is not proof that we are wrong and they were right.

College and high school education is diffused today among the masses to an extent that was unknown a generation ago. Whether we are happier, more prosperous or even more progressive for the change admits of some debate. Australian conditions seem to throw some doubt around the question.

"One of the anomalies of Australian life," says the National Geographic Magazine for December, "is their attitude toward education. In a country where the government digs a man's well, sells him fish, and tells him when to open his store, and where 98 per cent of the adult population can read and write, it is strange, indeed, that interest in higher education should be so slow in developing.

"Free public education from kindergarten to a university degree, giving equal opportunities to rich and poor of both sexes, is not known in Australia. The numbers enrolled in secondary schools, both public and private, and in universities are therefore relatively small.

"The states of Washington (United States) and Victoria (Australia) have about the same population, but the Washington high schools enroll four times the number of pupils, and the state university enrolls four times as many students.

"To my mind the chief reason is the low valuation placed on higher education; too few are willing to obtain it at a personal sacrifice. Stories of American boys and girls without money, who by the thousands work their way through school and college by sacrificing their holidays and vacations, performing menial services and living on meager fare in cheap lodgings, read like fiction to the son of the Australian laborer."

Yet we are told by the same writer that "the day laborer, as opposed to the employer and other workers, is king in Australia. The unions, through the labor party, practically control the executive, legislative and judicial machinery of the cities, the states and the commonwealth.

"Forty-eight hours is the recognized maximum for a week's work; but in certain occupations, 44, 42, 40 and even 36 hours are considered full time.

"On the basis of doing a moderate amount of work amid agreeable surroundings, most Australians are workers. * * * With a short, easy day for the business and professional man and for the wage-earner, with Saturday afternoon free and frequent holidays, the Australian has the energy and the time for amusement, which, because of the climate, take largely the form of outdoor sports.

"The desire for money is in most cases a desire to secure a competence, not to secure power and prestige by amassing a huge bank account. Wealth is so diffused that nobody is really poor and few are very rich."

Go-to-School-Monday

Why waste the next three months? Plenty of time to get our short course in Bookkeeping, Business, Arithmetic, Commercial Law, etc.

Take care of your farm accounts more accurately by taking our Farm Set.

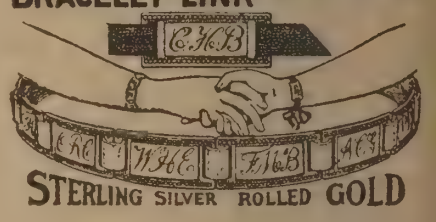
Our Shorthand and Bookkeeping graduates are always in demand.

Annual reunion February 16.

Northwestern Business College

M. M. Higley, Pres. Spokane, Wn.

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START A FRIENDSHIP BRACELET NOW.

Priceless as keepsakes and gifts. We give first link free. Write for particulars to A. J. STEVENSON, 8114 Post, Spokane.

Quick Sale of Duroc Swine

Two boars sold for $50 each and an offer of $75 for another that was not for sale—all from the first insertion of a small ad on the breeders' page of

The Pacific Northwest Farm Trio.

Such are the gratifying results secured by Doerfler Bros. of Silverton, Oregon, breeders of fine Durocs.

If you have good stock to sell tell our more than 50,000 subscribers about it and get quick action. Write today for our rates and let us tell you about our free ad service.



MABEL SAW THE PLACE WHERE FORD CARS ARE MADE

Dear Aunt Nellie: I am going to write about the holidays. Thanksgiving is when we thank God for our crops and Christmas is the birth of Jesus and the day of giving. New Year is first day of the new year. I live on a farm two and a half miles south of Oroville. We have two horses, Sunday and Pet, and three cows and three heifers. The cows' names are May, Dolly and Susie, and the heifers' names are Midget, Betsy, Blossom. I have a horse named Ted and three pullets and one rooster. I have one sister and two brothers. Their names are Julia, Ferber, Gilbert. I go to school in town. The name of the school is Southside school. We have five studies. They are arithmetic, spelling, reading, geography and language. The study I like best is geography. I am going to write to some of the cousins and I also am going to write to Genevieve McCauley of Dayton. Now I am going to tell you of my visit to the east, on the train. I saw many things. The first city we came to was Spokane and then we went through Idaho and we saw the twin cities and I saw where the Munsing underwear was made. I also saw where the Ford car was made. Then we went to Campbellsport, Wis., where I visited with my uncle and aunt and cousins. I am 10 years old September 19. I ride to school in a school wagon. I am in the fourth grade.—Mabel Schlef, R. R., Oroville, Wash.

LEARNING TO READ SWEDISH AT HER SUNDAY SCHOOL

Dear Aunt Nellie: I live on a farm and have lots of fun. I go to school and am in the fourth grade. I am 10 years old and 5 feet 2 inches tall. I have blue eyes, light hair and weigh about 100 pounds. My birthday is September 24. For a pet I have a cat named Lucky. My sister has a cat named Beauty. We also have a dear little calf named Beauty. It is all white excepting its ears are dark at the end and it has a dark ring around its neck which looks like a necklace. We have three cows and two heifers and two horses. We have over a hundred chickens. I have three brothers and three sisters. Two brothers and one sister are older than I. My oldest sister and I are almost the same size and we do have lots of fun together. I can tat and crochet a little.

I go to Sunday school and learn to read, talk and sing in Swedish. While at the public school, I learn English. I would like to see this letter in print. —Ethel Sandberg, Box 45, Olalla, Wash.

THEIR FARM IS ON THE SHORES OF LONE LAKE

Dear Aunt Nellie: I will tell you about our farm. We live on a 40-acre farm on the shores of a lake called Lone lake. It is a very pretty lake. We calle our place Lake View Farm. I have two pet cats. Their names are Tommy and Nigger. Tommy is six years old and Nigger is one. I will be 12 years old September 6. We have one horse and seven milk cows and two calves. We have about 350 chickens. I have two sisters and one brother and his name is Bennett. My sisters' names are Olive and Dora. Bennett is 13, Olive is 6 and Dora is 3 years old. Bennett is in the sixth grade, and I am in the fourth. Olive is in the primer grade. We have four rooms in our schoolhouse. There are 84 pupils in our school. My teacher's name is Miss Hazel Thomas. Bennett's teacher's name is Miss Ruth Davey, and Olive's is Mrs. Helen Howell. I like my teacher very much.—Adolph Olsen, Route 1, Box 17, Langley, Wash.

STELLA TELLS THE COUSINS ABOUT HER CHRISTMAS

Deaur Aunt Nellie: My birthday is June 11, and I am 8 years old. I got some toys for Christmas, a painting set, a hair ribbon, a story book, a handkerchief, and a game of Tiddley Winks. We had lots of candy Christmas. We had a program at the church and my sister had to speak.—Stella Stuurmans, R. F. D. 1, Lynden, Wash.

HATCHING EGGS FREE.

Hatching eggs from prize-winning pens of poultry FREE to thrifty boys and girls who will give the Washington Farmer a little of their time. Write today to Washington Farmer, Room 37, Review Building, Spokane, Wash.—Adv.

PLAY FOOTBALL IN THE FALL BUT MARBLES NOW

Dear Aunt Nellie: I am 9 years old and am in the fourth grade. I have two brothers and one sister. The oldest brother's name is Thomas and he is in the second grade. The other's name is Ross. The girl's name is a name I never heard before. It is Orena. We live in a lumber town and there are some farms around here too. My father is the superintendent of the mine. There is a Buick to carry the lumber out in the yards and the man that drives it taught me how to drive it. I go to the Lebarn school and we have about a mile and a half to walk every morning. We are having a vacation of two weeks. We play football in the fall but just now we are playing marbles. I have a lot of them. On the rainy and snowy days we play in the auditorium of the schoolhouse. The schoolhouse is quite a big one. There are about 200 pupils in the whole school. I have not missed a day in spelling this year and have not missed a day at school or been tardy either. If I do not miss a day or be tardy I will get a diploma at the end of the year with a gold seal on one end of it.—Grant Armstrong, Globe, Wash.

GRACE AND HER DOG HAVE GREAT FUN ON THE BEACH

Dear Aunt Nellie: My subject will be "In the Summer." In the summer I help mama in the morning and then my dog, Tippy, and I go down to the beach that we live by and go in bathing and have lots of fun. I get on a log and stand up with my dog on behind and paddle out till the water is as high as my head and then I jump off and swim a ways, but then come back to the log and get on again. My dog and I have lots of fun. We go picking wild flowers on an island called Dinner island. It is covered with lilies in the summer time. They are very big, some are four on a stem. I have all sorts of fun on the beach. I am 10 years old and am in the fifth grade. My birthday is August 22.—Grace Humbly, R. F. D. 2, Box 2, Friday Harbor, Wash.

IDA LOVES BEST OF ALL TO HAVE TRUE FRIENDS

Dear Aunt Nellie: I am 13 years old. I am going to write about what I love and hate. I love to have true friends and I love to be kind to them, too. I love my sister, who is taking care of me, and I think all the other girls who have no mother and are being cared for by their sister ought to like her. I love Christmas because it is the day Christ was born and we have a grand celebration. I hate to have untrue friends, and I also say the same as Enis Erickson, that I hate to be cruel to animals. I do not like selfish people, either. I think all the other girls will agree to what I say. I think that Enis Erickson and Alice Mortan wrote lovely letters. I wish to corerspond with them and many other girls of the Corner. We had a little program and a Christmas tree at school. Since the last time I wrote to the Corner we have have seven new scholars. Now we have two Franceses, two Johns, two Rubys, two Franks, two Marys and three Roses.—Ida R. Diliak, Buckeye, Wash.

EUNICE'S COLT ISN'T BIG ENOUGH TO RIDE YET

Dear Aunt Nellie: I am a little girl 10 years old. I am in the third grade. My birthday is June 24. My father has a Flanders car. My teacher's name is Miss Browning. I like her fine. My brother is in the eighth grade. I have two brothers and three sisters. My oldest brother is 22 years old and the other is 16 years old. My oldest sister is 31 years old and the other two are 26 and 20 years. Two of my sisters are married and one of my brothers is married. I have a colt. It's mother died. My colt is not big enough to ride yet. We live on a farm of seven acres. My father has four head of horses and four head of cattle.—Eunice Martin, box 124, Riverside, Wash.

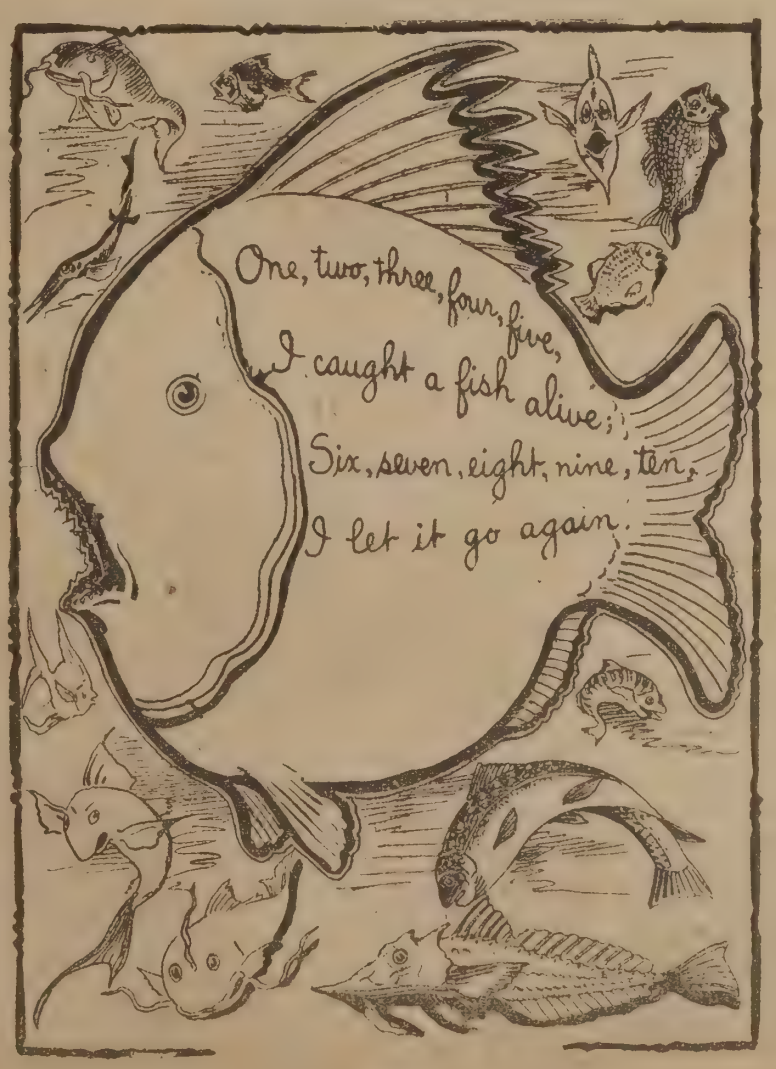
ADDIE O'ROURKE WRITES ABOUT HER SCHOOLROOM

Dear Aunt Nellie: In my schoolhouse there is only one room. The stove is in a corner and the library is, too. There is a few paintings on the wall. There are some new seats and some old ones. We have two swings and a pair of trapeze. The girl comes to the same school I do that got the big doll from Aunt Nellie. I am 13 years old and will be 14 May 5.—Addie O'Rourke, R. R. 1, Reardan, Wash.

MAUDE LIKES TO READ THE COUSINS' LETTERS

Dear Aunt Nellie: I am 10 years old. I am in the fifth grade in school. My teacher's name is Miss Mussen. My birthday is May 31. We live on a 160-acre ranch. I read the letters the children write and think they are fine.—Maude Bailey, Box 53, Malo, Wash.

I Caught a Fish Alive



THE TWINS HAVE TWIN PONIES OF THEIR OWN

Dear Aunt Nellie: We are twins, who enjoy reading the Children's Corner. We are 10 years of age and are in the 7B grade at school. We live in the country and have many pet turkeys and two small horses named Kewpie and Beauty. They are twins and are 4 years old. Their mother is a large bay horse, but they are both black. One has a white spot on the end of his nose, the other a white spot between his eyes. We have lots of fun riding our ponies to and from school. We live in the country and have three miles of good graveled road to go to school on. We go to school in town and there is a nice playground for us to play on, and a hot dinner at noon. In the summer we have a small flower garden and papa helps us make our playhouse. We have a baby brother, 4 years old. His name is Harold Edgar Black. We got lots of nice things for Christmas, and among them were two little gold watches for us. We spent our Christmas vacation at Seattle with our aunt, uncle and three cousins. Our aunty gave us each a lavalliere.—Thelma and Alma Black, Wash.

CLAYTONE GOES HUNTING SOMETIMES WITH HIS DOG

Dear Aunt Nellie: This is the second time that I have written to the Children's Corner and I read every letter that is in the paper, so I thought I would write again. I want to tell you some more about our farm. We had 10 cows and sold two of them so we have only eight now. I go hunting with my dog. Sometimes I go to Menlo to see my friend and he has a "twenty-two." I killed a bluejay with it. I killed it just as it was going in the chicken house to steal an egg. I will tell you what I got for Christmas. I got a little game, a necktie, a pair of sleeveholders and two handkerchiefs. When school started after vacation, we moved into the new schoolhouse and it has electric lights, electric bell, and an electirc fire bell. In case of fire there is a glass and a little hammer. It says, "In case of fire break this glass." I am 12 years old and in the fourth grade.—Claytone Beeson, Globe, Wash.

ETHEL LIKES TO WALK TO SCHOOL IN THE SPRING

Dear Aunt Nellie: My father is serving on the jury in Tacoma and my oldest brother is in bed with the measles. I have two brothers and one sister and one of our cousins is staying with us. My oldest brother is 15 years old and he is in the 10th grade. My youngest brother is 11 years old and he is in the seventh grade, and my sister is 9 years old and in the third grade. My cousin is the same age and in the same grade that my youngest brother is in. I live on a farm. We have 18 head of cattle, two mules, and their names are Kitty and Jennie. We have one dog and his name is Prince. I walk one mile to school. I like the walk to and from school, especially in spring. I am 13 years old and I am in the eighth grade.—Ethel Duke, Alder, Wash.

ROBERT HAS ONE CAT THAT HE CALLS TABBY

Dear Aunt Nellie: I am a little boy 6 years old. I like to read the Children's Corner. I am in the second grade. My teacher's name is Mr. Ayers. I like him very much. We have two horses and four head of cattle and 14 pigs. I have one brother and one sister. Their names are Edward and Alice. I have one cat and its name is Tabby. I have a sled. My birthday is June 10. Have I a twin?—Robert Fisher, R. F. D. 1, Colbert, Wash.

LORENA HAS NEVER BEEN ABSENT NOR TARDY YET

Dear Aunt Nellie: I live on an 80-acre farm. We have six cows, six cats, two horses and five pigs. I milk two of the cows. I am 10 years old and in the fourth grade. I am the only girl in the family. I have three brothers. Their names are Henry, Walter and Fred. I have three miles to walk to school. I have never been tardy nor absent. My teacher's name is Miss Howell and I like her very much.—Lorena Ross, Langley, Wash.

EDITH HOLM IS A BIG HELP TO HER MOTHER

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and am in the fifth grade at school. My sister Agnes is 16 years old and is in the eighth grade. My birthday is September 12. I live on an 11-acre farm. We have one horse and one cow and about 400 chickens. I like the farm very much. I help mamma wash dishes, sweep the floor and make the beds.—Edith Holm, Box 5, Olalla, Wash.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Jan. 27.—Wheat prices collapsed today under heavy selling due to rumors that peace was in sight. After an extreme break of 7 1-8c the market reacted, but closed weak, 1 1-2c to 6c net lower, with May at $1.75 3-8 to $1.75 1-2, and July at $1.47 3-8 to $1.47 1-2. Corn finished 7-8c to 1 1-4 @1 3-8c down, and oats off 1-8c to 1 1-4c. Provisions scored gains of 5c to 12 1-2c.

Notwithstanding that peace talk appeared to have only the flimsiest of backing in the way of specific new developments, the wheat market plunged swiftly downward as soon as trading opened. Rallies which ensued were quickly followed by a much greater descent than at first, and it was not until the last hour of the session that the flurry was in a measure overcome by week-end evening up of business.

Bearish sentiment was notably increased by the striking absence of fresh export demand for wheat and by assertions that railway congestion was again as bad as ever.

Corn yielded grudgingly to the influnce of wheat.

Oats followed the downturn of other grains. Seaboard demand proved slow.

In provisions the chief factor was strength of hog prices. Peace talk was likewise a deterrent against selling.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1916-17 and 1915-16 were as follows:

Seattle.	Wheat.	Oats.	Barley.	Hay.
1916-17	3834	833	779	2682
1915-16	6462	737	1105	2931
Portland.				
1916-17	3648	1630	145	1520
1915-16	9140	820	1330	1512
Tacoma.				
1916-17	4487	234	110	1406
1915-16	5733	251	482	1654
Total.				
1916-17	11969	2697	1034	5856
1915-16	21335	1808	2917	6097

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes — Potatoes, $2.25@2.50 cwt; sweet potatoes, $6.

Apples—Washington apples, cooking, 60c@85c; eating, $1@1.25; Wageners, 85c@$1.35 box; Jonathans, $1.25@1.35 box; Winter Bananas, 80c box; Kings, $1 box; Spitzenburgs, $2 box; Baldwins, 90c box; Delicious, large, $1.75@2.25 box; Rome Beauties, $1.25 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Coin, 36c lb; Gold Leaf, 40c lb; Better butter, 40c lb; Hazelwood, 40c lb; Peerless, 38c lb; Jersey Belle, 39c lb; Attalia, 40c lb; Diadem, 40c lb; Jersey, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 28½c; Hazelwood full cream triplets, 22c lb; Wisconsin limburger, 23c lb; brick cheese, 28c lb; domestic Swiss, 35c lb; western cream, Idaho or Oregon twin or triplets, 24c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $13.50@14; fresh eastern eggs, $13 case; eastern storage eggs, $10.50 case.

Live Poultry—Springs, 14c lb; hens, 13@14c lb; old roosters, 6@7c lb; ducks, 11@13c lb; turkeys, 20@27c.

Dressed Poultry—Hens, 17c lb; springers, 17c; old roosters, 10c; ducks, 15c; geese, 14c turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs. and up, 16½c; salted cured, 19c; green bulls and stags, 13c; salted cured, 15c; kip, 15 lbs. to 25 lbs., 21c; calf skins up to 15 lbs., 30c; dry flint hides, 32c; dry salted, 27c; dry calf skins, under seven lbs., 38c; dry sheep pelts, full wooled, 20-23c; dry shearlings, 10-75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2 each.

Butter and Eggs.

SAN FRANCISCO, Jan. 27.—Butter—Fresh extra, 38c.

Cheese—New, 18½c.

CHICAGO, Jan. 27.—Butter—Higher. Creamery, 31½@37½c.

Eggs—Receipts, 829 cases; unchanged.

ELGIN, Ill., Jan. 27.—Butter, 45 tubs at 39c, 10 tubs at 38c.

PORTLAND, Ore., Jan. 27.—Butter—Steady; cube extras, 38c.

Portland Market.

PORTLAND, Ore., Jan. 27.—The upward trend of the wool market continues. In the latter part of the week the Portland Wool Warehouse company sold 200,000 pounds of Heppner fine staple of the 1916 clip at 33 cents. This is the best price ever paid for this grade of wool in this section. The first consignment of early shorn mutton wool has been received from Roch creek, near Arlington. The wool contract market is inactive.

Oregon onion growers have advanced the selling price of onions to $6 a sack, but no sales have been made yet at this extreme quotation. The demand for potatoes has also been checked by the high prices ruling.

An advance of 3 cents in butter has raised the local print price to the highest of the season. Cubes are firm, but have not advanced accordingly. Another car of cheese was sold to go east during the coming week. The cheese market is firm and on the eastern basis.

The decline in egg prices has been checked by the receipt of orders from Spokane and Montana cities. Poultry and dressed meats are holding steady.

A fair business in hops is reported, with Oregons selling at 5 to 9 cents and western Washington at 10 cents.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $35.75 per ton.

Corn—Whole, $46; cracked, $47 per ton.

Millstuffs—Bran, $26.50 per ton; shorts, $30.50.

Barley—No. 1 feed, $38; brewing, nominal; rolled, $41@42.

Hay—Buying prices. Timothy, eastern Oregon, $19@20; alfalfa, $15@16; clover, $11; grain, $12@13.

Eggs—Oregon ranch, case count, 32@33c per dozen; candled, 35@37c.

Poultry—Hens, 16@18c; ducks, 20@22c; turkeys, live, 18@20c; dressed, 22@25c; geese, 12@14c.

Butter—City creamery, prints, 40@43c per pound; cubes, 38 1-2c.

Cheese—Oregon triplets, 20c; Young Americas, not quoted.

Dressed meats—Veal, 14 1-2@15c; pork, 13 1-2c.

Hops—1916 crop, 5@9c.

Potatoes—Oregon, jobbing price, $2.25@2.50 per cwt.

Onions—Buying price, $6 for country points.

Wool—Eastern Oregon, fine, 28@33c; coarse, 33@36c; valley, 35@41c.

Beans—Small white, 11 1-4c; large white, $11.10 per 100 pounds.

Hides—Salted hides (25c lbs. and up), 19c; salted stags (50 lbs. and up), 15c; green and salted kip (15 lbs. to 25 lbs.), 18c; green and salted calfskins (up to 15 lbs.), 27@28c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 13c; dry hides, 30c; dry salt hides, 25c; dry horse hides, $1 to $2; salt horse hides, $3 to $5.

Seattle Market.

SEATTLE, Jan. 27.—As long as Yakima holders can get bids of $55@60 for No. 1 gems f. o. b., which they are still doing, Seattle jobbers do not hope to work over any weaknesses in the market. Quotations here vary from $58 to $65 with a $70 level in immediate prospect, but sales under $65 were made possible only on purchases by wholesalers earlier in the season, and holdings of this stock are phenomenally light.

Seasoned traders are endeavoring to dissuade growers from increasing their potato acreage for the crop year of 1917, convinced that extremely low prices are to come next fall because of plans already made.

Onions are very firm at 6c per pound. Oregon is now the dominating spirit of the trade with practically all the holdings on the Pacific coast.

There has been a better movement this week of extra fancy apples, Spitzenbergs at $1.75@2, leading in popularity.

BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 32@33c per dozen.

Poultry—Live hens, fat, over 4 lbs., 18c per lb.; do, 3 lbs. and under, 15c; old roosters, 10c per lb.; springs, 18c per lb.; ducks, 19c per lb.; squabs, large, $3.50 per dozen; geese, fat, 12c per lb.; turkeys, live, 24c.

Butterfat—43c lb.; dairy butter, 28c per lb.

Beef—Buying price: Prime beef steers, 8c per lb.; cows, fat, 5@6c per lb.

Hogs—Light, 11 1-2@12c per lb.; do, heavy, 10@11c per lb.

Veal—Fancy light, 12 1-2@13c per lb.; do, heavy, 9@10c per lb.

Hides—Salted, 19c per lb.; salt kip, 22c per lb.; salted calf, 32@35c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 32@33c per lb., dry calf, 12c; (under six lbs.), 36c per lb.; bull and dry salts, 4c per lb. less; green bulls, 13c per lb.; dry butcher full wool sheep pelts, 20@23c per lb.

Seattle Wheat.

SEATTLE, Jan. 27.—With the heavy sales of wheat in the country this week Washington farmers have let loose of all their 1916 wheat and holdover up to 5 per cent, and due to the difficulty of securing cars between 10,000,000 and 15,000,000 bushels are held by eastern buyers in this territory. These, together with new high prices to farmers, are the dominating features of the week. Records of $1.60 for bluestem, and $1.62@1.63 with charges added, which buyers were compelled to pay, established some phenomenal net prices to farmers of this state.

Quite a little club wheat changed hands during the struggle for milling bluestem. Millers bought some for sale in the east, but not for grinding, as they are well supplied on much lower purchases to the end of the season. One mill bought 100,000 bushels of club for shipment east. General bids by millers in the country were $1.54 for bluestem, $1.50 for club and $1.50 for fife, although there is little fife left in Washington that has not changed hands.

Portland Wheat.

PORTLAND, Ore., Jan. 29.—Wheat trading came to almost a complete stop in the latter part of the week. With the slumps at Chicago prices here were scaled down severely. The drop put an end to all offerings by farmers and buyers considered it useless to put out bids. The demand from the east and California has ceased for the time being. The larger dealers welcome the lull in trading, as it gives them an opportunity to devote all their energies to dispatching wheat previously sold.

Closing bids at the local exchange for February wheat were: Bluestem, $1.57; forty fold, $1.54; club, $1.52; red Russian, $1.51.

Oats and barley shared in the weakness and bids for both cereals were reduced.

No change in flour or mill feed prices has been announced.

The hay market is heavily stocked and weak.

Live Stock Quotations.

At Chicago.

CHICAGO, Jan. 27.—Hogs—Receipts, 17,000; unsettled, 5c above yesterday's average. Bulk, $11.35@11.60; light, $11.10@11.60; mixed, $11.15@11.70; heavy, $11.20@11.70; rough, $11.20@11.35; pigs, $9.25@10.60.

Cattle—Receipts, 700; steady. Native beef cattle, $7.75@11.90; western steers, $7.75@10; stockers and feeders, $6@9; cows and heifers, $5@10.25; calves, $11@15.

At Omaha.

OMAHA, Jan. 27.—Hogs—Receipts, Higher. Heavy, $11.20@11.45; light, $10.90@11.30; pigs, $9.50@10.25; bulk of sales, $11@11.35.

Cattle—Receipts, 100. Steady. Native steers, $8@11; cows and heifers, $7@9; western steers, $7@10.50; Texas steers, $6.50@8; stockers and feeders $6.50@10.

At St. Paul.

SOUTH ST. PAUL, Minn., Jan. 27.—Estimated receipts at the Union Stock yards today. Cattle, 800; calves, 200; hogs, 4200; sheep, 300.

Cattle—The supply for Saturday was made larger than usual at the week-end by a lot of stuff that arrived too late for Friday's market. It included a fair showing of beef steers at $9@10 and fat sheep stock up to $8. A straight load of steers brought $9.25.

Hogs—Some of the loss registered in the trading on hogs here yesterday was regained in the market today, when prices were quoted steady to a nickel higher. Good heavy sorts were given the definite boost and went back to an $11.20 top. Bulk of sales were registered between $11 and $11.10.

Sheep—Sheep house trade had been on a firm basis all week. Higher price levels are in effect on most classes. Lambs of top grade are selling at $13.50@13.75, with seconds at $11@12 and good heavy lambs at $12@13.

At Portland.

PORTLAND, Ore., Jan. 27.—Hogs steady; receipts, 81. Bulk of packing grades, $10.90@11; heavy packing, 215 to 250 pounds, $11@11.10; heavy butchers, $11@11.10; light packing, 170 to 190 pounds, $10.90@11; rough heavy, $9.50@10.25; pigs and skips, $9@9.50; stock hogs, $8.25@9; cripples, $8@9.

Cattle steady; receipts none. Steers, prime light, $8.35@8.50; prime heavy, $8@8.35; good, $7.75@8; cows, choice, $7.35@7.50; medium to good, $6.25@7; ordinary to fair, $5.75@6.25; heifers, $4 7.50; bulls, $3.50@5.50; calves, $6@8.

Sheep steady; receipts, 494. Lambs, east of mountains, $11.50@12; lambs valley, $11@11.50; lambs, good, $9.75@10.25; choice yearlings wethers, $9.75@10.50; good yearlings, $9.50@9.75; choice ewes, $8@8.50; heavy ewes, $6.75@7.50.

At Seattle.

SEATTLE, Jan. 27.—Receipts, 577 cattle; 468 hogs.

Hogs—Prime light hogs, $11.25@11.35; medium to choice, $10.35@10.60; smooth heavy, $10.10@10.45; rough heavy, $9.25@9.85; pigs, under 150 pounds, $8.50@9.15.

Cattle—Prime light steers, $9; medium to choice, $8.25@8.50; common to good, $6.50@7.75; medium to choice, $7@7.25; common to good, $5@6.50; best bulls, $5@5.75; common bulls, $3.50@4.50; calves, $7@9.

Sheep—Prime lambs, $10.25@10.50; good lambs, $9.75@10; wethers, $8.50@9; ewes, $6.50@8.

Spokane Stock Yards Saturday.

Hogs—Receipts, 176; market steady. Prime heavy, $10.90@11; prime light, $10.65@10.85; prime mixed, $10.10@10.40; rough heavy, $10@10.25; stockers, $7@8.75; bulk of sales, $11.

Cattle—Receipts none; market steady. Prime heavy steers, $8.35@8.65; prime light steers, $8@8.25; good steers, $7.75@8; stockers and feeders, $5.50@6.50; prime cows, $7@7.50; good cows, $6.25@6.75; best heifers, $6.75@7.75; bulls, $3.50@5.50; calves, $6.50@9.

Sheep—Receipts none; market steady. Prime lambs, $11@11.50; common lambs, $10@10.75; best yearlings, $9.50@10.25; good yearlings, $8@8.50; best mutton ewes, $7.75@8; common ewes, $6@7.50.

San Francisco Produce Market.

SAN FRANCISCO, Jan. 27.—Butter—Fresh extras, 38c; prime firsts, 36½c; fresh firsts, 35½c.

Eggs—Fresh extras, 32½c; pullets, 31c.

Cheese—New, 18½c; Young Americas, 20c.

Poultry—Hens, 21@22c; old roosters, 12@13c; fryers, 24@26c; broilers, 27@30c; large, 25@27c; squabs, $2.25@2.50; pigeons, $1.25@1.75; ducks, 16@18c; geese, 18@20c; turkeys, live, 23@25c.

Onions—Carloads, $7.50.

Potatoes—Rivers, $2.40@2.65.



Hides, Fur, Wool, Horse Hair, Metal and Rubber. We are the largest dealers in the Inland Empire. Highest markets paid. Prompt returns. Deal with a home firm.

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT,
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Want Ads

HELP WANTED—MALE 3

BE AN AUTO AND TRACTOR EXPERT. $75 to $200 a month—learn in six weeks. Thousands of successful graduates. Catalog free. Rahe's Auto School, 532 East 11th st., Kansas City, Mo.

STEADY EMPLOYMENT, PLEASANT, profitable work; day and night classes; few months learning; position secured. Watchmaking - Engraving School, 218 Commonwealth bldg., 6th and Ankeny, Portland, Ore.

CHRISTIAN SCIENCE RANCH HAND. Address Mrs. Carrie Gagen, R. 4, Mt. Vernon, Wash.

SITUATION WANTED—MALE 21

POSITION WANTED, ABOUT MARCH 1, as farm manager, by man with years of practical and scientific experience with dairying in Washington. Unequaled recommendations from present employers. State particulars. B 14, Pacific Northwest Farm Trio, Spokane, Wash.

MARRIED COUPLE WANT FARM WORK; experienced; wife good cook. P. O. Box 1024, Spokane.

MISCELLANEOUS 57

TRUSTEES AND TEACHERS, WRITE concerning efficient teachers and good positions. Fisk Teachers' Agency, Helena, Mont.

(Continued on the following page.)

WHEAT, ALFALFA

and other grains yield more where a perfect seed bed is prepared. The **Western** pulverizes, packs and mulches—makes a perfect seed bed at one operation. Saves seed, time and horse power. Is especially adapted for breaking crust on winter wheat or other grain or in orchards after irrigation or packing rains. It forms the hardest crust into a granular mulch without hurting the grain, and prevents evaporation.



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MISCELLANEOUS—FOR SALE 60

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2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors, $1.00.
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Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
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SASH AND DOORS.

The best place to buy your sash and doors is from O. B. Williams Co. We not only sell for less, but will give you satisfaction, or money back. We own our own mill make prompt shipments, and guarantee safe delivery. Send for our big, illustrated catalog, No. 27, mailed free, post paid, promptly on request.

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Cupboard doors, frames, finish, mouldings, builders' hardware, glass, etc.

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on a Wheland Portable sawmill. You will save time and big money on your next lumber bill. With this sawmill, you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine.

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PORTLAND, ORE.

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MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

LIGHTING EQUIPMENT 74

NIXON-KIMMEL CO.—EDISON STORAGE battery and farm light plant distributors. Sell or repair everything electrical. Spokane.

AUCTIONEERS 75

JAS. M'KAY, AUCTIONEER. FARM AND auction sales. 312 6th ave., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

PATENTS — PICTURE OF PAT. OFFICE and 3-yr. calendar free. FitzGerald Co., pat. attys., 881 F st., Wash., D. C. Est. 1880.

POULTRY 174

QUEEN QUALITY W. LEGHORN CHICKS. Feb., $12 per 100; March, $11. April 10, May 9
QUEEN QUALITY S. C. R. I. REDS, $15. Agts. QUEEN INCUBATORS, 70 to 2000 eggs. 1200-chick brooder stove, $18.50.
QUEEN HATCHERY.
Office, 87 Pike St., Seattle.

HOUNDS—COON, FOX, WOLF, DEER AND rabbit hounds, pedigreed and eligible to register; young and old stock for sale; broke dogs sent on 10 days' trial. Money back guaranteed. OTIS SLATER & SON, Oconee, Ill., successors to R. F. Johnson, Assumption, Ill.

ORDER YOUR BABY CHICKS NOW FROM heavy laying strain; delivery guaranteed; our chicks please; R. I. Reds, March, $15 100; after Mar. $12. White Leghorns, March, $12 100; after March, $10. Maplebrook Poultry farm, Southworth, Wash., Box 3.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please. $12—100. Free catalog. Freshlaid Farm, Colfax, Wash.

FAMOUS CARNATION WHITE LEGHORNS. Baby chicks; high-grade utility stock; birds of merit, quick maturing; heavy winter layers; free range. Breeding stock. Ernest Raush, Carnation Poultry Farm, Kent, Wn.

S. C. WHITE LEGHORN AND S. C. RED eggs for hatching, $2.50 to $5 per 15; heavy-laying, exhibition strains. H. J. Fuller N124 Lincoln st., Spokane.

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Want Ads

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Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

POULTRY 174 Continued.



This classification introduces the person who wants to buy purebred poultry to the person who can fill his or her order satisfactorily. If you have breeding stock, hatching eggs or chicks to sell, now is the time to advertise.

MAMMOTH BRONZE TURKEY, BEST IN the west. Unrelated stock. Mrs. H. J. Cortner & Mrs. C. R. Lowery, Payette, Ida.

LIVE STOCK 177

PUREBRED STALLIONS.

We have for sale a few 1-year-olds, 2 this spring, Shire stallions, our own breeding; also a 5-year-old and an 8-year-old Shire stallion, both brown; a 3-year, a 7-year-old and 1 aged Percheron stallion, all black; one 2-year-old Brown Clyde stallion, bred by Canadian government. The oldest horses have been taken in exchange, mostly for colts of our own breeding, and can make you a cheap price on them. We sell at the barns only, and tell you all we know about each and every horse, guaranteeing them to be as represented or refund your money.

Our horses won all firsts and champions at Spokane Interstate Fair, N. W. Live Stock Show, Lewiston, Ida., and Pacific International, Portland, Ore., last year. If you need a horse, or want to exchange, write us, or, better, come and see them before buying. It will pay you.

G. M. WILSON, WILBUR, WASH.

SELLING OFF STOCK.

1 Ayreshire bull, Robin Hood stock; 20 grade cows, milk test 40 to 55 at Monroe condensery; 9 heifers, yearling this spring; 2 horses; machinery, separator, cans, etc. Total of 31 head; machinery and all for $2550. Cows are above average and are all big milkers. Good chance for some one. Chas. J. Davis, Tolt, King county, Wash.

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We offer several young bulls and heifers of excellent breeding. Send for descriptions and photos. Waikiki Farm, R. 7, Spokane, Wn.

12 HEAD OF VERY CHOICE REGISTERED red roan and white Jr. yearling Shorthorn bulls. Wm. Mulhall, Fenn, Ida.

HORSES and VEHICLES 183

FOR SALE—1 REGISTERED PERCHERON stallion, 6 years old. Marion E. Martin, Gist, Ore.

HARNESS and SADDLERY 189

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GROCERIES 222

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RUBBER STAMPS and SEALS 384

RUBBER STAMPS, SEALS, STENCILS, daters, inks and pads. Mail orders promptly attended to. Nampa Stamp Works. H. L. Nickels & Co., Nampa, Idaho.

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

FUR RUG MOUNTING A SPECIALTY. Heads, animals and birds mounted. Withers Bros., 822 Sprague, Spokane, Wash.

FURRIERS 429

WM. N. M'CARTY, WHOLESALE AND retail dealer in hides, pelts, wool and furs; always in market at top prices. Wire or write for prices. P. O. Box 135. Phone 308. Pocatello, Idaho.

BISSINGER & CO., DEALERS IN HIDES, pelts, wool, tallow and furs; consignments solicited; prompt remittance. P. O. Box 1553. Phone 503. Warehouse, 26th and R. R. st., Boise, Idaho.

ARCHITECTS 558

ADDRESS L. M. STARR FOR PLANS AND specifications. E1218 12th ave., Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS.
VETCH OR "TARES,"
A Great Forage or Seed Crop.
RED CLOVER, ALSYKE,
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.
COMPLETE LINE OF FARM SEEDS.

We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.

CORVALLIS FLOURING MILLS,
Corvallis, Oregon,
Home of the Famous Oregon Agricultural College.

TESTED SEEDS FOR FARM AND GARden—New 1917 seed catalogue now ready; valuable information gathered in 25 years' experience in the northwest. Write for quantity price on Grass, Clover and Alfalfa seed. For new catalogue address Aabling-Boyce Seed Co., Seattle, Wash.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, ORE.

FARM SEEDS, COMPLETE STOCK OF red and alsike clover, timothy, vetch grass seeds, seed grain, garden seeds. Send for free catalogue.
D. A. WHITE & SONS, Seedsmen,
SALEM, Ore.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

CLOVER, VETCH AND TIMOTHY.
Quality guaranteed; priced so you can afford to buy. Samples on request. Rhoten Farms, Salem, Ore.

ALFALFA SEED IN LOTS FROM ONE TO one hundred bushels at $8.50, f. o. b. Clements, Kan. Samples on request. H. H. Stephenson, Clements, Kan.

WRITE FOR CATALOUGE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEND US YOUR NAME
For Our New Seed Catalog.
SEATTLE SEED CO., SEATTLE.

NURSERY STOCK 621

PRUNE TREES; THOUSANDS; GRAFTED walnuts. Trees of all kinds. Buy direct and save 50 per cent. No agents. Our prices sell. Write for planters' catalog and price list. 26 years in business. Carlton Nursery Co., Carlton, Ore.

FARM LANDS—FOR SALE 651

40-ACRE DAIRY FARM NEAR BOISE; mile from interurban line and cheese factory; 24 acres of pasture and alfalfa; 10 acres a little too high for gravity water, balance under plow. Cross-fenced. Ridenbaugh water right. Family orchard. Plastered house; barn, 40x33; silo. Price $4500. Good terms. Hub Realty Company, Boise, Idaho.

253 ACRES OF NO. 1 RICE LAND FOR sale at $75 per acre. One good crop ought to pay for the land and all expenses. Water from 8 to 16 feet from surface, and canal running along side of land. $40 per acre cash; would take other property in exchange for balance, or on terms at 6 per cent. C. R. Suggett, College City, Calusa Co., California.

CALDWELL, IDAHO.

We make a specialty of farm lands under the Boise (government) project. The most favored spot in the west — soil, climate, social conditions and market considered. Terms.
MADDEN & BURNS, CALDWELL, IDAHO.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

CALIFORNIA FARMS FOR SALE. WRITE for list. E. R. Waite, Shawnee, Oklahoma.

FARM LANDS—FOR SALE 651 Continued.

WHY GO TO MONTANA OR CANADA WHEN YOU CAN BUY BETTER WHEAT LAND IN WASHINGTON FOR $20 PER ACRE? EASY TERMS.

720 acres, or will divide into smaller farms. This land is in the famous Waterville-Mansfield district, where there is plenty of water and moisture and the soil is a good, dark loam, with a clay subsoil; produces 30 to 40 bushels of wheat per acre; part of it is in cultivation, and practically all tillable; it lies close to the railroad and near a good town where there are good schools, churches, stores and other conveniences. The climate is excellent, and plowing can be under way very early in the spring. No severe winters to combat. This section of the country produces a very hard wheat, which commands the top price. We can sell this land for ¼ down and the balance a long time, at 6 per cent. Did you ever hear of anything better?
ARTHUR D. JONES & CO., SPOKANE.
ARTHUR D. JONES BLDG.

YOUR CHANCE IS IN CANADA — RICH lands and business opportunities offer you independence. Farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry. 92 Ninth ave. Calgary, Alberta.

MONTANA GRAIN AND STOCK FARMS IN Shields River valley, Judith Basin and Great Falls district. Good land for stock-raising, $7 to $15 per acre; grain land, $20 to $40 per acre; small cash payment, balance easy terms, at 6 per cent. Several good farms, with one-fourth or more in crop. Can take some good property as part payment on quite a number of good Montana farms. Call or write for Montana land list. HEGE & SCHIFFNER CO., 715-17 PAULSEN BLDG., SPOKANE.

BARGAINS IN FARM LAND.

Our business is loaning money on farm and city property. Occasionally we have properties for sale which have come into our possession on account of foreclosure of loans. These we offer at practically the net cost to us, which is far below their real value; a small payment down, the balance on easy terms, with low rates of interest. Send for list.
THE PENNSYLVANIA MORTGE. INV. CO.
BOX 6, SPOKANE, WASH.

80 A.; FAIR BLDGS.; 25 CULT.; TIMBER, water, team, tools, orchard; 25 m. Spokane, 8 m. R. R.; $2100.

40 a., splendid soil, 11 m. bus. center; 23 cult.; 3 m. elect. sta.; small bldgs.; free of frost; lies nicely; a bargain; $2100.

160 a., level prairie; 90 cult., bal. can be; ½ m. sta., 35 m. Spokane; $32.50 per a.; terms.
BALDWIN & PFILE, LINDELLE BLDG.

IMPROVED FARM ON CROP PAYMENT—640 acres choice, level, black loam land; 460 cultivated; all tillable; 50 in alfalfa; small buildings, fences, water; in a district in So. Alberta, where no crop failures in 15 years; $42 per acre. Write today for full details. We have personally inspected it.
THE C. L. GILLIS INV. CO.
HUTTON BLK., SPOKANE, WASH.

WHO WANTS A FARM?

I have two separate 80's for sale, 25 per cent below their appraised value. One 40 a. bottom; 25 cleared; fenced; the other 65 bottom; 10 cleared. Near town and schools; good roads; well settled neighborhood. Address O. W. Blanchard, Box 85, Rainier, Wash.

RAW LAND, SPECIALLY SUITED TO poultry raising and dairying. Ask for our 1916 offer and monthly payment plan. Office Wall and Post sts., near Post street bridge. Phoenix Lumber Co., Dept. A. Spokane, Wash.

FARM LANDS—WANTED 654

MAYBE YOURS IS JUST THE PLACE WE ARE LOOKING FOR.

If you want to dispose of your ranch, please write us or better come in and tell us about it. We have several customers for wheat and stock farms. Perhaps yours is just the farm we want.
ARTHUR D. JONES & CO.
ARTHUR D. JONES BLDG.
SPOKANE, WASH.

WE ARE LOOKING FOR GOOD WHEAT land, or for diversified farming. If you have any for sale, send us the particulars.
ROGERS & ROGERS.
INCORPORATED
SPOKANE, WASH.

ACRE TRACTS—FOR SALE 669

CALIFORNIA LANDS.

Three miles from Corning, California; on county road; 1 mile from school, with electric power and light service, telephone and rural mail; I offer 20 acres of level, clear, first-class alfalfa and fruit land; 10 acres leveled and planted to alfalfa; 5 acres in grain and 2 acres in family orchard; other 3 acres in house premises and pasture; good 5-room cottage, with fireplace, big horse and cow barn, chicken and milk houses; good water. This place can be bought for $3500. Terms if desired; 6 per cent interest. Here is a choice property that will stand inspection.

No trade considered. Get my list offering a variety of places here.
W. N. WOODSON, OWNER, CORNING, CAL.

FOR SALE OR EXCHANGE 702

MR. FARMER.

If you have any farm land or city property that you wish to sell or exchange for other property, write us for full particulars. We handle property in all parts of the northwest.
MAUSER & MAUSER,
JAMIESON BLDG., SPOKANE.

IF YOU HAVE FARMS FOR SALE OR exchange write us full particulars.
J. MELVIN THOMAS & CO.
EXCHANGE BANK BLDG., SPOKANE.

TO EXCHANGE—REAL EST. 705

PALOUSE FARM TO TRADE.

160 acres near Potlatch, Idaho, improved. Price $12,000. Also a 6-room house and 2 lots; a nice corner; in Spokane; and $1500 money. One or all for a large ranch, and assume; near Farmington preferred.

SEND US YOUR WANTS. We hustle and find your trades.
PACIFIC INVESTMENT CO.
109 EAGLE BLK., SPOKANE, WASH.

NEWS FOR BREEDERS

Sophie 19th and Her "Golden" Calf



C. I. Hood of Lowell, Mass., has refused to consider a $25,000 offer for this calf and for whose mother, Sophie 19th, he refused an offer of $50,000. Sophie has a record of two and three-fourths tons of butter in six years, which is given as the greatest ever made by a cow of any breed.

Swine Sale

Wilsons Sell Registered Stock

By A. E. GIPSON.

At the sale of registered swine held by Wilson Brothers of Greenleaf, Idaho, January 17, there was a surprising demand for registered animals on the part of farmers. The entire listings that were catalogued were quickly sold and more could have been disposed of had they been available. Thirty-three head were sold at an average of about $46, the total sales being $1575.

This is significant as showing the confidence of the farmers in the future of the hog and their willingness to invest in purebred animals. All of the purchasers were farmers and the stock was nearly all bred gilts and sows of different ages.

Live Stock Lectures.

The sale was held in a large tent which had been erected and warmed for the occasion. Preceding the sale lectures on live stock and demonstrations in judging were given by Professors Leland and McCall, the former government project advisor and the latter county agricultural agent for Canyon county.

Colonel A. J. Miller, the auctioneer in charge, also gave a pertinent talk on improved live stock and the importance of good foundation animals in building up the industry.

At night, under the auspices of A. L. Wilson, an illustrated lecture was given in Greenleaf academy by Professor Ireland on live stock, showing the conformation and points of merit of the best types of dairy cows and other animals.

A. L. Wilson believes in the future of Idaho as a center of quality animals and that animal husbandry is destined to put the farmers of the state on a safe financial basis. He leaves for the east soon to be present at some of the important gatherings of live stock breeders in different states.

The following are the buyers at the Wilson sale:

J. A. Van Cleef, Greenleaf; Lewis Griffith, Caldwell; E. V. Gipson, Caldwell; E. M. Hurlburt, Greenleaf; O. E. Peret, Greenleaf; J. S. Hurlbert, Nampa; B. F. Leavel, Parma; O. O. Womack, Parma; R. M. White, Caldwell; B. F. Leavill, Parma; William N. Rhodes, Greenleaf; William Womack, Parma; S. D. Williams, Greenleaf; Isaiah Williams, Greenleaf; John Tish, Caldwell; J. W. Root, Caldwell; W. C. Altig, Greenleaf.

REGISTERED SHORTHORN BULL.

L. M. Beal bought while at Portland a registered Shorthorn bull for his farm in the Kuna country. This will be followed by the purchase of a number of registered cows of the same breed.

Woman Deputy Sheriff.

Logansport, Ind., has a woman deputy sheriff.

WEST SIDE MAN BUYS SHORTHORNS

Among the western Washington men who have purchased breeding stock from the Hercules farm of Day & Rothrock at Sprague, Wash., is Sylvester Egan of Kent, Wash. Mr. Egan purchased the bull calf, Diamond Prince, the individual that won second prize in his class at both the Lewiston and Portland shows and headed the calf herd that was first at Lewiston and second at Portland. The heifer he acquired is a 2-year-old roan, which has been bred to Gainford Perfection, the Hercules herd sire, the bull that made many winnings in Canada during 1914 and 1915.

"The interest among farmers generally in high-class stock is on the increase," says Harry L. Day of the Hercules farm. "We are receiving inquiries and calls daily to an extent never dreamed of two years ago. Farmers generally have been enjoying a reasonable prosperity during the last two years to the extent that they feel able to improve the condition of their live stock, and are realizing now that this phase of their business should not be neglected."

NEWS IDEAS ABOUT HORSES.

A correspondent of the Cologne Gazette, discussing the subject of live stock interests in Germany as affected by the war, expresses an opinion that many of the popular ideas concerning horses and horse-breeding will have to be considerably modified. His chief points may be thus enumerated:

(1) Seeing that cavalry horses are likely to be almost negligible in future, breeding for army purposes certainly requires no stimulus; (2) as the future of racing is exceedingly doubtful, thoroughbred horses may not be largely wanted, so that the government studs should be utilized for the breeding of more general utility animals; (3) that blood sires and half-bred or coarser mares should be mated with extreme care, since the offspring may turn out to be anything except what is desired, and may have no type; and (4) that the horse-breeding industry should be conducted as an ordinary matter of business apart from considerations having reference to military and racing purposes.

PACIFIC INTERNATIONAL.

The Pacific International Live Stock exposition for 1917 has been given its initial appropriation of $3750 from the American Shorthorn Breeders' association of America, of which Frank W. Harding is executive secretary. This sum, according to O. M. Plummer, secretary treasurer of the Portland Union Stock yards, where the annual show is held, is 50 per cent greater than the sum received from the same source last year.

Wanted to Know.

"Who were Adam and Eve, grandma?"

"They were the first man and woman, dear."

"Were you 'quainted with 'em, grandma?"—Boston Transcript.

We Will Pay Salary To Farmer With Rig or Saddle Horse

The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state during the winter months. We are going to pay good salaries to those who can do the work.

We have decided to offer these positions only to farm owners or renters.

We feel sure there are many of our readers who would like to earn some extra cash during the winter months when work around the place is slack.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good hard licks for good pay. For men or women with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary during the winter months, without neglecting your farm chores—without being away from home more than a few hours each day. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter. If we get two or more applications from one neighborhood, the first will be given the preference in making our appointment. If you want a good salary proposition for the rest of the winter, don't wait till tomorrow to write us, but send your application today.

If not interested personally in the above proposition, why not get some neighbor or friend in touch with us at once who you think will appreciate an opportunity to make several hundred dollars during the winter months. You will be doing both him and us a favor.

Address your letter to Publisher The Washington Farmer, Review Building, Spokane, Wash.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. FEBRUARY 8, 1917. NO. 6.

One Hundred Thousand Paid in Commissions

Trading Company Officers Pocketed Third of Receipts From Stock

Out of collections of $315,636 for stock in the Northwestern General Trading company sold by agents and officers of the company, $101,011 were paid to such agents and officers as commissions, according to testimony and figures submitted in the trial in the federal court at Spokane last week. One item in this commission was, according to the witnesses examined and the documents submitted, $10,000 paid to Gale Smith, president of the company, in addition to his regular salary. Another item was $1000 paid to C. L. Davies as commission on the day following the filing of voluntary proceedings by the company in bankruptcy.

Much documentary evidence was submitted, including a large number of letters passing between the men now on trial. In these letters such terms as "mossbacks," "steam rollers," "cleanup," "big deal," "hot air," "jar loose" and "stand pat" were found frequently. The following are extracts from some of the letters:

We will make a cleanup if things go right.—C. L. Davies, manager Portland branch of Northwestern Trading company, October 9, 1914.

Some of these mossbacks are hard to jar loose from their coin.—C. L. Davies, September 14, 1914.

I don't know whether or not we will use the steam roller method; but if necessary we can do it, as we have plenty of gasoline and hot air.—S. T. Knudson, president of the Olympic Trading and Supply company, November 9, 1914.

If necessary get the steam roller in position and have it well fired up; and if you find it necessary, start it rolling and put them to sleep.—F. B. Sears, Northwestern Trading company, Spokane, to Knudson, November 12, 1914.

The steam roller is a rather necessary adjunct at these meetings, and when it gets started it has to run quick and fast.—F. B. Sears, November 19, 1914.

The Farmers' union bunch are standing pat with us with the exception of Mr. Dilivuk.—C. L. Davies, February 27, 1915.

I am rather inclined to think that it is good weather to go to South America.—C. L. Davies, April 1, 1915.

FILE BANKRUPTCY
But Continue Taking Commission.

One of the most startling revelations in the trial so far was in the testimony of H. S. House, special examiner for the federal department of justice, who testified that the officers of the company and their agents received 20 per cent commission on the stock they disposed of to the farmers and other, and that C. L. Davies, one of the officers now on trial, was paid or paid to himself $1000 in commissions after the company had actually filed its voluntary proceedings in bankruptcy, in which it was shown to be insolvent.

"During the time Davies was drawing commissions he was also on salary, being paid $150 a month, and after January 1, 1915, $225 a month," said Examiner House while on the witness stand. "He drew in salary $2225 and in commissions $2591."

"At the time the Northwestern went into voluntary bankruptcy had Davies collected all commissions due him?" inquired District Attorney Garrecht. "He had," replied the witness.

"State when was the bankruptcy filed." "April 23, 1915."

"After the date of the petition for bankruptcy were any commissions paid Davies?" inquired Attorney Garrecht. "Yes, on April 24, 1915, he drew $1009.75."

"How much in commissions was then due Davies?" "The books show $9.75."

"How was this $1000 shown on the books?" "It was charged to Davies as commission account."

"Was this sum ever repaid to the company?" "It was not."

"SOME GRANGER"
Davies Works From the Inside.

Not content with having secured the indorsement of the state grange and the farmers' union after a supposed investigation by committees of which C. B. Kegley, master of the grange, and J. C. Lawrence, now one of the defendants, were members, C. L. Davies became a member of the grange himself, apparently for the purpose of impressing the farmers with the supposed fact that he was working with and for them. He describes himself as "some granger" in a letter written from Portland to Gale Smith, president of the Trading company, announcing also that Mr. Kegley "and his bunch" had indorsed the company. The letter follows:

"Portland, Nov. 7. 1914.—Dear Gale:

(Continued on page three.)

How many tons of root crops can you grow on an acre?
How many pounds per day would be a good ration for a cow?
How many days would the yield of the acre feed the cow?
Read "The Value of Field Roots," by Thomas Shaw, on page 4.

Oakland Sensible Six

"Sturdy as the Oak"

Get the *real* thrill of the open road in an *Oakland Sensible Six*. The valve-in-head motor develops full 41 h. p. at 2500 r. p. m.—one h. p. to every 53 pounds of car weight.

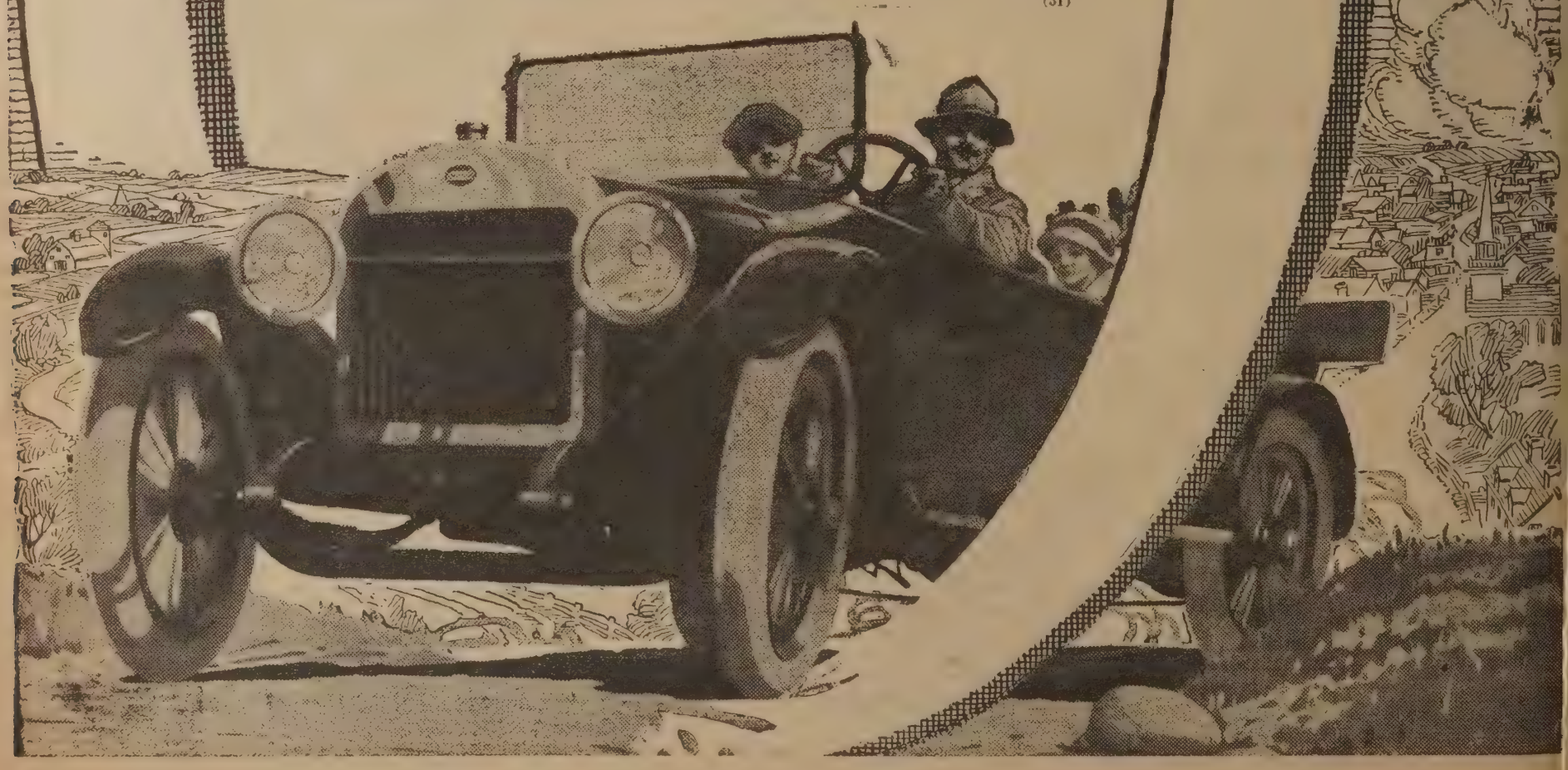
And every mile is an easy mile. The big, over-size tires, 32x4, the long, semi-elliptic springs, 51" in rear, 112" wheelbase, all make the *Sensible Six* one of the most comfortable and easy riding cars of its size ever built.

It has the power, comfort, good looks, reliability you want in an automobile—yet it is sensibly priced—$875, and built to operate at moderate cost.

Oakland Eight—$1585—is a big luxurious 73 h. p., 7-passenger touring car for those who demand the utmost in power, speed and luxury.

OAKLAND MOTOR COMPANY, Pontiac, Mich.

(51)



FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 6 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF February 8, 1917

One Hundred Thousand Paid In Commissions

Books Show That Trading Company Officers Pocketed One-Third of All Collections for Stock

(Continued from page one.)

Mr. Kegley and his bunch have finally indorsed the company. It took a long time to bring them over. I was up at Washougal yesterday and had a talk with Mr. Wing, one of the executive committee, and signed him up for a share of stock. He is the one that was bucking our proposition last spring at Washougal. We have him in line now; are getting him out and putting him to work undoing what he did last spring. That is the way to fix these fellows that knock. When they kick the brick wall down make them get in and build it up again.

"I am joining the grange down here and am going to be initiated tonight. I will be come granger, believe me. Heretofore when I wanted to arrange a meeting I would get in for a few minutes and then they would kick me out. But I am going to be in a position where I can go to their grange meetings and stay until the last dog is hung.

"I am glad to hear that you are gettings things lined up there with a bunch that are capable of getting the business. I trust that you will be able to run onto some new proposition that will be of benefit to us. CLYDE."

LAWRENCE INVESTIGATES
And Pronounces Company Sound.

One of the charges made by the prosecution in the Trading company case is that John C. Lawrence, one of the defendants, was in the employ of the Trading company receiving a regular salary from it at the time that he acted as a member of the farmers' union committee which investigated and indorsed the company. A letter in proof of this contention, signed by Lawrence, was read into the record.

Quick Dividends Promised.

Promises of the immediate payments of dividends was made to some purchasers of stock in the Northwestern General Trading company, according to the testimony of witnesses in the trial of Gale Smith and associates, Thursday in the federal court on a charge of using the mails to defraud.

Witness after witness testified that he was induced to buy stock under representations that were afterward found untrue, among these being the allegations that the company bought its goods in carload lots for cash and gave wholesale prices to its patrons.

Stock sales agents made promises, causing purchasers subsequently to repudiate their payments. This action was generally followed by a series of dunning letters threatening lawsuits, some of which were sent out under the disguise of the Inland Mercantile company, owned and operated by the Northwestern as its collection department.

Too Poor to Pay.

William W. Carlock, Bonners Ferry, Idaho, testified that in October, 1914, while he was at work, J. E. Argo, an agent for the Northwestern General Trading company, induced his wife to sign a contract for one share at $75, on which $10 was paid in cash.

Cheaper merchandise, strictly cash business, no terrors of bankruptcy, direct dealing with manufacturers and buying in carload lots were the inducements used in securing the signature of his wife.

After the stock was bought he learned the Northwestern prices were no lower than he could get at Bonners Ferry, and he then wrote the company a letter agreeing to surrender his payment if released from the note.

"If you knew our circumstances you would release my wife," wrote Carlock. "We are poor homesteaders and not able to go into anything like this. This amount of money means much to us, and if you will release us we will agree to forfeit our claim to the $10 already paid."

Relied on Farmers' Indorsements.

In denying Carlock's plea the Northwestern General Trading company pointed to its recent indorsement by the farmers' union and the Washington State grange. The letter was signed by F. B. Sears, head of the membership department, and was read to the jury. Among other things Sears said:

"This company is on sound footing and is building up very rapidly, and the time is not far distant when it will be the greatest proposition in the United States. There is no question but what it is today the biggest proposition of its kind west of the Mississippi river.

"The executive heads of the farmers' union took a couple of months to investigate the system, books and methods of the company and unanimously indorsed it. The state grange of Washington took the same course. This of itself placed the company above suspicion, and emphatically tells the people that it is right and proper to put their money into it."

Mrs. E. A. Bartlett, Troy, Mont., was visited by two women solicitors for the Northwestern in October, 1911, who assured her that the stock would be a good investment and would pay dividends in a short time. On this representation she bought five shares at $50 a share. Within two hours after she made the purchase she concluded to cut the order down to one share, but was informed that she was late, that the order had gone in by mail to Spokane.

She then wrote to the company with reference to the matter and received a letter from Gale Smith saying that the record showed the purchase by her of five shares of stock for $250, on which she had paid $30 and $220 still remained due.

After lauding the company and its future prospects Gale Smith declined to do anything for her. Mrs. Bartlett testified that she had inquired at the postoffice in her home town and found that no letter had gone out from the women solicitors when they claimed to have mailed her order.

Congratulations After Bankruptcy.

James Denholm of Portland testified that he bought five shares of stock in the Portland branch of the Northwestern Trading company March 21, 1915, at $50 a share, paying $50 cash. On April 6 he received a letter saying that if he paid the balance on his stock that he would be given a discount of 10 per cent and on the 8th he paid it up in full. On April 23 the company went into voluntary bankruptcy, a notice of which he received. On the following day came a letter with his certificate of stock and a note of congratulations.

Illustrating how the same methods were carried on by the Olympic Trading and Supply company of Seattle, a subsidiary of the Northwestern General Trading company and under the same management, Miss Etta Harris, a school teacher of Tacoma, testified in court how women agents induced her to buy five shares of stock, making to her a lot of rosy promises and exhibiting to her a "little brown book" in which the company announced that such a concern had nothing to fear from bankruptcy, and in which a multitude of promises were made.

On the witness stand Miss Harris read extracts from the book, among them the following:

"The sole object of the Olympic Trading and Supply company is to save dollars for the stockholders."

"It will trade direct with the manufacturer and will sell direct to you at wholesale prices."

"It will go into the markets of the world with spot cash."

"Only first-class, standard goods will be handled."

"The profits will be distributed among the stockholders as dividends."

Miss Harris declared that when she dealt with the company at its Seattle store she found none of the promises lived up to; that the stock of goods carried was inadequate and of a character such that she could not purchase what she wanted, and that the prices on the goods that were in stock were no cheaper than the same that could be purchased at Tacoma.

Reading further from the book she had received from the company's woman representative, Miss Harris brought out the following:

"No profit whatsoever will be added for the benefit of any person."

"Officers and employes will draw no big salaries and will not profit otherwise from the business. Not one dollar's worth of goods shall be purchased for this company unless the money is on hand to pay cash prices."

Knock and It Shall Be Opened Unto You

"The advice of the college won't hurt you, for, like the doctor's medicine, you don't have to take it unless you want to."

"The farm home should be built around the kitchen rather than around the parlor."

"When you are tempted to try some of these new, unusual, untried things, before you do it write to the State college for advice."

E. A. Bryan was president of the college at Pullman for over 20 years. He knows more about it than any other person. He saw it grow from its very beginning to its magnificent status today. He saw the college farm developed; saw the experimentation carried on and largely directed it; saw the departments of soil analysis, domestic science, farm crops, architecture, farm mechanics, animal husbandry, poultry, and all the lesser branches created and adapted for farm life betterment, and equipped and manned for that service.

He resigned the presidency of the institution a year or so ago, but his heart is still in its work. He knows exactly what it is and what it can do to assist in the improvement of farms and farm conditions. Next week, in the Washington Farmer, he offers his first article of a series telling exactly and specifically how the man or the woman on the farm can get assistance from the State college.

If the problem is one of farm buildings, farm live stock, farm soils, farm power, kitchen economics, the poultry yard, the crops, the fences, the lighting—

If it is any of the one thousand and one problems that every farmer, young or old, has faced, faces now and will face as long as rural life continues to develop, the college is able and willing and anxious to help. That is its peculiar business. That is what the state and the government support it for.

Dr. Bryan tells you just how to ask for what you may want to know, and declares that the promise is still true: "Knock and it shall be opened unto you."

Read his first article next week. Read the second the following week, and so on—and let the college give you the advice you need.

Marketing Agency
May Be Created by Legislature

As the Farmer predicted recently the creation of a state marketing agency has sprung to the front at Olympia. Several bills to that end are before the legislature, and others will likely follow. In his message Governor Lister treated this question as follows:

"The enactment of a law which will bring about better marketing conditions for those engaged in the different lines of agriculture is a subject which has received a great deal of attention during the last few years. I hope the legislature will give careful attention to such suggestions as the members may make."

It is probable that before the session is ended the friends of state marketing will unite in support of a single measure, and on that issue may be expected one of the liveliest fights of the session, as the plan of making the state the official middleman between the producers and the consumers will be fought with great determination and adroitness by commission men, fruit-handling firms and corporations, grain buyers and dealers in hay and all other farm products.

Artificial Rubber.

Freshly caught sea fish are said to be the principal ingredient of an artificial rubber of Dutch invention.

Value of Field Roots in Northwest

Aim Should Be to Grow the Kind That Grows the Best in the Locality

By THOMAS SHAW

The universal testimony of the farmers of the northwest in answer to the interrogations of the writer has pointed to the possibility of obtaining very large yields of roots. The yields mentioned in some instances, especially west of the Cascade mountains seemed incredulous in a way. The farmers spoke frequently of 25 to 30 tons per acre. In some instances they spoke of 25 tons as an average crop per acre, and these yields applied to rutabagas, mangels and carrots. In one instance a farmer told the writer that he had actually grown 65 tons of mangels to the acre. This was in the Tillamook country and on highly fertilized land. A yield like that may seem incredible to many, but yields of mangels in France point to still higher returns. It is claimed by French writers that more than 70 tons of mangels have been grown on an acre of land. Of course, such yields are in a sense phenomenal, but they point very clearly to the remarkable high adaptation of many parts of the northwest to the growing of these crops.

East of the Cascades they will not produce so highly, except where irrigation can be supplied. But in many areas good crops can be obtained in the absence of irrigation. This is especially true of areas where the rainfall is not less than 20 inches. This frequently happens in many areas in the intermountain states. In some of these the annual precipitation is considerably more than 20 inches. Of course, where irrigation is practiced, splendid crops may be grown, but when in its absence very large yields are talked of by those who have grown them, especially does this hold true of carrots, which may be grown on a less amount of rainfall than some other classes of field roots.

When such large yields of field roots may be obtained in a locality where dairying is the chief line of production followed, it is in a sense surprising that they are not grown by all who are engaged in dairying. That many dairymen do not grow them was made clear to the writer. The reasons given as to why they did not complained of the amount of the work involved in growing them and handling them when grown. But when the very large yields obtained are considered why should this be an objection?

Now, suppose the average yield is put at less than 25 tons. Suppose it is put at 20 tons. Suppose that our bushel, that is 50 pounds, were fed to a cow in milk every day, how long would the roots grown on an acre last that cow? Just 800 days or two years and 70 days. Suppose the cow was given the very liberal allowance of one and a half bushels a day, the roots would last for 533 days, or one year and 168 days. Again suppose the average yield is reduced to 15 tons and that one bushel a day is fed to a cow in milk, the roots grown on the acre would last the cow 600 days, that is one year and 235 days, or practically one and two-thirds years. Now one bushel a day with other fodder would be about as much as the cow would need to cover so long a period, and field roots are excellent for the production of milk. Why then should not the dairymen in the areas under consideration grow large quantities of field roots?

The facts are, however, that many of them do not grow roots. Why is it thus? The answer chiefly given was that they perferred to grow kale. That answer is so far good, but is it all sufficient? Does it not take about as much work to grow kale as to grow field roots? It may be answered that it is less work to feed kale than to feed roots. That is true if the roots have been stored for winter feeding and that would seem to be the best plan of feeding them. But this to some extent is offset by the disagreeable nature of the work of cutting the kale and bringing it in from the field in wet weather, as in the rainy season. Nor can kale be made to cover so long a season as field roots. The plan is good which grows kale for a part of the winter feeding, but would it not be improvement to grow field roots in addition and to store the same where they could be obtained without exposure in wet weather.

The cost of harvesting the roots should not be large, since it would not be necessary to go to the expense of providing underground receptacles to keep back the tendency to grow. They could be easily stored in the field in pits covered with straw and earth. They would even keep in the fields within an inclosure of poles lined with straw. They are thus kept frequently in the climate of Great Britain. One fine thing about field roots is the long time that they may be fed. Mangels especially may be kept under favorable conditions for many months after harvesting.

Which kind or kinds of roots to grow must be determined by the grower. The aim, of course, should be to grow the kind that grows best in the locality. That, of course, may be determined best by actual trial. In one case it will be rutabagas, in another mangels and in yet another carrots. Should they grow equally well, rutabagas will call for less labor than the other classes. Carrots, though a very sure crop, involve more labor, but they have the advantage when preparing them for feeding. Because of their size they do not in many instances call for slicing. When very large rutabagas and mangels are fed to cows they must be prepared by slicing or pulping.

Great use can be made of the carrot. Should soiling food be wanted in the autumn season the carrot can be made to furnish it in fine form. For such a use the half long would probably answer best. The seed may be sown in the usual way and as early as will be prudent. The weeder if judiciously used may be run over the ground before the carrots are up. This should be done in a dry day, and it must not be allowed to go too deeply, or it may harm the carrots. It should destroy many weeds lying near the surface. A skilled man could probably use the weeder by running it crosswise after the carrots are two or three inches high. It the stand of carrots is thick there would probably be more than enough left. But I would not ask any man to do this except in a very small way at first, to know how it will work on his soil. With a small area the garden rake may be thus safely used. I have proved that in my own experience. The cultivator does the rest of the work. Hand thinning is not called for nor hand hoeing, except enough to keep the weeds from making any seed. When the feeding season comes the carrots are pulled by hand from day to day, and fed to the cattle, tops and all. Being half long they may be pulled thus without difficulty. A very large amount of soiling food may be thus obtained per acre. If, however, the carrots are to be stored for winter feeding a larger kind may be grown. Thinning in such a case is absolutely essential.

Eleven Thousand Cattle

Are Assembled at Denver's National Western

By HORACE ADDIS.

The assertion that the 11th annual National Western Live Stock show at Denver January 20-27 was the greatest in the history of the show is believable when it is understood that there were 11,000 head of cattle received in the yards on Monday of show week, some for exhibition purposes, some for sale. There were also hundreds of hogs, horses and sheep. There were 49 cars of registered bulls and 11 cars of heifers shown in the carload lots and this was only a drop in the bucket of the total number offered, for over 2000 bulls in car lots were for sale in the stock pens.

There were just 11 carloads of fat cattle, all 2-year-olds; but there were 20 cars of 2-year-old feeders, 36 of yearlings and 22 of calves. Besides these 89 cars there were 8 of sheep and 38 of hogs. They came from Colorado, Wyoming, New Mexico, Utah, Kansas and Nebraska. Colorado, of course, sent most of them and bought most of the carloads of bulls.

Secretary Johnson informs me that 10 years ago when the show was started there was practically no pure bred stock shown from this region, so two classifications were made, one for the entries west of the eastern Colorado state line and the other open to the world. Now the western men compete in the open class, the western classification is getting to be of less and less importance and eastern breeders actually bought western cattle at the sale to take back home for breeders.

The horse show and the beef cattle show—the latter in both the breeding and fat classes—were the really great features of the show. There were 237 horses in the draft classes, besides nearly 100 in the fancy or "horse show" classes, and probably 50 drafters for sale purposes only. Percherons largely predominated. There were present several winners in the Chicago International. The second prize aged stallion there was first at Denver, but was not made champion. The quality throughout was of the best.

George Chandler and Son of Baker, Ore., showed a carload of yearling Hereford bulls and were able to win first in their class and grand championship on carload. It seemed probable that a few cars of bulls, of all this vast number, would remain unsold at the end of the week, but the Messrs. Chandler sold their car for $575 each. Another notable sale was that of a carload of registered Hereford bull calves under a year old, by the Hereford Corporation of Wyoming of Cheyenne, Wyo., for $300 a head.

The Fat Classes.

The show had both fat and feeder carloads and most of the cars were entered in the feeder class. I was not always able to distinguish a "feeder" from a "fat" carload, except by the big sign which gave the name and address of the owner and the commission firm. There were just 11 carloads of fat cattle, all 2-year-olds; but there were 20 cars of 2-year-old feeders, 36 of yearlings and 22 of calves. Besides these 89 cars there were eight of sheep and 38 of hogs. They came from Colorado, Wyoming, New Mexico, Utah, Kansas and Nebraska. Colorado, of course, sent most of them and bought most of the carloads of bulls.

The Fat Class Sales

There was a fine showing of single fat steers, of Hereford, Shorthorn, Angus and grade, but there were no singles or pens of sheep and very few of hogs. A purebred Angus steer, shown by Congdon & Battles of North Yakima, Wash., won first in this class and grand championship of the breed. He wound up his career by selling in the fat stock auction for $23 a hundred to the Brown Palace hotel of Denver. D. D. Casemont's Hereford steer, champion of that breed, was sold to the same hotel for $25.50 a hundred. The champion Shorthorn steer shown by R. G. Maxwell & Sons of Fort Collins, Col., sold to the Coffin Packing company, Denver, for $20 per hundred.

In the carlots the grand champion load were Herefords. They were shown by Clayton & Murmon of Eaton, Col., and sold for $16. Clayton & Murmon also had the reserve champion carload, also Herefords. They went to the Colorado Packing & Provision company for $12.25. The Portland Feeder company's carlot of Herefords, fed on beet pulp at Burley, Idaho, and for which the Messrs. Burke refused $12 before the show opened and which it seemed to me had a pretty good chance for championship took third place and sold for $11.90.

The grand champion carload of lambs, shown by Bruce G. Eaton of Eaton, Col., took the roof off when they sold to Armour & Co. for $25 a hundred, a record price for the show. The reserve champion lambs, shown by W. W. Brown of Eaton, Col., sold to Swift for $18 and the first prize car of wethers for $15.50.

The grand champion barrow, shown by D. E. Couchmon of Lyons, Neb., sold to the Coffin Packing company for $27 a hundred, another record, and the champion carload, also shown by Mr. Couchmon, sold to the same company for $16.75.

The Beef Breeding Classes.

The Herefords were the most strongly represented in the breeding classes, with 256 entries. It is safe to say there was not a poor animal shown and in most of them quality was very high. When Thomas Mortimer of Madison, Ind., who placed the ribbons, faced the junior yearling bulls, he found 46 animals awaiting place and he found 69 in the junior bull calf class, while 34 junior and 23 senior heifer calves lined up, most of them so good no great mistake would be made if any of them went to the top. Here A. B. Cook of Helena, Mont., was the heaviest winner. He walked off with both senior and both grand championships on his great 2-year-old bull Panama, and his equally great cow Lady Panama 7th, both bred by himself and both carrying great scale and

(Continued on page nine.)

Washington Portraits—No. 1.



E. H. Dunning.

E. H. Dunning of Richland, Wash., has been farming in Benton county two years, growing strawberries, alfalfa, potatoes and operating a small dairy. Dairying is his hobby and he proposes to make this the major line of work, other things secondary. He believes that dairying is the leading way by which the farmer in that section will attain success, as four heavy crops of alfalfa can be grown for roughage and corn for the silo can be grown in abundance. The soil is of a nature, however, that runs down rapidly and consequently needs a good deal of fertilization. He keeps enough hogs to use the skim milk and thus has another source of income without much added expense.

The next in the series of Washington portrait will be that of P. A. McNamara of Sequim, and will be given in the next week's issue of The Washington Farmer.

Board of Five Directors

Later Replaced by Permanent Board of Nine

By N. W. DURHAM

Chairman of Spokane Committee on Federal Land Bank

This is the second article in Mr. Durham's second series on the organization and operation of the new federal farm loan banking system.

Temporarily the federal farm loan banks (including that at Spokane) will be managed by a board of five directors to be appointed by the federal farm loan board at Washington, D. C. But a little later control of the management will pass into the hands of the farmers who are members of the local farm loan associations.

The law directs that after the subscriptions to stock in any federal land bank by national farm loan associations shall have reached the sum of $100,000, the five temporary directors shall be replaced by a board of nine, six of whom shall be chosen by the farm loan associations.

In other words, when the system is going and $2,000,000 has been loaned in the Spokane district of Washington, Oregon, Montana and Idaho, the temporary directors will give way to the permanent.

The six directors elected by and representing the farmers will be known as local directors, and the remaining three will be known as district directors and will be appointed by the federal farm loan board to represent the public interest.

This will be the manner of electing the six local directors:

"At least two months before each election the farm loan commissioner shall notify each national farm loan association in writing that such election is to be held, giving the number of directors to be elected for its district, and requesting each association to nominate one candidate for each director to be elected. Within 10 days of the receipt of such notice each association shall forward its nominations to said farm loan commissioner. Said commissioner shall prepare a list of candidates for local directors consisting of the 20 persons receiving the highest number of votes from national farm loan associations making such nominations.

"At least one month before the election the farm loan commissioner shall mail to each national farm loan association the list of candidates. The directors of each national farm loan association shall cast the vote of said association for as many candidates on said list as there are vacancies to be filled, and shall forward the vote to the farm loan commissioner within 10 days after the list of candidates is received by them. The candidates receiving the highest number of votes shall be elected as local directors. In case of a tie the farm loan commissioner shall determine the choice.

"The federal farm loan board shall designate one of the district directors to serve for three years and to act as chairman of the board of directors." The remaining two district directors will be designated to serve two and one years, respectively; and after the first appointments each district director will be appointed for three years.

"At the first regular meeting of the board of directors of each federal land bank it shall be the duty of the local directors to designate two of the local directors whose term of office shall expire in two years, and two whose term of office shall expire in three years. Thereafter every local director shall hold office for a term of three years."

The purpose of this method is to keep a continuing board, so that all will not go out at the same time. The law further provides that—

"Directors of federal land banks shall have been for at least two years residents of the district for which they are appointed or elected, and at least one district director shall be experienced in practical farming and actually engaged at the time of his appointment in farming operations within the district.

"No director of a federal land bank shall, during his continuance in office, act as an officer, director or employe of any other institution, association or partnership engaged in banking or in the business of making or selling land mortgage loans.

"Directors of federal land banks shall receive, in addition to any compensation otherwise provided, a reasonable allowance for necessary expenses in attending meetings of their respective boards, to be paid by the respective federal land banks. Any compensation that may be provided by boards of directors for federal land banks for directors, officers or employes shall be subject to the approval of the federal farm loan board."

It seems probable that the directors will not be paid, at least not until the system is well built up, any compensation beyond a per diem allowance for time actually given to the business.

(The next article in this series will pertain to the duties and powers of the officers of farm loan associations.)

Large City

Not Best Place for a University

Startling facts brought out before the legislature at Olympia emphasize the objections to locating a state university at a large city. When so located it becomes chiefly an institution maintained by the state, largely by the farmers, for the education of the young men and women of that city.

The official report shows an enrolment at the university of 3435 students, who are residents of Washington, and of these, 2255, a little more than 65 per cent are from King county, which is practically Seattle.

The 1917 report of the state board of finance informs us that for the university the legislature appropriated $1,410,866 at the session of 1915. That was a two-year allowance, so the average annual allowance for the university was $705,433.

King county paid 24 per cent of that, or $169,303 per year. Divide that sum by 2255, the number of students King county had in the university, and you have King county (which is practically Seattle) getting university education for its students at $75 per annum.

Tacoma is in Pierce county and Pierce county adjoins King. But by the same formula of determining education costs Pierce county is paying $284 per annum for each of its 211 students at the Seattle university.

Jefferson, another West Side county, pays $247 for each of its students, while King county pays $75.

Skamania, another West Side county, fronting on the Columbia river, is paying yearly for the upkeep of the state university, $3386. And Skamania had one student there, as shown by the experts' survey!

Spokane county, with 140 students in the university and paying 12 per cent of the state taxes, is taxed $84,651 yearly for the Seattle institution. It is costing Spokane county, therefore, $604 a year for each student it sends to Seattle.

Rural Lyceum

Free Entertainment and Instruction

By Horace Addis.

A free rural lyceum entertainment course is a novel and certainly a most commendable innovation originated at Idaho Falls, Idaho, mainly through the efforts of the commercial club, of which Mr. Bowman is president and Mr. Stubbs, secretary. Through their efforts both literary and musical talent of Idaho Falls were induced to give their services free and excellent entertainment is thereby provided. One hour of entertainment is given and then one hour of an instructive program.

Dr. L. C. Henderson, one of the government veterinarians, who is working on the elimination of hog cholera and is stationed at Idaho Falls, has given the idea his warmest support and he, together with Professor Clarence Johnson, teacher of agriculture in the city high school, have seen that the second hour was filled.

The good roads association has secured R. E. Salzman of Chicago to lecture on good roads. Mr. Salzman is a salaried man. The program rendered at Ririe recently when 150 were present is a sample of what is usually given. Miss Irene Welch Grisson gave a reading, the ladies' quartette rendered "Hail to the Snake River Valley," written by Miss Grisson. D. D. Flenner, son of Judge Flenner, who was famous in Idaho for his James Whitcomb Riley interpretations, gave a Riley reading. Dr. Henderson spoke on "Hog Cholera Control," Professor Johnson on "Live Stock" and R. E. Salzman on "Permanent Roads." The entire program was greatly enjoyed and similar crowds gather at most of the meetings.

Stock Judging

In Mount Vernon High School

To the Editor of The Washington Farmer: The agricultural department of the Mt. Vernon high school is divided into two classes, namely: "First-year class" and "second-year class." The first-year class takes up the study of types and breeds of farm animals, while the advanced class studies soils.

At the beginning of this year both classes took up stock judging in order to be ready for the annual stock judging contest at the county fair, which was held a month after school started. In the judging contest we competed with several of the other high schools of the county.

It was several weeks before we found out who won the judging contest, but when we received the returns all the prizes offered were won by members of the agricultural department of this school. Melbourne Peterson of the advanced class won first prize in judging cows and horses, and James Snowden of the first-year class won second prize. Melbourne received $6 and James $4. These two boys will have the honor to represent Skagit county in the students' stock judging contest at the state fair next fall.

In the pig judging contest Will Schroeder of the first-year class won first prize and received $1.50, and Harold Wersen of the advanced class won second prize and received $1.

After the fair the advanced class organized a club. We named it the Farmers' club of the Mount Vernon high school. We made several rules to follow. The librarian wrote to several papers and magazines. As we have been unable to get books this semester for some reason, we have been taking articles from the different farm papers and discussing them in class.

The club has divided into three groups, each group has a captain, who takes charge of the programs. Each group takes their turn in giving the programs.

The second semester the first-year class will study dairy farming three days a week. The other two days they will test milk. They will take laboratory trips to the different farms and score up the barns. They will visit rural schools and give demonstrations on milk testing in the spring.

The advanced class will experiment in vegetable gardening two days a week and the other three days will study how to make gardens and hotbeds. They will raise vegetables for the markets.

LAWRENCE LARSON.

Mount Vernon, Wash.

Beginning with this issue the Farmer will run a series of phoptographs of representative farmers living throughout the state, giving with each a brief sketch of his interests. Watch for them each week. They are intended to afford a means of getting acquainted with next-county as well as next-door neighbors.

Easy Registration

Is Purpose of Bill in Legislature

Bills are being considered in the legislature at Olympia intended to remove the objection found in the country districts to the present law requiring registration every four years in order to vote. The senate has passed a bill permitting a voter to register at the polling place on general election day, and it is expected that the house of representatives will agree to the measure or amend it so as to make voting itself constitute a reregistration. The bill passed by the senate also provides that the registration books may be signed at other places than the regular registration place, thus enabling the officers to place them at places more convenient for rural residents to register.

Capital Punishment.

Directly as a result of the murder of Chairman E. W. Olson of the industrial insurance commission last week, in the state house at Olympia, a bill has been drawn up restoring capital punishment in this state. It has both friends and enemies, but apparently more of the latter as there appears a strong sentiment against the reestablishment of the death penalty in Washington.

Revolver "Permits."

The legislature is about to abolish the "permit" system of obtaining liquor in the state, and a bill is under consideration requiring that hereafter a person will have to get a permit from the county sheriff or other peace officer before he may purchase a revolver. This law is immediately inspired by the shooting of Commissioner Olson with a revolver just bought, and which still had the price tag on it when taken from his assassin.

Session Is Half Over.

The present session is half over, and it is declared to be in the unusual position of having transacted the most important business of the session. Ordinarily the big measures are left to be disposed of during the last two weeks. Now, however, the constitutional revision question is disposed of by a resolution submitting it to a vote of the people next general election; the educational questions are almost disposed of in the agreement of the university and state college people on a compromise measure which forever establishes the status of the two institutions, leaving the state college practically exactly as it now stands; the liquor question is practically settled, though the senate may force amendments to the "bone dry" bill that has passed the lower house.

Bills Yet Remaining.

There are many measures of considerable importance still on the docket, however, among them the "first aid" bill. The point at issue in this measure is whether the cost of first aid to the injured in the industries of the state shall be borne by the employers or the employes or in part by each. Reports from Olympia indicate that there is a fair chance for agreement on the measure.

The military fund tax levy is also unsettled. There is still a strong effort being made to increase the tax for the militia by from half to three-quarters of a million dollars, making the money available nearer a million than half a million dollars.

The big "omnibus" budget bill which includes all the appropriations for the general maintenance of the state and its institutions is now being drawn up. It is expected that it will be some larger this session than usual.

The public highway funds have not been distributed yet, but it is understood that the legislature will agree to distribute them for eastern Washington in accordance with the recommendations made by the good roads association of that part of the state. There are controversies west of the mountains on the methods of distribution there.

Sells Ranch for $21,000.

Elnora Folsom, widow of the late Myron B. Folsom, has sold her 640-acre ranch near Tonasket, Okanogan county, to B. C. Gregory and W. A. Howard, recent arrivals from Palouse, for $21,000. About 70 cattle, horses and other stock went with the place.

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Determining Factors in Agriculture

All agricultural industry must, sooner or later, face the physical geography of the region as the controlling, almost immutable condition. Soil, subsoil, rainfall, temperature, wind currents, length of season, proximity and relation to ocean, rivers, mountain ranges, humidity and aridity, altitude and latitude, are determining factors in agriculture. Here in Washington we range in precipitation from three inches to 10 feet; in altitude from sea level to 15,000 feet above it; in native soil cover, from sagebrush to the densest forests; in soil, from beaver dams to volcanic ash; in season, from long to short.

While the range of conditions is so wide, we must not think that this is without value. In fact, it is one of our great assets. Even in animal husbandry, the variation necessitated by these natural conditions is full of interest and importance. The bunchgrass brakes of the Snake and the Columbia provide winter pasturage for herds of cattle, sheep and horses.

The high mountain areas covered for many months with snow and clothed during the short, hot summer with luxuriant forage form a counterpart for the same classes of live stock. The low, irrigated valleys with abundance of alfalfa and corn, furnish the feed and finishing grounds for meat producing aniamls. The long growing season, humid atmosphere and mild climate of the valleys west of the Cascade present ideal conditions for the abundant pasturage which is the most important foundation for the dairy industry. Climatic and soil conditions in the same region are favorable to the large production of root crops and kale supplementary to pasturage in the dairy industry. Even our brushy undergrowth in certain regions makes possible the Angora goat industry. The omniverous and omnipresent hog finds a reason for his existence in the physical basis which gives to us abundant cereal and forage crops.

The conditions are such as to give us a great range in the size of flock and herds, from the very small on irrigated tracts in central and cleared patches in western Washington, to vast herds on the plains and mountains.

The diversity of physical conditions and natural resources has laid the foundation for a diversified industry, which, in turn, is a good basis for the live stock industry. Washington is one of those states west of the Mississippi river with a larger urban than rural population. The city dwellers, sea-faring folk, fishermen, timbermen, lumbermen, coal and metal miners and railway men, are excellent consumers of eggs, butter, milk and meat, and provide a nearby market of no small consequence.

E. A. BRYAN.

Road Signs Needed

Road associations, county authorities or individuals could scarcely do a greater service from the standpoint of effort required than to put up accurate and informative signs along the roads. It is safe to say that travelers go thousands of miles out of their way during any year in the northwest because there are inadequate signs along the roads.

In California one automobile association has erected at one point a large sign board bearing a road map of the district. It is a capital idea, but it should be supplemented by smaller signs at road intersections wherever they occur bearing directions and distances. But it should be remembered by every association or officer or individual who prepares or places a sign that if it is not true it is worse than useless.

A Smaller Legislature

Senator Cornwell of Walla Walla has a bill at Olympia proposing a constitutional amendment to make the Washington legislature a single body of 15 legislators, who would be paid $3000 salary and hold annual sessions at the state capital.

No more progressive or scientific legislation will come before the Washington legislature this winter. Every one knows that something is radically wrong with present methods of state lawmaking. The fault lies with the system, not with the individual members of our bulky legislature. The system is conducive to confusion, error, extravagance, and the unbearable propagation of needless statutes. A member's constituents expect him to make a "record"—to come back home with a new law or two dangling at his scalp-belt—or at least he thinks they expect it of him and that he must live up to their expectations. With a legislature of 139 members it follows that log-rolling and mutual back-scratching flourish like weeds in June-time.

There is no theory about that; all well-informed people know it for a fact, and none know it better than the legislators themselves.

Senator Cornwell's proposed reform will require amendment of the state constitution, and that puts complete relief well into the future. But meanwhile the legislature need not wait on constitutional revision to give the people a considerable measure of retrenchment. It can cut down the present senate and house by one-half and still comply with the existing constitutional requirements. That would cut the legislative expense bill squarely in two and reduce log-rolling 50 per cent.

Objection that a single legislative body of 15 members would be "undemocratic" springs from imperfect study of principles of government. The converse of that is true. A single chamber legislature, meeting yearly and paid a reasonable salary, would be far more responsive to public demands than is the present system of divided responsibility between house and senate and members paid such trifling compensation that they are often notoriously independent of public sentiment.

Do Your Preparing Early

The tendency to put off till tomorrow what can and should be done today is no greater on the farm than anywhere else. Probably it is not as great. But it is nevertheless true that the plow lays are taken to the shop generally on Saturday when they are to be used to start plowing Monday; that the hay rack is built or repaired between shocking and hauling times; that the harvesting machinery is repaired or newly purchased the last week before the grain is ready to cut, and sometimes after it is ready.

It is not always possible to know many days in advance just what will be needed, or just what one can afford to buy. But as a general rule it can be known, or closely estimated, and preparations should be made as far ahead of time of actual need as possible. If the farm is going to need certain new machinery during the coming season, it is needless to wait until the last week to order it, thereby helping to cause a rush at both factory and railroad office and in all probability delaying the shipment and causing inconvenience and loss to all persons connected with the deal.

Life's Essentials

If you ask the average person what the essentials of life are, the reply will be food, clothing and shelter. These three, we are told, will sustain life.

Well, that depends entirely on what sort of life you mean. If you are referring to physical life, it may endure on these three elements. If you refer to modern, civilized life, other things are just as necessary and important. Men do not live by bread alone.

But without the great trio which actually support human life, all the other things would be in vain, no matter how plentiful they might be. And so there must be food, clothing and shelter that there may be life at all, and those people who supply these things are most important of all. It is on the basis constructed by the people who produce food and clothing and places to live, that all other things are built.

Industrial Wasters of the World

Secretary Redfield of the United States department of commerce says the Americans are the chief wasters of the world.

"It would not be untruthful," he remarked in an address at Philadelphia a few days ago, "to take the initials I. W. W., with which we are familiar, and attach them to ourselves as meaning the Industrial Wasters of the World. We like to be lavish."

Washington Gleanings

Potatoes have been selling at $50 a ton in Tacoma.

D. D. Kelly has sold for $9120 his farm east of Odessa to Simon Roloff, the 240 acres bringing $38 per acre.

Yakima fruit growers cleared $35,000 last year on sale of culled fruit, formerly nearly a total loss to the growers.

It is reported that Northern Pacific officials have set aside $360,000 for improvements in the Yakima valley for 1917.

Construction of a cheese plant at Oakville will be started within the next few weeks by a cooperative company of that district.

George K. Walter of Odessa purchased from N. A. Munro of Everett 640 acres lying several miles northeast of Odessa for $20,000.

The price for hogs on foot has reached $10.20 a hundred at Palouse. The shipments from Palouse will average at least a car a week.

John Leroue of Toppenish has agreed to purchase for a consideration of $15,000 an 80-acre tract six miles from Toppenish on the Fort Simcoe road.

L. E. Ensor of Reardan has sold 40,989 bushels of wheat, mostly marquis, for $61,264.24, or about $1.50 a bushel. This is the largest single sale of wheat ever closed in Reardan.

At the Sunnyside Cooperative Creamery company's annual meeting an increase in the sale of butter of $13,921 over last year was reported. This has been the creamery's best year.

What Others Say.

Southern Agriculturist: The reserve force is what tells.

Dakota Farmer: All that too many farmers ask is a gambler's chance.

National Stockman and Farmer: The demand for municipal distribution of milk is steadily growing.

Rural New Yorker: Even the liquor men now seem ready to admit that prohibition is gaining ground.

Hoard's Dairyman: Good farm management largely consists in getting one class of work out of the way of another and in performing each promptly on time.

THE BULL CALF WITH WORLD'S RECORD DAM AND SIRE — 40 LB. LONG DISTANCE COMBINATION

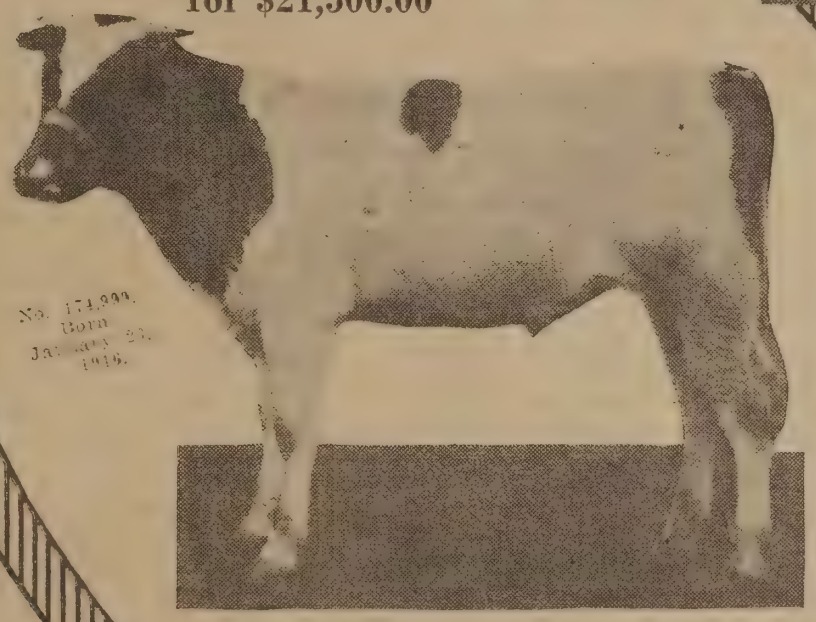
Finderne Mutual Fayne Valdessa, world's highest priced bull calf; sold at public sale for $21,500.00



HIS DAM

Finderne Mutual Fayne

who as a 3-year-old produced almost 37 lbs. butter in one week.



No. 174,999. Born Jan. 29, 1916.

A son of the World's Champion Long-Distance heifer, by the bull with the highest 7-day average. The records of his dam (at 3 yrs.) and sire's two nearest dams average 40.93 lbs. butter.

HIS SIRE

King Valdessa, son of the first 40 lb. cow.



STUDY THE PEDIGREE

His Dam—Finderne Mutual Fayne			
But., 3 yr 36.73	At 27 mo. 25.68	Milk	22,150.40
Milk 499.00	Milk 482.50	Average per cent fat	4.34
Butter, 30 days	107.17	(World's Butter Records for year and in 8 mo. division.)	
Milk	2,074.00	**His Sire—King Valdessa**	
8 mo. after calving	21.92	His two nearest dams average 43.03 lbs. butter in 7 days—	
Milk	405.80	The world's highest average	
S. O. yearly (Butter)	1,200.64		

A few approved cows accepted at $200 service fee in order of application.

LODGE VON HEIM
J. VON HERBERG!
LIBERTY THEATRE ····· SEATTLE

DOES A WORLD RECORD MILK BULL AT $800 APPEAL TO YOU?

SIRE

Aaggie Cornucopia Newman, No. 80744.

Whose dam was the world's record milk cow, Margie Newman—Butter 32.79; milk 895.50 (world's milk record when made); milk, 1 day, 136.50 (world's record when made).

One of the greatest young sires of the breed, being the sire of a junior 2-year that holds the world's seven-day milk record; two 2-year-olds who have made over 24 pounds and a 3-year-old who has made over 29 pounds of butter in seven days.

I now offer Colony Zarilda Cornucopia (twin), No. 170835. Born March 26, 1915. Now ready for heavy service. He bears wonderful promise; well boned, square built, more white than black.

Our price is based on present achievement. His value is bound to increase with the development of both his dam and sire, for this young bull's development is only started. Few bulls have ever had such wonderful backing of both milk and butter. READ HIS PEDIGREE.

DAM

Zarilda Clothilde 3d De Kol. No. 133840—at 4 years 2 months 2 days.

Butter (7 days)	28.72
Milk (7 days)	831.40
World's milk record for age at 6 years.	
Butter (7 days)	31.42
Milk (7 days)	834.30
Milk (1 day)	125.00
Milk (best 7 days)	853.50

$800 In Cash Prizes

If young swine are called pigs, what are young rats called?

$800 In Cash Prizes

The above and 59 more questions are to be answered in the big new free-for-all

FARM INFORMATION CONTEST

Could You Use $300?

If you live in Washington, Oregon, Idaho or Montana, you are eligible to compete.

Could You Use $300?

This contest includes 60 questions which every person should be able to answer. If you don't know the answers you should know them, and now is the time to learn. There is a definite answer for every question. Many of them are simple, yet it is not everybody who can answer them right off the reel.

This contest will give every one an opportunity to refresh his memory and at the same time provide interesting entertainment for the readers of the Farmer, besides affording the opening for

Earning Good Sums of Money

We will positively give EIGHT HUNDRED DOLLARS in cash awards (and more in event of ties) to the winners. As explained in the rules which follow, there will be five questions run in every issue of the Farmer for 12 weeks. The last five questions will appear in the issue of April 19.

You Can Enter Without Cost

You do not even have to be a subscriber of the Farmer to enter. As has already been stated, any resident of Washington, Oregon, Idaho or Montana is eligible to compete in this contest.

Five Questions Each Issue

The contest will be composed of 60 questions. Five will be run in each issue of the Farmer for 12 issues.

Answers to each question except No. 45 can be given correctly in from one to 10 words and will be given a score of 100 if correct. Answers to question No. 45 will be limited to 100 words each, and will be graded as to the common sense and general knowledge of farm conditions shown by the contestant without regard to spelling, grammar or penmanship. As with the other 59 questions, a perfect answer to No. 45 will be scored 100.

Perfect Score Is 6,000

The contestant who comes nearest to a score of 6000 and complies with all the conditions of the contest will receive the first prize; the next nearest, second prize, and so on. In case of a tie each tying contestant will receive the full amount of the prize.

There are 35 prizes as follows:

$150 is amount of First Prize.
$100 is amount of Second Prize.
$50 is amount of Third Prize.
$20 is amount of Fourth Prize.
$10 is amount of Fifth Prize.
$5 each, Sixth to Tenth Prizes.
$4 each, Eleventh to Fifteenth Prizes.
$1 each, Sixteenth to Thirty-fifth Prizes.

Read the Rules—Answer These Questions

6. What is the heaviest package which can be sent by parcel post?

7. What domestic fowl requires from 20 to 22 days in which to hatch its eggs?

8. What is the common name for maize?

9. In what year was the edition of the Bible known as the "Vinegar Bible" published? (This question is made simple by our CONTESTANT'S HELPFUL OUTFIT.)

10. What important part of a wagon has the same name as an important part of the human body?

A Valuable Aid to Contestants

One complete CONTESTANT'S HELPFUL OUTFIT, including all of the 60 questions and instructions and helpful warnings as to answers which would be wrong, and the correct answers to some of the most difficult questions, will be sent to any public library free of charge, upon request.

To each contestant who sends in a new, renewal or an extension of his subscription at the time of registering for the contest, this complete CONTESTANT'S HELPFUL OUTFIT will be sent in combination.

We feel that those beginning on the contest will find these suggestions as to what to avoid distinctly useful. This equipment supplies in convenient form everything needed to enable you to apply your ability to the best advantage, and will contain information enabling you to answer the most difficult questions correctly.

Puts Questions in Reach of Children

This CONTESTANT'S HELPFUL OUTFIT puts the solution of the questions in the reach even of the children, it being the purpose to make it possible for everybody in Washington, Oregon, Idaho and Montana to compete. This outfit includes, besides general information about the plan of the contest, the following:

Guide against wrong answers, which includes either correct answers of more difficult questions or easy references as to where to find the correct answers; and blank forms on which to write your answers in such a way that there can be no confusion when your answers are taken up by the judge for scoring.

It will be worth considerable to you to be assured that your answers are reaching the Farm Information Editor in such form that he will know in every instance exactly what question you intended to answer. This CONTESTANT'S HELPFUL OUTFIT will make it possible for you to

Begin Work at Once

On account of the large number certain to send for our CONTESTANT'S HELPFUL OUTFIT, thus making it possible for them to answer the entire 60 questions without delay, it is deemed advisable to offer some special inducements to secure prompt returns from this particular class of contestants. By securing the early replies of those who are thus supplied with the entire 60 questions, we will be able to have their papers carefully scored before the final rush of answers toward the end of the contest.

Understand, it is not absolutely required that those who use our CONTESTANT'S HELPFUL OUTFIT send in their replies at once, but, in order to induce them to get in early, the following plan for enlarging the awards to those prize winners whose answers come in early is offered:

ENLARGED PRIZE LIST—$800 CAN BE WON—ENLARGED PRIZE LIST

For those who use our CONTESTANT'S HELPFUL OUTFIT.

Thirty-Five Prizes	Amt. of prize if winner sends in answers during 1st period, Feb. 1- Feb. 21	Amt. of prize if answers sends in winner during 2d period, Feb. 21 Mch. 14	Amt. of prize if winner sends in answers during 3d period, Mch. 14 April 5	Amt. of prize if winner sends in answers during 4th period, April 5 April 19	Amt. of Prize for winner who does not send in answers before April 19
First Prize	$300.00	$225.00	$200.00	$175.00	$150.00
Second Prize	200.00	175.00	125.00	110.00	100.00
Third Prize	100.00	87.50	62.50	55.00	50.00
Fourth Prize	40.00	35.00	30.00	22.00	20.00
Fifth Prize	20.00	17.50	15.00	11.00	10.00
6th to 10th 5 prizes each	10.00	8.75	7.50	5.50	5.00
11th to 15th 5 prizes each	4.00	3.75	3.00	2.20	2.00
16th to 35th 20 prizes each	3.00	2.50	2.00	1.50	1.00

To secure our CONTESTANT'S HELPFUL OUTFIT, fill out order coupon on this page and send it in to Farm Information Editor, with your personal check, money order or 2-cent stamps, for $1 for one year or $1.50 for three years.

Other Rules

The answers will be passed upon and graded by a fair-minded, thoroughly competent judge.

Two weeks will be allowed for sending in answers after April 19, 1917, date of the issue containing the last five questions.

Remember, your failure to answer all the questions will not necessarily exclude you from the contest. There are 60 questions to be answered and it is not reasonable to suppose that all our prize winners will attain a perfect score. Your answers must all be sent in at the same time. Do not send any answers until you have completed the full list or as many as you can answer.

Those who use our CONTESTANT'S HELPFUL OUTFIT will be able to send in their complete set of answers without delay, there being no need of their waiting for the questions as they appear in The Farmer from week to week down to the final issue of April 19. In order to get as prompt returns as possible from those contestants who use our CONTESTANT'S HELPFUL OUTFIT, extra inducement is made in the prize awards. SEE ENLARGED PRIZE LIST.

Announcement of prize winners will be made and prize checks mailed as soon after close of contest as possible.

If any point is not clear, do not hesitate to write the Farm Information Editor.

All answers must be mailed on or before midnight, May 3, 1917, as shown by postoffice dating stamp on your envelope.

Order Coupon

If your subscription is paid ahead, the time paid for herewith will begin at the date to which you are now paid.

FARM INFORMATION EDITOR,
Review Building, Spokane, Wash.
Enclosed find $1 for one year, or $1.50 for three years' subscription to

THE WASHINGTON FARMER.

and enter me as a contestant in the Farm Information Contest. I am also to receive at once the complete CONTESTANT'S HELPFUL OUTFIT, consisting of guide against wrong answers, reply blanks, rules and all information to aid me to win a reward.

Name .....

R. F. D. .....Town .....

State .....

Notice—Amount of remittance to be either $1 for one year's subscription to the Farmer or $1.50 for three years' subscription.

For the purpose of this contest a central office has been opened at Spokane, to serve the convenience of all persons who wish to participate in this competition in Washington, Oregon, Idaho and Montana. Always address

Farm Information Editor, The Washington Farmer

REVIEW BUILDING, SPOKANE, WASHINGTON.

Eleven Thousand Cattle Seen

At National Western Show at Denver, Col., Last Month

(Continued from page four.)

showing wonderful breed type. He also captured several blues in younger classes. George Chandler & Sons of Baker, Ore., also annexed a nice lot of ribbons in the Hereford breeding classes.

The Shorthorns were but little behind the Herefords in numbers, with 220 entries, and were not one whit behind in quality. Frank Brown of Carlton, Ore., was honored with the strenuous task of judging the Shorthorns. He pronounced Maxwalton Roan Lady, the senior and grand champion cow, the greatest Shorthorn cow alive today. She is 5 years old and has calved twice and from her feminine head, along her strong, broad back, down her deep, wide body and well turned rump, the best Shorthorn type is at once apparent. She was bred by Carpenter & Ross of Mansfield, Ohio, and owned and shown by F. A. Gillespie & Sons of North Muskogee, Oklahoma, as was also the grand champion bull, Maxwalton Commander. The fact that Model Type, owned by D. Warnack & Sons of Loveland, Col., that was grand champion at the Portland show, beat 37 other junior yearling bulls and won first in his class, but could get no farther, gives an idea of the quality of the show and the task of placing the ribbons. Forty-nine junior bull calves were placed satisfactorily as were the other big classes shown.

The Aberdeen Angus class brought honor to the state of Washington, Congdon & Battles of North Yakima, with their well-fitted herd of very high quality carried off every blue ribbon, although they had strong competition from Kansas and Nebraska. While Galloways were shown by breeders from Missouri, Kansas and Iowa, the class was small and the individuals of only moderate merit.

The Dairy Cattle.

It was essentially a beef cattle show. This is the third year in which dairy cattle have had a place in the show, yet the exhibit was creditable, even if overshadowed by the other departments. There were three exhibitors each of Holsteins and Jerseys and two of Guernseys, though none had full herds. One small herd of milking Shorthorns was shown. The Jerseys were mainly of Island type and some splendid specimens of the breed were on exhibition. Size and good conformation marked most of the Holstein exhibits. Improvement could be made in the Guernseys shown and the milking Shorthorns were rather plain.

The Hog Show.

The hog show would not be considered large in the northwest, but it seemed to me the quality was equal to that found in the northwest. Perhaps the Berkshire class was the strongest, although both Poland Chinas and Durocs were well represented. There were a few good Hampshires.

The Poultry.

An unusual but pleasing feature was the poultry show, held upstairs above the dairy cattle. It was as complete and well managed and as replete with quality as any other division of the show. Over 1100 birds were shown. Barred Rocks had the largest number, with over 200 birds, Rhode Island Reds next, and then probably White Leghorns, with all the utility and a number of fancy breeds represented.

The Horse Show.

Each night of the week and the last two afternoons a horse show of the fancy classes was staged in the big stadium, in which 10,000 people can be comfortably seated. And it drew the crowds. On some occasions seats for all were not available, so great was the attendance. Horses from Chicago, from Texas and from various places outside as well as inside the state of Colorado, ridden or driven by gaily dressed ladies and gentlemen competed for big prizes, which I would have liked to see added to the utility classes; but they say this is what brings in the revenue, and I have to admit it does. The Denver people want to see the horse show.

Along with the splendid exhibits of breeding cattle from Iowa, Nebraska, Kansas and Ohio were many visitors from the east, but the entire west was well represented, and I met many stockmen I knew. A. B. Cook and George Chandler and his son have already been mentioned. Henry Thiessen of Sweetwater, Idaho, is another Hereford breeder who was an interested visitor. A. H. Barnum of Moro, Ore., was not only there, but took home a very fine bull for which he paid $1650, to head his Hereford herd.

Frank Brown, who judged Shorthorns, was not the only far western Shorthorn breeder. F. M. Rothrock of Spokane spent part of the week there and A. D. Dunn of Wapato was there all week. He and Mr. Brown each bought a bull at the sale, though I think they were buying for some one else and each grabbed a bargain.

I met Professor Carlyle, so long connected with the Idaho university, and now of the Oklahoma college. He judged Angus, Galloways and carlots of cattle. I also had the pleasure of meeting Professor French, late state leader of county agriculturists in Oregon, and for 18 months director of the experiment station at the Colorado agricultural college. J. E. Reynolds of La Grande, Ore., was there. He came to look for a high class Clydesdale stallion to head his very fine herd and was much disappointed to find the breed not represented. R. E. Reynolds, formerly with the animal husbandry department of the Oregon Agricultural college, and now county agriculturist at Cheyenne, Wyo., spent two days at the show.

J. H. Daughtrey, president of the Portland Union Stock Yards company, accompanied by his wife, was a visitor.

John L. Smith, proprietor of the Hazelwood farm, Spokane, Wash., was there to judge all the dairy cattle.

William Hanley of Burns was there and so was Mr. Mayer of Uniontown, Wash. The latter purchased a fine Shire colt from an Illinois firm.

The Hereford sale of breeding cattle was sensational. Fifty head went through the ring in less than three hours, on Thursday, at an average price of $1013. Top price was $5100, paid by the well-known breeder, Thomas Mortimer of Madison, Neb., for A. B. Cook's champion bull, Panama. Another of Mr. Cook's consignments brought $4250. This bull was taken by Professor Kenzer, formerly with the Idaho university, for the Taylor farm in Kentucky.

Chandler & Sons' New Era went for $1650, and was considered a great bargain at the price.

The Shorthorn sale did not show the same high average and top price was $1200, paid by J. R. Carpenter of Cheyenne, Wyo., for College King, a grand roan yearling, consigned by the Allen Cattle company of Colorado Springs, Col. C. A. Hauf of Glendo, Wyo., paid $1050 for Supreme Monarch, a very classy red yearling, consigned by Purdy Bros. of Harris, Missouri. The first 15 sold averaged 691, but a number of very plain bulls were sold toward the close of the sale.

The few Galloways sold were not of special merit and prices brought were moderate.

Raise Telegraph Charges.

Post and telegraph charges have been advanced in Austria in order to raise the interest on the war loans. It is expected in this way to raise $18,270,000 in additional revenue.

BE AN AUTO MECHANIC AND TRACTOR ENGINEER

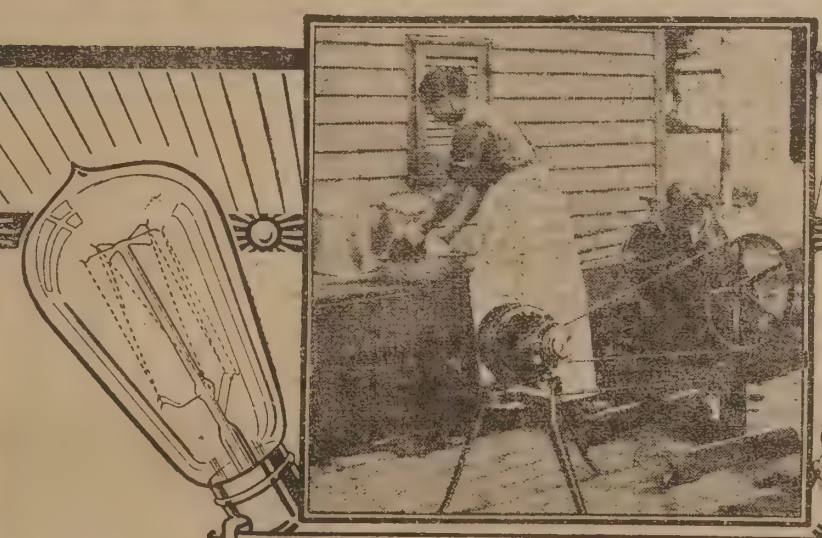
Personal instruction by the best GAS ENGINE INSTRUCTOR in the United States, with TWENTY YEARS' EXPERIENCE. Personal instruction guaranteed. No books, charts or printed lessons used. Practical EXPERIENCE from day you start until you GRADUATE. Our instruction is not mere THEORY, it's getting right down to actual work on REAL AUTOMOBILES and TRACTION ENGINES, on the road, operating field and SHOP. You go through every branch in easy stages. You can not fail to LEARN IT ALL.

Hawthorne Auto School 445 Hawthorne Ave. Portland, Oregon

Established 1907.

There's a good position waiting for the trained man.

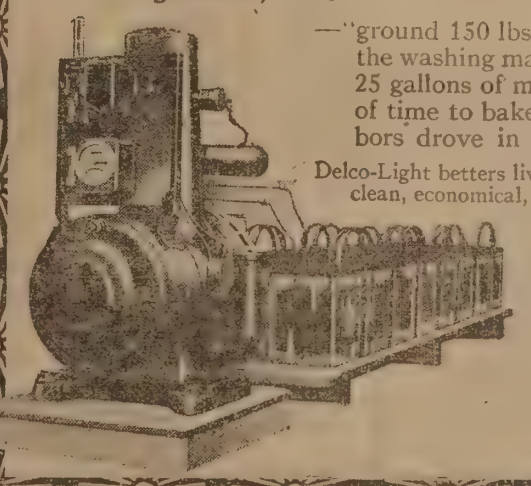
DELCO-LIGHT



All In The Day's Work

Delco-Light actually pays for itself in time and labor saved in doing the household chores.

Here is a sample day's work for Delco-Light, on the farm of A. L. Denlinger, near Engelwood, Ohio.



—"ground 150 lbs. of sausage meat—churned 90 lbs. of cream—turned the washing machine and wringer for large family wash—separated 25 gallons of milk. And after all of this work, my wife had plenty of time to bake bread. During the evening, some of the neighbors drove in and we had a pleasant time under Delco-Light."

Delco-Light betters living conditions on the farm. It furnishes an abundance of clean, economical, safe light for house and outbuildings. It makes possible a modern bath and running water in various parts of the house, and it furnishes power for small farm machines.

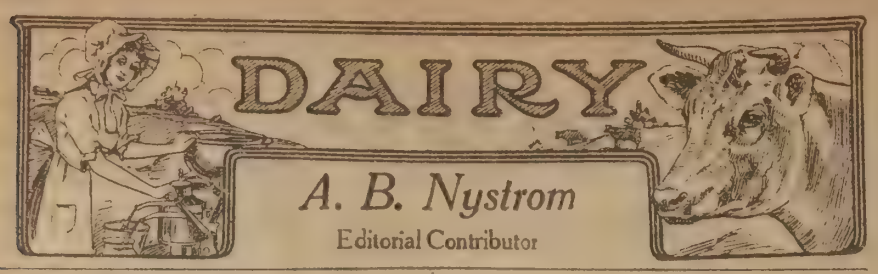
Delco-Light is a complete electric power plant—wonderfully compact, economical and efficient—and so simple that a child can care for it.

Be sure to write for the illustrated booklet

The Domestic Engineering Co., Dayton, Ohio

Distributor

E. H. Epperson, 314 E. Pike St., Seattle.



Money for Silos

Offered by Bank at Five Per Cent

Showing its faith in the dairy business as an upbuilder of the community, and in the silo as an upbuilder of the dairy business, the Mount Angel bank of Mount Angel, Ore., has announced that it will lend to farmers in the community $5000 at the low rate of interest of 5 per cent on the condition that such money shall be used for building silos.

It is stated that the dairymen are expressing interest in the offer, and as a result a number of new silos are expected to be built.

FARMERS' CREAMERY
Paying Concern for 20 Years.

The Skamokawa Farmers' Creamery association in southwestern Washington is about 20 years old and has been a paying institution from the beginning. The plant is up-to-date and has a comfortable surplus laid up for improvements needed at any time. The officers of the association are: Nels Peterson, president; W. J. Strong, treasurer; W. R. Oatfield, secretary. Peter Jergensen, who was the buttermaker of the creamery last year, has been retained for this year.

From December 1, 1915, to December 1, 1916, there was received a total of 137,461 pounds of butterfat, from which was manufactured 168,332 pounds of butter. The average overrun was 22.45 per cent. A dividend of 1 1-2 cents per pound was paid to all stockholders of the association, and a dividend of 1 cent per pound was given to all patrons who are not stockholders of the creamery.

WILL POOL ALL MILK
With a Special Selling Committee.

The agreement recently drawn up by the Skagit County Dairymen's association in western Washington has been ratified, and hereafter the members of the association will pool their milk and let all selling be done by a specially appointed committee. The conditions of the agreement do not become effective until 6000 cows are signed up, and now 3500 are signed. The association has 297 members, and a vigorous campaign is under way to secure a much larger membersship.

The original idea of the association was to contract with the buyers for all milk from the association at a stipulated price, the same to remain unchanged for three months. The price and other selling terms, however, will be left in the hands of the committee.

Questions

Are Answered by A. B. Nystrom

My cow's milk at times is thick and I can hardly strain it. It also has little lumps in it like butter, and when I wash the milk utensils in soapy water the water gets thick and slimy. I know it can't be from unsanitary conditions because I scald all the utensils and keep everything good and clean. The cow eats heartily and seems to be well; she doesn't cough. She is fed clover and timothy hay, also a warm bran mash twice a day, mixed with a commercial stock tonic. I haven't any idea why the milk should get this way. She will be this way about four or five days and then it will be all right again, but I am afraid to use the milk.

MRS. H. C. M., Spirit.

I would advise that you have the cow tested for tuberculosis. It is possible that she has tuberculosis of the udder. In this case you should by no means use the milk. The milk from any cow with garget should be discarded because it is unfit for food. The garget, however, usually shows up as lumps and stringy matter coming out of the udder at intervals and some times you find congestion in the udder, hard lumps, and more or less caked conditions. Give the cow plenty of exercise as well and I believe that by following out the suggestions given you will get good results.

FEEDING THE HEIFER
For Best Results Later in Life.

I have a heifer which freshened a short time ago. I have been advised that I must feed her heavy on mill feed now if I want her to do her best later on in life, as heavy feeding now will develop milk cells which no amount of feed will bring out of the dormant stage the next time she calves. Is there anything to this theory?

Also please advise me how much shorts per pound of milk it is best to give.

B. E. P., Orchards.

The Answer.

The above question was answered by A. B. Nystrom of the Washington State college as follows: It is the opinion of some dairymen that the method in which the heifer is handled during her first lactation period determines to a large extent her ability as a milk producer for the later lactation periods. This point has not been definitely proven, however, and some dairymen as well as scientists feel that the ability of a cow to produce milk is a thing that is bred into the cow and you can not change that by any method of handling. Our problem in handling any cow, of course, is to get the most out of her that we can at the least expense, and in this connection I wish to state that if a cow is properly fed when she is a heifer and at all times after that, we will get the most out of her. I think that the feeding previous to the time that the cow freshens is of more importance, or at least of just as much importance, as feeding during the time that the cow

Jerseys on a Grays River Farm



Ole Dosland and three of his Jerseys. Mr. Dosland stands farthest to the right. His dairy farm is on Grays River, in southwestern Washington.

Why Let Your Cows Slink Their Calves?

What is Abortion in cows?
A contagious, communicable venereal disease that is costing the breeders of the U. S. millions of dollars yearly.

Can this disease be prevented or overcome?
It can be prevented and overcome.

What do the agricultural colleges say?
Some say it can be prevented and overcome and others say it cannot be.

What does the U. S. Government say?
The U. S. Government recommends the hypodermic treatment as the very best method of combating this disease.

Who says that Abortion cannot be prevented and overcome?
People who have not used the Roberts treatment, or who have used only part of the treatment and not according to instructions.

Who says that Contagious Abortion can be prevented and overcome?
The owners of 5,000 herds of cattle who have treated their cattle from one to four times during the past 25 years, owing to the fact that their herds had become reinfected through new animals purchased.

Has this treatment always proved successful?
No; because the directions have not been followed.

Does Dr. Roberts claim that this treatment will wipe Abortion out of any herd regardless of how long it has been afflicted?
Yes, absolutely; providing the cattle are free from tuberculosis and providing directions for treatment are followed.

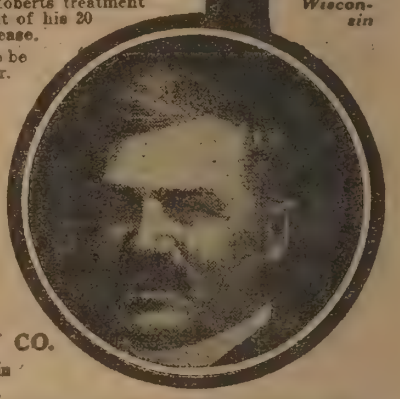
What evidence is there that this is true?
Animals and herds that were pronounced incurable by veterinarians and owners after having many kinds of abortion treatments given and applied to them have been successfully treated by Dr. Roberts and have been given splendid 7-day and yearly records. Lynden Grove Betsy De Kol, 5 years old—yearly butter record 721.49 lbs. and 18,563 lbs. of milk—is a typical case.

Do agricultural colleges indorse the Roberts treatment?
No; Agricultural Colleges cannot indorse or recommend any commercial treatment for live-stock diseases.

Does the U. S. Government recommend the Roberts treatment?
The U. S. Government cannot indorse any commercial treatment; the Government bulletin, however, embodies all of Dr. Roberts' treatment except these additional values, which are the result of his 20 years' scientific work and personal study of this disease.

If Dr. Roberts can buy infected herds, knowing them to be such, and by his treatment wipe out the disease; if Dr. Roberts can introduce the disease into a herd through infected animals, then check it and wipe it out; if Dr. Roberts can keep his own valuable herds of pure bred cattle free from tuberculosis and contagious abortion, it proves that it can be done. *Dr. David Roberts has done these very things and what he can do you can do if you will do as he tells you to do.*

All Abortion treatments are shipped direct from our laboratories at Waukesha, Wisconsin



There is a Roberts medicine for every animal ailment. Sold by nearly 4000 druggists; if not at yours, write us direct, give your dealer's name. Look for and insist on getting the package bearing Dr. Roberts' picture. Dr. Roberts' great "Practical Home Veterinarian," 184-page cloth-bound book, will be sent you postpaid for $1.00.

DR. DAVID ROBERTS VETERINARY CO.
150 Wisconsin Avenue, Waukesha, Wisconsin

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"Buhl Quality" stands the racket! Buhl Milk Cans, Sanitary Milking Pails, Strainers, are standard with Northwest dairymen.

Buhl "Tiger" Pattern

A postal brings the FREE circular on Buhl Sanitary Dairy Supplies or anything else in dairy, butter-making or cheese-making needs.

New Buhl "SANITARY" Milk Pail

Address Desk B, nearest house.

Monroe & Crisell Dairy Machinery Co.
81 Front St., Portland 607 Western Ave., Seattle

Buhl "Sanitary" Milk Strainer

A GUERNSEY BULL

in a grade herd in Minnesota increased its production 24%.

Guernsey Grade Cows produce butter most economically.

It has that wonderful natural yellow color.

Write for our Booklets

The American Guernsey Cattle Club
Box P W Peterboro, N. H.





Raise Your Calves on

Blatchford's Calf Meal

and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.

Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Factory, Dept. 58 Waukegan, Ill

Spokane Seed Co.

Distributors.

Spokane, Wash.

$16.95 Upward ON TRIAL

American

FULLY GUARANTEED CREAM

SEPARATOR



A Solid Proposition to send new, well made, easy running, perfect skimming separator for $16.95. Skims warm or cold milk; heavy or light cream. Different from picture, which shows larger capacity machines. See our plan of

MONTHLY PAYMENTS

Bowl a *sanitary marvel* easily cleaned. Whether dairy is large or small, write for free catalog and monthly payment plan. *Western orders filled from western points.*

AMERICAN SEPARATOR CO.

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"How To Feed Silage" FREE

Special 36-page chapter from famous 264-page book "Modern Silage Methods." Write for copy. Get up-to-the-minute helpful suggestions free. Also get our free catalog on Silver's "Ohio" Silo Fillers. 191[illegible] revised edition of "Modern Silage Methods" 25c, covers entire silage subject—every type of silo—how to build, 41 crops used, feeding, 8-page index. 56 illustrations. Write now.



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Purebred Registered

Holstein Cattle

The undeniable facts that the Holstein-Friesian Association of America is the largest and most prosperous dairy cattle association in America, that its membership is over 7000 more than the combined membership of the other dairy cattle associations, and that it increased its membership by 1260 during the fiscal year ending April 30, 1916, are primarily a fitting testimonial to the superior merits of the purebred Holstein-Friesian cow, that yields more milk for a day, for a year, for a life-time and for profit than any other cow. There is big money in the big "Black and White" Holsteins.

Send for FREE Illustrated Descriptive Booklets.

THE HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA.

F. L. Houghton, Sec'y, Box 205 Brattleboro, Vt.

GALLOWAY SEPARATORS

Have taken the field by storm. The highest quality separator possible to build. Simple, scientific design, only two shafts in the whole gearing. Bowl easily washed. Working parts run in oil spray. Easy to operate. A perfect skimmer. You can

GET ALL DAIRY PROFITS

You can save even half because we build these perfect separators in our own factories with the highest skilled labor and lowest possible cost for fine materials and sell them direct from factory to farm at one small profit based on enormous volume. Guaranteed for ten years. Compare and test it beside ANY SEPARATOR BUILT. Ask for 1917 free catalog.



WM. GALLOWAY CO.

Box 2443 Waterloo, Iowa

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

In answering advertisements don't fail to mention this paper.

is giving milk, and I would say in answer to your question that your cow should be liberally fed now, provided she is over her sickness due to calving, and you should aim to feed what we would call a balanced ration.

We do not consider that shorts is especially fitted for dairy cows. We like bran much better and usually bran can be obtained for from $1 to $2 less per ton. Feed some good, clean hay, usually about as much as the cows will eat up clean without waste, and from three and a half to four pounds of some succulent feed, such as roots or silage for each 100 pounds of live weight, and then feed a well-balanced grain mixture in the proportion of one pound of grain daily for each pound of fat that the cow produces in a week.

SKIM MILK CHEESE

Fat Is Replaced by Water.

Please give me what information you can on how to make skim milk cheese.

W. O. P., New Castle.

The Answer.

Professor A. B. Nystrom gives the following method of making cheese from skim milk:

I regret that there is very little published on the subject of making cheese from skimmed milk, and so far as I know there is no method by which we can make a cheese from skimmed milk equal to a full-cream cheese. Where skim milk cheese is made, the fat is replaced by water to a certain extent, and in this way a fairly good cheese can be made. Skim milk is heated to about 84 degrees Fahrenheit and ripened to .24 per cent acid by the addition of starter. When the proper degree is reached four ounces of rennet per 1000 pounds of water is added and thoroughly stirred into the milk for three minutes. The curd is cut as soon as it is firm and afterward stirred gently for five minutes or until the curd particles have commenced to contract. The whey is removed quickly and the curd plied, without stirring, at least 12 inches deep in one end of the vat. The whey running from the curd should test not over .22 per cent acid. As soon as the curd becomes firmly matter it is cut into large pieces and turned, and in 15 minutes it is ready for milling. After milling it is rinsed off with pure cold water and salted one and one-fourth pounds to each 100 pounds of curd. From this point on it is finished the same as full-milk cheese. Skim-milk cheese will shrink rapidly if it is not paraffined, and it is, therefore, advisable to apply paraffin when the cheese is three to four days old. When ripened at a temperature of 70 degrees Fahrenheit the cheese is ready for the market in about 30 to 40 days.

SLIMY SUBSTANCE

Gathers in Bowl of Separator.

I have a Jersey cow which came fresh last August, whose milk is apparently all right, but when put through the separator there is a slimy substance in the top of the bowl of a grayish mucuous matter. The cow is a good eater and seems healthy, but her manure is a little hard and has a little filmy coating sometimes. Can you tell me what the trouble is, and a remedy for it?

U. S. A., White Bluffs.

The Answer.

Referring to the above question, A. B. Nystrom, professor of dairy husbandry at the Washington State college, says:

The appearance of a slimy substance in the milk bowl after separating is a normal condition. We find this mucous matter present in practically all milk. Of course, some cows give more of this than others and that is probably due to the fact that there is a better circulation in the udder so that the refuse matter is taken care of; but I do not believe that you need to be alarmed over the condition that exists. The cow should have plenty of exercise, and if the milk itself shows slimy and abnormal before you separate it, I would suggest that you massage the udder regularly for 10 or 15 minutes each day to bring blood to the parts, in this way increasing the circulation.

PRIDE OF LILAC HEDGE.



Handsome is as hondsome does. Lilac Hedge Pride is handsome only because she is a producer. According to the live stock department of the First National bank of St. Paul, she produced 130 pounds of butter in 30 days, not a world record by any means, but a notable product. She is a grade Holstein of North Dakota.

SHARPLES

SUCTION-FEED PATENT

and what it means to you dairymen

The new SHARPLES patent, one of the broadest process patents ever obtained, covers any separator that will ***skim clean at all speeds.*** It covers the ***process*** of varying the feed in proportion to the centrifugal (separating) force. No one else can, for 17 years, make and sell such a separator.

You know of the tremendous losses caused by all fixed-feed separators because they are never turned full speed. More than 4,000 investigations ***proved*** that 19 out of 20 operators turn their separators ***below*** speed most of the time. Purdue Experiment Station Bulletin No. 116 ***proves*** that the loss from slow turning amounts to from 7 to 13 lbs. of butter per cow per year—or the appalling loss of 80,000,000 lbs. of butter yearly in America alone!

Skims Clean at *Any* Speed

So we realized that it was far from sufficient that a separator ***could*** skim clean when properly handled. It was vitally necessary that it ***would*** skim clean—even when improperly handled. That's SHARPLES, which sucks in just as much milk as the centrifugal force can perfectly handle—and ***no more.*** The result is ***clean*** skim at all speeds and ***unchanging*** thickness of cream.

All separator makers ***know*** of this tremendous loss and some ***admit*** it in their advertisements. They ***cannot*** stop the loss (because SHARPLES basic patent covers any separator that will skim clean at all speeds) so they try to ***warn*** against it by putting on a sight speed indicator (on which the operator's eyes must be glued every moment and his muscle must respond instantly to the indicator's ***prod*** for more speed)—or a bell indicator (which, like the fire alarm, gives notice of damage only ***after*** it is done). All such devices have proven ***failures,*** time after time, because few operators can stand being prodded or yelled at whenever the speed slackens.

A bell ringing device is truly an acknowledgement of the vast ***superiority*** of SHARPLES which automatically ***prevents*** all losses from uneven turning instead of simply announcing them.

Simple Tubular Bowl—*No Discs*

Not a single piece is added to accomplish the wonderful "Suction-feed." And the SHARPLES was ***already*** by far the ***simplest*** and easiest to clean. We realized that it was not enough that a separator ***could*** be kept clean—it must be so simple that it ***would*** be kept clean. So the ***patented*** SHARPLES Tubular Bowl contains ***no discs*** or blades—it is just a plain, light, steel tube. No other separator can use it.

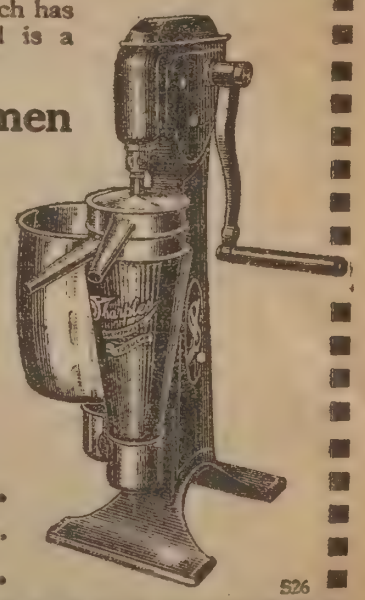
All other separators must contain discs or blades to skim at all. Their makers wrangle between them as to how many discs, and if curved or straight, and how the milk should be fed into them. They constantly change their designs without getting nearer the ***ideal.*** Some use more discs, many of them boast of using less. Such boasts plainly acknowledge that "the fewer discs the better."

The ***ideal*** is SHARPLES which has ***no discs at all.*** But this ideal is a SHARPLES patent.

Important to Dairymen

So all SHARPLES patents assure ***you,*** as a SHARPLES user, of ***larger*** profits and ***greater*** convenience than the other man gets. The knee-low supply tank, single ball bearing in oil, slow and easy crank speed, freedom from the tyranny of fixed speed, increasable capacity, easiest cleaning, automatic oiling without oil cups or oil holes—all these are ***your*** advantages ***exclusively,*** because they are exclusive SHARPLES features.

Send for catalog, which explains all this, addressing Dept. 49.



Sharples Separator Co.

West Chester . . . Pa.

Also Sharples Milkers and Gasoline Engines

Branches: Chicago San Francisco Portland Toronto

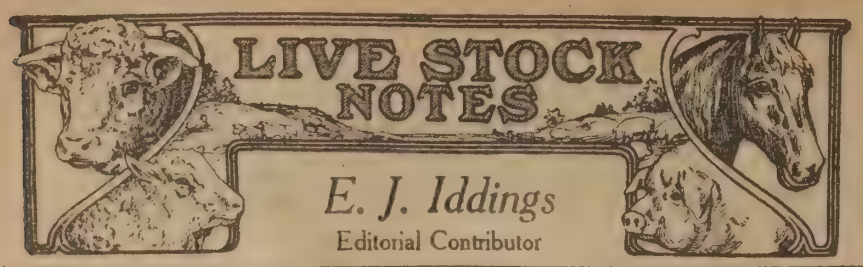
526

SPOKANE SEED CO.

GENERAL AGENTS.

Dairy Supplies. Barn Equipment.

910 First Ave., Spokane, Wash.



E. J. Iddings
Editorial Contributor

Veal Animals

How to Dress for the Market

"Calves must not be under six weeks or more than eight weeks old, weighing from 85 to 150 pounds, says William H. Plath, meat cutter at the Greenough-Hurley company of Spokane.

First cut head off, by doing so it is not necessary to stick the calf. Cut forelegs off below the knee cap, hind legs at first joint below hocks. Hang up, cut open full length from tail all the way down through throat. By doing so it is not apt to sour or spoil during hot weather. Many a fine veal has spoiled during hot weather because of not being opened properly. Take entrails out, leave the liver and kidneys in, and by being careful in removing the entrails it is not necessary to wash calf, but take a damp or dry cloth, depending upon the condition, to wipe it.

Don't ship until the animal heat is entirely out of the body. It is very essential that the directions for dressing the calves be followed, especially in letting the calves cool properly before shipping in hot weather, as 25 per cent of calves are received in bad order and sold for not more than charges, and some do not bring that. They should hang up from six to eight hours over night in an airy place to properly cool off before shipping. Calves under 75 pounds should not be shipped, and are liable to be comdemned by health officers as being unfit for food. Merchants, too, are liable to be fined if found selling these slunks, for violation of the law.

"Very heavy calves, such as have been fed on butter milk never sell well on the market. They are neither veal nor beef.

"Directions for shipping veal: Be sure to burlap calves. Fasten shipping tag, with your name and postoffice address or shipping point written plainly thereon, to the hind leg. Never ship calves to arrive here on Saturday as that is a very busy day to receive them."

HALF BUFFALO

Two Carloads From Montana.

Two carloads of cattle from Montana, unloaded at the Northern Pacific stockyards at Ellensburg, Wash., were half buffalo. The animals showed little evidence of their close relation with the bison except that they were heavier in the shoulders than the ordinary beef animal. They were bred on the ranch of a Montanan who has been experimenting for several years to develop an ideal type of beef cattle.

More Colville Sheep.

There were 5000 more sheep in the Colville valley last fall than a year ago, according to George W. Peddycord, president of the Bank of Colville.

Veterinary

Dr. S. B. Nelson

I have a cow with sore teats. The sores commence with a lump the size of a pea on the side of a teat. In a day or two they will grow to half the size of a dime and resemble a blister and contain a thin yellowish fluid. The blister breaks open ad leaves a raw sore which in time scabs over and festers and in time heals up, but before it has healed other sores have started on other teats. This has continued for four months now and the sores are still coming. It takes about two weeks for a sore to heal after it first appears. What is the disease and how can it be cured? H. H. C.
Chehalis, Wash.

The description which you give of the disease affecting the cow's teats and udder tallies very closely with the symptoms of cow pox, which I believe the disease to be. The run of the disease is about three weeks, and the fact that your cow has suffered for more than four months is something very unusual. I am going to recommend that you wash the udder and teats before and after milking with a 2 per cent solution of lysol, then apply a little benzonated zinc oxide ointment to the scabs and blisters. I think you will find that that will help in healing up the trouble. Milk this diseased cow last after all the others have been milked. Wash your hands or have the milker's hands washed in a 2 per cent solution of creolin before and after milking.

1. M argued that Shorthorn cattle are not Shorthorn Durhams. B argued that they are. Who is right? 2. What care and feed should a stud coming three have and how many mares should he serve per week? B. A. B.
Springdale, Wash.

1—Shorthorn is the accepted name now for the type of cattle that used to be called Shorthorns and in some sections called Durhams. The word "Durham" has become obsolete.

2—Regarding the care of your stallion, I would suggest that you give him a good feed of oats and hay, possibly about 10 to 14 or 15 pounds of grain per day, and, according to his size, from 12 to 18 pounds of hay. This also depends upon his exercise. He should have from five to eight miles of exercise per day. Among the stockmen, that is, horsemen, if they are trying to save the horse for a long life of future service, they generally try to limit him during his first year to two or three mares per week.

What is the cause and cure for the swelling just back of the upper front teeth of a horse, known as lampers? I have two colts coming 3 years old that have them, and it bothers them to eat. Have been feeding oat hay and corn fodder. D. H. S.
Camas, Wash.

The trouble generally known as lampers in horses is an irritation of the teeth of a young horse. Second, indigestion which generally occurs in older horses. As you have two colts coming 3 years old I would judge that



SAVE-The-HORSE *Will Cure It!*

OVER 200,000 cases of lameness successfully treated with **Save-The-Horse.** It is a by-word now among noted horsemen and breeders that **Save-The-Horse** is a prompt-acting, sure-cure remedy for Ringbone—Thoropin—**SPAVIN** or **Any** Shoulder, Knee, Ankle, Hoof, or Tendon Disease, no matter how old, serious or complicated.

NO BLISTERING. HORSE WORKS AS USUAL.

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Our **FREE** 96-page **BOOK** makes it possible for you to diagnose and treat cases, and our free expert veterinary's advice is here to help you if you are not sure.

Don't run the risk of having horse laid up when you most need him. Keep a bottle of **Save-The-Horse** on hand, and be prepared for any emergency. Write today for copy of Contract, **BOOK** and Advice—all **FREE.** Be prepared!

TROY CHEMICAL COMPANY, 18 Commerce Ave., Binghamton, N. Y.

Druggists Everywhere sell Save-The-Horse with CONTRACT, or we send by Parcel Post or Express Paid.



It's time your wife stopped cleaning lamps

Your gasoline engine can store enough power while it's doing other work to light your house and barn with the safest, handiest, cleanest light ever made—the electric light.

Send now for Free Booklet giving full description of how it operates.



TRADE MARK
Thomas A Edison
Electric Light Plant

Mr. Edison worked many hours a day for years to make his storage batteries the most dependable in the world. *Read his own words.*
If you could see the wonderful operations in his enormous factory that makes these batteries, you would recognize their reliability.

EDISON STORAGE BATTERY SUPPLY COMPANY,
San Francisco, Seattle.
or 2026 Michigan Avenue, Chicago, Ill.



Vaughan's Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $150 f. o. b. Spokane and common points.

FOR SALE BY

Washington Machinery & Supply Company

S122 MONROE SPOKANE, WASHINGTON

Goldie's Nehalem Beauty



Goldie's Nehalem Beauty, the new world's record junior 3-year-old Jersey, owned by Clifford Reid, whose farm is at McMinnville, Ore. This animal has given 750.5 pounds of fat, which amounts to 882.93 pounds of butter.

Get This Big Illustrated Catalog Free

Tells how the Hinmans—father and son—designed and built the first machine on their farm at Stockbridge, N. Y., in 1907. Shows the modern plant in Oneida, N. Y., with 500-machines-a-week capacity. Gives records of famous dairymen throughout the country, using the machine. Explains Hinman simplicity—why no vaccum tank, no air pipe lines, no complicated pulsating mechanicism are used. Describes simple Hinman combination of pump, vacuum in valve chamber (in pail cover) and natural action (not upward squeeze) teat cups with metal rubber rings instead of rubber sacks.

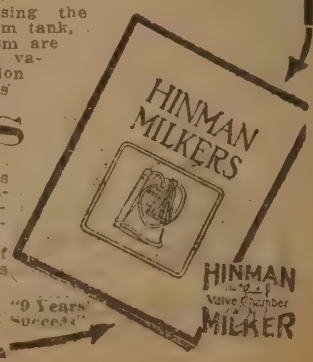
HINMAN MILKERS
Will Soon Pay for Themselves

Simple, Single Unit They cost less than one hired man and his board for six months. Simplicity is the reason for this low cost. Lay aside your prejudice against milking machines until you understand **the simplicity of the Hinman.**

Write today for Catalog and estimate of outfit for your needs. State how many cows you milk and how many in a row.



HINMAN MILKING MACHINE CO.
Over 22,000 Sold 45-55 Elizabeth St. Oneida, N. Y. "9 Years' Success"
Service Dealers Everywhere.





Here's Where it Tells-

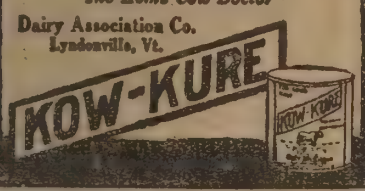
It isn't a question of sentiment whether or not your cows are in the pink of condition—but it does make a big difference in your bank account. Since you are keeping cows for milk instead of for meat, better see to it that their milk-producing organs are kept working normally.

At the first sign of decreasing milk-flow, look for the cause. Ten to one it is due to some trouble with the digestive or genital organs, and such disorders are best set right by the use of Kow-Kure, a cow medicine backed by twenty years of success. Try Kow-Kure on your poor milkers and watch results. Hundreds of doubting cow owners have been convinced that this old remedy has no equal for the prevention and cure of Abortion, Barrenness, Retained Afterbirth, Milk Fever, Lost Appetite, Scouring, Bunches, etc.

Buy Kow-Kure from your feed dealer or druggist; 50c. and $1.00.

Write for our free treatise, "The Home Cow Doctor"

Dairy Association Co.
Lyndonville, Vt.



Spokane Seed Co.

Distributors.
Spokane, Wash.

Warranted to Give Satisfaction.

Gombault's Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.

The All-Around Jersey is the *farmer's* cow. She's his friend and pride—the beautiful, gentle, ever-paying milk machine that lifts the mortgage, builds up the fertility of the farm, and puts the whole business on a sound, paying, permanent basis. She adapts herself to all climates and all feeds and does not need fancy care. She matures early and lives long. And she's so sleek, clean cut and handsome, as to be the family pet and pride. She produces well and sells well. Learn about her in our fine, free book, "About Jersey Cattle." Write for it *now*.



THE AMERICAN JERSEY CATTLE CLUB
314 West 23d St., N.Y. City

In answering advertisements don't fail to mention this paper.

the trouble is due to their cutting their teeth and I would advise you to make a strong solution of alum and with a little cloth or cotton, once or twice daily, apply the alum solution to the membrane just back of the teeth. Do not cut or burn them. It is not necessary.

I have a 12-year-old mare that has had the scours nearly all winter. She gets straw and good wheat hay night and morning and I let her run in the day to straw. She gets all the salt and water she wants and has not been worked this winter. I also have a yearling colt that acts the same way. He gets the same feed as the mare and they eat good and seem to feel good. The straw is nice and bright.

A. G. B.

Baird, Wash.

Your horses are getting too much roughage. I would advise that you cut down on your straw and grain hay and feed a little grain, if you can get it --a little alfalfa or clover hay. Then give to them in their drinking water a teaspoonful of glycerin morning, noon and night for a few days, then twice a day, then once a day for a few days. This has given good results in many cases.

I have a cow that lost her calf last summer at six months. Although I think it was from accident, I treated her with Hood's Farm Breeding powder, also gave her internally (once) one tablespoonful of saltpeter and injected (once) one-half ounce permanganate of potash and one ounce of alum in half gallon of warm water. Ever since, during milking, she has given a lot of trouble by attempting to urinate, not often with success. Can I do anything for this? J. R. W.

Olympia, Wash.

Try giving your cow one teaspoonful of Eugals solution of idine in a pint of water morning and evening. Take her off grain, if she is on grain, for a few days, and then gradually put her back on her grain ration.

I have a bunch of heifers on pasture. Last fall there was a scab formed around their eyes and the hair came off. This is now spreading over their bodies. I have tried sulphur and lard, but the disease continues to spread. What is the disease, its cause and treatment for same? J. J. S.

Bryant, Wash.

Try painting the diseased part of the skin with a 4 per cent solution of silver nitrate and, while the skin is damp, apply on top of the silver nitrate tincture of iodine. It may be necessary to give them from two to five treatments.

My cow has been giving bitter milk for about three months. After it stands 24 hours it is so bitter you can not make butter or use the cream. Have been feeding oat hay, alfalfa and carrots. It seems to hurt her in milking until after the flow of milk is started. She is free from any sore in the teats. She eats well and drinks plenty of water. L. M. D.

Pullman, Wash.

Try feeding your cow a pound and a half or two pounds of epsom salts in three quarts of water. If necessary give her a teaspoonful of hyposulphite of soda in one pint of water once daily.

What causes a cow to have red water? J. B.

Blaine, Wash.

The cause of red water in cows is not known. Up to the present time a permanent sure cure has not been found. The experiment station veterinarian of the station at Pullman, Wash., has been working on this question for some years. He has found a great many things concerning the nature of the disease, but regarding the things you ask I believe there is no definite knowledge determined yet.

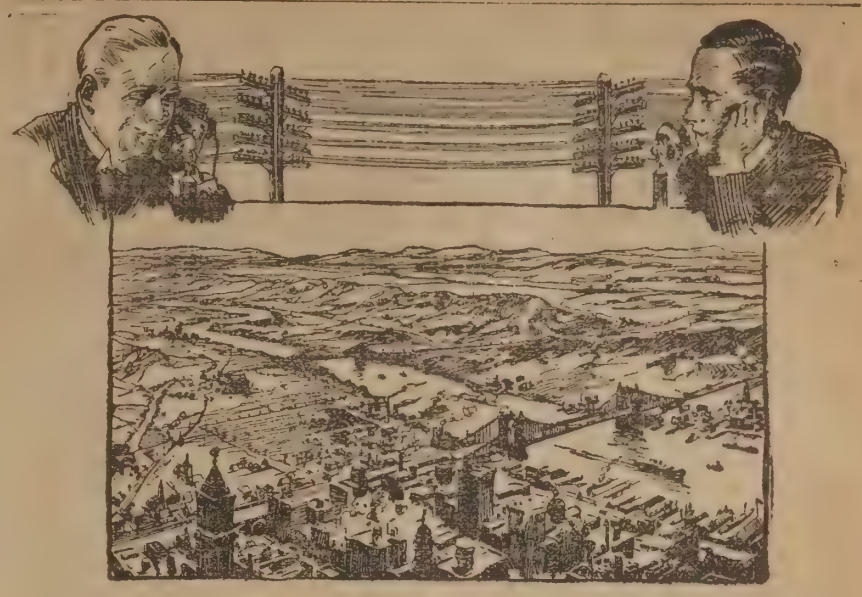
I have a cow that has warts on her udder and back. What can I do for her? C. G.

Wilbur, Wash.

I would advise painting the warts with American oil once or twice daily and then give the cow, internally, one-half ounce of Fowler's solution of arsenic. It may be that you should not use the milk during the time that you are giving the arsenic, and also for a few days afterward. You can feed the milk to pigs or calves, and I do not think it would do any damage.

Happiness.

Happiness comes from striving, doing, loving, achieving, economizing, always something pasitive and forceful.—David Starr Jordan.



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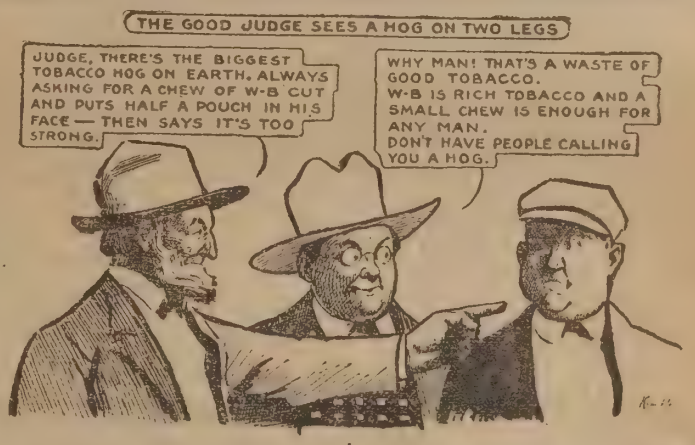
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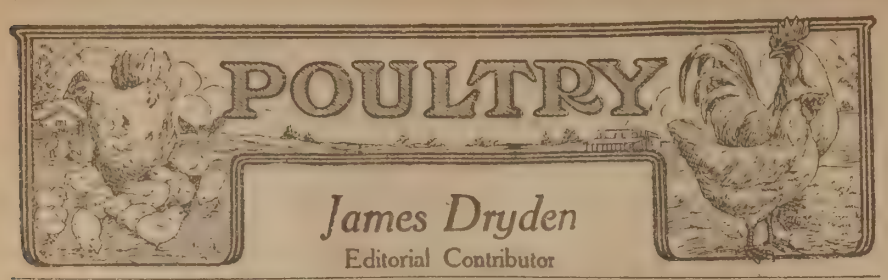


SOME call these face-stuffers hogs, some call them gophers. But they are getting scarcer and scarcer since gentlemen found out about W-B CUT Chewing. There is no excuse for a man making a monkey of himself today. The fine *rich tobacco flavor* was put into W-B by nature, the touch of salt brings it out nice and tranquil like, without your worrying your jaw around continually. W-B is getting to be pretty nearly as popular as sunshine these happy days.

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James Dryden
Editorial Contributor

If not already done, kill off all pullets 9 months old or more that have not laid, if other pullets of the same age and breed in the same flock laid at 6 and 7 months of age. These nonlayers will not lay much the rest of the year.

Now is the time to be figuring on the profits in egg production next winter by doing a lot of figuring now in the mating up of the breeding stock. Mate good layers to sons of good layers.

Line breeding or inbreeding for egg production for egg layers is a dangerous weapon; better not fool with it.

Profit-making pullets next fall and winter must be hatched in March or April.

Oregon poultrymen who wish to assure themselves against the ravages of bacillary white diarrhea in the chicks should have their breeding hens tested by C. C. Lamb of the poultry department of the Oregon Agricultural college, then kill off any hens that prove to be infected. It is easily done and worth while. J. W.

Poultry Results

He Wants to Get Hatchable Eggs

To the Editor: I have been raising chickens now for about five years, but have never felt that I was getting what I should out of them, and will appreciate it very much if you will advise me how I can improve on my weakest point, i. e., getting hatchable eggs and livable chicks.

By way of explanation, will state that my birds are kept in open front houses and in seasonable weather have the run of about an acre of orchard. They have all the variety of feed and exercise that I can give them, oyster shell, grit and meat scraps, deep litter to scratch in, and, in fact, seem perfectly healthy and are fairly good layers.

Have plenty of cockerels and have no complaint to make on infertile eggs, but I get too small a per cent of chicks out of the incubator and from under the hens.

I keep the male birds, the young pullets and half a dozen breeding hens in a house by themselves, and all the balance in another building, about 29x30 feet, and go after them for the eggs, and have to use eggs from these birds for hatching purposes. Always sell the hens in the summer after they are two years old, and keep about 50 pullets and 50 hens in the one building.

Now, the point I don't understand is, if I weaken them through the winter by their laying, how do the 200 eggers perpetuate themselves? We wouldn't know a hen was a high producer until she produces, and these eggs are hatched, or at least advertised and sold at a high price for hatching purposes. Still I do not know that my birds are laying enough eggs to affect their vitality for spring hatching eggs, as they are now turning out about nine dozen per week for the hundred; of course the pullets are doing most of the laying now.

Dr. Woods is a strong advocate of giving the breeders a good rest before using their eggs, but most of us are not fixed with buildings to have so many flocks.

I always keep half a dozen hens, from a separte strain I bought, and a cock that I buy from the outside in this building spoken of in the winter, and give them the run of my garden in the spring. From these I raise my cocks for the main flock.

I have some good birds—White Wyandottes—and they are making me a little money, but the losses I have make them cost me too much.

J. H. YEARSLEY.

Caldwell, Idaho.

Some important points are raised by Mr. Yearsley in his letter. The letter does not indicate anything particularly at fault in the management of the flock. However, there may be something not explained in the letter that would account for the poor results. I understand he uses 50 hens and 50 pullets as his breeding stock. This would be all right if the pullets were fully mature and laying full-sized eggs. Immature pullets should not be used as breeders. The males should also be fully matured, preferably a year old or more.

The main point in getting good, hatchable eggs and good, vigorous chicks is to first get vigor in the breeding stock, both in the males and females. The lack of vigor, however, is not always apparent. The hen as well as the male may apparently have good vigor and the hen may lay well, but may not transmit the vigor to the chick. Usually, however, one can tell by looking at the hens or by handling them whether they are in good breeding condition. The signs of vigor are a fully developed red comb, bright eyes, good condition of flesh, smooth plummage, and active disposition. The singing, active, scratching hen is usually in good vigor. Another good sign of vigor is that the hens are always ready for their meals at feeding time.

But all those signs may be present and yet in some cases there will be poor hatches and high mortality or slow growth in the chicks. This may be caused by inbreeding or other causes.

Male Half the Flock.

But the object is to get good vigor in the breeding stock in order to get vigorous chicks. Particular attention should be paid to the male, as he is half the flock. Vigor depends very largely on the feeding. Good hatchable eggs is a question largely of nutrition. Usually if the hens lay well they will lay good, hatchable eggs, but not always. The feeds may do for the production of eggs, but there may be something lacking in them necessary for the proper embryonic development of the chick. What that is it is hard to say. But there should be a sufficient variety of feed. A hen on a free range usually lays good hatchable eggs and it is no doubt because they find some food that is necessary but may be lacking in the ration fed.

In regard to feeds, Mr. Yearsley says nothing about green food. A plentiful supply of green food is one of the most essential things for breeding stock. They should have green food all the time and all they can eat all the time. Kale, cabbages, mangels, sugar beets, steamed alfalfa meal or leaves, or better green alfalfa or clover. If possible, vary the green food a little, that is, give more than one kind at a time. Do not change, for instance, from kale to beets all at once, because it will be several days before they will learn to eat the beets, and meantime they have suffered for lack of green food.

A little fresh meat scraps, or cut bones, in addition to the dried meat scrap, is good. Milk is also good. Oyster shell and grit are also necessary.

Keep Hens Busy.

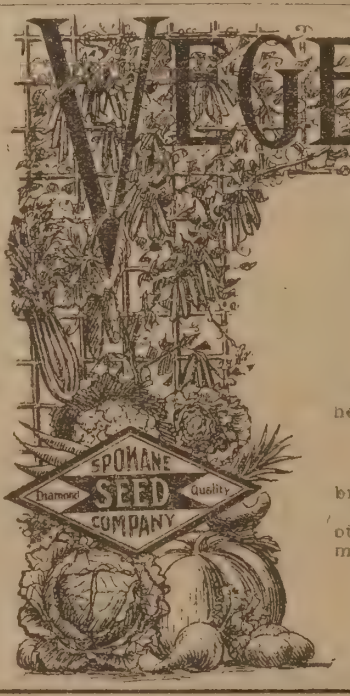
But whatever ration is fed, it should be fed in such a way as to keep the hens busy most of the time. Feed all the grain in a deep litter of straw. Give them all the range possible. This furnishes exercise and probably some feed that the ration lacks.

It is a very good plan to check up the incubator with sitting hens. Set several good setting hens with the same kind of eggs and at the same time as the incubator is set. If a good setting hen hatches a large percentage of the eggs and raises good chicks, then the eggs are all right and the breeding stock is all right. But they should be hens that attend to their business properly. It should never be taken for granted that the incubator is doing good work, because it is often not doing good work and the poultryman doesn't know it. It may hatch the chicks, but may not hatch them right. So check the machine with a good setting hen or two.

Are 200-Egg Hens Good Breeders?

Hens that are in good, vigorous condition, ready for their meals, laying eggs of normal size and shape, will be good breeders whether they lay 100 or 200 eggs in a year. I have had 300-egg hens that were good breeders. No





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stimulating condiments, however, should be fed to increase production, such as red pepper. High fertility and good vigor in the chicks does not depend upon low production in the hen. The reverse—poor laying—sometimes indicates poor breeding condition, such as overfatness. Again, hens affected with baccillary white diarrhea are not heavy layers. Year-old hens have rested their reproductive organs during the molting period and when they begin to lay they are in good condition for breeding. That is all the rest they need. Not many years ago an eastern poultry writer made the statement that no one ever produced a hen with a record of 225 eggs that produced a daughter equaling her record. I have bred dozens, perhaps hundreds or more, daughters of hens laying 225 eggs or more that laid from 225 to 309 eggs. Nearly all the high-record hens at the Oregon station have been bred from 200-egg hens. J. D.

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Use of Alcohol

As Fuel for Power Is Possible

Friends of prohibition at Olympia and other western capitals are giving much attention to practical methods of further restricting the sale of alcohol. Experience has shown that a good deal of drunkenness in prohibition states is traceable to the alcohol loopholes in the law, and the problem is one of growing difficulty by reason of the increasing industrial use of that product.

With ultimate exhaustion of the country's upply of gasoline, and advancing prices already upon consumers, attention will turn more and more to the substitution of alcohol for power purposes. A writer in the Rural New Yorker discusses this subject in an interesting and instructive manner. He says:

"As a gas fuel, alcohol is not as good as gasoline in theory; it is already one-sixth burned up, but, mixed with air, it can be more compressed before it explodes from the heat of compression, and this tends to equalize them. As a quick heater, alcohol has no equal; it is safe and odorless. In its most recent solidified form it is also cheap, since there is no loss when not burning.

"The munitions makers use alcohol and its derivatives, ether and acetone, and their demands have forced the price rather high. This condition will not last, and meanwhile the prohibition of alcohol as a drink—or 'food,' if you wish; it is going to be prohibited, anyhow—makes available a number of going concerns which can as well produce denatured alcohol.

"Mr. Ford has announced that the breweries of Michigan can made denatured alcohol for his tractors at a profit. He may solve the problem of a good alcohol motor; it is already near solution; but cheap alcohol from farm waste, which is also receiving his attention, is a harder problem. It can be solved, if he is willing to pay the price, but the price will surprise Mr. Ford. There is an idea that farmers were misled in respect to cheap alcohol, but the only trouble was that the law was 20 years ahead of its time. Any farmer who has or can buy the waste, and has the outfit and the knowledge, can make denatured alcohol. Lots of them have the waste, cheap and efficient outfits will come on demand, but the skill to manage a few hundred billion yeast cells so as to make them work at a profit is rather more than is required to make a profit out of 50 cows. But it is not unattainable.

"Another waste which is getting a lot of attention is the waste liquors from the wood-pulp industry. They grind up a lot of wood in these mills every day, and a good half of it goes into solution, and this solution is fermentable, but getting yeast cells to live and work in this sulphite waste is no easy matter. There are those who claim they are doing it, however, and others are taking any sort of waste wood and cooking it with acid till they get a fermentable liquid. But they have their troubles also. Materials which are starchy or sugary in their natural state are, after all, the best food for the yeast cell, and these are wasted every year by the ton. When we have learned, by Mr. Ford's help or otherwise, to use these, there will be cheap fuel for all the motors. But, like pasteurizing milk, while any one can make alcohol, it will be most cheaply made at central cooperative plants, and their establishment probably will be the ultimate solution of the problem involved in the production of industrial alcohol."

NEED GRAIN CARS

Shortage Delays Shipments:

To the Editor of The Farmer: The Mohler Warehouse company has been busy buying wheat and handling coal and wood. Last year they handled over 200,000 bushels of grain. Other warehouses are handling large amounts also. From $1 to $1.56 is the price received for wheat. There is close to 200 cars of wheat yet in Mohler because of the shortage in cars. There has not been a car here in from two to three weeks and I hear that they may have to ship on flat cars, because of the shipping of ice, which is starting now. The ground is now frozen very hard. Some of the ranchers are offering $45 per month for farm help, which they will soon need.

G. W. MARLER.

Mohler, Wash.

Home in a Tree.

William H. Garnett of Augusta, Me., is building a one-room house in a large tree on his estate.



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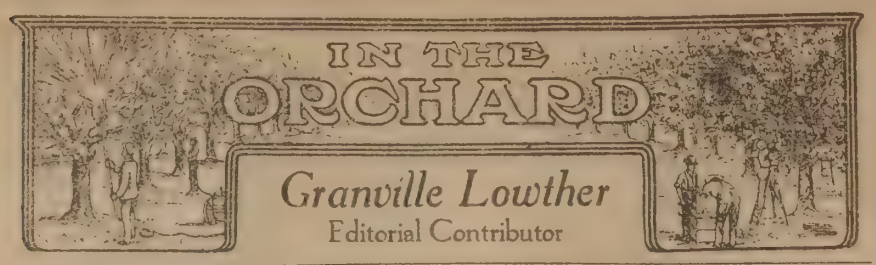
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"If We Knew How"

And We Will Know Sometime

By GRANVILLE LOWTHER.

If we only knew that when we grow poor varieties of fruit and put them on the markets we were diminishing our own profits, we would not grow them. Not long since I stopped off at a town in Oklahoma. In the depot there was a fruit stand in which there were on sale bananas, oranges, raisins, figs, apples and "western boxed apples." I saw a fine looking box of Ganoes, and while I knew the apple was not first class, I thought I would buy one and taste it. It was all right for a Gano, but no one would likely prefer it to an orange if he knew what he was buying; nor would he likely buy at another time one of our better varieties unless he were acquainted with the varieties by name and the difference in quality.

If we knew how to get together, so that in marketing our fruits we would not compete with ourselves to see who could quote the lowest prices, we would eliminate the waste of competition with ourselves, cheapen the cost of marketing and also get better prices. These facts, taken together, would greatly increase our profits. We will do it some day; in fact, we have made some advancement in that direction, but there is still much to be done.

If we knew how to produce the greatest amount of marketable fruit with the least amount of labor, we would by that means cheapen the cost of production and therefore increase our profits. This is done by the use of improved machinery that multiplies labor power; and by the proper adjustment of the laborers so that one group balances another.

If we knew that we could grow in this country a splendid quality of tobacco for spraying purposes, we would not only introduce a new industry into our orchard sections but would greatly cheapen the cost of spray materials.

If we only knew how to utilize our waste products at a profit or even if we knew how to make them pay the cost of production, so that they would not draw from the profit side of the account, we would be far ahead of where we are in the science of the fruit industry.

If we knew how to adapt our varieties to the soil, climate and altitude, we would grow better fruit. For instance, the keeping qualities of the Jonathan are better, if it is grown in the higher altitudes, and there is at least a month's difference between the ripening of apples grown in the lower Yakima valley, for instance, as compared with the same varieties grown in the orchard sections of the same valley nearest the mountains or in the higher altitudes.

We are learning; little by little, we gather experiences that cost us severely, but it is the only way we can get the information. We are as pioneers adapting the fruit industry to new conditions in a new country. Our experiences will become matters of record for the guidance of those who will come after us, and they will not repeat our mistakes. They will make others, for each and every generation has its own problems to meet, but they will avoid ours. Thus the knowledge of the race of mankind is cumulative; each and every generation adding something to the sum total of knowledge. For this reason each and every succeeding generation has a richer heritage than the one that preceded it.

The Central Packing House

S. V. Beckwith of the Rogue River Fruit and Produce association, in a paper before the apple conference claimed that the operation of the cetnral packing house in a community was a great help to the growers.

This is the ninth and last of the series of articles in the Farmer summarizing the addresses and the discussions of orchard problems as heard at the apple conference held in connection with the apple show at Spokane last November.

Essentially a co-operative idea, the central packing plant for an orchard community was declared by S. V. Beckwith of the Rogue River Fruit and Produce association to be one of the greatest aids to the grower in handling his product cheaply and properly. The following is his paper, in part, as read before the orchardists attending the apple conference at Spokane:

"I think the Rogue River Fruit and Produce association is a pioneer in the centralization of packing idea. We started it three years ago, hauling a good deal of the fruit to the central packing house at Medford; the following year we hauled more and last year we hauled every box of fruit that was packed, so that not a single box of fruit packed or shipped by our association was packed anywhere except in our own cold storage and packing house. I think it is just as important a feature in the general success of the apple growing business as any that has been discussed in connection with it. It seems to me that when you come down to the pack of your fruit you should consider yourself a manufacturing plant and you should run that manufacturing plant on a purely manufacturing basis.

"We have one plant which has a 40-car cold storage capacity and an up-to-date packing room sufficient for our needs, and I have persuaded every grower to let me haul his fruit in automobile trucks to this central plant in Medford. This means, more than anything else, standardization of pack. You have just one set of packers, you have one plant under one supervisor; you have one man who is attending to and is accountable for the proper packing of that fruit. In days gone by we ran three or four packing houses of our own and also had supervisors packing at from 12 to 20 packing houses on the ranches. We found it simply a physical impossibility to inspect that pack properly. That was the real reason for the starting of the move toward centralization. It does maintain a standardized pack. It relieves the grower of a lot of detail and worry when his time should be occupied with other things. I say to my growers, at the beginning of the season, this year our pears will cost 25 1-2 cents per box. That includes every item of supplies and labor that go into the packing of that fruit, including carloading, with the exception of the actual cost of hauling the fruit to my door. In other words, he gets his pears packed from my door until they are on the cars for 25 1-2 cents a box and his apples for 28 1-2 cents. We do not own our trucks, but we have some very live wires in the trucking business.

"Our problems are little different from any that most growers have to contend with. For the last three years 50 per cent of our tonnage has been pears, and I think it will increase. Pears, as you may know, especially Barletts picked in August, are pretty perishable commodity and just there is where this centralization of packing is peculiarly efficient. We persuaded our growers to haul in auto trucks and to let us haul them at night. All through the Bartlett season we never received a box of fruit at the packing house after 7 o'clock in the morning or before 6 o'clock at night. All the fruit was received by a night crew. We ran as high as 5300-odd loose boxes at night; for three days we ran over 500 a night and for the same three days we averaged seven cars a day packed. It never once occurred during the hot Bartlett season (and we handled something like 75 cars) that the fruit hauled at night was left over tomorrow. Of course that is not so necessary in handling apples and we do not haul at night during the apple season, but we can do it; the results of the centralization of packing are really very remarkable. I believe that sooner or later every district in the northwest is coming to that idea of packing every box of fruit it ships at one place.

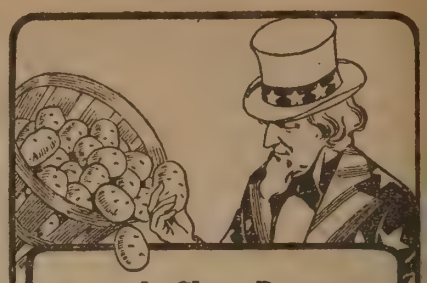
"I have heard some talk about the disposition of the culls. Again there is an attractive feature of the centralization idea. You have all your culls concentrated in one place and it is easy enough to sell in carloads. I have sold this year something like six carloads of apples in bulk and mainly because I had them at one spot and there was no difficulty in getting rid of them. I got $6.50 at my sidetrack; we charge nothing for handling of culls, so that all we get goes to the grower. They are used mostly in our valley in the manufacture of apple juice. We have two concerns there that have quite solved the problem of putting out fresh cider in hermetically sealed tin. I should like to see the time when all associations could get together and own their own cider and evaporating plant. That is another idea that makes the centralization very attractive."

DISCUSSION.

Question: Why did you inaugurate the plan of hauling apples in trucks?

Mr. Beckwith: It isn't every grower that will haul his apples with proper springs.

These trucks would haul from 150 to 225 boxes and it was like riding on a feather bed.



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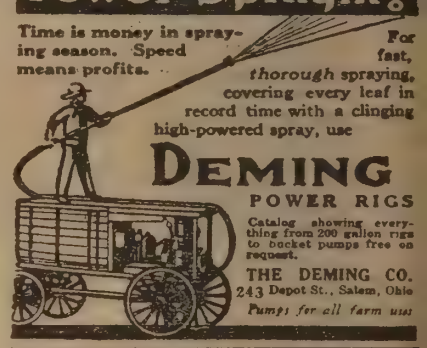
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Catalog showing everything from 200 gallon rigs to bucket pumps free on request.

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243 Depot St., Salem, Ohio
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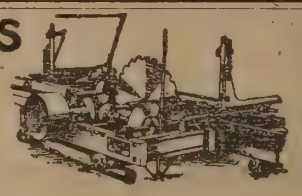
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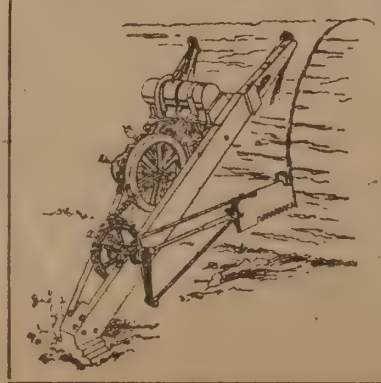
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AND GET LUMBER WORTH $25 TO $40

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Simplest, Strongest, Lightest and Fastest Drag Saw Built

Chain drive; can be used in any position. Bad weather does not hinder operation; one man operates it and moves it on the log; two men can carry it anywhere.

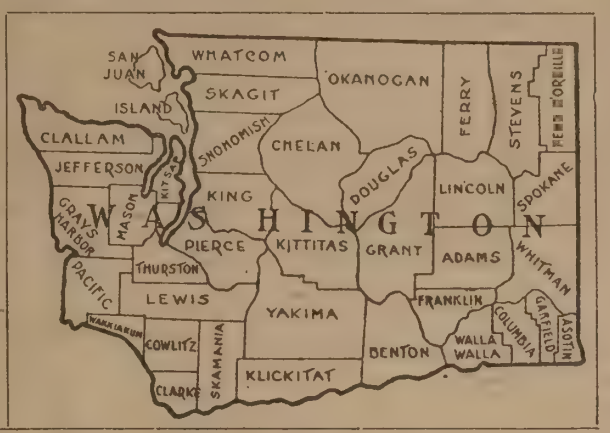
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In answering advertisements don't fail to mention this paper.

Insect Pests Make Trouble

Weevils and Maggots Lead Many to Abandon Rutabagas, Peas, Strawberries and the Like in Parts of Western Washington.



Lewis County, Wash.—Insect pests have driven the pea and the rutabaga off the farms of this county in a large measure.

Klickitat County, Wash.—Cattle on the grain farm are considered profitable for cleaning up waste from the grain fields and waste lands.

Okanogan County, Wash.—One of the county's greatest need is additional railroad facilities.

Insects Do Damage.

CHEHALIS, Lewis County, Wash., Jan. 26.—The leading products in this county are hay, oats, potatoes, a little wheat, barley and rye, kale, peas, small fruits and root crops. Hay, oats and pasture are the most valuable products. In early times peas and rutabagas were largely raised, but pea weavil, turnip worms and flea beetles have cut down the acreage to a great extent. High cost and lack of energy of labor eliminates all profits from garden and root crops. We have had an exceptionally good winter. Most of the upland is plowed and considerable bottom land, which is often too wet to plow until May. We expect, from the present outlook, that the crops will go in earlier this spring and in better shape than usual and prospects of extra good prices. L. K. COGSWELL.

Cattle on Grain Farm.

BICKLETON, Klickitat County, Wash., Jan. 24.—Although it is cold, there is no snow on the ground, as a chinook melted all the snow about 10 days ago, and many farmers commenced plowing, then the ground froze again about eight inches. The farmers consider the fall wheat prospect poor, as none is in sight above the ground and part of the kernels appear to be rotten. In all probability there will be much spring grain sown, although the fall grain still has a chance to come through. This community is increasing its production of grain every year, partly because of increased acreage and also because of better farming methods employed. One improvement noticeable is better building on the farms, also a better grade of live stock. There is one improvement I would like to see, and that is a better cooperative spirit among the farmers and more of a "get-together-and-boost" spirit in our towns. I do not agree with the idea of raising cattle on a wheat farm. It may apply to certain conditions in some territories, but here it is very profitable to have a bunch of cattle to eat up the waste of the field, as nearly every ranch around here has some waste land which can not produce grain and is used as pasture in the summer. In winter, up until December, the cattle feed upon the straw stacks and waste grain in the stubble, which otherwise would go to waste. I have a small bunch of stock around my straw stacks that I have not fed a spear of grain to yet, and they are looking fine, and with beef cattle selling at from $60 to $80 per head there is some money in straw stacks. BERT H. FAULKNER.

Need a Railroad.

TWISP, Okanogan County, Wash., Jan. 23.—The live stock man, the dairyman and the grain producer are preparing for a larger output the coming season. There has been a noticeable improvement in live stock here, as to horses, beef cattle, dairy stock and hogs. We would like to see a railroad through this vicinity so we could be on a par with outside markets. Under present conditions our products have to be freighted 30 miles by wagon and auto trucks in summer, and on sleds in winter, and this makes the expense greater than the profit on many articles. Very little fall grain was sown, and the ground was so dry up until freezing weather that the grain did not come up, with the exception of that grown on irrigated ground. The farmers are planning to do considerable spring seeding. A farm loan association was discussed at our grange recently, and a committee of three was appointed to investigate local conditions and report at the next meeting. Several have expressed a desire for an organization at Bureau Creek. We feel certain that we will soon have an organization. Great interest is shown in the Bureau Creek grange that was recently organized by C. L. Young, and we hope as great a benefit will be derived in buying the necessities and marketing our farm products, besides the importance of pulling together on all issues that have a tendency to improve conditions in our community.

GEORGE LA RUE.

Winter Severe on Grain.

LACROSSE, Whitman County, Wash., Jan. 29.—The ground being frozen since December first, and getting down to a depth of a foot or more which the chinook of the last week failed to lift, the winter wheat, which is the leading crop here, is in the poorest condition in many years, as the late, dry fall, followed by freezing temperatures, caused poor germination and very little growth. Possibly but half of the usual area was seeded last fall and the major crop will be spring sown. Nearly all forms of precipitation this winter since December is practically a tatal loss, as the frozen soil caused nearly all the water to run off; a condition which may affect crops next season. Live stock of all kinds are doing well, but hogs are getting very scarce.

M. E. SCHRECK.

Improvement in Live Stock.

CASTLEROCK, Cowlitz County, Wash., Jan. 26.—The coming season promises much to the farmer in this section of the state. There has been a decided increase in the improvement of live stock for breeding purposes, and winter grains have come through in splendid shape, green and thrifty. Fruit in this section of Cowlitz county grows prolific, but our market is limited and when we try to ship them into the city market along comes an inspector looking for trouble and he generally finds it, to the sorrow of the grower. What we need is a man for each county to help solve some of the difficulties the grower is up against in pruning, spraying, picking, packing and marketing. This community has started in on a wise plan, raising more dairy stock. Hogs do fine here, and the way pork is shipped into the Seattle market from this point makes a very profitable line of work for the farmer. Right here I will say that one farmer told me that his artichokes reduced the grain one-half in fattening his hogs, and the meat was of a better quality. He planted 14 sacks last spring on about 12 1-2 acres, and he estimated that he had 15 tons. I am of the impression that if this line is followed out it will prove one of the best solutions in utilizing the stump lands. Ten leading products in this county are: Grain, including barley, oats, some wheat, hay, potatoes, and all classes of vegetables that will grow in the northwest. Some of the farmers have been testing out the growing of vetch and it has proven a decided success; stock do well on it, and the crop yield is large. It takes rich soil and plenty of moisture in the fore part of the season, which we have here. Alfalfa does not seem to do as well, and some that have tried it say that there are other things that they can turn their attention to that will pay better and be more satisfactory, so have abandoned it. Still, in the southern part, near Woodland, a few have made a success, cutting six tons to the acre in small acreage. Potatoes seem to be the banner crop for us here. When the buyers came around and offered $30 per ton a number of farmers were too busy at something else so did not get around to sell at that time; now they are hugging themselves, as potatoes are up around $40 per ton, and indications are they will go higher. Some say they will not take less than $60 per ton, which goes to show that we are all on about the same scale, as "the more we get the more we want."

C. C. BROWN.

Want More Silos.

NEWPORT, Pend Oreille County, Wash., Jan. 29.—Pend Oreille county is rapidly increasing in its live stock and dairy products. The Citizens' club of Newport has taken up the slogan of "A Silo on Every Farm," and I think this indicates pretty clearly what is in the mind of the general populace as to the most crying need of the county. Live stock and dairying will undoubtedly be the dominant industries eventually in this county because of its rainfall and its natural adaptability to all tame grasses. I do not think that any damage has been sustained by the fall grain in the county, because the ground is well covered with a heavy blanket of snow and therefore well protected. Judging from previous winters here I would say the outlook for grain this year is excellent indeed, and, as we have a very large home market, the farmer should prosper.

CHAS. M. TALMADGE.

HOLDS DOOR OPEN.



To the Editor: Am sending you an illustration of a simple device for holding doors open when the old-fashioned lock is used. Take a half-inch board, eight inches long and three inches wide and shape it like the above cut. Screw it to a 2x4 on the barn where the stick on the lock projects. Nail it so the projecting stick hits the lock about one-fourth of an inch above the point. With a little pressure, the slope of the lock will make the projecting stick move up. When it comes to the notch in the lock it will drop down, locking the door back securely.

RAYMOND PHILLIPS.

Prosser, Wash.

NITRATE OF SODA
WHAT IT WILL DO FOR YOU
SPOKANE SEED CO.
FERTILIZER Dept.
SPOKANE, WASH.

BURTON'S 1917
SEED BOOK
describing BURTON'S QUALITY SEEDS tested under Western conditions on our Farm and Trial Grounds. It is full of cultural directions, concise descriptions, and valuable information gained from actual experiences.
WRITE TODAY. IT'S FREE
A penny postal may save you many dollars
THE BURTON SEED CO.
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A Powerful Light Tractor for Only
$585.00
Here's the little tractor with a big 1916 record. Its great performance in field and on belt has won hosts of friends—selling fast for 1917 use. Honestly built of high-grade materials—simple design and highest efficiency.
La Crosse
Happy Farmer
Tractor
Low in price—low in upkeep. Two models. Model "A" 8-16 h.p.—$585. Gasoline or kerosene. Pulls 2 or 3 plows. Model "B" 12-24 h. p.—$735—our wonderful new kerosene burner. Same type tractor as Model "A," economizing weight for pull. Unbreakable cast steel frame. Twin cylinder motor—overhead valves—perfect combustion—mechanically oiled. Hyatt Roller Bearings throughout.
Model B 12-24 H. P. $735.00
Write for catalog. Also ask about La Crosse Tractor-drawn implements. We have a distributor near you for prompt service.
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Live Dealer Agents Wanted

Big Crops
assured by using our tested 99 per cent pure seeds.
Catalog Free.
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Our new 1917 Catalogue now ready.
Yours for the asking.
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FREE BIG CATALOG OF LIVE SEEDS
and Plants and Pkt. Giant Pansy Sent FREE. Best New Seeds sure to grow, at low prices. Gardeners ask for Wholesale List
ALNEER BROS.
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Cherry and Pear Trees
We offer exceptionally fine trees at rock-bottom prices. Also a full line of other choice nursery stock at bargain prices. Write today.
Benedict Nursery Co.
185 E. 87th St. N. Portland, Oregon.

Is War Inevitable?

Pres. Wilson Breaks With Germany

WHAT LINCOLN BELIEVED.

Let us have faith that right makes might; and in that faith let us dare to do our duty as we understand it.

Feb. 21, 1859. ABRAHAM LINCOLN.

As this is written, the question in the minds of the civilized world is: Will the United States be drawn into actual war with Germany and her allies?

All diplomatic relationships between the two countries were broken Friday morning by President Wilson. Count von Bernstorff, German ambassador to this country, was given his passports, that he might return to Berlin; Ambassador Gerard, who has represented this country at Berlin, was asked to come home; the Swiss government has been asked to take over the conduct of American affairs in the German capital in so far as such affairs may be conducted under the critical conditions now existing and which are growing more critical with the passage of each hour.

The present situation comes to pass as a direct result of the formal announcement to the world by Germany that submarine warfare would be carried on without reserve in the waters surrounding the enemies of that country and her allies. No vessel, stated the announcement, whether neutral or enemy, could traverse those waters, owing to the determination of Germany and her allies of completely shutting food supplies and munitions from her enemies at whatever cost.

Violation of Pledge.

This announcement amounted to a specific renunciation of Germany's pledge made to President Wilson several months ago that her submarines would not be permitted to destroy any vessels without warning and without steps being taken to save the lives of those on board.

Speculation as to the real meaning of the new movement on the part of the Teutonic allies is varied. Some believe that it is made as a final, desperate effort to bring England and France to submission because of starvation before the same fate overtakes the teutons. The justification claimed by the Teutonic powers for the drastic move is that England has been practicing the starvation policy against Germany and Austria.

Loyalty in America.

Statesmen, members of state legislatures, private citizens and citizens of foreign birth have declared themselves loyally behind the president in his movements, come what may. Among the leading men of the nation who have made formal statements of loyalty are Vice President Marshall, Theodore Roosevelt, Senators Stone and Lodge of the foreign relations committee of congress, Senators Poindexter, Kern, Gallinger, Reed, Smoot, Chamberlain, Cummins and Weeks and Speaker Clark and Republican Leader Mann of the house of representatives.

German - American newspapers throughout the United States have expressed loyalty to the land of their adoption, though expressing deep regret that such serious difficulties should have come to pass between their native land and their adopted land.

German Vessels Seized.

Steps have been taken to seize German vessels which have taken refuge in harbors of the United States since the beginning of the war. Formal seizure of some of them, including the Prinz Eitel Frederick and the Prinz Wilhelm, has been made. There are claimed to be 95 German ships in American harbors, having a gross tonnage of over 600,000 tons. In New York harbor there are 31 of these vessels.

Precautions Taken.

Immediately following the breaking off of relations with Germany, military and naval precautions were taken by authorities all over the United States, even to the placing of guards about state militia armories.

All navy yards and stations were closed to the public, only employes and officers and enlisted men of the navy to be admitted until further notice.

Officers commanding army posts, arsenals, magazines and coast batteries were directed to exercise every precaution.

The state, war and navy building at Washington was closed to visitors and cards of identification were issued to employes and press representatives entitled to admission.

Publication of the daily ship movement list, giving the departures and arrivals of naval vessels, was suspended.

The White House and White House grounds were closed to visitors for the first time in many years.

Precautions were taken to safeguard munitions plants throughout the country, both private and public.

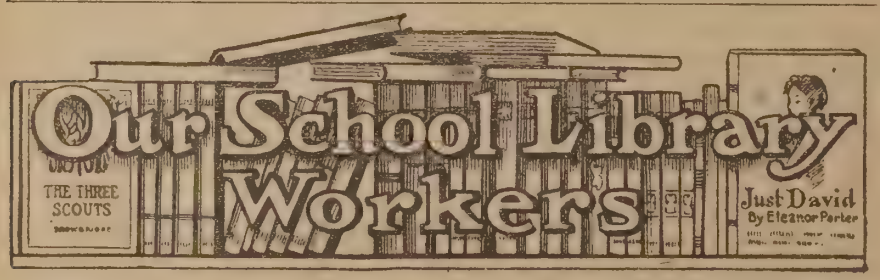
U. S. Naval Equipment.

It is admittedly difficult to place the United States in its relative strength from a war point of view, especially since the beginning of the present war during which vast destruction has been wrought and vast additions have been made to the navies of the warring nations.

The following are figures compiled on the U. S. Navy slightly more than one year ago: Modern battleships, 12; cruiser battleships, none; older battleships, 30; armored cruisers, 10; first-class cruisers, 5; second-class cruisers, 4; third-class cruisers, 16; gunboats, 30; monitors, 9; torpedo boat destroyers, 74; torpedo boats, 19; submarines, 73. This is a total of 282 vessels, manned by 55,000 men and officers.

At the same time as these figures were compiled, Germany had a total of 355 vessels manned by 79,000 men and officers, and England had a total of 631 vessels manned by 150,000 men and officers.





Yakima county is rubbing Stevens county pretty close in the matter of state honors for individual subscription work. Superintendent C. A. Payne of the White Swan public schools says, in reporting progress of his campaign, which the pupils of his school have just begun: "I am enclosing a check for $17.50, the result of the first day's effort on the part of our boys. I turned them loose last Friday at 4:30. At 6:50 two lads were back with $12. Loyal C. R. Snyder took eight subscriptions in that time."

This excellent work should be an incentive for other schools to take up a library campaign. This boy's work shows that he took one subscription every 15 minutes during the two hours he worked, and we have no doubt that other boys in the White Swan library teams will do equally as well. Let us hear from other schools, because we feel that the White Swan champion subscription getter will have to look to his laurels before the school library campaign is over in Yakima county.

Now, boys and girls, the library man who gets all the reports from your teacher just simply can't help but feel that each one of you will try to turn in at least one subscription to your teacher during the next week to help get new books for your school. These can be either "new" or "renewal" subscribers, as they all count the same in the campaign. Come, now, everybody!

Snails as Barometers.

Snails are excellent barometers. If there is rain in the air snails will seek shelter under leaves, in the bark of a tree or any other handy place.



Highest Prices Paid in the West
FOR YOUR FURS.
Ship direct to
C. G. APPLEGATH,
Successor to
G. P. RUMMELIN & SONS.
Manufacturing Furrier.
124 Second St.,
Portland, Ore.
Write for Price List.
Est. 1870.

HIDES Wool, Pelts Furs, Tallow
Highest Cash Prices Paid
Prompt Returns—Honest Weight
Write for price list and shipping tags.
Hibbard-Stewart Co., Inc., Seattle
Please Mention This Paper.

VEVLEY BROS. FURRIERS
SPOKANE, WASH.
pay highest market price for all kinds of raw furs. Furs made to order. Write for price list.

Raw Furs Wanted
I am in the market for large quantities of moleskins, also all other furs. Write for prices and shipping tags.
OSCAR GARD
75 Marion St., Seattle, Wash.

HIDES
WOOL, PELTS, MOHAIR, CASCARA BARK
We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.
THE H. F. NORTON CO.
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FISH
Direct From the Fishing Boats to You
Don't be satisfied with the kind of fish you get in the average inland store. Buy it direct from the packers and get far superior fish at less cost.
Delicious new-salted Ocean Fish of all kinds, freshly packed in brine, on the day of shipment.
Spiced, smoked, kippered and canned fish. Write for price list today.
Norway Fish Company
1907 Pike Place, Seattle, Wash.
Dealers in high grade sea foods, direct to consumers.

SELF-OILING WINDMILL
With INCLOSED MOTOR
Keeping OUT DUST and RAIN-Keeping IN OIL
SPLASH OILING SYSTEM
Constantly Flooding Every Bearing With Oil
OIL SUPPLY REPLENISHED ONLY ONCE A YEAR
DOUBLE GEARS - Each Carrying Half the Load
Every feature desirable in a windmill in the
AUTO-OILED AERMOTOR
Write AERMOTOR CO.
2550 West 12th Street CHICAGO

What Farm Animal Does This Represent?



Any person sending the correct answer to the above question before February 14, together with $2 in the form of money order, 2-cent stamps or personal check, will receive the Washington Farmer for three years and any one of the following standard high class magazines for one year: American Magazine, Metropolitan Magazine, Woman's Home Companion or Every Week.

Just see what these publications would cost you at the regular rates:

Washington Farmer, 3 years	$3.00	Washington Farmer, 3 years	$3.00
American Magazine, 1 year	$1.50	Woman's Home Companion, 1 year	$1.50
	$4.50		$4.50
Washington Farmer, 3 years	$3.00	Washington Farmer, 3 years	$3.00
Metropolitan Magazine, 1 year	$1.50	Every Week, 1 year	$1.00
	$4.50		$4.00

If you send the correct answer, any one of the above club combinations will cost you only $2.

If your answer is incorrect your money will be returned promptly. This offer is limited to replies mailed before February 14, as shown by the postoffice dating stamp on your envelope. Address

Quiz Editor, THE WASHINGTON FARMER
Review Building, Spokane, Washington.

Magazine Department of The Washington Farmer

Why I Read

Health of Mind for One Thing

By MARIELLA LADD.

Reading—what part does it play in the recreation and inspiration of the woman on the farm? How can she find time to read, by arranging her daily work carefully; how reading overcomes the tendency to worry and keeps the mind balanced and cool; what influence reading in the home has upon the children—these are a few of the points brought out by Mrs. Mariella Ladd, herself a farm woman, in a series of short articles which are to run in the Farmer. The first article, "Why I Read," will be found in this issue. This will be followed by "Reading and Education," "How I Find Time to Read" and "What I Like to Read."

Is recreation necessary? Or do these readers simply waste their time in securing it?

There can be only one answer to this question by any one who knows the least thing about farm life. The brightest and best work is always done by those who take systematic recreation.

Doctors have proved by experiment that work done by men and women who take time for recreation is much more valuable than similar work done by men and women who keep at work beyond the fatigue point and so cannot enjoy their leisure profitably. This is especially true of the farm housewife.

Recreation is as necessary as food. Reading, the best form of recreation for physical workers, provides the mind with food. Health of mind is even more important than health of body, because the mind largely rules the body. A hungry or empty mind is a poor ruler.

But, objects some one, how did the old folks who could not get books manage to live such creditable lives?

Because they took recreation in different ways. In the olden days families were large and homes were more attractive than they are today. Travel was less common, the world of the farmer was a small one. In this world his native humor helped him to see many amusing incidents and fed his human interest. Competition was less keen in the olden days. A man was more at liberty to follow his bent than he is now. A man who can follow his bent finds recreation even in his work.

Reading, however, is not only recreational. It is a means of inspiration as well. By reading the farm child learns how to interpret Nature and how to understand Nature's ways so that he can take advantage of them. Reading alone will not teach him this, of course. Reading must go hand in hand with observation and experiment. In the library units prepared for circulation among the schools of Washington by the Washington Farmer the books are chosen with this great fact in view. The books offered to the farm readers through these country schools are full of this appeal and are written by men and women who love Nature and believe the understanding of Nature to be at the heart of sound knowledge.

It is not accidental that Mary Lyon, the pioneer of women's higher education in America; Clara Barton, founder of the American Red Cross, which has earned the gratitude and admiration of the world, and Frances Willard, whose ideals are doing so much to protect and purify the American home, were all farm girls. They knew what it was to have busy hands and busy feet for many hours of the day. They spent their spare time in building up their minds, in reading, in thinking, in planning. Without books their plans would have been narrower and the world would be a much poorer place to live in today.

Librarians who have served country districts with books tell us that farm patrons are not carried away by books that have a great sale in the cities but only live for a few years. This fact points to the natural thoroughness of farm reading. Farm children are much more practical than city children. They like to test out ideas. It is only the best books that have ideas which will bear testing out. This fact presents another argument for promoting reading on the farm. Ideas provoke ideas. Mind acting upon mind becomes more fruitful. An idea presented to a practical mind multiplies in wealth and efficacy. An author, like a prophet, rarely knows the full meaning of what he puts forth. It is the practical people of the world who must take an author's idea and give it to the world in its most valuable form.

Next week Mariella Ladd will talk of the big part reading has to play in one's education.

Sidelights

And Yet He Lost.

Horatius was the greatest bridge player the world has ever known.—Deseret News.

Eat Slowly.

"Eat slowly and you will eat less." "That's true in most boarding houses, anyway."—Cleveland Leader.

Surest Thing You Know.

Where there's a will there's a way—to break it. Consult the probate court records and see.—Milwaukee News.

One Better.

"The old lady has named me as her heir."

"But she named me as her lawyer."—Life.

The Obvious One.

He—People are saying you married me for my money.

She—Well, I had to give them some reason.

Willies' Destructiveness.

"O-o-oh, m-o-ther," howled an Oklahoma City child, "Willie's broken my do-o-ll."

"The naughty boy! How did he do it?"

"I—I—I hit him on the head wiv it!" sobbed the little angel.

Room for a Large Company.

A little girl had been reprimanded by her mother for telling a falsehood. "Where do you think little folks go to that tell such stories?" asked the mother.

"I don't know," said the little girl, unconcernedly; "the same place big folks go to, I suppose."—Christian Herald.

Safety First.

A man observed that in these days of change and trying to keep up with Lizzie he had made it a rule never to ask a man how his wife was if he hadn't kept track of the pair for a couple of months. The rule was the result of his having said to a woman: "I had a long talk with your husband yesterday," and her reply: "Had you indeed? He's a very interesting man as I remember him."—Ladies' Home Journal.

She Was All Right.

There lives in Providence a very matter-of-fact man whose wife is, and always has been, a bit sentimental and fond of trying to draw from husband those little endearments he has ever failed to furnish.

"I suppose," said she, on one occasion, "if you should meet some pretty girl, you would cease to care for me."

"What nonsense you talk!" said husband. "What do I care for youth or beauty? You suit me all right."

Hens and History.

After reading the famous poem, "The Landing of the Pilgrim Fathers," to the class, the teacher said: "As a drawing exercise, suppose you each draw, according to your imagination, a picture of Plymouth rock."

All but one little fellow set to work. He paused, and finally raised his hand.

"What is it, Edgar?" the teacher asked.

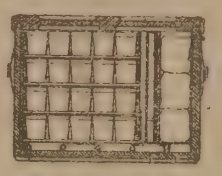
"Please, ma'am," Edgar piped out, "do you want us to draw a hen or a rooster?"—Ladies' Home Journal.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Fruit Carrier.

The fruit here is packed in boxes and covered with oiled paper. It is

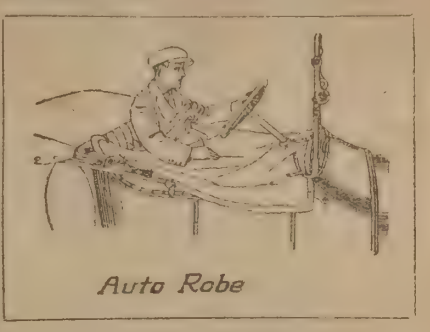


Fruit Carrier

cooled during transportation by ice packed in the chamber on the right. The cold air from the ice circulates on all sides of the fruit.

Automobile Robe.

This robe keeps the driver warm, but leaves his feet free to manipulate



Auto Robe

the pedals. It is atached by buttons on the sides of the car and by straps which buckle around the wind shield.

WHEAT LANDS

30,000 Acres, Tributary to Main Line of Chicago, Milwaukee & St. Paul Railroad, to Be Closed Out for an Eastern Syndicate

$6.00 TO $22.00 PER ACRE

TEN ANNUAL PAYMENTS

In Tracts to Suit

What is probably the last opportunity in this state to get select lands at such low prices and easy terms is here offered. These lands are in Adams and Grant counties, within 160 miles of Seattle, and are included under the proposed Quincy Irrigation Project.

Whole sections can be plowed without striking a stone or stump. The surface is largely covered with a luxuriant growth of bunchgrass.

The improved farms already dotting this fertile region are served by many good roads, and there are several schools already established.

This is a rare opportunity. Write or call at once for particulars.

ESTABLISHED 1888

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SEATTLE U.S.A.

Glimpses of Life in the Open Throughout the Pacific Northwest



1



2



3



4

The Pacific northwest is not only a land of promise, but is already a land of realization of life in the open, of a diversity of farm products—a land where new rural social problems are being worked out successfully.

The first picture on this page gives a glimpse of an almost ideal farm scene in the vicinity of Hageman, Idaho.

Many girls, as well as boys, are looking forward to and hoping for a trip to the fairs next fall; some as a result of winning in the boys' and girls' club contests. No. 2 is a picture of the camp school for girls at the last Oregon State fair, and here is a list of those who were present:

Benton county—Inez Starr, Corvallis.

Clackamas county—Evelyn Bohlander, Oregon City; Anna Mullenhoff, Boring.

Douglas county—Eva Blackwell, Riddle; Leta Wilson, Talent.

Hood River county—Beatrice Angus, Hood River; Dorothy Pennock, Cascade Locks.

Jackson county—Lucile E. Holdridge, Leta Stevens, Talent.

Lane county—Leia Hennis, Marcola; Gertrude Neet, Fall Creek.

Lincoln county—Myrtle Bloom, Myrabel Bloom, Rose Lodge.

Linn county—Muriel Blume, Albany; Nellie Morford, Junction City.

Malheur county—Helen Peck, Nyssa.

Marion county—Alice Jaquet, Silverton; Rose Winslow, Aumsville.

Morrow county—Elizabeth Brown, Vera Cowins, Heppner.

Multnomah county—Margaret Jonas, Lilly Luscher, Fairview.

Polk county—Hazel Bursell, Monmouth; May McDonald, Dallas.

Tillamook county—Lucy Daniels, Molher; Ellen Norberg, Tillamook.

Umatilla county—Dorothy Briggs, Hermiston; Carmen Jones, Pendleton.

Union county—Clara Courtney, Evelyn Guhlman, La Grande.

Wasco county—Arta M. Cole, Ora L. Evans, Mosier; Louise Morgensen, Tygh Valley.

Washington county—Margaret Bunger, North Plains; Lois Holmes, Sherwood.

Wheeler county—Lydia E. Prindle, Fossil.

No. 3 is a picture of Robert T. Reid, standing near a quince tree on his farm on the east side of Lake Washington, in King county. Something about Mr. Reid's farming operations will be found further on in this article.

No. 4 is a field of buckwheat raised in a peach orchard near Woodburn, Ore.

There is not a great deal of buckwheat raised in the Willamette valley. One of the seedmen of Portland, on being questioned regarding the production of buckwheat, said that he did not believe there is more than 5000 acres in the whole state sown to buckwheat. Most of it is in small patches, sown for bees.

(Continued on page thirty.)



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

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SYNOPSIS.

Charles Brandon, who has neither wealth nor title, wins distinction for having defeated the heretofore unconquerable duelist, Judson. Brandon is installed as one of the captains of the guard of King Henry VIII. Edwin Caskoden (who tells the story) is Master of the Dance at London Court. The two young men become fast friends. Edwin tells Brandon of the willful, but adorable Mary Tudor, who had coaxed her royal brother Henry out of many proposed marriages which had been arranged for Henry's advantage. Edwin confesses that he, like scores of other men, had fallen in love with Mary, but upon Mary's refusal to marry him, he immediately became attracted to the good and beautiful Lady Jane Bolingbroke.

At their first meeting, Mary and Brandon have a tilt, in which Mary comes off second best and acknowledges it. Wondering as to Brandon's social accomplishments, and to settle a wager with Sir Edwin that he could not dance, Mary invites Brandon, Edwin and Jane to her drawing room. To her surprise and Edwin's delight Brandon is perfectly at east and proves that he knows more about dancing than the Master of the Dance, himself. He teaches the Princess Mary one of the new French dances. At a ball, given by Mary, Brandon makes an enemy of the Duke of Buckingham, the most powerful nobleman in the realm, after which the princess asks Brandon to open the dance.

CHAPTER V.—(Continued

It was done prettily. The whole girl changed as scon as she found herself in front of him. In place of the old-time confidence, strongly tinged with arrogance, she was almost shy, and blushed and stammered with quick coming breath, like a burgher maid before her new-found gallant. At once the courtiers made way for her, and out she walked, leading Brandon by the hand. Upon her lips and in her eyes was a rare triumphant smile, as if to say:

"Look at this handsome new trophy of my bow and spear."

I was surprised and alarmed when Mary chose Brandon, but when I turned to the musicians to direct their play, imagine, if you can, my surprise when the leader said:

"Master, we have our orders for the first dance from the princess."

Imagine, also, if you can, my double surprise and alarm, nay, almost my terror, when the band struck up Jane's "Sailor Lass." I saw the look of surprise and inquiry which Brandon gave Mary, standing there demurely by his side, when he first heard the music, and I heard her nervous little laugh as she nodded her head, "Yes," and stepped closer to him to take position for the dance. The next moment she was in Brandon's arms, flying like a sylph about the room. A buzz of astonishment and delight greeted them before they were half way around, and then a great clapping of hands, in which the king himself joined. It was a lovely sight, although, I think, a graceful woman is more beautiful in La Galliard than any other dance, or, in fact, any other situation in which she can place herself.

After a little time the Dowager Duchess of Kent, first lady in waiting to the queen, presented herself at the musicians' gallery and said that her majesty had ordered the music stopped, and the musicians, of course, ceased playing at once. Mary thereupon turned quickly to me:

"Master, are our musicians weary that they stop before we are through"

The queen answered for me in a high-voiced Spanish accent: "I ordered the music stopped; I will not permit such an indecent exhibition to go on longer."

Fire sprang into Mary's eyes and she exclaimed: "If your majesty does not like the way we do and dance at my balls you can retire as soon as you see fit. Your face is a kill-mirth anyway." It never took long to rouse her ladyship.

The queen turned to Henry, who was laughing, and angrily demanded:

"Will your majesty permit me to be thus insulted in your very presence?"

You got yourself into it; get out of it as best you can. I have often told you to let her alone; she has sharp claws." The king was really afraid of Catherine's sour frown before he married her. It was her dower of Spanish gold that brought her a second Tudor husband.

"Shall I not have what music and dances I want at my own balls?" asked the princess.

"That you shall, sister mine; that you shall," answered the king. "Go on master, and if the girl likes to dance that way, in God's name let her have her wish. It will never hurt her; we will learn it ourself, and will wear the ladies out a-dancing."

After Mary had finished the opening dance there was a great demand for instruction. The king asked Brandon to teach him the steps, which he soon learned to perform with a grace perhaps equaled by no living creature other than a fat brown bear. The ladies were at first a little shy and inclined to stand at arm's length, but Mary had set the fashion and the others soon followed. I had taken a fiddler to my room and had learned the dance from Brandon; and was able to teach it also, though I lacked practice to make my step perfect. The princess had needed no practice, but had danced beautifully from the first, her strong young limbs and supple body taking as naturally to anything requiring grace of movement as a cygnet to water.

This, thought I, is my opportunity to teach Jane the new dance. I wanted to go to her first, but was afraid, or for some reason did not, and took several ladies as they came. After I had shown the step to them I sought out my sweetheart. Jane was not a prude, but I honestly believe she was the most provoking girl that ever lived. I never had succeeded in holding her hand even the smallest part of an instant, and yet I was sure she liked me very much; almost sure she loved me. She feared I might unhinge it and carry it away, or something of that sort, I suppose. When I went up and asked her to let me teach her the new dance, she said:

"I thank you, Edwin; but there are others who are more anxious to learn than I, and you had beter teach them first."

"But I want to teach you. When I wish to teach them I will go to them."

"You did go to several others before you thought of coming to me," answered Jane, pretending to be piqued. Now that was the unkindest thing I ever knew a girl to do—refuse me what she knew I so wanted, and then put the refusal on the pretended ground that I did not care much about it. I so told her, and she saw she had carried things too far, and that I was growing angry in earnest. She then made another false, though somewhat flatering, excuse:

"I could not bear to go through that dance before so large a company. I should not object so much if no one else could see—that is, with you—Enwin." "Edwin!" Oh! so soft and sweet! The little jade! to think that she could hoodwink me so easily, and talk me into a good humor with her soft, purring "Edwin." I saw through it all quickly enough, and left her without another word. In a few minutes she went into an adjoining room where I knew she was alone. The door was open and the music could be heard there, so I followed.

"My lady, there is no one to see us here; I can teach you now, if you wish," said I.

She saw she was cornered, and replied, with a toss of her saucy little head: "But what if I do not wish?"

Now this was more than I could endure with patience, so I answered: "My young lady, you shall ask me before I teach you."

"There are others who can dance it much better than you," she returned, without looking at me.

"If you allow another to teach you that dance," I responded, "you will have seen the last of me." She had made me angry, and I did not speak to her for more than a week. When I did—but I will tell you of that later on. There was one thing about Jane and the new step; so long as she did not know it, she would not dance it with any other man, and foolish as my feeling may have been, I could not bear the thought of her doing it. I resolved that if she permitted another man to teach her that dance it would be all over between us. It was a terrible thought to me, that of losing Jane, and it came like a very stroke upon my heart. I would think of her sweet little form, so compact and graceful; of her gray, calm eyes, so full of purity and mischief; of her fair oval face, almost pale, and wonder if I could live without the hope of her. I determined, however, that if she learned the new dance with any other man I would throw that hope to the winds, whether I lived or died. St. George! I believe I should have died.

The evening was devoted to learning the new dance, and I saw Mary busily engaged imparting information among the ladies. As we were about to disperse I heard her say to Brandon:

"You have greatly pleased the king by bringing him a new amusement. He asked me where I learned it, and I told him you had taught it to Caskoden, and that I had it from him. I told Caskoden so that he can tell the same story."

"Oh! but that is not true. Don't you think you should have told him the truth, or have evaded it in some way?" asked Brandon, who was really a great lover of the truth, "when possible," but who, I fear on this occasion, wished to appear more truthful than he really was. If a man is to a woman's taste, and she is inclined to him, he lays up great stores in her heart by making her think him good; and shameful impositions are often practiced to this end.

Mary flushed a little and answered, "I can't help it. You do not know. Had I told Henry that we four had enjoyed such a famous time in my rooms he would have been very angry, and—and—you might have been the sufferer."

"But might you not have compromised matters by going around the truth some way, and leaving the impression that others were of the party that evening?"

That was a mistake, for it gave Mary an opportunity to retailiat: "The best way to go around the truth, as you call it, is by a direct lie. My lie was no worse than yours. But I did not stop to argue about such matters. There is something else I wish to say. I want to tell you that you have greatly pleased the king with the new dance. Now teach him honor and ruff and your fortune is made. He has had some Jews and Lombards in of late to teach him new games at cards, but yours is worth all of them." Then, somewhat hastily and irrelevantly, "I did not dance the new dance with any other gentleman—but I suppose you did not notice it," and she was gone before he could thank her.

CHAPTER VI.

The princess knew her royal brother. A man would receive quicker reward for inventing an amusement or a guady costume for the king than winning him a battle. Later in life the high road to his favor was in ridding him of his wife and helping him to a new one—a dangerous way though, as Wolsey found to his sorrow when he sunk his glory in poor Anne Boleyn.

Brandon took the hint and managed to let it be known to this play-loving king that he knew the latest French games. The French Duc de Longueville had for some time been an honored prisoner at the English court, held as a hostage from Louis XII., but de Longueville was a blockhead, who could not keep his little black eyes off our fair ladies, who hated him, long enough to tell the deuce of spades from the ace of hearts. So Brandon was taken from his duties, such as they were, and placed at the card table. This was fortunate at first; for being the best player the king always chose him as his partner, and, as in every other game, the king always won. If he lost there would soon be no game, and the man who won from him too frequently was in danger at any moment of being rated guilty of the very highest sort of treason. I think many a man's fall, under Henry XIII., was owing to the fact that he did not always allow the king to win in some trivial matter of game or joust. Under these conditions everybody was anxious to be the king's partner. It is true he frequently forgot to divide his winnings, but his partner had this advantage, at least; there was no danger of losing. That being the case, Brandon's seat opposite the king was very likely to excite envy, and the time soon came, Henry having learned the play, when Brandon had to face some one else, and the seat was too costly for a man without a treasury. It took but a few days to put Brandon hors de combat, financially, and he would have been in a bad plight had not Wolsey come to his relief. After that, he played and paid the king in his own coin.

This great game of "honor and ruff" occupied Henry's mind day and night during a fortnight. He feasted upon it to satiety, as he did with everything else; never having learned not to cloy his appetite by overfeeding. So we saw little of Brandon while the king's fever lasted, and Mary said she wished she had remained silent about the cards. You see, she could enjoy this new plaything as well as her brother, but the king, of course, must be satisfied first. They both had enough eventually; Henry in one way, Mary in another.

One day the fancy struck the king that he would rebuild a certain chapel at Windsor; so he took a number of the court, including Mary, Jane, Brandon and myself, and went with us up to London, where we lodged overnight at Bridewell house. The next morning—as bright and beautiful a June day as ever gladdened the heart of a rose—we took horse for Windsor, a delightful seven-league ride over a fair rode.

Mary and Jane traveled side by side, with an occasional companion or two, as the road permitted. I was angry with Jane, as you know, so did not go near the girls; and Brandon, without any apparent intention one way or the other, allowed events to adjust themselves, and rode with Cavendish and me.

We were perhaps forty yards behind the girls, and I noticed after a time that the Lady Mary kept looking backward in our direction, as if fearing rain from the east. I was in hopes that Jane, too, would fear the rain, but you would have sworn her neck was stiff, so straight ahead did she keep her face. We had ridden perhaps three leagues when the princess stopped her horse and turned in her saddle. I heard her voice, but did not understand what she said.

In a moment some one called out: "Master Brandon is wanted." So that gentleman rode forward, and I followed him. When we came up with the girls Mary said: "I fear my girth is loose."

Brandon at once dismounted to tighten it, and the others of immediate party began to cluster around.

Brandon tried the girth.

"My lady, it is as tght as the horse can well bear," he said.

"It is loose, I say," insisted the princess, with a little irritation; "the saddle feels like it. Try the other." Then turning impatiently to the persons gathered around: "Does it requre all of you, standing there like gaping bumpkins, to tighten my girth? Ride on; we can manage this without so much help." Upon this broad hint everybody rode ahead while I held the horse for Brandon, who went on with his search for the loose girth. While he was looking for it Mary leaned over her horse's neck and asked: "Were you and Cavendish settling all the philosophical points now in dispute, that you found him so interesting?"

"Not all," answered Brandon, smiling.

"You were so absorbed, I supposed it could be nothing short of that."

"No," replied Brandon again. "But the girth is not loose."

"Perhaps I only imagined it," returned Mary carelessly, having lost interest in the girth.

I looked toward Jane, whose eyes were bright with a smile, and turned Brandon's horse over to him. Jane's smile gradually broadened into a laugh, and she said: "Edwin, I fear my girth is loose, also."

"As the Lady Mary's was?" asked I, unable to keep a straight face any longer.

"Yes," answered Jane, with a vigorous little nod of her head and a peal of laughter.

"Then drop back with me," I responded.

The princess looked at us with a half smile, half frown, and remarked: "Now you doubtless consider yourselves very brilliant and witty."

"Yes," returned Jane maliciously, nodding her head in emphatic assent, as the princess and Brandon rode on before us.

"I hope she is satisfied now," said Jane sotto voce to me.

"So you want me to ride with you?" I replied.

"Yes," nodded Jane.

"Why?" I asked.

(Continued on the following page.)

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from preceding page.)

"Because I want you to," was the enlightening response.

"Then why did you not dance with me the other evening?"

"Because I did not want to."

"Short but comprehensive," thought I, "but a sufficient reason for a maiden."

I said nothing, however, and after a time Jane spoke: "The dance was one thing and riding with you is another. I did not wish to dance with you, but I do wish to ride with you. You are the only gentleman to whom I would have said what I did about my girth being loose. As to the new dance, I do not care to learn it because I would not dance it with any man but you, and not even with you—yet." This made me glad, and coming from coy, modest Jane meant a great deal. It meant that she cared for me, and would, some day, be mine; but it also meant that she would take her own time and her own sweet way in being won. This was comforting, if not satisfying, and loosened by tongue: "Jane, you know my heart is full of love for you——"

"Will the universe crumble?" she cried with the most provoking little laugh. Now that sentence was my rock ahead, whenever I tried to give Jane some idea of the state of my affections. It was a part of the speech which I had prepared and delivered to Mary in Jane's hearing, as you already know. I had said to the princess: "The universe will crumble and the heavens roll up as a scroll ere my love shall alter or pale." It was a high-sounding sentence, but it was not true, as I was forced to admit, almost with the same breath that spoke it. Jane had heard it, and had stored it away in that memory of hers, so tenacious in holding to everything it should forget. It is wonderful what a fund of useless information some persons accumulate and cling to with a persistent determination worthy of a better cause. I thought Jane never would forget that unfortunate, abominable sentence spoken so grandiloquently to Mary. I wonder what she would have thought had she known that I had said substantially the same thing to a dozen others. I never should have won her in that case. She does not know it yet, and never shall if I can prevent. Although dear Jane is old now, and the roses on her cheeks have long since paled, her gray eyes are still there, with their mischievous little twinkle upon occasion, and—in fact, Jane can be as provoking as ever when she takes the fancy, for she is as sure of my affection now as upon the morning of that rare ride to Windsor. Aye, surer, since she knows that in all these years it has changed only to grow greater and stronger and truer in the fructifying light of her sweet face, and the nurturing warmth of her pure soul. What a blessed thing it is for a man to love his wife and be satisfied with her, and to think her the fairest being in all the world; and how thrice happy is he who can stretch out the sweetest season of his existence, the days of triumphant courtship, through the flying years of all his life, and then lie down to die in the quieted ecstasy of a first love.

So Jane halted my effort to pour out my heart, as she always did.

"There is something that greatly troubles me," she said.

"What is it?" I asked in some concern.

"My mistress," she answered, nodding in the direction of the two riding ahead of us. "I never saw her so much interested in any one as she is in your friend, Master Brandon. Not that she is really in love with him as yet, perhaps, but I fear it is coming and dread to see it. She has never been compelled to forego anything she wanted, and her desires are absolutely imperative. They drive her, and she is helpless against them. I think it never occurred to her that such a thing could be necessary; everything she wants she naturally thinks is hers by divine right. There has been no great need of such an effort until now, but your friend Brandon presents it. I wish he were at the other side of the world. I think she feels that she ought to keep away from him before it is too late, both for his sake and her own; but she is powerless to deny herself the pleasure of being with him, and I do not know what is to come of it all. That incident of the loose girth is an illustration. Did you ever know anything so bold and transparent? Any one could see through it, and the worst of all is she seems not to care if every one does see. Now look at them ahead of us! No girl is so happy riding beside a man unless she is interested in him. She was dull enough until he joined her. He seemed in no hurry to come, so she resorted to the flimsy excuse of the loose girth to bring him. I am surprised that she even sought the shadow of an excuse, but did not order him forward without any pretense of one. Oh! I don't know what to do. It troubles me greatly. Do you know the state of his feelings?"

"No," I answered, "but I think he is heart-whole or nearly so. He told me he was not fool enough to fall in love with the king's sister, and I really believe he will keep his heart and head, even at that dizzy height. He is a cool fellow, if there ever was one."

"He certainly is different from other men," returned Jane. "I think he has never spoken a word of love to her. He has said some pretty things, which she has repeated to me; has moralized to some extent, and has actually told her of some of her faults. I should like to see any one else take that liberty. She seems to like it from him, and says he inspires her with higher, better motives and a yearning to be good; but I am sure he has made no love to her."

"Perhaps it would be better if he did. It might cure her," I replied.

"Oh! no! no! not now; at first, perhaps, but not now. What I fear is that if he remains silent much longer she will take matters in hand and speak herself. I don't like to say that—it doesn't sound well—but she is a princess, and it would be different than with an ordinary girl; she might have to speak first, or there might be no speaking from one who thought his position too far beneath hers. She whose smallest desires drive her so, will never forego so great a thing as the man she loves only for the want of a word or two."

Then it was that Jane told me of the scene with the note, of the little whispered confidence upon her pillows, and a hundred other straws that showed only too plainly which way this worst of ill winds was blowing—with no good in it for any one. Now who could have foretold this? It was easy enough to prophesy that Brandon would learn to love Mary, excite a passing interest, and come off crestfallen, as all other men had done. But that Mary should love Brandon, and he remain heart-whole was an unlooked-for event—one that would hardly have been predicted by the shrewdest prophet.

What Lady Jane said troubled me greatly, as it was but the confirmation of my own fears. Her opportunity to know was far better than mine, but I had seen enough to set me thinking.

Brandon, I believe, saw nothing of Mary's growing partiality at all. He could not help but find her wonderfully attractive and interesting, and perhaps it needed only the thought that she might love him to kindle a flame in his own breast. But at the time of our ride to Windsor Charles Brandon was not in love with Mary Tudor, however near it he may unconsciously have been. He would whistle and sing, and was as light-hearted as a lark—I mean when away from the princess as well as with her—a mood that does not go with a heart full of heavy love, of impossible, fatal love, such as his would have been for the first princess of the first bloodroyal of the world.

But another's trouble could not dim the sunlight in my own heart, and that ride to Windsor was the happiest day of my life up to that time. Even Jane threw off the little cloud our forebodings had gathered and chatted and laughed like the creature of joy and gladness she was. Now and then her heart would well up so full of the sunlight and the flowers and the birds in the hedge—aye, and of the contagious love in my heart, too, that it poured itself forth in a spontaneous little song which thrills me even now.

Ahead of us were the princess and Brandon. Every now and then her voice came back to us in a stave of a song, and her laughter, rich and low, wafted on the wings of the soft south wind, made the glad birds hush to catch its silvery note. It seemed that the wild flowers had taken on their brightest hue, the trees their richest Sabbath day green, and the sun his softest radiance, only to gladden the heart of Mary that they might hear her laugh. The laugh would have come quite as joyously had the flowers been dead and the sun black, for flowers and sunlight, south wind, green pastures and verdant hills, all were riding by her side. Poor Mary! Her days of laughter were numbered.

We all rode merrily on to Windsor, and when we arrived it was curious to see the great nobles, Buckingham, both the Howards, Seymour and a dozen others stand back for plain Charles Brandon to dismount the fairest maiden and the most renowned princess in Christendom. It was done most gracefully. She was but a trifle to his strong arms, and he lifted her to the sod as gently as if she were a child. The nobles envied Brandon his evident favor with this unattainable Mary, and hated him accordingly, but they kept their thoughts to themselves for two reasons: First, they knew not to what degree the king's favor, already marked, with the help of the princess might carry him; and second, they did not care to have a misunderstanding with the man who had cut out Adam Judson's eyes.

We remained at Windsor four or five days, during which time the king made several knights. Brandon would probably have been one of them, as everybody expected, had not Buckingham related to Henry the episode of the loose girth, and adroitly poisoned his mind as to Mary's partiality. At this, the king began to cast a jealous eye on Brandon. His sister was his chief diplomatic resource, and when she loved or married it should be for Henry's benefit, regardless of all else.

Brandon and the Lady Mary saw a great deal of each other during this little stay at Windsor, as she always had some plan to bring about a meeting, and although very delightful to him, it cost him much in royal favor. He could not trace this effect to its proper cause and it troubled him. I could have told him the reason in two words, but I feared to put into his mind the thought that the princess might learn to love him. As to the king, he would not have cared if Brandon or every other man, for that matter, should go stark mad for love of his sister, but when she began to show a preference he grew interested, and it was apt sooner or later to go hard with the fortunate one. When we went back to Greenwich Brandon was sent on a day ahead.

CHAPTER VII.

After we had all returned to Greenwich the princess and Brandon were together frequently. Upon several occasions he was invited, with others, to her parlor for card playing. But we spent two evenings, with only four of us present, prior to the disastrous events which changed everything, and of which I am soon to tell you. During these two evenings the "Sailor Lass" was in constant demand.

This pair, who should have remained apart, met constantly in and about the palace, and every glance added fuel to the flame. Part of the time it was the princess with her troublesome dignity, and part of the time it was Mary—simply girl. Notwithstanding these haughty moods, any one with half an eye could see that the princess was gradually succumbing to the budding woman; that Brandon's stronger nature had dominated her with that half fear which every woman feels who loves a strong man—stronger than herself.

One day the rumor spread through the court that the old French king, Louis XII., whose wife, Anne of Brittany, had just died, had asked Mary's hand in marriage. It was this, probably, which opened Brandon's eyes to the fact that he had been playing with the very worst sort of fire, and first made him see that in spite of himself, and almost without his knowledge, the girl had grown wonderfully sweet and dear to him. He now saw his danger, and struggled to keep himself beyond the spell of her perilous glances and siren song. This modern Ulysses made a masterful effort, but alas! had no ships to carry him away, and no wax with which to fill his ears. Wax is a good thing, and no one should enter the siren country without it. Ships, too, are good, with masts to tie one's self to, and sails and rudder, and a gust of wind to waft one quickly past the island. In fact, one can not take too many precautions when in those enchanted waters.

Matters began to look dark to me. Love had dawned in Mary's breast, that was sure, and for the first time, with all its fierce sweetness. Not that it had reached its noon, or anything like it. In truth, it might, I hoped, die in the dawning, for my lady was as capricious as a May day; but it was love—love as plain as the sun at rising. She sought Brandon upon all occasions, and made opportunities to meet him; not openly—at any rate, not with Brandon's knowledge, nor with any connivance on his part, but apparently caring little what he or any one else might see. Love lying in her heart had made her a little more shy than formerly in seeking him, but her straightforward way of taking whatever she wanted made her transparent little attempts at concealment very pathetic.

As for Brandon, the shaft had entered his heart, too, poor fellow, as surely as love had dawned in Mary's, but there was this difference: With our princess—at least I so thought at the time—the sun of love might dawn and lift itself to mid-heaven and glow with the fervent ardor of high noon—for her blood was warm with the spark of her grandfather's fire—and then sink into the west and make room for another sun tomorrow. But with Brandon's stronger nature the sun would go till noon and there would burn for life. The sun, however, had not reached its noon with Brandon, either; since he had set his brain against his heart, and had done what he could to stay the all-consuming orb at its dawning. He knew the hopeless misery such a passion would bring him, and helped the good Lord, in so far as he could, to answer his prayer, and lead him not into temptation. As soon as he saw the truth he avoided Mary as much as possible.

As I said, we had spent several evenings with Mary after we came home from Windsor, at all of which her preference was shown in every movement. Some women are so impressive under strong emotion that every gesture, a turn of the head, a glance of the eyes, the lifting of a hand of poise of the body, speaks with a tongue of eloquence, and such was Mary. Her eyes would glow with a soft fire when they rested upon him, and her whole person told all too plainly what, in truth, it seemed she did not care to hide. When others were present she would restrain herself somewhat, but with only Jane and myself, she could hardly maintain a seemly reserve. During all this time Brandon remained cool and really seemed unconscious of his wonderful attraction for her. It is hard to understand why he did not see it, but I really believe he did not. Although he was quite at ease in her presence, too much so, Mary sometimes thought, and strangely enough sometimes told him in a fit of short-lived, quickly repented anger that always set him laughing, yet there was never word or gesture that could hint of undue familiarity. It would probably have met a rebuff from the princess part of her; for with a perversity, both royal and feminine, she wanted all the freedom for herself. In short, like any other woman, she would rather love than be loved, that is, until surrender day should come; then of course . . .

After these last two meetings, although the invitations came frequently, none was accepted. Brandon had contrived to have his duties, ostensibly at least, occupy his evenings, and did honestly what his judgment told him was the one thing to do; that is, remained away from a fire that could give no genial warmth, but was sure to burn him to the quick.

The more I saw of this man, the more I respected him, and this curbing of his affections added to my already high esteem. The effort was doubly wise in Brandon's case. Should love with his intense nature reach its height, his recklessness would in turn assert itself, and these two would inevitably try to span the impassable gulf between them, when Brandon, at least, would go down in the attempt. His trouble, however, did not make a mope of him, and he retained a great deal of his brightness and sparkle undimmed by what must have been an ache in his breast. Though he tried, without making it too marked, to see as little of Mary as possible, their meeting once in a while could not be avoided, especially when one of them was always seeking to bring it about. After a time, Mary began to suspect his attempts to avoid her, and she grew cold and distant through pique. Her manner, however, had no effort upon Brandon, who did not, or at least appeared not to notice it. This the girl could not endure, and lacking strength to resist her heart, soon returned to the attack.

(To be continued in the next issue.)

Strengthens Character.

I read this sentence the other day: "Remember that every decision you make either strengthens a little or tears down to a degree your character."

Do you see how true this is? It is like this: A question comes up for quick decision as to whether we should or should not do some certain thing. The first thought with most of us is: "Will it be best for us?" The second should be, if it is not, "Is it best for others?" If the habit is formed to make decisions in the light of justice and fairness the decision is so made and every time we make such decisions our character is strengthened. But if we neglect to consider the rights of others concerned and we take a selfish stand our character is one decision weaker.

A. W. B.

All the World's a Stage, and All the Men and Women Merely Players

Oregon Town Controlled by These Women



For the first time in the history of the nation a city administration composed entirely of women will demonstrate to advocates and opponents of woman suffrage "just what women can do."

Already the new administration has announced that their city shall be spotless. Further, they declare it shall also be "policeless" and they have already discharged the members of the city's police department. One interesting feature is the fact that Mrs. Laura Starcher, was elected mayor, defeating her husband by a good round majority.

The photograph, taken during the first meeting of the new mayor and her "cabinet," the name given locally to the newly elected woman council, shows (left to right around the council table), Mrs. Anna Means, councilwoman; Mrs. Florence Brownell, councilwoman; Mrs. Bertha Cheney, recorder; Mrs. Laura Starcher, mayor; Mrs. Stella Paulu and Mrs. Gladys Spinning, councilwomen.

Taking a Bath in the Carpathians



Copyrighted by International Film Service.

Baths are infrequent enough on the fighting lines. These German officers, assigned to the Austrian forces in the snowy Carpathian mountains, are determined to have their bath, and are not at all fussy about hot water. Just plain snow does them very well.

Survives Two Torpedoings.



Some good angel seems to be watching over Captain William T. Turner, who was in command of the Lusitania at the time she was sunk by a German submarine. According to word received in New York, Captain Turner has just survived another torpedoing, that of the transport Ivernia, sunk with a loss of several hundred lives.

After Riding Through Enemy's Line



Photo from Underwood & Underwood, N. Y.

A shot-riddled car in which a score of brave British Tommies rode valiantly through the enemy fire. The soldiers were ordered to make a hurried journey to a point which the censors have deleted.

Becomes U. S. Citizen.



Karl Jorn, a noted tenor of the Metropolitan Opera company of New York, has applied for his "second papers" for naturalization as an American citizen. Some reports have it that Jorn, still a German citizen, was recently ordered to return to Germany to sing at the Royal Opera, others, that he was to be sent to join his regiment.

Joining the Aristocracy.



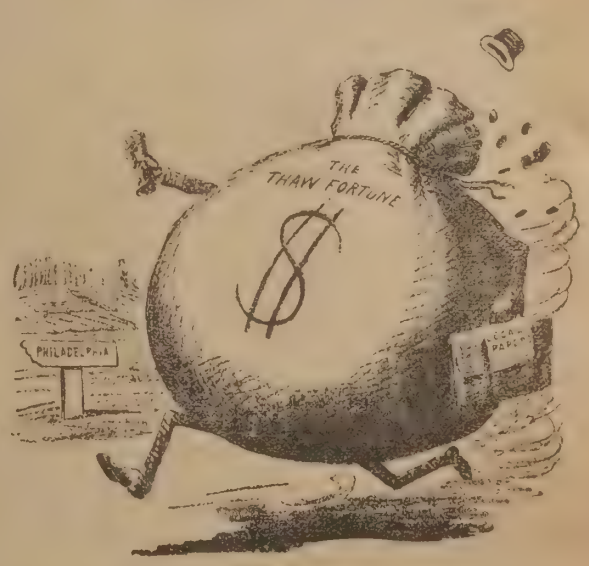
—New York Telegram.

Sackcloth and Ashes.



—Nashville Tennessean.

"Millions for Defense!"



Brooklyn Daily Eagle.

$275--Make This Prize Yours--$275

Add the Figures. Send in the Total

Science in Pickin' 'Em

LIVE STOCK EXPERT COMES TO RESCUE OF CONTEST EDITOR IN ADVISING LOVELORN YOUNG WOMAN.

The Contest Editor is grateful to V. Van Houten of the V. Van Stock farm, Bellingham, Wash., for a splendid commendation of advice given in this column, January 18, to "Estelle," a perplexed young woman who inquired if she should forgive a lover that made a marriage proposal contingent on her ability to win the $275 prize in the Figure Contest. In commending our advice, Mr. Van Houten says:

"People can get advice on raising calves and mating hogs, but those who can advise on the raising of children and the mating of men and women are too few. The cases are more complicated by far, but there are general principles that should be understood by young people and parents, and special cases can often be helped by a knowledge of the conditions and the dispositions of the ones involved.

A little help to the young people is worth more than a lift to the best pedigreed pig."

Mr. Van Houten also encloses the following letter for transmission to the young woman:

"Estelle:

"My daughter and I read your letter in the Farmer with much interest, and as I have had experience in assisting many young people out of their heart difficulties, I feel deeply concerned lest you turn your very commendable start into an ignominious finish by allowing your kindly disposition and your naturally affectionate nature to reverse the decision you promptly voiced in no uncertain terms when the young man offered his insult.

"It is possible that his beautiful hair has turned his head and that he thought he was offering you a magnificent prize at a bargain counter price. If so, you have shown him that he has been deceived in the goods he has to offer, and it may bring him to a proper realization of what he really is.

"While it is still possible that he loves you, it is almost certain that he loves himself much more fondly than he does you. Your feeling toward him, since he is indifferent toward you, is more one of kindly interest and womanly forgiveness than love. It is that noble trait of the female heart that interests itself in the weak and dependent. You feel that perhaps you are to blame for the state of affairs that exists and your self-denunciation naturally exalts the one whom you fear you have wronged.

"My advice would be that you stand by the beginning you have made. You can best prove yourself worthy of him, or of a better man, by respecting your own womanhood and making him prove himself worthy of you by an apology before you even go with him again, and by a few years of truly manly attention and a willingness to provide a home by his own efforts, before you ever consent to marry him. He should ask you to marry him and share his home with him, rather than offering to let you have a home by his fireside if you would provide the stove and the fuel.

"You might treat him as an acquaintance, if he likes, but it is his place to prove himself a friend before you place him on that basis. A man likes a girl who will meet him half way after he takes the first step, but he is excusable in not respecting a girl very highly if she seems lacking in self-respect. You can be just without being severe, and considerate without loss of principle.

"Win the contest if you can, but do not let him feed his conceit on the prize money. Invest it in Federal Farm Loan Bonds or something safe and good, so that you may have the interest for your own personal fancies or extras that you may want outside of what you can afford from a regular income or a husband's means."

The publication of Estelle's letter has caused the Contest Editor to be swamped with a deluge of mail bulging with poetry and deft disquisitions on the theme of love. The Contest Editor regrets to have created any false impressions of himself as indicated by these letters.

Some sympathize and some excuse, on the grounds of old age, the mild cynicism expressed in our answer to Estelle. Another correspondent calls the Contest Editor a "misogynist." Without looking it up in anybody's dictionary, the other cheek is promptly turned.

We are especially pleased with two soothing expressions done in verse. The first is a poem by Helen Selina Sheridan, sent by some maiden in Mr. Carnegie's library in Spokane, and reads:

Love hath a language for all years—
Fond heiroglyphs, obscure and old—
Wherein the heart reads, writ in tears,
The tale which never has been told.

Love hath his meter, too, to trace
Those bounds which never yet were given,
To measure that which mocks at space,
Is deep as death, as high as heaven.

Love hath his treasure hoards, to pay
True faith, or goodly service done,
Dear priceless nothings, which outweigh
All riches that the sun shines on.

The second, which might be classed as a swan song, from Miss A. M. Willis of Opal City, Ore., attunes like this:

Love buds and blossoms like the flowers in May;
We can be light and free from care while young;
But age steps in and youth soon flies away;
The songs of love have all been sung.

Get Busy Now.

Only six weeks remain of the big figure contest in which this paper is giving away $750 in 32 prizes, the largest to be $275 if the winner has paid $1.50 for three years' subscription to the Farmer.

The advantage of beginning your count now is that should you find your first solution to be wrong, you will have time to send in a corrected solution to the Contest Editor with another subscription payment as provided by the rules. A solution when once entered can not be changed.

Get into the contest now. Don't wait until the close when accuracy may have to be sacrificed to speed on account of lack of time.

This contest is given solely by the Northwest Pacific Farm Trio, which includes The Washington Farmer, The Idaho Farmer and The Oregon Farmer, and must not be confused with the subscription offers of any other newspapers or farm journals. Also remember that this is not a guessing contest.

To enter the Figure Contest it is necessary that you remit a new or renewal of subscription to the Farmer at the regular rate of $1 for one year or $1.50 for three years.

If you are already paid ahead on your subscription to the Farmer, your further subscription payments will be credited on an extension from the time to which you are now paid.

This Is How to Do It

Simply add up the figures in the puzzle chart as if they were in one long column. Your success depends on the accuracy of your total thus obtained.

Figures run from two to nine, and there are no double figures or characters which are not figures. The tail of the "6" has a decided curve, while the tail of the "9" is straight. All other figures have the usual characteristics, allowing no question as to the identity of any figure.

In event that no one submits the correct total, prizes will be awarded for the next nearest solutions.

This contest is restricted to persons residing in Washington, Idaho, Oregon and Montana.

A payment of $1 to $1.50 on subscription to the Farmer entitles the subscriber to enter the contest.

If your subscription is already paid in advance, your expiration date will be set ahead beyond this date to which you are now paid the full period for which you pay at this time. The advantage of paying $1.50 instead of $1 is that the winner of any of the first four prizes receives additional prize dividends apportioned on the amount paid in on subscription, besides the fact that $1.50 during this contest pays for a three-year subscription to the paper, while $1 pays for only one year.

More than one solution may be submitted by any contestant, by an additional subscription payment of not less than $1 nor more than $1.50. It is not necessary to pay the same amount with each solution if more than one is submitted.

You can send in a subscription for some one other than yourself and have the solution registered in your own name. Remember that by paying $1.50 instead of $1 on subscription, the larger will be your dividends if you win one of the four leading prizes; but not more than $1.50 will be received with one solution.

$750-Prizes-$750

FIRST PRIZE, $200,
to which will be added 50 times the amount paid by the subscriber with the winning solution. For example, if you pay $1.50 on subscription, this prize will be worth $275.

SECOND PRIZE, $100,
to which will be added 30 times the amount paid by the subscriber with the winning solution. This prize may be worth $145.

THIRD PRIZE, $60,
to which will be added 20 times the amount paid by the subscriber with the winning solution. This prize may be worth $90.

FOURTH PRIZE, $50,
to which will be added 10 times the amount paid by the subscriber with the winning solution. This prize may be worth $65.

FIFTH PRIZE, $40.

SIXTH AND SEVENTH PRIZES, Each $20.

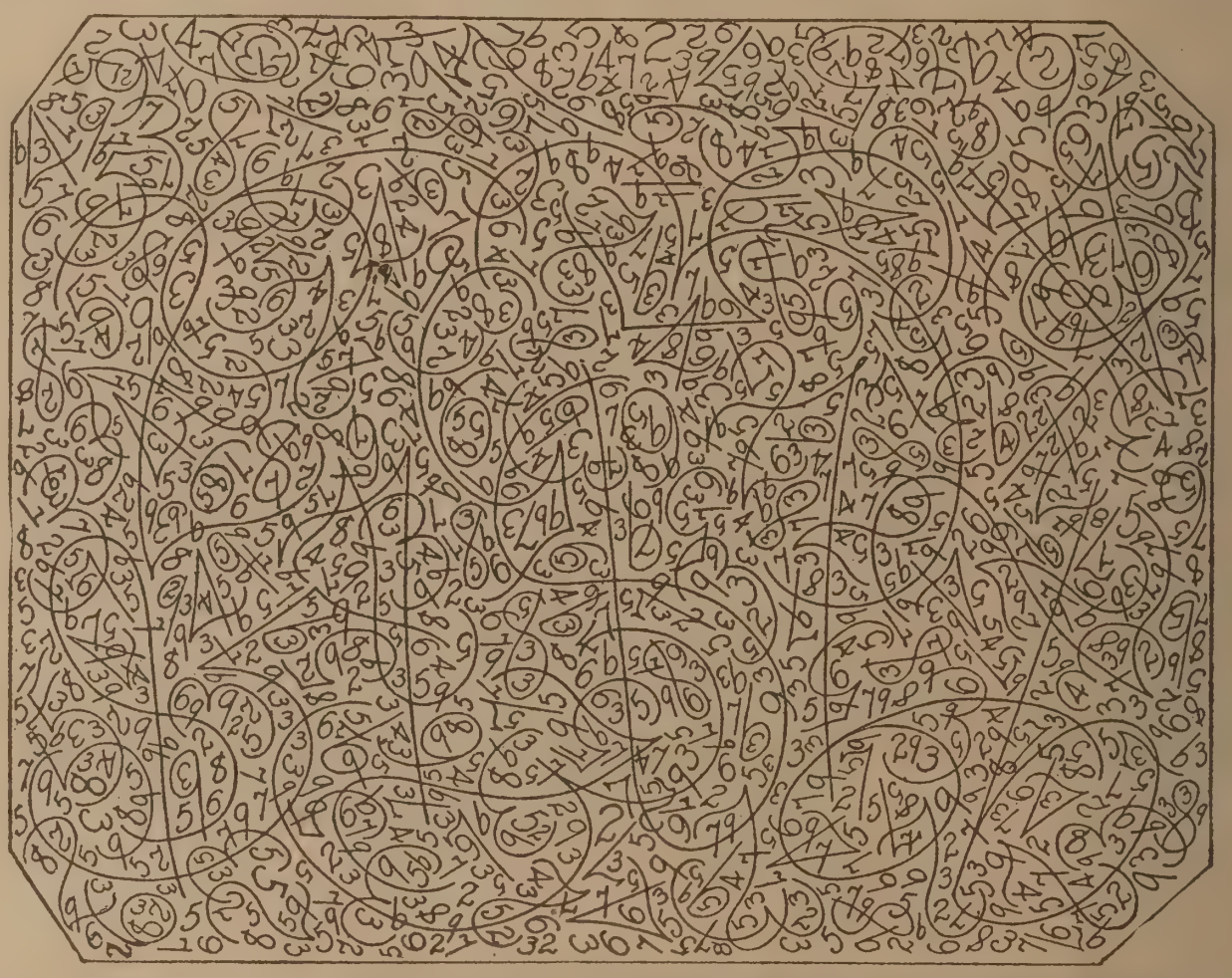
EIGHTH TO SIXTEENTH PRIZES, Each $7.

SEVENTEENTH TO THIRTY-SECOND PRIZES, Each $2.

CASH MUST ACCOMPANY.

Don't send in your charts and working papers unless called for by the Contest Editor. Simply write your solution in blank space provided in "Registration Blank."

Remember, the contest closes March 17, 1917.



REGISTRATION BLANK

Cut out this blank closely around the border and send it in with your solution and money.

To the Farmer Contest Editor:

Date sent .....191..

I enclose $..... for .....subscription to **The Washington Farmer.**

Name .....

Town .....

State .....

SOLUTION AND PAYMENTS.

The following spaces provide for three solutions, with the payments you desire to make with them. You may submit one or as many different solutions as you wish. You can subscribe for one or three years as per printed schedule, with each solution, as provided for in "The Conditions."

Solution.	Amount Paid.
.....	$.....
.....	$.....
.....	$.....

Answer this question: Are you now a subscriber? .....
If you wish paper sent elsewhere, fill in name and address.

.....

.....

You must address all inquiries and solutions to

The Washington Farmer Contest Editor

Review Building **Spokane, Washington**



Valentine

How to Entertain One's Guests

By LAURA PEARSON FELTON.

In giving a party of any kind, three questions confront one: Who to have, what to serve, how to entertain one's guests. I believe the most important question is who to have, as the guests, if rightly chosen, furnish the greater part of the fun. Congenial, happy guests are very necessary to the success of any party. Decorations add to the life of a party, too, as they help to get the guests into the spirit of the occasion, and give the home a festive air.

I bought plain white cards in envelopes to match. On the upper left hand corner of the card I pasted a tiny heart cut from red paper. I wrote my invitation and addressed the envelope with red ink and sealed the envelope by pasting a tiny red heart on the flap.

I decorated the house with strings of tiny red hearts cut from heavy red paper. The shades for the lights were made by fastening three hearts together, forming a cone, which I slipped over the light. This gives a soft, warm glow to the rooms.

Each lady was given a red cap to wear. These caps were made by cutting large hearts out of bristol board. Any heavy red paper could be used. I tied the sides of three hearts together with red baby ribbon and the cap thus formed was worn like a crown, with the apex of one heart coming in the middle of the forehead. These caps, worn with the light colored party frocks, made the ladies look like real valentines, and the bright red caps added to the decoration of the rooms, too. The gentlemen had red hearts pierced by an arrow pinned on their coat lapels.

As I did not have a table large enough to seat all my guests, I made use of an open stairway. I hung strings of hearts on each side of the stairs. Then each step was numbered. The couples were given numbers and a great deal of fun was made finding their seats, to correspond to their numbers. Partners for supper or lunch were found by matching sections of hearts. I cut 10 hearts—as I had 20 guests—from red paper. Each heart was cut into two pieces, no two hearts being cut alike. One half of each heart was given to a lady and the other half to a man. The matching of hearts made a difficult, but an amusing game, as it took some little time to match the irregular shapes.

Contests are apt to prove a bore to some, so I planned only one game or contest. This was a new way of playing the old word building game. "Sides" were chosen and each side given a piece of paper and a pencil. One side had the word VALENTINE, the other the word HEARTS, and they were allowed just five minutes to see which team could write the most words formed from the letters of their word. The winning side was given a box of candy hearts to treat the crowd with. The remainder of the evening was spent in dancing and music.

My refreshments were very simple. I planned them to carry out my color scheme of red. I bought paper plates and pasted a red heart in the center of each and served my lunch on them. A bow of red ribbon was tied to the handle of the glass cup I served the punch in, too. I served stuffed olive sandwiches, tomato salad, frosted cookies and punch. My sandwiches were made by lightly buttering a thin slice of white bread, placing a crisp lettuce leaf on it, then cutting stuffed olives in rings and placing them on the lettuce leaf, spread lightly with salad dressing and covered with another thin slice of bread. I cut the sandwiches in fancy shapes and tied them with red ribbon.

I made the tomato salad by adding a package of gelatine soaked in a half cup of cold water to a quart of hot tomato stock; season well with salt, celery salt, pepper and a little mustard. Pour into little moulds or cups to harden. Serve on a lettuce leaf with a spoonful of salad dressing on top of each mould.

The cookies were plain white sugar cookies frosted with powdered sugar frosting tinted red. I cut the cookies with a heart shaped cutter.

Any fruit punch may be used. I made the foundation of mine of loganberry juice, as it made a red punch. I added a little lemon juice, some orange juice, ice water, sugar and a few candied cherries.

Sport Suit.



"Stitching and big cartridge pockets are the style features of my snappy sport suit," says the New York Herald. "Note that my nifty sport hat is of matching straw."

Always Keeps Ahead.

What is it that the fastest racing automobile in the world can't overtake? It's own running expenses.

Cupid's Day

Fun for a Valentine Party

By EVELYN LEE.

"Fishing for Hearts" makes an excellent diversion at a St. Valentine's social. Secrete some person behind a screen with a basket of hearts for the ladies and another for the gentlemen. Get a pole and line and a bent pin to use as a hook. Then as each fisher throws the line over the screen, let the name of the person be distinctly announced. The paper hearts have various messages. When the heart is fastened the hidden operator jerks the line and the fisher knows he has a bite. Sentiments may be in prose or rhyme such as:

You will marry a woman whose hair is red,
Then often and often you'll wish you were dead.

You'll be a widow and live at your ease
With twelve little children to fret and tease.

You're doomed to endure a bachelor's woes,
To cook your own meals and darn your own hose.

You're doomed to endure an old maid's life,
A sweet-heart to many, but nobody's wife.

In order to create lively merriment each fisher is rigidly required to read aloud his own particular fate or fortune.

Naming Silhouttes.

"Naming Silhouettes" is another attractive amusement for February 14. Cut a large heart out of black cloth and sew on a white heart. Then stretch the curtain in a doorway. Place a light a few feet behind the curtain and extinguish the lights in the other room. Distribute cards and let the ladies write the identification of the silhouettes as they appear. Then the men exchange rooms with the ladies who appear one after another before the screen. The cards are graded and the winner announced.

A lot of wholesome laughter will result from a bubble-blowing with soapsuds and clap pipes as accessories. Choose a room with double doors or with three doors if possible. Suspend in each doorway one large heart, or the three hearts may be placed in one doorway. Each person is required to blow a bubble and then drive it with a fan into one of the hearts. He is entitled to try until he does hit a heart. Over each heart a placard with a jingle should be placed. Here are the three fates that await the bubble-blowers:

A woeful fate awaits you here,
You'll be single, I greatly fear.

Number two is the one to take,
You'll be engaged within a week.

Blow your bubble right through here
And you'll be married in just one year.

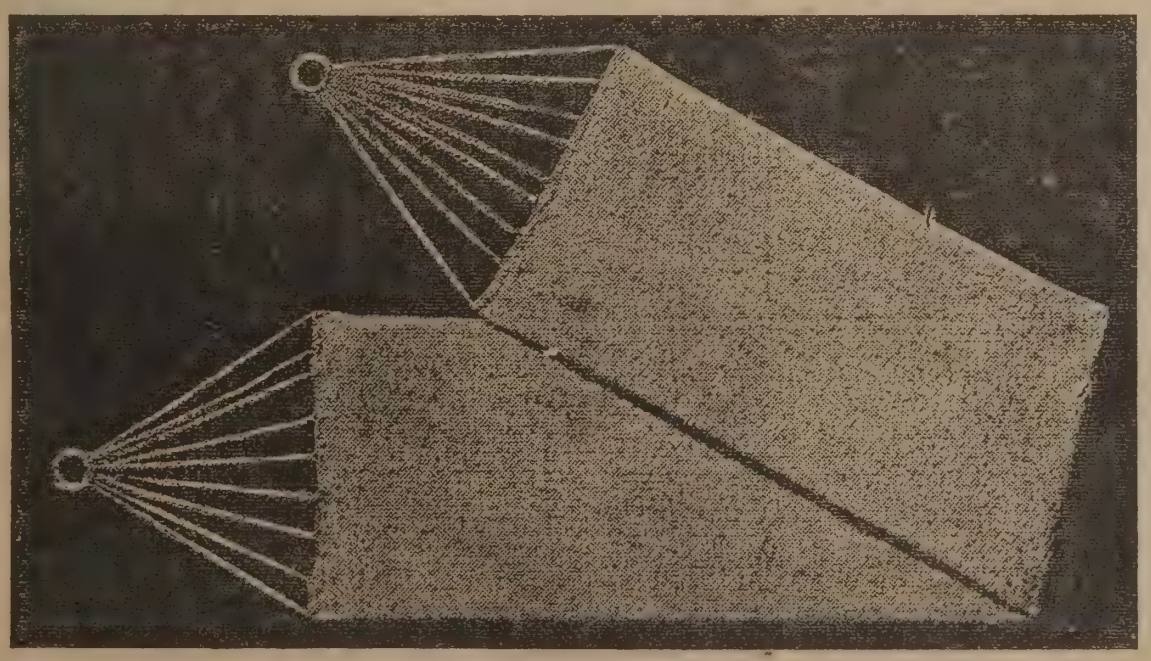
Shooting Contest.

With an air-rifle and darts one can have a delightful shooting contest indoors. A large board with various pictures pasted upon it should be placed in a conspicuous position. The symbols should be those of St. Valentine. If a girl and a boy hit the same object each becomes the other's valentine for the current year. If two of the same sex shoot the same symbol they will be rivals. Some pictures and their meanings are: Cupid, too many lovers; clasped hands, you will wed within the year; dove, a meek spouse; an arrow, a wounded heart; a blank, not this year.

A basket contest is interesting. Let the players "choose up" as in a spelling match. Distribute red cards to one group and gold cards to the other. Arrange the contestants on opposite sides of the basket, then let them try to toss the cards inside. The group caging the greatest number of goals is the winner of the tournament.

Popular Crochet Designs

By WINNIFRED WORTH



See Saw Back Drier.

This convenient article requires 27 inches Turkish toweling, 16 inches wide. Double the toweling and double crochet both ends. Begin at end, make chain of 39 sts. and fasten by dc. in ring, make 1 more dc. in ring, then ch. 39, sk. 4 dc. in end of drier, fasten by sl. st. in 5th st. Slip st. over 4 dc. and begin another chain until there are 9 chains. Fill ring with dc. Repeat on the other end. The ring must be large enough to allow thumb to go through.

Go-to-School-Monday

Why waste the next three months? Plenty of time to get our short course in Bookkeeping, Business, Arithmetic, Commercial Law, etc.

Take care of your farm accounts more accurately by taking our Farm Set.

Our Shorthand and Bookkeeping graduates are always in demand.

Annual reunion February 16.

Northwestern Business College

M. M. Higley, Pres. Spokane, Wn.

Patterns

1496—Ladies 'House Dress with Reversible Closing: Cut in six sizes, 34, 36, 38, 40, 42 and 44 inches bust measure. It requires six yards of 44-inch material for a 36-inch size. The skirt measures three yards at its lower edge. Price 10 cents.

1950-1959—Ladies' Costume: Waist 1950 cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 1959 cut in seven sizes, 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires five and seven-eighths yards of 44-inch material for a 36-inch size. The skirt measures about three and an



eighth yards at the foot. Two separate patterns, 10 cents for each pattern.

1958—Girls' One-Piece Dress: Cut in four sizes, 4, 6, 8 and 10 years. It requires two and a half yards of 44-inch material for a 6-year size. Price, 10 cents.

1615—Ladies' Camisole in Kimono Style: Cut in three sizes, small, medium and large. It requires one and a quarter yards of 36-inch material for a medium size. Price, 10 cents.

1960—Dress for Misses and Small Women: Cut in four sizes, 14, 16, 18 and 20 years. It requires four and a half yards of 44-inch material for an 18-year size. The skirt measures about two and two-thirds yards at the foot. Price, 10 cents.

1972—Juniors' Dress: Cut in three sizes, 12, 14 and 16 years. It requires four and three-fourths yards of 44-inch material for a 14-year size. Price, 10 cents.

USE THIS COUPON FOR PATTERN ORDERS.

Enclosed find ..... cents, for which send me the following patterns:

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

Catalogue Notice.

Send 10c in silver or stamps for our up-to-date spring and summer 1917 catalogue, containing 550 designs of ladies', misses' and children's patterns, a concise and comprehensive article on dressmaking, also some points for the needle (illustrating 30 of the various, simple stitches), all valuable hints to the home dressmaker.

Mustard Plaster

So It Will Not Blister the Skin

By ALICE W. BARLAND.

In making a mustard plaster for a lame back, or any like ailment, if the mustard is made into a paste with the white of an egg instead of water the plaster will give the desired heat without causing the skin to blister. I always place a thin cloth over the plaster so the mustard does not come in contact with the skin.

Every housekeeper should try out the comfort of keeping always on hand a package of common court plaster and a bottle of new skin. So often some member of the family cuts or scratches his hand and still must go on with the work. It is such a relief to have at hand just what is needed at the moment. These little articles cost almost nothing, but are worth much in saving nerve strain. Most of us women live at too high a tension because there are so many demands upon us. It has always been so and I doubt not it always will be the same. "Mother" is the one who must fix up the hurts of soul, body and clothing. I am reminded of a remark of my boy one day when he was about 10 years old. He had torn his trousers in what seemed to him a perfectly hopeless way. I mended them to his entire satisfaction. He looked the work over, put on the trousers and looked them over again and said: "Gee, mothers are great institutions!"

Wood Work

Easily Cleaned by Using Coal Oil

What is the most helpful thing you have learned during the past year in your experience with housekeeping? Let us pass it along to other housekeepers.

To the Editor of the Farmer: In cleaning woodwork, especially white, use one tablespoonful of coal oil to one quart of warm water. This does not damage the paint and saves so much time, as it is much more quickly done.

MRS. W. E. CHASE.
Mount Tabor, Ore.

George's Valentine.

Do you remember the valentine
You got when you were a kid!
How the paper lace and the cupids fine
Seemed lovely to your childish mind
As to all the others they did?

There were Annie and Lucy and Annie Hill,
And Susie and Carl and George and Will,
There were Pomp and Meigs and their lister 'Line,
And each sent a Val. to each of the nine.

Only George; and he was so small
That they didn't send any to him at all;
When George's father brought the mail from town
With gay-colored Vals. all weighted down,

And saw none at all for his poor little George.
He wrote one and mailed it; 'twas loving and large;
'Twas blue with lace, and cupids all red,
And a verse on the inside cover said,
"My love for you shall ever flow
Like water down a 'tato row."
So we had to admit, tho' ours were fine
That George had the funniest Valentine.

—Selected.

Fruit Canning

Is a Science, Says C. R. Campbell

Out of over 400 quarts of fruit and vegetables canned last summer and fall by Mr. and Mrs. C. R. Campbell of Bellevue, Wash., not one can was lost. There's a reason, of course.

"Canning fruit to keep is largely a matter of science," Mr. Campbell says. "There are two places where the average housewife is apt to make a mistake. First, in the matter of rubbers. We never use the rubbers which come with the jars, for the reason that they are flimsy and ill adapted to their purpose. And we never use the same rubbers twice. Rubbers are cheap.

"The second point is in reference to tops. Have you ever stopped to think that between the metal top itself and its porcelain lining is a space which is almost certain to become filled with fruit juice during the canning season? Pour a little water into a cover, after it has been apparently rinsed clean, and let it seep in under the lining. Then drain it out and see whether or not it brings the color of fruit juice with it. And then remember that after this juice has dried, it is impossible to get it out, and also that it forms an ideal breeding place for germs."

In meeting this difficulty, Mr. Campbell uses boiling water in which soda is dissolved to rinse the cans just before putting them in place.

Metal Shoes.

Metal shoes, resembling skates, which grip firmly when weight is applied to them, have been invented to enable men to climb steel frames of buildings, bridges and some types of poles.



They wear like iron—

Mayer

HONORBILT SCHOOL SHOES

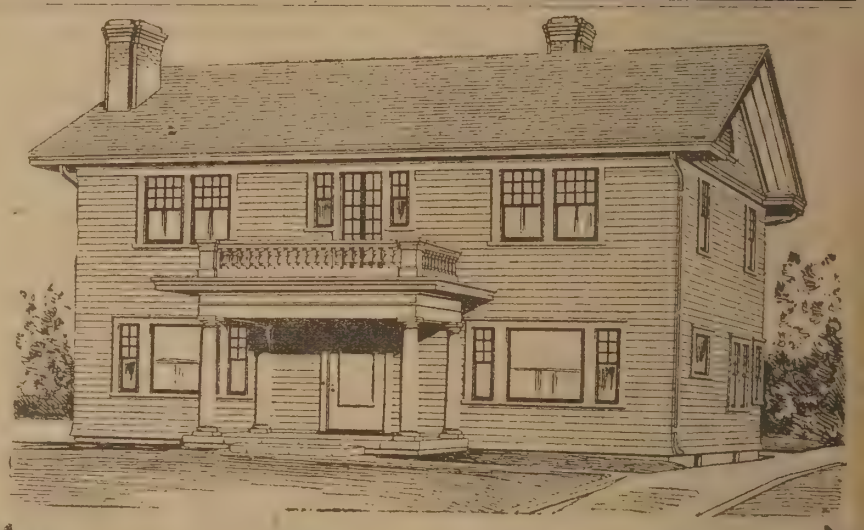
Ask your dealer for Mayer Shoes. Look for the trade-mark on sole.

F. Mayer Boot & Shoe Co.
Milwaukee, Wis.

Western Branch: Washington Shoe Mfg. Co., Seattle, Wash.

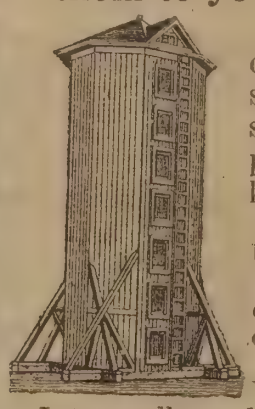
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Loving Nieces and Nephews: This is the shortest month of the year, but it has more celebrations in it than any other. Today, in many places, this is Arbor Day. No doubt where many of the Corner children live they see no use in planting trees, since most of the time and work is spent in cutting them down and getting rid of the stumps. And yet think what a desolate place this world would be without trees.

Four days away is Lincoln's birthday. Lincoln loved little children and I think nearly every child that knows of his great and useful life loves him.

February 14 is St. Valentine's day. This is a funny old day, but remember, it is better to be kind than funny.

The birthday of Washington, the father of our country, comes on February 22, and it is a great day. It is quite right to set aside his birthday to celebrate, for it was he more than any other one man, that made it possible for us to have a free country in America.

Arbor day teaches us to do things for others.

Valentine's day is a day of love.

The two birthdays should inspire us to do better things.

Affectionately,
AUNT NELLIE.

GIRLS SERVE HOT LUNCH TO CHILDREN AT SCHOOL

Dear Aunt Nellie: I am going to write to you for the first time. I am 10 years old and my birthday is the 17th of May. I am in the fifth grade. I have a sister and brother. My sister is younger than I and my brother is older. My sister's name is Elma and my brother's name is Rello. We live on a ranch of six acres. I have a pet dog. His name is Teddy. My brother has a pet cow and calf. My father and mother are deaf-mutes. I think that my father and mother will get so they can talk. My father has gone away to work. I am going to tell about our school now. There are four rooms in the whole schoolhouse. There are three classrooms and one cooking room. The girls serve hot lunch at school. There are about 48 children in our school. There are 12 windows in two rooms and 11 in the other room. My teacher's name is Mr. Howell. I like my teacher very much. We have two halls. We have a tennis court and playgrounds. We used to have two swings, but on Hallowe'en night some boys took them down. I would like to correspond with Minnie Ellison.—Dorothy Pierson, Freeland, Wash.

PUPPY BARKS AT EVERY ONE WHO COMES INTO THE YARD

Dear Aunt Nellie: I like to read the Farmer and especially the Children's Corner. I have some girl friends who have written. I read the Farmer every time it comes. I live about a mile from school. I am in the sixth grade and am 11 years old. There are about 44 pupils in my room and there are eight rooms in the building. We have a large gymnasium and we have picture shows every Friday. We also have a large high school. We have two horses and a colt. The colt is about 8 months old. His name is Dick. My brother has a puppy that barks at everybody that comes in the yard. Every morning I help mama with the dishes before I go to school. I start about 15 minutes after eight for school. I haven't been late or absent for one year and hope I won't be this year either. I almost forgot about the cows. We have eight milking cows and three calves. We also have one little bull calf. I wish that some one would write to me soon because I get very few letters.—Bertha Gamble, Bothwell, Wash.

VERA ENJOYS READING THE COUSINS' LETTERS

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We take the Farmer, and I enjoy reading the letters of your nieces and nephews very much. I think Inez Gagen wrote a very interesting letter about her trip back east. I am a girl 13 years old. My birthday is October 14. Have I a twin? I would like to correspond with any girl of my own age. I live on a farm of 160 acres. We have seven horses and five head of cattle. The horses' names are Buck, Pinto, Nan, Carrie, Jack, Frank and Pansy. The cows' names are Buttercup, Molly, Josephine, Blossom and Bill. We have a dog. His name is Ring. We have six cats, three little kittens and three old ones. Also four pigs and a nice flock of turkeys and chickens. I have three brothers and two sisters. Their names are Percy, Preston, Robert, Irma and Jennie, who is a sweet little baby 13 months old.

I go to the Valley school and am in the seventh grade. I have two miles to go, and I walk. My teacher's name is Mrs. Mary L. Whiteside.—Vera V. Gensel, Aeneas, Wash.

STARTED A BANK ACCOUNT WITH HIS RABBIT MONEY

Dear Aunt Nellie: I am 8 years old. My birthday is August 13. I go to the Ocks school. I drive three and a half miles to school every morning. My pony's name is Billie. There are 12 children in our school, six boys and six girls. Our teacher's name is Mabel Snyder. I am in the second grade. I will tell you about my pet rabbits. They are white as snow, with pink eyes. Last summer I sold 15 rabbits at $1 a pair and I made $7.50, with which I started a bank account. When I get enough money together I am going to buy me a nice big colt.—Charles J. Maurer, Mohler, Wash.

THINK HOME IS BEST EVER; THEY HAVE LOTS OF FUN

Dear Aunt Nellie: I am 10 years old and my birthday is December 18. I have three brothers and three sisters. We live on an 80-acre farm. We will have 21 cows to milk this summer. We have two horses, one pig, and one little white dog that my brother and sister like very much. We have 50 hens. We think our home is the best ever for we have lots of fun. There are 24 pupils in our school. My teachers name is Mrs. Look. I like her very much. I would like to become a member of the Children's corner.—Ruth Johnston, Bow, Wash.

HAVE LOTS OF FLOWERS, FOR PAPA IS A FLORIST

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old. My birthday is on the 25th of December. My father is a florist and sometimes I help him plant little plants. We have a great many flowers as father is the only florist in Kent. The flowers I like best are lilies of the valley and violets. I am the only child in the family. I am in the third grade at school. My teacher's name is Mrs. Snell.—Rosa Sanli, 509 Harrison street, Kent, Wash.

HAVE TWO PONIES, CALL THEM LADY AND PRINCE

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, and I hope it will not be the last. I am 11 years old, and in the sixth grade. My birthday is the 25th of August. My teacher's name is Miss Flora Jean English. I think she is a very good teacher. I live a half mile from the school. There are about 28 scholars in the school. Our schoolhouse has only one room. I have two sisters and one brother. My sister's names are Dorothy and Fay, and my brother's name is Warren. We have two Shetland ponies. They are spotted, sorrel and white. Their names are Lady and Prince. We have 22 other horses. One is a sorrel pony named Topsy. We have six cows. My cow's name is Tiny. The other cows' names are Lissy, Pansy, Daisy, Midget and Bonny. I can ride my cow; in the summer I ride her to pasture. We have about 30 rabbits. I have a little black rabbit that I caught when it was very little. I fed it until now; it is large. I live about five and one-half miles from Colfax, and love to live in the country very much. I live on an 880-acre farm. My papa takes The Washington Farmer and the first place I turn to is the Children's Corner.—Elsie Wiseman, Colfax, Wash.

LILLIAN GOT A BEAUTIFUL, BIG DOLL FOR CHRISTMAS

Dear Aunt Nellie: I was the first one to go and get the mail yesterday down to the mail box to see if The Farmer came, and when I saw my name in the Children's Corner, I was so glad, and mamma was, too. I had a jolly time Christmas. My brother got me a beautiful doll, 29 inches long, and as big as a two-months-old baby. She has real hair (curly) and real eyelashes, four teeth and has the cutest fingers and toes. I like to sew, so I have made two or three dresses already. Mamma got me a hair ribbon and a friend of mine gave me a big box of chocolates. I love to read the children's letters very much. I can tat, crochet and embroider. My brother Richard has the measles.—Lillian A. Motton, Route 2, Box 49, Friday Harbor, Wash.

ALICE LOVES TO HELP MOTHER WITH THE WORK

Dear Aunt Nellie: I have been reading the Children's Corner and I think it is real nice. I am 11 years old and am a great help to mother. I like to help mother work. Sometimes my little sister and I get up and get breakfast almost ready and then the rest get up. Mama helps us finish getting breakfast ready. I make real nice bread. At night when mama and I get supper over and all the dishes washed, we read in some books or papers.—Alice Miller, Box 63, Mayview, Wash.

WELCOME TO OUR CLUB, LITTLE BLUE-EYED GIRL

Dear Aunt Nellie: I would like to belond to your club. I am 10 years old and am in the fifth grade. I have light hair and blue eyes. I live on a farm of 40 acres. We have two horses, seven cows and three heifers. I have two pets. One is a black and white kitten and the other is a heifer. I have a little sister 3 years old. She has light brown hair and blue eyes. I also have another sister and a brother. I live half a mile from our school. My teacher's name is Miss Hazel Chandler. We have two rooms. All of the children below the sixth grade are in one room and the children from the sixth grade up to the tenth are in the other room. If I pass this year I will be changed into that room.—Lenore Fox, R. F. D. No. 1, Washougal, Wash.

LIKES TO HELP MOTHER SO SHE IS PIECING QUILTS

Dear Aunt Nellie: I have read the letter to the Children's Corner for a long time, but I never wrote before. I am 10 years old. I passed into the fifth grade last year, but I have been sick with curvature of the spine, so I could not go to school this year. I have two brothers and two sisters. I like to help my mamma, and as I can't walk around or lift anything heavy, I am helping her by piecing quilts. I wonder if any of the cousins have any pieces of calico, gingham or outing left from thin school dresses, that they would send me to put in my school quilt. Mamma says that if I am very, very careful with my stitches, she will let me take it to the fair next fall.—Leone Waldron, Clinton, Wash., R. F. D. Box 18A.

GIRLS HAVE BALL TEAM; PRACTICE IN SCHOOL GYM

My dear Aunt Nellie: I have been reading so much lately in the Children's Corner that I thought I would like to see my name printed. I live about one and one-half miles from Johnson, Wash. I am 13 years old and my birthday is on September 21. I am in the eighth grade, and it is not more than two weeks until we have our mid-year exams, although we are just having our Christmas vacation. We have a large gym at school and we girls have a team. We practice every other day.—Myrtle Sodorff, Box 62, Johnson, Wash.

READS EVERY LETTER THAT SHE SEES IN THE CORNER

Dear Aunt Nellie: I have read every letter that I have seen in the Farmer. We have 10 head of cattle. We have 22 pigs altogether, three big ones and 19 little ones. 75 chickens and two horses. We live on a 52-acre farm. I have three pets, two cats and one dog. The dog's name is Tom. He's black and white. I'm 10 years old and in the fourth grade. There are 22 pupils in the third grade, and 20 in the fourth grade. My teacher's name is Miss Hinkly. My birthday is in August.—Waldemar Johnson, R. F. D. 2, Box 3, Rochester, Wash.

WATCHED FOR HALF A YEAR, BUT DIDN'T FIND A TWIN

Dear Aunt Nellie: I would like to become a member of the Children's Corner. We have two dogs, two white cats, one goat, 50 chickens and 18 head of cattle and two horses. I am 13 years old. My birthday is August 26. My brother is six years older than I am. I have watched the Farmer for one-half year, but I did not find a twin. I can crochet and tat, and skate.—Albertha Capaan, R. F. D. 2, Box 37, Oak Harbor, Wash.

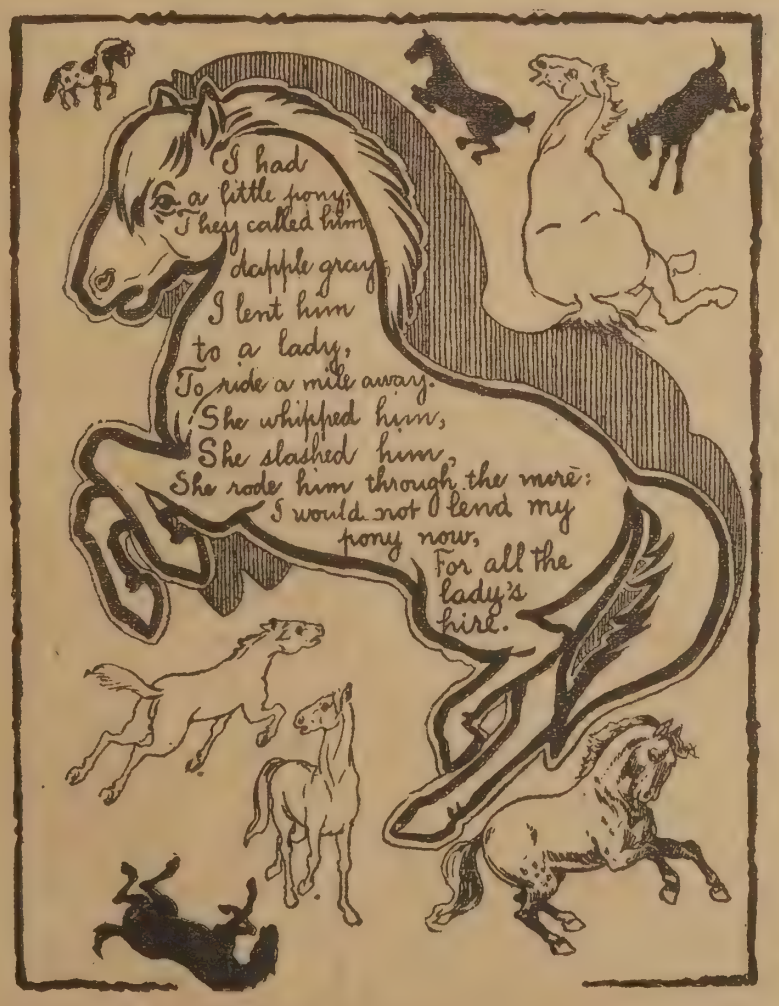
THE COUSINS ARE GLAD TO HAVE LOIS WRITE

Dear Aunt Nellie: I am 9 years old and in the third grade. My teacher's name is Miss English. I have two rabbits, one is brown and white and the other is black with some white on it. We have six cows. One is mine; it is a calf. I will close for fear of the waste basket.—Lois Fay Wiseman, Colfax, Wash.

EDNA RIDES HER PET HORSE TO TOWN ALONE

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner, but I read the letters and like them very much. I am going to write. I am 8 years old and live on a 160-acre farm. I have a pet horse. Her name is Maude. I ride her to town myself.—Edna Smith, Riverside, Wash.

My Little Pony



Grain and Produce Markets

Chicago Grain.

CHICAGO, Feb. 3.—Wheat prices shot skyward today after a downplunge of 6 cents. The rise following amounted to 14 cents, the greatest change values have shown in a single day since the beginning of the European war. Excited buying on the part of speculators who had overestimated the depressing effect of a severance of American relations with Germany was chiefly responsible.

The close was wild in wheat at $1.67 7-8 to $1.68 3-8 for May, and $1.47 3-4 to $1.48 1-8 for July, with last trading as a whole 3 3-8c to 7 5-8c above yesterday's finish. Corn wound up at a net advance of 1c to 1 1-2c, and oats with a gain of 5-8c to 1c. In provisions the result varied from 7c decline to a rise of 5c.

Some bullish sentiment was engendered by assertions that with the navies of England, France and the United States patrolling the ocean, shipping would be facilitatel rather than hampered.

Corn and oats, like wheat, displayed temporary acute weakness in response to the news of the diplomatic rupture with Germany.

Provisions gave way as much as 57c in some cases owing to the disclosure of the stand taken by the government at Washington. In the end though the market averaged exactly the same as before relations with Germany were cut.

Pacific Northwest Grain.

PORTLAND, Ore., Feb. 3.—Wheat—Firmer; no trading. Spot bids, 3 to 5 cents higher. Bluestem, $1.50; forty-fold, $1.48; club, $1.46; red Russian, $1.43.

Barley—Higher. No. 1 feed, $38.50.

SEATTLE, Feb. 3.—Wheat—Bluestem, $1.49; Turkey red, $1.48; forty-fold, $1.46; club, $1.46; fife, $1.46; red Russian, $1.43.

Barley, $38 per ton.

WILBUR, Wash., Feb. 3.—Bluestem, $1.30; club, $1.25. Oats, $37. Barley, $37. No sales are reported.

San Francisco Grain.

SAN FRANCISCO, Feb. 3.—Wheat—Firm; no trading.

Barley—May, $2.28 1-2b, $2.30a; December, $1.60b; February, $2.22 1-2b.

Minneapolis Grain.

MINNEAPOLIS, Feb. 3.—Wheat slumped 6 cents, but later swung upward. Corn and oats swayed in sympathy. Wheat receipts, eight cars, compared with 287 a year ago.

May wheat opened $1.65 to $1.65⅝; high, $1.72¼; low, $1.59⅞; closed, $1.71¾@1.71⅝.

July opened $1.62⅝@1.62¾; high, $1.69½; low, $1.58; closed, $1.69½.

Cash wheat—No. 1 hard, $1.79¾@1.81¾; No. 1 northern, $1.72¾@1.75¾; to arrive, $1.71¾@1.73¾; No. 2 northern, $1.69¾@1.75¾; No. 3 wheat, $1.59¼@1.71¾; No. 2 durum, $1.76½@1.89½; No. 2 hard Montana, $1.71¾@1.73¾.

Corn—No. 3 yellow 94¾@95¾c.

Oats—No. 3 white, 51¼@52¼c.

Flax, $2.87@2.93.

Flour—Unchanged; shipments, 40,565 barrels. Barley, 85c@$1.17.

Rye, $1.35@1.36. Bran, $31@31.50.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1916-17 and 15-16 were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1916-17	3,889	842	285	2,739
1915-16	6,534	760	1,110	2,970
Portland—				
1916-17	3,750	1,686	149	1,575
1915-16	9,156	822	1,330	1,539
Total—				
1916-17	7,637	2,523	434	4,314
1915-16	15,690	1,572	2,490	3,509

Seattle Wheat.

SEATTLE, Feb. 3.—The break of 11 cents per bushel following the latest ultimatum on shipping by Germany did not produce the selling rush that prevailed in the east, but rather induced the Washington farmer, who is not friendly to such a move, to more closely clutch the grain he had on hand.

Long inured to the views of Washington grain growers, millers did not expect that their declining bids would bring forth any wheat, and their slate to that extent held intact. Bid prices in the country showed more of a weakness than in the open market, where a spread of only 11 cents predicated on the previous day was effected. The bulk of what remained of Washington wheat was sold last week and the week previous up to $1.60. The best that millers would offer for bluestem and turkey red was $1.35.

Since the Washington wheat trade has been on a world basis the activities that influence prices in all parts of the world are being carefully weighed without partizanship, feeling or a desire to prophesy. It is assumed by dealers that Europe has for some time been expecting the last move by Germany, and the neutral countries now involved in the conflict prepared for it by laying in ample stocks of grain. In a word, many seasoned traders here feel that before the next harvest the war will be over and the serried ranks returned to peaceful pursuits. Wheat futures run more logically and pointedly now to conditions after the war than at any time during the last year.

One of the problems of the future is whether the winter wheat of the country is seriously damaged. Millers say little has been planted in this state due to dry fall weather. On the prospect that the new crop will be high millers report sales of September wheat at $1.10 and $1.50, although both sales were in small lots.

The flour market declined 20c per barrel before the date of the German announcement, but has remained stationary through the balance of the week, riding down the excitement of Thursday.

Portland Wheat.

PORTLAND, Ore., Feb. 3.—The wheat market was firmer at the close of the week with the advance at Chicago, but trade was inactive. Dealers were not disposed either to buy or sell freely in view of the uncertainties. Some of them, however, take a bullish view of the situation and predict the highest prices of the year unless the government steps in and takes control of the supply. As stocks in this country are now dangerously low there is fear in some quarters that this may occur. In the meantime farmers are not offering their grain on the market.

Closing prices at the merchants' exchange for February delivery were: Bluestem, $1.50; forty-fold, $1.48; club, $1.46; red Russian, $1.43. March prices were 1 to 2 cents higher than February.

Oats and barley were easy in the latter part of the week, but firmed up at the close. Both lines were dull. Practically no business is passing in the flour market, either for local or eastern account. Hay continues depressed owing to large stocks on the track here.

Seattle Market.

SEATTLE, Feb. 3.—The local ranch egg market broke sharply today and practically during the entire day quotations were in a downward condition. First sales were at 38c. A fall to 37c and then to 36c, with declining bids to producers, which carried them to 30c, followed the arrival of continued spring weather and a large lot of Petaluma eggs.

The butter market is easier in spots today, due principally to sentiment from warm weather. The cream supply has not increased, and California butter costs too much money at shipping points to bring in here. The condensaries have begun the manufacture of butter. Due to war conditions, jobbers believe the export trade in condensed milk will decline in volume from now on.

Cheese is stronger. Brisk selling is expected during the latter part of this month.

Wool.

BOSTON, Feb. 2.—The Commercial Bulletin will say tomorrow:

"The last week brought increased activity in the wool trade, and the German note has certainly not weakened the situation. On the whole this latest international development would seem to be a further element of strength. Most of the activity of the week has been in scoured wools suitable for woolen mills which show advanced prices, but the worsted interests have not been altogether idle."

Scoured basis: Texas fine, 12 months, $1.05@1.10; fine eight months, 88@90c.

California, northern, $1.05; middle county, 90@95c; southern, 70@75c.

Oregon, eastern No. 1, staple, $1.10@1.15; eastern clothing, 98c@$1; valley, No. 1, 92@95c.

Territory, fine staple, $1.20@1.25; half blood combing, $1.10; 3-8 blood combing, 85@88c; fine clothing, 95c@$1; fine medium clothing, 92@95c.

Pulled, extra, $1.05@1.10; fine A, 98c@$1; AA, 90@95c; A supers, 83@85c.

Butter, Eggs, Cheese.

CHICAGO, Feb. 3.—Butter—Unchanged; receipts, 6210 tubs.

Eggs—Lower; receipts, 4662 cases. Firsts, 42@42½c; ordinary firsts, 40@41c; at mark, cases included, 40@42c.

SAN FRANCISCO, Feb. 3.—Butter—Fresh extra, 41½c; prime first, 40c.

Eggs—Fresh extras, 36½c; pullets, 33c.

Cheese—Young Americas, 21½c.

ELGIN, Ill., Feb. 3.—Butter—Fifty-five tubs sold at 39c.

Portland Market.

PORTLAND, Ore., Feb. 3.—The shortage in butter has become acute. Storage stocks are reduced to the poorest grades and the supply of cream is now at the minimum. As Seattle and San Francisco markets are high, Portland creamery men have been forced to advance prices another cent. The buying price of butterfat has been raised 2 cents.

Eggs have sagged under large receipts to the 30-cent mark. It is thought this price will attract outside buying and check the decline.

Five cars of Tillamook cheese were shipped east in the past week and a Canadian order for 1000 cases was received by a local firm. The market is strong, but the factories fear an advance would stop local buying, by putting cheese out of the 25-cent retail class.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $34.50@35.50 per ton.

Corn—Whole, $47; cracked, $48 per ton.

Millstuffs—Bran, $26.50 per ton; shorts, $30.50.

Barley—No. 1 feed, $38@39; brewing, nominal; rolled, $42@43.

Hay—Buying prices. Timothy, eastern Oregon, $19@20; alfalfa, $15@16; clover, $11; grain, $12@13.

Eggs—Oregon ranch, case count, 30@31c per dozen; candled, 32@35c.

Poultry—Hens, 17@18c; ducks, 18@20c; turkeys, live, 18@20c; dressed, 22@25c; geese, 12@14c.

Butter—City creamery, prints, 42@44c per pound; cubes, 40c.

Cheese—Oregon triplets, 20c; Young Americas, not quoted.

Dressed meats — Veal, 14@14½c; pork, 13@13½c.

Hops—1916 crop, 5@9c.

Potatoes—Oregon, jobbing price, $2.50@2.75 per cwt.

Onions—Buying price, $6 for country points.

Wool—Eastern Oregon, fine, 28@33c; coarse, 33@36c; valley, 35@41c.

Beans—Small white, 11 1-4c; large white, $11.10 per 100 pounds.

Hides—Salted hides (25c lbs. and up), 18c; salted stags (50 lbs. and up), 14c; green and salted kip (15 lbs. to 25 lbs.), 18c; green and salted calfskins (up to 15 lbs.), 27@28c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 13c; dry hides, 30c; dry salt hides, 25c; dry horse hides, $1 to $2; salt horse hides, $3 to $5.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $2.25@2.50 cwt; sweet potatoes, $6

Apples—Washington apples, cooking, 60@85c; eating, $1@1.25; Wageners, 85c@$1.35 box; Jonathans, $1.25@1.35 box; Delicious, large, $1.75@2.25 box; Rome Beauties, $1.25 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Coin, 36c lb; Gold Leaf, 40c lb; Better Butter, 40c lb; Hazelwood, 40c lb; Peerless, 38c lb; Jersey Belle, 39c lb; Attalia, 40c lb; Diadem, 40c lb; Jersey, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 28½c; Hazelwood full cream triplets, 22c lb; Hazelwood Young America, 24c lb; Wisconsin limburger, 29c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $12@14; fresh eastern eggs, $12 case; eastern storage eggs, $10.50 case.

Live Poultry—Springs, 14c lb; hens, 13@14c lb; old roosters, 6@7c lb; ducks, 11@13c lb; turkeys, 20@27c.

Dressed Poultry—Hens, 17c lb; springers, 17c; old roosters, 10c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs. and up, 16½c; salted cured, 19c; green bulls and stags, 13c; salted cured, 15c; kip, 15 lbs. to 25 lbs., 21c; calf skins up to 15 lbs., 30c; dry flint hides, 32c; dry salted, 27c; dry calf skins, under seven lbs., 38c; dry sheep pelts, full wooled, 20@23c; dry shearlings, 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2 each.

WORK ON BIG DAM

Four Years and $2,000,000 Cost.

C. E. Crownover, manager of storage construction for the Yakima irrigation project, has moved his office from Lake Keechelus to North Yakima, where he will direct the building of a dam costing $2,000,000, at McAllister Meadows. The work will continue for four years. The first year will be given over to the building of camps, storehouses, shops, offices, mess houses and other equipment for handling the work. The government expects to employ 500 to 600 men during the construction season.

Live Stock Quotations.

At Chicago.

CHICAGO, Feb. 3.—Hogs—Receipts 8000; strong, 5c to 10c above yesterday's average. Bulk, $11.70@11.90, light, $11.25@11.85; mixed, $11.35@12; heavy, $11.40@12; rough, $11.40@11.55; pigs, $9.25@10.50.

Cattle—Receipts, 100; steady. Native beef cattle, $7.75@12; western steers, $7.75@10.15; stockers and feeders, $6@9.10; cows and heifers, $5@10.25; calves, $10@14.

Sheep—Receipts, 1000; strong. Wethers, $10.40@11.75; lambs, $12@14.65.

At St. Paul.

SOUTH ST. PAUL, Feb. 3.—Estimated receipts at the union stock yards today: Cattle, 118; hogs, 145; sheep, 6.

Cattle—The trade during the week has been on a somewhat more normal basis than last week. Trade today was negligible.

Hogs—Hardly enough stuff to make a hog market arrived here today. The two bunches which were sold cashed at $11.35, yesterday's top, reflecting a steady market. The week closed with prices 15c to 20c higher than at the close last week. Receipts have been very light, on account of weather conditions.

Sheep—Steady prices were paid for everything sold. For the week trade in the sheep house has been fairly good at steady to strong prices.

At Portland.

PORTLAND, Ore., Feb. 3.—Hogs—Steady; receipts, 234. Bulk of packing grades, 11.30@11.35; heavy packing, $11.35@11.40; light packing, $11.30@11.35; rough heavies, $10.15@10.35; pigs and skips, $10@10.50; stock hogs, $8.50@10.

Cattle—Steady; receipts, 8. Steers, prime light, $8.50@8.75; prime heavy, $8.75@9; good, $8@8.40; cows, choice, $7.50@7.75; medium to good, $7@7.25; ordinary to fair, $6@6.75; heifers, $4@7.50; bulls, $3.50@5.50; calves, $6@8.

Sheep—Steady; receipts, 7. Lambs, east of mountains, $12@12.25; lambs, valley, $11.50@11.75; lambs, good, $11@11.50; choice yearling wethers, $10@10.50; good yearlings, $9.75@10; choice ewes, $9@9.25; heavy ewes, $8.50@8.75.

At Seattle.

SEATTLE, Feb. 3.—Receipts, 409 hogs; market steady.

Hogs—Prime light, $11.80; medium to choice, $10.55@10.85; smooth heavy, $10.30@10.75; rough heavy, $9.45@10.15; pigs, under 150 lbs., $8.50@9.15.

Cattle—Prime light steers, $9; medium to choice, $8.25@8.50; common to good, $6.50@7.75; medium to choice, $7@7.25; common to good, $5@6.50; best bulls, $5@5.75; common bulls, $3.50@4.50; calves, $7@9.

Sheep—Prime lambs, $10.25@10.50; good lambs, $9.75@10; wethers, $8.50@9; ewes, $6.50@8.

Spokane Stock Yards Saturday.

Hogs—Receipts, none; market strong. Prime heavy, $11.55@11.60; prime light, $11.30@11.35; prime mixed, $10.40@11; rough heavy, 10@10.50; stockers, $7@8.75.

Cattle—Receipts, 30; market strong. Prime heavy steers, $9; prime light steers, $8.50@8.75; good steers, $8@8.50; stockers and feeders, $5.50@6.50; prime cows, $7.25@7.75; good cows, $6.50@7; best heifers, $7@7.75; bulls, $3.50@6; calves, $6.50@9.

Sheep—Receipts, none; market strong. Prime lambs, $11.50@12; common lambs, $10.50@11; best yearlings, $9.75@10.50; good yearlings, $8@9; best mutton ewes, $7.75@8.25; common ewes, $6.50@7.50.

Potatoes at $3.

Harry E. Mullen, a farmer living on the South Santiam river, near Albany, Ore., received $3 a hundredweight for 400 bushels of potatoes. The potatoes were from choice stock and of exceptional quality.

Cooperative Creamery Elects.

Sunnyside Cooperative creamery of Sunnyside, Wash., at its recent annual meeting relected the old board by acclamation. The annual reports shows the sales of butter to be $13,921 more than that of the preceding year. Sixty-five members and patrons sat at the banquet table at the Litchy cafe.

Who Fill Our Pulpits?

According to statistical reports recently compiled from the various colleges, it is found 33 per cent of our ministers come from rural homes.



Hides, Fur, Wool, Horse Hair, Metal and Rubber. We are the largest dealers in the Inland Empire. Highest markets paid. Prompt returns. Deal with a home firm

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

HELP WANTED—MALE 3

BE AN AUTO AND TRACTOR EXPERT. $75 to $200 a month—learn in six weeks. Thousands of successful graduates. Catalog free. Rahe's Auto School, 532 East 11th st., Kansas City, Mo.

STEADY EMPLOYMENT, PLEASANT, profitable work; day and night classes; few months learning; position secured. Watchmaking - Engraving School, 218 Commonwealth bldg., 6th and Ankeny, Portland, Ore.

WANTED—EXPERIENCED FEEDER AND buyer of live stock. Address Bx. 92, R. 1, Mt. Vernon, Wash.

SITUATION WANTED—MALE 21

MARRIED COUPLE WANT FARM WORK; experienced; wife good cook. P. O. Box 1024, Spokane.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER:

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.

Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

SASH AND DOORS.

The best place to buy your sash and doors is from O. B. Williams Co. We not only sell for less, but will give you satisfaction, or money back. We own our own mill make prompt shipments, and guarantee safe delivery. Send for our big, illustrated catalog, No. 27, mailed free, post paid, promptly on request.

6 cross panel doors, No. 1	$1.33
Craftsman doors	1.75
Glass doors, as low as	2.25
24x28, 2-light window	1.46
Bungalow casement sash	.56
3x6 hot bed sash	2.25
1-ply Gold Seal roofing	1.25
3-ply veneer panels, square foot	.05½

Cupboard doors, frames, finish, mouldings, builders' hardware, glass, etc.

O. B. WILLIAMS CO.
1943 FIRST AVE. SO. SEATTLE, WN.

CUT YOUR OWN TIMBER

on a Wheland Portable sawmill. You will save time and big money on your next lumber bill. With this sawmill, you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine.

Write for catalog and full details.
CONTRACTORS' EQUIPMENT CO.
18TH AND UPSHUR STREETS,
PORTLAND, ORE.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

STRAWBERRY BOXES.

We have all kinds of berry boxes and crates, butter and egg cases. TRY OUR CEDAR SHINGLES. HEDLUND BOX & SHINGLE CO., SPOKANE.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS—WANTED 63

WANTED—ABOUT 20 TONS, 8 TO 14 gauge galvanized hop wire; will pay $20 ton f. o. b. Portland. Cash.

L. B. BARDE,
240 FRONT ST., PORTLAND, ORE.

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

WANTED — KEROSENE OR GASOLINE brooder stoves. State size, price and make. Buena Vista Stock Farm, Kennewick, Wn.

WANTED—KRESKY FRESH AIR BROODer stove. F. H. Volland, Kennewick, Wn.

LIGHTING EQUIPMENT 74

NIXON-KIMMEL CO.—EDISON STORAGE battery and farm light plant distributors. Sell or repair everything electrical. Spokane.

AUCTIONEERS 75

JAS. M'KAY, AUCTIONEER. FARM AND auction sales. 312 6th ave., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174

FAMOUS CARNATION WHITE LEGHORNS. Baby chicks; high-grade utility stock; birds of merit, quick maturing; heavy winter layers; free range. Breeding stock. Ernest Raush, Carnation Poultry Farm, Kent, Wn.

MAMMOTH BRONZE TURKEYS, BEST IN the west. Unrelated stock. Mrs. H. J. Cortner & Mrs. C. R. Lowery, Payette, Ida.

PRIZE-WINNING BUFF ORPINGTONS. Settings, $2 to $10. Males, $3 to $15. Lucy R. Scudder, No. Yakima, Wash.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

POULTRY 174 Continued.



QUEEN QUALITY W. LEGHORN CHICKS. Feb., $12 per 100; March, $11. April 10, May 9
QUEEN QUALITY S. C. R. I. REDS, $15.
Agts. QUEEN INCUBATORS, 70 to 2000 eggs. 1200-chick brooder stove, $18.50.
QUEEN HATCHERY,
Office, 87 Pike St., Seattle.

ORDER YOUR BABY CHICKS NOW FROM heavy laying strain; delivery guaranteed; our chicks please; R. I. Reds, March, $15 100; after Mar. $12. White Leghorns, March, $12 100; after March, $10. Maplebrook Poultry farm, Southworth, Wash., Box 3.

WHITE BUFF AND BLUE ORPINGTONS, single and rose comb Anconas, the great winter layers, winners at leading Coast shows; eggs $1.50 to $3.00 for 15; chicks 20c each. Ira N. DeLine, Box D, Olympia, Wash.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please $12—100. Free catalog. Freshlaid Farm, Colfax, Wash.

DAY-OLD WHITE LEGHORN CHICKS, from 2-year-old hens, $12 per 100; eggs for hatching, $1.50 per 15, $6 per 100; White Wyandotte eggs, $2 a setting. The Pudor Farms, Puyallup, Wash.

WHITE ROCKS—TRAP-NESTED FOR EGG production. Cockerels and pullets for sale. Eggs for hatching. Winners leading Coast shows. L. R. Kerns, Eugene, Ore.

S. C. WHITE LEGHORN AND S. C. RED eggs for hatching, $2.50 to $5 per 15; heavy-laying, exhibition strains. H. J. Fuller, N124 Lincoln st., Spokane.

S. C. PEERLESS BLUE ANDALUSIANS, eggs $2 setting; ckls. $2 to $5. Write for folder. Mrs. C. W. Armstrong, Freewater, Ore.

LIVE STOCK 177

50 BRED SOWS AND GILTS, 50 OF TRUE Berkshire type and quality, bred to grand champion boars, are included in our private sale list now ready for mailing. Write for it today. Silver Birch Farms, Bx. R, Newport, Wash.

WAIKIKI FARM JERSEYS.
We offer several young bulls and heifers of excellent breeding. Send for descriptions and photos. Waikiki Farm, R. 7, Spokane, Wn.

12 HEAD OF VERY CHOICE REGISTERED red roan and white Jr. yearling Shorthorn bulls. Wm. Mulhall, Fenn, Ida.

HORSES and VEHICLES 183

IMPORTED STALLION FOR SALE, SURE foal getter. Write for particulars. S. J. Emery, Port Angeles, Wash.

FOR SALE—1 REGISTERED PERCHERON stallion, 6 years old. Marion E. Martin, Gist, Ore.

GROCERIES 222

3 LBS. EXTRA FINE COFFEE, ROASTED fresh daily, by parcel post, for $1. Martin Marks Coffee Co., Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

FUR RUG MOUNTING A SPECIALTY. Heads, animals and birds mounted. Withers Bros., 322 Sprague, Spokane, Wash.

ARCHITECTS 358

ADDRESS L. M. STARR FOR PLANS AND specifications. E1218 12th ave., Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

ALFALFA SEED IN LOTS FROM ONE TO one hundred bushels at $8.50, f. o. b. Clements, Kan. Samples on request. H. H. Stephenson, Clements, Kan.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

CLOVER, VETCH AND TIMOTHY.
Quality guaranteed; priced so you can afford to buy. Samples on request. Rhoten Farms, Salem, Ore.

FOR SALE—WESTERN DAKOTA ACCLImated White Blossom Sweet Clover Seed, 1916 crop. No weeds. John Whetham, Iona, S. D.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEEDS 620 Continued.



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS.
VETCH OR "TARES,"
A Great Forage or Seed Crop.
RED CLOVER, ALSYKE,
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.
COMPLETE LINE OF FARM SEEDS.

We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.

CORVALLIS FLOURING MILLS,
Corvallis, Oregon,
Home of the Famous Oregon Agricultural College.

TESTED SEEDS FOR FARM AND GARden—New 1917 seed catalogue now ready; valuable information gathered in 25 years' experience in the northwest. Write for quantity price on Grass, Clover and Alfalfa seed. For new catalogue address Aabling-Boyce Seed Co., Seattle, Wash.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, ORE.

FARM SEEDS, COMPLETE STOCK OF red and alsike clover, timothy, vetch grass seeds, seed grain, garden seeds. Send for free catalogue.
D. A. WHITE & SONS, Seedsmen,
SALEM, Ore.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

A LIMITED NUMBER OF THE FAMOUS Yakima Goodell strawberry plants, $3 per 100, delivered free.
WILL HANKS, NACHES, WASH.

SEND US YOUR NAME.
For Our New Seed Catalog.
SEATTLE SEED CO., SEATTLE.

EXCELLENT, NEW TIMOTHY SEED, $6 per hundred, f. o. b. Bucyrus. Sacks free. A. B. Hays, Bucyrus, N. D.

NURSERY STOCK 621

PRUNE TREES; THOUSANDS; GRAFTED walnuts. Trees of all kinds. Buy direct and save 50 per cent. No agents. Our prices sell. Write for planters' catalog and price list. 26 years in business. Carlton Nursery Co., Carlton, Ore.

"WE WANT YOU" TO REPRESENT US in your locality in the sale of our pedigreed, Idaho-grown nursery stock; large profits; easy work. Write us, asking for our selling proposition. Kimberly Nursery Co., Kimberly, Idaho.

FARM LANDS—FOR SALE 651

320 ACRES, LESS ABOUT 21 acres, taken by R. R.; one-quarter ready to sow to wheat; full possession to purchaser; the other quarter ready to sow to wheat, 1-3 the crop delivered, free of all charges, in warehouse (rented); land joining the town of Warden, on Milwaukee railway; small set of bldgs.; no well. A great bargain at $6000; $3000 cash; terms on balance.
ED G. BOWKER,
WARDEN, WASH.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen. Supt. Land Branch, Canadian Pacific Ry., 92 Ninth ave., Calgary, Alberta.

NORTHERN PACIFIC RAILWAY LANDS in eastern Montana at $2.50 to $18 per a. Suitable for farming or grazing. Easy terms. For information write or see W. E. HOLT, MILES CITY, MONT.

FARM LANDS—FOR SALE 651 Continued.

WHY GO TO MONTANA OR CANADA WHEN YOU CAN BUY BETTER WHEAT LAND IN WASHINGTON FOR $20 PER ACRE? EASY TERMS.

720 acres, or will divide into smaller farms. This land is in the famous Waterville-Mansfield district, where there is plenty of water and moisture and the soil is a good, dark loam, with a clay subsoil; produces 30 to 40 bushels of wheat per acre; part of it is in cultivation, and practically all tillable; it lies close to the railroad and near a good town where there are good schools, churches, stores and other conveniences. The climate is excellent, and plowing can be under way very early in the spring. No severe winters to combat. This section of the country produces a very hard wheat, which commands the top price. We can sell this land for ¼ down and the balance a long time, at 6 per cent. Did you ever hear of anything better?
ARTHUR D. JONES & CO., SPOKANE.
ARTHUR D. JONES BLDG.

MONTANA GRAIN AND STOCK FARMS IN Shields River valley, Judith Basin and Great Falls district. Good land for stock-raising, $7 to $15 per acre; grain land, $20 to $40 per acre; small cash payment, balance easy terms, at 6 per cent. Several good farms, with one-fourth or more in crop. Can take some good property as part payment on quite a number of good Montana farms. Call or write for Montana land list. HEGE & SCHIFFNER CO., 715-17 PAULSEN BLDG., SPOKANE.

BARGAINS IN FARM LAND.

Our business is loaning money on farm and city property. Occasionally we have properties for sale which have come into our possession on account of foreclosure of loans. These we offer at practically the net cost to us, which is far below their real value; a small payment down, the balance on easy terms, with low rates of interest. Send for list.
THE PENNSYLVANIA MORTGE. INV. CO.
BOX 6, SPOKANE, WASH.

160 ACRES WHEAT LAND, ALL TILLable; 80 acres cultivation; house, barn; all fenced and cross fenced; near state road, 1½ miles to railroad; handy to school; good soil; 18 miles from Spokane; $7500; terms.

40 acres Palouse land, all cultivation; black soil; electric station on place; good buildings; all fenced; $4500; terms. O. V. Manring Investment Co., Spokane, Wash.

80 A.; FAIR BLDGS.; 25 CULT.; TIMBER, water, team, tools, orchard; 25 m. Spokane, 8 m. R. R.; $2100.

40 a., splendid soil, 11 m. bus. center; 23 cult.; 3 m. elect. sta.; small bldgs.; free of frost; lies nicely; a bargain; $2100.

160 a. level prairie; 90 cult., bal. can be; ½ m. sta., 35 m. Spokane; $32.50 per a.; terms.
BALDWIN & PEILE, LINDELLE BLDG.

WHEAT FARM IN BIG BEND.

312 acres, all cultivated; 156 acres in crop; 156 to be plowed; 1½ miles to station; good house; large, new barn; well and windmill; neighbors across road; on state highway; clear; $42.50 per acre; ¼ cash, balance in 10 to 15 yearly payments at 7 per cent.
THE BIG BEND LAND CO.
602 SPRAGUE AVE., SPOKANE, WASH.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

RAW LAND, SPECIALLY SUITED TO poultry raising and dairying. Ask for our 1916 offer and monthly payment plan. Office Wall and Post sts., near Post street bridge. Phoenix Lumber Co., Dept. A. Spokane, Wash.

FARM LANDS—WANTED 651

MAYBE YOURS IS JUST THE PLACE WE ARE LOOKING FOR.

If you want to dispose of your ranch, please write us, or, better, come in and tell us about it. We have several customers for wheat and stock farms. Perhaps yours is just the farm we want.
ARTHUR D. JONES & CO.
ARTHUR D. JONES BLDG.
SPOKANE WASH.

WE ARE LOOKING FOR GOOD WHEAT land, or for diversified farming. If you have any for sale, send us the particulars.
ROGERS & ROGERS.
INCORPORATED
SPOKANE, WASH.

ACRE TRACTS—FOR SALE 669

CALIFORNIA LANDS.

1 mile from Corning, California, on county road, with electric, phone and mail service; I offer a choice little home place for old folks; good 3-room plastered house, woodhouse, well and pump; on 2½ acres of land, on which there are about 100 bearing olive, peach and apricot trees. Price $1000. Send for particulars. No trades considered. W. N. WOODSON, Owner, CORNING, CAL.

SUBURBAN TRACTS—For Sale 672

SUBURBAN HOME FOR SALE.

On account of sickness a neighbor has moved to California and asked me to sell his suburban home of 20 acres, west of Spokane, near paved road and electric line; good buildings; alfalfa, clover, strawberries, raspberries and five acres commercial orchard; close to school; good neighbors; all under irrigation. This is a place your family will appreciate. Terms. D. M. Adams, R. D. 1, Spokane, Wash.

TO EXCHANGE—REAL EST. 705

COMBINATION.

217 a., Idaho; 170 cultivated; about 110 in fall wheat; fenced. Price $8000. Mtge. $1000. To exchange for land in Whitman, Lincoln or Spokane county, and assume $5000, or will put in $3000 cash.

High-class, income-bearing 50-a. apple orchard to exchange for stock or wheat ranch or Spokane property. Price $25,000, clear.

Five houses, 2 fine lots, in Spokane, for land.

200 acres near Vale, Ore.; 30 a. in crop; 3-room house, barn, garage, 3 wells and windmill; fine range adjoining; 5 horses, 5 cattle, including 2 milch cows; 50 chickens; wagon, harness, plow, harrow. Want to exchange this for a good house and few acres close to Spokane. Price, with stock, $4500; without stock, $3700.

All kinds of city property to exchange for land. If you have the land, write us at once.

J. MELVIN THOMAS & CO.
214 EXCHANGE BANK, SPOKANE.

NEWS FOR BREEDERS

Guernsey Cattle

Show Great Increase in America

On examining the work carried out during the last working year of the American Guernsey Cattle club, ended April 29, 1916, one fully realizes the progress accomplished in the development of this dairy breed in the United States, and, above all, the continuous increase in the average production as it appears from the Advanced Register. The register of bulls contains 37,862 head, and that of cows 63,954 head, making a total of 101,816. Five years ago there were only 44,286 animals registered, which shows that during the last five-year period the Herd Register exhibited an increase of 130 per cent.—London Live Stock Journal.

NEWMO, ANGORA BUCK.



Long-fleeced Angora buck, owned by U. S. Grant, Dallas, Ore., 22 months old, and had never been sheared when photo was taken. The fleece was 22½ inches long.

WANT STATE PREMIUMS.

The Oregon State Purebred Live Stock association in a recent meeting adopted a resolution asking the legislature to appropriate $20,000 to be used as premiums at the state fairs and shows for live stock and poultry.

BUYS HEREFORD BULLS.

James Just of Presto, Idaho, has purchased from the Kennedy farm of Blackfoot two Hereford bulls coming two years old. It is reported that the price paid was $300 each.

TO MISSOURI FOR MULES.

S. Kent, D. C. Keith and J. J. Peak have gone from Davenport to Kansas City and will probably return with a large consignment of Missouri mules, for use in Lincoln county.

Draft Horses

Plain Gelding Sold for $275

There is a revival of the demand for horses. This is shown by the keenness with which farmers are now buying work horses for spring use. That ranchers should undertake their wintering on $36 oats and $16 alfalfa hay is conclusive evidence of the anticipated dearth of desirable material. Professor William Hislop, animal husbandman of the state experiment station at Pullman, reports a recent sale of a plain gelding, coming four years, weighing 1525 pounds, at $275 cash. This figure would have been quite ordinary had it been paid for a drafty individual with clean limbs and snappy action. The above transaction is typical of many others.

Thousands of horses have left our state on war contracts. That, in part, explains the scarcity in desirable equine stocks, but the root of the matter lies in the steadily decadent interest manifested by farmers in horse raising.

The present relation between supply and demand should inject strength into the draft horse business. The trade is demanding a bigger horse with more quality and action and to that end farmers owning mares hold the key.

During the coming breeding season, the latter should manifest more discrimination toward the patronage of stallions. They should not fail to realize that stud horses capable of being good sires are scarcer and more costly since the European war broke out two and a half years ago. Stallion owners will therefore be justified in demanding higher service fees so as to ensure reasonable returns on the investment.

The adoption of mare owners of a more liberal fee policy will attract a higher class of stallions, which in turn, will mean more effectual draft horse service. Let it be said without equivocation that the scrub is costly if the fee is ever so low and so long as he is available there is little inducement to invest in a first class stallion.

Unfaltering patronage of the high class sires will automatically drive the nondescript breeding horse from your community, a service which every one will welcome.

Sale of Percherons.

A dozen percheron horses were sold at the John Rauter place, near Warden, Grant county, Wash., nearly all bringing $200 or more.

Pioneer Breeder of Shorthorns

A. Chalmers of Forest Grove, Ore., proprietor of Fork Branch farm, has been breeding Shorthorns continuously longer than any other man in Oregon. Mr. Chalmers is a Scotchman, and, like so many others of that nationality, takes to the breeding of purebred live stock, apparently as if it were a part of nature's scheme. His father was a Shorthorn breeder on the "auld sod," and during his boyhood days, Mr. Chalmers was fortunate in making frequent visits to the home of the famous breeder, Amos Cruikshank, with whom his father was on terms of intimate friendship. His first Shorthorns were purchased in 1886, and through hard times or good times, high or low prices of grain, hay or cattle, Mr. Chalmers has bred Shorthorns.



Scottish Flower 3d, Shorthorn.

Mr. Chalmers' early purchases contained Cruikshank blood, and he still regards that line of breeding as among the best obtainable. His first purchase, Mignonette, was an inbred Governor General, and Mr. Chalmers describes her as having, like her sire, "a strong, smooth front and well-let-down hindquarters, and as fine a looking udder and teats as were ever put on a cow." She proved to be all he expected as a milker, and to this day Mr. Chalmers has a strong milking strain in his herd. He raises good calves in his herd. He raises good calves without a nurse cow. This cow was of the "Honeysuckle" strain and proved to be a great breeder as well as mother. That same year Mr. Chalmers bought Millium, a daughter of Mignonette by 11th Duke of Gilliban, a bull that sired many of the good Shorthorns in the Ladd and Reed herd. He also purchased Woodlark, Imp. Weeping Willow's last calf; Rubia, Juniper and Bella Darling, all by Waterman, and Fair May Morning and Ocean Wave, by the 7th Earl of Darlington. Illustrious 5th of Locust Lawn, Red Bird 5th and 7th Duke's 2d Goodness, three Kentucky bred heifers, were purchased two years later from B. F. Winn of Missouri. In 1891 these were followed by Acton Rose, Mayflower 3d and Mildred 9th, purchased from J. and W. B. Watt of Ontario, Canada. The latter of these, an inbred Royal Sailor, proved to be a remarkable breeder and is the foundation of the Fork Branch Mildreds, so well known in the Chalmers herd. English Lady, another inbred Royal Sailor, was purchased from C. E. Ladd in 1903, but was bred by the Watt Brothers, referred to above. She is the dam of Mr. Chalmers' famous old breeding bull, Scottish Baron, and the Marquis, a bull of Mr. Chalmer's own breeding, is his sire. Margery, by Bapton Ensign, purchased from C. E. Ladd in 1908, is another great cow. Although a few bulls have been bought from time to time since then, these are the animals that appear in nearly all the Chalmer's pedigrees and have made the Fork Branch Herd famous.

When Scottish Flower 3d, a cow with a great show record, sold in the recent Pacific International sale, with a baby bull calf at foot, for $825, Fork Branch Mildred 13th for $510 and Mildred's Prince, one of his bulls, for $1000, Mr. Chalmers' line of breeding, his plan of mating and his holding on to his choice herd during hard times all seem to have been vindicated. He has during his breeding operations furnished foundation stock for a number of good herds and notable additions to others.

Glimpses of Life in the Open

Farming Development Throughout Northwest

(Continued from page twenty.)

Buckwheat grows well in the northwest and does not require particularly fine soil. Inquiry among the millers leads to the conculsion that there is not much market for buckwheat, and they are not inclined to build it up. They buy what is brought them, but do not ask for any and make no inquiries if none comes in, preferring, apparently, to buy in the east.

Some buckwheat has been grown in Marion county in the past. The accompanying picture was taken within a few miles of Woodburn, on the bottom lands. It shows buckwheat growing in a young peach orchard.

Returning to Mr. Reid's farm, in addition to a vineyard, there are several acres of logan berries and an apple orchard. The apple trees and their cousins, a row of quinces, perhaps offer the most valuable suggestions to other orchardists. A group of Newtown Pippins set four years ago has already come into bearing, and the color, texture and eating quality of the apples is proof positive that here is another variety which will do well on the Sound. The trees are standards, and were set in deeply prepared holes, the roots pruned and carefully spread out, and with a liberal feeding of bone meal to start the youngster to growing. Out of several hundred trees so set, not one failed to do well.

The quinces raised on the Reid place are so large, smooth and shapely that at a short distance the visitor takes them for pears. Apparently there is no reason for the gnarly appearance of the average market quince except ignorance and carelessness—with many farmers, the quince has the reputation of being able to withstand pretty much any treatment—or lack of treatment—accorded it; and the result is that it is neglected. Mr. Reid started his trees out right and kept them growing healthily. They are pruned and cultivated—an intercrop of strawberries pays for this tillage in the young orchard—and once each year they are sprayed. This sounds like neglect, but then, as the proprietor explains, one dormant spraying which the trees unfailingly get is better than a half dozen theoretical sprays which they do not get. This dormant spray is the usual one-to-eight lime sulphur spray.

In conclusion, let me pass on an idea of considerable importance to all country dwellers.

"Recent investigations have shown that there are 22 varieties of Comice pears," Mr. Reid says. Many of those varieties are woody, flavorless, and lacking in eating and market qualities; nevertheless, they are sold under the name of Comice pear. Now, the handicap of getting such a variety to start with is enough to insure the failure of a man new in the fruit business. He has 'gotten off on the wrong foot,' and may fail to get into step in time to save himself from disaster. And what is true of Comice pears is true of many other varieties of fruits and vegetables—under the one variety are many variations in quality. Why do not the nurserymen begin to breed from the best, and to eliminate these worthless variations? And until this comes about, why are not beginners in horticulture warned that the strain is of equal or perhaps greater importance than the variety. Success in farming results from observation, hypothesis, and the testing or demonstration of these hypotheses. And under this formula, blind acceptance of a trade name or label is ruled out."

Boys' and Girls' Poultry Club

Free Hatching Eggs from Prize Winning Pens



Any thrifty boy or girl can get a start in purebred poultry by devoting a little time to pleasant work outside of school hours. We offer nothing but eggs from prize winners. Each setting contains 15 eggs and you can make your selection from the following breeds:

S. C. Reds, R. C. Reds, Barred Plymouth Rocks, White Rocks, White Wyandottes, Buff Orpington, Blue Orpington, Black Orpington, White Orpington, Light Brahmas, Anconas, S. C. Andalusians, R. C. Andalusians, R. C. Brown Leghorns, S. C. Leghorn, R. C. White Leghorn, S. C. White Leghorn, S. C. Buff Leghorn, Black Minorca, Bantam, Buttercup, Campine, Houdan.

Write today if you want to join the Poultry Club. You will want to have your eggs hatching before long, so don't delay.

Address:

Washington Farmer Room 37, Review Building Spokane, Wash.

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College of Agriculture
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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. FEBRUARY 15, 1917. NO. 7.

Was the $21,500 Bull Calf Sale Bona Fide?

Charges and Denials Are Supported by Affidavits and Statements.

Statement by E. A. Stuart, president of Carnation Stock Farms, giving letters and other incidents "indicating that there was some irregularity regarding the listing and sale of the Holstein bull calf, Finderne Mutual Fayne Valdessa, at the Portland stock show, for $21,500."

Affidavits of Gue, Holmes, Bishop and A. E. Smith, stating their belief that the sale was bona fide.

Wire from Bernhard Meyer in reply to a wire from The Farmer: "Bull was sent by me to the sale under the recommendation of Von Herberg, guaranteeing me $5000 at least."

Copy of letter to George Gue from B. Meyer: "I consign this bull to your sale without any restrictions whatsoever."

Signed statement by J. Von Herberg containing sensational charges.

"Friday at the Pacific International marked a great milestone of black and white in the northwest when the Finderne Mutual Fayne Valdessa consigned by Bernhard Meyer of Finderne, N. J., sold for the northwest record price for any single animal—$21,500. He was bought by John Von Herberg, interested in the theatrical business at Portland and Seattle, and owner of 90 head of pure bred Holsteins at Kent, Wash."

The above was the first paragraph of the announcement in The Farmer of December 14, 1916, of the most sensational incident in the live stock auction history of the northwest.

Now, after nearly two months, there comes to The Farmer the remarkable statement made by no less a personage than Mr. Stuart, who is at the head of the largest concern manufacturing condensed milk in the United States, together with other remarkable documents from men most prominent in live stock circles.

(Continued on page seven.)

Belied Name of Grange to Sell Stock

N. W. General Trading Co. Got Indorsement of Kegley and Lawrence

The trial of the five officers of the Northwestern General Trading company for conspiracy to defraud the public through the use of the United States mail, which has been in progress in the federal court in Spokane, has disclosed facts of intense interest and far-reaching importance to every reader of the Farmer. A summary giving the defendants in the case, together with the leading issues involved, follows:

Defendants in the Case.

The defendants in the case: Gale Smith, original promoter and president of the Northwestern General Trading company; Olin C. Fowler, treasurer of the company; C. L. Davies, treasurer and later manager of the company's branch at Portland; S. T. Knudson, sales manager of the Northwestern and later in charge of stock sales of the Olympic Trading & Supply company, and John C. Lawrence, one time candidate for governor, former public service commissioner, and head of the organization department of the Northwestern General Trading company when it went into bankruptcy.

Counsel for defendants: F. C. Robertson for the defendants; P. W. Campbell for Lawrence alone.

Prosecution: United States District Attorney F. A. Garrecht, assisted by H. S. House, a special examiner for department of foods, and J. S. Swenson, postoffice inspector.

Grange and Farmers' Union.

Letters from Clyde L. Davies, manager of the Portland branch of the Northwestern General Trading company, told of having secured an indorsement from "Kegley and his bunch."

The Farmers' union bunch are standing pat with us with the exception of Mr. Dilivuk.—C. L. Davies, February 27, 1915.

J. C. Lawrence was on the pay roll of the Northwestern General Trading company when acting as a member of a farmers' union committee making an investigation as to its indorsement.

J. H. Taylor, farmers' union organizer, received $35 a week from Northwestern at time he opposed a

(Continued on page six.)

The Tractor That Answers the Call

The UNIVERSAL Tractor Attachment

$275

F. O. B. Tacoma



For the Farm, the Orchard, the Road and the Lumber Yard.

Notice the large rear tractor driving wheels of this equipment. Note the heavy tubular steel weight and strain axle. It is a powerful tractor, a thorough tractor, and it will win you when you drive it yourself.

THE CALL OF THE TRACTOR

Your *1917 Problem* Is the *Tractor Problem.*

The Tractor CALL Is *Heard on Every Farm.*

You Will Have to Choose.

You Must Make Up Your Mind.

And why hesitate when for $275.00 you have offered you a complete, clean-cut Tractor proposition? You clamp the UNIVERSAL to the chassis of your auto; in three hours your auto is plowing for you, hauling your four or six horse spreader, doing chores at a cost and with an ease that surprises you and delights you, and it can be reconverted in the same time to a pleasure car again. You have nothing to learn—you run a UNIVERSAL tractor as you run an auto—the same engine, the same steering gear. No complicated mechanism to baffle and puzzle you—the ESSENCE OF THE UNIVERSAL is its complete simplicity combined with complete effectiveness.

Photo of parts in the Universal factory ready for shipment.



You Will Answer "The CALL of the TRACTOR"—*But Remember,* It Is Your Tractor Must Answer *Your* Call Later—Therefore INVESTIGATE.

"TRACTOR FACTS" and Other Literature--FREE

"Tractor Facts" tells all about the UNIVERSAL. It should be read by every man interested in Tractor Equipment. We will be pleased to send you this folder and other important literature FREE. Write to address as follows:

Gerlinger Motor Car Co., Dept. P, Tacoma, Wash.

Investigate the "UNIVERSAL"

Write us for descriptive literature. Write us for the address of our agent nearest to you. Let us show you the "Universal" in action.

GERLINGER MOTOR CAR CO.

Manufacturers of the

UNIVERSAL TRACTOR ATTACHMENT AND GERSIX TRUCKS

TACOMA, WASH.

Agents Wanted

Responsible firms or individuals wanted to represent the UNIVERSAL in certain territory. This is a proposition for the best interests. The UNIVERSAL will lead Tractor sales in the northwest in 1917. References and full particulars requested. Write, wire or telephone. Our traveling men may be near you.

Gerlinger Motor Car Co., Dept. P, Tacoma, Wash.

1842 The Seventy-Fifth Anniversary of 1917

P&O

LIGHT DRAFT PLOWS

Built for the Field Test.

Three-Quarters of a Century of "Knowing How" Hammered Into Every One of Them.

The product of the Parlin & Orendorff Co. has always been noted for simplicity of construction, great strength and ease of operation. It was upon such a basis that the founders of this business made their implements, established their reputation, and built their factory. It is upon the same foundation that the business has been carried on to this day, and in 1917 we celebrate our Diamond Jubilee; 75 years of practical experience gained through constantly striving to provide for the exacting requirements of three generations of American farmers.

For an even three-quarters of a century we have met the demand, and today we operate the largest and oldest permanently established plow factory in the whole world. "It's the way we build them."

P&O

Light Draft Plows, Harrows, Planters and Cultivators are made in all types and sizes, to meet the conditions in all sections, and are Backed by an Unqualified Guarantee.

We also make the most complete line of Traction Engine Plows produced, and we have a special catalog devoted to these famous plows.

The P&O Little Genius Engine Gang Plow

was the most popular plow shown at all points on the 1916 National Tractor Demonstration.

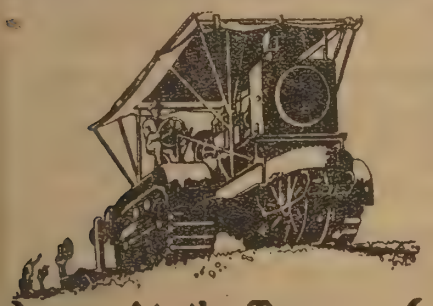
We will send P & O Catalogs to any address. While P & O Implements are sold only through established implement dealers, we welcome correspondence from farmers in all sections.

Ask Your Dealer or Write Us.

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SHEER POWER coupled with enormous traction carries the Caterpillar with its load over hills that bother most Tractors to make "empty."

¶ Sock your plows down to the beams-hook on your Combine. You cannot stall the

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¶ The tracks last for years. Slow speed motor—none so accessible or economical. High tension magneto; impulse starter; patent air cleaner; cut gears in oil; two speeds ahead. Grand prize (highest award) both California Expositions.

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I farm.....acres. Send me Caterpillar Catalog.
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THE HOLT MANUFACTURING CO.
Spokane, Wash.

When you write to advertisers be sure to state that you saw their advertisement in this paper.

Resolved

That there is a place in the dairy for the average cow as well as for the high-grader.

Would you take the affirmative or the negative of the question?

D. W. Ainey of Payette, Idaho, is a friend of the "average" cow. A. A. Stauffacher of Buhl, Idaho, is the friend of the high-grade cow. They debate the above question in next week's issue of The Farmer.

In This Issue

Extensive Review of Northwest General Trading Company Trial.

Documentary Evidence on Sale of $21,000 Calf.

Marketing Products of the Farm, an Article by John J. Dillon, New York.

The Federal Loan Act, the Third Article by Mr. N. W. Durham.

WASHINGTON PORTRAITS—NO. 2.



P. A. McNamara.

P. A. McNamara says that dairying is a paying business in Clallam county, and does not believe in trying to raise grain on a dairy farm. He has been in this business for 10 years near Sequim, raising as many cows as he has hay and pasture for. He keeps only the Jerseys, having the grade Jersey cows and purebred sire. All the heifers from his best cows he raises, and keeps his herd well culled of poor stock. Mr. McNamara does almost all of his own work, keeping hired help only in the seeding and harvesting time, and believes that it is the only way to succeed in the dairy business.

The next in the series of Washington portraits will be that of George E. Sellick of Kennewick, and will be given in next week's issue of The Washington Farmer.

Clara G. Wein, Seattle, Wash.: "Just a word of praise and recommendation for The Washington Farmer. It has been helpful to me as a city resident, in taking proper care of my chickens through your many helpful items in your magazine pertaining to chickens. I have followed each suggestion carefully and as a consequence my chickens lay better and are never sick."



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About March 1st

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Fill Coupon Below

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Please send catalog to me.
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The Abbreviation of What State Means 'To Launder'

$300 SOMEBODY WILL WIN | SIXTY QUESTIONS | SOMEBODY WILL WIN $300

Read the Plan and Rules of This Big, New, Free-for-All

FARM INFORMATION CONTEST

There are 60 questions which everybody should try to answer. They are interesting, they are entertaining, and the prizes make it worth your time to try to answer them. Look into the contest plan and fix your aim on the big cash awards.

READ THE RULES
Answer These Questions

11. When will the moon be full in March, 1917?

12. What part of a wagon and what piece of furniture have the same name?

13. In what state of the United States did the child live who was the original of the Mary in the poem beginning "Mary had a little lamb, its fleece was white as snow?" (If you haven't the information handy, consult our CONTESTANT'S HELPFUL OUTFIT, free to any public library or included with every subscription payment of $1 or $1.50 to the Farmer.)

14. Will bar of iron measuring when ice cold 1 inch thick and 1 inch wide and 12 feet long contain more than one cubic foot if its temperature is raised 100 degrees?

15. How many stars are there in the great dipper?

(Five more questions will appear next week.)

The announcement of this contest, February 1, brought quick responses from all the four northwest states from persons who sent in the order coupon on this page with subscription remittances, expressing their intention to register for the $300 prize provided in "Enlarged prize list plan."

$800—IN CASH to Be Paid—$800

We will positively give EIGHT HUNDRED DOLLARS in cash awards (and more in event of ties) to the winners. As explained in the rules which follow, there will be five questions run in every issue of the Farmer for 12 weeks. The last five questions will appear in the issue of April 19.

You Can Enter Without Cost

You do not even have to be a subscriber of the Farmer to enter. As has already been stated, any resident of Washington, Oregon, Idaho or Montana is eligible to compete in this contest.

Five Questions Each Issue

The contest will be composed of 60 questions. Five will be run in each issue of the Farmer for 12 issues.

Answers to each question except No. 45 can be given correctly in from one to 10 words and will be given a score of 100 if correct. Answers to question No. 45 will be limited to 100 words each, and will be graded as to the common sense and general knowledge of farm conditions shown by the contestant without regard to spelling, grammar or penmanship. As with the other 59 questions, a perfect answer to No. 45 will be scored 100.

Perfect Score Is 6,000

The contestant who comes nearest to a score of 6000 and complies with all the conditions of the contest will receive the first prize; the next nearest, second prize, and so on. In case of a tie each tying contestant will receive the full amount of the prize.

There are 35 prizes as follows:

$150 is amount of First Prize. **$50 is amount of Third Prize.** **$10 is amount of Fifth Prize.**

$100 is amount of Second Prize. **$20 is amount of Fourth Prize.** **$5 each, Sixth to Tenth Prizes.**

$4 each Eleventh to Fifteenth Prizes. **$1 each, Sixteenth to Thirty-fifth Prizes.**

OTHER RULES

The answers will be passed upon and graded by a fair-minded, thoroughly competent judge.

Two weeks will be allowed for sending in answers after April 19, 1917, date of the issue containing the last five questions.

Remember, your failure to answer all the questions will not necessarily exclude you from the contest. There are 60 questions to be answered and it is not reasonable to suppose that all our prize winners will attain a perfect score. Your answers must all be sent in at the same time. Do not send any answers until you have completed the full list or as many as you can answer.

Those who use our CONTESTANT'S HELPFUL OUTFIT will be able to send in their complete set of answers without delay, there being no need of their waiting for the questions as they appear in The Farmer from week to week down to the final issue of April 19. In order to get as prompt returns as possible from those contestants who use our CONTESTANT'S HELPFUL OUTFIT, extra inducement is made in the prize awards. SEE ENLARGED PRIZE LIST.

Announcement of prize winners will be made and prize checks mailed as soon after close of contest as possible.

If any point is not clear, do not hesitate to write the Farm Information Editor.

All answers must be mailed on or before midnight, May 3, 1917, as shown by postoffice dating stamp on your envelope.

ORDER COUPON—If your subscription is paid ahead, the time paid for herewith will begin at the date to which you are now paid.

FARM INFORMATION EDITOR,
Review Building, Spokane, Wash.

Enclosed find $1 for one year, or $1.50 for three years' subscription to

THE WASHINGTON FARMER.

and enter me as a contestant in the Farm Information Contest. I am also to receive at once the complete CONTESTANT'S HELPFUL OUTFIT, consisting of guide against wrong answers, reply blanks, rules and all information to aid me to win a reward.

Name .....

R. F. D. .....Town .....

State .....

Notice—Amount of remittance to be either $1 for one year's subscription to the Farmer or $1.50 for three years' subscription.

Answer this question: Are you now a subscriber?.....
If you wish paper sent elsewhere, fill in name and address.

A Valuable Aid to Contestants

One complete CONTESTANT'S HELPFUL OUTFIT, including all of the 60 questions and instructions and helpful warnings as to answers which would be wrong, and the correct answers to some of the most difficult questions, will be sent to any public library free of charge, upon request.

To each contestant who sends in a new, renewal or an extension of his subscription at the time of registering for the contest, this complete CONTESTANT'S HELPFUL OUTFIT will be sent in combination.

We feel that those beginning on the contest will find these suggestions as to what to avoid distinctly useful. This equipment supplies in convenient form everything needed to enable you to apply your ability to the best advantage, and will contain information enabling you to answer the most difficult questions correctly.

Puts Questions in Reach of Children

This CONTESTANT'S HELPFUL OUTFIT puts the solution of the questions in the reach even of the children, it being the purpose to make it possible for everybody in Washington, Oregon, Idaho and Montana to compete. This outfit includes, besides general information about the plan of the contest, the following:

Guide against wrong answers, which includes either correct answers of more difficult questions or easy references as to where to find the correct answers; and blank forms on which to write your answers in such a way that there can be no confusion when your answers are taken up by the judge for scoring.

It will be worth considerable to you to be assured that your answers are reaching the Farm Information Editor in such form that he will know in every instance exactly what question you intended to answer. This CONTESTANT'S HELPFUL OUTFIT will make it possible for you to

Begin Work at Once

On account of the large number certain to send for our CONTESTANT'S HELPFUL OUTFIT, thus making it possible for them to answer the entire 60 questions without delay, it is deemed advisable to offer some special inducements to secure prompt returns from this particular class of contestants. By securing the early replies of those who are thus supplied with the entire 60 questions, we will be able to have their papers carefully scored before the final rush of answers toward the end of the contest.

Understand, it is not absolutely required that those who use our CONTESTANT'S HELPFUL OUTFIT send in their replies at once, but, in order to induce them to get in early, the following plan for enlarging the awards to those prize winners whose answers come in early is offered:

ENLARGED PRIZE LIST—$800 CAN BE WON—ENLARGED PRIZE LIST

For those who use our CONTESTANT'S HELPFUL OUTFIT.

Thirty-Five Prizes	Amt. of prize if winner sends in answers during 1st period, Feb. 1- Feb. 21	Amt. of prize if answers sends in winner during 2d period, Feb. 21 Mch. 14	Amt. of prize if winner sends in answers during 3d period, Mch. 14 April 5	Amt. of prize if winner sends in answers during 4th period, April 5 April 19	Amt. of Prize for winner who does not send in answers before April 19
First Prize	$300.00	$225.00	$200.00	$175.00	$150.00
Second Prize	200.00	175.00	125.00	110.00	100.00
Third Prize	100.00	87.50	62.50	55.00	50.00
Fourth Prize	40.00	35.00	30.00	22.00	20.00
Fifth Prize	20.00	17.50	15.00	11.00	10.00
6th to 10th 5 prizes each	10.00	8.75	7.50	5.50	5.00
11th to 15th 5 prizes each	4.00	3.75	3.00	2.20	2.00
16th to 35th 20 prizes each	3.00	2.50	2.00	1.50	1.00

To secure our CONTESTANT'S HELPFUL OUTFIT, fill out order coupon on this page and send it in to Farm Information Editor, with your personal check, money order or 2-cent stamps, for $1 for one year or $1.50 for three years.

You must address

The Washington Farmer
Farm Information Editor
Review Building, Spokane, Washington.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 7 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF February 15, 1917

Want Common School of Agriculture

West Side Would Have State College Extend Its Educational Work

The need of a "common school of agriculture" in western Washington was urged at the meeting last week in Tacoma of the western Washington Horticultural association, which adopted a resolution favoring the establishment of such school by the state college in connection with the experiment station at Puyallup.

It was the consensus of opinion that such school should be open to children or their parents, with no other entrance requirements that ability to read and write the English language.

It was pointed out that owing to the fact that the state college, which is situated at Pullman, in eastern Washington, is not only distant from western Washington, but is immediately surrounded by farming conditions so different from those found in the western part of the state that farmers west of the Cascades are not adequately served It was declared at the meeting that frequently students go from western Washington points to Corvallis, Ore., to take up at the Oregon Agricultural college the subjects they wish to have given in western Washington.

The resolution asks the legislature to include in its educational tax levies a sufficient mileage to allow the establishment of such a school.

Approve Port Commission.

The association sent a telegram to the legislature in session at Olympia urging that whatever legislation be enacted concerning the Seattle port commission be drawn with a view to building up that institution rather than weakening it.

The association considered a wide variety of subjects, from farm life in general to specific matters, such as grape culture, apple culture and gardens. It was one of the most enthusiastic and helpful sessions of the organization ever held. The next session will be held at Bellevue, Wash.

Speakers included W. H. Paulhamus, T. O. Morrison of the state department of horticulture, Fred Burglehaus and Charles Orton of Sumner, Adam Eckert of Detroit, Wash.; Mrs. R. A. Small of Snohomish county, President Robert B. Miller of the association, Arthur Frank of the Puyallup experiment station, H. M. Brayton of Alderton and others.

Officers for the present year were elected as follows: J. L. Stahl, Puyallup, president; A. S. Caton, Olympia, first vice president; C. W. Orton, Sumner, second vice president; Mrs. R. A. Small, Everett, treasurer, and G. P. Stuart, also of Everett, secretary.

Next week's issue and subsequent issues of the Farmer will contain summaries of the points brought out by those addressing the convention and taking part in the discussions.

Thirteen New Laws

Governor Lister Has Signed Them

With a little more than half of the 60-day session of the state legislature over, 13 measures have become laws through passage by both houses and signature by the governor.

Two of the measures are those settling the controversy that arose when the University of Washington at Seattle undertook to rearrange the courses given by itself and the state college at Pullman by the transfer of several courses from the latter to the former.

Rabies Quarantine.

Another bill that has become a law is one authorizing the state department of agriculture to establish districts of quarantine against rabies.

Others of the 13 provide as follows:

The appropriation of $115,000 to cover the expenses of the session of the legislature.

The validation of a $2,000,000 bond issue voted by Pierce county to purchase an army post site at American lake.

Changing the name of North Yakima to Yakima only.

Potatoes

Some Varieties for Lewis County

By A. S. COREY.

To many producers a potato is a potato, while trade recognizes about three grades; the large potatoes weighing a pound and a half or over are used mainly by the dining car departments of the railroads; the fancy grade, composed of potatoes weighing from eight to 10 ounces, oval or long in shape, white or russet skinned, of shallow eyes and free from disease; the common grade composed of mercantile potatoes not in the other two classes. Some one will sort potatoes before they get on the market, and the farmers can better afford to pay themselves for this service than the city commission merchant.

Authorities seem to believe that the main reason why Yakima potatoes get from $3 to $5 a ton more than Lewis county potatoes is mainly in the grading and reputation that Yakima has built up for her product, and not because the potatoes themselves are superior. In fact, many dealers pass off Lewis county fancy potatoes as Yakimas and no one is the wiser, although the dealer profits financially thereby, and our producers lose accordingly.

As to varieties to grow that naturally he expected many different opinions from individual growers, but leading growers seem to perfer the Early Rose or Beauty of Hebron. As to the late potatoes, all united in naming the Burbank as leader, although some include as Burbank such kindred varieties as Pride of Multnomah and American Wonder. The Netted Gem was the second choice. The Up-to-Date is also a good yielder.

I would urge you farmers to combine on not more than three standard varieties so that carlots could be secured by dealers as desired; to carefully select your seed, to properly and critically grade your product. If you do this Lewis county spuds will soon command the same respect in the market as do the Yakimas.

Kittitas Jail Empty.

For the first time in a good many years the jail of Kittitas county is empty.

EGGS AT $1 EACH

When Potatoes Were $14 a Bushel.

John Burbee, a pioneer of the northwest, who was visiting in Chehalis, Wash., a short time ago, related an interesting story as to the high cost of living in this section in 1848-49, at which time Mr. Burbee says his father sold a large quantity of potatoes at $14 a bushel and onions at $7 a bushel to the Hudson Bay company at Vancouver. L. C. Wallace of Kelso, Wash., says that at that time $7 a bushel for wheat was nothing unusual for a market price. He also says that at one time his father gave $1 a piece for eggs to set.

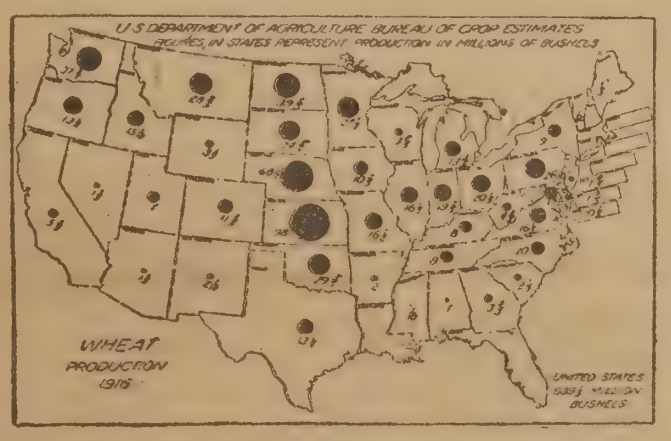
YAKIMA WOOL CROP

Of Uniform Growth and Texture.

"The wool crop of Yakima valley will be heavier and of better quality than it was last year," says George Prior. "The sheep are wintering in fine shape and the wool is of uniform growth and texture. It will be a much better quality all around than we had in the valley last year.

Wheat Production of United States

WASHINGTON RANKS FOURTH IN PRODUCTION OF WHEAT FOR 1916 AND LEADS ALL THE STATES WEST OF NEBRASKA. MONTANA IS RAPIDLY COMING TO THE FRONT. KANSAS LEADS ALL STATES.



The above diagram clearly brings out the leading wheat-producing states of the country. The diagram is made by the department of agriculture and taken from its December crop summary. By this report, it is seen that Washington, with its production of 37,635,000 bushels of wheat, is at the head of all the states west of Nebraska. Montana is rapidly coming to the front as a wheat-producing section with its record of 28,655,000 bushels. Oregon has 19,550,000 bushels to its credit and Idaho 15,071,000 bushels. Kansas leads all the states of the Union with over 98,000,000 bushels, followed by Nebraska with 68,550,000 bushels and North Dakota with 39,325,000 bushels. Of the eastern states, it will be noticed that Pennsylvania leads with 26,125,000 bushels, which is just a little less than the 27,555,000 bushels of Wisconsin and 29,585,000 bushels of Oklahoma.

Popcorn Imports

Of Washington Should Be Stopped

The state of Washington annually uses the equivalent of a great, big train load of popcorn, according to estimates made by Charles Uhden, produce dealer of Spokane. At two and a half cents per pound, which he states is considerably below the present price, this train load would be worth $24,000 to the grower. And he says that shipments which he has received from certain districts of the state convince him that it can be grown successfully here. In a statement to the Farmer, he sums up the situation this way:

Two-two Carloads.

"As far as I can find out, the jobbers of Spokane handle about five carloads a year. Using this as a basis for ascertaining the amount handled in the state, the result would be about as follows:

Spokane	5 carloads
Tacoma	5 carloads
Seattle	15 carloads
Walla Walla	1 carload
Everett	1 carload
Other jobbing centers	5 carloads
Total	32 carloads

"The lowest price at which we have bought the popcorn, which was a good many years ago, was 2 1-2 cents per pound at shipping point and since it is not best to paint things in the rosiest light, we will take this figure. (At present we pay considerably more.)

"Thirty-two carloads of 30,000 pounds make a total of 960,000 pounds at 2 1-2 cents a pound, $24,000. But if we can raise the popcorn successfully (as small shipments which I have received seem to indicate), and the grower can make money, we could no doubt ship into Montana and Idaho, perhaps British Columbia and Alberta, and thereby be enabled to dispose of double the quantity, which would represent a value of $48,000.

"The item is surely large enough to deserve consideration sufficiently to induce some one to investigate whether it is possible to raise the corn profitably."

BUILT AN ELEVATOR

Bulk Handling of Grain Crop.

Klickitat county employed B. W. Cooney as county agricultural agent the 18th of last September, since which time Mr. Cooney has given much attention to the promotion of a cooperative grain elevator which it is hoped will be the first step in solving the bulk grain problem of Klickitat county. Here is a citation from one of Agent Cooney's reports upon this subject:

"These questions naturally suggested bulk handling of the crop through a farmers' cooperative elevator. An elevator of this kind was duly incorporated March 27, 1916, at Centerville, Wash. Thirty-four shares of stock were then issued with a par value of $50 a share, giving a paid in capital of $17,000. This amount put the elevator up ready to receive the grain.

"The elevator handled 130.000 bushels of grain from August 1 to November 15, 1916, saving the farmers about six cents per bushel on the sack bill alone, or about $6500. In addition, there has been a large saving on the handling of the crop on the farm. I have been informed by several stockholders that they were able to save enough on their sack bill to pay for the shares they owned in the company."

Horticultural Inspector.

P. S. Darlington, who served the Okanogan district for four years as horticultural inspector, has been reappointed to succeed C. C. Clawson, who accepted a position with the government of Brazil.

Belied Name of Grange to Sell Stock

N. W. General Trading Co. Got Endorsement of Kegley and Lawrence

(Continued from page one.)

complete investigation by the farmers' union requested by Louis Delivuk.

Stock Sales and Commissions.

Examiner House presented figures showing sales of 10,245 shares of stock in the Northwestern General Trading company for a total of $441,296, on which there were collections of $315,-636. The total payments of commission by the Northwestern footed $101,-011, or 31.6 per cent of the entire receipts from the sale of stock.

Of $98,745 of stock sold by the Iowa Mercantile company, it was testified, $35,547 was paid out in commissions. Commissions in the Iowa company were divided equally in the beginning, the testimony showed, among T. R. Wilder, A. H. McGregor and Gale Smith. The Iowa company now is in a receiver's hands, and Wilder, its president, under indictment, according to testimony.

Nearly 32 per cent of money collected on stock sales by the Northwestern branch at Portland was paid out in commissions.

Clyde L. Davis, Portland manager, drew $1000 in commissions from the company after it had gone into bankruptcy; no authority for payment found by expert.

According to testimony, Gale Smith, president of the Northwestern General Trading company, admitted having received $10,000 in commissions, besides his salary, in two and one-half years.

Examiner H. S. House showed that in some cases all of initial payments had gone out in commissions and that the company received nothing.

Olympic Trading and Supply company paid out in commissions more than 51 per cent of its receipts from stock sales. Commissions paid on conclusion of stock sales regardless of whether collections were made or not. Thousands of dollars paid in commissions on stock for which the company received nothing. In total collections from stock sales of $142,963 the amount paid in commissions was $74,-267.

Net assets December 31, 1915, but 7 per cent of the money collected from the sale of stock.

Promises a Cash Business.

United States Attorney Garrecht for the prosecution, read excerpts from a prospectus issued by the Northwestern General Trading company:

"Our business is founded upon the soundest principles of trading known to the world—buying for cash and selling for cash. * * * This company will buy principally everything in car lots, direct from the manufacturers and producers. We will go into the markets of the world with spot cash, and therefore can command the lowest prices. * * * The board of trustees of this company are hereby prohibited by these articles from incurring any indebtedness on behalf of the company over and above such indebtedness as the said corporation may have cash on hand sufficient to pay."

The Northwestern General Trading company never on a cash basis at any time between 1912 and 1915, as shown by monthly balances taken from books.

Merchandise customers placated with the means of "rebate checks," called dividends, made up from payments on stock.

Cooperative store in Spokane charged more, witnesses testified, than the average retail store.

Is the Promise Fulfilled?

J. H. O'Gara, Laclede, Idaho, testified: "Their agent came to my house for two days, telling me all kinds of lies about that company.

"He said that a fellow could save from 30 to 50 per cent on all goods bought at their store and with the three or four shares of stock would not have to work after two years; that his dividends from the company would keep him, and all such dope as that, until he got me to sign for two shares and got my $20.

"As soon as we investigated the business I demanded my money back, told them they had swindled me, as I could not buy any cheaper than at the other stores in Spokane. Besides, they did not have hardly anything in stock. At that time I could have got my money back if I went after it right.

Operation for department for enforcing collections on unpaid stock notes outlined.

Poor people plead their case on payments for delinquent stock notes and are threatened with lawsuits.

Aged women among the victims; women solicitors used to sign up some of them.

Two subscribers for stock in the Portland concern received a letter of congratulation on uniting with "the greatest cooperative concern in the northwest" after it had gone into voluntary bankruptcy.

Among the interesting documents which came to light in the investigation preceding the present trial of the five officials of the Northwestern General Trading company was the recommendation of C. B. Kegley, master of the Washington State grange, in behalf of this company. The signed indorsement is printed in the 1915 catalogue of the Northwestern General Trading company, and is quoted here:

> Patrons of Washington:
> Your executive committee have made a personal investigation of the resources and liabilities, methods of business and quality of merchandise of the Northwestern General Trading company. We are satisfied that it is on a sound financial and cooperative basis, and through the proposed plan of a distributing center with each subordinate grange, and the active cooperation of the patrons, can be made to fill the need of the wholesale supply house for the grange members.
> Executive committee, Washington state grange.
> C. B. KEGLEY.
> J. O. WING.
> J. T. COMPTON.

Lining Up the Gronge.

The following letter from C. L. Davies, manager of the Portland branch of the Northwestern, to Gale Smith, president of the company in Spokane, was read:

"Portland, Nov. 7, 1914.—Dear Gale: Mr. Kegley and his bunch have finally indorsed the company. It took a long time to bring them over. I was up at Washougal yesterday and had a talk with Mr. Wing, one of the executive committee, and signed him up for a share of stock. He is the one that was bucking our proposition last spring at Washougal. We have him in line now; are getting him out and putting him to work undoing what he did last spring. That is the way to fix these fellows that knock. When they kick the brick wall down make them get in and build it up again.

"I am joining the grange down here and am going to be initiated tonight. I will be some granger, believe me. Heretofore when I wanted to arrange a meeting I would get in for a few minutes and then they would kick me out. But I am going to be in a position where I can go to their grange meetings and stay until the last dog is hung.

"I am glad to hear that you are getting things lined up there with a bunch that are capable of getting the business. I trust that you will be able to run onto some new proposition that will be of benefit to us. CLYDE."

Says Union and Grange Indorsed

"Spokane, Nov. 10, 1914.—Mr. Crabb, Saywer, Idaho—You understand this is a cooperative company issuing catalogs to members only. The membership numbers at this time nearly 8000 of the most progressive and enterprising people of this Inland Empire. By far the greater portion of these people are trading with the company, buying their merchandise, clothing, hardware, groceries, shoes, farm implements, vehicles, wagons, etc., through the company and report a saving of from 25 to 35 per cent on practically all kinds of merchandise. The company has prospered very rapidly, and in five years the membership has grown to nearly 8000 and the total assets to a third of a million of dollars, and the stock is selling for $75, nearly four times its original value.

"You will notice by the enclosed circular the executive heads of the Washington Farmers' union have investigated the company, its management and system of business very thoroughly and have unanimously indorsed the proposition. This of itself is going to enhance the value of the stock and should double the membership. The state grange of Washinton also took the same action and unanimously indorsed the company. Five shares is the most we can sell to one person and represents an outlay of only $375 and makes you a part owner in the Wholesale Mercantile company that is today in the foremost rank of any institution of its kind in the west and getting larger every day.
Northwestern General Trading Co.,
By Sears."

With Farmers' Union.

July 16, 1914, President Smith was authorized to work out a proposed combination with the Farmers' Educational and Cooperative union.

L. C. Crow, P. C. Cox of Colfax, J. P. Hill and J. C. Lawrence addressed the sixth annual meeting October 13, 1914, in behalf of the proposed merger with the Farmers' union. A resolution was adopted favoring a merger of the Northwestern General Trading company and the warehouse operated by the Farmers' Union and Supply company in Spokane.

It was agreed that from every share of stock in the Northwestern sold to members of the Farmers' union at $75 a share that $40 be applied on the debt of the Farmers' Union Warehouse and Supply company, amounting to $13,500.

In this connection the following communications written by C. L. Davies, treasurer and later manager of the company's office at Portland, will be read with interest:

"Portland, Oct. 19, 1914. F. B. Sears, Spokane: Please send me my receipt from the Farmers' union to show that I am their member, the initials and postoffice addresses and the official titles of the following: Crow, Cox, McCurtain and Hill.

C. L. DAVIES."

"Portland, Feb. 27, 1915.—S. T. Knudson, Seattle: I just returned from Spokane this morning. I was up for a few days to get a few little things straightened out. Mr. Gallahan (Gollehon) and Ben Gill have lost their jobs and, believe me, they are pretty sore about it. Trying to raise some trouble, but think they will give it up as a bad job. The Farmers' union bunch are standing pat with us with the exception of Mr. Delivuk.

C. L. DAVIES."

J. C. LAWRENCE

On Payroll While Investigating.

The testimony at the trial brought out the important fact that J. C. Lawrence received $50 a week from the Northwestern General Trading company when investigating it on behalf of the Farmers' union, of which he was a member. This was brought out in a cross-examination of W. L. Neihoster by Attorney Robertson.

"He told you that J. C. Lawrence was drawing $200 a month from the Northwestern when the state of Washington had paid him $500 a month as a member of the state public service commission?" "No, but he did tell us that Lawrence was put on a committee to investigate the Northwestern General Trading company when Lawrence at the time was on the company's payroll," said the witness.

"He told you that the farmers' union knew this?" "No, it was shown that the union did not know it."

Attorney Garrecht informed the court that neither Louis Delivuk nor W. G. Wynhoff appeared before the grand jury.

Lawrence Fees So Marked.

"You have testified that J. C. Lawrence received from the Northwestern General Trading company $1498. To what fund was that charged?" inquired Robertson of Examiner House of the department of justice. "To salaries and commission fund."

"No payments were made to Lawrence as purely commission?" "It was marked commission."

"Would you say from the books that Lawrence received a commission?" "I would say that he was paid a salary, first of $50 a week, which was later cut down to $35." Lawrence first drew pay on June 30, 1914, and received his last payment February 27, 1915.

"What about J. H. Taylor?" "He was on salary at $35 a week, which was later reduced to $25."

TAYLOR ON SALARY

Organizer for the Farmers' Union.

A letter, written by F. B. Sears, head of the membership department of the Northwestern, and addressed to Gale Smith at Cedar Rapids, Iowa, where the latter was assisting in the organization of the Iowa Mercantile company, was read, as follows:

"Spokane, Nov. 8, 1914. — Gale Smith, Cedar Rapids, Iowa: Mr. Jeffries, Mr. Lawrence and myself have been in conference today. Mr. Lawrence said he thought it was by far the best to put the bunch of agents all back on a commission basis. He said the other business in connection with the unions and with the bank proposition that would take up practically his entire time, therefore he wished to turn the handling of the agents back to me, which has been done, and we think it for the best.

"We are putting Mr. Taylor out on a salary, as his position should enable him to get big returns for the company. He is the official organizer for the (farmers') union, and is also in charge of the editorial department of some farmers' union papers, and pleased to get the company the advertising, which it is necessary to have, and get in and sell the stock. I feel confident that he will make good.

"This entire program has been made with the utmost approval of Mr. Lawrence, together with Mr. Jeffries and myself. Mr. Lawrence is going to address the meetings and do all he can to boost the proposition.

F. B. SEARS."

Union Bunch Stands Pat.

"Portland, Feb. 27, 1915.—S. T. Knudson, Seattle: I just returned from Spokane this morning. I was up for a few days to get a few little things straightened out. Mr. Gallahan (Gollehon) and Ben Gill have lost their jobs and, believe me, they are pretty sore about it. Trying to raise some trouble, but think they will give it up as a bad job. The farmers' union bunch are standing pat with us with the exception of Mr. Delivuk.

"C. L. DAVIES."

Leading Geek Leads to Fizzle.

"Monroe, Wash., Friday noon,—S. T. Knudson, Seattle: A man named Bennett here seems to be a leading geek, but he has just led his flock into a fizzle along cooperative lines at Everett. Edwards tried to talk to him, but couldn't even get a hearing. I'm going to make an attempt to land him. Am getting dope on him and will locate his weak spot. There sure is some way to land him and if we do it will at least break the ice.

"O. C. FOWLER."

Sends Smith Salary Check.

Seattle, Jan. 9, 1914.—Gale Smith Spokane: Enclosed you will find check for $100 salary due you for December as per your agreement with me. You will notice I am sending you my personal check, as Mr. Fowler has not felt like taking the matter up with Mr. Dabney and Pickett just at this particular time, but I am satisfied that a satisfactory arrangement will be made along this line within a short time. S. T. KNUDSON."

Are Establishing Chain of Stores.

"Spokane, April 2, 1914.—Mrs. Frank Terrill, Metaline Falls, Wash.: Furthermore the people connected with this business are at the present time establishing a chain of stores on the Coast similar to this one. Our president and general manager is vice president and assistant superintendent of the Seattle concern. Our sales department manager is now in Seattle financing the proposition there. The two companies will buy their goods together, which will have a tremendous buying power. F. B. SEARS."

Everything to Win, Nothing to Lose.

"Seattle, April 8, 1915.—S. L. Davies, Portland: I presume you have pur-

(Continued on page fifteen.)

Was $21,500 Calf Sale Bona Fide?

Charges and Denials Are Supported by Affidavits and Statements

(Continued from page one.)

The following introductory letter from H. G. Stibbs, advertising manager of the Carnation Stock farms, gives a setting to the letters that follow:

SEATTLE, Jan. 30, 1917.—To the Editor of The Washington Farmer: Herewith please find enclosed a letter written over the name of Mr. E. A. Stuart, president of the Carnation Stock Farms.

The name and reputation of the Carnation Stock Farms has been brought up in such a way in connection with the auction sale at the Pacific International Live Stock show held at Portland, Ore., last December which is quite misleading. It is Mr. Stuart's desire to clear the name of the Carnation Stock Farms of any official connection with the bidding on this animal, and we will appreciate very much your publishing this article over Mr. Stuart's name.

Thanking you very much for inserting this in your next issue, we beg to remain, Yours very truly,

CARNATION STOCK FARMS.
H. G. Stibbs.

Statement by E. A. Stuart.

Carnation Stock Farms, Seattle, U. S. A., Jan. 31, 1917.—To the Readers of The Washington Farmer: In the December 14th issue of this paper, page 4, there appeared an article headed, "Holstein Calf Sells for $21,500," etc., about the auction sale held by the Pacific International Live Stock show at Portland, Ore., December 5, 1916.

In this article, it was stated that C. W. Holmes of the Carnation Stock Farms bid on the bull calf Finderne Mutual Fayne Valdessa, which animal finally sold to J. G. Von Herberg for $21,500 on December 5, 1916.

We wish to state that Mr. Holmes, who was at that time superintendent of our western farm, was not authorized by the Carnation Stock Farms to bid on this animal. Furthermore, and contrary to reports, the Carnation Stock Farms have not listed any of their cows to be bred to this bull calf.

It is the writer's desire to clear the Carnation Stock Farms of any official connection with the bidding on this animal in view of the facts (given below) indicating that there was some irregularity regarding the listing and sale of same at auction on December 5, 1916.

In reply to inquiry regarding young bulls, my secretary received a letter from Mr. Bernhard Meyer of Finderne Stock Farms as follows:

Finderne Stock Farms, Bernhard Meyer, Owner, Finderne, N. J., Oct. 2, 1916.

Mr. F. Y. Van Patten, 3608 Thirty-seventh avenue, South, Seattle, Wash. Dear Sir: In reply to your favor of September 14 I enclose pedigree and pictures of three young bulls. They are as good as I have got them. The pictures were taken when they were very young, but they have developed to be very fine individuals at the present time and I price them as follows:

Finderne Mutual Fayne Valdessa No. 174999, $5000.

Finderne Johanna Fayne Korndyke No. 164270, ——.

King Valdessa Pride Johanna No. 187262, ——.

If you are interested in any of them and want any further information I will be pleased to give it to you, or if you want later pictures of them we will have them taken.

All three are good individuals, as good as they can make them and they are all rugged and in good health.

Awaiting a favorable reply, I remain. Very truly yours. B. MEYER.

Before leaving Seattle on November 7, 1916, for the east I heard indirectly that J. G. von Herberg had purchased the bull Finderne Mutual Fayne Valdessa. That this bull had been sold by Finderne Stock Farms previous to the auction sale on December 5, 1916, is proven in their letter of November 17 in reply to an inquiry from our Eastern farm at Oconomowoc, Wis., as follow'

Finderne Stock Farms, Bernhard Meyer, Owner, Finderne, N. J., Nov. 17, 1916.

Carnation Stock Farms, Oconomowoc, Wis. Gentlemen: In reply to yours of November 14th I must say that the bull Finderne Mutual Fayne is sold, but we still have a son out of Valdesa Scott II., whose pedigree and picture please find enclosed. This bull, King Valdessa Pride Johanna, No. 187262, is a very good individual, growthy and in perfect condition, and if you are interested you can buy him for five thousand ($5000) dollars. This is the best bull proposition that I nave on hand, etc.

Any further information will be gladly given. Should like to hear from you. I remain very truly yours,

B. MEYER.

Furthermore, upon the writer's visit to the Finderne Stock Farms on December 2, 1916, upon casual inquiry, he was informed by Mr. Meyer's herdsman that a Mr. von Herberg had purchased Finderne Mutual Fayne Valdessa for $2500 and had given instructions to have the calf expressed to George A. Gue, Portland, Ore.

In view of these facts we desire to clear the Carnation Stock Farms of any alleged connection with the bidding on this animal.

Your very truly,
CARNATION STOCK FARMS,
E. A. Stuart, President.

Telegrams and Replies.

Upon receipt of the above communication from E. A. Stuart, president of the Carnation Stock Farms, the following telegram was sent by the Farmer to Bernhard Meyer of Finderne Stock Farms, under date of Spokane, February 2: "E. A. Stuart, president Carnation Stock Farms, sends us communication for publication embodying copy of your letter October 2, offering Finderne Mutual Fayne Valdessa for five thousand dollars and copy of your letter November 17 to Carnation Farms, Oconomowoc, stating bull sold. Also says your herdsman told him December 2 this bull purchased by Von Herberg, Seattle, for twenty-five hundred. At live stock show, Portland, bull officially reported auctioned from you to Von Herberg for over twenty-one thousand. Prices and dates of sale in statements and at Portland conflict. Will publish Stuart's communication in next issue and will appreciate prompt wire from you as to when bull sold, at what price and to whom."

"Was Not True.

In reply, Mr. Meyer wired:

Finderne, N. J., via Somerville, N. J., Feb. 4, 1917.—Bull was sent by me to the sale under the recommendation of Von Herberg, guaranteeing me five thousand dollars at least, and all he would bring above it. What my herdsman said was not true.

BERNHARD MEYER.

Believing that the correspondence needed further elucidation a second wire was sent to Mr. Meyer as follows: "Your answer does not state to whom bull was sold or the price you actually received for him. Please give this information promptly by wire at our expense. Is report in our issue of December 14 that you sold bull to Von Herberg for twenty-one thousand correct?"

A second telegram from Mr. Meyer given below add further interesting information as to the sale of the $21,500 bull calf:

Finderne, N. J., via Somerville, N. J., Feb. 5, 1917.—The statement in your issue of December 14 is correct. The bull was sold at auction for twenty-one thousand five hundred dollars to Mr. von Herberg. After deducting commission, freight and expense I received the balance of my money in full. Exact amount what I got is my business.

B. MEYER.

The following telegram was sent by the Farmer to J. von Herberg, Seattle, under date of Spokane, February 2: "We have communication from E. A. Stuart, president Carnation Stock farms, for publication in which are embodied copies of letters from Bernhard Meyer of Finderne, N. J., offering Finderne Mutual Fayne Valdessa for five thousand dollars to him and statement from his herdsman that you bought this bull prior to December 2 for twenty-five hundred. At portland Live Stock show this bull officially reported sold on December 5 to you for over twenty-one thousand. Prices and dates of sale conflict as well as facts. Will publish Stuart's letter next issue and will appreciate prompt advices from you covering as full details as possible regarding your purchase of this animal."

No response was received to this telegram until February 8, when the following signed statement come from Mr. von Herberg, together with affidavits and other documents.

The reader will notice that some of these affidavits were executed early in January, showing that there was a growing sentiment questioning the sale of the bull calf Finderne Mutual Fayne Valdessa.

J. von Herberg's Statement.

Seattle, Feb. 7, 1917.—to the Editor: You have invited an answer from me relative to a certain communication made to you by E. A. Stuart for publication. I have not been favored with o copy of Mr. Stuart's communication, but am informed in a general way that he charges that the auction sale conducted by Mr. George A. Gue of North Yakima at North Portland, Ore., at which the young bull—Finderne Mutual Fayne Valdessa—was offered for sale and sold for $21,500, was fraudulent and that I purchased said bull at private sale from Bernhard Meyer for $2500. Mr. Stuart has evidently allowed his ill feeling for me to get the better of his judgment. I can see no other motive for his accusations. Sometime since I purchased from Mr. Stuart some cows, one of which was tubercular and two of which were aborted. I had reason to believe that Mr. Stuart knowingly sold me the diseased animals, and compelled him to return me my money. Subsequently, he attempted to sell me a bull, but forewarned was forearmed and I declined to deal with him. Since which time he has apparently held a great animosity toward me. Ordinarily, I would let his statements go unanswered for, as is well known, the Portland sale was openly conducted by Mr. Gue and some of the most representative Holstein breeders of the northwest attended and participated therein. It is idle, indeed, for Mr. Stuart to attempt to make the public believe that such men as William Bishop of Chimacum, A. E. Smith of Sumas, Mr. Boomer of Idaho, Mr. John L. Smith of Spokane and Mr. C. W. Holmes, then of the Carnation Stock Farm, would lend themselves to any fraudulent scheme; yet all of these men, and others of equal prominence, were at the sale and took part in the bidding on the bull. However, as I feel that the charges reflect not upon me only, but upon the distinguished gentlemen who conducted and took part in the sale I have concluded to take advantage of your invitation and lay the facts before the public:

Bidding on the Calf.

The bull was bred by Mr. Bernhard Meyer of the Finderne Stock farm, Finderne, N. J., who has probably made more world's records than any other Holstein breeder, and whose integrity has never been questioned and who, on the 4th of November, 1916, consigned without reserve, the bull to the Portland sale. I append a copy of Mr. Meyer's letter so consigning it. A large number of Holstein breeders of the Pacific northwest attended the sale, among those present being Charles W. Holmes, then superintendent of Mr. Stuart's Carnation Stock Farm, near Tolt, William Bishop of Chimacum, Henry Boomer of Idaho, A. E. Smith of Sumas, John L. Smith of Spokane and myself. Mr. Gue exposed the bull for sale and the bidding was general and lively until the price had reached up into the thousands. A. E. Smith continued to bid until his final offer was $9000; Mr. Bishop until his bid was $16,000; and Mr. Holmes until his final bid was $21,000. Sometime later I was informed by Mr. Gue that Mr. Stuart was circulating reports to the effect that the sale was fraudulent and because thereof he had obtained affidavits from some of those present. Since you informed me of Mr. Stuart's communication to you and invited my answer I have obtained from Mr. Gue certain of the affidavits and Mr. Meyer's letter consigning the bull to the sale, and I append hereto copies of the affidavits of William Bishop, Albert E. Smith, George A. Gue and C. W. Holmes.

Holmes Bought Cow.

I also understand that Mr. Stuart is now claiming that Mr. Holmes had no authority to appear at the sale and Make any bid on behalf of the Carnation Stock Farm. Personally knowing that Mr. Holmes on previous occasions, particularly at the Snohomish sale, had purchased stock for the Carnation Stock Farm and that he at different times priced and sold stock from the Carnation Stock Farm, and, indeed, that at the Portland sale he purchased a cow for upward of $1000, I saw Mr. Holmes and informed him of the claim made by Mr. Stuart. His answer is contained in his subsequent affidavit, a copy of which I attach. The omitted portion shown by the asterisks is withheld because of the fact that it involves personal matters matters between Mr. Stuart and Mr. Holmes, which, to a certain extent, cast reflections upon Mr. Stuart and which are of no consequence, except as showing a reason for Mr. Stuart now claiming that Mr. Holmes had no such authority.

Mr. Stuart's statement that the bull was bought by me at private sale for $2500 is absurd and I am informed that Mr. Stuart even was frank enough to admit that this statement was based upon some remark of an employe at the Finderne Farm. However, I attach a copy of an advertisement inserted by Mr. Meyer in and clipped by me from the January 25, 1917, issue of Black and White Record. It will be noticed that Mr. Meyer states that the bull was sold at the Portland sale and purchased thereat by me for the highest price a young bull ever brought. The fact that Mr. Meyer may have previously advertised or offered the bull for sale at $5000 is of no moment, for it is well known that persons frequently fail to realize the true worth or market value of an animal and offer to sell the same for a price much lower than the animal subsequently brings when judged by experienced stock men. I can cite many such instances, but feel confident that every breeder knows such to be the case.

Alleges Jealousy.

Mr. Stuart should not allow his personal enmity toward me, nor his jealousy, which has been aroused because of his knowledge that in the possession of Finderne Mutual Fayne Valdessa I have one of the best if not the greatest bred bull in America today, to lead him in making further attacks upon me or other Holstein breeders in this

(Continued on page seventeen.)

Since charges of irregularity have appeared with regard to the sensational sale of the bull calf Finderne Mutual Fayne Valdessa for $21,500 at the Pacific international live stock show at Portland December 5, 1916, and since evidence has been produced, we deem it right to print it in full.

We have two excellent reasons for this: First, because a number of well-known and responsible men are involved and it is only right they should be heard. Second, and even more important, is the fact that all farmers interested in Holsteins (in dairy cattle, in live stock of any kind) have a right to know all about a matter of this sort. They are entitled to this information.

Don't worry about the breed. It will not suffer. There is nothing charged against the Holstein cow or bull.

We make no charges—we print exactly what these men say, word for word.

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Northwest Farmers Alert

Under normal conditions nearly one-half of the exports from the United States to foreign countries consist of agricultural products. It follows that the American farmer should be the most interested citizen in foreign trade questions. But B. F. Harris, a prominent corn belt farmer and banker of Champaign, Ill., told the national foreign trade convention at Pittsburg last week that the American farmer knows less and cares less about the underlying forces in foreign trade than any other citizen.

While that assertion may be true in general, it is not applicable to our farmers in the Pacific northwest. From early days in Washington, Oregon and Idaho the farmers here looked to foreign markets for buyers of their surplus products. Ships from Europe came into Puget sound and the Columbia river seeking cargoes from the farms of the Willamette valley and the Inland Empire, and our farmers have always been alert to the importance of foreign trade and all public movements to foster it.

They have stood insistently for the opening of the Columbia and Snake rivers to navigation. They took a keen interest in the building of the Panama canal. They are awake to the importance of the upbuilding of an American merchant marine.

From his nearness to the sea the farmer of the Pacific northwest has enjoyed a broader outlook on world trade, and he will be found a keen student of the new and difficult problems that are the outgrowth of the European war.

Cooperative Lyceum Course

Actual, practical cooperation between the people of a town or city and the farming community surrounding it is admirable, and one of the things most to be sought after in the development of the country.

Idaho Falls, Idaho, and the people in and about it have ventured a little farther than most communities have along social and educational cooperation. They have gone in together to conduct a free rural lyceum course of entertainment and educational features. The commercial club, the schools, the good roads associations, the government and the farmers and residents of the city contribute. The programs consist of one-half purely entertainment, but of a high tone, and the other of education. Music, readings, humor and the like comprise the one-half. Lectures on practical subjects comprise the other. At one of these entertainments recently there were 150 persons present.

Such a thing is not only possible, but thoroughly practical for any community, and it not only gives two hours of pleasure with a bit of practical education, but it binds all elements of the community together into a cooperative alliance that promises much for the future good of all its people.

Community Property

A large daily paper recently published a photograph of a man and woman grown gray together in the rearing of a family and the wresting of a livelihood for themselves and their children from the soil. A heading over the picture read: "Pioneer Who Accumulated Fortune of $500,000 From the Soil, and His Wife."

The point of order may probably be taken that the heading should have read: "Pioneer and His Wife Who Accumulated Fortune." For, is it not true that the wife on the farm—of anywhere else that she is "a helpmeet"—is a real copartner in the accumulation of whatever fortune is accumulated?

Nemesis

There is an ancient doctrine that goes back to the heathen mythology, according to which a divinity presides over the destinies of man to keep him from becoming too successful, or to cast him down if his head rises too high. Sometimes it is represented as a jealousy on the part of the gods, who, knowing the ambitions of the human heart, watch lest men rival the gods, and, perchance, overthrow them.

At other times the doctrine appears to be the more prosaic law of compensation by which the good and evil in human life balance each other. Lazarus in heaven enjoys happiness to compensate for his miseries in this earthly life. The rich Dives, who had no unsatisfied wish on earth, burns for it in the nether world.

We all are under the influence of this doctrine more or less, even in common things. If there has been a long, dry spell, we think there must be coming a period of extraordinary rainfall to make up for it; if the summer has been very hot, the winter will be very cold to even up.

We carry this feeling into our social judgments and wishes. No sooner do our neighbors begin to prosper than we begin to invoke Nemesis against him. We act as though we feared Nemesis would not get hold of him and pull him back quick enough, so we lend a hand. We become envious and jealous of his prosperity. If the beauty of his house and grounds is commended, we say: "Yes, but he gives mighty little to the church." If his barns are filled with plenty and his live stock receives favorable notice, we admit it, but remark that he makes a slave of his wife and children for the sake of getting rich. If a youth stands high in his classes, we hint that he is getting the bighead. If the young lady is pretty and dresses well, we suggest that her mother had better keep a pretty sharp eye on that daughter.

In fact we are determined that we are going to be earnest helpers of Nemesis, and at least see to it that nobody gets too high without our dragging onto his coattails to bring him down low.

If only we could reverse the matter and try to balance things by helping somebody up from below we would be happier for it.

E. A. BRYAN.

The Interstate Bridge

The completion and opening to traffic of the bridge across the Columbia river, Columbia slough and Oregon slough, adding a vital link to the great Pacific highway down the Coast and connecting the states of Oregon and Washington in a very practical way marks the accomplishment of a purpose that tested engineering skill and the faith of the people of two counties. The bridge was made possible at this time by the voting of bonds by the counties of Multnomah, Ore., and Clarke, Wash. These bonds undoubtedly will, at no remote day, be redeemed by the two states, but the public spiritedness and industrial confidence of the people of these counties stand as an inspiration to the northwest.

The great bridge, which is nearly four miles long and is claimed to be the longest in the world, cost one and three-quarters millions dollars, and is built of thousands of tons of concrete and more than 8000 tons of steel.

Washington Gleanings

Unusual interest in silos is reported from the Dayton (Columbia county) district.

O. M. Fleming has sold his 567-acre ranch at La Crosse to A. M. Winn for $45 an acre.

Wenatchee will have a fruit byproducts plant the coming season, and it will make cider, vinegar, jellies and evaporated fruit.

It is reported that two Seattle men will establish a condensed-milk plant at Mount Vernon in the spring, at a cost of $125,000.

A moving picture machine has been installed at the farm home of T. J. Harrah in the Yakima valley. He plans two picture shows a week.

More than 65 prunegrowers assembled at Vancouver and appointed a committee of three to formulate plans for a prunegrowers' union or organization.

Garfield county will be made the new home of some 20 families who plan to migrate from Missouri and locate in one community this spring in the state of Washington.

Rosalia, in Whitman county, held a potato day recently, with a display of potatoes and a "feed," at which the potato constituted the leading article on the bill of fare.

The Farmers' Union Warehouse company of Palouse has paid $15,000 for potatoes since the crop came in, and with other shipments it is estimated that $25,000 worth of potatoes have been shipped out of Palouse during the season.

The Libby-McNeill Canning company of Oregon has a representative in Yakima soliciting pear tonnage for the coming season at a price said to be $22 per ton. It is thought the company will try to contract for about 1500 tons.

L. E. Ensor has made the largest single sale of wheat ever closed in Reardan, 40,989 bushels, 25 pounds. The lot was in bulk, and consisted of mixed varieties, mostly marquis. He received $61,264.25, or about $1.50 a bushel.

Approximately 1000 acres of land, mostly timber land in the vicinity of Davis Peak, on the north fork of the Lewis river, about 10 miles northeast of Woodland, Wash., will be opened to homestead entry at the Vancouver land office on February 21.

Professor W. T. Shaw of the zoology department of the Washington State college and Professor I. D. Charlton of the department of agricultural engineering have secured a patent on a machine for the extermination of ground squirrels and other underground pests.

A "wool car" from Washington, D. C., has been secured by W. S. Thornber, director of the extension department of W. S. C., to tour Washington the latter part of March. The demonstration car will be in charge of U. S. experts and a state college man will probably travel with the delegation.

The state experiment station at Pullman is going to issue a bulletin on "A Soil Survey of the Proposed Palouse Irrigation Project," including a detailed survey of the 103,000 acres of land in southern Franklin county, which may at some time be put under irrigation with water from the Palouse river.

A farm loan association has been organized at White Salmon. Thirty-six applicants signed the articles of the association. The directors are C. B. Hilton of Lyle, Wash.; D. W. Plank of Dorr, Wash.; C. A. Wagner of Laurel, Wash.; William Olson of Husum, Wash., and W. W. Hawn, Theodore Adams and D. Hunsaker of White Salmon.

What Others Say

Farm Journal: Plan a job before you tackle it.

Southern Agriculturist: Even a cracked resolution is better than none.

Farmers' Mail and Breeze: Now the booze seller seems to have no friends anywhere.

Hoard's Dairyman: The growing animal is doing work just as much as is the producer and should be fed accordingly.

Green's Fruit Grower: It is not safe to assume that since a certain method of pruning is desirable for one tree or shrub, it is equally desirable for another.

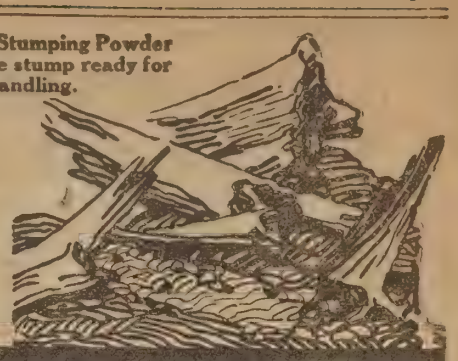




The first step in stump blasting; making hole under the stump.



Loading sticks of Giant Stumping Powder in hole under center.



Giant Stumping Powder left the stump ready for easy handling.

Save money on your stump blasting

The explosives that get stumps out cleanest and cheapest are those that have a heaving and lifting effect, shattering the stumps just enough to break them up. Then you can handle them easily.

"The farmer," says an Experiment Station, "should use an explosive prepared especially for his work; one that stands all ordinary shocks of handling and transportation and does not easily freeze. He does not need and should not use the expensive nitroglycerine explosives." Thousands of farmers have taken this advice and have found that

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

always save them money because they go further than any other stumping powders. Also, because they are made especially to suit *western* farm conditions and because they are always uniform in composition and action.

Giant Farm Powders—the product of the oldest manufacturer of high explosives in the United States—are the only genuine "giant powders" for agricultural use. They are made in two brands—Giant Stumping Powder and Eureka Stumping Powder.

Giant Stumping Powder is the ideal explosive for blasting stumps in wet ground. It keeps perfectly for months, resists water and chilling, and gets the stumps out economically.

Eureka Stumping Powder is the money-saving, low-freezing explosive for blasting stumps in dry soil. It costs less than Giant Stumping Powder and careful blasters save many dollars by using it for wet work also.

EVIDENCE

I bought five boxes of your Stumping Powder and now I want to sell a lot of other powder that I have.
RUDOLPH STADELI, Silverton, Ore.

Your Stumping Powder has a wide breaking power and less fumes to contend with after being exploded than any other on the market.
G. L. METZGER, Hillsdale, Ore.

In using a thousand pounds of your Stumping Powder neither I nor any of my men had the least bit of trouble in getting the very best results. I have used practically every powder on the market and find there is more strength in yours. J. L. EIDSON, Silverton, Ore.

Your Stumping Powder shoots the roots and spreads wide in the ground instead of going down. It is the best powder we have used.
G. S. McCARTNEY, Russellville, Ore.

I find your Stumping Powder all you claim for it. ELI CLINKER, Camas, Wash.

I am a large user of powder in stump blasting as well as in grading roads, breaking boulders and making ditches. I get good results from the Giant brands all the time.
MICHAEL HARVEY, Charleston, Wash.

Giant Stumping Powder gives good results when all other means of removing stumps have failed.
ROBERT CHABOT, Moclips, Wash.

Make This Test

You want to clear your land as cheaply as you can. If you are not using Giant Farm Powders, try them *now*. Mark and mail the coupon at the right. We will have our nearest distributor supply you—at the lowest market price—with a 25-pound or 50-pound case of Giant Stumping Powder or Eureka Stumping Powder. Compare this with any other and *prove* for yourself that Giant Farm Powders will save you money, time and work.

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They tell and show how to remove stumps and boulders, how to increase the fertility of the farm by blasting the subsoil, how to have earlier-bearing, thriftier orchards by blasting holes for trees, and how to drain your land by using Giant Farm Powders. These books are written especially to cover Pacific Coast conditions, and will be helpful to every farmer. Choose the books that you prefer and *mark and mail the coupon.*

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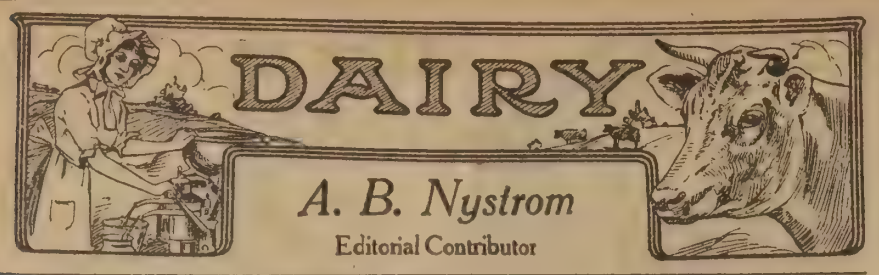
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Hood Farm Jersey Produces 1000 Pounds

The cow pictured here is Sophie's Adora 299594, one of the pride Jerseys of the Hood Farm, Lowell, Mass. She went on test at one day over four years of age, and in the following 365 days produced 15,852.2 pounds of milk containing 888 pounds of butter-fat, which amounts to 1044.7 pounds of butter, figured on the 85 per cent basis.



This record is claimed to make her world's champion 4-year-old Jersey, and champion of all Channel Island breeds of that age, as she surpassed the records of Successful Queen (Jersey) and of Azucena's Pride (Guernsey).

She is a daughter of Pogis 99th of Hood Farm, the sensational son of Sophie 19th of Hood Farm; her dam is Lass 59th of Hood Farm, who is a daughter of Hood Farm Torono. She is three-quarter sister to Sophie's Bertha, who was sold in a recent auction for $5000.

The Hood Farm, of which C. I. Hood is proprietor, is one of the most widely known dairy breeding farms in America, supplying to other breeders many of their choicest animals.

Questions
Are Answered by A. B. Nystrom

Will you kindly tell me the best treatment for a cow that occasionally has some small lumps in the milk? I believe it is called garget, or something like that. The milk is this way perhaps every four or five weeks, for a couple of milkings, and then goes away.

V. G. S., Seattle.

There is a possibility that your cow has garget and if that is the case you may find it difficult to get rid of it. Usually massaging the udder after having made hot applications for about 15 or 20 minutes effects a relief. The thing to do is to bring blood to the udder. You do this by increasing the circulation and that tends to carry away the infection. At the time regulate the feed so that the cow is getting considerable laxative feed. Feed plenty of succulence, good hay, and a well balanced grain ration.

MILK FEVER, BLOAT
Symptoms and How to Relieve.

What are the symptoms of milk fever, and when do they usually appear? What is the best method to relieve bloat? How can a cow's cud be restored after it has been lost?

E. J. E., North Yakima.

The above questions are answered by A. B. Nystrom, professor of dairy husbandry of the State college at Pullman, as follows:

When a cow has milk fever the udder usually is rather empty. The cow lies down and throws her head back toward her side, sort of indicating a severe pain. The milk fever usually appears the first day after the calf is dropped, although it may appear any time within the first week. The best way of preventing milk fever is to feed lightly for the first two or three weeks previous to freshening and also for the week following freshening, but if a cow has milk fever I would suggest that you pump the udder full of sterile air and leave it there until the condition is removed.

Bloat in cows can be prevented by turning the cows onto alfalfa or clover pastures gradually, or by letting them eat a considerable amount of the dry hay before they go on to the pasture. Cows should never be turned onto an alfalfa pasture while it is wet. If a cow is bloated relief can usually be effected by tying a large wooden bit in the cow's mouth, so that she is forced to keep her mouth open. This sort of gage the cow and she belches the gas out. If the cow is down it may be necessary to puncture the paunch on the left side with a trocar. This always gives relief and is not a serious operation at all.

The chewing of the cud is what we call rumination and this is normal in all ruminants, such as cattle, sheep, goats, etc. When these animals are out of condition they do not ruminate and it is spoken of as losing the cud. The cud, in the strict sense of the word, refers to the ruminating process, which is bringing the food from the first stomach or paunch back to the mouth to be rechewed before it goes into the second stomach. When the cow does not ruminate it indicates that she is not well.

CARE OF THE COW
Change Feed Before She Freshens.

What is the proper care of the cow, to become fresh in two or three weeks? What feeds, etc?

E. J. E.

North Yakima.

The Answer.

Professor A. B. Nystrom of the Washington State college says:

In taking care of a cow that is about to become fresh I would advise you to change the feed and give her laxative feeds largely. If you are feeding any grain it should be a mixture of bran and oats, or perhaps bran alone will be just as well. Feed alfalfa and clover hay rather than any of the cereal hays and give plenty of succulent feed, such as roots or silage.

Within a few days of calving time give the cow warm water to drink, and you will have very little difficulty. This warm water should be continued for a couple of days after the calf is dropped, and a very light feed is given a cow at this time. As she graduatelly gets over her sickness of calving you may increase the ration slowly until at the end of a week or 10 days she will be getting a ration similar to the rest of the herd.

BEETS FOR STOCK
Used to Furnish Succulence.

What is the best variety of beets for stock, especially for milch cows? Which varieties grow the most thrifty and largest?

P. H. S., Colville.

Professor A. B. Nystrom of the dairy department at the State college at Pullman answers the above question as follows:

We usually figure that the variety of beets does not make any difference so far as the feeding is concerned. These root crops are watery concentrates and are used to furnish succulence which is necessary in every ration. Of course, we take advantage of the feeding value and of the nutrients that they contain, but still we feed them more for the succulence they furnish than for the nutriment that they furnish. Therefore, we usually advise the raising of that crop which will give the highest yield of good succulence at the least cost. The crop that would be best in your section would probably not be the best in another section and it remains for you to determine under your conditions which is the best crop to use.

CLALLAM COUNTY COWS
Ned Hart's Grade Jersey at Head.

In the report of the Clallam county Cow Testing association for the month ending December 18, 1916, a grade Jersey cow, belonging to Ned H. Hart, stands at the head, giving 990 pounds of 6.7 per cent milk, which produced 66.3 pounds of butterfat. Three other cows have exceeded the 50-pound limit—all grade Jerseys. That of Homer J. Hart gave 807 pounds of 7.6 per cent milk and produced 61.3 pounds of butterfat; that of George S. Willis, giving 924 pounds of 5.7 per cent milk, producing 52.6 pounds of butterfat, and that of Lou Doran giving 888 pounds, 6.9 per cent milk, producing 52.4 pounds of butterfat. Eleven other cows in the association gave over 40 pounds of milk during the month.

Profitable Dairy.

J. N. Griffith of Blaine county, Idaho, has been keeping tab on his dairy business. From January 1, 1916, to January 1, 1917, Mr. Griffith's dairy consisted, on an average, of 12 cows, which entered into the year's business and gave the following very comfortable results: The total yield of butter fat for the year was 2253 pounds, which brought a total of $760.70, and which, as Mr. Griffith figured all the conditions, was $65 per cow for the year.

As to Balanced Ration for a Cow

Will you please compute a balance ration which will be advisable for me to use, from the following feeds? I am selling whole milk and have grade cows, weighing from 600 to 1000 pounds. I have silage in good condition that is composed of about two parts oats to one part of Canadian field peas, and also alfalfa hay that cost me about $20 per ton. The following concentrates are available:

	Per lb.		Per lb.
Peanut bran	$21.50	Rolled barley	46.50
Wheat bran	29.00	Oil meal	43.50
Wheat shorts	32.00	Soy bean meal	43.50
Rolled oats	39.00	Alfalfa ground hay	27.50

Of course some of these feeds are too high to use, but I believe this covers the list pretty well.

S. E. McC., Goshen.

Answered by A. B. Nystrom.

I note that you have peanut brand at $21.50 per ton, and you state that this has a nutritive ratio of 1:7.51. Professor Henry states that peanut hulls, which accumulate in great quantities at the factories, are sometimes ground and used for adulterating feeding stuff. This material, sometimes wrongly called peanut bran, is over half fiber and less valuable than common straw. I am wondering if you have the real peanut bran with a high nutritive value, or whether it is the peanut hulls you refer to. If an exact calculation of a balanced ration were to be made, we would have the following: A 1000-pound cow, giving 25 pounds of 4 per cent milk daily, would need for maintenance and for milk production:

Dry matter.	Purpose.	Protein.	Carbohydrates.	Fat.
25 lbs.	Maintenance	.7	7.0	.1
	Milk production	1.35	6.0	.52
25 lbs.	Total requirements	2.05 lbs.	13.0 lbs.	.62 lb.

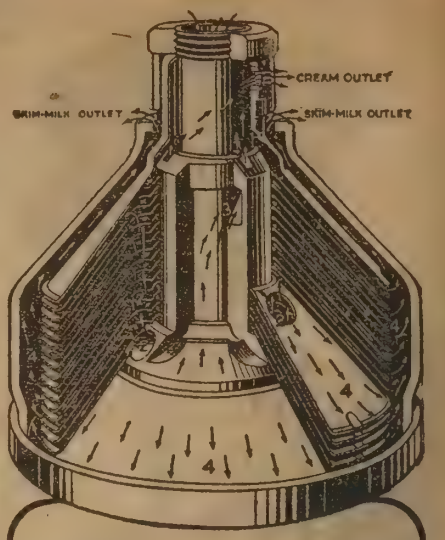
All of the low priced feeds you have given are high in protein and relatively low in carbohydrates, and for this reason it is not possible to get a very cheap ration for you without having it what we would term "too narrow," carrying a little too high a percentage of protein.

I have figured out that by using the following you can get fairly good results and it will approximate the standard:

		D. M.	Prot.	C. H.	Fat.
Alfalfa hay	10 lbs. @ $20 a ton 10c	9.1	1.06	3.9	.39
Pea and oat silage	35 lbs. @ $4 a ton 7c	9.625	.84	4.7	.35
Wheat bran	3½ lbs. @ $29 a ton 5c	3.1	.4375	1.45	.105
Oats	3 lbs. @ $39 a ton 6½c	3.2	.34	1.82	.133
Total cost	28.5c	25.02	2.6775	11.87	.678

This gives a ration with a nutritive ratio of 1.5 and the cost is 28½ cents. The carbohydrate is a little low, but aside from this I think the ration will give good results.

You can get a cheaper ration by about ½c per day by having five pounds of wheat bran and two pounds of oats, rather than equal parts of wheat bran and oats, but this will give you a ration of a nutritive ratio of 1:4.8, which is very narrow. If the peanut bran is of good quality and not chaff I would suggest that some of it be used to widen the ration.



Here is the heart of
The NEW
DE LAVAL
CREAM SEPARATOR

This is the new self-centering De Laval bowl with detached spindle, that is creating such a sensation in the dairy world.

This new De Laval bowl, with patented tangential tubular milk passages and patented removable milk conveyor, makes possible in a bowl of given size and weight, operated at a given speed, greater skimming efficiency and capacity than has ever before been attained in any other cream separator bowl.

These are big advantages that you can secure only in the New De Laval.

But aside from the big advantages of greater capacity and closer skimming, there are many other important improvements in the New De Laval.

All discs are now interchangeable and are unnumbered. There are fewer discs. On account of greater simplicity of bowl construction, the New De Laval is easier to wash and, capacity considered, is still easier to run than before. High grade construction and design, together with perfect automatic lubrication, are a guarantee that the splendid De Laval record for durability will be maintained in the new style machine.

If you are trying to get along without a cream separator or with a half-worn-out or unreliable machine, why not get a NEW De Laval NOW and stop your cream waste? You don't need to count the cost, because the De Laval will soon pay for itself.

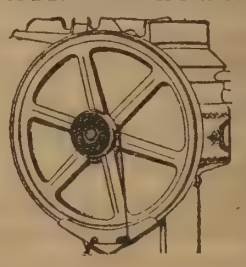
There is a De Laval agent near you who will be glad to explain all the improvements and advantages of the New De Laval, and will set and start a machine for you on your farm and let you try it for yourself.

Why not see the nearest De Laval agent at once? If you do not know him, write to the nearest office for any desired information.

New Catalog will be mailed upon request

De Laval Dairy Supply Co.
101 Drumm Street
San Francisco

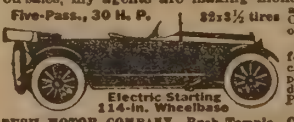
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



Every New De Laval is now equipped with a Bell Speed-Indicator, the "Warning Signal" which insures proper speed and uniform cream.

Driver Agents Wanted

Ride in a Bush Car. Pay for it out of your commissions on sales, my agents are making money. Shipments are prompt. Bush Cars guaranteed or money back.



Write at once for my 48-page catalog and all particulars. Address J. H. Bush-Pres. Dept. 2-FH

BUSH MOTOR COMPANY, Bush Temple, Chicago, Illinois

In answering advertisements don't fail to mention this paper.



Raise Your Calves on
Blatchford's Calf Meal
and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.
Prevents scouring and insures the early maturity of sleek, handsome calves.
It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Factory, Dept. 58 Waukegan, Ill

Spokane Seed Co.
Distributors.
Spokane, Wash.

ANKER-HOLTH

When you buy a Cream Separator, get the latest in separator construction. The Anker-Holth has many very important improvements that place it far in the lead. These features are the reason for so many being sold. Hundreds have been sent out from Portland, and they are now going faster than ever. WHY? Because the users have to talk about them, and their neighbors see them, and then they want one. The best is none too good for you.



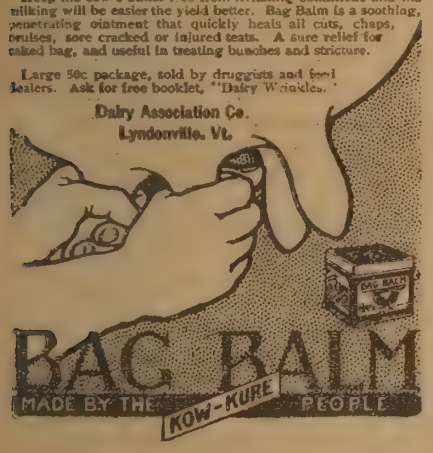
The J. C. Robinson Co.
48 First Street, Portland, Ore.

Comfort for Cows

Keep the cow's udder free from irritating conditions and the milking will be easier the yield better. Bag Balm is a soothing, penetrating ointment that quickly heals all cuts, chaps, bruises, sore cracked or injured teats. A sure relief for caked bag, and useful in treating bunches and stricture.

Large 50c package, sold by druggists and feed dealers. Ask for free booklet, "Dairy Wrinkles."

Dairy Association Co.
Lyndonville, Vt.



General Agents.
SPOKANE SEED CO.
SPOKANE, WASH.

$16.95 Upward ON TRIAL
American
FULLY GUARANTEED
CREAM
SEPARATOR



A SOLID PROPOSITION to send new, well made, easy running, perfect skimming separator for $16.95. Closely skims warm or cold milk. Makes heavy or light cream Different from picture, which illustrates larger capacity machines. See our easy plan of

Monthly Payments

Bowl a *sanitary marvel*, easily cleaned. Whether dairy is large or small, write for free catalog and monthly payment plan.

Western orders filled from Western points.
AMERICAN SEPARATOR CO.
Box 3187 Bainbridge, N. Y.

Wool Sale

Gets $64,000 for 160,000 Pounds

By A. B. KEITH.

Fred I. Long of Frazier, in northern Montana, last week sold 160,000 pounds of wool for $64,000, or 40c per pound. The wool had been stored in a wool warehouse, having been clipped in 1915, and was sold to a Boston firm. At the time the wool was sheared, a year and a half ago, the fleece was selling at from 24c to 25c per pound, but Mr. Long held out for 26c. The buyers would not consider it at that figure, so Mr. Long placed it in storage and for some time he has been predicting 40c wool. That expectation was realized in the sale last week. The news has roused interest in wool circles and Montana flockmasters feel very optimistic concerning this season's prices.

Mr. Long at one time was one of the largest flockmasters in northern Montana. Last year, however, he disposed of the most of his holdings in that line and retired. He is heavily interested in real estate in and about Great Falls.

FARMERS' CREAMERY
Sells 156,966 Pounds of Butter.

During the last year the Kennewick Cooperative creamery, Benton county, Wash., sold 156,966 pounds of butter, 2170 pounds of ice cream from the 129,203 pounds of butter fat bought from the farmers of Richland and Kennewick. The gross amount this business brought the company was $50,888.79.

Farmers were paid $12,035.08 for butter fat. The labor cost of the year was $2868.75; interest, $96; new equipment, $935; accounts payable, $275; general expenses, $3220.73; leaving a net profit to the ranchers who own the creamery of $1157.43.

The investment of the company, besides the plant, is represented in the report as cash on hand, $3048.98; accounts receivable, $1685.77; invoice, $375, giving a total of $5007.75.

The total gain of the company during the year is represented by the new equipment and net gain, and shows a total of $2092.43.

The company has been paying better than 1 cents a pound above the market for butter fat.

DAIRYING IMPROVING
Jefferson County Noted for Output.

CHIMACUM, Jefferson County, Wash., Dec. 28.—The main occupation in this part of the country is dairying, which is steadily improving, as a cow testing association has been running for over six months. Some of the herds have a few cows that are making very good records. During the month of October one Holstein cow made 92 pounds of butterfat and many of them make from 50 to 74 pounds of butterfat. One herd of ten cows averaged 41 pounds of butterfat. Most of them are purebred Holsteins. There are a considerable number of new buildings being erected and a few silos have been put up and filled the last season.

JOHN VAN TROJEN JR.

KILLS YOUNG LYNX
In Heart of Coeur d'Alene City.

A young lynx weighing 28 pounds and measuring 28 inches from the tip of his nose to the tip of his tail was killed the other morning at the corner of Second street and Lakeside avenue, in the heart of Coeur d'Alene city. The animal had apparently been driven from the mountains by the deep snow. He came up Second street from the lake. Several men joined in the pursuit and R. L. Urquhart killed him with a blow over the head with a club.

DIAMOND O RANCH
Changes Hands at $70,000.

Seventy thousand dollars for 2900 acres of land is the amount Ira Sanders, manager of the Diamond O ranch, received when he disposed of the Diamond O property near Blaine in Beaverhead county, Mont., to W. A. Staudemeyer of Minnesota. It is understood that the live stock and the farming implements went with the sale. The Diamond O ranch is one of the best known ranches in southern Montana.

Sun-Dried Beef.

In Latin America sun-dried beef is stretched for tether ropes.



How to Get More Cream

You can skim to a trace with the New National. You get practically 100% of your cream.

It is a big profit maker for you. The finest machine ever built. The handsomest machine. The most durable machine. Bearings of refined brass and finest steel. Lasts a lifetime. The easiest to run. The easiest machine to clean. The machine that quickly pays for itself in more cream profits and in the saving of your time and labor.

New National

The New National has won in every competition. It won because it was the best machine and the best made machine. It won because it skims more cream. If you have two cows or more the National is the machine that will make the most money for you. Remember, the New National is the only machine with the marvelous Vortespoon one-piece skimming device.

Marvelous Vortespoon

The marvelous Vortespoon gets more cream than any skimming device ever designed. One piece. One single solid piece of German nickle silver. Only one piece to clean. Smooth, bright, shiny and unbreakable. It never wears out.



Vortespoon

Unlimited Guarantee

The New National is guaranteed without limit. We guarantee it to skim more cream, to be easier to clean, and easier to handle in every way, and to last longer than any other machine on the market.

Manufactured by
The National Dairy Machine Company, Goshen, Ind.

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BE AN AUTO MECHANIC AND TRACTOR ENGINEER

Personal instruction by the best GAS ENGINE INSTRUCTOR in the United States, with TWENTY YEARS' EXPERIENCE. Personal instruction guaranteed. No books, charts or printed lessons used. Practical EXPERIENCE from day you start until you GRADUATE. Our instruction is not mere THEORY, it's getting right down to actual work on REAL AUTOMOBILES and TRACTION ENGINES, on the road, operating field and SHOP. You go through every branch in easy stages. You can not fail to LEARN IT ALL.

Hawthorne Auto School 445 Hawthorne Ave. Portland, Oregon
Established 1907.
There's a good position waiting for the trained man.



$81.86 PROFIT PER COW PER YEAR
over a period of 7 YEARS is the average of
A GRADE GUERNSEY HERD
IN WISCONSIN

IT WAS THE GUERNSEY BULL THAT DID IT

Write for our free booklets about GUERNSEYS
THE AMERICAN GUERNSEY CATTLE CLUB
BOX P W PETERBORO, N. H.

Power Drag Saw does the Work of 10 Men



One man can move machine from cut to cut on log. Two men can carry it. Cuts through 3½ foot log in three minutes. Approximately 25 cords a day. 3½ H. P. gasoline engine warranted. Steel wheel cart $8.00. Send for catalogue. MANUFACTURED BY
REIERSON MACHINERY CO.
1291 HOOD STREET, PORTLAND, OREGON

LIVE STOCK NOTES

E. J. Iddings
Editorial Contributor

Pays to Raise High Class Draft Colts



L. K. Cogswell of Chehalis, Wash., says that farmers should raise the high class draft colts and the best type of Morgan team and army horses. Such horses will always be valuable but small scrubs and big cull horses are not worth a quarter of the cost of raising them. Mr. Cogswell's remarks are based upon the experience he has had with a Blackhawk Morgan mare, Dinah, whose ancestry he knows for 50 years. Dinah, shown in the accompanying cut with four of her colts, weighs about 1200 pounds and her colts mature to 1250 or 1300 pounds. She has worked nearly every day, including the day the colt is foaled and the day before. She has easily paid for her keep besides that of most of her colts. She is of a long lived, hardy family, always willing and able to pull anything and is a splendid fast traveler for short or long distances.

Work Horses

Preparing for the Spring Rush

By JOE S. HARVEY, Filer, Idaho.

Where good, bright alfalfa hay is fed during the winter, no grain need be given mature horses unless they are used for heavy work. They will do the odd jobs around the farm without grain and come through in good working shape.

Our spring rush here in southern Idaho usually starts not later than March 7, but the weather is the deciding factor, so it is up to the farmer to watch the days, and, about two weeks before he expects to start plowing or harrowing, or whatever the job may be, he should begin feeding a good condition powder to cleanse the horse's system thoroughly. At the same time, it is wise to begin feeding grain, and, personally, I prefer oats. We usually give two feeds a day for three or four days and then add the third feed.

About the same time we begin grain feeding we also add another rubdown to the daily routine, brushing the animals thoroughly every evening after supper, in addition to the morning currying. This makes the coat soft and glossy, and contributes to the horse's well-being more than any other one act of care. That may sound strange to farmers who have not tried it on their own stock, but I am convinced of the truth of the statement.

During the first few days of field work it is economy to take plenty of time and allow the animals to accustom themselves to the heavy loads, and they usually sweat profusely if the weather is at all moderate, and nervous horses will injure themselves more by worry than by work. If they find that they are not expected to clean up the job within two days, they calm down wonderfully and give their bodies a chance.

With the best care, the horses, and colts especially, are likely to scald their shoulders. The pads should be thoroughly cleaned every evening and the shoulders bathed in a strong brine. If the skin breaks once, great care must be taken to keep the shoulder from becoming raw. Different home remedies may prove very helpful, but the following is the best salve for treatment I have ever found:

Take one part of sulphur and one part of lard and mix thoroughly. It is a good plan to melt the lard before adding the sulphur, so that the two may be thoroughly mixed. Add a few drops of carbolic acid, just enough for a disinfectant, and the remedy is ready for use.

If a shoulder shows a bare spot in the evening, with the skin slightly lacerated, bathe with brine. Then in the morning, before putting on the harness, salve the sore with the sulphur and lard mixture. The scald can always be cured if one is watchful enough and begins treatment early. By using some common sense, a driver can keep his horses unmarked, and this, besides proving a source of pride to him, will very materially increase the team's efficiency.



ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.

will reduce inflamed, swollen Joints, Sprains, Bruises, Soft Bunches; Heals Boils, Poll Evil, Quittor, Fistula and infected sores quickly as it is a positive antiseptic and germicide. Pleasant to use; does not blister or remove the hair, and you can work the horse. $2.00 per bottle, delivered.
Book 7 M free.

ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful, Swollen Veins, Wens, Strains, Bruises; stops pain and inflammation. Price $1.00 per bottle at dealers or delivered. Will tell you more if you write. Liberal Trial Bottle for 10c in stamps.
W. F. YOUNG, P.D.F., 371 Temple St., Springfield, Mass.



THE CORRUGATED CREAM SEPARATOR.
The standard for years. Has greatest cream gathering power. Operates itself, saving your time and labor. More cream and more and better butter. Greatest labor saver ever used on the farm. guaranteed. Write for catalog.
Ed. S. Cushman Co., Dept. 26, Centerville, Iowa.

Six Apples

Do Well in Western Washington

C. R. Campbell of King county says that there are six varieties of apples which do well on his side of the Cascades, and that the family orchard, which contains these varieties, is certain to be well provided in the matter of fruit during most of the year.

"First in point of time comes the Yellow Transparent," says Mr. Campbell. "Gravenstein, or Duchess if you don't like Gravenstein, follows. Then, in the order indicated, come the following: Wealthy, Winter Banana, King and Grimes Golden. This is enough of a mixture for anybody, and all of these apples do well for us. You'll notice that in eastern Washington the fairs are no longer offering premiums of 50 or 60 varieties, as we do over here. They have cut the awards down to those kinds which are worth while. It's time we did the same thing here."

Preparing for 1917 Crop.

Now that the 1916 sugar beet cutting and growing campaign has passed into history farmers of the Billings district of Montana are preparing for their 1917 crop, and already over 2000 acres of beets have been contracted for 1917 delivery.

Stock Yards

Salt Lake City Is in the Game

By HORACE ADDIS.

Salt Lake City is adjacent to a region of large live stock interests, including southern Idaho, but it has seen most of the stock shipped to other cities and much of the manufactured meat products shipped back. A year ago last month an organization of progressive Salt Lake business men was effected, and one of the best equipped live stock yards in America has been completed; and these men have been able to induce one of the great packing firms of the country to establish a plant here. The Cudahy company has taken over a small local concern and is remodeling and enlarging the plant at a cost of $100,000, so that by the middle of March, when formal opening is made, it will have a daily killing capacity of 1000 hogs, 1500 sheep and 100 cattle. It is so arranged as to be easily enlarged when the development of the industry warrants.

To date, the company has expended more than $75,000 in the construction of the yards, and they will accommodate 20,000 sheep, 5000 hogs, 1500 cattle and 500 horses. The company controls 246 acres and new units will be completed as needed. The tract is ideally located, far enough away from the city to be free from its encroachments, yet within a 10-minute ride by two steam railroads, by electric car, or by automobile. Both the Oregon Short Line and the Denver & Rio Grande tracks adjoin the yards, giving the best of shipping facilities. A good hotel is now ready for business close by. A modern exchange building is being erected at a cost of $25,000, which will house the general offices of the stock yards and 12 of its 18 office rooms have already been reserved.

The various interested interests are now trying to encourage and aid the live stock industry and induce the marketing of live stock every month. The Utah-Idaho Loan company has been organized, and among its officers I notice F. J. Hagenbarth, president of the National Woolgrowers' association, and others who have the confidence of the live stock breeders.

DRAINAGE RECLAMATION

Areas of Low Land in King County.

In terms of valuations concerned one of the most important county agent projects in the state is the one in charge of Agent F. W. Rader of King county, which involves the reclamation by drainage, of large areas of low land. The drainage propositions include the Issaquah one, which already has brought about an increase in land valuation estimated at $150,000; the Enumclaw project, involving $1000 acres of land and an already materialized increase in value of $100,000; the Enumclaw drainage project No. 2, involving 1800 acres of land with present results in increased land value estimated at $270,000; the Duvall project, including 3000 acres of land, and an estimated increase in valuation of $450,000.

Trap Two Foxes.

W. B. Gunnoe, one of the government crew employed for the destruction of predatory animals, went into Toppenish with a couple of beautiful fox skins, the former owners of which were trapped recently on the lower slopes of the range of hills south of town. The skins were secured in prime condition, the fur being at its best at this season of the year. Gunnoe expects to get a good price for the pelts, as furs of all kinds are scarce and command a ready market. As far as is known there have never been any foxes taken in this district heretofore. The government man thinks the animals wandered off from their home in the mountains and lost their bearings.

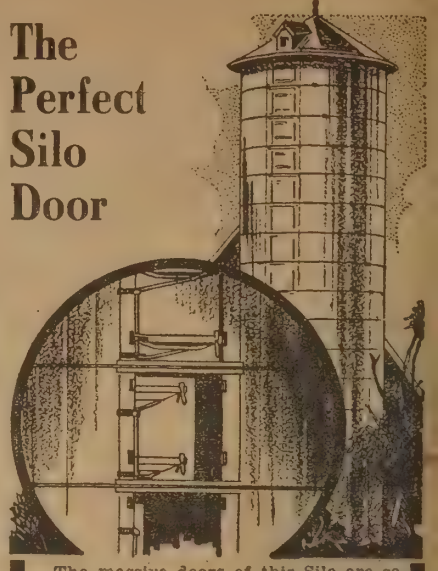
Before Planting Corn.

To the Editor of the Washington Farmer: Pouring a little coal oil over corn and stirring up well just before planting will make a good stand. I tried this last year. The untreated was a very poor stand, but in the treated there was not a hill missing.

S. D. TRUILT.

Washtucna, Wash.

The Perfect Silo Door



The massive doors of this Silo are so nicely balanced that any woman or child who can climb a ladder can swing them. The FOUR malleable compound latches clasp the door firmly against the jambs, making it absolutely airtight.
This is only one of the many reasons why the Weyerhaeuser Silo is the choice of the majority.
FREE LITERATURE—(1) Feeding Manual, (2) Essay on Planting and Raising Corn, (3) Weyerhaeuser Silos. Write for any or all of these.
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All Steel - a Work Saver



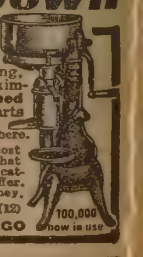
THIS all-steel churn is just what you have been waiting for. Make good butter without the hard work. Drawn steel barrel, heavily tinned inside—easy to clean—sanitary—cannot soak up moisture. Beautifully trimmed in red and blue. Ask your dealer or write us for Circular No. 26X.
Sturges & Burn Mfg. Co., Chicago, Ill.
Established in 1865
Sturges Steel Churns

BLACK LEG LOSSES SURELY PREVENTED by CUTTER'S BLACKLEG PILLS



Low-priced, fresh, reliable; preferred by western stockmen, because they protect where other vaccines fail.
Write for booklet and testimonials.
10-dose pkg. Blackleg Pills, $1.00
50-dose pkg. Blackleg Pills, $4.00
Use any injector, but Cutter's simplest and strongest. The superiority of Cutter products is due to over 15 years of specializing in VACCINES AND SERUMS ONLY. INSIST ON CUTTER'S. If unobtainable, order direct.
The Cutter Laboratory, Berkeley, California

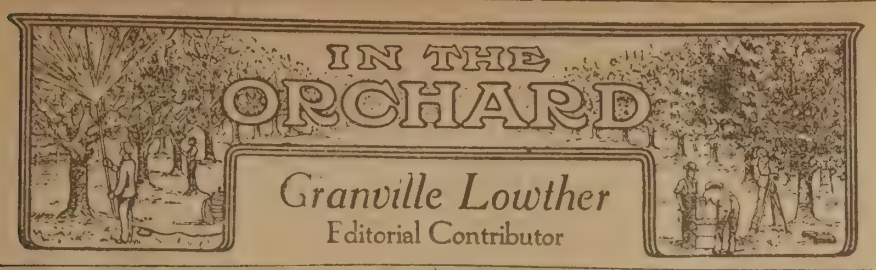
Only $2 Down
One Year to Pay!



$24 Buys the New Butterfly Jr. No. 2. Lightrunning, easy cleaning, close skimming, durable. Guaranteed a lifetime. Skims 95 quarts per hour. Made also in five larger sizes up to No. 8 shown here.
30 Days' Free Trial Earns its own cost and more by what it saves in cream. Postal brings Free catalog, folder and "direct-from-factory" offer. Buy from the manufacturer and save money.
ALBAUGH-DOVER CO. (12)
2183 Marshall Blvd. CHICAGO
100,000 now in use

Read the "Want Ads"

You will find it well worth while to read the "Want Ads" in each issue of this paper.



One difference between the wise man and the fool is that the wise man knows when he has made a fool of himself, the fool does not know because to be a fool is his normal condition.

Some people are so patriotic about their own town or country that they lie about the weather or the climate in which they live and disparage that in which some others live. This patriotic spirit is all right if it should take on different forms, but whatever we say about the weather or the climate, nature is deaf to praise or blame and moves on in majestic splendor, bringing the changes of seasons, produces life on the planets, building worlds and creating countless forms.

Fruit Products

Problem Is Still to Be Solved

By GRANVILLE LOWTHER.

It is generally conceded that in order to make the orchard business as profitable as many other lines of industry we must find a market for our waste products. Then, too, that market must not be a price which just a little more than pays the cost of a man and team for hauling to town in lug boxes, it must pay the cost of production as well.

Not long since I visited a brewery, the building of which cost perhaps one million dollars. They said that the prohibition movement had put them out of business as a brewery, but that they were manufacturing fruit juices. They used five thousand tons of apples last year, 1916, But the average price paid to the orchardist for his cull apples delivered on board the cars was $5 per ton. This is just a little better to the producer than waste.

The difficulty is in the process of solution and it will be worked out in an intelligent and economical way.

Did you hear some one say it could not be done
Because no one ever had done it?
Keep thinking and planning, persisting and trying
And the first think you know you'll have done it.

There is not a device in existence today
But some one has said: "You can't do it."
But some one went at it, kept patiently at it.
And the next thing was known he had done it.

Perhaps when God thought He would make a few planets
Some one interposed: "You can't do it."
But Nature responded, the universe thundered,
The next thing they said: "He had done it."

G. L.

Vines and Berries

Sometimes Go Together It Seems

"If you manure your strawberry vines you will force them to go all to top."

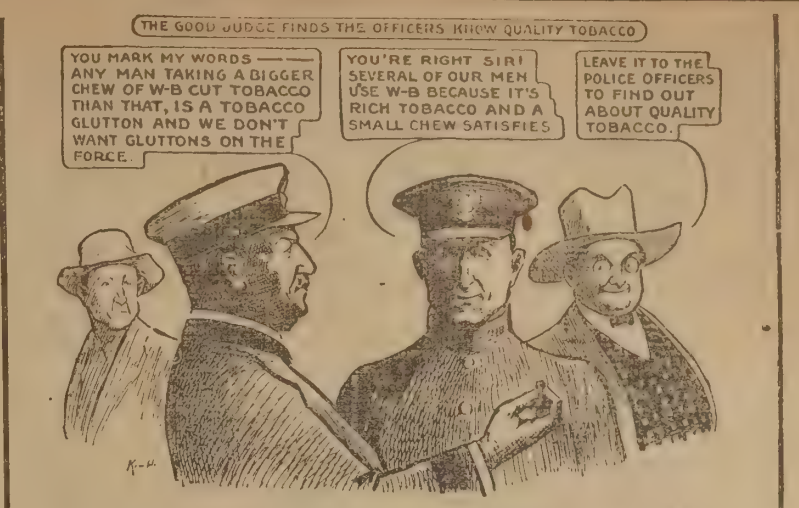
This is good orthodox teaching, from at least a certain proportion of our fruit growers. But—it isn't true, or at any rate, it isn't always true. C. R. Campbell, whose garden is located on the eastern shore of Lake Washington, near the city of Seattle, tried it out one year, against the earnest advice of his neighbors. And Mr. Campbell admits that he got some vines.

"They stood up knee high, so that they looked like young palm trees," Mr. Campbell comments. "And the people who came to see them told me I had made a big mistake; that I would get a crop of foliage plants, perhaps, but no strawberries. Well, I never saw finer strawberries in my life. We ate them fresh and we canned them, and at last I packed up a basket and took them into Seattle. Berries were selling in the store at that time at two boxes for a quarter, but I started in to sell mine at 25 cents straight. I sold several single boxes, then accidentally got into the home of one of the local grocers. As soon as I realized my mistake I began to try to back out, but the woman of the house, after examining my berries, took all that were left. She said that she got more good berries in the six boxes she bought from me than she would from a whole crate from the store."

Mr. Campbell adds that if he were raising berries regularly for market he would use some form of potash, in addition to stable manure. The potash is necessary in producing a firm berry for shipping.

Agricultural Training.

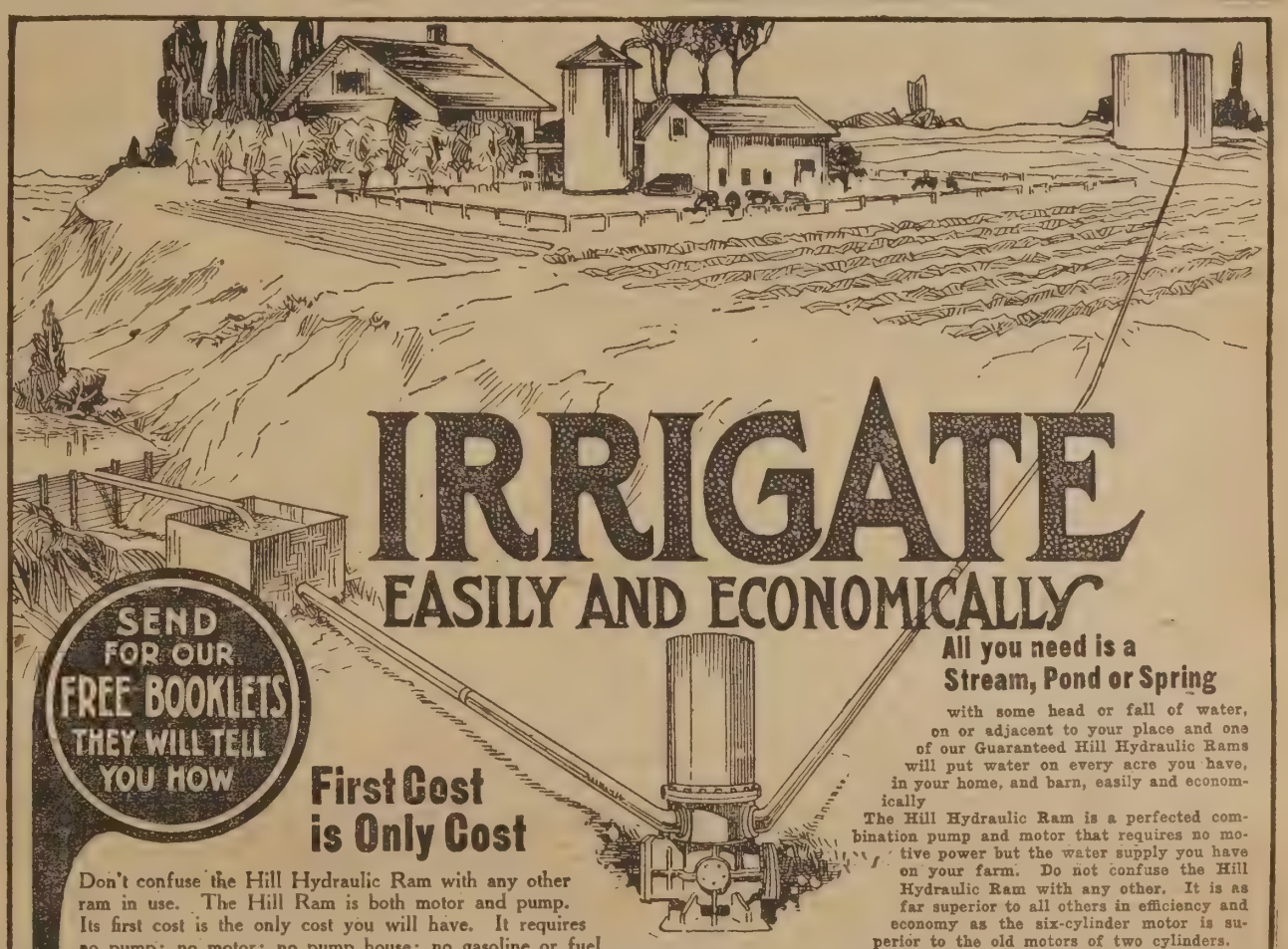
The French ministry of agriculture has organized a special service for the agricultural training of men injured in the war. Twenty-three training centers have been opened, and the instruction given covers almost every rural industry.



YOU notice a fine regard for appearance among the officers from Roundsmen to Captain—that's one reason they are so keen for W-B CUT Chewing. The pass-word among these gentlemanly fellows is "If you won't take a little chew don't take any." No need to disfigure the face, when a nibble of *rich* tobacco gives *more satisfaction* than a wad of ordinary stuff—also less grinding and spitting. Take a tip from the officer on W-B.

Made by WEYMAN-BRUTON COMPANY, 50 Union Square, New York City

In answering advertisements please mention this paper.



IRRIGATE
EASILY AND ECONOMICALLY

SEND FOR OUR FREE BOOKLETS THEY WILL TELL YOU HOW

First Cost is Only Cost

Don't confuse the Hill Hydraulic Ram with any other ram in use. The Hill Ram is both motor and pump. Its first cost is the only cost you will have. It requires no pump; no motor; no pump house; no gasoline or fuel oil engine. It requires no expert attention, you simply install the Hill Ram—start it and then forget it. It will pump water any reasonable lift, up to 300 feet, and will continue to pump without stoppage for replacement or repairs. Remember the only power that the Hill Ram needs is the water head you may have in a spring, pond or stream on or adjacent to your farm.

All you need is a Stream, Pond or Spring

with some head or fall of water, on or adjacent to your place and one of our Guaranteed Hill Hydraulic Rams will put water on every acre you have, in your home, and barn, easily and economically

The Hill Hydraulic Ram is a perfected combination pump and motor that requires no motive power but the water supply you have on your farm. Do not confuse the Hill Hydraulic Ram with any other. It is as far superior to all others in efficiency and economy as the six-cylinder motor is superior to the old motors of two cylinders.

IN FACT, WE DO NOT HESITATE TO GUARANTEE: THAT UNDER A GIVEN HEAD OF WATER PRESSURE ONE OF OUR HILL HYDRAULIC RAMS WILL DELIVER FROM 20% TO 40% MORE WATER THAN ANY OTHER RAM MANUFACTURED REGARDLESS OF PRICE, AND WILL CONTINUE TO DO SO INDEFINITELY.

WHAT A HILL RAM WILL DO—12 SIZES

A Hill Ram will relieve you from the worry and financial loss of drouth. It will reclaim your waste unwatered land; it will put water in your house and barn, making the labor cost less and the housework easier. It makes no difference how many acres you have, we have a Hill Ram that will fit your requirements. We make 12 different sizes from the No. 1 for household purposes to the massive No. 24 for large irrigation projects.

CONSULT OUR EXPERT STAFF FREE

We maintain a corps of Hydraulic Engineers

These men are leaders in their profession and to the man who wants expert advice their help is invaluable, but if you will fill out the coupon and send it to us these engineers will analyze your problem and give you honest expert advice. It will cost you nothing. No matter whether you have ten or ten thousand acres to irrigate, this service is free—just mail the coupon to us immediately.

National Engineering & Equipment Co.
L. C. SMITH BUILDING, SEATTLE, WASH.

FREE Booklet Coupon

NATIONAL ENGINEERING & EQUIPMENT CO.,
2520 L. C. Smith Building, Seattle, Wn.

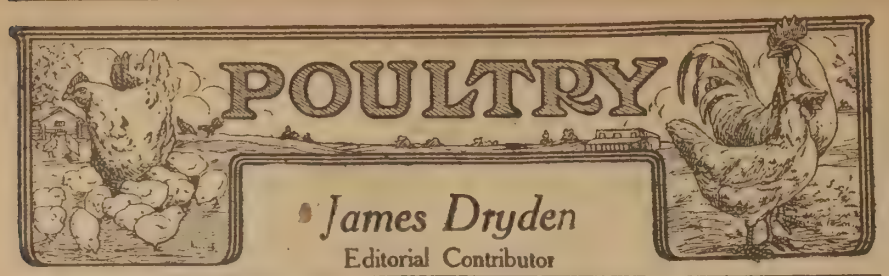
Gentlemen:

Please send without cost to me Bulletins "A" and "B" on the subject of Hill Hydraulic Rams.

Name .....

Address .....

1. *Supply head—vertical fall in feet* .....
2. *Distance in which this fall can be obtained* .....
3. *Vertical height above ram water is to be raised* .....
4. *Length of delivery pipe required* .....
5. *Available flow of water in cubic feet per sec. or gals. per min* .....
6. *Quantity of water required to be pumped* .....
7. *If for irrigation purposes, quantity of land to be irrigated* .....
8. *Remarks or additional data, as use for which water is intended, etc* .....



The poultryman's harvest will be good if he sows good seed—sets eggs from hens that produced a good harvest last year.

Profits will be big or little in proportion as good seed is sown. J. D.

Poultry

Ask State for Financial Help

The Idaho State Poultry and Pet Stock association has submitted to the legislature a measure which will, if enacted, establish two state poultry shows in Idaho and carry an appropriation of $1500 for financing them. One such show would be in northern Idaho and the other would be in southern Idaho, probably for the present at Lewiston and Boise as has been the custom.

The movement is being made not because the state poultry association is in distress financially, but with a view to relieving local business men from the responsibility of guaranteeing the financial success of the displays. The Boise show was aided to the extent of $1000 the past season, it is stated, by the business men of that city.

At its meeting recently the state association audited its books and found itself possessed of assets totaling $600 and liabilities of $100. Indebtedness of $500 has geen paid off during the past year.

The following officers were elected: President, L. V. Patch, Payette, Idaho; vice president, John Demond, Boise; secretary, Mrs. B. Silversmith, Boise; treasurer, W. N. Sweet, Boise. The new directors elected were L. F. Abel, Meridian; H. K. Silversmith, Boise; Mrs. R. W. Barber, Boise; C. L. Haworth, Boise; A. Ketchen, Boise.

Elect at North Yakima.

The North Yakima Poultry association at the recent annual meeting elected the following officers for the ensuing year: President, R. D. Walker; vice president, J. Nonnenmacher; second vice president, E. S. Lueth; secretary, Mrs. F. L. Brown; treasurer, A. F. Luise; superintendent, M. F. Thornton; executive committee, M. F. Thornton, C. W. Spain, E. S. Lueth, J. Nonnenmacher and the president, secretary and treasurer; committee on marketing, A. Allen, R. D. Walker and Harold Paddock.

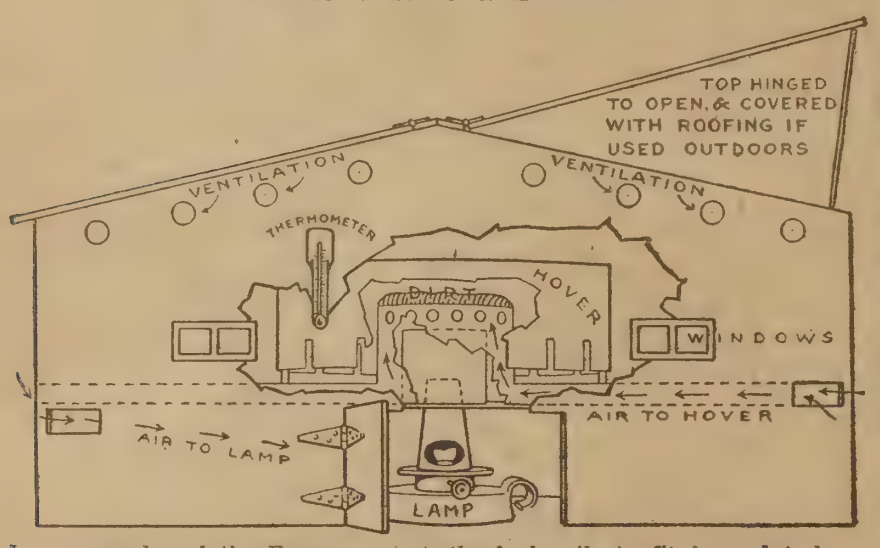
The treasurer's report showed a balance on hand of $80 after all premiums and expenses had been paid. It was decided to hold a show next year and use funds now on hand toward helping finance it. D. G. S.

Raising Turkeys and Geese.

In regard to raising turkeys, how many hens to one tommy? How old should turkey hens be? 2. Will geese eggs hatch that were layed in December? N. J.
Charleston, Wash.

Ten hens to a male is about right. Hens better be a year or two old, though fairly matured last year's stock may be used. The Tom, however, should be two or three years old. 2. Eggs may hatch at a month old or even older if they have been kept at a uniformly cool temperature of 40 to 50 degrees in a dry place and frequently turned. J. D.

How to Make a Brooder



I am a reader of the Farmer, and think it fine, will some one tell me how to make a good home-made brooder? What heat to use? What covering, if any, is necessary to use on the brooder floor, also what kind of litter is best to use for little chicks?

Please accommodate me with answers to these questions, and I will report my success. M. H. B.
Malaga, Wash.

Home-Made Brooder.

The following directions for making a brooder were submitted by H. F. Hoyt. Mrs. Hoyt says:

If chicks are hatched right, from the right kind of stock, almost any kind of a brooding device will raise them successfully; if not, it is a hard matter to raise them at all.

A good home-made, lamp heated brooder is made like the enclosed sketch. Two pails, one of the ordinary five-pound lard pails, and one of the 10-pound, will answer for the heater, a platform should be made three feet square, using 1x8 inches on the sides and one end, so that it will set eight inches off the ground and covering with matched lumber so that the floor will be tight, in the center of this cut out a hole with a key hole saw, just large enough for the smaller of the lard pails to fit in, and tack so that it lets in none of the lamp gas. This pail should be tight. Now take some one-inch battens and nail round all sides of the platform, leaving an opening of three inches in one corner for fresh air, and put on another layer of the matched stuff, thus making a one-inch air space between the two, this is the brooder floor, and should have a hole in the center that will let the larger pail set in and slip over the small pail in the lower platform. The large pail should be well punched with nail holes one inch from the top as it sets, which is the bottom, leaving the bottom whole, to be covered with sand or dirt to throw the heat; the hover can be made 18 or 20 inches square, like a little table with seven-inch legs, and should be covered with two layers of cloth that will not ravel that are six inches wide. The enclosed sketch, while not drawn to scale, will give a better idea of how to make this brooder than these direction.

We like straw cut into inch lengths best for chick litter, as hay sweepings from the barn generally contain fine weed seeds that get into the eyes of the chicks and cause trouble when they scratch.

Hatchet Cure

Recommended for Egg Eating Hen

The problem of the egg eating hen is still a problem. One writer declares that the remedy most effective is the use of the hatchet, followed by a chicken dinner, and there is a certain appeal in the suggestion that likely will cause it to be tried more frequently than some other suggestions.

Another person, however, says that if the contents of an egg are removed and the shell filled with bread crumbs soaked in ammonia, a complete cure will be effected. It is claimed that in some cases a single taste of the ammonia will destroy the hen's confidence in eggs as a food article.

It is often the case, also, that if nests are kept comparatively dark hens are not so likely to eat the eggs.

Early Hatching Best.

Now is the time to begin hatching eggs of the larger breeds. Plymouth Rocks, Wyandottes and Rhode Island Reds and larger breeds should be hatched before the end of March for best results. Seven months should be allowed for pullets of those breeds to mature and begin laying. Some of them may lay earlier and some later, but on the average if they lay in seven months they are doing well. However, the hatching may be continued into April if it could not be done in March, especially if it is good laying stock. The best layers lay early.

Leghorns and other breeds of that size may be hatched a month later than the large breeds. From the middle of March to the middle or even end of April will be all right.

It pays to hatch early. In fact it is absolutely necessary to hatch the chicks early enough to get them to laying by the first of November if one wishes to make money out of egg production.

There are millions of dollars lost to the poultry keepers of the United States just because the chicks are not hatched early enough. J. D.

Government Bureau Has Remedy

Entomologists of the United States department of agriculture have demonstrated that all species of lice which infest poultry may be quickly destroyed by the application of a very small quantity of sodium fluorid, according to the annual report of the chief of the bureau of entomology just issued. Entire flocks of poultry were cleared of the parasites in this way and were found to remain free when ordinary precautions were taken against reinfestation by contact with infested fowls.

In connection with this work the entomologists of the department made the first complete studies of the chicken mite and determined that it depends exclusively upon the fowl for its food and will not develop in any stage on filth or similar substances. In tests of a large series of insecticides it was found that a few thorough applications of crude petroleum to the interior of poultry houses will completely destroy the mites.

Shears for Heavy Materials.

Teeth on the lower blade of new shears enable them to grip heavy materials firmly and cut them smoothly.

KILL THE BUGS
MAKE MORE MONEY
"STANDARD BRAND"
Chicken Mite Killer
(To be pained on roost. Kills them all.)
"Standard Carbolineum"
kills bugs, preserves poles, fences, wood walks, etc.
"Standard Fly Chaser"
Your cows love it! They will repay you.
"Water Glass"
(Highest quality.)
Egg preserving time is near.
Tell us your insect troubles!
FREE information—laboratory.
STANDARD CHEMICAL COMPANY
Tacoma, Wash., U. S. A.

Raw Furs Wanted
I am in the market for large quantities of moleskins, also all other furs. Write for prices and shipping tags.
OSCAR GARD
75 Marion St., Seattle, Wash.

REVLEY BROS. FURRIERS
SPOKANE, WASH.
pay highest market price for all kinds of raw furs. Furs made to order. Write for price list.

Egg-o-hatch applied to eggs during incubation strengthens the chick and weakens the shell. It supplies free oxygen, absorbs carbon dioxide and makes brittle and porous the anima l matter of the shell. The biggest thing ever offered to poultrymen. 50 test hatches show average of 96 per cent for Egg-o-hatch eggs and 81 per cent for eggs not treated, right in same machine. Send 10 cents for sample, for 50 to 100 eggs. Full size package, for 600 eggs, 50 cents postpaid. Booklet free.
GEO. H. LEE CO., 253 Lee Bldg., Omaha, Neb.

PFILE'S 66 VARIETIES farm-raised Land and Water-Fowls, Eggs in season. Incubators. Illus. Catalog and "Grower's Guide," 2c. An honest deal. Write today. HENRY PFILE, Farmer-Poultryman, Box 720 Freeport, Ill.

New Spokane Incubators and Brooders
are sure hatchers. Built to suit Pacific northwest climate. Hot water or electric. Top raises like a lid, permitting turning of eggs without taking from machine. Seven styles and sizes. Prices, $7.50 up. Write for new catalog, which contains new ideas about chick hatching.
Spokane Incubator Company 8429 Haven St. Spokane, Wash.

LIVESTOCK INSURANCE
as provided by the
Montana Live Stock & Casualty Insurance Co.
IS PROVING A BOON TO STOCKOWNERS
This company has already established a reputation for prompt payment of losses and is fully organized to render efficient service in this state.
If there is not an agent in your locality, address
JOHN A. TODD, State Agent.
P. O. Box 74, Seattle, Wash.

Belied Name of Grange

Stock Selling and Commission Making

(Continued from page six.)

chased and have made reservations for your South American trip. I just received a letter from Mr. Smith stating that everything is going along nicely over there and the optimistic feeling seems to predominate. Our case comes up here Thursday. We have everything to win and nothing to lose, as you will see from the Olympic Trader, which will be issued about the 10th of the month. We are going after Miller Freeman like a house afire, and if there is any chance at all, and I think there is, we will have very soon what little money he has got, so if you are up this way anywhere near soon we will do some celebrating.

"S. T. KNUDSON."

Let Lawrence Have Good Say.

"Cedar Rapids, Iowa, Nov. 3, 1914.—F. B. Sears, Spokane: I have written to Mr. Jeffries this morning suggesting that you, he and Mr. Lawrence get together and formulate a proper policy governing our work among the grange and union members, particularly with regard to the agents' commission. Do not be too hasty about it and please let Mr. Lawrence have a pretty good say in the matter. I really would not like to take the matter out of Mr. Lawrence's hands, for he has had charge of the organization, but I will write him today that you and Mr. Jeffries are to consult with him, after which he is to use his own judgment. GALE SMITH."

Would "Line Up" Labor Unions.

"Cedar Rapids, Iowa, Nov. 6, 1914.—F. B. Sears, Spokane: "By the way, I wired Mr. Lawrence last night that Cedar Rapids labor unions were writing to Spokane to ascertain the standing of the Northwestern. He is well acquainted with the labor leaders at Spokane, and should be able to see them and prepare an answer to those inquiries that will be satisfactory to Cedar Rapids people. The Northwestern has always favored union labor, runs its building department with union help, built its building with union carpenters, plasterers, bricklayers, plumbers, steamfitters, etc., and there is no reason why the Northwestern should not have a splendid standing with the labor unions of Spokane. We have a chance here to line up the labor unions if they can get proper reports of us from Spokane, and I wish you would interest yourself in seeing what can be done.

"GALE SMITH."
"C. L. DAVIES."

To Meet Lawrence, Crow, Kegley.

"Cedar Raids, Iowa, Nov. 12, 1914.—J. C. Lawrence, Spokane: I want to get into conference with you immediately upon my return, which should be about Wednesday of next week, and we should also arrange a conference with Mr. Crow and Mr. Kegley at the earliest opportunity.

"GALE SMITH."

Wanted Branch at Waverly.

"Portland, Oct. 19, 1914.—J. C. Lawrence, Spokane: We are getting lined up with the grangers of Clarke county, which, we think, will be a great benefit to us in securing new business. I did not get to have a final talk with you in regard to the situation at Waverly, but I suppose you and Mr. Smith framed that up before he left for the east. I think it would be advisable to take the situation up there at once, as they are holding off with the proposition they have already started, to see what the Northwestern General Trading company is going to do, and there is no question but what Waverly will be an ideal place to try out a local branch.

Lawrence Boosts Waverly Plan.

"Spokane, Oct. 21, 1914.—C. L. Davies, Portland: Your letter of the 19th at hand, and in reply will say that I have put it up to Mr. Darknell at Waverly and am expecting to hear from him. He talked the matter over with Mr. Smith before he left, and the plan is to see what conclusions can be reached with the Waverly people by the time of Mr. Smith's return. J. C. LAWRENCE."

Lawrence O. K.s Trading Company.

"Spokane, Oct. 21, 1914.—Mr. Edwards, Vancouver, Wash.: In regard to your inquiry concerning the Northwestern General Trading company, will say that I recently acted as a member of a committee of the farmers' union appointed to make a thorough investigation of the Northwestern General Trading company, with a view to be indorsed by the executive board of the farmers' union of the wholesale supply house. The result of this investigation was entirely satisfactory to the executive committee, which gave it their unqualified indorsement.

"The intention is to have all of the members of the farmers' union become members of the trading company and have all of the members of the trading company not now members of the farmers' organization who are eligible to such membership to put in their applications for membershps at their various locals.

"This is the beginning of one of the largest cooperative organizations in the United States. The Northwestern General Trading company at the present time is one of the largest cooperative stores in the United States. Consolidation of its interests with the farmers' organization is the beginning of a new era. J. C. LAWRENCE."

Refund Money, "I Don't Think."

"Portland, August 17, 1914.—F. B. Sears, Spokane: That is one of the first things we do, is to refund a man's money when he writes for it. That is one of our golden rules, I don't think. However, I am writing Mr. Stein a letter which I think will bring him to time all O. K. We will also have our representative in that locality have a little talk with him and stir up his enthusiasm again.

"I have been thinking of going to war myself, but, being as I am tied up with the cooperative business, it will be some time before I will be able to enlist, and I think that by that time the war will be over. Hope so, anyway.

"Northwestern General Trading Co.,
"C. L. Davies, Manager."

Ought to Put Over Deal.

"Portland, Sept. 15, 1914.—F. B. Sears, Spokane: Believe me, we ought to put over some deal this fall of some kind of stock selling proposition, but we have got to get busy on the proposition shortly, as it will soon be winter.

"Northwestern General Trading Co.,
"C. L. Davies, Manager."

Mossbacks Stick to Coin.

Replying to a letter from F. B. Sears, manager of the collection department of the Northwestern Trading company in Spokane, in which Sears expressed the hope that the Oregon people were "of a different nature than those in Washington, and when they bought anything they would stand by it," Davies wrote, under date of September 19, 1914:

"I don't think there is much difference between the Washington and Oregon people any more than some of these mossbacks are somewhat hard to jar loose from their coin."

Thought Cleanup in Sight.

"Portland, Oct. 9, 1914.—F. B. Sears, Spokane: Things are getting better here every day and we are getting lined up to do some real business. It sure has been an old grind, but the ice is breaking better now and we will sure make a cleanup if things go right. C. L. DAVIES."

"Portland, Oct. 19, 1914.—F. B. Sears, Spokane: Please send me my receipt from the farmers' union to show that I am their member, the initials and postoffice addresses, and the official titles of the following: Crow, Cox, McCurtain and Hill.

"C. L. DAVIES."

Passes Prospective Patron Along.

"Spokane, Nov. 7, 1914.—S. T. Knudson, Seattle, Wash.: We received a letter this morning which we are enclosing herewith from a party in Anacortes. We answered this letter and advised her to become a member of your organization as you could better serve their interest than we could from here.

"We are enclosing herewith proxy signed by myself and a good portion of the balance of your old associates. This proxy ought to be of great benefit to you in handling your meeting. We are all members of cooperative concerns and fully sympathize with the ideas which you report.

"F. B. SEARS."

Is Grateful for "Proxies."

"Seattle, Nov. 9, 1914.—F. B. Sears, Spokane: I am just in receipt of your various proxies and I wish to thank you one and all for the courtesy. We are promised a very warm reception at the meeting and no doubt it will be very interesting. I think you can well afford to attend, as it will more than likely mean a lot to you in the days to come. I don't know whether or not we will use the steam roller

(Continued on following page.)

Right Now!

You should lay the foundation for your future egg and poultry profits by feeding



Holly **Chick Food**

High Protein **Chick Mash**

Poultrymen everywhere are feeding these excellent foods because they know them to be easily digested, palatable, pure and because they contain the right constituents for building healthy, sturdy chicks.

INCUBATORS AND BROODERS

The Pacific Coast Ideal,—most popular of all incubators, the best for the least price. Write and ask us about the MODEL coal-burning hover and the *International Sanitary* hover. We will gladly send Pamphlet describing these with prices.

Dealers sell LILLY'S Poultry Foods and Supplies.
If yours does not, write LILLY'S, Seattle.

RED CROWN GASOLINE

When better "GAS" can be made we'll make it

STANDARD OIL COMPANY
(CALIFORNIA)

FISH — **Direct From the Fishing Boats to You**

Don't be satisfied with the kind of fish you get in the average inland store. Buy it direct from the packers and get far superior fish at less cost.

Delicious new-salted Ocean Fish of all kinds, freshly packed in brine, on the day of shipment.

Spiced, smoked, kippered and canned fish. Write for price list today.

Norway Fish Company
1907 Pike Place, Seattle, Wash.
Dealers in high grade sea foods, direct to consumers.

HIDES — **WOOL, PELTS, MOHAIR, CASCARA BARK**

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

THE H. F. NORTON CO.
53-55 No. Front St. PORTLAND, ORE.
206 3D Ave. So. SEATTLE, WASH

Belied Name of Grange

Stock Selling and Commission Making

(Continued from preceding page.)

method, but if necessary we can do it, as we have plenty of gasoline and hot air. S. T. KNUDSON."

Fire Up the Steam Roller.

Spokane, Nov. 12, 1914.—S. T. Knudson, Seattle: We are glad you appreciate proxy from the bunch of real cooperators over here. Nothing would please me better than to be at your stockholders' meeting Saturday. I am sure I would enjoy the fun, and would certainly learn something that would be of benefit to us. If necessary, get the steam roller in position, and have it well fired up, and if you find is necessary start it rolling and put them to sleep. There are times when the steam roller is quite necessary, as we found it on one occasion, which you will remember.

"There is a proposition in sight over here that is going to be of great benefit to the cooperative concerns throughout the state of Washington, and that is the big central farmers' union bank which is to be organized. Mr. Lawrence is taking a very active part in the organization of this bank, and it will be of vast importance to all farmers' organizations throughout these northwest states.

"F. B. SEARS."

Steam Roller Worked Fine.

"Portland, Nov. 17, 1914.—F. B. Sears, Spokane: I had the pleasure of attending the second annual meeting of the Olympic Trading and Supply company at Seattle last Saturday. The meeting was held at the store building of the said company. About 400 members were represented. The boys' steam roller was working in fine order. They made the grade with a full head of steam. The steam roller, with its gigantic power and speed, worked so fast that Mr. Edwards, who was handing out the ballots to the members for the election, had to be informed that the meeting was all over, and that he was entirely out of order. The election of officers was followed by some good speeches and the annual report was read, which was very satisfactory to the members.

"C. L. DAVIES."

Steam Roller Is Necessary.

"Spokane, Nov. 19, 1914.—C. L. Davies, Portland: I should like to have been with you at the Seattle meeting. I guess they had rather a hot time over there. Haven't had any reports from it as yet. The steam roller is rather a necessary adjunct to these meetings at certain times and when it gets started has to run quick and fast to have the desired effect.

"F. B. SEARS."

Invited to Grand Opening.

"Portland, Feb. 4, 1915.—S. T. Knudson, Seattle: The grand opening of the Portland branch of the Northwestern General Trading company will be on February 15 and we request that you and the bunch from the Olympic Trading and Supply company be present on that date if possible. I also have a proposition to put up to you and Gale at that time which I think will be of great benefit to both the Northwestern General Trading company and the Olympic Trading and Supply company, and also to our personal benefits. C. L. DAVIES."

Feared Lot of Stock on Market.

"Seattle, Feb. 5, 1915.—C. L. Davies, Portland: I presume you are mighty busy getting things in shape around the store and looking after the sales force. I feel that now is the time to sell stock in your house. After another year I think you will find a lot of stock on the market and that will have a tendency to interfere with the salesmen in the field. S. T. KNUDSON."

NEARLY SIX YEARS of N. W. General Trading Company.

United States District Attorney Garrecht, conducting the prosecution, in his opening statement, followed the progress of the Northwestern General Trading company from its organization by Gale Smith and others in 1909 to its bankruptcy proceedings in 1915. He said that although the concern lost money every year it sent out circulars and empolyed agents to sell stock, who gave glowing accounts of the company's business. As time went along and the activities of Smith and his coworkers expanded they organized a branch of the trading company at Portland, with C. L. Davies in charge, and began selling stock there.

Later the Inland Mercantile company was formed to collect the unpaid balance on notes, and in 1914 Smith organized the Iowa Mercantile company at Cedar Rapids, Iowa, along the same line as the concern in Spokane.

Told of Company Prosperity.

One of Smith's active lieutenants, the district attorney continued, was Frederick B. Sears, who died in 1911. Sears was in charge of collections on stock notes and sent out many letters telling of the prosperity of the company, which were issued, it was claimed, with the approval of Smith.

Early in the history of the Northwestern General Trading company a stock sales department was organized, which contributed to Smith and his associates a commission of 25 per cent on all stock sold. After the death of Sears, S. T. Knudson was placed in charge of stock sales and continued in this capacity until he went to Seattle to take charge of the stock selling for the Olympic Trading and Supply company. Gale Smith was a director in the Seattle company, which paid him $50 a month.

"Bought for Cash, Sold for Cash."

Continuing, District Attorney Garrecht said the Northwestern General Trading company advertised that it bought for cash, in carload lots, and sold for cash, whereas it had run large accounts and owed more than $60,000 at the end of 1914. The losses in the business had grown steadily from a total of $8000 in 1911 to an aggregate loss for the whole period of $70,000 in 1915.

During all of these years the company was represented as solvent and its stock steadily advanced from $25 a share in 1910 to $75 a share in 1912. Losses were recouped, the jury was informed, from the proceeds of the sales of stock. With this new money dividends in the form of rebates were given patrons to make a favorable impression.

Smith Employed J. C. Lawrence.

In 1914 Gale Smith, according to the federal attorney, conceived the idea of securing the indorsement of the farmers' union and the State Grange of Washington. He employed J. C. Lawrence, prominent in state politics and activities of the farmers, and had him work among the farmers' organizations at $50 a week. The government charges that Lawrence knew of the insolvent condition of the Northwestern General Trading company, but secured the indorsement of the farmers' union and the grange in spite of this. The grange indorsement was given by a committee of which C. B. Kegley, master of the state grange, was a member, at a time when the Northwestern General Trading company is alleged to have been running behind.

Lawrence Sold Stock to Farmers.

One of the moves engineered by J. C. Lawrence, according to Attorney Garrecht, is the merger of the Northwestern General Trading company with the farmers' union, which had become involved for $13,000. Lawrence is also alleged to have sold Northwestern stock, directly and through agents, among the members of the farmers' union and labor organizations.

Left $182,000 Unaccounted For.

Figures presented by District Attorney Garrecht from the examination of the books of the Northwestern General Trading company by federal examiners showed that up to April 30, 1915, $317,916 had been collected from the sale of stock, while the total assets in sight were only $135,000, leaving $182,000 to be accounted for. The losses in the mercantile end of the business on April 30, 1915, were $71,000. Gale Smith had accepted a salary of $60 a month in 1909, which grew to $500 a month just before the bankruptcy in 1915.

Robertson Outlines Defense.

Outlining the defense Attorney Robertson said he would show that the organization of the Northwestern General Trading company in 1909 was a legitimate business enterprise, started to fill a field then believed to be open, and was not a conspiracy fradulently to use the mails, as alleged.

A. G. Stall, was credited with making the first move in the matter. Stall met Gale Smith in the office of Conrad Wolfle in Spokane and found that Smith was considering the opening of a mail order house as well. Smith was then a former newspaper man and printer and later installed his own printing office in the Northwestern General Trading company's building after the concern grew.

Business Was in Good Faith.

Attorney Robertson said that he would show that the business was always conducted with good faith and that when bankruptcy was forced as a measure of self-protection the company has assets of more than $300,000 and debts of only $49,000.

Attorney Garrecht read the following excerpts from a prospectus issued by the Northwestern General Trading company:

From "Our Policy."

"Not one dollar's worth of goods shall be purchased for this house unless the money is on hand to pay spot cash on delivery. Bankruptcy has no terrors for a business conducted on these principles."

SALES OF STOCK And Other Facts From Records.

W. W. Jeffries identified the minutes of the Northwestern General Trading company, of which he was secretary from late in 1909 until 1915. He said that frequently he was busy with other work and Gale Smith wrote up the minutes, while Jeffries signed them.

Early Stock Sales Recounted.

At the first annual meeting, October 13, 1909, President Smith reported the sale of 1500 shares of stock for $30,000, of which $6046 had been paid in cash. From these collections $2479 had been paid in commissions, and the minutes note that a difference of opinion existed as to the manner of conducting the sale of stock.

W. H. Sprague, Joseph Kaufman, Charles W. Haynes, Gale Smith and W. W. Jeffries and C. L. Davies were elected directors. On reorganization the board of trustees elected Gale Smith president, Joseph Kaufman first vice president, W. H. Sprague second vice president, W. W. Jeffries secretary, and C. L. Davies treasurer.

The company leased two store rooms at W128 and W130 Second avenue and opened for business November 24, 1909. A contract was closed with Robert Lair and S. T. Kundson for the sale of stock at a commission of 25 per cent. Manager Smith's salary was increased to $125 a month.

June 25, 1910, the price of stock was advanced from $30 to $40 a share.

Manager's Salary Increased.

At the annual meeting in October, 1910, receipts of $26,261 from the sale of stock since the last report was announced. There was talk of a new building. W. H. Sprague was reelected trustee. The old officers were reelected and Manager Smith's salary was increased to $150 a month.

On July 24, 1911, the price of stock was boosted from $40 to $50 a share, and the president authorized to organize a stock sales department, providing for the sale of stock on a commission of 25 per cent.

At the third annual meeting receipts from the sale of stock of $14,782 were reported and $55,000 of merchandise. W. W. Jeffries was reelected trustee. Gale Smith's salary was boosted to $175 a month and a deal closed for the A. E. Burgan building, at Division and DeSmet avenue, for $35,000, of which $9000 was to be paid in cash and the balance in four annual payments.

February 7, 1912, the stock was boosted to $60 a share, and a contract closed for the lease of the Shaw-Wells warehouse on East DeSmet avenue.

Conrad Wolfle Enters Firm.

At the fourth annual meeting Lawrence Jack, attorney for the company, delivered an address. Conrad Wolfle, a brother-in-law of Gale Smith, was elected a trustee to succeed Joseph Kaufman. Wolfle was elected first vice president in the annual election by the directors, the other officers remaining unchanged. W. H. Sprague asked that all matters of importance first be referred to the trustees for consideration. No action taken on the suggestion.

On January 14, 1913, a loan of $15,000 from the Spokane and Eastern Trust company was authorized, and the firm's banking business changed from the Exchange National bank to the Spokane and Eastern.

On December 27, 1913, Smith reported that he had been advised by Attorney Lawrence Jack that a branch office could legally be opened in Portland and stock sold there. C. L. Davies was appointed manager of the proposed Portland branch, and authorized to sell 1000 shares of stock at not to exceed $70 a share.

July 16, 1914, President Smith was authorized to work out a proposed combination with the Farmers' Educational and Cooperative union.

L. C. Crow, P. C. Cox of Colfax, J. P. Hill and J. C. Lawrence addressed the sixth annual meeting October 13, 1914, in behalf of the proposed merger with the farmers' union. A resolution was adopted favoring a merger of the Northwestern General Trading company and the warehouse operated by the Farmers' Union and Supply company in Spokane.

It was agreed that from every share of stock in the Northwestern sold to members of the farmers' union at $75 a share that $40 be applied on the debt of the Farmers' Union Warehouse and Supply company, amounting to $12,500.

Smith's Salary Now $6000 a Year.

After affecting the deal with the farmers' union the board of directors of the Northwestern the following day raised Gale Smith's salary to $6000 per annum.

January 18, 1915, a resolution was passed authorizing a loan of not to exceed $15,000 from the Fidelity National bank.

February 12, 1915, the first note of the final trouble appears in the record with a demand from J. T. Golehon, H. G. Wynhoff and other stockholders for permission to make an expert examination of books. After taking legal advice the board votad that stockholders had a right to see the books. A personal account carried in the name of Gale Smith for retiring the stock of dissatisfied shareholders was ordered changed to a company account to cover suspended stock. At this meeting all salaries were ordered cut and President Smith's pay reduced from $6000 a year to $335 a month.

February 25, 1915, demand is made by J. T. Gollenhon, Louis Delivuk, H. G. Wynhoff and others that the present board of directors resign. No action taken.

Tell of Stock Purchases.

R. M. McCoy, Cheney, had purchased one share of Northwestern stock at $40, on which he paid $30. He was promised a reduction of 20 to 35 per cent in the price of groceries, but found he could buy no cheaper than at home.

Miss Ida L. Fisher, a teacher of Missoula, Mont., bought five shares of Northwestern stock in 1912 at $60 a share from Mrs. Eisenhour, an agent. The deal had been closed with her sister, who had been promised a place with the company. After the deal was closed no job could be had.

Henry Daubel, Elk, Wash., had bought a share in the Northwestern on the representation that it would buy his wood. When he got ready to sell the company would not pay within 25 cents a cord of the market price, and he refused to make further payments on his stock.

Promise of immediate payments of dividends induced J. P. Hambrecht, Leavenworth, Wash., to invest $100 in Northwestern stock. He found the representations made were untrue and he made no further payments on his $375 contract.

Found Statements Untrue, Says.

Charles L. Freiderichs of Helena, Mont., had purchased five shares of Northwestern for $375, on which he paid $100 down, on the representation that the company's prices on groceries were 20 per cent under retail; that it was a large concern, soon to be as big as Sears-Roebuck and Montgomery Ward, all of which he found to be untrue, he said.

A. R. Sweet, Grangeville, Idaho, bought a share of stock in 1911 for $49, in the belief that a strictly cash business was conducted and lower prices given. Later he found the company was in debt, after which he refused to complete payment for his stock.

Almer McCurtain, secretary of the Farmers' union of Washington and Idaho, read the minutes of the union from July, 1914, to March, 1915, covering the period of the union's relations with the Northwestern General Trading company.

Agree to Consolidate.

The question of a consolidation of the two organizations was first brought up by J. C. Lawrence in July, 1914. The matter was discussed and action deferred until September, when a conditional indorsement of the union was given. This was finally concluded in December, 1914, and ratified at a massmeeting of the union members in January, 1915, at which time J. C. Lawrence and L. Delivuk, appointed on an investigating committee, made their report.

Afterward Delivuk made charges against the Northwestern and tried to secure further investigation. At two of the meetings at which the question was up J. H. Taylor presided and ordered that the matter lay over until the return of L. C. Crow, president of the union. Committees from stockholders in the Northwestern then waited upon the union and urged an investigation, and in March, 1915, a new audit of the books was ordered.

Confidence in Lawrence.

"Did you know that J. C. Lawrence was on the payroll of the Northwestern when he was appointed on that committee?" inquired Garrecht. "I did

(Continued on page twenty-one.)

Was Calf Sale Bona Fide?

Charges and Denials Backed by Documents

(Continued from page seven.)

community. However, I will say I will pay no further attention to any accusations which he may make, be they public or private, unless I take them up personally.

In conclusion I will state that shortly after the sale I declined a bona fide offer of $15,000 for one-half interest in the bull. The Holstein breeders, recognizing the worth of the bull—Finderne Mutual Fayne Valdessa—are rapidly agreeing to breed their cows to him, and I do not fear but that my investment will be a remunerative one and tend to the betterment of the stock of the Pacific northwest.

J. G. VON HERBERG.

Affidavit by William Bishop.

STATE OF WASHINGTON,
COUNTY OF THURSTON.

William Bishop being first duly sworn upon oath deposes and says: That he is the owner of a stock farm at Chimacum, Washington, and is now at Olympia, Thurston county, Washington, attending the legislature, of which he is a member; that he attended an auction sale of Holstein cattle held at North Portland, Ore., on December 8, 1916, by George A. Gue of North Yakima, Wash.; that at said sale the Holstein bull, Finderne Mutual Fayne Valdessa, was offered for sale at public auction; that at said sale this affiant in good faith and without any collusion with anybody and without any agreement, secret, expressed or implied, with any one whomsoever did in good faith bid the sum of $16,000 for said bull; that said bull was finally sold to J. G. Von Herberg for $21,500; that so far as affiant knows, or has any knowledge, information or belief, the other bidders at said sale were acting in good faith and without collusion; that said sale was fairly and openly conducted and the bids were openly made. That there were present at said sale nearly all the representative Holstein breeders of Oregon and Washington.

WILLIAM BISHOP.

Subscribed and sworn to before me this 9th day of January, 1917.

FRED W. AGATZ.

Notary public in and for the state of Washington residing at Olympia, Wash.

(Seal: Fred W. Agatz, State of Washington. Notary public. Commission expires May 7, 1918).

Affidavit by A. E. Smith.

State of Washington, County of King, ss:

ALBERT E. SMITH being first duly sworn upon oath says: That he is the owner of a stock farm at Sumas, Wash.; that he was present at a Holstein auction sale held at North Portland, Ore., on December 8, 1916, which was conducted by George A. Gue of North Yakima; that at said sale a Holstein bull, Finderne Mutual Fayne Valdessa, was offered for sale to the highest bidder. That at said sale this affiant bid for said bull the sum of nine thousand dollars; that said bid was made by this affiant in good faith and without any collusion or understanding or agreement, expressed or implied with any person whomsoever, and that so far as this affiant has any knowledge, information or belief the other bidders were acting in good faith and without collusion.

ALBERT E. SMITH.

Subscribed and sworn to before me this 26th day of January, 1917.

A. B. MACKAY.

Notary public in and for the province of Alberta. My commission expires at the will of the lieutenant governor.

Seal: A. B. Mackay, Notary Public, Province of Alberta.

Affidavit of George A. Gue.

State of Washington, County of King, ss:

GEORGE A. GUE being first duly sworn upon his oath deposes and says: That he is an auctioneer and live stock broker residing at North Yakima, Wash., and as such managed and conducted a certain Holstein sale held at North Portland, Ore., on December 8, 1916, and that at the above mentioned sale sold a registered Holstein bull—Finderne Mutual Fayne Valdessa—to the highest bidder for the amount of twenty-one thousand five hundred dollars; each and every bid received was a bona fide bid to the best of my knowledge and belief. This bull was consigned to the above mentioned sale by Bernhard Meyer of Finderne, N. J., with instructions to sell to the highest bidder without reserve. I also further state that there was no understanding between myself as manager and auctioneer of this sale, and any of the bidders on the above mentioned bull. That when the sale started the first bid was five hundred dollars and thereafter the bids kept increasing, nearly all of the Holstein breeders taking part and making bids until there was finally left William Bishop of Chimacum, Wash.; A. E. Smith of Sumas; Charles Holmes of the Carnation Stock farm; Mr. Boomer of Idaho, and Mr. J. G. von Herberg of Lodge von Heim, Kent, Wash. Mr. Smith's highest bid was something over twelve thousand dollars and that of Mr. Bishop sixteen thousand dollars and that of Mr. Holmes twenty-one thousand dollars and the final and highest bid was by Mr. von Herberg of twenty-one thousand five hundred dollars, for which sum the bull was sold to him.

GEORGE A. GUE.

Subscribed and sworn to before me this 8th day of January, 1917.

JAY C. ALLEN.

Notary public in and for the state of Washington residing at Seattle.

Seal: Jay C. Allen. State of Washington. Notary Public. Commission expires October 26, 1919.

STATE OF WASHINGTON,
COUNTY OF KING.

C. W. Holmes, being first duly sworn upon oath deposes and says: That for 16 months immediately prior to and ending on the 9th day of January, 1917, he was the superintendent of the Carnation stock farm in the Snoqualmie river valley near Tolt, Wash.; that on the 8th day of December, 1916, affiant, as was his usual custom, attended a public sale of Holstein cattle held in North Portland, Ore., which sale was managed and conducted by George A. Gue of North Yakima, Wash.; that at previous sales which affiant had attended affiant had bid, and on certain occasions had purchased animals for the Carnation stock farm, and had instructions and permission from E. A. Stewart, president of the Carnation stock farm, to purchase any animal which he saw and which he thought was advisable to buy; that at said sale so held in North Portland, Ore., on the 8th day of December, 1916, there was offered for sale by George A. Gue, the bull calf—Finderne Mutual Fayne Valdessa; that the pedigree of said animal was read at said sale and a letter from Bernhard Meyer of Finderne, N. J., was read consigning said bull to George A. Gue to be sold without reserve; that at said sale there was present practically all of the representative Holstein breeders in the northwest. That the bidding on said animal was general until the bids reached ten thousand dollars ($10,000), and thereafter there was left among the bidders William Bishop of Chimacum, Wash.; A. E. Smith of Sumas, Washington, H. R. Boomer of Idaho; that thereafter the bids increased between the said parties when J. G. Von Herberg of Lodge von Heim, Kent, Wash., entered the bidding, and when the bids had reached seventeen thousand dollars ($17,000) this affiant, having studied the pedigree of said animal, and having seen the animal itself, entered the bidding, and the bidding increased and continued until finally this affiant offered and bid the sum of twenty-one thousand dollars ($21,000) for said animal, and Mr. Von Herberg, bidding twenty-one thousand five hundred dollars ($21,500) the animal was sold to him. That affiant's bidding was done in good faith, with full knowledge of the pedigree of the animal, and with the full and honest belief that the animal was worth the sum which he bid. That affiant in making his bid of twenty-one thousand dollars ($21,000) was actuated by no purpose whatsoever except the belief that the animal was worth the sum so bid by him, and that it would be advisable for the Carnation stock farm to obtain it if it could at that price; that at no time was there any agreement, expressed or implied, between this affiant and any other person whomsoever, as to any amount or sum which he should bid for the animal, but that affiant acted on his own knowledge and belief as to the real value of said bull. That said sale was openly held in the same manner that all sales are held under like circumstances. That in affiant's opinion, based upon the pedigree of the bull, it is the best bull in the country today.

(Signed), C. W. HOLMES.

Subscribed and sworn to before me this 11th day of January, 1917.

(Signed) JAY C. ALLEN.

Notary public in and for the state of Washington, residing at Seattle.

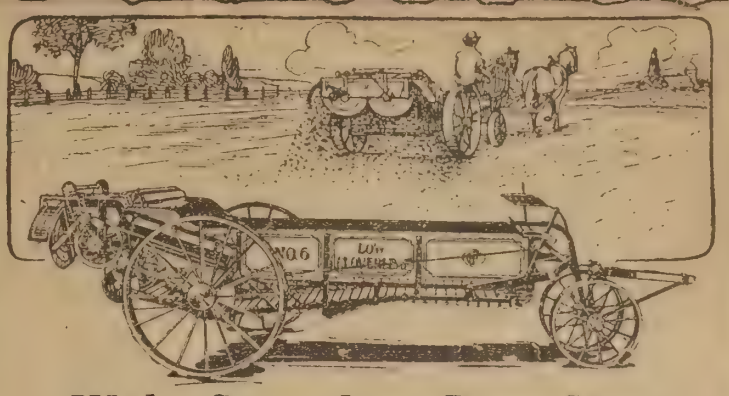
(SEAL)

Affidavits of C. W. Holmes.

State of Washington, County of King, ss:

C. W. HOLMES being first duly sworn upon oath deposes and says: That he is the C. W. Holmes who for some period of time, ending January 9th, 1917, was the superintendent of the Carnation Stock farm in the Snoqualmie River valley, near Tolt, Washington, and is the same C. W. Holmes who as representative of said farm attended the sale of Holstein stock conducted by George A. Gue in North Portland, Oregon, on the 8th day of December, 1916. That he has just been informed that Mr. E. A. Stuart, who is the manager and owner of the Carnation Stock farm, is claiming that this affiant had no authority to represent the stock farm at that sale, or for that matter any other sale. In making the statement Mr. Stuart must have forgotten that this affiant on several different occasions has attended stock sales and purchased stock for and on behalf of the Carnation Stock farm, and at the sale at North Portland, Oregon, purchased a cow for

(Continued on the following page.)



Wide Spreading Pays Best

WHEN you have looked them all over, you will probably decide to buy a wide spreading **Low Cloverleaf, Low Corn King** or **Low 20th Century manure spreader.** These machines break the manure up into very fine pieces and spread it evenly. They spread beyond the tracks of the rear wheels. The width of the spread is adjustable. Manure goes further and does the soil more good when spread with a **Low Cloverleaf, Low Corn King** or **Low 20th Century** machine.

These wide spreading machines with load leveler are by long odds the most popular spreaders ever brought out. We find that the better work our spreaders do the more we sell. Join the crowd and buy a **Low Cloverleaf, Low Corn King** or **Low 20th Century.**

If you will drop us a line, we will send you complete information and also tell you where you can see these machines.

International Harvester Company of America
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Saves 1/3

of gasoline and wear

The greatest single feature of the "Bean" Power Sprayer is the

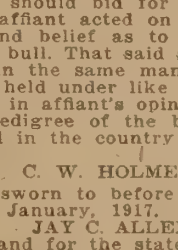
"Bean" Pressure Regulator

Patented, found only in the "Bean." Keeps pressure uniform at any desired point. Saves one-third of gasoline and wear and tear on engine because:

When spraying, the overflow simply runs directly back into the tank under *no pressure* (not through a safety valve under *full* pressure, as in all other types of control); and

When not spraying, the engine runs entirely free, liquid making a circuit from the tank and back under no pressure.

"Bean" Pressure Regulator also permits removal of any valve in pump, at full pressure, while engine is running. Absolutely safe and dependable. Only one of the 10 big vital, money and time saving features of the



"Bean" POWER SPRAYER

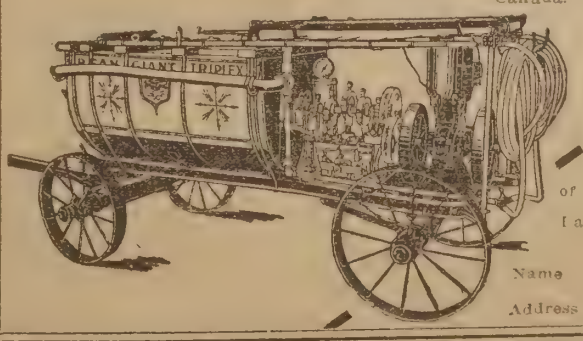
The 10-point sprayer

You owe it to your orchard and farm—to your pocketbook—to learn all about the "Bean" power Sprayer and our complete line of hand and power sprayers and accessories, before the spraying season begins. Write today for FREE catalog and name of dealer nearest you.

Only Grand Prize (Highest Award) P. P. I. Exposition San Francisco, 1915

BEAN SPRAY PUMP CO.

Originators of the first high-pressure spray pump
Established 1884.
254 W. Julian St., San Jose, Cal.
Sales representatives throughout U. S. A. and Canada.



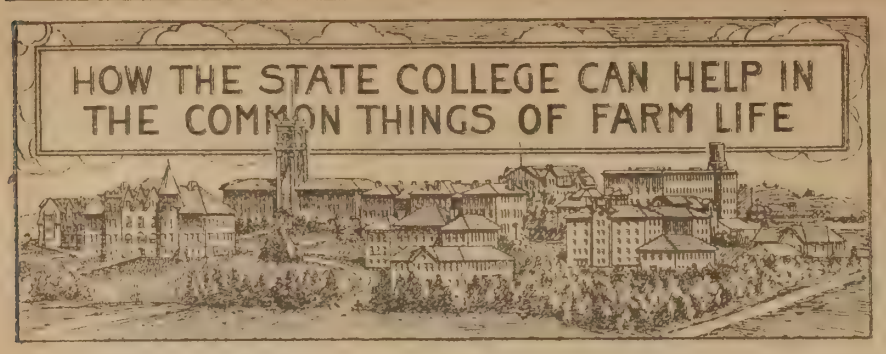
BEAN SPRAY PUMP CO.,
254 W. Julian St.
San Jose, Cal.

Gentlemen: Please send me new complete Spraying catalog I have.....acres of.....
Hand Pumps
I am interested in Power Sprayer Accessories

Name.....

Address.....

In answering advertisements please mention this paper.



By E. A. BRYAN.

The editor has asked me to do a thing which seems to be exceedingly simple, but which, in reality, is most difficult. He has asked me to write a series of short, pointed articles on what the agricultural college can do for the farmer on the common things of farm life. It reminds one a little of the farmer who wrote the long ago classical college begging that they might send him a brick from the college building so that he could see what a college really was.

It is like asking the doctor what he can do to help the patient. That depends on the disease and the general condition of the patient and his surroundings. The doctor stands ready to prescribe remedies for the disease or expound general hygienic laws, or precautions against particular ailments.

It is like asking the lawyer what he can do for his clients. That depends on whether the client wants a will drawn, or wishes to have his person or property protected from unjust attack, or desires to recover judgment for wrongs done against himself.

It is like asking the editor what he can do for the benefit of the subscriber. He could answer you by a catalogue which would fill all his columns and then might miss the recital of the very thing which would met your specific need upon occasion.

The agricultural college is a vital force in the community, pressing upward into growth and fruition a multitude of different forms of community and individual life; it is like a string of finest steel, in tension, pressing forward the slow movement of agriculture toward the better—repressing adverse forces. It hovers over the community like a benign climate, with its warmth and moisture and sunlight making for growth and development. It resembles the operations of a just and free government, whose power to preserve the peace and promote justice between man and man is not measured by ostentatious forts and armaments, but rests upon constitutions and laws founded upon justice and freedom supported by the firm, but quiet administration of courts and police.

The one therefore who would perceive and feel the all pervading influence of the agricultural college upon the "common things of farm life" will scarcely be able to say "Lo here! or lo there," but he must be awake to the silent and all pervading influences about him, and perceive the results as he perceives the growth of the plant by the difference between then and now.

Nevertheless, I will try in future numbers to indicate some of the specific cases in which the college may help in the common things of farm life.

In his second article next week Dr. Bryan shows that an efficient "plant" is as essential to a modern farm as it is to a modern factory. He says:

"Whether on the little or on the big farm a fundamental necessity is the 'plant' which forms the center and the instrument of farm operations. The 'plant' includes the farm home, the farm barn and all constructions from a pig pen to a power plant."

Of course more than half the value of a reply depends upon the definiteness of the question asked. In other words, if Dr. Bryan can give you a pointer or two in asking a question, it will add just that much to a satisfactory reply.

Was Calf Sale Bona Fide?

Charges and Denials Backed by Documents

(Continued from preceding page.)

$1010 for the stock farm; that at no time did Mr. Stuart ever criticize or deny affiant's authority so to do, and the fact is as to the cow purchased at North Portland through error she was turned over to the Donny Brook farm; that Mr. Richards, the manager of the farm who had been the competitive bidder at the sale for the cow, bidding $1005 desiring to keep her, affiant took the matter up with Mr. Stuart's office and they wanted to get Mr. Richards to pay $50 bonus for the cow, but finally agreed to let Mr. Richards have it for $1010. Mr. Stuart in making the statement must also have forgotten that he has instructed me, when I saw any stock which I thought was advisable to buy to buy it, stating that he was able to pay as much as any one elses. Not only did he give me authority to buy, but likewise authority to price and sell. Affiant states that the reason for Mr. Stuart now claiming that he had no such authority must be because of certain incidents which occurred during affiant's associations with the farm. That I had authority to buy and also to sell is borne out not alone by the fact that Mr. Stuart gave me expressed authority so to do, but by the actual purchases and the actual cash sales which I have made and which have been ratified and approved by him.

CHARLES W. HOLMES.

Subscribed and sworn to before me this 5th day of February, 1917.

JAY C. ALLEN,
Notary Public in and for the State of Washington, residing at Seattle.
(Notarial seal.)

Bull Sent Without Restrictions.

The following copy of a letter from B. Meyer to George Gue is enclosed among the documents sent by Mr. von Herberg:

Finderne, N. J., Nov. 4, 1916.

Colonel George Gue, North Yakima, Wash.: At your request I am consigning to your Portland sale Finderne Mutual Fayne Valdessa, No. 174999, a young bull of outstanding breeding and individuality. His dam, Finderne Mutual Fayne, holds the world's butter record, as a junior 2-year-old for one year, by over 200 pounds of butter. I consider this heifer the greatest female I ever owned, freshening shortly after finishing her yearly record. She made in seven days 36.72 pounds of butter as a 3-year-old and had it not been for an unfortunate accident she would undoubtedly have made 40 pounds. Too much can not be said in praise of the dam of this bull. I do not believe there was ever a better candidate for 50-pound honors than Finderne Mutual Fayne, had she lived. She was a large growthy heifer of ideal type and individuality and her persistent work at the pail making in one year 22,150 pounds of milk and 1200.63 pounds of butter, with an average test of 4.34 for the year.

I am enclosing herewith photos of the bull, his dam and his sire, King Valdessa, who now stands at the head of my herd. The records of King Valdessa's dam and sire's dam average higher for butter than any other bull in the world for seven and 30 days. Seven days' butter record, 43.03; 30 days' record, 167.90. King Valdessa is a young son of Spring Farm Pontiac Cornucopia and Valdessa Scott II., both of whom are so well known that very little comment is required. Valdessa Scott II. was the first 40-pound cow of the breed and is the only cow to make two records above 37 pounds She also has a fine list of daughters, one making almost a 33-pound record as a junior 4-year-old. Spring Farm Pontiac Cornucopia was the first bull of the breed to sell in public sale for $15,000. He is an excellent individual and is in hands where his offspring will be developed. He is from the first and one of the two 44-pound cows, K. P. Pontiac Lass, and by a good son of Aggie Cornucopia Lad. King Valdessa will be bred to a large number of the breed and his future as a sire is assured.

Animals like Finderne Mutual Fayne Valdessa are seldom consigned to a public sale. I want, however, to get a good representative of my herd on the Pacific coast and I think that this is a proper opportunity to do so and let the public say what he is worth.

I consign this bull to your sale without any restrictions whatsoever. I will ship him to you by express; will you kindly mail me shipping instructions. Very truly yours.

B. MEYER.

Will Back Every Statement.

A copy of the report of the Holstein sale at Portland as appearing in The Farmer was forwarded to H. G. Stibbs, advertising manager of the Carnation Stock farms. With reference to this Mr. Stibbs replies:

SEATTLE, Feb. 5, 1917.—To the Editor: Your letter of February 3rd with enclosure taken from December 14th issue of The Oregon Farmer has our attention.

There is no doubt in our mind that your Oregon representative reported this sale as given. It is true that Mr. Holmes was then superintendent of the Carnation Stock farms, but he had no instructions from the owners of the Carnation Stock farms to bid on this animal. It might have been that Mr. Holmes was bidding on this animal for somebody else. All we want to do is to correct the impression that he was bidding officially for the Carnation Stock farms.

Incidentally, we have here on file in our offices a letter from another man who bid on the animal in question. He states, however, that he was bidding for Mr. Von Herberg. We quote part of his letter as follows:

"When the price reached —— I quit bidding; but Mr. Von Herberg urged me to continue. I told him that it was reckless financiering; but I continued bidding for him until —— was reached. At that time I told him if he had any more money to tie up in the calf's skin he could do his own bidding, and I quit."

We merely quote the above to give you a few moro facts in the matter. When Mr. E. A. Stuart puts a statement of facts over his signature you can put it "down in your boots" that he is willing to stand back of every statement.

You might be interested to know that duplicate of this letter has been sent to all prominent publications in the west, as well as in the east. We hope that you will give these facts to your readers, because many of them no doubt know about the Carnation Stock farms and they are entitled to have the real facts of the case.

CARNATION STOCK FARMS.
H. B. Stibbs.

LIVE STOCK MEN

Will Meet in Spokane Next Week.

The Spokane chamber of commerce has issued a call to the live stock men of the northwest to meet at Spokane February 22 and 23. A large number of important matters will be taken up, including the legislation pending in the legislatures or that should be introduced, questions of feeding and breeding, diseases, community shipping and the like. It is expected that a large number of stock men will be present.

Blaine Creamery.

The creamery at Blaine, Wash., churned over 12,000 pounds of butter during December. The average during the year was over 14,000 pounds per month.

Pull Big Stumps by hand



Clear your stump land cheaply—no digging, no expense for teams and powder. One man with a K can rip out any stump that can be pulled with the best inch steel cable. Works by leverage—same principle as a jack. 100 pounds pull on the lever gives a 48-ton pull on the stump. Made of Krupp steel—guaranteed against breakage. Endorsed by U. S. Government experts.

Showing easy lever operation

HAND POWER K Stump Puller

Write today for special offer and free booklet on Land Clearing.

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Box M
182 Fifth Street
San Francisco
California

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You can produce more by making better seed beds.

Get a disk harrow with these improved practical features: cutlery steel disks, forged sharp; hardwood bearings, oil-soaked and dust-proof; split-lock bolts that cannot rattle loose. Select a

Cutaway CLARK Disk Harrow

The Double Action has rigid main frame, extra strong, that doubles efficiency. 100 styles to choose from—Single, Double and Special Purpose Types. Ask your dealer for the genuine CUTAWAY. Our book, "The Soil and Its Tillage," tells how to increase yield—a card brings it to you—FREE.

The Cutaway Harrow Company
Maker of the original CLARK disk harrows and plows.
7333 Main St., Higganum, Conn.



This Double Action Harrow saves one driving

SPRAY!

Spray for better fruit, larger crops, bigger profits. For fast work, fine, clinging sprays and long-lived outfits, spray the DEMING WAY. Send for the Deming 1917 Catalog, a 40-page guide to 25 types and sizes of sprayers. It's free.

THE DEMING COMPANY
244 Depot St. Salem, Ohio
Pumps for all farm uses.

DEMING

9 CORDS IN 10 HOURS



ONE MAN. It's KING OF THE WOODS. Saves money and backache. Send for FREE catalog No. B-64 showing low price and latest improvements. First order gets agency.
Folding Sawing Machine Co., 161 West Harrison St., Chicago, Ill.

POSTS Price List Free!

Genuine Red Cedar—they won't rot
Quit buying posts in small lots at high lumber yard prices. We ship direct from woods. FREE Price List shows sizes, prices, number in car.
Hewitt-Lea-Funck Co., 758 Funck St., Sumner, Wash.

GALLOWAY MASTERPIECE ENGINES

Are powerful, durable, reliable. Designed and constructed by master engine builders for hard, continuous, heavy-duty service. Use any fuel. Develop way above rated h. p. Easy to start—no cranking. Heavy weight, large bore, long stroke, low speed, wide bearings. All sizes at wholesale prices. From 1 2-4 to 16 h. p. portable, stationary, saw rigs, etc. Sold on five selling plans, cash or time.



WM. GALLOWAY COMPANY
Box 2455 Waterloo, Iowa

Will U-Boats Win?

Operation Is Watched Anxiously

The situation between Germany and the United States has continued for nearly two weeks so tense that the people of the world have stood ready to receive at any moment without surprise the announcement that a state of virtual war between them had come to pass. So battle torn and paralyzed is most of Europe, however, that the German-United States possibilities are to those countries but one of a multitude of elements making up the unprecedented developments of the times. In this country every city and village and country community is alert to catch the word of the latest action, and the question that has been asked for weeks if not months contiues to be: Is it possible to avoid war and maintain the national honor of the United States?

The "Overt Act."

In his message to congress at the time of the breaking of diplomatic relations with Germany, President Wilson made reference to a possible "overt act" on the part of that country which would, if committed, compel this country to take drastic steps, possibly to the point of actually declaring war on Germany. The overt act in his mind was no doubt the destruction of a vessel, American or foreign, carrying with it American lives. Consequently, reports of the submarine activities have been watched with this in mind, and it seems apparent that only the preservation of American lives during the first two weeks of the submarine campaign has kept actual hostilities down.

Have U-Boats Failed?

At the time Germany announced her resumption of submarine warfare, she declared that the destruction of vessels totaling 1,000,000 tons carrying capacity a month would starve England in two months. To what degree she has been successful in her work of destruction these first two weeks in view of this necessity is somewhat problematical, but it is shown that at the rate of sinking vessels on several different days she would destroy probably three-quarters of a million tons in a month.

Compilation covering the first nine days of the submarine work showed unofficially that about 700 vessels had successfully entered British ports and 410 passed out of the war zone unhurt. During the same period 89 vessels had been destroyed, of which one out of every four was a small trawler or similar vessel. These figures tend to convince some observers that the submarine campaign will be a failure so far as starving England in a few months is conecrned.

U. S. Sea Traffic.

There is another view of this question, however. Has not the renewal of the submarine warfare resulted in the withdrawal of much commerce intended for England from the seas due to fear of losses? Very few American ships have sailed for ports in the war zone, and one of the large companies has declared that it will not send any of its ships out unless the navy department will convoy them through the submarine area and protect them from attack, if possible. With the extra hazard, insurance companies will greatly increase their rates on cargoes and vessels, the burden falling on the shipper or the ship company.

Would Negotiate.

One of the interesting developments of last week was the reported move on the part of Germany to reopen discussion of the case with the United States with a view to preventing actual war between the two countries. This proposal seemed to meet with little favor in this country, being generally considered a byplay on the part of German authorities to gain more time and carry on its ruthless destruction without interference from the United States.

Preparedness.

Various plans for military training have been broached in congress and in the state legislatures. The proposals face two points of debate:

The amount that can properly be expended and the question of universal, compulsory training of soldiers as against a voluntary system.

Approval and Disaproval.

A significant feature of the present situation is the passage of a resolution by the German-American alliance, which has some three million members, pledging loyalty to the United States if actual war comes between this country and their fatherland.

Another significant matter is the expressions of Minneapolis citizens, who, at the call of Mayor Van Lear, have joined in a demonstration protesting against President Wilson's action in breaking diplomatic relations with Germany and protesting also against any action on the part of this country that would put it into war. Mayor Van Lear was elected by the socialist labor vote, and the demonstration was made primarily by that element.

Avoid War Is Plan.

President Wilson has made it clear that he will not sanction war or ask congress for a formal declaration if he finds it possible at all to avoid it in the face of developments that may come. He has indicated that he will ask, however, for full authority to take whatever steps he finds necessary to protect American lives and property on the seas.

Potato Poisoning

Reported From Yakima District

In a recent letter to the Farmer from Toppenish, C. A. Wyckoff of that place reports considerable loss in live stock as a result of eating frozen potatoes. He says:

"A heavy loss in potatoes by freezing in November has resulted in a loss of live stock in many instances, from allowing the frozen potatoes to lay where the stock could get to them. Chickens, pigs, cows and horses have suffered from ptomaine poisoning from eating them and a considerable number have died from the effects. E. H. Burlington lost about $1400 worth of horses and mules."

Commenting on the above, Dr. S. B. Nelson, veterinarian at the Washington State college, says:

There are two kinds of troubles which may originate from animals eating frozen potatoes. The first is a straight indigestion caused by the frozen indigestible potatoes eaten in any considerable quantity. The general symptoms of indigestion being present, such as flatulency, that is, the intestines being distended with gas, colicky pains, a watery diarrhea, indicating the irritation of the bowels and the effort of the bowels to expell the offending material. The second phase of the trouble is a true potato poisoning, and this is due to potatoes which are allowed to be outdoors or not protected so that they freeze, and then during the warmer period of the day or days they thaw and start to grow, that is, they may sprout a little bit, and at this time there is a change in one of the constituents in the peeling, which is poisonous. The potatoes are closely related to the deadly nightshade, of which bella donna is a well-know example and the poisonous substance solanin is the active principle of bella donna and also of potatoes that are just sprouting or have just sprouted, and it is quite possible that this is the cause of the trouble. The administration of eight grams of potassium permanganante given in two or three quarts of water as a drench to the larger animals, such as the horse and cow, may be of value as a treatment. It is the only treatment that could overcome the poison. In the smaller animals from one to two grams given in a small quantity of water would be the treatment for such animals as pigs; and for chickens make a solution of strong wine color and given a tablespoonful of the solution; that is, take one teaspoonful of the stronger solution and dilute it down to about a tablespoonful and use.

This is the Small Tractor You've Been Waiting For

HERE'S a tractor, the Advance-Rumely "8-16" that was especially designed to fit the needs of the small and medium size farm—a small, light weight, kerosene burning outfit to meet the demand where the famous Rumely OilPull is too large.

The "8-16" is easy to handle, economical and durable. It supplies reliable power for every farm job, and just as important, it is made by a company with an established reputation for dependability.

It is a real one-man outfit—tractor and plows are combined in one machine, and full control is from the driver's seat. With the Advance-Rumely you plow the same as with a horse gang, the plows are where you can always see what you're doing. Also you can back up with your plows, make short turns and cut square corners.

Kerosene for Fuel

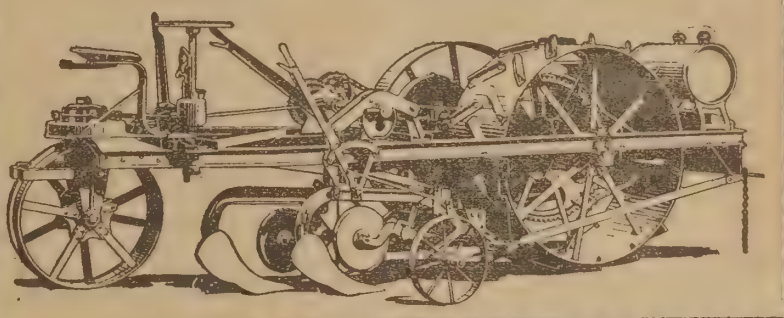
Kerosene is its fuel, and it burns kerosene, not as a makeshift proposition, but continuously and at variable loads as well as full load.

An Advance-Rumely "8-16" not only will plow, but it will draw your discs, drills, harrows, mowers and binders, and on the belt it will run a small separator, hay baler, silo filler, sheller, feed grinder, etc. In fact, it will deliver the same reliable, steady power on all jobs—draw-bar or belt. When used for other jobs than plowing, the plows are quickly detached.

The powerful four-cylinder motor and the entire machine is Advance-Rumely built throughout. It comes from the same shops that build the well known OilPull tractor, the Ideal separator, and all the other dependable machines in the Advance-Rumely line.

Write our nearest branch for a special catalog on this new Advance-Rumely outfit.

ADVANCE-RUMELY THRESHER CO.
LA PORTE (*Incorporated*) INDIANA
Address the branch nearest you
Spokane, Wash.—Portland, Ore.



American Fence



Woven with a mechanically hinged joint. Big, full gauge wires—full weight—full length rolls. Superior quality galvanizing—proof against hardest weather conditions.

American Steel Fence Posts last a lifetime. Hold fence secure against all conditions.

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Awarded Grand Prize at Panama Pacific International Exposition, the Supreme Award of Merit



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Ship direct to
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G. P. RUMMELIN & SONS.
Manufacturing Furrier.
124 Second St.,
Portland, Ore.
Write for Price List.
Est. 1870.

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

Mary and Her Lamb Lived

Farm Information Contest Brings Revelation

Mary had a little lamb,
Its fleece was white as snow,
And everywhere that Mary went
The lamb was sure to go.

Did you ever suspect in those early kid days when, perhaps as your first public appearance before your school you recited "Mary had a little lamb"—and maybe wept through the last line from stage fright and sympathy for Mary—that Mary actually lived and that the pet mentioned was a "regular" lamb?

I doubt if you ever thought of the poem as having any historical foundation. Well, the truth is that Mary lived and so did the lamb, and as both of them led pastoral lives, and the lamb died a pastoral death, the question has seemed of sufficient interest to be given a place in the 60 queries in the Farm Information contest now running in the Farmer.

The question, which is No. 13 in the contest, reads:

"In what state of the United States did the child live who was the original in the poem beginning, "Mary had a little lamb, its fleece was white as snow?'"

The "Mary" that "had a little lamb" was a realty; and her lamb was one of twins, thrust out of the pen by its unnatural mother.

Mary took it home, and cared for it; and it became a great pet in the family. One morning when it was to be taken to pasture, it could nowhere be found; but as Mary went singing on her way to school, it heard her voice, and followed her.

At the schoolhouse door, for fear it would stray away, she picked it up, and managed to carry it secretly to her desk, where it lay quietly covered with her shawl until she was called to her spelling-class, when the lamb got up, and pattered after her. The children laughed, and the teacher reproved, until her explanation was given, when he very kindly allowed her to take her pet home.

It happened on that morning that a young man named Rowlston, the son of a riding-master, who was fitting himself for Harvard, was at school, and a few days after, he produced three verses of the poem. How it ever came to be published, Mary did not know; for the young man died soon after, ignorant of the immortality of his verses.

The lamb lived many years, and came to its death by the horns of an angry cow.

Many of the questions in this contest look simple, and they are simple, but the answers now coming in from contestants are developing some interesting and heretofore overlooked facts.

See contest announcement on page 4.

Farmers Organize Bureau

To Develop Direct Market With Customers

In an effort to develop a market direct to the city customers for their farm products, a few farmers of Longbranch, Wash., on the west side of Puget Sound, have organized a direct trading bureau.

The plan of the bureau is to enlist as members both farmers who desire to sell direct to the consumers and consumers in both city and country who desire to purchase farm or other products direct from producers. As a means of promoting the general idea of direct trading, and as a means of introducing individual producers to individual consumers the direct traders' bureau will issue a monthly bulletin called the Direct Trader.

In addition to carrying arguments in favor of direct trading in farm products, and information which will facilitate the establishment and handling of direct trading relations the Direct Trader will carry announcements for its members of what they have to sell or what they wish to purchase. For the present at least this bulletin will be issued from Longbranch.

Joe Smith, the president of the bureau, writes:

"Many farmers who have tried to develop a direct trade with city customers have found that the advertising expense of locating and forming satisfactory business connections with such customers to be such a burden that it adds materially to the cost of production and delivery of their products. In other words, the farmer who endeavors to develop a direct-to-consumer trade has either failed on account of this added expense, or else, having succeeded, has found that in addition to being a farmer he has become a merchant with a steady drain of selling expenses equal to if not greater than those of the middlemen.

"Our plan is to induce producers and consumers to cooperate in large numbers to lessen this expense. If we can do this we can enable farmers to sell to consumers approximately as cheaply as the commission men or jobbers sell to retailers. If we can do this it will retain for the farmers the profits of the commission men and for the city consumers the profits of the retailers.

"By forming an organization of direct traders, both producers and consumers, we can eliminate careless producers, producers whose products are not up to standard quality or who do not give prompt attention to orders. Also, we can eliminate purchasers who are overexacting, who make undeserved complaints or shortage claims, or who do not pay their bills promptly. By keeping a record of complaints from its members and supplying confidential information regarding these complaints to members desiring it, the bureau will possess a means of enforcing square dealing on both sides, eliminating those members who do not live up to its rules for such trading.

"While we favor parcel post shipments of food products wherever practicable, we shall not confine our efforts to that channel, but urge the use of express or freight carriers where weights are too high or rates are cheaper than those of the parcel post."

Organizations

Doing Most for the Communities

Scattered inquiries were sent out recently by The Washington Farmer asking: "In your opinion what organization has been of the most value to your community during the past year, and in what way, giving name and postoffice address of the president and secretary."

Thirty-seven replies have been received from 16 different counties. Eleven answered that the grange has been the most influential organization. Next comes associations carrying on certain lines of business, as fruit growers' association and so on—seven of these. Then follow six farmers' unions; five religious organizations; five commercial clubs; two government organizations and one unclassified community organization.

These preliminary hints give evidence that there is no one organization that can be classified as doing the most for community development. It is the old problem of finding a few faithful, energetic, public-spirited citizens who will push for better social, business, educational privileges for the community and it doesn't make very much difference in what particular kind of an organization the leader of a few chosen ones is to be found.

From time to time The Washington Farmer hopes to give an account of some of these organizations and how they have gained this fine distinction of being leaders in their communities.

The Washington Farmer further urges every one of its subscribers to look around and to send in the names of the associations, together with that of the president and secretary that is doing enviable work for your own town and neighborhood.

Here are the names of the organizations so far received, together with their presidents and secretaries as far as reported.

Organizations.

Ramapo—Grange—C. A. Kilmer, Ramapo, master; Mrs. W. S. Miller, Joyce, secretary.
Hunters—Grange—Mrs. David Konker, master; Louis Albey, secretary.
Marysville—Grange—Adolph Ziebell, master; Ethel Campel, secretary.
Grandview—Walnut Grove grange—R. H. Bauer, master; Alice W. Bone, secretary.
Cathlamet—Grange—W. W. Head, master; Mrs. Stott, secretary.
Vancouver—Grange—H. W. Sparks, master; Mrs. H. W. Sparks, secretary.
Richland—Vale grange—O. Y. Anderson, master; Miss Mabel Erickson, secretary.
Kennewick—Finley grange No. 414—A. S. Goss, master; J. R. Ayers, secretary.
Okanogan—Grange—Arthur Wells, master; W. T. Beals, secretary.
Pullman—Grange.
Krupp—Farmers' union—Amos Poggensee, Ruff, president; J. C. Keller, Ruff, secretary.
Lantz—Farmers' Educational and Cooperative union—Otis Robinson, president; P. B. Callaway, secretary.
Adrian—Farmers' union—George DeBolt, president; A. A. Winfrey, secretary.
Almira—Farmers' union—J. Weisman, secretary; John Lorup, president.
St. Andrews—Farmers' union—J. V. McCall, Hay, president.
Brewster—Brewster unit—Frank Phipps, president; C. E. Chase, secretary.
Prosser—Prosser Commercial club—W. C. Sommers, secretary.
South Bend—South Bend Commercial club—W. P. Cressy, president; J. H. Henderson, secretary.
Ilwaco—Ilwaco Commercial club—M. E. Sinclair, president; John W. Homerson, secretary.
Colville—Chamber of commerce.
Waterville—County agent—A. M. Richardson.
Cathlamet—County agriculturist—George A. Nelson.
Sequim—Cow Testing association—P. S. Govan, Sequim, president; F. P. Holland, Dungeness, secretary.
Grays River—Grays River Farmers' Produce and Warehouse association—Charles C. Schamond, secretary.
Kennewick—Kennewick—Richland Marketing union—Lee M. Lampson, president; M. N. Hudnall, secretary.
Latah—F. N. Grain and Supply company—H. Kreisler, secretary and manager.
Snohomish—Snohomish Valley Fruit Growers' association—Adolph Heck, president; Dave DeSell, secretary.
Bickleton—Dorcas society of the Presbyterian church—Mrs. George W. McCredy, president; Mrs. Fred Zumwalt, secretary.
Winthrop—Bear Creek Willing Workers—Mrs. William Fulton, president; Mrs. C. Renrod, secretary.
Quincy—Christian Endeavor—Otis Gibson, Mildred Johnson.
Skamokawa—Churches—The Rev. A. G. Brown, Mrs. Myrtle DeVick.
Grandview—Churches—The Rev. O. T. Mathers.
Spring Valley—Ladies' Aid society—Mrs. Hattie Bell, president; Mrs. W. R. Munger, secretary.

GRAIN IN BULK

Meeting in Spokane This Week.

On February 16 and 17 there will be held in Spokane two meetings of special interest to grain growers. On the former date the grain men, who are expected to come from all the grain growing districts of the northwest, will discuss the problems of bulk handling and work out methods for putting the scheme into effect in greater degree this season than heretofore. On the following day the federal department will conduct a hearing on the matter of the standardization of grains, as provided under the new grains standardizations act of congress.

State Should Own Land.

To the Editor of The Washington Farmer: The person who wrote "State Marketing and Packing" in The Washington Farmer of January 18, left out just one word, "buy," to make the business a great success. It should have read, "Said commission shall have power to buy, rent, lease or occupy." I believe if the state is going into a business of that kind it should own its land and buildings. Then they could put up the buildings suitable for the business. A. M. NEWSOM.

Spokane, Wash., R. F. D. 2.



Crushes the Clods

cuts, levels, and turns the soil twice—all in one operation. That's the way "the coulters do the work" when you use the

"Acme" Pulverizing Harrow

Works deep into the soil leaving it compact below and with a nice mulch on top. Light draft and comfortable seat. Endorsed by Experiment Stations. Sizes 3 ft. to 17½ ft. wide. Send today for our new free book, *The "Acme" Way to Crops That Pay.*

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No. 23 6 1-2 ft. Wide

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A. D. 1917

Total Nitrate deposits in Chile	720 million tons
Estimated life of deposits at present rate of World's consumption	300 years

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We buy direct and are located in the best seed growing section and you will find our prices always the lowest on best quality seeds.

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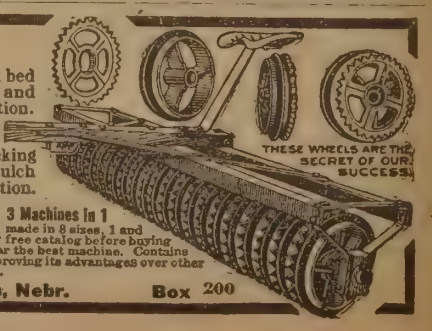
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J. B. LONG & CO.
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WHEAT, ALFALFA

and other grains yield more where a perfect seed bed is prepared. The **Western** pulverizes, packs and mulches—makes a perfect seed bed at one operation. Saves seed, time and horse power. Is especially adapted for breaking crust on winter wheat or other grain or in orchards after irrigation or packing rains. It forms the hardest crust into a granular mulch without hurting the grain, and prevents evaporation.



Western Pulverizer, Packer and Mulcher 3 Machines in 1 made in 8 sizes, 1 and 3 sections, prices $20 and up. We want every farmer to have our free catalog before buying a roller or packer. It proves we can save you money and have far the best machine. Contains full description, price direct to you, letters from many farmers proving its advantages over other makes, and much other valuable information. Send for it today.

WESTERN LAND ROLLER CO., Hastings, Nebr. Box 200

Belied Name of Grange

Stock Selling and Commission Making

(Continued from page sixteen.)

not at that time," said the witness.

"Did Lawrence at any time lead you to believe that he was acting for other than the best interests of the farmers' union?" inquired Robertson. "He did not," answered the witness.

"Did he try to deceive the committee to hide his connection with the Northwestern?" "He did not."

"Lawrence has always had the confidence of the farmers and still has it?" "Yes."

"Delivuk objected to Taylor selecting the expert?" inquired District Attorney Garrecht. "Yes."

"Did you know that Taylor was on the payroll of the Trading company?" "I did not."

Attorney Garrecht then had read the letter from Sears telling of the employment of Taylor as a field agent for the Northwestern.

Witness House, on direct examination by Attorney Garrecht, showed that Gale Smith, J. C. Lawrence and others of the defendants had drawn different salaries from the company.

Loss in 1912.

"Mr. House, what was the condition of the company as regards indebtedness June 30, 1912?" asked Garrecht. "It owed $15,000 on money borrowed and on merchandise bought and on July 1, 1912, the stock was raised to $75 a share; the company operated at a loss that year," was the answer.

Witness testified the company also did business at a loss in 1914, that during this time persons invested from $30 to $2000 each in the stock.

Among the witnesses called were aged women and poor people, who testified that they could ill afford to lose the money they had invested in Northwestern stock.

Mrs. Matilda C. Pleasant, Dayton, Wash., white haired and stooped by age, testified that a stock sales agent of the Northwestern called at her home in 1911, but that she was too sick to talk to him. Her granddaughter signed an applicantion for her for one share of stock at $50, on which $10 was paid and a note given. She afterward wrote to the company charging that the note had been secured through misrepresentation and fraud, and declined to pay it.

"Your granddaughter did nothing but what you directed?" inquired Attorney Robertson. "I did not direct her. I was sick in bed at the time," said the witness.

M. S. Crockett, a farmer, bought one share of stock in the Northwestern from S. T. Knudson on representations that goods could be bought for less through the company; that dividends would be paid and his produce purchased.

Hoped to Evade Middleman.

"Knudson said that as the stockholders were mostly farmers a produce department would do away with the middleman?" inquired Attorney Robertson. The witness assented.

Says Smith Word Painter.

George B. Cowden, Spokane Bridge, Wash., bought five shares in the Northwestern in 1910 for $300, on which he made a part payment. He was promised dividends after the company got under way and cheaper merchandise, he said, and talked once or twice with Gale Smith, president of the company, who painted its future in glowing terms. He afterward wrote to S. T. Knudson, stock sales manager, to see if he would take four shares off his hands. Knudson declined and eulogized the company, witness testified.

Told Company Would Redeem Stock.

Hilma B. Carlson, a former resident of Potlatch, Idaho, now living at Dassel, Minn., testified that she bought five shares of Northwestern stock in the spring of 1911 at $40 a share from an agent named Fisher. She was told that the company would redeem the stock at any time and that it would pay dividends in two years.

It was also represented that wholesals prices were given and all goods were bought and sold for cash. She afterward made several efforts to get the company to take the stock off her hands. To some of her letters no reply was made, while other letters told of the prosperous condition of the company and urged her to stay with it. Later she wrote to Gale Smith to inquire as to the value of the stock and was informed that it was worth $75 a share, but that no dividends had been paid.

The payment of dividends in a short time was guaranteed to M. L. Waite, Mabton, Wash., in 1914, when he subscribed for a share of stock. He was told that the company would handle his produce and had 1500 customers in Spokane which it supplied weekly. He made two shipments of tomatoes, for which he received but 35 cents a box or away below what he thought he shoudd have had. He then declined to pay his stock note and said 50 others in the valley had joined in a similar protest and talked of employing an attorney to protest their notes. He claimed that the note had not been obtained honestly and was not a valid debt.

Women Solicitors Got Woman.

Mrs. E. A. Bartlett, Troy, Mont., was visited by two women solicitors for the Northwestern in October, 1911, who assured her that the stock would be a good investment and would pay dividends in a short time. On this representation she bought five shares at $50 a share. Within two hours after she made the purchase she concluded to cut the order down to one share, but was informed that she was late, that the order had gone in by mail to Spokane.

She then wrote to the company with reference to the matter and received a letter from Gale Smith saying that the record showed the purchase by her of five shares of stock for $250, on which she had paid $30 and $220 still remained due.

After lauding the company and its future prospects Gale Smith declined to do anything for her Mrs. Bartlett testified that she had inquired at the postoffice in her home town and found that no letter had gone out from the women solicitors when they claimed to have mailed her order.

F. L. Stansbury or Oroville, Wash., testified that he was at work in the field in March, 1914, when F. B. Sears, an offical of the Northwestern Trading company, came along and solicited a purchase of stock.

"He told me of the big mail order house in Spokane, where you could get farming implements for much less than ordinary retail prices. I asked him what a type of disk riding harrow that I was using would cost, and he said about $25. I knew that was much less than I was able to get it for locally, so I subscribed for two shares of stock at $75 a share. He told me they were then paying dividends and tried to induce me to take five shares as an investment.

As soon as I got their catalogue I looked for the disk harrow, but it was not there. There were other harrows of an inferior grade at prices ranging from $17 to $27. I then had to pay $45 for the disk harrow in the local market.

Complained to Company.

"After this experience I wrote to the Northwestern General Trading company, making complaint. They replied that the gentleman who sold the stock did not intentionally misrepresent things, but that they did not have the disk harrow in stock."

In the purchase of five shares by Mrs. E. A. Bartlett October 4, 1911, at $50 a share, a total of $190 was paid. Of this $62.50 was paid out as commissions, $40 going to Mrs. M. M. Eisenhour and $22.50 to the stock sales account. The company received the balance.

$93.75 Paid in Commissions.

In the A. O. Jomsland deal five shares were sold for $375, all of which was paid, together with $3.65 interest. The commission payment was $93.75, of which $60 went to E. W. Rogers as agent and $33.75 to the sales department. The company received the balance.

In the E. Wells deal May 25, 1912, five shares were sold for $300, paid in cash. The commission was $75, paid to S. T. Knudson, the company receiving $225.

In the F. L. Stansbury deal March 27, 1914, two shares were sold for $150, of which $50 was paid in cash. The commission paid was $37.50, which went to the membership department, of which F. B. Sears was then in charge.

Asks Money; Suit Threatened.

J. H. O'Gara, a white-haired sawmill worker from Laclede, Idaho, was the last witness for the day and the chief one in point of interest, for the prosecution. He bought two shares of stock in 1911 from an agent, M. J. Welch of Spokane, to whom he paid $20. After an investigation of the company's store at Spokane O'Gara became dissatisfied and demanded the return of his money. He was threatened with suit in a series of letters written by F. B. Sears, head of the collection bureau of the company, operated under the title of the Inland Mercantile company, to conceal its identity.

(Continued on page twenty-three.)

Holstein Farm in Southwest Washington



The Holstein dairy farm of Abraham Sotki of Eden, in the lower end of Wahkiakum county. He is one of the progressive farmers of the county.

KING COUNTY ROADS
$3,000,000 During Last Four Years.

A total of $3,316,899.30 has been expended on the construction of roads and bridges in King county during the term of Arthur P. Denton, county engineer, according to figures compiled in the office on the last day of the term of the retiring engineer, who was succeeded Monday morning by Sam S. Humes. The majority of this work was done under the bond issue of $3,000,000 voted by the people on November 5, 1912, and includes the following: Gravel and dirt roads, 233.4 miles; bridges, trestles and bankers, 38 miles; hard surface roads, 38 miles; concrete and brick roads, 47.91 miles.

Cooperative Cost Basis.

The Okanogan Growers' union has arranged with the forest service to purchase about 100 cords of wood, which will be cut and sold to the members on a cooperative cost basis.

HIGH POTATO PRICES
Received by Oakesdale Growers.

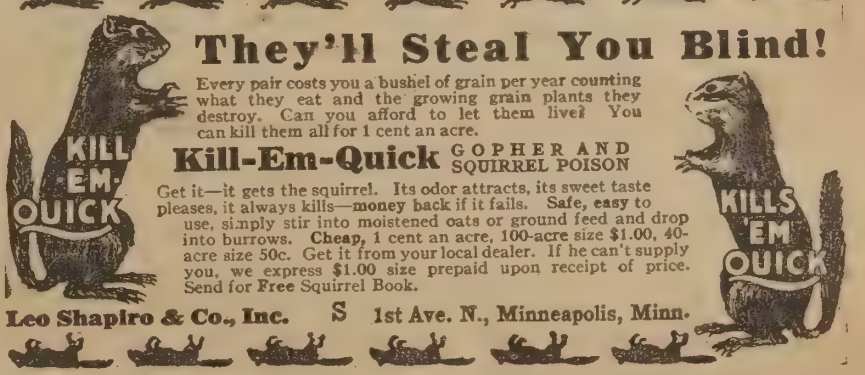
To the Editor of the Farmer: Potato growers who held potatoes are now disposing of them at record breaking prices. During the past 10 days a Kansas City buyer has bought and shipped five carloads from here. The price was $2 per hundred pounds for field run and $2.25 per hundred for sorted stock. There is not over two carloads left in this vicinity, all told. Fully half of the farmers of this neighborhood did not raise enough of potatoes for their own use and are now buying them from the grocery store.

MASON BROWN.

Oakesdale, Wash.

More Alfalfa Acreage.

The Horn Rapids Irrigation company in Benton county will put in 385 acres to alfalfa this spring, the land having been sold to dairymen from the Sound.



They'll Steal You Blind!

Every pair costs you a bushel of grain per year counting what they eat and the growing grain plants they destroy. Can you afford to let them live? You can kill them all for 1 cent an acre.

Kill-Em-Quick GOPHER AND SQUIRREL POISON

Get it—it gets the squirrel. Its odor attracts, its sweet taste pleases, it always kills—**money back if it fails. Safe, easy** to use, simply stir into moistened oats or ground feed and drop into burrows. **Cheap,** 1 cent an acre, 100-acre size $1.00, 40-acre size 50c. Get it from your local dealer. If he can't supply you, we express $1.00 size prepaid upon receipt of price. Send for **Free** Squirrel Book.

Leo Shapiro & Co., Inc. S 1st Ave. N., Minneapolis, Minn.

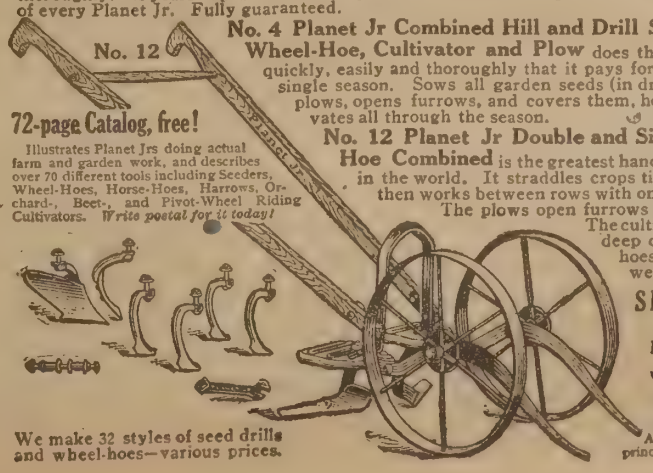
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AGENTS.
906-908 FIRST AVE., SPOKANE.

These tools enable you to cultivate triple the acreage



They are so scientifically constructed that they do 3 to 6 times the work of old-fashioned tools in the same time; or they do the same work with one-third the labor, and they get bigger better crops because they cultivate more thoroughly. 45 years of practical farming and manufacturing experience is back of every Planet Jr. Fully guaranteed.



No. 4 Planet Jr Combined Hill and Drill Seeder, Wheel-Hoe, Cultivator and Plow does the work so quickly, easily and thoroughly that it pays for itself in a single season. Sows all garden seeds (in drills or hills) plows, opens furrows, and covers them, hoes and cultivates all through the season.

No. 12 Planet Jr Double and Single Wheel-Hoe Combined is the greatest hand-cultivating tool in the world. It straddles crops till 20 inches high, then works between rows with one or two wheels. The plows open furrows and cover them. The cultivator teeth work deep or shallow. The hoes are wonderful weed killers.

72-page Catalog, free!

Illustrates Planet Jrs doing actual farm and garden work, and describes over 70 different tools including Seeders, Wheel-Hoes, Horse-Hoes, Harrows, Orchard-, Beet-, and Pivot-Wheel Riding Cultivators. *Write postal for it today!*

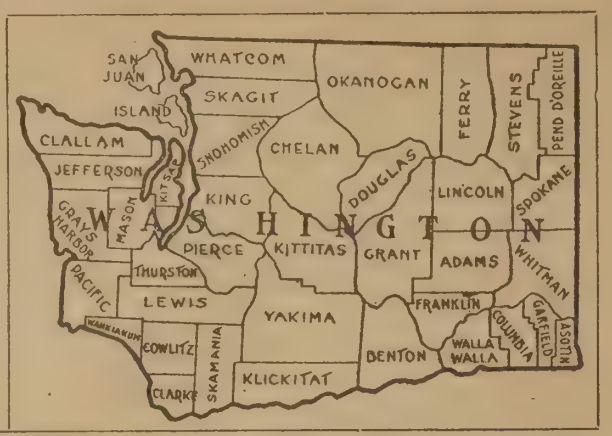
S L ALLEN & CO
Box 1107P
Philadelphia

We make 32 styles of seed drills and wheel-hoes—various prices.

We carry stock in Los Angeles. Agencies in all principal Pacific Coast cities.

Potatoes Are Already Planted

Plowing and Potato Planting Begun in Earlier Parts of the Coast Region; Early Spring About To Follow Mild Winter



The Leading Products.

SOUTH BEND, Pacific County, Wash., Jan. 27.—The ten leading products of this county are cheese, beef and dairy cows, cranberries, hay, milk, cream, butter, pigs, potatoes, garden truck, blackberries, apples and prunes. Lots of chickens are raised, strawberries and other small crops, but not enough to supply the local demand. This year there will be an increase in cheese, potatoes and cranberries. One farmer tried growing Sudan grass last summer, and another has been experimenting with different varieties of corn, and the results showed the Early Minnesota was a good variety for this county, where we have cool summers. Many are beginning to plow and some have planted potatoes. The winter has been a mild one, and every indication points to an early spring. In a few favorable places cattle have pastured all winter. The survey of the Warren ranch of several thousand acres has been completed, and this is divided into small tracts, which will be placed upon the market very soon. Plans are made for a large creamery or cheese factory on the land, which will take all of the dairy products of those buying the farms. There is, in the plat of this acreage, about 20 farms, averaging 100 acres each.

MRS. WINNIFRED BUCKINGHAM.

Feed and the Cow.

RAINIER, Thurston County, Wash., Feb. 3.—The two items that interest the ordinary farmer more than other products is feed and the dairy cow. I will herewith name the 10 principal products of this locality in Western Washington. Milk, as sold to the condensery, selling the cream to the creamery and feeding the skim milk on the farm; hay, such as red clover and timothy or some of the grasses; grain, such as oats, wheat and vetch; kale; poultry and Belgian hares; root crops, such as carrots, mangle beets and turnips; white beans; potatoes; small fruits, as strawberries, raspberries, currants, blackberries and loganberries; cattle. Some advocate clover and orchard grass, but I prefer clover and timothy, as timothy is not ready to cut until July and orchard grass should be cut in June. The weather is usually too uncertain for haying in June. Vetch and wheat make excellent hay when sown in the fall or are fine for silage. The potato crop was the most important crop last year, with good prices. Sudan grass was tried by a number of farmers last summer, but it did not give the results, as was expected. Dairying and the raising of feed will be the leading products in line this season, and more silos will be built.

L. F. DAVIS.

School in Private Homes.

GARFIELD, Whitman County, Wash., Feb. 2.—Cold weather and snow came early. Wheat is thought to be safe, as there has been a good depth of snow for two months. Most of the garden vegetables were gathered, but many apples were frozen on the trees and are valuable only to the birds, many of which would have starved on account of the deep snow. We have no grange or farmers' unions in the county, except at Grinnell. East of Garfield near the mountains, the community must furnish its own social life. Their schoolhouse burned last fall, so rooms were secured in private homes for the school until the new schoolhouse is built this spring. Our community built a church last spring, where we have services twice a month and a good Sunday school. We have one literary society and formerly had four. Much wood was hauled to town during the last several weeks on account of good sleighing, but the snow is now too deep. The thermometer has been below the freezing point for the last six weeks, but never reached zero near the mountains, although 16 degrees below zero was reported at Garfield, Potlatch, and other low places. Stock are doing well. Hay is high, but not scarce. Many farmers have put up ice for home consumption, and it is extra good now.

M. KIDWELL.

A Dairying County.

LITTLE ROCK, Thurston County, Wash., Jan. 30.—Perhaps the 10 leading products of this county are: Dairy, poultry, hay, potatoes, vetch (with grains for hay and seed), oats, rye, stock, fruit and roots. As near as I can judge their importance would be in order written. Conditions are so unsettled and changing of late that it is hard to give an accurate estimate of them. A great deal of vetch is being raised because it does well and builds up the land, besides being a fine feed. I believe the coming season is quite promising to the dairymen, as dairy products are up and probably will be a good price through the spring and summer. If so, it will bring up the price of dairy cows, which has been very low for two years. The poultry industry does not look quite as bright on account of the high price of feed, but with a big scarcity of fowls the price of eggs is likely to be high enough this spring to offset the high price of feed.

LEE KEGLEY.

Logging Camp Markets.

DARRINGTON, Snohomish County, Wash., Jan. 24.—Stock of all kinds are in good shape. Very little if any hay will have to be bought around here unless we have a very late spring. Logging camps have started up again after being closed down for some time. This will help the farmer who has potatoes to dispose of at a fair price. A few of the farmers here are going to try raising alfalfa, but I do not believe it can be raised successfully, as I have tried it and the second year it seemed to die out. All the beef cattle and hogs are butchered by the farmers and purchased by the logging camps at a fair price.

C. B. NEIDERPRUM.

Alfalfa Did Not Succeed.

MARIETTA, Whatcom County, Wash., Jan. 27.—The leading products grown in this county are oats, potatoes, berries, field peas, vegetables, barley, wheat, beans and creamery products. Oats rank as first, running as high as 100 bushels to the acre. Alfalfa has been tried here and has been given up. Dairying, of course, is always popular here, and milk is still at $2.05 per 100 pounds. Cattle seem to thrive best on clover, of which two crops are raised in a season. The season looks good for a large oat crop. This would have been an excellent winter for fall wheat, but there is not much raised here in this vicinity.

S. B. MAYHEW.

Berries Lead Product.

SUMNER, Pierce County, Wash., Feb. 3.—Berries and rhubarb are the principle crops here. But few dairies are located in the immediate vicinity of Sumner. Crops are not being changed here on account of the high price of land and small acreage. Fruit in general is a poor crop to rely on for this section.

W. J. LANGDON.

Rentals Are High.

TOPPENISH, Yakima County, Wash., Jan. 25.—The present mild weather has caused a great activity in pruning in fruit section, the present indications are for a heavy crop of bloom in nearly every variety of fruit. Farm work is not very well advanced because the ground is still frozen, but is more forward than last year or the year before. There has been the greatest demand for land on the reservation in the history of the valley, and as a consequence rentals are very high. In some instances land has rented as high as $17 per acre cash rent. A great number of leases have been sold at a substantial price. The present high prices of potatoes have created a desire in many people to plant heavily, but the extreme high price of seed will have a tendency to curtail the acreage to a certain extent. Stock in the fattening pens have done exceptionally well, as there has been practically no mud and no severe cold weather. Hay is more plentiful in the reservation and not so much in demand as last year. But corn is in demand and other feed grains in proportion. Potatoes are selling as high as $53 per ton, f. o. b. cars. Those having potatoes pitted are not yet able to market and many having them in storage are not able to get cars. There is a strong demand for hogs for breeding purposes, and sheep are very high and few offered for sale. Milch cows are variable in price. Feed is high, but butter fat is also high. Reservation dairymen are beginning to realize that they must test their herds and get rid of the poor producers. Poor cows are low in price, but good ones are in demand at good prices. Mr. Kramer of the Mutual Creamery company was in town recently and stated that the company had changed their plans for Toppenish and would put in about twice the capacity they had formerly planned. They now intend, in connection with the cheese factory, to manufacture butter, buttermilk, ice cream and other by-products.

C. A. WYCKOFF.

Bright Future Seen.

PORT ANGELES, Clallam County, Wash., Jan. 29.—The leading products from our farms are dairy products, hay, beef cattle, potatoes, apples, poultry and berries, and they rank in the order named. The increase in the production I should judge will average well to up about 10 per cent, and most marked in the production of dairy products. Alfalfa has only proven successful in some parts of the county, near Dungeness and Sequim. The farmers speak as if the outlook is very good for the potato crop this year and in a general way seem to be taken a bright outlook of matters.

J. P. CHRISTENSEN.

Try Out New Things.

MONTBORNE, Skagit County, Wash., Jan. 31.—The leading products of this county are oats, condensed milk, cabbage seed, canned fish, timothy and clover, potatoes, butter, canning of berry fruit, corn for silage and hogs. Different varieties of oats and barley are being tried out on La Conner Flat Stock farm by experiment station men. Artichokes are being tried out to kill the Canadian thistle and it serves as hog feed at the same time.

JOHN B. PETERSON.

Prunes Sent to London.

A total of 3600 boxes of Clarke county prunes, each weighing 25 pounds, were shipped to London, England, today by the J. K. Armsby Packing company of this city. These prunes will bring a fancy price in London. The prunes required two cars to transport them.



GROWN BY CAREFUL RE-SELECTION; clean, healthy, vigorous stock that will produce big crops of shapely, uniform, salable tubers.

The early demand and short crop has forced a sharp advance—if you intend to buy—ORDER NOW.
Prices on Request.
Ask for Our 1917 Catalog No. 180.

PORTLAND SEED CO.
PORTLAND, OREGON

BURTON'S 1917
SEED BOOK
describing BURTON'S QUALITY SEEDS tested under Western conditions on our Farm and Trial Grounds. It is full of cultural directions, concise descriptions, and valuable information gained from actual experiences.
WRITE TODAY. IT'S FREE
A penny postal may save you many dollars
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GOOD SEEDS
GOOD AS CAN BE GROWN
Prices Below All Others
I will give a lot of new sorts free with every order I fill. Buy and test. Return if not O. K.—money refunded.
Big Catalog FREE
Over 700 illustrations of vegetables and flowers. Send yours and your neighbors' addresses.
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LAND PLASTER
HOW TO USE IT
SPOKANE SEED CO.
FERTILIZER Dept.
SPOKANE, WASH.

Aster Seed
Nurserymen, Seedmen, Everybody!
Crego's Lavender and White; Giant Branching Lavender and Pink, Rose King and Violet King, Fine Mixed, separate colors, 5c pkg.; ½ oz. 50c; 1 oz., 75c; pound, $6; mixed, 50c an oz.; pound, $5.
FOSTER'S FLOWER SEED FARM,
1468 Locust St., Pasadena, Cal.

In answering advertisements don't fail to mention this paper.

Oregon-Grown Seeds Free
We assert that our Oregon-Grown Seeds are superior. Try them and be convinced. That is why we give you 35c worth for 5c, just enough to pay for postage and packing.



	Reg. Price.
1 pkt. cabbage, Danish ball head; best solid winter sort	.05
1 pkt. beet, Early Model, tender, dark beet, extra early	.10
1 pkt. parsnip, Gill's Tender Heart; no hard core	.05
1 pkt. lettuce, New York Large; best head lettuce	.05
1 pkt. Spencer Sweet Peas, Progressive mixture	.10
	.35

SPECIALISTS FOR OREGON-GROWN SEEDS, DAHLIAS, ROSES AND PERENNIALS. ASK FOR FREE 1917 CATALOG. WRITE US ABOUT YOUR NEEDS AND WE WILL QUOTE.
GILL BROS. SEED CO.
Mention this paper.
PORTLAND, ORE., R. 1, DEPT. W.
LET THE SEEDS TALK

Belied Name of Grange

Stock Selling and Commission Making

(Continued from page twenty-one.)

After considerable objection by Attorney Robertson, of counsel for the defense, the letters of O'Gara were admitted and read to the jury. Among other things, they say:

To Defend Suit.

"Laclede, Idaho, Jan. 12, 1914.—Inland Mercantile association, Spokane: Your letter of the 8th came to hand and I see that you still claim that I owe the company $68. It would be clearly a case for the jury to decide and I think that if it goes to a trial I will get my $20 back. I never received one cent of benefit. Just think of it, a man coming into my home and lying me out of $20, was weeks' hard work. He told me that they had declared a 3 per cent dividend and that if a man had four or five shares of stock he would not have to work any more, and all such dope as that. You know yourself what an agent will do to sell his stock. I know that I had not ought to have had anything to do with him, but smarter men than I am have been taken in by slick swindlers. Of course, if you want to take it to court I will have to defend it, even if it does take all I have got.

"J. H. O'GARA."

Claims Self Swindled.

"Laclede, Idaho, April 16, 1914.—Inland Mercantile association, Spokane: In reply to your correspondence, I want to say that I do not owe that company (Northwestern General Trading company) one cent. On the contrary, they owe me $20 that they swindled me out of by false pretenses, misrepresentations and lying. Their agent came to my house for two days, telling me all kinds of lies about that company.

"He said that a fellow could save from 30 to 50 per cent on all goods bought at their store and with the three or four shares of stock would not have to work after two years; that his dividends from the company would keep him, and all such dope as that, until he got me to sign for two shares and got my $20.

"As soon as we investigated the business I demanded my money back, told them they had swindled me, as I could not buy any cheaper than at the other stores in Spokane. Besides, they did not have hardly anything in stock. At that time I could have got my money back if I went after it right.

"I was working in the sawmill at that time and he got two weeks of my wages for nothing, not one cent of benefit have I ever received from my $20 hard earned money. Just think of a rich company like that claims to be around swindling poor working men out of their money.

"I am not the only one in this town that they have swindled. There are a half dozen others in the same boat with me. I was talking to some of them the other day, who said they would all club together and stand suit. I should think they would be satisfied with the money they got for nothing. That agent never came back to this town. He dasn't. If he had he would have been thrown into the river. I don't know whether he is with the company or not now. He told more lies than any man I ever seen.

"My wife went to the store and priced some of the things; they did not hardly have anything but clothing. She told them she could get things as cheap in Laclede. They told her she was foolish to come there and buy, so she did not buy anything, and then I wanted my money back.

"Now, if that wasn't obtaining money under false pretenses I don't know what it was, and I want to say to you that if it was a legal debt it would not be in your hands for collection. I don't think there is any judge or jury in Bonner county that would make me pay any money on that contract.

"J. H. O'GARA."

DEFENDANT TESTIFIES

Tells of Origin of Company.

Olin C. Fowler, one of the five defendants on trial in federal court in the case of the Northwest General Trading company, was the first witness for the defense. He conceived the idea of a cooperative mail order house in 1910, at which time he talked the matter over with an officer of the Oregon state grange in Portland. In December, 1912, he went to Seattle intent upon starting a mail order house of his own and induced his brother-in-law, a grocer, to put in his stock. Afterward the brother-in-law declined to go ahead and he interested H. C. Pickett and J. B. Dabney, together with whom he incorporated the Olympic Trading and Supply company, each taking an interest in the stock.

Finding that considerable money would be needed to carry on the work of the new concern it was decided to convert it into a cooperative company and invite the grange to join. For this purpose D. J. Davis and F. J. Chamberlain of the grange were induced to come in and the first officers on the cooperative basis were: Pickett, president; Davis, first vice president; Chamberlain, second vice president; Dabney, treasurer, and Fowler, secretary.

Fowler said he had never heard of the Northwestern General Trading company except in a competitive way. Later he declared that the Olympic concern was affiliated with the Northwestern General Trading company "in the matter of buying goods and not in the matter of consolidation." "After we called in Gale Smith and asked him to help us with the merchandizing end of the business Knudson remarked that if the company gave Smith $50 as a regular salary every month he would pay him another $50." Gale Smith was elected a director in 1913 to succeed D. J. Davis in the Olympic company.

Never Believed Business Paid.

Judge Van Fleet—Did the books at any time show that the company was doing business at a profit. The witness—Really, I never believed we were on a paying basis.

The court—Then why did you advance the price of stock from $30 to $40 a share. The witness—Eventually we expected the stock to go to $100 a share. This stock was sold not so much because of its intrinsic value as that it was a membership privilege. When the stock was raised the store had opened and this made the stock worth more to the new members, who were taking no chances on coming in.

"Then why did your literature lead people to believe that you expected to pay dividends?" inquired Attorney Garrecht. "We expected to pay dividends eventually, through the patronage of nonmembers, who would get no rebates," said the witness.

S. T. Knudson was the second defendant to be called.

Knudson Was to Get Commission.

Knudson identified a letter from the Olympic Trading and Supply company, written in 1913, inviting him to visit Seattle and see what that company had to offer in a larger field.

"I then went to Seattle to look into the matter," continued the witness. "I met H. C. Pickett, J. P. Dabney and Olin C. Fowler, the managers of the Olympic, and they outlined their proposition. F. J. Chamberlain of the board I knew of through his work in the state grange. We talked of cooperation and its possibilities and agreed that when a man put his money into such a concern and became a buyer he was a valuable asset. After several days spent in an exchange of ideas I drew a form of contract, which the directors of the company approved and accepted after having it passed upon by a lawyer."

"While the contract may have read differently, the understanding was that I was to get my commission when the sales were made, regardless of when the commissions came in."

Denies Intent to Deceive.

Attorney Garrecht produced a letter from Knudson to "Dear Member," written in January, 1915, enclosing a "dividend check" accruing from merchandise purchases. "Wasn't this plan an effort to deceive the shareholder?" inquired Garrecht.

"There was no intention to deceive any one," replied Knudson. Witness said the rebate check plan was conceived by J. B. Dabney.

Court admitted the Miller Freeman letters, in which the writer, a stockholder, after trying to get data on the Olympic company, but without success, charges the promoters with conducting a conspiracy to defraud.

His Widow Defends Sears' Acts.

Mrs. F. B. Sears testified that she was the widow of F. B. Sears, who had managed the collection department for the Northwestern Trading company He had never profited beyond his salary of $125 a month and led an honest and frugal existence, she said. He was in the employ of the company for nearly four years, beginning with the spring of 1910. His death occurred in April, 1916, after he had left the employ of the company. Mrs. Sears said that the connection of her husband with the company was honest and legitimate in every way. She had patronized and saved money at the Northwestern store.

(Continued on page twenty-four.)

"Many farms have a dipping tank in the hog pen but not in the house."—Professor D. H. Otis, head of the farm management bureau of the University of Wisconsin, at dairy students' banquet, farmers' week, at O. A. C., Corvallis, Ore.

Farms Give Wealth

Food Stuffs Exports on Increase

The American farmer continues to do his part to enhance the growing prosperity of the nation. A statement just issued by the U. S. department of commerce shows that December exports of breadstuffs, cattle, hogs, sheep, meat and dairy products all show substantial increases over exports in December, 1915.

In round numbers we expect $75,000,000 worth of breadstuffs and meat and dairy products in December, 1916, as against $57,000,000 worth in December a year ago. The comparison is as follows:

	1916.	1915.
Breadstuffs	$44,463,000	$33,158,000
Meat and dairy products	30,462,000	24,024,000

December exports of corn were but slightly in excess of exports a year ago, but exports of oats and wheat showed notable increases. The exports of flour decreased. Decreases were reported in the exports of fresh beef, oleo lard, neutral lard and pickled pork. Increases were reported in exports of canned and pickled beef, bacon, hams and shoulders and lard compounds.

We are making these enriching sales, and yet an abundance remains to feed our own people.

As this big subject is further studied the unwise agitation for an embargo on farm products and other food commodities is swiftly fading out. Thoughtful observers see that it is beneficial in many ways for the United States to sell its agricultural products down to a closer margin than in the past. We are beginning to see that large surpluses foster waste and tend to check production rather than to stimulate it.

Potato Seed

Should Be Harvested Immature

Benz of Toppenish, Wash., sometimes referred to as the potato king of Washington, says that potatoes for seed should not be ripe. His argument is that the ripe potato is "fat," and therefore less capable of speedy and sturdy generation, just as a fat hen is less efficient as a producer of eggs than the one that has worked off surplus fat scratching or hunting for food.

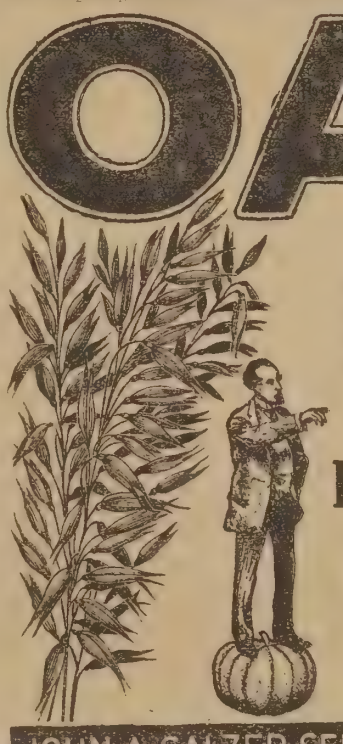
Mr. Benz says that sometimes frosts that kill potatoes just before they would become ripe are highly beneficial, and recommends that when such frosts do not come along, artificial means be taken to kill the tops where it is intended to harvest potatoes for seed.

Potatoes should not be planted in the same patch in which they grew, thinks the Toppenish grower. "The oftener you give a potato a railroad ticket the better," he says. It has been his experience that potatoes from three ounces to one pound are best adapted for seed, and he wants from one to six eyes on each piece planted. His experience also leads him to recommend the following rotation of crops in potato growing in localities where alfalfa will grow, or something similar in other locations: Alfalfa, four years; potatoes, two years; wheat, oats or corn, one or two years.

Baited the Sage Brush.

Two farmers south of Gooding, Gooding county, Idaho, baited the sage brush in their vicinity with five ounces of county strychnine and a few days later harvested 5000 pounds of dead rabbits.

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Belied Name of Grange

Stock Selling and Commission Making

(Continued from preceding page.)

C. B. Kegley, master of the state grange, explained an item of $40 on the books of the Northwestern General Trading company, drawn by him under the heading of "commissions" as the proceeds of a share of Northwestern stock sold by him to Gale Smith in 1913.

Kegley testified that he bought for $20 a share of Northwestern stock that had cost a dissatisfied stockholder $75.

Kegley was on a committee of the state grange that voted an indorsement of the Northwestern in 1914.

Edward Walk, accountant, was on the payroll of the Northwestern, according to testimony, when making an audit for the farmers' union to appease dissatisfied stockholders. He was the third representative of the farmers' union shown on Northwestern payroll when acting for the union in matters affecting the Northwestern.

L. C. Crow, former president of the farmers' union, when confronted with items on the books of the Northwestern totaling $119, due the company for associate membership cards issued in 1915, denied any knowledge of the entry. The account is still unpaid. He also denied any knowledge of a daily report of February 1, 1915, in which he was listed as having disposed of associate membership cards.

Fear of the "blue sky" law of Oregon caused the price of Portland Northwestern shares to be cut to $30 at the beginning, when the shares in the same corporation were selling at Spokane for $75.

J. C. Lawrence explained how he labored to secure indorsements of the Northwestern Trading company by the farmers' union executive board, the Farmers' Union Produce company, the state grange and the Spokane Central Labor council. During this period he was drawing $50 a week and expenses from the Northwestern, he said.

Lawrence Activities Varied.

John C. Lawrence, on direct testimony, said that he is age 56, was born in Ohio and came to Garfield, Wash., in 1878, and has maintained his residence there ever since. He has followed farming, the hardware business, grain dealing, banking and, in a public way, was a member of the board of education in territorial days, superintendent of schools, state senator, register of the United States land office at Waterville and a member of the public service commission. He has been a member of the farmers' union and the grange three or four years.

Lawrence testified that he first met Gale Smith fraternally at the East Spokane grange, of which they were both members, in the winter of 1912. He first discussed with Smith the matter of the indorsement of the Northwestern General Trading company by the farmers' union in May, 1914.

Has Cooperative Plan.

"I had in mind the establishment of a wholesale supply house for farmers," testified Lawrence. "The Northwestern Trading company was conducting a business along this line and we saw a possibility of securing a closer cooperation between the farmers' union and the Northwestern. I suggested the possibility of the recognition of the Northwestern as the official supply house for farmers. Smith agreed with the plan and told me to see what I could do along that line with the farmers' union and grange."

"Were you given any compensation at that time?" asked Attorney P. W. Kimball, conducting the direct examination. "No, not at that time," replied Lawrence. "I spent several weeks looking into the matter and visited North Yakima, where I met C. B. Kegley of the state grange and laid the matter before him.

"On the way back from North Yakima I talked with Almer McCurtain, state secretary of the farmers' union, who told me about the Farmers' Union Produce company of Spokane, the affairs of which were not in a satisfactory financial condition. After that I saw President Wiseman of the Whitman County Farmers' union, J. P. Hill, president of the Spokane County Farmers' union; Phil Cox, J. H. Taylor and L. C. Crow, with all of whom I discussed the idea of indorsing the Northwestern General Trading company.

"In the latter part of June, 1914, I again saw Gale Smith and reported that the proposed plan was meeting with favorable consideration by the farmers' union, but that something would have to be done to take care of the produce company in Spokane."

"Did Smith then agree with you on the matter of your compensation?" asked Attorney Kimball. "Yes, he agreed to pay me $50 a week and expenses," replied Lawrence. "It was necessary to travel a great deal and to incur considerable expense in seeing the various members of the executive board of the Farmers' Union Produce company, which had now to be taken into consideration."

"What were you paid for?" "The time given and the expenses."

"Was it understood and agreed that you were to remain permanently with the trading company if the indorsement went through?" "Yes."

"When was the matter taken up with the farmers' union?" "In July, 1914, at a meeting of the executive board, attended by L. C. Crow, A. B. Cross, Phil Cox, Almer McCurtain, I. H. Jennings, H. R. Herman and Louis Delivuk."

No Effort to Conceal.

"Who was with you when you attended this meeting?" "Gale Smith."

"You were present during the discussion?" "I was."

One $5000 Job.

On cross-examination by District Attorney Garrecht Lawrence stated that he had held but one $5000 a year job and that was through what might be called a political appointment.

"You say you saved money on goods brought from the Northwestern; did you make these purchases on an employe's rebate slip such as the others used?" "No, I bought on the ordinary membership card. I knew of no employes' rebate."

"Was there a local of the farmers' union organized at the store of the Northwestern General Trading company?" "Yes, and all employes joined."

"When did you go on the pay roll of the Northwestern?" "The latter part of June, 1914, and continued during July and August. Then I was off until after the indorsement was extended in September."

He Suggests Merger.

"Were you not specifically employed to secure this indorsement?" "No, I suggested it on my own initiative. After I learned of the difficulties of the Farmers' Union Produce company it took a great deal more time than I thought would be required at the beginning and I felt that compensation should be paid me."

"Was there opposition by some of the stockholders of the produce company to the indorsement of the Northwestern?" "Yes, some of the members of the produce company had entertained some old feeling against the Northwestern because they viewed it as a competitor in the same line of business."

"Was there opposiiton among the members of the Tri-State Terminal Warehouse company?" "Yes, they had contemplated putting in a merchandise branch. Mr. Delivuk's idea was to combine the Tri-State Terminal company with the produce company."

"You found a loss of $35,000 in the Northwestern?" "Yes."

"Why, then, did you favor a raise in the price of Northwestern stock to $100 a share?" "Mr. Smith had suggested this and we both approved of it. We needed more capital to develop the business and thought we could get it at $100 a share. Delivuk wanted to put the stock at $5."

His Employment Known.

"You say the first resolution of indorsement by the farmers' union was unsatisfactory to Smith and yourself?" "Yes."

"Didn't Y. C. Mansfield say that it was not best to tell the farmers the whole truth?" "I don't remember."

"Didn't he want to keep these things off the records?" "No, he said he would rather pay his share than influence the board to take that step because of the difficulties of the produce company."

C. B. Kegley, called as a witness for the defense, said that he had been master of the state grange of Washington for 12 years.

"Where do you live?" inquired counsel. "Six miles east of Palouse City."

"How long have you lived there?" "For 29 years."

"When did you become a stockholder in the Northwestern?" "In March, 1910."

"Bought goods there?" "Yes."

"How long have you known John C. Lawrence?" "For 25 years."

"When did Lawrence become associated with the Northwestern Trading company?" "Early in 1914, about June. We were on a committee on cooperation at the meeting of the state grange at North Yakima that year and he told me of his intention to go with the Northwestern."

"You made some investigation into the Northwestern?" "Yes, I was a member of a committee from the state grange, along with J. O. Wing and J. D. Compton, who investigated it in 1914. We came to Spokane for that purpose, and stayed here three days, and were shown over the store by Mr. Lawrence, who exhibited the Wilson report and his joint report with Mr. Delivuk to the farmers' union.

"Did Lawrence mention the earlier losses of the Northwestern?" "Yes. We concluded that they were only incidental to starting the business. Lawrence gave us a full report and we also saw Delivuk."

"Know Lawrence was in the employ of the Trading company?" "Yes, he then said so."

Recommended Concern to Farmers.

"What action did your committee take?" "We recommended it to the armers as a good place to purchase goods. We felt they could save money."

"Appear to be run as legitimate business?" "Yes,"

Attorney Robertson started to inquire about Miller Freeman, the seven sisters' bills, the Stop-Look-Listen league, but Judge Van Fleet ruled this out of order as immaterial and foreign to the purpose of the inquiry.

"Did you receive any commissions, salary or remuneration, except the saving in goods?" inquired Attorney Robertson. "None whatever."

Accepted Reports of Others.

"Did you examine the books when you were at the Trading company's store for two or three days?" inquired Attorney Garrecht on cross-examination. "It was impossible. We simply took the reports of the accountant Wilson, Mr. Lawrence and Mr. Delivuk," said Kegley.

"Chiefly Lawrence's word, wasn't it?" "No."

"Did he tell you of their stock sales commission?" "No, I already knew that myself."

"You knew of the rate of commissions paid?" "Yes, I knew they paid 20 and 25 per cent."

"Know Smith was getting part of the commission?" "No."

"Did you know how much had been



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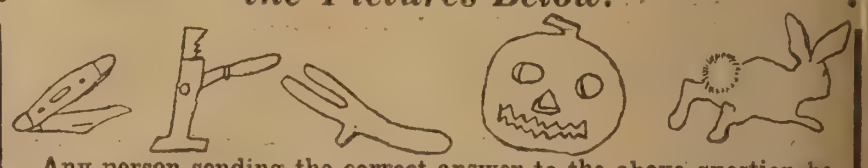
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paid on commissions." The witness had forgotten.

Told Notes Were Good.

"Did you know how much was due on notes and whether the same was a collectable asset?" "The sum due was then reported and the notes were said to be good."

"Did you know that 75 per cent of the notes were past due?" "No."

"They did not tell you that?" "No."

"Get any special rates on merchandise by being an employe of the company?" "Never was an employe of the company."

"Did you ever receive any commission on stock sales?" "Never sold any stock."

"We notice on the books, under date of August 13, 1913, that C. B. Kegley was paid $40 under the heading of 'commission.' Can you explain that?" "Yes, I sold Gale Smith a share of stock at that time. I had purchased the share in 1910. I had two shares, and needed only one, and sold him the other."

Attorney Garrecht said the records showed that Kegley had purchased but one share of stock in the company, and asked why this was.

Bought Dissatisfied Man's Share.

"At St. John, Wash., a man named Barber made a complaint that a salesman for the Northwestern had jobbed him. He said that the salesman had charged him $75 for a share of stock and that after he went home he found that its par value was but 20. He then offered to sell the stock for par, $20, and I asked him to hand it over."

"That stock was not transferred to you until March, 1915," said Attorney Garrecht. "No, I delayed in having a transfer of it made."

"Prior to that were you not a stockholder?" "During the time I was dealing with the company I was a stockholder."

L. C. Crow Becomes Interested.

L. C. Crow, former president of the farmers' union, said that he was born in Indiana, age 65, had lived in Washington 40 years and is a farmer. He had been president of the Washington and Idaho Farmers' union for six years and on the national board of the farmers' union for two years. He had given considerable study, he said, to the cooperative movement in America and had been connected with cooperative enterprises operated by the farmers' union.

"Was a tentative plan of consolidation with the Northwestern Trading company by the farmers' union submitted to you?" asked Attorney Robertson.

"J. C. Lawrence suggested this to me June 13, 1914," said Crow. "He thought it might be a good thing for the union to indorse the Northwestern as a cooperative institution. He said that he had been talking with Gale Smith, the head of the concern, and thought a great cooperative organization could be built up here by the farmers' union and the grange indorsing the Trading company. The idea being that members of these two organizations could get their goods at greatly reduced prices."

Asked Complete Audit.

"When did you first discuss the idea of consolidating with the Northwestern Trading company?" asked Attorney Garrecht, in opening the cross-examination. "In June, 1914," said Crow.

"You finally entered into an agreement with the company?" "Yes."

"You did not get together on the terms first offered by Gale Smith and J. C. Lawrence?" "No."

"They wanted to increase the capital stock to $1,500,000?" "Yes."

"In April, 1915, did you appoint Edward Walk to make an examination of the stock books?" "Yes, we asked him to make a complete audit of the stock books."

"Who was paying Walk?" "The Northwestern Trading company had employed him before that time as a systematizer. Gale Smith told me that they had lost money and wanted some one to install a correct system in the business. He felt that Walk was capable of doing this and for that reason I had retained Walk to make the examination for the farmers' union, after so requested by a committee of dissatisfied stockholders."

"Was there any audit of the books before the consolidation?" "I am told not. A financial statement had been made by an accountant named Wilson, which was reported to us by Delivuk and Lawrence."

"Never looked into figures of this report?" "No."

"They said the company had made losses?" "The company we had just amalgamated had also sustained losses. It seems that we have never started anything around here, but what sustained losses."

"The name of the company you amalgamated was the Farmers' Union Exchange and Produce company?" "Yes."

"It was in debt for $13,500?" "Yes."

Not a Stock Salesman.

"Were any members of your executive board on the board of the produce company?" "Yes, H. R. Herman of Genesee, Idaho."

"Did you distribute these associate membership cards?" "I don't think I ever did; I may have. I bought one card, paying $5. I consider that I got my money back in goods purchased. I am not a stock salesman."

"Ever have an account with the Northwestern Trading company?" "No, sir."

Attorney Garrecht showed the witness an account on the ledgers of the Northwestern General Trading company, where a total charge of $119 was made against L. C. Crow "on account moneys collected on associate memberships."

On being interrogated as to the correctness of this account, Mr. Crow said he could not recall anything with reference to it.

"Were you to get any credit for the number of cards turned in?" asked Attorney Garrecht. "I turned in no cards," said Mr. Crow. "If there is any account against me on those books I have paid it off."

Record Shows Charge.

The witness was then shown an agent's daily report for February 1, 1915, showing L. C. Crow's name among those who had turned in associate membership cards for that day.

"You say you don't know how those cards came to be on the books?" "No, sir."

"This is an account for membership. You are charged with having collected money and not turning it in. Can you explain this?" asked Garrecht. "Each speaker took out so many cards with him in the winter membership campaign. These cards were delivered to associate members at $1 each. It is possible that these cards were charged to me, as I, as president of the union, had charge of the organizers in the field. I did not go out myself, but received daily reports on the campaign. Taylor assisted me in handling this work."

"When you went east you appointed Taylor to act for you?" "Yes, I left matters in the hands of Taylor."

"Do you know if he was then in the employ of the Northwestern Trading company?" "I knew he had been up to that time."

"Did you know that he would have the appointment of a man to audit the books?" "No, I did not know that any trouble was coming up when I left."

"Did the men who secured associate memberships get any commissions?" "Different arrangements were made with different men. Some probably got commissions. Some were employed on salaries."

"Didn't you express some objection to the payment of commissions when the matter of consolidation first came up?" "Yes, we favored placing the men on a salary basis. Later we were informed that the company lost money, and the commission plan was restored."

"In February, 1915, did Louis Delivuk ask for a further investigation of the Northwestern General Trading company?" "Yes, I understand that he did."

"After trouble began some opposition to the consolidation appeared?" "Delivuk was the only one. He made the report on which we brought the consolidation around and he should have known what he was doing.

"At the meeting of March 8, 1915, of the executive board of the farmers' union, did Delivuk make charges that J. C. Lawrence and J. H. Taylor dominated a preceding meeting in which an effort was made to have an examination of the Northwestern?"

Witness said that Delivuk had been called on the carpet, as some of the board members resented these charges.

Lawrence's Standing Good.

"How long have you known J. C. Lawrence?" asked Attorney Robertson on redirect examination. "Thirty-five to 40 years. I have known him in every walk of life and met him soon after I came here. We used to teach school together."

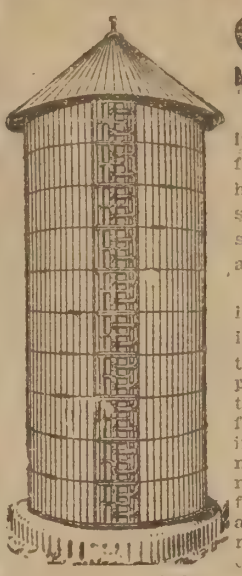
"Do you know his standing for honesty, integrity and probity?" "Yes, it is good." Witness said that Lawrence had told him on entering the employ of the Northwestern Trading company that he proposed to retire from politics and give his time to building up a great cooperative business.

"Do you think that it is right to appoint a man on a committee to investigate a concern of which he is on the payroll?" inquired Attorney Garrecht, referring to Lawrence.

"No. I did not know that he was on the payroll," replied Crow.

The result of the present trial of the former officers of the Northwestern General Trading company in the federal court at Spokane will be given in next week's issue of the Farmer together with tables summarizing the business of the company together with that of its alleged branches in Seattle, Portland, and in Iowa.

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Larger Share for the Producer

Standard Packing Wholesale Terminal Markets Under State Control

By JOHN J. DILLON

Our readers, who have followed the brilliant and successful fight of New York dairymen to compel the big distributers to pay them living prices for their products, will be interested in the following article from the pen of John J. Dillon. As New York's state commissioner of foods and markets Mr. Dillon organized the dairymen, fought their battles and led them to victory.

In this article he discusses the much broader problem of marketing all the products of the farm. He thinks he has a solution that will give the producer better prices and, at the same time, enable the consumer to buy more cheaply than now. His subject is "The High Cost of Living and Causes Therefor."

The cost of living is high, mainly because men of means and large affairs are not, as a rule, concerned about it. The portion of their income that is paid out for food is not important to them. Whether the cost of the food be high or low, the difference to them is not important. They may growl a little at the end of the month at an increased provision bill, but neither themselves nor their families are in any way disturbed by the price. They are never obliged to lessen the amount or quality of the food because of its high price. Hence their indifference to the matter.

Needless Waste.

Another reason for the high cost of living is waste. This includes the waste of food on the farms, because the farmer is unable to market it for enough to pay the cost of transportation and selling. Waste in transit because of the lack of proper grading and packing and standardizing of the product as it leaves the farm. Waste in the city due to the delay in delivery because of the practise of passing the food from one dealer to another in speculation; and waste due to the total destruction in compliance with the law by the city inspectors in condemning whole packages of food, particularly fruits and vegetables, and in some cases eggs, when only a small fraction of the article itself is damaged, and the balance might well be preserved.

Wrong Methods.

Generally inefficient and extravagant methods of distribution are still another factor in the high cost of food in the city. Agents or drummers go to the country to solicit the shipments for a particular dealer. He has heavy expense and usually a good salary. This comes out of the food. The produce is largely shipped in small lots at double the freight rates of carload shipments. When it reaches the city the commission dealer often buys it for his own account, or for the account of some company in which he is interested. As a trustee of the producers, he deals with himself. It then goes through the hands of several wholesalers and jobbers, frequently as many as seven in all before it reaches the retailer. With it all is a duplication of cartage charges, first from the dock to the commission dealer, and then from one to another of the wholesalers and jobbers who speculate in it. When the housewife buys her daily supply she pays her portion of the accumulated cost of wastes, commissions, extravagance and profits.

Middlemen and Speculators.

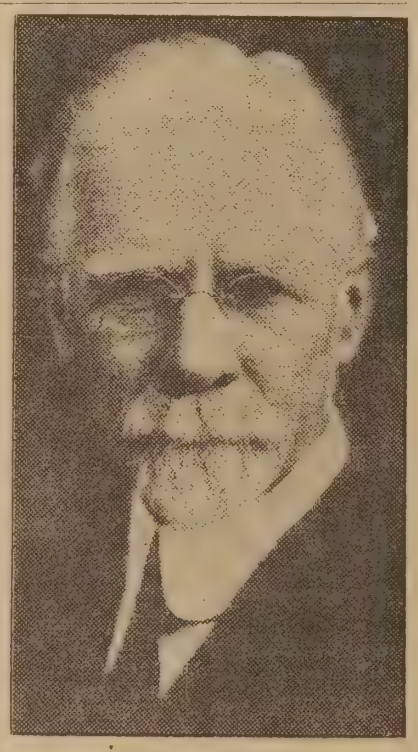
This system of sale and resale and speculation is encouraged, abetted and maintained by a system of credits extending all the way from the commission dealer through to the retailer. Losses are frequent and sometimes heavy. The loser is obliged to cover himself for these losses, and the producer and consumer bear the burden of the losses because the losing dealer is in a position to shift the burden upon them.

The shipper is obliged to entrust the sale of his goods to the dealer in the city. Sometimes the dealer is honest and does the best he can with them, and makes a fair return. Sometimes he takes his duty to the shipper lightly and manipulates the sale as best he can to his own advantage, and the producer in this case gets an insufficient return, and sometimes no return at all.

The Remedy.

The remedy for this condition is a direct, efficient and economic system of distribution from the farm direct to the consumer through a terminal wholesale market and the retail store.

The plan of the New York state department of foods and markets is to establish assembling rooms for food at the railroad in the local producing centers throughout the state. The producers under this system would organize into cooperative associations and they would down the market or assembling room. They would bring their products to this local packing house as it comes from the tree or the ground, and an employe in charge of the packing house would grade and pack the produce, and, if located in a village or city, would supply the local needs and ship the balance in carload



JOHN J. DILLON.

lots straight to a terminal wholesale market in the city. The food would be received in this terminal market by an auctioneer or salesman licensed by the state and operating under the supervision of the state, who would cause an inspection of the goods, make an open sale and keep an open record of the receipt of the goods, of its condition, of its weight, of its price and of the person who bought. The sales would be made in quantities to accommodate the city retailer so that he could buy his supply direct from the agent of the producer, and, of course, the housewife would be supplied daily from the retail stores.

The expense of grading and packing of freight to the terminal market, and for the sale to the wholesale market, would be a charge against the producer, and this expense would be less than the present commission for selling alone. There would be but one charge for cartage from the wholesale market to the retailer. In addition to the open public sale at the wholesale market, the prices for the different grade of goods would be made public and official by the state commissioner. This would be a protection to the housewife in buying at retail, and the commissioner of the department would have the duty of seeing that the retail prices were commensurate with the wholesale prices, and that no retailer demanded an excessive profit.

Extravagant System.

This system will not appeal to the statesmen and others who insist on preserving the status quo. They refuse to consider any measure that could possibly interfere with the present system and with the men who are now established in the trade and who speculate in food products. If their contention prevails, we might just as well stop talking about reducing the cost of living. If we authorize unnecessary middlemen and speculation to take toll out of every pound of food that comes into the city, the housewife must pay that toll in increased cost of her food supply. There is no other place for the dealer and speculator to get it, and there is no way for the housewife to escape it.

If we conclude to preserve and perpetuate this extravagant and speculative system, there is no hope for the farmer to get more money for his produce. It now costs the farmer 65 per cent of the price paid by the consumer to distribute his product. The farmer must be content with 35 cents of the consumer's dollar.

What Could Be Saved.

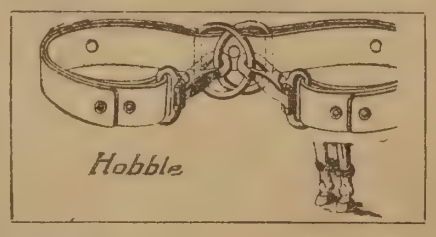
The purpose of the New York state foods department has been to reduce this 65 per cent of distributing cost by at least 25 to 30 per cent, and through the saving in the cost of distribution to pay the farmer a little more and to sell to the consumer a little less. The only certain method of accomplishing this end is by the system of grading and packing and wholesale terminal markets under state control. If this system be adopted the useless handling, the excessive profits, the continual wastes and the speculation in food products would be eliminated. The food would move in a straight channel from the producer to the consumer, and if properly supervised would undoubtedly save the consumers of New York City from $150,000,000 to $200,000,000 annually.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Hobble.

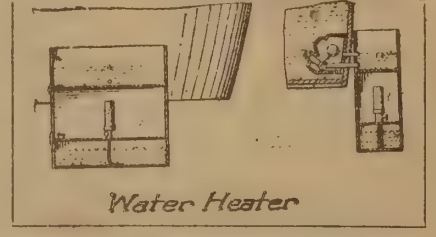
The rings of this hobble slide between two straps riveted together at the middle and ends; the rings are crossed and each attached to the op-



posite snap hook when it is desired to hobble the animal completely; but they are left uncrossed and each attached to the near hook, to leave it some freedom.

Stock Waterer.

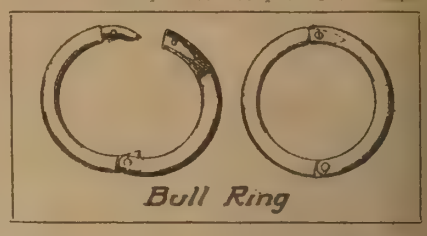
The idea here is to prevent the water in the drinking trough from



freezing. A small water-tight metal box, containing the float valve, is placed in the tank and connected with the trough by two pipes; one pipe supplies water to the trough through the float valve, the other keeps the water in the box and trough at the same level. The heating is done by a lamp.

Bull Ring.

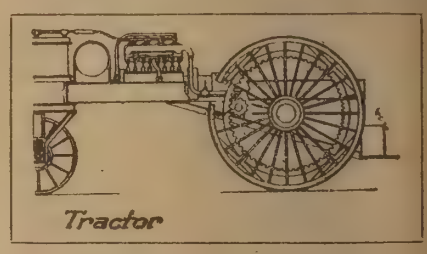
The special feature of this ring is the pointed end of one section which enables the operator to pierce the sep-



tum of the nose without a special tool. The sections are held together by bolts.

Traction Engine.

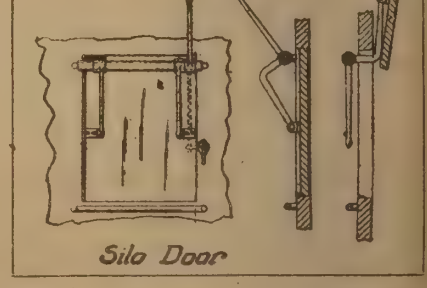
The new point about this tractor is that the exhaust of the engine is discharged between the gears at a point



just before they meet. This keeps the gears free from mud and earth.

Silo Door Operator.

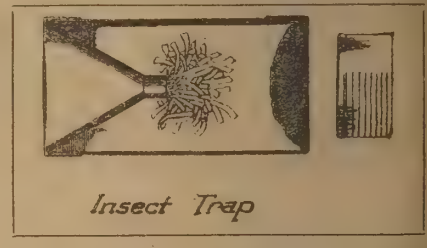
This operator swings the door up and thus permits it to be opened be-



fore the ensilage is below the level of the lower sill.

Roach, Bug and Insect Trap.

The entrance of this trap is covered with tissue paper cut into ribbons; this permits the bug to enter



readily but prevents its escape. The bait is placed at the opposite end of the trap.

California Dairies.

California's dairy industry has increased over $6,000,000 in value within the last four years and the total yield for 1916 is $40,627,039, according to the annual report of F. W. Anderson, secretary of the state dairy bureau.

New Cheese Factory.

Site has been secured and work will be pushed on a new cheese factory at Oakville, Grays Harbor county, Wash.

One at a Time, Please.

A lanky youth entered the crossroads general store to order some groceries. He was 17 years old and was passing through that stage of adolescence during which a boy seems all hands and feet, and his vocal organs, rapidly developing, are wont to undergo sudden and involuntary changes from high treble to low bass.

In an authoritative rumbling bass voice he demanded of the busy clerk, "Give me a can of corn" (then, his voice suddenly changing to a shrill falsetto, he continued) "and a sack of flour.

"Well, don't be in a hurry. I can't wait on both of you at once," snapped the clerk.—Chicago Daily news.

All the World's a Stage, and All the Men and Women Merely Players

Belgian King in New Uniform



At the right of the above photograph is shown King Albert of Belgium in the new uniform with which the Belgian troops are now equipped. The uniforms which they are wearing now resemble the khaki ones worn by the British to a very great extent, although it will be noticed that the Belgian steel helmet is more on the order of the ones used by the French.

Does Terrific Damage.



One of the most deadly small weapons of the war is the trench mortar. It is small, but fires a large projectile, which usually does terrific damage. Because of the smallness of these weapons large numbers of them may be placed in the trenches.

Wild Sea Dash by German Officers



Copyrighted by International Film Service.

One of the most original and daring exploits of the war came to light through the capture, within 12 miles of their destination, of 20 German officers, who made a wild dash from Spain for the German-held Belgian port of Zeebrugge, in an ancient little sailing craft. The vessel was fitted out secretly in Vigo, Spain. She evidently sailed around the north end of Scotland, passing through a storm so severe that for 12 days the hatches were battered down and the men had to be lashed to the ship while working on deck. Finally when within 12 miles of Zeebrugge, the direction of the wind changed, the gale blowing the vessel down the English channel, directly into the lines of the British patrol fleet. The photograph shows the Virgen Del Socorro, the vessel in which the cruise was made.

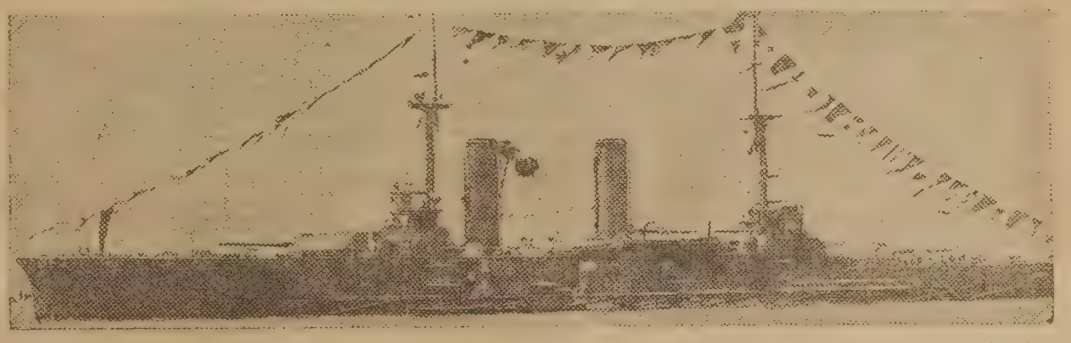
Watching for Enemy Air Scouts



Copyrighted by International Film Service.

Serbian soldiers posted in a place of vantage in the outskirts of Monastir to watch for the approach of Austrian and Bulgarian aeroplanes. As soon as one is sighted word is flashed to headquarters and Serbian birdmen rise to meet and turn back the enemy.

War Cruiser on Which 153 Perished



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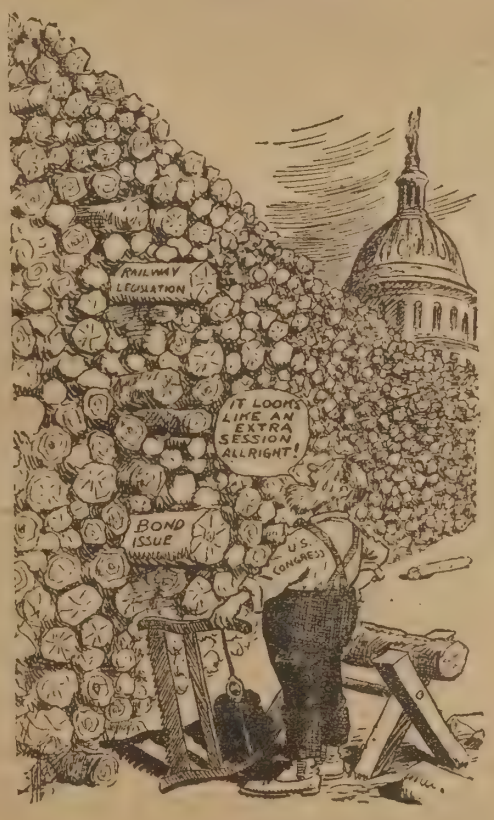
The Japanese battle cruiser Tsukuba, which has been destroyed by a magazine explosion in the harbor of Yokosuka, killing 153 of the crew and injuring 157. Fire originating from an unknown cause is believed to have reached the magazine.

It's Mostly U.



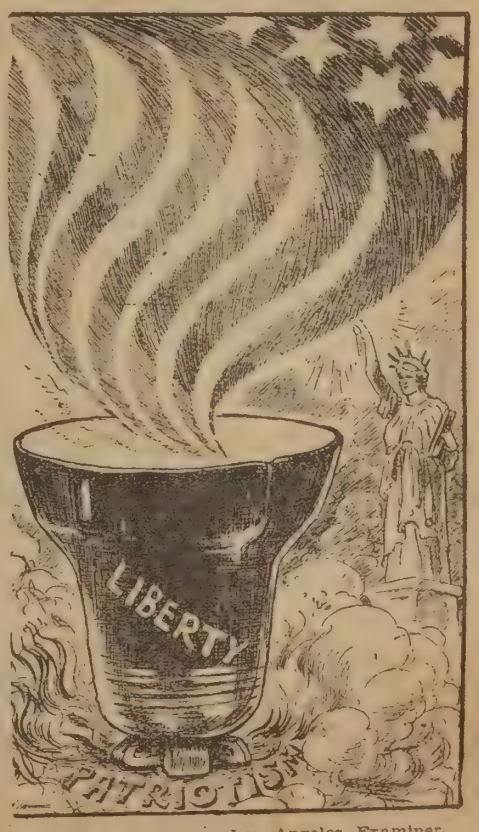
—Hal Coffman in Knoxville Sentinel.

In the Wood-Yard.



—Los Angeles Daily Times.

The Melting Pot.



—Los Angeles Examiner.

Farm Loan Associations

What They Can Do and For What They Are Liable

By N. W. DURHAM

Chairman Spokane Committee on Federal Land Banks

Many inquiries have been received by The Farmer regarding the organization and management of national farm loan associations. These inquirers will be especially interested in the following by Mr. Durham, which is the third of the present series.

Already scores of national farm loan associations have been organized in the Spokane district, embracing Montana, Idaho, Washington and Oregon, and many others are in process of formation.

The powers of these associations are broadly defined in section 11 of the law:

First, to indorse, and thereby become liable for the payment of mortgages taken from its shareholders by the federal land bank of its district.

Second, to receive from the federal land bank of its district funds advanced by said land bank, and to deliver said funds to its shareholders on receipt of first mortgages qualified under section 12 of the law.

Third, to acquire and dispose of such property, real or personal, as may be necessary for the transaction of its business.

Fourth, to issue certificates against deposits of current funds bearing interest for not longer than one year, at not to exceed 4 per centum per annum, after six days from date, convertible into farm loan bonds when presented at the federal land bank of the district in the amount of $25, or any multiple thereof. Such deposits when received shall forthwith be transmitted to said land bank, and be invested by it in the purchase of farm loan bonds issued by a federal land bank, or in first mortgages as defined by this act.

How It Is Managed.

The management of a farm loan association is by a board of "not less than five directors" chosen by the members of the association, "in the manner prescribed for the election of directors of national banking associations," "who shall hold office for the same period as directors of national banking associations."

These directors will choose, "in such manner as they may prefer," a secretary-treasurer, and determine his compensation.

The board of directors will elect a president, a vice president and a loan committee of three members.

The directors and all officers, except the secretary-treasurer, will serve without compensation unless the payment of salaries to them shall be approved by the federal farm loan board. This part of the law is wisely made flexible. Some farm loan associations will grow into a membership of hundreds, while others will remain small. It may be found, on experience, that the duties of directors and officers of large associations will become so burdensome that it will be necessary to give them moderate compensation. But they can be paid only with the approval of the national board at Washington.

Reasonable Expenses.

The law further provides that "the reasonable expenses of the secretary-treasurer, the loan committee and other officers and agents of national farm loan associations, and the salary of the secretary-treasurer shall be paid from the general funds of the association, and the board of directors is authorized to set aside such sums as it shall deem requisite for that purpose and for other expenses of the association. When no such funds are available, the board of directors may levy an assessment on members in proportion to the amount of stock held by each, which may be repaid as soon as funds are available, or it may secure an advance from the federal land bank of the district, to be repaid with interest at the rate of 6 per centum per annum, from dividends belonging to said association."

On the secretary-treasurer will fall the detailed work of the association. He is authorized by the law to "act as custodian of its funds, and to deposit the same in such bank as the board of directors may designate, to pay over to borrowers all sums received for their account from the federal land bank upon first mortgage, and to meet all other obligations of the association, subject to the orders of the board of directors and in accordance with the bylaws of the association.

"It shall be the duty of the secretary-treasurer, acting under the direction of the national farm loan association, to collect, receipt for and transmit to the federal land bank payments of interest, amortization instalments, or principal arising out of loans made through the association.

"He shall be the custodian of the securities, records, papers, certificates of stock and all documents relating to or bearing upon the conduct of the association.

"He shall furnish a suitable security bond, to be prescribed and approved by the federal farm loan board.

"He shall make a quarterly report to the federal farm loan board upon forms to be provided for that purpose.

"He shall assure himself from time to time that the loans made through the national farm association, of which he is an officer, are applied to the purposes set forth in the application of the borrower as approved, and shall forthwith report to the land bank of the district any failure of any borrower to comply with the terms of his application or mortgage. He shall also ascertain and report to said bank the amount of any delinquent taxes on land mortgaged to said bank and the name of the delinquent."

The Loan Committee.

We come now to the duties of the loan committee of the association. An application for a loan will first be referred to this committee, which "shall examine the land offered as security for the desired loan and make a detailed written report signed by all three members, giving the appraisal of said land as determined by them, and such other information as may be required by rules and regulations to be prescribed by the federal farm loan board. No loan shall be approved by the directors unless said loan committee agrees upon a favorable report.

"No borrower under this act shall be eligible as an appraiser, but borrowers may act as a member of a loan committee in any case where they are not personally interested in the loan under consideration. When any member of a loan committee or of a board of directors is interested, directly or indirectly, in a loan, a majority of the board of directors shall appoint a substitute to act in his place in passing upon such loan."

The next article in this series will tell in detail how loans are to be made.

AT WHITE BLUFFS

Eighteen Farmers Request Loan.

Eighteen farmers qualified at White Bluffs, Benton county, by signing up the request for loans under the association provided by the federal farm loan act. The amount they desire to borrow varies from $600 to $8000. The following board of directors was elected: Will angle, L. N. Fry, R. J. Roberts, B. R. Johnson, M. S. Meeks, H. E. Robinson, R. D. Barge, Emil Cords and M. M. Wiehl. The board of directors organized by electing the following officers: M. S. Meeks, president; Will Angle, vice-president; W. J. Kincaid, secretary-treasurer. The members then selected the following board of appraisers: R. J. Roberts, H. E. Robinson, L. N. Fry.

M. S. Meeks acted as chairman of the meeting and Will Angle as secretary. A resolution was passed fixing the following boundaries for the local association: All that territory adjacent to the south side of the Columbia river from the west line of Benton county east to and including the Hanford district. Also that portion of Franklin county lying along the Columbia river from White Bluffs to and including the Hanford district.

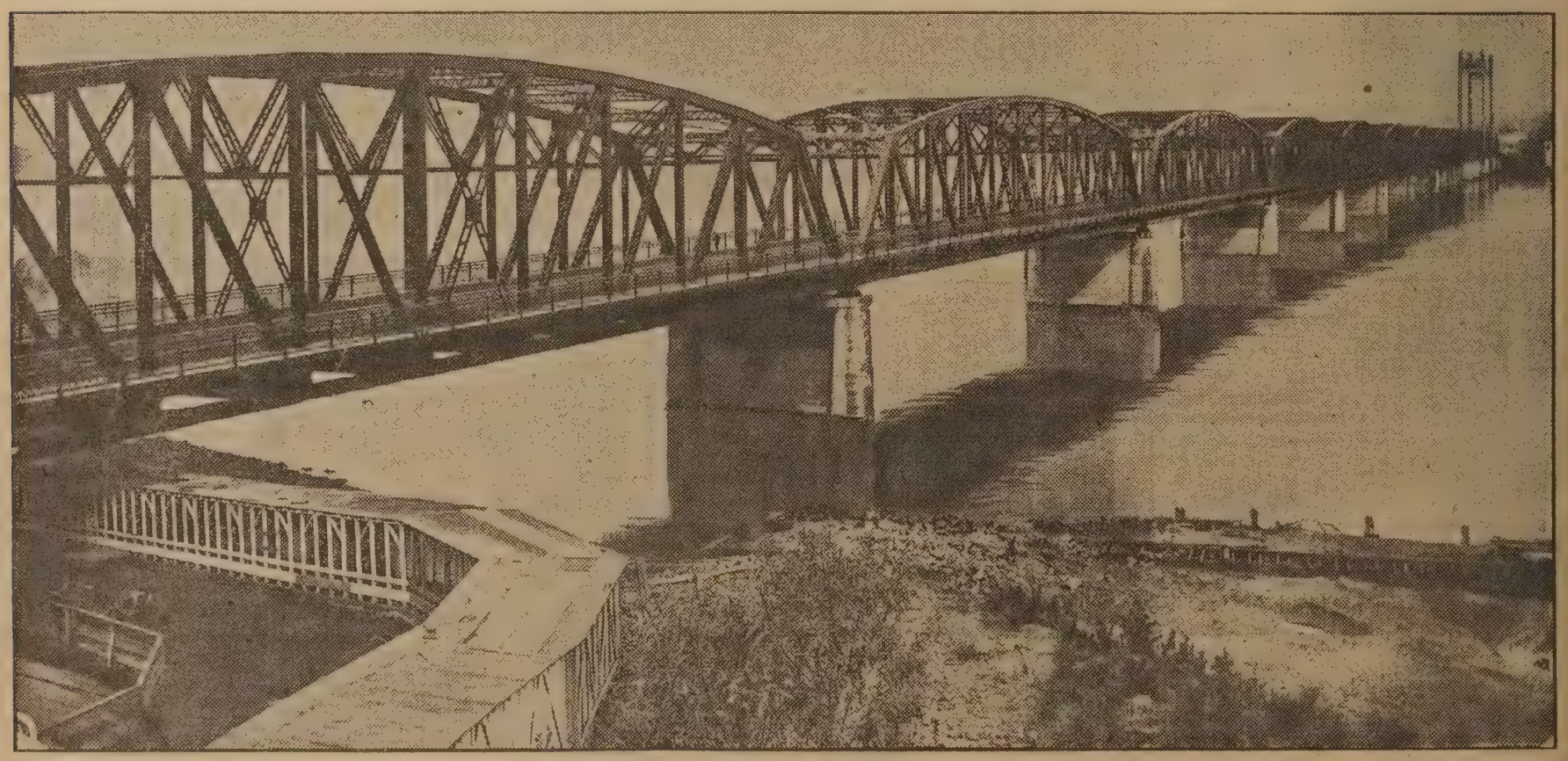
WHATCOM COUNTY

New Loan Association at Laurel.

Nels Jacobson of Lynden was elected temporary chairman of a farm loan association organized recently at Laurel. Twenty-six farmers at this meeting decided to petition the government for loans totaling $45,000. The association formed at Laurel will handle all loans in the townships of Lynden, Ferndale, Ten Mile and Marietta. Trustees elected included Mr. Jacobson; A. E. Rusco, Lynden; B. S. Hillier, Laurel; Fred Urfer, Ten Mile; E. S. Griff, Marietta; E. Edwards, Ferndale; Alvin Minor, Laurel; W. H. Kaufman, Ferndale, and R. Metcalf, Laurel.

"Farmers need to know their cows and a cow testing association furnishes the best means of knowing the cows. A cow testing association, if kept up, tests the bull as well as the cow."—Gustav Kunze, president Idaho State Dairy association, cheese manufacturer and dairyman, Buhl, Idaho.

Bridge Four Miles in Length Joins Oregon and Washington as Highway Link



The completion and opening to traffic of the Oregon-Washington interstate bridge between Portland and Vancouver, shown above, marks one of the great engineering triumphs of the generation. This bridge, which is a link in the Pacific highway, running from the British Columbia line to southern California, is claimed to be the longest bridge in the world. Its entire length is over 23,000 feet, nearly four miles. It is composed of three sections, however, the main bridge of 3500 feet crossing the Columbia river, and the other two sections crossing Columbia slough and Oregon slough, respectively. It cost one and three quarters million dollars ($1,750,000), and was built with money raised by the issuance of bonds by Clarke county, Wash., and Multnomah county, Ore., which bonds it is expected the two states will ultimately redeem. The structure contains besides hundreds of tons of concrete, more than 8000 tons of steel.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merrill Co.

SYNOPSIS.

Charles Brandon, who has neither wealth nor title, wins distinction for having defeated the heretofore unconquerable duelist, Judson. Brandon is installed as one of the captains of the guard of King Henry VIII. Edwin Caskoden (who tells the story) is Master of the Dance at London Court. The two young men become fast friends. Edwin tells Brandon of the willful, but adorable Mary Tudor, who had coaxed her royal brother Henry out of many proposed marriages which had been arranged for Henry's advantage. Edwin confesses that he, like scores of other men, had fallen in love with Mary, but upon Mary's refusal to marry him, he immediately became attracted to the good and beautiful Lady Jane Bolingbroke.

At their first meeting, Mary and Brandon have a tilt, in which Mary comes off second best and acknowledges it. Wondering as to Brandon's social accomplishments, and to settle a wager with Sir Edwin that he could not dance, Mary invites Brandon, Edwin and Jane to her drawing room. To her surprise and Edwin's delight Brandon is perfectly at ease and proves that he knows more about dancing than the Master of the Dance, himself. He teaches the Princess Mary one of the new French dances. At a ball, given by Mary, Brandon makes an enemy of the Duke of Buckingham, the most powerful nobleman in the realm. The evening is spent with the new dance, which greatly pleases the king. Brandon begins to realize that he loves the unattainable Mary, and, what is worse, Mary knows she loves Brandon. A party, including Brandon, spends a few days at Windsor, during which time the king makes several knights. Brandon would have been one of these had not Buckingham poisoned the king's mind against him. In the meantime, the old French king, Louis XII., whose wife, Anne of Brittany, had just died, has asked Mary's hand in marriage.

CHAPTER VII.—(Continued.)

Mary had not seen Brandon for nearly two weeks, and was growing anxious, when one day she and Jane met him in a forest walk near the river. Brandon was sauntering along reading when they overtook him. Jane told me afterwards that Mary's conduct upon coming up to him was pretty and curious beyond the naming. At first she was inclined to be distant, and say cutting things, but when Brandon began to grow restive under them and showed signs of turning back, she changed front in the twinkle of an eye and was all sweetness. She laughed and smiled and dimpled, as only she could, and was full of bright glances and gracious words.

She tried a hundred little schemes to get him to herself for a moment—the hunting of a wild flower or a four-leaved clover, or the exploration of some little nook in the forest toward which she would lead him—but Jane did not at first take the hint and kept close at her heels. Mary's impulsive nature was not much given to hinting—she usually nodded and most emphatically at that—so after a few failures to rid herself of her waiting lady she said impatiently: "Jane, in the name of heaven don't keep so close to us. You won't move out of reach of my hand, and you know how often it inclines to box your ears."

Jane did know, I am sorry for Mary's sake to say, how often the fair hand was given to such spasms; so with this emphasized hint she walked on ahead half sulky at the indignity put upon her, and half amused at her whimsical mistress.

Mary lost not time, but began the attack at once.

"Now, sir, I want you to tell me the truth; why do you refuse my invitations and so persistently keep away from me? I thought at first I would simply let you go your way, and then I thought I—I would not. Don't deny it. I know you won't. With all your faults, you don't tell even little lies; not even to a woman—I believe. Now there is a fine compliment—is it not?—when I intended to scold you!" She gave a fluttering little laugh, and, with hanging head, continued: "Tell me, is not the king's sister of quality sufficient to suit you? Perhaps you must have the queen or the Blessed Virgin? Tell me now?" And she looked up at him, half in banter, half in doubt.

"My duties——," began Brandon.

"Oh! bother your duties. Tell me the truth."

"I will, if you let me," returned Brandon, who had no intention whatever of doing anything of the sort. "My duties now occupy my time in the evening——"

"That will not do," interrupted Mary, who knew enough of a guardsman's duty to be sure it was not onerous. "You might as well come to it and tell the truth; that you do not like our society." And she gave him a vicious little glance without a shadow of a smile.

"In God's name, Lady Mary, that is not it," answered Brandon, who was on the rack. "Please do not think it. I can not bear to have you say such a thing when it is so far from the real truth."

"Then tell me the real truth."

"I can not; I can not. I beg you not to ask. Leave me! or let me leave you. I refuse to answer further." The latter half of this sentence was uttered doggedly and sounded sullen and ill-humored, although, of course, it was not so intended. He had been so perilously near speaking words which would probably have lighted, to their destruction—to his, certainly—the smoldering flames within their breast that it frightened him, and the manner in which he spoke was but a tone giving utterance to the pain in his heart.

Mary took it as it sounded, and, in unfeigned surprise, exclaimed angrily: "Leave you? Do I hear aright? I never thought that I, the daughter and sister of a king, would live to be dismissed by a—by a—any one."

"Your highness——" began Brandon, but she was gone before he could speak.

He did not follow her to explain, knowing how dangerous such an explanation would be, but felt that it was best for them both that she should remain offended, painful as the thought was to him.

Of course, Mary's womanly self-esteem, to say nothing of her royal pride, was wounded to the quick, and no wonder.

Poor Brandon sat down upon a stone, and, as he longingly watched her retiring form, wished in his heart he were dead. This was the first time he really knew how much he loved the girl, and he saw that, with him at least, it was a matter of bad to worse; and at that rate would soon be—worst.

Now that he had unintentionally offended her, and had permitted her to go without an explanation, she was dearer to him than ever, and, as he sat there with his face in his hands, he knew that if matters went on as they were going, the time would soon come when he would throw caution to the dogs and would try the impossible—to win her for his own. Caution and judgment still sat enthroned, and they told him now what he knew full well they would not tell him after a short time—that failure was certain to follow the attempt, and disaster sure to follow failure. First, the king would, in all probability, cut off his head upon an intimation of Mary's possible fondness for him; and, second, if he should be so fortunate as to keep his head, Mary could not, and certainly would not, marry him, even if she loved him with all her heart. The distance between them was too great, and she knew too well what she owed to her position. There was but one thing left—New Spain; and he determined while sitting there to sail with the next ship.

The real cause of Brandon's manner had never occurred to Mary. Although she knew her beauty and power, as she could not help but know it—not as a matter of vanity, but as a matter of fact—yet love had blinded her where Brandon was concerned, and that knowledge failed to give her light as to his motives, however brightly it might illumine the conduct of other men toward whom she was indifferent.

So Mary was angry this time; angry in earnest, and Jane felt the irritable palm more than once. I, too, came in for my share of her ill temper, as most certainly would Brandon, had he allowed himself to come within reach of her tongue, which he was careful not to do. An angry porcupine would have been pleasant company compared with Mary during this time. There was no living with her in peace. Even the king fought shy of her, and the queen was almost afraid to speak. Probably so much general disturbance was never before or since collected within one small body as in that young Tartar-Venus, Mary. She did not tell Jane the cause of her vexation, but only said she "verily hated Brandon," and that, of course, was the key to the whole situation.

After a fortnight, this ill humor began to soften in the glowing warmth of her heart, which was striving to reassert itself, and the desire to see Brandon began to get the better of her sense of injury.

Brandon, tired of this everlasting watchfulness to keep himself out of temptation, and, dreading at any moment that lapse from strength which is apt to come to the strongest of us, had resolved to quit his place at court and go to New Spain at once. He had learned, upon inquiry, that a ship would sail from Bristol in about 20 days, and another six weeks later. So he chose the former and was making his arrangements to leave as soon as possible.

He told me of his plans and spoke of his situation: "You know the reason for my going," he said, "even if I have never spoken of it. I am not much of a Joseph, and am very little given to running away from a beautiful woman, but in this case I am fleeing from death itself. And to think what a heaven it would be. You are right, Caskoden; no man can withstand the light of that girl's smile. I am unable to tell how I feel toward her. It sometimes seems that I can not live another hour without seeing her; yet, thank God, I have reason enough left to know that every sight of her only adds to an already incurable malady. What will it be when she is the wife of the king of France? Does it not look as if wild life in New Spain is my only chance?"

I assented as we joined hands, and our eyes were moist as I told him how I should miss him more than any one else in all the earth—excepting Jane, in mental reservation.

I told Jane what Brandon was about to do, knowing full well she would tell Mary; which she did at once.

Poor Mary! The sighs began to come now, and such small vestiges of her ill humor toward Brandon as still remained were frightened off in a hurry by the fear that she had seen the last of him.

She had not before fully known that she loved him. She knew he was the most delightful companion she had ever met, and that there was an exhilaration about his presence which almost intoxicated her and made life an ecstasy, yet she did not know it was love. It needed but the thought that she was about to lose him to make her know her malady, and meet it face to face.

Upon the evening when Mary learned all this, she went into her chamber very early and closed the door. No one interrupted her until Jane went in to robe her for the night, and to retire. She then found that Mary had robed herself and was lying in bed with her head covered, apparently asleep. Jane quietly prepared to retire, and lay down in her own bed. The girls usually shared one couch, but during Mary's ill temper she had forced Jane to sleep alone.

After a short silence Jane heard a sob from the other bed, then another, and another.

"Mary, are you weeping?" she asked.

"Yes."

"What is the matter, dear?"

"Nothing," with a sigh.

"Do you wish me to come to your bed?"

"Yes, I do." So Jane went over and lay beside Mary, who gently put her arms about her neck.

"When will he leave?" whispered Mary, shyly confessing all by her question.

"I do not know," responded Jane, "but he will see you before he goes."

"Do you believe he will?"

"I know it"; and with this consolation Mary softly wept herself to sleep.

After this, for a few days, Mary was quiet enough. Her irritable mood had vanished, but Jane could see that she was on the lookout for some one all the time, although she made the most pathetic little efforts to conceal her watchfulness.

At last a meeting came about in this way: Next to the king's bed chamber was a luxuriously furnished little apartment with a well-selected library. Here Brandon and I often went, afternoons, to read, as we were sure to be undisturbed.

Late one day Brandon had gone over to this quiet retreat, and having selected a volume, took his place in a secluded little alcove half hidden in arras draperies. There was a cushioned seat along the wall and a small diamond-shaped window to furnish light.

He had not been there long when in came Mary. I can not say whether she knew Brandon was there or not, but she was there and he was there, which is the only thing to the point, and finding him, she stepped into the alcove before he was aware of her presence.

Brandon was on his feet in an instant, and with a low bow was backing himself out most deferentially, to leave her in sole possession if she wished to rest.

"Master Brandon, you need not go. I will not hurt you. Besides, if this place is not large enough for us both, I will go. I would not disturb you." She spoke with a tremulous voice and a quick, uneasy glance, and started to move backward out of the alcove.

"Lady Mary, how can you speak so? You know—you must know—oh! I beg you——" But she interrupted him by taking his arm and drawing him to a seat beside her on the cushion. She could have drawn down the Colossus of Rhodes with the look she gave Brandon, so full was it of command, entreaty and promise.

"That's it; I don't know, but I want to know; and I want you to sit here beside me and tell me. I am going to be reconciled with you, despite the way you treated me when last we met. I am going to be friends with you whether you will or not. Now what do you say to that, sir?" She spoke with a fluttering little laugh of uneasy non-assurance, which showed that her heart was not nearly so confident nor so bold as her words would make believe. Poor Brandon, usually so ready, had nothing "to say to that," but sat in helpless silence.

Was this the sum total of all his wise determinations made at the cost of so much pain and effort? Was this the answer to all his prayers, "Lead me not into temptation"? He had done his part, for he had done all he could. Heaven had not helped him, since here was temptation thrust upon him when least expected, and when the way was so narrow he could not escape, but must meet it face to face.

Mary soon recovered her self-possession—women are better skilled in this art than men—and continued:

"I am not intending to say one word about your treatment of me that day over in the forest, although it was very bad, and you have acted abominably ever since. Now is not that kind in me?" And she softly laughed and peeped up at the poor fellow from beneath those sweeping lashes, with the premeditated purpose of tantalizing him, I suppose. She was beginning to know her power over him, and it was never greater than at this moment. Her beauty had its sweetest quality, for the princess was sunk and the woman was dominant, with flushed face and flashing eyes that caught a double luster from the glowing love that made her heart beat so fast. Her gown, too, was the best she could have worn to show her charms. She must have known Brandon was there, and must have dressed especially to go to him. She wore her favorite long flowing outer sleeve, without the close fitting inner one. It was slit in the shoulder, and gave entrancing glimpses of her arms with every movement, leaving them almost bare when she lifted her hands, which was often, for she was full of gestures as a Frenchwoman. Her bodice was cut low, both back and front, showing her large perfectly molded throat and neck, like an alabaster pillar of beauty and strength, and disclosing her bosom just to its shadowy incurving, white and billowy as drifted snow. Her hair was thrown back in an attempt at a coil, though, like her own rebellious nature, it could not brook restraint, and persistenly escaped her face and lay upon the soft white nape of her neck like fluffy sheeds of sun-lit floss on new ivory.

With the mood that was upon her, I wonder Brandon maintained his self-restraint even for a moment. He felt that his only hope lay in silence, so he sat beside her and said nothing. He told me long afterwards that while sitting there in the intervals between her speech, the oddest, wildest thoughts ran through his brain. He wondered how he could escape. He thought of the window, and that possibly he might

(Continued on the following page.)

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from preceding page.)

break away through it, and then he thought of feigning illness, and a hundred other absurd schemes, but they all came to nothing, and he sat there to let events take their own course as they seemed determined to do in spite of him

After a short silence Mary continued, half banteringly:

"Answer me, sir! I will have no more of this. You shall treat me at least with the courtesy you would show a bourgeoise girl."

"Oh, that you were only a burgher's daughter."

"Yes, I know all that; but I am not. It can't be helped, and you shall answer me."

"There is no answer, dear lady—I beg you—oh, do you not see—"

"Yes, yes; but answer my question; am I not kind—more than you deserve?"

"Indeed, yes; a thousand times. You have always been so kind, so gracious and so condescending to me that I can only thank you, thank you, thank you," answered Brandon, almost shyly; not daring to lift his eyes to hers.

Mary saw the manner quickly enough—what woman ever missed it, much less so keen-eyed a girl as she—and it gave her confidence, and brought back the easy banter of her old time manner.

"How modest we have become! Where is the boldness of which we used to have so much? Kind? Have I always been so? How about the first time I met you? Was I kind then? And as to condescension, don't—don't use that word between us."

"No," returned Brandon, who, in his turn, was recovering himself, "no, I can't say that you were very kind at first. How you did fly out at me and surprise me. It was so unexpected it almost took me off my feet," and they both laughed in remembering the scene of their first meeting. "No, I can't say your kindness showed itself very strongly in that first interview, but it was there nevertheless, and when Lady Jane led me back, your real nature asserted itself, as it always does, and you were kind to me; kind as only you can be."

That was getting very near to the sentimental; dangerously near, he thought; and he said to himself: "If this does not end quickly I shall have to escape."

"You are easily satisfied if you call that good," laughingly returned Mary. "I can be ever so much better than that if I try."

"Let me see you try," said Brandon.

"Why, I'm trying now," answered Mary with a distractingly little pout. "Don't you know genuine out-and-out goodness when you see it? I'm doing my very best right now. Can't you tell?"

"Yes, I think I recognize it; but—but—be bad again."

"No, I won't! I will not be bad even to please you! I have determined not to be bad and I will not—not even to be good. This," placing her hand over her heart, "is just full of 'good' today," and her lips parted as she laughed at her own pleasantry.

"I am afraid you had better be bad—I give you fair warning," said Brandon huskily. He felt her eyes upon him all the time, and his strength and good resolves were oozing out like wine from an ill-coopered cask. After a short silence Mary continued, regardless of the warning:

"But the position is reversed with us; at first I was unkind to you, and you were kind to me, but now I am kind to you and you are unkind to me."

"I can come back at you with your own words," responded Brandon. "You don't know when I am kind to you. I should be kinder to myself, at least, were I to leave you and take myself to the other side of the world."

"Oh! that is one thing I wanted to ask you about. Jane tells me you are going to New Spain?"

She was anxious to know, but asked the question partly to turn the conversation which was fast becoming perilous. As a girl, she loved Brandon, and knew it only too well, but she knew also that she was a princess, standing next to the throne of the greatest kingdom on earth; in fact, at that time, the heir apparent—Henry having no children—for the people would not have the Scotch king's imp—and the possibility of such a thing as a union with Brandon had never entered her head, however passionate her feelings toward him. She also knew that speaking a thought vitalizes it and gives it force; so, although she could not deny herself the pleasure of being near him, of seeing him, and hearing the tones of his voice, and now and then feeling the thrill of an accidental touch, she had enough good sense to know that a mutual confession, that is, taking it for granted Brandon loved her, as she felt almost sure he did, must be avoided at all hazards. It was not to be thought of between people so far apart as they. The brink was a delightful place, full of all the sweet ecstasies and thrilling joys of a seventh heaven, but over the brink—well! there should be no "over," for who was she? And who was he? Those two dreadfully stubborn facts could not be forgotten, and the gulf between them could not be spanned; she knew that only too well. No one better.

Brandon answered her question: "I do not know about going; I think I shall. I have volunteered with a ship that sails in two or three weeks from Bristol, and I suppose I shall go."

"Oh, no! do you really mean it?" It gave her a pang to hear that he was actually going, and her love pulsed higher; but she also felt a sense of relief, somewhat as a conscientious house-breaker might feel upon finding the door securely locked against him. It would take away a temptation which she could not resist, and yet dared not yield to much longer.

"I think there is no doubt that I mean it," replied Brandon. "I should like to remain in England until I can save money enough out of the king's allowance to pay the debt against my father's estate, so that I may be able to go away and feel that my brother and sisters are secure in their home—my brother is not strong—but I know it is better for me to go now, and hope to find the money out there. I could have paid it with what I lost to Judson before I discovered him cheating." This was the first time he had ever alluded to the duel, and the thought of it, in Mary's mind, added a faint touch of fear to her feeling toward him.

She looked up with a light in her eyes and asked: "What is the debt? How much? Let me give you the money. I have so much more than I need. Let me pay it. Please tell me how much it is and I will hand it to you. You can come to my rooms and get it or I will send it to you. Now tell me that I may. Quickly." And she was alive with enthusiastic interest.

"There now! you are kind again; as kind as even you can be. Be sure, I thank you, though I say it only once," and he looked into her eyes with a gaze she could not stand even for an instant. This was growing dangerous again, so, catching himself, he turned the conversation back into the bantering vein.

"Ah! you want to pay the debt that I may have no excuse to remain? Is that it? Perhaps you are not so kind after all."

"No! no! you know better. But let me pay the debt. How much is it and to whom is it owing? Tell me at once, I command you."

"No! no! Lady Mary, I can not."

"Please do. I beg—if I can not command. Now, I know you will; you would not make me beg twice for anything." She drew closer to him as she spoke and put her hand coaxingly upon his arm. With an irresistible impulse he took the hand in his hand and lifted it to his lips in a lingering caress that could not be mistaken. It was all so quick and so full of fire and meaning that Mary took fright, and the princess, for the moment, came uppermost.

"Master Brandon!" she exclaimed sharply, and drew away her hand. Brandon dropped the hand and moved over on the seat. He did not speak, but turned his face from her and looked out of the window toward the river. Thus they sat in silence, Brandon's hand resting listlessly upon the cushion between them. Mary saw the eloquent movement away from her and his speaking attitude, with averted face; then the princess went into eclipse, and the imperial woman was ascendant once more. She looked at him for a brief space with softening eyes, and, lifting her hand, put it back in his, saying:

"There it is again—if you want it."

Want it? Ah! this was too much! The hand would not satisfy now; it must be all, all! And he caught her to his arms with a violence that frightened her.

"Please don't, please! Not this time. Ah! have mercy, Charl—— Well! There! There! Mary mother, forgive me." Then her woman spirit fell before the whirlwind of his passion, and she was on his breast with her white arms around his neck, paying the same tribute to the little blind god that he would have exacted from the lowliest maiden of the land. Just as though it were not the blood of 50 kins and queens that made so red and sweet, aye, sweet as nectar thrice distilled, those lips which now so freely paid their dues in coined bliss.

Brandon held the girl for a moment or two, then fell upon his knees and buried his face in her lap.

"Heaven help me!" he cried.

She pushed the hair back from his forehead with her hand, and as she fondled the curls, leaned over him and softly whispered:

"Heaven help us both; for I love you!"

He sprang to his feet. "Don't! don't! I pray you," he said wildly, and almost ran from her.

Mary followed him nearly to the door of the room, but when he turned he saw that she had stopped, and was standing with her hands over her face, as if in tears.

He went back to her and said: "I tried to avoid this, and if you had helped me, it would never——" But he remembered how he had always despised Adam for throwing the blame upon Eve, no matter how much she may have deserved it, and continued: "No; I do not mean that. It is all my fault. I should have gone away long ago. I could not help it; I tried. Oh! I tried."

Mary's eyes were bent upon the floor, and tears were falling over her flushed cheeks unheeded and unchecked.

"There is no fault in any one; neither could I help it," she murmured.

"No, no; it is not that there is any fault in the ordinary sense; it is like suicide or any other great, self-inflicted injury with me. I am different from other men. I shall never recover."

"I know only too well that you are different from other men, and—and I, too, am different from other women—am I not?"

"Ah, different! There is no other woman in all this wide, long world," and they were in each other's arms again. She turned her shoulder to him and rested with the support of his arms about her. Her eyes were cast down in silence, and she was evidently thinking as she toyed with the lace of his doublet. Brandon knew her varying expressions so well that he saw there was something wanting, so he asked:

"Is there something you wish to say?"

"Not I," she responded with emphasis on the pronoun.

"Then is it something you wish me to say?"

She nodded her head slowly: "Yes."

"What is it? Tell me and I will say it."

She shook her head slowly: "No."

"What is it? I can not guess."

"Did you not like to hear me say that—that I—loved you?"

"Ah, yes; you know it. But—oh!—do you wish to hear me say it?"

The head nodded rapidly two or three times: "Yes."

And the black curving lashes were lifted for a fleeting, luminous instant.

"It is surely not necessary; you have known it so long already, but I am only too glad to say it. I love you."

She nestled closer to him and hid her face on his breast.

"Now that I have said it, what is my reward?" he asked—and the fair face came up, red and hosy, with "rewards," any one of which was worth a king's ransom.

"But this is worse than insanity," cried Brandon, as he almost pushed her from him. "We can never belong to each other; never."

"No," said Mary, with a despairing shake of her head, as the tears began to flow again; "no! never." And falling upon his knees, he caught both her hands in his, sprang to his feet and ran from the room.

Her word showed him the chasm anew. She saw the distance between them even better than he. Evidently it seemed further looking down than looking up. There was nothing left now but flight.

He sought refuge in his own apartments and wildly walked the floor, exclaiming, "Fool! fool that I am to lay up this store of agony to last me all my days. Why did I ever come to this court? God pity me—pity me!" And he fell upon his knees at the bed, burying his face in his arms, his mighty man's frame shaking as with a palsy.

That same night Brandon told me how he had committed suicide, as he put it, and of his intention to go to Bristol and there await the sailing of the ship, and perhaps find a partial resurrection in New Spain.

Unfortunately, he could not start to Bristol at once, as he had given some challenges for a tournament at Richmond, and could furnish no good excuse to withdraw them; but he would not leave his room, nor again see "that girl who was driving him mad."

It was better, he thought, and wisely too, that there be no leave-taking, but that he should go without meeting her.

"If I see her again," he said, "I shall have to kill some one, even if it only myself."

I heard him tossing in his bed all night, and when morning came he arose looking haggard enough, but with his determination to run away and see Mary no more stronger than ever upon him.

But providence, or fate, or some one, ordered it differently, and there was plenty of trouble ahead.

(To be continued in the next issue.)

Sidelights

Far From It.

Dark Wayfarer—"Does I know where de fo'th Nat'onal bank is? Why, boss, I don't even know where is de first nat'onal bank!"—Life.

Not His Own.

Harry—Pa, what is a henpecked husband?

Pa—A man whose nerve is in his wife's name.—Cincinnati Enquirer.

His Reason.

"I never see you take your wife out in the auto."

"My boy, I have all I can do to manage one at a time."—Northwestern Motorist.

A Splendid Chance.

Sapleigh—I like a girl who can take a joke.

Miss Keen—Then you stand a splendid chance of being accepted.—Boston Transcript.

The Reason.

"And now, Johnny," said the Sunday school teacher, after an elaborate explanation of the flood, "can you tell me what caused the flood?"

"Yes, ma'am," said Johnny, beaming with pride, "it rained."

No Time to Argue.

Man With One Leg—Yes, sir, I fell over the side of the ship and a shark came along and grabbed me by the leg.

"Good gracious! And what did you do?"

"Let 'im 'ave the leg, o' course. I never argues with sharks."

Inside Information.

The archbishop had preached a fine sermon on "Married Life and Its Duties." Two old Irish women were heard coming out of church commenting on the address.

"It's a fine sermon his reverence would be after giving us," said one to the other.

"It is, indeed," was the quick reply, "and I wish I knew as little about the matter as he does."—Chicago Daily News.

He Recognized It.

In honor of a visit to his plant by the governor of the state, an automobile manufacturer once had a complete car assembled in something like seven minutes.

Some weeks after the feat was heralded in the daily papers the telephone at the factory rang vigorously.

"Is it true that you assembled a car in seven minutes at your factory?" the voice asked.

"Yes," came the reply. "Why?"

"Oh, nothing," said the calm inquirer, "only I've got the car!"—People's Popular Monthly.

Not Even a Hesitater.

A professor traveling in the country had occasion to investigate the running time of the trains that passed through the small place where he was stopping. Carefully searching a time table he found apparently that there would be an express train due at 4 o'clock that afternoon. The professor was in time, and so was the express train. The intending passenger watched it approach and thunder by the station at the rate of 50 miles an hour. The traveler was annoyed, and, turning to a porter who stood near, remarked:

"That train didn't stop!"

"No, sir," replied the porter cheerfully, "it didn't even hesitate."

$275 You'd Better Hurry! $275

Add Up the Figures—Send in the Total

OTHERS ARE FIGURING, WHY NOT YOU?

MARCH 17

Only Four Weeks Remain, and You May Regret It If You Let This Opportunity Glide By! It's Worth Remembering. This Contest Closes

MARCH 17

Sets Her Troubles to Rhyme

Contestant Cleverly Describes the Fickleness of Figures.

To the Contest Editor:

True, as wise ones love to state, figures can't prevaricate. But to me it doth appear that they can act very queer. I may wrestle till I sweat, and what answer do I get? Never one that seems quite right, though I try with all my might.

How those sprightly twos and threes dance like leaves upon the trees! Fours, I find, can be most rude. Fives my vigilance elude; and I never dreamed a six could descend to seven's tricks! Seven! No squirrel upon a limb ever was so sly and slim! I can corner eights and nines, add them in well ordered lines. But to keep them all in bounds, ears must spurn distracting sounds, mind be clear and eye well trained, or I lose all I have gained.

There's the rub! Some one will speak and I'm baffled for a week! Friends and family must I muzzle, if, at last, I solve the puzzle? Yours distractedly,

PEGGY.

Forest Grove, Oregon.

"To the Contest Editor:

"In telling the plan of the contest I notice you say: "Simply add up the figures in the puzzle chart as if they were in one long column." Does that mean literally? If it does it would take a sheet of paper over 30 feet long. I have gone over that chart four different times and I am going over it once more, and I find the trick is in putting down every figure in the chart and in not putting down any figure twice. After that is done it's "pie" to add them up. But it's a job all righ not to put a figure down twice or miss any."

It is not necessary that the figures be set down in one long column. Set them down any way that best suits your purpose for adding them. It is only desired that your solution be the result of an honest effort to add the figures, and not merely a guess.

Some Misunderstand.

Several contestants seem to have the mistaken impression that they are expected to save all the issues of the paper in which the figure problem has appeared, and to secure a total of all figures in the twelve issues. The requirement is only the total of the figures appearing on one copy of the paper, or in one chart.

GET BUSY NOW

Only four weeks remain of the big figure contest in which this paper is giving away $750 in 32 pries, the largest to be $275 if the winner has paid $150 for thre years' subscription to the Farmer.

The advantage of beginning your count now is that should you find your first solution to be wrong, you will have time to send in a corrected solution to the Contest Editor with another subscription payment as provided by the rules. A solution when once entered can not be changed.

To enter the Figure Contest it is necessary that you remit a new or renewal of subscription to the Farmer at the regular rate of $1 for one year or $1.50 for three years.

This Is How to Do It

Simply add up the figures in the puzzle chart as if they were in one long column. Your success depends on the accuracy of your total thus obtained.

Figures run from two to nine, and there are no double figures or characters which are not figures. The tail of the "6" has a decided curve, while the tail of the "9" is straight. All other figures have the usual characteristics, allowing no question as to the identity of any figure.

In event that no one submits the correct total, prizes will be awarded for the next nearest solutions.

This contest is restricted to persons residing in Washington, Idaho, Oregon and Montana.

A payment of $1 to $1.50 on subscription to the Farmer entitles the subscriber to enter the contest.

If your subscription is already paid in advance, your expiration date will be set ahead beyond this date to which you are now paid the full period for which you pay at this time. The advantage of paying $1.50 instead of $1 is that the winner of any of the first four prizes receives additional prize dividends apportioned on the amount paid in on subscription, besides the fact that $1.50 during this contest pays for a three-year subscription to the paper, while $1 pays for only one year.

More than one solution may be submitted by any contestant, by an additional subscription payment of not less than $1 nor more than $1.50. It is not necessary to pay the same amount with each solution if more than one is submitted.

You can send in a subscription for some one other than yourself and have the solution registered in your own name. Remember that by paying $1.50 instead of $1 on subscription, the larger will be your dividends if you win one of the four leading prizes; but not more than $1.50 will be received with one solution.

$750—Prizes—$750

FIRST PRIZE, $200,

to which will be added 50 times the amount paid by the subscriber with the winning solution. For example, if you pay $1.50 on subscription, this prize will be worth $275.

SECOND PRIZE, $100,

to which will be added 30 times the amount paid by the subscriber with the winning solution. This prize may be worth $145.

THIRD PRIZE, $60,

to which will be added 20 times the amount paid by the subscriber with the winning solution. This prize may be worth $90.

FOURTH PRIZE, $50,

to which will be added 10 times the amount paid by the subscriber with the winning solution. This prize may be worth $65.

FIFTH PRIZE, $40.

SIXTH AND SEVENTH PRIZES, Each $20.

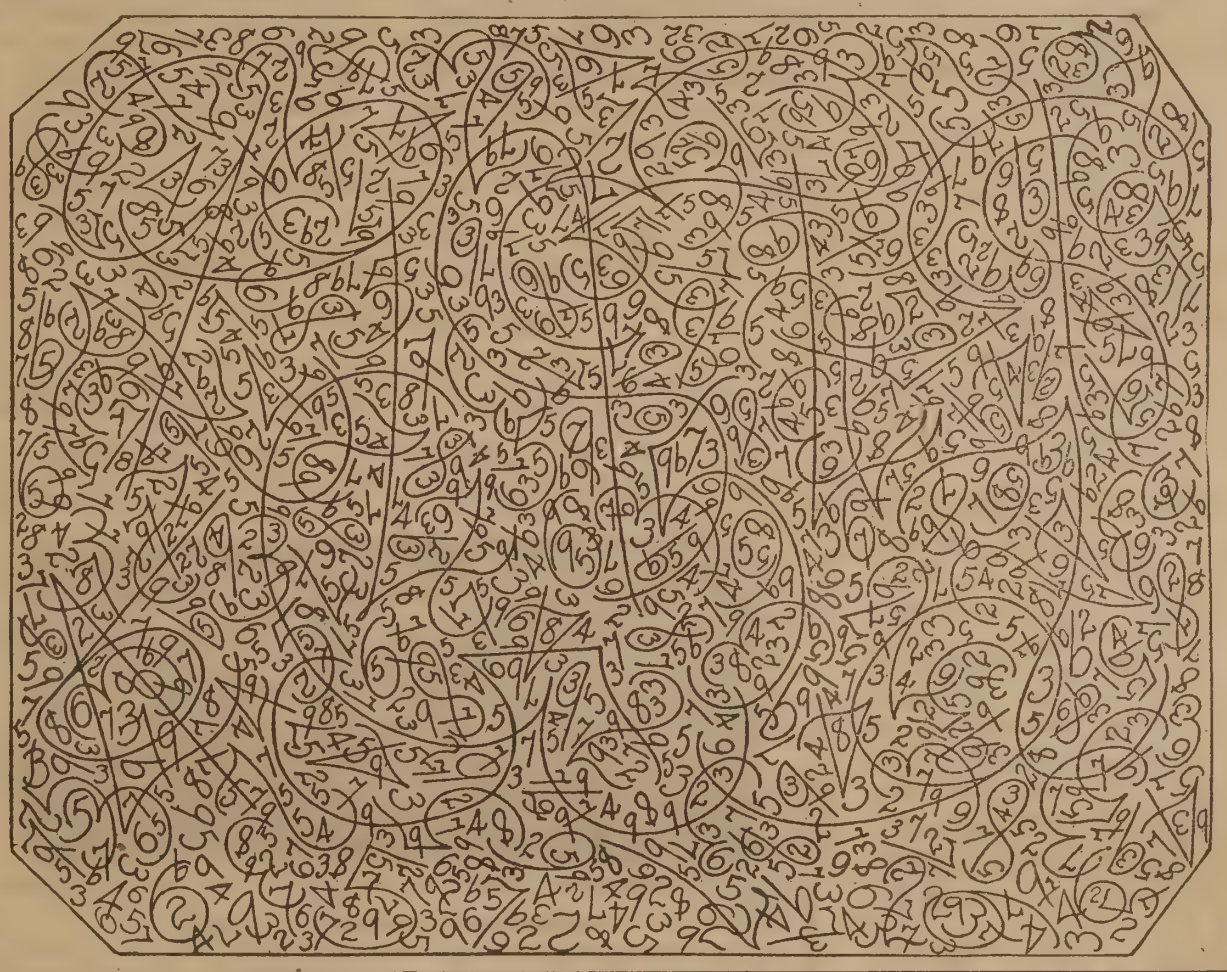
EIGHTH TO SIXTEENTH PRIZES, Each $7.

SEVENTEENTH TO THIRTY-SECOND PRIZES, Each $2.

CASH MUST ACCOMPANY.

Don't send in your charts and working papers unless called for by the Contest Editor. Simply write your solution in blank space provided in "Registration Blank."

Remember, the contest closes March 17, 1917.



REGISTRATION BLANK

Cut out this blank closely around the border and send it in with your solution and money.

To the Farmer Contest Editor:

Date sent .....191..

I enclose $..... for.....subscription to **The Washington Farmer.**

Name .....

Town .....

State .....

SOLUTION AND PAYMENTS.

The following spaces provide for three solutions, with the payments you desire to make with them. You may submit one or as many different solutions as you wish. You can subscribe for one or three years as per printed schedule, with each solution, as provided for in "The Conditions."

Solution.	Amount Paid.
.....	$.....
.....	$.....
.....	$.....

Answer this question: Are you now a subscriber? .....

If you wish paper sent elsewhere, fill in name and address.

.....

.....

You must address all inquiries and solutions to

The Washington Farmer Contest Editor

Review Building **Spokane, Washington**



Be Right

When Sure of This, Go Ahead

What is the quotation or what are the words which have helped you in the journey of life?

Is it a phrase from some famous author, or was it the words from some neighborly soul who helped you over a hard place and left you the invaluable legacy of a life motto?

What are your favorite motto, your favorite quotation, your favorite words?

Send them to the editor of the Farmer and let those words help another which have helped you.

To the Editor of The Farmer: The quotation which has influenced me more than any other is Davy Crockett's "Be sure you are right, then go ahead."

To follow this rule has involved many sacrifices, and sometimes has made enemies of those I deemed friends, but, on the whole, the approval of my own conscience has been ample compensation for all losses.

Another excellent maxim comes from St. Paul: "Prove all things; hold fast that which is good."

ELSIE COLE WILCOX.

Retsil, Wash.

Read and Learn

Is a Big Help in Self-Education

By Mariella Ladd.

That reading has a definite place in education, that it creates imagination, and a few of the things imagination has accomplished, are shown in the following, the second of a series of short articles on "Reading," by Mrs. Ladd.

If you happen to be in the Spokane public library on Friday afternoon, you will see a group of bright and eager youngsters waiting patiently for the story hour, which has become an institution there, as it is in most American city libraries.

The object of the story hour is to arouse interest in reading. Stories are arranged by the children's librarian with this in view. Books are taken out of the central library to satisfy the thirst created, or they are sent to outlying stations in care of the teacher who happens to preside there. Some teachers are so firmly convinced that reading helps their scholars to do better grade work that they are trying to arrange matters so that they can give credits for reading.

This goes to show that reading has its definite place in education. This place is mainly to arouse the imagination. Do you ever think what a wonderful power imagination is and what a place it has taken in the history of the world? All the great events that have happened, all the great inventions that make modern life so wonderful began in the imagination. Just now, when we are hearing so much about the doings of submarines, how strange it is to think that the submarine first lived in the imagination of Jules Verne! It is hard to realize when reading "Twenty Thousand Leagues Under the Sea" that the Nautilus is absolutely a creature of imagination.

Science, too, begins in imagination. All the knowledge we have of the elements and the soil, the knowledge that is yearly increasing our yields and fattening our pocketbooks, began with somebody's imagination. First, the imagination creates an idea, throws it on the screen of the mind, and finally puts it into action, tests it out and places it at the service of the community.

When we see what a big part the imagination plays in the world around us, we begin to notice how very imaginative most children are by nature. Give a child a few bare spools and he will make out of them a smokestack or anything else that he fancies resemblance to. The imagination of the child is so strong by nature that he can amuse himself for hours by its means better, than a grown-up person, whose imagination has grown less powerful, could amuse him.

The problem of education is the problem of training the childish imagination along right lines. This is best done by means of good books. The best of us know little of a child's possibilities. All we can do is to give opportunities of development and correct bad tendencies. It is necessary to select good books. Librarians are trained for that purpose. A school library is what no rural district should be without, because its absence handicaps the farm child unfairly in the race of life.

City librarians tell us that children who have been reading stories and have had their imaginations trained a little, begin to ask of their own accord for books about things they can make. This shows the practical value of story reading, when it is wisely directed. It does not kill inventiveness and energy. It quickens both into new life.

Parents must cooperate with teachers to gain the full benefit of the wonderful chance now being offered to the rural districts by the Farmer. Every parent who wants to give his children the best possible chance should insist on a school library in the school where his children attend. After all, it is the parent who is most interested in his children, though the American teacher is a good second. If both agree, the children will reap an incalculable benefit.

The third article in this series will tell how Mrs. Ladd, herself a farm woman, finds time for reading.

BREAKFAST DISH

Properly Made Corn Meal Mush.

Here is a fine breakfast dish: The day before make a good sized dish of corn meal mush in the following manner: Have a kettle with about two quarts of boiling water well salted. Wet up thoroughly with cold water two cups of corn meal and slowly stir it into the boiling water till the mush is very thick.

Set it on the back of the stove and let it simmer 15 or 20 minutes, being careful not to burn it, then turn out into a dish and make it smooth over the top. In the morning it will cut into fine solid slices and when fried in fat till brown on both sides it makes a very nice breakfast dish, to be eaten with or without syrup.

Corn meal mush to be eaten with milk while warm should not be made as thick as for frying, as it is too solid and heavy. On the other hand, the mush made properly for eating with milk contains so much moisture that it does not fry well, but spatters the hot grease and is hard to make brown. I used to drop the dry meal slowly into the boiling water, but find it much easier to wet the meal in cold water first.

Popular Crochet Designs

By WINIFRED WORTH

Guest Towel.

The supply of towels can not be too large. Add this beautiful design to your collection and it will come in handy at some future time if you can not use it now.

Satin stitch combined with French knots. There is no embroidery stitch, unless it be the feather stitch, as difficult to make as the French knot, and many workers do not realize that much depends on the quality and texture of thread used. This work was done with six-strand



filochet, using two strands for the knots and one for the satin stitch work.

Embroidered and Scalloped Edge of Towel.

For the embroidery use lazy daisy stitch with centers of French knots, the design shown in this very attractive towel. The daisy is in pink, but the little branches of feather stitching from between the petals are made of green.

Detail of Scallop of Towel 53.

Mark scallop as large as desired; begin in center of towel, and mark toward each end, stitch twice closely on machine around each scallop; cut out, dc. closely around for foundation.

1st Row—Make 6 open meshes on each scallop. Thus, 3 ch., skip 3 dc.,



sl. st. in 4 dc., 4 ch., and continue at point of scallop. Pull thread through next st., holding on needle until there are three stitches, then pull through all three at once, thus tying corners so they will not stretch. Treat each scallop in same manner. Be sure and have six open meshes to each scallop.

2d Row—2 dc., 1 p., 2 dc., 1 p., 2 dc., 1 p., 2 dc.; repeat until the 6 meshes are filled. Repeat to end of work.



Our Father which art in heaven.

Hallowed be thy name.

Thy kingdom come.

Thy will be done on earth, as it is in heaven.

Give us this day our daily bread.

And forgive us our debts, as we forgive our debtors.

And lead us not into temptation, but deliver us from evil.

For thine is the kingdom, and the power, and the glory, for ever.

Amen.

Plan Gardens

More Time Now Than Later On

By Ruth Gipson Plowhead.

When planning your spring garden, did you ever stop to think what it means, not only to yourself, but to the town and community, to have a really beautiful or "show" yard? When we see the wonder and admiration which one such yard attracts, we think how it would be if each home dweller made his surroundings as attractive as is in his power. The power of some would of course be small — time, money and strength being lacking—but even a dime and a few hours' time will do a great deal. It will plant a whole row of hollyhocks along that shabby fence, a row of four o'clocks about the foundations, or a big, bright bed of petunias or nasturtiums—all these are so easily grown.

This seems a bleak time in which to think of gardens, but most of us have more time now to plan our campaign than at any other time of the year. It pays to study the seed catalogues—some of them are almost a short course in agriculture, so complete are they. It is well to try a few novelties each year. It is thus that we get out of the ruts and progress. We are eating vegetables and gathering flowers of which our grandparents never dreamed, and our descendents will have delicacies we have never known.

Added to the high cost of living comes the admonition of physicians and dietitians to eat vegetables, and then more vegetables. So let us all who can raise as many vegetables as possible.

Uncle Sam advises all to plan their gardens on paper. If this seems not worth while, at least think about it, and have your seeds ready, so that when the spring rush comes they will be all ready and not delay the busy planter. Perhaps there is little time to spend on a vegetable garden, and you are too busy to think about many successive plantings. If so, it is a good idea to have the earliest and latest varieties of green vegetables put in at the same time, and one will get a longer crop with no more trouble than if you planted the one variety.

About Your House Bulbs.

If you have hyacinths, narcissus or easter lilies which you are now bringing to the light, remember that one of the great causes of failure is the giving of too great heat, so that the buds blight without developing. Keep them cool and not in too bright sunlight until the buds are well developed. If the hyacinth bulbs are inclined to choke among the leaves, as they so often do, a roll of dark paper inserted among the leaves about the flower stalk will cause the stem to grow toward the light and give the blooms more room to expand.

He—"What my son needs is to get some will-power, somehow."

Neighbor—"Oh, he'll marry."—Judge.

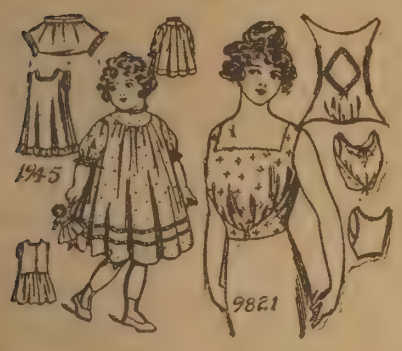
Patterns

1961-1962—Ladies' costume. Waist 1961 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and in 7 sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt, 1692, cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 46 inches bust measure. Skirt 1962 cut 34 inches waist measure. It requires 8 1-4 yards of 44-inch material for the entire dress in a medium size. The skirt measures about 2 1-2 yards at the foot. Two separate patterns, 10 cents for each pattern.

1726—Ladies' house dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 7 yards of 36-inch material for a 36-inch size. Price, 10 cents.

1945—Child's set of short clothes. Cut in 5 sizes: 6 months, 1 year, 2, 3 and 4 years. It will require for the







dress, 2 5-8 yards of 36-inch material. For the drawers, 3-4 yard. For the slip, 1 1-2 yards, for a 2-year size. Price, 10 cents.

9821—Ladies' one-piece corset cover. Cut in 6 sizes: 32, 34, 35, 38, 40 and 42 inches bust measure. It requires 1 3-8 yards of 36-inch material for a medium size. Price 10 cents.

1970—Ladies' kimono. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 5-8 yards of 44-inch material for a medium size. Price, 10 cents.

1955—Ladies' overall apron. Cut in 4 sizes: 34, 38, 42 and 46 inches bust measure. It requires 6 1-2 yards of 36-inch material for a 38-inch size. Price, 10 cents.

USE THIS COUPON FOR PATTERN ORDERS.

Enclosed find ..... cents, for which send me the following patterns:

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Pattern No. ..... Size .....

Pattern No. ..... Size .....

Name ....

.. ..

Postoffice .....

State ....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

What's the Idea?

School Boy Brings Home Notion

By H. B. HOWELL.

"What is this strange idea that my boy is bringing home from school about wanting to raise pigs in some new-fangled way?" is often the query of many a fond parent when first broached by his son, who has heard of the Boys' Pig clubs at the public school. Again, the question arises as to whether there is anything to be learned from him, and what it will cost to allow the boy to carry out this whim.

Time and experience, however, have taught that there is something for all to learn from these lessons taught by the small boy, and that the satisfaction of this whim has often returned many dollars to the family coffers, not to mention the content with which the boy remains on the farm as he grows older.

A few examples would perhaps tell the story better than can be done in any other way. Over in eastern Oregon, in Wallowa county, a little boy 12 years old came home from the public school, where he had heard about the pig club and its work. Immediately he became interested and he was met with more than the average enthusiasm when he arrived home, for his father promised him the pick of his herd at that time. Not satisfied with this, the boy finally got together $10, with which he purchased a pure-bred gilt. The pure-bred made a more rapid growth from the start and at state fair time was taken to the fair by the first owner, where the gilt won first prize in its class. The father of the boy, seeing these advantages, bought all the females and from this start has now become one of the leading breeders of swine in the state.

Dish Washing

Round Drainer Found to Be Handy

What is the most helpful thing you have learned during the last year in your experience with housekeeping? Let us pass it along to other housekeepers.

To the Editor of the Farmer: Referring to the above, would say I fear I haven't learned anything very new in regard to housekeeping, unless it's to use a dish drainer. It's a round one, made of heavy wire, and really one of the greatest time savers and most satisfactory contrivance one can imagine, providing one has an abundance of boiling water, and is a clean dish washer to begin with.

MRS. M. A. BROOKS.

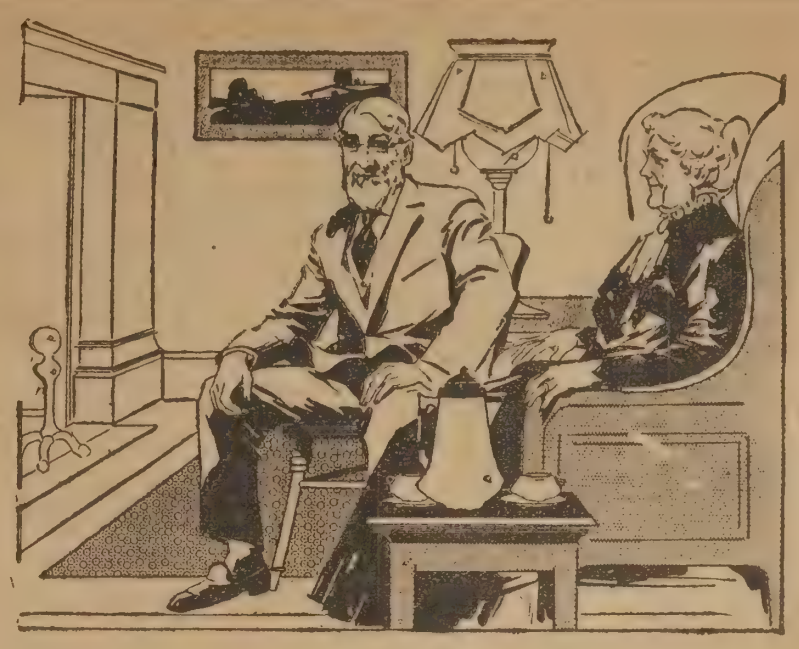
Wapato, Wash.

Looking Backward Party.

By LISSIE C. FARMER.

A "looking backward" party affords much amusement. For this the guests must be dressed so that their backs present a similar appearance to their faces and front parts of their body. Ladies should do up their hair on the top of their heads, and then wear a mask on the back of the head. The collar and waist finish must be the same as that usually put in front. In the same way the gentlemen should reverse their coats, tie and collars.

A good stunt for the evening's fun is a backward run race; that is, all in the race must walk or run backward. The supper or luncheon menu should be written backward; also the place cards. Another stunt is to spell words backward. All stand up in a row as for an old fashioned spelling class, and as the leader pronounces the words, the class spell them backward instead of in their regular order of letters.



"John, I haven't missed my cup of Ghirardelli's Ground Chocolate for forty years."

Ghirardelli's Ground Chocolate

is used in more than a million homes in the West.

It comes PROTECTED—as all chocolate should—in ½-lb., 1-lb., and 3-lb. hermetically sealed cans.



Since 1852 D. GHIRARDELLI CO. San Francisco

Boys' and Girls' Poultry Club

Free Hatching Eggs from Prize Winning Pens



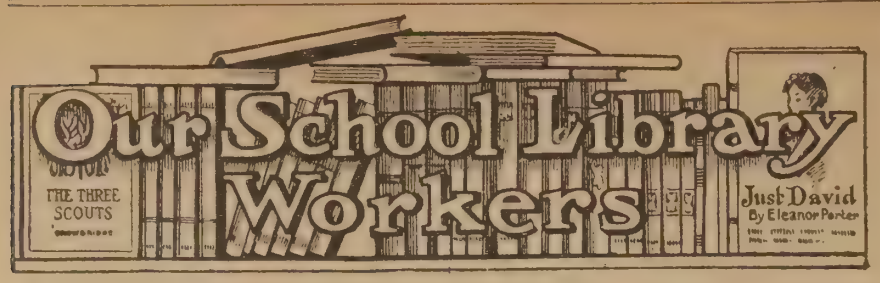
Any thrifty boy or girl can get a start in purebred poultry by devoting a little time to pleasant work outside of school hours. We offer nothing but eggs from prize winners. Each setting contains 15 eggs and you can make your selection from the following breeds:

S. C. Reds, R. C. Reds, Barred Plymouth Rocks, White Rocks, White Wyandottes, Buff Orpington, Blue Orpington, Black Orpington, White Orpington, Light Brahmas, Anconas, S. C. Andalusians, R. C. Andalusians, R. C. Brown Leghorns, S. C. Leghorn, R. C. White Leghorn, S. C. White Leghorn, S. C. Buff Leghorn, Black Minorca, Bantam, Buttercup, Campine, Houdan.

Write today if you want to join the Poultry Club. You will want to have your eggs hatching before long, so don't delay.

Address:

Washington Farmer Room 37, Review Building Spokane, Wash.



Miss Florence Woodward, teacher of Deep Creek school, Espanola, Wash., writes us the following very pleasing letter:

"In behalf of the children as well as myself I wish to say that the books arrived safely and we appreciate them very much. Their arrival was indeed a pleasure, and an unexpected one as well, for we did not expect them so soon. We wasted no time in looking at them. The children feel more than repaid for securing subscriptions to your paper. Personally, I was especially pleased with the copy of Pollyanna and know I shall enjoying reading it."

Miss Woodward and her eight enthusiastic pupils secured their books after a whirlwind campaign of just three days. In that short time they scoured their district most thoroughly, you may well believe. If anybody of an inquiring turn of mind ever asks you whether Deep Creek school has a resourceful and capable teacher you can truthfully say with emphasis—"Yes, indeed, it has." And you can speak right up for her eight girls and boys too, for they are hustlers, every one.

"We want to learn to work with our hands," said the scholars of Pleasant Prairie school some weeks ago. "Can't you send us a set of good tools for manual training work?"

Now, of course, this question came directly from Miss Kathleen Flanagan, teacher. So we readily agreed to send tools in place of books. The scholars went to work with a will and now their school is equipped with a splendid lot of tools with which we know they will be delighted and from the use of which they will get a big lot of valuable practice.

From up Colville way comes another acknowledgement of books received. This is from W. Ivan Montayne, teacher of North Basin school, who says: "The books for our school library came in due time. We like them very much and hope to get more in the future."

Mr. Montayne and scholars are only getting started. They have found a way to get books that beats the plan of Andrew Carnegie in a hundred ways.

Books Sent This Week.

Books sent this week to the following teachers to supplement their school libraries:

C. D. Gray, Downs school, Downs, Wash.; J. F. Hargroves, superintendent, Zillah public school, Zillah, Wash., and Elizabeth Karrer, Alpowa school, Unfried, Wash.

F. E. Wentz, Windsor school, R. D. No. 9, Spokane, Wash.; Ruth E. Rollins, Upper Hunters Creek school, Hunters, Wash.

Starting Out to Win Libraries.

Ford school, Stevens county, Clara E. Gollehon, teacher; Salkum school, Lewis county, Mrs. Tillie S. Gish, teacher; New Century school, Garfield county, Lillian Brown, teacher; District 122, Grant county, Margerie Leighton, teacher; Le Rone school, Yakima county, Noella Gendron, teacher, and Waits school, Stevens county, May Esveldt, teacher.

Cedar Mountain school, Belmont, Idaho, Mabel Coles, teacher; Independent school, Athol, Idaho, F. V. French, superintendent; East Greenacres school, Post Falls, Idaho; Charles Milliron, teacher; Home school, Lake Bay, Wash., W. F. Smith, teacher; Burn school, Humptulips, Wash., G. Branshaw, teacher; Wolf Lodge school, Coeur d'Alene, Idaho, Georgia Mooney, teacher.

HONOR ROLL.

White Lake school—Elizabeth McNeilly, Lee Skiles and Leon Thexton.

Lower Naches school—Ruth Keene, Lovell Collins, R. D. Low, Louis Knight and Gladys Fife.

Marcisse school—George E. Fox.

Deno school—Earle De Rusha and Inez Crossett.

Zillah school—John Farquer and Robert Fanbion.

Glenn Wilkins, Mildred Cochran, Violet E. Hills, Springdale school, Jonathan, Wash.; Gladstone Pease, Ernest Johnson, Ethel Johnson (2), Groebli school, Spokane, Wash., R. D. No. 2; Lyle Wellman (2), Sunnyside school, Kiesling, Wash.; Marjory Weir, McKinley school, Toppenish, Wash.; Auget Drivdahl, Granite Lake school, Cheney, Wash.; Ada Lovelace, Bayview school, Bayview, Wash.

Garden Plans

Cold Frames Quite Easily Made

By RUTH GIPSON PLOWHEAD.

February is the time to attend to a number of garden operations, none of which can well be delayed. Already some of my friends are starting a few boxes in the house, so that a few of the earlier vegetable and flower seeds may be well advanced. In the case of vegetables, it is presumably rather early unless one has a hotbed or cold frame, but a few flowers may easily be retransplanted to other boxes and pots. Pansies, for instance, now started may be placed outside in March.

Do you plan a hotbed? If so, you must be thinking of it. If you have but a small garden, a hotbed is more in the nature of a luxury than a necessity. Aside from the satisfaction you get in starting your own vegetables, there is little saved for the small gardener, as vegetable plants especially are cheap. The upkeep of glass, fresh manure, etc., amounts to enough each year to buy many plants. But if you want the pleasure and have the time to experiment, a hotbed is a great pleasure in your gardening. Inexpensive cold frames, which take the place of hotbeds quite well for our mild climates, are easily made in a sheltered spot, with any frame over which may be placed a frame, oiled cloth or other sheltering cover. This will do splendidly for starting head lettuce, celery, cabbage, tomatoes and your early perennial flowers.

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Why waste the next three months? Plenty of time to get our short course in Bookkeeping, Business, Arithmetic, Commercial Law, etc.

Take care of your farm accounts more accurately by taking our Farm Set.

Our Shorthand and Bookkeeping graduates are always in demand.

Annual reunion February 16.

Northwestern Business College

M. M. Higley, Pres. Spokane, Wn.

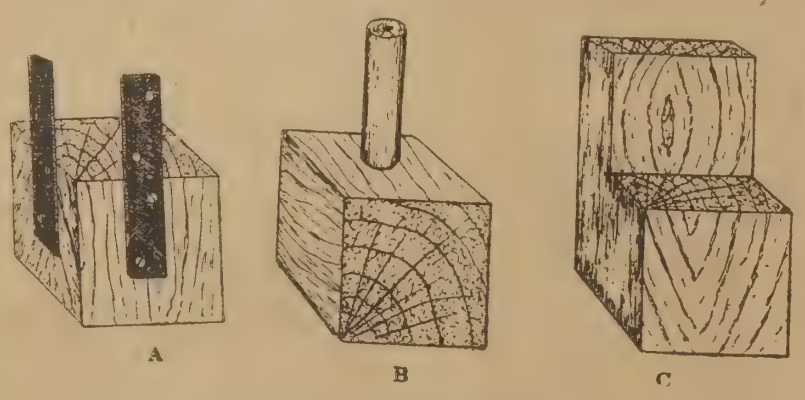
What Is the A. B. C.?

Audit Bureau of Circulations.

This is an association, nation-wide in its scope, not conducted for profit. Every publisher having membership in this organization pledges himself to sell circulation as a commodity, both as to quality and quantity. Advertisers using our columns are safeguarded. They know that we give all the circulation we offer.

Height of Working Surfaces

As a Rule Tops of Stoves, Tables, Are Too Low



Different Types of Blocks to Raise Table.

This represents one of the simplest means of raising the height of tables. (A) Block of wood with metal strips and screws or nails for fastening. (B) A block of wood with a wooden pin or bolt. This piece is set into the block and fits into a hole in the table leg. (C) A block of wood sawed to fit a corresponding notch in the table leg. It can be fastened by means of long nails.

As a rule working surfaces—tops of stoves, tables, sinks—are too low for the person of average height, says Carrie L. Pancoast in a bulletin entitled, "The Farm Kitchen." This causes straining of the muscles and undue stooping and is largely responsible for tired backs and rounded shoulders.

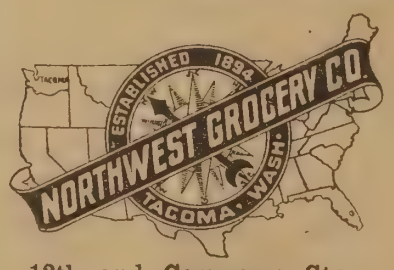
Tables too low may be placed on blocks of wood or the legs may be spliced with gas pipes or small slats.

The stove may be blocked with brick or cement. Legs on a stove are generally regarded as unsatisfatcory. The space beneath too often proves a catch-all for overshoes, mittens and domestic pets.

Most sinks, especially, are too low for a person of average height. The bottom of the sink should not be less than 30 inches from the floor, if the housewife stands at her dishwashing.

The height of any working surface will, of course, vary with the height of the worker, and whether or not she sits or stands at her work, but in general it should be about 32 inches for a woman of average height (five feet five inches.) It is wise for each housewife to perform the same task at different heights and see at which one she exerts least effort.

MAIL ORDER DEPARTMENT



13th and Commerce Sts.,
TACOMA, WASH.

Coffee By Mail

We will try anything once. Will you?

As a trial proposition, send us 50 cents and we will send you 1½ pounds of Northwest's Best Coffee, and after using it, if you believe it is not honestly the best Coffee you have ever used, we will refund the purchase price without question.

You take no chances.

This is not a package coffee, but a bulk coffee, freshly roasted and ground for you the way you want, after the order is received.

1½ lbs. by Parcel Post to any point in First or Second zone ..... $ .50

3 lbs. by Parcel Post to any point in First or Second zone $1.00

All good coffee; no tin cans to throw away, or premiums you do not need.

Fill in the coupon below and send with 50 cents or $1.00, in stamps, coin or money order, to

Northwest Grocery Company
TACOMA, WASH.

Send me 1 1-2 lb.—3 lb. Northwest's Best Coffee,

Whole, Ground (How?).....

Name .....

Address .....

Coffee sent whole or ground, as ordered. If you want it ground, state whether coarse, medium, fine, for percolator, or pulverized.



FARM BOYS AND GIRLS CAN HAVE THE MOST FUN

Dear Aunt Nellie; I have written before, but am writing again. I will write about "Fun on the Farm." We have 160 acres. Seventy-two are under cultivation and 88 are in timber. We do not live on this because it has no house on it, but we rent a farm close by, and I am sure it is just as good; at least, it will do until summer comes again. Our papa will build a house then. On the farm a person can have lots of fun because you can pick wild flowers, milk cows, ride horses and do all sorts of things that the city children can not do. We have three cows and six calves. I do not milk any of the cows. Papa does all the milking. There are lots of hills here, as I guess there is all over Washington. We go and gather violets and johnny jump-ups. Of course we do this in the spring, but in summer we get wild roses, which I like a little better than cultivated ones. I love the rocks, although there are lots of snakes in them. There are hundreds of rattlesnakes and other snakes killed here in the summer. We have to be very careful of them when around the rocks. I forgot to mention that we have three horses, two of them white and one a roan. Their names are Little Dick, Big Dick and Nell.—Ethel Greely, Riverside, Wash.

ANNIE TELLS US WHAT SHE DOES WHEN HOLIDAYS COME

Dear Aunt Nellie: I received the doily for a prize, and I thank you very much for it. I read all the letters in the Corner and I think some of them are quite interesting. This is the third time I have written to you. I am 12 years old, and my birthday is October 9. I am going to write about "The Holidays." Most children think of holidays as days of fun and amusement. I am one of those who think so. We have most of our fun in the summer, although in the winter we can coast and skate. Some of us spend our holidays away from home. I am staying home this vacation and studying arithmetic, physiology and geography, also piano music. Last summer, however, I took long rides in uncle's auto. The summer before that I went to Portland and one of my uncles accompanied me to Council Crest, City park, the movies, theaters and to the city hall. We intended to go to the "Oaks," but failed to get there. We also attended the rose festival. The following winter I spent the Christmas vacation coasting down a little hill near the house. What I will do the next holidays remains to be seen.—Annie Mathews, Husum, Wash.

HELEN TAKES DOMESTIC SCIENCE AT HER SCHOOL

Dear Aunt Nellie: My father takes The Washington Farmer. We like it very much. I took music lessons for about a year. I can play pieces in the seventh grade of music. I can sing, but I don't sing very much any more. I play most of my spare time. I am going to write about my school room. I am 14 years old. I am in the eighth grade. There are about 100 pupils in our high school. There are about twice that many in the grades. I am on the same floor as the high school, so we can play the piano in the assembly if we want to. One day the high school students didn't come to school, and we played the piano all noon. There are about 30 pupils in our room. Our teacher is Mr. Craig. I walk about a mile to school. I can crochet and sew. We have domestic science in our school. We have to walk about a half a mile from the schoolhouse to the place where we take domestic science. This is my first letter to the Children's Corner, but I would like to join. I would like to correspond with any girls of my age.—Helen Beckes, Grandview, Wash.

ALICE LOVES TO HELP MOTHER WITH THE WORK

Dear Aunt Nellie: We have been taking the Farmer for a long time and I enjoy reading the Children's Corner. I am a girl 11 years old and I can make good bread. My mamma said that I was a great help to her. She told old Santa to bring me a sewing box for Christmas. My little sister got one, too. We were very proud of them. I love to help mother do the work and she is going to let me make a cake, Sunday. I am going to make some candy tomorrow.—Alice Miller, Box 63, Mayview, Wash.

COWS WON FIRST PRIZE AT THE COWLITZ FAIR

Dear Aunt Nellie: I saw my name in the paper, so I thought I would write again. I live on a 160-acre farm. My papa has 14 cows and 18 calves. They won the first prize at Cowlitz County fair at Woodland. We have two horses. Their names are Sallie and Bell. I have four brothers and two sisters. My brothers' names are Bill, Clarence, Andrew and Hjalmar. My schoolmates are Julia Sours and Bessie Skalle. I play with them all the time. We live five miles from Kalama. The mail man brings our mail up to our gate. We live on the left side of the road. There are 27 pupils in our school. There are six in my grade. My father is 52 years old and mother is 47 years old. I am four feet and four inches tall, and I weigh 99 pounds. I have blue eyes and light brown hair. I like to go to school. I haven't been absent this term yet. At school we play ten step. First thing in the morning we have singing. My favorite studies are reading, spelling and geography. I help mother wash dishes, sweep the floors and in many other things. On Saturday, my sister Ina and I clean every room in the house. My sister is 15 and my sister Sophia is 21. She is married and has a little boy.—Marie Anderson, Kalama, Wash.

LOLA STAYS IN TOWN SO SHE CAN GO TO SCHOOL

Dear Aunt Nellie: You do not know who I am for this is the first time I have written to you. I have three pets. The dog's name is Sport, the cat's is Birdie and the chicken's name is Nancy. I am eight years and my birthday is the third of March. Will some of my cousins please write to me? We live 10 1-2 miles out of town, but I have to stay in town to go to school. My address is Miss Lola E. Stannard, E528 Astor avenue. I am in the fourth grade. My teacher's name is Miss Hart. I like her yey much. I should like to correspond with Katherine Bowen, if she will correspond with me.—Lola Alice Stannard, Colville, Wash.

POOR PUSSY'S TAIL IS BROKEN IN TWO PLACES

Dear Aunt Nellie: My father takes the Farmer. We do not live on a farm but I am going to write just the same. We have a horse named Gyp and she is a buckskin. We just sold our two acres of land and our loghouse. I have two brothers. The smallest will be 10 years old in March and the oldest is between 19 and 20. My father has a gasolin drag saw and saws wood for the people. I have a pet cat named Lim. He is yellow and white. His tail is broken in two places. I am thirteen years old and in the eighth grade. My teacher's name is Mr. Orris J. Hunter and the principal's name is D. A. Drew. The school has six rooms and there is another little school off to one side—LEE ROWE, Rochester, Wash.

THE TWO LITTLE DUCKS ARE ALMA'S VERY OWN

Dear Aunt Nellie: I live on a farm of 19 acres. I have four brothers and no sisters. My oldest brother is one and a half years younger than I. His name is Victor, and I have twin brothers whose names are Ernest and Carl. Carl is sick. I have another little brother whose name is Oscar. He is so fat and pretty. We have a big house with 10 rooms. It is green with white trimming. We have three cows, two heifers, one calf, one dog, two cats whose names are Puss and Diana, but they look so much alike that I can not tell them apart. The dog's name is Prince. Our horse's name is Dixie. Then, we have four swine, 100 chickens and two ducks which are my very own. I have a light complexion and am four feet ten inches tall and weigh 120 pounds. I can crochet and embroider and sew on the sewing machine. I am in the sixth grade at school. My teacher's name is Miss Lucy Smith, our sewing teacher's, Miss Sanders, and the music teachers's Miss Heater.—Alma Lunn, Box 133, Bothell, Wash.

THE CANARY BIRDS SING ALMOST ALL THE TIME

Dear Aunt Nellie: This will be the first time I have written to the Children's Corner. I enjoy reading their letters very much. I am 11 years old and my birthday is April 26. If I have a twin I wish they would please write to me. I am in the sixth grade and my brother Arnold is in the fourth. My teacher's name is Miss Livesey and she is very nice to us. We have three canary birds and they sing almost all the time. I am taking piano lessons and my teacher's name is Mr. Cross. I have two little pet cats at home and their names are Mouse and Coon and they are very cute. There is a big hill by our place and we have lots of fun coasting down it with our sleds, for it has been snowing here.—Lucile Peterson, R. F. D. No. 5, Box 348, Foster, Wash.

The Old Man and His Calf



EDITH JAMES STARTED THE NEW YEAR RIGHT

Dear Aunt Nellie: I enjoy reading the letters in the Corner very much. I live on a farm of 160 acres of land. We have 17 head of horses, three cows, 72 chickens and five ducks. I am 11 years old and in the sixth grade at school. My birthday is the 10th of August. We drive three miles to school. Our teacher's name is Miss Daisy F. Porter. I have gone to school every day this year. I have three sisters and one brother. My oldest sister's name is Beulah and she is 14 years old. My brother's name is Dean and he is 9 years old. My other sisters' names are Blanche and Artie. Blanche is 5 years old and Artie is 3 years old. I go to church every Sunday. I am a Christian and love the Lord Jesus Christ. I am entering the New Year a different girl. I found Christ during last year.—Edith James, Box 2, Krupp, Wash.

VELMA AND HER CAT ARE EXACTLY THE SAME AGE

Dear Aunt Nellie: I have been reading the Children's Corner and thought that I would write, too. I am 11 years old, my birthday is the 10th of April. I would like to correspond with Alice Merwenhuzen. I live on a 43-acre farm. We have three horses, Flory, Jess and Bolly. We have seven cows, Boss, Cherry, Gip, Turner, Spot, Norton and Polly. I have three cats and one dog for pets. The cats' names are: Tab, Dandy and Frisky. My dog's name is Rover. Two of the cows are mine, Polly and Turner. We have an Angora cat named Teddy that is the same age as I am. I go to school and am in the fifth grade. My teacher's name is Miss Connell. I like her very much. I am in the third grade in music. I like my music. At school the boys play basket ball and the girls play volley ball.—Velma Simpson, Elma, Wash.

On Aunt Nellie's Desk.

On Aunt Nellie's desk are letters from the following little boys and girls, which as yet we have not had space enough to print. They will all be printed in the order that they are received:

Frances McManamon, Othello; Clara Olson, Bothell; Vesta Johnson, Mansfield; Ethel Mortensen, Cathcart; Ward Rowe, Rochester; Derla McManamon, Othello; Edna Reinbold, Hubby; Flora Ransier, Belmont; Myrtle Weberg, Poulsbo; Mary Von Pressentin, Concrete; Phoebe Reeves, Elma; Hildreth Hicks, Coulee City; Reva Ada Lamb, Coulee City; Theodore Carlson, Shelton; Dea T. McManamon, Othello; Cora Kanouse, Elma; Mary Boppert, Winlock; Ruth Safe, Republic.

Nellie Salvage, Addy; Dollie Moss, Davenport; Rosey Johnson, Hassan; Ione Tuce, Stanwood; Ruth Eaton, Kent; Addie Russell, Deer Park; Gertrude Nelson, Puyallup; Hazel Hillerud, Lawrence; Lyda Augst, Beebe; Viola Augst, Beebe; Clara Olson, Bothell; Lorena Schultz, Lost Creek; Mabel Nicholson, Bothell; Margery Hawley, Bellingham; Mary France, St. John; Walker Tompkins, Prescott.

Myrtle Sodorff, Johnson; Agnes Halle, East Stanwood; Gladys Carlson, Everett; Naomi Canady, Almira; Inza Staiff, Freeland; Esther Carslin, Olalla; Evalena Clement, Tampico.

Senia Hulk, Kent; Myrtle Ledbetter, St. John; Thela Bowen, North Yakima; Elizabeth Bowen, Oroville; Kathryn Bowen, Oroville; Teddie Taylor, Riverside; Harvey Heath, Mondovi; Laura E. Hatley, Waitsburg; Liv Blekstad, Southworth; Pearl Faye, Monroe; Violet Hicks, Coulee City; Oliver Schilling, Withrow; Ethel Sprong, Sunnyside.

Dorthea Hicks, Coulee City; Exenia Matson, Shelton; Donald Ancil Fox, Cunningham; Ruth Wagner, Gilmer; Margaret Cox, Leahy; Pearl Rubie Johnson; Evalene K. Maurer, Mohler; Irene M. M. Glissler, Odessa.

Blanche Cantrell, Winlock; Agnes Lauer, Pomeroy; Verda Johnson, Rochester; Vonda Boulden, Elma; Flora Lamurs, Johnson; Alvana Forsman, Rochester; Ruth Friday, Puyallup; Mary Limmer, Winlock; Ruth Zuaschka, Everson.

Exenia Matson, Shelton; Myrtle Veronica Faye, Monroe; Edith Crabb, Marengo; Inez Lockwood, Raymond; Doris Streeter, Bow; Edith Annetta Parmeter, Reardan; Dorothy Blaisdell, Creston; Ivah Jump, Creston; Vera V. Gensel, Aeneas; Mildred Elizabeth Marks, Wapato.

Myrtle Gooch, Uniontown; Frank Clinton Steger, Shelton; Cecil Wayne Bramhall, Dayton; John Hayden, Mold; Goldie Miller, Mayview; Jennie Peterson, Thomas; Glynes Simenson, Corfu; Virginia Brockmiller, Wheeler; Ella Jane Love, Beebe; Grace Deharte, Latah; Charles Lee, Othello; Maybell Firth, Friday Harbor; Inza Staiff, Freeland; Margaret Stephens, Willapa; Emma Short, Lowden; Honer Bonita Lovette, Mansfield.

vette, Mansfield; Annie Van Dam, Oak Harbor.

Abreast With the Times.

J. T. Harrah has purchased a moving picture machine of the standard size, which he will install in the new home on his ranch in the lower Yakima valley. He expects to show the latest reels in his own home at the same time they are making the northwest theater circuit. It will be a great pleasure to his wife and three children and neighbors and friends.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Feb. 10.—Wheat prices ran up swiftly today, influenced to a large extent by reports that the British government had commandeered numerous South American line steamships and would undertake to convoy from United States ports to Europe as many cargoes of foodstuffs as might be required. After an extreme advance of 5 3-4c a bushel, the market closed strong at gains of 2 1-4c to 5 3-8c net, with May at $1.74 5-8 to $1.74 7-8, and July $1.49 3-4 to $1.50. Other commodities, too, finished higher, corn up 7-8c to 1 1-4c; oats, 1 1-4@1 3-8c to 1 3-4@1 7-8c, and provisions 7 1-2c to 25c.

Broadening out of wheat trade was especially notable in the last hour, when the prospects of a revival of export business looked better than had been the case any time before in over a week. On the other hand, some holders were uneasy in regard to the uncertainties of development during a double holiday, and were inclined to make realizing sales, but such transactions failed to become plentiful enough to alter vitally the prevailing bullish sentiments.

Dullness of offerings had a bullish effect on corn. Strength of oats was due to a considerable degree to reports that the southern winter oat crop had been badly damaged by severe cold weather.

Provisions climbed with hogs and grain. The chances of better shipping facilities, both by rail and sea, gave renewed confidence to buyers.

Pacific Northwest Grain.

PORTLAND, Ore., Feb. 10.—Wheat—Stronger; no trading; spot bids 2c to 3c higher. Bluestem, $1.55; fortyfold, $1.52; club, $1.50; red Russian, $1.48.

Barley—Higher; No. 1 feed, $39.25.

SEATTLE, Feb. 10.—Wheat—Bluestem, $1.55; turkey red, $1.55; fortyfold, $1.52; club, $1.52; fife, $1.52; red Russian, $1.50.

Barley—$39.50 per ton.

TACOMA, Feb. 10.—Wheat—Bluestem, $1.54; fortyfold, club and red fife, $1.49; red Russian, $1.44.

WILBUR, Wash., Feb. 10.—Wheat—Bluestem, $1.32; club, $1.27.

Oats—$37.

Barley—$37. No activity in the market.

Minneapolis Grain.

MINNEAPOLIS, Feb. 10.—Bigger demand sent wheat prices upward today and corn and oats hardened in sympathy. Wheat receipts, 180 cars. Holiday a year ago.

Wheat—May, opened $1.74 1-8 to $1.75; high, $1.78 1-4; low, $1.74 1-8; closed, $1.77 3-4 to $1.77 5-8.

July opened at $1.71 1-4 to $1.71; high, $1.74 3-4; low, $1.71; closed, $1.73 7-8.

Cash—No. 1 hard, $1.83 5-8@1.87 5-8; No. 1 northern, $1.78 5-8@1.81 5-8; to arrive, $1.77 5-8@1.79 5-8; No. 2 northern, $1.75 5-8@1.81 5-8; No. 3 wheat, $1.65 5-8@1.77 5-8; No. 2 durum, $1.81 5-8@1.92 5-8; No. 2 Montana, $1.77 5-8@1.79 5-8.

Corn—No. 3 yellow, $1.03@1.05 1-2.

Oats—No. 3 white, 54@55c.

Flax—$2.81 1-4@2.87 1-4.

Flour unchanged. Shipments, 42,822 barrels.

Barley, 86c@$1.18.

Rye, $1.35@1.36.

Bran, $31@32.

San Francisco Grain.

SAN FRANCISCO, Feb. 10.—Wheat—Firm; no trading.

Barley—May, $2.22½ bid, $2.30 asked; December, $1.63 bid, $1.64¼ asked.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1916-17 and 1915-16 were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1916-17	3,997	864	276	2,881
1915-16	6,547	785	1,112	2,932
Portland—				
1916-17	3,843	1,740	155	1,620
1915-16	9,233	832	1,337	1,613
Total—				
1916-17	7,840	2,604	431	4,501
1915-16	15,785	1,617	2,447	4,595

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $2.50@2.75 cwt; sweet potatoes, $6.

Apples—Washington apples, cooking, 60@85c; eating, $1@1.25; Wageners, 85c@$1.35 box; Jonathans, $1.25@1.35 box; Delicious, large, $1.75@2.25 box; Rome Beauties, $1.25 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 43c lb; Medo-Maid, 43c lb; Cascade, 43c lb; Gold Coin, 36c lb; Gold Leaf, 43c lb; Better Butter, 43c lb; Hazelwood, 43c lb; Peerless, 39c lb; Jersey Belle, 42c lb; Attalia, 43c lb; Diadem, 43c lb; Jersey, 39c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 28½c; Hazelwood full cream triplets, 23c lb; Hazelwood Young America, 24c lb; Wisconsin limburger, 29c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $11.50; fresh eastern eggs, $11@11.50 case; eastern storage eggs, $9.50@10.50.

Live Poultry—Springs, 15@16c lb; hens, 15@16c lb; old roosters, 7@9c lb; ducks, 11@13c lb; turkeys, 20@27c.

Dressed Poultry—Hens, 19c lb; springers, 19c; old roosters, 12c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs. and up, 16½c; salted cured, 19c; green bulls and stags, 13c; salted cured, 15c; kip, 15 lbs. to 25 lbs., 21c; calf skins up to 15 lbs., 30c; dry flint hides, 32c; dry salted, 27c; dry calf skins, under seven lbs., 38c; dry sheep pelts, full wooled, 20@23c; dry shearlings, 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2 each.

Seattle Market.

SEATTLE, Wash., Feb. 10.—Although there has been a relaxation in the demand from the east for Yakima potatoes, the market shows no reactionary tendency with the chief bullish factor in part removed. There have been many sales during the week of No. 1 gems at $58 to eastern buyers, and holders are naming the same figures to Seattle jobbing interests. This has compelled selling prices of $70 here, with a strong supporting undertone. Dealers who understand the potato trade will not say the market has hit the top. On the contrary, quotations up to $100 per ton are being predicted for the spring cleanup.

Onions are following potatoes upward. Jobbers raised quotations on both Yakima and Oregon onions today to 8 cents per pound. There are a few British Columbia onions here which can be sold at the same level, but in normal years, due to the secondary quality, imported stock would never have had a buyer.

Live Stock Quotations.

At Chicago.

CHICAGO, Feb. 10.—Hogs—Receipts, 21,000; strong, mostly 5c above yesterday's average. Bulk, $12.30@12.50; light, $11.80@12.45; mixed, $12.15@12.50; heavy, $12.05@12.55; rough, $12.05@12.20; pigs, $9.75@11.10.

Cattle—Receipts, 10,000; weak. Native beef cattle, $7.80@12.25; western steers, $7.90@10.30; stockers and feeders, $6.10@9.25; cows and heifers, $5.15@10.50; calves, $10.25@14.75.

Sheep—Receipts, 4000; weak. Wethers, $10.60@11.80; lambs, $12.10@14.60.

At Omaha.

OMAHA, Neb., Feb. 10.—Hogs—Receipts, 13,000; higher. Heavy, $11.90@12.20; light, $11.60@12.10; pigs, $9.75@11.50; bulk, $11.90@12.10.

Cattle—Receipts, 300; steady. Native steers, $8.50@11.50; cows and heifers, $7.25@9.25; western steers, $7@10.50; Texas steers, $7@8.50; stockers, $8.50@10.

Sheep—Receipts, 1500; steady. Yearlings, $11.50@13; wethers, $9.50@11; lambs, $13.25@14.25.

At Portland.

PORTLAND, Ore., Feb. 10.—Hogs—Firm; receipts, 171. Bulk of packing grades, $11.75@11.85; heavy packing, $11.90@12; light packing, $11.60@11.90; rough heavy, $10.50@11; pigs and skips, $10.40@11.10; stock hogs, $9.75@10.25.

Cattle—Firm; receipts, 55. Steels, prime light, $9@9.20; prime heavy, $9@9.20; good, $8.40@8.80; cows, choice, $7.50@7.75; medium to good, $7@7.25; ordinary to fair, $6@6.75; heifers, $4@7.50; bulls, $3.50@6; calves, $6@9.

Sheep—Firm; receipts, none. Lambs, east of mountains, $12.25@12.50; lambs, valley, $11.75@12; lambs, good, $11.25@11.75; choice yearling wethers, $10@10.50; good yearlings, $9.75@10; choice ewes, $9.25@9.50; heavy ewes, $8.75@9.25.

At Seattle.

SEATTLE, Feb. 10.—No receipts today. Market strong on all lines at yesterday's quotations.

Hogs—Prime light, $12.10@12.25; medium to choice, $10.65@10.95; smooth heavy, $10.40@10.85; rough heavy, $9.45@10.15; pigs, under 150 lbs., $8.50@9.15.

Cattle—Prime light steers, $9.25; medium to choice, $8.50@8.75; common to good, $6.75@8; medium to choice, $7.25@7.50; common to good, $5@6.50; best bulls, $5@5.75; common bulls, $3.50@4.50; calves, $7@9.

Sheep—Prime lambs, $10.25@10.50; good lambs, $9.75@10; wethers, $8.50@9; ewes, $6.50@8.

Spokane Stockyards Saturday.

Hogs—Receipts, 13; market strong. Prime heavy, $11.75@11.85; prime light, $11.60@11.70; prime mixed, $10.50@11; stockers, $7.50@9.

Cattle—Receipts, none; market strong. Prime heavy steers, $9; prime light steers, $8.50@8.75; good steers, $8@8.50; stockers and feeders, $5.50@6.50; prime cows, $7.35@7.85; good cows, $6.50@7; best heifers, $7.10@7.85; bulls, $3.50@6; calves, $6.50@9.

Sheep—Receipts none; market strong. Prime lambs, $11.50@12; common lambs, $10.50@11; best yearlings, $9.75@10.50; good yearlings, $8@9; best mutton ewes, $7.75@8.25; common ewes, $6.50@7.50.

Seattle Wheat.

SEATTLE, Feb. 10.—Not at all alarmed commercially over the war crisis of the week, eastern Washington farmers have become bulls almost without exception. This was established when miller buyers attempted to get a little wheat on bids in the country of $1.40@1.45 for bluestem and turkey red and 2@3c under for fife. Holders frankly said they were not interested in present quotations, and would continue to hold on to what they had.

In numerous localities buyers for the milling concerns were not even asked what they were willing to bid. In others it was boastfully asserted that England would have to buy grain, that some method would be found for getting it to destination and that if they held on long enough they would get $2 for every bushel sold. This position was regarded as extreme in view of the fact that only a few eastern buyers are left in the field to bull the market, and that those who are still active are carrying on their business through local resident buyers. Puget sound millers were not heavily interested either. They are well stocked up for the run to the end of the season and with rush orders for the south and east well along toward completion, they feel rather easy as to futures and are not inclined to tone up their bidding.

Portland Market.

PORTLAND, Ore., Feb. 12.—Only 31 cars of onions are now left in first hands in Oregon, 10 cars having been shipped out in the last week. Except for a few cars that may be held over, the stock is likely to be exhausted by the end of the month. The market now stands at $7.50 to the grower, with good prospects of going higher.

No outside onions will be available until March 10, when a steamer is due at Vancouver, B. C., with a small shipment of 3500 crates of Australians. Part of them are consigned to Portland. The grst large shipment of Australian onions is due at San Francisco on April 10.

The potato market is firm; with buyers offering up to 3 cents for fancy stock. No accurate figures are available as to the unsold supply here.

Out-of-town orders, particularly from eastern Washington and Montana, have been sufficient to absorb the large receipts of eggs and the market has held steady at the 30-cent basis for current receipts. Future prices here will depend on the continuance of this demand.

Butter was firmer at the close of the week. The local demand for cubes was only fair, but the shipping inquiry was good.

Outside orders were also responsible for poultry prices holding at a high level. Country dressed meats were scarce and firm, with live hogs selling at $12 at the yards. A 15-cent market for dressed pork was easily maintained.

Hops sales during the week were light and there was no interest in contracts.

Hides did not decline as some dealers expected, the eastern markets recording a slight advance after the break with Germany.

Butter and Eggs.

ELGIN, Ill., Feb. 10.—Butter, 25 tubs at 42 1-2c.

SAN FRANCISCO, Feb. 10.—Butter—Fresh extra, 38c.

Eggs fresh extras, 34c; pullets, 32 1-2c.

CHICAGO, Feb. 10.—Butter unchanged.

Eggs higher; receipts, 2623 cases; firsts, 44 1-2@45c; ordinary firsts, 42@43c; at mark, cases included, 40@44 1-2c.

PORTLAND, Feb. 10.—Butter—Prints, extras, 41@43c; cubes, extras, 38c; prime firsts, 37c; dairy, 30c.

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Highest Cash Prices Paid
Prompt Returns—Honest Weight
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160 ACRE FARMS IN WESTERN CANADA FREE



Canadian Farmers Profit From Wheat

The war's devastation of European crops has caused an unusual demand for grain from the American Continent. The people of the world must be fed and wheat near $2 a bushel offers great profits to the farmer. Canada's invitation is therefore especially attractive. She wants settlers to make money and happy, prosperous homes for themselves by helping her raise immense wheat crops.

You can get a Homestead of 160 acres FREE and other lands at remarkably low prices. During many years Canadian wheat fields have averaged 20 bushels to the acre—many yields as high as 45 bushels to acre. Wonderful crops also of **Oats, Barley and Flax.**

Mixed farming as profitable an industry as grain raising. The excellent grasses full of nutrition are the only food required for beef or dairy purposes. Good schools, churches, markets convenient, climate excellent.

Military service is not compulsory in Canada, but there is an extra demand for farm labor to replace the many young men who have volunteered for the war. The Government is urging farmers to put extra acreage into grain. Write for literature and particulars as to reduced railway rates to Supt. of Immigration, Ottawa, Canada, or

J. N. Grieve, Cor. 1st and Post sts., Spokane, Wash. Canadian Gov't Agt.



Want Ads

HELP WANTED—FEMALE 1

MIDDLE-AGED LADY TO HELP WITH housework; small family. Write or phone A. D. Thayer, Waverly, Wash.

HELP WANTED—MALE 3

BE AN AUTO AND TRACTOR EXPERT. $75 to $200 a month—learn in six weeks. Thousands of successful graduates. Catalog free. Rahe's Auto School, 532 East 11th st., Kansas City, Mo.

SITUATION WANTED—MALE 21

MARRIED COUPLE WANT FARM WORK epexrienced; wife good cook. P. O. Box 1024, Spokane.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER!

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

TRACTOR ENGINE.

We have, in first-class condition, slightly used Minneapolis 22½-H. P. traction engine for sale at a sacrifice. This is a bargain if you can use it. Write for price and full details.

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BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 81c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

STRAWBERRY BOXES.

We have all kinds of berry boxes and crates, butter and egg cases. TRY OUR CEDAR SHINGLES. HEDLUND BOX & SHINGLE CO., SPOKANE.

(Continued on the following page.)

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
The best place to buy your sash and doors is from O. B. Williams Co. We not only sell for less, but will give you satisfaction, or money back. We own our own mill, make prompt shipments, and guarantee safe delivery. Send for our big, illustrated catalog, No. 27, mailed free, post paid, promptly on request.

5 cross panel doors, No. 1	$1.33
Craftsman doors	1.75
Glass doors, as low as	2.25
24x28, 2-light window	1.46
Bungalow casement sash	.56
3x6 hot bed sash	2.25
1-ply Gold Seal roofing	1.25
3-ply veneer panels, square foot	.05½

Cupboard doors, frames, finish, mouldings, builders' hardware, glass, etc.

O. B. WILLIAMS CO.
1943 FIRST AVE. SO. SEATTLE, WN.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

WANTED — KEROSENE OR GASOLINE brooder stoves. State size, price and make. Buena Vista Stock Farm, Kennewick, Wn.

WANTED—KRESKY FRESH AIR BROODER stove. F. H. Volland, Kennewick, Wn.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBTAIN a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer,** and **The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

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QUEEN QUALITY S. C. R. I. REDS, $15. Agts. QUEEN INCUBATORS, 70 to 2000 eggs. 1200-chick brooder stove, $18.50.
QUEEN HATCHERY.
Office, 87 Pike St., Seattle.

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WE DO CUSTOM HATCHING AND SELL HATCHING EGGS. QUEEN HATCHERY, 89 Pike st., Seattle.

ORDER YOUR BABY CHICKS NOW FROM heavy laying strain; delivery guaranteed; our chicks please; R. I. Reds, March, $15 100; after Mar. $12. White Leghorns, March, $12 100; after March, $10. Maplebrook Poultry farm, Southworth, Wash., Box 3.

MY R. C. R. I. REDS HAVE WON EVERY first and second, except one, competed for in the past 3 years. Have mated 4 pens for the egg trade. A few cocks for sale. Mating list on application. G. W. Baker, Colfax, Wash.

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BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R 7, Waitsburg, Wash.

GROSSER'S LIGHT BRAHMAS, BIRDS and eggs for sale, sweepstake winners in National Western Stock Show; prices reasonable. E. Grosser, 2245 Perry St., Denver, Colo.

BARRED PLYMOUTH ROCKS, PRIZE winners at shows; way ahead of average in N. W. laying contest. Write for prices. Wm. H. Helmsoth, Baker, Ore.

MAMMOTH BRONZE TURKEY, BEST IN the west. Unrelated stock. Mrs. H. J. Cortner & Mrs. C. R. Lowery, Payette, Ida.

EGGS FROM THOROUGHBRED TRAPnested White Leghorns, $6 and $8 per 100. A. A. Hopson, Jennings Lodge, Ore.

EGGS FROM TANCRED S. C. W. LEGhorn hens, $1.25 per 15, $6 per 100, prepaid. J. W. Hirons, R. 2, B. 55, Scio Ore.

PRIZE-WINNING BUFF ORPINGTONS. Settings, $2 to $10. Males, $3 to $15. Lucy R. Scudder, No. Yakima, Wash.

LAKESIDE S. C. W. LEGHORN EGGS, $1.50. Mrs. T. W. Harvey, Spokane, Wn.

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Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

POULTRY 174 Continued.

HOGANIZED S. C. I. REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels, $5 each. These birds are all sons of a magnificant male, from a 271 egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs $6 in 100 lots; sittings, $1.50, $3, $5. Mrs. H. V. Rominger, Underwood, Wn.

WHITE BUFF AND BLUE ORPINGTONS, single and rose comb Anconas, the great winter layers, winners at leading Coast shows; eggs $1.50 to $3.00 for 15; chicks 20c each. Ira N. DeLine, Box D, Olympia, Wash.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please $12—100. Free catalog. Freshlaid Farm, Colfax, Wash.

DAY-OLD WHITE LEGHORN CHICKS, from 2-year-old hens, $12 per 100; eggs for hatching, $1.50 per 15, $6 per 100; White Wyandotte eggs, $2 a setting. The Pudor Farms, Puyallup, Wash.

WHITE ROCKS—TRAP-NESTED FOR EGG production. Cockerels and pullets for sale. Eggs for hatching. Winners leading Coast shows. L. R. Kerns, Eugene, Ore.

S. C. WHITE LEGHORN AND S. C. RED eggs for hatching, $2.50 to $5 per 15; heavy-laying, exhibition strains. H. J. Fuller, N124 Lincoln st., Spokane.

S. C. PEERLESS BLUE ANDALUSIANS, eggs $2 setting; ckls. $2 to $5. Write for folder. Mrs. C. W. Armstrong, Freewater, Ore.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

BLACK-BREASTED RED GAMES, $10 A trio. N. W. Wernett, Mesa, Wash.

LIVE STOCK 177

FARMERS! HOGRAISERS! GIANT BIGtype Poland or Berkshires at 1-3 usual breeders' prices; top pigs, famous ped. inc., $12.50 ea. Free hog booklet. "The Bartwood Idea." Bartwood Farm, Hamilton, Mt.

12 HEAD OF VERY CHOICE REGISTERED red roan and white Jr. yearling Shorthorn bulls. Wm. Mulhall, Fenn, Ida.

HORSES and VEHICLES 183

IMPORTED STALLION FOR SALE, SURE foal getter. Write for particulars. S. J. Emery, Port Angeles, Wash.

FOR SALE—1 REGISTERED PERCHERON stallion, 6 years old. Marion E. Martin, Gist, Ore.

SHIRE STALLION, 3 YEARS OLD, ⅞ pure. Will sell cheap. David T. Orr, Ovid, Idaho.

GROCERIES 222

3 LBS. EXTRA FINE COFFEE, ROASTED fresh daily, by parcel post, for $1. Martin Marks Coffee Co., Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.
In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.
If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.
It will pay those who want good, acclimated seed to watch for offers under this classification.

TESTED SEEDS FOR FARM AND GARden—New 1917 seed catalogue now ready; valuable information gathered in 25 years' experience in the northwest. Write for quantity price on Grass, Clover and Alfalfa seed. For new catalogue address Aabling-Boyce Seed Co., Seattle, Wash.

ALFALFA SEED IN LOTS FROM ONE TO one hundred bushels at $8.50, f. o. b. Clements, Kan. Samples on request. H. H. Stephenson, Clements, Kan.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

CLOVER, VETCH AND TIMOTHY.
Quality guaranteed; priced so you can afford to buy. Samples on request. Rhoten Farms, Salem, Ore.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEEDS 620 Continued.

OREGON SEEDS,
VETCH OR "TARES,"
A Great Forage or Seed Crop.
RED CLOVER, ALSYKE,
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.
COMPLETE LINE OF FARM SEEDS.
We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.
CORVALLIS FLOURING MILLS,
Corvallis, Oregon,
Home of the Famous Oregon Agricultural College.

LIMITED SUPPLY FINE NORTHERN Okanogan valley grown yellow and white Dent seed corn. Yellow took first prize and White fourth for First district corn show in St. Paul. None shipped testing under. 90 per cent. Price 10c per lb., prepaid. L. F. Pourtales, Oroville, Wash.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, ORE.

160 ACRES; 6½ MILES FROM COUNTY seat, Vale, Ore., and one mile to station. A1, fenced. Two miles from oilfield; no improvements; clear. Price $8000; half cash, bal. time, 8 per cent.
M. L. PHELPHS, BOISE, IDAHO.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

A LIMITED NUMBER OF THE FAMOUS Yakima Goodell strawberry plants, $3 per 100, delivered free.
WILL HANKS, NACHES, WASH.

RED AND ALSYKE CLOVER AND VETCH seed; bright, high test; clean; dependable. Write us.
M. SENDERS & CO., ALBANY, ORE.

SEND US YOUR NAME
For Our New Seed Catalog.
SEATTLE SEED CO., SEATTLE.

NURSERY STOCK 621

HEAVY 2-YR. LONDON MARKET CURrant, $7 per hundred; strong Champion Gooseberry, $6 per hundred; well rooted 1-yr. Connover's Asparagus, by post prepaid, 90c per hundred. Orders less than 50 plants or bushes not taken. Remit with order.
Waldo Hills Seedling Nursery, Shaw, Ore.

PRUNE TREES; THOUSANDS; GRAFTED walnuts. Trees of all kinds. Buy direct and save 50 per cent. No agents. Our prices sell. Write for planters' catalog and price list. 26 years in business. Carlton Nursery Co., Carlton, Ore.

BARTLETT AND ANJOU PEARS R. ANN, Lambert, Duke, Mcrell cherries. Fine lot privet hedge plants, money-saving prices. Christopher Nurseries, Christopher, Wash.

FARM LANDS—FOR SALE 651

320 ACRES, LESS ABOUT 21 acres, taken by R. R.; one-quarter ready to sow to wheat; full possession to purchaser; the other quarter ready to sow to wheat, 1-3 the crop delivered, free of all charges, in warehouse (rented); land joining the town of Warden, on Milwaukee railway; small set of bldgs.; no well. A great bargain at $6000; $3000 cash; terms on balance.
ED G. BOWKER,
WARDEN, WASH.

LAND.
Montana grain and stock farms, in best parts of the state, for sale at very reasonable prices and on easy terms. Improved places in Judith Basin at $36 to $50 per acre. Good grain lands in Great Falls and Miles City districts, $15 to $25 per acre, on easy terms. We have for sale in half sections and larger farms about 10,000 acres in the famous Shields River calley at prices ranging from $15 to $50 per acre, on easy terms. Several fine stock farms. Have several good farms on which owners will take some trade. Send for Montana land list, free for asking. Hege & Watkins Co., 715-17 Paulsen bldg., Spokane, Wash.

BARGAINS IN FARM LAND.
Our business is loaning money on farm and city property. Occasionally we have properties for sale which have come into our possession on account of foreclosure of loans. These we offer at practically the net cost to us, which is far below their real value; a small payment down, the balance on easy terms, with low rates of interest. Send for list.
THE PENNSYLVANIA MORTGE. INV. CO.
BOX 6, SPOKANE, WASH.

320 GRAIN FARM, 8 MILES FROM HARTline; 160 acres in crop; 160 to be summer fallowed; well-built 6-room plastered house, with basement; barn room for 20 head of horses; 5000-bushel granary; 2 good implement houses, 20x32 each; garage, with concrete floor; family orchard; well; gas engine; 5000-gal. reservoir; water piped everywhere, including house; good neighborhood; no encumbrances; a bargain at $60 per acre. At least $4000 cash, balance 8 per cent.
LEO REINHART, HARTLINE, WASH.

FOR SALE BY OWNER—112 ACRES, IN Chehalis river valley; first-class dairy and poultry farm; close in. R. R. Young, Porter, Wash.

976-ACRE STOCK RANCH, $5000; TERMS. Write Pope, Butte, Ore.

FARM LANDS—FOR SALE 651 Continued.

STOCK AND GENERAL FARM.
1307 acres in Benton county, Oregon; 3 miles from Wellsdale and 10 from Corvallis; 350 acres cultivated; 50 in crop; 400 timber; land is on good wagon road and lies fine for all-around farm and stock ranch; 8-room dwelling; 2 barns; 3 sheds; buildings good; fair fences; wells, springs and creek; implements and plenty of good stock go with place. Price $55 per acre; about half cash; buyer to assume $23,000 mortgage at 5 per cent; interest due Oct. 1, 1917. It will pay you to investigate.
S. N. STEELE, 267½ OAK ST.,
PORTLAND, ORE.

GENERAL ALL AROUND FARM, 437 A., on Willamette river, 38 miles above Portland; 12 miles north of Salem; 300 a. in good state of cultivation, mostly river bottom; ten-room house, hot and cold water; 2 large barns; plenty other outbuildings; all fenced; soil well adapted to clover and potato growing; boat landing on place; 3 miles to railroad; centrally located in rich farming district; adjoining lands held at $125 to $200 per a. Price, for quick sale, to close an estate, $75 per a., half cash; 6 per cent on deferred payments. Jno. H. Gibson, agent, 912 C. of C. bldg., Portland, Ore.

MONTANA LANDS.
We have for sale on 10-year terms, at 6 per cent, 29,000 acres fine wheat land in Dawson and Rosebud counties, Montana, at from $8 to $22 per acre, and over 75,000 acres fine grazing and farm lands at from $4.50 to $650 per acre, on 10-year terms. A large number of our settlers are from Walla Walla and Palouse sections.
MONTANA WHOLESALE LAND CO.
MILES CITY, MONTANA.

ON PUGET SOUND.
Enjoy the salt sea air, the fine fishing, clams; 5-acre tracts for $425, on terms; every one fronting on the salt water; money is being made with poultry, grapes and early products; best markets in easy reach; 25c fare to nearby city; good pure water; plenty of fuel; suitable for summer homes; make reservations at once. CHARLES SOMERS, CO., Alaska bldg., Seattle.

160 ACRES WHEAT LAND, ALL TILLable; 80 acres cultivation; house, barn; all fenced and cross fenced; near state road, 1½ miles to railroad; handy to school; good soil; 18 miles from Spokane; $7500; terms.
40 acres Palouse land, all cultivation; black soil; electric station on place; good buildings; all fenced; $4500; terms. O. V. Manring Investment Co., Spokane, Wash.

IDEAL DAIRY FARM.
160 a. creek bottom; 1 mile from two stations; 100 miles S. of Portland, in Willamette valley; watered by river and two streams; 50 a. in cultivation, 90 a. good timber, 20 a. waste; lies level; good buildings; stock, tools and implements in. Price $8500. No trade. Godard & Weidrick, 243 Stark st., Portland, Ore.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 3nd and Cherry st., Seattle, Wash.

FARM LANDS—WANTED 654

WE ARE LOOKING FOR GOOD WHEAT land, or for diversified farming. If you have any for sale, send us the particulars.
ROGERS & ROGERS,
INCORPORATED
SPOKANE, WASH.

ACRE TRACTS—FOR SALE 669

CALIFORNIA LANDS.
2 miles from Corning, California, on concrete state highway, with electric, phone and mail service; I offer a choice 5-acre lot, all in bearing fruit trees, with alfalfa sown between trees; cottage, barn, chicken house, pumphouse, well, centrifugal pump and motor, all ready for business, for $1750; choice location and good neighborhood. Write for particulars. Traders don't write.
W. N. WOODSON, owner, CORNING, CAL.

WE OWN 3000 ACRES OF BENCH AND meadow land which we will close out on easy terms in 40-acre tracts or more at bargain prices, ranging from $10 per acre up.
FIRST STATE BANK,
MAHONEY & BAXTER,
BONNERS FERRY, IDAHO.

FOR SALE OR EXCHANGE 702

FOR SALE OR EXCHANGE.
A first-class dairy farm of 760 acres, located at Washougal, Wash.; 1 block from depot, 3 blocks to school; fronting 2200 on a main highway, and fronting on the Columbia river a distance of two miles; only 25 miles from Portland. This place is fully stocked and equipped. Can raise plenty hay, alfalfa, corn, oats, etc., and pasture enough for a large quantity of live stock. At present we have 178 head of stock. Price $125,000. Mortgage $25,000, at 7 per cent, due in four years. This place must be seen to be appreciated. It has fine barns, two good houses, city electric lights and water. In fact, 40 acres are suitable for subdivision into acre lots, which would sell from $400 to $500 per acre. Owner is city resident, and is not a farmer, and has other business to take his attention. He would, on that account, exchange it for income property or straight stock ranch in eastern Washington or Oregon.
L. GERLINGER,
506 GERLINGER BLDG.
PORTLAND, Ore.

TO EXCHANGE—REAL EST. 705

COMBINATION.
217 a., Idaho; 170 cultivated; about 110 in fall wheat; fenced. Price $8000. Mtge. $1000. To exchange for land in Whitman, Lincoln or Spokane county, and assume $5000, or will put in $3000 cash.
High-class, income-bearing 50-a. apple orchard to exchange for stock or wheat ranch or Spokane property. Price $25,000, clear.
Five houses, 2 fine lots, in Spokane, for land.
200 acres near Vale, Ore.; 30 a. in crop; 3-room house, barn, garage, 3 wells and windmill; fine range adjoining; 5 horses, 5 cattle, including 2 milch cows; 50 chickens; wagon, harness, plow, harrow. Want to exchange this for a good house and few acres, close to Spokane. Price, with stock, $4500; without stock, $3700.
All kinds of city property to exchange for land. If you have the land, write us at once.
J. MELVIN THOMAS & CO.
214 EXCHANGE BANK, SPOKANE.

NEWS FOR BREEDERS

D. Warnock & Sons of Loveland, Col., whose great young Shorthorn bull, Model Type, was grand champion at the Pacific International stock show at North Portland, received several letters of inquiry from northwest parties as a result of a news item printed in the Farmer.

During the Denver stock show, the third week in January, George C. McMullen, a commission man of Kansas City, purchased 24 carloads of cattle to fill an order for feeders from Junction City, Kan. He paid $52,000 for the consignment and the size of the order as well as the price paid do not indicate any decline in the live stock business.

The sale of the second prize carload of bulls at the Denver stock show, shown by L. G. Davis of Saratoga, Wyo., to the Tompkins Cattle company of Denver at $500 each, was almost as sensational as the sale of the George Chandler champion carload at $575. Those bulls were very smooth and true of type, but did not have the great bone and vigor shown by the Chandler bulls that so well fitted them for range breeding.

J. M. Fruitts of Enterprise, Ore., has been a Hampshire breeder for many years and a persistent and consistent showman and a winner in open competition. He says: The future of the hog business is sure greater than it has ever been before. As the high priced grain is bound to bring the hog market up in pork production as well as breeding purposes, the scrub hog will be cut out. The people can not afford to feed the high priced grain to scrubs. The market for the pure breds is good. People are waking up and are beginning to see they must get better stock to head their herds to keep in touch with the world, as the scrub hogs are a thing of the past. Every breeder of pure bred stock realizes that every year he must compete with other breeds and to do this requires better herd headers and improvement of his own herd.

F. A. Koser, Rickreall, Ore., breeder of Cotswold sheep, who won grand championship on ram one year at the National Sheep show and another year first on pen of 10 rams as well as notable winnings at the Chicago International stock show says: "Generally speaking, pure bred sales are contingent on the wool and mutton market. So far as pure bred sheep are concerned, Europe is depleted and must come to this country to replenish her supply. This means continued high prices for pure bred grade sheep, for mutton is higher than ever before and will continue high, adding to the demand for pure bred rams, a demand always good if mutton prices are good."

The sale of the carload of bull calves shown by the Hereford Corporation of Cheyenne, Wyo., at the Denver stock show, for $300 a head, was one of the best sales of the week, when the age of the animals is considered. They are a fine lot of calves and this corporation is turning off many of that kind. They have a ranch of 30,000 acres six miles from Cheyenne, on which for many years Henry Altman bred up a great herd of Herefords. Mr. Altman from time to time purchased the best bulls and cows money would buy, but insisted on raising the calves on their mother's milk and grass alone, and he points to this sale from this great herd as proof of the fact that the succulent buffalo grass of Wyoming still has the same qualities for producing growth and fat as when the buffalo and later the great herds of Texas cattle were trailed across the state. This company recently purchased the ranch and all of its euipment from Mr. Altman, including 1100 of as great breeding cows as can probably be found together in America. The ranch, six miles from Cheyenne, was a point of great interest during the meeting of the National Live Stock association at Cheyenne, and was visited by many. Luke Brite of Marfa, Tex., who bought the calves, will take them to his Texas ranch to use on his big purebred herd there. H. A.

A KIGER DUROC JERSEY.



The above picture shows Mr. Harvey, who handles F. M. Kiger's Duroc Jerseys at Walnut Grove farm, near Gresham, Ore. The animal standing beside him is one of the Kiger Duroc sows. Mr. Kiger has announced a large sale of his hogs of this breed at the farm for February 21, and it is reported to be attracting considerable interest among swine breeders.

MOHAIR INDUSTRY

Looks Good for United States.

U. S. Grant of Dallas, Ore., who was elected president of the National Mohair Growers' association at its annual meeting at Galveston, tells me that the most important business transacted was the incorporation of the association and the adoption of a new constitution and bylaws to conform to the incorporation laws of Texas.

Mr. Grant says that the mohair industry was never in a better condition in the United States. There are just three countries that raise mohair, Turkey, South Africa and the United States. At the present time not a pound of mohair can be gotten out of Turkey. There has been a two years' drouth in South Africa, which resulted in no kids being raised.

At one time mohair was used mostly for fancy articles of apparel, but now it is used for rugs, auto tops and even sweaters, which are said to shed rain for hours.

There was a time when western Oregon was one of the largest growing regions of mohair in the country, but after the boom of some years ago, when prices slumped and there was scarcely any sale for goats, many went out of the business and the production of Oregon mohair was decreased. Now, however, most of those growing Angoras are good, experienced breeders; they are making money and increasing their flocks.

The principal increase in flocks has been in Arizona, New Mexico and Texas, with considerable in the lower half of California. Texas alone now raises four and one-half million pounds of mohair annually. They shear twice a year down there and get a little more hair per head than in Oregon, but nowhere else do they get the luster of our western Oregon hair. On account of the sudden and extreme changes of climate it is impossible to carry hair over a year on the goat down there while up here the growing of "long" mohair is possible and quite a number of breeders carry one or more kids over every year and successfully raise long hair like that shown in the photo of Mr. Grant's young buck.

Asked as to the care of Angoras, Mr. Grant says shelter must be provided during winter and the goats must be housed at night and in bad weather. Feed some hay all the time and in bad weather feed a little oats. But the most important thing in raising Angoras is the care of the kids. His kids come in March and the doe needs about the same care as a ewe. Kids should have a regular weaning time. He weans in August and immediately puts the kids on green feed, rape, clover or even native grass will do if there is enough of it. He also feeds grain from the start and says to feed them plenty. The first year of a goat's life determines its size and vitality and Mr. Grant's goats are noted for their good size. A goat is a good rustler; it will eat browse, berry bushes and some weeds, but the man who starves his young goats to this kind of diet makes a great mistake.

Mr. Grant says that not only will mohair goods absolutely turn water, but a mohair blanket will not gall a horse's back and is the only material so far known of which this can be said. Mr. Grant had the opportunity to bring these facts to the attention of a high army officer, who has brought it to the attention of the U. S. government. This officer favors the making of tents and even uniforms, as well as saddle blankets of mohair.

Mulefoot Hogs.

Last year T. W. Everall, near Toppenish, Wash., conducted some experiments by crossing pure bred Mulefoot sows on a pure bred Poland China boar. The result was a hog of very fine feeding quality. He advises not to go beyond the first cross and to use nothing but pure bred dams and sire. It is claimed the Mulefoot hog is immune from cholera. Mr. Everall expects to conduct some experiments along that line during the present year and find out for himself whether the claim is true or fake.

Lewis County Cow.

A graded Jersey cow, owned by Lloyd Owen of Centralia, Lewis county, Wash., made the best record in 1916 of any cow owned in the Lewis County Cow Testing association, according to a statement by W. T. Myer, official tester of the association. In 305 days the cow gave 9281 pounds of milk, which showed 454.46 pounds of butter fat. The profit on the cow for the year was $96.58.

Registered Herefords.

Two registered purebred Hereford bulls have been added this week to the stock of high-grade cattle in the Kittitas valley of Washington. B. F. White, Woldale rancher, has just made the purchase of the bulls at Mabton.

SHORTHORN SALES.

Frank Brown of Carlton, Ore., one of the foremost breeders of Shorthorn cattle in the northwest, and who judged the Shorthorn classes at the western international livestock show at Denver, is now actively engaged in arranging for the Shorthorn sale which will be held in Spokane on April 5, at which time there will be about 50 bulls and 25 females offered by breeders of purebred Shorthorns in the northwest. All of the individuals offered at this sale will be registered purebreds. The sale will be conducted by Colonel N. G. Kraschel, who has acquired prominence in Shorthorn sales held during recent years in the middle west.

Mr. Brown has commissioned F. M. Rothrock of Spokane, one of the proprietors of the Hercules stock farm, to arrange details in connection with this sale, and requests that all those interested in securing catalogues correspond with Mr. Rothrock at Spokane, who will supply their wants.

Mr. Brown will also conduct a Shorthorn sale at Portland April 3.

BUY HEREFORD BULLS.

Just and Reid of Presto, Idaho, who have for years been breeders of pure bred Herefords, have just bought of E. M. Kennedy two fine highbred Hereford bulls. One is Beau Donald 74th. The other bull is a son of Beau Mystic, the biggest bull that has won the grand championship at the international show, when he weighed 2800 pounds.

DIRECTORY OF BREEDERS.

Breeders of pure-bred live stock in Washington, who have not already done so will help on a most valuable work by sending their names and addresses to William Hislop, animal husbandry department, Pullman, Wash., as the state college has undertaken and has almost completed a directory of breeders of purebred live stock in Washington.

BUYS BELGIAN STALLION.

John H. Belcher of Oakley, Idaho, has purchased the Blue Boy Brilliant Belgian stallion, 5 years old in July, of A. C. Ruby & Co., of Portland, Ore., for the price of $2100.

WORK THE STALLION

Is Advice of Live Stock Expert.

Dr. S. B. Nelson of the department of veterinary science at the state college at Pullman, is an ardent advocate of making the stallion, regardless of how big or valuable he may be, work like the other horses on the farm during the non-breeding season.

Dr. Nelson declares that he is confident hard work from the age at which a gelding would be put into the teams would make the stallion a sturdier animal and enable him to inject a vitality into his offspring that they otherwise could not receive. He says it is a great mistake to allow him to develop into a great mass of soft fat with muscles and bone and nervous system undeveloped. Apply to the boy the rule that the average horse breeder applies to the horse and you develop a weakly, unhealthy man, says Dr. Nelson. He cites instances of where horses that have been subjected to this pampered life have been brought into the veterinary stables and found incapable of enduring the violence that is necessary in handling them for treatment. The bone of such animal is improperly developed—large enough but improperly knit—he says.

He says that in some countries it is quite customary to work the breeding stock in regular farm teams, citing Italy for an example. If no other way is available, if the horse is hard to manage in a team, he recommends that a tread mill be constructed and the stallion allowed to pump the water, milk the cows, churn the butter, operate the washing machine or run the electric generator for the storing up of electricity.

HORSES

Purebred Stallions

We have for sale a few 1-year-olds, 2 this spring, Shire stallions, our own breeding; also a 5-year-old and an 8-year-old Shire stallion, both brown; a 3-year, a 7-year-old and 1 aged Percheron stallion, all black; one 2-year-old Brown Clyde stallion, bred by Canadian government. We sell at the barns only, and tell you all we know about each and every horse, guaranteeing them to be as represented or refund your money.

Our horses won all firsts and champions at Spokane Interstate Fair, N. W. Live Stock Show, Lewiston, Ida., and Pacific International, Portland, Ore., last year. If you need a horse, or want to exchange, write us or come and see before buying. It will pay you.

G. M. WILSON, WILBUR, WASH.

CLYDESDALE STALLION

FOR SALE—Highland Gallant, No. 18027, bay, weight 1800 pounds; stands 17 hands high; foaled April 20, 1913; sire Imp. Scarlet Pimpernel No. 15375; dam, Imp. Marietta, No. 16298, a sure foal getter.

O. I. TRICE, Grandview, Wash.

HAMPSHIRE SWINE

HAMPSHIRE SWINE

Won first on boar 1 year and under 18 months. Won first on young boar and sweepstakes on same at southern Idaho fair, 1916. Young stock for sale. Fairview Stock Farm.

ANTON MACHACEK. R. 1, Buhl, Idaho.

HAMPSHIRE SWINE.

Choice stock of all ages at bargain prices.
HIGHLAND FARM, Box 22, Underwood, Wn.

HEREFORD CATTLE

BULL RANCH.

Registered Hereford cattle.

CHAS. BULL, Prop. Mabton, Wn.

In answering advertisements don't fail to mention this paper.

SALES

BRED SOW SALE

Wednesday, Feb. 21

35 DUROC JERSEY sows, bred to farrow soon after March 1. These sows are from Grand Champion stock and will be sold to the highest bidder.

Sale to begin promptly at 1 o'clock at WALNUT GROVE FARM, near the Twelve-Mile house on the Base-Line road, 12 miles east of Portland, one mile north of Gresham and one mile south of Fairview. Can be reached by steam, O.-W. R. & N. R. R. to Fairview; also electric lines and Gresham jitneys leaving First and Alder sts., Portland. Free lunch at 12:30. Write for catalogue.

F. M. KIGER
Office 132 E. 6th St.
PORTLAND, ORE.

J. W. HUGHES
Forest Grove
Auctioneer

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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. FEBRUARY 22, 1917. NO. 8.

Four Guilty in Trading Co. Case

Smith, Knudson, Fowler and Davies Are Convicted; Lawrence Is Acquitted

Gale Smith—One year in the city jail and $10,000 fine.

S. T. Knudson—One year in the city jail and $7500 fine.

C. L. Davies—Nine months in the city jail and $5000 fine.

O. C. Fowler—Three months in the city jail and $750 fine.

These were the sentences meted out by Federal Judge Van Fleet to the four men convicted of conspiracy to defraud the public through the use of the mails in operating the Northwestern General Trading company and its allied branches.

Appeal bonds were fixed as follows: Smith, $20,000; Knudson, $10,000; Davies, $7500; Fowler, $2500.

Attorney F. C. Robertson was given 60 days in which to perfect a bill of exceptions as a basis for perfecting an appeal of the sentence to the United States circuit court of appeals.

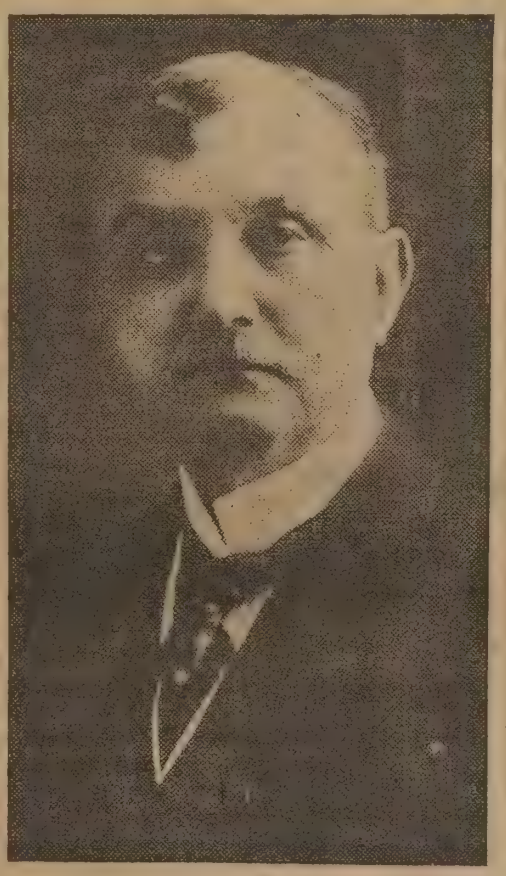
Sentence was passed after Judge Van Fleet had denied a motion of the defendants' attorney for a new trial.

Judge Van Fleet declared that consideration for the defendants' wives and families prompted him to spare them the ignominy of a felon's stripes and a term in the federal penitentiary.

"I always hesitate to make a felon of a man who never has been convicted of a felony," he declared. "I have made up my mind that I will not subject the wives and little children who may be dependent upon the defendants to the disgrace of a sentence in the penitentiary."

By its verdict the jury holds that the trading companies named in the indictment, the Northwestern General Trading company of Spokane, the Olympic Trading and Supply company of Seattle, the Portland branch of the Northwestern company and the Iowa Mercantile company of Cedar Rapids, Iowa, were operated as a part of a conspiracy to defraud the public.

Judge W. H. Van Fleet



—Photo by Shively & Ihrig, San Francisco.

Judge Van Fleet's instructions to the jury in the Northwest General Trading company case made exceedingly clear the nature of conspiracy in swindling methods. These instructions will be given in next week's issue of the Farmer.

Gale Smith was president and general manager of the Northwestern. Knudson was president and general manager of the Olympic. Davies was treasurer of the Northwestern and manager of its Portland branch, and Fowler was secretary treasurer of the Olympic.

Gale Smith had been a newspapeman at Washtuena and Ritzville, Wash., before coming to Spokane 10 years ago. He followed mining before launching the Northwestern, being a brother-in-law of Conrad Wolfle, the well known mining man.

S. T. Knudson was originally a farmer's son near Genesee, Idaho, and later a storekeeper at Greenacres, Wash., before he entered the employ of the Northwestern as stock salesman in 1909. In 1913 he went to Seattle and took charge of the stock sales for the Olympic.

C. L. Davies was born near Waverly and at 23 was farming 1000 acres of leased land. His folks were well-to-do and Davies had financial backing. He became interested in the Northwestern in October, 1909, when elected director, and went to Portland in 1914 to take charge of the branch store there.

O. C. Fowler is an advertising and catalogue specialist, who has been employed at Spokane, Portland and Seattle for six or seven years. In 1913 with some Seattle friends he aided in the incorporation of the Olympic Trading company, which operated on a very small scale until S. T. Knudson came.

(Continued on page twenty.)

THIS WEEK

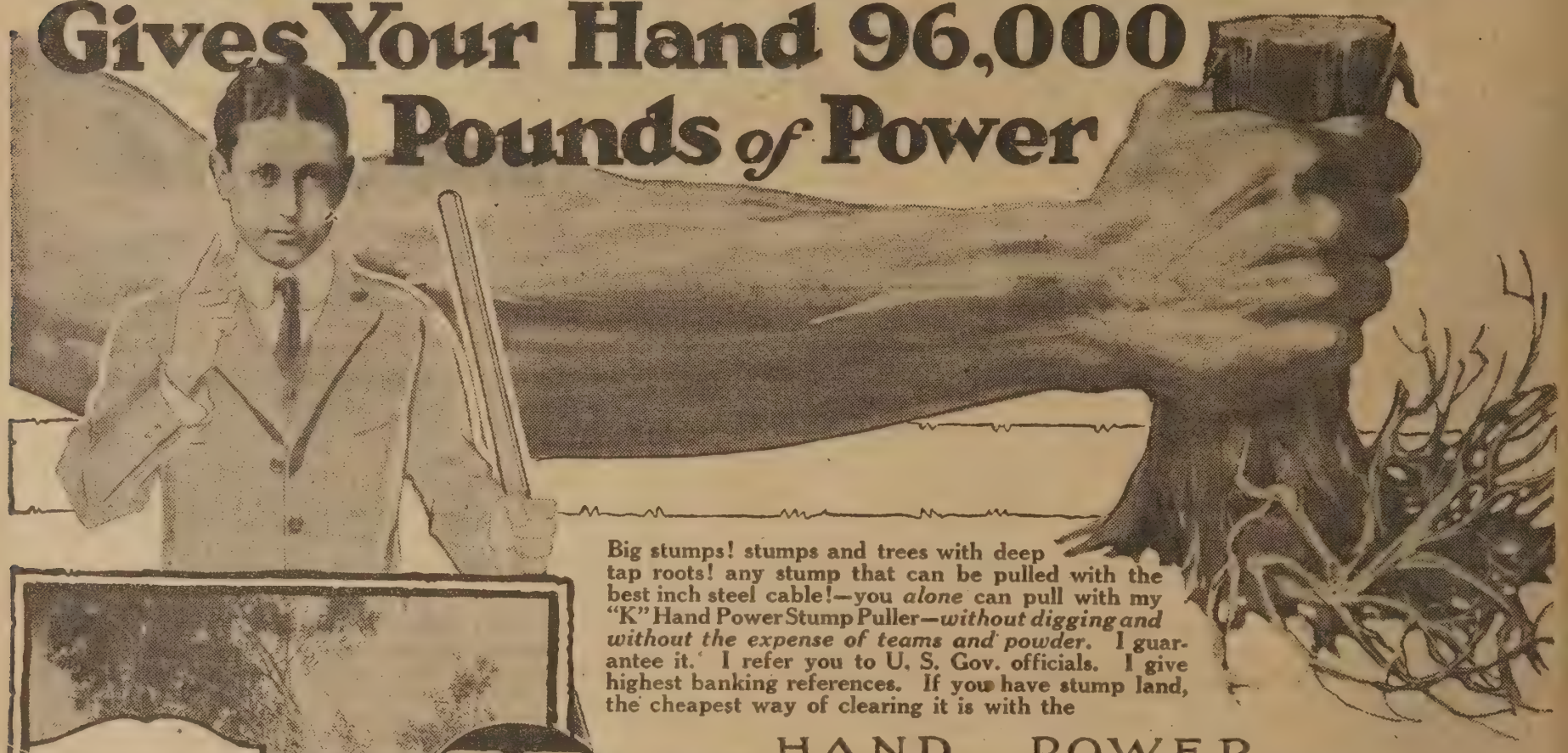
Is Bulk Grain Handling in the Northwest Inevitable? Many Say Yes; Some Say No. See Page 19.

Portland Stock Yards President Thinks $21,500 Calf Sale Bona Fide.—See Page 5.

The Same Pests Destroy the Farm Orchard That Destroy the Commercial Orchard. The Coming Issue of the Farmer Tells in Detail How and When and With What to Spray to Kill These Pests.

NEXT WEEK

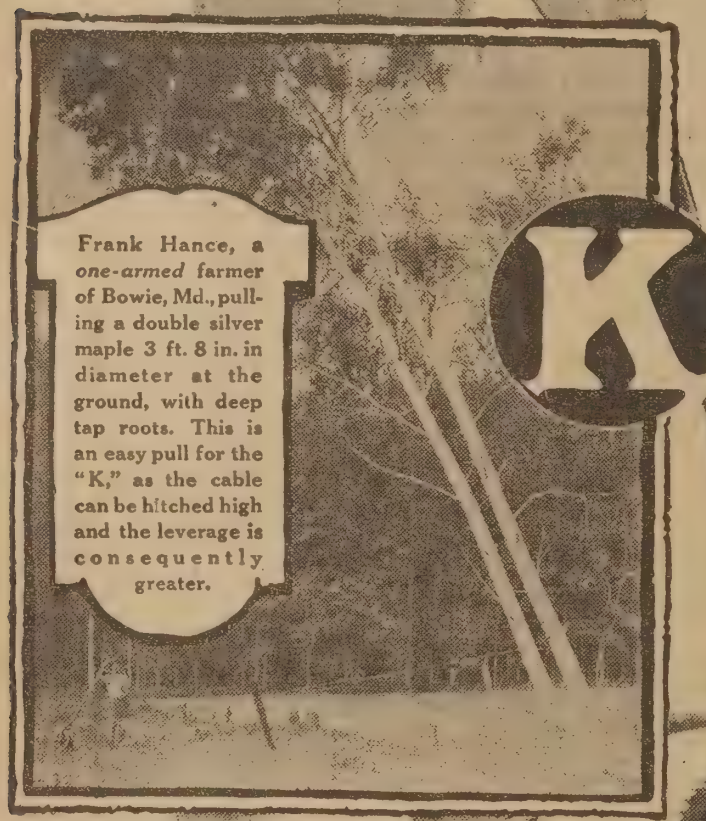
My K Hand Stump Puller Gives Your Hand 96,000 Pounds of Power



Big stumps! stumps and trees with deep tap roots! any stump that can be pulled with the best inch steel cable!—you *alone* can pull with my "K" Hand Power Stump Puller—*without digging and without the expense of teams and powder.* I guarantee it. I refer you to U. S. Gov. officials. I give highest banking references. If you have stump land, the cheapest way of clearing it is with the

HAND POWER

K Stump Puller



Frank Hance, a *one-armed* farmer of Bowie, Md., pulling a double silver maple 3 ft. 8 in. in diameter at the ground, with deep tap roots. This is an easy pull for the "K," as the cable can be hitched high and the leverage is consequently greater.

How the "K" Pulls Biggest Stumps

The "K" works on the leverage principle of the ordinary lifting jack, except that the power is applied on a cog-wheel instead of a standard. 100 lbs. push on the lever develops a 48-ton pull on the stump—all an inch steel cable will hold. One man operates it alone—no teams to pay for—no walking.

A Mechanical Wonder

Made of the very best steel—guaranteed against breakage. Weighs only 171 lbs.—easily carried or hauled about on its own truck wheels. Has two speeds—60 feet per minute for hauling in cable or for small stumps—slow speed for heavy pulls. *Works equally well on hillsides and marshes where horses can not go.*

Owners Praise It

H. Sinclair of the Dept. of the Interior, a U. S. Gov. official, writes "The stump puller is a wonder."

Ernest Thompson Seton, author and naturalist, declares the "K" "a great success."

Hundreds of owners write in, telling of pulling six- and seven-foot stumps, of pulling faster and pulling bigger stumps than by any other machine.

Special Offer I am making a special offer to get a "K" Stump Puller introduced in every neighborhood. Write me today for full information and for free book on Land Clearing.

Walter J. Fitzpatrick
Box 99 182 Fifth St. San Francisco, Cal.



H. G. Hunzicker of Foster, Wash., pulling a 24-inch fir stump with deep tap roots out of hard ground, without using powder or cutting any roots.

Tear Out and Mail Today

Walter J. Fitzpatrick
Box 99 182 Fifth St., San Francisco, Cal.

Send me full particulars on your special offer and your free booklet on Land Clearing.

Name_____

Address_____

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 8 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF February 22, 1917

Live Stock Men in Convention

Consideration of Special Stock Train East Next Fall May Be Taken Up

For some time the agricultural committee of the Spokane Chamber of Commerce has been considering the proposition of a northwest live stock special train of show animals to be sent to the middle west and eastern fairs this year. The Farmer sent out inquiries as to how stockmen regarded this and has received a number of representative replies. These replies were almost uniformly in favor of the project. Some of the leading stockmen have expressed themselves doubtful of its advisability, but declined to be quoted, largely for the reason that they did not wish to put themselves in the position of doing anything that would seem to depreciate the quality of stock that could be raised in the northwest. It was merely a matter as to whether the time was ripe for such a special.

The northwest live stock convention, which begins a two days' session in Spokane today, February 22, will doubtless dispose of this matter.

Outside of local speakers on the program are to be included Dr. J. Madsen, bureau of animal husbandry, U. S. department of agriculture; E. M. Ammons, president of the Denver Live Stock show, and Professor Thomas Shaw of St. Paul.

What some stockmen think:

B. T. Burns of Latah county, Idaho, a man of wide experience in farming as well as in business matters and a persistent advocate of better stock in the Palouse country for many years, writes that he is convinced that a special live stock train would be a great factor in educating people of the middle west and eastern states with reference to what "we can and are doing in this part of the great west. A special train load can be selected that we would have cause to be proud of and the benefits to be derived from such an advertisement would be hard to determine."

Herbert Willard of Yamhill county, Ore., breeder of Poland Chinas, believes that the Pacific northwest has a great advantage in climate as compared to most eastern and middle west states as a live stock producing section, but the marketing of live stock remains the big question. Mr. Willard has raised hogs in Iowa and in Minnesota, but much prefers Oregon for this industry and does not think that there is a great difference in the cost of raising live stock between this section and in the east.

Roy G. Adams, formerly county agriculturist of Adams county, Wash., now farming in Spokane county, writes that there is no question that the Pacific northwest is a natural stock producing section and should surpass the middle west in a very few years. "The proposed live stock special should prove a great stimulus to the growing of better stock here and also show the corn states that good stock can be grown on alfalfa, field peas and wheat."

W. N. Birch, county agriculturist of Twin Falls county, Idaho: "I think the Buhl Cow Testing association gives the indication of what we may expect in the line of dairy products. This association made an average of over 8000 pounds of milk and 300 pounds of butter fat per cow during the first year's work. We are not yet certain, but if any association in the United States has equaled this record there is only one." Mr. Birch add: "I think that the Pacific northwest live stock special is a grand idea."

Curtis J. Miller, breeder of registered Hereford cattle of Lewis county, Idaho, believes that the "Pacific northwest stock special would do more good for the northwest than any proposed action of the past in regard to convincing the east and middle west that we do grow live stock that would compare favorable with the best grown in those sections. This will bring more farmers west in my opinion than could be interested in any other way."

Julius Fisk, Spokane county, Wash., believes that a properly gotten-up live stock special "will be of great interest to those of us who are doing something in the line of producing good stock and it will be hooted at by many of those who think that this country will continue yielding large crops of wheat from the fertility still in the soil."

R. W. Hogg, Marion county, Ore., who specializes in Poland China swine, says: "The breeders of the northwest have always been heard from in competition with the eastern breeders. It would be useless for a western breeder of medium type Polands, and I believe they are the kind for the northwest, to go to the east to exhibit, where all of the breeders are breeding the big types."

William Hanley, Burns, Ore., every one knows Bill Hanley: "In my judgment it would be a fine idea to run a live stock special train east, as exhibiting and advertising are always good, but the great success would be developing by financing. We have our big Harney valley basin yet untouched and the idea of developing through water supply not yet out of the litigating stage."

H. R. Boomer, the well known stock breeder of Canyon county, Idaho, says the live stock special "would no doubt be good advertising for the west if some of the best stock can be secured," adding: "we have good corn substitutes, I believe grass and small grains more than offset the corn fertility."

R. R. Graves, professor of dairy husbandry, Oregon agricultural college, says: "I believe that a train load of northwest live stock on a middle west show circuit would be a splendid advertisement for the northwest. A big Pacific Northwest Interstate show would serve to attract the attention of the dairymen and breeders to the northwest."

W. F. Howard of Canyon county, Idaho, and vice president of the American Poland China Record, heartily approves of the live stock special and says that if he has "anything in the line of purebred stock that is good enough to go he will gladly put it in with the bunch."

E. E. Flood, Spokane county: "It is true that as yet we are not in competition with the eastern purebred breeders, but it will not be long until the east must necessarily look to the west for their purebred sires."

J. R. Lichty, Bonneville county, Idaho, says that though stock raising in this section is in its infancy, it is already past the stage of experimenting. He believes that united effort will make the live stock special a success.

W. J. Jordan of Lewiston, Idaho, who has been a great factor in the success of the Northwest Live Stock show, says of the proposed live stock special that: "I believe that it is a splendid idea and one that deserves a great deal of consideration."

C. Wesley Brown, Gray's Harbor county, Wash., whose specialty is standard bred horses, is a little doubtful of the advisability of the live stock special, as the live stock industry is still in its infancy. He believes that "strife and time will develop it."

Dwight A. Smith of Lemhi county, Idaho, who has a herd of milking Shorthorns, says with regard to the live stock special: "There is nothing we could do that would inspire the interest that sight of the animals grown here would cause."

J. B. Peterson, Skagit county, Wash., believes the live stock special would advertise the northwest as one of the principal breeding sections of the United States.

Victor d'Hondt, Spangle, Wash., breeder of goats, believes the northwest live stock special would be one of the best ways to advertise the Pacific northwest.

L. J. Campbell, Stubblefield Home, Walla Walla, Wash., would include in the live stock special all grains and forage crops used to fit the animals.

F. A. Philips, Baker county, Ore., believes the idea a good one, but he doesn't think he could have anything ready to go east in 1917.

V. Van Houton, Whatcom county, Wash., sees in the live stock special one of the "biggest advertising propositions for this section."

L. D. Johnson of Whitman county, Wash., still thinks the east has an advantage in raising stock, as corn is the cheapest feed.

F. R. Steel, prominent Josephine county breeder in Oregon: "I approve heartily the plan of sending the live stock special."

T. M. Meikle, Cowlitz county, Wash., says he is not in favor of the live stock special proposition.

G. E. Steward of Adams county, Idaho, says: We can show good stock without corn that is king in the east."

C. M. Stevenson, Jefferson county, Idaho, is heartily in favor of the live stock special.

Grain Standards.

Some time between now and the harvest season of 1917 the U. S. department of agriculture will announce a complete standard of grades for grain as provided under the recently adopted federal grain standardization act. This announcement likely will be made within a month or six weeks, as the law requires that the standard must be announced 90 days before becoming effective, and the department is confident that it will be ready to govern the 1917 crop of northwest wheat.

Led by Charles J. Brand, chief of the office of markets and rural organizations, federal officials are now nearing the completion of a long series of hearings in the grain-growing districts.

Next week's issue of the Farmer will contain an article outlining the work of these officials, the probable provisions of the new standard and the basis upon which it is founded.

Dairy Meet

Of Inland Empire Producers

A group of producers representing nearly every section tributary to Spokane met February 10 at the Spokane Chamber of Commerce and organized the Inland Empire Dairy Producers' association. H. S. Findley of Cheney was elected president and B. E. Smead of Opportunity, secretary-treasurer. The few men who met are in earnest and have issued a call for a meeting to be held in the Spokane Chamber of Commerce at 10 a. m., February 24, 1917, at which time constitution and bylaws will be adopted. It is expected that one of the principal subjects discussed will be that of individual testing of milk for butter fat by dairymen themselves as well as the proposition of organizing a cow testing association. Cooperative buying of supplies and selling of products come up although this is deemed to be a subject that will require much consideration. The committee in charge has sent out a letter to every producer of dairy products throughout the Inland Empire whose name they could learn.

For Bulk Grain.

The Farmers' Elevator company of Mansfield, Douglas county, will build another elevator for bulk grain.

Some of Washington's Maxims.

Let your heart feel for the afflictions and distresses of every one.

It is a maxim with me not to ask what, under similar circumstances, I would not grant.

Be courteous to all, but intimate with few; and let those be well tried before you give them your confidence.

I shall never attempt to palliate my own foibles by exposing the error of another.

I never wish to promise more than I have a moral certainty of performing.

Every action in company ought to be with some sign of respect to those present.

Be not hasty to believe flying reports to the disparagement of any.

Labor to keep alive in your breast that little spark of celestial fire—conscience.

Associate yourself with men of good quality, if you esteem your reputation; for it is better to be alone than in bad company.

Sleep not when others speak; sit not when others stand; speak not when you should hold your peace; jog not the table or desk on which another reads or writes; lean not on any one.

Grade or Average Cow Best?

Dairymen Debate Question of Which Is Most Profitable to Owner

We present our readers this week an unusually interesting debate between two experienced dairymen. The question could be stated in this form: "Resolved, that there is a place in the dairy for the average cow, as well as for the high-grader." D. W. Ainey of Payette, Idaho, appears for the affirmative; A. A. Stauffacher of Buhl, Idaho, for the negative. Both reason well, and both are just a little caustic in their remarks, but that helps to spice the controversy. Mr. Ainey writes:

To the Editor of the Farmer: I would like to take one more little "slant" at the dairy business. I hope not many understood me to be advocating the superior virtues of the "scrub" cow. I wish we had all high-class dairy cows, cows that would produce more than 300 pounds of butter fat per year, but we have not; so what is to be done about it? We have not near enough cows to supply the needs of the race for dairy products and not even enough to answer for breeding purposes. Therefore, as unsatisfactory as the scrub cow may be, we are bound to make use of her both for breeding and producing milk.

Protest Is Entered.

It is idle to talk of killing them off and replacing them with the 300-pound variety, at least until we have established commercial relations with some other planet. I, therefore, protest against the contemptuous references to the 'common" man who has only "common" cows, that are found in the writings of those who assume to teach.

It doesn't help matters to tell the dairyman what he ought to have unless you can suggest a practical way for him to get it, and it is most unkind and unjust to denounce him as a dolt for not having something—he can not get. I think it is rather to his credit that he is able to make so much with his poor stock. As before stated, I know of some dairies of very ordinary cows that are paying a profit. I also know of some dairies of very superior cows that are not. I do not mean by that that the poor cow is better than the good one. The good cow is to be preferred all the time. It is very desirable that all the poor cows be supplanted by good ones. I believe that is orthodox. We are all agreed on that. The problem, then, is how can the exchange be effected.

Where Teachers Fall Down.

Our teachers tell us to get rid of the low producers and put in their places cows of high production. There is where our teachers fall down. If I sell my poor cows to a dealer he will take them over and sell them to some other dairyman at a big price on the reputation of my herd, and then gather up a bunch of old skates and sell them to me on an iron-clad guarantee that "they are well marked." What has the dairy industry gained by the transaction?

Then our astute teachers tell us we must clear the decks by butchering all the poor cows. Well, we should then be in the position of the woman of the fable who killed the hen that laid the golden egg.

Of course, some one will say, "Now, Smarty, how would you do it?" I am frank to say that although I have been in the game for more than 40 years, I do not know. There is a way and it is by the way of breeding, which is a slow way and subject to many backsets. I believe there is no other way, so my advice is to keep hammering along the right way even though progress is rather slow. Nature furnishes but few short cuts to the summit. We can slide down, but we have to toil up.

Breed Scientifically.

Fellow dairymen, am I right about this? If I am let us employ our energies in the solution of the problem rather than in descanting an Utopan conditons, or anathematizing each other for not performing the impossible. Let some one who understands the principle of breeding tell us how to bring our herds up to a higher standard in the most practical way.

How about cross breeding? One of my neighbors has a Jersey cow that gives very rich milk, but only a small quantity of it. He tells me he is going to cross her with the Holsten. Will he succeed? Is that a practical way to improve the dairy cow? What are the chief difficulties in breeding up a herd of dairy cows and how may they be overcome? There are many things I would like to know, and when I inquire among my neghbors I find them as much in the dark as I am.

Stick to the Business.

To the question, is it best to stick to the business, I say "yes," in fact, we must stick to it. The people must be fed. The farmer's lot is a hard one, but his calling is a necessity. From every source comes the cry to the farmer to produce greater crops of greater excellence. I have, in my life, witnessed wonderful strides in this direction. The farmer is a marvel in resourcefulness, and yet he has hardly been able to keep up with the demands made upon him.

Now, just a word in response to Mr. Boomer. I am in full accord with Mr. Boomer in nearly all he had to say. A good cow is always to be preferred to a poor one. What I tried to do was to refute the theory of butchering dairy cows that fall below 300-pound production. I ventured the statement that to follow the advice of some advocates of the wholesale butchery of dairy cows would reduce an already inadequate supply of food products 75 per cent. No one has disputed the statement, but Mr. Boomer intimated that from a business standpoint that would be a good thing for the fellows in his class. I admit it.

Wholesale Murder.

In discussing the threatened strike of railroad trainmen, some men prominent in the life of this country characterized it as a conspiracy to commit wholesale murder, because to stop the trains carrying milk into the cities would result in the death of thousands upon thousands of children. What, then, may be said of the conspiracy to destroy the source of this indispensible food supply? It is not so easy to separate the dairy business from philanthropy. Surely Mr. Boomer was thinking more of his rights than of his responsibility, and I am in some doubt about the dairy men, in whom the ownership of the cows happen to be lodged, having even a right to slaughter their cows.

I also stated that some dairies of excellent cows under the supervision of very capable men are not paying. I cited Mr. Boomer's dairy as one of them. I make no charge of mismanagement. I credit him with top-notcher cows and the best of management and he confesses failure. Over against that, I place the ordinary man with the ordinary cow, making a profit out of the business. I don't do that to humiliate Mr. Boomer, but it ought to suggest the impracticability of the demand of the men of the Boomer class that the common man kill his common cows. Suppose the common men demand that Mr. Boomer turn his unprofitable cows over to the butcher.

Business Not Paying.

But all this is idle. Every practical observer is aware that the dairy, as a whole, is not a paying business. A few men under especially favorable conditions are making a small profit, but as a whole the business is not a paying one. I fully believe that the movement for better cows is in the right direction, but better cows, alone, will not put the business on a paying basis. The market for the product will continue in the future, as it has in the past, to be the controlling element.

In my experience I have sold butter between the extremes of 60 cents and 7 cents a pound. When production increases the price decreases. What, then, is the incentive to increase production? A short crop frequently makes the farmer a greater profit than the big crop. D. W. AINEY.

Payette, Idaho.

THE OTHER SIDE

Mr. Stauffacher, who is a breeder of Holstein-Friesian cattle, writes:

To the Editor of the Farmer: We suppose the letter published in your issue of January 4 and under the caption: "Takes a Squint at Dairy Problem," was given space not because of any facts or helpful ideas it contained, but rather to get some dairyman or breeder of dairy stock who is really interested in the development of the industry and who has made a study of its principles to take exception to the wild statements and show why such senseless ideas should have perished along with the last "Hay-Seed."

Certainly no one would expect to be taken seriously when he says, first, "That he has had about 45 years' experience in the dairy business" and then follows that statement by offering to wager the extravagant amount of a whole quart of buttermilk to back up his statement, "That there is more clear profit made on dairy cows that produce 180 pounds of butterfat or less (a year) than there is on cows that produce more than that."

But the real joke is sprung when he reveals his great secret of how he gets this "something from nothing." He "turns this common cow—but here we must take exception, and insist that she would be a most uncommon cow—loose in the morning along the highways and byways to gather up waste and come home at night bringing four gallons of milk and one and a half pounds of butter, worth about six bits." What a shame it is that we find herd laws on the statute books of the state forbidding us from following this precept and reaping this "six bits" from nothing. Your experienced dairyman does not inform us whether or not he milks this cow in the morning. If she did as well in the morning as she did at night she would have produced twice "six bits," or "twelve bits" a day, and that from "practically nothing."

Now, if this cow can keep this up for an average of nine months in the year she will have produced 8640 pounds of milk and 405 ponnds of butter, valued at $202.50, if she is milked but once a day, but if the gentleman thought he could afford to milk her in the morning and she gave as much as she did at night this amount would, of course, be doubled, and she would have produced 17,280 pounds of milk and 810 pounds of butter, valued at $405, for one year's production from "practically nothing." And with a herd of 20 such cows a man would have the nice income of $8100 annually from "practically nothing." Fine business.

Now, it is evident that this is not the cow on which this gentleman has offered to wager the quart of buttermilk, for she certainly would not come in the 180-pound class. And he was reckless enough to wager that the cow that produced but 180 pounds of butter fat would make more real profit than this one, for she certainly would have produced over 300 pounds.

We can not say that we have had 45 years' experience in the dairy business, but we have been connected with and interested in the dairy and

(Continued on page eleven.)

The Ups and Downs of a Bunchgrass Boy

Vital, Throbbing Days of Youth in the Big Bend Country of Eastern Washington; Your Playgrounds as Many Miles as Your Pony Could Carry You Over in a Day; Your Playmates the Wild, Four-Footed and Feathered Things of the Range.

The part which our older pioneers played in taming the wilderness has been often told, yet in the columns of The Farmer will be told for the first time the story of this supremely important phase of our life in the new northwest from the standpoint of a boy—a wholesome, normal, every-day sort of boy—whose best friends during the long years of pioneer boyhood were his dog and cayuse.

You who think you know what it is to battle with the unsmiling forces of adversity, read what the men and women and boys and girls, now just slipping over the horizon of the past, have paid to help make this state of Washington what it is today.

Do not miss the first chapter of "The Ups and Downs of a Bunchgrass Boy" in the Farmer of March 8, by Joe L. Ashlock, who recounts his own early years in the Big Bend country of central Washington.

Washington Portraits No. 3.



George E. Sellick.

"The old idea that 'any man can be a farmer' is due for a revision," writes George Sellick of Kennewick. "Eight years of intimate acquaintance with farm problems proves to my satisfaction that modern farming is the biggest business in the world." Mr. Sellick, one of the representative farmers of Benton county, began irrigation farming in the autumn of 1908 without any previous farming experience, and today has a profitable live stock farm.

An interesting account of Mr. Sellick's farm experiences is given in another part of this issue.

The next in the series of Washington portraits will be that of J. E. Buckingham of South Bend, and will be given in next week's issue of The Washington Farmer.

Aeroplane Decorations.

Belgian war aeroplanes are sometimes decorated with Brownies or other grotesque figures.

Washington "Bone Dry"

Bill Passed and Signed, Becomes Law in June

Ninety days after the present session of the legislature closes, the state of Washington will become "bone dry." The absolute prohibition bill introduced several weeks ago by Representative Halsey of Asotin county, sponsored by the anti-saloon league, was passed by the lower house some time ago, later passed by the senate, and has now been given the official signature of Governor Ernest Lister.

The measure did not bear an emergency clause, nor was the referendum attached to it, as had been frequently predicted. Therefore, it becomes a law in accordance with the constitutional provision making measures effective 90 days after the close of the session.

Under the terms of the act, it is unlawful for intoxicating liquor to be manufactured in the state, brought into the state, sold, drunk or had in the possession of an individual. The adoption by Washington of the bill makes all three states of the northwest—Idaho, Oregon and Washington—"bone dry."

Ten Days Left.

There are 10 days of the present session of the legislature left. This means that from now on bills will be considered rapidly and in many cases without full consideration. Some will be killed for lack of time to consider them, while others will be passed without complete consideration of their merits.

Emergency Clauses.

Last session the most bitter fight of the session between the governor and the legislature was brought about by the legislature's placing emergency clauses on measures with a view to preventing a possible referendum being started against hem. Governor Lister vetoed many of these emergency provisions. He has begun the same tactics this session, and the spirit of harmony that has existed up to this time between him and the legislature is threatened with violation.

The first veto of the session came when a measure by Senator Cox of Walla Walla, providing that penitentiary grain or oyster or wool sacks be apportioned pro-rata among those applying for them in accordance with the actual needs of the applicants, carried an emergency clause. Governor Lister vetoed this caluse. Senator Cox accepted the bill without it, preferring to make no attempt to pass this clause over the governor's veto. As a result, the apportionment of bags will be made this year on the basis of county production of grain, oysters or wool, with the first-come-first-served method of allotment.

FIBER FLAX

Possible on Puget Sound.

Dr. A. W. Thornton of Ferndale, Whatcom county, Wash., is certain that a high grade of fiber flax can be grown in many localities on Puget sound. He bases his assertion on experiments and observations.

Dr. Thornton was for a number of years a student of the subject as a special agent of the U. S. department of agriculture. His investigations have covered a period of more than 20 years in Washington.

DEPTH FOR POTATOES

Depends on Condition of the Soil.

To the Editor of The Washington Farmer: I want to ask about raising potatoes. We live in western Washington, near the navy yard. How deep should potatoes be planted? Could they be raised successfully more than two years on the same ground? What time should early potatoes be planted?

N. J.

Clarkston, Wash.

Answer by Leonard Hofnauer, state college extension specialist.

The depth at which potatoes should be planted will depend somewhat upon the condition of the soil and also the time of planting. If the soil is loose and in good condition one is able to plant deeper than where the soil is out of condition. Also, potatoes that are planted early are usually planted shallower than those planted later. The difference is that the soil at the time the early plantings are made is not as warm, and the moisture conditions are usually not so good, and therefore, the shallower planting is safer.

However, one may say that potatoes should be planted at perhaps a depth of three and one-half to four inches. It is not good practice to plant potatoes for a number of years in succession on the same ground. We have a good many diseases of the potato, and by planting in succession on the same ground the probability of injury from diseases is increased. For the best results one should grow potatoes in a distinct rotation of crops; and in that way improve the yield as well as the quality and at the same time lessen the damage from plant diseases.

Early potatoes may be planted on well drained land as soon as the soil can be worked satisfactorily. There is occasionally some danger of freezing, but one needs to take a chance on that.

Winona Chautauqua.

Three-day Chautauqua has been arranged for Winona, Whitman county, next fall.

Pit Silo

Cost $5 and Four Days' Work

To the Editor of The Washington Farmer: I want to give you my experience with the pit silo. I dug one this last fall, 8x19, at a cost of four days' labor for myself and boy. I used my hay derrick to elevate the dirt and scattered it out with a slusher. We gave it one coat of cement at a cost of $5 for material, which was the total cash outlay. I find this very satisfactory as it is absolutely air tight. There has been no loss since I got the top off. In filling, I put green cut alfalfa on top, which kept the air from the corn silage. Hence, there was no loss. After the silage gets fed down so that we can't lift it out, I will rig up a derrick to elevate it.

It all depends upon the soil whether it will pay to dig one or not. If your soil is solid enough to hold in place till you can get it cemeted it will be all right. If there is gravel or sand it will not work. Or should it be where water will sub in, it would not be satisfactory. If you have some sand rock it may be blasted out and still be made economical. But in either case before cementing, mix up mud and plaster in all the holes or scratches in the walls, this will save the cement just that much.

GEORGE E. MALTBY.

North Yakima, Wash.

It is well to remember, as is pointed out by a North Dakota experiment station bulletin that there are certain precautions to following in the building and in the use of the pit silo.

1. Do not put the silo below the ground water line; the water will come in and turn the ensilage black and lessen its feeding value, if it does not destroy the ensilage altogether. In North Dakota, those sections having comparatively low water-table, that is, 30 feet or more, are declared suited to this type of construction.

2. There must be some provision for lifting the ensilage out at feeding time. Usually the apparatus that is used to lift the earth out of the pit is later used to hoist the ensilage.

3. The pit silo, no doubt, would have come into general use long before it has, says the bulletin, had it not been for a fear of poisonous gas.

The greatest danger is during filling. At this time the green silage ferments and forms carbonic acid gas. This gas is heavier than air, and therefore tends to settle near the bottom of the quiet air in the pit. If the silo is left for any length of time, partially filled, the owner should take the precaution of lowering a lighted candle before entering, or to stir up the air by means of a limb of a tree, or with any other contrivance that will cause the air in the pit to move and mix. While the silo is full or nearly so, and after the silage has been in the silo about a month, there is very slight danger from poisonous gases in a pit silo.

That $21,500 Calf Sale Is Not Yet Cleared Up

E. A. Stuart of the Carnation Stock Farms stated in last week's Farmer that he had received a letter from B. Meyer, offering him the Holstein bull calf Finderne Mutual Fayne Valdessa for $5000, and another letter from Mr. Meyer stating the animal had been sold; also that Mr. Meyer's herdsman had told him, Stuart, that the bull had been sold to J. Von Herberg of Seattle for $2500.

All this was before the sensational price of $21,500 for this animal at the Portland Stock show in December.

On the other hand, a statement by Mr. Von Herberg included a copy of the letter from Mr. Meyer to Mr. Gue, the auctioneer, that the calf had been sent to the sale without any restrictions whatsoever.

The situation was further clouded by telegrams to the Farmer from Mr. Meyer himself, one to the effect that the bull was sent by him to the Portland sale under a guarantee of $5000 and that the alleged statement of his herdsman to Mr. Stuart was not true.

In the light of these contradictory statements, a representative of the Farmer called upon William H. Daughtrey, president of the Portland Union Stock Yards company, under whose auspices the Portland show and sale took place, and asked him for a statement with regard to this whole matter. Mr. Daughtrey's statement follows:

PORTLAND UNION STOCKYARDS COMPANY, NORTH PORTLAND, Ore., Feb. 15, 1917.—To the Editor: As we know that record prices are apt to create some suspicion of the genuineness of any live stock sale, when the Holstein bull calf Finderne Mutual Fayne Valdessa brought $21,500 at the Pacific International Live Stock show in December, I began an investigation, as this institution does not tolerate any underhand work at this or any other sale under our control. I satisfied myself, as did the other officials of the company, that the sale was bona fide and genuine in every particular, and I have no reason to change my opinion today.

WILLIAM H. DAUGHTREY, President.

In a statement made by J. Von Herberg in last week's issue to the Farmer, he named among those bidding on the Holstein bull calf, Finderne Mutual Fayne Valdessa, the well-known Holstein breeder, John L. Smith, of Spokane. With reference to this, Mr. Smith makes the following statement:

HAZELWOOD FARM, SPOKANE, Feb. 16.—To the Editor of the Farmer: In regard to the sale of the bull calf, Finderne Mutual Fayne Valdessa, sold at the Portland show December 8, 1916, will say I did not bid one dollar on the bull. JOHN L. SMITH.

Mason Pomona

$21,000 for Farm Loan Association

By Mrs. R. R. Williams, Shelton, Wash.

There was a small but live gathering at the regular meeting of the Mason County Pomona Grange No. 20 recently. A resolution was adopted which will be communicated to the other Pomona granges throughout the state, which in substance protests against taking the tax off standing merchantable timber, and a committee composed of W. G. Rex, L. C. Shelton and M. B. Schumacher was elected to obtain all possible information on the subject and take it up with the other Pomona granges.

The temporary cimmittee in charge of forming a farm loan association reported subscriptions amounting to nearly $21,000.

An interesting feature of the Pomona meeting was an open meeting in the afternoon, at which the officers of the Mason County Fair association read their reports, and then called upon the assembly to elect officers for the association for the coming year. Probably more than half of those present had been members of the association, but it was felt that the association should more thoroughly represent the farmers of the county, and that this could be done in no better way than by having the grangers elect officers.

For the past three years most of the officers have been residents of the town of Shelton, and while their work has been thoroughly satisfactory they themselves have felt that the association would have the benefit of heartier cooperation from the outlying parts of the county if the farmers themselves were represented in greater numbers on the board of directors. With this in mind, there was the unusual feature of a public election of officers of an association which has no members until this year's membership tickets are put on sale.

In addition to the officers thus elected, it was voted to have each of the subordinate granges in the county, five in number, elect from their membership one member to be added to the board of directors of the Fair association. It was also voted to carry on an active campaign for membership throughout the county, which has never been canvassed before for members. The association is now on its feet for the first time in several years, with a small balance to start work for the coming year. The officers elected represent both new life and previous experience; both town and country; and it is hoped that this year the association may follow the gain it made in the past year in greater degree. The officers elected were: President, W. G. Rex, first vice president, Mrs. R. R. Williams; second vice president, Jacob Wingert; secretary, M. F. Knight; treasurer, Eli B. Robinson; board of directors, in addition to the above, L. C. Shelton and G. C. Angle.

Big Horse Sale

At Spokane Union Stock Yards

The Spokane union stock yards has announced its first stock sale for the present season. On March 1 and 2 not fewer than 300 head of horses will be put up at auction at the yards, and Walter D. Roberts of the yards says that it is likely the number will approximate 500.

All the horses to be sold will be brought in by farmers or stock men. No animals belonging to the stock yards company will be offered. "Consignments consist principally of well-bred, draft type, farm chunks—mares and geldings," says the announcement. It explains the nature of the sale further as follows:

"All horses will be inspected by a competent horseman, and guaranteed as represented, purchaser to be given until 10 a. m. the following day to reject horses bought in the ring that were not as represented."

To Reclaim 700 Acres.

Work on the Kletsch-Rush dyke in Cowlitz county is in progress. The dyke will reclaim about 700 acres of valuable agricultural land. The contract requires completion of the dyke by May 1.

THE WASHINGTON FARMER

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OUR GUARANTEE TO SUBSCRIBERS.

Any subscriber who does not feel that The Washington Farmer is worth to him all and more than the subscription price may order the paper discontinued and the unusued portion of the amount paid for the subscription will be refunded. You must be satisfied.

Entered as second-class matter January 13, 1916, at the postoffice at Spokane, Washington, under the act of March 3, 1879.

GUARANTEE OF ADVERTISEMENTS.

We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

N. W. General Trading Co. Case Should Be a Lasting Warning

Incidentally the trial and conviction in the United States court of a group of men charged with conspiracy and swindling farmers of the Pacific northwest out of several hundred thousand dollars is serving the public beneficially by revealing the inner workings of the Northwestern General Trading company and the Olympia Trading company.

Records, letters between officials and employes and other evidence make it plain that to a large extent the business of these concerns was selling stock, paying heavy commissions and providing handsome salaries.

The costly experience of several thousand farmers in the Pacific northwest should be a guide for the future and a lasting warning to the officials of the grange and the farmers' union against ill-advised official boosting of any kind of a stock-selling scheme.

The men who were running the trading company understood the value to themselves of these indorsements. They considered them powerful agencies for selling stock to farmers, who otherwise would have been cold and properly cautious. And they were delighted to get these vouchers at a time when, as it now appears, the company was losing money, their stock-selling campaign was slacking down and they were in need of just such a powerful stimulant to revive their languishing fortunes.

Proceedings in open court have shown the modus operandi. The indorsement of the farmers' union was sought. The farmers' union had on its own hands a trading company that was a losing venture and had gone $13,500 in debt. Some of the union's officials and committeemen had become personally liable for these debts. So the enticing plan was invented of letting the Northwestern General Trading company pay off that indebtedness with commissions on future sales of stock to farmers.

Preliminary to their indorsement the executive committee of the farmers' union delegated John C. Lawrence and Louis Delivuk to investigate and report, and a little later the executive committee ratified the deal. The farmers' union officials were to urge their members to take stock in the Northwestern General Trading company, and 40 per cent of such stock sales was to go toward the cancellation of those $13,500 of debts.

Next came the indorsement of the grange, acquired through the cooperation of State Master C. B. Kegley, J. C. Wing and J. T. Compton, and published in the 1915 catalogue of the Northwestern General Trading company.

"Your executive committee," said Messrs. Kegley, Wing and Compton, "have made a personal investigation of the resources and liabilities, methods of business and quality of merchandise of the Northwestern General Trading company. We are satisfied that it is on a sound financial and cooperative basis, and through the proposed cooperative plan of a distributing center with each subordinate grange, and the active cooperation of the patrons, can be made to fill the need of a wholesale supply house for the grange members."

Out of these entanglements have come loss and grief for many members of the grange and the farmers' union. These losses can never be recovered, but the United States government, by probing the whole tangled affair and turning its searchlight into dark places, has made it impossible for these operators to play a "return engagement," and difficult for others to flourish on unsound and tricky business methods.

The $21,500 Calf Sale Should Be Probed to the Bottom

An oldtime evil of the New York stock exchange was known as "Wash sales." That is, two or more brokers conspired to make large bogus sales on the floor of the exchange for the purpose of running up the quoted price of the stock they were manipulating. That evil is now practically stamped out in Wall street.

Circumstances surrounding the auction sale of the Holstein bull calf Finderne Mutual Fayne Valdessa, for a reputed price of $21,500, at the Portland stock show, last December, have excited a deepening fear that the principals in the transaction resorted to "wash sale" methods.

The Farmer regrets that its fair efforts to bring out the facts in this matter have not been met with candor which ought to come from the breeder of this animal. A concise review of the record will be found illuminating.

In a letter dated October 2, 1916, B. Meyer, the breeder, offered the bull to E. A. Stuart, president of the Carnation stock farms, near Seattle, for $5000.

In a letter of November 17, 1916, Mr. Meyer told Mr. Stuart that the animal had been sold. He failed to give the price, but his own herdsman told Mr. Stewart that a Mr. Von Herberg was the purchaser and the price was $2500.

The animal's next appearance was at the Portland sale, and Mr. Meyer, its breeder, was its reputed owner. In his transmitting letter to Mr. Gue, the auctioneer, Mr. Meyer said, "I consign this bull to your sale without any restriction whatsoever." But in his answer to the Farmer's telegram of inquiry of February 4, Mr. Meyer says: "Bull was sent by me to the sale under the recommendation of Von Herberg, guaranteeing me $5000 at least, and all he would bring above it. What my herdsman said was not true."

When the Farmer sent another telegram, asking Mr. Meyer to be more explicit, he telegraphed this reply: "The bull was sold at auction for $21,500 to Mr. Von Herberg. After deducting commission, freight and expense, I received the balance of my money in full. Exact amount what I got is my business."

According to the record as made by Mr. Meyer, he was willing to sell the animal last October for $5000. He was willing to send it to the Portland show on a $5000 guarantee and did so send it.

The public, then, is asked to believe that Mr. Von Herberg paid $21,500 at auction, on December 8, for a bull whose owner was willing to sell at $5000.

Just what does Mr. Meyer mean by the term "commission," deducted from the reputed sale price of $21,500? Was that commission 5 per cent, or 50, or 90 per cent? Why does he say the exact amount he got is his business? It is the public's business too. He is engaged in a business that should be conducted in open view and above-board.

This is a matter that should not be lightly dropped. The good name and the fair fame of the Portland stock show are involved, and its directors owe a duty to the public to probe the transaction to the bottom.

No only this, but the stability and prosperity of the live stock industry itself throughout the Pacific Northwest depends upon sales whose genuineness can not be questioned.

Washington Gleanings

M. Reilly of Palouse district reports a profit of $90 an acre from four acres of Canadian field peas.

C. A. Marlhugh of Mt. Vernon has refused $46 a ton for his large crop of potatoes. At the price offered his crop would have brought him in excess of $9000.

It is reported that a California concern is taking over a large acreage on the Coast in Pacific county for the purpose of developing the cranberry growing industry.

For the purpose of extending the work of the Hanks strawberry farm near Naches, Yakima county, the Hanks Fruit Products company has been organized with a capitalization of $4200.

The American Shorthorn Breeders' association is advertising their breed throughout the northwest by the use of a moving picture film showing the animals displayed at the Chicago International last fall.

Cle Elum—Kittitas county farm returns from hay, grain and live stock estimated at $2,200,000, while production from coal industry in Roslyn-Cle Elum coal field totaled $4,200,000,—nearly twice value of farm products.

The boys of Aberdeen are being organized into a potato club to produce potatoes on vacant lots in the city during the present season. Secretary W. C. Mumaw of the chamber of commerce is fathering the organization.

A report from Lynden, Whatcom county, says that a Mrs. Thompson of that place had successfully hatched a brood of chickens during weather that neared zero, and that they were promising to make early friers.

A measure has been introduced in the legislature at Olympia by Senator Iverson of Kitsap county creating the office of director of farm markets, his idea being to establisch a state marketing system. The measure is not thought likely to be passed.

Wool growers are expecting the coming season to be the best from the standpoint of price in the history of the wool industry. Forty cents a pound is the price already written in some contracts, and some producers are holding for even higher prices.

A branch of the federal farm loan association was recently organized by 10 farmers near Fan lake, just out of Deer Park. E. J. Carey was elected secretary and Charles Rivers, Swan Peterson and A. Reiter was appointed a committee to make the necessary arrangements.

Hops sold on contracts made from one to five years ago in the state of Washington brought more money the last season than did those sold in the open market. Contract prices were usually as high as 13 cents, while the open market brought only from 6 cents to 12 cents.

It is reported that the requirement of the 640-acre homestead act that no land may be so homesteaded which has a general watering place on it has resulted in a large number of the first applications being worthless, as applicants nearly always chose lands which did have the watering places.

The large bridge spanning the Columbia river at Vancouver, Wash., thus connecting the states of Oregon and Washington as a link of the Pacific highway from Canada to Los Angeles, is nearing completion. The last rivet has been put in, and only the finishing touches, including hard surface of the roadway, remain to be placed.

What Others Say

Ohio Farmer: Birds more than pay for their keep.

Southern Agriculturist: The garden requires constant care, but it is worth it.

Hoard's Dairyman: We have great faith in liberal feeding of dairy cattle.

Farmer and Stockman: Plan your garden so it can be tilled with horse machinery.

Indiana Farmer: The first thought every one who buys an automobile should have in mind is a due consideration for sensible driving of his machine.

How the Loans Are to Be Made

Must Subscribe to Certain Amount of Stock in the Federal Land Bank

By N. W. DURHAM,

Chairman of Spokane Committee on Federal Land Board.

Ten or more farmers in a community, we shall say, have organized a farm loan association, and the federal land bank for their district having organized for business, these farmers want to borrow money on their farms. What steps are to be taken to that end?

Their association will first forward its articles of association to the federal land bank of the district, in this region embracing the four states of Montana, Idaho, Washington and Oregon, with the federal land bank at Spokane. Each association, as previously explained, will have a loan committee consisting of three of its members. We now quote the law direct:

"They (the articles of association) shall be accompanied by the written report of the loan committee, and by an affidavit stating that each of the subscribers is the owner, or about to become the owner, of farm land qualified under section 12 of this act as the basis of a mortgage loan; that the loan desired by each person is not more than $10,000 nor less than $100, and that the aggregate of the desired loans is not less than $20,000; that said affidavit is accompanied by subscription to stock in the federal land bank equal to 5 per cent of the aggregate sum desired on mortgage loans; and that a temporary organization of said association has been formed by the election of a board of directors, a loan committee and a secretary-treasurer, who subscribes to said affidavit, giving his residence and postoffice address."

Appraiser Investigates.

The directors of the federal land bank at Spokane will then "send an appraiser to investigate the solvency and character of the applicants and the value of their lands, and shall then determine whether, in their judgment, a charter should be granted to such association. They shall forward such articles of association and the accompanying affidavit to the federal farm loan board (at Washington) with their recommendations. If said recommendation is unfavorable the charter shall be refused.

"If said recommendation is favorable the federal farm loan board shall thereupon grant a charter to the applicants, therefore, designating the territory in which such association may make loans, and shall forward said charter to said applicants through said federal land bank. Provided that said federal farm loan board may for good cause shown in any case refuse to grant a charter."

A member of a farm loan association must subscribe for the capital stock of that association to the extent of 5 per cent of the loan he desires. Thus, if 10 members apply for loans aggregating $20,000 their stock subscriptions will aggregate $1000.

Then the association in turn must subscribe for a like amount of the capital stock of the federal land bank of its district. The farm loan association will hold in trust the local stock of its members, and the federal farm loan board will hold in trust the district bank stock of the association. "Such capital stock shall be held by said land bank as collateral security for the payment of said loan, but said association shall be paid any dividends accuring and payable on said capital stock.

After Charter Was Granted.

"After a charter has been granted to a national farm loan association any natural person, who is the owner, or about to become the owner, of farm land qualified as the basis of a mortgage loan, and who desires to borrow on a mortgage of such farm land, may become a member of the association by a two-thirds vote of the directors upon subscribing for one share (par value $5) of the capital stock of such association for each $100 of the face of his proposed loan or any major fractional part thereof. He shall at the same time file with the secretary-treasurer of the association his application for a mortgage loan.

"Before any mortgage loan is made by any federal land bank, or joint stock land bank, it shall refer the application and written report of the loan committee to one or more of the land bank appraisers appointed under authority of section three of this act, and such appraiser or appraises shall investigate and make a written report upon the land offered as security for said loan. No such loan shall be made by said land bank unless said written report is favorable."

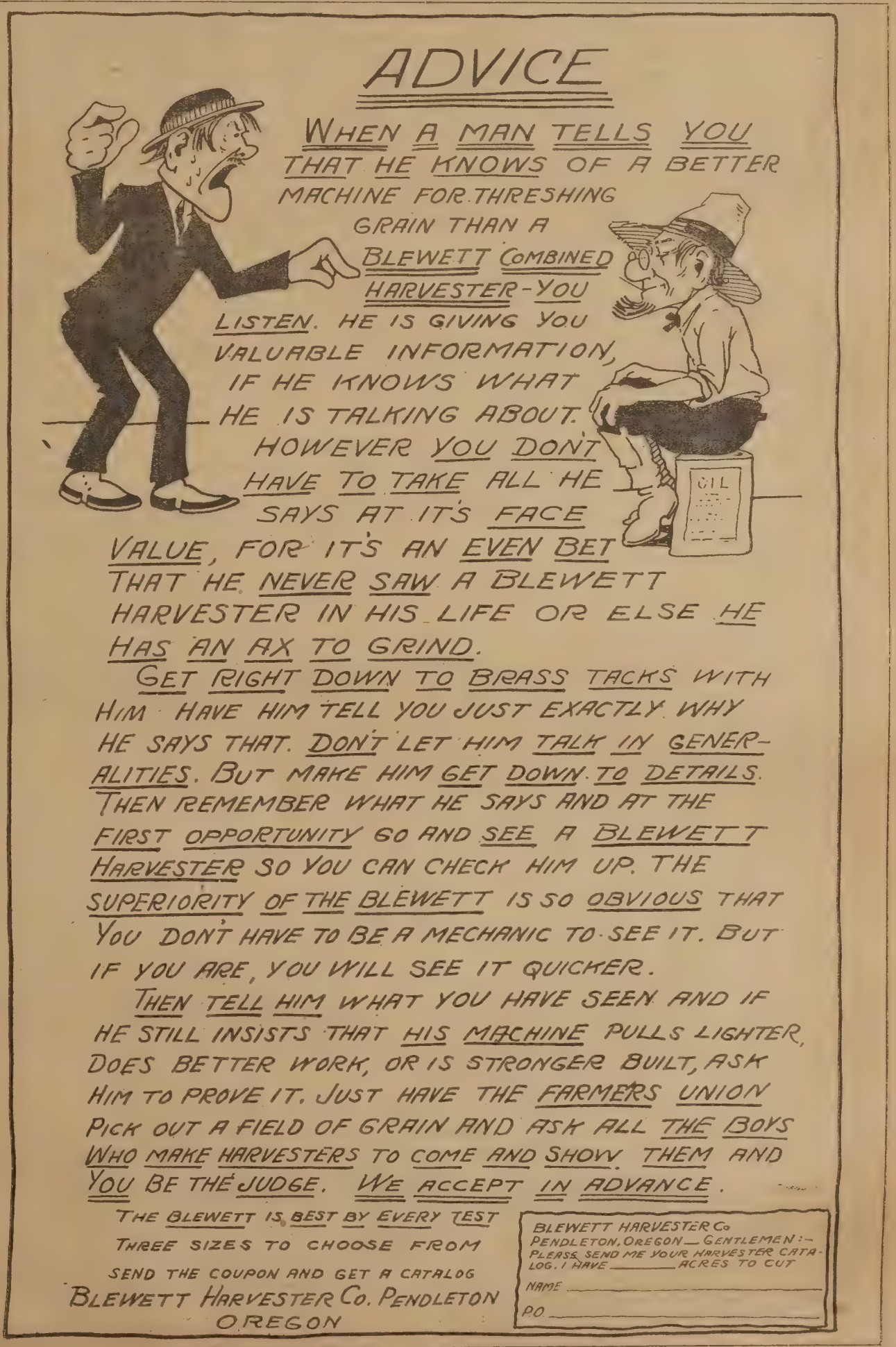
Norris Johnston of Council, Idaho, asks: "Suppose a farmer borrowed $2000 from the assoiation in his neighborhood, and that the farmer that borrowed the $2000 did not make good or pay his interest; who stands the loss—the farmer or the association or the government? If the 10 or more farmers have to stand the loss do they fall into possession of said land?"

On that point the law provides that "shareholders of every national farm loan association shall be held individually responsible, equally and ratably, and not one for another for all contracts, debts and engagements of such association to the extent of the amount of stock owned by them at the par value thereof, in addition to the amount paid in and represented by their shares."

This means that each member of the association is held liable to the extent of 10 per cent of his own loan and no more. If his own loan is $100 and if losses result from a loan made by his association his $50 of stock may be taken towards making good that loss. It that should prove insufficient he could be assessed to the extent of another $50. After that his liability would cease.

Another section of the law provides that "if there shall be default under the terms of any indorsed first mortgage held by a federal land bank under the provisions of this act the national farm loan association or agent through which said mortgage was received by said federal land bank shall be notified of said default. Said association or agent may thereupon be required, within 30 days after notice, to make good said default, either by payment of the amount unpaid thereon in cash, or by the substitution of an

(Continued on page eleven.)



How Many Seconds in the Month of February 1916?

$300 SOMEBODY WILL WIN — SIXTY QUESTIONS — SOMEBODY WILL WIN $300

Read the Plan and Rules of This Big Free-for-All

FARM INFORMATION CONTEST

There are 60 questions which everybody should try to answer. They are interesting, they are entertaining, and the prizes make it worth your time to try to answer them. Look into the contest plan and fix your aim on the big cash awards.

READ THE RULES
Answer These Questions

16. How many stars in the American flag?

17. What grain is used in making graham flour?

18. Does the book of Hezekiah come in the old or new testament of the Bible?

19. Which anniversary of a marriage is known as the Golden Wedding anniversary?

20. What breed of chickens bears the same name as the landing place of a group of early American colonists?

(Five more questions will appear next week.)

The announcement of this contest, February 1, brought quick responses from all the four northwest states from persons who sent in the order coupon on this page with subscription remittances, expressing their intention to register for the $300 prize provided in "Enlarged prize list plan."

$800—IN CASH to Be Paid—$800

We will positively give EIGHT HUNDRED DOLLARS in cash awards (and more in event of ties) to the winners. As explained in the rules which follow, there will be five questions run in every issue of the Farmer for 12 weeks. The last five questions will appear in the issue of April 19.

You Can Enter Without Cost

You do not even have to be a subscriber of the Farmer to enter. As has already been stated, any resident of Washington, Oregon, Idaho or Montana is eligible to compete in this contest.

Five Questions Each Issue

The contest will be composed of 60 questions. Five will be run in each issue of the Farmer for 12 issues.

Answers to each question except No. 45 can be given correctly in from one to 10 words and will be given a score of 100 if correct. Answers to question No. 45 will be limited to 100 words each, and will be graded as to the common sense and general knowledge of farm conditions shown by the contestant without regard to spelling, grammar or penmanship. As with the other 59 questions, a perfect answer to No. 45 will be scored 100.

Perfect Score Is 6,000

The contestant who comes nearest to a score of 6000 and complies with all the conditions of the contest will receive the first prize; the next nearest, second prize, and so on. In case of a tie each tying contestant will receive the full amount of the prize.

There are 35 prizes as follows:

$150 is amount of First Prize. **$50** is amount of Third Prize. **$10** is amount of Fifth Prize.

$100 is amount of Second Prize. **$20** is amount of Fourth Prize. **$5** each, Sixth to Tenth Prizes.

$4 each Eleventh to Fifteenth Prizes. **$1** each, Sixteenth to Thirty-fifth Prizes.

OTHER RULES

The answers will be passed upon and graded by a fair-minded, thoroughly competent judge.

Two weeks will be allowed for sending in answers after April 19, 1917, date of the issue containing the last five questions.

Remember, your failure to answer all the questions will not necessarily exclude you from the contest. There are 60 questions to be answered and it is not reasonable to suppose that all our prize winners will attain a perfect score. Your answers must all be sent in at the same time. Do not send any answers until you have completed the full list or as many as you can answer.

Those who use our CONTESTANT'S HELPFUL OUTFIT will be able to send in their complete set of answers without delay, there being no need of their waiting for the questions as they appear in The Farmer from week to week down to the final issue of April 19. In order to get as prompt returns as possible from those contestants who use our CONTESTANT'S HELPFUL OUTFIT, extra inducement is made in the prize awards. SEE ENLARGED PRIZE LIST.

Announcement of prize winners will be made and prize checks mailed as soon after close of contest as possible.

If any point is not clear, do not hesitate to write the Farm Information Editor.

All answers must be mailed on or before midnight, May 3, 1917, as shown by postoffice dating stamp on your envelope.

ORDER COUPON—If your subscription is paid ahead, the time paid for herewith will begin at the date to which you are now paid.

FARM INFORMATION EDITOR.
Review Building, Spokane, Wash.

Enclosed find $1 for one year, or $1.50 for three years' subscription to

THE WASHINGTON FARMER.

and enter me as a contestant in the Farm Information Contest. I am also to receive at once the complete CONTESTANT'S HELPFUL OUTFIT, consisting of guide against wrong answers, reply blanks, rules and all information to aid me to win a reward.

Name .....

R. F. D. .....Town .....

State .....

Notice—Amount of remittance to be either $1 for one year's subscription to the Farmer or $1.50 for three years' subscription.

Answer this question: Are you now a subscriber?.....
If you wish paper sent elsewhere, fill in name and address.

A Valuable Aid to Contestants

One complete CONTESTANT'S HELPFUL OUTFIT, including all of the 60 questions and instructions and helpful warnings as to answers which would be wrong, and the correct answers to some of the most difficult questions, will be sent to any public library free of charge, upon request.

To each contestant who sends in a new, renewal or an extension of his subscription at the time of registering for the contest, this complete CONTESTANT'S HELPFUL OUTFIT will be sent in combination.

We feel that those beginning on the contest will find these suggestions as to what to avoid distinctly useful. This equipment supplies in convenient form everything needed to enable you to apply your ability to the best advantage, and will contain information enabling you to answer the most difficult questions correctly.

Puts Questions in Reach of Children

This CONTESTANT'S HELPFUL OUTFIT puts the solution of the questions in the reach even of the children, it being the purpose to make it possible for everybody in Washington, Oregon, Idaho and Montana to compete. This outfit includes, besides general information about the plan of the contest, the following:

Guide against wrong answers, which includes either correct answers of more difficult questions or easy references as to where to find the correct answers; and blank forms on which to write your answers in such a way that there can be no confusion when your answers are taken up by the judge for scoring.

It will be worth considerable to you to be assured that your answers are reaching the Farm Information Editor in such form that he will know in every instance exactly what question you intended to answer. This CONTESTANT'S HELPFUL OUTFIT will make it possible for you to

Begin Work at Once

On account of the large number certain to send for our CONTESTANT'S HELPFUL OUTFIT, thus making it possible for them to answer the entire 60 questions without delay, it is deemed advisable to offer some special inducements to secure prompt returns from this particular class of contestants. By securing the early replies of those who are thus supplied with the entire 60 questions, we will be able to have their papers carefully scored before the final rush of answers toward the end of the contest.

Understand, it is not absolutely required that those who use our CONTESTANT'S HELPFUL OUTFIT send in their replies at once, but, in order to induce them to get in early, the following plan for enlarging the awards to those prize winners whose answers come in early is offered:

ENLARGED PRIZE LIST—$300 CAN BE WON—ENLARGED PRIZE LIST

For those who use our CONTESTANT'S HELPFUL OUTFIT.

Thirty-Five Prizes	Amt. of prize if winner sends in answers during 1st period, Feb. 1- Feb. 21	Amt. of prize if answers sends in winner during 2d period, Feb. 21 Mch. 14	Amt. of prize if winner sends in answers during 3d period, Mch. 14 April 5	Amt. of prize if winner sends in answers during 4th period, April 5 April 19	Amt. of Prize for winner who does not send in answers before April 19
First Prize	$300.00	$225.00	$200.00	$175.00	$150.00
Second Prize	200.00	175.00	125.00	110.00	100.00
Third Prize	100.00	87.50	62.50	55.00	50.00
Fourth Prize	40.00	35.00	30.00	22.00	20.00
Fifth Prize	20.00	17.50	15.00	11.00	10.00
6th to 10th, 5 prizes each	10.00	8.75	7.50	5.50	5.00
11th to 15th 5 prizes each	4.00	3.75	3.00	2.20	2.00
16th to 35th 20 prizes each	3.00	2.50	2.00	1.50	1.00

To secure our CONTESTANT'S HELPFUL OUTFIT, fill out order coupon on this page and send it in to Farm Information Editor, with your personal check, money order or 2-cent stamps, for $1 for one year or $1.50 for three years.

You must address

The Washington Farmer

Farm Information Editor

Review Building, Spokane, Washington.

Binder Twine

Another Advance in Sisal Price

Another advance is announced in the price of Yucatan sisal, the base for binder twine. New York agents of the Commission reguladora, the Yucatan state monopoly, have put up the price 2 cents to American binder twine manufacturer. It is now at 16 1-2 cents a pound. When the commission took control of the Yacatan output less than two years ago users in the United States were paying around 5 cents.

The situation has grown up so serious and burdensome to American farmers that the subject came up for discussion at a recent meeting of President Wilson's cabinet, and government agencies investigating the operations of this rapacious trust have been directed to speed up their labors.

The U. S. government has filed a suit in the federal court in New York against the Pan-American commission corporation, the American company that is financing the Yucatan trust, charging conspiracy under the anti-trust laws to restrain interstate and foreign trade in sisal and to increase the market price throughout the United States.

Injunctions were asked against the corporation, the Commission Reguladora; the Yucatan Combination of Sisal Producers, which received its financial assistance, and against several individuals connected with them, to prevent further operation in interstate or foreign commerce.

"The combination attacked was formed late in 1915 to monopolize the field and increase the price of sisal in the United States," according to a statement issued by Thomas W. Gregory, United States attorney general, in filing the suit.

"Sisal is produced as an article of commerce only in Yucatan, and is the only fiber available for the manufacture of binder twine, of which 250,000,000 to 300,000,000 pounds is required annually for harvesting the grain crop of the United States.

"The parties to the combination are American bankers, the Pan-American Commission Corporation, organized and controlled by them, and the Commission Reguladora, which has an office in New York and imports and sells sisal in the United States.

"To enable the commission to purchase the entire output of Mexico, and import and sell it at the prices and on the terms fixed by the combination, the bankers, through their corporation, are supplying the commission in the United States a continuous credit of $10,000,000 and otherwise assisting the commission in the United States. For this service the corporation receives a minimum compensation of $450,000 a year, in addition to the regular rates of interest on loans made to the commission.

"At the time the combination was formed the price of sisal at New York was 5 1-4 cents a pound, and for five years before had averaged about 5 1-2 cents. As a result of the combination the price has been advanced until it is now 16 1-2 cents. This price, if maintained, means probably an increase to the farmers of more than $25,000,000 in the cost of twine for 1917 over the cost for 1915."

CHAR-PIT METHOD

Dupertuis Farm of 135 Acres.

The sale of the Henry Dupertuis farm of 135 acres to his son, Paul H. Dupertuis, is announced. The consideration was $7000. The farm is located seven miles west of Chehalis on the National Park highway and is bench land. Henry Dupertuis is widely known throughout the northwest as one of the men who made a remarkable personal success of clearing stumps from his logged-off land by the char-pit method.

Pupils Win Prizes.

George R. Bright, C. S. Brown and G. R. Walker, judges, announced their decision on the winners of the special cash prize offered by the Chehalis Citizens' club for the best essays on the recent farmers' extension school held in this city. There were 19 papers submitted. First prize was awarded to Gladys Murphy of school district No. 27, R. F. D. 3, Mrs. Anna B. Hilton, teacher. Second prize was awarded Eva Severs of the Union school, M. Edna Newby, teacher.

Has Fed from the Field.

A Stuart Island farmer in San Juan county has finished putting in his crop of yellow Danver carrots, having fed from the field until the present time.

Salt of the Oceans.

There is enough salt in the oceans to cover the United States to a depth of 8500 feet.

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Please mail me Free without expense or obligation your new catalog of home-furnishings.

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We offer you liberal credit. You can take a year to pay for your purchase.

$3.00 Down and $1.25 a Month Buys This Beautiful Bed Outfit

THE BED ALONE, if you were to purchase it at a regular retail furniture store, would cost you almost the price of the outfit. When you have this bed made up in your home you will find that it will add refinement and a neat, cheerful effect in the room in which it is placed.

DIMENSIONS—Bed can be furnished in 4½-foot width, the full size only. The posts are 2 inches in diameter. Fillers ⅛ of an inch. The head piece stands 52 inches high and the foot piece 35 inches high. Can be furnished in gold Vernis Martin, giving the bed a most delightful appearance.

THE MATTRESS will be furnished in the full size, 4½ feet only. It is a great deal better mattress than you ordinarily find in the outfits. It is a 40-pound mattress and we do not hesitate to recommend it in every way. A good quality elastic sanitary cotton felt is used in making this mattress and it is covered with a splendid grade of fancy art ticking, securely tufted and finished with a heavy roll edge. The scientific construction assures a wonderfully comfortable and durable mattress.

THE SPRINGS are something new and a most extraordinary value. They are noiseless and durable. The double rust proof wire fabric is attached to the heavy angle iron frame by oil-tempered helical springs. The weight is well equalized and distributed all over the entire spring.

No. 1133. Outfit complete as pictured. Weight about 160 lbs. Price $19.85



$2.25 Down and $1.00 Monthly Buys This Fine Solid Oak Arts and Crafts Dining Table

THIS BEAUTIFUL TABLE, though simple, is so nicely proportioned and handsomely finished that it makes a wonderful table for any family to have. A nice dining table that will be serviceable and neat, and not be a big item of expense. You will notice that the pedestal is truly mission in shape and 6 inches in diameter. The legs are very massive. Every part of the table, both base and top, is carefully sandpapered and smoothed before the finish is applied. Top measures 42 inches when closed, extending to 6 feet. Furnished in fumed or golden oak.

No. 1418. Weight about 117 lbs., furnished complete with leaves. Price..... $13.95

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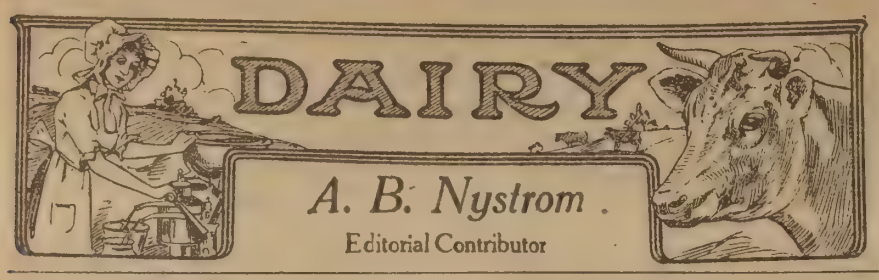
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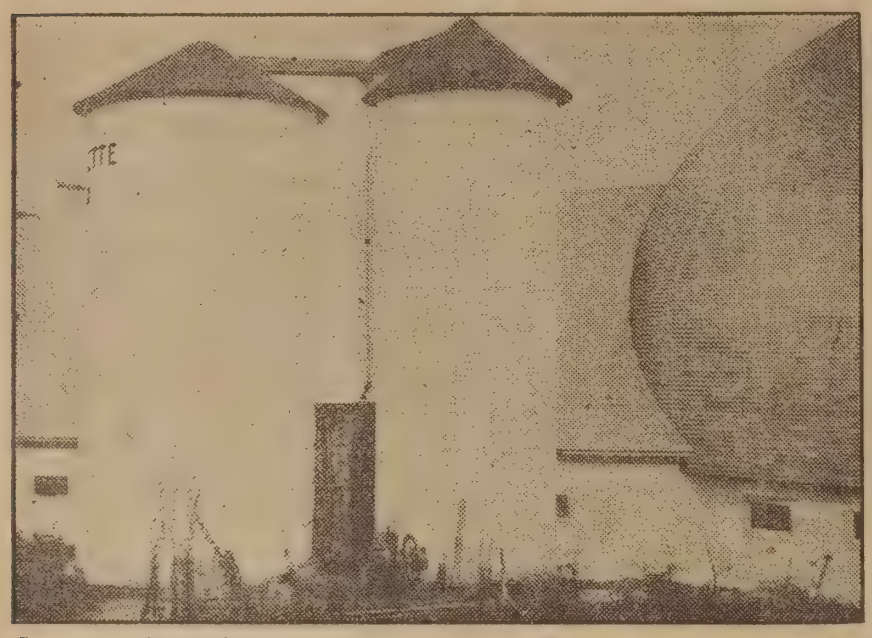


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Address Washington Farmer, Premium Dept., Room 37, Review Bldg., Spokane, Wash.



Silos on a Wahkiakum Dairy Farm



The above picture shows the silos on Howard L. Wiester's dairy farm at Skamokawa, Wash.

Nine Cows When Three Give Same Returns

By C. H. BERGSTROM, Tester.

Following is a list of cows producing 50 pounds of butter fat or over for the month in the eighth monthly report of the Snohomish Valley Cow Testing association:

Owner.	Name of cow.	Breed.	Age.	Date fresh.	Lbs. milk.	Test.	Lbs. B. F.
Roe Bros.	No. 12	Gr. Ays.	6	11-30	1535	4.5	69.00
Shadinger Bros.	Alma	Holstein	2	11-3	1341	4.4	59.00
Shadinger Bros.	Ginger	Gr. Holstein ...	3	10-22	1143	4.6	52.37
Shadinger Bros.	Cascade Clara	Holstein	3	8-7	1479	3.5	51.77
Dennis Metz.	Pansy	Gr. Jersey	5	10-14	978	5.2	50.86

In the 40-pound class Shadinger Bros. have 3, D. F. Sexton 2, Glenwood Farm 1, P. A. Weber 1, F. L. Krassin 3, George Stecker 1 and T. G. Bowen 1.

Below is a table of averages for three groups—50 pounds B. F. or over, 40 pounds B. F. to 50 pounds B. F. and 25 pounds to 30 pounds B. F. respectively:

Av. lbs. milk.	Av. test.	Av. lbs. B. F.	Av. value of product.	Av. feed cost.	Av. profit above feed cost.	Av. feed cost per 100 lbs. milk.
1243	4.37	56.61	$27.34	$11.16	$15.97	.846
979	4.45	43.67	21.12	9.16	11.99	.943
628	4.1	25.73	12.70	7.70	5.09	1.30

The averages for the 50-lb. group are taken from the records of five cows, while those for the other two groups are taken from 12 cows. The cows in the last group are with but one or two exceptions taken from the same herds as are those in the second group, attention being given to lactation period, age, etc., i. e., for each cow of the second group, fresh, for instance, three months, a cow of approximately the same age and weight, fresh for nearly the same time, was chosen from that herd. This makes the production conditions as nearly equal as possible. Study of this table will show which cow is actually the cheapest producer and will also substantiate the statement that the large majority of our herds are too large. It will be noted that three cows of the first group make as much profit as four cows in the second group and more profit than nine cows in the third group. Why keep nine cows when three will make the same returns?

"How To Feed Silage" FREE

Send for 36-page birds-eye on handling silage—a chapter from "Modern Silage Methods." 1917 edition of this book 25c. 264 pages. Answers all silage or silo questions. Ohio Silo Filler Catalog FREE.

The Silver Mfg. Co., Box 503 Salem, Ohio



Profitable Dairy Stock.

The increased interest that farmers are taking in more profitable dairy stock is gratifying, says R. A. Blanchard, agricultural agent of Crook county. The farmers of central Oregon are convinced that purebred stuff pays in dividends on the investment and are not slow to express that conviction by paying good prices for high class stock. E. C. Park, chairman of the live stock committee of the county agricultural council, has been particularly active in arranging for the importation of dairy calves. Messrs. Wood, G. N. Rader, M. E. Landes and Park have arranged to bring in $850 worth of high class Golden Glow blooded stock. J. A. Foss of Terrebonne is another importer of fine blood and John Kemmling of Prineville recently imported two fine animals at $500.

The county agent, under the direction of the county agricultural council, is at work on the formation of a bull association, which it is believed will prove of equal benefit in the upbuilding of our dairy industry.

Bee Disease

Now the Time to Prevent Spread

By ED VANCE, Twin Falls, Idaho.

Watch your bee hives. This is the time of the year to prevent the spread of foul brood among bees. A little cooperation among people keeping bees can do more than the inspector can do all the rest of the year. When I say cooperation I mean for every one who has a hive of bees to do his part.

Some warm day in February go out and find if any colonies are dead. You can tell by plowing into the entrance if they are alive they will answer with a buzz. If you can not get a response look inside and make sure they are dead. If dead remove at once into a cellar building that is bee tight so the bees can not rob out the honey as that is the way foul brood is spread to other colonies. If you do not know foul brood when you see it keep it till the inspector or some one who does know it sees it before you use the hive to put bees in again.

One hive left out to be cleaned out when warm weather comes will infest a whole community and cause the loss of hundreds of dollars worth of bees. Any colonies that are weak should have the entrance contracted so as to admit only one bee at a time, that a small force can guard their hive against rodents. Then as soon as the weather will permit examine all weak colonies to see that they are not infected with foul brood. If you do not know the disease when you see it you can learn by writing to the department of entomology, Washington, D. C., and receive bulletin on foul brood.



The Book of Dairy Books

It's *the* book, because it's *the* authority on *the* breed—the beautiful, ever-paying Jersey.

This book, "About Jersey Cattle," goes way back to the beginning of the breed, shows how it was line bred and protected from mixture by law, and shows why it has developed into the most economic and most persistent-milking of all breeds. It gives tests, yields, etc., proving that the Jersey is the *money* cow—the "Giant of The Dairy."

The book is free but worth a lot. Send a postal for your copy *today*.

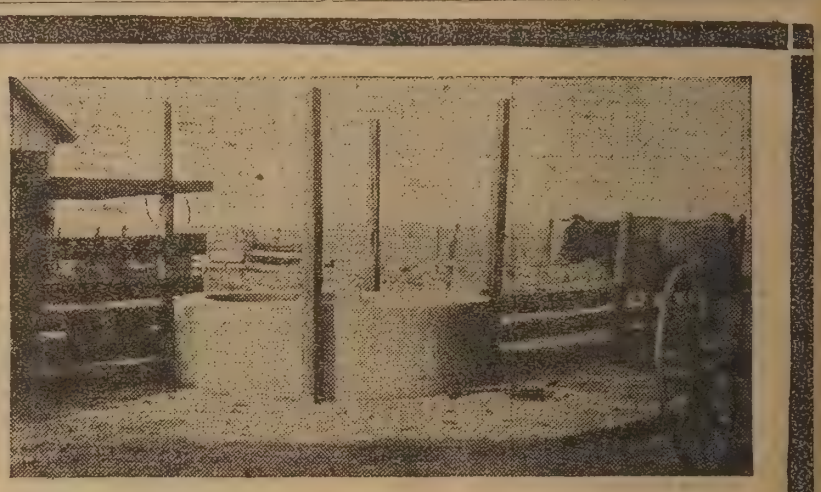
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Build a Concrete Stock Tank

A concrete stock tank keeps the water sweet and cool. A concrete floor surrounding it does away with the muddy bog where the stock must stand and drink. The stock tank and the floor are simple and inexpensive to build.

Concrete can never rot nor rust. There are no rusty nails, splinters or sharp edges about a concrete stock tank. Use common lumber for the forms—haul your own sand and pebbles from the pit—and see your local dealer for your Portland cement. Mix the materials ONE part Portland cement, TWO parts sand and THREE parts pebbles. This is the same material as that used in the Galveston Sea Wall, which saved that city from destruction in the great storm of 1915.

Write today for our booklet "Concrete Troughs, Tanks, Hog Wallows, Manure Pits and Cisterns." Just say "Send me Booklet No. 142."

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100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.

Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Factory, Dept. 58 Waukegan, Ill

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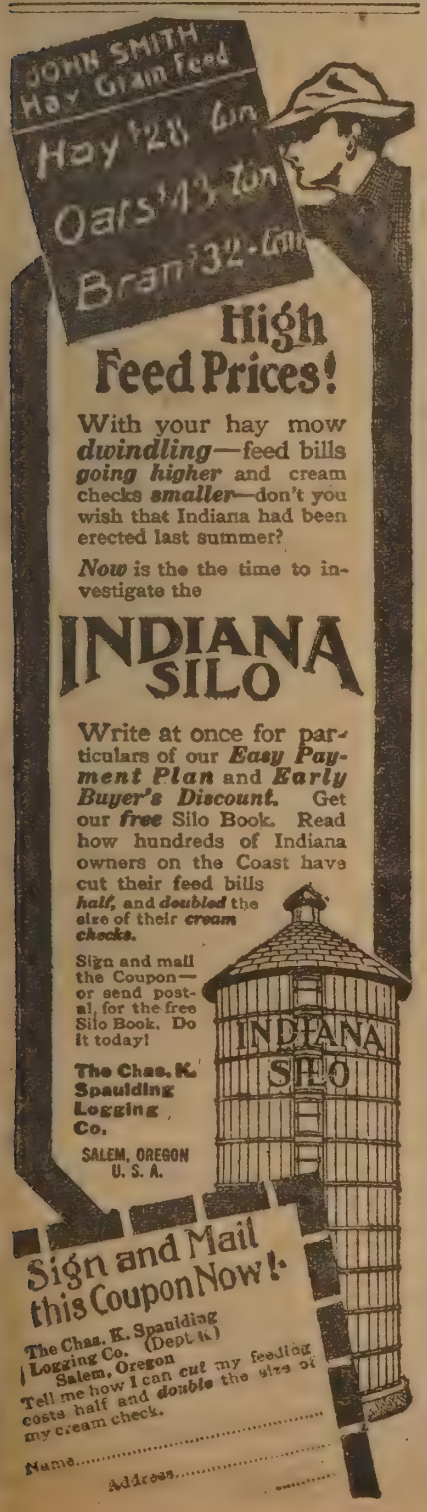
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The scope of its labors and the numerous details involved in the administration of the affairs of the Holstein-Friesian Association are best comprehended by a consideration of the fact that, during the fiscal year ending April 30, 1916, $158,994.50 was received by the secretary's office for the registration of pedigrees and for transfers. This volume of business required 46,760 entries in the cash books, and the issuance of 143,130 certificates; this prodigious labor is demanded for the conduct of but one department of the greatest dairy cattle breeders' association in the world.

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With your hay mow *dwindling*—feed bills *going higher* and cream checks *smaller*—don't you wish that Indiana had been erected last summer?

Now is the the time to investigate the

INDIANA SILO

Write at once for particulars of our ***Easy Payment Plan*** and ***Early Buyer's Discount.*** Get our ***free*** Silo Book. Read how hundreds of Indiana owners on the Coast have cut their feed bills ***half,*** and ***doubled*** the size of their ***cream checks.***

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Salem, Oregon

Tell me how I can *cut* my feeding costs half and *double* the size of my cream check.

Name.....

Address.....

High Grade Cow

More Profitable Than Average?

(Continued from page four.)

stock business for several years and have always striven for high production in the individual and are glad to be able to add that our efforts have thus far been fruitful, for while we do not have the honor of having any world's record cows, but only a good working dairy, the records of our cow testing association showed that the 23 head which we were milking last year, including 11 2-year-olds, averaged over 377 pounds of butter fat for the year, at an average cost of production for the feed consumed of 8.8 cents a pound. And with the average price of 27.5 cents a pound paid by the local creameries for butter fat we can figure a profit even from cows producing over 300 pounds. And the record also shows that the cow that produced over 545 pounds of fat in our herd last year made us a greater margin of profit than did those that produced around the 300-pound mark.

In conclusion, we are most pleased to state that the official report has just reached us that one of the best "managers" in the dairy business has just produced a cow, Segis Fayne Johanna, 114,658, a Holstein-Friesian, that made 50.68 pounds of butter in seven days from 722 pounds of milk, under strictly official test. How many 180-pound cows would one have to feed to be able to produce the same amount of butter in a week? Yours for better cows, A. A. STAUFFACHER.

Get the Best.

To the Editor of The Farmer: Going out of or going on with the dairy business is the talk when a bunch of dairymen meet. The writer has been doing some close figuring this winter and has concluded to go on. I have been milking 38 head this winter, six heifers, and two we are drying off now. This week we have been getting as high as 255 gallons per day and at those figures I can not see why it will not pay a handsome profit. My herd is of all pure Holsteins. I am using Hazelwood Bracelet Korndyke at the head of my herd. His dam has 133 pounds butter record in 30 days, his sister was grand champion at the Chicago and the San Francisco dairy shows. The average of this herd this winter at the present rate is 67 pounds per cow, including the six heifers.

Get the best to do the best.

JOHN L. SMITH.

Wants a Uniform Price.

To the Editor of The Washington Farmer: I would like to see a law in the state of Washington for the benefit of the dairy industry. That is, to prohibit creameries paying two or three different prices for cream and milk condenserics from doing the same.

In central Lewis county the creameries pay 1 to 2 cents more anywhere that there is competition and where there is no competition they pay from 1 to 3 cents per pound less. Now, that is not giving the farmers a square deal.

The condenseries in Lewis county pay us now from 10 cents to 25 cents less per hundred-weight than they pay in King, Snohomish and Whatcom counties, which is not giving the farmers in Lewis county a fair deal, and the milk is all used for the same purpose, as is the cream.

Now, I would like to have this reach as many of the farmers as possible and see what they think about it. The creameries ought to pay all who ship the cream 40 cents, but at present they are paying some 30 cents and some 40 cents.

I would like to hear through the paper what all who read this think about it. HUGH G. CORP.

Forest, Wash.

Farm Loans

Borrowers Must Take Some Stock

(Continued from page seven.)

equal amount of farm loan bonds issued by said land bank, with all unmatured coupons attached."

While the law is not specific on one point raised by Mr. Johnson we think there is no doubt that if a mortgage were foreclosed and the mortgaged land later sold at a price that made the association whole, the members of the association would be repaid such sums as they might have been assessed.

The next article in this series will relate to the opportunity of the landless man to acquire a farm under the new system.



Dairy of H. G. Anderson & Son, Jackson, Minn.

"It is now about three months since we got our new hired man. His name is HINMAN, and right here we want to say he is the best ever. He milks three cows in the time that it took to milk one; and that is not all; the work is done with neatness and dispatch. No running off on a Saturday evening and gone till Monday; always on the job seven days every week. One more great advantage: You know the dairy cow is quite different from the society woman; she doesn't want any change of style. She wants the milking done on time, and always the same. No change of style goes with her, and that's where Hinman is Johnny-on-the-spot and always does his work the same; therefore we could not afford to let him go at any price. We consider him by far the best, cheapest and most reliable hired man."

H. G. Anderson & Son, Dec. 14, 1915.

HINMAN MILKERS WILL SURELY INCREASE DAIRY PROFITS

because they save where the only saving is possible in a dairy. You can't save on feed without losing milk yield, but you can save on hand labor. A 3-unit outfit costs less than wages and board of one hired man for six months. So simple a boy can milk 18 to 25 cows an hour.

No complicated pulsating mechanism — no air pipe lines — no vacuum tanks.

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The Hinman soon pays for itself and adds its first cost to profits every six months to a year.

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HINMAN MILKING MACHINE CO.

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Service Dealers Everywhere.



A cow can not *tell* you when she is sick, but her milk yield is a very accurate indication of her condition. The fact is, thousands of cows are allowed to remain unprofitable or below their reasonable standard of productiveness through their owner's failure to act on the hint of the milk pail. Don't pass it off by simply calling her a "backward cow"—correct the trouble and reap the extra profit.

Kow-Kure is a medicine for cows that are "off color." It is in no sense a food, but it promptly acts on the digestive organs and enables the cow to thrive on her natural food. Its great curative powers act on the genital organs where many cow ailments originate. The success of Kow-Kure is positive in the prevention and cure of Abortion, Barrenness, Retained Afterbirth, Milk Fever, Scouring, Lost Appetite, Bunches and other common ills.

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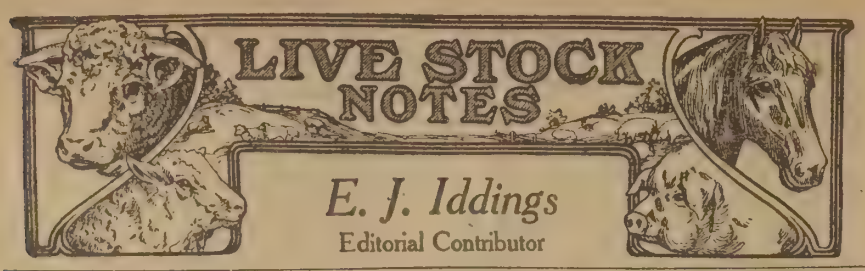
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Sheep

Owner Finds Them Profitable

To the Editor: I have a few sheep and I like them very well. I just lately completed a new sheep barn on my place on Lamar Gulch, with N. Buroker superintendent of construction. It is said to be the most complete and convenient building of its kind in the country, being 70x14 feet. It provides ample accommodations for 65 sheep to eat at once. I have 55 sheep on my place and I commenced lambing the first of January. I have to date 25 lambs.

Just a word or two about sheep. What animal can be fed on so little during the winter? What type of animal will eat so many weeds and keep the ranch so clean as will the sheep? What animal gives such a quick threefold profit, wool, mutton and lambs? A sheep matures almost as soon as a chicken and in three or four years, with ordinary care and success, the number will be quadrupled. What will 20 to 50 ewes do on the average ranch? With ordinary care they will live on what other animals disdain. Their wool will pay the taxes, their extra lambs buy the gasoline. Their increase will amount to several hundred dollars per year and in two or three years the original investment will be netted and the band will be pure velvet.

These results will be obtained from a small bunch kept under average conditions and taking into consideration the yearly losses that are bound to occur.

I have a spring on the south side of my place practically in the middle and flows all the way through the place with abundant shade along this branch of the creek. I live in the northeastern part of Umatilla county, 25 miles from Walla Walla and 23 miles from Pendleton. J. M. SWAGGART.

Weston, Ore.

Sheep Dipping in Honduras.

The cattle and other stock in Honduras suffer from ticks, mange, flies, lice and worms. Nothing has been done until recently to remedy these troubles, but last year an experienced stockman from St. Louis spent some months at Ceiba demonstrating how cattle could be freed from ticks, and he is there again to continue the work, with the expectation of shipping cattle from this port to the United States within a few months. Under his direction a few cattle-dipping tanks have been constructed, and the use of an arsenical dip made from ingredients secured in New Orleans is being used by two or three cattle owners.

Packing-House Concession.

The Argentine government has granted a concession for a packing house in Tierra del Fuego to Alejandro Menendez Behety, who expects to organize a syndicate to finance the project. The packing house is to be built on the bank of the Rio Grande, and the concession contains an authorization for the building of a metal suspension bridge over the river, this bridge to pass to the control of the government 15 years from the date of the concession.



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Veterinary

Dr. S. B. Nelson

I have a colt that has a poll evil. I had a veterinary look at him, but his treatments did no good. H. J. S.

Grandview, Wash.

There is no medical treatment that is satisfactory in treating poll evil. The best treatment is the radical operation which extends down on the poll to the place where the ligaments of the neck fasten, scraping the injured part of the head and giving it free drainage. Any competent veterinarian can perform this operation, known as Williamson's operation, for you, and that is what you should have done.

I have a young horse that has a small white or grayish growth near the pupil. It has the appearance of a hard lump and has been that way about two weeks. I do not know what caused it. J. E.

Benge, Wash.

I take from your description that the growth is on the eyeball near the pupil. If a veterinarian was treating the animal he would drop a few drops of cocaine into the eye and then give it a very careful examination to see whether or not there is a growth or ulcer there; as it may not be possible for you to get the services of a veterinarian I am going to suggest that you drop a few drops of a 5 per cent solution of argyrol into the eye three times a day. That may give some relief.

I have a yearling colt that came in off the range about six weeks ago. He was very poor and is getting poorer. He eats well. I feed all the hay he will eat, both wheat and oat hay. I gave it some turpentine a few days days ago, but it did no good. It will pass as high as four worms at a time. The worms are black and white and about two inches long. W. S. S.

Hanson Ferry, Wash.

There are two things that can be troubling your colt. One is that the teeth might be causing trouble, but it would be a little early for that, but it might occasionally happen to come this early. Secondly, parasites could be causing the trouble and give the symptoms you mention, and I think probably that this is the trouble. I would recommend that you give the colt one dram of iron sulphate morning and evening for a week. Then give it one pint of raw linsed oil with one-half ounce of turpentine in it. If necessary you could repeat this dose in about three weeks or four weeks.

I had a 9-month-old calf that got the diarrhoea a little over a month ago. It grew worse all the time, becoming very poor, and the eyes became greatly sunken. It ate well, and was almost as lively as my other calves of about the same age—in fact it was a week before I discovered which one it was, as they have good bedding and it kept itself clean. It died in about three weeks after the disease started. About two weeks after this one died I noticed the bowels of another one a little loose. The first one I tried different feeds and care, the second one I bought some guaranteed remedy for scours, etc., which I started giving, and the calf grew worse right away and within two days was dead. At the present time they are getting good clover hay night and morning, with a trifle of rye grass and mosquite mixed in with it. In the daytime they run outside. Could you tell me what causes this diarrhoea, and what is the best thing to stop it? N. J. W.

Silver Lake, Wash.

The trouble with your calf is probably an infectious diarrhoea. I would advise taking away the feed and giving a dose of castor oil, from one to two ounces, depending uopn the age and size of the calf. After this feed very carefully, giving as good clover hay as you possibly can—a little whole oats, and then at the same time you may give either a teaspoonful of glycerine morning, noon and night in a little water, or you can give from 15 to 25 grains of sulfocarbolate of zinc three times a day for a few days.

I have a horse eight years old that has a swelling on the left side of his neck at the throat. The left side of his head is feverish and water drips at times. N. L.

Blewett, Wash.

The trouble which you describe is probably a trouble with the salivary glands situated just below the ear. Your description, however, is not quite clear. I would advise you to give your horse once daily for a week one dram of potassium iodide on his feed if he will take it, otherwise in his drinking water. Then paint the swelling once daily with tincture of iodine.

I have lots of apples and as there is no market for them I throw a sack of apples in the yard for my horses every day. Is there any harm in feeding them? E. G.

Wilbur, Wash.

Apples have not very much food value in themselves, but they are a good adjunct to the rest of the ration. However, you are very liable to have an accident with this some day, when a horse forgets to chew the apple and lodges in the throat and causes the horse to choke. It would be wiser, I think, if you would slice the apple so that the horse could not choke on it.

I have a mare that seldom lies down, perhaps twice a month. Lately she kicks up toward her belly with her hind feet, also kicks out behind with one leg at a time, usually after having been driven. I have her in a stall by herself. Thinking she had kidney trouble I have given her ground mustard, but it does not help much.

Tyler, Wash. J. W. B.

Try taking your mare off feed for 24 hours, then begin giving her the following: Iron sulphate, two drams; tartar emetic, five grains; giving her that morning and evening for two days. Then give her five days more, morning and evening, two drams of iron sulphate. The following morning give her a quart of raw linseed oil with ounce of turpentine well mixed with it. Rest her for a couple of days, after which go on and use her. I am taking for granted that the mare is not with foal.

I have a horse that became lame a little after shoeing, which was about a month ago. Now the leg is swollen from the knee up. I pulled the shoe off and the foot seems to be all right. I poulticed and bathed the foot in hot water, but it seems that the trouble is not there. C. W.

Tieton, Wash.

Lameness is one of the most difficult things for any one to diagnose and treat even when you have the animal to make an examination and the very fact that the only symptom you can give is that the leg is swollen makes it impossible for me to make a diagnosis for you. Consult one of your local veterinarians and I think that he can, after a careful examination give you diagnosis and advise treatment. In the meantime I would advise you to bathe the swollen parts with the hot salt water in order to take out the swelling and soreness.

1. I have a mare that drags her toes on both her left front and hind feet and walks a little sideways. She shows no signs of fever in her legs and seems perfectly well, apparently has no soreness at all.

2. I have a heifer that freshened a few days ago and she does not give any milk out of one back teat. I inserted a tube and got no milk. That quarter of her udder is quite hard. R. P. R.

Comiche, Wash.

1. It is quite likely that your mare is suffering from a nervous disorder which shows in the fact that certain muscles of the body are not well supplied with their nerve functions. I do not know whether I can be of any service to you or not, but suppose you try giving the mare 10 grains of powdered nux vomica on her feed night and morning for some days.

2. Regarding the heifer, it is quite likely that there is a membrane unperforated at the top of the teat. I think the best thing for you to do is to consult your local veterinarian and ask him to puncture the membrane and slit it for you. It takes a special instrument for this operation.

Food Freaks.

An Italian pig's foot stuffed with ham meat looks like a toy. Everything but the tail of cord is eaten. This is but one of many food freaks that one finds in a visit to Sunny Italy.

FARM VALUES AND RAILROADS

Transportation Problem Must Be Solved Nationally in Order to Assure Agricultural Prosperity.

THE greatest industry of the United States is farming. Next to that comes transportation.

Efficient transportation is essential to the continued welfare and business progress of the nation. To the farmer it means wider markets and better prices for his crops.

Speaking for 90% of the railroad mileage of the country, we invite your cooperation in the solution of the railroad problem to that end.

Make Regulation Efficient

There is no question that public regulation of transportation has come to stay. The railroads accept it. They ask only that such regulation be made efficient. They ask that the functions properly subject to public supervision—incorporation, the issuance of securities, the making of rates—be placed under the direction of a single responsible national body such as the interstate commerce commission, with regional subcommissions, in order that regulation may be kept close to the people. They ask that such regulation be so administered as to permit the railroads to earn a living return, to attract new capital and to make the improvements and extensions necessary to enable them to serve the American people fairly and efficiently.

In the federal reserve and rural credit banking systems the operation of regional divisions under federal supervision is well illustrated. The railroads seek a similar solution of their problem.

Commerce Is Nation Wide

The farmer wants free trade among the states.

Commerce in farm products is not confined to state lines. It is nation wide. Its regulation should also be national. The fundamental state right is the right of each state to be protected against discriminations by other states such as exist today. Every barrier that a state erects to the free movement of commerce across its borders limits the farmer's market, makes it easier for speculators to control products and depress prices and tends to increase the cost of what the farmer has to buy.

The railroads can not serve 49 masters—48 states and the nation—and serve efficiently. The present system of multiple and conflicting regulation is wasteful and destructive.

In the interest of all, regulation should be in behalf of all the states. We invite discussion of this question and shall be glad to answer questions and to supply information on request.

This is the first of several brief talks on this subject.

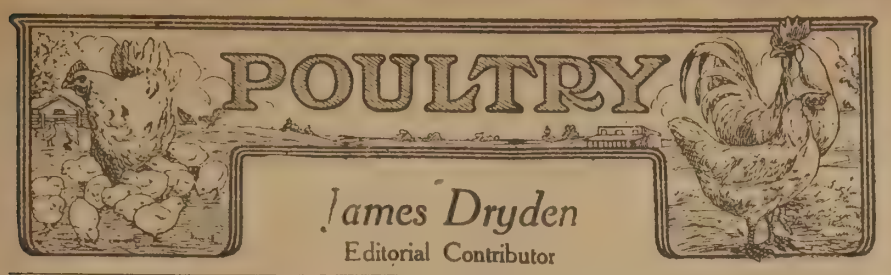
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—Adv.



Chickens

How to Dress for the Market

In the first place poultry should be well fed and well watered, and then kept from 15 to 20 hours without food before killing, according to W. H. Plath, meat cutter at the Greenough-Hurley company of Spokane. Stock dresses out better when well watered and adds to the appearance. Full crops injure the appearance and are liable to sour, and when this does occur, correspondingly lower prices must be accepted than obtained for choice stock. Never kill by wringing neck.

Kill by bleeding in the mouth or opening the vien of the neck; hang by the feet until properly bled. Leave head and feet on and do not remove intestines nor crop. Scalded chickens sell best. For scalding chickens the water should be near the boiling point as possible without boiling— 160 to 175 degrees Fahrenheit; hold by the head or feet and immerse and dip up and down five or six times; the feathers and pin feathers should then be removed immediately, while the body is warm, very cleanly, and without breaking the skin; then "plump" by dipping 10 seconds in water nearly or quite nearly boiling hot; then plane in very cold water for three or four hours, or until chickens are properly cooled, it being advisable to change water once or twice or place a piece of ice in water; when chickens are properly cooled place on shelves to dry; do not pack for shipping unless they are dry and wrap heads; during the hot weather it would be advisable to ice chickens, if ice is obtainable.

Brooders

How to Make the Fireless

To the Editor: Is it possible for you to give me directions for making a fireless brooder? D. H. G.
Roy, Wash.

The best fireless brooder we have ever used was a box 3x3 feet, for exercising the chicks in, and a small box and a warm piece of cloth for a hover. When it comes to raising chicks without artificial heat one has to become an old hen for the first few days, as the chicks must be made to retire to the warm sleeping room often, and the two boxes, when used in some large room, make the handiest kind of brooding device, as they are so easy to clean and change litter in, and if one has the time, he can raise many units of 50 chicks each in this way, and all the equipment needed for each unit is the two boxes and a piece of cloth, a drinking dish, and plenty of fine litter; and some room that can be warmed for the first few days, so that the chicks may learn to scratch in the exercise boxes without becoming cold. H. F. H.

YAKIMA SHOW

Quality of Birds Above Average.

By D. G. Sutherland.

At the Lower Yakima Valley Poultry association's annual show at Sunnyside, Wash., the number of exhibitors were not so many as on previous years, only 129 birds being on exhibition. The quality on the whole was above the average.

The breeds best represented were the White Leghorns, the White and Barred Rocks, the White Wyandottes, Rhode Island Reds and Black Minorcas.

Oscar Nelson of Coeur d'Alene, Idaho, acted as judge. The highest scores were made by J. F. Rehbock, White Leghorn pullet, 93½, and for hen 92½. The next highest was made by Mrs. Harry Turner on White Rock cock and pullet, each scoring 92 points.

The silver cup for best pen in American class was won by Ira Allen of Wapato, with White Wyandottes. The silver cup in the Mediterranean class by Sprony Brothers of Mabton, Wash., with White Leghorns.

The following officers were elected for the ensuing year: President, Frank Taylor; vice president, Mr. Strong, Mabton, Wash.; secretary-treasurer, Mrs. G. E. Longnecker. The directors are as follows: Fred Rehbock, E. N. Marton, J. D. Knight. S. H. Schreiner is superintendent and Oscar Nelson is judge. The date for the next show is the first week in December.

Sells Bunch Grass Mules.

W. S. Oliphant of Pomeroy has sold to Watts Phillips $1750 worth of young mules, which he says were net income to the farm, as they never had anything to eat but bunchgrass.

IMPROVE HERDS

Whatcom Dairymen Sell Culls.

It is reported that in Whatcom county 10 or 12 carloads of dairy cows have been sold and shipped out in the progress of a countywide move toward improvement of herds during the past year.

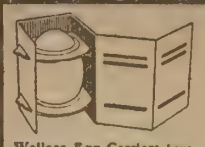
Progressive Rural School.

One of the progressive schools of Stevens county is that of Narcisse district No. 58. There are 38 pupils in attendance this winter. Mrs. Daisy Lorenz, the teacher writes:

"We have a garden club that meets twice a month. Good interest is shown. We use the schoolhouse for club meetings. We have a grange, Narcisse grange. D. Klingler is the master; Mrs. J. Gnagy, secretary; Mrs. M. Fox, treasurer; A. L. Bradly, chaplain; Mrs. C. M. Baker, lecturer. Pomona will be held here March 23, and the school is to give an entertainment."

This little school is 12 miles east of Colville. It is well along in the race for one of the libraries offered by The Washington Farmer.

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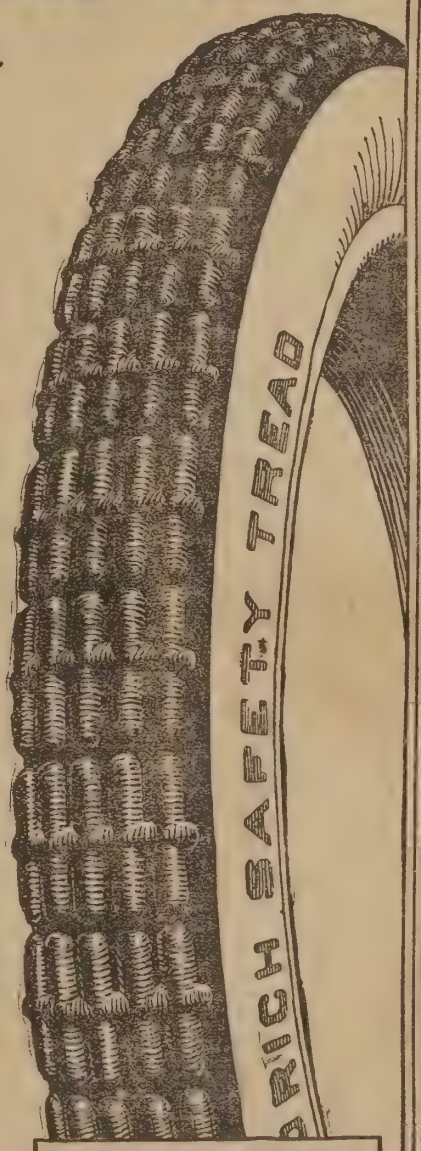
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"BEST IN THE LONG RUN"



Grape Growing

Possible in Western Washington

By PAUL E. TRIEM.

To be strictly accurate it should be stated that you can not raise grapes in western Washington, unless you do it right. The result of experience in grape culture is the proof of this.

Among the more successful attempts at grape culture on Puget sound is the work done by Adam Eckert of Detroit, Wash. He made his first planting in his present location on the Sound in 1890, and since that time has grown and fruited about 75 varieties. Recently Mr. Eckert has put his experience with grapes into book form, and from this booklet we condense the following suggestions:

Hillside land, preferably with an eastern or southern slope, and with soil ranging from light, warm clay to gravelly loam, should be chosen for grapes. Rocks not large enough to interfere with tillage are an advantage rather than a detriment, as they hold heat stored in them during the day and radiate it at night, thus tending to equalize the temperature.

A deep soil is not required, and soils rich in organic matter are to be avoided because of their tendency to increase vine growth at the expense of fruit. If organic matter proves to be actually deficient at a later stage of growth this lack can be supplied by sowing and turning under cow peas, which will supply all the plant food needed except potash.

The variety or varieties chosen should be those which have demonstrated their ability to do well in this locality. Mr. Eckert says that no variety will do well in all localities, and that that old time favorite, the Concord, has come the nearest of all the kinds tested to being a total failure in this part of the state.

Alkali Land

Is Good for Growing Asparagus

There are three good reasons why asparagus should be grown extensively in the irrigated sections of the northwest. The first is that it is in good demand in the markets at prices that insure a good profit to the producer. Asparagus should yield a net profit of $100 per acre after three or four years from the time of planting and after the roots are well developed. This is a minimum yield for a crop in this country if planted in the right kind of soil and if given proper care.

The second reason for growing it is that in all the irrigated sections of the northwest there is more or less of alkali land, too strong in salts for ordinary crops, but on that account all the better for asparagus. It is a vigorous feeder and will consume more alkali than any crop we know anything about at the present time. Originally it grew on the sea coast, where the salt water washed the land on which it grew and left deposits of mineral salts somewhat similar to those on alkali soils. For this reason salt is used as a fertilizer for asparagus beds, and it will flourish where the salt is strong enough to kill some kinds of vegetables. Some years ago I hauled a wagon load of the strongest alkali soil I could find, dug a square basin into which I threw it, planted asparagus roots, and also planted roots near by in soil that had not been thus treated. My object was to see whether there was any difference in the plants set in alkali as compared with those in the ordinary volcanic ash. The result proved, in so far as one such test could prove, that alkali for asparagus is a fertilizer. I am aware that one test is not satisfactory, yet considering the original habitat of asparagus I am convinced that much waste land in this country could be utilized at a good profit, a profit similar to that of the profits on our orchard lands, be made to support a dense population and bring wealth to the country. In other words, it would add to the industries we already have, add to the wealth and the population of the country.

My Third reason is that it can be made to supplement the fruit industry. Canneries seem necessary in order to make the most possible out of our waste fruits. Yet up to this time canneries have not been generally profitable. One reason is that with fruits alone a cannery can only run about half the year. But suppose we began early in the season canning asparagus. Then in May began with strawberries. Later the cherries are ready, then early peaches, apricots and plums. By this time the general crop is on and there are overripe peaches, not good for shipping, but just right for canning. Late in the season and all winter cull apples might supply the cannery, so that with proper management a cannery could run every month in the year. This would enable its managers to conduct the business at a profit, whereas if they run only about half the year they run at a loss. In this way asparagus is not profitable alone for what it brings in the markets, but because it so supplements other products as to enable us to maintain canneries at a profit, and thereby make profits from fruits that are now mostly waste.

To to able to maintain a cannery at a profit, increases the wealth and population of both the country and the city. The time will come when we will seek by every means possible to bring our alkali lands under cultivation. We will either drain them at considerable cost and grow alfalfa, corn and other crops on them, or we will grow crops adapted to alkali soils. Doubtless both systems will be employed, but if the land we now call waste land is better for asparagus than the average soil, and if we can find a profitable market for that product there is good season why we should grow it. G. L.

CANNING CLUB
Demonstrates Possibilities.

The Bellevue Belle Home Canning club, which was organized about one year ago, has 27 members at the present time. During the last canning season the club canned 8238 quarts of fruit, 787 quarts of fruit juice, 2162 quarts of vegetables, 12,147 glasses of jelly and about 2500 quarts of miscellaneous supplies. This is a "mothers and daughters'" club, organized under supervision of the department of agriculture, and even at this early stage of its development it has demonstrated its importance in the community.

TO BUILD PLANT
Store and Pack Fruit Products.

Plans are being laid by the Stanfield Fruitgrowers' union, Umatilla county, for the construction of a cold storage and packing plant. Professor C. I. Lewis, head of the department of horticulture at the Oregon Agricultural college, and Paul H. Weyrauch, president of the Fruitgrowers' Exchange, Inc., will assist in planning the structure.

At the Editor's Desk.

Caspar's Veterinary Guide, a booklet treating of diseases and cures of live stock. It is published by C. N. Caspar Co., E454 Water street, Milwaukee, Wis., and is priced at 50 cents. It contains some interesting colored charts showing the internal arrangement of organs of stock.

The Strawberry, by W. S. Brown. This is a short, crisp bulletin issued free to farmers by the Oregon Agricultural college, and uses no unnecessary words. It is Extension Bulletin No. 146.

The Planet Jr. catalogue, published by S. L. Allen & Co., Philadelphia, is out and ready for distribution to those who may be interested in tools of cultivation in particular.



INCREASED PROFITS MAKE A BETTER FARM

Uncle Sam advises farmers to grind the feed for their cattle. Why? Cattle thrive better on ground feed. Use the "New-Way Engine and grind your feed in one-half the time and with absolutely no loss of time for repairs, hang-ups, etc. The "New-Way" Engine is especially adapted to running cob crushers, grinders and other power apparatus within its power.

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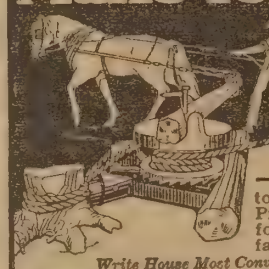
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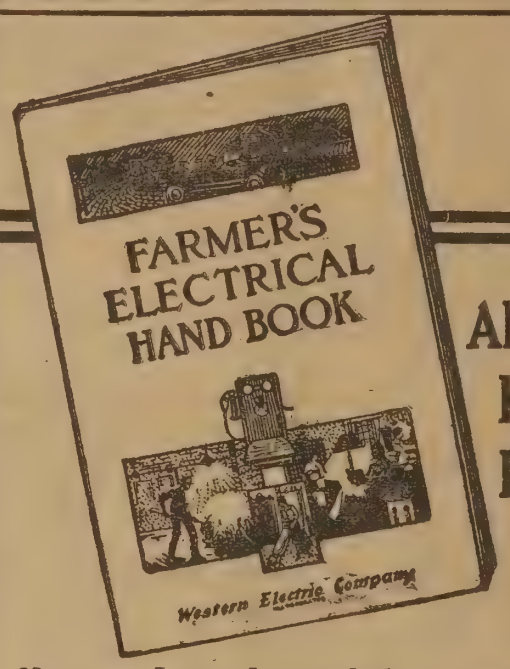
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City Boy Becomes Good Farmer

Holsteins, White Leghorns, Alfalfa, Asparagus and Strawberries

To the Editor of The Washington Farmer: I was born and raised very near the center of the great city of Chicago, receiving my education in the city schools and attending one year of high school. In the autumn of 1908 I came to Kennewick with the family. We had absolutely no farming experience.

We purchased 20 acres of land partially under cultivation, but with no buildings worthy of the name. The live stock consisted of one cow, two calves and a team of geldings, one of which died the first winter.

The farm is located on a small hill overlooking the confluence of the Snake and Columbia rivers and commands a splendid view of the surrounding country.

I spent the next two years trying to grasp the rudiments of agricultural practice. During the winter of 1910-1911, through the kindness of a newly acquired friend, I was able to attend the winter short course at Washington State college, I had always been a student and while at the college I utilized every available minute of the nine weeks in the lecture room, laboratory and library. I regard those nine weeks as a very important element in our success. Since that time I have continued to study agriculture. I subscribe to a number of farm papers, have a small library and read the state traveling library books. I also consult the county agriculturist when occasion arises. I consider the county agriculturist's office of great value not only to the individual farmer, but to every county so fortunate as to have one. We keep a careful system of accounts with each department of the farm. These practices have given me the local title of the "lead pencil farmer." Our entire 20 acres are now in cultivation and we rent 10 acres more. We have adequate though not expensive buildings, a 36-ton silo, which was filled from one and a half acres of corn last year. Silage and alfalfa make a splendid ration for the dairy herd and materially decreases the cost of the ration.

Our Holstein herd has numbered 25 head, four of these are purebred. A purebred sire of good pedigree and conformation has always been used. We have a large covered yard that serves the double purpose of sheltering the cattle and protecting the manure from the leaching effects of the weather. We follow a six-year rotation of alfalfa, corn and potatoes, using cover crops and manure in the fall. Fall plowing is practiced almost entirely. Our potatoes yielded 17.5 tons per acre last season.

We have bred S. C. White Leghorns for three years. Our strain has been trapnested for many years. The flock has made an average yearly net profit of $2 per bird from market eggs. Our present flock of 300 show a net return for November and December of $275.

Three brood mares are used to do the farm work. They are mated to the best available stallions and two or three colts raised each year. I hope soon to replace our grade mares with purebred Percherons. One fact stands out preeminently in the stock business, aside from the initial investment, it costs very little more to raise a purebred animal than a grade and the profit is decidedly greater.

Asparagus and strawberries are also raised. These crops are our most stable perennial products and splendid money makers. We also expects to add seed corn production to our lines next season. Our constant aim is to increase the fertility of the land. Large crops yield the greatest profit.

I will offer the following outline for the guidance of the beginner in irrigation farming. If he has a foundation of farm experience he should progress faster than the inexperienced man. Twenty acres is large enough to start. Put the land to alfalfa as soon as possible. Do not put too much money into buildings, but purchase good, high grade live stock. Start a small herd of cows, high grade, with a predominance of the greed you favor, add a purebred cow as soon as possible, use the best purebred sire that can be purchased or patronized and gradually build up to a purebred herd by replacing the grades with purebred cows as fast as conditions allow. Start the poultry plant early, it is one of the best money makers.

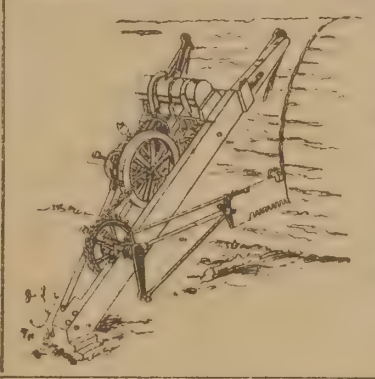
Formulate a good rotation, conserve the manure and make use of green cover crops. Plowing is perferably done in the fall. Use the best seed obtainable. Experiment to find if the use of commercial fertilizers will be profitable. These methods with thorough intertillage will insure good crop yields. The principles of proper irrigation can only be learned from experience. Plant and take good care of an acre or two of asparagus and strawberries.

Study the methods of the best farmers in the district, ask questions when in doubt. Take all the advise that is offered you and run it through your own common sense "winnowing machine." Study scientific agriculture, attend the agricultural college if possible. The old idea that "any man can be a farmer" is due for a revision. Eight years of intimate acquaintance with farm problems prove to my satisfaction that modern farming is the biggest business in the world. Success in farming is largely dependent on the individual. No hard and fast races for success can be laid down, but I am sure that the man with some capital who is willing to work, endure some reverses and not anticipate premature success will find irrigation farming a pleasant and renumerative occupation.

GEORGE E. SELLICK.
Kennewick, Wash.

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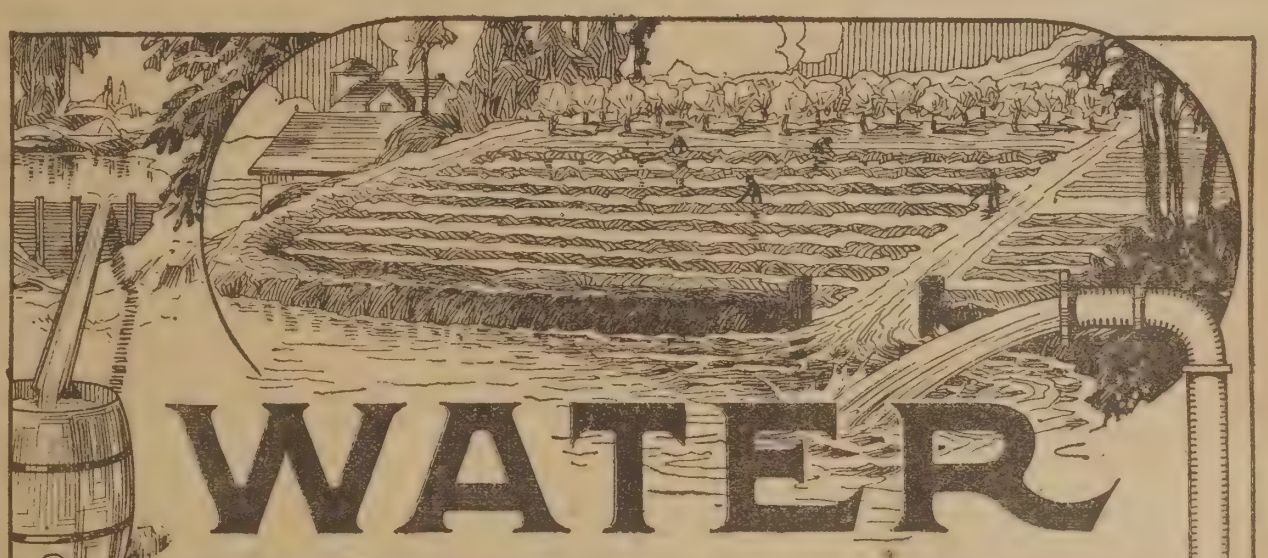
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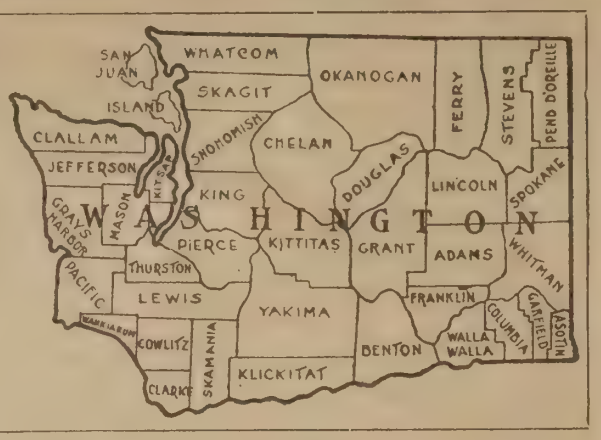
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Please send without cost to me Bulletins "A" and "B" on the subject of Hill Hydraulic Rams.

Name.....

Need Market Standardization

Market Union succeeds with strawberries and should be developed to apply to all products that are produced on the farm.



KENNEWICK, Benton County, Wash., Feb. 7.—There is no increase of live stock at the present time. Many cows have been culled out of the dairies, but dairy products have not decreased to any appreciable extent, because in most cases it was poor cows that were disposed of. One very noticeable improvement in the line of crops is in the way the strawberry beds are being cared for. In previous years, since I have been in the county, there were many strawberry beds decidedly neglected. I have yet to find the first strawberry bed this year that has been neglected. The results of the marketing union in selling last year's crop is being remarkably well reflected in the methods of production. The present care of the strawberry plants will mean an exceedingly small per cent of poor berries. The one great need of our district is the same standardization and system of marketing other crops that the growers have now adopted for the strawberries. There is some new building of houses and barns. Many new silos were built last season and many more planned for the coming season. The fall grain has not been noticeably damaged by the cold weather. The snow and rainfall have been very light this winter.

LEE M. LAMPSON.

Hay and Oats Decrease.

LA CONNER, Skagit County, Wash., Feb. 16.—Some of the products of Skagit county that are leaders are: Hay, grain, live stock, dairying, cabbage seed, potatoes, forage crops, field peas, garden products, fruit and timber. Live stock, forage crops, cabbage seed, garden seed, potatoes and field peas seem to be increasing faster in importance from the fact that the income per acre is much greater than the others. While hay and oats are grown on a much larger scale and are sure croppers, yet they are on the decrease. There are very few crops, if any, that are being abandoned for the reason that they have proved unsuccessful. Generally when there has been a failure the fault has been on the part of the producer rather than the kind of crop. There seems to be an increasing interest taken in the growing of field corn. Mangels are going to be a heavy crop for this coming year. All forage crops are rapidly increasing each year. The coming season has every indication of being a very promising one. The high prices at the present time and the past season have stimulated the farmers to such a pitch that they seem to be determined to make their land produce an increased crop.

I. W. ALEXANDER.

Hop Acreage Decreases.

CHEHALIS, Lewis County, Wash., Feb. 10.—Ten leading products of Lewis county are lumber, milk and dairy cattle, oats, hogs, beef, potatoes, eggs and chickens, vegetable and fruit cannery products, draft horses, and hops. Lumbering is the big business with farming rapidly taking the commanding place. The production of milk, milk products and dairy stock, especially Holstein cattle, are making big increases. The production of hops is declining, there being about one-fourth as many raised as were produced 20 years ago. Corn for ensilage is being successfully tired out and alfalfa is also being tried. The coming season looks very promising. The lumber business is improving and the milk business is unusually good, also other lines of farming. At least six organizations to take advantage of the farmers' bank scheme are being organized in the county.

J. C. BUSH.

Moisture Deficient.

BRUCE, Adams County, Wash., Feb. 12.—The snow has disappeared and the farmers will begin some farm work this week, although there is some frost in the ground. The prospect is not very bright for a crop for this year if we are to depend on our winter moisture to make it, as there is the least moisture for spring that we have had in 16 years. Some lands are changing hands. The big sale of John M. Phillips near Othello was attended by about 300 people and stock sold well. Three teams brought $500, $530 and $565. Good roads movement is taking a share of the farmers' attention. A plan is on foot to gravel the road from Cunningham to Othello.

A. O. LEE.

Sheep and Wool Lead.

VALE, Malheur County, Ore., Feb. 10.—The ten leading products of this county in the order of their value are as follows: Sheep, including wool and mutton, cattle, hay, grain, horses, hogs, fruit, honey, alfalfa seed and dairy products. Of these, measured by the amount of capital invested, sheep and cattle are the most important. Hay, however, is of equal importance for the reason that the herds that our summer pasture will keep, could not be wintered without it. There is a gradual increase in all kinds of products mentioned above, but not a marked increase in any particular one. I do not think that any crop that has ever been tried here has proven an entire failure. The outlook now is for about the usual crop and satisfactory prices.

W. G. THOMSON.

Sheep and Wheat Lead.

REDMOND, Crook County, Ore., Feb. 7.—The leading industry in Crook and Deschutes counties is live stock. The two most important would be sheep and wheat, and dairying and root crops, such as potatoes, would follow in line. This condition is rapidly changing such that the dairying and potato industry will be highly expressed, though the live stock industry will remain first for years to come. Our farmers are becoming very much interested in the use of field peas and it indicates that the county will soon have an appreciable acreage set to this excellent legume crop, in which event an attempt will be made to secure a market for these peas similar to that industry in adjoining states. Just at present this irrigated section of Crook and Deschutes counties contains an abundance of excellent alfalfa hay which is not moving off very fast, and the farmers are looking for a market for this.

Due to the dry winter we are having, the prospect of dry land farming is not so bright just now, but the irrigated section of the country is rapidly coming to the front. About 30 per cent of our farmers in our irrigated section are making money, which is a good showing, indeed, compared with similar projects. The potato industry will soon be on a very stable basis here, Our potato growers' association is putting out an excellent market product and securing prices all the way from 25 cents to 50 cents above similar localities.

R. A. BLANCHARD.

Timothy Is Popular.

CANYON CITY, Grant County, Ore., Feb. 12.—Potatoes, timothy hay, clover and timothy mixed, alfalfa, clover, oats, barley and wheat and rye are the leading products of this county. Timothy hay is used for feeding cattle and sheep. It is the best hay we have for fattening stock. The other hay is mostly used for feeding range stock through the winter. Alfalfa is increasing. No crops are being abandoned. There are no new products being tried. Live stock is in good demand, dairy products are very light this time of the year. It is hard to tell about the coming season as yet. We have plenty of snow, so we are sure of plenty of water.

E. M. FISK.

Hogs on Decrease.

MIKKALO, Gilliam County, Feb. 7.—The present prospects are not very favorable for a crop this year, as there has been a great shortage in the fall of moisture up to the present time. Live stock are about holding their own, with the exception of hogs, which are quite on the hum, caused by the scheme the packers worked on the hog raisers last year.

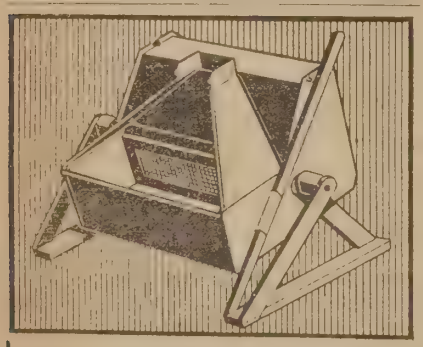
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Plant them and thus be assured that your fields or gardens will yield superior quality grains, grasses and vegetables.

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Preparedness

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The soil may be rich, conditions good, and yet you may have a failure **due to planting inferior seeds.**

Use the best seeds and secure best results.

Our seeds are carefully grown and specially selected for the western states. None better.

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The Inland Seed Company, *Spokane, Wash.*

Should Wilson Act?

Protection of Ships Demanded

One of the big questions that has been heard during the past few days is this: Should President Wilson take radical action against Germany's submarine policy without waiting for a so-called "overt act?"

The country continues to be divided into two camps, those who are anxious to have peace maintained at almost any price and those who are equally anxious that the honor of the country, the rights of humanity and the rights of American shipping on the seas be protected by a resort to actual warfare, if need be.

Shipping Tied Up.

The latter contend that the blockade by Germany against shipping from the united States to England and her allies is nearly as effective in so far as American ships and products are concerned as if American ships were actually destroyed by submarines. They declare that because of fear of submarines ships are not sailing, and advocate that the United States provide them with arms or convoys and send them on their way to Europe to defy Germany's opposition.

Wilson Wants Power.

While it is understood that President Wilson it not looking for an immediate opening of hostilities between this country and Germany, it is expected that he will go before congress before March 4 and ask for authority to take any action that may become necessary at any time to protect American interests on the seas. The present session of congress expires on March 4 in accordance with law, and it is said that the president is anxious to receive authority from congress to deal with emergencies that may come up thereafter, without having to call a special session of the new congress, should such emergency arise. He has discussed the question with his cabinet from this point of view.

Seamen Are Released.

Serious controversy between this country and Germany appeared last week when it was announced that Germany was holding prisoner 72 seamen taken some time ago with the prize ship Yarrowdale. The report stated that Germany intended to hold the men as a guarantee that German subjects in America, especially crews of ships interned, would be properly treated. President Wilson started an investigation of a nature indicating a demand that the men be released, which they were shortly after.

Sinking of Ships.

Sinking of ships by submarines continues unabated. Large numbers of vessels, both neutral and belonging to belligerents, have been sent to the bottom by German undersea vessels, but as a rule those on board are rescued, especially in the cases of neutrals.

The sinking of the Lyman M. Law, a United States schooner, threatened to prove the "overt act" required to bring about hostilities, but when it was learned that the sinking was not done without precautions looking to the rescue of the crew, eight of whom were reported to be American subjects, the seriousness of the act became minimized.

Ambassadors Embark.

Count von Bernstorff, German ambassador to this country prior to the breaking of diplomatic relations with his country by the United States, sailed last week for Germany in company with his official family and a number of other German subjects. Ambassador Gerard, U. S. representative in Germany, who was reported to be held by German authority for a time following the break, is not so held, and will arrive in America within a short time. Foreign countries, both neutral and belligerent, have expressed readiness to cooperate in securing safe passage of the ships carrying the two ambassadors.

Strong hope is now expressed that it will be found unnecessary to sever diplomatic relations with Austria or any of Germany's other allies as was at first feared. Correspondence between those governments and this country have borne evidence of desire for the maintenance of peaceful relations.

Car Shortage Affected.

Owing to the congestion of freight at Atlantic ports due to the failure of vessels to sail the car shortage is becoming more acute than it has been for a number of weeks. Vessels are not venturing out with cargoes in normal number owing to fear of the submarine blockade, and it is reported that thousands of cars are standing unable to unload because there is neither warehouse room nor vessels in which to place their freight.

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NORTHRUP, KING & CO.'S DEPENDABLE, TESTED SEEDS



DO you wish to cut down your household expenses this summer in the easiest way? Then plant a real garden that will keep you supplied all the season with delicious vegetables.

Whatever you raise depends largely on the seed you sow. Your valuable time and labor will bring the best returns only when you sow reliable seeds.

The STERLING Seed Boxes which are sent out fresh each year to dealers give you an opportunity to make a personal selection of the seeds best suited to your locality. They include the choice home garden varieties. The packets are large and contain dependable, tested seeds full of vitality. Easy-to-follow cultural directions printed on the back.

Make out your order now and take it to your dealer to be filled. He can procure for you, quickly, anything in the seed line which he may not have in stock—but be sure you get Northrup, King & Co.'s Seeds.

NORTHRUP, KING & CO., SEEDSMEN
Minneapolis, Minn.

Long White Type Potato

Market Demands of Standard and Main Crop

Chester C. Farr, county agricultural agent for Snohomish county, delivered an informal lecture on potato raising before the annual meeting of the Snohomish County Fruit Growers' association, outlining practical points on potato production. Referring to marketing, he said:

"The market demands, for its standard and main crop potato, a tuber of the long white type, such as the Burbank. For the early market, of course, a red potato is satisfactory. The greatest need of any community which intends to go into the potato business in earnest is to have enough of one type to attract the attention of buyers. Standardizing production and pack is important."

This led to the practical suggestion that the growers in and around Snohomish take immediate steps to agree on the variety of potato to be given preference by growers, and also on cultural methods. A marketing plan can be worked out later, but this is the psychological moment for determining these features which must soon be put into operation.

Turning for a moment to the subject of grading, Mr. Farr told his audience that the medium sized potato, which will weigh from three to eight ounces, is the best for the general market. Above that size comes the restaurant grade, while the smaller potatoes go into a cheaper grade used by cheap restaurants and by some of the logging camps.

"In getting a smooth, marketable potato, two points of great importance are the spraying of the vines, keeping always in mind that spraying is a method of prevention rather than of cure in dealing with potato diseases; and the handling of the potatoes, from the time they are taken out of the ground to their final delivery to the consumer. The matter of seed for this year's crop is apt to prove somewhat serious, as many of the growers have been tempted by the high prices to oversell. Seed should be selected at the time of harvesting the crop, taking tubers rather under the market size, from hills which have produced well and which have shown good resistence to disease. In raising potatoes for seed it is a good plan to cut off the vines at about the time the skin begins to slip on the tuber. The small, immature potatoes so secured make the best seed. A large tuber is like the water sprout which you cut from your fruit tree—it has gone so fully to sappy growth that it has lost its vitality. Remember that the potato is a scion, like a bud, and it not a true seed."

In concluding this important matter of seed selection and preparation, the Snohomish county man advised the use of whole tubers, treated with corrosive sublimate, one to one thousand. This is better than the use of formaldehyde in western Washington, he explained. In regard to the old practice of clipping off the bud end, Mr. Farr stated that this enabled the grower to detect blight, but that otherwise it was useless. The belief that vines from the bud end were lacking in vitality has proved without foundation.

RAISING GARLIC.

Same Process as Given to Onions.

To the Editor of the Washington Farmer: Can you give me any information on the raising of garlic?

M. G. GUTIN.

Republic, Wash.

Garlic is raised by the same processes of cultivation that are ordinarily given to onions, says Professor O. M. Morris, of the Washington State college. It is propagated by the division of the old bulbs. These small bulbs are seeded the same as onion seeds. Its yield would be approximately the same as the average for onions, running in the neighborhood of 250 to 500 bushels per acre, depending upon soil, season and other growing conditions.

The price for garlic is altogether seasonal. Some years it is high and again it is very low. There is comparatively little demand for it so that an over-supply would be difficult to sell. The price ranges, usually, all the way from half a cent to 3 cents a pound.

May Kill Dogs

New Law Requires Use of Muzzle

The legislature has passed and Governor Lister has approved a law bearing an emergency clause that authorizes the state department of agriculture to establish quarantine districts against rabies or other like diseases of animals.

In conformity with the new law, Acting Commissioner H. T. Graves of the department has designated all eastern Washington a quarantine district with a view to stamping out the alarming spread of rabies. Under the rules of the new district, after the measure shall have been approved five days, any person may legally shoot any dog found at large unless muzzled. It is not necessary that the animal be shown to have rabies.

The measure is considered drastic, but was enacted by agreement between the department of agriculture, the two houses of the legislature and Governor Lister in view of the difficulty experienced in controlling the rabie infection reported extensively in all districts where live stock are raised.

The measure was signed Monday, February 19, and became a law immediately because of the emergency clause.

Good Silo

Is Desirable on Ten Acre Tract

To the Editor of the Washington Farmer: Would it be possible to have a silo on 10 acres? Also, allowing for pasture and hay, how many cows could one keep? Could you give me a good balanced ration for my cows? I have no silage or roots.

I feed cut alfalfa hay, equal portions of dried beet pulp, shorts, bran and alfalfa meal. MRS. JOE FINGER.

Bothell, Wash.

James N. Price, specialist in dairy extension, State College of Washington, answers the above questions as follows:

It is entirely possible to have a silo on 10 acres. In fact, if you are intending to handle dairy cattle on a 10-acre farm, it would be extremely desirable to make use of the silo. I think you would find it more practical to use silage and hay the entire year, rather than to depend upon pasture on a small farm.

It is not possible to say just how many cows could be kept on 10 acres, because the yield of silage and hay will vary so much on different types of land. In order to use a silo with best success, you should have at least eight cows, unless you wish to build a pit silo. It is often practical to build a pit silo small enough for four or five cows. You should be able to develop your farm by the use of barnyard manure so that it will yield silage and hay enough for 10 cows.

You can improve the ration given in your letter by adding a larger amount of the dried beet pulp. I would suggest the following grain mixture to be fed with your alfalfa:

Five or six parts of beet pulp, one part wheat bran; two parts shorts; one part alfalfa meal.

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Is Bulk Grain Handling Inevitable?

Convention Hears Both Sides; Majority Sentiment Favors Bulk Method

The second annual bulk grain convention, held last week at Spokane, after lengthy discussion of both sides of the question, adopted a resolution indorsing the movement toward bulk grain handling in the northwest.

Dock commission officials from Portland, Ore., announced that their investigations had convinced them that the handling of grain in bulk was inevitable, and that the commission was going to put up to the people of Portland early this year a proposal to issue municipal bonds to build elevators for the receipt and transmissing to ships of bulk grain.

The convention adopted resolutions also indorsing the Portland proposal and supporting a bill now before the Washington legislature designed to extend the powers and scope of the Seattle port commission, enabling it to receive and transfer bulk grain.

The measure now before the Washington legislature providing that grain be not assessed for taxation until September 1 of the year following its harvest was formerly indorsed in a resolution. It was argued that with the grain becoming assessable on March 1, as under the present law, there was a tendency for farmers to sell without being able to take advantage of later improvement in the market.

Go Slow, Urge Speakers.

That there was a large number of steps to be taken before bulk handling would be the complete success that was desired was the assertion of Samuel Glasgow, pioneer producer and miller of the northwest. He declared that seven steps of preparation were necessary: Preparation on the farm, for hauling to the warehouse, for storing and transferring at the warehouse, for shipping on the railroads, for storing and transferring at the tidewater terminals, for shipment on vessels and for receipt at oriental or other foreign ports to which export would be made.

Others joined Mr. Glasgow in advising the grain growers and dealers to make haste slowly.

Experiences Are Cited.

Of the 200 or more farmers present at the convention a score or more discussed the questions that arose. Almer McCurtain of Davenport, chairman of the committee appointed last year to investigate the practicability of the bulking system, took a prominent part in the discussions. He declared that sentiment was increasing in favor of the bulk system, and that he had yet to hear one farmer who had tried it say he was willing to go back to the sack method.

F. N. Stockert, secretary of the Northwest Grain Dealers' association, outlined the methods followed in Montana, where the bulk system is much more fully developed than in Oregon, Washington or Idaho. He spoke enthusiastically for the system.

Sacks Expensive.

A letter from the Balfour-Guthrie company was read, predicting that grain bags this season would be offered at approximately 11 1-2 cents. Frank A. Smith of Bemis Bros. Bag Co., of Seattle, stated that his concern could not state prices at this time, supply and demand as harvest approached largely determining the price.

Portland Men Present.

Charles M. Moores, president of the Portland docks commission, and Engineer J. B. Hegardt of the same commission were present. They told of personal investigations made in the Inland Empire, which convinced them that "bulk handling of grain is inevitable," and led the dock commission to plan a movement for the construction and operation by the city of Portland of bulk grain terminal elevators. They said it was proposed to make the first unit of such elevator system one of a million bushels capacity, which would mean that several millions of bushels could be handled through it during a season if shipping facilities were available.

Dennis Sullivan of the Farmers' Warehouse company of Rockford, Wash., told of that company's successful conversion of a flat warehouse into a bulk house. He said that he converted a floor space 40 by 100 feet for bulk bins; that on the old 2 by 6 studding he placed shiplap for lining; that he thus secured a 40,000-bushel capacity; that he had handled 65,000, of which 25,000 had been shipped out; that the remodeling cost approximately $2300; that he used an air conveyor for transferring from the warehouse to the cars, this conveyor having a capacity of 600 bushels and being driven by a 40 hoursepower electric motor, which gave plenty of power; that it required two men to load cars with the equipment; that he figured a charge of 1 1-2 cents a bushel for handling, but that since no other buyers than the company he represented purchased wheat in that warehouse, such charge was not actually made; that the cleaning effected in the air conveyor process increased the grade of the wheat an average of 1 1-2 per cent, thereby more than making up for the loss in weight actually resulting from the removal of smut and other foreign matter. Mr. Sullivan declared that the experiment had proved the practicability and economy of using a flat warehouse for handling grain in bulk.

Others who had tried the system spoke along the same general lines. O. W. Collins of Thornton, Wash., said that the electric power required to put 125,000 bushels into the cooperative warehouse and there load 25,000 of it out, cost $17.40 last season. He said he used only one man to handle the entire 125,000 bushels. He used a centrifugal washing machine for the elimination of smut. He said personally he had produced 14,000 bushels of grain; that he paid $500 for a share of stock in the company; paid $155 for three road tanks; figured the sacks he would otherwise have used at 12 cents and on that basis saved $200 and had his share of stock and his three road tanks left at the close of the season.

While the bulk handling of grain was enthusiastically indorsed by the convention last week in Spokane, it was not until after the question had been discussed for several hours. The following are some of the points in the arguments made for and against the system:

FOR.

That actual experience has proved it cheaper to handle grain from threshing machine to cars in bulk than in sacks.

That the great cost of sacks would be eliminated.

That grain may be cleaned during the transfer from wagons to warehouse or cars, thus eliminating freight on foreign material and producing a higher grade.

That the grain can be stored on the farm and hauled to the warehouse or elevator at the leisure of the producer.

That the bulk system would tend to reduce the number of varieties grown, thus helping to standardize and simplify the production, shipment and milling of grain.

That it may be stored on the farm, saving warehouse storage charges.

That it can be handled in bulk much more rapidly at the warehouses from wagons, from warehouses to cars or from cars to ships.

That one man can take the place of four or five who would be required in sack warehouses.

That the more rapid handling would do much toward relieving car shortage due to congestion of cars.

That bulk grain is becoming the standard for market quotations, and should be adopted throughout the entire country.

That the price of grain in sacks is rarely enough higher than grain in bulk to pay for the sack.

That it would eliminate the payment of freight on sacks, which aggregate thousands of tons during a season.

That ships will gladly prepare to handle bulk grain and favor ports which receive it in bulk, owing to the less delay in loading.

That the difficulty heretofore experienced with bulk grain heating on ship board while passing through the tropics in eliminated by the Panama canal.

That threshermen charge less for threshing in bulk than when required to sack grain.

That experience shows flat warehouses can be converted cheaply into bulk grain storage houses.

AGAINST.

That the change, if it comes, must come slowly because it requires a complete reversal of system and preparations must be made not only by the individual farmers and warehouses, but by the transportation companies and the terminal concerns.

That the common flat warehouses can not readily be converted into bulk warehouses.

That the great number of varieties of grain grown make it difficult to handle in bulk without mixing them.

That the presence of smut in the grain of the northwest makes mixing frequently impracticable because a small quantity of smutty wheat turned into a bin of clean wheat reduces the grade of the entire content of the bin.

That vessels as now constructed are inadequately prepared to ship grain in bulk.

That the railroads are not prepared with cars suitable for bulk shipments.

That handling in bulk causes the wheat belonging to a given farmer to lose its identity, so that all he can demand on his storage ticket is a like amount of wheat of like variety and grade.

That it would be difficult to fix adequately the responsibility of an elevator company to insure against losses or its inability to deliver to the holder of a storage ticket grain in the amount and like character of that which he had delivered to it.

That the equipment for storage both on the farm and in the warehouse and for transportation is too expensive.

That the usual difference in market price between bulk grain and sacked grain is sufficient to counterbalance the saving in sack bill and other items of handling.

That it is more difficult to borrow money on grain stored in bulk than on grain stored in sacks.

That a more elaborate system of grading is necessary in bulk handling because of the loss of its identity.

That the present abnormal shipment of wheat eastward instead of westward to tide water creates favor for bulk handling, which will be destroyed when the world war ceases and shipping is resumed on the Pacific.



Selling Garden Truck "On the Hoof."

The exhortation to sell hay and grain as a finished product rather than as a raw material has long been heeded by wise farmers, but it is not often that this injunction can be carried out in regard to garden truck and poultry, which are looked upon as the final product in themselves. On Thompson's farm, near Kent, in King county, however, the yield of the gardens and the poultry runs is carried a step farther than is usually the case, for most of it is used through a Seattle restaurant.

Mr. Thompson has always been something of a farmer, at least in his interest in farming. He owned several farms before his present place, which comprises 12 acres of White river valley land—as fine land as any in the state or in the world. One of the features of the place is the chicken house, built to accommodate 2000 chickens and said to be one of the most scientifically equipped in the entire country. At present Mr. Thompson has about 400 chickens, with a bunch of thrifty youngsters coming up to fill the empty space.

There are some 45 hogs on the place now, but this is the minimum number kept. There are ample quarters for a much larger number. Part of the pork produced is sold through other channels than the restaurant, but practically all the other products of garden, orchard and poultry plant are consumed by the patrons of the Thompson restaurant.

Lots of Corn Silage to Acre.

W. A. Goff of Snohomish considers himself a farmer even though his "farm" is of but one and one-third acres' extent. It is bottom land, and although Mr. Goff is an old Kansas man, he states emphatically that there is no better land in the world. He is willing to admit, however, that the same kind of corn can not be raised in Snohomish that they raise in the middle west.

"You've got to have hot weather and plenty of sunshine to mature good ear corn," Mr. Goff explains. "We simply can't do it here, and there's no use pretending we can; but when it comes to corn for silage, then we can talk. We can raise more corn silage to the acre on this bottom land than they can anywhere else on earth!"

In the matter of feeding dairy cows, Mr. Goff has his own ideas, which he is convinced are correct, even if they are not in harmony with modern agricultural orthodoxy.

"I'm not going to feed my cows any more beets," he declares. "I bought several tons and tried them out—had thought of planting part of my farm to them; and after testing them out as thoroughly as I could, I am satisfied they don't begin to equal in feeding value the grain or hay that could be raised on the same acreage. Adding them to the ration I was feeding my cows didn't increase the milk flow a drop. They're mostly water, and I've decided to water my cows with a bucket after this."

SUGAR BEET EXPERT
To Act as Field Superintendent

H. C. Rosenfeldt, a brother of F. W. Rosenfeldt of Ellensburg, is preparing to move to that city, where he will act as field superintendent for the sugar beet factory, now in course of erection near North Yakima. Mr. Rosenfeldt has had seven years' experience as a sugar beet grower at Scots Bluff, Neb. In that locality the crop averages 15 tons per acre and is found exceptionally profitable.

Four Guilty in Trading Co. Case

Smith, Knudson, Fowler and Davies Convicted; Lawrence Is Acquitted

(Continued from page one.)

District Attorney Garrecht joined Attorney Robertson in a plea for leniency for O. C. Fowler. "On behalf of members of the jury I am requested to state that in the conviction of O. C. Fowler the jury looked upon him more as the instrument of those older and more experienced than himself," said Garrecht.

Judge Avers Verdict Justified.

In remarks preliminary to passing sentence Judge Van Fleet said:

"The duty of the court in administering punishment is never a pleasant one for me and becomes more disagreeable as I grow older. However, this disagreeable necessity is forced upon us as a result of our position and can not be evaded because of sympathy or sentiment. Happily, in criminal cases the court is saved the necessity of passing upon the facts, which rests with the jury.

"I would do less than my duty if I refrained from expressing entire satisfaction with this verdict. I would ignore one of the moving forces in this case to say that evidence did not exist that compelled a verdict of guilty. One could not follow this case without being impressed that during the progress of these enterprises the defendants devoted their best efforts toward putting stock upon the market regardless of whether the public received any benefit or not. Had it appeared that the enterprise made a profit it would not have prevented a conviction under the showing as to representations made to the public to induce stock purchases. The evidence shows that these enterprises never were carried on at a profit.

Declares Fair Trial Was Had.

"These defendants have had an absolutely fair trial. No ruling has been made by the court for which my conscience takes me to task. Able counsel has defended these men and the district attorney has tried simply to present the plain, cold facts.

"The evidence of the government experts was given solely to lay before the jury the facts in this case as disclosed by the records. I have never seen functionaries of this kind make less effort to place deductions on their findings than in this case. Under this evidence the jury could not have done other than what it did.

Deterring Effect Is Sought.

"The offense is a serious one; in which the defendants are charged with having defrauded a large number of people. To uphold the majesty of the law the gravity of the offense must be taken into consideration and adequate punishment provided. The object of punishment is not primarily to reach the individual, but for the deterring effect it will have in preventing a recurrence of such things."

Motion for New Trial Denied.

"If I felt the slightest doubt that the jury had in any way been subjected to coercion in this case I would grant a new trial, but I do not so feel," said Judge Van Fleet. "The remarks of the foreman did not even convey an impression as to how the jury stood beyond that they could not agree. The motion for a new trial is overruled."

The court instructed Attorney Robertson that a motion to vacate the judgment could be made at any time before the end of the present term in April. Counsel was further informed that he could extend his grounds for a new trial in the bill of exceptions to be filed later.

Foreman Discusses Jury's Work.

Members of the jury as a rule declined to discuss the case, referring all inquiries to Foreman David Gorman.

"The first question to be determined," said Mr. Gorman, "was whether a conspiracy existed, and this was the rock on which we split. Without the existence of a conspiracy we could not proceed with the question of guilt or innocence.

"The first ballot was eight for the existence of a conspiracy and four against it. We then talked the matter until midnight, taking numerous ballots, probably 100 in all, and finally won over two more jurors, making 10. All during the morning hours today and until we again went before the court at 11 o'clock the vote stood 10 to 2 for the existence of a conspiracy. We then seemed to be hopelessly deadlocked and the suggestion was made that we go before the court for further instructions. After these were given we lost no time in reaching an agreement as to the existence of a conspiracy, after which we balloted separately on the question of guilt or innocence. One ballot each was taken as to Gale Smith, S. T. Knudson, C. L. Davies and O. C. Fowler, in each of which the verdict was guilty. One ballot was taken on J. C. Lawrence in which the verdict was acquittal.

What They Thought of Lawrence.

"The jury seemed to regard Lawrence as a servant or employe of the leaders in the conspiracy, and as it was not shown that he had profited beyond his salary he was placed in a different class from the others. Members of the jury have requested that I mention no names of the jurors in connection with the various ballots. Their differences were all honestly formed and finally removed after hearing further instructions from the court.

"Members of the jury worked faithfully all the time in discussing the case. It was a hard case, with many angles and complications, and I have never seen a jury work harder or more faithfully."

ON THREE PAYROLLS.
How Farmers' Money Was Spent

Gale Smith, the chief defendant in the trial for conspiracy to defraud through the use of the mails, in his direct examination for the defense denied all conspiracy charges and branded as false everything alleged by the government to be crooked.

In opening his testimony Mr. Smith said that he was born in Illinois, and prior to becoming connected with the Northwestern General Trading company was employed on the Ritzville Times and the Washtucna Enterprise, both in Washington, and later followed mining.

Conceived Trading Idea in 1908.

"The first suggestion as to the organization of the Northwestern General Trading company came from A. G. Stall, an acquaintance, in the latter part of 1908," said Smith. "Early in 1909 we started to form the company, and sold a few shares of stock before it was incorporated in June of that year. The original incorporators were Joseph Kaufman, A. G. Stall, A. H. McGregor, A. J. Miller, Charles W. Haynes and myself.

"About this time I met S. T. Knudson and a man named Laird, with whom we arranged to sell stock in the new company, first at 25 per cent commission, then 20 per cent and again at 25 per cent. Laird went insane in 1910, and after that I took up the stock sales jointly with Mr. Knudson."

"Prior to 1910 had you received any commissions?" inquired Attorney Robertson. "No."

Authorized Commissions in 1911.

"State if payment of commissions was approved by the company." Yes, at the meeting of the trustees in June, 1911."

"Did you get anything that you were not entitled to?" "No."

"What assistance did you give Knudson in the sales department?" "Helped him manage it and look after the agents."

"At your first annual meeting in 1909 were any new men placed on the board of directors?" "Yes, C. L. Davies, W. W. Jeffries and W. H. Sprague, none of whom I had met before."

"When did your store begin business?" "In the fall of 1909 or early in 1910."

"When did you buy the building on Division street?" "In 1911."

Business Was $390,000 in 1914.

"What was the approximate volume of mercantile business after you opened the store?" "As I recollect it, it was about $200,000 in 1912, $280,000 in 1913 and $390,000 in 1914."

"Did hard times change your estimates as to the probable growth of the store?" "Yes, many concerns failed during those years."

"Have a loss in 1912?" "Yes, but it was less than in 1911."

"What did you understand about the clause in the prospectus, saying officers should receive nothing except their salaries?" "I wrote the prospectus, and meant this to refer to merchandise; that no officer in this line was to profit beyond the salary paid him."

"Ever buy in carload lots?" "Yes, besides the commodities bought locally we purchased 47 carloads of goods from transcontinental points."

Conceived Portland Branch in 1913.

"Who conceived the idea of the Portland branch?" "C. L. Davies first suggested it in 1913. He was later placed in charge after it opened."

"Did you get any commissions out of the Portland store?" "No."

"Have anything to do with starting the company at Seattle or at Cedar Rapids, Iowa?" "No."

Under Cross-Examination.

"At the time you entered the contract with Knudson to sell stock for the Northwestern did the board of trustees know that you were to share in the commissions," asking District Attorney Garrecht in cross-examination. "Yes," replied Smith.

"You wrote the minutes?" "Yes."

"Why didn't you put that in the minutes?" "I did not think it necessary."

"Did you put it in the report of the next annual meeting?" "No, but we talked it over."

"Were not copies of your prospectus sent to Seattle and Cedar Rapids for use in forming the companies there?" "Possibly; they may have secured copies of it."

"In your letter to Isaac Kendall you tell him to be quite sure that the officers draw nothing but their salaries. In view of the payment to you of commissions what did you mean by that?" "The commissions were a part of my salary."

"According to the minutes, when your salary was raised or lowered there is no mention of commissions." "No, it was not thought necessary."

Invited to Cedar Rapids.

"Why did you go to Cedar Rapids at the request of Wilder and McGregor?" "McGregor and I were acquainted. When Knudson failed to go there they asked me to come."

"Why did you place the stock of the Portland house at $30 on the opening, when stock was selling in Spokane at $75? "The corporations commissioner of Oregon asked us to place it at that figure."

"At the time you were getting a salary and commissions at Seattle and commissions at Cedar Rapids, you were drawing a salary at Spokane?" "Yes."

"Did the Spokane stockholders know of this?" "No."

"The Iowa Mercantile company had gotten under way when you went back there in 1914, and you helped get out the stock register?" "I don't recall. I may have done this."

The Court—You were president of the Northwestern at the time you went to Iowa? Smith—Yes, sir.

Shared in Commissions.

"Did you take a contract to organize and manage the stock sales department of the Iowa Mercantile company?" continued Mr. Garrecht. "Yes, with Thomas R. Wilder and A. H. McGregor."

"Each got a third of the commissions?" "I believe we did."

"When you left Cedar Rapids your intention was to go back there?" "Yes, if I could arrange my plans to get away."

"Did you engage agents at Cedar Rapids?" "I did."

"Was it run along the same lines as the Northwestern?" "It was while I was there."

"You wrote to A. C. Kelly, a sales agent of Chicago, to go there?" "I did."

Wolfle Frequently Consulted.

"When did you borrow $15,000 from the bank?" "In June, 1912."

"When was this loan ratified?" "Some time after that."

"Look at the minutes. Wasn't it in January, 1913?" "It seems to have been."

"You did not tell the stockholders' annual meeting of 1912 about this loan?" "I think it was paid back about that time."

"Why, then, was it ratified?" "Because Sprague and Haynes were raising some question about going into debt."

"Did this have anything to do with Conrad Wolfle's election?" "No."

"The meeting at which this loan was ratified was the only one attended by Conrad Wolfle?" "He was frequently consulted."

"What became of the money secured in this $15,000 loan?" "Used to pay for merchandise."

"Who objected to the confirmation of the loan?" "Directors Sprague and Haynes."

Queries on Collection Company.

"What was the reason for Sprague's objection?" "He objected to my management of the company. He wanted to fire some of the employes and I would not consent to it."

"Because of having trouble with Haynes and Sprague you wanted them off the board?" "No, some of the other members thought they should step down and spoke to them about it."

"The Inland Mercantile company was organized and operated with the funds of the Northwestern Trading company as a part of the business?" "Yes."

"You directed its policy?" "Yes."

A series of letters sent out to delinquent stockholders were submitted and identified by the witness, tending to show the character of the correspondence carried on by the Inland Mercantile company.

"Then you did have a general knowledge of what Sears was doing?" asked Garrecht. "Yes. I directed him to use the language employed. I did not, however, see all of the letters that he wrote."

"About the time J. C. Lawrence suggested the indorsement by the Farmers' union you placed him on the payroll?" "About that time."

"At the time Lawrence was appointed to make investigation of your books with a view of securing the indorsement of the Farmers' union he was then on your payroll?" "Yes."

"Were your books ever audited?" "Not all the way through, unless Mr. House did it. Mr. Walk had started to make an audit when the bankruptcy proceedings began."

Witness denied that he had opposed an effort by stockholders to have the books audited by Lemasters & Cannon, but wanted them to work with Robert Porter, an accountant employed by the farmers' union. Neither Lemasters & Cannon nor Porter made a complete audit.

Agreement on Stock Sales.

"You agreed to pay $40 a share on the debt of the farmers' union warehouse in Spokane for every share of stock sold by members of the union?" "Yes."

"How many shares were sold under this agreement?" "About 167."

"Any of this money applied on the

Credit for exposing the first of these trading companies belongs to Miller Freeman, then publishing The Washington Farmer, whose patrons had called to his attention some smaller concerns operating under the guise of cooperating institutions. While thus engaged the attention of the Farmer was directed to the Olympic Trading and Supply company of Seattle. Calls were made twice at the company's store and later two letters of inquiry were written before the first article exposing the company appeared in the Farmer of March 15, 1915. An editorial in this same issue declared: "This case appears to be typical of a number of such institutions operating throughout the northwest, and where the merchandizing end is merely a cloak for the extensive stock manipulations of the officers, who are willfully and knowingly practicing gross deception on the people."

This was followed by articles and editorials in the Farmer laying bare the swindling methods of business pursued by the Northwestern General Trading company and its allied branches. Local and national authorities were time and again urged to make an investigation until finally the federal department of justice in connection with the postal authorities began and carried on for a year the searching inquiry which has now resulted in the conviction of four of the officers of these trading companies.

The wide benefits which come from genuine cooperative efforts depend largely upon the wiping out of swindling concerns that prey upon the public in the name of cooperation.

debt?" "I think the trustee in bankruptcy paid about $800."

"Any shares sold after the company went into bankruptcy?" "No."

"How did you know the company was running at a profit or a loss?" "We had financial statements made."

"Were they presented at your annual meetings?" "No, they were generally made at the end of the year, after we invoiced."

"You issued a statement for 1911 saying that all bills were paid and the company out of debt. Isn't it a fact that you were in debt then?" "I couldn't say without looking at the books."

Bills Hint Indebtedness.

At this point Attorney Garrecht read a number of letters and telegrams addressed to the Northwestern General Trading company in 1911 urging the payment of past due accounts. A pink slip issued by the company for 1911 showed no indebtedness of any kind. Other dunning letters dating down to 1915 were read showing that the company was also behind in its bills in later years.

"Your published policy of paying cash for all things was not adhered to, it seems?" "No, the board relied upon the notes."

"Doesn't your charter provide that you could not go into debt?" "Yes, sir. The first debt was authorized by the stockholders in the purchase of the building."

"And this was the only indebtedness ever authorized by the stockholders?" "I think that is correct."

"Some of these dunning letters came before the building was bought. Didn't you deceive the stockholders then?" "No, sir."

Bought on Credit.

"At one time you talked of creating a surplus fund to be invested in mortgages?" "That was dependent on the stockholders and the payments for stock."

"But you did not restrict the matter in this way in the minutes?" "No, sir."

"Isn't it a fact you never wrote a line in the minutes about going into debt except for the building?" "Yes."

"Isn't it a fact you bought on credit the whole of the time you were doing business?" "Yes, we bought on the usual 30 days."

"Speaking of the Olympic, you wrote to a gentleman in Iowa that you were putting in a concern 'similar to ours'?" "Yes."

"You were also a director and vice president of the Seattle company, which would indicate that you were pretty closely affiliated?" "Yes."

By-Laws Not His.

"You were present at the meeting that ratified Knudson's contract?" "Yes."

"You knew that the by-laws prohibited an officer from receiving anything but his salary?" "I had nothing to do with Knudson's Seattle contract. It was drawn before I got there."

"At this meeting you voted yourself a salary of $50 a month, Knudson $100 a month, and raised O. C. Fowler to $175 a month?" "Yes."

The court—I thought you said you got $100 a month. Witness—I did.

Witness explained that $50 was paid by the company and $50 by Knudson for assistance given him.

No Split With Knudson, Fowler.

"Was Knudson voted that $100 to split with you and Fowler?" "No."

"Then Knudson must have paid you his $50 from his commissions?" Witness was unable to say.

"The money received by the Olympic to pay salaries came from the sales of stock?" "Yes."

"They had no store then?" "No, sir."

"You raised the price of stock—what was that based upon?" "The future growth of the business."

Lawrence Met Labor Council.

"Did J. C. Lawrence attend the meeting of the labor council in Spokane, as you requested?" "Yes, he said he did."

"You wired him to get this indorsement?" "Yes, we wanted this to satisfy the labor unions of Cedar Rapids, to show them the standing of our house in Spokane."

"What connection did your house in Spokane have with investors in the Iowa company?" "It did not make a great deal of difference, people back there wanted it."

"So you picked Lawrence to do it?" "Yes."

Points to Coincidences.

"At the time J. H. Taylor was about to select an auditor to go over your books for the farmers' union he was on your payroll?" "Yes."

"That is just another coincidence, the same as J. C. Lawrence being on the payroll when he went to investigate your company for the Farmers' union. These men were evidently on the pay roll for a purpose?" To this witness made no reply.

"Lawrence was your right hand man and looked after stock selling when you were not around?" "Yes, sir, after the indorsement of the union."

More Letter Writing Is Shown.

District Attorney Garrecht read a letter written by Gale Smith to Edward Thomman, an agent operating at Eugene, Ore., who was trying to secure an indorsement of the Northwestern by the local grange. Thomman's letter outlined a series of questions suggested by the grangers, and to these Smith had replied. One of his replies stated that the company's merchandise obligations were of merely a temporary character and would be paid by the end of the month. Garrecht then had Smith read a series of entries showing that the Northwestern General Trading company was then indebted and had been for months to a number of wholesale houses in Spokane, some of them in amounts running as high as $7000.

"You sold $495,000 worth of stock in the Spokane and Portland houses and had assets, with the unpaid notes taken into consideration, of $316,000. What became of the other $182,000?" asked Garrecht.

Had Good Will Worth $1,000,000.

"We had good will worth $1,000,000," replied Smith, while the audience laughed.

"Upon what do you base your estimate of $1,000,000 for the good will?" inquired Attorney Robertson.

"On an organization of 8000 people, together with the farmers' union, which brought in 8000 more."

CHECKS IN BLANK

Signed to Be Used by Gale Smith.

C. L. Davies, one of the defendants in the case, said that he was born near Waverly, had gone through the eighth grade of school and had leased 1000 acres of land when 23 years old. He became connected with the Northwestern General Trading company in 1909 and went to Portland to take charge of their branch there in 1913. He was elected a director at the first annual meeting of the company in 1909 and has since continued in that capacity. He had urged the opening of the store at Portland and fell heir to its management after that branch was put in.

In preparing for the Portland activity Davies said he visited Corporation Commissioner R. A. Watson of Oregon, who asked him to place the selling price of the stock at the outset at $30 per share. Watson told him Oregon had a rigid blue sky law which placed restrictions around the issuance of capital stock. The state commissioner authorized the payment of commissions of 20 per cent.

Paid Gale Smith Commissions.

Witness knew of the payment of commissions to Gale Smith of Spokane and said that was generally known by members of the board of directors.

"Explain the $1000 check which you drew from the Portland house about the time the company went into bankruptcy," asked Attorney Robertson. "That was $1009 for commissions due me. The money had been due for some time, but I did not want to take it out of the business."

"Explain how Directors Sprague and Haynes resigned." "They had gone around the country roasting the company. Sprague said that if we would buy his stock he would resign. It was concluded to buy his stock."

"What about the steam roller?" "That expression was started in 1912 when Teddy Roosevelt was running for president on the bull moose ticket. Sprague and Haynes said steam roller methods were used around the store and from that the expression was taken up."

Denies Proxies Conspiracy.

"Did you conspire to use proxies in the control of the meetings?" "No, sir. Proxies came in in due form and were not generally used."

"Isn't it a fact that at every meeting the proxies outvoted the shareholders?" inquired Attorney Garrecht in cross-examination. "I don't know."

"When you promised to start branch stores at Eugene and Roseburg, Ore., and failed to do it was the money for the stock returned?" "No, the patrons bought stock in the Portland house and nothing more."

"Why did you vote to pay commissions to Gale Smith?" "To keep from raising his salary."

"But at the next meeting, according to the minutes, you did raise his salary?" "Yes, but we would have had to raise it more had he not been paid the commissions."

Signed Name to Blank Checks.

"After you went to Portland, you, as treasurer of the Northwestern, signed up a lot of checks in blank to be used by Gale Smith?" "Yes."

"And for this you received $10 a month?" "Yes."

"Didn't you know that it was against the state law to buy back the stock of Director W. H. Sprague?" "No, I didn't know that."

"What did you do with this Sprague stock?" "Turned it over to the company."

"Didn't go out to sell it?" "Not to my knowledge."

District Attorney Garrecht called attention to the Sprague stock which indicated that it had been canceled in lieu of later stock issued to some other purchaser. Exhibiting a check for $450 to the witness, Attorney Garrecht asked:

Turned Money Over to Sprague.

"Didn't you get this money yourself?" "I got the money from the company, but turned it over to Sprague."

"In March we find another check for $450 issued to you. We would ask if you didn't get that also?" "It shows that it was made out to me."

"Please explain this." "I don't know anything about it. I sold a car of potatoes to the company about that time."

THINGS HIDDEN

Miller Freeman Began to Probe.

Miller Freeman of Seattle, called by the prosecution in rebuttal, testified that he had lived in the state since 1884 and knew the defendants Knudson and Fowler, and had discussed with them the affairs of the Olympic Trading and Supply company of Seattle in the latter part of February, 1915.

"In these meetings did you ever express the purpose of wrecking the Olympic Trading company?" asked Attorney Garrecht. "No, sir," replied the witness.

"What did you say?" "My conversation began with Mr. Knudson while I was publisher of the Washington Farmer," said Mr. Freeman. "I asked for definite information for publication, and explained that if the showing was satisfactory I would get behind the company and boost for it. I was told that the stock had been sold broadcast over the state and the northwest, and said that some complaints were being made as to the operations of the company. I wanted to know how much stock had been sold; how much money collected; the commissiones paid; the assets and the cash on hand. I also inquired if the so-called dividends or rebates on merchandise purchases were paid out of the earnings of the store or from cash received for capital stock.

"Knudson gave me a copy of the Olympic Trader, the official organ of the company, in which he said these questions were answered. I found that the report in the Olympic Trader related to the merchandise sales and not the sales of stock. Knudson said that it would not do to give this information to the farmers, who are not familiar with business matters and that therefore the matter would be misunderstood and cause harm.

Information Denied.

"Knudson, Fowler and J. P. Dabney were present at this meeting. I insisted on having the information that I sought so that I might get an intelligent idea as to the operation of the company, but Knudson finally declined to give it. I then told him that it seemed to me that their printed prospectus did not give all of the facts. I asked him if some inside ring existed that was getting a commission on sales of stock. Fowler then spoke up and said that Knudson did have such a contract and received 25 per cent commission on the stock sold. He attempted to justify it as being an advantageous contract for the company. I said it was all right if they placed their cards on the table and let their stockholders know."

"Did you see them again before you published anything?" asked Garrecht. "Yes, sir. We had another conversation in which I said that I would be glad to publish anything they had to say exactly as they wrote it."

"Did they write anything for you?" "No, sir."

"What further did you do?" "I called a second time and found F. L. Chamberlain, Knudson and Fowler there. Mr. Chamberlain was then a high official of the state grange. I called Chamberlain's attention to the fact that representations he was making as an officer of the grange were inducing many people to invest in the Olympic company. I asked him if he were familiar with the contract for the sale of stock held by Knudson, and he replied that he was."

"What position did Chamberlain hold with the Olympic?" "He was editor of the official organ, the Olympic Trader."

Wouldn't Tell Farmers.

"What further did you say to Chamberlain?" "I asked him if he believed in the principle of keeping people in the dark. He replied that farmers do not understand business, and if some things were explained to them they would create a bad impression. He admitted that the so-called dividends or rebates on merchandise were paid from the treasury to people who were favorable to the company."

"What did he say as to assets?" "He placed the merchandise assets at $20,000. I tried to get him to say how much stock had been sold, but I could not get this information."

"Thereafter you wrote this letter?" inquired Attorney Garrecht, presenting a letter from Freeman to the Olympic Trading company, dated in February, 1915, seeking information along the lines that he had previously solicited orally. The witness said he had sent the letter.

"Did you get an answer from Knudson?" "Yes; on March 6."

"You then wrote a second letter to which you received no reply?" "Yes."

"How long after the second letter was written before you made any publication with reference to the Olympic Trading company?" "The last letter was written March 6 and the article did not appear until March 15, 1915."

"You were furnished with no further information by Knudson, Fowler or Chamberlain?" "No."

"When was the action for receivership started in the superior court?" "The latter part of April, 1915."

Father's Will Not Mentioned.

In opening cross-examination Attorney Robertson asked Mr. Freeman about the will of his father and if the same were not called to his attention at one of their meetings. He replied that it had not been mentioned.

The witness was interrogated as to charges made against him by W. H. Paulhamus at the 1913 session of the legislature that he represented the special interests. Freeman recalled the charges, but stated that they were untrue. Freeman also said that he had opposed the "seven sisters" measures in 1913. He emphatically denied that his opposition was influenced by the fishing industry or any one else.

The witness stated that he had since disposed of his interests in the Washington Farmer and other farm papers and is now engaged in the publication of the Pacific Fisherman and an automobile journal.

COMMISSIONS $101,000

Total Losses Were $180,538.

H. S. House, an examiner for the department of justice, called as a witness for the prosecution, read his report on the financial affairs of the Northwestern General Trading company to the jury.

Totals Are Interesting.

From three sheets of typewritten figures Examiner House read the following totals to the jury:

Sales of Stock.

1495	shares at $20	$ 29,900
1264	shares at $25	31,600
500	shares at $30	15,000
249	shares at $35	8,715
2269	shares at $40	90,720
880	shares at $50	44,000
1449	shares at $60	86,940
1981	shares at $75	148,575
159	shares at $75 (Farmers' Union Stock)	11,925
10,245	shares sold for	$467,375
Less cancelations and adjustments		26,078
Value of stock sold		$441,297

Assets April 30, 1915.

Cash on hand	$ 7,706.11
Merchandise	99,404.85
Real estate	35,200.00
Alterations	20,960.10
Printing department	1,236.19
Office supplies and advertising	11,562.18
Fixtures of store	7,791.94
Due from agents	1,737.91
Mis. acts. rec.	3,387.35
Equity in piano contracts	5,783.20
Auto, horses, etc.	1,000.00
Miscellaneous assets	6,141.89
Total assets	$201,911.72
Less accounts payable	56,077.73
Balance due on real estate	10,000.00
Miscellaneous accts. payable	736.10
Total accounts payable	$ 66,813.83
Net assets	135,097.89

Difference between assets and amount collected on stock, $180,538.98.

Segregation of Disbursements, Showing Losses.

General operating expense	$ 50,757.62
Salaries	14,317.51
Office supplies and expense	14,373.71

Collection department	7,531.62
Shipping department	16,498.85
Parcels post and pre-pay	7,348.98
Postage	4,121.70
Advertising	16,232.66
Miscellaneous	43,773.75
Loss on merchandise January 1, 1915, to April 30, 1915	5,060.11
Total	$170,016.51
Less profits (gross) on merchandise	65,938.40
Miscellaneous adjustments	16,280.57
Other miscellaneous items	8,270.26
Total	$ 90,489.23
Net outlay	$ 79,527.28
Commission paid	101,011.60
Total losses	$180,538.88

Olympic Trading Co.

State Examiner H. S. House testified as to the showing made by the books of the Olympic Trading & Supply Co., reading to the jury the following figures from the books after they were taken over by the government:

Sales of Stock.

785 shares sold at $20 per share.
1093 shares sold at $30 per share.
2767 shares sold at $40 per share.
1465 shares sold at $50 per share.
391 shares sold at $60 per share.
6503 shares sold for $255,970.
Average sale price per share, $39.35.
Total amount collected on stock sold, $142,963
Total amount of commission paid, $74,267.50.
Per cent of commission paid on amount collected, 51 2-3.

Full Commission.

Sales on which the entire commission was paid, but where payments of less amount were made by the purchasers:

Shares.	Total price.	Total pay'ts.	Total com.
29	$ 580	$	$ 232
70	1,400	337	560
52	1,560		546
241	7,230	1445	2530
480	19,200		5760
608	24,320	4940	7296
71	3,550		887
605	30,250	4883	7562
1	60		15
182	10,920	1710	2730
2339	$99,070	$13,316	$28,119

Comission paid on above exceeds amount collected on stock by $14,793.22.
Number of sales on which the purchaser made no payments, 484.
Number of sales on which small payments were made, 1220.
Total number of sales, 1704.

Assets.

Assets derived by the Olympic Trading and Supply company from money collected on stock sales to December 31, 1915:

Cash	$ 644.56
Merchandise	12,081.14
Office furniture and fixtures	4,167.27
Miscellaneous assets	856.45
Total	$17,749.42
Less accounts payable	7,727.36
Net	$10,022.06

Difference between amount collected on stock and assets accumulated, $132,-941.86.
Per cent of assets accumulated from money collected, 7.

Disbursements.

Disposition of $132,941.86.

Salaries	$ 15,423.15
Clerk hire	12,436.98
Freight and cartage	12,511.13
Printing and stationery	6,303.65
Expenses of newspaper	1,033.00
Rent of store	4,294.00
Postage	3,532.00
Miscellaneous expenses	9,699.00
Insurance, taxes, etc.	460.00
Legal expense	750.00
Advertising	727.00
Miscellaneous losses	105.00
Net loss on Chehalis store	2.164.00
Net loss on Wenatchee store	1,825.00
Gross loss, not including refunds	$ 75,265.00
Less profits, cash discount and interest $ 3,359	
Gross on mdse. 32,203	$ 36,062.00
Net loss, not including refunds	$ 39,206.00
Refunds on merchandise	19,338.00
Total loss on merchandise	$ 58,545.00
Commission paid on stock sold	$ 74,267.00
Total	$132,812.00

PORTLAND BRANCH
Losses Totaled Over $17,000.

Examiner H. S. House of the department of justice submitted the following figures to the jury, taken from the books of the Portland branch of the Northwestern General Trading company:

Sales of Stock.

325 shares at $30	$ 9,750.00
890 shares at $40	35,600.00
163 shares at $50	8,150.00
1378	$53,500.00

Summary.

Total shares sold	1378
Total sale price of stock	$53,500.00
Total amount collected	28,525.00
Total commission paid	8,044.00
Overpaid C. L. Davies, commission	1,000.00
Total commission and C. L. Davies' overpayment	9,044.00
Per cent of commission on stock collections	31.7

Assets, April 30, 1915.

Cash	$ 358.59
Merchandise inventory	7,406.28
Due from agents	1,874.83
Miscellaneous items	94.17
Due from Spokane office	810.99
Furniture and fixtures, including automobile	11,899.12
Total	$12,444.03
Less miscellaneous accounts payable	1,628.64
Net assets	$10,815.39
Amount collected on stock exceeds assets by	$17,331.97
Percentage of assets to amount collected	37.8

Losses of the Portland Branch.

Salary of C. L. Davies, manager	$ 225.00
Other salaries	2,416.91
Rent	755.00
Traveling expenses	758.75
Postage	403.44
Printing and advertising	520.50
Auto expense	400.94
Miscellaneous expense	1,327.54
Total	$ 8,808.08
Less interest, discount and profit on merchandise	520.73
Net losses	$ 8,287.35
Commissions paid	9,044.62
Total losses	$17,331.97

ITEM OF $98,000
Added to More Than $500,000

The finances of the Iowa Mercantile company were brought out in the testimony of Lewis H. Jacus, an accountant of Cedar Rapids, Iowa.

"State your relation with the Iowa Mercantile company," said United States District Attorney F. A. Garrecht. "A director and bookkeeper until the company went into the hands of a receiver in September, 1916."

"After the receivership had you any connection with the company?" "Yes, I helped to make a financial statement for the trustee."

"How much was collected from the sale of stock?" "It was $98,745."

"How much was paid in commission?" "The total was $35,547."

Through the failure of the Iowa Mercantile company of Cedar Rapids, Iowa, another item of $98,745 was added to the more than $500,000 charged by the federal government to have been lost in a conspiracy to mulct innocent stockholders in the operation of a string of alleged cooperative mercantile companies in three states.

WILDCAT SCHEME
Stock Selling Was the Big Aim.

"All of the evidence in this case goes to show that at the time the farmers' organizations were called together to indorse the Northwestern General Trading company it was nothing more than a wildcat stock selling scheme, intended to deceive those who were asked to invest their money in it," said District Attorney Garrecht in his closing address to the jury.

"At the very inception of the Olympic Trading and Supply company, when the defendant, O. C. Fowler, issued a large catalogue to make people think that he had a big house with a great stock, the evidence shows that all he had was a lot of nerve and some printer's ink.

"They say that the Iowa Mercantile company of Cedar Rapids, Iowa, has no connection with this case, yet we find A. H. McGregor, an incorporator of that company, was one of the original incorporators of the Northwestern General Trading company and a close friend and associate of Gale Smith. We find E. F. Roach, a stock salesman of the Olympic, on his way to Cedar Rapids, writes to Knudson that he had located an opening for a new cooperative store at Fort Dodge, Iowa, and lined up a 'good bunch of directors.'

Sees Other Fraud Evidence.

"We see in this letter from the Inland Mercantile company to Matilda C. Pleasant, the aged woman who took the stand here to tell her story, another evidence in the general fraudulent scheme. Mrs. Pleasant had been advised by an attorney that she did not have to pay the note she had given for stocks.

"In reply the Inland Mercantile, writing as if it were a separate and distinct corporation, threatened her with suit if the matter were not paid. The Inland Mercantile company was financed by the Northwestern General Trading company and operated from its building by Frederick B. Sears, who signed the letters with the initial B to conceal his identity.

"Another of the numerous evidences of the intent to defraud is the long list of instructions to agents issued by S. T. Knudson, in which it was said that the company was bound to be a great success and had no chance to fail since it bought and sold only for cash. At that time the company was heavily indebted and running behind at the rate of $25,000 a year.

Federal Agents Assaulted.

"An assault has been made here upon H. S. House and J. S. Swenson, employes of the government, who have merely performed their duty in this case. Yet the figures prepared by Mr. House have been accepted by the accountant for the defense, who based his report on the figures of Mr. House.

"What hurts in this connection is the evidence produced from the books and papers in this case, as such evidence has been produced in all other great mail fraud cases, such as the wireless cases and others. An attempt was made to have it appear that Mr. House had said that J. C. Lawrence drew commissions when Mr. House merely pointed out what the books showed, that Lawrence's payments were charged to the 'organization and commissions' account.

"You are not here to convict Mr. Crow and Mr. Kegley, and in suggesting this counsel would take you away from the facts as far as possible. The only criticism we have to offer is that they made a serious mistake, and, having taken a position, they were too proud to change it, even though they were parties to indorsing this crooked scheme.

Kegley's Explanation Damnable.

"When Kegley was asked if he had received commissions he indignantly denied it. We then showed him the records of the Northwestern General Trading company, where, in 1913, he received $40 listed as commissions. His explanation of the transaction was just as damnable as the record in the case. He said that he sold back to Gale Smith one share of stock, which was in violation of the state law prohibiting a corporation from repurchasing its own capital stock.

"When poor widows of hard-working miners asked that their stock be taken back they met with a chilly reception and were threatened with the courts if they refused to pay. Yet when the master of the state grange wanted his money refunded it was done without loss of time.

Flays Davies Check Explanation.

"When confronted with two checks for $450 issued to him by the Northwestern General Trading company C. L. Davies was unable to explain them that night. The next day he made an even worse attempt at it, when he said that he repaid it through some bank in Montana, which he had reached by long distance telephone.

"On their face these checks betray the attempt to cover up the purchase of stock of an obstreperous director. After Davies acquired this stock from W. H. Sprague we next find him trading it for land in Montana. There is no evidence that the company was benefited by this transaction.

"You have the figures as to how the price of stock was raised from time to time by the Northwestern in spite of its losses, for no other reason than to secure larger commissions for Smith and his associates. That is the very reason why so much secrecy existed as to the payment of commissions.

Paid $219,323 Commissions on $584,748.

"The records of the trading companies at Spokane, Portland, Seattle and Cedar Rapids, Iowa, show that $584,748 were collected from stockholders in these companies and $219,-323 paid out in commissions. For this vast amount of money there is nothing to show, as the companies have gone into bankruptcy.

"The disappearance of this vast sum of money is the reason why the restriction against indebtedness was placed in the bylaws of these companies. Had the condition of these organizations been known we doubt very much whether the farmers' organizations would have indorsed them. It is for these things that the defendants have been brought before you to make answer."

F. C. Robertson Praises Court.

F. C. Robertson, in opening the concluding argument for the defense felicitated the court on the fair treatment it had given the defendants.

"These men are alleged to have conspired, not singly but as a whole in the commission of the acts charged in the indictment," said Mr. Robertson "They are not charged with any particular dishonest act, but with having conspired to defraud, through the use of the mails. The Spokane Chamber of Commerce spend $80,000 a year to invite men to come here and engage in competitive business. One of the men thus induced to come was A. G. Stall, who first interested Gale Smith in the organization of the Northwestern General Trading company.

"At that time the payment of 25 per cent commissions was considered reasonable, and a contract was made with S. T. Knudson and Robert Lair. Afterward Lair went insane and Gale Smith took over the contract jointly with Knudson. I contend that there was nothing criminal or dishonest in this act; that it was a legitimate effort to start a straight and honest business enterprise.

"We have had such men as G. B. Dennis testify here that the commissions paid in this case are reasonable and less than those as a rule given for promoting work with other companies.

Says Fowler Was an Enthusiast.

"Now, take O. C. Fowler, one of the defendants. Like my friend Garrecht, he is an enthusiast. He went to his friends, told them about his great idea for the organization of a mail order house that would some day be a Sears-Roebuck. They were impressed with his idea and agreed to back him.

"They secured some of the literature of the Northwestern Trading company and made use of it, which accounts for the similarity in the publications of the two companies. They then secured the services of Knudson, an expert stock salesman, with whom they closed a contract. Later Gale Smith was induced to give his assistance in the purchase of merchandise, and Knudson told him that he would pay Smith $50 and the company $50, making $100 a month. There was nothing irregular or dishonest about this transaction, was there?

"Thomas R. Wilder established the company in Cedar Rapids, Iowa. Testimony has been introduced here that he was indicted in the state courts, but he has not been convicted. Wilder found himself opposed by powerful interests and Gale Smith went back there to help him get the organization started.

Got Farmers Interested.

"The business of the Northwestern Trading company grew faster than they anticipated, and soon they had 8000 stockholders and doing a business of $300,000 a year. Then J. C. Lawrence, who had made a study of cooperation and owned two large stores, was interested.

"Through Lawrence the support of C. B. Kegley, L. C. Crow and other farmers was secured, men with enough land to raise all the wheat between here and Tekoa. The farmers agreed that they would combine their produce company with the Northwestern for the mutual benefit of all concerned.

"Yet W. L. Niehorster, secretary of the grand jury, comes here like a German submarine to tell us that J. C. Lawrence received other than his salary in the work of effecting this consolidation. About this time the gallant young H. S. House, government detective, imagined that he had found where L. C. Crow had made a sale of stock for the trading company. When the book was stuck under his nose Mr. Crow had not even heard of the transaction.

"When these farmers gave their indorsement to the Northwestern Trading company they pledged their honor with it. They are men of integrity and high honor and were determined to make it win. If you convict J. C. Lawrence and Gale Smith in this case you will necessarily convict these farmers who gave their indorsement to that enterprise.

The charge to the jury by Judge Van Fleet is a remarkably clear and comprehensive statement of the law of conspiracy which has been the basis of the trial of the former officers of the Northwestern General Tarding company. This will be of great interest to our readers and will be published in the next issue of the Farmer.



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Draft Horse

Still the Main Farm Dependence

By PAUL E. TRIEM.

The coming of the tractor does not mean the passing of the heavy horse. This fact has been apparent to close observers for some time, and is emphasized by late reports from various authentic sources. For instance, Professor William Hislop of the state experiment station at Pullman recently reported the sale of a plain gelding weighing 1525 pounds at $275 cash, and adds that this transaction is typical of many others. The prediction of pessimistic breeders and farmers that the heavy horse was doomed has not been fulfilled. Dollars and cents tell the story, and the big horse is selling higher than ever.

The Explanation.

There is a flexibility of power in the draft horse unequaled by any man made mechanism. A good team of mares or geldings can deliver vastly more than their rated horsepower in times of emergency. They can not keep this up, but emergencies are of short duration. The ten-twenty tractor will deliver its 10 horsepower at the drawbar 24 hours a day, if need be, but it will not deliver 15 horsepower or 20 horsepower for a three-minute stretch of hard going. Flexibility of service is one of the advantages of the heavy team. Custom, or habit, is another—farmers have been using horses for generations, and they do not change their ways of thinking and working over night. The tractor for big operations—the cultivation of fairly level tracts in large units; and the horse for smaller operations, is probably a fair summary of present tendencies.

Cause of High Prices.

This being the case, an explanation of present high prices for draft horses, issued by the Washington State college, may be worth considering.

"The root of the matter lies in the steadily decadent interest manifested by farmers in horse raising. Farmers owning mares hold the key to the situation."

And here is a final bit of advice from the same source: "Let it be said without equivocation that the scrub is costly if the feed is ever so low. Unfaltering patronage of the high class sires will automatically drive the nondescript breeding horse from your community, a service every one will welcome."

LIVE STOCK SALE

Record Prices in South Africa.

At the kaffrarian live stock sales held at King Williamstown on December 1 prices obtained were the highest ever recorded in South Africa, is the report of Consul E. A. Wakefield, Port Elizabeth.

One slaughter ox was sold for $209.25, four others were knocked down at $165.50 each, and Merino sheep for slaughter sold up to $9.30 each. Prices for meat in South Africa have been reasonable as compared with other parts of the world, but have recently been advanced by all retailers.

From the prices quoted it is evident that further advancement will be made at once.

NEED OF CARE

In Blasting Holes for Trees.

Using dynamite to blast holes in which to insert fruit trees cost Oscar McCann of Felida his right hand. He was blowing out the holes for the trees by using half a stick of dynamite, lighting a short fuse and pushing it into a small hole with a stick. At the time of the accident the dynamite came out with the stick, and exploded before Mr. McCann could drop it. His hand was shattered so badly that amputation above the wrist was resorted to. Mr. McCann is 38 years old, and a brother-in-law of Charles Nichols, on whose place he was working.

Beef Steers $9.25.

James Judge of Grasshopper, in southern Montana, has contracted beef steers to W. J. Boomer, buyer for the Carsten Packing company of Seattle, for $8.75, the highest price received in the Grasshopper district this year. William Montgomery, the veteran cattleman of the Big Hole basin, is reported to have refused $9.25 for his beef steers.



Vaughan's Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

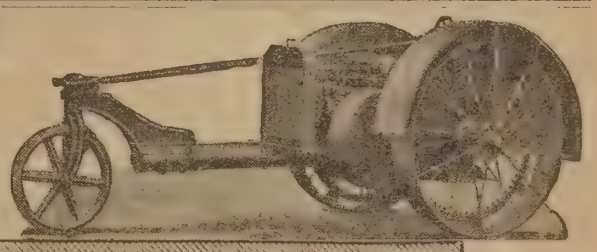
Net cash price for complete machine as shown in cut, $150 f. o. b. Spokane and common points.

FOR SALE BY

Washington Machinery & Supply Company

S122 MONROE SPOKANE, WASHINGTON

LA CROSSE Happy Farmer Tractor



Any Farmer Can Afford One

Low in first cost—low in upkeep. Highest quality construction on simple, common sense lines. Only ½ the parts used in other tractors. Model "A" 8-16 H. P. Light Weight Tractor pulls 2 or 3 plows according to soil conditions. Burns gasoline or kerosene. Made a great 1916 record. **Write for Catalog**

Model "B" our wonderful **kerosene burner.** The highest development in a light, all-purpose farm tractor and only $735.00 f.o.b. factory, La Crosse, Wis. Guaranteed drawbar pull 2000 pounds, or three 14-inch plows. Hyatt Roller Bearings throughout. Handles any belt work. Weighs only 3700 pounds. We have a distributor near you for prompt service. Write for Catalog.

MODEL A 8-16 Horse Power $585.00

MODEL B 12-24 Horse Power $735.00

LA CROSSE TRACTOR COMPANY
Dept. 18 Minneapolis, Minn.
Also ask about La Crosse Tractor-drawn Implements.

Live Dealer Agents Wanted

The only pump without a stuffing box

Any sprayer user will understand what a big trouble and power saving that means.

It's another exclusive feature of the "Bean" Power Sprayer. The cup-shaped plunger fits so closely on the down stroke that no stuffing box is needed, yet on the up stroke there is no friction. When necessary, packing can be replaced in a few minutes.

Cylinders are porcelain-lined. No chipping or flaking. No corrosion; not affected by the spray liquid. No grooved cylinders. No expense for replacements.



JOHN BEAN Inventor of the Bean Power Sprayer and Magic Pump

"Bean" POWER SPRAYER
The 10-point sprayer

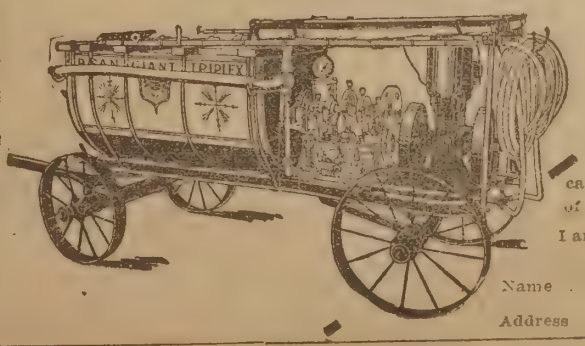
Learn all about the 10 exclusive features of the "Bean." Send for

Free Catalogue No. 30

Fully illustrated. Describes our complete line of hand and power sprayers and accessories.

Only Grand Prize (Highest Award) P. P. I. Exposition San Francisco, 1915

SPOKANE SEED CO.
SPOKANE, WASH.
Factory Agents.



SPOKANE SEED CO., 308 First Ave., Spokane, Wash.

Gentlemen: Please send me new complete Spraying catalog. I have.....acres of ..... Power sprayer. I am interested in Hand Pumps Accessories

Name .....

Address .....

$275 THE DROP FALLS ON MARCH 17TH $275

Then Your Opportunity to Grasp This Big Prize Will Fade Away

Only Three Weeks to Win

Besides the Possibility of Your Winning One of the Thirty-Two Cash Prizes You Get This Paper at the Very Low Special Rate of 3 Years for $1.50

Read the Conditions

Simply add up the figures in the puzzle chart as if they were in one long column. Your success depends on the accuracy of your total thus obtained.

Figures run from two to nine, and there are no double figures or characters which are not figures. The tail of the "6" has a decided curve, while the tail of the "9" is straight. All 6ther figures have the usual characteristics, allowing no question as to the identity of any figure.

In event that no one submits the correct total, prizes will be awarded for the next nearest solutions.

This contest is restricted to persons residing in Washington, Idaho, Oregon and Montana.

A payment of $1 to $1.50 on subscription to The Farmer entitles the subscriber to enter the contest.

If your subscription is already paid in advance, your expiration date will be set ahead beyond this date to which you are now paid the full period for which you pay at this time. The advantage of paying $1.50 instead of $1 is that the winner of any of the first four prizes receives additional prize dividends apportioned on the amount paid in on subscription, besides the fact that $1.50 during this contest pays for a three-year subscription to the paper, while $1 pays for only one year.

More than one solution may be submitted by any contestant, by an additional subscription payment of not less than $1 nor more than $1.50. It is not necessary to pay the same amount with each solution if more than one is submitted.

You can send in a subscription for some one other than yourself and have the solution registered in your own name. Remember that by paying $1.50 instead of $1 on subscription, the larger will be your dividends if you win one of the four leading prizes; but not more than $1.50 will be received with one solution.

$750-Prizes-$750

FIRST PRIZE, $200,

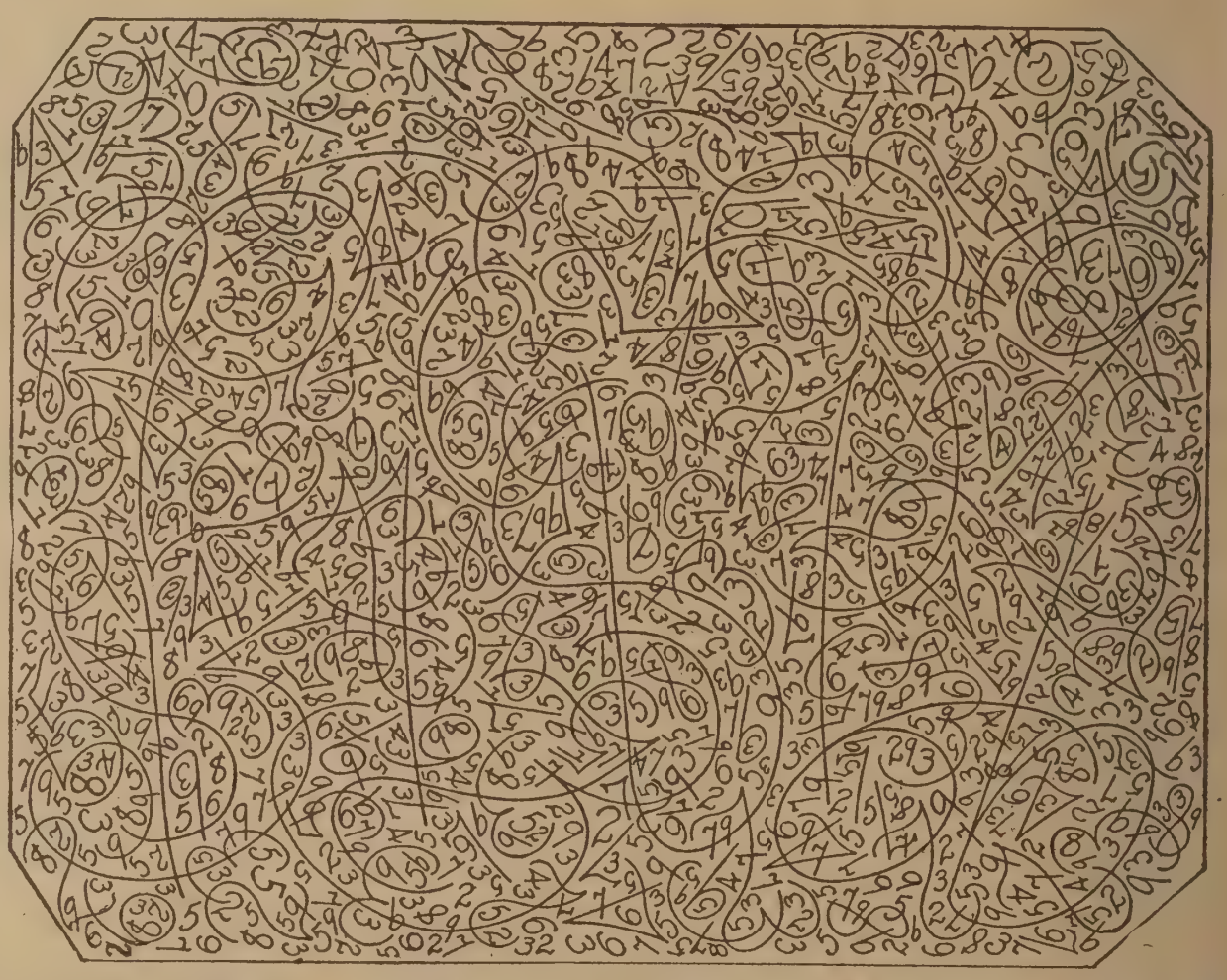
to which will be added 50 times the amount paid by the subscriber with the winning solution. For example, if you pay $1.50 on subscription, this prize will be worth $275.

SECOND PRIZE, $100,

to which will be added 30 times the amount paid by the subscriber with the winning solution. This prize may be worth $145.

THIRD PRIZE, $60,

to which will be added 20 times the amount paid by the subscriber with the winning solution. This prize may be worth $90.



FOURTH PRIZE, $50,

to which will be added 10 times the amount paid by the subscriber with the winning solution. This prize may be worth $65.

FIFTH PRIZE, $40.

SIXTH AND SEVENTH PRIZES, Each $20.

EIGHTH TO SIXTEENTH PRIZES, Each $7.

SEVENTEENTH TO THIRTY-SCOND PRIZES, Each $2.

CASH MUST ACCOMPANY.

Don't send in your charts and working papers unless called for by the Contest Editor. Simply write your solution in blank space provided in "Registration Blank."

Something to Know

If your subscription is paid in advance, further payment will be credited on an extension of your subscription from the time to which it is now paid.

Any solution unaccompanied by payment on subscription will not be entered.

REGISTRATION BLANK

Cut out this blank closely around the border and send it in with your solution and money.

To the Farmer Contest Editor:

Date sent .....191..

I enclose $..... for.....subscription to **The Washington Farmer.**

Name .....

Town .....

State .....

SOLUTION AND PAYMENTS.

The following spaces provide for three solutions, with the payments you desire to make with them. You may submit one or as many different solutions as you wish. You can subscribe for one or three years as per printed schedule, with each solution, as provided for in "The Conditions."

Solution. Amount Paid.

..... $.....

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Answer this question: Are you now a subscriber? .....

If you wish paper sent elsewhere, fill in name and address.

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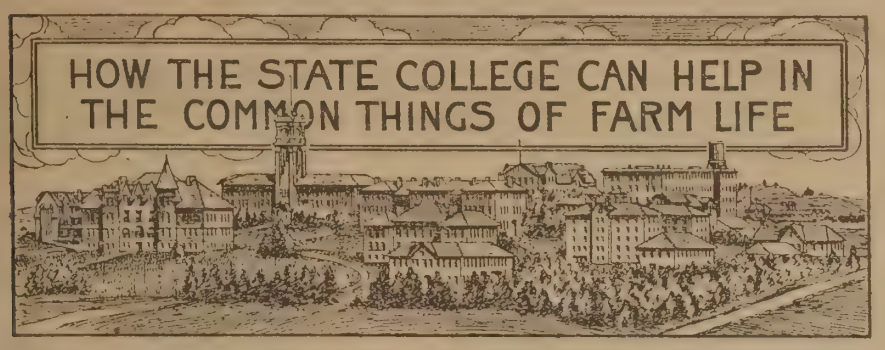
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You must address all inquiries and solutions to

The Washington Farmer Contest Editor

Review Building Spokane, Washington

HOW THE STATE COLLEGE CAN HELP IN THE COMMON THINGS OF FARM LIFE



In the last number I pointed out that the value of the agricultural college in helping in the common things of farm life is to be perceived more in its constant overshadowing, all pervading wholesome influence than in some startling remedy for more specific difficulties or some marvelous recipe which will bring big and sudden profits. Nevertheless, we all like the concrete and the specific and so I will try to give some instances in which help may be obtained.

Whether on the little farm or on the big farm, a fundamental necessity is the "plant" which forms the center and the instrument of farm operations.

The "plant" includes the farm house, the farm barn and all constructions from a pig pen to a power plant.

I need not say that an efficient plant is as essential to a modern farm as it is to the modern factory. Our farmers as a class are not yet awake to this fact. They have not generally thought of it from this point of view. They are content to inhabit a dwelling that has neithor comfort, convenience, beauty nor efficiency. They permit the "better half" to operate her important end of the work with an equipment which they would not tolerate in in the field, and at a disadvantage which means a clear lack of economy. The barn too often is the counterpart of the house. It is neither sanitary, convenient nor economical. In farm tools and machinery alone the generality of farmers are awake to more modern ideas, and this because of the glittering advertisements, the smooth agents and the credit system of distribution.

Now when he (or she) does awake to the situation so far as house or barn is concerned, and when an unusual crop or a high price has occurred, or when the budding womanhood of the eldest daughter has warned the anxious mother to provide a suitable "parlor" for eventualities, or when the enterprising neighbor has erected an ostentatious "barny" house or a huge, illy designed barn, gaily painted and decked with flashy lightning rods, which proclaims to the community that neighbor Jones has taken on a new life and is coming up in the world; the desire to tear down and build anew often becomes irresistible.

Now, if the stirrings within have prompted consideration, on the ordinary farm, of conditions of better living, greater convenience, comfort and health, or, to put it otherwise, if a more efficient farm plant, right here your own agricultural college is in a position to help you both generally and specifically.

It will help you, generally, if you are enrolled on its mailing lists in the extension department, for the popular bulletins, which treat of a multitude of subjects of the common farm life. It will help you, generally, also, if you are enrolled on the experiment station list for the bulletins on subjects in which you are specifically interested.

It will help you, generally, further by advice as to books or government bulletins treating of the particular subjects in which at the time you are interested. But for this help you must ask: "Ask and ye shall receive."

Then it will help you personally and in detail by advice suited to your particular case. Now, don't make a mistake right here. Don't expect that the college will build a house for you or send you a washing machine or supply you seed, gratis, for the season's crops. That is impossible. Let us illustrate the possibility of help in the case of a wish to begin improvements with the house—new or old.

The college contains a department of architecture. This department makes a special study of all kinds of farm buildings—houses, barns, bunk houses, shops, machinery sheds, silos, poultry houses, pig pens—what not. In some of these cases it has designs, prints or blue prints, for such constructions, which it will send free. It also gives much instruction in the internal arrangements of farm houses—not only the living parts but especially the working parts.

The college also has a home economics department, in which, from the woman's standpoint, every detail of interior arrangement and decoration is studied and planned to give the best results with the least waste of energy. The farm home should be built around the kitchen, rather than around the parlor. The water supply, the waste, the position of range, work table, cupboards, bins, closets, stores, everying should be so arranged as to give the highest efficiency with the fewest steps. Now, the architectural department and the home economics department will cooperate with you, if you will state your case in time and will be a little patient, in every step of interior detail. Then the college has a department of sanitary engineering, which, in adition to its published bulletins on the development of water supply and farm sewage disposal, will give you specific advice, if you state your case and will be patient, remembering the heavy load of other duties to be carried also.

The development of an efficient farm center does not necessarily mean large outlay, though it must be confessed that in comparison with the lavish waste on new styles of farm machinery the average farm kitchen has been most penuriously provided for.

The good man stares at the cost of an enameled sink, water supply and waste, cold storage, a washing system or a septic tank, but doesn't hesitate a moment at a new piece of machinery that runs into three figures, that has been recommended by an oily agent.

The college will advise on the lighting system, if you want that, on water supply or sewage disposal, on cold storage, on house ventilation, external design or internal arrangement. It will not act as your architect or superintendent, however.

Here in the northwest, on the larger farms, the farm house should be small, compact, designed for the living of the family. Its adjunct should be the bunk house—the separate inexpensive but comfortable building, where the "hands" live. It should be sanitary and provided with comfortable beds, adequate heat, lounging rooms, and sometimes may properly have a kitchen and dining room attached. The college will help with this design also.

E. A. Bryan

Ireland

Compulsory Tillage of Lands

Regulations affecting the cultivation of land in Ireland have been recently issued.

Generally speaking, every occupier of arable land in this country is to be required to cultivate in the year 1917 a certain proportion of such land. The proportion to be cultivated shall be one-tenth of the area where no part of the holding was cultivated last year. If any part was cultivated in 1916 the proportion shall be equivalent to the extent previously cultivated, with an addition of one-tenth of the whole area, the compulsory maximum amount to be cultivated being one-half of the total area of the holding.

The regulation is not to affect holdings of less than 10 acres in extent or those regarding which the department of agriculture certifies that they can be or are used to better advantage in some other manner than by cultivation for the production of food.

Land under a first or second year's crop of rye grass or cultivated by any person under a conacre letting approved by the department of agriculture shall be deemed to be "cultivated."

Unnecessary.

"Did you ever try the hot water treatment in the morning?"

"Don't have to. My wife keeps me in it all the time."—Baltimore American.

Does a Cow Rise Fore or Aft?

And How About the Horse? A Discussion

By Farm Information Editor

"In getting up from the ground what part of its body does a cow raise first? A horse?"

The fellow who framed that question, of course, intended to be real serious and must have been thinking of perfectly able-bodied, good natured cows and well-behaved horses.

Certainly a cow would look funny getting up sideways unless she had lost her cud, which sometimes causes cows to do weird things.

But to answer the question that way would be about as inteligent as the reply of the darky when asked why a watermelon had black seeds, to which he answered with another question, "how would lavender seeds look?"

Somebody has answered that the first movement of a horse when he starts to rise from the ground is to prick up his ears, which causes me to wonder if that is what the fellow meant who propounded that question. No, I think not. The question doubtless is whether the animal rises fore or aft, and then you must consider only those horses which are in full possession of all their faculties, both mentally and physically, because there is a story of a horse which on account of a wooden leg always rose to starboard, the other leg being the deficient member.

The mention of this invalid horse leads on to the story of Bill, the inventor, who was responsible for the patched-up animal.

The horste stepped in an open post-hole one day and broke its leg. Bill's father was ready to pursue the usual course and shoot the horse when Bill, of inventive mind, pleaded to be allowed to practice his mechanical skill. The father consented and Bill soon had Dobbin walking around quite successfully on the wooden pin. A horse 90 per cent efficient had been saved from the wreck and Bill was very proud, until one day there came a rain and the water stood 18 inches deep in the barnyard.

The wooden leg insisted on floating, with the result that the horse was overturned and drowned in water less than knee-deep. Bill confessed his technical shortsightedness with the explanation that he should have put an iron shoe on the wooden foot for an anchor.

If I seem to wander away from my subject now and then I will ask the readers of the Farmer to pardon me because the intense interest which has been awakened by this new contest among residents of all the northwest states has seemed to rattle me. With orders pouring in at the rate of several score every day for our Contestant's Helpful Outfit, and a flood of answers from those who obtained this outfit soon after the contest announcement was first made, I am simply doing nothing now but breathing farm information during the day and dreaming about "Mary and her little lamb" at night.

Maybe that I am like the story that is told of Dr. Granville Lowther, who is one of the best known contributors to the Farmer. Doubtless, no other man in the northwest writes with the same understanding as Dr. Lowther on subjects which relate to fruit culture. His ability to take what some would regard as a dry subject and inject real genuine entertainment into his treatment of it has given him a position seldom occupied by scientists. In other words, he is a horticultural specialist who also possesses literary ability.

A Palouse farmer tells the story of a friend who invited him to come to some meeting of fruit growers down in the Yakima valley and listen to a lecture by Dr. Lowther. The friend was a devoted admirer of Dr. Lowther's and in making the invitation urgent said, very seriously, "I guarantee that you will hear one of the best talks that you have ever listened to, because Dr. Lowther is a charming speaker and full of his subject."

The day came and the college professor was on hand to hear the talk. As that was all that had taken him there he began to scan the program for Dr. Lowther's subject, of which he was described as being full, and there it was. What do you think?

"Prunes."

With this issue of the Farmer the last chance to win a $300 prize in the Farm Information Contest by registering in the first period vanishes. Those who register after today and for the next three weeks can only compete for a $225 prize, but don't let this opportunity get away. In three weeks more the prize drops to $200. Our Contestant's Helpful Outfit is included with every subscription to this paper of one year for $1 or three years for $1.50, except those subscriptions paid in connection with the Figure contest. See announcement on page 8.

New Bell for Doors.

Turning the knob even a trifle rings a bell in a new lock for home doors.

Was man nicht im Kopfe hat musz man in den Füszen haben.

To any person offering a correct translation of the above phrase in the common language of the United States, accompanied by $2 in personal check, postoffice money order or 2-cent stamps before March 1, the Washington Farmer will be sent THREE YEARS, together with any one of the following high-class magazines for one year: American Magazine, Metropolitan Magazine, Sunset Magazine or Woman's Home Companion.

The regular yearly rate of any one of these magazines is $1.50, while the rate for the Washington Farmer for one year is $1. You receive:

Washington Farmer, 3 years, American Magazine, 1 year	**$2**
Washington Farmer, 3 years, Metropolitan Magazine, 1 year,	**$2**
Washington Farmer, 3 years, Sunset Magazine, 1 year,	**$2**
Washington Farmer, 3 years, Woman's Home Comp., 1 year,	**$2**

If your translation is not correct your money will be returned promptly. Address:

FOREIGN LANGUAGE EDITOR

The Washington Farmer.

Review Building, Spokane, Washington.

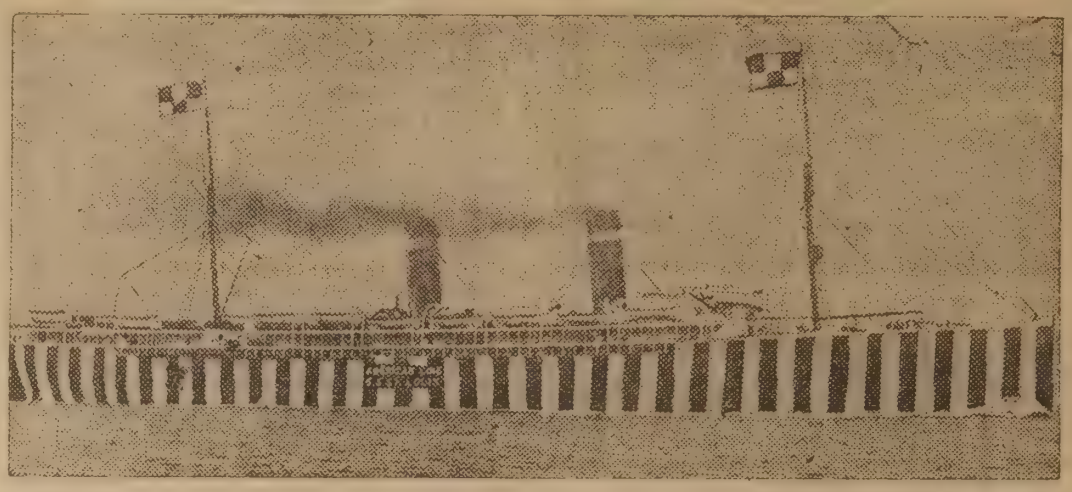
All the World's a Stage, and All the Men and Women Merely Players

He Represents Germany.



Dr. Paul Ritter, the Swiss minister, who has taken over the interests of Germany in the United States.

Want Americans to Paint Ships Like This



The above picture shows what the American liner St. Louis would look like if painted as it is demanded that American vessels be painted in the German note. The St. Louis has been detained in New York several days since her original sailing date on account of the German submarine menace.

In the German note it is stated that only one steamship a week in each direction will be permitted to sail under the American flag between England and the United States.

These vessels must follow a specified route and be painted as directed, with vertical stripes about 10 feet wide; they must carry large flags at each masthead of red and white checks and fly the American flag from the rear.

Now, however, all periods of grace for neutral ships entering the zone announced as prohibited by Germany have expired. The statement from Berlin says that immunity ceased in respect to the Atlantic and English channel zones on the night of February 12, for the North sea zone on February 6 and for the Mediterranean zone on February 10.

Stops Hospital Work.



The workshop which Mrs. Frederic C. Penfield, wife of the American ambassador at Vienna, equipped and maintained with her own funds to furnish bandages and dressings for the Austrian wounded has been closed. Mrs. Penfield will return to the United States with her husband. The capital keenly regrets her departure.

Types of Hungary's Many Peoples



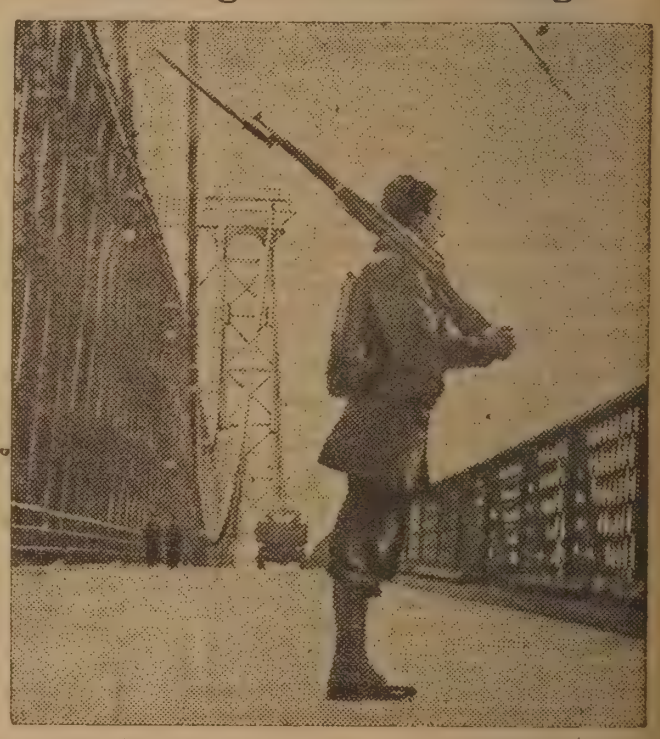
In the pictures here printed are shown at group of Hungary's aristocracy and a group of peasant types of Hungary's many peoples, photographed at the coronation of Charles, emperor of Austria-Hungary, as king of Hungary at Budapest on December 10 of last year.

This unusual photograph shows some of the aristocracy of the ancient kingdom garbed in their national costumes and the peasantry are shown in national costume.



—Copyrighted by International Film Service.

Guarding Manhattan Bridge



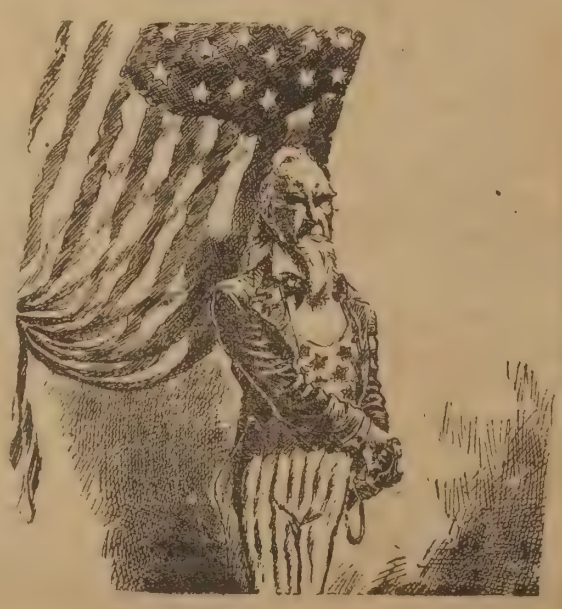
One of the many scenes in New York reflecting the tension between the United States and Germany. A member of the Second battalion, New York State Naval Militia, is shown on guard on the Manhattan bridge, one of the newest of the great suspension bridges from Manhattan to Brooklyn across the East river. All vehicles entering upon the structure are examined for possible explosives.

Meanwhile, Let Her Drift.



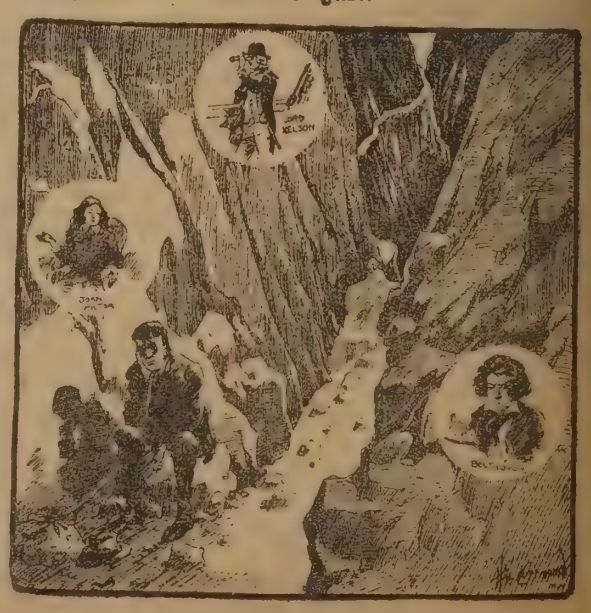
Philadelphia Ledger.

When the Pen Fails.



—Nashville Tennessian.

Don't Quit.



Hal Coffman in the Knoxville Sentinel.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merril Co.

SYNOPSIS.

Charles Brandon, who has neither wealth nor title, wins distinction for having defeated the heretofore unconquerable duelist, Judson. Brandon is installed as one of the captains of the guard of King Henry VIII. Edwin Caskoden (who tells the story) is Master of the Dance at London Court. The two young men become fast friends. Edwin tells Brandon of the willful, but adorable Mary Tudor, who had coaxed her royal brother Henry out of many proposed marriages which had been arranged for Henry's advantage. Edwin confesses that he, like scores of other men, had fallen in love with Mary, but upon Mary's refusal to marry him, he immediately became attracted to the good and beautiful Lady Jane Bolingbroke.

At their first meeting, Mary and Brandon have a tilt, in which Mary comes off second best and acknowledges it. Wondering as to Brandon's social accomplishments, and to settle a wager with Sir Edwin that he could not dance, Mary invites Brandon, Edwin and Jane to her drawing room. To her surprise and Edwin's delight Brandon is perfectly at ease and proves that he knows more about dancing than the Master of the Dance, himself. He teaches the Princess Mary one of the new French dances. At a ball, given by Mary, Brandon makes an enemy of the Duke of Buckingham, the most powerful nobleman in the realm. The evening is spent with the new dance, which greatly pleases the king. Brandon begins to realize that he loves the unattainable Mary, and, what is worse, Mary knows she loves Brandon. A party, including Brandon, spends a few days at Windsor, during which time the king makes several knights. Brandon would have been one of these had not Buckingham poisoned the king's mind against him. In the meantime, the old French king, Louis XII., whose wife, Anne of Brittany, had just died, has asked Mary's hand in marriage.

Brandon avoids Mary for some time, but when next they meet, they declare their love, but agree that they can never belong to each other. Brandon resolves to leave as soon as possible for New Spain.

CHAPTER VIII.

About a week after Brandon's memorable interview with Mary an incident occurred which changed everything and came very near terminating his career in the flower of youth. It also brought about a situation of affairs that showed the difference in the quality of these two persons thrown so marvelously together from their far distant stations at each end of the ladder of fortune, in a way that reflected very little credit upon the one from the upper end. But before I tell you of that I will relate briefly one or two other matters that had a bearing upon what was done, and the motives prompting it.

To begin with, Brandon had kept himself entirely away from the princess ever since the afternoon at the king's ante-chamber. The first day of so she sighed, but thought little of his absence; then she wept, and as usual began to grow piqued and irritable.

What was left of her judgment told her it was beter for them to remain apart, but her longing to see Brandon grew stronger as the prospect of it grew less, and she became angry that it could not be gratified. Jane was right; an unsatisfied desire with Mary was torture. Even her sense of the great distance between them had begun to fade, and when she so wished for him and he did not come, their positions seemed to be reversed. At the end of the third day she sent for him to come to her rooms, but he, by a mighty effort, sent back a brief note saying that he could not and ought not to go. This, of course, threw Mary into a great passion, for she judged him by herself—a very common, but dangerous method of judgment — and thought that if he felt at all as she did, he would throw prudence to the winds and come to her, as she knew she would go to him if she could. It did not occur to her that Brandon knew himself well enough to be sure he would never go to New Spain if he allowed another grain of temptation to fall into the balance against him, but would remain in London to love hopelessly, to try to win a hopeless cause, and end it all by placing his head upon the block.

It required all his strength, even now, to hold in line his determination to go to New Spain. He had reached his limit. He had a fund of that most useful of all wisdom, knowledge of self, and knew his limitations; a little matter concerning which nine men out of 10 go all their lives in blissless ignorance.

Mary, who was no more given to self-analysis than her pet linnet, did not appreciate Brandon's potent reasons, and was in a flaming passion when she received his answer. Rage and humiliation completely smothered, for the time, her affection, and she said to herself, over and over again: "I hate the low-born wretch. Oh! to think what I have permitted!" And tears of shame and repentance came in a flood, as they have come from yielding woman's eyes since the world was born. Then she began to doubt his motives. As long as she thought she had given her gift to one who offered a responsive passion, she was glad and proud of what she had done, but she had heard of man's pretense in order to cozen woman out of her favors, and she began to think she had been deceived. To her the logic semed irresistible; that if the same motive lived in his heart, and prompted him, that burned in her breast, and induced her, who was virgin to her very heart-core, and whose hand had hardly before been touched by the hand of man, to give so much, no power of prudence could keep him away from her. So she concluded she had given her gold for his dross. This conclusion was more easily arrived at owing to the fact that she had never been entirely sure of the state of his heart. There had always been a love-exciting grain of doubt; and when the thought came to her that she had been obliged to ask him to tell her of his affection, and that the advances had really all been made by her, that confirmed her suspicion. It seemed only too clear that she had been too quick to give—no very comforting thought to a proud girl, even though a mistaken one.

As the days went by and Brandon did not come, her anger cooled, as usual, and again her heart began to ache; but her sense of injury grew stronger day by day, and she thought she was, beyond a doubt, the most ill-used of women.

The other matter I wish to tell you is that the negotiations for Mary's marriage with old Louis XII of France were beginning to be an open secret about the court. The Duc de Longueville, who had been held by Henry for some time as a sort of a hostage from the French king, had opened negotiations by inflaming the flickering passions of old Louis with descriptions of Mary's beauty. As there was a prospect for a new emperor soon, and as the imperial bee had of late been making a most vehmement buzzing in Henry's bonnet, he encouraged De Longueville, and thought it would be a good time to purchase the help of France at the cost of his beautiful sister and a handsome dower. Mary, of course, had not been consulted, and, although she had coaxed her brother out of other marriage projects, Henry had gone about this as if he were in earnest, and it was thought throughout the court that Mary's coaxings would be all in vain—a fear which she, herself, had begun to share, notwithstanding her usual self-confidence.

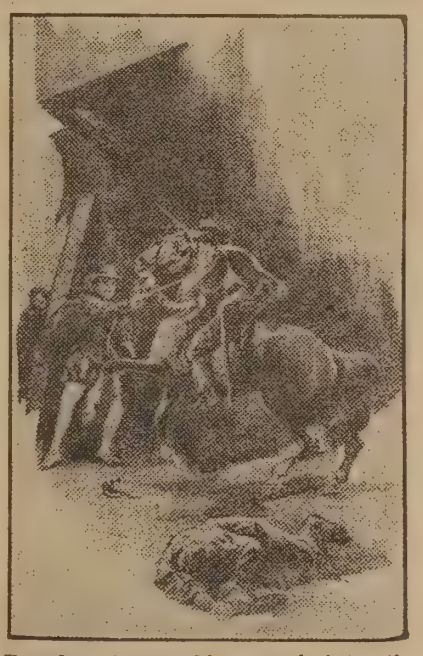
She hated the thought of the marriage, and dreaded it as she would death itself, though she said nothing to anyone but Jane, and was holding her forces in reserve for the grand attack. She was preparing the way by being very sweet and kind to Henry.

Now all of this, coming upon the heels of her trouble with Brandon, made her most wretched indeed. For the first time in her life she began to feel suffering; that great broadener, in fact, maker, of human character.

Above all, there was an alarming sense of uncertainty in everything. She could hardly bring herself to believe that Brandon would really go to New Spain, and that she would actually lose him, although she did not want him, as yet; that is, as a prospective husband. Flashes of all sorts of wild schemes had begun to shoot through her anger and grief when she stared in the face the prospect of her double separation from him—her marriage to another, and the countless miles of fathomless sea that would be between them. She could endure anything better than uncertainty. A menacing future is the keenest of all tortures for any of us to bear, but especially for a girl like Mary. Death itself is not so terrible as the fear of it.

Now about this time there lived over in Billingsgate Ward—the worst part of London—a Jewish soothsayer named Grouche. He was also an astrologer, and had of late grown into great fame as prophet of the future—a fortune teller.

His fame rested on several remarkable predictions which had been fulfilled to the letter, and I really think the man had some wonderful powers. They said the was half Jew, half gypsy, and, if there is alchemy in the mixing of blood, that combination should surely produce something peculiar. The city folk were said to have visited him in great numbers, and, notwithstanding the priests and bishops all condemned him as an imp of satan and a follower of witchcraft, many fine people, including some court ladies, continued to go there by stealth in order to take a dangerous, inquisitive peep into the future. I say by stealth; because his ostensible occupation of soothsaying and fortune telling was not his only



Brandon thrust his sword into the horse's throat.

business. His house was really a place of illicit meeting, and the soothsaying was often but an excuse for going there. Lacking this ostensible occupation, he would not have been allowed to keep his house within the wall, but would have been relegated to his proper place—Bridge Ward Without.

Mary had long wanted to see this Grouche, at first out of mere curiosity; but Henry, who was very moral—with other people's consciences—would not think of permitting it. Two ladies, Lady Chesterfield and Lady Ormond, both good and virtuous women, had been disgraced and expelled from court in the most cruel manner by order of the king himself.

Now, added to Mary's old-time desire to see Grouche, came a longing to know the outcome of the present momentous complication of affairs that touched her so closely.

She could not wait for Time to unfold himself, and drop his budget of events as he traveled, but she must plunge ahead of him, and know, beforehand, the stores of the fates—an intrusion they usually resent. I need not tell you that was Mary's only object in going, nor that her heart was as pure as a babe's—quite as chaste, and almost as innocent. It is equally true that the large proportion of persons who visited Grouche made his soothsaying an excuse. The thought of how wretched life would be with Louis had put into Mary's mind the thought of how sweet it would be with Brandon. Then came the wish that Brandon had been a prince, or even a great English nobleman; and then leaped up, all rainbow-hued, the hope that he might yet, by reason of his own great virtues, rise to all of these, and she become his wife. But at the threshold of this fair castle came knocking the thought that perhaps he did not care for her, and had deceived her to gain her favors. Then she flushed with anger and swore to herself she hated him, and hoped never to see his face again. And the castle faded and was wafted away to the realms of airy nothingness.

Ah! how people will sometimes lie to themselves; and sensible people at that.

So Mary wanted to see Grouche; first, through curiosity, in itself a stronger motive than we give it credit for; second, to learn if she would be able to dissuade Henry from the French marriage and perhaps catch a hint how to do it; and last, but by no means least, to discover the state of Brandon't heart toward her.

By this time the last-named motive was strong enough to draw her any whither, although she would not acknowledge it, even to herself, and in truth hardly knew it; so full are we of things we know not of.

So she determined to go to see Grouche secretly, and was confident she could arrange the visit in such a way that it would never be discovered.

One morning I met Jane, who told me, with troubled face, that she and Mary were going to London to make some purchases, would lodge at Bridewell House, and go over to Billingsgate that evening to consult Grouche. Mary had taken the whim into her willful head, and Jane could not dissuade her.

The court was all at Greenwich and nobody at Bridewell, so Mary thought they could disguise themselves as orange girls and easily make the trip without any one being the wiser.

It was then, as now, no safe matter for even a man to go unattended through the best parts of London after dark, to say nothing of Billingsgate, that nest of water-rats and cut-throats. But Mary did not realize the full danger of the trip, and would, as usual, allow nobody to tell her.

She had threatened Jane with all sorts of vengeance if she divulged her secret, and Jane was miserable enough between her fears on either hand; for Mary, though the younger, held her in complete subjection. Despite her fear of Mary, Jane asked me to go to London and follow them at a distance, unknown to the princess. I was to be on duty that night at a dance given in honor of the French envoys who had just arrived, bringing with them commission of special ambassador to De Longueville to negotiate the treaty of marriage, and it was impossible for me to go. Mary was going partly to avoid this ball, and her willful persistency made Henry very angry. I regretted that I could not go, but I promised Jane I would send Brandon in my place, and he would answer the purpose of protection far better than I. I suggested that Brandon take with him a man, but Jane, who was in mortal fear of Mary, would not listen to it. So it was agreed that Brandon should meet Jane at a given place and learn the particulars, and this plan was carried out.

Brandon went up to London and Saw Jane, and before the appointed time hid himself behind a hedge near the private gate through which the girls intended to take their departure from Bridewell.

They would leave about dusk and return, so Mary said, before it grew dark.

The citizens of London at that time paid very little attention to the law requiring them to hang out their lights, and when it was dark it was dark.

Scarcely was Brandon safely ensconced behind a clump of arbor vitae when whom should he see coming down the path toward the gate but his grace, the Duke of Buckingham. He was met by one of the Bridewell servants who was in attendance upon the princess.

"Yes, your grace, this is the gate," said the girl. "You can hide yourself and watch them as they go. They will pass out on this path. As I said, I do not know where they are going; I only overheard them say they would go out at this gate just before dark. I am sure they go on some errand of gallantry, which your grace will soon learn, I make no doubt."

He replied that he "would take care of that."

Brandon did not see where Buckingham hid himself, but soon the two innocent adventurers came down the path, attired in the short skirts and bonnets of orange girls, and let themselves out at the gate. Buckingham followed them and Brandon quickly followed him. The girls passed through a little postern in the wall opposite Bridewell House and walked rapidly up Fleet Ditch; climbed Ludgate Hill; passed Paul's church; turned toward the river down Bennett Hill; to the left on Thames street;

(Continued on following page.)

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from preceding page.)

then on past the bridge, following Lower Thames street to the neighborhood of Fish-street Hill, where they took an alley leading up toward East Cheap to Grouche's house.

It was a brave thing for the girl to do, and showed the determined spirit that dwelt in her soft white breast. Aside from the real dangers, there was enough to deter any woman, I should think.

Jane wept all the way over, but Mary never flinched.

There were great mud-holes where one sank ankle-deep, for no one paved their streets at that time, strangely enough preferring to pay the sixpence fine per square yard for leaving it undone. At one place, Brandon told me, a load of hay blocked the streets, compelling them to squeeze between the houses and the hay. He could hardly believe the girls had passed that way, as he had not always been able to keep them in view, but had sometimes to follow them by watching Buckingham. He, however, kept as close as possible, and presently saw them turn down Grouche's alley and enter his house.

Upon learning where they had stopped, Buckingham hurriedly took himself off, and Brandon waited for the girls to come out. It seemed a very long time that they were in the wretched place, and darkness had well descended upon London when they emerged.

Mary soon noticed that a man was following them, and as she did not know who he was, became greatly alarmed. The object of her journey had been accomplished now, so the spur of a strong motive to keep her courage up was lacking.

"Jane, some one is following us," she whispered.

"Yes," answered Jane with an unconcern that surprised Mary, for she knew Jane was a coward from the top of her brown head to the tip of her little pink heels.

"Oh, if I had only taken your advice, Jane, and had never come to this wretched place; and to think, too, that I came here only to learn the worst. Shall we ever get home alive, do you think?"

They hurried on, the man behind them taking less care to remain unseen than he did when coming. Mary's fears grew upon her as she heard his step and saw his form persistently following them, and she clutched Jane by the arm.

"It is all up with us, I know. I would give everything I have or ever expect to have on earth for—for Master Brandon at this moment." She thought of him as the one person best able to defend her.

This was only too welcome an opportunity, and Jane said: "That is Master Brandon following us. If we wait a few seconds he will be here," and she called to him before Mary could interpose.

Now this disclosure operated in two ways. Brandon's presence was, it is true, just what Mary had so ardently wished, but the danger, and, therefore, the need, was gone when she found that the man who was following them had no evil intent. Two thoughts quickly flashed through the girl's mind. She was angry with Brandon for having cheated her out of so many favors and for having slighted her love, as she had succeeded in convincing herself was the case, all of which Grouche had confirmed by telling her he was false. Then she had been discovered in doing what she knew she should have left undone, and what she was anxious to conceal from every one; and worst of all, had been discovered by the very person from whom she was most anxious to hide it.

So she turned upon Jane angrily, "Jane Bolingbroke, you shall leave me as soon as we get back to Greenwich for this betrayal of my confidence."

She was not afraid now that the danger was over, and feared no new danger with Brandon at hand to protest her, for in her heart she felt that to overcome a few fiery dragons and a company or so of giants would be a mere pastime to him; yet see how she treated him. The girls had stopped when Jane called Brandon, and he was at once by their side with uncovered head, hoping for, and, of course, expecting a warm welcome. But even Brandon, with his fund of worldly philosophy, had not learned not to put his trust in princesses, and his surprise was benumbing when Mary turned angrily upon him.

"Master Brandon, your impudence in following us shall cost you dearly. We do not desire your company, and will thank you to leave us to our own affairs, as we wish you to attend exclusively to yours."

This from the girl who had given him so much within less than a week! Poor Brandon!

Jane, who had called him up, and was the cause of his following them, began to weep.

"Sir," said she, "forgive me; it was not my fault; she had just said——" Slap! came Mary's hand on Jane's mouth; and Jane was marched off, weeping bitterly.

The girls had started up toward East Cheap when they left Grouche's, intending to go home by an upper route, and now they walked rapidly in that direction. Brandon continued to follow them, notwithstanding what Mary had said, and she thanked him and her God ever after that he did.

They had been walking not more than five minutes, when, just as the girls turned a corner into a secluded little street, winding its way among the fish warehouses, four horsemen passed Brandon in evident pursuit of them. Brandon hurried forward, but before he reached the corner heard screams of fright, and as he turned into the street distinctly saw that two of the men had dismounted and were trying to overtake the fleeing girls. Fright lent wings to their feet, and their short skirts affording freedom to their limbs, they were giving the pursures a warm little race, screaming at every step to the full limit of their voices. How they did run and scream! It was but a moment till Brandon came up with the pursuers, who, all unconscious that they in turn were pursued, did not expect an attack from the rear. The men remaining on horseback shouted an alarm to their comrades, but so intent were the latter in their pursuit that they did not hear. One of the men on foot fell dead, pierced through the back of the neck by Brandon's sword, before either was aware of his presence. The other turned, but was a corpse before he could cry out. The girls had stopped a short distance ahead, exhausted by their flight. Mary had stumbled and fallen, but had risen again, and both were now leaning against a wall, clinging to each other, a picture of abject terror. Brandon ran to the girls, but by the time he reached them the two men on horseback were there also, hacking away at him from their saddles. Brandon did his best to save himself from being cut to pieces and the girls from being trampled under foot by the prancing horses. A narrow jutting of the wall, a foot or two in width, a sort of flying buttress, gave him a little advantage, and up into the slight shelter of the corner thus formed he thust the girls, and, with his back to them, faced his unequal foe wiht drawn sword. Fortunately the position allowed only one horse to attack them. Two men on foot would have been less in each other's way and much more effective. The men, however, stuck to their horses, and one of them pressed the attack, striking at Brandon most viciously. It being dark, and the distance deceptive, the horseman's sword at last struck the wall, a flash of sparks flying in its train, and lucky it was, or this story would have ended here. Thereupon Brandon thrust his sword into the horse's throat, causing it to rear backward, plunging and lunging into the street, where it fell, holding its rider by the leg against the cobblestones of a little gutter.

A cry from the fallen horseman brought his companion to his side and gave Brandon an opportunity to escape with the girls. Of this he took advantage, you may be sure, for one of his mottoes was that the greatest fool in the world is he who does not early in life learn how and when to run.

In the light of the sparks from the sword-stroke upon the wall, brief as it was, Brandon recognized the face of Buckingham, from which the mask had fallen. Of this he did not speak to any one till long afterward, and his silence was almost his undoing.

How often a word spoken or unspoken may have the very deuce in it either way.

The girls were nearly dead from fright, and in order to make any sort of progress Brandon had to carry the princess and help Jane until he thought they were out of danger. Jane soon recovered, but Mary did not seem anxious to walk, and lay with her head upon Brandon's shoulder, apparently contented enough.

In a few minutes Jane said, "If you can walk now, my lady, I think you had better. We shall soon be near Fishmonger's hall, where some one is sure to be standing at this hour."

Mary said nothing in reply to Jane, but, as Brandon fell a step or two behind at a narrow crossing, whispered:

"Forgive me, forgive me; I will do any penance you ask; I am unworthy to speak your name. I owe you my life and more—and more a thousand times." At this she lifted her arm and placed her hand upon his cheek and neck. She then learned for the first time that he was wounded, and the tears came softly as she slipped from his arms to the ground. She walked beside him quietly for a little time, then, taking his hand in both of hers, gently lifted it to her lips and laid it upon her breast. Half an hour afterward Brandon left the girls at Bridewell house, went over to the bridge where he had left his horse at a hostelry, and rode down to Greenwich.

So Mary had made her trip to Grouche's, but it was labor worse than lost. Grouche had told her nothing she wanted to know, though much that he supposed she would like to learn. He had told her she had many lovers, a fact which her face and form would make easy enough to discover. He informed her also that she had a low-born lover, and in order to put a little evil in with the good fotrune and give what he said an air of truth, he added to Mary's state of unrest more than he thought by telling her that her low-born lover was false. He thought to flatter her by predicting that she would soon marry a very great prince or nobleman, the indications being in favor of the former, and, in place of this making her happy, she wished the wretched soothsayer in the bottomless pit—he and all his prophecies; herself, too, for going to him. His guesses were pretty shrewd; that is, admitting he did not know who Mary was, which she at least supposed was the case. So Mary wept that night and moaned and moaned because she had gone to Grouche's. It had added infinitely to the pain of which her heart was already too full, and made her thoroughly wretched and unhappy. As usual, though, with the blunders of stubborn, self-willed people, some one else had to pay the cost of her folly. Brandon was paymaster in this case, and when you see how dearly he paid, and how poorly she requited the debt, I fear you will despise her. Wait, though! Be not hasty. The right of judgment belongs to—you know whom. No man knows another man's heart, much less a woman's, so how can he judge? We shall all have more than enough of judging by and by. So let us put off for as many tomorrows as possible the thing that should be left undone today.

(To be continued in the next issue.)

Sidelights

Here First.

Willie was boasting about his family. "Our folks came over in the Mayflower," he declared proudly.

"Huh! That's nothing," said Bobbie. "I guess they stayed with our folks the first night after they landed."—Boston Transcript.

Not This Time.

"Quick, hand me that satchel!" yelled the physician, "a man just telephoned me in a dying voice that he couldn't live without me."

"Wait," declared his wife, who had taken up the receiver, "that call is for Edith."—Punch Bowl.

Forbidden Fruit.

London Saturday Journal: The sailor had been showing the lady visitor over the ship. In thanking him she said:

"I see that by the rules of your ship tips are forbidden."

"Lor' bless yer 'eart, ma'am," replied Jack, "so were the apples in the Garden of Eden.'

The Lowest Office.

"Boss," said Ras Lightfoot the other day, "I gotta git off termorrah."

"Get off tomorrow?"

"Yessah."

"But I can't spare you very well."

"I gotta go. Its lodge business."

"That new lodge you joined?"

"Yessah."

"Why are you so badly needed at the meeting?"

"Ah am de sumblime king."

"Sumbline king?"

"Yessah."

"You have been a member of that lodge only two weeks and you tell me you are the sublime king already?"

"Yessah."

"How does that come?"

"You see, sah, in ouagh lodge de sumblime king am de lowes' office what dey is."



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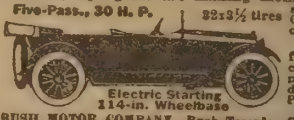
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Any person sending the correct answer to the above question before March 1, together with $2 in the form of money order, 2-cent stamps or personal check, will receive the Washington Farmer for three years and any one of the following standand high class magazines for one year: American Magazine, Metropolitan Magazine, Woman's Home Companion or Every Week.

Just see what these publications would cost you at the regular rates:

Washington Farmer,
3 years $3.00
American Magazine, 1 year $1.50
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Washington Farmer,
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If you send the correct answer, any one of the above club combinations will cost you only $2.

If your answer is incorrect your money will be returned promptly. This offer is limited to replies mailed before February 21, as shown by the postoffice dating stamp on your envelope. Address

Quiz Editor, The Washington Farmer
Review Building, Spokane, Wash.



Both Ways

Plan to Work 'Coming and Going'

What is the most helpful thing you have learned during the last year in your experience with housekeeping? Let us pass it along to other housekeepers.

To the Editor of the Farmer: I find the old saying, "Make your head have your heels," works as well now as ever.

I try to plan my work so I can work "coming and going," and, sister housekeepers, you can so arrange your kitchens, however large or small, to have hundreds of steps. I speak as the mother of five (now grown) children, one pair of twins, and I live on a farm.

The greatest helper in the last year has been my washer, run by a small gasoline engine.

MRS. ALICE FARR.

Albion, Wash.

When I Read

Finding Time in the Farm Home

By Mariella Ladd.

The core of my method of finding time for reading is the fact that I never for a moment allow myself to forget that reading is one of my most important duties.

Hundreds of men, trained for the purpose, are employed by the United States government to collect information about various phases of farm life. Thousands more are engaged in putting this information into readable form. Libraries of various kinds abound. If I read ever so industriously, I can not read more than a small fraction of what is written. If I do not read, and if I do not take advantage of a library selected for me with care by experts, I lose, and deserve to lose, all the chances of improved conditions that extended knowledge might bring me.

Then, I need to keep in touch with women outside my own class.

Last, but not least, I read to keep my mind supple and growing.

I arrange my daily work carefully, so as to get some reading time each day. If anything happens that I can not get it, I let it go and take double allowance at the first convenient time.

I find it a great economy of time in reading to make a plan and follow it closely. For instance, I do not take up a book and read it through, lay it down, and forget it. I ask myself what I want to know, and look for that in all the books I read until I have found it.

The subjects about which I am most curious just now are religion, cooperation, salesmanship, marriage, social service, politics and child study.

When I am using my hands for mechanical work I often use my mind for memorizing passages from books that seem to me worth memorizing. I think this habit is a great help to one. It not only overcomes the tendency to worry that is so common; it also keeps the mind balanced and cool under irritations. Memorizing of this kind I always do from a slip of paper, never from a book. I have a great objection to seeing books mixed up with the paraphernalia of a kitchen or a sewing room.

I always welcome any offer of any one to read aloud to me, whether I can fully enjoy the reading or not. Sometimes I learn quite a number of things in this way, and sometimes ideas come to me that I can afterward follow up. In any case, I am encouraging reading in some one and fostering a kind of cooperation that I like very much.

Next week Mrs. Ladd will talk about "What I Like to Read." This will be the fourth and last of her articles in this series.

Closet Room

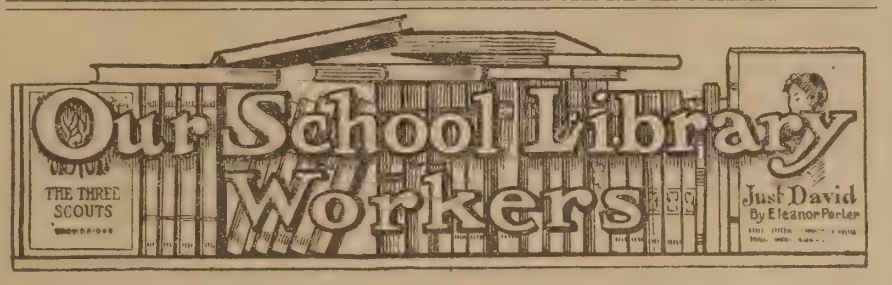
Where There Was None Before

By MRS. E. J. CANNADY.

Many houses are scantily provided with closets and when there are several children in the family, the housewife must exercise considerable ingenuity to find a place for their numerous garments.

A corner closet is easily made and the amount one will hold is astonishing to those who have never had one. Fit a three-cornered shelf in one corner of the room, using two or three brackets which may be purchased at any hardware store. The shelf should be seven or more feet from the floor. Two curtains may be hung in front, or a carpenter called upon to hang a door and fill out the space with lumber. If the ceiling of the room is high the closet may be extended to the ceiling, and the space above the shelf will be an excellent place to keep the hat boxes. A curtain or small door in front will protect them from the dust.

An ingenious woman who had no place for bed clothes and table linen had a box made, six feet long, three feet wide and 18 inches deep, just the right size to fit into the square bay window of the dining room. The top was fastened on with hinges, and the interior divided into two parts by a partition. A cushion was made like a narrow mattress and covered with art denim. With the addition of a few pillows this was a cozy window seat. The box was stained and varnished to match the wood of the room. If one wishes to do the work herself, a packing box of the proper size and shap may be obtained at a dry goods store and covered with denim, put on plain or laid in pleats and the top may be padded and covered with denim. An article similar to this is a home-made wardrobe couch. Fit a castor under each corner. Secure the lid to the box with hinges.



After a spirited contest between the Reds and Blues of White Swan school, White Swan, Wash., the valiant Blues went down to defeat before the great drive of the Reds. However, the "spoils of war" were equally divided; and as fine a lot of books as the heart of boy and girl could desire were sent the school for the enjoyment of Reds and Blues alike. Just the same the Blues feel that when another library contest is put on they will leave the Reds so far in the rear that all the present glory of the Reds will be transferred with great pomp and circumstance to the Blues. On the other hand, the Reds are strongly inclined to make light of the chance of the Blues ever beating them. And there you are. We look for the Blues to call for another contest.

Lower Naches school has just secured a fine list of books. G. A. Martin, superintendent, selected them from our "435 book special," which certainly gives a wide and varied selection of the best books in the English language.

Ever since Miss Mildred Glasgow of Bossburg school made such a splendid showing for individual work as a subscription getter there has been keen rivalry from individual workers in other schools to beat her record. So far Miss Mildred has not been bested, although Bessie Webb of Ford school, Stevens county, Wash., now has her tied. Miss Bessie is a lieutenant of the Reds of Ford school and as the contest is in full swing it looks as though the championship of the state may soon have to be transferred from Mildred to Bessie.

Miss Clara E. Gollehon, teacher of Ford school, says in her letter of February 7: "I am sending you 15 subscriptions for your paper. They have been taken since February 1. Below are the officers of our Red and Blue teams:

Reds—Captain, Florence Tigges; lieutenant, Bessie Webb; lieutenant, Florence Crooker.

Blues—Captain, Glenn Hays; lieutenant, William Morgan; lieutenant, Roy Knox.

With 13 of the 15 subscriptions taken by the Red team it looks like the Blues were getting ready for one final, glorious burst of speed that will even the race up and make it a neck and neck finish after all.

Yakima county, as mentioned in our notes in the issue of February 8, has the idea that the real champion individual workers live down that way. We must admit that there are some mighty capable workers in the schools of Yakima county, and we are just going to drop the hint for what it may be worth to the boys and girls of Stevens caunty to the hotbed of competition now exists in Yakima county and Stevens will have to do some real hustling if she wants to prevent Yakima getting in the lead.

Books sent this week to the following schools:

Wiley City school, Yakima county, J. K. Busch, teacher; Artesian school, Yakima county, R. L. Dailey, principal.

New schools to start library contests this week:

Deer Creek school, Stevens county, Wash., Miss Alta Cooney, teacher.

Deer Lake school, Island county, Wash., Miss Hanna Jacobsen, teacher.

Prescott school, Walla Walla, Wash., L. E. Mark, teacher.

HONOR ROLL.

Union Flat school—Ruby Sanford.

Artesian school—Lois Turnley.

Chewelah school—Dorothy Rauch, Algene Spedden, Edwin Monroe, Claude Strobe.

Ford school—Florence Tiggs, Bessie Webb, Florence Croker, Willie Morgan, Glenn Hays, Mamie Hunter.

Wiley City school—Marion Hughes, Madeline Wiley, Constance Wiley, Gladys Langworthy, Madge Carpenter, Lila Draper, La Verne Hackett.

White Swan school—Clarence Morin.

Ha! What's this? A prize of yellow gold? Why, Yes, so it is! And it's for school library workers in Washington.

NOTICE.

As a reward for good, hustling work by individual school library workers in Washington, our book man will pay $5 in gold to the boy or girl who has to his or her credit the greatest number of Washington Farmer subscriptions up to May 1, 1917.

All library workers who have made good records up to this time are eligible. To such workers we say: "Don't stop—make your present start a stepping stone and win the gold prize of $5.

Free Library

Is Maintained by Community

The Bellevue Improvement club of Bellevue, King county, Wash., has initiated a movement which might profitably be followed by other organizations. At a central location in the community a library of books pertaining to agriculture has been gathered. This includes government bulletins and authoritative works published by private firms. The library is available without charge to all local citizens, so that it is an easy matter for a puzzled gardener or poultryman to settle any doubtful point without waiting for the slow and often expensive solution of experience.

LINEN YARN

Government to Take Possession.

A further notice has been issued by the British army council under the defense of the realm regulations in which dealings in any yarns suitable for aeroplane linens are prohibited. Notice is also given of an intention of the government to take possession of all stocks of Courtrai flax or yarns, and an order has been made requiring all persons holding any stocks of Courtrai flax to make a return of the same with full particulars from December 30, 1916. A further order has been issued providing that flax that can be used for the manufacture of aeroplane cloth must not be used for any other purpose without permission.

Negro Normal Schools.

North Carolina has three negro normal schools.



The Chinese Woolflower

introduced by us three years ago is now acknowledged to be the greatest new garden annual. It is a success everywhere, plants growing 2 to 3 feet, a pyramid of color, its many branches bearing great balls of wool-like substance and most intense crimson scarlet. Flowers develop in June and none fade before frost, ever brilliant and showy beyond belief. Seed per pkt. 10 cts., 3 for 25 cts.

New Mastodon Pansies. For immense size, wonderful colors and vigor they are marvels. Seed 10 cts. per pkt., 3 for 25 cts.

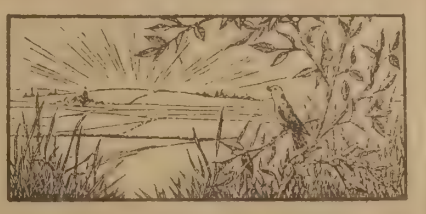
Everblooming Sweet William, a startling novelty, blooming in 60 days from seed, continuing all the season, and every season being hardy. Flowers large, colors exquisite—pkt. 10 cts.

These 3 great Novelties, with two more (5) for only 20 cts. See Catalog for colored plates, culture, etc.

Our Big Catalog of Flower and Veg. Seeds, Bulbs, Plants and rare new fruits free. We are the largest growers in the world of Gladiolus, Cannas, Dahlias, Lilies, Iris, etc.

JOHN LEWIS CHILDS, Inc., Floral Park, N. Y





Whither shall I go from thy Spirit? or wither shall I flee from thy presence?

If I ascend up into heaven, thou art there; if I make my bed in hell, behold, thou art there.

If I take the wings of the morning, and dwell in the uttermost parts of the sea;

Even there shall thy hand lead me, and thy right hand shall hold me.

Patterns

1948—Girls overblouse dress with guimps. Cut in 5 sizes, 4, 6, 8, 10 and 12 years. It requires 1 3-4 yards of 27-inch material for the guimpe and 3 3-8 yards for the dress, for an 8-year size. Price, 10 cents.

1944—Girl's one-piece dress. Cut in 4 sizes: 2, 4, 6 and 8 years. Size 8 will require 2 3-4 yards of 44-inch material. Price, 10 cents.

1947—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 7-8 yards of 36-inch material for a 36-inch size. The skirt measures about 3 1-4 yards at the foot. Price, 10 cents.

1715—Lady's apron, with or without sleeve. Cut in 3 sizes: Small, medium and large. It requires 6 3-4 yards of 36-inch material for a medium size with sleeves, without sleeves, 6 yards. Price, 10 cents.

1967—Lady's combination corset cover and drawers. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 3 yards of 36-inch material for a medium size. Price, 10 cents.

1954—Lady's one-piece dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 7 1-2 yards of 36-inch material for a 36-inch size. The skirt measures about 3 3-8 yards at the foot. Price, 10 cents.



Fill in this coupon and mail to Pattern Dept.
THE PACIFIC NORTHWEST FARM TRIO,
36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

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BE SURE TO GIVE NUMBER AND SIZE.

Sleeplessness

Little Helps to Overcome It

By Alice W. Barland.

Sleeplessness, it seems to me, is one of the worst trials that flesh is heir to. One is nervous and tired, and every nerve, bone and muscle cries out for the rest that comes only with natural sleep, yet he can not "let go" of himself long enough to fully relax. Have you ever been in that condition? If you have, you know how you tossed and turned, listened to the clock strike the hours, remembered all the work you must do the next day, no matter how you should feel.

I have been told all sorts of things to do to induce sleep. One was to count, and if just counting did not bring results, then count sheep jumping over a fence. Perhaps this system might work with some, but I am sure I have counted 10,000 sheep jumping over a fence, and the more I counted the more wide-awake I became.

All that is necessary to do to get to sleep is to relax every muscle. Watch yourself go to sleep, or try to go to sleep. If you are of a nervous temperament you will notice that you are not relaxed; that your body, instead of being limp and sinking into your bed, is tense with nerve-strain, and your head drawn back in an unnatural and uncomfortable position.

Try turning on your right side, leaving your heart full power to do its work. Curve your neck by holding your chin down, and just try to believe your body is sinking into the softest place and you are content that it should. If this fails to bring sleep, try deep breathing in addition. Breathe just as deeply as you are able, filling your lungs to the utmost. You will find it so hard to do that you will have to concentrate your mind on the job, and if your poor brain has been working away on something that is a worry or trouble, it will rest off those brain cells, and, before you know it is going to happen, you will be asleep. This is well worth trying and has saved me from many a sleepless night. If your brain refuses to stop working, try eating a piece of dry bread, a cracker or a cookie. It will seem a bother to get up and get it, but it has helped me to get a good sleep.

Just Like George Washington.

When I'm a man I'm going to be
A soldier brave and true,
And do the things that Washington
Has been supposed to do.

George Washington, he crossed the Alps
In seventeen-eighty six;
He got the southern negroes
Out of a frightful fix.

He fought with Alexander,
He crossed the ocean blue,
And landed in America
In fourteen-ninety-two.

He led the Greeks against the foe,
And won the Trojan war;
He conquered land in Africa,
And chased the heathen Moor.

He won the fight at Hastings
He made old Caesar run;
He drove away the savage Turk
And Attila, the Hun.

He did—he did so many things—
Oh, how I'd love to be
A hero like George Washington,
And be as brave as he!

—Cecelia G. Gerson.

To Protect Birds.

United States and Great Britain have signed a treaty for the mutual border protection of migratory birds. One of these days Uncle Sam wil have a like treaty with Mexico.

Cuttlefish of Greek Coast.

The sun-dried cuttlefish or devil fish of the Greek coast with suckers intact, looks like a football. The shredded part is more tempting than the tentacles.

Be Brief

Is a Good Motto for Dreamers

What is the quotation or what are the words which have helped you in the journey of life?

Is it a phrase from some famous author or was it the words from some neighborly soul who helped you over a hard place and left you the invaluable legacy of a life motto?

What are your favorite motto, your favorite quotation, your favorite words?

Send them to the editor of the Farmer and let those words help another which have helped you.

To the Editor of the Farmer: The following is a motto which I have used for nine years and I think it is worthy of attention and request it to be printed in the Farmer. It is a very good stimulant for a dreamer: "Be brief; time is life." W. H. WINN.

Albany, Ore.

Size of Cuttlefish.

Some cuttlefish are so large that the suckers, when stretched to their full length, can encompass the girth of a half dozen human beings.

Go-to-School-Monday

Why waste the next three months? Plenty of time to get our short course in Bookkeeping, Business, Arithmetic, Commercial Law, etc.

Take care of your farm accounts more accurately by taking our Farm Set.

Our Shorthand and Bookkeeping graduates are always in demand.

Annual reunion February 16.

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A Pure, Perfect Food For Your Plants

is what you must have. If yo buy a fertilizer you need t know what is in it, otherwis it may harm more than i helps. You know exactly wha is in

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which contains 15% of nitroge immediately available. It quantity and results are cer tain. Every ounce is the bes possible plant food. It wil cover your acres with a bigge and finer crop for about hal the money that you woul have to spend in other ways Now is the time to act. Writ for literature and data. Ad dress Dept. B.

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We do the largest consignment business in the northwe Equally fair treatment on all shipments, large or small. R turns at full market value mailed same day goods are r ceived. Trial shipments wanted and appreciated, but a handled as regular shipments and not at inflated values.

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Don't be satisfied with the kind of fish you get in the average inland store. Buy it direct from the packers and get far superior fish at less cost.

Delicious new-salted Ocean Fish of all kinds, freshly packed in brine, on the day of shipment.

Spiced, smoked, kippered and canned fish. Write for price list today.

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Dealers in high grade sea foods, direct to consumers.

BOYS' AND GIRLS' POULTRY CLUB



FREE HATCHING EGGS FROM PRIZE-WINNING PENS.

The Farmer, in line with other cooperative work with its readers, has a plan which enables thrifty boys and girls to obtain foundation stock in purebred poultry. A little of your time outside of school hours is all that is required. We offer nothing but eggs from prize winners. Each setting contains 15 eggs, and you can make your selection from the following breeds:

S. C. Reds, R. C. Reds, Barred Plymouth Rocks, White Rocks, White Wyandottes, Buff Orpington, Blue Orpington, Black Orpington, White Orpington, Light Brahmas, Anconas, S. C. Andalusians, R. C. Andalusians, R. C. Brown Leghorns, S. C. Leghorn, R. C. White Leghorn, S. C. White Leghorn, S. C. Buff Leghorn, Black Minorca, Bantam, Buttercup, Campine, Houdan.

Write today if you want to join the Poultry Club. You will want to have your eggs hatching before long, so don't delay.

Address:

THE WASHINGTON FARMER Room 37, Review Building, Spokane, Wash.



ELIZABETH HAD A LONG AUTO TRIP WITH GRANDPA

Dear Aunt Nellie: I want to tell my cousins about my automobile trip with Grandpa. We started about 8 o'clock. We had dinner at Conconully, a little town up in the mountains. There is a beautiful blue lake at the town. The cemetery is right by the lake. Grandpa went there to set a monument and we went with him. There was lots of pretty flowers there. We ran around and looked at the flowers while he was at work. Then we went to Okanogan to stay all night. We went to church with the lady and her little granddaughter from the hotel. The next day we went to Chelan, a distance af about 75 miles. There we had dinner. Chelan is a very pretty town located on a beautiful lake almost surrounded by snow capped mountains. We then started for Wenatchee, which is about 65 miles. Grandma was surely surprised to see us. Grandpa said that we were such good girls that he would take us another time this summer. We can hardly wait.—Elizabeth Bowen, Oroville, Wash.

DAYS ARE WORST WHEN THAW SPOILS COASTING

Dear Aunt Nellie: I have not written to the Childrens' Corner for a long time. Ever since school started I have neglected to write altogether. I was 12 years old October 3. Although we live just outside of the city limits of North Yakima, my father takes the Farmer, for he subscribed for it before we moved close to town. I think the subject on which I will write will be "The Worst Day." In the winter time after a big snow has come and all the children are out playing on their sleds having a good time and a thaw comes seems to me a shame. I love to play in the snow and I hate to see it go away. This winter after a big snow a thaw came and the days were nice and warm, but I couldn't enjoy them for I had just gotten a sled that same day it started to thaw. I enjoy the spring best, but when the days are cloudy I don't enjoy them at all. When I was smaller and afraid of thunder I didn't like that, but now I enjoy thunder showers.—Thela Bowen, R. 7, North Yakima, Wash.

HAVE TWO PIGS; BLANCHE IS MOST AFRAID OF THEM.

Dear Aunt Nellie: My father takes the Farmer. I like the Corner very much. I will be 12 the 15th of March. I live on a 160-acre ranch. There are six head of horses and 21 cows, and four little calves. One of the calves' names is Blacky, one King J. R., and the other ones' names are Pet and Spot. We have two pigs which I am most afraid of. I live five miles east of Winlock. I have two brothers and two sisters. Their names are Ralph, Kenneth, Ruby and Kathy. Our school started in September. My brother Ralph is in the third grade, and so is Ruby. I am the oldest one. In the winter time the Lacamas creek gets up in one of our pastures. I have blue eyes and nearly red hair. I have an aunt in the ninth grade. She has great big brown eyes. I can crochet, but I can't tat. My teacher's name is Miss Mabel Perry, and I like her very much. —Blanch Cantrell, Lacamas Stock Farm, Winlock, Wash., R. F. D. No. 1, box 115.

AGNES LIKES HISTORY, READING AND GRAMMAR

Dear Aunt Nellie: I would like to join the Children's Corner. I am 12 years old, and my birthday comes in July. I live on a 480-acre wheat farm. I have two brothers and two sisters. One brother is a farmer and the other is still going to high school. One of my sisters is a nurse and the other is a teacher. I am in the fifth grade. I like history and reading and grammar. We have about 21 pupils in our school. Our teacher's name is Miss Lucinda Dunagan.—Agnes Lauer, R. 1, Pomeroy, Wash.

CLARA IS A WIDE-AWAKE BOOSTER FOR THE CORNER

Dear Aunt Nellie: This is the fourth time I have written to the Corner. I got Mabel Nicholson, Alma Lunn and Bertha Gamble to write to the Corner. My subject will be "Fun on the Farm." I like farm life very much and would not exchange with any city girl. I live one-half mile from Bothell. I go to the Bothell school. There are 12 nice big rooms in our school. We have a nice big gym. There the girls and boys play basket ball and games. We children after school go skating on the Sammish river which is frozen. There are many, many reasons why I like the country better than the city. The tall stately firs stand bowing as the winds blow and give us nature's sweetest odors. The beautiful pussy willows soon will be out and give the world some beautiful branches of them. The spring is coming with all its glory and flowers and birds.—Clara Olson, Box 108, Bothell, Wash.

MYRTLE LOVES MUSIC; SHE IS TAKING LESSONS

Dear Aunt Nellie: Father takes the Farmer and I enjoy reading the Children's Corner. I think our corner is growing every day. I was very proud of my prize and many thanks. I was 11 years old October 22. I live on a 160-acre farm. I am in the fifth grade at school. We have four cows and one calf. We have eight horses and three colts. One colt will eat tobacco leaves. We have a piano and I have taken 12 music lessons. I can play quite a few songs. I love music. I like to go to school. My teacher's name is Miss Ice. I have four brothers and two sisters. One of my sisters is dead. We have an Overland car. When the roads are good we have many pleasure trips. My youngest brother, Ira, is 14 years old and he can run the machine anywhere.—Myrtle Goldie Ledbetter, St. John, Wash.

WISHES SOME OF THE GIRLS TO WRITE TO HER

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I thought I would write, too. I live on the farm and I have lots of fun. We have 24 horses and three cows. Their names are Reddy and Spot and Jersey. We have one dog and his name is Benny. My weight is 151 pounds. I am 13 years old and my birthday was the 17th of September. I have two sisters and one brother. Their names are Edward and Emily and Agnes. I go to school and I am in the fifth grade. My teacher's name is Miss Frans. We have a big house. Have I a twin? I wish some of the girls would write to me.—Irene M. M. Glissler, Lock Box 357, Odessa, Wash.

ORCHARD AND FLOWERS ARE LOVELY IN SUMMER

Dear Aunt Nellie: I have thought so many times that I would write a letter. We have had nice days for a while. I am in the eighth grade and 14 years old. A letter from any girl about my age is welcome. I live three miles from school. I have four brothers and a sister. They are all younger than I. We live on a 40-acre farm. We have cattle. If I graduate this year I will go to high school next year. I like summer best because we go swimming in a lake. The lake is only a mile and a half away from our farm and everything looks so nice in summer especially the fruit orchard and the flower garden. Well the winter is fun, too; you can skate or coast.—Senia Hulk, Kent, Wash.

SNOW WAS A FOOT DEEP WHERE EDITH CRABB LIVES

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. We are having revival meetings now. I am 9 years old, my birthday is the 19th of December. I am in the third grade. We have three cows. Their names are Rose, Dottie and Blossie. We have 20 horses. We have one dog; his name is Don. We are having lots of snow now. It is about a foot deep. I have two sisters and three brothers. Ruth is in the fourth grade and Ina and Dewey are in the eighth grade. My youngest brother's name is Burl and my oldest brother's name is Wade. My youngest sister's name is Ruth.—Edith Crabb, Marengo, Wash.

RUTH TELLS US OF THEIR BEAUTIFUL SCHOOLHOUSE

Dear Aunt Nellie: I am going to tell you about our beautiful new schoolhouse. It is made of bricks and tile with white trimmings. We have four rooms and a library and a teacher's office. My teacher's name is Miss Spencer. I like her very much. I am 11 years old and in the sixth grade. My birthday is in November. I have a brother 6 years old and two sisters, one 9 and one 4.—Ruth Friday, R. F. D. No. 1, Box 229, Puyallup, Wash.

WHEN THERE IS SNOW PAPA TAKES THEM TO SCHOOL

Dear Aunt Nellie: I like to read the letters from the Children's Corner. My papa takes the Farmer. I have one sister and one brother. My brother's name is Thomas, and my sister's name is Dorothea. My sister is 7 years old, and my brother is 3 years old. We have four cats, one big one and three little ones. Santa was too good to me. I got lots of presents this year. We have a man working for us. I couldn't go to school last week. I am in the third grade. I am 9 years old I have a mile and a half to go to school. My sister is in the second grade. We have about 75 chickens and two geese. We have 19 pupils in our school. My sister likes school, too. My teacher's name is Miss Codd. The snow is about three or four inches where it isn't drifted.—Myrtle Godch, Box 116, Uniontown, Wash.

VONDA'S BROTHER LIKES TO PLAY WITH THE DOG

Dear Aunt Nellie: I have two sisters and two brothers. My sisters' names are Dora and Orphia, and my brothers' names are Bruce and Dades. I am 11 and my birthday is June 30. We have four little kittens and one old cat. We have a dog. Bruce likes to play with the dog. Ruby is one of our nearest neighbors, and she writes to the Children's Corner. I go to school and I am in the sixth grade. There are 31 children in my room. I have to walk two miles to school. I live on a 120-acre farm.—Vonda Boulden, R. F. D. No. 1, box 2, Elma, Wash.

FLORA WOULD LIKE TO TAKE THE TRIP INEZ HAD

Dear Aunt Nellie: It has been a long time since I wrote to the Children's Corner, but thought I would write again. I am 11 years old and my birthday is on the first day of February. We are having vacation now and I am spending the day with my friend. We are having a good time together. We went coasting today, but it didn't go very good. I would have liked to take the trip Inez Gagen did. I bet she had a good time.—Flora Lamurs, Box 41, Johnson, Wash.

DURING VACATION, FRANK HELPS FATHER HAUL BARK.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner but I hope it won't be the last. My father takes the Washington Farmer. I enjoy reading the other children's letters. I live on a 240-acre farm. We have 15 head of cows and seven head of horses. I am 14

Rhymes and Jingles for the Tittle Folks.



years old. I am in the eighth grade and have to walk a mile and a half to school. My teacher's name is Miss Larsen. There are seven pupils in our school. I would like very much to correspond with Harry Burke. During the Christmas vacation, I help my father haul bark. There is almost five inches of snow here. Your nephew, Frank Clinton Saeger, Box 231, Shelton, Wash.

DONALD TELLS ABOUT THE COYOTE HIS PAPA KILLED

Dear Aunt Nellie: I am going to tell you about the coyote that papa killed. I was standing at the window and saw turkeys flying up in trees so I went out to see what was the matter. The coyote came around chasing the chickens and so I told papa to get the gun quick and shoot him. So he did. Now we got a nice hide. I don't know what we will do with it.—Donald Ancil Fox, Cunningham, Wash.

FUN TO FEED ALL THE CHICKENS AND RABBITS

Dear Aunt Nellie: I have never written to the Children's Corner before. I like to read the letters very much. I am 8 years old. I go to school every day. I am in the third grade. I have three sisters and one brother. We have three cows and 60 chickens, four geese and 27 rabbits. I have lots of fun feeding them. I hope to read my letter in the Farmer.—Jennie Peterson, Box 67, Thomas, Wash.

BUSTER AND SNOWBALL ARE CECIL'S TWO PETS

Dear Aunt Nellie: I have read the letters in the Children's Corner and enjoy them very much. I am a boy 9 years old and my birthday is January 6. I am in the fifth grade. My teacher's name is Miss Ora Bullock. There are seven pupils in our school. I have three sisters and one brother. Their names are: Velma, age 14; Genevieve, 13; Doris, 2, and Wesley, 5. I have one mile to walk to school. I live on a 400-acre farm. We have 18 horses and three cows. I have two pets, a dog and a cat. The dog's name is Buster and the cat's Snowball. We had a play on Christmas and it was called "Kris Kringle's Minstrels." Kris Kringle brought me a watch, a fairy-tale book, a picture, card and handkerchiefs. I wanted him to bring me a bank, but I did not get it. —Cecil Wayne Bramhall, Dayton, Wash.

SHE IS OLDER THAN HER BROTHERS AND SISTERS

Dear Aunt Nellie: I like to read the letters in the Corner very much. I was 14 years old December 3, and I am in the eighth grade. I live on a 40-acre farm a mile from Rochester. We have five cows, three calves, three horses and about 80 chickens. We have a dog named Fox and a cat named Tommy. I have two brothers and two sisters. Their names are Edwin, Albert, Ruth and Florence. My oldest brother is 11 years old and the younger is seven. I am the oldest in the family. My teacher's name is Mr. Hunter and I like him fine. I walk a mile to school every day. I would like to correspond with Mildred Little or any other girl of my own age.—Alvina Forsman, Rochester, Wash.

LIVES ON A FARM WITH HER UNCLE AND AUNT

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 11 years old. My birthday is on May 19. I am in the fifth grade. My teacher's name is Miss Bergersen. I live with my uncle and aunt on a farm of 135 acres. I have lived here since I was 11 days old. My father, brothers and sister live in San de Fuca, Wash., about 12 miles from here. In summer, during vacation, I stay with them. On my uncle's farm there are about 15 cows, eight calves, three horses, one pony, pigs and a few chickens. We have two dogs and two cats. The dogs' names are Dixie and Sport. I would like to have some of the girls write to me.—Annie Van Dam, Oak Harbor, Wash.

THIS COUSIN WALKS A MILE TO HER SCHOOL

Dear Aunt Nellie: I have been reading the Children's Corner. I like it very much. I go to school. I am in the seventh and eighth grades. I am 13 years old, or will be 14 on May 15. I go to school one mile. My teacher's name is Mr. Stevens. I have two sisters. Their names are Lyda and Alice. I live on a farm. One of my friends, Ella Love, wrote to the Corner also. I have a married sister who has a little boy baby that will be 4 months old the 26th of January.—Viola Augst, Box No. 30, Beebe, Wash.

WRITE AGAIN, LYDA; TELL US MORE ABOUT YOURSELF

Dear Aunt Nellie: I have been reading the Children's Corner. I like it very much. I thought I would write to the Corner. I am 11 years old and will be 12 the 7th of April. We have many chickens. I like to feed them; and then we have four cows and two calves. We have 11 mules and four horses and one little colt. I have four sisters and five brothers. We go to the Enterprise schoolhouse. We live one mile from school. We walk in summer and ride in winter.—Lyda Augst, box No. 30, Beebe, Wash.

COUSIN MARGARET WANTS A CORNER CORRESPONDENT

Dear Aunt Nellie: This is the first time I have written to the children's corner. I am a little girl, 11 years old. I am in the fourth grade. Our teacher's name is Miss Hamilton. We have 13 pupils in our school. We have one cow, one calf and three dogs. Their names are Jimmy, Happy, Prince. We have 13 horses, three pigs and 20 chickens. I have three-quarters of a mile to go to school. I would like to have some of the girls write to me.—Margaret Cox, Leahy, Wash.

FOR BOYS AND GIRLS.

Send for a copy of "Pep," the new boys' and girls' paper. You are entitled to a sample copy free and you will receive it regularly, without charge, if you join our Money-Making club. When you ask for your copy of "Pep," inquire about the Money-Making club. A postcard will do. Premium Dept., Washington Farmer, room 87 Review building, Spokane, Wash.; —Adv.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Feb. 17.—Many complaints that abnormally dry weather in the southwest and west was causing serious crop damages gave an upward slant to wheat today. The market closed unsettled at the same as yesterday's finish to 1 1-2c higher, with May $1.73 1-2 to $1.73 5-8, and July $1.48@1.48 3-4 to $1.49. Corn wound up unchanged to 1-8@1-4c higher, oats gained 1-8c to 1-4c, and provisions showed a rise of 10c to 20c.

Disappointment over the absence of any new export buying led to some reaction in wheat prices as the day approached an end. New crop months, however, maintained a relatively firm tone.

Some inquiry from the seaboard made the corn market harden a trifle. Oats reflected the changes in corn values. Trade was so light that the market was easily influenced.

Higher quotations on hogs brought about firmness in provisions. The bulges, though, led to considerable realizing on the part of holders.

Cash Quotations.

CHICAGO, Feb. 17.—Wheat—No. 2 and No. 3 red and No. 2 and No. 3 hard, nominal.

Corn—No. 2 yellow, nominal: No. 4 yellow, 99c@$1; No. 4 white, $1.00¼.

Oats—No. 3 white, 58½@58¾c; standard, 59@59½c.

Rye—No. 2, nominal.

Barley, $1@1.30.

Timothy, $3.50@5.50; clover, $12@18.

Pacific Northwest Grain.

PORTLAND, Ore., Feb. 17.—Wheat strong. No trading. Spot bids unchanged to ½c up. Bluestem, $1.57½; fortyfold, $1.53; club, $1.52; red Russian, $1.49.

Barley lower. No. 1 feed, $39.

TACOMA, Feb. 17.—Wheat, bluestem, $1.57; fortyfold, $1.53; club and red fife, $1.52; red russian, $1.49.

SEATTLE, Feb. 17.—Wheat, bluestem, $1.57; Turkey red, $1.53; fortyfold, $1.52; club, $1.54; fife, $1.54; red Russian, $1.52.

Barley, 39 per ton.

WILBUR, Wash., Feb. 17.—Bluestem, $1.40; club, $1.35. Oats, $37. Barley, $39. Oats and barley are being shipped here to supply the demand for feed.

Portland Wheat.

PORTLAND, Ore., Feb. 17.—The grain market is almost tied up by the bad railroad situation. There is a constant demand from the east for wheat and large premiums are offered for quick delivery, but when shipments are made there is no certainty the grain will get beyond the Missouri river. A number of sales are being made to the east, but they are for deferred shipment. A moderate amount of business is being done with California in the best milling grades and in chicken wheat.

Closing bids for February wheat were: Bluestem $1.57 1-2, forty-fold $1.53, club $1.52, red Russian $1.49.

Oats is held steady around $36 by the belief that the government will soon be in the market for a fresh supply for use on the border. The barley market continues inactive.

The market for 1917 grain bags is nominal at 11 1-2 cents. A smaller quantity is certain to be used this year and it is also likely there will be more difficulty in getting the needed supply from Calcutta than was the case last year.

Seattle Wheat.

SEATTLE, Feb. 17.—Buyers and sellers have been apathetic on the wheat market this week. Bids of $1.40 for bluestem and turkey red and 5c under for red wheats in the country have not been sufficiently attractive to draw out any of the small farm holdings. The car shortage, which is regarded as more pronounced on Puget sound than at any point in the west, is back of the apparent indifference of buyers who point out that even though they would be willing to bid up strong for the grain they could secure no cars in which to ship it. The present problem of exporters is not in getting more grain, but in moving what they have been holding on account of lack of railway equipment for several weeks.

Butter and Eggs.

PORTLAND, Ore., Feb. 17.—Butter—Weak; buying price butter fat down 4c; No. 1, 39c; No. 2, 37c; cube extras, 37c.

Candles Raised in Paris.

Candles have increased in price in Paris as a result of the restrictions placed on the use of electricity, gas and petroleum for illuminating purposes.

Portland Market.

PORTLAND, Ore., Feb. 17.—The butter market took a sharp drop of 4 cents in the latter part of the week. Weakness of outside markets was announced by creamery men as the cause of the decline. Since the lower price went into effect, however, there has been much quiet buying of cubes, which leads some to believe that the market was put down to enable shippers to fill a large order for the eastern market. It has been known for some time that there have been eastern inquiries for butter on the market.

Cheese is firmer again as stocks are being reduced by shipments to the eastern states.

Continued buying of eggs for Montana account is holding the market firm at the 32 cent basis, case count. Flocks of hens in this state are lighter than a year ago and it is probable egg prices will not fall below the 25 cent mark in the storing season. Last year eggs were stored at 20 to 22 cents and in previous years about 17 cents was considered a safe level by speculators.

Poultry and dressed meat receipts were small all the week and prices were firm with a brisk demand.

Onion growers at the close of the week advanced their selling price to $3.50 a sack. The unsold stock in the state now amounts to but 24 cars. The onions are keeping well.

Potatoes are firm at $3 to $3.25 bid at country points for shipping stock.

Apples are cleaning up well and the market is firm, but no higher.

Live Stock Quotations.

At Chicago.

CHICAGO, Feb. 17.—Hogs, receipts 18,000; strong 5c to 10c above yesterday's average; bulk, $12.20@12.40; light, $11.65@12.35; mixed, $12.05@12.50; heavy, $12@12.50; rough, $12@12.15; pigs, $9.40@10.70.

Cattle, receipts 800; steady. Native beef cattle, $7.85@12; stockers and feeders, $8.25@9.20; cows and heifers, $5.20@10.40; calves, $9.75@14.

Sheep, receipts 7,000; weak. Wethers, $11@12; lambs, $12.40@14.75.

At Omaha.

AHA, Feb. 17.—Hogs, receipts higher. Heavy, $12.10@12.30; light, $11.80@12.15; pigs, $10@11.75; bulk of sales, $11.90@12.15.

Cattle, receipts 1,200. Steady. Native steers, $8.25@11.25; cows and heifers, $7.25@9.25; western steers, $7.50@10.50; Texas steers, $7@8.25; stockers and feeders, $6.50@10.

Sheep, receipts 200; steady. Yearlings, $11.50@13.50; wethers, $10.50@11.50; lambs, $13.65@14.50.

At Portland.

PORTLAND, Ore., Feb. 17.—Hogs steady; receipts, 264. Bulk of packing grades, $12.20@12.25; heavy packing, $12.25@12.35; light packing, $12.20@12.25; rough heavies, $10.50@11; pigs and skips, $11@11.25; stock hogs, $9.75@10.25.

Cattle steady; receipts, 21. Steers, prime light, $9@9.25; prime heavy, $9@9.25; prime heavy, $9@9.25; good, $8.40@8.50; cows, choice, $7.50@7.75; medium to good, $7@7.25; ordinary to fair, $6@6.75; heifers, $4@8; bulls, $3.50@6; calves, $6@9.

Sheep steady; receipts, 35. Lambs east of mountains, $12.50@13; lambs, valley, $12.25@12.50; lambs, good, $11.25@11.75; choice wethers, $10.50@10.75; choice ewes, $9.25@9.75; heavy ewes, $8.75@9.25.

At Seattle.

SEATTLE, Feb. 17.—Receipts, 49 hogs; 22 cattle.

Hogs—Prime light, $12.35@12.50; medium to choice, $11@11.30; smooth heavy, $10.50@11.50; rough heavy, $9.55@10.25; hogs under 150 pounds, $9.20@9.65.

Cattle—Prime light steers, $9.25; medium to choice, $8.50@8.75; common to good, $6.75@8; medium to choice, $7.25@7.50; common to good, $5@6.50; best bulls, $5@5.75; common bulls, $3.50@4.50; calves, $7@9.

Sheep—Prime lambs, $10@10.50; good lambs, $9.75@10; wethers, $8.50@9; ewes, $6.50@8.

Spokane Stock Yards, Saturday.

Hogs—Receipts, 316 head; market strong. Prime heavy, $12.10@12.25; prime light, $12@12.10; prime mixed, $10.75@11.25; rough heavy, $11@11.25; stockers, $7.50@9; bulk of sales, $12@12.10.

Cattle—Receipts, 45; market strong. Prime heavy steers, $9@9.25; prime light steers, $8.65@8.85; good steers, $8@8.50; stockers and feeders, $5.50@6.50; prime cows, $7.50@8; good cows, $6.75@7; best heifers, $7.50@8; bulls, $3.50@6; calves, $6.50@9.

Sheep—Receipts none; market strong. Prime lambs, $11.75@12.25; common lambs, $10.75@11.25; choice yearlings, $9.75@10.50; good yearlings, $8@9; best mutton ewes, $8@8.50; common ewes, $7@7.50.

Seattle Market.

SEATTLE, Feb. 18.—Accentuated speculative feeling is the dominant note in the potato market for the weekend, with No. 1 Gems as the pivot at $70@75, an advance since Monday of $5 per ton. Holdings in this state have been located with acute exactness. There are less than 60 carloads of potatoes of all kinds in storage in Seattle, and not more than 100 carloads in eastern Washington that are not sold. These are the figures on which speculators base their chances for fliers on a still higher market.

Fresh ranch eggs are firm, but jobbers have no settled conviction that prices will remain strong for any length of time. Light receipts and a vigorous demand are responsible for the present strength in the market. Wholesalers are practically marking time until the opening of the storage egg season next month.

Butter is steady to firm on the decline of the week. Creamerymen report that there was a brisk movement for a day or two after the market fell, but that this business has slowly decreased to normal. That the peak of the high prices for this season has been struck and passed is universally conceded on Western avenue.

Stocks of old cheese are light and jobbers are trying to clean up with shading of prices.

Onions and potatoes occupy exactly the same position in future influences. Oregon holders, according to most reliable reports obtainable from here, have less than 25 cars. Australian imported onions may not get on this market for 30 days, and dealers are claiming that the Pacific coast will be cleaned up before that time.

Buoyant prices of oranges as a competitor have lifted the apple market 25c and increased the movement. Winesaps are quoted today at $2@2.25, although jobbers would not care to make the fact public until they had been able to replenish their light stocks from eastern Washington.

BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 31c per dozen.

Poultry—Live hens, fat, over 4 lbs., 20c per lb., do, 3 lbs. and under, 18c; old roosters, 11c per lb.; springs, 20@22c per lb.; ducks, 20c per lb.; squabs, large, $3.50 per dozen; geese, fat, 12@14c per lb.; turkeys, live, 23@24c.

Butterfat—43c lb.; dairy butter, 27c per lb.

Beef—Buying price: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.

Hogs—Light, 13c per lb.; do, heavy, 11c per lb.

Veal—Fancy light, 14c per lb.; do, heavy, 12@13c per lb.

Hides—Salted, 19c per lb.; salt kip, 22c per lb.; salted calf, 32@35c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 32@33c per lb.; dry calf (under six lbs.), 36c per lb.; bull and dry salts, 4c per lb. less; green bulls, 18c per lb.; dry butcher full wool sheep pelts, 20@23c per lb.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $2.50@2.75 cwt; sweet potatoes, $6.

Apples—Washington apples, cooking, 65@85c; eating, $1@1.25; Wageners, 85c@$1.35 box; Jonathans, $1.25@1.35 box; Delicious, large, $1.75@2.25 box; Rome Beauties, $1.25 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 43c lb; Medo-Maid, 43c lb; Cascade, 43c lb; Gold Coin, 36c lb; Gold Leaf, 43c lb; Better Butter, 43c lb; Hazelwood, 43c lb; Peerless, 39c lb; Jersey Belle, 42c lb; Attalia, 43c lb; Diadem, 43c lb; Jersey, 39c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 28½c; Hazelwood full cream triplets, 23c lb; Hazelwood Young America, 24c lb; Wisconsin limburger, 29c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $40.50; fresh eastern eggs, $10.50 case; eastern storage eggs, $9.50@10.50.

Live Poultry—Springs, 15@16c lb; hens, 15@16c lb; old roosters, 7@9c lb; ducks, 11@13c lb; turkeys, 20@27c.

Dressed Poultry—Hens, 19c lb; springers, 19c; old roosters, 12c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs. and up, 16½c; salted cured, 19c; green bulls and stags, 13c; salted cured, 15c; kip, 15 lbs. to 25 lbs., 21c; calf skins up to 15 lbs., 30c; dry flint hides, 32c; dry salted, 27c; dry calf skins, under seven lbs., 38c; dry sheep pelts, full wooled, 20@23c; dry shearlings, 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2 each.

Remove Billboards.

Massachusetts proposes to remove offensive billboards from scenic highways.

Wool.

BOSTON, Feb. 16.—The Commercial Bulletin will say tomorrow:

"The wool market has been fairly active during the last week, especially in view of the limited stocks available. Manufacturers have shown a disposition to buy more or less steadily and in fair quantities. Prices show no material change compared with the end of last week, although everything is exceedingly firm. Rather more contracting is reported from the west and the mills report little change in the actual market."

Scoured basis: Texas fine, 12 months, $1.12@1.15; fine eight months, 95@97c.

California: Northern, $1.10@1.12; middle county, 95c@$1; southern, 75@80c.

Oregon: Eastern No. 1 staples, $1.05@1.17; eastern clothing, $1@1.03; valley No. 1, 95c@$1.

Territory: Fine staple, $1.20@1.25; half blood combing, $1.10@1.12; ¾ blood combing, 95c@$1; common and braid, 74@75c; fine clothing, $1.03@1.05; fine medium clothing, 98c@$1.

Pulled: Extra, $1.10@1.12; fine A, $1@1.03; AA, 95c@$1; A supers, 90@95c.



Hides, Fur, Wool, Horse Hair, Metal and Rubber. We are the largest dealers in the Inland Empire. Highest markets paid. Prompt returns. Deal with a home firm.

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT,
Joseph Thiebes and C. T. Symmes,
1101-09 Railroad Ave., Spokane, Wash.

Want Ads

HELP WANTED—MALE 3

BE AN AUTO AND TRACTOR EXPERT. $75 to $200 a month—learn in six weeks. Thousands of successful graduates. Catalog free. Rahe's Auto School, 532 East 11th st., Kansas City, Mo.

SITUATION WANTED—MALE 21

MARRIED COUPLE WANT FARM WORK; epexrienced; wife good cook. P. O. Box 1024, Spokane.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER:

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE

SASH AND DOORS.

The best place to buy your sash and doors is from O. B. Williams Co. We not only sell for less, but will give you satisfaction, or money back. We own our own mill make prompt shipments, and guarantee safe delivery. Send for our big, illustrated catalog, No. 27, mailed free, post paid, promptly on request.

5 cross panel doors, No. 1	$1.33
Craftsman doors	1.75
Glass doors, as low as	2.25
24x28, 2-light window	1.46
Bungalow casement sash	.56
3x6 hot bed sash	2.25
1-ply Gold Seal roofing	1.25
3-ply veneer panels, square foot	.05½

Cupboard doors, frames, finish, mouldings, builders' hardware, glass, etc.

O. B. WILLIAMS CO.
1943 FIRST AVE. SO. SEATTLE, WN.

TRACTOR ENGINE.

We have, in first-class condition, slightly used Minneapolis 22½-H. P. traction engine for sale at a sacrifice. This is a bargain if you can use it. Write for price and full details.

CONTRACTORS' EQUIPMENT CO.
18TH AND UPSHUR STS., PORTLAND, ORE.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 8½c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

(Continued on the following page.)

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free. BEHNKE-WALKER BUSINESS COLLEGE, 167 FOURTH ST., PORTLAND, ORE.

HAWTHORNE AUTO SCHOOL, 445 Hawthorne ave., Portland, Oregon. School in session all year 'round. No books, charts or printed lessons used. Everything practical and up to date.

MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer, and The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

HOGANIZED S. C. I. REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels, $5 each. These birds are all sons of a magnificant male, from a 271 egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs $6 in 100 lots; sittings, $1.50, $3, $5. Mrs. H. V. Rominger, Underwood, Wn.

QUEEN QUALITY WHITE LEGHORN chicks; Feb., $12 per 100; Mar., $11; April, $10; May, $9; June, $8. Queen incubators, 70 to 2000 egg capacity; 1200-chick brooder stove, $18.50.

WE DO CUSTOM HATCHING AND SELL HATCHING EGGS. QUEEN HATCHERY, 89 Pike st., Seattle.

79,637 EGGS IN 1916 FROM MY FLOCK of 450 S. C. Black Minorcas, prize winners in the snowroom and laying contest; eggs from my Hoganized and trap-nested breeding stock at $2 per 15, $3.50 per 30, $5 per 50, $8 per 100, $70 per 1000. No baby chicks or stock for sale. John Dollenbacher, R. 1, Selah, Wash.

ORDER YOUR BABY CHICKS NOW FROM heavy laying strain; delivery guaranteed; our chicks please; R. I. Reds, March, $15 100; after Mar. $12. White Leghorns, March, $12 100; after March, $10. Maplebrook Poultry farm, Southworth, Wash., Box 3.

MY R. C. R. I. REDS HAVE WON EVERY first and second, except one, competed for in the past 3 years. Have mated 4 pens for the egg trade. Guaranteed satisfaction. Mating list on application. G. W. Baker, Colfax, Wash.

FAMOUS CARNATION WHITE LEGHORNS. Baby chicks; high-grade utility stock; birds of merit, quick maturing; heavy winter layers; free range. Breeding stock. Ernest Raush, Carnation Poultry Farm, Kent, Wn.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please $12—100. Free catalog. Freshlaid Farm, Colfax, Wash.

WHITE BUFF AND BLUE ORPINGTONS, single and rose comb Anconas, the great winter layers, winners at leading Coast shows; eggs $1.50 to $3.00 for 15; chicks 20c each. Ira N. DeLine, Box D, Olympia, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R 7, Waitsburg, Wash.

GROSSER'S LIGHT BRAHMAS, BIRDS and eggs for sale, sweepstake winners in National Western Stock Show; prices reasonable. E. Grosser, 2245 Perry St., Denver, Colo.

BARRED PLYMOUTH ROCKS, PRIZE winners at shows; way ahead of average in N. W. laying contest. Write for prices. Wm. H. Helmsoth, Baker, Ore.

S. C. WHITE LEGHORN AND S. C. RED eggs for hatching, $2.50 to $5 per 15; heavy-laying, exhibition strains. H. J. Fuller, N124 Lincoln st., Spokane.

"ROSECROFT" WHITE WYANDOTTES are winter layers. Hens $2, pullets $2.50, cockerels $3; eggs $3 for 15, $5 for 30. Rosecroft, Wenatchee, Wash.

EGGS FROM THOROUGHBRED TRAPnested White Leghorns, $6 and $8 per 100. A. A. Hopson, Jennings Lodge, Ore.

EGGS FROM TANCRED S. C. W. LEGhorn hens, $1.25 per 15, $6 per 100, prepaid. J. W. Hirons, R. 2, B. 55, Scio Ore.

MAMMOTH BRONZE TURKEYS—SALAble stock all sold. Mrs. H. J. Cortner and Mrs. C. R. Lowery, Payette, Idaho.

PRIZE-WINNING BUFF ORPINGTONS. Settings, $2 to $10. Males, $3 to $15. Lucy R. Scudder, No. Yakima, Wash.

LAKESIDE S. C. W. LEGHORN EGGS, $1.50. Mrs. T. W. Harvey, Spokane, Wn.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

POULTRY 174 Continued.

DAY-OLD WHITE LEGHORN CHICKS, from 2-year-old hens, $12 per 100; eggs for hatching, $1.50 per 15, $6 per 100; White Wyandotte eggs, $2 a setting. The Pudor Farms, Puyallup, Wash.

S. C. PEERLESS BLUE ANDALUSIANS, eggs $2 setting; ckls. $2 to $5. Write for folder. Mrs. C. W. Armstrong, Freewater, Ore.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

BLACK-BREASTED RED GAMES, $10 A trio. N. W. Wernett, Mesa, Wash.

LIVE STOCK 177

FARMERS, HOG RAISERS—BIG-TYPE Poland or Berkshires at 1-3 usual prices; top pigs, bearing famous pedigrees, $12.50 each. Free hog booklet. "The Bartwood Idea." Bartwood Farm, Hamilton, Mt.

4 WELL GROWN 10-MONTHS-OLD REGistered Duroc-Jersey boars, from best strain in northwest, at $30 each, if taken at once; shipped on approval. Ben Kelley, Penawawa, Wash.

12 HEAD OF VERY CHOICE REGISTERED red roan and white Jr. yearling Shorthorn bulls. Wm. Mulhall, Fenn, Ida.

HORSES and VEHICLES 183

IMPORTED STALLION FOR SALE, SURE foal getter. Write for particulars. S. J. Emery, Port Angeles, Wash.

GROCERIES 222

3 LBS. EXTRA FINE COFFEE, ROASTED fresh daily, by parcel post, for $1. Martin Marks Coffee Co., Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 137 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS,
VETCH OR "TARES,"
A Great Forage or Seed Crop.
RED CLOVER, ALSYKE,
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.
COMPLETE LINE OF FARM SEEDS.

We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.

CORVALLIS FLOURING MILLS,
Corvallis, Oregon,
Home of the Famous Oregon Agricultural College.

TESTED SEEDS FOR FARM AND GARden—New 1917 seed catalogue now ready; valuable information gathered in 25 years' experience in the northwest. Write for quantity price on Grass, Clover and Alfalfa seed. For new catalogue address Aabling-Boyce Seed Co., Seattle, Wash.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request. ROUTLEDGE SEED & FLORAL CO. 145-147 2D ST., PORTLAND, ORE.

160 ACRES; 6½ MILES FROM COUNTY seat, Vale, Ore., and one mile to station. A1, fenced. Two miles from oilfield; no improvements; clear. Price $8000; half cash, bal. time, 8 per cent. M. L. PHELPHS, BOISE, IDAHO.

ALFALFA SEED, RED CLOVER, SWEET clover; Early Ohio; Idaho Rural; Peachblow seed potatoes; Dicklow spring wheat—the big crop producer; blue barley. Jerome M. & E. Co., Jerome, Idaho.

ALFALFA SEED IN LOTS FROM ONE TO one hundred bushels at $8.50, f. o. b. Clements, Kan. Samples on request. H. H. Stephenson, Clements, Kan.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEEDS 620 Continued.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue. BUTZER'S SEED STORE, 188-190 Front St., Portland, Oregon.

ALFALFA, RED CLOVER, ALSYKE CLOver, white clover, sweet clover, timothy and other grasses; seed oats and wheat; at reasonable prices. Voegeler Seed Co., Salt Lake City, Utah.

A LIMITED NUMBER OF THE FAMOUS Yakima Goodell strawberry plants, $3 per 100, delivered free. WILL HANKS, NACHES, WASH.

RED AND ALSYKE CLOVER AND VETCH seed; bright, high test; clean; dependable. Write us. M. SENDERS & CO., ALBANY, ORE.

CLOVER, VETCH AND TIMOTHY. Quality guaranteed; priced so you can afford to buy. Samples on request. Rhoten Farms, Salem, Ore.

SEND US YOUR NAME For Our New Seed Catalog. SEATTLE SEED CO., SEATTLE.

NURSERY STOCK 621

HEAVY 2-YR. LONDON MARKET CURrant, $7 per hundred; strong Champion Gooseberry, $6 per hundred; well rooted 1-yr. Connover's Asparagus, by post prepaid, 90c per hundred. Orders less than 50 plants or bushes not taken. Remit with order. Waldo Hills Seedling Nursery, Shaw, Ore.

NURSERY STOCK—FRUIT TREES, ALL kinds, grafted walnuts, filberts, grapes, small fruit plants, etc., at greatly reduced prices. Save time by mailing complete want list, stating varieties, number of each and grade. Lafayette Nursery Co., Lafayette, Ore.

PRUNE TREES; THOUSANDS; GRAFTED walnuts. Trees of all kinds. Buy direct and save 50 per cent. No agents. Our prices sell. Write for planters' catalog and price list. 26 years in business. Carlton Nursery Co., Carlton, Ore.

BARTLETT AND ANJOU PEARS R. ANN, Lambert, Duke, Morell cherries. Fine lot privet hedge plants, money-saving prices. Christopher Nurseries, Christopher, Wash.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

FARM LANDS—FOR SALE 651

OPPORTUNITY OF A LIFETIME to get some REAL land; rich and deep clay loam and shot clay soil; raises banner crops; level as a floor; on two railroad lines, near Seattle, Tacoma, Olympia; big army mobilization camp site, and cannery which contracts to buy crops; new town started right on ground, where 12 passenger trains stop every day; settling up rapidly by practical farmers of Idaho, Washington, Oregon and California; they're all enthusiastic. Land is easily cleared; select a tract now and get crop in this spring. $750 buys 10 acres, on terms of $20 cash and $10 monthly. Write at once for information.

A. H. REID & CO.
315 NEW YORK BLOCK,
SEATTLE, WASH.

LAND.

Montana grain and stock farms, in best parts of the state, for sale at very reasonable prices and on easy terms. Improved places in Judith Basin at $36 to $50 per acre. Good grain lands in Great Falls and Miles City districts, $15 to $25 per acre, on easy terms. We have for sale in half sections and larger farms about 10,000 acres in the famous Shields River calley at prices ranging from $15 to $50 per acre, on easy terms. Several fine stock farms. Have several good farms on which owners will take some trade. Send for Montana land list, free for asking. Hege & Watkins Co., 715-17 Paulsen bldg., Spokane, Wash.

320 GRAIN FARM, 8 MILES FROM HARTline; 160 acres in crop; 160 to be summer fallowed; well-built 6-room plastered house, with basement; barn room for 20 head of horses; 5000-bushel granary; 2 good implement houses, 20x32 each; garage, with concrete floor; family orchard; well; gas engine; 5000-gal. reservoir; water piped everywhere, including house; good neighborhood; no encumbrances; a bargain at $60 per acre. At least $4000 cash, balance 8 per cent. LEO REINHART, HARTLINE, WASH.

MONTANA LANDS.

We have for sale on 10-year terms, at 6 per cent, 29,000 acres fine wheat land in Dawson and Rosebud counties, Montana, at from $8 to $22 per acre, and over 75,000 acres fine grazing and farm lands at from $4.50 to $650 per acre, on 10-year terms. A large number of our settlers are from Walla Walla and Palouse sections. MONTANA WHOLESALE LAND CO. MILES CITY, MONTANA.

196 ACRES OF RICH FARM LAND, 3½ miles from railroad town of 3000; with good buildings; 100 acres cultivated, plowed, ready to seed; 40 acres open pasture, balance pasture and scattering oak; including implements and 53 head of stock; school near; R. F. D. and cream route. Very cheap at $12,000. GEO. W. LILLY, 516 SELLING BLDG., PORTLAND, ORE.

40 A., UNDER CULTIVATION, ADJOINING town of Chesaw; all fenced; 4-room bungalow; good water; $3000; easy terms if desired. V. G. Grove, Chesaw, Okanogan county, Washington.

FARM LANDS—FOR SALE 651 Continued.

FINE PALOUSE FARM, OAKESDALE.

323 acres, all choice Palouse soil, under cultivation; entire place fenced and cross-fenced, hog tight; 10 acres alfalfa, 220 acres could be put in spring grain or peas this year; good 6-room house, with spring water piped into it; good barn for 20 head of stock; all kinds of outbuildings; fine well and spring, with nice family orchard; located ¾ mile from station and warehouse and 3 miles from Oakesdale, the heart of Palouse country. Leased to good tenant. Price $25,500, which is less than $79 per acre. Can make good terms if desired. Lots of land in this neighborhood no better is held at $100 per acre. See Mr. Tipton.

HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG.

STOCK AND GENERAL FARM.

1307 acres in Benton county, Oregon; 3 miles from Wellsdale and 10 from Corvallis; 350 acres cultivated; 50 in crop; 400 timber; land is on good wagon road and lies fine for all-around farm and stock ranch; 8-room dwelling; 2 barns; 2 sheds; buildings good; fair fences; wells, springs and creek; implements and plenty of good stock go with place. Price $55 per acre; about half cash; buyer to assume $23,000 mortgage at 5 per cent; interest due Oct. 1, 1917. It will pay you to investigate. S. N. STEELE, 267½ OAK ST., PORTLAND, ORE.

HEGE & WATKINS CO.

120 acres, 1½ miles from Odessa, with 100 acres under plow; fair buildings; good well, only 7 feet deep; all under fence and worth $25, but owner needs a little money and is offering it for $15 per acre; terms. At this price you can pay for it with this year's crop.

160 acres, near Ritzville; 75 acres choice soil, 45 under cultivation; 20 for spring seeding; fair buildings and fine water; will include tools and farm machinery for a quick deal at $2800. See Mr. Tipton. HEGE & WATKINS CO. 715-16-17 PAULSEN BLDG.

GENERAL ALL AROUND FARM, 437 A., on Willamette river, 38 miles above Portland; 12 miles north of Salem; 300 a. in good state of cultivation, mostly river bottom; ten-room house, hot and cold water; 2 large barns; plenty other outbuildings; all fenced; soil well adapted to clover and potato growing; boat landing on place; 3 miles to railroad; centrally located in rich farming district; adjoining lands held at $125 to $200 per a. Price, for quick sale, to close an estate, $75 per a., half cash; 6 per cent on deferred payments. Jno. H. Gibson, agent, 912 C. of C. bldg., Portland, Ore.

480 A. WHEAT RANCH, 7 MILES from Warden, 2 miles to wheat station; 300 acres in wheat, ¼ to purchaser, subject to lease; good well, windmill, fair bldgs.; price $20 acre; $4000 cash down, balance 8 equal annual payments, 8 per cent interest. ED. G. BOWKER, WARDEN, WASH.

BARGAINS IN FARM LAND.

Our business is loaning money on farm and city property. Occasionally we have properties for sale which have come into our possession on account of foreclosure of loans. These we offer at practically the net cost to us, which is far below their real value; a small payment down, the balance on easy terms, with low rates of interest. Send for list. THE PENNSYLVANIA MORTGE. INV. CO. BOX 6, SPOKANE, WASH.

ON PUGET SOUND.

Enjoy the salt sea air, the fine fishing, clams; 5-acre tracts for $425, on terms; every one fronting on the salt water; money is being made with poultry, grapes and early products; best markets in easy reach; 25c fare to nearby city; good pure water; plenty of fuel; suitable for summer homes; make reservations at once. CHARLES SOMERS, CO., Alaska bldg., Seattle.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

CALIFORNIA FARMS FOR SALE. WRITE for list. E. R. Waite, Shawnee, Okla.

976-ACRE STOCK RANCH, $5000; TERMS. Write Pope, Butte, Ore.

SEED PEAS FOR SALE. A. D. THAYER, Waverly, Wash.

FARM LANDS—WANTED 654

WE ARE LOOKING FOR GOOD WHEAT land, or for diversified farming. If you have any for sale, send us the particulars. ROGERS & ROGERS. INCORPORATED SPOKANE, WASH.

ACRE TRACTS—FOR SALE 669

WE OWN 3000 ACRES OF BENCH AND meadow land which we will close out on easy terms in 40-acre tracts or more at bargain prices, ranging from $10 per acre up. FIRST STATE BANK. MAHONEY & BAXTER, BONNERS FERRY, IDAHO.

FOR SALE OR EXCHANGE 702

FOR SALE OR EXCHANGE.

A first-class dairy farm of 760 acres, located at Washougal, Wash.; 1 block from depot, 3 blocks to school; fronting 2200 on a main highway, and fronting on the Columbia river a distance of two miles; only 25 miles from Portland. This place is fully stocked and equipped. Can raise plenty hay, alfalfa, corn, oats, etc., and pasture enough for a large quantity of live stock. At present we have 178 head of stock. Price $125,000. Mortgage $25,000, at 7 per cent, due in four years. This place must be seen to be appreciated. It has fine barns, two good houses, city electric lights and water. In fact, 40 acres are suitable for subdivision into acre lots, which would sell from $400 to $500 per acre. Owner is city resident, and is not a farmer, and has other business to take his attention. He would, on that account, exchange it for income property or straight stock ranch in eastern Washington or Oregon. L. GERLINGER, 506 GERLINGER BLDG PORTLAND, Ore.

NEWS FOR BREEDERS

During the Denver stock show Mr. Mayer, the well-known shire breeder of Uniontown, Wash., purchased the shire colt, Logan Hingiest, by Lock Hingiest, that was a grand champion at the Chicago International a few years ago.

D. O. Lively, late chief of the live stock division of the Panama-Pacific exposition, attended the Denver stock show. While greatly interested in the Hereford sales he did not buy anything at Denver. Mr. Lively recently purchased the Whitehall herd of registered Herefords—80 head—at Tracy, Cal., and has moved them to his place near Mayfield, Cal.

J. O. Watts, a Barred Rock breeder of Eugene, Ore., won first on a pullet bred cockerel at the National Western Poultry show at Denver in January. Oregon birds thus won a long way from home.

William Cox, who has been with the George Chandler & Son Hereford herd at Baker, Ore., for the last 18 months and made the show circuit in both 1915 and 1916, has accepted a position with the Hereford corporation of Wyoming at Cheyenne, a corporation that has one of the largest and best herds in the United States. The corporation is planning a show next fall.

J. H. Field of Lander, Wyo., who breeds Barred Rocks with egg production at all times the first consideration and who has a heavy laying strain, contends that show quality is not incompatible with utility. His birds are heavy as well as great layers. He exhibited at the National Western Poultry show in connection with the Denver stock show in January and won first on cockerel bred hen; first, pullet mating pen; second, third and fourth, cockerel bred pen; third and fourth, exhibition pen, and fifth, exhibition cock.

At the Shorthorn sale during the Western National Stotk show at Denver in January Frank Reno of Idaho Falls, Idaho, purchased the fine yearling Shorthorn bull Bold Victor, paying $310 for him. This bull was consigned by Elmendale farm of Fairbury, Neb. He is by Royal Victor, a grandson of the great Choice Goods. His dam, Royal Violet, is by Bold Scot, a grandson of Gallant Knight, and Cruickshank breeding appears several times on both sides of his pedigree. Mr. Reno will place the young bull at once in service in his Shorthorn herd near Dubois, Idaho.

Winterton brothers of Charleston, Utah, during the Denver stock show purchased from George Chandler & Son of Baker, Ore., the March bull calf, Debonair 61st, paying $1000 for him. Debonair 61st is by Debonair 26th, a son of the great breeding bull Debonair; dam, Seminda, by Beau Donald 33d, another bull with a great reputation as a breeder. The dam's dam is Miss Mona, a show cow and half sister to Debonair 26th. The Messrs. Winterton are to be congratulated on the purchase of so richly bred an animal that a number of good judges called one of the best Hereford calves at the show.

The Idaho Falls Land and Live Stock company of Idaho Falls, Idaho, during the Denver stock show purchased 58 head of registered Hereford cows, a herd bull and 24 registered bull calves. This company was recently organized with W. S. Shattuck, president; S. C. Lemon, secretary, and T. H. Smelson, manager. They have large irrigated holdings not far from Idaho Falls. The herd bull purchased is Carlos 78th, by Beau Carlos 2d, son of Beau Carlos, and he is a grandson of Beau Donald. On the dam's side are Lamplighter, Beau Brummel and other great bulls. The bull was consigned by L. G. Davis and the price paid was $950.

Professor H. T. French, who for a long time was connected with the Idaho experiment station and later was state leader of county agriculturists in Oregon, is doing very effective work as head of the extension department of the Colorado Agricultural college. Professor French informed me while I was at Denver that he was much gratified at the fact that he is going to have W. H. Kerr, son of President Kerr of the Oregon Agricultural college, with the college soon, at the head of the office of markets and marketing, which has only lately been established. By furnishing reliable information as to the production and demand for cantaloups and potatoes alone, two crops of which Colorado produces immense quantities, it is believed the farmers can be saved thousands of dollars and the market stableized. Growers of other crops can also be assisted and while there are problems that will not be settled at once great good is expected from the office

When George Chandler & Son of Baker, Ore., won first prize on carload of Hereford bulls and sweepstakes over all classes at the National Live Stock show at Denver, January 20-27, they won a signal victory for the northwest and for their own line of breeding. It may be fairly easy to select one bull from a large herd and make a great show animal of him, but this was a carload of 15 all from the same sire except one, and he by a son of the same sire. They were pronounced by experts who saw them to be all of very similar type and of extra good bone, showing vitality and true Hereford conformation. The buyer, E. L. Dana of Parkman, Wyo., is the well-known breeder who paid $10,000 for the great breeding bull, Superior Fairfax, at the Warren G. McCray sale at Kentland, Ind., last year. Mr. Dana is using seven other Fairfax bulls. He has purchased many choice animals and a few years ago bought the entire choice herd of registered Herefords of Monte Blevins of North Park, Col. In buying these yearling sons of Mr. Chandler's great sire, Debonair, he has shown the wisdom that usually characterizes his purchases and has put one more feather in the Chandler Hereford cap.

The United States office of Western Dairy Investigations at Salt Lake, Utah, is accomplishing much for the dairy industry of the west. Western dairy extension work by the U. S. government was begun in a small way in 1910 and in 1913 J. E. Dorman was put in charge of the office at Salt Lake. At that time there were four men, now there are 16, connected with the offices and a cheese specialist will probably soon be put in Oregon, Washington, Idaho, Montana and Wyoming. The work of the division has been mainly devoted to practical demonstrations in feeding, in management of the dairy herd and in the manufacture of dairy products. In the nine states covered by the activities of this office, where five years ago there were practically no silos, there are now over 3000, largely as a result of the campaign carried on by the field agents in cooperation with the extension division of the agricultural colleges. Five years ago all the states in the division were importing large quantities of dairy products. Now both butter and cheese are being exported and Mr. Dorman says prospects are very bright for the dairy industry in the west.

H. A.

Buys Challenge Plate 3d.

G. W. De Lay, proprietor of the Rushes farm at Hot Lake, Ore., has bought the Shorthorn bull, Challenge Plat 3d. Joseph Turner made the selection at the Toronto sale February 2. This bull was dropped in October, 1913, and is reported by his former Canadian owners as a very sure breeder. He is also said to be a bull similar in appearance to Ringmaster.

Add to Shorthorn Herd.

Mulhall Bros. of Fenn, Idaho, have added some fine Shorthorn blood to their herd. Among them a new sire, "Type's Model," which won the championship at Portland in 1915, and also the junior championship at Chicago.

LOAD OF MILCH COWS.

W. A. Goodman, who recently purchased 100 acres of alfalfa land near Weiser, has been picking up a load of milch cows from the high class herds of Washington county, Oregon, his old home, which he will ake to Idaho.

OREGON SHORTHORNS

Early Breeders of the State.

By George Gammie.

The early history of the Shorthorn cattle in the Pacific northwest dates away back along about 1860 or 1862. The Hudson Bay company imported some Shorthorn cattle from England, red in color, and a few years later Arthur Quigley purchased a farm at Ridgefield, Wash., purchased a few cows and heifers from the Hudson Bay company and laid the foundation of a dairy of milking Shorthorns. I well remember the first time I saw these cattle. When I took charge of the Bachelor's Island farm in July, 1877, Mr. Quigley's farm had a pasture on Lake river and he swam his cows across Lake river to pasture every day. Every day all summer I saw these cows, about 26 in number, all dark red, low-down, blocky cows, with well developed udders, a grand lot of dairy cows. I don't mean to say they were registered—merely grades. At that date there were few registered cows.

Also there was another lot of Shorthorns brought into Oregon by a man named King into what is known as King's valley, in Polk country. S. G. Reed and W. S. Ladd purchased a bunch of these cows. Also Mr. Tyszkiewisz purchased a few of them and they were all put on Bachelor's island. These cattle were not registered, but many an inferior animal to them was registered in after years. They were entirely different in conformation from the Hudson Bay company cattle, large, roan deep-bodied animals resembling very much the Boot breeding of Shorthorns. Before putting the Ladd and Reed Shorthorns on Bachelor island I selected 20 steers and six cows kept on the farm and shipped 60 cows

THE BEST LINIMENT

OR PAIN KILLER FOR THE HUMAN BODY

Gombault's

Caustic Balsam

IT HAS NO EQUAL

For the Human Body —It is penetrating, soothing and healing, and for all Old Sores, Bruises, or Wounds, Felons, Exterior Cancers, Boils Corns and Bunions, CAUSTIC BALSAM has no equal as a Liniment.

We would say to all who buy it that it does not contain a particle of poisonous substance and therefore no harm can result from its external use. Persistent, thorough use will cure many old or chronic ailments and it can be used on any case that requires an outward application with perfect safety.

A Perfectly Safe and Reliable Remedy for Sore Throat, Chest Cold, Backache, Neuralgia, Sprains, Strains, Lumbago, Diphtheria, Sore Lungs, Rheumatism and all Stiff Joints

REMOVES THE SORENESS—STRENGTHENS MUSCLES

Cornhill, Tex.—"One bottle Caustic Balsam did my rheumatism more good than $120.00 paid in doctor's bills." OTTO A. BEYER.

Price $1.50 per bottle. Sold by druggists, or sent by us express prepaid. Write for Booklet R.

The LAWRENCE-WILLIAMS COMPANY, Cleveland, O.

LOOK THIS UP

The Breeders' Department in this issue contains the names of many prominent live stock breeders. Their offers are worthy your consideration.



HERE'S something curious about W-B CUT Chewing—it takes less out of your pocket and puts a better chew into your mouth. No big plug sagging your pocket, no big wad sagging your cheek. Half as much of this *rich* tobocco goes twice as far as ordinary plug. W-B saves your *silver* and gives you a silver-lining feeling of happiness all over. You can't help from telling your friends about W-B.

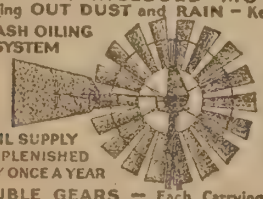
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SELF-OILING WINDMILL

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OIL SUPPLY REPLENISHED ONLY ONCE A YEAR

DOUBLE GEARS — Each Carrying Half the Load

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WRITE AERMOTOR CO. 2500 12TH ST., CHICAGO

Complete Dispersion Sale

Registered A. J. C. C. Cattle

April 11, 1917

I am going to make a complete dispersal sale of all of my registered Jerseys, which are of the best blood in the country. Sale will be held in Oregon City. Write me for catalogue now and I will mail you one about March 1st.

W. G. E. SMITH, HOOD RIVER, OREGON.

J. W. Hughes, Forest Grove, Auctioneer.

1842 The Seventy-Fifth Anniversary of 1917

P&O

LIGHT DRAFT PLOWS

Built for the Field Test.

Three-Quarters of a Century of "Knowing How" Hammered Into Every One of Them.

The product of the Parlin & Orendorff Co. has always been noted for simplicity of construction, great strength and ease of operation. It was upon such a basis that the founders of this business made their implements, established their reputation, and built their factory. It is upon the same foundation that the business has been carried on to this day, and in 1917 we celebrate our Diamond Jubilee; 75 years of practical experience gained through constantly striving to provide for the exacting requirements of three generations of American farmers.

For an even three-quarters of a century we have met the demand, and today we operate the largest and oldest permanently established plow factory in the whole world. "It's the way we build them."

P&O

Light Draft Plows, Harrows, Planters and Cultivators are made in all types and sizes, to meet the conditions in all sections, and are Backed by an Unqualified Guarantee.

We also make the most complete line of Traction Engine Plows produced, and we have a special catalog devoted to these famous plows.

The P&O Little Genius Engine Gang Plow

was the most popular plow shown at all points on the 1916 National Tractor Demonstration.

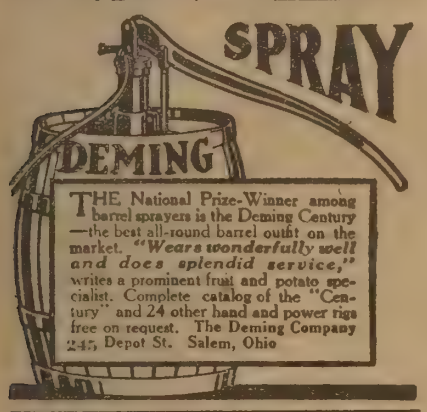
We will send P & O Catalogs to any address. While P & O Implements are sold only through established implement dealers, we welcome correspondence from farmers in all sections.

Ask Your Dealer or Write Us.

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Kansas City, Omaha, Dallas, Portland (Ore.), Minneapolis, St. Louis, Sioux Falls, Spokane, Denver, Oklahoma City, Utah Implement-Vehicle Co., Salt Lake City, Baker & Hamilton, San Francisco, Dixon & Griswold, Los Angeles



THE National Prize-Winner among barrel sprayers is the Deming Century—the best all-round barrel outfit on the market. *"Wears wonderfully well and does splendid service,"* writes a prominent fruit and potato specialist. Complete catalog of the "Century" and 24 other hand and power rigs free on request. The Deming Company 245 Depot St. Salem, Ohio

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Excellent country territory open for good, reliable man to sell a high grade line of household and farm necessities of our own manufacture. Steady, growing business, big margin of profit, no previous experience necessary. We teach how and furnish advertising. Our reputation your biggest aid. This is a real chance for a capable man to earn a splendid salary. Write for book "Convincing Proof." Learn what others are doing. Investigate today.

SHORES-MUELLER CO.
Department E Cedar Rapids, Ia.

GUERNSEY CATTLE

REGISTERED GUERNSEY BULL
For Sale.
2 Years Old.
$200.
G. N. HESGARD. Newberg, Ore.

DUROC-JERSEY SWINE

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Pullman, Wash.

In answering advertisements don't fail to mention this paper.

and heifers to Billy Grant of The Dalles to make room for the registered Shorthorns.

I believe the best steer I have seen on this coast was from one of the Tyszkiewisz cows of the King's valley Shorthorns, named Clark, purchased from Tyszkiewisz and fed by W. G. Brown, weight 3000 pounds, shown at the Portland Fat Stock show, 1889, held in what is now the Multnomah club grounds.

The first importation of registered Shorthorns was purchased by Ladd and Reed in the spring of 1873. A grand lot of cattle, highly bred and grand individuals, about 13 cows and heifers and the bull, Governor General; four Ayrshire cows and bull, four Clydesdale mares and stallion, Young Marquis; four Berkshire sows and two boars and some Cotswold and Leister sheep.

Hillhurst Rose, a grand roan cow, cost $1800; Honeysuckle, a great breeder and heavy milker, cost $1300; Fanny 29th, very profitable and the best milker, cost $1200; Weeping Willow, very prolific and a good milker, cost $750; Pet Gwynne, a grand roan cow and a fair milker, $900; Pet Gwynne II., a very prolific breeder and fair milker, $600. These animals were all selected by the late William Watson, Killor, Scotland, a grand judge of animals and a man of wonderful experience. His father, Watson of Killor, Scotland, was the first and early improver of the Polled Angus cattle, formed the model in his head and bred until he got it. At the same time the Booths of Killerby and Warleyby were molding the Bates breed of Shorthorns, and Billy Watson here in Oregon had the great privilege of being along with all these great breeders while they were quietly going along and molding these animals by selections until they arrived at world-wide fame as breeders of the Shorthorn and Polled Angus cattle. The Ladd and Reed cattle were all closely connected with these famous bred animals and were a grand lot.

SHORTHORN CALF

How Large Should Year-Old Bull Be

By E. L. POTTER.

H. E. T. writes: "How large should a good Shorthorn bull calf be at 12 months of age? Is it possible to make them weigh 1000 pounds at that age?"

With the aid of a nurse cow or with an extraordinarly good mother it is possible to make Shorthorn bull calves weigh 1000 pounds at 12 months; that is, to make them average that much. They will, of course, have to have all the grain they could eat in addition to the milk. Without an unusual quantity of milk on making calves average this big although some of them may weigh even more. It is one thing to make one or two out of a lot weigh a 1000 and another to make the whole lot weigh it.

With good nurse cows giving an unlimited supply of milk it is a different story and we would expect any bull calf raised in this manner for the show ring to weigh more than 1000 pounds at 12 months.

BLOODED HOLSTEINS.

Three young cows are under test at the A. E. Smith Milkyway farm, four miles east of Sumas, Wash. They are: Korndyke Mechthilde Key, a 3-year-old, with a record of 20½ pounds of butter and 72 pounds of milk; Princess Jouge Buckeye, 24½ pounds butter and 86 pounds of milk; Canary Spofford Empress II., a 2-year-old, 23¼ pounds of butter and 68 pounds of milk. There are other cows that have a milk record as high as 90 pounds. The herd consists of 125 head of blooded Holsteins.

PROFIT IN SHEEP.

W. B. Teeters finds profit in raising good sheep on his farm near Meridian, Idaho. A year ago Mr. Teeters purchased 105 head of young sheep at Sweet, paying $18 per head. He retains 44 head of the lambs he has raised from the sheep purchased. His ewes were sold at $30 each, and the same day he sold the sheep 60 head of them were resold at $45 a head. He figures up a total of $3000 profit for the year.

TO MEET IN BILLINGS.

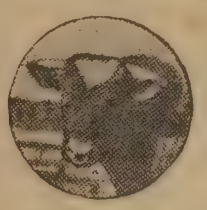
Billings has been chosen as the 1917 meeting place of the Montana Shorthorn Breeders' association. The date will be fixed by the executive committee.

The Slaughter Percentage.

It is worthy of record that the slaughter percentage of live stock on hand each year in Britain is 18.6 per cent in cattle, 37.9 per cent in sheep and in pigs 121.3 per cent.

Breeders' Department

SHORTHORN CATTLE



Gainsford Perfection 442173

Hercules Shorthorns

We can supply you with choice, well grown breeding stock. Your inspection of our herd is invited. Visitors always welcome.

Day & Rothrock

205 Exchange Bank Bldg., Spokane, Wash.

HOLSTEIN CATTLE

Avalon Dairy

Registered bull calves by Hartwood Hello Hengerveld (129564) from cows with good A. R. O. records, DeKol, Korndyke and Pontiac blood. Prices right. Six per cent interest on time payments. Write today.
AVALON DAIRY, Kuna, Idaho.

HOLSTEIN CATTLE

Young stock by richly bred grandson of King of the Pontiacs, out of high producing advanced registry cows.
A. E. SMITH, Sumas, Wash.

HOLSTEIN BULLS
and a few females for sale out of A. R. O. dams of the noted Segis family. Herd bull, Model Annie De Kol Segis, No. 81071, dam's record, 30.91 lbs. butter in 7 days, his 4 nearest dams' average, for 7 days, 29.63 lbs.
MOREHEAD & HOBSON, Outlook, Wn.

BUFFALO DUKE DOEDE
(102228) heads my herd. He is a half brother of world's record cow, Dutchess Skylark Ormsby, producing 1506 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.
H. H. STIVER. Buhl, Idaho.

REGISTERED HOLSTEINS.
Some cows and heifers of 30 lbs. breeding for sale.
W. FRED HARPER, New Plymouth, Idaho.

JERSEY CATTLE

JERSEY ISLE STOCK RANCH.
Imported Jersey Isle cattle. Young bulls and heifers for sale from sire and dams of choice Island breeding.
C. E. LONG, Prop., Buhl, Idaho.

WAIKIKI FARM JERSEYS.
We offer several young bulls and heifers of excellent breeding. Send for descriptions and breeding.
WAIKIKI FARM, R. 7, Spokane, Wash.

POULTRY

Rhode Island Reds and Whites—Both Combs

Stock $1.50 to $10.
Eggs, $2, $3, $5 per 15.
Bronze turkeys and Toulouse geese, stock and eggs.
Belgian hares, bred does, $3 up.
Alredale puppies, $7.50 each.

J. Nonnenmacher

R. F. D. No. 3, North Yakima, Wash.

WINNERS OF THE BLUE.
Barred Rocks—S. C. Black Minorcas.
Write for prices on high-class exhibition and breeding stock. Satisfaction guaranteed.
WILBER CLAYTON, R. F. D. 1, Payette, Ida.

BARRON WYANDOTTES

outlay all breds in contests. Mine are three-fourths Barron blood, strictly utility bred. First in the west. Eggs, $2.00 for 15; $5.00 for 50.
C. B. AUSTIN. Kuna, Idaho.

$3.00 EACH FOR BARRED ROCK
Breeding cockerels. Half that for fifteen hatching eggs. Take advantage of this special offer. Send your order today. Satisfaction guaranteed.
A. C. BERNTZEN, Eugene, Ore.

BAILEY'S BARRED ROCKS.
Eggs from my prize winners, $2, $3 and $4 per 15.
E. S. BAILEY, R. D. No. 4, Boise, Idaho.

BERKSHIRE SWINE

GALBRAITH RANCH BERKSHIRES
Best breeding stock obtainable. Prices reasonable. Phone 20F3.
T. A. GALBRAITH, Kent, Wash.

HOLSTEIN CATTLE

Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.
Write for pedigrees and terms.
H. R. BOOMER. New Plymouth, Ida.

Registered Holstein Bull

Coniston Burke De Kol, 5 years old. Has finest kind of papers. Price $200, f. o. b. Kennewick, Wash. Here is a splendid chance to introduce the best of new blood to your herd. Address
W. S. HOYT, 11 N. Post St., Spokane, Wn. Tel. Main 3183R.

HUEBNER'S JERSEYS
For Sale—A yearling bull, solid color, black tongue and bush. Son of imported Oxford You'll Do, Jr., he by Oxford You'll Do. Sire of 933-lb. cow.
Dam Creoles Belinda, a close descendant of Governor Marigold, one of the best of the breed.
Priced for quick sale, $125.
A. H. HUEBNER, North Yakima, Wn.

WATERLOO HOLSTEIN FARM.
Holstein bull calves for sale.
Herd Sire—Prince Walker Pietertje | King Segius 10th Segius Walker Pietertje 2d
C. F. JENNESS. Meridian, Idaho.

HOLSTEINS FOR SALE.
Pure-bred bulls of serviceable age, priced right. Correspondence solicited.
J. R. LONG, R. F. D. No. 4, Buhl, Idaho.

RED POLLED CATTLE

RED POLL FARM.
REGISTERED RED POLLED CATTLE. Grand champion bull and cow 1916 Gem State fair are producing some excellent stock. Calves under 8 mos. for sale.
William Weick, R. No. 5, Caldwell, Ida.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.
Herd headed by Idaho Expansion (341305) assisted by Superba Jr., (241305) and Sammy (79833). Top for size and quality. I have a few fall boars left. Now is the time to get in on spring orders. Correspondence solicited.
J. M. ROYSTON EST., C. ROYSTON, MGR. Payette or Fruitland, Idaho.

HORSES

Purebred Stallions

We have for sale a few 1-year-olds, 2 this spring, Shire stallions, our own breeding; also a 5-year-old and an 8-year-old Shire stallion, both brown; a 3-year, a 7-year-old and 1 aged Percheron stallion, all black; one 2-year-old Brown Clyde stallion, bred by Canadian government. We sell at the barns only, and tell you all we know about each and every horse, guaranteeing them to be as represented or refund your money.

Our horses won all firsts and champions at Spokane Interstate Fair, N. W. Live Stock Show, Lewiston, Ida., and Pacific International, Portland, Ore., last year. If you need a horse, or want to exchange, write us, or come and see before buying. It will pay you.
G. M. WILSON, WILBUR, WASH.

STALLIONS

At Alta Stables,
PENDLETON, ORE.
One extra good, big, black imported Percheron, 5 years old, weight 2300.
One extra good imported son of the great $40,000 Carnot. (66666) 66666.
Other Percherons, Belgians, Shires and Clydsdales that are desirable, besides a number of young ones with correct pedigrees from one to three years old and Percheron and Belgian mares. All will be priced to sell.
If You Have a Stallion That You Can Not Use Longer, I Might Change.

J. R. Justice, Importer

PENDLETON, ORE.

Thirty Days' FREE Trial

In order to convince you quickly that the Imported Belgian Melotte is the best separator, far superior to any separator on the market, we will send one to you on a 30 Day Free Trial. An absolute and unconditional free trial for 30 days. Use the separator on your farm for 30 days just as though you owned it. Put it to every possible test. Try it out in every way. Compare it with others. Take your skim milk to a creamery and test it. See how easily the Melotte is kept clean and sanitary. See how easily it is operated. Try out the wonderful, self-balancing bowl. Give it a good fair thorough test entirely at our expense.

No Money in Advance—

We don't want your money until we have proven to you that the Melotte *is* the best separator on the market. We don't want you to sign any papers. No money down, no deposit, no guarantee, no formalities. Simply ask us to send the separator on our 30 Day Free Trial Offer. Please understand that you are under no obligation. We make this liberal offer because we know a test will convince you. We know you will decide to keep the Melotte. But if you don't, send it back at our expense. This 30 Day Free Trial does not cost you a single penny.

$7.50 Down—After Trial

If you are satisfied, after 30 days' free trial, that the Melotte will give you more cream and bigger profits; that it is easiest to operate; that it will stand more wear; that it is *the* separator for you—when you have proved this to your own satisfaction—pay only $7.50 after the 30 days' free trial on your own farm and then the balance in small monthly payments of $7.50. You are to be the sole judge. All that we ask is a thorough trial.

Small Monthly Payments

We want you to have the best separator on the market—the prize winner of all Europe—the separator that is now taking the U. S. by storm. We don't want anything to stand in the way of your having and using, and experiencing the satisfaction of owning the best separator on the market. We have, therefore, arranged so you can have the Melotte on small monthly payments. This is an arrangement which is entirely satisfactory to us, and you can pay for the machine in small payments each month which you will scarcely feel. In fact, you will really make this payment out of your increased profits—out of the returns from the increased amount of cream. We want you to feel that you have the best. We want to make it as easy as possible for you to have the best. And we arranged this plan so you can have the wonderful Melotte.

The Rock-Bottom Price

The same price that Mr. Melotte charges direct from his factory to European farmers plus only $1.75 for water freight. The American farmer is indeed fortunate in having these separators transported by water, costing only $1.75 to land the separators in America. And because of this water transportation, and because the duty has been removed from separators, you can get the Melotte Separator at only $1.75 more than the price charged to European farmers. Even the war does not affect this price. Mr. Melotte cabled us, "Sell these separators at the rock-bottom price, the same as before the war."

Our 15-Year Guarantee

Every Melotte Separator sold on a binding, 15-year guarantee. A guarantee that can be relied upon. A guarantee that you can easily understand and hold us accountable for. A guarantee that is 100 percent stronger than any other separator guarantee. It is given on each Melotte Separator as an absolute protection to the purchaser. We guarantee every Melotte Cream Separator to be exactly as represented. We guarantee that the material used is the best obtainable for the purpose. At any time within 15 years, should any part prove defective on account of poor workmanship or poor material, it will be replaced. We keep on hand in Chicago a complete stock of all repair parts although there is a surprisingly small demand for these parts, due to the sturdy construction of Melotte.



Send Coupon for Catalog

Fill out and mail the coupon below at once for a new Melotte catalog containing full description of this great Belgian Separator. Fill it out now—don't wait a day. Get the full details of our great cream separator offer. Post yourself on the separator situation and read what the European farmers for years have been doing with this wonderful separator. Sending the coupon will place you under no obligations whatever, but will put into your hands immediately a catalog with full description of this wonderful separator and the details of our 30-day, unconditional free trial.

What More Can We Offer?

What can we offer that we haven't offered? What do you want that we haven't mentioned? We will go the limit. We will do anything you say within reason. We will put our separator in competition with any separator in the world. We have the best so why should we be afraid to put it in competition. And if the other manufacturers haven't confidence enough in their separators to give you a free trial without deposit or bank guarantee, ask them what they are afraid of. You are entitled to this offer. Insist upon it. For our part, if the Melotte doesn't stand every test, we certainly don't ask or want you to buy it, as we want the Melotte to be sold on its merits alone. That is why we are so anxious to place this separator on your farm. Whether you buy the Melotte or some other separator, you owe it to yourself to know the facts before buying. So don't hesitate a minute. Fill out the coupon and send it to us today. Tell us if there is anything that we have not mentioned in this advertisement that we can do to satisfy you that the Melotte *is* the best separator.

Extra!

No Duty Now!
Save $15.25

The high tariff and patent arrangements have kept the Melotte out of reach of the American farmer. Now this handicap is off. The Melotte comes in *free of duty*. The world's greatest cream separator, the winner of 264 international grand prizes, now at an *extra reduction of $15.25.*

The Melotte Separator
H. B. BABSON, U. S. Manager
19th Street & California Avenue
Dept. 4342 Chicago, Illinois

Without any obligation on me send me, free and prepaid, your book, "Profitable Dairying," and your special free-tariff prices on the Belgian Melotte Cream Separator. Also full details of your free-trial, monthly-payment, no-money-down offer.

Name

Address

Valuable Book FREE

"Profitable Dairying"

The book is the work of B. H. Benkendorff, Wisconsin Dairy School Agricultural College, Madison, Wis., and K. L. Hatch, Winnebago County Agricultural School, Winneconne, Wis. 88 pages. Contains no advertising. A real, practical, commonsense treatise, telling everything about cows and dairying—how to feed and care for cattle—how to make more money out of your cows. Every farmer should have this book in his library. It is worth while getting now, even if you are not considering a cream separator at present. Sent free upon receipt of the coupon.

Send Coupon Now

We'll send also our New Melotte catalog and details of our rock-bottom 30-day free trial, easy payment offer. Send the coupon now—while this offer lasts.

The Melotte Separator H. B. BABSON, U. S. Mgr. Dept. 4342 19th Street and California Avenue **Chicago, Ill.**

One Point

of superiority in the Melotte is this: The bowl is *self-balancing*—it hangs down from a single bearing and spins like a top. Can't get out of balance. The Melotte turns so easily that the bowl spins for 30 minutes after you stop cranking unless you apply brake. No other separator requires a brake to stop the spinning. *The Melotte is guaranteed for 15 years.*

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. MARCH 1, 1917. NO. 9.

The Humble Spud Is Putting On Airs

Topping Prices for 50 Years, Potatoes Have Jumped Into the Seats of the Mighty

Potato prices have been going up in leaps and bounds. Such prices have not been known before in the memory of the oldest inhabitants. In New York City potatoes have been bringing wholesale $9 for a sack of 165 pounds, and pedlers have been retailing them as high as seven cents a pound. These prices have precipitated food riots among women in the tenement districts.

Several hundred desperate women stormed the city hall in an effort to reach the mayor and in another riot demonstration 1000 women expressed their indignation. Food riots have occurred in other cities.

T. P. Miller, president of the newly organized Fruit and Vegetable Shippers' association, said at Chicago: "There are only 250 cars of potatoes in the whole state of Colorado now. There should be at this season 3000 cars. Idaho has only 1200 cars, Oregon 250 and Washington 100, which is about one-third to one-fifth their normal supply. And this supply is being rapidly shipped out. We had 60 cars yesterday, mostly from the west, and we relayed most of the 60 cars as far east as Boston and as far south as Texas. Potatoes are retailing at 80 cents a peck in Chicago, and are said to be likely to go higher. The reason lies not only in the very short crop last year, but in the added freight charges involved in bringing them from the far west."

Potatoes have been jobbing in the market of Portland, Ore., at $3.75 to $4 a sack. Farmers have been receiving $3.25 to $3.50 and in other instances $3.75 was paid for a car. Farmers' holdings in Oregon are estimated at 250 to 350 cars and the estimate of Portland dealers is that Washington has a supply of 200 cars and that 1000 cars remain in Idaho.

Advices to the Farmer from Boise is to the effect that potatoes have been rolling from the potato districts in southeastern Idaho at prices to Idaho growers as high as $3.60 per hundred f. o. b. shipping station. The 1916 crop in southern Idaho was about 6000 carloads, which is slightly below the previous year, but the quality is rated as better. At present there is less than half the quantity of potatoes in storage in southern Idaho than there was a year ago.

Eastern buyers announced opening prices last fall at 75 cents a hundred, but within three days the farm markets department forced the price up to $1.25 and shortly thereafter the price went to $1.50, followed in short order to $2.25.

The bulk of the Idaho potato crop moved this past season at $1.50 and better. Idaho white potatoes in sacks sold at $3.05 on track in Chicago Saturday.

Outlook for 1917 planting of potatoes is quite problematical at this time. On account of extreme high prices now prevailing and shortage of seed carried over, it seems doubtful if there will be as large an acreage as in 1916.

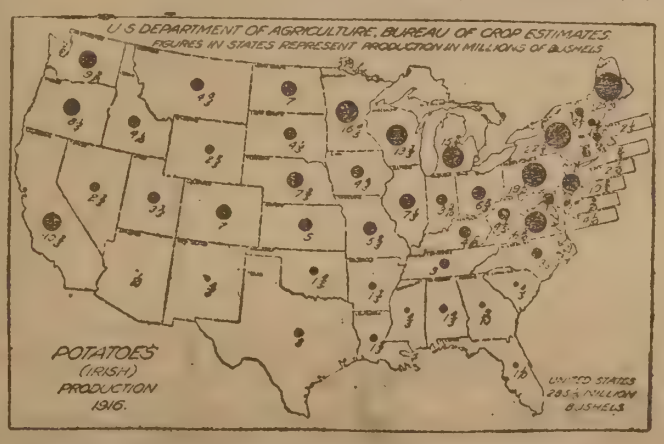
The accompanying diagram, with footnote, tells of the potato production of the United States for the past year.

As given by the U. S. department of agriculture the average farm price per hundred on December 1 of potatoes for the 50 years, 1867 to 1916 inclusive, was 55.7 cents per bushel or 93 cents a hundred, the lowest price was a little over 26 1-2 cents in 1895, or 44 cents a hundred and only a cent higher in 1896. The highest price was in 1916, $1.46 or $2.43 a hundred.

For the ten years, 1867-1876 inclusive, the average price was 56.3 cents per bushel or 94 cents a hundred, the lowest price being nearly 34 1-2 cents per bushel in 1875, or 57 cents a hundred, with a total production for that year 166,877,000 bushels; and the highest price 65 cents per bushel in 1870, or $1.08 a hundred, with the total production for that year 114,775,000 bushels.

(Continued on Page Thirty-six.)

Potato Production of United States



MAINE LEADS, NEW YORK IS SECOND AND PENNSYLVANIA IS THIRD. CALIFORNIA, WASHINGTON AND OREGON LEAD STATES WEST OF THE MISSISSIPPI RIVER.

It is a curious fact that to Maine, the jumping off place of the Atlantic coast, one would have to go for the largest potato producing state. Not only does one have to go to Maine, but go through Maine clear to the very northeast portion of the state to find the high producing potato section. Taking the 25,500,000 bushels of potatoes raised in Maine in 1916 as the lead, one finds that New York comes next with 22,400,000 bushels, Pennsylvania third with 19,040,000 bushels. Minnesota, Virginia and Michigan produced respectively 16,800,000; 16,250,000 and 15,360,000 bushels. The three state of the Pacific coast. Washington, Oregon and California each produced more than any other state west of Minnesota, California producing 10,575,000; Washington, 9,900,000, and Oregon, 8,250,000 bushels; while Montana's production is given as 4,875,000 bushels and that of Idaho at 4,050,000 bushels.

IF YOU ARE INTERESTED IN

The New Grade Standards for Grain, read page 3
Spraying for Orchard Pests, read page 8
The Northwest Live Stock Convention, read page 5
A Judge's Definition of Conspiracy, read page 10
The $21,500 Bull Calf Controversy, read page 3

COMING: ARTICLES BY W. H. PAULHAMUS

Oakland Sensible Six

"Sturdy as the Oak"

Satisfaction

There's a lot of **solid satisfaction** waiting for you in the purchase of an **Oakland "Sensible Six."**

From the first time you ride in it, you'll find the **Oakland** really "sensible" in power, comfort, ease of handling, and operating cost.

Its valve-in-head motor delivers full 41 h. p. at 2500 r. p. m.—one h. p. for every 53 pounds of car weight.

Its big oversize tires, 32x4; long supple springs, 51 inches in rear; wide seats and ample leg room,—mean **comfort** over any roads.

Its **sensible** weight, 2150 pounds, assures fuel and tire economy.

Its excellent finish, real leather upholstery, beauty and high class equipment stamp it a quality car at a **sensible** price—$875.

Oakland Eight—$1585—is a big luxurious 73 h. p., 7-passenger touring car for those who demand the utmost in power, speed and luxury.

OAKLAND MOTOR COMPANY, Pontiac, Michigan

(52)

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 9 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF March 1, 1917

Prices Out of Reach of Dairymen

Can the Pacific Northwest Build Up a Great Live Stock Industry on $21,500 Calf Sales?

What does the sale of the $21,500 Holstein bull calf at Portland last December mean for the dairy industry of the Pacific northwest?

A few figures just received by The Farmer from Jefferson county, Washington, may help to answer this question. C. T. McWhorter, county agriculturist, sends a report of the Jefferson County Cow Testing association for the six months ending January 1, 1917, C. B. Dean, tester. The average butterfat from 224 cows for the six months is 144.5 pounds; average cost of feed, $22.09; average profit over feed, $28.44.

The 25 highest cows in the association for the six months average 213 pounds of butterfat; average cost of feed, $36.62; average profit over feed, $37.73. The 25 lowest producing cows in the association gave an average of 81.4 pounds of butterfat; average cost of feed, $14.15; average profit over feed, $15.78.

The most profitable cow was a grade Holstein owned by Bert McConnaghy, which produced 245 pounds of butterfat, making a profit over feed of $55.88.

The buyers as well as the breeders of pure-bred live stock are looking for an explanation of the following contradictory statements:

October 2, 1916, B. Meyer, the breeder, offered the Holstein bull calf, Finderne Mutual Fayne Valdessa, to E. A. Stuart for $5000.

November 17, 1916, Mr. Meyer told Mr. Stuart that the animal had been sold. He failed to give the price, but Mr. Meyer's herdsman told Mr. Stuart that a Mr. Von Herberg was the purchaser and the price was $2500.

In his transmitting letter to Mr. Gue, the auctioneer at the Pacific International Stock show sale, at Portland, last December, Mr. Meyer said: "I consign this bull to your sale without any restriction whatsoever." But in his answer to The Farmer's telegram of inquiry of February 4, Mr. Meyer says: "Bull was sent by me to the sale under the recommendation of Von Herberg, guaranteeing me $5000 at least, and all he would bring above it. What my herdsman said was not true."

When The Farmer sent another telegram, asking Mr. Meyer to be more explicit, he telegraphed this reply: "The bull was sold at auction for $21,500 to Mr. Von Herberg. After deducting commission, freight and expense, I received the balance of my money in full. Exact amount that I got is my business."

The least profitable cow was a grade Guernsey, producing 60 pounds of butterfat at a profit of $3.14.

The greatest producing problem for the dairyman of the Pacific northwest today is to get his herd out of the class of 25 cows averaging $15 and into the class of 25 cows averaging $37. By the Babcock test he can weed out the $3 cow, the $6 cow and the $11 cow. By better feeding and by a better sire he can further improve the production of his herd. But when he tries to get into the class of the 25 best producing cows he must pay the closest attention to scientific feeding, balanced rations, to the economic value of the different kinds of feed and to make a greater requirtment on the blood lines of the sire.

How much can the vast plurality of stockmen pay for a sire that will enable them to get into the average of the better half of the cows?

Let N. C. Maris, whose wide observations and experience of many years in the Pacific northwest give him a hearing among stockmen, answer this question in his communication given below. Mr. Maris declares that extreme prices at public or private sales of pure bred

(Continued on page twenty-four.)

GRANGE WAREHOUSE Shows Successful Operation.

The Grangers' Warehouse company of Kent, Wash., reports a total volume of business for 1916 of $113,702.86. There are now 196 members, with no losses during the past year.

New Grain Standards

Will Govern 1917 Crop in United States

Grain growers, shippers and dealers will this year be required to handle grain under a new set of standards. Within the next few weeks the U. S. department of agriculture will announce the standards as determined under the provisions of the recently enacted federal grain standardization act, and 90 days after this announcement the new standards will become effective to govern the inspection and grading of all grain shipped from one state into another and all grain exported.

These standards, however, will not change vitally the inspection and grading regulation in the northwest, especially in Washington. This is indicated by the assertion of State Grain Inspector R. D. Jarboe of Washington that "the proposed table of standards of the federal department is practically the same as that now in use in Washington except in a few minor details." Chief Charles J. Brand of the office of markets and rural organization in the U. S. department of agriculture indicates the probability of the proposed standards being finally adopted by saying that objections are being voiced only on minor points.

Public Hearings Held.

The department of agriculture is just now completing a long series of public hearings in the grain producing sections securing the views of the grain growers, shippers, buyers and millers. Three of these hearings have been held in the northwest—Portland, Seattle and Spokane. Interest has been indicated by the attendance of a large number of farmers, shippers and millers at all these hearings, and while many points of interest have been brought up and discussions entered into, the outline of the government's proposed standards appeared generally acceptable.

"We are anxious to establish standards that will be satisfactory to grower, miller, shipper and dealer," said Chief Brand while in Spokane conducting the hearing, "and we know that such standards are possible."

Will Be Five Grades.

As will be seen by reference to the table of proposed standards on this page, the department plans to make five grades of grain, with anything not good enough to be placed in No. 5 going into what is called "sample grade."

Five elements are considered at arriving at these grades: (1) The weight, (2) the moisture content, (3) the presence of other varieties of grain not of the same class, (4) the presence of inseparable foreign material and (5) damaged kernels such as cracked, heated or frosted berries.

"It is contemplated," says the department of agriculture, "that the standards for wheat shall be on the basis of the grain remaining after the determination of 'dockage.'"

What Is Dockage?

Defining what is meant by dockage, the department explains:

"Dockage includes foreign material such as sand, dirt, small weed seed, weed stems, chaff, straw, grains other than wheat and undeveloped, shriveled and small, broken pieces of wheat kernels, which readily can be removed from the wheat by the use of proper sieves, screens or other practical means best suited to the character of foreign material present. The quantity of the dockage shall be calculatted in terms of percentage based on the total weight of the grain including the dockage. The percentage of dockage so calculated shall be stated in terms of whole per cent and half per cent. A fraction of a per cent when equal to or greater than a half shall be treated as a half, and when less than a half it shall be disregarded. The percentage of dockage so determined and stated shall be added to the grade designation."

Smut Problem Troublesome.

At the hearings in the northwest marked objection was heard to the department's proposal to establish a grade to be known as "sample grade, smutty." This objection was raised on the ground that it would place an undue and unnecessary stigma on grain so designated.

Regarding the grading of smutty wheat, which the northwest produces in greater quantity and greater degree of smut than any other district, the proposed rulings of the department of agriculture read:

"Smutty wheat shall be graded 'sample grade, smutty,' unless the quantity of smut in the wheat is ascertained by scoring, washing or otherwise, in which case the loss in weight caused by the removal of the smut shall be known as 'smut dockage.' The quantity of smut dockage shall be calculated on the same basis and in the same manner as dockage, and the percentage of smut dockage, so determined and stated, shall be added to the grade designation. After the determination of dockage and smut dockage the grain shall be graded according to the grade requirements of the class to which it belongs."

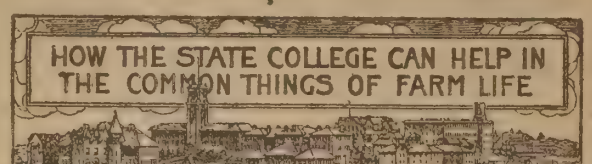
Proposed Standards for Wheat Grades, United States Department of Agriculture

Grade	Hard Red Spring	Durum, Hard Red Winter and Soft Red Winter.	Common White and White Club	Moisture.		Wheats of other Classes	Inseparable Foreign Material	Damaged Kernels.	
				Hard Red Spring	Durum, Hard Red Winter Soft Red Winter, Common White and White Club.			Total	May Include Heat Damaged
	Lbs.	Lbs.	Lbs.	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
1	59	61	60	14	13	2	0.5	1	0
2	57	59	58	14	13	4	1	5	0
3	55	57	56	14	13	6	2	5	0.5
4	53	55	54	15	14	10	4	10	1
5	51	53	52	16	15	10	6	15	3

Sample Grade—Not good enough for grades 1 to 5. Grades 1-4 must be sweet. Grade 5 may be musty or slightly sour, but must be cool.

Farm, Plant to Save Steps and Labor

Keep in View the Two Uses—Storing and Housing—In Barn Designs



III.

In my last number I discussed that part of "the plant" which is the center—the farm house. The circumference of the plant includes the barn and other adjuncts. The barn has two functions—storing and housing. It is not the only storage place nor the only housing place. The structure for these functions (storing and housing) must be close together in the interests of fewer steps and greater economy. Three movements to do something costs fifty per cent more energy than two. Labor raising is not the lazy man's recourse, but the wise man's, the recourse of him who would accomplish larger results with a given expenditure of effort. Therefore the design of the entire plant is the utmost importance. And to make the design one must know the conditions. Perhaps there is a barn already, too good to be replaced, but which can be adapted. Is it horses or cattle or both that are to be provided for? Is it beef cattle on feed, or dairy cattle or stock cattle? How many head in your system? What will be your feed supply? Does it include ensilage? What concentrated feed do you produce or buy? How is the manure to be disposed of and saved? Where is the litter for bedding to be kept? The design, you see, is all important, and while you have ideas and have had experience, in all probability, the college man has had a wider opportunity of observation, may be of experience, and may help you. At least he won't hurt you, for like the doctor's medicine, you need not take it unless you want to.

It has been customary to house stock and store feed under the same roof and for obvious reasons of economy in building and in feeding. But sometimes the saving of fire risk admonishes separation of housing and storage of roughage and the use of modern feed conveyors. This is particularly true in dairy barns. It has been customary to house horses and cattle under the same roof. But where there are either large numbers of cattle or horses, barns separate and apart make for economy, efficiency and safety. The size and position of silos, haymows, feed carriers, manure carriers, manure sheds, stanchions, stalls, feed bins, harness rooms, milk rooms and the provision for drainage, ventilation, light, all are questions of scientific arrangement for the greatest sanitation, and for comfort, the least risk and the greatest efficiency in every farm plant. Farmers may build the barns close and tight to save waste of heat energy. But they must not over look the demands for fresh air and light. There must be the proper proportion of storage to the stock to be supplied. All conditions of climate, and specialization must be met. On these points the college specialist will help you.

About the barn center are other structures. Machinery, implements and tools, both on account of risk and for other reasons, should be in sheds separate from the barns. Hogs should be housed separately; also sheep. The blacksmith shop should be removed from the other buildings. The water supply and the drainage of yards are of great importance. The paddocks or corrals can not be overlooked. The point is, that overlooked as it usually is, the design and construction of this essential part of the farm plant, requires breadth of view, the consideration of a great range of problems, much accurate knowledge and on all of these points, the farmer can get both general and special help from the college in the solution of his problem. This is not a question of the big farm and lots of money to put into the plant, though the array of things mentioned might suggest it. The principles here laid down and the possibility of help from the college which I have suggested are as applicable to the smal lfarm as to the big.

E. A. Bryan

WHEN YOU WANT INFORMATION IT IS OFTEN QUITE IMPORTANT TO KNOW HOW TO ASK FOR IT, WHERE TO ASK FOR IT, AND EVEN WHEN TO ASK FOR IT. DR. BRYAN IN HIS ARTICLE WILL GIVE SOME HINTS AS TO HOW YOU CAN OBTAIN THE MOST INFORMATION POSSIBLE FROM THE STATE COLLEGE REGARDING SOIL AND CROPS.

Washington Portraits—No. 4.



J. E. Buckingham.

J. E. Buckingham of South Bend is one of the younger farmers of Pacific county. He engaged in the dairy business three and a half years ago, and sells his productions direct to the consumer. His ultimate aim is to build up a good herd of Holsteins, and gradually replace his cows with registered stock.

"There are many opportunities," says Mr. Buckingham, "for the young farmers in Pacific county. There is a need of small fruit farms, truck or garden patches, chicken ranches, and dairies that will make a good grade of butter. But in all these lines the farmers must cooperate in order to receive a fair price for their produce."

The next in the series of Washington portraits will be that of Alvin Anderson of Oneida, and will be given in next week's issue of The Washington Farmer.

Milk Condenseries

May Undergo New Regulation

The question of defining the quality of milk prepared and placed on the market by condenseries is one of the prominent issues in the legislature at Olympia this session as it has been at others in the past. Producers and condensery operators, as well as the general milk using public are watching the developments, or should be.

There is now before the legislature a measure, substitute Senate Bill No. 90, on this subject which, while supposedly designed to do much toward settling the differences that exist between the producers and the manufacturers, apparently may not do so. As an index to the uncertainty as to the measure's real import, two prominent men recognized as among the leaders on dairy problems were asked if this measure would affect the production of condensed milk in which part of the butterfat was replaced by a vegetable oil. One replied unequivocally: "There is nothing in this bill which touches that matter." The other replied: "If this bill becomes a law it will make it impossible to tamper with milk. It will put synthetic milk out of business."

To what extent manufacturers replace actual butter fat by cheaper vegetable oils is problematical, or to what extent such manipulation may be carried on under the provisions of the federal pure foods acts. It seems apparent, however, that the present legislature at Olympia will not enact definite legislation covering this issue.

Regulations Desired.

Dairymen are reported to be strongly favorable to a law that will define the exact butterfat content of condensed milk. It is argued that if a diluted milk or one containing vegetable oils is placed on the market it not only partially destroys the market for actual milk and cream from the dairies, but tends to reduce the standing of the district as a producer of high grade products.

Dairy Combine

Charged in Federal Indictments

For alleged violation of the Sherman anti-trust law, eight corporations and 11 individuals were indicted by a grand jury in Boise, Idaho, last Saturday. The indicted concerns and persons include some of the largest dairy interests in the northwest.

The indictment alleges that these concerns combined to control the dairy and dairy products business to such extent as to work serious injury to 172 independent concerns in Oregon, Washington, Idaho, Montana, Utah, Wyoming, Nevada and California.

The prosecution of the charges in further court procedure has not been announced.

The following defendants were named in the indictment:

The Jensen Creamery company, a Utah corporation with its principal place of business in Salt Lake City.

The Mutual Creamery company, a Utah corporation with its principal place of business in Salt Lake City.

Henningsen Produce company, a Montana corporation, Butte.

The Schallinger Produce company, a Washington corporation, Spokane.

The Commercial Creamery company, a Washington corporation, Spokane.

The Hazelwood company, an Oregon corporation, Portland.

The Hazelwood company, limited, a Washington corporation, Spokane.

The Klock Produce company, a Washington corporation, Seattle.

Individuals indicted were:

W. F. Jensen, president, director and stockholder of the Jensen Creamery company and its successor, the Mutual Creamery company.

D. E. Newman, connected with the Mutual Creamery company.

H. A. Shellenberger, manager of the Mutual Creamery company, at Boise.

A. P. Henningsen, an officer and director of the Henningsen Produce company, of the Schallinger Produce company, of the Klock Produce company, of the Hazelwood company and of the Commercial Creamery company, and who has been a stockholder in the Jensen Creamery and Mutual Creamery companies.

W. F. Henningsen, an officer and director of the Henningsen Produce company.

Carl Schallinger, a stockholder and officer of the Schallinger Produce company.

E. W. Ellis, a stockholder in and superintendent of the Jensen Creamery company, and of its successor, the Mutual Creamery company.

Carlyle Hall, a stockholder in and manager of the Jensen Creamery company at Pocatello, Idaho, and at Salt Lake City.

B. B. Corless, a stockholder in and manager of the Jensen Creamery company at Salt Lake City and at Portland, Ore.

R. A. Goodhue, a stockholder in and manager of the Hazelwood company at Portland, Ore.

W. W. Hamilton, who has been a stockholder in and manager of the Jensen Creamery company at its place of business in Boise and Lewiston, Idaho.

This case, which appears to be one of vital interest to the dairying industry of the northwest as well as to the users of dairy products, will be watched closely by The Farmer and kept before its readers as developments occur.

Naval Militia

To Be Ready Under Freeman

Orders have been received at Seattle by Miller Freeman to report for active duty and assume the command of the naval militia of the state of Washington. Commander Freeman, who was the founder of the organization, has been on the retired list since 1910.

The naval militia of Washington now comprises a membership of approximately 400, with divisions at Seattle, Tacoma, Everett and Aberdeen. The navy department has urged that the enrolment be increased to the maximum of 700 and that the organization be prepared to respond to a call for active service at sea.

In event of trouble with Germany it is not unlikely that the entire command will be transferred to the Atlantic coast.

The airplane squad, consisting of 12 officers and men, will leave for Pensacola, Fla., February 24.

Commander Freeman is a pioneer of this state, having been reared in the Yakima valley. He founded and published The Ranch for many years, which journal was later changed by him to The Washington Farmer. He also founded The Oregon Farmer of Portland and The Idaho Farmer of Boise, these three journals now being owned by the Cowles Publishing company.



Miller Freeman.

In addition he established Pacific Motor Boat, devoted to motor boating and yachting on the Pacific coast, and the Town Crier, a critical weekly review. He founded and still publishes Pacific Fisherman, a monthly devoted to the commercial fisheries of the Pacific coast, and Motorship, a journal of international circulation in the interest of the commercial motor vessel.

Vegetables on the Table the Year Round

There is no farm in the northwest where there is a family to feed that should not have string beans, pickled beets, asparagus, turnips, green peas, cauliflower, onions, Brussels sprouts, celery, sweet corn, succotash, sauerkraut, fried parsnips, eggplant, head lettuce, lettuce salad, radishes, rhubarb pie, spinach, tomato soup, sliced tomatoes, carrots, cucumbers, mustard greens, spinach, pumpkin pie, baked squash, cold slaw, cabbage and corned beef on the table every day of the year. No, no, not all at once—and corned beef is not a vegetable.

But every farm should have one or more of these "good things to eat" every day of the year. The garden should produce them—except the beef.

On another page in this issue is the first of a series of articles that will run in The Farmer throughout the spring and summer, designed to stimulate interest in garden possibilities and give specific information on "how to grow things."

Stock Men Organize Conference

Special Live Stock Train to Eastern Shows Meets With General Favor

One hundred and fifty men, the majority of whom were actual producers of live stock, attended the two-day session of the Northwest Live Stock convention at Spokane last week in the assembly room of the Spokane Chamber of Commerce, listened to addresses by several of the most prominent live stock authorities of the west, discussed dozens of the problems that confront the live stock industry and closed the gathering at a banquet given by the chamber of commerce at the Davenport hotel Friday evening. By resolution the organization was made permanent and its next annual meeting left in the hands of the Spokane Chamber of Commerce.

Formal action looking toward the running of a special train east next fall loaded with the prize winning live stock of the northwest was taken when a motion was carried authorizing the appointment of a committee of five delegates to work with the agricultural committee of the Spokane Chamber of Commerce in planning and providing for such train. The committee as appointed consists of Thomas F. Wren, president of the Northwest Live Stock Show, at Lewiston, Idaho; J. H. T. Smith of Pullman, Wash.; H. C. Davis of Granger, Wash.; Alex Morrison of Valley, Wash., and M. M. Talmadge of Newport, Wash.

The proposal to make such demonstration of the northwestern live stock possibilities met with enthusiastic favor among those present. E. E. Flood of Spokane, outlined the plan, stating that it was not intended to allow such train to interfere with northwestern fairs; that it would be run after the state and county fairs and return in time for the winter shows.

Resolutions Adopted.

One of the most important and far-reaching resolutions adopted by the convention was that looking toward securing a reduction in freight rates by the railroads on purebred live stock. The resolution asks joint endeavor by the Spokane Chomber of Commerce and the live stock convention.

Another resolution asks joint state and federal action against rabies. Others are as follows:

Asking the Spokane Interstate fair not to change its base date as to hog entries without first giving a year's notice to the swine men of the northwest.

Approving the certification of live stock shipments by the state department of agriculture for interstate shipment, especially as regards purebreds.

Endorsing the work of the educational institutions of the northwest in regard to agricultural and live stock education, and urging adequate appropriations for their maintenance and development.

Thanking the Spokane Chamber of Commerce and those who assisted in making the convention successful.

Ammons Inspires Stockmen.

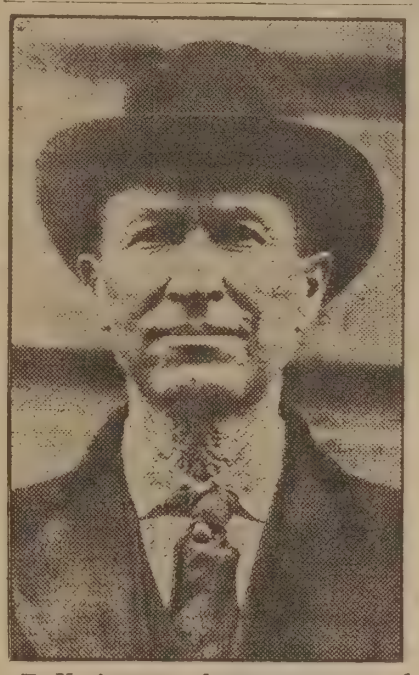
The most picturesque and inspirational single figure at the convention was Former Governor E. M. Ammons of Colorado, one of the foremost stockmen of the United States. He delivered three addresses, each received with enthusiasm.

He declared that one of the most important questions in live stock production was early maturity; that the market demanded young stock. Beef cattle should be marketed at slightly under two years old, and should be made to weight at that age from 1000 to 1150 pounds, he said. He denounced cross-breeding, and said that every breeder should have an ideal and breed directly with that in view continually. He laid special emphasis on the necessity of the northwest producer feeding northwest feeds, and said that it was fallacy to think that corn is necessary to the production of either beef or hogs; that using the grains and grasses and hay of the northwest stock should be grown as rapidly as possible. "You can't grow a young steer too fast," he said. You can't put too much fat on him, but you can on an older animal."

"Stand By Your Shows."

Governor Ammons urged loyalty to the shows of the northwest. The rivalry between shows and between individual exhibitors is a healthy rivalry, he said. "If the other fellow beats you this year, find out how he did it and return and best him next year. Better your stock if for no other reason just to win over your rival, always remembering that every improvement that brings a victory is an improvement for the good of every man in the business."

Other speakers on the program included John D. Halliday of Chicago, president National Wool Warehouse company; William Hislop of the animal husbandry department of the state college at Pullman; E. J. Iddings of the same department of the University of Idaho at Moscow; E. E. Faville of Spokane; J. C. Graham of Palouse, Wash.;



E. M. Ammons, former governor of Colorado, who took a leading part in the live stock convention at Spokane last week.

J. H. McCroskey of Fishtrap, Wash.; C. M. McAllister, president of the Portland Union Stock Yards; Dr. J. Madsen of the United States biological department at Seattle; J. H. Roberts of the Spokane Union Stock Yards; O. M. Plummer of the Portland Union Stock Yards; E. E. Flood of Spokane; Dr. T. T. Baker of the University of Idaho; and others who entered into the discussions.

Interesting Declarations.

Among the facts and ideas finding expression in the addresses and discussions were the following:

The subject of establishing a purebred market in the northwest, preferably at Spokane, is a subject worthy the consideration of the breeders of the northwest.—G. M. Wilson of Wilbur, Wash.

The two big problems are: How increase the number of stock, and how to minimize the cost of production and marketing. The use of feeds grown on the farm should be practiced with as little use of mill feeds and special preparations as possible, though the judicious use of the latter classes is always worthy of consideration.—William Hislop.

So much talk of oil meal and cake and the like tends to make the beginner or the small grower fear to enter the business because it sounds complicated and expensive. It should be emphasized that the feed grown at home is adequate ordinarily for success.—F. M. Rothrock of Sprague, Wash.

The basis of the herd is not the sire or the dam. It is the man behind the herd. The live stock business is not for everybody, but for the man who likes it and stays with it year in and year out.—E. J. Iddings.

The five underlying principles in the combatting of infectious diseases among live stock are: Keeping the germs, or micro-organisms away from the animal; vaccination; segregation and isolation; discarding pastures for a few years where infectious diseases have been known; and competent veterinary service in every community.—Dr. J. H. Martin of Spokane, reading a paper by Dr. H. T. Graves of Olympia.

The United States produced in 1916 only 280,000,000 pounds of wool, and imported during 13 months including that year 400,000,000 pounds. Great Britain has under embargo, forbidding its exportation, 65 per cent of the wool of the world. The cure for the high cost of living is to add one pound more to each steer or sheep or hog.—John D. Halliday of Chicago.

Community shipments solve many problems for the farmer with only one or a very few stock. The Spokane Union stock yards have received cars of community stock, including animals owned by as high as 14 farmers.—J. H. Roberts.

It is almost as dangerous to the industry for hogs to be very high as very low. We must keep breeding stock on the farms, but we can not do it when they demand such tempting prices. Farmers as a rule do better when they ship to the stock yards and do business with commission buyers than when they sell privately at home.—O. M. Plummer of Portland.

There are 20 contagious sheep diseases, and 60 non-contagious, including forage poisoning. Sheep worth $5,000,000 are lost annually in the United States through forage poisoning.—Dr. E. T. Baker.

In 21 years of banking experience, he had yet to charge off his first stockman's account because of the stockman's failure.—E. T. Coman, bank president, Spokane.

The following are those who formally registered while attending the live stock convention:

Babcock, Frank, Ewan, Wash.
Baker, Dr., Moscow, Idaho.
Bailey, J. H., Palouse, Wash.
Baldwin, George E., Lincoln Stock Farms company, Coulee City, Wash.
Banta, J. R., Carstans, Alberta.
Boomer, H. H., Salmon, Idaho.
Buckner, Orval, Great Falls, Mont.,
Buchanan, Edgar M., Miles, Wash.
Burpee, J. W. Fairfield, Wash. R. F. D. No. 1.

(Continued on page twenty-six.)

State Association

Of Egg Producers Is Organized

A far-reaching poultry association to be known as the Washington Cooperative Egg and Poultry association, was formed at Seattle last week when a considerable number of poultrymen from various parts of the state met.

The purpose and scope of the association are cooperative handling not only of poultry products, but of dairy products, dairy and poultry feed, etc. W. H. Paulhamus, who presided, explained that the purpose in thus extending the range of activities was to provide for the future when it might be necessary to take up matters at present unconsidered. Two thousand shares of stock with a par value of one dollar each are to provide the working capital. Seattle was chosen as the location for the central office, with such branch offices to be selected later as circumstances require.

It is provided that all members must sell all of their eggs, except those for hatching purposes and those sold privately by direct consent of the board of directors, through the association.

A board of nine trustees, to act until the next annual meeting, was elected as follows:

Professor Linklater, western Washington experiment station, at Puyallup; E. A. Palmeter, Silverdale; W. H. Paulhamus, Puyallup; J. H. Guffey, Island county; W. A. Bauman, Lynden; B. B. Holmes, Bellingham; W. A. Doyle, Vashon; George W. Holt, Auburn, and H. L. Willis, Mount Vernon.

DAIRY PRODUCERS.
Form Inland Empire Association.

Dairymen met in Spokane Saturday and organized the Inland Empire Dairy Producers' association and elected H. S. Findlay of Cheney, Wash., president; Arthur E. Hooper of Ferrel, Idaho, vice president, and D. E. Smead of Opportunity, Wash., secretary-treasurer; and adopted a constitution and by-laws. A full account of the meeting and its purposes will be given in next week's Farmer.

Triumphant Angus at Home

Northwestern Herd Bring Back Blue Ribbons

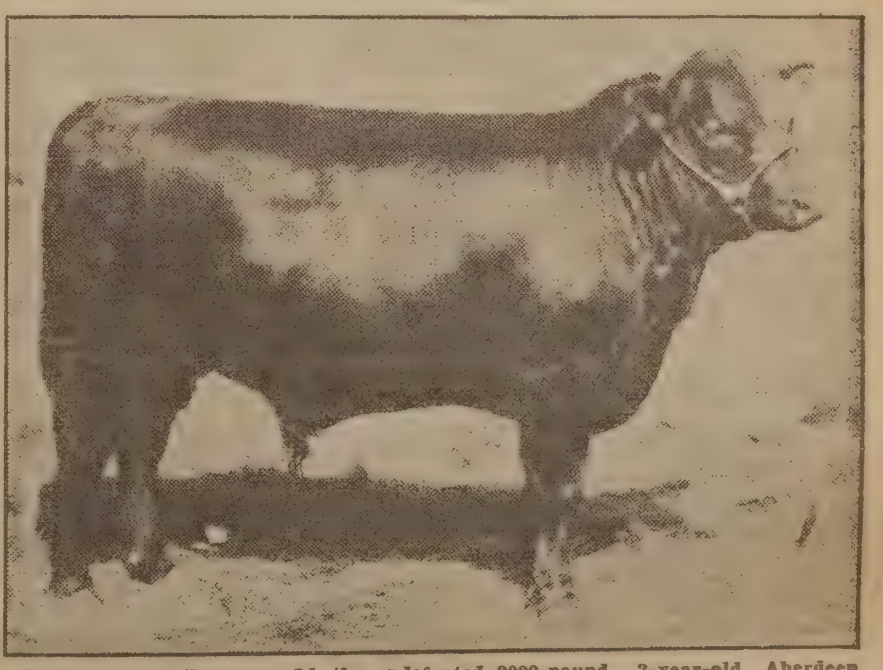
By D. G. SUTHERLAND

After touring the middle west, competing in many of the leading live stock shows and winning a large share of the honors at all of them, the Congdon & Battles herd of Aberdeen Angus are again at home, near North Yakima, Wash.

They made the Iowa, Minnesota, Wisconsin, Illinois and Missouri state fairs. The American Royal of Kansas City, the Chicago International and the Western at Denver. They returned with 74 first prizes to their credit, and many second, third and fourth prizes.

Their herd bull, Quality Lad of Rosemere 3d, stands undefeated. The herd furnished the junior champion female of all shows, being the junior heifer calf, Queen of Rosemere 5th. Their steer was grand champion of all shows, except the Chicago International, where they stood second, being defeated by a California bred animal. At the Chicago International, the herd won more first and second prizes than any of its competitors, including first prize aged herd and first prize calf herd.

The Congdon & Battles herd now numbers over 100. Two cars more will be shipped in soon. It is planned ultimately to increase the herd to 500 head.



Quality Lad of Rosemere 3d, the undefeated 2000-pound, 2-year-old Aberdeen Angus bull that lead the champion aged herd at the last Chicago International stock show, owned by Congdon & Battles of North Yakima, Wash.

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GUARANTEE OF ADVERTISEMENTS.

We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Farmer Organizations Need Trustworthy Leaders

Farmers of Dakota county, Nebraska, have formed a protective association to deal in an organized way with agents offering stock in speculative companies. Stock salesmen will be required to submit their propositions to all the members at a meeting, and individual members of the association are pledged not to buy into any scheme, however alluringly it may be presented by the agent, until it has been investigated by the protective organization.

Sensational disclosures in the recent trial in Spokane of Gale Smith and other officers of the Northwestern General Trading company show that the Nebraska plan has elements of danger as well as of protection. Once an agent got the endorsement of the Dakota county association he would use it to sell stock to individual farmers all over the country. "Our enterprise has been investigated by this protective association of farmers," he would say, "and they pronounce it sound and good;" just as the stock salesmen of the Northwestern General Trading company used the indorsement from C. B. Kegley, master of the state grange, and L. C. Crow, state president of the farmers' union, to sell stock in that swindling concern to farmers of the Pacific northwest.

The Nebraska farmers are groping for a remedy for a great and growing evil, but they are in danger of making worse a condition al ready bad.

What is needed is more rigid state supervision of stock-selling projects, particularly of concerns that are paying agents 25, 40 or 50 per cent in commissions on sales of stock.

Another urgent need is the selection of trustworthy leaders in such worthy organizations as the grange and the farmers' union—men who will refuse to lend their indorsement to concerns that are being exploited by incapable or dishonest managers.

Department of Agriculture.

On April 1 this year E. F. Benson of Tacoma, one of the most widely known men in agricultural and horticultural and live stock work in the northwest, becomes state commissioner of agriculture. The appointment was made recently by Governor Lister to fill a place that has been occupied by H. T. Graves, live stock deputy, as acting commissioner, since the resignation of J. H. Perkins, the first commissioner in the department, three years ago. Commissioner Benson is a man who has been successful in his private business, and who has shown a special adaptation for solving the big problems of agriculture in this state. He will have associated with him in the work, as members of the department's advisory board, E. E. Flood of Spokane, Granville Lowther of North Yakima, Ira D. Cardiff of the state college experiment station, and Governor Lister. The dairy and live stock, horticultural, food and drugs and seed testing branches of the department each has a deputy commissioner at its head.

The farming interests of the state have a right to expect much from the department of agriculture. The department of agriculture has a right to expect the united cooperation of the farming interests.

Lawless Blow at the Welfare of All the Farmers

The threat to sink American and other ships bearing farm produce and other merchandise is a blow at the rights and welfare of all the farmers of the United States.

So long as ships dare not sail, and so long as they lie idle at the wharfs, the railroads refuse to haul wheat to tide water, giving the reasonable explanation that further shipments from the interior to the seaboard would increase the prevailing congestion and tie up thousands of freight cars at a time when the country is already suffering from a shortage of rolling stock.

Fortunately for the farmer, the surplus from the last harvest is pretty well sold and moved across the Atlantic. But another crop is coming on and it is the part of wisdom to look to the future.

In round numbers, the United States had a billion-bushel wheat crop in 1915. The 1916 crop fell to 600,000,000 bushels. The average for the two years was large, but Europe was an eager bidder, and by distributing the marketing over the two years we sold the surplus at excellent prices. A large carry-over from 1915 was sold in 1916.

The 1917 wheat crop may be another billion-bushel wheat yield, but even if it should be only an average crop, the price will be governed by foreign buying. If lawless warfare upon the high seas should be allowed to prevent the shipment of the surplus, the whole crop would hang over the home market and the farmers would have to sell at ruinous prices.

A similar embargo would apply to other cereals, fruits, live stock, to the metals of the Inland Empire and the fisheries of Puget sound and the Columbia river.

If our people are clear-visioned, straight-thinking and courageous, they will insist that the government at Washington stand up for American rights and the prosperity of the American people.

Form a Chuck Hole Club

Recently a meeting of good roads advocates, comprising a large number of the residents on Fidalgo island, in Puget sound, met and formed what they termed a chuck hole club. What it really is is an anti-chuck hole club, for the purpose is the ultimate extinction of that particular species of bad roads features.

Every community should have its chuck hole club. Every man and boy and most of the women and girls in that community should be members. It is the most fallacious of falacies to believe that the road district or the county or the state should do all the road work. A few hours' work with a team or with only a spade or rake would put the road along side a quarter section in good shape. An occasional repetition of that amount of labor would keep it in good shape. Only extensive improvements or repairs should be required of the district or the county or the state. A club of local people could do wonders for themselves and their horses and automobiles.

Virtue in a Fight.

A state senator, at the close of a long, argumentative wrangle over a measure that was up in the legislature for discussion, remarked: "Well, while we are quarreling we are not passing laws, so I say, let's quarrel."

This particular senator was one of the few legislators who realize that the worth of a legislature is not to be determined on the large number of bills enacted, but rather on the quality of those laws. Not more laws, but fewer and better laws, was his doctrine, and if the law books of almost any state could be assembled and placed on a pair of scales one would see evidence that he was right.

In many states the laws are so numerous and conflicting that they are confusing to the ablest lawyers and judges. Many cases that go to the supreme court for decision are so taken because of technicalities or confusion. There are many laws on the books which are never enforced because they lack popular support or penalty provisions, but they remain there year after year, and each legislative session sees sometimes as high as several hundred additional measures added to the lists.

Washington Gleanings

Potato prices have reached an almost unprecedented level. In many locations they have been selling at wholesale at as high as $60 a ton.

It is being argued that the introduction of the sugar beet into potato growing districts will do much toward the eradication of potato diseases.

Apple prices are reported as improved in the Wenatchee and Yakima district, with the natural result that they are being sold in considerable quantities.

Yakima county is now to have an agriculturist, the commissioners of that county having agreed to the appointment, with the necessary appropriation to pay his salary, with the assistance of the government as provided in the Smith-Lever act of congress.

A series of farm institutes have been held in Grays Harbor county under the leadership of County Agriculturist C. F. Monroe. He secured the services of representatives of the state college experiment station. Agriculturists throughout the state have been carrying out such programs with great success.

The Whatcom county dairymen's association has been considering the problem of pooling their product with a view to economizing in market methods and receiving greater consideration at the hands of the buyers. A similar plan is being worked out in Snohomish county.

During the past several days Ray McKaig, secretary of the North Dakota Nonpartizan league and master of the grange of that state, has been delivering lectures in the northwest on the general subject of nonpartizanship. Considerable interest among the farmers, especially the grange, has been manifested in the subject.

The state board of control has apportioned the grain bags manufactured at the state penitentiary among the grain growing counties. The price fixed is 10 1-2 cents each. At the bulk grain convention at Spokane recently, it was predicted that the price of sacks on the open market would be not less than 11 cents.

Great interest is being manifested in the logged-off land special train that the Great Northern railroad company is going to run through northern Idaho and eastern Washington timbered regions in April or May. The train will carry all manner of land clearing equipment, with probably 25 persons on board to lecture and demonstrate.

The record of the Winlock Cooperative creamery shows that the output of 1916 was 60,000 pounds more that in 1915. During the year 262,419 pounds of butter were made and sold, which brought a gross return of $82,365.90. The total expenses of the plant for the year amounted to $5482.90. The average price paid for butter fat was 53.8 cents per pound, but $1320.85 was divided among the stockholders in dividends, bringing the average price up to 34.3 cents.

What Others Say

Hoard's Dairyman: We pledge our undivided and whole-hearted support to our common country.

National Stockman and Farmer: The farmer is the first, but not the sole, beneficiary of the county agricultural agent.

Breeders' Gazette: Those who learn from experience of others, rather than from their own, are increasing in numbers.

Dakota Farmer: Man is the most wantonly destructive animal on earth, and the most senseless. The snuffing out of millions of buffalo bears melancholy witness. The vast flocks of passenger pigeons disappeared under man's slaughter attack.

GIANT POWDERS Lift them out



It will pay you to test Giant Farm Powders in competition with any other stumping powder.

In the last year more than 2,000,000 pounds of these Giant Powders were used for stump blasting in Washington and Oregon alone. The users included farmers in every county in both states, the largest lumber and development companies, and the United States Government. They use the Giant brands because they have found that

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

always give satisfaction and do their work at the lowest possible cost and in the most thorough manner.

In the Pacific Coast states the farmers require explosives that will disrupt, crack, split and heave the stumps and at the same time lift and loosen the roots for easy handling. Giant Farm Powders do this because they are made especially to suit western conditions. Because of their wider-spread force, they remove the stumps more economically than powders or dynamites that merely shatter and pulverize.

Test one case. Compare it with any explosive that you have ever used for stump blasting. After you have blasted a dozen stumps you will understand why farmers who have once used them always continue to use the Giant Farm Powders. Fill out and mail the coupon at the right, and we shall arrange with our nearest distributor to supply you promptly at the lowest market price.

There are two Giant Farm Powders—Giant Stumping Powder, used for blasting in wet soil, and Eureka Stumping Powder (which costs a little less) for blasting in dry soil. Both resist cold to a remarkable extent, seven days' exposure to a temperature of 32 degrees failing to freeze them. Ask your dealer for these brands.

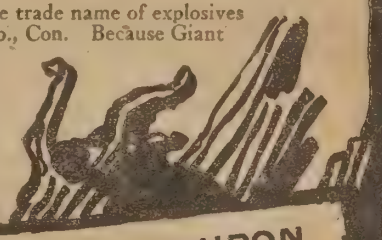
THE GIANT POWDER CO., CONSOLIDATED — HOME OFFICE: SAN FRANCISCO — ESTABLISHED 1866
"Everything for Blasting"

BRANCH OFFICES: Seattle, Spokane, Portland, Salt Lake City, Denver

Have You Our Stump Book?

It is the most helpful and interesting book ever issued on Stump Blasting. It tells and shows how to save money and make land-clearing easier. It is written by Western men, from the Western viewpoint, and is full of pictures showing latest methods of blasting. Mark and mail the coupon and get it free. Other books—on boulder blasting, tree planting, ditching and subsoiling with explosives—also free on request. Mail the coupon *now*, before you lay this aside.

Warning. Giant Powder is the trade name of explosives manufactured by the Giant Powder Co., Con. Because Giant Powders are best known everywhere, many have assumed that all high explosives are Giant Powders. Insist upon having the genuine, made only by the Giant Powder Co., Con. If your dealer has only ordinary dynamite, write us and we will see that you get the genuine.



FREE BOOK COUPON

The Giant Powder Co., Con.
San Francisco.

Send me your illustrated books on the subjects which I have marked X.

☐ Stump Blasting ☐ Tree Planting
☐ Boulder Blasting ☐ Ditch Blasting
☐ Subsoil Blasting 203

Trial Order Blank
(Kindly fill out if ready to purchase)
Have your nearest distributor supply me with

.....lbs. Giant Stumping Powder
.....lbs. Eureka Stumping Powder

NAME .....

ADDRESS .....

Write below your dealer's name.

How, When and With What to Spray

Directions for Preparing and Using Sprays for All Manner of Orchard Pests Fully Outlined

By A. L. MELANDER, Entomologist, State College, Pullman, Wash.

There is no single spraying that will kill everything. Select the ones that fit your case. Many plant diseases and pests can not be controlled by spraying and require special treatment. For information about insects, pests, plant diseases and spraying write to the experiment station, Pullman, Washington. The advice is free.

The following is a list of orchard spraying formulae, with directions for their preparation and use:

1—LIME-SULPHUR.

Ground sulphur .....110 pounds
Fresh calcium stone lime .. 50 pounds
Water, to make ..... 50 gallons

Slake the lime with 10 gallons hot water. Stir in the sulphur and add the remainder of the water. Boil briskly until the sulphur is dissolved (about 45 minutes) stirring continuously and keeping the cooker covered. As the liquid boils down add water to keep to the original level. When finished let any remaining sediment settle. Use only the clear liquid, which may be stored if kept from the air. Prepared in this way lime-sulphur should have a hydrometer reading of about 26 degrees, Beaume, somewhat weaker than the factory-made product.

For use any concentrated lime-sulphur may be diluted according to the table shown at the bottom of this page.

2—SODA-SULPHUR.

The dry powdered forms of soda-sulphur on the market may be dissolved in water at the rate of about 50 pounds to 100 gallons, when they give a spray comparing in polysulphid (the killing value) content with dormant strength lime-sulphur. A similar spray may be prepared in liquid form as follows:

Ground sulphur ..... 1 1-3 pounds
Potash or lye .....1 pound
Hot water ..... ¾ gallon

Add the ingredients to the hot water whereupon the chemical reaction takes place almost immediately. Stir a few minutes until dissolved.. The concentrate may be diluted according to hydrometer test but nearly twice as much should be used as in the case of lime-sulphur. E. g. if the concentrate tests 24 degrees use 20 gallons (instead of 10.2) to make 100 gallons of dormant spray.

Use: As dormant spray for same pests as lime-sulphur.. Unsafe during growing season.

3—FISH-OIL SOAP.

Water .....20 gallons
Lye or potash, 98 per cent ..7 pounds
Fish-oil .....5 gallons

Boil the water, dissolve the lye in it and stir in the oil. Boil for two hours. This should make about 130 pounds of gelatinous soap.

Use: (a) As an emulsifier for oil sprays; (b) to increase the effectiveness of nicotine spray; (c) dissolved 1 pound to about five gallons of water as a contanct spray for soft-bodied insects like aphids, young scales, thrips, on tender plants. The addition of quassia is unnecessary. Laundry soap may be substituted for fish-oil soap.

4—CRUDE OIL EMULSION.

Boiling water .....8 gallons
Lye or potash ..... 3 pounds
Fish-oil soap (see formula 3) 20 pounds

Dissolve in order named to form the emulsifier; then, with vigorous agitation, slowly add 20 gallons of crude (not fuel) oil. The resulting miscible oil may be poured in the spray tank and with the agitator running fill with water to 200 gallons.

It is much more dependable to use the ready-made miscible oils on the market, which should be diluted according to the directions furnished on the container.

Use: As a dormant spray recommended where lime-sulphur has proved unsatisfactory. Not an efficient fungicide.

5—KEROSENE EMULSION.

Kerosene .....2 gallons
Fish-oil soap (see formula 3) ....½ lb.
Boiling water .....1 gallon

Cut the soap in thin slices if hard, boil until dissolved and churn the hot suds into the kerosene, away from the fire. When emulsified stir into 35 gallons of water, for summer use. This spray has largely been replaced by nicotine.

Use: A contact spray for sucking insects, like woolly aphid, green aphis, plum aphis, etc.

6—NICOTINE, OR TOBACCO SPRAYS.

40 per cent nicotine .....1 pint
Fish-oil soap (see formula 3) 3 or 4 lbs
Water .....125 gallons

Dissolve soap in hot water, add the nicotine and dilute.

A similar decoction can be made by soaking 50 pounds of dried tobacco plants in 100 gallons of water for 24 hours, stirring frequently. Strain and dilute the solution obtained with an equal amount of water and add the required soap. Such home-made spray is variable in nicotine content and will not keep.

Use: The standard summer spray for aphids or plant lice, leaf hoppers, orchard mites, thrips and young worms.

7—PYRETHRUM: HELLEBORE.

Pyrethrum powder of white Hellebore powder ..... 1 pound
Warm water .....2 gallons

Make a paste of either powder by stirring in a little boiling water, add the remaining water and let stand for 24 hours. Then dilute to about 15 gallons. The efficiency of this spray is increased by adding a solution of one pound of soap. Either powder may be dusted dry.

Use: For soft-bodied insects like currant worms or slugs, especially on small fruits ready for picking.

8—ARSENATE OF LEAD.

Arsenate of lead, paste (poison) 1 lb.
Water .....40 to 50 gallons

For newly hatched insects it is not necessary to use it stronger. For old or large insects use double the quantity, or more. Smooth the paste thoroughly with a small amount of water before putting in the spray tank. Arsenate of lead powder is twice as strong as paste. Do not use arsenate that feels gritty or that settles rapidly.

Arsenate of zinc powder or paris green are about four times as strong as paste lead. They are especially valuable for resistant insects like tent caterpillars, tussock worms and bettles, but may scorch in a damp season. If paris green is used as a liquid spray, add five pounds of fresh-slaked lime to each pound of poison.

Use: The standard poison for coating foliage or fruit as a protection against chewing insects, caterpillars, codling worm, cherry slug, etc. Valueless for sap-sucking insects like aphids, scales, orchard mites or leaf hoppers.

9.—POISONED BAITS.

Bran, shorts or flour ..... 30 pounds
Paris green, zinc arsenite or white arsenite ..... 1 pound

Mix dry, season with either (a) four lemons ground through a meat chopper; or (b), one or two quarts of molasses; or (c) one pound salt. Then add enough water to form a mash and scatter where required. Fresh horse manure may be used instead of the bran, seasoning then with salt. Arsenite of soda (see formula 15), the quickest acting insect poison known, may be used as the poison in either formula at the rate of three pints of the stock solution to the 30 pounds of bran, etc.

Use: For cut worms, grasshoppers, or crickets. Do not apply directly to the young trees, but distribute on the ground, either by spoonfuls or broadcast.

10.—BORDEAUX.

	Double.	Standard.	Weak.
Blueston (copper sulphate)	10	5	2 pounds
Stone lime	8	5	2 pounds
Water to make	50	50	50 gallons

Dissolve the bluestone by suspending it in a sack in 25 gallons of water in a barrel, or by crushing it and adding to hot water. Slake the lime in another vessel, adding a little water slowly, and dilute to 25 gallons. Mix the two thoroughly, which is usually done by pouring the two simultaneously into a third vessel.

Use: (a) The standard formula is a repellant for leaf eating insects because of the metallic taste. Valuable for cut worms, grasshoppers, flea beetles. (b) As a fungicide. Double strength used in western Washington as a late fall or winter spray for anthracnose; the weak formula a summer spray on delicate foliage for cherry shot-hole or peach blight; the standard strength for scab.

11.—SULPHUR.

Sublimed flowers of sulphur or ground flour is sometimes used as a dust spray either alone or diluted with equal parts of hydrated lime. As a liquid spray, for every 20 gallons stir one pound of sulphur into flour paste made of one pound of flour and one gallon boiling water, before diluting.

Sulphur paste, milled sulphur, atomic sulphur and diatomic sulphur are commercial preparations containing about 50 per cent of finely divided sulphur. They are used at 2 to six pounds to 50 gallons.

Use: For orchard mites and mildew. A stronger spray than iron sulphide, liable to burn very young fruit in hot weather.

12.—IRON SULPHIDE MIXTURE.

Lime-sulphide, 32 degrees ..5 gallons
Ferrous sulphate (green vitriol or copperas).. ...20 pounds
Water to make .....200 gallons

Add the lime-sulphur to the spray tank nearly full of water and with agitator running stir in the iron sulphate previously dissolved in about 10 gallons of water. The mixture consists principally of black iron sulphide and finely divided sulphur. It is the latter that gives value to the spray.

13.—SOIL FUMIGANTS.

A. Carbon Disulphide—Allow two-thirds ounce to each square yard of surface and cover immediately with oil-cloth. Extremely volatile and inflammable.

Use: For borers, cutworms, root weevils, wireworms in strawberry fields, gardens, etc.

B. Cyanide—Pour 1 per cent solution of sodium cyanide (deadly poison) into spots requiring treatment. Do not inhale fumes. Destructive to plans as well as insects, but soil treated becomes safe in a few days.

Use: For exterminating ant nests, for woolly aphid and other subterranean insects.

14—FUMIGATION FOR NURSERY STOCK.

Sodium cyanide 130 per cent..1 ounce
Water .....2 ounces
Sulphuric acid.....1½ ounces

This amount is sufficient to fumigate 150 cubic feet. Place the nursery stock in a box made gas-tight by sealing with building paper if necessary. Pour the acid into the water in an earthenware bowl and set it on the plants. Wrap cyanide in a paper and drop into the bowl of acid, immediately putting down the cover. Fumigate for 30 to 45 minutes. Do not in-

(Continued on page fourteen.)

Hydrometer test of concentrate. Degrees Beaume	Specific gravity	To make 100 gallons of spray, use: For dormant spray: 1 lb. sulphur in 5 gal. 3 deg. Beaume; sp. gr. 1.02	For summer spray: 1 lb. sulphur in 10 gal. 1.5 deg. Beaume; sp. gr. 1.01
34	1.3015	6.7 gal.	3.3 gal.
32	1.2788	7.2 gal.	3.6 gal.
30	1.2569	7.8 gal.	3.9 gal.
28	1.2357	8.5 gal.	4.2 gal.
26	1.2153	9.4 gal.	4.7 gal.
24	1.1955	10.2 gal.	5.1 gal.
20	1.1578	12.3 gal.	6.2 gal.

Use: As dormant spray when buds are swelling, for San Jose scale, oyster-shell scale, insect and mite eggs, bud-worm and twig borer. Concentrated lime-sulphur mixed with lime whitewash useful to coat tree trunks for rabbits and borers. In summer strength for orchard mites. Also a valuable fungicide for mildews, apple anthracnose, apple scab, peach leaf-curl and lichens.

Program for Usual Orchard Spraying.

1. When buds begin to swell:
Oil spray or 3 degrees lime-sulphur. (W. C. E.)*
A general cleanup for scales, insect eggs and fungi, particularly important for San Jose scale. With nicotine added, the most valuable treatment for aphis when buds first show green (W. C. E.)

2. When new foliage is first appearing.
Nicotine (W. C. E.) Usually unnecessary if given in preceding.
For aphids, orchard mites, thrips, leaf-hoppers. With arsenical added (W.) For bud worm (W.), twig borer (C.)

3. When blossoms are ready to open (apple, pear.)
Lime-sulphur, 1.5 degrees.
For scab (W. E.) and mildew (W. C. E.) With nicotine added, for orchard mites, aphids, thrips.

4. When last petals are falling (apple).
Arsenate of lead.
For codling moth, caterpillars (C. E.) With lime-sulphur, 1.5 degrees added. For scab (W. E.) and mildew (W. C. E.)

5. Additional summer sprayings may be needed, as arsenate of lead for codling moth and caterpillars; nicotine for aphids, oyster shell scale, mites; Bordeaux for grasshoppers.

6. In November.
Lime-sulphur, 3 degrees; or Bordeaux, double or standard strength.
For apple anthracnose (W.) Nicotine (W. C. E.) For returning aphids.

*W, western Washington; C, central Washington; E, eastern Washington.

Hints on Spraying.

It takes a definite quantity of material to spray a tree thoroughly, whether applied at high or low pressure or whether applied as a mist or a driving spray. Low pressure does not save material, but wastes time. The labor cost in spraying often exceeds the cost of the materials used.

High pressure is mainly valuable in lessening the time it takes to spray, but high pressure increases the range of a nozzle and adds to the penetrative force of the spray, thus bettering the chance of doing effective work.

The bodies of insects are greasy and hard to wet, yet many sprays depend on coming in actual contact with the insect in order to kill. Many insects and many eggs are located in the lowermost crevices of rough bark, out of reach of any but a penetration system of spraying.

Therefore, spray thoroughly. Direct attention to the hardest places to reach. Cover every surface. Wet behind the buds and into the bottom of every crack. Fill the lower calyx cup. Do not try to economize on spray by doing superficial work or by missing the ends of the branches. For all orchard spraying use a high-pressure pump, 250 pounds if possible. Use only nozzles of the Clipper or Bordeaux type, as they alone combine speed, range and penetration. Use an eight-foot spray rod. Have a crook joint to set the nozzles at an angle of 45 degrees. Spray from a tower if the trees are beyond reach from the ground. For dormant and calyx spraying throw most of the liquid downward, stroking the branches from the tips toward the trunk, but some spraying must be done in every other direction as well. Do not try to improve on the formulas by adding other ingredients or by using the spray stronger than recommended. There's a reason.

Watch your spray pump. Have it overhauled and in readiness before it is time to spray. Wash out the spray liquid at the end of each day's work. In freezing weather drain off the liquids when through.

$225 SOMEBODY WILL WIN — SIXTY QUESTIONS — SOMEBODY WILL WIN $225

With the opening of the second period for those using our Contestant's Helpful Outfit, February 22, the first prize dropped from $300 to $225. On March 14 this prize reduces again to $200. Better start now by getting our Contestant's Helpful Outfit.

Read the Plan and Rules of This Big Free-for-All

FARM INFORMATION CONTEST

There are 60 questions which everybody should try to answer. They are interesting, they are entertaining, and the prizes make it worth your time to try to answer them. Look into the contest plan and fix your aim on the big cash awards.

READ THE RULES

Answer These Questions

21. What farm fowl has the same name as one of the warring nations of Europe?

22. Where is the key of the Bastile? (See almost any public school history or consult our CONTESTANT'S HELPFUL OUTFIT.)

23. If young swine are called pigs, what are young rats called?

24. What common bird has a name pronounced the same as a letter of the alphabet?

25. What will be the cost of running a 6-line "want" ad for three times in the Washington Farmer, The Oregon Farmer and The Idaho Farmer? For example: What will be the cost of running the following ad for three insertions in each of these state papers?

Coolidge Hatchery—S. C. White Leghorn baby chicks, standard bred, excellent type, vigorous, healthy, leaders in egg production. $12 per 100, $110 per 1000. Send for descriptive circular. C. C. Coolidge, La Grande, Ore.

(Five more questions will appear next week.)

Answers to the sixty questions from those who have secured our Contestant's Helpful Outfit have started to roll in, with the result that a very large number of persons will be registered in the First Period of the contest for the $300 prize. Read the Enlarged List and familiarize yourself with the advantage of using our Contestant's Helpful Outfit.

$800—IN CASH to Be Paid—$800

We will positively give EIGHT HUNDRED DOLLARS in cash awards (and more in event of ties) to the winners. As explained in the rules which follow, there will be five questions run in every issue of the Farmer for 12 weeks. The last five questions will appear in the issue of April 19.

You Can Enter Without Cost

You do not even have to be a subscriber of the Farmer to enter. As has already been stated, any resident of Washington, Oregon, Idaho or Montana is eligible to compete in this contest.

Five Questions Each Issue

The contest will be composed of 60 questions. Five will be run in each issue of the Farmer for 12 issues.

Answers to each question except No. 45 can be given correctly in from one to 10 words and will be given a score of 100 if correct. Answers to question No. 45 will be limited to 100 words each, and will be graded as to the common sense and general knowledge of farm conditions shown by the contestant without regard to spelling, grammar or penmanship. As with the other 59 questions, a perfect answer to No. 45 will be scored 100.

Perfect Score Is 6,000

The contestant who comes nearest to a score of 6000 and complies with all the conditions of the contest will receive the first prize; the next nearest, second prize, and so on. In case of a tie each tying contestant will receive the full amount of the prize.

There are 35 prizes as follows:

$150 is amount of First Prize. **$100** is amount of Second Prize. **$50** is amount of Third Prize. **$20** is amount of Fourth Prize. **$10** is amount of Fifth Prize. **$5** each, Sixth to Tenth Prizes. **$2** each Eleventh to Fifteenth Prizes. **$1** each, Sixteenth to Thirty-fifth Prizes.

OTHER RULES

The answers will be passed upon and graded by a fair-minded, thoroughly competent judge.

Two weeks will be allowed for sending in answers after April 19, 1917, date of the issue containing the last five questions.

Remember, your failure to answer all the questions will not necessarily exclude you from the contest. There are 60 questions to be answered and it is not reasonable to suppose that all our prize winners will attain a perfect score. Your answers must all be sent in at the same time. Do not send any answers until you have completed the full list or as many as you can answer.

Those who use our CONTESTANT'S HELPFUL OUTFIT will be able to send in their complete set of answers without delay, there being no need of their waiting for the questions as they appear in The Farmer from week to week down to the final issue of April 19. In order to get as prompt returns as possible from those contestants who use our CONTESTANT'S HELPFUL OUTFIT, extra inducement is made in the prize awards. SEE ENLARGED PRIZE LIST.

Announcement of prize winners will be made and prize checks mailed as soon after close of contest as possible.

If any point is not clear, do not hesitate to write the Farm Information Editor.

All answers must be mailed on or before midnight, May 3, 1917, as shown by post-office dating stamp on your envelope.

ORDER COUPON—If your subscription is paid ahead, the time paid for herewith will begin at the date to which you are now paid.

FARM INFORMATION EDITOR.
Review Building, Spokane, Wash.

Enclosed find $1 for one year, or $1.50 for three years' subscription to

THE WASHINGTON FARMER.

and enter me as a contestant in the Farm Information Contest. I am also to receive at once the complete CONTESTANT'S HELPFUL OUTFIT, consisting of guide against wrong answers, reply blanks, rules and all information to aid me to win a reward.

Name .....

R. F. D. ..... Town .....

State .....

Notice—Amount of remittance to be either $1 for one year's subscription to the Farmer or $1.50 for three years' subscription.

Answer this question: Are you now a subscriber?.....
If you wish paper sent elsewhere, fill in name and address.

A Valuable Aid to Contestants

One complete CONTESTANT'S HELPFUL OUTFIT, including all of the 60 questions and instructions and helpful warnings as to answers which would be wrong, and the correct answers to some of the most difficult questions, will be sent to any public library, free of charge, upon request.

To each contestant who sends in a new renewal or an extension of his subscription at the time of registering for the contest, this complete CONTESTANT'S HELPFUL OUTFIT will be sent in combination.

We feel that those beginning on the contest will find these suggestions as to what to avoid distinctly useful. This equipment supplies in convenient form everything needed to enable you to apply your ability to the best advantage, and will contain information enabling you to answer the most difficult questions correctly.

Puts Questions in Reach of Children

This CONTESTANT'S HELPFUL OUTFIT puts the solution of the questions in the reach even of the children, it being the purpose to make it possible for everybody in Washington, Oregon, Idaho and Montana to compete. This outfit includes, besides general information about the plan of the contest, the following:

Guide against wrong answers, which includes either correct answers of more difficult questions or easy references as to where to find the correct answers; and blank forms on which to write your answers in such a way that there can be no confusion when your answers are taken up by the judge for scoring.

It will be worth considerable to you to be assured that your answers are reaching the Farm Information Editor in such form that he will know in every instance exactly what question you intended to answer. This CONTESTANT'S HELPFUL OUTFIT will make it possible for you to

Begin Work at Once

On account of the large number certain to send for our CONTESTANT'S HELPFUL OUTFIT, thus making it possible for them to answer the entire 60 questions without delay, it is deemed advisable to offer some special inducements to secure prompt returns from this particular class of contestants. By securing the early replies of those who are thus supplied with the entire 60 questions, we will be able to have their papers carefully scored before the final rush of answers toward the end of the contest.

Understand, it is not absolutely required that those who use our CONTESTANT'S HELPFUL OUTFIT send in their replies at once, but, in order to induce them to get in early, the following plan for enlarging the awards to those prize winners whose answers come in early is offered:

ENLARGED PRIZE LIST—$300 CAN BE WON—ENLARGED PRIZE LIST

For those who use our CONTESTANT'S HELPFUL OUTFIT.

Thirty-Five Prizes	Amt. of prize if winner sends in answers during 1st period, Feb. 1- Feb. 21	Amt. of prize if winner sends in answers during 2d period, Feb. 21 Mch. 14	Amt. of prize if winner sends in answers during 3d period, Mch. 14 April 5	Amt. of prize if winner sends in answers during 4th period, April 5 April 19	Amt. of Prize for winner who does not send in answers before April 19
First Prize	$300.00	$225.00	$200.00	$175.00	$150.00
Second Prize	200.00	175.00	125.00	110.00	100.00
Third Prize	100.00	87.50	62.50	55.00	50.00
Fourth Prize	40.00	35.00	30.00	22.00	20.00
Fifth Prize	20.00	17.50	15.00	11.00	10.00
6th to 10th 5 prizes each	10.00	8.75	7.50	5.50	5.00
11th to 15th 5 prizes each	4.00	3.75	3.00	2.20	2.00
16th to 35th 20 prizes each	3.00	2.50	2.00	1.50	1.00

To secure our CONTESTANT'S HELPFUL OUTFIT, fill out order coupon on this page and send it in to Farm Information Editor, with your personal check, money order or 2-cent stamps, for $1.00 for one year or $1.50 for three years.

You must address

THE WASHINGTON FARMER
Farm Information Editor
Review Building, Spokane, Washington.

What Is Conspiracy to Defraud?

Answered by Judge Van Fleet Instructing Jury in Trial of Northwest Trading Company

The trial and conviction of the four officers of the Northwest General Trading company in the federal court at Spokane brought out a clear exposition by Judge Van Fleet in his instructions to the jury as to what constituted a conspiracy to defraud. Among other things, Judge Van Fleet said:

"The defendants are charged in an indictment with conspiracy. It charges the defendants on trial, and Lawrence Jack and Frederick B. Sears, now deceased, and divers other persons to the grand jurors unknown, with having on or about June 1, 1909, in violation of the criminal code of the United States, wilfully, unlawfully and feloniously entered into a conspiracy to commit an offense against the United States, and in furtherance of such conspiracy used the postoffice establishment of the United States to effectuate a scheme to defraud; that the scheme was, in substance, that the conspirators would operate certain mercantile corporations—the Northwestern General Trading company, the Olympic Trading and Supply company and the Iowa Mercantile company and divers other corporations to the grand jurors unknown—and induce the public to purchase shares of stock therein, asserted to be of great value, by representing that said corporations were cooperative mercantile establishments in successful operation whose objects were to sell merchandise at wholesale prices, plus the cost of handling, to their stockholders; whereas, in truth and in fact, the said corporations were not then being conducted successfully, but the principal object of the said conspirators in operating said corporations was, by false and fraudulent representations, to obtain money from persons named in the indictment and from the public in payment for of stock and to appropriate it to their own use.

Overt Acts Alleged.

"Certain overt acts, that is, open and manifest acts, are then charged to have been committed by the defendants on trial and said Lawrence Jack and said Frederick B. Sears in pursuance of such conspiracy, and for the purpose of carrying it into effect. In that regard it is alleged that in furtherance of the conspiracy the defendants on trial and said Lawrence Jack and Frederick B. Sears deposited certain letters, which have been read to you, in the postoffice of the United States at Spokane for mailing and delivery.

The alleged coconspirator named in the indictment as Lawrence Jack, and the alleged coconspirator Frederick B. Sears, and the alleged unknown persons, are not on trial here, and with them, therefore, your verdict is not concerned; nor does their absence in anywise affect the question of the guilt or innocence of the five on trial —Gale Smith, Cylde L. Davies, Stephen T. Knudson, John C. Lawrence and Olin C. Fowler."

Three Points for Decision.

Judge Van Fleet defined the three points for the jury to determine to be: First, if a conspiracy existed; second, was an overt act committed by one or the other of the parties to the case; third, was such overt act committed by one or more of said defendants in furtherance of said conspiracy?

"Of course, if you find that there was no conspiracy formed," continued the court, "or if found, that the defendants on trial were not parties to it; that no overt act was committed by any party thereto in furtherance thereof, then your inquiry is at an end and the defendants on trial must be acquitted.

"As I have indicated during the trial, it is necessary to warrant a verdict of conviction that the government establish an intent on the part of the defendants to defraud. To show this you should be satisfied that the defendants did not in good faith intend to conduct the corporations mentioned in a manner calculated to develop their operations into a successful and paying business in the interest of the stockholders, but that, either in the beginning or during the course of their operations, regardless of whether such business would be successful or beneficial to stockholders, the defendants agreed to continue or carry on such operations with the intent and for the purpose of selling the stock and obtaining money or property from others, therefore by means of false or fraudulent pretenses, representations or promises alleged in the indictment."

Continuing, the court instructed the jury that if it should find that the business was honestly conceived and conducted and that no conspiracy existed at any period of its operation, then the defendants should be acquitted.

"If the business is found to have been honestly conceived and conducted in the beginning and in its earlier stages and later became part of a conspiracy under which fraudulent act were committed, then a verdict of guilty is to be returned, notwithstanding the good intentions at the outset," the court instructed.

Mere failure in business, the court said, would not alone justify an imputation of an intent to defraud. This is merely a circumstance to be considered with the other evidence in the case and is not alone conclusive.

Intent to defraud must be shown in connection with the overt acts to be established by the prosecution, the court ruled. The intent may be determined by the jury from the circumstances surrounding the commission of the act.

"Men committing a wrongful act do not ordinarily proclaim in an open, definite manner the real purpose or intent with which the act is done, and therefore unless it could be inferred from the circumstances surrounding it the real intent could in most instances not be established," said the court.

Intent to Defraud.

"If the jury finds that any of the corporations named were not used in the general scheme to defraud it is asked to disregard such testimony unless it tends to explain the connection of the defendants with other persons or corporations.

"You will understand from this that it is not necessary that it be shown by the government that all of the corporations named in the indictment were in fact used or operated in furtherance of the alleged scheme to defraud," said the court. "It is sufficient if you find that some one or more of them was so used."

The mere receipt of compensation for the sale of stock in one or more of the companies, the court held, would not of itself be sufficient to establish an intent to defraud. This would merely be a circumstance to be considered in connection with other testimony. It was further held that where a defendant has consulted a lawyer in good faith and is given an inaccurate construction of the law; under which in good faith he does things which he thinks are legal this may be considered in connection with other evidence as to whether such person had an intent to defraud.

Evidence Touching Fraud.

The court further instructed the jury that the commission of a wrongful act by one of the defendants individually in the management of one of the several corporations involved would not warrant a finding of guilty unless it were shown that such dishonest act was in the furtherance of a scheme to defraud in which the mails were used.

"Where two or more persons act together understandingly in such a manner there is a conspiracy, although there may not have been a word spoken between them regarding it," continued the court. "Every scheme to defraud in which two or more persons understandingly carry it out is a scheme to defraud.

"Therefore, in the present case if you find from the evidence that there was an understanding among these defendants that the stock of these various corporations was to be and was sold to the public by means of false pretenses and representations—that is, if the defendants understood that the purchasers of stock were to be and were deceived as to the true conditions respecting these companies—then you may find that they conspired to devise a scheme to defraud as charged in the indictment.

Circumstances to Be Considered.

"Although the defendants may not have entered into any agreement as to the formation of a conspiracy, if the manner and circumstances of such illegal combination are such as to give the jury room to believe that one was formed, then it is justified in finding that a conspiracy existed in the absence of a written or oral agreement to this effect.

"It is not necessary that parties to a conspiracy shall all meet at one time and formally agree, for a conspiracy may be carried out without any formal declaration of its purpose by any of those concerned. Neither is it necessary that all of the parties to a conspiracy were members of it when originally formed, for if it is shown that a new or additional party came into a conspiracy after it had been formed for the purpose of aiding in its operation he is from that moment a fellow conspirator and responsible alike with the rest.

Acts Are Binding.

"It is required, however, that such new member of a conspiracy must know that the parties whom he is assisting are engaged in a common and unlawful design. Such knowledge may, however, be inferred from his conduct, and if his acts lead the jury to believe that he had knowledge of the intention of his associates to defraud this is sufficient. The act of one conspirator will bind all of his coconspirators, and likewise the declaration of one conspirator can be used against the others.

"If one is party to an unlawful scheme or plan or is a member of a combination, which he does not, in becoming a party thereto, know to be criminal, but later becomes aware of the criminal design, and does not withdraw or repudiate it, he may be found guilty of conspiracy The fact that a conspirator is a servant of or in the employ of another party to the combination does not preclude there being a conspiracy between them; and until there is an affirmative withdrawal from the conspiracy by the servant or employe his acts bind his employer and coconspirator."

Explains Overt Act.

Discussing what constitutes an overt act the court said: "The particular act need not be in itself criminal. It may be a perfectly innocent act. In this case the overt acts mentioned in the indictment were the use of the postal service by mailing to persons either printed or written matter containing statements tending to further the unlawful conspiracy charged in the indictment.

"It is sufficient under the law if it appears that the conspiracy was in existence at the time that an overt act in furtherance of it was committed, and that such overt act was committed within three years prior to the finding of the indictment".

The court said that previous evidence of good character could be taken as a circumstances along with the other evidence in the case. Evidence of previous good character should not deter the jury from finding the defendants guilty if the evidence, beyond a reasonable doubt, warrants it, he held further.

The court requested the jurors to disregar any impressions they may have formed following his questioning of witnesses, that might give rise to a belief that he held an opinion as to the guilt or innocence of the accused.

Burden of Proof.

Discussing the credibility of the defendants as witnesses, the court told the jury that they should be accorded the same degree of credibility as other witnesses, not overlooking, of course, the personal interest they may have in the outcome of the case.

The burden of proof, in the present case, as in all similar prosecutions, the court held, rests with the government, which, however, is not called upon to make a case free from all possible doubt. Such doubt should not consist of a mere fanciful hesitation, growing out of sympathy, and other than a fair and impartial consideration of the evidence, said the court.

"In arriving at your verdict, you should give no consideration to the fact that a defendant has been indicted as tending in any way to establish guilt," said the court.

Convict One or All.

The court held that the jury might convict one or more or all of the defendants as the facts may warrant. "It is not incumbent on the government, notwithstanding the offenses charged, to necessarily show that all of the parties alleged to have been concerned in the conspiracy, were in fact participants in it, in order to convict any of them.

Speed of Fly.

In proportion to its size a fly walks 13 times as fast as a man can run.

Rabbits and rattlesnakes, cougars and bald-faced bears, outlaw ponies, squirrel-catching cats and many odd characters of pioneer days in Washington—

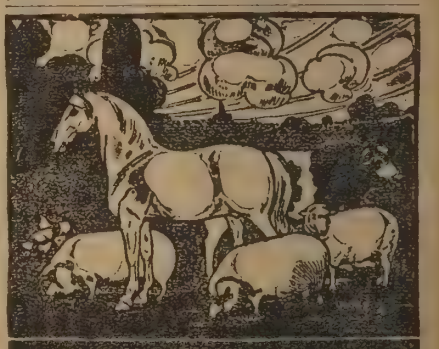
All woven into a vivid narrative which the author calls

THE UPS AND DOWNS OF A BUNCH GRASS BOY

The first instalment of which will appear in next week's issue.

In this series of articles Mr. Joe Ashlock has turned back the pages of his life to the halcyon days of his boyhood, spent among the early settlers of the Big Bend section of Washington. He takes us back to the old Big Bend that was—wild, sparsely settled—an immense range of virgin bunch grass country over which there brooded at time a spirit of great loneliness for a little boy.

We haven't had anything to offer you for a long time that we believe will give you so much real enjoyment. Watch for the opening article of the series in next week's issue.



KRESO DIP No. 1

will
Insure Your Live Stock
AGAINST
Parasites and Disease.

KILLS LICE, MITES and FLEAS.
FOR SCRATCHES, WOUNDS, SCAB, and COMMON SKIN TROUBLES.

Prevents Hog Cholera.

Experiments on live hogs prove that a 2½% dilution of Kreso Dip No. 1 will kill virulent Hog Cholera Virus in 5 minutes by contact.

We will send Free Booklets on

The treatment of mange, eczema or pitch mange, arthritis, sore mouth, etc.

How to build a hog wallow, which will keep hogs clean and healthy.

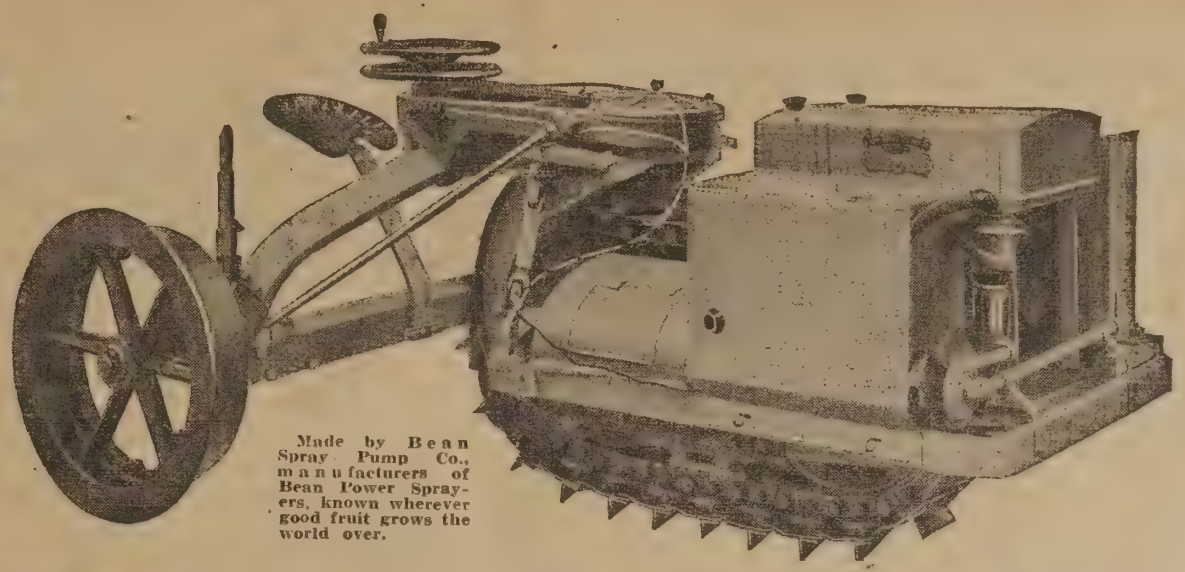
How to keep your hogs free from insect parasites and disease.

Write for them.

Kreso Dip No. 1 in Original Packages

FOR SALE BY ALL DRUGGISTS.

PARKE, DAVIS & CO.
Department Animal Industry,
DETROIT, - - MICH.



Made by Bean Spray Pump Co., manufacturers of Bean Power Sprayers, known wherever good fruit grows the world over.

BEAN TRACKPULL TRACTOR

The Little King *of* Orchard Tractors

Goes under the boughs of trees only 4 feet off the ground. Gets into corners where a horse could never go. Works close to the trees without injuring them.

The Beam TrackPULL six-horse Tractor, combines giant strength with light weight and long traction. Just think of a tractor so small that it will go under boughs only 4 feet off the ground and will work right up close to the trees and between vines or anything that grows in rows only 7 feet apart.







That's what the Bean TrackPULL does. It will do your plowing, your cultivating and your discing, and then run stationary machinery when it is not working in the field.

It actually does the work of six horses on what it would cost you to feed one team, and you can work it 24 hours a day if you want to.

This Little Tractor Is Better Than Horses

It will do your heavy work when you want it done. It will save you money by saving you the cost of man labor and by doing more work and better work in less time than it takes horses to do it. It will not be affected by heat or insects. It will cultivate deep in hot weather. It will cost nothing to maintain when it is idle. It will mean that you will have a large unit of power at your command day or night.

Read what this orchardist wrote us a few days ago:

"By accident I was permitted to witness a few minutes' demonstration of the Bean TrackPULL Tractor last Saturday. For some time I have been looking for a practical orchard tractor and have examined not a few with the orchard work exclusively in mind. From what I saw at your demonstration, for wieldiness and flexibility you have thus far outclassed the whole bunch. Indeed, it would seem the time has come for 'that good span of bays' to hunt another job! The demonstrator, as if by magic, made his 'critter' do anything and everything among crowded trees that any orchardist could reasonably demand. The impossible had to about face, gracefully make his bow and depart."

IDEAL *for* SOFT SOIL *and* CULTIVATING

This tractor weighing only 2800 pound **pulls instead of pushes itself over the ground.** This is a big advantage over the tractor which has a rear drive. The Bean TrackPULL **does not get stuck in soft places.** You simply **swing the whole front end to right or left,** just as you would a team, and **keep on going.**

The Bean lays its own track on which it pulls. This wide track offers much less resistance than the rear drive tractor that sinks in and packs the soil. The Bean TrackPULL **packs the soil less than a man's shoe when he walks,** and the TrackPULL has **full power on the turns, as well as on the straight-away.**

The Bean TrackPULL **plows closer to vines and trees than a team. Makes little difference how far off center you hitch. It gets under the branches of trees no team can get under. Turns inside of a 10-foot circle.** A boy can operate it easily. It is equipped with a pulley for stationary work.

BEST CONSTRUCTION—Lasts Longest

The Bean TrackPULL six-horse Tractor is built in one size only, 6-h. p. at drawbar and 10-h. p. at belt.

The motor is a Le Roi 4-cylinder vertical type 4-cycle, equipped with Donaldson air clarifier. Bosch ignition, water cooled, with centrifugal pump, also fan, combination pump and splash lubricating system.

We use Hyatt bearings in track wheel and sprocket and in track rollers. There are six New Departure ball bearings in the transmission, running in grease and all dust proof. Gears are steel.

PROMPT DELIVERIES IN APRIL.

We are behind on orders and are working night and day. We have started work on an addition to our plant to increase our capacity and will be able to make prompt shipments in April.

DON'T WAIT—MAIL THE COUPON TODAY.

We will gladly send you our folder telling you more about the Bean TrackPULL Six-Horse tractor and what it will do for you.



This or This



BEAN SPRAY PUMP CO.

254 W. Julian St., San Jose, Cal.

COUPON

Bean Spray Pump Co.,
254 W. Julian st.,
San Jose, Cal.

Please send me prices and the big folder with the complete story of the BEAN TrackPULL. If I decide to purchase I will need my tractor about

Date ..... 191....

I work .....acres.

I grow .....
(Name fruits or vegetables you produce.)

Name .....

St. or R. F. D. .....

City .....

County .....

State .....

Deeds in Wive's Name

As to Federal Farm Loan Association Members

By N. W. DURHAM

Chairman of Spokane Committe on Federal Land Bank Board

An interesting and close question is raised in the following communication from R. Fairbank Newberg, Ore.:

"We organized the first federal farm loan association in Yamhill county, and others will follow. We got into trouble when we got organized over who were entitled to membership. There were two elected directors and one of them was elected president, though the deeds to their lands were in their wives' names. They were objected to and so we elected others, but would much rather have retained them, but we wanted everything just right. Now we want to know if the ones we objected to were eligible to be members and hold the positions we elected them to?

"In one case the land came to the wife as part of an estate. In the other the land was deeded to the wife by request of her husband in order to save probate expenses in case of death of her husband."

The law says: "Ten or more natural persons who are the owners, or about to become the owners, of farm land qualified as security for a mortgage loan under section 12 of this act, may unite to form a national farm loan association."

Section 12 provides that "no such loan shall be made to any person who is not at the time, or shortly to become, engaged in the cultivation of the farm mortgaged."

While the writer of these articles is not authorized to speak officially for the federal farm loan board, we are confident that the board will adopt a broad and liberal course in chartering local farm loan associations, and that they will not withhold a charter because of slight technical irregularities.

In one of the cases cited, the land in question seems to be community property, and we think no objection would be raised against the husband serving as director or officer of the associatiton. The other case is less clear, for the land seems to be the separate property of the wife. If she is desirous of making a loan on it, and her husband is cultivating it for their mutual benefit, we think the board would also recognize his election as director and his right to serve."

George W. Smith writes from Springston, Idaho: "I would like to know if I could borrow money from the bank to pay for a farm, and give the bank first mortgage on the land. Please give me full particulars in regard to this."

Yes, provided you are in a position to finance the deal. If, for illustration, the price of the farm was $3000, you could borrow from the federal farm loan bank 50 per cent of that sum, assuming that the bank's appraiser found that the land was worth the $3000. If you had the remaining $1500 yourself, you could add to it the $1500 borrowed from the government and thus complete the deal. Or, lacking the $1500, if the present owner was willing to take your second mortgage for $1500, it could be worked out in that way.

The federal farm loan board has expressed its readiness to help landless men of small means acquire farms in this manner. It has been criticized for this policy by the Farm Mortgage Bankers' Association of the United States, but the Wall Street Journal, a daily newspaper of wide circulation among the big interests, but pretty broad and independent in its utterances, well says in defense of the board:

"There is still no reason to change the opinion expressed here in the former article that the original owner in this case, well-satisfied with the character of his former tenant, may be satisfied to receive $2500 in cash and a second mortgage on the property, under the conditions outlined in the Wilson article. It is by no means to be inferred that the owner would become hopelessly involved and default. We admit it would not be as easy a matter for the tenant as would have been the case had he accumulated something of a nestegg.

"But the Farm Mortgage Bankers' association and other mortgage concerns which are not in sympathy with the farm loan act, approach the matter from a wrong standpoint. They view the problem in the light of conditions under which they have been doing business. They fail to appreciate the fact that the federal farm loan act is setting out to accomplish something which independent concerns have been unable, or unwilling to do heretofore.

"No one doubts that the farmer with some means has little difficulty in securing all the credit he wants. It is to help those that formerly have not had the means of commanding credit that the farm loan act is designted. It is not surprising if the means to that end must upset traditions and establish precedents. The Form Mortgage Bankers' association does not have to be told that various successful real estate operations have been carried out when unusual credit has been judiciously extended. The mortgage concerns have secured pretty well the cream of the business, but there may be excellent results to be obtaind in the lower strata of farm mortgages heretofore ignored."

Next week's article will discuss the amortization feature of the law—the plan whereby the borrower keeps whittling down the principal of his debt over a long period of time—not less than five years and not more than 40, as the borrower may elect.

STUMP LAND PROBLEM

Proves an Expensive Investment.

To the Editor of The Washington Farmer: I have 40 acres of land that is cleared, except for the stumps, at a cost of $40 an acre. By careful measurement I am losing the use of one square rod for every three stumps, or the equivalent. Three expert stump dentists concluded it was worth $1 a stump, or $3 per rod to shoot and burn them and fill the cavities.

Results: First clearing of one acre, $40; stump dentistry, 160 rods at $3 per rod, $480; total cost per acre gained, $520; interest at 6 per cent, $31.20.

Will some one tell me how to farm that acre and make it pay interest?

N. S. A.

Lynden, Wash.

Answer by Leonard Hegnauer, state college extension specialist.

It would be difficult, even under the present high prices of farm products, to find a crop that would pay good interest and for labor on such an expensive investment. I am free to confess that I am at a loss to suggest a crop that would be profitable, all costs considered. If one had an intensive crop which was very high priced, and which could be grown only on a very limited area, then it might be possible to make the interest on such an investment. However, I know of no crop that would in all ways and at all times be dependable as a profit-producing proposition under such conditions as you have outlined in your letter.

SIDEWALK STALLS

For Farmers at North Yakima.

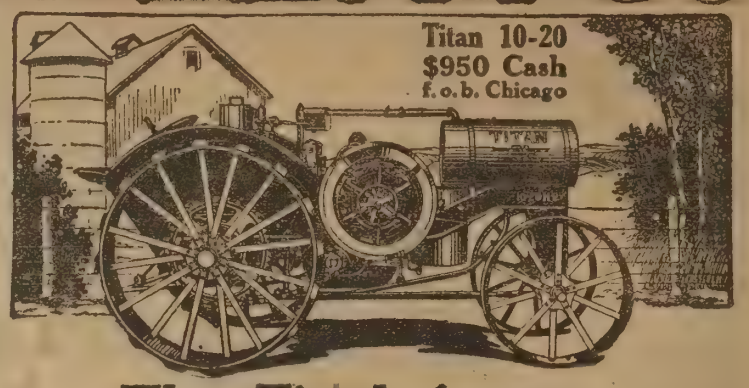
In order that farmers with produce of one sort and another to sell may have opportunity of doing so, an agreement has been reached between the owners of the public market at First and A streets and the city commissioners which looks to the establishment of sidewalk stalls as soon as the growing season opens. The market people will stretch an awning over the sidewalk about their building and provide benches against the building. The farmers may drive up to the curb with their produce and display it on the sidewalk stalls. The commissioners will permit the use of the sidewalk for the purpose.

Whatcom County Fair.

The Whatcom County Fair association finds itself $1200 better off than at the corresponding time last year, $500 having been invested in permanent investments, $500 of the association's notes paid off and $200 worth of old bills liquidated. W. H. Waples was named again as president and David W. Bender succeeds H. E. Stewart as secretary.

Pomeroy Farmers' Union.

Pomeroy Farmers' union in Garfield county has elected James Oliver president and W. J. Schmidt secretary-treasurer. A sack committee was appointed consisting of James Oliver, W. A. DeDow and D. B. Williams.



The Final Answer

To the Tractor Fuel Question

WE believe that a farmer who buys a kerosene tractor costing hundreds of dollars is entitled to get what he pays for.

We **know** that **Titan** tractors are real kerosene tractors. When you buy a **Titan** tractor you are safe. You have the **written guarantee of a responsible Company** that your tractor will do good serviceable work, **using common coal oil as fuel** at all loads. That is the final answer to the tractor fuel question.

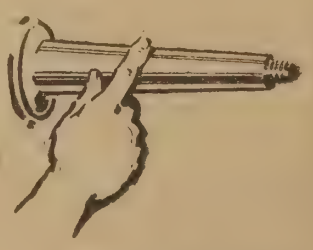
Titan tractors are now built in three sizes, 10-20-H. P., the 3-plow outfit; 15-30-H. P., for 4 and 5 plows; and 30-60-H. P. for the heaviest work of the largest farms. All operate on kerosene.

The 10-20-H. P. size is a two-speed tractor, 1.85 and 2.50 miles per hour, with a smooth running twin-cylinder engine, slow speed, mechanically oiled, starting and running on magneto. It can be used for any field work you would expect nine or ten horses to do, and it will run any machine that takes up to 20-H. P. at the belt.

If you place your order soon you can have a **guaranteed Titan tractor** for the heavy spring work. Drop us a line so we can send you full information at once. Don't wait. Write now.

International Harvester Company of America
(Incorporated)

Crawford, Neb. Denver, Colo. Helena, Mont. Los Angeles, Cal.
Portland, Ore. San Francisco, Cal. Spokane, Wash. Salt Lake City, Utah



No Gumming
Or Scoring

—when you use Mica Axle Grease. The grease is always evenly spread and it *lasts*. Mica Axle Grease would still be good grease even if it contained no powdered mica. But the mica makes it even better. Gives extra lubrication—forms a smoother surface—makes the grease last twice as long. Get a can from your dealer today.

Standard Oil Company
(California)

MICA AXLE GREASE

Build Up the Quality of Your Poultry

Cash returns from your poultry are in direct proportion to the capacity your fowls have for heavy egg production.

Dispose of the "boarders" in your flock and secure new stock from the advertisers in the poultry columns on our "Want Ad" page.

$275 ONLY TWO WEEKS TO MARCH 17TH $275

Then Your Opportunity to Grasp This Big Prize Will Fade Away

Only Two Weeks to Win

Besides the Possibility of Your Winning One of the Thirty-Two Cash Prizes You Get This Paper at the Very Low Special Rate of 3 Years for $1.50

NOTICE—The Contest Editor is always pleased to answer any questions and wishes contestants to feel free to make any inquiries when they are in doubt. Letters of inquiry must be signed, however, in order to secure answers. It is not found desirable to try to answer inquiries through the Farmer, as the greater number of the questions asked have already been answered several times on this page. Sign your names, because your letters will not be used, in any event, without your consent and no contestant's name will be attached to any published letter without first securing the special permission of the writer. It is a genuine pleasure to answer your inquiries.

Read the Conditions

Simply add up the figures in the puzzle chart as if they were in one long column. Your success depends on the accuracy of your total thus obtained.

Figures run from two to nine, and there are no double figures or characters which are not figures. The tail of the "6" has a decided curve, while the tail of the "9" is straight. All other figures have the usual characteristics, allowing no question as to the identity of any figure.

In event that no one submits the correct total, prizes will be awarded for the next nearest solutions.

This contest is restricted to persons residing in Washington, Idaho, Oregon and Montana.

A payment of $1 to $1.50 on subscription to The Farmer entitles the subscriber to enter the contest.

If your subscription is already paid in advance, your expiration date will be set ahead beyond this date to which you are now paid the full period for which you pay at this time. The advantage of paying $1.50 instead of $1 is that the winner of any of the first four prizes receives additional prize dividends apportioned on the amount paid in on subscription, besides the fact that $1.50 during this contest pays for a three-year subscription to the paper, while $1 pays for only one year.

More than one solution may be submitted by any contestant, by an additional subscription payment of not less than $1 nor more than $1.50. It is not necessary to pay the same amount with each solution if more than one is submitted.

You can send in a subscription for some one other than yourself and have the solution registered in your own name. Remember that by paying $1.50 instead of $1 on subscription, the larger will be your dividends if you win one of the four leading prizes; but not more than $1.50 will be received with one solution.

$750-Prizes-$750

FIRST PRIZE, $200,

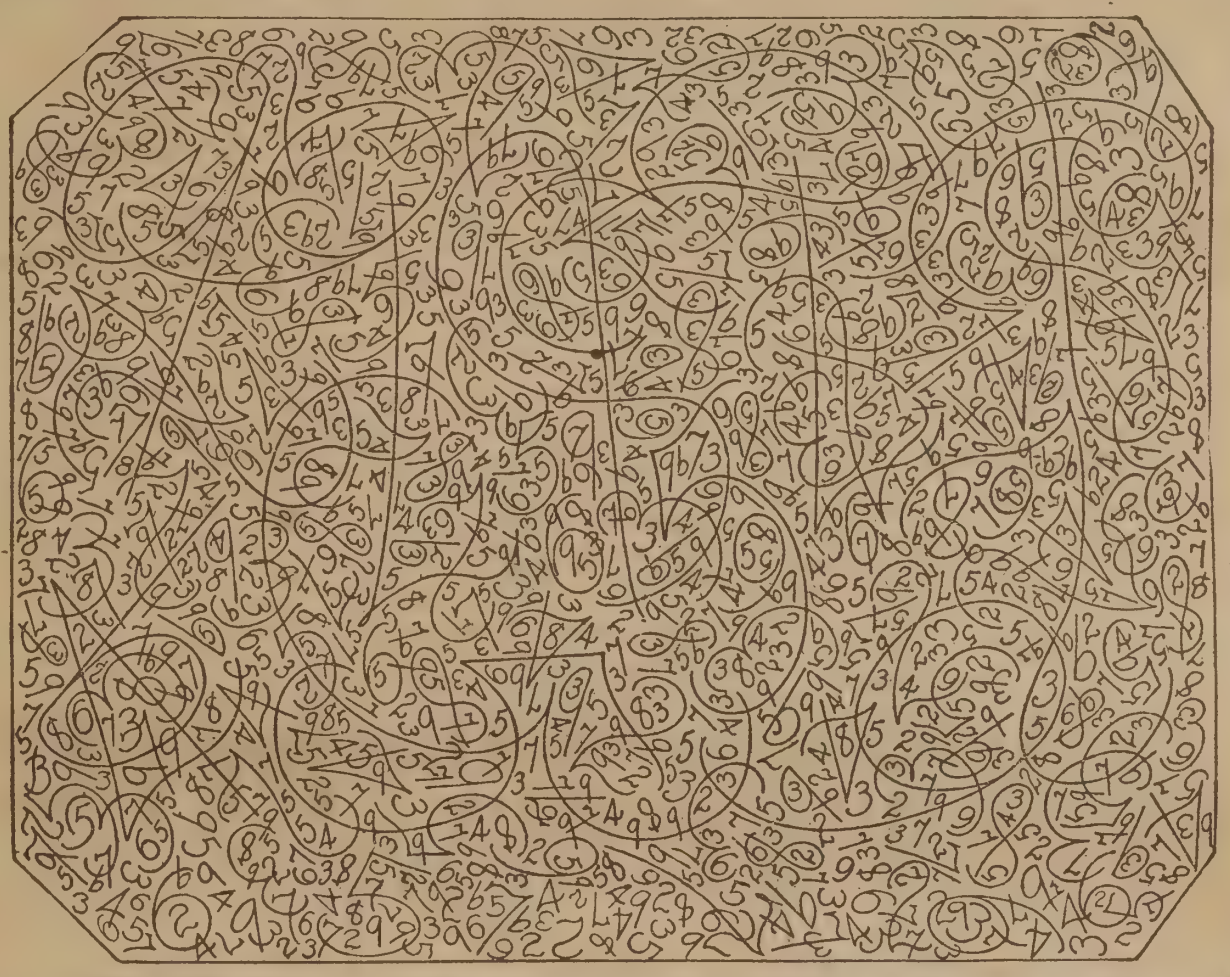
to which will be added 50 times the amount paid by the subscriber with the winning solution. For example, if you pay $1.50 on subscription, this prize will be worth $275.

SECOND PRIZE, $100,

to which will be added 30 times the amount paid by the subscriber with the winning solution. This prize may be worth $145.

THIRD PRIZE, $60,

to which will be added 20 times the amount paid by the subscriber with the winning solution. This prize may be worth $90.



FOURTH PRIZE, $50,

to which will be added 10 times the amount paid by the subscriber with the winning solution. This prize may be worth $65.

FIFTH PRIZE, $40.

SIXTH AND SEVENTH PRIZES, Each $20.

EIGHTH TO SIXTEENTH PRIZES, Each $7.

SEVENTEENTH TO THIRTY-SCOND PRIZES, Each $2.

CASH MUST ACCOMPANY.

Don't send in your charts and working papers unless called for by the Contest Editor. Simply write your solution in blank space provided in "Registration Blank."

Something to Know

If your subscription is paid in advance, farther payment will be credited on an extension of your subscription from the time to which it is now paid.

Any solution unaccompanied by payment on subscription will not be entered.

REGISTRATION BLANK

Cut out this blank closely around the border and send it in with your solution and money.

To the Farmer Contest Editor:

Date sent .....191..

I enclose $..... for.....subscription to The Washington Farmer.

Name .....

Town .....

State .....

SOLUTION AND PAYMENTS.

The following spaces provide for three solutions, with the payments you desire to make with them. You may submit one or as many different solutions as you wish. You can subscribe for one or three years as per printed schedule, with each solution, as provided for in "The Conditions."

Solution.	Amount Paid.
.....	$.....
.....	$.....
.....	$.....

Answer this question: Are you now a subscriber? .....

If you wish paper sent elsewhere, fill in name and address.

.....

.....

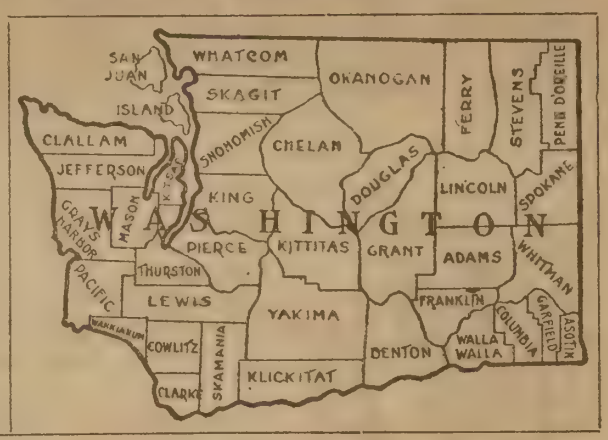
You must address all inquiries and solutions to

The Washington Farmer Contest Editor

Review Building Spokane, Washington

Boys and Girls Leading Crop

Wheat Takes Second Place to Boys and Girls in One of Big Wheat Growing Districts; Cows Are Placed in Third Rank.



OTHELLO, Adams County, Wash., Feb. 19.—We consider the leading crop to be our boys and girls. We are striving to make them good American citizens. The next is wheat and is practically "it" in the way of cereals in this county. Some farmers plant a few potatoes but our merchants ship them in by carloads in November and the farmers got their supply then. It is a well-known fact that we may grow very good potatoes, but the wheat idea has the average farmer under control and he prefers to raise wheat and buy his spuds. Dairying is the next in importance. Many are increasing their herds of the dairy type. Hog raising and horse raising is commanding the attention of nearly all farmers. Sheep are grown quite extensively in the isolated portions of the county. Poultry cuts no small figure in keeping down expenses on the farm. Fruit growing receives very little attention although many varieties may be grown successfully. There has been some trial on new forage plants but the very best for the dry parts is rye. Peas have been tried and Sudan grass, but it has not proved very successful. Corn ranks next to wheat and rye for forage. The promise for a good crop this year does not look so very bright because of lack of moisture. Dry dirt may be turned up by the plows in places and the average depth of moisture on stubble is about eight to 10 inches. The writer has lived here 16 years and can not recall similar conditions in that time. Farmers are beginning field work on a limited scale. Some frost is in the ground. A. O. LEE.

Pears Are in Lead.

FAIRFIELD, Spokane County, Wash., Feb. 19.—The 10 leading products of this portion of Spokane county are peas, wheat, oats, timothy, alfalfa, hogs, dairy products, poultry, fruit and potatoes. Aside from the first three crops, the other seven are only of minor importance. Wheat and oats are both giving way to the peas, but will not be entirely abandoned. However, some of the larger farmers have abandoned both wheat and oats. Timothy hay and alfalfa are grown to some etxent on the waste places by many farmers. Hogs are a profitable side line to glean the fields and take care of the cracked peas where peas are grown. The dairy, poultry, fruit and potatoes are of some importance, but in the main only supply the home demand. Live stock such as horses and cattle just about keep up the local demand. In fact, cattle are losing out on account of the farmers getting away from summer fallowing by growing peas, and this does away with the summer pasture. The coming season promises to be one of the most profitable this section ever had. Every acre that is not in peas will be in oats and a good price for all is assured.

ROY G. ADAMS.

Peas Increasing.

SPOKANE, Spokane County, Wash., Feb. 21.—Spokane county is preeminently a wheat growing county, and will always remain as such. Other leading productions of this county include oats, peas, barley, potatoes, apples, clover, sweet clover, alfalfa and truck crops. I think that these are named according to their importance in this county. The acreage planted to the pea crop is very much on the increase this season. In all probability we will have three times as many peas in the county as grown here previously. Likewise, the seeding of clover is increasing very much here and in some sections the acreage is becoming sufficiently large that we contemplate the introducing of a clover huller in at least two sections of Spokane county the coming season. Several different men have planted approximately 75 acres of red clover on their farms.

With the coming of the growing of peas, there is a consequent falling off in the amount of acreage devoted to the corn crop. Corn has never been a very successful crop for farmers in the non-irrigated sections, and where it has been used as a silage crop it is now being replaced by combinations of wheat and vetch and also by oats and peas, which are grown together. In live stock and dairying, interest centers in the production of pork, milk, butter and eggs. For this line of production very effective stimulas has been given such work by the introduction of the growing of peas and cheap silage crops, such as wheat and vetch, oats and peas, wheat and sweet clover, and have materially stimulated these industries. Sweet clover as a pasture crop is also coming to the front more and more each season. J. R. SHINN.

Need Home Cannery.

MALAGA, Chelan County, Wash., Feb. 7.—This community has increased in the production of dairy stock, fruit and grain wonderfully in the last four years. At one time this was a great hay country, but when fruit was on the boom in the Wenatchee valley nearly every one here put in orchards instead of hay and for a few years they did not even take advantage of growing hay between young trees. When the fall in the price of fruit came, farmers turned to growing hay again, but not as much as before. The dairy business has come to the front here now, in spite of the market 20 miles away. If there was a creamery or a market of some kind here nearer home the dairymen would then have a better chance and they could then afford to build better barns and silos, take better care of their dairy cows and, in fact, make it pay and pay well.

MRS. O. ALLENBAUGH.

How, When and With What to Spray

Expert Tells How to Eradicate Northwest Orchard Pests

(Continued from page eight.)

hale any of the gas, for it is fatally poisonous. Do not fumigate evergreens. Do not fumigate stock after the buds are open. For grafts or scions use two-thirds the formula. For greenhouses use one-third the formula.

15—WEED KILLERS.

A. Iron Sulphide.

Iron sulphide (green vitriol or copperas) .....20 to 80 pounds
Water ..... 50 gallons

B. Arsenite of Soda (Poison).

White arsenite (arsenious acid)..1 lb.
Potash or lye .....2 pounds

Boil ingredients of B together in two gallons of water. For use dilute this stock solution to 50 gallons of water.

Use: Either A or B sprayed over young weeds will kill them. Used for mustards and other broad-leaved plants. Old weeds become very resistant.

16—COMBINATION SPRAYS.

Some sprays are not injured if mixed together. Other sprays have their properties changed when combined and should not be mixed. A combination spray for apple scab, codling moth and aphids could consist of.
40 per cent nicotine.....1 pint
Lime-sulphur, 32 degrees...5 gallons
Arsenate of lead, paste.....5 pounds
Water .....125 gallons

To this spray soap should not be added.

The following table shows what sprays can be mixed together and what ones are incompatible. "X" indicates that there is but slight or no chemical reaction and the sprays can be safely mixed; "O" indicates that there is a reaction which harms or destroys the value of the individual sprays; "R" indicates that the mixture is more or less repellant to the taste of chewing insects and hence the combination is not apt to be so effective as if the arsenical were used alone; "S" indicates that the combination might scorch foliage; "U" indicates that the mixing is unnecessary.

	Lime-sulphur	Soda-sulphur	Soap	Crude oil emulsion	Kerosene emulsion	Tobacco	Arsenate of lead	Bordeaux	Atomic sulphur	Iron sulphide
Soda-sulphur	Ux									
Soap	O	Ux								
Crude oil emulsion	O	x	Xu							
Kerosene emulsion	O	x	Xu	X						
Tobacco	X	o	X	X	X					
Arsenate of lead	Xrs	O	os	xrs	xrs	Xr				
Bordeaux	O	O	O	O	O	X	xR			
Atomic sulphur	Ux	Ux	X	Ux	X	X	X	Ux		
Iron sulphide	Ux	Ux	x	Ux	X	X	X	Ux	Ux	
Lime	Ux	o	o	o	o	X	xR	ux	ux	ux

Trying Artichokes.

NEPPEL, Grant County, Wash., Feb. 16.—The main crop here is alfalfa. Others are apples, pears, apricats, cattle, hogs, sheep, melons, cantaloupes and vegetables. This season we are trying sugar beets and artichokes. A new cheese factory is being installed here. The following plants have not proved profitable on account of the marketing conditions or heat: Oats, barley, potatoes, parsnips, cabbage, rutabagas and turnips. The coming season is very promising, as the federal loan act promises to put the homesteader on a sound working basis, which has never been accomplished before.

MARTIN PENHALLICK.

Delinquent Taxes.

Philadelphia has $1,055,000 in delinquent 1915 taxes on its roll, which called for $16,000,000 in that year.

1842 The Seventy-Fifth Anniversary of 1917

P&O

LIGHT DRAFT PLOWS

Built for the Field Test.

Three-Quarters of a Century of "Knowing How" Hammered Into Every One of Them.

The product of the Parlin & Orendorff Co. has always been noted for simplicity of construction, great strength and ease of operation. It was upon such a basis that the founders of this business made their implements, established their reputation, and built their factory. It is upon the same foundation that the business has been carried on to this day, and in 1917 we celebrate our Diamond Jubilee; 75 years of practical experience gained through constantly striving to provide for the exacting requirements of three generations of American farmers.

For an even three-quarters of a century we have met the demand, and today we operate the largest and oldest permanently established plow factory in the whole world. "It's the way we build them."

P&O

Light Draft Plows, Harrows, Planters and Cultivators are made in all types and sizes, to meet the conditions in all sections, and are Backed by an Unqualified Guarantee.

We also make the most complete line of Traction Engine Plows produced, and we have a special catalog devoted to these famous plows.

The P&O Little Genius Engine Gang Plow

was the most popular plow shown at all points on the 1916 National Tractor Demonstration.

We will send P & O Catalogs to any address. While P & O Implements are sold only through established implement dealers, we welcome correspondence from farmers in all sections.

Ask Your Dealer or Write Us.

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Sioux Falls Spokane Denver Oklahoma City
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SEEDS

are carefully selected and tested. This means bigger crops, of better quality. Our Alfalfa, Red Clover, Alsyke Clover, White Clover, Sweet Clover and Timothy are all hardy western-grown seeds.

Our wheat, oat and barley SEED are grown in the Mountain Valleys of Utah and Idaho. Our FREE catalog tells all about Vogeler's Purity Seeds—the best money can buy. Write today.

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Salt Lake City, Utah.

GOOD SEEDS

GOOD AS CAN BE GROWN
Prices Below All Others

I will give a lot of new sorts free with every order I fill. Buy and test. Return if not O. K.—money refunded.

Big Catalog FREE

Over 700 illustrations of vegetables and flowers. Send yours and your neighbors' addresses.

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WHEAT, ALFALFA

and other grains yield more where a perfect seed bed is prepared. The Western pulverizes, packs and mulches—makes a perfect seed bed at one operation. Saves seed, time and horse power. Is especially adapted for breaking crust on winter wheat or other grain or in orchards after irrigation or packing rains. It forms the hardest crust into a granular mulch without hurting the grain, and prevents evaporation.

Western Pulverizer, Packer and Mulcher 3 Machines in 1 made in 3 sizes, 1 and 3 sections, prices $20 and up. We want every farmer to have our free catalog before buying a roller or packer. It proves we can save you money and have far the best machine. Contains full description, price direct to you, letters from many farmers proving its advantages over other makes, and much other valuable information. Send for it today.

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WESTERN LAND ROLLER CO., Hastings, Nebr. Box 200

America Beats Time

Government's Position a Trying One

At the time of this writing the United States still lingers on the verge of actual hostilities toward Germany. The German submarine warfare is being carried on relentlessly against ships of both belligerents and neutrals. Reliable statistics are unobtainable, but it is known that enough vessels have been sent down and enough intimidated and kept off the seas to affect seriously the supplies reaching England and her allies. How seriously, none but those at the seat of government in London can actually know. In an address, parts of which became public last week, the British premier admitted that the submarine menace must be checked or overcome if Britain did not wish to suffer the pangs of hunger and possibly lose thereby the war it is now waging.

America's Position.

The position of this country is one difficult to understand. Comparatively few of its citizens, it would appear, desire actual hostilities toward Germany or any country, yet many feel that the limit of national patience has been reached. Many others believe that this country should refuse to enter the war until some specific injustice against American citizens be committed, such as the destruction of American lives by submarine activities. This is apparently still President Wilson's point of view.

Germany Satisfied?

Up to this time no "overt act" has been committed against the United States. Reports of the loss of American life have been heard, but under conditions and surrounded by such doubts in certain instances as to make it appear to the authorities at Washington that none of them has been the "overt act" which President Wilson at the outset admitted he feared would be committed.

That Germany is bending every effort to prevent conflict with this country without actually giving up her policy of submarine warfare is evident. Not only does she wish the United States to take no part in the armed conflict against her, but she is believed by many to be satisfied with the result of her threats against shipping without actually sinking American ships. For it is apparent that American ships, like those of many other neutrals, are in large part avoiding the war zone. Either they are not sailing, or they are trading in other ports. To what extent American shipping is tied up by this intimidation is difficult to learn.

Holland Suffers Loss.

One of the most startling acts of the German submarines so far reported was that of the destruction of seven ships belonging to Holland. It is claimed that these vessels were given promise of safety if they sailed from Falmouth, England, in one fleet, which they did. Three of them were outward bound from Holland and three homeward bound. It is also reported that their crews were rescued.

Congress on Prohibition.

Congress has passed a prohibition measure which makes states that have partial prohibition absolutely dry. The measure prohibits the interstate shipment of intoxicating liquor into a state where its manufacture and sale is prohibited except under a permit system. This new law, which becomes effective immediately unless vetoed by President Wilson, supplants the permit system in Washington and makes Washington "bone dry" at once. As a result, county auditors report an enormous demand for permits during the last week, thousands of people hurrying to secure one last shipment of liquor before the federal act goes into effect.

The effect of the new law in the northwest is especially interesting. Idaho and Oregon were already under absolute prohibition, but the permit system was in effect in Washington. The Washington legislature has recently passed and Governor Lister has signed a bone dry law that would become effective regularly 90 days after the adjournment of the legislature. But a referendum movement looking toward holding the bill up until the election of 1918 has already been started. The result of the federal act will be to make the state dry without the approval of the legislature's law, and therefore the attempted referendum movement must come to naught.

Byproducts Plant

Planned for Spokane District

W. H. Paulhamus of Puyallup and Sumner, where he has been successful in the cooperative development of the fruit and vegetable cannery business, is taking steps looking toward the establishment of a similar industry in Spokane. Negotiations are under way for one of the Spokane brewery plants to be converted into a byproducts plant.

Mr. Paulhamus and officials of the Spokane Chamber of Commerce are enthusiastic over the possibilities, stating that the only question at stake now is the tonnage of vegetables and fruits made available for the plant by growers in the Spokane district.

Details of the financial arrangement for establishing and operating the proposed plant have not been made public, but it is understood that Spokane capital will be available.

Producers in the district responded enthusiastically at the meeting held in the territory affected last week, since which time representatives of the chamber of commerce have been circulating papers for pledges of raw materials for the cannery the coming season.

High Ideals.

"You should think of higher things.'

"I do. I am entirely unable to keep my mind off the price of meat and gasoline."

E. Foss, Tolt, Wash.: "I certainly would be lost if not for your magazine to help me on my farm. We all watch very eagerly for it to come. It contains such an amount of things for our cattle, farms, poultry and so forth."

Eureka Potato Planter

Raise Potatoes This Year

Increase your profits by using our potato planter. Opens furrow, drops seed any distance or depth, covers, marks for next row—all automatically. Puts on fertilizer if desired. One man operates and sees seed drop. Made of steel and malleable iron, assuring long service and few repairs.

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1 OIL SUPPLY REPLENISHED ONLY ONCE A YEAR

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Barley



Early ripening varieties. Salzer's Silver King has yielded 173 bu. per acre. Finest for malting and feeding. Northern Grown, pedigreed strains. Strong straw, big head, plump grain. Approved by Wisconsin and Minnesota Experimental Stations.

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Write today for samples of any field seed you are interested in, and big 184-page Seed Catalog. FREE.

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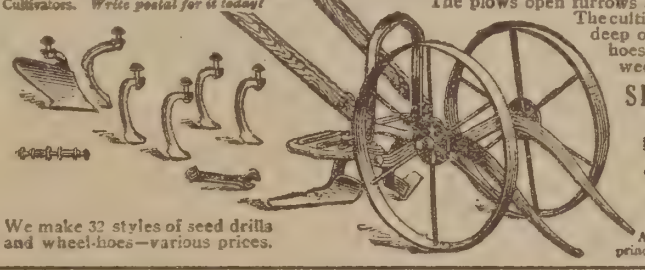
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No. 4 Planet Jr Combined Hill and Drill Seeder, Wheel-Hoe, Cultivator and Plow does the work so quickly, easily and thoroughly that it pays for itself in a single season. Sows all garden seeds (in drills or hills) plows, opens furrows, and covers them, hoes and cultivates all through the season.

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"Acme" Foot Lift Weeder

destroys all weeds, cutting deep as desired, and tills perfectly. It's knife edges, presented to the ground at a slicing angle, make draft easy. Foot lift lever clears off the weeds and lifts the blades for transportation. 5 sizes, cutting 5 ft. to 12 ft. wide. Write today for book, "*The Acme Way to Crops That Pay*". Describes the entire "Acme" line.

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SPOKANE, WASH.

pay highest market price for all kinds of raw furs. Furs made to order. Write for price list.

Oregon-Grown Seeds Free

We assert that our Oregon-Grown Seeds are superior. Try them and be convinced. That is why we give you 35c worth for 5c, just enough to pay for postage and packing.

	Reg. Price.
1 pkt. cabbage, Danish ball head; best solid winter sort	.05
1 pkt. beet, Early Model, tender, dark beet, extra early	.10
1 pkt. beet, Early Model, tender, dark beet, extra early	.05
1 pkt. parsnip, Gill's Tender Heart; no hard core	.05
1 pkt. lettuce, New York Large; best head lettuce	.10
1 pkt. Spencer Sweet Peas, Progressive mixture	.10
	.55



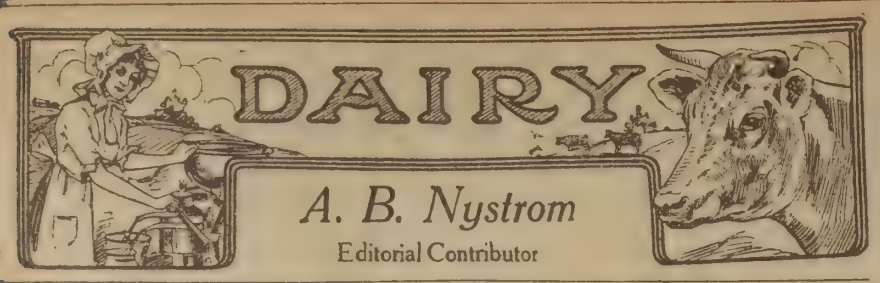
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GILL BROS. SEED CO.

Mention this paper.

PORTLAND, ORE., R. 1, DEPT. W.

LET THE SEEDS TALK



Questions
Are Answered by A. B. Nystrom

Kindly inform me whether or not Alber's molasses feed, fed with beet pulp and alfalfa hay, would make a balanced ration for dairy cows?

W. V. S., Maple Valley, Wash.

We have never used Alber's molasses feed and do not know the composition nor the amount of digestible nutrients in this feed. But we have heard many dairymen praise it as a good dairy feed. Its value will depend on how well it fits in with other feeds that are being used.

Small Paying Cheese Factory.

I would like to have you tell me the minimum size o fa paying cheese factory and creamery, stating how many cows they use milk or cream from, and the distance to haul. What is the cost of building and fixtures? There are 100 to 150 cows in a radius of seven miles. Would like to know if it would pay to erect a cheese factory or creamery and hire a capable man to make cheese or butter. Milch cows are increasing and probably would increase faster if the farmers could dispose of their milk or cream.

J. G., Ocosta, Wash.

We usually consider that a successful cheese factory can be run with from 150 to 200 cows, and such a plant will pay just as well or possibly better than a creamery with 300 or 400 cows at the present prices of cheese. The cost of constructing the factory will depend somewhat upon the location, but in western Washington a very substantial building suitable for making cheese could be built for about $1500, and a complete outfit of the very best cheese factory machinery can be placed in this factory for from $750 to $800. This includes the cost of installation, and thus you see that a factory can be built and equipped for from $2200 to $2500.

Carrots for Dairy Cows.

Will carrots dry up cows in milk? I have been told by several farmers that they know from experience that carrots will dry up a cow, but if I understand correctly what I have read, they are as good as other roots. Am I right? E. W., Forest Grove, Ore.

Carrots will dry up cows if fed exclusively. The carrot is very watery, as is any of the root crops. When cows are fed root crops only they do not get enough nutrients to supply the wants of the body. If a 1100-pound cow, giving 25 pounds of 4 per cent milk daily, were to live and produce milk on carrots alone, she would need daily 160 pounds to furnish enough carbohydrates, 200 pounds to furnish enough dry matter, and 235 pounds to furnish enough protein. These watery concentrates are fed for the succulence as much as for the nutrients they contain. When carrots are fed in connection with a good quality hay and a well-balanced grain mixture, they are very valuable as cow feed. In the absence of other succulence they are worth upward of $10 per ton, but should be fed sparingly at price. When they can be secured at $5 per ton or less from 30 to 50 pounds per day can be fed with profit.

Comparing carrots with other root crops, we find that there is very little difference in their feeding value. The crop that will give the highest yield of palatable roots at the lowest cost is the crop to use.

Lime in Watering Trough.

Is it advisable to put a little lime in the watering trough for cows? I have seen this done with seemingly good results.

H. McD., Arlington, Wash.

Lime my be added to the ration by feeding it through the water, or by adding a tablespoonful each day to the grain ration. Adding lime to the water not only helps the cow in furnishing lime for her needs, but also keeps the water tank cleaner.

Warming the Drinking Water.

I am milking 30 head of Holsteins (grade), and practicing individual feeding. I have some cows giving 40 pounds. These we feed 40 pounds of corn silage and about 12 pounds of good ground alfalfa. The silage was put up October 15, after maturity and frost. The silage was put up with the ear, and is about one-sixth corn in weight. We feed and milk regular. We warm our water to 80 degrees Fahr. Our barn during coldest weather is 45 degrees. The cows stay in fine shape. Is it possible to get a maximum flow from this feed? I would like to have you help me out.

J. L. A., Bryon, Wash.

Your combination of corn silage and alfalfa meal is a splendid one and you should get practically maximum returns from this. I might state that some of your highest producing cows could use some grain to advantage, and I would suggest a mixture of two parts of oats, two parts of bran, and one part of oil meal or soy bean meal. Only a small amount need be fed. Our practice is to feed all the hay the cows will eat up clean. The fact that your cows are in good shape indicates that you are feeding pretty well. No doubt the warming of the water has a lot to do with this, but I will state that it is not necessary to heat the water above 50 or 60 degrees Fahrenheit. In fact we have found it better to use the water at this temperature rather than that of a higher temperature.

Cream for Churning.

Can you tell me of anything that can be used to sour cream quickly in cold weather? I find it almost impossible to sour the cream before it becomes bitter, but do not like to keep it in the kitchen where it will absorb the odors from cooking. How long should cream be kept before churning?

MRS. G. A. G., Usk, Wash.

The best way to prepare cream for churning in cold weather is to keep it at a temperature of 50 to 60 degrees for a day or two, or until you have gathered enough for your churning, then warm it to 70 degrees, or even as high as 75 degrees Fahrenheit, allowing it to stand at this temperature for from six to 12 hours. If it is possible I would suggest that you get some clean sour skim milk, or clean sour buttermilk, and add to the cream before you set it away for the ripening process. This tends to act as a starter and you will have no difficulty in souring the cream. You must be careful, however, to see that the starter used is clean in flavor, not bitter or rancid in any way. If you wish to use a commercial starter, you can get one from any of the creameries or dairy supply houses, and if you will follow directions given you will have no difficulty in securing a clean starter made of skim milk or whole milk.

Feeding Frozen Beets.

Will you kindly inform me whether or not the freezing or frosting of sugar beets or any other kind of beets will kill stock or will in any way be injurious to milk cows?

G. T. ROSE, Loomis, Wash.

If beets or any other root crop freezes it should be used for stock feeding purposes immediately upon its being thawed out. After freezing and thawing the root crop deteriorates quickly and begins to rot. No partially decayed roots should be used for feeding cows. I would, therefore, say that as a general thing it is not safe to feed frozen roots to dairy cows.

Largest Olive Grove.

Los Angeles county has the largest olive grove in the world.

MUCH IN FEEDING
Should Go Along With Selection.

Of the 10 highest cows in butter fat production in the first six months' work in the Jefferson county, Washington, Cow Testing association, five belong to the Glendale Creamery company and of these five one is a purebred Jersey and four are grade Jerseys. The purebred Jersey gave 284 pounds of butter fat during the six months and made a profit over feed of $45.49; while one of the grades gave 272.7 pounds of butter fat and made a profit over feed of $49.29, and another one of the grade Jerseys producing even less butter fat, 262.7 pounds, made a profit over feeding of $50.87.

Burt McConnaghy had three of the 10 cows, one a grade Holstein producing 245.2 pounds of butter fat and giving a profit over feeding of $55.88, the highest profit of any cow in the bunch. Dr. E. E. Hegg had a purebred Holstein 13 years old that produced 227.6 pounds of butter fat and gave a profit over feed of $43.44.

One of the results of this cow testing association is that 21 cows have been butchered and two herds dispersed since the tester commenced work. Commenting on the work of the association, O. T. McWhorter says:

"The records thus far indicate that the line which divided the profitable from the unprofitable cows is also the line which divides the cows which receive a good ration, containing roots or silage, from those receiving small amounts of feed containing no succulents. Undoubtedly many of the cows showing low profits have done so because they were not supplied with the proper feed. Already the owners are planning on building silos and raising roots to offset this difficulty next year."

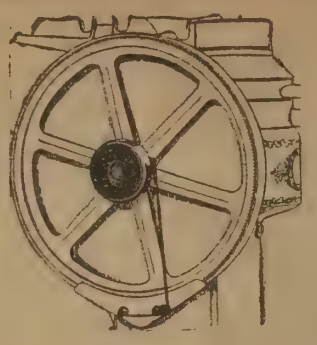
High Cow at Buhl.

The high cow for the month of January in the Buhl, Idaho, Pioneer Cow Testing association is a purebred Jersey, owned by C. E. Long of Buhl, producing 79.8 pounds of butter fat. The high herd average was maintained by the herd of S. H. Kaylor of Twin Falls, all purebred Jerseys with an average of 51.43 pounds of butter fat per cow. Two cows in the herd of H. H. Stiyer were on the A. R. O. test during the month. Their records were 10.45 and 14.63 pounds of butter fat as junior 2-year olds.

With 371 cows on test the association average for the month was 31.91 pounds of butter fat per cow. This we believe is a northwest average, this is also the highest average of any month for the association, it being the fourth time the 30-pound mark has been surpassed in the history of the association. Fifty-five cows produced more than 45 pounds butter fat for the month and 11 herds averaged 30 or more pounds butter fat for the month.

California Industries.

Five tuna canners at Long Beach, on account of the short tuna season, have turned their attention to canning sardines. This adds another and important industry to those already existing in southern California.



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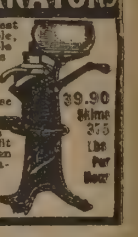
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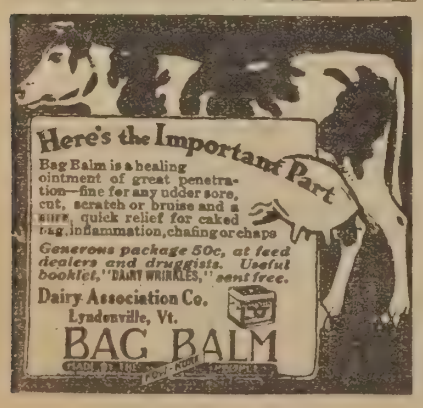
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TESTING THE COWS

Guess Work Poor at Walla Walla.

The report of the Walla Walla Valley Cow Testing association for the month of January, 1917, indicates that the average production per cow per month has been raised better than 100 pounds of milk for the 454 cows tested over the average of the association last year. This is largely due to the fact that over 100 of the lowest producers have been eliminated and that the best cows are receiving better care and feed. The figures have demonstrated that it is decidedly profitable to feed concentrates to the highest producers, says O. P. Patton, county agricultural agent.

Before the association started work in November, 1915, 14 members made estimates as to which were their five best cows in their relative order. Upon the completion of the year, when the production of each cow was known, is was found that not one of the 14 had even placed his two best cows correctly, and only four had guessed which was the highest producer. In many cases a cow which had been slated for slaughter turned out to be one of the five best.

By ascertaining which are the best cows and saving their heifer calves, the association records have proven very valuable to the dairyman desiring to remain in the business and increase his average production per cow.

In making out the 40-pound list of cows for the month of January, 1917, there are 67 honor cows as compared with 39 a year ago. Of the 67 this month 27 produced over 50 pounds.

This month the third cow in the association to make better than 91 pounds of butter fat in a month appears at the head of the list. The animal is owned by Charles Baker, and is a 4-year-old daughter of the purebred Holstein sire, Sir Vale Segis, belonging to Mr. Homer Brown. She produced 91.3 pounds of butter fat for the month, or nearly three pounds a day.

Of the 67 cows on the honor list, 26 belong to the state penitentiary, five to the Walla Walla college, four to Swegle Brothers and four to E. C. Burlingame.

The average production per cow for the entire herd of six purebred Holsteins belonging to the Walla Walla college was 1934 pounds of milk and 60.9 pounds of butter fat for the month.

Sunnyside Cow Testing.

The Sunnyside Cow Testing association in the Yakima valley of Washington gives a list of 16 cows that produced more than 50 pounds of butter fat during January. The two highest producers were a Holstein, owned by H. C. Davis, and a grade Jersey, owned by Peabody & Son, each having a record of 62.9 pounds of butter fat for the month.

Five of the cows produced over 60 pounds of butter fat and 11 between 50 and 60 pounds. In addition to this list there were 49 cows producing more than 40 pounds of butter fat per month and over 30 per cent of the cows tested produced over 30 pounds of butter fat for the month. H. C. Davis led the herd average with 40.8 pounds of fat per cow. Other herds with better than 30-pound averages were Moorehead and Hobson, G. W. Huston, Charles Hammer, W. O. Cox, Axel Anderson, S. S. Sorenson, R. E. Deets, E. L. Shader, E. C. Putterbaugh and Fred Allen. N. R. Weldin was the official tester.

Boise Valley Cow Testing.

The January honor roll of the Boise Valley Cow Testing association in Idaho includes 43 cows that gave 40 pounds or more of butter fat. Of these three are registered Holsteins, 20 grade Holsteins, 11 grade Jerseys, six grade Guernseys, two grade Brown Swiss and one grade Red Poll. The high record herd average for nine months is still held by the Jerseys of Lee & Son. Thirteen cows in this herd averaging seven months in milk have produced an average of 258.8 pounds of butter fat. The highest producing cow for the month is a grade Guernsey, owned by H. A. Wines, with a record of 62.9 pounds of butter fat. The nine months' record for individual cow is still held by Dorie, 5-year-old grade Guernsey, belonging to H. A. Wines, with a record of 437.9 pounds of butter fat.

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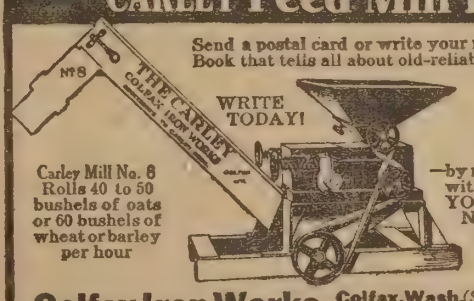
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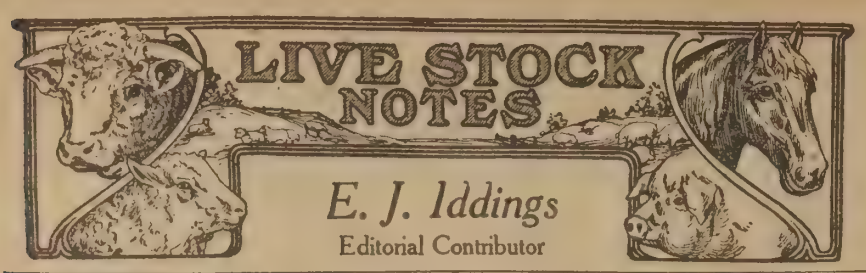
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"Throughbred"

Old Question Is Again Answered

To the Editor: In a recent issue of The Idaho Farmer I saw again a correction in the use of the word "thoroughbred" and I am writing for more information on the subject. I have not been able to find out where or by whom the word thoroughbred has been applied exclusively to any certain breed of horses. Webster's dictionary admits no such monopoly of the word. The word is defined as meaning bred from the best stock or blood of any animal. The expression "thoroughbred women" is even admitted. Now I would like to know if the dictionary is wrong or if some horseman has misapplied the word.

Hamer, Idaho. E. P. J.

Referring to the letter of your correspondent, E. P. Jensen of Hamer, Idaho, I will say that Mr. Jensen is entirely correct in his statement that the word "thoroughbred" is not recognized by Webster's dictionary as belonging to any particular breed of live stock. No doubt this fact is responsible for the use of the word "thoroughbred" as a prefix to the names of various breeds to indicate purity of breeding. In other words, the word "thoroughbred" as used by many writers and often in advertisements in agricultural papers, preceding the name of a breed of live stock, such as Shorthorn cattle, means that these Shorthorns are purebred, or, in other words, have been bred for many years without the admixture of alien blood. That is, they are registered and are guaranteed by these registration papers to have been bred for a long series of years without the admixture of alien blood.

In live stock work, as in many other industries, there is a peculiar vocabulary that belongs especially to this business. Live stock men are privileged to set aside certain terms to designate various features of their work, and the constant use of such terms with a special meaning for many years is sufficient authority to indicate correct usage. By common consent of live stock men, the word "thoroughbred" is used as the breed name for the English running horse. Thoroughbred is used to apply to this horse in the same way that Percheron designates a certain horse of draft type that we secure from the district of La Perche in France. This term "thoroughbred" was first applied to this English horse by the breeders of England until it has been commonly accepted as the correct name for the breed. If we, therefore, care to use live stock terms correctly, the word "thoroughbred" in its strict interpretation belongs to the running horse of England and nowhere else. Even though Webster does admit the use of "thoroughbred" as a prefix for all breed names, live stock men feel that the word "purebred" indicates the proper meaning a little more clearly, and if used instead of "thoroughbred" admits no confusion of terms. We feel, therefore, that the only correct usage for "thoroughbred" in connection with live stock work is as the breed name for the horse mentioned above.

E. J. I.

Hog Cholera

Being Successfully Stamped Out

By HORACE ADDIS.

That the work of the U. S. government in combatting hog cholera is highly successful is indicated by the figures given concerning the work on the Twin Falls tract in southern Idaho. Dr. Sullivan instituted work there July 1, 1914, and the government has gradually enlarged the territory covered until it now takes in a large part of southern Idaho.

In 1912 on the Twin Falls tract 47,637 hogs were raised and that year 3163, or 6.6 per cent, were lost. This was the first year that district was ravaged by cholera to any extent. The following year, 1913, saw 82,563 hogs raised and 12,978 lost, or 15.7 per cent. In 1914 the hogs raised totaled 100,000 and the loss 1269, or 1.2 per cent. Of this number 955 died before the government work was begun. In 1915, 150,000 hogs were raised and 1482 were lost. This included Bonneville, Bingham, Jefferson and Madison counties in addition to the original tract. In this district 103 farms were inspected in 1916 and 63 of them found to be infected. There were 17 outbreaks of cholera in the Twin Falls district, which now includes Twin Falls, Gooding, Lincoln, Cassia and Minidoka counties. This shows a reduction in the herds affected from 103 to 17. The number of hogs raised in the Twin Falls district in 1916 was about 125,000 and in the other counties named 121,000. These other counties are now listed as the Idaho Falls district and heavy losses, almost equal to those of the Twin Falls district, caused the government work to be extended to include those counties. Dr. Sullivan hopes for complete eradication of the disease or at least to keep the losses negligible, if the farmers will continue their cooperation.

Blaine county has recently had several outbreaks of cholera and a meeting at Carey, which was attended by 175 farmers, is typical of the way the work is organized. Seven school districts were organized. A committeeman leader and survey man was put in each district. They watch closely and in case of an outbreak report promptly to the government bureau at Twin Falls and an immediate investigation is made, free of charge. If cholera exists the state live stock sanitary board is notified and the herd vaccinated with hog cholera serum at the cost of the serum to the board, with state deputy veterinary service free. Each vaccinated herd is placed under quarantine to keep the owners of neighboring herds away. Owners are instructed to keep hogs off the highways and dogs on their own premises. After three weeks the premises are thoroughly cleaned and disinfected by the owner under supervision of a deputy state veterinarian. All possibly infected material is then burned and a large power spray used with a reliable creso compound. Finally the pens are whitewashed and lime sprinkled about them. In places a barrel of disinfectant has been purchased by several farmers clubbing together.

Dr. Sullivan asserts that where places have been cleaned up and disinfected there have been only four recurrences of the disease and these have been traced to imperfect disinfection. He says farmers could clean up and disinfect and get rid of hog cholera themselves by systematically taking all the necessary precautions. But it is because they will not do this that some one with authority must take the lead. Even then the utmost cooperation is needed to stamp out the disease.

Veterinary

Dr. S. B. Nelson

I have a 10-year-old mare that raised a colt fine years ago. Since then I have never been able to get her in foal. She is in heat constantly. J. L. W.
Cambridge, Idaho.

The fact that your mare is in heat constantly would indicate that there is some irrtaton of the ovaries. I would recommend the administration of one-fourth ounce of sodium bromide on the feed or in the drinking water morning and evening for a short period of time. Then when the proper times comes to breed her I am going to recommend to you that you have her bred by use of the impregnator. You may get results this way that you will not get otherwise.

Some of my cattle are lame from a festered sore in the cleft of the hoof that does not yield readily to any treatment I have tried so far. G. V.
Forest, Idaho.

Dope your cattle's sore feet with a 5 per cent solution of hot creolin, then, if you can, throw the cattle down, using the three half-hitch method and examine the cleft carefully, then apply a strong astringent solution of one ounce of lead acitate and one ounce of zinc sulphate in one pint of water. Later apply pine tar to the cleft.

I have a disease among my cattle which breaks out on them in various places. It seems very irritating and the hair come off. That seems to be the first symptoms I notice. C. G. B.
Boise, Idaho.

Try painting the irritated places with a 1 per cent solution of picric acid in water. Apply this once daily for a couple or three days, and then every other day.

What shall I feed little pigs without milk. They are dying. I feed slop from the kitchen with shorts, bran and ground barley, also alfalfa? H. C. W.
Ephrata, Wash.

Cut out the giving of ground barley and shorts, then scald the alfalfa and feed in a mash with a little of the scraps from the kitchen. You can also feed them ground oats. Do not feed them too much.

I would like to know a cure for warts on horses and cattle. One, on a colt coming two years old, was not visible when I turned him out last spring. It came during the summer or fall. Some call this a cancer wart, although it does not bleed much and is at the base and in front of the ear. C. M. B.
Colville, Wash.

The wart can be cut off if it has a narrow neck attachment, and then near the stump use a hot iron at almost white heat, not quite, and when the scar from the cautery comes off apply tannic acid daily. If there is no neck to the wart and it is a broad one, then you may have to burn it out completely and do this seveal times, being careful not to disturb the ingrowing edge of the wound.



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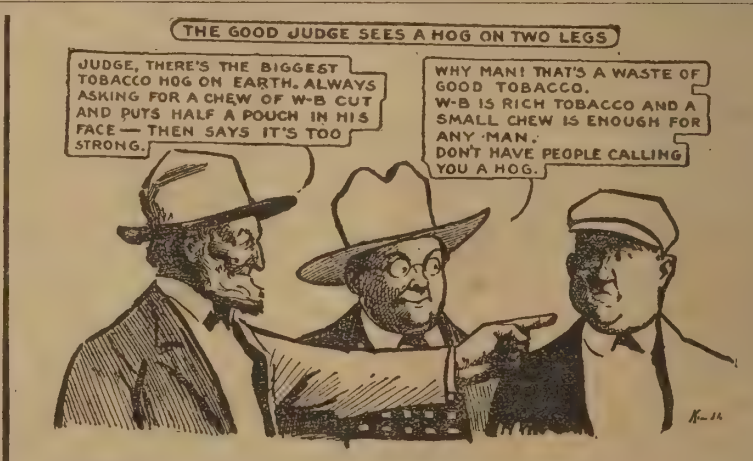
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More Wheat

Dry Farming in Grant County

O. G. Trester and M. F. Stockwell are planning to put in 1200 acres of wheat this year west of Canyon City, Grant county, Ore., which is said to be the largest wheat growing experiment yet entered in that county. They will do their plowing with 16 head of horses and a gas tractor. Mr. Trester is the owner of a mill in Prairie City and is getting the mill at John Day in shape to run by the first of March. In addition to raising wheat for the mills these men will be able to raise quite a number of hogs per year on the mill feed. The land to be farmed is all dry land and the experiment is in the nature of a demonstration as to the grain that can be raised on thousands of acres of bench land in that county. As a matter of fact there will be more wheat raised in Grant county this year than ever before.

RANGE BULLS.

Need of Legislative Control.

The constructive breeding of animals by man goes back to prehistoric times. Centuries passed before an attempt was made to formulate any principles leading to success in animal procreation. Three hundred and eighty years ago, during the reign of Henry VIII., an important bill controlling animal breeding was passed in England. Doubtless that law laid the foundation of Britain's greatness as a live stock producing country.

At the present time an important issue with range beef producers in Washington is the control of range bulls. William Ilislop of the experiment station at Pullman, Wash., states that the men who are earnestly endeavoring to improve the grade of their cattle are constantly worried with scrub bulls belonging to other men.

The majority of states have stallion laws, but singularly few have bull laws, although the number is increasing steadily. The passage of a law which would prohibit anything except a purebred (registered) bull of one of the recognized beef breeds from running loose upon the public domain would be particularly beneficial to the industry.

The comparative breeding values of the purebred and the scrub sire may be justly tabulated as follows:

The calves of the purebred sire will have:

1. Thick, low-set type.
2. Easy-feeding qualities.
3. Heavy fleshing tendencies.
4. Uniformity of conformation.
5. Uniformity of color.
6. Early maturity qualities.
7. A weight of 1000 to 1100 or more pounds per head at 2 years old.
8. A value of $45 to $50 per head at 2 years old.

The calves of the scrub sire will have:

1. Upstanding, slab-sided type.
2. Hard keeping qualities.
3. Thin fleshing tendencies.
4. Nondescript conformation.
5. Mixed colors.
6. Late maturity.
7. A weight of 1000 to 1100 pounds per head at 3 or more years old.
8. A value of $30 to $35 per head at 3 or more years old.

In addition, the best heifer calves by the purebred sire can be retained in the breeding herd, while practically none of the heifers by the scrub sire would be worth retaining at any cost.



JAMES CHESNEY'S START IN SHEEP.

The west is full of human interest stories, connected with the vicissitudes of live stock breeders. James Chesney, a wealthy sheep and cattle breeder of Evanston, Wyo., whom I met on the train while on my way to the National Live Stock association meeting at Cheyenne, told of his first wool sale in 1869. Mr. Chesney was born in Salt Lake. His mother came across the plains in 1848, with other immigrants in a prairie schooner drawn by oxen. She brought about 25 sheep and through good and bad times always kept a small flock. In the year of 1869, when Mr. Chesney was about 18 years old, an eastern wool buyer was in Salt Lake, anxious to buy wool. James went home from up town, gathered up all the wool there was about the house, including the contents of two mattresses on which they slept—about 300 pounds in all. His mother was away when he got the wool and when she returned he handed her the money, about $125, mostly in twenty-dollar gold pieces. It was the first "real money" they had seen for so long that his mother cried for joy. A neighbor woman had about 200 pounds of wool and Mr. Chesney showed his financial ability right then by going over and buying her wool at 20 cents, reselling it for 43. When the lady learned what the price was she relieved her feelings by giving her oldest son, of about the same age, a hard whipping, because he had not learned the buyer was in town and secured the full price.

Mr. Chesney says he saw wool selling from 3 to 8 cents in 1894 and has seen many ups and downs in the sheep business. At present he has 10,000 sheep, a fine herd of registered Hereford cattle, including the bull, Bonnie Lad 38th, for which he has refused $10,000 and also a fine band of registered Percheron horses.

DROVE EIGHT YOKE OF BULLS.

J. A. Moore of Buffalo, Wyo., better known as "Jack" Moore, who made the speech presenting a mounted moose head to retiring President Heard, at the National Live Stock association convention at Cheyenne, Wyo., is one of the unique and interesting characters of Wyoming. Mr. Moore usually wears a woolen shirt with attached soft collar and looks the prosperous cattle man. His speech on the occasion referred to, was a gem of humor and oratory and he has a high reputation as an orator and a shrewd politician. He managed Governor Kendrick's successful campaign for the United States senate. Mr. Moore told me during the Denver Stock show that the most important occasion in all his life, to himself and probably to a good many who saw him, was when, 49 years ago, as a 7-year-old boy, he drove eight yoke of bulls through the streets of Denver. His father was running a sawmill, one of the hands got drunk and the big load of lumber had to finish its journey and be delivered in the city. Young Jack was given the task and proudly and successfully he accomplished it, attracting considerable attention even in that region where strange sights were common.

Mr. Moore says the region of his own town and all of Wyoming for that matter, is prosperous and that 90 per cent of the farms in his neighborhood are owned by ex-hired men, most of them cowpunchers, of which Governor Kendrick is a conspicuous example.

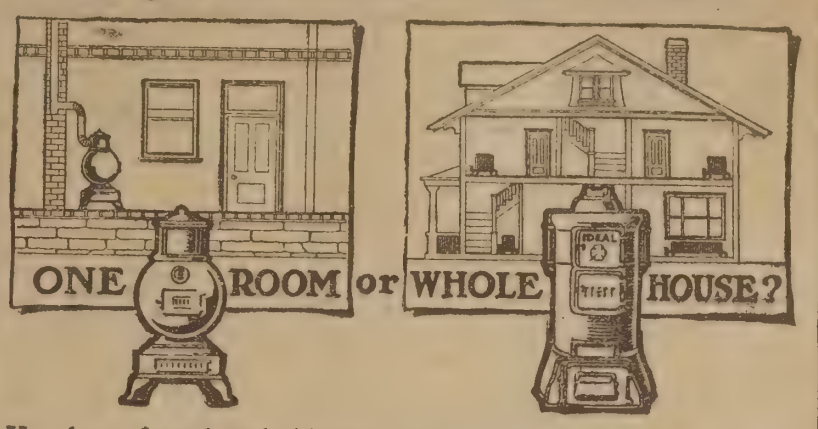
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Agriculturists have succeeded in raising a brown cotton in Egypt that is stronger than any heretofore produced there.

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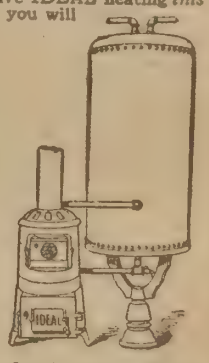
It is wise even to increase your borrowing at the bank in order to have IDEAL heating *this winter* for the comfort and savings that IDEAL heating will give you will make you more money than the bank interest you may pay.



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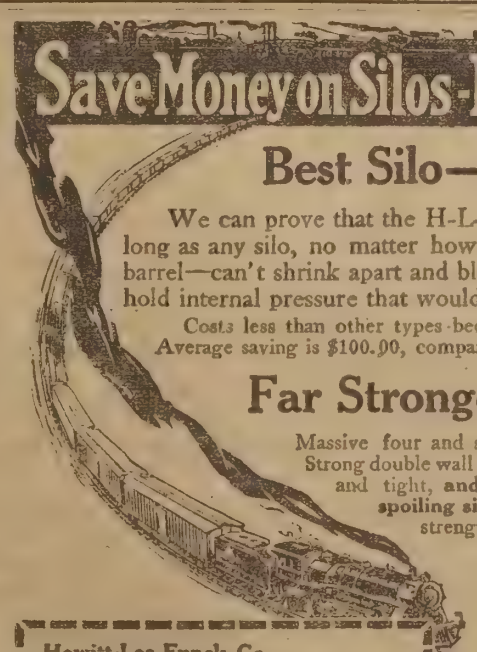
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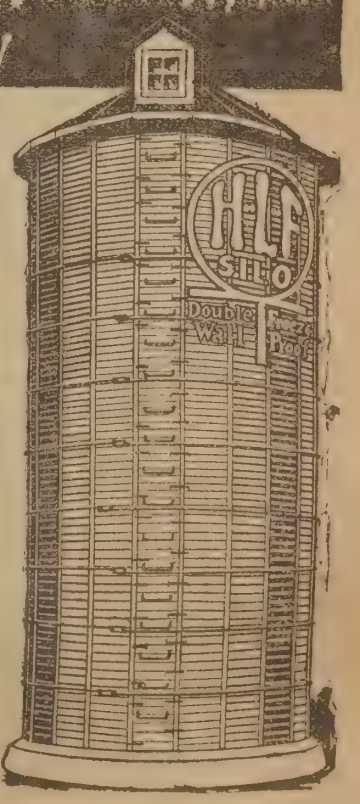
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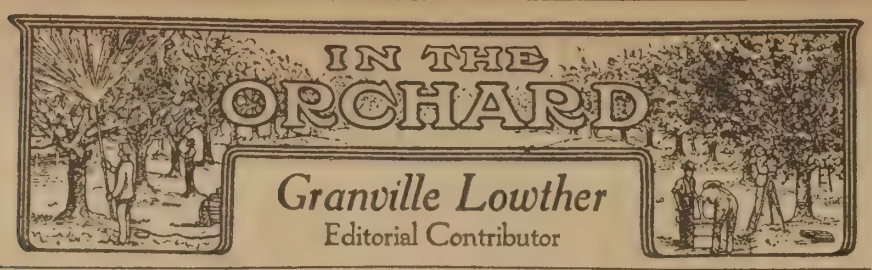
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Granville Lowther
Editorial Contributor

Bridge Grafting

Saves Trees That Are Injured

Numerous inquiries are received at the department of agriculture every spring in regard to the treatment of fruit trees, especially apple trees, that have been girdled or otherwise injured during the winter by mice and rabbits. While there are varous ways in which slight injuries of this character may be treated, if any attention seems advisable, wounds that girdle or nearly girdle the trunk require the most specific measures if the tree is to be saved. In such cases bridge grafting is the method of treatment commonly employed; in fact, it is about the only remedy that can be recommended.



Bridge graft three years old, made to save a pear tree that had been girdled by blight.

A bridge graft is made by using scions or small limbs to connect the two portions of the back of a stock which have been separated by an injury; in other words, the injured area is "bridged" by a scion or scions, the ends of which unite with the uninjured parts above and below the wound in such a manner that a connection between the tissues is established.

Bridge grafting may be used successfully on almost any kind of fruit tree that admits of being readily propagated by grafting. In practice there is occasion to resort to it very much more frequently with the apple than with any other fruit, but pear trees are often treated, at least in some sections. No reason is apparent why the method should not be successful on plums and cherries. Peaches graft less readily than the other trees mentioned, and there may be some question as to the usefulness of the method in the case of this fruit. The injuries which can be overcome or lessened by bridge grafting are always local in character and do not of themselves at the time they occur seriously affect the health and vigor of the tree either above or below the injured area.

Mechanical injuries which may be remedied by bridge grafting are usually inflicted in one of three ways: By animals that feed upon the bark and tender wood, by insects that burrow through the growing layer of bark and wood, or by implements used in the tillage of the orchard, usually the result of carelessness of workmen. Local injuries may be caused by various diseases, of which pear-blight is the most common. The trunks of pear trees are not infrequently completely girdled and killed by this disease. If taken in time, however, it may be possible to cut away the diseased bark, bridge the wound area with grafts, and thus save the tree. Relatively large areas of bark may also be killed by what is commonly called sun scald, as well as by other troubles.

The number of scions required for a bridge will depend largely upon the size of the trunk. No fixed rule can be given. The larger the number, the more nearly complete will be the restoration of the connection between the parts above and below the wound; but if placed too close together, the bark at the margins of the wound between the scions will be raised. The starting of the bark except at the immediate points of insertion of the scions must be avoided. The operation is completed by thoroughly covering the area occupied by the ends of the scions and the margins of the wound with grafting wax, strips of waxed cloth, or by some other means that will adequately prevent these parts from drying out. The use of wax for this purpose is the most advisable. Some operators cover the entire wound, scions and all, with melted wax. To be effective, bridge grafting should be done in the spring, before growth starts.

While the bridging of a wound by grafting is comparatively easy, the use of preventive measures, so far as they are effective, is much easier. Weeds and rubbish about the trunk of a tree are likely to attract mice, as they furnish both a desirable nesting place and a food supply. By clearing away upon the approach of cold weather the grass and aftergrowth that has accumulated near the trees, the danger of injury from mice is greatly reduced. Adequate protection against rabbits that are likely to gnaw the bark from young trees may be afforded by placing wire netting or wooden-veneer protectors about the trunks, or even by wrapping them with several thicknesses of newspaper. A more convenient way, however, and one reported to be effective, is to keep the trunks well covered during the winter with a lime-sulphur mixture.

On another page of this issue of the Farmer will be found comprehensive information and directions concerning the mixing, uses and application of orchard sprays. This information is necessarily condensed, but is designed to give full information on the subject in such way that the farmer or orchardist may know exactly what spray to use, when to use it, how to use it and how to make it himself if desired. The directions are as applicable to the farm orchard of fifty trees as to the commercial orchard of a thousand trees.

When additional details are desired concerning any problem of caring for the orchard it may be obtained by addressing the state college experiment station at Pullman, Wash.

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The Government this year is asking farmers to put increased acreage into grain. Military service is not compulsory in Canada but there is a great demand for farm labor to replace the many young men who have volunteered for service. The climate is healthful and agreeable, railway facilities excellent, good schools and churches convenient. Write for literature as to reduced railway rates to Supt. of Immigration, Ottawa, Can., or to

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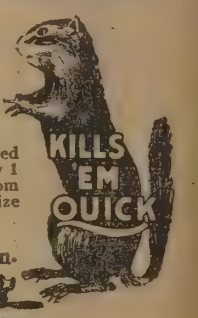


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The Farm Garden

Article 1

The Hot Bed

Nature may be assisted in growing early vegetables by the use of a simple, inexpensive hot bed.

It is doubtful if there is any other side feature of farming that offers such possibilities as does the farm garden. And yet the farm garden is frequently given little attention. Too frequently some little area somewhere is used for the planting of a few vegetable seeds of indiscriminate varieties with little thought as to the fitness of the soil or location, little thought as to the suitableness of the climatic conditions to the vegetables planted and little thought as to proper methods of planting or proper methods of care after the plants show above the ground.

There are, to be sure, many first class farm gardens. There should be one on every farm where there is a family to feed. There should not be a day in the year—spring, summer, autumn or winter—that some vegetable grown on the farm is not available for table use. There is no such day on the farm, where gardening is done systematically.

Throughout the spring and summer the Farmer will publish articles designed to give specific information upon which may be based the development of the garden. Such subjects as the selection of location, the cultivation of the soil, the use of fertilizer, the use of the hot bet, the planting of the garden with the idea of fresh vegetables during the entire year, the methods of planting and cultivating the various vegetables, the climatic and soil conditions necessary for the production of these vegetables and kindred matters will be treated.

In the preparation of these articles such sources as personal experiences, various garden authorities and experiment station bulletins and reports will be drawn upon. Special credit is given to the experiment stations of the state college of Washington, the Oregon Agricultural college and the University of Idaho.

The first of these articles appears herewith, and deals with the hot bed and some of the common vegetables that may profitably be started in it.

HOT BED CONSTRUCTION.

The hot bed is simple, both as to principle and construction.

Select a spot where the sun shines and which is, if possible, sheltered from winds and storms to some extent. The south side of a building is a favorable location.

Dig a pit 20 to 30 inches deep, from seven to nine feet wide and as long as desired to make a hot bed of adequate size. Fill the pit with unrotted manure from the stable, being sure to include in it straw or corn stalks so that it will not pack too firmly. Tramp down well. Cover with an inch or more of something like leaf mold or rotting straw.

Construct a frame about 18 inches high at the north side and 12 inches at the south, having "rafters" to support the glass sash that will be used later as the hot bed cover.

Place the frame over the manure-filled pit. Fasten, if necessary. Put in a layer of good soil about six inches deep.

Don't Be in a Hurry.

Mechanically, the bed is now ready for use, but it should be allowed to settle for a very few days, during which the manure in the pit will pass through its most active stage of fermentation, creating an excessive amount of heat.

Before using the hotbed put the glass sash in place in such way that they may be raised and lowered on hinges or slipped in grooves so that plenty of ventilation may be had. Ventilation is an absolute necessity, and on days when the sun shines warmly the seed or the plants, if they have appeared, should be given the benefit of the open air and natural warmth.

The only purpose of the hotbed is to start plants earlier than they could be started in the open, and it is therefore useful only in localities where cold weather with possible frost accompanies early spring.

Here are a few vegetables that should be in every farm garden, where climatic conditions are justifiable and which, in nearly all localities of the northwest, should be started in a hotbed to secure the best results:

Cabbage, Brussels sprouts, cauliflower, kohlrabi, tomatoes, egg plant, peppers and celery or celeriac.

The Growing Season.

There are a number of questions to be considered in selecting vegetables suitable for a given locality, such as soil, length of summer season and variation in temperature. The two latter are so closely connected that the following figures indicating the length of time required for the above plants to reach maturity afford reasonable basis for judging whether they will succeed in the locality in question: Cabbage and Brussels sprouts, 90 to 130 days cauliflower, eggplant, tomatoes, peppers, 100 to 140 days; kohl-rabi, 60 to 80 days; celery or celeriac, 100 to 150 days.

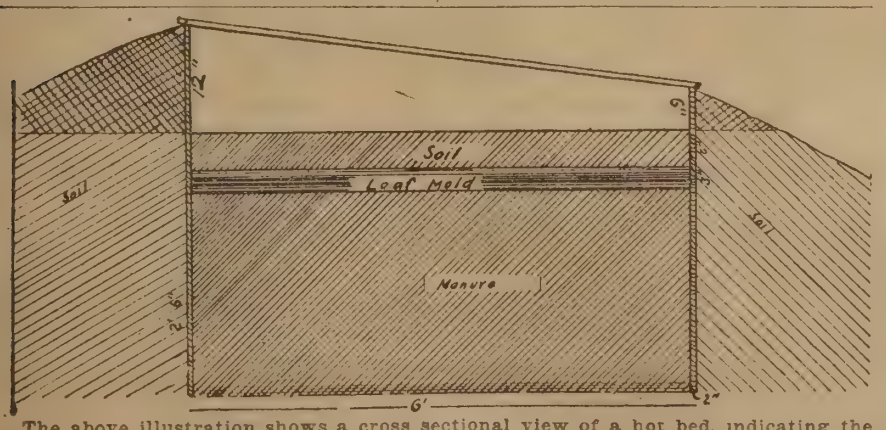
Hardening of Plants.

Much of the failure experienced with hotbeds is due to the failure of the gardener to harden the plants before setting out in the open. During a period of several days, at least, immediately prior to transplanting, the plants in the hotbed should be gradually accustomed to the open. At first the ventilation should be increased and the water supply reduced slightly.

Transplanting Method.

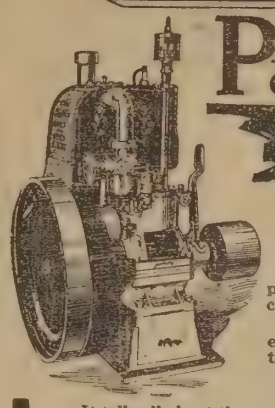
The soil where the plants are to be set should be thoroughly prepared before they are removed from the hotbed, not afterward. Plants can live without food or water for a long time in some cases, but they are better off if the transplanting is done so quickly and gently that not even a shock results from the change.

Soften the soil in the hotbed by giving it an abundance of water. Lift the plants with as much soil clinging to them as possible. Set them so that the roots keep their natural positions as much as possible. If the day is either warm or cold, protect the plant by shelter of some kind. Give them plenty of water, but don't drown them. See that the soil is in contact with the roots, not hard packed, but sufficiently firm to keep out the drying air.



The above illustration shows a cross sectional view of a hot bed, indicating the pit of warmth giving manure, the leaf mold or other layer, the soil in which the seed is to be sown, and the angle at which the glass sash are set facing the south to receive more effectively the rays of sunlight.

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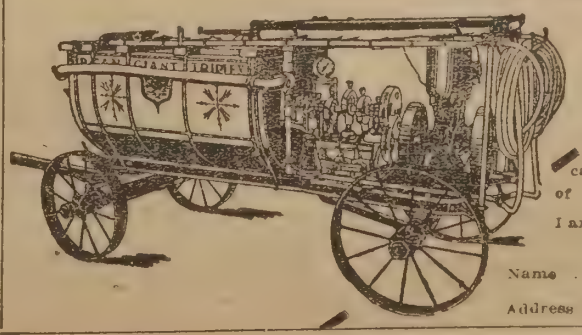
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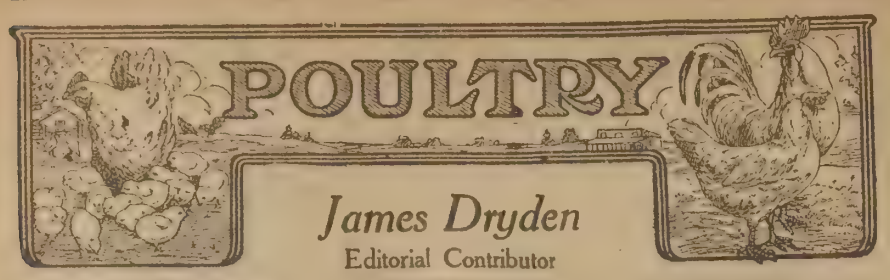
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Eggs that hatch well come from hens that have good vitality.

The reproductive organs of the hen are apparently very sensitive. A hen may produce well, but not reproduce well.

The fact that a hen lays well does not necessarily imply that her eggs will hatch well and her chicks grow well.

The hen that rustles for a living, lays a nestful of eggs in the fence corner, hatches every egg and rears every chick, if cooped up in a house and fed and cared for well does not always, if ever, produce good hatchable eggs. The hen that has the liberty to range over the fields will produce eggs that will hatch well and chicks that will grow well. J. D.

New Breed Not Yet Available.

So many orders and letters of inquiry have been received by Professor Dryden at the O. A. C. poultry department, asking for settings or fowls of the new Oregon breed, that he has issued a form letter which states in substance that the department wishes to develop the type further before disposing of any of them. Possibly some will be available next fall or next year under certain breeding restrictions. Professor Dryden says that there are some other breeds available usually, but for the present none of the new breed can be sold for any price, although some people have offered very high prices for cockerels in particular.

To Get Rid of Ants.

To the Editor: To get rid of ants of any kind in a very short time, sprinkle concentrated lye in the dry form all around wherever the ants are troublesome, and they will positively leave.

MILO L. GEORGE.

Walla Walla, Wash.

Es ist kein Meister vom Himmel gefallen.

To any person offering a correct translation of the above phrase in the common language of the United States, accompanied by $2 in personal check, postoffice money order or 2-cent stamps before March 8, the Washington Farmer will be sent THREE YEARS, together with any one of the following high-class magazines for one year: American Magazine, Metropolitan Magazine, Sunset Magazine or Woman's Home Companion.

The regular yearly rate of any one of these magazines is $1.50, while the rate for the Washington Farmer for one year is $1. You receive:

Washington Farmer, 3 years, American Magazine, 1 year	**$2**
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If your translation is not correct your money will be returned promptly. Address:

FOREIGN LANGUAGE EDITOR
The Washington Farmer.
Review Building, Spokane, Washington.

Hatching Methods

Hen Compared to the Incubator

By JAMES DRYDEN.

There is a method in everything that brings money, even in setting a hen. Keeping chickens wont pay, unless there is a method in the keeping. It is the method that pays. Setting a hen will not make money, but the method of seting her will. Thousands, probably millions of hens are set every year with very little method, and the result is loss of millions of dollars.

The setting hen has her place in the poultry business, just as the incubator has its place, and I want to call attention in this article to some methods of hatching with hens. If any considerable numbers of chickens are to be hatched with hens it is necessary that there be some method. We don't expect to raise chickens by the artificial way without a method and without some expense in providing the equipment. Then why do we expect the hen to do all the hatching and raising of the chicks without some equipment and without some expense?

The photograph shown herewith illustrates the equipment necessary for hatching and brooding chickens by one method. This method has been tried at the Oregon station for a number of years. The illustration is of the Oregon station's combination hen hatching and brooding coop. This coop or house is an incubator as well as a brooder, though a natural one. The chicks are hatched in it, and then they are brooded in it. More than that, it is a growing house for the chickens. It is large enough to rear them in after the brooding stage is past. By the artificial way we have to have an incubator, then a brooder, then after that a house to rear them in. Here in this combination house it is all in one.

This coop is five feet long and three feet wide, three feet high at front and two feet at back. It is divided into four separate compartments for four hens. Movable partitions of burlap or canvas are fastened to a four or six inch board at the bottom and to a cross-piece at the top. The four hens should be all set at one time and when the hatch comes off the chicks are given to two hens. Two hens will take care of all the chicks four hens will hatch. Two partitions are taken out, leaving the middle one, so that the hen and chicks have more room.

To give the hen more room for feeding and dusting, covered runs are provided, a separate one for each hen. The hen can get off the nest when she wants to and go out into the run to drink and eat and go back to her own nest again. She can not go to another nest and start a quarrel with another hen, with the result broken eggs, and another hen can not visit her and sit down in the same nest, while the eggs in the other nest are chilled. The outside runs are made of 12-inch boards and a frame of one-inch mesh poultry netting is laid over the runs. At the far end of the runs feed and water is kept all the time. This is covered with a six-inch board, which is hinged to the upright board. This keeps the rain out of the feed and makes it convenient for feeding and watering. One can put in enough feed and water and go off on a picnic for a week and the hens will attend to business. Where there is danger from rats or other vermin of that kind a floor may be put in the coop, but we have followed the plan of tacking one-inch mesh netting on to the bottom of the coop and then covering it with earth. This makes a better nest for the hen and at the same time affords protection from rats.

The covered runs are left in place for a few days after the chicks are hatched; then they are taken away and the hens are confined in the house and the chicks allowed to run out on the

(Continued on page twenty-six.)

HOW ABOUT SEED?

Better Buy Early This Season.

Have you made arrangements for your seed yet? Inquiry at the seed stores reveals the fact that some seed is going to be scarce this season. At all events the first seed is usually the best. The late orders are apt to be filled with seconds, particularly if seed is scarce. Another advantage in buying early, is that, should something go wrong with it, and should testing prove that it is not very good, another lot may be ordered. It pays to be forehanded in seed buying, as well as in other things.

Place for Medicine Bottles.

If you have no place to put the medicine bottles, get a few brackets and put up two or three shelves in the pantry or the bathroom, so high that the little folks can not reach them. If your household is not different from the majority, they will always be full. There should be remedies for simple ailments, rolls of old linen or muslin for bandages, flannel for hot compresses, the hot water bag, liniment, salve, etc. Put a curtain in front of the shelves, to keep them from dust and to hide them from view. E. J. C.



To SAVE LITTLE CHICKS and help them to grow into big, strong, healthy birds, **FEED**

Diamond Chick Food

Our name and trade mark on every original package.
MADE ONLY BY
Portland Seed Co.
Portland, Ore.

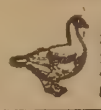


Ask for catalog 182.

"All About Eggs"

New Book about making better hatches and stronger chicks; making hens lay more and regularly; preserving eggs absolutely fresh for higher price market; packing; shipping, marketing, etc. Free on request. Lee Complete Poultry Library (5 books) postpaid for 5 cents in stamps. Write today.

GEO. H. LEE CO., Box 253 Omaha, Neb.



PFILE'S 65 VARIETIES farm-raised Land and Water-Fowls. Eggs in season. Incubators. Illus. Catalog and "Grower's Guide," 2c. **An honest deal.** Write today. **HENRY PFILE, Farmer-Poultryman, Box 720 Freeport, Ill.**

New Spokane Incubators and Brooders

are sure hatchers. Built to suit Pacific northwest climate. Hot water or electric. Top raises like a lid, permitting turning of eggs without taking from machine. Seven styles and sizes. Prices, $7.50 up. Write for new catalog, which contains new ideas about chick hatching.

Spokane Incubator Company 8429 Haven St. Spokane, Wash.



Save Your Chicks

That's your greatest problem. Little chicks die by thousands from *indigestion, diarrhoea, gapes, leg weakness, etc.* They need help—three-fourths of the loss can be avoided. Begin with the bowels—make the digestion right by using

Dr. Hess Poultry PAN-A-CE-A

Cures Gapes, Indigestion, Leg Weakness, etc.

Here are a few of the valuable ingredients in Pan-a-ce-a to meet the requirements of your poultry which I have just stated: *Nux Vomica*, a nerve tonic; *Carbonate of Lime*, a shell former; *Hyposulphite of Soda*, an internal antiseptic; *Quassia*, an appetizer; *Iron*, to enrich the blood, and other valuable ingredients, all well known and recommended by the highest medical and veterinary authorities.

Costs 1 Cent a Day for 30 Fowls

1½ lbs. 25c
3 lbs. 50c
7 lbs. $1.00
25-lb. pail $3.00

My Guarantee

So sure am I that Dr. Hess Poultry Pan-a-ce-a will prevent and cure gapes, indigestion, leg weakness and the like, reduce your loss to mere nothing and help your chicks grow and mature rapidly, that I have told my dealer in your town to supply you with enough for your flock, and if it doesn't do as I say, return empty packages and get your money back.

Write for free book on Poultry Culture.

Dr. Hess & Clark
Ashland, Ohio

Dr. Hess Stock Tonic

Positively expels worms. A valuable tonic and conditioner for cattle, horses, hogs and sheep. Improves appetite, tones system, helps digestion. 25-lb. pail, $2.25; 100-lb. sack, $7.00; smaller packages as low as 65c.

Dr. Hess Instant Louse Killer

Kills lice on poultry and farm stock. Destroys bugs on cucumber vines, slugs on roses, etc. Use by dusting or sprinkling. Comes in handy sifting-top cans, 1 lb. 25c; 3 lbs. 60c.

Pay for Yucatan Reforms

Binder Twine Prices for Northwest Farmer

Recent developments would indicate that the grain growers of the Palouse, the Big Bend region, Walla Walla and Umatilla valleys, as well as other regions of the Pacific northwest, are paying for certain social reforms affecting the farming interests of Yucatan.

How the government of a Mexican state has organized the monopoly and put up the price of binder twine is seen from further inquiry into the sisal industry.

In Yucatan the chief product is sisal hemp, used extensively in the manufacture of binding twine. When the government took hold of that industry two years ago and organized the growers into the "Comision Reguladora" the producers were receiving less than 5 cents a pound for sisal. Now they are paid about 16 cents, and the American grain growers must foot the bill.

The United States department of justice has begun a prosecution in the federal courts of this country of the "Comision Reguladora" and a company of American bankers who are financing the Yucatan monopoly, charging that they constitute a trust that is violating the laws of the United States. It is very doubtful whether American law can reach the Yucatan people, but it may take into its toils the American bankers back of them.

EDENIC PICTURE OF LIFE IN YUCATAN.

To defend their monopoly the officials of the "Comision Reguladora" are publishing full-page advertisements in some of the New York papers, and in their statement they present an almost Edenic picture of life in Yucatan. We are told that—

"In consequence of the admirable social reforms inaugurated by Governor Alvarado's administration, peonage has been abolished and the field laborer is now a free man and must be paid living wages. Instead of working for a pittance, as they did prior to the present revolutionary reforms, the laborers now receive from $1.50 to $3 (American gold) per day. The day's labor is limited by law to eight hours and the working week to five days. Child labor is prohibited, female labor is strictly regulated, working conditions have been improved at considerable cost to the planters, public schools have been established on each sisal plantation at the expense of the farmers, and the labor law provides compensation to laborers for accident and sickness, besides compelling the farmers to provide old age pensions and otherwise safeguard and protect the health of the laborers. Hundreds of Americans are going to Yucatan now because of the improved labor conditions, good wages, equitable laws and just treatment."

HE SHOULD BE PRESIDENT OF MEXICO.

If that roseate description is half true Governor Alvarado should be president of Mexico. There is, however, no question that he has done a great work for the Yucatan sisal growers. The "Comision Reguladora," we are further informed by its agents in this country, is a cooperative marketing organization composed entirely of sisal farmers, under the control of the government of the state of Yucatan. The board of directors—10 in number—is composed entirely of sisal planters of Yucatan. None but the farmers derive profit from its operation. All the sisal growers of Yucatan and the adjoining state of Campeche are members of the organization and participate in its benefits in proportion to the number of pounds of fiber each delivers to the association for marketing.

After deducting the expenses of operation, federal and state taxes, cost of transportation and warehouse charges the remainder of the proceeds of sale is divided among the farmers at the end of each commercial year.

OUR GRAIN GROWERS HELP TO FOOT THE BILL.

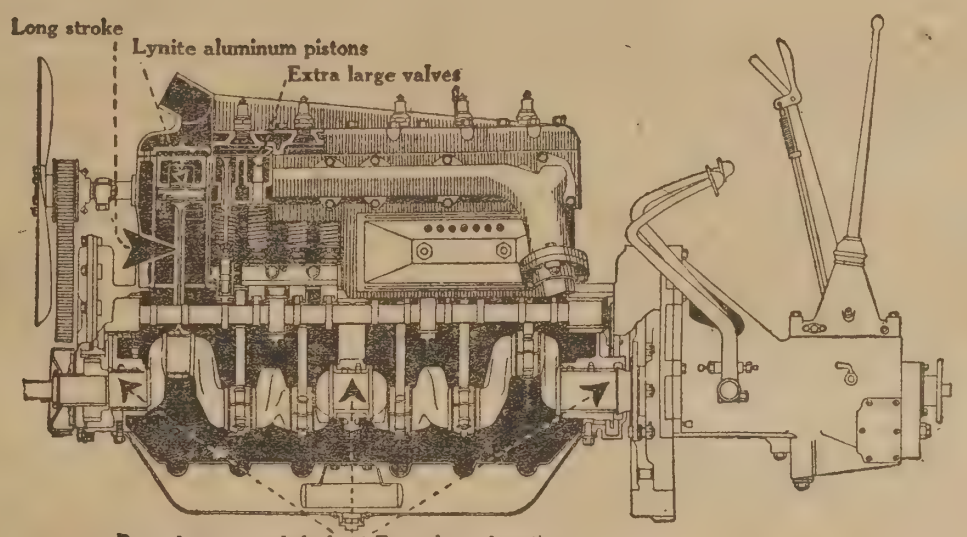
Governor Alvarado seems to be an organizing genius, but even genius could not get these results if the product were not of limited output. Binder twine is made from sisal and Manila hemp, and the crop of each product is about 1,100,000 bales a year. Apparently sisal can be grown more cheaply in Yucatan than hemp in the Philippines. Before the "comision" was organized speculators took advantage of that fact and bought and sold sisal at enormous profits. The "Comision Reguladora" was formed to oust the speculative middlemen, and has done its work with thoroughness and dispatch.

Mexico presents in general so forbidding an aspect that it is pleasing to turn the eye to one happy and radiant spot in the stricken republic. It is the state of Yucatan, in the south. Yucatan, it seems, has an enlightened and progressive government, and in some inexplicable manner has contrived to keep out of the disorders and ruin brought on the rest of the country.

THE STANDARD OIL COMPANY'S

It's all power because it's all refined gasoline—not a mixture.





A SOUND ENGINE IN A SOUND CAR

The engine of the Chalmers 6-30 is very rugged. Yet simple. Modern in everything, but not extreme in any. A good, safe engine. Reliable. Well lubricated. Of good bearings. Accessible. And one that "stays put." Has plenty of power. Though it is not a big engine. The power is well proportioned to the weight of the car. Thus making hills easy going. The power is smooth, too.

Specifications

Engine—6 cylinders, bore 3¼ ins., stroke 4½ ins., piston displacement 224 cu. ins. Power—45 h.p. (on the brake test.) Starter—Westinghouse 2 unit. Carburetor—Stromberg, horizontal, hot air heated. Clutch—Dry disc, asbestos on steel. Fuel feed—Stewart-Warner vacuum system. Ignition—Remy distributor, Willard 80 ampere hour battery. Tires—32 x 4, chain tread on rear.

Prices

Five-passenger	Touring,	$1250	f.o.b.	Detroit	Seven-passenger	Sedan,	$1850	f.o.b.	Detroit
Seven	"	"	1350	"	"	Seven	"	Limousine, 2550	"	"
Three	"	Roadster	$1250	"	"	Seven	"	Town Car, 2550	"	"

All Orders for Chalmers Cars from the Inland Empire promptly filled by

Chalmers Auto Company

1228-1230 First Ave., Spokane, Wash. Distributors for Eastern Wash., Northern Idaho and Western Mont.

Prices Out of Reach

Of Common Northwest Dairy Business

(Continued from page three.)

live stock keep the average man from buying or even bidding. "I consider," he adds, "a healthy, moderate range of prices at a level within the reach of the average farmer far better for any useful breed of live stock than sensational high prices. Tremenduous prices do more harm than good."

With regard to the sale of the $21,500 Holstein bull calf, H. R. Boomer, one of the bidders at that sale, is led to ask the question in his communication given below which has properly occurred to more than one other stockman: "I could never see why bulls should bring $20,000 before being tried out, when three or four dams of such bulls could be bought for that amount and the purchaser raise his own bull and have some other calves beside the cow."

The Farmer also gives an interesting letter from George A. Gue, the auctioneer, regarding this sensational sale:

George A. Gue's Statement.

North Yakima, Wash., Feb. 16, 1917.

To the Editor: Replying to yours, that I heard from in regards to the publication, "Was the $21,500 Bull Calf Sale Bona Fide?"

My affidavit, as manager and auctioneer has been published and it would seem to me that further comment on my part was unnecessary. However, to clear myself and the Portland sale of any possible question, a few words may not be amiss.

To begin with, I wish it distinctly understood, that it is not my desire, nor am I going to be lead into taking a personal part in the controversy between Mr. Von Herberg and Mr. Stuart. It is to be deplored that such feelings had to be aroused, for personal conflict can't be waged without harm to all concerned.

When sales are attacked, as this particular sale has been, an inestimable damage has been done as confidence in the auctioneer and sale is apt to be lost. I have been very successful in my auction work, and I credit this success entirely to the confidence the buying public have in me. I have always played fair and never willingly allowed myself to be connected in any way with anything that was not honest and above board, or in any way take advantage of my bidders.

An auctioneer of experience and ability gets to be an adept in reading faces. He can almost tell when a man's last bid is in (although they try to fool him sometimes). He can almost to a turn tell when by-bidders are present. I have always worked on the theory that to be successful in my work I would of necessity have to deal with my customers more than once. My affidavit shows that this sale was straight and no animal was bid on in collusion with anyone, to the best of my knowledge. I challenge anyone to show where I have ever allowed a by-bid on or protection of any kind on stock at my sales. (I might say, however, the auctioneer does not live that has not had the proposition made him in regards to the protection of stock up to a certain amount.) And surely at this particular sale there were no signs of anything like this.

Every bidder was alert, intent, leaning forward, every nerve on edge. I can see them now: Mr. Smith counseling with an advisor; each bide sure and determined; Mr. Holmes, standing in the driveway, face colorless, bidding determinedly, but with each bid seeming to say, "Shall I go on?" Dr. Richards bid up to $5000 on the bull for Mr. Von Herberg, but, as he stated at the Northwest Breeders' banquet, given at the Multnomah hotel the evening of the first day of the sale, he was willing to bid that much on the bull himself, but when he got above that he would rather Mr. Von Herberg would speak for himself. William Bishop stood at my right, face white and eyes snapping. He gave me his bids in his usual direct and decisive way, by the simple word "Yes."

Mr. Von Herberg sat next to Dr. Richards, white, nervous, yet determined, telling the auctioneer in so many words, "I'll go the limit, but I'll have him." Those present at the ringside could not help but see the effect of the unusually high and spirited bidding, and several remarked on the serious looks of the contending bidders.

When the bidding reached $15,000, those present will remember I stopped the sale long enough to say I was satisfied, as the bull then had reached the price that his noted grandsire had been sold for, but that this animal was so greatly superior that if his grandsire brought $15,000 this youngster, being from a dam absolutely in a class by herself, should never stop at that figure. After that the bids ran on until he was finally sold to Mr. Von Herberg for $21,500, and that ended it.

A. E. Smith of Sumas, Wash., replying to my request for his affidavit (when told that the honor of the sale had been attacked), said: "It is strange that a transaction as open and clear and fair as this sale should be questioned; certainly those who knew the bidders can not question the truth of the whole thing."

I have held two sales for the Carnation Stock Farm, one at the home farm (here in the west) and the other at San Francisco. At the Frisco sale I sold a grade Holstein cow for more than $500 and when she had reached the $300 mark I frankly told the bidders the cow had reached her value, yet if any were financially able to pay more the animal would be a great credit to their herds. They started bidding again and we soon had her above $500. (Mr. Stuart will verify this statement.)

In the Yakima Herald, H. C. Davis of Granger, Wash., one of our most prominent western breeders, is quoted as saying, "Had I possessed Mr. Stuart's bank account I would have taken that bull home if he had cost me $50,000."

In closing I wish to say, the bull in question is worth $25,000 if he is worth anything. He sold for $21,500.

Trusting this will satisfy the public as to my position in this matter and in a measure repair the damage to me and the Portland sale, I remain,

GEORGE A. GUE.

Statement by H. R. Boomer.

New Plymouth, Ida., Feb. 16, 1917.

To the Editor: Answering your letter of the 14th, I would like to know the truth regarding the sale of the $21,500 calf, but am not in position to give any information of value regarding the dispute. As far as I was concerned I bid for nobody but myself, but soon saw the bull was going beyond what he was worth to me at the present time, with a comparatively small number of cows. I could never see why bulls should bring $20,000 before being tried out when three or four dams of such bulls could be bought for that amount and the purchaser raise his own bull and have some other calves besides the cows. On the other hand, with a herd large in numbers and bred on a par with the bull, I can see where a few thousand dollars might be a small item to the purchaser and he might think paying a high price at a public auction the quickest way to get advertised. If two such buyers got to competing you can see what the result would be. Except as above stated, I know nothing of the facts of this case.

H. R. BOOMER.

As N. C. Maris Views It.

"I was not present at the sale, though I was on the grounds, and I have no knowledge or information about it," said N. C. Maris to a representative of The Farmer. "However, I do feel at liberty to say emphatically that it is a mistake to have extreme prices at public or private sales of purebred live stock. Such prices keep the average man from buying or even bidding. When he sees animals bringing enormous prices he looks on the whole thing as a game which he can not play. It is for the speculator and the millionaire but not for him. So he pays no attention to purebred stock. It tends toward illegitimate boosting and it has had just such an effect in the past. Extreme high prices have had a damaging effect in several cases which I can call to mind. I consider a healthy, moderate range of prices, at a level within the reach of the average farmer far better for any useful breed of livestock than sensational high prices. Tremendous prices do more harm than good.' '



ENDURANCE

THE hinges on the barn of the old homestead were hand-hammered by the blacksmith. The iron was slowly and carefully made and was free from most of the chemical impurities that cause rust. That is why those old iron hinges lasted to see many doors come and go.

"ARMCO" IRON CORRUGATED CULVERTS

like grandfather's barn door hinges, are made of iron so pure that they resist rust. They will outlast many ordinary metal culverts and, like the old hinges, will endure after the men who place them have passed away.

"Armco" Iron Culverts mean true economy in road building and upkeep; they represent prudence in the use of public funds. The trade-mark on every section is a pledge of "value received".

For full information on "Armco" Iron Culverts, Flumes, Sheets, Roofing, and Formed Products, write the manufacturer in your vicinity, or

ARMCO IRON CULVERT AND FLUME MFRS. ASSOCIATION
Cincinnati, Ohio



MAIL ORDER DEPARTMENT

ESTABLISHED 1884 NORTHWEST GROCERY CO. TACOMA, WASH.

13th and Commerce Sts.,
TACOMA, WASH.

Coffee By Mail

We will try anything once. Will you?

As a trial proposition, send us 50 cents and we will send you 1½ pounds of Northwest's Best Coffee, and after using it, if you believe it is not honestly the best Coffee you have ever used, we will refund the purchase price without question.

You take no chances.

This is not a package coffee, but a bulk coffee, freshly roasted and ground for you the way you want, after the order is received.

1½ lbs. by Parcel Post to any point in First or Second zone ..... $ .50

3 lbs. by Parcel Post to any point in First or Second zone $1.00

All good coffee; no tin cans to throw away, or premiums you do not need.

Fill in the coupon below and send with 50 cents or $1.00, in stamps, coin or money order, to

Northwest Grocery Company
TACOMA, WASH.

Send me 1 1-2 lb.—3 lb. Northwest's Best Coffee,

Whole, Ground (How?).....

Name .....

Address .....

Coffee sent whole or ground, as ordered. If you want it ground, state whether course, medium, fine, for percolator, or pulverized.

When you write to advertisers be sure to say that you saw their advertisement in this paper.

The Motor Car
On the Farm

The good driver does not do a number of things which are seen done repeatedly. The good driver does not insist on all his rights, nor tries to pass with a curve just ahead or fails to give plenty of warning. The good driver never tries to pass between two cars.

For 1916 total receipts from auto and motorcycle registrations of various kinds in Oregon amounted to $146,232. The cost of license plates, badges, printing, clerk hire and postage was $26,244.55. This left $119,987.45 to be returned in proportion to the various counties for road purposes.

During the 12 months ending June 30, 1916, the tire manufacturers of the United States exported tires to the value of $80,000,000. This is four times the amount exported during the preceding year, and shows that the business in American tires abroad has been placed upon a very satisfactory basis. A substantial increase is noted in South American business.

During 1915, according to statement issued by the national automobile chamber of commerce, motor car users discarded 9,000,000 tires, representing an expenditure of more than $290,000,000.

What would be the result if half of this sum, approixmately $150,000,000, could be saved annually? It would pay for the construction of five concrete highways across the continent each year; it would build another Panama canal in three years; pay off the national debt in seven years; or build a fleet of 10 first-class battleships every year.

Relative to Gasoline.

In a statement recently given out by the United States bureau of standards, effort is made to correct two erroneous opinions generally held by the public regarding motor fuel. According to the report, specific gravity is practically worthless as a check on gasoline when it is desired to gage its value for use in motor cars. Just what is the proper test is still a matter of some doubt, and in this regard the report states:

"It seems most probable that the definition of gasoline will have to be based on the percentage that distils over between specified temperatures, when the distillation is carried out under specified conditions. This distillation test, speaking in nontechnical terms, is a measure of the freedom with which the gasoline will vaporize. The gasoline must not vaporize too freely for two reasons—one that it would not be safe, and, secondly, its loss in storage by evaporation would be too great. Hence, the specification may have to contain limitations of the percentage distilling over below a certain temperature, coupled, perhaps, with a proviso that certain percentages shall distil over below other fixed temperatures, in order that requisite amounts of low-boiling constituents shall be present to insure easy starting of an engine. Likewise, the specification must contain a provision that all must distil over below a certain maximum temperature, in order to exclude from the gasoline the heavier petroleum distillates, such as kerosene."

The report also informs the public that it must not expect the bureau of standards to take hasty action in formulating a gasoline test.

British Forbid Hide Trading.

War office forbids purchase, delivery or negotiations relating to wet salted hides of 45 pounds and upward, dry salted hides of 25 pounds and upward, and dry hides of 18 pounds and upward at prices exceeding by more than 1 per cent prices at which said hides were sold by or on behalf of the importer thereof into united kingdom; unlicensed hide brokers are refused permission to engage in negotiations for purchase or sale of such hides, and no tanner may purchase hides without giving guaranty to put the hides purchased into process of manufacture of leather suitable for military requirements. All persons engaged in the hide business must furnish the director of army contracts particulars as to their business.

THIS COUPON OPENS YOUR CREDIT ACCOUNT

TULL & GIBBS SPOKANE WN.

Please mail me Free without expense or obligation your new catalog of home furnishings.

Name .....

City ..... State .....

R. F. D. ..... P. O. Box .....

USE THIS COUPON

This Outfit $19.85



We offer you liberal credit. You can take a year to pay for your purchase.

$3.00 Down and $1.25 a Month Buys This Beautiful Bed Outfit

THE BED ALONE, if you were to purchase it at a regular retail furniture store, would cost you almost the price of the outfit. When you have this bed made up in your home you will find that it will add refinement and a neat, cheerful effect in the room in which it is placed.

DIMENSIONS—Bed can be furnished in 4½-foot width, the full size only. The posts are 2 inches in diameter. Fillers ¼ of an inch. The head piece stands 52 inches high and the foot piece 35 inches high. Can be furnished in gold Vernis Martin, giving the bed a most delightful appearance.

THE MATTRESS will be furnished in the full size, 4½ feet only. It is a great deal better mattress than you ordinarily find in the outfits. It is a 40-pound mattress and we do not hesitate to recommend it in every way. A good quality elastic sanitary cotton felt is used in making this mattress and it is covered with a splendid grade of fancy art ticking, securely tufted and finished with a heavy roll edge. The scientific construction assures a wonderfully comfortable and durable mattress.

THE SPRINGS are something new and a most extraordinary value. They are noiseless and durable. The double rust proof wire fabric is attached to the heavy angle iron frame by oil-tempered helical springs. The weight is well equalized and distributed all over the entire spring.

No. 1133. Outfit complete as pictured. Weight about 160 lbs. Price **$19.85**



$2.25 Down and $1.00 Monthly Buys This Fine Solid Oak Arts and Crafts Dining Table

THIS BEAUTIFUL TABLE, though simple, is so nicely proportioned and handsomely finished that it makes a wonderful table for any family to have. A nice dining table that will be serviceable and neat, and not be a big item of expense. You will notice that the pedestal is truly mission in shape and 6 inches in diameter. The legs are very massive. Every part of the table, both base and top, is carefully sandpapered and smoothed before the finish is applied. Top measures 42 inches when closed, extending to 6 feet. Furnished in fumed or golden oak.

No. 1418. Weight about 117 lbs., furnished complete with leaves. Price..... **$13.95**

TULL & GIBBS

SPOKANES GREATEST HOUSEFURNISHING STORE

FIRST AVE. & WALL ST.

EDISON PHONOGRAPH SHOP

Open Your Account Now With Tull & Gibbs

It's the easiest thing in the world to do.

Just fill out the above coupon and mail it today. You need our catalog of home-furnishing to help you in buying the things you need in your home.

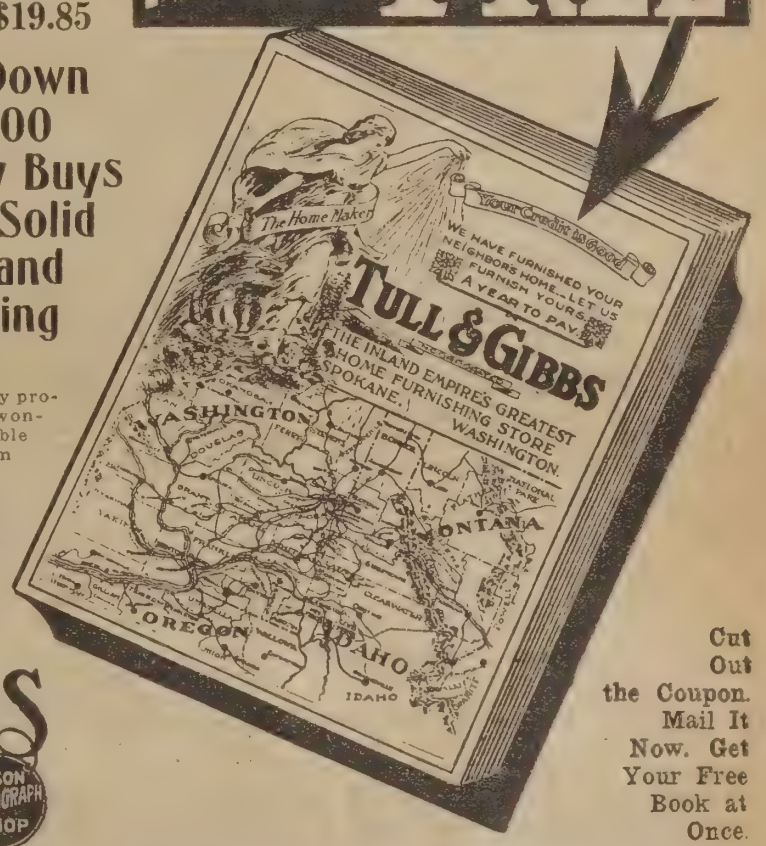
There are hundreds of bargains in our catalog like those we offer here.

You can buy everything you need for your home, and take a year to pay for it.

Easy to Buy—Easy to Pay!

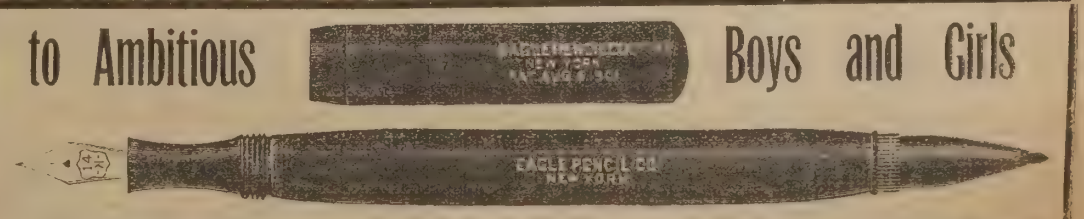
We believe in the HONESTY of the American People. WE TRUST YOU. And we do it pleasantly and willingly. We want you to be happy and satisfied. We want your home to be beautiful, comfortable, and we make it possible for you to beautify it by offering you everything for the home cheaper than you can buy it elsewhere and at terms that make paying for the goods so easy you'll never miss the small monthly payments. We make home-furnishing EASY.

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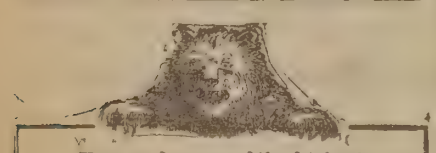
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Stock Men
Organize Permanent Association

(Continued from page five.)

Badrick, Palouse, Wash.
Brenner, Alex, Republic, Wash. R. F. D. No. 1.
Bruihl, Charles, Benge, Wash.
Cable, H. L., Thornton, Wash.
Carder, W. H., Chewelah, Wash.
Cassidy, M. B., Hartline, Wash.
Comegys, Horace, Thornton, Wash.
Copeland, Grant, Hooper, Wash.
Crossland, L. C., Hatton, Wash.
Davis, H. C., Granger, Wash.
Davis, James M., Benge, Wash.
Dilworth, David C., Buckeye, Wash.
Downer, E. W., Pullman, Wash.
Elliott, E. E., Bonners Ferry, Idaho.
Ellis, B. J., Lamont, Wash.
Fishback, Theodore, Coeur d'Alene, Idaho.
Frederick, C. C., Amber, Wash.
Galbraith, A. R., Opportunity, Wash.
Gale, S. H., Rosalia, Wash.
Gardner, Mr., Montana.
Gay, C. C., Boyds, Wash.
Giese, Julius, Julietta, Idaho.
Graham, James C., Palouse, Wash.
Graham, W. A., Fort Shaw, Mont.
Gray, Robert H., Post Falls, Idaho.
Gunning, D. A., Reardon, Wash.
Gunning, George E., Reardon, Wash.
Haden, H. E. and daughter, Wilbur, Wash.
Halliday, John D., Chicago, Ill.
Harper, Earl, Johnson, Wash.
Harvey, E., Ellensburg, Wash.
Haygard, Finch, Sequim, Wash.
Hislop, William, Pullman, Wash.
Hooper, A. E., St. Joe, Idaho.
Howard, T. H., Oakesdale, Wash R. F. D. No. 2.
Huntley, George H., St. John, Wash.
Huntley, L. Pratt, Colfax, Wash.
Janett, George, Mondovi, Wash.
Johnson, A. P., Garfield, Wash.
Johnson, Oscar, Missoula, Mont.
Kayler, James H., Peck, Idaho.
Kendrick, F. H. Valley, Wash.
Leahy, D. J., Leahy, Wash.
Lemley, I. D., Rosalia, Wash.
Little, H. N., Fruitland, Wash.
Little, M. S., Fruitland, Wash.
Logsdon, A. J., Valley, Wash.
McAllister, C. M., Portland Union Stock Yards, Portland.
McGregor, A. C., Hooper, Wash.
McCroskey, J. H., Sprague, Wash.
Madsen, J., Seattle.
Maurier, L. A., Rosalia, Wash.
Mayer, J. V., Uniontown, Wash.
Meenach, C. M., Kiesling, Wash.
Meenach, F. T., Kiesling, Wash.
Merritt, Dick, Rosalia, Wash.
Merritt, W. M., Rosalia, Wash.
Miller, George, Effie, Wash.
Mitchell, C. W., Wheeler, Wash.
Morrison, Alex., Valley, Wash.
Olson, Peter, Roy, Wash.
Nelson, S. B., Pullman, Wash.
O'Neil, J. M., Almira, Wash.
O'Neill, P. P., Valley, Wash.
Osborne, O. F., Coulee City, Wash.
Osterkamp, Edward, Reardan, Wash.
Owes, Albert, Effie, Wash.
Peach, Charles, Valley, Wash.
Perry, Deloss, Clarkston, Wash.
Peterson, Charles, Krupp, Wash.
Peterson, Jens, Almira, Wash.
Peterson Brothers, Espanola, Wash.
Plummer, O. M., Portland.
Plaster, A. C., Reardan, Wash.
Reed, Joseph, Marble, Wash.
Richardson, B. F., Wilbur, Wash.
Rowland, L. D., Corbin, Wash.
Samuels, H. F., Samuels, Idaho.
Schell, B. W., Palouse, Wash.
Shaw, J. N., Moscow, Idaho.
Skeels, Gene, Uniontown, Wash.
Severence, George, Pullman, Wash.
Stanley, J. V., Bonners Ferry, Idaho.
Terry, Fred, Rosalia, Wash.
Turnley, R. P., Rosalia, Wash.
Treadwell, H. M., Burke, Idaho.
Trimble, J. E., Garfield, Wash.
Valentine, J. B., Walla Walla, Wash.
Wagner, H. E., St. John, Wash.
Weeks, W. E., Peck, Idaho.
Whittier, Robert, Helmville, Mont.
Wilson, G. M., Wilbur, Wash.
Woodward, A. G., Fairbanks, Wash.
Wynhoff, H. G., Almira, Wash.

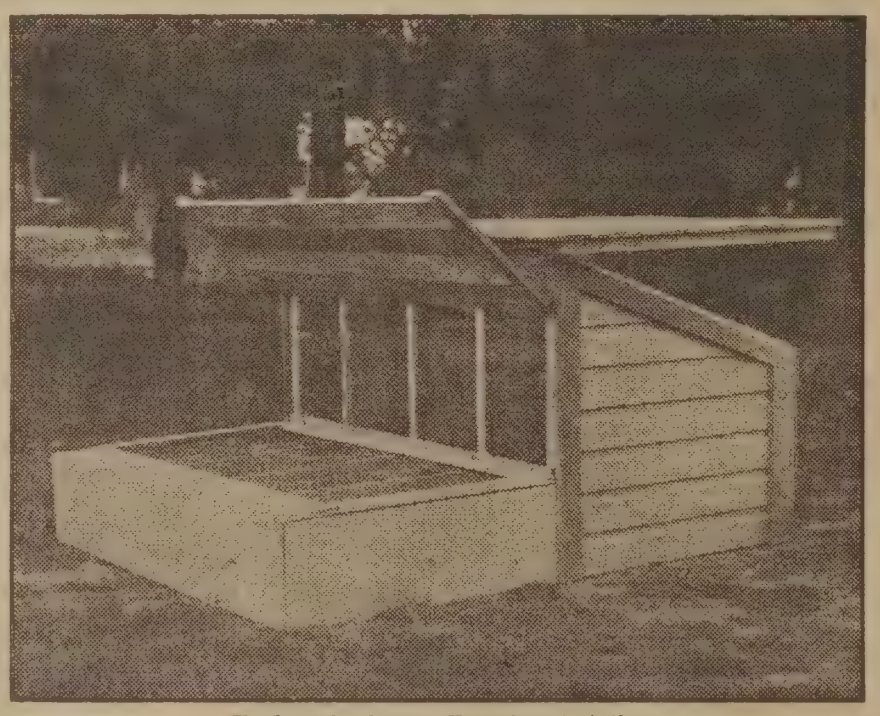
In addition the following residents of Spokane and vicinity were present: D. M. Adams, A. Backland, D. D. Bathrick, J. Bently, H. C. Brown, J. D. Campbell, Thomas Conway, S. A. Evans, E. E. Faville, W. Ferguson, E. E. Flood, J. A. Henry, R. J. Hilton, H. J. Honeywell, J. J. Hughes, William Huntley, H. L. Kimball, E. A. McKenna, J. H. Martin, David Munroe, Charles Mulholland, A. W. Peer, A. H. Posten, Theodore Reed, J. H. Roberts, W. D. Roberts, J. W. Russell, H. L. Sannett and Ernest Sargent.

Hatching Methods
Hen Compared to the Incubator

(Continued from page twenty-two.)

clean grass. In a couple of weeks the hens may also be given their liberty.

Hen Hatching and Brooding Coop



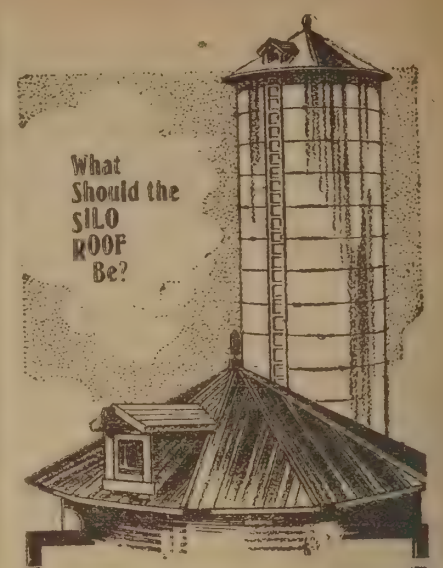
Used at the Oregon Experiment station.

When the brooding stage is past and the hen leaves the chicks roost perches are put in the house for them. The house is moved occasionally on to clean ground. It is very important to raise the chickens on clean ground and especially important not to throw the feed on ground covered with droppings; this to prevent the spread of disease.

When the cockerels are old enough they may be sold for broilers and this leaves room for the pullets.

It will be noticed that both the front door and the roof are hinged. It is better to keep the front door down when the hens are sitting to darken the nests. Afterwards when the chicks are hatched it may be kept open to allow more fresh air in the coop. With the roof on hinges it makes it more convenient to get at the nests or hens. There is also a 12-inch door at the rear for getting at the nests. This is a board hinged at the bottom and cut in two sections so that only two nests are exposed at one time.

There are other methods of hen hatching ad brooding, but this is one method that we have worked out at the station that has been successful. Try it.



SOME POINTS
For the Farmer Who Insists on Knowing WHY!

This roof comes in sections, complete and READY TO PUT ON. No cutting nor fitting. Rafters bolted to castings, and thus to silo itself. AUTOMATICALLY adjusts itself. The material the very finest. Water tight, strong, durable. Dormer window and Gin pole. Ventilation perfect: YEARS EXPERIENCE BACK of this ROOF.

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Roof, and moreover, PRACTICAL understanding men, who KNOW WHAT the FARMER MUST HAVE.

WE BELIEVE THAT THE DAY is at hand WHEN NO FARMER WILL FEED STOCK at any time of the year WITHOUT AT LEAST A PORTION of SILAGE IN THE RATION.

FREE LITERATURE: (1) **Feeding Manual,** containing the most modern scientific data on feeding. (2) **Essay on Planting and Raising Silage Corn,** replete with valuable, practical information. (3) **Weyerhaeuser Silos,** giving complete information, showing the practical, scientific details. SEND FOR ANY or ALL OF THESE—we will be glad to mail them to you FREE.

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The Toll Gate and Grain Pit

Pointed Story Helps Bring Peace in Divided Convention

At the grain convention held at Pullman, Wash., a few weeks ago a friendly but spirited controversy took place between John G. McHugh, representing the Minneapolis Chamber of Commerce, and certain representatives of the farmers of the northwest.

It must be understood that the Minneapolis Chamber of Commerce is nothing more or less than the Minneapolis grain exchange, through which the great bulk of the grain of the famous Dakotas must pass. Mr. McHugh was defending the exchange from vigorous attack by those who declared it to be a monopoly.

When the fight was at its warmest Former President E. A. Bryan of the state college entered the ring with a smile on his face and told the following story:

"I made an automobile trip from Pullman to Portland last sumer by way of Pendleton and The Dalles. Near The Dalles, on the main thoroughfare, we came to the Des Chutes river, a broad, shallow, swift stream, filled with rocks and boulders, with mountainous walls rising on either side. As we drove up the public highway to the river, right athwart the highway was a modern gate, with a comely woman as gatekeeper—in fact, almost too good-looking to be in charge of so strategic a point on the public highway. Beyond the gate was a rickety, cheap-looking bridge; just wide enough for one vehicle at a time, built on a series of home-made wooden buttresses.

"A dollar was the charge to open the gate and permit one to cross the bridge. To a mild inquiry if this wasn't a rather high price to charge, we were informed that if we didn't wish to pay the price we could go some other way. Inquiry elicited the information that there was a crossing about 90 miles above, and that below was the Columbia river. On each side of this toll-bridge was the main highway from eastern Oregon, eastern Washington, Idaho and the far east, to Portland. Of course, we paid the dollar, at the same time thinking how mediaeval is Oregon that she should permit this private tollgate to continue to exact such an amount from the great tide of travel (50 to 100 autos a day) along a state and national highway. There were a hundred other places along the thoroughfare where the state might have licensed a private individual to erect a gate and exact a dollar from all travelers, where it wouldn't have made any difference, for the public would have easily and quickly gone around. But this was an awfully strategic place to have a tollgate. Wouldn't you like to have a tollgate on such a line of commerce at such a strategic point?

"The people who kept the gate seemd awfully nice people. They made the change correctly. I doubt not that they or their predecessors had put some labor and money into that rickety old bridge and were entitled to some compensation. I doubt not that the state of Oregon had given to them the legal right to take tolls. I fancy they were honest folk who were acting strictly within the law. But the system seemed very mediaeval, to say the least. Perhaps there was a day in the remote past when it was even wise to let somebody build a bridge and put a gate across the highway and charge for passing through it; but that day is surely past."

Applying this story to the situation in the middle western grain market, Dr. Bryan said:

"We need many thoroughly organized markets where buyers and sellers may meet. The bigger the movement along the highway of commerce, the greater is the strategic importance of a perfect market organization. What an ideal place it is to have a tollgate! The talented men who created this and other similar exchanges doubtless put some time and money into creating and perfecting the organization. Many of the members are doubtless excellent gentlemen. They dress well, are good providers for their families and doubtless give something to charity. They believe in conducting a strictly legal business, and feel badly when 'incompetent' store clerks and others dabble in futures to their own hurt. Still, they see the enormous value of such a market and take pride in what they contribute to its success. They class as 'agitators' all who question the wisdom of continuing the tollgate system.

"Here at the Minneapolis exchange is a narrow place in the great highway of commerce. The location is strategic. it is on the highway over which the staff of life is transported. The one who would like to pass without paying the toll is told that he is free to go some other way. The great, ruthless public, however, thinks this barrier is mediaeval. 'Why this obstruction?' they say. 'The highways of commerce should be as free as the nation's highways. Private interest must give way to public good.'

"It is thus that the problem of the public versus private grain exchanges comes up for discussion. It is fortunate that this wheat convention has the opportunity to listen to so distinguished a representative of the 'private exchange' system explaining its merits and answering the criticisms against it. It is also fortunate that the rising tide of a newer conception of the management of the highways of commerce should also have their exponents."

COMMUNITY SERVICE

To Be Recognized by Bankers.

One of the banks of Bend, Crook county, Ore., is offering a service medal to the student who, in the opinion of the teachers and pnpils, has done the greatest service during the year in the community, home and school. The students will ballot on this nomination and the nominees will be considered by the faculty.

Baby Silo for His Hens

Three Feet by Nine, Holding Six or Eight Tons

By D. G. SUTHERLAND



Part of the flock of 400 Ancona chickens, and the chicken silo owned by J. D. McKnight of Sunnyside, Wash.

J. D. McKnight of Sunnyside, Wash., has 400 Ancona laying hens and pullets. In order to supply them with green, winter feed, last fall he built a silo three feet in diameter and nine feet high. It was built of wood and on the same plan of the large silos. It was filled with unmarketable cabbage, turnip and rutabaga tops, and lawn clippings from a bluegrass and white clover lawn, the cabbage and tops were chopped up, similar to making other silage. A small amount of salt was used and it was covered with water.

The silo held between six and eight tons. All material used would have otherwise gone to waste. The silage kept fine, the chickens are very fond of it, the egg production has been good.

Mr. McKnight says his silo has reduced the cost of his winter feed one-third. He says if he were going to build another he would use a pit silo. With a silo of his diameter, in extremely cold weather, it would freeze too much, unless in some way protected.

TOMMY GETS LETTER

From His Uncle in Scotland.

The following letter was received by a 10-year-old lad living on an Oregon farm from his bachelor uncle, living in Edinburgh, Scotland. Accompanying the letter is the following comment by our contributor: "As an example of the right kind of a letter to write to a real boy, we think this is well worth passing on to other real boys who read The Farmer."

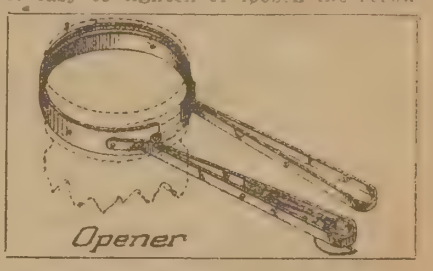
"Dear Tommy: How are you? Do you feel merry and bright, and have you still got that donkey of which I have a kodak picture? And how is the dog? Did I tell you my Scotch terrier dog chum had pups? There were six of them, two boys and four girls; like the Chinese, we don't think much of girls, so we drowned them. The other two grew up together side by side. They were called 'the big yin' and 'the wee yin,' not that there was much between them in size, but you have to distinguish them somehow. They are both dark brindle in color; you should see them fight for an old shoe—but the wee yin is master; whenever he loses his temper, the fight stops. For a long time I did not know which one to keep. Sometimes I liked one, sometimes the other, but as I could not keep the mother and both of them, I at last decided to keep the wee yin, so I gave the other to a good friend who will look after him well. It was great to see how considerate they were for each other; when you put down their food they gulped it down in case the other would eat too much and hurt himself. The big yin generally got most; he just ate straight ahead while the little one was doing some fancy touches licking around the edges of the plate. I don't know whether he was biggest because he ate most, or ate most because he was biggest. Which do you think? The 'wee yin' now goes by the name of 'Toddle Ben,' Ben for short, and he knows it all right. Now I will wish you a Merry Xmas, and I hope you will write me soon and tell me about your dog and other pets. With love, from Uncle Harry."

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Cap Opening Tool.

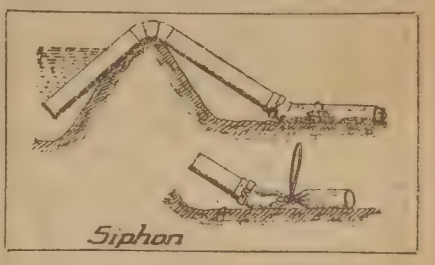
The women folk will be interested in this tool, which, it is claimed, makes it easy to tighten or loosen the screw



caps of preserve jars. The device attached to one handle is used to open tin cans.

Irrigating Siphon.

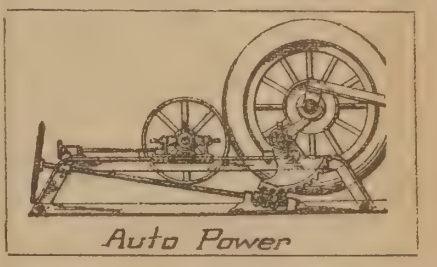
This siphon is used to take water from an irrigation ditch at any point without the use of bulkheads and gates.



It has a flexible tube, on the lond end, which is used to regulate or stop the flow of water.

Power Transmission.

The new feature here is the hand-operated worm, by means of which the rear wheels of the automobile are



elevated and held against a pair of grooved wheels. The power is taken from the axle of the grooved wheels.

Hanger for Ears of Corn.

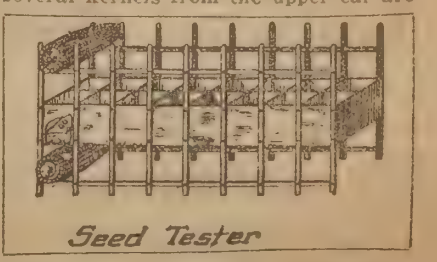
It will be noticed that each link of this hanger is shaped like the letter W, except that it has, in place of the



middle point, a U-shaped piece at right angles to the letter. Any desired number of links can be hung one to the other.

Seed Tester.

The object here is to provide a seed corn tester in which the seed can be accurately identified. In each section, several kernels from the upper ear are



placed on moist earth in the forward box, and several from the lower ear, in the rear box; thus error of identification are practically impossible.

All Carry Fans.

In China and Japan men and women of all classes, callings and professions, carry fans,

Must Not Put on Airs

No Highfalutin Language in This Contest

By Farm Information Editor.

"Silas, after you have extracted the lacteal fluid from the bovine ruminants, you will eradicate the cycloloma platyphylum from the brassica oleracea."

Just imagine my father giving my day's orders in such terms at about 5 a. m. one fine morning on the farm where 5 a. m. is rather late to be getting started on the day's work.

He never would have said it. He would have said, "Silas, after you have done the milking, you may hoe the pigweed from the cabbage."

There is a beastly lot of farming being done by highbrows in the city these days—farming which is mostly language like that quoted above, farming by folks who know nothing about farming and never will learn.

Now, the point is that highfalutin language counts for nothing in the Farm Information contest which is now running in the farmer. There are 60 questions to be answered and the answers will be scored on common sense and general knowledge of farming conditions rather than on spelling, grammar and penmanship.

It is the desire of the Farm Information Editor that every reader of The Farmer make himself at home in this contest. Use the language that you use around home. If you say "ain't" and "hain't" around home, don't try to put on airs in your answers. Just be natural and your papers will not be rated one fraction of a per cent less because of the way in which you express yourself.

The Farm Information Editor can not boast of an ancestry that come over in the Mayflower or of a great-great-grandfather who was the last man to fall dead on the works at Thermopylae, but he does find particular pride in having grown up on a farm.

He stands ready at any time to fight for the language of the rural districts, because it is the language of least words, a language without frills and furbelows. It is the common tongue of the plain people, many of them just as well educated as those who indulge in $20.000 bulls and other luxuries of the impractical city farmer.

I can recall that in my days on the farm I never became "indignant," but was sometimes "mad" or "sore." Our picket fences were mostly "palings" and our hogs were never "swine." In those days cows did not have "udders" and dogs never had "rabies." We had our own terms for those physical protrusions and mental outbreaks, and when we said 'em everybody knew exactly what we were talking about.

This contest is open to every one. It does not require a technical farm education to answer the 60 questions, because the most of them could be answered without a single day of textbook training. Farm knowledge, not four-syllable words or 30-volume encyclopedias, is what you need.

If you do not care to follow the 60 questions as they appear, five each week, in The Farmer, just remember that our Contestant's Helpful Outfit is included with every new, renewal or extension subscription for The Farmer. See announcement of prize list on page 9.

Cut Out Patches, Put Them Together and Tell Whose Likeness It Represents.



Picture is that of a celebrated South American explorer.

Any person sending the correct identification to the above likeness before March 8, together with $2 in the form of money order, 2c stamps or personal check, will receive the Washington Farmer for three years and any one of the following standard high class magazines for one year: American Magazine, Metropolitan Magazine, Woman's Home Companion or Every Week.

Just see what these publications would cost you at the regular rates:

Washington Farmer,
3 years $3.00
American Magazine, 1 year $1.50
$4.50

Washington Farmer,
3 years $3.00
Metropolitan magazine, 1 year $1.50
$4.50

Washington Farmer,
3 years $3.00
Woman's Home Companion,
1 year $1.50
$4.50

If you send the correct answer, any one of the above club combinations will cost you only $2.

If your answer is incorrect your money will be returned promptly. This offer is limited to replies mailed before February 21, as shown by the postoffice dating stamp on your envelope. Address

Quiz Editor, The Washington Farmer
Review Building, Spokane, Wash.

Potatoes

Has Grown Them for 40 Years

By CHARLES H. DAVIDSON,
Thorp, Wash.

I have been raising the humble spud off and on for the last 40 years, and in this state I find that where there is natural fall of moisture to grow good grain crops there the spud does well, and the way I grow them is like this: I plow deep, harrow and drag the furrow off four feet apart, plant the spuds 10 to 12 inches apart, cover two and a half to three inches. When they are up four inches high, hill up and cover everything but the three top leaves. As fast as they get five to six inches high cover up again all but the top leaves. The spud vine will put out shoots and spuds grow bigger and nicer than what grows from the bottom roots. Every time they are covered up they set an extra layer of spuds. I have hilled up three times and digging time got the returns in spuds the same as four distinct crops. I raised a crop one year on the Sound that went better than 14 tons to the acre.

But I have the best up my sleeve for the man who likes to grow spuds and who is unable to give all of his time to them. Following is the way I grow them now: I wait until the ground begins to warm up and then I use a 12-inch plow and plow 9 to 10 inches deep. I pick out uniform spuds that are true to the shape and the kind I want to plant, which are of a size 1 1-2 to 2 inches long, and plant them whole, 10 to 12 inches apart, in the furrow and plant every third furrow as I plow, then I give the ground a good harrowing and clod smashing; then, when the spuds are about all up I harrow again; then pulling out a few weeds is about all there is to be done to them. Then digging time comes and I have more and nicer spuds than the average person and do not half kill myself cultivating, the last being the way I like best, as the work is only at digging time.

New Auto Light.

A new rear light for automobiles is equipped with an alarm that sounds a signal if it be extinguished accidentally.

FREE

Hatching Eggs



A Poultry Club for Thrifty Boys and Girls

The Farmer, in line with other cooperative work with its readers, has a plan which enables thrifty boys and girls to obtain foundation stock in purebred poultry. A little of your time outside of school hours is all that is required. We offer nothing but eggs from prize winners. Each setting contains 15 eggs, and you can make your selection from the following breeds:

S. C. Reds, R. C. Reds, Barred Plymouth Rocks, White Rocks, White Wyandottes, Buff Orpingtons, Blue Orpingtons, Black Orpingtons, White Orpingtons, Light Brahmas, Anconas, S. C. Andalusians, R. C. Andalusians, R. C. Brown Leghorns, S. C. Leghorns, R. C. White Leghorns, S. C. White Leghorns, S. C. Buff Leghorns, Black Minorcas, Bantams, Buttercups, Campines, Houdans.

Any boy or girl who sends one new or renewal subscription to The Farmer will be sent a certificate of membership to our club, with complete instructions about what to do to get the eggs. Act now. Address

The Washington Farmer

Room 37, Review Building, Spokane, Wash.

All the World's a Stage, and All the Men and Women Merely Players

Would Be Main Weapons Against U-Boats



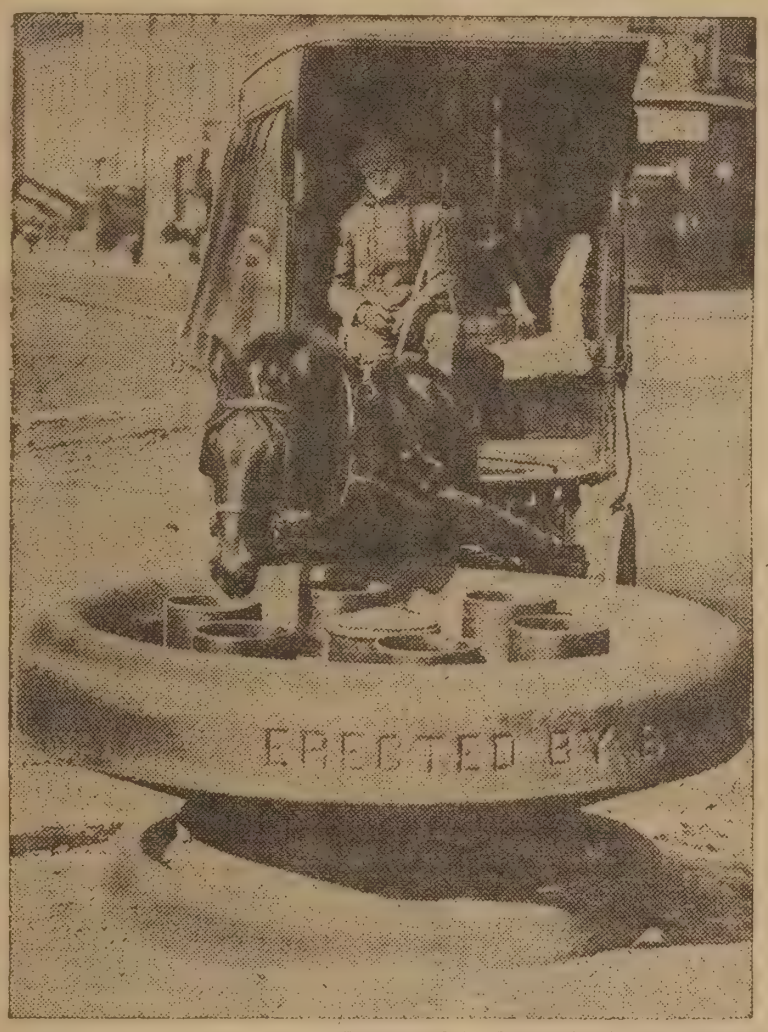
The torpedo boat flotilla of the United States Atlantic fleet will be the main weapon against German U-boats in the event of hostilities between this country and Germany. Just at present the torpedo boat flotilla, which is in command of Rear Admiral Albert S. Cleaves, is with the Atlantic fleet off Guantanamo, Cuba. If war came, the flotilla would be assigned to guarding the coat from submarines and doubtless to the convoying of merchant vessels between the United States and Europe.

Dog Gets Unique Outing.



Above is shown the photograph of Miss Clara Jaeger of Montclair, N. J., with her toy spaniel in her handbag. Miss Jaeger takes the minute animal out for an airing in this manner every day and the dog makes no attempt to escape.

Horses Believe in Safety First



Copyrighted by International Film Service.

The latest movement for practical sanitation has been launched by the Pennsylvania Society for the Prevention of Cruelty to Animals. It is an individual drinking cup for horses, by which they hope to prevent the spread of glanders through the state.

The Entering Wedge



—Fresno Herald.

Interned Ships Are Guarded



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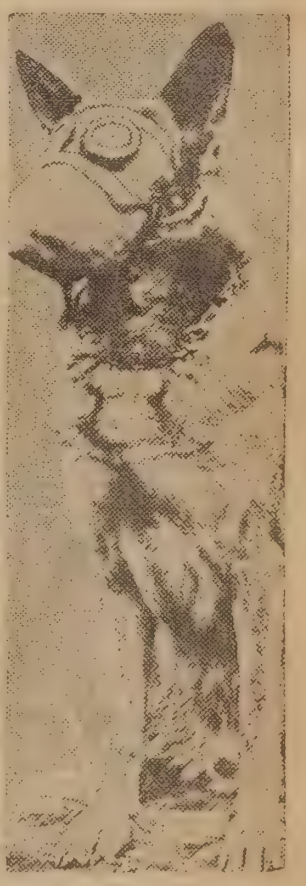
Our United States officers are now maintaining guard upon all of the German vessels interned at New York and other ports to prevent the scuttling of the ships or an attempted dash to sea in the event of war being declared. It was discovered immediately after the severance of diplomatic relations between the United States and Germany that some of the ships had been seriously disabled by their crews to prevent the possibility of their being used by the United States.

Gen. Funston.



The above is the photograph of Major General Frederick Funston, commander of southern department, U. S. A., since February, 1915, who died suddenly in a hotel at San Antonio, Texas, on the evening of February 19. Ever since March, 1916, when placed in command of all United States forces on the Mexican border, General Funston had worked at an unusual pace and of late rearrangement of regular troops entailed an enormous amount of detail work.

On Firing Line.



Copyrighted by International Film Service.

Dogs of carious breeds have proven invaluable in trench warfare of the present great conflict. In order to protect them against gas attacks, gas masks have been devised. This picture shows one of the dogs used by the French army in the west wearing his gas mask.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merril Co.

SYNOPSIS.

Charles Brandon, who has neither wealth nor title, wins distinction for having defeated the heretofore unconquerable duelist, Judson. Brandon is installed as one of the captains of the guard of King Henry VIII. Edwin Caskoden (who tells the story) is Master of the Dance at London Court. The two young men become fast friends. Edwin tells Brandon of the willful, but adorable Mary Tudor, who had coaxed her royal brother Henry out of many proposed marriages which had been arranged for Henry's advantage. Edwin confesses that he, like scores of other men, had fallen in love with Mary, but upon Mary's refusal to marry him, he immediately became attracted to the good and beautiful Lady Jane Bolingbroke.

At their first meeting, Mary and Brandon have a tilt, in which Mary comes off second best and acknowledges it. Wondering as to Brandon's social accomplishments, and to settle a wager with Sir Edwin that he could not dance, Mary invites Brandon, Edwin and Jane to her drawing room. To her surprise and Edwin's delight Brandon is perfectly at ease and proves that he knows more about dancing than the Master of the Dance, himself. He teaches the Princess Mary one of the new French dances. At a ball, given by Mary, Brandon makes an enemy of the Duke of Buckingham, the most powerful nobleman in the realm. The evening is spent with the new dance, which greatly pleases the king. Brandon begins to realize that he loves the unattainable Mary, and, what is worse, Mary knows she loves Brandon. A party, including Brandon, spends a few days at Windsor, during which time the king makes several knights. Brandon would have been one of these had not Buckingham poisoned the king's mind against him. In the meantime, the old French king, Louis XII., whose wife, Anne of Brittany, had just died, has asked Mary's hand in marriage.

Brandon avoids Mary for some time, but when next they meet, they declare their love, but agree that they can never belong to each other. Brandon resolves to leave as soon as possible for New Spain.

In the meantime negotiations for Mary's marriage with Louis XIII. became an open secret about the court. Mary, longing to know the outcome of her complicated affairs, persuades Jane to go with her secretly to Grouch, a Jewish fortune teller, who lived in Billingsgate Ward, in the worst part of London. They disguise as orange girls and make the trip, after the more prudent Jane, unbeknown to Mary, asks Edwin to follow them at a distance. This being impossible for Edwin to do, Brandon goes. Shortly after the girls had emerged from Grouch's, they are pursued by four horsemen. Brandon overtakes them and kills two. The other two horsemen attack Brandon from their saddles. Brandon thrusts his sword into the throat of one of the horses and it falls, pinning its rider underneath. His cry brings his companion to his side, which gives Brandon a chance to escape with the girls. During the fray the mask from the face of one of the men falls and Brandon recognizes Buckingham, but does not speak of it to anyone.

CHAPTER IX.

I thought the king's dance that night would never end, so fond were the Frenchmen of our fair ladies, and I was more than anxious to see Brandon and learn the issue of the girls' escapade, as I well knew the danger attending it.

All things, however, must end, so early in the morning I hastened to our rooms, where I found Brandon lying in his clothes, everything saturated with blood from a dozen sword cuts. He was very weak, and I at once had in a barber, who took off his shirt of mail and dressed his wounds. He then dropped into a deep sleep, while I watched the night out. Upon awakening Brandon told me all that had happened, but asked me to say nothing of his illness, as he wished to keep the fact of his wounds secret in order that he might better conceal the cause of them. But, as I told you, he did not speak of Buckingham's part in the affray.

I saw the princess that afternoon, and expected, of course, she would inquire for her defender. One who had given such timely help and who was suffering so much on her account was surely worth a little solicitude; but not a word did she ask. She did not come near me, but made a point of avoidance, as I could plainly see. The next morning she, with Jane, went over to Scotland Palace without so much as a breath of inquiry from either of them. This heartless conduct enraged me; but I was glad to learn afterward that Jane's silence was at Mary's command—that bundle of selfishness fearing that any solicitude, however carefully shown upon her part, might reveal her secret.

It seems that Mary had recent intelligence of the forward state of affairs in the marriage negotiations, and felt that a discovery by her brother of what she had done, especially in view of the disastrous results, would send her to France despite all the coaxing she could do from then till doomsday.

It was a terrible fate hanging over her, doubly so in view of the fact that she loved another man; and looking back at it all from the vantage point of time, I can not wonder that it drove other things out of her head and made her seem selfish in her frightened desire to save herself.

About 12 o'clock of the following night I was awakened by a knock at my door, and, upon opening, in walked a sergeant of the sheriff of London with four yeomen at his heels.

The sergeant asked if one Charles Brandon was present, and upon my affirmative answer demanded that he be forthcoming. I told the sergeant that Brandon was confined to his bed with illness, whereupon he asked to be shown to his room.

It was useless to resist or to evade, so I awakened Brandon and took the sergeant in. Here he read his warrant to arrest Charles Brandon, Esquire, for the murder of two citizens of London, perpetrated, done and committed upon the night of such and such a day, of this year of our Lord, 1514. Brandon's hat had been found by the side of the dead men, and the authorities had received information from a high source that Brandon was the guilty person. That high source was evidently Buckingham.

When the sergeant found Brandon covered with wounds there was no



Princess Mary writes to Brandon.

longer any doubt, and although hardly able to lift his hand he was forced to dress and go with them. A horse litter was procured and we all started to London.

While Brandon was dressing I said I would at once go and awaken the king, who I knew would pardon the offense when he heard my story, but Brandon asked the sergeant to leave us to ourselves for a short time and closed the door.

"Please do nothing of the sort, Caskoden," said he; "if you tell the king I will declare there is not one word of truth in your story. There is only one person in the world who may tell of that night's happenings, and if she does not they shall remain untold. She will make it all right at once, I know. I would not do her the foul wrong to think for one instant that she will fail. You do not know her; she sometimes seems selfish, but it is thoughtlessness fostered by flattery, and her heart is right. I would trust her with my life. If you breathe a word of what I have told you, you may do more harm than you can ever remedy, and I ask you to say nothing to any one. If the princess would not liberate me . . . . but that is not to be thought of. Never doubt that she can and will do it better than you think. She is all gold."

This, of course, silenced me, as I did not know what new danger I might create, nor I might mar the matter I so much wished to mend. I did not tell Brandon that the girls had left Greenwich, nor of my undefined, and, perhaps, unfounded fear that Mary might not act as he thought she would in a great emergency, but silently helped him to dress and went to London along with him and the sheriff's sergeant.

Brandon was taken to Newgate, the most loathsome prison in London at that time, it being used for felons, while Ludgate was for debtors. Here he was thrown into an underground dungeon foul with water that seeped through the old masonry from the moat, and alive with every noisome thing that creeps. There was no bed, no stool, no floor, not even a wisp of a straw; simply the reeking stone walls, covered with fungus, and the windowless arch overhead. One could hardly conceive a more horrible place in which to spend even a moment. I had a glimpse of it by the light of the keeper's lantern as they put him in, and it seemed to me a single night in that awful place would have killed me or driven me mad. I protested and begged and tried to bribe, but it was all of no avail, the keeper had been bribed before I arrived. Although it could do no possible good, I was glad to stand outside the prison walls in the drenching rain, all the rest of that wretched night, that I might be as near as possible to my friend and suffer a little with him.

Was not I, too, greatly indebted to him? Had he not imperiled his life and given his blood to save the honor of Jane as well as of Mary—Jane, dearer to me a thousand-fold than the breath of my nostrils? And was he not suffering at that moment because of this great service, performed at my request and in my place? If my whole soul had not gone out to him I should have been the most ungrateful wretch on earth; worse even than a pair of selfish, careless girls. But it did go out to him, and I believe I would have bartered my life to have freed him from another hour in that dungeon.

As soon as the prison gates were opened next morning, I again importuned the keeper to give Brandon a more comfortable cell, but his reply was that such crimes had of late become so frequent in London that no favor could be shown those who committed them, and that men like Brandon, who ought to know and act better, deserved the maximum punishment.

I told him he was wrong in this case; that I knew the facts, and everything would be clearly explained that very day and Brandon released.

"That's all very well," responded the stubborn creature; "nobody is guilty who comes here; they can every one prove innocence clearly and at once. Notwithstanding, they nearly all hang, and frequently, for variety's sake, are drawn and quartered."

I waited about Newgate until 9 o'clock, and as I passed out met Buckingham and his man Johnson, a sort of lawyer-knight, going in. I went down to the palace at Greenwich, and finding that the girls were still at Scotland, rode over at once to see them.

Upon getting Mary and Jane to myself, I told them of Brandon's arrest on the charge of murder, and of his condition, lying half dead from wounds and loss of blood, in that frightful dungeon. The tale moved them greatly, and they both gave way to tears. I think Mary had heard of the arrest before, as she did not seem surprised.

"Do you think he will tell the cause of the killing?" she asked.

"I know he will not," I answered; "but I also know that he knows you will," and I looked straight into her face.

"Certainly we will," said Jane; "we will go to the king at once," and she was on the qui vive to start immediately.

Mary did not at once consent to Jane's proposition, but sat in a reverie, looking with tearful eyes into vacancy, apparently absorbed in thought. After a little pressing from us she said: "I suppose it will have to be done; I can see no other way; but blessed Mother Mary! * * * help me!"

The girls made hasty preparations, and we all started back to Greenwich, that Mary might tell the king. On the road over I stopped at Newgate to tell Brandon that the princess would soon have him out, knowing how welcome liberty would be at her hands; but I was not permitted to see him.

I swallowed my disappointment and thought it would be only a matter of a few hours' delay—the time spent in riding down to Greenwich and sending back a messenger. So, light hearted enough at the prospect, I soon joined the girls, and we cantered briskly home.

After waiting a reasonable time for Mary to see the king, I sought her again to learn where and from whom I should receive the order for Brandon's release, and when I should go to London to bring him.

What was my surprise and disgust when Mary told me she had not yet seen the king—that she had waited to "eat, and bathe, and dress," and that "a few moments more or less could make no difference."

"My God! your highness, did I not tell you that the man who saved your life and honor—who is covered with wounds received in your defense, and almost dead from loss of blood, spilled that you might be saved from worse than death—is now lying in a rayless dungeon; a place of frightful filth, such as you would not walk across for all the wealth of London Bridge; is surrounded by loathsome, creeping things that would sicken you but to think of; is resting under a charge whose penalty is that he be hanged, drawn and quartered? and yet you stop to eat and bathe and dress. In God's name, Mary Tudor! of what stuff are you made? If he had waited but one little minute; had stopped for the drawing of a breath; had held back for but one faltering thought from the terrible odds of four swords to one, what would you now be? Think, princess, think!"

I was a little frightened at the length to which my feeling had driven me, but Mary took it all very well, and said slowly and absent-mindedly:

"You are right; I will go at once; I despise my selfish neglect. There is no other way; I have racked my brain—there is no other way. It must be done, and I will go at once and do it."

"And I will go with you," said I.

"I do not blame you," she said, "for doubting me, since I have failed once; but you need not doubt me now. It shall be done, and without delay, regardless of the cost to me. I have thought and thought to find some other way to liberate him, but there is none; I will go this instant."

"And I will go with you, Lady Mary," said I, doggedly.

She smiled at my persistency, and took me by the hand, saying, "Come!"

We at once went off to find the king, but the smile had faded from Mary's face, and she looked as if she were going to execution. Every shade of color had fled, and her lips were the hue of ashes.

We found the king in the midst of his council, with the French ambassadors, discussing the all-absorbing topic of the marriage treaty; and Henry, fearing an outbreak, refused to see the princess. As usual, opposition but spurred her determination, so she sat down in the anteroom and said she would not stir until she had seen the king.

After we had waited a few minutes, one of the king's pages came up and said he had been looking all over the palace for me, and that the king desired my presence immediately. I went in with the page to the king, leaving Mary alone and very melancholy in the ante-chamber.

Upon entering the king's presence he asked, "Where have you been, Sir Edwin? I have almost killed a good half-dozen pages hunting you. I want you to prepare immediately to go to Paris with an embassy to his majesty, King Louis. You will be the interpreter. The ambassador you need not know. Make ready at once. The embassy will

leave London from the Tabard Inn one hour hence."

Could a command to duty have come at a more inopportune time? I was distracted, and upon leaving the king went at once to seek the Lady Mary where I had left her in the ante-room. She had gone, so I went to her apartments, but could not find her. I went to the queen's salon, but she was not there, and I traversed that old rambling palace from one end to the other without finding her or Lady Jane.

The king had told me the embassy would be a secret one, and that I was to speak of it to nobody, least of all to Lady Mary. No one was to know that I was leaving England, and I was to communicate with no one at home while in France.

The king's command was not to be disobeyed; to do so would be as much as my life was worth, but besides that, the command of the king I served was my highest duty, and no Caskoden ever failed in that. I may not be as tall as some men, but my fidelity and honor—but you will say I boast.

I was to make ready my bundle and ride six miles to London in one hour, and almost half that time was spent already. I was sure to be late, so I could not waste another minute.

I went to my room and got together a few things necessary for my journey, but did not take much in the way of clothing, preferring to buy that new in Paris, where I could find the latest styles in pattern and fabric.

I tried to assure myself that Mary would see the king at once and tell him all, and not allow my dear friend Brandon to lie in that terrible place another night; yet a persistent fear gnawed at my heart, and a sort of intuition, that seemed to have the very breath of certainty in its foreboding, made me doubt her.

As I could find neither Mary nor Jane, I did the next best thing: I wrote a letter to each of them, urging immediate action, and left them to be delivered by my man Thomas, who was one of those trusty souls that never fail. I did not tell the girls I was about to start for France, but intimated that I was compelled to leave London for a time, and said: "I leave the fate of this man, to whom we all owe so much, in your hands, knowing full well how tender you will be of him."

I was away from home nearly a month, and as I dared not write, and even Jane did not know where I was, I did not receive, or expect, any letters. The king had ordered secrecy, and if I have mingled with all my faults a single virtue it is that of faithfulness to my trust. So I had no news from England and sent none home.

During all that time the same old fear lived in my heart that Mary might fail to liberate Brandon. She knew of the negotiations concerning the French marriage, as we all did, although only by an indefinite sort of hearsay, and I was sure the half-founded rumors that had reached her ears had long since become certainties, and that her heart was full of trouble and fear of her violent brother. She would certainly be at her coaxing and wheedling again and on her best behavior, and I feared she might refrain from telling Henry of her trip to Grouche's, knowing how severe he was in such matters and how furious he was sure to become at the discovery. I was certain it was this fear which had prevented Mary from going directly to the king on our return to Greenwich from Scotland, and knew that her eating, bathing and dressing were but an excuse for a breathing spell before the dreaded interview.

This fear remained with me all the time I was away, but when I reasoned with myself I would smother it as well as I could with argumentative attempts at self-assurance. I would say over and over to myself that Mary could not fail, and that even if she did, there was Jane, dear, sweet, thoughtful, unselfish Jane, who would not allow her to do so. But as far as they go, our intuitions—our "feelings," as we call them—are worth all the logic in the world, and you can say what you will, but my presentiments—I speak for no one else—are well to be minded. There is another sense hidden about us that will develop as the race grows older. I speak to posterity.

In proof of this stament, I now tell you that when I returned to London I found Brandon still in the terrible dungeon; and worse still, he had been tried for murder, and had been condemned to be hanged, drawn and quartered on the second Friday following. Hanged! Drawn! Quartered! It is time we were doing away with such barbariety.

We will now go back a month for the purpose of looking up the doings of a friend of ours, his grace, the Duke of Buckingham.

One the morning of the fatal battle of Billingsgate, the barber who had treated Brandon's wounds had been called to London to dress a bruised knee for his grace, the duke. In the course of the operation, an immense deal of information oozed out of the barber, one item of which was that he had the night before dressed nine wounds, great and small, for Master Brandon, the king's friend. This established the identity of the man who had rescued the girls, a fact of which Buckingham had had his suspicions all along. So Brandon's arrest followed, as I have already related to you.

I afterward learned from various sources how this nobleman began to avenge his mishap with Brandon at Mary's ball when the latter broke his sword point. First, he went to Newgate and gave orders to the keeper, who was his tool, to allow no communication with the prisoner, and it was by his instructions that Brandon had been confined in the worst dungeon in London. Then he went down to Greenwich to take care of matters there, knowing that the king would learn of Brandon's arrest, and probably take steps for his liberation at once.

The king had just heard of the arrest when Buckingham arrived, and the latter found he was right in his surmise that his majesty would at once demand Brandon's release.

When the duke entered the king's room Henry called to him: "My Lord, you are opportunely arrived. So good a friend of the people of London can help us greatly this morning. Our friend Brandon has been arrested for the killing of two men night before last in Billingsgate ward. I am sure there is some mistake, and that the good sheriff has the wrong man, but right or wrong, we want him out and ask your good offices."

"I shall be most happy to serve your majesty, and will go to London at once to see the lord mayor."

In the afternoon the duke returned and had a private audience with the king.

"I did as your majesty requested in regard to Brandon's release," he said, "but on investigation, thought it best to consult you again before proceeding further. I fear there is no doubt that Brandon is the right man. It seems he was out with a couple of wenches concerning whom he got into trouble and stabbed two men in the back. It is a very aggravated case and the citizens are much incensed about it, owing partly to the fact that such occurrences have been so frequent of late. I thought, under the circumstances, and in view of the fact that your majesty will soon call upon the city for a loan to make up Lady Mary's dower, it would be wise not to antagonize them in this matter, but to allow Master Brandon to remain quietly in confinement until the loan is completed and then e can snap our fingers at them."

"We will snap our fingers at the scurvy burghers now and have the loan, too," returned Henry angrily. "I want Brandon liberated at once, and shall expect another report from you immediately, my lord."

Buckingham felt that his revenge had slipped through his fingers this time, but he was patient where evil was to be accomplished and could wait. Then it was that the council was called during the progress of which Mary and I had tried to obtain an audience with the king.

(To be continued in the next issue.)

LARGER PANS

Are a Great Saving on Baking Day.

"One day, when baking cookies," says a housewife in the March Woman's Home Companion, 'I expressed a wish for larger pans. My husband said, 'Why not have some made to fit the oven?' He then measured the grate and went down to the hardware store. In a few days I had two Russia iron pans 19½ by 18½ inches, and one inch deep. As these pans hold three dozens of cookies, I can do my baking very much more quickly than I could with the old pans, which held only 12 cookies."

Egg Beater Butter.

People who like fresh butter and can not always get it may be interested in knowing that it may be made with an eggbeater in an enameled jug. A pint of cream will not only make a respectable pat of butter, but furnish butter milk for those who like it, and, all things considered, it is as economical as any other way of buttering one's bread—and more delicious than most of the usual ways.

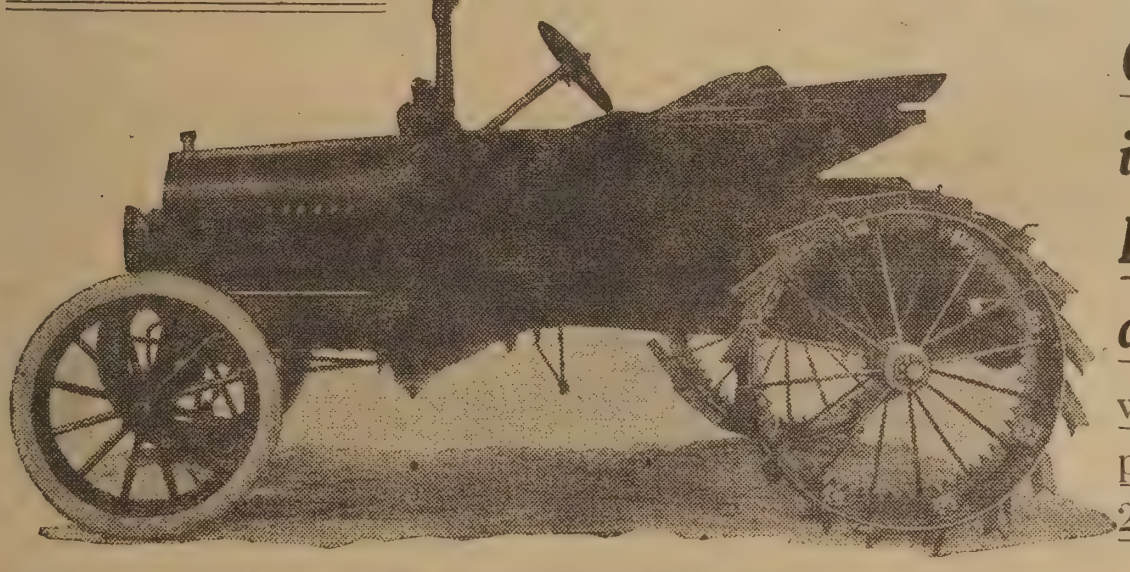
Small Electric Lamp.

A small electric lamp, which is carried on the back of the head, has been designed for use at night by automobile drivers.

Folding Table.

A library table that unfolds and forms a full-sized double bed is a furniture novelty of recent invention.

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What to Read

Different Classes Necessary

By MARIELLA LADD.

The following is the fourth and last of this series of articles on reading, by Mrs. Ladd.

First of all, I like to read books about ideal children. "Polyanna," "Rebecca of Sunnyside Farm," "Mrs. Wiggs and the Cabbage Patch," for instance. They somehow hearten one up and make one laugh at odd moments, when, without them, one might be tempted to do anything but laugh!

Next, I like to read stories that the children read, because then I can talk to them about the characters in them and help them to read more thoroughly than they might do alone.

Then I like to read books that help me to save time in my household work. It is a pity that books of this kind are usually written to suit city housewives. I get over this difficulty by reading only the interesting and useful parts from my own point of view. For instance: When a friend lent me a copy of Mrs. Christine Frederick's "New Housekeeping," I thought at first that it was of no use to me at all. When I had turned down several chapters, I came to the chapter on the kitchen. Then I found some ideas that I could put into effect, and I did so, with simply wonderful results. Again, with regard to the food question, I have found great help from the "Home Economics Series," but am always on the lookout for new ideas that make for health. A friend lent me "Starving America," by Alfred McCann. Here, again, the greater part of the book had to be passed over as suitable only for city dwellers. I found, however, lots of useful information in it, and my husband was very glad to share much of it with me.

The "Personal Hygiene" book of the Home Economic series has been very useful to me in matters concerning the health of the home. Personally, I have found great help from reading Annie Payson Call's books, "Power Through Repose," "As a Matter of Course" and others.

For purely recreative reading, I like a book that gives me a hearty laugh or else enlarges one's human sympathies.

As a rule, I avoid stories with a tragic ending or mysteries of any kind. They worry me somehow, and make me wonder why the writers take so much trouble to drag their characters along such weary ways, when they could have just as easily and more pleasantly traveled direct. The great exception to this rule is "A Story of an African Farm," by Olive Schriener. This book always fascinates me by its sadness and by its author's wonderful power of expression. It is a sort of introduction to the great questions of the day that cluster around woman's emancipation.

Since the enfranchisement of women in the west, I have tried to read the newspapers and some books about the history of the woman's movement. I have not made much progress in this direction. It startles one to read that the number of women who work for a living in the states has more than doubled since the beginning of the century. It also makes one feel glad that one's lot is on the farm, where one can still control one's own working conditions to a great extent.

I keep a book list, and buy or borrow as I can. I also keep a notebook, into which I write sentences from the books I read which appear worth remembering in a special sense. We have no library near us at present. The Washington Farmer library will be a most precious acquisition when we can secure it.

No Penny.

The habit of calling the one-cent piece of our American coinage a "penny" is utterly without foundation or excuse. We have no penny in our coinage. At one time half-cent pieces were coined, but now the unit is one cent, the hundredth part of a dollar.

Frozen Potatoes

As Palatable as if Never Nipped

What is the quotation or what are the words which have helped you in the journey of life?

Is it a phrase from some famous author or was it the words from some neighborly soul who helped you over a hard place and left you the invaluable legacy of a life motto?

What are your favorite motto, your favorite quotation, your favorite words?

Send them to the editor of The Farmer and let those words help another which have helped you.

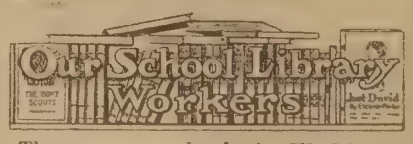
To the Editor of The Farmer: Here is a method of cooking potatoes that have been frozen, which I heard of last winter from a lady from Alaska:

Place a kettle of boiling water on the stove and when water is boiling hard, throw in the potatoes without any previous treatment. They must not be washed or touched with cold water. After they have boiled for a few minutes, water may be drained off and more (boiling) water put on, and when they are done you will find that the "spuds in jackets" are just as palatable as if never nipped by frost.

MRS. J. A. PLASTER.

Ferndale, Wash.

Miss Leila W. Hunt, assistant professor of foods and cookery of the state college home economics department, states she has also tried the above method for both potatoes and cabbage, and secured the same results noted by Mrs. Plaster. Just why this is, she says, can not be stated without further study of the problems involved, but it is likely that the deterioration in frozen potatoes takes place when they "thaw," rather than when they freeze. Applying the hot water before the potatoes or cabbage have had a chance to thaw out in the usual way apparently saves the potatoes from the damage of thawing out gradually.



Three new schools in Washington registered for library contests this week: Thornton school, Whitman county, H. M. Redwin, teacher; South Basin school, Stevens county, John N. Hoffer, teacher; Deer Lake school, Stevens county, Eva J. Rigg, teacher. All these are live schools and will be heard of shortly among the library winners.

"Enclosed find check" is the opening phrase of a good, big lot of letters received from teachers in various parts of Washington, and our bookman has been the busiest man about the place for several days.

Miss Georgia Mooney, teacher of Wolf Lodge school, Kootenai county, Idaho, tells us that her Blue and Red teams have been hard at work and have already won a nice lot of books. Also there comes a letter accompanied by subscriptions from the boys and girls of East Greenacres school of Kootenai county, Idaho, through Teacher Charles Milliron. Library contest interest is spreading in Idaho and we shall not be surprised if some of our workers who are after that $5 gold prize for the best individual record may find some real competition from the girls and boys of Idaho.

Next week we shall tell you about Loyal C. R. Snyder of White Swan school, Yakima county, who is a great hustler and who begins to look like a leader for that prize to be awarded May 1, which we told you about in last week's papers.

HONOR ROLL.

Albert Bunce, Marjorie, Ryan, Alice Margaret Sutton, Marie Coday, Audrey Brownlow, Mary Weaver, Lawrence Lynch, Opal Davis, Louise Bachmir, Mildred Marks, Parker Bottom school. Herbert Mitchell, John Hartmeyer, Lynn Henyan, Glenora school. Warren McNeeley, East Greenacres school. Laura Larsen, Calkum school. Dorothy Rauch, Chewelah school. Bessie Webb, Ford school. Loyal C. R. Snyder, White Swan school.

Fruit Gelatins

Different Ways to Prepare

By RUTH GIPSON PLOWHEAD.

If your family happens to be fond of gelatin, you may serve it with the assurance that one great food expert at least considers it one of the very best desserts. Especially where there are children, it may be used often, and varied so as to seem different.

A fruit gelatin is like the famous French "stock pot," for almost every kind of fruit or fruit juices may be added to it, and improve the flavor—partly used glasses of jelly, or those which have turned to grape sugar may be melted and used as the flavoring base.

Where one wants a gelatin heavy with fruit, chopped apples make a delicious and inexpensive foundation, to which may be added fruits to taste.

Here is a plain, inexpensive recipe, which is always enjoyed at our home. The recipe makes about three quarts—enough for several meals for a small family. It may be varied by serving with whipped cream, chopped nuts, sugar and cream, or plain fruit juices.

Recipes.

Make gelatin according to directions on package from:

Two packages of gelatin, one and a half quarts of water, half quart of raspberry juice, one and a half cups of sugar, juice of two lemons.

When starting to thicken, add six medium-size chopped apples, three diced bananas, the raspberries from which the juice has been poured, and several drops each of lemon and vanilla.

A more expensive but very delicious dessert is made by adding to a quart of lemon gelatin a package of marshmallows cut in quarters, one cup of diced pineapple, one cup of nut meats and three bananas. Large, sweet cherries, canned, are also delicious pitted, and the juice gives a fine flavor.

Scissors

Are Most Useful in the Kitchen

"Have you a pair of sharp steel scissors in your kitchen?" asks a writer in Farm and Fireside. "If not, think of the things they will help you do and you will procure a pair at once.

"When cutting meat, celery, marshmallows, pimento for salads; or carrots, cabbage, onions, parsley for soups, nothing could be more useful than a pair of scissors. This is also true when cutting citron, lemon or orange peel or taffy candy.

"Rhubarb sauce will have a better color and flavor if the stalks are cut with scissors instead of a knife, as the scissors do not remove the skin.

"A fowl is more easily disjointed with scissors than a knife. The work done more quickly, and there is no splintering of the bones.

"These are only a few of the uses for scissors in the kitchen, besides the ordinary use of cutting strings and shelf papers. However, to be useful, the scissors must be sharp, and to be sharp they require care. The scissors should be washed and dried thoroughly after using, and hung up so they will be open."

For the Meat Eater.

Irish potatoes and most other vegetables and fruits tend to make the body tissues and fluids alkaline, so correcting the tendency of meat, eggs, fish and similar foods to create acid conditions. Since the body performs its work best when it is neutral, or slightly alkaline, this function of fruits and vegetables is important, especially to the hearty meat eater.



Behold, a King shall reign in righteousness and princes shall rule in judgment.

And a man shall be as a hiding place from the wind, and a cover from the tempest; as rivers of water in a dry place, as the shadow of a great rock in a weary land.

And the eyes of them that see shall not be dim, and the ears of them that hear shall hearken.

The heart also of the rash shall understand knowledge, and the tongue of the stammerers shall be ready to speak plainly.

Pork

Various Ways to Prepare the Meat

During the next few months a great deal of butchering will be done on the farm, and the housewife will be tempted to serve meat at all meals in order to "save it," says Amy Kelley of the department of home economics at the University of Idaho.

If meat is preserved by freezing only, the loss is often great if a thaw comes, but if the meat is preserved by canning in sterilized jars, and by curing, it may be kept indefinitely. The ribs and loin of pork and sausage may be canned by sterilization. Many women have asked why it is not as well to put sausage down in crocks covered with lard as to can it. Pork contains a large amount of fat, and, because of this, many people find it difficult to digest. If more fat is added, the indigestibility is increased. Bacons and hams are preserved by curing. After they are put down in brine, they should be smoked. This process should especially be applied to the bacons. Bacon is the one form of pork that school children should eat frequently, as it is easily digested. The smoking helps to make it more digestible, and, hence, it should be carried beyond the pickling stage.

Many people like baked hams, but feel that they can not afford to make a whole one. In such a case, a slice two or three inches thick may be baked and good results obtained. Sausage and bacon are good if baked or "oven broiled." They are prepared the same as for frying and are placed on a rack or pan and cooked in a hot oven.

Pork Loaf.

Half pound of round steak and one one pound of sausage, or one pound of round steak and half pound of sausage, one egg, three slices of bread moistened with water, one onion, quarter pound salt pork. Pepper and salt.

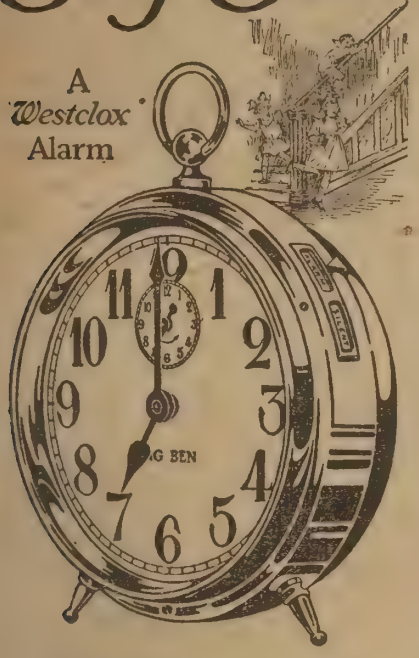
Chop the meat. Chop the onion and cook (but do not brown) it in the fat fried out of a small portion of the pork. Add the bread and cook a few minutes. When this is cool, mix all the ingredients and form into a long, round roll. The surface can easily be made smooth if the hand is wet with cold water. Laying the remaining pork cut in thin slices on top, and bake 40 minutes in a hot oven. The sausage may be omitted of desired, and other seasoning used.

Baked Sliced Ham.

Place in a baking pan a slice of ham cut one inch thick. If the ham is not sugar-cured, it should be soaked in cold water an hour. Sprinkle on top a little powdered mustard, brown sugar, and two tablespoons of vinegar. Add a little water and bake about 40 minutes, basting often. Boiling water may be added to the gravy, but do not thicken.

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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Swiss Cheese

General Directions for Making

To the Editor: I would like to know how to prepare Swiss cheese—not Dutch cheese. MRS. F. S.
Lake Bay, Wash.

To prepare the "rennet" for fourth stomach of the calf for the making of rennet for cheese-making, carefully remove the fourth stomach when the calf is slaughtered, empty it by turning it inside out, and carefully pick or brush off all particles of foreign matter; do not wash with water, says James N. Price, specialist in dairy division at the Washington State college. Then sprinkle with salt and dry thoroughly.

Swiss Cheese.

To give detailed directions for the making of Swiss cheese would require more space than is available for this answer. General directions are stated as follows:

Warm the milk to 86 degrees Fahrenheit, and add enough rennet to coagulate the milk in 20 to 30 minutes. When the curd is in the proper condition (that is, when it will make a clean break over the finger when the latter is inserted, the whey appearing clear in the break) it is ready to cut.

The cutting may be done with a wire bread-toaster. Do this carefully so that the pieces may be uniform in size and the curd not broken with fine particles. The curd knives used in cheddar cheese-making may be used for this purpose.

The temperature is now raised gradually to 130 degrees or 135 degrees Fahrenheit. Stir the curd gently, but constantly, to prevent matting, and to insure even cooking. Hold the temperature at 130 to 135, stirring constantly until the curd is firm enough to squeak between the teeth; then allow the curd to settle.

The curd is then removed from the whey to a cloth and immediately put to press in circular or brick molds. The pressure is light at first, being gradually increased for the first half hour; then full pressure is put on. The cheese should be turned several times a day, readjusting the cloth each time to insure a smooth cheese. It is best to put on dry cloths several times during the day. After 24 hours, remove the cheese from the press and put in brine or salt it dry.

In the brine salting, make a brine strong enough to float an egg. Place the cheese in the brine three or four days, turning them over occasionally to insure even salting.

In dry salting, the cheese are placed on the curing shelves and dry salt is spread over the surface of the cheese. The salt, being dissolved by the moisture in the cheese, penetrates to the interior. No more salt should be applied than will be dissolved over night. Turn and apply salt each day for three to five days. The brine salting is said to give the best results.

George Washington.

It matters very little what immediate spot may have been the birthplace of such a man as Washington. No people can claim, no country can appropriate him. The boon of Providence to the human race, his fame is eternity and his dwelling place is creation.—Charles Philips.

Washington did the two greatest things which, in politics, men can have the privilege of attempting, he maintained, by peace, that independence of his country which he had acquired by war. He founded a free government in the name of the principles of order, and by reestablishing their sway.—Guizot.

How sleep the brave who sank to rest
By all their country's wishes blest!
When spring, with dewy fingers cold,
Returns to deck their hallowed mold,
She there shall dress a sweeter sod
Than Fancy's feet have ever trod
—collins.

Kitchen Lore.

Stoneware and earthenware absorb fats and therefore retain their odors, and for this reason all fats should be kept in ti nor glass, which do not absorb them.

Hot water sets grease and grease spots should be washed with cold water, which hardens the grease and makes it easy to remove. Then the soiled spot can be washed with warm water.

When a cake recipe calls for melted butter the butter should be just melted, not cooked. If it is cooked the cake will be tough.—New York Evening Sun.



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Give full details in your first letter to The Washington Farmer, Review building, Spokane, Wash.—Adv.



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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Sidelights

The Only Obstacle.

Billy—I would lay the world at your feet, but for one thing.

Milly—And that is?

Billy—Some other people are using it.—Judge.

Could Qualify.

Po—Your roommate says that he is a practical socialist.

Dunk—He must be. He wears my shirts, smokes my tobacco and writes to my girls.—Pitt Panther.

Two Spellings.

The reporter was interviewing a legislator at the statehouse. "This," said the solon, "is the age of steel, and——" "Pardon me, please," interrupted the reporter, "but in behalf of accuracy, would you kindly spell that word?"

Mistaken Identity.

Merchant—What we want is a nice, quiet boy who doesn't use bad language, smoke cigarettes, whistle around the office or get into mischief.

Applicant (disgustedly)—You don't want no boy; you want a girl.—Boston Transcript.

Shellfish Extraordinary.

The guest glanced up and down the bill-of-fare without enthusiasm.

"Oh, well," he decided finally, "you may bring me a dozen fried oysters."

The colored waiter became all apologies.

"Ah's verry sorry, sah, but we's out ob all shellfish, 'ceptin' aigs."—Ohio Farmer.

Too Many Saws.

"Now, John, did you ever see a saw?"

"Yes, sir, I saw a saw."

"What saw was it you saw, John?"

"It was a see-saw, sir."

'A sea saucer! Why, John, what do you mean?"

"I mean seesaw, sir."

"And when did you see the sea?"

"I didn't see the sea; I saw the saw."

"But how did you see the saucer?"

"Why, sir, I never saw the saucer. I saw the seesaw, sir."

"Well, my boy, if that's the way you see saw, the less saws you see the better. You may take your seat."—Ohio Farmer.

Timely Return.

The Royal Palm, a train running out of Palm Beach, Fla., was boarded by robbers, who ordered the passengers to line up on each side of the aisle of the coach with their hands held high above their heads. The robbers then passed down the aisles, taking the money, watches, jewelry, etc., from the passengers. There were two Jews lined up side by side, and when it came their turn to be searched, Ikey looked up in the robber's face and said: "Mister Robber, vill you do me von favor?"

"Yes," said the robber, "but be quick. What is it?"

"May I put my hand in my pocket?" asked Ikey.

"Yes," said the robber, "but no monkey-business; I've got my gun on you."

Ikey thereupon put his hand in his pocket and pulled out a roll of bills, and, taking off two 20s and a 10, turned to Jackey, who stood trembling at his side, with the remark: "Jakey, here iss dot $50 I borrowed from you yesterday."—Ohio Farmer.

Patterns

1949—Lady's skirt, with or without yoke belt. Cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires 4 3-4 yards of 36-inch material for a 24-inch size. The skirt measures about 3 1-8 yards at the foot. Price, 10 cents.

1953—Lady's waist. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 2 3-4 yards of 44-inch material for a 36-inch size. Price, 10 cents.

1964—Girl's one-piece dress. Cut in 4 sizes: 8, 10, 12 and 14 years. It requires 4 yards of 44-inch material for a 12-year size. Price, 10 cents.

1946—Girl's gymnasium suit. Cut in 5 sizes, 8, 10, 12, 14 and 16 years. It requires 3 3-4 yards of 27-inch material for the blouse, and 3 3-8 yards for the bloomers, for a 12-year size. Price, 10 cents.

1471—Lady's apron. Cut in 3 sizes: Small, medium and large. It requires 5 1-2 yards of 36-inch material for a medium size. Price, 10 cents.

1938—Dress for misses and small women, with underwaist. Cut in 3 sizes: 16, 18 and 20 years. It requires 4 1-4 yards of 44-inch material for the underdress, and 3 yards for the overdress, for an 18-year size. The underskirt measures about 2 1-8 yards at the foot. Price, 10 cents.



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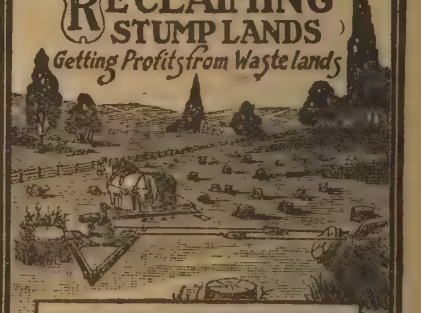


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DOLLIE MAKES HER OWN SCHOOL DRESSES ALONE

Dear Aunt Nellie: This is the first time I have written to the Corner. My father takes the Washington Farmer and I enjoy reading the cousins' letters and many other things. I have one sister and six brothers. My sister is older than I and my brothers are younger. Mr. sister's name is Jessie and my brothers' names are Johnny, Frankie, Daryll, Arnin, Ernest and Miles. Daryll has been an invalid since he was 1 years old and he will be 8 years old next July. There are four of us going to school, we have one mile and a half to go. We have to pass the places where our grandmothers live. Sometimes we stop at Grandma Wright's house and sometimes at Grandma Moss's to get warm. We like our teacher. His name is Mr. Tomblin. We have missed our school more than half the time on account of sickness. First we all had the measles and after that we have been sick off and on all the time. We have four horses, two cows and one calf. My brother has three rabbits. We have 50 chickens. In the summer time we help plant and weed the garden and pick berries. In the evening we go out and get the cows home and as papa is busy most of the time we girls and my eldest brother will do the milking. I am 12 years old and I have started to cut out and sew my own school dresses and also to darn and mend.—Dollie Moss, Box 36, Davenport, Wash.

CORA WORKED IN GARDEN ALL OF LAST SUMMER

Dear Aunt Nellie: I am 13 years old and my birthday is November 24. I live on a 20-acre farm. We have three cows, two heifers, two horses, two rabbits, a dog and two cats. The cows' names are Cherry, Jap, and Blue. The heifers' names are Judy and Lucy. The horses' names are Dan and Pete. We call the dog Tige and our cats Pussy and Tommy. I have a sister and a brother. My sister's name is Ida and my brother's name is Aaron. Ida is 10 years old and Aaron is 14 years old. I can tat, crochet, embroider and knit. I have to walk half a mile to school every day. I just missed two days this term. I haven't missed a word in spelling this term. Our teacher's name is Mr. Gwin and the primary teacher's name is Mrs. Gwin. I worked in the garden and hayfield last summer. We have lots of hay in the barn.—Cora Kanouse, Elma, Wash.

PAPA HAD MILDRED'S RING MADE BIG ENOUGH FOR HER

Dear Aunt Nellie: This is the second time I have written to the Corner. I had a little ring and it was too small and so this evening papa gave me a surprise of my little ring. He had it made larger. I am wearing it right now. This time I will talk about the school that I go to. It has only two rooms. There are four grades in each room. In my room there are first, second, third and fourth grades. In the other room there are the fifth, sixth, seventh and eighth grades. There are about 40 or 41 pupils in my room. I like to go to school. I am 7 years old and in the third grade. I am going to read with the fourth grade. My birthday is July 11. I have to go about three miles to school. Papa takes me every morning and gets me every night.—Mildred Elizabeth Marks, R. F. D. 1, Wapato, Wash.

ELLA GOES AFTER THE THREE COWS ON HER PONY

Dear Aunt Nellie: My father takes the Washington Farmer and I have been reading the Children's Corner and enjoy reading them very much. I am 13 years of age and am in the fifth grade. My birthday is the 11th of August. I live 3 1-4 miles from school. My teacher's name is Mr. Stevens. I live on a 320-acre farm. We have 30 horses and three cows. I have one sister and three brothers and I also have two half-brothers and one half-sister. I have pleasant times in summer. I go after the cows on my pony. His name is George. This is the first time I have written to the Corner. I have been wanting to write, but did not know where to write.—Ella Jane Love, R. F. D. 1, Box 26, Beebe, Wash.

HAVE FUN SLIDING ON THEIR SLED, FIREFLY

Dear Aunt Nellie: I think the Children's Corner is nice, I like to read the letters. We live on a 320-acre farm. Our schoolhouse is two miles from where we live. Our school is in a little town called Paha. In winter we drive one horse, but when there is no snow on the ground we walk. I am in the sixth grade. There are 41 children in our school. There are two rooms and two teachers. We have good times sleighriding this winter. There is a big hill at the side of our house. Our sleigh is called Firefly.—Edna Lehman, Paha, Wash.

SLED GOES DOWN HILL JUST LIKE LIGHTNING

Dear Aunt Nellie: This is the first time I have written to the Children's Coroner and would like to join. I live on a farm about one and a half miles from Johnson. I go to school and am in the eighth grade. My brother teaches me and so it makes it easier. It is only about three or four days until we have our mid-year exam. At school we have a basket ball team (a girls' basket ball team). We play every other day. I and another girl friend of mine get out there and play all the time. The snow is so hard now that it is very good coasting. I go out on some big hill and my sled just goes like lightning. I am 13 years old and my birthday is September 11.—Myrtle Sodorff, Box 62, Johnson, Wash.

MAYBELL FIRTH HAS TWO CUTE GOLDFISH FOR PETS

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I live on a 40-acre ranch. We have three cows. Their names are Spot, Bill and Blossom. I have one sister. Her name is Della. We have two dogs. Their names are Jack and Bollster. I am 10 years old. My birthday is in May. I have some pets. They are a rabbit and a cat. We have about 25 chickens. I have about a half mile to go to school. I am in the fifth grade. We have six in our class. I have eight studies. My teacher's name is Miss Parker. I have two goldfish. My sister is 13 years old. She is in the seventh grade.—Maybell Firth, Box 19, Friday Harbor, Wash.

INZA PICKED 12 CRATES OF BERRIES IN ONE DAY

Dear Aunt Nellie: This is the first time I have written to the Corner. I like to read the letters very much. I am 11 years old and my birthday is July 28. I am going to tell about our strawberry patch. It is quite a large one. I have to pick strawberries every summer and it is hot sometimes. I can pick quite a few crates a day. My brother, who is 13 years old, can not pick as many as I can. The most I ever picked in one day was 12 crates. I have two sisters and one brother that pick strawberries, too.—Inza Staiff, Freeland, Wash.

KNOWS THAT HER BEST FRIEND IS HER MOTHER

Dear Aunt Nellie: This is my third letter to the Corner. My last two letters were in print, so I thought I would try again. My subject this time is "My Best Friend." My best friend is my mother. She makes all my clothes. She gets me ready for school in the morning and does so many more things I can't mention at present and I think I should try and help her all I can. We had a very nice Christmas program and I spoke a piece. The title was the "Stocking's Christmas." I have not missed a day in school or I haven't been late for school once this term and I hope I never will miss any. I like all my studies except geography and arithmetic. I think school is real nice.—Iona Tuce, Stanwood, Wash.

GLADYS IS GLAD WHEN GRANDMA VISITS THEM

Dear Aunt Nellie: I live on a 40-acre farm. We have 13 cows, three calves and two horses. I am 8 years of age and go to school in the country. We have a very nice schoolhouse about a mile from our home. I am in the third grade. My teacher's name is Miss Churches and we all like her fine. My subject is "My Best Friend." She is my grandma. She makes my doll clothes and booties for the doll. She reads Sunday school stories to us children. Her home is in the city, but she comes to visit us every summer. We are all very glad when she comes, too. I have one sister, Claire, and one brother, Austin.—Gladys Carlson, Everett, Wash.

HELPS HER MOTHER SWEEP AND WASH THE DISHES

Dear Aunt Nellie: I have been reading the Children's Corner and enjoy it very much. I am 12 years old and I will be 13 the first of March. I am in the fifth grade. My teacher's name is Miss Sayer and I like her very much. The schoolhouse has two rooms. I drive to school and it is two miles and a half. I have dark hair and brown eyes. We have nine horses and over a hundred chickens. I have a pet rooster and two dogs and a yellow cat. The dogs' names are Bob and Curley. I live on a 60-acre farm. I can tat and crochet and help mamma sweep and wash the dishes.—Virginia Brockmiller, Wheeler, Wash.

Goosey, Goosey, Gander



TRAINED THE DOGS TO SIT UP, ROLL OVER AND SPEAK

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am in the sixth grade. I am 12 years old. My birthday was January 31. My teacher's name is Mr. Guitteau. There are 24 pupils in our room, 31 in Miss Kidd's and 27 in Miss MacDonald's room. Altogether there are 82 children. We have a small farm. My brother has three rabbits and he takes care of 59 chickens. We have two dogs named Jack and Patty. They can speak, roll over and sit up. I have two brothers and two sisters. Their names are Willie, Roy, Ruby, Reatha and Ruth. We all go to school except Ruby. She stays home with mama and her five dolls.—Ruth Marie Eaton, Box 74, Kent, Wash.

LIKES TO HAVE SISTER READ THE LETTERS TO HIM

Dear Aunt Nellie: I like to have my sister read the letters to me. I am 7 years old and in the second grade. We live at Bruce station. I have two sisters, Helen and Lucille. I have two horses, one is named Pearl and the other Buster. We have two pet cats. Their names are Gray and Tommy. We have one cow named Daisy. We have two dogs, Frisk and Don. I have a sled and like to coast. We have a nice coasting place. My mother teaches school.—Charles Lee, Othello, Wash.

HONOR LOVETTE GOES TO SCHOOL AT MANSFIELD

Dear Aunt Nellie: I have read the Children's Corner and like it very much. I am 10 years old and in the fourth grade. I like to go to school. I go to school at Mansfield. My teacher's name is Miss Carver. I like her fine. I have three brothers and no sister. My brother's names are Marion, Ronald and Gerard. We live five miles out of town. I would rather live in town than on the farm. We have three pigs, six horses, one cow and a heifer and calf.—Honor Bonita Lovette, Mansfield, Wash.

THEIR DOG WAS RUN OVER BY AN AUTOMOBILE

Dear Aunt Nellie: I am going to write to the Corner. This is the first time I have written. We have three cats and they have no names. We have eight cows and six calves and one fat pig. We live on a 40-acre farm. We also have one horse named Jim and our dog was run over by an automobile. I go to school and am in the fourth grade. I am 9 years old. —Agnes Helen Halle, East Stanwood, Wash.

WE'RE GLAD TO HEAR FROM YOU, GRACE; WRITE AGAIN.

Dear Aunt Nellie: I am 10 years old. I am in the fifth grade. My birthday is March 15. I have one sister and one brother. We have four beautiful horses, one of them we can ride. We have two dogs, Dandy and Bob. We have six cows and two calves. We have a lot of pigs. I can crochet, tat and embroider. I have to walk a mile and a half to school. I go to the Bell school. My teacher's name is Miss Ruth E. Kienholz. I like her very much. Grace Deharte, Latah, Wash.

LOVES TO GO TO SCHOOL: NEVER MISSES ONE DAY

Dear Aunt Nellie: I have been very interested for a long time in the Children's Corner and I decided I would write and see if I would see my letter in the list. I am in the eleventh grade and am 15 years old. I have 13 pet chickens and a pet cat. I love to go to school and go every day. My teacher's name is Mrs. Shay. I like her very much.—Margaret Stephens, Willapa, Wash.

EMMA HAS ALWAYS GONE TO MUD CREEK SCHOOL

Dear Aunt Nellie: I am 11 years old. My birthday is on February 24. I go to school and am in the sixth grade. The name of our school is Mud Creek. I have all the time gone to it. My school teacher's name is Lela McCoy. She has taught us for two years. We like her fine. I have four sisters and four brothers. My father owns a section. We live on it. My school chum's name is Josephine Fouste.—Emma Short, Lowden, Wash.

TELL US MORE ABOUT YOUR SCHOOL NEXT TIME

Dear Aunt Nellie: I am 10 years old and am in the fourth grade. I like to go to school. My teacher's name is Miss Meek. I like her very much. We have eight small pigs and one big hog, seven horses, three calves and two cows. I have two sisters and two brothers. Their names are Nellie, Georgia, Harry and Ollie.—Pearl Rubie, Johnson, Wash.

Grain and Produce Markets

Live Stock Quotations.

At Chicago.

CHICAGO, Feb. 24.—Hogs—Receipts, 15,000; strong, 5c to 10c above yesterday's average; bulk, $12.70@12.95; light, $12@12.90; mixed, $12.55@13; heavy, $12.50@13; rough, $12.50@12.60; pigs, $9.50@11.25.

Cattle—Receipts, 500; steady. Native beef cattle, $7.85@11.90; western steers, $7.85@10.15; stockers and feeders, $6.25@9.10; cows and heifers, $5.15@10.20; calves, $9@12.75.

Sheep—Receipts, 3000; steady. Wethers, $10.90@12.15; lambs, $12.25@14.60.

At Portland.

PORTLAND, Ore., Feb. 24.—Hogs—Steady; receipts, 519. Bulk of packing grades, $12.25@12.35; heavy packing, $12.40@12.60; light packing, $12.20@12.35; rough heavies, $11@11.50; pigs and skips, $11@11.50; stock hogs, $10@11.

Cattle—Steady; receipts three. Steers, prime, light, $9.35@9.60; prime heavy, $9.25@9.35; good, $8.75@9.25; cows, choice, $7.75@8; medium to good, $7@7.75; ordinary to fair, $6.50@7; heifers, $8@8.25; bulls, $4.50@7; calves, $6@10.

Sheep—Steady. receipts, none. Lambs, east of mountains, $12.75@13; lambs, valley, $12@12.50; lambs, good, $11.50@11.75; prime wethers, $10.50@10.75; choice ewes, $9.25@9.75; heavy ewes, $8.75@9.25.

At Seattle.

SEATTLE, Feb. 24.—Receipts 186 cattle, 36 hogs.

Hogs—Prime light hogs, $12.60@12.75; medium to choice, $12.25@12.30; smooth heavy, $11.75@12; rough heavy, $11.25@11.50; pigs, under 150 pounds, $9.50@11.50.

Cattle—Prime light steers, $9.75@9.85; medium to choice, $8.60@8.85; common to medium, $6.75@8.25; cows and heifers, $8.25@8.50; medium to choice, $7.60@7.85; common to medium, $3.75@4.75; calves, $6.75@9.25.

Sheep—Prime lambs, $11.50@2; good lambs, $10.75@11; wethers, $9.50@10; ewes, $7.50@9.

Spokane Union Stockyards Saturday.

Hogs—Receipts, 52; market steady. Prime heavy, $12.50@12.60; prime light, $12.25@12.40; prime mixed, $11.25@11.50; rough heavy, $11.50@11.60; stockers, $8@10.

Cattle—Receipts, 31; market strong, prime beef cows higher. Prime heavy steers, $9.40@9.75; prime light steers, $9.10@9.35; good steers, $8.25@8.75; prime cows, $8@8.25; good cows, $7@7.35; best heifers, $8@8.50; bulls, $3.50@6; calves, $7@10.

Sheep—Receipts. 45; market strong. Prime lambs, $12@12.50; common lambs, $11@11.50; choice yearlings, $10.50@11; good yearlings, $9.50@10; best mutton ewes, $10@11; common ewes, $8@9.

Seattle Wheat.

SEATTLE, Feb. 24.—Farmers are growing more indifferent to the offers in the country from either Puget sound millers or buyers from the east, who appear loth to quit the field. Bids of $1.45@1.50 for bluestem and Turkey red and 5c under for fife and fortyfold were insufficient to jar them loose from their holdings.

Chicago Grain.

CHICAGO, Feb. 23.—Big purchases for Europe led to a decided advance in wheat values today. The outcome was a strong close, 1 1-2c to 2 1-2c net higher, with May at $1.78 1-2 to $1.78 3-4c and July at $1.51 5-8c to $1.51 3-4. Other commodities, too, scored gains—corn 3-8@1-2c to 5-8c, oats 1-4c, and provisions 20c to 30c.

Cash Quotations.

CHICAGO, Feb. 24.—Wheat No. 2 red, $1.80 3-4; No. 3 red, No. 3 and No. 3 hard nominal.

Corn—No. 2 yellow, $1.01 1-2; No. 3 yellow 99c@$1 3-4; No. 4 yellow 96c@99.

Oats—No. 3 white 57 1-4c@58 1-2; standard 58c@59 1-2.

Rye—No. 2 nominal.

Barley—$1@1.28.

Timothy—$3.50@5.50. Clover—$12@18.

Pork—$30.08; lard $17.65; ribs $16@16.50.

Pacific Northwest Grain.

PORTLAND, Ore., Feb. 24.—Wheat firm. No trading. Spot bids 2c higher. Bluestem, $1.60; fortyfold, $1.56; club, $1.54; red Russian, $1.52.

Barley unchanged.

SEATTLE, Feb. 24.—Wheat—Bluestem, $1.61; Turkey red, $1.63; fortyfold, $1.57; club, $1.57; red Russian, $1.54.

Barley, $38.50 per ton.

WILBUR, Wash., Feb. 24.—Bluestem, $1.45; club, $1.40; oats, $37; barley, $37. Timothy hay, $21; wheat hay, $21; alfalfa, $20.

Portland Market.

PORTLAND, Ore., Feb. 24.—The onion market has reached the $10 level, that price now being paid to growers. Only a few cars remain unsold. Dealers think the maximum price of the season has been reached, as consumption in the Coast market is very small, and Japanese and Australian onions are about due.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No 1, $36@37.50 per ton.

Corn—Whole, $47; cracked, $48 per ton.

Millstuffs—Bran, $26.50 per ton; shorts, $30.50.

Barley—No. 1 feed, $39@40; brewing, nominal; rolled, $42@43.

Hay—Buying prices. Timothy, eastern Oregon, $19@20; alfalfa, $14@16; grain, $12.50@14.

Eggs—Oregon ranch, case count, 33 1-2c per dozen; candled, 34@37c.

Poultry—Hens, 18@19c; ducks, 18@22c; turkeys, live, 20@22c; dressed, 23@28c; geese, 12@14c.

Butter——City creamery, prints, 42@43c per pound; cubes, 39c.

Wool.

BOSTON, Mass., Feb. 23.—The Commercial Bulletin will say tomorrow:

"Activity has been more pronounced again this week in the wool market, not only on manufacturers' account, but also among dealers in a speculative way. Practically everything has been in demand and scoured sorts have been especially active with prices a cent or two higher in the grease than a week ago.

Yakima Wool at 40 Cents.

The 1917 wool market at North Yakima opened Saturday with sales by Dan Goodman and Coffin Bros., with a top price of 40 cents a pound, which made a new high record price in the wool business in this country and a range of 10 cents a pound higher than the price which prevailed last year. Mr. Goodman sold approximately 20,000 pounds. The Coffin clip was only a small clip of Lincoln ewe wool in very fine condition.

Humble Spud

Takes Seat Among the Mighty

(Continued from page one.)

For the 10 years, 1877-1886, the average price was 51.4 cents per bushel, or 86 cents a hundred, the lowest price being in 1884, a little over 39 1-2 cents per bushel, or 66 cents a hundred, with the total production for that year 190,642,000 bushels; and the highest price in 1881, 91 cents per bushel, or $1.52 a hundred, with the total production for that year 109,145,000 bushels.

For the 10 years, 1887-1896, the average price was 48.9 cents per bushel, or 82 cents a hundred, the lowest price being a little over 26 1-2 cents per bushel, in 1895, or 44 cents a hundred, with the total production for that year 297,237,000 bushels; the highest price being almost 76 cents per bushel, in 1890, or $1.27 a hundred, with the total production for that year 148,290,000 bushels.

For the 10 years, 1897-1906, the average price was 52.1 cents per bushel, or 87 cents a hundred, the lowest price being 39 cents per bushel, in 1899, or 65 cents a hundred, with the total production for that year 228,785,000 bushels; the highest price nearly 62 cents per bushel, in 1905, or $1.03 a hundred, with the total production for that year 260,741,000 bushels.

For the 10 years, 1907-1916, the average price was 69.7 cents per bushel, or $1.16 a hundred, the lowest price being nearly 49 cents per bushel, in 1914, or 82 cents a hundred, with the total production for that year 409,921,000 bushels; the highest price $1.46 per bushel, in 1916, or $2.43 a hundred, with the total production for that year 285,437,000 bushels.

Retail at $4.

One of the Spokane grocers on Saturday announced the price of potatoes at $4 per sack, any number of sacks to a customer; another announced the price on Saturday at $3.50, but not more than one sack will be sold to a customer. Since October 16, when the retail price was $1.40 a sack, potatoes have made 13 advances in price. Here they are: October 18, 1.50; October 20, $1.65; October 25, $1.75; October 27, $1.85; November 4, $1.90; January 3, $2; January 15, $2.25; January 22, $2.50; February 7, $2.75; February 15, $3; February 20, $3.25; February 22, $3.50; February 24, $4.

Ten Cents for Baked Potato.

Potatoes were listed at $75 for Yakimas and $70 for locals on the Tacoma market Saturday. Tacoma restaurants have taken potatoes from the free list, and, beginning tomorrow, baked potatoes will be sold at 10 cents and German fries at a nickel.

At Seattle.

Seattle advices of Saturday estimate that there are between 125 and 150 carloads of potatoes in storage there and less than 100 carloads in the entire Yakima valley. California and Chicago speculators, who were never before on this market, are holding approximately 100 carloads of Puget sound potatoes. It is not believed there are more than 20 cars of Yakima Gems on this side of the mountains. Bid prices for Gems run from $70 to $75 a ton, with selling prices at $80 to $85, and a majority of the regular jobbing houses are buying short, content to have enough to fill current orders without attempting to anticipate the future. Puget sound potatoes are selling at $75, with quotations to jobbers of $60 to $65. Brokers who endeavored today to buy some of these potatoes in storage met with flat refusal by holders to quote.

Congress will adjourn March 4 without passing any embargo laws against the exportation of farm and other food products. Unwise agitation for that un-American plan to cheapen agricultural products for the deceptive benefit of city dwellers practically subsided several weeks ago. Open discussion of the issue in congress and the press convinced the president, members of congress and thoughtful city people that an embargo would injure the farmer and in the long run be detrimental to wage-earners in manufacturing and commercial centers.

The truth is that, aside from potatoes, prices of farm produce generally have not advanced in greater ratio than the prices the farmer must pay for clothing, boots and shoes, grain sacks, implements and machinery, coal and many other necessaries. Flour, cornmeal, meats, dairy products, eggs and poultry, generally speaking, are not unreasonably high. Dairy products, in fact, have been selling too low, if the producer is to have a fair return for his labor and investment.

Potatoes are excessively high just now. But so far as potatoes are concerned, we have already a practical embargo. We are importing, not exporting, potatoes, which are on the free list, and New York is bringing them in from Bermuda and Canada.

But that is a condition that will soon adjust itself under the natural working law of supply and demand. As we are importing, not exporting, potatoes, an embargo could not relieve the shortage.

An embargo law, in fact, would have the converse effect from that expected by its advocates, since its only effect would be to discourage the planting of potatoes for the next harvest.

Want Ads

HELP WANTED—MALE 3

I WANT LIVE REPRESENTATIVE IN each county, to take orders for a one-man all-purpose farm tractor that is 1000 lbs. lighter, costs less than half as much and develops twice as much power on the drawbar as its nearest competitor. A marvel of simplicity and efficiency. Investigate. Rettig, Sales Manager, North Yakima, Wash.

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GOVERNMENT POSITIONS ARE EASY TO get. My free booklet BY956 tells how. Write today—NOW. EARL HOPKINS, Washington, D. C.

WANTED — MAN, LOCAL OR TRAVEL; fine line; big pay. J. W. Mitchell, Granby Court, Spokane.

SITUATION WANTED—Female 18

SITUATION; COOK ON RANCH OR STEAM breaking outfit; experienced. Mrs. A. Maiers, Pasco, Wash., 110 S. 4th st.

SITUATION WANTED—MALE 21

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EDUCATIONAL 45

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MISCELLANEOUS—FOR SALE 60

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Craftsman doors	1.75
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MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

PATENTS — PICTURE OF PAT. OFFICE and 3-yr. calendar free. FitzGerald Co., pat. attys., 881 F. st., Wash., D. C. Est. 1880.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer,** and **The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

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POULTRY 174
Continued.

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HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please $12—100. Free catalog. Freshlaid Farm, Colfax, Wash.

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BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R 7, Waitsburg, Wash.

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BARRED PLYMOUTH ROCKS, PRIZE winners at shows; way ahead of average in N. W. laying contest. Write for prices. Wm. H. Helmsoth, Baker, Ore.

S. C. WHITE LEGHORN AND S. C. RED eggs for hatching, $2.50 to $5 per 15; heavy-laying, exhibition strains. H. J. Fuller, N124 Lincoln st., Spokane.

"ROSECROFT" WHITE WYANDOTTES are winter layers. Hens $2, pullets $2.50, cockerels $3; eggs $3 for 15, $5 for 30. Rosecroft, Wenatchee, Wash.

S. L. WYANDOTTES AND S. S. HAMBURGS —Pullets and hens $2 to $5, cocks and ckls. $5 to $15. Winners at many shows. G. C. Wherry, Payette, Ida.

S. C. PEERLESS BLUE ANDALUSIANS, eggs $2 setting; ckls. $2 to $5. Write for folder. Mrs. C. W. Armstrong, Freewater, Ore.

LAKESIDE S. C. W. LEGHORN EGGS, $1.50. R. 3. T. W. Harvey, Spokane, Wn.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

LIVE STOCK 177

FARMERS, HOG RAISERS—BIG-TYPE Poland or Berkshires at 1-3 usual prices; top pigs, bearing famous pedigrees, $12.50 each. Free hog booklet. "The Bartwood Idea." Bartwood Farm, Hamilton, Mt.

STANDARD BRED STALLION, BARCUS No. 62219; foaled 1914; splendid individual; wgt. 1125. F. W. Covey, Weiser, Idaho.

12 HEAD OF VERY CHOICE REGISTERED red roan and white Jr. yearling Shorthorn bulls. Wm. Mulhall, Fenn, Ida.

FOR SALE OR TRADE—A GOOD BREEDing jack. J. K. Muman, Penawawa, Wash.

HORSES and VEHICLES 183

HORSES—WE HAVE SOME REAL BARgains in horses, from 1000 lbs. to 1500 lbs.; young and old, from $125 to $350 per team with harness. See them working any day and know just what they are.

PACIFIC TRUCK & TRAILER CO.
2212 4TH AVE., SEATTLE, WASH.

IMPORTED STALLION FOR SALE, SURE foal getter. Write for particulars. S. J. Emery, Port Angeles, Wash.

GROCERIES 222

3 LBS. EXTRA FINE COFFEE, ROASTED fresh daily, by parcel post, for $1. Martin Marks Coffee Co., Portland, Ore.

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RUBBER STAMPS, SEALS, STENCILS, daters, inks and pads. Mail orders promptly attended to. Nampa Stamp Works, H. L. Nickels & Co., Nampa, Idaho.

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WM. N. MCARTY, WHOLESALE AND retail dealer in hides, pelts, wool and furs; always in market at top prices. Wire or write for prices. P. O. Box 135. Phone 308. Pocatello, Idaho.

BISSINGER & CO., DEALERS IN HIDES, pelts, wool, tallow and furs; consignments solicited; prompt remittance. P. O. Box 1553. Phone 503. Warehouse, 26th and R. R. st., Boise, Idaho.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS,
VETCH OR "TARES,"
A Great Forage or Seed Crop.
RED CLOVER, ALSYKE,
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.
COMPLETE LINE OF FARM SEEDS.
We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.
CORVALLIS FLOURING MILLS,
Corvallis, Oregon,
Home of the Famous Oregon Agricultural College.

TESTED SEEDS FOR FARM AND GARden—New 1917 seed catalogue now ready; valuable information gathered in 25 years' experience in the northwest. Write for quantity price on Grass, Clover and Alfalfa seed. For new catalogue address Aabling-Boyce Seed Co., Seattle, Wash.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, ORE.

ALFALFA SEED, RED CLOVER, SWEET clover; Early Ohio; Idaho Rural; Peachblow seed potatoes; Dicklow spring wheat—the big crop producer; blue barley. Jerome M. & E. Co., Jerome, Idaho.

ALFALFA, RED CLOVER, ALSYKE CLOver, white clover, sweet clover, timothy and other grasses; seed oats and wheat; at reasonable prices. Voegeler Seed Co., Salt Lake City, Utah.

A LIMITED NUMBER OF THE FAMOUS Yakima Goodell strawberry plants, $3 per 100, delivered free.
WILL HANKS, NACHES, WASH.

RED AND ALSYKE CLOVER AND VETCH seed; bright, high test; clean; dependable. Write us.
M. SENDERS & CO., ALBANY, ORE.

ONION SEED, OREGON YELLOW DANvers. Grown at Gladstone, Ore.; $1.40 postpaid; money back if not satisfactory. A. G. Stevens, R. 1, Milwaukie, Ore.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

RECLEANED PEARL OR WHITE VETCH, $8 cwt., f. o. b. Bonners Ferry. Sample on request. G. H. Kindschuh, Bonners Ferry, Ida.

SEED PEAS FOR SALE. A. D. THAYER, Waverly, Wash.

NURSERY STOCK 621

NURSERY STOCK—FRUIT TREES, ALL kinds, grafted walnuts, filberts, grapes, small fruit plants, etc., at greatly reduced prices. Save time by mailing complete want list, stating varieties, number of each and grade. Lafayette Nursery Co., Lafayette, Ore.

"WE WANT YOU" TO REPRESENT US in your locality in the sale of our pedigreed, Idaho-grown nursery stock; large profits; easy work. Write us, asking for our selling proposition. Kimberly Nursery Co., Kimberly, Idaho.

NURSERY STOCK 621
Continued.

PRUNE TREES; THOUSANDS; GRAFTED walnuts. Trees of all kinds. Buy direct and save 50 per cent. No agents. Our prices sell. Write for planters' catalog and price list. 26 years in business. Carlton Nursery Co., Carlton, Ore.

BARTLETT AND ANJOU PEARS R. ANN, Lambert, Duke, Mcrell cherries. Fine lot privet hedge plants, money-saving prices. Christopher Nurseries, Christopher, Wash.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

FARM LANDS—FOR SALE 651

OPPORTUNITY OF A LIFETIME to get some REAL land; rich and deep clay loam and shot clay soil; raises banner crops; level as a floor; on two railroad lines, near Seattle, Tacoma, Olympia; big army mobilization camp site, and cannery which contracts to buy crops; new town started right on ground, where 12 passenger trains stop every day; settling up rapidly by practical farmers of Idaho, Washington, Oregon and California; they're all enthusiastic. Land is easily cleared; select a tract now and get crop in this spring. $750 buys 10 acres, on terms of $20 cash and $10 monthly. Write at once for information.

A. H. REID & CO.
315 NEW YORK BLOCK,
SEATTLE, WASH.

FINE PALOUSE FARM, OAKESDALE.

323 acres, all choice Palouse soil, under cultivation; entire place fenced and cross-fenced, hog tight; 10 acres alfalfa, 220 acres could be put in spring grain or peas this year; good 6-room house, with spring water piped into it; good barn for 20 head of stock; all kinds of outbuildings; fine well and spring, with nice family orchard; located ¾ mile from station and warehouse and 3 miles from Oakesdale, the heart of Palouse country. Leased to good tenant. Price $25,500, which is less than $79 per acre. Can make good terms if desired. Lots of land in this neighborhood no better is held at $100 per acre. See Mr. Tipton.

HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG.

REAL FARMERS — MEN WHO know good land when they see it —are rapidly taking up THURSTON COUNTY 10-ACRE FARMS, just opened to settlement. Near Seattle. Tacoma, Olympia, the big army mobilization camp site, and fruit and vegetable cannery; soil deep and rich; raises banner crops; land level as a floor; in raw state, but easily cleared; new town started; twelve passenger trains stop here daily. At $750 for 10 acres, on terms of $20 cash and $10 monthly, this is the opportunity of a lifetime. Write at once for information.

A. H. REID & CO.
315 NEW YORK BLOCK,
SEATTLE, WASH.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

320 GRAIN FARM, 8 MILES FROM HARTline; 160 acres in crop; 160 to be summer fallowed; well-built 6-room plastered house, with basement; barn room for 20 head of horses; 5000-bushel granary; 2 good implement houses, 20x32 each; garage, with concrete floor; family orchard; well; gas engine; 5000-gal. reservoir; water piped everywhere, including house; good neighborhood; no encumbrances; a bargain at $60 per acre. At least $4000 cash, balance 8 per cent.
LEO REINHART, HARTLINE, WASH.

MONTANA LANDS.
We have for sale on 10-year terms, at 6 per cent, 29,000 acres fine wheat land in Dawson and Rosebud counties, Montana, at from $8 to $22 per acre, and over 75,000 acres fine grazing and farm lands at from $4.50 to $650 per acre, on 10-year terms. A large number of our settlers are from Walla Walla and Palouse sections.
MONTANA WHOLESALE LAND CO.
MILES CITY, MONTANA.

35 ACRES BEST ALDER BOTTOM LAND, graveled road, mile to pavement, fronts on navigable water across bay from Everett. Location, roads, water, markets, soil make this a mighty desirable and productive home. Wood will pay for clearing. John Mills, Puyallup. For anything on West Side write us.

40 A., UNDER CULTIVATION, ADJOINING town of Chesaw; all fenced; 4-room bungalow; good water; $3000; easy terms if desired. V. G. Grove, Chesaw, Okanogan county, Washington.

CALIFORNIA FARMS, NEAR SACRAmento, for sale; easy terms. Write for list. E. B. Waite, Shawnee, Okla.

FARM LANDS—FOR SALE 651
Continued.

LAND.
Montana grain and stock farms, in best parts of the state, for sale at very reasonable prices and on easy terms. Improved places in Judith Basin at $36 to $50 per acre. Good grain lands in Great Falls and Miles City districts, $15 to $25 per acre, on easy terms. We have for sale in half sections and larger farms about 10,000 acres in the famous Shields River valley at prices ranging from $15 to $50 per acre, on easy terms. Several fine stock farms. Have several good farms on which owners will take some trade. Send for Montana land list, free for asking. Hege & Watkins Co., 715-17 Paulsen bldg., Spokane, Wash.

STOCK AND GENERAL FARM.
1307 acres in Benton county, Oregon; 3 miles from Wellsdale and 10 from Corvallis; 350 acres cultivated; 50 in crop; 400 timber; land is on good wagon road and lies fine for all-round farm and stock ranch; 8-room dwelling, 2 barns, 2 sheds; buildings good; fair fences; wells, springs and creek; implements and plenty of good stock go with place. Price $55 per acre; about half cash; buyer to assume $23,000 mortgage at 5 per cent; interest due Oct. 1, 1917. It will pay you to investigate.
S. N. STEELE, 267½ OAK ST.,
PORTLAND, ORE.

HEGE & WATKINS CO.
120 acres, 1½ miles from Odessa, with 100 acres under plow; fair buildings; good well, only 7 feet deep; all under fence and worth $25, but owner needs a little money and is offering it for $15 per acre; terms. At this price you can pay for it with this year's crop.
160 acres, near Ritzville; 75 acres choice soil, 45 under cultivation; 20 for spring seeding; fair buildings and fine water; will include tools and farm machinery for a quick deal at $2800. See Mr. Tipton.
HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG.

GENERAL ALL AROUND FARM, 437 A., on Willamette river, 38 miles above Portland; 12 miles north of Salem; 300 a. in good state of cultivation, mostly river bottom; ten-room house, hot and cold water; 2 large barns; plenty other outbuildings; all fenced; soil well adapted to clover and potato growing; boat landing on place; 3 miles to railroad; centrally located in rich farming district; adjoining lands held at $125 to $200 per a. Price, for quick sale, to close an estate, $75 per a., half cash; 6 per cent on deferred payments. Jno. H. Gibson, agent, 912 C. of C. bldg., Portland, Ore.

480 A. WHEAT RANCH, 7 MILES from Warden. 2 miles to wheat station; 300 acres in wheat, ¾ to purchaser, subject to lease; good well, windmill, fair bldgs.; price $20 acre; $4000 cash down, balance 8 equal annual payments, 8 per cent interest.
ED. G. BOWKER,
WARDEN, WASH.

JUDITH BASIN,
MONTANA.
2045 acres; produces 25,000 to 50,000 bushels wheat yearly; fenced and cross-fenced; 1200 acres highest class bottom, rich, black loam; bal. level bench or gently rolling plow; 1600 a. cultivated; abundance spring water; buildings; ¼ mile to Straw on railroad; 2 elevators; $60 per acre, 1-3 cash.
M'AUSLAND & PEACH,
740 PEYTON BLDG., SPOKANE, WASH.

40-ACRE DAIRY FARM, NEAR BOISE; mile from interurban line and cheese factory; 24 acres of pasture and alfalfa; 10 acres a little too high for gravity water, balance under plow. Cross-fenced. Ridenbaugh water right. Family orchard. Plastered house; barn, 40x33; silo. Price $4500. Good terms. Hub Realty company, Boise, Idaho.

CHOICE FARM OF 640 ACRES, ABOUT 2½ miles from landing on Columbia river; 400 acres improved, with 300 acres for crop 1917; balance unimproved is good bunchgrass pasture with running stream; 160 acres fenced hog tight; 28x50 barn, 5-room house. Price $15,000. A. L. Tucker, Coulee City, Wash.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

160 ACRES; 6½ MILES FROM COUNTY seat, Vale, Ore., and one mile to station. A1, fenced. Two miles from oilfield; no improvements; clear. Price $8000; half cash, bal. time, 8 per cent.
M. L. PHELPS, BOISE, IDAHO.

400 ACRES CHOICE WHEAT LAND IN Baird country, of which 350 acres are improved. Should be summer fallowed. Price $10,000. Half cash, balance reasonable terms. A. L. Tucker, Coulee City, Wash.

HALF SECTION WHEAT LAND, ABOUT 10 miles from market. About 300 acres improved, 100 acres for crop 1917. Special price $7500. Third cash, balance reasonable terms. A. L. Tucker, Coulee City, Wash.

880 ACRES WHEAT LAND, IN HORSE Heaven, near Kennewick; fenced; some buildings; two wells; unusual bargain at $9 per acre. Write for particulars. Keystone Lumber Company, Tacoma, Washington.

FARM LANDS OBTAINED THROUGH foreclosure of mortgage offered at rare bargains and on easy terms. Send for list. Pennsylvania Mortgage Investment company, Spokane, Washington.

ACRE TRACTS—FOR SALE 669

WE OWN 3000 ACRES OF BENCH AND meadow land which we will close out on easy terms in 40-acre tracts or more at bargain prices, ranging from $10 per acre up.
FIRST STATE BANK.
MAHONEY & BAXTER,
BONNERS FERRY, IDAHO.

REAL ESTATE AT AUCTION 699

400 ACRES, IN TRACTS FROM 5 TO 240 acres each; choicest land in Spokane valley; 12 to 25 miles from Spokane on 3 Rys. and interurban electric line. Every modern facility, including good schools, electric lights and domestic water systems. Every acre irrigated. Some tracts improved and all under cultivation. Will sell any or all at a bargain on terms to suit purchaser or will exchange part of holdings for Minneapolis and Chicago property. For particulars write G. Seaton, Apt. D, W1311 6th ave., Spokane, Wash.

NEWS FOR BREEDERS

The north side Twin Falls tract in southern Idaho has wintered 280,000 sheep the last winter. Of this number, 17,000 are owned on the tract. There has been for the last few years a steady increase in both the number wintered and the number owned. Farmers have received higher prices for their hay this winter than ever before. There has been no disease or difficulty of any kind and the sheep have come through the winter in good shape. On the Overlook farm the purebred Hampshire ewes have been lambed nearly 150 per cent. Most of the lambs are yet to be dropped on the tract. While sheep have increased, the number of hogs has decreased, until where there were about 15,000 on the tract three years ago, there are now only about 5000.

Jars, a Percheron stallion owned by Davis Brothers, Filer, Idaho, is now 7 years old and has worked regularly each season since maturity. He has done his part at the plow and in the hay field, and the last year Davis Brothers have worked him and another stallion all the year on a transfer wagon, pulling heavy loads. They begin to ease up on the work the first of February and stop entirely before the breeding season begins, on April 1. The result is that the horse is hard, strong and is a very sure breeder. Last year he served 116 mares, and they know now of at least 45 that are safe in foal that were only covered once. All mares were bred by the season, and they believe fully 90 per cent of the mares are in foal. The Messrs. Davis fully indorse the expressions of Dr. Nelson about working the stallion, in The Farmer of February 15, and point to Jars as an example of how the plan works. He is a horse of naturally a very fine disposition and works as quietly and safely as a gelding, but they contend that working regularly not only one makes a horse more sure as a breeder of strong, vigorous colts, but has the effect of making his disposition better and the horse easier to handle.

H. H. Schildman of Filer, Idaho, recently returned from a three weeks' trip in Iowa and Nebraska, where he selected a foundation herd of 20 head of registered Shorthorn cows and heifers, 10 of which now have calves at foot. One of the best is Nerissa 93110, a Scotch-bred cow of the Butterfly family, tracing to Imp. Emma and Imp. Galaxy. She has size and very fine breed type. Crimson Matchless 2d is a fine, big roan cow by Lord Matchless, tracing to Imp. Matchless 16th by Senator. Another fine roan is Miss Heiress, also by Lord Matchless. She has a calf at foot fit to show anywhere. He is by Comet, a son of Snowflake, a Scotch bull of strong Cruickshank blood. The calf has an excellent head, a long body and is good all over. Mr. Schildman has in Double Knight, by Good Choice, a son of Choice Goods, the undefeated international champion, a young bull of straight lines, fine head, good, deep body and good quarters. His old roan bull, Stanley, is by Cherry Grove Bamff 16th, dam Ethel by Sterling, a very low, block animal, with extra heavy rounds, weight a ton, and is a proven good breeder. Mr. Schildman has several young heifers in good condition that he will push right along and show at the southern Idaho fair at Filer this coming fall, and probably at Rupert and Burley, and possibly at the state fair. There is considerable interest and a good outlet for Shorthorns on the Twin Falls tract, and Mr. Schildman hopes to see a Shorthorn association organized at the fair at Filer next fall.

Already the indications are that the annual meeting of the Cattle and Horse Raisers' Association of Oregon, to be held at La Grande, Ore., April 24 and 25, will be a great meeting. Secretary S. O. Correll has the program practically completed. The speakers will include T. W. Tomlinson, secretary of the National Live Stock association; Professor E. L. Potter, animal husbandman of the O. A. C.; George C. McMullen of the live stock commission firm of Witherspoon-McMullen, Kansas City, the man who sold more cattle last year than any other man in America; W. B. Webster of the Kansas City stock yards; A. D. Dunn, the silver-tongued orator and Shorthorn breeder of the Yakima valley, and Ephraim Barnes of the United States forest service. Governors Lister of Washington and Alexander of Idaho have been invited, and are expected to address the meeting, and Governor Withycombe of Oregon will be in attendance during the entire session. Letters received indicate a big attendance. La Grande citizens will have charge of the entertainment features. Two thousand dollars has been guaranteed for expenses, and gigantic plans have been made. Probably a cowboys' breakfast will be given the second morning, moving pictures and other entertainment will be provided, and a banquet the last night will close the meeting. Besides this, a purebred stock show will be given and the fine beef cattle and horses will be on parade. H. A.

TWO SHORTHORN SALES.

Keep in mind the two Shorthorn sales, both of which will occur the first week in April, and which constitute two leading spring Shorthorn sales of the northwest. Frank Brown of Carleton, Ore., is the manager of both sales.

The first sale will be held at the Portland Union stockyards, April 3, 1917, when close to 100 head of choicely bred young bulls and heifers will be sold, and will be followed by a sale at Spokane, Wash., on April 5, with a like number.

The American Shorthorn Breeders' association has recognized these sales as two of the most important in the west, by giving $250 in cash premiums and also two silver cups at each show, one for the best bull and the other for the best female. These prizes will be offered for animals only that are to be sold in the sales.

This sale is evidence of the cooperative spirit with the small breeder to find a market for his surplus of bulls and heifers, and the man who is in the market for a carload of bulls or heifers can not overlook the opportunity to attend this sale.

KIGER DUROCS SELL.

The F. M. Kiger Duroc Jersey swine sale at Gresham, Ore., February 21, resulted in no sensational prices, but all the females sold at fair values. The show gilt, Kiger's Maid, farrowed March 31, 1916, topped the sale, going to E. M. Clark of Nehalem, Tillamook county, Ore., for $80. She has the appearance of an excellent brood sow, and is a high-class show animal. Mr. Clark was the heaviest buyer, taking 13 gilts for a total of $715. Besides that, he got the boar, Oregon Lad, at the bargain price of $30.

Mrs. L. G. Ewalt, Aurora, Ore., took three gilts for $185.

Another buyer was Thomas McDougal, Tigard, Ore., who took four for $240.

R. Curtis of Fairview took three for $167.50.

Other buyers were F. A. Coffin, Monmouth, Ore., one gilt, $50; Fred Hicks, Corbett, Ore., gilt, $50; H. McGinnis, Boring, Ore., gilt, $52.50; C. L. Denny, Estacada, Ore., gilt, $55.

Boar prices were not so good. P. L. Embry, Oswego, Ore., took one for $20, and F. L. Blanchard, Yamhill, Ore., one for $30.

BREEDERS' ASOCIATION.

The annual meeting of the Lewis County Pure Breeders' Association was held in Chehalis, Lewis county, Wash., at the St. Helens hotel in Chehalis following luncheon. The officers of the organization were reelected as follows: H. B. Coffman, president; F. M. Svinth, vice president; George R. Walker, secretary-treasurer. It was voted to have the second annual outdoor meeting of the association at Cloquato Grove Saturday, August 4. There was an excellent attendance.

STALLION SALE COMING.

The first annual Twinn Falls County Stallion and Colt show will be held at Filer, Idaho, Saturday, March 10. A fairly nice list of prizes will be given and it is believed many of the fine colts sired in the neighborhood and all over the county will be shown.

SELLS 27 HOSTEIN COWS.

James O'Grady has sold 27 head of Holstein cows to Dettling and Inglin at Stanfield, Ore. Mr. O'Grady has retained 20 head as foundation for another dairy herd which he will build up.

Dispersal Sale at Hood River.

A dispersal sale of registered Jerseys will be held at Hood River at the farm of W. G. E. Smith April 11. J. W. Hughes, auctioneer.

BROWN SWISS CATTLE

Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale. THEO. BRUGGER, Route 3, Gresham, Ore.

Colfax Blue Ribbon Stud

Colfax, Washington.

40 HEAD

Imported and American Bred

Percheron Shire and Clydesdale Stallions and Mares

From yearlings up to five year old, ton horses with veterinary certificates for health and soundness.

In **Percherons** we have the strains of the great **Etudiant, Brilliant** and **Besigue** blood.

In **Shires** and **Clydesdales** assembled here are some of the prize winners of the **Panama-Pacific-International** at San Francisco in 1915 and including some of the leading **State Fairs** of the **Central** and **Middle West** of 1916.

Enterprise Pride, who has never met defeat in his 2 and 3 year old form and having been **champion** at the **Illinois** and **Iowa State Fairs** and **reserve champion** of the breed at the **Panama Pacific.**

His stable mate, **Hope's Pride,** who in his turn also has been **first** and **champion.**

Prince Hopkins, declared by his admirers to be the **greatest living exponent** of the **breed,** with his stable mate, **Baron's Prince,** just rising 3 years old and at different shows in the strongest competition having never been defeated, always winning the coveted honors—together with a stable full of the blood of **Scotland's Greatest Sire—Baron's Pride,** all these are now **offered to you at prices that DEFY COMPETITION.**

If you or your community needs a stallion write us your wants, or better still, call and see us.

Peter McFarlane, Mgr.

Address all correspondence to Colfax Blue Ribbon Stud, Colfax, Washington.

ANNUAL SALE OF PURE BRED SHORTHORNS

Portland, Ore., April 3rd
Spokane, Wash., April 5th

Consignors announced later. For particulars and catalogs write

F. M. ROTHROCK *or* FRANK BROWN
Spokane. Carlton, Ore.

H. C. Davis Dispersal Sale of Holsteins April 2nd

AT HOME FARM, GRANGER, WASH.

90 Head or More of Females. Bulls All Sold but Three Calves

More world's record blood than ever offered at auction from one herd. Higher average production. Higher average individuality. Younger average age, only 4 animals over 5 years of age. Will give terms to responsible parties, not to exceed one year. Bankable notes, to draw 8 per cent interest. Everything guaranteed as represented. Located on N. P. and O.-W. R. & N. Rys. N. P. trains stop at ranch, others will be met. For catalogue write

H. C. DAVIS, Granger, Wash.

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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. MARCH 8, 1917. NO. 10.



O say, does that star-spangled banner yet wave
O'er the land of the free and the home of the brave?

I pledge allegiance to my flag, and to the republic for which it stands---one nation, indivisible, with liberty and justice for all.

$275 ONLY ONE WEEK TO MARCH 17TH $275

Then Your Opportunity to Grasp This Big Prize Will Fade Away

Only One Week to Win

Besides the Possibility of Your Winning One of the Thirty-Two Cash Prizes You Get This Paper at the Very Low Special Rate of 3 Years for $1.50

NOTICE—The Contest Editor is always pleased to answer any questions and wishes contestants to feel free to make any inquiries when they are in doubt. Letters of inquiry must be signed, however, in order to secure answers. It is not found desirable to try to answer inquiries through the Farmer, as the greater number of the questions asked have already been answered several times on this page. Sign your names, because your letters will not be used, in any event, without your consent and no contestant's name will be attached to any published letter without first securing the special permission of the writer. It is a genuine pleasure to answer your inquiries.

Read the Conditions

Simply add up the figures in the puzzle chart as if they were in one long column. Your success depends on the accuracy of your total thus obtained.

Figures run from two to nine, and there are no double figures or characters which are not figures. The tail of the "6" has a decided curve, while the tail of the "9" is straight. All other figures have the usual characteristics, allowing no question as to the identity of any figure.

In event that no one submits the correct total, prizes will be awarded for the next nearest solutions.

This contest is restricted to persons residing in Washington, Idaho, Oregon and Montana.

A payment of $1 to $1.50 on subscription to The Farmer entitles the subscriber to enter the contest.

If your subscription is already paid in advance, your expiration date will be set ahead beyond this date to which you are now paid the full period for which you pay at this time. The advantage of paying $1.50 instead of $1 is that the winner of any of the first four prizes receives additional prize dividends apportioned on the amount paid in on subscription, besides the fact that $1.50, during the contest, pays for a three-year subscription to the paper, while $1 pays for only one year.

More than one solution may be submitted by any contestant, by an additional subscription payment of not less than $1 nor more than $1.50. It is not necessary to pay the same amount with each solution if more than one is submitted.

You can send in a subscription for some one other than yourself and have the solution registered in your own name. Remember that by paying $1.50 instead of $1 on subscription, the larger will be your dividends if you win one of the four leading prizes; but not more than $1.50 will be received with one solution.

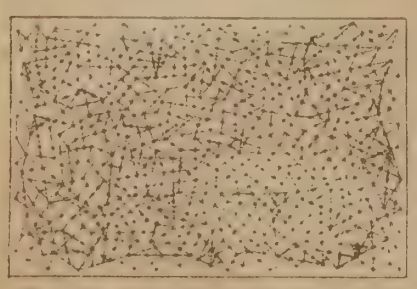
Deciding Ties

In the event of ties on the first problem, those tying will be required to solve a second puzzle, like the small illustration, only considerably larger. Only those tying on the first problem will be eligible to solve the second, or tie-breaking, problem.

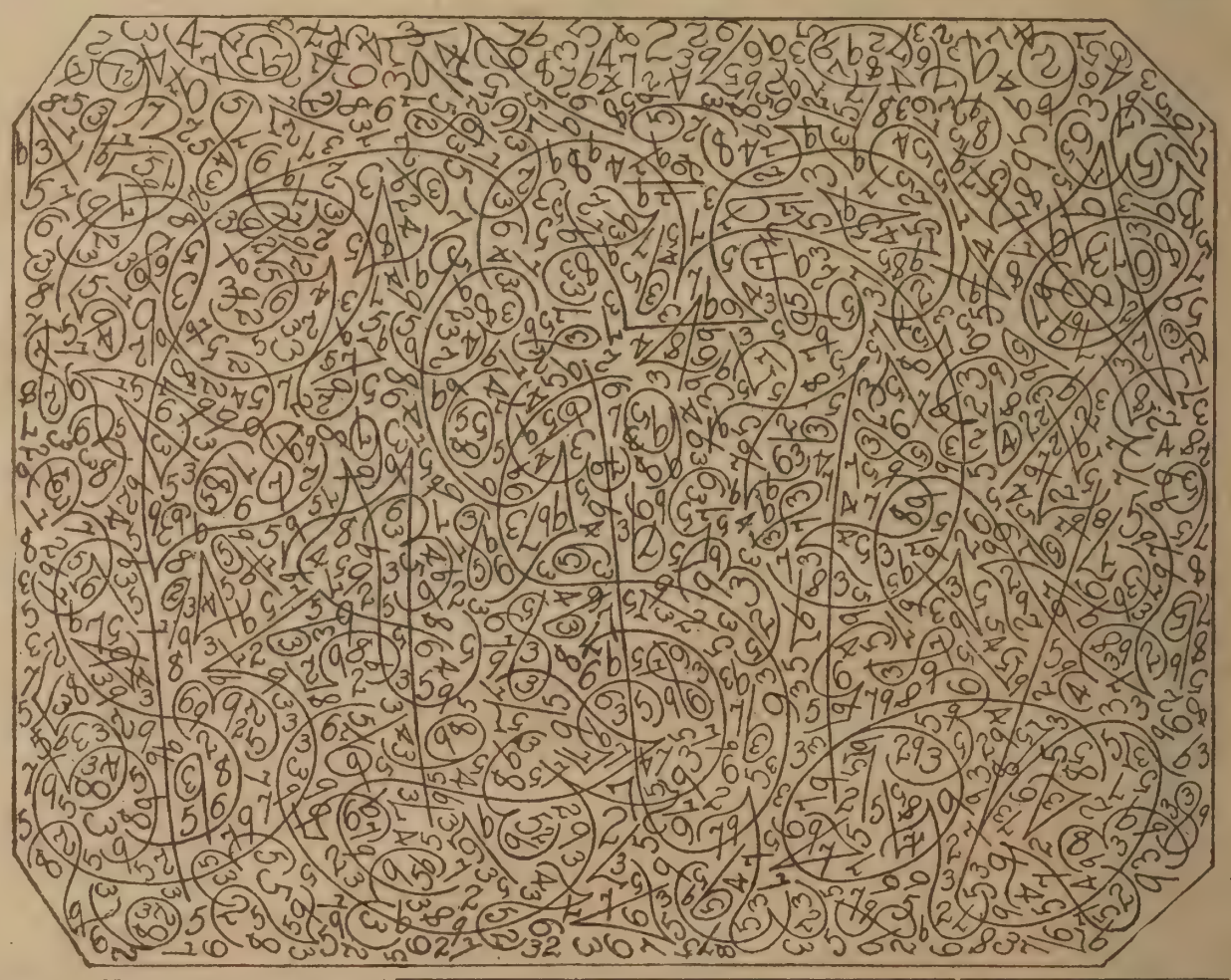
The second problem will involve drawing a continuous line through the greatest possible number of dots. Rules for solving the second problem will be published more fully in event that it becomes necessary to present it, and these rules, together with extra charts, will be mailed to each tying contestant just as soon as possible after all answers to the first puzzle have been received and registered. The small illustration simply gives an idea of the nature of the second problem and nothing can be done toward solving it until it is determined whether there are any ties on the first puzzle, which will be known after March 17, 1917.

In case of ties on the second problem, the same problem will simply be rearranged and another solution asked from those tying on the second problem. If two or more persons tie for any prizes on third solution, each will receive the full amount of the prize instead of a division being made of the prize money.

This is what the second problem will be like:



From the date of publication of this second problem one week will be given for its solution.



$750—Prizes—$750

FIRST PRIZE, $200,
to which will be added 50 times the amount paid by the subscriber with the winning solution. For example, if you pay $1.50 on subscription, this prize will be worth $275.

SECOND PRIZE, $100,
to which will be added 20 times the amount paid by the subscriber with the winning solution. This prize may be worth $145.

THIRD PRIZE, $60,
to which will be added 2 0times the amount paid by the subscriber with the winning solution. This prize may be worth $90.

FOURTH PRIZE, $50,
to which will be added 10 times the amount paid by the subscriber with the winning solution. This prize may be worth $65.

FIFTH PRIZE, $40.
SIXTH AND SEVENTH PRIZES, Each $20.
EIGHTH TO SIXTEENTH PRIZES, Each $7.
SEVENTEENTH TO THIRTY-SECOND PRIZES, Each $2.
CASH MUST ACCOMPANY.

Don't send in your charts and working papers unless called for by the Contest Editor. Simply write your solution in blank space provided in "Registration Blank."

Something to Know

If your subscription is paid in advance, further payment will be credited on an extension of your subscription from the time to which it is now paid.

Any solution unaccompanied by payment on subscription will not be entered.

REGISTRATION BLANK

Cut out this blank closely around the border and send it in with your solution and money.

To the Farmer Contest Editor:

Date sent .....191..

I enclose $..... for.....subscription to **The Washington Farmer.**

Name .....

Town .....

State .....

SOLUTION AND PAYMENTS.

The following spaces provide for three solutions, with the payments you desire to make with them. You may submit one or as many different solutions as you wish. You can subscribe for one or three years as per printed schedule, with each solution, as provided for in "The Conditions."

Solution.	Amount Paid.
.....	$.....
.....	$.....
.....	$.....

Answer this question: Are you now a subscriber? .....
If you wish paper sent elsewhere, fill in name and address.

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.....

You must address all inquiries and solutions to
The Washington Farmer Contest Editor
Review Building **Spokane, Washington**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 10 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF March 8, 1917

Far-Reaching Creamery Trust Alleged

Pacific Northwestern States Included in the Indictment Following Probe by U. S. Authorities

The investigation has been on for some time which led to the indictment by the United States grand jury at Boise, mentioned in last week's Farmer, charging a creamery trust in eight western states, including eight corporations and 11 individuals. Leon Bone of Salt Lake, special agent of the bureau of investigation of the U. S. department of justice, was in charge of this investigation. Mr. Bone is reported as saying that the operations of the defendants had been under examination for two years. Word also comes from Salt Lake that the probe has been a most thorough one and that the federal authorities are in possession of letters and correspondence exchanged between the creamery officials in the several states, and that upon this correspondence indictments were founded. It is also understood at Boise that much of the data submitted to the grand jury concerning the operation of the defendants in Idaho was obtained by William G. Scholtz, director of farm markets of the state of Idaho, who was one of the witnesses before the body.

Here is the list of the companies in the alleged creamery trust:.

The Jensen Creamery company, Salt Lake.

The Mutual Creamery company, Salt Lake.

The Henningsen Produce company, Butte.

The Schallinger Produce company, Spokane.

The Commercial Creamery company, Spokane.

The Hazelwood company, Portland.

The Hazelwood company, limited, Spokane.

The Clock Produce company, Seattle.

The following individuals were also indicted in connection with the indictments of the eight corporations: W. F. Jensen, D. E. Newman, H. A. Schellinberger, A. P. Henningsen, W. F. Henningsen, Carl Schallinger, E. W. Ellis, Carlyle Hall, B. B. Corless, R. A. Goodhue and W. W. Hamilton.

"Espionage" Charged.

It is charged in the indictment that from March 1, 1914, until the date of its presentation the defendants have conspired to restrain interstate trade and commerce in creamery and dairy products to prevent the purchase of butter fat and other raw materials by other manufacturers and dealers in these products within the states of Oregon, Washington, Idaho, Montana, Nevada and California, and to cause their financial loss and ruin by eliminating them as competitors and maintaining a system of "espionage."

"They have given short weight in manufactured products placed upon the market, thus defrauding the consumers and thereby enhancing their own profits, to the end that they might thereby be better enabled to eliminate competition in other sections of territory," the indictment recites.

Charge is made that the defendants temporarily paid more for raw materials than market conditions justified in territory where they met with competition, and that they have given false weights and tests to producers in localities where they met with competition, showing a higher percentage of butter fat than was actually present, for the purpose of causing such producers to believe that similar tests by their competitors were false.

In localities where the defendants met with no effectual opposition it is charged they have given producers false tests of butter fat, showing a lower percentage than was actually contained in the materials furnished, thereby defrauding the producers, for the purpose of enhancing their own profits and enabling themselves more effectually to eliminate competition.

It is charged that employes and agents of the defendants have been induced to give false tests in the buying and testing of raw materials, and that the defendants have secretly attempted to obtain the support of influential persons in certain localities by means of unwarranted favors shown, intending through their influence to obtain the control of the available supply of raw materials.

Accused of Attempted Bribery.

False and misleading statements as to the methods and products of competitors have been made, it is charged. The defendants are charged with attempts to bribe the agents of common carriers to divert to themselves shipments of raw materials intended for their competitors; and it is charged that the defendants have hired and attempted to hire employes of competitors and decrease their efficiency; that they have prevented and attempted to prevent their competitors from obtaining storage facilities for their perishable products, in order to cause a deterioration in the quality of such products sufficient to require their sale at a loss.

Attempts have been made to influence legislation in certain of the states named, it is charged, in favor of the defendants and to the injury of competitors; it is charged that the defendants have endeavored in certain states to prevent and obstruct the enforcement of existing laws when a failure to enforce them would inure to their benefit and to the injury of their competitors.

Division of Territory Alleged.

It is charged that by mutual agreement they have apportioned among themselves the various sections of the territory from which they obtained raw materials and in which their manufactured products were marketed, in such manner as to prevent competition among themselves, either in the purchase of raw materials or in the sale of manufactured products, and in like manner have, by mutual agreement, fixed prices in the different sections of such territory, both as to prices paid for raw materials and as to prices demanded for manufactured products.

These prices have been so arranged, it is charged, as to greatly hinder and restrain their competitors, in that higher prices were paid for raw materials in those sections where the defendants had no competition, and that lower prices were demanded for manufactured products in the markets entered by their competitors.

It is charged that the defendants, by mutual agreement, paid higher prices for raw materials than market conditions justified, and particularly by the contemporaneous market prices of products manufactured from such materials, for the purpose of forcing their competitors either to retire from business or to suffer severe financial loss. After eliminating competition by the methods alleged, according to the indictment, and by the means of the exclusive control of the markets thereby obtained, the defendants have demanded and obtained from the consumers of such manufactured products "excessive and unwarranted prices for such products" and it charged they thereby obtained for themselves further finan-

(Continued on page thirty-four.)

Swindlers Get Their Deserts

Induced Thousands of Farmers to Buy Stock

Pertinent editorial comment on the conviction of the leaders in the Northwestern Trading company at the recent trial in Spokane is made by the Portland Oregonian in a recent issue. The men convicted of conspiracy to defraud were Gale Smith, president of the company; O. C. Fowler, C. L. Davies and S. T. Knudson, other officers. Their conviction followed the wholesale filching of thousands of dollars from the farmers of the three northwestern states, it appearing in the trial that the endorsement of the trading company by the Washington State Grange and the Farmers' Union of Washington, through committees of these organizations, played a part in enabling the swindlers to carry on their operations. The Oregonian's editorial follows:

In the conviction and sentence of the men who conducted the Northwestern Trading company one of the worst gangs of swindlers which ever infested the northwest has received its deserts. On the pretext that they would buy merchandise direct from the manufacturer for cash and sell only for cash and would thereby make large profits with small risk, they induced thousands of farmers to buy stock in the company. The fact is that their main purpose was to sell stock and to pay themselves large commissions on its sale, for they bought little from manufacturers. They bought from jobbers on time, like any retail merchant, and soon loaded the company with debt. They played the old game of the get-rich-quick man to get money for nothing by fraud, and if Judge Van Fleet erred at all in sentencing them, he erred on the side of leniency.

Every important statement made by Gale Smith and his confederates has been proved to be false. They promised to do a cash business, but they bought on credit. They represented that the company made a profit when in fact it lost money all the time, and on this false pretense they raised the price of shares by degrees from $20 to $75. They promised not to receive any money from the company beyond salary as officers, but they received large sums as commissions on sales of stock. They professed to have employed an independent agency to make collections, when in truth they organized their own collection agency and through it threatened suit against stockholders who became delinquent.

The officers of the grange and farmers' union can not escape a share of the blame for the fraud which was perpetrated by this gang of swindlers on their members. These officers helped the game by announcing that they had investigated the company and had found it sound and good, though it was unsound from the first. Whether they knew the truth or not, they are unfit leaders. If they knew it, they deceived their constituents deliberately; if they did not know it, their investigation was a sham or they were incompetent to form a judgment on the facts.

Success for a time of this gang in victimizing citizens of Oregon and Washington under the noses of the state corporation commissioners and in defiance of the laws should be a spur to these officials to exercise unceasing vigilance against fraudulent stock selling. After promoters have presented a fair-seeming project which justifies a license to sell stock, watch should be kept upon them to see that they live up to their promises and that their statements made at the outset continue to be true. Every dollar sunk in such wildcat companies is a dollar diverted from legitimate investment, and every person thus victimized is filled with suspicion which injures the good name of the Pacific northwest. There is plenty of honest work for the people's savings in developing the country; the results of thrift should not be permitted to flow into the pockets of the Wallingfords.

Washington Portraits No. 5.



Alvin Anderson, one of the younger farmers of Wahkiakum county, was born and raised on the farm near Oneida. He has a dairy farm of about 7000 acres; has been raising some beef cattle, although he intends to go into the dairy business exclusively. The soil of this section of the county is very fertile, being mostly reclaimed tideland, and is ideal land for dairy purposes.

The next in the series of Washington portraits will be that of Virgil Dunbar of Pateros, and will be given in next weeks' issue of The Washington Farmer.

POTATO SCAB.

Treat the Seed Before Planting.

To the Editor of The Washington Farmer: Will you please give a formula for treating seed potatoes for scab? A. L.

The above question is answered by O. M. Morris, professor of horticulture at the Washington State college, as follows:

The best treatment for seed potatoes infested with scab is one ounce of corrosive sublimate, dissolved in seven gallons of water. Soak the potatoes in this solution for one and one-half hours. Drain and cut before planting.

Formalin can be used at the rate of one pint to seven gallons of water. Soak the potatoes in this for an hour and a half. The corrosive sublimate is better because of the fact that it destroys other fungous pests that may be on the potatoes at the time. One of the most common in the northwest is rhizocatonia. The formalin treatment will not destroy this. Either of these solutions can be used for the treatment of four batches of seed before making a fresh solution.

Dishonesty in Live Stock Sales

"I Have Seen the Checks the Seller Received, but Not the Ones the Buyer Gave Back"

The Farmer has already called attention to the old-time evil of the New York stock exchange known as "wash sales," when two or more brokers conspired to make large bogus sales on the floor of the exchange for the purpose of running up the quoted price of the stock they were manipulating. That evil is now practically stamped out in Wall street.

R. P. Stericker, secretary of one of the national purebred horse societies, the Cleveland Bay Society of America, indicates by his letter, given below, that there is need to a greater or less extent of a campaign that shall wipe out "wash sales" at auction sales of purebred live stock:

To the Editor: Where there is collusion or dishonesty it is almost impossible for prices at auction sales to be "bona fide." I can't see how this can be obviated.

The system among dishonest people of selling an animal privately (before a public sale) and then running it through the auction to any price agreed upon is both old and reprehensible. Nobody with a grain of common sense believes in these absurd prices and I for one would like to see it stopped, but how?

I know that private sales are often "padded." I have seen the cheques that the seller received, but not the ones the buyer gave back. I know such transactions "throw dust" in a few people's eyes, but not many.

This particular sale you speak of is "on the face of it" fictitious. It will not be long until some other sale "tops" this one. R. P. STERICKER,
Secretary.

Chicago, Ill.

Letters were sent by the Farmer to the secretaries of the great Pure Bred associations of the country, enclosing the statement from E. A. Stuart of the Carnation Stock Farm, together with statements and affidavits in reply regarding the sale of the Holstein bull calf Finderne Mutual Fayne Valdessa for the alleged price of $21,500 at the Pacific International Stock Show and sale at Portland, Ore., last December. The following points plainly indicate the conflicting nature of these statements and counter-statements:

In a letter dated October 2, 1916, B. Meyer, the breeder, offered the bull to E. A. Stuart, president of the Carnation stock farms, near Seattle, for $5000.

In a letter of November 17, 1916, Mr. Meyer told Mr. Stuart that the animal had been sold. He failed to give the price, but his own herdsman told Mr. Stuart that a Mr. Von Herberg was the purchaser and the price was $2500.

The animal's next appearance was at the Portland sale, and Mr. Meyer, its breeder, was its reputed owner. In his transmitting letter to Mr. Gue, the auctioneer, Mr. Meyer said, "I consign this bull to your sale without any restriction whatever." But in his answer to the Farmer's telegram of inquiry of February 4, Mr. Meyer says: "Bull was sent by me to the sale under the recommendation of Von Herberg, guaranteeing me $5000 at least, and all he would bring over it. What my herdsman said was not true."

When the Farmer sent another telegram, asking Mr. Meyer to be more explicit, he telegraphed this reply: "The bull was sold at auction for $21,500 to Mr. Von Herberg. After deducting commission, freight and expense, I received the balance of my money in full. Exact amount what I got is my business."

In its letter to the secretaries of the pure bred live stock associations the Farmer added: "The personal differences whatever they may be, between Mr. Stuart and Mr. Von Herberg, are of the merest incidental character so far as the Farmer is concerned, but the putting of the livee stock industry, which promises so large for the Pacific Northwest, on a permanently stable and prosperous basis is the utmost moment to the Farmer, and this cannot be done if speculative prices, created by 'wash' sales, if such there be, go forth as bona fide sales."

A statement also was sought from these secretaries as to how auctions of pure bred live stock could be so conducted and guarded that they would give complete assurance of being bona fide sales.

ENORMOUS PRICES.
Always React On Industry.

The following letter will be read with interest. It is from Mr. Winslow, the secretary-treasurer of the Ayrshire Breeders' association:

To the Editor: It is unfortunate when in any purebred life stock society their reputation either by the private owners or by the sales committee or by any one else is such that suspicion is cast upon the prices brought. Any attempt to inflate the prices beyond the actual breeding value always reacts. The fact of this animal bringing $21,500 is in itself sufficient to cause suspicion, whether just or unjustly I do not know, but I do not think the Holstein association as an association will encourage anything of that kind as I am personally acquainted with many of the leading men in that association and doubt their approval of anything of that kind. If that was a bogus sale it was certainly a mistake.

In the Ayrshire Breeders' association we have always disapproved of any attempt to inflate prices, believing the actual value of the animal would warrant its being sold for what it was worth and anything beyond that we have tried to prevent. Good, square and honest sales of desirable cattle of actual worth will usually bring buyers that are willing to pay all the animals are worth and sales of that kind add interest to the stock and are of value in building up their reputation. C. M. WINSLOW.

Brandon, Vt.

BOARD OF REVIEW.
To Protect Live Stock Industry.

Here is the reply of F. E. Dawley, secretary of the American Cheviot Sheep society:

To the Editor: I regret exceedingly to learn that such a controversy has arisen in Holstein-Fresian circles—for I believe that most of the Holstein sales have been conducted very properly. I have been fortunate in being able to keep in pretty close touch with affairs in this section, where the first of the combination sales were held, and where they have largely been developed.

With the increase in sales companies—and the spread of the plan—it would be strange if men have not been drawn in who were less scrupulius than the ones who first inaugurated the system, and there may be some just grounds for criticism.

The apparently high standing of the men who seem to be involved in the transaction which you outline should help to straighten out the tangle, and largely their statements, together with the apparent facts, as shown by correspondence and conversations prior to the date of sale, must furnish the evidence in the case.

I know how well a frame-up can be planned and executed in a cattle transaction, because all farm help is not reliable—nor is it proof against inducements to "get even" with a former employer. Many men of this class have nothing to lose, and are ready to profit by these transactions.

Of course the Holstein-Friesian association should pass on the matter and give the facts to the public. Their interest in the black and white cow will lead them to take such action as they deem just, but the entire registered Live Stock Industry of America is interested, and I am firmly convinced that this matter is but one more evidence that a board made up, much as the American Association of Live Stock Record Associations is, or perhaps that same board, is needed to actually review and act, as a sort of a court of appeals in all such matters.

I have great reason to believe that at least in one case an executive committee and a board of directors, accepted the conclusion of a biased investiga-

(Continued on page twenty.)

Government
Should Own Apple Warehouses?

The Farmer is constantly receiving interesting expressions of personal opinion from its readers, which it is glad to pass on to others.

What the apple business needs is a bureau controlled and operated by federal agents where a buyer can put up his cash for a car of this or that, and the feredal grading expert must turn out a car to that point of demand with no expense, but a wire to the producer, and have all the warehouses and cold storages owned by the government. Not until then will the state of Washington get what she is entitled to for her wonderful apple crop, which in the future will be her chief asset, with wheat second.

MARTIN PENHALLICK.

Neppel, Wash.

USE ELECTRICITY
For Many Farm Purposes.

The vicinity of Twin Falls, Idaho, is pioneering in the use of electricity for farm purposes. By means of transmission lines, power for heat and light and the driving of some farm machinery is obtained. A similar movement is on foot at Burley, Idaho.

Australian Wool for Army.

Whatever wool is sent to England from Austrlia or New Zealand this year can not be offered or sold except to the director of army contracts.

To Stamp Out Rabies Scourge

Spread of Malady Throughout Northwest Calls for Action

What is probably the most widespread infection of rabies in the history of the northwest is being experienced this winter, according to reports from all parts of the four states, especially Oregon and Washington. The coyote menace is calling forth united action by the authorities and the country people of the states in an effort to eradicate them. Washington state has declared war on unmuzzled dogs, also, it appearing that many of them are infected with rabies and are spreading the disease among each other and among live stock.

Oregon Issues Orders.

David N. Roberg, state health officer for Oregon, has announced an ordinance dealing with the matter, and copies of it are being sent broadcast.

It requires that animals afflicted with rabies shall be killed, but also requires that animals suspected of the malady shall be kept under restraint for the period of possible incubation, which is not less than 10 days; that all dogs shall be muzzled or secured when an outbreak of the disease is prevalent or at hand; that suspected dogs, after the 10-day period of observation, shall not be permitted to run at large, unless muzzled, for an additional three months, which is the extreme period for incubation; for the filing of reports on cases called to the attention of officers, and for the summary control of county-wide epidemics.

Thirteen positive cases have been confirmed by examinations of coyote and dog heads since January 6 of this year, while four Pasteur treatments have been given by the state board of health to persons who were bitten by rabid animals. The record of the last two months surpasses that of the previous six.

Washington Regulations.

In carrying out an object intended by the Washington legislature of this year at Olympia when it passed a measure conferring quarantine power on the department of agriculture, Acting Commissioner H. T. Graves has placed under quarantine the entire counties of Spokane, Pend Oreille, Whitman, Garfield, Asotin, Columbia, Walla Walla, Franklin, Adams, Lincoln, Ferry, Stevens, Okanogan, Chelan, Douglas, Grant, Benton, Kittitas, Klickitat and Yakima. The following rules and regulations have been established and a penalty for their violation provided:

1. All dogs running at large within the boundaries of the counties herein specified shall be properly and securely muzzled so as to prevent their biting other dogs or animals.

Provided, that this rule shall not apply to dogs under leash or securely confined on the premises of their owner.

2. No dogs shall be transported or moved from the territory hereinbefore quarantined unless permission has first been secured from the commissioner or his authorized agent.

Penalty.

Any owner, owners or agents who wilfully violate or negligently allow this quarantine or these rules and regulations to be violated shall be guilty of a misdemeanor and be punished by a fine of not more than two hundred and fifty dollars ($250) or be imprisoned in the county jail for not more than ninety (90) days.

Peace officers, under the provisions of section 5, chapter 100, laws 1915, are requested to assist in the enforcement of said quarantine, rules and regulations, and any person is authorized, under the provisions of chapter 13, laws 1917, to destroy, without liability therefor, any dog not muzzled as herein provided and found running at large in the herein defined areas.

Ports Are Rivals
May Mean Bulk Grain Facilities

Rivalry between Portland, Ore., and Seattle, Wash., bids fair to do much toward hastening the day when there will be terminal facilities on northwestern tidewater for handling bulk grain.

The Seattle port commission is openly in the field bidding for the patronage of the farmers and offering them facilities for receiving their grain in bulk or in sacks. Likewise the Portland dock commission has announced that it proposes to do everything reasonable to develop facilities to handle all the bulk grain that can come to that port and retain the lead which it has held as a grain shipping point. Tacoma, a friend of neither Seattle nor Portland when it comes to business activities, and one of the big wheat exporting terminals of the Pacific coast, is saying little, but "sawing wood" with the apparent view of profiting from the Portland-Seattle bout.

Portland May Issue Bonds.

C. B. Moores of the Portland dock commission has announced that the commission will ask the people of Portland to vote bonds this spring sufficient to construct a bulk grain elevator with a capacity of 1,000,000 bushels as the first unit in more extensive construction.

Speaking of the movement of the Seattle people to divert the grain business of the Inland Empire from Portland to Seattle, Mr. Moores said in an address before a Portland booster organization the other day:

"There will be the dedication of a big bulk elevator in Pendleton tomorrow, and Robert Bridges of the Seattle port commission will be there just as he was at the meeting in Corvallis recently to keep Seattle's facilities before the minds of the grain growers.

"At the Corvallis meeting he had the admirable nerve to introduce a motion that the convention adjourn to meet at once in Seattle and consider further the problem of bulk handling of grain.

"Seattle is doing everything in her power to wean the wheat men of the Inland Empire away from Portland as a shipping point, and their energy is to be admired, but Portland must put forth equal energy to hold her own.

"There is a crisis in the grain business, and Portland must prepare to meet it, or be left.

"Grain growers have made it sufficiently clear that they will not deal with private elevators and they have made it sufficiently clear that they are done with the sack method of handling grain. Their sentiment is overwhelmingly for the bulk handling and the elevator.

"It is up to us to provide public elebators, therefore, and the dock commission has proposed to the people in June a bond issue for this purpose."

Mr. Moores, while he expressed a belief that the spirit of the people is conservative and that they are opposed to bonding, declared that Portland is well able to handle the bonds necessary for the enterprise.

Seattle's total tax levy he pointed out is 45.8 mills as against 27.4 in Portland, and her bonded indebtedness $47,000,000 in round figures, as against Portland's $26,900,000.

Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTEL I.

MY six-year-old son is as happy as a clam in high water when he is in mud up to his neck. On a hot day he would sooner play in the mud than eat. Rogers Akers, age four, feels the same way about it. I have made my boy—Herbert is his name—a sort of mud wallow in one corner of the garden which is surrounded by tall sunflowers and sanded on the bottom, the sand being to cut the edge in the mud. Rogers lives across the street. When he spies Herbert about ready to submerge, across the street he comes, and into the mud wallow he goes, little white dress, stockings and all. His mother, blessed with good sense, doesn't whip him for getting in the dirt. You know, there is clean dirt and dirty dirt. The soil of a well tilled garden is really clean; and when it is merely mixed with water and spread over the legs and face of a baby boy it is still clean, so a little boy can be mud all over and still be clean. That is the philosophy of it. On a hot day, Herbert and Rogers are thrice doubly welcome to all the mud they can find—and if they can't find any, we manufacture it for them.

And so it was with me when I was a youngster of five or six. Memory begins at about that time. There was an immense wheat field with many huge tar weeds in it. There were long, hot summer days while the men were at work in the fields. There was an unpainted shack of a house in which my mother cooked meals for the harvest hands, father being the foreman of the crew. There was a huge trough of cool water down in the barnyard; under it, a mud wallow. There was an old sow and a whole lot of baby pigs that used to come panting out of the tall, yellow wheat, and make a bee-line for the wallow under the water trough. Gracious, how those baby pigs enjoyed that cool mud! And how I longed to roll in it with them. I asked mother one day why I couldn't have some nice, cool, clean mud in which to roll on hot summer days. She laughed. Presently when dinner was over and the dishes washed, she went around to the shady side of the house, scooped out a big hole in the earth, filled it with clean water, and told me to strip and get into it.

Now you know why Herbert has his mud wallow in the sunflowers, and why I have sworn to defend his right to play in mud and water on a hot summer day.

It's play. Watch the baby calf when first it stands on its long, tottery legs. Right away, as soon as it has sucked a time or two, it wants to kick up its heels—falls down in its attempt to do so. Watch the tiny pigs and see them play hide and seek about their mother and among her huge, fat legs. Watch the kittens as they cuff each other and bite each other's and their mother's tail. Watch the whole animal world when it is young, if you please, and you will see that it wants to play. Then, dare you say that baby girls and baby boys, the finest little animals in existence, should not play? Let them play, mud be hanged. When the day's play is over, put them to bed via the bathtub.

I am putting this emphasis on play, because I believe it does not always find its way as it should into the lives of those rarest and best of all farm animals, little boys and girls. It didn't in my case, through no fault of my parents, I think. Even yet, the memory of that huge, yellow, desolate wheatfield is depressing. The air was full of bees, the wheat was full of tar-weed—all the world was full of pricks and stings for a barelegged little boy! My only refuge was the cool mud wallow behind the house, and to it I flew weeping many a time. A bee stung me on the leg—I ran to the mud hole and put mud on the sting. Tar pricklers got between my toes, I put my foot in the mud and it eased the pain. That cool puddle was my playmate and friend in time of need, and today stands out as one of the bright spots of my childhood.

When we look back to the tender age of six, there are long gaps in the memory, and only such monumental things as bee stings, mud holes, stick horses and the discovery of chewing gum stand forth. I remember my first Christmas, which was out at the old "stage station," or Mullinix ranch near Waitsburg, Wash. Among the wonders of that frosty morning was scrap-book bearing on its outside cover a picture of Santa Claus with a red nose, a cheery smile, and long, white whiskers. From whiskers to boots I loved that Santa Claus. I still have the old scrap-book, which now is frayed with age and yellow. But fresh as ever is the memory it brings of that Christmas morning out at Uncle Jack Mullinix's old stage station.

One day I heard father say he was going up to the Big Bend to take up a ranch. That was when I was eight or nine. Soon after that we were jolting over the road in a "covered wagon," father and mother in the seat ahead and I curled up among the bedding and horsefeed, and frequently peering from under the wagon canvas at the wonder of the surrounding country. It got monotonous as the days passed. There was a heavy wind as we went through a long canyon called "Lord's gulch." I was cold, shivering and miserable, and finally lost my nerve and cried. Then we came down into the deep Snake river canyon at Lyon's ferry. Clearly photographed in my mind today are the towering cliffs of the Snake river canyon at that point. High up among the cliffs a cow was grazing, and to me it looked no bigger than a rabbit. We camped there for several days, and the wonders never ceased.

We crossed Snake river on a cable ferry, and met many Indians, some of them with faces painted a brownish red and wearing feather bonnets. We came finally to the water place called Washtucna, where cattle were being "rounded up." The cowboys would dash on horseback after a fleeing steer, swing a rawhide lariat, and in an instant the beef would go down with its heels in the air. Then and there was born in me the desire to learn to throw a rope and be a cowboy. I was for deserting the covered wagon and joining the cow camp at once. One of the cowboys who wore huge, dangling spurs and great hairy "chaps" said he would give me a job.

Many years afterward I rode on horseback through the Washtucna country. I hunted up the spot where we had camped. But it was all changed—for a town had grown up and where once was a grassy range were wheat fields and barbed wire fences. The change was disappointing. It wiped out a sweet memory of childhood, putting in place thereof a string of wheat warehouses, a railroad and a fenced-in spring.

The days that passed as we jolted on to the Big Bend were so full of monotony that I remember little that happened. Often we made dry camps, watering the horses and doing our cooking and washing from the water barrel carried in the wagon. Once we drew up beside a tule swamp. There were many willows, green grass, shade, and out through the willows and tules I could see the water and now and then a swimming duck. My excitement was intense. While father staked out the horses and mother prepared the meal over a camp fire I made my way through the green grass and the shade nearly to the water's edge. Some red willows grew out near the water. My longing for one of those red switches burned into the very depths of my nine-year-old soul. I made a step toward them and there was a whirring rattle in the grass at my very feet, and a spotted snake with a flat head and darting black tongue glided out of the grass a step or two ahead, now and then looking back from beady, black eyes. I screamed and ran.

We had gotten well out into the rattlesnake country. Father went after the snake, thinking it was simply a small, harmless water snake—presently came bounding out looking for a club which he didn't find before the snake got away. After that, I stayed close to camp and we no longer slept under the wagon on the ground.

With the chapter next week the Bunch Grass boy begins life in earnest in the Big Bend country.

The Star Spangled Banner.

The war department, by designating by official order The Star Spangled Banner as the national anthem, has recognized regularly what long has been officially the American national air only by order of the navy department.

The order also directs that when the anthem is played at any place, persons belonging to the military service shall stand at attention facing the music. They are ordered to salute at the first note of the anthem and retain the position until the last note.

"The Star Spangled Banner" was written by Francis Scott Key the morning of September 14, 1814, after the British attack on Fort McHenry.

Key had gone in a small boat to the British fleet in Chesapeake bay to ask Lord Cockburn for the release of a captured civilian. Lord Cockburn held Key, who watched the bombardment of Fort McHenry and through a day and night was exposed to the fire of his friends at the fort.

Lord Cockburn boasted that the fort would last only a few hours, but next morning Key saw the flag still waving, and, taking an old letter from his pocket, he used a barrel head as a desk and penned the words. They were set to the music of "Anacreon in Heaven" by Ferdinand Durany.

Legislature Ends

Tale of Fifteenth Session Told

By the time this issue of the Farmer is in the hands of its readers the 15th session of the Washington state legislature will have adjourned. Its record will have been made.

As is usually the case, these last days are crowded full of measures that have been delayed in consideration from time to time during the session, and many of them will be killed for lack of time in the final hours of the session and many will be passed without full consideration of their merits.

Irrigation Code.

At this writing it appears that the irrigation code for which many of the orchards and arid farming districts have worked faithfully will fail of passage.

This measure was designed to codify and simplify the irrigation laws of the state, and to modernize the system so that water rights held undeveloped under the age-long doctrine of riparian rights might be brought into use in the development of large areas of land now lying useless because of lack of water. If this measure is not enacted it will be because of the opposition which it has met with at the hands of corporate interests desiring to maintain control of waters for power purposes.

$12,000,000 Appropriations.

The legislature is making total appropriations of approximately $12,000,000 for all purposes. The final results of the consideration of appropriation measures, together with the action taken on such measures by Governor Lister in the nature of approvals or vetoes, may show a less total than these figures.

One of the contests of the last few days has been over the proposal to levy 1.9 mills for the institutions of higher learning, which would raise approximately $850,000 more money for this purpose than has been raised under the present levy. The senate has already passed this measure, but the lower house has opposed it with sufficient vigor to indicate that the final action will show a levy of not to exceed 1.55 mills.

Director of Markets.

The senate passed late last week a bill creating the office of state market director, modeled after the Idaho law. How it will fare in the house was considered problematical. It would give such officer a salary of $3000.

Mrs. P. W. Van De Grift, Leavenworth, Wash.: "I wish to thank you for the many good things you print in your paper and to wish you great success."

Standardization

Of Dairy Business Is Advocated

"Our field extends from the pasture to the breakfast table," said Professor G. L. Martin of the University of Montana, addressing the dairymen at the Western Dairy Products show at Portland last week on the subject of standardization of the business.

This standardization should be made to include dairy educational work, production of milk, butter and cream and distribution of all products of the dairy farm, he pointed out.

"Producers and manufacturers must line up to work for quality and definite standards so as to meet competition," said Professor Martin. "We have suffered from lack of efficiency and lack of cooperation. The time has come for us to get together. There is need in the dairy industry for a science of dairy economics."

Show Awards Are Made.

The following are the awards in the show:

Home trade cheese, possible 100—Gustav Kunze, Buhl, Idaho, first (gold medal), 95; John Bogart, Woodland, Wash., second (silver medal), 94 1-2; Hugh Barber, Tillamook, Ore., third (bronze medal), 94

Export cheese, possible 100—Eagle, Idaho, factory of the Boise Cooperative creamery, first, 94 1-2; Montpelier, Idaho, cheese factory, second, 94; Chris Holbeck, Galt, Cal., third, 93 1-2.

In the butter scoring contest Oregon won the silver trophy with a score of 961.5 out of a possible 1000. Washington was second with 950.5, and Idaho third with 942.5.

How Result Was Obtained.

In this contest the five highest scores from each state were added together to determine the state championship. The Oregon scores included were those of the Monmouth cooperatice creamery, 195.5; McMinnville creamery, 194; Woodburn creamery, 191, and Mt. Angel creamery, 183. The possible score was 200.

The Washington team consisted of Skamokawa creamery, 198; Yelm cooperative creamery, 190.5; Old Dominion creamery, Colville, 190; Sorenson creamery, Linden, 189, and the F. S. Kelly creamery, 183. The Washington team won the trophy last year.

In all there were 56 exhibits in this contest, the states represented being Utah, Nevada, Wyoming, Colorado, Washington, New Mexico, Idaho, California and Oregon, but some of the states did not have sufficient exhibits to make up a team of five.

Milk prizes were won as follows, the possible score being 100:

Raw milk—Portland Pure Milk & Cream company, 96.9; Elliott-Brant Rancho, Owensmouth, Cal., 96.75.

Pasteurized milk—Vine Lodge dairy, Portland, 97.25; Crescent Creamery company, Los Angeles, 97.

Milk dealers (determined from a test of milk delivered to five patrons)—Portland Pure Milk & Cream company, 95.78; Pure Milk Dairy, Seattle, 95.44.

Certified Milk—Clover Hill farm, Portland, 98.4; Maplewood farm, Seattle, 96.1.

Raw cream—Fernwood dairy, Portland, 96.15; Elliott-Brant rancho, Owensmouth, Cal., 95.3.

Pasteurized cream—Crescent Creamery company, Los Angeles, 96.9; Hygeia Meadows, Portland, 96.8.

In the short-course butter judging contest the Idaho Agricultural college team carried off the honors with a score of 4699 out of 5100, Oregon Agricultural college being second with a score of 4099.

In the buttermakers' contest the Oregon team won with a score of 4521 out of a possible 5100. Idaho was second with 4318 and Washington third with 4248.

Cattle Shipments Grow.

Montana exported to eastern markets 227,823 head of cattle in 1916, an increase of 53,892 over 1915 shipments, according to reliable reports from that state.

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Farm Organizations Should Be Led By Men of Brains and Honesty

The trial and conviction of the four officers of the defunct Northwest General Trading company sharply point the moral that the leader of a farm organization should be a man of clear brain and rugged honesty.

Thorough investigation by the United States authorities and a fair trial in the United States court have stamped as swindling the methods pursued by the Northwest General Trading company and its allied branches, thus sustaining the exposures of these concerns repeatedly made by the Farmer during the last two years.

C. B. Kegley and J. C. Lawrence, who examined and indorsed the Northwest General Trading company for the grange and farmers' union, either did not have brains clear enough to detect these swindling methods, or they lacked the rugged honesty to denounce them.

C. B. Kegley has proved himself unworthy of the trust imposed upon him as master of the Washington State grange. He should give place to such a man, for example, as W. H. Paulhamus of Pierce county, or W. J. Sutton of Spokane county, or D. A. Scott of Adams county, or R. C. McCroskey of Whitman county, or D. H. Cox of Walla Walla county, or others who could be readily named—a man who would not advise farmers to buy stock in a swindling concern, which robbed them of $500,000 of good money.

Growing Cheap Products for the Nation to Waste

Governor Whitman of New York very sensibly refuses to be stampeded by "food riots" and other sensational demonstrations in New York city. "No one is going to starve and it is foolish to assert that any one has to," said the governor in a statement to the public. "The people have simply got to eat what they can afford to eat."

Governor Whitman's judgment is borne out by a report just made by the department of health of New York city. It finds that there is "obviously less dependency and real need than has been common for many years past," and "there does not appear to be any sudden or recently developed emergency in this city."

While the health department finds that increased exportation of staple articles of food is a factor in the rise of prices, it also attributes much of the increase to lack of intelligent economy in buying by city housewives.

As a matter of fact, it is nationally an economic benefit for the United States now and then to sell its farm products down pretty close to a clean board. Waste is the besetting sin of Americans—waste on the farm and waste in the cities. When any commodity is over-plentiful it is human nature to undervalue and waste it. A little scarcity now and then sets the nation thinking on plans to prevent waste and ways for the better utilization of all the valuable food products of the farm, the orchard and the dairy.

Great masses of our population, particularly in the large cities, need to be educated regarding the food values of different products. They should give more intelligent thought to their marketing. Too long the American farmer has borne the unnecessary burden of growing cheap products for the nation to waste.

Cooperative Shipping

The possibility of farmers who have only one marketable animal or possibly half a dozen each to ship them to a central open market and secure the same service and freight rates as if they owned a full carload or a full trainload each is realized when it is known that the Portland Union stock yards have received community shipments in which 20 ownerships were represented by one car.

In this shipment, says Secretary O. M. Plummer of the yards, some farmers had only one animal each, but each received the same attention that he would have had had the entire carload belonged to him. He paid his part of the shipping charges, which were figured at carload rates. He received the actual price for his animal that its weight and marketable condition brought.

This is but another illustration of the possibility of cooperation.

Above-Board Sales of Supreme Value to Livestock Industry

Stockgrowing is one of the great national industries. It touches vitally every life in the republic. Several millions of people are directly dependent upon it, and all the rest of the population are dependent upon its food products.

It follows that an industry so vital to the national welfare should be guarded against chicanery, and that breeders of fine stock should be alert, even above all others, to oppose all manner of trickery and misrepresentation.

Letters in this issue of The Farmer from high officials of four great national associations should be read by all who have at heart the maintenance of honest methods and the welfare of those who are engaged in the industry. They were called out by the recent auction sale at Portland, Ore., of a high-bred Holstein bull calf at a reputed but questioned price of $21,500.

The secretary of the national Cleveland Bay association well says that the system of "selling an animal privately (prior to a public sale), and then running it through the auction to any price agreed upon, is both old and reprehensible." He continues: "Nobody with a grain of common sense believes in these absurd prices. I know that private sales are often padded. This particular sale you speak of is, on the face of it, fictitious."

The secretary-treasurer of the national Ayrshire Breeders' association says the reported sale of this animal for $21,500 "is in itself sufficient to cause suspicion, whether justly or unjustly, I do not know."

The secretary of the American Cheviot Sheep association calls on the Holstein-Friesian association to investigate the Portland sale and "give the facts to the public."

And the secretary of yet another national association, the Red Polled Cattle club of America, finds that "it is hard to keep these sales bona fide, the tendency for speculation is so great, and, to many, inflated values, no matter how obtained, appeal as advertising matter of great value."

It may be hard to keep these live stock auction sales bona fide, but the Farmer is determined that its influence shall be thrown always on the side of square dealing and open, aboveboard methods. It does not intend to be made a catspaw if an earnest purpose and vigilant watching will prevent it.

At the same time it will be entirely fair, as it has been scrupulously fair in this case, when suspicious sales are made at auction, to give the dealers who are brought under suspicion generous allowance of its space to explain their transactions and defend themselves.

Washington Gleanings

For $125,000 J. Morris Jones has sold his 2400-acre ranch in Lincoln county to James B. Sammis of Davenport.

The headquarters of the Horn Rapids Irrigation company, which was recently reorganized in Seattle, has been moved to Richland.

Approximately 40,000 tons of potatoes have been shipped out of the Yakima valley this season, and the crop is not yet fully cleaned up.

W. B. Gunnoe, goverment trapper, of Toppenish, during the last year caught 366 coyotes, two foxes, 27 bobcats, three lynx and 35 badgers.

C. E. Berg is constructing a 30x44-foot building at Walla Walla, which will be used as a flour mill. It will have a capacity of 25 barrels a day.

It is reported that the construction of a cheese plant at Oakville will be started within a few weeks by a cooperative company of that district.

The boys and girls' canning and garden clubs of the state last year made $117,306.12 and there are more than 17,000 club members in all the clubs.

Farmers and business men of St. John and vicinity have organized the St. John Elevator company, with a capital stock of $25,000, all subscribed for.

James B. Samis of Davenport has bought the Ellen A. Jones farm in Lord's valley. The farm comprises 2240 acres, southeast of Harrington, and brought about $60 per acre.

A demand is coming from the farmers that a pea day be held in Rosalia and that a man of experience in the pea business be secured to discuss this now demanded crop.

Secretary Lane announces the restoration to entry of 3509 acres in Whatcom county and 500 acres in Lewis county, previously withdrawn in the belief that they contained coal.

W. E. Maas of Cowiche has purchased the 24-acre ranch of John D. Simon in the Moxee valley for $4800. He will take charge of the Moxee property about the 15th of March.

The Kennewick-Richland Marketing union has entered into contract with the Spokane Fruit Growers' company for marketing their 1917 strawberry, asparagus and early potato crops.

O. E. Gibson, N. C. Jamison and County Agriculturist Agent F. W. Rader report the organization of a cow testing association covering the territory between Kent and Seattle. It has 500 cows signed up.

The farmers in the vicinity of Dryad have organized a farm loan association, with about 16 members and $2300 capital. H. T. Clippinger is president; Carl P. Staeger, vice president, and Lloyd Larsen, secretary.

The Washougal milk condenser, which has been closed for an extended time has just been bought by the Hazelwood company of Portland. They have had a representative canvassing the vicinity to secure contracts for milk.

What Others Say

Dakota Farmer: Cheap labor is often expensive and wasteful.

National Stockman and Farmer: We move to commit 90 per cent of the proposed food legislation to the cold storage committee.

Ohio Farmer: It is the duty of the milk producers' organization to teach each member the greater profit of becoming an all-year-round producer.

Farmers' Review: The cold storage man is a speculator, just as is the farmer who stores his wheat or his corn for higher prices, and should not be condemned merely because he is a speculator.

Southern Agriculturist: The world is mad today, and force seems to rule, but sanity will come again, and all nations realize as never before the futility and the foolishness of war.

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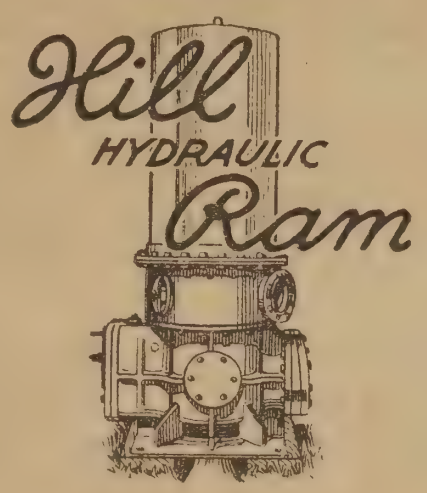
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More dollars per acre are yours if you get water on the soil—and the water question is quickly solved with the Hill Hydraulic Ram. This ram is the latest achievement in low-cost, individual irrigation systems. All you need to operate this ram is a stream or active springs. With sufficient fall you can lift water practically to an elevation as high as 300 feet.

This wonderful ram runs itself. It works automatically. It needs no motive power other than the head or fall of water available on or near your farm.

WITH THE



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Rams for all Farm Purposes

Water in your home, water in your barn, and water on your land, just when and where you want it, will be delivered to you by the Hill ram. These rams are made in 12 sizes for every purpose, from the small household rams to those supplying sufficient water for modern irrigation systems. They will irrigate any area, from 10 to 10,000 acres.

Think what it means to have the convenience of running water in your home and barn, and water on your land just when you need it to produce the biggest, best and surest crops? The Hill ram makes this possible. And it requires no mechanical skill to operate it. It is simple and sturdy. There is nothing to get out of order. And operating and maintenance cost are practically insignificant. You start it and then forget it. It eliminates the drudgery of water pumping, and water carrying, it relieves you from the worry of drouth. It pays for itself in a short time.

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JUST FILL OUT THE COUPON BELOW, *mail it to us and we will write you explaining how a suitable irrigation system can be installed on your farm at the lowest possible cost to you.*

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Our guarantee protects you absolutely. We do not ask you to take any chances whatever, because we make you the most liberal guarantee that any firm can offer. Successful installation and operation of every Hill ram installed by us is absolutely assured. This ram will work for you indefinitely. Find out about it now.

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High prices now paid for farm produce demand that you produce the biggest, best crops in order to profit by the great opportunities that now confront you. Never since the civil war have farm products been in such demand. Don't let your profits be subject to the whims of the weather. Get in the "sure profit" class by putting water on your land, with a Hill ram.

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Low Farm Loan Interest

Five and a Half Per Cent Rate Promised

By N. W. DURHAM

Chairman of Spokane Committee on Farm Loan Bank.

From Washington comes the good news that the federal farm loan system will start business with an interest rate that will range between 5 and 5 1-2 per cent.

The federal farm loan board are understood to have arranged for placing half of the entire first issue of farm loan bonds with a syndicate of bankers at New York and elsewhere, at a rate of 4 1-2 per cent. On that basis they feel warranted in making a mortgage rate that will not exceed 5 1-2 per cent, as the law says the mortgage rate shall not exceed the bond rate by more than 1 per cent. This 1 per cent of "spread" between the two rates is to cover the expenses of the system and pay dividends on the stock of the farm loan banks.

Will Appeal Widely.

With the amortization feature of the law, and an interest rate of 5 1-2 per cent, the federal system will appeal to millions of farmers who are now paying higher interest charges and have not the benefit of amortizing their principal.

Let us, for illustration, take the case of a farmer whose place is now mortgaged for $1000 at 8 per cent, and whose circumstances are such that he would have to make renewals from time to time until his mortgage had run for 20 years.

In these 20 years he would pay out $1600 in interest and still be owing the principal of $1000. This is assuming, too, that the mortgage company would make renewals from time to time without charging a commission.

But if he borrowed $1000 from the government, and made it payable in 20 annual instalments with interest at 5 1-2 per cent, his total payments at the end of the 20 years would be only $1673.54 and the principal of the debt would be wiped out.

In other words, he would pay out only $73.54 more than he would have had to pay the mortgage company. But in one case he would be free of debt, while in the other he would still be owing the original $1000.

Amounts Payable Annually.

The following amortization table gives in detail the exact sums the borrower of $1000 at 5 1-2 per cent would pay each year until the debt was extinguished at the end of 20 years:

Interest at 5½ per cent.

Years.	Payment.	Interest.	Applied on principal.	Principal still unpaid.
1	$83.68	$55.00	$28.68	$971.32
2	83.68	53.42	30.26	941.06
3	83.68	51.76	31.92	909.14
4	83.68	50.00	33.68	875.46
5	83.68	48.15	35.53	839.93
6	83.68	46.20	37.48	802.45
7	83.68	44.13	39.55	762.90
8	83.68	41.96	41.72	721.18
9	83.68	39.66	44.02	677.16
10	83.68	37.24	46.44	630.72
11	83.68	34.69	48.99	581.73
12	83.68	32.00	51.68	530.05
13	83.68	29.15	54.53	475.52
14	83.68	26.15	57.53	417.99
15	83.68	22.99	60.69	357.30
16	83.68	19.65	64.03	293.27
17	83.68	16.13	67.55	225.72
18	83.68	12.41	71.27	154.45
19	83.68	8.49	75.19	79.26
20	83.68	4.36	79.26	.....

Note that under the old plan, if the mortgage bore 8 per cent, the annual interest payment would be $80; while under the government system, with interest at 5 1-2 per cent, the annual payment, which would cover both the interest and the amount paid toward reducing the principal, would be but $3.68 more.

Payment Plan Optional.

Farmers borrowing from the federal farm loan banks, however, would not be bound to a 20-payment plan. They will have the choice of any number of payments, from five to 40 years, and the further privilege, after five years, of paying off their debt in larger instalments and getting the more quickly out of debt. On this point the law says:

"Provided, That after five years from the date upon which a loan is made additional payments in sums of $25 or any multiple thereof for the reduction of the principal, or the payment of the entire principal, may be made on any regular instalment date under the rules and regulations of the federal farm loan board."

A Way Will Be Found.

Hans Larsen writes from Goshen, Whatcom county, Washington: "I have read considerable regarding the federal land banks, but there is one thing I have not learned yet. I understand you can sell your land and transfer the mortgage to the buyer, but in case a man would sell a portion of his land after he has got a loan on it, how can it be adjusted then?"

There seems to be no express provision in the law covering this point, but we think it will be met by means of regulations to be adopted by the federal farm loan board at Washington.

Crenshaw Sells Ranch.

John Crenshaw has sold his ranch of 160 acres two miles east of Garfield to George Draper of Elberton. The land brought $90 per acre. In turn, Mr. Draper disposed again of the Crenshaw farm to Alvin Johnson of Elberton, while Mr. Draper takes over 80 acres of land beglonging to Mr. Johnson, which joins the Draper ranch. This last 80 acres brought an even $100 an acre.

Pit Silos

Built on Farm of Kapps Brothers

By H. W. REAUGH.

Kapps Brothers, living 12 miles northeast of Corfu, built a pit silo last summer. W. E. Kapp said that the first operation was to make a collar 18 inches deep and 12 inches wide. This circle was 10 feet in diameter. The rocks were put in this trench and cement poured in. This took three loads of rock, one load sand and two sacks of cement. The cement was mixed four to one. That is, four sacks sand to one cement. The pit was then dug out 10 feet and thrown out with a shovel. This was then made perfectly perpendicular by means of a steel straight edge, then plastered about half an inch thick with a mixture of sand and cement, two to one. The pit was dug 20 feet deep. The dirt in the last 10 feet was hauled out by means of a windlass. The plastering took seven sacks of cement and one load of sand. The work of construction took two men 10 and a half days each.

The cost of the 10x20-foot pit silo would be as follows:

9 sacks cement at 80c	$ 7.20
2½ days hauling rock and sand, at $5.00	12.50
Digging, 2 men 10½ days, at $5.00	52.50
Total	$72.20

This gives a total cost of $72.20 but as a matter of fact but $7.20 was in actual cash. The work was done at slack time and the work was put into permanent equipment.

This silo was filled with Russian thistle on top, center of rye and thistle and lower part with rye. The rye and thistle made a very excellent silage which stock relish best. Mr. Kapp says that his young stock are in much better condition than usual for this season of the year, and is a strong advocate of silage after one year's feeding.

Sheep Clubs

For Spokane County Boys and Girls

By W. W. SKUSE.

It is planned to make the second season of club work in Spokane county very much broader in scope and more valuable than was possible in 1916, which was necessarily a season of pioneering.

This year there will be 40 to 50 clubs, having a total of 400 to 500 members. The different kinds of clubs will be canning, pig, sheep, legume, potato and land reclamation, with about an equal proportion of each. Out of these the new clubs this year are the sheep, legume and land reclamation clubs. We look particularly for great results in the sheep clubs.

Through the kindness and cooperation of F. M. Rothrock we will be able to secure at least 50, and we hope 100, orphan lambs. These lambs will be taken and fed by hand until one month of age. They will then be ready for the boys and will be shipped by express from the central part of the state, where Mr. Rothrock's flocks are kept. It is estimated that a lamb will not cost over $4, which represents only the cost of labor of caring for the lamb and the express charges. Where necessary E. E. Flood of the Exchange National bank is willing to loan the purchase price to a boy on the same plan used last year with the pig club members. There sheep clubs will fit in fine with the legume and land reclamation clubs, and it will mean the start of many farm flocks as the pig club meant the introduction of purebred swine in many communities.

Red Most Conspicuous.

Of all colors, red is the most conspicuous at a distance.

Distribution Problem

Is Attacked by Inland Empire Dairymen

At a meeting of dairymen in the convention room of the Spokane Chamber of Commerce a week ago the Inland Empire Dairy Producers' association came into being, and while little was done other than perfecting that organization it was made manifest that one of two things must come to pass at no distant date. Namely, either the distributing companies of Spokane must so district the city as to eliminate the present heavy overhead expense and thereby pay the producer a price for his milk sufficient to save him from actual loss or the producers will do it themselves.

This determination, while barely touched upon during the meeting, was strongly indicated by discussions among producers prior to the meeting and is clearly aimed at in several sections of the constitution of the new association as formulated and adopted during the day.

A. H. Weeks of Valleyford voiced the sentiment of all when he said:

"The purpose of this organization, as I see it, is primarily to work for the general betterment of the dairy industry, but particularly to establish a price for our products that is equitable and just to both ourselves and to the consumers. Heaven knows, the consumer is paying enough, but with the present price of feed there isn't a producer in the room that is making a penny; few, if any, that are breaking even. It is wasteful methods of distribution that is breaking us, and that is the big problem we have got to solve.

"The distributors claim that it costs them 8 cents a gallon to deliver milk in Spokane, and no wonder. I personally have counted five milk wagons from five different companies covering the same district. Five complete outfits doing what one could do. It shouldn't cost more than 4 cents to distribute milk if done without waste.

"What we want here is an organization that is broad enough to stop this waste by establishing a cooperative distributing center of our own if necessary, and that is broad enough to further reduce our expenses by buying and selling all seed, feed and other supplies used by its members."

Cooperation Provided.

When the constitution was completed, a task that took nearly the entire day, it contained this provision:

"And this association, when deemed necessary, shall have the power to incorporate to the end that it may carry on cooperative buying, selling and distributing of anything pertaining to the dairy industry."

There were 75 dairymen present when the meeting opened, and all had come to point out the impossibility of continuing in a business that is losing them money even when nothing is taken out for labor, and to take immediate action toward bettering conditions. Conversations before the meeting disclosed the fact that all were of too near the same mind to necessitate argument of these questions in the meeting and that nothing could be done until an association was formed, so the dairymen gave their undivided attention to organization.

Costs 18 Cents; Sells for 14.

Only once was the question of price brought up during the deliberations. This was when T. A. Sheldon of Cheney in response to the question of what it cost to actually produce a gallon of milk declared he had been testing and weighing his milk and feed for five years, and, allowing himself $1.50 a day for labor, the milk for which he receives 14 cents a gallon costs him 18 cents a gallon to produce.

While waiting for the report of the committee drafting the constitution and by laws N. M. Crider of Thornton started an argument that resulted in the organization of a cow testing association. He stated his belief that every man should have a Babcock testing machine on his place; that he tested his cows two or three times every month and any time he thought the distributors weren't giving him a fair test it didn't take him long with his records to reach an understanding.

Questions Testing Value.

J. C. Graham of Palouse stated that the Babcock test on the farm was a good thing, but that most dairymen didn't have time to test and if they did were told by the distributig companies that they didn't know how. "The best plan to my mind," he said, "is to have an official tester who comes every month; who is vouched for by the state college and by the government and whose figures no distributing company will dispute." Mr. Graham then told of the splendid results accomplished by the Whitman County Cow Testing association, of which he is a member, and explained the workings of the association.

Boosted by David Munroe, J. L. Smith, N. C. Hansen of Freeman and others, enthusiasm for a testing association spread quickly, and upon a request from H. S. Findley of Cheney, president of the association, for an expression as to how many would like to join a testing society 35 dairymen owning 490 cows signed up. Details as to the organization and operation of the cow testing association were left to the executive committee of the parent association.

Officers Are Elected.

The election of officers resulted in the installing of Mr. Findley as president, B. E. Smead of Opportunity as secretary-treasurer and Arthur E. Hooper of Ferrell, Idaho, vice president. The executive committee consists of R. H. Gray of Post Falls, Idaho; David Munroe of Hayford and James C. Graham of Palouse.

These men had really been elected two weeks previous, when the association held its first meeting and adjourned to complete organization at this time. They were placed in nomination all at once by Mr. Weeks and their election ratified. Herb Sharp, however, didn't understand the procedure and raised the cry of "railroading," masking his remarks under a thin cloak of apparent good humor. The matter, while regrettable, was not taken seriously by the other delegates.

The various committees will be appointed by President Findley as soon as possible and active work started toward bringing about the results needed and desired by the dairymen.

Among those present at the meeting, 42 of whom signed up membership cards and paid a year's dues before leaving the hall, were:

Alfred H. Weeks, Valleyford; N. M. Crider, Thornton; David Munroe, Hayford; O. A. Burnett, Nine Mile Falls; T. A. Sheldon, E. H. Dickens, F. E. Newton, Robert Gehrke, G. E. Olson, Ole Oslund, George Blackshaw, William Rudolf, Albert Schultz, Mrs. S. K. Betz, E. D. Mault, S. D. Stroup, W. R. Millsap, J. L. Ankrom, all of Cheney; J. L. Smith, Spokane; Robert H. Gray, Post Falls, Idaho; James C. Graham, Palouse; Fred A. Anderson, Mead; Arthur E. Hooper, Ferrell, Idaho; L. Falk, Tyler; S. O. Ridout, Sprague; M. F. Middelburg, Deep Creek; N. C. Hansen, Freeman; S. S. Ferns, Sprague; James Anderson, Opportunity; John P. Ramsey, Sprague; B. E. Smead, Joseph Ulowetz and C. D. Black of Opportunity; J. H. Kanby, Peck, Idaho; Frank Kepke, Deep Creep; Alex Irvine, Espanola; Herb Sharp, Colbert; Henry Mertz and John Anderson, Opportunity; John Bedk, Spokane Bridge; F. J. Kenney and Henry Tank, Espanola; John Pringle, Trent; Andrew George, Medical Lake; A. J. Mollendorf, Espanola; E. N. Wisdom, Medical Lake; W. C. Powell, Spokane, and I. L. Hixon, Chewelah.

$225 SOMEBODY WILL WIN SIXTY QUESTIONS SOMEBODY WILL WIN $225

With the opening of the second period for those using our Contestant's Helpful Outfit, February 22, the first prize dropped from $300 to $225. On March 14 this prize reduces again to $200. Better start now by getting our Contestant's Helpful Outfit.

Read the Plan and Rules of This Big

FARM INFORMATION CONTEST

There are 60 questions which everybody should try to answer. They are interesting, they are entertaining, and the prizes make it worth your time to try to answer them. Look into the contest plan and fix your aim on the big cash awards.

READ THE RULES

Answer These Questions

26. How many seconds in the month of February, 1916?

27. What article of diet is commonly called the staff of life?

28. When did the law go into effect which prescribes the number of stars and the number of stripes which there shall be in the flag of the United States? (Our CONTESTANT'S HELPFUL OUTFIT answers the question.)

29. On what horizon does the new moon set; east, west, north or south?

30. What apple has the same name as a high political position?

(Five more questions will appear next week.)

Answers to the sixty questions from those who have secured our Contestant's Helpful Outfit have started to roll in, with the result that a very large number of persons will be registered in the First Period of the contest for the $300 prize. Read the Enlarged List and familiarize yourself with the advantage of using our Contestant's Helpful Outfit.

$800—IN CASH to Be Paid—$800

We will positively give EIGHT HUNDRED DOLLARS in cash awards (and more in event of ties) to the winners. As explained in the rules which follow, there will be five questions run in every issue of the Farmer for 12 weeks. The last five questions will appear in the issue of April 19.

Open to Four States

Contestants must be residents of Washington, Oregon, Idaho and Montana.

Five Questions Each Issue

The contest will be composed of 60 questions. Five will be run in each issue of the Farmer for 12 issues.

Answers to each question except No. 45 can be given correctly in from one to 10 words and will be given a score of 100 if correct. Answers to question No. 45 will be limited to 100 words each, and will be graded as to the common sense and general knowledge of farm conditions shown by the contestant without regard to spelling, grammar or penmanship. As with the other 59 questions, a perfect answer to No. 45 will be scored 100.

Perfect Score Is 6,000

The contestant who comes nearest to a score of 6000 and complies with all the conditions of the contest will receive the first prize; the next nearest, second prize, and so on. In case of a tie each tying contestant will receive the full amount of the prize.

There are 35 prizes as follows:

$150 is amount of First Prize.

$100 is amount of Second Prize.

$50 is amount of Third Prize.

$20 is amount of Fourth Prize.

$10 is amount of Fifth Prize.

$5 each, Sixth to Tenth Prizes.

$2 each Eleventh to Fifteenth Prizes.

$1 each, Sixteenth to Thirty-fifth Prizes.

OTHER RULES

The answers will be passed upon and graded by a fair-minded, thoroughly competent judge.

Two weeks will be allowed for sending in answers after April 19, 1917, date of the issue containing the last five questions.

Remember, your failure to answer all the questions will not necessarily exclude you from the contest. There are 60 questions to be answered and it is not reasonable to suppose that all our prize winners will attain a perfect score. Your answers must all be sent in at the same time. Do not send any answers until you have completed the full list or as many as you can answer.

Those who use our CONTESTANT'S HELPFUL OUTFIT will be able to send in their complete set of answers without delay, there being no need of their waiting for the questions as they appear in The Farmer from week to week down to the final issue of April 19. In order to get as prompt returns as possible from those contestants who use our CONTESTANT'S HELPFUL OUTFIT, extra inducement is made in the prize awards. SEE ENLARGED PRIZE LIST.

Announcement of prize winners will be made and prize checks mailed as soon after close of contest as possible.

If any point is not clear, do not hesitate to write the Farm Information Editor.

All answers must be mailed on or before midnight, May 3, 1917, as shown by post-office dating stamp on your envelope.

ORDER COUPON—If your subscription is paid ahead, the time paid for herewith will begin at the date to which you are now paid.

FARM INFORMATION EDITOR,
Review Building, Spokane, Wash.

Enclosed find $1 for one year, or $1.50 for three years' subscription to

THE WASHINGTON FARMER.

and enter me as a contestant in the Farm Information Contest. I am also to receive at once the complete CONTESTANT'S HELPFUL OUTFIT, consisting of guide against wrong answers, reply blanks, rules and all information to aid me to win a reward.

Name .....

R. F. D. .....Town .....

State .....

Notice—Amount of remittance to be either $1 for one year's subscription to the Farmer or $1.50 for three years' subscription.

Answer this question: Are you now a subscriber?.....
If you wish paper sent elsewhere, fill in name and address.

A Valuable Aid to Contestants

One complete CONTESTANT'S HELPFUL OUTFIT, including all of the 60 questions and instructions and helpful warnings as to answers which would be wrong, and the correct answers to some of the most difficult questions, is truly a big help to the contestant.

To each contestant who sends in a new renewal or an extension of his subscription at the time of registering for the contest, this complete CONTESTANT'S HELPFUL OUTFIT will be sent in combination.

We feel that those beginning on the contest will find these suggestions as to what to avoid distinctly useful. This equipment supplies in convenient form everything needed to enable you to apply your ability to the best advantage, and will contain information enabling you to answer the most difficult questions correctly.

Puts Questions in Reach of Children

This CONTESTANT'S HELPFUL OUTFIT puts the solution of the questions in the reach even of the children, it being the purpose to make it possible for everybody in Washington, Oregon, Idaho and Montana to compete. This outfit includes, besides general information about the plan of the contest, the following:

Guide against wrong answers, which includes either correct answers of more difficult questions or easy references as to where to find the correct answers; and blank forms on which to write your answers in such a way that there can be no confusion when your answers are taken up by the judge for scoring.

It will be worth considerable to you to be assured that your answers are reaching the Farm Information Editor in such form that he will know in every instance exactly what question you intended to answer. This CONTESTANT'S HELPFUL OUTFIT will make it possible for you to

Begin Work at Once

On account of the large number certain to send for our CONTESTANT'S HELPFUL OUTFIT, thus making it possible for them to answer the entire 60 questions without delay, it is deemed advisable to offer some special inducements to secure prompt returns from this particular class of contestants. By securing the early replies of those who are thus supplied with the entire 60 questions, we will be able to have their papers carefully scored before the final rush of answers toward the end of the contest.

Understand, it is not absolutely required that those who use our CONTESTANT'S HELPFUL OUTFIT send in their replies at once, but, in order to induce them to get in early, the following plan for enlarging the awards to those prize winners whose answers come in early is offered:

ENLARGED PRIZE LIST—$800 IN PRIZES—ENLARGED PRIZE LIST

For those who use our CONTESTANT'S HELPFUL OUTFIT.

Thirty-Five Prizes	Amt. of prize if winner sends in answers during 1st period, Feb. 1- Feb. 21	Amt. of prize if winner sends in answers during 2d period, Feb. 21 Mch. 14	Amt. of prize if winner sends in answers during 3d period, Mch. 14 April 5	Amt. of prize if winner sends in answers during 4th period, April 5 April 19	Amt. of Prize for winner who does not send in answers before April 19
First Prize	$300.00	$225.00	$200.00	$175.00	$150.00
Second Prize	200.00	175.00	125.00	110.00	100.00
Third Prize	100.00	87.50	62.50	55.00	50.00
Fourth Prize	40.00	35.00	30.00	22.00	20.00
Fifth Prize	20.00	17.50	15.00	11.00	10.00
6th to 10th 5 prizes each	10.00	8.75	7.50	5.50	5.00
11th to 15th 5 prizes each	4.00	3.75	3.00	2.20	2.00
16th to 35th 20 prizes each	3.00	2.50	2.00	1.50	1.00

To secure our CONTESTANT'S HELPFUL OUTFIT, fill out order coupon on this page and send it in to Farm Information Editor, with your personal check, money order or 2-cent stamps, for $1.00 for one year or $1.50 for three years.

You must address

THE WASHINGTON FARMER
Farm Information Editor
Review Building, Spokane, Washington.

America Humiliated

By Congress, Says President Wilson

Notwithstanding the fact that over 500 members of congress out of the total of 531 were favorable to granting to President Wilson the power he asked to protect American ships from submarine attacks in the war zone, a few senators "talked the bill to death" and congress adjourned Sunday, March 4, without passing any measure on that subject.

The trouble arose when less than a dozen senators organized a filibuster with a view to preventing a vote on the measure until the hour for adjournment was reached. The constitution requires that congress adjourn on March 4. Among these few senators were Senator Stone of Missouri, chairman of the foreign relations committee; Senator La Follette of Wisconsin and Senator Jones of Washington.

Extra Session Required.

Immediately following the adjournment, President Wilson took the only course left him without leaving American shipping unprotected, and called a special session. At the time this is written no action has been taken, Monday being given up to other matters.

President Wilson's appeal to congress was to empower him to take whatever action he found necessary in the way of arming American vessels or convoying them with naval vessels through the territory infested by German submarines. He called it "armed neutrality" which he wished to establish, and promised congress that he would undertake no warlike move without calling congress together and securing its approval.

Stone Reveals Secrets.

Considerable criticism of Senator Stone of Missouri has been heard because, in a heated speech in congress Saturday night, he declared that it was one of the plans of the naval department to equip merchant ships with small "submarine chasers," designed to act as scouts and keep submarines at a safe distance from the merchant ships. This was called by some an unwarranted revelation of naval secrets, which would tend to forewarn the submarines so that they might be prepared to meet such opposition.

Mexican-Japanese Plot.

The most startling feature of the war news during the last week was the disclosure of an attempt by German officials to enlist Mexico and Japan in war against the United States in case this country failed to remain neutral during the submarine campaign. In some manner, yet unexplained, the United States government has come into possession of a note from Foreign Minister Zimmermann in Berlin to former German Ambassador von Bernstorff in this country, proposing to the Mexican government that it negotiate with Japan for an alliance if the United States did not maintain neutrality. It is believed that the message was delivered to Mexico, but not to Japan. German officials in Berlin have admitted that the plot actually existed, and that the message as published was correct.

Japan Friendly to U. S.

Following the disclosure of the plot, Japanese officials made public statements to the effect that an alliance against the United States would have received no consideration from the Japanese government had it been presented; that Japan was in alliance with England, France, Russia and Italy, and proposed to remain true to them till the end of the war.

Mexican officials, however, have issued no statement concerning the German proposal or Mexico's attitude toward it.

Jones Defends Germany.

In his opposition to arming United States ships for travel in the war zone, Senator Jones of Washington declared that such movement was one directed not against general submarine war, but against Germany. He declared that England had established a blockade around Germany and Greece, and that American ships had stayed out of those waters because this country did not wish to offend England and her allies.

Submarine Successes.

England claims that the German submarine has proved a failure; that fewer ships than expected have been sunk, and that she can build new ones fast enough to supply the increasing deficiency.

Germany announced at the reopening of the submarine campaign that it must sink vessels each month with a total carrying capacity of 1,000,000 tons. It is declared now, however, that vessels of less than half this tonnage have been destroyed during the first month of the renewed campaign.

President Inaugurated.

In the midst of the tension brought about by the European war and the many side issues which it has created, President Wilson and Vice President Marshall paused Monday for their second inaugural. Owing to the constitutional requirement that the inauguration of president take place on March 4, President Wilson took the oath of office for his second term Sunday in the presence of only a few close friends and members of his cabinet. The chief justice of the United States supreme court administered the oath. The president, in conformity with custom, kissed the Bible as a symbol of acknowledgment of reliance upon divine guidance. He turned its pages and kissed the verse reading, "The Lord is my refuge and strength; a very present help in time of trouble."

Vice President Marshall took the oath of office before the United States senate Monday.

Bone Dry Regulation.

Congress has passed and President Wilson has signed the measure which makes every state that has voted against the manufacture and sale of intoxicating liquors bone dry. The measure is a postoffice bill prohibiting the shipment from one state to another of liquor. This has the effect of prohibiting the use of a "permit system," such as the state of Washington has had, making it impossible for persons in states with laws like the Washington law to import drinks.

The measure was intended originally to become effective at once upon being signed by the president, but a supplementary resolution passed by both houses of congress delayed its going into effect until July 1, up to which time states having a permit system may continue to get liquor under such regulations as the state laws provide.

Particularize Your Question

Intelligent Farmer Knows More About the Soil Than He Can Tell



IV.

In the previous number of the series I have discussed the Farm Plant, and the helps in its construction and adaptations which the college can offer.

In this number I shall talk about the soils and the crops which grow thereon.

Every intelligent farmer who has been raised on the farm or who has operated a farm, large or small, for any considerable period of time, knows a great deal more about the soil than he can tell. I walked into the greenhouse years ago with Professor Balmer, who had been raised in a greenhouse. "William," said he, "you are using too much water." Whether it was the appearance of the leaves of the plants or the looks of the soil in the beds, or the feel of the atmosphere that told him this, I do not know nor do I think that he could have told. He knew instinctively from long experience. Something told him through his various senses what the trouble was and what the remedy. So with the farmer who knows his own soil. He watches it for the time to plow, to till, to seed. Whether he feels it, or smells it or tastes it or simply looks at it, he knows more about it than he could ever explain to you, or to himself either. People are perpetually holding at a discount the most wonderful but real knowledge of the soil and of farm things which are essential to succeed. But great as is his knowledge and egotistical as he often is about anybody else's knowledge, yet the sensible farmer realizes that there is a world of knowledge which he as yet does not possess, which he might get and from which he would derive both pleasure and profit if he did possess it. And herein the college longs to help him, both generally and specifically. Not that it has boxed and stored up all this scientific knowledge ready to be drawn forth upon occasion. There is no greater, nor any more foolish conception of the matter than this. It is like the conception that every ailment is a specific disease and that for each one of these there is a specific remedy. The doctor looks at you. "O yes," he says, "you have coronditis. It is very bad." Forthwith he pops a little specific pill down your throat and you are well.

Now this is not the right way in medicine nor in farming either. But the agricultural scientist is skilled in diagnosing the case and in prescribing the general remedial agencies. Is your soil too acid? Is it not properly drained? Does it lack humus? What about the subsoil? Are the methods of tillage and manipulation wrong? Are your cropping systems defective? Is your soil alkaline? Is it a hopeless case, which you should abandon?

The professor asked his class in examination, "What would you do if your soil were underlaid with hard pan and strongly impregnated with alkali?" "I would sell out to an eastern sucker and skip the country," answered the bright youth.

Would lime be good for your soil? The college man can and will help you, if you ask him, and if you will be reasonable about it. I say be reasonable, for you can not expect him to know by intuition your problem. Where is the land located, in swamp, forest or desert? (Better give section, township, range). What is the rainfall? Elevation? Subsoil? etc., etc. Give anything that will throw light. Be reasonable as to the time of answer and explain if there is reason for especial haste. Don't imagine that the man is on tap just waiting for you. He is busy, overcrowded. Others also are waiting. Don't be foolish or unreasonable in the questions you ask. "Will maple trees grow on my soil?" wrote a man to me years ago, sending a sample of the soil. "Plant two or three maple trees and find out," replied I. "What chemical element is necessary for this soil to give high color to the apples?" wrote a fruit farmer, and stormed because he did not get a specific answer. No chemical element added to the soil will make the bright red or yellow apple. Wenatchee soil transplanted to Pullman leaves the bright color of the apple behind it at Wenatchee. Pullman soil transplanted to Wenatchee will grow bright colored apples. It is not a chemical element in the soil but conditions of sunlight and climate and exposure that will do the color business for you.

E. A. Bryan

In his next article Dr. Bryan will tell of the help that may come to the farmer from the state college by advice which will ward off the fake crop, or the crop unsuited to conditions, or the crop less profitable than the old standbys or more hazardous than the staple ones.

Spokane Valley Growers Should Act Promptly

After years of disappointing waiting the growers of the Spokane district are offered a cannery and good prices for all their surplus produce. There is only one provision to the offer, but it is vital—sufficient produce must be guaranteed by the growers.

The work of securing the necessary contracted tonnage is lagging and a fine industry is in peril. It is necessary that the growers should know that fact and act promptly upon it. They should be alert and acting on their own initiative.

GREEN MANURING

Soil Fertility and Pasture.

Green manuring, often spoken of as cover cropping, should be practiced more.

Henry Holtz of the experiment station of the state college at Pullman, Wash., states that green manuring prevents washing, adds organic matter to the soil, prevents leaching, and affords winter pasture.

Summerfallowed fields, corn fields and even stubble fields wash badly in spring, due to heavy rains and frost. This can be largely prevented by a green manure crop. In some sections of eastern Washington, where the organic matter is getting low, and there is a rainfall of 15 inches or more, rye can be sown in the stubble in the fall and plowed under in the spring when the rye is about 8 to 10 inches high. This material will easily decompose during the following season. In orchards, crops that are well suited for this, especially in the irrigated sections, are vetch, rye, wheat, rape and peas.

In the Coast sections lying west of the Cascade mountains, where the rainfall is high, a large amount of the plant food material is leached beyond the root zone. This can be prevented by the use of green manures, which will take up the soluble plant food materials and return them again to the soil when plowed under in the spring.

In addition to the beneficial effects upon the soil, green manuring crops make good winter pastures.

Much better results can be secured by plowing under two or three tons of barn yard manure per acre with the cover crop. Organic matter must be sustained either by green manuring, crop residues or barn yard manure, if the soil fertility is to be maintained.



Western Branch, Washington Shoe Mfg. Co., Seattle, Wash.

Commission Market Law

California in Mixup in Carrying Out Measure

A spirited fight is progressing in California over the state's recently enacted commission market law. Senator Brown of Los Angeles, who carried the measure through to the finish, is charging that State Food and Market Commissioner Weinstock is working in open hostility to the purposes of the law.

As a vigorous movement has been started for state marketing laws in Washington and other western states, readers of The Farmer will be interested in the lively controversy now waging in California.

"My bill was intended to reduce the cost of living to the consumer by bringing him into direct contact with the producer," says Senator Brown. "But Director Weinstock, instead of establishing markets to bring producer and consumer together, has been going about establishing little trusts among producers so the cost of produce to the consumer will be higher instead of lower. My bill was not intended to establish trusts and higher prices, but to break trusts and lower prices.

"Director Weinstock says $25,000 appropriated under my bill was not meant to establish markets in all the cities of the state. Of course not. I am surprised that a business man should talk that way. No good business man would try to establish a hundred warehouses or stores until he had found that one warehouse or store was a success.

"My bill intended that an experimental market should be set up in Los Angeles or San Francisco to try out the purposes of the act and $25,000 was ample for that work."

In his report to Governor Johnson, Director Weinstock flatly says that he was not from the start in favor of the state engaging in the actual business of selling farm produce by commission or otherwise, and that the governor, who has shied at the commission market act from the jump, had fully agreed with him.

Weinstock then tells of his activities in organizing farmers into marketing associations and how he enabled them to sell their produce at increased prices.

Here are some of the paragraphs from Weinstock's report, in which he takes issue with Senator Brown and insists that the scheme of the Los Angeles man is visionary and impractical.

"There is another class of free market enthusiasts which believes that the high cost of living could be solved if our miscellaneous farm products could be brought together in a state depot in each of our largest cities and there be sold at public auction to all kinds of buyers, including wholesalers, retailers and households.

"The conclusion reached after survey and investigations was that it would be extra hazardous to undertake the establishment of markets in San Francisco and Los Angeles at this time in view of the existing physical conditions; that to undertake it under unfavorable conditions would spell failure and would give the whole auction idea for California marketing points a black eye for a long time to come, and that, therefore, it would not be wise to undertake it unless there were reasonable assurance that it was likely to succeed.

"It is not at all practicable to sell by public auction perishable products in small household quantities that must be gotten in the hands of the housewife during the earliest morning hours.

"While I personally welcome the establishment of every new free market, I do not regard them as the panacea for marketing ills, as they touch simply the barest fringe of the problem of distribution, and at best the sales thereon represent only—and under the most favorable circumstances would represent only—an insignificant fraction of our gross home consumption of such farm products."

The Berkeley (Cal.) Citizens' committee, organized to fight the high cost of living, has also opened a fight on Commissioner Weinstock, independent of that begun at Sacramento by Senator W. E. Brown of Los Angeles. The committee has appointed a delegation to confer with Brown, however, and will join forces with him if he will support its demand for state markets as distinguished from free markets.

Champion Wether

Dresses Out Sixty Per Cent Meat

By E. J. IDDINGS.

The University of Idaho's purebred Southdown show wether, Thickset Lad, was sold a few days ago to the Hagan & Cushing company of Moscow, Idaho. He went over the scales at 200 pounds, live weight, sent directly from the university farm. The carcass after 24 hours' shrink weighed 120 pounds, or a dressing percentage of 60, with the initial weight on foot taken without shink. The significance of this percentage will be understood when it is considered in connection that the average lamb or mutton carcass dresses 48 to 50 per cent.

Thickset Lad was a wether of the university's own breeding and was a very thick, compact and heavily fleshed wether. He was grand champion wether at the Spokane Interstate fair in September and at the Northwest Live Stock show in December.

INDUSTRIAL CLUBS.

Bossburg Students Enthusiastic.

By V. J. TUCKER.

The pupils and the principal of the Bossburg school held a meeting, one Friday afternoon, and organized two industrial clubs. One, a poultry club with a membership of nine, the other a vegetable club with six members.

These clubs were organized under the direction of T. N. Newbill, state club leader, and have measured up to the standard set by the department of agriculture. The pupils understand fully what is expected from them. They are enthusiastic about their club work and expect to make good.

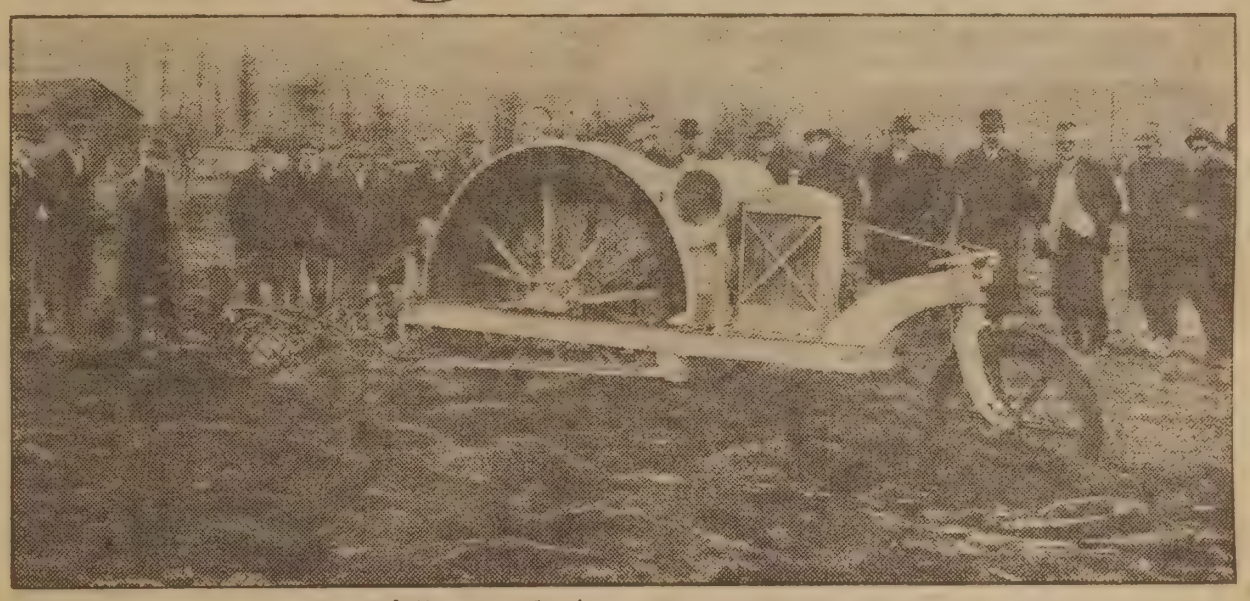
We have chosen this kind of work because this locality is well adapted to the raising of vegetables and poultry. Corn is not a success in this immediate vicinity. What is true, however, of this section of Stevens county may not be true of country ten miles or less from here.

We think the club should be not merely a pastime for the children, but a medium through which they will acquire the habits of industry and thrift and learn to do things in a business like manner. At the same time the club members may be making money. Think of the advantages, financially, and yes, morally, of a club of nine members working together for their common welfare. Why wouldn't it be practical for all of them to raise the same kind of standard bred poultry, feed and care for them properly and market their products as a corporation would? Even if each member had only a dozen chickens, by combining their products, the club would be in a position to command a good price for its eggs for hatching and for what other products it may have to dispose of.

The same line of reasoning will apply equally as well with the vegetable club. This work of cooperation will not be perfected the first year, nor the second, but cooperation in marketing is sure to come. Why not encourage the boys and girls in our clubs to do their marketing in the right way?

Stevens county has contracted for a county agriculturist for a term of two years. The Bossburg clubs are waiting impatiently for him to arrive at Colville. He will find a hearty welcome in Bossburg and a bunch of youngsters anxiously waiting to hear more about club work.

The Big Bull Tractor



Big Bull Tractor Plowing at Enumclaw, Washington.

How the Bull Will Pay

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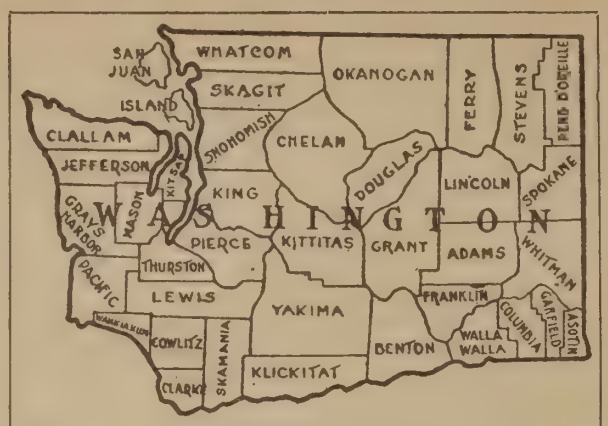
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Orchard Value Questioned

Income From Fruit Crops in Some Localities Induces Orchardists to Dig up Trees and Put in Other Crops.



BENTON COUNTY, Wash.—Abandonment of orchards is seen in some instances, owing to failure to make money out of them during the past few years. Some orchards are reported to be in process of grubbing up.

STEVENS COUNTY, Wash.—Feed is grown almost entirely for home consumption, dairy cattle, beef cattle and hogs being used to "market" it.

Orchard Value Questioned.

PROSSER, Benton county, Wash., Feb. 24.—We have had good weather this month up to yesterday it turned cold, 20 above, and today it is snowing. The first half of February was good plowing weather and the farmers put in good time. The products of this county that have the most money in at present are sheep and wool, wheat, alfalfa hay, poultry, small fruits, apples, pears, etc., potatoes, grapes, onions and corn. I do not count small garden truck. We grow lots of apples, but it costs more to raise them than we get out of them. There is quite a bit of hay on hand yet. Some farmers are increasing their onion and potato fields. No crops are being abandoned except the orchard. About one-half of the orchards are being cut out on account of the cost of spray and no price for fruit. Some of the farmers are going to plant sugar beets for a tryout. The coming season does not look well at this time for small grain. The fall and winter were too dry. Some of the sheepmen are lambing now, but it is most too cold; there is no sunshine.

G. W. WILGUS.

Feed Crops on Farms.

HUNTERS, Stevens county, Wash., Feb. 26.—The 10 leading products of this section are alfalfa hay, cream, pork, beef, wheat, oats, barley, corn, apples and eggs. The first five are all produced on an extenstive scale. Though other kinds of hay are produced, such as clover, timothy and grain hay, alfalfa is the predominating hay crop. All the hay is consumed in this section. The cream is collected and pasteurized at Hunters and shipped to Spokane. What butter is produced on the farms is sold locally. The raising of hogs and beef cattle is on the increase. Good stock is becoming more and more appreciated and purebred Shorthorns and Herefords are being introduced. On account of the high price of wheat last year's acreage was large and the coming season will see an even greater acreage sown. Practically all the oats, barley and corn is consumed on the farms or locally. The eggs come practically all from barnyard flocks. The production of eggs amounts to considerable and the surplus is shipped out by the merchants. The outlook for the coming season is decidedly promising, particularly to the producers of pork, beef and wheat.

ELIAS NELSON.

Hot House Practical.

GRANDVIEW, Yakima county, Wash., Feb. 24.—As to leading crops here the first is alfalfa, then dairying and then corn, as it leaves the land in fine shape for other crops. If there is any increase it is in the dairy. No crops have been abandoned and no news ones are being tried out; some think poultry pays. Hogs are a good stock now. Apples and peaches have not paid very well, pears are a good crop to raise, quite a number will try a few beets. Some are trying beef cattle, but owing to the small farms can not do much. One man has a hothouse for early vegetables and seems to be doing well.

E. H. FAULKNER.

Vetch Proves Valuable.

VADER, Lewis county, Wash., Feb. 26.—The leading products from the farms around Vader are dairy products, hay, beef cattle, potatoes and poultry. Alfalfa is not raised here. Vetch is raised by some of the farmers. It does well and is a paying crop. The present high prices of potatoes have created a desire in many people to plant heavily this spring, but the high price of seed will have a tendency to curtail the acreage to a certain extent. Stock in this section has done well this winter. Hay is more plentiful in this county and not so much in demand as it was last spring. Milch cows are variable in price. Butter fat is high, poor cows are low in price. I believe the coming season is quite promising to the dairyman, as dairy products are up and probably will be a good price through the spring and summer. If so, it will bering up the price of dairy cows, which is very low at present time. The poultry industry does not look quite as bright as last year on account of the high price of feed. The price of eggs may stay high enough to off-set the price of feed.

L. S. WILSON.

Horses Are Improved.

EPHRATA, Grant County, Wash., Feb. 19.—The products of Grant county are led by wheat, practically all of which is of the bluestem and Baart varieties. The last few falls have been so dry that it has been impossible to sow fall wheat and get it up, so consequently spring wheat has been sown almost exclusively. There is considerable rye grown in the southern part of the county, but very little oats or barley, except in some of the bottoms. Beef cattle would be the next of importance in an agricultural way. Probably more than 100 carloads of beef cattle are shipped yearly. The people are gradually getting better bulls in the country and the beef stock is getting better each year.

The fruit industry is probably third in importance. Between 50 and 70 cars of fruit are shipped yearly. This will gradually increase as but few of the young orchards are in bearing and in two more years many times this amount will be shipped. A great many pumping plants are scattered over the county and several irrigating districts that are supplied water by pumping are also located in the county.

Alfalfa growing is gradually becoming an important industry. This will increase. Dairying is gaining in prominence, as many persons are buying cows and either shipping their milk to local creameries or creameries outside of the county. There is hardly a farmer in the county but is raising from one to 12 head of colts per year, most of which are sired by purebred Percheron stallions. The type of horses raised in this county is exceptionally good and with the feeding of young mares coming on the grade will be improved all the time. There has not been as much precipitation as usual, but there is considerable snow on the ground now which will help bring the moisture up for this year's crop.

H. W. REAUGH.

Ground Is Wet.

RITZVILLE, Adams county, Wash., Feb. 25.—The 10 leading products in this county are as follows: Wheat, barley, oats, potatoes and common vegetables, as well as all kinds of fruits and berries. Vegetables, fruits and berries are raised only for home consumption. In the line of animals, hogs take the lead, next sheep, beef cattle, work horses and dairy stock. There are no new products except ensilage being tried out to speak of, only the changing of different varieties of grains. Forage crops are timothy, red top and clovers on peat soils and alfalfa on irrigated, sandy tracts. With other tried-out forage crops there has not been a marked success. The coming season is considered favorable providing spring sets in at a proper time. Everything at present is in a dormant condition. Today sees five inches of snow here. Moisture on summer fallow is down deep, which is necessary to produce a good crop. The winter has been long and steady, but rather mild. Stock of all description look well where they received care.

JACOB HARDER.

Prospects Improve.

METHOW, Okanogan county, Wash., Feb. 26.—Some of the leading products of this county are to my belief classed as follows: Beef cattle, apples, dairy products, wheat, oats, hay, hogs, vegetables, lumber and ore. The apple is increasing in importance. None of them have been abandoned. More intelligent light on the production of all of them has boosted all of them. No farmers are trying any new product that I know of. Alfalfa hay is the main feeding product here, with corn for feeding hogs. The coming season looks 50 per cent more favorable than it did a week ago, owing to 18 inches of new snow, which will insure moisture to the hill ranches, which are the producers of all the grain in the county. Beef cattle selling at Pateros; steers 8 1-4 cents, live weight, highest price on record here.

CHARLES GRANT.

No Changes in Crops.

MEAD, Spokane county, Wash., Feb. 23.—The per cent value of crops grown here is about as follows: Wheat, 50 per cent; oats, 15 per cent; apples, 5 per cent; hay, 4 per cent; beef, 3 per cent; peas, 2 per cent, and cabbage, 2 per cent. No material change being made in the amount of any crop grown, none are being abandoned as unprofitable and no new ones being tried.

GEORGE HINGSTON.

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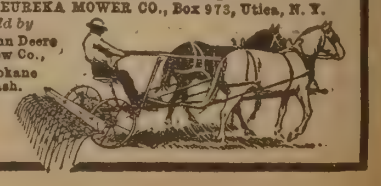
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Wheat and Hogs

To Be Ready for Coming Change

The packers of the state of Washington sent something like $14,000,000 out of the state of Washington during the year 1916 for hogs and hog products. This money, which once circulated in this part of the country, has now passed into other hands simply because we did not raise our own hogs.

At $6.35, which was the average price paid for hogs on the Seattle market last year, farmers received 85 cents a bushel for their wheat.

Taking these items as his text, F. C. Sharkey, manager of the Union stock yards of Seattle, expressed a forcible opinion on the past, the present and the future of the hog business in western Washington.

"Every farmer who has curtailed his breeding stock during the past year because of high priced grain and low priced hogs has made a big mistake," says Mr. Sharkey. "It is a fact that at going prices for hogs and wheat he was apparently losing money by sticking with the business, but now he is facing the fact that eventually conditions will change; that in Russia three great wheat crops have accumulated; and that when the bars are let down and this tremendous tonnage is thrown on the market, wheat will go down—and hogs will go up. When you add to this the fact that even during this unfavorable year of 1916 the man who sold his wheat on the hoof got 85 cents a bushel for it, and that by so doing he was enabled to keep his herd and so to be ready for the change which is coming, you can see whether or not the few who did this were wise. Nothing is more certain than that with the turn which must come, soner or later, wheat will go down and hogs will continue to go up."

Asked as to the feeding problem in western Washington, where corn has not yet become a certain crop, Mr. Sharkey pointed out the possibilities of wheat and peas, both of which do well west of the Cascades.

"And don't forget our pasture," he added. "On the right sort of pasture hogs can be carried up to the point where they have the frame, the bone and vitality, for the final work of finishing them for market. Peas will do this hardening just as well as will corn, although it may take a few more of them."

Road Betterments

Farmers Take a Keener Interest

By FRANK W. GUILBERT.

The farmers are taking a keener interest in the way their funds are spent for road betterments than ever before. They are, I believe, becoming less suspicious of the intentions of their neighbors and other residents of their districts or counties than heretofore. They are listening, too, with less interest and faith in the stories told them by a few clever tongued, so-called leaders, about the wasteful methods of everybody who happens to have something to do with the administration of their affairs.

I am willing to admit much money has been wasted in making roads and unquestionably more will follow, but not nearly so much is being thrown away in proportion to the amount spent now, as was the case even two years ago. The reason is that the farmers are getting over the idea that no matter what they may do or say the waste will go on forever, and they are reasoning with those whom they have authorized to represent them in getting results. I'll further admit that some groups of officials make one feel that he has been insulted, if he offers a suggestion or objection, but these are also growing less in numbers. Another good sign.

In my judgment the taxpayer has been just as much to blame (possibly more so) as the official. Often he has gone before a board of commissioners, or other authorities, demanding certain things unfair to the general public and with no reason apparent but his own selfish ends. Of course, he has been turned down. Demands of public officials must be based upon fairness and common sense and must be for those things of common good to the district involved.

The reason, I believe, to which the improvement in the understanding between the individual and the public official is largely due is the growing interest in and better attendance at community gatherings, fostered by clubs, local granges and kindred organizations. When groups of interested people come together often in an honest endeavor to learn and work with each other and their neighbors on a fair basis for the betterment of all, good results will surely result.

Skagit County Pomona.

The following officers were recently installed in the Skagit county Pomona grange: Master, Mrs. Elsie Tait; overseer, F. M. Kirby; lecturer, Miss Anna Callahan; steward, Tandy Knight; treasurer, L. A. Warren; secretary, L. B. Laraway; gatekeeper, Lee Ellwood; lady assistant steward, Mrs. Daniels.

William Bouck of Sedro-Woolley, Elsie Tait of Summit Park, Charles Millward of Bay View and N. Van Zile of Summit Park were appointed by the master as a committee to arrange for a county grange fair sometime during the coming fall.

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The acres used and cultivated time and again, and the area to be gone over to get the fodder are the big items in Silage cost.

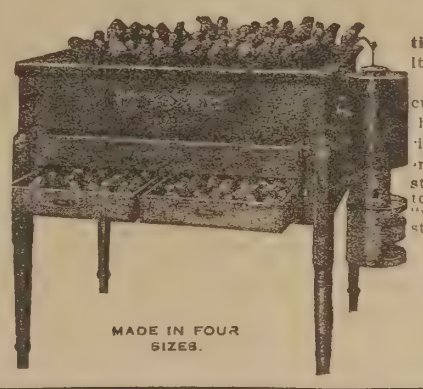
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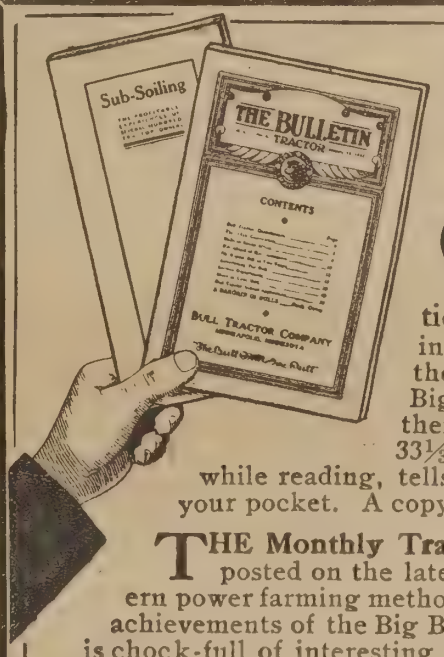
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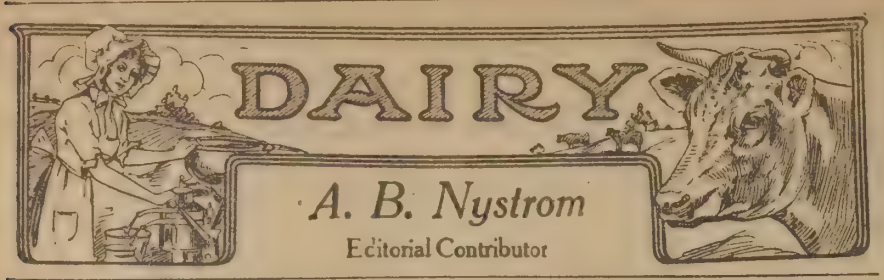
is the most popular tractor in the world today—because of its many unique features—the subsoiling feature of the long spade lugs on the drive wheel which runs in the bottom of the furrow ("the best way of subsoiling known up to the present time," uses no extra power and charges nothing for its work) its low fuel and upkeep cost—its ability to work fast and continuously for many hours, day and night, without overheating, its self-steering device, its simplicity, accessibility and sturdiness.

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THE BULL TRACTOR MINNEAPOLIS U.S.A.
Kerosene or Gasoline



Dairy Questions

Are Answered by A. B. Nystrom

Can you give me an explanation for bloody milk? G. T., Wallula, Wash.

If the milk is bloody immediately after it is produced it is probably due to the rupture of some blood vessel in the udder and this will no doubt gradually disappear. Sometimes when the udder has received a blow, or when there is some diseased condition present, the milk shows red from the blood; or in other cases when the cows have just recently freshened the pressure of the blood in the udder is sufficient to burst some of the blood vessels and the blood again appears in the udder. If the milk does not turn red until after it has stood 12 to 24 hours it is due to the presence of undesirable organisms, and thoroughly scalding all utensils will eradicate them.

After studying the bulletin of "Feeding Dairy Cows in Washington" I concluded that we are starving our sows, as up to a short time ago we were feeding only alfalfa and four or five pounds of carrots. I noticed that alfalfa is too narrow by itself, so started feeding timothy during the day, which is the only other feed I have.

I have five cows, milking about 10 gallons a day, and outside of 14 quarts of milk and four pounds of butter a week for our own use, they brought in $40 in December and $35 in January. Are the cows worth while to be fed a grain ration? I mean could they be brought up on their cream enough to pay for the grain or had I better sell off the cows and buy better stock? With proper feeding would they be average cows? Grain sells here for $1.75 to $2 per cwt.

F. R. F., Addy, Wash.

It seems to me that you should feed more of the carrots or other succulent feed. I believe you could bring your cows up to two and a half gallons per day if you would feed from 30 to 40 pounds of carrots per day rather than four or five. If you can not get the carrots, I think it would be well for you to buy some dried beet pulp and soak it overnight in four or five times its weight of water, feeding about 25 to 35 pounds of this soaked pulp per day. If your cows are large cows they will not need any grain, but if they are small it may be necessary for you to feed grain in order for them to get enough nutrients to manufacture all the milk they are capable of making. Try feeding a little heavier and see if they will not respond. Feed all the hay they will eat, and if you decide to feed grain, mix a little bran and oil meal, or perhaps bran and soy bean meal, equal parts, giving them about two pounds per day of this. Of course, it does not pay to feed expensive grain to poor cows, but perhaps your cows are good ones and will pay for the grain that they eat, if you give it to them. The best thing is to try it out.

Please give me a grain ration to go with the following for milch cows: All of the second crop of hay (clover and mesquit) that they can eat, four or five gallons cut rutabagas mornings, and silage (first cutting of grass) evenings. We have fed no grain of any kind so far this winter. We have some cows coming fresh that we like to feed grain and some of the best of the rest. The silage is put in whole from the field. Do you think it will pay us to buy feed at present high prices?

J. G., Ocosta, Wash.

The ration you are feeding seems to be a little wide; that is, it contains a little too much carbohydrates in proportion to the protein, and in view of this fact I believe it would be wise to feed some grain, such as oil meal, soy bean meal or cotton seed meal, or perhaps a mixture of these three. These feeds are rather high in price at present, but if you use only a small quantity of them you will find that you can furnish protein much more cheaply by the use of these feeds than by buying bran, shorts or other milk feeds.

You do not state what feeds are available, nor the prices of them, so I am not able to give you definitely a ration that will suit your conditions. Allowing the cows to eat as much of the hay as they will eat up clean, and giving them from 30 to 40 pounds of rutabagas and silage together each day, I would suggest that you mix equal parts of oil meal, soy bean meal and cotton seed meal, feeding this to the cows at the rate of one pound for each six or seven pounds of milk. If you can get bran at $25 per ton or less, I would suggest that you feed some of this as well. The mixture would then be two parts of bran, one each of the others, and you should feed to the cows in proportion of one pound to every five pounds of milk.

IS FAKING STEALING?

To Lie About Type of a Cow.

By D. C. HOWARD, Oregon Agricultural College.

These days we hear a great deal said of the art of breeding. The world as a unit is benefited by the art and skill of the successful and constructive breeder. The product of the truly constructive breeder is sought after. His fellow breeders show their appreciation of his attainment by paying him well for his live stock. To a great extent the purchaser must depend upon the word of the breeder as to the breeding and production of the animal. This is true in all classes of live stock. In dairy cattle we have, first what we can see of the animal, or her type; and, second, what the records show, or her production. No doubt we can safely say that these two factors are of equal importance.

Only the Breeder's Word.

If a breeder in any way manipulates the test of a cow, or misrepresents her production, he is regarded as a crook and is dealt with accordingly. This, then, if type and production are equal, reaches only one-half the lie. The man who misrepresents the type of a cow whose progeny he expects to sell is as much a thief as the man who lies about her production. Yes, more so, for the public has the official records on the cow's production and he has only the breeder's word on her type.

Mutilate or Retouch.

I may lie to a buyer or to the public in three ways about the type of a cow. First, I may tell them verbally or in writing that a cows' type is up to a certain standard. Second, I may substitute the picture of another cow of superior type. And third, I may mutilate or retouch a picture until it is misleading and a gross misrepresentation.

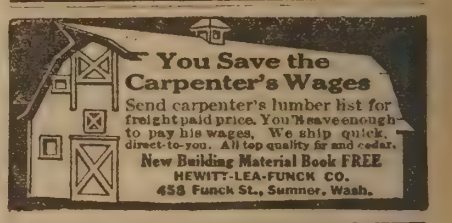
The third of these methods is quite common, and probably the most dangerous. These fake or counterfeit cows find their way into live stock and agricultural papers. They represent a lie that undoubtedly represents the character of the breeder and should warrant his exclusion from the fellowship of the true, constructive breeders. The publicity men and breeders should use their influence and power against such practice, and deal accordingly with an offender.

As Much an Offender.

To show a cow through the press with an udder artificially padded, or a back line radically modified is as much an offense as doping a heavey horse, or selling a gold brick.

We all love beautiful live stock and prize and admire their pictures. We desire a stylish pose; we want their pictrues to show all there is in the animal, to display all that we desire; but we want no fakes, no imaginary sketches or padding. We can overlook a flaw in nature's handiwork, but we can not tolerate a fraud.



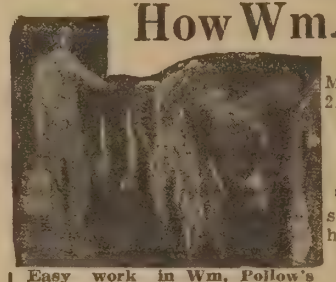


Read the "Want Ads"

You will find it well worth while to read the "Want Ads" in each issue of this paper.

How Wm. Pollow Added to Profits

The Cost of One Hired Man



Easy work in Wm. Pollow's Dairy, Middletown, Wisconsin.

Mr. Pollow finds it an easy task now to milk his 22 cows alone since installing

Hinman Milkers

'roduces 500 pounds of milk a day. Mr. Pollow stated that if it was not for the Hinman Milker he would be compelled to hire another man.

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The J. C. Robinson Company

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Don't forget that your cows can get physically "off color" just as you sometimes do. Watch the milk yield; if it is going down without apparent reason, something is wrong with the cow. Overfeeding is likely to make the condition worse; she needs a medicine that will clear up and strengthen her organs of production.

Kow-Kure is making thousands of new friends among the best dairymen every year, because it supplies this great need. It is a cow *medicine*, pure and simple—not a food. It has great curative and tonic powers that immediately act upon the digestive and genital organs and enable the cow to thrive on her natural food. Kow-Kure has back of it twenty years of success in making backward cows profitable and in the prevention and cure of Abortion, Barrenness, Retained Afterbirth, Milk Fever, Scouring, Lost Appetite, Bunches and other common ills.

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Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Factory, Dept. 58 Waukegan, Ill

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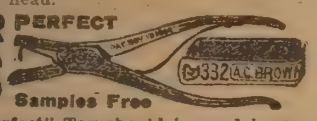
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EAR TAGS PERFECT



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Bowl a *sanitary marvel* easily cleaned. Whether dairy is large or small, write for free catalog and monthly payment plan. *Western orders filled from western points.*

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The highest prices ever paid in the St. Paul yards for a cow or a bull for beef were paid within a year for Holsteins. Two grade Holstein cows 13 years old brought $187, one 12-year-old registered Holstein cow $116, and a registered 4-year-old Holstein bull $168.93. In considering Holstein cattle as a dual purpose breed; the above authentic facts render further comment unnecessary. There is big money in the big "Black and White" Holsteins.

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The Jitney Cow

Is a Menace to Dairy Industry

The following letter adds to the value of the discussion which has been carried on by the Farmer with regard to the best interests of the dairymen. The letter is from E. C. Calloway, milk chemist of the city of Portland, Ore.:

To the Editor; Just as the public are learning that it is bad policy to patronize jitneys and allow them to run in opposition to a reliable and well regulated public service corporation, they are also learning that the one and two-cow dairy should not be allowed to exist within the limits of a city and compete with reliable dairies and milk dealers that are regulated by law.

The one and two-cow dairy furnishes a destructive competition to the milk business, especially in mild climates, and they are so numerous that they must be reckoned with. It is their universal practice to cut prices one or two cents per quart in order to get business. They figure that there is no cost to the production except the investment in the cow. They graze the cow on a vacant lot (unless the owner orders them off), give her a well balanced ration of potato peelings and slops, and the children do the milking and deliver the milk. No dairyman that is compelled to deliver milk of standard quality is able to meet such competition.

It is being recognized that it is only fair and just that the one-cow dairy should be regulated just as much as the fifty-cow dairy. It is also being recognized that the man who lives next door to one of these city cows has a right of protest. No farmer would think of building his barn 20 to 50 feet from his dwelling. Yet that is what many city dwellers have to endure from their next door neighbor. There is a depreciation of all property adjacent to a city cow barn; but our laws so carefully guard the personal privilege of the individual that the property owner has small chances of damages in a court of equity. The one and two-cow dairy in the city limits is thus a menace to propertly interests as well as to the dairy industry. E. C.

WELLBRED STOCK

Few Appreciate Their Benefits.

By H. H. BEIER.

Few people realize or appreciate the benefits that may be derived by the average dairyman when a herd of wellbred dairy stock is brought into their community. In a great many cases when a herd comes into a locality the people begin to calculate how much money that man is going to make out of his live stock sales. The neighbors watch this herd and begin to like the stock, and in a short time they will make a purchase of a sire for their herd or some females for a foundation to build on. In a few years' time the effects of this herd can be seen in every dairy herd in that community in the way of a higher grade of stock. If the farmer with a small herd had to send to another state or great distance for these animals, it is needless to say that in many cases he would not be using the well-bred stock that he does.

There have been two herds of registered Holstein cattle that came into the Boise valley and established a splendid reputation for production and show stock and are now sold and gone. What is left to show for them? This question is easily answered when we look around. There are eight members of the Boise Valley Cow Testing association using sires from one of those herds. Five of these sires are from A. R. O. Davis. The farmers should be very grateful to the men that have introduced good stock into their community.

BROCCOLI CONTRACT

Lane County Farmers Sign Up.

Contracts to purchase broccoli to be grown on 300 acres of Lane county farm lands have been signed by H. A. Raser and W. T. Langleis of the Western Broccoli association, recently formed in Eugene, Ore. Fifty farmers have accepted the terms offered by the company. The crop is expected to total 60,000 crates, and will be shipped to eastern markets in carload lots. Growers will plant from 1 to 22 acres of broccoli.

Needs Firemen.

London, England, can spare no more firemen for the army.

Dr. David Roberts' COW CLEANER

You can't watch your cow too closely during the freshening period. Thousands of healthy, profitable cows are disabled every year because their owners do not take measures to make them clean properly. If you have a cow or heifer about to calve, *now* is the time to make sure it will clean properly by giving it Dr. David Roberts' Cow Cleaner. Dr. Roberts' Cow Cleaner ripens the cotyledons, or buttons, which hold the afterbirth and it comes away by its own weight. It does away with the forcible removal of the afterbirth, which frequently brings on blood poison, sometimes causing death. Come to the aid of your cows and heifers—give them Dr. Roberts' Cow Cleaner. It means health for the animals and profit for you.

Dr. David Roberts' Calf Cholera Remedy

should be given to your calves as soon as the dreaded scours appear. (*Scours lead direct to calf cholera, that highly contagious, death-dealing disease.*) Calf Cholera Remedy prevents fermentation of the food in the digestive organs and liquefies the poisonous gases which cause scours. It soothes the irritated mucous membranes and regulates the flow of the digestive juices. The calf's digestion becomes normal and the trouble disappears. Be prepared to save your calves.



Breeding Tonic makes sure breeding. Prepares organs for breeding. Use regularly and you will have fewer accidents and better, healthier calves.

Cow Tonic, Calf Meal, Diolice, Badger Balm, Laxotonic and Stokvigor—valuable remedies, which should always be kept on hand.

Get Dr. Roberts' Live Stock Prescriptions at your drug store—nearly 4000 dealers in U. S. Look for and insist on getting the package bearing Dr. Roberts' picture. If you do not already have the 134-page "Practical Home Veterinarian," treating all diseases of all live stock, send $1.00 and receive by mail, postpaid. Address

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A properly constituted Calf Meal is equal to and better than cow's milk for raising calves, because it takes the place of milk, thus saving 50% of your feed bills.

LILLY'S Calf Meal

is thoroughly cooked under 60-lb. steam pressure. It is all food, easily digested, fresh and sweet with that nutty flavor so relished by calves.

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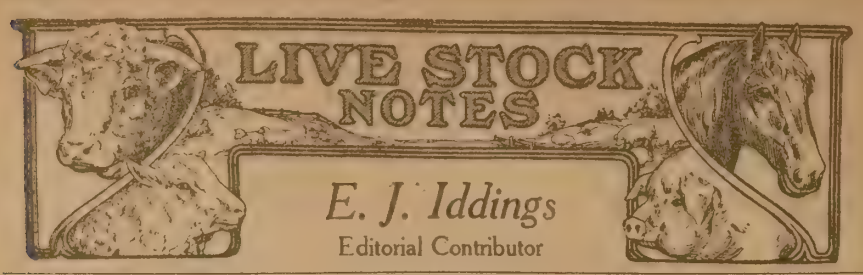


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Necessary Feed

What Does Working Team Require?

W. B. writes: "Please inform me what a big team of horses plowing every day would consume of hay. I feed them good oat hay in the morning and evening and oats at noon, and also morning and evening."

The Answer.

E. L. Potter, professor of animal husbandry at the Oregon Agricultural college replies to the above question as follows:

A proper allowance would be one pound of oats for each hundred pounds live weight per day. That is, a 1500-pound horse would get 15 pounds of oats, divided in three feeds of five pounds each. A quart of oats weighs a pound. The hay would be about the same as the oats, only divided into only two feeds. Five pounds in the morning and 10 pounds at night would oe about right. If the oats are measured and fed in the amounts indicated it will not be necessary to weigh or measure the hay, since the horses will clean up about the amounts quoted. Would make them clean up the mangers pretty well unless the hay was rather poor. Larger or smaller horses would be fed in proportion.

Beet Pulp Value

For Feeding Cattle and Sheep

By E. L. POTTER.

The byproducts from the manufacture of beet sugar are two—pulp and molasses. In the process of manufacture the beets are cut into small pieces and the sugar extracted with water. The remaining material is known as beet pulp and is used entirely for stock feed. The sugar beet contains a good deal of mineral matter of an alkaline nature and which is dissolved out with the sugar. It has not been possible to completely separate the sugar and the alkalies, so as much sugar as possible is taken out and the residue is sold for stock feed as beet molasses.

Feeding Value.

The wet pulp contains about 90 per cent water. The 10 per cent of dry matter has about the same feeding value as the same amount of wheat or barley. Where the pulp can be fed, its value is therefore about one-tenth that of wheat or barley. This is its value to the animal. What the farmer can afford to pay for it is another problem. On account of the high water content, the pulp can not be hauled far, and, furthermore, spoils quickly. It can be preserved in the silo, but this involves considerable expense, and even then the loss is considerable. The pulp is made only during the fall and winter months, hence the most satisfactory method of handling the pulp is to feed it to fattening steers or lambs in yard right at the sugar factory. In this way the pulp is fed about as fast as made, and handling and hauling reduced to a minimum. The pulp, however, must be fed with some other feed, and in the west this is preferably alfalfa.

Steers Need No Grain.

Steers given 40 to 60 pounds of pulp, together with all the alfalfa they will eat, fatten rapidly. Lambs, however, require some grain.

It is quite common for some big cattleman to contract the entire pulp output of the factory. The prices range from 50 cents to $1 a ton, depending on the location of the factory with reference to the cattle markets and to the supply of alfalfa.

Good Dairy Feed.

In actual test, the dried pulp appears about equal to wheat or barley for growing stock and for dairy cows, especially when mixed with other feed to make it more palatable. For fattening purposes it is less valuable, and consequently is seldom used for beef cattle or sheep. Hogs do not like it, and tests by the Oregon experiment station indicate that it has little value for hog-feeding purposes. It is, however, a very desirable dairy feed, and its use for this purpose is growing rapidly.

The molasses contains about 75 per cent dry matter, which is largely sugar. The value of the molasses is about three-fourths that of wheat or barley. It is very digestible, and, being high in carbohydrates, should be especially suitable as a supplement to the protein roughages of the west. The large amount of alkali, however, makes it unpalatable, and, if fed in large amounts, it is strongly purgative. Of course the stickiness makes the feed very unhandy. For these reasons it is usually mixed with some other feed. Some places the cattle feeders who buy the wet pulp also buy the molasses and feed it by sprinkling it over cut alfalfa hay. The manufacturers also commonly mix the molasses with either ground alfalfa or dried pulp, dry and marketed in this form. This makes a good feed if it can be obtained at a satisfactory price and if one is sure of what he is getting. Manufacturers often mix low-grade products in such molasses feeds, and even where not adulterated the alfalfa hay is commonly of the lowest quality.

On the whole, the beet sugar byproducts make very satisfactory stock feed. They are usually safe and nutritious, and well worth the consideration of the stockman who is obliged to purchase feed. The manufacturers must sell to the stockmen, but some of them depend upon clever and expensive salesmanship to dispose of their output at more than it is really worth, while others try to make a price that will sell their goods with the minimum cost of advertising and salesmanship.

FOR SALE OR TRADE

1 Weyerhaeuser silo, 10x26, new, all painted, in first-class order. Will sell or trade, reasonable.
H. C. RUTLEDGE, Littlerock, Wash.



Veterinary

Dr. S. B. Nelson

1. I have a mare that raises good colts and is a fine, well-built animal herself, but she is cold shouldered. After she is worked a few minutes she is as good a pulling horse as a person would wish to own. Will her colts be affected the same way. 2. I have a cow that I want to dry up for beef. She has a large udder that will not dry up. She was fresh in September and I dried her up in six weeks. She did not give over a gallon of milk at freshening. Is there anything I can do to reduce her udder? F. F. P.
Cape Horn, Wash.

1. No, her colts will not necessarily be affected the same way especially if they are never worked alongside of her and especially if they are broken by a very careful driver.

2. Regarding your cow try applying daily to the udder common camphor ointment. Apply the ointment once daily rubbing it in fairly well. Also for a few days put her on a dry feed. Do not give her any green feed, silage, roots or grain. If necessary give her a handful of epsom salts in a quart of water once daily so that she may not become constipated.

I have a young mare that is crippled. She can not back and when hitched up stands spraddled out behind. She can not get her left hind leg over a wagon tongue. She is not swollen any, but after a hard pull her muscles jerk and she will change from one foot to the other and puts both hind feet as far back as she can. J. A. P.
Mountain Home, Idaho.

I am not able to make a definite diagnosis of the trouble affecting your mare, but I am of the opinion that the trouble is a nervous one of some kind, and as a general treatment I am going to advise you to give the mare one ounce of Fowler's solution of arsenic morning and evening for 30 days. If you notice swellings below the eyes then stop the treatment for a day or two and resume. It is possible that this might help her, although I am not sure.

1. As soon as our cows are turned out of the barn each day they go to a little knoll and eat a considerable quantity of the soil there. What is lacking in their food? We are feeding oat and alfalfa hay, oil meal and shorts, also good handful of salt each day. 2. Have a 2-year-old heifer about to freshen that froths at the mouth, often forming a little pool in her feed box. When bringing her from the pasture last fall, a distance of 12 miles, she even passed a little blood with the froth. G. B.
Monroe, Wash.

1. Try adding a spoonful of precipitated calcium phosphate to her feed once daily or once every other day for a while. 2. In regard to the second heifer, you should have her teeth and mouth examined to see if there is some offending object there, such as a sharp, or broken, or split tooth, or some foreign substance lodged between the teeth. The treatment will, of course, depend upon what is found.

B. A. Brooks, Springdale, Wash.: "I am a retired railroad man, settled here on a farm two years ago and at the same time I subscribed for The Washington Farmer, and it has been of so much value to me as a beginner on the farm that I feel it my duty to write and tell you how much I appreciate the instruction I have received from the paper. The best of all is that if we do not receive the instruction we desire in the paper all we have to do is to write and ask you any question we may desire and you will answer it in a way that can be relied upon."

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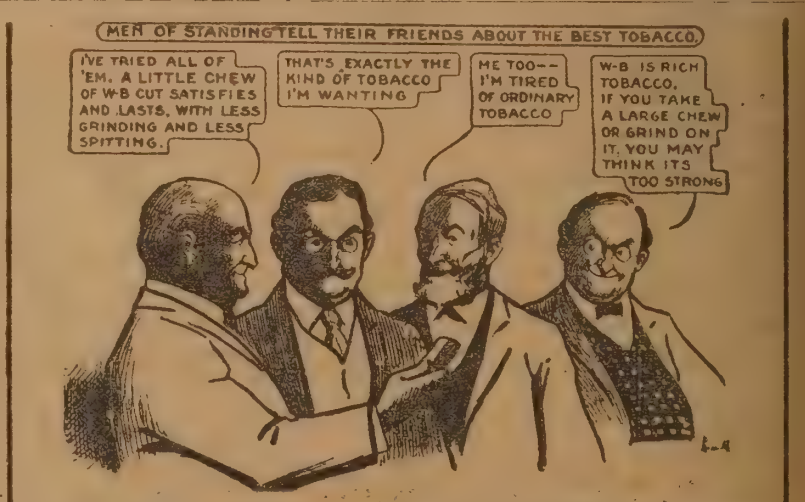
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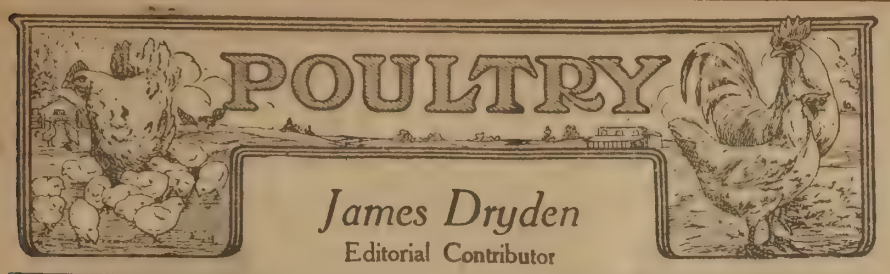
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The shape of the egg is no indication of what the sex of the chick will be.

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Select uniform eggs for hatching. They should weigh about two ounces if laid by hens. Pullet eggs may run less.

Do not pay as much attention to the breed as to the strain in buying eggs for hatching, if the purpose is to raise good egglayers.

Eggs may be kept two or three weeks for hatching if kept in a temperature of 40 to 50 degrees, but the fresher they are the better. They should be kept in a cool, dry cellar, and not in the pantry near the stove.

The best eggs for hatching come from flocks that have free range. By proper feeding, good hatching eggs may be secured from flocks confined in limited runs, but those from free range flocks are usually the best. J. D.

Elects Officers.

At the annual meeting of the Washington County (Oregon) Poultry association the following officers were elected for the coming year: W. T. Lethin, president; Walter Roswurm, vice president; G. M. Littlehales, secretary; R. H. Greer, treasurer; A. Bryant, J. Murrow, W. F. Benfer, executive committee.

Premium Poultry Club.

Some of the seventh and eighth grade students of the training school at Albion, Idaho, have been organized into a poultry club with Miss Jackson assisted by Miss Mayer (student teacher) as leaders. The name chosen by the club is Albion's Premium Poultry club; club flower, pansy.

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Poultry Science

Takes Place of Plague of Systems

By PAUL E. TRIEM.

Most of us who have fallen victim to recurrent attacks of the chicken fever during the past 20 years have been able to study the gradual evolution of what may be called the "science of getting eggs." There was a time when a chicken was a chicken, and that was all there was to it. If she was a hen or pullet, either she laid eggs or she didn't. If we had a flock of, say 20 alleged layers, we took our net returns in the form of egg checks minus feed bills, with all the fortitude of constitutional fatalists. Perhaps we got one egg; perhaps we got 20. It was all up to the little gods of chance.

Then came the era of "systems." They broke out like measles. These systems for getting eggs, and incidentally from two to ten dollars net profit per feathered head each year, possessed all the potency and charm of mystery and magic. We mastered them, applied them to our flock, fought with the neighbor acres the line fence, who was proselyting for a different system—and eventually we recovered, sadder and wiser chicken men.

Science Intervenes.

And now, after all the turmoil and windy disturbance of these chaotic years, comes the still, small voice of science. It doesn't tell us how to make five or ten dollars net profit on every hen, but it does tell us what we, collectively—the chicken men and women of today—know about getting eggs. No extravagant claims are made. Consider, for instance, this sentence from a recent federal bulletin on "Winter Egg Production":

"The production of eggs in winter from pullets and to some extent from hens," says the author, "can be greatly stimulated by good methods of feeding, housing and handling."

Sounds rather flat after the "five dollars per hen per year" school of literature, doesn't it? But there is this trifling difference in favor of the federal bulletin: There is nothing in it but what is practical, and if its advice is carried out conscientiously and in full "the production of eggs in winter will be stimulated." That is about all there is to it. Fall and winter eggs mean a satisfactory profit.

Among the practical points brought out in this practical little "Circular No. 71" are the following:

Winter quarters should be disinfected and made winter tight before the layers are placed in them. Change the litter, or the surface of the dirt floor. Be sure that three sides of the house are tight, and so eliminate drafts. Fresh air is a foe to dampness, and dry, cold air is perferable to moist, warm air. Cull out all underdeveloped and weakling hens. March and April hatched pullets will be in the best shape for the winter campaign. Make the hens exercise for all whole grain by feeding it in deep litter. Diversity in grain, green food and animal substitutes for the insects of summer is necessary. Beef scrap or a satisfactory substitute is an essential often overlooked by the farmer. Keep the hen house clean in winter. Spray against mites with kerosene at least once a month, and look out for lice. If any of the birds develop colds or other sickness, isolate them. A good remedy for colds is as much potassium permanganate as well remain on top of a dime, in a gallon of water, to be used in place of the regular drinking water.

Judge Not.

In men whom men condemn as ill,
I find so much of goodness still,
In men whom men pronounce divine,
I find so much of sin and blot,
I hesitate to draw the line
Between the two, when God has not.
—Joaquin Miller.

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LIME AND SULPHUR

As to Cost of Making Solution.

To the Editor of The Farmer: In your issue of June 22, 1916, there appears an article by Granville Lowther that a Mr. Congdon of the Yakima valley can make a lime and sulphur solution at $3 per barrel, as against $8 that he had to pay the manufacturer, and judging by that the spray should test 30 degrees baume. As to the first part, I agree with Mr. Congdon that some of the manufacturers are making a very poor article at its best, and perhaps some dealers are diluting it in order to get a better profit, and let the grower pay for the consequences. I have had occasion to test some of the lime and sulphur solution offered for sale in the open market, which was guaranteed to test fully 30 degrees baume, and when I tested it one tested 27 degrees and another, made by a different concern, tested 25 degrees baume. Now, I ask if a grower sprays his trees according to their directions, one part of lime and sulphur solution to from 10 to 12 parts of water for dormant spraying, what will be the results? All his work will be for nothing, and his orchard will be in about the same state as before spraying. Test your spray and see that it will test 30 baume, then dilute with one part of lime and sulphur to 10 parts of water, providing, of course, that your concentrate is manufactured of pure lime and sulphur and no other chemicals added, and I will promise you desired results, providing, of course, you do your part right and spray every limb and twig, including the trunk thoroughly. Now, this is what got me into the spraying manufacturing business. Like Mr. Congdon, I could not get what I wanted. The more I sprayed the worse, apparently, my orchard got. So much so, in fact, that I intended to cut down my trees, and I believe if it had not been for my good wife my farm would have had another name than Aetna orchards. Now, I do not intend to impose on your valuable space, but there is another thing that I would like to mention, as there are many of my customers that are subscribers to The Farmer, and no doubt read the articles of Dr. Lowther, as I do myself and find them interesting, and sometimes I am able to learn something that I did not understand before, as we are never too old to learn. I have made a study of orchard problems for about 28 years, so I am not what you may call a novice. Now, by reading the aforesaid article, there is no doubt in my mind that the consumer thinks he is held up, as it were, if lime and sulphur can be made at $3 per barrel. The manufacturer would in that case make $5 clear profit, and that is, to say the least, worse than highway robbery. At least I would think so. Now let me get down to facts and figures. I have at my desk a farmers' bulletin just received from the department of agriculture of Washington, D. C. It is bulletin No. 650, and anybody can send for it and it will be sent free of charge. In it we read that to make a lime and sulphur solution testing 32 and 34 degrees requires 160 pounds of commercial ground sulphur and 80 pounds stone lime to make 50 gallons of lime and sulphur solution. Now with sulphur at 3 cents per pound, bases and lime at $1.50 per barrel, making the cost of sulphur $4.80 and the lime at 60 cents, making a total of the sulphur and lime $5.40. The barrel will cost about 75 cents. To this must be added shipping, which amounts to about 25 cents per barrel, and fuel consumed and labor, which would be about 50 cents, making a grand total of $6.90. We will say nothing of wear and tear on machinery. By this you will see that it is impossible to make a barrel of lime and sulphur for $3. There must be a mistake somewhere, and I think such articles should not find their way into print, for they are misleading.

B. LEIS.

Beaverton, Ore.

I fully agree with Mr. Leis that nothing should find its way into print that is misleading. Just now it is difficult for me to get at the materials for reply, because I am at El Campo, Texas, away from home, have not access to my former article, can not get the prices of sulphur at the two periods of time implied by Mr. Leis' figures and mine. But may it not be that both statements are correct, and that the difference is in the different circumstances under which the sprays were manufactured? For instance, Mr. Congdon probably bought his sulphur and lime in the latter part of 1915. Mr. Leis is quoting recent prices. I am not where I can verify the difference, but I do know that sulphur within the last year has advanced materially and rapidly, Mr. Leis quotes lime by the barrel and sulphur by the pound. Mr. Congdon doubtless bought by the carload. Mr. Leis quotes barrels at 75 cents each. Mr. Congdon probably used no barrels, for I know he had a large reservoir, from which he could have drawn his spray directly into the spray tank without barreling. Mr. Leis quotes the cost of shipping; but Mr. Congden did not ship, he manufactured for home use.

Now, I do not know whether all these different conditions would make the difference in price or not. But I do know that my informant was our fruit inspector, with whom I went to examine some experiments he was making in sprays and other matters, and who showed me the spray manufacturing plant. I have reason to believe that he thought he was telling me the truth, and I have every motive to be correct in my statements of fact.

G. L.

One-Crop System

Is Opposed by Laws of Nature

By PAUL E. TRIEM.

The history of agriculture is filled with instances of a community which finds one particular product of the soil which it can raise to better advantage than most others, and which, in consequence, gradually becomes a one-crop country. Strawberries, potatoes, lettuce, celery, peas—almost any fruit or vegetable—may form the nucleus of the system; but in the end the results are pretty much the same: Nature apparently overlooks, for years, perhaps, the attempt to pervert her laws, but eventually she puts a stop to the whole vicious system.

Consider the history of a typical "strawberry district," for instance. Early in the development of such community it became apparent that fine berries can be raised and put on the market so as to command a premium. One after another, the farmers in the favored district fall into line, until most of the available land is cropped to berries. The virgin soil is well supplied with humus and is free from strawberry pests, and for several seasons the enthusiasm continues. Growers from older districts predict trouble, and are laughed at. It is a case of sour grapes with them.

Varieties "Run Out."

Then something happens. The yield begins to fall off, and the varieties which have been found best for local requirements are said to be running out. Other varieties are tried, but apparently they are run out to begin with. The truth comes hard, but it comes at last; it is not the plants, but the soil that is exhausted.

Or it may be that another enemy arrives before soil depletion. The vanguard of the hosts of insect and fungus pests may appear in the form of grub or weevil. Things will never be the same after this first break-in of the old system. The weevil, once established in the soil, can, perhaps, be controlled by suitable measures, among the most prominent of which will be rotation of crops. The old, vicious order is broken, in any case, for it will never again be possible to crop the land uninterruptedly, year after year, to berries. A sort of garden of Eden period initiates the culture of many crops, in many new communities, but a time always comes when the farmer must go out into the world of law, the ultimate statement of which is that nature abhors the one-crop system.

Saves Fruit

Cannery for the Spokane Valley

That Spokane valley may have a cannery in the near future seems very probable because of the enthusiasm with which the growers received the proposition as brought before them by W. H. Paulhamus of the Puyallup and Sumner canneries. Mr. Paulhamus and his superintendent, Walter Vary, recently spent three days in the interest of a cannery in Spokane valley. Meetings were held at Green Bluffs, Otis Orchards, Vera, Opportunity, Meadow Lake, Hazelwood and Sunset prairies. Mr. Paulhamus explained the work of the Sumner and Puyallup canneries and the need of such an establishment because of the inability to ship fresh fruit long distances in good condition. Tonnage is already being signed up for strawberries in the Green Bluff district; The Hazelwood and Sunset districts will furnish green beans and strawberries; other districts will furnish fruit and garden products as well. Representatives of the Spokane Chamber of Commerce are cooperating with the growers in following up the campaign for securing tonnage.

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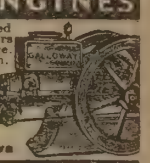
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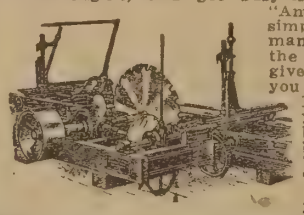
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The Farm Garden

Article 2

Plan It Early

Vegetables Differ Widely in Conditions Required for Maturing Successfully—Plans Should Be Laid Accordingly.

The garden, whether on the farm or in the city back yard, should be planned as carefully and as far in advance of actual planting time as practicable. Especially is this true if one would have vegetables from it early in the spring and have a continuous succession of "good things to eat" from it throughout the summer and fall.

The Location.

Don't be stingy with your garden plot. If your farm is worth $100 an acre, interest on the investment in half an acre would be $5 if figured at 10 per cent. Therefore, give the vegetables room.

There are many points to be considered in selecting the location.

First, the soil must be good. One can not "gather grapes from thorns," nor spinach and cabbage from rocks or hardpan.

Second, since different vegetables require different soil and different conditions of moisture and temperature, it is not always advisable to confine the garden to one plot. Certain plants must be protected from frost or extreme heat. Others suffer no injury when they are subjected to moderate cold. Others not only can endure, but actually require much warmth. Some require much moisture; others comparatively dry soil. What would a watermelon do in a cold, wet lowland? What would celery do on a dry, hot hillside?

Third, the garden should be protected as much as possible from the March wind and the snow flurry of early spring. Especially is this true of the more tender varieties, which it is desired to bring into use early. Transplanted plants should be guarded against extremes of both heat and cold. It is therefore advisable to select for the garden a location protected by buildings, trees, hedges or even special board fences. Since the early spring protection needed is from cold weather rather than from heat, it is generally advisable to select a slope facing to the south, but in so doing it must not be forgotten that presently the need will be protection from heat rather than from cold.

Local Conditions Vital.

While there are many vegetables that will grow satisfactorily in almost any part of the northwest, it must not be forgotten that many others require conditions that are found only in certain localities. This feature should enter largely into the planning of the garden. There are vegetables that need only a short season, but a warm one. Others grow rapidly and thrive under comparatively cold conditions. Others require a long, uniform season neither hot nor cold.

Roughly speaking, there are three general divisions of vegetables suitable for a cool season. (1) The following are among those which do well and mature in a short, compartively cool season: Peas, spinach, turnips, radishes, kohl-rabi, leaf lettuce and mustard. It is possible, however, in the average locality to carry these vegetables well into the summer by a second planting. (2) Among those which are unable to withstand excessive heat, head lettuce, early cabbage and cauliflower are prominent. It is therefore wise to start these plants in a hotbed or cold frame, having them growing well and ready for transplanting by the time the weather will permit them to grow in the open. (3) There is a third class, consisting of a large number of the most common and useful vegetables, such as onions, beets, parsnips, carrots, kale, salsify (oyster plant), parsley and leek. These vegetables will endure considerable heat if other conditions are entirely favorable, such as moisture and proper cultivation, but they do much better in localities where excessive heat is not experienced.

Warm Weather Vegetables.

Vegetables that do well in warm seasons, that, in fact, require much warm weather and practically total absence of frost, may be divided into two classes: (1) The first class includes that large division of staple garden products such as sweet corn, beans of most varieties (including Lima beans), muskmelons and watermelons, cucumbers, pumpkins and squashes. These vegetables mature in a moderately short season, and can be planted in the open garden. They should not be planted until danger of frost is passed. If planted before the ground is thoroughly warm many of them will not do well, even though a good stand is secured. Especially is this true of the cucumbers. (2) Tomatoes are the king of this second class, which is quite limited. Peppers and eggplant are others. They require both a long season and a warm one, wholly free from frost. Few localities in the northwest possess the climatic requirements to insure success with them if planted in the open. They should therefore always be started in hot or cold frames and be well developed by the time frosts are passed. A locality subject to frosts before late in the fall is entirely unsuited for their production.

This is the second article in the farm garden series now being run in The Farmer. Personal experiences and experimentation by agricultural colleges and university departments are the sources drawn upon.



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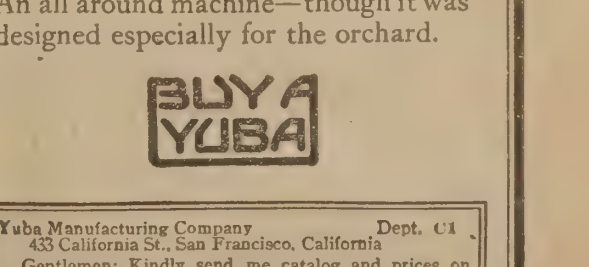
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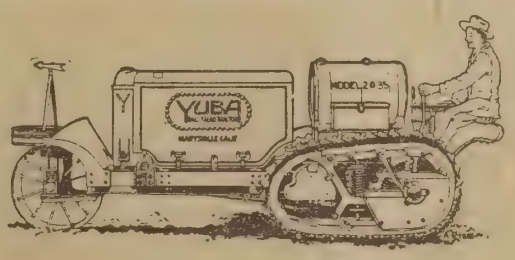
LA CROSSE TRACTOR CO.
Dept. 18, Minneapolis, Minn.

LIVE DEALER AGENTS WANTED

Model "B" 12-24 H.P. $735.00



What will it do for me?



Yuba 20-35

It will plow 15 to 20 acres per shift.

It will disc 35 to 40 acres.

It will haul 20 tons on high speed on a reasonably good road.

It will operate a 32-inch separator.

It will pull an independently operated combined harvester with a 20-ft. cut.

It is powerful enough for any job—small enough to go almost anywhere—simple enough for any one to drive.

It is the ideal machine for the wheat farmer, the rice grower, the bean raiser and the contractor.

BUY A YUBA

Which size is best suited for your needs?

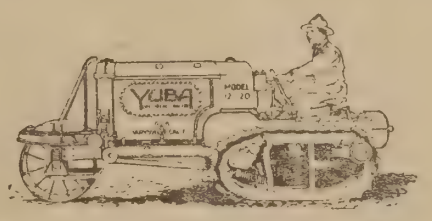
Yuba Manufacturing Company

(Formerly The Yuba Construction Company—change in name only)

433 California Street
San Francisco

Factories at Marysville and Benicia, California

What will it do for me?



Yuba 12-20

It plows 10 acres, cultivates 25 acres, and hauls 12 tons per shift.

It will operate a 6-inch pump.

It is narrow enough to go in 7-ft. hop rows, or 7-ft. vineyards.

It is the right design for beet growers who plant in 20-inch rows.

It is the only tractor for the asparagus grower.

The Model 12-20 and the Yuba plow form a one-man outfit—even in the orchard.

An all around machine—though it was designed especially for the orchard.

BUY A YUBA

Yuba Manufacturing Company Dept. C1
433 California St., San Francisco, California

Gentlemen: Kindly send me catalog and prices on the Yuba Ball Tread Tractor.

I am interested in Model 12 20____ Model 20-35____

Name_____

Town_____ State_____

P. O. Box_____ Size of farm_____

[Check main crop raised]

___Fruit ___Rice ___Grain
___Grapes ___Hops ___Alfalfa

and there have just been issued new Pump and Plow Catalogs which we will be glad to send prospective buyers.

Disk Alfalfa

Have No Mercy on the Plant Roots

By C. Powers, Deer Park, Wash.

Adams J. Smith, a farmer, living in southern Stevens county, Wash., believes that he has proved conclusively that vigorous tearing up of the soil in alfalfa fields is beneficial to the crop. In an interview on the subject of his own experience Mr. Smith says:

Pulverize Soil.

"I believe I have found the one thing that is needed by alfalfa in this section when the season is unusually dry," said



Adam J. Smith.

Mr. Smith, as we were viewing the thick and dark green mass of the vegetation. "The thing is to pulverize the soil around the roots as much as possible after a cutting. This year after the first cutting I went over that portion of the field with a disk harrow thoroughly in both directions. My son tended the other part of the field, where the alfalfa does not look so well, and he did not use the disk because he was afraid of cutting the roots of the plants and thus injuring them. On this portion I went right ahead, leaving the alfalfa roots to look out for themselves, determined to fully test my theory, feeling that a poor crop is worse than none. You can see the result. That alfalfa would satisfy any one, while the yellow, spindling stuff is not worth raising.

"Many farmers make the mistake of being too careful about the roots of crop plants. The roots, especially of alfalfa, go very deep and they can take care of themselves. Everybody who has studied dry farming methods knows that keeping a dust blanket on the surface helps any cultivable crop materially in time of drouth. I believe that my theory as to this treatment of alfalfa had its inception when I, as a boy on an Iowa farm, put a heavy harrow on a cornfield where the young shoots of corn had just come above the surface. Neighbors looked on with disgust, declaring that I would pull out all the tender plants by the roots. I could see from the start that they were on the wrong track, and that while some of the plants were torn out by the harrow teeth, the loss amounted to little and the whole field was likely to be vastly benefited by the treatment. This proved to be the case, and the next year all the neighbors harrowed the fields of young corn with excellent results.

"In this case it was not the dust blanket that I was after, for the conditions were vastly different, but the results were the same. After a rain the Kansas soil was so badly caked that the young shoots of corn had too much to contend with, and the harrow teeth broke up the clods and thus liberated them. Then, again, the weeds were beginning to get their growth in the fields, and before the corn would be high enough to cultivate they would have such a start as to make much trouble for the farmer. I know that since those boyhood days of mine the farmers of the country have quite generally learned the beneficence of the harrow act at the proper time. It has saved them much labor and added to the value of their corn crop. It was an experiment on my part, but when I thought of it in studying my alfalfa problem I resolved to try a modification of it and watch for the results, which are just what I hoped for. Hereafter I shall raise more alfalfa, for I know now just how to treat the crop to make it grow."

Dishonest Sales

Work Injury to Stock Industry

(Continued from page four.)

tor, who not only acted in the capacity of detective, prosecuting attorney, judge and jury, and the verdict was not in accord with the weight of evidence, which in many instances was twisted to suit the views of the "investigator." Such decisions are not fair, and work to the disadvantage of the breed, and the industry in general—so to sum up, I would say that to protect the entire live stock industry; we need a court made up of representatives of all the live stock associations, who shall act as a board of review, to whom all these controversies can be referred, and who shall recommend final action and punishment.

F. E. DAWLEY.

Fayetteville, N. Y.

INFLATED VALUES.

Tendency for Speculation Great.

The following reply was from H. A. Martin, secretary of the Red Polled Cattle Club of America:

To the Editor: I do not know as I am competent to speak on this question of public sales. As we do not have many public sales of Red Polls. In the first place we never have had but few monied men handling Red Polls, and we have had conditions as presented by the every-day farmer, and in so doing have worked up a private sales trade, which has taken care of all the suprlus they had to offer, and today it is a difficult matter to get up a sale of any size without robbing the breeding herds, as the breeders are all sold out very close. What few sales we have we have tried to have them bona fide sales which so far as I have ever been able to learn they have been clean cut, straightforward sales.

But I do know this, it is hard to keep these sales bona fide, the tendency for speculation is so great and to many inflated values, no matter how obtained appeal as advertising matter of great value. There is no doubt of the great value of such sales for advertising if on the square, but the public is rather skeptical for the reason they are never sure whether they are on the level.

One thing I believe would help in such sales, if all animals were listed by the owners, without any restrictions, and the sales manager in their advertising would so list these animals giving date such animals were listed with him for the particular sale.

The owners not to price such animals at private treaty nor to report them sold, but in answer to any questions about such animals to give the inquirer the exact facts, stating such an animal is listed for public sale, giving date of listing, and information in regard to the public sale said animal is listed to be sold.

I find quite often where animals have been listed for a public sale the owner or party that listed the animals, in reply to a private inquiry, report such an animal as sold, when in fact they are not sold, but booked for some public sale. I see this seems to be the case in this controversy you refer to.

In handling public sales we have to deal with human beings, the fickleness of which is a problem only partially solved, and I feel at a loss to advise, for so many things we think will solve the problem fail.

Thank you for your kind interest in bringing this matter before the people in the fair and intelligent manner you have.

H. A. MARTIN, Secy.

Gotham, Wis.

Takes Possession of Raw Jute.

The Great Britain war office gives notice that it takes possession of all unsold stocks of raw jute in the united kingdom and intends to take possession of any unsold stocks arriving after February 17. All dealings in raw jute on spot, in transit, or in course of shipment prohibited. Dealings in jute for storing in India or for shipment from India direct to allied or neutral countries not prohibited.

Trade Unions in Norway.

Norway has a total trade union membership of 25,000.

To the Washington Farmer: Enclosed find $1.50 and the date on the wrapper of The Washington Farmer showing my time does not expire until December 17, 1917. However, it is your mistake and your treat. Yours for almost four years more of The Washington Farmer. I like it best of any farm paper.

Wauconda, Wash. J. A. SUMMERS.

DELCO-LIGHT



For the first time electric light and power are available to anyone—anywhere.

Heretofore, the benefits of electricity have been confined to those who live in the larger towns and cities.

Now Delco-Light makes electric current universally available.

Delco-Light is today furnishing thousands of farm-houses with brilliant, convenient, safe and economical light.

It is furnishing power to operate pumps, washing machines, churns, cream separators, milking machines, vacuum cleaners, etc.

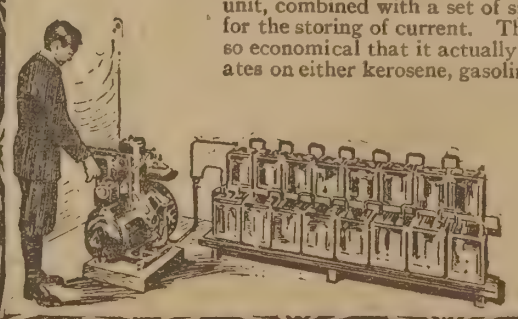
It is lighting country churches, stores and public halls.

It is furnishing light and power to summer homes and camps, to houseboats and yachts, etc.

It is lighting rural railway stations and construction camps.

It is lighting the camps of United States troops on the Mexican border, and it is disclosing heretofore undreamed-of beauties in the depths of Mammoth Cave, Kentucky.

Altogether, over 15,000 Delco-Light plants are in operation, and Delco-Light offices and service stations are to be found in almost every part of the world.



Delco-Light is a complete electric plant—the engine and dynamo in one compact unit, combined with a set of specially built and wonderfully efficient batteries for the storing of current. The plant is so simple a child can care for it, and so economical that it actually pays for itself in time and labor saved. It operates on either kerosene, gasoline or natural gas.

Be sure to write for the illustrated booklet

The Domestic Engineering Company
Dayton, Ohio
Offices in all principal cities

Distributor
E. H. Epperson, 314 E. Pike St., Seattle.

Essence of the Big Questions for Busy Men and Women

OUR WEEKLY MAGAZINE DEPARTMENT

Stories, Pictures and Home Helps for All the Folks

Bought Ten Acres From Indians

William, George and Joe Butler Came From England in 1887

By H. H. BUSHNELL

"It was in the chill November" that "took" the "North Bank" and rode east along the southern fringe of the state of Washington. The wind blew furiously, and the Columbia had no peace. Under the spite of the wind it even lost its majesty. River and sky were like an irritable giant and his nagging, peevish, giantess wife. The furious gust tore the water to rags, across its surface drifted clouds of spray like dust, and the fretted, angry river snarled back at the leaden clouds.

Over in Oregon, where in milder weather the beautiful falls toss their heads and shake their shinning tresses down over the mountainsides, the hand of winter had plastered them as tightly to the rocks as ever an Italian barber has plastered the locks of some young dandy to his forehead. But winter used cold instead of hair oil and bayrum.

I "detrained" at Skamania station, and walked about a half mile through the blast of the wind to Butler dock. Here William Butler established a



"Mike," William Butler and Joel Butler.

farm years ago, and here he justified his judgment.

William, George and Joe Butler came from Lincolnshire, England, in 1887, landing at Quebec. "I never saw London in my life," said William. "I was born in England and grew up there, but I know naught of London."

They were farm hands and naturally sought farming country in the new world. From Quebec they went to Toronto, thence to the farms of Canada, and by degrees drifted westward and south. I think it was in 1887 they reached Portland, and two of them went to work on the Ladd farm, milking cows and caring for stock generally. Later still William and Joe went up the Columbia and fished. In 1892 they bought 10 acres from the Indians. This was on a sort of island, formed by the river and a slough through which in times of low water two streams meander. Later on they acquired more land from the government.

A neat little home was erected; William Butler married and children were born. A store was built close to the dock; horses, cows, pigs and chickens were produced, and a home orchard grew to maturity. Wonderful crops of root vegetables were produced there. This was due to the fertilizer applied.

Mr. Butler took me down along the slough and showed me the dog salmon coming up to spawn. Wagonloads of these fish crowd their way over the riffles up to the pools and give up their lives that their children may live, according to the race habit of the fish. And wagonloads of the dead salmon the Butlers gathered and used to enrich the soil.

About six years ago he decided to plants walnuts. "There's always a market for walnuts," said he. So he put in a nice little orchard.

"You may say," he said, "that the man who cultivates walnut trees has the right of it. Many told me that walnuts don't need cultivation. When they say that to me I bring them out and show them my trees—the ones I've cultivated and the ones I haven't cultivated. The difference is right there."

When I got to the Butler place William and Joe were conveying some surplus live stock to the dock for shipment. The pigs went in crates without much difficulty, but the Holstein bull—a pretty good bull, too—felt pretty frisky. Finally, they hitched the team to the wagon, tied "Mike" to the rear axle, and he stepped right along, because he had to. Still more obstreperous was a steer, which lay down and bawled all the way to the dock.

After dinner, we sat and talked a while. I asked him about England and farm conditions there. He liked this country far better. "What have they in England better for the working man than we have here?" he asked. "Nothing."

"They build good roads," said Joe.

"Yes," admitted his brother, but that was about all he would admit. He told stories of the low wages and long hours. He drew pictures of opportunities here as compared with England. "Farm laborers," said he, "never eat with the farmer's family in England. They get bread, meat and potatoes, with no variety. Here the workman is treated as a fellow human. He is treated according to the way he works. There is not much chance to get ahead there; here he can."

Speaking about variety in the way of food, I looked across the table where we had eaten. Two kinds of meat there were, and preserves and pickles and cheese—an abundance and a variety seldom seen on city tables.

"In England the farm help were not allowed to ride on anything," he said. I was back there on a visit once, and I told them about the improved farm machinery of America, and they said: 'Bill Butler, he's a proper liar now.' I got some folders and showed them the pictures and made them believe me."

But later he told me that he thought communities should have market booths in the cities, as they did in the old countries, and he thought the country people do not pay enough attention to the appearance of what they have to market. It should have a standard of appearance as well as a standard of quality.

In England, he recalled the flocks of sheep, and he is considering the purchase of a few sheep for his place. He recalled how the English farmer rotated his crops and what excellent yields he secured with sheep on the pastures. He has disposed of a good many of his hogs and is building up a new line with purebred Duroc Jerseys, which he likes pretty well. He thinks they are well adapted to northwest conditions.

The Butlers have a store at Skamania, where Mrs. Butler and Johnny, age 12, look after the business a good part of the time. Miss Lucy Butler attends to the housework at the farm. Mrs. Butler says she hopes they can get rid of the store—she wants to get back home.

The farm home is built for comfort. Some time ago Mr. Butler bought a spring back in the hills, and water is piped across the slough and into the kitchen. There is plenty of wood in the woodshed; there is fish put down in brine; there is pork prepared for winter; there is fruit made ready for the days of nonproduction, and plenty of vegetables. Preparedness—that is the word which describes the Butler farm home. Snug and stout and well stocked for a siege, it stands like a fortress for its inmates, a shelter from the rough weather of the world.

MILLION ACRES.

Land Filed on at Miles City.

By A. B. KEITH

All records were broken at the land office at Miles City, in eastern Montana, for the month of January, both in the amount of land filed on and in cash receipts. The number of entries for the month of all classes, but mainly under the 640-acre homestead act, was 2289 and the amount of land involved in these entries was nearly 1,000,000 acres, more than enough to constitute a county under the present county division law. The money received was $75,906, the biggest month's business in the history of the office, and one that will probably stand as the record.

If a million acres of grazing land was entered on during the month of January, one month more of such business would exhaust the available grazing land, and while it is not expected that the January rush will be repeated, it is expected that the land will be entered upon at a lively pace.

Chris Maurer recently disposed of his ranch near Point of Rocks in Madison county, 720 acres, for $25,000. Half of the total is under cultivation in hay and grain. George Rebich of Dillon was the purchaser. The deal included the farm implements, buildings, machinery and improvements. The Maurer ranch is ideally located and considered one of the best in the section.

Mints' Coinage.

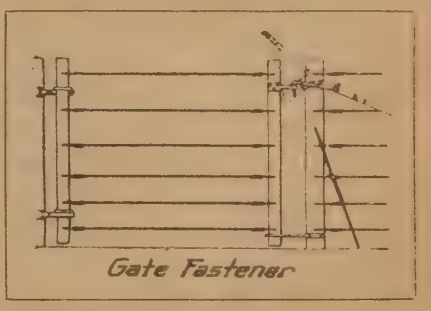
Since the United States mints were established, in 1792, they have coined 733,000,000 dimes, 855,000,000 nickels, 2,345,000,000 cents. Where are they now? It is estimated that probably not more than half these coins are still in existence and that only a small fraction is in active circulation.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Wire Gate Fastener.

The end of the flexible gate shown here is held at the bottom by a loop

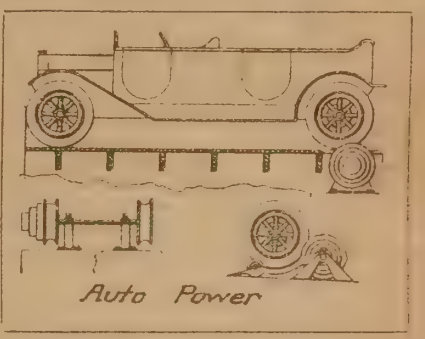


Gate Fastener

and at the top by a hook attached to a long lever. The heavy lever handle holds the gate closed.

Transmission Apparatus.

In one modification of the appartus shown here the rear wheels of the automobile run on two grooved

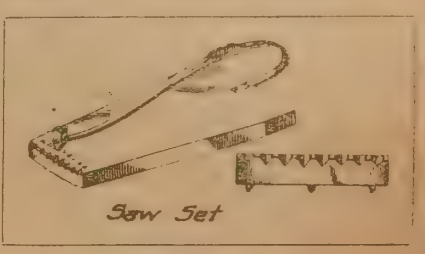


Auto Power

wheels; in the other they run between grooved wheels and idler wheels. The power is taken from a pulley on the axle of the grooved wheels.

Saw Set.

The notches numbered 5, 6, 7, etc., are used to set the teeth of timber saws at the proper angle for different woods: notch 5 is for maple, 6 for beach, 7 for hemlock, 8 for pine, 9 for

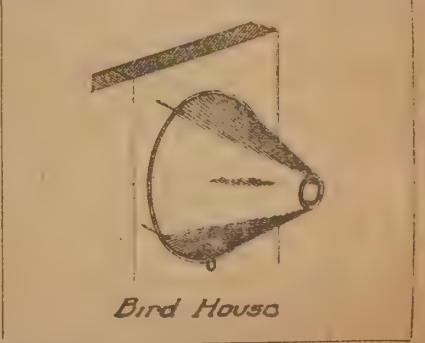


Saw Set

spruce, 10 for basswood, 11 for a hand saw, and 12 for oak. The operator places each tooth in turn in the proper notch; then places the setting tool on the tooth and strikes it with a hammer.

Bird Houses.

Boys and girls who intend to set out bird houses this spring should do so at once, because the birds begin



Bird House

looking for suitable places as soon as they arrive. The house shown here is simple and good; it sheds the rain and provides excellent drainage.

Desert Roads.

A plank road in portable parts is being laid in the California deserts for economy and convenience.

Contests Bare Queer Things

Show What You Know and Win Some Money

By the Contest Editor



A freight brakeman started on an eastbound freight train from Pullman, Washington, to Moscow, Idaho. The train was a mile long. He walked the whole length of the train, arriving at the front end just as it pulled into Moscow. The distance between the two cities is ten miles, and the train was going twenty miles an hour. How far did the brakeman travel and at what speed?

Send your answer to the above problem to Figure Editor, Review Building, Spokane. The twelve best answers will be published in The Farmer of April 14.

Answers Peggy in Rhyme.

Poetic expression was given in the Farmer February 15 to the distraction of a subscriber at Forest Grove, Ore., caused by her efforts to solve the figure problem. The subscriber signed herself "Peggy." A more optimistic view is taken of the same problem by "Elizabeth" of Roberts, Idaho, who writes:

In regard to Peg's dismay, I will try, without delay, to tell her of my success, for I feel that I am blessed.

At first I said, "It can't be done," but at last I found it fun.

Why, the twos they came right down, and the threes followed like a houn'; the fours were really glad, but the fives were rather sad, though they followed right in line while the sixes skipped behind; the sevens, they were just the thing, tall and stately and of course quite proud, while the eights said with a swing, "We will follow with the crowd." "We will, too," replied the nines, "and we will have some fun."

So now I say, "It can be done.' Of course I don't say I have hit it right, but I still hope with all my might.

ELIZABETH.

The figure contest closes on March 17, leaving only one week to compete for the $275 prize and 31 other prizes to be awarded to the winners

Bible Twisted, Distorted.

Farm folks are just like other folks, contrary to the impressions of our city bred friends, who try to tell the farmer how to farm. They are interested in other questions besides how to make cows give cream instead of skim milk, as is emphasized by the interest awakened by question No. 9 in the Farm Information Contest, "In what year was the edition of the Bible known as the 'Vinegar Bible' published?"

In centering attention on this rather curious question many interesting facts have been revealed as to the history of the Bible. This great book is shown to have had its ups and downs, and to have been the victim of the whims of the wag, the jokesmith, the heretic and the blundering proofreader.

The "Vinegar Bible," so called, is an edition of the Bible for which both the printer and the proofreader, or both, must be made the "goat." This queer appellation came from presumably a typographical error in the title over Luke xx., in which the "Parable of the Vineyard" read, "Parable of the Vinegar." The error is laid up against the Clarendon Press, Oxford.

There have been numerous freak editions of the Bible known variously as "He-Bible," "She-Bible," "Breeches Bible," "Bug Bible," "Ears-to-Ears Bible," "Murderers' Bible," "Printer's Bible," "Rebekah's-camels Bible," "Thumb Bible," "Wifehater Bible," and "Wicked Bible."

The "He-Bible" may indicate that as early as 1611 the controversy over equal rights between men and women was beginning to materialize. The "He-Bible" was the first edition of the King James Bible, having a certain passage (Ruth iii. 15) translated, "He went into the city" instead of "She went into the city," as in subsequent editions.

It may have involved the moot question which will not down even to this day as to whether angels are male or female. Who knows?

Then came the "She Bible" soon after in the same year to correct the "He Bible," the women as usual demanding the last word and having it.

The "Breeches Bible" was the Geneva Bible published in 1560, reading in Genesis iii. 7, "They sewed fig leaves together and made themselves breeches," the "breeches" being substituted for aprons. This particular edition was different from others apparently only in the manner in which it described the events in the Garden of Eden following the raid on the apple orchard.

The "Bug Bible" published in 1551 read in Psalms xci. 5, "So that thou shalt not need to be afraid for any bugges (terrors) by night."

The "Ears-to-Ears Bible" which came out in 1810 is so characterized by reason of an error which looks very much like the work of some bloomin' Englishman. In Matthew xiii. 43 it read, "Who hath ears to ear (hear), let him hear."

The "Printer's Bible," published about 1702, was an atrocious libel on the printer's craft, reading in Psalms cxix. 161, "Printers (princes) have persecuted me without cause," expressing quite aptly the emotions of the latter day editor when he picks up his own paper and discovers that the printer by the omission of the little word "not" has turned his perfectly well intentioned defense of some maligned brother into the most direct charge of criminality.

"The "Rebekah's-camels Bible," which appeared in 1823, read in Genesis xxiv. 61, "And Rebekah arose and her camels (damsels)."

"Murderer's Bible" came out about 1801, reading in Jude 16, "These are murderers," meaning murmurers. The "Thumb Bible" was an Aberdeen edition of 1607, about the size of the thumb, one inch square and a half inch thick. The "Wifehater Bible" was the scriptural sensation of 1810, reading in Luke xiv. 26, "If any man come to me and hate not his father * * * yea, and his own wife also."

The worst of all, doubtless, was the "Wicked Bible," in which the word "not" was omitted from the seventh commandment.

Thousands of readers of the Farmer are following the questions in the Farm Information contest, announcement of which is carried this week on page 9, and many have ordered our Contestant's Helpful Outfit which is included with every new, renewal or extension subscription to the Oregon Farmer, Washington Farmer or Idaho Farmer, except those subscriptions which are entered in the Figure Contest.

Farm Machinery

Why Have the Prices Increased?

A letter to the Farmer from G. A. Ranney, secretary and treasurer of the International Harvester company, under Chicago date of February 19 says:

"The article in your issue of December 7, 1916, intimating that a trust is 'advancing prices of farm machinery' has just come to our attention. We think you should be advised that the Chicago dispatch on which the article is based was grossly incorrect, and that the coupling with it of our Spokane representative's statement about certain increases of prices for this company's products is calculated both to mislead your readers and injure us.

"The 'conference' referred to was of thresher manufacturers alone, not makers of general farm machinery. We were neither represented nor interested in that conference in any way, and know nothing of its purpose or action.

"This company makes its prices without consulting its competitors, and such increases in the prices of its products as have been announced have been due to increases in raw material and labor costs."

Fur-Bearing Animals.

The British commercial attache at Petrograd reports the publication of an imperial decree dated November 7, 1916, empowering the Russian minister of agriculture to create on crown lands reserve areas for the preservation and breeding of fur-bearing animals and of birds. The decree applies especially to the preservation of sables in Siberia.

WHAT EVERY FARMER WANTS

Cheap and Efficient Transportation His Great Need—How It Can Best Be Assured.

THE present situation of the railroads presents two alternatives, efficient federal regulation or federal ownership.

The experience of other countries proves conclusively that government ownership of railroads is more costly and less efficient than the system of private ownership in this country. The railroads of the United States have the lowest freight rates, the smallest capitalization per mile, the highest operating efficiency and pay the highest wages of any railroads in the world.

High Rates on Government Roads

The charge for hauling a ton of freight one mile on the government-owned roads of various countries and on the privately owned roads of the United States is shown in the following table:

	Average Freight rate per ton mile
Germany (Gov't Rys.)	1.24 cent
France "	1.30 cent
Australia	
New South Wales "	1.59 cent
South Australia "	1.15 cent
Switzerland "	2.63 cent
Canada (Private ownership)	.76 cent
United States (Private ownership)	.73 cent

No railway system under government ownership can show a record for cheapness and service approaching that of American railroads under private ownership. What the railroad situation needs is the adoption of a system of national regulation that will encourage initiative and investment and enable the carriers to meet the growing requirements of American business.

Keep Railroads Out of Politics and Politics Out of the Railroads

It is to the interest of the railroads and the interest of the whole country that the railroads keep out of politics and that politics be kept out of their management.

Government ownership under our political system would make the control of the railroads a partisan issue at every election. It would bring political and economic disaster.

No man in the country stands to lose more by the adoption of a political system of railroad management than the farmer. None will profit more from efficient national regulation that will do away with the present conflicts and waste of local control and enable the railroads to make the extensions and improvements necessary to keep pace with the business progress of the nation.

We invite discussion of this question, and shall be glad to answer questions and supply information on request.

RAILWAY EXECUTIVES' ADVISORY COMMITTEE

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—Adv.

Wie man den Baum biegt, so wächst er.

To any person offering a correct translation of the above phrase in the common language of the United States, accompanied by $2 in personal check, postoffice money order of 2-cent stamps before March 15, the Washington Farmer will be sent THREE YEARS, together with any one of the following high-class magazines for one year: American Magazine, Metropolitan Magazine, Sunset Magazine or Woman's Home Companion.

The regular yearly rate of any one of these magazines is $1.50, while the rate for the Washington Farmer for one year is $1. You receive:

Washington Farmer, 3 years, American Magazine, 1 year	**$2**
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Any one of these combinations would cost you $4.50 on the basis of the regular yearly rate of the Farmer and magazine.

If your translation is not correct your money will be returned promptly. Address:

FOREIGN LANGUAGE EDITOR
The Washington Farmer.
Review Building, Spokane, Washington.

MONTHLY PRICES OF WHEAT.

The following table gives the United States estimated average price, cents per bushel, to producers of wheat, monthly for 9 years.

	1916	1915	1914	1913	1912	1911	1910	1909	1908
Jan. 1	102.8	107.8	81.0	76.2	88.0	88.6	103.4	93.5	88.7
Feb. 1	113.9	129.9	81.6	79.9	90.4	89.8	105.0	95.2	89.0
Mar. 1	102.9	133.6	83.1	80.6	90.7	85.4	105.1	103.9	89.2
Apr. 1	98.6	131.7	84.3	79.1	92.5	83.8	104.5	107.0	89.8
May 1	102.5	139.6	83.9	80.9	99.7	84.6	99.9	115.9	89.3
June 1	100.0	131.5	84.4	82.7	102.8	86.3	97.6	123.5	92.3
July 1	93.0	102.8	76.9	81.4	99.0	84.3	95.3	120.8	89.5
Aug. 1	107.1	106.5	76.5	77.1	89.7	82.7	98.9	107.1	90.4
Sept. 1	131.2	95.0	93.3	77.1	85.8	84.8	95.8	95.2	88.7
Oct. 1	136.3	90.9	93.5	77.9	83.4	88.4	93.7	94.6	90.4
Nov. 1	158.4	93.1	97.2	77.0	83.8	91.5	90.5	99.9	91.5
Dec. 1	160.3	91.9	98.6	79.9	76.0	87.4	88.3	98.6	92.8

All the World's a Stage, and All the Men and Women Merely Players

Picturesque Sight Common in England



In the above photograph is shown three of the members of the British Women's Land league in the costumes which they wear during their daily labors on a large farm near Evesham, England. Linen smocks, riding trousers and high boots, capped by wide-brimmed felt hats, make the farmer girls of Britain a picturesque addition to the scenery of the English countryside.

Woman Leads Food Rioters



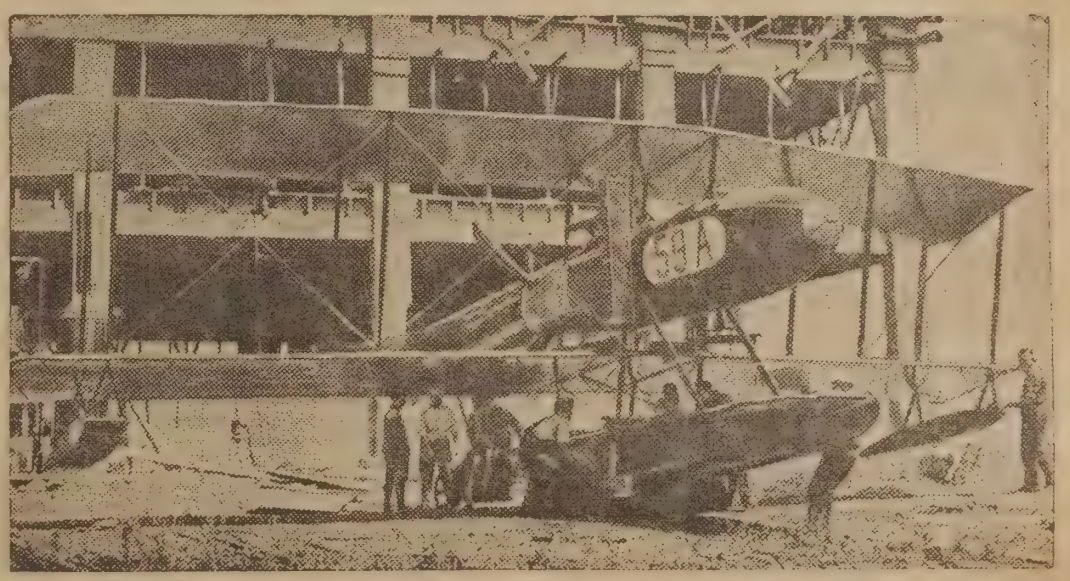
"Sweet Marie" Ganz, indicated in the photograph by the arrow, was the leader of the East Side women who stormed the New York city hall demanding food and relief from the excessive food prices. She is a former I. W. W. worker. She was arrested and found guilty of disorderly conduct, but was released under suspended sentence. "Sweet Marie" was photographed outside the New York city hall surrounded by her followers whom the police were endeavoring to disperse.

Guarding Great New York Bridges



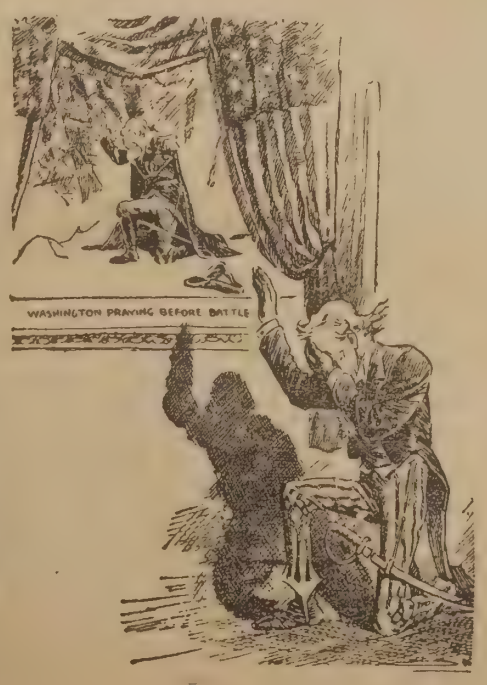
Naval militiamen line the roadways and approaches of the Brooklyn, Manhattan, Williamsburg, Queensboro, Hell Gate and other bridges from New York to Long Island, while others guard the bases of the bridges from possible attack from the water. Tugs equipped with light caliber guns patrol the water and halt any craft approaching close enough to do any harm to the bases, the destruction of any one of which would send the giant structure crashing into the river almost 200 feet below, together with its vast burden of trolley cars, elevated railroad trains, foot passengers, automobiles and trucks.

Speedy and Powerful Navy Air Scout



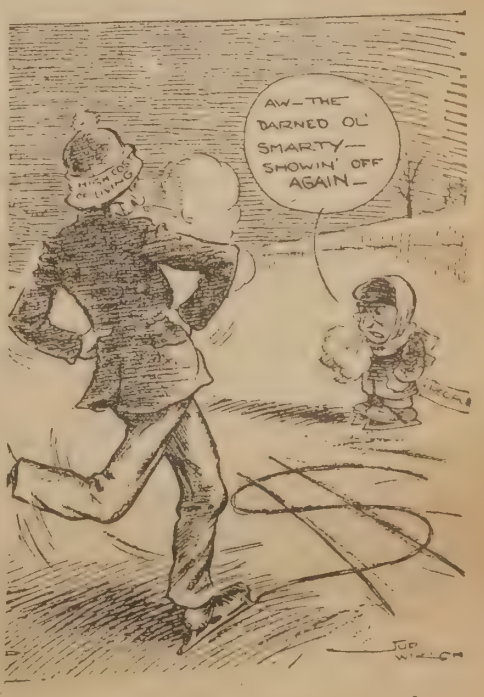
Above is shown a photograph of the new 300-horsepower navy seaplane which has been built for the United States navy at New London, Conn. It is as speedy and as powerful as any of those used by the foreign governments and is the first of the new giant air fleet to be delivered to the navy.

The Spirit of America.



—Nashville Tennessean.

Great on Fancy Figures.



—Milwaukee Leader.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

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SYNOPSIS.

Charles Brandon, who has neither wealth nor title, wins distinction for having defeated the heretofore unconquerable duelist, Judson. Brandon is installed as one of the captains of the guard of King Henry VIII. Edwin Caskoden (who tells the story) is Master of the Dance at London Court. The two young men become fast friends. Edwin tells Brandon of the willful, but adorable Mary Tudor, who had coaxed her royal brother Henry out of many proposed marriages which had been arranged for Henry's advantage. Edwin confesses that he, like scores of other men, had fallen in love with Mary, but upon Mary's refusal to marry him, he immediately became attracted to the good and beautiful Lady Jane Bolingbroke.

At their first meeting, Mary and Brandon have a tilt, in which Mary comes off second best and acknowledges it. Wondering as to Brandon's social accomplishments, and to settle a wager with Sir Edwin that he could not dance, Mary invites Brandon, Edwin and Jane to her drawing room. To her surprise and Edwin's delight Brandon is perfectly at ease and proves that he knows more about dancing than the Master of the Dance, himself. He teaches the Princess Mary one of the new French dances. At a ball, given by Mary, Brandon makes an enemy of the Duke of Buckingham, the most powerful nobleman in the realm. The evening is spent with the new dance, which greatly pleases the king. Brandon begins to realize that he loves the unattainable Mary, and, what is worse, Mary knows she loves Brandon. A party, including Brandon, spends a few days at Windsor, during which time the king makes several knights. Brandon would have been one of these had not Buckingham poisoned the king's mind against him. In the meantime, the old French king, Louis XII., whose wife, Anne of Brittany, had just died, has asked Mary's hand in marriage.

Brandon avoids Mary for some time, but when next they meet, they declare their love, but agree that they can never belong to each other. Brandon resolves to leave as soon as possible for New Spain.

In the meantime negotiations for Mary's marriage with Louis XIII. became an open secret about the court. Mary, longing to know the outcome of her complicated affairs, persuades Jane to go with her secretly to Grouch, a Jewish fortune teller, who lived in Billingsgate Ward, in the worst part of London. They disguise as orange girls and make the trip, after the more prudent Jane, unbeknown to Mary, asks Edwin to follow them at a distance. This being impossible for Edwin to do, Brandon goes. Shortly after the girls had emerged from Grouch's, they are pursued by four horsemen. Brandon overtakes them and kills two. The other two horsemen attack Brandon from their saddles. Brandon thrusts his sword into the throat of one of the horses and it falls, pinning its rider underneath. His cry brings his companion to his side, which gives Brandon a chance to escape with the girls. During the fray the mask from the face of one of the men falls and Brandon recognizes Buckingham, but does not speak of it to anyone.

Brandon, weak and wounded, is arrested for the murder of two citizens of London. He is taken to Newgate, the most loathesome prison in London at that time.

CHAPTER IX.—(Continued.)

Buckingham had gone to pay his respects to the queen, and on her way back espied Mary waiting for the king in the ante-room, and went to her.

At first she was irritated at the sight of this man, whom she so despised, but a thought came to her that she might make use of him. She knew his power with the citizens and city authorities of London, and also knew, or thought she knew, that a smile from her could accomplish everything with him. She had ample evidence of his infatuation, and she hoped that she could procure Brandon's liberty through Buckingham without revealing her dangerous secret.

Much to the duke's surprise, she smiled upon him and gave a cordial welcome, saying: "My lord, you have been unkind to us of late and have not shown us the light of your countenance. I am glad to see you once more; tell me the news."

"I can not say there is much of interest. I have learned the new dance from Caskoden, if that is news, and hope for a favor at our next ball from the fairest lady in the world."

"And quite welcome," returned Mary, complacently appropriating the title, "and welcome to more than one, I hope, my lord."

This graciousness would have looked suspicious to one with less vanity than Buckingham, but he saw no craft in it. He did see, however, that Mary did not know who had attacked her in Billingsgate, and he felt greatly relieved.

The duke smiled and smirked, and was enchanted at her kindness. They walked down the corridor talking and laughing, Mary awaiting an opportunity to put the important question without exciting suspicion. At last it came, when Buckingham, half inquiringly, expressed his surprise that Mary should be found sitting at the king's door.

"I am waiting to see the king," said she. "Little Caskoden's friend, Brandon, has been arrested for a brawl of some sort over in London, and Sir Edwin and Lady Jane have importuned me to obtain his release, which I have promised to do. Perhaps your grace will allow me to petition you in place of carrying my request to the king. You are quite as powerful as his majesty in London, and I should like to ask you to obtain for Master Brandon his liberty at once. I shall hold myself infinitely obliged, if your lordship will do this for me." She smiled upon him her sweetest smile, and assumed an indifference that would have deceived any one but Buckingham. Upon him, under the circumstances, it was worse than wasted. Buckingham at once consented, and said, that notwithstanding the fact that he did not like Brandon, to oblige her highness, he would undertake to befriend a much more disagreeable person.

"I fear," he said, "it will have to be done secretly—by conniving at his escape rather than by an order for his release. The citizens are greatly aroused over the alarming frequency of such occurrences, and as many of the offenders have lately escaped punishment by reason of court interference, I fear this man Brandon will have to bear the brunt, in the London mind, of all these unpunished crimes. It will be next to impossible to liberate him, except by arranging privately with the keeper for his escape. He could go down into the country wait in seclusion until it is all blown over, or until London has a new victim, and then an order can be made pardoning him, and he can return."

"Pardoning him! What are you talking of, my lord? He has done nothing to be pardoned for. He should be, and shall be, rewarded." Mary spoke impetuously, but caught herself and tried to remedy her blunder. "That is, if I have heard the straight of it. I have been told that the killing was done in the defense of two—women." Think of this poor unconscious girl, so full of grief and trouble, talking thus to Buckingham, who knew so much more about the affair than even she, who had taken so active a part in it.

"Who told you of it?" asked the duke.

Mary saw she had made a mistake, and, after hesitating for a moment, answered: "Sir Edwin Caskoden. He had it from Master Brandon, I suppose." Rather adroit this was, but equidistant from both truth and effectiveness.

"I will go at once to London and arrange for Brandon's escape," said Buckingham, preparing to leave. "But you must not divulge the fact that I do it. It would cost me all the favor I enjoy with the people of London, though I would willingly lose that favor, a thousand times over, for a smile from you."

She gave the smile, and as he left, followed his retiring figure with her eyes, and thought: "After all, he has a kind heart."

She breathed a sigh of relief, too, for she felt she had accomplished Brandon's release and still retained her dangerous secret, the divulging of which, she feared, would harden Henry's heart against her blandishments and strand her upon the throne of France.

But she was not entirely satisfied with the arrangement. She knew that her obligation to Brandon was such as to demand of her that she should not leave the matter of his release to any other person, much less to an enemy such as Buckingham. Yet the cost of his freedom by a direct act of her own would be so great that she was tempted to take whatever risk there might be in the way that had opened itself to her. Not that she would not have made the sacrifice willingly, or would not have told Henry all if that were the only chance to save Brandon's life, but the other way, the one she had taken by Buckingham's help, seemed safe, and, though not entirely satisfying, she could not see how it could miscarry. Buckingham was notably jealous of his knightly word, and she had unbounded faith in her influence over him. In short, like many another person, she was as wrong as possible just at the time when she thought she was entirely right, and when the cost of a mistake was at its maximum.

She recoiled also from the thought of Brandon's "escape," and it hurt her that he should be a fugitive from the justice that should reward him, yet she quieted these disturbing suggestions with the thought that it would be only for a short time, and Brandon, she knew, would be only too glad to make the sacrifice if it purchased for her freedom from the worse than damnation that lurked in the French marriage.

All this ran quickly through Mary's mind, and brought relief; but it did not cure the uneasy sense, weighing like lead upon her heart, that she should take no chance with this man's life, and should put no further weight of sacrifice upon him, but should go to the king and tell him a straightforward story, let it hurt where it would. With a little meditation, however, came a thought which decided the question and absolutely made everything bright again for her, so great was her capability for distilling light, she would go at once to Windsor with Jane, and would dispatch a note to Brandon, at Newgate, telling him upon his escape to come to her. He might remain in hiding in the neighborhood of Windsor, and she could see him every day. The time had come to Mary when to "see him every day" would turn Plutonian shades into noonday brightness and weave sunbeams out of utter darkness. With Mary, to resolve was to act; so the note was soon dispatched by a page, and one hour later the girls were on their road to Windsor.

Buckingham went to Newgate, expecting to make a virtue, with Mary, out of the necessity imposed by the king's command, in freeing Brandon. He had hoped to induce Brandon to leave London stealthily and immediately, by representing to him the evil consequences of a break between the citizens and the king, liable to grow out of his release, and relied on Brandon's generosity to help him out; but when he found the note which Mary's page had delivered to the keeper of Newgate, he read it and all his plans were changed.

He caused the keeper to send the note to the king, suppressing the fact that he, Buckingham, had any knowledge of it. The duke then at once started to Greenwich, where he arrived and sought the king a few minutes before the time he knew the messenger with Mary's note would come. The king was soon found, and Buckingham, in apparent anger, told him that the city authorities refused to deliver Brandon except upon an order under the king's seal.

Henry and Buckingham were intensely indignant at the conduct of the scurvy burghers, and an immense amount of self-importance was displayed and shamefully wasted. This manifestation was at its highest when the messenger from Newgate arrived with Mary's poor little note as intended by the duke.

The note was handed to Henry who read aloud as follows:

"To Master Charles Brandon:

"Greeting—Soon you will be at liberty; perhaps, ere this is to your hand. Surely would I not leave you long in prison. I go to Windsor at once, there to live in the hope that I may see you speedily. MARY."

"What is this?" cried Henry. 'My sister writing to Brandon? God's death My Lord of Buckingham, the suspicions you whispered in my ear may have some truth. We will let this fellow remain in Newgate, and allow our good people of London to take their own course with him."

Buckingham went to Windsor next day and told Mary that arrangements had been made the night before for Brandon's escape, and that he had heard that Brandon had left for New Spain.

Mary thanked the duke, but had no smiles for any one. Her supply was exhausted.

She remained at Windsor nursing her love for the sake of the very pain it brought her, and dreading the battle for more than life itself which she knew she should soon be called upon to fight.

At times she would fall into one of her old fits of anger because Brandon had not come to see her before he left, but soon the anger melted into tears, and the tears brought a sort of joy when she thought that he had run away from her because he loved her. After Brandon's defense of her in Billingsgate, Mary had begun to see the whole situation differently, and everything was changed. She still saw the same great distance between them as before, but with this difference, she was looking up now. Before that event he had been plain Charles Brandon, and she the Princess Mary. No mere mortal, thought she, could be so brave and strong and generous and wise; and above all, no mere mortal could vanquish odds of four to one. In the night she would lie on Jane's arm, and amid smothered sobs, would softly talk of her lover, and praise his beauty and perfections, and pour her pathetic little tale over and over again into Jane's receptive ear and warm responsive heart; and Jane answered with soft little kisses that would have consoled Niobe herself. Then Mary would tell how the doors of her life, at the ripe age of 18, were closed forever and forever, and that her few remaining years would be but years of waiting for the end. At other times she would brighten, and repeat what Brandon had told her about New Spain; how fortune's door was open there to those who chose to come, and how he, the best and bravest of them all, would surely win glory and fortune, and then return to buy her from her brother Henry with millions of pounds of yellow gold. Ah, she would wait! She would wait! Like Bayard she placed her ransom at a high figure, and honestly thought herself worth it. And so she was—to Brandon, or rather had been. But at this particular time the market was down, as you will shortly hear.

So Mary remained at Windsor and grieved and wept and dreamed, and longed that she might see across the miles of billowy ocean to her love! her love! her love! Meanwhile Brandon had his trial in secret down in London, and had been condemned to be hanged, drawn and quartered for having saved to her more than life itself.

Put not your trust in princesses.

CHAPTER X.

Such was the state of affairs when I returned from France.

How I hated myself because I had not faced the king's displeasure and had not refused to go until Brandon was safely out of his trouble. It was hard for me to believe that I had left such a matter to two foolish girls, one of them as changeable as the wind and the other completely under her control. I could but think of the difference between myself and Brandon, and well knew, had I been in his place, he would have liberated me or stormed the very walls of London single-handed and alone.

When I learned that Brandon had been in that dungeon all that long month, I felt that it would surely kill him, and my self-accusation was so strong and bitter, and my mental pain so great, that I resolved if my friend died, either by disease contracted in the dungeon or by execution of his sentence, that I would kill myself. But that is a matter much easier sincerely to resolve upon than to execute when the time comes.

Next to myself, I condemned those wretched girls for leaving Brandon to perish—Brandon, to whom they both owed so much. It turned me against all womankind for their selfish sake.

I did not dally this time. I trusted to no Lady Jane or Lady Mary. I determined to go to the king at once and tell him all. I did not care if the wretched Mary and Jane both had to marry the French king, or the devil himself. I did not care if they and all the host of their perfidious sisterhood went to the nether side of the universe, there to remain forever. I would retrieve my fault, in so far as it was retrievable, and save Brandon, who was worth them all put together. I would tell Mary and Jane what I thought of them, and that should end matters between us. I felt as I did toward them not only because of their treatment of Brandon but because they had made me guilty of a grievous fault, for which I should never, so long as I lived, forgive myself. I determined to go to the king, and go I did within five minutes of the time I heard that Brandon was yet in prison.

I found the king sitting alone at public dinner, and, of course, was denied speech with him. I was in no humor to be balked, so I thrust aside the fright, for I was wild with grief, rage

When Knighthood Was in Flower

BY EDWIN CASKODEN

guard, and much to everybody's and despair, and showed it in every feature, rushed to the king and fell upon my knees at his feet.

"Justice, O king!" I cried, and all the courtiers heard. "Justice, O king! for the worst used man and the bravest, truest soul that ever lived and suffered." Here the tears began to stream down my face and my voice choked in my throat. "Charles Brandon, your majesty's one-time friend, lies in a lothsome, rayless dungeon, condemned to death, as your majesty may know, for the killing of two men in Billingsgate ward. I will tell you all: I should be thrust out from the society of decent men for not having told you before I left for France, but I trusted it to another who has proved false. I will tell you all. Your sister, the Lady Mary, and Lady Jane Bolingbroke were returning alone, after dark, from a visit to the soothsayer Grouche, of whom your majesty has heard. I had been notified of the Lady Mary's intended visit to him, although she had enjoined absolute secrecy upon my informant. I could not go, being detained upon your majesty's service—it was the night of the ball to the ambassadors—and I asked Brandon to follow them, which he did, without the knowledge of the princess. Upon returning, the ladies were attacked by four ruffians, and would have met with worse than death had not the bravest heart and the best sword in England defended them victoriously against such fearful odds. He left them at Bridewell without hurt or injury, though covered with wounds himself. This man is condemned to be hanged, drawn and quartered, but I know not your majesty's heart if he be not at once reprieved and richly rewarded. Think, my king, he saved the royal honor of your sister, who is so dear to you, and has suffered so terribly for his loyalty and bravery. The day I left so hurriedly for France the Lady Mary promised she would tell you all and liberate this man who had so nobly served her; but she is a woman and born to betray.

The king laughed a little at my vehemence.

"What is this you are telling me, Sir Edwin? I know of Brandon's death sentence, but as much as I regret it, I can not interfere with the justice of our good people of London for the murder of two knights on the streets. If Brandon committed such a crime, and, I understand he does not deny it, I can not help him, however much I should like to do so. But this nonsense about my sister! It can not be true. It must be trumped up out of your love in order to save your friend. Have a care, good master, how you say such a thing. If it were true, would not Brandon have told it at his trial?"

"It is as true as that God lives, my king! If the Lady Mary and Lady Jane do not bear me out in every word I have said, let my life pay the forfeit. He would not tell of the great reason for killing the men, fearing to compromise the honor of those whom he had saved, for, as your majesty is aware, persons sometimes go to Grouche's for purposes other than to listen to his soothsaying. Not in this case, God knows, but there are slanderous tongues, and Brandon was willing to die with closed lips, rather than set them wagging against one so dear to you. It seems that these ladies, who owe so much to him, are also willing that he should die rather than themselves bear the consequences of their own folly. Do not delay, I beseech you majesty. Eat not another morsel, I pray you, until this brave man, who has so truly served you, be taken from his prison and freed from his sentence of death. Come, come, my king! this moment, and all that I have, my wealth, my life, my honor, are yours for all time."

The king remained a moment in thought with knife in hand.

"Caskoden, I have never detected you in a lie in all these years I have known you; you are not very large in body, but your honor is great enough to stock a Goliath. I believe you are telling the truth. I will go at once to liberate Brandon; and that little hussy, my sister, shall go to France and enjoy life as best she can with her old beauty, King Louis. I know of no greater punishment to inflict upon her. This determines me; she shall coax me out of it no longer. Sir Thomas Brandon, have my horses ready, and I will go to the lord mayor, then to my lord bishop of Lincoln and arrange to close this French treaty at once. Let everybody know that the Princess Mary will, within the month, be queen of France." This was said to the courtiers, and was all over London before night.

I followed closely in the wake of the king, though uninvited, for I had determined to trust no one, not even his majesty, until Brandon should be free. Henry had said he would go first to the lord mayor and then to Wolsey, but after we crossed the bridge he passed down Lower Thames street and turned up Fish street hill into Grace Church street on toward Bishopgate. He said he would stop at Mistress Cornwallis's and have a pudding; and then on to Wolsey, who at that time lodged in a house near the wall beyond Bishopgate.

I well knew that if the king once reached Wolsey's, it would be wine and quoits and other games, interspersed now and then with a little blustering talk on statecraft, for the rest of the day. Then the good bishop would have in a few pretty London women and a dance would follow with wine and cards and dice, and Henry would spend the night at Wolsey's, and Brandon lie another night in the mire of his Newgate dungeon.

These were bold words, but I did not care one jittle farthing whether they pleased him or not. The king stared at me and said:

"Caskoden, you are a perfect fiste at my heels. But you are right; I had forgotten my errand. You disturbed my dinner, and my stomach called



"I rode up to the king and with uncovered head addressed him."

loudly for one of Mistress Cornwallis' puddings; but yau are right to stick to me. What a friend you are in case of need. Would I had one like you."

"Your majesty has two of whom I know; one riding humbly by your royal side, and the other lying in the worst dungeon in christendom."

With this the king wheeled about and started west toward Guildhall.

Oh, how I hated Henry for that cold blooded, selfish forgetfulness worse than crime; and how I hoped the Blessed Virgin would forget him in time to come, and leave his soul an extra thousand years in purging flames, just to show him how it goes to be forgotten—in hell.

To the lord mayor we accordingly went without further delay. He was only too glad to liberate Brandon when he heard my story, which the king had ordered me to repeat. The only hesitancy was from a doubt of its truth.

The lord mayor was kind enough to say that he felt little doubt of my word, but that friendship would often drive a man to any extremity, even falsehood, to save a friend.

Then I offered to go into custody myself and pay the penalty, death, for helping a convicted felon to escape, if I told not the truth, to be confirmed or denied by the princess and her first lady in waiting. I knew Jane and was willing to risk her truthfulness without a doubt—it was so pronounced as to be troublesome at times—and as to Mary—well, I had no doubt of her either. If she would but stop to think out the right she was sure to do it.

I have often wondered how much of the general fund of evil in this world comes from thoughtlessnes. Cultivate thought and you make virtue—I believe. But this is no time to philosophize.

My offer was satisfactory, for what more can a man do than pledge his life for his friend? We have scripture for that, or something like it.

The lord mayor did not require my proffered pledge, but readily consented that the king should write an order for Brandon's pardon and release. This was done at once, and we, that is, I, together with a sheriff's sergeant and his four yeomen, hastened to Newgate, while Henry went over to Wolsey's to settle Mary's fate.

Brandon was brought up with chains and manacles at his ankles and wrists. When he entered the room and saw me, he exclaimed: "Oh! Caskoden, is that you? I thought they had brought me up to hang me, and was glad for the change; but I suppose you would not come to help at that, even if you have left me here to rot; God only knows how long; I have forgotten."

I could not restrain the tears at sight of him.

"Your words are more than just," I said; and, being anxious that he should know at once that my fault had not been so great as it looked, continued hurriedly: "The king sent me to France upon an hour's notice, the day after your arrest. I know only too well I should not have gone without seeing you out of this, but you had enjoined silence upon me, and—and I trusted to the promises of another."

"I thought as much. You are in no way to blame, my friend; all I ask is that you never mention the subject again."

"My friend!" Ah! the words were dear to me as words of love from a sweetheart's lips.

I hardly recognized him, he was so frightfully covered with filth and dirt and creeping things. His hair and beard were unkempt and matted, and his eyes and cheeks were lusterless and sunken; but I will describe him no further. Suffering had well-night done its work, and nothing but the hardihood gathered in his years of camp life and war could have saved him from death. I bathed and reclothed him as well as I could at Newgate, and then took him home to Greenwich in a horse litter, where my man and I thoroughly washed, dressed and sheared the poor fellow and put him to bed.

I resolved to raise heaven and earth, and the other place, too, if necessary, before this should happen. So I rode boldly up to the king, and with uncovered head addressed him: "Your majesty gave me your royal word that you would go to the lord mayor first, and this is the road to my lord bishop of London. In all the years I have known your majesty, both as gallant prince and puissant king, this is the first request I ever proffered, and now I only ask of you to save your own noble honor, and do your duty as man and king."

"Ah! this bed is a foretaste of paradise," he said, as he lay upon the mattress.

It was a pitiful sight, and I could hardly refrain from tears. I sent my man to fetch a certain Moor, a learned scholar, though a hated foreigner, who lived just off Cheap and sold small arms, and very soon he was with us. Brandon and I both knew him well, and admired his learning and gentleness, and loved him for his sweet philosophy of life, the leaven of which was charity—a modest little plant too often overshadowed by the rank growth of pompous dogmatism.

The Moor was learned in the healing potions of the east, and insisted, privately, of course, that all the shrines and relics in christendom put together could not cure an ache in a baby's little finger. This, perhaps, was going too far, for there are some relics that have undoubted potency, but in cases where human agency can cure, the people of the east are unquestionably far in advance of us in knowledge of remedies. The Moor at once gave Brandon a soothing drink, which soon put him into a sweet sleep. He then bathed him as he slept, with some strengthening lotion, made certain learned signs, and spoke a few cabalistic words, and, sure enough, so strong were the healing remedies and incantations that the next morning Brandon was another man, though very far from well and strong. The Moor recommended nutritious foods, such as roast beef and generous wine, and, although this advice was contrary to the general belief, which is, with apparent reason, that the evil spirit of disease should be starved and driven out, yet so great was our faith in him that we followed his directions, and in a few days Brandon had almost regained his old-time strength.

I will ask you to go back with me for a moment.

During the week, between Brandon's interview with Mary in the anteroom of the king's bed chamber and the tragedy at Billingsgate, he and I had many conversations about the extraordinary situation in which he found himself.

At one time, I remember, he said: "I was safe enough before that afternoon. I believe I could have gone away and forgotten her eventually, but our mutual avowal seems to have dazed me and paralyzed every power for effort. I sometimes feel helpless, and, although I have succeeded in keeping away from her since then, often find myself wavering in my determination to leave England. That was what I feared if I allowed the matter to go to the point of being sure of her love. I only wanted it before, and very easily made myself believe it was impossible, and not for me. But now that I know she loves me it is like holding my breath to live without her. I feel every instant that I can hold it no longer. I know only too well that if I but see her face once more I shall breathe. She is the very breath of life for me. She is mine by the gift of God. Curses upon those who keep us apart." Then, musingly and half interrgatively: "She certainly does love me. She could not have treated me as she did unless her love was so strong that she could not resist it."

"Let no doubt of that trouble you," I answered. "A woman like Mary can not treat two men as she treated you. Many a woman may love, or think she loves many times, but there is only one man who receives the full measure of her best. Other women, again, have nothing to give but their best, and when they have once given that, they have given all. Unless I have known her in vain, Mary, with all her faults, is such a woman. Again I say, let no doubt of that trouble you."

Brandon answered with a sad little smile from the midst of his reverie. "It is really not so much the doubt as the certainty of it that troubles me." Then, starting to his feet: "If I thought she had lied to me; if I thought she could wantonly lead me on to suffer so for her, I would kill her, so help me God."

"Do not think that. Whatever her faults, and she has enough, there is no man on earth for her but you. Her love has come to her through a struggle against it, because it was her master. That is the strongest and best, in fact the only, love; worth all the self-made passions in the world."

"Yes, I believe it. I know she has faults; even my partiality can not blind me to them, but she is as pure and chaste as a child, and as gentle, strong and true as—as—a woman. I can put it no stronger. She has these, her redeeming virtues, along with her beauty, from her plebian grandmother, Elizabeth Woodville, who, with them, won a royal husband and elevated herself to the throne beside the chivalrous Edward. This sweet plebian heritage bubbles up in the heart of Mary, and will not down, but neutralizes the royal poison in her veins and makes a goddess of her." Then with a sigh: "But if her faults were a thousand times as many, and if each fault were a thousand times as great, her beauty would atone for all. Such beauty as hers can afford to have faults. Look at Helen and Cleopatra, and Agnes Sorel. Did their faults make them less attractive? Beauty covereth more sins than charity—and maketh more grief than pestilence."

After his month in Newgate with the hangman's noose about his neck, all because of Mary's cruel neglect, I wondered if her beauty would so easily atone for her faults. I may as well tell you that he changed his mind concerning this particular doctrine of atonement.

(To be continued in the next issue.)

Cancealing His Identity.

Yon Yonson, a citizen of a Wisconsin town, rushed into the village store one night just before closing time. Yon was hatless, coatless and breathless, and as he dashed in he dropped on his knees and begged the storekeeper: "Carl, Carl, hide me, hide me! The sheriff's after me!"

"I've no place to hide you here, Yon," answered the storekeeper.

"Yon moost, you moost!" screamed Yon.

"Crawl into that gunnysack then."

He was no more than hidden when in ran the sheriff.

"Seen Yon?" he questioned.

"Don't see him here," replied the other, truthfully.

But the sheriff wasn't satisfied and he went nosing around. Soon he spotted the gunnysack.

"What's in here?"

"Oh, just some old harnesses and sleighbells."

The sheriff gave the sack an awful kick.

"Yingle, yingle, yingle," moaned Yon.

Well Named.

"What's your dog's name, sonny?"

"Ginger."

"Does Ginger bite?"

"Naw! Ginger snaps."—Boston Transcript.



Kitchen

Of More Importance Than Parlor?

By LAURA PEARSON FELTON.

One day last summer I was invited to spend the afternoon at the home of one of my country friends. This friend of mine lives on a large farm and has the wherewith to buy all the necessities of life and a few of the luxuries.

When I called I was ushered into the front room of the house, or what proved to be the parlor. The furniture was very elegant, the couch leather upholstered, as were the chairs. The rug was heavy and expensive, although not made for service. The pillows, carefully placed on the couch, plainly were not intended to lay one's head on. They had that "just so" appearance, the same as the other furnishings of the unattractive room. The air was heavy with the odor of moth balls.

My friend very proudly ushered me into this sanctuary of hers and when she had laid my hat away she sat gingerly on the edge of one of the fancy chairs and presently excused herself for a moment to attend to a pie she had in the oven for supper.

I sat for a few moments looking about at the signs of prosperity, but lack of comfort, then followed the direction my friend had taken.

When I reached the kitchen I was given a surprise. Here there was no sign of prosperity. The stove was old, the table had a worn oil cloth on it and the pots and pans being used were so battered they were positively unsanitary.

My friend had lost her air of proud possession here and was just plain Mollie of old times. She was profuse in apologies for the bare kitchen floor and the worn oil cloth—"just hadn't gotten around to buy new," she said. When I asked her if she didn't think a piece of zinc would be more serviceable as a table cover, she was quite surprised and said: "But the oil cloth is so much cheaper."

I tried to make her see that in the long run the zinc was much cheaper and by all odds more desirable. All the time I could not keep from comparing the ragged oil cloth and the worn, bare floor with the marble topped table and the elegant rug in the parlor.

This little, hard-working woman spent the better part of from 8 to 12 hours a day in her kitchen, and perhaps that many hours a month in her parlor. In the parlor were soft cushions and easy chairs. In the kitchen so much unnecessary work was caused by the lack of convenient kitchen furnishings that the owner of the parlor finery seldom had time to rest in the easy chairs or to enjoy the soft rug. Anyway, those parlor things were not bought for use—merely for show.

How much more sensible if the little country friend had taken the money and furnished her kitchen, first with good linoleum, then bought one of the substantial cabinets now provided to save steps, and taken a little pains to make the kitchen—her workshop—light and attractive, and then, with what she had left out of the sum she desired to spend, furnished the parlor.

If I had it to do, I would sweep those moth balls out from under the couch, clear away all the fine chairs and fancy cushions and the fantastic rug. Then I would buy a serviceable, attractive rug, good, solid yet comfortable chairs, a restful lounge, Swiss curtains and some real pillows with washable coverings. Then I would make it understood that these things were to be used by any member of my household as long as they showed they appreciated them enough to take care of them.

Besides the things I have enumerated, I would want some simple, carefully selected pictures on the walls, a bookcase filled with wholesome, interesting and instructive books, a plain library table where one could write or read. I would want the farm papers, newspapers and magazines kept there, too. I would want that best room of mine a place to rest in, because I would have the kitchen so arranged that I would have some time to rest.

The Farmer wishes some of you farm women would write and tell just the kind of a kitchen you would like the best. What do you think of the parlor? Have you one?



He sendeth the spring into the valleys, which run among the hills.

They give drink to every beast of the field: the wild asses quench their thirst.

By them shall the fowls of the heaven have their habitation, which sing among the branches.

He watereth the hills from his chambers: the earth is satisfied with the fruit of thy works.

He causeth the grass to grow for the cattle, and herb for the service of man: that he may bring forth food out of the earth.

Housewives

How Uncle Sam Can Help Them

By ELIZABETH QUAKER.

When speaking of our government, we are apt to grow very enthusiastic and feel a natural pride, yet how few derive any benefit from it aside from the general protection it offers.

Uncle Sam is most generous, both with painstaking efforts and money, in his desire to help the farmwives toward greater efficiency. Now, it seems only fair that they should show their appreciation by taking their problems to him. As did my wise neighbor, who found she had quite a surplus of certain vegetables in her garden, one season. All her previous efforts to preserve this sort of goods had met with "flat failure." So she wrote to the agricultural department about it and soon received Farmer's Bulletin No. 359, Canning Vegetables in the Home. Each season since she is able to include several cans of these vegetables among her winter supplies.

"But I have no particular problem," I hear some one say. Well, then how about your hobby? I overheard an energetic housekeeper remark to a group of neighbor women, the other day; 'I'd rather be a good meat cook than anything else."

Perhaps, your pet ambition is to be able to make a perfect loaf of bread, or grow a beautiful flower garden, or are you anxious to earn a little extra spending money by raising herbs? These and almost numberless other topics are treated by scientists and experts in these little pamplets, which the government prints and you may have a copy for the asking if you state which ones you desire and address, Department of Agriculture, Washington, D. C.

If you do not already have Bulletin No. 359 mentioned above, let me advise you to add it to your next list when sending. It is a practical treatise. Being in terms of the everyday farm wife, not assuming that we all have up-to-date canning outfits.

Then there is the extension work carried on through the state agricultural colleges. If you are real ambitious you may go so far as to earn the B. S. degree right in your own home, by means of a correspondence course. The Pullman Agricultural college offers such a course, I believe.

Some eastern universities have issued free reading courses for the farm home for the benefit of those women living within the state.

Heretofore, we might drift along "any old way," but now we must lay hold and pull or get left behind.

Purple Carnations.

A department of the New Jersey agricultural experiment station has recently succeeded in producing purple carnations.

LIKE MOTHER'S TOOLS.

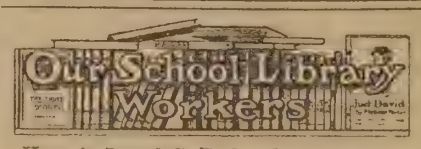
Toys That Are Helpful to Child.

By ALVARA P. WILLIAMS.

A friend with three little children complains that her worst trouble is in making her oldest understand the difference between the child's own property and the grown-ups' things. "She treats everything in the house as if she had a right to use it, and every one else must wait for her," the mother explained. I remember this same tendency on the part of some children in school, and then I used to trace it to homes where the child had nothing it could call its own. You can nearly always tell whether a child has a room of its own and is taught to care for it, by the consideration he shows for other people's rooms everywhere. Why shouldn't this be true of smaller things?

With this in mind, I have watched children who have artificial toys, and children who have toys which are miniatures of mother's household tools, and

(Continued on following page.)



Here is Loyal C. R. Snyder, the young man who has distinguished himself as the champion school library worker of the Pacific northwest. Loyal is a pupil of White Swan school, White Swan, Wash. Just see what a wide-awake chap he is and then judge for yourself how high he stands in the opinion of the superintendent of White Swan public schools, C. A. Payne. "Loyal is 10 years old," says Mr. Payne, "is in the seventh grade and is a very bright boy. He is a hustler and makes good at anything he attempts." Here is Loyal's record as a subscription-getter: Eight subscriptions in a little over two hours—then four more in the next day or so, making 12 altogether. He stands at the very top, and though he has some pretty stiff competition for first place, we expect great things of him and believe he will be able to lead the whole field till the close of the season.



From Deer Creek school Valley, Wash., comes the following cheery little letter written by Miss Alta Cooney, teacher:

"Although we have a small school," says Miss Cooney, "and a sparsely settled district, nevertheless, we met with splendid success in obtaining subscriptions. I am enclosing a money order for $10.50, amount received for eight subscriptions."

Miss Cooney may have a small school, but her pupils are certainly the kind of boys and girls who believe that an ounce of energy is worth a ton of diffidence. Likewise, although Deer Creek school district is sparsely settled the folks who live there are to be commended for their prompt recognition of the educational value of a good school library and their equally prompt discernment of the fact that the Washington Farmer is an exceptionally worth while farm paper. We want Miss Cooney, her pupils and our subscribers in Deer Creek district to know that we admire and appreciate the fine spirit of the team work, which is easily read between the lines of Miss Cooney's letter.

When we showed the book man the letter written by Miss Georgia Mooney, teacher of Wolf Lodge school, Coeur d' Alene, Idaho, a pleased smile spread over his face. He chuckled. His eyes crinkled up at the corners and twinkled with satisfaction. Then he said in his droll way: "The Wolf Lodge hustlers must be hunting in packs."

We think that each pupil in Wolf Lodge school is a "whole pack by himself," especially as Evelyn Ahlskog brought in $8 in subscriptions all by herself.

Altogether, Miss Mooney reports $22 in subscriptions taken in a short time. "The pupils have worked faithfully" she tells us. Likewise, she says she will have more subscriptions to send in later. Let it be known by all who read this that the young ladies and young gentlemen of Wolf Creek school are a most capable lot of workers and lead all the schools of Idaho in what they have accomplished.

New schools to take up library work for the Farmer this week:

Highland school, Klickitat county, Wash., Miss Alice Chamberlain, teacher.

Sunset school, Whitman county, Wash., L. J. Babcock, teacher.

Silver Creek school, Stevens county, Wash., L. E. Decker, teacher.

Dennison school, Spokane county, Wash., Miss Nell M. Carr, teacher.

Honor Roll.

Chewelah school—Dorothy Rausch.

White Swan school—Loyal C. R. Snyder.

Deer Creek school—Eva Bond, Esther Eastman, Ellen Olsen.

Parker Bottom school—Lucinda Pagott.

Saturday, March 10, Library Day

On Saturday, March 10, the boys and girls of all these schools will strive to add more good books to their school libraries.

It will be a big day and a busy day—a day filled with earnest, ambitious effort in increase the growing wealth of good literature that the combined work of teachers, pupils, parents and other good friends of the Farmer have been adding to the school libraries of the state.

On Library day we want every one of our school workers to get at least one subscription to the Farmer—one three-year subscription if possible for that will mean one more good book for the school library.

We respectfully ask the earnest help and cooperation of teachers, parents and friends in making Library day stand out as the red letter day of the year for adding books to school libraries. Tell everybody about Library day. Tell them that on Library day hundreds of excellent books will be won by schools throughout the state and that you want your school to get its full share.

The pupils of any school in the state can take subscriptions for the Farmer on this day for the benefit of their school library at the rate of $1 for one year or $1.50 for three years and receive books in proportion to the amount of subscriptions sent in.

Let's all put our hearts into making Saturday, March 10, a great day to which every one of us can look back when it has passed and say: "I helped make Library day a big success."

Fruits

Carrying Over Till Next Year

By LISSIE C. FARMER.

This is the time of year when most housekeepers will be examining their stocks of preserves, jellies, jams and canned fruits to see what stocks they will carry over until next winter, and unless glassed fruits have the appearance of being in excellent condition—juice clear and transparent, no swell heads, bubbles, mold or mildew—it is better to open the jars and use the fruit at once or do it over than to take the risk of its spoiling during the coming warm summer weather.

Fruit that is in fairly good condition may be simply heated over in the jars by removing the tops and rubber bands, setting them on the stove in vessels of cold water adding some sugar to fruit and bringing the water to the boiling point, and when thoroughly heated through, resealing.

Or the fruit may be made over into preserves. First remove all specks or mold from the fruit, drain off the juice and add an equal amount of sugar and boil together for at least twenty minutes. Pour this juice over the fruit and stand the kettle containing it on the back of the stove and let it cook slowly for several hours. Wash the jars, tops and rubber bands and reheat them in clean water. Add spices and lemon juice to the preserves to suit the taste and when both jars and preserves are hot, refill the jars.

Spiced fruit may be made, also, in which case vinegar is added to the sugar and fruit juice in a sufficient amount to give the desired tartness, and the amount of spices used is about double what is required for the fruit preserved. A little ginger root may be added if liked and more lemon juice.

Perhaps the easiest way to do over the fruit is to make it into a jam or butter, two methods of doing fruit, the only difference between which is that butters are cooked longer than jams and are stirred and thus aerated while cooking, and so are brought to a browner, finer, smoother consistency than jam. To make over fruit into jam or butter, empty both fruit and juice into a kettle, add sugar in the proportion of about one cup of sugar to two cups fruit and juice if the fruit has been moderately sweetened; more or less sugar, according to the tartness of the fruit. Cook until the consistency desired and reseal in the cleaned and re-heated jars tops and bands.

It is usually better in doing over fruit to put it in different jars from those from which it has just been emptied so that the emptied jars may have a chance to air well before being again used. It is usually better too, to use new rubber bands.

Butters, jams and preserves will keep for some time without being sealed up, but are apt to form a scum or mold on the top so unless one expects to use them up very soon, it is generally better to seal them up again.

Jellies may be made over in several different ways if they have formed heavy layers of mold on top and so look as if they would not keep through the summer heat.

The top mold should all be skimmed off until a place is reached where there is not the least taste of mold. Then the glasses can all be emptied into a kettle and boiled down into a syrup which may be used in numberless ways through the coming season. It may be added in small quantities to jello or gelatine and molded again into jellies for desserts; it may be mixed with ice cream for serving; it may be used as a sauce for all kinds of hot or cold puddings, or a syrup for the breakfast hot cakes; it can be combined with fresh fruit juices for cooling summer drinks; it may be stirred into fruit cakes to add flavor; it may be added to the juice for making jam, preserves, and butters. If it is to be kept any length of time, it should be sealed up again in bottles or jars.

FLOWERS BRING CHEER.

As Well as to Add to Value of Home.

By MRS. B. H. JONES, Forest Grove, Ore.

One winter day my small daughter sat thinking. A radiant smile came over her little face. "Oh, muvver," she exclaimed, "I thinked a rose—such a pretty rose!"

It came to me as a sweet sermon. No matter how barren our surroundings, we may all "think roses"—yes—and hand them to others; thoughts of hope, of joy, of peace, charity, love, appreciation and "whatsoever things are lovely." Aside from its spiritual significance, we may "think" into existence real blossoms. How a flower garden cheers all who pass a farm or home, besides adding many dollars to the value of the place!

To me, flowers bring sweet memories and offer a chance to work with God in his sunshine that I could not wish to lose. As soon as possible every year, I send for my favorite catalogues (most of them cost only a postal card), and then comes the fun of choosing my seeds. Of course, John helps plan the vegetable garden, but for my flower beds I have my own sweet way. Being a busy mother, I choose those plants which have few enemies and which need least work. I must have sweet peas, but find them a care, so this year I'll have only a short row near the kitchen porch, where they can be easily watched and the blossoms picked. For a border last year I chose yellow flowers. Dwarf sunflowers made a fine background for annual chrysanthemums and California poppies. This year I shall try dwarf-double sunflowers and calliopsis back of the poppies, with African daisies in front of them. These flowers bloom profusely and are little care. Cosmos makes a fine border and hollyhocks are always lovely, however, they are apt to have enemies—black caterpillars and brown rust.

For planting near the house nothing is prettier than nasturtiums, four-o'-clocks, and on the north aquilegia or pansies. The long-spurred aquilegia is very charming. It needs two years to bloom, as does the foxglove.

This year I shall try hardy larkspur hybrids (perennials which bloom the first season) and schizanthus, or butterfly flower. This little flower should have space to develop its beautiful leaves and blossoms. It is so easily grown and so beautiful. Another favorite with me is phlox drummondi. I intend to border my paths with it, and also plant it in the bull-bed.

LIKE MOTHER'S TOOLS

Toys That Are Helpful to Child.

(Continued from preceding page.)

it seems as if almost universally the same principle holds good. A child who has dozens of mechanical toys and expects to have everything in the world cater to his amusement is careful of nothing. But a child who has toys which are exact reproductions of grown-up tools has the same interest in them and desire to keep them in good condition that he sees among his elders.

To quote my own experience, my little girl bothered me all the time by taking my broom, dust pan, dishes, spoons, etc., and, of course, they were too large for her to handle. Now she has a broom of her own, a little flatiron, a teakettle, and no longer troubles my tools. She is very careful of "my broom," "my iron," and has a place for them. Aside from the fact that she is copying all my actions about the house, she is learning the difference between her possessions and those of other people, and is learning to take care of her own things. Of course, it is not all as easy as it sounds, but she has twice as much respect for other peoples' property as she did before she had any of her own.

Household Hints.

When meat soup is ordered for a convalescent, prepare it the day before and skim the fat off.

Put a little baking soda into the pot where the spinach is cooking, and you will find that it will retain its green color.

You will find that your irons won't stick if you prepare your hot starch with soapy water. This also gives a nice shine to the linens.

To have fudge of a creamy texture, place the pan in cold water immediately on taking from the fire and stir—not beat—the mixture with a silver spoon.

A teaspoonful of lemon juice added to a quart of water in which rice is to be boiled will make the rice very white and will keep the grains separate when boiled.



Europe's many tongues and consequent misunderstandings.

The Fruits of Understanding

Throughout the vast area of this country prevails a common tongue. The whole of Europe hardly exceeds our territory, yet Europe has more than a score of nationalities and many different languages.

In the United States the telephone, as exemplified by Bell System, renders a matchless service in its mastery of distance and in encouraging the use of a universal language. This accomplishment is in spite of the great influx of population from every country in the world.

In Europe the independent countries, separated by barriers of language, and lacking efficient telephone service, suffer from inadequate facilities for inter-communication.

We now talk from the Atlantic Coast to the Pacific, and eliminate more than three thousand miles. In Europe, contending with a babel of voices and unrelated telephone systems, a bare quarter of that distance has been bridged with difficulty.

The ideal of the Bell System has been day by day to extend its service in the interest of all telephone users. Its efforts have resulted in providing the facilities to unite cities and rural districts in true American democracy.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

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"Think of it! The price hasn't gone up for these fine Clothes!"

Yes, think of it! It will pay *you* to look into this, see the fine clothes, try them on, and then be astonished that such fine style and sturdy wearing qualities can still be bought for $17! A great demand centered on this suit of one nationally-known price has enabled the makers to effect great economies and keep the price $17, as before. Get *your* suit today!

You know the price *before* you go into the store—$17 always, everywhere. Watch your local newspapers for advertisements of the nearest Styleplus Store. Look for Styleplus in the Store Window. Look for the Styleplus Label in the coat collar. If there should not be a Styleplus Store in your town, ask your favorite dealer to order a Styleplus suit or overcoat for you.

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Hustle

Good Thing to Do While You Wait

What is the quotation or what are the words which have helped you in the journey of life?

Is it a phrase from some famous author, or was it the words from some neighborly soul who helped you over a hard place and left you the invaluable legacy of a life motto?

What are your favorite motto, your favorite quotation, your favorite words?

Send them to the editor of The Farmer and let those words help another which have helped you.

To the Editor: Here is an amendment to an old quotation which has greatly helped me, and I hope that some one else may profit by it. It has kept me in mind that one must work for what he gets, and it has kept me working, always to good results, ever since I told some one, "Have patience, things will come to him who waits." He answered, "Provided he hustles while he waits."

DAVID B. COOK.

Bonanza Bar, Idaho.

Recipes

A Few Dishes You May Try

Chinese Peanut Dumplings.

Make a rich pastry as for American pie and roll out and cut into little squares. One each square of dough lay a few roasted and shelled peanuts, fold over the dough and carefully drop each dumpling into boiling water. Cover the pot and let them cook 15 or 20 minutes. Serve with sugar sauce. It would seem to need the native touch to keep these dumplings in their original shape. To be sure of success as made by an alien hand, they may be tied in little cloths as would be done in making apple dumplings.—Kansas City Star.

Sour Milk Doughnuts.

Sift into a bowl four cups of flour, a teaspoon and a half of soda and the same amount of cream of tartar, add a half teaspoonful each of cinnamon and nutmeg. Rub in lightly with the tips of the fingers a half tablespoonful of sour milk, then add a cup of sugar, a cup of sour milk and two well beaten eggs. Stir into a soft dough, turn out on a will floured board, pat and roll into a sheet about one-quarter of an inch in thickness. Cut in any shape desired, then fry in deep fat. It is necessary to remember that doughnuts require longer cooking than fish balls or croquettes, and therefore they must not be allowed to brown too quickly.

A Crochet-Covered Pouch.



This pouch is of soft gray suede, the lower part covered with bright colored striped crochet. The point is finished with a heavy colored tassel and little silver rings are set round the top, through which a silver chain is run.

Patterns

1997—Child's dress. Cut in five sizes: 6 months, 1, 2, 3 and 4 years. It requires two and one-half yards of 36-inch material for a 2-year size. Price, 10 cents.

1996—Girls' one-piece dress. Cut in five sizes: 4, 6, 8, 10 and 12 years. It requires three and one-half yards of 36-inch material for a 6-year size. Price, 10 cents.

1995—Ladies' four-piece skirt (in raised waistline). Cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires three and three-eighths yards of 44-inch material for a 24-inch size. The skirt measures about three yards at the foot. Price, 10 cents.



2005—Ladies' shirtwaist, with or without yoke. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires three and three-eighths yards of 36-inch material for a 36-inch size. Price, 10 cents.

1822—Ladies' house or porch dress. Cut in seven sizes: 32, 34, 36, 38, 40, 42 and 44 inches bust measure. It requires five and one-half yards of 44-inch material for a 36-inch size. The skirt measures about three and one-quarter yards at the foot. Price, 10 cents.

1994-1981—Ladies' costume. Waist 1994 cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 1981 cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires eight and three-quarter yards of double-width material for a 36-inch size, for the entire dress. The skirt measures about two and seven-eighths yards at the foot. Two separate patterns, 10 cents for each pattern.

Fill in this coupon and mail to Pattern Dept.
THE PACIFIC NORTHWEST FARM TRIO,
36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Pattern No. ..... Size.....

Pattern No. ..... Size.....

Pattern No. ..... Size.....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No.....

BE SURE TO GIVE NUMBER AND SIZE.

Deviled Spaghetti.

Boil carefully for 20 minutes four ounces spaghetti; drain and throw into cold water for 15 minutes; drain again and chop fine. Put one tablespoonful of butter and one of flour into a saucepan, add half a pint of milk; stir constantly until boiling; add the spaghetti, a teaspoonful of salt, a dash of pepper, a few drops of onion juice, a tablespoonful of parsley and three hardboiled eggs chopped fine. Put this into individual dishes, cover lightly with bread crumbs and brown quickly in a hot oven. Serve with a tablespoonful of catsup in the center of each.

Fruit Fritters.

Beat yolks of two eggs slightly, add gradually a half cupful of cold water and beat until light and foamy. Add one-half cupful of milk and mix well. Make a hole in the center of one cupful and a half of flour to which has been added one-half teaspoonful of salt; add liuid, slowly stirring all the time; beat until smooth, then add carefully one heaping teaspoonful of baking powder and the whites of eggs beaten stiff. Fry in hot fat until brown.

Jess Courtright, Sultan, Wash.: "We enjoy the Washington Farmer very much and find it very interesting."

TO OUR— POLICY-HOLDERS

Forty thousand policy holders now enjoy the benefits and advantages of insurance in the Northwestern Mutual Fire Association—"Your Home Company."

For several years the Northwestern Mutual has written more fire insurance than any other company doing business in Washington—in fact right now it is doubtful if any other two companies combined equal it.

This splendid development is the result of your loyalty and untiring zeal in cooperating with us to reduce the fire waste and to bring down the cost of insurance.

Every dollar you save in fire prevention is money in your own pocket and money in the pockets of your fellow policy-holders. But so large and so strong is the Northwestern Mutual that its policies are non-assessable—yet you get all the savings that mutual insurance affords. Already policy-holders in the Northwestern Mutual are richer by cash savings to the amount of $2,250,000.

Keep up the good work!

Help others to take advantage of the Northwestern service—which means fewer fires, greater protection.

Explain to neighbors the benefits of our policies. Outline the especially desirable features of the farm policies—the low rates on barns and stock; the fact that your work animals are protected wherever they may be, on the farm or in town; that even your family's clothing may be protected, at home or away from home.

And above all—

Don't forget the automobile. Our automobile insurance department can save you and your friends money.

Drop us a postal, and we will put you in touch with the agent nearest your farm.

F. J. MARTIN, President

Northwestern Mutual Fire Association

General Offices, 208 Columbia St., Seattle. Spokane Offices,



My Dear Children:

Oh, there were so many letters this time. Last time I thought there could not be more, but you have seen the list we have of letters waiting to be printed, so many dear ones, too. They will be printed in their turn.

There were letters telling us of all kinds of good things, kind things and pleasant things; there were some which told of trouble cheerfully borne, and to those and to all our dear little ones in trouble we send our sympathy and love.

Many of our dear little ones forget, and are not very careful with their letters. Many ask how to win a prize. Many ask Aunt Nellie to write them personally. This is impossible, and our nephews and nieces must be content for the present with my one letter to you all.

To compete for a prize, write on one or more of the subjects given below for March and April, or on any other subject you choose, including those given for previous months; on one side of the paper only; sign your name and address plainly; watch your penmanship and spelling and see that your letter is neat. You must write your own letters.

I see much improvement in the letters. Those who have written several letters are writing better. This encourages me and pleases me very much. Nothing worth while can be done without trying. Lovingly,

AUNT NELLIE.

PRIZE WINNERS.

Teddie Taylor, Riverside, Wash.

Gladys May Plemon, Burbank, Wash.

Flora B. Ransier, Belmont, Wash.

ROLL OF HONOR.

Elsie Austin, Dayton; Ruth Safe, Republic; Evis Erickson, Lynden; Winnifred Jones, Auburn; Mary France, St. John; Laura Hartley, Waitsburg; Phoebe Reeves, Elma; Ward Rowe, Rochester; Mary Roppert, Winlock; Clara Olsen, Bothell; Exemia Matson, Shelton.

NEW SUBJECTS.

Here are some new subjects on which you may write:

My Country.

My Favorite Book.

How I Earned My First Money.

LETS THE COWS OUT ON SATURDAY MORNING

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My papa takes the Farmer and I read the Corner. I live on a 200-acre farm. We have about 57 chickens. We have five horses. One of them is black. I have a dog and a cat. The dog's name is Buster. The cat's name is Tabbens. It is yellow and white. I am 9 years old and in the fourth grade. I walk two miles to school. Sometimes I ride. I have two brothers and one sister. My brothers' names are Norman and Howard and my sister's name is Inga. She is 12 years old. We have a rooster. It is brown. It is so tame I can catch it when I feed the chickens. There are six in my grade, seven counting myself. I sometimes let the cows out on Saturday morning.—Thelma Satra, R. F. D. 1, box 33, East Stanwood, Wash.

EVALENA IS THE OLDEST GIRL IN HER SCHOOL

Dear Aunt Nellie: I read the cousins' letters and like them very much. I was 14 years old January 16. I have light hair, blue eyes and weigh 102 1-2 pounds and am in the eighth grade. I have four brothers and one sister. My oldest brother is married. He is 22 years old. Cyrus is 20, George is 16 and John is 10. My sister is 8 years old. There are 10 scholars in my school. My teacher's name is John A. Neilan. I have two pets, a dog and a cat. My dog's name is Towser. I am the oldest girl in my school. I have a horse. His name is Pete. He is a dark blue color and is 4 years old. I expect to write to the Children's Corner again soon. There are five scholars in my class. We have a half hour noon.—Evalena Clement, Tampico, Wash.

JUST ONE SLEIGHRIDE AND THAT WAS A FAILURE

Dear Aunt Nellie: I am going to write on the subject "The Worst Day." I am a little girl 9 years old and go to a country school, which is right below a big hill. One day in December it was snowing hard all day and the next morning there was a foot of snow. The boys all brought their sleds and at noon a few of us girls and boys went coasting. Some of the boys stayed at the foot of the hill and were snow balling. One of the boys that was coasting gave me his sled and said I could guide it. So five of us girls got on the sled and started down the hill in full speed. It went so fast that I couldn't see to guide it any more and coasted right into the boys that were snow-balling at the foot of the hill. We coasted right against our teacher and he fell over in the snow. He was up in a minute, brushing the snow from his hair and coat and came right toward me. He took hold of my arm, led me into the schoolhouse and gave me a good shaking. He told me I could not go out of the schoolhouse again that day. All I could do was to watch the children coasting from the window. I told my teacher twice that day that I didn't mean to push him over, but he wouldn't let me go outside. So I had to stay in the schoolhouse like a prisoned bird with nothing to do but to think of only one sleighride, and that a failure, a good shaking and my teacher's fall in the snow, while all the others outside were having a good time. Really, that was the worst day for a happy girl of 9.—Mary Boppert, Winlock, Wash.

ONE DAY IT SEEMED THAT EVERYTHING WENT WRONG

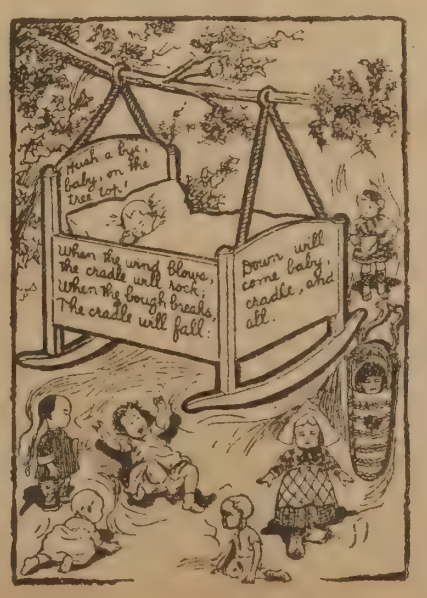
Dear Aunt Nellie: This is the second time I have written to the Children's Corner. My subject is "The Worst Day." When I got up in the morning I was cross because it was raining. I said to mother that it seems like it has to rain all the time. When I was putting on my clothes I tore some of the buttons off my dress. Then I had to get a needle and thread and sew on the buttons. When I got ready to sew I had lost some of the buttons and I got my thread full of knots so I had to let it go. After I had eaten my breakfast I started to wash dishes and I broke some of them. When the clock struck 10 mamma told me to go to the mail box and mail some letters. So off I went. When I got there the mail man had gone past. When I got home I told mother that it looks like everything goes wrong today. And so it went the whole day long. I was glad when night came so I could go to bed and not do any more harm.—Exenia Matson, R. R. 1, box 15, Shelton, Wash.

HOW SHE GOT ACQUAINTED WITH HER CHUM, CALLA

Dear Aunt Nellie: As I have not written for quite a while, I will write now. My subject is, "My Best Friend." My best friends name is Calla Foster. Her birthday is October 12 and she is 11 years old. There are only 86 days between our birthdays. She has light brown hair and dark brown eyes and her face is light. We are the same height and in the sixth grade. She sits in front of me at school and she gave me a nice card for Christmas. We have lots of fun at noon and recess. I shall tell you how we became friends. The first day of school I got acquainted with a little girl who had not lived here very long and she and Calla and her sister Blanch were sitting on the fence and I went up to speak to this girl that I had not known for very long and she told me the names of the girls she was with and asked them to come into the school house to find our seats. Calla took the seat right in front of me and we have those seats still. —Inez Lockwood, Raymond, Wash.

(We hope Calla can see your letter in print so that she will know she has a real friend and perhaps she will remember that day when she was so lonely. Aunt Nellie.)

Hush-a-Bye Baby.



FLORA LEARNED THAT MAMA MEANS JUST WHAT SHE SAYS

Dear Aunt Nellie: The worst day I can remember is when I wanted to go skating with a crowd of children from our school and mama wouldn't let me. I was at school when the children said they would like to go skating on a big lake not far away and the teacher said he would dismiss them at quarter after two. I went to a family that had a phone and called mama up to see if I could go with them. Mama said I didn't have my skates, so I had better not. I said, "If I go after them, could I go?" but she didn't say anything but "Good-by" and hung up. I went back to school and asked the teacher if I could go home and get my skates. He said I could go if I got back in time for school. When I got home mama met me at the door and sent me back to school without my skates and after that I knew when mama said "No," she meant it.—Flora B. Ransier, box 7, Belmont, Wash.

MARY GOT HER LEG HURT WHEN SHE WAS COASTING

Dear Aunt Nellie: I wrote once before and saw my letter in the Corner, so I thought I would write again. I will tell you about my trouble since I wrote before. Last spring I had to stay out of school for appendicitis. I had to stay out a month. Now I have to stay out because I got my leg hurt. We were sleigh-riding at school and I stood in the track and a sled came down the hill and hit my leg. I missed 10 days of school. We had a week's vacation for Christmas. I missed three days before Christmas. Mamma said she thought my leg was cracked. We have 96 chickens and get from 40 to 50 eggs a day. We got 55 eggs one day. We milk four cows. We have nine cows and two colts and five horses. I like to live on the farm. I am in the sixth grade and am 12 years old. My birthday is August 16.—Mary France, R. F. D. 2, St. John, Wash.

LOVES HORSEBACK RIDING MORE THAN ANYTHING ELSE

Dear Aunt Nellie: I wrote to the Corner once before and I got a letter from one of the cousins whose last name is the same as mine. Another friend of mine promised to write to the Corner also. I love to read the letters because they are so interesting. I love horseback riding best of anything and often wish I had a real Shetland pony of my own. I also love to read books of any kind. We are having warmer weather than usual and the meadow larks can be heard singing once in a while, but we have signs of a hard winter. The coyotes are going in packs and are sometimes heard howling at night. Last winter there was three feet of snow. We have lovely times sleighing, but I think everybody is glad when summer comes. I shall be glad to hear from any of the cousins.—Mabel Nicholson, box 331, Bothell, Wash.

MARY LIMMER WALKS TWO MILES TO HER SCHOOL

Dear Aunt Nellie: I am 8 years old and in the third grade. I have three sisters and one brother. The sisters' names are Rosa, Margareta and Frances. My brother's name is Joseph. My father takes the Farmer and I enjoy reading the letters in the Corner. I walk two miles to school. I like to go to school. My sister is in the fifth grade and my brother is in the sixth. We have nine cows, two horses, seven calves, 36 chickens and three pigs. I like to feed the chickens and gather the eggs at night.—Mary Limmer, Winlock, Wash.

SCHOOL SHUT DOWN ON ACCOUNT OF THE MEASLES

Dear Aunt Nellie: My father takes the Farmer and I like to read the children's letters real well. I am in the fifth grade at school. I like to go to school very much. Our school was shut down for a while on account of the measles. I would like to win a prize. I like to help my mother about the house. I have a little brother 9 months old and I like to hold him and play with him. We milk 17 cows. I like to milk. The three cows' names that I milked are Lucile, Blossom and Star. They are very gentle.—Rosey Johnson, Hassan, Wash.

HAD A PIECE TO SPEAK WHEN SHE WENT BACK TO SCHOOL

Dear Aunt Nellie: This is my second letter to you. I am 8 years old and in the third grade. I was 9 years old February 16. I would like to correspond with Mary Johnson because her birthday is the 15th. My youngest brother had the scarlet fever and my other brother is coming down with it and I can not go to school. I miss my teacher and classmates an awful lot. I was working for a diploma for being neither absent nor tardy. Because my brothers are sick I will miss it this year. I got one in the first and second grades. I am learning a piece to speak to my classmates when I go to school again.—Phoebe Reeves, Box 63, Elma, Wash.

GRANDMA GAVE VERA HER VERY FIRST SURPRISE.

Dear Aunt Nellie: This is my first surprise, that I can well remember. I was a little girl about five years of age. One morning our deliveryman brought me a large package, which I could scarcely wait until I got it open. And what do you think I found? I will tell you. A lovely doll almost as large as myself. And a full wardrobe from a nightgown to a set of furs. Grandma sent it to me for Christmas and you can well imagine my surprise. Oh yes, I named her Jennie, which is also Grandma's name.—Vera V. Gensel, Aeneas, Wash.

RUTH'S SCHOOL TEACHER BOARDS AT HER HOUSE

Dear Aunt Nellie: My birthday is July 1. I am 8 years old. This is the first time I have written to the Children's Corner. My mother is dead; my papa is dead, too. Now I have another papa and mother. I have two sisters and three brothers. I have a pony, she is gray. We have 14 head of cattle and six head of horses, three pigs, seven hens, one dog and one cat. I am in the third grade. My teacher's name is Mrs. Manns. She boards at our place.—Ruth Wagner, Gilmer, Wash.

PAPA CUTS HIS GRAIN WITH COMBINED HARVESTER

Dear Aunt Nellie: I am going to tell you about our farm. We have 320 acres of land and we have three cows and 23 head of horses, 10 pigs and about 50 chickens. Papa cuts his grain with a combined harvester. I am 10 years old and am in the fourth grade. I have two miles to go to school. My teacher's name is Miss Bruce. I have two brothers. The oldest is 15 years old and is in high school at Chewelah. My other brother is 4 years old.—Harvey Heath, Mondovi, Wash.

LOTS OF FUN PADDLING THEIR CANOE IN SUMMER

Dear Aunt Nellie: I live on a 40-acre farm and we have 16 head of cattle, two little pigs and about 50 chickens, a sheep and two horses. We have lots of fun swimming in the creek. We have a canoe and paddle out and then tip it over, then we swim out from under it. Then we tip it up again and paddle to shore. In winter we go coasting and skating. We go to the top of the hill and then coast down across the ice.—Pearl Foye, Box 5, R. F. D. 1, Monroe, Wash.

LITTLE BABY BROTHER IS ESTHER'S BEST FRIEND

Dear Aunt Nellie: This is the fourth time I have written to the Children's Corner. I am 12 years of age. For my subjevt I have chosen "My Best Friend." My best friend is my baby brother. He will be one year old March 4th. He is the sweetest little thing I ever saw. His name is Roy Henry. Every time I go to school he waves good-bye to me.—Esther Carsline, Olalla, Wash.

GOLDIE THINKS IT'S FUN TO PLAY HIDE AND SEEK

Dear Aunt Nellie: I enjoy reading the Children's Corner. I am a little girl 7 years old, and I like to play hide and go seek with my sisters and brothers. My little brother has two little pups. One's name is Bruno and the other's name is Bungo. I have a pet cat and he is very tame. I have two sisters and four brothers—Goldie Miller, Box 63, Mayview, Wash.

WALKER MUST BE SURE TO WRITE SOMETIME AGAIN

Dear Aunt Nellie: We have one cow and one horse. I have a pet cat, too. I was 7 years old July 1. I am in the third grade at school. I like to read the Children's Corner. We have taken the Washington Farmer for two years now. I have one sister and no brother. My sister Charlotte was 2 years old October 1, 1916.—Walker Thompkins, Prescott, Wash.

Sidelights

Distributes Them.

"She seems to take great pains with her piano playing."

"Yes, and gives more than she takes."—Browning's Magazine.

As Our Mothers See Us.

Neighbor—"How did that naughty little boy of yours get hurt?"

Ditto—"That good little boy of yours hit him on the head with a brick."—American Boy.

Couldn't Afford a Family.

The old red rooster—"Maria, don't you really think that we ought to raise a family?"

The little speckled hen—"Raise a family! I should say not. Not while eggs are 60 cents a dozen."

The Ruling Passion.

The auctioneer was quite ill and fears were entertained that he would not recover. But he did.

Beside his bed stood the doctor and the auctioneer's wife, anxiously watching each symptom, each movement, each respiration.

"Doctor," whispered the hammer-wielder's wife, "what is his pulse now?"

The doctor raised the patient's wrist.

"His pulse," he answered, "is now going at 104."

Whereupon the auctioneer sat up excitedly in bed.

"Going at 104!" he cried feebly. "Going at 104! Who'll make it 105? Do I bear 105 for a pulse that has been running steadily for 47 years and has never once stopped! Will you bid 105? Who'll make it 105?"

Barber Shop Pleasantry.

The barber shop was well patronized, when in walked a shabby stranger.

"Good morning, sir!" called the barber, doubtfully.

"Good morning!" replied the stranger. "My good man, will you shave one side of my face for a penny?"

The barber winked at his waiting customers. "Certainly," he replied. "Take a seat, please."

Presently it was the shabby stranger's turn to occupy the seat of honor. "Now, which side shall I shave?" asked the barber, as he waved the lathering brush in the air.

"The outside," replied the shabby stranger, meekly.—Pittsburg Chronicle.

In Plain Sight.

Willie Stone had been sent on an errand to the home of the rich Mr. Lott. He returned with the astonishing news that Mr. Lott was going mad.

"What makes you think that?" his father asked.

"The way he talked," said Willie. "When I went into the room where he wanted to see me he said, 'Boy, where is your hat?' and there it was on my head all the time!"—Chicago Herald.

Assumed Proprietorship.

"Is that your dog?" "I dunno," replied Mr. Erastus Pinkley. "I didn't lay no claim to 'im tell a man thought he was my dog an' began to kick 'im aroun'. An' den I sort o' assumed proprietorship jes' foh de sake o' showin' dat I was de kind of a dog owner dat couldn' be trifled with."—Washington Star.

Potatoes---Spuds---Tubers---Are High



—Tacoma Ledger.

Why Tag Along When You Can Lead

A business course at the Northwestern will put you in the class that **Leads**, just as it has done for hundreds of others.

Our courses are so arranged that one may enter any time and make excellent progress.

"Be Sure to Visit Us."

The Northwestern

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WE WILL PAY SALARY

to farmer with rig or saddle horse. The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are paying good salaries to those who can do the work and are offering these positions only to farm owners or renters.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. For men with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter to The Washington Farmer, Reviewing, Spokane, Wash.—Adv.

He Never Troubles Trouble and It Never Troubles Him

The alligator is a very comfortable animal, if we estimate comfort as an absence of pain He has a thick skin, so that nothing in the ordinary course of nature irritates or troubles him. He has very few nerves and therefore very little pain. He hibernates during part of the year and sleeps most of the time when he is not hibernating. He never worries. He seems perfectly calm and placid and his movements are very slow and deliberate. He never troubles about politics, wars, religion, has no appreciation of music, art, science, philosophy, and when he wants something to eat he does not have to go to the store to buy or to a telephone and order it, and then pay bills at the end of the month. He just opens his mouth and lets the mosquitos, flies, frogs and other insects and small animals fly in, walk in, crawl or hop in, any way to get in, and when there are enough of them he just closes his mouth upon them and he has his dinner. But the closing is not a slow process like most of his movements. It springs shut like a trap or the twitching of the muscles or the batting of an eye, so that his food is not likely to get away from him. But the point is, it costs him no labor. He builds no houses, wears no clothes, reads no books, admires no pictures, enjoys no music, needs no fuel, has no nervous diseases and lives to be as old as man. Do you not wish you were an alligator?

Well, there are people who seem to think that the absence of nerves, of development, of the appreciation of things and therefore the absence of the losses and the absence of pain is happiness. I do not think so. I think that this is the best generation of human history, and if there are those, as I know there are, for I talk with them occasionally, who believe that the former days were better than these, if you will go back in the evolution of the race to the period when these powers were undeveloped and when we did not know the losses—in other words, if you will study the alligator as compared with the present development of human life, I think we will decide that every new brain cell, every new nerve, every new invention, anything that tends to human progress, adds to human happiness. G. L.

FIVE DOLLARS EXTRA For Some Library Worker.

NOTICE.

As a reward for good, hustling work by individual school library workers in Washington, our book man will pay $5 in gold to the boy or girl who has to his or her credit the greatest number of Washington Farmer subscriptions up to May 1, 1917.

Up to this time there are six possible winners of that $5 in gold. The score of the individual contest is now as follows:

Loyal C. R. Snyder, White Swan, Wash., 12 subscriptions.

Dorothy Rausch, Chewelah, Wash., 11 subscriptions.

Bessie Webb, Ford, Wash., 10 subscriptions.

Mildred Glasgow, Bossburg, Wash., nine subscriptions.

May Greiner, Selah, Wash., six subscriptions.

Eva Bond, Valley, Wash., three subscriptions.

We are not going to make any comment on this score other than to say that the race is not yet over and it does't follow that because Eva Bond is sixth place this week she is going to be there next week. As the contest grows hotter and hotter you can't tell who will win. And that makes a race a race, dosu't it?

Want Ads

HELP WANTED—MALE 3

I WANT LIVE REPRESENTATIVE IN each county, to take orders for a one-man all-purpose farm tractor that is 1000 lbs. lighter, costs less than half as much and develops twice as much power on the drawbar as its nearest competitor. A marvel of simplicity and efficiency. Investigate. Rettig, Sales Manager, North Yakima, Wash.

BE AN AUTO AND TRACTOR EXPERT. $75 to $200 a month—learn in six weeks. Thousands of successful graduates. Catalog free. Rahe's Auto School, 532 East 11th st., Kansas City, Mo.

GOVERNMENT POSITIONS ARE EASY TO get. My free booklet BY956 tells how. Write today—NOW. EARL HOPKINS, Washington, D. C.

AGENTS—WANTED 9

WANTED—AGENTS TO SELL THE EBERT Duryea farm tractor; price within reach of every farmer or gardner; a money making proposition for workers. Write sales manager, 303 E. Pike, Seattle.

SITUATION WANTED—Female 18

SITUATION; COOK ON RANCH OR STEAM breaking outfit; experienced. Mrs. A. Maiers, Pasco, Wash., 110 S. 4th st.

SITUATION WANTED—MALE 21

WANTED—POSITION ON RANCH, BY A sober and industrious man. Write for particulars. Box 90, Harrisburg, Pa.

MARRIED COUPLE WANT FARM WORK; experienced; wife good cook. P. O. Box 1024, Spokane.

EDUCATIONAL 45

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HAWTHORNE AUTO SCHOOL, 445 HAWthorne ave., Portland, Oregon. School in session all year 'round. No books, charts or printed lessons used. Everything practical and up to date.

MISCELLANEOUS—FOR SALE 60

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BIG SAVINGS FOR EVERY BUILDER:

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
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Order your sash and doors direct from O. B. WILLIAMS CO. We sell for less because we own our own mill. Large stock. Prompt shipment and safe delivery to destination guaranteed. Our big illustrated Catalog No. 27 mailed free, postpaid, on receipt of request. We do not handle rough lumber.

5 cross panel doors, No. 1	$1.33
3-ply veneer, 1 panel doors	2.00
Front glass doors, 2 ft. 8 in. by 6 ft. 8 in.	3.00
Kitchen glass door, 4 lights	2.25
Bungalow sash, as low as	.56
3x6, hot bed sash	2.25
20x25, medicine cabinet doors	2.25
Panel cupboard doors	.85
1-ply Gold Seal roofing	1.35

We carry a full line of building material, incluring frames, inside finish, builders' hardware, paint, etc.

O. B. WILLIAMS CO.
1943 1st AVE. SO. SEATTLE, WN.

SASH AND DOORS.

The best place to buy your sash and doors is from O. B. Williams Co. We not only sell for less, but will give you satisfaction, or money back. We own our own mill make prompt shipments, and guarantee safe delivery. Send for our big, illustrated catalog, No. 27, mailed free, post paid, promptly on request.

5 cross panel doors, No. 1	$1.33
Craftsman doors	1.75
Glass doors, as low as	2.25
24x28, 2-light window	1.46
Bungalow casement sash	.58
3x6 hot bed sash	2.25
1-ply Gold Seal roofing	1.35
3-ply veneer panels, square foot	.05

Cupboard doors, frames, finish, mouldings, builders' hardware, glass, etc.

O. B. WILLIAMS CO.
1943 FIRST AVE. SO. SEATTLE, WN.

CUT YOUR OWN TIMBER

on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With this sawmill, you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine.

Write for catalog and full details.
CONTRACTORS' EQUIPMENT CO.
18TH AND UPSHUR STREETS,
PORTLAND, ORE.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle. Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer,** and **The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

HOGANIZED S. C. I. REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels, $5 each. These birds are all sons of a magnificant male, from a 271 egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs $6 in 100 lots; sittings, $1.50, $3, $5. Mrs. H. V. Hominger, Underwood, Wn.

WAIKIKI FARM'S POULTRY DEPT. IS now booking orders for eggs and day-old chicks. S. C. White Leghorns; eggs $1.50 per setting, $6 per 100; chicks, $12 per 100. S. C. Reds; eggs, $1.50 per setting, $8 per 100; chicks, $16 per 100. Heavy laying strains. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

QUEEN QUALITY WHITE LEGHORN chicks; Feb., $12 per 100; Mar., $11; April, $10; May, $9; June, $8. Queen incubators, 70 to 2000 egg capacity; 1200-chick brooder stove, $18.50.
WE DO CUSTOM HATCHING AND SELL HATCHING EGGS. QUEEN HATCHERY, 89 Pike st., Seattle.

ORDER YOUR BABY CHICKS NOW FROM heavy laying strain; delivery guaranteed; our chicks please; R. I. Reds, March, $15 100; after Mar. $12. White Leghorns, March, $12 100; after March, $10. Maplebrook Poultry farm, Southworth, Wash., Box 3.

S. C. R. I. REDS—STOCK FROM TOPnotch western breeders crossed with my own trap-nested birds. Eggs after Mch. 15, $1.50 for 15; $8 100; baby chicks, $16 100. Safe delivery and strong chicks guaranteed. F. H. Volland, Kennewick, Wash.

ORPINGTONS, ROCKS, WYANDOTTES, Cornish, Leghorns, Pekin and Runner ducks, Embden geese, Holland Turkeys; white breeds only; heavy laying strains. Write us. Royal White Farm, Box 503, Route 1, Kirkland, Wash.

PACIFIC COAST CHAMPION BARRED ROCKS.
World's biggest winners at San Francisco and other large northwest shows. Write for catalog. M. J. Myers, 1594 Division St., Portland, Ore.

MY R. C. R. I. REDS HAVE WON EVERY first and second, except one, competed for in the past 3 years. Have mated 4 pens for the egg trade. Guaranteed satisfaction. Mating list on application. G. W. Baker, Colfax, Wash.

FAMOUS CARNATION WHITE LEGHORNS. Baby chicks; high-grade utility stock; birds of merit, quick maturing; heavy winter layers; free range. Breeding stock. Ernest Raush, Carnation Poultry Farm, Kent, Wn.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please $12—100. Free catalog. Freshlaid Farm, Colfax, Wash.

WHITE BUFF AND BLUE ORPINGTONS, single and rose comb Anconas, the great winter layers, winners at leading Coast shows; eggs $1.50 to $3.00 for 15; chicks 20c each. Ira N. DeLine, Box D, Olympia, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R 7, Waitsburg, Wash.

GROSSER'S LIGHT BRAHMAS, BIRDS and eggs for sale, sweepstake winners in National Western Stock Show; prices reasonable. E. Grosser, 2245 Perry St., Denver, Colo.

WHITE WYANDOTTES, BUFF ROCKS and Rouen ducks; prize winning stock; good layers; eggs $2 per 15, some breeders $3 to $5. P. H. Tomlinson, College Place, Wash.

BARRED PLYMOUTH ROCKS, PRIZE winners at shows; way ahead of average in N. W. laying contest. Write for prices. Wm. H. Heimsoth, Baker, Ore.

S. C. WHITE LEGHORN AND S. C. RED eggs for hatching, $2.50 to $5 per 15; heavy-laying, exhibition strains. H. J. Fuller, N124 Lincoln st., Spokane.

TOULOUSE GEESE, AND M. B. TURKEY eggs, 25c each, Pearl Guineas, S. S. Hamburns and S. C. Buff Orpingtons, eggs, 10c each. J. Wellborn, Warren, Ore.

EGGS FROM TANCRED S. C. W. LEGhorn hens, $1.25 per 15, $6 per 100, prepaid. J. W. Hirons, R. 2, B. 55, Scio Ore.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

POULTRY 174 Continued.

79,637 EGGS IN 1916 FROM MY FLOCK of 450 S. C. Black Minorcas, prize winners in the showroom and laying contest; eggs from my Hoganized and trap-nested breeding stock at $2 per 15, $3.50 per 30, $5 per 50, $8 per 100, $70 per 1000. No baby chicks or stock for sale. John Dollenbacher, R. 1, Selah, Wash.

S. L. WYANDOTTES AND S. S. HAMBURGS —Pullets and hens $2 to $5, cocks and ckls. $5 to $15. Winners at many shows. G. G. Wherry, Payette, Ida.

PRIZE WINNING BUFF ORPINGTONS, settings $2 to $10; males, $3 to $15. Lucy R. Scudder, Box 36, F. N. Yakima, Wash.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

"WHITE ELEPHANT" R. C. W. LEGHORN eggs, $1.50 per 15. Mrs. J. E. Jackman, R. D. 4, Kalispell, Mont.

BRONZE TURKEY TOMS, $5, $7, $10; FEW young hen turkeys. H. T. Cutler, Parker, Wash.

LAKESIDE S. C. W. LEGHORN EGGS, $1.50. R. 3. T. W. Harvey, Spokane, Wn.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

CHOICE BARRED ROCK COCKERELS, $3. B. Livingston, Glenwood, Wash.

LIVE STOCK 177

FARMERS, HOG RAISERS—BIG-TYPE Poland or Berkshires at 1-3 usual prices; top pigs, bearing famous pedigrees, $12.50 each. Free hog booklet. "The Bartwood Idea." Bartwood Farm, Hamilton, Mt.

HORSES and VEHICLES 183

HORSES—WE HAVE SOME REAL BARgains in horses, from 1000 lbs. to 1500 lbs.; young and old, from $125 to $350 per team with harness. See them working any day and know just what they are.

PACIFIC TRUCK & TRAILER CO.
2212 4TH AVE., SEATTLE, WASH.

GROCERIES 222

3 LBS. EXTRA FINE COFFEE, ROASTED fresh daily, by parcel post, for $1. Martin Marks Coffee Co., Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

CONTRACTORS, BUILDERS 567

BULK GRAIN ELEVATOR CONTRACTOR. Write me for plans and prices on any size. Anthony Robertson, N4217 Lincoln st., Spokane, Wash.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.
In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.
If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.
It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS.
VETCH OR "TARES,"
A Great Forage or Seed Crop.
RED CLOVER, ALSYKE,
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.
COMPLETE LINE OF FARM SEEDS.
We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.
CORVALLIS FLOURING MILLS,
Corvallis, Oregon,
Home of the Famous Oregon Agricultural College.

TESTED SEEDS FOR FARM AND GARden—New 1917 seed catalogue now ready; valuable information gathered in 25 years' experience in the northwest. Write for quantity price on Grass, Clover and Alfalfa seed. For new catalogue address Aabling-Boyce Seed Co., Seattle, Wash.

A LIMITED NUMBER OF THE FAMOUS Yakima Goodell strawberry plants, $3 per 100, delivered free.
WILL HANKS, NACHES, WASH.

SEEDS 620 Continued.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, ORE.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

ALFALFA SEED, RED CLOVER, SWEET clover; Early Ohio; Idaho Rural; Peachblow seed potatoes; Dicklow spring wheat—the big crop producer; blue barley. Jerome M. & E. Co., Jerome, Idaho.

ALFALFA, RED CLOVER, ALSYKE CLOver, white clover, sweet clover, timothy and other grasses; seed oats and wheat; at reasonable prices. Voegeler Seed Co., Salt Lake City, Utah.

RED AND ALSYKE CLOVER AND VETCH seed; bright, high test; clean; dependable. Write us.
M. SENDERS & CO., ALBANY, ORE.

ONION SEED, OREGON YELLOW DANvers. Grown at Gladstone, Ore.; $1.40 postpaid; money back if not satisfactory. A. G. Stevens, R. 1, Milwaukie, Ore.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEED PEAS FOR SALE. A. D. THAYER, Waverly, Wash.

NURSERY STOCK 621

NURSERY STOCK—FRUIT TREES, ALL kinds, grafted walnuts, filberts, grapes, small fruit plants, etc., at greatly reduced prices. Save time by mailing complete want list, stating varieties, number of each and grade. Lafayette Nursery Co., Lafayette, Ore.

STRAWBERRY PLANTS—CLARK'S SEEDling, Magoon, Gold Dollar, Wilson, $2.50 per 1000. 200 plants, your choice, $1.00 prepaid.
J. W. Vinacke, Canby, Oregon.

BARTLETT AND ANJOU PEARS R. ANN, Lambert, Duke, Morell cherries. Fine lot privet hedge plants, money-saving prices. Christopher Nurseries, Christopher, Wash.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

LARGE FIELD-GROWN ROSES, $1.50 PER dozen bushes, prepaid. Different colors. H. C. Kerns, Eugene, Oregon.

FARM LANDS—FOR SALE 651

RICH, LEVEL FARM LAND, IN Thurston county, Wash., near Seattle, Tacoma and big government army post location; twelve passenger trains stop every day at station right on ground; rich soil, raises wonderful prize-winning crops; tract just opened up and settling rapidly; new town already started; delightful, mild climate; splendid marketing facilities; good neighbors; excellent opportunities. Write for free illustrated folder, just issued.

A. H. REID & CO.
315 NEW YORK BLOCK,
SEATTLE, WASH.

FOR SALE—A SNAP IN IRRIGATED YAKima valley; 170 acres; diversified farming, dairy ranch including $2000 worth of registered and grade stock; 1½ miles from live town; 3 railroads. We have many good bargains to offer in fruit, hay, dairy, diversified farming and unimproved lands in the center of the richest valley in the world, where crop failures, blizzards and destructive storms are unknown. Address Hilton Land Co., Granger, Wash.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands $11 to $30 acre; arrigated lands, $35 to $50; 20 years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

MONTANA LANDS.
We have for sale on 10-year terms, at 6 per cent, 29,000 acres fine wheat land in Dawson and Rosebud counties, Montana, at from $8 to $22 per acre, and over 75,000 acres fine grazing and farm lands at from $4.50 to $650 per acre, on 10-year terms. A large number of our settlers are from Walla Walla and Palouse sections.
MONTANA WHOLESALE LAND CO.
MILES CITY, MONTANA.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

40 A., UNDER CULTIVATION, ADJOINING town of Chesaw; all fenced; 4-room bungalow; good water; $3000; easy terms if desired. V. G. Grove, Chesaw, Okanogan county, Washington.

FARM LANDS—FOR SALE 651 Continued.

LAND.
Montana grain and stock farms, in best parts of the state, for sale at very reasonable prices and on easy terms. Improved places in Judith Basin at $36 to $50 per acre. Good grain lands in Great Falls and Miles City districts, $15 to $25 per acre, on easy terms. We have for sale in half sections and larger farms about 10,000 acres in the famous Shields River valley at prices ranging from $15 to $50 per acre, on easy terms. Several fine stock farms. Have several good farms on which owners will take some trade. Send for Montana land list, free for asking. Hege & Watkins Co., 715-17 Paulsen bldg., Spokane, Wash.

GENERAL ALL AROUND FARM, 437 A., on Willamette river, 38 miles above Portland; 12 miles north of Salem; 300 a. in good state of cultivation, mostly river bottom; ten-room house, hot and cold water; 2 large barns; plenty other outbuildings; all fenced; soil well adapted to clover and potato growing; boat landing on place; 3 miles to railroad; centrally located in rich farming district; adjoining lands held at $125 to $200 per a. Price, for quick sale, to close an estate, $75 per a., half cash; 6 per cent on deferred payments. Jno. H. Gibson, agent, 912 C. of C. bldg., Portland, Ore.

YAKIMA VALLEY FARM.
129-acre improved farm, price $115 per acre; good six-room house and barn; 80 acres in alfalfa and corn, balance partly improved; water right fully paid excepting on eleven acres; located in well settled district with rural mail and telephones, two miles to school and railroad. A farm joining this place sold for $300 per acre recently. The improvements and water right for this place cost $11,000. This is a bargain. Terms, $6500 cash, balance five years' time. Other smaller irrigated farms for sale. Write at once.
ROY C. LICHTY, SUNNYSIDE, WASH.

320 GRAIN FARM, 8 MILES FROM HARTline; 160 acres in crop; 160 to be summer fallowed; well-built 6-room plastered house, with basement; barn room for 20 head of horses; 5000-bushel granary; 2 good implement houses, 20x32 each; garage, with concrete floor; family orchard; well; gas engine; 5000-gal. reservoir; water piped everywhere, including house; good neighborhood; no encumbrances; a bargain at $60 per acre. At least $4000 cash, balance 8 per cent.
LEO REINHART, HARTLINE, WASH.

35 ACRES BEST ALDER BOTTOM LAND, graveled road, mile to pavement, fronts on navigable water across bay from Everett. Location, roads, water, markets, soil make this a mighty desirable and productive home. Wood will pay for clearing. John Mills, Puyallup. For anything on West Side write us.

CHOICE FARM OF 640 ACRES, ABOUT 2½ miles from landing on Columbia river; 400 acres improved, with 300 acres for crop 1917; balance unimproved is good bunchgrass pasture with running stream; 160 acres fenced hog tight; 28x50 barn, 5-room house. Price $15,000. A. L. Tucker, Coulee City, Wash.

202-3 ACRES FOR SALE; 7 ACRES OF prairie, rest Chehalis river bottom; 1 team horses, 3 milch cows, 1 heifer 14 mo. old; house, barn, granary, outbuildings; hay, roots, tools, chickens. Write owner for full particulars. H. A. Kanouse, R. 1, B. 31, Elma, Wn.

FIVE DOLLARS SAVED
is an acre of ground. Get prices, terms and location of AGRICULTURAL LANDS near Tacoma.
JESSE O. THOMAS JR.
320 TACOMA BLDG. TACOMA, WASH.

160 ACRES, 3 MILES N. OF MEDICAL Lake, Wash., and 1 mile from Ry. siding; all ready for crop; black loam soil; very fertile; fenced; small house; good well; very close to neighbors; $75 per acre.
WM. MULHALL, FENN, IDAHO.

160 ACRES; 6½ MILES FROM COUNTY seat, Vale, Ore., and one mile to station. A1, fenced. Two miles from oilfield; no improvements; clear. Price $8000; half cash, bal. time, 8 per cent.
M. L. PHELPS, BOISE, IDAHO.

HALF SEC. WHEAT, FRUIT, ALFALFA land; 2 sets buildings, fenced, cross-fenced; fruit, wood, water; 6 miles town, 1½ miles store, 2 schools; best climate; $50 acre. W. H. Kinnan, R. 2, Goldendale, Wn.

400 ACRES CHOICE WHEAT LAND IN Baird country, of which 350 acres are improved. Should be summer fallowed. Price $10,000. Half cash, balance reasonable terms. A. L. Tucker, Coulee City, Wash.

HALF SECTION WHEAT LAND, ABOUT 10 miles from market. About 300 acres improved, 100 acres for crop 1917. Special price $7500. Third cash, balance reasonable terms. A. L. Tucker, Coulee City, Wash.

880 ACRES WHEAT LAND, IN HORSE Heaven, near Kennewick; fenced; some buildings; two wells; unusual bargain at $9 per acre. Write for particulars. Keystone Lumber Company, Tacoma, Washington.

NORTHERN PACIFIC RAILWAY LANDS in eastern Montana at $2.50 to $18 per a. Suitable for farming or grazing. Easy terms. For information write or see W. E. HOLT, MILES CITY, MONT.

FARM LANDS OBTAINED THROUGH foreclosure of mortgage offered at rare bargains and on easy terms. Send for list. Pennsylvania Mortgage Investment company, Spokane, Washington.

FOR SALE—BY OWNER, TWO WELLimproved half sections, close to school, town and postoffice, in Alberta, Canada. F. L. Geis, Daysland, Alberta, Can.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

ACRE TRACTS—FOR SALE 669

WE OWN 3000 ACRES OF BENCH AND meadow land which we will close out on easy terms in 40-acre tracts or more at bargain prices, ranging from $10 per acre up.
FIRST STATE BANK,
MAHONEY & BAXTER,
BONNERS FERRY, IDAHO.

REAL ESTATE AT AUCTION 699

400 ACRES, IN TRACTS FROM 5 TO 240 acres each; choicest land in Spokane valley; 12 to 25 miles from Spokane on 3 Rys. and interurban electric line. Every modern facility, including good schools, electric lights and domestic water systems. Every acre irrigated. Some tracts improved and all under cultivation. Will sell any or all at a bargain on terms to suit purchaser or will exchange part of holdings for Minneapolis and Chicago property. For particulars write G. Seaton, Apt. D, W1311 6th ave., Spokane, Wash.

Grain and Produce Markets

Chicago Grain.

CHICAGO, March 3.—Estimates that only 29,000,000 bushels of wheat remained for export from the United States during the next four months had a decided bullish effect today on prices. Largely in consequence, the market at the close, although unsettled, was 2¼c to 4⅛c net higher, with May at $1.88¾ to $1.88⅞ and July at $1.59 to $1.59⅛. Corn gained 1⅝c to 2⅞c; oats 1⅛c to 1⅜c and provisions 2c to 85c.

Bullish sentiment developed rapidly in the wheat market after the probable smallness of the exportable surplus had been announced. Aside from the figures on the exportable surplus, however, the market had an upward tendency owing to prospects that American vessels soon would resume sailings and that shipments to Europe in consequence would be much increased.

Snowfalls in the southwest retarded more or less the advance of new crop deliveries of wheat. Besides, on account of week-end profit-taking there was a moderate reaction all around from top prices as the day approached a finish. Nevertheless, the buying power in the market seemed to show no curtailment and there were but few traders sufficiently venturesome to put out new short lines.

Corn established a new high price record. The reasons were that the hog market still was soaring and that the latest reckoning put the domestic farm reserves of corn at the lowest aggregate since 1892. Oats responded in lively fashion to the strength of other grain.

Urgent export demand for lard was a factor in hoisting the entire provision market to unprecedented levels. Other causes were the continuance of the hog shortage and of the remarkable accompanying advance of the value of corn.

Cash Quotations.

CHICAGO, March 3.—Wheat—No. 2 and No. 3 red, nominal; No. 2 hard, $2.04½; No. 3 hard, nominal.

Corn—No. 2 yellow, nominal; No. 3 yellow, $1.05@1.07; No. 4 yellow, $1.05@1.05½.

Oats—No. 3 white, 59½@61c; standard, 60¾@61½c.

Rye—No. 2, nominal.

Barley, $1@1.20.

Timothy, $3.75@5.75; clover, $12@18.

Chicago Futures.

	Open.	High.	Low.	Close.
Wheat—				
May	$1.84¾	$1.89⅝	$1.84¾	$1.88¾
July	1.56⅛	1.59⅞	1.55⅞	1.59⅛
Corn—				
May	1.05¾	1.07⅝	1.05⅛	1.07⅛
July	1.05½	1.07⅛	1.04⅞	1.06⅞
Oats—				
May	.58⅞	.59⅞	.58⅝	.59⅝
July	.56¼	.57⅝	.56⅛	.57⅛
Pork—				
May	33.75	33.30	32.75	33.30
July		32.60	32.40	32.60
Lard—				
May	18.80	19.07	18.80	19.00
July	18.80	19.02	18.80	18.85
Ribs—				
May	17.40	17.60	17.50	17.55
July	17.50	17.62	17.47	17.57

Pacific Northwest Grain.

PORTLAND, March 3.—Wheat stronger. No trading. Spot bids, 1 to 3c higher. Bluestem, $1.69; fortyfold, $1.63; club, $1.63; red Russian, $1.60. Barley higher. No. 1 feed, $39.

SEATTLE, March 3.—Wheat—Bluestem, $1.30; turkey red, $1.71; fortyfold, $1.66; club, $1.66; fife, $1.66; red Russian, $1.63.

Barley, $39 per ton.

TACOMA, March 3.—Wheat—Bluestem, $1.66; fortyfold, $1.62; club and red fife, $1.61; red Russian, $1.59.

WILBUR, Wash., March 3.—Bluestem, $1.55; club, $1.50. Oats, $37. Barley, $37. The Grain Growers' Warehouse company bought 2000 bushels of wheat this week at $1.50.

San Francisco Grain.

SAN FRANCISCO, March 3.—Wheat—Firm; no trading.

Barley—May, $2.15 bid, $2.20 asked; December, $1.62⅛.

Minneapolis Grain.

MINNEAPOLIS, Minn., March 3.—After a weak opening, wheat prices hardened today on stronger demand and May closed nearly 4c up. Corn and oats strong. Wheat, receipts 263 cars, compared with 339 a year ago.

Wheat—May opened $1.85 1-2 to 1.86; high, $1.90 3-4; low, $1.86; closed, $1.90 to 1.90 1-2.

July opened $1.79 1-2 to 3-4; high, $1.83 1-4; low, $1.79 1-2; closed, $1.82 5-8@1-2.

Cash: No. 1 hard, $2$2.08 1-8@2.10 1-8; No. 1 Nor. $1.97 1-8@2.04 1-8; to arrive, $1.95 1-8; No. 2 Nor. $1.94 1-8@2.02 1-8; No. 3 wheat, $1.86 1-8 @1.95 1-8; No. 2 Durum, $1.94 5-8@1.99 5-8; No. 2 hard Montana, $1.98 1-8@2.01 1-8.

Corn—No. 3 yellow $1.03 1-4@1.05 1-4.

Oats—No. 3 white, 57 3-4c@59 3-4.

Flax—$2.77 1-2@2.83 1-2.

Car Receipts on Coast Points.

Receipts of grain and hay in car lots at coast points for the fiscal year beginning July 1 up to Saturday night for 1916-17 and 1915-16 were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1916-17	4152	912	299	3065
1915-16	6636	793	1160	3231
Portland—				
1916-17	4041	1906	170	1710
1915-16	9218	835	1365	1879
Total—				
1916-17	8193	2818	460	4775
1915-16	15,904	1628	2515	5110

Live Stock Quotations.

At Omaha.

OMAHA, Neb., March 3.—Hogs—Receipts, 6000; higher. Heavy, $13.35@13.55; light, $13.10@13.45; pigs, $11@12.50; bulk of sales, $13.25@13.45.

Cattle—Receipts, 100; market steady. Native steers, $8.50@11.30; cows and heifers, $7.50@9.50; western steers, $7.50@10.50; Texas steers, $7@8.50.

Sheep—Receipts, 500; steady. Yearlings, $11.50@13; wethers, $10.50@12; lambs, $13.25@14.50.

At Chicago.

CHICAGO, March 3.—Hogs—Receipts, 14,000; steady, 20c to 25c above yesterday's average. Bulk, $13.55@13.75; light, $13@13.70; mixed, $13.35@13.85; heavy, $13.35@13.90; rough, $13.35@13.50; pigs, $10.25@12.25.

Cattle—Receipts, 800; steady. Native beef cattle, $8@12; stockers and feeders, $6.40@9.25; cows and heifers, $5.30@10.30; calves, $8@11.25.

Sheep—Receipts, 1000; steady. Wethers, $10.75@12; lambs, $11.85@14.50.

At Portland.

PORTLAND, Ore., March 3.—Hogs, steady; receipts, 444. Bulk of packing grades, $12.60@12.85; heavy packing, $12.85@13; light packing, $12.80@12.85; rough heavy, $11.75@12; pigs and skips, $11.50@11.75; stock hogs, $10.50@11.50.

Cattle, steady; receipts, 55. Steers—Prime light, $9.60@9.80; prime heavy, $9.50@9.75; good, $9@9.40; cows, choice $7.75@8; medium to good, $7@7.75; ordinary to fair, $6.50@7; heifers, $6@9; bulls, $4.50@7; calves, $6@10.

Sheep, steady; receipts, none. Lambs, east of mountains, $12.75@13; lambs, valley, $12@12.50; lambs, good, $11.25@11.75; prime wethers, $10.50@10.75; choice ewes, $9.25@9.75; heavy ewes, $8.75@9.25.

At Seattle.

SEATTLE, March 3.—Receipts, 90 hogs; 25 cattle. Market strong.

Hogs—Prime light hogs, $13.10; medium to choice, $12.25@12.30; smooth heavy, $11.75@12; rough heavy, $11.25@11.50; pigs, under 150 pounds, $9.50@11.50.

Cattle—Prime light steers, $9.75@9.85; medium to choice, $8.60@8.65; common to medium, $6.75@8.25; cows and heifers, $8.25@8.50; medium to choice, $7.60@7.85; common to medium, $3.75@4.75; calves, $6.75@9.25.

Sheep—Prime lambs, $11.50@12; good lambs, $10.75@11; wethers, $9.50@10; ewes, $7.50@9.

Spokane Union Stock Yards Saturday.

Hogs—Receipts 125, market strong. Bulk of sales $12.85. Prime heavy, $12.75@12.85; prime light, $12.65@12.75; prime mixed, $12.25@12.40; rough heavy, $11.75@11.85; stockers, $8@10.

Cattle—Receipts 146, market strong. Prime heavy steers, $9.75@10; prime light steers, $9.35@9.65; good steers, $8.50@9; prime cows, $8@8.50; good cows, $7.50@8; best heifers, $8.25@8.75; bulls, $4@6.50; calves, $7@10; stockers and feeders, $6@7.50.

Sheep—Receipts none, market strong. Prime lambs, $12@12.50; common lambs $11@11.50; choice yearlings, $10.50@11; good yearlings, $9.50@10; best mutton ewes, $10@11; common ewes, $8@9.

Seattle Market.

SEATTLE, Wash., March 3.—Apparently nothing can stand against the public boycott, as speculators in potatoes found out today. While quotations of $85@90 for Yakima gems and $80@85 for Puget sound stock were unaffected, buyers dropped completely out of the market on further telegraphic advices of the demoralization in New York and Chicago as the result of determination by consumers and committees to force down the price of foodstuffs.

It is generally admitted that the Washington spud market has been sustained by brisk upward bidding by eastern buyers, and with this support removed quotations remain in midair, with every prop abrogated. The consumption in Seattle will not reach two carloads per day, and it is evident that to market the present holdings, estimated here to be 200 carloads, would be impossible at the present prices.

Brokers, speculators and jobbers who have been actively in the market vanished rapidly today, impelled by gloomy prospects in the east, where the bulk of the Washington spuds have gone and must still go. Three days ago these operators were bidding $75 f. o. b. Yakima They have suddenly become indifferent, bids have been withdrawn, and a puzzled expression adorns the features of all who have been so confidently predicting $100 to $125 for the spring cleanup. That the present condition is only tentative, and that the flurry will pass and prices spring back to higher altitudes is the claim of a minority. Nevertheless, potatoes are not regarded as highly as they were 10 days ago.

Onions continue their uninterrupted strength, and no good grades can be bought for less than 12c.

Cheap apples are held by only a few houses, but what are left are moving rapidly. Quotations are very firm.

The local ranch egg market has not yet touched bottom, and some of the latter jobbing houses will quote 24@25c Monday. The demoralization of the week is ascribed to the speculative purchases of Petaluma eggs, moving to this market in large quantities and a desire of those who did not sit in on the experiment to force losses therein. While storage operations will be two weeks late this year, they should start next week, and the houses that put eggs in the coolers for the fall and winter trade are desirous of fixing the level at which they can buy stock.

The bulk of the spring eggs went into storage last year at 19@23c, average 22c, but this year it is conceded on all sides that the stock will cost more, probably 24@25c, so that next week will probably witness the minimum level for the season, and storage operations will begin

The butter market is something of a puzzle. California quotations have dropped to such an extent that jobbers can bring it in to compete with offering on the Seattle market. It could undersell prices here if necessary, but in view of the extreme shortage, which approached the most acute stage during the past three months, it is not probable that any price-cutting will be done. Wholesalers boast of the good quality of the California butter, two carloads of which arrived today and will go on the market at once.

There is a pronounced scarcity of cheese, and the wholesalers will elevate quotations for Monday. Sharp stock is cleaned up and the make of new stock is difficult to obtain.

BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 25@26c per dozen.

Poultry—Live hens, fat, over 4 lbs., 20c per lb., do. 3 lbs. and under, 18c; old roosters, 11c per lb; springs, 20@22c per lb.; ducks, 20c per lb.; squabs, large, $3.50 per dozen; geese, fat, 12@14c per lb.; turkeys, live, 23@24c.

Butterfat—46c lb.; dairy butter, 27c per lb.

Beef—Buying price: Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c per lb.

Hogs—Light, 13@14c per lb.; do., heavy, 10@12c per lb.

Veal—Fancy light, 12@14c per lb.; do. heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 32@35c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 32@33c per lb.; dry calf (under six lbs.), 36c per lb.; bull and dry salts, 4c per lb. less; green bulls, 18c per lb.; dry butcher full wool sheep pelts, 22@26c per lb.

SELLING PRICES.

City Prices—Team Lots.

Apples—Winesaps, $1.50@2.25 box; Spitzenburgs, extra fancy, $2 box.

Feed—Scratch feed, $52 per ton; all grain chop, $44 per ton; oats, $43 per ton; rolled oats, $42 per ton; rolled barley, $45 per ton; wheat, $59 per ton; bran, $28 per ton; shorts, $32 per ton; alfalfa meal, $26 per ton; whole corn, $50 per ton; cracked corn, $51 per ton.

Hay—Eastern Washington timothy, $22 per ton; alfalfa, $15@16 per ton; double compressed, $25 per ton; straw, $12 per ton; wheat hay, $16 per ton.

Onions—Oregon, 12c per lb.; Yakima, 12c per lb.

Potatoes—Local, $85 per ton; Yakima Gems, $85@90 per ton.

Rutabagas—Yakimas, $2 sack.

Butter—Washington creamery extras, cubes, 42c lb.; do. bricks, 43c lb.; creamery firsts, cubes, 41c lb.; do. bricks, 42c lb.

Spinach—Walla Walla, $1.75 case.

Eggs—Fresh ranch, 30c.

Wool.

LNDON, March 3.—Offerings at the wool auction sales today amounted to 4100 bales. There was a strong demand and the auctions closed firm and 10 per cent higher. Medium merinos were often 15 per cent up. Fears of a shortage of future supplies caused the keen demand during the sales and virtually all the available quantity, 91,000 bales, was sold.

Licenses to export crossbreds have been stopped. It is believed a few carpet wools are going to America, but no decision has been reached regarding America's supply of Australian merinos.

Portland Market.

PORTLAND, Ore., March 3.—Wool buyers are still trying to make contracts in eastern Oregon, but only a few growers have signed up. The price generally offered was 40 cents. Valley growers are looking for a 60-cent market for the light, shrinking, valley wools. Mohair shearing will begin the latter part of this week.

The butter market is easing off because of the steady decline at San Francisco, and lower prices all around are looked for any day.

Cheese advanced 3 cents a pound at the close of the week to the highest prices of the season. Tillamook stocks are reported to be small and the demand from the east continues strong.

There are only a few shipping orders for eggs on the market and, with receipts growing, prices have declined sharply.

Poultry of all kinds is scarce and firm. Pork is strong, because of record prices at the yards, but veal drags and is weak.

Only seven cars of onions remain to be shipped and but four cars are left unsold in Oregon growers' hands. Jobbers have sufficient stocks to last until Australian onions arrive later in the month.

The potato market is still suffering from weakness east. There are practically no shipping orders and the best price offered farmers now is $3. First-hand stocks are light.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $37@37.50 per ton.

Corn—Whole, $47; cracked, $48 per ton.

Millstuffs—Bran, $27 per ton; shorts, $30.50.

Barley—No. 1 feed, $39; brewing, nominal; rolled, $42@43.

Hay—Buying prices. Timothy, eastern Oregon, $19@20; alfalfa, $14@16; grain, $12.50@14.

Eggs—Oregon ranch, case count, 23 1-2@24c per dozen; candled, 25@27c.

Poultry—Hens, 18@20c; ducks, 18@22c; turkeys, live, 20@22c; dressed, 23@28c; geese, 12@14c.

Butter—City creamery, prints, 42@43c per pound; cubes, 38c.

Cheese—Oregon triplets, 23c; Young Americas, 24c.

Dressed meats—Veal, 14c; pork, 15 1-2@16c.

Hops—1916 crop, 3@3c.

Potatoes—Oregon, jobbing price, $3.25@3.50 per cwt.

Onions—Buying price, $10 for country points.

Wool—Eastern Oregon, fine, 22@35c; coarse, 33@36c; valley, 40c.

Beans—Oregon, small white, 9 3-4c; California small white, 11 3-4c; large white, 11 1-2c per pound.

Hides—Salted hides (25 lbs. and up), 18c; salted stags (50 lbs. and up), 14c; green and salted kip (15 lbs. to 25 lbs.), 18c; green and salted calfskins (up to 15 lbs.), 27@28c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 13c; dry hides, 30c; dry salt hides, 25c; dry horse hides, $1 to $2; salt horse hides, $3 to $5.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $3.75@4 cwt; sweet potatoes, $6.

Apples—Washington apples, cooking, 65@85c; eating, $1@1.25; Wageners, 75c@$1.10 box; Rome Beauties, $1@1.40 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 43c lb; Medo-Maid, 43c lb; Cascade, 43c lb; Gold Coin, 36c lb; Gold Leaf, 43c lb; Better Butter, 43c lb; Hazelwood, 43c lb; Peerless, 39c lb; Jersey Belle, 42c lb; Attalia, 43c lb; Diadem, 43c lb; Jersey, 39c lb.

Cheese—Wisconsin full cream, twins, 23c; triplets, 22½c; Hazelwood full cream, triplets, 22c lb; Hazelwood Young America, 24c lb; Wisconsin limburger, 28@29c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 25c lb.

Eggs—Fresh local ranch eggs, $11 case; eastern storage eggs, $9.50@10.50.

Live Poultry—Springs, 17c lb; hens, 17@18c lb; old roosters, 9@10c lb; ducks, 13c lb; turkeys, 20@25c lb.

Dressed Poultry—Hens, 21c lb; springers, 20c; old roosters, 13c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs., 23c; calf skins up to 15 lbs; 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

"Cities and Towns."

The word "city" used to be applied in England only to places where there were cathedrals. Ely, though only a small place of about 8000 persons, is always referred to as a "city," while quite recently Birmingham and Liverpool were called "towns."

Horses Sell

Three Hundred Go at Spokane

That there is strong demand for draft horses and that there are many good horses in the county were indicated at the first sale of the season, held at the Spokane Union stockyards last week.

Over three hundred head sold at prices averaging about $150, with many selling higher than that.

Fancy prices were paid for some of the finer animals. Well-known stockmen were in the ring. Washington State college was represented by Professor William Hislop of the animal husbandry department. There was little need to stop long on a good animal, but some older ones were not disposed of without effort. Even a horse with a smooth mouth and plenty of weight, however, was snapped up if he showed evidence of being a good work animal.

A pair of 5-year-old geldings, offered by J. R. Hinshaw, were bought by a Spokane firm for $440. L. J. Reed offered a pair of 5-year-old black geldings and they were taken by Professor Hyslop for the state college at $445. Professor Hyslop also bought a pair of bay geldings.

Other top sales were: Frank Burnett, Pullman, a pair of 5-year-old mares to J. F. Reed for $440; N. Lynch, 5 and 6 year old geldings to Walter Roberts for $420; J. Cox, one 7-year-old gelding weighing 1700 pounds to C. M. Payne, $250; J. Cox, 7-year-old mare to A. J. Brincken for $237.

Among the other buyers were: Y. Scott, George Greenwald, B. C. Parmenter, A. L. Mitchell, C. S. Stephens, Guy W. Wolfle, J. A. Neal, J. A. Weidert, F. S. Day, J. C. Lewis and D. M. Carey.

Prominent consignors were: J. G. Kienbaum, Wesley Hannan, A. J. Reed, J. B. McGinn, Frank Kepl and W. R. Edgar. Mr. McGinn bought the two cars of mules and one car of horses from Kansas City which sold at from $350 to $425 a team.

Portland Wheat.

PORTLAND, Ore., March 3.—Wheat prices at the close of the week had reached within 3 cents of the highest point of the season, which prevailed in the middle of January. The demand from the east was strong and some business was worked. But for the car situation and the tightness of country holders; the trade would have been heavy.

Closing bids for March wheat at the merchants' exchange were: Bluestem, $1.69; fortyfold and club, $1.63; red Russian, $1.60.

Oats were firm with up to $37.50 bid for April delivery. Four Portland firms sent bids to San Antonio, Texas, on the government order for 6000 tons of oats for army use on the border. The bids per cental were: Allers Bros., Milling company, $1.92 1-2; Globe Grain company, $1.98 1-2; M. H. Houser, $2; Northern Grain and Warehouse company, $2.10.

Flour prices were advanced 20 cents a barrel to $8.40 for patents on Saturday. The mill feed market is very firm, as stocks are light.

Seattle Wheat.

SEATTLE, March 3.—There has been only a light movement of wheat from holders to buyers this week, due to the bullish attitude of farmers and the apathy of millers. Country bids have been $1.55 for bluestem and turkey red and 5 cents under for fife and club, the spread being explained in the tendency of Minneapolis buyers to overbid local interests.

Millers of Puget sound took only a perfunctory interest in wheat buying this week. It is claimed that they are comparatively well stocked; that they held no buying briefs from outside interests and with a dull season in the flour trade caution got in the way of any heavy operations.

Farmers will not sell. Holding probably not more than 5 or 6 per cent of the 1916 crop and carryover at this time they are in a better position to sustain a sellers' market than at any time during the winter. Bidders were repulsed with asking prices, country basis, of $1.75, as none were confirmed.

Increases in bid prices on this market followed Chicago more closely this week than for the last 60 days, thereby upsetting the tradition that Washington wheat does not work with Chicago markets. Cheaper varieties of wheat are quoted at higher levels than during the previous bull movement. Clearing of the car situation is the only obstacle in the way of farther advances, it is believed, for Eastern buyers hesitate to load up with no information in their hands as to when the grain can be moved. Exporters, moved by experiences through the winter, are cautious about taking on wheat stocks. Some heavy losses are reported in transit because of their inability to get cars to destination. Local dealers heard reports this week that English interests were in this market for Washington wheat, and would send cargo vessels to Puget sound to load.

Representative sales on exchange this week were 5000 bushels of April turkey red at $1.67, 5000 bushels of prompt club at $1.57, 5000 bushels of March club at $1.57 and 5000 bushels of March club at $1.65.

The steamship Santa Alicia loaded 69,544 bushels of wheat at Tacoma this week for Antofogasta.

Soft wheat flour advanced 20 cents per barrel today, millers contending that wheat and flour markets were out of balance. Bookings for future orders are being limited to 60 days.

Bid and asked prices on the Merchants' exchange for the week-end were as follows:

	March		April.	
	Bid.	Asked.	Bid.	Asked.
Bluestem	$1.70	$1.73	$1.70	$1.75
Turkey Red	1.71	1.75	1.71	7.71
Fortyfold	1.66	1.71	1.67	1.73
Club	1.66	1.69	1.67	1.69
Fife	1.66	1.69	1.67	1.70
Red Russian	1.63	1.67	1.64	1.68

	March.	April.
Rye	$42.00	$44.00
Barley	39.00	39.00
Oats	37.75	38.00
Timothy	19.00	18.00
Alfalfa	12.50	12.50
Straw	7.00	6.50

SAVING IN WHEAT

In Chief Importing Countries.

The demand for imported wheat this season in all the principal importing countries, in consequence of the new milling regulations, will be less than usual, says George Broomhall's Corn Trade News of Liverpool. Even in England the saving in the use of wheat will be very considerable, whereas in France, Italy, Holland, Scandinavia and Spain the economy will be even more important. British millers instead of extracting 68 to 70 per cent of flour from the wheat berry as formerly are now called upon to make a flour containing 81 per cent of wheat, or to make a 76 per cent flour and to admix 5 per cent of rice or other flour, with the option of admixing an additional 5 per cent. This order will lead to very considerable saving in the use of wheat. Under ordinary conditions British millers, this season, would have required about 29,000,000 quarters foreign and native wheat (about 4,000,000 sacks of foreign flour would also have been imported). The 34,500,000 sacks of flour which British millers would have made out of 29,000,000 quarters of wheat at 68-70 per cent extraction may now be made out of 23,400,000 quarters of wheat at the maximum extraction of 81 per cent, plus 5 per cent added substances. Under the new conditions, therefore, there should be a saving of fully 100,000 quarters per week in the demand from British millers, or at the rate of 5,600,000 quarters (or 44,800,000 bushels) of wheat per annum.

LEATHER DEMANDS

Make It a Precious Article.

Little likelihood that leather will be any cheaper for some time is seen by L. G. Adams of the Adams Leather company of Spokane. Notice of an advance of 3 cents per square foot in leather used for uppers for heavy shoes was received recently by the company.

"Sole leather has advanced in the last 20 months until we hardly know what to expect next," Mr. Adams said. "Stock that was selling 20 months ago at 48 cents a pound now is quoted to us at 95 cents. The market is strong and the demand heavy.

"Some big profits have been made by speculators in the leather business in the last two years. Men who foresaw the big demand from the warring nations of Europe bought up large supplies. Merchants who had left themselves unprotected had to buy at advanced prices to fill their orders for the regular trade."

Many Tons of Cider.

It is reported that cider has become a much more popular drink since the state of Washington went dry. It is estimated that there were 6000 tons of apples converted into byproducts during the past season, and that a very large percentage of this product was cider.

Women of England.

Over 7,000,000 women are now employed in business and profession in England.

WOOL MEN PREPARE

Shearing Season Begins Soon.

Wool growers of the Yakima valley are already contracting for the shearing of the 1917 clip. Sheepmen are expecting a good clip, exceeding the total of last year by 200,000 pounds, bringing the amount to $2,225,000.

The usual number of machine plants will be in operation at different points in the valley.

Sam Blatchley will operate a plant in Kittitas canyon, the Kiona Shearing company at Kiona and Jacob Marr at Ephrata o nthe Columbia river.

Other smaller plants will move from one band to another.

Shearing will begin about March 26 and continue through April in the lower valley and in Kittitas county for a month longer.

Suggested Canadian Embargo.

A movement is on foot in Ontario province to prohibit the importation of fruit during the local production period. The Niagara fruit growers propose to send a deputation to Ottawa to request the dominion government to put an embargo on all foreign fruits and vegetables during the four months of the Canadian fruit season.



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"You Can Do What Others Are Doing"

George Rupp says: "I came here from Hudson, Iowa. I can stand on my windmill and count no less than a dozen grain elevators. I can stand in my yard in the Fall and count as many threshing machines. My horses and cattle have run outside all winter.

(In 1915 Alberta produced 107,741,000 bu. of oats or an average of 56.35 bu. per acre. The total value of all crops in 1915 was $114,186,000.00.)

Mr. A. Taylor of the Rhein District in Saskatchewan, says: "I had 30 acres in wheat that averaged 50 bu. an acre, 315 acres in oats, that averaged 88 bu. ian acre, 20 acres in barley that averaged 60 bu. an acre."

(In 1915 Saskatchewan produced 196,042,000 bu. of Spring Wheat or 28.54 bu. average per acre—total value of all crops for the year was $382,845,000.00.)

W. Lost says of the Kenville District in Manitoba: "I had 203 acres of wheat that averaged 43.5 bu. an acre, 17 acres of oats that averaged 65 bu., 25 acres of barley that averaged 50.5 bu. an acre.",

(In 1915 Manitoba produced 96,062,000 bu. of Spring wheat or an average of 28.83 bu. an acre. Total value of all crops for 1915 was $201,100,000.00.)

Charles Draper says: "I came from Nebraska with no capital—and have not had a poor crop for seven years. Any man willing to work can succeed here."

Mr. G. D. Schnauffer says: "I came from Illinois in 1907. Today I am worth $30,000—I cleared $120 from the litters from one sow last year."

(In 1915 British Columbia produced 3,033,000 bu. of potatoes or an average of 247.23 bu. per acre; the total value of all crops was $11,889,100.00.)

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NEWS FOR BREEDERS

The 1917 session of the Idaho Cattle and Horse Raisers' association will meet at Idaho Falls next January. The State Wool Growers' convention is also expected and it is the hope of that live city to get the live stock association meeting, including the swine breeders and dairymen and the seed growers, potato growers and others that met at Pocatello this winter.

Dr. Thomas C. Wilson of Idaho Falls, Idaho, has 1200 head of hogs, all eligible to registry as Duroc Jerseys, but he is growing them for market. Dr. Wilson expects to see hogs go to 12 cents at the buying point in Idaho and has, in fact, been offered that price for two carloads ready in the early spring. He thinks by next year people will begin to fairly get back into the hog business.

The doctor expects to turn off 1000 hogs during the year, for which he counts on $25,000. He will let the gilts farrow, wean the pigs and then begin to fatten them, thus having still more hogs next year. The last of his hogs in summer will hog off peas.

Recently established union stock yards that are of much interest to Idaho live stock breeders have been erected at Ogden, Utah. This is a little the closest open market southeastern Idaho stockmen have. The first unit of these yards was completed in December. The entire completed portion has concrete floors, a perfect drainage system, covered pens for sheep, hogs and cattle and every modern device for feeding, watering and caring for the stock. The yards have been built along side of the yards of the Odgen Packing company's big plant and a new railroad bridge, nearly completed, gives them the best of railroad facilities. Ogden has direct railroad lines to Los Angeles, San Francisco, Denver and all points east. It is the plan of those interested to make this a great feeder point, especially for San Francisco and Los Angeles. But the man with a car of finished stock can ship on through whenever Ogden prices do not suit him. It looks as if the Ogden yards ought to be of benefit and that use should be made of them by Idaho Shippers.

H. A.

MORE WORLD'S RECORDS BROKEN.

The Holstein-Friesian heifer, Jewel Pontiac Segis 229261, has broken the world's records in the junior 2-year-old class of the division covering tests begun not less than 240 days after calving, is the word from Secretary F. Q. Houghton of the Holstein-Friesian association. The former world's record of 21.91 pounds of butter in seven days was held by Finderne Mutual Fayne, while the former world's record of 445.5 pounds of milk in seven days was held by Johanna De Kol of Rush Court. The record of the new champion is 473.6 pounds of milk, containing 22.07 pounds of butter, in seven days.

Jewel Pontiac Segis established her record 355 days after freshening. She holds the world's record for both milk and butter in the 60 and 90 day divisions and has now broken the records for milk and butter, and the combination record for both, in the eight-months-after-calving-division. Jewel Pontiac Segis was bred and is owned by J. M. Hackney of Arden Farms, Inc., of St. Paul, Minn. Her sire is King Segis Pontiac Count 93909 and her dam is De Kol Jewel Pontiac 142-184.

WESTERN BERKSHIRE CONGRESS.

The western Berkshire congress meeting and sale as well as the Western Berkshire show have now become established institutions. The very successful meeting and sale held at Davis, Cal., February 13, 14 and 15 have established the western Berkshire congress upon a permanent basis, is the report of F. R. Steel of Grants Pass, Ore., who was elected president of the congress.

Charles M. Talmadge of Newport, Wash., was chosen vice president and Arlington M. Smith of Visalia, Cal., secretary-treasurer.

The 45 animals sold brought an average of $145 each. The lowest price was $50 and the highest $500. A secret judging committee was appointed to see that any such if found among the consignments should not be perpetuated upon the buying public. The advance knowledge that this committee would unheasitatingly throw out any poor cows, however, kept any one from sending such to the sale.

The reception of the congress by the University of California (the event took place at the University of California farm) was carried out with a splendid spirit of helpfulness and cooperation.

ABBEKIRK DOEDE.



The above photo shows Abbekirk Doede 290732, a junior 2-year-old Holstein heifer owned by H. H. Stiyer of Buhl, Idaho, that in seven days, on official test, produced 18.23 pounds of butter which is believed to be the Idaho state record for junior 2-year-olds. Mr. Stiyer's herd bull, Buffalo Duke Doede 102228, is out of the dam of the great world record cow Duchess Skylark Ormsby, with 1508.33 pounds of butter in a year, and his sire is Sir Jewel Pontiac Doede, dam of 17 A. R. O. daughters, including Miss Netherland Artis Parthenia, 29.97 pounds of butter in seven days. The bull is a good individual and Mr. Stiyer has seven of his daughters, of which he way well be proud. One of Mr. Stiyer's cows, Albin Lottie DeKol, has a record of 324 pounds of fat, or 400 pounds of butter in five months. She has a fine bull calf by Buffalo Duke Doede.

Far-Reaching Trust

Alleged Among Big Creameries

(Continued from page three.)

cial strength and ability to eliminate competition "and to restrain interstate trade and commerce."

Charge is made that premiums and rebates have been given to an extent not justified by the business thereby obtained, to increase their own business and to decrease the business of their competitors; that they have purchased the products of competitors and thereupon made false claims of inferior quality or condition of such products in order to cause financial loss to their competitors.

Was Competition Real?

They have worked concertedly in the same sections of territory, it is charged, to prevent competitors from getting an adequate supply of raw materials and have for a time entered into apparent competition among themselves in certain territory where such procedure seemed necessary in order to eliminate competitors, and after eliminating the competition certain of the defendants have withdrawn from such territory, while another or others remained in exclusive control thereof, all by mutual agreement.

Say Others Forced In.

Charge is made that by various methods in order to force competitors to join with them in fixing prices for the purchase of raw materials, the defendants "have attempted to induce and coerce, and have induced and coerced, certain of their competitors" to adopt the methods complained of, according to their wishes and direction.

Purchase has been made of the business, plants and stations of competitors, it is charged, for the purpose of closing and doing away with the same and thus preventing competition, "all in furtherance of, and to effect the objects of, the aforesaid conspiracy unlawfully and unreasonably to restrain interestate trade and commerce."

Ruined Competitors, Is Charge.

It is charged that by virtue of the conspiracy and concerted action alleged, and because of the fact that the proportion of the business carried on by the defendants greatly exceeded that of other manufacturers, wholesale

Colfax Blue Ribbon Stud

Colfax, Washington.

40 HEAD

Imported and American Bred

Percheron Shire and Clydesdale Stallions and Mares

From **yearlings** up to **five** year old, ton horses with **veterinary** certificates for health and soundness.

In **Percherons** we have the strains of the great **Etudiant. Brilliant** and **Besigue** blood.

In **Shires** and **Clydesdales** assembled here are some of the prize winners of the **Panama-Pacific-International** at San Francisco in 1915 and including some of the leading **State Fairs** of the **Central** and **Middle West** of 1916.

Enterprise Pride, who has never met defeat in his 2 and 3 year old form and having been **champion** at the **Illinois** and **Iowa State Fairs** and **reserve champion** of the breed at the **Panama Pacific.**

His stable mate, **Hope's Pride,** who in his turn also has been **first** and **champion.**

Prince Hopkins, declared by his admirers to be the **greatest living exponent** of the **breed,** with his stable mate, **Baron's Prince,** just rising 3 years old and at different shows in the strongest competition having never been defeated, always winning the coveted honors—together with a stable full of the blood of **Scotland's Greatest Sire—Baron's Pride,** all these are now **offered to you at prices that DEFY COMPETITION.**

If you or your community needs a stallion write us your wants, or better still, call and see us.

Peter McFarlane, Mgr.

Address all correspondence to Colfax Blue Ribbon Stud, Colfax, Washington.

ANNUAL SALE OF PURE BRED SHORTHORNS

Portland, Ore., April 3rd
Spokane, Wash., April 5th

Choicely Bred Young Bulls and Heifers.
CONSIGNED BY

Frank Brown, Carlton, Ore.
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Alex. Morrison, Valley, Wash.
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dealers and others, they have been in a position to bring financial distress and ruin to others engaged in the creamery business if they so desired. And it is charged that when others engaged in the business, did not so conduct it as to please the defendants, they did so bring financial ruin to other manufacturers and dealers; and it says many persons who have been ambitious to engage in the industry "have been by said conspiracy prevented from engaging in the creamery business in competition with said defendants."

Second Count in Indictment.

There are two counts in the indictment, and the second count charges that continuously throughout the period of time named, within the state and district of Idaho, the defendants unlawfully conspired to obtain a monopoly in the creamery business which has been carried on among the several states by themselves, and which constitutes trade and commerce among the several states of the United States within the meaning of the act of congress.

It is charged in the second count the defendants did bring financial distress and ruin to other manufacturers, wholesale dealers and others engaged in the creamery business among the various states named, "as well to the great detriment and injury of the general public;" that the defendants have obtained a monopoly in the trade and commerce in the indictment described, particularly in said state and district of Idaho.

Presentation of the evidence in the case to the grand jury was made by John R. Smead, assistant United States district attorney, who said that, so far as he knew, the case would be prosecuted by James L. McClear, United States district attorney, and himself, without the aid of special counsel. Mr. Smead says the prosecution is under the Sherman anti-trust act of July 2, 1890, and that the Clayton act, passed in 1913, was not amendatory of the original act, but was supplementary thereto.

Trial in September.

Unless unforeseen circumstances arise causing a delay, the case will be tried in the United States district court at Boise at the September term of court that starts on the second Monday in September.

Referring to the indictments, John R. Smead, assistant United States district attorney, who had charge of presenting the evidence to the grand jury, says further that it was to determine whether the acts complained of indicated violations of the anti-trust law or simply tactics employed locally in the markets by the defendants. Valuable assistance on the alleged infractions of the law was rendered not only by William G. Scholtz, director of farm markets of Idaho, but also by J. K. White, pure food inspector, and H. L. Jackson, state chemist.

It is understood there was an investigation at Salt Lake last November by United States grand jury that concerns some of the defendants.

Several hundred witnesses will be called by the government from eight states when the cases are tried. All the defendants will be tried together unless there is a "severance," meaning that separate trials may be had. Allowance of a severance is entirely in the discretion of the court, according to Mr. Smead.

A CHAMPION OXFORD.



The above photo shows the champion Oxford ewe at the Panama-Pacific exposition at San Francisco in 1915. She is owned by C. P. Kizer of Harrisburg, Ore., one of the few breeders of Oxfords in the Pacific northwest. Mr. Kiser says he likes the good size of the Oxfords, that they make an excellent cross on fine wool sheep and that he has difficulty in supplying the demand.

Association Grows.

During January the National Duric-Jersey Record association recorded 5132 pedigrees received, 96 new members, and had an increase in receipts of fully 20 per cent over January of 1916. Last year the association conducted 14 futurity shows. This year the association will promote three different kinds of futurity shows, the national at Omaha, the state futurity and the district futurity. Any breeder is eligible for the national, one state futurity and one district futurity.

Thirteen state futurities, carrying classifications of $400 each, will be promoted at different state fairs, among them being the Montana State fair and the Oregon State fair.

Aluminum in Place of Wood.

Aluminum is now being substituted in place of wood in the manufacture of automobile bodies.

POULTRY

RHODE ISLAND REDS

and Rhode Island Whites, both combs; eggs, $2, $3, $5 per 15; Bronze turkey and Toulouse geese eggs; pedigreed Belgian hares.
J. NONNENMACHER, R. F. D. 3, No. Yakima, Wash.

BARRON WYANDOTTES

outlay all breds in contests. Mine are three-fourths Barron blood, strictly utility bred. First in the west. Eggs. $2.00 for 15; $5.00 for 50.
C. B. AUSTIN. Kuna, Idaho.

$3.00 EACH FOR BARRED ROCK

Breeding cockerels. Half that for fifteen hatching eggs. Take advantage of this special offer. Send your order today. Satisfaction guaranteed.
A. C. BERNTZEN, Eugene, Ore.

BAILEY'S BARRED ROCKS.
Eggs from my prize winners, $2, $3 and $4 per 15.
E. S. BAILEY, R. D. No. 4, Boise, Idaho.

WINNERS OF THE BLUE.
Barred Rocks—S. C. Black Minorcas.
Write for prices on high-class exhibition and breeding stock. Satisfaction guaranteed.
WILBER CLAYTON, R. F. D. 1, Payette, Ida.

ENGLISH WHITE LEGHORNS AMERICAN

Raise your cockerels for next year from Famous Tom Barron strain. Eggs **$3.00** for 15; American White Leghorns, **$1.50** for 15c eggs; 90% fertility guaranteed. All breeders range raised. A few cocks and cockerels left, **$3.50** and **$5.00.**
EVERGREEN POULTRY FARM, OSWEGO, ORE., R. 1, Box 176 A.

H. C. Davis Dispersal Sale of Holsteins April 2nd

AT HOME FARM, GRANGER, WASH..

90 Head or More of Females. Bulls All Sold but Three Calves

More world's record blood than ever offered at auction from one herd. Higher average production. Higher average individuality. Younger average age, only 4 animals over 5 years of age. Will give terms to responsible parties, not to exceed one year. Bankable notes, to draw 8 per cent interest. Everything guaranteed as represented. Located on N. P. and O.-W. R. & N. Rys. N. P. trains stop at ranch, others will be met. For catalogue write

H. C. DAVIS, Granger, Wash.

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SHORTHORN CATTLE



Gainsford Perfection 442173

Hercules Shorthorns

We can supply you with choice, well grown breeding stock. Your inspection of our herd is invited. Visitors always welcome.

Day & Rothrock
205 Exchange Bank Bldg., Spokane, Wash.

HOLSTEIN CATTLE

Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.
Write for pedigrees and terms.
D. R. BOOMER. New Plymouth, Ida.

Avalon Dairy

Registered bull calves by Hartwood Hello Hengerveld (129524) from cows with good A. R. O. records, DeKol, Korndyke and Pontiac blood. Prices right. Six per cent interest on time payments. Write today.
AVALON DAIRY. Kuna, Idaho.

HOLSTEIN CATTLE

Young stock by richly-bred grandson of King of the Pontiacs, out of high producing advanced registry cows.
A. E. SMITH, Sumas, Wash.

BUFFALO DUKE DOEDE
(102228) heads my herd. He is a half brother of world's record cow, Dutchess Skylark Ormsby, producing 1606 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.
H. H. STIYER. Buhl, Idaho.

WATERLOO HOLSTEIN FARM.
Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje	King Segius 10th Segius Walker Pietertje 2d

C. F. JENNESS. Meridian, Idaho.

HOLSTEINS FOR SALE.
Pure-bred bulls of serviceable age, priced right. Correspondence solicited.
J. R. LONG, R. F. D. No. 4, Buhl, Idaho.

Holstein Friesian Cattle

All our own breeding. A herd equally strong at both ends. Herd head, Sir Korndyke Ormsby Piebe, sired by Sir Korndyke Hengerveld De Kol 36th; dam Queen Piebe Ormsby Mercedes, record junior 2-yr.-old, 24.65 lbs. butter in 7 days, 3-yr.-old in 365 days, 952.28 lbs. butter, 20,286.20 lbs. milk; 4-yr.-old, 35.16 lbs. butter in 7 days. She is ¾ same blood as Queen Piebe Mercedes, world's record 4-yr.-od, record 1389.45 lbs. of butter in 365 days.

Most of the cows are sired by Sir Johanna Ruth Fayne, now 9 yrs. old, still in service. For average A. R. O. test of daughters, age and production considered, he stands near the top of the list.

WM. TODD & SONS, R. 4, North Yakima, Wn.

Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the bred.

At the recent Chicago International, our bred won 1st on aged herd, 2d on young herd, 1st on calf herd, and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

Congdon & Battles
Otto V. Battles, Mgr.
North Yakima, Wash.

RED POLLED CATTLE

RED POLL FARM.
REGISTERED RED POLLED CATTLE. Grand champion bull and cow 1916 Gem State fair are producing some excellent stock. Calves under 8 mos. for sale.
William Weick, R. No. 5, Caldwell, Ida.

JERSEY CATTLE

WAIKIKI FARM JERSEYS.
We offer several young bulls and heifers of excellent breeding. Send for descriptions and breeding.
WAIKIKI FARM, R. 7, Spokane, Wash.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (341305) assisted by Superba Jr., (241305) and Sammy (79833). Top for size and quality. I have a few fall boars left. Now is the time to get in on spring orders. Correspondence solicited.
J. M. ROYSTON EST., C. ROYSTON, MGR. Payette or Fruitland, Idaho.

DUROC-JERSEY SWINE

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Pullman, Wash.

BERKSHIRE SWINE

GALBRAITH RANCH BERKSHIRES
Best breeding stock obtainable. Prices reasonable. Phone 20F3.
T. A. GALBRAITH, Kent, Wash.

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

HORSES

Purebred Stallions

We have for sale a few 1-year-olds, 2 this spring, Shire stallions, our own breeding; also a 5-year-old and an 8-year-old Shire stallion, both brown; a 3-year, a 7-year-old and 1 aged Percheron stallion, all black; one 2-year-old Brown Clyde stallion, bred by Canadian government. We sell at the barns only, and tell you all we know about each and every horse, guaranteeing them to be as represented or refund your money.

Our horses won all firsts and champions at Spokane Interstate Fair, N. W. Live Stock Show, Lewiston, Ida., and Pacific International, Portland, Ore., last year. If you need a horse, or want to exchange, write us, or come and see before buying. It will pay you.

G. M. WILSON, WILBUR, WASH.

STALLIONS

At Alta Stables,
PENDLETON, ORE.

One extra good, big, black imported Percheron, 5 years old, weight 2300.

One extra good imported son of the great $40,000 Carnot. (66666) 66666.

Other Percherons, Belgians, Shires and Clydsdales that are desirable, besides a number of young ones with correct pedigrees from one to three years old and Percheron and Belgian mares. All will be priced to sell.

If You Have a Stallion That You Can Not Use Longer, I Might Change.

J. R. Justice, Importer
PENDLETON, ORE.

Imported Belgian Stallion

For sale—One imported Belgian stallion, registry No., American 3290, foreign 43396; color cherry-bay; foaled 1905. Sound, gentle, active and good disposition. Price $1000. Terms to responsible party.
PIERCE COUNTY BELGIAN HORSE CO. Kapowsin, Wash.

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120-inch W heelbase

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Because of What John W. Bate Has Done

Hundreds of Extras

Factory efficiency has been made a fine art in this plant. John W. Bate, our efficiency engineer, has spent millions to attain it.

This entire plant, covering 45 acres, was built and equipped to secure it. Now our new body plant completes it. We urge you to learn where these tremendous savings show in extra value.

For a Lifetime Car

Part of this saving pays for 100 per cent over-strength. Our margin of safety used to be 50 per cent. It has now been doubled.

Steering parts, gears, axles, etc., are made oversize. Our rear springs are built so that, in two years, not a single spring has broken.

Over 440 parts are built of toughened steel. Parts which get a major strain are built of Chrome-Vanadium. The steel in Mitchells costs us up to 15 cents per pound. And we do not skimp on weight.

The result is safety, freedom from repairs and troubles. And a car which probably will serve men for a lifetime. Time will prove, we believe, that this double strength is worth half the price of the car.

$4,000,000 in Extras

There are 31 extra features in Mitchells, most of them exclusive. On this year's output these extras cost us about $4,000,000.

They are things like a power tire pump, an easy control, a ball-bearing steering gear, engine primer on the dashboard, a light in the tonneau, a locked compartment, etc.

Every one is a wanted feature. Yet they are impossible, at a modest price, without Mitchell factory efficiency.

Extras in Luxury

The Mitchell has long been considered by experts one of the handsomest cars on the street. The output is largely sold in metropolitan centers.

Yet this year we have added 24 per cent to the cost of finish, upholstery and trimming. We are giving you heat-fixed finish, extra-grade leather, and scores of new dainty touches.

TWO SIZES

Mitchell —a roomy, 7-passenger Six, with 127-inch wheelbase. A high-speed, economical, 48-horsepower motor. Disappearing extra seats and 31 extra features included.

Price $1460, f. o. b. Racine

Mitchell Junior —a 5-passenger Six on similar lines, with 120-inch wheelbase. A 40-horsepower motor—¼-inch smaller bore than larger Mitchell.

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Also all styles of enclosed and convertible bodies. Also demountable tops.

All this results from another economy. We now occupy our new body plant. All Mitchell bodies, open and closed, are built here now, under Bate efficiency methods. And this added luxury clearly shows the result.

What So Important?

What else is so important?

Extra values like these, without extra price, come only through efficiency. Under other methods, all these values are wasted in the shop.

Mitchell stands unique among fine cars in respect to efficiency. For a dozen years John W. Bate has worked here to attain it. Go to your Mitchell dealer and see the results. Compare it with cars built otherwise. If you can, take an engineer with you, and we will abide by his verdict.

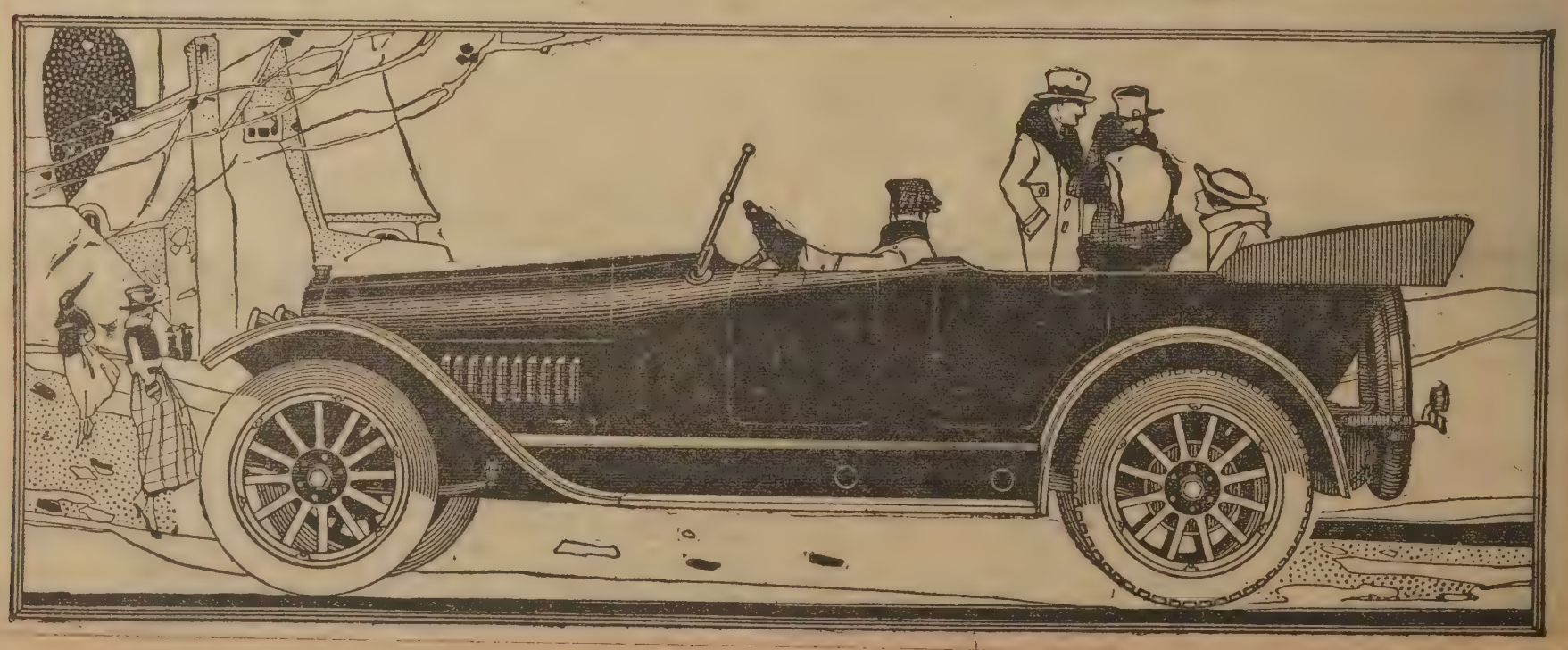
$1150 Mitchell Junior

Note that this year's line includes two sizes—the Mitchell and the Mitchell Junior. But the Mitchell Junior—for five passengers—is still powerful and roomy.

This is also for efficiency. So the man who wants a 5-passenger car need not pay for more power or more room than he needs.

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College of Agriculture
University of Illinois

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. MARCH 15, 1917. NO. 11.

We Put Out the Sign "Cooperation"

And Then Do Everything It Is Possible for Us to Do to Avoid Cooperation

By W. H. PAULHAMUS

Most of us are not aware that we people on the farms are not the only people interested in cooperation. The truth of the matter is—that all of the large business interests of the United States are working along the same lines.

The meat packers are working cooperatively, the Standard Oil Company is working cooperatively, the bankers are working cooperatively, and in fact any line of business that is not working on a cooperative basis is not making good, and the fact that any industry fails to hang out a sign announcing that this is a cooperative movement is no indication that it is not being conducted along cooperative lines.

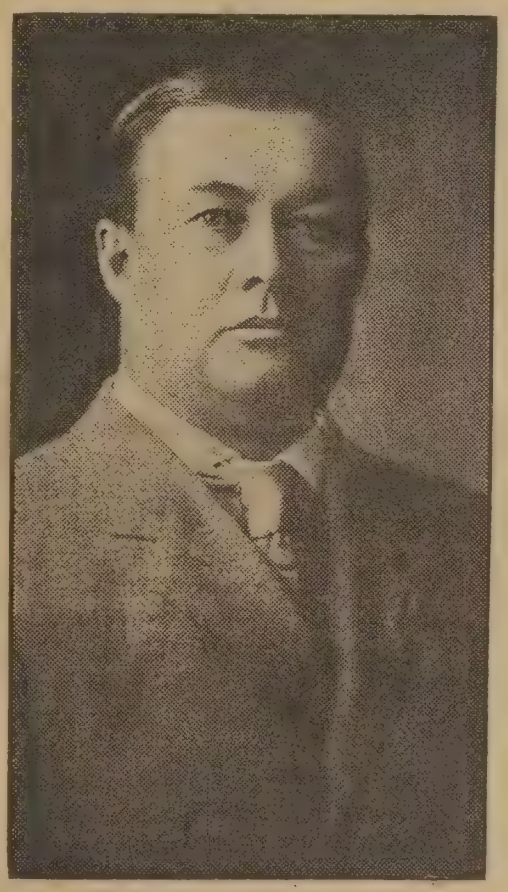
About all that we people in the agricultural districts do is to put out the sign "cooperation" and then do everything it is possible for us to do to avoid cooperation.

Cooperation means working in harmony, with a view of obtaining the best possible results for all in interest. This is a very simple method and can be followed to a successful conclusion by any community.

There is not a farming community in the United States that would not profit materially by holding a meeting and selecting a captain, and then permitting the captain to outline a business policy and obtain results.

Of course it is necessary to have a captain, but it is more necessary to have privates, as no captain can be successful unless he has privates, just as no leader can be successful unless he has followers.

The trouble with the cooperative movement is that we have all captains



W. H. Paulhamus

and no privates, and for this reason we should all favor military training in our schools, which I believe would teach us the elementary principles necessary in cooperation, just as it is necessary in our army and our navy, both of which are largely cooperative movements, which means that everybody connected is cooperating for one purpose.

We have the best example that the world has ever been shown of the cooperative movement in the war now being carried on—the German government are cooperators, and the allies very much resemble the average farmers' cooperative movement.

We have just had another striking example of cooperation in the recent organization conducted at Spokane, at Seattle, at Wenatchee and several other points. This movement was cooperative only to the extent that the farmer was given an opportunity to cooperate with his cash with some gentlemen, who were capable of wearing good clothes and eating good dinners, but it was not cooperative to the extent that the farmer received any results.

I believe that we can truthfully say that it requires good clothes, in addition to being a stranger to us, to gain our confidence, while the truth of the matter is we have in our own community entirely capable leaders, who understand our problems, and who will lead us to success if we will be content to be followers.

The leaders of our state grange and state union, and many other prominent citizens were misled and induced to get into bad company. This is only to be

(Continued on page ten.)

WATCH FOR THIS—

By all means read the intensely interesting account of splendid shoulder to shoulder cooperation among more than 12,000 milk producers in the Chicago district and how it resulted in a smashing victory over powerful distributing companies for better prices. This important article will appear

IN NEXT WEEK'S FARMER



Wizards of Transportation

George Stephenson is rightly called the father of the steam railway. He ran the first successful steam engine on the 25th of July, 1814. In September, 1825, he opened the first railway over which passengers and goods were carried by a locomotive.

The Human Interest In Progress

THE man who is responsible for a system by which the world enjoys safer, easier, quicker and cheaper transportation, is a determining factor in progress.

When George Stephenson started the first locomotive on its way he pushed the world forward centuries. Today we see the automobile with all its possibilities made practical and its energy made effective by the rubber tire.

The leading example of highly specialized and efficient tire service is found in Firestone Non-Skid Tires.

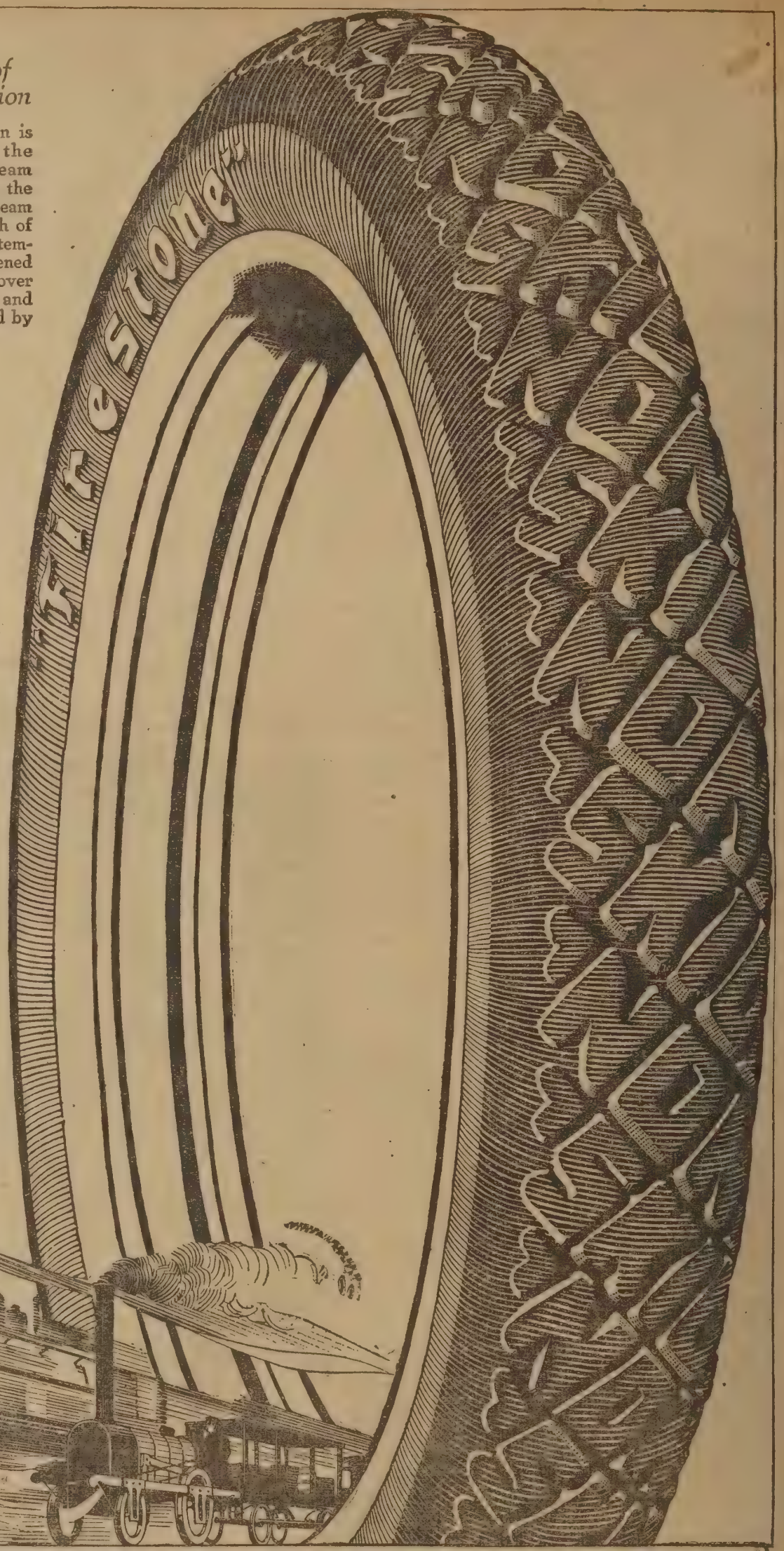
The miles of reliable wear on any road at all seasons, the car-protection and easy-riding, make Firestone Tires a world-wonder in transportation.

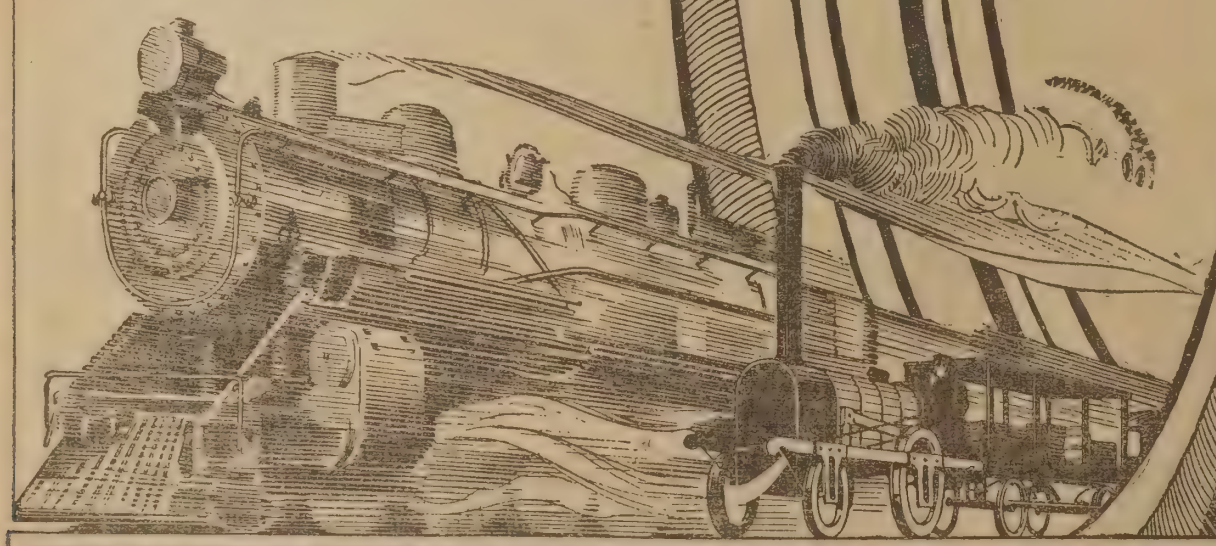
And as there is a man-power behind every big work, so this service is vitalized and given the personal element by the name on every tire of the founder and present head of the business, Mr. Firestone. That name on the tire is your assurance of quality.

Your dealer can get Firestones for you, and this quality will cost you no more than ordinary tires. Because Firestone Tires are widespread in use and the output is tremendous and efficiently handled by the Firestone Organization. Your dealer will serve you.

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Firestone

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40 No. 11 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF March 15, 1917

This Poultry Man Can Tell You

Just How Much His Chickens Pay Him for the Pleasure of His Company

By PAUL E. TRIEM

W. A. Hayward of Shelton, Mason county, Wash., knows just how much his chickens pay him for the pleasure of his company. In spite of the modern agitation for exact figures in this respect there is a delightful vagueness in the reply of most chicken cranks to the question, "Do your chickens really pay?" Mr. Hayward answered this question defintely and without hesitation.

"My present flock of Rhode Island Reds is not yet mature enough to have paid much of anything," he said, "but I can tell you what my White Leghorns did in one of their average years. I had 340 hens; I took in altogether $1335., and my net profit was $800. These chickens had the use of 1 1-4 acres of uncleared ground, and their houses were warm and comfortable, but not expensive."

Mr. Hayward feeds his chickens for egg production—in the brushy paths of their uncleared yard they find bugs and green food, but this is not their only supply. Animal food of some sort is supplied in their scratch food, and corn or cabbage is always available. The former is run through a cutter which reduces it to available size. Mr. Hayward makes little use of sprouted oats, on account of the difficulty of keeping them from molding.

In reply to a question as to why he had changed from Leghorns to Reds, when the former had proved their ability to fill the egg basket and, incidentally, the purse, Mr. Hayward said that the superior vitality and "living ability" of the larger breed had attracted him. When a Leghorn chick gets a bad start it seldom recovers sufficiently to devolep into a healthy mature chicken. The Rhode Island Reds, on the other hand, have unusual recuperative power and seldom fail to hold their own against any reasonable handicap in the way of weather or accident.

In the Hayward garden four varieties of sweet corn have been tried out. Cory and Golden Bantam have both been displaced by an unknown blue variety—one which Mr. Hayward brought from Oregon. The cob is small, the grains deep, and the quality is a revelation to one who thinks he has sounded the depths of corn palatability. Since the advent into the Hayward kitchen of this variety most others have had to retire.

Country Gentleman is the exception to this. This variety, so favorably known in the east, has not yet established its ability to cope with Pacific coast climatic conditions, but apparently it is in the way to do so. Even during the present backward season and with the handicap of late planting it has nearly matured roasting ears, and the growth of the plant itself is amazing. With proper selection and cultural conditions there seems little doubt that this variety will become of value on the Sound.



The above pictures show Mr. Hayward among his poultry and in the corn field of his home near Shelton, toward the southern end of Puget Sound. Mr. Hayward believes that his blue corn of name unknown to him is a variety of much promise.

Dollar Fifty

To Be Paid for 1917 Grain Crop

Enterprise, Ore., has set the Chicago, Minneapolis, Portland and other grain exchanges an example so hard to follow that it is not being followed. In fact, it is believed that the little Oregon town has established a new record in "futures" for the northwest, if not for the entire United States.

C. R. Elliott, a retired stockman and farmer of that place, has contracted the 1917 wheat crop of H. A. Quesenberry of Enterprise at $1.50 per bushel. The contract covers the grain to be grown on a 275-acre tract owned by Elliott and farmed by Queensberry.

W. R. Holmes, president of the Wallowa National bank of Enterprise, confirms the report of the transaction, but says that he does not "think that it establishes anything." Mr. Elliott is an enthusiastic business man, who, says President Holmes of the bank, "figures that he can make some money on the contract."

Wool Train

Will Demonstrate in Washington

The government wool car, the purpose of which is to educate the people of the country in the subject of wool production and marketing, is now in the state of Washington, where it will travel for the remainder of this month. Representatives of the state college animal husbandry department and of the federal department of agriculture will be with the car.

At each stop, of which there will be 17, lectures and talks on sheep production, methods of producing wool, shearing, marketing and even manufacturing woolen goods will be given. The car also carries a moving picture outfit showing sheep from the range to the market and wool from the fleece to the cloth.

A number of sheep from the state college farm will be carried along for demonstration purposes.

The following is the itinerary of the demonstration car:

Pullman, at the state college—March 16 and 17.

Colfax—March 19, 8 a. m. to 10:15 a. m.

La Crosse—March 19, 11:30 a. m. to 11:30 a. m. March 20.

Dayton—March 20, 2:45 p. m. to 12:45 p. m. March 21.

Waitsburg—March 21, 1:15 p. m. to 4:55 p. m.

Walla Walla—March 22, 8 a. m. to 8:15 p. m.

Pasco—March 23, 8 a. m. to 11 a. m.

Kennewick—March 23, 11:07 a. m. to 9:33 p. m.

Prosser—March 24, 8 a. m. to 10:49 p. m.

North Yakima—March 26, 8 a. m. to 10 p. m.

Ellensburg—March 27, 8 a. m. to 10:10 p. m.

Sunnyside—March 28, 9:20 a. m. to 4:10 p. m.

Grandview—March 28, 4:30 p. m. to 9:55 a. m. March 29.

Toppenish—March 29, 10:52 a. m. to 3:05 p. m.

Connell—March 29, 6:15 p. m. to 12:15 p. m. March 30.

Ritzville—March 30, 2 p. m. to 7:50 p. m.

Sprague—March 31, 8 a. m. to 2:50 p. m.

Cheney—March 31, 3:50 p. m. to 9:25 p. m.

Community Organization.

County Agriculturist O. T. McWhorter has arranged with the people of Elwha, in Clallam county, for an agricultural organization which will meet once each month.

Endorsed By Kegley and Crow

On the Advice Many Farmers Were Caught in Gigantic Swindle

(From the Mason County Journal.)

The recent conviction of five of the promoters of a "cooperative trading company" (the Northwestern General Trading company and its allied branches in United States court at Spokane), after a long and hard-fought trial, should serve as a warning to people who do not have money to lose to pass up all such get-rich-quick schemes and save-money schemes in future. We have no means of knowing how much money the little county of Mason contributed to this and other stock-selling schemes, but it is a safe guess that our people who could ill afford the loss have kissed goodbye to at least $10,000 in the last five years, in spite of the frequent warnings of this paper. The desire to buy goods cheaper is quite natural, and most people have an idea that the other fellow is exploiting them. The truth is that no business nowadays enjoys more than a moderate margin of real profit, but it is doubtless true that the expense of conducting most business is abnormal. The trend of the times, wages and the essential things required in sconducting any business, and perhaps more than anything else the growing demand of the public for "service," spells higher prices for everything and at the same time a nerrowing profit on the investment. None of these cooperative concerns, so far as we have been able to observe, has by legitimate business methods been able to eliminate unnecessary expense and sell goods cheaper to their stockholders, although some were able to keep up a pretense for a time, or as long as the new crop of suckers held out and they could sell stock. Careful reading of the testimony during the trial disclosed a cold-blooded scheme on the part of the promoters to make the farmers "come through," and the heavy fine and imprisonment seems justly merited.

The unfortunate part of the so-called cooperative trading transactions is that so many grangers were encouraged to invest their money by leading officers of their organization.

The Olympic trading concern, at Seattle, was vouched for by several of these officers, after a purported investigation, and it later developed that some of the investigators were on the payroll of the concern. It has been shown that 51 per cent of the money received from stock sales, supposed to be the capital of the company, went as commissions to those who sold the stock.

In the case of the Spokane concern it was proven that of $584,748 collected from the people in exchange for stock, $219,323 was paid out in commissions to agents and officers.

Master Kegley of the state grange, President Crow of the farmers' union and other officials formed a committee to investigate this concern, and reported it in first-class condition and doing a safe and conservative business.

John C. Lawrence, for whom it is claimed that he always "stood for the welfare of the people and against the special interests"—whatever that may be—was one of the committee, and seems to have been on the company payroll at the same time.

How these gentlemen, each claiming to have had long business and mercantile experience, could agree that a business suffering the loss of more than one-third of its capital at the outset, could be working along safe, conservative lines, certainly passeth all understanding.

The fact remains, in this case, that, after handling more than half a million dollars of the money of farmers and people of small means, the Spokane trading concern has merchandise and assets of about one-quarter of that sum. The promoters have absorbed or lost the rest, honest cooperative movements have received a severe blow, the farmers of the northwest have been cruelly despoiled, and the business interests of each little community has retrograded just that much. The lesson should be remembered when the next canvasser comes along with his little get-rich-quick or save-money scheme.

FARMERS CAUGHT

By Following Grange Advice.

The Clarke County Sun, after giving the news of the conviction of the four leading officers of the Northwest General Trading company in the United States court at Spokane, having been found guilty of using the mails to defraud, says:

This is the company that operated extensively about a year and a half ago in Clarke county. They had branch offices in Seattle and Portland. C. L. Davis was the man who sold the stock around Brush Prairie, Minnehaha, Washougal and other points in this county. Shares sold for $40 each, and each shareholder was privileged to buy groceries, supplies, etc., at wholesale prices. About $335,000 was collected in stock sales and about $112,000 of this went to salesmen for commissions. What roped the farmers and grangers into the concern was the fact that the Northwestern Trading company was indorsed by the executive committee of the Washington state grange, C. B. Kegley, J. O. Wing and J. T. Compton. And it was also indorsed by the farmers' union. The company did operate for a while, but it was a swindle, with no possible show of success.

THAT INDORSEMENT

Made by the Grange Committee.

The following signed indorsement was printed on the front cover page of the 1915 catalogue of the Northwestern General Trading company:

Patrons of Washington:

Your executive committee has made a personal investigation of the resources and liabilities, methods of business and quality of merchandise of the Northwestern General Trading company. We are satisfied that it is on a sound financial and cooperative basis, and through the proposed plan of a distributing center with each subordinate grange, and the active cooperation of the patrons, can be made to fill the need of the wholesale supply house for the grange members.

Executive committee, Washington state grange.

C. B. KEGLEY.
J. O. WING.
J. T. COMPTON.

HOLDING THE SACK

Garfield County Stockholders.

East Washingtonian: Heads of the Northwestern Trading company and of the Olympic concern were found guilty of fraudulent use of the mails in their stock manipulations. The Northwestern once did a thriving business in Garfield county, and many stockholders are now holding the sack.

Breeder of Spotless Reputation

Is the Best Sateguard the Purchaser of Well-Bred Animal Can Have

If dishonesty was the rule the whole fabric of the nation's business would fall to pieces. On the other hand, the nation's business would be considerably curtailed if it were confined only to those men whose words were as good as their bonds. Hence, while not losing faith in honesty and integrity and efficiency in building up any line of business, it is just as necessary to have laws, rules and regulations to support the weak-kneed and to punish the guilty. Constitutional government is said to be a thing of checks and balances and the purebred live stock business, while depending ultimately upon the spotless reputation of the breeder, also needs these checks and balances. If not closely watched, abuses creep in, and the good of the industry depends upon ferreting and eradicating these abuses.

The buyers as well as the breeders of purebred live stock are still looking for a satisfactory explanation of the following contradictory statements regarding the $21,500 calf sale at Portland last December:

October 2, 1916, B. Meyer, the breeder, offered the Holstein bull calf, Findern Mutual Fayne Valdessa, to E. A. Stuart for $5000.

November 17, 1916, Mr. Meyer told Mr. Stuart that the animal had been sold. He failed to give the price, but Mr. Meyer's herdsman told Mr. Stuart that a Mr. Von Herberg was the purchaser and the price was $2500.

In his transmitting letter to Mr. Gue the auctioneer at the Pacific international stock show sale, at Portland last December, Mr. Meyer said: "I consign this bull to your sale without any restriction whatsoever." But in his answer to the Farmer's telegram of inquiry of February 4, Mr. Meyer says: "Bull was sent by me to the sale under the recommendation of Von Herberg, guaranteeing me $5000 at least, and all he would bring above it. What my herdsman said was not true."

When the Farmer sent another telegram asking Mr. Meyer to be more explicit he telegraphed this reply: "The bull was sold at auction for $21,500 to Mr. Von Herberg. After deducting commission freight and expense I received the balance of my money in full. Exact amount that I got is my business."

According to the letters of the secretaries of the great purebred live stock societies of the country, the second instalment of which is herewith given in the Farmer, the purebred live stock industry needs thoughtful attention both in the way of emphasizing the priceless value of men of honesty and integrity and skill in the business, as well as in further guarding against those who would use the industry as a means of dishonest gain.

BY-BIDDING

How It May Be Largely Stopped.

The following letter is from Gurney C. Gue, secretary and treasurer of the American Hackney Horse society, incorporated in 1891:

The following letter is from Gurney C. Gue, secretary and treasurer of the American Hackney Horse society, incorporated in 1891:

Acknowledging and replying to your favor I would say that after 30 years of close association with horse auctions in New York I am unable to suggest a means by which "auctions of purebred live stock can be so conducted and guarded that they will give complete assurance of being bona fide sales." To paraphrase a famous saying of Senator John J. Ingalls, the purification of public sales is an iridescent dream, in my opinion.

It matters not how scrupulous an auctioneer may be, if a consignor puts an animal in a sale under a secret arrangement with one or more persons to bid it up to a certain amount, the manager of the sale can not ordinarily do anything to prevent such by-bidding or wash sale, as the case may be. Of course, if he has information that the bidding is fictitious, he can ignore the bids, but his liablity for damages in case he makes a mistake is usually sufficient assurance to the consignor and confederates that nothing of this kind will happen. I have seen it happen a few times, however, at horse sales, when the late Peter C. Kellogg was living.

Most auctioneers in the New York horse market have long ago given up trying to prevent by-bidding except by charging up the usual commission to the consignor when his horse is "bid in" the same as when he is actually sold. This stops most of it, though not all.

Whether he buys at public or private sale, the best safeguard a purchaser of well-bred horses or cattle can have, in my opinion, is the character of the seller; the consignor if at auction. Opportunities for fraud and sharp practice are so many and so difficult to prevent that I would never think of buying a registered animal from a breeder without a spotless reputation. After all, that is the best assurance that an animal is bred as represented, and that he is to be sold to the highest bidder, without by-bidding or reserve.

GURNEY C. GUE,
Sec. and Treas.
Hempstead (L. I.) N. Y.

PUREBRED STOCK

Put It on Firm Foundation.

J. R. Pfander, secretary of the National Duroc-Jersey Record association, gives an informative extract from the history of that great association:

To the Editor: I am in receipt of yours in which you enclosed to me clipping from the recent issue of The Washington Farmer which contained statements and affidavits relative to a recent phenomenal sale or public auction of the Holstein bull calf, which I have read over very carefully.

You asked me for a statement as to how I think auctions of purbred live stock could be conducted so that they would guarantee to the public as being bona fide sales. I can see no difference in the manner of conducting a Holstein sale than a pig sale. The latter I have had some experience with. We pig men have come through what we term "boom" times, when fictitious values were placed on animals of undeserving merit. These transactions, of which I am somewhat familiar, had for their whole object, as developments proved, the sole purpose of catching "suckers." Numerous ways have been employed to accomplish this purpose, which space and time will not permit me to enumerate, so I will try and go back to my original subject, the manner of conducting a legitimate public sale.

In my estimation we have solved this problem, at least to our satisfaction. We accomplished this by placing our public sales on a cash basis. During our "boom" times I was employed as a field man, soliciting advertising from the breeders for their sales, so this gave me quite a close observation of the outcome of these sales. It was nothing uncommon for me to present my advertising bill to the party who would have the sale with an average of $300 to $500 per head on an offering of pigs and be told that I would have to wait on payment of my bill as he had not received enough cash out of the sale to pay the expenses. This soon told all of us that there was a "screw" loose in the machinery some place. Animals were either sold and settled for before the sale, or there were old obligations which consumed the selling price of the animals in the sale.

This kind of business went so far with pig men that many of our leading breeders were on the verge of bankruptcy and when the bubble burst there were very few men who had made any money during these "boom" times, but scores of them had lost money. Many a young man who took the lead in this play of the sucker, was forced to sell his farm to pay the notes that he had been induced to give to pay the fabulous prices.

You may ask what was our condition after the bubble had burst. Busi-

(Continued on page ten.)

"PLEASE, MISTER, WON'T YOU GIVE ME YOUR DOG?"

A wistful, heart-hungry little boy, oppressed with the great lonliness of an only child out in a new country, waiting for hours by the side of a wagon trail across a vast expanse of prairie, trying desperately to get a playmate. And finally the dog came—a puppy, upon whom the boy lavished his love, but which, alas, was destined to a tragic fate, leaving the lad's heart emptier than before.

Such is but one of the interesting and touching incidents of his boyhood days in the Big Bend district related in this issue by Joe L. Ashlock. Don't fail to read this engrossing chapter from a pioneer Washington boy's life. It will prove a real treat for grownups and make most delightful reading for our young folks. You'll find it on page 22. "**The Ups and Downs of a Bunch Grass Boy.**"

Important Laws Enacted

Legislature Deals With Many Vital Issues

Deadlocked for several hours over the question of appropriating $4000 as a relief sum for Mrs. Edward Olson, widow of Commissioner Olson of the industrial insurance department, who was assassinated in his office at Olympia the first week of the legislative session, the state legislature remained in session until 5 o'clock Friday morning, when, after making the appropriation, it adjoined until January, 1919, unless called together in special session by the governor.

The legislature this year enacted into law some 10 important measures, among which were the following:

The bone dry liquor law, under which intoxicating liquor can not be shipped into the state after June 6, the date on which all the measures passed become effective.

The bill defining for all time the courses to be given at the state college and at the university.

The bill fixing the tax levy for the state college, university and the three normal schools at 1.58 mills, which will raise approximately $1,580,000 a year for the maintenance of these institutions.

The resolution submitting to the people of the state the question of whether or not to call a convention to revise the state constitution.

The bill levying one-half mill tax for the purpose of erecting a capitol building at Olympia.

The bill increasing the military levy to three-tenths of a mill, which will raise about $300,000 a year.

The bill establishing a system of first aid to the injured in employment in the industries of the state.

The irrigation code.

This latter measure is one of the important measures of the session. It was declared on the floor of the legislature that it would allow the development through irrigation of 2,000,000 acres of arid land.

The bill provides for determination of rights to the use of water on the basis of superior public use, placing domestic, irrigation and power uses on an exact par. The office of state hydraulic engineer, to be filled by appointment by the governor, is created, the engineer to make examination of each case and report to the court before which the case will be heard. Existing riparian rights are left undisturbed and water can be secured only by payment of the amount determined by the court after a hearing. The act carried an appropriation of $25,000.

A number of important measures failed of passage through direct opposition to them or through failure of their friends to force them to the front on the daily calendar. Among those which never passed are the following:

A bill reapportioning legislators to counties on population basis; a bill reestablishing capital punishment; a bill establishing a fourth normal school at Centralia with separate tax levy; remedial amondments to mothers' pension act to restore aid to abandoned mothers; a bill providing for state powder factory; a bill requiring compulsory military training in high schools and a series of measures proposing changes in election laws, including the short ballot, a blanket primary ballot, the election of county officials for four-year terms and various measures directed toward nonpartizan elections.

Two changes were made in the primary election laws, one eliminating second choice voting and the other allowing absent voting at primaries.

Of the 180 measures approximately which were passed by the legislature 121 remained on Governor Lister's desk unsigned when the legislature adjourned. The governor has until evening of March 20 in which to approve or veto such measures.

Stock Show at Sprague.

At the last meeting of the commercial club of Sprague, Lincoln county, J. H. McCroskey made a talk on the advisability of holding a stock show this summer. He pointed out that as Sprague, with the Meadow Lake stock farms and the Rothrock & Day is a center for high-grade stock, a creditable show could be held. A committee composed of J. H. McCroskey, F. M. Rothrock, A. L. Smalley, J. W. Anderson, C. E. Beckwith and C. S. Browne was appointed to handle the matter.

Fruit Growers' Agency

Successful Year and Broader Plans Proposed

Declaring the work of the Fruit Growers' agency, Inc., for the first year was successful, the board of trustees last week decided to recommend to the annual meeting of the agency to be held April 9, that its scope be broadened. The first year was experimental in a way, but with the past experience to serve as guide it is hoped to greatly enlarge the activities. The board met in Spokane. All points were discussed, and a harmonious agreement was said to have been reached. President Paul Weyerauch of Walla Walla summed up the results as follows:

Plan to Extend Usefulness.

The board discussed the outlook for the future and decided to not only go ahead, but to widen the scope.

It was decided to recommend that the qualifications be changed, and to reduce the fee for active members from $100 to $25 annually.

Would reduce the tonnage requisite for active membership from 100 cars to 50 cars.

Would admit to membership every legitimate factor of the fruit industry, including cash buyers who handle as much as 50 cars of fruit a season.

It was suggested to change the name to Northwestern Fruitmen's Chamber of Commerce, more thoroughly to represent the character of the organization.

Would establish a traffic bureau to handle all problems with which the agency may have to deal.

The agency is not a selling organization. Its functions are those largely of a marketing nature, which include the gathering of crop estimates and the dissemination of market reports. Inspection also is a feature.

President Is Optimistic.

President Weyrauch said:

"We feel that the first year has shown the value of the agency and that next year we can do still better work. Under the plan we started on some associations and some features were not available, but as we now propose to widen out we can use these things which we feel will be mutually advantageous.

"The way this is to be done is being worked out and we are not at liberty to disclose it. At first this was a growers' agency, but so much tonnage is being handled by others that we feel the full benefits can not be obtained without widening the field. We could not see that at first, but have found some advantage now.

"We see the need of securing the aid and support of the federal department of agriculture. Both the department

(Continued on page eleven.)

Allege Harvester Trust

Gregory Argues Mammoth Combines Wrong

In reargument before the supreme court of the federal dissolution suit against the International Harvester company in Washington last week, Attorney General Gregory personally presented the government's reason for seeking disintegration of the so-called trust. He declared that if the intent of congress to prohibit undue concentration of capital and restraint of competition were not carried out, government control, if not ownership, in all likelihood would follow, with its evils and dangers.

Such "colossal combinations" of capital, enjoying preponderant control of an industry—even if "good" combinations—are illegal and harmful, the attorney general argued. He pointed to evidence that the defendant controls between 77 and 85 per cent of the harvesting machinery trade, asserting that one "dummy" and six "office boys" formed the huge combination. This referred to the transfer of constituent corporations' assets to William C. Lane for subsequent transfer to the New Jersey corporation.

"Lane, the dummy," said Mr. Gregory, "offered to transfer the subsidiaries. The office boys gravely asked for time to consider. The next day these six office boys said the proposition 'looked good' to them and accepted. George W. Perkins (formerly of J. P. Morgan & Co.) was the little child who led them by the hand. J. P. Morgan & Co. waved the magic wand—and received $3,500,000 for promotion services—to make legal what was illegal."

There was conscious wrong-doing in the combination's formation, the attorney general insisted. Competition actually has been "throttled and destroyed," he said.

By controlling the industry, he contended, the combination can control prices, competitors being few and comparatively feeble.

Solicitor General Davis concluded the government's plea, contesting the defendant's suggestion that the Sherman law prohibits undue restraint of trade, but not necessarily of competition.

Harvest Labor

To Be Big Problem at Fairfield

To the Editor: This community has increased its pea acreage for next year between 400 and 500 per cent, or in other words, will have between 16,000 and 18,000 acres devoted to peas. The farmers are increasing their pea acreage and eliminating summer fallow almost entirely. In fact many farmers have not had any summer fallow for several years, their entire acreage being devoted to peas every year. The harvesting of the pea crop next harvest is causing some apprehension as it will take at least 1000 harvest hands and to get this large number of men may be a hard problem at that time.

ROY G. ADAMS.

Fairfield, Wash.

JACK SPLAWN

One of the best known and most loved of the old-time stock men of the Northwest.

A splendid specimen of a class of men of such outstanding worth and genuine merit, that their memories become an inspiration to those who have had the fortunate privilege of their acquaintance and friendship, and whose names constitute the jewels in the crown of our beloved commonwealth.

Was it the environment of the business in which they were engaged, or was it the inborn character of the men which led them to this new country that developed this type of manhood?

Whatever may have caused the making, Jack Splawn was one of that class—

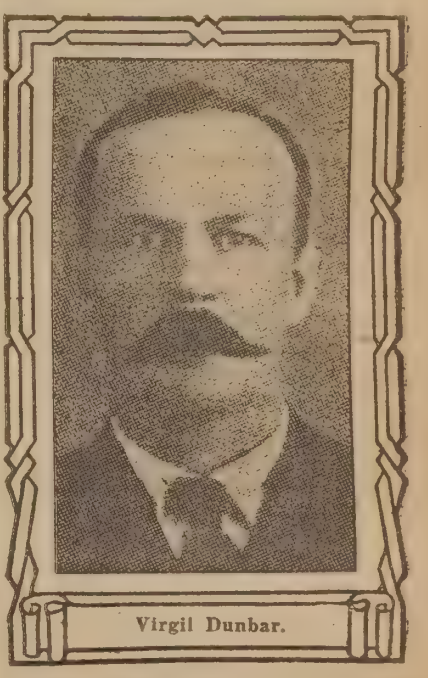
His cheerful, hopeful, cordial disposition,
His freedom from hypocrisy and littleness,
His courage to say and do what he thought was right,
His willingness to serve in public or private work where duty seemed to point—

endeared him to his friends who will prize his memory as a precious experience in their own lives and will hope that his example may continue to influence the coming generations, who will carry on the development of this great state, to which he gave his own life in such unselfish devotion.

One of his numerous and sincere friends,

E. F. BENSON.

Washington Portraits No. 6.



Virgil Dunbar.

Virgil Dunbar of Pateros is a stanch advocate of diversified farming, and for six years has been trying it out on an Okanogan county dry ranch with a marked degree of success. A supply of decaying vegetation must be returned to the soil to insure lasting productiveness, and Mr. Dunbar believes that diversified farming will do this.

Mr. Dunbar says: "I consider alfalfa one of the most profitable crops that can be raised in this part of the country, even if one gets only one good cutting, as the yield per acre is greater and the cost of production less than any other crop, and stock of all kinds thrive on it. Hogs raised on alfalfa until four or six weeks of marketing time, then fed corn, make the finest and cheapest of pork. I have an acre of irrigated alfalfa, which provides ample pasture for 16 to 18 hogs during the season. This acre also contains an orchard of various fruits, which are profitable and convenient for family use, and the trees provide necessary shade for the hogs. The balance of the tillable land I rotate with wheat and corn, instead of summer fallow. The wheat is cut for hay, as cattle is my main line. Corn does well with proper care, it being necessary to cultivate often, but not too deeply, in order to keep a dust mulch and so prevent evaporation of moisture."

The next in the series of Washington portraits will be that of Willis Chambers of Port Angeles, and will be given in next week's issue of The Washington Farmer.

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Entered as second-class matter January 13, 1916, at the postoffice at Spokane, Washington, under the act of March 3, 1879.

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Outrage of U. S. Senate Rules

The spectacular ending of the sixty-fourth congress, when a little group of 12 filibustering senators blocked the president and an overwhelming majority of both houses and prevented the passage of legislation to enable President Wilson to maintain our rights of life and commerce at sea, will arouse the American people to the absurdity and outrage of the senate rules.

Under the rules of the United States senate that body can not proceed to vote so long as any senator wants to speak upon the question. That affords an opportunity for a little group of senators, or a single senator if he has the physical endurance, to "talk to death" any measure that has their disapproval.

In this instance 76 senators signed a manifesto to the American people, declaring that they wanted this bill passed and were ready to vote for it, but were blocked by 12 filibustering senators.

The conduct of the 12 obstructionists was unpatriotic, un-American and unconstitutional. For it is clearly the intent of the constitution that the majority shall rule.

Our Rights of Sea

When the 12 United States senators blocked action by congress and the president in abandoning our rights of sea they imperiled the welfare of the great body of the American people.

In conducting their filibuster persistent effort was made to make it appear that the only thing involved in Germany's submarine atrocities were the lives of a few American citizens sailing into the danger zone. The truth is that, even if we dismissed all consideration of national right and duty—all thought of national honor and self respect—and yielded to the ruthless sea methods, we should be sacrificing the welfare of the whole American nation.

The farmer would be the chief sufferer. If his wheat and other surplus products are denied a passage across the Atlantic they will roll back on the home markets and prices will fall with a rush.

The wage-earners in American factories would also suffer, and their penalty would be immediate. Hundreds of thousands of men and women now working in factories that are supplying goods to Great Britain, France and other European countries, would be thrown out of employment, and their distress would still further restrict the farmer's market.

Any condition that brings loss to the farmers and distress to the factory workers will mean loss and distress to all other classes—the merchants, the physicians, the dentists, the lawyers and all others.

Too Many Extravagant Demands

The health department of New York city urges support of a bill now before the state legislature to permit the sale and distribution in New York city of skim milk. When intelligently used, skim milk has valuable food properties. It retains all its muscle-building casein and also its sugar of milk, and when fed to children, along with a little meat or vegetable fats to take the place of the extracted butterfat, is nourishing and wholesome.

These scientific facts are better understood in Europe than in the United States. In our country a great part of the public has been made unreasonable in its food demands by the country's long abundance and resulting waste.

Too many people in moderate circumstances have been demanding an extravagant supply of food. They have come to think that nothing but the choicest cuts of meat will do; nothing but milk high in cream content; nothing but fancy and extra fancy fruit; nothing but breakfast foods prepared from costly selected grain. And so on down the list.

If that exacting standard gave better health or imparted added vigor to the body, the Farmer would not raise one word in protest. But it is the other way around. Science knows now that these finical requirements are positively injurious to health. In requiring fine wheat flour and discarding the bran and darker parts of the wheat science knows now that we have been throwing away "vitamines" that are essential to health, and the same is true in somewhat less degree when we throw away the parings of potatoes and fruits.

Limiting Factors

A certain field of alfalfa in Chelan county, Wash., was a puzzle to its owner. After making a phenomenal first year's growth it was suddenly and unexplicably checked during its second summer, and never again grew vigorously.

Various local experts came and looked over the field and prescribed. One of them said, "Your field needs lime." Lime was administered, without benefit. Another said, "This alfalfa is root-bound. Go over the field with a disk." This also was tried, without effect. Top dressing with manure and with various amendments was experimented with. Not one of these measures either hastened or checked the feeble growth of the safron-tinted alfalfa.

Then the owner, who was not an expert, but who was an observer and a thinker, went out into his field one morning with a post hole spade and set to work. Down through the mellow loam he went, and presently the narrow blade of the spade began to bring up moist earth; 18 inches farther and the quest terminated. The four-foot hole had become a well, with six inches of water standing at the bottom.

Alfalfa does not like wet feet, apparently, and the reason for the failure of manure, lime, commercial fertilizers and disking to produce a favorable reaction was explained. These things are all good in their places, but this was not a case requiring any of them.

Agricultural science has a name for these lacks, physical or chemical, in the growing conditions required by a given plant. It calls them "limiting factors," and takes occasion frequently to remind us that accurate diagnosis is required in determining the particular lack to be overcome. Sometimes the scanty supply of available nitrogen is a limiting factor; sometimes it is lime, or potash. The point to remember is that when a lack exists, supplying something else will not meet the need. If your land lacks potash, stable manure will not meet this need except in a very limited way. If it needs tiling, no fertilizer in the world will take the place of drainage. Don't try "shotgun prescriptions" on your soil. Take time to determine what is really needed and supply that thing.

There is such a thing as giving land too much fertilization, just as there is such a thing as giving a person too much poison of one kind to counteract another poison that has been taken into the system.

If you want to try something new, ask the authorities at the state college or experiment station first. They have tried out many things already, and may be able to save you a lot of trouble and expense.

Washington Gleanings

Puyallup has asked for $150,000 for a school of secondary agriculture to be established there.

Last year about 1500 acres were planted to potatoes in the Puyallup valley, and this year the estimate is 2200.

Plans for an extensive squirrel poisoning campaign, which will cover every section of Spokane county, are being formulated by County Agriculturist J. R. Shinn.

New varieties of seed wheat will be used in some sections of Whitman county this year. Early baart and marquis seed wheat are among those that will be given a trial.

Four big seed companies of the United States have contracted for the peas from 15,000 acres in the vicinity of Fairfield and 5000 acres near Latah, Waverly and Rockford.

The South Bend Canning company has organized with G. A. Tripp as president. All the stock is paid in and a specialty will be made of canning beans and evergreen blackberries.

The chamber of commerce of Rosalia has decided to have the fair and live stock show this year on September 27, 28 and 29. The amount necessary to run the fair has nearly all been subscribed.

A new 10,000-bushel elevator will be built this summer at St. John. A number of farmers at Diamond are also working towards the formation of a company to build an elevator at that place this summer.

J. L. Willett, superintendent of the Yakima county poorfarm, has sold 11 tons of potatoes raised on the place, receiving $65 a ton. He still has a sufficient number for seed and to supply the table needs of the institution.

Announcement has been officially made that the Cowiche extension of the Northern Pacific will be completed in time for the 1917 crop movement. This brings practically all the tonnage of the Tieton project within two miles of railroad.

The fruit growers of Peach, Lincoln county, have formed a local corporation for the handling of the combined output of their orchards, which they propose to market for themselves. The organization is capitalized for $5000.

George McCroskey has added 400 acres to his extensive land holdings by purchasing the farm owned by Mrs. R. E. Largent, near Whelan. The price paid was $35,200, or $88 per acre. The farm is one of the best improved in Whitman county.

It is estimated that approximately 20,000 acres will be seeded to garden peas in the vicinity of Fairfield, Spokane county, this season. These peas are contracted to eastern seed companies at from 2 to 4 cents a pound, and will at those figures produce not less than three quarters of a million dollars.

Project Manager R. K. Tiffany of the U. S. reclamation service announces that a corps of engineers will soon be put into the field surveying for a proposed canal to water 120,000 acres in the Wenas, Selah and Moxee valleys, west and north of North Yakima and also a considerable acreage above the present Sunnyside canal below Union Gap.

What Others Say

Farm and Home: Plant, first of all, to feed your family and live stock.

Denver Field and Farm: Our freedom is alarmingly restricted by fool laws.

American Agriculturist: Produce crops generously at conservative outlay of money and muscle, with full confidence in ultimate market outlet at reasonably profitable prices.

Hoard's Dairyman: Men who understand something of machinery and a great deal about cows are in most cases obtaining excellent returns through the use of the milking machine.

Farmers' Mail and Breeze: Assured high meat values of the future, the need of greater economy in the use of farm labor, and the importance of full utilization of pastures place sheep-raising in an entirely new light.

Trees in BLASTED soil bear better



Fruit growers have proved—by planting some trees in blasted beds and others in ordinary ground—that trees planted after the use of explosives root deeper, grow faster and better—that they are thriftier in every way, bear earlier, and yield larger crops.

They have proved also that when the soil of established orchards is properly blasted the trees immediately take on new vigor and bear better fruit thereafter. Orchardists know that this condition is due to the increased moisture-storage capacity induced by blasting and to the consequent release of plant food from the subsoil.

Fruit growers in every Pacific Coast State have used tons of

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

for planting trees and deep-tilling their orchards. These powders are made in two brands, Eureka Stumping Powder and Giant Stumping Powder, and are prepared especially for farm work. prepared especially for farm and orchard work. They are more effective and do their

Eureka Stumping Powder pulverizes the soil instead of caking and packing or throwing it high in the air. This is the action that is wanted in stump and soil work, and the action that the so-called "high strength" dynamites will not give. When you use Eureka Stumping Powder the finished job costs you less money.

Giant Stumping Powder, which is also used for subsoil blasting, is the most efficient explosive for many other kinds of farm work, including blasting dead trees or stumps in wet soil.

WASHINGTON Fruit Growers Say:

"Generally speaking, the growth of plants depends upon the condition of the soil into which the roots penetrate. If the depth of loose soil is too limited or the surface water is permitted to stand too long, the growth is impaired. Explosives properly used in such instances have invariably relieved the condition and resulted in excellent growth. The yield is often three times as great on blasted soil as from those untreated in the same vicinity."
ROSECROFT FRUIT FARM, Sumner.

"We consider the use of explosives an important factor in planting orchards. It is important to secure good drainage and the roots should be able to penetrate deeply into the subsoil. Young fruit trees newly planted should make at least one foot of new growth the first year, and this is hardly possible unless the land is put into good mechanical condition, with plenty of room for the roots to spread in the loosened subsoil."
A. LINGHAM, Puyallup.

Experiment Stations Say:

"I have seen orchards in Hood River greatly benefited by the use of dynamite, where the dynamite opened up the soil to give better drainage." C. I. LEWIS, Oregon Experiment Station.

"The use of explosives is not simply a benefit in the case of hardpan, but is beneficial to all soils and is necessary in any heavy, impervious soil. Its effect is to loosen, drain, and aerate, and give additional feeding ground for the roots."
UNIVERSITY OF SOUTHERN CALIFORNIA.

"Without the use of dynamite in tree-planting the roots soon meet with the smooth and compacted sides of the hole, through which they have great difficulty in penetrating. The tree is in about the same situation as if it had been planted in a large tub. When dynamite is used cracks are formed in the soil to distances of five or sometimes six feet on all sides. This makes the very best conditions for the continued growth of the tree. For tree planting dynamite is recommended confidently as the best method of preparing the soil."
U. S. BULLETIN No. 38.

Make this test of Giant Powders

By *using* the Giant Farm Powders you can demonstrate their superiority for tree planting and orchard tillage. Fill out the trial order blank in the coupon to the right. We will have our nearest distributor supply you—at lowest market price—with a 25- or 50-pound case of either of the Giant Farm Powders. Test this in comparison with any dynamite. The results will show you why fruit growers in every section insist upon having the Giant Farm Powders for orchard tillage work.

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Advantage of Long Loan

Enough to Recommend Federal Bank System

By N. W. DURHAM

Chairman of Spokane Committee on Farm Loan Bank

Norman Lombard, secretary of a California farm mortgage corporation, writes from San Francisco:

"I have been reading from time to time articles in the Fermer concerning the organization of the federal farm loan system and have been very sorry to note that all of your articles, until that appearing in the current number, have shown a decided bias in favor of the new system such as to entirely blind you to the disadvantages that are inherent in the system.

"I feel that the farmers of the country are being badly misled by the politicians who are currying favor in an endeavor to secure the farmer vote, and by the rural press, which, of course, tells the farmer what he wants to hear. I do not believe the disadvantages of the system have been anything like as well advertised as the alleged advantages and as, in my opinion, the success of the system will be better assured by a complete understanding, I have very much regretted this tendency."

Mr. Norman has written a booklet that dwells on "the inconvenience of the system," the "strict and rigid rules," and his belief that farmers will not respond to the cooperative requirements, because, as he puts it, "It is well known that the detached and segregated conditions of country life promote the growth of petty feelings of jealousy, envy and distrust."

Some of these difficulties are real, and some are greatly exaggerated. The Farmer has a deep conviction that the benefits of the system heavily outweigh its disadvantages.

The single advantage of long-time loans—from five to 40 years at the option of the borrower, with the privilege of paying off the mortgage in full at any time after five years—is sufficient in itself to commend the system to millions of borrowing farmers. An owner of improved Spokane real estate was discussing this feature the other day.

"I wish that we city owners had such a system," he said. "I should be mighty glad if I had an opportunity to finance my debt in that way. While I have no complaints against the treatment I have had from private mortgage companies, the fact remains that uncertainty always hangs over us—the fear that when our mortgage matures we may have difficulty in securing a renewal; that the interest rate may advance on us; or that larger commissions will be charged for a renewal. Under the farm loan system all these uncertainties are swept away. The borrower can adjust his financial affairs to a long-time, definite plan, paying off his principal in small amortization instalments, or increasing the payments after five years if he wants to."

Another advantage of the new system is the opportunity it offers to landless men of small means to acquire a farm and work off the debt in easy payments. Frank R. Wilson of the federal farm loan bureau points out the manner of doing that in a recent informative article:

"Suppose John Smith, a renter, wants to buy 100 acres of land valued at $50 an acre. The total purchase price would be $5000, but John Smith has not the money to buy it.

"Under the federal farm loan act Mr. Smith would be entitled to borrow $2500 if the appraised value should be the same as the purchase price. This would leave $2500 to be handled by a second mortgage. The amount borrowed under the farm loan act could be paid to the original owner of the land and a second mortgage executed for the difference.

"The original owner would thus get a satisfactory payment down, and if he had confidence in the purchaser he would probably be willing to accept a second mortgage for the balance, divided into 10 annual payments.

This reasoning by Mr. Wilson has been attacked and ridiculed by a member of the publicity committee of the Farm Mortgage Bankers' association of America; but that criticism is refuted by no less an authority than the Wall Street Journal.

"This newspaper (says the Wall street authority) is not enamored with the federal farm loan act, chiefly because, as class legislation, it is not constructed upon sound business principles. At the same time we beg leave to challenge the above argument, coming, as it does, from a quarter which should be expected to have a clear knowledge of the subject. Far from undermining the loan bureau's illustration in this particular, it would seem that the point made by the publicity committee of the Farm Mortgage Bankers' association rather plays into its hands.

"Assuming that the original owner is desirous of selling his property and that he is well satisfied with the character of the would-be purchaser, $2500 in cash and a second mortgage under the above conditions should prove an advantageous arrangement. As the federal farm loan bank holds the first mortgage, the equity in the second mortgage would be enhanced from year to year because of the amortization feature of the federal loan.

"The whole point rests upon whether the original owner intends to sell the property or wants merely to borrow on it. If he wants to sell, and this is his position according to Mr. Wilson's example, he would then be securing $2500 in cash, permanently, upon which there would be no interest charge, etc., and for the second mortgage he would be obtaining interest at a good rate with payment in full after 10 years. At the same time he would be free of all land taxes, etc. Of course, if he is merely a borrower then recourse to the federal farm loan bank or the hundred other channels would be open to him as to anybody else."

In another editorial the Wall Street Journal says: "There can be no question as to the benefits of rural credits properly administered. Such systems under government auspices have proved of inestimable value on the continent of Europe, and doubtless the same good can be accomplished here."

Our San Francisco critic's judgment is evidently warped by personal interest.

Good News for Renters and Farm Owners' Sons

You can get a rich 160-acre farm free this spring, excellent for growing grain and mixed farming. Write for copy of "The Home Seekers' and Settlers' Guide." It gives full facts and tells what others are doing. Address Canadian Northern Railway, A. A. Brostedt, D. F. & P. A., 605 Hastings St., Vancouver, B. C., Canada.

MOXEE VALLEY
National Farm Loan Association.

All of the Moxee valley, in central Washington, is included in the Moxee National Farm Loan association organization, which has just been completed. The articles have been signed by more than a dozen farmers, with loans aggregating $34,400. The association elected nine trustees: H. Wayenberg, Charles Schmidt, W. D. Duffield, D. Walters, N. J. Dickson, Chris Thompson, B. F. Kumler, P. Zutenhorst and E. Altwardt. Officers are: W. R. Duffield, president; B. F. Kumler, vice president; J. E. McGrath, secretary-treasurer; N. J. Dickson, H. Wayenberg, Chris Thomson, loan committee.

Buys Farm for $48,000.

J. S. Klemgard, pioneer Whitman county farmer, increased his land holdings to 1840 acres when he purchased from W. H. Eaton the 631-acre "Cloverdale" farm, 11 miles west of Pullman, for $48,000, or $76 per acre.

Community Club.

GRANITE FALLS, Snohomish county, is enthusiastic over success in organizing a "Community club" which now has over 50 members, and as it has been opened to the ladies the membership will soon be materially increased.



How Old was The Old Oaken Bucket?

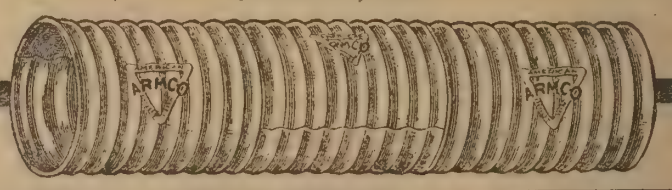
THE "iron-bound" bucket that hung in the well was covered with moss but the hoops were always tight and the bale was always secure. Time left its impress on the wood and on the metal but *rust* did not eat through the iron although the bucket was subjected to the severest of exposures. The iron was *pure* iron and pure iron resists rust.

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By chemical analysis these are purer iron than were the hoops of the old oaken bucket. Under similar conditions "Armco" Iron should outlast even the old-fashioned ron. Under highways and railroads all over the country, "Armco" Iron Culverts give service like that of the old oaken bucket. They are the only metal culverts that can be counted on to outlast the generation that installs them.

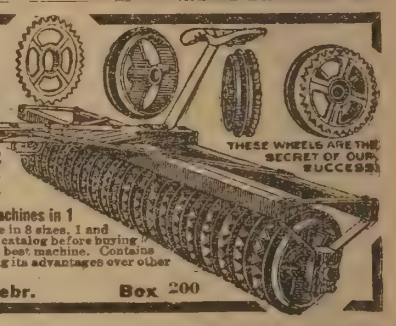
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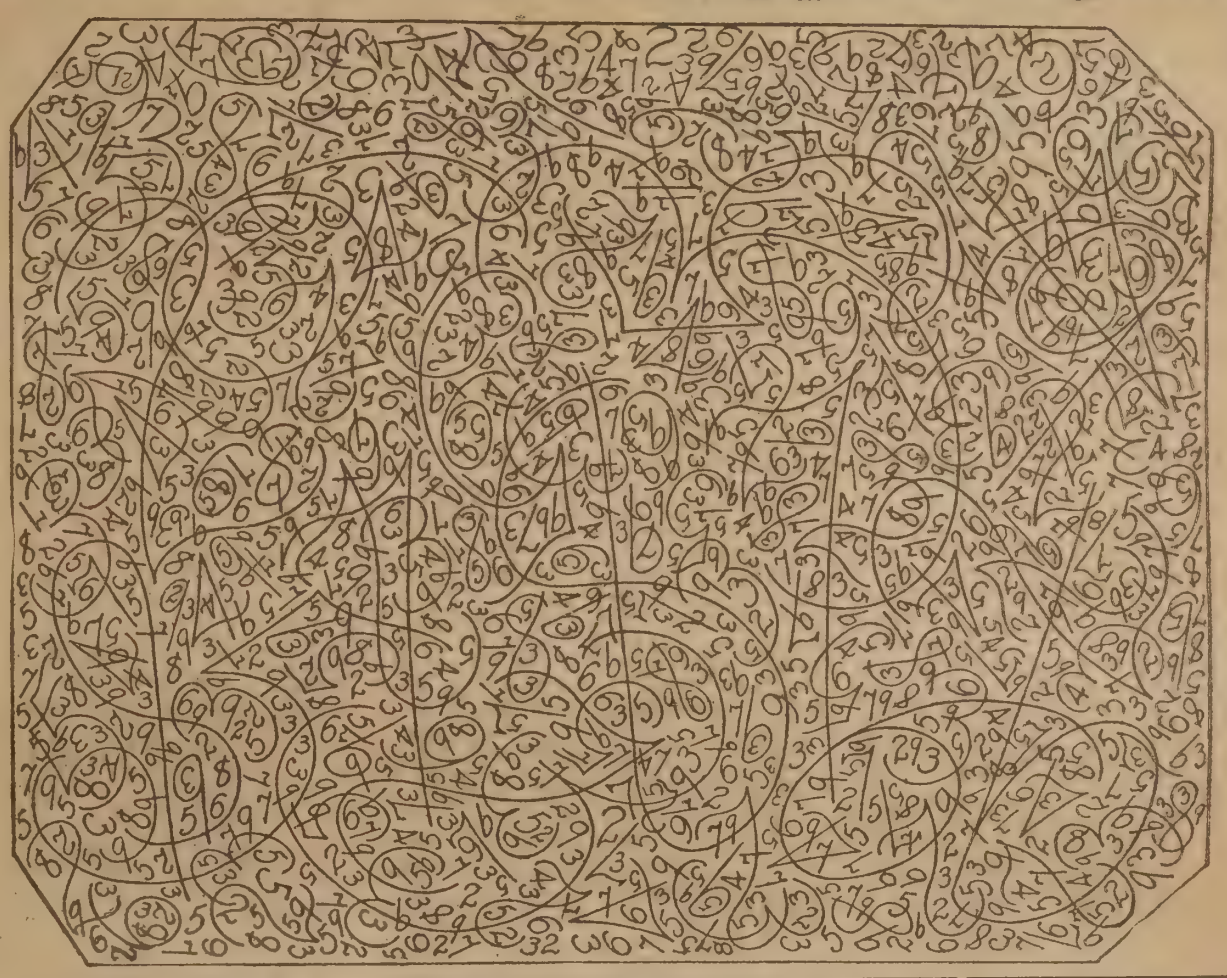
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Read the Conditions

Simply add up the figures in the puzzle chart as if they were in one long column. Your success depends on the accuracy of your total thus obtained.

Figures run from two to nine, and there are no double figures or characters which are not figures. The tail of the "6" has a decided curve, while the tail of the "9" is straight. All other figures have the usual characteristics, allowing no question as to the identity of any figure.

In event that no one submits the correct total, prizes will be awarded for the next nearest solutions.

This contest is restricted to persons residing in Washington, Idaho, Oregon and Montana.

A payment of $1 to $1.50 on subscription to The Farmer entitles the subscriber to enter the contest.

If your subscription is already paid in advance, your expiration date will be set ahead beyond this date to which you are now paid the full period for which you pay at this time. The advantage of paying $1.50 instead of $1 is that the winner of any of the first four prizes receives additional prize dividends apportioned on the amount paid in on subscription, besides the fact that $1.50 during this contest pays for a three-year subscription to the paper, while $1 pays for only one year.

More than one solution may be submitted by any contestant, by an additional subscription payment of not less than $1 nor more than $1.50. It is not necessary to pay the same amount with each solution if more than one is submitted.

You can send in a subscription for some one other than yourself and have the solution registered in your own name. Remember that by paying $1.50 instead of $1 on subscription, the larger will be your dividends if you win one of the four leading prizes; but not more than $1.50 will be received with one solution.

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FIRST PRIZE, $200,
to which will be added 50 times the amount paid by the subscriber with the winning solution. For example, if you pay $1.50 on subscription, this prize will be worth $275.

SECOND PRIZE, $100,
to which will be added 30 times the amount paid by the subscriber with the winning solution. This prize may be worth $145.

THIRD PRIZE, $60,
to which will be added 20 times the amount paid by the subscriber with the winning solution. This prize may be worth $90.

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to which will be added 10 times the amount paid by the subscriber with the winning solution. This prize may be worth $65.

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SEVENTEENTH TO THIRTY-SECOND PRIZES, Each $2.

CASH MUST ACCOMPANY.

Don't send in your charts and working papers unless called for by the Contest Editor. Simply write your solution in blank space provided in "Registration Blank."

Something to Know

If your subscription is paid in advance, further payment will be credited on an extension of your subscription from the time to which it is now paid.

Any solution unaccompanied by payment on subscription will not be entered.

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Cut out this blank closely around the border and send it in with your solution and money.

To the Farmer Contest Editor:

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I enclose $..... for..... subscription to **The Washington Farmer.**

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The following spaces provide for three solutions, with the payments you desire to make with them. You may submit one or as many different solutions as you wish. You can subscribe for one or three years as per printed schedule with each solution, as provided for in "The Conditions."

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Answer this question: Are you now a subscriber? .....
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You must address all inquiries and solutions to

The Washington Farmer Contest Editor

Review Building. Spokane, Washington.

Put Out "Cooperation" Sign

And Then Fail to Cooperate Practice Usually Followed

(Continued from page one.)

expected, as none of us are entirely free from mistakes, and can look back and see where we have had narrow escapes from the same conditions. I do not believe that our friends of the grange and union are helping matters any by trying to blame all of the trouble on political enemies. Of course, political enemies desire to see their enemies annihilated, but if we get caught in bad company and give our political enemies an opportunity to smile, it is much better to take our medicine and try to recover ourselves.

The word cooperation should not only be a hyphenated word, but it should contain more hyphens and more letters, and really should be under the title, "Co-operative-Mis-management."

Almost every business man that you meet starts to run away when you speak to him of cooperative societies. He immediately draws his coat around him and puts his hands in both pockets for fear he will lose something.

We must admit that cooperative societies, as a whole, have not been extremely successful, for the reason that cooperative societies generally do not use sufficient care in selecting the management.

It is a good deal like politics—a man who will not make all kinds of promises is hard to elect to any office; therefore we very frequently have inefficiency in our public places, and the man in the community having fixed ideas and ordinary horse-sense is not very popular in the community, and can not be elected to the management of the business of the community for the reason that he disagrees so many times with many of the temporarily popular subjects.

In addition to this, most cooperators refuse to give the loyal support to their society on account of having so much time on their hands that they desire to listen to criticism of every person who desires to criticize, and this very frequently means 99 per cent of the community.

Men of large business interests have no difficulty in cooperating, for the reason that they are willing to delegate the management to some one individual, and then look for results. If results are not obtained, they select some other individual, and if results are obtained, they proceed immediately to divide up a reasonable share of the earnings with the manager who does make good.

The cooperative movement should not suffer because mistakes have been made. Those who try to profit at the expense of cooperation will always receive just punishment, but the cooperative movement must go ahead, as it is the salvation of the agricultural interests of our country.

THE READERS OF THE FARMER ARE TO BE CONGRATULATED OVER THE ASSURANCE OF A SERIES OF ARTICLES ON COOPERATION BY W. H. PAULHAMUS. MR. PAULHAMUS HAS BEEN IDENTIFIED WITH THE GREATEST COOPERATIVE BUSINESS CONCERN OF THE PACIFIC NORTHWEST—THE PUYALLUP AND SUMNER FRUITGROWERS' ASSOCIATION OF WESTERN WASHINGTON. NO ONE HAS BATTLED MORE PERSISTENTLY OR MORE SUCCESSFULLY WITH THE INSIDIOUS FORCES ARRAYED AGAINST TRUE COOPERATIVE UNDERTAKINGS THAN MR. PAULHAMUS, AND NO MAN IS IN GREATER DEMAND TO HELP OUT THE BEGINNINGS OF COOPERATIVE ENTERPRISES ALL OVER THESE NORTHWESTERN STATES.

"I BELIEVE MY NEXT ARTICLE WILL BE ENTITLED 'THE MIDDLEMAN,' OF WHOM WE HEAR SO MUCH UNNECESSARY CUSSING," WRITES MR. PAULHAMUS.

Breeder

Of Spotless Reputation Is Need

(Continued from page four.)

ness was mighty slow and it was nothing uncommon for a sow that had previously sold for $2000 to $3000 to be offered in an auction and sold for her real value of $200 to $300. This practically ruined the business for a while, but after our breeders saw the folly of their ways, the cash basis was adopted and now business has been 10 years getting back to the firm foundation upon which it rested before the "boom times."

It is nothing uncommon now to talk to the clerk after one of our best sales, where the average on bred sows is from $100 to $250, and have the banker tell us that 75 to 80 per cent of the offering has already been settled for within an hour's time of the close of the sale. This gives me assurance that our sales are being conducted in a bona fide manner. I don't know whether the breeders of the blacks and white are conducting cash sales or not. If they are, it would be an easy matter to verify any of the prices at which animals sold, so if you want to know whether your public sales are being conducted on a bona fide basis, I would make investigation relative to the amount of money that goes through the clerk's hands, and I think you will soon have the information you desire and know whether your sales are bona fide or not.

J. R. PFANDER,
Secretary.

Peoria, Ill.

PEDIGREE STOCK

Bloated Prices Check Industry.

R. W. Brown, the secretary of the American Galloway Breeders' association, writes:

I have at hand your favor enclosing statement and affidavits regarding sale of the Holstein bull calf at the recent Portland show for $21,500.

From the sale reports of the last few years it would seem that the different breed organizations are attempting to outdo each other in boosting sale prices. While it is rather difficult to get at the actual facts in these auction sales, there has been sufficient rumor and other evidence to indicate that many of these sales are not conducted on a substantial basis. Even though such sales may be authentic, the high prices reported are unreasonable. So long as such practices prevail we can not expect, as farmers and breeders, to have the confidence of bankers and other interests who are endeavoring to support the pure-bred live stock industry, neither can we expect to secure any satisfactory relationship with state and federal governments in our live stock work, especially in the matter of compensation for animals that might have to be slaughtered to prevent the spread of contagious diseases.

Another serious condition that arises in connection with these "wash sales" is that the smaller breeders who are not in close touch with the interests that support such sales hear of the reported prices and hold their cattle for a higher valuation than they themselves are able to obtain. The result is that they find themselves with a lot of sale cattle on hand that they are unable to dispose of.

The fact that our pedigree live stock industry is not more generally appreciated among farmers is due to the frequent attempts that have been made to boost prices for registered stock above values that are not intrinsically sate. The whole business could be placed upon a more substantial basis than it is, but it will require cooperation and persistence on the part of breeders and the live stock press who are desirous of seeing the future of the business conducted along safe and sane lines.

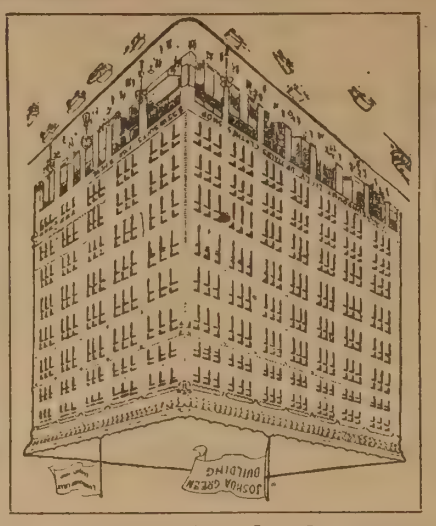
I do not know what corrective measures might be employed, but I am sure that publicity is one of them, and you are to be congratulated in your efforts to bring these matters to light. I assure you that our association will be pleased to cooperate with you in any movement that might tend to make the pedigree live stock industry of greater usefulness than it is at present.

R. W. BROWN,
Secretary.

Carrollton, Mo.

For Rabbit Control.

The Deschutes county court in Oregon recently set aside $500 to be used in rodent control and distributed by the county agriculturist. This poison will be given only to clubs having a poison mixer, who will follow the directions of the biological survey and submit a report, similar to the plan used last year. Two hundred thirty dollars' worth of strychnin has been purchased and 95 ounces distributed in 12 clubs. Four clubs report 8500 rabbits poisoned already in both counties.



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Our new mail order department brings our immense stock of ten thousands suits and overcoats direct to your home. It is now possible to purchase from us at the same low price and with the same guarantee of fit and service as the thousands of our customers in the city.

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Selling clothes upstairs on the second floor is a radical change from the old way—the low rent, the inexpensive fixtures, the cash selling plan and the fact that we are willing to accept a small profit—these are the reasons why we are able to save $10 to every purchaser.

Thousands of men in the northwest have taken advantage of our selling plan and proven to themselves that they save money—you can do the same.

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Cut out coupon and mail today for samples and measure blanks. State the kind of suit wanted. You can easily take your own measure. No trouble, no delay. You pay only on delivery and if not satisfied don't pay. **We guarantee satisfaction or your money back.**

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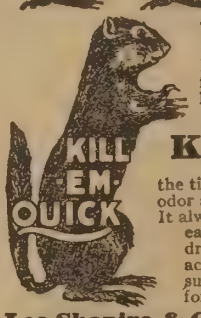
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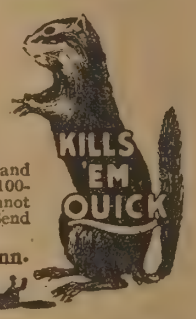


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the time-tested, guaranteed squirrel killer. It gets 'em. Its odor attracts. Its sweet taste pleases. They always eat it. It always cleans 'em out—money back if it doesn't. Safe and easy to use, simply stir into moistened oats or ground feed and drop into burrows. Cheap, costs only 1 cent an acre. 100-acre size $1.00, 40-acre size 50c. If your local dealer cannot supply you, we express $1.00 size upon receipt of price. Send for Free Squirrel Book.



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Spokane Incubator Company 8429 Haven St. Spokane, Wash.

Railroads Are Ready

Will Serve Country if War Comes

Both the heads of the great railroad companies of this country and the heads of the labor organizations of which the operatives are members have notified President Wilson that if this country is drawn into war the railroads will stand ready and willing to render whatever service is possible in the transportation of troops or supplies or munitions.

The train operatives have announced that they will not permit a strike to be called during the war, if one comes, regardless of whether the supreme court holds the Adamson law constitutional or not.

The court is expected very soon to announce its decision on the Adamson law, which is the measure passed by congress last fall at the request of President Wilson to prevent the threatened strike of railroad workmen.

Arm Merchant Ships.

Following the filibuster in congress which defeated the "armed neutrality" measure designed to give the president authority to arm American merchant ships to protect themselves against submarines, President Wilson sought advice from his cabinet and decided that it was within his power to so arm the ships without consent of congress. As a result, he has issued orders to the navy department that merchant vessels be armed, and it is understood that they are instructed to attack any submarine discovered within gunshot of their course through the war zone, whether the submarine shows any direct evidence of hostile intentions or not.

Suppress Ship News.

Secretary Daniels of the navy department, following the decision of President Wilson to arm American merchant ships, issued an appeal to the newspapers and telegraph and cable companies as to the movement of such ships in an attempt to aid them in escaping the submarine peril.

War Seems Near.

This situation is believed by officials and diplomats at Washington, D. C., to bring the United States and Germany nearer to war than ever before in the history of the two countries. At the time of this writing no shots have been fired by an American merchant ship, nor has any such ship been attacked by a submarine. So tense is the situation, however, that it appears more than probable that such attack or such shot would bring about actual hostilities.

Gerard Reaches Home.

Ambassador Gerard, who was recalled to this country from Germany when the president severed diplomatic relations with Germany, has reached American soil. He landed in Havana Sunday, March 11, sailing the following day for Key West, Fla., from whence to proceed to Washington.

The name of Gerard has been mentioned as a possible successor to Secretary of War Baker, who some time ago announced his intention of resigning.

Eliminate Much Talk.

As a result of the filibuster in congress, by means of which 12 senators talked the ship arming measure to death, the United States senate, at the request of President Wilson, remained in session after the regular adjournment of congress March 4 and revised its rules. Henceforth, under the rules, two-thirds of the senate can at any time limit the length of debates, so that it will no longer be possible for a few senators who are opposed to a measure to take up all the time of a session and prevent its passage.

President Wilson has decided upon April 16 as the date for the convening of congress in the special session which he considers necessary for the passage of certain important measures not connected directly with the war situation.

Bank Officers Chosen.

Announcement is made at Washington that Daniel G. O'Shea of Red Lodge, Mont., has been appointed president of the federal farm loan bank soon to be established in Spokane to handle the northwest farm loan work under the recent federal act. The other officers of the bank are: Vice president, C. E. B. Roberts, Rupert, Idaho; secretary, George C. Jewett, Palouse; treasurer, George M. Dreher, Spokane; fifth director, A. W. Canthorn, Portland; registrar and attorney, Turner Oliver, La Grande, Ore.

Fruit Growers

Broader Plans for Selling Agency

(Continued from page five.)

and ourselves have learned many things the last year. It is necessary for the department to have a medium through which to work, and we furnish this. The department plans even greater things for us. It plans to develop the fruit industry of the Pacific northwest to the fullest extent.

Shipped 17,020 Cars.

"A factor I consider of great importance has been our crop estimates. For the first time we have had an accurate estimate. In the beginning of the season we estimated 19,930 cars for Washington. To date 17,020 cars have been shipped. We had better estimates in this state by reason of having the aid of the state department of agriculture.

"The office of markets has kept three men here who have investigated the systems of 37 growers' organizations. They have established systems of accounting in seven organizations and have prepared a uniform account sales, which has been adopted by 80 per cent of the membership. This enables growers to compare their returns with a grower in any other organization of the agency.

"The market news service has been of great value. On August 1 the service was begun from the office of the agency at Walla Walla and was transferred to Spokane in September. A feature of the service was a bi-weekly report on Canadian markets.

"An inspection service has been started. The government kept a man at Fort Worth and another at Dallas, Texas, who looked after the condition of our fruit to inspect cars in transit. This operates to protect the shipper from unjust rejections.

"A traffic managers' meeting was held at Seattle recently, at which all problems of transportation were discussed and a report made to members.

"Our recommendations today to lower the fee and to reduce the tonnage is for the purpose of increasing the membership."

The report of the financial officer showed that the expense of the agency had been $7067, with $306 on hand. The expense to the growers has been 85 cents a car. President Weyrauch cites this to show that the work has not been of great expense to the grower.

The expense report follows:

Issues Financial Statement.

Expenditures—	
Annual license and filing of articles of incorporation	$ 40.00
Market subscription contract	1000.00
List of growers furnished by marketer	15.00
Office expenses, including rental, use of furniture, typewriters, dictaphones, etc., also stenographic service March 26, 1916, to March 5, 1917	2250.00
Office salaries, April 1 to March 5	2291.64
Postage	287.93
Stationery	215.27
Traveling expenses of president	265.45
Traveling expenses of trustees	320.50
Printing bylaws, uniform contracts	42.00
Telegraphic and long distance telephone service	192.12
Legal services	5.00
Publicity expense	44.90
Special stenographic service, Spokane meetings	43.45
Special stenographic service, traffic managers' meeting, Seattle	6.00
Transportation and storage committee stenographic service	22.94
Typing growers' lists for members	25.00
Total	$7067.20
Balance on hand	$ 306.40

The office of markets of the federal
Others present were: President Wey- department was represented last week by C. E. Bassett, specialist on cooperative organizations, G. A. Nahstoll and Judge J. M. Burns, assistant solicitor of the department of agriculture.
rauch; J. B. Adams, Wenatchee; C. H. Swigart, North Yakima; H. G. Fletcher, representing W. F. Gwin of Seattle; William Sackett, Hamilton, Mont.; B. W. Johnson, Corvallis, Ore.; C. J. Webb, Spokane, representing P. R. Parks of the Spokane Fruit Growers' agency.

U. S. GRAIN BUREAU

To Be Located in City of Spokane.

Announcement has been made by the department of agriculture that the new grain standards bureau for the northwest will be located in Spokane, Wash. It will open on April 1, and be ready for business when the new grain standards under the federal act become effective, which will be probably about July 1.

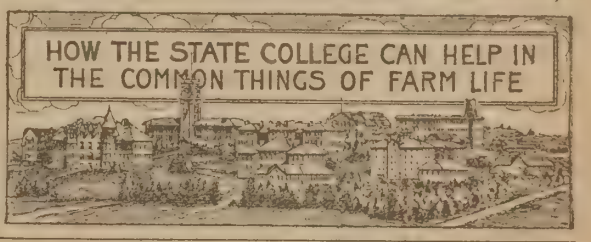
To the Washington Farmer: I like the Washington Farmer and the pep it has to stand by the rancher.

C. T. WESTADY.

Route 1, North Yakima, Wash.

Warding Off Fake or Unsuitable Crop

All the World Loves the Faker, Loves to be Humbugged. Write to State College.



V.

In the last number I began to talk about both soils and crops, but came to the end of the chapter before I got through with soils. I said, and repeat, that not only general help to all farmers and special help to inquiring ones, but also by special investigations as new problems or new applications of general laws arise, may help be afforded.

In the matter of crops, great help may come by warding off the fake crop or the crop unsuited to conditions, or less profitable than the old standbys or more hazardous than the staple ones. All the world loves the fakir, loves to be humbugged. I suppose it is because we want to "get rich quick" or to get "something for nothing" that we are constantly wasting our good wealth and strength on the impossible and the absurd. A fakir comes across a big, coarse-grained, ill-yielding grain resembling wheat in part and hullless barley in part. It is as old as the pyramids and as worthless as it is old. He calls it "goose wheat" and invents a story about its being found in the craw of a Canada wild goose. He also calls it "corn wheat" and invents a story about its enormous yield and its being a substitute for corn. Forthwith the story flies far and wide through the newspapers, for the newspaper man loves the agricultural fakir above all men. The gullible public send in their orders at so much per ounce or so much per pound, just as fast as the women ordered the 10-cent silk skirts. When you are tempted to try some of these new unusual, untried things, before you do it write to the college for advice, and state your conditions, for in some places the proposed new crop might be useful and in others wasteful.

One fearful drawback in crop production is the presence of noxious weeds. You want to guard against their introduction upon your place as you guard against the smallpox. Therefore, when you propose to sow clover, or alfalfa or grass seed of any kind or any other seeds, send a sample, from the very lot from which it is proposed to buy, and ask that it be tested for purity, also for germination. It will not cost you anything. It doesn't matter quite so much about the high percentage of germination for that only means the use of more seed and possibly weaker vitality in the plants. But watch for the weeds. The report looks high—99 per cent pure it may be. But what are the weeds? Bull thistle? That doesn't matter much—a little more perhaps. Green foxtail? Only one seed out of every hundred. Only six, maybe, in a cubic centimeter! Only six hundred in a quart of seed! Think of the possible danger! And the college can keep you from it if you will ask its help. Or if a plant which you suspect to be a noxious plant occurs on your farm, send a specimen to the college. Send, if possible, root and stem and leaves and flowers or fruit. It may be harmful or harmless, but the college can help you to determine.

You want to know how you should prepare the ground for some special crop. Ask the college. Or you wish to know how much seed of clover or alfalfa or peas or what not to sow. Ask for information, stating conditions. Perhaps you are new in the country or have pursued the single crop system and you need help in a system of crop rotation. The proper college man will be glad to help you. If one of the college traveling force chances to be in your vicinity, and you know him to be a specialist in the line on which you want advice, get him to go out to your place with you and talk it over. But don't expect the plant pathologist to give you advice on the feeding of dairy cows. What I say of crops is but suggestive of a hundred chances for help from the college.

E. A. Bryan

"WE ARE ON THE VERGE OF A PERIOD OF ANIMAL HUSBANDRY IN THE STATE OF WASHINGTON," ARE THE WORDS WHICH DR. BRYAN WILL BEGIN HIS NEXT ARTICLE, WHICH WILL TREAT OF LIVE STOCK AND HOW THE COLLEGE CAN HELP IN PROMOTING A HEALTHY GROWTH OF THIS GREAT INDUSTRY.

Brookline's Oldest Woman.

Miss Elizabeth Russell, who has the distinction of being the oldest woman in Brookline, Mass., recently had to call on a doctor for the first time in 103 years.

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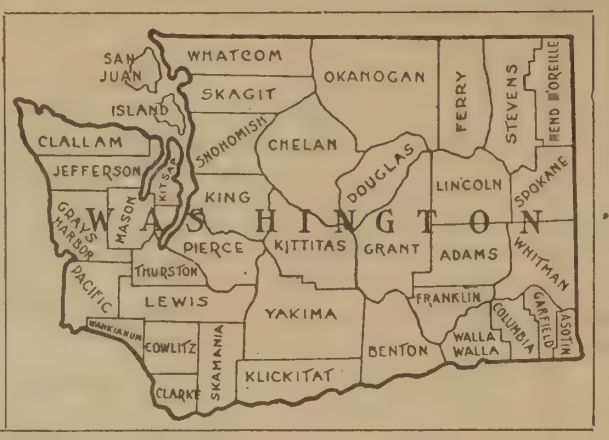
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May Reseed Much Fall Grain

Bad Fall and Winter Leads to Fear That Much Whitman County Wheat Will Have to Be Sown This Spring Again.



Whitman County, Wash.—Owing to unfavorable seeding and growing weather much of the fall grain may have to be reseeded in the western part of the county. Peas promise to become an important crop, but is about the only new one being tried out. The fruit industry is waning.

May Reseed Wheat.

LACROSSE, Whitman County, Wash., March 4.—Spring work usually starts here about March 1, and all plowing and spring seeding is finished by the first of April. Very little spring plowing is done for spring crops as a rule. Most plowing for summer fallow is done as early in the spring as possible and the fall seeding as early as September weather permits. Haying generally starts the last of June, and the cutting of fall wheat starts usually near the middle of July. Spring wheat generally ripens from August 1 to the 15th. Spring work this year will be late, and at this writing from five to six inches of snow still covers the ground, which is very unusual here. Prospects of fall crops are not very promising, as the germination during winter was very poor, with very little growth; so there will be lots of reseeding done, undoubtedly. Precipitation since last fall is only about 75 per cent of the normal, and nearly all that fell since December ran off, making stubble soil much drier for this time of the year. There is more snow on the ground now than at any time this winter, which will benefit fall wheat.

M. E. SCHRECK.

Peas Are Promising.

OAKESDALE, Whitman County, Wash., March 1.—The leading products of Whitman county are wheat, oats, hay, live stock, barley, potatoes, dairy products, fruit, poultry and garden products. Wheat is the leading crop, and, owing to high prices, it is rapidly increasing in importance. So far no crop has been entirely abandoned, but the fruit industry is in danger of becoming so. The high cost of production and poor market conditions are responsible for the decline in the production of fruit. The only new product that is being talked of now is the production of seed peas. Several farmers are planning to sow from five to 50 acres of the Alaska garden peas this spring. This new venture will be watched with interest by a large number of farmers, and if it proves successful there is no doubt but that the production of seed peas will become an important industry in this part of the country. There is some uneasiness among the farmers regarding the safety of the winter wheat. The winter has been very severe, and although there has been plenty of snow, it is badly drifted. The high winds have swept the south slopes bare, leaving the wheat there unprotected, while on the north slopes the snow is drifted so badly that the wheat is in danger of being smothered out. This morning the thermometer registered 12 degrees below zero. This is the coldest first March day I ever saw. Judging from the present high prices of all kinds of farm products I should think the coming season would be a very promising one.

MASON BROWN.

Soil Needs Lime.

SOUTH BEND, Pacific County, Wash., March 2.—The fall crops are doing nicely. Some rye which had grown six inches was pastured in the middle of February. A late snowfall, lasting nearly two weeks, has delayed spring work. Some oats will be sown in March and April. A lime quarry has been opened at Bear River. Ground limestone is selling for $5 a ton. Nearly all of the soil in this section needs lime. County Agriculturist H. C. Wilcox has resigned and will move to Wyoming. His successor has not been named. Mr. Wilcox was a great help in developing up-to-date methods, and his departure is regretted. He gave a number of lectures, some to the boys and girls, urging them to organize into clubs. The price of milk has dropped in South Bend and Raymond. Cranberries are cheaper, too. A farm loan association was completed at Menlo February 24. The amount asked for is $40,000. This will be used in building up the valley farms and improving them. The committee are Mr. Habersetzer and Mr. Lichenthaler of Frances, Ernest Lilly and Emil Scholtz of Menlo and Jack Moore of Willapa.

MRS. WINNIFRED BUCKINGHAM.

Leading Products.

KENNEWICK, Benton county, Wash., —The leading products in Benton county are about as follows: Tree fruits, cream, wheat, hay, strawberries, corn, potatoes, grapes, poultry, and pork. Corn, strawberries and potatoes are increasing in importance, the two first named very decidedly. Pork production has decreased very materially the past year because of low prices. The grape production is far less than it was four years ago, because of lack of a marketing system. Several farmers are planning to cooperate with the agricultural office in making field tests of commercial fertilizers. One farmer is going to try a plan of thickening up a thin stand of alfalfa by keeping the old stand clipped off so it will not shade the new plants until they are

What's on the Fertilizer Bag?

Does your manufacturer print on the fertilizer bag; how much immediately available nitrogen (viz., Nitrates) it contains? Many do not. Home mixing is the safe, economical method. Mix your own fertilizers and know what you get.

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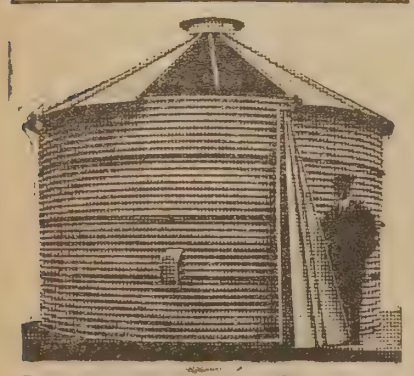
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MORSE'S SEEDS FOR FARM AND RANCH

Plant Morse's

Alfalfa, Clover, Beans, Peas, Grass, Tomatoes, Onion, Corn, Mangold, and all farm, field and vegetable seeds.

Strong germination and vitality

Sold by all leading Dealers or direct from
C. C. MORSE & CO.
SEEDSMEN
745 Front Street San Francisco

started. The coming season looks very promising in most all lines, it looks especially promising for the few pork producers that are left and also for the strawberry and asparagus growers as they now have a definite system of marketing their produce worked out and are practically all cooperating in it. LEE M. LAMPSON.

Contract Potatoes at $20.

MARIETTA, Whatcom County, Wash., March 5.—Much ground will be broken about the middle of this month and peas and oats and spring wheat will be seeded. Summer fallow will continue until late in September to have the seed in about the first of October for fall grain. Spring is coming in about normal and much talk is occasioned by prospects for a good crop of potatoes. Some crops of potatoes have already been contracted at $20 per ton. What little fall crops are raised here are coming out in good shape, the season being exceptionally good. Weather has been clear, with little frosts at night.

S. B. MAYHEW.

Too Many Predatory Animals.

VADER, Lewis County, Wash., March 3.—Some of the leading products of the farms around Vader are milk and dairy products, dairy cattle, oats, hogs, beef, potatoes, eggs, chickens and draft horses. The production of milk products and dairy cows, both Holsteins and Jerseys, is on the increase. The coming season looks very promising to the farmer. The high prices at the present time and the past season have encouraged the farmers to such a pitch that they seem determined to make their land produce an increased crop. The production of hops is decreasing very rapidly, there being not more than one-third as many raised as there was a few years ago. There is no grange or farmers' union in this vicinity. We can not raise sheep successfully here on account of so many predatory animals. L. S. WILSON.

Sows Sweet Clover.

CENTERVILLE, Klickitat County, Wash., Feb. 26.—The chief industries of this county are wheat, sheep, hogs, cattle, lumber, oats, barley, the fruit industry in the Columbia river district, chickens, wheat, hay and alfalfa hay. There will be very little variation in the average crop rotation with the exception of a few small crops. One neighbor is planning to sow sweet clover as a soiling crop and pasture. Some talk of planting beans, and most likely the potato will get an extra send-off on account of the high prices now. The dairy interests are divided between Portland and Seattle, the latter having paid us a good price so far. C. F. McEwen has purchased and shipped to his home in Montana several cars of cattle, affording a market here for our extra stock cattle. The sheep business has been on the boom, several parties having sold out their sheep and are looking for more. The hog business is at a premium here and will be a very short crop the coming season. The wheat situation at the present time is favorable on most of the farms, but there are a few that don't have a good stand, but the prospects are much better than last year. The bulk elevator is on the increase here, with good results the last season. There are about four inches of snow on the wheat fields, which are doing fine.

C. A. LESTER.

Seed and Plant in June.

CHEHALIS, Lewis County, Wash., March 1.—This county has been through a very comfortable winter, with little snow, ice or frosty weather. There have been no bad floods as yet. Farmers have not been keeping sheep and but very few pigs and far fewer hens than usual, on account of the egg boycott and the high cost of feed. The cattle prices have been far below cost of production for the last two years and have driven over 5000 good cattle out of the county, which will make a shortage and paying prices again. Most of the upland and well drained bottoms and some of the wet land have been plowed and considerable grain sown. The balance of the ground will be plowed and sown up to June 15. June-sown oats and potatoes often make the heaviest, best crops. No summer fallowing is done, but quite a lot of fall plowing has been done, and some fall wheat, oats and rye sown, which look in, at 15 cents a pound, and veal is scarce at 15 cents. Potatoes are $60 and up a ton. Many will be planted early this year. Hay and straw are 20 per cent cheaper than last fall. Straw is now $6 and hay $14. Grass is about gone here, which will cause a stiff advance on beef, cows, young cattle and heavy horses, which are getting scarce. Eggs have had a steady, fair market, but are reported down now.

L. K. COGSWELL.

Are Planting Potatoes.

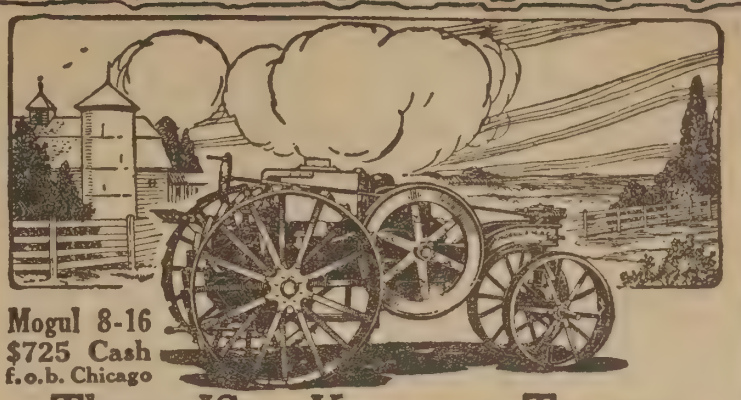
CHIMACUM, Jefferson County, Wash., March 2.—We have had a late winter this year, and the spring work, like hauling manure and plowing, is in progress now, especially on the high ground. A few early potatoes have been planted, and I think there will be a large acreage of them put in this year. A good many of the farmers were lucky this year, as they held their potatoes and have received a good price that is ranging from $55 to $60 per ton on the farm. Almost everybody has plenty of hay this year, as they had experience enough last year with the high prices of hay and the hard winter.

JOHN VAN TROJEN JR.

Two Weeks Late.

PORT ANGELES, Clallam County, Wash., March 2.—The spring plowing for the Olympic peninsula generally starts about the middle part of March and the normal season for fall plowing is the latter part of September. Summer fallowing practically does not amount to anything in Clallam county. The present season is what you would term "backward." We have had 34 1-2 inches of snow, which is the third heaviest snowfall in 25 years. There is considerable snow on the ground, and it freezes during the nights. Judging by present signs our spring will be two weeks late.

J. P. CHRISTENSEN.



There IS a Kerosene Tractor
It is Mogul 8-16

IN order to remove the last shadow of doubt about the ability of **Mogul 8-16** to operate successfully on kerosene, we now put into our warranty a guarantee that **Mogul 8-16 will do good, serviceable work at all loads, operating on common coal oil.**

That is our answer to critics and doubters—a **signed guarantee** to purchasers of Mogul 8-16. You can now buy a tractor **built** to operate on kerosene, that **does operate successfully** on kerosene, and that is **guaranteed** to do good, serviceable work on your farm, using kerosene for fuel.

Now it is up to you. Buy a guaranteed Mogul kerosene tractor and you get a machine that will do your work for about half the fuel cost of a gasoline tractor of the same power, and that will work faithfully for you through the rush seasons when you need reserve power.

Will you please send us your name and address, so that we can tell you in full detail **why** we can guarantee the kerosene burning feature of Mogul tractors. **Mogul 10-20** and **Mogul 12-25**—the larger Moguls—are also kerosene tractors.

International Harvester Company of America
(Incorporated)

Crawford, Neb. Denver, Colo. Helena, Mont. Los Angeles, Cal.
Portland, Ore. San Francisco, Cal. Spokane, Wash. Salt Lake City, Utah

"HIPRESS" with the RED LINE 'round the top

Every Brown Boot You See Without "Red Line 'Round the Top" is an imitation of "Hipress," the Original Brown Rubber Footwear.

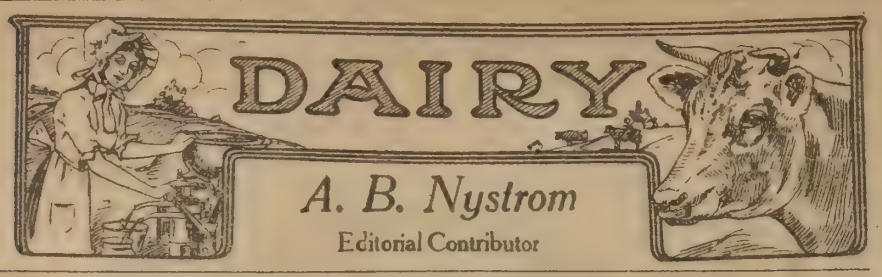
"Hipress" color can by copied but—
"Hipress" One Solid Piece Construction cannot be imitated, and—
"Hipress" Wonderful Wear cannot be duplicated.

Only the B. F. Goodrich Company—for Forty-seven years the manufacturer of standard rubber products—knows how to Mold the toughest auto tire rubber into One Solid Piece boots and shoes. They wear twice and even three times as long as old style black footwear. And its well-nigh impossible for a One Solid Piece boot or shoe to crack, peal or leak. There's just as much extra comfort as wear in them, too.

So be particular about getting rubber footwear with the "Red Line 'Round the Top!" Your dealer will be glad to fit you in any style you need.

Made only by
The B. F. Goodrich Company
AKRON, OHIO 38,000 Dealers
Makers of the Celebrated Goodrich Automobile Tires
—*"Best in the Long Run"*





Montesano Cow Testing Association

One of the most interesting reports that has come to the Farmer is the yearly summary of the Montesano Cow Testing association in western Washington of which R. W. McKenna is tester. C. F. Monroe, county agricultural agent, has taken great interest in this association. The association has had 24 members, 21 of whom completed the year's work. There were 510 cows tested. Fifty-one cows were found to be so unprofitable that they were sold to the butcher. One hundred and forty-six cows did not complete a full year's work, but the yearly records of 313 cows were obtained.

The average cow produced 6021 pounds of milk during the year at a feed cost of 90 cents per hundredweight of milk; produced 263.4 pounds of butter fat at a feed cost of 20 cents per pound of butter fat.

The highest producing cow gave 11,672 pounds of milk, producing 680.3 pounds of butter fat.

The lowest producing cow gave 2107 pounds of milk and produced 98.3 pounds of butter fat.

The highest average herd produced 8959 pounds of milk with 521.1 pounds of butter fat. The lowest average herd is credited with 2912 pounds of milk, producing 135.5 pounds of butter fat.

Twelve cows gave over 10,000 pounds of milk during the year, the butter fat ranging from 337.6 pounds of butter fat to 680.3. The proportion of the grain to the roughage fed to these 12 cows was 58 per cent.

HIGHEST BUTTERFAT RECORDS FOR THE YEAR.

Name	Age	Breed	Owner	Lbs. Milk	Lbs. Butterfat
Emanon's Anne West	4	PB Jer.	E. L. Brewer	11,672	680.34
Pansy	8	GR Jer.	Murphy Bros.	12,324	595.4
The Owl's Golden Queen	5	PB Jer.	E. L. Brewer	9,186	589.81
Golden Massy Polo 3d	6	PB Jer.	J. H. Taylor	9,174	563.2
Gertie's Lily	12	PB Jer.	J. H. Taylor	9,667	548.0
Gertie's Son's Lass	5	PB Jer.	J. H. Taylor	9,340	536.2
Queen's Golden Pogis	7	PB Jer.	E. L. Brewer	9,071	518.7
Golden 26	5	Gr. Jer.	Murphy Bros.	10,148	506.3

In this group, the proportion of the grain to the roughage fed was 123 per cent. Also, the cow producing the highest amount of butter fat for the year made the largest net profit, namely, $151.46. There are among us a considerable number of people who can see only bankruptcy ahead for the man who buys and feeds concentrated or mill feeds. These items may be of interest to these people.

War to Aid Dairy Industry.

Lane county dairymen and business men have been inspired by the possibilities of the dairy industry in Oregon after the close of the war, as predicted by Herbert A. Emerson, deputy commissioner of foods and markets of the state of New York, who was a recent visitor at the home of Mr. and Mrs. W. A. Sims in Eugene. Mr. Emerson declares that the foundation of the dairy industry in Europe has been shattered by the war and that Europe for the next 30 years must look to America for dairy products.

"The countries at war are depending on America to furnish them with dairy supplies," said Mr. Emerson. "Each soldier in the British army is given four ounces of cheese daily. As there are 5,000,000 soldiers in the army this makes a total of 1,250,000 pounds, or 65 carloads, consumed every day.

"If Oregon can furnish the right kind of goods it can hold the market in Europe for many years to come. There will be an immense demand for the dairy products of this state, as well as those of every other state where dairying is an industry."

A PRIZE WINNER.



Cloveridge Sir Beets Netherland is the name borne by the Holstein bull calf shown above. He was bred on Cloveridge farm, owned by W. K. Newell, Seghers, Ore., and was shown last December at the Pacific International Stock show at Portland, Ore., where he won first in his class and junior championship.



NO DOSE TO MEASURE.
NO LIQUID TO SPILL.
NO STRING TO ROT.

BLACKLEGOIDS are small pills. Each pill is an accurate dose of blackleg vaccine.

BLACKLEGOIDS are easily administered—simply inject them under the skin with a vaccine injector.

TAKE NO CHANCES.

Don't wait until your calves become infected. This means certain loss—there is no *cure* for blackleg. Vaccinate now—before the deadly disease shows itself.

THE COST IS SMALL.

BLACKLEGOIDS are economical. The expense is trifling compared with the loss you are liable to sustain if you do not use them.

ORDER THROUGH YOUR VETERINARIAN OR DRUGGIST.

Write for free booklets on Blackleg, with full information about Blacklegoids.

PARKE, DAVIS & CO.

Dept. Animal Industry. DETROIT, MICH.

In answering advertisements don't fail to mention this paper.

Only $2 Down
One Year to Pay!

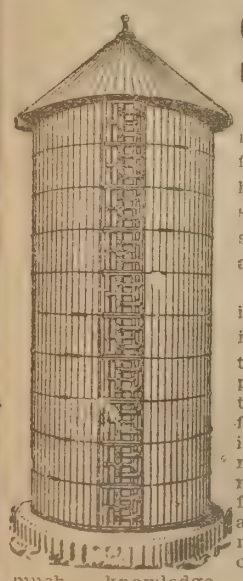
$24 Buys the New Butterfly Jr. No. 2. Lightrunning, easy cleaning, close skimming, durable. Guaranteed a lifetime. Skims 95 quarts per hour. Made also in five larger sizes up to No. 8 shown here.



30 Days' Free Trial Earns its own cost and more by what it saves in cream. Postal brings Free catalog, folder and "direct-from-factory" offer. Buy from the manufacturer and save money.

ALBAUGH-DOVER CO. (12)
2183 Marshall Blvd. CHICAGO

INTER-STATE SILO



Too often in the past farmers have considered "a silo just a silo."

But a silo is the most important, the most profitable, the most far-reaching investment ever made on a farm and as much care, as much knowledge, as much thought should be applied in its selection as any equipment bought for the farm.

The Inter-State Silo and the Hinge-Red Door are superior to all other makes.

McGoldrick Lumber Co.
Spokane, Washington.

Fill in below and mail to McGoldrick Lbr. Co., Spokane, Wash., for our 1917 catalogue.

Name .....

Address .....

In answering advertisements don't fail to mention this paper.

Raise Own Feed

Is Advice Given to All Dairymen

Two bits of advice are given to dairymen by C. C. Aspinwall, one of the successful producers of Thurston county, Wash.: (1) Every dairyman should raise his own feed, at least all the common varieties; (2) every dairyman should have a silo.

Mr. Aspinwall, who was for a number of years superintendent of the Washington State Training school at Chehalis and who is now representative in the state legislature, milks about 30 cows, all grades but one. He is not a believer in grades as preferable to purebreds, however, considering that a grade must be unusual to be as valuable as a purebred.

He farms 120 acres at the southern tip of Puget sound, near Olympia. The first year he bought all his feed, but since then he has put more of his farm into cultivation, built a silo, and now grows and stores all his own feed.

SUNNYSIDE COWS

Report of the Official Tester.

The report of N. R. Weldin, official tester of the Sunnyside Cow Testing association, for the month of February shows 571 cows to have been tested and 58 dry cows.

The following table gives the owners and records of the cows in the association which have produced more than 50 pounds of butter fat during the period of 30 days ended March 1:

Owner of cow.	Breed of cow.	Lbs. milk.	Lbs. B. fat.
H. C. Davis .....H.		1602	80.1
Moorhead & Hobson H.		1632	63.7
Moorhead & Hobson H.		1485	59.4
Charles Hammer ..G. J.		1098	58.2
Charles Hammer ..G. J.		906	54.3
L. H. Lee .....G. S.		1320	54.1
Moorhead & Hobson H.		1659	53
N. B. Schafer .....G. H.		1125	50.6
H. C. Davis .....H.		1857	50.1

There were, in addition to the 50-pound list, 25 cows known to have produced between 40 and 50 pounds of fat for the month.

H. C. Davis led in herd averages, with a 41.5-pound average. Others with herd averages of over 30 pounds were Moorhead & Hobson, G. W. Huston, R. E. Deets, S. G. Sorenson, John St. Hilaire, Charles Hammer, W. O. Cox, Axel Anderson and L. H. Lee.

Do You Know That

Railway cars would be sanitary if it were not for the people in them?

See the Difference

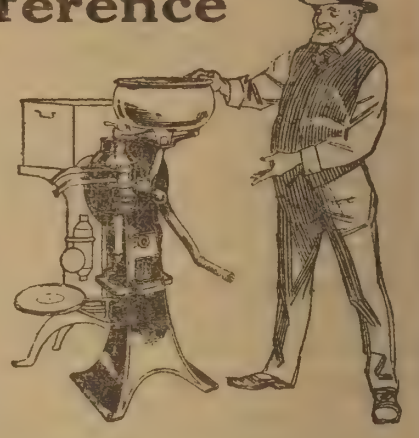
BETWEEN

THE NEW

DE LAVAL

AND OTHER

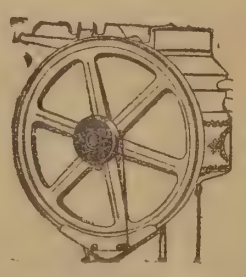
CREAM SEPARATORS



YOU can *see the difference* between a NEW DE LAVAL and any other cream separator right away.

And five minutes spent in comparing the bowl construction, the size, material and finish of all the working parts, the manner of oiling, the tinware and the frames, will surely convince you of the superiority of De Laval construction and workmanship.

Then if you go a step farther and turn the cranks of the two machines side by side for fifteen minutes, running milk or water through the bowl, you will see still more difference.



Every New De Laval is now equipped with a Bell Speed-Indicator, the "Warning Signal" which insures proper speed and uniform cream.

Speed Indicators can be furnished for use on old style De Laval machines at a cost of $3.00 each.

And if you will run the two machines side by side in practical use, as any De Laval agent will be glad to have you do—the De Laval one day and the other machine the next—for a couple of weeks, you will see still greater difference in the work of the two machines.

There is a De Laval agent near you who will be glad to explain all the improvements and advantages of the NEW De Laval, and who will set and start a machine for you on your farm and let you *prove the difference* for yourself.

Why not see the nearest De Laval agent at once? If you do not know him, write to the nearest office for any desired information.

DE LAVAL DAIRY SUPPLY CO.

LARGEST DAIRY SUPPLY HOUSE ON THE PACIFIC COAST. We specialize in Alpha Gasoline and Distillate Engines, Ideal Green Feed Silos, Irrigation Equipment, Centrifugal and Deep Well Pumps and Alpha Spraying Outfits. Send for special catalog.

101 DRUMM STREET, SAN FRANCISCO

50,000 Branches and Local Agencies the World Over

Honor Roll at Waikiki Farm.

The Farmer has received from Ira P. Whitney, manager of the Waikiki farm, Spokane county, Wash., a list of 27 cows out of 80 cows being milked at the farm, which produced 40 or more pounds of butter during the month of December. Mr. Whitney writes:

"While we are not members of any association, all of our testing is done by the official tester of the Whitman county association, Noel Buchanan, who spends six days at Waikiki each month. He does our register of merit testing and also takes a four-milking composite sample of all cows in the herd not on official test."

Here is the list of cows producing over 50 pounds during December:

Name of Cow.	Breed.	Age Years.	Days Fresh.	Lbs. Fat. Dec.	Total Fat to Date.
Princess Coleman	Registered Jersey	6	81	75.3	175.0
Fancy Iron Duchess	Registered Jersey	4	174	60.2	360.4
Pilot's Model	Registered Jersey	2	245	53.0	422.5
Clara Eleanor	Registered Jersey	6	77	47.1	115.8
Fritzie Miller 3d	Registered Jersey	4	30	43.9	43.9
Amateur's Tred, Ethel	Registered Jersey	2	53	42.3	77.7
Lady Trilby Du Val (Imp.)	Registered Jersey	7	240	41.9	370.6
Princess Ella Ware	Registered Jersey	4	60	40.5	80.6
Emperor's Lady Scott	Registered Ayreshire	4	44	76.4	106.9
Barcheskie Marchioness	Registered Ayreshire	11	103	40.9	133.7
No. 139	Grade Jersey	8	29	69.9	69.9
No. 302	Grade Jersey	5	43	61.3	86.9
No. 32	Grade Jersey	7	148	60.8	289.1
No. 313	Grade Jersey	4	37	54.8	65.2
No. 25	Grade Jersey	6	61	53.5	120.6
No. 84	Grade Jersey	5	76	51.4	131.7
No. 147	Grade Jersey	4	35	50.7	58.3

Do You Know That

Bad temper is sometimes merely a symptom of bad health?

Procrastination in sanitary reform is the thief of health?

BLACK LEG LOSSES SURELY PREVENTED by CUTTER'S BLACKLEG PILLS

Low-priced, fresh, reliable; preferred by western stockmen, because they protect where other vaccines fail.



Write for booklet and testimonials.
10-dose pkg. Blackleg Pills, $1.00
50-dose pkg. Blackleg Pills, $4.00
Use any injector, but Cutter's simplest and strongest. The superiority of Cutter products is due to over 15 years of specializing in VACCINES AND SERUMS ONLY. INSIST ON CUTTER'S. If unobtainable, order direct.
The Cutter Laboratory, Berkeley, California

Raise Your Calves on
Blatchford's Calf Meal
and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.
Prevents scouring and insures the early maturity of sleek, handsome calves.
It is steam-cooked and no trouble to prepare or use.
Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Factory, Dept. 58 Waukegan, Ill

Spokane Seed Co.
Distributors,
Spokane, Wash.



Bad-Tempered and Why?

Cows are sensitive animals and form habits easily. Many a good cow has become "mean", through some irritating udder sore left to heal itself. Save the cows' disposition and serious danger by using Bag Balm, the great healing ointment, at the first sign of caked bag, inflammation, chafing, sore, chapped or injured teats. A great antiseptic healer for any scratch, bruise or cut.

Sold in generous 50c packages by feed dealers and druggists. Write for useful free booklet, "DAIRY WRINKLES."
DAIRY ASSOCIATION CO., Lyndonville, Vermont

BAG BALM
MADE BY THE HOME OF QUALITY PEOPLE

SPOKANE SEED CO.
Distributors.
SPOKANE, WASH.

Pioneer Jerseys

Brought Into White River Valley

In the possession of Mrs. T. Liston of White River Valley, Wash., is a deed, wrinkled and yellow with age now, which was made out in 1878. The signers were A. A. Denny, Mary A. Denny, George F. Frye and Louisa C. Frye, and title was conveyed to Edmond Bow. During the Seattle fire this deed rested in the safe of J. B. Metcalf, and part of its present color probably is due to the heat of the big conflagration.

Mrs. Liston, who now lives on part of the pioneer farm, remembers the first Jerseys brought into White River Valley. They were bought by her father, and ever since that time Jerseys have held an important place on the Bow farm.

The old Bow place adjoins the Pacific highway, and it is no uncommon sight now to see half a dozen high-powered motor cars whizzing past at the same time. This carries Mrs. Liston back to pioneer days, when the narrow-gage railroad was built up to the Newcastle mines.

"We used to go down to a place where the cars were supposed to stop," says Mrs. Liston, "and perhaps they did stop and perhaps they didn't. There was no station, and the right of way occupied by the track was so narrow that if you stuck your arm out of the window you were apt to have it knocked off by a tree trunk. Of course, we didn't have to go to Seattle in this way—there was a steamer on the river which we could take if we wanted variety. The only trouble was that when the steamer reached the mouth of the river, unless tide conditions were favorable, it sometimes had to wait till far into the night before it was able to get across the sand spit. But in spite of it all," adds the daughter of the pioneers, "I don't know but what we had better times then than we do now. We didn't travel so rapidly—but we did take time to live."

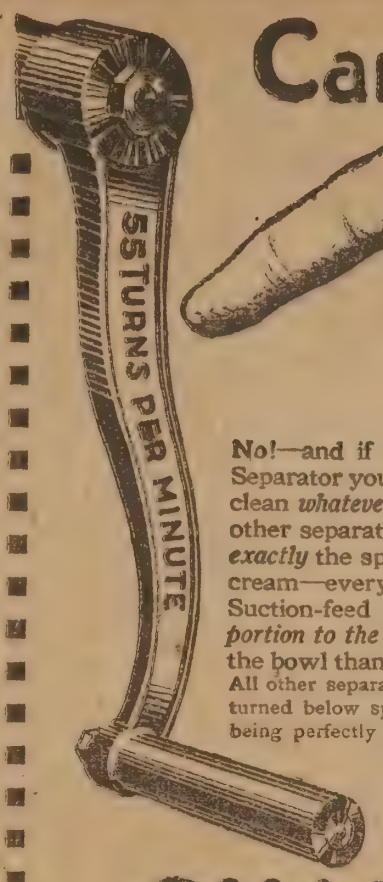
HIRED HELP

Higher Cost and Smaller Farms.

T. Liston of King county, Wash., believes that when land goes over $200 an acre it is too high for farming purposes. For a good many years Mr. Liston was in the dairy business, but six years ago he decided that the cost of production was overtopping selling price, and that a good time had come for selling off his cows.

"There was more money in selling milk 15 years ago at 8 cents a gallon than there is in selling now for twice that," Mr. Liston says. "Look at the matter of help, for one thing. We used to get a good man for $20 a month; now we must pay $50 or $60. Shorts were $16 a ton, while now—well, you know what they are. The dairy farmer of today handles more money than the oldtimers did, but he doesn't succeed in keeping any more of it for his own use."

Mr. Liston believes the big farms will have to be cut into smaller holdings, so that the matter of hired labor will be largely eliminated. When a man and his family are able to do all of the work, they are in an independent position. Living costs little, and the money taken in goes farther.



Can you do it? Every day?



No!—and if you have a Sharples Suction-feed Separator you don't have to, for it skims equally clean *whatever* speed you turn. But with every other separator you must turn the crank at just *exactly* the speed stamped on it, or you will lose cream—every time! The wonderful Sharples Suction-feed varies the milk feed *in direct proportion to the separating force—never* more milk in the bowl than it can *perfectly* separate.

All other separators have a fixed milk feed. Thus when turned below speed much of the milk runs out without being perfectly separated, and some gets into the cream, making it thin and uneven. Thousands of actual tests have proven that 19 out of 20 persons *do* turn too slow most of the time, and that *everybody* turns too slow some of the time. Get a

SHARPLES SUCTION-FEED CREAM SEPARATOR

—the *only* separator that skims clean at widely varying speeds
—the *only* separator that delivers cream of unchanging thickness—all speeds
—the *only* separator you can turn faster and finish skimming quicker
—the *only* separator with just *one* piece in the bowl—no discs, easiest to clean
—the *only* separator with knee-low supply tank and a once-a-month oiling system



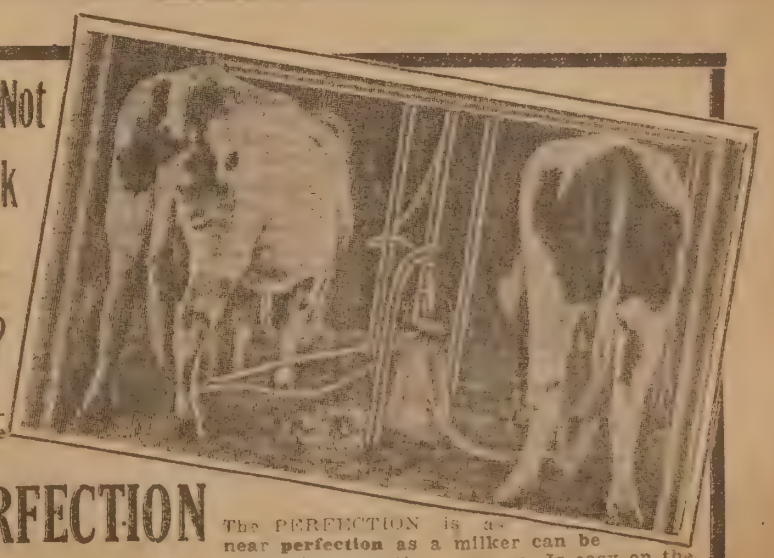
Sharples is positive insurance against carelessness and its consequent cream waste. We realized that it was far from sufficient that a separator *could* skim clean when properly handled. It was vitally necessary that it *would* skim clean—even when improperly handled. If any of the old-style fixed-feed separators would adopt a device for the purpose of notifying the operator when he is turning too slow, it would be an acknowledgement of the ***vast superiority*** of Sharples, which automatically ***prevents*** losses from irregular turning instead of simply announcing them. Write today for catalog to Dept. 49.

Sharples Separator Co., West Chester Pa.
Also Sharples Milkers and Gasoline Engines
Branches: Chicago San Francisco Portland Toronto

SPOKANE SEED CO.
General Agents
910 First Ave., Spokane, Wash.

Why Not Milk This Way?

Investigate the

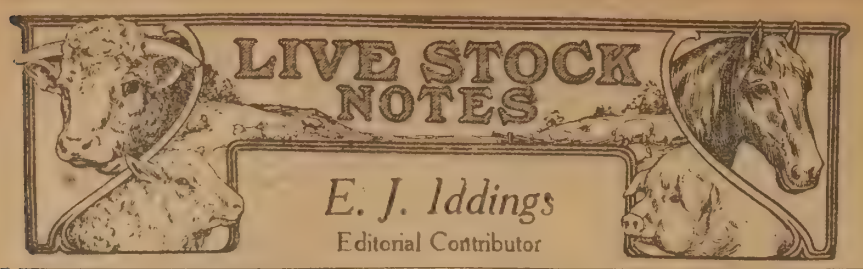


PERFECTION Milking Machine

The PERFECTION is as near **perfection** as a milker can be made. It saves time—money. Is easy on the cows—they like it. The PERFECTION gives a downward squeeze and suck—a perfect imitation of the calf itself.

The PERFECTION pump is very simple—runs smooth and easy—floats in oil. Will last a lifetime. The pulsator is unique and perfect in action **—it is the only machine capable of adjustment to the individual cow.** Write today.

J. C. ROBINSON COMPANY 47 FIRST STREET, PORTLAND, ORE.



BULL ASSOCIATION

Farmers Endeavor to Improve Herds

The farmers in the vicinity of Powell Butte in Crook county, Ore., formed the Central Oregon Bull association. County Agriculturist Blanchard, acting under the direction of the County Agricultural Council, assisted in forming the organization. E. S. Barnard, secretary-treasurer and chairman of the committee on economic problems of the County Agricultural council, was particularly active in assisting in the formation of the association. After adopting the articles and by-laws, the following officers were elected: George F. Beckman, president; Levi Ernst, secretary-treasurer and E. S. Barnard, chairman of the board of directors. The association will use a bull of the Jersey breed.

The bull association is merely the get-together of several men who are using the same breed of cows, who purchase a high grade bull cooperatively, thus getting the advantage at a lower cost. As the association grows, blocks or sections are formed and a bull supplied to every 70 cows. At the end of two years, when the danger of in-breeding occurs, the bulls of the blocks in the association are exchanged.

Manage O. A. C. Live Stock Farm.

The appointment of D. E. Richards, manager of the Oregon Agricultural college live stock farm and live stock, as instructor on the animal husbandry faculty and as secretary of the Oregon state stallion registration board, has been announced by Professor E. L. Potter. His time and salary will be equally divided between the college and the state board. All his college work will be specialized on horses.

Veterinary

Dr. S. B. Nelson

I have a cow that has small hard lumps along her back. They seem to be under the hide, but break similar to a boil, leaving a bloody scab. She will be fresh in about a month and seems to be losing flesh, though I am feeding her well. I give her bran, shorts, oil meal, carrots and good hay.
J. W. P.

Oak Harbor, Wash.

The description that you give of the hard lumps along the cow's back fits pretty closely the condition known as "warbles" in the cow's back. This condition is caused by the "bot fly," or "ox warble fly," which lays its eggs on the hair of the animals during the hot summer months. At the present time the thing to do is to squeeze the grubs out of the boils and destroy them, then in the summer when the cattle are turned into the field the treatment is to apply to the hair some oil, sticky substance, such as whale oil, or similar substance. Otherwise, there is no treatment for the trouble.

I have two mules that get sore shoulders when they are worked in the field. The shoulders chafe, but do not seem to swell much. Is there anything I can get to toughen their shoulders before it is time to work them?
J. C. O.

Wilson Creek, Wash.

Try applying to the shoulders every night when the team comes in a small quantity of "elyerite of tannin." If you can apply this for a week or 10 days before you begin to work the mules hard, so much the better.

I had a cow that lost her appetite three days after calving. I doctored her for impaction of the stomach. She seemed to be in no pain, but died about 10 days afterward. I opened her and found her heart enclosed in a substance resembling tripe. Her udder was a mass of clotted blood. About three months after a former calf two teats on one side became obstructed and did not open again, although the udder was full. Could this have caused her death, as she was a heavy milker.
M. B.

Curlew, Wash.

Your cow died from inflamation of the lining covering the heart, known as "peridarticis." I do not believe that the obstructed teats had anything to do with the inflamation of the heart, although it may be that it did. The inflamation of the heart could have come from either her catching cold, or if bacteria were present in the blood of the udder, they might be absorbed and show themselves in the inflamation caused both inside and outside of the heart.

If a cow aborts her calf at four months should she be brought to a flow of milk and would the milk be fit to use?
C. C. H.

Humptulips, Wash.

Yes, the cow should be given treatment for the conditions which generally follow when the calf has been aborted and the cow should be brought to her full flow of milk and when the cow has recovered from calving and the results of the abortion she should go into full milk and the milk is fit to use.

I have a cow that got some oat beards in her eyes. I tried to get them out, but could not do so. I have been washing the eye out with weak carbolic acid water. It has now formed an ulcer or abscess and there is quite a lot of puss and blood. It discharges very freely and has a strong odor. The eye is sunken away into the head and seems loose. She is totally blind in it. Should the eye be taken out?
O. H. H.

Kealey Springs, Sask., Canada.

You are mentioning here and asking advise for a very serious trouble. If you do not have the advantage of expert veterinary service try the following treatment provided that the eye ball has not yet bursted. It the eye ball has bursted, then it should be removed. However, if not, inject at the corner of the eye a few drops of a 4 per cent cocaine solution. Wait a few minutes and then drop in a few drops more. After about six or seven minutes open the eye and flush it out carefully with a warm 2 per cent solution of boracic acid in water. Flush it with a running stream until it is clean, and then examine carefully it the oat beards have been gotten out. It not, remove them with a small pair of pinchers. After the eye is clean drop into it four or five times daily a few drops of a 2 per cent solution of argyrol. Continue this treatment until the animal is better.

Women Carpenters.

Nineteen young women carpenters have been sent from London to France to build huts for the British army.



ABSORBINE STOPS LAMENESS

from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone, or similar trouble and gets horse going sound. It acts mildly but quickly and good results are lasting. **Does not blister or remove the hair** and horse can be worked. Page 17 in pamphlet with each bottle tells how. $2.00 a bottle delivered. **Horse Book 9 M free.**

ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful Swellings, Enlarged Glands, Wens, Bruises, Varicose Veins; heals Sores. Allays Pain. Will tell you more if you write. $1 and $2 a bottle at dealers or delivered. Liberal trial bottle for 10c stamps.
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Identify Your Stock

The reason lost stock is seldom returned is because it lacks Perfect Identification. Each animal should carry an ear tag, with name and address of owner stamped thereon.



The "Perfect" Tag should be used because it is the lightest tag manufactured; made of aluminum; noncorrosive and non-poisonous. This ear tag is indorsed by stockmen all over the United States.

Send for FREE sample tag and prices.
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69 W. Broadway, Salt Lake City, Utah.

The Aultman & Taylor Pea and Bean Puller



Save Your Whole Crop

After you have gone to the expense of raising a crop of peas or beans, you should not be satisfied with anything but the best in hulling machinery. Do not trust your crop to an improvised huller, such as a grain separator with pea and bean hulling attachment, as it only invites loss through cracked seed, poor cleaning and inferior separation.

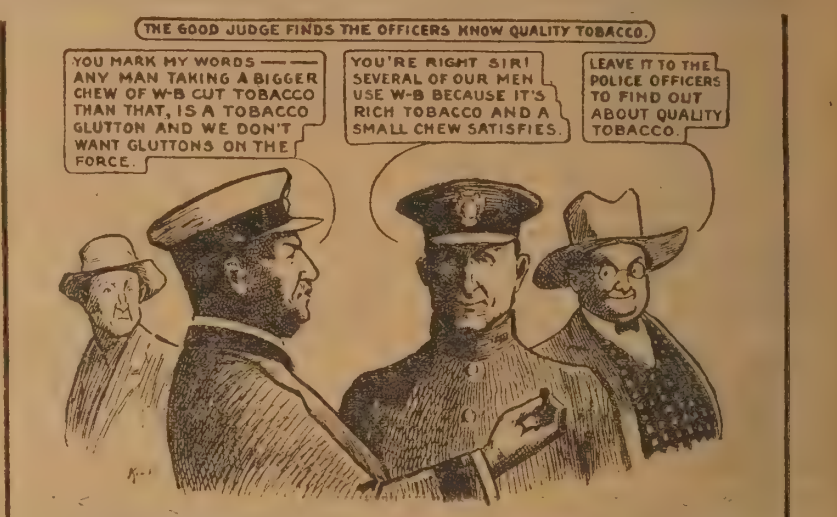
The AULTMAN-TAYLOR pea and bean machine is designed and built solely for the successful handling of peas and beans. It is a machine you can trust your crop to and feel satisfied that none of it will be wasted.

Our 1917 catalog fully describes this huller, as well as the New Century Separator. A special Tractor Catalog tells you about the Aultmann-Taylor Four-Cylinder Gas Tractors, and why they lead all others.

Write or call at our nearest branch house.

The Aultman & Taylor Machinery Co.

Spokane Wash. Adams St. & G. N. Tracks. Box 433.
Walla Walla, Wash. Box 76
Mansfield, Ohio.



YOU notice a fine regard for appearance among the officers from Roundsmen to Captain—that's one reason they are so keen for W-B CUT Chewing. The pass-word among these gentlemanly fellows is "If you won't take a little chew don't take any." No need to disfigure the face, when a nibble of *rich* tobacco gives *more satisfaction* than a wad of ordinary stuff—also less grinding and spitting. Take a tip from the officer on W-B.

Made by WEYMAN-BRUTON COMPANY, 50 Union Square, New York City

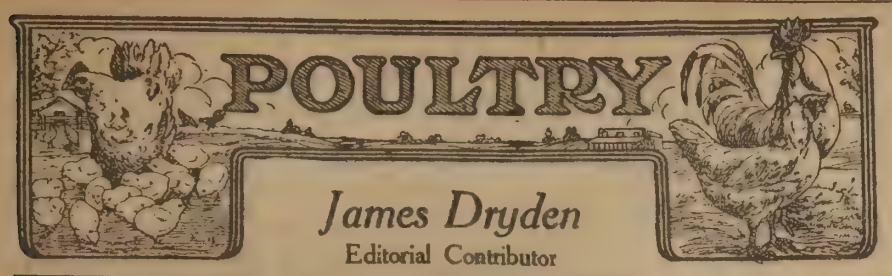
Cyphers Incubators



The practicability of artificial incubation has been so firmly established that it is not any more questioned.

The important thing is to select an incubator that is thoroughly reliable and that can be depended on regardless of the rise or fall in temperature, and one so scientifically constructed that it will produce strong, healthy chicks. Such an incubator, is **The Cyphers**, now known as the "world's standard" hatcher. All sizes in stock. Write for catalog.

The Inland Seed Co.
909 First Avenue
Spokane, Wn.



Poultrymen are learning that fresh air is their most valuable ally in fighting or preventing diseases. It is also one of the best aids in filling the egg basket. In spite of all that has been said about the open-front house and fresh air, a great many persist in closing up the house in cold weather. Many build an open-ffont house, but when a cold spell comes they lose courage and tack up gunny sacks over the opening. In 99 times out of 100 there is no need of closing up the house at all. The chickens will be healthier and lay better if the opening is left open all the time. There is no use in doctoring sick fowls that roost in a closed house. Doctor the house. J. D.

Values Double in Nine Years.

In nine years the value of poultry and poultry products in Oregon state has increased from about $4,000,000 to approximately double that amount The poultry department of the O. A. C. at Corvallis has done much to increase the interest in the Poultry business.

PFILE'S 65 VARIETIES farm-raised Land and Water-Fowls. Eggs in season. Incubators. Illus. Catalog and "Grower's Guide," 2c. **An honest deal.** Write today. **HENRY PFILE, Farmer-Poultryman, Box 720 Freeport, Ill.**

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New Book about making better hatches and stronger chicks; making hens lay more and regularly; preserving eggs absolutely fresh for higher price market; packing; shipping, marketing, etc. **Free on request.** Lee Complete Poultry Library (5 books) postpaid for 5 cents in stamps. Write today.

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"CHICKEN MITE KILLER"
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Your cows love it! They will repay you.

"WATER GLASS"
(Highest quality.) Egg-preserving time is near.

In case of insect troubles, write for free advice to our laboratory.

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Tacoma, Wash., U. S. A.

Egg Production

Question of Breeds and Breeding

To the Editor: I find it difficult to keep the Single Comb Leghorn's combs from freezing, but I have proved their ability to lay eggs. How does the Rose Comb Leghorns compare with the Single Comb in egg production?

M. L.
Withrow, Wash.

If the rose comb White Leghorns have been bred along the same line as the single comb Leghorns there should be no difference in their egg yield. It is more a question of their breeding than of the breed when it comes to egg production. It would be easier to secure a good laying strain of single comb White Leghorns than of the rose comb, because there are more of them and a number of breeders have been breeding them up specially for egg production.

In most any part of the northwestern states there should not be much trouble from the combs freezing. There are, of course, a few cold districts where it would be almost impossible to keep them from freezing, but in most sections if the chickens are housed properly, there should be little freezing of combs. They should he kept in open front houses all the time and in that way they become hardened and are not so apt to freeze their combs. If they are kept in a warm house for a few days and then turned out into the cold there combs are very tender and will be sure to freeze. J. D.

Sick Hens

Careful Examination Is Needed

To the Editor: Can you please tell me what is the matter with my chickens? They have had the same disease for three years. They get the same disease about the same time each year, sometime in February, and it lasts till summer. The hen gets very sick suddenly, maybe she will stay on the nest all night and die before morning. Her comb will stay just as red as can be, but she will have a greenish-yellow discharge from her bowels and she will usually died from one to three days. I have given them injections of carbolic and boric acid in water and saved some, caught in time. Our chickens look healthy and lay pretty well, but get the same thing every spring F. B.
Okanogan, Wash.

From the description given one could only guess at the nature of the sickness. Would suggest that he dissect two or three of the sick hens and examine closely the digestive organs, especially the liver and intestines. The symptoms, so far as they are given, might indicate tuberculosis, though nothing positive could be said until an examination was made. If tuberculous the liver will usually show yellowish spots and the intestines often more or less spotted with tubercles. It any other abnormal conditions are found, write us giving full particulars. J. D.

"Business Hen" Works.

H. Villeneuve, an experienced poultry raiser of purebred birds, near Nampa, Idaho, says his experience is that Barred Rocks need less grain than other breeds that are more active, like the Rhode Island Reds, for example. He says that his Reds will eat and use to advantage a half more grain than the Rocks. The latter if fed too much will take on fat, to the detriment of their egg production. He says too many people fail to understand this, and hence are disappointed with the Barred Rocks as egg producers. The hen, he says, that is too fat, or too lazy to hustle, won't amount to much in filling the egg basket. The "business hen" is the one that works for her rations.

Panama Canal Service.

Since the Panama canal was put into use in August, 1914, nearly 3000 ships have passed through it, carrying nearly 12,000,000 tons of freight. The receipts in toll is abount $4,000,000, with the cost of operation nearly $7,500,000, showing a heavy loss.



LILLY'S

Holly **Chick Food**

High Protein **Chick Mash**

They are true body builders for the chick. The foundation of your strain's future is laid in the health and strength building-up of the young chick. RIGHT NOW IS THE TIME TO SEE TO IT!

Model Coal Burning Hover

is a simple, portable, Brooder House Stove more economical than oil. Cost of operation 2 cents to 5 cents per day. Can be used for fifty chicks or for fifteen hundred. The stove is cast iron. The canopy has no curtains to collect vermin. Practical Poultrymen WRITE US FOR FULLER DETAILS, or ORDER NOW—$15.00 COMPLETE.

International Sanitary Hover

The all-metal circular brooder of wide reputation. The only hover with the lamp in the interior; a complete hover movable from place to place without carpentry or other construction work. SEND for DESCRIPTIVE PAMPHLET, or ORDER NOW—$8.50.

Dealers sell Lilly's Poultry Foods and Supplies.

If Yours does not, write Lilly's, Seattle.

The High Cost of Living Vanishes

before the low prices you are able to obtain on food supplies when you buy them through the

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A new plan for the distribution of merchandise, in which you are not asked to buy stock, but which enables you to save from 20 to 30 per cent on all food supplies.

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Crystal White Soap	$3.65 per 100 cakes
Arm and Hammer Soda	5 1-2c per lb.

All other groceries at corresponding prices.

We want one bright active man or woman interested in cooperative work, in every community to act as our representative.

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ARMOUR BUILDING, Seattle.

REPLY COUPON

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of Washington,
Armour Building, Seattle.

Gentlemen: Please send me your catalogue and price list, and give me full particulars as to your plans and methods of operation.

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(Address).....



Transplanting

Care Should Be Taken With Trees

Naturally one of the vital steps in the development of an orchard, whether an acre on the farm or 100 acres as a commercial venture, is the first step—setting out the young trees.

Professor W. S. Thornber, director of the extension department of the state college at Pullman, Wash., in a short circular on the subject, has given the main points to be observed. The circular follows:

The transplanting of trees is always accompanied by some danger of loss or backset because of loss of feeding roots, drying of the bark of the roots, thus making activity impossible; or failure on the part of the planter to make the soil firm around the roots and thereby prevent wind injury to newly formed rootlets.

Immediately upon receipt of trees, if they are moist and in good condition, heel-in in moist soil. If the roots are dry and the top shriveled, bury top, roots and all in moist soil for a few days before planting. This will frequently save trees when ordinary treatment would not.

When ready to plant dig the holes large enough to accommodate the roots without cramping and deep enough so that when the tree is transplanted it will stand from one to two inches deeper than in the nursery. Prune off all injured or bruised parts of the roots so that the cut ends will rest on the bottom of the hole or will face downward. Place the tree in the hole so that it rests firmly on the bottom; fill in with moist, rich soil until the hole is from one-third to one-half full, or until the roots are thoroughly covered, shake the tree slightly to work the soil among the roots, and then get into the hole and tramp the soil until it is firm. If it is impossible to firm it with the feet use a piece of two by four four six to eight feet long, the end of which should be padded. Fill the hole and leave the surface loose and smooth, but never cloddy or covered with chunks of sod.

If water is to be used it is best to dig the holes one or two days before planting and put from two gallons or more of water in each hole, permitting it to soak away before planting. Never apply water to the surface of the ground around trees after they are transplanted as it will do more harm than good.

The roots of deciduous trees may become very dry and yet not suffer serious injury, but evergreens must never be permitted to dry as they have a resinous sap which hardens when it dries out or comes in contact with the air. This kills the trees.

Evergreen trees can be transplanted almost any month of the year, but best results are obtained by transplanting just as the buds begin to expand, usually from the 10th of April to the first of May, or right after the spring growth has hardened, from the middle to the last of July. Deciduous trees must be transplanted during the fall or very early in the spring.

Dynamite

Used in Planting Orchard Trees

By J. M. FIELD.

During the spring of 1911 I set out a young orchard, which covered 25 acres. In laying out the tract one row came exactly in an old road that was hard, barren soil. I could hardly dig holes here at all because of the extreme hardness of the ground. I did not wish to move the row to one side as that would spoil the symmetry of the tract. I decided to try dynamite for loosening up the ground.

I took a dirt auger and bored a small hole to a depth of 30 inches and exploded one-half stick of 40 per cent dynamite in the bottom of it. It did not tear up the surface as I had expected it to do, but when I dug down to see what the effect was underneath I was surprised to find the hard subsoil thoroughly pulverized to a distance of one and one-half to two feet on each side. This seemed to be in excellent condition for my young trees, and I gave the other holes in the old road the same treatment. Then I was so well satisfied with the results that I decided to use dynamite to loosen up all the holes so much better than could be done with any implement I had.

BOYS AND GIRLS' Club Work in Cowlitz County.

Cowlitz county's first attempt at the Boys and Girls' club work shows that 19 children are entitled to receive the national gold achievement pin. The pupil who leads the list is Bertha Frey of district 41, near Ostrander, who made a net profit of $25.70 in the canning club. Second place is taken by Willie Clark of Yale, whose net profit was $24.70 in potatoes.

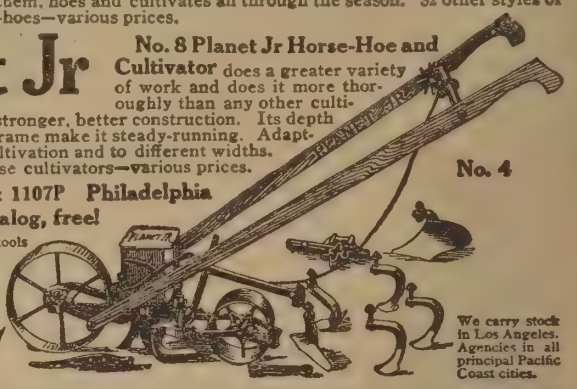
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With one hand stroke the hair the wrong way, with the other sift in Dr. Hess Instant Louse Killer. Rub well into the skin. Try it and see how easily you can rid your horses, cattle and calves of lice. You'll find
Dr. Hess Instant Louse Killer
an excellent thing in the poultry yard. Sprinkle freely in nests, on roosts, about pens, yards, houses, run-ways. Don't fail to put it into the dust bath. That's the easy way. Fowls and chicks will work it all through their feathers—no guilty louse escapes. It comes in handy sifting-top cans.
1 lb. 25c; 3 lbs. 60c (except in Canada)
Dr. HESS & CLARK
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"No gardener would do without a No. 4 Planet Jr if he would but try it. I would not take ten times its price and do without it," writes Isaac Kennedy, Owensboro, Ky.
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Western Canada Farmers Require 50,000 American Farm Laborers AT ONCE!
Urgent demand sent out for farm help by the Government of Canada. Good wages. Steady employment. Low railway fares. Pleasant surroundings. Comfortable homes. No Compulsory Military Service. Farm hands from the United States are absolutely guaranteed against Conscription. This advertisement is to secure farm help to replace Canadian farmers who have enlisted for the war.
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J. N. GRIEVE, Cor. First and Post Sts., Spokane, Wash.


SCATTER YOUR STRAW AND SAVE YOUR CHAFF
THE BEST USE that can be made of straw is to put it back in the soil. More humus in the land means bigger crops. Straw properly spread back of the harvester conserves the moisture and helps prevent the blowing of the soil. We can equip 1917 Holt Combined Harvesters with our patent Straw Scattering Device shown in the illustration. This consists of a light frame fastened to the rear of the harvester and back of the straw carrier.
On the frame are placed two rapidly moving beaters which are driven from the straw carrier shaft. The beaters scatter the straw evenly over a space 20 feet wide back of the machine. This plan of handling straw makes it unnecessary to burn straw that is usually run in winrows after the Harvester. Ground on which straw is scattered as described is very easily plowed. The Straw Scatterer may be used in connection with the chaff dump. You save your chaff and scatter the straw at the same time.
The Holt Manufacturing Co., Spokane, Wash.
Send me new free Holt Book describing Self Propelled, Gas and Ground Drive Harvesters—four 1917 models,
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The Holt Manufacturing Company
SPOKANE, WASHINGTON

The Farm Garden

Article 3

Seed Testing

Good Seeds Are As Essential to Good Gardens as Fertile Eggs Are to Successful Poultry Raising.

One had as well set hens on pebbles or go hunting with powderless shells as to attempt to grow beans from seeds in which the germ of life is dead or very weak. The time was when people set their hens on just eggs, without a great deal of thought whether they were good eggs or bad, or from good stock or poor. But that system, or lack of system, has changed. Likewise, gardeners have accepted anything branded turnip seeds and planted them in "rich, moist loam" made out of clay or gravel or sand, as the case might be, and expected a good crop of turnips. And that system also is changing. Soils are now studied; planting methods are improved; cultivation is made a science. And now the necessity and practicability of testing seeds to learn whether they will grow are being recognized. Colleges and universities throughout the country are establishing modern seed-testing departments, and federal and state departments of agriculture are doing likewise. And even individual farmers and farm gardeners are learning how to test for themselves.

The Equipment Needed.

The equipment necessary is easily obtained. For small amounts of seed, such as the common farm garden would require, a few blotters, a few plates or saucers, a few pieces of flannel, and a little water will serve. Seed-testing laboratories in come instances have elaborate equipment, but it is necessary for the work they must do. They are testing the "germinable viability" of the seeds. The farmer doesn't care much about that. What he wants to know is whether the seed will grow, and therefore plates, blotters, flannel and water are all he requires.

Method to Be Used.

Proper conditions of warmth, moisture and air are essential to germination of seeds. In general these conditions are the same for all seeds, but differ in a number of special cases.

tend to act as wicks to "draw" water from the vessel into which an end is placed, but care must be taken that they do not take too much or too little water.

Plate Germination.

For testing large seeds (beans, for example) take a piece of canton flannel, moisten it, place the seeds between two folds, lay on a plate with an end hanging over to rest in a vessel of water as nearly as possible on a level with the plate, and place in a darkened room where the temperature may be kept between 68 and 75 degres, as indicated by the ordinary Fahrenheit thermometer. The water vessel is not essential, but in cases where it is not used more constant watching must be practiced to protect the seeds against damage from loss of moisture. Much of this watching is necessary, however, under any circumstances, and much testing is done without the wick system.

Smaller seeds may be germinated in the same manner between sheets of blotting paper, while very small seeds will germinate successfully on top of a single sheet of moist blotter.

Adaptation of Methods.

Among the seeds that do better between the folds of the canton flannel than between or on top of the blotters are the following, and seeds of similar size and nature: Beans, peas, corn, watermelon, pumpkin and squash.

Among those for which the two sheets of blotting paper are best adapted are these and others like them: Beets, cucumbers, buckwheat, onions, muskmelons and parsnips.

Among those that will germinate readily on top of a single sheet of blotter are such as cabbage, kale, Brussels sprouts, lettuce, turnip and all very small seeds.

Two other methods of testing are practiced, but in general appear less practicable than the methods just described. The first is the actual planting of the seed in rows in a box filled with moist earth. This method is better than the former methods in one respect—that more even conditions of temperature, moisture and light may be had—but it is manifestly more difficult to keep watch on the germination developments.

The other method is fundamentally similar to the blotter and flannel methods. A shallow box is filled with moist earth or sawdust, and earthen plates with openings in the bottom are embedded in this earth or sawdust. The seeds are germinated in these plates in much the same manner as in the first method described.

Use of Testing.

It is advisable to take as large a number of seeds of each kind as seems practical, 100 being the ideal number. After the germination period is passed, a count of those which have sprouted vigorously will show the percentage of good seed, and planting can be done accordingly, or the entire supply of seed discarded if the percentage is low. Seeds for testing should be taken promiscuously from the packet or package, so that the result will be truly representative.

The time necessary to germinate seeds depends upon the seed nature and the moisture and temperature. Ordinarily, almost any garden seed should sprout well within 10 days. In many of them sprouting may be seen in from two to four days.

Prime Essentials.

Even moisture and temperature are first essentials to good testing. Seed must not be too wet, nor must they ever be allowed to become dry after once swelling. The temperature should be kept about 70 degrees, varying to never below 65 nor above 75 if the best results are desired.

In using the blotters and the flannel (canton), care must be taken that they do not become too wet. Seeds require moisture, but must not be kept too wet. The blotters and the flannel

No child who has ever loved a garden will despise the farmer, for he has learned by experience to respect manual labor, and that brains and hands must go together to bring good crops.—M. Louise Greene.



What Is the Best Teacher?

The Perfect Silo Door

EXPERIENCE

Is the best teacher. Of no profession is this more truly said than of dairying and farming, and the

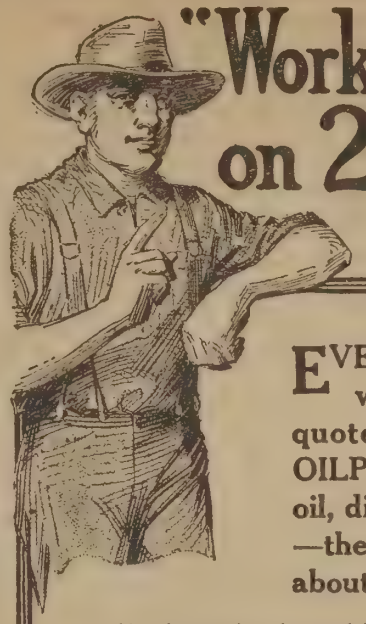
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You get strength and long life in your OILPULL, not continual delays and expenses. All parts are well protected, the air intake is located high up out of the dust, the engine is oil-cooled.

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The OILPULL is governor controlled, the speed of the engine *automatically* and instantaneously changes to every variation in the load. This means smooth, steady, economical power and your machinery always running at its highest efficiency. Then, of course, there is no danger from sparks.

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READ HOW TO WIN IT IN OUR BIG

FARM INFORMATION CONTEST

Don't Let It Escape. Get Our Contestant's Helpful Outfit and Start at Once. On April Fifth This First Prize Drops to $175.

Read the Rules—Answer These Questions

31. The abbreviation of what state means "to launder?"
32. What breed of swine has a name made up of the names of an Asiatic nation and a European nation?
33. What kind of bird with the name of a domestic animal, uses the nests of other birds in which to lay its eggs?
34. How many women have been legal rulers of France?
35. How much must you pay to get a U. S. postal money order for $99.99?

$800—IN CASH to Be Paid—$800

We will positively give EIGHT HUNDRED DOLLARS in cash awards (and more in event of ties) to the winners. As explained in the rules which follow, there will be five questions run in every issue of the Farmer for 12 weeks. The last five questions will appear in the issue of April 19.

Open to Four States

Contestants must be residents of Washington, Oregon, Idaho and Montana.

Five Questions Each Issue

The contest will be composed of 60 questions. Five will be run in each issue of the Farmer for 12 issues.

Answers to each question except No. 45 can be given correctly in from one to 10 words and will be given a score of 100 if correct. Answers to question No. 45 will be limited to 100 words each, and will be graded as to the common sense and general knowledge of farm conditions shown by the contestant without regard to spelling, grammar or penmanship. As with the other 59 questions, a perfect answer to No. 45 will be scored 100.

Perfect Score Is 6,000

The contestant who comes nearest to a score of 6000 and complies with all the conditions of the contest will receive the first prize; the next nearest, second prize, and so on. In case of a tie each tying contestant will receive the full amount of the prize.

There are 35 prizes as follows:

$150 is amount of First Prize. **$50** is amount of Third Prize. **$10** is amount of Fifth Prize.

$100 is amount of Second Prize. **$20** is amount of Fourth Prize. **$5** each, Sixth to Tenth Prizes.

$2 each Eleventh to Fifteenth Prizes. **$1** each, Sixteenth to Thirty-fifth Prizes.

OTHER RULES

The answers will be passed upon and graded by a fair-minded, thoroughly competent judge.

Two weeks will be allowed for sending in answers after April 19, 1917, date of the issue containing the last five questions.

Remember, your failure to answer all the questions will not necessarily exclude you from the contest. There are 60 questions to be answered and it is not reasonable to suppose that all our prize winners will attain a perfect score. Your answers must all be sent in at the same time. Do not send any answers until you have completed the full list or as many as you can answer.

Those who use our CONTESTANT'S HELPFUL OUTFIT will be able to send in their complete set of answers without delay, there being no need of their waiting for the questions as they appear in The Farmer from week to week down to the final issue of April 19. In order to get as prompt returns as possible from those contestants who use our CONTESTANT'S HELPFUL OUTFIT, extra inducement is made in the prize awards. SEE ENLARGED PRIZE LIST.

Announcement of prize winners will be made and prize checks mailed as soon after close of contest as possible.

If any point is not clear, do not hesitate to write the Farm Information Editor.

All answers must be mailed on or before midnight, May 3, 1917, as shown by post-office dating stamp on your envelope.

ORDER COUPON—If your subscription is paid ahead, the time paid for herewith will begin at the date to which you are now paid.

FARM INFORMATION EDITOR,
Review Building, Spokane, Wash.
Enclosed find $1 for one year, or $1.50 for three years' subscription to

THE WASHINGTON FARMER,

and enter me as a contestant in the Farm Information Contest. I am also to receive at once the complete CONTESTANT'S HELPFUL OUTFIT, consisting of guide against wrong answers, reply blanks, rules and all information to aid me to win a reward.

Name .....

R. F. D. .....Town .....

State .....

Notice—Amount of remittance to be either $1 for one year's subscription to the Farmer or $1.50 for three years' subscription.

Answer this question: Are you now a subscriber?.....
If you wish paper sent elsewhere, fill in name and address.

A Valuable Aid to Contestants

One complete CONTESTANT'S HELPFUL OUTFIT, including all of the 60 questions and instructions and helpful warnings as to answers which would be wrong, and the correct answers to some of the most difficult questions, is truly a big help to the contestant.

To each contestant who sends in a new renewal or an extension of his subscription at the time of registering for the contest, this complete CONTESTANT'S HELPFUL OUTFIT will be sent in combination.

We feel that those beginning on the contest will find these suggestions as to what to avoid distinctly useful. This equipment supplies in convenient form everything needed to enable you to apply your ability to the best advantage, and will contain information enabling you to answer the most difficult questions correctly.

Puts Questions in Reach of Children

This CONTESTANT'S HELPFUL OUTFIT puts the solution of the questions in the reach even of the children, it being the purpose to make it possible for everybody in Washington, Oregon, Idaho and Montana to compete. This outfit includes, besides general information about the plan of the contest, the following:

Guide against wrong answers, which includes either correct answers of more difficult questions or easy references as to where to find the correct answers; and blank forms on which to write your answers in such a way that there can be no confusion when your answers are taken up by the judge for scoring.

It will be worth considerable to you to be assured that your answers are reaching the Farm Information Editor in such form that he will know in every instance exactly what question you intended to answer. This CONTESTANT'S HELPFUL OUTFIT will make it possible for you to

Begin Work at Once

On account of the large number certain to send for our CONTESTANT'S HELPFUL OUTFIT, thus making it possible for them to answer the entire 60 questions without delay, it is deemed advisable to offer some special inducements to secure prompt returns from this particular class of contestants. By securing the early replies of those who are thus supplied with the entire 60 questions, we will be able to have their papers carefully scored before the final rush of answers toward the end of the contest.

Understand, it is not absolutely required that those who use our CONTESTANT'S HELPFUL OUTFIT send in their replies at once, but, in order to induce them to get in early, the following plan for enlarging the awards to those prize winners whose answers come in early is offered:

ENLARGED PRIZE LIST—$800 IN PRIZES—ENLARGED PRIZE LIST

For those who use our CONTESTANT'S HELPFUL OUTFIT.

Thirty-Five Prizes	Amt. of prize if winner sends in answers during 1st period, Feb. 1- Feb. 21	Amt. of prize if winner sends in answers during 2d period, Feb. 21 Mch. 14	Amt. of prize if winner sends in answers during 3d period, Mch. 14 April 5	Amt. of prize if winner sends in answers during 4th period, April 5 April 19	Amt. of Prize for winner who does not send in answers before April 19
First Prize	$300.00	$225.00	$200.00	$175.00	$150.00
Second Prize	200.00	175.00	125.00	110.00	100.00
Third Prize	100.00	87.50	62.50	55.00	50.00
Fourth Prize	40.00	35.00	30.00	22.00	20.00
Fifth Prize	20.00	17.50	15.00	11.00	10.00
6th to 10th 5 prizes each	10.00	8.75	7.50	5.50	5.00
11th to 15th 5 prizes each	4.00	3.75	3.00	2.20	2.00
16th to 35th 20 prizes each	3.00	2.50	2.00	1.50	1.00

To secure our CONTESTANT'S HELPFUL OUTFIT, fill out order coupon on this page and send it in to Farm Information Editor, with your personal check, money order or 2-cent stamps, for $1.00 for one year or $1.50 for three years.

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Farm Information Editor
Review Building, Spokane, Washington.

Essence of the Big Questions for Busy Men and Women

OUR WEEKLY MAGAZINE DEPARTMENT

Stories, Pictures and Home Helps for All the Folks

La Grippe, the Trade Mark of Aristocracy

Man From Sunny Yakima Breaks Into High Society While in Texas; Did Mind or Matter Bring Relief?

By GRANVILLE LOWTHER.

I thought when I left the northwest on the sixth day of January that I was leaving cold winds, winter snows, la grippe, influenza and many other ills flesh is heir to. I imagined I was going to a country of balmy breezes, invigorating salt air from the gulf and salubrious sprays softened by southern sunshine. But I was mistaken. I had scarcely got myself settled and unpacked my trunk until the cold winds came sweeping from the north at a rate of speed faster than a train running from Oklahoma City to Houston.

"I suppose this is the kind of weather you folks have up north?" said one of my friends.

"No," I replied. "this is the kind of weather you have down here."

"You came from the north, would you deny that you are a sample of the folks up there? Why, then, do you deny the weather you brought with you?"

Like a judge on the bench deciding an important case, I asked for time to weigh the evidence before rendering a decision.



Dr. Lowther.

Aristocracy Has La Grippe.

What I started out to tell was that it seemed to me nearly everybody had la grippe. At any rate the "superior classes" had it. I am coming to the conclusion that certain diseases are mostly diseases of the aristocracy. Appendicitis, for instance, is not often found in persons unable to pay for an operation, and I never knew a wage worker or a farmer with the gout.

For several days I was trying to decide whether the disease was contagious or infectious; whether it attacked all classes alike, or belonged mostly to the aristocracy; whether if I did not have it I would lose caste and be classed with the "niggers" and "poor whites." While I was deciding I began to sneeze.

It was not the old fashioned nose-in-the-air type in which the head is thrown backward then forward as if making a polite bow to your best lady, but the suppressed delicatessen style behind handkerchiefs requiring three or four changes a day.

My imagination took wings and I wondered if I would be able to make my weekly contributions to The Farmer, and how much or how little the readers would lose if I failed them. Of one thing I was assured, and that was that I had a fashionable disease in a fashionable society. But now that I had it, and my social status was assured, I wanted a light form. What could I do?

The Psychology of It.

I confess I do not know what the mind will do for persons whose minds are different from mine; but I had my own thoughts to manage and I did the best I could with them. I knew that the mind had great influence over the body, for once when I disobeyed my father, and I saw him cutting a switch, I felt the cold chills running up and down my back as plainly as I ever did with the ague.

At another time when I wanted to lick one of my school mates the other boys told the teacher that my face was as red as blood, and I know my head was hot all the afternoon. Then, I will never forget the night when I asked my best girl to marry me. She affirmed that she could hear my heart beating the whole distance that separated us. So I knew there was truth in the claim that mind and matter act and react upon one another. Then, too, I remembered that in Baldwin's Psychology it was taught that, "There is a correspondence between every act of thing, feeling and willing, and some molecular change in the body."

Later, Professor James taught that "Thought changes the atoms; the atoms change the molecules, and the molecules change the blood." I concluded to adopt Professor James' statement as my slogan of war against the millions of invading germs coming into my body unbidden and unwelcome. I repeated it over and over until I could say it consciously, unconsciously, subconsciously and superconsciously, then marshaled the atoms of my anatomy like men of war. It was an interesting fight with fluctuations, actions, reactions and changes similar to those of the battle fields of Europe.

The doctor visited our place every day, and my friends had him call on me. In the meantime I had been reading up on the subject of germs; how they invaded the mucus membranes and multiplied at the rate of a million a minute, more or less. I had read that Professor Pfeiffer had called them baccillus influenza, but the name had not killed them.

When the doctor came in I was still reading. Looking at me with a kind of quizical air he said: "What are you reading?"

"Bacteriology," I replied. "What species of bacteria are you most interested in?" said the doctor.

"Baccillus influenza,"

"Are you a physician?" said the doctor.

"No, I am a democrat."

"Good enough for you, you ought to have la grippe. But the disease is awfully hard on democrats, so you will have to take some medicine or it may kill you."

"All right, shovel it out."

"Oh," he said, "we do not carry medicines with us, we write prescriptions."

"Certainly, I beg your pardon; I forgot."

The Doctor's Directions.

(1) Drink all the cold water you can conveniently hold.

(2) Take most of your food in soup form.

(3) If necessary, take laxatives to move the bowels once or twice each day.

(4) Take four doses of quinine each day until your head begins to buzz, then gradually diminish the doses.

(5) Take a good, warm bath every morning and evening.

(6) Stay in out of the cold.

(7) Keep the air in the room pure.

(8) Do not overexert yourself. (I never do that anyway.)

I did all he told me and am still alive; in fact am getting better.

The Difficulty.

The difficulty is that when I get well I will not know whether it was the mind cure, the medicine cure, or both that cured me. It would be of little consequence for a lobster to use the mind cure, he has so little mind. It would be futile for a disembodied spirit or an angel to use the medicine cure, they have so little matter. The question is, what should we do who have some of the qualities and characteristics of both?

WORLD RECORD SILO
Was Made by Washington Mill.

What is believed to be the largest silo in the world is located near Dallas, Texas, on the large farm of the Tennessee Dairy company. It is 40 feet in diameter and 80 feet high, and is calculated to hold over 2000 tons of silage. The gigantic proportions of the silo are seen when it is figured that it would contain enough silage to feed one cow 35 pounds a day for 340 years.

It was manufactured by the Union Lumber company of Union Mills, Wash., and required about 66,000 feet of lumber and three cars for shipment. R. C. Pierson of the mill company says that the Tennessee Dairy company had previously purchased two smaller silos of the same make, being "only" 20 feet in diameter and 65 feet high. The largest silo that he had any previous knowledge of was one measuring 24 feet in diameter and 93 feet in height.

The Union Lumber company has a factory in New Orleans, from which the large silo could have been shipped to Texas several hundred dollars cheaper, but the dairy company wished it manufactured from Douglas fir, for which the northwest is famous.

Better to Buy Early.

Manufacturers of all kinds of equipment have found it necessary to increase prices. Automobiles and farm machines of all kinds must go up. Many firms already have advanced their prices, and there will undoubtedly be still further advances.

Silos and farm buildings must be included in this class. Every piece of wire, every bolt, nail, rod or stick has advanced in price. The manufacturer must pay more for his raw material, and likewise he will demand more of the jobber and distributor. This will be noticed more when the greatest demand is made. Therefore, to buy wisely will mean to buy ahead of time.

Its Far-Reaching Effect.

Former Governor Ammons of Colorado, in an address before a gathering of farmers recently, told the following story:

A man in Colorado died and passed to the other world.

St. Peter: "Where do you come from?"

Colorado Man: "From the state of Colorado."

St. Peter: "You do not belong here; you belong down below."

The man started away in the direction indicated. Coming to the brow of a hill, he looked over into one of the most beautiful valleys he had ever seen. Trees, green, fields, streams of water were everywhere to be seen. As he reached the lower level, he met a happy-looking man, of whom he asked. "What place is this?"

"Hell," was the unhesitating reply.

"But I thought hell was a dry, hot, parched place," said the Colorado man.

"So it was formerly," said the other, "but it has been converted into a great irrigation project by the United States reclamation service, and everything is changed."

Out His Soup.

"Sorry, old man, to hear that you spilled some soup on Miss Andrews' gown at the dinner last night."

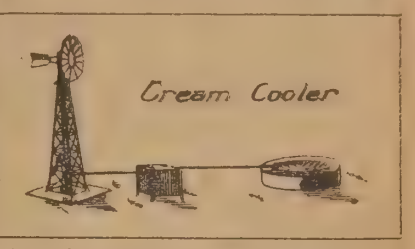
"So was I dreadfully put out about it. You know it isn't polite to ask for soup twice."—Judge.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Cream Storing Cabinet.

This cabinet is a water-tight box which holds a small can for the new cream and a large can for the stored cream. It is placed on the pipe from a



windmill pump, or on the pipe from any other supply of cold running water.

Hog Oiler.

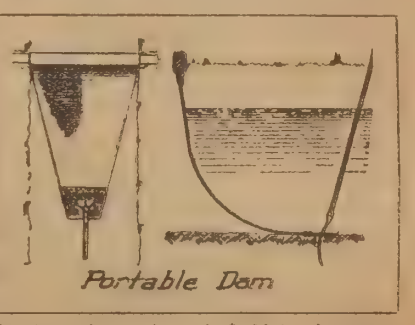
This oiler has a canvas covered drum of sheet metal or wood, which



revolves on an axle and dips into oil in the tank beneath. The canvas carries the oil to the hog's back.

Portable Dam.

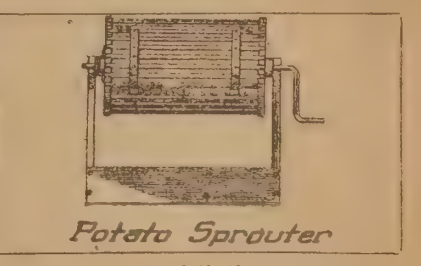
The ordinary canvas dam for irrigation ditches is held at the top by a cross-bar and at the bottom by shovelfuls of earth placed on the canvas;



the dam shown here is held in the same way at the top, but is held at the bottom by a pitchfork, or other pointed implement, struck through a burlap edge.

Potato Sprouter.

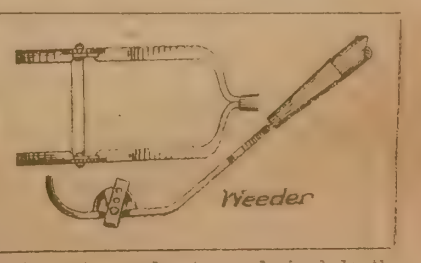
When sprouted potatoes are shoveled into this slatted drum and revolved the



separate sprouts fall through and the potatoes come out clean.

Weeder and Cultivator.

The double-edged blade of this weeder has a rocking motion which gives the cutting edges the proper angle in both the forward and back strokes. The



device cuts weeds at any desired depth below the surface and leaves a good dust mulch.

Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER II.

WE drove from the Walla Walla valley to the Grand coulee in the Big Bend country in about 10 days. We camped in the coulee, and father rode out over the surrounding hills looking for a suitable claim, which finally he found. He went to Waterville and filed; then returned, having learned that lumber to build a house could be obtained at Badger mountain, 60 miles away. Leaving mother and me camped in the wagon bed, which had been set on the ground, he made two trips to Badger mountain for lumber. John R. Lewis lived nearby, and there were several of the Lewis children, with whom I played. They spoke nothing but Welsh, yet we managed to play together somehow.

As I now look back I puzzle to know what mother and I lived on that summer while father was away on long trips. We had bought from Walla Walla valley a lot of dried prunes, dried peaches, bacon, flour, potatoes and other hardy provender, but it does not seem possible that the supply could have lasted all summer. I suppose Mrs. Lewis must have supplied us with milk and occasional garden truck. I remember that one or the other of the Lewis children were either eating or yelling for bread and milk most of the time. They called it something in Welsh which sounded like "bary clath."

There were many rattlesnakes, and for these I learned to watch! The slightest rustle in the grass, or the slightest rattle, had me instantly on the alert. An Indian squaw and her papoose, or baby, had been bitten a little while before we came to the coulee. Both died. It was unsafe to leave blankets on the ground, for at night when it was chilly the snakes would crawl under them. Dan Paul and Philip McIntee, stockmen, who lived near the Lewises, told many harrowing tales about finding "rattle bugs" in their beds when they awoke in the morning, and in other grewsome ways added to my discomfort. But there were no bees or thistles as there had been in the Walla Walla country, for which relief I was thankful.

That summer the surveyors were laying out the route of the Washington Central branch of the Northern Pacific, which now runs from Spokane to Coulee City. They were camped near the Lewis place and had a Chinese cook, for whom I took a great liking. He fed me so many cookies and doughnuts that my mother bade me stay away from his cook tent. Also he swore like a pirate. He had a sallow-faced, consumptive looking Chinaman to help him whom he cursed in a way that suggested brimstone and fire everlasting. He explained to me one day that his helper smoked opium and was no good. In spite of mothers' orders I managed to spend a good deal of time in John's cook tent, and he told me how bad it was to smoke opium and drink whisky. He must have been a pretty good Chinaman. One afternoon when it rained and the sun afterwards shone brightly there was a brilliant, arching rainbow. The sight of it seemed to make John homesick for China. He told me what the rainbows were like in China and said they were called "suva kahn," or something like that. He said he would never go back to China, though, and swore violently at somebody there who had served him a mean trick. I suppose, I liked him so well that when the surveyors left I cried.

He was not a Christian Chinaman, though, and the boys used to tease him about his religion—or lack of it. I remember one evening at the supper table one of the boys said:

"John, who makes your whiskers grow?"

It was supposed that John would have to say that Buddha or Shinto or Confucius or some other heathen god made them grow. John was not so easily trapped.

"Who makee you whiskees glow?" he countered.

"God makes mine grow," replied the surveyor, who was young and had a fuzzy mustache.

"Same man makee mine glow," barked John. The laugh was on the would-be joker.

In the Walla Walla country I had had occasional playmates, and we usually got to church or a public gathering once or twice a month. The summer we camped in the Grand coulee I had the Lewis children to play with—and John, the Chinaman. But when at last we moved out to our claim, five miles south of the present town of Hartline, playmates I had none. During the months and years that followed the great, burning hunger of my soul was for playmates.

There were great numbers of squirrels on the bunch grass prairie, and they used to play about our doorstep and under our small, wood-frame house. For hours at a time I have lain on the shady side of our house watching them play, not moving a muscle lest they should be frightened. There were many small lizards, horned toads we called them. I caught these and vainly tried to make pets of them. I captured various bugs and tried to tame them, but vainly. Wild sage hens frequently came into our dooryard, but they fled at the slightest motion. Coyotes barked and howled morning and evening, and I wanted to catch one and tame it for a pet. But it was a vain hope.

I wanted a pet of some kind very badly. All plans failed; and, finally, in desperation, I took a rope and stationed myself by the main traveled road, which ran a few hundred yards south of our house. Hour after hour, day after day, I stood there; and every time a team came along with a dog following I asked the man if I could have his dog.

I was refused a good many times, occasionally with rudeness. At last a man said I could have his dog—a wonderful, brown-eyed pup. He got out of the wagon, coaxed the pup to him, tied my rope around its neck, and said it was my dog. I was fairly paralyzed with joy, but believe I thanked the man for his dog. He and John the Chinaman to this day live in my memory as two great benefactors of my childhood.

We had a small wheat crop that year. The squirrels came to it in droves. My father fought them with poisoned wheat and slew them by hundreds. My great fear was that Rover, my pup, would get a poisoned squirrel. I kept him tied, but one day he chewed the rope in two. Terror stricken, I raced away to find him. I did—but too late. He had been out digging for live squirrels, and in so doing had found a lately poisoned one, which he ate.

I had seen scores of squirrels die of strychnine poisoning and knew the symptoms. The hair stands erect along the spine, and the eyes turn a peculiar, glassy green. There is stiffness in the hindlegs, which presently become paralyzed and are dragged. Then in a few moments the animal foams at the mouth and goes into convulsions and dies.

When I found Rover his hair was up and he was stiffening in the hind legs. His eyes turned on me with a vacant, greenish stare and he did not wag his tail when I spoke and petted him. I knew what should be done: Warm, melted lard should be poured down his throat. But we were far from the house. I screamed to mother, but she could not hear. I coaxed the stricken dog to follow me to the house, and he tried to do so, but he walked stiffly and finally refused to budge. I seized his collar and dragged him as far as I could. All the while his body was stiffening. At last, in desperation, I gathered him up bodily and tried to run. As I ran he went into convulsions, and in trying to hold him in my arms and make progress at the same time I fell down.

Even when the dog was in the last throes of strychnine poisoning I struggled on with him, partly carrying and partly dragging the dying dog. All the while I kept calling to mother to "melt some lard." Finally she heard the outcry and ran out of the house. The dog was dead when she reached us, and I was clinging to him and crying. I remember yet the terror that was in her face as she snatched me away from my poisoned pet. In the struggle foam from his mouth had gotten all over my clothes and hands. She fairly flew into the house with me and, before saying a word to assuage my grief, scoured over every inch of me with soap and water, and asked me time and again if any of the foam had gotten on my lips. I doubt if I should have been poisoned if it had, but mother was taking no chances.

I again took up my stand by the main road and asked passers-by for their dogs. But I had a run of bad luck. Some laughed at me. Some did not answer at all. Finally one man with an unpleasant face looked at me in disgust and said, "Not by a damn sight." That cured me of asking for dogs.

Father brought me a baby rabbit one day. He had caught it in the bunch grass. He helped me make a little house for it, and we experimented to determine what it wanted to eat. Young carriots plainly were preferred. I fairly covered the small thing with carrots in my desire to love it and make it happy. This civilized diet was too much for a bunch grass rabbit, I suppose; for presently it got dysentery, ceased to eat and became thin and weak. I wanted to sit up with it at night, but my folks made me go to bed.

One night I put it snugly to bed, calling it many endearing names and tryingg in a dozen ways to insure its comfort. In the morning it was there exactaly as I had left it, but dead and cold.

For a day I remained immured in grief, declining food, water, sleep or consolation. Then I made a small box, lined it with some scraps of red flannel, put in some bunch grass, and laid my dead rabbit to rest. I had been told that in burying their dead the Indians often set food on the grave, which was supposed to provision spirits on their way to the happy hunting ground. With this thought in mind I filled the small coffin as full of tender young carrots as the presence of the rabbit and the grass would permit, and buried it behind the house. At the head of the grave I erected a shingle on which was written in scarwling lead pencil:

QUIRRIE.
A Rabbit.

IN THE NEXT CHAPTER THE BUNCH GRASS BOY TELLS OF "ROWDY," THE FIRST REAL CAYUSE HE HAD, BOUGHT FROM A PIONEER STOCKMAN WHO HAD GOTTEN THE HORSE OUT OF CHIEF MOSES' BAND. "ROWDY WAS MY FIRST, AND GREATEST TEACHER, I THINK. HE TAUGHT ME COURAGE, PERSISTENCE, COOLNESS, QUICK THINKING AND ACTUAL CUNNING OF A KIND TO MATCH HIS. TIME AND AGAIN HE PITCHED ME OVER HIS HEAD, OR SLIPPED FROM UNDER ME."

Humor-ous.

"Now," said a teacher to her class in English, "can anyone give me a word ending in ous, meaning full of, as dangerous, full of danger; hazardous, full of hazard?"

There was silence for several minutes, then a small boy raised his hand.

"Well," encouraged the teacher, "what is your word?"

"Pious, full of pie," was the answer.

Figure Contest Nears End

Contestant Contributes a Swan Song

By the CONTEST EDITOR.

GOODBY, OLD PUZZLE, GOODBY.

(Familiar Tune.)

The man who made that puzzle chart,
(Goodby, old puzzle, goodby)
He must have been most awful smart!
(Goodby, old puzzle, goodby)
'Tis intricate, confusing quite
(Goodby, old puzzle, goodby)
He keeps me thinking noon and night
(Goodby, old puzzle, goodby)

Chorus—
It haunts when awake, O!
I wash, scrub or bake, O!
My dreams it doth choke, O!
Goodby, 'old puzzle, goodby.

So often I the figures trace,
(Goodby, old puzzle, goodby)
'Tis like a dear, familiar face.
(Goodby, old puzzle, goodby)
Eleven hundred—two to nine,
(Goodby, old puzzle, goodby)
If I succeed won't I feel fine?
(Goodby, old puzzle, goodby)

Corus—
It tires my eyes, O!
To add I despise, O!
But I'll get that prize, O!
(If I can.)
Goodby, old puzzle, goodby.

A CONTESTANT.

Forest Grove, Ore.

When this issue of the Farmer reaches its readers there will be small time left to get into the figure contest. Solutions to be entered in the contest must show by the postmark on the envelope that they were mailed not later than 12 o'clock next Saturday night. If you have not sent in your solution do not delay another day. Fire it in at once. There are 32 prizes to be awarded in this contest, the largest of which is $275.

Somebody wishes to know more about freak editions of the Bible, several of which were mentioned last week in dilating on the interest aroused by the question in our Farm Information contest: "In what year was the edition of the Bible known as the 'Vinegar Bible' published?"

There is but little more to tell. There were, however, a few other editions of the Bible which attracted attention in their day. Some of the most notable were:

"Discharge Bible" (1806), reading in First Timothy v. 21, "I discharge (charge) thee before God."

"Placemakers' Bible" (about 1562), reading in Matthew v. 9, "Blessed are the placemakers (peacemakers)."

"Standing Fishes Bible" (1806), reading in Ezekiel xlvii., "The Fishes (Fishers) shall stand upon it."

"How many upper front teeth has a cow?" So goes question No. 2 in the Farm Information contest, and someone writes that he can not tell the number, but that he thinks the cow has at least 16 teeth in its upper jaw. Our correspondent says it is so long since he lived on a farm that he has quite forgotten much he once knew about the dental construction of cows and pigs. Cows, however, he feels sure, are well equipped with teeth because he has heard many persons speak of "milk teeth."

"If you would ask me about dogs," he writes, "I could answer you much more intelligently. Just ask me how many teeth a dog has, and I'll refer you to a certain section on the posterior side of my thigh, at a point considerably more up than down, where there exists to this day an almost perfect cast of about as completely an equipped set of canine teeth as you could ever contemplate. Why, I could not only tell you how many teeth a dog has, but likewise the length of teeth carried by one particular dog that I have met."

"I say 'met,' but that is not exactly the correct way to state it, you will understand by the location of the scars just mentioned. I say I 'met' him, but I didn't. I was going in the other direction."

"If you don't care to ask me, just ask my wife. She knows, because she does all the mending at our house."

Many persons who have signified their intention of entering the Farm Information contest seem to have overlooked the fact that as the weeks pass the amount of the prizes possible for those to win who use our Contestant's Helpful Outfit reduces gradually. There is much to be gained by getting into this contest early. Send in a new, renewal or extension subscription to the Farmer and secure this outfit in order that you may compete for first prize while the amount stands at $200. Only a few days and this prize drops to $175. See announcement on page 9.

All the World's a Stage, and All the Men and Women Merely Players

Ambassador Fletcher in Mexico



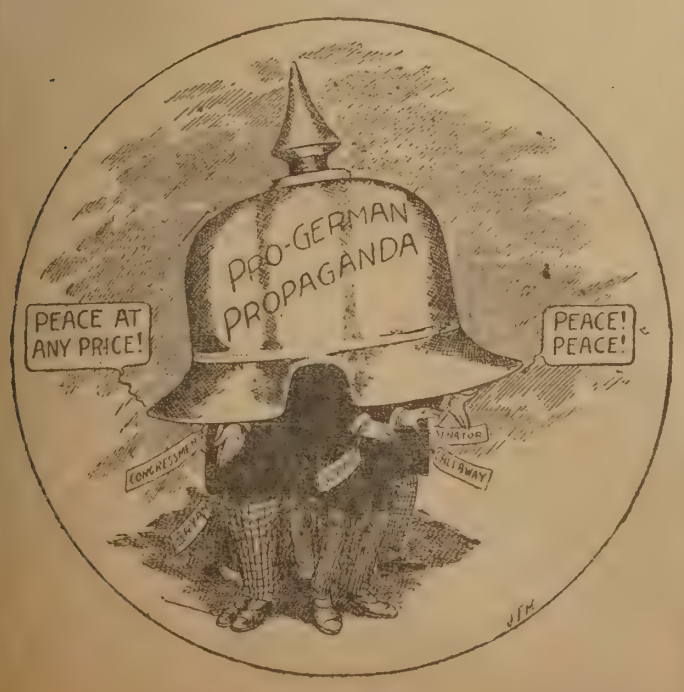
The above photograph shows United States Ambassador Fletcher upon his arrival at Nuevo Laredo, Mexico, conferring with the Mexican official sent to meet him. The tall officer who bears such a marked resemblance to the "first chief" is commander of the bodyguard furnished by General Carranza to escort the ambassador through the hostile country to the capital.

Women Accused of Conspiracy



Above are shown the two women who are charged with having conspired together with Alfred George Mason, shown in the insert, to take the life of David Lloyd George, premier of Great Britain, and Arthur Henderson, a member of the cabinet and the war council of the empire. On the right is the woman warden.

The Cap Fits



—Springfield Union.

Cavalry Drill by New York Women



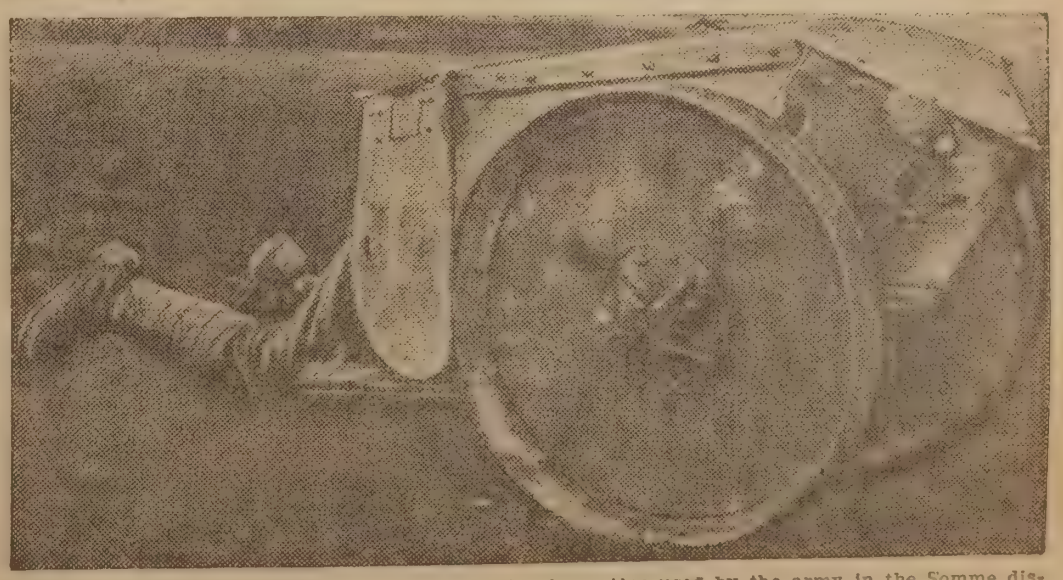
One of the first organizations to prepare for action in the event of war with Germany is the women's military reserve, composed of 30 prominent society women of New York. Costumed in smart olive-drab riding clothes they hold cavalrm reatl ogot rBactionntiV, cmfwyp shrdlu h later go to the roof of a neighboring hotel for dismounted drill.

Picked Men Guard New York Streets



Ten machine guns have been received by the New York police department and 120 picked men, all of whom have had previous service in the army drill in the Central park riding academy and a part of the elaborate plan for preparedness in the event of war with Germany. The guns can be used against rioters or against an invading force with just as deadly results.

New Invention Bothers Teutons



The above photograph shows the new French wire cutter used by the army in the Somme district. The soldier enters the machine and pushes it ahead of him until he reaches the barbed wire entanglements. Inside the car are two huge clippers which can be seen at the front. These clippers cut through the wire and allow a passageway for the attacking French infantry to get through.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

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CHAPTER XI.

As soon as I could leave Brandon, I had intended to go down to Windsor and give vent to my indignation toward the girls, but the more I thought about it the surer I felt there had, somehow, been a mistake. I could not bring myself to believe that Mary had deliberately permitted matters to go to such an extreme when it was in her power to prevent it. She might have neglected her duty for a day or two, but, sooner or later, her good impulses always came to her rescue, and, with Jane by her side to urge her on, I was almost sure she would have liberated Brandon long ago—barring a blunder of some sort.

So I did not go to Windsor until a week after Brandon's release, when the king asked me to go down with him, Wolsey and de Longueville, the French ambassador-special, for the purpose of officially offering to Mary the hand of Louis XII., and the honor of becoming queen of France.

The princess had known of the projected arrangement for many weeks, but had no thought of the present forward conditions of affairs or she would have brought her energies to bear upon Henry long before. She could not bring herself to believe that her brother would really force her into such wretchedness, and possibly he would never have done so, as much as he desired it from the standpoint of personal ambition, had it not been for the petty excuse of that fatal trip to Grouche's.

All the circumstances of the case were such as to make Mary's marriage a veritable virgin sacrifice. Louis was an old man, and an old Frenchman at that; full of French notions of mortality and immorality; and besides, there were objections that can not be written, but of which Henry and Mary had been fully informed. She might as well marry a leper. Do you wonder she was full of dread and fear, and resisted with the desperation of death?

So Mary, the person most interested, was about the last to learn that the treaty had been signed.

Windsor was nearly eight leagues from London, and at that time was occupied only by the girls and a few old ladies and servants, so that news did not travel fast in that direction from the city. It is also probable that, even if report of the treaty and Brandon's release had reached Windsor, the persons hearing it would have hesitated to repeat it to Mary. However that may be, she had no knowledge of either until she was informed of the fact that the king and the French ambassador would be at Windsor on a certain day to make the formal request for her hand and offer the gifts of King Louis.

I had no doubt Mary was in trouble, and felt sure she had been making affairs lively about her. I knew her suffering was keen, but was glad of it in view of her treatment of Brandon.

A day of two after Brandon's liberation I had begun to speak to him of the girls, but he interrupted me with a frightful oath: "Caskoden, you are my friend, but if you ever mention their names again in my hearing you are my friend no longer. I will curse you."

I was frightened, so much stronger did his nature show than mine, and took good care to remain silent on that subject until—but I am going too fast again; I will tell you of that hereafter.

Upon the morning appointed, the king, Wolsey, de Longueville and myself, with a small retinue, rode over to Windsor, where we found that Mary, anticipating us, had barricaded herself in her bedroom and refused to receive the announcement. The king went upstairs to coax at the fair young besieged through two inches of oak door, and to induce her, if possible, to come down. We below could plainly hear the king pleading in the voice of a bashful bull, and it afforded us some amusement behind our hands. Then his majesty grew angry and threatened to break down the door, but the fair besieged maintained a most persistent and provoking silence throughout it all, and allowed him to carry out his threat without so much as a whimper. He was thoroughly angry, and called to us to come up to see him "compel obedience from the self-willed hussy,"—a task the magnitude of which he underrated.

The door was soon broken down, and the king walked in first, with de Longueville and Wolsey next, and the rest of us following in close procession. But we marched over broken walls to the most laughable defeat ever suffered by besieging army. Our foe, though small, was altogether too fertile in expedients for us. There seemed no way to conquer this girl; her resources were so inexhaustible that in the moment of you expected victory success was turned into defeat; nay, more, ridiculous disaster.

We found Jane crouching on the floor in a corner half dead with fright from the noise and tumult—and where do you think we found her mistress? Frightened? Not at all; she was lying in bed with her face to the wall as cool as a January morning; her clothing in a little heap in the middle of the room.

Without turning her head, she exclaimed: "Come in, brother; you are quite welcome. Bring in your friends; I am ready to receive them, though not in court attire, as you see." And she thrust her bare arm straight up from the bed to prove her words. You should have seen the Frenchman's little black eyes gloat on its beauty.

Mary went on, still looking toward the wall: "I will arise and receive you all informally, if you will but wait."



And she thrust her bare arm straight up from the bed to prove her words.

This disconcerted the imperturbable Henry, who was about at his wit's end.

"Cover that arm, you hussy," he cried in a flaming rage.

"Be not impatient, brother mine! I will jump out in just a moment."

A little scream from Jane startled everybody, and she quickly ran up to the king, saying: "I beg your majesty to go. She will do as she says so sure as you remain; you don't know her; she is very angry. Please go; I will bring her rown stairs somehow."

"Ah, indeed! Jane Bonigbroke," came from the bed. "I will receive my guests myself when they are kind enough to come to my room." The coverlid began to move, and, whether or not she was really going to carry out her threat, I can not say, but Henry, knowing her too well to risk it, hurried us all out of the room and marched downstairs at the head of his defeated cohorts. He was swearing in a way to make a priest's flesh creep, and protesting by everything holy that Mary should be the wife of Louis or die. He went back to Mary's room at intervals, but there was enough persistence in that one girl to stop the wheels of time, if she but set herself to do it, and the king came away from each visit the victim of another rout.

Finally his anger cooled and he became amused. From the last visit he came down laughing:

"I shall give up the fight or else put my armor on with visor down," said he; "it is not safe to go near her without it; she is a very vixen, and but now tried to scratch my eyes out."

Wolsey, who had a wonderful knack for finding the easiest means to a difficult end, took Henry off to a window where they held a whispered conversation.

It was pathetic to see a mighty king and his great minister of state consulting and planning against one poor girl; and, as angry as I felt toward Mary, I could not help pitying her, and admired, beyond the power of pen to write, the valiant and so far impregnable defense she had put up against an array of strength that would have made a king tremble on his throne.

Presently Henry gave one of his loud laughs, and slapped his thigh as if highly satisfied with some proposition of Wolsey's.

"Make ready at once," he said. "We will go back to London."

In a short time we were all at the main stairway ready to mount for the return trip.

The Lady Mary's window was just above, and I saw Jane watching us as we rode away.

After we were well out of Mary's sight the king called me to him, and he, together with de Longueville, Wolsey and myself, turned our horses' heads, rode rapidly by a circuitous path back to another door of the castle and reentered without the knowledge of any of the inmates.

We four remained in silence, enjoined by the king, and in the course of an hour, the princess, supposing every one had gone, came downstairs and walked into the room where we were waiting.

It was a scurvy trick, and I felt a contempt for the men who had planned it. I could see that Mary's first impulse was to beat a hasty retreat back into her citadel, the bed, but in truth she had in her makeup very little disposition to retreat. She was clear grit. What a man she would have made! But what a crime it would have been in nature to have spoiled so perfect a woman. How beautiful she was! She threw one quick, surprised glance at her brother and his companions, and lifting up her exquisite head carelessly hummed a little tune under her breath as she marched to the other end of the room with a gait that Juno herself could not have improved upon.

Henry and the ambassador spoke a word in whispers, when the latter took a box from a huge side pocket and started across the room toward Mary with the king at his heels.

Her side was toward them when they came up, but she kept her attiture as if she had been of bronze. She had taken up a book that was lying on the table and was examining it as they approached.

De Longueville held the box in his hand, and bowing and scraping said in broken English: "Per mit to me, most gracious princess, that I may have the honor to offer on behalf of my august master, this little testament of his high admiration and love." With this he bowed again, smiled like a crack in a piece of old parchment, and held his box toward Mary. It was open, probably in the hope of enticing her with the sight of its contents—a beautiful diamond necklace.

She turned her face ever so little and took it all in with one contemptuous, sneering glance out of the corners of her eyes. Then quickly reaching out her hand she grasped the necklace and deliberately dashed it in poor old de Longueville's face.

"There is my answer, sir! Go home and tell your imbecile old master I scorn his suit and hate him—hate him—hate him!" Then with the tears falling unheeded down her cheeks, "Master Wolsey, thou butcher's cur! This trick was of your conception; the others had not brains enough to think of it. Are you not proud to have outwitted one poor heart-broken girl? But beware, sir; I tell you now I will be quits with you yet, or my name is not Mary."

There is a limit to the best of feminine nerve, and at that limit should always be found a flood of healthful tears. Mary had reached it when she threw the necklace and shot her bolt at Wolsey, so she broke down and hastily left the room.

The king, of course, was beside himself with rage.

"By God's soul," he swore, "she shall mary Louis of France, or I will have her whipped to death on the Smithfield pillory." And in his wicked heart—so impervious to a single lasting good impulse—he really meant it.

Immediately after this, the king, de Longueville and Wolsey set out for London.

I remained behind hoping to see the girls, and after a short time a page plucked me by the sleeve, saying the princess wished to see me.

The page conducted me to the same room in which had been fought the battle with Mary in bed. The door had been placed on its hinges again, but the bed was tumbled as Mary had left it, an dthe room was in great disorder.

"Oh, Sir Edwin," began Mary, who was weeping, "was ever woman in such frightful trouble? My brother is killing me. Can he not see that I could not live through a week of this marriage? And I have been deserted by all my friends, too, excepting Jane. She, poor thing, can not leave."

"You know I would not go," said Jane, parenthetically. Mary continued: "You, too, have been home an entire week and have not been near me."

I began to soften at the sight of her grief, and concluded, with Brandon, that, after all, her beauty could well cover a multitude of sins; perhaps even this, her great transgression against him.

The princess was trying to check her weeping, and in a moment took up the thread of her unfinished sentence: "And Master Brandon, too, left without so much as sending me one little word—not a line nor syllable. He did not come near me, but went off as if I did not care—or he did not. Of course he did not care, or he would not have behaved so, knowing I was in so much trouble. I did not see him at all after—one afternoon in the king's—about a week before that awful night in London, except that night, when I was so frightened I could not speak one word of all the things I wished to say."

This sounded strange enough, and I began more than ever to suspect something wrong. I, however, kept as firm a grasp as possible upon the stock of indignation I had brought with me.

"How did you expect to see or hear from him," asked I, "when he was lying in a lothsome dungeon without one ray of light, condemned to be hanged, drawn and quartered, because of your selfish neglect to save him who, at the cost of half his blood, and almost his life, had saved so much for you?"

Her eyes grew big, and the tears were checked by genuine surprise.

I continued: "Lady Mary, no one could have made me believe that you would stand back and let the man, to whom you owed so great a debt, lie so long in such misery, and be condemned to such a death for the act that saved you. I could never have believed it!"

"Imp of hell!" screamed Mary; "what tale is this you bring to torture me? Have I not enough already? Tell me it is a lie, or I will have your miserable little tongue torn out by the roots."

"It is no lie, princess, but an awful truth, and a frightful shame to you."

I was determined to tell her all and let her see herself as she was.

She gave a hysterical laugh, and, throwing up her hands, with her accustomed little gesture, fell upon the bed in utter abandonment, shaking as with a spasm. She did not weep; she could not; she was past that now. Jane went over to the bed and tried to soothe her.

In a moment Mary sprang to her feet, exclaiming: "Master Brandon condemned to death and you and I here talking and moaning and weeping? Come, come, we will go to the king at once. We will start to walk, Edwin—I must be doing something—and Jane can follow with the horses and overtake us. No; I will not dress; just as I am; this will do. Bring me a hat, Jane; any one, any one." While putting on hat and gloves she continued: "I will see the

When Knighthood Was in Flower

BY EDWIN CASKODEN

king at once and tell him all! all! I will do anything; I will marry that old king of France, or forty kings, or forty devil's; it's all one to me; anything! anything! to save him. Oh! to think that he has been in that dungeon all this time." And the tears came unheeded in a deluge.

She was under such headway, and spoke and moved so rapidly, that I could not stop her until she was nearly ready to go. Then I held her by the arm while I said:

"It is not necessary now; you are too late."

A look of horror came into her face, and I continued slowly: "I procured Brandon's release nearly a week ago; I did what you should have done, and he is now at our rooms in Greenwich."

Mary looked at me a moment, and, turning pale, pressed her hands to her heart and leaned against the door frame.

After a short silence she said: "Edwin Caskoden—fool! Why could you not have told me that at first? I thought my brain would burn and my heart burst."

"I should have told you had you given me time. As to the pain it gave you—" this was the last charge of my large magazine of indignation—"I care very little about that. You deserve it. I do not know what explanation you have to offer, but nothing can excuse you. An explanation, however good, would have been little comfort to you had Brandon failed you in Billingsgate that night."

She had fallen into a chair by this time, and sat in reverie, staring at nothing. Then the tears came again, but more softly.

"You are right; nothing can excuse me. I am the most selfish, ungrateful, guilty creature ever born. A whole month in that dungeon!" And she covered her drooping face with her hands.

"Go away for a while Edwin, and then return; we shall want to see you again," said Jane.

Upon my return Mary was more composed. Jane had dressed her hair, and she was sitting on the bed in her riding habit, hat in hand. Her fingers were nervously toying at the ribbons and her eyes cast down.

"You are surely right, Sir Edwin. I have no excuse. I can have none; but I will tell you how it was. You remember the day you left me in the waiting-room of the king's council?—when they were discussing my marriage without one thought of me, as if I were but a slave or a dumb brute that could not feel." She began to weep a little, but soon recovered herself. "While waiting for you to return, the Duke of Buckingham came in. I knew Henry was trying to sell me to the French king, and my heart was full of trouble—from more causes than you can know. All the council, especially that butcher's son, were urging him on, and Henry himself was anxious that the marriage should be brought about. He thought it would strengthen him for the imperial crown. He wants everything, and is ambitious to be emperor. Emperor! He would cut a pretty figure! I hoped, though, I should be able to induce him not to sacrifice me to his selfish interests, as I have done before, but I knew only too well it would tax my powers to the utmost this time. I knew that if I did anything to anger or antagonize him, it would be all at an end wtih me. You know he is so exacting with other people's conduct, for one who is so careless of his own—so virtuous by proxy. You remember how cruelly he disgraced and crushed poor Lady Chesterfield, who was in such trouble about her husband, and who went to Grouche's only to learn if he were true to her. Henry seems to be particularly sensitive in that direction. One would think it was in the commondments: Thou shalt not go to Grouche's. It may be that some have gone there for other purposes than to have their fortunes told—to meet, to—but I need not say that I—" and she stopped short, blushing to her hair.

"Well, I knew I could do nothing with Henry if he once learned of that visit, especially as it resulted so fatally. Oh! why did I go? Why did I go? That was why I hesitated to tell Henry at once. I was hoping some other way would open whereby I might save Charles—Master Brandon. While I was waiting, along came the duke of Buckingham, and as I knew he was popular in London, and had almost as much influence there as the king, a thought came to me that he might help us.

"I knew that he and Master Brandon had passed a few angry words at one time in my ballroom—you remember—but I also knew that the duke was in—in love with me, you know, or pretended to be—he always said he was—and I felt sure I could, by a little flattery, induce him to do anything. He was always protesting that he would give half his blood to serve me. As if anybody wanted a drop of his wretched blood. Poor Master Brandon! his blood * * * " and the tears came, choking her words for the moment. "So I told the duke I had promised you and Jane to procure Master Brandon's liberty, and asked him to do it for me. He gladly consented, and gave me his knightly word that it should be attended to without an hour's delay. He said it might have to be done secretly in the way of an escape—not officially—as the Londoners were very jealous of their rights and much aroused on account of the killing. Especially, he said that at that time great caution must be used, as the king was anxious to conciliate the city in order to procure a loan for some purpose—my dower, I suppose.

"The duke said it should be as I wished; that Master Brandon should escape, and remain away from London for a few weeks until the king procured his loan, and then be freed by royal proclamation.

"I saw Buckingham the next day, for I was very anxious, you may be sure, and he said the keeper of Newgate had told him it had been arranged the night before as desired. I had come to Windsor because it was more quiet, and my heart was full. It was quite a distance from London, and I thought it might afford a better opportunity to—to see—I thought, perhaps, Master Brandon might come—might want to—to--see Jane and me; in fact I wrote him before I left Greenwich that I would be here. Then I heard he had gone to New Spain. Now you see how all my troubles have come upon me at once; and this the greatest of them, because it is my fault. I can ask no forgiveness from any one, for I can not forgive myself."

She then inquired about Brandon's health and spirit, and I left out no distressing detail, you may be sure.

During my recital she sat with downcast eyes and tear-stained face, playing with the ribbons of her hat.

When I was ready to go she said: "Please say to Master Brandon I should like to—tosee—him, if he cares to come, if only that I may tell him how it happened."

"I greatly fear, in fact, I know he will not come," said I. "The crulest blow of all, worse even than the dungeon, or the sentence of death, was your failure to save him. He trusted you so implicitly. At the time of his arrest he refused to allow me to tell the king, saying he knew you would see to it—that you were pure gold."

"Ah, did he say that?" she asked, as a sad little smile lighted her face.

"His faith was so entirely without doubt, that his recoil from you is correspondingly great. He goes to New Spain as soon as his health is recovered sufficiently for him to travel."

This sent the last fleck of color from her face, and with the words almost choking her throat: "Then tell him what I have said to you and perhaps he will not feel so——"

"I can not do that, either, Lady Mary. When I mentioned your name the other day he said he would curse me if I ever spoke it again in his hearing."

"Is it so bad as that?" Then, meditatively: "And at his trial he did not tell the reason for the killing? Would not compromise me, who had served him so ill, even to save his own life? Noble, noble!" And her lips went together as she rose to her feet. No tears now; nothing but glowing, determined womanhood.

"Then I will go to him wherever he may be. He shall forgive me, no matter what my fault."

Soon after this we were on our way to London at a brisk gallop.

We were all very silent, but at one time Mary spoke up from the midst of a reverie: "During the moment when I thought Master Brandon had been executed—when you said it was too late—it seemed that I was born again and all made over; that I was changed in the very texture of my nature by the shock, as they say the grain of the iron cannon is sometimes changed by too violent an explosion." And this proved to be true in some respects.

We rode on rapidly and did not stop in London except to give the horses drink.

After crossing the bridge, Mary said, half to Jane and half to herself: "I will never marry the French king—never." Mary was but a girl pitted against a body of brutal men, two of them rulers of the two greatest nations on earth—rather heavy odds, for one woman.

The king and queen and most of the courtiers were in London—at Bridewell and Baynard castle—where Henry was vigorously pushing the loan of 500,000 crowns for Mary's dower, the only business of state in which, at that time, he took any active interest. Subsequently, as you know, he became interested in the divorce laws, and the various methods whereby a man, especially a king, might rid himself of a distasteful wife; and after he saw the truth in Anne Boleyn's eyes, he adopted a combined policy of church and state craft that has brought us a deal of senseless trouble ever since—and is likely to keep it up.

As to Mary's dower, Henry was to pay Louis only 400,000 crowns, but he made the marriage an excuse for an extra 100,000, to be devoted to his own private use.

When we arrived at the palace, the girls went to their apartments and I to mine, where I found Brandon reading. There was only one window to our common room—a dormer window, set into the roof, and reached by a little passage as broad as the window itself, and perhaps a yard and a half long. In the alcove thus formed was a bench along the wall, cushioned by Brandon's great campaign cloak. In this window we often sat and read, and here was Brandon with his book. I had intended to tell him the girls were coming, for when Mary asked me if I thought he would come to her at the palace, and when I had again said no, she reiterated her intention of going to him at once; but my courage failed me and I did not speak of it.

I knew that Mary ought not to come to our room, and that if news of it should reach the king's ears there would be more and worse trouble than ever, and, as usual, Brandon would pay the penalty for all. Then again, if it were discovered it might seriously compromise both Mary and Jane, as the world is full of people who would rather say and believe an evil thing of another man than to say their prayers or believe the holy creed.

I had said as much to the Lady Mary when she expressed her determination to go to Brandon. She had been in the wrong so much of late that she was humbled, and I was brave enough to say whatever I felt; but she said she had thought it all over, and as every one was away from Greenwich it would not be found out if done secretly.

She told Jane she need not go; that she, Mary, did not want to take any risk of compromising her.

You see, trouble was doing a good work in the princess, and had made it possible for a generous thought for another to find spontaneous lodgment in her heart. What a great thing it is, this human suffering, which so sensitizes our sympathy, and makes us tender to another's pain. Nothing else so fits us for earth or prepares us for heaven.

Jane would have gone, though, had she known that all her fair name would go with her. She was right, you see, when she told me, while riding over to the Windsor, that should Mary's love blossom into a full-blown passion she could wreck everything and everybody, including herself perhaps, to attain the object of so great a desire.

It looked now as if she were on the high road to that end. Nothing short of chains and fetters could have kept her from going to Brandon that evening. There was an inherent force about her that was irresistible and swept everything before it.

In our garret she was to meet another will, stronger and infinitely better controlled than her own, and I did not know how it would all turn out.

(To Be Continued in Next Issue.)

Satisfactory to Her.

Pa—I greatly disapprove of that young Smithson and one particular reason is his lack of industry in his calling.

Daughter—His calling? Why, papa, he calls seven evenings in the week!—Tit-Bits.



In Your Shoes All Day

Tramping out in the open from morning to night—that's the kind of wear that makes most socks you buy go to pieces quickly. Wear

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FOR MEN, WOMEN AND CHILDREN

Made Strongest Where the Wear is Hardest

and at night you'll find your socks holeless. Durable-DURHAM Hosiery sells for 15, 19, 25 and 35 cents. Heels, soles and toes are heavily reinforced. The deep, stretchy, garter-pull-proof tops with the anti-run stitch are knit on *to stay*. The quality is uniform throughout, the sizes are correctly marked. Toes are smooth and even. Famous Durham dyes insure fast colors. You can't buy better hosiery at any price. Made by the largest hosiery mills in the world. Fastened to every pair is our unlimited guarantee ticket that insures absolute satisfaction. Sold everywhere.

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STERLING SILVER ROLLED GOLD

A. J. STEVENSON, S114 Post, Spokane.

LOOK THIS UP

The Breeders' Department in this issue contains the names of many prominent live stock breeders. Their offers are worthy your consideration.



Live in Deeds

What Quotation Has Helped You?

What is the quotation or what are the words which have helped you in the journey of life?

Is it a phrase from some famous author, or was it the words from some neighborly soul who helped you over a hard place and left you the invaluable legacy of a life motto?

What are your favorite motto, your favorite quotation, your favorite words?

Send them to the editor of The Farmer and let those words help another which have helped you.

To the Editor: I am sending you a quotation which may help some one:

"We live in deeds, not years; in thoughts, not breaths;
In feelings, not in figures on a dial.
We should count time by heart throbs.
He most lives who thinks most, feels the noblest, acts the best."
—Bailey.

MISS WILLIE BELL DYSART.
College Place, Wash.

St. Patrick's Day

Instructive Fun for March 17

By LOUISE VAN AUKEN.

The 17th of March is a time when all of us think of Ireland and St. Patrick, and reptiles, and shamrocks, and shillelahs. It's a sportive date, and we all wear the green. This color everywhere is the most dominant of the entire spectrum.

Either at a party or at home around the library table a lot of innocent fun and instructive entertainment can be created by the asking of queries centering on the names of "green." Here are a few that may be put:

A synonym for always plus green? Evergreen.

Green and a part of the human anatomy? Greenback.

Green and the opposite of ocean? Greenland.

Green and a building? Greenhouse.

A city of France plus green? Paris green.

Green and a musical instrument? Greenhorn.

Green stone and water-surrounded by land? Emerald isle.

Questions to which the answers are Irish places may be asked. A map will show many more possible towns than these:

A winter garment? Ulster.

To be cunning and to depart? Sligo.

A popular girl and to be rapid? Belfast.

A stopper? Cork.

A path for a tall person? Giant's causeway.

To slay and to challenge? Kildare.

A sovereign plus a city? Queenstown.

Recipes

Some That May Be New to You

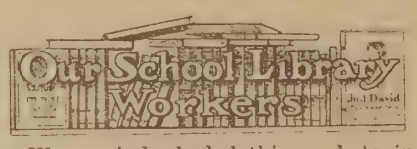
To make oatmeal soup slice an onion and parboil it in a little water till rather soft; add a bit of bayleaf, celery salt, three-fourths cup of cooked oatmeal, two cupfuls water and let simmer for nearly an hour. Add two cupfuls milk, salt and pepper to taste and a tablespoonful butter. Strain and serve with small squares of toasted bread.

Cinnamon Rolls.

These are made with baking powder and may take the place of a desert at a simple family dinner. Sift a pint of flour with one and a half teaspoonfuls baking powder, and half a teaspoonful salt; rub in two tablespoonfuls shortening and make into a soft dough with sweet milk. Roll out thin, sprinkle with a cupful of light brown sugar well mixed with a teaspoonful ground cinnamon. Roll up tightly like a jelly roll, cut across in slices an inch thick, lay in a greased pan and bake quickly.

Sausage Turnover.

Roll out thin, rich pie dough and cut into four or five-inch squares. Place in the center of each a little heap of cooked sausage meat. Fold each square into turnover shape, brush with milk and bake in a quick oven till crisp and golden in color. Many use raw sausage, but it insures wholesomeness to have it partially cooked before it is baked.



We are indeed glad this week to introduce Miss Dorothy Rauch, now leader and champion over all School Library workers in the Pacific northwest. Miss Dorothy is, to our way of thinking, one of the brightest and winsomest lassies in Washington. And, besides having that rare charm of personality which her portrait plainly indicates, Miss Dorothy has a winning firmness of purpose that insures success in whatever she undertakes. She has a greater number of subscriptions to her credit than any other worker, and she is pushing steadily ahead day by day. Will Dorothy be the winner of that $5 in gold, May 1? Well, we can't safely make any predictions now, but the chances in Dorothy's favor are very, very good. And she is hard at work making them better right along.



Individual Standing This Week.

Dorothy Rauch, Chewelah, Wash., 14 subscriptions.

Loyal C. R. Snyder, White Swan, Wash., 12 subscriptions.

Bessie Webb, Ford, Wash., 10 subscriptions.

Mildred Glasgow, Bossburg, Wash., nine subscriptions.

Dorothy Larue, Mayview, Wash., six subscriptions.

Lester Ruark, Mayview, Wash., six subscriptions.

Violet Leachman, Mayview, Wash., five subscriptions.

Eva Bond, Valley, Wash., three subscriptions.

Here is a most inspiring record of achievement by a little school. On February 1 the New Century school at Mayview, Wash., started work for a school library. There were 13 pupils and their teacher, Miss Lillian Brown, and after a little conference the campaign for subscriptions was begun. The weather wasn't favorable—roads were bad—traveling mighty difficult, and certainly not pleasant. But Miss Brown and each of those 13 boys and girls had a vision of more good books in their school, and they one and all had the kind of faith in themselves that always brings success. They kept steadily at work on Saturdays and after school hours, and on March 1 New Century school had earned a library of 30 fine books. "The girls and boys were much enthused over the contest," Miss Brown tells us—and we are glad to set down here the admiration we feel for the purposeful way this enthusiasm was directed toward acquiring the good books these young folks wanted to place in their school.

Miss Alta Cooney, to whose school we sent a nice lot of books last week, writes us a dandy good little letter, as follows: "I received your splendid books, and am pleased to find them such excellent copies. We shall do our best to obtain more of them in the near future." We infer from the last sentence in Miss Cooney's letter that her boys and girls are still busily at work for additional books.

Honor Roll.

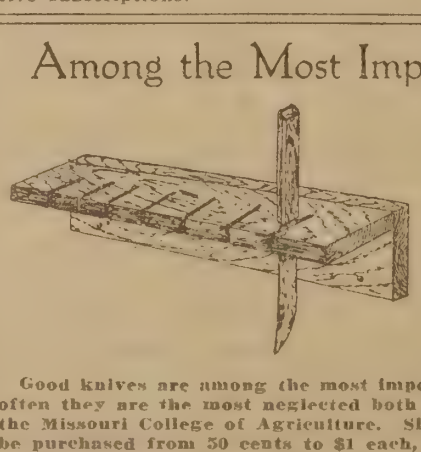
CHEWELAH SCHOOL, Chewelah, Wash., Dorothy Rauch; WHITE SWAN SCHOOL, White Swan, Wash., Loyal C. R. Snyder; DEER CREEK SCHOOL, Valley, Wash., Esther Eastman, Eva Bond, Ellen Olson; PARKER BOTTOM SCHOOL, Wapato, Wash., Lucinda Pigott; NEW CENTURY SCHOOL, Mayview, Wash., Lester Ruark, Violet Leachman, Dorothy Larue, Myrtle Anderson, Merle Schneckloth, Kenneth Fitzsimmons, Grace Smellar, Sylvan Ruark; SUNSET SCHOOL, Sunset, Wash., Harry Cota, Lula Henning, Hattie Miller, Charlotte Pickett, Harold Herron, Victor Hubbard, Joe Mills, La Valda Morgan, Ross Pickett; SOUTH BASIN SCHOOL, Orin, Wash., Annie Noah, Sammie Reitz, Clara Reitz; WAITS SCHOOL, Valley, Wash., Bennie Sundvik, E. Boucher, H. Woodbury; BAY VIEW SCHOOL, Bay View, Wash., Estner Crumrine, Mary Nelles; THORNTON SCHOOL, Thornton, Wash., Thelma Kerns, Dwight Barton, Marvin Ward.

"We have received the books you sent us, for which please accept our thanks. We are well satisfied with them and have found them everything you said they were." This is quoted from a letter from C. B. Merritt, teacher of Prairie school, at Sumas, Wash.

New Schools Starting Campaigns.

WHITE SALMON SCHOOL, Klickitat county, O. F. Glass, superintendent; STEVENSON GRADE SCHOOL, Skamania county, Miss Lucy Lindsay, teacher; BICKLETON SCHOOL, Klickitat county, J. E. Johnson, principal; NAPOLEON SCHOOL, Stevens county, Miss Edith Dornty, teacher; LYLE SCHOOL, Klickitat county, Philip Pere, principal.

Among the Most Important of Kitchen Tools





Good knives are among the most important tools in the kitchen workshop, yet often they are the most neglected both as to selection and care, says a bulletin of the Missouri College of Agriculture. Sharp knives of excellent quality steel may be purchased from 50 cents to $1 each, depending upon the size. The broad, flat spatula, useful for many kinds of work as scraping and mixing can be bought for from 15 to 40 cents. Knives should not be jumbled into drawers with forks, spoons and can openers so that their edges are dulled. A wire coil similar to a pen rack can be placed where convenient and into this the knife handles can be slipped. Or the blades can be inserted into grooves cut into pieces of soft pine wood.



From off the starry mountain-peak of song,
Thy spirit shows me, in the coming time,
An earth unwithered by the foot of wrong,
A race revering its own soul sublime.—Lowell.

Home Canning

Home-Cooked Canned Dinner

C. R. Campbell and Mrs. Campbell of Bellevue, Wash., recently served a "canned dinner" as an illustration of the possibilities of home canning in not only decreasing living costs, but in adding to the variety and palatability of the bill of fare.

Among the dishes served at this canned dinner were tomato soup, peas, beans, corn, squash, chicken, seedless blackberries and fruit cake made from canned fruit. Corn was served both on the ear and in the usual way.

Mr. Campbell is a great believer in government bulletins.

"People ask me how we do our canning," he comments, "and I tell them it's the easiest thing in the world to learn—all you've got to do is to use the information the government puts freely at your disposal. Write to the United States department of agriculture, division of publications, Washington, D. C., and ask for bulletins on home canning. You will receive a bunch of literature which will teach you more than years of experiment, and all you've got to do is to carry out the directions implicitly. That's the way we can our fruit."

Referring to the popular theory that peas, beans and corn are particularly prone to ferment, Mr. Campbell negatives the whole thing.

"They don't spoil if you can them right," he says. "Again, I will have to refer you to the government bulletins—you can learn there exactly how to do it, and if you follow directions you can't fail.

"We didn't stop with canning fruits and vegetables last fall," Mr. Campbell continued. "A time came when chicken feed went so high and egg production fell so low that we decided there was no profit in keeping our hens through the winter. We could have sold them, of course, but so many other people were doing the same thing that the price had fallen to just about nothing. So, instead of selling, we canned the whole bunch. Did they keep? Why, of course they kept! We followed government directions. And now, if some one comes in unexpectedly to dinner, we're ready for him. If two, or six, or a dozen should come just as unexpectedly, it wouldn't make any difference. We've got the finest kind of chicken, with fruit and vegetables, ready at a moment's notice. Not a can of chicken spoiled, and if you can tell by the flavor that you are eating canned chicken, you're the first one who has ever been able to do so."

In regard to the cost of living when home canning is utilized, Mr. Campbell points out that a great big dinner for 18 people can be served for $3.74, which allows the home canner the top-notch market price for his garden produce at the time of canning and 25 cents an hour for labor required to can them.

"There's just one final point," the canning enthusiast concludes. "It is important to have the very best vegetables and fruit for canning."

Home and the Children.

Ordinarily children are much what their parents make them, says the New York Evening Sun. If home is bright, cheerful and full of glow, full of the spirit of mutual love and kindness, the children will grow up bolted and screwed to that fireside.

Kerosene

Keeps Starch From Being Sticky

What is the most helpful thing you have learned during the last year in your experience with housekeeping? Let us pass it along to other housekeepers.

To the Editor: A helpful hint for a busy day is to add one or more tablespoonfuls of kerosene to the starch in which clothes are starched and the irons will not stick.

One Egg Cake.

The following is my own recipe for a one-egg cake:

One and one-half cups of sugar, rubbed to a cream with one rounding tablespoonful of butter, or other shortening. Beat in one egg, add 1 1-4 cups of buttermilk or sour milk, into which a scant 1-2 teaspoonful of soda has been dissolved. And 1-4 teaspoonful of salt; any flavoring desired, and sift in three cupfuls of flour, to which has been added a heaping teaspoonful of baking powder. A trifle more or less flour may be used according to your own judment as to the consistency you like your cake batter. Bake in three layers, and use any filling desired.

Butterscotch Pie.

One large cup of brown sugar, 2 tablespoonfuls of flour, yokes of 2 eggs beaten light, 1 1-2 cups of cold water, pinch of salt, 3 tablespoons melted butter. Mix sugar and flour to a cream on top of stove, stirring constantly to keep from burning. Let cool slightly and pour into a baked pie crust. Beat the whites of the two eggs to a stiff froth, add 2 tablespoons sugar and vanilla to flavor. A teaspoon of vanilla should also go into the cream for filling the crust. After putting on the frosting set in the oven a minute.

MRS. W. T. LLOYD.

Cabinet, Idaho.

New Spring Suit.



For the tailor-made girl there will be smart simple suits made on novel lines. This example is of blue gabardine and has a "weskit" of white satin. Black satin hat with a scarlet quill seems to go well with the suit.

Magnet Will Hunt Needles.

Much time is saved in hunting for lost needles if you keep a horseshoe magnet suspended from a string in your work basket, ready to drop to the floor and hunt your lost needles for you.

YOUNG MERCHANTS

Marketing Done by Boys and Girls.

In connection with the work of boys' and girls' canning and gardening clubs at Bellevue, Wash., during the coming season, something out of the usual line of such work is being planned. Canning and gardening work of this kind naturally results in the accumulation of a surplus of fresh and canned garden products. The marketing of these in a community where the average family has its own garden is not easy. For this reason, arrangements are being considered to put this season's product on the Seattle market, and at the same time to make the marketing a means of further practical education of the junior gardeners and canners.

It is proposed to rent or secure a stall at the public market, in which the fruits, vegetables and canned goods produced by the youngsters will be displayed for sale. In charge of the stall each day will be two of the young people themselves. In this way not only will the production end be taught, as at present, but that even more important element of salesmanship will be brought out. Possibly some sort of prize will be offered for the boy or girl averaging the highest sales.

Curried Chicken.

Carefully clean and joint one medium sized chicken. Cover with cold water, add a teaspoonful of salt and simmer until very tender. Have a large covered dish well heated, place the chicken in it and return to the saucepan containing the chicken stock to the stove after removing as much of the fat as possible. When the stock is nearly at the boiling point add to it two tablespoonfuls of finely chopped parsley, one teaspoonful of onion seasoning, a dash of pepper, and, last of all, a teaspoonful of curry powder well mixed with a little of the stock. Thicken the gravy with cornstarch, cook two minutes and pour while very hot over the chicken. Cover the dish at once and serve immediately with waffles, hot biscuits or steamed rice.

Buckwheat Cakes.

One cake of compressed yeast, 2 cups lukewarm water, 1 cup of milk scalded and cooled, 2 tablespoonfuls of light brown sugar, 2 cups of buckwheat flour, 1 cup sifted white flour, 1 1-2 teaspoonfuls of salt. Dissolve the yeast and sugar in lukewarm milk and water, gradually add the buckwheat, white flour and salt, which have been mixed. Beat until smooth. Cover and set aside in a warm place free from draft to rise for about an hour. When light stir well and bake on a hot greased, or aluminum griddle. If it is possible to let rise over night, one-quarter cake of yeast will suffice, but an extra half teaspoonful of salt must be added.

Peach Delight.

With such a satisfying dinner the dessert might well be omitted. But it is not expensive, if one happens to have the ingredients left from previous meals. Fill halves of canned peaches with slightly sweetened boiled rice, cold, of course. Add, if you have them, a few crumbs of stale macaroons and top with a tablespoonful of whipped cream.

To Remove the Mote.

When traveling one should always bear in mind that cinders are apt to find their way into the eyes. An eye cup, a lotion for bathing and a few flaxseed should be included in your package. A boric acid included in your be found soothing for eyes that are inflamed from dust, wind or foreign matter.

In Mending Gloves.

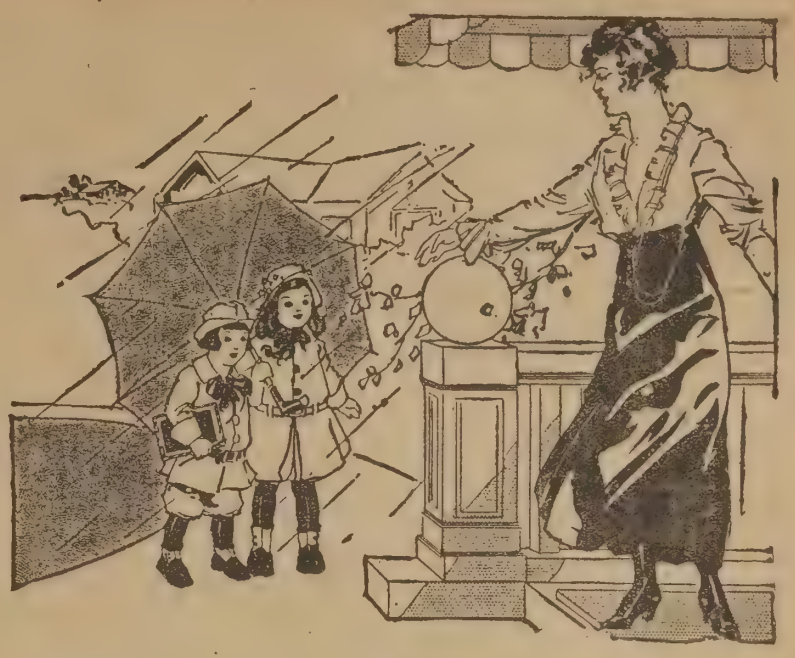
I have found that a marble is a good substitute for a glove darner when a small hole in a glove needs mending.

Girdles Still Hold.

Girdles of beads or of braid ending with huge upholstery tassels are an attractive addition to many one-piece frocks.

Just Drop the Cake Pan.

Before placing your cake in the oven, drop the pan once or twice to jar the large gas bubbles, thus producing finer grain in the baking.



"Hurry, children—I've got a real treat for you."

Ghirardelli's Ground Chocolate

is a fortifying food beverage for all—from childhood to old age.

It comes PROTECTED—as all chocolate should—in ½-lb., 1-lb., and 3-lb. hermetically sealed cans.



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of the Pacific Northwest, equal to that of any safe mortgage or cattle loan company, at

The Exchange National Bank

Spokane, Washington.

Capital $1,000,000. Write for Particulars.

Household Food Waste

More Vital Than Agricultural Shortcomings

In an informative and sensible statement relative to the food problem, Secretary of Agriculture Houston emphasizes a fact which the Farmer has frequently dwelt upon—that household wastefulness is more responsible than any shortcomings of agriculture.

"As a nation," says Secretary Houstop, "we seem to disdain economizing. The estimate of $700,000,000 waste in the country, as prepared by our experts, even if cut in half, would still leave an enormous waste."

If this estimate of $700,000,000 waste is substantially correct and there is no reason to doubt its accuracy, it would just about balance the total value of our wheat crop in normal times and with normal prices.

Secretary Houston directs attention to another fract frequently mentioned by the Farmer—that while the 1916 wheat crop of the United States was short, the 1915 yield was a record breaker, and the two crops together gave us more than an average production. In this connection the secretary says:

"It is evident that the public has failed to look at all the facts involved, especially in the case of wheat. The wheat crop for the current year was reported to be 640,000,000 bushels, against a five-year average of 728,000,000, and the record crop of 1915 of 1,026,000,000. Apparently the public has compared the crop of 1916 solely with the record crop of 1915 and failed to take into account the unusually large carryover from that year into the present year of 164,000,000 bushels or more."

Taking the two years of 1915-16 we had a combined wheat yield of 1,666,000,000 bushels, an average for the two years of 833,000,000 bushels, or more than 100,000,000 bushels greater than the five-year average.

The Farmer is glad to quote the sensible conclusions of the secretary of Agriculture, for they confirm the soundness of the position it took early against the embargo folly, which for a while seemed likely to sweep congress into grave blunders.

Profits

From Poultry When Feed Is High

By MARIELLA LADD.

Two years ago, when chicken wheat cost 1 1-2 cents a pound and corn a little more, I calculated that we fed to each of our hens during a week in winter 3 cents' worth of grain besides the ueual trimmings. This year, if we had relied wholly on wheat and corn for proteid and carbohydrates and fats, each hen would have cost us 6 cents per week for grain alone, and, as eggs have not doubled in price and hens have not learned how to double their yield to order, profits would have shrunk to a very small margin indeed. As a matter of fact, by substitution and extra care, we have maintained profits to a fair level.

The Canadian field pea has been an excellent substitute for wheat. It has a proteid value of 21 per cent to wheat's 11 per cent. Less of it, therefore, is required to maintain the proteid contents of a ration. Its mineral content is 2.60, against wheat's 1.9, which makes it still more valuable as an egg producer. At the same time, hens tire of it more rapidly than they tire of wheat. We found it better to alternate the two, watching carefully for signs of loss of appetite. The peas are better crushed or boiled in a mash mixed with bran for the sake of variety.

Naturally it would not pay to buy peas to feed hens. That would make eggs cost still more than high wheat. But it is easy to find a patch of ground that will grow peas when it would not grow anything else without a lot of trouble. Besides, peas build up the ground they are grown in and make it more productive. Taking labor, seed, etc., into account, our peas cost us less than a cent a pound. They were not big enough to fetch a top price at market, so that we felt justified in turning them into eggs.

Fat is a very necessary element of a hen's food in winter. It is not only needed to keep up the hen's body heat; it is a valuable constituent of the yolk, which, unless the hen has plenty of fat in her food, is liable to be pale and sickly in appearance. Corn with 5.4 per cent of fat, when mixed with wheat, is most satisfactory. When corn is soaring with other grains, sunflower seeds are a splendid substitute. These seeds are so rich in fat that English manufacturers are planning to make artificial butter from them. They can not, therefore, be used so freely as corn. The growing of sunflowers is not only easy, but pleasant and ornamental. The sunflower needs good, rich ground, but it can be grown around the house and buildings instead of flowers. They must not be planted too early in the northwest, and must be kept well watered and cultivated. The seed must be planted two or three inches deep and at least three feet apart. The ground should have an eastern or southeastern aspect, if possible, and the earlier the seed heads mature the better. When the heads have been gathered, the stalks may be used for fodder.

For feeding purposes, rape is probably the cheapest fattening food. It can be planted in patches by itself or with some grain like corn or rye. The value of rape as a chicken food is that it stimulates the appetite and digestion of other foods. When rape is fed during the few weeks of fattening the birds will do better, and usually fetch a much higher price on the market.

Sweepings from manger and hay loft are excellent winter food for hens. Not only do they contain many seeds, but these seeds have to be scratched out of their natural husks. In getting them, biddy is almost as happy as she is in summer when she scours the fields for her relishes.

Now is the time to prepare for next winter, so that whatever the price of wheat may be then our biddies will not have to suffer or be sacrificed.

Conveniences

Little Helps for Farm Housewife

By ADA CARROLL WORTMAN.

There was such a pathetic plea in one of our farm papers recently for the older farm women to tell some of the things which had been helpful to them. It was from a very young homemaker on the farm, who had just discovered some wonderful labor-saving device, and, upon her going joyfully to tell her neighbors, she found that many of them had known of it and used it for years. She was much aggrieved at the thoughtless selfishness of farm women who would keep such helpful advice to themselves.

It is possible nowadays to make the farm home almost strictly modern, without the expenditure of a great sum of money, such as would be needed to install a system of gas lighting and cooking and a complete water system. There are so many small helps that can be purchased for a few dollars, and that go so far toward making the farm home a more convenient place for the burdened farm woman.

The question of water is of paramount importance, but not every farmer can put in a pressure or gravity tank and pipes through his house. Instead, why not have a pump in the kitchen and a cheap sink? When we moved to our present farm, last spring, we came from a modern home in the outskirts of a small city, and felt that we must have some of the conveniences that we had been used to enjoying.

The first thing we did was to hunt up a second-hand bathtub, which cost us just $6, and install it in a small empty room adjacent to the kitchen. The range was set just outside the door of the bathroom, so that it was a small matter to set a boiler of water thereon and heat it for the bath. A drain was laid to carry the water away down the hill after using it. This drain was simple—just an ordinary inch-and-a-half pipe led from the bathtub to the outside wall of the kitchen, where it and the drain from the sink entered a six-inch tile, which led under the surface of the ground to a point well away from the house—a place on a side hill where the water quickly disappeared.

Out in the kitchen we set a cheap sink, costing $3.75. It was large enough to hold a large dishpan, such as we needed to wash the separator in, and all the waste water from kitchen and bathroom was disposed of without any carrying.

The well was directly under the kitchen, so the pump was already in place, but if it had not been, we should have put the pump at the sink and run the pipes from it into the well, so that we could pump water right in the house. It is not a hard matter to do this unless the well is very deep or a long way from the house, in which case there would need to be a supply tank, so that all the water pumped by the windmill for the stock might first go through the kitchen tank, and there would be a constant supply.

Either of these methods would insure a supply of water for the house and a means of disposing of it after using, and would amply repay the expense of installation. It would be better to go without something else and have the water so convenient, and there are few farmers who could not do as I have indicated.

Patterns

1987—Lady's house gown or negligee. Cut in 4 sizes: 34, 38, 42 and 46 inches bust measure. It requires 7 yards of 44-inch material for a 38-inch size. Price, 10 cents.

1988-1976—Lady's costume. Waist 1988 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 1976 cut in 7 sizes: 22, 24, 26, 28, 30, 32

and 34 inches waist measure. It requires 2 1-2 yards of 44-inch material for the waist, and 5 1-2 yards for the skirt for a medium size. The skirt measures about 3 1-8 yards at the foot, with plaits drawn out. Two separate patterns, 10 cents for each pattern.

1978—Child's dress. Cut in 4 sizes: 2, 4, 6 and 8 years. It requires 2 1-2 yards of 36-inch material for a 4-year size. Price, 10 cents.

2002—Boy's Russian suit, with or without revers collar and shield. Cut in 4 sizes: 2, 3, 4 and 5 years. It requires 3 3-4 yards of 36-inch material for a 4-year size. Price, 10 cents.

1985—Lady's combination corset cover and drawers. Cut in 4 sizes: 34, 38, 42 and 46 inches bust measure. It requires 3 1-4 yards of 36-inch material for a 38-inch size. Price, 10 cents.

1998—Dress for misses and small women. Cut in 3 sizes: 16, 18 and 20 years. It requires 6 1-2 yards of 36-inch material for an 18-year size. The skirt measures about 2 3-4 yards at the foot. Price, 10 cents.

Fill in this coupon and mail to Pattern Dept.
THE PACIFIC NORTHWEST FARM TRIO,
36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Pattern No. ..... Size.....

Pattern No. ..... Size.....

Pattern No. ..... Size.....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No.....

BE SURE TO GIVE NUMBER AND SIZE.

Cream Cheese Salad.

Cut a small cream cheese into cubes. Arrange on sections of head lettuce, and serve with a simple French dressing the recipe for which calls for one fourth teaspoonful salt, half as much paprika, four tablespoonfuls olive oil and two tablespoonfuls vinegar, mixed in the order given.

Double Deck Bee Hive.

John Cushman of Eatonville, Pierce county, Wash., has just received a shipment of double deck bee hives with which he expects to experiment. He says that the double deck hive will bring better results than the ordinary hive.

Women Form Poultry Club.

The women of the Camas valley, Ore. grange organized a poultry association recently, with Mrs. Cynthia Lange as president, Mrs. Bessie Martindale, vice president, and Alice Scranton, secretary-treasurer.

WE WILL PAY SALARY

to farmer with rig or saddle horse. The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are paying good salaries to those who can do the work and are offering these positions only to farm owners or renters.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. For men with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter to The Washington Farmer, Review building, Spokane, Wash.—Adv.



STARTS WITH THE WORST AND ENDS WITH THE BEST

Dear Aunt Nellie: Here I am for the second time. This time I feel so I must thank you ever and ever so much for the nice prize you sent me. It was indeed very nice of you, auntie. This time I will write about "My Best Friend," "My Worst Day" and "My First Surprise." My worst day was the 22d of May, 1914. It was the last day of school and we were having a picnic. It was about noon when word came for us children to hurry home because there was a fire all around our home. The cause was that a neighbor woman set fire to some slashing she wanted to burn. A strong wind sent the fire over to our place, and when we came home about 30 men were helping papa and mamma protect our home from the flames. They all worked till it was dark that night. Then the wind went down and the flames ceased. My first surprise was in the winter of 1916, when one of the Bellingham book stores offered a dollar to any boy or girl not under 9 nor over 11 years of age that in 50 words or less could tell what books they liked best. I was 9 then, so I wrote about what books I liked best and in a few days I was very much surprised by receiving a dollar as a prize and a very nice letter saying my letter was one of the best. The dollar I put in the bank, which is my first start in a savings account. Here comes my best friend on earth. That is mamma. I have a better friend, and that is Jesus, but it was mamma that taught me to love Him.—Evis Erickson, box 108, R. F. D. 2, Lynden, Wash.

TELLS ABOUT HER LOVELY DRIVE TO PENTICTON

Dear Aunt Nellie: I want to tell you about my trip to Penticton, Canada. Grandpa, papa, mamma and my brothers and sisters went with me. When we got to Oroville we had to get permission to go across the line. Then when we crossed the line we had to get a pass from the Canadian officer. Then we drove 30 miles along the finest roads you ever saw. We got out and saw the Okanogan falls. There was an old Indian squaw fishing. We drove on to Penticton along the most beautiful lake shore road. Penticton is a very pretty town, located in a beautiful pine forest. We went from there to Keremos along a lovely shady road. The tops of the trees touched over the road. We got home that evening about 7 o'clock all very tired, but we enjoyed the trip very much.—Kathryn Bowen, Oroville, Wash.

PET SHEEP WILL COME TO THE DOOR AND KNOCK

Dear Aunt Nellie: I am 10 years old and am in the sixth grade. I can crochet and tat, though I like to crochet best. I have a sister whose name is Derla and a brother named Dea. They are in the seventh grade. We live in the country and go to a school about a quarter of a mile from our house. On our place there are two lakes which are the same as Soap lake. One is on each end of the place. Above one of them there is a bluff and in that there is a face of a man. We have a little bunch of sheep and I have some of my own. One of them, a sheepherder gave me, and now she will come to the door and knock. She will stand up for a piece of bread and will drink milk. I also have a red hen, which we call Reddie, and one white cat, besides some horses.—Frances McManamon, Othello, Wash.

HOPES ALL ACCIDENTS MAY PROVE AS LUCKY AS THEIRS

Dear Aunt Nellie: I think the subject that I can write more about is "The Worst Day," which I remember well, a very frightful day, to the parties most concerned. It happened last winter when the snow lay crisp and white on the ground. There was a sleighing party of three and in some way or other parts of the sleigh broke, letting a portion of the load in the snow, thus freeing the horses and letting them run one-fourth of a mile before I got out of the wrecked sleigh. Now, I don't know whether this was the worst day or the best day, as no one was injured, neither persons or horses. I feel thankful all escaped injury that day and hope all accidents may prove as lucky.—Laura E. Hatley, Waitsburg, Wash.

MABEL HAS A GOOD MANY RELATIVES IN WAR ZONE

Dear Aunt Nellie: I live on a farm of 100 acres. I go to the Twin Groves school. There are 25 scholars in our room. Our teacher is Mr. Young. We have three rooms in our schoolhouse. I have two sisters and one brother. My sisters are married. We have lots of fun on the farm. In the summer we go in swimming and do housework. In the winter we go sleighriding and snowshoeing. I have many relations in England. They are very scared of the war.—Mabel Woodfield, St. Anthony, Idaho.

YES, IT DOES HELP IF MOTHER IS INTERESTED

Dear Aunt Nellie: I am 13 years old and in the seventh grade at school. The subject that I chose to write about is "My Best Friend." My best friend is my mother. She always takes my part. If I am happy she is happy with me and if I am sad she is sad with me. When my brother and sister and I go to school she sees that we are clean and whole. She also cooks good meals for us. She asks us every day if we are getting along well at school, because she loves us and wants us to get ahead in our class. Arithmetic is my hardest study and sometimes I can't get the problems and if my class gets ahead of me I get sad. My mother tries to soothe my sorrows by telling of brighter days. She always is planning so we can get our lessons easier. You know it helps a girl lots to have a mother who takes interest in her school work.—Ruth Safe, Republic, Wash.

YELLOW CANARY WILL PICK YOU IF YOU TEASE HIM

Dear Aunt Nellie: I have been reading the Children's Corner every time we get the paper. I am glad I have so many little cousins. The other children write so well, I thought I would write, too. I know some of the children who have written to you. I am in the eighth grade at school. I have two sisters going to this school. We walk two miles and three-quarters to school. We live on a farm. There are 11 children in our school, four boys and seven girls. I will describe a pet I have. It is a little canary bird. He is yellow, with a black cap on his head. He sings and he will pick you if you tease him. I take real good care of him. He is 7 years old and he seems to be a young bird.—Ivah Jump, R. F. D. No. 2, box 61, Creston, Wash.

EDNA WOULD NOT CHANGE PLACES WITH A CITY GIRL

Dear Aunt Nellie: I am 12 years old. My birthday is September 12. I have a friend who comes to the country almost every summer. She stays with her uncle and aunt. They are our closest neighbors. We have a very nice time. I go to school and am in the fifth grade. I have three sisters and one brother. Their names are Elsie, Mata, Helen and Adolph. Elsie does not go to school, but the rest of us do. Mata is 14 years old. She is in the eighth grade. Helen is 10 and she is in the fifth grade. Adolph is 7 years of age. He is in the first grade. I live on a farm. We have about 80 chickens and three geese. We have one sheep. We have two dogs. Their names are Bob and Shep. I like to live on a farm and would not change with a city girl.—Edna Reinbold, Hubby, Wash.

INZA'S WORST DAYS WERE WHEN SHE HAD MEASLES

Dear Aunt Nellie: I thought I would write a letter to the Children's Corner, as I like to read the others very much. My subject is "The Worst Day." My worst days were when I had the measles. I had to stay in bed three days and a half. The second day I was in bed I had a bad fever and wanted to get out of bed all the time. I have four brothers and two sisters at home. My big sister has had the measles, but the rest of them have not. They never caught them, although they were in the room quite often. I am over with them now and will start to school again. I like to go to school. I am in the sixth grade and am 11 years old. My birthday is July 28.—Inza Staiff, Freeland, Wash.

LIVE ON 320-ACRE FARM IN THE GRAND COULEE

Dear Aunt Nellie: I will write to the Children's Corner. I have never written before. I love to read the letters. We live on a 320-acre farm in the Grand coulee, 20 miles from town. We get our mail by a stage line called the Nespelem route. I have two sisters and two brothers, all younger than I. We have seven horses, one cow, some pigs, chickens and turkeys. I am 11 years old and in the fifth grade. Our school has been closed for two weeks on account of the measles. My teacher's name is Miss Bridge.—Naomi Canaday, Almira, Wash., Nespelem route.

Pussy-Cat, Pussy Cat.



MARGERY HAS ADVANTAGES OF TOWN AND COUNTRY

Dear Aunt Nellie: I have never written to the Corner before. As yet, I have see but two Bellingham letters in the Corner. I was 14 years old January 3. I started to high school January 26. I have three sisters and four brothers. I have a father and mother. My oldest brother is junior in the normal school here. He is taking a special course so he can enter college a little advanced. He is 20. My next brother, who is 18, and my oldest sister, who is 17, are seniors at the Whatcom high school here. My next sister down the line is 15 and a junior second in high school. My brother younger than myself is 9 years old and in the third grade. My little sister is in the first A grade. The baby, 2 years old, is large for his age and very cute. Our names are, from the oldest down: Irving, Myron, Catherine, Josephine, Margery, Donald, Betty and Junior. Our home is a five-acre chicken ranch. We have 1800 chickens. Last year we had an incubator containing 6000 eggs. This year we are doubling the capacity and it will contain 13,000 eggs. Our incubator is to run by electricity this year. I live neither in the city or in the country, but have the advantage of both.—Margery Hawley, 820 Moore street, Bellingham, Wash.

HAVE AN AUTO AND A BOAT NAMED "AGNES W."

Dear Aunt Nellie: I have read the letters often in the Children's Corner and I will write, too. I live on a farm. We have a cow and three calves and about 29 chickens. We have 20 acres of land. We have a dog named Teddy and two cats. I am writing this letter in school. I am in the third grade and am 9 years old. We have an automobile and a boat named "Agnes W." I have two brothers and one sister. Our school is named Lincoln school. I have a mile to go to school. There are seven in my class. There are 37 children in our room. We live in a big white house. We have a mile to go to town. We have a white horse. His name is Jim.—Myrtle Weberg, Poulsbo, Wash.

MARY HASN'T SEEN ANY LETTERS FROM CONCRETE

Dear Aunt Nellie: I have read the Children's Corner a number of times. I have seen letters from quite a few places, but none from Concrete yet. I have never written before. There are nine and a half inches of snow here. We have 15 cows and a number of calves. We have two horses, two pigs, three dogs and three cats. The horses' names are Nell and Prince. The dogs' names are Brownie, Bob and Topy. The cats' names are Blacknose, Blacky and Tom. I walk about half a mile to school. My teacher's name is Mr. Carl. I like him very much. I am 10 years old and am in the fifth grade.—Mary Von Pressentin, Concrete, Wash.

ETHEL FEELS BAD BECAUSE DOGGIE MUST WEAR MUZZLE

Dear Aunt Nellie: I am going to tell you about my dog. His name is Colonel and he has black hair. He has but two white spots. Those are on his chin and neck. When I go to school in the morning he always goes part way with me and is at a certain place to meet me every evening. When our county commissioners ordered that all dogs be muzzled we got one for Colonel, but he does not like to wear it because it makes his nose sore. It makes me feel bad to see my doggie wear a muzzle.—Ethel Sprong, Sunnyside, Wash.

BIG SISTER IS TEACHING HILDRETH AT HOME

Dear Aunt Nellie: I thought I would write to the Children's Corner. I am in the fourth grade and am 11 years old. I have light hair and blue eyes. I have five sisters and two brothers. My big sister is teaching me at home. I am four feet nine inches tall. We have 68 head of cattle, 14 pigs and 21 head of horses. We had lots of corn this year. We have two dogs and three cats. My birthday is October 3.—Hildreth G. Hicks, Coulee City, Wash.

TONY, THE CANARY BIRD, SINGS A GREAT DEAL

Dear Aunt Nellie: My papa has a homestead of 200 acres. I am 12 years old and am in the fourth grade. I have light hair and blue eyes. I am five feet and two inches tall. I weigh 106 pounds. We have a canary bird named Tony and he sings a great deal.—Violet Hicks, box 162, Coulee City, Wash.

PEND OREILLE RIVER RUNS BY THEIR FARM

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but have read every letter and like them very much. I am a girl 10 years old, born May 31, 1906. I have a little pony of my own, also three cats. We have a team, 14 pigs, 30 chickens, a cow and calf. I live on a farm of about 300 acres. There is a river running by our place called the Pend Oreille. It is frozen. I have two little brothers, one of them is named Ransom and the other Lawrence. Lawrence is 5 years old and Ransom is 1 year old. I ride to school on my pony. Her name is Sadie. My papa carries the mail.—Lorena Schultz, Lost Creek, Wash.

LEARNED TO PLAY ON THE PIANO WHEN SHE WAS FIVE

Dear Aunt Nellie: I am 9 years old and my birthday is January 23. My sister is 14 and her birthday is August 16. I go to school every day. I am in the fourth grade and my sister is in the seventh grade. I have a big doll and her name is Josephine. My teacher's name is Mrs. Kane. There are 42 pupils going to our school. My sister's name is Ethel. Sometimes I help my mother with the dishes and carry in wood for her. I have to walk one mile to school. When there is ice our teacher lets us go skating. I learned to play the piano when I was 5 years old. We have an auto and it is a dodge. I like to ride in an automobile—Doris Streeter, R. I., Bow, Wash.

WE WANT YOU TO WRITE ANOTHER LETTER, EVALENE

Dear Aunt Nellie: I was 10 years old September 1. I live on a farm of 320 acres. We have 10 horses and their names are Madge, Bill, Dan, Barney, Tom, George, Kit, Mike, Maggie and Doll. We have one cow. Her name is Trilby. We have five pigs and a dog and his name is Nick. I have one brother and his name is Charles. I have two little sisters and their names are Agnes, age five, and Bernice, age three and a half years. My doll's name is Nellie. I am in the second grade at school.—Evalene K. Maurer, Mohler, Wash.

RIDE TO SCHOOL ON HORSE-BACK WHEN THERE IS SNOW

Dear Aunt Nellie: I have been reading the Children's Corner and like it very much. My father takes the Farmer. There are three pupils in our school. We ride to school on horseback during the snow. I like to live on a farm because you can have pets. I have a pet cat named Tommy and a pet dog named Slivers. I have a horse that I like very much. It's name is Babe. We live on a farm 10 miles from Corfu, Wash.—Glynes Simenson, Box 88, Corfu, Wash.

EDITH HAS A PLAYHOUSE WITH A ROCK FIREPLACE

Dear Aunt Nellie: I am 8 years old. My birthday is May 18. We live on a five-acre farm. We have about 90 chickens. We are going to hatch some more. I have a playhouse. It has a fireplace. I made it of rocks. In summer I go barefooted and pick wild flowers and berries. We have some nice blackberries. We have lots of fun in summer. I have no brother or sisters.—Edith Kobe, Kirkland, Wash.

CHILDREN GET CREDITS AT SCHOOL FOR HOME WORK

Dear Aunt Nellie: I am 9 years old and in the fifth grade. My teacher's name is Miss Pederson. I like her very much. I have one sister and no brothers. My sister's name is Gunvor. She is 4 years old. I help my mother before I go to school in the morning and when I come home. At school we get credits for home work. If we get 600 credits a month we get a half holiday.—Liv Elekastad, Southworth, Wash.

READS EVERY LETTER THAT SHE SEES IN THE CORNER

Dear Aunt Nellie: I have read every letter that I have seen in the Farmer. My subject is about the schoolhouse. The schoolhouse is very large and there are six rooms in the building. In my room there are 42 pupils, 32 in the third grade and 10 in the fourth grade. I am 11 years old. My teacher's name is Miss Hinckley. I will close for this time.—Yerda Johnson, Rochester, Wash.

The Washington Farmer is glad to announce the receipt of letters for the "Children's Corner" from the following during the last week: Helen Guenther, Maud Shineke, Irene May Hott, Irene Glissler, Ruth Crabb, Marie Wolf, Anna Staube, Josephine Wagner, Irene Slaughter, George Vaneberg, Olive Long, Beulah May Wilson, Maude Daniel, Irma B. Polson, Ethel Gladson, Grace Clark, Mamie Jennings, Florence Cox, Margaret Cox, Mildred Widmer, Eleanor Dobers, Ora McDonald, Margaret Helen Jelly, Lucile Gwen, Clayton Beeson.



O Lord, I've never lived where churches grow;
I love creation better as it stood
That day you finished it so long ago
And looked upon your work and called it good.
I know that others find you in the light
That's sifted down through tinted window panes,
And yet, I seem to feel you near tonight
In this dim, quiet starlight on the plains.

I thank you, Lord, that I am placed so well;
That you have made my freedom so complete;
That I'm no slave of whistle, clock and bell,
Or weak-eyed prisoner of wall and street.
Just let me live my life as I've begun,
And give me work that's open to the sky;
Make me a pardner of the wind and sun
And I won't ask a life that soft or high.

Let me be easy on the man that's down
And make me square and generous with all;
I'm careless sometimes, Lord, when I'm in town,
But never let them say I'm mean or small.
Make me as big and open as the plains;
As honest as the horse between my knees;
Clean as the wind that blows behind the rains;
Free as the hawk that circles down the breeze.

Forgive me, Lord, when sometimes I forget;
You understand the reasons that are hid.
You know about the things that gall and fret;
You know me better than my mother did.
Just keep an eye on all that's done and said;
Just right me sometimes when I turn aside,
And guide me on the long, dim trail ahead,
That reaches upward toward the Great Divide.

The above poem was written by Charles B. Clark Jr. and has been regarded as one of the best bits of sentiment ever expressed in poetic form concerning the picturesque life of the cowboy of the range. Probably no other cowboy poem has found its way into so many scrap books.

WORLD'S CROPS
Summary of Present Position.

According to reports received by Broomhall's Corn Trade News the middle of last month:

Russia—Crops remain under snow.

Argentina—Confirmed wheat crop of good quality; indications of outturn fully maintained. Maize crop outlook improved.

Australia—Some further heavy rains in Queensland and New South Wales not wanted, but think they will have no bad effect on wheat crop.

India—Beneficial timely rains have fallen in most parts; crops growing well on big acreage.

France—Severe frost; but much snow. Position of wheat crop improved, but feared weak plants may suffer. Government has ordered an admixture of 15 per cent of maize, rye or barley with wheaten flour.

Germany—Constinued reports of severe frost and shortage of food. Bavaria admits cereal crops are overestimated.

Italy—Officially stated that the wheat crop was seeded under normal conditions and germination was regular. Continued complaints that wet winter is having a bad effect on young crops. Government is offering a substantial bonus for grain growing.

North Africa—Further favorable reports of wheather and crop prospects received.

Lies and Lies.

The first and most wonderful baby in the world was in the Hopkins household. He had reached the age when he could coo, an accomplishment which he indulged in most of the time.

"He is the most welcome visitor I ever had," announced the proud mother. "He just lies and talks to me by the hour."

"Isn't that lovely?" agreed the caller. "So unlike most visitors—they just talk and lie to you by the hour."—Country Gentleman.

Watching for a Morsel.

The man getting his hair cut noticed that the barber's dog which was lying on the floor beside the chair had his eyes fixed on his master at work.

"Nice dog, that," said the customer.

"He is, sir."

"He seems very fond of watching you cut hair."

"It isn't that, sir," explained the barber. "You see sometimes I make a mistake and snip off a little bit of a customer's ear."—Boston Transcript.

Who's Who, and What Do They Know
Told at Stockmen's Banquet in Spokane

Professor E. J. Iddings, dean of the agricultural department of the University of Idaho, was speaking at the big banquet given by the Spokane Chamber of Commerce to the live stock men attending the convention recently held in Spokane.

"There's a man down in Oregon who has always taken a great interest in promoting pig clubs," he said, "and for this reason he has become a favorite with farmer boys throughout the state.

"One day in a country schoolroom, the teacher asked the children to write down for her the names of the three men in the United States who they felt were entitled to greatest honor. One little fellow struggled long and manfully with the problem. He was a patriot, a sportsman and a member of a pig club, and when he finished the three names on his paper were Woodrow Wilson, Jess Willard and C. M. McAlister of the Portland Union stockyards."

McAlister "Comes Back."

Without pause, Mr. McAllister of the stockyards was on his feet amid the laughter, and, with his napkin held aloft to still the tempest, began to speak:

"Mr. Toastmaster: I must leave to catch my train for Portland, but I want to tell you a story before I go. I promised Dean Iddings that I would not tell it, but, with your permission, I will anyway.

"The dean and I were traveling in a rural community in Idaho and were spending the night at a farmhouse. After supper, the 8-year-old son of the house came in from the kitchen, held out a handful of little pellets and asked him what they were.

"'Those are beans,' Mr. Iddings replied; and the youngster turned and shouted back to the kitchen: 'He does know 'em, Maw.' And then he turned to the dean and said: 'Maw said you wuz here tryin' to tell Paw how to farm, but that you didn't know beans.'"

Sidelights

Looking Backward.

"There's no danger," said the doctor. "It's only a carbuncle coming on the back of your neck. But you must keep your eye on it!"—Christian Register.

Extra Weight.

"Hey, Redney, look here! I weigh three pounds more'n you!"

"Aw, g'wan, y're cheatin', Skinny! Youse got y'r hands in y'r pockets!"

Who's Your Mother?

First little chicken to second little chicken: "Say, kid, who's your maw, the hen that hatched you or the hen that laid the egg that you came out of?"

There's Always an Excuse to Buy.

The Hawker—Buy some flowers for your wife?

"But I'm not married."

"Well, then, guv'nor, buy the lot to celebrate your luck!"—Tit-Bits.

Seems So, Sometimes.

"I don't think women have always been vain. Yon know women were made before mirrors," said Mrs. Vainly.

"And they've been before them ever since," snapped her husband.

The Eye of the Law.

First Officer—Did you get that fellow's number?

Second Officer—No; he was going too fast.

First Officer—Say, that was a fine-looking dame in the car.

Second Officer—Wasn't she?—Puck.

Need Comfort.

For three successive nights Newpop had walked the floor with the baby. On the fourth night he became desperate and bought a bottle of soothing syrup.

"Why, James," exclaimed his wife when she saw the bottle, "what did you buy that for? Don't you know it is very dangerous to give a child anything like that?"

"Don't worry," was her husband's reply, "I'm going to take it myself."—Wisconsin State Journal.

Don't Soil the Furniture.

They were a saving old couple, and as a result had a beautifully furnished house. One day the old woman missed her husband. "Joseph, where are you?" she called.

"I'm restin' in the parlor."

"Not on the sofy?" she gasped in horror.

"No, on the floor."

"Not on that grand carpet?" came back in tones of anguish.

"No, I rolled it up."—Sharples News.

No Play Acting.

A Philadelphian who had been away from his home for several years decided to visit his native city. After his arrival there, while on his way to his brother's home the taxi in which he was riding was held up by a funeral procession.

"Whose funeral is that?" he asked a newsboy standing on the curb.

"Bill Smith's," replied the newsie.

"I knew him well," said the man; "can it be possible Bill is dead?"

"Course he's dead," replied the boy. "What d'ye think they're doin', rehearsin' wid him?"

Want Ads

HELP WANTED—MALE 3

OUTSIDE SITUATION.
Good salary can be earned selling our complete line high class nursery stock. Cash advanced. Write for terms.

ALBANY NURSERIES, ALBANY, ORE.

HAWTHORNE AUTO SCHOOL,
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date

BE AN AUTO AND TRACTOR EXPERT. $75 to $200 a month—learn in six weeks. Thousands of successful graduates. Catalog free. Rahe's Auto School, 532 East 11th st., Kansas City, Mo.

GOVERNMENT POSITIONS ARE EASY TO get. My free booklet BY956 tells how. Write today—NOW. EARL HOPKINS, Washington, D. C.

SITUATION WANTED—Female 18

SITUATION; COOK ON RANCH OR STEAM breaking outfit; experienced. Mrs. A. Maiers, Pasco, Wash., 110 S. 4th st.

SITUATION WANTED—MALE 21

WANTED—POSITION ON RANCH, BY A sober and industrious man. Write for particulars. Box 90, Harrisburg, Pa.

MARRIED COUPLE WANT FARM WORK; experienced; wife good cook. P. O. Box 1024, Spokane.

BUTTERMAKER (SWISS) WANTS POSITION. Can furnish best of references. Address O. F., 411 Stock Exch., Portland, Ore

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free. BEHNKE-WALKER BUSINESS COLLEGE, 167 FOURTH ST., PORTLAND, ORE.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER:

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:
2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete, ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS—FOR SALE 60
Continued.

SASH AND DOORS.

Order your sash and doors direct from O. B. WILLIAMS CO. We sell for less because we own our own mill. Large stock. Prompt shipment and safe delivery to destination guaranteed. Our big illustrated Catalog No. 27 mailed free, postpaid, on receipt of request. We do not handle rough lumber.

5 cross panel doors, No. 1	$1.33
3-ply veneer, 1 panel doors	2.00
Front glass doors, 2 ft. 8 in. by 6 ft. 8 in.	3.00
Kitchen glass door, 4 lights	2.25
Bungalow sash, as low as	.56
3x6, hot bed sash	2.25
20x25, medicine cabinet doors	2.25
Panel cupboard doors	.85
1-ply Gold Seal roofing	1.35

We carry a full line of building material, including frames, inside finish, builders' hardware, paint, etc.

O. B. WILLIAMS CO.
1943 1st AVE. SO. SEATTLE, WN.

MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

PATENTS — PICTURE OF PAT. OFFICE and 3-yr. calendar free. FitzGerald Co., pat. attys., 881 F. st., Wash., D. C. Est. 1880.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer,** and **The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

BABY CHIX.

White Leghorns, the kind that are real dividend payers, bred for 16 years for eggs, size, VIGOR, VIM and VITALITY. $10 per 100, from the oldest established hatcher in the state. Delivery in good condition guaranteed. Lakeside Poultry Farm, Roy, Wn.

ORDER YOUR BABY CHICKS NOW FROM heavy laying strain; delivery guaranteed; our chicks please; R. I. Reds, March, $15 100; after Mar. $12. White Leghorns, March, $12 100; after March, $10. Maplebrook Poultry farm, Southworth, Wash., Box 3.

S. C. R. I. REDS—STOCK FROM TOPnotch western breeders crossed with my own trap-nested birds. Eggs after Mch. 15, $1.50 for 15; $8 100; baby chicks, $16 100. Safe delivery and strong chicks guaranteed. F. H. Volland, Kennewick, Wash.

ORPINGTONS, ROCKS, WYANDOTTES, Cornish, Leghorns, Pekin and Runner ducks, Embden geese, Holland Turkeys; white breeds only; heavy laying strains. Write us. Royal White Farm, Box 503, Route 1, Kirkland, Wash.

MY R. C. R. I. REDS HAVE WON EVERY first and second, except one, competed for in the past 3 years. Have mated 4 pens for the egg trade. Guaranteed satisfaction. Mating list on application. G. W. Baker, Colfax, Wash.

FERTILE EGGS FROM EXHIBITION stock—Barred Plymouth Rocks, Single Comb Rhode Island Reds; winter layers. Specially mated for show birds; $3.00 per 15, $10 per 100. H. Villeneuve, R. 8, Nampa, Idaho.

FAMOUS CARNATION WHITE LEGHORNS. Baby chicks; high-grade utility stock; birds of merit, quick maturing; heavy winter layers; free range. Breeding stock. Ernest Raush, Carnation Poultry Farm, Kent, Wn.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please $12—100. Free catalog. Freshlaid Farm, Colfax, Wash.

WHITE BUFF AND BLUE ORPINGTONS, single and rose comb Anconas, the great winter layers, winners at leading Coast shows; eggs $1.50 to $3.00 for 15; chicks 20c each. Ira N. Deline, Box D, Olympia, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

BARRED PLYMOUTH ROCKS, PRIZE winners at shows; way ahead of average in N. W. laying contest. Write for prices. Wm. H. Heimsoth, Baker, Ore.

S. C. WHITE LEGHORN AND S. C. RED eggs for hatching, $2.50 to $5 per 15; heavy-laying, exhibition strains. H. J. Fuller, N124 Lincoln st., Spokane.

EGGS FROM TANCRED S. C. W. LEGhorn pens, $1.25 per 15, $6 per 100, prepaid. J. W. Hixons, R. 2, B. 55, Scio Ore.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

POULTRY 174
Continued.

HOGANIZED S. C. L. REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels, $5 each. These birds are all sons of a magnificant male, from a 271 egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs $6 in 100 lots; sittings, $1.50, $3, $5. Mrs. H. V. Rominger, Underwood, Wn.

79,637 EGGS IN 1916 FROM MY FLOCK of 450 S. C. Black Minorcas, prize winners in the showroom and laying contest; eggs from my Hoganized and trap-nested breeding stock at $2 per 15, $3.50 per 30, $5 per 50, $8 per 100, $70 per 1000. No baby chicks or stock for sale. John Dollenbacher, R. 1, Selah, Wash.

WAIKIKI FARM'S POULTRY DEPT. IS now booking orders for eggs and day-old chicks. S. C. White Leghorns; eggs $1.50 per setting, $8 per 100; chicks, $12 per 100. S. C. Reds; eggs, $1.50 per setting, $8 per 100; chicks, $16 per 100. Heavy laying strains. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

QUEEN QUALITY WHITE LEGHORN chicks; Feb., $12 per 100; Mar., $11; April, $10; May, $9; June, $8. Queen incubators, 70 to 2000 egg capacity; 1200-chick brooder stove, $18.50.

WE DO CUSTOM HATCHING. QUEEN HATCHERY, 89 Pike st., Seattle.

TWELVE YEARS A BREEDER.

Fine, pure-bred, well developed, farm raised, from A1 utility stock; Barred Plymouth Rock cockerels, $2 each.

I. H. TRIMBLE, PALOUSE, WASH.

S. L. WYANDOTTES AND S. S. HAMBURGS —Pullets and hens $2 to $5, cocks and ckls. $5 to $15. Winners at many shows. G. G. Wherry, Payette, Ida.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

"WHITE ELEPHANT" R. C. W. LEGHORN eggs, $1.50 per 15. Mrs. J. E. Jackman, R. D. 4, Kalispell, Mont.

R. C. BUFF WYANDOTTE EGGS, FOR hatching, $1.50 and $1 per 15. Mrs. W. E. Boner, Joseph, Ore.

FOR SALE — CHINESE PHEASANTS' eggs, $3 per dozen. Dr. F. M. Cole, Caldwell, Idaho.

PRIZE-WINNING BUFF ORPINGTONS— Settings $2 to $10. Lucy R. Scudder, Box 36F, North Yakima, Wash.

EGGS FROM THOROUGHBRED TRAPnested White Leghorns, $6 and $8 per 100. A. A. Hopson, Jennings Lodge, Ore.

COOK AND PHILO W. ORPINGTONS, Eggs, stock. J. N. Scott, Naches, Wn.

CHOICE BARRED ROCK COCKERELS, $3. B. Livingston, Glenwood, Wash.

GROCERIES 222

3 LBS. EXTRA FINE COFFEE, ROASTED fresh daily, by parcel post, for $1. Martin Marks Coffee Co., Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

CONTRACTORS, BUILDERS 567

BULK GRAIN ELEVATOR CONTRACTOR. Write me for plans and prices on any size. Anthony Robertson, N4217 Lincoln st., Spokane, Wash.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

ALFALFA, RED CLOVER, ALSYKE CLOver, white clover, sweet clover, timothy and other grasses; seed oats and wheat; at reasonable prices. Voegeler Seed Co., Salt Lake City, Utah.

RED AND ALSYKE CLOVER AND VETCH seed; bright, high test; clean; dependable. Write us.

M. SENDERS & CO., ALBANY, ORE.

A LIMITED NUMBER OF THE FAMOUS Yakima Goodell strawberry plants, $3 per 100, delivered free.

WILL HANKS, NACHES, WASH.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEEDS 620
Continued.

OREGON SEEDS.
VETCH OR "TARES,"
A Great Forage or Seed Crop.
RED CLOVER, ALSYKE,
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.
COMPLETE LINE OF FARM SEEDS.

We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.

CORVALLIS FLOURING MILLS,
Corvallis, Oregon,
Home of the Famous Oregon Agricultural College.

TESTED SEEDS FOR FARM AND GARden—New 1917 seed catalogue now ready; valuable information gathered in 25 years' experience in the northwest. Write for quantity price on Grass, Clover and Alfalfa seed. For new catalogue address Aabling-Boyce Seed Co., Seattle, Wash.

SEED CORN, SEED POTATOES, BOTH Yellow and White Dent varieties; field selected before frost; kiln dried; part tested runs 95 per cent. Price 6c per pound. 400 lbs. specially seed grown, hill select, Netted Gem potatoes, 6c. C. L. Hartman & Son, Prosser, Wash.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.

ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, ORE.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

TESTED SEEDS—CHOICE CLOVER, TIMothy, corn, grain, grass and garden seeds, for spring planting. Mail orders a specialty. Prompt shipment. Send for catalogue. Murphy's Seed Store, Albany, Ore.

ALFALFA SEED, RED CLOVER, SWEET clover; Early Ohio; Idaho Rural; Peachblow seed potatoes; Dicklow spring wheat—the big crop producer; blue barley. Jerome M. & E. Co., Jerome, Idaho.

ONION SEED, OREGON YELLOW DANvers. Grown at Gladstone, Ore.; $1.40 postpaid; money back if not satisfactory. A. G. Stevens, R. 1, Milwaukie, Ore.

NURSERY STOCK 621

NURSERY STOCK—FRUIT TREES, ALL kinds, grafted walnuts, filberts, grapes, small fruit plants, etc., at greatly reduced prices. Save time by mailing complete want list, stating varieties, number of each and grade. Lafayette Nursery Co., Lafayette, Ore.

STRAWBERRY PLANTS—CLARK'S SEEDling, Magoon, Gold Dollar, Wilson, $2.50 per 1000. 200 plants, your choice, $1.00 prepaid.

J. W. Vinacke, Canby, Oregon.

EVERBEARING STRAWBERRY PLANTS, Montana grown, extra hardy and true to name. "Superb" and "Progressive" varieties, $2.50 per 100, $20 per 1000, postpaid. W. A. Thayer, Bearmouth, Mont.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

LARGE FIELD-GROWN ROSES, $1.50 PER dozen bushes, prepaid. Different colors. H. C. Kerns, Eugene, Oregon.

FARM LANDS—FOR SALE 651

—PALOUSE FARM—

320 acres, 4 miles from a good Palouse town, all under cultivation, except five acres; 150 acres in fall wheat; 80 for spring seeding; 1-3 of all crop to purchaser, or can get possession; has comfortable 6-room house; fair barn and outbuildings, with fine water. The land lies extra good, and is the very best quality. A bargain at $25,000, one-half cash, balance to suit at 6 per cent. See Mr. Tipton.

HEGE & WATKINS CO.
715-716-717 PAULSEN BLDG.

RICH, LEVEL FARM LAND, IN Thurston county, Wash., near Seattle, Tacoma and big government army post location; twelve passenger trains stop every day at station right on ground; rich soil, raises wonderful prize-winning crops; tract just opened up and settling rapidly; new town already started; delightful, mild climate; splendid marketing facilities; good neighbors; excellent opportunities. Write for free illustrated folder, just issued.

A. H. REID & CO.
315 NEW YORK BLOCK,
SEATTLE, WASH.

35 ACRES BEST ALDER BOTTOM LAND; graveled road, mile to pavement, fronts on navigable water across bay from Everett. Location, roads, water, markets, soil make this a mighty desirable and productive home. Wood will pay for clearing. John Mills, Puyallup. For anything on West Side write us.

FARM LANDS—FOR SALE 651
Continued.

A FINE COUNTRY HOME.

Forty acres, ten acres cleared, balance good pasture; five-room house, new barn 48x62, concrete floor; 13 cows, 10 head young stock, 1 horse, hogs, chickens; close to Seattle.

STOCKED DAIRY FARM.

100 acres of rich valley land at Fall City, Snoqualmie valley, about 25 miles east of Seattle, on the Sunset highway; 80 acres in crop; large, new modern house, large barn, silo, milking machines, 38 Holstein cows, 16 head of young stock, 1 Holstein bull, 10 hogs, 350 chickens. This is one of the finest equipped farms in the Snoqualmie valley. All farm implements. Personal property is worth over $10,000. Price $35,000; $10,000 cash and the balance on time at 6 per cent. C. L. Parrish, 202 New York block, Seattle, Washington.

SEND FOR FARM LIST.

FOR SALE—A SNAP IN IRRIGATED YAKima valley; 170 acres; diversified farming, dairy ranch including $2000 worth of registered and grade stock; 1½ miles from live town; 3 railroads. We have many good bargains to offer in fruit, hay, dairy, diversified farming and unimproved lands in the center of the richest valley in the world, where crop failures, blizzards and destructive storms are unknown. Address Hilton Land Co., Granger, Wash.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

440 ACRES, ELEVEN THOUSAND DOLlars, $2000 cash, balance all time you want; good improvements; 100 acres meadow; Cheney district.

A section, all in cultivation, $35 per acre, only $4000, balance one-third crop; good wheat land. J. S. Langlois, Ritzville, Wash.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau. C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

FIVE DOLLARS SAVED
is an acre of ground. Get prices, terms and location of AGRICULTURAL LANDS near Tacoma.

JESSE O. THOMAS JR.
320 TACOMA BLDG. TACOMA, WASH.

160 ACRES, 3 MILES N. OF MEDICAL Lake, Wash., and 1 mile from Ry. siding; all ready for crop; black loam soil; very fertile; fenced; small house; good well; very close to neighbors; $75 per acre.

WM. MULHALL, FENN, IDAHO.

160 ACRES; 6½ MILES FROM COUNTY seat, Vale, Ore., and one mile to station. A1, fenced. Two miles from oilfield; no improvements; clear. Price $8000; half cash, bal. time, 8 per cent.

M. L. PHELPS, BOISE, IDAHO.

880 ACRES WHEAT LAND, IN HORSE Heaven, near Kennewick; fenced; some buildings; two wells; unusual bargain at $9 per acre. Write for particulars. Keystone Lumber Company, Tacoma, Washington.

FARM LANDS OBTAINED THROUGH foreclosure of mortgage offered at rare bargains and on easy terms. Send for list. Pennsylvania Mortgage Investment company, Spokane, Washington.

160-A. RELINQUISHMENT; LEVEL VALley land; improvements; 10 feet to water; irrigation well and plant; 320 A. adjoining open under new homestead law. Box 332, Winnemucca, Wash.

FOR SALE—MARSHALL STRAWBERRY plants; the best berry grown; 50c per 100, postpaid; $2.50 per 1000 f .o. b. Classic, Virgil Wilson, Classic, Wash.

40 A., UNDER CULTIVATION, ADJOINING town of Chesaw; all fenced; 4-room bungalow; good water; $3000; easy terms if desired. V. G. Grove, Chesaw, Okanogan county, Washington.

FOR SALE—BY OWNER, TWO WELLimproved half sections, close to school, town and postoffice, in Alberta, Canada. F. L. Geis, Daysland, Alberta, Can.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

IRRIGATED LANDS—For Sale 663

FOR SALE—720 ACRES, WELL EQUIPPED; artesian wells; alfalfa, orchards, berries, grapes; 3 sets buildings, with baths and gas; locust grove; school; railroad terminates on farm; adapted to dairy or purebred live stock; also 1500 acres leased land; have seed, feed and equipment; part in crop; would put in all the crop desired; 8 miles from Lewiston on paved road; ideal climate; no finer farm anywhere; will sell all or divide. Daniels & Wallace, Lewiston, Idaho.

IN THE FAMOUS OKANOGAN VALLEY, IRRIGATED LANDS; abundant water; rich soil; transportation; range; free timber; 28 years to pay for water on federal farm loan plan of repayments; small payment down. A job if wanted.

GRAIN LANDS, producing 30 to 50 bu. wheat per acre, at reasonable prices.

DIVIDEND-PAYING STOCK RANCHES.

J. W. GRAHAM, TONASKET, WASH.

OPPORTUNITY IMPROVED IDAHO IRRIgated ranch; 80 acres alfalfa, potatoes; ranch is yours at $2500, balance long time at 6 per cent. Last year's income $3000. Must sacrifice. Write owner for particulars. Geo. Nasse, 245 E. Rochelle St., Cincinnati, O.

ACRE TRACTS—FOR SALE 669

A 31-ACRE PLACE, ON THE HIGH BANK of the Sacramento river, 6 miles east of Corning, on a good county road, phone, rural mail and electric service. Choice garden and orchard land. Fine family orchard. Several big oak trees. Good fishing and hunting at hand. Good orchards and neighbors all about. On opposite bank of the river from STANFORD ranch. No overflow. Pretty place to live. Price $3000. Send for map and details. No trade deal considered. Refer to No. 5.

W. N. WOODSON, OWNER, CORNING, CAL.

Grain and Produce Markets

Chicago Grain.

CHICAGO, March 10.—Notwithstanding that the wheat market averaged higher today, peace rumors gave quotations a downward sweep in the last hour. Closing quotations were unsettled, ranging from 1¼c net lower to ⅝c advance, with May at $1.86½@1.86⅝ and July at $1.56⅝@1.56¾, corn lost ¼c to ½c and oats ⅝c to ½c. Provisions wound up with gains of 12c to 20c.

Moderate advances, interrupted by numerous transient setbacks, were brought about in wheat prices as a result of President Wilson's orders for the arming of American merchant ships. Reports that the British government was negotiating for the purchase of the entire Canadian crop of 1917 tended also for a while to give considerable advantage to the bulls and so likewise did severe duststorms in Kansas.

Assertions that the price which Great Britain was offering for the Canadian wheat yield of 1917 was only $1.30 a bushel exerted an additional bearish influence during the late dealings. On the other hand, announcement that one railroad to the seaboard from Chicago had lifted the embargo on export shipments of grain helped somewhat to check selling as the day came to an end.

Corn swayed with wheat, advancing early and sagging later. On the upturn the market touched a new high record price, $1.10⅜ for May delivery. Oats were guided entirely by the action of other grain.

Relatively high prices which the British government fixed for lard at Liverpool did a good deal to tighten the provision market here. Besides, record top quotations on hogs continued to rule at the Chicago yards.

Cash Quotations.

CHICAGO, March 10.—Wheat No. 2 and No. 3 red and No. 2 and No. 3 hard, nominal.

Corn—No. 2 yellow nominal; No. 3 yellow, $1.09 3-4@1.10 1-2; No. 4 yellow, $1.08@1.09 1-4

Oats—No. 3 white, 60@61c; standard, 60 3-4@61 3-4c.

Rye nominal.

Barley, $1.03@1.32.

Timothy, $3.75@5.75. Clover, $1[illegible]@13.

Chicago Futures.

	Open.	High.	Low.	Close.
Wheat—				
May	$1.86⅜	$1.87⅜	$1.85¾	$1.86½
July	1.57¼	1.58¾	1.57¼	1.56⅝
Corn—				
May	1.09¾	1.10⅜	1.08⅝	1.09⅜
July	1.08¼	1.09¼	1.07¾	1.07⅞
Oats—				
May	.59⅝	.60⅜	.58⅝	.59
July	.57¼	.57¾	.56⅝	.56⅝
Pork—				
May		33 50	33 3[illegible]	33 32
July	32 50	32 80	32.50	32 67
Lard—				
May	18 87	19.25	18.87	18.97
July		19.20	18.9[illegible]	18.9[illegible]
Ribs—				
May	.17.47	17.70	17.45	17.56
July		17.75	17.50	17.60

Pacific Northwest Grain.

PORTLAND, March 10.—Wheat—Easier; no trading. Spot bids 2c to 3c lower. Bluestem, $1.67; fortyfold, $1.63; club, $1.62; red Russian, $1.58.

Barley unchanged.

SEATTLE, March 10.—Wheat—Bluestem, $1.71; Turkey red, $1.71; fortyfold, $1.64; club, $1.64; fife, $1.64; red Russian, $1.61.

Barley, $38 per ton.

TACOMA, March 10.—Wheat—Bluestem, $1.70; fortyfold, $1.68; club and red fife, $1.65; red Russian, $1.61.

WILBUR, Wash., March 10.—Bluestem, $1.56; club, $1.53. Oats, $37. Barley, $37. The Grain Growers' Warehouse company bought 4000 bushels of bluestem Tuesday at $1.60, the highest price ever paid here for wheat.

WALLA WALLA, Wash., March 10.—Club wheat, $1.53; bluestem, $1.60. Barley, $38@39.

Minneapolis Grain.

MINNEAPOLIS, March 10.—After a strong opening, wheat prices sagged and closed fractionally lower. Corn and oats swayed in sympathy. Wheat receipts, 287 cars, compared with 289 a year ago.

Wheat—May opened $1.90 1-2 to $1.90; high, $1.90 5-8; low, $1.87 3-8; closed, $1.88 1-8.

July opened $1.81 3-8; high, $1.82 1-2; low, $1.79 7-8; closed, $1.80 1-8.

Cash, No. 1 hard, $2.06 1-8@2.08 1-8; No. 1 Northern, $1.96 1-8@2.03 1-8; to arrive, $1.93 1-8; No. 2 Northern, $1.94 1-8@2.02 1-8; No. 3 wheat, $1.86 1-8@1.96 1-8; No. 2 Durum, $1.90 @1.95; No. 2 hard Montana, $1.97 1-8@ 1.99 1-8.

Corn, No. 3 yellow, $1.05 3-4@ 1.06 3-4.

Oats, No. 3 white, 57@59c.

Flax, $2.89@2.93.

Flour — Unchanged. Shipments, 65,942 barrels.

Barley, 96c@$1.23.

Rye, $1.53@1.54.

Bran, $33.50@34.50.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1916-17 and 1915-16 were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1916-17	4,190	110	296	3,098
1915-16	6,744	806	1,173	3,295
Portland—				
1916-17	4,043	1,937	178	1,755
1915-16	9,257	835	1,368	1,952
Tacoma—				
1916-17	1,692	269	107	1,380
1915-16	6,106	237	439	8,911
Totals—				
1916-17	12,930	2,326	581	6,233
1915-16	22,107	1,948	3,030	14,158

San Francisco Produce Market.

SAN FRANCISCO, March 10.—Butter—Fresh extras, 33½c; prime firsts, 33c.

Eggs—Fresh extras, 25½c; pullets, 24c.

Cheese—New, 21c; Young Americas, 24c.

Poultry—Hens, 24@25c; old roosters, 1[illegible]@16c; broilers, 35@40c; large, 30@33c; fryers, 27@30c; squabs, $2.75@3; pigeons, $1.75@2.25; ducks, 19@20c; geese, 18@20c; turkeys, 23@24c.

Potatoes—Rivers, $3@3.75.

Onions—$6@6.50.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., March 10.—Hogs—Receipts, 9500; higher. Heavy, 14.55@14.70; light, $14.25@14.60; pigs, $12@13.50; bulk of sales, $14.40@14.60.

Cattle—Receipts, 300; steady. Native steers, $8.75@11.75; cows and heifers, $7@9.50; western steers, $7.50@10.50; Texas steers, $7@8.50; stockers and feeders, $6.50@10.

Sheep—Receipts, 700; steady. Yearlings, $11.50@13.25; wethers, $10.50@12.25; lambs, $13.75@14.75.

At Chicago.

CHICAGO, March 10.—Hogs—Receipts, 11,000. Unsettled, 5c lower than the opening, which was 5c to 10c above yesterday's average. Bulk, $14.30@15; light, $14.30@14.95; mixed, $14.55@15.05; heavy, $14.50@15.05; rough, $14.50@14.65; pigs, $11.40@13.90.

Cattle—Receipts, 500; steady. Native beef cattle, $8.50@12.50; stockers and feeders, $6.60@9.60; cows and heifers, $5.60@10.50; calves, $9.50@13.25.

Sheep—Receipts, 4000; steady. Wethers, $11@12.40; lambs, $12.40@15.05.

At Portland.

PORTLAND, Ore., March 10.—Hogs—Receipts, 442. Steady. Bulk of packing grades, $13.35@13.50; heavy packing, $13.40@13.60; light packing, $13.25@13.50; rough heavies, $12.25@13; pigs and skips, $11.75@12.25; stock hogs, $11@12.

Cattle—Receipts, 87. Steady. Steers, prime light, $9.50@9.75; prime heavy, $9.65@9.85; good, $9@9.40; cows, choice, $7.75@8.15; medium to good, $7@7.75; ordinary to fair, $6.50@7; heifers, $6@9; bulls, $6.25@7.25; calves, $6@10.

Sheep—Receipts, none. Steady. Lambs, east of mountains, $12.90@13.10; lambs, valley, $12.50@13; lambs, shorn, $10.75@12.25; prime wethers, $11.75@12; choice ewes, $9.75@10; heavy ewes, $8.75@9.25.

At Seattle.

SEATTLE, March 10.—No receipts. Indications for higher market on hogs and cattle. Sheep steady.

Hogs—Prime light, $13.10; medium to choice, $12.25@12.50; smooth heavy, $11.75@12; rough heavy, $11.25@11.50; pigs under 150 pounds, $9.50@11.50.

Cattle—Prime light steers, $8.75@9.85; medium to choice, $8.60@8.65; common to medium, $6.75@8.25; medium to choice, $7.60@7.85; common to medium, $3.75@4.75; calves, $6.75@9.25.

Sheep—Prime lambs, $11.50@12; good lambs, $10.75@11; wethers, $9.50@10; ewes, $7.50@9.

Spokane Stock Yards Saturday.

Hogs—Receipts, none; market strong. Prime heavy, $13.35@13.50; prime light, $13.25@13.35; prime mixed, $12.90@13; rough heavy, $12.35@12.50; stockers, $9@10.

Cattle—Receipts, 105; market steady. Prime heavy steers, $9.60@9.85; prime light steers, $9.35@9.50; good steers, $8.50@9; prime cows, $8@8.50; good cows, $7.50@8; best heifers, $8.25@8.75; bulls, $4@6.50; calves, $7@10; stockers and feeders, $6@7.50.

Sheep—Receipts, none; market steady. Prime lambs, $12@12.50; common lambs, $11@11.50; choice yearlings, $10.50@11; good yearlings, $9.50@10; best mutton ewes, $10@11.

Meat Situation Shifts.

Wide differences between the amount of food meats in storage on March 1, 1917, and March 1, 1916, ranging from an increase of 34.5 per cent in cured beef to a decrease of 36.9 per cent in frozen pork, are indicated in figures gathered by the agricultural department. Frozen beef increased 17.1 per cent, and dry salt pork 5.3 per cent. Sweet pickled pork decreased 4.8 per cent; lard, 31.7 per cent, and frozen lamb and mutton 31.1 per cent.

Boosts Milk Price.

The Dairymen's league, which virtually controls the sources of supply for this city and vicinity, announces a schedule for the six months beginning April 1, which average 1¼ cents a quart more for milk than the corresponding months of last year.

Seattle Market.

SEATTLE, Wash., March 10.—Potato dealers believe they have at last approximated the visible supply of the state, and today they place the figure at or near 450 cars, 150 of which are west of the Cascades. This is twice the estimate given when the market was high, but it seems that declining prices have smoked out holders within the last week to a surprising degree. The outlook is for a series of declines, predictions being made today that Yakima Gems would be selling at $50 per ton before the 1916 crop is cleaned up, and this in the face of the fact that Seattle alone will use 100 carloads.

Brokers here have quotations of $65 @70 f. o. b. Yakima, and holders are willing to let go at that. The figure is regarded as too high. Operations are stagnant. Nobody is buying, as conditions are regarded as too hazardous.

The onion market is following spuds. Prices are weak, despite shortage of the visible supply. The best grade of dry Oregon onions can be bought at 8c per pound.

Small apples are very popular, with quotations at 60@75c per box. The extreme limit of prices for extra fancy fruit is now believed to be in vogue.

Practically every jobber on Western avenue will begin storing eggs for the spring crop on Monday, convinced that the market has fallen to the lowest level at 25c. Some of the houses paid 26c today, but this fact was kept well under cover in the fear that producers would expect an advance of 1c next week. The opening of the storage season would make any higher prices inadvisable.

Poultry prices will remain stationary next week. Jobbers say that higher quotations will not relieve the scarcity, as the country is shipping all it can spare at the present time.

Butter is steady to weak. Condensaries are shipping daily to this market, and it is reported will engage more heavily than ever in the butter make this spring and summer.

BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 25c per dozen.

Poultry—Live hens, fat, over 4 lbs., 20c per lb., do 3 lbs. and under, 18c.; old roosters, 11c per lb.; springs, 20@22c per lb.; ducks, 20c per lb.; squabs, large, $3.50 per dozen; geese, fat, 12@14c per lb.; turkeys, live, 23@24c.

Butterfat—43c per lb.; dairy butter, 24c per lb.

Beef—Buying price: Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c per lb.

Hogs—Light, 13@14c per lb.; do., heavy, 10@12c per lb.

Veal—Fancy light, 12@14c per lb.; do., heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 32@35c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 32@33c per lb.; dry calf (under six lbs.), 36c per lb.; bull and dry salts, 4c per lb. less; green bulls, 18c per lb.; dry butcher full wool sheep pelts, 22@26c per lb.

SELLING PRICES.

City Prices—Team Lots.

Apples—Winesaps, $1.50@2.25 box; Spitzenburgs, extra fancy, $2 box.

Feed—Scratch feed, $53@54 per ton; all grain chop, $45 per ton; oats, $43 per ton; rolled oats, $42 per ton; rolled barley, $45 per ton; wheat, $59@60 per ton; bran, $28 per ton; shorts, $32 per ton; alfalfa meal, $26 per ton; whole corn, $51 per ton; cracked corn, $52 per ton.

Hay—Eastern Washington timothy, $22@23 per ton; alfalfa, $15@16 per ton; double compressed, $25 per ton; straw, $12 per ton; wheat hay, $16 per ton.

Onions—Oregon, 8c per lb.; Yakima, 8c per lb.

Potatoes — Local, $70 per ton; Yakima Gems, $80 per ton.

Rutabagas—Yakimas, $2 sack.

Butter—Washington creamery extras, cubes, 39c lb.; do., bricks, 40c lb.; creamery firsts, cubes, 38c lb.; do. bricks, 39c lb.

Spinach—Walla Walla, $1.75 case.

Eggs—Fresh ranch, 27@28c.

Protest Rates on Wool.

A complaint has been filed with the interstate commerce commission by S. W. McClure of Salt Lake City, secretary of the National Wool Growers' association, against the Union Pacific and 32 other railroads, including the Canadian Pacific, charging that the companies have been applying tariff rates to shipments of wool from western to eastern points that are unjust, unreasonable and discriminatory.

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CREAMERY CONCERNS

Plead Not Guilty to Conspiracy.

Pleas of not guilty to a charge of conspiracy in violation of the Sherman anti-trust act, in the creamery business, have been entered in the United States court at Boise by A. P. Henningsen, Portland; W. F. Henningsen, Butte; Carl Schallinger, Portland; R. A. Goodhue, Spokane; Henningsen Produce company, Butte; Schallinger Produce company, Portland; Hazelwood company, Portland; Commercial Creamery company, Spokane, and the Hazelwood company, limited, Spokane.

All of the 11 corporations and eight individuals indicted have now pleaded except B. B. Corless of Seattle, who has been granted further time on account of delay in his notice, and the Klock Produce company, Seattle.

Portland Market.

PORTLAND, Ore., March 12.—According to reports received by wool dealers, contracting in all parts of the west has slowed down. The failure of congress to pass the army bill with appropriations for military clothes has checked speculation in the east, and the effect is felt in the western field. There is no doubt, however, that the government will finally enter the market, and as its clothes requirements are expected to equal at least 100,000,000 pounds of raw wool the trade believes that prices higher than ever will yet be recorded.

To date only a few odd clips, mostly fine wool, have been contracted for in Oregon at prices ranging from 30 to 35 cents. Only one contract for coarse wool at 40 cents is known to have been made, being for a lot of early shorn thoroughbred Shropshire.

Egg storing is under way on a 25-cent market. This is the highest price at which eggs have ever been stored here.

Butter is weak for cubes and steady for prints. City creameries have supplied themselves with California butter and the outside demand is left to take care of the surplus of outside creameries. The cooperative creamery association has begun selling its butter direct to the trade through its new selling agency here.

Small receipts of poultry keep the local market high on chickens. Dressed pork is strong at the record price of 17 cents, but veal drags at 14 cents.

Potato shippers say the eastern markets have improved, but there is not much buying demand at this end. A few offers are being made to farmers at $2.50@3. Jobbing trade in potatoes is very dull. New potatoes from Florida are on sale at 10 cents a pound. Onions are slow, with jobbers quoting No. 1 stock at $9 and No. 2 at $6. Farmers' stocks of onions are exhausted.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $36.75@37.25.

Corn—Whole, $49; cracked, $50 per ton.

Millstuffs—Bran, $28 per ton; shorts, $31.

Barley—No. 1 feed, $38.50; brewing, nominal; rolled, $42@43.

Hay—Buying prices. Timothy, eastern Oregon, $19@20; alfalfa, $14@16; grain, $12.50@14.

Eggs—Oregon ranch, case count, 25c per dozen; candled, 27c.

Poultry—Hens, 18@20c; ducks, 18@22c; turkeys, live, 20@22c; dressed, 23@28c; geese, 12@14c.

Butter—City creamery, prints, 39@40c per pound; cubes, 35@35 1-2c.

Cheese—Oregon triplets, 23c; Young Americas, 24c.

Dressed meats—Veal, 14c; pork, 17c.

Hops—1916 crop, 3@8c per pound.

Potatoes—Oregon, jobbing price, $3.25@3.50.

Onions—Jobbing prices: No. 1, $9; No. 2, $6 per sack.

Wool—Eastern Oregon, fine, $30@35c; coarse, 40c; valley, 40c.

Beans—Oregon, small white, 9 3-4c; California small white, 11 3-4c; large white, 11 1-2c per pound.

Hides—Salted hides (25 lbs. and up), 18c; salted stags (50 lbs. and up), 14c; green and salted kip (15 lbs. to 25 lbs.), 18c; green and salted calfskins (up to 15 lbs.), 27@28c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 13c; dry hides, 30c; dry salt hides, 25c; dry horse hides, $1 to $2; salt horse hides, $3 to $5.

Cattle Top Market.

Twenty-four head of cattle purchased from W. A. Patton, rancher in the Wingville district of Baker county, Oregon, topped the market at Portland stock yards, selling at $9.85.

Washigton Crop Report.

A summary of the March crop report for Washington as compiled by the bureau of crop estimates and transmitted through the weather bureau, United States department of argiculture, is as follows:

Wheat on Farms—Estimated stocks on farms March 1 this year, 4,520,000 bushels, compared with 7,713,000 a year ago and 5,021,000 two years ago. Price on March 1 to producers, $1.44 per bushel, compared with 94 cents a year ago and $1.28 two years ago.

Corn on Farms—Estimated stocks on farms March 1 this year, 183,000 bushels, compared with 158,000 a year ago and 165,000 two years ago. Price March 1 to producers, $1.02 per bushel, compared with 90 cents a year ago and 98 cents two years ago.

Corn of Merchantable Quality—The perceatage of the 1916 crop, which was of merchantable quality is estimated at 75 per cent, compared with 82 per cent of the 1915 crop and 80 per cent of the 1914 crop.

Oats on Farms—Estimated stocks on farms March 1 this year, 3,430,000 bushels, compared with 3,850,000 a year ago and 2,792,000 two years ago. Price March 1 to producers, 53 cents per bushel, compared with 42 cents a year ago and 53 cents two years ago.

Barley on Farms—Estimated stocks on farms March 1 this year, 1,020,000 bushels, compared with 1,453,000 a year ago and 1,349,000 two years ago. Price March 1 to producers, 87 cents per bushel, compared with 64 cents a year ago and 76 cents two years ago.

Seattle Wheat.

SEATTLE, March 10.—There has been considerable activity this week in bluestem, stimulated by the strong bids from Minneapolis presumably for St. Louis account, as the southern market uses little other Washington wheat.

Millers here who have been in the market in a perfunctory way cut but little figure in the transactions of the week, as they were below bids offered from the outside. There were a number of actual sales of bluestem to Minneapolis at $1.62, although Puget Sound millers were bidding but $1.57 for either bluestem or turkey red and $1.53 for fife and club. Due to the car shortage, Seattle millers, who prefer bluestem for grinding, did not care to dabble in export grades. Operations by Minneapolis for the beginning of the week were at $1.55 bid, but they were unable to get any wheat into circulation and began toning up 2c per bushel.

Scarcity of cars has reached such a stage as to make delivery in the east almost impossible. The best that shippers can expect is an occasional car or two.

Representative sales on 'change this week included 5000 bushels of April red Russian at $1.64, 5000 bushels of March club at $1.67 and 5000 bushels of April bluestem at $1.68.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippwers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $3.50 cwt; sweet potatoes, $6.

Apples—Washington apples, cooking, 65@85c; eating, $1@1.25; Wageners, 75c@$1.20 box; Rome Beauties, $1@1.40 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 43c lb; Medo-Maid, 43c lb; Cascade, 43c lb; Gold Coin, 36c lb; Gold Leaf, 43c lb; Better Butter, 43c lb; Hazelwood, 43c lb; Peerless, 39c lb; Jersey Belle, 42c lb; Attalia, 43c lb; Diadem, 43c lb; Jersey, 39c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 22½c; Hazelwood full cream, triplets, 23c lb; Hazelwood Young America, 24c lb; Wisconsin limburger, 28@29c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 25c lb.

Eggs—Fresh local ranch eggs, $8.50 case.

Live Poultry—Springs, 17c lb; hens, 17@18c lb; old roosters, 9@10c lb; ducks, 13c lb; turkeys, 20@25c lb.

Dressed Poultry—Hens, 21c lb; springers, 20c; old roosters, 13c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs. and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs; 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

Beef Brings Record Price.

Fifty cornfed steers averaging 1245 pounds each were sold Friday by T. O. Crozier, Culdesac farmer, to the Inland Meat company for 10 cents a pound, which is the record price for beef in this region.

Peat Deposits of Ireland.

Peat covers about one-seventh of the area in Ireland and the deposits are estimated to contain 40,000,000,000 tons of fuel.

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NEWS FOR BREEDERS

E. M. Kennedy of Blackfoot, Idaho, took a carload of 16 Hereford bulls to the Denver stock show in January, where he sold them at a good price. Some of them went to Wood Bros. of Omaha some to Wyoming and some to the western slope in Colorado. Mr. Kennedy considers the selling of Idaho bulls to go back to Nebraska, something of which the state has a right to be proud. He went to Omaha after the show to purchase 60 head of registered Hereford cows on which he had an option, but the time ran out and he was just too late, as they were already sold. He says there was considerable comment by breeders further east on the bone size, good top lines and general quality of the western Herefords. Mr. Kennedy has a herd of 80 registered breeding cows, headed by Donald 37th, a bull he brought in from Iowa last year. They are all of the same line of breeding and are a very uniform herd.

Leaf and Jones of Rupert, Idaho, who were the principal buyers at the A. A. Davis Holstein sale at Filer, Idaho, last fall also purchased a few from H. H. Stiyer and others and now have about 28 head of registered females and a few grades. They purchased Mr. Davis' herd bull, Model Fobes, of Idaho, a very fine individual, whose four nearest dams average 28.5 pounds of butter in seven days, and his sire has 17 A. R. O. daughters. They thus have a foundation herd of rich breeding along producing lines. They have just completed a very fine barn, with Louden equipment and modern in every respect.

A PROMISING HEIFER.



The sweet Holstein heifer shown above was bred and is still owned by William Bishop of Chimacum, Wash. She was shown at the Pacific International Stock show at North Portland, Ore., last December, winning first in her class and junior championship. She promises to develop into a fine show cow and has ancestral inheritance that should make her a big producer.

POULTRY

RHODE ISLAND REDS

and Rose Island Whites, both combs; eggs, $1 per 15; Bronze turkey and Toulouse goose eggs; pedigreed Belgian hares.
J. NONNENMACHER, R. F. D. 3, No. Yakima, Wash.

BARRON WYANDOTTES

outlay all breds in contests. Mine are the fourths Barron blood, strictly utility bred. First in the west. Eggs, $2.00 for 15; $5.00 for 50.
C. B. AUSTIN, Kuna, Idaho.

$3.00 EACH FOR BARRED ROCK

Breeding cockerels. Half that for fifteen hatching eggs. Take advantage of this special offer. Send your order today. Satisfaction guaranteed.
A. C. BERNTZEN, Eugene, Ore.

WINNERS OF THE BLUE.
Barred Rocks—S. C. Black Minorcas.
Write for prices on high-class exhibition and breeding stock. Satisfaction guaranteed.
WILBER CLAYTON, R. F. D. 1, Payette, Ida.

BARRED ROCKS
Both matings. Winners at the late Denver show. Sales, 60 birds. Hatchable eggs in season.
J. H. FIELD, Lander, Wyo.

BAILEY'S BARRED ROCKS.
Eggs from my prize winners, $2, $3 and $4 per 15.
E. S. BAILEY, R. D. No. 4, Boise, Idaho.

BARRED ROCKS.
Heavy laying strain eggs, $2.50 per setting of fifteen.
J. W. McINTYRE, Jerome, Idaho.

HEADS JERSEY HERD.
On Kaylor Farm at Twin Falls.

By HORACE ADDIS.



Rosy's Jolly Golden Fern.

The accompanying photo shows Rosy's Jolly Golden Fern, the Jersey bull at the head of S. H. Kaylor's herd at Twin Falls, Idaho. This handsome young bull is by Golden Fern's Noble, dam Rosy's Jolly Golden Fern by Jolly Fox Hunter. He traces six times to Golden Fern's Lad and four times to Golden Jolly, making him a bull of rich breeding along both show and producing lines. Mr. Kaylor's herd is mostly of Island or close-up Island breeding. He has one half-sister of the world record 3-year-old, Goldie's Nehalem Beauty, in the Clifford Reid herd at Portland, Ore., purchased from Mr. Reid, and a full sister to her dam.

This latter cow has a bull calf by Clifford Reid's great show bull, Onota's Catillon Boy, that at this time looks almost invincible in the show ring. He has the head, length of body and hips that go to make a great show animal. Mr. Kaylor expects to keep him for his own use. Gem's Nehalem Lassie is producing over two pounds of butter a day, on official test. Majesty's Golden Maid is a granddaughter of Oxford's Majesty. Dippon's Viola is a daughter of Viola's Golden Jolly. Catillon Majesty, by Mr. Reid's bull, Onata's Catillon Boy, dam Majesty's Golden Maid, is one of his greatly prize cows. Mr. Kaylor also has a few cows of American breeding, among them one from the William Ladd herd that produced 74 pounds of butter the second month of her official test.

At Head of the Class.

In the report published by the American Jersey Cattle club of yearly tests accepted in January the herd of Ed Cary at Carleton, Ore., makes an unusually strong showing. In the class of cows 5 years and older St. Mawes Poppy stands first, with 1120.32 pounds of butter. The report of this test was published in the Farmer a few days after its completion as 1090 pounds, but the official figures increase that by 30 pounds. She stands at the head of the class.

In the 4 1-2 and 5 year class Blossom's Rosaire has 806.01 pounds of butter and Rosaire's Blossom (twins), 682.25 pounds, standing first and second. In the junior 4-year-old class St. Mawes Rose has 721.35 pounds of butter, standing third. And in the class under 2 years old St. Mawes' Susie Olga stands first, with 642.08 pounds of butter.

St. Mawes, the bull that started Mr. Cary's herd on the road to fame, now has 20 daughters in the Register of Merit, three of them with over 900 pounds of butter. Rosarie Olga Lad, his present old herd bull, has 19 daughters in the Register of Merit, or that have qualified all of them as 2-year-olds or younger. St. Mawes' Beauty has 690.3 pounds of butter to her credit and two others have over 600 pounds. Poppy's St. Mawes, the present junior herd sire, has three daughters in the Register of Merit—all that have been tested and one of them has a record over 600 pounds.

Besides the Cary cattle in the January report, Oregon is further represented with Clifford F. Reid's Golden Nehalem Beauty, that as a junior 3-year-old produced 880 pounds of butter, a world's record. H. A.

Purchase Top Notchers.

A. L. Wilson and W. M. Rhodes of Greenleaf, Idaho, reached home March 3 with a carload of fine stock for their breeding farms. The shipment also included a young Shorthorn bull for W. F. Howard of Roswell.

Wilson's purchase consisted of 12 head of Poland China swine, of different ages, that represented an expenditure of $1200; Mr. Rhodes secured a magnificent span of Percheron mares, 2 years old, that cost around $1100, and Mr. Howard's 6-months calf cost a long price. The animals are all registered stuff.

FIFTH SEMI-ANNUAL SALE
of the
WESTERN WASHINGTON HOLSTEIN BREEDERS' ASSOCIATION
APRIL 11th. 1917.
ON THE SNOHOMISH COUNTY FAIR GROUNDS.

CONSIGNORS

A. E. Smith, Seattle.
Hugh Nisbet, Chimacum.
Thos. Yarr, Chimacum.
Wm. Bishop, Chimacum.
Hermon Steffen, Monroe.
A. Benson, Lynden.
Chas. Eldridge, Chimacum.
J. H. Hulbert, Mt. Vernon.
Tualco Valley Farm, Monroe

Seventy-five registered Holsteins, "The Best in the West," including cows with 30-pound butter records, and cows that have given over 100 pounds of milk per day, officially. Sons and daughters of 30-pound sires, and dams with large 7-day and semi-official yearly records.

If you want the best, attend this sale.

If you do not receive a copy of the Catalog by March 10th, write the secretary for one.

A. B. WINTERS, 15151 HEWITT AVE., EVERETT, WASH.

Shorthorn Show and Sale
by the
NORTHWESTERN SHORTHORN ASSOCIATION

86 head—52 bulls and 34 cows and heifers—of choice Shorthorns from the best herds in the Pacific Northwest, will be shown and sold

Tuesday April 3rd, 1917
AT THE PORTLAND UNION STOCK YARDS, PORTLAND, OREGON.

Consignments from the following herds:

F. M. Rothrock, Spokane, Wash.
A. D. Dunn, Wapato, Wash.
A. Chalmers, Forest Grove, Ore.
W. O. Minor, Heppner, Ore.
Frank Brown, Carlton, Ore.
J. B. Cornett, Shedd, Ore.
T. B. Gibson Estate, Woodlawn, Cal.
Oregon Agricultural College, Corvallis, Ore.
Schmidt Bros., Oregon City, Ore.
Mrs. M. J. Hughes, Cobble Hill, B. C.
E. F. Anderson & Son, Albany, Ore.
C. C. Beers, Lyons, Ore.
C. H. Lindeman, Crabtree, Ore.
Gust Jaeger, Sherwood, Ore.
A. T. Cutting, Molalla, Ore.
G. E. Wyatt, Corvallis, Ore.
Elvin Witham, Corvallis, Ore.

Opportunity for the bull buyer, and the man who wants to buy foundation females, that will prove a profitable investment.

See the show the day prior to sale. It affords opportunities for comparison of bulls and females that will be appreciated by buyers, and valuable lessons may be learned therefrom.

A sale under the same auspices will also be held at Spokane Union Stock Yards, Spokane, Wash., consisting of 55 head of Shorthorns, on April 5, 1917. Plan to attend one or both sales.

For catalogues and particulars, address

FRANK BROWN, SALES MGR.,
Carlton, Oregon.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. MARCH 22, 1917. NO. 12.

Filibuster Fails to Stop the President



Twelve United States senators prevented congress giving President Wilson authority to arm American merchant vessels. Upon advice from Secretary of State Lansing and Attorney General Gregory the president instructed the navy department to proceed forthwith to arm vessels flying the United States flag, and authorized such vessels to fire on any submarine sighted in the war zone. Secretary Lansing and Attorney General Gregory are shown with the president above, the former at the left and the latter at the right.

In This Issue: Sheep Scarcity Arouses Government to Action

This Is It!!--$200--This Is It!!

READ HOW TO WIN IT IN OUR BIG

FARM INFORMATION CONTEST

Don't Let It Escape. Get Our Contestant's Helpful Outfit and Start at Once. On April Fifth This First Prize Drops to $175.

Read the Rules—Answer These Questions

36. The name of what fungus disease extremely destructive to wheat will be changed to the nose of a farm animal if for one letter is substituted the two letters directly following it in the alphabet?

37. What does the government estimate as the amount of sugar-beet seed produced in the United States in the year 1916?

38. What root vegetable is most used in making sugar?

39. What brand of oil widely advertised in this paper is formed by combining a word meaning a very low temperature with a word meaning thin.

40. In six to ten words tell three reasons why it is beneficial to cultivate the soil around growing plants?

$800—IN CASH to Be Paid—$800

We will positively give EIGHT HUNDRED DOLLARS in cash awards (and more in event of ties) to the winners. As explained in the rules which follow, there will be five questions run in every issue of the Farmer for 12 weeks. The last five questions will appear in the issue of April 19.

Open to Four States

Contestants must be residents of Washington, Oregon, Idaho and Montana.

Five Questions Each Issue

The contest will be composed of 60 questions. Five will be run in each issue of the Farmer for 12 issues.

Answers to each question except No. 45 can be given correctly in from one to 10 words and will be given a score of 100 if correct. Answers to question No. 45 will be limited to 100 words each, and will be graded as to the common sense and general knowledge of farm conditions shown by the contestant without regard to spelling, grammar or penmanship. As with the other 59 questions, a perfect answer to No. 45 will be scored 100.

Perfect Score Is 6,000

The contestant who comes nearest to a score of 6000 and complies with all the conditions of the contest will receive the first prize; the next nearest, second prize, and so on. In case of a tie each tying contestant will receive the full amount of the prize.

There are 35 prizes as follows:

$150 is amount of First Prize. **$50** is amount of Third Prize. **$10** is amount of Fifth Prize.

$100 is amount of Second Prize. **$20** is amount of Fourth Prize. **$5** each, Sixth to Tenth Prizes.

$2 each Eleventh to Fifteenth Prizes. **$1** each, Sixteenth to Thirty-fifth Prizes.

OTHER RULES

The answers will be passed upon and graded by a fair-minded, thoroughly competent judge.

Two weeks will be allowed for sending in answers after April 19, 1917, date of the issue containing the last five questions.

Remember, your failure to answer all the questions will not necessarily exclude you from the contest. There are 60 questions to be answered and it is not reasonable to suppose that all our prize winners will attain a perfect score. Your answers must all be sent in at the same time. Do not send any answers until you have completed the full list or as many as you can answer.

Those who use our CONTESTANT'S HELPFUL OUTFIT will be able to send in their complete set of answers without delay, there being no need of their waiting for the questions as they appear in The Farmer from week to week down to the final issue of April 19. In order to get as prompt returns as possible from those contestants who use our CONTESTANT'S HELPFUL OUTFIT, extra inducement is made in the prize awards. SEE ENLARGED PRIZE LIST.

Announcement of prize winners will be made and prize checks mailed as soon after close of contest as possible.

If any point is not clear, do not hesitate to write the Farm Information Editor.

All answers must be mailed on or before midnight, May 3, 1917, as shown by post-office dating stamp on your envelope.

ORDER COUPON—If your subscription is paid ahead, the time paid for herewith will begin at the date to which you are now paid.

FARM INFORMATION EDITOR,
Review Building, Spokane, Wash.
Enclosed find $1 for one year, or $1.50 for three years' subscription to

THE WASHINGTON FARMER.

and enter me as a contestant in the Farm Information Contest. I am also to receive at once the complete CONTESTANT'S HELPFUL OUTFIT, consisting of guide against wrong answers, reply blanks, rules and all information to aid me to win a reward.

Name .....

R. F. D. .....Town .....

State .....

Notice—Amount of remittance to be either $1 for one year's subscription to the Farmer or $1.50 for three years' subscription.

Answer this question: Are you now a subscriber?.....
If you wish paper sent elsewhere, fill in name and address.

A Valuable Aid to Contestants

One complete CONTESTANT'S HELPFUL OUTFIT, including all of the 60 questions and instructions and helpful warnings as to answers which would be wrong, and the correct answers to some of the most difficult questions, is truly a big help to the contestant.

To each contestant who sends in a new renewal or an extension of his subscription at the time of registering for the contest, this complete CONTESTANT'S HELPFUL OUTFIT will be sent in combination.

We feel that those beginning on the contest will find these suggestions as to what to avoid distinctly useful. This equipment supplies in convenient form everything needed to enable you to apply your ability to the best advantage, and will contain information enabling you to answer the most difficult questions correctly.

Puts Questions in Reach of Children

This CONTESTANT'S HELPFUL OUTFIT puts the solution of the questions in the reach even of the children, it being the purpose to make it possible for everybody in Washington, Oregon, Idaho and Montana to compete. This outfit includes, besides general information about the plan of the contest, the following:

Guide against wrong answers, which includes either correct answers of more difficult questions or easy references as to where to find the correct answers; and blank forms on which to write your answers in such a way that there can be no confusion when your answers are taken up by the judge for scoring.

It will be worth considerable to you to be assured that your answers are reaching the Farm Information Editor in such form that he will know in every instance exactly what question you intended to answer. This CONTESTANT'S HELPFUL OUTFIT will make it possible for you to

Begin Work at Once

On account of the large number certain to send for our CONTESTANT'S HELPFUL OUTFIT, thus making it possible for them to answer the entire 60 questions without delay, it is deemed advisable to offer some special inducements to secure prompt returns from this particular class of contestants. By securing the early replies of those who are thus supplied with the entire 60 questions, we will be able to have their papers carefully scored before the final rush of answers toward the end of the contest.

Understand, it is not absolutely required that those who use our CONTESTANT'S HELPFUL OUTFIT send in their replies at once, but, in order to induce them to get in early, the following plan for enlarging the awards to those prize winners whose answers come in early is offered:

ENLARGED PRIZE LIST—$800 IN PRIZES—ENLARGED PRIZE LIST

For those who use our CONTESTANT'S HELPFUL OUTFIT.

Thirty-Five Prizes	Amt. of prize if winner sends in answers during 1st period, Feb. 1- Feb. 21	Amt. of prize if winner sends in answers during 2d period, Feb. 21 Mch. 14	Amt. of prize if winner sends in answers during 3d period, Mch. 14 April 5	Amt. of prize if winner sends in answers during 4th period, April 5 April 19	Amt. of Prize for winner who does not send in answers before April 19
First Prize	$300.00	$225.00	$200.00	$175.00	$150.00
Second Prize	200.00	175.00	125.00	110.00	100.00
Third Prize	100.00	87.50	62.50	55.00	50.00
Fourth Prize	40.00	35.00	30.00	22.00	20.00
Fifth Prize	20.00	17.50	15.00	11.00	10.00
6th to 10th 5 prizes each	10.00	8.75	7.50	5.50	5.00
11th to 15th 5 prizes each	4.00	3.75	3.00	2.20	2.00
16th to 35th 20 prizes each	3.00	2.50	2.00	1.50	1.00

To secure our CONTESTANT'S HELPFUL OUTFIT, fill out order coupon on this page and send it in to Farm Information Editor, with your personal check, money order or 2-cent stamps, for $1.00 for one year or $1.50 for three years.

You must address

THE WASHINGTON FARMER

Farm Information Editor

Review Building, Spokane, Washington.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 12 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF March 22, 1917

Milk Producers Win Brilliant Victories

Wise and Courageous Cooperation Lifts 12,000 Dairymen Out of the Slough of Distress

This is a true narrative of cooperative achievement, of the lifting of more than 12,000 milk producers out of the slough of distress and impending ruin to the heights of prosperity. The Farmer tells this story in some detail, for it considers the brilliant victory won by the milk producers' association of the Chicago district one of the most remarkable, if not the most remarkable, demonstration in American history of the benefits of cooperative organization under wise, courageous and loyal leadership.

In the light of the association's achievements all wonder ceases that at the recent annual convention in Chicago the great hosts of enthusiastic delegates cheered the speakers to the echo, "pledging their undivided support to the men whom they had elected, and doubly pledging their allegiance to the milk producers' association, declaring that they will see to it that every farmer, every farm owner and every dairyman in this great dairy district must become a member of this association."

The winter and spring of 1916 brought dark days to the milk producers of Illinois, Indiana and Wisconsin. Their product was being delivered to the distributors at prices below the actual cost of production. Thousands were discouraged and looking about for different occupations.

Then the great strike was organized, a milk board of capable and trusted leaders was appointed, with full powers of negotiation, and the association pledged its members to stand firm for an association price of $1.55 per hundred pounds average for milk delivered to the condensing or bottling plants, or $1.30 per eight-gallon can delivered in Chicago. Now, let the milk board tell its own story, as it reported its work to the recent Chicago convention:

"This soon brought about that now famous conference held at the Hotel La Salle, which was called by the health commissioner, John Dill Robertson of the city of Chicago. At this conference the Bowman Dairy company agreed to pay the price, and their milk was released at once. The Borden company took the matter under further advisement. Later that day the Bordens offered to pay the price at their bottling plants and arbitrate for their condensing plants. This was refused. The next day, Saturday, they then proposed to pay our price for April, and went so far as to send out this offer to all of their plants where we had members. This offer also was refused. Sunday forenoon word commenced to come from the Borden plants that Bordens had offered to pay the price and asking permission to sell. They were then told that if they wished to have the association recognized, it would be necessary to hold another conference with the Borden manager. This was readily consented to, and on the following day this conference was held.

"The Borden company promised to dismiss the injunction suits brought in the court of Judge Landis and also to show no discrimination to any member who had been active during the strike, and to pay the association price to all members of the association. Upon this agreement, their milk was released.

"Immediately after the Bowman Dairy company's milk had been turned over to them it was learned that they had commenced over 100 suits against our members in Kane, Cook and McHenry counties, claiming of each $10,000 damages. Some attempt was made to have them dismiss these suits, but without satisfaction.

"A meeting was called of the milk boards of the Bowman plant. This meeting was held on the following Friday in the Hotel Morrison. Almost every Bowman plant was represented. Mr. Bowman was invited, and came with his lawyer. After some preliminary talk, the roll was called and Mr. Bowman and his lawyer had the opportunity to hear direct from the representatives of their patrons just what would happen unless the suits were dismissed. The roll call was only partially completed when Mr. Bowman's lawyer arose, holding up both hands, and cried, 'Boys, don't shoot any more; we know when we are licked. If you will have a resolution passed here asking the Bowman Dairy company to dismiss these suits, they will be dismissed.' This was done, with their promise that no more suits would be started, and here ended the most successful milk strike in all history."

That settled the summer contract.

"When the time for the fall or winter contract period arrived a delegate meeting on August 22 for the purpose of considering prices was held in the First Methodist church, Chicago.

"This meeting was very largely attended, and many outsiders were permitted to come in and take part. For this reason, it was advised that the vote on the price which was taken at that meeting be not made public until canvassed by the milk board and campaign committee, and not to be made public then unless these committees thought it for the best interests of the association to do so.

"When this vote was canvassed it was found that the price voted by those who sell to the bottling and condensing plants and those who ship to Chicago in cans varied at quite a wide range. The price voted for the plants was $2.02 1-2 per 100 pounds, and the price voted for the can shippers was found to be $1.65 per can. Which, figured on the 100-pound basis less the established differential, was $2.12 1-2 per 100 pounds, as it has been the established custom to fix the price for can milk based on the price sold to the bottling and condensing plants.

"It was decided not to make these prices public, but to call another delegate meeting and exclude all except reg-

(Continued on page eleven.)

Washington Portraits No. 7.



Willis Chambers.

Willis Chambers, one of the representative farmers of Clallam county, has been farming near Port Angeles for 13 years. He has been raising a few sheep and hogs, ducks, chickens and turkeys and also doing some dairying. Mr. Chambers believes that diversified farming is best suited for that part of the state.

The next in the series of Washington portraits will be that of J. R. Ayers of Kennewick, and will be given in next week's issue of The Washington Farmer.

Ensilage Corn

Success in White River Valley

Nelson brothers, dairy and potato farmers of White River valley, report a fine yield of ensilage corn last year. This is the third season ensilage has been grown successfully on the Nelson farm, and the only complaint the brothers make is that they did not put in double the acreage they did plant. Red cob ensilage is the variety grown, and last season 15 loads of barley were added to the corn to fill the silos, two of which, each with a capacity of 97 tons, are now in use on the farm. The barley was planted in August, but was fairly mature at the time of filling the silos.

Potatoes are raised every year, and in this way, averaging the big years with the lean ones, a fair profit is secured. Both of the young men in charge of the farm are enthusiastic in regard to the testing association now being organized by County Agriculturist Rader.

"It's the biggest thing that has ever happened for this part of the country," one of them declared. "We ought to have had it years ago."

Speaking of the difference of opinion which exists among milk producers as to the relative value of roots and silage in the dairy ration, Nelson brothers state that, figuring land rent at $20 per acre and with other production costs about average, it will cost less than $3 a ton to put corn silage into the silo, and that from then on there would seem to be an advantage in ease of handling in favor of silage over roots.

Potatoes

Tendency to Plant Small Pieces

To the Editor of The Farmer: I have heard that it is possible to save the eyes for the planting of potatoes used on the table. Can you inform me how this is done and whether I can grow a thrifty plant from the same? L. B. Lopez, Wash.

The above question is answered by Leonard Hegnauer, extension specialist in soils and crops, at the State College of Washington.

In seasons when seed stock is very high, there is always a tendency to cut potatoes into smaller pieces when used for seed. Some even take out the eyes with a small amount of the fleshy part of the potato, the thickness of which is very little more than that of an ordinary potato peeling.

However, to insure strong, healthy plants, a larger seed piece is necessary in order to have plenty of food material for the little plant until it is able to get its support from the soil. The yield depends to a considerable extent upon the size of the seed pieces. If one should continue the use of very small seed pieces, or simply the eyes, he would soon lose in yield.

Snow-Kist Oranges.

D. De Jong of Lynden recently harvested a crop of home-grown oranges when the temperature was around freezing to show that Lnyden can compete favorably with southern California in this respect. Mr. De Jong raised the Lynden Snow-kist brand at his home, and the fruit is as beautiful and delicious as any that ever came up from the south.

Did It Himself

Way of Getting Back to the Land

When Leonard Gilkey, who captured the first prize for the best single farm exhibit at the land show in Seattle, began farming, six years ago, he began in the usual way—by asking the advice of his neighbors as to what he could hope to raise and how he should raise it.

"And the result was that I made a flat failure of everything," he comments. "I gained just one thing by that first year's work, and that was the certainty that I must work it out myself, and that I must do a lot of experimenting and observing before I would be able to farm at a profit. I was on the farm to stick, however—had worked as a postal employe in various cities long enough to break down physically and financially, so that at the time when we went onto our 40-acre farm in Oregon we had no capital except a little borrowed on the security of the land itself. We had to make good."

That they have done so, this city family transplanted to the country, no one who saw the Gilkey exhibit needs to be told. Everything was pioneer work, from clearing the land to selecting the best varieties of potatoes for table and market. Here is the Gilkey way of accomplishing this last task:

"I didn't like any of the varieties raised in our neighborhood," Mr. Gilkey explains, "so I sent away and secured 36 different varieties. Seventeen of these are here in my exhibit, but out of the three dozen I shall probably not keep, in the end, more than six. But those will be the six best adapted to my farm and my methods and my market."

Among roots for cow feed Mr. Gilkey has found the Long Red and the Golden Tankard mangels the best, while his "Golden Glow Dent corn" has also proved a winner. He milks from five to eight cows, which pay him about $60 a month. He considers the best feature of his move to the country to be the influence of country living on his two boys, both of whom take as much interest in the farm work as does their father.

"It was a hard pull, getting started," he admits. "But it was worth it. None of us would go back to the city to live for any consideration I can conceive."

Loan $188,000 Worth of Pea Seed.

County Agriculturist Jr. R. Shinn, assisted by the Spokane Chamber of Commerce, has secured the loan of 1,259,272 pounds of pea seed valued at $188,890 from seed companies in return for contracts for 10,000 additional acres of peas in Spokane county. The Fairfield district alone in Spokane county has 15,000 acres which will be planted in peas this year.

More Income Taxes.

A larger proportion of the population of Walla Walla county will pay income taxes this year than in any other county in the state, according to internal revenue collectors. The number subject to the tax is about 64 in 1000, the largest number of whom are farmers.

Wool Shortage Arouses Government

Effort Is Being Made by United States Bureau of Animal Husbandry to Stimulate Industry

The United States is producing not to exceed half of the wool it requires.

The European war has greatly curtailed wool production in other countries than the United States.

England and her colonies control approximately 65 per cent of the wool of the entire world, and have placed an embargo against its shipment to this or any other country.

Even the close of the war will not immediately liberate this 65 per cent for general use in this country or other manufacturing countries, for the war has so disturbed England's manufacturies that most of her available supply will be required to rehabilitate her own industries.

These facts help to explain why wool sells today in this country at prices heretofore almost unheard of; why buyers have been paying as high as 35 to 40 cents; why offers are now being made to contract this season's clip at prices around 40 cents; why the market is so keen that wool on the backs of lambs yet unborn may almost be contracted.

Government Alert.

They also explain in some degree the rapidly spreading interest in the wool growing industry as indicated by the government's attempt to stimulate sheep production and the improvement of the wool grown by a "demonstration" car, conducted through the sheep growing states by experts of the federal department of animal industry and of the agricultural colleges throughout the country.

The government's demonstration car is now in the state of Washington in charge of Virgil O. McWhorter of the federal department, and C. E. Howell of the state college of Washington. Demonstrating at Pullman last week, Colfax, March 19; La Crosse, March 20; Dayton and Waitsburg, March 21, and Walla Walla, March 22, these men will conduct the car and its educational equipment through the state during the remainder of this month as follows:

Pasco—March 23, 8 a. m. to 11 a. m.

Kennewick—March 23, 11:07 a. m. to 9:33 p. m.

Prsser—March 24, 8 a. m. to 10:49 p. m.

North Yakima—March 26, 8 a. m. to 10 p. m.

Ellensburg — March 27, 8 a. m. to 10:10 p. m.

Sunnyside—March 28, 9:20 a. m. to 4:10 p. m.

Grandview—March 28, 4:30 p. m. to 9:55 a. m., March 29.

Toppenish—March 29, 10:52 a. m. to 3:05 p. m.

Connell—March 29, 6:15 p. m. to 12:15 p. m. March 30.

Ritzville—March 30, 2 p. m. to 7:50 p. m.

Sprague—March 31, 8 a. m. to 2:50 p. m.

Cheney—March 31, 3:50 p. m. to 9:25 p. m.

Wool Science.

The object of the wool car is not only to stimulate interest in wool production with a view to increasing the quantity, but to educate growers so that they may prepare their product for market in a manner that will entitle it to top prices and insure a better grade of manufactured goods from it.

"Persons familiar with the buying and manufacturing of home-grown and foreign wools assert that on account of poor preparation American wools net the growers from one to three cents a pound less than their actual value," declares a writer of the federal department. "This is due to failure to classify the wool before selling and to defects from the use of improper twine, branding paints and other minor causes."

The demonstration car carries six head of sheep, with samples of wool corresponding to each; samples of several grades of wool under microscopes so that those interested may learn more readily the differences between the grades; graded and nongraded packs, to show the advisability of proper packing before shipment to market; charts and tables showing essential facts and points to be kept in mind in the production and handling of wool; samples of woven goods, to illustrate the effect on the finished product of certain methods of handling the wool or of certain grades of wool; and a model of a properly built and equipped shearing shed for use in localities where there are as high as a few thousand sheep to be shorn.

Moving Pictures.

The car also carries five reels of motion picture films for use in "free movies" at each place visited. These films show the production of sheep and the handling of wool, all operations from the lambing quarters to the department store where the woolen goods are on sale.

Determining Factors.

Wool is graded upon three main factors—length, strength and fineness. It is not always true, however, that the fine wools are most profitable, for the coarse varieties shrink much less in the scouring process. They therefore sell in the "grease" state frequently as high as the finer wools, but after being scoured usually bring a price several cents lower than the price of the scoured fine wools.

Weak Wool Undesirable.

Wool is greatly influenced in quality by the condition of the sheep just prior to shearing time, say the government experts. Sheep in poor flesh produce neither as heavy fleeces nor as high quality. Illness or suffering from sudden feed shortage or bad weather tend to make the wool "tender," or of insufficient strength and elasticity.

Grade in Shearing Sheds.

It is more common than otherwise, Mr. McWhorter told visitors to the car at Colfax, for growers in western territory to sack their wool up without regard to the character of the different fleeces, putting, therefore, sometimes two or three or more different grades into one sack. Buyers either must examine each sack or buy for a price that will protect them against the chance of discovering inferior quality when the sacks are opened later.

For this reason, grading should be done at the time of shearing.

Each fleece should be examined and graded separately. This is more difficult on the small farms than in localities where there are a few thousand sheep, as in the latter case it is possible to secure an expert to follow the shearers as they proceed from flock to flock. But it is possible for even the small sheepman, though inexperienced, to improve greatly the value of his clip by care in regard to shearing, assorting and sacking. The following are rules which the federal department recommends to all sheepmen, whether producers of large numbers or small, as an aid to improving the quality and value of their wools:

1. Adhere to a settled policy of breeding the type of sheep suitable to the locality.

2. Sack lambs', ewes', wethers', and all buck or very oily fleeces separately. If the bucks or part of the ewes or wethers have wool of widely different kind from the remainder of the flock, shear such separately and put the wool in separate sacks so marked.

3. Shear all black sheep at one time, preferably last, and put the wool in separate sacks.

4. Remove and sack separately all tags, and then allow no tag discount upon the clip as a whole.

5. Have slatted floors in the holding pens.

6. Use a smooth, light, and hard glazed (preferably paper) twine.

7. Securely knot the string on each fleece.

8. Turn sacks wrong side out and shake well before filling.

9. Keep wool dry at all times.

10. Make the brands on the sheep as small as possible and avoid tar brands.

11. Know the grade and value of your wool and price it accordingly.

12. Do not sweat sheep excessively before shearing.

13. Keep the floor sweepings out of the wool.

14. Do not sell the wool before it is grown.

15. When all these rules are followed place your personal brand or your name upon the bags or bales.

Sliding Scale

Of Wages for Help on the Farm

Not long ago the Farmer published an article from Dr. E. A. Bryan, former president of the Washington State college, proposing a sliding scale of wages for the all-year-round hired man on the farm. Starting with the four months from the middle of June to the middle of October, the period of greatest demand and highest priced labor, Dr. Bryan suggested $60 per month; $50 per month from the middle of March to the middle of July, and $40 per month from November 15 to March 15.

This is on the basis of $600 a year, or an average wage of $50 per month, the employe to board himself. In addition, he is to have the use of a cottage and small garden, some fruit from the orchard and possibly a pig or two.

The same wage scale would work out for $480 per year as follows: Four months at $48, four months at $40 and four months at $32.

With regard to this article of Dr. Bryan's the following letters have been received:

Used Plan for Ten Years.

To the Editor: Replying to your letter of February 21, requesting my opinion on the year-round farm labor, will say we have found the plan as suggested a good one; in fact, we have practiced it for 10 years and have no labor troubles. Each employer must figure the rate for each season to fit his proposition. We grow grain, hay, alfalfa, hogs, cattle, sheep and horses. We keep several men all the year round. Pay all according to ability and season; often refuse to permit men to work for their board during the winter months. If an employe is married we furnish him supplies at cost to us, allow a reasonable amount of fruit and vegetables, try to treat them like men, feed them well and wish we could do more for them, as their road is not a smooth one.

D. S. WALLACE.

Lewiston, Idaho.

Writer Likes Dr. Bryan's Plan.

To the Editor: Received copy of your paper with Dr. E. A. Bryan's proposition of a yearly price for farm hands. I think his plan very reasonable, indeed if one could get good farm hands at the price he states ($50 a month and board themselves at present food prices) we would be in clover. We pay, in this locality, $40 per month for the average man, and $50 and as high as $60 for an all-round man who can take full charge of the work and stock.

I am quite sure he is right as to giving the hired help a comfortable place to live, a garden, cow to milk, and, in fact, make him feel as near one of the firm as you can possibly do so, and still keep him in his place.

I have worked by the month myself and claim to know how to appreciate a good boss, and I think the average farm hand will respond to proper treatment from his employer.

I have lived in Idaho for 16 years, came from Chenoa, Ill.; have been raising purebred Shorthorn cattle, Percheron horses and purebred Poland China hogs, grain, hay and clover seed, and find my work very profitable.

W. F. HOWARD.

Parma, Idaho.

Chance to Buy Shares.

To the Editor: I think the general wages for farm labor are about high enough. Here they are $45 per month. We do not need hard labor very much in winter months, but I think the best way would be to give the regular labor harvest wages during harvest season. Then there could not be any chance for a kick.

As for a man with a family working for wages, the best way would be to give him a chance to buy a share in the stock and implements—say one-half interest. Take a mortgage if the tenant does not have the money to pay; then let the man put his labor up against the land. In that way he will have an interest in the work and will take care of the stock and implements, also the land upkeep. This is my view of the situation. It may not be of any help to you, but, anyway, this is my view.

W. J. BLANCHETT.

Quincy, Wash.

Tell Us What Has Been the Most Interesting Experience in Your Life

The glimpse from the life of a little 10-year-old girl in the Family Circle department of The Farmer this week is an example of the experiences of one kind or another that all of us have—won't all of you join our Experience Circle and tell us some of the things that have happened to you in your own life?

We will be glad to publish what you send for the entertainment and enjoyment of other readers.

This means boys and girls—young men and young women—and parents—every reader who has had some interesting experience, no matter whether it happened last week, last year or in the golden days of the long ago.

Wheat Is Lost

Through Activities of Submarines

Wheat belonging to M. H. Houser of Portland, well-known grain man of the northwest, has been lost on sinking vessels to an amount of about 150,000 bushels during the winter, according to reports compiled.

It is stated unofficially that during the period in which this grain was lost Mr. Houser had exported nearly 13,000,000 bushels. This is taken by some to indicate to some degree the insignificance of the submarine campaign, as the percentage of loss sustained by this one exporter is slight. The greater part of the exportations, however, were prior to the renewal of the submarine campaign February 1.

Sweet Clover and Alfalfa.

Arrangements have been completed by County Agriculturist O. T. McWhorter for a test crop of sweet clover and alfalfa in the district west of Port Townsend, Jefferson county.

Our Duty to Smoke Out Swindlers

Shameful Effort Is Made to Shield C. B. Kegley at Expense of the Grange and Its Members

The Grange News, which is the organ of C. B. Kegley, is trying to make it appear that the government's good work of running down and convicting the swindling officers of the plundering Northwestern General Trading company, and exposing Mr. Kegley's connection with the swindlers, the United States government was in some sort of a "conspiracy" to attack and discredit the Grange.

In other words, that the United States officials who gathered the evidence, the United States grand jury that indicted the swindlers, the jury who convicted them after a fair trial in the federal court, and even the federal judge who presided at the trial, had a dark, deep design to strike at the whole Grange organization and the Farmers' Union. What consummate nonsense!

This coupling by Mr. Kegley's organ of the rank and file of the grange membership with the disreputable coterie that filched hundreds of thousands of dollars out of the pockets of the farmers of the Pacific northwest is an outrage. The grange membership is made up of honest, straightforward, hard-working men and women who had nothing in sympathy with the tricky operators of the Northwestern General Trading company.

Mr. Kegley and some of his appointees are also circulating a ridiculous assertion that the Farmer is unfriendly to the Grange because it printed the news about his connection with and endorsement of the swindling Northwestern General Trading company.

That assertion is utterly false. The Farmer has the highest regard for the Grange and the Farmers' Union and will ever be found working for their best interests.

The disreputable Northwestern General Trading company and its convicted officials and their stock-selling boosters are not the Grange or the Farmers' Union, and it is outrageous that this shameful effort is made to shield Mr. Kegley at the expense of the Grange and its members.

It is to be expected that the appointees and adherents of C. B. Kegley in the grange will be pushing resolutions prepared by themselves through the grange, declaring the utmost confidence in Kegley's integrity and in his ability to guide the order and denouncing those who have aught to say in exposing the flat-footed indorsement of the swindling Northwestern General Trading company by declaring that the indorsement was made at a time when the company was supposed to be solvent and on a firm basis.

The cold fact of the flat-footed indorsement remain:

> Patrons of Washington:
> Your executive committee has made a personal investigation of the resources and liabilities, methods of business and quality of merchandise of the Northwestern General Trading company. We are satisfied that it is on a sound financial and cooperative basis, and through the proposed plan of a distributing center with each subordinate grange, and the active cooperation of the patrons, can be made to fill the need of the wholesale supply house for the grange members.
> Executive committee, Washington state grange.
> C. B. KEGLEY.
> J. O. WING.
> J. T. COMPTON.

As to the nature of the examination into the affairs of the Northwestern General Trading company, Mr. Kegley himself testified under oath in the United States court in Spokane:

"Did you examine the books when you were at the Trading company's store for two or three days?" inquired Attorney Garrecht on cross-examination. "It was impossible. We simply took the reports of the accountant, Wilson, Mr. Lawrence and Mr. Delivuk," said Kegley.

"You made some investigation into the Northwestern?" "Yes, I was a member of a committee from the state grange, along with J. O. Wing and J. D. Compton, who investigated it in 1914. We came to Spokane for that purpose, and stayed here three days, and were shown over the store by Mr. Lawrence, who exhibited the Wilson

(Continued on page seventeen.)

State Gets Market Bureau

Governor Signs Bill Passed by Legislature

Governor Ernest Lister has signed the Metcalf bill passed by the recent legislature creating the office of state director of farm markets.

While the practical value of the present measure remains to be proved it constitutes a step of far-reaching possibilities on the part of the state in improving marketing conditions.

The bill was prepared by Senator Ralph Metcalf of Tacoma, who was a member of the commission which went from this country to Europe three years ago to make a study of rural credits and marketing systems.

Has a Preamble.

The measure is unique in legislation in that it begins with a preamble, which reads as follows:

"The production and marketing of farm products is hereby declared to be a matter of public interest and a proper subject for investigation, encouragement, development, regulation and control of the state."

The bill then provides for the appointment of a director of farm marketing by the director of the agricultural experiment station of the state college, with the consent of the governor. He shall be appointed to serve at the pleasure of the director of the experiment station. He shall receive a salary of $3000 a year and his expenses in the conduct of his office shall be borne by the state.

Fifteen thousand dollars is appropriated by the bill for the work of the new department during the present two years.

Duties and Powers.

"It shall be the duty of the director to investigate and promote, in the interest of the state, economical and efficient distribution of all farm products, for this purpose cooperating to the fullest extent practicable with the United States department of agriculture and with other agencies of the federal government of this state and of other states engaged in similar activities. He shall have power:

"(a.) To maintain a market news service by publication of bulletins and through newspapers, giving information as to prices, available supplies of different farm products, demand in local and foreign markets, freight rates and any and all other such matters of interest to producers and consumers.

"(b.) To aid and assist producers and consumers in establishing economical and efficient systems and methods of distribution, in promoting more direct business relations through the organization of cooperative societies of sellers and buyers, and in every practicable way to reduce the waste, expense and cost of marketing, that the producer may secure more adequate returns and the consumer a lower cost of food products.

"(c.) To investigate the methods of commission merchants and of all others who buy, sell, handle on commission or otherwise, or deal in farm products, to the end that distribution of such commodities in this manner may be efficiently and economically and honestly accomplished. In such investigation he may hear complaints and suggestions, and shall have power to visit the place of business of any individual, firm, corporation or association, and examine under oath such individuals and the officers and employes of such firms, corporations and associations for the purpose of obtaining accurate information. If the director shall find legislation necessary for the regulation of such distribution of farm products he shall recommend such to the governor not later than the 15th of November of each even numbered year.

"(d.) To investigate the feasibility of direct dealing between producers and consumers through the agency of the parcel post and the employment of mail order methods.

"(e.) To receive applications for farm help and for employment in farm work, assisting in bringing the job and the man together without expense to either employer or laborer, and to this end to cooperate with the authorities of the United States, the state or municipalities that may be engaged in similar work.

"(f.) To investigate transportation of farm products, methods, delays and charges, and advise and assist producers in relation thereto."

Babcock Tester in School.

A Babcock tester has been secured for the Arden school, Stevens county, and it is planned to do class work in testing, with instruction in care of milk, cream and butterfat, together with the rudiments of farm accounting and bookkeeping. Foods and feeding will be given attention, with an effort to have the pupils do some direct experimental work at their own homes.

Drainage Project.

County Agent C. F. Monroe has been aiding those interested in a drainage project comprising several hundred acres north of Satsop, Grays Harbor county.

Pea Crop Over $1,500,000

Oats and Peas Make 20 Tons Silage Per Acre

County Agriculturist J. R. Shinn astounded the members of the Inland Empire Development league, which met in Spokane Monday, with his recital of the pea industry of Spokane county. He declared the crop this year would be around 40,000 acres and worth between $1,500,000 and $2,000,000. He found oats and peas sometimes made 20 tons of silage and that wheat made about the same in some cases. Sweet clover is another crop Mr. Shinn is boosting, and he also is inclined to the belief that the growing of clover might do away with smut in grain.

Gets $12,000 from Land Once Idle.

A pea crop is worth from $40 to $50 an acre, Mr. Shinn, said. He advocated growing the crop instead of summer fallowing. He cited one example of a man who got a $12,000 crop from land that previously had lain idle. He placed great stress on inoculation of the seed. Without this he would not expect success.

W. W. Skuse, in charge of the boys and girls' pig and canning clubs gave an illustrated talk on his work. Lamb and legume clubs will be added this year.

S. E. Hege, who had been elected president of the league, presided. Harold Hooker was elected secretary.

Gets 1056 Land Inquiries.

The report of the secretary showed 1056 inquiries for land had been received since January 1. They covered nearly every state, but California led with 100, North Dakota came next with 94, and then in succession came Montana, Iowa, Minnesota and Illinois. Generally speaking they came in largest numbers from the northern tier of states. Saskatchewan sent 68, and Alberta 31.

The report showed these inquiries had been obtained largely as the result of advertisements placed in publications at a cost of $331, or an average of 3 1-3 cents each.

Interest centered in the talk by T. L. Greer, manager of the land department of the Humbird Lumber company of Sandpoint, Idaho. He told how they had sold 12,000 acres of cut-over land last year.

Lauds Chamber Farm Pamphlet.

The talk by Mr. Greer was listened to with keen interest, and the note of "satisfied settler" which he sounded met with hearty applause. He declared the pamphlet, "A Farm Home for You," put out by the chamber of commerce, was the best publication of the kind he had seen. The fact that real estate men in his section willingly took space in the booklet this year was the best evidence of its value.

"Land speculation is as bad as any other kind of speculation. We are not in the speculation business; we are merchandizing. Mr. Humbird makes me feel that my problem is to get a satisfied settler, and my success depends on that. The satisfied settler will sell the land for us. If I learn that a man is not satisfied I get him out quickly, and I get him out by getting another man to buy him out. We usually find a man concludes he is satisfied as soon as he finds he can sell.

"The community interest is the big thing. We want to get the community interested largely in the same thing.

Women Must Be Contented.

"We have the problem of satisfying the women. If they are satisfied the men usually are, but you can't do anything with a dissatisfied woman. We have the problem that people don't want to go into a community unless there are roads and schools, and we can't get these things until we have the settlers to justify them, we are told. So we must gradually work along. A vacant shanty is a drawback to getting settlers, so we try to avoid that. It means the man is a misfit.

"Some of our land costs $100 an acre to clear, but I have known crops worth $100 an acre to be raised the first year. Of course there is a big demand with us, and prices are high."

A. M. Harris of Newport, Wash., told of the interest being taken in dairying. They had received benefits from the league. He said the creamery they had established could not supply the demand. Stock was taken at $25 a share to finance it, and there had been no loss.

F. W. Fitze of Coeur d'Alene told of their success in establishing a creamery. He said they had no sooner started than a certain element in Spokane began to knock it. He hoped the Spokane Chamber of Commerce could do something to prevent a repetition of such things. He told how the commercial club of his city sponsored the plan and helped the farmers buy the cows.

Professor N. C. Jamison of Washington State college told of the work of cow testing associations. There are 400 such organizations in the United States and 17 in this state. The work was merely that of keeping books to find which cows were profitable. The feed is weighed, the milk tested and weighed, and the profits ascertained. The owner can eliminate those that do not pay. The association hires a man who makes this test once a month. In one association out of 600 cows it was found 100 were losers. He estimated that out of 25,000,000 cows in the United States 8,000,000 were losing money to their owners.

T. S. Griffith asked him about the value of apple pomace for feeding dairy cows, and he said it was valuable feed in connection with other feeds.

Federal Land Banks Will Charge Farmers Five Per Cent Interest

The farm loan board announces that the interest rate on all loans made to farmers throughout the country by federal land banks will be five per cent.

A rate of four and one-half per cent on bonds to be issued by the land banks also is officially announced.

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Leadership That Rings True May Be Found in the Pacific Northwest.

It will help every farmer to read and study the illuminating report in this issue of the methods and achievements of the organized dairy farmers of the Chicago district.

> "It became our good fortune," says the secretary of that victorious association, "to demonstrate to the whole world that the farmers can, will and did stick together solid enough to go out and for the first time in the history of the dairy industry bargain their product."

If we analyze this remarkable fight and victory we find that success turned on two controlling factors—the loyalty of the members and the intelligent devotion of their leaders. Character of leadership was everything.

It is safe to say that these leaders were not playing politics. It is safe to say that they were not giving their time and thought to boosting stock-swindling schemes like the Northwestern General Trading company. Instead of aiding a coterie of unscrupulous jobbers to plunder their members out of hundreds of thousands of dollars sunk in worthless stock, as was done by C. B. Kegley, master of the state grange, and L. C. Crow, president of the farmers' union, the Illinois leaders were indefatigable in the praiseworthy work of enriching their members—making life more pleasant for the wives and children out on the farm, and inspiring thousands of farm producers with new zeal, courage and love of their great industry.

Surely, leadership of this true quality may be found in the Pacific northwest.

The Real Foundation

Dean E. J. Iddings of the animal husbandry department of the University of Idaho sounded a keynote at the recent live stock convention in Spokane when he declared that the actual foundation of the live stock herd was neither the sire or the dam, but "the man behind the herd." His sentiments were echoed by others among the speakers.

Success in any line of endeavor depends in no small part on whether the person in that particular line is in sympathy with it. This is doubly true with the live stock business. No man can succeed with cattle unless he likes cattle. No man can succeed with horses unless he likes horses. Desire for profit is not enough. There must be human sympathy from which must go a kindliness in treatment that wheat-growing or lumbering or merchandising does not require.

One Hundred Per Cent

The report of a cooperative creamery in Washington shows that during the last year it made 100 per cent gain over the previous year. That is, it took in twice as much money and paid out to its members twice as much.

This is a splendid showing, but no one should be deceived by it into believing that all there is to do to double profits is to start a cooperative association.

Cooperation must have time to develop. It does not grow to success in a night or a year. It is new to most people, and the methods which are necessary are not well received by some members at times. A hard struggle and a patient waiting is needed to develop cooperative spirit.

Common School of Agriculture

A serious gap exists in the chain of practical country education. Our higher schools, our agricultural colleges, are doing a wonderful work. In the grade schools of the country and in some of the cities the seed of agricultural interest is being sown in childish minds. But between these extremes, this beginning and completion, there lies a field of immense importance; there should be available for every farming community a common school of agriculture, open to big boys and girls and to their fathers and mothers alike; a place where no human being is barred by entrance requirements, other than the ability to read and write English and the desire to learn.

As far as possible this school should be held in connection with an experiment station, and it should be open 12 months in the year to those men and women who need more than the smattering of farming lore offered by the present country school, but who are not in a position to enter an agricultural college for even a three-month continuous course. It should be possible for these farmers of today, the men and women who are now on the land, to avail themselves during spare hours of that great body of knowledge already available for the farmers of tomorrow, the boys and girls who can take a three or four year course.

The Family Garden.

The possibility of the farm garden is more often overlooked than recognized. It is too frequently not developed on a well-thought-out plan. It is too often looked upon as of little or no consequence.

The truth about it is, however, that it can be made one of the most profitable parts of the farm. Not that it will bring in much cash. Usually it would bring in very little. But it would, if properly planned and worked, produce "good things to eat" for every month in the year. By judicious use of a hothouse certain of the early vegetables may be ready for use almost as soon as the snow is gone. Others may be made to follow as the season develops. The same vegetable may be made to cover a considerable portion of the summer by planting at intervals. Late varieties may be ready for use in the fall, and some may be stored away in the cellar or root house for use during the winter. Half an acre of good land dedicated to a garden is a profitable venture.

The Egg-Laying Contest

The holding of egg-laying contests was a first step in the right direction, in that it recognized poultry as a commercial factor. When we consider that poultry products are worth $600,000,000 a year in the United States we must recognize that laying contests are valuable, for they stimulate economical production.

The all-northwest contest at Pullman has greater value than others because it is held for a year, and this gives a fairer test of real quality.

But after it is over we shall not expect the results to prove absolutely the superiority of any one breed over others. We have a number of good breeds and they are worthy of preserving. But there is room for improvement in every breed and this is far more important than it is to try to place one breed over another.

There are thousands of acres of land in the towns of this country in the form of vacant lots and back yards that should be put to work growing something useful. Likewise, there are thousands of acres of fence corners, ditch banks and the like on the farms of the country that years of idleness have made peculiarly ready to produce crops of real value.

Nature establishes a balance when nobody interferes.

Washington Gleanings

The organization of a Clarke county potato growers' union has been effected.

Dairymen in Clarke county have organized and will register their cows for a testing association.

First wool clips sell at 40 cents. The 1917 market at North Yakima opens 10 cents higher than last year.

The can department of the Pacific American Fisheries company of Bellingham expects to turn out 115,000,000 tin cans this year.

There has been a big jump in Yakima valley shipments. The increase this year is estimated at 10,000 more carloads than last year.

In order to encourage songbirds to locate in Olympia, students in the manual training department of the Olympia schools will build birdhouses.

C. W. Rearick of Kelso, Cowlitz county, has applied for a patent on a new potato planter. The new machine is said to have been a success in trials at Kelso.

The Silver Creek National Farm Loan association was formed at Silver Creek, Lewis county, recently with about 13 members, and they will ask for over $20,000.

Stanley Coffin of Coffin Brothers, Yakima county sheepmen, has purchased 200 purebred Romney sheep in Australia, according to a cablegram received by his brother.

A. J. Hosler, a recent arrival from Ohio, has purchased the Durkee farm of 467 acres, three and one-half miles northwest of Pullman, paying $43,199.50 for the place.

Mrs. Mary Goff of Littell, Lewis county, has leased her 137-acre farm to Harvey Schultz, who will engage extensively in dairying. He has just received a carload of Holsteins.

The 10th national farm loan association in Yakima county has been organized by farmers in the Moxee district. Applications for loans aggregating $31,500 were applied for at the first meeting.

County Agricultural Agent C. F. Monroe of Snohomish county reports to the state college that in the last year 22 silos, with an aggregate silage capacity of 1600 tons, have been built in his county.

Organizations of the prune and potato growers of Clarke county have been completed. The prune men will issue recipes for cooking prunes in various ways and will start a nation-wide publicity campaign in behalf of the Clarke county prune.

Sheep shearing will begin generally in the Yakima valley in the last week of March and continue in full swing for about a month. This includes the section from North Yakima to the Columbia river. In Kittitas county the shearing will run a month later.

Tracts aggregating 10,000 acres of timber, grazing and irrigable lands on the Klamath Indian reservation are to be put on sale. The land generally sells around $10 an acre. The Indians now have 11,000 acres under irrigation and 140,000 acres more can be irrigated.

What Others Say

Ohio Farmer: The general farmer should take more interest in poultry than he does.

Southern Agriculturist: To provide a living at home is safety whatever the weather or the war may be or do.

Kimball's Dairy Farmer: Never was it so advisable, so necessary, to grow large yields of all farm produce as now.

Farm and Fireside: Successful farming is largely a matter of good judgment and of "taking time by the forelock."

The Farm Journal: Those who have been contending that women would not know what to do with the ballot if they got it, have another guess.

Savings and Farm Loan Bonds

Important Feature of New System Has Been Generally Overlooked

By N. W. DURHAM, Chairman Spokane Committee of Federal Farm Loan Board

When the federal farm loan board was in Spokane I discussed with Commissioner Charles E. Lobdell, one of its members, an interesting feature of the new system that has been generally overlooked in all articles and utterances that I have read on this subject.

That is the savings feature of the law—the plan whereby thrifty people remote from banks, and this includes the farmer boys and girls, will be encouraged and aided to save up their dimes and quarters for the purchase for farm loan bonds.

These farm loan bonds, as I have previously explained, will be exempt from all taxation—national, state and local—will be secured by farm land mortgages, dollar for dollar, and will probably bear 4 1-2 or 5 per cent interest.

"I consider this one of the most beneficial provisions of the law," said Commissioner Lobdell, "and believe that it will have a far-reaching influence on national thrift. I look forward to a day when hundreds of thousands of farmers' wives, and farm boys and girls as well, will be saving up their pennies and dimes to buy a $25 bond."

I suggested that it would be a fine thing for the schools to take up.

"Yes," said Mr. Lobdell somewhat reluctantly, "that is, provided it could be done in a way not to embarrass poor boys and girls who might be unable to acquire a bond. I was a poor boy myself and have not forgotten how keenly these distinctions are felt.

"Could not that difficulty be overcome," I asked, "if the schools merely encouraged pupils to acquire bonds with their own earnings?"

"I think it could," he replied, "and the influence on industry and thrift would be very great. Boys and girls would be alert to find various ways of earning little sums."

The provision of the law that encourages savings and their investment in bonds is found in section 11, defining the powers of national farm loan associations. Power is granted each local association—

"To issue certificates against deposits of current funds bearing interest not longer than one year at not to exceed 4 per centum per annum after six days from date, convertible into farm loan bonds when presented at the federal land bank of the district in the amount of $25 or any multiple thereof. Such desposits, when received, shall be forthwith transmitted to said land bank, and be invested by it in the purchase of farm loan bonds issued by a federal land bank or in first mortgages as defined by this act."

Suppose, for illustration, that a farmer's wife or daughter acquires a dollar by the sale of eggs, butter or vegetables; or a farmer's boy sells a pig of his own raising or earns a dollar or more by working for a neighbor, they can deposit their money with the local association and receive a certificate therefor.

The secretary-treasurer of the association sends that money, along with the savings of others in the community, to the federal land bank at Spokane.

When an individual has acquired $25 worth of certificates he exchanges it for a $25 bond, and he can go on in the same way acquiring additional bonds.

Or the plan can have much larger application. A farmer, for instance, who sells his wheat crop for thousands of dollars can invest the money in bonds. Or one who sells a calf for $15 can quickly and without cost take out a certificate for that amount. It is expected by the farmers of the law that this feature will develop great popularity and be put to very extensive use.

Liability for Losses.

John Woolever writes from Lantz, Wash.:

"In your reply to Norris Johnston, Council, Idaho, you say: 'This means that each member of the (farm loan) association is held liable to the extent of 10 per cent of his own loan, and no more. If his own loan is $100 and if losses result from a loan made by his association his $50 of stock may be taken toward making good that loss. If that should prove insufficient he could be assessed—another $50. After that his liability would cease.' We also think you should let the poor fellow up, after you get all he's got.

"Again: Ten members (our whole association) want $100 each, and no more, for which we offer 1600 or more acres of average, unencumbered farm land as security. You tell us we can "borrow as little as $100," but in order to get this we must borrow $2000 each to satisfy the demand of $20,000 or continue as we are, paying 8 per cent to 10 per cent. Why this unreasonable demand of $20,000? Is it possible that our Uncle Samuel can't see so small a loan as $1000? There must be a reason for this inconsistency. Please explain. We say finally; we will think, till we know better, that the "$50," above is a typographical error."

Mr. Woolever's confusion arises from a typographical error. The phrase "if his own loan is $100" should have read "if his own loan is $1000." A member of a farm loan association can not be held liable for possible losses beyond 10 per cent of the sum he himself has borrowed.

The $20,000 requirement is reasonable, all things considered. A farm loan association could hardly be justified on a smaller basis. Your remedy is to get more members into your association.

Add to Whitman Forest.

President Wilson, on recommendation of Secretary of Agriculture Houston, has issued an order adding 50,000 acres to the Whitman national forest in Oregon, much of which is privately owned lands, mainly on the divide between the John Day, Powder and Burnt rivers.

$1150 F. o. b. Racine
Mitchell Junior—a 40 h. p. Six
120-inch Wheelbase

Mitchell SIXES

$1460 F. o. b. Racine
7-Passenger—48-Horsepower
127-inch Wheelbase

Mitchell Junior—$1150

Now Added to Mitchell Line

Many buyers prefer a 5-passenger car. Such a car has ample room with a 120-inch wheelbase. Few such cars are that long. And a 40-horsepower motor gives them ample power.

To meet that demand we build Mitchell Junior, which sells for $1150. It is our big, 7-passenger Mitchell in a little smaller size. So you now pay only for the room and power you need.

Saving Every Waste

Note how John W. Bate, our efficiency engineer, is saving every waste. These two Mitchell sizes form a new example.

He has built and equipped here a model plant, which now covers 45 acres. It is designed to build the Mitchell at the lowest factory cost. About 98 per cent of the Mitchell is built under his methods. Our factory cost has been cut in two.

Our new body plant this year brings another big saving—hundreds of thousands of dollars. Nowhere else in the world could a car like the Mitchell be built at so low a cost.

Extras That Result

These savings show in Mitchell extras. There are hundreds in the car.

There are 31 features which nearly all cars omit. And each is a thing you'll want.

There is 100 per cent over-strength in every vital part. Over 440 parts are built of toughened steel. Many parts are oversize. Steering and transmission parts are built of Chrome-Vanadium. The gears we use are tested for 50,000 pounds per tooth.

There are springs which never have broken — the Bate cantilever springs. In two years of use, on many thousand cars, not a single leaf has broken.

There is beauty and luxury which few cars can afford. This year alone we add 24 per cent to the cost of finish, upholstery and trimming. Our new body-plant savings pay that.

See These Extras

Before choosing a car for years to come, learn what these extras mean. See the 31 features—like a power tire pump—which hardly a car includes. See the beauties and luxuries which distinguish the Mitchell.

The vast over-strength, in all probability, means a lifetime car. It means safety, low upkeep, small repairs.

See what Mitchells give as compared with cars built in wasteful ways. The facts are bound to win you to the Mitchell.

If you don't know our nearest dealer, write us for his name.

MITCHELL MOTORS COMPANY, Inc.
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TWO SIZES

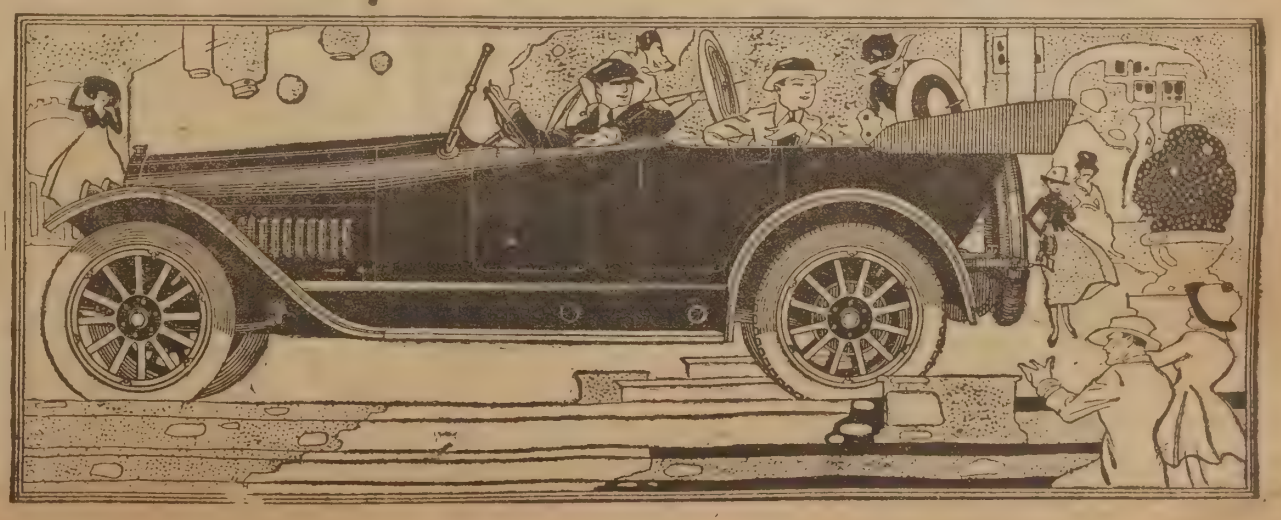
Mitchell—a roomy, 7-passenger Six, with 127-inch wheelbase. A high-speed, economical, 48-horsepower motor. Disappearing extra seats and 31 extra features included.
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Mitchell Junior—a 5-passenger Six on similar lines, with 120-inch wheelbase. A 40-horsepower motor—¼-inch smaller bore than larger Mitchell.
Price $1150, f. o. b. Racine

Also all styles of enclosed and convertible bodies. Also demountable tops.

Mitchell, Lewis & Staver Co., Pacific Northwest Distributors.

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Hybrid No. 123 Unsatisfactory

Klickitat Man Says Smut Is Great Trouble With Hybrid Wheat; Forty-fold Retains Lead in that Section of the State



BICKLETON, Klicitat county, Wash., March 10.—Spring has not arrived yet; the snow is mostly gone, but it freezes hard nights. No spring work is being done yet with the exception of two weeks' plowing in February. The leading products here are wheat, barley, sheep, cattle, hogs, horses, oats, hay, potatoes and poultry. Grain and live stock are increasing yearly in importance. One kind of wheat, hybrid No. 125, has not proved a success here. It smuts worse than other wheat and but very little is raised any more. Fortyfold and bluestem are the favorite. Some Arcadia is raised with good success. I think the coming season is promising for most everything except fall grain at the present time, and it is doubtful whether it will make a stand or not. Farmers are getting excellent prices for their products, but when they buy anything it takes all the profit to pay for it, so it is about a stand off.

BERT H. FAULKNER.

Conditions Are Normal.

CHEHALIS, Lewis County, Wash., Wash., March 5.—Fall plowing is done in September, October, November or December, according to the weather conditions and the inclination of the farmer. There is plowing in the spring sometimes as early as January, with seeding from February to June. There is no summer fallowing, as in eastern Washington. Dairymen cut some hay in June, but, owing to weather conditions, it is not usually safe to cut hay until early in July. Wheat and oats are harvested in August and early September. Corn for ensilage is ready in September and October. The spring is a little late, but as considerable plowing has been done, conditions will be about normal. We have few fall crops. A little wheat is fall-sown and green feed for milch cows is sown in September and the two following months. So far as noticed the fall crops are in usual condition. J. C. BUSH.

Season About Normal.

STEVENSON, Skamania County, Wash., March 1.—Some snow is on the ground and the weather is cold. The season is about normal and March is coming in about as usual, clear, with some wind. Considerable plowing was done during the mild weather in February, but no seeding as yet. No summer fallowing has been done in this section. March is generally the month when gardens are made and the crops planted here, such as oats and potatoes. We have had a very fine winter and the season is about our usual one.

W. T. JACKSON.

More Apples Grown.

OMAK, Okanogan county, Wash., Feb. 26.—The 10 leading products in this county are horses, cattle, hogs, sheep, poultry, fruit, wheat, corn, potatoes and alfalfa. Live stock is the leading industry. In the lower altitudes fruit is in the lead. Fruit is rapidly increasing, also poultry and dairying. There are several successful dairies in the county. All conditions seem to favor successful crops. On account of the new trees coming in bearing it is estimated that the apple crop will be 100 per cent larger than last year.

J. O. WOODS.

Cattle Lead in Okanogan.

TWISP, Okanogan county, Wash., March 8.—It is a question which is in the lead in this county, the beef or dairy cattle. We know beef cattle are found in larger herds, but the greater number of herds are dairy cattle and it is hard to tell which is in the lead. Alfalfa is about next in importance, while fruit growing takes fourth place. Great interest with attractive profits are connected with the fine horses raised in this county. More people depend on poultry for their groceries and pin money than any other product. The wheat business seems very flattering just at present. Oats are a staple crop of much importance. The hog man is playing lucky now and several of them are found here. The humble spud is grown with great success and at present, in commercial value, is almost equivalent to legal tender. The indications are that the coming season will be a very promising one for this season.

GEORGE LA RUE.

Pay for What You Want.

CASTLE ROCK, Cowlitz County, Wash., March 3.—Weather conditions in this county have been backward this spring in the lower region of the Cowlitz river and its tributaries in the valleys which have for a soil formation what is known as the sandy loam. Plowing is generally done in the late fall and winter months, giving plenty of time for preparing the ground for sowing and planting the crop, and if done properly will give plenty of time for the healthy growth before the dry season begins. On the upland a different order prevails. Plowing is done as early in the spring as possible; water stands on the ground and in the soil later than in the sandy loam, but despite the later seeding crops seem to grow about as soon and are harvested nearly at the same time. No summer fallowing is done in this section of the country, as it is too hard work to clear land and let it go for every other season as they do on the East Side, which will be done away with when a plan can be devised to retain the humus and nitrogen in the soil with a crop each year. We are planning on a large potato acreage the coming season. As prices go up the farmers are rustling to get every available piece of land into working shape. Buyers are paying $72 a ton, the best figure ever paid on the Cowlitz river. And the end is not reached, as many of our growers have seed to buy, which will come high, as seed seems to bring a better price. Just like eggs a neighbor of mine has been bringing to the store and selling at the regular price of 25 cents a dozen; but if you were to go over there and tell them you wanted a setting of eggs the price would be about double. So it goes in all things. If we show a keen desire to have a certain thing, then is the time we have to pay for it. The farmers in this county are in readiness for the coming season. The winter has not been very hard, and they have brought their stock through looking fine. Fall crops are looking fine. Prices have been high for what has been sold, but brought cash; interest money has been paid, and in a great many cases the principal whittled down. The farmers' associations that have been formed are composed principally of men and women that are not cramped for money, but are asking for same to improve their farms a little faster than they could ordinarily do by the money as they earned it.

C. C. BROWN.

Snow Protected Crops.

LITTLE ROCK, Thurston county, Wash., March 9.—Spring plowing sometimes starts in January if the winter is mild and continues as late as the last of May or the first of June. Some places seeding can be done in January, while in wet places, where it overflows or in marshy ground, seeding has to wait sometimes as late as June. Fall plowing starts in September and continues until December. Harvesting starts in July and sometimes runs as late as October. Spring is about three weeks late this year and owing to the snow being on the ground later than last year work is not as far along as former years. There seems to be nothing the matter with the fall seeding. The ground generally was covered with snow when the coldest spells were on.

LEE KEGLEY.

Farm Work Waits.

OTHELLO, Adams County, Wash., March 4.—At the annual school election J. B. Finkbeiner was elected as director for three years and the vote to change the schoolhouse site from the present location to the new site at Bruce carried. Snow is falling today, and the ground is frozen, with farm work at a standstill. Elden Kelly, living south of Othello, killed a coyote in his barn one day last week, and James McManamon at Deadman lake killed one recently that came into his yard during the day. Both acted strangely, and no doubt were afflicted with rabies.

A. O. LEE.

In a Quandary.

"You seemed much affected by Spenson's hard luck story."

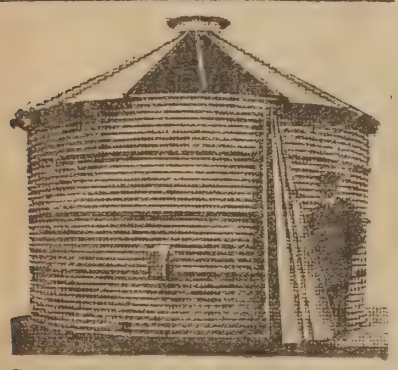
"I don't deny it. Spenson saw me get a $10 bill changed and I was racking my brain to think up a good excuse for not leading him a quarter."—Birmingham Age-Herald.

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are carefully selected and tested. This means bigger crops, of better quality. Our Alfalfa, Red Clover, Alsyke Clover, White Clover, Sweet Clover and Timothy are all hardy western-grown seeds.

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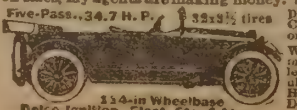
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Ride in a Bush Car. Pay for it out of your commissions on sales, my agents are making money. Shipments are prompt. Each Car guaranteed or money back.
Write at once for my 48-page catalog and all particulars. Address J. B. Bush, Pres. Dept. 34 H

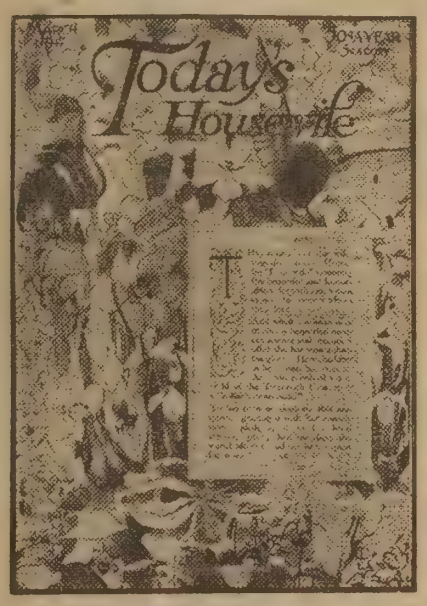


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MONTHLY



WEEKLY

Magazine prices are advancing sharply. Any day now we may be forced to withdraw our splendid clubbing offers. A tip to friends of The Washington Farmer.

White paper and practically everything else that goes into the making of papers and magazines has advanced tremendously in cost. Some of the best known publications have doubled in price. Others will follow suit. We do not know when the letter or telegram will come which will force us to withdraw the unusual clubbing offers below. We are, therefore, giving marked prominence to this announcement in order that our wide circle of friends may benefit from the decided saving which it gives. Our urgent advice is to assure yourself of a splendid assortment of reading matter by acting at once on one of the offers below and thus get the benefit of the present low prices. You will never get these clubs for less money. You may have to pay a great deal more. ACT NOW by using the coupon provided.

OFFER NUMBER 1—$3.50 FOR $1.75.

The **Washington** Farmer 3 years, special rate now	$1.50
Every Week, one year	$1.00
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Value	$3.50

OUR SPECIAL PRICE FOR ALL FOUR, $1.75.

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Every Week, for one year	$1.00
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Our Special Price for All Three, $1.95

In remitting you may send your personal check, stamps, draft or money order. If your subscription is paid ahead you can accept any one of these offers and your subscription will be advanced three years.

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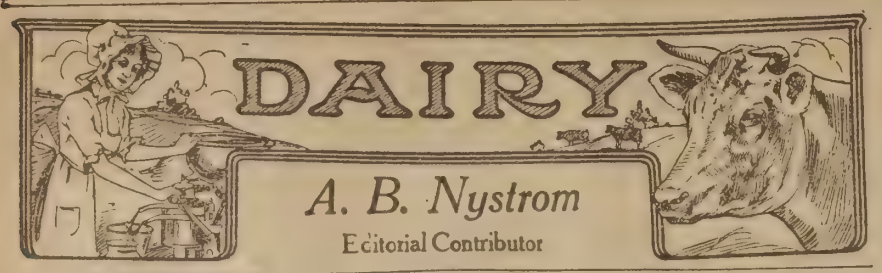
THE WASHINGTON FARMER
Spokane, Wash.:

Enclosed find $..... in payment for magazine offer

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Cow Testing

Linn County Forms Association

The Linn County Cow-Testing association met at Albany, Ore., March 7 and completed organization and elected officers. Professor Barr of the O. A. C. delivered a short, but instructive, address, and a number of matters pertaining to the questions of feed and dairy profits were discussed. The following officers were elected: President, H. J. McInnis; vice president, George Connor. H. E. Selby, a graduate of the O. A. C., is the tester, and work has already commenced. Three of the members, R. L. Burkhart, J. M. Dickson & Son and George Connor will do official testing in addition to the regular association work.

The following is a complete list of the members: Elza Morgan, J. M. Dickson & Son, W. D. Pate, Shedd; E. D. Steen, Z. J. Brown and L. K. Cheadle, Lebanon; Orland Zeek and R. L. Patterson, Lacomb; Thomas Spillman, U. G. Smith, George Conner, R. L. Burkhart, A. P. Mishler, Henry Stewart, D. J. Hulbert & Son, J. L. Anderson, A. R. Forster and Mr. McInnis, Albany; Martin Cummings and J. A. Daugherty, Halsey; Ashton & Sons, Tangent.

TWENTY COWS

Average 500 Pounds Butter.

For the year 1916 Warren Gray, the Jersey breeder, of Jefferson, Ore., had 20 registered Jerseys in the Marion County Cow-Testing association and they averaged a little over 500 pounds of butter. None of them milked the full year, and he took the run of the herd as they come fresh.

Mr. Gray has 16 completed official records. Perhaps the most remarkable, all things considered, is that of Rose Ixia. She began at 14 years old and produced 396 pounds of fat, or 465.9 pounds of butter. At her next freshening, when 15 years old, she was put on test again and produced 477.64 pounds of butter. Lady Isabel Mowatt, another of Mr. Gray's cows, is now 16 years old. Her daughter, My Mowatt, has produced 641 and 643 pounds in two consecutive years. My Mowatt's daughter, Bobby's Fancy Queen, made a record of 423 pounds as a 2-year-old and is on test again as a 4-year-old. She is expected to qualify for a gold medal. Her daughter has freshened and is a good prospect, but will not be tested until next year. Her calf is a heifer. Mr. Gray has two more daughters of the old cow, one with a record of 482.34 pounds of butter as a 2-year-old and is on test again as a 3-year-old, with much promise. The old cow's youngest daughter began at 1 year and 10 months. She promises to make a great record. Mr. Gray believes in "families" of Jerseys, if you have the right family.

WILL OFFER HOLSTEINS.

Clarence Evans, the well-known Poland China breeder of Halsey, Ore., has allowed his herd of Holsteins to grow until he has decided to hold a Holstein sale about the first of June, when a nice lot of females and a few young bulls will be disposed of. Like many other swine breeders, Mr. Evans has fattened and sent quite a number of hogs to market and is short of breeding stock ready for service, but has some nice litters coming on.

Babcock Demonstration.

County Agriculturist B. W. Cooney has been domonstrating the use of the Babcock test as applied to the farmers' herd in Klickitat county. It was found in one herd that the owner had seven cows testing below 3 1-2 per cent, it being a very east matter to show the owner that he was keeping the cows and that the cows were not keeping him.

Holstein Sale at Snohomish.

The fifth semi-annual sale of the Western Washington Holstein Breeders' association will be held at Snohomish April 13. Indications point that this will be one of the best sales held in the northwest, as the consignors are promising to send some of their best record animals.

Airplanes on Sail.

Airplanes, ready for delivery, are on sale in a Broadway (New York) store.

A HIGH PRODUCER.



The above photo shows Imp. Castilian Lady 266628, a Jersey cow owned by C. E. Long of Buhl, Idaho, that is a great producer. Mr. Long's entire milking herd was in the Buhl cow testing association last year and had the highest average of any herd—399.8 pounds of fat, or 470.57 pounds of commercial butter per cow. Castilian Lady produced 713.3 pounds of butter and was the highest producer in the herd, but she is by no means the best show animal.



Raise Your Calves on

Blatchford's Calf Meal

and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.

Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Factory, Dept. 58 Waukegan, Ill

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Bring back any Goodrich tires you feel have failed to give you right service.

Goodrich will at once make good *all* their shortcomings—generously and gladly.

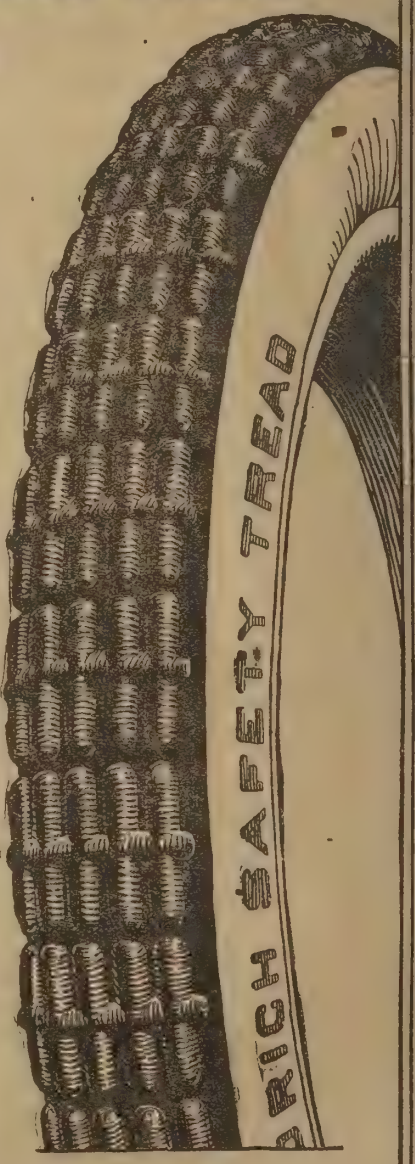
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The very name of Goodrich pledges it to the best service a fabric tire can give—*style*, safety, *comfort*, durability, freedom from tire trouble, and mileage.

The buyer takes no risk of imperfection in it. A Goodrich tire must deliver the high standard of service Goodrich pledges for it, or Goodrich Fair Treatment squares the account in full.



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"BEST IN THE LONG RUN"

Milk Producers Win Big Victory

Cooporation Brings Twelve Thousand Dairymen Success

(Continued from page three.)

ular, appointed delegates and officials of the association; in other words, stop fooling and get down to business. This meeting was held at the Hotel Morrison on September 8, almost every local sending delegates.

"During the time between these two delegate meetings your committee had been busy investigating conditions and holding conferences with the buyers, the result of which, together with the price voted at the former meeting, was fully reported to the delegates assembled at the September 8 meeting.

"After much discussion by the delegates at that meeting, another vote was taken regarding the price to be asked for all milk, with the understanding that the average price was to control.

"Tellers were appointed and a roll call of the locals made. The vote varied on milk per 100 pounds from $1.90 to $2.25. The tellers retired to compare the vote and reported that the average vote per 100 pounds was a trifle over $2 and the average price voted per can was a trifle over $1.60. A motion was promptly made and carried without a dissenting vote, that the price be fixed at $2 per 100 pounds and $1.60 per can. Your committee so announced.

"Your committee then notified all dealers that this was the price which would be insisted upon to the extent of repeating the spring fight if necessary. Richmond Smith company reported almost the next day that they were signing up contracts for can milk at our price and on the 15th of September the Borden company announced that they would pay the association price as fixed by your committee of 190, but that they would not make a six months' contract. But we are very glad to report that so far as your committee could learn, not a single member accepted their proposition. In a few days the Bowman company announced their price as fixed by the association, averaging $2 for the six months. The same day the Bordens sent out a bulletin that they would guarantee to pay as much as that. They were then called up over the telephone and asked what was meant by this bulletin. They reported that they would guarantee to pay all of our members delivering milk to them not less than the price we asked. On this assurance, their milk and the milk of all other dealers paying our price was released."

This winter rate, averaging $2 per hundred, was based upon the following monthly scale, for milk delivered at bottling and condensing plants for the six months ending April 1, 1917:

October	$1.90
November	2.10
December	2.10
January	2.05
February	2.00
March	1.85
Average	2.00

This is for 3-5 milk, with 3 cents added for each one-tenth of a point above and 3 cents deducted for each one-tenth of a point below.

For can milk, the following prices were agreed upon for the same six-month period, eight-gallon cans, f. o. b. Chicago:

October	$1.60
November	1.70
December	1.70
January	1.60
February	1.55
March	1.45
Average	1.60

Still better prices will be demanded for the coming summer. We are informed by the official organ of the association that:

"At a conference of delegates from the locals of the Chicago dairy district held in the Methodist church block on Thursday, February 2, to determine the price at which the milk producers of this district could offer their milk for the six summer months ending September 30, it was unanimously decided to make this offer at the average price of $2.12 per 100 pounds and $1.68 per eight-gallon can, scaled as follows, per 100 pounds: April, $2.40; May, $2; June, $1.60; July, $2.12; August, $2.30; September, $2.30; and per eight-gallon can: April, $1.90; May, $1.60; June, $1.30; July, $1.68; August, $1.80; September, $1.80.

"Of the 214 locals of which the association is composed, nearly all were represented. This may seem an excessive price for this six-month period, compared with what has been paid in past years for the same period; yet, if the price of the feed that is going into the making of milk during the first half of this period is taken into consideration, it will be readily seen that this price is not excessive."

The association has a campaign committee, and it reports that it "had charge of all field work during the controversy of last spring, with the result that dairy farmers all through these 21 counties and districts who heretofore had been separated and split apart from one another were banded together into one great army of men, determined to protect their rights."

The secretary of the association declares that in point of importance the Chicago dairy district takes the lead. "While the New York district, composed of seven states, leads in numbers, with nearly 30,000 members, while we have 12,200, mostly in Illinois, with a fine following in southern Wisconsin and northern Indiana, the volume of business handled for the year, as well as the variety, has been far beyond anything ever contemplated or attempted by this or any other milk producers' association in the past.

"Not only have we made history in the class of farmers' organizations, but we have become pace-setters for every dairy center in the United States."

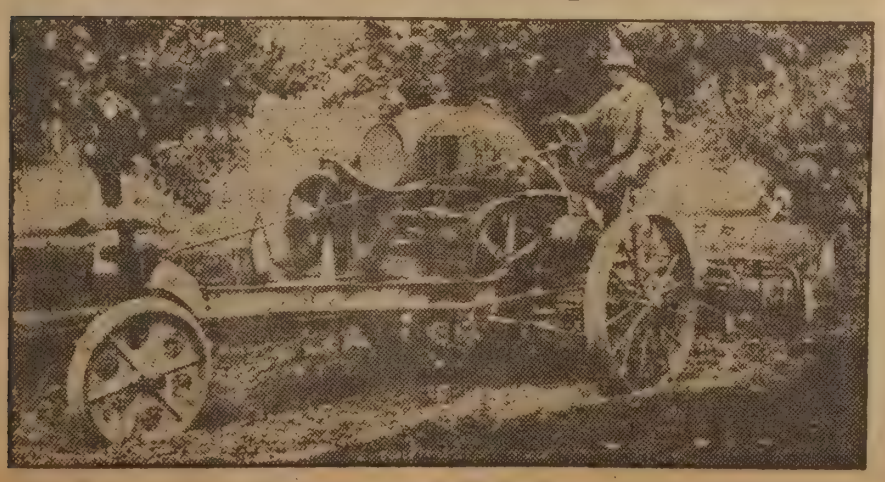
The case is well summed up in these words of the secretary, which make a fitting conclusion for this article:

"It became our good fortune to demonstrate to the whole world that farmers can, will and did stick together solid enough to go out and for the first time in the history of the dairy industry bargain their product."

Do You Know That

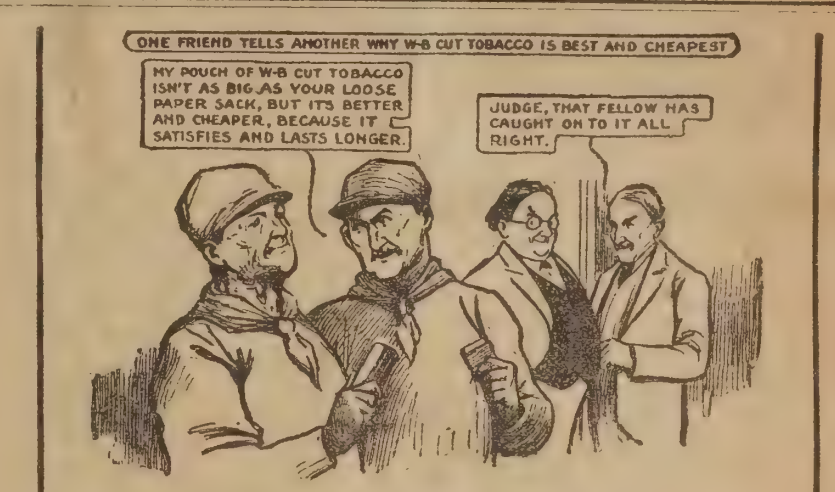
It never pays to be stingy?

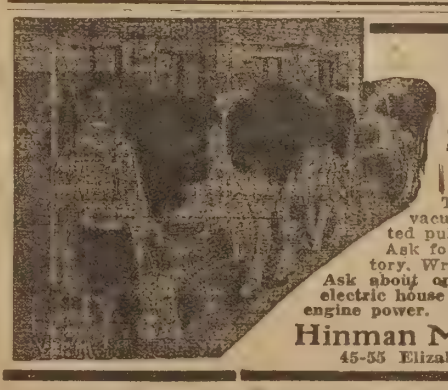
A Small Tractor Cultivating an Orchard



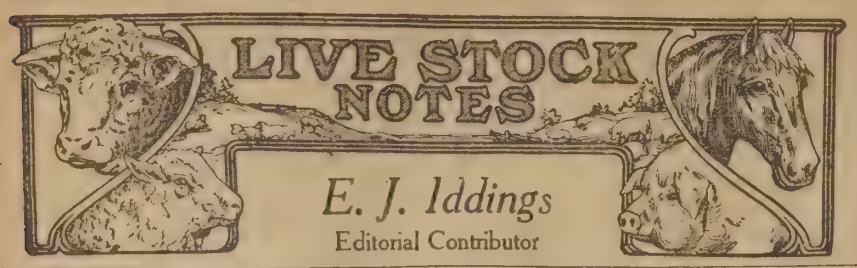
Above is shown one of the small tractors among the many now coming into the field of actual operation on the farms of the country.











E. J. Iddings
Editorial Contributor

Feeding Tests

Show Cost Per Pound of Pork

Professor R. C. Ashby, now of the University of Minnesota but formerly of the State College of Washington at Pullman, has prepared some interesting figures showing the results of hog feeding at the Minnesota experiment farm. He calculates the cost per hundred pounds of pork produced from certain specified feeding, calculating the feed at varying market values.

The following is Professor Ashby's report:

116 Pounds to 204 Pounds.

During 85 days, February to May, 1915, we fed 23 pigs on a ration of shelled corn, shorts and oil meal. Average daily gain was .97 pound per pig. They consumed 520 1-4 pounds total grain for 100 pounds gain.

Corn at 75 cents, shorts at $26, oil meal at $36, made each 100 pounds of gain cost $7.186. With shorts at $34, oil meal at $44 and corn at 85 cents, gains cost us $8.314 per 100 pounds. On $1 corn they cost us $9.484 per 100 pounds.

We fed 24 hogs for 64 days in winter with an average daily gain of 1.39 pounds per pig. With 75-cent corn, $26 shorts and $55 tankage, 100 pounds of gain cost $7. With $34 shorts, $60 tankage and 85-cent corn, it cost $7.974 for 100 pounds gain. With corn at $1, it cost $9.074 for the same. They took 482.16 pounds total grain for 100 pounds gain.

Using oil meal instead of tankage, we fed eight pigs for 64 days, and they averaged 1.17 pounds each per day. With shorts at $26, oil meal at $36 and corn at 75 cents, they cost us $7.434 for 100 pounds gain. With $34 shorts, $44 oil meal and 85-cent corn, it cost $8.647 for 100 pounds of gain, and with corn at $1, it cost $9.766 to produce 100 pounds of gain. In this case 531.18 pounds of total grain were required to produce 100 pounds of gain.

145 Pounds to 284 Pounds.

Sixteen pigs were fed 98 days and averaged 1.41 pounds daily gain per pig. With 75-cent corn, $26 shorts and $55 tankage it cost $8.063 to produce 100 pounds gain. With 85-cent corn, $34 shorts and $60 tankage 100 pounds gain cost $9.162 and when corn costs $1, the cost of 100 pounds gain cost us $10.559. Here it took 510.5 pounds total grain to produce 100 pounds gain.

Corn Versus Barley.

We fed 12 pigs 98 day, from October to January, six of them ate corn, shorts and tankage and increased from 86 pounds to 229.8 pounds, with an average daily gain of 1.46 pounds per pig. With 75-cent corn, $26 shorts and $55 tankage, these pigs produced 100 pounds of gain for $6.322 with 85-cent corn, $34 shorts and $60 tankage their gains cost $7.189 per 100 pounds, and boosting corn to $1 put their cost of gain to $8.186 per 100 pounds. They made 100 pounds of gain for each 433.6 pounds total grain.

Six pigs were fed ground barley, shorts and tankage. They increased from 86 pounds to 222 pounds, with an average daily gain of 1.38 pounds per pig. With 80-cent barley, $30 shorts and $60 tankage they put on 100 pounds gain for $8.825. With 90-cent barley, $34 shorts and $60 tankage it cost $9.788 for 100 pounds of gain. When the barley was charged at a dollar per bushel the gain cost us $10.68 per 100 pounds of gain. Five hundred one and three-tenths pounds total grain were required for each 100 pounds of gain.

SUMMARY.

Where hogs weigh near 200 pounds and corn is worth 80 cents per bushel, the further increase in weight will cost more than the market now pays for it. Hogs that are weighing from 100 to 135 pounds offer a fair prospect for profit, if fed for the winter market. In any case they must be thrifty to feed well. Anything under 100 pounds in weight should certainly be fed if one has or can get the feed. The cost of gain increases rapidly as a hog passes the 175-pounds weight. When risk is added to the cost of gain it leaves a very small margin on anything but light hogs. Whatever you are feeding feed liberally. It never pays to stunt a pig that is fitting for market.

Breaking Colts.

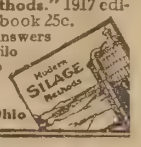
P. A. Frakes, the veteran Holstein breeder at Scappoose, Ore., has a unique way of breaking colts or half wild horses to stand tied. Instead of fastening the rope to the halter he simply slips it through the halter ring, takes it back and ties it in a loop over the back, behind the fore legs. When the horse thus tied begins to pull back he feels the rope draw over his back and is glad to jump forward. He soon gives up pulling back and stands tied without trouble.

Long Neck; Few Joints.

In spite of the length of the giraffe's neck, there are only seven joints in it.

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Veterinary

Dr. S. B. Nelson

I have a cow that took sick shortly after freshening. She was feeding on dry bunch grass pasture. After calving was kept on alfalfa pasture and we noticed her eating with difficulty. She soon quit eating and drinking altogether, but gave the same amount of milk. She kept this up for about two weeks and then started to eat a little again. She has had several of these spells. J. M.
Wallula, Wash.

The trouble with your cow is an intestinal one, and the fact that she gets over it shows it to be recurrent. I am going to advise you to give your cow a pound and a half of epsom salts in two quarts of water. The next day give her one full quart of raw linseed oil. Two days later begin giving her one ounce of compound tincture of gentian in one pint of water. Give this for 10 days to two weeks.

I have a young cow that has been fresh six weeks that gives bitter milk. It is more noticeable in the cream and butter and the butter becomes very rancid in just a few days after churning. The cow seems to be healthy and in good condition. She was not this way last year. F. W. B.
Olalla, Wash.

I would advise giving a pound and a half of epsom salts in three quarts of water to the heifer, provided she is a good sized cow. It not, just give her one pound of the epsom salts. Give her also one tablespoonful of fluid extract of phycolacca in a little water once daily. If the bitterness does not stop after three or four or five days after this treatment I think that it would be wise to wash out the inside of the udder with a 2 per cent solution of boracic acid in boiled warm water. Dip the ends of the teats in tincture of iodine, then boil the syringe. Use the glass end of a 5 per cent ink dropper to put up into the teat. Boil it thoroughly before using it. Be very careful not to get any infection into the udder. One or two treatments would be of value. The udder should be lightly massaged while the liquid is in it and then the liquid should be milked out.

What is best to do for a horse that has large stomach worms? They are about eight inches long. What can I do for lice on a horse? R. S.
Nahcotta, Wash.

Give your horse one teaspoonful of powdered sulphate of iron in his feed night and morning for a week. The next morning have given to your horse one quart of raw linseed oil with one ounce of turpentine well shaken up in the oil. For the lice on the horse there is no better treatment than to boil a little tobacco, the clipped stems if you can get them, in water until a light brown liquid is formed, then on a nice, warm, sunshiny day wash the horse all over with this liquid. You can blanket him until he dries, which is often times advisable. A second treatment five or six days later will be sure to get the young lice that were in the eggs at the first treatment.

I feed my cows one quart of oil meal and two quarts of shorts twice daily and all the alfalfa hay they eat, but they do not seem to be doing as well as they should. Have I been feeding too much linseed meal or would shorts and bran be better? We used to get good results with the latter, but they are too high now to feed.
Gig Harbor, Wash. M. G. W.

I would refer you to the very splendid article in the recent Washington Farmer by Professor Nystrom of the State College of Washington, in which article he discusses the proper feeding of dairy cows. I think that the information you desire is carefully given in that article and would refer you to it.

Please tell me what to do for blackleg in cattle. C. F. L.
Leahy, Wash.

The best thing to do to prevent blackleg is to vaccinate all youn stock once in the spring and once in the fall. Blackleg vaccination is proof against the disease in approximately 99 per cent of cases. Once in a while one of the vaccinated animals dies because you are giving the disease in a mild form and sometimes even this is too strong for some animals. You can obtain the government vaccine free of cost, with instruments for use by writing to Dr. S. B. Nelson, department of veterinary science, state college of Washington, Pullman.



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Virtually Means War

Submarines Sink American Ships

The sinking of the American steamships City of Memphis, Illinois and Vigilancia, announced Sunday, by submarines virtually means war with Germany. Fourteen from the Vigilancia are missing, as there are some of the men from the City of Memphis. The president is contemplating a call for an immediate session of congress to hear an address asking for authority to adopt aggressive measures against the submarine menace. Already American ships are being armed to defend themselves; the next move must be to send warships with orders to seek out submarines and clear the transatlantic lands.

Of the three ships destroyed, two were unloaded and were homeward bound, and were American-built and manned largely by American citizens.

Call Off Railway Strike.

The fear of a railroad strike has passed. The railroad managers Sunday night told President Wilson they would grant the employes' demand for an eight-hour basic day rather than hamper the government at this critical time. Monday the delayed decision of the supreme court on the Adamson law was handed down, holding the law to be constitutional and valid.

This means that the brotherhoods have won an important victory. It is assumed they would be awarded pro rata time for overtime on the basis of an eight-hour day, which they have been assured.

Notwithstanding that the foreign situation remained tense during the last week as for several weeks past the threatened railroad strike took precedence over it in matter of news.

Following the postponement of the supreme court's decision in the Adamson law case, which was to try the constitutionality of the measure passed last fall to avert the strike at that time the officers of the railroad brotherhoods declared that a strike would begin on eastern lines at 7 o'clock Saturday evening, March 17, and would become effective over the entire country by Wednesday of this week. Owing to the serious foreign relations, which have appeared likely to involve this country in war at any moment, President Wilson called upon the railroads and their employes to reach some agreement by means of which the strike could be averted at this time. As a result of a conference between representatives of the president and the railroad men and their employes postponement of the strike was made for 48 hours, pending further negotiations.

Abdication of Emperor Nicholas.

The abdication of Emperor Nicholas on behalf of himself and the heir apparent, Grand Duke Alexis, in favor of Grand Duke Alexandrovitch and the later abdication of the Grand Duke Michael himself, is the astounding news of the week from Europe. The revolution originated with the progressive members of the duma. Thus falls the autocracy which has held Russia in its grip since the beginning of history. The house of Romanoff has ruled the empire for 400 years.

Just what form the new government of Russia will assume is indefinite. For the moment entire authority rests with the 12 members of the duma, executive committee, and the cabinet headed by Prince Lvoff, who, according to some forecast, will be president of the new republic.

The difference which threatened to create a serious split between the duma committee and the committee of workingmen, soldiers and deputies have automatically disappeared since, with the abdication of Grand Duke Michael as regent, the question whether Russia should remain an empire or compel its antiquated government to yield to a new government is now solved.

Elections to Decide.

Later dispatches say the decision whether Grand Duke Michael Alexandrovitch shall occupy the Russian throne, abdicated by his brother, Emperor Nicholas, is left to a plebiscite of the Russian people, according to a manifesto issued by the grand duke. This is taken in some quarters to mean that Grand Duke Michael does not intend to accept the regency temporarily, but only after the holding of elections.

This revolution is looked upon as the victory of the war party, and is meaning a greater activity on the part of the Russians against the Germans.

The empress and crown prince of Russia are now safe in Finland, and the emperor is at the Snetogorsky monastery in Pskoff.

The Motor Car
On the Farm

New Legislation.

Every two years the legislatures of the states of the northwest meet and invariably, of late years, they bring out a "new model" automobile code. Therefore, it behooves every owner of a car to keep watch of the changing laws in order that when they go into effect he may be prepared to abide by them. The legislatures of the present year have been no exception to the rule. They have rebuilt the auto codes of their states, making changes in such matters as license fees, speeds allowable, character of license plates, and so on.

Tire Mileage.

Many motorists in reviewing tire mileage records often credit the satisfactory performance to the casing, to the exclusion of the tube, forgetting or overlooking the fact that if the tube had not acted its part faithfully the casing could not have established so good a record, says the American Chauffeur.

If the casing is right, of course the work of the tube is very simple. It does not have to withstand pressure and wear. It has only to hold air and keep on holding air.

That is why so many motorists think "a tube is a tube," and let it go at that.

Tubes cost relatively little, but poor tubes can easily become the most expensive part of your equipment. Too many dealers will sell good casings and low-grade, low-profit tubes, which cost many times their price by losing pressure and so wearing out the casings.

Good tubes add life to any tires, and good tubes are just as important as good casings. Much more tire trouble than is commonly supposed can be traced to poor tubes, rather than to poor casings.

Some motorists could actually afford to throw away the tubes they are using and replace them with quality tubes. They would save money in the end.

Air, being a gas, very slowly permeates almost any kind of a solid. Rubber used in making tubes must neither harden nor crack, but must recover from its stretch in a casing, even after long use.

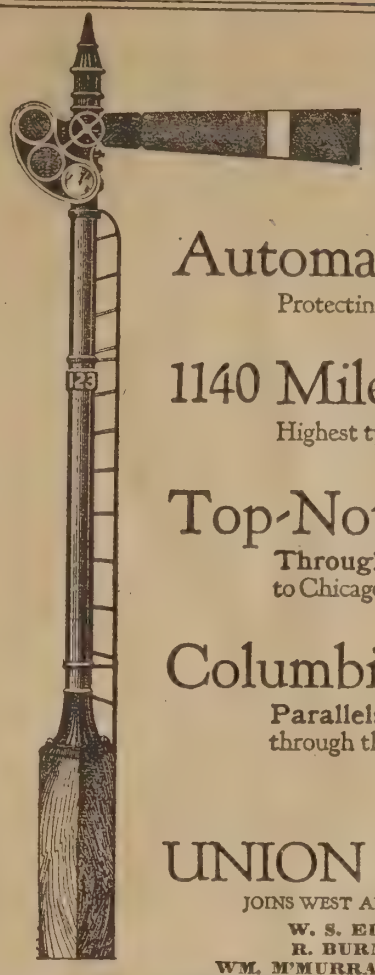
Magnitude of Fruit Industry.

The magnitude of the fruit industry of Yakima valley is a thing not easily grasped. According to figures compiled by F. E. De Sellem, horticultural inspector for Yakima county, 4000 owners have 45,600 acres planted; $20,000,000 is the value of the investment; $7,000,000 is the value of the 1916 crop of 11,000 carloads; $1,100,000 is invested in warehouses and cold storage; $1,000,000 was paid last year for boxes and nails; $122,000 was paid last year for spray material; $150,000 was paid for 80 carloads of wrapping paper; $1,200,000 was paid to 3000 transient laborers employed for a period of 100 days; $250,000 was paid for 50,000 tons of ice for refrigerator cars; 20 shipping agencies market the product, at a cost of $700,000 for handling charges at 10 cents a box.

BEST HE EVER READ.

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L. A. TOLLINER.
Laurier, Wash.



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Protecting every foot of the way to Chicago.

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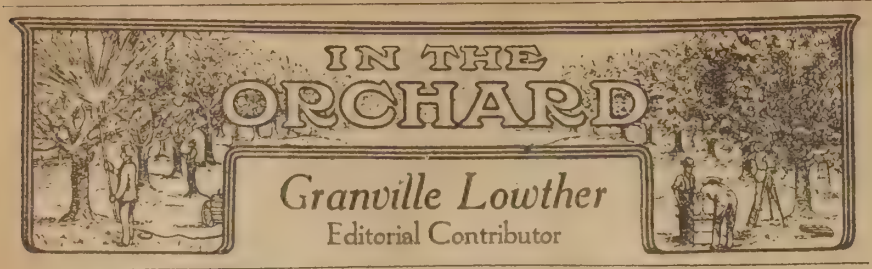
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206 3d Ave. So. SEATTLE, WASH.



SHOW FRUIT

To Put Up Fresh Strawberries.

To the Editor of the Farmer: I wish to know how to put up fresh, ripe strawberries in alcohol so that they will preserve their full size, the same as they are when picked from the vines. J. W. LATT.

Olympia, Wash.

The following recipe was issued by the department of agriculture of Ottawa, Canada:

Fluid No. 1.

Formalin, one pound; water, 44 pounds; alcohol, five pints.

Allow the mixture to stand. Should there be any sediment, pour off the clear liquid and filter the remainder through filtering paper. This 2 per cent solution of formalin has been found very useful for preserving strawberries so as to give them a natural appearance.

Fruit that has been preserved in this way is poisonous and should not be used for edible purposes.

FORCING RHUBARB

Three-Year-Old Vigorous Growers.

Fred Burglehaus of Sumner, Washington, warns growers that production of rhubarb is now somewhat in excess of consumption, and that the canneries must be looked to to take care of this surplus.

Field culture of rhubarb reqquires a warm, well-drained loam, with plenty of plant food available. Each crown division planted should contain at least one vigorous bud, and if the crowns are frozen before planting, all the better. A dust mulch should be maintained throughout the season, as rhubarb is a water-loving plant. Nitrogen in some form must be provided in ample quantities—for instance, nitrate of soda, at the rate of from 300 to 600 pounds to the acre. Barnyard manure, if well rotted, is excellent, as it introduces humus as well as available nitrogen. From 30 to 40 tons of short stable manure, or 6 to 10 tons of sheep manure, is about the right allowance per acre of this class of fertilizer.

"The first year's crop should not be pulled," Mr. Burglehaus explains. "A light pulling may be made the second year, but always leave plenty of foliage for the plant's own use. Refuse from trimming should be distributed over the field. I do not believe there is any profit in rhubarb selling under 2 cents a pound, except where it is sold to the canneries. A good plantation should yield from 15 to 20 tons to the acre, and should be in good bearing condition for at least 15 years."

One of the biggest mistakes made in forcing rhubarb, Mr. Burglehaus believes, is the use for the forcing houses of weak crowns, already worn out in field culture. "It should be evident enough to any one," he continues, "that if a plant can not succeed under the natural conditions of the open field, it can not be expected to thrive in the abnormal environment of the forcing house. Three-year-old, vigorous crowns should be used. Heat and darkness are essentials as far as the house itself is concerned, and a lantern or lamp in a boarded-in corner of the cellar will provide these conditions for several hills for family use. Heat should range from 50 to 60 degrees. I do not believe that forcing rhubarb is a paying business in itself—it should rather be carried on in connection with field culture."

The Farm Garden

Article 4

Garden Tillage

Soil Must Be Rich and It Must Be Put in Good Condition and Kept So Throughout the Season.

Soil can be made too rich for gardening, but where that of one garden is too rich that of most of the others in the neighborhood is not rich enough.

In placing stable manure on the garden plot two things must be kept in mind: (1) The comparative exhaustion of the native fertility of the soil and (2) the degree of moisture that may be maintained during the period in which the manure will undergo decomposition. Too much is as bad as not enough. It means that unless there is abundance of water to last throughout the season the garden will "burn"; the large amount of plant food in the fertilizer will tend to give the plants a luxurious early growth, but the depletion of the moisture later will cause a sudden reversal. Who has not seen, for example, a bunch of wheat grow up about some decaying vegetable matter—grow up luxuriously the first part of the season only to dry up before the grain has an opportunity to ripen. But where moisture is plentiful the manure should be applied freely, 20 to 30 tons per acre not being excessive.

Plow It Under Deep.

Fertilizers as a rule should be plowed well under the surface. The old proverb, "Necessity is the mother of invention," applies to vegetables as well as to supposedly more inventive men. Vegetables tend to develop a root system to meet their particular needs, and it is therefore the tendency of a plant, where the plant food is on the surface, to develop a root system that does not penetrate the soil. This necessitates perpetual surface moisture, which is virtually impossible in the average garden.

On the other hand, if the food is from three to eight or 10 inches below the surface, there is a tendency toward the development of a penetrating root system which reaches to the more permanent moisture supply. Those vegetables also which root deep by nature are enabled to utilize very little of the plant food that is on the surface, and if it is not found well below, where the fine feeder roots are grown, the plant must necessarily suffer a degree of starvation.

Cooked potatoes and cabbage and turnips are more rapidly converted into animal tissues than are unprepared vegetables. In like manner the soil elements which nature converts into plant tissues in the garden are more readily so converted when the soil is well pulverized and moist. The walls of the lungs of an animal are full of minute blood vessels, where the blood comes almost into direct contact with the air in the lungs, that it may receive oxygen therefrom. In the well tilled garden soil the minute rootlets of the vegetables are enabled to come into direct contact with the food elements of the soil and carry them upward to be converted into vegetable tissue.

Therefore, plow the garden soil deep. Stir the subsoil as much as possible. Pulverize the soil so the plant roots may go down deeply and readily, more moisture be held in storage and a greater degree of aeration be maintained. Then keep the surface constantly cultivated to insure against unnecessary loss of moisture and baking.

HOT BED WITHOUT GLASS.

The Farmer has received this query: "I want to make a hotbed for some flowers, and would like to know if burlap would answer the same purpose as glass"—J. C. G.

The purpose of a hotbed is to create and maintain warmth for the growing of plants earlier than they could be grown in the colder open ground. The purpose of the glass sash cover is to admit the sunlight while yet protecting the plants from the lower temperature outside.

In a climate or locality where it is not vitally necessary to protect the plants from cold during the day time, the glass is not necessary, though with it a better more even temperature could be maintained. In such case the use of burlap or other covering at night would serve the purpose, though anything which would darken the hotbed during day time would be impracticable.

It is possible to shelter the bed sufficiently in many cases to eliminate the necessity of glass covering, and the burlap could be used practically in providing part of this shelter without shutting out the sunlight.

But where the temperature is even occasionally as low as frost or nearly so at any time during the eight or 10 best hours of the day, the use of a glass covering is considered almost imperative.

EVAPORATED APPLES

Finds Ready Market for Products

J. F. Irby, a fruitgrower of the Vera district of the Spokane valley of Washington, reports gratifying success with an apple evaporator which he erected in November. He handled 100,000 pounds of apples during the season and is prepared to operate on a larger scale the coming season.

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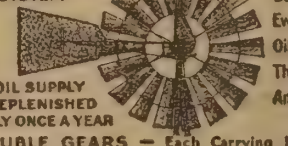
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Is America Farming?

Comparison With Other Countries Says No

European countries do better farming than America does, if grain yields per acre may be taken as an indication.

This is the first deduction made by Professor J. S. Jones, director of the University of Idaho experiment station, in a paper presented at the university during farmers' week recently. He cited figures on comparative yields, as follows, to prove the point:

Wheat—In 1879 the average yield of wheat per acre in Germany was 17 1-4, and in the United States 13.7 bushels. In 1909, 30 years later, the average yield per acre in Germany had risen to almost 31 bushels, but in the United States to only 15.4 bushels. The percentage of increase in Germany was 77 per cent, and in the United States only 14.4 per cent. From less than one-tenth the acreage of the United States grain crop, Germany in 1909 produced nearly one-fifth as much wheat.

Barley—During the same 30 years as above, Germany's increase in barley yield per acre was 67 per cent, while that of the United States was only 1 1-4 per cent.

Oats—In 1879 the average oats yield per acre in Germany was 32.5 bushels, and in this country 28 bushels. In 1909 Germany's average yield had increased to 59.5 bushels per acre, and that in this country to only 30.2 bushels. Germany's increase was approximately 86 per cent and that of the United States less than 6 per cent.

Collective Yields of Wheat, Rye, Barley and Oats—In 1879 the average yield per acre covering these four grains was within one bushel of the same in Germany and the United States. In 1909 Germany had forged ahead nearly 18 bushels per acre. The percentage of increase in the United States was 6.6 per cent; in Germany it was 80 per cent. The average yield in Germany had risen from 21.8 bushels to 39.5 bushels, while in this country the average yield had increased from 20.4 to 21.6 bushels.

"During this period it is to be remembered that the German farmers were cultivating lands that have been in cultivation for years," said Professor Jones. "We were adding to our cultivated lands vast acreages of virgin prairie soil."

All Europe Leads Us.

All of western Europe, which includes all Europe except Russia and Turkey, leads the United States in much the same manner that it was shown Germany alone does. In 1907 the acreage of wheat, oats, rye, barley and potatoes in the United States was 88,546,000; in western Europe it was 176,727,000. On these acreages the United States produced 1,874,635,000 bushels; western Europe produced 7,608,957,000. From only twice the acreage of the United States, western Europe produced four times the amount of grain and potatoes.

Minnesota in 1907, with nearly 1,000,000 more acres in wheat than Germany and France, produced only a little over one-half as many bushels of wheat. Minnesota, North Dakota and Kansas combined in the same year grew practically the same acreage of wheat as did France, yet France grew more than twice as many bushels. The average yield of wheat in Minnesota is steadily decreasing, which is equally true in North Dakota and Kansas. The average yields of wheat in both Germany and France are steadily increasing.

Look for Explanation.

"Let us look for a satisfactory explanation," says Professor Jones in concluding this remarkable comparison.

Professor Jones believes that he has found the explanation. He believes there is a very practical way to increase the yields of grain crops in this country, as has been done in Europe. This explanation, this "practical way," will be given in next week's issue of The Farmer.

CORRECTS STATEMENT

Condensery Prices Paid for Milk.

To the Editor: In your issue of February 22 there appeared under the heading of "Wants a Uniform Price" a letter from me wherein the following statement was made: "The condenseries in Lewis county pay us now from 10 cents to 25 cents less per hundredweight than they pay in King, Snohomish and Whatcom counties, which is not giving the farmers in Lewis county a fair deal, and the milk is all used for the same purposes, etc."

I find upon investigation that the above statement is in error, the prices paid for milk at the several factories having been uniform for several years back, and in common justice to the condensers interested and myself I desire to correct the statement referred to above, as it was not my desire to wilfully mosrepresent present conditions in the least. HUGH G. CORP.

Forest, Wash.

Market for Vegetables.

The representatives of Libby, McNeill and Libby at North Yakima, Wash., have received word to canvass farmers for delivery of vegetables to the cannery the company will build at North Yakima this year. Spinach, beets, beans, asparagus, tomatoes and other vegetables are desired.

Hens Lay Well During Winter

Idaho Man Tells How He Cares for Them to Get Results

To the Editor of The Farmer: I have seven hens and 43 pullets which averaged 15 1-2 eggs per chicken during the month of February. I do not say that every chicken laid, but that is the average. I have five Ancona pullets, four pullets from Rhode Island Red hens crossed with a Blue Andalusian rooster, and they were the first pullets to lay. The rest are Blue Andalusians. They wanted to sit winter and summer and can not be beat for a table fowl.

I have a chicken house made from cheap cull lumber bought at the sawmill for $6 per 1000. The house is 14x24 feet, with a shed roof made of cedar shakes; the cracks in the sides and ends are all battened. It is built north and south, and in the north end I have built a roosting place that is tight, with an extra tight roof, which is all inside of the main building, tight up in the corner with the open end inside of the building, with a drop curtain. The south end of the building is open also, and is covered with woven chicken wire and also has a drop curtain. The curtains are all made of flour sacks sewed together, but neither of the curtains have been down this winter. The frame of the building is made of poles and the roosts are made of peeled willow.

I have dirt on the ground floor and put wheat on the straw for the hens to scratch in and work for the other grain. I have used the main body of the house for a scratching shed. I fed cracked corn and whole corn at times, mixing the cracked corn with bran and shorts, giving one measure of cracked corn with two measures of bran and shorts, wet with warm water on cold mornings, not getting it too wet. The water was hot enough so that the mash was warm to the hand. Sometimes I put in a teaspoonful of red or cayenne pepper. At noon and night they got grain; about three times a week a peck of sliced cull apples were set in for them, and they would quit all other feed for their apples. This is all the green feed they have had this winter. Other winters they have had carrots and some cabbage, but none this winter.

Feeds Them Fish.

I keep oyster shells in a hopper all the time, and also some bran and shorts. About twice a week I boiled a mess of perch with the bran and shorts mixed in while fish is boiling, and hot enough to make almost crumbly. I also put a tablespoonful of salt into two gallons of this mash. I have used warm water all the time. I have had no patent foods or utensils and I have never had an incubator. I have not lost one chick from disease that I know of. In fact, I have lost but four or five that I thought were sick in the 11 years.

Feeds Chicks Second Day.

I feed my little chicks the second day, and the first feed is corn meal, wet a little, with a dash of red pepper in it. I put the feed on a board for the first week, and then turn the hen loose until it is too cold. I never feed enough so that they will have any left to run over but I feed them often at first. Crumbled bread, corn or wheat bread is given after the first week and also cold boiled potatoes whenever I have it.

The house is protected from all north winds by being in a cove on the south side of a hill, and if there is any sunshine they get it.

I never disturb the flock, but if I go in to the henhouse and don't talk to them they will get up in a corner, as much as to say, "Is it you?" But as soon as I start to talking it is all right.

Here is one thing to remember, that it takes just as much feed to get eggs when feed is high as it does when feed is low, and I did not receive any more for eggs this winter than I have during the winter of the last 11 years.

Fumigates Frequently.

I use sulphur to fumigate, and I put a small teacupful on paper and put under the roosts, then touch a match to the paper and the sulphur will burn for half an hour or so. I do this every two or three weeks. I also put stove ashes in the henhouse for them to dust in, and scatter a little air slacked lime in the litter winter and summer. The hens have the run of the place in the summer time. O. C. SHIPMAN.

Black Lake, Idaho.

Ancient Farming

Herodotus, in the year 450 B. C., said that good cultivation yielded two-hundredfold in the Valley of the Euphrates. Even in that land of Eden, poor cultivation yielded but fiftyfold.

In 1898, the average Wheat yield per acre in New York State was 21.2 bushels; in 1907, 17.3 bushels per acre; in 1912, but 16 bushels.

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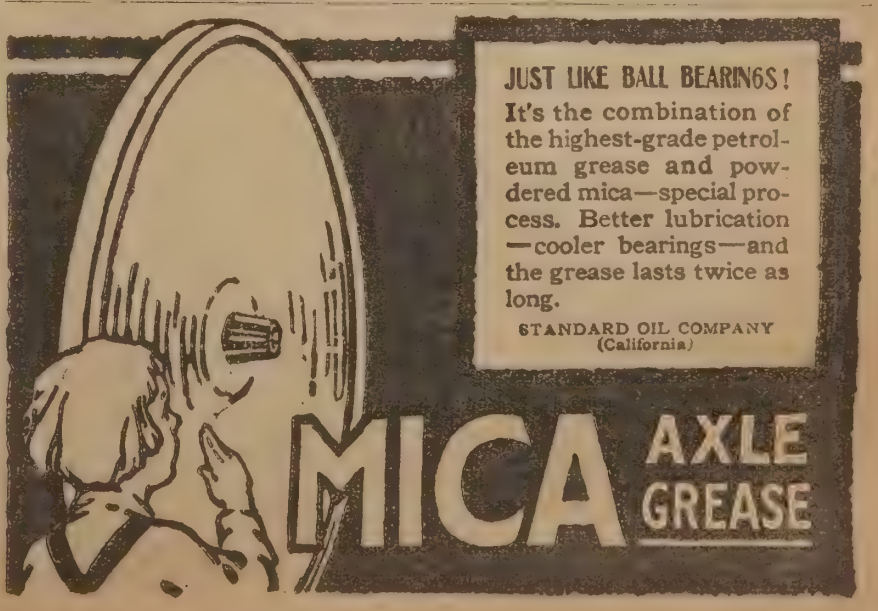
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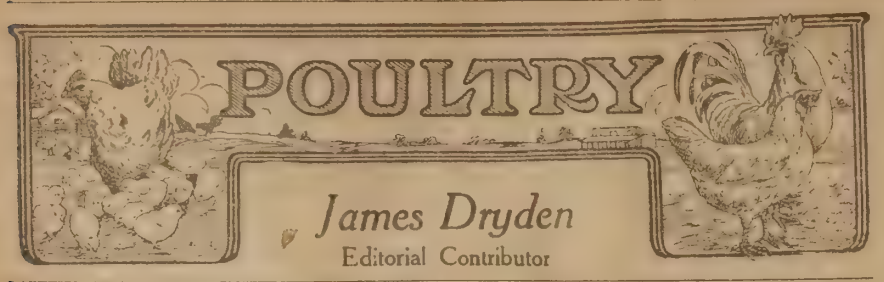


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Good meat qualities come by inheritance, just like egg-laying qualities.

Hogs at $10 a hundred means $20-a-hundred chickens. The public seems willing to pay the difference.

More attention will be given to meat chickens before long. The opportunities in the future may be as great in breeding for meat as for eggs.

The market for poultry is excellent. A few Plymouth Rocks to sell now will make some money. A 6 1-2-pound Plymouth Rock hen would bring $1.30. A 3 1-2-pound Leghorn at 18 cents would bring 65 cents, a difference of 67 cents in favor of the Rock. This is more than the difference in the cost of feeding the two. Were the prices 10 cents for Rocks and 9 cents for Leghorns the difference would be about 35 cents. This would more nearly represent the difference in the cost of feeding the two hens for a year. Assuming that each lays the same number of eggs in a year, the Plymouth Rock would be the most profitable to keep when the prices were 20 cents and 18 cents, respectively. If the prices should drop to 10 and 9 cents the difference would just about pay for the additional cost of feed for the Rock. J. D.

Running the Incubator.

It has been shown very clearly in experiments at the Oregon station that the method of running the incubator is responsible not only for the number of chicks that hatch, but also in a large measure for the quality of the chicks hatched. It is not sufficient, therefore, to hatch the chicks; that is easy; but they must be hatched right, and that is harder. The experiments showed, for example, that the weight of the chick was increased or decreased as the humidity in the machine was greater or less. Further, the amount of moisture in the machine during incubation affected the chemical composition of the chick in certain particulars.

The lesson is that the successful incubator operator must exercise great care in running the machine. Chicks that have not been incubated properly will not live and grow well, and the mortality will be large. The failure to successfully rear the chicks is not all the fault of the rearer or of the brooder; it often goes farther back to the incubator.

There are three things that are important: First is the temperature. There must be steady, uniform temperature. The operator must exercise the greatest care in holding the temperature as steady as possible. Chicks may be hatched even though the temperature fluctuates up and down a degree or two every day, but they will not be hatched as well. The operator should understand his machine. He should test the different sections of the egg tray to see if the temperature is fairly uniform all over the tray. This should be done with a number of thermometers before the eggs are put in. This is one of the first requisites of a good incubator, a uniform temperature in different corners of the egg chamber.

If the incubator is heated with a coal oil lamp, the burner should be in good condition, and, if not, a new one supplied. A new wick should be put in. It pays to use good oil. Cheap grades of oil produce smoke and soot and very often fires. Besides good oil, though it may cost more, may be the cheapest because it will furnish more heat. This is the second requisite for keeping a uniform temperature—a good burner and wick and good oil.

The temperature of incubation is 103 degrees at the top of the eggs. It is a good plan to start the machine at 102, then gradually raise it to 103 by the end of the first week; then maintain it at 103 throughout the hatch. It may be allowed to run half a degree higher on the 19th day and until hatch is off.

How much variation above or below 103 can the eggs stand? is a question often asked. They will stand considerable. It may run down to 100 and up to 106, and still the eggs will hatch, but when the temperature goes up and down the conditions are not the best for successful hatching. The question should not be what the eggs will stand, but what temperature will hatch the best chicks.

The question of good chicks is important for the man who buys day-old chicks. The chicks may look all right, even though they have been injured in the incubator by variations in temperature, but in a few days in the brooder they will begin to die. This is where the risk in buying day-old chicks comes in, or one of the risks, and the man who buys chicks should know something of the conditions under which they were hatched. J. D.

Gooding Community Club.

One of the beneficial results of the visit of the Second district president, Mrs. G. W. Lamson to the Gooding, Idaho, Woman's club, was the formation of the Woman's Community club, composed of the Woman's club, and other women from the city and surrounding country. Mrs. Samson pointed out that this should be composed of country women, city women, foreign women and young women. The good things which the country should have and has not as yet, will be the aim of this community club. It was also decided to form a parent-teacher association.

Hens Must Have Feed.

A productive hen requires from 70 to 80 pounds of feed a year. If she gets only 40 to 50 pounds, she will simply satisfy her body requirements. She will not lay eggs. The scantily fed hen is a poor investment. It is only the liberally fed hen that yields the profit.

Lays One Day in Five.

According to the United States census, Missouri's 21,000,000 hens lay 111,000,000 dozen eggs annually. If this is true, the average hen lays about 63 eggs a year.

Chickens

Help Solve High Cost of Living

R. S. Tandy of Jefferson, Ore., has a chicken story that not only illustrates how to help solve the high cost of living, but gives farmers and poultrymen who have the opportunity of raising cheap poultry feed much to ponder over. Mr. Tandy lives on a small lot, about 50 feet wide. He had 17 hens during 1916, besides two or three bought for setters and fattened and killed as soon as their hatching duties were over. During the year he purchased $44 worth of feed. This part of the record was easily kept. The feed was supplemented only by the grass cuttings from the lawn in summer and an insufficient amount of kale in winter. On the other side, all eggs used or sold were credited at the current prices when laid. Sixty-six dollars' worth of eggs were thus produced, besides those used in raising 50 chickens. The chickens were begun to be eaten when they reached good frying size, and when the year closed there were only 35 hens and two cock birds.

Mr. Tandy only gave a little time to his "poultry farm," as he could spare from his real estate business. The hens were kept in a small poultry house at the back of the lot. They were allowed to run out an hour or so each afternoon in good winter weather, but were kept inside at all times in the summer, as the lot is taken up with a garden.

Mr. Tandy's hen house has only open wire netting from the ground up about four feet on each side. Boxes for laying are along the back of the house, a self-feeder holds whole oats, and oyster shell grit is kept before them all the time. A little alfalfa meal is kept before them when kale is scarce. The floor is kept covered with straw and a little wheat thrown in each morning to induce scratching and exercise. The roosts are set over a false floor about four feet high and that floor covered with straw. Mr. Tandy only cleans the roosts once a week, though he realizes they should be cleaned oftener. He pours a little coal oil over each end of the roosts when cleaned, letting it run down to the middle, and is never troubled with mites. New straw is, of course, put on the false floor when cleaned.

Mr. Tandy has now a fine flock of mottled Anconas in one pen, and just hens, with White Leghorn and Barred Rock blood, showing in the other. Counting chickens at a fair value his eggs cost him almost exactly 12 cents a dozen, and his family had strictly fresh eggs and healthy, fat broilers all summer. The little chicks were hatched in a box eight by three feet and with a roof over half the box, and were kept there until old enough to put in the coop. The high cost of eggs or poultry has no terrors for him. If he can produce eggs at this low cost, is it not possible to make a profit on the farm poultry? H. A.

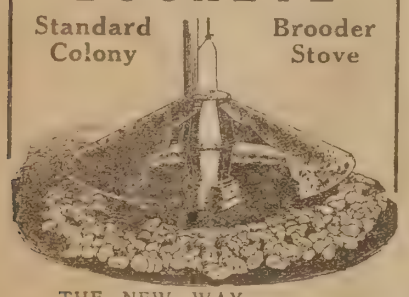
FEEDING FORMULA
Brings Excellent Results.

Use of the following feed formula by Charles Rothwell of Corning, N. Y., resulted in the production of considerably more than 100 eggs per hen in his back yard poultry pens last year, according to his recent report:

A dry mash composed as follows (kept before them at all times): Cottonseed meal, 100 pounds; corn meal, 50 pounds; wheat bran, 50 pounds; alfalfa meal, 15 pounds; charcoal, 10 pounds; calt, three pounds. They were kept busy with scratch feed, fed in deep litter composed of equal parts of the following grains: Oats, wheat, barley and cracked corn, except in hot weather, when the corn was eliminated.

The exact number of eggs laid by these hens in the last year is as follows: January, 59; February, 132; March, 358; April, 558; May, 650; June, 566; July, 574; August, 478; September, 150; October, 59; November, 54; December, 34, a total of 3652 eggs in the year. Ten of the hens were killed for family use. Assuming that the market value of these eggs would average 30 cents per dozen, the total value of the eggs would be $101.30. The cost of feed consumed by the hens during the year was $34, a trifle over $1 per head. Deducting this from the value of eggs produced, leaves a profit of $67.30, or an average of a little over $2 apiece per hen.

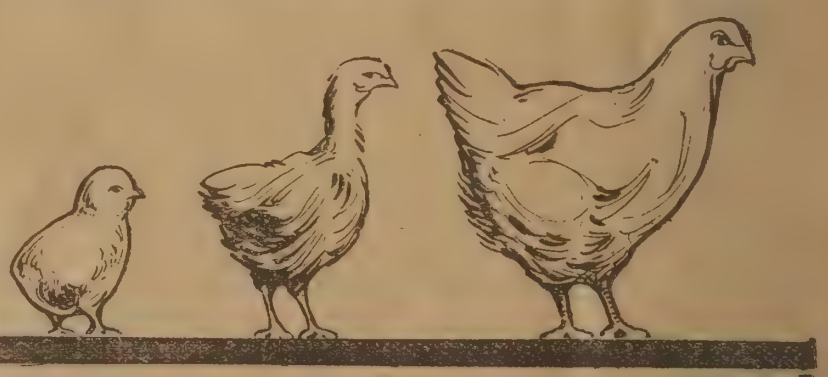
"BUCKEYE"
Standard Colony Brooder Stove



THE NEW WAY—you can raise more chicks and better chicks at ¼ the cost of the old style brooder methods.
The "Buckeye" Booklets and our Poultry Supply Catalog No. 182 mailed on request.



To SAVE LITTLE CHICKS and help them to grow into big, strong, healthy birds, FEED
Diamond Chick Food
Our name and trade mark on every original package.
PORTLAND SEED CO.
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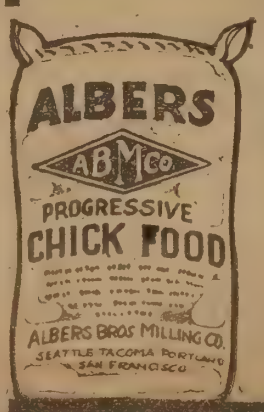
From the Young Chick to the Sturdy Hen

is only a short period of growth. Different rations are required during the stages of development. Albers "Progressive" Poultry Foods meet this demand. Right now, poultry raisers need a generous supply of

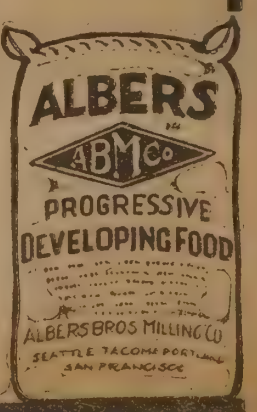
Albers
"Progressive" Chick Food and Chick Developer

Chicks should be fed from three days after hatching until six weeks old. Then a ration of developing food. At the developing stage, feed to supply growth in bone and flesh and feathers are needed.

Ask your dealer for Albers "Progressive" Poultry Foods, or write us direct, giving your dealer's name. We will see that you are supplied.



Albers Bros. Milling Co.
Seattle, Wash.
Portland, Tacoma, San Francisco, Los Angeles.



Our Duty to Smoke Out Swindlers

(Continued from page five.)

report and his joint report with Mr. Delivuk to the farmers' union."

"Did you know how much was due on notes and whether the same was a collectable asset?" "The sum due was then reported and the notes were said to be good."

"Did you know that 75 per cent of the notes were past due?" "No."

"They did not tell you that?" "No."

"Get any special rates on merchandise by being an employe of the company?" "Never was an employe of the company.

"Did you ever receive any commission on stock sales?" "Never sold any stock."

"We notice on the books, under date of August 13, 1913, that C. B. Kegley was paid $40 under the heading of 'commission.' Can you explain that?" "Yes, I sold Gale Smith a share of stock at that time. I had purchased the share in 1910. I had two shares, and needed only one, and sold him the other."

Attorney Garrecht said the records show that Kegley had purchased but one share of stock in the company, and asked why this was.

"At St. John, Wash., a man named Barber made a complaint that a salesman for the Northwestern had jobbed him. He said that the salesman had charged him $75 for a share of stock and that after he went home he found that its par value was but 20. He then offered to sell the stock for par, $20, and I asked him to hand it over."

"That stock was not transferred to you until March, 1915," sad Attorney Garrecht. "No, I delayed in having a transfer of it made."

"Prior to that were you not a stockholder?" "During the time I was dealing with the company I was a stockholder."

This is a sort of an investigation that led C. B. Kegley to declare that "a personal investigation of the resources and liabilities, methods of business and quality of merchandise for the Northwest General Trading company" was on a basis that "satisfied" him of its sound, financial and cooperative basis and through the proposed plan of a distributing center, with each subordinate grange, and the active cooperation of the patrons, can be made to fill the need of the wholesale supply house for the grange members."

The Washington Farmer does not believe that such an examination or such an endorsement will commend itself to the members of the grange. Moreover Mr. Kegley was not a stranger to the Northwestern General Trading company. It has already been shown by his own testimony that he bought a share of stock for $20 upon the complaint of a man who charged that he had been cheated by having the stock sold to him for $75 and that he sold this stock three years later to Gale Smith, the president of the company, for $40, but did not have these transactions indicated on the books of the company for a number of years.

If it was merely a blunder which led C. B. Kegley to give an endorsement which caused many members of the grange, as well as many farmers outside of the grange, to lose money in the swindling trading company, it is the kind of a blunder which should forever debar a man from occupying a position of supreme influence in a great order like that of the grange.

Here are two letters read in evidence in the trial of the Northwest General Trading company that clearly indicate the value to the swindling company of the endorsement of farm leaders:

The following letter from C. L. Davies, manager of the Portland branch of the Northwestern, to Gale Smith, president of the company in Spokane, was read:

"PORTLAND, Nov. 7, 1914.—Dear Gale: Mr. Kegley and his bunch have finally indorsed the company. It took a long time to bring them over. I was up at Washougal yesterday and had a talk with Mr. Wing, one of the executive committee, and signed him up for a share of stock. He is the one that was bucking our proposition last spring at Washougal. We have him in line now; are getting him out and putting him to work undoing what he did last spring. That is the way to fix these fellows that knock. When they kick the brick wall down make them get in and built it up again.

"I am joining the grange down here and am going to be initiated tonight. I will be some granger, believe me. Heretofore when I wanted to arrange a meeting I would get in for a few minutes and then they would kick me out. But I am going to be in a position where I can go to their grange meetings and stay until the last dog is hung.

"I am glad to hear that you are getting things lined up there with a bunch that are capable of getting the business. I trust that you will be able to run onto some new proposition that will be of benefit to us. CLYDE."

F. B. Sears was at the head of the membership department of the Northwestern General Trading company:

""SPOKANE, Nov. 10, 1914.—Mr. Crabb, Sawyer, Idaho.—You understand this is a cooperative company issuing catalogs to members only. The membership numbers at this time nearly 8000 of the most progressive and enterprising people of this Inland Empire. By far the greater portion of these people are trading with the company, buying their merchandise, clothing, hardware, groceries, shoes, farm implements, vehicles, wagons, etc., through the company and report a saving of from 25 to 35 per cent on practically all kinds of merchandise. The company has prospered very rapidly, and in five years the membership has grown to nearly 8000 and the total assets to a third of a million of dollars, and the stock is selling for $75, nearly four times its original value.

"You will notice by the enclosed circular the executive heads of the Washington Farmers' union have investigated the company, its management and system of business very thoroughly and have unanimously indorsed the proposition. This of itself is going to enhance the value of the stock and should double the membership. The state grange of Washington also took the same action and unanimously indorsed the company. Five shares is the most we can sell to one person and represents an outlay of only $375 and makes you a part owner in the wholesale mercantile company that is today in the foremost rank of any institution of its kind in the west and getting larger every day. Northwestern General Trading company.

By SEARS."

The assumed justification of Kegley in muddying the waters and declaring that any criticism of himself is a criticism of the grange is becoming thinner and thinner, and the grange folks are seeing through it pretty easily.

At the request of a reader early in 1915, The Farmer began the investigation which has resulted in the conviction of the swindling officers of the Northwestern General Trading company. Because of its insistence that an investigation should be made by the authorities, The Farmer drew upon itself the enmity of those swindlers and of those who have indorsed them.

A farm paper can render no service more valuable to its constituency than in smoking out fraudulent schemes, especially when these schemes assume the garb of cooperation. In fact, it is a duty we owe to our readers to do this, whether it is a misnamed cooperative trading concern, or a scheme of manufacturers or middlemen to extort exhorbitant prices from producers, or a put-up job on the part of unscrupulous live stock breeders to sell at auction purebred breeding stock at fictitious figures.

The Farmer is confirmed in its well considered belief that C. B. Kegley has proved himself unworthy of the trust imposed upon him as master of the State Grange and should give place to a man of clear brain and rugged honesty, who would not advise farmers to buy stock in a swindling concern which robs them of $500,000 of good money.

Let These 11,000 Farmers Answer

For every question you have regarding the "Big Bull" Tractor, for every argument that any one may advance against it, there are a thousand answers from the men who make up the **supreme court** of authority on the merits of the **"Big Bull"**—the eleven thousand and more farmers who now own and operate

"The Bull With the Pull"



Bull Tractor on Cameron's Ranch, Seven Miles East of Sunnyside, Wash.

We have an attractive booklet in which these owners tell their story in their own words. Let us send it to you. The demand bids fair to exceed the supply this year. Send in your order now.

Price $775, Seattle or Spokane.

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Northwest Buick Co., Seattle-Spokane.
Please send me your latest descriptive Bull Tractor literature.
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Seeking Higher Priced Wheat

Tell-Tale Story of a Chemical Analysis For the Grain Grower

By THOMAS T. KERL
Coeur d'Alene, Idaho

A few years ago I had a conversation with a prominent wheat grower of Walla Walla. He said in substance "we have a soil that is permanently fertile. I have grown wheat in the Walla Walla country for 50 years and I can get just as big crops now as I did years ago. It is all a matter of the season and the work done in putting the wheat in."

Is this really the truth? Or is it only seemingly the truth?

There is, of course, wide fluctuation in the yield of wheat in different seasons and depending upon the care in preparing the ground, but I am inclined to think that, if one really could make a fair comparison of a 10-year average of wheat production with a 10-year average, 30 or 40 years ago, there would be shown a striking decrease in fertility and yield where wheat growing has been the one farming operation.

Decrease in Fertility.

Some recent chemical analyses shown me by Professor Olson of the Agricultural college at Pullman, Wash., seem to me to be pretty good proof of decrease in fertility.

The college farm has been run for 16 years with no summer fallowing, but with a rotation in which red clover, alfalfa, and corn have been used. When these crops are grown there is an accumulation of nitrogen in the soil. The question then naturally arises, is there any more nitrogen in the wheat grain when grown on ground that has produced, the year preceding, one of these crops, than there is in the wheat that is produced from ground that has been rotated wheat, summer fallow or wheat, oats, summer fallow.

The analyses seem to show this conclusively. In the 1914 crop, the following analyses may be compared:

	(1)	(2)	(3)
Red Russian	2.61	1.79	1.43
Winter fife	2.14	1.85	1.54
Hybrid 143	2.54	2.12	1.49

The figures in column (1) are percentages that result where the nitrogen content of the soil has been kept up by legumes, manure and cultivation of various crops. The figures in column (2) are results obtained where wheat was sown in ground that had previously grown corn. The figures in column (3) represent percentages in wheat grown on land handled in the ordinary way without legumes or cultivated crops in the rotation. There is a decrease in nitrogen content from 20 per cent to 82 per cent in some cases apparently due to the fact that in the poorer cases the nitrogen was not in the soil. The percentages given are not haphazard analyses but averages from many analyses.

For the year 1915 average analyses of wheat grown in the Inland Empire in the ordinary rotations show a percentage of 1.65 of nitrogen. The lowest analysis was 1.38 per cent and the highest 2.07 per cent. For the same year, the wheat grown on the college farm at Pullman where nitrification of the soil has been secured by suitable rotations showed 2.11 per cent as low for nitrogen and 3.03 per cent for high.

The significance of the nitrogen analysis is this: if the percentage is multiplied by 6.25 the protein in the wheat is approximately secured. If this produce is again multiplied by 5, the wet gluten percentage is shown. Bakers and millers are shouting for more gluten in the flour. The more gluten in the flour the more water will the flour absorb and hold and the better the bread will rise. Millers now are making gluten tests and are paying from 5 to 10 cents and even more per bushel for wheat with a high gluten content. Basing price on nitrogen content is a sound commercial proceeding. At our large grain centers there should be chemists to analyze the nitrogen in wheat and the nitrogen content of wheat should be a larger factor in determining the price than it is today. A good chemist can make 40 to 50 nitrogen analyses a day.

If the farmer knew that he was going to be paid according to nitrogen content as well as mere pounds, he would soon rotate his ground in crops to produce the higher quality.

Not until the American farmer nitrogenizes his soil by suitable rotations of crops will the maximum protein be in our bread.

David Chitlow of Richfield, Conn., an expert chemist for bakers, in a recent address makes this statement—"There has been a steady decline in the protein and gluten values of standard bread making flours produced under the type groups of Minneapolis flour from 1894 to November, 1916."

"In the middle of the 90s northwest wheat flours of patent flour grade, contained over 13 per cent of protein and dry gluten with the ash practically constant at .43 per cent. By 1904 the gluten had receded to 11 per cent for the same group of flours; and today and for some time past, the percentage of protein and dry gluten has been between 9 and 10 per cent. Non-rotation of crops is partly responsible for the lower gluten, etc."

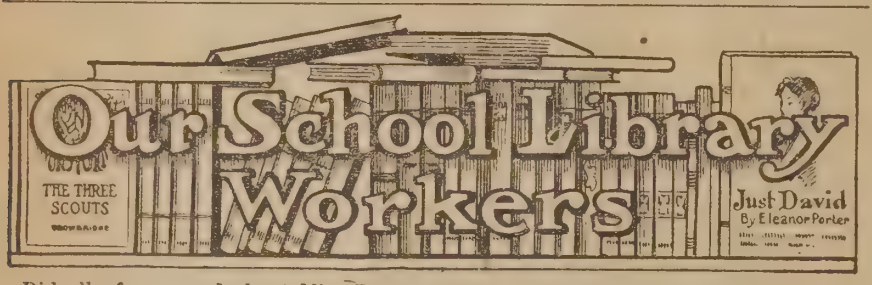
In our wheat districts are grown probably from 20 to 40 varieties of wheat. The tendency is to increase the varieties in the vain hope of getting a variety that will naturally have a higher glutent content.

The theory is that to improve the quality of wheat all that is necessary is to change the seed occasionally. It is believed that wheat will deteriorate after being grown in the same land for a great number of years. The chances are that the farmer who tries to improve his wheat by new seed alone is running down the wrong road.

Such a method is, in the grain growing business, very much like it would be in the stock business, if a farmer in the Palouse were to import a prize herd of Shorthorn cattle from the oppulent east and then winter them on straw and timothy hay. There is not any doubt about Shorthorn cattle being a good kind of cattle, but they must be fed plenty of food 365 days in the year and there must be great variety in the food.

If a plant deteriorates in a given district with years of cultivation, it may safely be said that there is something in the climate that is not favorable or there is a lack in some of the elements in the soil that go to make up a plant. These elements are potassium, calcium, magnesium, iron, sulphur, nitrogen, phosphorus. To determine just what element is lacking in a soil is not an easy matter, but seemingly nitrogen and possibly sulphur are lacking in sufficient available quantities in many of our wheat soils. At any event it seems quite certain that by building up the nitrogen in the soil we can get very marked improvement in the quality of the crops produced.

Maybe, when farmers feel full of Falstaffian bragadocio, they will do well to remember the tell-tale story of the chemist's analysis.



Did all of you read about Miss Dorothy Rauch of Chewelah, Wash., in last weeks' paper? And about Loyal Snyder of White Swan, Wash., in the issue of March 8th?

Well, Miss Dorothy has Master Loyal feeling pretty glum at this writing—though Loyal is not the least bit inclined to acknowledge defeat. He is saying little, but we incline strongly to the belief that he is busily sawing wood.

Dorothy has 16 subscriptions to her credit and Loyal 12. By the time Loyal has 16, Dorothy will no doubt have several more—then again she may not. It's a real race and grows more and more interesting each week.

And pray don't any of you make the mistake of supposing that this race is wholly between Dorothy Rauch and Loyal Snyder. There is Bessie Webb, for instance, with 10 subscription; Mildred Glasgow with 9, Dorothy La Rue and Lester Ruark each with 6 and Violet Leachman and Eva Bond with 5 and 3, respectively.

Just supposing that Eva Bond, with only three subscriptions, should suddenly make up her mind to win that gold prize, even with big odds against her. Wonderful things are done by grit and determination. Come to think about it, did any of you ever hear of any big accomplishment that didn't come from grit, determination and hard work? So those who are low today may be high tomorrow.

Maybe Loyal Snyder isn't the only one who is keeping mum, but keeping busy as well. Knowing the way Mildred Glasgow makes thing hum when she puts on that winning smile of hers and gets after Farmer subscriptions in earnest, we should not be a bit surprised if she climbed right up with Dorothy and Loyal before May 1st.

Then there is Bessie Webb—bright, alert and already in third place. Bessie, too, may have a fine lot of surprises up her sleeve. And who can tell what plans may be afoot over Mayview way by Dorothy La Rue, Lester Ruark and Violet Leachman?

Surely, it is a fine race—and its interest grows because you can't begin to guess who will win. Here is the way the subscriptions stand at present.

Dorothy Rauch, Chewelah, Wash., 16.
Loyal Snyder, White Swan, Wash., 12.
Bessie Webb, Ford, Wash., 10.
Mildred Glasgow, Bossburg, Wash., 9.
Dorothy La Rue, Mayview, Wash., 6.
Lester Ruark, Mayview, Wash., 6.
Violet Leachman, Mayview, Wash., 5.
Eva Bond, Valley, Wash., 3.

New Schools in the Library Contest.

Mountain Home school, Benton county, Miss Myra Renshaw teacher.

Valley Heights school, Benton county, C. A. Parker teacher.

Valley View school, Benton county, Miss Marguerite Lynn, teacher.

HONOR ROLL.

Chewelah school, Dorothy Rauch; **Sunset School,** Joe Mills, Victor Hofford, Ralph Gibbons; **Bolles Junction school,** Marie Stewart, Harvey Brittain, Melvin Stewart, Walter Mikkelson.

In connection with this week's honor roll it is worth noting that the boys considerably outnumber the girls. Perhaps the example set by Loyal Snyder is having a good effect.



Real $25 Value

Suits and Overcoats

$15.00

Order Suits by Mail



Our new mail order department brings our immense stock of ten thousand suits and overcoats direct to your home. It is now possible to purchase from us at the same low price and with the same guarantee of fit and service as the thousands of our customers in the city.

Save $10.00

Buy your clothes the modern upstairs way, the money-saving way. Ten thousand suits to select from—blue serges, pencil stripes, clay worsteds, tweeds, cassimeres, velours—any fabric you may fancy, all hand tailored, at a saving of $10.00 to you.

Selling clothes upstairs on the second floor is a radical change from the old way—the low rent, the inexpensive fixtures, the cash selling plan and the fact that we are willing to accept a small profit—these are the reasons why we are able to save $10 to every purchaser.

Thousands of men in the northwest have taken advantage of our selling plan and proven to themselves that they save money—you can do the same.

Mail Coupon Today

Cut out coupon and mail today for samples and measure blanks. State the kind of suit wanted. You can easily take your own measure. No trouble, no delay. You pay only on delivery and if not satisfied don't pay. **We guarantee satisfaction or your money back.**

We Pay Delivery Charges Anywhere.

LUNDQUIST-LILLY,
Seattle.
Gentlemen:
Please send samples and measure blank to suit.
Name .....
Address .....

Lundquist-Lilly
Upstairs Clothes Shop.
Joshua Green Bldg., Seattle.

Hillside Farming

Between Benches and the Bottoms

In the ordinary course of western Washington pioneer farming the rich and comparatively level river bottoms and delta lands are the first to be cleared and put to work. In time these are all taken up, and the level benches are drafted into the service of mankind. Still farther along in the progress of farming evolution, all of the level land available has been put into crops, and the rise in land values has started adventurous men and women with a hunger for tilling the soil to experimenting with hillside land. In Europe this point has long since been passed, and the terraced hillsides are looked upon as a regular part of the producing area.

With this in view, it is well to consider this statement from a recent bulletin issued by the state college experiment station:

"Green manuring prevents washing, adds organic matter to the soil, prevents leaching and affords winter pasture."

There are some of the requirements of the case, in a nutshell.

One of the great difficulties in using hillside land has always been to prevent erosion and leaching, by which the soil itself or its soluble plant food is washed away. A cover crop of vetch or rye "sown in the fall and plowed under in the spring, when the rye is about eight or 10 inches high," will not only hold the soil together physically and prevent the leaching of plant food, but will furnish fall and spring pasture and add humus to the soil.

Here in the northwest, particularly in those parts of Oregon and Washington west of the Cascades, it may well occur that in the long run and with proper handling, these sloping lands, with their superior drainage and, in the case of southern slopes, their increased warmth, will prove more valuable than some of the bottom lands.

LOAN ASSOCIATIONS

Keep County Agriculturist Busy.

Charles A. Cole, county agriculturist, returned from Eatonville, having finished the dissemination of information on the new farm loans in the Tacoma Eastern district. Eatonville, Kapowsin, Benston, Alder and Ashford have formed an association, he said, and already have asked Uncle Sam for $30,000 for farm extension purposes, and expect to ask for a total of $50,000.

The county agriculturist and his assistants are getting about as fast as they can, talking to farmers and ranchers, telling them the details of the new help which the government has provided. The three days' agricultural institute at Eatonville, at which 1400 persons were in attendance, greatly helped this work, said Mr. Cole.

Longbranch already has formed an association, as has Sumner, said Mr. Cole.

Pure Bred Jersey Bull.

County Agriculturist O. T. McWhorter is aiding three dairymen from the Mount Pleasant district in Clallam county to locate a pure-bred Jersey bull to be purchased on a cooperative basis. A bull organization was also looked upon with favor in the South Bay district.

INDIAN FARMERS

Take More Kindly to Leadership.

As an item in the report of R. B. Coglon, county agent leader in Washington, County Agriculturist H. B. Smith of Okanogan says: During the week the county agent held live stock meetings at Nespelem. J. M. Johnson, superintendent of the Colville agency, informs me that my activity in promotion of cooperative marketing of over 5000 head of cattle on the reservation has started a movement of great financial value to the Indians. I talked through two interpreters to the Nez Perce and Colville tribes and after the meeting talked to the chiefs and leading stockmen individually. It surprised me to discover that many full-blood Indians owned from 50 to 200 head of cattle. One Indian shipped 300 last year, but not one sold for over $55 and were not sold by weight. Mr. Johnson told me that if these cattle had been sold over the scales they would have brought $10 more. The superintendent told me that after the meeting he had talked to the leading stockmen about cooperative shipping of cattle and had found most of them interested and apparently willing to try the new plan, and that in his opinion the more skeptical Indians would adopt the plan when they discovered the success of the first shipments by the leading and more progressive stockmen. In one way the plan will be introduced more easily among Indians than whites, because the former all follow a few leaders.

Do You Know That

A man is as he thinketh in his heart?

Potatoes

Better Crop by Fall Planting

C. R. Campbell of Bellevue, King county, believes in planting potatoes early. In fact, Mr. Campbell is convinced that he can get a better crop, other things being equal, by planting in the fall than in the spring.

"Of course, fall planting must be done on land that is well drained, and you must use whole potatoes—if you cut your seed it is pretty apt to rot before growing time in the spring. And here is another point—don't be disappointed if your fall-planted potatoes don't come up much ahead of those planted in the spring. They will be ready for the table probably two weeks earlier and will bear a heavier crop. The best crop of potatoes I ever got was from a fall planted field, which was given no fertilizer."

In contrast to this method with potatoes, Mr. Campbell admits that his general garden goes in rather later than those of his neighbors.

"People tell me that you must get seeds into the ground early in order to take advantage of the abundance of spring moisture," Mr. Campbell explains. "Well, maybe they are right, but I don't plant my garden till the ground is warm, and I don't irrigate it, either. I believe that a plant is like an animal and that a bad setback early in growth is never fully recovered from. If the seed bed is properly prepared and subsequent tillage is what it should be, fairly late planting is best, in my experience at any rate, for Puget sound."



Weyerhaeuser Grain Tank, in use with stationary thresher rig. Sheaves are hauled to thresher, located near tank, and grain threshed at once direct into tank.

BULK Your Grain

WITH THE



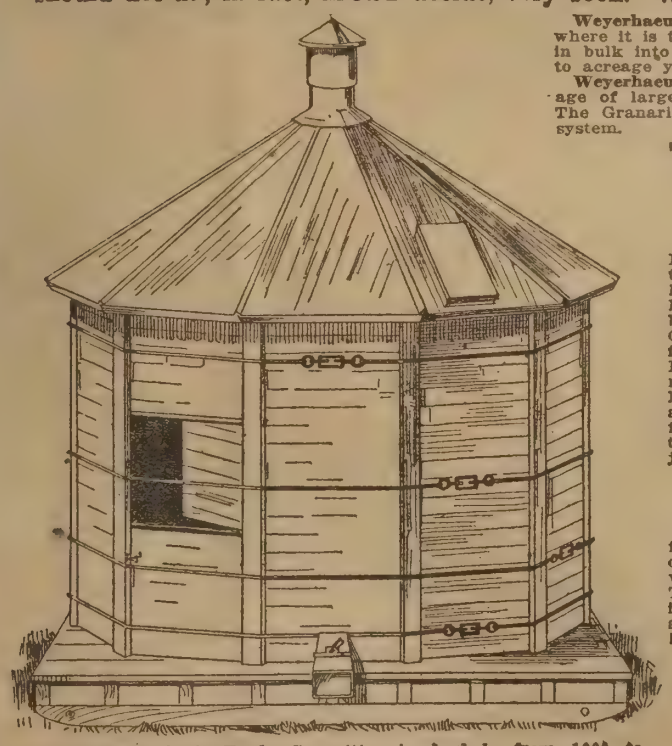
Weyerhaeuser Granary, in use with combine rig. One wagon is loading at the combine while other is discharging at the granary.

Weyerhaeuser Fir Grain Tanks and Granaries

"Swat the Sack," is a motto grain producers of the Northwest are discussing in earnest right now. It is a question that YOU should decide; in fact, MUST decide, very soon. WHY NOT DECIDE NOW? WHY NOT INVESTIGATE AT ONCE? WRITE US.

Weyerhaeuser Grain Tanks are for the Farmer who stores his GRAIN where it is threshed; tanks hauled to center points and grain threshed in bulk into tank direct. Tanks hauled from summer fallow acreage to acreage you cultivate—no tanks lie idle.

Weyerhaeuser Granaries are for the Farmer who wants central storage of large capacity and for converting flat warehouses to bulk grain. The Granaries are stationary and constitute your own home elevator system.



Weyerhaeuser Grain Tank—Capacities in bushels from 1000 to 2000. Diameter, all capacities, 14 feet. Filling spout placed in scuttle of roof for main fill; ventilator at apex is sleeved to lift off for spout to fill to brim; after filling replace ventilator. Doors give access to assist run of grain from spout and to shovel out all floor grain. Doors also enable occupancy for other purposes when not holding grain.

The Practical Way to Bulk Your Grain Is the Weyerhaeuser Way

The Weyerhaeuser Grain Tanks and Granaries are BUILT RIGHT. Designed only after most rigid investigation and with a foundation of years of Weyerhaeuser experience in making the famous Weyerhaeuser Silo for Farmers of the northwest. 200,000 bushels bulked in Weyerhaeuser tanks in 1916. The Grain Tank must be simple of construction so that farm labor, even at the busiest season, can erect it. It must be easily moved or easily knocked down and reerected. It must be strong and last indefinitely. It must allow easy access of men, have proper filling arrangements, and allow quick running of the grain from the spout. It must be constructed of such material and in such a way that there shall be no injury to the grain. Lastly, it must be of a

Price That Is Right

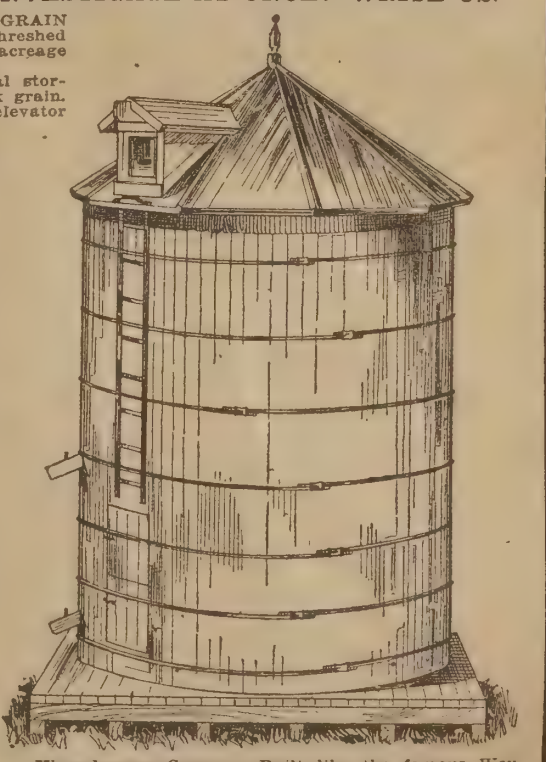
All these conditions the Weyerhaeuser products fulfill. The MOST VALUE for the PRICE CHARGED of any Grain Tank on the market. No sweating with the wooden tank. Perfect protection to grain. The WEYERHAEUSER BULK GRAIN WAY in a word is LOW as to FIRST cost, and for DURABILITY and LENGTH and PERFECTION OF SERVICE IS INCOMPARABLE.

Write Us for Folder "BULK YOUR GRAIN"--Free

Weyerhaeuser Timber Company

Manufacturers of Weyerhaeuser Grain Tanks and Granaries and of the Famous Weyerhaeuser Silos.

EVERETT, WASH.

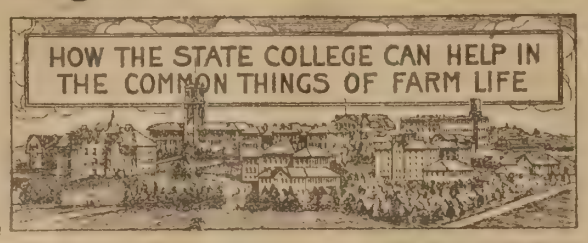


Weyerhaeuser Granary—Built like the famous Weyerhaeuser silo. Capacities in bushels, 3000 to 8000. The granary is filled by elevator through dormer. Two spouts for drawing out grain. Doors at bottom to allow access for cleaning out floor grain, etc. Your own home elevator at low cost.

The Hinged Doors Allow Its Use for Other Purposes After Grain Is Hauled

New Washington Live Stock Ear

Time at Hand To Lay Broad and Deep the Foundations For Future of the Industry



VI.

We are on the verge of the period of animal husbandry in the state of Washington. Live stock represents a distinctive stage in the progress of agriculture and has done so in all lands and in all the historical ages. We are here and now entering upon that stage. No that we have had no live stock in the past. Herds and flocks were here before wheat. The dairy industry has had its devotees in the state of Washington for a quarter of a century. But what, with hops and fruit and wheat and range live stock at different times at in different places dominating the local situation, it is not until lately that the foundations of the real animal husbandry are being laid broad and deep. The change of system is by no means easy, and the college is a sort of clearing house through which the change may come about more easily.

There is the whole problem of feeding which must be economically done, if feed is to be turned into meat or milk or energy in the most economical and profitable way. What is the relative value of roots and grains and the different legumes and grasses? What function does each of the types of feed perform and what feeds are especially adapted to the particular region in which the farmer lives? What balance must be maintained among the feeds and what is the cheapest feed to buy to supply the particular deficiency? for in every region there is a surplus of this kind and a shortage of that. For given results, what quantities of the different kinds of feed, such as ensilage or roots should be provided.

The college men can help you in these problems, no matter how small your farm may be.

The ordinary bulletins will help you, and when you are puzzled to understand the subject on which you desire information, ask for specific help. For example: You have determined to feed for the market a carload of steers. You write to Professor Hislop as follows: "I live at such a place. I desire to feed a carload of steers, 2 or 3 years old, as the case may be, which I now have or expect to buy. I have an abundance of alfalfa. The steers are fat and I would like to turn them off, if the market is right, about such a time. The possible concentrated feeds are at such and such a price. What quantity of alfalfa and what of concentrates shall I feed, and how shall I increase it from time to time?"

Not only will you get help in this matter, but it is possible for you to keep the professor advised of the progress of events, for the sake of additional help or suggestions which he may make.

In the matter of breeding you may need and can have similar help from the college for the asking.

E. A. BRYAN.

NEXT WEEK IN THE FARMER DR. BRYAN WILL TAKE UP THAT MOST IMPORTANT SUBJECT OF FARM MANAGEMENT. IT IS INTERESTING TO NOTE THAT THE IMPORTANT DIVISION OF THE UNITED STATES DEPARTMENT OF AGRICULTURE ON FARM MANAGEMENT ORIGINATED WITH A WASHINGTON STATE COLLEGE MAN, PROFESSOR W. J. SPILLMAN.

"EGG CIRCLE"

Is Formed by Poultry Growers.

Chester C. Farr, county agricultural agent for Snohomish county, reports the formation of an "egg circle," made up of some 25 Snohomish county poultrymen. By selling all of their eggs through the one sales channel, the egg circle people are enabled to get from 2 to 5 cents per dozen premium on the product.

Mr. Farr reports, also, the formation of two potato clubs, one in connection with the Snohomish County Fruitgrowers' association, the other organized as an agricultural development committee of the "community club" by some of the producers near Granite Falls. Dr. W. W. Goodrich is president, J. H. Curtis vice president and W. R. Farr secretary-treasurer of the latter organization. Both potato clubs have adopted the long white potato as their standard, and will attempt to help their communities turn out a uniform market potato.

SMUTTY WHEAT

Is Opposed to "Sample Grade."

The Portland Merchants' exchange has gone on record as strongly opposed to the grading of smutty wheat as "sample grade" by the federal grain standardization bureau, and recommends "that such grain, after cleaning, take the grade to which it is entitled on basis of moisture test, weight test and other grade specifications, the dockage for smut to be shown on certificate of grade."

FARM LOAN OFFICES.

The members of the Farm Loan association of Brewster, Okanogan county, have signed up for $36,400, this amount will at least be doubled if it continues to grow as rapidly as it has the last few days. The following officers are elected to head the new organization: L. E. Price, president; A. F. Holden, vice president; A. E. Holden, secretary-treasurer. The board of appraisers are L. E. Price, U. H. Myers and J. M. Terry. The directors are: M. D. Smith, A. F. Holden, J. M. Wilson, F. E. Thompson, John Gordon, J. M. Terry, U. H. Myers and L. A. Dale.

Pit Silo

Was Built in Sand 30 Feet Deep

To the Editor of the Washington Farmer: I noticed in the issue of February 22, 1917, an article on pit silos, in which the writer says if there is sand or gravel where a pit silo is to be dug it will not work.

I built a pit silo two years ago right in pure sand, 30 feet deep. The way I did it was to plaster it from the top down as we took out the sand. I first built a wooden mold 12 feet in diameter and leaving a space of six inches and leaving the outer row of staves six inches shorter. This makes a rim or curb 12 feet in diameter, six inches thick, with a footing of 12 inches wide and three inches thick. Next a building was built over the curb and a hay carrier installed. We had a big mining bucket to take out the sand with. We dug down two feet in solid formation and only a foot a day in loose formation and plastered up what we dug out the same day. The plaster was made of screened sand two parts and cement one part. After we were down 50 feet and four inches we put in a concrete bottom. Next the silo was painted with a mixture of cement and water, about equal parts.

To remove the ensilage we had a bucket made of sheet iron about three feet and six inches in diameter by three feet and eight inches deep. It was hung with two rods and a timber, the rods being fastened about 18 inches from the bottom at each side of the bucket. This gives it a hang about the same as a barrel churn and makes it easy to empty. The wooden beam and the rods taking the place of the barrel churn stand. We take out about 800 pounds of ensilage at a pull. We use a hay rack with a tight bottom to deliver the silage to the feeding troughs.

FRED ERFURTH.

Miles, Wash.

Rare Luxury of Shower Baths for the McLeod Jerseys



This is a view of the McLeod dairy home near Bellingham. In the center, toward the back of the picture, is to be seen the small bungalow built by Mr. McLeod in order that his farm help may enjoy actual home life. There are in reality, therefore, two homes supported by his 10 acres.

By BECKY BJERKE.

A particularly important feature of the barn equipment of the McLeod dairy near Bellingham is the arrangement of a water system whereby a cow can be given a shower bath if she comes in muddy. City water is piped into the barn. For every two cows there is a faucet to which a hose it attached for washing down.

Just eight years ago David McLeod purchased 10 acres of uncleared land three miles from the heart of the business district of Bellingham, Wash., erected a small house for his family and built a small barn for his three cows, horse and small covered buggy. He began his dairy business by delivering three quarts of milk on a Wednesday morning. By Saturday every pint that he had to sell from his three cows was spoken for.

Mr. McLeod cleared the land and put it under cultivation as early as possible. He used care in the selection of his cows, in breeding, in handling the milk, in arranging for a permanent feed supply and in every business detail.

Business Methods Pay.

The result of these efforts are evidenced by the success of the business. The state dairy inspector recently graded the dairy at 92 1-2 per cent, the highest in the county, and one of the few over 90 per cent dairies of the state.

From the small beginning of three cows Mr. McLeod has built up a dairy milking 24 cows daily, all Jersey breed. No cow is "boarded" that does not produce at least 7000 pounds of milk a year. One cow has given 10,000 pounds of milk for two years, and is still holding her record.

Every foot of Mr. McLeod's 10 acres is under cultivation, oats, peas, vetch, and corn all being grown for filling the silo. A modern eight-room house has been built, with hot and cold water, bath, laundry, built-in cupboards, large pantry, storeroom, and wired for electricity.

A cozy three-room bungalow has been built on the place for the hired man and his wife.

The cow barn is a model of cleanliness. It is well lighted and well ventilated. The stalls have wooden floors, Mr. McLeod believing that cement floors are too cold for cows to lie upon. The side walls and wide passages are of cement.

Each day, now by auto delivery, Mr. McLeod delivers 55 gallons of milk to Bellingham consumers. He is known as the Bellingham babies' dairyman because he has more babies on his route than any other dairyman in the county. Last year while Whatcom county was experiencing the worst storm of years and traffic of all kinds was at a standstill for weeks, he saw that every baby on his route had its daily fresh milk.

Sturges Steel Churns

Make Butter With Ease

Drawn steel barrel—smooth as a bowl—easy to clean. Cannot soak up moisture—saves work and time. Just what every housewife wants. Good for a lifetime use. Beautifully finished in red and blue. Ask your dealer or write us for circular No. 28X

Sturges & Burn Mfg. Co.
508 South Green Street
Chicago, Ill.
Established in 1865





Vaughan's Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cards of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $150 f. o. b. Spokane and common points.

FOR SALE BY

Washington Machinery & Supply Company

S122 MONROE SPOKANE, WASHINGTON

Live in the Country

And No Anti-Alien Law Will Be Needed

By PAUL E. TRIEM

On a rich and prosperous little farm west of the Cascades, which once supported a man and his wife, their sons and daughters and from one to four hired men, a little brown, silent couple from across the Pacific are now doing all the work that is being done. They are tenant farmers, thrifty, law-abiding, unobtrusive—and yet they are not commonly considered a real asset to the neighborhood. They and others of their kind have come in, one by one, till many of the farms in the region are leased and operated by the Japanese.

Let us pause again to call attention to the industry, the frugality and the unobtrusiveness of these little brown men and women. In so far as these qualities go they are ideal neighbors. But their ideals are not our ideals, and under conditions which, partially through their choice and partially through the restrictions of our laws, make it impossible for them to become citizens, their economic position is that of skimmers of the virgin fertility from some of our most valuable lands. And this undesirable function they perform in several ways.

It is to the interest of every tenant farmer, for instance, no matter what his nationality, to get the greatest present profit from the land he is working. This makes against the maintenance or increase of soil fertility—has been found to do so unmistakably in older communities than ours. Of even greater though less conspicuous importance, however, is the change in social and community conditions, occasioned by the immigration of a class whose sole ideal is to get ahead financially. The effect is noticeable in the very front yards of these rented places, from which every vestige of beauty, every flower and shrub, every touch of the loving hand of the home builder, has been shorn away. It is not that these alien farmers do not love beauty—they come from one of the most artistic nations in the world. But they are here to make money, as we understand and value it. Children old enough to work in the field go out in the morning and toil down the long rows beside father and mother. The little ones too young for this are left penned in the house, or idling about by themselves in the back yard.

> Teach the land owner the high privilege of country living—and this matter of alien farming will adjust itself without the enactment of laws prejudicial to the amity of nations.

This question of the economic intermingling of two races essentially alien is not one to be solved by hasty laws, breathing the race hatred of their creators. It is in the final analysis a community problem, to be solved by community education and community cooperation.

Teach the land owner the high privilege of country living; teach him to farm at a profit, and to make a real home, not merely a habitation in the country. Teach him, if he is too blind or too selfish to consider these things, that the inevitable result of a general influx of peoples of lower social and domestic ideals than our own must be to lower land values and the rentals from land; with such an educational campaign as this the matter of alien farming will adjust itself without the enactment of any laws prejudicial to the amity of nations.

There is much for us to learn from these brothers of a darker hue— industry and frugality and content with wholesome employment among other things; but in learning these lessons we must not be blind to the danger of lowered ideals and living conditions. Social gravity is as inexorable as is physical gravity, and it is only by constant watchfulness that an individual or a nation is able to maintain and gradually to increase its nobility of character, its true "civilization."

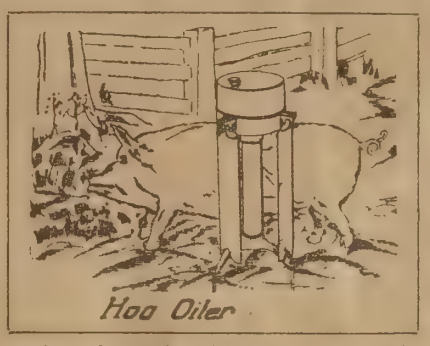
"Spacious and fair is the world; yet, oh! how I thank the kind heavens
That I a garden possess, small though it be, yet mine own.
One which enticeth me homewards; why should a gardener wander?
Honor and pleasure he finds, when to his garden he looks."—Goethe.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Hog Oiler.

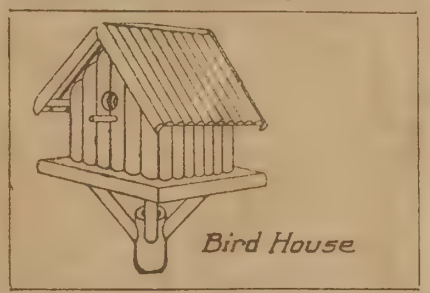
Each rubbing post of this oiler is connected at the top with a plunger, which is forced in when the hog rubs



against the post. This movement sends a charge of oil over the plunger and down the outer face of the post to the hog's back.

Bird House.

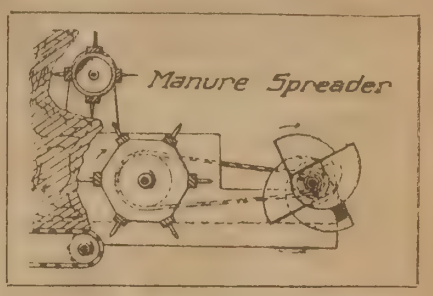
A good birdhouse should be well ventilated, cool and somewhat moist; otherwise, the young birds do not thrive. These desirable qualities are



obtained here by making a double house; the inside house has a slat bottom and a water-tight roof; the outer one is covered with bark to exclude heat, but is not water tight.

Spreader Attachment for Fertilizer Distributers.

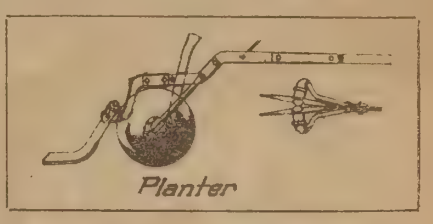
The new feature here is the rear spreader, which has oblique blades and is so placed that the greater part of



the manure thrown back by the beaters falls on these blades and is spread laterally. The blades are so curved that the straw does not cling to the front edge.

Planter.

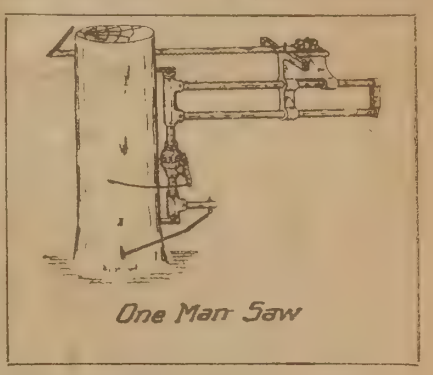
The advantage claimed for this planter is that the seed is dropped in front of the axle of the furrow-



opening disks and thus falls into the furrow before loose earth can roll in.

Timber Felling Mechanism.

This device enables one man to fell a tree. The carrier at one end of the saw slides on a guide which is



free to swing horizontally against the tension of springs. The pull of the springs tends to swing the saw out of action and thus produce a desirable springy cut.

A Group of Men and Boys Interested in Solving the Problems of Farm Power



The above photograph was taken before the Holt building in Spokane, Wash., during the "winter school" at which about 300 farmers assembled to study the caterpillar in its application to farm power problems.

Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER III.

DURING the first year or two on our Big Bend farm, nearly 25 years ago, our nearest neighbor, William Bundschue, lived five miles away. From this place we hauled water from an 80-foot well. Father dug a well and struck water at 56 feet. Then Tom Kirkland moved in a mile south. With well water of our own and a neighbor a mile away, we felt that we were living in a crowded city.

Mother and I were left on the farm one summer while father went to Walla Walla to work in the harvest fields for a "grubstake" to last through the winter. He left us with an old "squaw pony" we called Chub. Chub was the right name for this horse, which was as broad as long, almost, and so gentle that it didn't know what scare was. Uncle Sam, mother's younger brother, came out and stayed a few weeks with us, and we three, mother, Sam and I, actually rode Chub at once. Mother rode pretty well up on the horse's neck, Sam rode somewhere about the middle and I was perched, barelegged, as far back as I could get without slipping over Chub's tail.

Chub disappears from memory somehow and is replaced by Billy, a white pony specked with gray. Billy, like Chub, was gentle. He was loaned to mother and me by Jim Odgers, then editor of the Coulee City News, and afterward editor of a paper in Davenport.

The first real "cayuse" I had was Rowdy. This was when I was 11 or 12, I think. Father bought Rowdy from Tom Ferguson, a pioneer stockman of the Grand Coulee country, who, in turn, had gotten the horse out of Chief Moses' band. Rowdy bore the triangle-dot brand of the Indian chieftain. He had one eye that was white, a buckskin hide, a streak of black down his spine, a snort like a fire engine, and beneath his tame exterior there lurked a hive of devils. He was a pretty serious proposition for a 12-year-old boy without a saddle and only a rope bridle.

Rowdy was my first and greatest teacher, I think. He taught me courage, persistence, coolness, quick-thinking and actual cunning of a kind to match his. Time and again he pitched me over his head or slipped from under me. Going at a swift gallop, he would shy at something unseen by me, whirl about like a top and take the back trail with the speed of a cannon ball. Often he left me in the trail behind. Once he did this and father caught him a month afterward on another range, 25 miles away. I do not think my parents realized how much this cayuse punished, actually terrorized, me. He was gentle and trustworthy as a kitten when handled by a grownup and they laughed at me when I said he was wild.

Growing up without brothers, sisters or playmates, I came to regard my ponies, the cattle, and the horses as companions. Coyotes were enemies. So were badgers, for they dug holes into which swiftly running cayuses often fell, to the sorrow of horse and rider. Badger holes were a terror of the range. Every cowboy who rode the hills lived in fear of badger holes, and felt that sooner or later it would be his turn to go into one. We did not fear the open-mouthed holes particularly, for a horse could see them, and quite invariably would leap them safely. But the badgers had a vicious habit of running a burrow close to the surface of the ground, and occasionally threw up "mounds" which were perforated in many directions with their burrows. These mounds would cave in under the flying hoofs of a pony. Striking a badger mound, horse and rider would go down with the quickness of an explosion. In such a case the great dread was that one would be struck by the saddle horn as the horse rolled over him. The boys were amazingly lucky, however. I myself never got anything worse than a hard squeeze and a bad scare as the pony rolled over me.

The summer I was 13 mother and father, after many debates as to the safety of their plan, left me alone on the place while they drove overland one hundred and seventy miles to the Walla Walla valley for a load of dried fruit—principally prunes, peaches and apples, with a less amount of canned fruit. I had my dog, two cats, a pony, a good sized flock of chickens, some pigeons and a 22-calibre rifle with which to amuse myself while they were gone. I had a little money, 50 cents or a dollar, maybe, which I spent for ammunition.

For a long time I milked the six cows morning and evening, put the milk away in the cellar, skimmed off the cream and fed the skimmed milk to the chickens and calves, reserving the cream for myself and dog. The cats were catching squirrels and I judged they could get along without any cream.

I thought with some satisfaction when I began to run things on the ranch that now, for once, my dog and I would have all the cream we wanted. We did. I gave Shep his cream in a gallon can, filling it half full at times. At first he would wag his tail joyously when he saw the cream can coming. Then he ceased to wag it. By and by when he saw the can half full of rich cream sitting before him he would look at me with reproach in his soft brown

(Continued on page thirty.)

Hang Contest Editor!

Ouch! Discovered at Last! A Plea for Mercy

By THE CONTEST EDITOR

Indictment On Four Counts.

To the Contest Editor:

I have been figuring on going into your contest, but finding out that you are running a skin game you will never get one cent from me. You didn't think anyone would ever figure up more than one of your puzzles. Now I have got proof enough to hang a man like you, and, more than that, you will never get another subscription from me.

Your February 23rd puzzle answer was 6873.

Your February 20th puzzle answer was 6991.

Your January 23rd puzzle answer was 6989.

Your March 6th puzzle answer was 6945.

And we lost one of the dates for which the puzzle answer was 6943. Now if you call that a fair deal—nit!

ARTHUR LAMB.

Stites, Idaho.

The foregoing letter is published to give our more good-natured contestants a fair idea of the trials and tribulation of a Contest Editor.

Enclosed with the above letter were four copies of the puzzle chart from which the Contest Editor's traducer had made the counts which are given in his letter.

Now, just a word with Arthur. You say that it was never calculated that anyone would figure up all the charts as they appeared from week to week. The fact is, Arthur, that more than 200 of our contestants did total every chart, and more than half of that number arrived at the same conclusion on every count, as will be shown by the report of the contest soon to be published. And not one of them ever found the same total in any case that you give in your charges of dark and devious methods.

The truth is, Arthur, that three of the charts which you enclose as clipped from the paper, were printed from precisely the same plate and the fourth chart was engraved from the same drawing from which the others were made.

What shall we do about it, Arthur? We are anxious to satisfy you as to our integrity because we suspect that down around your home town you are probably known as a pretty fairminded type of citizen, and, maybe, one of the last persons in the community to think ill of your neighbors. Tell us, will you, what we shall do about it? Shall we accept your conclusions as given above, or shall we find consolation in the verdict of the other two hundred well-meaning contestants who have counted all the charts, reported their findings and never thought of charging us with a crime.

We might refer you, Arthur, to some of your neighbors about Stites, who have obtained results which agree perfectly with what we hold to be the correct solution.

Did it ever occur to you, Arthur, that there might have been anything wrong with your mathematics? Now be fair. Do you think your figures are infallible? We don't want your money, but we desire to know because, really, we are anxious to rehabilitate ourselves in your good estimation.

Had Nice Time, Haven't We?

Well, any way the contest is over and just as soon as the tie-deciding puzzles, made necessary by the rather large number giving the correct solution, are returned the results will be published and the prizes awarded.

The Contest Editor has enjoyed it because, let it be understood, there have not been many letters received like the one which heads this column. Our contestants—more than 3000 of them—have been good-natured, warm-blooded folks who have made the Contest Editor feel like quitting this old city job and getting back to the farm again among "regular" people. Many of them have said in submitting their solutions that in event they did not win they felt that the Farmer was worth all they had paid, and that they particularly appreciated the low subscription price for which they have been able to obtain the best farm journal in America, a special rate put into effect for the purposes of this contest.

This contest has been a great get-together meeting, and the Contest Editor feels like he had shaken the hand of everyone of you, although he has met personally less than a half-dozen of those competing. Thank you, and may we meet again.

FIGURED AND FIGURES.

Friends and family I could not muzzle,
But every week I figured that puzzle.
My first and lowest figure was six-nine-five-four;
When I counted again behold I found some more.
The largest number that I found was six-nine-seven-one,
To be that much out, believe me, that's no fun.
Three numbers each I figured alike;
Now tell me, dear friends, which one is it like.
To be sure I send them in all three,
The editor to answer that question for me.
Once I counted one-two-two-one numbers in that chart,
I did not know if I was right or if I was some short.
I tried again and found one-two-two-two;
That looks to me like if it was true.
Girls and boys, don't get the blues,
But settle down and figure the tows.
I got one-two-eight twos the first time;
The second time I found one hundred and twenty-nine.
Please go ahead and figure the threes;
It seems like counting a swarm of bees.
My first is two-nine-three, the second two-nine-four,
So I will send each, one,three and four.
Number four will be next in order;
There are seventy-three without a border.
Dear friends, from the fives you can't get free;
For weeks the fives played a game with me.
But at last I have conquered thee,
Of the same two hundred and six I see.
Number six that plays no trix—
It's no trouble to count the six—
Eighty-three, that one is done;
To count the sevens, that's no fun.
I have found one hundred and ninety-one;
In my opinion that's a fine sum.
Here it goes for number eight;
Eighty-five, and that's no fake;
This is not all, but here comes the nine,
Two hundred and fifty-one times nine,
Is the finish of this rhyme.

MATHILDA DIEDRICH.

Jerome, Idaho.

MOUSE TRAVELS HOW FAST?

To the Contest Editor: In the Farmer of March 1 I see it stated that a fly in proportion to its size walks 13 times as fast as a man can run.

This leads me to an experience I had yesterday on a trip to Nine Mile to get my mail.

As the day was pleasant and sleighing never better, after having proceeded on our trip about four miles, the horses trotting leisurely along, I noticed a field mouse running ahead of the off horse on the hard and well-beaten smooth path made by the sleigh runners.

I drew my companion's attention to the mouse ahead of the horse, and urged the team on a little faster. It was now that the real sport began. Mr. Mouse began to run for dear life, finally climbing up out of the sleigh track up the snow bank and made for tall timber.

As eyewitnesses we could follow him for 40 or 50 rods. Not being in possession of a speedometer we could not tell how fast we were going, but judge at the rate of five or six miles per hour. I presume that by consulting the encyclopedia the speed would be obtainable.

This might be a good question for the Contest Editor, should he be short of material.

We find the Farmer very instructive as well as amusing. Especially the 60 contest questions keep up a guessing. In our neighborhood meetings invariably the first question is, "Have you entered the Farm Information contest?"

"To be sure I have, but am puzzled on the 24th question."

"Why, that's an easy one—it's a 'jay.'"

In this way we all learn something to improve our knowledge. By running up against what seems incomprehensible we are made wise.

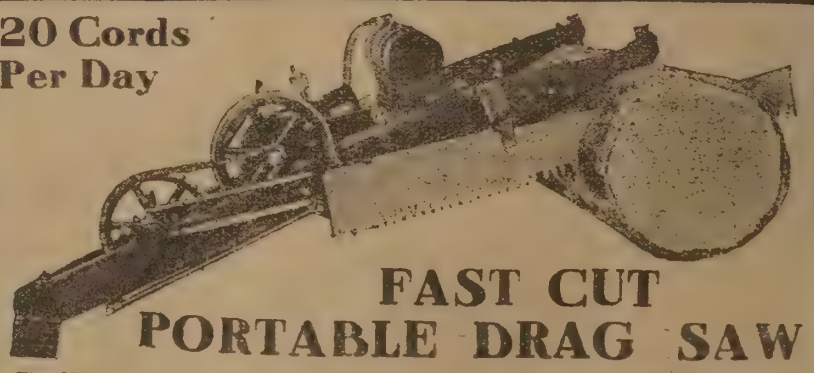
E. W. F. GIESSELMAN.

Nine Mile, Wash.

New York Water Front.

New York city owns in fee 22 per cent of its water fronts, or about 127 miles.

20 Cords Per Day



FAST CUT PORTABLE DRAG SAW

The Mitchell is a portable drag saw that is as well built throughout as the large Mitchell machines costing many times as much.
The Mitchell Portable will work on the largest logs and cuts remarkably fast. The engine is high powered and extra care has been used in its construction.
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Mitchell Lewis & Staver

Mitchell-Lewis & Staver Co.

Portland, Ore. or Spokane, Wash.

Send me catalog and price of the Mitchell Portable Drag Saw.

Name .....P. O. .....

All the World's a Stage, and All the Men and Women Merely Players

Claims $25,000,000.



Above is the photograph of the former Colombian president, General Raphael Reyes, who has arrived in Washington, D. C., to press the claim of his country for $25,000,000 for the loss of land necessitated by the Panama canal. General Reyes is of the opinion that the money should be paid promptly.

Millionaire Yachtmen to Aid Navy



Frank D. Roosevelt, in the center of the above picture, is the first assistant secretary of the navy and has enlisted the aid of scores of millionaire yachtmen and shipping men of New York, as well as many tugging, towing and wrecking companies and maritime departments of great railroads for submarine defense in the event of hostilities between the United States and Germany. In the above group is shown: Upper left hand corner, C. L. Poor; lower left, Vincent Astor; upper right, Robert E. Tod, and lower right, P. A. S. Franklin.

Kaiser's Chief Adviser.



Americans arriving from Berlin, who were in a position to see what was taking place behind the screen, regard General von Ludendorff, the first quartermaster general of the German imperial army, as the person most responsible for the German policy. General von Ludendorff, the Americans say, appears to have the brain that conceives the military plans.

Relieving the New York Militia



The above photograph shows the police boats which have been put in charge of the bridge guarding in New York. Note the powerful machine gun on the deckhouse. On the lower deck the ship is equipped with one-inch rapid-firing guns and two more machine guns like the one in the photograph.

Women of the Ghetto Battle With Police



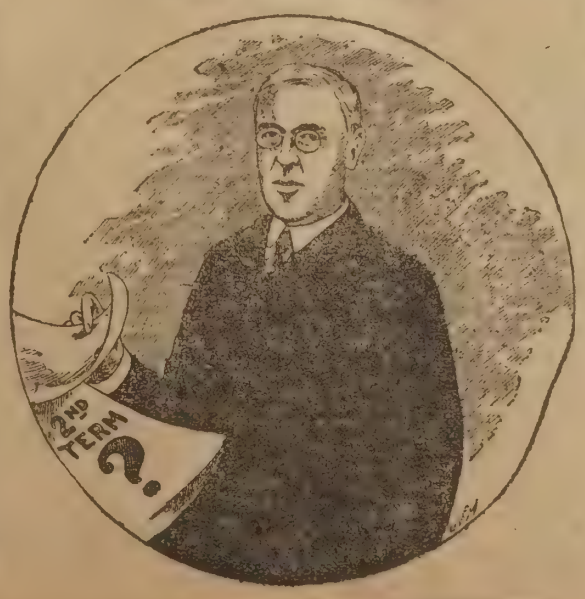
Spurred on by anarchistic speeches of their leaders, more than 1000 women and boys of the Ghetto swarmed down on New York city hall and attempted to force an audience with the mayor in an effort to lower the prices of food. After numerous arrests the riot which had assumed serious proportions, was finally stopped.

"Peace Without Victory.



—Brooklyn Eagle.

Turning Over a New Leaf.



—Springfield Union.

The Bully.



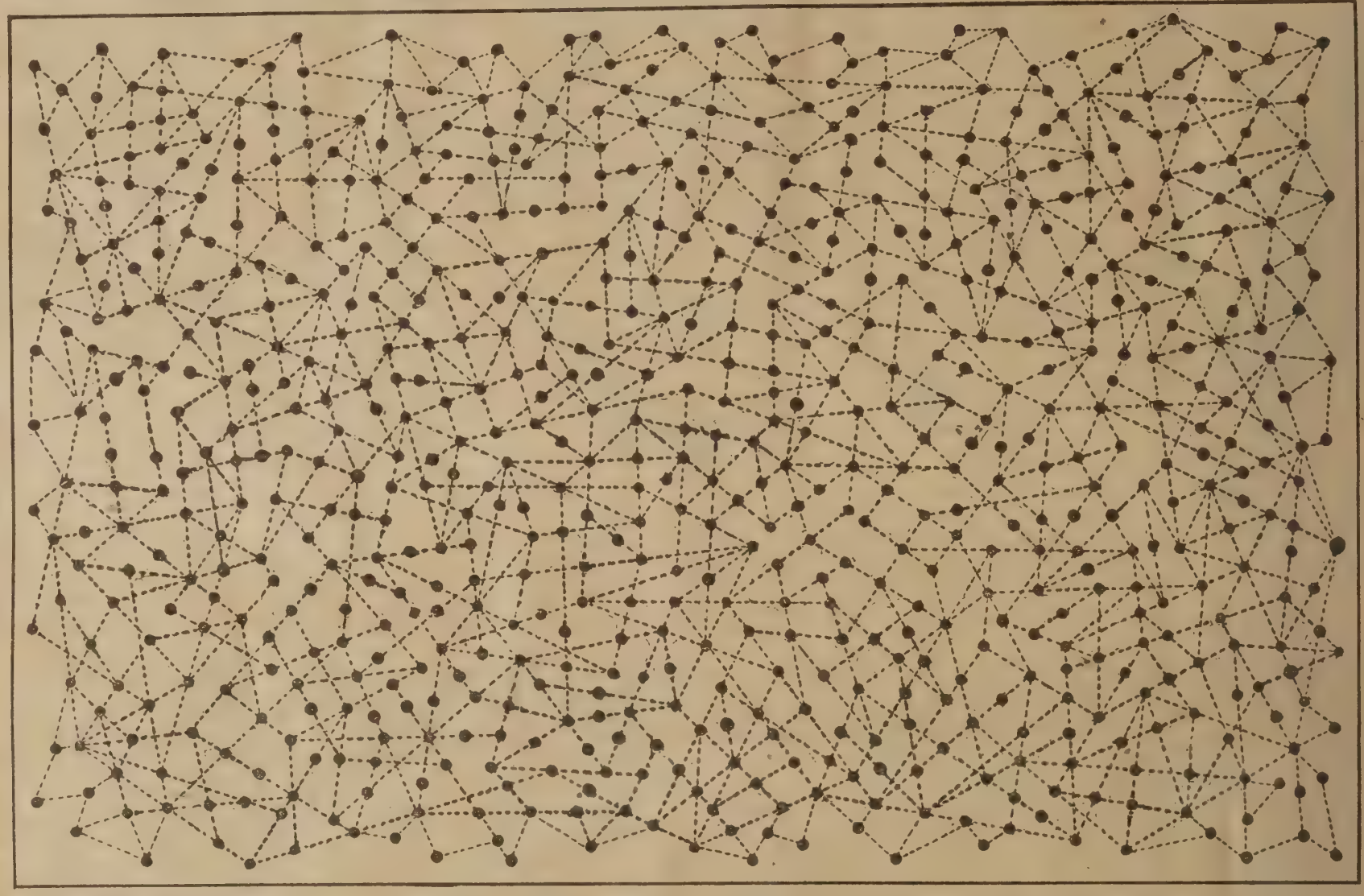
—New York Telegram.

6971 Is the Correct Solution in the Figure Puzzle

All those who submitted the correct solution of the first puzzle are entitled to submit a solution of the second. As more contestants are tied on the solution of the first puzzle than there are prizes, all those who submitted any other than the correct solution are eliminated. Two extra charts will be mailed to those who are eligible to entry in second puzzle. Only one solution of the second puzzle may be submitted. Once submitted the solution can not be changed. Solutions of this puzzle must be forwarded not later than April 3, 1917, as shown by postmark on envelope. In event of ties on this problem a third problem will be submitted and should there be ties on it each tied contestant will receive the full amount of the prize tied for.

THIS IS THE SECOND, OR TIE DECIDING PUZZLE.

START YOUR LINE ON THIS SIDE OF CHART



THE PROBLEM

The problem is to draw a continuous line through the greatest number of dots.

You must begin at a dot on the extreme left hand side of the chart.

Each section of the line must pass through at least three dots before branching off into another direction.

The dot where the line changes its direction is to be counted as the first dot in the part of the line you are then drawing as well as the third, or last, dot in the preceding section. In summing up the total number of dots your line passes through, however, merely count this dot as one. Invariably follow the dotted lines.

The direction of your line must be changed only at the point where there is a dot, and not at an intersection of two dotted lines where there is no dot.

If you do not follow a dotted line for its full length, when you enter upon it, the remaining part of that dotted line can not be used or followed again, even though you enter upon it at the opposite end, or at any intermediate point of such intersection. The dot at any intersection belongs to either line until the line being drawn passes through it in one direction or the other.

This last rule, however, does not prevent your following a dotted line which intersects the unused part of another dotted line and counting the dot that may be at the point of such intersection. The dot at any intersection belongs to either line until the line being drawn passes through it in one direction or the other.

Your line must not touch any dot more than once. It must not cross itself or be anywhere retraced.

The points where you start and end must not be connected.

Draw your line so it will not wholly obliterate the dotted line it follows.

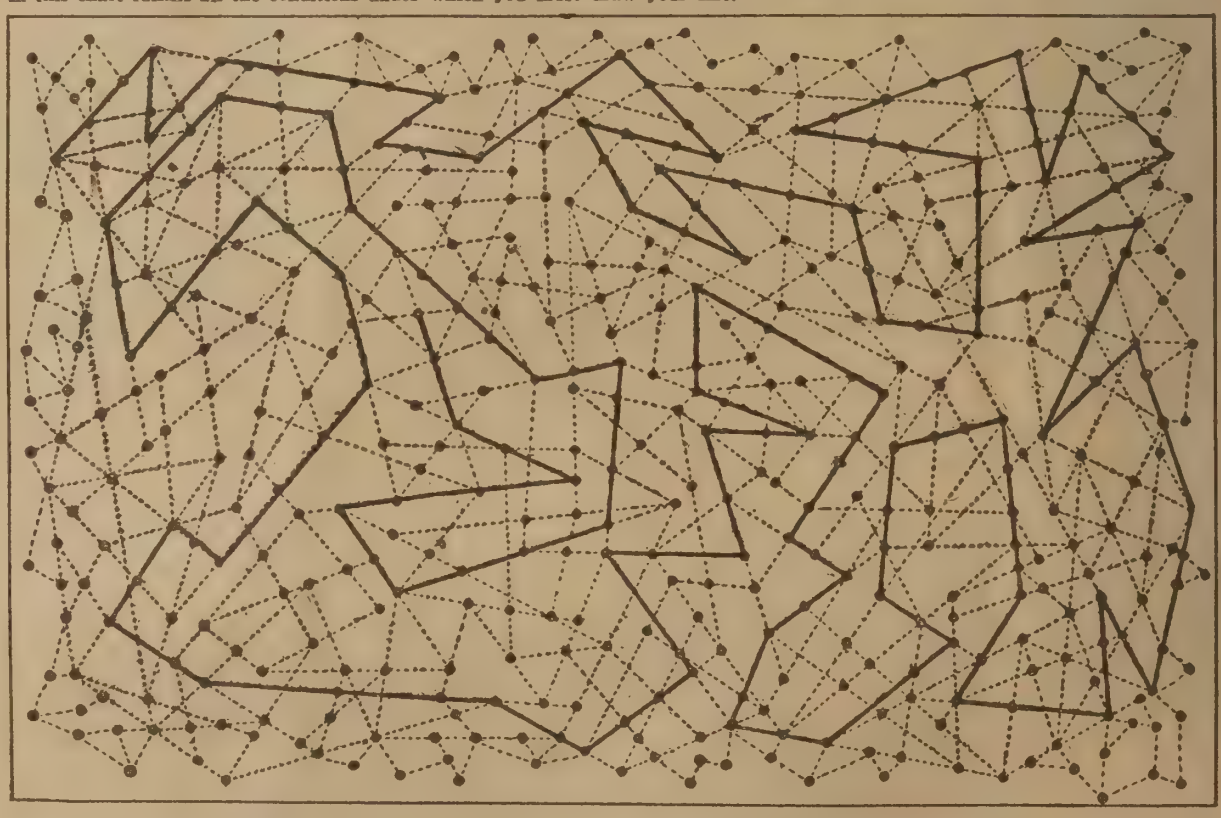
Any solution not conforming to these rules will be regarded as incorrect, and any error in stating the number of dots the line passes through will make a solution void.

The winning charts will be subject to inspection after the awards are announced.

SHOULD TWO TIED CONTESTANTS WHO ARE ASSOCIATED IN BUSINESS TOGETHER, PERSONALLY ACQUAINTED, OR WHO HAVE HAD ANY COMMUNICATION IN REGARD TO THIS PROBLEM. SUBMIT THE SAME SOLUTION, AND NO ONE ELSE SUBMITS ONE SIMILAR TO IT, ONE PRIZE ONLY WILL BE AWARDED TO THOSE SUBMITTING THE SOLUTION, IF IT BE A PRIZE WINNER, UNLESS THEY CAN SHOW CONCLUSIVELY THEY WERE NOT AWARE THE OTHER OR OTHERS WERE WORKING ON IT, AND THEY HAD NO ACCESS TO EACH OTHER'S WORK.

Send blank and chart in a sealed envelope to Contest Editor, The Washington Farmer, Review Bldg., Spokane, Wn. Do not send working papers unless called for, or enclose any letters or notes.

The small chart below is printed for the purpose of giving a practical illustration of how the line shall be drawn. The line in this chart fulfills all the conditions under which you must draw your line.



Read This Carefully

This blank must be attached to the chart after you have drawn your line across it, and the two forwarded to the Contest Editor. Do not forward this entire advertisement, but cut out the chart neatly and this blank around the border and place them in a sealed envelope, whether delivered in person or mailed to the Contest Editor. The two, should be pinned together.

Solution Blank

To The Farmer Contest Editor:

Having submitted 6971 as the solution of the first puzzle, I herewith submit my solution of the second puzzle, as follows:

Total dots connected .....

Name ..... **Address** .....

IMPORTANT NOTICE: State below the exact amount you paid in connection with the solution 6971. Do not include what was paid with any other solution, if you submitted any other.

Amount paid with 6971.

Date Paid	Amount
....	$..... .....
....	$..... .....



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merril Co.

CHAPTER XII.

I had not been long in the room when a knock at the door announced the girls. I admitted them, and Mary walked to the middle of the floor. It was just growing dark and the room was quite dim, save at the window where Brandon sat reading. Gods! those were exciting moments; my heart beat like a woman's. Brandon saw the girls when they entered, but never so much as looked up from his book. You must remember he had a great grievance. Even looking at it from Mary's side of the case, certainly its best point of view, he had been terribly misused, and it was all the worse that the misuse had come from one who, from his standpoint, had pretended to love him, and had wantonly led him on, as he had the best of right to think, to love her, and to suffer the keenest pangs a heart can know. Then you must remember he did not know even the best side of the matter, bad as it was, but saw only the naked fact, that in recompense for his great help in time of need, Mary had deliberately allowed him to lie in that dungeon a long, miserable month, and would have suffered him to die. So it was no wonder his heart was filled with bitterness toward her. Jane and I had remained near the door, and poor Mary was a pitiable princess, standing there so full of doubt in the middle of the room. After a moment she stepped toward the window, and, with quick-coming breath, stopped at the threshold of the little passage.

"Master Brandon, I have come, not to make excuses, for nothing can excuse me, but to tell you how it all happened—by trusting to another."

Brandon arose, and marking the place in his book with his finger, followed Mary, who had stepped backward into the room.

"Your highness is very gracious and kind thus to honor me, but as our ways will hereafter lie as far apart as the world is broad, I think it would have been far better had you refrained from so imprudent a visit; especially as anything one so exalted as yourself may have to say can be no affair of such as I—one just free of the hangman's noose."

"Oh! don't! I pray you. Let me tell you, and it may make a difference. It must pain you, I know, to think of me as you do, after—after—you know; after what has passed between us."

"Yes, that only makes it all the harder. If you could give your kisses——" and she blushed red as blood—"to one for whom you care so little that you could leave him to die like a dog, when a word from you would have saved him, what reason have I to suppose they are not for every man?"

This gave Mary an opening of which she was quick enough to take advantage, for Brandon was in the wrong.

"You know that is not true. You are not honest with me nor with yourself, and that is not like you. You know that no other man ever had, or could have, any favor from me, even the slightest. Wantonness is not among my thousand faults. It is not that which angers you. You are sure enough of me in that respect. In truth, I had almost come to believe you were too sure, that I had grown cheap in your eyes, and you did not care so much as I thought and hoped for what I had to give, for after that day you came not near me at all. I know it was the part of wisdom and prudence that you should remain away; but had you cared as much as I, your prudence would not have held you."

She hung her head a moment in silence; then, looking at him, almost ready for tears, continued: "A man has no right to speak in that way of a woman whose little favors he has taken, and make her regret that she has given a gift only that it may recoil upon her. 'Little,' did I say? Sir, do you know what that—first—kiss was to me? Had I possessed all the crowns of all the earth I would have given them to you as willingly. Now you know the value I placed on it, however worthless it was to you. Yet I was a cheerful giver of that great gift, was I not? And can you find it in your heart to make of it a shame to me—that of which I was so proud?"

She stood there with head inclined a little to one side, looking at him inquiringly as if awaiting an answer. He did not speak, but looked steadily at his book. I felt, however, that he was changing, and was sure her beauty, never more exquisite than in its present humility, would yet atone for even so great a fault as hers. Err, look beautiful, and receive remission! Such a woman as Mary carries her indulgence in her face.

I now began to realize for the first time the wondrous power of this girl, and ceased to marvel that she had always been able to turn even the king, the most violent, stubborn man on earth, to her own wishes. Her manner made her words eloquent, and already, with true feminine tactics, she had put Brandon in the wrong in everything because he was wrong in part.

Then she quickly went over what she had said to me. She told of her great dread lest the king should learn of the visit to Grouche's and its fatal consequences, knowing full well it would render Henry impervious to her influence and precipitate the French marriage. She told him of how she was going to the king the day after the arrest to ask his release, and of the meeting with Buckingham, and his promise.

Still Brandon said nothing, and stood as if politely waiting for her to withdraw.

She remained silent a little time, waiting for him to speak, when tears, partly of vexation, I think, moistened her eyes.



"It is my turn to ask forgiveness.

"Tell me at least," she said, "that you know I speak the truth. I have always believed in you, and now ask for your faith. I would not lie to you in the faintest shading of a thought—not for Heaven itself—not even for your love and forgiveness, as much as they are to me, and I want to know that you are sure of my truthfulness, if you doubt all else. You see I speak plainly of what your love is to me, for although, by remaining away, you made me fear I had been too lavish with my favors—that is every woman's fear—I knew in my heart you loved me; that you could not have done and said what you did otherwise. Now you see what faith I have in you, and you a man, whom a woman's instinct prompts to doubt. How does it compare with your faith in me, a woman, whom all the instincts of a manly nature should dispose to trust? It seems to be an unwritten law that a man may lie to a woman concerning the most important thing in life to her, and be proud of it, but you see even now I have all faith in your love for me, else I surely should not be here. You see I trust even your unspoken word, when it might, without much blame to you, be a spoken lie; yet you do not trust me, who have no world-given right to speak falsely about such things, and when that which I now do is full of shame for me, and what I have done full of guilt, if inspired by aught but the purest truth from my heart of hearts. Your words mean so much—so much more, I think, than you realize—and are so cruel in turning to evil the highest, purest impulse a woman can feel—the glowing pride in self-surrender, and the sweet, delightful privilege of giving where she loves. How can you? How can you?"

How eloquent she was; It seemed to me this would have melted the frozen sea, but I think Brandon felt that now his only hope lay in the safeguard of his constantly upheld indignation.

When he spoke he ignored all she had said.

"You did well to employ my lord of Buckingham. It will make matters more interesting when I tell you it was he who attacked you and was caught by the leg under his wounded horse; he was lame, I am told, for some time afterward. I had watched him following you from the gate at Bridewell, and at once recognized him when his mask fell off during the fight up by the wall. You have done well at every step, I see."

"Oh, God! to think of it! Had I but known! Buckingham shall pay for this with his head; but how could I know? I was but a poor, distracted girl, sure to make some fatal error. I was in such agony—your wounds— believe me, I suffered more from them than you could. Every pain you felt was a pang for me—and then that awful marriage! I was being sold like a wretched slave to that old satyr, to be gloated over and feasted upon. No man can know the horror of that thought to a woman—to any woman, good or bad. To have one's beauty turn to curse her and make her desirable only—only as well-fed cattle are prized. No matter how great the manifestation of such so-called love, it all the more repels a woman and adds to her loathing day by day. Then there was something else worse than all"—she was almost weeping now—"I might have been able to bear the thought even of that hideous marriage — others have lived through the like—but—but after—that—that day—when you—it seemed that your touch was a spark dropped into a heart full of tinder, which had been lying there awaiting it all these years. In that one moment the flame grew so intense I could not withstand it. My throat ached; I could scarcely breathe, and it seemed that my heart would burst." Here the tears gushed forth as she took a step toward him with outstretched arms, and said between her sobs: "I wanted you, you! for my husband—for my husband, and I could not bear the torturing thought of losing you or enduring any other man. I could not give you up after that—it was all too late, too late; it had gone too far. I was lost! lost!"

He sprang to where she stood leaning toward him, and caught her to his breast.

She held him from her while she said: "Now you know—now you know that I would not have left you in that terrible place, had I known it. No, not if it had taken my life to buy your freedom."

"I do know; I do know. Be sure of that; I know it and shall know it always, whatever happens; nothing can change me. I will never doubt you again. It is my turn to ask forgiveness now."

"No, no; just forgive me; that is all I ask," and her head was on his breast.

"Let us step out into the passageway, Edwin," said Jane, and we did. There were times when Jane seemed to be inspired.

When we went back into the room Mary and Brandon were sitting in the window-way on his great cloak. They rose and came to us holding each other's hands, and Mary asked, looking up to him:

"Shall we tell them?"

"As you like, my lady."

Mary was willing, and looked for Brandon to speak, so he said: "This lady whom I hold by the hand and myself have promised each other before the good God to be husband and wife, if fortune ever so favor us that it be possible."

"No, that is not it," interrupted Mary. "There is no 'if' in it; it shall be, whether it is possible or not. Nothing shall prevent." At this she kissed Jane and told her how she loved her, and gave me her hand, for her love was so great within her that it overflowed upon every one. She, however, always had a plentitude of love for Jane, and though she might scold her and apparently misuse her, Jane was as dear as a sister, and was always sure of her steadfast, tried and lasting affection.

After Mary had said there should be no "if," Brandon replied:

"Very well, Madame Destiny." Then turning to us: "What ought I to do for one who is willing to stoop from so high an estate to honor me and be my wife?"

"Love her, and her alone, with your whole heart, as long as you live. That is all she wants, I am sure," volunteered Jane, sentimentally.

"Jane, you are a Madam Solomon," said Mary with a tone of her old-time laugh. "Is the course you advise as you would wish to be done by?" And she glanced mischievously from Jane to me, as the laugh bubbled up from her heart, merry and soft as if it had not come from what was but now the home of grief and pain.

"I know nothing about how I should like to be done by," said Jane, with a pout, "but if you have such respect for my wisdom I will offer a little more; I think it is time we should be going."

"Now, Jane, you are growing foolish again; I will not go yet," and Mary made manifest her intention by sitting down. She could not bring herself to forego the pleasure of staying, dangerous as she knew it to be, and could not bear the pain of parting, even for a short time, now that she had Brandon once more. The time was soon coming—but I am too fast again.

After a time Brandon said: "I think Janes' wisdom remains with her, Mary. It is better that you do not stay, much as I wish to have you."

She was ready to obey him at once.

When she arose to go she took both his hands in hers and whispered: "'Mary.' I like the name on your lips," and, then glancing hurriedly over her shoulder to see if Jane and I were looking, lifted her face to him and ran after us.

We were a little in advance of the princess, and, as we walked along, Jane said under her breath: "Now look out for trouble; it will come quickly, and I fear for Master Brandon more than any one. He has made a noble fight against her and against himself, and it is no wonder she loves him."

This made me feel a little jealous.

"Jane, you could not love him, could you?" I asked.

"No matter what I could do, Edwin, I do not, and that should satisfy you." Her voice and manner said more than her words. The hall was almost dark, and—I have always considered that occasion one of my lost opportunities; but they are not many.

The next evening Brandon and I, upon Lady Mary's invitation, went up to her apartments, but did not stay long, fearing some one might find us there and cause trouble We would not have gone at all had not the whole court been absent in London, for discovery would have been a serious matter to one of us at least.

As I told you once before, Henry did not care how much Brandon might love his sister, but Buckingham had whispered suspicions of the state of Mary's heart, and his own observations, together with the intercepted not, had given these suspicions a stronger coloring, so that a very small matter might turn them into certainties.

The king had pardoned Brandon for the killing of the two men in Billingsgate, as he was forced to do under the circumstances, but there his kindness stopped. After a short time he deprived him of his place at court, and all that was left for him of royal favor was permission to remain with me and live at the palace until such time as he should sail for New Spain.

CHAPTER XIII.

The treaty had been agreed upon, and as to the international arrangement, at least, the marriage of Louis de Valois and Mary Tudor was a settled fact. All it needed was the consent of an 18-year-old girl—a small matter, of course, as marriageable women are but commodities in statecraft, and theoretically, at least, acquiesce in everything their liege lords ordain. Lady Mary's consent had been but theoretical, but it was looked upon by every one as amounting to an actual, vociferated, snorous "yes;" that is to say, by every one but the princess, who had no more notion of saying "yes" than she had of reciting the Sanscrit vocabulary from the pillory of Smithfield.

Wolsey, whose manner was smooth as an otter's coat, had been sent to fetch the needed "yes;" but he failed.

Jane told me about it.

Wolsey had gone privately to see the

(Continued on following page.)

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from preceding page.)

princess, and had thrown out a sort of skirmish line by flattering her beauty, but had found her not in the best humor.

"Yes, yes; my lord of Lincoln, I know how beautiful I am; no one knows better; I know all about my hair, eyes, teeth, eyebrows and skin. I tell you I am sick of them. Don't talk to me about them; it won't help you to get my consent to marry that vile old creature. That is what you have come for, of course. I have been expecting you; why did not my brother come?"

"I think he was afraid; and to tell you the truth I was afraid myself," answered Wolsey with a smile. This made Mary smile, too, in spite of herself, and went a long way toward putting her in a good humor. Wolsey continued: "His majesty could not have given me a more disagreeable task. You doubtless think I am in favor of this marriage, but I am not."

This was as great a lie as ever fell whole out of a bishop's mouth. "I have been obliged to fall in with the king's views on the matter for he has had his mind set on it from the first mention by De Longueville."

"Was it that bead-eyed little mummy who suggested it?"

"Yes, and if you marry the king of France you can repay him with usury."

"'Tis an induceemnt, by my troth."

"I do not mind saying to you in confidence that I think it an outrage to force a girl like you to marry a man like Louis of France, but how are we to avoid it?"

By the "we" Wolsey put himself in alliance with Mary, and the move was certainly adroit.

"How are we to avoid it? Have no fear of that, my lord; I will show you."

"Oh! but my dear princess; permit me; you do not seem to know your brother; you can not in any way avoid this marriage. I believe he will imprison you and put you on bread and water to force your consent. I am sure you had better do willingly that which you will eventually be compelled to do anyway; and, besides, there is another thought that has come to me; shall I speak plainly before Lady Bolingbroke?"

"I have no secrets from her."

"Very well; it is this. Louis is old and very feeble; he can not live long, and it may be that you can, by a ready consent now, exact a promise from your brother to allow you your own choice in the event of a second marriage. You might in that way purchase what you could not bring about in any other way."

"How do you know that I want to purchase aught in any way, Master Wolsey? I most certainly do not intend to do so by marrying France."

"I do not know that you wish to purchase anything, but a woman's heart is not always under her full control, and it sometimes goes out to one very far beneath her in station, but the equal of any man on earth in grandeur of soul and nobleness of nature. It might be that there is such a man whom any woman would be amply justified in purchasing at any sacrifice—doubly so if it were buying happiness for two."

His meaning was too plain even to pretend to misunderstand, and Mary's eyes flashed at him, as her face broke into a dimpling smile in spite of her.

Wolsey thought he had won, and to clinch the victory said, in his forceful manner: "Louis XII will not live a year; let me carry to the king your consent, and I guarantee you his promise as to a second marriage."

In an instant Mary's eyes shot fire, and her face was like the blackest storm cloud.

"Carry this to the king: that I will see him and the whole kingdom sunk in hell before I will marry Louis of France. That is my answer once and for all. Good even, Master Wolsey." And she swept out of the room with head up and dilating nostrils; the very picture of defiance.

St. George! She must have looked superb. She was one of the few persons whom anger and disdain and the other passions which we call ungentle seemed to illumine—they were so strong in her, and yet not violent. It seemed that every deep emotion but added to her beauty and brought it out, as the light within a church brings out the exquisite figuring on the windows.

After Wolsley had gone, Jane said to Mary: "Don't you think it would have been better had you sent a softer answer to your brother? I believe you could reach his heart even now if you were to make the effort. You have not tried in that matter as you did in the others."

"Perhaps you are right, Jane. I will go to Henry."

Mary waited until she knew the king was alone, and then went to him.

On entering the room, she said: "Brother, I sent a hasty message to you by the Bishop of Lincoln this morning, and have come to ask your forgiveness."

"Ah! little sister; I thought you would change your mind. Now you are a good girl."

"Oh! do not misunderstand me; I asked your forgiveness for the message; as to the marriage, I came to tell you it would kill me, and that I could not bear it. Oh! brother, you are not a woman—you can not know." Henry flew into a passion, and with oaths and curses ordered her to leave him unless she was ready to give her consent. She had but two courses to take, so she left with her heart full of hatred for the most brutal wretch who ever sat upon a throne—and that is making an extreme case. As she was going, she turned upon him like a fury, and exclaimed:

"Never, never! Do you hear? Never!"

Preparations went on for the marriage just as if Mary had given her solemn consent. The important work of providing the trousseau began at once, and the more important matter of securing the loan from the London merchants was pushed along rapidly. The good citizens might cling affectionately to their angels, double angels, crowns and pounds sterling, but the fear in which they held the king, and a little patting of the royal hand upon the plebeian head, worked the charm, and out came the yellow gold, never to be seen again, God wot. Under the stimulus of the royal smile they were ready to shout themselves hoarse, and to eat and drink themselves red in the face in celebration of the wedding day. In short, they were ready to be tickled nearly to death for the honor of paying to a wretched old lecher a wagon-load of gold to accept, as a gracious gift, the most beautiful heart-broken girl in the world. That is, she would have been heart-broken had she not been inspired with courage. As it was, she wasted none of her energy in lamentations, but saved it all to fight with. Heavens! how she did fight! If a valiant defense ever deserved victory, it was in her case. When the queen went to her with silks and taffetas and fine cloths to consult about the trousseau, although the theme was one which would interest almost any woman, she would have none of it, and when Catherine insisted upon her trying on a certain gown, she called her a blackamoor, tore the garmet to pieces, and ordered her to leave the room.

Henry sent Wolsey to tell her that the 13th day of August had been fixed upon as the day of the marriage, de Longueville to act as the French king's proxy, and Wolsey was glad to come off with his life.

Matters were getting into a pretty tangle at the palace. Mary would not speak to the king, and poor Catherine was afraid to come within arm's length of her; Wolsey was glad to keep out of her way, and she flew at Buckingham with talons and beak upon first sight. As to the battle with Buckingham; it was short but decisive, and this was the way it came about: There had been a passage between the duke and Brandon, in which the latter had tried to coax the former into a duel, the only way, of course, to settle the weighty matters between them. Buckingham, however, had had a taste of Brandon's nimble sword play, and, bearing in mind Judson's fate, did not care for any more. They had met by accident, and Brandon, full of smiles, and as polite as a Frenchman, greeted him.

"Doubtless my lord, having crossed swords twice with me, will do me the great honor to grant that privilege the third time, and will kindly tell me where my friend can wait upon a friend of his grace."

"There is no need for us to meet over that litle affair. You had the best of it, and if I am satisfied you should be. I was really in the wrong, but I did not know the princess had invited you to her ball."

"Your lordship is pleased to evade," returned Brandon. "It is not the ballroom matter that I have to complain of; as you have rightly said, if you are satisfied, I certainly should be; but it is that your lordship, in the name of the king, instructed the keeper of Newgate prison to confine me in an underground cell, and prohibited communication with any of my friends. You so arranged it that my trial should be secret, both as to the day thereof and the event, in order that it should not be known to those who might be interested in my release. You promised the Lady Mary that you would procure my liberty, and thereby prevented her going to the king for that purpose, and afterwards told her it had all been done, as promised, and that I had escaped to New Spain. It is because of this, my Lord Buckingham, that I now denounce you as a liar, a coward and a purjured knight, and demand of you such satisfaction as one man can give to another for mortal injury. If you refuse, I will kill you as I would a cut-throat the next time I meet you."

"I care nothing for your rant, fellow, but out of consideration for the feelings which your fancied injuries have put into your heart, I tell you that I did what I could to liberate you, and received from the keeper a promise that you should be allowed to escape. After that a certain letter addressed to you was discovered and fell into the hands of the king—a matter in which I had no part. As to your confinement and noncommunication with your friends, that was at his majesty's command after he had seen the letter, as he will most certainly confirm to you. I saw this for my own sake, not that I care what you may say or think."

This offer of confirmation by the king made it all sound like the truth, so much will even a little truth leaven a great lie, and part of Brandon's sails came down against the mast. The whole statement surprised him, and, most of all, the intercepted letter. What letter could it have been? It was puzzling, and yet he dared not ask.

As the duke was about to walk away, Brandon stopped him: "One moment, your grace; I am willing to admit what you have said, for I am not now prepared to contradict it; but there is yet another matter we have to settle. You attacked me on horseback and tried to murder me in order to abduct two ladies that night over in Billingsgate. That you can not deny. I watched you follow the ladies from Bridewell to Grouche's, and saw your face when your mask fell off during the melee as plainly as I see it now. If other proof is wanting, there is that sprained knee upon which your horse fell, causing you to limp even yet. I am sure now that my lord will meet me like a man; or would he prefer that I should go to the king and tell him and the world the whole shameful story? I have concealed it heretofore, thinking it my personal right and privilege to settle with you."

Buckingham turned a shade paler as he replied: "I do not meet such as you on the field of honor, and have no fear of your slander injuring me."

He felt secure in the thought that the girls did not know who had attacked them, and could not corroborate Brandon in his accusation, or Mary, surely, never would have appealed to him for help.

I was with Brandon—at a little distance, that is—when this occurred, and after Buckingham had left, we went to find the girls in the forest. We knew they would be looking for us, although they would pretend surprise when they saw us. We soon met them, and the very leaves of the trees gave a soft rustle in response to Mary's low, mellow laugh of joy.

(Continued in the next issue.)

Extremes.

Report says a revival has broken out in the Unitarian church, a sympathetic consequence of Billy Sunday in Boston.

Fine! And no danger! A bonfire on the ice is always safe.—Life.

YOUR FLAG!



This is the time for every American to hoist "OLD GLORY" to the breeze!

Realizing that in this time of national stress and strain the patriotic readers of The Washington Farmer will want to show their colors, we have arranged to offer large sized, fast color American flags in connection with subscription orders. Size of flags 3x5 feet, full 48 stars. Supply is limited. Flags will go to the first who ask for them.

The flag will be sent with new or renewal subscription to The Washington Farmer for 3 years, both for only $2, which is the regular 3-year subscription rate of this paper. If you are paid ahead your subscription will be extended three years.

In ordering kindly use this coupon.



The Washington Farmer, Room 37 Review Bldg., Spokane.

Enclosed find $2 (your personal check, stamps or money order), for which send me American flag as advertised and **The Washington Farmer** for 3 years.

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Wasted in the Kitchens

Sum of $700,000,000 Worth of Food Products

Secretary of Agriculture Houston estimates that $700,000,000 worth of food products are yearly wasted in the kitchens of the United States. Seven dollars for every inhabitant—$35 for the average family.

But what about the far greater waste on the farms—millions upon millions of tons of good food that the hard-working producers can not save or market profitably under our existing imperfect marketing and distributing mtthods? Luscious peaches dropping to the ground; millions of bushels of good apples and other fruits; berries drying on the bushes; and root crops wasted in quantities that would make the German people, the French and the British marvel at our national extravagance?

Then we are wasting yearly some 15,000,000 tons of one of the very best food products this country produces. Our dairymen are feeding high price products and then the nation is wasting what science proves to us is the best part of the cow's gift to mankind—the skim milk.

A recent able article by John Phillips Street, chemist of the Connecticut agricultural station, ought to be read in every American home and taught in every school. Mr. Street is at a loss to understand the ill-founded prejudice against skim milk. He thinks it may date back to the time when cream was separated from the milk by gravity and skimmed milk was necessarily old milk. But there can be no reason for it today, when separation by centrifugal force leaves the skimmed milk fresh. Mr. Street continues:

"In spite of the delicious taste of cream it is not the most valuable part of the milk, as some apparently intelligent people appear to believe. The exact contrary is, in fact, the case. The part of the milk left after the cream has been removed contains practically all the protein, sugar and mineral salts. In the ordinary mixed diet, moreover, a sufficient amount of fat is supplied by meat, butter, lard, etc., so that the loss of this ingredient from the milk is of relatively little importance. Protein, on the other hand, being the most costly of the food elements, is the one most likely to be lacking in inexpensive meals, although generally used to excess by those who can afford it.

"Skimmed milk is the cheapest available source of animal protein at the present time. Whole milk is cheaper than either meat or eggs as a source of protein; but skimmed milk is even cheaper, costing, under normal market conditions, only half as much as meat, and skimmed milk cheese, if we could have it, would be cheaper still, and much better for some purposes than the whole milk product.

"At least 1,600,000,000 pounds of butter are made annually in this country, and from this are obtained about 28,000,000,000 pounds of skimmed milk. About 2,000,000,000 pounds in addition are obtained from the sale of cream. This gives us an annual supply of 30,000,000,000 pounds of cheap, nutritious and digestible food, which nevertheless is banished, both by law and public opinion, from the table and kitchen to the barnyard.

"A recent government bulletin made it abundantly clear that the days of cheap meat are past, and that this food is likely to grow scarcer than more plentiful. It is plain, therefore, that we can not very well afford to let 30,000,000,000 pounds of an animal protein food go to waste every year, or serve only as a cattle food, particularly now when the nations of Europe are engaged in destruction instead of production, and are looking to us to supply their deficiencies."

No more important problem is before the American people than the finding of ways to prevent the existing enormous waste of a great part of nature's bounty. Its solution will mean increased prosperity for the farm and better living conditions for the people in the cities.

Downside First Is Best.

Most every one when washing a painted wall starts from the top and goes down, with the result that the water running down on the dry wall below leaves water streaks, which are hard and sometimes impossible to remove, says a writer in the New York Evening Sun.

I find that by starting from the bottom this is overcome, for even if the water happens to run down the wet wall it leaves no streak.

This hint was a valuable help to me and I cheerfully pass it along.

Too Wise.

Visitor—How much rent do you pay for this dump?

Subdubs—I own it.

Visitor—Ah, I knew you were too sensible to rent such a place.—Pathfinder.

Enough.

Henshaw—I hear he was operated on. What did he have?

Gee Whiz—Money.—Life.

Initials for Embroidery in Script Style

TO TRANSFER THIS DESIGN

Put some soap in a pint of hot water, stir and remove soap. Saturate design with mixture, then remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material. Cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

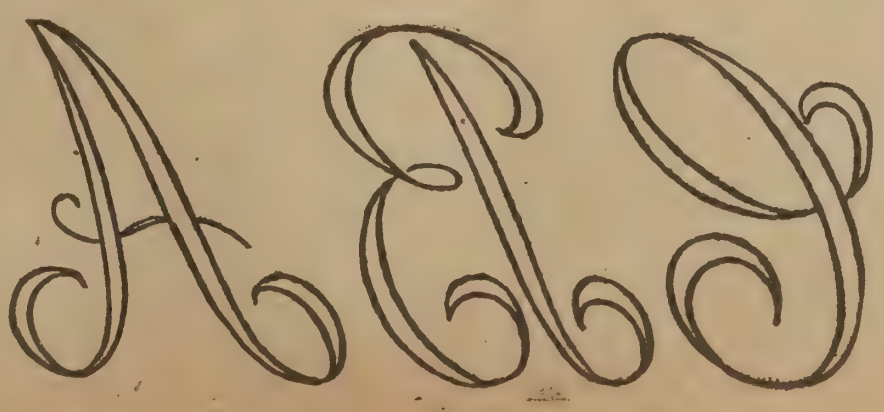


In all alphabets which I have given, and they are so useful, I have kept in mind the importance of simplicity. There are no letters as a decoration which stand out in lovelier relief than those of simple design. The beauty of any letter or combinations of letters is clearness, neatness and pretty arrangement.

Cord effects are sought because they are plainest. This is done by padding heavily. Never draw the padding cords too closely, for all padding cord will shrink and draw the goods. Pad the letter sufficiently heavy to bear the embroidery floss in what is known as the winding effect, which is wound as a spool of thread, from right to left, with no roughness or padding on the wrong side. White embroidery floss of a linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design. Soak it in tepid water containing a few drops of lamp oil, and your letter will be clear and white when laundered, without any trace of ink thereon.

Sincerely yours,

Winifred Worth



Favorite Mottoes

What is the quotation or what are the words which have helped you in the journey of life?

Send it to the editor of The Farmer and let it help another.

To the Editor: In my case the motto, "A square deal makes friends," also the quotation from Lincoln, "The better part of one's life consists of his friendships," is most worthy of mention.

A. E. SKARP.

Westmond, Idaho.



And He shall judge among many people, and rebuke strong nations afar off; and they shall beat their swords into ploughshares, and their spears into pruninghooks: nation shall not lift up a sword against nation, neither shall they learn war any more.

But they shall sit every man under his vine and under his fig tree; and none shall make them afraid: for the mouth of the Lord of hosts hath spoken it.

DRUDGERY OR DELIGHT?
Homemaking May Be One or Other.

A school friend of mine once wasted a lot of good pity on me because I had chosen to live on a farm and spend my life in what she frankly called drudgery. The pity only amused me. It is true, I was often tired and help was sometimes hard to get and not always helpful. Still, I loved my work and felt my skill increasing daily. To me home-making as it becomes possible in farm life, was the most delightful work.

My friend was musical and spent hours practicing scales and exercises. I have seen her almost faint under the strain of long concentration. Yet she felt that in the pursuit of art all effort was well directed. She could not understand that my attitude was very similar to her own. My art was not music, but home-making. The pursuit of the one is just as sweet and satisfying as that of the other.

There is one saying of Washington Irving that I love to think of because it exactly expresses my thought: "In America, literature and the elegant arts must grow up side by side with the coarser plants of daily necessity." That is even the arts must be democratic. We must not place the musician, the artist, the author on a pedestal and worship them while we despise the humble artist whose creations are the foundation of human health and well-being. The idea of drudgery is inseparable from art. Only practice can make perfect and practice means continual repetition. Whether this drudgery becomes delight or not depends entirely on the art pursued. It is all in the mind.

Drudgery becomes delight when home-making becomes an art, when the home-maker feels herself to be what she is, a member of the most ancient and therefore most honorable profession open to women.

Remembering this definition of drudgery, how full of meaning are the words of Margaret Fuller:

"Drudgery is as necessary to call out the treasures of the mind as harrowing and planting those of the earth."

Swiss Roundjager.

If you want to try something different in the meat line on the farm, cut this out and keep it until the next "butchering day." It will be sure to please you:

Very lean beef (cured) chopped coarse, 4 lbs.
Lean pork, 6 lbs.
Suet, 3 oz.
Saltpeter, 1 1-2 teaspoonfuls.
Allspice, 1 1-2 teaspoonfuls.
Caraway seed, 1 1-2 teaspoonfuls.
Sugar, 1-2 ounce.
White pepper, 3-4 ounce.
Cloves, 1 teaspoonful.

Says H. S. Eakins, Colorado Agricultural college.

Do You Know That

Honesty is the best policy?

Going After the Cows

What Happened When I Was a Little Farm Girl of Ten

To the Dear Girls of the Family Circle: Whenever I open the pages of the Farmer and turn to our own page various pictures come to my mind.

Sometimes I think of a little 10-year-old barefoot girl, with brown hair and eyes to match. She watches the clock, of a hot summer afternoon, and when the hands show nearly 5 o'clock she takes her sunbonnet and with a patient little sigh starts off down the road.

She does not mind the first part of the walk much for there is a farm house once in a while, but after she passes the last one and enters the woods, leaving the road and following only a path, she begins to feel lonely.

The path winds through the trees till it disappears in a swift though shallow creek. Now the advantage of being barefoot is evident, for the path, lost in the stream, finds itself again on the other side and it is that path she must follow.

The stream is fed by springs which gush from the banks on either side, making the water very cold.

There are rapids just at the fording place and sharp slippery rocks on the bottom. How the little girl dreads to wade in! She is only 10 years old and she wonders what would happen if she lost her footing and slipped down in the deepest place, and she wonders if she could get up all alone. She thinks about many things as she stands on the brink of the cold stream with her toes in the water. But she knows that on the other side of the creek somewhere around in the woods are 20 cows feeding, and she has been sent to find them and drive them home.

So she draws a deep breath, throws back her sunbonnet, letting it hang by the strings that she may have an unobstructed view of the fording place, holds up her little skirts so they will not get wet and bravely wades in. The rocks are sharp and hurt her feet cruelly and the water is high above her knees in places and so cold and swift that it almost takes her off her feet, but she reaches the other side, climbs the hill and listening hears away off among the trees the tinkle, tinkle, tinkle of several bells. This is no fenced enclosure, but wild, unsettled hills and valleys, where wolves howl on winter nights.

The feeding ground is free for all and several small herds are driven there every day, and each herd has a bell cow. It is up to the little girl to select her own bell from all the others that are tinkling or she will be led to the wrong herd. After carefully listening she locates her bell and finds she must leave the beaten path because the sound of the bell is on the other side of thick trees and scratchy bushes which leave ugly marks on her little bare legs. If that old bell cow would be decent enough to keep moving till she was found it would help some, but after a hard scramble through brush and thorns in the direction where our little girl thinks she hears the bell she finds she is mistaken and often must stand still and wait for the guiding tinkle to direct her in her search.

At last she gets her eyes on the old bell cow and feeding near her she may find the rest of the herd. Not always, though, because quite frequently there are some venturesome young heifers which seem to take pleasure in straying away and concealing themselves in a cluster of trees.

They must all be found and so she patiently seeks them, tired, hot and dusty though she becomes, and fearful, too, as the sun sinks lower and the shadows lengthen.

At last the whole herd is rounded up and counted, and with the old bell cow leading, is started homeward.

Her trials are not over though by any means because some of the herd are always finding clusters of tender grass off to one side and are sure to lag behind and must be kept moving.

After a hard scramble through the brush and branches the little girl gets her cows down to the fording place and compels the last reluctant cow to leave the cool shady water. Again she gathers up her skirts and follows the cows through the cold stream. The worst is over now, for there is no more brush or scratchy thorn apple trees, and for her much abused feet there is the beaten path and finally the soft, sandy road. This little girl knows that the barnyard gate will be open and her father will be standing there with two shining milk pails. She knows he will look at her kindly and listen as she tells him about her trials with the cows, will pat her shoulder and say "too bad" if she shows him an extra bad bruise on her bare feet. He will not scold her even if there is a cow or two missing sometimes, but will tell her she is "a good girl" and that he knows she has tried to find them all and now she must run in the house and get her supper.

You see, my dear farm girlies, I know all about it because I was the little girl.

A. W. B.

Patterns

2004—Junior Dress: Cut in three three sizes, 12, 14 and 16 years. It requires 5 yards of 36-inch material for a 14-year size. Price, 10 cents.

1975—Lady's Dressing Sack: Cut in six sizes, 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 3½ yards of 44-inch material fo ra 36-inch size. Price, 10 cents.

1982-1992—A Good Suit for Sport and School: The patterns are cut in three sizes, 16, 18 and 20 years. The skirt requires 3½ yards of 36-inch material for



a 16-year size. The blouse requires 3¼ yards. The skirt measures about two and one-third yards at the foot, with plaits drawn out. Two separate patterns, 10 cents for each pattern.

1977—Lady's Apron: Cut in four sizes, 34, 38, 42 and 46 inches bust measure. It requires 7¼ yards of 36-inch material for a 38-inch size. Price, 10 cents.

2001—Lady's House Dress, with or without Back Yoke: Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 3-8 yards of 36-inch material for a 36-inch size. The skirt measures about 3 yards at the foot. Price, 10 cents.

2003—Lady's Dress: Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6¾ yards of 36-inch material for a 36-inch size. The skirt measures about three yards at its lower edge. Price, 10 cents.

Kitchen Helps

Save Housewife Labor and Time

The following are extracts from a bulletin on The Farm Kitchen, by Carrie L. Pancoast, of the agricultural extension service of the University of Missouri:

Pans, skillets, and all other utensils should be selected with smooth surfaces so that they may be easily and quickly cleaned. Flat bottomed, shallow utensils require less time and fuel than tall rounded or grooved ones.

A garbage pail with a lid which may be raised by pressing a foot lever is most convenient. If expense must be considered a bread box into which an ordinary pail may be set proves quite satisfactory as it can be covered, thus lessening the attraction of flies.

Have in the kitchen a high stool or a combined high stool and step ladder. A woman should not waste her strength standing at tasks which she can do just as well or better sitting.

Good scales in the kitchen will enable the housewife to determine whether she is getting honest weights for money expended.

A steam cooler preserves the flavor and mineral matter of food and requires but little watching. It is used successfully also in canning.

Soldier Blue to Replace Navy.

Soldier blue is seen just now so often that it seems probable this softer, more becoming shade may in time wholly supersede the dark marine tone. Partly because of dye shortage, partly because anything remotely resembling military dress is almost sure of success, this color is being used a great deal and a very pleasant change it makes. Organdie blouses trimmed with fine white lace collars and cuffs, silk dresses and street suits are all to be found of soldier blue.

To Mend a Bath Towel.

Do not darn a bath towel. When such a towel shows signs of a hole, loosen the tension of your sewing machine, and, with lengthened stitch, run it back and forth across the towel. This makes a neat repair and prolongs the life of the towel.

A Good Nail Bleach.

The best manicure acid is made by putting a tablespoon of lemon juice in a cup of hot water. It removes stains from the fingers and nails and softens the cuticle about the nails in a satisfactory way.

To Retain Color in Vegetables.

When vegetables are cooked with the cover off they will retain their color in much of its original freshness.

Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO.

36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

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Western Branch, Washington Shoe Mfg. Co., Seattle, Wash.

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Every acre put on the market last year was sold, indicating attractiveness of our proposition. Additional acreage now ready at prices from $7.50 an acre up, on terms to suit purchaser.

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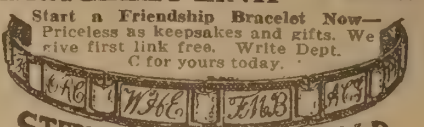
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TEACHER IS READING A STORY TO HER CLASS

Dear Aunt Nellie: My best friend is what I am going to tell you about. My best friend is Ellsworth Pratt, a boy of 9. He is fat, but I like him. He is in the fourth grade and he sits by me. Ellsworth lives about a quarter of a mile from school. He brought a book from his house to school. Our teacher reads it to the class. It is about two little dogs named Jackie and Petie Bow-Wow. It is funny.—Ward Rowe, Box 17, Rochester, Wash.

CLARA HAS SPENT MANY HAPPY HOURS WITH ROVER

Dear Aunt Nellie: My subject is "My Best Friend." He is a dog. His name is Rover. He will bite at strangers if they show they will harm you. He is a faithful friend, indeed, and will serve me faithfully if he is treated right. We used to have fun with him. I would pretend I was crying, and he would come and lick my hand and try to soothe me. He has beautiful brown eyes that are so intelligent, and when he is hurt so pitiful. If he serves me, I should serve him and give him good food and drink and a warm place to sleep. Dogs are good to drive cows to the barn and also to go with one on walks.—Clara Olson, Bothell, Wash.

RUNS THE GASOLINE PUMPING ENGINE IN SUMMER

Dear Aunt Nellie: I thought I would write and tell you about our ranch. It is located eight miles northwest of Othello. There is a creek one-half mile west of the place. I am 14 years of age. I have two sisters. The oldest is Derla; the next is Frances, but I am the oldest. We have 107 head of sheep, one old dog and a pup. The old dog is a good sheep herder. We have 15 head of cattle and about 20 head of horses. In the summer I run the stationary gasoline pumping engine. It is a 10 horsepower Galloway. We have a 1916 model Ford touring car, and I can run it anywhere. I go to town in half an hour. My birthday is September 7.—Dea T. McManamon, Box 93, Othello, Wash.

CAN GET BACK NOW BEFORE SUNDOWN WITH THEIR CAR

Dear Aunt Nellie: Papa takes the Farmer, and I enjoy reading the letters. I am 14 years old. My birthday is May the 8th. I live one mile from school. My teacher's name is Miss Estella Vane. I live on a 800-acre farm. We have 11 head of horses. Papa did have 27 hogs before he sold and killed them. He has only 11 now. My two brothers and papa have 40 head of cows and calves. I have four cats and one dog and a pup. The dog's name is Spot, and the pup's name is Jerry Willard. He is black and white and curly. We have about 50 pigeons. My brother has two goats. Their names are Billie and Nannie. Papa has a car. Before we got it it took us all day to go to town, but now we go down in the afternoon and get back before sundown. We live 12 miles from town.—Bonnie Scoggin, L. B. 2016, Pomeroy, Wash.

ALWAYS ENJOYS READING THE COUSINS' LETTERS

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I enjoy reading the other cousin's letters. I am 10 years old and am in the seventh grade at school. My birthday is August 23. I have one sister at home; also three brothers. Then I have one sister and two brothers that are away from home. I live on a farm, and have such fun! We have three cows, but only one is milking. We have five or six horses and three colts.—Alice E. Ritchey, Chesaw, Wash.

FIRST SURPRISE WHEN SHE WAS JUST THREE YEARS OLD

Dear Aunt Nellie: My first surprise was on Christmas. I remember I was 3 years old. We had a Christmas tree. The tree was about four feet tall. I got a cup and saucer. There was a banana in the cup. I got a little broom and a number of other things.—Elizabeth Bowen, Oroville, Wash.

ONE OF OUR LITTLE BLUE-EYED COUSINS

Dear Aunt Nellie: I am 10 years old and in the fourth grade. I live on a 30-acre farm. We have five sheep and eight calves. I have five sisters and two brothers. We got a sled for our Christmas. I got a big doll, two feet tall. I have brown hair and blue eyes. —Reva Ada Lamb, Box 162, Coulee City, Wash.

WE HOPE THAT THEODORE WILL WRITE TO US AGAIN

Dear Aunt Nellie: I have been reading the letters from the boys and girls of the Children's Corner, so I thought I would write, too. I was 13 years old October 25. We live on a farm of 141-4 acres and have a cow and 13 chickens. I go to school and I am in the seventh grade. My teacher's name is Miss Eva Wolford. I like her very much. I have two brothers and one sister. My brother's names are Wener and Leander. My sister's name is Vera. Wener is 11, Leander is 7, and Vera is 9 years old.—Theodore Carlson, R. 1, Box 8, Shelton, Wash.

DORTHEA HAS NEVER WRITTEN TO US BEFORE

Dear Aunt Nellie: I have never written to the Children's Corner before. I am 9 years old and in the third grade. I go two miles to school. My teacher's name is Mrs. Schold. There are 15 children going to school. I have light hair and blue eyes. I am four feet two inches tall.—Dorthea Hicks, Coulee City, Wash.

VESTA AND SISTER RIDE HORSEBACK TO SCHOOL

Dear Aunt Nellie: I have been reading other children's letters in the Children's Corner. I enjoy reading them. I am 10 years old and in the fourth grade. I like to go to school. My teacher's name is Miss Carver; I like her fine. I also go to Sunday school. There are about 12 in our class. My teacher's name there is Mrs. Parker. I have four sisters and one brother, the oldest sister is married. We live on a farm. We live three miles and a half from school. My sister and I ride horseback to school.—Vesta Johnson, Mansfield, Wash.

COUSIN ETHEL HAS TWO LITTLE WHITE KITTENS

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and my birthday is October 22. I have four sisters and three brothers. One of my brothers goes to school with me. He is in the seventh grade and I am in the second grade. My teacher's name is Mr. Oldham. There are five children in my class. We live on a farms. We have cows, horses, pigs, chickens, four cats and a dog. We have five inches of snow here. I have two white kittens.—Ethel Mortensen, Cathcart, Wash.

WE WANT ETHEL TO WRITE TO US AGAIN SOME TIME

Dear Aunt Nellie: I like school too. I am in the second grade. I am 8 years old. I will be nine in March. I have one brother and two sisters. I like my teacher. Her name is Miss Shuts. I have a little colt. I live of a farm of 160 acres. We have some nice chickens and eight cows.—Ethel Short, Molson, Wash.

READS THE CORNER EVERY TIME THEY GET THE PAPER

Dear Aunt Nellie: I have been reading the Children's Corner every time we get the paper and I like it very much. I am in the fifth grade and I am 12 years old. My birthday is the tenth of October. My teacher's name is Mary McDougall; she is a very good teacher. I go to a big schoolhouse. There are 100 pupils in our school. I have two and one-half miles to walk to school. I do not ride. I live on a 30-acre farm. There are 16 cows and two horses. We have two calves and just 22 chickens.—Ruby Ware, Box 55, R. F. D. 1, East Stanwood, Wash.

GETTING UP LATE FAILED TO MAKE THE DAY BETTER

Dear Aunt Nellie: I am going to write about "my worst day." "Mama," I said one evening, "I have been getting up at 6 o'clock all winter long, and sometimes I feel so sleepy! You have been feeling so well all week, and as tomorrow is Sunday, why can't I stay in bed tomorrow morning until I get ready to get up?" "Well, daughter," mama replied, "you may if you wish, but I do not think it will do any good." I had always gone to bed about 8 o'clock, but as I did not have to get up so early the next morning I sat up that evening and read until half past 9. The next morning I awoke about 6 o'clock, but, as I did not have to get up, I turned over and tried to go to sleep again. It was raining, and I could hear the rain beating on the roof. Listening to the rain, I soon fell asleep. When I awoke again it had stopped raining. I turned over in bed and looked at the clock. "Half past 9," I exclaimed. "Why, I will only have half an hour to clean up my room and get ready for Sunday school." I got up, dressed, washed, and combed my hair, which took me about 15 minutes. I hurried through my work and ran downstairs. I found a cold breakfast awaiting me, as the rest of the family had gone to church. I was feeling disagreeable, and the sight of a cold breakfast made me more so. I reached Sunday school about 10 minutes late. I had always gone to Sunday school early, as I did not like to enter after it had been called to order. After Sunday school I went immediately home, as I was feeling so disagreeable that I spoke crossly to everyone who spoke to me. Everything seemed to go wrong that afternoon and I was very glad when evening came. I never again asked to stay in bed in the morning, but got up at 6 o'clock. —Gladys May Plemon, Burbank, Wash.



CHUM HAS MOVED AWAY, BUT THEY WRITE OFTEN

Dear Aunt Nellie: I will choose for my subject "My Best Friend." My best friend and I used to chum together, but now we live away from one another, though we write often to each other. From the first day I knew her we chummed together. She was our nearest neighbor. We went to and from school together and were always in the same grade. She is a very pretty girl with blue eyes and brown curly hair and a sweet, pretty face. She is a month older than I am, but we are the same height. She is a very jolly girl. When we were small we would play with dolls and have picnics together. Of course we would both invite our sisters to join us in our fun; back of our place there was a pretty green grove, and here we would hold our picnics and have so much fun. We would play all day, and at noon we ate our lunch with our big sisters and then she would come to my home, and I would go to hers. I believe we loved each other more than any other friend.—Alvina Murawski, Box 5, Northport, Wash.

MOTHER RAISES RHODE ISLAND RED CHICKENS

Dear Aunt Nellie: I am 12 years old and in the seventh grade. I have one sister whose name is Frances, and one brother whose name is Dea. They are both going to write to you. I enjoy reading the Children's Corner. I go to the Deadman school. My teacher's name is Mrs. Lee. We have two dogs, three cats, a bunch of sheep and several head of cattle and horses. I like the stock. I live on a farm of 160 acres. My mother raises lots of Rhode Island Red chickens. My birthday is July 8.—Derla McManamon, Othello, Wash.

VISITS AUNT ON COEUR D'ALENE RESERVATION

Dear Aunt Nellie: This time I am going to tell you about our trip to visit my aunt Mary last summer. She lives at Coeur d'Alene reservation. First we went through Davenport and then Reardan, Medical Lake, Cheney, Spangle, Waverly, Latah and Tekoa. We started from Medical Lake to the Coeur d'Alene reservation, and made it in one day. We went 62 miles a day in a hack with our own team. We had a nice visit. I can make light bread, bake cake, embroider, hemstitch and do beadwork. I have dark brown hair and dark brown eyes. I weigh about 106. I am a Christian girl. My papa is an elder and interpreter. We have a nice missionary. His name is Gerard M. Van Pernis. We have a new organ in our church. We are Presbyterians. We live on a 100-acre ranch. It is my own allotment. I am going to tell you about my school room. There are five rows of desks, four blackboards. The schoolhouse stands by the main road. One of my pet horses got the prize for two years. My teachers' name is Henry Markishtum. I think the Children's Corner is growing. For a half year I have read the Children's Corner every time the paper comes.—Sallie Selina Garry, Miles, Wash.

VELMA MAKES US GUESS WHO HER BEST FRIEND IS

Dear Aunt Nellie: My best friend has dark hair and eyes. She is just my height, 5 feet and 21-2 inches, although she is grown up. I know you would think her a best friend, too, Have you guessed who she is? Well, she is my mother. I am 13 years old, and my birtday is May 4. Carlyle, my brother, is 9, and sister Carmen is a year younger than I am. We have lots of fun coasting and playing in the snow. Sometimes we help papa feed the cattle, of which we have about 165. Carlyle has a Shetland pony, and he thinks her the best ever. She is a cute little roan.—Velma Batie, Twisp, Wash.

PLAY BLACKBOARD GAMES WHEN IT IS VERY COLD

Dear Aunt Nellie: I have read many of the letters in the Children's Corner, but this is the first time that I have written to you. I live in the country and walk a quarter of a mile to school. There are 11 children in my school—four boys and seven girls. I am in the seventh grade. I am 12 years old. I have a sister who is 11 years old and a brother who is 10 months old. My sister is in the sixth grade at school. We have lots of fun at our school. There is some ice by our schoolhouse and we skate on it and go riding on our sleds. When it is too cold to go outside and play we play games on the blackboard.—Dorothy Blaisdell, Creston, Wash.

WINIFRED JONES WRITES A STORY WITH A MORAL

Dear Aunt Nellie: I am very fond of making up stories. This is one I made up at school. This is the title: "What the Snail Taught the Boy." Once a boy was walking along the road when all at once he saw a poor snail. The boy was just about to step on it, when suddenly it lifted its body on a stone and said, "My dear friend, I am not doing you any harm, am I?" The boy looked down in astonishment and said, "No, my friend." "Well, then," said the snail, "why do you want to do me harm?" Then the boy hung his head. He stood there a long time, then turned and went away. The boy's parents were poor, and when he reached home he said, "I was walking down the road and I saw a snail. I was anxious to step on him on purpose, when he said, 'Am I doing you ary harm?'" But before the boy had time to finish telling his story his mother said, "Go and get some paper and a pencil, and we will make a pennant that has this motto on it: "Be to others kind and true, as you wish others be to you.'" Then the boy and his mother made it and hung it on the rough wall. The small family always kept that as the greatest thing they had. This story may interest my dear cousins. I may write again. I have written before, so I know you know me.—Winifred Elizabeth Jones, Box 59, R. F. D. 1, Auburn, Wash.

HAVE A VICTROLA IN THE SCHOOL WHERE RUTH GOES

Dear Aunt Nellie: I am 8 years old and in the third grade. I have three brothers, but no sisters. My brothers' names are Edward, Harold and William. We live on a 40-acre farm. We have seven cows, five calves and one dog. We have a cat and 39 chickens and one pig. We go to school every day. We have a Victrola in our school. My teachers' name is Miss Hintz.—Ruth Zuaschka, Everson, Wash.

HAD A BASKET SOCIAL AT THEIR SCHOOLHOUSE

Dear Aunt Nellie: We had a basket social at our schoolhouse the 2d of February. I have lots of fun coasting while I'm not at school. We coast down a hill just above our house. We have lots of fun picking berries and flowers in the summer time. We like to hunt cows, too. Sometimes one of my neighbors and I hunt them. Our cow has a calf now. It is red and has a white foot. I would rather live in the country than in the city.—Nellie Salvage, Addy, Wash.

TEDDY LOVES HIS MOTHER BECAUSE SHE IS SO KIND

Dear Aunt Nellie: My best friend is my mother. She takes care of me when I am sick. She cooks my meals and gets my lunch ready to take to school. She washes my clothes and tries to keep me clean, but sometimes I get dirty. I try to keep as clean as I can so she won't have so much to do. I love her because she is good and kind to me and she wants me to grow up to be a good boy.—Teddie Taylor, Riverside, Wash.

PLAY IN CREEK THAT RUNS BACK OF THE HOUSE

Dear Aunt Nellie: I am 9 years old and in the fourth grade. My teacher's name is Miss Ada English. She is awfully nice. I live on a 40-acre farm. A large creek runs right back of our house. In summer we go swimming and wading. My birthday is the 27th of February. I have many pets, a large dog named Bingo and a kitten. My calf's name is Lilac. I love to read the letters in the Children's Corner.—Myrtle Veronica Faye, Monroe, Wash.

HAD A SURPRISE PARTY ON HER EIGHTH BIRTHDAY

Dear Aunt Nellie: I am a girl 11 years old and in the fifth grade. My teacher's name is Miss Sill and I like her very much. I am going to tell about "My First Surprise." It was my birthday when I was 8 years old. When I came home from school that afternoon I saw some of my friends at my house. After a while some more of my friends came and then I knew it was a surprise party. We had a lot of fun that time.—Addie Russell, Deer Park, Wash.

BLANCHE IS A LITTLE FOURTH OF JULY GIRL

Dear Aunt Nellie: I am 9 years of age. I will be 10 July the fourth. I am in the fourth grade. My teacher's name is Esther Hanson. I have two sisters and one brother. I live on a 320-acre farm. In the middle of the summer we have headers. I help mama cook for the headers. I have a dog and a cat for pets.—Blanche Bell, Mold, Wash.

The Washington Farmer is glad to announce the receipt of letters for the Childrens Corner from the following during the last week: Daisy Alberta Laird, Martha Arndt, Lillo Pollastruni, Pearl Smith, Gladys Cary, Viola Augst, Lyda Augst, May Drew, Myrtle Sodorff, Grace Willoughby, Graham Potter Charles McDonald, Josephine Edna McAndrew, Esther Carslin, Selena Deno, Margaret Cox, Kenneth Duncan, Mabel Ervin, Jeannette Samson, Paul Helme, Berthold Canrad.

Cheer Up

Put on a smile and keep it there;
Don't look so glum and blue.
You'll feel a whole lot better
When the long, hard winter's through.
And then, besides, we may yet get
Into that awful fray,
And our bones bleach on Europe's fields,
So let's cheer up today.

Sidelights

Aw, Gwan!

I've often heard that fleas were black,
I don't believe that's so;
For Mary had a little lamb
Whose fleece was white as snow.

The Difference.

"What's the difference between a socialist and a plutocraft?"

"There are many, but the leading one is that the former fights for his principle and the latter for his interest."—Baltimore American.

An Affair of Honor.

Farmer Swett—"You say you belong to the army of the unemployed? Well, my friend, I guess I kin give you something of a job today."

The Wanderer—"What! An' have me be a deserter from de army? Ye don't know military ethics, do ye?"—Puck.

That's So, Too.

"Why," said a youngster to his elder brother, "do herrings have so many more illnesses than other fish?"

"Who says they do?" asked the youth addressed.

"Why, this book says that thousands upon thousands are cured every year."

One Woman's Wisdom.

The Widow—Have you read the will?

The Lawyer—I have tried to, but it is in your late husband's handwriting and I can't make anything out of it.

The Widow—Well, if you are unable to make anything out of it, there can't be much in it for the rest of us.

The Real Loafer.

The teacher was trying to picture the outcome of laziness and idleness. He drew a terrible picture of the habitual loafer, the man who hates work, and his ultimate fate.

"Now, Charlie," he continued to a little boy who had been looking out of the window and whose mind was far from the lesson of the hour, "tell me who is the wretched, miserable individual who gets clothes, food and lodging and gives nothing in return?"

"Please, sir," he replied, "the baby."—Credit Lost.

Severe Test.

A young man in quest of a situation entered the apartment.

"Well," kindly said the captain of finance, "there's an opening in the bank for the right young man, and there have been several applicants for it already. Are you energetic and willing to learn?"

"Try me, sir."

"That's good for a starter. Do you gamble?"

"No, sir. I have a mother to support and can't risk my earnings that way."

"Ahem! Now"—here the great man squared himself before his applicant, an indication that the most important question was now to come—"do you ever go fishing?"

"Yes, sir," replied the young man, without hesitation. "Was fishing yesterday."

"Ah! And what kind of a catch did you make?"

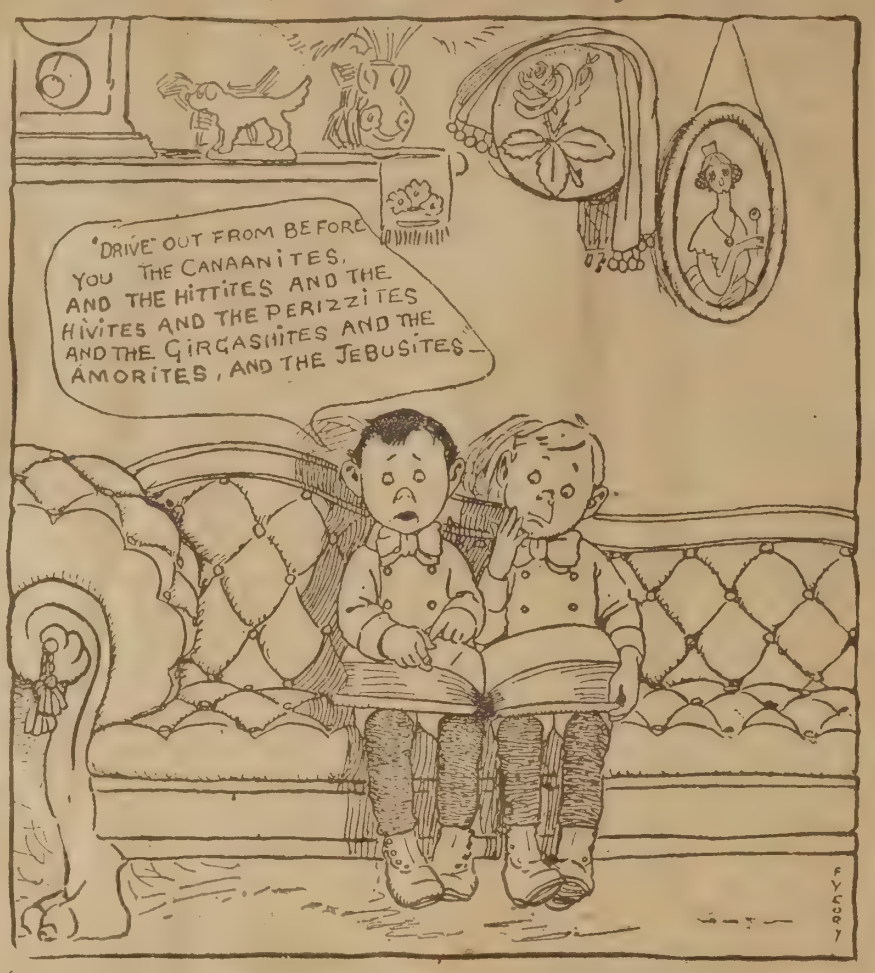
"Good!"

"You're the young man I've been seeking. All the others answered up all right until I put that last question, then they lied!"

Pass It On

Have you had a kindness shown!
Pass it on, pass it on!
'Twas not made for you alone,
Pass it on, pass it on!
Let it travel down with years,
Let it wipe another's tears,
Till in heaven the deed appears.
Pass it on, pass it on!

"Ben Bolt", Twentieth Century Version



—From the Indianapolis Times.

Don't you remember the gospel, Ben Bolt,
The gospel that Pa made us learn?
Some parts sounded queer, but, stricken with fear,
We committed 'em, rather than burn.

Ups and Downs of a Bunch Grass Boy

(Continued from page eighteen.)

eyes. I may say that I got to feeling much the same way about cream—and have never felt right toward it since that summer.

I got pretty lonesome, all right, though I did not admit it when mother and father returned in the fall. Many times I wandered aimlessly about the place boo-hooing and sobbing just because I was lonely. For a long time I lived mainly on young chickens, cream, vegetables from our garden and biscuits, which I made. I began to long for salt pork—ham in particular. Shep's appetite was failing. He would not even smell of his cream, and I judged he wanted a bone. We had many chickens, and I wondered if I could trade some of them for a ham, giving me some salty pork and Shep a bone. I saddled Rowdy and rode 10 miles to Coulee City and asked Jim Hunter, the big merchant of the town, if he would trade me a ham for a lot of chickens. He said he would. Riding back home I went around by Tom Kirkland's, a mile south of our place, and asked him if he would take my chickens to town the next time he went. He would. So I sacked up a couple of dozen young frys, Tom hauled them to town and Hunter delivered to me the ham. The very smell of the ham put new life into me, as it did into the dog.

The hens quit laying as summer advanced, and it was not long before I had to eat my ham without any eggs. That summer I was reading a story of oriental plot, one of whose most thrilling characters was a Sikh called Runjeet Singh. Anything which Runjeet Singh did not like he called "vile pig," "accursed son of a monkey," and so on. The story took quite a grip on my imagination. So, as the egg production of the hens began to dwindle, in imitation of the haughy Sikh, I hissed to them that they were vile pigs, accursed hens and troublesome monkeys. But it was moulting time and they were indifferent to my oriental objurgations.

Late in summer fires broke out in the mountains back of the Columbia river, surrounding on three sides the Big Bend country. Many animals were driven out. It does not seem possible that they swam the Columbia river; nevertheless, several bears and a number of cougars came into our neighborhood. One morning I discovered tracks in the road dust not far from the house, as big as a saucer—a cat's paw many times magnified. For a wonder the beast had not attacked the cows or calves during the night. A day or two later Charley Gifford, while working in a new well, looked up and saw a huge, yellow, cat-like head 20 feet above him. He climbed out, got his rifle, followed the beast a short distance and shot it. It measured nine feet from tip to tip, and was quite lean, evidently having suffered from hunger.

NEXT WEEK THE BUNCHGRASS BOY TELLS OF HIS LONGING FOR RUNNING WATER AND LAKES WHICH BURNED LIKE THE DESERT THIRST, AND HOW BY THE TIME HE WAS 14 YEARS OLD HE HAD RIDDEN AS FAR SOUTH AS WILSON CREEK, NORTHWARD AS FAR AS THE GRAND COULEE AND EAST TO WILBUR, 16 TO 25 MILES AWAY.

"THIS TERRITORY, BEING UNFENCED, WAS THEN MY RANGE, MY PLAYGROUND, BUT THE GREATEST WONDER IN MY PLAYGROUND WAS THE GRAND COULEE AND STEAMBOAT ROCK IN THE MIDDLE OF ITS FLOOR-LIKE BOTTOM."

THEN HE TELLS HOW WITH A BOY COMPANION: "WE STRUCK THE HEAD OF THE LADD TRAILS, WHICH LED BY A PRECIPITOUS AND HAIR-RAISING ROUTE DOWN INTO THE GRAND COULEE. IN GETTING DOWN THE LADD TRAILS THE FIRST TIME I CAME NEAR LOSING MY LIFE."

Lingering Respect.

"Do you skate?"

"No. When I think of how precious ice was last summer, I can't persuade myself to use it for any such frivolous purpose."—Washington Post.

Do You Know That

The highest conception of riotous living is a hog eating potatoes and onions?

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MISCELLANEOUS—WANTED 63

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POULTRY 174

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POULTRY 174
Continued.



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POULTRY 174
Continued.

HATCHING EGGS—PEARL GUINEAS, $1.75 per 15; Toulouse geese, 25c each; Mammoth Pekin ducks, $1.75 per 15; Rose Comb reds, S. C. Buff Leghorns, $1.25 per 15.
C. O. JOHNSON.
R. 1, MEDICAL LAKE, WASH.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

"WHITE ELEPHANT" R. C. W. LEGHORN eggs, $1.50 per 15. Mrs. J. E. Jackman, R. D. 4, Kalispell, Mont.

R. C. BUFF WYANDOTTE EGGS, FOR hatching, $1.50 and $1 per 15. Mrs. W. E. Boner, Joseph, Ore.

FOR SALE — CHINESE PHEASANTS' eggs, $3 per dozen. Dr. F. M. Cole, Caldwell, Idaho.

PRIZE-WINNING BUFF ORPINGTONS—Settings $2 to $10. Lucy R. Scudder, Box 36F, North Yakima, Wash.

EGGS FROM THOROUGHBRED TRAPnested White Leghorns, $6 and $8 per 100. A. A. Hopson, Jennings Lodge, Ore.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

CHOICE BARRED ROCK COCKERELS, $3. B. Livingston, Glenwood, Wash.

LIVE STOCK 177

FOR SALE, OR EXCHANGE FOR LIVE stock—Imported Hackney stallion; weight 1650. For further information address C. W. De Voe, Jerome, Idaho.

GARFIELD JOHANNA FAYNE, REG. Holstein bull, for sale; sire Sir Johanna Fayne Douglas. Mathis, Winchester, Wn.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS.
VETCH OR "TARES,"
A Great Forage or Seed Crop.
RED CLOVER, ALSYKE,
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.
COMPLETE LINE OF FARM SEEDS.

We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.

CORVALLIS FLOURING MILLS.
Corvallis, Oregon,
Home of the Famous Oregon Agricultural College.

TESTED SEEDS FOR FARM AND GARden—New 1917 seed catalogue now ready; valuable information gathered in 25 years' experience in the northwest. Write for quantity price on Grass, Clover and Alfalfa seed. For new catalogue address Aabling-Boyce Seed Co., Seattle, Wash.

SEED CORN, SEED POTATOES, BOTH Yellow and White Dent varieties; field selected before frost; kiln dried; part tested runs 95 per cent. Price 6c per pound. 400 lbs. specially seed grown, hill select, Netted Gem potatoes, 6c. C. L. Hartman & Son, Prosser, Wash.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, ORE.

ALFALFA, RED CLOVER, ALSYKE CLOver, white clover, sweet clover, timothy and other grasses; seed oats and wheat; at reasonable prices. Voegeler Seed Co., Salt Lake City, Utah.

A LIMITED NUMBER OF THE FAMOUS Yakima Goodell strawberry plants, $3 per 100, delivered free.
WILL HANKS, NACHES, WASH.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEEDS 620
Continued.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

TESTED SEEDS—CHOICE CLOVER, TIMothy, corn, grain, grass and garden seeds, for spring planting. Mail orders a specialty. Prompt shipment. Send for catalogue. Murphy's Seed Store, Albany, Ore.

ALFALFA SEED, RED CLOVER, SWEET clover; Early Ohio; Idaho Rural; Peachblow seed potatoes; Dicklow spring wheat—the big crop producer; blue barley. Jerome M. & E. Co., Jerome, Idaho.

FOR SALE—RED AND ALSYKE CLOVER; special low prices. Write for sample. A. B. Hinz, Jefferson, Ore.

NURSERY STOCK 621

NURSERY STOCK—FRUIT TREES, ALL kinds, grafted walnuts, filberts, grapes, small fruit plants, etc., at greatly reduced prices. Save time by mailing complete want list, stating varieties, number of each and grade. Lafayette Nursery Co., Lafayette, Ore.

STRAWBERRY PLANTS—CLARK'S SEEDling, Magoon, Gold Dollar, Wilson, $2.50 per 1000. 200 plants, your choice, $1.00 prepaid.
J. W. Vinacke, Canby, Oregon.

EVERBEARING STRAWBERRY PLANTS, Montana grown, extra hardy and true to name. "Superb" and "Progressive" varieties, $2.50 per 100, $20 per 1000, postpaid. W. A. Thayer, Bearmouth, Mont.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. L. Moffet, Ellensburg, Wash.

LARGE FIELD-GROWN ROSES, $1.50 PER dozen bushes, prepaid. Different colors. H. C. Kerns, Eugene, Oregon.

FARM LANDS—FOR SALE 651

OPPORTUNITY OF A LIFETIME
to get some REAL land; rich and deep clay loam and shot clay soil; raises banner crops; level as a floor; on two railroad lines, near Seattle, Tacoma, Olympia; big army mobilization camp site, and cannery which contracts to buy crops; new town started right on ground, where 12 passenger trains stop every day; settling up rapidly by practical farmers of Idaho, Washington, Oregon and California; they're all enthusiastic. Land is easily cleared; select a tract now and get crop in this spring. $750 buys 10 acres, on terms of $20 cash and $10 monthly. Write at once for information.

A. H. REID & CO.
315 NEW YORK BLOCK,
SEATTLE, WASH.

—PALOUSE FARM—

320 acres, 4 miles from a good Palouse town, all under cultivation, except five acres; 150 acres in fall wheat; 80 for spring seeding; 1-3 of all crop to purchaser, or can get possission; has comfortable 6-room house; fair barn and outbuildings, with fine water. The land lies extra good, and is the very best quality. A bargain at $25,000, one-half cash, balance to suit at 6 per cent. See Mr. Tipton.

HEGE & WATKINS CO.
715-716-717 PAULSEN BLDG.

40 ACRES, TWO MILES FROM CORNING, on good county road, with phone, rural mail, and electric light and power service; surrounded by thriving orchards and good neighbors; about 150 orange trees, 15 years old; about 5 acres olives, apricots and peaches, all in bearing, and some white figs are on this land. About 5 acres of splendid alfalfa, corn and garden land, and the balance bench land suitable for olives, almonds and grain. This is a beautiful property and susceptible to magnificient development. Price only $5000. Property is clear of debt and reasonable terms will be made. No trade will be considered. Write for particulars. Refer to No. 6.
W. N. WOODSON, Owner, CORNING, CAL.

FOR 30 DAYS WE OFFER 640 ACRES, 5 miles from a good town in Rosebud county, Montana; 80 per cent tillable; no gumbo or alkali; heavy grass; 2 feet of soil, 18 feet clay subsoil; $15 per acre; $2000 cash, balance at 6 per cent, long time. 640 acres, 2 miles from above; 125 acres tillable, balance fine grazing; 3 springs; some small timber; ideal stock ranch; $5 per acre; $1000 cash, balance 6 per cent, long time. No trades. Reference, any bank or business house. Bolevar & Brown, 41 West Park st., Butte, Montana.

35 ACRES BEST ALDER BOTTOM LAND, graveled road, mile to pavement, fronts on navigable water across bay from Everett. Location, roads, water, markets, soil make this a mighty desirable and productive home. Wood will pay for clearing. John Mills, Puyallup. For anything on West Side write us.

I HAVE THREE GOOD WHEAT AND STOCK RANCHES FOR SALE, $35 TO $45 PER ACRE; TERMS. WRITE ME.
C. W. BETHEL.
HARRINGTON, WN.

FARM LANDS—FOR SALE 651
Continued.

A FINE COUNTRY HOME.

Forty acres, ten acres cleared, balance good pasture; five-room house, new barn 48x62, concrete floor; 13 cows, 10 head young stock, 1 horse, hogs, chickens; close to Seattle.

STOCKED DAIRY FARM.

100 acres of rich valley land at Fall City, Snoqualmie valley, about 25 miles east of Seattle, on the Sunset highway; 50 acres in crop; large, new modern house; large barn, silo, milking machines. 28 Holstein cows, 16 head of young stock, 1 Holstein bull, 10 hogs, 350 chickens. This is one of the finest equipped farms in the Snoqualmie valley. All farm implements. Personal property is worth over $10,000. Price $35,000; $10,000 cash and the balance on time at 6 per cent. C. L. Parrish, 202 New York block, Seattle, Washington.
SEND FOR FARM LIST.

FOR SALE—A SNAP IN IRRIGATED YAKima valley; 170 acres; diversified farming, dairy ranch including $2000 worth of registered and grade stock; 1½ miles from live town; 3 railroads. We have many good bargains to offer in fruit, hay, dairy, diversified farming and unimproved lands in the center of the richest valley in the world, where crop failures, blizzards and destructive storms are unknown. Address Hilton Land Co., Granger, Wash.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands $11 to $30 acre; arrigated lands, $35 to $50; 20 years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

MONTANA FARM—1108 ACRES; 450 IN cultivation, balance cut-over river bottom; no overflow; no underbrush; good pasture; black loam soil; 3 sets buildings; 7 miles from Kalispell, in Flathead county; school on farm; on main road, R. F. D. and phone line; the best part of the best county in state. You can't beat the quality and you can't beat the price. $38 per acre. Terms. A. L. Robinson, Kalispell, Montana.

STOCK RANCH, 240 ACRES, ABOUT 13 miles east of Lebanon, Ore.; two sets of buildings, plenty of fruit for two families; on county road; about 20 acres under cultivation, balance pasture, with some timber; good soil; plenty of spring water; price $7500; would consider improved acreage near any good school town up to $4000; terms on the balance. S. R. Tondy, Jefferson, Ore.

440 ACRES, ELEVEN THOUSAND DOLlars, $2000 cash, balance all time you want; good improvements; 100 acres meadow; Cheney district.

A section, all in cultivation, $35 per acre, only $4000, balance one-third crop; good wheat land. J. S. Langlois, Ritzville, Wash.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau. C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

160 ACRES, 3 MILES N. OF MEDICAL Lake, Wash., and 1 mile from Ry. siding; all ready for crop; black loam soil; very fertile; fenced; small house; good well; very close to neighbors; $75 per acre.
WM. MULHALL, FENN, IDAHO.

160 ACRES; 6½ MILES FROM COUNTY seat, Vale, Ore., and one mile to station. A1, fenced. Two miles from oilfield; no improvements; clear. Price $8000; half cash, bal. time, 8 per cent.
M. L. PHELPS, BOISE, IDAHO.

$80 ACRES WHEAT LAND, IN HORSE Heaven, near Kennewick; fenced; some buildings; two wells; unusual bargain at $9 per acre. Write for particulars. Keystone Lumber Company, Tacoma, Washington.

FARM LANDS OBTAINED THROUGH foreclosure of mortgage offered at rare bargains and on easy terms. Send for list. Pennsylvania Mortgage Investment company, Spokane, Washington.

NORTHERN PACIFIC RAILWAY LANDS in eastern Montana at $2.50 to $18 per a. Suitable for farming or grazing. Easy terms. For information write or see W. E. HOLT, MILES CITY, MONT.

160-A. RELINQUISHMENT; LEVEL VALley land; improvements; 10 feet to water; irrigation well and plant; 320 A. adjoining open under new homestead law. Box 332, Winnemucca, Wash.

FOR SALE—BY OWNER, TWO WELLimproved half sections, close to school, town and postoffice, in Alberta, Canada. F. L. Geis, Daysland, Alberta, Can.

CALIFORNIA FARMS, NEAR SACRAMENto for sale; easy terms. Write for list. E. R. Waite, Shawnee, Okla.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

IRRIGATED LANDS—For Sale 663

FOR SALE—720 ACRES, WELL EQUIPPED; artesian wells; alfalfa, orchards, berries, grapes; 3 sets buildings, with baths and gas; locust grove; school; railroad terminates on farm; adapted to dairy or purebred live stock; also 1500 acres leased land; have seed, feed and equipment; part in crop; would put in all the crop desired; 8 miles from Lewiston on paved road; ideal climate; no finer farm anywhere; will sell all or divide. Daniels & Wallace, Lewiston, Idaho.

IN THE FAMOUS OKANOGAN VALLEY, IRRIGATED LANDS; abundant water; rich soil; transportation; range; free timber; 28 years to pay for water on federal farm loan plan of repayments; small payment down. A job if wanted.

GRAIN LANDS, producing 30 to 50 bu. wheat per acre, at reasonable prices.
DIVIDEND-PAYING STOCK RANCHES.
J. W. GRAHAM, TONASKET, WASH.

320 ACRES IRRIGATED LAND IN MOSES Lake country, adjoining C. & O. nursery, $60 per acre; especially adapted to orchard or alfalfa raising; unlimited water at 40 feet. No money down if purchaser will improve property and pay in 10 equal instalments, commencing one year from date of sale, with 6 per cent interest.
A. R. MEAD, ODESSA, WASH.

Grain and Produce Markets

Chicago Grain.

CHICAGO, March 17.—Notwithstanding that the railway labor crisis led to much nervousness and irregularity in the wheat market today, prices in the late dealings showed considerable strength, owing largely to assertions that the government was preparing measures to prevent cessation of traffic even if the president's appeal to the contending forces to get together failed. The close was unsettled, ranging from 1c decline to 1⅜c advance, with May at $1.84 to $1.84⅛ and July at $1.54⅞ to $1.55⅛. Corn finished ⅛c off to ⅛c up, oats down ¼c to ⅜c, and provisions at gains of 7½c to 30c.

Cash Quotations.

CHICAGO, March 17.—Wheat—No. 2 red—Nominal; No. 3 red, $1.87; No. 2 hard—Nominal; No. 3 hard, $1.87.

Corn—No 2 yellow—Nominal; No. 3 yellow, $1.07@1.08; No. 4 yellow, nominal.

Oats—No. 3 white, 56½@58¾c; standard, 59@59¼c.

Rye—Nominal.

Barley, $1@1.32.

Timothy, $3.75@5.75.

Clover, $12@18.

Pacific Northwest Grain.

PORTLAND, Ore., March 17.—Wheat—Firm; no trading; spot bids, 1 to 2 cents higher. Bluestem, $1.70; forty fold, $1.67; club, $1.66; red Russian, $1.62.

Barley—Unchanged.

TACOMA, March 17.—Wheat—Bluestem, $1.69; forty fold, $1.65; club and red fife, $1.64; red Russian, $1.60.

SEATTLE, March 17.—Wheat—Bluestem, 1.70; turkey red, $1.71; forty fold, $1.66; fife, $1.65; red Russian, $1.63; club, $1.66.

Barley, $38.50 per ton.

WILBUR, Wash., March 17.—Wheat—Bluestem, $1.52; club, $1.47. Oats, $37. Barley, $37.

WALLA WALLA, Wash., March 17.—Club wheat, $1.53; bluestem, $1.60; barley, $38-$39.

San Francisco Grain.

SAN FRANCISCO, March 17.—Wheat—Firm; no trading.

Barley—May, $2.20 bid, $2.25 asked; December, $1.57.

Live Stock Quotations.

At Portland.

PORTLAND, Ore., March 17.—Hogs—Receipts, 410. Firm. Bulk of packing grades, $14.10@14.35; heavy packing, $14.35@14.50; light packing, $14.10@14.25; rough heavy, $13.50@14; pigs and skips, $12.25@13; stock hogs, $11.50@12.25.

Cattle—Receipts, 52. Steady to strong. Steers, prime light, $9.25@9.60; prime heavy, $9.50@9.70; good, $8.90@9.25; cows choice, $7.75@8; medium to good, $7@7.35; ordinary to fair, $5.25@6.75; heifers, $6.50@8.50; bulls, $5@7.25; calves, $6@10.

Sheep receipts none; firm. Lambs, east of mountains, $12.90@13.10; lambs, valley, $12.50@13; lambs, shorn, $10.75@12.25; prime wethers, $11.75@12; choice ewes, $9.75@10; heavy ewes, $8.75@9.25.

At Seattle.

SEATTLE, March 17.—Receipts, 332 hogs, 4 cattle. Cattle and sheep steady; hogs, 10 cents higher.

Cattle—Prime steers, $9.75@9.85; medium to choice steers, $6.50@8.50; common to medium steers, $6.50@8.50; best cows and heifers, $8.25@8.60; medium to choice heifers, $8.25@8.60; medium to choice cows, $6@8.25; common to good cows, $4@7.50; calves, $6.50@9.50; best bulls, $5.50@6; common bulls, $3.50@6.

Hogs—Prime light, $14.50@14.65; medium to choice, $14.35@14.45; Smooth heavies, $13.35@14.15; rough heavies, $13.35@13.65; pigs, under 150 pounds, $10.10@13.15.

Sheep—Prime lambs, $12.50@13.75; good lambs, $12.25@12.50; wethers, $10.25@10.50; ewes, $9.10.

Spokane Union Stockyards.

Hogs—Receipts, 74; market strong. Prime light packing, $14.25@14.35; prime heavy packing, $14.35@14.50; rough heavy, $13.35@14.50; pigs, $12.50@13.25; stockers, $10.00@11.50. Bulk of sales, $14.40.

Cattle—Receipts, 153; market steady. Prime heavy steers, $9.50@9.75; prime light steers, $9.25@9.40; good steers, $8.50@9.00; prime cows, $8.00@8.50; good cows, $7.50@8.00; common cows, $6.50@7.25; best heifers, $8.25@8.75; bulls, $4.00@6.50; calves, $7.00@10.00; stockers and feeders, $6.00@7.50.

Sheep — Receipts, none; market strong. Prime lambs, $12.00@12.50; common lambs, $11.00@11.50; choice yearlings, $10.50@11.00; good yearlings, $9.50@10.00; best mutton ewes, $10.00@11.00.

Seattle Market.

SEATTLE, March 17.—With a perceptible strengthening of the market toward the week end the potato situation is today improved over a week ago.

Quotations by growers of eastern Washington of $65 f. o. b., as reported by brokers here, and $60 for Puget Sound potatoes is $5 better money than would have been considered possible on Monday.

That speculators have overplayed the market is now everywhere conceded. The most that is hoped for is that prices will fall no farther. Visions of $80, $90 and $100 spring clean-ups have faded.

A few New Zealand onions, the first of the new season to go on this market, are selling slowly at 8c. Some of the onions had sprouted en route and green shoots proclaimed the quality. Oregon is practicalyy sold out.

All Stayman Winesaps, Rome Beauties and Spitzenburg apples are about cleaned up on this market, and only Winesaps, Newtowns and Arkansas Blacks remain. The demand is for cooking fruit at $1@1.50.

After battling for a solid week for fresh ranch eggs for the April storage crop, jobbers report that the fight against rising costs as paid producers has been unequal, and cases of only 200 to 300 are reported into the coolers by the largest houses.

Butter is firm and scarce, but California markets are near and in good condition for the invasion of speculators. City creamery men therefore are resisting temptations to hoist the market.

BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 26@27c per dozen.

Poultry—Live hens, fat, over 4 lbs., 20c per lb.; do 3 lbs. and under, 18c; old roosters, 11c per lb.; springs, 20@22c per lb.; ducks, 20c per lb; squabs, large, $3.50 per dozen; geese, fat, 12@14c per lb.; turkeys, live, 23@24c.

Butter fat—42c per lb.; dairy butter, 25c per lb.

Beef—Buying price: Prime beef, steers, 7@8c per lb; cows, fat, 7@8c per lb.

Hogs—Light, 13@14c per lb.; do heavy, 10@12c per lb.

Veal—Fancy light, 12@14c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb; salted calf, 32@35c per lb; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 32@33c per lb.; dry calf (under six lbs.), 36c per lb.; bull and dry salts, 4c per lb. less; green bulls, 18c per lb.; dry butcher full wool sheep pelts, 22@26c per lb.

Seattle Wheat.

SEATTLE, March 17.—The situation in regard to the supply of cars has been of more force this last week in governing operations of grain buyers than the price. Dealers who were actively in the market have been unable to get hold of any cars for shipments east, although there seems to be little difficulty in getting a supply for moving grain from the interior to Seattle. There is much complaint among the millers as to the ability of exporters to secure cars in large lots on surprisingly quick delivery. The situation with regard to holders of grain in the interior has not changed. Farmers as a rule have fixed upon a minimum price at which they will sell and it is now controversial whether they would release holdings even at $1.75. Eastern mills have created a fair demand for prompt shipment. Unless the car situation cleans up soon last season's wheat is likely to be still moving east by the time the new crop reaches the market.

On 'change here traders have held back, owing largely to the uncertainty of delivery. Prices have undergone little change in consequence, as activity is lacking. Opening the week at $1.67 bid and $1.70 asked for bluestem and Turkey red, quotations eased through the week with almost imperceptible fluctuations, excepting in the cheaper grades of milling wheat, which advanced 3 cents toward the week-end.

Farmers of eastern Washington were so well cleaned up on last week's high bids of $1.60 that it is estimated that there is not more than 3 to 5 per cent of the holdings now in their hands. The 1916 carryover it is stated has been sold out. Farmers who have grain are quoting $1.75. With no prospect of getting cars buyers have taken the position that it would be poor business policy to accumulate a lot of wheat with no knowledge of where it would be held until such time as it could be started east.

Portland Market.

PORTLAND, Ore., March 17.—Rush orders for eggs from Montana and British Columbia evidently sent in anticipation of a railway strike, have cleaned up the local market and put prices higher. Storers had to meet this outside competition and receipts did not equal the demand. Dealers had no difficulty in obtaining 27 cents, and single case lots brought half a cent more.

There was similar buying in the butter market, which raised country creamery extras to 26 cents. City prints stood at the old price. The butter make is still under normal.

Higher prices have checked consumption of poultry, especially chickens, and sales dragged in the latter part of the week.

Dressed meats are firmer with pork selling at the record price of 18 cents.

Wool dealers announce that contracting has ceased in all sections, asserting that the prices demanded by growers are prohibitive. Buyers who visited the Yakima section have returned and report that growers are determined to hold a little while longer. But little effort is made to contract in eastern Oregon, as it is known the growers will hold back for the sealed bid sales.

Mohair shearing has started in the southern counties and a few early clips have been bought at 50 cents.

The best price now bid for spit tops in the northwest is 7 cents. In spite of the discouraging market outlook growers in this state show no inclination of reducing their acre.

The demand for potatoes is still poor, although conditions in some of the eastern markets are reported better.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $36.50@37.25 per ton.

Corn—Whole $51; cracked $52 per ton.

Millstuffs—Bran, $29 per ton; shorts $33.

Barley—No. 1 feed, $38; brewing, nominal; rolled, $42@43.

Hay—Buying prices, Timothy, eastern Oregon, $19@20; alfalfa, $14@16, grain, $12.50@14.

Eggs—Oregon ranch, case count, 27@27 1-2c per dozen; candled, 29c.

Poultry—Hens, 18 @19c; ducks, 22@24c; turkeys, live, 22@24c; dressed, 23@28c; geese, 12@14c.

Butter—City creamery, prints, 38@39c per pound; cubes, 35 1-2@36c.

Cheese—Oregon triplets, 23c; Young Americas, 24c.

Dresser meats—Veal, 35 1-2@36c; pork, 18c.

Hops—1916 6crop, 14 1-2c per pound.

Potatoes—Oregon, jobbing price, $3@3.50.

Onions—Jobbing prices: No. 1, 4@7c; No. 2, $6 per sack.

Wool—Eastern Oregon, fine, 30@35c; coarse, 40c; valley, 40c.

Beans—Oregon small white, 10c; California small white, 12 1-2c; large white, 12 1-4c per pound.

Hides—Salted hides (25 lbs. and up), 18c; salted stags (50 lbs. and up), 14c; green and salted kip (15 lbs. to 25 lbs.), 18c; green and salted calfskins (up to 15 lbs.), 27@28c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 13c; dry hides, 30c; dry salt hides, 25c; dry horse hides, $1 and $2; salt horse hides, $3 to $5.

Stocks of Wheat on Farms.

According to the March report of the United States department of agriculture, stocks of wheat still on the farm totaled 101,365,000 bushels on March 1, 1917. One year ago farm stocks of wheat totaled 244,448,000 bushels. The average farm value of this wheat was $1.644 per bushel on March 1, 1917.

Comparison for northwestern states are as follows:

	Stock on farms March 1, Bu.		Price Per Bu., March 1, 1917.
Washington	4,516,000	7,713,000	$1.44
Oregon	2,737,000	3,004,000	1.50
Idaho	2,110,000	3,933,000	1.45
Montana ...	4,871,000	10,545,000	1.57
Totals	14,234,000	25,195,000	

Nebraska had more wheat on the farms March 1, 1917, than any other state in the union—15,081,000 bushels. North Dakota was next with 11,011,000 bushels; Kansas, third, with 10,782,000 bushels; South Dakota, fourth, with 5,938,000 bushels, and Minnesota fifth, with 5,787,000 bushels.

Top Price for Wheat.

The top price reported for wheat in the Lewiston, Idaho, market was received by John Lambert for 4000 bushels of select Marquis wheat at $1.65 a bushel. This wheat was raised on the Lambert ranch on Waha prairie and the average yield is reported at 39 bushels to the acre.

BETTER PRICES BROADER MARKETS

Part Played in Problem by Transportation — National Treatment for a National Enterprise.

IN every part of the country the farmers are turning their attention to questions relating to the handling of their products after they leave the farm. Transportation is a part of this problem. The cost of reaching their markets and the ability to reach them promptly at the right time are important factors in determining the returns from their crops.

Low Freight Rates

Fortunately, the American farmer has at his command the lowest freight rates in the world. It costs no more to move a load of wheat 500 miles by rail than it does to haul it five miles from farm to station by team. A ton of farm produce of any kind can travel almost twice as far for the same charge on American railroads as on the government-owned roads of other lands.

The cheapness of transportation is not the whole issue. To meet the needs of the farmer transportation facilities must be ample. There must be plenty of tracks and cars and locomotives and sufficient terminals.

Billion a Year Needed

The railroads are anxious to provide means to take care of all the business they can obtain. But a vast outlay of money is required. A billion and a quarter dollars a year for the next ten years or more must go into railroads to provide the necessary transportation facilities.

During the past few years it has become more and more difficult to obtain, even in part, the money required for this purpose. This has been due partly to the poor promise of a satisfactory return on the investment; partly to the uncertainty created by numerous and conflicting regulations.

Regulate For All the People

Nobody seriously proposes that the public regulation of railroads shall be weakened. Certainly the railroads themselves do not. But it is a reasonable proposal that the regulation of this great national business should be handled by national agencies, on national lines, in the interest of all the people, and not by local agencies to serve local or sectional ends.

Regulation at cross purposes by 49 masters—48 states and the federal government—now imposes upon the railroads an annual burden of many millions of dollars of wasteful expense, from which the public derives no benefit. It is of primary importance to the farmer to cut down this waste in order that his products may be moved to market at the least expense and with the greatest possible expedition.

The farmer's interest demands free trade among the states.

RAILWAY EXECUTIVES' ADVISORY COMMITTEE

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—Adv.

Wheat Prices

Likely to Remain High This Year

If we can keep open our trade lines with Europe, and ships do not become too scarce, wheat and other farm products will continue to bring good prices in 1917. Potatoes may be an exception, as eastern reports say farmers are planning to put in a greatly increased acreage.

"With the present crop a failure in Argentina, and with unfavorable farm conditions in Europe, it may be the chance of the northwest, together with western Canada, to keep the whole world from going hungry," says the Northwestern National bank in its March letter. The bank continues:

"Very little wheat remains 'back in the country,' though eastern Montana is said still to have a considerable amount of grain in the hands of farmers, due to the heavy snows in that section which have prevented marketing.

"The question of good seed for the 1917 planting is a highly important one.

"The state universities are endeavoring to cooperate with farmers in this vital matter, and usually there are organizations of seed growers in the various states who publish seed lists with the object of bringing growers and buyers together. In Montana the seed situation is good. The 1916 spring wheat crop was ample and there was little injury from rust. In North and South Dakota the outlook is not so favorable. There is a sufficiency of seed in the hands of the farmers, but it is usually poor in quality. There is no reason, however, for farmers to run a risk on this account, for the agricultural colleges are offering opportunities for the purchase of good seed."

Broomhall's Liverpool cables report that Argentine wheat offers are light and American shipments increasing. Prices are advancing and the continent is absorbing American offers.

In France the weather continues unseasonable. The acreage is greatly reduced and growing conditions are unfavorable.

In Italy the weather conditions have been unfavorable since seeding.

Dryness is reported over a wide area of Spain and crop prospects are bad.

In the Balkan states crop prospects are unfavorable on a greatly reduced acreage.

In Australia further rains have fallen over a wide area and grain movement is retarded. Where wheat is stacked damage has resulted. It is believed that much of the grain is still unhoused as storage is limited. In England and Scotland the weather is against best developments.

All Russian advices agree that crop prospects are only fair. The winter has been dry, with abnormally light snow. Little is longer heard about the great Russian grain surplus that was going to be released if the Dardanelles were opened. The straits are still blocked, and there is every reason to believe that the Russians have consumed their surplus and are themselves on short rations.

In a sentence, all signs indicate a world shortage of wheat and other grains in 1917.

Curlew Valley Live Stock.

Almost every stockraiser in the north half of Stevens county was present at the Curlew Valley Live Stock association meeting at Curlew last week. M. O'Brien of Curlew was elected president, Dennis Peone vice president and John P. Helphrey secretary-treasurer. Resolutions were adopted asking state, federal and county aid in exterminating coyotes. The appearance of rabies in the county was announced, and concerted action in hunting, trapping and poisoning the animals was agreed upon. Arrangements were started for the making of a brand book for the county to facilitate the finding of estrays. A resolution was passed forbidding the use of any but purebred beef type sire on the open national forest range.

Fruit Men Go on Record.

Representatives of 12 shipping agencies in the Yakima valley are considering the advisability of packing unwrapped all C grade apples and fancy and extra fancy grades of all but the high standard varieties. Yakima shippers use about 80 cars of wrapping paper, which will cost $8.50 a hundredweight, as against $4.50 last year.

Hogs $15 a Hundred.

Record-breaking prices were paid in Spokane last week for hogs when the E. H. Stanton company gave William Martin of Lewiston, Idaho, $15 a hundredweight for a car of choice swine. The hogs weighed about 225 pounds.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $3.25@3.50 cwt; sweet potatoes, $6.

Seed Potatoes—Early Ohios, 4c lb; Early Rose, 4c lb; white potatoes, 4c lb.

Apples—Washington apples, cooking, 65@85c; eating, $1@1.25; Wageners, 75c@$1.30 box; Rome Beauties, $1@1.40 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 43c lb; Medo-Maid, 43c lb; Cascade, 43c lb; Gold Coin, 36c lb; Gold Leaf, 43c lb; Better Butter, 43c lb; Hazelwood, 43c lb; Peerless, 39c lb; Jersey Belle, 42c lb; Attalia, 43c lb; Diadem, 43c lb; Jersey, 39c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 22½c; Hazelwood full cream, triplets, 23c lb; Hazelwood Young America, 24c lb; Wisconsin limburger, 28@29c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 25c lb.

Eggs—Fresh local ranch eggs, $8@8.50 case.

Live Poultry—Springs, 17c lb; hens, 17@18c lb; old roosters, 9@10c lb; ducks, 13c lb; turkeys, 26@25c lb.

Dressed Poultry—Hens, 21c lb; springers, 20c; old roosters, 13c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs; 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

Fruit for Canning.

The following prices are offered for good, sound fruit in the cannery campaign in the Spokane valley:

At 3 cents a pound, dewberries, gooseberries, English Morrella cherries, Early Richmond cherries and Duke and Late Duke cherries.

At 3 1-2 cents, Montmorency cherries.

At 4 cents a pound, strawberries and Royal Ann cherries.

At 4 1-2 cents, black currants.

For tomatoes the company offers $10 per ton; for green gage and egg plums, $15; for Italian prunes, $20; for Bartlett pears, $22.50; for Concord and other dark varieties of grapes, $30; for Damson plums, $40 per ton.

For good, sound cull apples, $7.50 a ton is offered.

And for beans prices would range from $32.50 to $80 per ton, according to variety.

Farmers' Society of Equity.

The annual meeting of the Bear Lake Farmers' Society of Equity was held at Montpelier, Idaho. Questions of interest to the farmers and the welfare of the society were discussed. A dividend of 8 per cent was declared payable to the stockholders. The following directors were elected for the ensuing year: John Quayle, Henry Teuscher, C. G. Keetch, E. P. Hoff, Harrison Tippets, J. A. Berry and J. W. Cook. The directors chose the following officers: G. H. Hall, president; Fred C. Evans, vice president; W. Woodruff Clark, secretary and manager.

Canadian Wheat Taken Over.

The Canadian council of agriculture has decided that the whole 1917 crop of wheat in Canada shall be taken by the British government. The price to be paid is put for No. 1 northern at Winnipeg, a minimum of $1.50 and a maximum of $1.90 a bushel. It is understood the dominion government will handle the business of buying from the farmers and insure transportation to the seaboard.

Grain Estimates in France.

The French minister of agriculture has published estimates of the acreage sown during the fall and winter of 1916 in wheat, spelt, rye, barley and oats. There is a total decrease in the acreage of wheat of over 2,000,000 acres as compared with the previous year. Spelt acreage remains about the same; a decrease of over 200,000 acres in rye; an increase of about 20,000 acres in barley, while the oats acreage remains about the same.

Form Bull Association.

The Central Oregon Bull association has been formed, with George H. Beckman as president, Levi Ernst secretary-treasurer and E. S. Barnard member of board of directors. This represents the culmination of several months' effort. The above association adopted articles and by-laws and is being assisted in purchasing a Jersey bull of excellent quality. A block of this association will probably be formed near Terrebonne, where other farmers are being interested.

Growers Name Sales Chief.

Trustees of the Yakima Valley Fruitgrowers' association in central washington have selected P. V. Clark to succeed C. W. McCullah as sales manager, turning down outside offers to market their tonnage and unanimously deciding to market fruit through their own sales department.

Apple Forecast 8000 Cars.

Estimates from those prominent in the apple industry of the Wenatchee district in Washington placed the crop of 1917 at 8000 cars.

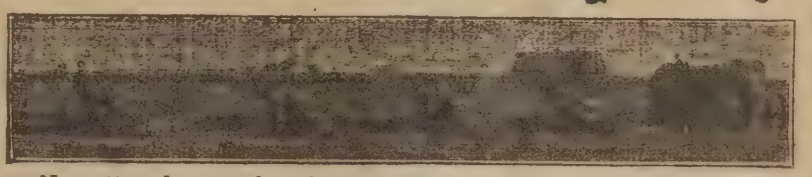
Assessors Uncover Potatoes.

It is understood at North Yakima, Wash., that the appearance of deputy assessors March 1 had more to do with the drop in the price of potatoes than any other cause, uncovering stocks in the hands of growers far larger than was expected, from 150 to 200 cars.

At $78 an Acre.

Ernest Robinson, a young rancher, has disposed of a wheat ranch two miles north of Davenport, Wash., to Miss Emma Lowry, who has land adjoining, for $78 an acre.

Go Get a Homestead Free this spring



No matter where you have been farming, a fortune awaits you if you go now and get one of the recently surveyed 160 acre homesteads in the rich districts reached by the Canadian Northern Railway, the newest transcontinental railroad of America, "The Road to Opportunity." Here you can make a fortune at growing grain and mixed farming, raising cattle, hogs and poultry.

Western Canada's improved, easily accessible markets and recent extension of railways makes conditions and opportunities of settlement excellent.

"You Can Do What Others Are Doing"

George Rupp says: "I came here from Hudson, Iowa. I can stand on my windmill and count no less than a dozen grain elevators. I can stand in my yard in the Fall and count as many threshing machines. My horses and cattle have run outside all winter.

(In 1915 Alberta produced 107,741,000 bu. of oats or an average of 56.35 bu. per acre. The total value of all crops in 1915 was $114,186,000.00.)

Mr. A. Taylor of the Rhein District in Saskatchewan, says: "I had 30 acres in wheat that averaged 50 bu. an acre, 315 acres in oats, that averaged 88 bu. ian acre, 20 acres in barley that averaged 50 bu. an acre."

(In 1915 Saskatchewan produced 195,042,000 bu. of Spring Wheat or 23.54 bu. average per acre—total value of all crops for the year was $382,845,000.00.)

W. Leat says of the Kenville District in Manitoba: "I had 203 acres of wheat that averaged 45.5 bu. an acre, 17 acres of oats that averaged 65 bu. 25 acres of barley that averaged 50.5 bu. an acre.",

(In 1915 Manitoba produced 96,062,000 bu. of Spring wheat or an average of 28.83 bu. an acre. Total value of all crops for 1915 was $201,100,000.00.)

Charles Draper says: "I came from Nebraska with no capital—and have not had a poor crop for seven years. Any man willing to work can succeed here."

Mr. G. D. Schnauffer says: "I came from Illinois in 1907. Today I am worth $30,000—I cleared $120 from the litters from one sow last year."

(In 1915 British Columbia produced 3,033,000 bu. of potatoes or an average of 247.23 bu. per acre; the total value of all crops was $11,550,100.00.)

Special Low Rates

Low round trip home-seekers' fares to Western Canada are in effect every Tuesday, March to Nov., inc. Also one-way low fares for settlers. Even if you have already selected your farm, it will pay you to travel to Western Canada via the Canadian Northern Railroad.

Grazing Land Grants

Grazing land grants may be procured at very low cost for a period of twenty-one years. Outdoor feeding of beef cattle on native grasses bring even better results than indoor feeding.

Good Roads

Bridges and culverts are built where needed, and roadways are usually graded up, although the land is just rolling enough to give good natural drainage.

Good Schools

The Public school system is well abreast of the times. One eighteenth part of the whole prairie section of Western Canada is set aside as a school grant. Land taxes are low and go mostly for schools.

Free Book

Be sure and write today for a free copy of "The Home-Seekers' and Settlers' Guide," full of complete and authentic information. *A fortune is waiting for you.*

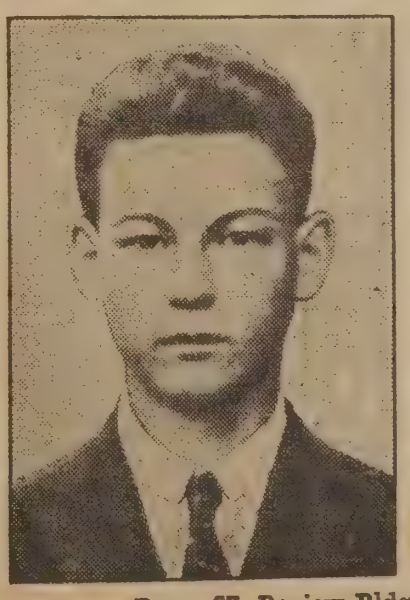
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TO FATHERS and MOTHERS—



Help That Boy Get a Start

If your boy is now a member of our **Poultry Club**, cooperate with him and help him succeed. If he isn't a member, tell us and we'll explain our plan, which gives boys a feeling of ownership and an opportunity to do things. Write us about it today. Poultry Club,

Washington Farmer

Room 37 Review Bldg., Spokane, Wash.

"Fast Practice" in Public Sales

Denounced as One of the Greatest Shames in Live Stock History

The buyers as well as the breeders of purebred live stock are still looking for a satisfactory explanation of the following contradictory statements regarding the $21,500 calf sale at Portland last December.

October 2, 1916. B. Meyer, the breeder, offered the Holstein bull calf, Finderne Mutual Fayne Valdessa, to E. A. Stuart for $5000.

November 17, 1916, Mr. Meyer told Mr. Stuart that the animal had been sold. He failed to give the price, but Mr. Meyer's herdsman told Mr. Stuart that a Mr. Von Herberg was the purchaser and the price was $2500.

In his transmitting letter to Mr. Gue the auctioneer at the Pacific international stock show sale at Portland last December Mr. Meyer said: "I consign this bull to your sale without any restriction whatsoever." But in his answer to the Farmer's telegram of inquiry of February 4 Mr. Meyer says: "Bull was sent by me to the sale under the recommendation of Von Herberg, guaranteeing me $5000 at least, and all he would bring above it. What my herdsman said was not true."

When the Farmer sent another telegram asking Mr. Meyer to be more explicit he telegraphed this reply: "The bull was sold at auction for $21,500 to Mr. Von Herberg. After deducting commission, freight and expense I received the balance of my money in full. Exact amount what I got is my business."

E. C. Stone, the writer of the following letter, is the secretary-treasurer of the American Hampshire Swine Record association.

To the Editor: Your favor has been received and would have been answered sooner had I been in the office and had time to look after correspondence. I have been attending public sales almost every day for the past six or eight weeks.

One of the greatest shames in live stock history is the "fast practice" used in public sales. We mean by "fast practice" just the same thing as entered into the selling of the $21,500 bull calf at the Pacific International.

A few years ago the breeders of Poland China hogs and Duroc hogs were practicing the same game as was used in this calf sale. One of the common things was that I would go to your side and bid far beyond any possible price that a man could be expected to bid in order to make your sale a high average. In most cases I was not to move the animal from the place where purchased. If I did move the animal from the place it was your duty to come to my sale and buy as many hogs as I bought at your sale for as many dollars as I had bid in your sale. Thus you will see both of us would have a very high average price sale and yet we had done nothing more than trade hogs.

A young man with more money than brains will occasionally attend one of these sales. This reckless bidding was done for the purpose of catching this young man and causing him to spend long money for all the purchases that he made. It is not honest and for that reason does not work well.

The Poland China breed of hogs almost ruined itself in this kind of practice. The Duroc breed of hogs came on and followed up the same practice for a few years. A number of very prominent breeders lost their farms simply because they would have a public sale amounting to $15,000 to $20,000 and yet would not take in money enough to pay the sale expenses. After several years of such practice they hit the stone wall and from that time on most of their sales are held on the square with an occasional animal that some one may buy previous to the sale and then carry to a price beyond reason.

I entered the public sale business after all of these successes and failures had been made. I was determined to be in no way connected with any sale except the sale held absolutely on the square.

Today you will see sale reports published where hogs average in price $500 to $400 per head. Whenever you see those kind of prices you are to know without telling that some one has been buying a $21,000 bull calf. It isn't good sense, and it can not be practiced with success.

A very rare, occasional animal in any breed is worth $1000, in hogs some of them are worth $2000 to $3000, but none of them are worth $21,000.

Many an auctioneer and field man have come to me and pointed out how the breed of which I am the manager would fail and sink into the past history if I did not join their practice. My answer has always been and always will be when we can not sell hogs honestly then you will no longer find me in the business. I believe in holding public sales and let each man bid his honest money against the other man. If they refuse to bid, or the stock does not bring market price and expenses, then it is time to stop the public auction and sell your stock on the packers' market. I am not able to tell you how to stop this practice, unless you can get the attention of the secretary and manager of the several breeds. The belted breed of hogs will either have honest sales or no sales. Whenever they want to conduct their business in any other way they have the job of looking for a new secretary and a new business manager. We have succeeded beyond comment in our growth, and shows. No breed has ever made the gains that the Hampshire breed has made and I believe it is as much due to honesty as any other one thing. The bull calf never sold for $21,500. It is beyond reason, beyond good sense, and I am glad that the Carnation farms have exposed them. The public sale system is one of the greatest systems in the world, yet it is easy to corrupt. I shall be glad to hear from you further at any time.

E. C. STONE.

Secretary American Hampshire Swine Record association.

NEWS FOR BREEDERS

St. Mawes' Beauty, a junior three-year-old Jersey cow owned by Ed Cory, Carlton, Ore., completed a year's official record in January of 747.9 pounds of fat, or 877.9 pounds of butter. The record has just been published by the A. J. C. C. and places her second in her class in the United States, surpassing the former world's record held by Lass 74th of Hood Farm, but falling three pounds short of that made by Goldie's Nehalem Beauty owned by Clifford Reid of Portland, and finished about the same time. Beauty made a great record with her first calf of 690.4 pounds of butter, begun at one year and eleven months. She finished her year in prime condition, qualified for class AA and will be placed on official test again. She has probably freshened before this reaches the Farmer readers and is expected to crowd the record in the next class. H. A.

DISPERSAL SALE OF JERSEYS.

On April 11 W. G. E. Smith of Hood River will hold a dispersal sale of his Jersey herd. To these animals will be added Jerseys from the herds of W. S. Turner of Oregon City and J. B. Hyde of Portland. About 40 head will be entered in the sale.

Mr. Smith's herd traces to such sires as Journalist, Guenon's Gay Lad, Agatha's Flying Fox, Eurybia's Prince and Pedro, and on the dam's side to Eurybia, Dora of Deercombe, Ashland Fancy and Golden Marsh. The other herds offered have illustrious ancestry, also, several of the Hyde offerings being from the Charles Miller herd, which was dispersed a few years ago.

SEGIS WALKER PIETERTJE LAD.

To the Editor: I regret to have to announce the death of Segis Walker Pietertje Lad, 119777, on February 25, he having been shot owing to an accident from which recovery seemed impossible.

It was a great loss to me personally and no doubt to this part of the country. Segis Walker Pietertje Lad has been grand champion Holstein bull at three state fairs, and has never been defeated. His dam also was grand champion at the Gem State fair in 1915, the only time shown. The sire of Segis Walker Pietertje Lad was King Segis IX., a son of King Segis from a 28-pound 4-year-old daughter of Johanna Rue III.'s Lad. Fortunately I had on hand a yearling son of his from a 30-pound show cow, Daisy Pioneer Clyde, a daughter of Sir Clyde, with 30 pounds in seven days, and 123 pounds in 30 days. She was grand champion female at the Gem State fair last fall, her yearling daughter junior champion and the bull calf above mentioned first premium senior calf, being full brother to the junior champion heifer.

To use one the daughters of Segis Walker Pietertje Lad I recently secured a son of Johanna McKinley Segis, the 40-pound son of King Segis. This calf's six nearest dams average over 30 pounds and his dam is a daughter of Rag Apple Korndyke.

H. R. BOOMER.

New Plymouth, Idaho.

ABERDEEN-ANGUS SALE.

At the Aberdeen-Angus Cattle society's sale of bulls, conducted by Messrs. Macdonald, Freser & Co., in Aberdeen, Scotland, 380 bulls averaged $207.48, compared with $156.12 for 387 head last year.

Top was $918, paid by Colonel Ogston of Kildrummy, for a Trojan Erica bull from Ballindalloch. G. Petrie, Glenlogie, paid $765 for another Trojan Erica from Ballindalloch, and Colonel Ferguson of Pittour, paid the same figure for a second prize Witch of Endor bull from Mr. Penny of Skillymarno.

SHORTHORN SALE AT INVERNESS.

The annual sale of Shorthorn cattle at Inverness, Scotland, saw an average of $194.94 made for 80 bulls. J. A. Gordon-Oswald, Aigas, Beauty, headed the list with Alias Challenger, a red roan, sired by Tulip Chieftain, bred by Maswilliam, Garbity, and out of Spring Flower by Prince of Orange. He won the champion prize, and was purchased by Stewart Lochdhu for $510.

BUYS REGISTERED ANIMALS.

C. F. Sawyer, breeder of registered Percheron horses, who owns a farm three miles east of Palouse, has bought five registered animals from Sam Wade & Sons of Lostine, Ore.

NEW BERKSHIRE ASSOCIATION.

The Rogue Valley Berkshire association is a newly formed live stock association in southern Oregon.

DUROC-JERSEY SWINE

A GOLDEN OPPORTUNITY

7——Durock Jersey Gilts——7

These are my tops. I had reserved them for my own use. Owing to recent business changes, I have decided to offer them for sale.

They are sired by Sprongs Prince, he by Topeka, dam Capitol Belle. On the dam side they are out of a granddaughter of Advance Wonder, tracing back to the great show sires, Proud Advance and Crimson Wonder. They are 7 months old, weigh 200 lbs. in breeding condition. They will be sold either open or bred.

C. G. SPRONG. Grandview, Wash.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR JAMES N. PRICE. Pullman, Wash.

BERKSHIRE SWINE

GALBRAITH RANCH BERKSHIRES

Best breeding stock obtainable. Prices reasonable. Phone 20F.3.

T. A. GALBRAITH, Kent, Wash.

WE WILL PAY SALARY

to farmer with rig or saddle horse. The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are paying good salaries to those who can do the work and are offering these positions only to farm owners or renters.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. For men with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter to The Washington Farmer, Review building, Spokane, Wash.—Adv.

Canada Offers 160 Acres Land Free to Farm Hands

Bonus of Western Canada Land to Men Who Assist in Maintaining Needed Grain Production.

The demand for farm labor in Canada is great. As an inducement to secure the necessary help at once, Canada will give **one hundred and sixty acres of land free as a homestead** and allow the time of the farm laborer who has filed on the land to apply as residence duties, the same as if he actually had lived on it. Another special concession is the reduction of one year in the time to complete duties. Two years instead of three as heretofore, but only to men working on the farms for at least six months in 1917. This appeal for farm help is in no way connected with enlistment for military service, but solely to increase agricultural output. A wonderful opportunity to secure a farm and draw good wages at the same time. Information as to low railway rates may be had on application to

J. N. GRIEVE,
Canadian Government Agent.
Corner First and Post, Spokane, Wash.



Hides, Fur, Wool, Horse Hair, Metal and Rubber. We are the largest dealers in the Inland Empire. Highest markets paid. Prompt returns. Deal with a home firm.

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THE WASHINGTON FARMER

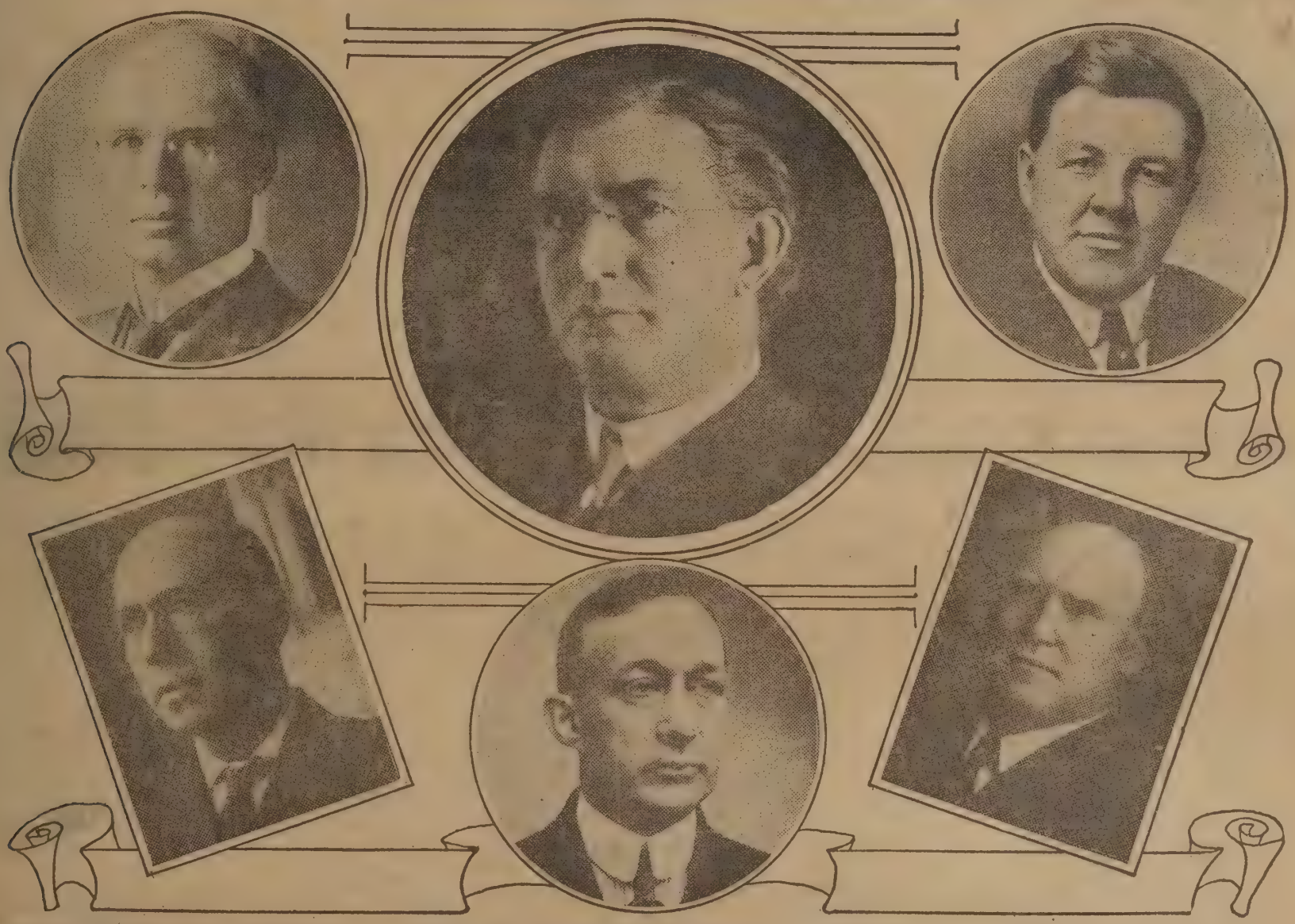
SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. MARCH 29, 1917. NO. 13.

Farm Bank Soon Ready for Business

Officers Are Appointed for Spokane Branch, and Rate of Interest Fixed at 5 Per Cent

By N. W. DURHAM, Chairman of Spokane Committee on Land Bank.



Northwest district farm bank officers, left to right: Above, vice president, C. E. B. Roberts, Idaho; president, D. G. O'Shea, Montana; secretary, G. C. Jewett, Washington. Below, fifth director, A. W. Cauthorn, Oregon; treasurer, G. M. Dreher, Washington; registrar, Turner Oliver, Oregon.

Now that the federal farm loan board at Washington has appointed the five directors who will organize and temporarily manage the Spokane district federal land bank it seems probable that the institution will be ready within a few weeks to make loans. No definite announcement can be made yet, however.

Appointments are now made for all of the 12 district banks, the bank at Berkeley, Cal., being the last to be announced from Washington. Individual members of the national board will now visit the 12 bank cities to direct the local boards in their duties and start the banks going.

Technically the national board exceeded its authority in designating the particular duties of the local directors. In naming the Spokane district board, for example, the national board specified who should be president, who vice-president, who secretary and who treasurer, when the law says the five directors—"Shall choose from their number, by majority vote, a president, a vice president, a secretary and a treasurer."

Undoubtedly the local board will comply technically with this requirement by ratifying the action of the national board. The law says:

"They (the local boards) are

(Continued on page five.)

In This Week's Issue

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Last Chance--$200--Last Chance

READ HOW TO WIN IT IN OUR BIG

FARM INFORMATION CONTEST

Don't Let It Escape. Get Our Contestant's Helpful Outfit and Start at Once. On April Fifth This First Prize Drops to $175.

Read the Rules—Answer These Questions

41. What great general requested that his heart be buried in one place and his body in another?

42. A wagon box ten feet long, three feet wide and twenty-four inches deep will hold how many bushels of wheat?

43. What member of Wilson's cabinet has the same name as an important city in Texas.

44. What day of the week was July 4th, 1909?

45. Why is the cow a useful farm animal? (Confine your answer to 100 words.)

$800—IN CASH to Be Paid—$800

We will positively give EIGHT HUNDRED DOLLARS in cash awards (and more in event of ties) to the winners. As explained in the rules which follow, there will be five questions run in every issue of the Farmer for 12 weeks. The last five questions will appear in the issue of April 19.

Open to Four States

Contestants must be residents of Washington, Oregon, Idaho and Montana.

Five Questions Each Issue

The contest will be composed of 60 questions. Five will be run in each issue of the Farmer for 12 issues.

Answers to each question except No. 45 can be given correctly in from one to 10 words and will be given a score of 100 if correct. Answers to question No. 45 will be limited to 100 words each, and will be graded as to the common sense and general knowledge of farm conditions shown by the contestant without regard to spelling, grammar or penmanship. As with the other 59 questions, a perfect answer to No. 45 will be scored 100.

Perfect Score Is 6,000

The contestant who comes nearest to a score of 6000 and complies with all the conditions of the contest will receive the first prize; the next nearest, second prize, and so on. In case of a tie each tying contestant will receive the full amount of the prize.

There are 35 prizes as follows:

$150 is amount of First Prize. **$50** is amount of Third Prize. **$10** is amount of Fifth Prize.

$100 is amount of Second Prize. **$20** is amount of Fourth Prize. **$5** each, Sixth to Tenth Prizes.

$2 each Eleventh to Fifteenth Prizes. **$1** each, Sixteenth to Thirty-fifth Prizes.

OTHER RULES

The answers will be passed upon and graded by a fair-minded, thoroughly competent judge.

Two weeks will be allowed for sending in answers after April 19, 1917, date of the issue containing the last five questions.

Remember, your failure to answer all the questions will not necessarily exclude you from the contest. There are 60 questions to be answered and it is not reasonable to suppose that all our prize winners will attain a perfect score. Your answers must all be sent in at the same time. Do not send any answers until you have completed the full list or as many as you can answer.

Those who use our CONTESTANT'S HELPFUL OUTFIT will be able to send in their complete set of answers without delay, there being no need of their waiting for the questions as they appear in The Farmer from week to week down to the final issue of April 19. In order to get as prompt returns as possible from those contestants who use our CONTESTANT'S HELPFUL OUTFIT, extra inducement is made in the prize awards. SEE ENLARGED PRIZE LIST.

Announcement of prize winners will be made and prize checks mailed as soon after close of contest as possible.

If any point is not clear, do not hesitate to write the Farm Information Editor.

All answers must be mailed on or before midnight, May 3, 1917, as shown by post-office dating stamp on your envelope.

ORDER COUPON—If your subscription is paid ahead, the time paid for herewith will begin at the date to which you are now paid.

FARM INFORMATION EDITOR,
Review Building, Spokane, Wash.
Enclosed find $1 for one year, or $1.50 for three years' subscription to

THE WASHINGTON FARMER.

and enter me as a contestant in the Farm Information Contest. I am also to receive at once the complete CONTESTANT'S HELPFUL OUTFIT, consisting of guide against wrong answers, reply blanks, rules and all information to aid me to win a reward.

Name .....

R. F. D. .....Town .....

State .....

Notice—Amount of remittance to be either $1 for one year's subscription to the Farmer or $1.50 for three years' subscription.

Answer this question: Are you now a subscriber?.....
If you wish paper sent elsewhere, fill in name and address.

A Valuable Aid to Contestants

One complete CONTESTANT'S HELPFUL OUTFIT, including all of the 60 questions and instructions and helpful warnings as to answers which would be wrong, and the correct answers to some of the most difficult questions, is truly a big help to the contestant.

To each contestant who sends in a new renewal or an extension of his subscription at the time of registering for the contest, this complete CONTESTANT'S HELPFUL OUTFIT will be sent in combination.

We feel that those beginning on the contest will find these suggestions as to what to avoid distinctly useful. This equipment supplies in convenient form everything needed to enable you to apply your ability to the best advantage, and will contain information enabling you to answer the most difficult questions correctly.

Puts Questions in Reach of Children

This CONTESTANT'S HELPFUL OUTFIT puts the solution of the questions in the reach even of the children, it being the purpose to make it possible for everybody in Washington, Oregon, Idaho and Montana to compete. This outfit includes, besides general information about the plan of the contest, the following:

Guide against wrong answers, which includes either correct answers of more difficult questions or easy references as to where to find the correct answers; and blank forms on which to write your answers in such a way that there can be no confusion when your answers are taken up by the judge for scoring.

It will be worth considerable to you to be assured that your answers are reaching the Farm Information Editor in such form that he will know in every instance exactly what question you intended to answer. This CONTESTANT'S HELPFUL OUTFIT will make it possible for you to

Begin Work at Once

On account of the large number certain to send for our CONTESTANT'S HELPFUL OUTFIT, thus making it possible for them to answer the entire 60 questions without delay, it is deemed advisable to offer some special inducements to secure prompt returns from this particular class of contestants. By securing the early replies of those who are thus supplied with the entire 60 questions, we will be able to have their papers carefully scored before the final rush of answers toward the end of the contest.

Understand, it is not absolutely required that those who use our CONTESTANT'S HELPFUL OUTFIT send in their replies at once, but, in order to induce them to get in early, the following plan for enlarging the awards to those prize winners whose answers come in early is offered:

ENLARGED PRIZE LIST—$800 IN PRIZES—ENLARGED PRIZE LIST

For those who use our CONTESTANT'S HELPFUL OUTFIT.

Thirty-Five Prizes	Amt. of prize if winner sends in answers during 1st period, Feb. 1- Feb. 21	Amt. of prize if winner sends in answers during 2d period, Feb. 21 Mch. 14	Amt. of prize if winner sends in answers during 3d period, Mch. 14 April 5	Amt. of prize if winner sends in answers during 4th period, April 5 April 19	Amt. of Prize for winner who does not send in answers before April 19
First Prize	$300.00	$225.00	$200.00	$175.00	$150.00
Second Prize	200.00	175.00	125.00	110.00	100.00
Third Prize	100.00	87.50	62.50	55.00	50.00
Fourth Prize	40.00	35.00	30.00	22.00	20.00
Fifth Prize	20.00	17.50	15.00	11.00	10.00
6th to 10th 5 prizes each	10.00	8.75	7.50	5.50	5.00
11th to 15th 5 prizes each	4.00	3.75	3.00	2.20	2.00
16th to 35th 20 prizes each	3.00	2.50	2.00	1.50	1.00

To secure our CONTESTANT'S HELPFUL OUTFIT, fill out order coupon on this page and send it in to Farm Information Editor, with your personal check, money order or 2-cent stamps, for $1.00 for one year or $1.50 for three years.

You must address

THE WASHINGTON FARMER
Farm Information Editor
Review Building, Spokane, Washington.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 13 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF March 29, 1917

Fruit Paper Prices Boosted; Government Investigates

If the fruit growers of Washington, Oregon and Idaho have to pay the price for wrapping paper now being asked by the paper manufacturers, it will cost them from $500,000 to $750.-000 more to pack their fruit this year than it did last year.

The United States department of justice is now beginning an investigation of the situation with a view of learning the cause of the sudden and enormous increase in the price of the fruit wrappers, which has increased over last year from 50 to 100 per cent, according to the various grades of paper used. Announcement of the increase has been made simultaneously by all the big manufacturers.

Prices which a year ago ranged from $4 to $6 per hundred are this year quoted at from $8 to $10.

In one case of special high grade paper a price of $10.50 per hundred has been quoted.

Federal Attorney Francis A. Gerrecht, of the district of eastern Washington, is cooperating with the fruit growers' associations of the northwest in the investigation. In the meantime growers are refusing to contract for their paper, and are considering ways and means by which the quantity of paper required could be cut down if the abnormal prices persist throughout the season.

Growers report that last fall and early winter, when taking up the matter of paper contracts for the 1917 season, they were informed by the paper companies that prices could not be quoted at that time, though the contracts could be made with guarantee that the paper could be delivered at a price later to be determined.

The uniformity of action by the companies in announcing the boosted price has led to wide-spread suspicion that a trade combine has been formed. This suspicion has led to the formal investigation by the fruit growers' organizations and the department of justice.

The Spokane Fruit Growers' association, which numbers in its membership the great bulk of the local associations of the four northwestern states, has empowered C. J. Webb, assistant manager, to conduct the preliminary investigation on behalf of the growers which it represents. Mr. Webb is cooperating with District Attorney Garrecht.

"As Soon as Possible Consistent With Good Business"---- Farm Bank's Message to the Farmers

"The federal farm loan system will give the man on the farm an opportunity to finance his own affairs without profit to anybody on earth."

This is the message to the farmers of the northwest from President Daniel G. O'Shea of the northwestern district bank now in process of organization at Spokane. And he continues it:

"If any profit is made in the conduct of the business of the bank, it will be returned in dividends to the stockholders in the local farm loan associtaions, who are the borrowers. If the rate of interest is placed so low that no such dividends can be returned (and the minimum rate of interest possible is the aim of the directors), that in itself will be the greater profit to the borrowers.

"The interest rate at which business will be begun has been fixed at 5 per cent, and applies alike in every state in the union. Loans may be taken for periods of from five to 40 years, and paid off under amortization provisions whereby each annual payment not only covers the interest, but reduces the principal a given amount. The 36-year period promises to be most popular. On a 56-year loan of $1000 the annual payment would be $60.44, which is practically equal to interest on a similar loan at 6 per cent, yet it not only pays the interest, but at the end of the 36 years will have wiped out the entire debt. As long as the borrower makes this annual payment, his loan is not callable to annoy him and his mortgage can not be foreclosed.

"Loans may be made only for the purchase of land, for paying off indebtedness incurred prior to the organization of the bank or the local association, for equipment for the conduct of the farm, for purchasing live stock or machinery, for erecting additional buildings or for otherwise improving the farm.

"Under the provisions of the law local organizations are required, and these organizations will of necessity prove a stimulus to cooperation and development along many other lines of community betterment than merely financial.

"It has been suggested that the working of the farm loan bank is so hedged about by regulations and restrictions that it will be inoperative or nearly so. This is not true. While it will require some time to perfect the organization and put it into complete operation, the system will gradually expand until, I am sure, it will be adopted generally throughout the country to the great benefit of the farming, and hence the general public.

"The board has arrived in Spokane without so much as an office. A great mass of mail has piled up during the past weeks when there was no one authorized to receive it and reply to it. We have all the details of location and organization to attend to; all this correspondence to consider and answer; all the foundation to lay upon which we must work in the future. We are proceeding deliberately and carefully, but we will put the bank into condition to begin making actual loans as quickly as possible consistent with sound business policy, out of which must grow the far-reaching good that it is destined to accomplish."

How to Succeed in Growing Peas

Practical Student of Subject Gives Specific Directions

The Farmer has been asked by many of its readers for definite information on how to grow peas. For the following directions, applicable in general to all cases, though local conditions may influence soil working and time of seeding, credit is due Agriculturist J. R. Shinn of Spokane county, Wash., who has made pea growing his specialty:

(1) Where spring plowing is necessary, as is largely the case this year, double disking prior to plowing is advisable. Disking after plowing is also advisable if time can be allowed for weeds to come up so that they may be killed. Harrowing and seeding should follow immediately. Early preparation of land is esstential to best success.

(2) Peas will be planted this year with the grain drill, the same as wheat or oats, using the oats side of the feed. Extreme care must be taken that the drill does not crask the peas.

(3) Peas should be sown 100 to 180 pounds to the acre. Most seed companies contracting crops require 180 pounds to the acre.

(4) Seed must be innoculated. "So important is innoculation that it may be regarded as of equal importance with the seed itself," says Mr. Shinn. Innoculation consists of putting into the ground with the seed certain bacteria, which have the power of taking nitrogen from the air for plant food. Without these bacteria the nitrogen can not be taken by the roots; without the nitrogen the peas will not thrive.

How to Innoculate Seed.

Take soil fresh from gardens where peas were successfully grown. Sprinkle the peas with water and shovel about till they are thoroughly moist. Sprinkle the soil, over them and continue to shovel them about till they have taken all the dirt they will. Sow immediately, without allowing them to be exposed to the sunlight. "Experience has taught us that there is no more dependable method than that of using soil from garden areas, where peas have grown successfully for a number of years," Says Mr. Shinn.

Commercial preparations for innoculation may be secured at a cost of from 50 cents to $1.50 an acre. Preparations may also be secured from college or university experiment stations or the U. S. department of agriculture at nominal cost. Special directions for their use could be secured from the same sources, differing as between the different preparations.



Bearing branch of a pea vine.

SPECULATION IN WOOL
Brings Warning to Producers.

President J. E. Cosgriff of the American Wool Improvement association, in a statement recently, urged producers of wool, especially the small farmer with a few sheep, to make a study of the wool situation and market conditions. He declared that the intermountain section is now filled with many buyers whom it would be proper to class as speculators. Producers can not protect themselves in their selling unless they know wool and wool market conditions, urges President Cosgriff.

Washington Portraits No. 8.



J. R. Ayers.

Judging from his experience of two and a half years in the dairy business in Benton county, J. R. Ayers of Kennewick says that a good combination in the farming line for that county is asparagus, strawberries, potatoes and dairying. "Asparagus brings returns in March, strawberries in April and May, potatoes during the summer and fall, while the dairy cows bring returns all the time," writes Mr. Ayers.

The next in the series of Washington portraits will be that of D. A. Lenocker of Schrag, and will be given in next week's issue of The Washington Farmer.

More Millions for Farm Education

Congress Also Provides for Home Economics and Industrial Training

Much news of a purely sensational character has detracted attention from one of the most important and far reaching measures passed by the last congress and approved by the president February 23, 1917. This is the Smith-Hughes vocational act, introduced in the senate by Hoke Smith of Georgia and in the house by B. M. Hughes, also of Georgia.

This act provides for the promotion of education in agriculture, in home economics and in the trades and industries as well as cooperating with the states in the training of teachers of vocational subjects.

For every dollar appropriated by congress another dollar must be appropriated by the state or by the community, and all this money must be used for salaries of teachers and none of it for buildings, lands, equipment or for such supplementary education as is necessary in order to meet the requirements of the act.

Beginning with the year ending June 30, 1918, an appropriation of $500,000 is made by congress to cooperate with the states in paying the salaries of teachers of agriculture and another appropriation of $500,000 for teachers of trades and home economics. Each of these amounts is increased year by year until 1926, when each amount will reach the sum of $3,000,000 and remain at that figure annually thereafter.

For the purpose of cooperating with the states in preparing teachers of agricultulre and home economics for the fiscal year ending June 30, 1918, $500,000 is appropriated, which is increased to $1,000,000 in 1921 and annually thereafter.

This total of $7,000,000 with the additional $7,000,0000 from the states will make a perpetual fund of $14,000,000 annually, providing for an education which "should be of less than college grade and be designed to meet the needs of persons over 14 years of age who have entered upon or who are preparing to enter upon the work of the farm or of the farm home," and "to meet the needs of persons over 14 years of age who are preparing for a trade or industrial pursuit or who have entered upon the work of a trade or industrial pursuit."

For the purpose of cooperating with the states in paying the salaries of teachers, supervisors, or directors of agricultural subjects there is appropriated for the use of the states for the fiscal year ending June 30—

1918	$ 500,000
1919	750,000
1920	1,000,000
1921	1,250,000
1922	1,500,000
1923	1,750,000
1924	2,000,000
1925	2,500,000
1926	3,000,000

and annually thereafter the sum of $3,000,000.

These sums are alloted to the states in the proportion which their rural population bears to the total rural population of the United States, not including outlying possessions, according to the last preceeding United States census: Provided, that the allotment of funds to any state shall be not less than a minimum of $5000 for any fiscal year prior to and including the fiscal year ending June 30, 1923, nor less than $10,000 for any fiscal year thereafter.

For the purpose of cooperation with the states in paying the salaries of teachers of trade, home economics, and industrial subjects there is appropriated for the use of the states for the fiscal year ending June 30:

1918	$ 500,000
1919	750,000
1920	1,000,000
1921	1,250,000
1922	1,500,000
1923	1,750,000
1924	2,000,000
1925	2,500,000
1926	3,000,000

and annually thereafter the sum of $3,000,000. These sums are allotted to the states in the proportion in which the urban population bears to the total urban population of the United States according to the last preceeding United States census; a minimum of $5000 being provided up to and including 1923 and a minimum of $10,000 thereafter. Not more than 20 per cent of the money appropriated shall be expended for salaries of teachers of home economics subjects.

For the purpose of cooperating with the states in preparing teachers, supervisors and directors of agricultural subjects and teachers of trades and industrial and home economics subjects, there is appropriated for the fiscal year ending July 30—

1918	$ 500,000
1919	700,000
1920	200,000
1921	1,000,000

and these sums are allotted to the states in proportion which their population bears to the total population of the United States, according to the last preceding United States census. The allotment of funds to any state shall be not less than a minimum of $5000, for any fiscal year prior to and including the year ending June 30, 1919, nor less than $10,000 for any fiscal year thereafter.

The following table, prepared by The Farmer, gives the maximum amounts which each of the four states of the Pacific northwest may expect from the Smith-Hughes vocational act of congress for the three years 1918, 1919 and 1920. The figures for the remaining six years will have to be revised by the census of 1920. These sums are double the amounts obtained from the federal government, as each dollar appropriated by the federal government is contingent upon another dollar given by the state.

Year.	Agricu'al Teachers' Salaries.	Trades Teachers' Salaries.	Salaries Preparing Teachers.	Total.
		Idaho.		
1918	10,000	10,000	10,000	30,000
1919	10,000	10,000	10,000	30,000
1920	10,400	10,000	20,000	40,400
1921	13,000	10,000	20,000	43,000
1922	15,600	10,000	20,000	45,600
1923	18,200	10,000	20,000	48,200
1924	20,000	20,000	20,000	60,800
1925	26,000	20,000	20,000	66,000
1926	31,200	20,000	20,000	71,200
		Montana.		
1918	10,000	10,000	10,000	30,000
1919	10,000	10,000	10,000	30,000
1920	10,000	10,000	20,000	40,000
1921	12,250	10,000	20,000	42,259
1922	14,700	10,000	20,000	44,700
1923	17,150	10,850	20,000	60,000
1924	20,000	20,000	20,000	60,000
1925	24,500	20,000	20,000	64,500
1926	44,400	43,200	20,000	107,600
		Oregon.		
1918	10,000	10,000	10,000	30,000
1919	11,100	10,800	10,220	32,120
1920	14,800	14,400	20,000	49,200
1921	18,500	18,000	20,000	56,500
1922	22,200	21,600	20,000	63,800
1923	25,900	25,200	20,000	71,100
1924	29,600	28,800	20,000	78,400
1925	37,000	36,000	20,000	93,000
1926	44,400	43,200	20,000	107,600
		Washington.		
1918	10,900	14,200	12,400	37,500
1919	16,350	21,300	17,360	55,010
1920	21,800	28,400	22,320	72,520
1921	27,250	35,500	24,800	87,550
1922	32,700	42,600	24,800	100,100
1923	38,150	49,700	24,800	112,650
1924	43,600	56,800	24,700	125,200
1925	54,500	71,000	24,800	150,300
1926	65,400	85,200	24,800	175,400

State Board.

In order to secure the benefits of the appropriations any state shall, through the legislative authority thereof, accept the provisions of this act and designate or create a state board, consisting of not less than three members and having all necessary power to cooperation with the federal board for vocational education in the administration of the provisions of this act.

In any state the legislature of which does not meet in 1917, the governor may accept the provisions of this act and receive its benefits until the legislature of said state meets in due course and has been in session 60 days.

Any state may accept the benefits of any one or more of these respective funds and may defer the acceptance of any one or more of these funds provided that, after June 30, 1920, no state shall receive any appropriation under this act unless it has previously taken advantage of at least the minimum amount appropriated for the fund or funds it desires.

Federal Board.

A federal board for vocational education is created to consist of the secretary of agriculture, the secretary of commerce, the secretary of labor, the United States commissioner of education and three citizens of the United Staets to be appointed by the president, one of the three citizens being a representative of the manufacturing and commercial interest, one a representative of the agricultural interest, and one a representative of labor. The three citizen members shall receive a salary of $5000 per annum.

An appropriation of $200,000 annually is made to carry on the work of the federal board in making investigations and reports to aid the states in the furtherance of vocational education.

To secure the appropriations made in this act plans prepared by the state board shall be approved by the federal board.

Salaries Only.

For each dollar of federal money expended for salaries the state or local community shall expend an equal amount for such salaries and all this money shall be devoted exclusively to the payment of salaries.

In order to receive the benefits of the appropriations made by the act the state shall provide in its plan for agricultural education—

That such education shall be that which is under public supervision or control;

That the controlling purpose of such education shall be to fit for useful employment;

That such education shall be of less than college grade and be designed to meet the need of persons over 14 years of age who have entered upon or who

(Continued on page fourteen.)

Pure Bred Live Stock

Big Industry Injured by Inflated Prices

A letter received from T. W. Bartley of Fernwood farm, Moscow, Idaho, says:

"I want to congratulate you upon the paper you are getting out. I find much of interest and value in it and feel that it covers the whole field of farming and rural life in Idaho.

"Was especially pleased at the stand taken on the sale of the $21,000 bull calf at Portland, and hope you will be able to smoke out those who are trying to conceal the facts. Have no doubt it was a fake sale, and Mr. Stuart is to be commended for calling your attention to the facts in his possession. Such methods, if allowed to continue, will destroy the value of such sales and very materially injure the cause of pure-bred stock.

"I am a breeder of pure-bred live stock and hope soon to have some surplus stock for sale, but do not hesitate to say that prices of pure-bred live stock are too high, and these high prices are preventing many people from engaging in the business. All prefer pure-breds to scrubs or grades, but when they attempt to buy foundation stock find prices that seem to them prohibitive. Speculators have got into the business, are paying unreasonable prices for foundation stock and are attempting to inflate prices so they may sell to the public and make a profit from the stock so purchased."

Farm Loan Association.

The farmers of the Kennewick valley, Washington, have organized a farm loan association. H. H. Peter, Joseph Gerards, Ole Brue, W. H. Fratzer and Don Cresswell were elected directors. Mr. Cresswell was chosen president and Mr. Kratzer, secretary-treasurer. Mr. Gerards, Mr. Brue and Mr. Cresswell were the three members chosen to constitute the loan board. The association has a membership of 13.

ETERNAL VIGILANCE.

To Keep Records Above Suspicion

The following letter is from A. Graham Galbraith, the secretary of the American Suffolk Horse association:

To the Editor: The association that I have the honor to represent as secretary has never conducted any sales of purebred stock, and not having had much experience in this line of work, I do not feel that I am in a position to offer any suggestions for the elimination of the so-called "wash sales." Unquestionably it is a matter to be deplored that there are people identified with purebred stock, the highest branch of the live stock industry, who have not that high personal honor that should be associated with the best, and as most of the breed associations have a large and varied membership about all that their officers can do is to frown upon all questionable transactions and by ternal vigilance keep all their pedigree records above suspicion.

A. GRAHAM GALBRAITH,
Secretary of the American Suffolk Horse Association., De Kalb, Ill.

NOT GENERAL

Sales at Fictitious Prices.

Wayne Dinsmore, secretary of the Percheron Society of America, writes:

To the Editor: I do not believe that wash sales at fictitious prices are at all general among live stock men, but the proposition of preventing anything of this kind is, I believe, impossible of solution. If you can remodel human nature, and make all men honest, you may be able to accomplish your aim.

My observation has been that stockmen themselves administer the punishment necessary to deter others from making fictitious sales, for if wash sales are made, the news soon gets out, and men become suspicious of any party who is involved in anything of this kind, and decline to have anything further to do with public sales held by the offending party.

There is probably a littel of this going on in all breeds of live stock, but I think there is very little of it in the Percheron breed.

WAYNE DINSMORE, Secretary.
Chicago, Ill.

GENERALLY HONEST

Tricky Chap Does Not Last Long.

If the Farmer is not mistaken, the author of this letter, C. S. Plumb, secretary-treasurer of the American Kerry and Dexter Cattle club, is the author of the well-known "Types and Breeds of Farm Animals."

To the Editor: I note the information you send regarding the sale of Finderne Mutual Fayne Valdessa. Live stock sales must be conducted largely on the basis of confidence in the integrity of those identified with them. I think any person familiar with the sale ring realizes that it is impossible to prevent boosting prices when men agree among themselves to do so. The character of a sale depends upon the character of the auctioneer, and also the characters of the consignors to the sale or sales. I have been patronizing the sale ring to some extent for over 25 years, and on occasion have felt that I have been made to pay too much, and others have felt the same. Yet I think the average man at the sale is honest, and that the tricky chap does not last long. As no stream can rise no higher than its source, so the auction ring conditions can not very well rise above the standards of the people who create said sales and support them.

I think crookedness in live stock selling should be punished by the law just as crookedness would be in anything else. C. S. PLUMB.
Columbus, Ohio.

HONOR OF BREEDER

Foundation of Live Stock Business.

The following letter is from R. M. Wood, the secretary of the Standard Delaine Merino Sheep Breeders' association:

To the Editor: The foundation of the purebred live stock business is the integrity of the individual breeder. Upon his honor must rest the entire industry, for he alone knows what is the pedigree of every animal he produces. The buyer must take the breeder's word for the breeding of the animal. Likewise in an auction sale. The buyer must rely upon the honesty of the seller as to any representations made. There are practically no legal methods by which he can be protected.

A sale conducted by a single breeder depends upon his honor and reputation. The success of a combination or association sale also is based upon the consignors and the faith they can command from the public. The comparative absence of scandal or even criticism bespeaks the high plane upon which purebred livestock sales have been conducted for many years in this country.

The least suspicion of jobbery will ruin for a long time even the possibility of any men connected with such sale ever holding a successful sale. Fake sales, but none but those concerned. R. M. WOOD, Secretary.
Douglas, Wyo.

Registering Association.

R. C. Johnston, secretary-treasurer of the American Angora Goat Breeders' association, writes:

To the Editor: As our association does not auction or sell live stock in any way, being merely a registering association, we can not give you any rules governing auctions.

I knew E. A. Stuart very well when he lived at Lawrence, Kan., and you can give him my kindest regards.

R. C. JOHNSTON,
Secretary-Treasurer.
Lawrence, Kansas.

Loan Association Formed.

The Newman Township Farm Loan association base been organized in the Spokane valley with $50,000 subscribed. J. E. Bell is president and J. M. Simpson secretary-treasurer.

Farm Loan Bank Soon Ready

Officers Are Appointed and Interest Rate Fixed at Five Per Cent

(Continued from page one.)

further authorized and empowered to employ such attorneys, experts, assistants, clerks, laborers and other employes as they may deem necessary, and to fix their compensation, subject to the approval of the federal farm loan board."

We have said that these five directors will temporarily manage the bank. Its permanent management will be in the hands of nine directors. The various local farm loan associations in Washington, Oregon, Idaho and Montana will choose six of the nine directors, and the national board will appoint three.

Selection of Final Board.

These nine directors will not be chosen until the federal farm loan bank has put out $2,000,000 in mortgage loans. The method of their selection is as follows:

"At least two months before each election the farm loan commissioner shall notify each national farm loan association in writing that such election is to be held, giving the number of directors to be elected for its district, and requesting each association to nominate one candidate for each director to be elected.

"Within 10 days of the receipt of such notice each association shall forward its nomination to said farm loan commissioner. Said commissioner shall prepare a list of condidates for local directors, consisting of the 20 persons securing the highest number of votes from national farm loan associations making such nominations.

"At least one month before said election said farm loan commissioner shall mail to each national farm loan association the list of candidates. The directors of each national farm loan association shall cast the vote of said association for as many candidates on said list as there are vacancies to be filled, and shall forward said vote to the farm loan commissioner within 10 days after said list of candidates is received by them. The candidates receiving the highest number of votes shall be elected as local directors."

May Mean Changes.

The national board will have the power to continue in service three of its five appointees, but two of the original directors will have to take their chances of election before the farm loan associations.

The wisdom of so large a board as nine members is open to question. In all probability they will be scattered over the four states in the district, and the expense of gathering for board meetings will be large, even if the non-office-holding directors should be paid only their traveling expenses and per diem. This is a feature of the law that should be watched with a view to possible amendment.

The Farmer receives numerous letters asking how soon the Spokane bank will be ready to make loans on farm lands. It is impossible to answer these inquiries definitely. Our readers, however, may be assured that we shall watch this matter closely and keep them informed constantly of developments.

Interest Rate 5 Per Cent.

It has been officially announced that the system will start business with a mortgage interest rate of 5 per cent, a rate that will be very alluring to farmers who now pay 7, 8 or 10 per cent. Even in New England, where farm loans are made on the lowest rates in the country, farm owners are eagerly awaiting the opening of the bank at Springfield, Mass. Leonard G. Robinson, who has been appointed president of the bank, says the interest rate on farm mortgages in Maine, New York and New Jersey ranges from 7 to 8 per cent exclusive of commissions.

"As the farm mortgages become standardized and the investing public becomes more familiar with them, it is probable that the interest charge to the farmer may go below 5 per cent," Mr. Robinson said. "The bonds will be investments of the soundest possible nature, the repeated examinations will insure their security; they are exempt from federal, state or municipal taxation and they will constitute first-class collateral for banks and other similar institutions.

"It is to be expected also that the life insurance companies will invest to a large extent in land bonds. They have done so in the past, but in some instances their experience has been unsatisfactory from causes which the new system eliminates. They have invested large sums of money in certain localities to the exclusion of others. As an instance, the investments of life insurance companies in farm mortgages in Iowa in 1914 amounted to $139,000,000. In the same year investments in Connecticut reached only $75,000, while in Massachusetts and New York there was an aggregate of $10,000 each, in Maine $5900 and none in New Hampshire and Rhode Island."

In the view of Mr. Robinson the farm loan plan will equalize the credits in all parts of the country. He pointed out that in some localities it is comparatively easy to borrow on farm mortgages, but that in others the funds are entirely absorbed in local improvements, buildings, road construction and other activities.

Is America Farming?

Comparison With Other Countries Says No

Last week, under the above heading, The Farmer published figures given by Professor J. S. Jones of the agricultural experiment station of the University of Idaho, showing that European countries had made rapid and great increases in their average yields of grain per acre during the past quarter of a century, while in the United States there had been comparatively little increase. In wheat yields per acre, Germany increased in 30 years 77 per cent; the United States only 14.4 per cent. In barley her increase in average yield per acre was 67 per cent; the United States only 11-4 per cent. In oats Germany's increase in yield per acre was 86 per cent and that of the United States less than 6 per cent.

Below is given what Professor Jones believes to be the true explanation of the almost unbelieveable facts cited in last week's article.

"Early in the 19th century (in 1805 to be exact), an Englishman by the name of Thayer wrote a book which pointed out the value of root crops in English agricultural practice. The English farmers adopted the suggestion. Over 2,000,000 acres of root crops, mostly turnips, are now grown in Great Britain in rotation with 6,500,000 acres of cereal crops. It is said that German agricultural economists had Thayer's work translated and urged upon their own farmers the adoption of the British practice. Their efforts met with little success. The German farmer realized that to grow roots successfully deep plowing would have to be practiced. Deeper plowing would result in bringing more stones to the surface and they in turn would have to be carried off the fields, too much effort for the benefits to be derived seemed to be the conclusion of the German farmers.

French Pioneering.

"In the meantime French scientists had discovered the indirect value of sugar beet growing upon cereal crops. Napoleon's attention being directed that way, he immediately ordered his minister of the interior to see that 90,000 acres of sugar beets were grown in various districts. The year 1811 was the beginning of the sugar beet industry in France. It has revolutionized agriculture in France because of the increased yields of the cereal crops which are grown in rotation with the beets. Not until a system of government aid to sugar factories similar to that adopted by the French was put into operation, however, could the German farmers be induced to increase their meager acreage of beets.

"Before the introduction of beet culture, four cereal crops were grown in succession. They were followed by one year of fallow. Plowing to a depth of three or four inches only was the common practice. It is said that in Germany one-third of the total area of level land was regarded as being too poor to cultivate and cereal crops were yielding on the better lands but little more than 12 bushels per acre. The introduction of sugar beet culture changed this. The successful growing of that crop forced deeper plowing and thorough cultivation. The succeeding grain crops quickly showed a remarkable increase in yield. The conversion of the German farmer was complete. They would not think for a moment now of returning to the old system of farming, and what is true of the German farmer is equally true of the farmers of other western European countrues.

Fertilization by Roots.

"If we study the root system of the sugar beet, the real reason of the value of the root crops in the rotations appears. The mass of fine roots found on the mature beets, break off when the main root is lifted at hearvest time. This mass of organic matter, left well below the surfact, is capable of rapid decay and produces almost as marked results in increasing soil fertility as a light application of barnyard manure.

"Unfortunately we have no extensive data to draw upon to show in a similar manner the beneficial effects of root crops in rotation systems in this country. Data available from 115 farmers reporting, shows that, although above the average before the introduction of root crops, increased their average yields of small grains very decidedly by the introduction of the root crops. The percentage increase for corn, oats, wheat and barley ranges from 27.6 to 52 per cent.

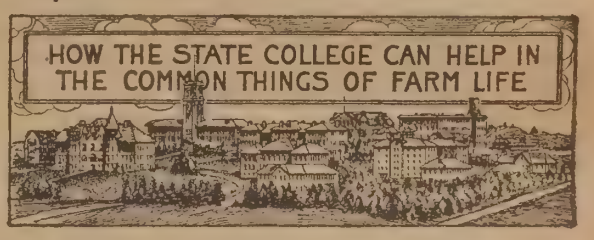
Objections Are Raised.

"I think I hear some one objecting that the farmer with from 160 to 320 acres of wheat land, can not think of introducing such a crop in his rotation. That objection may be well taken, but something has to be done to get rid of wild oats and other troublesome weeds. The growing of a few acres of

(Continued on page twenty-three.)

Have You Prepared Your Farm Plan?

Production of Milk, or Fruit, or Grain, or Hay or Live Stock or of Mixed Husbandry

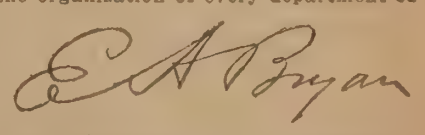


The newest of all the departments in the agricultural colleges is that of farm management. We, at the State College of Washington, are rather proud of the fact that the conception, organization and development of that division of the United States department of agriculture originated with a Washington State College man, Professor W. J. Spillman, now head of the division of farm management, U. S. D. A. After Mr. Spillman had accepted the invitation to leave the department of agriculture of this college and become a member of the U. S. D. A., after having been with us for eight years, he found, on looking over the agriculture of the whole country, especially of the south, a cloudy sky. In his new position he felt ill at east—without chart or compass. He went into the office of that prince of secretaries, James Wilson, and said, "Mr. Secretary, what is it you wish me to do here in the department?" "That is the very thing we sent for you to tell us," replied the secretary. "We wish you, in your lines, to be our adviser, and we will hear and determine whether we will accept and follow your recommendations." "Oh, is that it?" said Spillman, and went forth to consider and recommend. And the result was, in the end, the great division of farm management and the extension of its results to the common farmers.

Every man has some sort of plan for the management of his business, but not infrequently the plan and its execution are defective. One of the simplest of all the systems is that of the big wheat farmer, who exploits the soil on a large scale and ships its riches to the uttermost parts of the earth and spends the winter in California on the proceeds. This system is very like mining. But for the great mass of farmers this is impossible and although dealing with smaller units, their problems are more complex and difficult.

It is essential to correct management of any system of farming that the general scheme be settled upon—whether milk production, or fruit production, or grain production, or hay production, or meat production, or mixed husbandry. And if mixed husbandry is settled upon, it is still necessary to determine where the emphasis shall be placed—what shall be the most important crop or crops. If the farmer is a beginner in this state or contemplates a new deal—a new kind of farming—nothing could be wiser than to seek a personal interview with the head of the agricultural department of the college and go over the whole matter in detail. The money spent in traveling expenses would be more than repaid by the help he would receive.

But if he already is in up to the neck in his business then it is largely a study of the organization of his system, the proper proportioning of it, the adjustment of stock to crop, of crop to land, of labor to the work to be done, and of accounting which will show the results. In all of these he can get general and special help from the college. He will find that many things must be arranged on a unit system. If, for example, he wants to keep some cows and has just enough to occupy half the time of a milker and expects to use the other half in an entirely different kind of farm labor, he will find the adjustment unprofitable. He must reduce it to the unit system. And so in the organization of every department of the work. Then must be the proper proportion between land and work, stock and machinery and live stock and labor. It all must form a single system. In the formation of that system he can get help from the college.



In the next instalment Dr. Bryan declares that "The orchard and the garden belong with every farm home," a sentence that will bear rereading and deep thought. Comparatively few farmers, especially in the wide-stretching grain producing lands of the Pacific northwest, have any adequate conception of the part that the farm garden can play in the living for the whole family.

To The Washington Farmer: I will say that it is a splendid farm paper and I think all farmers should read it. It would do them good. I can not praise your paper too highly.

Reardan, Wash. J. L. BROWN.

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Farm Money at Five Per Cent!

The official announcement by the federal farm loan board at Washington that the uniform mortgage rate under the new farm loan system will be only 5 per cent is the biggest piece of news heard by the American farmers in many a year.

Five per cent farm money! A rate undreamed of a few years ago. Five per cent money for the little farmer as well as the big—only 5 per cent on a $100 loan if a borrower wants that sum.

And this low rate accompanied by advantages not given under the old private system: The borrower's option to take his loan for any period he may desire, from five years to 40 years; to pay off the principal in small semi-annual instalments, and in larger instalments, or in total after five years, if he so desires.

Paying Off a Loan.

When it was thought that the rate would be 5½ per cent The Farmer printed an amortization table based on that rate for a loan of $1000, payable in 20 annual instalments. We now give a similar table computed on the 5 per cent rate:

Total Annual Payment.	Interest.	Applied on Principal.	Principal Still Unpaid.
$ 80.24	$ 50.00	$ 30.24	$ 969.76
80.24	48.49	31.75	938.01
80.24	46.90	33.34	904.67
80.24	45.23	35.01	869.66
80.24	43.48	36.76	832.90
80.24	41.65	38.59	794.31
80.24	39.72	40.52	753.79
80.24	37.69	42.55	711.24
80.24	35.56	44.68	666.56
80.24	33.33	46.91	619.65
80.24	30.98	48.26	570.39
80.24	28.52	51.72	518.67
80.24	25.93	54.31	464.36
80.24	23.22	57.02	407.34
80.24	20.37	59.87	347.47
80.24	17.37	62.87	284.60
80.24	14.23	66.01	218.59
80.24	10.93	69.31	149.28
80.33	3.83	76.50	.....
Total.. $1604.89	$604.89	$1000.00	.....

Take, for illustration, the case of a farmer who now has his place mortgaged for $1000 at 8 per cent. His annual interest charge is $80. If he allows the mortgage to run, with frequent renewals, for 20 years, he will pay out $1600 in interest and still owe the original $1000 of principal.

But the farmer who borrows $1000 from a federal farm loan bank for 20 years, on the amortization plan, will have annual payments of only $80.24 and be whittling down all the time his principal of $1000. At the end of the 20 years he will have paid out, all told, $1604.89—only $4.89 more than the farmer with the old line mortgage would pay for interest alone—and at the end of the 20 years his principal debt will be wiped out; his farm will be free.

Interest Is Decreasing.

The foregoing table affords an interesting study. The reader will note that while the sum he pays each year stands fixed for the full 20 years, namely $80.24, the sums paid for interest and reduction of the principal are fluctuating.

His first year's $80.24 is divided by assigning $50 as interest and $30.24 for reduction of the mortgage debt. But in the 20th year only $3.83 is needed for interest, and the balance of the $80.33 ($76.50) goes to the extinguishment of the mortgage. The interest item keeps on decreasing from year to year; the amortization item keeps on increasing every year.

The broad general effect of the new system will be a hastening of western development, for the west will enjoy the same low rate that is given the east. It will encourage thousands of farmers to go forward with improvements long wanted, but deferred because money rates were high. It will enhance the equity of the farmer who is deep in debt, for those who are paying now 8 or 10 per cent will soon be able to shift to the low government rate and start then on the hopeful task of wiping out their debts.

As the system becomes more generally understood, and communities familiarize themselves with the steps to be taken to organize and conduct farm loan associations, we anticipate a revolution in the farm mortgage business of the United States.

Wool Industry Needs Stimulus

It is a significant fact that the United States government is expending several thousands of dollars conducting a "wool demonstration" car throughout the states where sheep are grown or should be grown. Two purposes are back of this work: The increase of wool and mutton production and the improvement of the grade of wool placed on the markets of this country.

"In the northwest one of the big problems is to establish the sheep on the farm," said a representative of the government to persons visiting the wool car, "for increase of flocks on a decreasing range is hardly probable or even possible."

When sheep are high priced as they are now is a poor time for the average farmer to attempt to stock his ranch with more than a very few head, but many farms would find it profitable to acquire a small flock, not alone for the profit from wool and meat, but for the benefit to be derived in the way of weed eradication and soil improvement.

The Spelling Bee

The spelling bee, long a forgotten institution in this feverish life of 20th century America, is coming into its own. Hundreds of boys and girls throughout the state of Washington have been thumbing their spellers as they, and incidentally their fathers and mothers, have never thumbed them. Spelling was becoming a lost art. Now it is to be reinstated in its rightful place as one of the essentials and fundamentals of education.

Many, perhaps most, of the fundamentals of education are only to be mastered by laborious effort. The "natural" spellers are usually those individuals whose interest in the printed word leads them to make the effort essential to memorizing hundreds and thousands of symbols. The rest of us won't make this effort if we can get out of it. Most of us, under the present system, have been able to escape the drudgery; and most of us, as a consequence, spell by desperation and the grace of God, and write but indifferently. All hail the spelling bee! May it quickly come again into its own.

The orchard is often looked upon as a thing grown at too great cost to be destroyed, but an orchard that is not kept clean and thrifty and profitable is not only a detriment to the farm on which it is situated, but to the other farms where there is an earnest effort to raise fruit.

There never was before in the history of this country so much power in the hands of the people. Radical actions by the few who formerly held the power led to the uprising that placed it more in the hands of the many. There should now be a strong effort on the part of the people at large to avoid radical actions which would lessen the virtue of the transfer.

Washington Gleanings

"Pigs is pigs" in Wahkiakum county. Recently a Chester White sow owned by Joseph Longtain, a farmer living in the Elochoman valley, became the mother of 19 pigs, 13 of which are living.

From $50,000 to $60,000 will be spent by the Yakima county commissioners in maintenance of six trunk lines of roads in that county this year. These roads radiate from North Yakima and extend to the county boundaries.

A company of several prominent Eureka flat wheat producers has been formed for the purpose of building an elevator at Pleasant View. The elevator will have a capacity of 130,000 bushels and will be 95 feet high. The building and contents will cost $30,000.

Members of the Kent Commercial club are calling on farmers in the valley with contracts to grow cucumbers, cabbage and cauliflower for a large pickle factory, which it is proposed to locate here. The factory is assured if enough raw material is guaranteed.

W. H. Paulhamus has been reelected president of the Puyallup and Sumner Fruitgrowers' association. Mr. Paulhamus has served the association in this capacity for nine years. H. H. Ellerding was reelected as vice president and T. H. Ridley as secretary-treasurer.

The Utah-Idaho Sugar company has accepted its full quota of 7500 acres and has 650 contracts with owners in the Yakima valley for the growing of sugar beets for the coming season. The acreage is scattered all the way from Prosser to Ellensburg in fields of 10 to 100 acres in size.

F. M. Rothrock of Spokane, sheepman, has purchased 30 sections of land in Yakima county, on the west side of the Columbia river, close to Priest rapids, for a sheep range. The price is said to have been $30,000. Mr. Rothrock also has purchased 1200 ewes, the market value of which is $15 each.

Farmers and business men of St. John and vicinity have organized the St. John Elevator company. The capital stock is $25,000, all subscribed for. E. C. White, J. R. Mulkey, P. L. Nelson, Will R. Heglar, Harry Terhune were selected as incorporators. There are about 45 stockholders in the new company.

Dr. Robert Prior has bought 12,000 acres of logged-off lands between Ahtanum and Cowiche creeks, adjoining the Rainier forest reserve, for $50,000. Dr. Prior already owns large tracts in that section and holds others under lease. His new purchase will give him 27,000 acres of range for sheep.

One of the largest and most modern dairy barns in the vicinity of Auburn, in King county, has just been finished on the ranch of Charles Schalkenbach. It is fitted up with all modern dairy conveniences and water is piped throughout the building from a 600-foot astesian well recently sunk.

What Others Say

Indiana Farmer: Spring work in the orchard is the kind of work that pays good dividends.

Hoard's Dairyman: There is something in clover hay that supplies what the gluten feed lacks.

Rural New Yorker: Some men think they are far ahead of the procession just because they are driving the hearse!

American Agriculturist: Looking ahead and nearer home, there would seem to be abundant reasons for American farmers to work for abundant crops.

Farmer and Stockman: Looking for a new overseer once, George Washington said the man must be, "above all, Midaslike, one who can convert everything he touches into manure, as the first transmutation toward gold; in a word, one who can bring worn-out and gullied lands into good tilth in the shortest time."

Five Books Free

DO YOU want to save money on your stump blasting? Do you want to get the stumps out cleaner—split them up better—and cut down the quantity of powder required? Our Stump book, "Better Stump Removing," tells and shows how to do it.

OR do you want your fruit trees to grow faster, yield sooner and bear bigger crops. Our Tree book, "Better Orchard Tillage," shows how you can secure these results by blasting when planting.

IF you want to save fertilizer and grow bigger crops, send for our Crop book, "Better Farm Tillage." It tells how blasting will make the subsoil mellow several feet deep and release new plant food for your crops.

ARE there rocks on your farm? Our folder, "Better Boulder Breaking," shows how a few minutes' work will get them out of your way forever.

DOES your farm need draining? Our Ditch book shows how to blast clean, smooth ditches of any size—the easiest, quickest way of making them.

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

Here are some of the reasons why you should insist upon Giant Farm Powders for all farm blasting.

1. They are made especially to suit Western farm conditions, by a Western company with 50 years' experience.
2. They are the *genuine* Giant Powders—the product of the manufacturers who originated the name. The fact that other explosives are often called "giant powders" indicates the high quality of the genuine.
3. They go further than ordinary dynamites. They exert their strength over a wide area, cracking, splitting and heaving out stumps, roots and all, rather than shattering and throwing them high in the air.
4. They will not freeze at ordinary temperatures, standing 32° for days without requiring thawing.
5. They are being used by thousands of farmers, scores of whom state that the Giant brands "give better results"—"save money"—"have wider breaking power"—"shoot the roots"—and "are always uniform in strength and action."

There are two of the Giant Farm Powders: Giant Stumping Powder, for wet work, and Eureka Stumping Powder, for dry work. Eureka costs less and many careful blasters use it for wet work, too.

Ask Your Dealer

Your local dealer probably has Eureka and Giant Stumping Powders and other Giant blasting supplies. If he does not have them, write us. We will see that you are supplied promptly through the local dealer with whom you prefer to trade, through a dealer in a nearby town who has a magazine, or direct from our nearest distributing point.

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CONSOLIDATED *"Everything for Blasting"* ESTABLISHED 1866
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Make This Test

Get a 25 or 50 pound case of either of the Giant Farm Powders. Get at the same time a case of any other dynamite or stumping powder.

Blast with each. Keep track of the quantities used. Figure the cost. You will find—as farmers everywhere have found—that the Giant Farm Powders save farmers time, work and money.

To make it easy for you to secure Giant Farm Powders we print a trial order form in the coupon at the right. Fill it out and we will have our nearest distributor supply you with a trial case at the lowest market price.



Mail the coupon below or a post card and get one or all of the Giant books. You will find them valuable. They contain illustrations of the most economical ways of doing farm work with Giant Farm Powders.

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☐ Boulder Blasting ☐ Ditch Blasting
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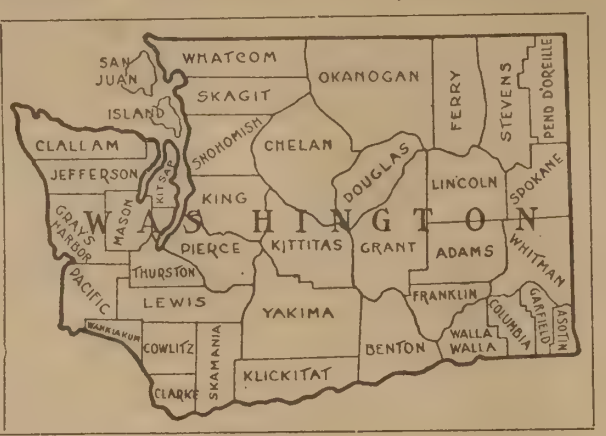
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Rush of Farm Work Expected

Work of Both Seasons Must Be Done in a Few Weeks—Late Spring Follows Fall in Which Work Was Curtailed.



GARFIELD, Whitman county, Wash., March 20.—We have had good sleighing since November 10 without a break except near town. All the fields are hid under the snow. No danger of freezing. Much wheat was sown very early and it may be smothered because of the bad snow drifts. Owing to the abnormal dry fall much was left unseeded; also much fall plowing was done. If spring ever opens up work will be rushing day and night as we are fully a month late. There should be plenty of moisture for there is still from a foot to two feet of snow, but no rain so far. Grain and fruit are the main crops. Every farmer has his own horses, a few cows, hogs, orchard, garden, berries, poultry, etc., and most all of them market some of these byproducts. A great deal is made from cows and poultry. Feed is getting mighty scarce and it's a long time until grass is ready. Much fruit is raised, but it costs so much and pays so poorly many orchardists are getting discouraged. Spring plowing is usually done in April and seeding from April to the middle of May. There is less farm work being done than I ever knew of at this time of the year, on account of deep snow.

M. KIDWELL.

Sow Vetch in the Fall.

GIG HARBOR, Pierce County, Wash., March 19.—As Pierce county, or that portion of it lying along the Sound, has a mild winter climate, farming operations can be carried on almost continuously throughout the winter. We have had a normal winter, with a somewhat scant precipitation of moisture. This has rendered it possible to do much seeding even during the month of February. Under such conditions it is possible to get along without much fall plowing, although more of this might still be advisable. Some oats was sown in February, and seeding of all kinds went along quite briskly in the early days of March. An especially large acreage of early potatoes is being planted, owing, of course, to the extraordinarily high prices of that produce this season. No doubt the planting of late potatoes will be somewhat overdone, but that is not likely to be the case with the early potato that gets into the market in June in this section. Comparatively little land is adapted to the early crop. Wet valley soils and springy hilltops can not be planted very early, and they, of course, are the great potato producers. Such crops as were fall-planted seem to be coming out well. Our farmers are getting into the way of sowing considerable spring vetch, but sowing it in the fall. This gets a good start in the fall, grows some even during the winter, comes on rapidly in the spring, and can be cut and cured for hay, pastured, or turned under for corn and root crops. Being a legume, this adds much to the fertility and humus in the soil when so turned under. By taking off our early spring crops and plowing immediately afterward, we manage to give our land the equivalent of a pretty good summer-fallowing without losing a crop.

W. D. BOYNTON.

Seeding Is Delayed.

EPHRATA, Grant County, Wash., March 16.—Farming operations have begun in the south part of Grant county. The farmers are busy now in seeding spring rye and spring wheat. This season is considerably later than most seasons, and the farmers are very anxious to get their crops in at once. There will be no seeding done in the northern part of Grant county for several weeks, owing to the snow which is still on the ground. There was very little fall wheat sown in this county, and what was sown did not get up. It seems to be coming through the ground in good shape, and it looks as if it would be a good stand.

H. W. REAUGH.

Seeding Late This Year.

NEPPEL, Grant County, Wash., March 20.—Wheat seeding is a little late this season, with very little fall seeding done on account of the dry fall. February 10 is the earliest that any spring seeding ever has been done. No spring plowing has been done for immediate seeding, as it dries out unless irrigated. Fall plowing is out of the question, as it is like dry ashes and does not fall away from the plow mold. Fall seeding starts usually the latter part of August if in rains. Fallowing is done usually in May, while the ground is still moist. Other conditions are about normal. The Neppel cheese factory is under construction. Silos will be constructed for winter fodder with alfalfa that is raised here in abundance. Moses Lake Farm Loan association has a strong organization and one of the best. The fruit has a fair prospect, as nothing has been damaged yet. MARTIN PENHALLICK.

Farm Labor Needed.

SPOKANE, Spokane County, Wash., March 21.—The ordinary farm work of Spokane county usually begins by the 1st of April on most of our farms. During the last season this work was much delayed, and it was not before the middle of April that active spring plowing and seeding began. This year there will be an abundance of spring work, owing to the fact that last fall the ground was so dry that fall plowing was not practiced by many farmers. One of the first crops to be planted this spring will be peas, and this is closely followed by the seeding of oats. Since Spokane county has such a vast acreage of peas to put in, we will look forward with anxiety to the opening of spring. During ordinary seasons the harvesting of our crops usually takes place in the following order: Winter wheat is the first crop to be harvested, and this usually comes about the 1st of July for hay. A week or 10 days later the crop is harvested for grain where the binder is used. Following the winter wheat comes the harvesting of peas, and closely following the pea crop comes the harvesting of oats. Farm work in this locality will be rather abnormal this season, owing to the lateness of spring and the great amount of land which will have to be prepared for seeding peas. There will be a great demand for farm help throughout the south end of Spokane county. It is a little too early for us to tell what condition the wheat crop will be after it comes out of the winter, since the snow is covering a great deal of the land. J. R. SHINN.

Rush of Work to Come.

FAIRFIELD, Spokane County, Wash., March 20.—Spring plowing and seeding ordinarily commence about March 20, but from present conditions it will be a month late this year. There wasn't a great deal of fall plowing done last fall on account of the long dry spell, so the farmers will be hard put to it when the work does start. There is very little summer fallowing here now, but those who do still summer fallow plow any time during June. They first disk the stubble and wait then for the weeds to start before plowing. Fall wheat, for the most part, seems to be coming through in normal condition. Harvest usually starts with fall wheat by July 15 to 20. Peas are harvested about July 20 to August 1, and oats from August 25 to September 1.

ROY G. ADAMS.

Much Work to Do.

MEAD, Spokane County, Wash., March 17.—As a usual thing, plowing commences the last of February and the first week of March, and the seeding of oats follows soon after. It will be two weeks before any work of this kind will be done this season. Fall seeding usually commences in August and continues until well into October. Summer fallowing is commenced in May. The cutting of alfalfa starts in June, and wheat for hay about July 4; wheat to thresh the 1st of August. There will be more than the normal amount of work to do this spring, as there was but little fall plowing done, and some of the late-sown wheat will have to be reseeded. GEORGE HINGSTON.

No Fruit Blossoms Yet.

RAINIER, Thurston County, Wash., March 19.—Our equinoxil storm has set in now. Very little rain since February 1. The weather has been cold, with frosty nights, with some snow and cold, raw winds. Some seeding has been done and general early spring work. The spring will be late and there are no fruit blossoms yet. Farm work commences on the uplands and black soil about March 10, on the heavy clay soil April 1 to May 1. Fall plowing and seeding usually commence about September 15, but last fall it was too dry for any to be done before the last of October, consequently very little was done, and what seeding was done looks pretty small now. Lots of winter plowing was done, so there will be a heavier spring crop put in. Harvesting of grain crops starts about July 15 and continues until September 15.

L. F. DAVIS.

Spring Work Is On.

LA CONNER, Skagit county, Wash., March 12.—The first plowing in this section was done about the first of February on the meadows, other land being too soft to do anything with. The past week has been an active one in this section in the beginning of spring work. The weather has been fine and the teams and tractors were nearly all in motion. This line of work will be rushed from now on as the weather will permit. As far as can be seen at this time, spring work in the various departments will be about normal. All fall crops, with very few exceptions, are coming out of the winter in a fine condition. It is a little early to tell much about the cabbage crop, as they have not been uncovered; that is, those that were covered entirely last fall.

I. W. ALEXANDER.

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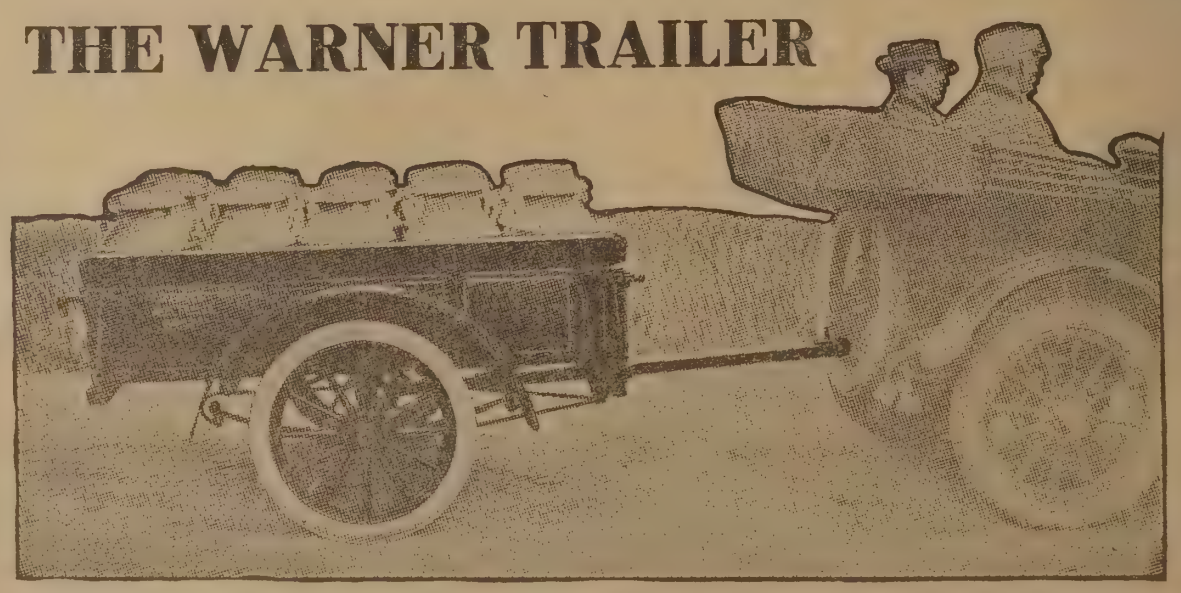
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Are We at War?

Congress Called For April 2

President Wilson has called congress to meet in extraordinary session on April 2, two weeks earlier than originally planned, and it is understood that when that body assembles he will ask them to declare officially that a state of war with Germany exists and has existed for several weeks. It is expected also that he will lay before congress a definite plan for both aggressive and defensive warfare against Germany, as it is admitted that that country's sinking of American ships without warning and without rescuing of their crews and others aboard constitutes actual warfare against the United States.

While no definite plans have been made known at Washington it is believed that the president's cabinet is in unanimous accord with his determination to put the entire United States navy and army into service to protect American interests and lives on the sea and it is believed that both the president and his cabinet are agreed that the time for making aggressive warfare against Germany has come.

Whether this country should make war alone or form alliances with England and her allies is known to be one of the questions President Wilson and his advisers are considering. Also whether steps should be taken to place an actual army on European soil to assist the allied armies of France and England is a question being considered, but which will necessarily have to be determined following developments of the next few weeks.

It seems apparent, however, that this government will throw its entire sympathies and material support on the side of the allies. One of the leading features of such support undoubtedly will be the supplying of large sums of money to the governments of England and her allies for the purchase of food supplies and munitions. The clearing of the sea lanes of submarine and the sending of supplies to the enemies of Germany and her allies, both as to food and munitions will be another effective means of waging warfare.

Whether or not this country would deem it advisable to send men to the European battle fields it appears practically certain that if a state of war is declared to exist a large volunteer army or a large army under a compulsory military training bill, which might be hurriedly passed by congress, would be called. That it would require several months to train a large army for service in Europe is admitted. Former President Roosevelt has expressed a desire to be commissioned to organize an expedition, which, he declares, he could put into the trenches of Europe within five months.

Another question asked is: What steps would Germany take against this country if war is declared? Pressing need for men in Europe to combat the French, English, Italian and Russian armies, it seems, would make it wholly impracticable for her to consider sending an army to American soil, even could she run the gantlet of English and United States navy blockade with an expedition to this continent. That an unrestricted submarine campaign would be waged against all American commerce and naval vessels, both in American and European waters, seems assured.

What part Mexico would play in the situation is also a problem that is considered. Many express the belief that the Mexican border must be strongly protected in case of war, it being freely predicted that Mexico will ally herself with Germany and render whatever aid is possible by harrassing this country.

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LOGGED-OFF LAND

West Side Conditions Different.

To the Editor of the Washington Farmer: Noticing in two or more issues of the Washington Farmer of the logged-off land special to be sent by the G. N. R. R. through northern Idaho and eastern Washington, the thought has occurred to me that if they draw conclusions from clearing logged-off land in those places and apply them to western Washington they will be away off on what it costs to clear land west of the Cascades. Any one who has seen both places and existing conditions will know that to take the cost of clearing an acre of logged-off land in eastern Washington as an acreage cost and apply those figures to western Washington will give prospective settlers a misleading idea of the cost of clearing land in any of the coast counties. It they want an average for the whole state just come to Whatcom or any county on the coast and tackle some of our fir and cedar stumps that range from four to 12 and more feet through, also where there are windfalls of the same size or some places where the vine, maple and alden are so thick it bothers a rabbit to get through. Why, there are stumps in Whatcom county and in all the coast counties that it takes a box of dynamite to pull them apart enough to enable them to be pulled out by a donkey engine, then there is the stump to be burned and the enormous hole to be leveled off.

If this logged-off land special is to be run for the purpose of trying to determine the average cost of clearing logged-off land there by giving prospective settlers an idea of what it costs to clear land in this glorious state of Washington, we cordially invite them over on our side of the Cascades and go to it. FRED COLE.

Acme, Wash.

Whitman Grange for Farm Agent.

Whitman Pomona grange No. 2, in session at Ewartsville, went on record unanimously in favor of a farm agriculturist for the county.

Ideal heat keeps out spring rawness!

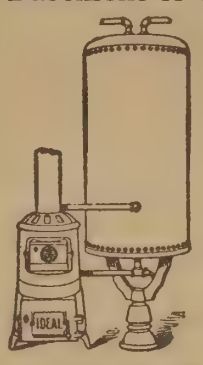


It is better for the family to keep a little heat going *all* through your home during these chill and damp spring days. Raw, wet weather is dangerous to health. *IDEAL heating keeps whole house warm and dry!* Only a small fire in the IDEAL Boiler is necessary to make *every room* as balmy as June.

AMERICAN RADIATORS & IDEAL BOILERS

So don't delay finding out about IDEAL heating by writing to us or asking friends who have IDEAL-AMERICAN radiator heated homes. Thousands of farm families in every state say that IDEAL heating is the one best feature in their homes for economy, labor saving, cleanliness, durability, and complete comfort satisfaction. The comfort of the home makes the success of the farm!

Basement or water pressure not necessary—don't wait!

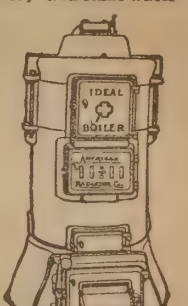


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IDEAL Boiler is set in cellar, side-room or "lean-to;" and same water is used for years. Put an IDEAL Boiler and AMERICAN Radiators in your house this year. Call up the nearest heating contractor and ask him to give you an estimate. Don't put off any longer, suffering the chills and ills of old-fashioned heating methods during these raw springs and severe winters.



A No. 4-22-W IDEAL Boiler and 420 ft. of 38-in. AMERICAN Radiators, costing the owner $280, were used to heat this farm house. At this price the goods can be bought of any reputable, competent Fitter. This did not include cost of labor, pipe, valves, freight, etc., which vary according to climatic and other conditions.



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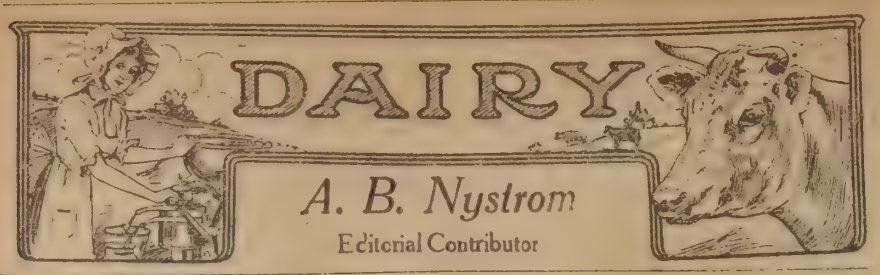
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Boise Valley February Tests

At the Boise Valley Cow Testing association there were 411 cows under test in February, including 31 herds, according to the report of H. H. Beier, official tester of the association. The average butterfat per cow was $27.95 pounds. The high cows of various breeds were:

Holstein	Bonny Oaks	F. O. Johnson	71.3 pounds
Guernsey	Belle	H. A. Wines	65.4 pounds
Jersey	Rose	Leo Marsters	54.7 pounds
Shorthorn	Bob	M. F. Pratt	50.3 pounds
Brown Swiss	Swiss	F. Marsters	41.8 pounds
Red Polled	Bessie	M. F. Pratt	36.6 pounds

Six other cows produced over 50 pounds of butterfat during the month.

COW TESTING

Montesano Association Figures.

H. P. Hansen, tester for the Montesano (Wash.) Cow Testing association, reports for February: Although the dairymen were handicapped by all sorts of bad weather during the month, the cows in most of the herds made a creditable showing. It is interesting to note the record made by Murphy Bros.' herd. Although the greater number of animals of the herd are grades they are of a very high quality, a purebred Jersey sire having been used for several generations.

The following are the cows producing over 50 pounds of butterfat during the month:

Owner of cow.	Lbs. of milk.	P.C. fat.	Lbs. of B. fat.
E. L. Brewer, Jersey...	944.3	6.63½	62.62
Parker Askew, Jersey..	1005	5.9	59.3
Murphy Bros., Jersey..	1170	5	58.5
Murphy Bros., Jersey..	1145	5.1	57.4
E. L. Brewer, Jersey...	962.1	5.55	53.41
J. H. Taylor, Jersey....	1038.4	4.922	51.11
J. H. Taylor, Jersey....	956.4	5.261	50.33

Pioneer Tests.

Twenty-nine cows of the Pioneer Cow Testing Association of Buhl, Idaho, met the requirements for admittance to the honor roll for the 29-day period ending March 1. The grade Holstein owned by Gustav Kunze heading the list with 69.9 pounds of butter fat to her credit. During the month an order for a car load of tested Jersey or Guernsey cows was received, also two requests from parties wishing young cows. None of the dairymen, however, have any stock for sale. The list of cows producing over 55 pounds of butter fat for the month are given:

Owner and Breed.	Milk.	Test.	Bf.
Gustav Kunze, Hol.....	1705	4.1	69.9
C. E. Long, Jer.....	1297	5.1	66.1
A. A. Stauffacher, Hol	1951	3.34	65.1
David Rees, Hol.	1348	4.7	63.3
R. B. Sherman, Guer..	1131	5.6	63.3
David Rees, S. H.....	1635	3.5	57.2
A. A. Stauffacher, Hol...	1827	3.12	57.0
Geo. A. Childs, Jer.....	1116	5.1	56.9
S. Honderich, Hol.....	2612	2.16	56.4
John Kaeser, Hol.	1522	3.7	56.3
C. D. Irwin, Jer.....	893	6.3	56.2
A. A. Stauffacher, Hol...	1742	3.19	55.5
Gustav Kunze, Hol.....	1348	4.1	55.2

Jefferson Tests.

During the month ending February 28 there were 112 cows producing over 30 pounds of fat in the Jefferson County Cow-Testing association of Washington. There were four herds totaling 45 cows which average over 30 pounds of fat for the month. The following table gives the records of cows producing over 50 pounds of fat for the month:

Owner and breed.	Lbs. Milk	Lbs. Butter Fat	Feed Cost
Geo. Hendricks, P. B. H...	1584	66.52	$11.20
Glendale Creamery, Gr. J.	1641	65.64	17.50
H. L. Hansen, Gr. H.....	1845	64.57	18.45
H. L. Hansen, Gr. H...	1956	64.54	18.45
H. L. Hansen, P. B. H...	1827	58.46	18.45
Glendale Cream.., P. B. J.	1170	57.33	16.50
Glendale Creamery, Gr. H. (Swanson Farm)	1353	56.82	8.50
Geo. Hendricks, Gr. H...	1161	55.72	11.20
Burt McConaghy, Gr. H...	1467	53.46	14.20
H. L. Hansen, Gr. H....	1709	52.81	17.60
Robert Cook, Gr. H.....	1179	51.87	10.90
Glendale Creamery, Gr. J.	1020	51.00	12.09

PROFIT PER COW, $123.

J. W. Vandervelden of Roy, Ore., has 13 cows on test in the Washington County Cow Testing association, some of them pure bred and some grade Jerseys. Their total milk for ten months was 88,154 pounds and their butter fat 4694.05 pounds, or 5317.62 pounds of 5 per cent butter. Several of the cows had their dry period during the ten months. The average profit for the ten months was $123.87 per cow. This is above the cost of feed. Mr. Vandervelden's work is all done by his own family, but, even if this was not the case, he estimates the value of the manure and calf to pay for the labor.

CONTAGION SPREADS

Through Contact With Disease.

Professor H. L. Blanchard of the experiment station of the state college at Puyallup, Wash., was speaking about the comparative prevalence of abortion in cattle, now and formerly.

"About 22 years ago, there was a big epidemic of abortion in our part of the state," he commented. "At that time my lane ran right down the center of my farm, so that my cattle didn't come into contact with any of the others in the neighborhood, and as long as this lasted I wasn't troubled. Then, without thinking, I shifted my lane over beside the line fence, and one day when I looked down into the pasture, I saw my cattle from the next farm all in together. That was the beginning of trouble, and it took me just three years to get back where I was before that day. You might say that I lost three years' time, so far as returns from the dairy were concerned."

Professor Blanchard states that care of the cow, following delivery of the calf, is important, as this tends to keep the tissues in a condition to resist infection. He suggests washing with a solution of any mild disinfectant in warm water, utilizing a piece of hose and a funnel for the syringe. This simple precaution is also of service in case of laceration, and tends to prevent the formation of adhesions and misplacements.

The Man for Guernseys.

D. H. Looney of Jefferson, Ore., who won both grand championships on Guernseys at the A. Y. P. stock show who has been breeding Guernseys continuously for a good many years, says: "The demand for pure bred dairy cattle is naturally affected by the condition of the dairy industry, and dairying is affected by the price of dairy products. The scarcity of the Guernseys and their growing popularity make their sale good. They are bringing as much as, or a little more than, ever before. For myself, I must say I am unable to supply the demand and I do not know any other Guernsey breeder in the northwest who can."



D. H. Looney, Jefferson, Ore.

Clallam County Tests.

During the 30 days ending February 18, there were 120 cows in the Clallam County Cow-testing association of Washington, producing over 30 pounds butter fat and seven cows producing over 50 pounds fat. There were four herds totaling 55 cows which averaged over 30 pounds fat for the month. The following table gives the records of cows producing over 50 pounds of fat during the month:

Owner and Breed.	Milk Lbs.	Fat Lbs.	Cost Feed.
Edwin Pettit, P. B. J....	1239.0	64.42	$10.53
Edwin Pettit, P. B. J....	1110.0	56.61	10.53
Edwin Pettit, P. B. J....	828.0	50.50	10.53
P. A. McNamara, Gr. J..	1050.0	52.50	8.97
E. F. Gierin, P. B. H...	1458.0	52.48	11.65
E. F. Gierin, P. B. H...	1278.0	48.56	11.65
Lue Doran, Gr. J.....	1005.0	50.25	15.54
George S. Willis, Gr. J....	822.0	50.14	8.84

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American preserves are need in Argentina.



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The New 1917 De Laval

And now, in the De Laval machines for 1917, a number of new and still further improvements have been made, which make the De Laval machines of today much better in many respects than they have ever been before.

Their capacities are greater per dollar of cost; they skim cleaner under the more difficult conditions of separator use; they are equipped with the most improved speed regulator, thus insuring the proper speed necessary for complete separation; they are even better lubricated, and the bowl construction is even more sanitary than ever.

In other words, superior as the De Laval machines have always been to all would-be competitors and utilizers of abandoned De Laval features, the De Laval machines of 1917 are improved and superior in every way to all previous types and models of De Laval construction.

All these improvements and new features are described and explained in the new 1917 De Laval catalog now ready for mailing, but some of them are difficult to describe and make fully understood by words.

Be Sure to See a New De Laval

The new De Laval machines themselves best explain their new and superior features, and their use does this more completely and convincingly than even an examination of them. Every local agent is glad to afford opportunity for examination, and better still, for home test of a new De Laval machine.

But the demand for the new machines is a month ahead of the possible supply under the present difficult conditions of manufacture and freight distribution. More De Laval machines by half have been made in 1917 than ever before, but the De Laval works are now ten thousand machines behind actual orders, and the demand is ever increasing.

Hence, the importance of securing a machine quickly if your local dealer happens to have one, and of ordering well ahead if he does not. And likewise, the importance of waiting patiently a little for a machine if need be.

A new De Laval catalog will be gladly sent on request, and if you don't know your nearest local agent please simply address the nearest De Laval main office as below.

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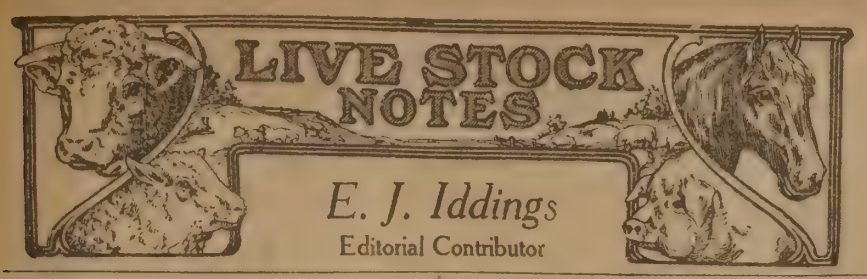
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Read the Want Ads in This Issue

New ads appear each week in the "Want Ad" department of this paper. Just take a few moments to look them over you may find something you have been looking for to repay you for your effort.



PEA RATION FOR PIGS

Shown to Be the Most Fattening.

By Fred Schroeder.

Experiments being conducted on the Washington State college farm with a pea ration for pigs shows that the hogs are fattening more quickly than on other standard rations. Fifty hogs are being used in the experiment being conducted by Benton M. Bangs, whose work in supervising the experiment will entitle him to master's degree in agriculture.

The animals are divided into four lots, and are being fed as follows: Lot 1, barley 60 per cent, shorts 30 per cent and oil meal 10 per cent. Lot 2, peas 60 per cent, shorts 30 per cent, tankage 10 per cent. Lot 3, peas, 60 per cent, shorts 30 per cent, oil meal 10 per cent. Lot 4, barley 60 per cent, shorts 30 per cent, tankage 10 per cent.

Lot 2, handfed, is showing the best results, with lot 3 second, both being a major ration of cleanings or cracked peas. The hogs are being weighed every week, the experiment being conducted over a period of eight weeks, being now in the last week.

SHEEP SALE

Clearing Houses for Small Breeders.

The secretary-treasurer of the American Hampshire Sheep association, writes:

To the Editor: This association, as you know, went on record at its last annal meeting as being in favor of holding an annual sheep sale somewhere in the east or middle west. The executive committee have since considered the advisability of making it a great national affair to include as many other breeds as may wish to join with us in the movement.

It is the purpose of this sale to make a clearing house for the small breeder who has not flock enough to make extensive advertising profitable, and provide also a place where the man who desires to purchase one or a carloan, may come and actually see the animals he is buying.

This should prove a valuable school. Of this we must use care, however. No inferior animals should ever be consigned to this sale. It will work as a boomerang if we do. Send only the good ones and have them in good flesh. I do not mean by this "high show" fit, but in good working flesh. At the National Wool Growers' sale at Salt Lake City last September, Hampshires averaged nearly $80 per head. Only good ones were there. We do not expect such prices as these here, but, if the sheep are good, the prices will be satisfactory.

COMFORT A. TYLER,
Secretary-Treasurer.

Detroit, Mich.

Veterinary

Dr. S. B. Nelson

I have a cow that has lumps all over her back, known as warbles, which hatch in the spring and become very annoying to the animal. Is there anything that will exterminate them in the dormant state? L. S. B.

Greenacres, Wash.

No, I do not know of anything that will exterminate them in the dormant stage by applying it to the cow's back. Some people have advised squirting a little gasoline into the warbles, but that is not a very satisfactory thing to do. I think the best thing is to daily squeeze the lumps until the warble's larva pops out. Then destroy it by crushing. Next year during the summer season when the warble bot fly is flying paint the parts of the body, such as the legs and neck, where the fly deposits its eggs with some substance containing a heavy oil. It does not matter much what kind of a heavy oil is used. Some people use linseed oil and some people use fish oil—anything to keep the egg from sticking to the hair.

1. What are the requirements under the laws of Washington for owner, to comply with in placing stallion for public service? 2. About four weeks ago I lost an eight-month-old calf that had always done well since birth. It appeared to get stiff and lost all control of its hind quarters, could not stand or even move hind feet. Had a good appetite all the time. Now I have another calf in the same condition.

Smyrna, Wash. T. C.

1. The state laws of Washington require that any stallion which is offered to the public for service must have been examined by a registered veterinary practitioner and must have had an examination of soundness. The law prescribes what constitutes soundness. Then after this veterinary practitioner makes his report to the commissioner of agriculture at Olympia the commissioner sends to the owner a certificate of soundness giving the owner permission to place the stallion on the public stand for service.

2. It is possible that the disease affecting your stock is hemorrhagic septicemia, although I am not sure of my diagnosis, but there are some of the symptoms which would indicate this trouble. I would recommend to you that you thoroughly disinfect the quarters where you are feeding your young animals. Use for this purpose first one part of corrosive sublimate to 1000 parts of water. Three days later whitewash the entire inside of the calf quarters. Whitewash floors, walls and everything you can reach. For the latter, the whitewashing, you could use a cheap spray pump. For the first disinfecting with the corrosive sublimate you should use an old broom. That is the best advice I can give you in this case.

I have a heifer giving milk since July, 1916. She seems to be in good health, eats well and is lively. At times I notice an enlargement like an enlarged vein in her teats and then there are small clots of blood in the milk. What is the remedy for grubs that form just under the skin on a cow's back?

E. W. M.

Ford, Wash.

Try painting the teats with tincture of iodine when the condition comes on which you mention. Also give her one teaspoonful of hyposulphite of soda in one quart of water once daily. Regarding the grubs, the best treatment is to squeeze out the grubs catching them in some scall vessel turned upside down over the abscess and then crush it. That prevents the formation and development of the warble fly. Then next summer during June and July apply to the cow where the warble lays its egg along the legs, shoulders and part of the back, some oily substance, such as linseed oil and tar, or fish oil and tar. This will prevent the fly from laying its eggs and causing the trouble.

I have a mare that is slightly windbroke. Is there a cure? H. I. J.

Winlock, Wash.

There is no specific cure for a windbroken horse. Cut the animal's feed down one-half, lessen the hay fed even more than this if possible. Sprinkle the hay and the grain with water. Give one ounce of Fowler's solution of arsenic once daily for a couple of weeks, rest a couple of weeks and continue the treatment.

Is it best to breed 2-year-old mares or wait until they are older?

Twin Falls, Idaho. J. A. P.

Some breeders believe that it is a wise thing to breed a good large 2-year-old mare so that she will foal at 3. They believe that it broadens her and makes her larger. Other breeders prefer to breed at 3 and foal at 4. I think the larger percentage of breeders prefer the first.

I had a mare choke on dry beet pulp and whole oats; called a veterinarian at once but was unable to get him. In the meantime oil was given her and in five minutes' time she started to breathe fast. Later the veterinarian came and at first sight said the mare had pneumonia. I told him we had given her oil and he said some of it must have gone to the lungs as they were rattling bad by that time. He did not try very much to remove the choke but the next day tried and stopped because it made breathing much harder. The next day they got the choke out and I think she would have died soon but with the veterinarian's care lived 17 more hours. The veterinarian said on examination of the lungs that the oil killed her. Can a horse die with pneumonia in 58 hours?

Milltown, Wash. SUBSCRIBER.

Yes, a horse can die in 58 hours and less with pneumonia. Sometimes they die as soon as eight or 10 hours in very severe cases.

Reports Big Litters.

John B. Peterson of Montborne, Wash., reports that the pigs on his place this spring are averaging 13 1-2 pigs to the litter. One sow had 14, another 15 and another 16. They were sired by his boar "Red Dandy."



ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.

Reduces Bursal Enlargements, Thickened, Swollen Tissues, Curbs, Filled Tendons, Soreness from Bruises or Strains; stops Spavin Lameness, allays pain. Does not blister, remove the hair or lay up the horse. $2.00 a bottle at druggists or delivered. Book 1 M free.

ABSORBINE, JR., for mankind—an antiseptic liniment for bruises, cuts, wounds, strains, painful, swollen veins or glands. It heals and soothes. $1.00 a bottle at druggists or postpaid. Will tell you more if you write. Made in the U. S. A. by

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The Standardized, Reliable Dip and Disinfectant.

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We will send you free a booklet on the treatment of mange, eczema or pitch mange, arthritis, sore mouth, etc.

We will send you free a booklet on how to build a hog wallow, which will keep hogs clean and healthy.

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SEATTLE
BE SURE AND MENTION THIS PAPER

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This Grade Guernsey Cow

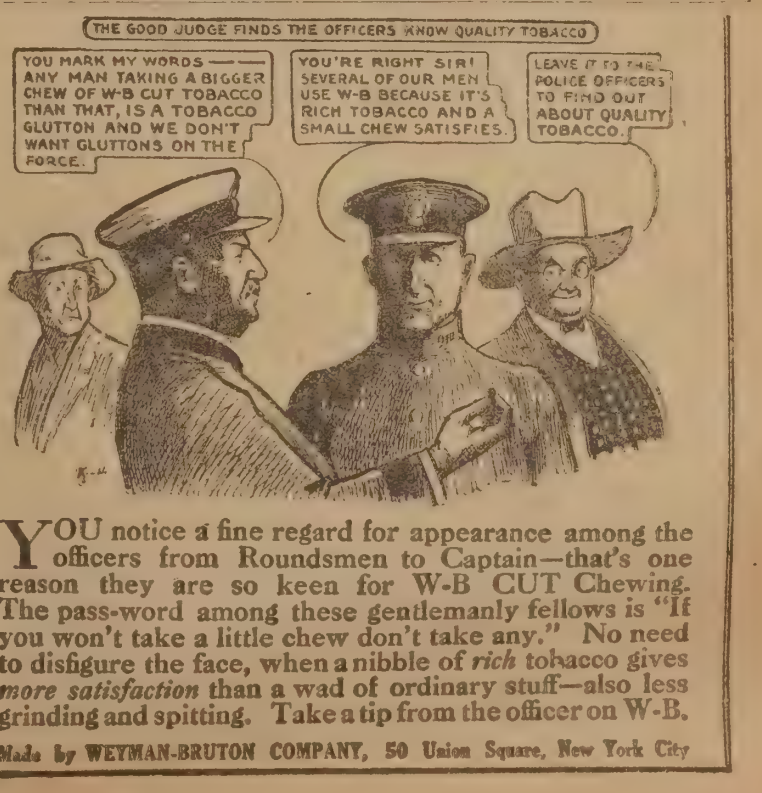
Her milk production for the year was 16286.1 lbs.

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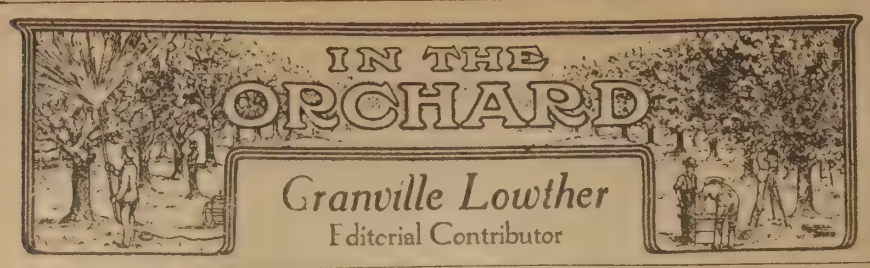
THE AMERICAN GUERNSEY CATTLE CLUB
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YOU notice a fine regard for appearance among the officers from Roundsmen to Captain—that's one reason they are so keen for W-B CUT Chewing. The pass-word among these gentlemanly fellows is "If you won't take a little chew don't take any." No need to disfigure the face, when a nibble of *rich* tobacco gives *more satisfaction* than a wad of ordinary stuff—also less grinding and spitting. Take a tip from the officer on W-B.

Made by WEYMAN-BRUTON COMPANY, 50 Union Square, New York City



TOBACCO SPRAY

After Two Years' Experiments.

F. A. DeSellem, fruit inspector for Yakima county, Wash., has for the last two years been making some experiments with nicotine sulphate as a spray for scale and codling moth. These experiments have not been carried far enough to warrant final conclusions, but they at present seem to justify the prediction that in the near future tobacco spray will take the place largely of lime-sulphur and arsenate of lead. Its value seems to be that it not only kills the scale and codling moth, but aphis and other insects as well. It is also claimed that it checks, but does not entirely prevent, the spread of blight.

Mr. DeSellem summarizes his conclusions in a bulletin he has published as follows:

"1. While we are not ready to make a final statement, the work during 1915 and 1916 indicates that nicotine sulphate acts as a material check to the work of the codling moth.

2. At the present prices for nicotine it would not be advisable to substitute nicotine sulphate for arsenate of lead in codling moth control alone, but where aphis and sucking insects are to be controlled the omission of lead will result in a considerable saving.

3. In the above demonstrations when nicotine sulphate and arsenate of lead have been used side by side the former has proved as efficient as the lead in codling moth control and has kept the trees free from all sucking insects.

4. Trees sprayed with nicotine sulphate showed much higher percentages of extra fancy and fancy fruit than the trees sprayed with lead. The fruit was more highly colored.

5. Observations during the seasons of 1915 and 1916 indicate that the nicotine acts as a material check to the spread of San Jose scale.

6. In the nicotine sprays the addition of soap is advisable.

7. It does not seem necessary to use nicotine stronger than 1 to 800 for codling moth, and 1 to 1024 has given nearly as good results.

8. It is expected to continue the work under the most severe conditions this coming season." G. L.

The Farm Garden

Article 5

THE CABBAGES

A Few Facts About the Cabbage Family, Including Cauliflower, Brussels Sprouts and Kohl-Rabi.

Cabbage, cauliflower, kale, Brussels sprouts, kohl-rabi, radishes and turnips belong to what is known in garden science as the mustard family, but with the exception of the two latter they might well be termed "the cabbages."

They all require the richest of soil, with the exception of cauliflower at one particular stage in its growth; they can endure considerable cold; none of them is able to combat extreme heat, and with the exception of the radish and the turnip, they require comparatively long seasons, except where specially early varieties of cabbage have been developed.

Cabbage, cauliflower, sprouts and kohl-rabi should be started in the hot bed, but this is not essential if the season is long enough and the spring free enough from excessive cold.

Cabbage—One ounce of good cabbage seed will produce enough plants to set a quarter of an acre. The plants should be set in rows three feet apart and two feet apart in the row. A quarter of an acre will accommodate approximately 1800 plants. The soil should be rich and heavy, well fertilized and containing plenty of humus. Cultivation should be intensive. As the heads begin to form, unless the soil is very rich, it is profitable to work into the surface a quantity of sodium nitrate, depending upon the degree of soil fertility and the available moisture. An application of from 20 to 30 pounds on a quarter acre cabbage patch is recommended as a general average.

Cabbage must have plenty of moisture and must be planted where extreme heat may be avoided even though moisture is plentiful.

Cauliflower—In general, as to transplanting, soil requirements, cultivation and the like, the same rules should be followed for cauliflower as for cabbage. Prior to heading time cauliflower is almost as resistant to frost as is cabbage, but the heads are very sensitive, and a slight touch of frost means ruin. Partially as a protection from frost, but more essentially for blanching purposes, the outside leaves of cauliflower should be tied about the head as it begins to take form. The plant is also extremely sensitive to high degrees of heat.

A quarter of an ounce of seed will produce about 800 plants. The seed is comparatively expensive. Cauliflower cultivation is considered difficult, but with proper conditions and judicious care it may be made one of the most valuable vegetables of the farm garden.

Brussels Sprouts—In starting, transplanting and cultivating follow the same general methods as with cabbage. Sprouts are hardy. They require about the same space as cabbage. They are slow growers. It requires from 16 to 20 weeks from planting to produce the little heads that develop on the main stem where the leaves branch off. Brussels sprouts are also generally admitted to be difficult of successful production in this country, but where good soil, long seasons and plenty of moisture are had they also may become valuable adjuncts of the garden.

Kohl-rabi—This plant is also able to resist much frost and therefore may be planted in the open ground instead of the hot bed when not desired for early production. Kohl-rabi is one of the least common of garden vegetables. Its edible part consists of an enlargement of the main stem, its nature and flavor being much the same as that of the heart of a cabbage head. If not transplanted from the hot bed it should be sown in rows and thinned to stand five to eight inches apart. Rows should be 15 to 20 inches apart. Half an ounce of seed will produce 1000 plants, or probably 400 feet of row after thinning.

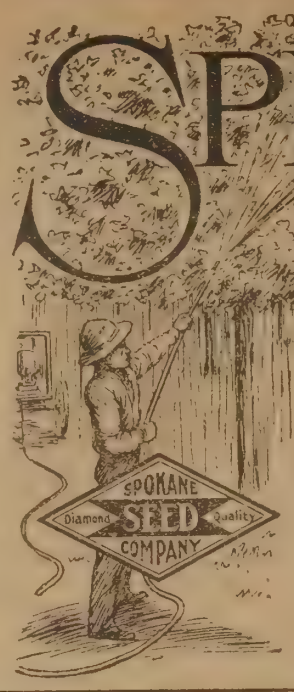
What Is Humus?

The Farmer has been asked to explain the meaning of the term "humus," as used so frequently in discussions of of soil problems.

Humus is the substance formed in the soil by decaying vegetable matter, such as leaves, stubble, roots, manure, crop plowed under and so on. Humus not only comprises elements of plant food itself, but it has the power of holding the necessary nitrates of fertile soil to prevent their escaping through washing or other means. It also has the effect of a sponge in absorbing and holding moisture in position and form available for the use of growing plants and aids in keeping the soil porous. Humus is indispensible to plant growth. Poor crops are in many cases due to its lack.

Gold.

Gold was known from the earlier historic times, and is mentioned in the eleventh verse of the second chapter of Genesis. At first it was chiefly used for ornaments. The trade of the goldsmith is mentioned in the fourth verse of the 17th chapter of Judges, in connection with the overlaying of idols with gold leaf.



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Our seeds are 99% (or better) pure. Your home dealer can supply you—if not, write us. We have been here for twenty-five years in the seed business.

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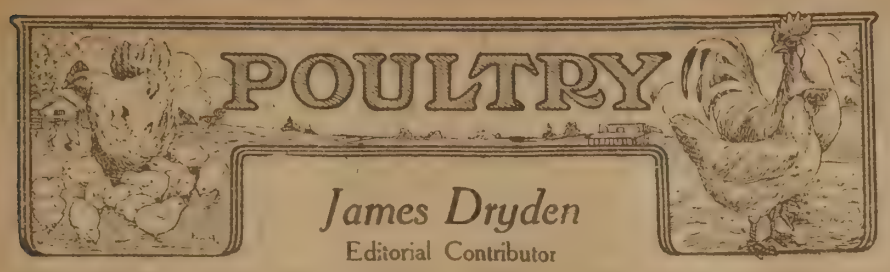
Worth While Offers

In the want ads of this paper you will find frequent attractive offers.

In answering advertisements don't fail to mention this paper.

New Spokane Incubators and Brooders
are sure hatchers. Built to suit Pacific northwest climate. Hot water or electric. Top raises like a lid, permitting turning of eggs without taking from machine. Seven styles and sizes. Prices, $7.50 up. Write for new catalog, which contains new ideas about chick hatching.

Spokane Incubator Company 3429 Haven St. Spokane, Wash.



At this writing, (March 19) eggs are 6 or 7 cents higher than they were a year ago. This extra price will go far toward paying for the extra cost of feed.

The demand for eggs for hatching and day old chicks of utility strains is unprecedented in the Pacific northwest, and the orders are being filled right at home. As good laying stock can be procured in this section as in any other section of the United States. If breeders will continue the good work and use the trapnest, Oregon, Washington and Idaho will soon be shipping out quantities of heavy laying stock to states in the east.

Give the farm boy a setting or two of eggs of some heavy laying strain. Then give him the coops and feed necessary and see what he can do with the pullets next fall and winter. But get them from good pedigreed layers. Don't discourage him by giving him some poor layers. The care of a pen of good chickens will show the boy that there is a relation between effort and results, and the results will be eggs and pocket money. J. D.

Records

In All-Northwest Laying Contest

The following are the pens in the all-northwest laying contest which have made the highest records from October 15, 1916, to March 1, 1917:

	Eggs.
J. A. Hanson, Corvallis, Ore., White Leghorns	299
Oregon Agricultural college, Corvallis, White Leghorns	289
Mrs. W. T. Thompson, Bozeman, Mont., White Orpingtons	265
Abercrombie & Witbeck, Kerrisdale, B. C., R. I. Reds	265
F. F. Solly, Westholme, B. C., White Leghorns	265
J. R. McRae, Milwaukie, Ore., White Leghorns	261
P. W. Harries, Seattle, Wash., White Leghorns	259
D. Tancred, Kent, Wash., White Leghorns	252
C. Daniels, Hoquiam, Wash., White Rocks	252
Hi-a-Hee P. Products Co., Grants Pass, Ore., Barred Rocks	251
Oregon Agricultural college, Corvallis, Barred Rocks	248
V. L. Garner, Wenatchee, Wash., White Wyandottes	242
Bliss & Bliss, Southworth, Wash., Barred Rocks	241
B. O. Longsdorf, Lebanon, Ore., White Minorcas	238
A. Unsworth, Sardis, B. C., White Leghorns	233
G. M. Brown, Los Angeles, Cal., Rhode Island Reds	237
J. D. Balmat, Spokane, Wash., White Leghorns	237
Auburn P. Farm, Auburn, Wash., Barred Rocks	227
George D. Adams, Victoria, B. C., White Wyandottes	226
Paul B. Towne, Tekoa, Wash., White Leghorns	224
Valley Farm, Boerne, Texas, White Leghorns	224
Oregon Agricultural college, Corvallis,	224

The highest record for the month was made by a pen of Barred Rocks owned b ythe Auburn Poultry farm, Auburn, Wash. The highest individual record for the full term was 86 eggs, made by a White Leghorn hen owned by K. Hammerbacher, Grants Pass,, Ore. The highest individual record for February was 22 eggs, made by a Barred Rock hen entered by William Coats, Vancouver, B. C.

Geese

Start With a Few and Increase

By JAMES DRYDEN.

A subscriber at Riverton, Utah, asks for "information on the raising of geese." I would refer this correspondent to an article in these columns of the issue of August 17, 1916. A farmers' bulletin on ducks and geese has been published by the United States department of agriculture, and a letter to the department would doubtless bring the bulletin, if it is still in print.

Another correspondent, in Oregon, wishes to know how much land would be necessary for 1200 geese. To give a proper answer to this question requires a rather wide knowledge of the subject. Literature on geese raising is not very extensive, and I know of no bulletin or other publication that gives the necessary knowledge for properly handling a flock of geese of this size. Besides, I know of no farm that raises this number of geese. That does not prove, however, that such a thing is impossible. It is possible. If it is possible to raise a dozen geese, it is possible to raise a hundred dozen. It is all a question of knowledge. Because a thing is not done, we are too often ready to say that it is impossible. The best way, however, to achieve the impossible is to begin with the possible. Start with a small number and increase. As geese live largely on pasture grasses, with little grain, they must have considerable range. I would say that 100 acres would be none too little for 1200 geese, according to what information I have. The idea would be to give them plenty of good pasture all summer, so that they can not eat the grass all off and foul the land. Then the farm would have to be divided into a number of fields, as it would be not be profitable to run that number of geese together.

Thomas Manion of Mount Carmel, Pa., owns a 30-year-old hen.

Blood Spots

Found in Eggs From Healthy Hens

Consumers of eggs are accustomed to finding occasionally an egg with a blood spot. This spot does not really mean that the egg is bad though the consumer is likely to refuse to use it. For that reason the poultryman who wishes to retain good customers candles the eggs and thereby makes sure that they are free from blood spots.

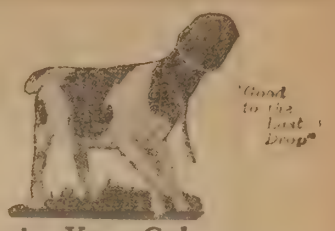
The question is frequently asked, what causes blood spots and what is the remedy. The cause is supposed to be drops of blood that enter the oviduct with the yolk and before the albumen is put on.

The organs concerned in the production or making of the egg are the ovary and oviduct. The yolk is formed in the ovary. There are hundreds of little yolks or ovules that are developing into full-sized yolks or awaiting the proper opportunity to develop. Each of these yolks is surrounded by a thin membrane called a follicle. As the yolk enlarges and reaches full size this follicle or sac bursts or ruptures, permitting the yolk to leave the ovary and enter the mouth of the oviduct. Sometimes when the sac ruptures there are drops of blood that enter the oviduct with the yolk. In the oviduct the yolk is enclosed or surrounded with the albumen and the drop or drops of blood are also enclosed.

Blood spots may come from hens that that are perfectly normal and healthy. J. D.

Do You Know That

The legislature of your state does not meet again until 1919?



Raise Your Calves on

Blatchford's Calf Meal

and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.

Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Factory, Dept. 58 Waukegan, Ill

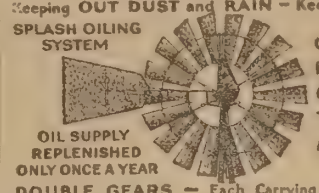
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Spokane, Wash.

SELF-OILING WINDMILL

With INCLOSED MOTOR

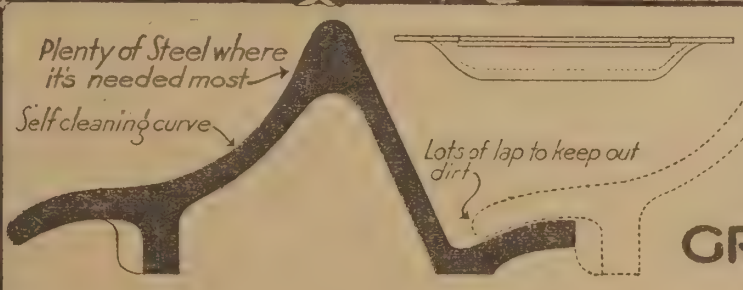
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DOUBLE GEARS — Each Carrying Half the Load

Every feature desirable in a windmill in the AUTO-OILED AERMOTOR

WRITE AERMOTOR CO. 2500 12TH ST., CHICAGO



The YUBA GROUSER PLATE

(CAST STEEL) 55% CARBON.

IT IS as impossible now as it was three years ago to improve the basic design and principle of the *Yuba Ball Tread Tractor.* But, in studying every part of the machine under constant and strenuous service, we have discovered opportunities for minor changes.

The new tread or grouser plate is one of the interesting features of the new Model 20-35. It is made of high carbon steel, four times as strong as cast iron, twice as stout as ordinary steel. Double the wear of the pressed steel track is assured.

The former shoe, pressed from a steel plate, was unavoidably thinned and consequently weakened at the point of bend—the very place where the wear came. The new shoe is reinforced at this point by at least three times as much as high carbon steel.

It is boltless—no nuts to loosen, nothing to watch. It is self-cleaning. It has the maximum traction—will work in the softest soil. There is no opening for rubbish to work in between the treads.

The track upkeep of *The Yuba Ball Tread,* already less than that of other tractors, will be practically cut in two by the adoption of this tread shoe or grouser.

This is just one of the features of the New Yuba Model 20-35.

Yuba Manufacturing Company

Formerly The Yuba Construction Company
(Change in name only)

433 California Street, San Francisco

Factories at
Marysville and Benicia
California



Yuba Manufacturing Company
433 California Street
Department C2
San Francisco, California

Gentlemen: Kindly send me catalog and prices on Yuba Ball Tread Tractor.

I am interested in { *Model 12-20.* / *Model 20-35.*

Name .....

P. O. Box .....

Town .....

State .....

Size of Farm .....

Check main crop raised:

Fruit *Rice* *Grain*
Grapes *Hops* *Alfalfa*

Donkey Is Some Lifter

Farm Information Contest Lifts the Veil

By FARM INFORMATION EDITOR

While our contestants are busy thumbing the Bible to ascertain whether the book of Hezekiah appears in the Old or the New Testament, I would like to discuss some of the other questions in the farm information contest.

"What boy's name is also the name of an animal and a device for lifting?" runs question No. 51. Somebody writes to remark that the question might have been phrased equally well, "What boy's name is also the name of two devices for lifting?"

That is probably true, granting that "Jack" is the name which answers the question. We have Bill Nye as authority that the donkey is about as successful a device for lifting as is the mechanical jack. In describing his experience as editor of the "Boomerang," at Laramie, Wyo., he said that his newspaper office was located over a livery stable.

"You could enter the office by an outside stairs," he said, "or you could just step inside the stable, twist the old gray mule's tail and take the elevator."

One question which seems to be a stunner to many of our contestants is No. 22, "Where is the key of the bastile?"

Some of our contestants write to assure us that the key is no longer in existence; that, in fact, it was destroyed together with the bastile. One contestant declares that he has read French history from cover to cover and has failed to find any trace of the old key. He put the question up to a college professor who had visited Paris and the site of the old bastile and was told that there must be some kind of "catch" in this question.

This college professor has evidently overlooked a very pretty little incident in American history, and should inform himself more thoroughly on details if he purposes to go on "professing." I wonder what George Washington would think if he were told that the key to the bastile was destroyed. I imagine he would become indignant at any suggestion that he had been a party to a fake exhibition.

The farm information editor must apologize to his contestants for question No. 39, "What brand of oil widely advertised in this paper is formed by combining a word meaning a very low temperature with a word meaning thin."

The answer to this question was appearing in The Farmer every week up to the time that this contest opened. Then the makers of Zerolene must have found that their advertising was selling them out of their product. Any way, Zerolene advertising was abandoned entirely in this paper, which makes it necessary to score all contestants 100 on this question without regard for their answers. Some seemed to satisfy themselves that "gasoline" answers the question, but it does not.

It is very enjoyable to receive so many sidelights on the contest, but I am somewhat annoyed at attempts to expose the identity of the farm information editor. Several contestants request his name, and two spinsters—who fail to state whether they have any money—request his photograph.

"I like your stuff," one of them writes, but experience has taught me to be chary of compliments. This is not a popularity contest and my conceit will be controlled until I am assured that I am not being "kidded." Speaking about popularity, I never forget the story told by Charley Case, burnt cork comedian, who recently committed suicide in New York, about his sister Mary.

"Don't you know," he began, "my sister Mary is the most popular girl in our town. Why, she attended one of these parties the other night where you have to kiss a girl or give her a dollar, and Mary came home with thirty-five or forty dollars."

Now is the time to get into the farm information contest, but I would advise that before starting you secure our contestant's helpful outfit, which is included with every new, renewal or extension subscription to The Farmer.

Those who gave the correct solution in the figure contest are now working the second or tie-deciding problem, and the awards will be announced just as soon as these charts are returned and time is given to size up the results.

More Millions

For Farm Education Are Provided

(Continued from page four.)

are preparing to enter upon the work of the farm or of the farm home;

That the state or local community or both shall provide the necessary plans and equipment for such education in schools and classes in the state;

That the amount expended for the maintenance of such education in any school or class shall be not less annually than the amount fixed by the state board with the approval of the federal board;

That such schools shall provide for directed or supervised practice in agriculture, either on a farm provided for by the school or other farm, for at least six months a year;

That the teachers, supervisors or directors of agricultural subjects shall have at least a minimum qualification determined for the state by the approval of the federal board.

In order to receive the benefits of the appropriations for the salaries of teachers of trades, home economics and industrial subjects, similar provisions are made, as well as for workers over 14 years of age who have entered upon employment in part time schools, and that the state or local community, or both shall provide the necessary plant and equipment.

The state treasurer is named as the custodian of all moneys received under this act

It is also emphasized that no portion of any moneys appropriated under this act shall be applied directly or indirectly to the purchase erection, preservation or repair of any building or buildings or equipment, or for the purchase or rental of land.

No portion of any moneys appropriated under this act for the benefit of the state shall be applied directly or indirectly to the purchase, erection, preservation or repair of any building or buildings or equipment, or for the purchase or rental of lands, or for the support of any religious or privately owned or conducted school or college.

Pull Big Stumps by hand



Clear your stump land cheaply—no digging, no expense for teams and powder. One man with a K can rip out any stump that can be pulled with the best inch steel cable. Works by leverage—same principle as a jack. 100 pounds pull on the lever gives a 48-ton pull on the stump. Made of Krupp steel—guaranteed against breakage. Endorsed by U. S. Government experts.

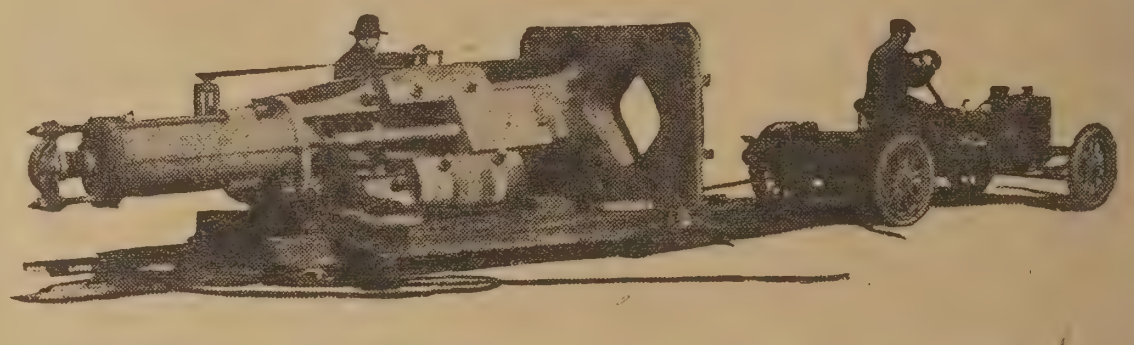


HAND POWER
K Stump Puller

Write today for special offer and free booklet on Land Clearing.

Walter J. Fitzpatrick
Box M
182 Fifth Street
San Francisco
California

In answering advertisements don't fail to mention this paper.



This proves, more powerful than words, the great pulling power of the Chalmers. A short time ago a big steam hammer arrived at the Chalmers works. It weighed in excess of 30,000 pounds. After it was unloaded from a freight car it had to be moved to a building a quarter of a mile away. A Chalmers chassis, just finished, was taken from the factory and a towing rope attached. Several times the rope broke and the steel rollers placed under the hammer were crushed like eggshells. The Chalmers, however, hauled the load with ease, and the hammer was in place in an hour.

Specifications

Engine—6 cylinders, bore 3¼ ins., stroke 4½ ins., piston displacement 224 cu. ins. Power—45 h.p. (on the brake test.) Starter—Westinghouse 2 unit. Carburetor—Stromberg, horizontal, hot air heated. Clutch—Dry disc, asbestos on steel. Fuel feed—Stewart-Warner vacuum system. Ignition—Remy distributor, Willard 80 ampere hour battery. Tires—32 x 4, chain tread on rear.

Prices

Five-passenger Touring	$1250	Seven-passenger Sedan	$1850
Seven " Touring	1350	Seven " Limousine	2550
Three " Roadster	1250	Seven " Town-car	2550

(All prices f.o.b. Detroit)

National Agrarian Party

Within the Possibilities of Next Decade

By E. A. Bryan

The time is fast approaching when the formation of a national agrarian political party will be worthy of careful consideration. It does not require a close observer to perceive that economic questions are becoming the determining factor in political alignments. The wage-earning, labor union fraction of society has become pretty thoroughly organized, and already places the aspirations of the group above any past political connections or predilections. Though the farmers and the laborers in the various industries have some things in common, particularly the fact of physical labor, they have many interests which are not in common and which are diametrically opposed.

For example, the cost of food products; the farmer wishes it to be high that he may receive a legitimate reward for his labor; the laborer wishes it to be low that the outlay for living may be less. For example again, taxes. The wage earner wishes large public expenditure that work may be plenty and wages high. He will always vote for a bond issue for the construction of public works. On the other hand, the farmer is a payer of taxes and opposes this increase, as a rule.

The truth is that the farmer is a capitalist who is his own employer, and in almost every instance when there appears to be diverse interests between capital and labor he finds his personal interests on the side of capital, even though he is one of the most diligent workers in the world.

While 80 to 85 per cent of our people were yet engaged in agriculture there was no need of an agricultural political party. But now that there are scarcely 40 per cent of the population engaged in farming, now that commercial interest, banking interests, manufacturing interests, transportation interests and labor interests are so concentrated, so thoroughly organized and have such ready access to the public ear, the time approaches when this largest and most fundamental class must consider the means of its own protection and the advancement of its own interests.

The Patrons of Husbandry (the grange) and the Farmers' Cooperative and Educational union, by the terms of their organization are nonpolitical, and, as a matter of fact, their membership belongs to all political parties. They are chiefly educational and social, and confine their political activity chiefly to propaganda for certain specific economic ends, such as rural delivery or parcels post. Such organizations must continue their usefulness, but do not quite meet the requirement of a national agrarian party, always with a large congressional representation, the party always aligning itself for offensive or defensive legislation in the interests of its class.

In many countries with constitutional governments there are and there have been in the past agrarian parties. In few countries is the government so distinctly in the hands of one or the other of two great political parties. Rather, is it in the hands of one or the other allied groups of parties, as the government of Great Britain prior to the war was in the hands of the Liberals, composed of the liberal party proper, the Irish group, the Labor group, etc.

The "issues" between the republican and democratic party are no longer sufficiently radical or comprehensive to meet the demands of their adherents. The recent campaign and election show that the high tariff and free trade no longer represent a true dividing line even though it as yet remained the most distinctive feature. Two party names, these or others, may continue, but they are likely to be made up of groups, such as the labor group or agrairian group, free to align themselves, as interest may dictate.

Our labor friends have been loudly proclaiming "nonpartizanism," yet they form the most partizan of parties, acting with a solidarity and an organization unequaled by any other party of the day. "Nonpartizan" has been made a shibboleth to jar loose the membership of a dominant party. A distinctively "agrarian" party is easily within the possibilities of the next decade. When it comes it will likely be a state as well as a national party, for its issues will be as strongly affected by state as by national legislation. This fact may modify the attitude of the country toward the election of a president by popular vote, for while the majority of the population is urban the majority of the states is rural.

Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER IV.

LIFE on a Big Bend farm 25 years ago was not wholly a round of monotony for a small boy. It is surprising how interesting a place "home" can be, even though it consists of a one-room, unpainted cabin set in a 320-acre wheat field—which, sad to say, did not produce very much wheat. There were times, however, when the cows and calves, my pony, the dog, the cat and my pigeons became tiresome, and I longed for children to play with.

My great desire was for "a creek" and trees and shade. Father had taken up a "timber culture," and the law required that he should put out 10 acres of trees. With eagerness, I dropped the box elder seed, following his hoe. I pictured myself climbing through the leafy branches of the box elder trees, peering into bird nests, or sitting quietly in a comfortable fork listening to the twittering of the feathered things. There would be tree squirrels, too, storing nuts in the hollows of the trees. Father explained that box elder trees would not have "hollows" in them for a long time; that the bunchgrass squirrels did not climb trees, and that nuts did not grow on box elders.

My dreams never materialized, for the climate in that part of the Big Bend was unfavorable to the quick development of trees. We managed to make a few of them grow around the house. It was surprising how much they added to the comforts of the place.

My longing for running water and lakes burned like the desert thirst. Wilson creek was 15 miles away, and it was not practicable to ride that far; though I have ridden 10 miles to play around a small lake south of Coulee City in which there were many tadpoles. I made boats with sails and took them to the Coulee lake to sail them. My greatest discovery was Garland's lake, which was five or six miles southwest of our place in the "scab rock." The lake was a half mile long by an eighth mile in width, quite deep in places, and contained many patches of tall tules, among which the wild ducks swam. The Garland family lived on the edge of the lake in a "pot hole," one side of which opened on the lake. The Garland boys were three—Bert, Jasper and Grover. We used to hunt around the lake, finding ducks' nests and scaring up many killdeers. These birds, as they hopped about on their long, yellow legs and uttered their peculiar piercing cries, were most fascinating to me.

Also, which was less pleasant, we scared up rattlesnakes now and then. Not only were there rattlesnakes, but there were moccasins and "blue racers." Oddly enough, the ponies feared the blue racers more than any other serpent. I was riding Rowdy through the rocks near the water's edge one day, and a blue racer darted from the grass right under his nose. He reared and shied sidewise so violently that he nearly flung me from the saddle. The Garland boys said that blue racers sometimes wound around horses' legs, which was why they were so greatly feared by the cayuses, as well as other range-bred animals.

By the time I was 14 or 15 I had learned to ride pretty well, though was far from the "puncher" class. I had ridden as far south as Wilson creek, 16 or 20 miles away; northward as far as the Grand coulee, a similar distance, and east to Wilbur, 20 or 25 miles. This territory, then in unfenced bunchgrass, was my range, my playground.

After Garland's lake and the adjacent "scab land" of moist, grassy pot-holes and many shaded clumps of "sarvice" bushes, the greatest wonder in my playground was the Grand coulee and Steamboat rock in the middle of its floor-like bottom. About 18 miles north of my home we struck the head of the Ladd trails, which led by a precipitous and hair-raising route down into the Grand coulee. In getting down the Ladd trails the first time I came near losing my life.

Lew Ames and I were hunting for a horse one day, and our ride took us far up into the Coulee country. During the day we made for water three times, and each time found a "dry hole," for it was late in summer. By the middle of the afternoon we were suffering acutely from thirst. Our ponies also were suffering for water. Lew said the nearest water was down in the coulee, but to get to it we must go down the Ladd trails. We feared the trails, but we feared our thirst worse. Riding up to the precipitous edge of the coulee, we could see on its level floor, about 800 feet below, the sparkling water of a small, flowing stream. A mile or two up there was a break in the wall, and at this point were the Ladd trails.

We made the first "bench" all right, though I am sure we were gray with fear on the way down. At several points the path followed the very edge of a brink, a step away from which was a drop of 100 or 200 feet.

On the second bench the path forked, and we did not know which was the right path. We turned to the right, and this path proved to be merely a coyote trail down the "shell rock" heaped a hundred feet high against the base of the high precipice. In fear and trembling, we made our way out on the shell rock. Then danger began. Our ponies' hoofs kicked loose many stones, which began to roll down the steep descent. Rocks above the ones we started were loosened in turn, and by and by great boulders began to bound down. We dared not turn back, and scarcely dared proceed—but the latter was the only chance, for, by going ahead, we could keep the moving stones in our rear. Thus we managed to get to the bottom with only a bad scare.

And then we made for water as fast as our tough ponies could run; after which we headed for Tom Ferguson's ranch, getting there at supper time. Upon invitation, we partook of the beans, sour-dough biscuit, bacon, "spuds" and dried apples which Tom set before us. He asked us about our trip down the trails, and we told him, explaining that we had come down coyote trail "just for the fun of the thing." Tom swore loudly, and told us not to do it again or we "would get our damfool necks broke."

Poor, old, lovable, cheerful, kind-hearted but drinking Bob Pugh was one of the most-loved friends of my childhood. Bob lived in a one-room cabin a

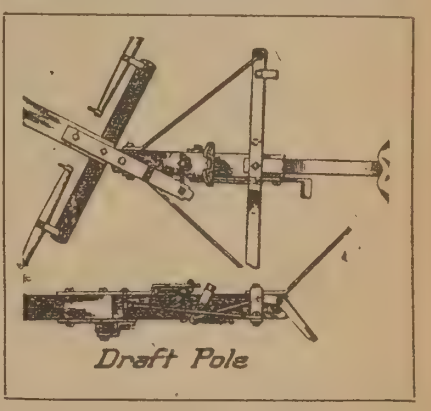
(Continued on following page.)

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Draft Pole for Agriculture Implements.

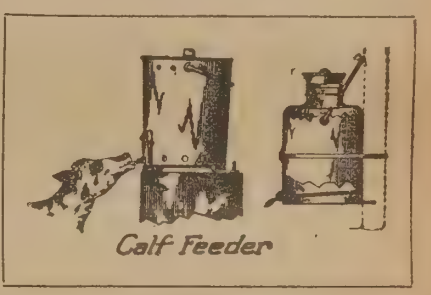
The latch at the rear end of this pole holds it rigidly in the straight position, or, if drawn back by the driver, permits the pole to swing sidewise. The extent of the side swing is limited by a link.



Draft Pole

Sucking Device.

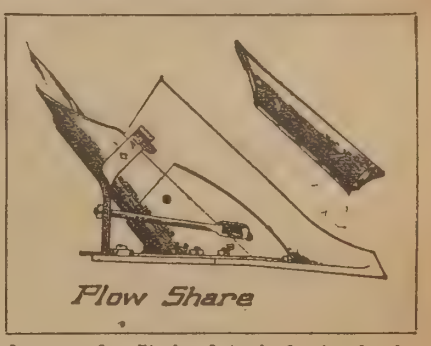
The special feature here is the nipple, which is in the form of a valve; it is closed normally, but is opened when the outer end is grasped in the mouth of the calf.



Calf Feeder

Detachable Plowshare.

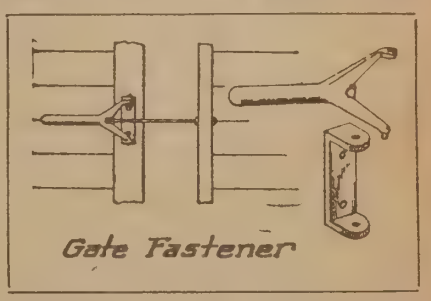
This plawshare is held firmly in place by means of three lugs and a draw rod. It is detached simply by loosening one nut.



Plow Share

Wire Gate Fastener.

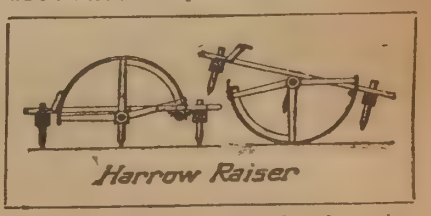
The free end of the flexible wire gate here has a hooked rod, which engages a hook on the forked handle attached to the post; the gate is held fast when the handle is forced in beyond the line of its pivot hinges.



Gate Fastener

Harrow Raiser.

The half wheels of this harrow, when released by the driver, make a complete revolution and thereby raise the teeth and free them from trash.



Harrow Raiser

A Million Letters Failed to Arrive

Carelessness in preparing letters for the mail caused many writers to wonder why they received no replies during the last year. No doubt many friendships were broken because letters went astray. No doubt many persons became much "peeved" on receipt of a second bill when they had sent the money in reply to the first.

The report of the postoffice department for the last year show that more than 1,000,000 letters reached the dead letter office in Washington because of improper address. Over 675,000 letters could not be delivered because of insufficient or illegible addresses; over 115,000 letters were mailed without any address whatever; over 220,000 letters were held for insufficient postage.

And perhaps, strangest of all, many of these oversights occurred on letters containing money. Nearly $2,225,000 reached the dead letter office in improperly directed envelopes. Much of this money was forwarded to the persons for whom intended or returned to the writers, but much of it could not be for lack of information even in the letters themselves.

Ups and Downs of a Bunch Grass Boy

(Continued from preceding page.)

couple of miles from our place. He could fiddle, sing, dance, tell funny stories by the hour, and, in moments of sobriety, could give rare good advice. In his housekeeping he was neat as a pin. He had a wonderful dapple-gray pony named Riley; a sow and some little pigs; a team of spirited horses, and 12 cats. He was Welsh, and the music of that race was in his voice and his soul—if only he could have let whisky alone! A rare good fellow was he, but his life was a tragedy. Since last I saw him, nearly 20 years ago, I have heard that he had "quit drinking," and again that he was dead.

Bob's place was a place of good cheer and thrift when he was at home and sober. When he was drunk it was as if a blight had descended upon it. Once I rode over to see him, and, peering through the window, saw him asleep in a drunken stupor on the bed. At other times I found the place deserted, and everything mussed and neglected while he was in Coulee City on a "tear."

Once I rode into his place, on which occasion his cats had multiplied to 12. The poor things were meowing about, hungry and thirsty. I knew that that year the coyotes were hungry, due to a scarcity of squirrels and very few calves on the range; that long before Bob would return from his "celebration" in Coulee the coyotes would have cleaned out his cats. I pitied the poor creatures, and finally rounded them up and shut them in the one-room cabin, setting a big pan of water on the floor and further provisioning them with a huge pile of accumulated baking-powder biscuits which I found in the house.

A week later, I think, Bob came home sobered up. He found his 12 cats in the house, all alive and in a fair degree of comfort. It requires no imagination to see why Bob found his house scarcely inhabitable to one of his fastidious neatness—and he was that neat when sober. I arrived at his place shortly after him. He had everything in the house thrown out in the yard, cats included, and was "cleaning house." As soon as I came within hearing, he began to swear at the blank-blanked son-of-a-blank who had no more blanked sense that to shut a dozen blanked cats in a man's blanked house and leave them there a whole blanked week. It was a blank of a trick to play on a man and his cats, he said.

IN THE NEXT CHAPTER THE MEMORIES OF THE BUNCHGRASS BOY LINGER FOR A LITTLE, GOING BACK OVER THE TRAIL. "THERE COMES TO MY MIND A PICTURE OF GRANDFATHER, GRANDMOTHER AND MY UNCLES SAM AND HARRY, STANDING ON THE SMALL DEPOT PLATFORM AT CARTHAGE, ILL., WAVING GOODBY TO FATHER, MOTHER AND ME AS WE STARTED OUR JOURNEY OUT WEST." MANY HAVE TOLD OF THE WESTWARD JOURNEY, BUT HERE WE HAVE THE CURIOSITY AND THE WONDERMENT OF THE CHILD ENTERING INTO RAILROAD TRAVEL AS PICTURESQUELY DESCRIBED AND AS REAL AS THOSE CHILDISH EXPERIENCES IN THE WAGON TRAINS OF THE EARLIEST IMMIGRANTS INTO THE FAR WEST.

Would Like it Repeated.

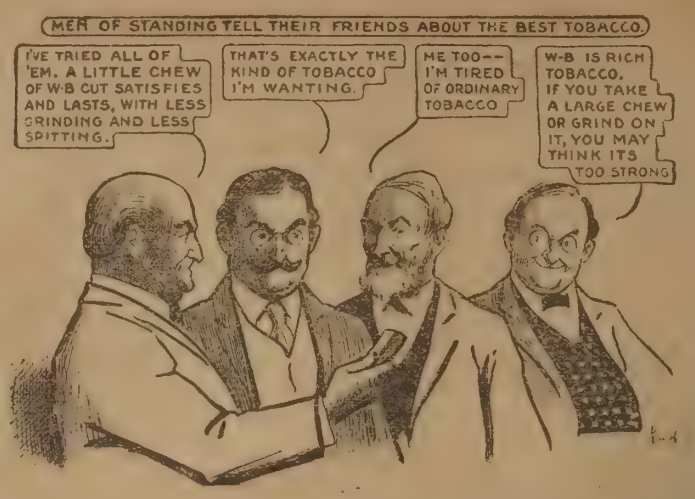
"Bang!" went the rifles at the maneuvers. "Oo-o!" screamed the pretty girl—a nice, decorous, surprised little scream. She stepped backward into the arms of a young man.

"Oh!" she said, blushing. "I was frightened by the rifles. I beg your pardon."

"Not at all," said the young man. "Let's go over and watch the artillery."

RECENTLY SURVEYED HOMESTEADS NOW OPEN.

Every reader of this paper should write at once for a free copy of "The Home Seekers' and Settlers' Guide." It tells all about the rich 160-acre free farms, excellent for growing grain and mixed farming, also what others are doing. Address Canadian Northern Railway, A. A. Brostedt, D. F. & P. A., 605 Hastings St., Vancouver, B. C., Canada. —Adv.



WHEN you gentlemen get together at your lodge meetings, somebody is pretty sure to start the little pouch of W-B CUT up the line for his brothers. It's conducive to brotherly feeling. There is gratitude for the *rich* tobacco that makes a *little* nibble go so *far* and for the touch of salt that brings out the *tobacco satisfaction* without so much jaw work.

Made by WEYMAN-BRUTON COMPANY, 50 Union Square, New York City

When you write to advertisers, be sure to say that you saw their advertisement in this paper.



SOW STERLING SEEDS for BETTER GARDEN CROPS

IMPROVING the yield and quality of your garden crops is important this year. Beans and many other food products are worth more now than at any time during the last quarter century. Yet you can raise a large portion of your family's food in your own garden and keep your table bountifully supplied with all kinds of delicious fresh vegetables at very slight cost.

Greatest success in gardening is attained only by sowing reliable seeds. Northrup, King & Co.'s garden seeds have been bred and selected for trueness to type, superior quality and heavy yield. They are carefully tested for germination and are especially adapted to sowing in the Northwest.

That's why it will pay you to be particular this year in asking your dealer for

NORTHRUP, KING & CO.'S SEEDS

NORTHRUP, KING & CO., MINNEAPOLIS, MINN.

All the World's a Stage, and All the Men and Women Merely Players

Prominent Figures in Russia



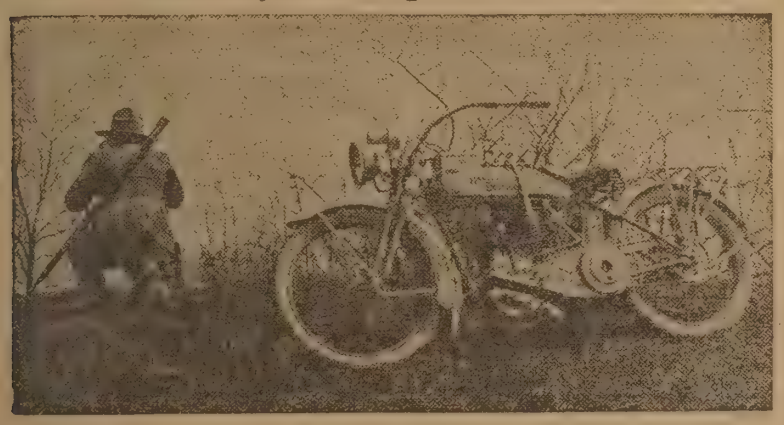
—Copyright by Underwood & Underwood.

Prof. Paul Miliukoff. Grand Duke Michael. M. Rodzianko.

The foreign minister in the new Russian cabinet, Professor Paul K. Miliukoff, has grave problems to solve. Grand Duke Michael Alexandrovitch, brother of the czar, was offered the regency of Russia. He has been at odds with the emperor for many years. Grand Duke Michael is strongly opposed to German influence in Russia and in the imperial family. Michael will accept the regency only upon approval of the people. M. Rodzianko, president of the Russian duma, formed an executive committee of duma members, which seized the reins of the Russian government.

Rodzianko was the leading figure among the deputies, who unanimously decided to oppose the imperial order for a dissolution of the house. They continued their session, and M. Rodzianko informed the emperor, then at the front, that the hour had struck when the will of the people must prevail.

Motorcycle Corps War Asset



The motorcycle riders of the United States do not intend to be left behind in any preparedness campaign that may result from the international crisis. Already there is a well-organized movement on foot to start a company of motorcycle volunteers in every community in which 25 or more riders can be gathered into a company. The promoters of the plan have received an unqualified indorsement of the value of the motorcycle in military organization from the war department. Ralph A. Hayes, private secretary of Secretary of War Baker, in an answer to a letter written Secretary Baker, outlining the plan for the organization of motorcycle volunteers, said:

"Doubtless, in case the present crisis should unhappily become more acute, the services of motorcyclists would be very necessary and valuable. The experience of the contending forces on the other side of the ocean demonstrate that motorcycle forces can and must be used for service which would be less satisfactorily performed by any other branch of the service."

Captain Davis, assistant quartermaster in charge of the entire southern district, in a recent interview, said of the motorcycle forces on the Mexican border: "Motorcycles have proved very satisfactory in service on the border. All of the officers want them, and if war should come we will have to have many more of them." With these indorsements, it is believed that it will not be difficult to interest the riders to form local organizations, so that they will at least be partially prepared should their country need them.

Ancient Bagdad Is Captured by British



—Photo by International Film Service.

Ancient Bagdad has fallen into the hands of a British force, led by General Maude, after a desperate stand by the Turkish defenders. The British found large military stores left behind and an item in the booty included 500 wounded Turks.

Can Distinguish Friends From Foes



—Photo by International Film Service.

Montraville M. Woods of Boston, has just invented a torpedo which he claims can distinguish friend from foe. The whole makeup hinges upon the microphone, or detectaphone. This is how the inventor says it would work in the event of attack by hostile warships upon an American port: The microphones are all set. When the sound of the oncoming vessels is picked up by the microphones, they are telegraphed to the mechanical brain of the torpedo. The brain, upon receipt of the message, closes a circuit which releases the anchor pin and starts the propeller. Away speeds the torpedo, 40 miles an hour, straight toward the source of the sounds to which it has been tuned.

General Lake.



Here is General Sir Percy Lake, commander of the British forces on the right bank of the Tigris. He is working under the general direction of General Maude, in command in Mesopotamia.

General Maude.



The above is a picture of General F. S. Maude, who, by taking Kut-el-Amara, has retrieved one of the greatest British blunders of the war. It is noted by the English with pride that he required but 73 days to take the place, while General Townshend's little garrison held it for 146 days against the Turks.

Just a Question of Time.



Pittsburg Times.

The Resurrection.



Brooklyn Daily Eagle.

How Long Can He Hold Her?



New York Evening [illegible]



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

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CHAPTER XIII.—(Continued.)

After perhaps half an hour we encountered Buckingham with his lawyer-knight, Johnson. They had evidently walked out to this quiet path to consult about the situation. As they approached, Mary spoke to the duke with a vicious sparkle in her eyes.

"My Lord Buckingham, this shall cost you your head; remember my words when you are on the scaffold, just when your neck fits into the hollow of the block."

He stopped, with an evident desire to explain, but Mary pointed down the path and said: "Go, or I will have Master Brandon spit you on his sword. Two to one would be easy odds compared with the four to one you put against him in Billingsgate. Go!" And the battle was over, the foe never having struck a blow. It hurt me that Mary should speak of the odds being two to one against Brandon when I was at hand. It is true I was not very large, but I could have taken care of a lawyer.

Now it was that the lawyer-knight earned his bread by his wits, for it was he, I know, who instigated the next move—a master stroke in its way and one which proved a checkmate to us. It was this: the duke went at once to the king, and, in a tone of injured innocence, told him of the charge made by Brandon, with Mary's evident approval, and demanded redress for the slander. Thus it seemed that the strength of our position was about to be turned against us. Brandon was at once summoned and promptly appeared before the king, only too anxious to confront the duke. As to the confinement of Brandon and his secret trial, the king did not care to hear; that was a matter of no consequence to him; the important question was, did Buckingham attack the princess?

Brandon told the whole straight story exactly as it was, while Buckingham as promptly denied, and offered to prove by his almoner that he was at his devotions on the night and at the hour of the attack. So here was a conflict of evidence which called for new witnesses, and Henry asked Brandon if the girls had seen and recognized the duke. To this question, of course, he was compelled to answer no, and the whole accusation, after all, rested upon Brandon's word, against which, on the other hand, was the evidence of the Duke of Buckingham and his convenient almoner.

All this disclosed to the full poor Mary's anxiety to help Brandon, and the duke having adroitly let out the fact that he had just met the princess with Brandon at a certain secluded spot in the forest, Henry's suspicion of her partiality received new force, and he began to look upon the unfortunate Brandon as a partial cause, at least, of Mary's aversion to the French marriage.

Henry grew angry and ordered Brandon to leave the court, with the sullen remark that it was only his services to the princess Mary that saved him from a day with papers on the pillory.

This was not by any means what Brandon had expected. There seemed to be a fatality for him about everything connected with that unfortunate trip to Grouche's. He had done his duty, and this was his recompense. Virtue is sometimes a pitiful reward for itself, notwithstanding much wisdom to the contrary.

Henry was by no means sure that his suspicions concerning Mary's heart were correct, and in all he had heard he had not one substantial fact upon which to base conviction. He had not seen her with Brandon since their avowal, or he would have had a fact in every look, the truth in every motion, a demonstration in every glance. She seemed powerless even to attempt concealment. In Brandon's handsome manliness and evident superiority, the king thought he saw a very clear possibility for Mary to love, and where there is such a possibility for a girl, she usually fails to fulfill expectations. I suppose there are more wrong guesses as to the sort of man a given woman will fall in love with than on any other subject of equal importance in the whole range of human surmising. It did not, however, strike the king that way, and he, in common with most other sons of Adam, supposing that he knew all about it, marked Brandon as a very possible and troublesome personage. For once in the history of the world a man had hit upon the truth in this obscure matter, although he had no idea how correct he was.

Now, all this brought Brandon into the deep shadow of the royal frown, and, like many another man, he sunk his fortune in the fathomless depths of a woman's heart, and thought himself rich in doing it.

CHAPTER XIV.

With the king admiration stood for affection, a mistake frequently made by people not given to self analysis, and in a day or two a reaction set in toward Brandon which inspired a desire to make some amends for his harsh treatment. This he could not do to any great extent on Buckingham's account; at least, not until the London loan was in his coffers, but the fact that Brandon was going to New Spain so soon and would be out of the way, both of Mary's eyes and Mary's marriage, stimulated that rare flower in Henry's heart, a good resolve, and Brandon was offered his old quarters with me until such time as he should sail for New Spain.

He had never abandoned this plan, and now that matters had taken this turn with Mary and the king his resolution was stronger than ever, in that the scheme held two recommendations and a possibility.

The recommendations were, first, it would take him away from Mary, with whom—when out of the inspiring influence of her buoyant hopefulness—he knew marriage to be utterly impossible; and second, admitting and facing that impossibility, he might find at least partial relief from his heartache in the stirring events and adventures of that far away land of monsters, dragons, savages and gold. The possibility lay in the gold, and a very faintly burning flame of hope held out the still more faintly glimmering chance that fortune, finding him there almost alone, might, for lack of another lover, smile upon him by way of squaring accounts. She might lead him to a cavern of gold, and gold would do anything; even, perhaps, purchase so priceless a treasure as a certain princess of the blood royal. He did not, however, dwell much on this possibility, but kept the delightful hope well neutralized with a constantly present sense of its improbability in order to save the pain of a long fall when disappointment should come.

Brandon at once accepted the king's offer of lodging in the palace, for now that he felt sure of himself in the matter of New Spain and his separation from Mary he longed to see as much as possible of her before the light went out forever, even though it were playing with death itself to do so.

Poor fellow, his suffering was so acute during this period that it affected me like a contagion.

It did not make a mope of him, but came in spasms that almost drove him wild. He would at times pace the room and cry out: "Jesu! Caskoden, what shall I do? She will be the wife of the French king and I shall sit in the wilderness and try every moment to imagine what she is doing and thinking. I shall find the bearing of Paris and look in her direction until my brain melts in my effort to see her, and then I shall wander in the woods, a suffering imbecile, feeding on roots and nuts. Would to God one of us might die. If it were not selfish I should wish I might be the one."

I said nothing in answer to these outbursts, as I had no consolation to offer.

We had two or three of our little meetings of four, dangerous as they were, at which Mary, feeling that each time she saw Brandon might be the last, would sit and look at him with glowing eyes that in turn softened and burned as he spoke. She did not talk much, but devoted all her time and energies to looking with her whole soul. Never before or since was there a girl so much in love. A young girl thoroughly in love is the most beautiful object on earth—beautiful even in ugliness. Imagine, then, what it made of Mary!

Growing partly, perhaps out of his unattainability—for he was as far out of her reach as she out of his—she had long since begun to worship him. She had learned to know him so well, and his valiant defense of her in Billingsgate, together with his noble self-sacrifice in refusing to compromise her in order to save himself, had presented him to her in so noble a light that she had come to love up to him as her superior. Her surrender had been complete, and she found in it a joy far exceeding that of any victory or triumph she could imagine.

I could not, for the life of me, tell what would be the outcome of it all. Mary was one woman in 10,000, so full was she of feminine force and will—a force which we men pretent to despise, but to which in the end we always succumb.

Like most women, the princess was not much given to analysis; and, I think, secretly felt that this matter of so great moment to her would, as everything else always had, eventually turn itself to her desire. She could not see the way, but, to her mind, there could be no doubt about it; fate was her friend: always had been, and surely always would be.

With Brandon it was different; experience as to how the ardently hoped for usually turns out to be the sadly regretted, together with a thorough face-to-face analysis of the situation, showed him the truth, all too clearly, and he longed for the day when he should go, as a sufferer longs for the surgeon's knife that is to relieve him of an aching limb. The hopelessness of the outlook had for the time destroyed nearly all of his combativeness, and had softened his nature almost to apathetic weakness. It would do no good to struggle in a boundless, fathomless sea; so he was ready to sink and was going to New Spain to hope no more.

Mary did not see what was to prevent the separation, but this did not trouble her as much as one would suppose, and she was content to let events take their own way, hoping and believing that in the end it would be hers. Events, however, continued in this wrong course so long and persistently, that at last the truth dawned upon her and she began to doubt; and as time flew on and matters evinced a disposition to grow worse instead of better, she gradually, like the sun-dial in the moonlight, awakened to the fact that there was something wrong; a cog loose somewhere in the complicated machinery of fate—the fate which had always been her tried, trusted and obedient servant.

The trouble began in earnest with the discovery of our meetings in Lady Mary's parlor. There was nothing at all unusual in the fact that small companies of young folk frequently spent their evenings with her, but we knew well enough that the unusual element in our parties was their exceeding smallness. A company of eight or 10 young persons was well enough, although it, of course, created jealousy on the part of those who were left out:



"Carry this to the king: That I will see him and the whole kingdom sunk in hell before I will marry Louis of France."

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Give full details in your first letter to The Washington Farmer, Review building, Spokane, Wash.—Adv.

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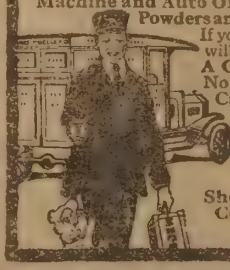
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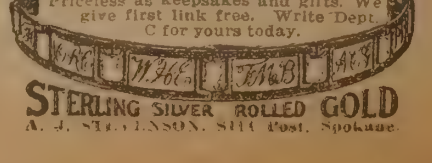


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STERLING SILVER ROLLED GOLD

A. J. STILLSON, 8114 Post, Spokane.

but four -two of each sex—made a difference in kind, however much we might insist it was only in degree; and this we soon learned was the king's opinion.

You may be sure there was many a jealous persons about the court ready to carry tales, and that it was impossible long to keep our meetings secret among such a host as then lived in Greenwich palace.

One day the queen summoned Jane and put her to the question. Now Jane thought the truth was made only to be told, a fallacy into which many good people have fallen, to their utter destruction; since the truth, like every other good thing, may be abused.

Well! Jane told it all in a moment, and Catherine was so horrified that she was like to faint. She went with her hair-lifting horror to the king, and poured into his ears a tale of imprudence and debauchery well calculated to start his righteous, virtue-prompted indignation into a threatening flame.

Mary, Jane, Brandon and myself were at once summoned to the presence of both their majesties and soundly reprimanded. Three of us were ordered to leave the court before we could speak a word in self defense, and Jane had enough of her favorite truth for once. Many, however, come to our rescue with her coaxing eloquence and potent, feminine logic, and soon convinced Henry that the queen, who really counted for little with him, had made a mountain out of a very small mole-hill. Thus the royal wrath was appeased to such an extent that the order for expulsion was modified to a command that there be no more quartet gatherings in Lady Mary's parlor. This leniency was more easy for the princess to bring about, by reason of the fact that she had not spoken to her



"She went alone, one afternoon, to see Brandon."

brother since the day she went to see him after Wolsey's visit, and had been so roughly driven off. At first, upon her refusal to speak to him—after the Wolsey visit—Henry was angry on account of what he called her insolence; but as she did not seem to care for that, and as his anger did nothing toward unsealing her lips, he pretended indifference. Still the same stubborn silence was maintained. This soon began to amuse the king, and of late he had been trying to be on friendly terms again with his sister through a series of elephantine antics and bear-like pleasantries, which were the most dismal failures—that is, in the way of bringing about a reconciliation. They were more successful from a comical point of view. So Henry was really glad for something that would loosen the tongue—usually so lively, and for an opportunity to gratify his sister from whom he was demanding such a sacrifice, and for whom he expected to receive no less a price than the help of Louis of France, the most powerful king of Europe, to the imperial crown.

Thus our meetings were broken up, and Brandon knew his dream was over, and that any effort to see the princess would probably result in disaster for them both; for him certainly.

The king upon that same day told Mary of the intercepted letter sent by her to Brandon at Newgate, and accused her of what he was pleased to term an improper feeling for a low-born fellow.

Mary at once sent a full account of the communication in a letter to Brandon, who read it with no small degree of ill comfort as the harbinger of trouble.

"I had better leave here soon, or I may go without my head," he remarked. "When that thought gets to working in the king's brain, he will strike, and I—shall fall."

Letters began to come to our rooms from Mary, at first begging Brandon to come to her, and then upbraiding him because of his coldness and cowardice, and telling him that if he cared for her as she did for him, he would see her, though he had to wade through fire and blood. That was exactly where the trouble lay; it was not fire and blood through which he would have to pass; they were small matters, mere nothings that would really have added zest and interest to the achievement. But the frowning laugh of the tyrant, who could bind him hand and foot, and a vivid remembrance of the Newgate dungeon, with a jangling noose or a hollowed-out block in the near background, were matters that would have taken the advanturous tendency out of even the cracked brain of chivalry itself. Brandon cared only to fight where there was a possible victory or ransom, or a prospect of some sort, at least, of achieving success. Bayard preferred a stone wall, and thought to show his brains by beating them out against it, and in a sense he could do it. * * * What a pity this senseless, stiff-kneed, light-headed chivalry did not beat its brains out several centuries before Bayard put such an absurd price upon himself.

So every phase of the question which his good sense presented told Brandon, whose passion was as ardent though not so impatient as Mary's, that it would be worse than foolhardy to try to see her. He, however, had determined to see her once more before he left, but as it could, in all probability, be only once, he was reserving the meeting until the last, and had written Mary that it was their best and only chance.

This brought to Mary a stinging realization of the fact that Brandon was about to leave her and that she would lose him if something were not done quickly. Now for Mary after a life of gratified whims, to lose the very thing she wanted most of all—that for which she would willingly have given up every other desire her heart had ever coined—was a thought hardly to be endured. She felt that the world would surely collapse. It could not, would not, should not be.

Her vigorous young nerves were too strong to be benumbed by an overwhelming agony, as is sometimes the case with those who are fortunate enough to be weaker, so she had to suffer and endure. Life itself, yes, life a thousand times, was slipping away from her. She must be doing something or she would perish. Poor Mary! How a grand soul like hers, full of faults and weakness, can suffer. What an infinite disproportion between her susceptibility to pain and her power to combat it. She had the maximum capacity for one and the minimum strength for the other. No wonder it drove her almost mad—that excruciating pang of love.

She could not endure inaction, so she did the worst thing possible. She went alone one afternoon, just before dusk, to see Brandon at our rooms. I was not there when she first went in, but, having seen her on the way, suspected something and followed, arriving two or three minutes after her. I knew it was best that I should be present, and was sure Brandon would wish it. When I entered they were holding each other's hands, in silence. They had not yet found their tongues, so full and crowded were their hearts. It was pathetic to see them, especially the girl, who had not Brandon's hopelessness to deaden the pain by partial resignation.

Upon my entrance he dropped his hands and turned quickly toward me with a frightened look, but was reassured upon seeing who it was. Brandon mechanically walked away from her and seated himself on a stool. Mary, as mechanically, moved to his side and placed her hand on his shoulder. Turning her face toward me, she said: "Sir Edwin, I know you will forgive me when I tell you that we have a great deal to say and wish to be alone."

I was about to go when Brandon stopped me.

"No, no; Caskoden, please stay; it would not do. It would be bad enough, God knows, if the princess should be found here with both of us; but, with me alone, I should be dead before morning. There is danger enough as it is, for they will watch us."

Mary knew he was right, but she could not resist a vicious little glance toward me, who was in no way to blame.

(To be continued in the next issue.)

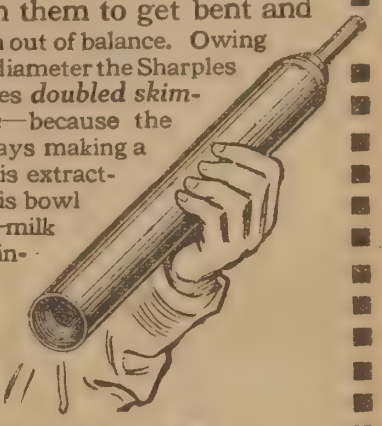
Chair Gymnasium.

Almost a whole gymnasium is contained in a new chair in which a seated person, by pulling straps over his shoulders, manipulates levers and weights that exercise most of the muscles.



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High and Noble Qualities

Each Little Trait Is a Stone in Wall of Character

To the dear girls of the Family Circle —Did you read the story of the lonesome little girl who, evening after evening, went away into the woods, to hunt the cows? I am certain there are girls, among the readers of the Family Circle who have cows or pigs or sheep to drive, and I imagine they do it, as I used to do, because I was told to drive them. No doubt they think it hard and wonder why they have such tasks to perform when some other girls never seem to have hardships.

Young people are not likely to consider much of anything about their work except the hardships. I am sure I never thought of much else in connection with my early tasks, but looking back upon those years I see how the performance of those tasks had a strong influence for good upon my life.

If some little word that I may write should help some other girl I will feel I have not written in vain. I believe it would not have been beyond my understanding had some one taken the trouble to point out to me how the task of bringing up the cows was a factor in laying the foundation to character building.

You have all seen a mason lay a stone wall and you know how he places one stone upon another till the wall is finished. Each stone has its place and each one is necessary. So it is with character building. Let us think of each trait cultivated as a stone in the character wall.

Everything in the world has to have a beginning, and a fine, strong character has to start from the beginning and be built up.

The dictionary tells us that character means the qualities which distinguish a person especially high and noble qualities. So characters are made like a stone wall, by developing one good trait after another.

Let us see now, girls, what hunting cows has to do with character building.

First, the little girl was told by her father to go and hunt the cows. She was not told to go till she got tired, not told to go if she wanted to do so, but to go, listen for the bell, then hunt till she found the cows. She was to keep hunting, though the way was hard. This was a lesson in obedience. She knew her father was depending upon her to bring up the cows that they could be milked, and the milk converted into butter for the family's use and to sell to customers who were depending on her father to bring them their weekly supply.

It was an important business, the bringing up the cows, and she learned responsibility. She knew her father depended upon her and she learned to be trustworthy. You will remember the cows were scattered about and had often to be searched for, long and hard, through trees and brush and the little girl learned perseverence.

Her father instructed her to drive the cows home slowly and quietly as it was injurious to them to be hurried. She often wanted to get home more quickly than the old cows would walk, but having already learned obedience she added the trait of patience to her list. You will remember there was a cold, swift stream to cross, so deep it made her afraid. She would have liked some one to give her a strong hand to cling to, but she was alone and the cows on the opposite side, so she learned self dependence and though she was afraid she crossed anyway, learning to be brave.

Do you see how our character wall is growing? Let us sum up the traits or stones in our wall. First and most important, is obedience. The longer I live and the more I observe the lives of young people the stronger I grow in the belief that obedience should be the first law in the home. Obedience to the commands of parents or older people who have authority over young people is like the rudder to a boat. Without such guidance young lives will surely drift out of the safe and true course.

Next we have responsibility, then trustworthliness, perseverence, self reliance, patience, courage. These seven traits of character when practiced for years make a well balanced and rounded out character.

Of course, with such a very small girl the stones in her character wall were not very big, but as we said before there must always be a beginning. We are always growing better or worse. We never remain the same. Let us remember this, dear girls. The process of character building lasts as long as life. We build up or tear down day by day. Let us be very careful to build up.

"Heaven is not reached at a single bound,
But we build the ladder by which we rise
From the lowly earth to the vaulted skies.
Step by step and round by round."

—A. W. B.

Every Morning

Offers Chance for New Beginning

What is the quotation or what are the words which have helped you in the journey of life?

Send it to the editor of The Farmer and let it help another.

To the Editor: I am sending a quotation which I think has much consolation in it, hoping it may help some one who is discouraged: "Every day is a new beginning; every morn is the world made new. You who are tired of sorrow and sighing, this is a beautiful thought for you." DORRIS FITCH.
Walla Walla, Wash.

Annual Waste of Cattle Food.

The annual waste in the United States of foods available for cattle has been estimated at $100,000,000 by department of agriculture experts.

Home-Made Clothes

Cooperative Plan in Dressmaking

By MARIELLA LADD.

It has always puzzled me why home-made pies and cakes are credited with superior excellence and "home-made" clothes looked upon, especially by the young folks, as something to be delivered from. Perhaps some information I have collected on the subject may interest readers of The Farmer.

Out of 20 friends who gave me their experiences only two had sewing rooms. Ten acknowledged that ready-to-wear clothes were very much more costly in the end, but did not feel that they had time to do more than the very plainest sewing at home.

Five had successfully tried a cooperative method. Near neighbors planned to do their spring and fall sewing at the same time and hired a dressmaker from the city to help with the work. Eoch neighbor shared expenses according to the work that had to be done, and the one who gave up room to the dressmaker and boarded her was compensated according to a fixed rate. This plan had been tried for two years only, but so far there had been no hitch.

All 20 were capable needlewomen and 15 of them had sewing machines. Their difficulties arose not from lack of ability, but from sheer lack of time and conveniences. Only four had mirrors big enough to show the hang of a skirt. Ten had been using the same patterns for years. This alone accounted for much unpopularity, for little changes in dress are as essential as little changes of diet, and fashions, while they need not be slavishly followed, are just as helpful in their way as the changing seasons.

The most general need was a cutting-out table. Of course, there is always the floor, but a cutting-out table is much better than the floor and need not cost much. It should be from 34 to 38 inches high, according to its owner's height, at least three feet wide and six feet long. In it should be drawers, if possible, for assorted pieces of materials and patterns. On such a table a garment can be laid out and cut to advantage. It can be stood against a wall and covered when not in use.

With a cutting-out table, a mirror and an up-to-date pattern garments made at home by skilful fingers can not be detected from those made by an expensive modiste, so that my researches have gone to prove the distinctions between different classes of home-made products to be an absolutely fictitious one founded on supposed limitations that can be banished by patience and a get-together spirit.

Makes Many Matches.

Sweden recently exported 10,000,000,000 matches to the United States.

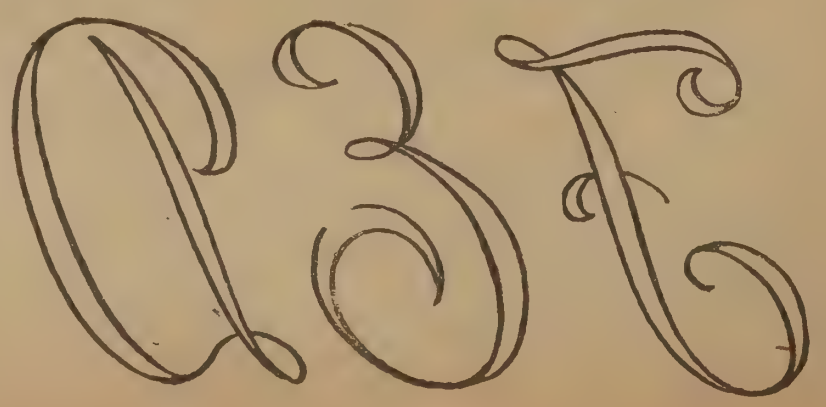
Script Initials for Embroidery

By WINNIFRED WORTH.

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material. Cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

In all alphabets which I have given, and they are so useful, I have kept in mind the importance of simplicity. There are no letters as a decoration which stand out in lovelier relief than those of simple design.







It's wiser being good than bad;
It's safer being meek than fierce;
It's fitter being sane than mad.
My own hope is, a sun will pierce
The thickest cloud earth ever stretched;
That after Last returns the First,
Though a wide compass round be fetched;
That what began best can't end worst,
Nor what God blessed once prove accurst.

—Browning

A WAR-TIME EASTER

Privations of the Colonial Days.

By EVA MAY.

How many people would go to church Easter Sunday if the minister announced the week before that the building would not be comfortably heated? In the colonial days and the days of the revolutionary war the churches were not heated, but the congregation did not mind the cold. One devout member wrote:

"Though it was so cold, yet John Tuckerman was baptised. At 6 o'clock my ink freezes so that I can hardly write by a good fire in my wife's chamber. Yet was very comfortable at meeting."

Many privations were endured by the patriotic people of 1776. Prices steadily mounted higher and higher and some products could not be obtained. On Easter morning of that year the most fashionable ladies of Boston and other cities went to church minus their pins, because the war had cut off the supply from Europe. The ladies used thorns and the spines of cacti instead—serviceable but not beautiful substitutes.

The fashions of that time prescribed the extensive use of gauze materials for dress; there were gauze gowns, gauze petticoats, gauze bonnets, gauze caps, gauze ribbons, gauze kerchiefs and gauze aprons. This material was also used to make the peculiar high head dresses of that period. No new gauze could be obtained for the Easter bonnet of 1776.

Some of the ladies of 1776 wore queer beauty masks of silk when they appeared upon the streets. If a lady rode on horseback, she would wear a "riding mask," fitted with a silver plate to be grasped between the teeth and thus securely held in position.

Frock of Taffeta.

The sketch shows the way in which the French adjust the apron on a new, smart frock of blue taffeta. The gown has a narrow skirt and carries out the oval silhouette demanded for the spring. The bodice and apron are of blue and tan polka dot foulard, and at the waist line in front is a huge buckle made of colored beads. The apron is made on traditional lines. The American woman does not need a pattern for it any more than she needs a recipe for pie. It is not tied at the waist line, but gives the appearance of having slipped down in a disorderly manner by holding on to the hips.

The woman who has a plain, dark gown that needs a new touch might do well to take up with due consideration the subject of the ornamental apron.—New York Evening Sun.

Improve Polish.

If milk is used to soften shoe polish it will improve the gloss.

Patterns

1990—Ladies' apron and sleeve protector. Cut in four sizes: 34, 38, 42 and 46 inches bust measure. Size 38 requires 5 yards of 36-inch material for the apron, and 3-8 yard for the sleeve protector. Price 10 cents.

1670—Costume for misses and small women. Cut in three sizes: 16, 18 and



20 years. It requires 5 1-2 yards of 36-inch material for an 18-year size. The skirt measures about 3 yards at the lower edge. Price 10 cents.

1983—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. It requires 4 yards of 44-inch material for a 12-year size. Price 10 cents.

1986—Girls' guimpe dress. Cut in four sizes: 4, 6, 8 and 10 years. It requires 1 1-2 yards of 27-inch material for an 8-year size, for the guimpe, and 3 1-4 yards for the dress. Price 10 cents.

2000—Ladies' dress, with body lining. Cut in six sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. It requires 6 yards of 44-inch material for a 36-inch size. The skirt measures about 2 2-3 yards at the foot. Price 10 cents.

1984—Ladies' house dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 6 3-4 yards of 36-inch material for a 36-inch size. The dress measures about 2 3-4 yards at its lower edge. Price 10 cents.

Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No. .....

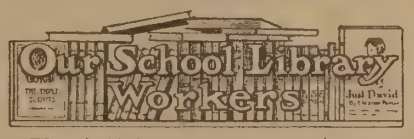
BE SURE TO GIVE NUMBER AND SIZE.

Windows

Quick and Easy Way to Clean

What is the most helpful thing you have learned during the last year in your experience with housekeeping? Let us pass it along to other housekeepers.

To the Editor: A quick and easy way to clean windows is to take whiting (plaster Paris) and water. Mix to a thin cream, enough to paint the windows; add a spoonful of kerosene. Rub on the windows to loosen the dirt; let dry, then rub off with a dry cloth. There will be no lint or cloudy streaks and the kerosene makes the glass shine.



The individual subscription contest is becoming a real race. A little over two weeks ago Loyal Snyder was well in the lead and going fine. Then Miss Dorothy Rauch sailed in and won first honors, which she still holds. And now comes Miss Bessie Webb to put Loyal back to third place. So it goes—each week bringing a change—and holding out promise of still more surprises.

If Miss Eva Bond were to do as well, let us say, as did Bessie Webb, who scored four subscriptions in one week, Eva would then be in fifth place, whereas she is now in eighth. And if Mildred Glasgow were to round up five subscriptions she would tie Bessie Webb for second place—and so on.

Just as we said last week, it isn't possible to even guess who will win, because it is plain to see that every boy and girl in the race is right after the gold prize; and the odds are not so greatly in favor of those now in the lead as to make them seem sure of winning if some of the lower ones take on a sudden burst of speed and continue it for the next two or three weeks.

The list of contestants now stands as follows:

	Subscriptions.
Dorothy Rauch	16
Bessie Webb	14
Loyal Snyder	12
Mildred Glasgow	9
Dorothy La Rue	6
Lester Ruark	6
Violet Leachman	5
Eva Bond	3

Four new schools joined the ranks of the library workers this week. Garden City school, Grays Harbor county, brings 15 live boys and girls into the circle. They will work under the direction of W. R. Stiles, teacher. Richland school, Benton county, Miss Myrtle A. Penn, teacher; Kiona-Benton City school, Benton county, A. A. Baker, teacher, and Buena Vista school, Benton county, E. M. Craig, teacher, have 50, 55 and 30 workers, respectively.

Miss Lillian Brown of New Century school, Garfield county, writes us: "Your books were received last week and were in excellent condition. We all like them very much and feel well rewarded for our work."

There are still six books to go to New Century school, which, with those already sent, will make a library that any school can feel proud of having earned by a little spare-time effort.

Girls and boys and school entitled to a place on this week's honor roll:

Ford school—Bessie Webb.

Bicklcton school—Esverald Van Nostern, Irene Larsen, Elizabeth Nelson, Luella Faulkner.

Denison school—Donald T. Page, Hillman Buchser.

Sunset school—Boyd Hubbard, Harold Herron, Joe Mills, Dora Henning.

$ SAVED IN HOME CANNING $ ON THE FARM

What are you going to do this year to overcome the waste of fruit and vegetables due to crowded markets? Will you ship **all** this perishable material, regardless of market conditions, paying big commissions, high freight, and stand losses from decay and an overcrowded market—**or will you**—like the big manufacturer, convert this into a finished product and **MAKE A PROFIT?**

Answering These Questions

We say that facilities to produce **"Home Canned Foodstuffs"** are as necessary to such producers as is a cream separator to a dairy farmer.

That's the secret of success today for the Farm Woman, Fruit Grower and Market Gardener. With Sanitary Home Canning Outfits and cans from the Seattle Can company, the Home Canner will put up better goods as to quality and flavor than are now offered by the big canneries, and what the family can not use at home may be sold on the market. This solves the problem of "Waste versus Profit."

High Cost of Living

Sixty per cent of our population live in cities. They consume, but do not produce. The City Consumer wishes "the best." "Home-made goods" are always preferable. **The best** canned goods are Home Canned goods.

The best way to can goods at home is **"The Steam Pressure Way."** With our Sanitary Home Canning outfits for tin and glass jars, to handle pints, quarts, half-gallons and gallon cans, for use on any stove or with Fire Box attached for wood or coal, a steam pressure outfit may be had at **prices ranging from $16.50 upward.**

Use Coupon at Once

And get the folder and literature on this **new science** in the art of Home Canning.

Plans (with prices on cans and apparatus) for community work and packing plants of larger size, cheerfully furnished on request.

Seattle Can Company

Home Canning Department

1263 Utah Ave. Seattle, Wash.

Seattle Can Co.,

1263 Utah Ave., Seattle, Wash.

Gentlemen: Send me folder on Home Canning Outfits as described in The Washington Farmer.

Name .....

Box or Rural Route.....

Town..... State.....

Farm Hands Wanted

Western Canada Farmers Require 50,000 American Farm Laborers AT ONCE!

Urgent demand sent out for farm help by the Government of Canada. Good wages. Steady employment. Low railway fares. Pleasant surroundings. Comfortable homes. No Compulsory Military Service. Farm hands from the United States are absolutely guaranteed against Conscription. This advertisement is to secure farm help to replace Canadian farmers who have enlisted for the war.

A splendid opportunity for the young man to investigate Western Canada's agricultural offerings, and to do so at no expense. Only those accustomed to farming need apply.

For particulars as to railway rates and districts where labor is required, or other information regarding Western Canada, apply to

J. N. GRIEVE, Cor. First and Post Sts., Spokane, Wash.



Prize Poultry

For Thrifty

Boys and Girls

Our poultry club provides a way for ambitious boys and girls to get a start. It gives them manly and womanly jobs, a feeling of ownership, an opportunity to do things. We furnish the hatching eggs from prize pens.

Send one order for a new or renewal subscription to The Washington Farmer at the special three-year rate of $1.50, and we will send your boy or girl a certificate of membership and all details concerning the club.

Give name of child when writing, and act without delay. We desire to hear from parents.

POULTRY CLUB

WASHINGTON FARMER,
Room 37, Review Bldg., Spokane, Wash.

Do You Need Live Stock?

Our BREEDERS' DEPARTMENT offers many splendid opportunities to purchase registered and, in some cases, grade stock of merit. Before you buy look these offers over.



STREAM WAS LONESOME SO IT WENT TO JOIN THE SEA

Dear Aunt Nellie: As I was walking home from school tonight I came to a little stream. I followed it for a ways and came to some falls. When it fell over the bank it made a very pretty noise. It seemed to say to me, "Don't you think I am pretty?" I went on a little farther and came to where it curved around three rocks. Pretty soon I came to where another stream came into it. It said to the other stream, "May I come into your stream and help make you larger?" "Yes, yes, come right in." It was a large stream now. I went a long ways and it went over a bank again. Another stream came in. Now this stream was big. When it went over the bank it didn't go all in one place, but separated and made about a hundred little streams. Along its banks were green grass. As it fell over the bank it said to me, "I am going to the sea, I am not going to be alone all my life. Pretty soon I will be all dried up."—Mary France, St. John, Wash.

FISH TRAPS HALF A MILE LONG ARE IN THE BAY

Dear Aunt Nellie: I live on Orcas island, the largest island in the San Juan group. I will be 14 years old on May 19. I go about a mile and a half to the Crow Valley school. Our teacher is Miss Olga Hagen. She is a good teacher. I have two brothers. We live about a half a mile from the beach. We have lots of fun in the summer. There is usually a fish trap in the bay. We have a Sunday school in our neighborhood. To get back to fish traps, they are usually a half or three-quarters of a mile long. There are many fish around the island, among them are the lin cod, rock cod, spring, sockeye and humpback salmon. I go over to Friday Harbor sometimes to visit my aunt. I wish Adolph Olsón of Langley, Wash., would write to me.—Chester Kinnear, East Sound, Wash.

SHEP, WHITE PADDY, NAN AND BOB ARE HER PETS

Dear Aunt Nellie: I am 11 years old and in the fifth grade. I have two pets, one dog and one cat. I also have two canary birds. I call my dog Shep and my cat White Paddy. I call my canary birds Nun and Bob. I have three sisters and three brothers. My sister's names are Georgia, Artie and Nellie. My brothers' names are Basil, Eugene and Russell. My brother Basil is going to college at Pullman. We live on an 80-acre farm about eight miles from Dayton. I am now going to tell you about my school. It is one mile to school and I walk. There are nine pupils in one room. My teacher's name is Miss Gladys Tucker. We have one cow, four horses and one calf.—Elsie Austin, R. F. D. 1, Box 39, Dayton, Wash.

NICE, COLD SPRINGS ON THE CARVEY FARM

Dear Aunt Nellie: I live on a farm. We have 14 acres. Papa raises a lot of wheat every year. I have one brother and one sister. My brother's name is Jack, and my sister's name is Edith. We have a lot of horses and cattle and a lot of chickens. I have a pony named Tony. I ride two and one-half miles to school. Our school house is a large brick building. We have 12 grades in our school. I am in the second grade. This is a nice place in summer. We have nice, cold springs on our place. We milk about 10 cows in the summer. We are only milking three now. We have three cats, their names are Bill, Will and Silverheels.—Hazel Carny, Tonasket, Wash.

THIS IS GEORGIA'S FIRST LETTER TO THE CORNER

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I am 12 years old. I am in the fourth grade. My birthday is December 6. My teacher is Mrs. Sholl. I like her fine. I have no brothers or sisters. I live on a farm of 640 acres. I have a pony and saddle and bridle. My pony's name is Star and my sheep's name is Billie. We have two little pups. We are milking six cows. We have 17 head of cattle all together and 14 head of horses. We live seven miles from town. I have half a mile to go to school.—Georgia Buck, Box 111, Coulee City, Wash.

WORE AUNTIE'S STOCKINGS UNTIL HERS WERE DRIED

Dear Aunt Nellie: I am going to tell you about the worst day I have had. One time I was going to my aunt's on a very rainy day. My feet were so wet that they felt as if I was walking in a ditch. When I got there they were not home. So I ran a half a mile farther because their dog was after me. Then I found out that those people were not home either. So I was on my way home when I met them on the way. Then I went back with them and wore my aunt's stockings until mine were dry. That was the worst day I ever had.—Stella Sturrmans, R. F. D. 1, Lyaden, Wash.

HAD A BASKET SOCIAL ON WASHINGTON'S BIRTHDAY

Dear Aunt Nellie: This is the first time I've written to the Children's Corner. I am 10 years old. My birthday is on October 20. I have a little brother 1 year and 9 months old. His name is Silas Simon Parmeter. My father owns a store. We have one cow and two pigs and a Ford truck. I go after my cow every night in summer. Our schoolhouse is right across the road. I am in the fifth grade. My teacher's name is Miss Bernard. We had a program and basket social on Washington's birthday.—Edith Annetta Farmeter, R. F. D. No. 1, Reardan, Wash.

ARETA HAS PROMISED TO VISIT THE CORNER AGAIN

Dear Aunt Nellie: I am nine years old. My birthday is September 13. I am in the third grade at school. I walk three-quarters of a mile to school. My daddy has four head of cattle. I have one cow and her name is Brownie. We have two horses, about 50 rabbits. We have a Ford. My daddy runs a store and is postmaster at Alpha. I have one brother and his name is Roy. I have a sore arm and had it operated on not long ago. It has been sore for about four years. I help my mother. I like to read the letters in the Corner very much. I will come again.—Areta McAmary, Alpha, Wash.

OLIVER HAS NO BROTHERS OR SISTERS TO PLAY WITH

Dear Aunt Nellie: I enjoy reading the letters of the other children. I thought they would enjoy reading a letter of mine. I am 6 years old. I am going to school. I am in the second grade. My teacher's name is Miss Nellie Holmes. I like her real well. I live on a ranch three miles from Withrow. We have seven horses, three colts, one cow, one calf, one pig, 70 chickens, one dog and one cat. The dog's name is Sport. I have no brother or sister. I have lots of toys to play with.—Oliver Schilling, Withrow, Wash.

CHINESE LEARNED TO MAKE PAPER WATCHING THE WASP

Dear Aunt Nellie: I am a girl 12 years old. My birthday is October 2. My subject is "Paper." Paper is very useful. We see paper every day. The wasps were the first paper makers. The Chinese learned to make paper by watching the wasp. Paper is made out of rags, rice, flax and many other things. Paper is used to paper the insides of houses, to put on the roof, to use to make toys and for all the books we have. I live on a nine-acre orchard tract. I have a pet cat named Jimmy James. I am in the sixth grade. We take sewing to school.—Minerva Kenedy, Opportunity, Wash.

NICHOLAS GOES TO THE PINE SPRING SCHOOLHOUSE

Dear Aunt Nellie: There are 640 acres on our farm. My papa has 13 cows, four horses, eight calves and about 150 chickens, and I own a calf and two chickens. I go to school at Pine Spring schoolhouse. I am 11 years old and in the fifth grade. I have two brothers and one sister. Their names are Melford, Lloyd and Nita. We live four miles from Tyler. I walk a mile to school.—Nihcolas Nelson, Tyler, Wash.

COUSIN GRACE RIDES HER PONY, TOPSY, TO SCHOOL

Dear Aunt Nellie: I have been reading the childrens' corner every week and like it very much so I thought I would write. I am 11 years old. My birthday is the 8th of May. I am in the fifth grade, I go to the Bell school. My teacher's name is Ruth Keenholtz. I like her very much. I have two brothers younger than myself. The oldest brother and I ride Topsy, our pony, to school. We live on the farm and I like it better than in town because we can have more fun. I can crochet, tat and embroider.—Grace Clark, Tekoa, Wash.

BEST FRIEND HAS BLUE EYES AND GOLDEN HAIR

Dear Aunt Nellie: I am going to write to you now and tell you about my best friend. I have never written before. My best friend is Helen Christianson. She has blue eyes and golden hair. She was born on the 7th day of July, 1904, and I was born on the 31st day of July, 1904. So you see we are pretty near twins. We play in the woods together in spring when I have time and when she has time. We pick berries together also. We are both in the same grade at school.—Gertrude Nelson, box 141, Puyallup, Wash.

HAZEL'S CHUM IS AS SWEET AS SHE CAN BE

Dear Aunt Nellie: This is the first time that I have written to the Children's Corner. My papa takes the Washington Farmer. I like to read the letters from other girls and boys. I am 9 years old. My birthday is June 18. Mary Dunn is my best chum, she has dark curly hair, blue eyes and is small for her age. She is 10 years old. She is as sweet as she can be, good natured and always full of fun. We are in the same class at school.—Hazel Marion Hillerud, Lawrence, Wash.

STAY IN TOWN WINTERS SO VESTA CAN GO TO SCHOOL

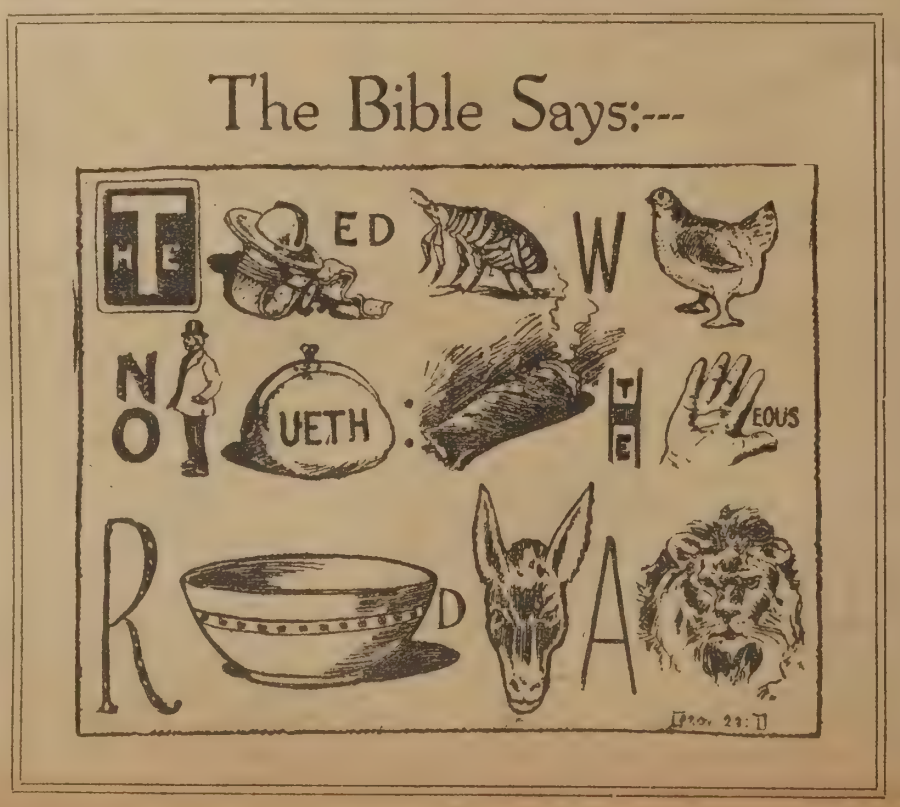
Dear Aunt Nellie: I am 10 years old and I am the oldest one in the family too. I have two sisters and one brother. My oldest sister is eight years old and her name is Ethel. My youngest sistr's name is Myrtle and she is three years old. My brother is six years old and his name is Orville. I go to school. My teacher's name is Miss Shutes. I like her. My best friend's name is Myrtle Dimmitt. She is in the other room. We stay in town in the winter time so my sister and I can get to school. In summer we live in the country.—Vesta Short, Molson, Wash.

PETER LIVES ON A FARM AND WORKS REAL HARD

Dear Aunt Nellie. My father is dead. He died about eight years ago. He got killed at a lime quarry, where he was working. I have a sister in Edmonton, Alberta. She would never forget me. She always would send me a present for my birthday and Christmas, Easter and Fourth of July. I love my mother very much. I live on a farm and have to work hard. I am 9 years old and in the fourth grade. There are 11 children in our school. My teacher's name is Mrs. Ella U. Hanna.—Peter Flanik, Northport, Wash.

JOHN READS BETTER THAN ANY ONE IN HIS CLASS

Dear Aunt Nellie: This is the first time I have written to the Corner and I want to know if I have a twin? I was 6 years old April 27. We have a little pony named Fly. She is quite pretty. If I have a twin I wish she would write to me. I walk one and a half miles to school. I can read the best of all in my class. My teacher's name is Mrs. Hanson. I like her very much.—John Francis Hayden, box 25, Mold, Wash.



MADE A DANDY SNOWMAN; DORA PUT HER CAP ON HIM

Dear Aunt Nellie: I thought I would write to you and tell you about our snowman. One Sunday my friend came over and the snow came pouring down, so we thought we would enjoy ourselves my making a snowman. When we had it done by brother Arthur and cousin James came to see it. They laughed at it and began to throw at it but we told them not to. They asked me if I would put my cap on, and I said yes. Then Arthur ran in and got papa's pipe and stuck it through the teeth. When it was finished we called mama out to see it. It had eyes made out of black rocks and teeth and ears made out of snow. The next morning when we woke up we ran to see it, but its head was blown off.—Dora Dunaway, Glenoma, Wash.

WOULD GLADLY ANSWER LETTERS FROM COUSINS

Dear Aunt Nellie: I have never written to the Children's Corner before and I want to join. I am 14 years old. My birthday is June 9. There are 18 children in our school. I am in the eighth grade. I walk about two miles to school. We have a horse named Dick and two milch cows. We have 37 chickens and they are starting to lay nicely. I love to read the Children's Corner. If any of the cousins will write to me I will glady answer them.—Exenia Matson, R. R. No. 1, Box 15, Shelton, Wash.

THERE ARE TWO OTHERS IN LESTER'S GRADE AT SCHOOL

Dear Aunt Nellie: I have been having a good time. I have a sorrel horse with a white face. I ride it to school. I am 8 years old. I am in the fourth grade. I have two others in my grade. My teacher's name is Mrs. M. K. Hanson. We have 21 scholars in this school. This school's name is Rocky Point. I have two sisters and one brother. Their names are Nellie, Ora, John, and my name is Lester. Ora and John have written to you before.—Lester Hayden, Mold, Wash.

HAD TO STAY SHUT UP IN ONE ROOM TO KEEP WARM

Dear Aunt Nellie: My suject is "My Worst Day." One day last winter it was very cold and stormy. We could not go to school. We had to stay shut up in our front room to keep warm. We had two hired men. They stayed in the house all day. There was a room full of us. The older ones were trying to read and talk. We children had to keep quiet, which was very hard for us. I was glad when the day was over.—Katherine Bowen, Oroville, Wash.

HAROLD CLAIMS FLOSIE, THE PONY, AS HIS OWN

Dear Aunt Nellie: I live on a farm of 700 acres. I have four sisters and four brothers. We have 26 head of horses and 12 head of mules. We have a little pony that I call mine, her name is Flossie. We have 12 head of cattle and four little calves. I like to live on the farm better than in town. I go to school. I am in the sixth grade. I was 12 years old the 15th of September. My teacher's name is Georgia Saxon.—Harold Muman, R. F. D. 1, Box 7, Penawawa, Wash

PLAY GAMES AND HAVE A GOOD TIME AT SCHOOL

Dear Aunt Nellie: I love to read the Corner. I am 10 years old. I am in the fourth grade. My teacher's name is Miss McDougall. There are 39 children in the room. There are 109 in the school. We have four rooms in the schoolhouse. We play games and have good times at school. I live in the country. I have five brothers and one sister.—Lillian Birkesto, East Stanwood, Wash.

WHEN LEO CALLS, BO-PEEP COMES RUNNING

Dear Aunt Nellie: I live on a farm of 80 acres and also have 80 acres all of my own. eW have about 20 acres under cultivation. For pets we have a lamb whose name is Bo-Peep, when we call him he comes running. We have about 800 head of sheep. We will shear them in about two weeks. My two brothers and I each have a pony of our own. Their names are Dickey, Lightfoot and Susie.—Leo Ohms, White Swan, Wash.

THIS COUSIN LIVES ON A FARM NEAR CHEHALIS

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We take the Farmer. I am 7 years old. My teacher's name is Miss Newby. I go to the Union school. I have one kitten. Its name is Goldie. I live on a 100-acre farm.—Maudie Yates, Chehalis, Wash.

The Washington Farmer is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Margaret Collaer, Grace Wills, Alice Clinesmith, Laverne Nunn, Florence Stephens, Esther Bergman, Kathryn Chamberlin, Frances McManamon, Gertrude Par, Marharette Dye, William Harmanes, Pearl Sarff, Laura Hatley, Tillie Helde, Maud Winston, Avah Fox, Hazel Slinkard, Necia Hire, Inez Lockwood, Calla Foster, Ida Shaw, Deo Weir, Myrtle Faye, John Shaw, Ruby Cantrell, Edna Smith, Mary Wilkins, Rena Craig, Grace E. Balsley, Clara Barton, Maud Burns, Oscar Berg



"Prices are going up, but I pay the same for my Styleplus Clothes!"

Although you get the same Guarantee of Satisfaction with every suit, the price of Styleplus Clothes hasn't advanced a single cent! Still $17—the same always, everywhere. Buy your clothes direct from the nearest Styleplus dealer. It gives you a big advantage. You *see* and *try on* the clothes—get exactly *your* style and fit—you know just what your money is going to bring you. Get your Styleplus suit today!

You know the price *before* you go into the store—$17 always, everywhere. Watch your local newspapers for advertisements of the nearest Styleplus Store. Look for Styleplus in the Store Window. Look for the Styleplus Label in the coat collar. If there should not be a Styleplus Store in your town, ask your favorite dealer to order a Styleplus suit for you.

Style plus all wool fabrics + perfect fit + expert workmanship + guaranteed wear

Write us (Dept. T) for free copy of "The Styleplus Book."

HENRY SONNEBORN & CO., INC. Founded 1849 Baltimore, Md.



Styleplus Clothes $17

TRADE MARK REGISTERED

"The same price the nation over."
(*Price in Cuba $23*)

YOUR FLAG!



This is the time for every American to hoist "OLD GLORY" to the breeze!

Realizing that in this time of national stress and strain the patriotic readers of The Washington Farmer will want to show their colors, we have arranged to offer large sized, fast color American flags in connection with subscription orders. Size of flags 3x5 feet, full 48 stars. Supply is limited. Flags will go to the first who ask for them.

The flag will be sent with new or renewal subscription to The Washington Farmer for 3 years, both for only $2, which is the regular 3-year subscription rate of this paper. If you are paid ahead your subscription will be extended three years.

In ordering kindly use this coupon.

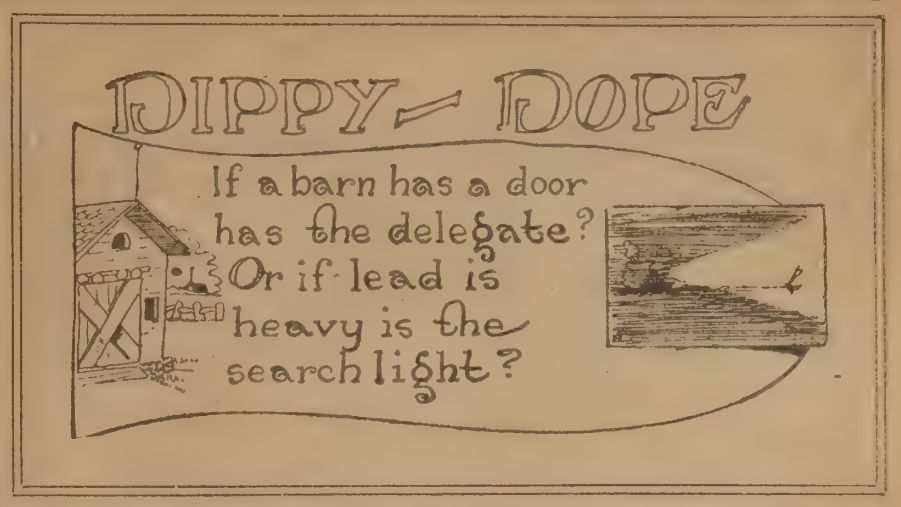


The Washington Farmer, Room 37 Review Bldg., Spokane.

Enclosed find $2 (your personal check, stamps or money order), for which send me American flag as advertised and **The Washington Farmer** for 3 years.

Name .....

Address .....



Union Arithmetic.

Among the examples given out by the teacher was one pertaining to "men working 10 hours a day to complete a certain contract."

The following morning, in looking over the little pile of exercises, the teacher found young Frank's sum wholly unattempted. Upon asking for an explanation the boy, after considerable fumbling in his pocket, brought forth a note from his father and handed it to her. It read:

"Miss Wheeler—I wouldn't allow my boy to do this sum you give him as it looks to me like a slur at 8-hour sistum enny sum not more than 8 hours he is welcum to do but not more."—Country Gentleman.

America Farming?

Comparisons Seem to Indicate No

(Continued from page five.)

roots, carrots, beets, mangels, turnips, rutabagas or potatoes because of the thorough cultivation which must be given them may help a little in solving that problem. The objection raised does not apply to the farmers of the irrigated sections. To a certain extent, they have already learned the value of root crops. It does not take a great deal of urging to induce them to grow the sugar beet providing a satisfactory market in the shape of a sugar factory is at hand. If that system of marketing is denied them, they immediately utilize larger quantities in their feeding operations.

"On cut and burned over lands farmers are gradually learning to recognize their soil's one deficiency, its lack of organic matter. With the growing and feeding of clover, field peas and root crops and the proper utilizing of the resulting quantities of barnyard manure, the bringing of these lands into a high state of fertility is readily accomplished. Even in the Palouse country of eastern Washington, there are a few of us who have recognized the feeding value of the different root crops. Our university stock—beef cattle, dairy cattle, sheep, hogs and even horses—are given a liberal allowance of roots in their daily rations for several months of the year and with results that are surprisingly satisfactory from the standpoint of gain in flesh and general appearance. We feed at the present time from 60 to 70 tons per year and could feed 100 tons very readily if we had better storage facilities for the roots.

"In conclusion:

"First—We can afford to learn from the experience of European farmers whose greater yields of small grains in bushels per acre are attributed in no small degree to the prominence given the root crops in their rotations. Second—Our sage brush soils and the soils of our cut and burned-over areas are low in their content of organic matter and the nitrogen which organic matter carries. Successful systems of farming on both these types of land depend upon the introduction and growing of those crops which add materially to the soil's stock of organic matter. These crops are usually the clovers and alfalfa. It is believed that the root crops, to a certain extent, at least, in both north and south Idaho can be grown to advantage in rotation with alfalfa, the clovers and the small grains. Third—Root crops should be more widely used than they are at the present time in the feeding of all classes of live stock."

A Demonstration.

"Visitors, I suppose, bother you a good deal, sir?" said a reporter to a famous statesman.

"I have no fewer than 60 visitors a day," the statesman replied. "Of these 60, 30 on an average I must see."

"How do you get rid of them quick enough? How, without offending them, do you show them that it is time to go?" inquired the reporter.

"My secretary," said the statesman, "comes to me when the time limit has expired and tells me very audibly that my wife wishes to see me."

'Ha, ha, ha," laughed the reporter. "I suppose now—"

But just then the secretary entered and said:

"Your wife, sir, wishes to see you."—Chicago News.

Want Ads

HELP WANTED—MALE 3

OUTSIDE SITUATION.
Good salary can be earned selling our complete line high class nursery stock. Cash advanced. Write for terms.

ALBANY NURSERIES, ALBANY, ORE.

HAWTHORNE AUTO SCHOOL.
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

WANTED — A FIRST-CLASS STALLION salesman, one who can bring the customers direct to the stables. Address Colfax Blue Ribbon Stud, Colfax, Washington.

GOVERNMENT POSITIONS ARE EASY TO get. My free booklet BY956 tells how. Write today — NOW. EARL HOPKINS, Washington, D. C.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free.
BEHNKE-WALKER BUSINESS COLLEGE,
167 FOURTH ST., PORTLAND, ORE.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER:

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:
2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

TRACTOR BARGAINS.
Practically good as new:
1-8-16 I. H. C. Mogul.
1-12-18 Leader.
1-16-30 Gas Pull.
Also PORTABLE SAWMILLS, BOILERS, THRESHING MACHINES, GAS ENGINES.
Write us what you want to buy, sell or trade second hand.
AGENCY FOR
Samson, Wallis & Track-Layers Tractors.
WESTERN FARQUAR MACHINERY COMPANY.
308 EAST SALMON ST., PORTLAND, ORE.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

(Continued on following page.)

MISCELLANEOUS—FOR SALE 60
Continued.

SASH AND DOORS.

Order your sash and doors direct from O. B. WILLIAMS CO. We sell for less because we own our own mill. Large stock. Prompt shipment and safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request. We do not handle rough lumber.

5 cross panel doors, No. 1	$1.33
3-ply veneer, 1 panel doors	2.00
Front glass doors, 2 ft. 8 in. by 6 ft. 8 in.	3.00
Kitchen glass door, 4 lights	2.25
Bungalow sash, as low as	.56
3x6, hot bed sash	2.25
20x25, medicine cabinet doors	2.25
Panel cupboard doors	.85
1-ply Gold Seal roofing	1.35

We carry a full line of building material, incluring frames, inside finish, builders' hardware, paint, etc.

O. B. WILLIAMS CO.
1943 1st AVE. SO. SEATTLE, WN.

MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer,** and **The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

BABY CHIX.

White Leghorns, the kind that are real dividend payers, bred for 16 years for eggs, size, VIGOR, VIM and VITALITY. $10 per 100, from the oldest established hatcher in the state. Delivery in good condition guaranteed. Lakeside Poultry Farm, Roy, Wn.

QUEEN QUALITY WHITE LEGHORN chicks: Feb., $12 per 100; Mar., $11; April, $10; May, $9; June, $8. Queen incubators, 70 to 2000 egg capacity; 1200-chick brooder stove, $18.50.

WE DO CUSTOM HATCHING. QUEEN HATCHERY, 89 Pike st., Seattle.

ORDER YOUR BABY CHICKS NOW FROM heavy laying strain; delivery guaranteed; our chicks please; R. I. Reds, March, $15 100; after Mar. $12. White Leghorns, March, $12 100; after March, $10. Maplebrook Poultry farm, Southworth, Wash., Box 3.

S. C. R. I. REDS—STOCK FROM TOPnotch western breeders crossed with my own trap-nested birds. Eggs after Mch. 15, $1.50 for 15; $8 100; baby chicks, $16 100. Safe delivery and strong chicks guaranteed. F. H. Volland, Kennewick, Wash.

MY R. C. R. I. REDS HAVE WON EVERY first and second, except one, competed for in the past 3 years. Have mated 4 pens for the egg trade. Guaranteed satisfaction. Mating list on application. G. W. Baker, Colfax, Wash.

FAMOUS CARNATION WHITE LEGHORNS. Baby chicks; high-grade utility stock; birds of merit, quick maturing; heavy winter layers; free range. Breeding stock. Ernest Raush, Carnation Poultry Farm, Kent, Wn.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please $12—100. Free catalog. Freshlaid Farm, Colfax, Wash.

WHITE BUFF AND BLUE ORPINGTONS, single and rose comb Anconas, the great winter layers, winners at leading Coast shows; eggs $1.50 to $3.00 for 15; chicks 20c each. Ira N. DeLine, Box D, Olympia, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R 7, Waitsburg, Wash.

S. C. WHITE LEGHORN AND S. C. RED eggs for hatching, $1.50 to $5 per $15; $7 per 100; heavy-laying, exhibition strains. H. J. Fuller, N124 Lincoln st., Spokane.

S. C. ANCONAS, EXCLUSIVELY HATCHing eggs, from a good laying strain. I feed no drones, $1.50 per 15, $6 per 100. Mrs. Ludke, R. 1, Box 121, Ridgefield, Wn.

BARRED PLYMOUTH ROCKS, PRIZE winners at shows; way ahead of average in N. W. laying contest. Write for prices. Wm. H. Helmsoth, Baker, Ore.

S. L. WYANDOTTES AND S. S. HAMBURGS —Pullets and hens $2 to $5, cocks and ckls. $5 to $15. Winners at many shows. G. G. Wherry, Payette, Ida.

EGGS FROM TANCRED S. C. W. LEGhorn hens, $1.25 per 15, $6 per 100, prepaid. J. W. Hirons, R. 2, B. 55, Scio Ore.

BRONZE TURKEY TOMS, $5, $7, $10; FEW young hen turkeys. H. T. Cutler, Parker, Wash.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

POULTRY 174
Continued.

HOGANIZED S. C. I. REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels, $5 each. These birds are all sons of a magnificent male, from a 271-egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs, $6 in 100 lots; settings, $1.50, $3, $5. Mrs. H. V. Rominger, Underwood, Wash.

79,637 EGGS IN 1916 FROM MY FLOCK of 450 S. C. Black Minorcas, prize winners in the showroom and laying contest; eggs from my Hoganized and trap-nested breeding stock at $2 per 15, $3.50 per 30, $5 per 50, $8 per 100, $70 per 1000. No baby chicks or stock for sale. John Dollenbacher, R. 1, Selah, Wash.

HATCHING EGGS—PEARL GUINEAS, $1.75 per 15; Toulouse geese, 25c each; Mammoth Pekin ducks, $1.75 per 15; Rose Comb reds, S. C. Buff Leghorns, $1.25 per 15.

C. O. JOHNSON.
R. 1, MEDICAL LAKE, WASH.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

R. C. BUFF WYANDOTTE EGGS, FOR hatching, $1.50 and $1 per 15. Mrs. W. E. Boner, Joseph, Ore.

FOR SALE — CHINESE PHEASANTS' eggs, $3 per dozen. Dr. F. M. Cole, Caldwell, Idaho.

PRIZE-WINNING BUFF ORPINGTONS— Settings $2 to $10. Lucy R. Scudder, Box 36F, North Yakima, Wash.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

WHITE WYANDOTTE EGGS, $1.50 FOR 15; $6 100. J. D. Baker, Payette, Ida.

LIVE STOCK 177

FOR SALE, OR EXCHANGE FOR LIVE stock—Imported Hackney stallion; weight 1650. For further information address C. W. De Voe, Jerome, Idaho.

GARFIELD JOHANNA FAYNE, REG. Holstein bull, for sale; sire Sir Johanna Fayne Douglas. Mathis, Winchester, Wn.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 137 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS.
VETCH OR "TARES,"
A Great Forage or Seed Crop.
RED CLOVER, ALSYKE,
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.
COMPLETE LINE OF FARM SEEDS.

We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.

CORVALLIS FLOURING MILLS,
Corvallis, Oregon.
Home of the Famous Oregon Agricultural College.

TESTED SEEDS FOR FARM AND GARden—New 1917 seed catalogue now ready; valuable information gathered in 25 years' experience in the northwest. Write for quantity price on Grass, Clover and Alfalfa seed. For new catalogue address Aabling-Boyce Seed Co., Seattle, Wash.

SEED CORN, SEED POTATOES, BOTH Yellow and White Dent varieties; field selected before frost; kiln dried; part tested runs 95 per cent. Price 6c per pound. 400 lbs. specially seed grown, hill select, Netted Gem potatoes, 6c. C. L. Hartman & Son, Prosser, Wash.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.

ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, ORE.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEEDS 620
Continued.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

FARM SEEDS, COMPLETE STOCK OF red and alsike clover, timothy, vetch grass seeds, seed grain, garden seeds. Send for free catalogue.

D. A. WHITE & SONS, Seedsmen,
SALEM, Ore.

TESTED SEEDS—CHOICE CLOVER, TIMothy, corn, grain, grass and garden seeds, for spring planting. Mail orders a specialty. Prompt shipment. Send for catalogue. Murphy's Seed Store, Albany, Ore.

ALFALFA SEED, RED CLOVER, SWEET clover; Early Ohio; Idaho Rural; Peachblow seed potatoes; Dicklow spring wheat—the big crop producer; blue barley. Jerome M. & E. Co., Jerome, Idaho.

ALFALFA, RED CLOVER, ALSYKE CLOver, white clover, sweet clover, timothy and other grasses; seed oats and wheat; at reasonable prices. Voegeler Seed Co., Salt Lake City, Utah.

BLACK SEED OATS—"VICTOR"; AWARDed gold medal at San Francisco; richest oat on earth. Sample, prices free. Otis Ray Daugherty, Molalla, Ore.

SUDAN GRASS SEED,
40 cents pound.
J. E. JENKS & SON,
TANGENT, ORE.

A LIMITED NUMBER OF THE FAMOUS Yakima Goodell strawberry plants, $2 per 100, delivered free.

WILL HANKS, NACHES, WASH.

FOR SALE—RED AND ALSYKE CLOVER; special low prices. Write for sample. A. B. Hinz, Jefferson, Ore.

NURSERY STOCK 621

EVERBEARING STRAWBERRY PLANTS, Montana grown, extra hardy and true to name. "Superb" and "Progressive" varieties, $2.50 per 100, $20 per 1000, postpaid. W. A. Thayer, Bearmouth, Mont.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

FULL-BEARING STRAWBERRIES. Progressive, Standpat, Superb. Prices reasonable. Thos. Grave, Gresham, Ore.

FARM LANDS—FOR SALE 651

REAL FARMERS — MEN WHO know good land when they see it —are rapidly taking up THURSTON COUNTY 10-ACRE FARMS, just opened to settlement. Near Seattle, Tacoma, Olympia, the big army mobilization camp site, and fruit and vegetable cannery; soil deep and rich; raises banner crops; land level as a floor; in raw state, but easily cleared; new town started; twelve passenger trains stop here daily. At $750 for 10 acres, on terms of $20 cash and $10 monthly, this is the opportunity of a lifetime. Write at once for information.

A. H. REID & CO.
315 NEW YORK BLOCK.
SEATTLE, WASH.

—PALOUSE FARM—

320 acres, 4 miles from a good Palouse town, all under cultivation, except five acres; 150 acres in fall wheat; 80 for spring seeding; 1-3 of all crop to purchaser, or can get possession; has comfortable 6-room house; fair barn and outbuildings, with fine water. The land lies extra good, and is the very best quality. A bargain at $27,000, one-half cash, balance to suit at 6 per cent. See Mr. Tipton.

HEGE & WATKINS CO.
715-716-717 PAULSEN BLDG.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands $11 to $30 acre; arrigated lands, $35 to $50; 20 years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

FOR 30 DAYS WE OFFER 640 ACRES, 5 miles from a good town in Rosebud county, Montana; 80 per cent tillable; no gumbo or alkali; heavy grass; 2 feet of soil, 18 feet clay subsoil; $15 per acre; $2000 cash, balance at 6 per cent, long time. 640 acres, 2 miles from above; 125 acres tillable, balance fine grazing; 3 springs; some small timber; ideal stock ranch; $5 per acre; $1000 cash, balance 6 per cent, long time. No trades. Reference, any bank or business house. Bolevar & Brown, 41 West Park st., Butte, Montana.

FIVE DOLLARS SAVED
is an acre of ground. Get prices, terms and location of AGRICULTURAL LANDS near Tacoma.

JESSE O. THOMAS JR.
320 TACOMA BLDG., TACOMA, WASH.

I HAVE THREE GOOD WHEAT AND STOCK RANCHES FOR SALE. $35 TO $45 PER ACRE; TERMS. WRITE ME.

C. W. BETHEL,
HARRINGTON, WN.

FARM LANDS—FOR SALE 651
Continued.

MY ALFALFA LAND AT STANFIELD yielded last year 7½ tons per a.; 1916, 8 tons; price both years $9 per ton in stack.

I own 760 a. near this same kind, but not improved, under new govt. project known as Umatilla West Extension, near Columbia river, Morrow Co. Government will furnish water for not more than 160 acres to any one owner, so must sell excess.

Subject to govt. lien for water, will let it go for next 30 days at $40 per acre; easy terms or part crop payment.

GEO. C. HOWARD, OWNER.
314 C. C., PORTLAND, ORE.

FOR SALE—A SNAP IN IRRIGATED YAKima valley; 170 acres; diversified farming, dairy ranch including $2000 worth of registered and grade stock; 1½ miles from live town; 3 railroads. We have many good bargains to offer in fruit, hay, dairy, diversified farming and unimproved lands in the center of the richest valley in the world, where crop failures, blizzards and destructive storms are unknown. Address Hilton Land Co., Granger, Wash.

MONTANA LAND.

We have for sale on 10-year terms, at 6 per cent, 29,000 acres fine wheat land in Dawson and Rosebud counties, Montana, at from $8 to $22 per acre, and over 75,000 acres fine grazing and farm lands at from $4.50 to $6.50 per acre, on ten-year terms. A large number of our settlers are from Walla Walla and Palouse sections.

MONTANA WHOLESALE LAND CO.
MILES CITY, MONTANA.

STOCK RANCH, 240 ACRES, ABOUT 13 miles east of Lebanon, Ore.; two sets of buildings, plenty of fruit for two families; on county road; about 20 acres under cultivation, balance pasture, with some timber; good soil; plenty of spring water; price $7500; would consider improved acreage near any good school town up to $4000; terms on the balance. S. R. Tondy, Jefferson, Ore.

440 ACRES, ELEVEN THOUSAND DOLlars, $2000 cash, balance all time you want; good improvements; 100 acres meadow; Cheney district.

A section, all in cultivation, $35 per acre, only $4000, balance one-third crop; good wheat land. J. S. Langlois, Ritzville, Wash.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2nd and Cherry st., Seattle, Wash.

160 ACRES, 3 MILES N. OF MEDICAL Lake, Wash., and 1 mile from Ry. siding; all ready for crop; black loam soil; very fertile; fenced; small house; good well; very close to neighbors; $75 per acre.

WM. MULHALL, FENN, IDAHO.

WE OFFER YOU SELECTION FROM 15,000 acres of choice wheat land in the Musselshell valley on easy terms; big movement on for such lands; the time to buy is now. For particulars write King Land & Loan Co., Harlowton, Montana.

ALFALFA LAND.

140 a.; 60 a. tillable; 40 a. in cultivation; 30 a. in alfalfa. This is an extra good dairy ranch; 3 miles from good R. R. town. Price $8500. Box 222, Leavenworth, Washington.

160-A. RELINQUISHMENT; LEVEL VALley land; improvements; 10 feet to water; irrigation well and plant; 320 a. adjoining open under new homestead law. Box 332, Winnemucca, Nevada.

FARM LANDS OBTAINED THROUGH foreclosure of mortgage offered at rare bargains and on easy terms. Send for list. Pennsylvania Mortgage Investment company, Spokane, Washington.

160-A. RELINQUISHMENT; LEVEL VALley land; improvements; 10 feet to water; irrigation well and plant; 320 A. adjoining open under new homestead law. Box 332, Winnemucca, Wash.

FOR SALE—BY OWNER, TWO WELLimproved half sections, close to school, town and postoffice, in Alberta, Canada. F. L. Geis, Daysland, Alberta, Can.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

FARM LANDS—WANTED 654

WANTED—SHEEP RANCH, GOOD RANGE in connection, mild winters; will go anywhere; must be cheap and good terms. What have you? Address Box 83, Richland, Ore.

IRRIGATED LANDS—For Sale 663

FOR SALE—720 ACRES, WELL EQUIPPED; artesian wells; alfalfa, orchards, berries, grapes; 3 sets buildings, with baths and gas; locust grove; school; railroad terminates on farm; adapted to dairy or purebred live stock; also 1500 acres leased land; have seed, feed and equipment; part in crop; would put in all the crop desired; 8 miles from Lewiston on paved road; ideal climate; no finer farm anywhere; will sell all or divide. Daniels & Wallace, Lewiston, Idaho.

320 ACRES IRRIGATED LAND IN MOSES Lake country, adjoining C. & O. nursery, $60 per acre; especially adapted to orchard or alfalfa raising; unlimited water at 40 feet. No money down if purchaser will improve property and pay in 10 equal installments, commencing one year from date of sale, with 6 per cent interest.

A. R. MEAD, ODESSA, WASH.

OPPORTUNITY IMPROVED IDAHO IRRIgated ranch; 80 acres alfalfa, potatoes; ranch is yours at $2500, bal. long time at 6 per cent; last year's income $3000; must sacrifice. Write owner for particulars. Geo. Nasse, 245 E. Rochelle st., Cincinnati, Ohio.

ACRE TRACTS—FOR SALE 660

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Grain and Produce Markets

Chicago Grain.

CHICAGO, March 24.—Big losses in acreage as a result of winter killing did much to hoist the value of wheat today. The market, however, reacted because of profit-taking and in the end was unsettled at the same as yesterday's finish to 2¾ up, with May $1.90¾ to $1.91 and July $1.63 to $1.63⅜. Corn gained ⅝ to 1½c, oats closed ⅛c off to 1⅛c advance and provisions unchanged to 17c higher.

Reports from 11 leading states indicated that abandonment of winter wheat territory aggregated 4,885,000 acres, the heaviest total ever known except once. This showing with a fresh flood of damage reports from west of the Missouri river, led to unusually free buying that carried the market to the topmost prices which the new crop deliveries have attained this season. Prospects of increased cooperation of the United States in supplying foodstuffs to the entente nations counted materially as a help to the bull side of the market.

Anticipation of a good sized falling off in the United States visible supply total on Monday offset to some extent the influence of heavy realizing sales in the last hour.

Aggressive buying made corn soar to new high record prices for the season. Rumors of an Argentine embargo and the continued scarcity of domestic rural offerings were prominent factors. Oats rose with corn and wheat.

Provisions derived strength from the higher quotations on hogs and grain. Lard and ribs touched the highest prices yet this season.

Pacific Northwest Grain.

PORTLAND, Ore., March 24.—Wheat—Firm; no trading. Spot bids steady. Bluestem, $1.73; fortyfold, $1.70; club, $1.68; red Russian, $1.64. Barley—Unchanged.

TACOMA, March 24.—Wheat—Bluestem, $1.74; fortyfold, $1.70; club and red fife, $1.69; red Russian, $1.66.

SEATTLE, March 24.—Wheat—Bluestem, $1.74; turkey red, $1.74; fortyfold, $1.70; club, $1.69; fife, $1.69; red Russian, $1.67. Barley, $39.50 per ton.

WILBUR, Wash., March 24.—Bluestem, $1.60; club, $1.55. Oats, $37. Barley, $37.

San Francisco Grain.

SAN FRANCISCO, March 24.—Wheat, firm; no trading.

Barley, May, $2.29; December, $1.68 bid.

Minneapolis Grain.

MINNEAPOLIS, March 24.—Wheat prices opened firm, but the close was fractionally down. Corn and oats were in fair demand.

Wheat—Receipts 283 cars compared with 332 a year ago.

Wheat—May opened, $1.90 to 1.89 5-8; high, $1.91 7-8; low, $1.99 5-8; closed, $1.89 1-8.

July opened, $1.83 1-2; high, $1.84 5-8; low, $1.81 7-8; closed, $1.82 1-8.

Cash—No. 1 hard, $2.06 1-8@2.07 1-8; No. 1 Nor. $1.97 1-8@2.01 1-8; to arrive, $1.93 1-8; No. 2 Nor $1.93 1-8@2.01 1-8; No. 3 Wheat $1.85 1-8@1.95 1-8; No. 2 durum, $1.95@2.07; No. 2 hard Montana, $1.98 1-8@2.00 1-8.

Corn—No. 3 yellow, $1.16@1.17.

Oats—No. 3 white, 61 1-4@62 3-4c.

Flax, $2.87 1-4@2.95 1-4.

Rye, $1.61@1.62.

Bran, $35@35.50.

Flour—Fancy patents advanced 15 cents; quoted at $10; first clears advanced 30 cents, quoted at $8.85. Other grades unchanged. Shipments, 43,406 barrles.

Barley, $1@1.27.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1916-17 and 1915-16 were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1916-17.....	7,002	824	1,226	3,513
1915-16.....	4,220	1,132	299	3,215
Portland—				
1916-17.....	4,204	2,025	182	1,885
1915-16.....	9,457	881	1,445	2,058
Total—				
1916-17.....	11,206	2,849	1,418	5,398
1915-16.....	13,677	2,063	2,671	5,273

Portland Wheat.

PORTLAND, Ore., March 26.—Oats were the strong feature of the grain market in the latter part of the week. The big demand in the interior for oats and hay for shipment into the sheep sections of Idaho, Utah, Nevada, Wyoming and Colorado raised prices all along the line. In the local market oats sold up to $38.50, and dealers reported sales in the country on the basis of $40 and even better at Coast. There is also government inquiry for oats and some demand from California. The trade looks for stocks to be cleaned out entirely before the season is over.

Hay prices are somewhat higher, but are not as strong here as in the country, as the local demand is not heavy and the supply is ample.

Wheat has held around the high point in spite of the impossibility of shipping east. The limited number of cars received during the week were used in rushing emergency shipments of feed into the sheep sections. Closing bids for April wheat were: Bluestem, $1.74; fortyfold, $1.70; club, $1.68; red Russian, $1.64.

Barley is firm at $40 in sympathy with the bulge in California, where new export business has been worked in the last few days.

Flour was advanced to the $8.60 basis for patents at the close of the week. This is the highest price known here since civil war days. Millfeed prices have also been raised and further advances are predicted.

The merchants' exchange has wired a protest to the interstate commerce commission against the proposed advance in freight rates, as affecting the 1916 crop. The wheat was sold on the basis of current freight rates and the roads alone are responsible for the failure to move it.

Live Stock Quotations.

At Omaha.

OMAHA, March 24.—Hogs—Receipts, 6800; market higher. Heavy, $14.60@14.80; light, $14.35@14.70; pigs, $12@13.50; bulk of sales, $14.50@14.70.

Cattle—Receipts, 200; market steady. Native steers, $9@12.50; cows and heifers, $7@19.50; western steers, $7.75@11; Texas steers, $7.50@9; stockers and feeders, $7@10.25.

Sheep—Receipts, 800; market steady. Yearlings, $14.50@13.25; lambs, $13.75@14.85.

At Chicago.

CHICAGO, March 24.—Hogs—Receipts, 14,000; market strong at yesterday's average to 5c higher. Bulk, $14.85@15.05; light, $14.20@15; mixed, $14.50@15.10; heavy, $14.45@15.15; rough, $14.45@14.60; pigs, $10.50@14.

Cattle—Receipts, 800; market weak. Native beef cattle, $9.20@12.65; stockers and feeders, $7@10; cows and heifers, $9.60@10.70; calves, $10.50@15.

Sheep—Receipts, 3000; market steady. Wethers, $11.20@12.65; lambs, $12.75@15.25.

At Seattle.

SEATTLE, March 24.—Receipts, 55 cattle. Market strong on all lines.

Cattle—Prime steers, $9.75@9.85; medium to choice steers, $6.50@8.50; best cows and heifers, $8.25@8.60; medium to choice cows, $6@8.25; common to good cows, $4@7.50; calves, $6.50@9.50; best bulls, $5.50@6; common bulls, $3.50@6.

Hogs—Prime light, $14.50@14.65; medium to choice, $14.35@14.45; smooth heavies, $13.85@14.15; rough heavies, $13.35@13.65; pigs, under 150 pounds, $10.10@13.15.

Sheep—Prime lambs, $12.50@13.75; good lambs, $12.25@12.50; wethers, $10.25@10.50; ewes, $9.10.

At Portland.

PORTLAND, Ore., March 24.—Hogs steady; receipts, 268. Bulk of packing grades, $14.25@14.40; heavy packing, $14.35@14.50; light packing, $14.20@14.35; rough heavies, $13@13.50; pigs and skips, $12.75@13; stock hogs, $11.50@12.75.

Cattle—Steady; receipts, 39. Steers, prime light, $9.35@9.65; prime heavy, $9.50@9.75; good, $8.90@9.25; cows, choice, $7.75@8; medium to good, $7@7.35; ordinary to fair, $6.25@6.75; heifers, $6.50@8.50; bulls, $5@7.25; calves, $6@10.

Sheep—Steady; receipts none. Lambs, east of mountains, $12.90@13.10; lambs, valley, $12.50@13; lambs, shorn, $10.75@12.25; prime wethers, $11@11.50; choice ewes, $9.75@10; heavy ewes, $8.75@9.25.

Spokane Stock Yards Saturday.

Hogs—Receipts 20, market strong. Prime light packing, $14.50@14.60; prime heavy packing, $14.50@14.75; rough heavy, $13.60@13.75; pigs, $12.60@13.35; stockers, $10@11.50; bulk of sales, $14.50.

Cattle—receipts 89, market steady. Prime heavy steers, $9.50@9.75; prime light steers, $9.25@9.40; good steers, $8.50@9; prime cows, $8@8.50; good cows, $7.50@8; common cows, $6.50@7.25; best heifers, 8.25@8.75; bulls, $4@6.50; calves, $7@10; stockers and feeders, $6@7.50.

Sheep—Receipts, none; market steady. Prime lambs, $12@12.50; common lambs, $11@11.50; choice yearlings; $10.50@11; good yearlings, $9.50@10; best mutton ewes, $10@11.

Portland Market.

PORTLAND, Ore., March 24.—Butter is scarcer than ever before known at this time of year. Cubes are selling up to 38 cents and many shipping orders are unfilled. No increase in the make is expected before next month. City prints have been advanced a cent and would go higher, but creamery men fear to check consumption.

Egg speculators are again buying freely for storing and there is also a good demand from the Sound.

No new business has been reported in the wool market, but buying soon in anticipation of govtrnment needs is looked for.

The potato market is still quiet, but prices are firmer as farmers' stocks are running low. The last car of onions has passed out of first hands.

Bean prices have been raised again in response to sharp advances in California.

The hop market continues inactive.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $38.25@39.25 per ton.

Corn—While, $51; cracked, $52 per ton.

Millstuffs—Bran, $30 per ton; shorts, $34.

Barley—No. 1 feed, $40; brewing, nominal; rolled, $42@43.

Hay—Buying prices, Timothy, eastern Oregon, $20@21; alfalfa, $16@18; grain, $12.50@14.

Eggs—Oregon ranch, case count, 26 1-2@27c per dozen; candled, 29c.

Poultry—Hens, 19@20c; ducks, 22@24c; turkeys, live, 22@24c; dressed, 23@28c; geese, 12@14c.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $3.25@3.50 cwt; sweet potatoes, $6.

Seed Potatoes—Early Ohios, 4c lb; Early Rose, 4c lb; white potatoes, 4c lb.

Apples—Washington apples, cooking, 65@85c; eating, $1@1.25; Wageners, 75c@$1.20 box; Rome Beauties, $1@1.40 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 43c lb; Medo-Maid, 43c lb; Cascade, 43c lb; Gold Coin, 36c lb; Gold Leaf, 43c lb; Better Butter, 43c lb; Hazelwood, 43c lb; Peerless, 39c lb; Jersey Belle, 42c lb; Attalia, 43c lb; Diadem, 43c lb; Jersey, 39c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 22½c; Hazelwood full cream, triplets, 23c lb; Hazelwood Young America, 24c lb; Wisconsin limburger, 28@29c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 25c lb.

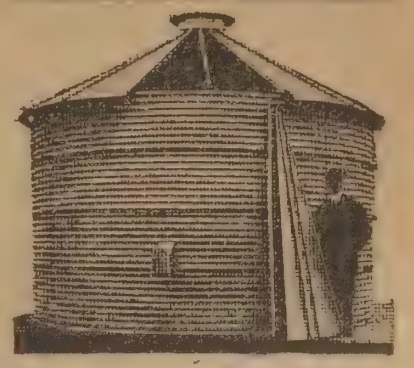
Eggs—Fresh local ranch eggs, $9@9.50 case.

Live Poultry—Springs, 18c lb; hens, 18c lb; old roosters, 10c lb; ducks, 13c lb; turkeys, 20@25c lb.

Dressed Poultry—Hens, 21c lb; springers, 20c; old roosters, 13c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs; 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.



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Seattle Market.

SEATTLE, Wash., March 24.—There has been more activity in the potato market this week, and while actual sales do not show any change in the quotations, inquiries have increased and grower holders and speculators are leaning more to the bull side.

Brokers here are unable to get confirmations of orders in the Yakima valley under $70, although they will bid $60 and $65. Jobbers who have small stocks are selling on the curb at that level, and report the demand slow.

Jobbers fear the effects of the Japanese Irish spud, 1000 sacks of which will go on this market next week. This is the first shipment of potatoes ever received from the Nipponese kingdom and the quality is yet to to be tried out. It is reported on authentic sources that there is a surplus of 1000 tons which importers are ready to market on Puget sound as soon as permits can be secured from the government. Opening prices are conjectural, but it is stated that the stock can be sold at a profit at $50 and $55. This is the pivotal question, as it is conceded that they must undersell both Yakimas and Puget sound spuds in order to affect this market. Should the Japanese potato experiments prove successful, competition for the spring trade will have been established with the local grower in onions and spuds and on eggs in the winter season.

The apple market is very firm. Only a few wholesale houses here are supplied with the fruit, and this in small amounts. Brokers are quoting $1.85 f. o. b. Yakima for four and four and one-half tier extra fancy Winesaps and $1.50 for five-tier. Newtown Pippins are $1.55. There is a heavy demand for apples in eastern markets and 25 to 30 carloads left the valley in a week. It is believed here, however, that apple holdings in eastern Washington are ample.

High prices of both butter and eggs which have run parallel in sentiment through the week, will part company on Monday according to the best advices now obtainable in the wholesale districts. Settled weather after the winds of the last four days is now expected, and the receipts are scheduled on the basis of reports from the country to increase heavily, while at the same time the demand will decrease.

The surplus needed for storage operations is likely to show. Receipts this week have been 50 per cent of the volume of a year ago, and the eggs went into consumption as fast as checked in. Efforts will be made by jobbers to bear the market to 25c. If this can be accomplished storage for the fall will be resumed, although not on as extensive a scale as last year.

The output of butter for the week has been the smallest, as reported by city creamerymen, of any week during the last year. Only for a differential in the California market prices, it is stated, it would have advanced at least 4c. It has been impossible to supply the demand from the daily local churnings. Country creameries have been shipping grudgingly of a reduced make. The condensaries have thrown 1000 pounds per day into the balance, but all these sources combined have fallen below the requirements of a market that consumes 950,000 pounds of butter per month. Grazing is needed to ease the situation.

Cheese is firm. Jobbers have nothing to offer under 25c per pound. Manufacturers quote 23@24c f. o. b., and report shortages in the make. Condensaries and cheese manufacturers in competitive territory are battling for milk, with the premium paid by the milk concerns throwing the bulk into their hands.

The shortage of the hay crop in eastern Washington, consequent high prices and the difficulty of securing cars for hauling the hay into this market has created a brisk demand while making a place for Puget sound hay. Steamers plying between this port and the Skagit country have been bringing in full cargoes of the hay. Wholesalers, in making examinations of the quality before buying, say that hay that was cut before the rains is of high quality, and is taking the place of eastern Washington timothy with many buyers. The difference in price of eastern Washington hay at $23@25 as against Puget sound at $18, best grade, is an attraction to many consumers and small dealers.

BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 26@28c per dozen.

Poultry—Live hens, fat, over 4 lbs., 20c per lb.; do 3 lbs. and under, 19c; old roosters, 12c per lb.; springs, 21c; ducks, 20c per lb.; squabs, large, $3.50 per dozen; geese, fat, 16c per lb.; turkeys, live, 23@24c.

Butter fat—42c per lb.; dairy butter, 25c per lb.

Beef—Buying price: Prime beef steers, 7@8c per lb; cows, fat, 7@8c per lb.

Hogs—Light, 14@15 1-2c per lb.; do heavy, 10@12c per lb.

Veal—Fancy light, 13@14c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 32c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim) 36c per lb.; dry calf (under six lbs.), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry butcher full wool sheep pelts, 25@28c per lb.

SELLING PRICES.

City Prices—Team Lots.

Apples—Winesaps, $1.75@2.25 a box; Spitzenburgs, extra fancy, $1.75 box.

Feed—Scratch feed, $54@55 per ton; all grain chop, $46@47 per ton; oats, $42 per ton; rolled oats, $42 per ton; rolled barley, $45 per ton; wheat, $60@61 per ton; bran, $30@31 per ton; shorts, $32 per ton; alfalfa meal, $24 per ton; whole corn, $51 per ton; cracked corn, $52 per ton.

Hay—Eastern Washington timothy, $23@25 per ton; alfalfa, $19@19 per ton; double compressed, $25 per ton; straw, $12 per ton; wheat hay, $16 per ton.

Onions—Oregon, 9c per lb.

Potatoes—Local, $65 per ton; Yakima Gems, $70 per ton.

Rutabagas—Yakimas, $2.50 sack.

Butter—Washington creamery extras, cubes, 38c per lb.; do bricks, 39c lb.; creamery firsts, cubes, 37 lb.; do bricks, 38c lb.

Eggs—Fresh ranch, 28@29c.

Seattle Wheat.

SEATTLE, Wash., March 24.—With all mills sufficiently supplied under the conditions that now prevail in the flour trade the amount of grain that changed hands this week in the country is very small. The approximate of the crop in this state of 3 to 5 per cent is being closely held, and is centered in a very small number of hands.

Futures are looking strong up to the beginning of the new crop year. One of the representative sales on change this week was 5000 bushels of July bluestem at $1.50. It is now everywhere conceded that the last of the hard wheat crops has been sold and is now beyond the possibility of reselling. Bids to the farmers for the week have been $1.52 for bluestem and turkey red and $1.47 to $1.48 for club and fife.

Farmers are clutching their grain, turning deaf ears to bids of less than $1.75, and do not appear to be interested. It is believed here that that level would sweep into strong hands very quickly all the grain that is now left in the state. Soft wheat is becoming scarce, but under the pressure of gloomy flour futures millers are convinced that there will be enough grain, with their own holdings and what is left in farmers' hands, to bridge over until the new crop year. Eastern buyers have been discouraged over the difficulty of getting cars and practically laid down this week.

Wool.

BOSTON, March 23.—The Commercial Bulletin will say tomorrow:

"While the volume of wool business has not increased very perceptibly over that of a week ago, more interest was displayed by the mills. Demand has been chiefly for grades above high quarter blood, all of which were fully firm in price. Contracting in the west has been limited to a few scattered clips, which were taken at the old rates. Demand among spinners and combers is for small quantities and chiefly stock lots, on which prices are steady."

Scoured basis:

Texas, fine, 12 months, $1.20@1.25; fine 8 months, $1.05@1.10.

California northern, $1.15@1.20; middle county, $1.05@1.10; southern, 80@85c.

Oregon eastern No. 1, staples, $1.25@1.30; eastern clothing, $1.05@1.10; valley No. 1, 95c@$1.

Territory fine staple, $1.30@1.35; half-blood combings, $1.20@1.25; three-eighth blood combing, $1@1.05; fine clothing, $1.10@1.12; fine medium clothing, $1@1.05.

Pulled extra, $1.10@1.15; fine A, $1@1.05; AA, $1.05@1.10; A supers, $1@1.05.

Butter and Cheese.

SAN FRANCISCO, March 24.—Butter—Fresh extra, 35 1-2c; prime firsts, 34 1-2c.

Cheese—New, 20 1-2c.

ELGIN, Ill., March 24.—Butter, 25 tubs at 40c.

CHICAGO, March 24.—Butter unchanged. Eggs higher. Receipts, 9404 cases; firsts, 27 1-2c; ordinary firsts, 26 1-2@27c; at mark, cases included, 26@27 1-2.

PORTLAND, Ore., March 24.—Butter firm. Market almost bare. Cube extras, 33c.

San Francisco Produce Market.

SAN FRANCISCO, March 24.—Butter—Fresh extras, 35½c; prime firsts, 34½c.

Eggs—Fresh extras, 27c; extra firsts, 26c; fresh extra pullets, 25½c; extra firsts, pullets, 25c.

Cheese—New, 20½c; Young Americas, 24c.

Poultry—Hens, 23@24c; old roosters, 15@16c; fryers, 30@35c; broilers, 38@40c; large, 30@35c; squabs, $2.75@3; pigeons, $1.75@2.25; ducks, 19@20c; geese, 18@20c; turkeys, 23@24c.

Potatoes—Rivers, $3@3.50.

Onions—$7@7.50.

Feedstuffs—Cracked corn and feed cornmeals, $51@51.50; rolled barley, $45@47; meal, alfalfa, $23.50, carloads; less, $26.50.

Receipts—Flour, 4905 quarters; barley, 8420 centals; beans, 576 sacks; potatoes, 1290 sacks; hay, 530 tons; hides, 1060; wine, 25,900 gallons.

Klickitat Stockman Dead.

William J. Mulligan, age 40, a well-known Klickitat stockman, died at Fallbridge, Wash. He lived in Klickitat county nearly all his life. He was formerly engaged in running sheep with his father, William Mulligan Sr., a Klickitat pioneer, and for several years had been foreman for A. L. Bunnell, sheep owner.

Hogs on Cheap Feed Test.

Willim Hyslop, professor of animal husbandry at Washington state college, has sold a car of 45 hogs from the college farm to the E. H. Stanton company of Spokane at $15 per hundred pounds. Part of the shipment was fattened on peas and part on barley, low-priced grains as against corn and wheat, high-priced grains.

No Water Shortage Feared.

After a check of snowfall conditions on the Yakima water shed reclamation officials are convinced that there need be no fear of a shortage of water for the coming crop.

Season Good for Lambing.

Yakima valley flock masters report good success with their sheep this spring. Lambing is well along and the losses have been small.

Linseed.

DULUTH, Minn., March 24.—Linseed on track, $2.90 1-4; arrive, $2.90 1-4; May, $2.91 1-4; July, $2.92 7-8 bid.

Canada Offers 160 Acres Land Free to Farm Hands

Bonus of Western Canada Land to Men Who Assist in Maintaining Needed Grain Production.

The demand for Farm Labor in Canada is great. As an inducement to secure the necessary help at once, Canada will give **one hundred and sixty acres of land free as a homestead** and allow the time of the farm labor, who has filed on the land, to apply as residence duties, the same as if he actually had lived on it. Another special concession is the reduction of one year in the time to complete duties. Two years instead of three, as heretofore, but only to men working on the farms for at least six months in 1917. This appeal for farm help is in no way connected with enlistment for military service, but solely to increase agricultural output. A wonderful opportunity to secure a farm and draw good wages at the same time. Canadian Government will pay all fare over one cent per mile from Spokane to Canadian destinations. Information as to low railway rates may be had on application to

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Our new mail order department brings our immense stock of ten thousand suits and overcoats direct to your home. It is now possible to purchase from us at the same low price and with the same guarantee of fit and service as the thousands of our customers in the city.

Save $10.00

Buy your clothes the modern upstairs way, the money-saving way. Ten thousand suits to select from—blue serges, pencil stripes, clay worsteds, tweeds, cassimeres, velours—any fabric you may fancy, all hand tailored, at a saving of $10.00 to you.

Selling clothes upstairs on the second floor is a radical change from the old way—the low rent, the inexpensive fixtures, the cash selling plan and the fact that we are willing to accept a small profit—these are the reasons why we are able to save $10 to every purchaser.

Thousands of men in the northwest have taken advantage of our selling plan and proven to themselves that they save money—you can do the same.

Mail Coupon Today

Cut out coupon and mail today for samples and measure blanks. State the kind of suit wanted. You can easily take your own measure. No trouble, no delay. You pay only on delivery and if not satisfied don't pay. **We guarantee satisfaction or your money back.**

We Pay Delivery Charges Anywhere.

LUNDQUIST-LILLY,
Seattle.
Gentlemen:

Please send samples and measure blank for suit.

Name .....

Address .....

Lundquist-Lilly

Upstairs Clothes Shop.
Joshua Green Bldg., Seattle.

NEWS FOR BREEDERS

Shorthorn Sales at Portland and Spokane

Northwest Shorthorn breeders have announced through the columns of the Farmer their forthcoming sales—one to be held at the Union stock yards, North Portland, on April 3rd and the other at the Union stock yards, Spokane, Wash., on April 5th. The catalogues for both sales have been issued and are being mailed to prospective purchasers. Through the medium of both sales, 144 choicely bred bulls and heifers will be offered, 90 of which will be at Portland and 54 at Spokane. The list of consignors to both sales this year, include many new names in addition to the breeders who have contributed to Shorthorn sales held in the past, indicating the cooperative spirit with the smaller bredeer to find a market for his surplus.

While the Portland sale is familiar to all, through its having become a recognized institution, the Spokane event is this year but being initiated. The demand for better live stock throughout the northwest generally is increasing greately. The Spokane event should be of great value to many people living in the region tributary to Spokane. Should patronage justify it, the Spokane sale will be made an annual event.

Practically all the females listed in both sales are of breeding age, some having been bred. The bulls are ready for service, and for the protection of the buyer, a strong guarantee attaches to each animal sold. The entries to each sale will be exhibited the day prior to the sales and 12 prizes of $5 each will be given for the following classes: Bulls calved prior to September 1, 1915; bulls calved after September 1, 1915; cows or heifers calved prior to September 1, 1915, and heifers calved after September 1, 1915. In addition to these prizes, the American Shorthorn Breeders' association is giving two silver cups; one for the best bull of the show and one for the best female.

Both sales will start promptly at 10 a. m. and will be conducted by Colonel N. G. Kraschel of Harlan, Iowa. Frank Brown of Carlton, Ore., will supply catalogues of the Portland sale upon request and a card addressed to F. M. Rothrock at Spokane will bring a Spokane catalogue. Various railroads have authorized the usual certificate plan fares to the Spokane show.

DUFUR COLT SHOW.

The second annual Dufur Colt show will be held on Friday and Saturday, June 15 and 16, at Dufur, Ore. The membership of this committee is as follows: Henry Bolton, Kingsley; Harry Richards, Boyd; J. E. Kennedy, Wamic; J. T. Adkisson, The Dalles; A. R. Chase, county agriculturist, and George W. Johnston, H. C. Dodds, Henry Erickson, F. B. Ingels, P. W. Knowles and G. D. Brodie, Dufur. George W. Johnston and George D. Brodie were selected as president and secretary, respectively.

MORE SHORTHORNS FOR IDAHO.

D. E. Kiggins of Boise, Idaho, recently purchased 19 head of cows and calves, four heifers and two bulls from A. D. Dunn of Wapato, Wash., for shipment to the Boise valley.

The cows and heifers were mostly well-bred Scotch Shorthorns, and the two bulls were straight Scotch in their breeding. In addition, one of the cows had a splendidly-bred Butterfly bull calf, sired by the well-bred Canadian bull, Royal Lavendar.

ERROR CORRECTED.

In the last issue of The Farmer the announcement of the Jersey dispersal sale of W. G. E. Smith of Hood River, Ore., indicated that the sale would be held in that city. Instead, it is scheduled for Oregon City, Ore., and will be held April 11. To the Smith animals will be added Jerseys from the herds of W. S. Turner of Oregon City and J. B. Hyde of Portland. About 40 head will be entered in the sale.

DISPERSAL SALE OF JERSEYS.

A dispersal sale of registered Jerseys will be held April 11 at Oregon City, Ore. This sale will include the entire herds of W. G. E. Smith of Hood River, W. S. Turner of Oregon City and J. B. Hyde of Portland. About 40 animals will be disposed of, among them two herd bulls, a number of cows and bred heifers are to be offered.

SALE AT SKAMOKAWA.

H. L. Weister, proprietor of the Sunrise dairy farm, near Skamokawa, Wash., will hold an auction sale of Jerseys at his farm the afternoon of April 5. He will dispose of several registered bulls and some high-grade cows and bred heifers.

DUROC-JERSEY SWINE

A GOLDEN OPPORTUNITY

7——Durock Jersey Gilts——7

These are my tops. I had reserved them for my own use. Owing to recent business changes, I have decided to offer them for sale.

They are sired by Sprongs Prince, he by Topeka, dam Capitol Belle. On the dam side they are out of a granddaughter of Advance Wonder, tracing back to the great show sires, Proud Advance and Crimson Wonder. They are 7 months old, weigh 200 lbs. in breeding condition. They will be sold either open or bred.

C. G. SPRONG. Grandview, Wash.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR.
JAMES N. PRICE. Pullman, Wash.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (541305) assisted by Superba Jr., (241305) and Sammy (79833). Top for size and quality. I have a few fall boars left. Now is the time to get in on spring orders. Correspondence solicited.

J. M. ROYSTON EST., C. ROYSTON, MGR. Payette or Fruitland, Idaho.

BERKSHIRE SWINE

GALBRAITH RANCH BERKSHIRES
Best breeding stock obtainable. Prices reasonable. Phone 20F.3.
T. A. GALBRAITH, Kent. Wash.

SHEEP

450 RAMBOUILLET EWES.
Fours and fives, with Blackface Lambs. Ewes, $9.50; lambs, $5.50. 5600 Cotswold yearling ewes, with wool on, $14.
G. H. HARVEY & SON, Boise, Idaho.

POULTRY

Rhode Island Reds

and Rhode Island Whites—both combs. Eggs $2, $3, $5 per 15. $6 and $8 per 100. Bronze turkey and Toulouse geese eggs. Pedigreed Belgian hares. Selling out. Bred does, $2.
J. Nonnenmacher, R. F. D. 3, North Yakima, Washington.

S. C. WHITE LEGHORNS.
Choice hatching eggs from the direct descendants of O. A. C. laying strain of 225 and 229 egg hens. Guarantee 90 per cent fertility. $1.50 per 15, $9.50 per 100.
A. H. CRAVENS, Monmouth, Ore.

PRIZE WINNING STOCK.
S. C. White and Brown Leghorns and Rhode Island Reds; heavy layers; eggs, $1.50 per 15.
R. H. GREER, Hillsboro, Ore.

MAMMOTH BRONZE TURKEY EGGS
from large, big-boned, well marked imported stock.
THOS. BRUNK, Rt. 2, Salem, Ore.

BAILEY'S BARRED ROCKS.
Eggs from my prize winners, $2, $3 and $4 per 15.
E. S. BAILEY, R. D. No. 4, Boise, Idaho.

WINNERS OF THE BLUE.
Barred Rocks—S. C. Black Minorcas.
Write for prices on high-class exhibition and breeding stock. Satisfaction guaranteed.
WILBER CLAYTON, R. F. D. 1, Payette, Ida.

EGGS FROM SELECT S. C. White Leghorn pens of high average layers. Awards Boise Shows, 1916 and 1917; $1.50 setting 15, $8 per 100. Quality prices. **ARCHIE M. LARSON, R. 3, Weiser, Idaho.**

HORSES

Imported Belgian Stallion

For sale—One imported Belgian stallion, registry No. American 3290, foreign 43396; color cherry-bay; foaled 1905. Sound, gentle, active and good disposition. Price $1000. Terms to responsible party.
PIERCE COUNTY BELGIAN HORSE CO. Kapowsin, Wash.

Breeders' Department

HOLSTEIN CATTLE

CARNATION HOLSTEINS
Are Guaranteed "For Health"

HERD SIRES
Johanna McKinley Segis
King Segis 10th
Matador Segis Walker

Carnation Stock Farms

YOUNG STOCK
offered at reasonable prices, with health and breeding guaranteed.

Is Under Supervision of United States

Bureau of Animal Industry. We have been operating under its direction (for health) for the last two years.

We aim to keep every animal in our herd in good health and have chosen this most stringent method, the federal test.

When we buy animals we demand federal test. We, therefore, guarantee the health of all animals (testable age) when we sell.

This, with our quality breeding, is appreciated by careful buyers.

Write us your needs.

Carnation Stock Farms General Offices: 1062 Stuart Bldg., Seattle. Farm: Snoqualmie Valley, near Tolt, Wash.

HOLSTEIN CATTLE

Young stock by richly bred grandson of King of the Pontiacs, out of high producing advanced registry cows.
A. E. SMITH, Sumas, Wash.

BUFFALO DUKE DOEDE
(102228) heads my herd. He is a half brother of world's record cow, Dutchess Skylark Ormsby, producing 1506 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.
H. H. SCYER, Buhl, Idaho.

WATERLOO HOLSTEIN FARM.
Holstein bull calves for sale.
Herd Sire—Prince Walker Pietertje { King Segius 10th Segius Walker Pietertje 2d
C. F. JENNESS. Meridian, Idaho.

HOLSTEINS FOR SALE.
Pure-bred bulls of serviceable age, priced right. Correspondence solicited.
J. R. LONG, R. F. D. No. 4, Buhl, Idaho.

In answering advertisements don't fail to mention this paper.

Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.
Write for pedigrees and terms.
H. E. BOOMER. New Plymouth, Ida.

Avalon Dairy

Registered bull calves by Hartwood Hello Hengerveld (129524) from cows with good A. R. O. records, DeKol, Korndyke and Pontiac blood. Prices right. Six per cent interest on time payments. Write today.
AVALON DAIRY. Kuna, Idaho.

JERSEY CATTLE

WAIKIKI FARM JERSEYS.
We offer several young bulls and heifers of excellent breeding. Send for descriptions and breeding.
WAIKIKI FARM, R. 7, Spokane, Wash.

SHORTHORN CATTLE



Gainsford Perfection 442173

Hercules Shorthorns

We can supply you with choice, well grown breeding stock. Your inspection of our herd is invited. Visitors always welcome.

Day & Rothrock
205 Exchange Bank Bldg., Spokane, Wash.

HORSES

COLFAX BLUE RIBBON STUD

COLFAX, WASHINGTON

40 Head—Percheron, Shire and Clydesdale STALLIONS AND MARES FOR SALE

An outstanding lot of **STALLIONS** and **MARES** from 2 to 5 years old of **SUPERIOR** size, **BREEDING** and **QUALITY** all for sale and at prices that **DEFY COMPETITION. A Veterinary Certificate** for **health** and **absolute soundness** goes with every horse sold. If you want the very best blood of the breeds here is where you can find it. **Liberal TERMS.**

If you or your community needs a stallion write us your wants, or better still, come and see us.

PETER M'FARLANE, Mgr.

Address all correspondence to **Colfax Blue Ribbon Stud, Colfax, Wash.**

STALLIONS

At Alta Stables
PENDLETON, ORE.

Imported Percheron and Belgian Stallions that are extra good. Besides other Percheron, Belgian, English Shire and Clydesdales, with imported ancestors, that are young and good, with correct pedigrees, that are desirable. One pair extra Percheron mares. If you are a customer and want to save your money, take time to come and see me. **Remember, Good Stallions and Low Prices.**

If You Have a Stallion That You Can Not Use Longer, I might Change.

J. R. JUSTICE, Importer
Pendleton, Ore.

Purebred Stallions

We have for sale a few 1-year-olds, 2 this spring, Shire stallions, our own breeding; also a 5-year-old and an 8-year-old Shire stallion, both brown; a 3-year, a 7-year-old and 1 aged Percheron stallion, all black; one 2-year-old Brown Clyde stallion, bred by Canadian government. We sell at the barns only, and tell you all we know about each and every horse, guaranteeing them to be as represented or refund your money.

Our horses won all firsts and champions at Spokane Interstate Fair, N. W. Live Stock Show, Lewiston, Ida., and Pacific International, Portland, Ore., last year. If you need a horse, or want to exchange, write us, or come and see before buying. It will pay you.

G. M. WILSON, WILBUR, WASH.

In answering advertisements please mention this paper.



Overland
TRADE MARK REG.

—two minds with but a single thought

Every indication points to a demand very much in excess of the possible supply of automobiles this year.

We are prepared.

This year we apply the economies of vast production for the first time to a *complete* line of automobiles—an end toward which we have been working for eight years.

Light Fours, Big Fours, Light Sixes and Willys-Knights, including the marvelous Willys-Knight Eight, are built and sold with

—*one* executive organization,
—*one* factory management,
—*one* purchasing department,
—*one* sales force,
—*one* group of dealers.

There is now an Overland or a Willys-Knight for every class of buyer.

Every one of these beautiful cars is a better car—better in appearance, in performance and in riding comfort.

One of them is the car of your dream under the evening lamp.

See these cars now. Get a car yourself this spring.

Light Four		Light Six	
Touring	$665	Touring	$985
Roadster	$650	Roadster	$970
Country Club	$750		
Big Four		Willys-Knight	
Touring	$850	Four Touring	$1285
Roadster	$835	Eight Touring	$1950

All prices f. o. b. Toledo
Subject to change without notice

The Willys-Overland Company, Toledo, Ohio
Manufacturers of Willys-Knight and Overland Motor Cars and Light Commercial Cars
"Made in U. S. A."

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College of Agriculture
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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. APRIL 5, 1917. NO. 14.

TRACTOR·TRUCK·AND AUTOMOBILE·NUMBER



Here Is a Small Tractor Taking the Place of a Six-Horse Team.

IN THIS WEEK'S ISSUE OF THE WASHINGTON FARMER

Is the first report of an investigation it is making to learn if it is practical to plant potato eyes with only a small part of the potato, saving part for table use. Read it and watch for others

TO BE PUBLISHED AS INFORMATION IS RECEIVED

Oakland Sensible Six

The Practical Car for You

Up any hills—over any roads—the **Oakland Sensible Six**—$875—will take you with ease, comfort and economy.

It's a big car, though it weighs but 2150 pounds, and its long, semi-elliptic springs—51 inches in rear—over-size tires (32x4), long wheelbase, (112 inches), all give the **Sensible Six** that easy riding quality which wins the enthusiastic praise of owners everywhere.

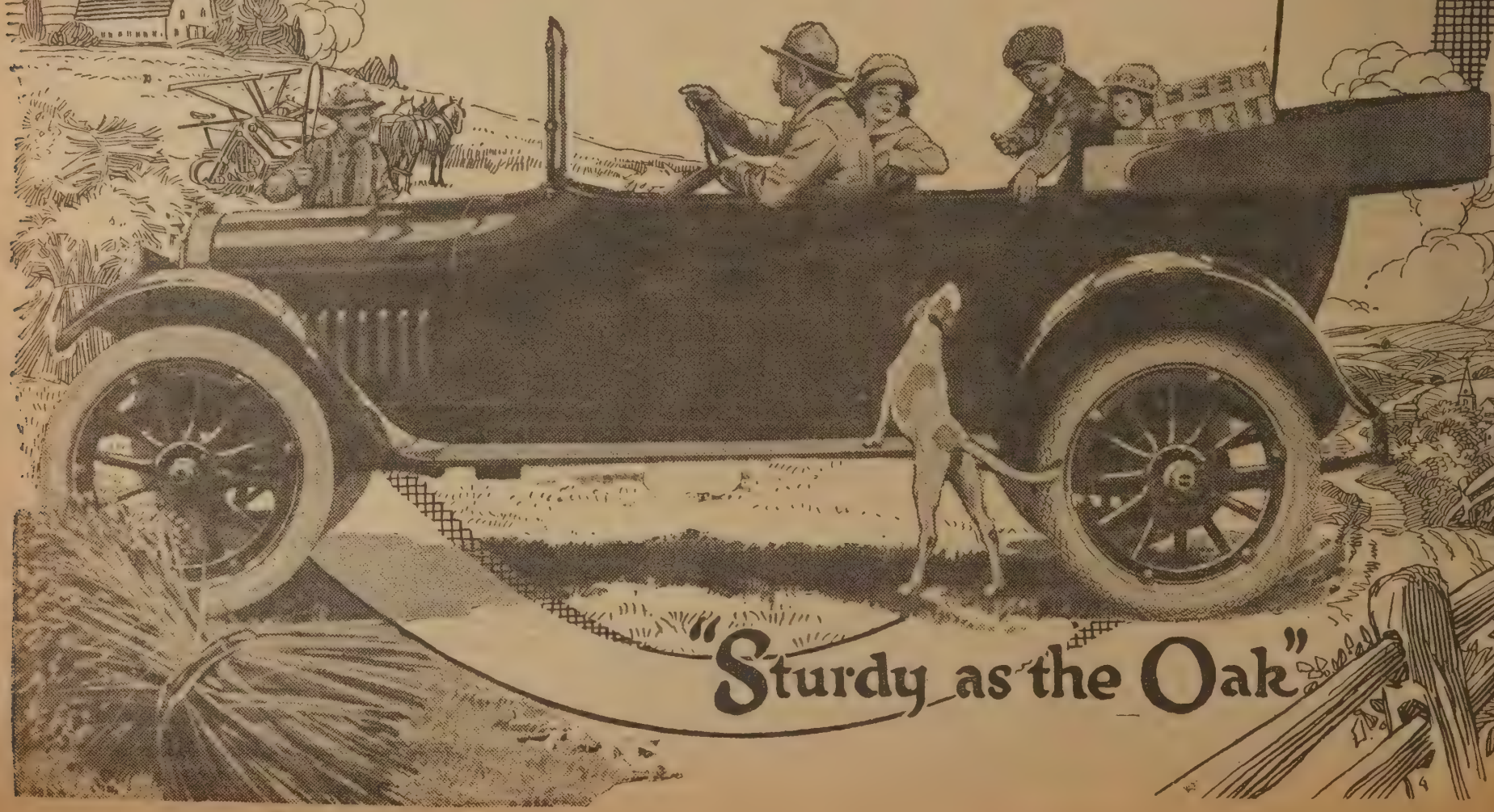
The valve-in-head motor develops 41 h. p. at 2500 r. p. m.—one horse power for every 53 pounds of car weight. On the hills or in bad going the **Sensible Six** has more actual power and more proportionate power than any other car of its weight.

This power with light weight means fuel and tire economy. Average drivers get from 18 to 25 miles per gallon, and from 8,000 to 12,000 miles per set of tires.

Oakland Eight—$1585—is built for those who need a big, luxurious 7-passenger eight cylinder car of maximum pull and speed.

Our new book "How to Buy Your Car Intelligently" will prove helpful to you no matter what car you buy. Write for it today—it's free. (54)

OAKLAND MOTOR COMPANY, Pontiac, Mich.



"Sturdy as the Oak"

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 14 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF April 5, 1917

Potato Prices Raise Seed Question

To What Extent Will It Pay to Use Eyes and Peelings for Seed?

The scarcity of potatoes has brought from many sources the question of the practicability of growing potatoes by planting the eyes with only a small portion of the potato, leaving the greater part of the potato for table use.

Would such planting produce good crops?

To what extent would high prices for potato seed justify the planting of eyes only?

How would you cut and prepare the eyes for planting?

What is the scarcity or supply of potatoes in your section?

The above inquiry was sent out by The Farmer to county agricultural agents and others. In reply timely and exceedingly interesting information has been received.

Uncertain Results.

E. F. Benson, who has just entered upon his work as state commissioner of agriculture, says:

I never planted potato skins or eyes because it seemed too uncertain a method to get a sure stand.

If soil and climatic conditions are ideal the planting of eyes with a small portion of the potato would undoubtedly give good results. But the potato furnishes the nourishment to aid germination and early growth, and with seed even as high as three or four cents a pound I don't believe it would pay to experiment with planting "peelings" or "eyes," on any commercial scale.

I can learn of no seed shortage in the Yakima valley and find small lots for sale at various points. Am not at all familiar with any other district in the state.

Experience Necessary.

A. A. Kelly, the well known, experienced market gardener of East Spokane, makes it plain that experience and especially favorable conditions are necessary when one would plant only the eyes of potatoes:

In the introduction of a new variety of potatoes, especially when the distance is far between introducer and customer, it is common practice to ship only the eye with a small portion of the tuber. And also when sufficient demand will justify or when a premium is awarded for the greatest amount of crop from a given quantity of seed, the eye of the potato may be divided into as many as three or four parts, each of which will produce a hill of potatoes. This, of course, calls for exceptional good judgment, experience and the very best of conidtions.

Yes, good crops can be produced from the eye with only a small piece attached, but the soil must be prepared to a degree that is scarcely followed in planting the ordinary subdivision of the tuber. The scientist tells us that the eye of the potato has a well-developed root system extending to the center of the tuber, and the fact that a goodly sized piece of the tuber attached to the eye will with only ordinary conditions result in a good crop, which seems to bear out the science theory. Practically all good growers of potatoes agree that a large seed piece furnishes food that is assimilated by the young growing eye or sprout.

Except to the grower of a very small potato patch the economy of the seed piece as suggested in your inquiry is absolutely impractical. Regardless of the price of seed when no extraordinary remuneration is anticipated for the resultant crop, it will not pay to reduce the size of the seed piece.

Plant Food in the Soil.

Lee M. Lampson, Benton county agricultural agent, writes:

In planting potatoes the size of the cutting necessary for good results evidently depends upon the availability of the plant food in the soil. Judging from our observation, good results are secured only in very exceptional cases where cuttings smaller than a hen's egg are planted. Results have averaged a little better where cuttings twice as large as this have been used. Potatoes are very scarce and high, but it would not be advisable to sacrifice on the size of the seed, as the difference in crop yield will probably be more than all of the seed costs.

Charles A. Cole, Pierce county agricultural agent has this to say:

The only experience I have had with planting potato eyes was from small mail orders. The pieces were about one inch square. While you may grow a good crop of potatoes from such eyes or from potato peelings I do not think it best to advise this practice, neither do I think it a good plan to plant small potatoes. Small potatoes may be planted once, but don't use the resulting crop for seed. I believe the best results are obtained by planting pieces of potatoes with at least two eyes.

Small Whole Potato.

H. W. Reaugh of Grant county also doubts the advisability of scrimping in the seed:

No doubt the high price of seed this year will cause many farmers to cut their seed pieces of potatoes in much smaller sizes than usually. In fact where the price of seed potatoes is as high as this year. Many potato growers believe that the one eye seed pieces will produce more results except possibly on extremely high priced land. But where the potatoes are planted on summer fallow or similar land the seed pieces can be reduced with good results.

Many farmers will use the small whole potatoes this year for planting and it will produce good results, but if this method of selection is continued from year to year the potatoes will tend to run out, but very little deterioration should come from the one year's planting.

I have seen people take the medium to large potatoes many times and cut out a fairly large cone shaped piece around the eyes which would leave a large portion of the potato to be used for eating purposes. I do not believe it would pay, however, to put too small a piece of potato with the eyes as it is apt to cause the young plant to be less vigorous in starting and consequently reduce the yield.

Strong Eyes.

Readers of The Farmer will be glad to have this word from Dr. Granville Lowther:

You can grow good potatoes by planting the eyes, provided enough potato is left with each and every eye to furnish food for the tender sprout, until it is strong enough to take its food from the earth. On the average, two-thirds of the potato can be saved for table use, and in large potatoes more.

It is well to note that one end of the potato produces strong, and the other end weak eyes. The strong eyes will produce a much larger, better crop than the weak. In strength and productivity, the eyes between the two extremes are medium.

If only the strong eyes are used for planting, most of the potato can be used for food.

Reasonable Sized Piece.

B. W. Cooney, Klickitat county agricultural agent, writes:

I don't believe the best results can be obtained with an eye piece cut too thin. I would not care to use a piece smaller than a dollar and preferably one-half inch or more in thickness. There is a time in the sprouting of your seed piece that the young plant gets all of its nourishment from the piece it sprouts from. Naturally if this piece contains very little starch upon which the plant depends for a time before throwing out roots, consequently reducing its vigor sometimes to large degree.

I would not expect much from a field of potatoes that had been planted with potatoes amounting to little more than peelings. I do not believe the price of potatoes at present is so high but that I would use a reasonable sized seed piece of one good strong eye. There are cases no doubt where it might save the grower a little by using a thin eye piece, but I would want it to be the exception and not the rule.

The supply of seed potatoes, or what is commonly termed seed, is fairly abundant, but good seed potatoes that have been properly harvested and stored, free from diseases, are at a premium in the state.

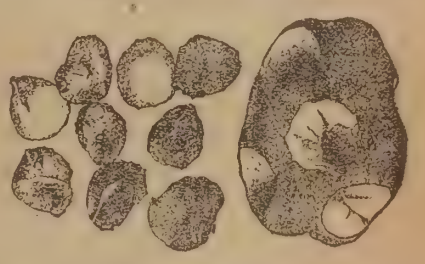
Results Not Uniform.

J. M. Alcorn, assistant county agricultural agent of Crook and Deschutes counties, Oregon, says:

As to planting but the eyes, once in a while fair results are reported from this method when the soil and other conditions are just right, but the good results do not seem to be uniform at all. The high prices might justify planting smaller pieces than is customary where the two-ounce piece is recommended, but I would not want to recommend that the country over resort to eye planting. We are pretty well supplied with seed for local use, since one of our strongholds down here is seed potatoes, but there are not more than two or three cars of unsold stuff in the country, the manager of the Deschutes Potato Growers' association of Redmond informs me.

Other Comments.

William Stuart, horticulturist of the national department of agriculture, has gone into the subject of saving seed potatoes at some length in the Weekly News Letter. He is of the opinion that the cost of seeding Irish potatoes can be greatly reduced "if instead of using a whole potato for planting the gardener will cut out from potatoes cone shaped pieces of flesh, each containing an eye of the potato. In this way from one-fourth to one-fifth of the flesh of the potato will be needed to provide seed and the remainder of the potato can be cooked for table use. These cones range from one-fifth



Potato with cones containing eyes cut out for seed.

to one-seventh of an ounce in weight, whereas under the usual methods the sets range from three-fourths to two ounces in weight. His article seems to apply to the garden patch and to provide a plan by which seeding can be extended from day to day, while the rest of the potato is being used for food.

C. H. Bergstrom, who recently succeeded O. C. Van Houten as Thurston county agricultural agent thinks one might use a small portion of the potato surrounding the eye providing seed and conditions were ideal and on the very best of prepared and conditioned land; that Thurston county farmers are not getting more than $30 to $35 a ton for their potatoes and nearly every farmer has some supply on hand.

M. A. Means, Lewiston, Ida., who keeps a pretty close tab on the question of seed, says that while he has had no practical experience, yet many farmers have told him that they only planted the eyes of potatoes. They peeled the potatoes one-fourth to one-half inch, then cut this at equal distances between the eyes. Mr. Means reports plenty of potatoes in that locality for table use and planting.

Gasoline Cartridge.

Patents have been granted to a Maryland inventor for a gasoline cartridge for breaking up farm soil in the same way that dynamite is used.

Washington Portraits No. 9.



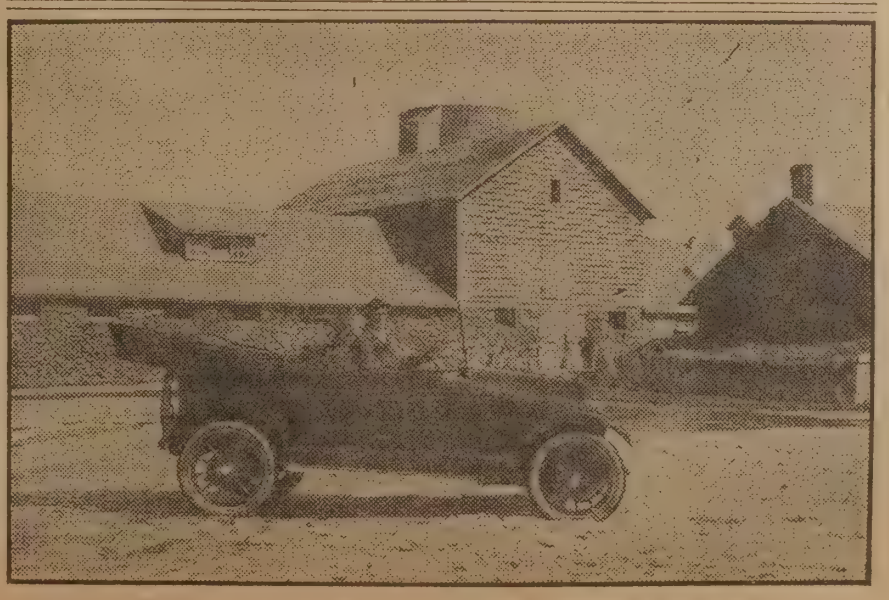
D. A. Lenocker.

D. A. Lenocker came to western Adams county, near Schragg, and settled on a homestead in 1901. During these 16 years he has been engaged in the raising of wheat for the market and has raised his own live stock. He raises enough barley and oats for his stock feed and says that it does not pay to raise them for the market in that community.

The next in the series of Washington portraits will be that of A. P. Bertschi of Glenwood, and will be given in next week's issue of The Washington Farmer.

Farmers to Build Elevators.

Eureka flat farmers have organized a company to build a grain elevator at Pleasantview, 12 miles west of Starbuck, Wash. The building will be of concrete and equipped with machinery for cleaning and grading grain, will have a capacity of 130,000 bushels and will cost $30,000. In the company are C. W. Pearson, J. E. Painter, Lawrence Davidson and Kirkman & Reynolds, all heavy wheat producers of that section.



The latest model from the Overland automobile factories.

Tractor and Horse Must Pull Together

Labor Saving Power Machinery Makes Up for Shortage of Labor; Does What Horse Can Not

By H. H. HARWOOD of the Northwest Buick Company.

One of the first measures for putting the farm on a business basis is the installation of up-to-date labor saving and time saving machinery. Rapidly coming to the forefront among such mechanical equipment is the motor truck and the farm tractor.

In the northwest the farmer has taken to the motor truck as the means of saving him thousands of dollars, and last season there were more of these labor saving machines introduced in this section of the country than ever before and indications are that this season will see even a greater increase. Volumes could be filled with the record of their achievement. Here are a few typical incidents showing the capacity of these machines.

Hauls Wheat to Warehouse.

Interesting demonstrations in the wheat fields on Asotin prairie, above Snake river in eastern Washington, were made last summer with a two-ton truck and trailer. The truck with its trailer hauled a load of 85 sacks of blue barley from No. 21 ranch to Tammany, covering a distance of 12 miles in one hour, one-half of the distance being through stubble fields. The weight of the total load was two and one-half times the capacity of the truck, or 10,152 pounds. The round trip was made in three hours, including the delay in loading and unloading, and at a total cost of $3.22, or a cost per sack of 3 3-4 cents. Previous record over the same haul, and with horses, showed a cost per sack of exactly 8 cents.

Another demonstration held last season in eastern Washington, which attracted more than the usual amount of attention, was that given Mrs. Nels Truedson, who operates a thousand-acre wheat farm near Sprague. Twenty-four tons of wheat were moved from the farm to Sprague in 11 hours, over a distance of 17 miles for the round trip, or a total of 136 miles. The total number of bushels moved was 828. The road was over four grades, averaging from 5 to 8 1-2 per cent and one-half mile in length. The two-ton truck used in the demonstration consumed 19 gallons of gasoline and one gallon of oil during the performance of this test.

A Big Bend Demonstration.

Again, a three and one-half ton truck purchased by Reinbolt brothers, who are wheat farmers located about 21 miles north of Davenport, Wash., and are compelled to haul their wheat to that point, also attracted considerable attention. Seventy-two sacks of wheat were loaded onto the truck in the field and pulled through the field from which the wheat had just been cut and the ground was soft. Two round trips, covering a distance of 84 miles and delivering 312 bushels of wheat, in nine and one-half hours was made. The fuel consumption for the test was 19 gallons of gasoline and one gallon of lubricating oil.

At Colfax, Wash., a two-ton truck was loaded with three tons of wheat right from the separator in the field, pulled through the medium soft ground to the county road over a 7 per cent grade and delivered its load at the warehouse at the railroad many miles away.

Another Wheat Experience.

Henry Hickman of Coltax, Wash., has a haul of four miles to the warehouse, two miles of which has a grade ranging from 10 to 20 per cent, and a drop in altitude over this four miles reaches the remarkable figure of 1250 feet. The truck, which was in service last summer and which Mr. Hickman expects to put in service the coming year, takes down 45 sacks in 35 minutes and returns in 40 minutes, making the major portion of the hill on second and third gear. Under the present road and climatic conditions it would require a four-horse team no less than two and one-half hours to accomplish the grade on the return trip with an empty wagon. This truck was driven on a double shift of 10 hours each, or a total of 20 hours per day.

When one considers that all these examples of truck performance, that the weight of the average sack of wheat runs from 130 pounds and over, it can be seen how much each one of these trucks hauled and what the saving was to the farmer.

Another enthusiastic truck user in eastern Washington reports that he drove a two-ton truck 145 miles, 72 1-2 miles the truck was loaded. He made five round trips—each trip was 29 miles. The total hours from start to finish, counting two hours out for meals, was 13. The total number of tons hauled was 15. The total number of bushels of wheat hauled was 522. The total gasoline consumed was 20 gallons, and the lubricating oil was three quarts. There were three grades on the trip that averaged between 10 and 11 per cent and two grades of 7 1-2 per cent. At no time on the entire test did they use low gear except to make the start in each case.

The farmer has been converted to the motor truck and they are now fast friends. Of that there can be no question. It remains for him to select the truck suitable for his particular requirements, and that entails the study of his conditions by a truck expert who has a thorough knowledge as to how to solve his problems, and to be capable of analyzing them intelligently.

Tractors are now being used in practically every agricultural district of the country. Farmers have been purchasing these machines in large numbers during the past year. The success attending the use of the pioneer machines induced others to avail themselves of this form of power on the farm.

The experience of farmers last fall has convinced them that this new force on the farm has peculiar advantages. The accumulated experience that farmers are getting in handling these machines, first in securing the greatest efficiency from the engine, and second, the different kinds of work upon the farm for which these tractors may be employed, and also the improvements that manufacturers are making, are doing much to popularize the tractor in the rural districts.

Operators Become Experienced.

The tractor, like the automobile, is having a better chance today than it did two or three years ago, because there are more experienced operators to handle them. Tractor men not qualified to run these machines were responsible for some of the failures to get good service from them. But the situation is much improved. Farmers and farmers' boys are rehearsing the different features of the different makes of tractors, the best methods of operation, the ability of the different machines to accomplish his work quite as naturally as they formally did their favored team of horses. While this interchange of experiences is already familiarizing the farmer with tractor requirements, it is going to mean more in the future so that farmers will not be handicapped with a lack of good tractor engineers. As a matter of fact, it is no more difficult to run the ordinary light farm tractor than it is to run an automobile.

> The farm tractor will simply fit into the greater needs of the country and will do the heavier chores and drudgery that horses are little fit for. It will not replace the horses, but simply assist them and make life easier for them. Let us not dream too long on the practicability of the horseless farm—it is a long way off as yet.

Experience has shown that the farmer of today is the owner of the greatest percentage of automobiles which have been sold. Experience has also shown that there is no comparison between horses and the tractor, where it is found that conditions are such that the tractor can be operated profitably. Of course, there are some conditions where a tractor should not be used, and no reputable dealer will place one in operation under such conditions, not only for the protection of the purchaser, but for his own reputation for integrity.

As an example of the practicability and profit to the farmer of the small tractor, the experience of some farmers in this state last summer may prove interesting.

In one case where the cost of the tractor was $775, delivered, on several occasions pulling two 14-inch plows, it plowed a full acre per hour. In a number of other instances the average was three-fourths acre per hour. Near North Yakima a tractor put up 85 tons of ensilage in 13 hours, burning distillate at a cost of $5.06. Previously the owner had taken two days to put up the same amount of ensilage and had to hire a team to haul coal and another to haul water.

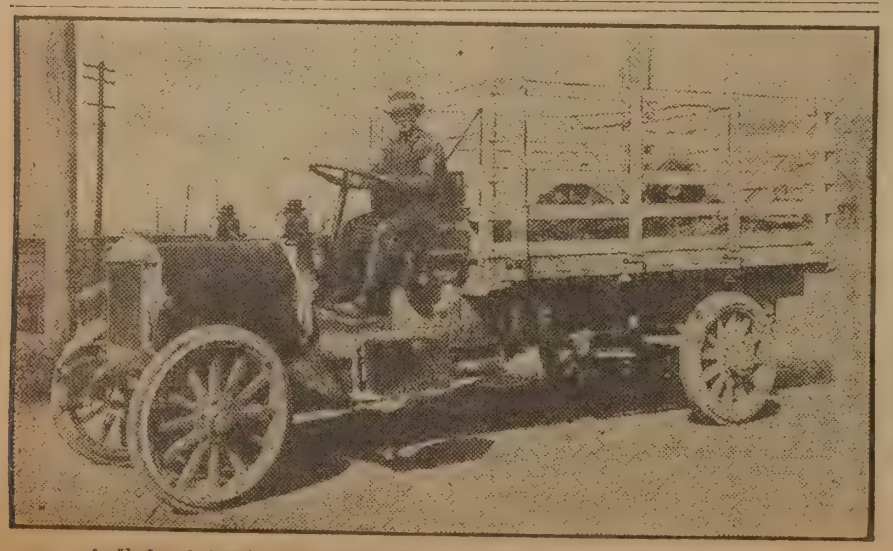
In southern Washington and in Oregon the farm tractor is proving profitable in orchards. In eastern and western Washington its versatility for pulling trees, stumps, hauling stones from rough ground, plowing, mowing, binding, hay baling, pumping, etc., many things that horses could not possibly do make it really a mortgage lifter.

The introduction of the farm tractor will not, as some believe, remove horses from the field and their pastures. Some prophets who predict that horses on the farm will soon be only a memory will quite likely be but memories long before the horse is. The advent of street cars did not have that effect on horses, neither has the bicycle or the automobile. Today there are more horses in this country than there were 10 years ago, and prices are considerably higher. The one thing that the farm tractor will do is to supply the needed power on the farm that horses can not give. Take away the farm tractors which are in use today and several hundred thousand horses would be required to replace then, for until horses could be had the land would have to go unplowed and untilled.

The number of tractors now in use will be multiplied many times during the next 10 years, but there will still be as many horses in this country as there are today, and prices will be even higher than now.

Farm tractors are becoming a necessity just as electric street cars have

(Continued on page seventeen.)



A Federal truck equipped with stock body for hauling live stock.

Community Brand

Gives Potatoes a Stable Market

A. H. MacLean, a well-known grocer of Tacoma, had something to say to the members of the Western Washington Horticultural association at its recent session which was a revelation to many of them.

"I, as a middleman, represent, if you please, only an arbiter between the producer and the consumer," he explained. "In this connection I am often asked why we do not pay as much for local grown potatoes as for Yakima Gems. It is not a matter of quality, for a time has already come when some western Washington potatoes are as good as the best raised across the Cascades. At present, however, we can not put locals into competition with the Yakiam product, and we will not be able to do so until we have a sufficient acreage to draw upon to insure a supply, once a demand is created."

This matter of the middleman's part in creating a market was brought opt very clearly by Mr. MacLean.

"I have suggested to some neighboring communities," he said, "that a market could be built up for a small sack of potatoes—one put out in a cloth sack, branded with the community trademark, and sold at 25 cents. This size would fill the need which exists among apartment house dwellers and other housekeepers in a small way, for whom the hundred-pound sack is too large and who still want a uniform, dependable article. No, an individual grower probably could not take advantage of this need. The fact is that no demand exists for such an article at present—the need exists, and the demand could be created; but no middleman would undertake to do so without the assurance best furnished by a community that after a market had been created the supply would be forthcoming year after year."

Community Club Hall.

The people of the West Valley, Wahkiakum county, have formed a society to be known as the West Valley Improvement club and they are making arrangements to build a hall. The Constable brothers and sisters deeded a piece of land 100 feet square to the club on which to erect the hall. The site lies just north of the residence of George Burch. There is a good spring near the ground and the location is a convenient one for the people of that valley.

To The Washington Farmer: I am sending in my renewal for three years. We all read The Washington Farmer, from the highest to the least. The first gets it is the one who gets to read it first. The children enjoy the children's page so much. A. D. FULLER.
Pateros, Wash.

No Foundation for Attempted Scare

Law Does Not Require Legislative Legalization of Farm Loan Bonds

By N. W. DURHAM, Chairman of Spokane Committee on Land Banks.

Sensational articles have been published in some of the newspapers of the Pacific northwest declaring that the failure of the Washington legislature to pass a law legalizing investment of trust funds in the bonds of the new federal farm loan system would disqualify all farm loan associations in that state and drive the federal farm loan bank away from Spokane to some city in Oregon, Idaho or Montana.

These unfounded articles have created considerable alarm, and the Farmer has received a number of inquiring letters from officers and members of associations in Washington.

Now that the officers and directors of the Spokane district bank are in Spokane organizing the institution, that quarters have been chosen and the organization is working under the direction of the federal farm loan board at the national capital, all fears on that score should be allayed.

There never was the slightest warrant for the publication of the sensational canard. Nothing in the law, either directly or indirectly, requiries legislative legalization of the farm loan bonds. The legislature was remiss in its duty in failing to take the action asked by Secretary of the Treasury McAdoo and recommended by Governor Lister, but there was not the slightest danger that the national board would be so unreasonable and unjust as to penalize the farmers of the state for the negligence of their legislature.

There is only one provision in the law that would authorize the national board to disqualify a state from participation in the system, and that pertains to an entirely different matter. Under the heading "State Legislation," section 30 says:

"It shall be the duty of the farm loan commissioner to make examination of the laws of every state of the United States and to inform the federal farm loan board as rapidly as may be whether in his judgment the laws of each state relating to the conveying and recording of land titles, and the foreclosure of mortgages and other instruments securing loans, as well as providing homesteads and other exemptions and granting the power to waive such exemptions as respects first mortgages, are such as to assure the holder thereof adequate safeguards against loss in the event of default on loans secured by any such mortgages.

"Pending the making of such examination in the case of any state, the federal farm loan board may declare first mortgages on farm lands situated within such state ineligible as the basis for an issue of farm loan bonds; and if said examination shall show that the laws of any such state afford insufficient protection to the holder of first mortgages of the kind provided in this act, said federal farm loan board may

(Continued on page thirty-one.)

Dual Purpose

Applies to Autos and Cows Alike

There is much said in the live stock business about "dual purpose" animals. The sheep is, perhaps, the leader because he produces not only meat, but wool. Certain breeds of cattle are developed with a view to both milk and beef production. Likewise the hen, producer of eggs and chicken pie, and the medium-weight horse, with both draft and roadster abilities.

So it is with the motor vehicles. There is a field for the dual purpose automobile, the automobile that may be shifted from road service to power use by the use of a tractor attachment. Especially is this need felt on the small farm where the owner can not afford to have both a car and a tractor or truck.

Several of the manufacturers are now putting out attachments by means of which the small car, or in some instances, the large car, may readily be transformed into a farm tractor. While they are new in the field in practically all cases they are being tried out by many farmers and being watched carefully by others.

Regarding the actual experience of those who have used tractor attachments The Farmer is in receipt of a number of letters. T. B. Fredendall of Pamona, Cal., states that he pulled three eight-inch gang plows very successfully with the attachment for his small machine, and further states it will do more and better work than can be done with two horses. He consumes about a half gallon of 10 1-2-cent distillate per hour. He recommends it for a small place of from 20 to 60 acres.

Mr. R. E. Fisher of Woodland, Cal., is using a tractor attachment, which he claims is satisfactory in every way. He uses it mostly in orchard work, but has put in 30 acres of grain, doing all the work with the attachment, pulling six-horse farm tools.

Ed Walker of Stockton, Cal., writes that he finds his attachment satisfactory. He hauled two and one-half tons of hay to market and pulled three sections of a 15-foot harrow without difficulty. He expects to cut his hay with the attachment and he also is using one at Lindsay, Cal., in his orchard. He thinks it is practical for both small and large farms.

Dairymen Urge Agriculturist.

The Whitman County Cow Testing association in annual meeting at Palouse strongly urged the county commissioners to take steps at once for a county agriculturist. H. H. Curtis, Pullman, was elected president; A. G. Woodward, Fairbanks, vice president; and A. B. Nystrom, Pullman, secretary-treasurer. The association was organized two years ago, the members representing 380 cows and paying at the rate of $1.50 per cow for the testing.

Good Roads Movement

Finds Expression in Work of Legislatures

The money actually expended in public road building in the United States annually at the present time approximates $300,000,000, indicating the interest taken throughout the country in betterment of rural travel.

The northwest is rapidly coming to the front in road building, and greater activity than usual was noted in the sessions of the legislatures just recently adjourned. While the money appropriated and expended by the state highway authorities is much less in all instances than the aggregate of that raised and spent by the counties and county road districts, it is notable that the legislature of Idaho voted a highway bond issue of $1,000,000; that the Oregon legislature voted to submit to the people of the state at an election in June a $6,000,000 bond issue; and that the legislature of Washington continued in effect that state's two highway levies by which approximately $2,500,000 is raised annually for highway building under the general approval of the state highway department.

Secure Federal Aid.

In addition to these amounts, the legislatures of the three states passed measures under which federal aid amounting to several hundred thousand dollars will be accepted for the construction of what shall be called post roads.

Indicating the large sums of money raised by county and district levies or bonds for road purposes, the state of Washington will expend nearly $19,000,000 on highway construction during the next two years, of which between $13,000,000 and $14,000,000 will be raised by the smaller taxing units. In like manner, in the other states of the northwest the greater share of the money actually put into road construction and maintenance is raised by county or district.

Automobiles Make Funds.

Largely due to the fact that automobiles and auto trucks are such wearing users of the roads, the states are year by year increasing the license fee on them and placing the money so derived into funds for the benefit of the roads. Under the proposed Oregon bond issue, it is expected that the auto license fees will pay both interest and principal on the $6,000,000 bonds if they are voted. In Washington, money received from such licenses totals approximately $600,000 a year under the present law.



A Caterpillar "30" operating in cleared land in a river bottom of Oregon.

Milk Producers Win

Summer Prices Same as in Winter

The New York Dairymen's league and the big milk distributors of New York city have agreed on prices for the next six months and the threatened strike is averted.

The agreement is a compromise. The producers asked for summer prices somewhat higher than the prices that have ruled the past winter, but have agreed to a schedule that is the same to a cent as the average of prices for the six months ending March 31.

The dairymen's league make the following official announcement:

"Detailed arrangements have been made whereby the large milk dealers in the city of New York have secured their supply of milk for the six months April 1, 1917, to October 1, 1917, through the dairymen's league. It is not anticipated that there will be any shortage of milk in New York city due to the failure of dealers to pay league prices. The directors of the dairymen's league met in the Murray Hill hotel on March 19, and modified their original schedule of prices. In modifying these prices the directors took into consideration the situation and the conditions of international affairs."

The compromise is regarded as another victory for cooperation among the producers, as it has been almost an unbroken custom for milk prices to be materially lower in summer than during the winter.

The achievements of the dairymen's league are remarkable when it is considered that their members will get prices this spring and summer that will be 80 per cent higher than the corresponding prices in the same months of 1916. The figures are as follows:

	1916	1917	Originally proposed for 1917
April	$1.31	$2.04	$2.20
May	1.06	1.93	2.15
June	1.00	1.80	1.95
July	1.16	2.00	2.20
August	1.32	2.54	2.35
September	1.41	2.54	2.55

These prices are per 100 pounds of milk for the New York city district. Prices for the second district are 10c less.

During the current six months the following prices have been charged by the dairymen's league:

October	$2.[illegible]
November	2.25
December	2.25
January	$2.15- 2.20
February	2.15
March	2.11

Permanent Help

Should Have More Consideration

To the Editor of The Washington Farmer: The article by Dr. Bryan on the year-'round labor problem is thorough comprehensive and quite practicable. A good many farmers, especially those who are becoming well established, are doing just about as suggested in this article, and a few have been so doing for a good many years.

The permanent man should have more consideration at all times than the transient helper who comes only in the harvest or in the nice weather, has no permanent interest in the farm or farm life and does not have to face the snowstorm and wade the mud during the long and too often lonesome winter.

This suggests the plan of giving the permanent man and his family a few weeks' vacation. Nothing pays better. Your men will come back in most cases better satisfied with the farm life and will go ahead with new vigor. Why shouldn't he? This can generally be arranged after the fall rush or during the winter months. I suggest just here that it is a good thing for the boss sometimes to take his best hired man's place for a couple of weeks and realize how many details this helper really has to take care of. Often it will make him more considerate.

Farm wages should depend to some extent upon prices received for farm products. The writer has made a practice of this for the last two years, paying $5 per month more than the regular wage providing wheat be worth 80 cents or more when he sells. With wheat at present prices, the laborer should have even more consideration.

R. V. PERINGER.

Belmont, Wash.

RYE FOR SHEEP

Makes a Splendid Pasture.

Does rye make good pasture for sheep? Will it grow on alkili soils?

J. M. S.

Weston, Ore.

Rye makes a splendid pasture for sheep. It has the advantage that it may be sown late in the fall or early in the spring and in either case will make a pasture crop. It makes its growth at a time when few other plants will make sufficient growth for pasture. Rye will also grow better on alkali soils than most of the common agricultural crops. Land may contain too much alkali for the successful growth of rye, but if this is the case there is no need of trying any of the other ordinary forage crops, for they succumb to alkali much more quickly than does rye.

Organize for Farm Loans.

Officers of the Meridian Farm Loan association, including the townships of Lynden, Ten Mile and Marietta, were named at a meeting of the board of directors. R. E. Metcalf was elected president and B. S. Hillier secretary. Directors include Elvin Minor, W. H. Kaufman, Fred Urfer, A. E. Rusco, B. S. Hillier, Francis Edwards, R. E. Metcalf, D. F. Bliss and Nels Jacobson.

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Farm Bank and Cooperation

President D. G. O'Shea of the northwestern district federal farm loan bank, now organizing at Spokane, tells The Farmer that he sees great possibilities along lines of financing the small farm through the workings of the loan system. But he sees something that might well prove more far-reaching than matters of money and mortgages. He sees a nationwide development of the cooperative movement in rural communities.

Under farm credit systems in some of the states that are trying it, loans may be taken by individual farmers without associating themselves together in a loan organization. This might seem to be a special merit of such system, but President O'Shea looks upon the federal requirement that local associations be formed before loans may be negotiated as a meritorious provision. He sees such association a community association, a group of farmers banding themselves together for a common purpose, meeting to discuss affairs pertaining to this purpose, uniting to carry out provisions of the law for their individual, but at the same time, joint good. And he also sees these farmers when they meet developing other subjects of common or community interest. He sees possibilities of social life being built up about the local farm loan association.

The spirit of cooperation is abroad in the land. Farming communities are rapidly grasping the possibilities. They are ready for any stimulus that may be received, and if the farm loan system proves the success that its newly appointed officers believe it will, it will at the same time certainly prove an object lesson in the matter of united, community effort.

What Is Education?

There is an age-old question, What is education? When does a young man cease to be ignorant and become educated? Is the college youth of today and yesterday one who in all probability can neither spell correctly, write legibly, nor speak readily and forcibly—is this final product of our present educational system truly "educated?"

The basic facts and methods, however, should be mastered—really mastered by thorough and continuous drill and review. This was the backbone of the common school curriculum of 50 years ago: reading, which included the ability to spell correctly all of the words met with in the vocabulary of the average business or professional man or woman, together with the ability to get at the meaning of a book or an article without waste of time or labor; writing—another of the lost arts of today—and arithmetic. Perhaps the schoolboy of today will compare more favorably with the average youngster of half a century back in this last essential than in any other, a fact which, if true, indicates that it is not the innate thinking ability of the individual which has deteriorated, but rather that relentless and unescapable drill of the little red schoolhouse which our grandfathers attended.

Farms of Europe Are War Victims

In the four northwestern states of Washington, Oregon, Idaho and Montana we have a population of only seven persons to the square mile.

Germany has 335 to the square mile. Belgium about 650, and England about 635.

When these figures are considered we glimpse the reason why the warring countries find it so difficult to feed their people in time of war. They are over-crowded, and there lies the deep, underlying cause of this terrific conflict.

Agricultural efficiency has been impaired by the war. The strength of the nations is at the front, and the soil is tilled by old men, boys, women and girls who have to work with run-down live stock and worn out implements and machinery. It has been found impossible to keep the land well fertilized, and the inevitable consequence is a diminished yield at a time when the fighting countries have their greatest need of food.

These conditions indicate a fairly long period of good prices for the products of the American farm. When the war is over hungry Europe will seek food wherever it may be found around the world. The run-down farms can not be restored in a week or a month. Probably two or three years will be needed to put them back to that stage of productiveness that existed when the war drums beat the great call to arms in the first days of August, 1914.

Telling the Extremes

The story about the man who makes a million dollars in a year is enticing to the paper, whether it be printed for town or for country. The great success, the wonderful accomplishment, is the thing that a man can write about and use exclamation points.

And yet these stories are not typical; they have their place in the every-day reading diet of a paper just as pepper has a place on the dinner table. Nobody eats straight pepper—it is a spice and helps digest the food. That is the way the story of remarkable and unusual success should be taken. They are true, but we all do not reach them. There may be favoring circumstances and surroundings which help bring the achievement about.

These extraordinary stories are merely as a sort of condiment to life. They are within the range of possibility for us all; however, the thing really most interesting is about the averages, to which most of us belong.

A Good Foundation

There were, not so long ago, days when canneries started up in communities without anything but enthusiasm as a foundation. Every once in a while one can find an old, disused building, erected on the spur of the moment, to can fruit and vegetables, and then it was found, too late to save the investment, that there weren't enough vegetables and fruit produced to support the institution.

Large organizations have learned that facts are the only safe basis for enterprises. For an example, before deciding to establish a cannery at North Yakima a concern conducted a campaign for tonnage. They met the farmers and growers at many gatherings, told them what they would pay for various articles, and signed contracts for definite tonnage.

There is nothing like facts to build on. Enthusiasm is a good thing and a necessary thing, but it must have the solid foundation to make it of permanent value.

Beautify the Place.

There is neither man nor woman in whom there is not some response to the beautiful. Sometimes the appreciation of "things as they ought to be" is so dulled that one may seem to lack it altogether, but it is not so. Unkempt premises—fences down, grass and weeds growing and dying about the buildings, trash lying about, the house or barn unpainted, the broken window unrepaired—these and kindred things result from listlessness or laziness and tend to create and perpetuate in one those characteristics which mean failure and worthlessness.

Well-kept premises—fences in order, yards spick and span with flowers blooming, buildings bright with color, no rubbish lying around—these and their like result from energy and ambition, and create and perpetuate the characteristics which mean success and worthiness.

Washington Gleanings

Loans asked by members of the 15 farm loan associations in Yakima county aggregate $500,000.

M. D. Rinehart has bought the Jonas farm of 370 acres at McKay from Clarence Smith for $100 an acre. The farm is all in crop.

The board of county commissioners of Kitsap county has entered into a contract with the state college at Pullman to furnish an agricultural or county agent.

A. L. Hill and F. H. English have purchased the George Harper farm of 240 acres, three miles northwest of Palouse, on the Colfax road, paying $18,500, or approximately $77 an acre.

Notice of election to a life membership in the American Poultry association has been received by W. K. Whitaker of the department of poultry husbandry at the state college at Pullman.

Mount Crawford farmers have been busy blowing stumps off the right of way on their roads on top of the mountain. They expect to open up about a mile of road this spring. The county is supplying the powder to blow the stumps.

Many new acres of prunes have been set out in Clarke county, following the big crop and high prices received during the last year. There will be a considerable amount of new acreage if prunes mature this year, particularly in the Felida district.

Officers of the fair association have asked the granges in Snohomish county to unite and make a Pomona exhibit at the county fair next fall. Meetings are being held with every subordinate grange in the county in the interest of the exhibit.

Extensive clearing of land has been carried on in the section of Lewis county around Chehalis during the winter months just closing. Many acres have been entirely cleared of stumps and roots and will be put under the plow for the first time this coming season.

A comprehensive permanent exhibit of pictures of prize-winning bulls, steers and heifers of America during the last season is being installed in Wilson hall, the agricultural building at the state college at Pullman, under the direction of Professor William H. Hislop, professor of animal husbandry.

Professor Walter Holt, for the last three years principal of the Richland high school, has resigned to take the position of county agriculturist of Okanogan county. Professor Holt is a specialist along agricultural lines and has done much for the Richland high school in educating the boys in practical farming methods.

Two west side boys who enrolled in the agricultural course at the state college have been awarded first and second prizes as a result of the collegiate butter judging at the Portland dairy products show. L. C. Callow of Elma was the winner of the first prize and George Hinman of Everett was the winner of the second prize.

What Others Say

Wallace's Farmer: The inquiries concerning grass seed mixtures are coming in very rapidly now.

Dakota Farmer: Farms that are permanently profitable usually keep a man busy the year around.

Farmers' Mail and Breeze: Careful planning is needed in a woodlot just as much as in the grain fields.

California Cultivator: The world is crying for food. Actual starvation is facing millions. There is a great duty before all America.

Hoard's Dairyman: In short, do not hesitate to purchase a second-hand dairy bull if he is well bred and has proven himself a good breeder.



Rugged, Hardy Work Wagons

These Overlands are as keen for the work of farm hauling as for the constant hard usage in commercial delivery work.

The Overland 1200 pound Delivery Wagon is built on the reliable time tested 35 horse-power chassis that made Overland famous the world over.

It is electrically equipped for lighting and starting and has every convenience.

The body is big and has capacity for larger bulk freight as well as 1200 pounds of weight.

It is a comfortable easy riding car as well and may be had with two *extra three-passenger removable seats for fifteen dollars additional if desired.* With these extra seats you have a comfortable eight passenger car.

It is a great money maker and time saver on any farm.

At the price $850 it is exceptional value for it shares proportionately in the economies of our vast production of the most comprehensive line of motor cars ever built by any one producer.

The smaller cars either panel or express type are exceptional values and equally sturdy and reliable for lighter farm hauling.

See the nearest Willys-Overland dealer at once and have him show you these wagons and the beautiful new line of passenger cars.

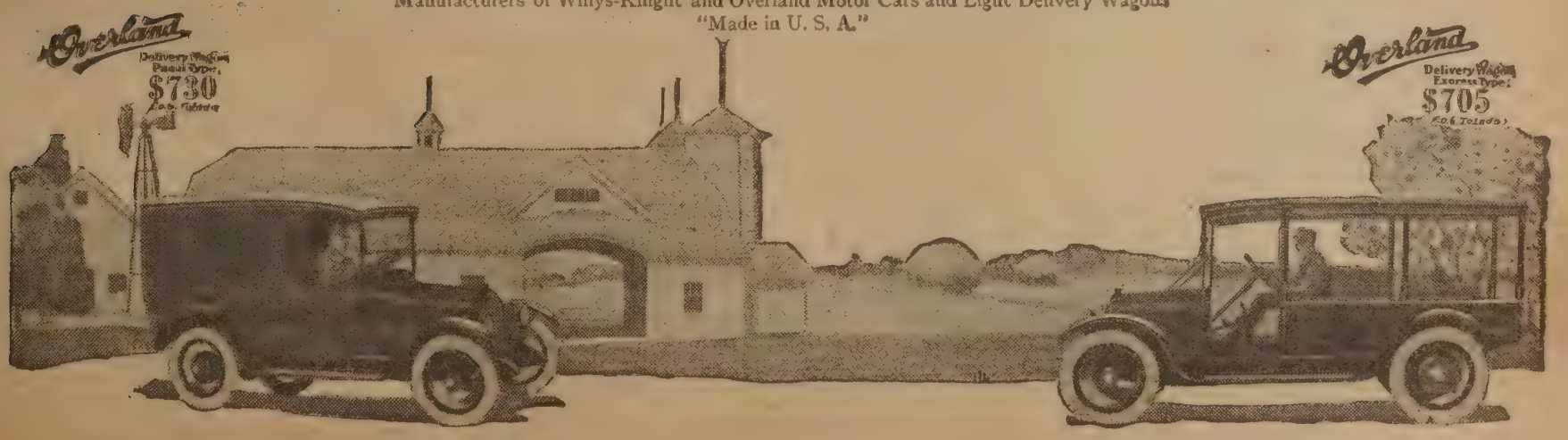
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The Willys-Overland Company, Toledo, Ohio

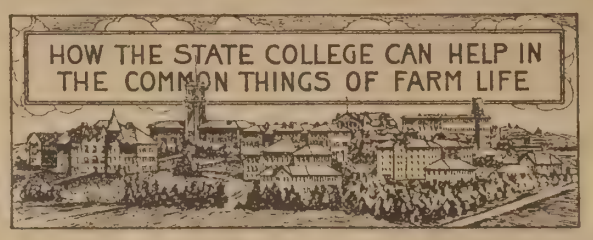
Manufacturers of Willys-Knight and Overland Motor Cars and Light Delivery Wagons

"Made in U. S. A."



Farm Home Orchard and Garden

Enough Fruit Can Be Raised on Half Acre. Farm Garden Is Not What It Should Be



VIII.

The orchard and the garden belong with every farm home. In some cases the orchard furnishes the principal crop and all other things are secondary. When this is the case, so exacting are the demands of the specialty, that the general farm conditions are entirely subordinated to the main issue. Still the minor interests ought not to be overlooked. In a small but very useful way a minimum of live stock may be fitted into an orchard farming system without disturbing the main issue and serving a good purpose, at all times, and in the periods of low prices or crop failure, helping to tide over. Swine are quite adaptable to the fruit farm. Dairy cows, at least for the home supply, should always be included. Poultry may with advantage be fitted in on a considerable scale. In each and all of these directions the college may be a coadjutor and next friend. But on the main orchard crop its help is absolutely indispensable. The orchardist who does not keep in constant touch with his agricultural college is foolish. In the matter of varieties, of fertilizing by manure or commercial fertilizer, or green manuring, in dealing with all pests, insect and fungus, in pollination problems, in questions of harvesting and marketing, the college is a clearing house through which every orchardist should receive and contribute all useful knowledge in both theory and practice. And miscarriage of plans or methods should be submitted and discussed not alone for the sake of the personal profit, but of the general welfare.

So far as the small farm orchard and the gardens are concerned, the college is in a position to render useful assistance. I have for a long time been the advocate of a very small farm orchard in eastern Washington and on the larger farms in western Washington. A half acre is enough. Needless to say that the varieties of apples, pears, cherries, plums, prunes etc., should be so selected as to furnish as nearly as possible a continuous supply of fresh fruit from the earliest date possible to the latest period, with fruits that will keep throughout the rest of the year. In planning for this you can and should ask for help. If it is to replace an old orchard, state every phase of the problem when asking for assistance.

The garden is much more meager than it should be, both in the extent of its varieties and the excellence of the ones selected and the arrangement of time and method of planting, etc. The opportunities for help in common vegetable gardening are especially neglected.

The ornamentation of the yard and grounds with suitable trees and shrubs and the plantation and cultivation of flowering plants offer another interesting and useful field of help which is almost wholly neglected by the farmer and the farmer's wife. The college not long ago distributed, gratis, in the dry belt more than 20,000 trees and shrubs and gave careful direction for plantation and care so as to make the home in the semi-arid belt more beautiful and comfortable.

E. A. BRYAN.

IN HIS NEXT ARTICLE DR. BRYAN WILL TELL HOW THE FARMER IS BEGINNING TO MAKE USE OF THAT USEFUL SERVANT, THE GAS ENGINE, AND HOW THE FARMER'S SON, AS WELL AS THE FARMER HIMSELF, NEEDS TO KNOW SOMETHING DEFINITE AND HELPFUL ABOUT FARM MACHINERY GENERALLY.

WINTER WHEAT

Needs Rest Period Before Heading.

To the Editor: Will Red Russian wheat, sown late in the fall of 1916, and which does not sprout till March, 1917, head out in 1917 and make a crop? U. P.

The above question was referred to E. G. Schafer, agronomist at the Washington State college, who replies as follows:

I believe there is practically no danger but what winter wheat when seeded in the fall will head out and mature providing it comes through the winter successfully. I believe this is true even though it does not come up until spring. It seems to be necessary for winter wheat to be subjected to severe colds or at least a rest period before it will head out. This is, most winter varieties when planted in the spring will not head out and mature a crop. On the other hand if it has lain in the soil during the winter and is uninjured it should head out and mature, but possibly somewhat later than if it had had a better start.

Save 50% On Your Tire Bill

BEFORE

AFTER

GET 3,500 more miles from your old tires! McMonies rebuilds your old casings into new guaranteed tires, at half the cost of new ones. This wonderful new process has saved motorists of the Northwest thousands of dollars.

Guaranteed for 3500 Miles

—In writing—3500 miles without a puncture is the signed guarantee you get with every McMonies rebuilt tire.

1-2 The Cost of New Tires

Introductory Prices on McMonies rebuilt tires made from your old casings:

Plain-tread—30x3	Rebuilt Tires, $6.75	*Non-Skid*—30x3	Rebuilt Tires, $7.75
30x3½	Rebuilt Tires, 8.00	32x3	Rebuilt Tires, 9.00
32x3½	Rebuilt Tires, 9.50	32x4	Rebuilt Tires, 10.75
34x4	Rebuilt Tires, 13.50	34x4	Rebuilt Tires, 15.50

Send us a trial order of one tire, without money. If you don't say that it makes your old tires look and wear like new, it won't cost you a cent.

W. H. McMONIES & COMPANY, 7th & Hancock Sts. Portland, Oregon

Guaranteed 3500 Miles without Puncture!

MAIL THIS COUPON TODAY!
W. H. McMonies & Co., Portland, Oregon Dept. F
Kindly send information regarding your process of tire rebuilding.
Name.....
Address.....
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Fair List Prices — Fair Treatment

What You Get With GOODRICH BLACK SAFETY TREAD TIRES



HAVE you ever taken stock what you get WITH as well as IN a Goodrich Black Safety Tread Tire?

You know, of course, you get the *best non-skid fabric* tire, the oldest, largest, most skillful rubber manufacturer can make, and get it at the *low* standard ONE-PRICES of the *Goodrich Fair List.*

You know you get the toughest tread, rubber compounding has yet produced, and all the seven cardinal tire virtues—style, comfort, safety, economy, durability, freedom from tire trouble, and mileage—IN a Goodrich Tire.

But have you looked deep into the Goodrich *pledge* of *perfection,* and *Goodrich Fair Treatment,* which go WITH each Goodrich tire, and require a service worthy of the good name the tire bears?

Goodrich Tires Must Make Good

If, as occurs in rarest instance, a tire fails to render its service, the B. F. Goodrich Company is more eager than you that its short-coming be made good.

Bring back a Goodrich tire that owes you anything: is Goodrich's invitation to the world.

Goodrich Fair Treatment at once cancels any debt of a Goodrich Tire—makes good quickly, generously, and gladly.

Certainty of utmost service is what you get WITH a Goodrich Tire

ORDER THROUGH YOUR DEALER

The B. F. Goodrich Co.
Akron, Ohio

Also maker of the Tires on which Dario Resta won the official 1916 Automobile Racing Championship—Silvertown Cord Tires

Where You See This Sign Goodrich Tires are Stocked

GOODRICH TIRES

Ask Your Dealer for Them

SILVERTOWN'S DOMINATION OF 1916 AUTO RACING

The 1916 automobile racing season brought forth amongst a half hundred Silvertown victories the following especial triumphs of the ONLY *two-ply, cable-cord* tire:

National Automobile Racing Championship, won by Dario Resta with 4100 points.

15,582 points scored toward the championship by Silvertown to 7,176 by ALL its competitors COMBINED.

Eighty per cent. of all the prize winning positions of A.A.A. sanctioned races.

31 Firsts to 5 Firsts by ALL its competitors.

"Best in the Long Run"

Act Now to Save Money on Your Reading Matter



MONTHLY



MONTHLY



WEEKLY

Magazine prices are advancing sharply. Any day now we may be forced to withdraw our splendid clubbing offers. A tip to friends of The Washington Farmer.

White paper and practically everything else that goes into the making of papers and magazines has advanced tremendously in cost. Some of the best known publications have doubled in price. Others will follow suit. We do not know when the letter or telegram will come which will force us to withdraw the unusual clubbing offers below. We are, therefore, giving marked prominence to this announcement in order that our wide circle of friends may benefit from the decided saving which it gives. Our urgent advice is to assure yourself of a splendid assortment of reading matter by acting at once on one of the offers below and thus get the benefit of the present low prices. You will never get these clubs for less money. You may have to pay a great deal more. ACT NOW by using the coupon provided.

OFFER NUMBER 1—$3.50 FOR $1.75.

The Washington Farmer 3 years, special rate now	$1.50
Every Week, one year	$1.00
People's Home Journal, one year	.50
Today's Housewife, one year	.50
Value	$3.50

OUR SPECIAL PRICE FOR ALL FOUR, $1.75

OFFER NUMBER 2—$2.50 FOR $1.25

The Washington Farmer 3 years, special rate now	$1.50
Every Week, for one year	$1.00
Value	$2.50

OUR SPECIAL PRICE FOR BOTH TOGETHER, $1.25

OFFER NUMBER 3—$3.00 FOR $1.95.

The Washington Farmer 3 years, special rate now	$1.50
Twice-a-Week Spokesman-Review, one year	$1.00
Today's Housewife, one year	.50
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OUR SPECIAL PRICE FOR ALL THREE, $1.95

In remitting you may send your personal check, stamps, draft or money order. If your subscription is paid ahead you can accept any one of these offers and your subscription will be advanced three years.

PLEASE ORDER BY NUMBER

THE WASHINGTON FARMER

Spokane, Wash.:

Enclosed find $..... in payment for magazine offer

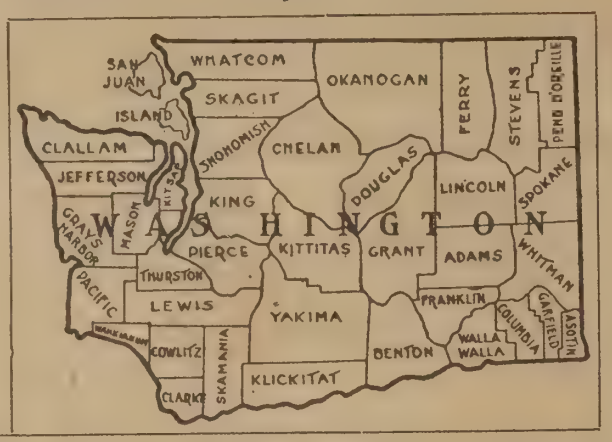
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Address .....

Late Season Helps Fruit

Buds Are Held Back by Cold, Minimizing Chance for a Loss by Frost Later in the Spring After the Buds Are Developed



KENNEWICK, Benton County, Wash., March 30.—Spring is extremely late, the buds on the trees have not started to swell yet, and the alfalfa has started to grow in only a few places. The wheat started out all right but the late spring does not make conditions look promising. The late spring holding the fruit buds back is a benefit to that industry. Generally the farm work will be two or three weeks later than usual.

LEE M. LAMPSON.

Plow and Harvest Together.

BRICKLETON, Klickiat County, Wash., March 30.—Spring is three weeks late in this section. Farmers are just beginning to stir the ground. Hard frosts have kept everything at a standstill all through March. Spring plowing and seeding are usually done from March 10 to May 1, depending on the altitude. In a distance of 15 miles here the altitude varies from 1200 to 3200 feet. The farmers on the lower levels farm a month earlier than the ones on the high elevation. Fall plowing and seeding is done according to what time the fall rains come. A few seed in the dust. Summer fallowing is done from April until July, depending on the conditions of the ground. Two years ago I saw a large farmer above me, running a plowing outfit and heading grain at the same time, but that is unusual. Harvest generaly comes in July and August. Winter wheat is uncertain, it is impossible to judge what it will be at present. Work is now commenced on a bulk grain elevator of 100,000 bushels capacity at Alderdale, a station on the S. P. & S., 16 miles from here, our nearest point. F. W. Sanders, manager of the present warehouse is constructing it.

BERT H. FAULKNER.

Little Planting Done.

SHELTON, Mason County, Wash., March 20.—Just as soon as the soil is not too wet, plowing begins. Some years this condition comes in February, more often in March. This winter and spring but little plowing has been done and the prospects are that most of it will be delayed until in April. Occasionally plowing is delayed in May. The larger the tracts under cultivation the earlier plowing begins if conditions are favorable. Our sandy soils offer the first invitation to the plowman. The many varieties of soil and the many small tracts are not favorable for the usual systems for plowing. Summer fallowing is a rare process and but little fall plowing is done. Potatoes are harvested any time from June 1 until the next spring just before plowing. Hay is harvested in July; usually better hay could be had if harvesting was not delayed by June rains. The spring is late and very little planting is done. In many cases fall cropping has has resulted in a total failure.

SCOTT HAYES.

Land Washing a Menace.

COLFAX, Whitman County, Wash., March 18.—Spring here is late. Farmers usually are plowing by this time. The snow is hanging on and the nights are cold. Drifts are from 4 to 10 feet deep. Fall wheat seems about normal and will come through the winter o. k. of the present freezing and thawing does not injure it. The acreage is away below normal, owing to the dry fall. Cattle and hogs are scarce and abnormally high. Summer fallowing progresses through the greater part of the summer, owing to the methods employed. Some disk early and plow late, others plow early and cultivate late. Both methods have their advantages and disadvantages. Early disking, followed by late plowing without further cultivation, keeps the ground from "washing" so badly in the spring, but the yield is a little less per acre than where early plowing and late cultivation are followed. I believe that in the long run the former method is the preferable, as early plowing followed by intense cultivation pulverizes the soil to such an extent that the spring thaw washes the soil on the hillsides as deep as it has been plowed. If the present "washing" is not averted, it will be only a question of time until the hills of the old Palouse will be barren.

E. C. HUNTON.

Cold and Dry.

TOPPENISH, Yakima County, Wash., March 22.—Spring in the middle Yakima valley is rather later than usual. Fruit buds show very little development at the present time, while hardy plants, such as alfalfa and clover, have as yet made no growth. The ground is unusually dry at this time of year, but spring plowing and seeding are rather more forward than usual. The nights have been very cold, the ground being frozen until the middle of the forenoon almost every day during the month of March. Much high wind has prevailed, and very little moisture has fallen. The snowfall in the lower foothills is lower down than usual at this time of year, yet it is very light, and with a few days' warm wind will entirely disappear. Most fruit trees show an excellent bud formation. A larger acreage of potatoes than usual will be planted this year, while the acreage of corn and small grains will be greater. The acreage to alfalfa and other hay crops will be smaller than usual. A larger percentage of the new land will be planted to potatoes or grain. While the snowfall in the lower mountains is light, that in the higher elevations is almost normal; that, taken together with the amount of storage water which will be available, seems to indicate that irrigation water will be fairly plentiful. The acreage of melons will be smaller than usual, while a considerable portion of the surrounding territory, perhaps 3000 acres, in the vicinity of Toppenish and Sunnyside will be planted to sugar beets. This is a new crop for this section of the country. The interest in highly bred stock is growing at a very rapid rate and is being influenced as much as any other way by the formation of pig clubs and other live stock clubs by the students of the various schools. There have been numerous sales in the vicinity of the middle Yakima valley this spring. Nearly everything offered has been sold at a good price. Ordinary dairy cows, mixed breeds and mixed in quality, have brought from $60 to $100; horses and mules of medium and heavy weight are in great demand and are finding ready sale at excellent prices; hogs are the highest ever known in the valley. Beef cattle are scarce, while sheep bring almost any price that the owner cares to ask for them. A considerable number of tractors are being purchased by the farmers this season, and will be tried out for ordinary farming purposes as well as for hauling heavy loads over the roads. The use of light trailers on automobiles for hauling light loads is increasing very rapidly. A great many dairymen are bringing their milk and cream to town in this manner, and on the return trip take back 800 to 1200 pounds of supplies.

C. A. WYCKOFF.

Work Must Be Rushed.

RITZVILLE, Adams county, Wash., March 23.—The various branches of farm work in the spring are commenced with seeding just as soon as the frost is out of the ground and the soil reasonably dried so it will not stick to the implements. Summer fallowing is continued until well along in June. Some say early summer fallowing is best, but it involves a combat with the weeds which sprout and grow until harvest time. Disking the soil and late plowing is a very good way to get the weeds. This spring is at least three weeks late. For five days a severe storm from the southwest raged recently, starting with snow and running into a duststorm. There is little or no fall plowing done in this community. Fall seeding is done as soon as enough rains fall to sprout the grain. Last fall there were no early rains and people who seeded in the dust have to reseed again. Farm work this spring will be done in a rush as the earliest seeding promises best results. Harvesting crops varies about one month owing to the season. As a rule we start on fall grain after July 4.

JACOB HARDER.

Latest Spring on Record.

NEWPORT, Pend Oreille county, Wash., March 24.—Spring plowing as a rule starts in the Pend Oreille valley from March 15 to April 1. Seeding is done from the first of April to the 15th of May, and fall plowing can be done at any time after the crops are taken off and the best results are had by seeding in August or early September. Summer fallowing is not practiced as there is ample moisture for all grain crops. Harvesting starts the first of August and is continued through the month. The present spring season is the latest of which any record is had. There is an average of 15 inches or more of snow on the level today, March 24. Snow in this section as a rule is gone from the open lines on the first to the 15th of March. This year it will be after the first of April before the ground is bare. This condition is usually of great advantage to fall grains as well as hay crops, but it is a serious handicap to the spring sown crops. It will have a tendency to reduce the yield of wheat and oats because of the short growing season. Farm work as far as I can determine at this time will be about normal except in the case where farmers failed to get their fall plowing done, and such will have a serious setback by reason of a late crop.

CHARLES M. TALMADGE.

Seed Early in Spring.

HUNTERS, Stevens county, Wash., March 27.—In this section farmers invariably try to do their spring seeding as soon as possible, for any grain crop to do well should be pretty well along by the time dry weather sets in. We usually have more or less rain through April and May and there is generally considerable rain in June, but July and August are dry. Therefore the spring seeding is done as early as the season will permit. This year the season is late. There will be more spring plowing than usual due to the dry falls. As regards fall powing many wait until after the first fall rains which means plowing in Octobef usually. But the fall rains are uncertain and often inadequate and when they come late there is but little time for plowing before it freezes up. Hence there is some dry fall plowing done in September by those having much spring work to do. While not so good it leave less to be done in spring. There is not a great deal of summer fallowing done here. Often it grows up to chess, a troublesome weed in the subsequent crop. With an annual precipitation of 18 inches obtained here there should be no need of summer fallowing.

ELIAS NELSON.

Crops Used at Home.

NEWPORT, Pend Oreille County, Wash., March 1.—Hay, timothy and clover are the principal farm crops here. Next, I would say, come oats, wheat, cream, beef and poultry. Timber, of course, is the big product of the country, and the lumber industry consumes practically all of the farm products, and most of the farmers' products are marketed locally.

CHAS. M. TALMADGE.

Three Weeks Late.

MONTBOURNE, Skagit County, Wash., March 17.—Spring plowing is generally done in March and seeding in April. There is very little fall plowing and no summer fallowing. The hay crop is ready to cut about the middle of July and the oat crop is harvested in August and September. The spring is about two to three weeks late. Very few fall crops are sown here.

J. B. PETERSON.



Save Your Thresh Bill

YOU can do it with a Red River Special threshing outfit. Good work without breakdowns. The Red River Special saves the farmer's grain. *Beats it out.* "Saved enough more of our grain over other machines to pay our thresh bills," say Andrew Scott and 17 other farmers of Kerwin, Kansas. Buy or hire a

Red River Special

Beating shakers toss and beat the straw just as you would by hand. 90 per cent of the grain is separated at the big cylinder—by "the Man Behind the Gun." Low upkeep and repair cost. Frames made of seasoned hard maple lumber. Steel used where iron lacks strength. Tell your thresherman to get a Red River Special. It means better threshing and less lost time for you. Or write and learn about our "Junior" machine. Small enough to make threshing your own grain pay. *Write for the Red River Special Paper.*

Nichols & Shepard Co.
In Continuous Business Since 1848
Builders Exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam Traction Engines and Oil-Gas Tractors
Battle Creek Michigan



Healthy Vegetables

The U. S. Dept. of Agriculture recommends that you rid your seeds and soil of infection before planting, with the greatest known disinfectant—

FORMALDEHYDE
The Farmer's Friend

It prevents potato scab and black-leg that attacks beets and other vegetables. It guards against onion rot and onion smut and smudge, cucumber root rot. It prevents mould in celery, lettuce, parsnips and other covered seeds when applied to the beds before planting. One pint bottle of our Formaldehyde costs 35 cents. Big scientific book with full directions sent free upon request.

PERTH AMBOY CHEMICAL WORKS
100 WILLIAM STREET NEW YORK

VOGELER'S Purity SEEDS

are carefully selected and tested. This means bigger crops, of better quality. Our Alfalfa, Red Clover, Alsyke Clover, White Clover, Sweet Clover and Timothy are all hardy western-grown seeds.

Our wheat, oat and barley SEED are grown in the Mountain Valleys of Utah and Idaho. Our FREE catalog tells all about Vogeler's Purity Seeds—the best money can buy. Write today.

Vogeler Seed Co.
Salt Lake City, Utah.

$175--It Might as Well Be Yours--Think a Moment

Think of the many times your friends have earned prizes by entering contests in which you might just as well have participated. You were quite certain their exhibit at the fair was inferior to that which you had at home; you were satisfied, and are now, that you are just as bright and capable as many of your more successful acquaintances. You have let them forge ahead merely because you failed to embrace the opportunity—the same opportunity they profited by. There will be cases like this in the

FARM INFORMATION CONTEST

Don't let it escape. Get our contestants' helpful outfit and start at once
On April 19 this first prize drops to $150---Read the Rules---Answer these questions

46. From what fruit are raisins made?
47. For what product advertised in this paper is the phrase used: "Chases dirt?"
48. Will an iron bar measuring when ice cold 1-inch wide, 1-inch thick and 12 feet long contain more than 144 cubic inches when its temperature is raised 100 degrees?
49. Is a subscriber of this paper guaranteed against loss in dealing with its advertisers?
50. What is the meaning of the words "E. Pluribus Unum," found on many of our United States coins?

$800—IN CASH to Be Paid—$800

We will positively give EIGHT HUNDRED DOLLARS in cash awards (and more in event of ties) to the winners. As explained in the rules which follow, there will be five questions run in every issue of the Farmer for 12 weeks. The last five questions will appear in the issue of April 19.

Open to Four States

Contestants must be residents of Washington, Oregon, Idaho and Montana.

Five Questions Each Issue

The contest will be composed of 60 questions. Five will be run in each issue of the Farmer for 12 issues.

Answers to each question except No. 45 can be given correctly in from one to 10 words and will be given a score of 100 if correct. Answers to question No. 45 will be limited to 100 words each, and will be graded as to the common sense and general knowledge of farm conditions shown by the contestant without regard to spelling, grammar or penmanship. As with the other 59 questions, a perfect answer to No. 45 will be scored 100.

Perfect Score Is 6000

The contestant who comes nearest to a score of 6000 and complies with all the conditions of the contest will receive the first prize; the next nearest, second prize, and so on. In case of a tie each tying contestant will receive the full amount of the prize.

There are 35 prizes, as follows:

$150 is amount of First Prize. **$50** is amount of Third Prize. **$10** is amount of Fifth Prize.
$100 is amount of Second Prize. **$20** is amount of Fourth Prize. **$5** each, Sixth to Tenth Prize.
$2 each, Eleventh to Fifteenth Prizes. **$1** each, Sixteenth to Thirty-fifth Prizes.

OTHER RULES

The answers will be passed upon and graded by a fair-minded, thoroughly competent judge.

Two weeks will be allowed for sending in answers after April 19, 1917, date of the issue containing the last five questions.

Remember, your failure to answer all the questions will not necessarily exclude you from the contest. There are 60 questions to be answered and it is not reasonable to suppose that all our prize winners will attain a perfect score. Your answers must all be sent in at the same time. Do not send any answers until you have completed the full list or as many as you can answer.

Those who use our CONTESTANT'S HELPFUL OUTFIT will be able to send in their complete set of answers without delay, there being no need of their waiting for the questions as they appear in The Farmer from week to week down to the final issue of April 19. In order to get as prompt returns as possible from those contestants who use our CONTESTANT'S HELPUFL OUTFIT, extra inducement is made in the prize awards. SEE ENLARGED PRIZE LIST.

Announcement of prize winners will be made and prize checks mailed as soon after close of contest as possible.

If any point is not clear, do not hesitate to write the Farm Information Editor.

All answers must be mailed on or before midnight, May 3, 1917, as shown by post-office dating stamp on your envelope.

ORDER COUPON—If your subscription is paid ahead, the time paid for herewith will begin at the date to which you are now paid.

FARM INFORMATION EDITOR,
Review Building, Spokane, Wash.
Enclosed find $1 for one year, or $1.50 for three years' subscription to

THE WASHINGTON FARMER

and enter me as a contestant in the Farm Information Contest. I am also to receive at once the complete CONTESTANT'S HELPFUL OUTFIT, consisting of guide against wrong answers, reply blanks, rules and all information to aid me to win a reward.

Name .....

R. F. D. ..... Town .....

State .....

Notice—Amount of remittance to be either $1 for one year's subscription to The Farmer or $1.50 for three years' subscription.

Answer this question: Are you now a subscriber? .....
If you wish paper sent elsewhere, fill in name and address.

A Valuable Aid to Contestants

One complete CONTESTANT'S HELPFUL OUTFIT, including all of the 60 questions and instructions and helpful warnings as to answers which would be wrong and the correct answers to some of the most difficult questions, is truly a big help to the contestant.

To each contestant who sends in a new renewal or an extension of his subscription at the time of registering for the contest, this complete Contestant's HELPFUL OUTFIT will be sent in combination.

We feel that those beginning on the contest will find these suggestions as to what to avoid distinctly useful. The equipment supplies in convenient form everything needed to enable you to apply your ability to the best advantage and will contain information enabling you to answer the most difficult questions correctly.

Puts Questions in Reach of Children

This CONTESTANT'S HELPFUL OUTFIT puts the solution of the questions in the reach even of the children, it being the purpose to make it possible for everybody in Washington, Oregon, Idaho and Montana to compete. This outfit includes, besides general information about the plan of the contest, the following:

Guide against wrong answers, which includes either correct answers of more difficult questions or easy references as to where to find the correct answers; and blank forms on which to write your answers in such a way that there can be no confusion when your answers are taken up by the judge for scoring.

It will be worth considerable to you to be assured that your answers are reaching the Farm Information Editor in such form that he will know in every instance exactly what question you intended to answer. This CONTESTANT'S HELPFUL OUTFIT will make it possible for you to

Begin Work at Once

On account of the large number certain to send for our CONTESTANT'S HELPFUL OUTFIT, thus making it possible for them to answer the entire 60 questions without delay, it is deemed advisable to offer some special inducements to secure prompt returns from this particular class of contestants. By securing the early replies of those who are thus supplied with the entire 60 questions we will be able to have their papers carefully scored before the final rush of answers toward the end of the contest.

Understand, it is not absolutely required that those who use our CONTESTANT'S HELPFUL OUTFIT send in their replies at once, but, in order to induce them to get in early, the following plan for enlarging the awards to those prize winners whose answers come in early is offered:

ENLARGED PRIZE LIST—$800 IN PRIZES—ENLARGED PRIZE LIST

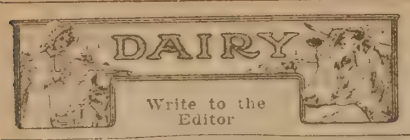
For those who use our CONTESTANT'S HELPFUL OUTFIT.

Thirty-Five Prizes	Amt. of prize if winner sends in answers during 1st period. Feb. 1 Feb. 21	Amt. of prize if winner sends in answers during 2d period. Feb. 21 Mch. 14	Amt. of prize if winner sends in answers during 3d period. Mch. 14 April 5	Amt. of prize if winner sends in answers during 4th period. April 5 April 19	Amt. of Prize for winner who does not send in answers before April 19
First Prize	$300.00	$225.00	$200.00	$175.00	$150.00
Second Prize	200.00	175.00	125.00	110.00	100.00
Third Prize	100.00	87.50	62.50	55.00	50.00
Fourth Prize	40.00	35.00	30.00	22.00	20.00
Fifth Prize	20.00	17.50	15.00	11.00	10.00
Sixth to 10th Five prizes each	10.00	8.75	7.50	5.50	5.00
11th to 15th Five prizes each	4.00	3.75	3.00	2.20	2.00
16th to 35th 20 prizes each	3.00	2.50	2.00	1.50	1.00

To secure our CONTESTANT'S HELPFUL OUTFIT, fill out order coupon on this page and send it in to Farm Information Editor, with your personal check, money order or 2-cent stamps, for $1.00 for one year or $1.50 for three years.

You must address

THE WASHINGTON FARMER
Farm Information Editor
Review Building, Spokane, Washington.



A. B. NYSTROM, Editorial Contributor

Costs Increase

Faster Than Do Dairy Revenues

Looking back upon his 32 years of experience in farming, James Nelson of Renton Junction, Wash., does not think the rancher, particularly the milk producer, of today stands as good a chance to make money as did the pioneers. The explanation, according to Mr. Nelson, is that production costs have gone up, without an equivalent rise in the price paid the dairyman.

"You can figure it our yourself," he comments. "Today I am selling an average of eight cans of milk, for which I receive $2 per can. Here is what it costs me to produce this milk: One-half ton of hay, at $16 per ton; three sacks of malt, at $22 per ton; two sacks of middlings, at $28 per ton; 500 pounds of beets—probably it costs me $1.75 to produce these. I pay my milkers a total of $4 a day. This makes the production cost of my eight cans of milk close to $19.75, and I am not figuring in interest on my investment, taxes or wages for myself and my wife.

"Years ago," Mr. Nelson continued, "We used to take the milk can into the barn and pour the milk directly into it. We produced what we considered good clean milk, but there were none of the modern requirements and there was no inspector to tell us how to handle milk. One at a time these things were added, and as each new requirement went into effect we received a temporary increase for our milk. Then the price would drop back, so that in the end we find ourselves paying out a lot more for labor and equipment than we did in the beginning, without a corresponding increase in the price we are paid."

Mr. Nelson does not feed silage, as he finds he can get as many roots, acre for acre, as he could get of corn silage, and he considers the former full as good for his purpose as the latter. The Nelson farm comprises 145 acres, mostly bottom land. From 90 to 100 bushels of oats can be produced on this kind of land, and potatoes and corn also do well. Speaking of corn, eight rows of sweet corn planted in the Nelson garden show the value of using acclimated seed: four rows were planted with seed grown on the farm and the other four with the same variety, bought at the seed store. There was a difference of 18 inches or so in the height of the stalks, almost throughout the season, and maturity and yield correspond with this difference in vigor.

Silage Not Injured

By Frosting of Corn in the Field

By HORACE ADDIS.

Last fall much of the corn in the Willamette valley and elsewhere in the northwest was struck by a hard frost before it was mature enough for silage. Some dairymen countermanded orders for silos, because they considered the corn badly damaged and the general opinion was that the silage put up would be of much less than the average feeding value. To the surprise of dairymen generally this has proved to not be the case. I have visited a large number of the breeders and dairymen of the valley and find that the universal experience is that the frosted silage is better than expected while, in some cases, the declaration is made that the silage is as good as or even better than any they have had before. Whenever the corn was fairly well matured when the frost struck it, and especially if water was liberally used when putting it in the silage is of an excellent quality. One prominent Jersey breeder let his corn stand for two weeks after the frost struck it and he found that it matured considerably in that time. His silage is sweet and good and the cows eat it with relish.

Outside of the fact that the fodder blades did not cut up quite as well as those of corn with more life in it, and as there is perhaps a very slight waste on that account, as the larger pieces of blades are not eaten quite so readily, there seems to be no damage to the silo and, in some cases, I have found the frosted silage sweeter, eaten more readily and the cows eating larger quantities than other silage in the same neighborhood put up before the frost, but put up rather green and therefore rather sour.

I have found the same experience in the few places I have visited outside the valley, and it would therefore seem that there should be less fear of frosted silage corn; that it is better to let corn mature more and taken the chance of frost than to put it in the silo too green.

IDAHO CHEESE WINS

High Class Product Is Shown.

The highest score in both export and home trade classes of cheese was captured by Idaho cheesemakers exhibiting at the Northwest Dairy Products show at Portland, Oregon, last month. Cheese was entered from factories in Idaho, Washington, Oregon, California and Wyoming, and the competition was very keen.

The medal winning cheese in the home trade was produced by Gustave Kuntz of Buhl, Idaho. It was a very smooth medium open textured milk and clean flavored chese. The moisture content was 36.8 per cent, which is moderate or even low for this type and suggests that Mr. Kuntze would not be at all inconvenienced by a 40 per cent moisture standard.

The high scoring cheese in the export class came from the Boise Co-operative Creamery Co.'s Eagle factory. This sample was firm, well matured and had a fine, sharp, nutty flavor. It was a very fine example of the slower maturing type and had a moisture content of 32.4 per cent.

Idaho as a state had a larger per cent of her factories represented than any other state exhibiting.

Cheese has been found such a satisfactory method of marketing the butterfat from so many sections that the quantity manufactured is increasing steadily and is certain to increase more rapidly as dairying is more extensively practiced.

AS TO FALL GRAIN

Will It Do Well Sown in Spring?

To the Editor of The Washington Farmer: Will winter wheat or rye sown in the spring head and mature the same as spring wheat or rye? Would it be apt to make as good a crop as if fall grain had been sown in the fall? Some of the farmers here claim that "all that is necessary for fall grain sown in the spring to head and mature is to get it in the ground early enough so that the ground will freeze a couple of inches before spring.

I have a quarter section and would like to sow the fall grain (rye) if the chances are nearly equal for a crop; but if it seems best I will sell the fall rye for what I can get and buy some spring grain. D. E. F.

Mesa, Wash.

Answer by Leonard Hegnauer, State college extension specialist.

There seems to be a great deal of variation among varieties of grain with reference to their ability to grow when sown in the fall and in the spring. Others are both winter and spring and will head out and produce a crop when sown either winter or spring. A strictly winter variety, however, is not safe to sow in the spring, but it may produce a crop the first season even if sown late in the winter. For spring sowing it is better to use the spring varieties, and I should prefer this wherever it is possible to obtain them.

Junior Agricultural College.

The commercial club of Puyallup is discussing the establishment of a Junior Agricultural college in the Puyallup valley.

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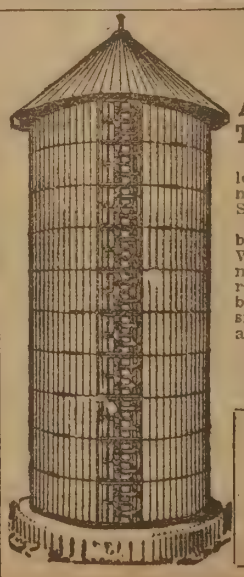
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Fill in below and mail to McGoldrick Lbr. Co., Spokane, Wash., for our 1917 catalogue.
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List of Awards Coming

Many Figure Losers Write Cheery Letters

By THE CONTEST EDITOR.

An early issue of the Farmer will contain the list of awards in the figure contest and the names of all those who tied on the correct solution, 6971.

The contest editor is pleased to receive letters like the following three communications selected from a large number of the same character from losers in the figure contest:

Baby Tore Up Charts.

To the Contest Editor: Congratulate me, please. I came just in one of having to trace the dotted lines, as my answer was 6972. The girls say I've wasted enough time on the puzzle now to crochet lace for a trousseau. But say it was fun and I've got the paper cinched for three years.

It helped to pass away a lot of time in these snow-locked hills. And I don't feel half so bad about losing out as I will if I forget my new incubator just once. The adding was good training to help me remember. Anyway I'm glad they're all added and I can go to work.

No, I'm not such a poor mathematician, but I added all the charts and set the answers on a tablet back—didn't try to remember what they were and the girls used the tablet back to mail a photo! So I added up a lot more charts and baby tore them up, so my answer was decided by the last three charts, one was 6963 with a 9 in doubt, one was 6971 with a 2 in doubt, and one was 6974, so I was pretty close to it.

MRS. MARILLA KIDWELL.
Garfield, Wash.

Far From "Coast of Norway."

To the Contest Editor: "Everybody's Doin' It!" You say 6971 is the correct solution in the figure puzzle. I do not believe my figures are infallible, but I do believe I have worked the puzzle a "hundred" times and always with the same result (6972).

You have left me struggling in a maelstrom of mistaken identity far from the coast of Norway. Well, I send congratulations to you, Mr. Editor, to the winners and I also congratulate myself because regardless of the high cost of living I will receive copies of the Farmer to and including the 21st day of December, 1920. Very truly yours.

JACK TIMMONS,
Havre, Mont. (An Also Ran).

A Case of "Nerves."

To the Contest Editor: I certainly believe you when you say you have no more knowledge as to the possibilities of the dot problem than the rest of us. I am glad we have only three trials. More would cause nervous prostration to at least one contestant. Sincerely yours,

MRS. C. D. HANCE.
Eureka, Mont.

Mrs. Hance also describes the way she feels about the contest in the following verse:

THE WAY I FEEL ABOUT IT.

I did not think one had to be so very smart
To add up the figures on the figure chart.
To get every one but not any twice
Was the trick, then they added up nice.
It was fun and it helped to while away
Many an hour of winter's cold day.
But, O the puzzle with all those dots
Where shall I begin and where shall I not.
Which way shall I turn, now where shall I go;
Can I catch the dot or am I too slow?
These questions come to me o'er and o'er
As I follow a line trying to get four
Instead of three; the dots play out;
I must stop short.
I get nervous and mad and stop with a snort.
"I might as well quit, I can never win."
Then I cool off again and go at it again.
For my chances are as good, yes, every bit,
As any of the others, so I'm not going to quit.
If the editor decides under the conditions laid down
That I'm not the winner, I hope I'll not frown.
But if I have the most dots and win the big prize
Our roof must be weighted or else it will rise



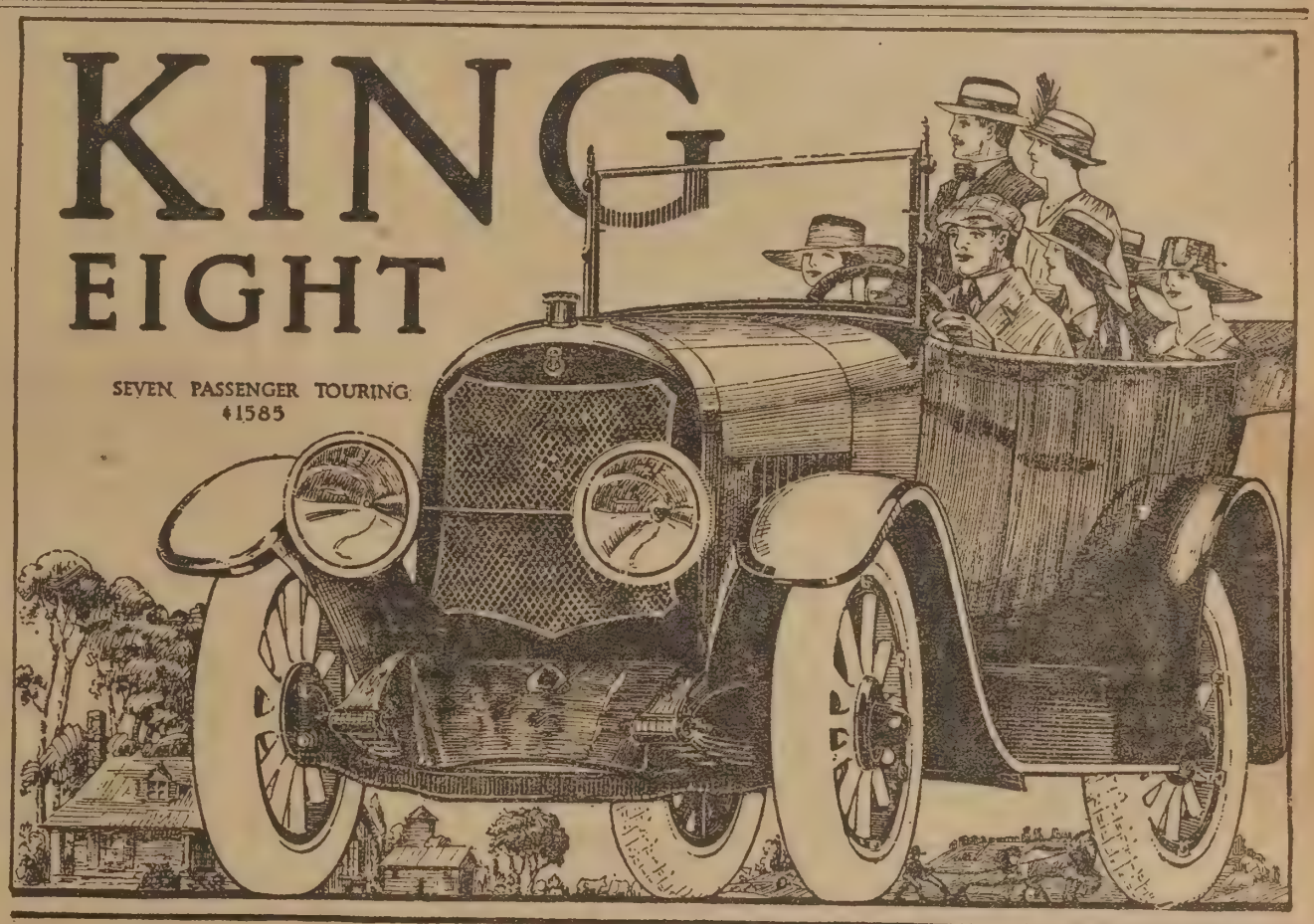
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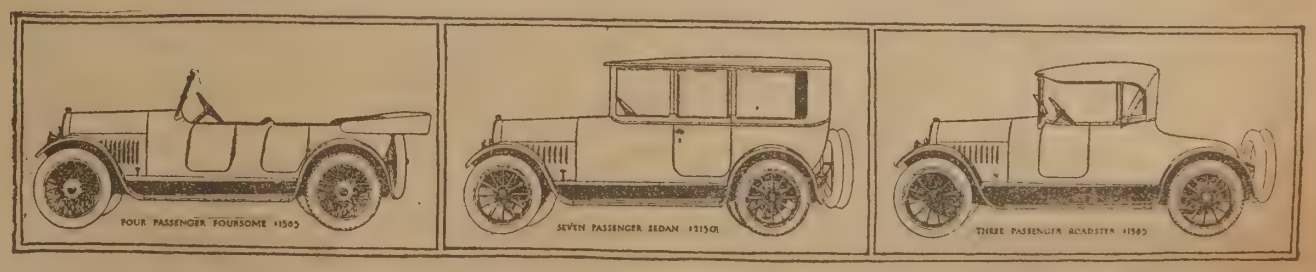
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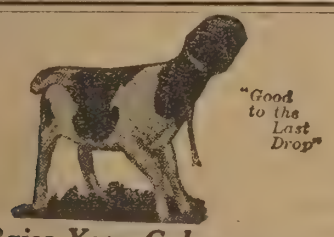
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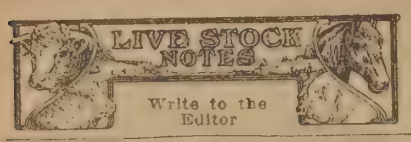
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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.



E. J. IDDINGS, Editorial Contributor

Care of Sow

Look to the Housing and Feeding

By E. J. FJELSTED,
Field Animal Husbandman, University of Idaho.

Why does the farmer save only 50 to 65 per cent of the pigs farrowed in the spring? This question is at all times paramount with the producer, and especially is this true when hogs are selling for 15 cents per pound in the open markets. With this question in view, the following suggestions are offered to help the farmer solve this important problem.

The most important factor tending toward a higher per cent loss is improper housing. Before farrowing, the quarters should be thoroughly cleaned and disinfected. This precaution will materially reduce the canker sore mouth trouble so common among small pigs, and lessens the danger from internal and external parasites. See to the quarters that they are dry, and provide sufficient bedding to keep the sow off the bare floor, but not enough to allow her to make a deep nest. Provide a fender around the pen to prevent the sow from lying on the pigs. A strip of 2x6-inch fastened to the wall about six inches from the floor will serve this purpose very well.

Next in importance, and, if carefully studied, will help materially in the solution of the problem, is the feeding of the sow before and after farrowing. If you have some roots, such as mangles, carrots, sugar beets, etc., that are not frozen, be sure to make use of them in your rations. The roots will tone the system and reduce the usual troubles at farrowing time to a minimum. For the best results, the sow should receive roots some weeks before farrowing time. A small amount of grain should be fed in connection with the roots. Do not feed the sow anything except warm water for at least 24 hours after farrowing. At the end of this period, feed her some thin slops, the solid part composed of bran or shorts. Get her back to full feed gradually. A heavy feed soon after farrowing oftentimes causes indigestion, which will result in impaction, and probably the loss of the sow. Many sows become "pig eaters" as a result of heavy feeding too soon after farrowing.

The following mixture should be before the sows at all times:

100 pounds slacked coal; 2 pounds air-slacked lime; 2 pounds common salt; 1 pound epsom salts.

Sprinkle over this mixture a solution made by dissolving two pounds of copperas in one quart of boiling water.

Pasture Poisons

Are Menace in the Spring Time

By S. B. NELSON

Head of the veterinary department of the State College of Washington.

At this time of the year there appears in many moist as well as wet places the green doubly compound leaves of the water hemlock or cowbane or wild parsnip as it is called, a deadly poisonous plant. The leaves have narrow serrated or saw-toothed leaflets about two or three inches in length. It grows from a root stock somewhat resembling a small narrow regular oblong sweet potato.

When green feed is scarce as it is now, the bright green leaves and stocks become quite attractive to grazing stock and they eat it freely. They even eat into the crown of the root of the plant which contains the larger quantity of the poison cicutoxin, and when the animal obtains this plant it nearly always proves fatal because the plant material has an opportunity of being absorbed and causing the poisoning before the owner knows anything about it.

The symptoms are a severe pain, a peculiar trembling across the shoulders and in the tissues back of the shoulders. These tremblings later develop into more or less severe muscular spasms. The eyes have a staring look increased by the dilation of the pupils. The pulse is weak, wiry and sometimes intermittent—that is, it misses a beat. The breathing is irregular, sometimes heaving and at other times regular, being influenced to a considerable degree by the muscular spasm. There are no regular symptoms regarding the bowels though at times there will be small passages of manure at short irregular intervals.

Remedial measures are not of much value unless they can be administered very soon after the animal has partaken of the plant. Probably one of the best remedies to use is potassium permanganate, the dose of which is from 10 to 50 grains for cattle, depending upon the age and size of the animals. The drug should be dissolved in from two to four quarts of water. The more water used within reason the more apt the liquid is to come into contact with the poisonous plant material. Be sure that the drug is completely dissolved before the solution is given to the sick animal.

Water hemlock frequently grows in smaller or larger groups so that as a preventive measure it may be either fenced away from the pasture land, or it may be removed by digging.

In many cases the plant could be entirely exterminated at a small cost for the labor necessary. It is to be remembered that every time a plant is dug up and destroyed the chances for the poisoning of stock is lessened.

In the later spring and summer months, hemlock grows two to five feet high. The stem is hollow and carries an umbrella cluster of small white flowers. At this time of the year it is much more readily recognized so that it may be dug out.

Grabbing Ideas

This issue of The Farmer has many good ones. Some of them you can put to profitable use now, others you can store away in your mind for future use. You will find them all through the paper—a practical suggestion here that will save you money—a good plan there that will make you money. You'll surely enjoy nosing them out and making those that apply to your line of work a part of your mental and business equipment and capital. There are lots of good ideas for the women folks, too, and interesting bits of entertainment for the young folks and kiddies. Read this issue, all of you—it will yield some real nuggets, and it will whet up your appetite for the dandy good things you will find in next week's issue.



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The Elgin Six has just established a new record of 67½ hours between Chicago and Miami, Fla., a strenuous trip of 1626 car-racking, stamina-testing miles.

Thirteen hours of this time was driven in a heavy rainstorm that made the roads slippery and dangerous, and in some places so deep and heavy with mud that the average car could not negotiate them at all.

The route included the steep, rocky mountain grades of Kentucky and Tennessee, the heavy sands of Georgia and the slimy, treacherous swamp roads of Florida.

The Elgin Six has made perfect scores and won highest economy honors in some of the most gruelling endurance and economy runs of the last year.

Many other remarkable Elgin performances have firmly established the Engin Six as a Mechanical Masterpiece and a champion for long-sustained speed, endurance and economy.

And, as for style and beauty, no other car selling under $1250 has the fashionable center cowl and the "V"-type radiator of the high-priced European models. Its beautiful yacht line design sets the Elgin Six aside from the monotonous designs of common cars and gives it distinction on country roads or city streets.

Elgin Motor Car Corporation, Chicago, U. S. A.

We can make immediate delivery.
Write us for Booklet E.

Ross & Skinner

Distributors Idaho and Washington.
1012 Sprague Ave., Spokane, Wash.

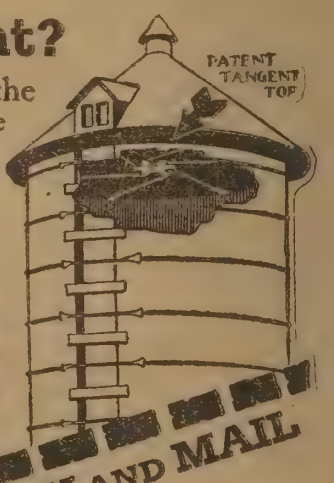
The ELGIN is the IDEAL car for country roads.

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There's more at stake than just the cost of your silo! If a silo full of ensilage blows down or goes to pieces, there's hundreds of dollars in feeding-value lost.

Don't experiment with a "home-made" —or with any silo that cannot point to a successful record.



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THE DAIRYMANS SILO

A *successful silo,* made by a successful concern. The Crisell patent tangent-top construction (*exclusive Simplex feature*) keeps the silo in absolutely true circle. A guarantee bond to this effect with every silo sold.

A Simplex will *insure* your dairy profits this year and the years to come. The man who owns a Simplex doesn't worry about high feed prices.

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Everything for the Dairyman
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Am interested in knowing more about the Simplex Silo. Send free literature.

Name.....

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I feed.....cows.

Veterinary

Dr. S. B. Nelson

"Do Not Furnish Instruments."

To the Editor: In the March 22 issue of The Farmer there was published in this department an answer to the question of what to do for blackleg in cattle. In this answer the statement "You can obtain the government vaccine free of cost, with instrument for use, by writing to," etc., is an error. I dictated "with instructions." That has been misinterpreted in transcribing or in typesetting. Will you kindly correct this by saying that "We furnish the government vaccine free of cost, with full INSTRUCTIONS for use. We do not furnish the instruments."

S. B. N.

A little more than a month ago my hay getting low I put the dry cows and young cattle on rye hay, cut green and stacked, the dry cows for a while had some oat hay. About two weeks ago one cow dropped her calf two or three weeks premature. She seemed to be all right, all functions acting naturally for two or three days, then she began losing appetite and a couple of days more she was dead. We dissected her and could not find anything wrong except an offensive odor about the womb. Three days ago another cow lost her calf and is now showing the same symptoms. Is it the feed and are the other cows apt to do the same thing? J. R. S.

Republic, Wash.

You state in your letter that you have been feeding rye hay to cattle. I hardly think that your cattle are affected with contagious abortion, although that might be the case, but I am rather of the opinion that the trouble is due to the hay that you are feeding. Whenever pregnant animals are fed rye hay and they lose their young we look very carefully to the rye hay because this kind of hay is subject to the invasion of a fungus known as Clavitets purpura, also known as ergot. If there is any quantity of this in the rye hay, and there nearly always is, the action of the ergot is to contract the blood vessels of the womb and as such stop the blood supply and cause the premature birth of the young. I think that if this is the trouble, after the change of feed for your cows, you would have no more trouble. If you do have trouble, that is, it continues, there may be some other cause for it.

A couple of weeks ago we had a horse die. He acted like he had a mild case of colic and we gave him a quart of raw linseed oil. He was sick two days and two nights. We opened him and found an intestine had bursted.

H. E. F.

Riverside, Wash.

As a general rule ruptures of the bowels are due to a part of the bowel being severely distended with gas which because of a twist in the bowel can not pass backward. The gas may, of course, be an over amount formed because of a little indigestion, or it may be practically the normal amount of gas present, but the twist in the bowels not allowing it to escape causes the rupture. There is no treatment after the rupture occurs.

I have an 8-year-old cow which calved last on November 15, 1915. She ran in pasture and was served last part of May. She was then served by another bull June 20 and shortly after she was sick, but seemed to recover in a day or two. She wanted to go dry the 1st of December and was permitted to do so. She does not show any signs of coming fresh at this date. Do you think she has been injured or has she contracted abortion?

F. V. S.

Beach, Wash.

I do not think that the cow shows any evidence of having contracted contagious abortion. A person would rather be of the opinion that she was with calf if she has not shown any evidence of heat since June. There may, however, be some internal uterine trouble which prevents her from coming in heat or even showing that she is not with calf. There is no remedy or advice I can give you in this matter.

I have a cow that has large bumps filled with pus on her side. Do not know what caused them. W. K.

Chewelah, Wash.

The only explanation that could be given regarding the trouble affecting your cow is that she has become infected in some way and that the infection has localized itself as you describe it by forming large lumps filled with pus, that is, abscesses on her side. I am going to recommend that you open the abscesses from one side to the other so as to give them good free drainage, then wash them out with a 10 per cent solution of creolin once. After that, wash them out daily with a 2 per cent solution of creolin, or some other coal tar product. That is practically all of the external treatment that she will need. At the same time I am going to recommend that you give the cow one dram of potassium iodide night and morning for five days. Give the potassium iodide in one pint of water and drench the cow.

I have a horse that has eye trouble. One eye will become swollen and inflamed, watering profusely for one or two days, then seems to be all right and the other eye will show the same trouble. This has continued for three weeks. The horse has a good appetite and is fat. No other symptoms except stamping hind feet. F. A. D.

Kennewick, Wash.

Drop into the horse's eyes morning and evening a few drops of a 2 per cent solution of argyrol in water. Drop it in from the outside corner of the eye.

I have a cow that has red water. Can this be cured? J. G.

Clear Lake, Wash.

Write to Dr. J. W. Kalkus, veterinarian to the experiment station at the state college of Washington at Pullman. Dr. Kalkus has been experimenting with red water and investigating the trouble for a number of years and he can give you the information that is available on this subject.

Please describe tuberculosis in milch cows. I have a cow that coughs whenever she becomes excited or the cold air strikes her. R. D. N.

Roberts, Idaho.

The symptoms of the advanced stage of tuberculosis of cattle generally are as follows: Bright, shiny eyes, dry muzzle, a staring coat of dry, unthrifty looking hair, generally turned toward the ears, occasional diarrhea and constipation, the loss to a certain extent of the milk production power. If the cow is exercised some she breathes and pants considerably. There is general unthriftiness. In other cases there may not be any visible signs of the disease at all, as tuberculosis is a very insidious disease which affects the lymph glands as well as sometimes all other organs of the body and frequently it is not possible to determine these lesions by physical examination. The only way to determine whether or not any lesions are present is by means of the tuberculin test.



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Cascara Bark

We buy cascara bark, Oregon grape root and Oregon balsam of fir at the prevailing market. Submit samples and quantity you have for sale.

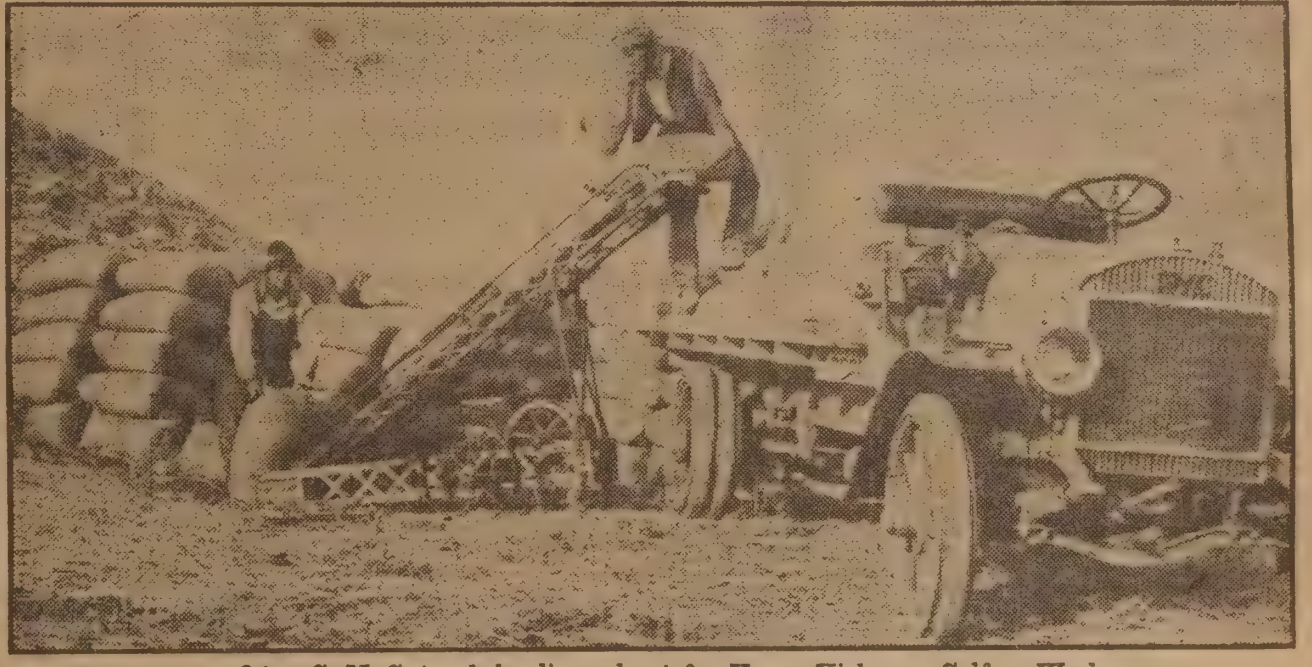
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"A Horse Is the Poorest Motor Ever Built"



2-ton G. M. C. truck hauling wheat for Henry Hickman, Colfax, Wash.

A horse eats 12,000 pounds of feed a year; he eats the whole output of five acres; yet his efficiency is only 2 per cent. He must be taken care of 365 days of the year, yet he averages only three and one-half hours' work per day, and tires in six.

Land and labor are both too high tostand this expense.

With a GMC truck one man can haul in ten hours from your setting in the field 1000 bushels of wheat a distance of ten miles, loading and unloading same, at a total cost of less than 1-2c per sack per mile.

Remember GMC TRUCKS do not eat when they do not work.

Mail attached coupon for information of GMC performance last summer on the farms of the Northwest. Let us tell you what they will do for you.

Northwest Buick Co.

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Seattle **Spokane**

Northwest Buick Co., Seattle-Spokane:
Please send me, without any obligation on my part, full information regarding G. M. C. trucks

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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

The seed is now being planted for next winter's egg crop—the eggs are being set. As the seed is good, so will the crop be.

No matter how early the chicks may be hatcher or what breeding they have behind them, the pullets will not lay in the fall and winter unless they have been kept growing throughout the summer by good care—good feed and feeding, plenty of clean range, roomy coops or houses with plenty of fresh air in them, and freedom from insect pests. Neglect of the chicks in the summer is one of the main causes of few eggs and high prices in winter. J. D.

Feeding Brooder Chicks.

The chicks should be taken out of incubator about 12 hours after they are all hatched and thoroughly dry.

First Day.

Give buttermilk or skim milk to drink but no water, and have plenty of bran and egg mixed crumbly, or stale bread soaked in milk and squeezed dry, ready for them on a shingle. Give them a chance to eat before putting them under hover. Put them under the hover before they get cold.

In half an hour take them out again to feed and after that every hour for the first day. After the first day take them out every two hours and put them back after eating, leaving them out about half an hour. Use a wire screen around the hover to keep them from coming out and getting chilled until they learn to go to the hover when cold. Have plenty of bran and egg mash or stale bread and milk on shingle when you put them out. Take away any of the mixture left and feed it to other brooder lots, but do not keep it more than two or three hours. Sprinkle a little fine grit on the sand.

Second Day.

Sprinkle on sand a grain mixture of equal parts, fine cracked wheat and corn, as much as they will clean up. After three days feed cracked grain in cut straw about an inch deep at the start. Then in two days more add another inch of straw. At 10 days old they should have about five inches of cut straw.

Second Week.

At the end of week bran and egg may be discontinued and a mash mixture fed once a day, the first thing in the morning. If there are plenty of infertile or tested out eggs mix some of them in the mash. The mash will be three parts by weight of brain, one part middlings, one part corn meal, with a pinch of salt. Mix with lukewarm water to a crumbly consistency. Be sure there are no lumps in the salt.

Beginning of second week put 5 per cent meat scrap in mash, and give water as well as milk to drink. Feed grain mixture three times a day in litter, enough to keep the chicks busy scratching as much as possible. The last feed in the day, which should be about two hours before dark, be sure they get all they can eat. At other times keep them a little hungry. They should always be hungry when feeding time comes.

Grit, charcoal and fine cracked bone should be kept in hoppers all the time. Green food to be fed all they will eat.

The same ration will do for hen hatched and hen brooded chicks.

Continue this way until chicks are six week old.

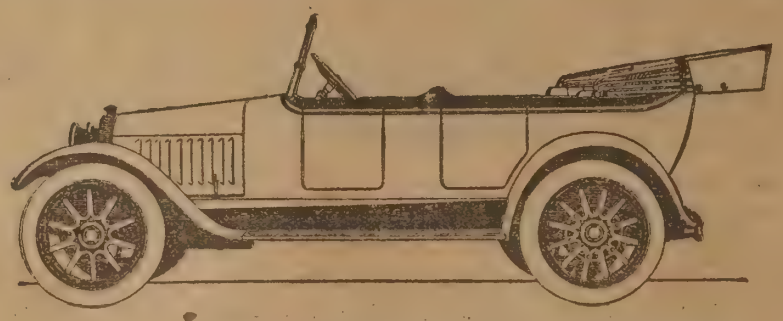
If milk buttermilk is not available use 10 per cent meat scrap in mash at end of first week when egg is discontinued. J. D.

Has It Come to This?

I have received a circular from a Washington poultryman advertising his poultry flock, which contains this motto: "Eggs Before Ribbons." The meaning of this might not be apparent to the novice, but it is clear to others. It means, of course, that this poultryman is breeding for eggs rather than the exhibition points that win ribbons in the shows. It is hard, of course, for the inexperienced poultryman to understand why a bird

Tells why chicks die

E. J. Reefer, the poultry expert, 466 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease over night and actually raises 98 per cent of every batch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.



Chalmers 7-Passenger Touring Car—Price $1350 Detroit

Full Value for Every Dollar

In this Chalmers, 7-Passenger Touring Car

Scan the list of other 7-passenger cars for the equal of this Quality Chalmers. You will not find it. Only in this Chalmers are combined so many real values. You may pay $300 to $500 more and find nothing better.

Only a builder of long experience and with a yearly output of thousands could produce this car at so low a price. Only thus can quality of materials and of manufacturing be combined with economy of production. Because Chalmers does this is the reason why this Chalmers 7-passenger Touring Car has no competition at anywhere near its price of $1,350.

These Prove Quality Claims

Chalmers claims a motor of unexampled smoothness, of unusual power. Prove it by examining Chalmers Lynite pistons, 1/3 the weight of the usual cast iron. These give smoothness, less strain on bearings, admit of higher power. Compare the Chalmers crankshaft with others. It is one-piece, special steel, drop-forged, balanced in motion to a fraction of an ounce.

See the Chalmers Transmission

Gears are crucible nickel steel, case-hardened and heat-treated. They shift easily, without clashing, and properly used are practically indestructible. The Chalmers type of dry-plate, disc clutch is far in advance of other designs. Chalmers rear axle is the same as used in expensive foreign and American cars. It is silent, efficient, economical.

A Big Beautiful Body

Big—122 inch wheelbase. Beautiful—because graceful in form, hand-finished in Chalmers shops, upholstered in genuine pebble-grain leather, with new Scotch "fluted" finish. Auxiliary folding seats, Pantasote top, curtains open with the doors, fasteners are the "lift the dot" pattern.

Compare Quality—and Price

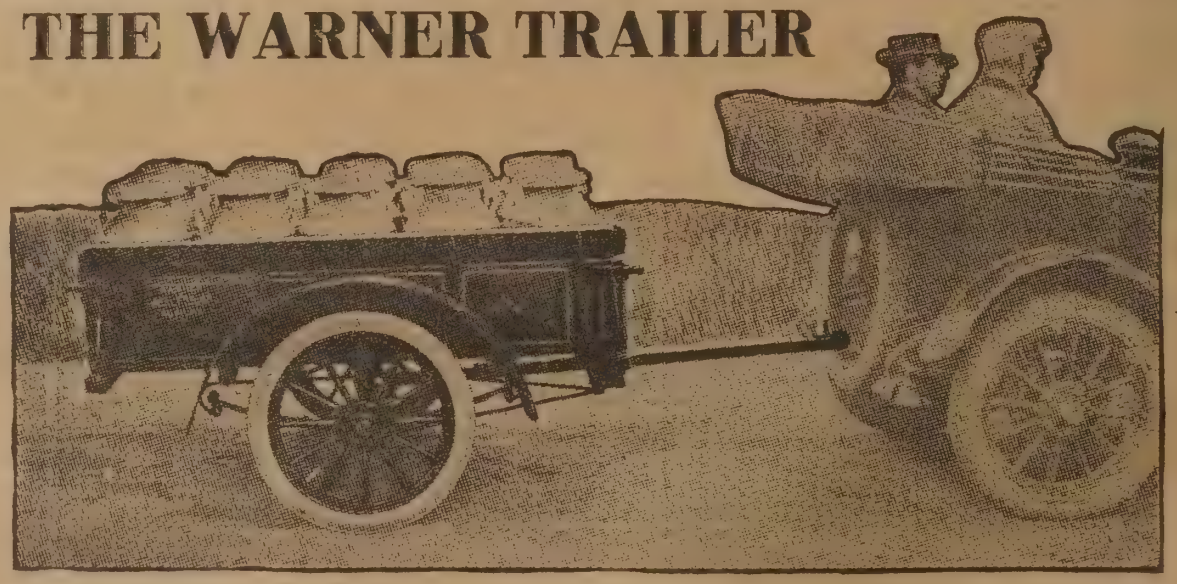
Think how great the difference between this quality Chalmers and other cars. Realize what unusual value is here offered. You will go much higher in price before you will find any other to please you so well. And all these claims we submit for *your* decision. Come—try the car. Investigate. Then only can you decide.

Touring Car, 7-passenger	$1350	Roadster, 3-passenger	$1250
Touring Car, 5-passenger	1250	Limousine, 7-passenger	2550
Touring Sedan, 7-passenger	1850	Town Car, 7-passenger	2550

(All prices f. o. b. Detroit.)

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Distributors for Eastern Washington.
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THE WARNER TRAILER



You can easily afford to own a motor car if you can make it earn its upkeep. The WARNER TRAILER doubles the usefulness of the automobile.

Carries any load up to 1250 pounds safely—and at automobile speed.

Does not skid or jolt—tracks perfectly—and can be backed. THE WARNER TRAILER is designed and built by automobile engineers of wide experience—men who have studied the light haulage problem from every angle.

It has a specially designed body—mounted on regular automobile springs, axles and wheels, and is attached to the automobile by a shock-proof drawbar that prevents any possible injury from sudden starts and stops.

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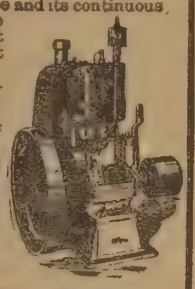


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THE "NEW-WAY" ENGINE

It is direct cooled. There is no water to carry, no water to slop, no extra weight. When the engine is not in use on the binder, potato digger or manure spreader it is mounted on the sub-base and its continuous flow of power may be harnessed to any belt driven machine about the farm.



It saves time, money and back-ache.

Send for catalogue No. 29.

A Postal Card will bring it.

Built in all sizes and types from 1 to 12 H.P. Price according to size and equipment.

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Make Longer Cream Shipments

This Sturges refrigerator can has a special heat and cold proof insulation between its inner and outer walls.

In a test it lost only eight degrees "coolness" in twelve hours in a steady heat of ninety-two degrees. 24-hour hauls safely made. Just the thing for sweet cream shippers. Widen your market—save work of icing, using felt jackets, cones, etc.

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Sturges Refrigerator Car



"The Coulters Do The Work"

They cut, crush, smooth, pulverize, and mulch, turning the soil twice—all in one operation. That's why the

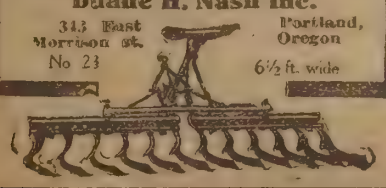
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makes an ideal seed bed. Light draft—easy on the horses and YOU ride. There's an "Acme" for every purpose—sizes 3 to 17½ feet in width. Send for new free book, *The "Acme" Way to Crops That Pay.* Do it NOW.

Duane H. Nash Inc.

343 East Morrison st. Portland, Oregon

No 23 6½ ft. wide



In answering advertisements don't fail to mention this paper.

that has won the blue ribbon in the show room is not necessarily a good layer, or that a blue ribbon bird may be a poor layer. The average American is built so much along the lines of utility that it strikes him as a strange contradiction that the poorest layer may win the blue ribbon.

This has been one of the revelations of the trapnest. Before the trapnest came we didn't know which were the good and poor layers in the flock. About the only way we had of judging a hen was in the show room. She was judged according to certain shapes, certain color of feather, and in shape and color there were a score of points that were considered in awarding the prize. Poultry shows are judged in the same way today, except that here and there there are utility shows now. But the trapest has shown that the best colored bird or the best shaped bird according to the show standard is not necessarily a good layer. The chances are that she is as likely to be a poor layer as a good layer. It has shown us that shape and color have not been very good guides in selecting good layers. We think, however, that show standards will be changed before long; they must be changed if the show is to keep pace with the poultry industry. J. D.

Tractor and Horse

Must Work on Farm Together

(Continued from page four.)

become, the same as the telephone has supplemented the telegraph in the way that they have taken the place of messenger boys in the quick delivery of mail. No one will agree that there are not more miles of telegraph in use today than there were 10 years ago, nor can it be said that there are fewer messenger boys, yet the telephone is in almost every business house and many housholds doing their work faithfully, and for which there was but little demand a few years ago.

Salesman Is Responsible.

The suiting of the particular truck or tractor to the individual conditions under which it must operate is a problem as big for the salesman and distributor as that of the farmer. Now that the truck and tractor are acknowledged factors in every line of farm business, and are here to stay, the distributor and the salesman must have the ability to solve the problems of transportation presented in each individual case and to sell the prospective buyer proper equipment to give the maximum efficiency under the conditions covering each particular case.

Must Suit Conditions.

With few exceptions no motor truck or tractor should be put in operation upon the farms of eastern Washington unless the salesman has gone personally over the ground and seen the conditions under which it must operate. In that way only will the purchaser be sure that he is getting the best advice under the circumstances.

Another item of equal, if not greater importance, than that of having the dealer go over the ground personally, is to make sure before the goods are purchased that the distributor has ample stability for protecting the purchaser in case of breaking of parts. Regardless of the cause of breakage, unless the parts are within easy reach, all the time which the machines may save may be burned up waiting for parts to come from the factory.

Must Protect Machine.

No distributor is justified in placing a machine in operation unless he is prepared adequately to protect it. What good is a tractor in the middle of the field laid up for two weeks waiting for parts to come from the factory? What good is a motor truck in the midst of the hauling season unless there are parts within easy reach?

Motor trucks and tractors have come to stay and everybody knows it. Just as horse power in the past has supplemented the man with the hoe, so in the future the tractor and truck will supplant the horse in many lines of work. It took man many ages to realize that by using horse-drawn machines he could greatly increase his efficiency. Today few men realize that the tractor has taken the place of the horse for all manner of farm work. It is replacing the horse for the same reason that the horse replaced the ox team—it is more efficient.



Save Your Chicks

That's your greatest problem. Little chicks die by thousands from *indigestion, diarrhoea, gapes, leg weakness, etc.* They need help—three-fourths of the loss can be avoided. Begin with the bowels—make the digestion right by using

Dr. Hess Poultry PAN-A-CE-A

Cures Gapes, Indigestion, Leg Weakness, etc.

Here are a few of the valuable ingredients in Pan-a-ce-a to meet the requirements of your poultry which I have just stated: *Nux-Vomica*, a nerve tonic; *Carbonate of Lime*, a shell former; *Hyposulphite of Soda*, an internal antiseptic; *Quassia*, an appetizer; *Iron*, to enrich the blood, and other valuable ingredients, all well known and recommended by the highest medical and veterinary authorities.

Costs 1 Cent a Day for 30 Fowls

1½ lbs. 25c
3 lbs. 50c
7 lbs. $1.00
25-lb. pail $3.00

My Guarantee

So sure am I that Dr. Hess Poultry Pan-a-ce-a will prevent and cure gapes, indigestion, leg weakness and the like, reduce your loss to mere nothing and help your chicks grow and mature rapidly, that I have told my dealer in your town to supply you with enough for your flock, and if it doesn't do as I say, return empty packages and get your money back.

Write for free book on Poultry Culture.

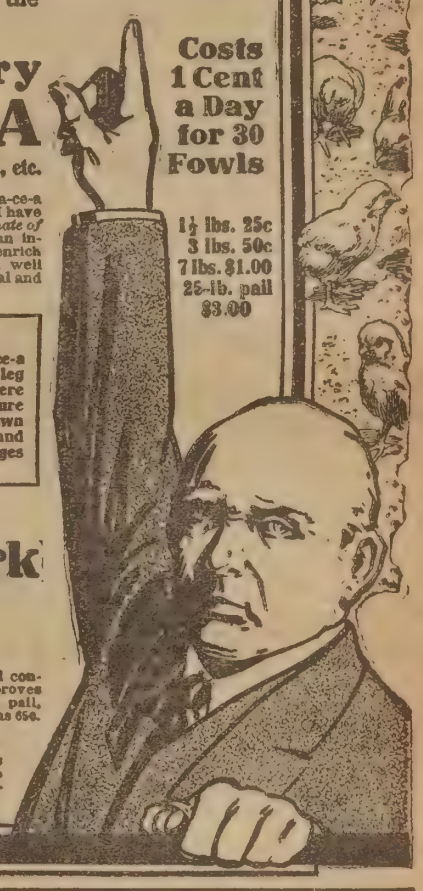
Dr. Hess & Clark
Ashland, Ohio

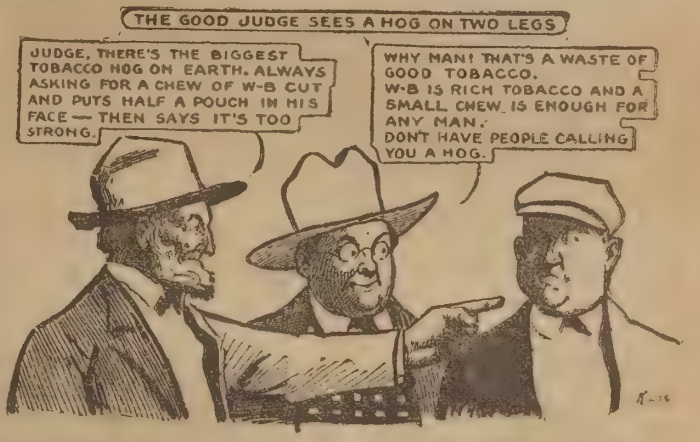
Dr. Hess Stock Tonic

Positively expels worms. A valuable tonic and conditioner for cattle, horses, hogs and sheep. Improves appetite, tones system, helps digestion. 25-lb. pail, $2.25; 100-lb. sack, $7.00; smaller packages as low as 65c.

Dr. Hess Instant Louse Killer

Kills lice on poultry and farm stock. Destroys bugs on cucumber vines, slugs on roses, etc. Use by dusting or sprinkling. Comes in handy sifting-top cans. 1 lb. 25c; 3 lbs. 60c.





SOME call these face-stuffers hogs, some call them gophers. But they are getting scarcer and scarcer since gentlemen found out about W-B CUT Chewing. There is no excuse for a man making a monkey of himself today. The fine *rich tobacco flavor* was put into W-B by nature, the touch of salt brings it out nice and tranquil like, without your worrying your jaw around continually. W-B is getting to be pretty nearly as popular as sunshine these happy days.

Made by WEYMAN-BRUTON COMPANY, 50 Union Square, New York City

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WOOL · PELTS
FURS · TALLOW

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NO CARTAGE · NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS · HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC
SEATTLE
BE SURE AND MENTION THIS PAPER

IN THE ORCHARD

Write to the Editor

GRANVILLE LOWTHER
Editorial Contributor

Lye Spray

Thinks It Best For Early Spring

By GRANVILLE LOWTHER.

Mrs. L. T. Hall, writing about conditions on Vashon island, Wash., and about the proper spray to use, recommends lye instead of the sprays in general use. In commenting on Mrs. Hall's article, I would say that I am fully convinced that lye will kill anything that lives, provided it is applied with sufficient strength. I am very well acquainted with a man now past the middle age of life who, when he was a child, accidentally spilled a can of concentrated lye on his arm, and before the effects could be neutralized the flesh was eaten almost to the bone and the scars will remain as long as he lives.

There are two questions, however, that are of practical import. Is it good for the trees, and, if so, what is the relative cost as compared with other sprays? I have not tried it, but I take Mrs. Hall's testimony that it is good for the trees.

The following is Mrs. Hall's article:

Having tried numerous sprays, we have come to the conclusion that the lye spray is the best early spring spray. Not only does it clean the bark of all fungus and insect life, but there is no poison resulting to the fruit by absorption, and also the lye which sinks into the ground around the trees is a soil digester. We have formed a habit of fertilizing before spraying, then turning the chickens into the orchard to gather the bugs for a few weeks before spraying and digging in the fertilizer after lye spraying. This spray may not be used when the wind is blowing, as it is dangerous to eyes and complexion. Many men protect the head and neck during spraying by wearing a sunbonnet.

Young trees can not stand as strong a solution as older ones. For 1 to 3 year olds one can to 30 gallons is enough. The strongest it may be used is one can to 10 gallons, the strength proportioned according to age and disease of tree. The stronger spray is not put on in as great a quantity as the weaker. Before spraying, the trees should be searched for eggs of tent caterpillar, which will be found in clusters stuck around the twigs and smaller branches like a piece of chewing gum. Burn these after removing.

While tobacco spray has had a medium result for later spraying, we are going to use a crude carbolic spray, made very weak in a soap emulsion, this year. This will kill aphis and pear leaf blister mite. Ducks and toads in the orchard are a good preventive of aphis, as they both eat ants, which insect is responsible for the care and distribution of aphis eggs. The aphis is sometimes known as the cow of farmer ant. We have no codling moth on Vashon island, but back east we used to tie tar paper around the stalk or trunk of tree and in winter remove and burn when the paper was found to be well inhabited. As soon as the tar paper wrappers were burned the trees were winter sprayed with lye solution. Never use an arsenate of lead spray unless you wish your fruit to cause ill health and the cattle to die from eating the grass beneath the trees, even to the second crop of grass, which will cause illness if not always death.

STRAWBERRIES

Progressive and Superb EVERBEARING

Have fresh berries from spring till winter. Send postal today for catalogue of valuable information on vegetable plants and roots.

KELLY GARDENS, Sta. B., Spokane.

The "Twin City"—A Real Tractor



Twin City "40-65" Oil Tractor pulling 9 plows 9 inches deep on the Tom H. Lewis farm at Kahlotus, Wash.

This engine is plowing in as loose soil as we have in the state of Washington and proves THE TWIN CITY ROUND WHEELED TRACTOR will stand up in any soil that is at all adaptable for tractors—doing the work as well and cheaper than any other tractor.

Twin City Tractors are built in four sizes. A SIZE FOR EVERY FARM and every size burns kerosene and distillate as well as gasoline.

Twin City tractors have stood the test of years of service. It is the ONLY complete line of tractors on the market built on one harmonious line throughout.

We have sold more Twin City tractors the past month than we did all last year. THE REASON: We have demonstrated that the Twin City is a REAL TRACTOR and will stand up in any soil that is adaptable for tractors. The belt power is as smooth as any steam engine.

Buy a Twin City and You Buy a Real Tractor

Sieler Machinery Company, Northwest Agents

N1104 MONROE ST., SPOKANE, WASH.

TWIN CITY TRACTORS. WOODS BROS. THRESHERS.

In answering advertisements please mention this paper.

The Farm Garden

ARTICLE 6.

Frost Cautions

The late spring in many sections of the northwest has made more than usually vital the matter of knowledge concerning the power of various vegetables to resist cold. While this matter has been touched upon in previous articles, it is deemed advisable to publish at this time extracts from a special bulletin prepared by the United States department of agriculture on this subject. The following are lists of vegetables arranged according to appropriate times for their planting, which is determined on the basis of their power to resist cold:

GROUP 1.

Plants not injured by a light frost. These may be planted as heavy frosts are over or usually as soon as the soil can be put in good condition. Cabbage, Irish potatoes, early peas, (smooth types as distinguished from wrinkled), onion sets, salad crops, such as kale, spinach, mustard. At the same time start in seed boxes in the house or hotbeds tomatoes, eggplant, peppers, cauliflower.

GROUP 2.

Vegetables which should be planted only after danger of hard frost is over. Lettuce, radishes, parsnips, carrots, beets, wrinkled peas, early sweet corn.

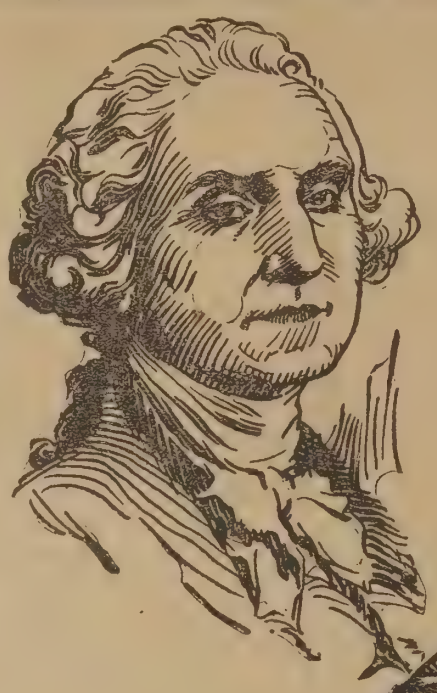
GROUP 3.

These should be planted after all danger of frost is past: String beans, sweet corn (late varieties). A few early tomato plants may also be set out, but care should be taken to protect them from any sudden chilly weather, by providing a shelter of newspapers, boxes, etc.

GROUP 4.

This group should not be planted until all danger of frost is past and the ground has begun to warm up. Included in this would be cucumbers, melons, squashes, pumpkins, Lima beans, tomatoes, eggplant, peppers. Plants of tomatoes, eggplant and peppers which have been grown in boxes or hotbeds should be ready to set in the open at this time.

"In order to insure a steady supply of vegetables, crops like peas, beans, radishes, lettuce and other rapidly maturing crops may be planted every three or four weeks," says the bulletin. "Some of these can be planted in the spaces made available by removing the other crops."



"The Will of the People and My Own Good Name"

G. Washington



In Washington's Inaugural Message he promised to sustain "The Will of the People and My Own Good Name."

And so it is in the world of business. Commercial honor can successfully be built only on the standard of quality and personal good faith. By the "will of the people" and by answering all their demands for Most Miles per Dollar, Mr. Firestone has built an organization which stands for leadership.

Firestone

Tires fulfill every demand of safety, easy riding and economy. And as assurance that this quality shall continue, you have the pledge of an efficient organization and the personal responsibility of the Firestone name.

Your dealer and the nearest Firestone Branch unite to give you prompt, economical service.

FIRESTONE TIRE AND RUBBER COMPANY
AKRON, OHIO Branches and Dealers Everywhere

38

One of the Late Models of the Mitchell.



GOVERNMENT WHITEWASH
Its Use on Lower Part of Trees.

I have received an article from W. C. Getz, Bellingham, Wash., in which he says:

"Please tell me through The Farmer if government whitewash can be used on the lower part of fruit trees, and, if so, can you give me the receipt for it?"

I am not well informed on the practical use of what is called the government whitewash. There is considerable difference of opinion among orchardists as to the value of paints and washes of different kinds for trees. Some claim that anything which tends to stop up the pores of the bark and prevent a circulation of air is injurious, while others claim, on account of the tendency to check the ravages of insects, that they are of value. The same difference of opinion exists as to the value of paints for cuts caused by pruning or by accident. Some claim that a wound will heal faster if it is not painted over, while others claim that the air should be excluded by painting. I am not entirely settled in my opinion on that question, except that one year we painted the wounds on a few of our trees and I could see no especial benefit from it, so that we have not kept it up.

Recipe for Government Whitewash.

Lime (unslaked)	40 lbs.
Salt	15 lbs.
Rice flour (or ground rice)	3 lbs.
Spanish whiting	½ lb.
Glue	1 lb.
Water	5 gals.

Slake the lime in warm water and cover so as to keep in the steam; strain through a fine sieve or strainer; add the salt, well dissolved, in warm water. Then add the rice, boiled hot; the Spanish whiting, and finally the glue, which has been previously dissolved over a slow fire. Lastly, add the five gallons of hot water. Stir well and let stand for a few days. Apply hot with a brush. One pint of the mixture will cover a square yard. Coloring matter may be put in, such as Spanish brown, yellow ochre, etc. G. L.

Buys 2270 Sheep.

W. A. McGuffie of North Yakima has purchased from Peter Olivier for $56,000 2270 sheep and 4880 acres, the latter mostly range.

Buys Purebred Jersey.

William Porter of Pullman, Whitman county, has purchased the purebred Jersey cow Alfriston Daisy from the state college. This cow is the only one in the herd imported from the island of Jersey.

Yakima Wants County Agriculturist.

Monday afternoon 50 farmers appeared in person before the county commissioner asking that one be appointed. There were but two opposing. The matter is still unsettled.

GALLOWAY'S LATEST SPREADER

Two horses handle it anywhere! Covered by eleven patents. Thirty days' actual field trial. Returnable within twelve months if not perfectly satisfactory—we pay freight both ways and refund your money without argument. Manufactured direct to our factories. Sold direct from factory to farm.

ONLY 42 IN. HIGH AT CENTER

GROW BIGGER CROPS

Make use now of every available load of manure! Properly spread it means money added to your bank account next fall. Ask for 1917 free book today.

Wm. Galloway Co., Bo 2449, Waterloo, Iowa

Apple Profits

Grow better fruit. It pays. Get your own price. Control Apple Aphids, Red Bug and similar pests, the new dangers to orchards, with Black Leaf 40.

Valuable Booklets FREE

Tell you what to do and how to use Black Leaf 40. Can be used with other sprays or separately. Endorsed by experiment stations and colleges. Write today for free booklets and valuable chart "When to Spray." FREE.

When To Spray

The Kentucky Tobacco Product Co., Incorporated Louisville, Kentucky.

Kills Aphis

Black Leaf 40

40% Nicotine

88 Bu. Oats Per Acre

Mr. A. Taylor of Saskatchewan, writes: "I had 315 acres in oats that averaged 88 bushels an acre, 30 acres in wheat that averaged 50 bushels an acre, 20 acres in barley that averaged 50 bushels an acre."

This is only one of thousands of good reports from Western Canada. The total value of all farm crops in Saskatchewan alone for one year was $382,845,000.00. Recently surveyed 160-acre Homesteads are now open to you in this fertile farming section.

160-Acre Farm FREE

Go get a homestead free this year. No matter where you have been farming, a fortune awaits you if you go now and get one of the recently surveyed 160-acre free homesteads in the rich districts in Saskatchewan, Alberta, Manitoba and British Columbia, reached by the Canadian Northern Railway, the newest transcontinental railroad of America, "The Road to Opportunity." Here you can make a fortune at growing grain, mixed farming, raising cattle, hogs and poultry. Easily accessible markets make conditions and opportunity of settlement excellent now.

Special LOW RATES

Low round-trip home-seekers' fares to Western Canada are in effect every Tuesday, March to November inclusive. Also one-way low-fare for settlers. Even if you have already selected your farm, it will pay you to travel to Western Canada via the Canadian Northern Railroad. 21-year grazing land grants may be procured at very low cost. Outdoor feeding of beef cattle on native grasses bring even better results than indoor feeding. Country roads are good and the public school system is well abreast of the times.

Free Book Be sure to write today for a free copy of the "Home-Seekers' and Settlers' Guide," full of complete and authentic information. A fortune is waiting for you.

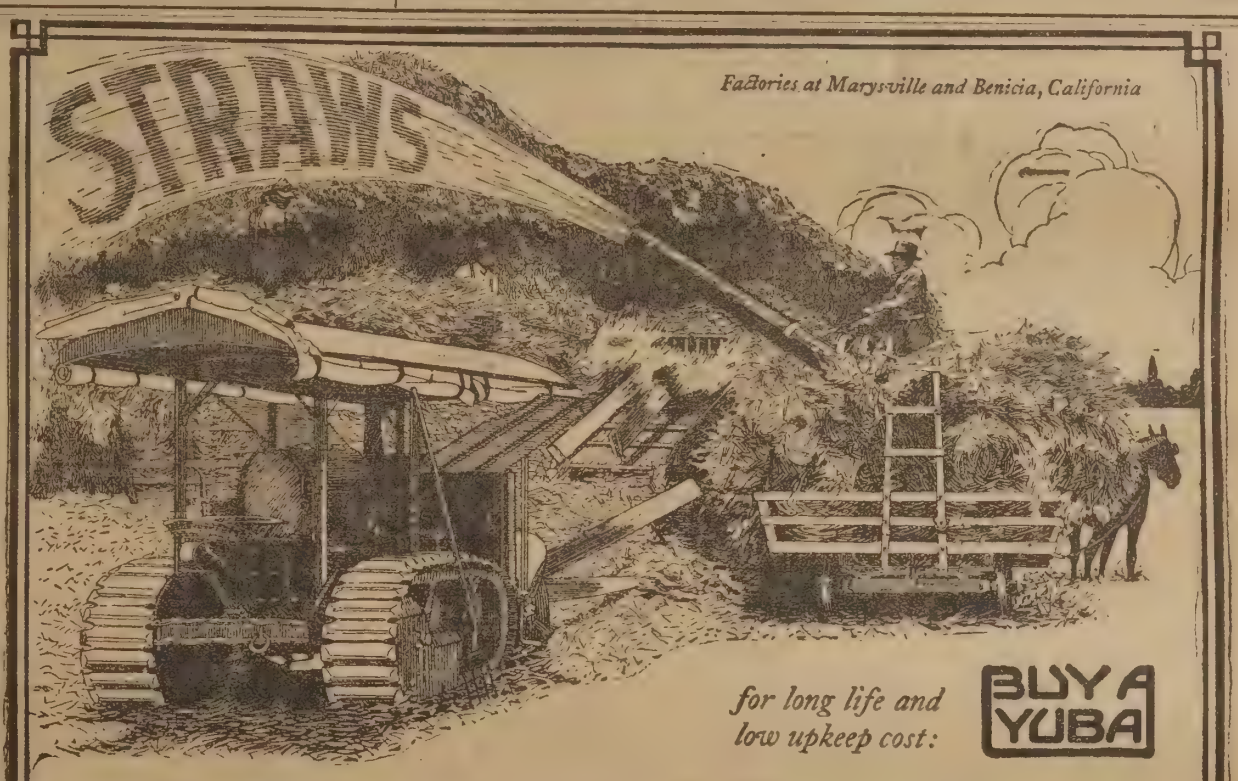
CANADIAN NORTHERN

Canadian Northern Ry.

A. L. Brostedt, D. F. & P. A. 605 Hastings st., Vancouver, B. C., Canada.

A. L. Davis, G. A. Cor. 4th and Jackson st. St. Paul, Minn.

When you write to advertisers, be sure to say that you saw their advertisement in this paper.



Factories at Marysville and Benicia, California

for long life and low upkeep cost: BUY A YUBA

STRAWS—unimportant, unrelated facts but they show how the wind blows and how the YUBA is dominating the tractor field.

"You certainly have a lot of Yuba salesmen here," said a visitor at the State Fair.

"Salesmen!" exclaimed the Yuba man. "They are not salesmen. They are men who own Yubas and like to talk about them!"

Hayward Reed, of Sacramento, has been watching all tractors on the market since back in 1914. He was the second purchaser of a Yuba Model 20-35 and bought it at its first exhibition. He has since ordered two more.

The James Mills Orchard Company investigated all makes of tractors. They purchased three Yubas, and four months later, yet another.

Mr. Williams of Woodland phoned to the Marysville office for a Yuba service man. He was sent promptly. When the man arrived Mr. Williams said: "I simply had to show somebody how beautiful this machine runs!"

The first lot of Model 12-20 tractors was sold out before one was shipped.

We are now able to make prompt deliveries

Yuba Manufacturing Company Dept. C3
433 California St., San Francisco, California

Gentlemen: Kindly send me catalog and prices on the Yuba Ball Tread Tractor.

I am interested in Model 12-20____ Model 20-35____

Name____

Town____ State____

P.O. Box____ Size of farm____

[Check main crop raised]

____Fruit ____Rice ____Grain
____Grapes ____Hops ____Alfalfa

and there have just been issued new Pump and Plow Catalogs which we will be glad to send prospective buyers.

Yuba Manufacturing Company, 433 California Street, San Francisco

(Formerly The Yuba Construction Company—change in name only)

Ask Your Question--These Answer It

Gersix MOTOR TRUCKS

"Made in the Northwest to Meet the Needs of the Northwest"

2½-ton capacity—six-cylinder motor—electric lights—electric starter—worm-gear drive—extreme simplicity—vacuum feed—extra heavy construction.



"A Steady, Sturdy, Simple Six"

F. O. B. Tacoma Complete Chassis **$2650**

INVESTIGATE—That is all we ask. The GERSIX is ALL truck. No shop theory in the GERSIX, but practical truck knowledge and long experience. Sterling qualities, ability to stand up and perform—these can be said of every part of this truck. Every single unit down to the smallest part is the time-proved product of SPECIALISTS—of MEN WHO KNOW. INVESTIGATE THIS TRUCK BEFORE YOU BUY.

In Use Throughout the Northwest---Owners All Satisfied

FREE LITERATURE—Tells about trouble-proof transmission, and many other things the truck buyer should know. Write us—we will gladly send you our folders.

AGENTS WANTED

Certain territories are still available for GERSIX TRUCKS and UNIVERSAL TRACTOR ATTACHMENT representation. Live men only, and responsible. This is a proposition for the best interests. The Gersix Trucks are known all over the Northwest. The "Universal" Tractor attachment will lead in Northwest tractor sales in 1917.

UNIVERSAL TRACTOR ATTACHMENT

"Made in the Northwest to Meet the Needs of the Northwest"

"A Modern Workhorse"—Converts most any automobile chassis into a powerful tractor. Converted to pleasure car again in three hours. No mechanical changes whatever.



The Universal Attachment with Ford chassis. A tractor for the Farm, the Orchard, the Lumber Yard, or Road.

F. O. B. Tacoma Complete Attachment **$275**

INVESTIGATE—That word is a slogan every thinking man will listen to. The "UNIVERSAL" Tractor Attachment meets the man who must have a Tractor at the lowest cost, and it is the Tractor for you regardless of cost. In a word, incomparable for simplicity, for all-purpose work, for indestrucibility, for economy in operation.

This Man Gave It the Acid Test —More Than Satisfied

F. H. Mackey of Ellensburg writes that he, with Mr. Frear, expert machinery buyer for the county, pulled 388 gallons of gasoline and other load with a Standard Oil Tank as the trailer six miles to his ranch, on sticky and heavy road. He says: "That workhorse is sure one pulling fool. In every test the Universal has stood up very good indeed."

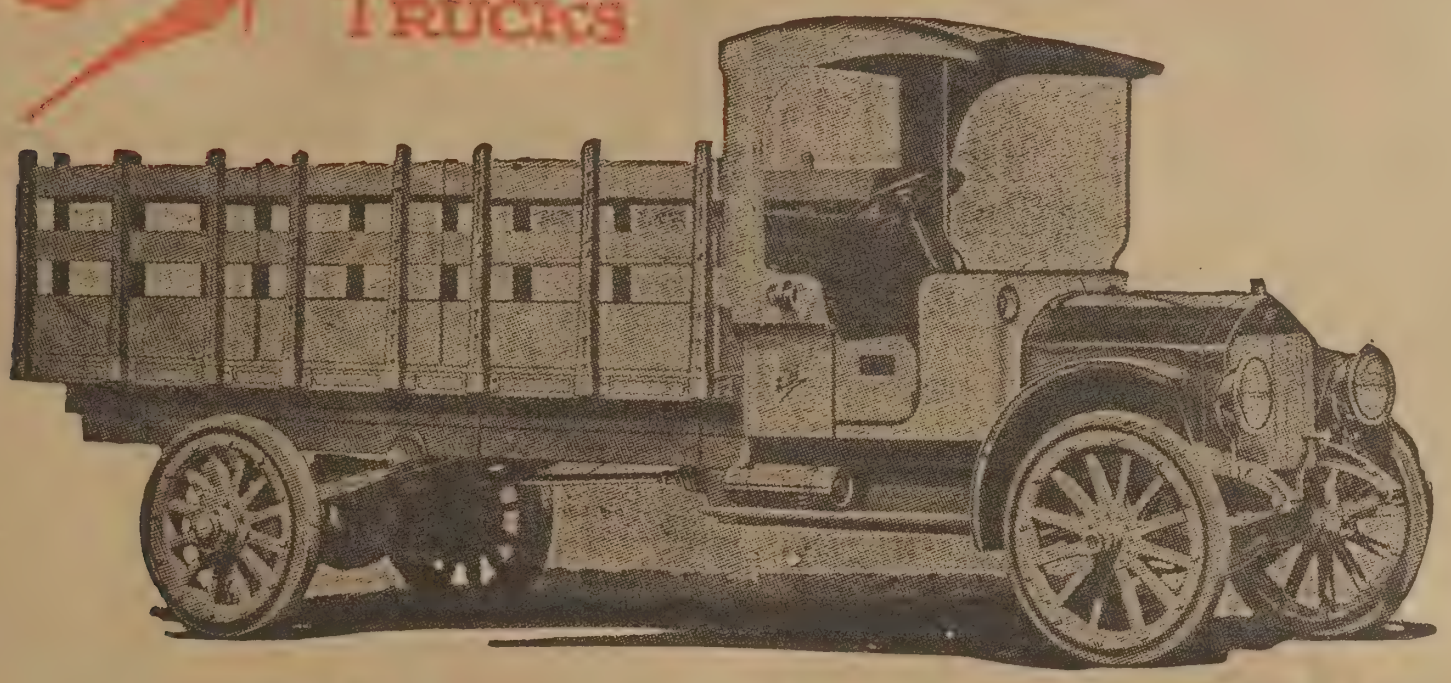
FREE LITERATURE—Write us for "Tractor Facts." Tells you things you should know about tractors.

GERLINGER MOTOR CAR CO.

Manufacturers of Gersix Trucks and Universal Tractor Attachment.

Tacoma, - - - - - - - - - Wash.

Garford Motor Trucks



THIS TRUCK HAS SAVED ITS COST

Through excessive perspiring and jolting in the slow horse and wagon trips over bumpy roads from farm to station, the average hog will lose about two per cent of his weight.

This represents a direct money loss. For the station weight—not the farm weight—is the basis of sale.

Quick, easy transportation on good, smooth-surfaced roads is therefore very essential.

The Admiral Stubblefield trucks—two 2-ton Garfords—have actually paid for themselves in the saving of hog shrinkage in hauling the animals over the 40-mile route for shipment.

This is the direct testimony of Mr. Admiral Stubblefield, owner of the trucks and one of the largest hog buyers in the northwest.

A similar saving can be realized in transporting any kind of stock.

And Garford Motor Trucks, through their sturdiness, their ease of operation, their economy of both fuel and time, and their adaptability to practically any kind of work, are the ideal means of transportation for the farmer.

Crates of fruit, bags of grain, bales of hay—in fact any farm produce—can be moved more economically with the proper Garford truck, mounted with the right type of body, than by the old horse and wagon method.

Hundreds of farmers, stockmen and fruitgrowers are using Garford trucks—at a profit.

And they report far greater hauling economy than was ever possible with horses and wagons.

YOU can use a Garford just as profitably as your competitor. It will pay you to investigate.

Catalogues and full information on request.

Write for our booklet, "Roads—Their Influence on Social and Economic Conditions."

Garford Motor Truck Co., Inc. 1726 Broadway, Seattle, Wash.

The Fancher-Larson Co. 1201 First Avenue, Spokane, Wash.

Oregon-Oakland Motor Co. 522 Alder Street, Portland, Ore.

The Garford Motor Truck Company, Lima, Ohio

Manufacturers of Motor Trucks of 1, 1 1-2, 2, 3 1-2, 5 and 6 ton capacity.

4 1-2, 7 and 10 Ton Tractors.

The Garford Road Builder.

Distributors and Service Stations in All Large Cities.

U. S. Answering Call

Would Battle for American Ideals

At this moment congress is assembling to consider the recommendations made Monday by President Wilson that a state of war between this country and Germany be declared to exist, and to take such steps as to make the warfare of the United States most effective in the event that the president's recommendation is approved. President Wilson asked congress to declare that a state of actual war exists as shown by the wanton destruction of American lives and property by German submarines; to take steps looking toward the utmost practical cooperation with England and her allies in their warfare against Germany; to extend liberal financial credits to these nations to finance their warfare; to equip the navy to the greatest possible degree of efficiency to cope with submarines and other menaces of war; to authorize compulsory military training and raise at once an army of 500,000 men; to take action to raise such funds as the government will require to carry out these steps.

To Fight for Humanity.

If this country goes to war with Germany, as seems inevitable, it will not be because of any desire to aid Germany's opponents, nor because of enmity toward the German people. Hundreds of thousands of American citizens are German born, or trace their ancestry to Germany. If America goes to war it will not be for conquest. No victory will be sought save the victory of liberty, justice, law and humanity over tyranny, injustice, lawlessness and inhumanity. The principles that the colonists fought for in 1776 are the principles for which the United States will fight, if fight she must, in 1917.

Provocation Is Great.

Some 250 American citizens have been killed through Germany's submarine warfare. Hundreds of other peaceful, neutral citizens have been sacrificed with no warning and little chance of rescue. Commerce of the United States has been destroyed in large tonnage, and much more driven from the sea through fear of submarine attack. German intrigues in the United States have resulted in large property losses and created widespread fear of repetitions. Documentary evidence is in the possession of the United States showing that high German officials have plotted to unite Mexico and Japan against the United States.

Preparations Being Made.

This country is still hopeful that general participation in the war may be averted, but preparations are being rushed for any events that may transpire. Governmental secrecy is maintained as to the exact nature and extent of much of the preparation, but the navy is being put into the best possible fighting trim, and additions are being made to it as rapidly as factories and munitions plants can produce them; the regular army is being recruited to war strength and plans are being laid for the development of a large citizen army; the state militia are being called back into the service; plans to put the agricultural and manufacturing industries on the most efficient basis possible are being launched. Industrial mobilization in modern warfare is as vital as mobilization of men and arms.

Spies Are Hunted Down.

The danger from spies and plotters in the event of war is considered great in this country. Already many spies have been apprehended. Under their activity not only could the enemy be informed of the preparations and warlike movements of this country, but munitions plants, railways, supply vessels, forts and arsenals and factories of all kinds would be jeopardized. Therefore the United States government has made each of its hundreds of thousands of employes a guard against spying, and rigorous methods for dealing with suspects are being put into effect.

Peace at Any Price.

The pacifists are still active and the peace-at-any-price advocates are hard to eliminate. Styling themselves "The Emergency Peace Federation," an organization the identity of which is unknown, is carrying on a nationwide advertising campaign in behalf of peace. The advertisements urge peace loving people to plead with their representatives in congress to oppose entrance into the war.

American People Loyal.

Though the extreme pacifist is active and self assertive, the people of the United States are rallying behind the president in the present crisis, assured that humanity and not commercialism, justice and not aggrandizement, love of permanent world peace and not militarism are the principles upon which the war will be fought if actual war comes.

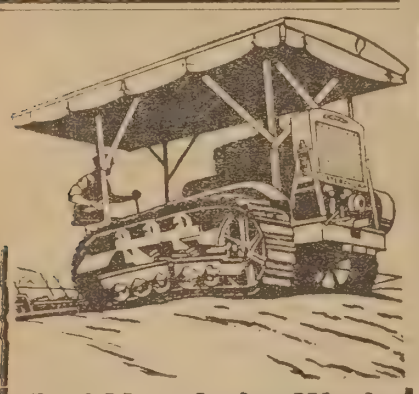
Commerce Kept From Sea.

Indicating that the submarine warfare on shipping has been effective far beyond the actual number of ships sunk, the report of the United States department of commerce shows that the exports from this country were about $150,000,000 less in February than they were in January, without any apparent reason other than fear of destruction of ships by submarines.

New Zealand Wheat Prices.

In the interest of steady and fair prices for bread supplies and in the interest of the wheat grower the New Zealand government has again imposed a duty of 18 cents per 100 pounds on wheat from all countries and 24 cents per 100 pounds on flour from the united kingdom and possessions, with 4 4-5 cents additional from all other countries, also the 1 per cent ad valorem war tax in each case. The government has fixed the maximum price of wheat at from $1.35 per bushel for the poorer grades to $1.39 for the best grades for delivery during February, March and April, and 1 cent per bushel additional for each of the months of May, June and July, with 1 cent per bushel additional for all wheat sold after the last date.

It is expected this will insure a much larger acreage than was sown in 1916, together with a fair price for the crop, and that it will also prevent any attempt to corner wheat in this dominion with a view to pushing up prices.



Rush Your Spring Work

YOU ARE NOW confronted with the problem of handling an unusual amount of seeding, harrowing and plowing which must be done in the shortest possible time. The late spring makes necessary speedy work. Ground conditions are favorable for crops; wheat prices are holding up. Why don't you buy a

CATERPILLAR

Reg. U.S. Pat. Off.

¶ Doesnt slip nor pack the soil. 2 speeds ahead—cut steel gears in oil—heavy duty accessible Holt motor—high tension magneto—impulse starter—patent air cleaner—Benjamin Holt steel tracks—Holt Service and Caterpillar School course included in price.

"18" H.P.—"45" H.P.—"75" H.P.

¶ *Order a "75" for April.*

Mail Coupon To-Day.

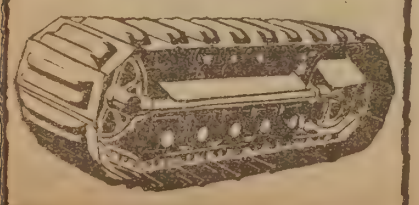
Please send me free folder—T R 521

I farm.. .....acres.

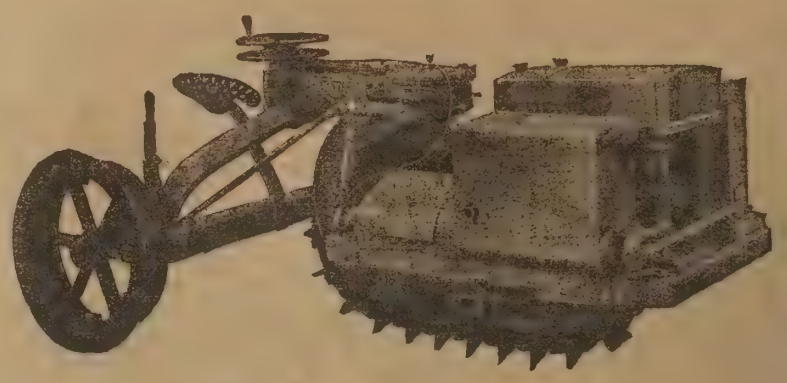
Name .....

Address .....

THE HOLT MANUFACTURING CO.
Spokane, Wash.



Better Than 6 Horses



Bean TrackPULL Tractor

Here is a little Tractor that does the work of six horses on what it costs to keep one team—only it does more work and does it better—gets into corners and closer to trees than a team—does your plowing, your cultivating, your discing, or runs stationary machinery, and will work 24 hours a day if necessary.

This wonderful little Tractor is very light, is rugged, simple and efficient. On account of its light weight and long traction surface it is the **ideal machine for cultivating.**

How It Works

The Bean TrackPULL Tractor is built on a substantial track 12 inches by 32 inches on the ground. The power in the tractor pulls it along its own revolving track. That's why it does not pack the soil—gets long traction, turns easily to right or left—can make a complete turn in a 10-foot circle, is most economical in operation and a boy can easily work it. When the hot days come your team loafs and you get only an average half day's work done in 10 hours. The Bean TrackPULL will work day and night if you want it to, and does the work all day long that a six-horse team could do if they worked hard continually.

The Price Is Only $975.00

Bean TrackPULL Tractor construction consists of a 10-h. p. (at belt) Le Roi 4-cylinder vertical type 4-cycle motor. Equipped with Donaldson air clarifier, Bosch ignition, Perfex radiator, water cooled with centrifugal pump and fan, combination splash and pump lubrication, Hyatt roller bearings in track wheel sprocket and track rollers, six New Departure ball bearings in the transmission, running in grease and dustproof. Gears are steel. No differential or other complicated mechanism.



Making figure 8 around trees and leaving no unfinished work.



Pulling a spring-tooth cultivator between rows 12 1-2 feet apart.

Prompt Deliveries in April

Our entire output is sold a month in advance and we are working night and day. We have just finished a large addition to our factory and increased our capacity so that we will be able to ship tractors that are ordered now in April.

Bean Spray Pump Co.
254 W. Julian St.,
San Jose, Cal.
LOS ANGELES BRANCH:
131-133 N. Los Angeles St.

Send Coupon to Bean Spray Pump Co. Office Nearest You

Mail the Coupon Today

We will gladly send you our folder telling you more about the Bean TrackPULL six-horse tractor if you will fill in and mail to us the coupon below.

Bean Spray Pump Co.,
254 W. Julian St., San Jose, Cal.
131-133 N. Los Angeles St.,
Los Angeles, Cal.

Please send me prices and the big folder with the complete story of the Bean TrackPULL. If I decide to purchase I will need my tractor about

Date....., 191..

I work.....acres.

I grow.....
(Name fruits or vegetables you produce.)

Name .....

Street or R. F. D.....

City .....

County.....

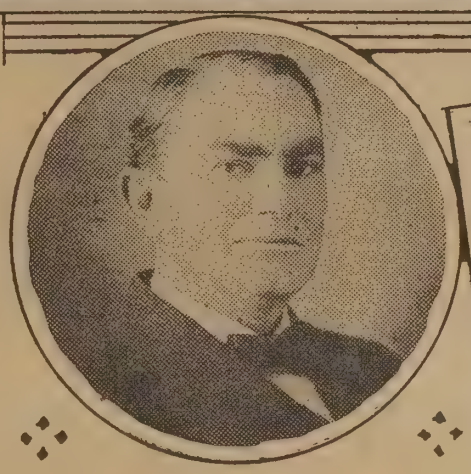
State.....

Federation Solves Village Church Problem

Proof Is Found in History of a Year in a Little Oregon Town Where Church Flourishes



Herewith is shown the congregation of the federated church of Scio following one of the services. In the lower picture is to be seen the old Baptist church and parsonage, no longer in use since the federation was effected. The individual photograph is that of the Rev. H. B. Iler, to whose zeal is due much credit for the success of the union.





"How good and how pleasant it is for men to dwell together in unity," sang the Psalmist; and in like manner there comes from Scio, a little town of the Willamette valley in Oregon, a story of the goodness and pleasantness brought about by the union of three struggling little churches into one enthusiastic and vigorous body. The story is told by Principal O. V. White of the Scio schools, who writes the following concerning the consolidation:

"The religious conditions and the spiritual outlook were anything but inviting a year ago when the Rev. E. H. Edgar, evangelist, and P. A. Stockton, singing evangelist, came to our town.

"The church buildings and three church organizations had a nominal existence among us. Both churches were without resident pastors, with services every two weeks in the Christion church, conducted by pastors from outside our town. One Sunday school was in operation as a sort of union affair and held its sessions in the Baptist church. A few faithful Christians of the various denominations kept alive the church spirit as best they could against heavy odds and most discouraging conditions.

Federation the Only Solution.

"At the close of a two weeks' successful revival by the above named men a call was issued by the evangelist for a special meeting of the Christian people of the town to discuss the federation idea, which had for weeks been brewing in the minds of the thoughtful workers of the town as the only solution of our church attendance problem. About 35 of the leading citizens and church workers of the town were present at the meeting and took part in the open discussion.

"About 10 of the prominent business men and pastors from Albany were present at this meeting and gave valuable assistance in the work of organization and in the selection of articles of faith (which articles are very brief, touching only the fundamentals of faith in Jesus Christ).

"More than two hours were spent in an open discussion, which was freely and eagerly entered into by a score of those present. The articles of faith were read, adopted and presented for signature to those who wished to become charter members of the federated church—the only one in the Willamette valley. Men seemed more than anxious to be the first to place their names on the document, which seemed to bid fair to deal a solar plexus blow to the partition wall which had so long kept us apart in our devotions and blinded us to our own highest spiritual interests. Both men and women pushed their way to the secretary's table. The entire company sang with hearty good cheer, "Blest Be the Tie That Binds," and a hearty handshaking time followed.

Seven Directors in Charge.

"A board of seven members from the denominations was elected and now have charge of the entire church property, finance, the spiritual interests of the church and the calling of a pastor to serve the people of the entire town—one church.

"The sacrament of the Lord's supper is observed once each month. No set mode of baptism is followed—each for himself. One general treasury has charge of our missions and offerings for education.

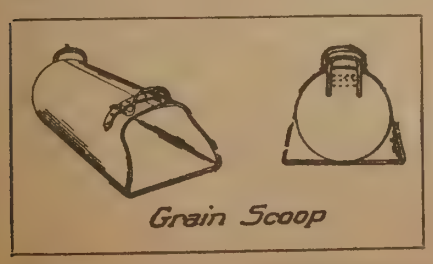
"Our pastor, the Rev. H. B. Iler, has been with us about a year, and we have a live and representative congregation each Sunday, a Sunday school of a representative type, a well attended and interesting prayer meeting on Thursday evening and an active Christian Endeavor society. The pastor marries our sons and daughters, officiates at all our funerals, advises and instructs our young people, visits in all our homes, eats with us and prays at our family altars. In short, we are all pleased and greatly encouraged, and would not dream of returning to the former plan of division in worship."

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

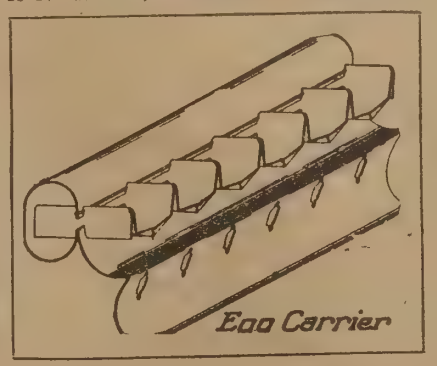
Grain Scoop.

The new feature of this scoop is that there are a number of air holes in the rear plate which permit the air to escape and thus prevent the formation of compressed air pockets at the end.



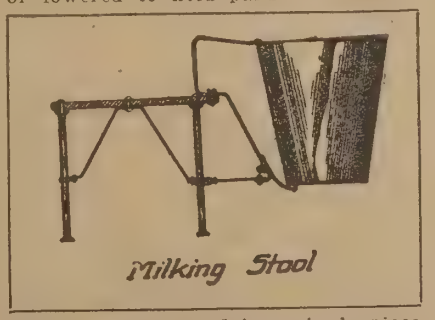
Egg Carrier.

Each egg in this cardboard carrier is held in a suspended pocket, and this, it is claimed, reduces the breakage to a minimum. The edges of the case are held securely by notches in the partitions.



Milking Stool.

The lower end of the pail support of this stool is a fork which can be raised or lowered to hold pails of different sizes; the upper end is a single piece of spring steel.

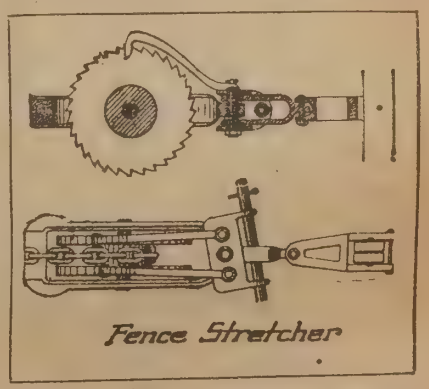


Horses on Farms and Ranges.

Despite the export of horses to Europe, the total number of horses on farms and ranges in the United States is estimated to have decreased only 33,000 during 1916, and there were more horses on farms and ranges on January 1, 1917, by 164,000 than on the same date in 1914.

Wire Fence Stretcher.

When the handle of this stretcher is rocked back and forth, the ratchet arms alternately turn the ratchet wheels and wind the chain on the chain wheel. The handle can be operated from either side or from both sides at once.



Ups and Downs of a Bunch Grass Boy

By J. L. ASHLOCK.

(Copyright 1917, by J. L. Ashlock.)

CHAPTER V

AS I journey on with this tale, I see that I am leaving farther and farther behind the romance of my childhood—childhood with its joys, sorrows, lessons, unwisdom of a kind and wiseness of a kind, and, best of all, its innocent contemplation of life itself. We lose this innocence as we grow older, exploring the paths whither destiny leads and bumping a world which is rather calloused to our bumps.

I am tempted to linger—to go back over the trail. There comes to mind a picture of grandfather, grandmother and my uncles, Sam and Harry, standing on the small depot platform at Carthage, Ill., waving goodby to father, mother and me as we started our journey out west. Grandmother was crying—even after the train had passed so far away that she made but a small figure on the platform. I knew that she was crying and that the white handkerchief she waved was wet with tears.

Mother was crying, too, softly, and her cheeks were very bright. Father was smiling in an odd, embarrassed way, and tugging at his mustache and stroking his beard. He looked constantly out of the window at the fields sweeping by, and said nothing.

As for me, I was all curiosity. I wanted to know why every one was weeping. What were the "cars" whistling about?. Nobody answered me. A cow galloped away from the train, and the man across the aisle told me that the cow had been on the track and that the cars had whistled so that the cow would get off and let them go by. What was the cow doing on the track? I asked. Eating grass, the man said. Why didn't the cow eat grass somewhere else? I asked. Because it was a cow, said he. Why was it a cow? The man laughed, but did not answer. I demanded one. Why was it a cow, anyhow—what if it had not been a cow? The man laughed again, and mother pinched my ear and told me to be quiet.

I espied our lunch basket presently—a great, round, deep basket of woven willow, which was brown and straw color, with a checkerboard effect. It had a woven willow lid which was solid brown. I essayed to lift the lid, to see what was under it. Then there was an argument, mother insisting that I should wait till supper time. Were we going back to grandma's for supper? No—we would not see grandma for a long, long time. That settled it. I was hungry. I wanted to eat at once; maybe supper time wouldn't come for a long, long time. Mother compromised by giving me a big slice of bread spread with butter and sugar, followed by half an apple. I inquired about the other half and was told to wait till supper time.

Night came at last, after a sleepy, tiresome, jolting afternoon, with every one too sad, too busy, or too something else to talk to me. A man came through and lighted a number of lamps in the swaying top of the car. The lamps sputtered and gave forth a peculiar odor, which was quite interesting to me and drew a number of questions which no one seeme dable to answer. The smell of the lamps was mixed with occasional gusts of smoke that came in through the opened door of the car, or a window, and the mixture of lamp smell and smoke smell was very pleasant to me. Also, I was greatly interested at the cinders which pelted against the window pane, and at the first opportunity thrust out my hand to see how the cinders would feel; whereupon mother jerked my hand inside and told me very decisively that if ever again I stuck my hand out she would spank me. Why? Because, she said.

The night was weird and wonderful—pale yellow light and subdued voices inside, blackness shooting by outside and the wild ringing of the engine bell or long muffled whistle.

When I awoke it was light again; and the train was still going, just as fast as ever.

I marveled. I asked the man across the aisle if the train didn't stop to sleep at night. The man said no; it stopped only now and then to take a drink. I wanted a drink, too, and ceased not my clamor till father took a tin cup from our checkered lunch basket and got me a drink from somewhere in the far end of the car.

After the first day I wearied of looking out of the car window; was too tired or sleepy most of the time even to ask questions, and had only a passing interest in the big lunch basket. We kept on going. Mother had cheered up, and she and the other women in the car laughed and talked and sang songs. Father talked to the other men, and I can remember hearing them speak of "land out west."

(Continued on page thirty-four.)

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The quality proof of a tire is in its service. And country driving is the supreme test.

Federal Tires are built with an exceptionally tough tread, which not only yields long service but gives greatest traction.

They are safe tires, too. For in the base are built four heavy steel cables of exceptional tensile strength. These cables hold the tire securely to the rim under all conditions. Yet it slips off easily when required.

Made in white Rugged and black Traffik tread and sold by leading dealers everywhere.

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Factories, Cudahy, Wis.

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15,000 Tried to Get a HUDSON SUPER-SIX and Failed

Last year, thousands of buyers, including a large number of farmers, failed to get a Hudson Super-Six. We were too far oversold. Yet no car above $1100 had so large an output.

More people, we fear, will be disappointed this year as the Super-Six is better known and holds all worthwhile records.

The Economy of It

People buy the Super-Six because of endurance. Its speed, its power, its hill-climbing ability are all interesting factors. But the greatest of all is economy.

The year a gasoline saver in the form of radiator shutters. We add a motormeter. We use a patent pneumatic carburetor, which adjusts itself to every engine speed. And we put an engine primer at the driver's hand.

You'll Want It

You are bound to want a Hudson Super-Six when you know the facts. If you buy a fine car, you want the one which can outdo all others. If you buy a car to keep you want one that stays new.

And if any one can afford a **good** car like the Hudson, it is the Pacific northwest farmer, because he will appreciate its economy—it super-endurance. It may cost less, in the long run, than a car at half the price.

Remember, the Hudson motor is patented. No one else has it.

It has won every record that counts. In the great endurance test it broke all records by 52 per cent.

The whole car, as now built, is worthy of this motor. Every part is an engineering masterpiece.

A lesser car may bring you long regret. Find out the facts while you can get an early spring delivery.

Write us for the new Hudson booklet. Don't wait, but look it up now if you think you want the greatest car that is built.

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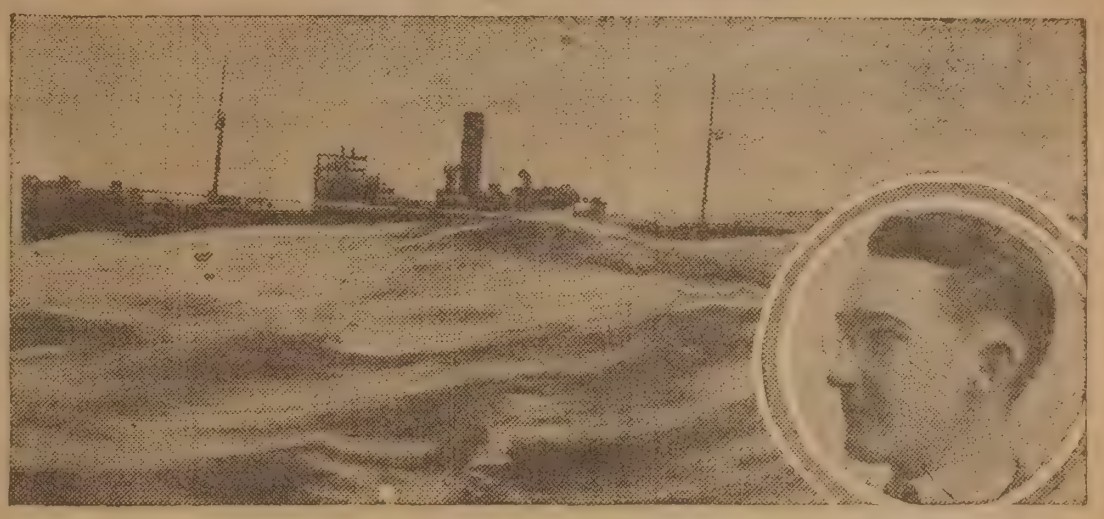
All the World's a Stage, and All the Men and Women Merely Players

Cuban Candidates in Reelection



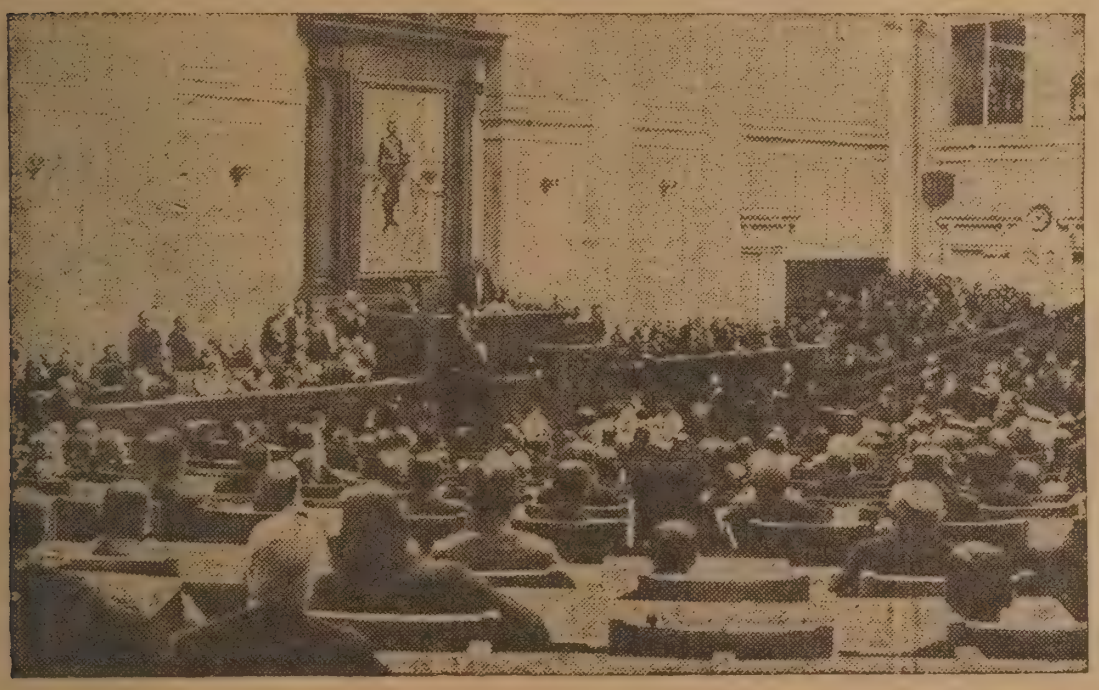
Reelections in Victoria do Las Tunas will be held April 9. The voting will decide whether President Menocal (at the left), conservative candidate, is to remain in power for another four years, or must give way to Dr. Alfredo Zayas (at the right), liberal candidate.

Sinking of the Yarrowdale



Guy Van Dorn, an American boy (shown in the insert above), photographed the steamer Yarrowdale as she was going down from a porthole of the Hudson Maru, the Japanese ship used by the German South sea raider as a prison ship. This picture shows the Yarrowdale sinking after the mysterious German sea raider had exploded a bomb aboard her. Van Dorn was landed at Pernambuco, Brazil, from the Hudson Maru, when the first word of the operations of the sea raider was given to the world. Members of the crew of the Yarrowdale, many of whom were Americans, were taken to Germany, but have just been released on the demand of the United States government, after having been held in quarantine for two months.

Russia's Lawmakers in Session



Copyrighted by International Film Service.

The Russian duma; or congress, which is largely responsible for the successful revolution against Czar Nicholas and his administration is here seen in session in the chamber of Tauride palace which has been set aside for its use. A large portrait of the czar has been placed behind the president's desk.

Trying to Keep Pace With Events



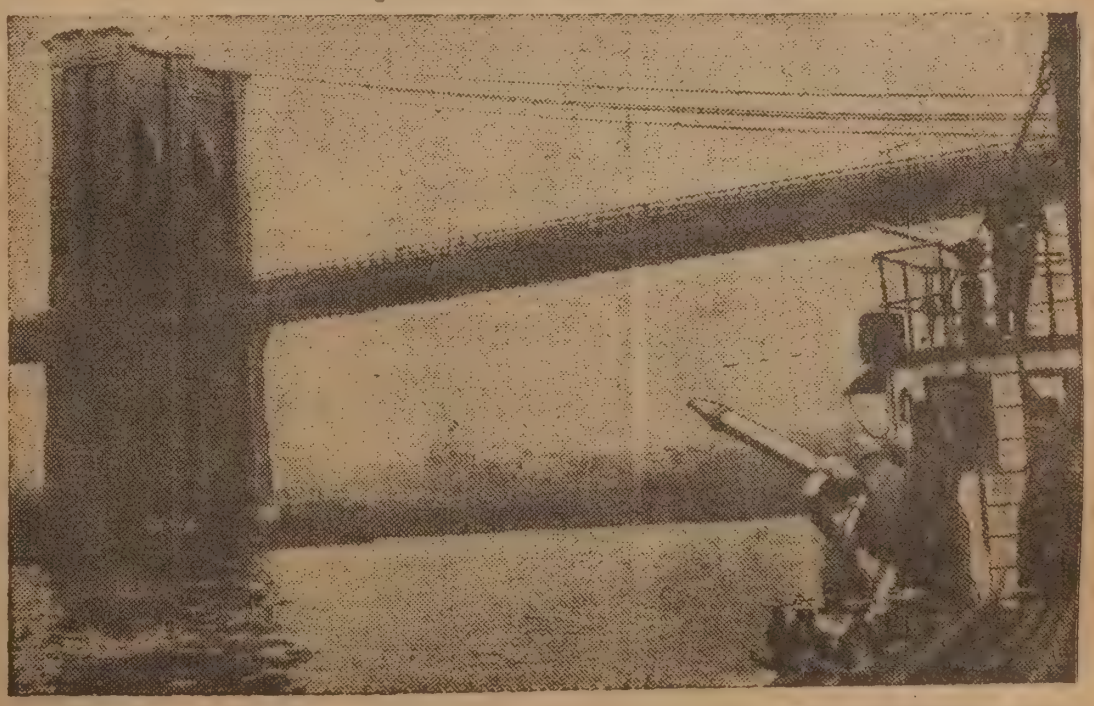
—Kansas City Star.

The Stranger at the Door



—San Francisco Chronicle.

Fireman Aid in National Defense



The above photograph shows the fireboat New York tied up in the lee of the Brooklyn bridge, guarding against fire the huge munition piers where war supplies are being loaded for the allies. The fireboats of New York play an important part in the defense plans of Manhattan and also act as lookout boats aiding the defense of the bridges by playing their powerful searchlights on the piers and superstructures at night.

When Knighthood Was in Flower

BY EDWIN CASKODEN

CHAPTER XIV.—(Continued)

Presently we all moved into the window-way, where Brandon and Mary sat upon the great cloak and I on a camp stool in front of them, completely filling up the little passage.

"I can bear this no longer," exclaimed Mary. "I will go to my brother tonight and tell him all; I will tell him how I suffer, and that I shall die if you are allowed to go away and leave me forever. He loves me, and I can do anything with him when I try. I know I can obtain his consent to our—our—marriage. He can not know how I suffer, else he would not treat me so. I will let him see—I will convince him. I have in my mind everything I want to say and do. I will sit on his knee and stroke his hair and kiss him." And she laughed softly as her spirt revived in the breath of a growing hope. "Then I will tell him how handsome he is, and how I hear the ladies sighing for him, and he will come around all right by the third visit. Oh, I know how to do it; I have done it so often. Never fear! I wish I had gone at it long ago."

Her enthusiastic fever of hope was really contagious, but Brandon, whose life was at stake, had his wits quickened by the danger.

"Mary, would you like to see me a corpse before tomorrow noon?" he asked.

"Why! of course not; why do you ask such a dreadful question?"

"Because, if you wish to make sure of it, do what you have just said—go to the king and tell him all. I doubt if he could wait till morning, but believe he would awaken me at midnight to put me to sleep forever—at the end of a rope or on a block pillow."

"Oh! no! you are all wrong; I know what I can do with Henry."

"If that is the case, I say good-bye now, for I shall be out of England, if possible, by midnight. You must promise me that you will not only not go to the king at all about this matter, but that you will guard your tongue, jealous of its slightest word, and remember with every breath that on your prudence hangs my life, which, I know, is dear to you. Do you promise? If you do not I must fly; so you will lose me one way or the other, if you tell the king; either by my flight or by my death."

"I promise," said Mary, with drooping head; the embodiment of despair; all life and hope having left her again.

After a few minutes her face brightened, and she asked Brandon what ship he would sail in for New Spain, and whence.

"We sail in the Royal Hind, from Bristol, in about a fortnight," he replied.

"How many go out in her; and are there any women?"

"No! no!" he returned; "no women could make the trip; and, besides, on ships of that sort, half pirate, half merchant, they do not take women. The sailors are superstitious about it and will not sail with them. They say they bring bad luck—adverse winds, calms, storms, blackness, monsters from the deep and victorious foes."

"The ignorant creatures!" cried Mary.

Brandon continued: "There will be a hundred men, if the captain can induce so many to enlist."

"How does one procure passage?" inquired Mary.

"By enlisting with the captain, a man named Bradhurst, at Bristol, where the ship is now lying. There is where I enlisted by letter. But why do you ask?"

"Oh! I only wanted to know."

We talked awhile on various topics, but Mary always brought the conversation back to the same subject, the Royal Hind and New Spain. After asking many questions she sat in silence for a time, and then abruptly broke into one of my sentences—she was always interrupting me as if I were a parrot.

"I have been thinking and have made up my mind that I will do, and you shall not dissuade me. I will go to New Spain with you. That will be glorious—far better than the humdrum life of sitting at home—and will solve the whole question."

"But that would be impossible," Mary," said Brandon, into whose face this new evidence of her regard had brought a brightening look; "utterly impossible. To begin with no woman could stand the voyage; not even you, strong and vigorous as you are."

"Oh, yes I can, and I will not allow you to stop me for that reason. I could bear any hardship better than the torture of the last few weeks. In truth I can not bear this at all; it is killing me, so what would it be when you are gone and I am the wife of Louis? Think of that, Charles Brandon; think of that, when I am the wife of Louis. Even if the voyage kills me I might as well die one way as another; and then I should be with you, where it were sweet to die." And I had to sit there and listen to all this foolish talk!

Brandon insisted: "But no women are going; as I told you, they would not take one; besides, how could you escape? I will answer the first question you ever asked me. You are of 'sufficient consideration about the court' for all your movements to attract notice. It is impossible; we must not think of it; it can not be done. Why build up hopes only to be cast down?"

"Oh! but it can be done; never doubt it. I will go, not as a woman, but as a man. I have planned all the details while sitting here. Tomorrow I will send to Bristol a sum of money asking a separate room in the ship for a young nobleman who wishes to go to New Spain incognito, and will go aboard just before they sail. I will buy a man's complete outfit, and will practice being a man before you and Sir Edwin." Here she blushed so that I could see the scarlet even in the gathering gloom. She continued: "As to my escape I can go to Windsor, and then perhaps on to Berkeley Castle, over by Reading, where there will be no one to watch me. You can leave at once, and there will be no cause for them to spy upon me when you are gone, so it can be done easily enough. That is it; I will go to my sister, who is now at Berkeley Castle, the other side of Reading, you know, and that will make a shorter ride to Bristol when we start."

The thought, of course, could not but please Brandon, to whom, in the warmth of Mary's ardor, it had almost begun to offer hope; and he said musingly: "I wonder if it could be done? If it could—if we could reach New Spain, we might build ourselves a home in the beautiful green mountains and hide ourselves safely away from all the world, in the lap of some cozy valley, rich with nature's bounteous gift of fruit and flowers, shaded from the hot sun and sheltered from the blasts, and live in a little paradise all our own. What a glorious dream; but it is only a dream, and we had better awake from it."

Brandon must have been insane!

"No! no! It is not a dream," interrupted downright, determined Mary; "it is not a dream; it shall be a reality. How glorious it will be; I can see our little house now nestling among the hills, shaded by great spreading trees with flowers and vines and golden fruit all about it, rich plumaged birds and gorgeous butterflies. Oh! I can hardly wait. Who would live in a musty palace when they have within reach such a home, and that too with you."

Here it was again. I thought that interview would be the death of me.

Brandon held his face in his hands, and then looking up said: "It is only a question of your happiness, and hard as the voyage and your life over there would be, yet I believe it would be better than life with Louis of France; nothing could be so terrible as that to both of us. If you wish to go, I will try to take you, though I die in the attempt. There will be ample time to reconsider, so that you can turn back if you wish."

Her reply was inarticulate, though satisfactory; and she took his hand in hers as the tears ran gently down her cheeks; this time tears of joy—the first she had shed for many a day.

In the Siren country again without wax! Overboard and lost!

Yes, Brandon's resolution not to see Mary was well taken, if it could only have been as well kept. Observe, as we progress, into what the breaking of it led him.

He had known that if he should but see her once more, his already toppling will would lose its equipoise, and he would be led to attempt the impossible and invite destruction. At first this scheme appeared to me in its true light, but Mary's subtle feminine logic made it seem such plain and easy sailing that I soon began to draw enthusiasm from her exhaustless store, and our combined attack upon Brandon eventually routed every vestige of caution and common sense that even he had left.

Siren logic has always been irresistible and will continue so, no doubt, despite experience.

I can not define what it was about

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JOSEPH A. WHITE, Prop.

Mary that made her little speeches, half argumentative, all-pleading, so wonderfully persuasive. Her facts were mere fancies, and her logic was not even good sophistry. As to real argument and reasoning there was nothing of either in them. It must have been her native strength of character and intensely vigorous personality; some unknown force of nature, operating through her occultly, that turned the channels of other persons' thoughts and filled them with her own will. There was magic in her power, I am certain, but unconscious magic to Mary, I am equally sure. She never would have used it knowingly.

There was still another obstacle to which Mary administered her favorite remedy, the Gordian knot treatment. Brandon said: "It can not be; you are not my wife, and we dare not trust a priest here to unite us."

"No;" replied Mary with hanging head, "but we can—can find one over there."

"I do not know how that will be; we shall probably not find one; at least, I fear; I do not know."

After a little hesitation she answered: "I will go with you any way—and—and risk it. I hope we may find a priest," and she flushed scarlet from her throat to her hair.

Brandon kissed her and said: "You shall go, my brave girl. You make me blush for my faint-heartedness and prudence. I will make you my wife in some way as sure as there is a God."

Soon after this Brandon forced himself to insist on her departure, and I went with her full of hope and completely blinded to the dangers of our cherished scheme. I think Brandon never really lost sight of the danger, and almost infinite proportion of chance against this wild, reckless venture, but was daring enough to attempt it even in the face of such clearly seen and deadly consequences.

What seems to be bravery, as in Mary's case, for example, is often but a lack of perception of the real danger. True bravery is that which dares a danger fully seeing it. A coward may face an unseen danger, and his act may shine with the lustre of genuine heriosm. Mary was brave, but it was the feminine bravery that did not see. Show her a danger and she was womanly enough—that is if you could make her see it. Her willfulness sometimes extended to her mental vision and she would not see. In common with many others she needed mental spectacles at times.

CHAPTER XV.

So it was all arranged, and I converted part of Mary's jewels into money. She said she was sorry now she had not taken de Longueville's diamonds, as they would have added to her treasure; I, however, procured quite a large sum, to which I secretly added a goodly portion out of my own store. At Mary's request I sent part to Bradhurst at Bristol, and retained the rest for Brandon to take with him.

A favorable answer soon came from Bristol, giving the young nobleman a separate room in consideration of the large purse he had sent.

The next step was to procure the gentleman's wardrobe for Mary. This was a little troublesome at first, for, of course, she could not be measured in the regular way. We managed to overcome this difficulty by having Jane take the measurements under instructions received from the tailor, which measurements, together with the cloth, I took to the factional little man who did my work.

He looked at the measurements with twinkling eyes, and remarked: "Sir Edwin, that be the curiousest shaped man ever I see the measures of. Sure it would make a mighty handsome woman, or I know nothing of human dimensions."

"Never you find about dimensions; make the garments as they are ordered and keep your mouth shut, if you know what is to your interest. Do you hear?"

He delivered himself of a labored wink. "I do hear and understand, too, and my tongue is like the tongue of an obelisk."

In due time I brought the suits to Mary, and they were soon adjusted to her liking.

The days passed rapidly till it was a matter of less than a fortnight until the Royal Hind would sail, and it really looked as if the adventure might turn out to our desire.

Jane was in tribulation, and thought she ought to be taken along. This, you may be sure, was touching me very closely, and I began to wish the whole infernal mess at the bottom of the sea. If Jane went his august majesty, King Henry VIII., would be without a master of dance just as sure as the stars twinkled in the firma-

(Continued on following page)

Out of Work

Not if Northwestern-trained in bookkeeping, shorthand and typewriting. You must visit our institution in order to appreciate our equipment; enthusiastic teachers and students. Remember, that every day is enrolment day at the Northwestern.

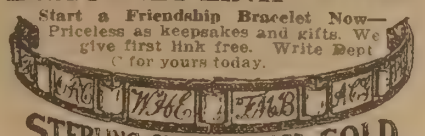
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FOR FARMERS AND STOCKMEN

of the Pacific Northwest, equal to that of any safe mortgage or cattle loan company, at

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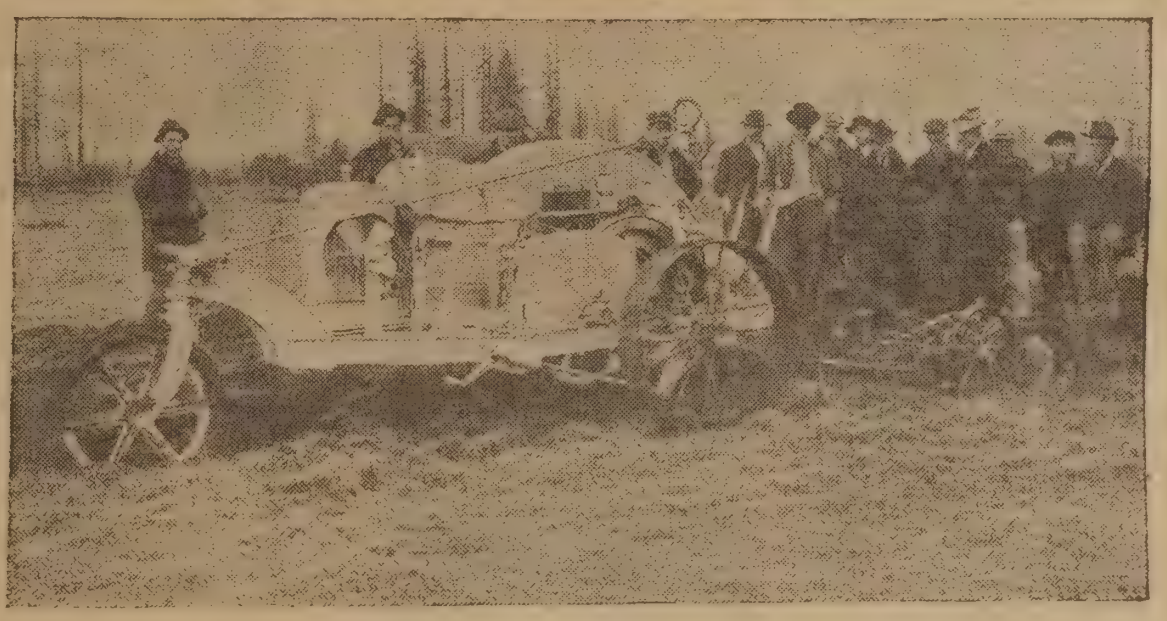
Capital $1,000,000. Write for Particulars.

Farm and Ranch Loans

With Liberal Prepayment Privileges.
For Information Write

Vermont Loan & Trust Co.
Empire State Bldg. Spokane, Wash.

"The Bull Gets with the Pull"



Bull Tractor on Washington Farm.

The Tractor That Does Things

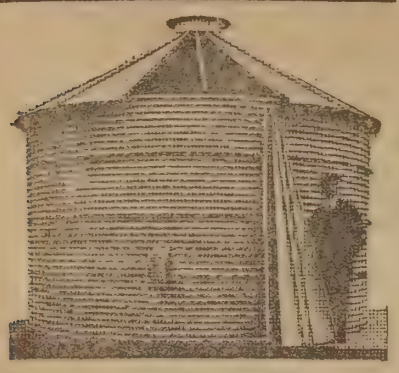
Here are a few things the Bull Tractor has done in Washington:
Plowed in field one and one-half miles around at Cameron Ranch, Sunnyside, Wash., a depth of ten inches, up a 15% grade.
Plowed five and one-half acres on Parish Farm, North Yakima, Wash., in six and one-half hours.
Filled ninety-ton silo in thirteen hours, at cost of $5.00, near North Yakima.
Operated successfully in plowing a stubblefield near Davenport, where grade of 20% was encountered.
At Reardan fifteen acres were plowed with two 14-inch plows at an average of an acre an hour.
Pulled two-ton truck with capacity load of potatoes out of mud at Bellingham.
Plowed ten acres out of twelve near Olympia, without a driver.
Snaked logs out of field for Nels Anderson of Edison.
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At Wapato plowed continuously for twenty-four hours, plowing a total of nineteen and one-fourth acres, at a cost of 61c per acre.
"THE BULL TRACTOR will do the same for you."
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Northwest Buick Co.

Distributors

Seattle Spokane

Northwest Buick Co., Seattle-Spokane:
Please send me your latest descriptive Bull Tractor literature.
Name .....
Address .....



CORRUGATED METAL GRAIN BINS

Rain Proof — Rat Proof
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500 to 5,000 bushels capacities
Portable or stationary

THE SAFEST WAY TO STORE GRAIN

Metal Wagon Boxes and Portable Grain Loaders save grain and labor

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AGENTS WANTED

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SPOKANE, WASHINGTON

RECLAIMING STUMP LANDS
Getting Profits from Waste lands



WRITE TODAY FOR YOUR COPY
of the most complete treatise ever printed on the reclamation of stump lands with mechanical appliances. SENT FREE with special introductory offer. W. Smith Grubber Co., Dept. 22 LaCrescent, Minn.

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THE AUTOMATIC WATER VAPORIZER

Removes all carbon
Increases your power
Increases your mileage
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Live agents wanted in every county and state.

"Money Back Guarantee."

Cars to 35 H. P. $6.50
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Pure Water CHEAPENS FEEDING



—helps fatten your stock
—keeps them healthy and increases flow of milk from your cows.
With the Milwaukee Air PowerWaterSystem you can have an unfailing supply of pure, fresh water "direct from the well" anywhere about the house or barn, without the use of a storage tank.
Write for illustrated catalog and price list today.

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Portland, Ore.

LAND PLASTER HOW TO USE IT

SPOKANE SEED CO.
FERTILIZER Dept.
SPOKANE, WASH.

When Knighthood Was In Flower

(Continued from preceding page.)

ment. It was, however, soon decided that Brandon would have his hands more than full to get off with one woman, and that two would surely spoil the plan. So Jane was to be left behind, full of tribulation and indignation, firmly convinced that she was being treated very badly.

Although at first Jane was violently opposed to the scheme, she soon caught the contagious ardor of Mary's enthusiasm, and knowing that her dear lady's every chance of happiness was staked upon the throw, grew more reconciled. To a person of Jane's age this venture for love offers itself as the last and only cast—the cast for all—and in this particular case there was enough of romance to catch the fancy of any girl. Nothing was lacking to make it truly romantic. The exalted station of at least one of the lovers; the rough road of their true love; the elopement, and, above all, the elopement to a new world, with a cosy hut nestling in fragrant shades and glad with the notes of love from the throats of countless songbirds—what more could a romantic girl desire? So, to my surprise, Jane became more than reconciled, and her fever of anticipation and excitement grew apace with Mary's as the time drew on.

Mary's vanity was delighted with her elopement trousseau, for of courst it must be of the finest. Not that the quality was any better than her own, but the doublet and hose showed so differently on her. She paraded for an hour or so before Jane, and she became accustomed to the new garb, and as the steel reflected a most beautiful image, she determined to show herself



Clother in doublet, hose and confusion, the prettiest picture mortal eyes ever rested on.

to Brandon and me. She said she wanted to become accustomed to being seen in her doublet and hose, and would begin with us. She thought if she could not bear our gaze she surely would make a dismal failure on shipboard among so many strange men. There was some good reasoning in this, and it, together with her vanity, overruled her modesty and prompted her to come to see us in her character of a young nobleman. Jane made one of her mighty protests, so infinitely disproportionate in size to her little ladyship, but the self-willed princess would not listen to her, and was for coming alone if Jane would not come with her. Once having determined, as usual with her, she wasted no time about it, but throwing a long cloak over her shoulders started for our rooms with angry, weeping, protesting Jane at her heels.

When I heard the knock I was sure it was the girls, for though Mary had promised Brandon she would not, under any circumstances, attempt another visit, I knew so well her utter inability to combat her desire, and her reckless disregard of danger where there was a motive sufficient to furnish the nerve tension, that I was sure she would come, or try to come, again.

(To be continued in the next issue.)

(Copyright, 1898, by Bobbs-Merrill Co.)

MORSE'S SEEDS FOR FARM AND RANCH

Plant Morse's

Alfalfa, Clover, Beans, Peas, Grass, Tomatoes, Onion, Corn, Mangold, and all farm, field and vegetable seeds.

Strong germination and vitality

Sold by all leading Dealers or direct from

C. C. MORSE & CO.
SEEDSMEN
745 Front Street San Francisco

Pulverize as you plow

Use a Right Lap Disk Plow for the perfect seedbed.

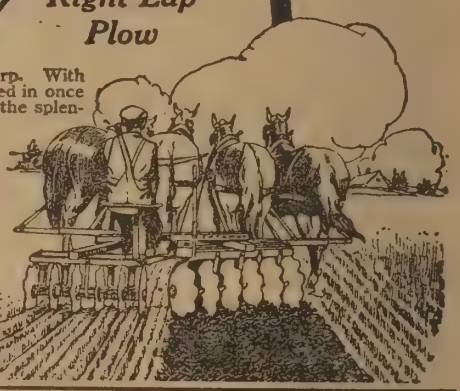
Don't turn over the ground in lumps and chunks, but break up and pulverize the furrow ready for the seed when preparing

Stubble and Fallow Land

You cannot sow after the mouldboard plow, which leaves the land in chunks and a shiny hard furrow-bottom which the tiny plants are unable to penetrate. Use

Cutaway CLARK *Right Lap Plow*

the disk plow with the blades *forged* sharp. With seeder attachment, you plow, disk and seed in once over the ground. You'll be pleased with the splendid seedbed of finely worked soil. The seedling plants will like it too and pay you in the harvest. You can plow more acres at less cost. This tool in seven sizes. Also a hundred others. Ask your dealer about them and write for our free book, "The Soil and Its Tillage."



The Cutaway Harrow Co.
Maker of the original CLARK disk harrows and plows
7317 Main Street
Higganum, Conn.

Canada Offers 160 Acres Land Free to Farm Hands

Bonus of Western Canada Land to Men Who Assist in Maintaining Needed Grain Production.

The demand for Farm Labor in Canada is great. As an inducement to secure the necessary help at once, Canada will give **one hundred and sixty acres of land free as a homestead** and allow the time of the farm labor, who has filed on the land, to apply as residence duties, the same as if he actually had lived on it. Another special concession is the reduction of one year in the time to complete duties. Two years instead of three, as heretofore, but only to men working on the farms for at least six months in 1917. This appeal for farm help is in no way connected with enlistment for military service, but solely to increase agricultural output. A wonderful opportunity to secure a farm and draw good wages at the same time. Canadian Government will pay all fare over one cent per mile from Spokane to Canadian destinations. Information as to low railway rates may be had on application to

J. N. GRIEVE
Canadian Government Agent
Corner First and Post Sts., Spokane, Wash.

Worth While Offers

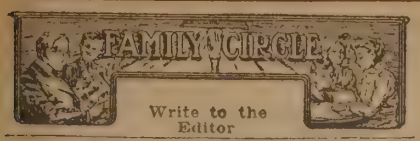
In the want ads of this paper you will find frequent attractive offers. Get the habit of reading them.

What Is the A. B. C.?

Audit Bureau of Circulations.

This is an association, nationwide in its scope, not conducted for profit. Every publisher having membership in this organization pledges himself to sell circulation as a commodity, both as to quality and quantity. Advertisers using our columns are safeguarded. They know that we give all the circulation we offer.

When you write to advertisers be sure to state that you saw their advertisement in this paper.



ALICE W. BARLAND
Editorial Contributor

One Must Obey

Obedience Vital Part of Training

Dear Girls of the Family Circle: I feel like writing to the Family Circle tonight, to every one gathered around the reading lamp, but more especially will I address myself to the girls of the household. You see, girls, I have not forgotten how it feels to be a girl, though there are more gray hairs in my head than there used to be. I remember the thoughts I used to have on the old farm. I used to lean out of my window on moonlight nights, when every one in the house was asleep. I can see just how the world used to look in the clear moonlight.

I used to wonder where I would be a year from that night, two years, 10 years, 20 years. I used to wonder what changes would come into my life, if I would some day see great cities, sail on the ocean, climb mountains; or if I would always stay on the farm where I must rise at 5 every morning and work all day till 9 o'clock. Many times, when extra things had to be done, I used to look out at the big barn across the road. It looked so big and black, for the old weather-beaten boards had never seen a bit of paint. I used to wonder how I ever dared to crawl under that big, dark barn.

The old barn was built rather close to the ground, and the foundation was broken in places, and the hens used to steal their nests under there.

As I was the only one of the older children who could crawl under, I was always chosen to get the eggs, about once a week

How I hated it! I had to lie perfectly flat and pull myself along on my elbows. It was so dark, and cobwebs and spiders were everywhere. I used to imagine I would touch a snake every time I crawled forward. And once I saw two round balls of fire so close that I shrieked, whereupon those balls of fire got active and quickly showed me they belonged to a cat. It was too dark to see the eggs, so they had to be found by the sense of touch. Sometimes my exploring hands came in contact with a cross old hen vainly trying to spread herself over two or three dozen eggs. In that case, she had to be captured, and some way, any old way, I was expected to deliver that squawking hen to my waiting mother at the hole through which I had crawled. Then another trip back for the pan of eggs that I had left behind, while mother placed the hen in "solitary confinement." Waiting with my mother at the opening was, usually, my older brother, who was just too big to admit of his flattening himself out under the barn floor, which explains why he was not under there with the setting hens and spiders instead of me. He would cheer me on with messages like these: "Look out, there are big black things with horns under there," or "I saw a skunk going under the barn the other day." Then would come mother's calm voice, telling me not to be afraid; that nothing would hurt me, and to find all the eggs I could; that she would stay right there. Then the voice of my brother would come again: 'Oh, pshaw! Don't be a 'fraid cat.'"

Girls, have you got a big brother who loves to tease? If you have, then you know all about it. But cheer up; they get quite decent when they grow up. Of all the chores connected with my little girlhood that have left upon my memory an impress of dread, hunting eggs under the barn and crossing the swift, cold creek to drive up the cows stand out the clearest.

But it never entered my mind to make any excuse for not doing either chore. I was simply practicing my lessons in obedience and responsibility, which are the first lessons I knew anything about. I imagine these experiences are not so very unlike your own, because farm life is much the same the world over. They seem very hard while we are living them, but, after all, they are only incidents along life's journey. The purpose of these little personal experiences, dear girls, is to impress on your minds the great importance in the building of character to learn while young to be obedient to parents and faithful and dependable in performance of duties.

It happens that I have opportunity for heart-to-heart talks with girls from 13 to 17 years of age, who, having slipped away from control of their parents and having gone wrong one way and another, have been commited by the courts to industrial schools under supervision of the state.

Every 25 out of 30 tell me they began their downward course by disobeying their mothers; then tried to cover that offense by lying. Do you wonder, dear girls, that I feel deeply impressed with the necessity of young people having regard for the commands and advice of those who, above all others, have their greatest good at heart? Are you dreaming your dreams in the moonlight as I used to do? Are you, too, wondering if you will do things and go places?

There is no reason why you need not do almost everything you want to do. Make the most of every opportunity, and as the years come on ways will open, and no doubt you will climb mountains, sail on the ocean and visit great cities. Those three, at least, of my moonlight dreams have been realized.

A. W. B.

When Easter Comes.

When Easter comes the violets lift
Their shyly hooded faces
Where late the frozen snows adrift
Heaped high the wonderful spaces.
When Easter comes the sunbeams dance
On green leaves all aquiver,
And grasses rally, spear and lance,
By ripping brook and river.

When Easter comes the lilies haste
What time the bells are ringing
To bring their perfumes, pure and chaste,
From hallowed censers swinging,
Shine dim church aisles on Easter day
Beneath their serried whiteness,
And happy children kneel and pray
Amid the lilied brightness.

When Easter comes a merry train,
The robin, wren and starling,
With song and wing are here again,
And many another darling,
The bluebird and the oriole,
The martin and the swallow,
"Anyway," they chant, "with grief and dole!
Here's spring, and summer'll follow!"

When Easter comes, when Easter comes,
Then winter's spell is over!
Ere long we'll hear the elfin drums
Where bees are deep in clover,
After we catch the swaying lilt
Of wings among the daisies
And see the rose cup's sweetness split
Among the garden mazes.

When Easter comes—ah, happy day!—
E'en tears like dewdrops glisten,
And songs climb up the heavenward way
While angels bend to listen,
For love and life and joy untold
Are in the age long story
That spells itself on harps of gold
And thrills with endless glory.

—Margaret E. Sangster.



Ring out old shapes of foul disease,
Ring out the narrowing lust of gold;
Ring out the thousand wars of old,
Ring in the thousand years of peace.

Ring in the valiant man and free,
The larger heart, the kindlier hand.
Ring out the darkness of the land,
Ring in the Christ that is to be.

—TENNYSON.

KITCHEN AND PARLOR

Plans for Light and Ventilation.

To the Editor of The Farmer: I am sending my ideas of a kitchen and parlor. This is not a description of our kitchen and parlor, as we are living in a rented house now, but expect to build this summer.

First of all, I want plenty of light and ventilation; and I want the stove between two windows. That is the fault I find with so many house plans. The stove is always placed in the darkest corner of the kitchen, so one's back is to the windows when cooking. I think a 12x12-foot kitchen is large enough, with a kitchen cabinet or work table by or under a window on the left. To the right, a stove between two windows, to the right of the stove a sink and drainboards under another window, and have linoleum on the floor and the walls covered with oilcloth. One might add other arrangements to suit their needs.

In the parlor I would want a nice, comfortable fireplace. Then I think the parlor described by the lady in a recent issue of The Farmer is just fine. A little more I would add, keep the window blinds up all day so the sunshine could find every corner. I would rather have the sunshine than so much fine furniture till I would have to pull down the blinds to protect it. It seems to me a house looks dreary with the blinds pulled down.

D. E. SCRUGGS.

Deer Harbor, Wash.

To Our Credit.

"Now," said the Sunday school teacher, "can any of you tell me what sins of omission are?"

"Yes, ma'am," came the answer. "They are the sins we might have committed and didn't."—Chicago Herald.

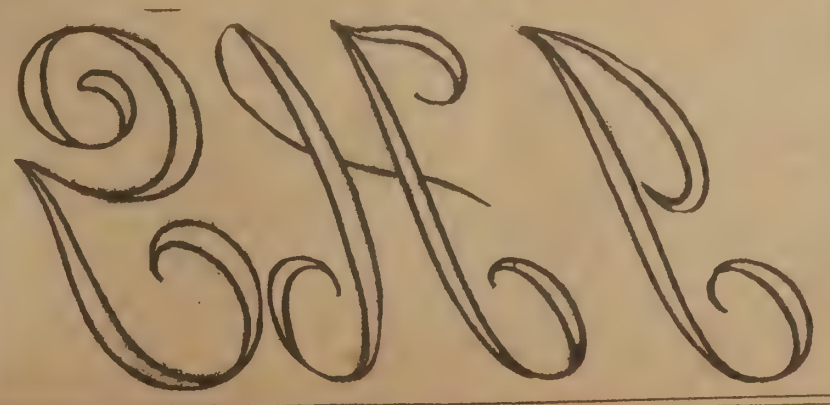
Script Initials for Embroidery

By WINIFRED WORTH.

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material. cover with two folds of newspaper, and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of a linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design.





The Leader of all Cushion Shoes

Mayer

HONORBILT CUSHION SHOES

For men and women

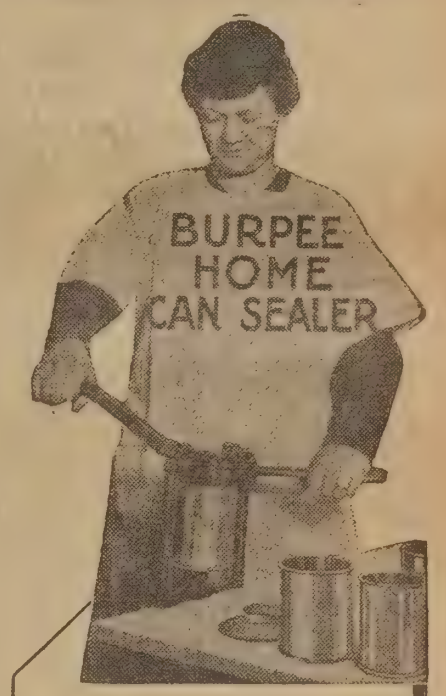
Ask your dealer for Mayer Shoes. Look for the trade-mark on the sole.

F. Mayer Boot & Shoe Co., Milwaukee, Wisconsin

MILWAUKEE Mayer CUSTOM MADE

HONORBILT

Western Branch, Washington Shoe Mfg. Co., Seattle, Wash.



Start a Good Business

Can your fruits, vegetables, and meats right on the farm—and sell them at retail prices any time of year. Don't throw surplus products away. Save them, and turn them into money. Write for free information about the

BURPEE HOME CAN SEALER

Makes Home Canning Easy

Made by one of the biggest canning machinery factories in the country. Satisfaction guaranteed, or money back. Cheap and easy to operate. Clamps on any kitchen table. Seals cans airtight. No solder and no acid needed. A child can use it. Cans easily secured from distributing stations.

The Complete Machine $10

Our $10 machine seals the popular size pint cans. Small inexpensive attachments furnished for other sizes. A free book of canning recipes compiled with assistance of the U. S. Dept. of Agriculture also goes with every machine. Write today for free illustrated folder.

Burpee & Letson, Ltd.
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Canning Machinery Manufacturers.

MAIL THIS COUPON TODAY

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So. Bellingham, Wash.
Dear Sirs:—Please send free illustrated folder on Burpee Home Can Sealer.
Name .....
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Here's Hosiery for Everybody



Long-wearing hosiery for men. Good-looking, ravel-proof hosiery for women. And children's hosiery extra reinforced throughout.

Durable

DURHAM

Hosiery

FOR MEN, WOMEN AND CHILDREN

Made Strongest Where the Wear is Hardest

is the greatest hosiery value at any price. Has strongly reinforced heels, soles and toes. The deep, stretchy, garter-pull-proof tops with the anti-run stitch are knit on *to stay*. The quality is uniform throughout—the sizes are correctly marked. The famous Durham dye prevents color turning green. Toes are smooth and even. Sells for 15, 19, 25 and 35 cents.

Ask your dealer to show you our 35-cent Silk-Mercerized Hosiery with the patented anti-run stitch.

DURABLE DURHAM HOSIERY Trade-Mark

DURHAM HOSIERY MILLS, Durham, N. C.

UNION PACIFIC SYSTEM

Are you reading the history now running serially in advertisement form in *Colliers*, *Saturday Evening Post* and other national magazines, of the BUILDING of the Union Pacific?

Union Pacific is a national achievement upon which depended the safety of the Union and the holding of the Pacific States.

The stories are rich in intimate facts of United States history. When you read them you will realize what a great part Union Pacific played in the growth and welfare of our Nation; and how truly serviceable Union Pacific is and will be—in peace or war—to the people of our United States, as individual travelers, or shippers, and as a Nation.

UNION PACIFIC SYSTEM

Patterns

2007—Girls' one-piece dress: Cut in four sizes: 4, 6, 8 and 10 years. It requires 3 3-4 yards of 36-inch material for a 6-year-size. Price, 10 cents.

2011—Child's dress: Cut in four sizes: 2, 3, 4 and 5 years. It requires 2 1-4 yards of 36, inch material for a 3-year size. Price, 10 cents.

1818—Ladies' three-piece skirt: Cut in eight sizes: 22, 24, 26, 28, 30, 32, 34 and 36 inches waist measure. It requires 3 3-8 yards of 44-inch material for a 24-inch size. The skirt measures about 3 1-3 yards at the foot. Price 10 cents.

2021—Ladies' sports blouse: Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 3 1-2 yards of 36-inch material for a 36-inch size. Price, 10 cents.



2009—Ladies' lounging robe: Cut in four sizes: 34, 38, 42 and 46 inches bust measure. It requires 6 5-8 yards of 44-inch material for a 34-inch size. Price, 10 cents.

2014——Over blouse dress for misses' and small women: Cut in three sizes: 16, 18 and 20 years. It requires two yards of 36-inch material for the guimpe and 3 5-8 yards for the dress, for a 16-year size. The dress measures about 2 1-2 yards at its lower edge. Price, 10 cents.

Fill in this coupon and mail to Pattern Dept.
THE PACIFIC NORTHWEST FARM TRIO
36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Name ....

.....

Postoffice ....

State ....

R. F. D. or St. No.....

BE SURE TO GIVE NUMBER AND SIZE.



this can cuts table costs

in more than a million homes in the West. Yours should be among them.

You'll find a "rounded" spoon of Ghirardelli's Ground Chocolate is equal in chocolate strength to the "heaping" spoon of others.

A cup of Ghirardelli's for breakfast will do more than please the taste—it **nourishes**—enables you to do away with more expensive foods.

Tomorrow try a sensible breakfast—a cup of

Ghirardelli's Ground Chocolate

Since 1852 D. GHIRARDELLI CO. San Francisco

$ SAVED IN HOME CANNING ON THE FARM $

What are you going to do this year to overcome the waste of fruit and vegetables due to crowded markets? Will you ship **all** this perishable material, regardless of market conditions, paying big commissions, high freight, and stand losses from decay and an overcrowded market—**or will you**—like the big manufacturer, convert this into a finished product and **MAKE A PROFIT?**

Answering These Questions

We say that facilities to produce **"Home Canned Foodstuffs"** are as necessary to such producers as is a cream separator to a dairy farmer.

That's the secret of success today for the Farm Woman, Fruit Grower and Market Gardener. With Sanitary Home Canning Outfits and cans from the Seattle Can company, the Home Canner will put up better goods as to quality and flavor than are now offered by the big canneries, and what the family can not use at home may be sold on the market. This solves the problem of "Waste versus Profit."

High Cost of Living

Sixty per cent of our population live in cities. They consume, but do not produce. The City Consumer wishes "the best." "Home-made goods" are always preferable. **The best canned goods are Home Canned goods.**

The best way to can goods at home is **"The Steam Pressure Way."** With our Sanitary Home Canning outfits for tin and glass jars, to handle pints, quarts, half-gallons and gallon cans, for use on any stove or with Fire Box attached for wood or coal, a steam pressure outfit may be had at **prices ranging from $16.50 upward.**

Use Coupon at Once

And get the folder and literature on this **new science** in the art of Home Canning.

Plans (with prices on cans and apparatus) for community work and packing plants of larger size, cheerfully furnished on request.

Seattle Can Company

Home Canning Department
1263 Utah Ave. Seattle, Wash.

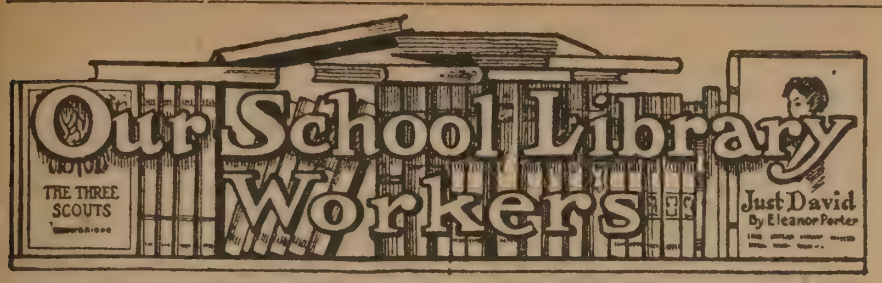
Seattle Can Co.,
1263 Utah Ave., Seattle, Wash.

Gentlemen: Send me folder on Home Canning Outfits as described in The Washington Farmer.

Name .....

Box or Rural Route.....

Town..... State.....



The Washington Farmer,
Spokane, Washington.

Our school has not started a Washington Farmer library campaign. Please tell the bookman to write to our teacher and mention my name as a pupil who would be willing to help secure more library books for our school by taking subscriptions for the Washington Farmer in our district. I will talk to the other boys and girls in our school and see if they are willing to start a Red and Blue subscription contest.

My teacher's name is———. There are——pupils in my room. I am——years old. My name is———.

My postoffice is———. State———.

The bookman has been away for a week, down in the country where a lot of the boys and girls live who are working to get school libraries. While down there he met a good many people who were very much interested in the boys and girls, and who had given their subscriptions to members of the Red and Blue teams to help them in their campaign.

The bookman said it made him feel proud of the Red and Blue team hustlers, when these people told him how earnestly they all had worked

Then he met other people who told him that their teacher had not started a Red and Blue team subscription contest in their district. They asked why it hadn't been done so they could help their school to get some of these books for their library, also, by giving their new and renewal subscriptions to the boys and girls.

The bookman could not tell them why this had not been done. But he promised to try and find out. So, boys and girls, if your school has not started a Washington Farmer subscription campaign in order to get some of the nice books other schools are receiving every week, fill out this blank and send it to the Washington Farmer, so the bookman can write to your teacher and tell of your interest in the matter and see if he can't give these people, who are willing to help your school get books with their subscriptions, a chance to do so.

The bookman says he feels sure he is going to get a lot of letters from the boys and girls who are interested, for he knowns how anxious they all are to get books to read. So every one of you can help.

Here is what one teacher says about the books that the boys and girls are helping place in their school libraries:

"We were very much pleased with the books and feel that the effort made in procuring them was worth while, indeed. Respectfully, Franc DeGraff."
North Yakima, Wash.

New Schools Starting Contests.

Pioneer school, Stevens county, W. H. Blackenburg, teacher; Velvet school, Stevens county, Irene F. Adam, teacher; Evans school, Stevens county, Avis C. Fisher, teacher; Rice school, Stevens county, Vivien Johnson, teacher; Woldale school, Kittitas county, Mrs. Estelle S. Simmons, teacher; Lyons school, Kittitas county, Erie Gates, teacher.

The individual subscription contest between pupils of the various schools continues to be filled with interest. Somebody is going to win that $5 in gold on the first of May, and any boy or girl has the right to compete for it. It will be given to the goy or girl who secures the most subscriptions through individual effort by that time.

Contestant's Standing.

Dorothy Rauch, Chewelah, Wash, 20; Bessie Webb, Ford Wash., 14; Loyal C. R. Snyder, White Swan, Wash., 12; Mildred Glasgow, Bossburg, Wash., 9; Dorothy LaRue, Mayview, Wash., 6; Lester Ruark, Mayview, Wash., 6; Violet Leachman, Mayview, Wash., 5; Eva Bond, Valley, Wash., 3.

We expect new contestants to come in next week. Also the school winning the book prize for their teacher on Library day will be announced.

No Foundation

For Scare About Bank Being Moved

(Continued from page five.)

declare said first mortgages on land situated in such state ineligible during the continuance of the laws in question."

When the federal farm loan board conducted its hearing in Spokane Commissioner Norris questioned Governor Lister on this point and was assured by the governor that the laws of this state would be found entirely satisfactory.

Undoubtedly the laws have been found satisfactory in all the four states in this district, for mortgage companies have long been making farm loans in large volume in Washington, Oregon, Idaho and Montana, and the great life insurance companies are heavy investors in such mortgages. The laws of all these states have been carefully scanned by the attorneys of these mortgage companies and life insurance associations and found ample and satisfactory.

The Farmer gives herewith in full the recent announcement of the federal farm loan board that a uniform interest rate of 5 per cent would be charged on all farm mortgages under the new system. The Associated Press dispatch carried only a brief condensation of the order. The board announces:

"The federal farm loan board has finally fixed, by resolution, the interest rate at which farm loan bonds will be sold and the interest rate on loans extended to farmers. The bonds will bear 4 1-2 per cent and will probably be sold at a premium. The interest rate to the farmer will be 5 per cent. The interest rate which will be charged the farmers is 1 per cent less than the maximum provided by the federal farm loan act.

"This determination on the part of the farm loan board, reached after careful consideration of every factor in the situation, means a tremendous financial saving to the farmers of the United States. The present farm mortgage indebtedness of the United States is approximately $4,000,000,000, and the average interest rate is approximately 7.4 per cent. A reduction of this rate to 5 per cent on the present volume of farm loan business means an average saving to the farmers of nearly $100,000,000 a year.

"This takes no account of the greatly increased volume of loans certain to follow the decreased interest rate. The determination of the interest rate to the farmer is based upon the rate fixed on the farm loan bonds. Under the law the farm loan board is permitted to add to the interest rate on the bonds a maximum of 1 per cent to pay the cost of operating the farm loan banking system. The great volume of business assured the twelve federal land banks at the start has induced the board to limit the operation cost to half of 1 per cent, so that since the bonds will bear 4 1-2 per cent the rate of interest to the farmer will be 5 per cent."



THERE'S A

MACK TRUCK

FOR EVERY NEED

More than 7000 **Mack Trucks** are in daily use throughout the United States. Farmers and the industrial and business interests of Washington and Idaho have bought $75,000 worth of **Mack Trucks** in the last three months.

The question is—What is your need?

Do you want a light, medium or heavy duty truck? Whether it is for wheat to market, wood, coal, lumber hauling, or general farm utility, there's a MACK TRUCK built especially for YOU. Sizes 1, 1 1-2, 2, 3 1-2, 5, 5 1-2, 6 1-2 and 7 1-2 tons—anything YOU want.

MACK TRUCKS have certain definite points of superiority and adaptability. We can't give you more than a few hints in this announcement. You'll learn more about MACK TRUCKS in these pages—but don't wait; mail the coupon today for catalogue and other literature.

Especially we want to send you a mighty interesting booklet—"Mack Truck Aids Science;" how a 31-2-ton MACK TRUCK carried a 20,185-pound load up a mountain—it's a good story of a remarkable performance.

MACK TRUCKS—Maximum service; utmost value.

T. G. YOUNG
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CUT OUT ON THIS DOTTED LINE: MAIL TODAY.
T. G. Young, Distributor Mack Trucks,
1000 Pike Street, Seattle. (Or mail to Spokane address.)
Please send me information about Mack Trucks. I may be interested in a .... ton truck, for hauling ....
Name .....
Address .....



Hazel Tells About Their Nice Farm.

Dear Aunt Nellie: I am going to write about our farm. I would not trade with any city girl. We have 40 acres and 30 of them are under cultivation. Scatter Creek runs through our place. Papa has cleared our land with the donkey engine. We have about 350 fruit trees and one-half of an acre of logan and blackberries and a quarter of an acre of strawberries. Papa has 12 acres of grain in and mama has 29 chickens. We have some pets. They are guinea pigs and rabbits. Papa has three horses and two cows. My sister milks the cows. We have five cats at the barn. We have two dogs. We have a big house with eight rooms and two pantries. Mama has some flowers around the house. We have a little calf; it is three months old. I am 12 years old. My birthday is June 19. I helped papa plant an acre of potatoes last year. I help mama in the house. I go to school too, and I am in the seventh grade.—Hazel Allen, Rochester, Wash.

Thinks the Baby is Sweet and Cute.

Dear Aunt Nellie: I am twelve years old and my birthday is the 16th of July. I live on a dairy farm two miles from the school. I go to a Sunday school. Our Sunday school and school have been shut down on account of measles. I have three brothers and two sisters. Their names are Arthur, Ernest, Robert, Grace and Alice. Alice is the smallest, whom we all love and think very sweet and cute. My teacher's name is Miss Huntington. I have not seen any letters from this part of the country so thought I would write. I have finished piecing the blocks for my quilt, so I sent Leona Waldron some pieces for her quilt. I am sorry she can't get out and enjoy herself like other girls can.—Lydia Guild, Woodland, Wash.

Have a Fine New School Now.

Dear Aunt Nellie: I am a little girl 11 years old and I am in the fifth grade. I started to school at the beginning of the term and went about a month, when our school house burned down. Then we went to school in a vacant farm house until our schoolhouse was built. Our school is called the Kirby school. I live in the country. I have seven sisters and three brothers. In the spring and summer months my sister and I take music lessons. We are in the second grade in music. I can tat and crochet. I have a little pet dog and I call him Browny. He is very friendly and likes to play.—Hattie Malone, Pomeroy, Wash.

Big Lake on the Merrick Farm.

Dear Aunt Nellie: I am going to tell you about our farm. We live on a 160 acre farm. There is a big lake on our farm and we go boat riding and fishing. The name of our lake is Deep lake. I have five brothers. Their names are Morse, Fayrse, Ross, Earl, Tonie. Papa has four horses. I have a Shetland pony and his name is Midget. His weight is 350 pounds. I ride him one and a half miles to school. I have two geese. We have 50 chickens. We have an old mother pig and eight little ones. We have seven head of cattle and two dogs. There is a large pine tree here, which is 22 feet around.—Henry Merrick, Fish Trap, Wash.

Pond Is Full of Ducks All the Time.

Dear Aunt Nellie: I am 12 years old. My birthday is the second of December. I am in the sixth grade. I have two sisters younger than I am and two brothers, one older and one younger than I am. We live on a ranch of about 160 acres. One of the fields has a pond of water on it and there is about 700 ducks in it all of the time. I am going to tell you about my school. There are four rooms. We have three teachers. My teacher's name is Miss Peterson. We have an extra room that we use to eat in. There are 24 children in my room. There are about 63 all together.—Marjorie Cayse, Dungeness, Wash.

No Absences Since School Began.

Dear Aunt Nellie: My subject is, "My First Surprise." I came home from school and I saw the Washington Farmer. I unwrapped the paper and turned to the Childrens' Corner. I looked at the Aunt Nellie letter and read it, then I looked to see the letters and saw my name as second prize. I could hardly believe my eyes. My mama was surprised also. My friends and I have a very good time. I am all the time joking people. My school has had perfect attendance during all the months of school so far; we have had neither absences or tardies since school began. I am 11 years old, November 26.—Helen Niblick, Trinidad, Wash.

Hot Lunches at School Every Day.

Dear Aunt Nellie: We have been taking The Farmer for some time and we like it very much. I live on an eight-acre farm. I have eight pet chickens of my own and two cats, the cats' names are Blackie and Tom. I am 11 years old and my birthday is the 21st of June. I am in the sixth grade at school. My teacher's name is Mr. Howell. I like him very much for a teacher. There are nine pupils in our class. I am going to tell you about our schoolroom. It is a large building with four rooms in it. Three of the rooms are used for schoolrooms and the other is used for cooking. We have hot lunch every day.—Dorothy Curtis, Freeland, Wash.

Have to Wait Till Summer Comes.

Dear Aunt Nellie: I have had a birthday since the last time I wrote. I am 12 years old. I would like to correspond with any one of my own age. I have one sister and one brother. Their names are Opal and Herbert. Opal is 14 and Herbert is 21 months old. My sister and I go to the Johnson school. I am in the seventh grade and she is in the ninth. We girls have a lot of fun at school now, but we do not play basket ball because there is only one ball. The others have been punctured. I wish that summer was here so we could go for pleasure rides in the car, but we will have to wait till it does come.—Flora Lamm, Johnson, Wash.

Knows Mother's Her Best Friend.

Dear Aunt Nellie: I go to school every day. I go to Uniontown and it is about three and a half miles. We ride a little pony to school. My pony's name is Jimmy. My teacher's name is Miss Mary Codd. I am in the fifth grade and I am 10 years old. My sister is in the third grade. She is 8 years old. My studies are reading, penmanship, spelling, arithmetic, language, hygiene, history and geography. My subject is "My Best Friend." My best friend is my mother and she is my best friend because she washes my clothes, cooks for me, protects me, and makes my bed.—Jennie Myers, Uniontown, Wash.

The Dog, "Judy," Is 14 Inches High.

Dear Aunt Nellie: I read all of the letters that I see in the Children's Corner. This is the first letter I have written and I hope it won't be the last. We have a little dog whose name is "Judy." She is 14 inches high. We have had many kittens but they always die. I am 12 years of age. My birthday is January 28th. I live 100 rods from school. My teacher's name is Mr. Bramblitt; he tries to make school pleasant for us and is always joking. Just the same he is strict with us.—Alice Bartlett, Centralia, Wash.

The More the Merrier, Esther.

Dear Aunt Nellie: I wonder if there is any room for another little girl. I am a farmer's daughter. I am 9 years old. I am in the second grade at school. My birthday is February 29 so you see that I am a leap year girl. My teacher's name is Mary Soper. She is good and kind to the children and the children all like her. In summer I have lots of fun picking strawberries, raspberries and blackberries and in the fall, I pick huckleberries and in the winter I have lots of fun coasting down the big hill. In the spring I begin to work on my garden.—Esther Sandberg, Olalla, Wash.

Girls Play Volley Ball at School.

Dear Aunt Nellie: I am 11 years old. My birthday is May the 24th. I am in the fifth grade at school. I have three sisters and two brothers. My sisters' names are Ruth, Esther, Agnes, and my brothers' names are Gust and Alf. I live on a 20-acre farm. We have four cows, one heifer and two horses. We have about 180 chickens. I go to school every day. We play volley ball and the boys play baseball. The school I attend is called Riverside. My teacher's name is Mr. Manners.—Svea Boman, Independence, Wash.

Cat Was 19 Years Old When it Died.

Dear Aunt Nellie: I am 10 years old. My birthday is February 11. I have one sister and one brother. My sister's name is Elnora. She is 6 years old and my brother's name is Gene. He is 3 years old. We live with our grandpa and grandma. Our old pet cat died of old age today. She was 19 years old. She was born in 1898. We have 13 head of horses and one hog, also 180 chickens. We children raise a garden every year. We walk to school. We have three miles to walk.—Agnes Davis, Hulby, Wash.

Little Pet Kitten is a Blue One.

Dear Aunt Nellie: I live on a farm of 260 acres. I have one pet kitten. It is blue. I have two brothers; one is 16 and the other is 15. I have one sister and she is 20 years old. I go to school. I am 11 years old. I am in the fourth grade.—Naomi Miller, Leese, Wash.

Dresses Little Brother and Sister.

Dear Aunt Nellie: I am 9 years old and in the fourth grade. My birthday is November 3. We live on a 15-acre farm. We have two colts and one horse. The horses name is Jude and the names of the colts are Dixie and the other Buck. We have seven heifers and five cows. We have a puppy named Mutt. We children have lots of fun playing. Our teacher's name is Miss Wilcox. She is a good teacher. I wash dishes for mama and I dress my sister and brother.—Neva Helen Cayse, Dungeness, Wash.

Taken 17 Lessons on the Piano.

Dear Aunt Nellie: I go to school and am in the seventh grade. My teachers' names are Mrs. Murdock, Miss Silverstone and Mr. Williams. I take sewing at school every other day. I live in the country and live two miles and a half from school, but I ride in a bus. We have a piano and my sister, my brother and I take lessons. I have taken 17 lessons. I will be 13 years old July the first.—Marcia Mossman, Raymond, Wash.

Only One Room in Marie's School.

Dear Aunt Nellie: I live on Puget Sound. I am nine years old. My birthday is on May the nineteenth. We have two cows, lots of chickens, two cats and one dog. I have three sisters and one brother. I am the baby of the family and I am in the fourth grade. My teacher's name is Miss Shelley. There is only one room in our school and there are 27 pupils. I walk a mile and a half to school.—Marie Fountain, Fragaria, Wash.

Brothers Are in the English Army.

Dear Aunt Nellie: I live on a 40-acre farm. I am 7 years old. I have two rabbits and a cat. We have three horses. Their names are Bill, Babe and Nance. Nance got cut by some barbed wire. I don't think we can use her any more. We take The Farmer and the first place I turn is the page where the letters are. I have fun on the farm. I have four brothers. Two of them are in the English army. I will write again.—Clayton Hay, Sunnyside, Wash.

Here's a Little Blue-Eyed Cousin.

Dear Aunt Nellie: I live in the country. I have never lived in the city. We live on 160 acres. We have 25 head of cattle and five horses. Their names are Fannie, Ned, Dixie, Trixie and Prince. I walk half a mile to school. There is just one room. My teacher's name is Miss Scribner. I am 9 years old and am 5 feet high. I have yellow hair and blue eyes.—Violet Throop, Deer Park, Wash.

Tells How She Earned Her Money.

Dear Aunt Nellie: I am 9 years old and my birthday is in July. I am in the third A grade. I have a pet dog named Prince and when he stands up he is as tall as papa. I have a pet kitten named Muff and we have over 90 chickens. Papa has two horses named Birdie and Jim. I gather the eggs every night and get in a little wood and papa gives me 20 cents every week. I like my teacher very much.—Eva Durham, Seattle, Wash.

Will Have a Garden This Summer.

Dear Aunt Nellie: I have two sisters and one brother and we have a calf and its name is Daisy and we have a dog. His name is Bounce. I go to school in town. I have a steer and my brother has one too. I live on a ranch. My sister is going to school. The two youngest are twins. They do not go to school. I am going to make a garden this summer. I am 8 years old and have $5. My sister has $5.50.—Gustave B. Sloughter, Mansfield, Wash.

The Washington Farmer is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Grace E. Balsey, Maud Burns, Hazel Ethrege, Willie Bell Dysart, Eva Wees, Clara Burton, Rena Craig, Oscar Berg, Josie Read, Nick Seivonen, Louise James, Rubie Amley, Hattie Litchfield, Ethel Harriman, Lucile Bowers, Evalena Clement, Edna McClelland, Elizabeth Bowen, Mary Symington, Eugene Pollastrini, Mary Willis, Rogenia Willis, Katherine Bowen, Gladys Brummund, Ellen Purcell, Frank Purcell, Imogene Nelson, Myrtle Ledbetter, Jessie Moss, Ella Liere, Ruby Warren, Mabel Margret.

The Bible Says:



BOYS AND GIRLS



Win

THIS SHETLAND PONY

For the Best Garden Products

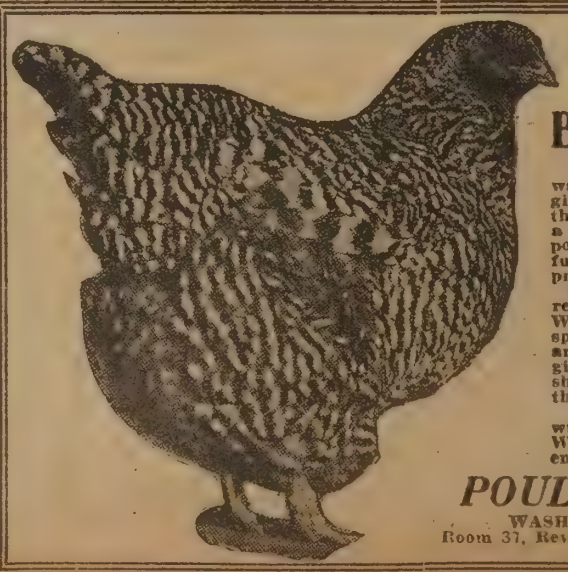
We want to encourage gardening among the boys and girls of the great Pacific Northwest. We know boys and girls who have earned good pocket money raising vegetables and selling them. We have, therefore, decided to give away as prizes the following for the best garden products:

1st prize: A beautiful Shetland pony,
2nd prize: Iron Age Hand Cultivator,
3rd prize: Agricultural Encyclopedia.

There are no strings or impossible conditions to this contest. It is open to every boy and girl under the age of 18.

Write LILLY'S *Seattle, for full particulars,* and remember that you cannot buy better seeds than

LILLY'S *Best For The West*
Established 1885



Prize Poultry

For Thrifty

Boys and Girls

Our poultry club provides a way for ambitious boys and girls to get a start. It gives them manly and womanly jobs, a feeling of ownership, an opportunity to do things. We furnish the hatching eggs from prize pens.

Send one order for a new or renewal subscription to The Washington Farmer at the special three-year rate of $1.50, and we will send your boy or girl a certificate of membership and all details concerning the club.

Give name of child when writing, and act without delay. We desire to hear from parents.

POULTRY CLUB
WASHINGTON FARMER.
Room 37, Review Bldg., Spokane, Wash.

Crooked Stick

Gives Place to the Tractor Plow

During the tractor demonstration which took place November 13 to 18 on the farm of T. H. Larson on the Pacific highway in Washington the thoughtful observer was brought face to face with the fact that "gas" is coming into its own. The farmers who attended the demonstration came in automobiles, almost to a man. On the broad highway adjoining the field in which the plowing was done, huge trucks rumbled past, some of them carrying the produce of the farms to the city, others conveying city goods to the farmer's door. And in the field an apparently intelligent monster of steel and brass nosed its way up and down the plow furrow, dragging two 14-inch plows through the frozen soil. One spectator, a white-haired old man who leaned heavily on his cane, shook his head slowly as he gazes across the fence.

"What's the world coming to, I should like to know?" he queried, addressing the crowd at large. "When I was a boy in England I can remember a time when scythes were prohibited in harvesting the grain. It all had to be cut with cycles, and the man with the biggest hand, who could grasp the biggest bunch, was the prize harvester. Our plows were little better than crooked sticks. But now——"

Again he shook his head, as he pointed his cane at the retreating tractor.

Opinion favorable to mechanical plowing, where the fields are large enough to justify the initial expense, was freely pronounced by the witnesses for the demonstration.

Time With Chickens Well Spent.

(To the Editor.)—I would like to say to every small farmer west of the Cascades to keep at least a small flock of chickens of a good laying strain. Here, where the land is hard to clear and not much, if any, capital to do it with, a flock of blooded chickens won't come amiss and helps a lot towards paying running expenses on the place. I put up 17 full blooded White Leghorn pullets in a pen by themselves on the first of February to test their laying qualities and here is shown what I realized from said pen: Laid 393 eggs, or 32 3-4 dozen of eggs in 28 days, sold to our local hospital at 40 cents per dozen, or $13.10. Deducting expenses for feed that I had to buy amounting to about $2, would leave me a profit of $11.10, not counting the feed that I raised on the place which would amount to, perhaps, $1.25. We have been on the old homestead for nearly eight years and we have never been without fresh eggs anytime of the year. Many people have asked me, "What do you feed your chickens that they are laying all the year around?" The answer is this: "If you are willing to spend a little time each day to take good care of a flock you can do the same thing.

First of all get a laying strain; fix up good, warm, dry quarters and keep them clean, plenty of room for them to scratch in and good, clean drinking water constantly before them. This is the way I feed ours: In the morning a warm mash consisting of cull spuds or carrots mixed with bran, also warm drinking water in the winter. I raise oats and field peas mixed for chicken feed. Bundle it up and the bundles are fed at noon, hung up on wire hooks in the scratching pens and biddy does her own threshing and enjoys doing it. By this method I save all the straw for feed for the young stock. In the evening I feed scratch, sometimes wheat and real cold cracked corn. All the wood ashes on the place go to the poultry house in the roosting quarters. By doing this they get all the charcoal they need and the droppings are easier to remove. All bones from slaughtered cattle and hogs are taken care of and ground up in winter on a bone grinder. Oyster shells and dried beef scraps constantly beside them, besides granite rock grit. You can find rock suitable for grit on most all the uplands, pound them up with a sledge hammer when there is no rock crusher. I consider the little time I spent with taking care of our chickens well spent.

C. B. NEIDERPRUM.

Darrington, Snohomish Co., Wash.

Ellensburg's First Market Day.

Ellensburg's first market day last week proved a great success. Articles of every description were offered for sale, including incubators, horses, hogs, household furniture and farm implements. There was a crowd of 200 active buyers. The second Wednesday of every month hereafter will be market day.

Limestone

Find Out If Your Land Needs It

County Agriculturist Floyd W. Rader of King county, Wash., calls attention to the tendency of lime to work down into the soil. It is because of this tendency of alkaline salts in solution to seek lower levels that many irrigation districts are now confronted with the necessity of removing an excess of alkali from their lower lands; and in applying lime to acid soils this same fact should be kept in mind. The point of practical application is that lime should be added to plowed land after plowing rather than before. A violation of this rule often leads the farmer to conclude that his soil did not need liming, or that lime is of no benefit, when the fact is that by plowing his lime under he has robbed the surface soil of its beneficent action. The subsoil is much less apt to be acid than the surface soil in any case.

Ground limestone will not cake if applied on wet ground, and many be spread as early in spring as team and wagon can get into the fields. February or March is a good time, although April is not too late.

If you are in any doubt as to whether or not your land needs liming, Mr. Rader says it is a simple enough matter to decide for yourself. Buy a tube of blue litmus paper at the drug store and insert a small strip in a handful of dirt, just enough to moisten the paper. Examine at frequent intervals. If the paper begins to turn red quickly—say within from three to five minutes—your soil is decidedly acid. If it takes half an hour to color the paper pink, on the other hand, much less acid is indicated. Apply two tons of ground limestone for the very acid soil, and from one-half to one ton for milder cases.

Here is a final tip offered by the King county agent: Burned lime quickly reverts to the same chemical composition as lime stone, so that as a rule there is no advantage in applying the former.

Grain Grades Fixed

Will Govern the Season's Crops

Announcement has come from Washington, D. C., that the department of agriculture has adopted a set of grain standards for the entire grain business of the United States. The standards will become effective for grading the 1917 crops.

No detailed report of the exact standards have yet been received in the northwest, but it is believed that they conform in most respects to the proposed standards as outlined to the producers, dealers and shippers in February when the department of agriculture held hearings throughout the grain growing districts. These standards differed only slightly in some minor details from those already operative under the Washington state grain inspection law, which is practically the same as that recently adopted in Oregon

The Farmer will publish the details of the regulation in a later issue.



W. H. Paulhamus

Mr. Paulhamus says—

"Cooperation means working in harmony with a view of obtaining the best possible results for all interested. This is a very simple method and can be followed to a successful conclusion by any community."

In an early issue of The Farmer Mr. Paulhamus will give his impressions of

The Middleman

From the viewpoint of a man whose work in establishing cooperative enterprises has been so successful as to make him a nationally-known figure, Mr. Paulhamus' estimate of the middleman is bound to be of extraordinary interest and value.



The Farmer has arranged with Mr. Paulhamus for a series of articles on

Cooperative Marketing

which will go straight to the heart of the vital subject in a way that we know every reader will appreciate.

Smoothing the Way for Mother

The Farmer is not as exclusively masculine in its leanings as the great Henry George, who said, "I am for men." The Farmer is also for women as well as men.

"**LET THE WOMEN DO THE WORK**" is all right so long as they aren't asked to do too much of it. The Farmer is going to offer some plans and suggestions during the months just ahead for reducing both the work and the cost of housekeeping in country homes. We believe most of our women folks will enjoy these talks and find many a way to profit from them.



Not a word about father—he is doing 3 days' work in 1, thereby saving two days. But what about mother?

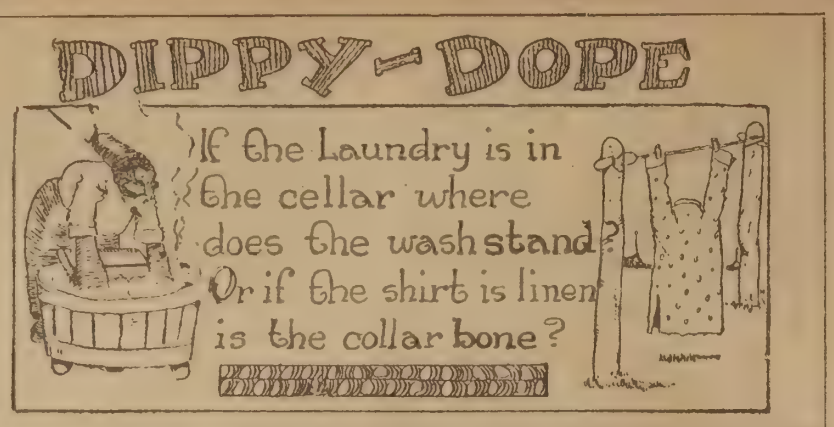


Will the well dressed party sell Mr. Jones of Pinedale Farm $1000 worth of stock in the Great Consolidated Hot Air Company? No, the w. d. p. will not.

The Farmer, of the issue Mr. Jones is holding has told the facts about this company and made Hot Air stock look about as desirable as a fourth mortgage on an abandoned brickyard.

Swatting the Swindler

is a part of the work The Farmer has cut out to do in future issues. Watch for these "swats."



His Best.

She (on board ship)—Mr. Jones, if I fell overboard and were drowning, would you jump in and save me?

He (hesitating, but honest)—By Jove. You know, I don't believe I could. But I tell you what I would do. I would watch you drown with the deepest sorrow and regret.—Life.

Mutual Creamery Co.

Seattle, Washington.

PIONEER DEVELOPMENT.

In many western states our time and money and pioneer work, with a cash market for the farmers' dairy and poultry products, have made it possible to reach the present splendid development whereby Western states have become exporters instead of importers.

WORLD-WIDE MARKET.

We reach local markets, also markets in any part of the United States and in all parts of the world, thus assuring the producer good returns and benefits from a wide distribution of his products. The farmer produces and we reach those that consume and we bring in the dollars from over the mountains.

OUR PROFITS.

Our profit is fixed by our articles of incorporation, namely, 3 per cent on sales, if we can earn that much. Should we earn more than 3 per cent on sales, this surplus earning is returned to our producer stockholders, holding stock in the company at the rate of one share, par value $10, for every two cows milked, in proportion to the amount of milk, cream, eggs and poultry they sell us. This limits our profits to approximately 1 cent per pound on butter, six-tenths of a cent per pound on cheese and nine-tenths of a cent per dozen on eggs.

COMPETITION.

This company does not own a share of stock in any corporation or firm, whether competitors or not, directly or indirectly engaged in the creamery or produce business in the west, in the United States or in the world; and no firm, individual or corporation, whether competitors or not, directly or indirectly engaged in the creamery and produce business in the west, in the United States or in the world, owns any shares of stock or holds any interests whatsoever in this company.

STOCKHOLDERS.

Two hundred and forty-three farmers have taken stock in our company, and sixty-six of our employes are stockholders. It is the right and privilege of every farmer, with milk and cream to sell, to become a stockholder with us, and 60 per cent of our capital stock is reserved for producers.

DIVIDENDS PAID DURING 1916.

The total dividends distributed to stockholders during the year 1916 were 8 per cent upon the par value of stock outstanding. We have in addition to these dividends paid to the farmers and producers above referred to 2 per cent upon the total value of dairy and poultry products sold by them to this company.

MUTUAL CREAMERY COMPANY.
W. F. JENSEN, President.
M. W. ELLIS, Manager. —Adv.

Ups and Downs of a Bunch Grass Boy

(Continued from page twenty-four.)

Once we crossed a great, high bridge. Looking down, as if from the clouds, I beheld what seemed to be thousands of wheelbarrows. Just why all those wheelbarrows were there I did not know to this day. Somewhere on the road, in Wyoming or Montana, likely, big Indian women with straight, black hair, red handkerchiefs, and large rings in their ears, came on the train with big platters of broiled meat, elk steak, I think. The Indina women were selling large, juicy elk steaks at a few cents each. Father hesitated; then, in response to my wild entreaty, felt in his pocket for a coin. Mother caught his arm and resolutely told him not to buy—we could not afford it. She had her way, and the Indian woman with rings in her ears and checks dyed red passed on down the aisle and sold her steaks to somebody else.

After the first few days of the journey across the plains I must have slept a good deal, for there is little of it that I can recall. It was only the very unusual that gripped my imagination and started a string of questions that I recall. Such a thing happened when we had traveled for many days. Looking out of the window, I beheld what I believed to be immense, blue clouds lying in conical masses on the distant skyline. Instantly I was all excitement. I believed that the train was about to plunge into these masses of blue clouds.

They were not clouds, said mother. They were mountains. What made me think they were clouds, anyway? They looked like clouds I declared; if one stepped on a mountain, would he fall in? Surely he would, for they looked so soft and blue.

But mother said that they were mountains, not clouds, and were not soft. They were the Blue mountains, and we were getting close to Walla Walla. I insisted that the Blue mountains were soft, like clouds. I reminded mother that she had often told me how a man named Rip Van Winkle had walked into a mountain with his dog and gun and had met some people there who put him to sleep, and he didn't wake up for years and years and years. These were the same kind of mountains; and if I stepped on one I would go in out of sight, and thre would be some people there to catch me and put me to sleep.

Mother nearly retreated under the volley of my curiosity. It was the legend of Rip Van Winkle which she had told me oftentimes when I had begged for a story. In my mind, the soft, blue mountains, Rip Van Winkle, his dog and gun and the goblins were associated together; so I mistook the Blue mountains of southeastern Washington for the Catskills in which Rip Van Winkle lost his way once upon a time and slept for two decades.

The train puffed into Walla Walla by and by, and it was well it did, for our big lunch basket was empty. So was I. We went down the street of the then small town of Walla Walla, and came to a restaurant presently into which my parents marched me and seated me at a table. Father told the man to bring me a bowl of bread and milk. This was done, and for the bread and milk father paid the man 25 cents. I did not know till years afterward that it was the last 25 cents he had in the world; so if I had had elk steak in Wyoming I would have gone hungry—as did my parents—in Walla Walla.

We lived in the Walla Walla valley for several years; in the very shadow of the beautiful Blue mountains; but to me the romance of the mountains became no less. To me they were a row of giants' castles, each castle inhabited by giants and ogres of the most ogrish kind. I supposed, too, that "the old bad man" lived away down under the mountains and tended his fires, so that he could singe little boys who chanced to fall into his clutches. One night there was a fire in the mountain timber. The pine smoke rolled down into the valley, and I could see the flames in the mountains. I raced from window to window, sure that the old bad man had broken out of the mountains and was kindling his fires to consume bad little boys. I would accept no other explanation, and that night slept with my head under the cover, in mortal terror lest I should awaken and find the old bad man poking at me with his fork to bear me away to the fires he had kindled on the blue mountain tops.

NEXT WEEK THE BUNCHGRASS BOY TELLS OF HIS FRIENDSHIP WITH MR. GILLIAM, A DIGNIFIED, WHITE-BEARDED, FINE-EYED OLD GENTLEMAN—A PIONEER OF THE WALLA WALLA VALLEY, AND HOW HE USED TO TELL HIM STORIES—STORIES OF THE IMMENSE, COCK-AND-BULL KIND, WHICH, UPON THE SLIGHTEST PROVOCATION, HE WHOLESALED FROM THE DIAMETER, CIRCUMFERENCE AND DEPTH OF HIS SEVEN-YEAR-OLD IMAGINATION. THE BUNCHGRASS BOY TELLS HOW HE WAS CURED OF THE "WHOPPER" BUSINESS, AND HOW THEREAFTER HE "WOULD MAKE NO STATEMENT OF ANY KIND, WHETHER CONCERNED WITH WHALES, RABBITS, WHITE OR SOOTY WINGED ANGELS, TILL I HAD ASCERTAINED BEYOND ALL REASONABLE DOUBT THAT I WAS SPEAKING STRICTLY WITHIN THE UNINTERESTING CONFINES OF TRUTH."

Sidelights

Her Turn.

Smith got married. The evening of his first pay day he gave his bride $14 of the $15 salary and kept $1 for himself.

But the second day Smith gave his bride $1 and kept $14 himself.

"Why, John," she cried in injured tones, "how on earth do you think I can manage for a whole week on a paltry $1?"

"Darned if I know," he answered. "I had a rotten time myself last week. It's your turn now."—Topeka State Journal.

He Proved It.

A staff officer, noted for his jovial habits, determined to try the rare experiment of abstaining from spirituous liquors for a season. Late in the evening of the day when he started he met the staff surgeon, who was a theoretical temperance man.

"Doctor," said he, "haven't I heard you say that by abstinence from stimulating drinks a man's days would be prolonged?"

"Tehere's no doubt of it."

"That is my opinion," said our colonel, with a lonesome yawn. "I resolved to drink nothing today and it has been the longest day of my life."

Whose Uncle?

A man learned of the death of an uncle in a distant state and employed an attorney to get for him his share of the estate. After much delay the lawyer sent for his client and said:

"I have collected your share of your uncle's property, and here is a statement of our account."

The account rendered showed many items of expenses, such as "taking depositions," "notary's fees," "court costs," "traveling expenses," etc., a considerable charge in favor of the attorney for his services and only a small balance for the nephew.

After examining and pondering over the statement for quite a while the client looked up and said to the lawyer: "Was that your uncle or mine that died?"—West's Docket.

A Feathered Hat.

With a wild sweep the wind tore around a corner and removed the hat from the head of a respectable and near-sighted citizen who chanced to be passing.

Peering wildly around the man thought he saw his hat in a yard behind a high fence. Hastily climbing over he started to chase it, but each time he thought he had caught it it got yet another move on. Then a woman's angry voice broke on his ears.

"What are you doing there?" she demanded, shrilly.

He explained mildly that he was only trying to retrieve his hat. Whereupon the woman said, in wonder:

"Your hat? I don't know where it is, but that's our little black hen you're chasing."

Do You Know That

When you look back on your life it won't be the dollars you have made but the living you have enjoyed that will seem to have been worth while?

Want Ads

HELP WANTED—MALE 3

OUTSIDE SITUATION.
Good salary can be earned selling our complete line high class nursery stock. Cash advanced. Write for terms.

ALBANY NURSERIES, ALBANY, ORE.

HAWTHORNE AUTO SCHOOL,
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used
Everything practical and up to date

SITUATION WANTED—MALE 21

CAPABLE, ACTIVE MAN DESIRES POSITION with progressive poultry man. L. S. Nevius, Sylvan, Wash.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free.
BEHNKE-WALKER BUSINESS COLLEGE,
167 FOURTH ST., PORTLAND, ORE

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER:

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 75c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

SASH AND DOORS.

Order your sash and doors direct from O. B. WILLIAMS CO. We sell for less because we own our own mill. Large stock. Prompt shipment and safe delivery to destination guaranteed. Our big illustrated Catalog No. 27 mailed free, postpaid, on receipt of request. We do not handle rough lumber.

5 cross panel doors, No. 1	$1.31
3-ply veneer, 1 panel doors	2.00
Front glass doors, 2 ft. 8 in. by 6 ft. 8 in.	3.00
Kitchen glass door, 4 lights	2.25
Bungalow sash, as low as	.56
3x6, hot bed sash	2 25
20x25, medicine cabinet doors	2.25
Panel cupboard doors	.85
1-ply Gold Seal roofing	1.35

We carry a full line of building material, including frames, inside finish, builders' hardware, paint, etc.

O. B. WILLIAMS CO.
1943 1st AVE. SO. SEATTLE, WN

TRACTOR BARGAINS.

Practically good as new:
1-8-16 I. H. C. Mogul.
1-12-18 Leader.
1-15-30 Gas Pull.
Also PORTABLE SAWMILLS, BOILERS, THRESHING MACHINES, GAS ENGINES.
Write us what you want to buy, sell or trade second hand.
AGENCY FOR
Samson, Wallis & Track-Layers Tractors
WESTERN FARQUAR MACHINERY COMPANY.
308 EAST SALMON ST., PORTLAND, ORE.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 81c, roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS—WANTED 63

COMB AND STRAINED HONEY WANTED. Write us what you have to offer. We also buy cream, eggs, live poultry, veal and hogs. Write for prices and shipping tags. Checks mailed promptly. Commercial Creamery Co., Spokane, Wash.

—CREAM WANTED—
We pay cash for cream, poultry, eggs, veal, hogs and hides. Write for prices and shipping tags. Commercial Creamery Co., Spokane, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer, and The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

HOGANIZED S. C. I. REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels, $5 each. These birds are all sons of a magnificent male, from a 271-egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs, $6 in 100 lots; settings, $1.50, $3, $5. Mrs. H. V. Rominger, Underwood, Wash.

79,637 EGGS IN 1916 FROM MY FLOCK of 450 S. C. Black Minorcas, prize winners in the showroom and laying contest; eggs from my Hoganized and trap-nested breeding stock at $2 per 15, $3.50 per 30, $5 per 50, $8 per 100, $70 per 1000. No baby chicks or stock for sale. John Dollenbacher, R. 1, Selah, Wash.

BABY CHIX.
White Leghorns, the kind that are real dividend payers, bred for 16 years for eggs, size, VIGOR, VIM and VITALITY. $10 per 100, from the oldest established hatcher in the state. Delivery in good condition guaranteed. Lakeside Poultry Farm, Roy, Wn.

QUEEN QUALITY WHITE LEGHORN chicks: Feb., $12 per 100; Mar., $11; April, $10; May, $9; June, $8. Queen incubators, 70 to 2000 egg capacity; 1200-chick brooder stove, $18.50.
WE DO CUSTOM HATCHING. QUEEN HATCHERY, 89 Pike st., Seattle.

ORDER YOUR BABY CHICKS NOW FROM heavy laying strain; delivery guaranteed; our chicks please; R. I. Reds, March, $15 100; after Mar. $12. White Leghorns, March, $12 100; after March, $10. Maplebrook Poultry farm, Southworth, Wash., Box 3.

S. C. R. I. REDS, BEST WESTERN prize winning stock, crossed with my own trap-nested birds; eggs, $1.50 for 15; $7 100; baby chicks for May delivery, $8.50 for 50; $16 per 100; safe delivery guaranteed. F. H. Volland, Kennewick, Wash.

PACIFIC COAST CHAMPION BARRED ROCKS.
World's biggest winners at San Francisco and other large northwest shows. Write for catalog. M. J. Myers, 1594 Division St., Portland, Ore.

MY R. C. R. I. REDS HAVE WON EVERY first and second, except one, competed for in the past 3 years. Have mated 4 pens for the egg trade. Guaranteed satisfaction. Mating list on application. G. W. Baker, Colfax, Wash.

FAMOUS CARNATION WHITE LEGHORNS. Baby chicks; high-grade utility stock; birds of merit, quick maturing; heavy winter layers; free range. Breeding stock. Ernest Raush, Carnation Poultry Farm, Kent, Wn.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please $12—100. Free catalog. Freshlaid Farm, Colfax, Wash.

WHITE BUFF AND BLUE ORPINGTONS, single and rose comb Anconas, the great winter layers, winners at leading Coast shows; eggs $1.50 to $3.00 for 15; chicks 20c each. Ira N. DeLine, Box D, Olympia, Wash.

$1.50 FOR 15. $2.50 FOR 30. PREPAID anywhere in Wash., Ore., Idaho or Mont. R. P. Rock eggs, for hatching, from first-class farm-raised utility stock. Ira H. Trimble, Palouse, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

WHITE WYANDOTTES, BUFF ROCKS and Rouen ducks; prize winning stock; good layers; eggs $2 per 15, some breeders $3 to $5. P. H. Tomlinson, College Place, Wash.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

EGGS FROM TANCRED S. C. W. LEGhorn hens, $1.25 per 15, $6 per 100, prepaid. J. W. Hirons, R. 2, B. 55, Scio, Ore.

BRONZE TURKEY TOMS, $5, $7, $10; FEW young hen turkeys. E. T. Cutler, Parker, Wash.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

POULTRY 174 Continued.

BARRED PLYMOUTH ROCKS, PRIZE winners at shows. Near front in N. W. laying contest. Eggs $1.50. Folder free. Wm. H. Heimsoth, Baker, Ore.

R. C. BUFF WYANDOTTE EGGS, FOR hatching, $1.50 and $1 per 15. Mrs. W. E. Boner, Joseph, Ore.

FOR SALE — CHINESE PHEASANTS' eggs, $3 per dozen. Dr. F. M. Cole, Caldwell, Idaho.

PRIZE-WINNING BUFF ORPINGTONS—Settings $2 to $10. Lucy R. Scudder, Box 36F, North Yakima, Wash.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

LIVE STOCK 177

JACKS AND JENNETS FOR SALE.
$500 to $600 buys an elegent jack. The jennets are priced at ⅓ their value; the jacks at approximately the same. They are the largest and best herd in the United States to select from. Eastern Oregon Jack Farm, Lexington, Ore. B. F. Swaggart, Prop.

GARFIELD JOHANNA FAYNE, REG. Holstein bull, for sale; sire Sir Johanna Fayne Douglas. Mathis, Winchester, Wn.

JOB PRINTING 372

BUTTER WRAPPERS BY PREPAID PARCEL POST, printed in waterproof ink, on vegetable parchment, 8x11, $3.00 per 1000; 9x12, $3.25 per 1000; cash with order; for third and fourth zones add 10c. Allen Printery, Spokane, Wash.

RUBBER STAMPS and SEALS 384

RUBBER STAMPS, SEALS, STENCILS, daters, inks and pads. Mail orders promptly attended to. Nampa Stamp Works, H. L. Nickels & Co., Nampa, Idaho.

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

FURRIERS 429

WM. N. M'CARTY, WHOLESALE AND retail dealer in hides, pelts, wool and furs; always in market at top prices. Wire or write for prices. P. O. Box 135. Phone 308. Pocatello, Idaho.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.
In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.
If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.
It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS.
VETCH OR "TARES,"
A Great Forage or Seed Crop.
RED CLOVER, ALSYKE.
"THREE GRAIN OATS," Wonderful Yielder.
GRAY WINTER OATS.
COMPLETE LINE OF FARM SEEDS.

We will be glad to communicate with you on any of your requirements, send samples and quote prices. We have the largest and best cleaning facilities in the Willamette valley. Let us hear from you on small or large lots.

CORVALLIS FLOURING MILLS.

Corvallis, Oregon.
Home of the Famous Oregon Agricultural College.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flour seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, Ore.

BLACK SEED OATS—"VICTOR"; AWARDed gold medal at San Francisco; richest oat on earth. Sample, prices free. Otis Ray Daugherty, Molalla, Ore.

SUDAN GRASS SEED,
40 cents pound.
J. E. JENKS & SON,
TANGENT, ORE.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEEDS 620 Continued.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

FARM SEEDS, COMPLETE STOCK OF red and alsike clover, timothy, vetch grass seeds, seed grain, garden seeds. Send for free catalogue.
D. A. WHITE & SONS, Seedsmen,
SALEM, Ore.

TESTED SEEDS—CHOICE CLOVER, TIMothy, corn, grain, grass and garden seeds, for spring planting. Mail orders a specialty. Prompt shipment. Send for catalogue. Murphy's Seed Store, Albany, Ore.

ALFALFA SEED, RED CLOVER, SWEET clover; Early Ohio; Idaho Rural; Peachblow seed potatoes; Dicklow spring wheat—the big crop producer; blue barley. Jerome M. & E. Co., Jerome, Idaho.

ALFALFA, RED CLOVER, ALSYKE CLOver, white clover, sweet clover, timothy and other grasses; seed oats and wheat; at reasonable prices. Voegeler Seed Co., Salt Lake City, Utah.

FOR SALE—RED AND ALSYKE CLOVER; special low prices. Write for sample. A. B. Hinz, Jefferson, Ore.

NURSERY STOCK 621

"WE WANT YOU" TO REPRESENT US in your locality in the sale of our pedigreed, Idaho-grown nursery stock; large profits; easy work. Write us, asking for our selling proposition. Kimberly Nursery Co., Kimberly, Idaho.

EVERBEARING STRAWBERRY PLANTS. Montana grown, extra hardy and true to name. "Superb" and "Progressive" varieties. $2.50 per 100. $20 per 1000, postpaid. W. A. Thayer, Bearmouth, Mont.

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. L. Moffet, Ellensburg, Wash.

FARM LANDS—FOR SALE 651

—PALOUSE FARM—

320 acres, 4 miles from a good Palouse town, all under cultivation, except five acres; 150 acres in fall wheat; 80 for spring seeding; 1-3 of all crop to purchaser, or can get possession; has comfortable 6-room house; fair barn and outbuildings, with fine water. The land lies extra good, and is the very best quality. A bargain at $25,000, one-half cash, balance to suit at 6 per cent. See Mr. Tipton.

HEGE & WATKINS CO.
715-716-717 PAULSEN BLDG.

CHOICE TRACTS IN SPOKANE VALLEY.
400 acres best land in valley, in tracts of 5 acres up to 240; 12 to 25 miles from Spokane, on 3 rys. and interurban electric line. Every modern facility, including good schools, electric lights and domestic water systems. Every acre irrigated. Some tracts improved, and all under cultivation. Will sell any or all at a bargain, on terms to suit purchaser, or will exchange part of holdings for Minneapolis and Chicago property. For particulars write G. SEATON, W1311 6th ave., Spokane, Wash.

COME AND MAKE
YOUR HOME ON PUGET SOUND.

The Bellingham Real Estate association invites you to come and make your home in northwest Washington on Puget Sound. We welcome correspondence from you and will answer any inquiries concerning the farm described below, situated in Whatcom Co.

$25,000—160 acres; 115 acres under plow, rest easily cleared; all level, rich bottom land, all well ditched and drained; good road; fair buildings; near school; spring water piped to house and barn; 10 head of stock; good farm community.

Address all communications to Sec'y
BELLINGHAM REAL ESTATE ASS'N.
DOCK ST., BELLINGHAM, WASH.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

FOR SALE—FIVE SECTIONS IN GOOD farming district in Montana, now 22 miles from railroad; dark loam soil; 60 per cent tillable; price $5.50 per acre; terms, $3 per acre down, balance long time at 6 per cent per annum. This price holds for short time only. H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

FIVE DOLLARS SAVED
is an acre of ground. Get prices, terms and location of AGRICULTURAL LANDS near Tacoma.
JESSE O. THOMAS JR.
320 TACOMA BLDG., TACOMA, WASH.

FARM LANDS—FOR SALE 651 Continued.

RICH, LEVEL FARM LAND, IN Thurston county, Wash., near Seattle, Tacoma and big government army post location; twelve passenger trains stop every day at station right on ground; rich soil, raises wonderful prize-winning crops; tract just opened up and settling rapidly; new town already started; delightful, mild climate; splendid marketing facilities; good neighbors; excellent opportunities. Write for free illustrated folder, just issued.

A. H. REID & CO.
315 NEW YORK BLOCK,
SEATTLE, WASH.

6 MILES FROM CORNING, ON GOOD county road, surrounded by prosperous grain and stock farms, I offer 160 acres of level and clear land, suitable for alfalfa, grain or fruit trees. Land has been cropped to grain for several years. No rocks, stumps, or trees to be removed. Will sell in 40-acre or 80-acre parcels, or as a whole. A good piece of land in a good location. Price $50 per acre. Land is clear of debt of any kind, and reasonable terms can be had. No trade deals considered. Write for map and details. Refer to No. 8.
W. N. WOODSON, owner, CORNING, CAL.

218-ACRE GENERAL FARM, HALF MILE from Palouse, Wash., 190 acres in cultivation; south line only a few rods from city limits; complete set of farm buildings; water from deep well, springs, Palouse river. Price $17,000; $78 per acre; half cash; terms to suit purchaser on balance. Now leased at cash rental, subject to sale. After April 1 lessee entitled to 1917 crops. Purchaser can have rental money.
INTERSTATE LAND COMPANY.
GEO. N. LAMPHERE SR.
PALOUSE, WASH.

MONTANA LAND.
We have for sale on 10-year terms, at 6 per cent, 29,000 acres fine wheat land in Dawson and Rosebud counties, Montana, at from $8 to $22 per acre, and over 75,000 acres fine grazing and farm lands at from $4.50 to $6.50 per acre, on ten-year terms. A large number of our settlers are from Walla Walla and Palouse sections.
MONTANA WHOLESALE LAND CO.
MILES CITY, MONTANA.

440 ACRES, ELEVEN THOUSAND DOLlars, $2000 cash, balance all time you want; good improvements; 100 acres meadow; Cheney district.
A section, all in cultivation, $35 per acre, only $4000, balance one-third crop; good wheat land. J. S. Langlois, Ritzville, Wash.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2d and Cherry st., Seattle, Wash.

ON CROP PAYMENT.
N. E. ¼ 6-15-30, near Othello, Wash., all in cultivation; no waste land; no buildings; produced $3000 worth of wheat last year. Price $3000, on crop payments.
The Washington Trust Co., Spokane.

WE OFFER YOU SELECTION FROM 15,000 acres of choice wheat land in the Musselshell valley on easy terms; big movement on for such lands; the time to buy is now. For particulars write King Land & Loan Co., Harlowton, Montana.

I HAVE THREE GOOD WHEAT AND STOCK RANCHES FOR SALE, $35 TO $45 PER ACRE; TERMS. WRITE ME.
C. W. BETHEL,
HARRINGTON, WN.

ALFALFA LAND.
140 a.; 60 a. tillable; 40 a. in cultivation; 30 a. in alfalfa. This is an extra good dairy ranch; 3 miles from good R. R. town. Price $8500. Box 222, Leavenworth, Washington.

FOR SALE—ONE OF THE BEST FARMS in the Moison country; good buildings; water; some timber; near town. For price and terms address Box 10, Moison, Wash.

160-A. RELINQUISHMENT; LEVEL VALley land; improvements; 10 feet to water; irrigation well and plant; 320 a. adjoining open under new homestead law. Box 332, Winnemucca, Nevada.

FARM LANDS OBTAINED THROUGH foreclosure of mortgage offered at rare bargains and on easy terms. Send for list. Pennsylvania Mortgage Investment company, Spokane, Washington.

FOR SALE—BY OWNER, TWO WELLimproved half sections, close to school, town and postoffice, in Alberta, Canada. F. L. Geis, Daysland, Alberta, Can.

IF YOU WANT LAND IN MONTANA, write to H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

IRRIGATED LANDS—For Sale 663

FOR SALE—720 ACRES, WELL EQUIPPED; artesian wells; alfalfa, orchards, berries, grapes; 3 sets buildings, with baths and gas; locust grove; school; railroad terminates on farm; adapted to dairy or purebred live stock; also 1500 acres leased land; have seed, feed and equipment; part in crop; would put in all the crop desired; 8 miles from Lewiston on paved road; ideal climate; no finer farm anywhere; will sell all or divide. Daniels & Wallace, Lewiston, Idaho.

320 ACRES IRRIGATED LAND IN MOSES Lake country, adjoining C. & O. nursery, $60 per acre; especially adapted to orchard or alfalfa raising; unlimited water at 40 feet. No money down if purchaser will improve property and pay in 10 equal instalments, commencing one year from date of sale, with 6 per cent interest.
A. R. MEAD, ODESSA, WASH.

OPPORTUNITY IMPROVED IDAHO IRRIgated ranch; 80 acres alfalfa, potatoes; ranch is yours at $2500, bal. long time at 6 per cent; last year's income $3000; must sacrifice. Write owner for particulars. Geo. Nasse, 245 E. Rochelle st., Cincinnati, Ohio.

ACRE TRACTS—FOR SALE 669

10 ACRES FERTILE LAND; NEW 3-ROOM cottage; 5 acres cleared; orchard; near school; about 16 miles southwest of Seattle. Price $1750. Pinney & Street, 726 Third, Seattle.

Grain and Produce Markets

Chicago Grain.

CHICAGO, March 31.—Wheat prices averaged higher today, largely as a result of the failure of expected rains, especially in Nebraska. The market closed unsettled at $1.95@1.95¼ for May and $1.64¼@1.64½ for July, with the market as a whole ⅞c off to 1c advance compared with yesterday's finish. Corn gained ¼@⅝c, oats closed ⅛c down to ½c, and provisions at losses of from 2½c to 40c.

Uneasiness regarding the long-continued lack of moisture throughout important sections of the winter crop belt dominated the wheat trade during the earlier trading, and was offset only in part as the session approached the close. In addition to drouth fears the tightening of the crisis between Germany and the United States encouraged sentiment for higher prices. Subsequently, however, the Oklahoma crop made a surprising exhibit, showing an improvement of 5 points during March, and this development counted as a factor in lowering values.

Price rallies which took place in the wheat market at the last were due chiefly to week end adjustment of trades.

Corn showed stubborn resistance to selling pressure. Talk of $13 hogs before fall did much to uphold advances. Brisk demand from the east and south gave independent firmness to oats. There was persistent buying of May by strong commission houses.

Provisions swayed in line with the hog market. An early advance was was followed by setbacks due to free selling on the part of houses that of late had been purchasing freely. The bulk of the trade was in lard.

Cash Quotations.

CHICAGO, March 31.—Wheat—No. 2 red, nominal; No. 3 red, $2.03@2.05¼; No. 2 hard, $2.04½@2.04¾; No. 3 hard, nominal.

Corn—No. 2 yellow, $1.22½@1.23; No. 3 yellow, $1.21½@1.22½; No. 4 yellow, $1.20½.

Oats—No. 3 white, 64½@64¾c; standard, 65 @66½c.

Rye—No. 2 nominal; No. 3, $1.64.

Barley, $1.18@1.36.

Timothy, $4@5.75; clover, $12@18.

Pork, $34.62; lard, $20.12@20.22; ribs, $18@18.45.

Chicago Futures.

	Open.	High.	Low.	Close.
Wheat—				
May	1.95⅝	1.97	1.93	1.95
July	1.63½	1.65	1.62¾	1.64¼
Corn—				
May	1.18¼	1.19	1.18⅛	1.18⅝
July	1.17	1.17⅝	1.16¾	1.17
Oats—				
May	.62	.62½	.62	.62⅜
July	.58⅝	.59	.58½	.58⅞
Pork—				
May	....	34.62	34.60	34.62
July	....	33.90	33.60	33.60
Lard—				
May	20.20	20.22	20.02	20.12
July	20.35	20.40	20.15	20.27
Ribs—				
May	18.40	18.40	18.30	18.32
July	18.57	18.57	18.47	18.50

Pacific Northwest Grain.

PORTLAND, Ore., March 31.—April delivery—Wheat, bluestem, $1.74; fortyfold, $1.68; club, $1.66; red Russian, $1.65; oats No. 1 white feed, $39.75; barley, No. 1 feed, $40.

Future—May bluestem, $1.75; May fortyfold, $1.70; May club, $1.67; May Russian, $1.65; May oats, $40.35; May barley, $40.

TACOMA, March 31.—Wheat—Bluestem, $1.74; fortyfold, $1.71; club and fife, $1.69; red Russian, $1.65.

SEATTLE, March 31.—Wheat—Bluestem, $1.74; turkey red, $1.75; fortyfold $1.69; club, $1.68; fife, $1.63; red Russian $1.66.

Barley, $40 per ton.

WALLA WALLA, Wash., March 31.—Club wheat, $1.56; bluestem, $1.62. Barley, $40.

Portland Market.

PORTLAND, Ore., March 31.—Eggs are going into storage this week at 28 cents against a 22-cent market last year, and an average of 17 1-2 cents before the war. This would indicate a record market for eggs in the fall and winter when the stock comes out. The lay is good but the big receipts are readily absorbed by local and Seattle operators.

Butter is very scarce with cube extras selling up to 40 cents and creamery prints holding at 42 cents in cartons. Cheese is also scarce, but manufacturers hesitate to advance the price, as buying on the Coast for home consumption has been checked by the high cost.

Poultry receipts were unusually small in the last week and hens advanced to record price. There are fair arrivals of dressed meats, but they sell well at high prices.

The potato market is firm with 3 cents freely offered by carlot shippers, but farmers now have little to sell. First hand stocks in this state are estimated at only about 75 carloads.

The only wool buying during the last week was in the Yakima section, where local dealers purchased all that was available, paying up to 40 cents for medium. Eastern Oregon growers still refuse to contract, except at prices that buyers will not consider. The rains have stopped goat shearing at all points in the valley.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $40@41 per ton.

Corn—Whole, $54; cracked, $55 per ton.

Millstuffs—Bran, $31 per ton; shorts, $35.

Barley—No. 1 feed, $40; brewing, nominal; rolled, $43@44.

Hay—Buying prices, Timothy, eastern Oregon; $20@22; alfalfa; 17@20; grain, $12.50@14.

Eggs—Oregon ranch, case count, 27 1-2@28c per dozen; candled, 29c.

Poultry—Hens, 20@21c; ducks, 22@23c; turkeys, live, 20@22c; dressed, 23@28c; geese, 12@14c.

Butter—City creamery, prints, 42@43c per pound; cubes, 39 1-2@40c.

Cheese—Oregon triplets, 23c; Young Americas, 24c.

Dressed meats—Veal, 14@14 1-2c; pork, 18@18 1-2c.

Hops—1916 crop, 3@7c per pound.

Potatoes—Oregon, jobbing price, $3@3.50.

Onions—Jobbing prices: No. 1, $10; No. 2, $5@8 per sack.

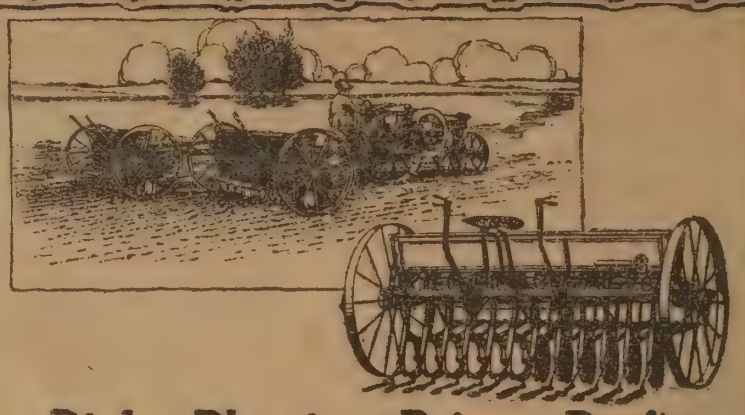
Wool—Eastern Oregon, fine, 30@35c; coarse, 40c; valley, 40c.

Beans—Oregon small white, 10c; California small white, 13c; large white, 12 1-2c per pound.

Hides—Salted hides (25 lbs. and up), 18c; salted stags (50 lbs. and up), 14c; green and salted kip (15 lbs. to 25 lbs.), 13c; green and salted calfskins (up to 15 lbs.), 27@28c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 13c; dry hides, 30c; dry salt hides, 25c; dry horse hides, $1 and $2; salt horse hides, $3 to $5.

Wool Deals Total $60,000.

NORTH YAKIMA, Wash., March 30.—Three wool deals closed yesterday and today bring $60,000 to growers in the Yakima valley. Prior & Sons, Olney Brothers and Coffin Brothers sold 170,000 pounds to Isador Koshland, Portland, and Joseph Farquhar, Boston, the former taking the bulk of the purchases.



Right Planting Brings Profit

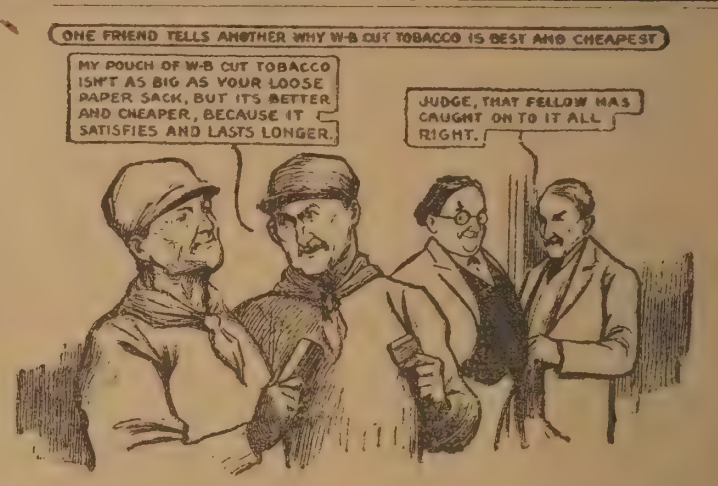
IF you are growing small grains for fun and not for the most profit, plant your seed any old way. But if you want every dollar of profit you can get, plant your seed right. Use an **Empire Jr., Hoosier,** or **Kentucky drill.** Right planting is more important than many farmers think. It often means profit where the other fellow has to take a loss.

The local dealer who handles these drills carries the drill best suited to your work. With his advice you can choose a drill that will plant your seed in your soil and plant it so that you have a much better chance of getting a bumper crop than if you planted in some other way.

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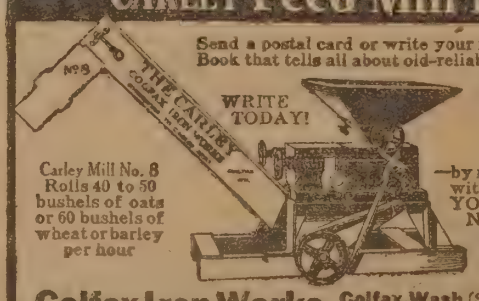


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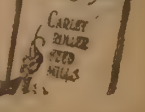


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Seattle Market.

SEATTLE, March 31.—The weekend brings a stronger feeling in the spud market, based on a better movement, increasing tendency of speculators to hold on and a few more inquiries from the east which do not show a willingness, however, to pay any higher prices than what now prevails, or $60@70 f. o. b. Yakima and a similar price for Puget Sound stock at Seattle. Four carloads were sold at Yakima yesterday at $60, and if this is indicative of the feeling among holders there the market has not advanced, but only strengthened.

Little new butter has appeared this week, but on the contrary city manufacturers have been selling to country creameries for the first time in the history of Western avenue. The condensaries have cut down their allotment for this market. California holders have advanced quotations to 40c f. o. b., while at the same time advising buyers here that they are able to fill only 50 per cent of the orders. New York is taking all the southern butter that it can get and is bidding up strong. The situation today is more tense than it has been for many years.

Eggs are very firm. Jobbers have become reconciled to the fact that eggs into storage will cost them 8@10c higher than normal, and must therefore sell at 45c retail next fall and winter. All offerings for the week have gone into consumption as fast as received, and only a few cases have been stored.

Cheese is firm at 25c for Oregon and Washington triplets.

BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 27 1-2@28c per dozen.

Poultry—Live hens, fat, over 4 lbs., 20c per lb.; do 3 lbs. and under, 19c; old roosters, 12c per lb.; springs, 21c; ducks, 20c per lb.; squabs, large, $3.50 per dozen; geese, fat, 16c per lb.

Butter fat—46c per lb.; dairy butter, 29c per lb.

Beef — Buying price: Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c per lb.

Hogs—Light, 14@15 1-2c per lb.; do heavy, 10@12c per lb.

Veal—Fancy light, 13@14c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 32c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 36c per lb.; dry calf (under 6 lbs.), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry butcher full wool sheep pelts, 25@28c per lb.

SELLING PRICES.

City Prices—Team Lots.

Apples—Winesaps, $1.50@2.50 a box; cooking, 85c@$1.25 a box; Newtowns, $1.25@2.25 a box.

Feed—Scratch feed, $55@56 per ton; all grain chop, $46@47 per ton; oats, $42 per ton; rolled oats, $43 per ton; rolled barley, $46@47 per ton; wheat, $61@62 per ton; bran, $32@33 per ton; shorts, $35@36 per ton; alfalfa meal, $24 per ton; whole corn, $53 per ton; cracked corn, $54 per ton.

Hay—Eastern Washington timothy, $23@25 per ton; alfalfa, $25@26 per ton; double compressed, $30 per ton; straw, $12 per ton; wheat hay, $20@21 per ton; Puget sound, $20@21 per ton.

Onions—Oregon, 7 1-2c per lb.

Potatoes—Local, $65 per ton; Yakima Gems, $70 per ton.

Rutabagas—Yakimas, $2.50 sack.

Butter—Washington creamery extras, cubes, 42c per lb.; do bricks, 43c per lb.; creamery firsts, cubes, 41c per lb.; do bricks, 42c per lb.

Eggs—Fresh ranch, 30c.

Seattle Wheat.

SEATTLE, Wash., March 31.—The sale of one lot of wheat for eastern account by Puget sound millers this week at $1.72 eastern Washington shipping points was the most notable transaction of the last 10 days as indicative of the Washington market. The margin between buyers and sellers has narrowed and it is reported to be much easier to secure a parcel of grain now that seeding time has come on. Farmers who have grain are apparently more willing to let go, notwithstanding the firm situation elsewhere.

Country bids have been at a maximum of $1.68 for bluestem and turkey red and 3@5c under for club and fife. Millers have been on the market, but are not pushing farmers to sell, due to the dull future outlook at the milling end. More grain has been bought by some of the leading milling houses on Puget sound this week than at any similar period in the last 90 days.

Wool.

BOSTON, March 30.—The Commercial Bulletin will say tomorrow:

"Transfers of wool have been neither numerous nor large, according to trade reports this week. Prices, however, were firm with no disposition to shade values.

"Manufacturers report nothing new of moment, and reports from the west indicate very few contracts placed during the last week, owing to the present asking prices on the part of growers."

Scoured basis:

Texas fine, 12 months, $1.20@1.25; fine eight months, $1.05@1.10.

California northern, $1.15@1.20; middle county, $1.05@1.10; southern, 80@85c.

Oregon—Eastern No. 1 staples, $1.25@1.30; eastern clothing, $1.10@1.15; valley No. 1, 95c@$1.

Territory—Fine staple, $1.30@1.31; half-blood combing, $1.20@1.25; three-eighths blood combing, $1@1.05; fine clothing, $1.15@1.20; fine medium clothing, $1.10.

Pulled—Extra, $1.10@1.15; fine A, $1@1.05; AA, $1.05@1.10; A supers, $1@1.05.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., March 31.—Hogs—Receipts, 8100; steady. Heavy, $14.80@15.05; light, $14.35@14.85; pigs, $12.50@14.25; bulk of sales, $14.60@15.

Cattle—Receipts, 200; steady. Native steers, $9@12.50; cows and heifers, $7.50@10.50; western steers, $8@11; Texas steers, $7@9; stockers and feeders, $6.75@10.25.

Sheep—Receipts, 500; steady. Yearlings, $11.50@13.50; wethers, $10.50@12.50; lambs, $14@15.25.

At St. Paul.

SOUTH ST. PAUL, Minn., March 31.—Hogs—Receipts, 450; steady; range, $14@15; bulk, $14.7514.85.

Cattle—Receipts, 170. Killers steady. Steers, $5.50@11.50; cows and heifers, $6@9; calves steady, $5@12.75; stockers and feeds quiet and lower for week, $4@8.50.

Sheep—Receipts none. Market steady; lambs, $8@14.50; wethers, $6@12; ewes, $5.50@11.25.

At Portland.

PORTLAND, Ore., March 31.—Hogs—Steady; receipts, 264. Bulk of packing grades, $14.25@14.40; heavy packing, 215-250 pounds, $14.35@14.50; light packing, 170-190 pounds, $14.20@14.35; rough heavies, $13@13.50; pigs and skips, $12.75@13; stock hogs, $11.50@12.75.

Cattle—Steady; receipts, 48. Steers, prime light, $9.35@9.65; prime heavy, $9.50@9.75; good, $8.90@9.25; cows, choice, $8@8.25; medium to good, $7@7.75; ordinary to fair, $6.25@6.75; heifers, $6.50@8.50; bulls, $5@7.25; calves, $6@10.

Sheep — Steady: receipts, none. Lambs, east of mountains, $13.25@13.50; lambs, valley, $13@13.25; lambs, shorn, $10.75@12.25; prime wethers, $11.50@12; choice ewes, $10.50@11; heavy ewes, $8.75@9.25.

At Seattle.

SEATTLE, March 31.—No receipts; market strong on all lines.

Hogs—Prime light, $14.65@14.75; medium to choice, $14.50@14.60; smooth heavies, $14@14.25; rough heavies, $13.50@14.75; pigs, under 150 pounds, $10@13.75.

Cattle—Prime steers, $9.75@9.85; medium to choice steers, $6.50@8.50; best cows and heifers, $8.25@8.60; medium to choice cows, $6@8.25; common to good cows, $4@7.50; calves, $6.50@9.50; best bulls, $5.50@6; common bulls, $3.50@6.

Sheep—Prime lambs, $12.50@13.75; good lambs, $12.25@12.50; wethers, $10.25@10.50; ewes, $9.10.

Spokane Stock Yards Saturday.

Hogs—Receipts, 27; market strong. Prime light, packing, $14.50@14.60; prime heavy packing, $14.60@14.75; rough heavy, $13.60@13.75; pigs, $12.60@13.35; stockers, $10@12.

Cattle—Receipts, 22; market steady. Prime heavy steers, $9.50@9.75; prime light steers, $9.25@9.40; good steers, $8.50@9; prime cows, $8@8.50; good cows, $7.25@7.75; common cows, $6.25@7; best heifers, $8.25@8.75; buls, $4@6.50; calves, $7@10; stockers and feeders, $6@7.50.

Sheep—Receipts none; market strong. Prime lambs, $12@12.50; common lambs, $11@11.50; choice yearlings, $10.50@11; good yearlings, $9.50@10; best mutton ewes, $10@15.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $3@3.25 cwt; sweet potatoes, $6.

Seed Potatoes—Early Ohios, 4c lb; Early Rose, 4c lb; white potatoes, 4c lb; Early Six Weeks, 5c lb.

Apples—Washington apples, cooking, 75c@$1; eating, $1@1.25; Wageners, $1 box; Rome Beauties, $1@1.40 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 43c lb; Medo-Maid, 43c lb; Cascade, 43c lb; Gold Coin, 36c lb; Gold Leaf, 43c lb; Better Butter, 43c lb; Hazelwood, 43c lb; Peerless, 39c lb; Jersey Belle, 42c lb; Attalia, 43c lb; Diadem, 43c lb; Jersey, 39c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 22½c; Hazelwood full cream, triplets, 23c lb; Hazelwood Young America, 24c lb; Wisconsin limburger, 28@29c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 25c lb.

Eggs—Fresh local ranch eggs, $9@9.50 case.

Live Poultry—Springs, 18c lb; hens, 18c lb; old roosters, 10c lb; ducks, 13c lb; turkeys, 20@25c lb.

Dressed Poultry—Hens, 21c lb; springers, 20c; old roosters, 13c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs; 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 30 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

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THE Advance-Rumely "8-16" gives a man a chance to take advantage of weather conditions instead of being at their mercy. Whether it is plow quick, or harvest on time—the 8-16 is able and ready to do every farm operation at the time *best suited to bring maximum results.*

In the first place, it is a one-man all purpose outfit. Plowing is made a one-man job because tractor and plows are combined in one machine, and full control is from the driver's seat. With the Advance-Rumely you plow as with a horse gang, the work always in sight. You can back up with your plows, make short turns and cut square corners.

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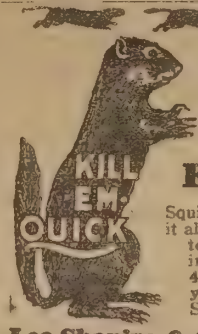
And it burns cheap kerosene with full efficiency—not only at full load but at variable loads or continuous light loads.

The catalog shows in detail the powerful four-cylinder motor and the other features that make the "8-16" a tractor that fits to perfection the small and medium size farm. Just like the famous OILPULL tractor, and Ideal Separator—dependability is "inbuilt."

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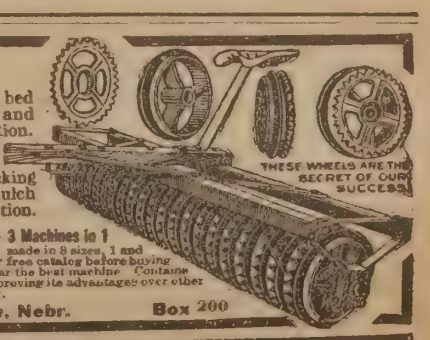
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WHEAT, ALFALFA
and other grains yield more where a perfect seed bed is prepared. The **Western** pulverizes, packs and mulches—makes a perfect seed bed at one operation. Saves seed, time and horse power. Is especially adapted for breaking crust on winter wheat or other grain or in orchards after irrigation or packing rains. It forms the hardest crust into a granular mulch without hurting the grain, and prevents evaporation.



Western Pulverizer, Packer and Mulcher 3 Machines in 1
made in 8 sizes, 1 and 2 sections, prices $20 and up. We want every farmer to have our free catalog before buying a roller or packer. It proves we can save you money and have far the best machine. Contains full description, price direct to you, letters from many farmers proving its advantages over other makes, and much other valuable information. Send for it today.
WESTERN LAND ROLLER CO., Hastings, Nebr. Box 200

J. A. FREEMAN & SON, General Agents
Western Pulverizer, Packer and Mulcher
For *OREGON and WASHINGTON*
315 Belmont St., Portland. Write for Folder.

NEWS FOR BREEDERS

Started With Pure Bred Cows



The last herd bull of William Todd & Sons, North Yakima, and his first five calves in their herd.

Ten years ago a creamery man offered William Todd some purebred cows, and four were purchased on time, Mr. Todd agreeing to apply one-half of the creamery check each month in payment. Although during the first year one of the cows was lost, the three remaining animals in due time paid for the four. The present dairy herd of William Todd & Sons, near North Yakima, except two males, have been raised from the three cows and their increase. They purchased a young calf, Johanna Ruth Fayne, for $100, which animal was later placed at the head of the herd and proved so satisfactory that the bull, now in his 10th year, is still retained and doing service in the herd. Later Sir Korndyke Ormsby Piebe was bought for $1000. The Todds raise all of their own feed and have never gone extensively into the show ring, their exhibits being confined largely to the Washington state fair and the Cascade stock show. They have a goodly number of awards to their credit. They go on the principle that any dairy cow that will net from the pail alone pay for herself, her feed and a fair compensation for care, is not good enough to have a place in his herd, nor will they sell such a cow to any other dairy herd. She must go over the block. Harmonious cooperation between the father and the sons has resulted in a herd of 40 fine cows and heifers, five calves and two herd sires —an enviable record.

Western Berkshire Congress.

F. R. Steel of the Winona ranch, Grants Pass, Ore., president of the Western Berkshire congress, announces that "the one great Berkshire show of the west in 1917 will be the Western Berkshire congress show held at Salem, Ore., in conjunction with the 1917 Oregon state fair," and adds:

"You should begin picking out and fitting your show herd now. Select the one or two most promising March or April boar pigs of this year's farrow with three or four or perhaps five of the best sow pigs of the same age; and push them along on full feed as best you can for the 'under six months' or 'junior pig' classes. One boar and three sows of this age can be entered as an 'under year herd'; and if four of them are by one sire they can enter again as 'get of sire'; and if four are out of one sow they can also be entered as 'produce of dam.' These group and herd entries give an exhibitor a chance for more winnings at no greater transportation, feed or care expense—a more effecient show herd. Just the same thing can be done in the 'under year' class—pigs farrowed after September 1, 1916. This same sort of lineup can be well followed in the older classes, showing one boar—either an aged, senior yearling, or junior yearling; and three sows of one or more of these classes; and then bringing in the four as a senior or 'over age' herd. If bred by the exhibitor all the herds may be again shown as 'herds bred by exhibitor.'"

Of 17 Calves 14 Are Bulls.

J. B. Cornett, the Shorthorn breeder of Shedd, Ore., out of 17 calves born on the place the past winter, has had 14 bulls. They are all by the great Clifton King, for which Mr. Cornett paid $900 three years ago and as they are good, thrifty calves, showing the quality Clifton King is putting into all his offspring, Mr. Cornett is feeling pretty well satisfied.

STATEMENT OF THE OWNERSHIP, management, circulation, etc., required by the act of congress of August 24, 1912, of The Washington Farmer, published weekly at Spokane, Washington, for April 1, 1917.

State of Washington, county of Spokane, ss. Before me, a notary public in and for the state and county aforesaid, personally appeared J. F. Young, who, having been duly sworn according to law, deposes and says that he is the vice president of The Washington Farmer, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the act of August 24, 1912, embodied in seection 443, Postal Laws and Reegulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Publisher, Cowles Publishing company, Spokane, Washington; editor ——; managing editor, Edwin A. Smith, Spokane, Washington; business managers, none.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holdng 1 per cent or more of the total amount of stock.)

W. H. Cowles, Spokane, Washington; J. F. Young, Spokane, Washington; F. J. Whaley, Spokane, Washington; Cowles Publishing Co. (a corporation), Spokane, Washington.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages or other securities are: (If there are none, so state.)

None.

4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association or corporation has any interest, direct or indirect, in the said stock, bonds or other securities than as so stated by him.

COWLES PUBLISHING COMPANY,
By J. F. YOUNG, Vice Pres.

Sworn to and subscribed before me this 27th day of March, 1917.
(Seal) E. J. WHALEY.
(My commission expires Oct. 17, 1919.)

POULTRY

Rhode Island Reds

and Rhode Island Whites—both combs. Eggs $2, $3, $5 per 15. $6 and $8 per 100. Bronze turkey and Toulouse geese eggs. Pedigreed Belgian hares. Selling out. Bred does, $2.
J. Nonnenmacher, R. F. D. 3, North Yakima, Washington.

S. C. WHITE LEGHORNS.
Choice hatching eggs from the direct descendants of O. A. C. laying strain of 225 and 229 egg hens. Guarantee 90 per cent fertility. $1.50 per 15, $9.50 per 100.
A. H. CRAVENS, Monmouth, Ore.

PRIZE WINNING STOCK.
S. C. White and Brown Leghorns and Rhode Island Reds; heavy layers; eggs, $1.50 per 15.
R. H. GREER, Hillsboro, Ore.

WINNERS OF THE BLUE.
Barred Rocks—S. C. Black Minorcas. Write for prices on high-class exhibition and breeding stock. Satisfaction guaranteed.
WILBER CLAYTON, R. F. D. 1, Payette, Ida.

BARRED ROCKS
Both matings. Winners at the late Denver show. Sales, 60 birds. Hatchable eggs in season.
J. H. FIELD, Lander, Wyo.

MAMMOTH BRONZE TURKEY EGGS
from large, big-boned, well marked imported stock.
THOS. BRUNK, Rt. 2, Salem, Ore.

BAILEY'S BARRED ROCKS.
Eggs from my prize winners, $2, $3 and $4 per 15.
E. S. BAILEY, R. D. No. 4, Boise, Idaho.

EGGS FROM SELECT S. C. White Leghorn pens of high average layers. Awards Boise Shows, 1916 and 1917; $1.50 setting 15, $8 per 100. Quality prices. **ARCHIE M. LARSON, R. 3, Weiser, Idaho.**



Last Call for Sale

We want our readers to attend the big combination dispersal sale of

A. J. C. C. Cattle

At Oregon City, April 11, 1917, beginning at 10:30 a. m.

40 Head of Registered Jersey Cattle—Thirty-six females and two herd bulls and two bull calves.

You should not fail to attend this sale as there is Flying Fox, Combination, Melian Ann blood lines in much of this offering.

The great sire Champion Flying Fox and the great sire Holger are the sires of much of the

Champion Flying Fox will be sold as one of the herd bulls..

Julian King, a Gertie Ladd bull, is the other herd bull to be sold.

Do not miss this great sale. The cattle are the property of W. G. E. Smith of Hood River, W. S. Turner of Oregon City, and J. B. Hyde of Portland, Oregon.

If you do not have a catalog write for one to

C. D. Milton, Clerk, 702 Spalding Building, Portland, Ore.
J. W. HUGHES, Auctioneer. T. A. Rhoten, Assistant

Shady Lawn Farm Dispersal Sale

45 registered Jerseys, 45 high grade Jerseys to be sold at auction May 10, 1917, at farm, Fairbanks, Wash., 35 miles south of Spokane, on electric line.

A. G. Woodward, Owner, Fairbanks, Wash.

ENGLISH—WHITE LEGHORNS—AMERICAN

Raise your cockerels for next year from Famous Tom Barron strain. April and May eggs, $2.00 for 15. American White Leghorns, $1.25 for 15 eggs; 90% fertility guaranteed. All breeders range raised. A few cocks and cockerels left, $3.50 and $5.00.
EVERGREEN POULTRY FARM, OSWEGO, ORE., R. 1, Box 176 A.

WE WILL PAY SALARY

Give full details in your first letter to The Washington Farmer, Review, wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are paying good salaries to those who can do the work and are offering these positions only to farm owners or renters.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. For men with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.
to farmer with rig or saddle horse. The publisher of The Washington Farmer Building, Spokane, Wash.

When you write to advertisers be sure to say that you saw their advertisement in this paper.

University of Wind

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. APRIL 12, 1917. NO. 15.

Governor's Special Message to Our Readers

Urges Loyal Response to the Call of the Nation for Greater Food Production

To All Readers of The Washington Farmer:

Washington is a favored state agriculturally and its people have a great opportunity in responding to the patriotic call for a larger food production. The wide variety of fruits and vegetables which can be here grown admits of abundant stores of canned and dried and preserved supplies, and in this saving of fruits and vegetables almost every family in the country can have a part. The boys' and girls' club movement can add largely to the amount of food products. The pig clubs and the poultry clubs and the canning clubs all are called upon to take a loyal interest in the country's welfare.

Every family that adds to its table from its kitchen garden serves the common cause of patriotic preparedness just the same as the man who plows additional acres for wheat or makes an addition to meat supplies.

If every farmer will do a little more than he purposed to do in the way of food products, if every family will buy a little less and cultivate a little larger garden patch, or put a vacant lot into potatoes or beans or peas, the total will be an enormous increase in the output of the food products of the state of Washington and will result in a magnificent contribution towards feeding those who are called to arms and those already at arms in foreign countries, as well as in supplying the needs of the people at home.



GOVERNOR ERNEST LISTER.

I am more profoundly confident than ever, as I stated in my proclamation, that while "the man on the farm can be a leader in this patriotic service, there is hardly a person in any community without the chance to grow something for family use or the market." I believe that it is only necessary to get this thought before the people of this state, to make plain the present and coming needs of the nation, to insure a ready response from all loyal citizens, who will be eager to unite themselves into local organizations and into community effort to further this patriotic movement.

Ernest Lister

Governor of Washington.

Now is the time to become a member of
THE PATRIOTIC LEGION OF WASHINGTON
Open to men, women and children. See page 3

$1150 F. o. b. Racine
Mitchell Junior—a 40-h. p. Six
120-inch Wheelbase

Mitchell SIXES

$1460 F. o. b. Racine
7-Passenger—48 Horsepower
127-inch Wheelbase

John W. Bate's Extras

Which Make Mitchell Cars Distinct

Here are some facts which you should prove before you buy a fine car. Surely nothing else in Motordom is any more important.

John W. Bate has for 30 years been a famous efficiency expert. He has given 14 years to the Mitchell car.

This factory is his creation, designed for this single type. Our present cars were evolved by him, through hundreds of studied changes.

He spent one year in Europe, to combine in Mitchells all the best of European standards.

So the latest Mitchells, in every detail, typify the ultimate efficiency.

These Two Objects

Mr. Bate's first object was factory efficiency. To build a great car, in the finest way, at the lowest factory cost.

He spent millions of dollars to that end. This whole mammoth plant was built and equipped for the purpose. Nearly every part—including our bodies—is built under Bate methods here. And those methods save us, on this year's output, at least $4,000,000.

Next he applied efficiency to the car. He made over 700 improvements. He aimed to make the Mitchell the finest of fine cars. And to make it a lifetime car.

31 Extra Features

His factory savings pay for extras, which most like cars omit. There are 31 distinct features—all costly features—which are rarely found in cars. Things like a power tire pump, a dashboard engine primer, a ball-bearing steering gear, a light in the tonneau, a locked compartment, etc.

100% Over-Strength

In the past three years, part by part, he has doubled our margins of safety. Now all important parts are twice as strong as needed. That is proved by tests.

Over 440 parts are built of toughened steel. All safety parts are oversize. All major strains are met with Chrome-Vanadium.

Gears are tested for 50,000 pounds per tooth. Bate cantilever springs—used for two years—never yet have broken. Not a single one.

24% Added Luxury

Our new body plant this year gives another big saving. That enables us to add 24 per cent to the cost of finish, upholstery and trimming. This makes the Mitchell the luxury car of its class. And all our bodies are exclusive, built and designed by our experts.

Go See the Results

Go see these extras—extra features, extra beauty, extra strength. Under other methods, such things are impossible at Mitchell prices.

See also Mitchell Junior, which is nearly like the Mitchell, but a little smaller size. You will agree that no such values are elsewhere shown in fine cars.

Do this now. In May and June we are always oversold.

MITCHELL MOTORS COMPANY, Inc.
Racine, Wis., U. S. A.

TWO SIZES

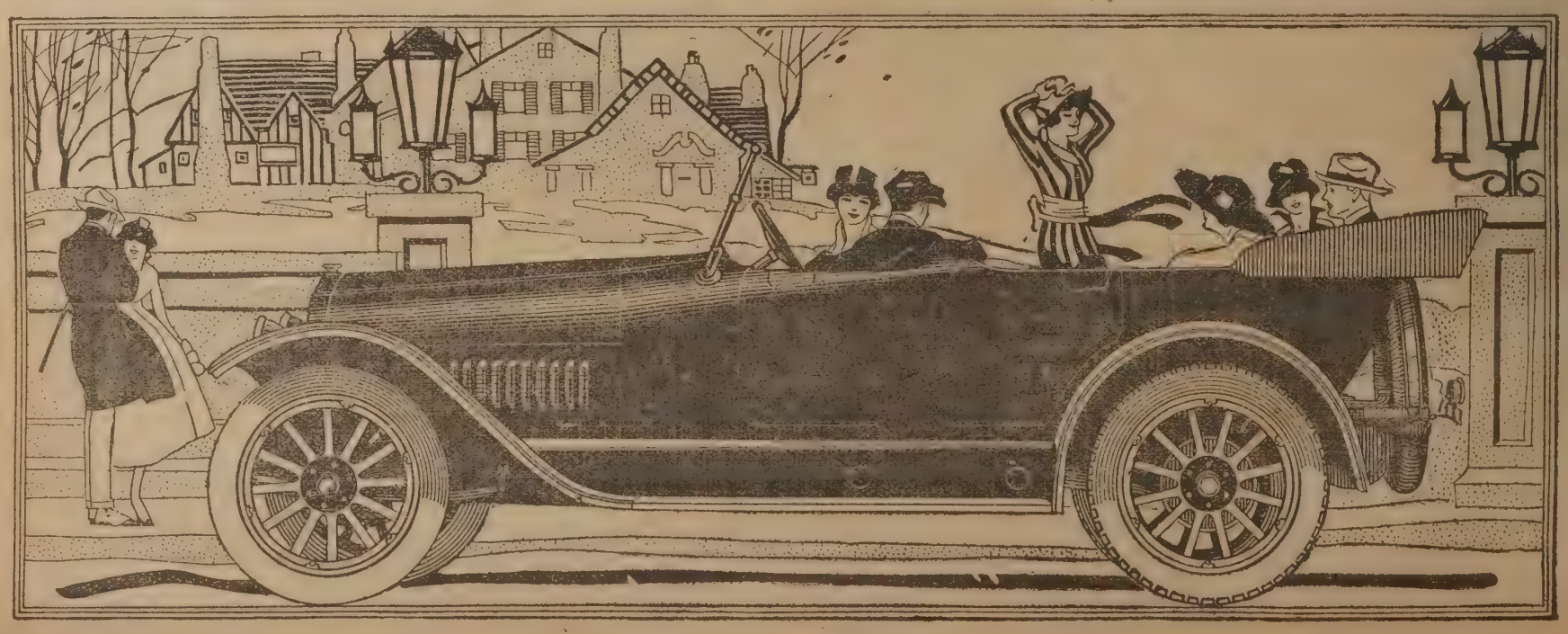
Mitchell—a roomy, 7-passenger Six, with 127-inch wheelbase and a highly developed 48-horsepower motor.
Price $1460, f. o. b. Racine

Mitchell Junior—a 5-passenger Six on similar lines, with 120-inch wheelbase and a 40-horsepower motor—¼-inch smaller bore.
Price $1150, f. o. b. Racine

Also six styles of enclosed and convertible bodies. Also new Club Roadster.

Mitchell Lewis & Staver Co., Pacific Northwest Distributors.

S120 Lincoln St., Spokane, Wash. East Morrison and E. First Sts., Portland, Ore.



FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 15 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF April 12, 1917

Your Country's Call to Produce More Food

After All Is Said and Done the Plow May Be Mightier Than the Sword in Helping to Win War

Now that the country is at war with Germany, the nation turns to the American farmer with an appeal for increased production.

In the final analysis the plow may be mightier than the sword. If Germany had not brought up its agricultural productiveness to a high degree of efficiency it would have been starved into subjection.

The great conflict has now largely narrowed down to an endurance test of deprivation and hunger. On one hand, England and her allies are blockading Germany to keep ships from taking food supplies into German ports. On the other hand, Germany is resorting to ruthless submarine warfare to make England and France go hungry.

Here is where the American farmer will play a big part in winning the war for popular rights, human freedom and the future security of peace-loving nations. He should speed up the plow and cultivate his acres to the fullest extent of their producing capacity, that from our abundance we may feed not only the armies of the nations that are fighting Germany, but their people at home as well.

As Governor Lister of Washington puts it in his proclamation:

> "Equally important with the needs for arms and equipment is an adequate supply of food for our nation and the countries whose people and institutions have been attacked by an autocratic government ignoring the rights of humanity."

The war for American independence was won by those "embattled farmers whose shots were heard around the world." The present great war will largely be won by the American behind the plow feeding the man behind the gun "somewhere in France."

In his proclamation Governor Lister tells the people of Washington that proper preparedness means energetic attention must at once be given to producing as much as possible from the land in both the country and the city; that now the people generally can make a great contribution to the resources that will strengthen the nation—"by every man, woman and child undertaking in an intelligent way to increase the yield of food products." The governor adds that "while the man on the farm can be a leader in this patriotic service there is hardly a person in any community without the chance to grow something for family use or the market." Add to this the fact that a penny saved is as good as a penny earned and that any conservation of food resources, as the canning and the drying and preservation of fruits and vegetables, can add immensely to food supplies, one sees the practicability of joining in the concerted movement to meet the patriotic call that comes from the country at large.

Sign, cut out the accompanying coupon and enroll yourself as a member of the Patriotic Legion of Washington.

Enrolment Blank for

THE PATRIOTIC LEGION OF WASHINGTON

Membership Open to Men, Women and Children.

I am a loyal and patriotic American. I most earnestly desire to do my share in helping to defend the honor of my country in time of war. I therefore request enrolment as a member of The PATRIOTIC LEGION of WASHINGTON and pledge myself to the work of increasing our nation's food supply during the war into which our country has been plunged.

Signed .....

Date of Enrolment .....Address .....

WHEN SIGNED FORWARD THIS BLANK TO THE EDITOR OF THE WASHINGTON FARMER, SPOKANE, WASH.

Governor Lister's Proclamation.

Governor Ernest Lister of Washington last week issued the following proclamation, which is deserving of careful reading and prompt action:

A national crisis places upon every citizen the patriotic duty of immediately helping to sustain the United States in the action resulting from interference with our established rights and liberties.

Equally important with the need for arms and equipment is an adequate supply of food for our nation and the countries whose people and institutions have been attacked by an autocratic government ignoring the rights of humanity.

Proper preparedness means that energetic attention must at once be given to producing as much as possible from the land, in both the country and the city. The people of this prosperous state have the opportunity today of making a great contribution to the resources that will strengthen the nation—by each man, woman and child undertaking in an intelligent way to increase the yield of food products.

The man on the farm can be a leader in this patriotic service, but there is hardly a person in any community without the chance to grow something for family use or the market.

With the certain knowledge that all citizens will be quick to act for the good of the country, and because organized effort is essential for full service to the nation:

Now, therefore, I, Ernest Lister, governor of Washington, by virtue of the authority vested in me by law, do hereby call on the people of the state to cooperate in a great agricultural preparedness campaign, and direct immediate action to be taken as follows:

That the county auditor in each county in the state forthwith call to a meeting the county treasurer, county clerk, county agriculturist, county superintendent of schools, the chairman or a representative of the board of county commissioners, an officer from each bank at the county seat, and such other citizens as he may deem advisable, to organize by the election of a chairman and secretary, and the appointment of proper committees, for the purpose of bringing about the fullest possible food production in every part of that county.

That the central committee at the county seat appoint a local committee in each school district of the county, whose duty it shall be to see that full advantage is taken of every opportunity to increase the yield of food products.

That the local committees in each school district of the state make arrangements for a patriotic rally to be held on Saturday, April 14, for the purpose of planning action that will be of the most benefit to the nation from encouraging agriculture preparedness.

That the state granges, farmers' unions, commercial clubs and all other organizations qualified to act and inspired with a patriotic purpose, be invited to join in this service.

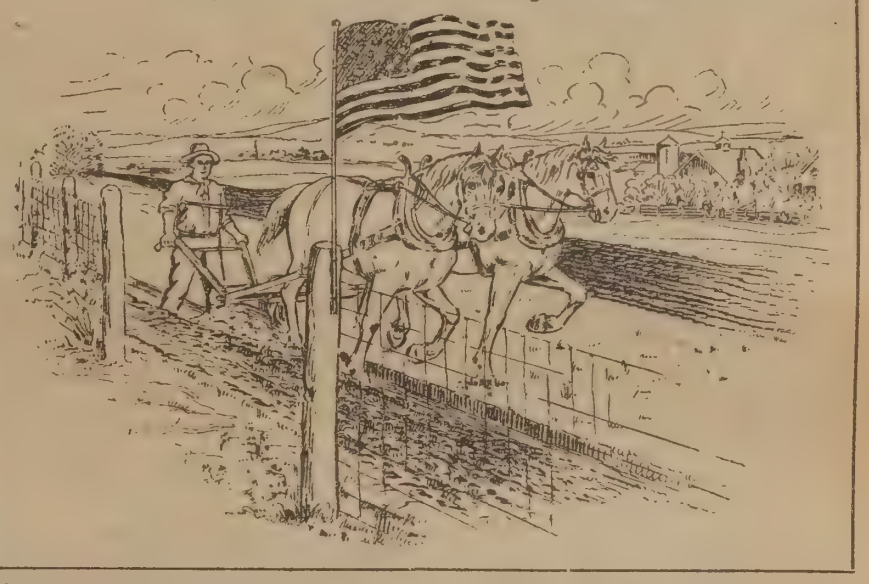
That the state department of agriculture, the state educational institutions and schools, and especially those that are serving the agricultural needs of the state, actively support this movement.

That steps be taken by the active committees throughout the state to devise ways and means for helping any one willing to cultivate land if assisted in securing seed, a plan suggested being for the person assisted in this way to pay at harvest time the cost of the seed, or to return from the crop at least twice the amount of the seed. Or any other plan which may seem to better suit local conditions may be adopted.

The state of Washington is rich in resources and I appeal to all citizens of this commonwealth to take an active part in this patriotic movement that will prepare us to meet any demands that may come.

(Continued on following page.)

Loyal to His Country's Call



A Pet Whale in Walla Walla County, Washington!

This week's instalment of THE UPS AND DOWNS OF A BUNCHGRASS BOY tells all about it. If you want many a good, hearty chuckle, just turn to page 19 and read the most vivid, moving and altogether delightful narrative of pioneer days in the Walla Walla country that Joe. Ashlock has done yet. Just see if it isn't.

Another One of These Good Stories Next Week

Wheat to $2.24 at Chicago

Bad Weather Conditions Have Proved Disastrous to Winter Wheat

How deceptive are the judgments of men! When the price of wheat went down, down, in the hard times of the early '90s and the crop of the Inland Empire was marketed around 25 cents many farmers and business men predicted that the days of dollar wheat were gone forever.

Now we see $2 wheat, in fact frantic buying and price advances of unparalleled rapidity and extent resulted in a wheat advance at Chicago Saturday to $2.24 for No. 3 red and no man knows where it will eventually go. The immediate rise in the Chicago market was due to the April government crop report which is characterized as the most sensational ever issued in the United States. Efforts of American farmers to bring this year's winter wheat crop to record production for war time needs apparently have been defeated by severe weather conditions and a crop of only 430,000,000 bushels is now expected as against 482,000,000 in 1916 and 674,000,000 in 1915.

Winter wheat was sown last autumn on 40,090,000 acres, which is close to the largest acreage on record. The crop had a bad start in the important growing states and entered winter in poor condition. Insufficient snow covering during the winter killed much of the crop

Much of the abandoned acreage will be planted to corn in the southern part of the belt and to spring wheat in the northern portion. Prevailing high prices for wheat are expected to spur farmers to place a larger acreage under spring wheat, and officials look for a record crop of that cereal.

In Kansas and Nebraska, the two leading winter wheat growing states, the crop suffered enormous damage. Kansas reported a condition of 45 per cent of normal. That was a decline of 50 points from the condition reported December 1 last.

Condition of winter wheat in the important growing states on April 1 was:

Ohio, 80; Indiana, 65; Illinois, 60; Missouri, 62; Nebraska, 35; Kansas, 45; Oklahoma, 74.

World Shortage.

The world shortage and the world war remain two great factors in determining the future of the demand for wheat. With two exceptions, every wheat producing country in the world from which figures can be obtained is short on this vitally important crop. The exceptions are India and Australia. In India the forecast for 1917 is an increase in wheat acreage of 8 per cent over the preceding year. In Australia the 1916-1917 crop is given as 100.3 per cent of the previous crop.

But the estimated production of wheat in Denmark, Spain, France, United Kingdom, Italy, Norway, Netherlands, Rumania, Russia (48 governments), Switzerland, Canada, United States, India, Japan, Egypt and Tunis is given as 74.7 per cent of that produced in 1914-5. These figures are from the International Institute of Agriculture, Rome, Italy, and cover the 16 leading countries in wheat production. Moreover, the production of wheat in Argentina, Australia and New Zealand for 1916-17 is 70 per cent of that produced in 1915-16, or 92.3 per cent of the previous five-year average. In other words, the wheat crop of the world is below normal at a time when abnormal demands are being made upon it, when great quantities are being destroyed on land and sea and when normal labor supply is turned toward other channels.

Unless all signs fail, it will be several years before the world will return to normal prices for wheat. Even if the war should end tomorrow time would be needed to restore agriculture to the conditions that existed in July, 1914. Europe must farm with diminished man power, diminished animal power and diminshed soil fertility. It must market its products with run-down railroads and worn-out locomotives and cars.

Of course, surprises sometimes come along in wheat, but so far as human vision goes the world is in for several years of diminished yield and high prices.

Secretary Houston again appeals to the country to make every effort to raise adequate food crops this year, not only for the United States, but to meet the requirements of the entente.

"The importance to the nation of a generous food supply for the coming year can not be overemphasized in view of the economic problems which may arise as a result of the entrance of the United States into the war," said the secretary. "Every effort should be made to produce more crops than are needed for our own requirements. Many millions of people across the seas as well as our own people must rely in large part upon the products of our fields and ranges. This situation will continue to exist even though hostilities should end unexpectedly soon, since European production can not be restored immediately to its normal basis.

Enlarge Production.

"It is obvious that the greatest and most important service that is required of our agriculture under existing conditions is an enlarged production of the staple food crops. Because of the shortage of such crops practically throughout the world there is no risk in the near future of excessive production such as sometimes has resulted in unremunerative prices to producers. This is particularly true of the cereals and of peas, beans, cow peas, soy beans and buckwheat.

"In view of the world scarcity of food, there is hardly a possibility that the production of these crops by the farms of the United States can be too great this year and there is abundant reason to expect generous price returns for all available surplus.

"The most effective step that may be taken to increase the production of these crops is to enlarge the acreage devoted to them in the regions where they are grown habitually. This expansion of acreage should be to the limit permitted by available good seed, labor and equipment. The placing of too great emphasis on production in new regions is inadvisable, since the introduction into a farm operation of a crop not usually grown frequently involves practical difficulties not easily foreseen nor quickly surmountable.

"Taking the winter wheat territory as a whole, winter killing has occurred to an extent very much greater than usual. This obviously, if not compensated for in some way, will mean a material reduction in the supplies of our most important bread cereal. Where winter wheat has been damaged sufficiently to justify the abandonment of fields it should by all means be replaced by spring-planted food crops, preferably small grains or corn."

These facts brought out by the government crop report grow in importance when it is remembered that the winter wheat production is about three-fourths of the total wheat production of the country.

Should Produce More Food

Plow May Be Mightier Than Sword in War,

(Continued from preceding page.)

On the very next day after the issuing of the call by Governor Lister for agricultural preparedness, County Auditor C. E. Barret of Yakima county called a meeting in the Commercial club rooms of North Yakima. Fifty business men met for organization with C. H. Hinman, chairman, and County Superintendent Rodey Ackley, secretary. A survey will be made immediately of vacant lots in North Yakima and newspapers will take up a publicity campaign encouraging the organization of boys' corn, potato, pig and sheep clubs. E. F. Benson, state commissioner of agriculture, was present, and much enthusiasm was reported. Later the secretary, School Superintendent Ackley, was directed to write to the mayors of all towns in Yakima county asking them to undertake organizations in their communities for carrying out Governor Lister's proclamation.

Spokane County Wide Awake.

Officers at the Spokane county courthouse have organized the Spokane County Patriotic league to help increase the food production in the county. It was decided to give County Agriculturist J. R. Shinn a special assistant to take charge of the intensified farm work to encourage the farmers to raise hogs and chickens and to get every available acre of the county into crop this year. Miss Donaldson, the county school superintendent, will urge the school directors in each district to produce as much food as possible, while the county assessor will ask rural deputies to urge on the good work of increasing the food production. Officials, teachers and others will work with the commissioners on the plan.

Owners of vacant lots in Spokane have offered to have them put into production. The chamber of commerce committee will see that these vacant lots are turned into garden plots.

In response to requests from the chamber of commerce committee, the city council of Spokane will donate $1000 to promote home gardens among children. This is to be used in cooperation with $500 from the chamber of commerce and other cooperation, financial and otherwise, from the school authorities, parent-teacher associations and public-spirited men and women throughout the city.

Food production increase in the vicinity of Asotin was the keynote of the commercial club meeting when a delegation of the "League for Increasing Production of Foodstuffs" from Lewiston invaded Asotin and was entertained at luncheon by the commercial club. Action was taken to list available vacant property and the council was given assurance of water for irrigation at actual cost.

Appeals to Farmers.

In this connection a stirring appeal comes from Secretary of Agriculture Houston to the farmers of the United States to farm as they have never farmed before.

"Both for economic and patriotic reasons," the secretary says, "the American farmer should strive this year for the highest standard of efficiency in the production and conservation of food. He should wring every possible ounce of production from the soil and conserve for the soil every atom of fertility. Let no one think," he says, "that the American farmer, on his farm, will play a small or unimportant part in this crisis.

"It is not only your own crop you are growing," he continued; "it is, in a sense, the nation's crop. Attention—unusual attention—should be given to the selection and safeguarding of seed for planting, the preparation of the land and the care of the crop.

"Fruits and vegetables," he declares, "which ordinarily it is inadvisable to attempt to conserve should be systematically saved now. Canning, drying and preserving operations should not be delayed until late summer or autumn, and family gardens should be planned to supply ample quantities of early maturing fruits and vegetables for preservation, as well as fresh products for immediate consumption. We should get back to the old-time methods and save, preserve and cure everything.

"Because of the scarcity of tin plate and the high prices of tin cans," Secretary Houston continued, "it may be necessary in household preservation of food more extensively to pack fruit and vegetables in other containers, and to dry large quantities.

As Governor Lister says, there is scarcely a man, woman or child in Washington who can not aid in this enterprise. If you are stirred by this appeal and believe in the pledge announced in the coupon given herewith, cut it out, fill in the blank with your name and address, mail it to the editor of The Washington Farmer and you will be enrolled in the Patriotic Legion of Washington. You can become a member just as well by saving as by producing. "A penny saved is as good as a penny earned." Can, preserve or cure food products and you are entitled to become a member. Lend your influence as well as contributing your effort to this universal call of agricultural preparedness.

Four Important Live Stock Sales

In this issue of The Farmer we give complete reports of four highly important live stock sales of the past week: The Shorthorn sale at Portland, Ore., the H. C. Davis dispersion sale of Holsteins at Granger, Wash., the Leaf and Jones dispersion sale at Rupert, Idaho, and the Shorthorn sale at Spokane.

For full report of each sale, giving the number and character of animals sold, prices paid and names of purchasers turn to pages 17, 18, 30 and 31.

Beginning Next Week

With next week's issue the Farmer will start a series of short illustrated articles on

The A B C of Road Construction

by Frank W. Guilbert, secretary Spokane county Good Roads association.

Mr. Guilbert is unquestionably one of the most thoroughly practical and best posted road builders in the Pacific northwest today. You can't read his direct, sensible explanation of the fundamentals of road construction and upkeep without feeling that you know quite a bit more about the "reasons why" of good roads and faulty roads than you ever knew before.

Don't miss the opening article of the series in next week's Farmer. It's worth while.

Washington Portraits No. 10.



A. P. Bertschi.

A. P. Bertschi has a profitable hay farm in Klickitat county near Glenwood. His principal varieties are clover, oats and wheat, although he has had some success with timothy. Mr. Bertschi says that there is a growing demand for sheep and hog raising in his community. Several farmers have tried both out and have been successful.

The next in the series of Washington portraits will be that of R. V. Peringer, of Belmont, and will be given in next week's issue of the Washington Farmer.

Men Who Are Pushing Pacific National Dairy Show



1. W. W. Warrens, Portland, president.
2. G. H. Dammeier, Gresham, Ore., secretary.
3. Henry Thiessen, Oak Grove, Ore., treasurer.
4. William Ladd, Portland, honorary president.
5. W. B. Ayer, Portland, honorary president.
6. J. W. Clise, Seattle, honorary president.
7. Walter K. Taylor, Corvallis, Ore., director
8. Clifford Reid, Portland, director.
7. Walter K. Taylor, Corvallis, Ore., director.
10. J. L. Smith, Spokane, director.
11. J. D. Mickle, Portland, state dairy and food commissioner.

The above officers were elected at a meeting held in Portland, which was the result of a dozen previous conferences. Fifty men, some of whom had contributed liberally already, subscribed for enough stock to make the incorporation of the new Pacific National Dairy show a practical certainty. The stock was subscribed and incorporation will follow, capital being placed for the present at $5000.

The following were present: W. K. Newell, Seghers; Thomas Carmichael, Gaston; W. B. Ayer, Portland; Professor R. R. Graves, Corvallis; Professor and Mrs. Fitts, Corvallis; J. M. Dickson, Shedd; C. L. Smith, Portland; G. H. and Mrs. Dammeier, Gresham; Clifford and Mrs. Reid, Portland; F. C. and Mrs. Linn, Perrydale; Harry West, Scappoose; J. W. Pomeroy, Scappoose; W. K. Taylor, Corvallis; B. C. Altman, Gresham; Ed Cary, Carlton; J. W. Vandervelden and Frank Vandervelden, Roy; Thomas and Mrs. Withycombe, Portland; George Withycombe, Gaston; W. O. Morrow, Independence; H. Thiessen, Oak Grove; C. S. Magee, McMinnville; John T. Whalley, Aurora; I. N. Staples, Portland; D. Brooks Hogan, Oswego; J. B. Ward; J. D. and Miss Mickle, Portland; O. G. Simpson, Portland; Robert Ireland; Lloyd Ewalt, Portland; Mr. Boyce, Portland; McDonald Potts, Portland; Dr. C. W. Cornelius, Portland; H. A. and Mrs. Lawis, Russeville; Mr. and Mrs. Lazelle, Oregon City; N. C. Maris, Salem; Carl Schallinger, Portland; H. C. Browne, A. D. Milligan, C. D. Minton, Horace Addis, H. H. Bushnell, Fred Davies, Portland.

With men like these boosting the Pacific National Dairy Show, which will be held at Portland this year, and with the design of holding it in Seattle, Spokane or other points in the Pacific northwest in future years, there is promise that the great dairy interests of the Pacific northwest are in good and trusty hands.

The plan, as briefly outlined by Chairman Mickle, is this:

The time has come when the dairy interests of the Pacific northwest are sufficiently large and strong to hold a show of their own, and make it a show not for Portland alone, nor for Oregon alone, but for the entire Pacific northwest. The show itself, which it is planned will be held in Portland this year, will not be kept there of necessity; possibly it may be held in Seattle the next year, in Spokane the following year and so on. The show is to be not only of dairy cows, but of dairy products. It is probable that the show will be held a week after the Oregon state fair.

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for damages on account of disease in stock sold through these columns.

Universal Liability to Service Is Principle of Military Training

President Wilson tells congress and the nation that the United States will need "in case of war at least 500,000 men, who should, in my opinion, be chosen upon the principle of universal liability to service." Additional forces may be needed later, he added, and provision should be made to get them through compulsory training of young men.

While some will differ from the president on that point, it must be admitted that our government was founded on the principle of general obligatory military training and the citizen's liability to serve his country in case of need.

Washington recommended it in his first annual message, and he and his first secretary of war drafted a bill to that end.

The first national defense act passed by congress, the militia law of 1792, provided a system of universal compulsory service. It required the enrolment in the militia of every able-bodied male citizen between the ages of 18 and 45, but authorized the various state legislatures to make such exemptions as they might wish. In time these exemptions kept on increasing and eventually the country drifted into the volunteer system.

It is not proposed by the president and his advisers to set up general training of all the men of the nation. What they do propose is that the young men who are physically sound, say the youths of 20 to 23, shall be given military training by the United States government, and from the forces thus trained the government will draw men as they may be needed. It would first call the unmarried men and those having no dependent parents.

Several bills are now before congress. It is thought the president inclines to that prepared by Senator Chamberlain of Oregon, chairman of the military affairs committee of the senate. Senator Chamberlain thus explains his measure as he amended it after conference with the president:

"In 1917 those 20 years of age will be trained, and if the president finds that the national defense so requires he may, by proclamation, also call out for training all those of the ages of 21, 22 and 23. In 1917 the president, even though he does not find it necessary to call out those of 21, 22 and 23 years, may require them to register and be examined."

Senator Chamberlain estimated that training of all the physically fit young men of 20 to 23 would provide an available force of nearly 2,000,000. He predicted that "if we should have a long war we should doubtless have to raise troops by compulsory service, and said a universal training plan would determine definitely the number of men available and those having the fewest responsibilities and dependents.

Farm Money at Cost.

The federal farm loan bank will afford the man on the farm an opportunity to finance his own affairs "without profit to anybody on earth."

So declared President D. G. O'Shea of the northwestern branch of the loan bank to a representative of the Washington Farmer.

This simply means that money will be supplied the farmers at cost. It means that no higher interest will be charged on loans than is required to pay the necessary expenses of the conduct of the banking business. This interest has been fixed to start with at 5 per cent. No promise is made that it will ever be lowered, but if the system as it develops enables cheaper money to be supplied the farmers than that, it will be supplied, says President O'Shea. It is not the intention of the government to make money out of the loan bank, but to help the farming industry finance its development and thereby build the foundation of a great and prosperous nation.

Agricultural Preparedness.

Secretary of Agriculture Houston has made an appeal to the farmers of America to join in agricultural preparedness measures so that the country may not be handicapped by food shortage in its efforts to meet international prices.

"Both for economic and patriotic reasons," the secretary said in a formal statement, "The American farmer should strive this year for the highest standard efficiency in the production and conservation of food."

The secretary adds that under existing conditions every practicable step should be taken to protect fruit and vegetable output throughout the season, and to utilize and preserve them as fully as possible when they are matured. Canning, drying and preserving operations should not be delayed until late summer or autumn, and family gardens should be planned to supply ample quantities of early maturing varieties for preservation.

The secretary suggested the preservation by drying for soup stock of such vegetables as carrots, potatoes and celery, and or drying of surplus sweet corn. Many crops grown usually for soil improvement, or for agriculture, he declared, possess large food value, if utilized properly and their utilization for human food and oil production "doubtless will be advisable." Such crops as soy beans, cow peas, peanuts and kaffir were mentioned specifically in this connection.

Use of Organizations.

"The only place where I have no support," said a county agriculturist, "is in a part of the country where they have no organization. They have tried several times to organize, but somehow it always dies out."

Human beings need organizations. It helps to get together with others and hear what they have to say. It adds something else which everybody ought to have—ability to express oneself.

This same agriculturist told of visiting two sections in his county, one where they had a good organization and the other where they had none. In the first, when he asked them if there were any questions they would like to ask, half a dozen came to the front, and one at least knew the answer, but asked that others might be informed, and also to start things. At the other meeting nobody asked anything, but after the meeting was over they collected in groups and asked each other many questions which could have been brought out in open meeting.

Ease in speaking what one thinks is gained by practice, and in no other way.

The Blood Lines.

When we come to the matter of environment we find that a great body of tradition and knowledge has been created to help us. We are told how to plant and how to cultivate; how to prune, spray and harvest. And all of these things are worth considering, for even the superlatively vigorous plant or animal can make little headway against an unfriendly environment. No one doubts that seed-bed, stable and hog-house should be the best time and labor can prepare. The surroundings of the growing thing, whether it be an animal or vegetable, can not be too favorable; but in the end it is the heredity, the ancestry, the blood lines, which will do most to insure profit or loss. The tendency to grow, to thrive, to press forward thriftily toward maturity, woven into the inmost being of any living creature from carrot to man, is worth more than all the pampering in the world.

Washington Gleanings

Twenty new members have been added to the Randle grange as the result of a membership campaign just closed.

The name selected for the farmers' organization at Union will be the Progressive Farmers' club. Motto is, "Do our best."

P. J. Sweeny of Tacoma has been appointed state grain inspector to succeed R. D. Jarboe, who resigned to go to the federal grain serivice.

Negotiations for the establishment of a beet sugar factory at Satsop have been concluded. A price of $6 a ton has been guaranteed for beets and a large acreage has been contracted for.

Extensive shipments of potatoes which have been stored in Vancouver for the past two or three months have been made recently to points in the middle west, principally Nebraska, Kansas and Minnesota.

That the wages of farm hands in Whatcom and Skagit counties are $5 higher than last year is the report of the federal employment bureau in Bellingham. The average paid now is $35 to $40 a month.

Baker and Acme townships of Whatcom county have indorsed the $88,000 bonding proposition to build and improve roads in the two townships. The principal construction will be a hard surface road through the townships.

The proposed new state highway between Meyers Falls and the Spokane river will be constructed under the supervision of the state, and the $40,000 available for expenditure this year will build between 12 and 15 miles.

Hay at the rate of 20 cars a day is being shipped from the Yakima valley to Montana and Oregon to save cattle from starvation. Stockmen are entirely out of feed and some of them are hauling hay 35 miles from the railroad.

Arrangements have been completed whereby the Exchange National bank of Spokane will advance live stock men in the Okanogan district approximately $25,000 for the purchase of purebred sires to run on the forest ranges this season.

Actual construction of the extension of the Cowiche branch of the Northern Pacific will begin this month. The road will be completed in ample time to handle the crops grown this year. Since the construction was announced the Utah-Idaho Sugar company has contracted about 300 acres of beets in the Tieton.

The sum of $1,812,052 became available from the state public highway fund April 1, while federal aid will amount to more than $400,000. The road budget approved by the commission includes the following: Pacific highway, $449,603; Olympic highway, $219,376; McClellan pass highway, $101,750; National Park highway, $248,598; Central Washington highway, $110,000; minor highways and secondary state roads, $332,250.

What Others Say

Farm and Fireside: Indeed, the likelihood of overproduction in any line seems remote.

Kimball's Dairy Farmer: The method of living from hand to mouth is no longer safe.

Ohio Farmer: The county agent is making good. The farmers are learning to utilize him.

Nebraska Farmer: Between regulated and unregulated monopoly, regulation is preferable; but neither, to my mind, is so satisfactory as free competition.

Farm Journal: You may forget your own birthday in the stress of the years, but tie a string around your finger to remind you of the little chap's birthday.



PROOF that Blasting the soil pays fruit growers

EVIDENCE

"In preparing the ground for the planting of trees the *Rural Press* recommends the use of powder." PACIFIC RURAL PRESS, San Francisco.

"We advocate the use of explosives for loosening up compact soils and hardpan in tree planting, knowing the value of such work"
FANCHER CREEK NURSERIES, Fresno, Cal.

"The use of a good explosive is of great benefit in planting an orchard, as the ground should be loose enough to allow roots to go to their natural depth easily."
BENEDICT NURSERY CO., Portland, Ore.

"We favor blasting holes for trees where the soil is heavy. Powder will loosen the soil, giving it a better chance to become aerated, as well as making it more retentive of moisture."
OREGON NURSERY CO., Orenco, Ore.

"My orchard has made excellent growth, due to the fact that I used dynamite, breaking up the soil and making excellent beds for the roots. If I were to set another orchard I would not think of doing so without blasting each tree hole"
T. A. JOHNSON, Boise, Idaho.

"We have used explosives in digging tree holes in the hard caliche subsurface layers which occur here. We find this cheaper than the use of pick and crowbar, and more satisfactory in that the soil is shattered deeper than the hole could be dug."
GEORGE T. FREEMAN,
Arizona Agricultural Experiment Station, Tucson.

"The use of Farm Powders in the orchard industry is rapidly being learned and appreciated. The worst looking orchard I ever saw, suffering from a lack of drainage, was blasted two or three years ago, and now it looks as fine as any other well kept orchard in this valley."
E. H. SHEPARD, Publisher "Better Fruit," Hood River, Ore.

"We have observed many cases in which powder has been used for blasting beds for fruit trees, invariably with great success. The use of explosives is of material benefit when the soil is inclined to be rather shallow and underlaid with a hard subsoil. There are few soils in which blasting cannot be done profitably."
THE FRUIT GROWER, St. Joseph, Mo.

"I have done a great deal of orchard planting and use powder for making the holes. At first it was used chiefly on heavy hardpan or other soils that were difficult to prepare with the spade, but is now used on all classes of soil. If I were planting trees even in light soil, easily handled, I should prepare all the holes with powder. Trees so planted make extraordinary growth."
FRANK FEMMONS, Oakhurst, Cal.

"Generally speaking the growth of plants depends upon the condition of the soil into which the roots penetrate. If the depth of loose soil is too limited or the surface water is permitted to stand too long, the growth is impaired. Explosives properly used in such instances have invariably relieved the condition and resulted in excellent growth. The yield is often three times as great on blasted soil as from those untreated in the same vicinity."
ROSECROFT NURSERY & FRUIT FARM, Sumner, Wash.

"The O'Connor prune orchard near Los Gatos in the Santa Clara Valley, California, was blasted in 1913. During the previous six years the largest crop was 3,900 pounds. In 1914 after the blasting, the crop was 8,000 pounds, more than double. It was a dry year, too. Where there were from 30 to 40 per cent. of 'drops' in the orchards on both sides, the O'Connor place lost only about 5 per cent. Prunes from the blasted orchard averaged much larger and the trees made a better growth and retained their foliage a month longer than the orchards on either side."
JOHN A. GALPIN, Los Angeles, Cal.

"My orchard was planted three years ago and all trees were of even age and size. I intended to blast the whole orchard but ran out of powder and finished the small balance without it. This enabled me to compare the growth of the trees and satisfy myself that the expense was justified. The trees that were planted in blasted ground show a growth of 75 to 100 per cent. over the trees that were planted in ground not blasted. They also appear healthier and more satisfactory in every way. I have just bought 1100 more prune trees and would not think of planting them without preparing the ground with powder."
HERMAN H. SMIDT, R. 3, Oregon City, Ore.

2

is given by many fruit growers in the accompanying page from the Giant book, "Better Orchard Tillage." These men say that blasting

- enables the trees to root deeper;
- adds moisture storage capacity;
- saves labor and money;
- improves orchards that are not doing their best;
- is always profitable when properly done;
- places the soil in the ideal condition that permits newly planted trees to make extraordinary growth;
- increases the yield of fruit.

Scores of the most successful fruit growers in the Pacific Coast States plant all of their trees in beds blasted with one of the

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

—Eureka Stumping Powder or Giant Stumping—both of which are made especially for this and other agricultural work. They have found these Giant Powders particularly well adapted to subsoiling and for blasting tree beds.

Some kinds and grades of explosives tend to shatter and pulverize anything they come in contact with. They act too quickly. These ordinary dynamites do not do the work well and cost more. Eureka Stumping Powder exerts its strength slowly, comparatively speaking. It tends to disrupt, crack, split and heave the soil and it extends its influence over a wide area. It loosens and pulverizes the soil instead of packing it and throwing it high in the air. This is the action that is wanted in soil work and this action the "high percentage" dynamites will not give.

Warning Giant Powder is the trade name of explosives manufactured by the Giant Powder Co., Con. Because Giant Powders are best known everywhere, many have assumed that all high explosives are Giant Powders. Insist upon having the genuine, made only by The Giant Powder Co., Con. If your dealer has only ordinary dynamites, write us and we will see that you are supplied with *real* Giant Powders.

Try ONE BOX

Perhaps you have never planted trees in blasted beds. To make it easy for you to prove the value of blasting the soil, we print a trial order form in the coupon to the right. Fill it out and we will have our nearest distributor supply you—at the lowest market price—with a 25- or 50-lb. case of either of the Giant Farm Powders. Blast beds for all of your trees. Plant one in a spade-dug hole, the ordinary way. Note the difference in growth.

If you *are* using explosives for tree-planting, test a case of Giant alongside of the brand you have been using. After blasting with each, take a spade and see how much more thoroughly Giant does the work.

Remember that you can blast whenever the soil is dry. Any day to a year before planting time. Many growers keep Giant Farm Powders always on hand.

Have You Had the Book "Better Orchard Tillage"?

Prepared especially to tell the facts about blasting soils for orchards and in orchards of the West. It tells how to secure the proper sub-irrigation conditions by blasting. It explains how blasting promotes drainage and increases both moisture-storage capacity and fertility. It gives detailed directions for preparing the soil for tree planting or for deep cultivation of established trees. We will send a copy free on request. Tell us about your problems and mark and mail the coupon. Other books on Ditch Blasting, Boulder Blasting, Subsoil Blasting for all farm crops, and Stump Blasting will also be sent on request. Ask for the books that interest you.

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DISTRIBUTORS WITH MAGAZINE STOCKS EVERYWHERE IN THE WEST

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San Francisco.

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- ☐ Ditch Blasting
- ☐ Subsoil Blasting

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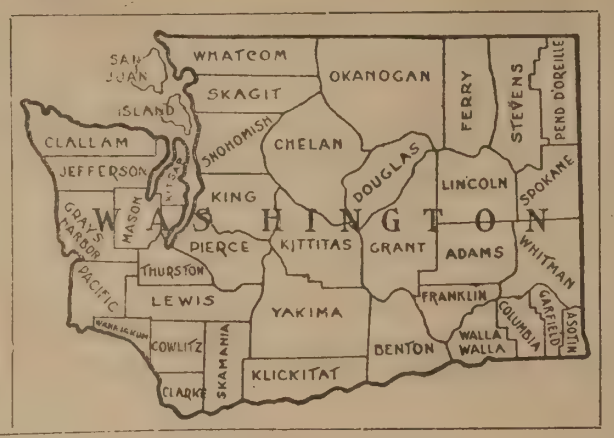
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Tear out and mail this coupon NOW

Are Plowing Between Showers

Live Stock Has Wintered Fine in Western Washington. Dairy Cows Among the Best. Farm Wages Are Higher Than Usual.



CASTLEROCK, Cowlitz County, Wash., March 30.—The general weather conditions of Cowlitz county are rather bad at the present time. We have had a very backward spring. First it snowed and then it blowed, then a cold rain set in for the valley, and on the hills snow storms, driving the wild animals into the valley. Notwithstanding all this, the farmers are cheerfully going ahead, plowing between showers, and in a number of cases, seeding. Live stock has wintered fine and the assessor on personal property informs me that he has been agreeably surprised in making his assessments to find such substantial progress among the live stock growers. The dairy cows are among the best. As a rule, the farmers are bothered considerably to get good help, but some are hiring married men and furnishing a house to live in, a garden and other eatables, the help boarding themselves. If the farmer had a ready market for what they furnish free to their help, this would be a rather expensive way, but as it is, it keeps good help always on the farm and apparently contented. Wages are high compared with other years, but not as bad as one would think, considering the demand for young men for enlisting and the state work in the county on the Pacific highway. C. C. BROWN.

May Reseed Fall Wheat.

LA CROSSE, Whitman County, Wash., March 31.—Farm labor has been, so far, up to demand, with a good class of laborers. Wages range from $5 to $10 per month higher than in previous years and the men seem to be well satisfied. Farm work is very backward and but little field work was done up to the end of the month. Most of the farmers are of the opinion that very nearly all the fall wheat will have to be reseeded. This has been one of the latest springs ever known. April at hand and hardly a sign of vegetation, with cold winds and severe duststorms drying out the soil. Compared with a year ago, 1917 bids fair for a dry year. Rainfall the first three months in 1916 was 9.30 inches and 3.64 inches for 1917. Live stock is doing remarkably well considering no green pasture.

M. E. SCHRECK.

Land Values High.

SUMNER, Pierce County, Wash., April 1.—I have heard of no shortage of labor except that it seems to be hard to get good milkers at a price that most dairymen can pay. We hire only married men, and as we get extra prices for milk we can pay wages that keep milkers contented. As to the size of the farm, we have 45 acres and keep three men the year around, and hire but very little outside help, and do but little outside dairying. Berries are raised mostly here, and holdings are small. Land values are high. Very few men can keep help through the winter and pay interest on investments. It seems to depend largely on the men—a few can do it and make it pay, but most of them can not. Weather is wet and cold, and but very little planting has been done yet. W. J. LANGDON.

Farm Labor Scarce.

MONTBOURNE, Skagit County, Wash., March 2.—Farm labor is a little scarce, as the logging company pays more wages. It depends on the man one hires if he proves to be satisfactory or not. Wages are about 10 per cent higher than in previous years. The men, as a rule, are more or less restless. Dairy farming, where one has 25 head of milch cows or more, is the only kind of farming where it pays to keep a man the year round. There has been more wind, rain and snow through the month of March than usual. Grass has not started to grow yet, and no spring crops have been planted yet. There is a scarcity of hogs in this community. The cattle are in better shape this spring than they were a year ago.

JOHN B. PETERSON.

More Cattle in Country.

BOSSBURG, Stevens county, Wash., March 22.—This is the most backward spring we have had for many years. There is still considerable snow on the level land and there will be no plowing for three weeks on the hills and in Echo valley. Most of the spring plowing is usually done here by April 15 and seeding by May 1. There was but little fall seeding last fall on account of dry weather and there will be more work to do on farms in this part of the country than there has been any year since. About half of the grain crops have been fall seeding, but there was little last fall and we don't know how it will come through the winter as it is still under the snow. There is little summer fallowing done here except where the land has become full of weeds. Although this has been the longest winter since 1899 all the farmers got their stock through in good shape. We hear few complain of a feed shortage. There are more cattle in the country than ever before and fewer hogs and some of our farmers are putting sheep on the farms. Cattle of all kinds sell for good prices. We are looking for good prices the coming year and all the farmers are putting in grain crops wherever possible. There has been no damage done to fruit here so far, and as the trees have made no start as yet, we do not look for any later. W. W. PALMER.

Help Is Scarce.

KENNEWICK, Benton County, Wash., March 23.—The land here in Kennewick valley is usually prepared for spring and the summer crops of spuds and corn during the months of February and March. Also alfalfa land is cultivated about the same time by means of spring toothing. Panting of potatoes begins about the first of April, followed up with corn and early garden vegetables. There is no summer fallowing in the valley to speak of. On the uplands, such as the Horse Heaven district among the wheat ranchers, they summer fallow. Our valley land is all cut up into from 10 to 40 acre tracts or mostly all in alfalfa and orchards with small patches of spuds and corn for silage. This spring is about normal, in crop interests. Farm work is about normal with help very scarce. The last fall crops are sufficient to carry the majority of the farmers through till the new crops are ready to be used. About all the surplus hay is sold. The weather is fine for doing farm work.

F. A. SMITH.

Great Variety of Crops.

MALAGA, Chelan County, Wash., March 22.—The leading crops here are alfalfa, wheat, barley, oats, apples, cherries, pears, peaches, potatoes and corn. Some of these crops, such as soft fruit and garden stuff, are not raised in large quantities on account of the market being far away. Some of the farmers here are planning on planting more onions, beans and potatoes than heretofore. In some parts of this county beets of all kinds are raised. Seed potatoes are going to be very high in price and scarce also. So many of the farmers here did not get their potatoes dug last fall in time and they froze. It has been a backward spring so far, and cold. Some are doing their plowing and are seeding spring wheat. All the extra ground will be used for hay this year. Farm help is very hard to get this spring. The ground is in fairly good shape for plowing and with the good supply of irrigation water they have here they are bound to have a good crop of some kind out of the many crops that can be raised here. Hogs bring a good price and young spring pigs will bring a better price than they have in years. A good many horses have been sold here this spring and winter for an unusually god price. Good prices and good crops are looked forward to for the coming season.

MRS. O. ALLENBAUGH.

Farm Labor Inadequate.

CHEHALIS, Lewis county, Wash., March 28.—Farm labor is hardly equal to the demand in Lewis county. Many young men, sons of farmers, go to the woods to work preferring the life of the camps to work on a farm. The average farmer's boy who goes to the woods is not much account after that for the farm, as he is not contented and soon gets the wandering habit. Comparatively few farm hands are thoroughly efficient, that is there are so many things to know about feeding and caring for stock and operating farm machinery that comparatively few are fully qualified farm hands. Wages are a little higher perhaps than usual at this season, few receiving less than $40 per month, with board furnished. I think a good many farmers expect too much from their men, not realizing that the time has gone by when men have to or will work unreasonably long hours. The farm hand notices that many men in town work regularly only 10 and even eight hours daily and naturally resent the "daylight until dark" proposition. The wage scale for steady men should be agreed upon for the year with a lower rate during the winter months and higher wages in the busy season. Any farm of 80 acres in Lewis county should keep a man by the year if the farmer does not have help in the family on which he can depend. Of course the all-year-round help depends on circumstances. A man dairying needs a man all the time if he has 15 or 20 cows, while if the same man was raising beef or grain he might need only occasional help. There has been heavy snow until recently in the hills adjoining the Chehalis valley and the spring is a little late. There is little seeding done because the weather has not been fit. It is warmer now and much of the snow has gone. Farmers are hoping that in early April they will be able to make up some of their lost time.

J. C. BUSH

Wheat Prospect Poor.

PROSSER, Benton County, Wash., March 25.—The weather is dry and cold for this time of year. There was lots of wind the last week. Most of the spring wheat is blown out and the prospect for a wheat crop does not look good at this time, as there has been no growing weather yet. Spring plowing is usually done the last of February and March. Seeding of spring wheat is usually done in February and March; garden truck in March and April and corn is planted in April also. Fall plowing is done in the valley any time after October first; summer fallowing is done from April 1 to July 1. The first cutting of alfalfa is done during the first half of June and six weeks between each cutting thereafter, until the frost kills it. Wheat harvesting begins about July 15, but this spring is not coming in normal and last spring was also late. Peach and apricot trees should be in full bloom at this time of year, but this year they will do well to be in bloom by the last of April. Fall crops are like hens teeth.

G. W. WILGUS.

Must Reseed Wheat.

WILSON CREEK, Grant county, Wash., March 25.—Seeding is generally done in the month of March except on the Crab Creek bottoms where plowing and seeding is done in the month of April and May. There is very little fall plowing done here. Fall seeding is generally done in the month of September and October. Summer fallowing commences right after spring seeding is finished and continues to the first or middle of July. This spring is about 30 days late. Farm work this year will be about normal. Nearly all fall wheat will have to be reseeded. The leading crops are wheat and hay. Some oats, barley and corn will be planted this year and a very large acreage will be planted to potatoes. There is very little or practically no gardening done here. Farmers this year are raising more hogs and cattle, owing to the high prices of pork and beef. A good many are selling their poultry on account of the high prices of poultry, feed and wheat. Feed is getting scarce on account of the long winter and roughage for stock is commanding a premium.

J. P. SCHROEDER.

The Greek Topaz.

The topaz of the ancient Greeks and Romans is generally said to be chrysolite as we know it, while their chrysolite is our topaz. Chrysolite is a silicate of magnesia and iron.

Do Not Put Up With Power That Will "Pass"—You Want It To "Pull"

Wasteful extravagance goes hand in hand with inefficient farm power apparatus. Soil scratched with light plowing that reduces production, crops lost with poor threshing that wastes the yield, soon eat up the saving made in the purchase of a cheap and light farm engine. The farm engine should be a good one, capable of doing work that will bring returns in proportion to its cost. No better engines can be found than those that bear the Nichols & Shepard name as members of the

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Your own neighbor probably owns a steam or a gas engine of our make. Let him tell you what it can do, and then you might write for a little farm paper that will give you the opinion of others that you know at home. A catalog that is worth reading carefully will be sent you with the paper. A postal request to the nearest branch house will bring you both.

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War Is Now Upon Us

Call for Loyalty in Words and Acts

The newspapers have told the story of the first week of April, 1917, a week momentous in the history of America—the hurried meeting of the special session of congress Monday, the address of President Wilson urging upon the joint session the declaration of a state of war existing between the United States and Germany, the presentation in the senate of the war resolution on Tuesday and the prevention of its consideration for the day by Senator La Follette, the passage of the resolution by the senate Wednesday, its debate by the house Thursday and its passage in the house early Friday morning, the signing of the resolution by President Wilson and his war proclamation later on Friday.

The newspapers also have told the story of active war preparations in calling out the national guardsmen, in recruiting the army and navy, in planning a huge loan, perhaps $2,000,000,000, to the entente allies as well as $3,500,000,000 asked of congress for the military and naval establishments during the first year of the war.

Time for arguing has passed. Our own beliefs for or against war are forgotten. War is upon us. Our country's enemies can no longer be our friends. The hour demands loyalty in words as in acts and patriotism calls for greater conservation and production of food supplies—a nation-wide campaign for thrift.

Federal Farm Loan Bonds

President O'Shea Does Not Fear Bond Issues

By N. W. DURHAM

Chairman of Spokane Committee on Land Banks

While there is no present occasion for alarm, some uneasiness is felt in Washington over the possibility that war between the United States and Germany may retard the growth of the federal farm loan system.

If the government should try to carry on the war with big bond issues the farm loan officials might find it increasingly difficult to market their farm loan bonds. The $9,000,000 starting capital that has been put into the 12 federal farm loan banks ($750,000 for each bank) is only the "priming of the pump." It is only about one five-hundredth part of the farm mortgage indebtedness of the United States. The farmers will want hundreds of millions of dollars and eventually billions, and the new system can supply these great sums only through the bond markets of the country.

It is therefore obvious that if the government were to put out vast war loans it would be bidding against itself in the bond markets. It would be playing the war needs against the farm mortgage needs of the country. It might wreck the federal farm loan system, and at best it would impair its service. Having to pay higher interest rates in order to market its farm loan bonds, it would be required, in turn, to raise the interest rate on farm mortgages.

To overcome that and other dangers that would grow out of excessive bond offering, President Wilson is urging that the cost of the war should be chiefly met by direct taxation.

"It is our duty," said the president in his recent address to congress, "to protect our people as far as we may against the very serious hardships and evils which would be likely to arise out of the inflation which would be produced by vast loans."

In line with that recommendation opinion is growing at Washington that greater sums should be raised by increasing the income tax, by heavier internal revenue taxes on liquors and tobacco, and probably by a system of stamp taxes similar to that employed in the Spanish-American war.

It is a complicated and difficult problem, and its wise solution will call for careful thought and much intelligent planning.

D. G. O'Shea, president of the Spokane land bank, does not believe that national bond issues of other states taken to finance the war will interfere with the operations of the government rural credits system.

"I can not see that war bond issues would interfere in any way with the land banks," President O'Shea said today. "European countries which have similar systems have been continuing to finance farm loans as an incident to their other necessities. The total of loan bonds to be issued is very small, when compared with the resources of the country. We have inquiry now from possible purchasers.

"No, war will hardly interfere or delay the operation of the system. Right now our chief work consists in organizing the local associations, each one of which will remain a permanent and independent corporation, perhaps forever. Through them all the loans will be made. Since the opening of the bank in Spokane we have forwarded charters or application blanks to about 100 of these associations which are within our territory, and are getting them into proper organization."

GOOD NEWS FOR RENTERS AND FARM OWNERS' SONS

You can get a rich 160-acre farm free this spring, excellent for growing grain and mixed farming. Write for copy of "The Home Seekers' and Settlers' Guide." It gives full facts and tells what others are doing. Address Canadian Northern Railway, A. A. Brostedt, D. F. & P. A., 605 Hastings St., Vancouver, B. C., Canada.—Adv.

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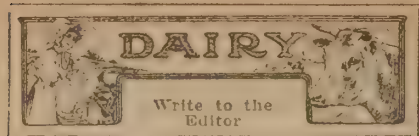
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Makers of the Celebrated Goodrich Automobile Tires
—"Best in the Long Run"



A. B. NYSTROM, Editorial Contributor

Wheat Silage

Offers Possibility in Northwest

At this time in the year many farmers are planning their silage crops. Much has been heard about the possibility of using wheat for silage in preference to corn in the localities where corn is not particularly successful as is the case in many northwestern localities.

The following is taken from a bulletin prepared by J. R. Shinn, county agriculturist for Spokane county, on the subject of wheat for silage, and throws light on the possibilities:

Cheap silage is a prime essential for profitable feeding of dairy cows, beef cattle, or sheep. This is especially true during the winter months. When the pasture dries up silage is even more essential for summer feeding. To obtain this kind of feed the middle west farmers have learned to rely upon corn. An investigation made by the author during the winter of 1913 showed that the yields of corn silage on Spokane county farms, not having irrigation, was very low compared with middle west yields. Incidentally a visit to the Glen Tana dairy farm revealed the fact that very satisfactory yields of excellent silage were being secured from wheat and vetch. These crops are seeded together in the fall and harvested for silage while green the following year. The foreman of this farm claimed a yield of 19 tons on a measured acre of ground and an average yield of 13 tons per acre for a 12-acre field. Furthermore, it is claimed that this silage gives better results than corn silage when fed to dairy cows and that its keeping quality is very satisfactory.

Selecting Wheat for Silage.

Jones' fife wheat has been used most for silage purposes, because it is one of the finest stemmed and sweetest wheats grown in the county. In the low places this wheat often attains a height of six feet, and, if cut at the proper time, averages 20 tons per acre. If allowed to mature on such ground it usually lodges before the grain is ripe. For this reason the cutting of these rank-growing patches of wheat prior to the harvesting of the remainder of the field would be economical farm practice. Furthermore, where the wheat grows so rank comparatively low yields of grain are usually found.

In a great many instances farmers, on whose places the above mentioned estimates of yields of wheat silage were secured, were asked to estimate the yield of hay. Quite uniformly their estimates of hay were one-fourth the yield of green forage. To further test out this factor a bundle of green wheat and vetch was taken and cured. When green it weighed 20 pounds, and when cured as hay it weighed five pounds. In other words, winter wheat will make approximately four times as much silage as hay.

Time to Harvest Wheat Silage.

According to our present knowledge wheat should be cut for silage while the entire plant is green and the kernel is in the milk. At this time the straw is not hollow, but as the ripening period advances the stem becomes hollow, thereby affording air space and consequent danger of spoilage when placed in the silo.

When winter wheat is grown alone for silage, it may be cut and bound the same as when grown for grain. If wheat is grown with vetch a mower must be employed, since the vetch tangles the crop. In this latter combination extra men are also necessary to open the mower swath in order to allow free passage of team and mower.

Cutting and Storing in Silo.

Wheat should be cut into one-half inch lengths or less before being placed in the silo. It should be spread evenly in the silo and tramped thoroughly. As an extra precaution to exclude the air, parties using wheat silage have resorted to the wetting down of the ensilage with water during the time of filling or soon thereafter.

Advantages of Wheat Over Corn.

Dairymen who have tried wheat silage claim better results in keeping up the milk flow and producing flesh than were secured with corn silage.

Every wheat farmer is provided with his own machine for harvesting wheat silage—the grain binder.

The harvest season for wheat silage comes at a time when labor is easily obtained and at about half the wage asked during the corn silage harvest.

The services of engines used for threshing purposes can readily be secured for cutting wheat silage, while at the time for corn silage cutting, the engines are busy threshing grain.

If wheat is cut for silage when the kernels are in the milk, the wild oats in the crop are removed from the field before sufficiently ripe to shatter their seed. This assists materially in keeping the land clean.

The filling of stave silos with wheat silage at the beginning of the summer's drouth prevents them from drying out and falling to pieces. When corn silage is used and the silos stand empty all summer they are generally badly warped and in poor condition at siloing time in the fall.

ON 40-POUND LIST

Honor Roll of Thurston County.

There were 37 cows during the month of March on the 40-pound list in the Thurston County Cow Testing association, according to the report of Hinston Grover, the tester. This shows a slight decrease from the month of February.

Brownie, a cow owned by C. C. Aspinwall, heads the list with 63.2 pounds of butterfat.

Star, the high cow for the last two months, owned by Mr. Munn, is second with 61.1 pounds.

During the last month another purebred bull was purchased by a member of the association. Traves Ayer has secured a Holstein bull of excellent breeding from the state college.

The following is the "roll of honor," composed of those cows producing over 40 pounds of butterfat for the month:

Owner and breed.	Milk.	Fat.
C. C. Aspinwall, mixed	1240	63.2
E. Munn, Jersey-Guernsey	986	61.2
O. Gardener, Jersey-Guernsey	863	57.2
E. Munn, Jersey-Guernsey	1079	55.0
W. Kelsey, Duroc-Guernsey	1271	53.0
E. Munn, Jersey-Guernsey	865	52.8
D. J. Bigelow	1137	51.2
A. Koch, mixed	1274	51.0
D. J. Bigelow	1370	50.7
E. Munn, Jersey-Guernsey	828	48.9
E. Munn, Jersey-Guernsey	856	48.8
A. H. Kaiser, registered Guernsey	911	48.3
A. Koch, Durham-Guernsey	1042	47.9
A. H. Kaiser, registered Guernsey	868	47.7
Will Kelsey	1048	47.7
A. Koch, Durham-Guernsey	1178	47.1
A. H. Kaiser, registered Guernsey	902	46.9
Sleater Bros., Jersey-Guernsey	980	46.1
E. Munn, Jersey-Guernsey	741	45.2
C. C. Aspinwall, Guernsey	1181	44.9
A. Koch, Holstein-Guernsey	978	44.8
A. Koch, Durham-Guernsey	1128	44.0
E. Munn, Jersey-Guernsey	756	43.8
A. Koch, Holstein-Guernsey	930	43.7
M. E. Meek, Jersey-Guernsey	973	42.7
D. J. Bigelow	821	42.7
D. J. Bigelow	859	42.5
E. Munn, Jersey-Guernsey	809	42.1
C. C. Aspinwall, Jersey-Guernsey	822	41.8
A. Koch, Holstein-Guernsey	1265	41.7
E. Munn, Jersey-Guernsey	632	41.1
D. J. Bigelow	1001	41.0
D. J. Bigelow	1162	40.7
M. E. Meek, Brown Swiss	992	40.7
A. Koch, Durham-Guernsey	825	40.4
C. C. Aspinwall, Guernsey	895	40.3
E. Munn, Jersey-Guernsey	629	40.3

Holland's Lessening Dairy Products.

A scarcity of milk and butter is reported from Holland, a country that in normal times exports large quantities of dairy products. The really serious feature in the situation is the decrease in the year of milk. This is attributed to the lack of stimulating and nourishing fodder, now almost unobtainable, which was imported in large quantities before the war. For the last year cream has been relatively scarce in Amsterdam and the prices unusually high.



Raise Your Calves on
Blatchford's Calf Meal
and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.

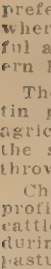
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It is steam-cooked and no trouble to prepare or use.

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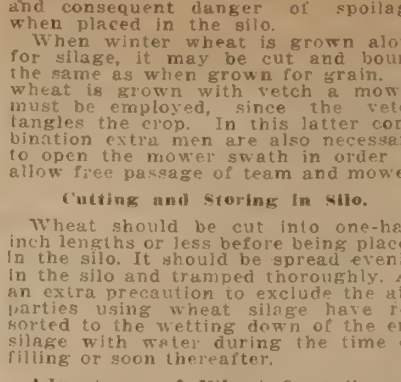
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NO STRING TO ROT.

BLACKLEGOIDS are small pills. Each pill is an accurate dose of blackleg vaccine.

BLACKLEGOIDS are easily administered—simply inject them under the skin with a vaccine injector.

TAKE NO CHANCES.

Don't wait until your calves become infected. This means certain loss—there is no *cure* for blackleg. Vaccinate now—before the deadly disease shows itself.

THE COST IS SMALL.

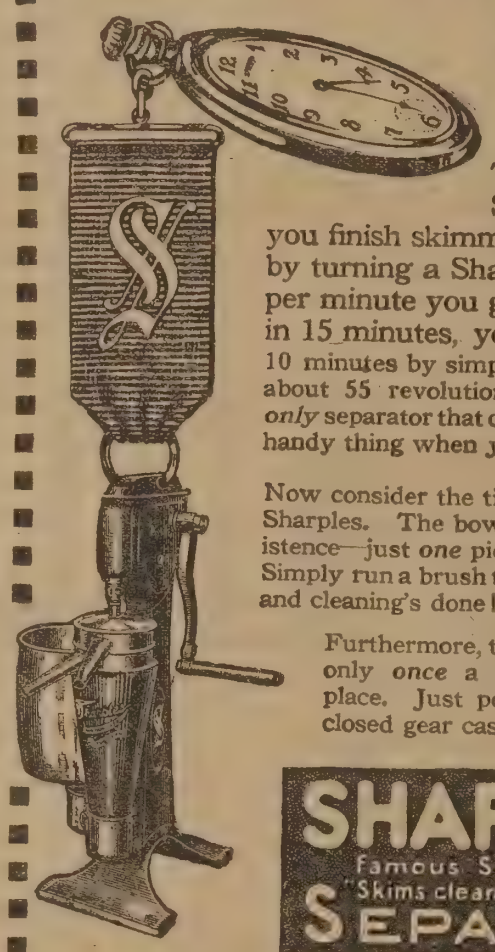
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Write for free booklets on Blackleg, with full information about Blacklegoids.

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Saves Time!

The faster you turn the Sharples, the quicker you finish skimming! For instance: If by turning a Sharples at 45 revolutions per minute you get through separating in 15 minutes, you can get through in 10 minutes by simply increasing the speed to about 55 revolutions. The Sharples is the *only* separator that can be "hurried"—a mighty handy thing when *you* are hurried.

Now consider the time saved in cleaning the Sharples. The bowl is the most simple in existence—just *one* piece in it, no discs or blades. Simply run a brush through it once or twice—and cleaning's done!

Furthermore, the Sharples requires oiling only *once* a month—and in only *one* place. Just pour a little oil into the enclosed gear case—more time saved!

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—the *only* separator with knee-low supply tank and a once-a-month oiling system

Remember that all separators lose considerable cream when turned below speed—*except Sharples!* The Sharples gets all the cream no matter whether you turn it fast or slow. It saves up to $100 a year more than other separators. Cordially welcomed by women, owing to its easy turning and easy cleaning. Over a million Sharples users. Write for catalog to Department 49.

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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

Premiums for Berkshires.

The American Berkshire association as provided for special premiums mounting to $1200 at the National win show to be held at Omaha, Neb., hich, together with $800 offered by he National Swine Growers' associaion, will make a classification of 2000 for Berkshires at that show. An ppropriation of $500 was made for erkshire barrows in the single and en classes at the International Live tock exposition. This, with the mount offered by the Live Stock exposition will furnish a classification f $1000 for barrows. The association remiums at the International for rand champion dressed carcass, barow, pen and grand champion carload, won by Berkshires, remains the ame. The total amount offered by the ssociation for Berkshire barrows at he International totals $800 in cash nd trophies.

DRIED BEET PULP

For Beef Cattle and Sheep Feed.

The Farmer has received a letter rom W. F. Towne, manager of the Larowe Milling company of Detroit, Mich., n which he refers to an article which ppeared in the Farmer of March 8, by .- I. Potter, on dried beet pulp for eeding beef cattle and sheep. Mr. owne says:

"It is evident that the writer of this rticle—Mr. Potter—is under a misapprehension with regard to dried beet pulp on two or three important points. For instance, the statement that dried pulp is seldom used for fattening beef stock is not borne out by the facts. The demand for pulp for this purpose has grown to the point where we could probably sell at least a fourth of our present total output to packing companies and feeders of beef cattle and sheep."

Mr. Towne incloses a letter from C. B. Cunningham of Sacramento county, Cal., regarding the feeding of beet pulp to swine. Here is an extract:

"I would suggest that two parts of beet pulp to one part of grain be used, and that same be well soaked and salted. I am using that every day in feeding my stock, even when they are running out on the alfalfa. For sows that are suckling their young I use two parts of wheat middlings and one part of the above mixture, and I find that even while suckling I can keep them up in flesh, and I know positively that it is on account of the best pulp, for I never was able to do so before feeding this pulp."

Veterinary

Dr. S. B. Nelson

1. What can I do for botts in horses, also for heaves? 2. I have a calf that has bunches along its back which contain grubs. L. S. B.
Elma, Wash.

1. For botts in horses give one-half ounce to one ounce carbon bisulphide in gelatine capsules. The following morning or a few hours later give one quart of raw linseed oil. For the heaves there is no specific remedy. Sometimes good results have been obtained by giving one ounce of Fowler's solution of arsenic in a little water once daily to the animal for two, three or four weeks.

2. Regarding the calf which has the grubs or worms on its back these are warble grubs. The best thing to do is to squeeze the warbles out daily and crush them. Hold a tin cup over the parts when squeezing them so that they do not fly and strike you in the face or on the clothing. Then during the summer months of June and July apply some oil substance to the hair where the betts flies or warble flies lay their eggs. Fish oil with a little tar mixed with it has been recommended and is good material.

1. I have a cow that has been lame since the snow came. There is no swelling on her limbs anywhere, but especially after getting up she is quite stiff and sore. 2. I have a mare that secretes a whitish fluid a great deal. Can that be abortion, and if so, will it affect the stock that graze in the same field? 3. What is the simplest and best clover bloat remedy?
Snohhomish, Wash. R. A. F.

1. It is possible that your cow is affected with rheumatism. Give her one and one-half pounds of epsom salts in three quarts of water. Two days later begin giving her one ounce of sodium salicylate morning, noon and night for two days. See what that will do for her.

2. Regarding your mare, I do not believe that the discharge is an indication of contagious abortion, and I do not believe it will affect the stock that graze in the same field. It is more likely a local mucous irritation which, if the mare is not with foal, might be treated with a very light solution of potassium permanganate. Just a pinch between the fingers put into a pailful of warm water might be used as an injection.

3. In regard to clover bloat, give one ounce of creolin in one quart of water. Follow in a few minutes after this with one pound to one pound and a half of epsom salts in three quarts of water. If the bloat is very bad the cow should be tapped on the left side halfway between the last rib and the point of the hip, and a hand breadth down from the backbone.

Warranted to Give Satisfaction.
Gombault's
Caustic Balsam



Has Imitators But No Competitors.
A Safe, Speedy and Positive Cure for
Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.
As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable.
Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address
The Lawrence-Williams Co., Cleveland, O.



Ask ME – I know
The calf knows that when bossy has a sore udder or teats the milk comes hard and the cow is restless and irritable. A cow that is nervous and uncomfortable cannot yield her full milk supply.
Bag Balm is a wonderfully effective, healing ointment, and quickly clears up scratches, cuts, chaps, bruises, inflammation, or caked bag. A valuable aid in treating bunches and stricture. Have a package on hand and keep little hurts from getting big.
Sold by feed dealers and druggists in generous 50c packages. Write for our free booklet, "Dairy Wrinkles."
DAIRY ASSOCIATION CO.
Lyndonville, Vt.
BAG BALM
MADE BY THE K Dy-KURE PEOPLE

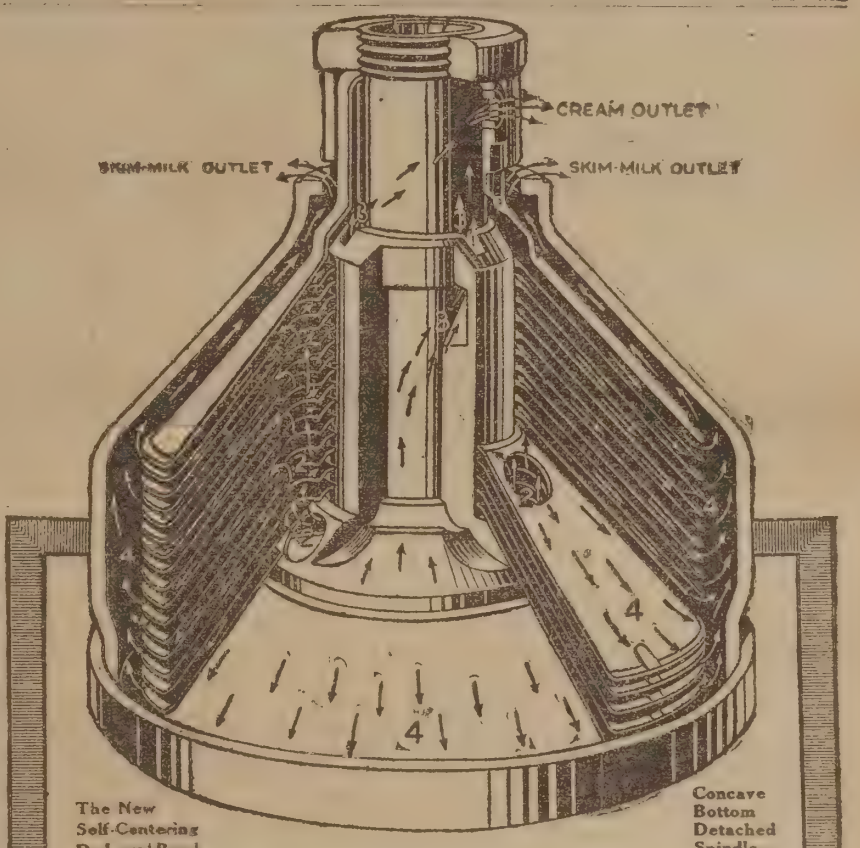
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You can save even half because we build these perfect separators in our own factories with the highest skilled labor and lowest possible cost for fine materials and sell them direct from factory to farm at one small profit based on enormous volume. Guaranteed for ten years. Compare and test it beside ANY SEPARATOR BUILT. Ask for 1917 free catalog.
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This company has already established a reputation for prompt payment of losses and is fully organized to render efficient service in this state.
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The New Self-Centering De Laval Bowl
Concave Bottom Detached Spindle

The Supremacy of the
NEW DE LAVAL

THERE may be some question as to who makes the best wagon or the best plow or the best watch, but when it comes to cream separators the supremacy of the De Laval is acknowledged at once by every fair minded and impartial man who is familiar with the cream separator situation.

Thousands and thousands of tests, the world over, have proven that the De Laval skims the cleanest.

The construction of the New De Laval keeps it in a class by itself.

It outlasts and outwears all other makes by far, and can be run with much less cost for repairs.

The world-wide De Laval organization, with agents and representatives in almost every locality where cows are milked, ready to serve you, insures that the buyer of a De Laval will get quick and valuable service when he needs it.

More De Lavals are sold every year than all other makes combined.

The New De Laval has greater capacity than the 1916 style, is simpler in construction, has fewer and interchangeable discs, is easier to wash, and the skimming efficiency is even greater.

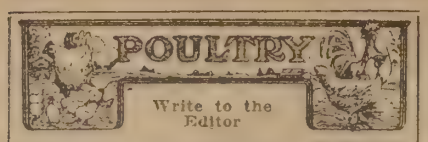
Each New De Laval is equipped with a Bell Speed Indicator.

Order your De Laval now and let it begin saving cream for you right away. Remember that a De Laval may be bought for cash or on such liberal terms as to save its own cost. See the local De Laval agent, or if you don't know him, write to the nearest De Laval office as below.

New Catalog will be mailed upon request

DE LAVAL DAIRY SUPPLY COMPANY
LARGEST DAIRY SUPPLY HOUSE ON THE PACIFIC COAST.
We specialize in Alpha Gasoline and Distillate Engines, Ideal Green Feed Silos, Irrigation Equipment, Centrifugal and Deep Well Pumps and Alpha Spraying Outfits. Send for special catalog.
101 DRUMM STREET, SAN FRANCISCO
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

When you write to advertisers be sure to say that you saw their advertisement in this paper.



JAMES DRYDEN
Editorial Contributor

While Assistant Secretary Vrooman suggests as a patriotic duty that every farmer keep 100 chickens, it is none the less the farmer's duty to select good chickens, hens that are good layers or good meat producers, otherwise the wheat that the farmer feeds to them had better be made into flour to feed the soldiers.

When it came to the production of food, all the warring nations have lacked preparedness. Their soldiers were better trained than their hens. What would it have meant to those nations if the efficiency of the farm fowls had been increased 50 per cent by proper breeding? It could have been done at less cost to the nation than one day's warfare is now costing either England or Germany.

"Please give me a remedy for my hens. They get canker in the mouth and one eye swells together and some of them go blind in one eye without it swelling together. I have a good chicken house built up so they can go underneath, but there is a seepage when it rains underneath." B. Y. G.
Big Lake, Wash.

This is a case of either roup or canker, or both. If taken in the first stages the disease may be cured. Use permanganate of potash of a 2 per cent solution. The head of the bird should be dipped in the solution and held there as long as possible without strangling the fowl. This should be done daily two or three times until a cure is effected. Applying iodine with a feather to the canker spots is also recommended. Separate the affected fiwls from the rest of the flock and disinfect water vessels and feed troughs. The condition of dampness under the house should be remedied.

J. D.

Marketing

Cooperation Helps Solve Problem

We have a letter from Emma J. Boyce, American Falls, Idaho, in which occurs the following:

"I am only a beginner in the poultry business, but I see at once that we must arrange other ways to market eggs than just to take them to the stores in American Falls, or even to sell them to private individual customers here, for the reason that just as soon as a few farmers bring in a few dozen extra above the local demand the stores cut prices from 2 1-2 to 5 cents per dozen. No matter how careful I may be to gather my eggs often and keep them clean and to never sell a stale egg, I have to suffer the cut in price just the same as the party who isn't careful of his or her hens' eggs as to freshness, cleanness, etc. * * * I thought some such system as the sealed carton system of direct sales from producer to consumer might be a good one. What does The Farmer think of it and what does it suggest?"

First, I would suggest cooperation among the egg producers. But it usually takes more than a suggestion to get them to cooperate. If a few farmers would meet together in the spirit of cooperation the condition described at American Falls could very soon be remedied. They must have eggs enough, however, to make regular shipments in case lots, the more the better. So long as the express companies favor the large shipper by charging much less per dozen when shipped in case lots than in small quantities, so long will it be necessary for small producers to cooperate or combine their shipments in order to overcome this handicap. The eggs could be gathered together at one farm and candled and graded and packed in cases holding 30 dozen. In the Portland territory it is about as cheap to ship two cases at a time as one case. It would not take many producers to get the requisite quantity to ship in case lots, but if they could get two or three cases a day or five cases, so much the better. Regular shipments in quantities like that would make it worth while for some of the larger dealers in the cities to offer good prices. But the shipments must be regular and the eggs must be strictly fresh, the small ones taken out and the dirty ones washed.

American Falls is some distance from large cities, but eggs could be shipped to Boise, Idaho; Salt Lake City and Butte, Mont. Let the cooperators appoint one of their number secretary and manager who would see that they were properly graded and packed. First he should be instructed to correspond with some of the buyers in the cities mentioned and possibly in others. He could get the names of reputable dealels by writing to bankers, or to express agents in those cities. The postmasters would also furnish the information. The expense of the carton could probably be eliminated, but the buyers should be consulted as to this. It would be well in the end to stamp every egg with a rubber stamp, which would be the trademark, and if the quality of the eggs was always good this stamp would help to sell the eggs. Customers would ask for that brand.

It is all easy enough, except the cooperating. The farmers or producers should all sign a castiron agreement that they will sell all their eggs through the association or egg circle for at least a year, otherwise the local dealers will try to break up the cooperation by offering as high a price or higher price than they could get by shipping the eggs themselves.

A trade with private consumers, however, can be worked up by any egg producer. Eggs may be sent in 12-dozen lots by express to private city customers. This is often done now. A 12-dozen crate of eggs will keep all right for two weeks if kept in a cool, dry place. If it is too many for one family two neighbors or three can take a crate between them. The same crate may be sent by parcel post. It hardly pays to ship eggs by express in smaller quantities. They may be sent by post in smaller packages. Sometimes the express companies in the large cities will furnish the names of private customers who will take shipments of this kind. In some cities the postmaster keeps a list of buyers or private families.

J. D.



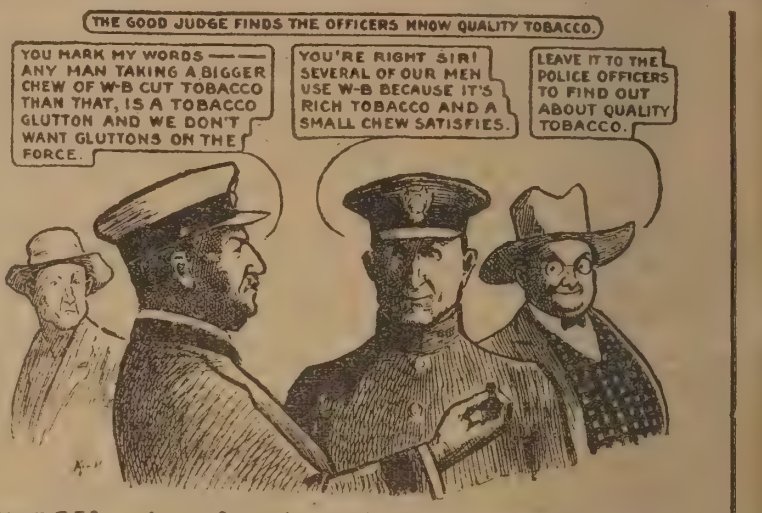
HALF the battle of raising profitable poultry is starting your little chicks out with the proper development.

Albers Chick Food and Chick Developer

are scientifically prepared feeds, made from clean, wholesome grains. Contain no grit, shell, dust or foul screenings, nothing a chick will not eat and thrive on.

Don't experiment—make this the most profitable year in your history. Purchase Albers' Progressive Poultry Foods through your dealer. Accept no substitutes.

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YOU notice a fine regard for appearance among the officers from Roundsmen to Captain—that's one reason they are so keen for W-B CUT Chewing. The pass-word among these gentlemanly fellows is "If you won't take a little chew don't take any." No need to disfigure the face, when a nibble of *rich* tobacco gives *more satisfaction* than a wad of ordinary stuff—also less grinding and spitting. Take a tip from the officer on W-B.

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Guard Against Disease!

Keep the air pure, keep animal skins clean and free from lice, give your animals healthy living quarters, and you'll have little to fear from contagious diseases.

Dr. Hess Dip and Disinfectant

Establishes Health Conditions

A standard dip for sheepscab and ticks, kills lice on all animals. Use regularly—all the year round. Spray and sprinkle freely about stables, pens, yards and use about the house in garbage cans, sinks, cesspools, etc., to keep down bad smells and destroy disease germs.

Pint bottles, quarts, half-gallon and gallon cans and barrels.

Dr. Hess Fly Chaser protects animals from flies. Makes cows quiet and restful. Does not discolor hair or blister.

If not found at your dealer's, address

DR. HESS & CLARK
Ashland, Ohio

Tells why chicks die

E. J. Reefer, the poultry expert, 466 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease over night and actually raises 98 per cent of every hatch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.

Hardy Nursery Stock

Northern grown trees. Write for price list and varieties.

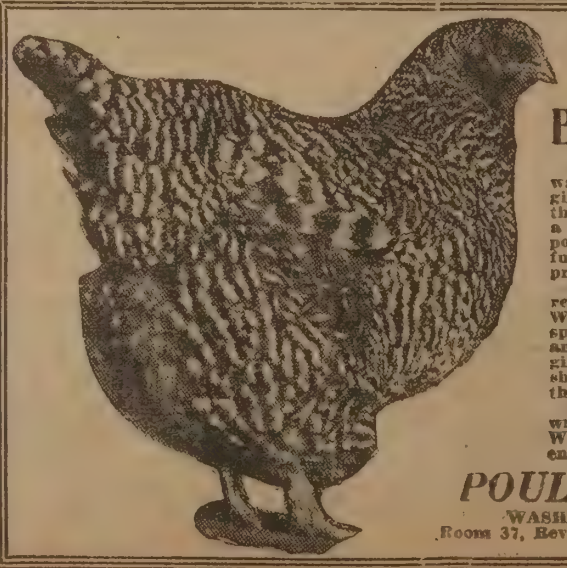
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Have fresh berries from spring till winter. Send postal today for catalogue of valuable information on vegetable plants and roots.

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Prize Poultry

For Thrifty

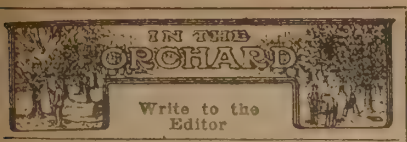
Boys and Girls

Our poultry club provides a way for ambitious boys and girls to get a start. It gives them manly and womanly jobs, a feeling of ownership, an opportunity to do things. We furnish the batching eggs from prize pens.

Send one order for a new or renewal subscription to The Washington Farmer at the special three-year rate of $1.50, and we will send your boy or girl a certificate of membership and all details concerning the club.

Give name of child when writing, and act without delay. We desire to hear from parents,

POULTRY CLUB
WASHINGTON FARMER.
Rooms 37, Review Bldg., Spokane, Wash.



GRANVILLE LOWTHER
Editorial Contributor

Cherry Juice.

A letter from H. G. Monce, Nampa, Idaho, reads as follows:

"I am much interested in the growing and marketing of cherries since I have 2000 bearing trees at Nyssa, Ore. These trees are six years old and I estimate will yield an average of 10 gallons per tree for summer of 1917.

Have almost equal numbers in each of the following varieties: Early Richmond; Governor Wood, English Morillo, St. Dake and Mont Morency.

I contemplate selling the crop for cherry juice and would be much interested to see an article treating on this subject in your paper."

I have had the same thing in mind about which inquiry is made in this letter. There is very little literature on the subject in so far as I have been able to discover, and the industry in this country is new. For more than a year I have been giving attention and study to the question of manufacturing fruit juices, and how to market them to the best advantage, but I find very little to furnish information on the subject of cherry juice. I have observed the markets and find very little cherry juice offered for sale. The trade offers grape juice, apple juice, cranberry juice, orange juice and lemonade in large quantities, but only occasionally will we find cherry juice at the soft drink places. Last winter I spent some time in southern New Mexico and Arizona, where the water was so charged with lime and alkali that it was like taking medicine to drink it. I did what many others did: I drank fruit juices and root beer. I also took special notice of the kinds offered for sale. I very seldom found cherry juice, yet it is a most pleasant and appetizing drink. Why it is not more largely sold I do not know, but have a suspicion that it is because it is more valuable made into cherry wine and cherry brandy and what the German's call Kirschwasser, which, until the war, was made chiefly upon the upper Rhine and shipped to this country. Since the war the supply from that source is cut off and naturally manufacturers would try to meet the demand. This may or may not be the reason, but there is always a cause for every effect, and this looks to me like a reasonable solution of the problem.

G. L.

The Farm Garden

ARTICLE SEVEN.

The Turnip Class

The turnip, rutabages, radish, kale, cabbage, cauliflower and the like belong to the same vegetable family—the mustards. This is easily understood when these plants are observed at blossom time, the blossom and seed formation being very similar.

Turnips—Turnips should be sown in ground that can be kept reasonably moist throughout the growing season. They will not thrive in excessively hot localities, and therefore should be planted early enough in most sections to come to maturity before the hottest, driest part of the summer is reached. Turnips must be grown rapidly. If for any reason they are stunted—as from drouth or heat—they are inclined to become tough and pithy. Like most vegetables, they respond loyally to cultivation, but demand less than most other garden plants. Success can not be had with them unless the soil is well fertilized and well tilled prior to planting. They should be planted in rows and should be thinned to such extent that when grown they will not touch. There are many varieties, some suitable for table use and others primarily for feeding. Turnips are the victims of both a leaf-eating bug and a root maggot. Methods of combatting these pests will be discussed in a subsequent article in this column.

Rutabagas—The rutabaga is a close relative of the turnip. It is of richer, yellower meat, but is not generally so much used for table food as for live stock feed, though it is excellent for the table.

The rutabaga should be planted and cared for much the same as the turnip, but demands more cultivation. They require a longer season for reaching maturity, being a slow growing vegetable. Like the turnip, they fail if allowed to be stunted at any time in their growth by lack of moisture or cultivation or by too great heat.

Radishes—It is doubtful if any other garden vegetable is so universally known and grown as the radish. This is due partially to its freshness as an early spring vegetable and partially to the fact that it is easily grown. The small turnip radishes may be sown as soon as the ground can be worked. They can endure considerable frost, though cold retards their development. Sow them anywhere, and almost any way, and they will grow; but care in sowing and cultivation will result in a better quality of quickly-grown radishes. To be good the radish must be grown quickly, except the long, late varieties. The small ones should be planted successively, probably seven to 15 days apart, in order to have fresh, crisp radishes ready for the table at all times during the spring and early summer. Shortly after the first crop of early radishes is ready the later varieties should be planted. They are best adapted to summer and fall use. Radishes should be planted in rows from six inches to a foot apart and thinned to stand about an inch apart in the row. The seed should not be covered more than half an inch, which means that the surface of the soil must at all times we kept moist until the seeds have sprouted and formed root.

Orchard Sells for $13,500.

A deal has been closed between William Shelton and Sim Smith, whereby the latter acquired Mr. Shelton's 15-acre orchard tract a mile west of Cashmere, in Chelan county, for $13,500, or $900 an acre. It is planted to standard varieties of commercial apples, and the trees are mostly 10 years old.



WANTED
Cascara Bark

We buy cascara bark, Oregon grape root and Oregon balsam of fir at the prevailing market. Submit samples and quantity you have for sale.

BLUMAUER-FRANK DRUG CO.
357 Everett, Portland, Oregon.



DELCO-LIGHT
ELECTRICITY FOR EVERY FARM

DELCO-LIGHT helps to keep the young folks on the farm. It brings City Comforts and Conveniences and Economies to the farm home.

And it pays for itself in time and labor saved.

Delco-Light furnishes an abundance of clean, safe, economical electric light for house and barn.

It furnishes electric power to pump the water, wash the clothes, milk the cows, separate the cream, churn the butter, operate the electric fan and the vacuum cleaner.

Delco-Light is a simple, economical, highly efficient electric plant that requires almost no attention and that runs on kerosene, gas, or gasoline.

There is a Delco-Light Representative in your vicinity who will tell you all about it.

Price complete, with batteries, except in Canada and far western points is . . . . . $275 F. O. B. Dayton

The Domestic Engineering Company
Dayton, Ohio.

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E. H. Epperson, 314 E. Pike St., Seattle.

Controls all barn and dairy equipment



CEDAR RAPIDS SPEED GOVERNOR

—as low as $12.00

—the speed governor of a thousand different speeds. Every turn of the hand wheel gives a different speed and each speed is absolutely steady and uniform.

Install it yourself with a screw driver. No figuring pulleys, no chance of installing it wrong for it runs in either direction, attached to the floor, the wall or the ceiling. It's *as cheap as an ordinary line-shaft* with the governor pulley thrown in.

THE Cedar Rapids Speed Governing Line Shaft is as cheap as the average friction-clutch pulley, yet it controls the speed of several pulleys at once without stopping your engine. The engine operates the governor—the governor controls the line-shaft.

The governor absorbs all jerky vibration. The power transmitted is steady and smooth. Runs all machinery at uniform speed. If you own an engine you need the Cedar Rapids Speed Governing Line-Shaft. One man saved enough labor fanning 50 bushels of clover-seed to more than pay for his governor outfit.

Controls Them All

Cream Separators require starting at slow speed. The Speed Governing Line Shaft *makes any separator run smoothly.*

Butter Churning necessitates slowing down the machinery to gather the butter. It regulates this.

Your Grindstone can best be run from a pulley on the Speed Governing Line Shaft.

Lighting Plants require regular power without "mis-fire" or "break". Controlled by the Speed Governing Line Shaft.

Your Washing Machine should be operated slowly when washing large pieces. The Governing Line Shaft controls it.

$50 in Cash Prizes

to be awarded July 1st. Present *owners* and *prospective buyers* should write for full particulars.

Northwest Distributors
MITCHELL, LEWIS & STAVER CO.
Portland, Oregon
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CEDAR RAPIDS FOUNDRY & MACHINE COMPANY
452 Second St. West
Cedar Rapids - Iowa



ANOTHER WEEK AND IT'S GONE

YOUR CHANCE TO WIN $175.00 ENDS APRIL 19

Send Today for Our Contestants' Helpful Outfit—If You Act Now Your Chances Are Equal to Those of Any One Else in Our Big

NOTE THESE FACTS

FARM INFORMATION CONTEST

READ THE RULES—ANSWER THESE QUESTIONS

51. What boy's name is also the name of an animal and a device for lifting?

52. When it is 12 o'clock noon in Washington, D. C., what time is it in Hong Kong?

(Our CONTESTANT'S HELPFUL OUTFIT tells you.)

53. What is the document called which shows that a piece of land is given as security for a loan?

54. What advertiser in various issues of this paper has offered to send an illustrated book entitled "Tree Planting"?

55. How many feet in a surveyor's chain?

$800—IN CASH to Be Paid—$800

We will positively give EIGHT HUNDRED DOLLARS in cash awards (and more in event of ties) to the winners. As explained in the rules which follow, there will be five questions run in every issue of the Farmer for 12 weeks. The last five questions will appear in the issue of April 19.

Open to Four States

Contestants must be residents of Washington, Oregon, Idaho and Montana.

Five Questions Each Issue

The contest will be composed of 60 questions. Five will be run in each issue of the Farmer for 12 issues.

Answers to each question except No. 45 can be given correctly in from one to 10 words and will be given a score of 100 if correct. Answers to question No. 45 will be limited to 100 words each, and will be graded as to the common sense and general knowledge of farm conditions shown by the contestant without regard to spelling, grammar or penmanship. As with the other 59 questions, a perfect answer to No. 45 will be scored 100.

Perfect Score Is 6000

The contestant who comes nearest to a score of 6000 and complies with all the conditions of the contest will receive the first prize; the next nearest, second prize, and so on. In case of a tie each tying contestant will receive the full amount of the prize.

There are 35 prizes, as follows:

$150 is amount of First Prize. **$100** is amount of Second Prize. **$50** is amount of Third Prize. **$20** is amount of Fourth Prize. **$10** is amount of Fifth Prize. **$5** each, Sixth to Tenth Prize. **$2** each, Eleventh to Fifteenth Prizes. **$1** each, Sixteenth to Thirty-fifth Prizes.

OTHER RULES

The answers will be passed upon and graded by a fair-minded, thoroughly competent judge.

Two weeks will be allowed for sending in answers after April 19, 1917, date of the issue containing the last five questions.

Remember, your failure to answer all the questions will not necessarily exclude you from the contest. There are 60 questions to be answered and it is not reasonable to suppose that all our prize winners will attain a perfect score. Your answers must all be sent in at the same time. Do not send any answers until you have completed the full list or as many as you can answer.

Those who use our CONTESTANT'S HELPFUL OUTFIT will be able to send in their complete set of answers without delay, there being no need of their waiting for the questions as they appear in The Farmer from week to week down to the final issue of April 19. In order to get as prompt returns as possible from those contestants who use our CONTESTANT'S HELPFUL OUTFIT, extra inducement is made in the prize awards. SEE ENLARGED PRIZE LIST.

Announcement of prize winners will be made and prize checks mailed as soon after close of contest as possible.

If any point is not clear, do not hesitate to write the Farm Information Editor.

All answers must be mailed on or before midnight, May 3, 1917, as shown by post-office dating stamp on your envelope.

ORDER COUPON—If your subscription is paid ahead, the time paid for herewith will begin at the date to which you are now paid.

FARM INFORMATION EDITOR,
Review Building, Spokane, Wash.
Enclosed find $1 for one year, or $1.50 for three years' subscription to

THE WASHINGTON FARMER

and enter me as a contestant in the Farm Information Contest. I am also to receive at once the complete CONTESTANT'S HELPFUL OUTFIT, consisting of guide against wrong answers, reply blanks, rules and all information to aid me to win a reward.

Name .....

R. F. D. ..... Town .....

State .....

Notice—Amount of remittance to be either $1 for one year's subscription to The Farmer or $1.50 for three years' subscription.

Answer this question: Are you now a subscriber? .....
If you wish paper sent elsewhere, fill in name and address.

A Valuable Aid to Contestants

One complete CONTESTANT'S HELPFUL OUTFIT, including all of the 60 questions and instructions and helpful warnings as to answers which would be wrong and the correct answers to some of the most difficult questions, is truly a big help to the contestant.

To each contestant who sends in a new renewal or an extension of his subscription at the time of registering for the contest, this complete Contestant's HELPFUL OUTFIT will be sent in combination.

We feel that those beginning on the contest will find these suggestions as to what to avoid distinctly useful. The equipment supplies in convenient form everything needed to enable you to apply your ability to the best advantage and will contain information enabling you to answer the most difficult questions correctly.

Puts Questions in Reach of Children

This CONTESTANT'S HELPFUL OUTFIT puts the solution of the questions in the reach even of the children, it being the purpose to make it possible for everybody in Washington, Oregon, Idaho and Montana to compete. This outfit includes, besides general information about the plan of the contest, the following:

Guide against wrong answers, which includes either correct answers of more difficult questions or easy references as to where to find the correct answers; and blank forms on which to write your answers in such a way that there can be no confusion when your answers are taken up by the judge for scoring.

It will be worth considerable to you to be assured that your answers are reaching the Farm Information Editor in such form that he will know in every instance exactly what question you intended to answer. This CONTESTANT'S HELPFUL OUTFIT will make it possible for you to

Begin Work at Once

On account of the large number certain to send for our CONTESTANT'S HELPFUL OUTFIT, thus making it possible for them to answer the entire 60 questions without delay, it is deemed advisable to offer some special inducements to secure prompt returns from this particular class of contestants. By securing the early replies of those who are thus supplied with the entire 60 questions we will be able to have their papers carefully scored before the final rush of answers toward the end of the contest.

Understand, it is not absolutely required that those who use our CONTESTANT'S HELPFUL OUTFIT send in their replies at once, but, in order to induce them to get in early, the following plan for enlarging the awards to those prize winners whose answers come in early is offered:

ENLARGED PRIZE LIST—$800 IN PRIZES—ENLARGED PRIZE LIST

For those who use our CONTESTANT'S HELPFUL OUTFIT.

Thirty-Five Prizes	Amt. of prize if winner sends in answers during 1st period. Feb. 1 Feb. 21	Amt. of prize if winner sends in answers during 2d period. Feb. 21 Mch. 14	Amt. of prize if winner sends in answers during 3d period. Mch. 14 April 5	Amt. of prize if winner sends in answers during 4th period. April 5 April 19	Amt. of Prize for winner who does not send in answers before April 19
First Prize	$300.00	$225.00	$200.00	$175.00	$150 00
Second Prize	200.00	175.00	125.00	110 00	100 00
Third Prize	100.00	87.50	62.50	55.00	50.00
Fourth Prize	40.00	35.00	30.00	22.00	20.00
Fifth Prize	20.00	17.50	15.00	11.00	10 00
Sixth to 10th Five prizes each	10.00	8.75	7.50	5 50	5 00
11th to 15th Five prizes each	4.00	3.75	3.00	2.50	2 00
16th to 35th 20 prizes each	3.00	2.50	2.00	1.50	1.00

To secure our CONTESTANT'S HELPFUL OUTFIT, fill out order coupon on this page and send it in to Farm Information Editor, with your personal check, money order or 2-cent stamps, for $1.00 for one year or $1.50 for three years.

You must address

THE WASHINGTON FARMER

Farm Information Editor

Review Building, Spokane, Washington.

Our School Library Workers

The nice warm spring days are making all the boys and girls feel fine. They can get around among the neighbors to better advantage. This will enable them to finish the canvass for subscriptions in the school districts where they are closing up a school library contest.

The boys and girls down in Kittitas county are working hard for their libraries. Three schools have entered the contest this week and we hear that more will follow in a few days. The new schools entering are:

Dysart school, Kathryn Burroughs, teacher.

Ridgeway school, Howard Barnes, teacher.

Cove school, Miss Florence Foltz, teacher.

Now, we know that there are other boys and girls in that same county who would like to have their school get more library books through the Washington Farmer subscription plan. So, if any one of the boys and girls in any other schools desire to form a red and blue library team to take subscriptions and will write to the "Bookman," care of the Washington Farmer, he will write to your teacher and see if it will be agreeable to start a library contest in that district.

Read the "honor roll" this week and see how many of the boys and girls whose names appear there are known to you:

HONOR LIST.

Florence Cook and Florence Edsill, Stevenson school, Stevenson, Wash.

Ruth Thompson, Hopewell school, Everson, Wash.

Master John Bowen, White Salmon school, White Salmon, Wash.

Clifford Light, Bolles Junction school, Prescott, Wash.

Cathrine Nichols, Parker Bottom school, Wapato, Wash.

Laurence Havstad (3), Carl Timmerman (2), Eudora Mitchell, Ruby Leer, Lena Colvin, Merle Smith, Harry Cownell (2), Muriel Mountain, Ella Eggers (3), Murray Davidson (2), Stanley Hackney, Charles Blaker, Miss Nellie Richter, Joev Pollett, Richland school, Richland, Wash.

Dorothy Rauch (5), Chewelah school, Chewelah, Wash.

Joe Denton, Deer Park school, Loon Lake, Wash.

A great deal is being said about our soldiers and sailors just now because of the war which threatens our country. So a great many schools are including the following four books among their orders. You would like to read each one, we know.

Makers and Defenders of America.
Story of Lafayette.
Yankee Ships and Yankee Sailors.
Stories of Great Americans.

Individual Contest.

Dorothy Rauch still leads in the contest. Miss Dorothy seems to believe in that old saying: "A steady drop wears away the rock," for every day or so she sends us a subscription. Even the office force is interested in the contest and have picked their favorites to win. One will say, "You just watch Bessie Webb! She will win yet!" Another will say: "Loyal Snyder will surprise you one of these days!" So there you are.

Dorothy Rauch, Chewelah, Wash. ..22
Bessie Webb, Ford, Wash. 14
Loyal C. R. Snyder, White Swan, Wash. 12
Mildred Glasgow, Bossburg, Wash... 9
Dorothy LaRue, Mayview, Wash. 6
Lester Ruark, Mayview, Wash. 6
Viola Leachman, Mayview, Wash. .. 5
Eva Bond, Valley, Wash. 3

Books have been sent to the following teachers this week:

Lillian Brown, Mayview, Wash.
Mrs. John Oliver, Parker, Wash.
Sudie L. Lee, Colville, Wash.
D. M. McConnell, clerk, Almira, Wash.
Clara Philips, Prescott, Wash.
Viola Willey, Richland, Wash.

Teachers should send in the subscriptions they take each week together with the subscription money collected, in order to give prompt service to the patrons who are aiding their contest.

Community Center School Building.

The commercial club of Sprague, Lincoln county, has named a committee to cooperate with the school board in the educational campaign favoring the building of a new community school auditorium and gymnasium.

Okanogan County Agriculturist.

Walter A. Holt, who graduated from the department of horticulture with the Washington State college class of 17913, has been appointed county agriculturist for Okanogan county.

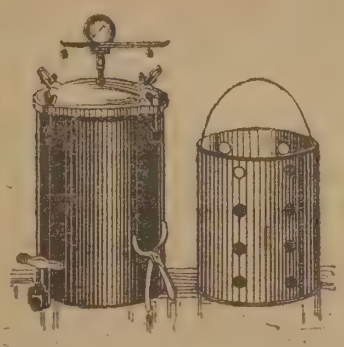
$ MAKE MONEY BY HOME CANNING $

HOME FARM & ORCHARD OUTFITS

A CANNING outfit is neither complete nor sanitary unless the canning is under **STEAM PRESSURE** and the cans hermetically sealed by a can-closing machine before the canned goods are placed in the retort. This does away with solder, unsanitary methods, spoilage, and **SAVES** the cost of solder and one-half the time devoted to sealing by the old method.

THAT constitutes a "Complete **SANITARY** Canning Outfit." It is the only safe and thoroughly effective way to sterilize canned produce. For any one putting up 500 cans of fruit—it is a modern hygienic necessity. This is the "**STEAM PRESSURE WAY**" with a strong, durable and easily adjusted **SANITARY CAN CLOSING MACHINE.** Cheap types of can closing machines are on a par with solder—neither of which are up-to-date. Our "Complete **SANITARY** Canning Outfit" is among the best that skill and science can produce.

NOTE—Owing to the uncertainty of market conditions on material for equipment, we **URGE** you to place your order with us immediately, while present prices for "Complete **SANITARY** Canning Outfits" are quoted.



COMPLETE SANITARY CANNING OUTFITS.

NO. 1—FAMILY TYPE.

200 to 350 Cans Per Day.

Outfit consists of—

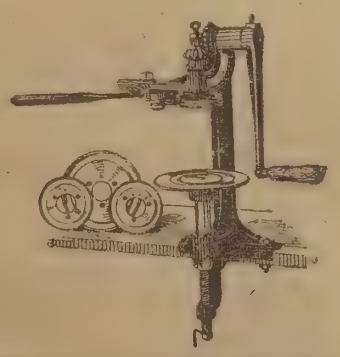
1 12x18-inch H. & A. Retort
1 Retort Cover with Packing
1 high-grade Steam Gage
1 Safety Pop-Off Valve
1 Petcock or Relief Valve
1 Galvanized Iron Grate
1 Galvanized Iron Triangle
1 pair of Can Tongs
1 H. & A. Recipe Book.

Holds at each charge—

21 No. 2 cans
12 No. 2½ cans
12 No. 3 cans
4 No. 10 or gallon cans.

Shipping weight .....65 lbs.
Price $16.50

F. o. b. Seattle, Wash.



SANITARY CAN CLOSING MACHINE
Hand Power Double Seamer
H. & A. Type

This shows machine, fastened to bench, with four chucks that accompany it. It is so simple that it is foolproof in operation and adjustment. It is durable and rigid and made to stand hard work. It double seams every can hermetically, and in its simplicity no experience is required to operate it. Do not buy cheap and poor imitations. It absolutely seals the can right. It is a modern necessity in canning under sanitary conditions.

Weight .....25 lbs.
Price complete $38.50
F. o. b. Seattle, Wash.

Weigh These Facts:

FIFTY per cent of all fruit and vegetables grown is WASTED. THE BEST of this as to size, color, flavor and appearance, ripening where it grows—CAN NOT BE SHIPPED. Perishable fruit and vegetables on a poor and an overcrowded market—IS A SURE LOSS. Will you save this loss this year by using our "Complete SANITARY Canning Outfit?" Why not can for the market? The "big fellow" cannot get his fruit and vegetables—FRESH. For HOME CANNING, yours is fresh when you PICK it. His "factory braud" can not, hence, compete with your "Home Canned Goods" that are always the best and the kind demanded by the city consumer. If you cannot buy a large outfit this season, start with a smaller one. This year's profit will buy a larger outfit next year. Put these things together and see how easy it will be to MAKE MONEY in the Home Canning Business.

Lots of farmers are **"rastling"** with 10 acres of fruit and vegetables and bucking the market through the commission broker, who is as helpless on a poor and an overcrowded market as is the farmer, making little or no headway and frequently encountering a severe loss, could very easily overcome this by installing on "the ranch" one of our **"COMPLETE SANITARY CANNING OUTFITS."**

In this wise you will be doing what thousands of farmers and growers have recently learned with success and profit to do—**CAN AT HOME FOR THE MARKET.** That is what **ALL** Farm Papers throughout the United States have been persistently advocating for several years. That is **ALSO** what all state and United States departments of agriculture have long been strenuously advising as the **sure salvation** of the farmer and grower against a loss that he can not otherwise overcome.

A word now about our **SANITARY CAN CLOSING MACHINE**, one of the most durable pieces of machinery ever put on the market. It is quicker than soldering, by half, and insures a hermetically sealed can. With it go four chucks, or closing appliances for all standard sizes of fruit and vegetable cans. **These are standard chucks.** This machine is a hand power, double seamer. Its operation is simple and requires no experience. It is a small edition of the celebrated H. & A. type for power seaming. We can not recommend it too strongly and we absolutely insist that its use is a necessity where canning is to be done under **SANITARY** methods.

With each **OUTFIT**, we send one of the famous H. & A. 56-page formula and recipe books—**FREE.** Extra copies may be had at $2 each. This is virtually, with its comprehensive information—**the right hand of the Home Cauner.** All of the recipes and formulae are practical, and only such are given as have been thoroughly tested in actual canning practice on a large scale.

BELOW is a coupon. Check the item in which you are interested from the canning standpoint and send it to us for literature and letter. We shall be glad to correspond with you and without obligation to purchase on your part before you are satisfied on every point as to our representations.

If material continues to advance, the price of machinery must advance. We again, therefore, urge you to buy NOW.

To the farmer and grower we offer four types of our "Complete SANITARY Canning Outfits."

No. 1, for use upon any stove.

No. 2, portable fire box for wood or coal, to be used in the house or orchard. With retort out and top that we furnish it becomes a stove for the sitting room.

No. 3, portable fire box with tank and burner for gasoline, for inside or outside use.

No. 4, orchard or community, with extra capacity.

We can furnish anything up to a commercial plant with say a capacity of 3000 to 6000 cans a day.

Address: HOME CANNING DEPARTMENT

SEATTLE CAN COMPANY

1261 Utah Avenue, Seattle, Wash.

Coupon for Canning Literature.

CHECK OUTFIT DESIRED
No. 1 .....
No. 2 .....
No. 3 .....
No. 4. .....

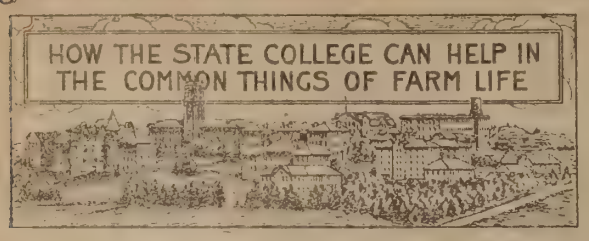
Date ....., 1917.

SEATTLE CAN COMPANY,
Home Canning Department,
Seattle, Washington.

Gentlemen: As checked, but without obligation to purchase, send me literature on your "Complete SANITARY Canning Outfits."

Name .....
City .....Box or R. F. D.....
County .....State .....

Just What Do You Want to Know?



How To Build a Cement Silo, Or Concrete Fence Posts, Or Water Trough?

There is a phase of farm economy in which nearly every farmer and farmer boy is much interested and has some degree of skill. This is Farm Mechanics. We sometimes describe this division of the college, which includes also buildings and drainage, as "farm engineering." Everybody likes to see the "wheels go 'round," most of all the farm boy.

Just now the farmer is beginning to make use of that useful servant, the gas engine. Whether in automobile, or lighting plant, or on harvester, or to be used in the operation of feed cutters, root slicers, separators or what not, the gas engine is here to stay. If the farmer or the farmer's son would but use two to six weeks of these long winter months in getting the help of the men at the college in studying the gas engines and heavy oil engines and other farm machinery, he would find it the most profitable part of the winter. He could learn much of the principles of the common machinery and of the operation of the less used machinery which would stand him in good stead in all his work. But if he cannot take advantage of this opportunity, he at least can write from time to time, as special problems arise for special advice and it will be given. If it is covered in some printed matter, that will be sent. If it is not so covered, the information will be sent by letter.

Does he wish to build a cement silo, or concrete fence posts, or a concrete water trough, he can receive any information which he lacks, if he will make his wants clearly understood. He cannot expect his correspondent at the college to boost this make of machinery and condemn that, but he will have an impartial criticism on the principles used in any. Oftentimes a problem arises of the amount of power required for certain purposes, or of the proper system of the transmission of power with the least loss, or of the most effective arrangement of machinery, in which the advice of the expert would save time and money. If the farmer will submit to the expert the specific question he will be glad to give advice.

In no kind of manufacture is the machine used for so small a fraction of the time as on the farm. In no other kind of machinery is the depreciation so great. In none is the cost of proper housing a greater burden. It is important then that the operation be thoroughly understood, that the installation be convenient and economical, and that the upkeep be reduced to a minimum. In all of these directions the college can help if you give it the opportunity.

E. A. BRYAN.

WHILE IT IS UP TO A FARMER TO KNOW SOMETHING ABOUT ALL KINDS OF FARMING YET IT IS UP TO HIM TO KNOW MUCH ABOUT HIS OWN KIND OF FARMING, JUST AS IT IS UP TO THE LAWYER TO BE POSTED IN SOME LINES AND OTHERS AND UP TO THE PHYSICIANS AND SURGEONS TO EXCELL IN THEIR OWN SPECIALTIES. IT IS ALONG THIS LINE THAT DR. BRYAN GIVES A VALUABLE HINT IN THE CLOSING ARTICLE OF HIS SERIES NEXT WEEK WHEN HE SAYS: "YOU SHOULD RECEIVE ALL OF THE BULLETINS WHICH RELATE TO YOUR KIND OF FARMING" AND SHOULD LOOK TO THE EXPERIMENT STATION EXPERTS AS SYMPATHETIC FRIENDS AND HELPERS.

At the Editor's Desk.

The 26th annual report of the state college experiment station at Pullman has been received. This is bulletin No. 136, and is sent free to all citizens of the state on application. Every farmer should have a copy, for it shows him how the affairs of the station are conducted and what work has been done. It is like the statement of the activities of a bank to a stockholder.

Apportion Highway Funds.

The state highway board has apportioned funds as follows for state highways: Pacific, $449,603; Olympic, $219,376; McClellan Pass, $101,750; National Park, $149,850; Sunset, $190,375; Inland Empire, $248,598, and Central Washington, $110,000. Secondary state highways will get $322,250.



With a Weyerhaeuser Silo

Hundreds of progressive northwest dairymen are satisfied owners of Weyerhaeuser Silos. They investigated, then they made their decision, and NOW they are

Weyerhaeuser's Best Testimonials

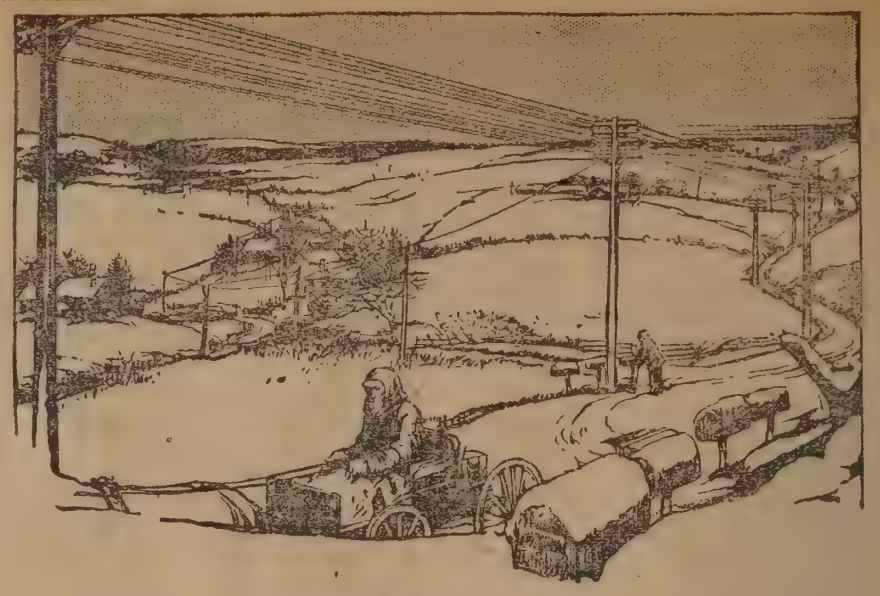
You, as a thinking, practical man, will decide that you must and can have a Silo. Then the next step is INVESTIGATION. We want you to get in touch with us, let us show you WHY THE WEYERHAEUSER IS THE BEST INVESTMENT YOU CAN MAKE.

A Silo must be low in first cost, cheap in upkeep; it must be easy to erect, and convenient in everyday use; it must be durable and permanent, an investment, not an expense. It must take care of silage perfectly.

FREE LITERATURE: (1) Feeding Manual, (2) Essay on Planting and Raising Corn, (3) Weyerhaeuser Silos. Write for any or all these.

Weyerhaeuser Timber Co.
EVERETT, WASH.

WEYERHAEUSER FIR SILOS



Standards of Service

In rural communities clusters of mail delivery boxes at the crossroads evidence Uncle Sam's postal service. Here the neighbors trudge from their homes—perhaps a few yards, perhaps a quarter mile or so—for their mail.

Comprehensive as is the government postal system, still the service rendered by its mail carriers is necessarily restricted, as the country dweller knows.

Long before rural delivery was established the Bell System began to link up the farmhouse with the neighboring towns and villages. One-fourth of the 10,000,000 telephones in the Bell System are rural. They reach more places than there are post offices. Along the highways and private lanes the telephone poles lead straight up to the farmer's door.

He need not stir from the cheerful hearth ablaze in winter, nor grope along dark roads at night for friendly news or aid in time of trouble. Right in the heart of his home is his telephone. It is the American farmer's key to the outside world, and in no other country is it found.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES
One Policy One System Universal Service



Vaughan's Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cards of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $150 f. o. b. Spokane and common points.

FOR SALE BY

Washington Machinery & Supply Company
S122 MONROE SPOKANE, WASHINGTON

REDUCE High Cost of Living

by planting every available space in vegetables and supply your table without cost. Insure yourself a good crop BY PLANTING SEEDS GROWN BY THE INLAND SEED CO. Secure from your local dealer or send to us direct. Get our catalogue No. 35.

The Inland Seed Co. Spokane, Wash.

Holstein Dispersion Sale

Seventeen Head of Registered Animals Average $275

By H. K. SILVERSMITH

The dispersion sale of registered Holstein-Friesian cattle owned by Leaf & Jones of Rupert, Idaho, held on March 27 was well attended and good prices prevailed. The top price of the sale was $525 for Model Fobes of Idaho, the herd sire, purchased by Earl Beebe of Rupert. The same purchaser secured eight head at an average of $312 per individual. The 17 head sold averaged $275. Colonel Earl O. Walter of Buhl, Idaho, handled the pedigree end of the sale. The auctioneers were Colson Clayton, Clayton, Walter, Hollenbeck and Hearts-horn.

Most of the cattle sold came from the A. A. Davis herd of Buhl, Idaho. Mr. Davis owns 15 daughters of the herd sire that topped the sale.

In connection with the above sale 45 head of grade Holsteins and Jerseys were sold, some of the cows bringing as high as $165.

Sale list follows:

Columbo Lilinokalani II., 5 years, to John Kaeser, Filer, Idaho, for $250.

Halla IV., 6 years, to John Kaeser, Filer, Idaho, for $235.

Jessie Fobes Improver Peeterje, 5 years, to R. W. Waldron, Rupert, Idaho, for $235.

Princess Hegugerveld Lyons, 5 years, to G. C. Breayeal, Rupert, Idaho, for $245.

Shade Vasliti Hortog Asma De Kol II., 5 years, to Earl Beebe, Rupert, for $245.

Lady Grandeur De Kol, 6 years, to John Kaeser, Filer, Idaho, for $250.

Wixon Zinnia II., 4 years, to J. B. Reford, Rupert, Idaho, for $260.

Inka De Kol Ina, 6 years, to Earl Beebe, Rupert, Idaho, for $310.

Maggie Ormsby Pietertje, 4 years, to C. H. Hager, Rupert, Idaho, for $260.

Princess Model, 3 years, to Earl Beebe, Rupert, Idaho, for $200.

Ormsby Itelka, 6 years, to Earl Beebe, Rupert, Idaho, for $300.

Frau De Kol Piebe of Edgertown, 5 years, to C. C. Nelson, Heyburn, Idaho, for $250.

Lady Grandeur De Kol II., 2 years, to Earl Beebe, Rupert, Idaho, for $280.

Inka De Kol Ina II., 3 years, to Earl Beebe, Rupert, Idaho, for $350.

Briders Butter Girl, 6 years, to Earl Beebe, Rupert, Idaho, for $300.

Yearling heifer to G. C. Breayeal, Rupert, Idaho, for $185.

Interstate Fair Premiums.

The premium list for the Spokane Interstate fair, September 3 to 8, has been completed and was sent to exhibitors.

ALFALFA SEED 99¾% pure

Write for special low prices

SEED CORN a full line

BEARDLESS BARLEY at special price

FERTILIZERS all kinds

MANGEL-WURZEL BEETS

We Ship Promptly

SEATTLE SEED CO. 810-12 Western Ave., Seattle

$30 to $50

Kirstin One-Man Stump Puller

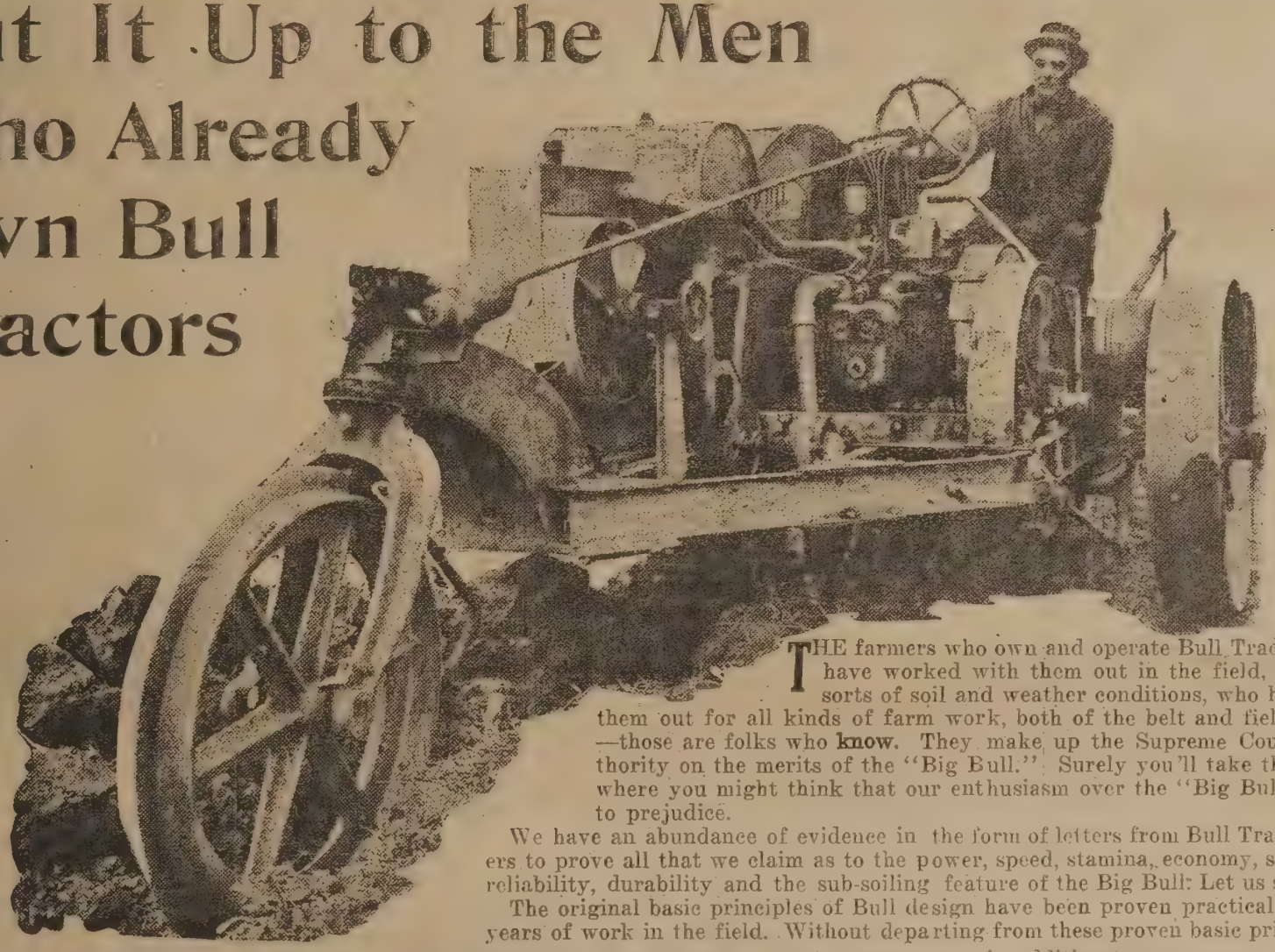
Provides quickest, cheapest and best way to clear land. Clears 2 acres from 1 setting. Write quickly for folder Buy now and double the value of your land. Make big profits on your crop this year. Agents wanted.



W. E. MORRISON, 821 Riverside, Spokane, Wash.

In answering advertisements please mention this paper.

Put It Up to the Men Who Already Own Bull Tractors



THE farmers who own and operate Bull Tractors, who have worked with them out in the field, under all sorts of soil and weather conditions, who have tried them out for all kinds of farm work, both of the belt and field variety—those are folks who **know.** They make up the Supreme Court of authority on the merits of the "Big Bull." Surely you'll take their word where you might think that our enthusiasm over the "Big Bull" is due to prejudice.

We have an abundance of evidence in the form of letters from Bull Tractor owners to prove all that we claim as to the power, speed, stamina, economy, simplicity, reliability, durability and the sub-soiling feature of the Big Bull: Let us show you.

The original basic principles of Bull design have been proven practical by three years of work in the field. Without departing from these proven basic principles—

The 1917 BIG BULL Has Three Big New Features

in addition to numerous refinements in construction.

The Clapper Kerosene Vaporizer which, we believe, excels in economy, efficiency and ease of operation any kerosene device on the market. It converts the liquid kerosene into a gas vapor before it enters the combustion chamber, and when ignited causes perfect combustion, leaving no kerosene to work past the piston rings into crank case. It enables the Big Bull Motor to produce as much power from a gallon of kerosene as from a gallon of gasoline—without fouling or overheating your motor or destroying its efficien cy.

Power on the Land Wheel in addition to the BIG BULL sub-soil ing wheel in the furrow. This feature and the large motor (12-24 h. p.) makes the Big Bull a practical 3-plow Tractor.

Positive Circulating Oiling System Oils connecting rod bearings through hollow crankshaft insures positive lubrication, with no attention except to keep oil reservoir filled. A big saving in oil consumption.

If you wish we'll refer you to Bull Tractor owners right here in this community who will prove to you any claim we make. **FILL OUT COUPON AND MAIL TODAY.**

Northwest Buick Co.

SEATTLE DISTRIBUTORS SPOKANE

Northwest Buick Co., Seattle-Spokane:
Please send me your latest descriptive Bull Tractor literature.
Name .....
Address .....

Spokane Shorthorn Sale

Average of $314 for the Forty-Seven Head

Receiving an average of $314.46 for each of the 47 head of stock brought into the ring—the 14 cows averaging $385 and the 33 bulls $284.54—the spring sale of the Pacific Northwest Shorthorn Breeders' association, held Thursday afternoon at the Spokane Union stockyards, proved successful beyond the fondest hopes of its promoters. So much so, in fact, that F. M. Rothrock, sales manager, announced at the close that the breeders' sale would be made an annual event, next year's sale to be held February 23.

"We are well pleased with our sale today," said Mr. Rothrock, "and feel that prices received were fair to both buyer and seller. That we beat the recent Portland sale, is, of course, gratifying, but not surprising, in view of the fact that we had a much better class of stuff to offer."

F. W. Harding of Chicago, secretary of the American Shorthorn Breeders' association, who is just finishing up a tour of the west, was present at the sale, complimenting the breeders upon the class of stock consigned and speaking highly of the rapid development of the Shorthorn breed in the west.

"There are 22,000 Shorthorn breeders in the United States today," said Mr. Harding, "and nowhere is the breed developing more swiftly than in the northwest. This is but a logical result of changing conditions, for with the breaking up of the range and the maintenance of cattle on arable farms, the Shorthorn must inevitably be found the logical breed. It is the best dual purpose animal known, hence its growing popularity.

"The sale here today compares favorably with those held elsewhere throughout the country, as there is not much spread on prices of good Shorthorns."

At the opening of the sale the cows were brought in and for a while it loked like H. F. Samuels' sale. The Idaho man was there for good breeding stock and he got it, persistently boosting the best bids of I. Dunn and E. H. Hart of Molson, George Burnett of Davenport, H. D. Burns of Reardan, and others. He bought the first five animals going under the hammer, all cows, paying $655 for Sunbeam, a coming 2-year-old heifer, from the herd of A. D. Dunn of Wapato, this being the highest price paid for any animal during the sale. He paid $545 for Meadow Brook Mary, 9-year-old cow, consigned by Frank Brown of Carlton, Ore., and paid the second highest price of $590 for Lady Roan, 2-year-old, consigned by Alex. Morrison of Valley, Wash. In fact, nine of the 14 cows sold went to Mr. Samuels, Rosalind II., grand champion of the previous day's show, costing him $500 before he could force Dunn and Hart out.

Of the bulls, Golden Star, calved October 1, 1915, and consigned by Frank Brown of Carleton, Ore., brought the highest price, D. Urquhart of Krupp paying $440 for the animal. The next highest price was $435, bid by Charles Peach of Valley, Wash., for King Lavender, coming two-year-old from the herd of A. V. Bradrick & Son of Palouse, Wash. Silver Goods, consigned by Day & Rothrock and adjudged grand champion of the show was sold for $405 to Mr. Samuels, this being the only bull bought by him.

The heaviest bidders for the young males were Grant Copeland of Spokane and O. M. Plummer of the Union stockyards at Portland, Mr. Copeland buying six and the Portland man three. The latter bought with the beef idea in mind, while Mr. Copeland was looking for good stuff for his ranches.

The sale was cried by Colonel N. G. Kraschel of Des Moines, Iowa, assisted by Harry Cranke in the ring.

Consignor, A. D. Dunn, Wapato, Wash.—
Female:
Sunbeam 493120, calved May 22, 1915—H. F. Samuels, Samuels, Idaho ..... $ 655
Maid Augustine 2d 510629, calved November 22, 1915—I. Dunn, Molson, Wash. 330
Eureka 502895, calved August 24, 1915—E. H. Hart, Molson..... 360
Dunbro Hayes 510626, calved November 19, 1915—H. F. Samuels, Samuels, Idaho 200
Male:
Premier 440322, calved April 21, 1915—E. W. King, Okanogan, Wash 300
Marlow 519008, calved March 19, 1916—Grant Copeland, Spokane, Wash. 250
Waubansia 496768, calved April 12, 1915—John Hanz, Edwall, Wash. 150
Dorrit 519005, calved January 29, 1916—Grant Copeland, Spokane, Wash 240
Patriot 505252, calved February 20, 1916—O. M. Plummer, Portland, Ore. 300
Gerald Dale 454947, calved June 5, 1915—C. A. Hungate, Waitsburg, Wash. 310
Consignor, Day & Rothrock—
Female:
Irene 3d 532829, calved April 12, 1916—H. F. Samuels, Samuels, Idaho 300
Lady Rose 2d 532831, calved April 15, 1916—E. H. Hart, Molson, Wash 300
Rosalind 2d 523834, calved April 24, 1916—H. F. Samuels..... 500
Male:
Prince Rupert 532810, calved May 1, 1916—M. Thurlow, Twisp, Wash 300
Red Goods 532811, calved May 1, 1916—William Harris, Spangle, Wash 300
Secret Knight 532320, calved April 23, 1916—A. Blenz, Wilbur, Wash. 290
Silver Goods 532821, calved April 30, 1916—H. F. Samuels. 405
Major Dean 532807, calved April 16, 1916—Grant Copeland, Spokane, Wash. 295
Prince Golddust 532809, calved May 13, 1916—E. D. Sweet, Grangeville, Idaho 360
Royal Victor 532817, calved April 26, 1916—H. A. Hughes, Spokane, Wash 290
Consignor, Frank Brown, Carlton, Oregon—
Female:
Meadow Brook Mary 15th 29564, calved January 1, 1908—H. F. Samuels 545
Mystic Dahlia 208992, calved May 20, 1915—H. F. Samuels..... 255
Rosalind 507552, calved May 13, 1916—H. F. Samuels 300
Golden Star 507540, calved October 1, 1915—D. Urquhart, Krupp, Wash 440
Roan Prince 507543, calved April 10, 1916—I. Dunn, Molson, Wash. 300
Consignor, T. B. Gibson estate, Woodland, Cal.—
Female:
Roselawn Orange 497841, calved February 17, 1916—H. D. Burns, Reardan, Wash. 325
Christmas Gift 497830, calved December 24, 1915—George Burnett, Davenport, Wash..... 300
Male:
Western Goods 497829, calved September 5, 1915—O. M. Plummer, Portland, Ore..... 260
April Elberg 500344, calved April 29, 1916—Grant Copeland, Spokane, Wash. 300
Roselawn Mine 497836, calved April 25, 1916—W. H Patterson, Bayview, Wash. 300
Consignor, Alex Morrison, Valley, Wash.—
Female:
Spokane Beauty 168840, calved April 1, 1912—H. F. Samuels... 410
Lady Roan 250511, calved May 23, 1915—H. F. Samuels..... 590
Male:
Gold Eagle 539910, calved March 26, 1916—Dave Gunning, Reardan, Wash. 300
Crown 539908, calved March 31, 1916—Brinkton, Latah, Wash. 300
Consignor, Joseph Turner, Meyers Falls, Wash—
Male:
Triangle 505633, calved July 28, 1915—E. W., Okanogan, Wash. 250
Roan Victor, calved April 26, 1916—Grant Copeland, Spokane, Wash. 240
St. Valentine 495906, calved August 6, 1915—John M. Wilson, Brewster, Wash. 280
Orange Lad 505251, calved December 10, 1915—John Zaches, Quincy, Wash. 260
Cherry Boy 478288, calved April 24, 1915—Pete Morrison, Spokane, Wash. 225
Chickadaw, calved March 27, 1916—C. A. Hungate, Waitsburg, Wash. 290
Tavor, calved May 6, 1916—O. M. Plummer, Portland, Ore..... 270
Consignor, D. E. Pearson, Boyds, Wash.—
Male:
Woodrow 418284 calved February 1, 1914—George Irving, Bonners Ferry, Idaho 290
Washington Pride 501192, calved March 14, 1916—W. M. Burns, Pateros, Wash. 170
Consignor, J. H. McCroskey & Sons, Sprague, Wash.—
Male;
Charity Lad, calved May 3, 1916—Grant Copeland, Spokane.... 220
Rose Duke, calved April 29, 1916—John Hanz, Edwall, Wash... 170
Consignor, A. V. Bradrick & Son, Palouse, Wash.—
Male:
King Lavender, calved July 13, 1916—Charles Peach, Valley, Wash. 435
Consignor, J. W. Dugan, Kingsley, Iowa—
Male:
Sultan Fine 501815, calved July 1, 1915—L. C. Benedict, Kaslo, Wash. 300

Shorthorn Show Awards.

At the Shorthorn show preceding the sale the following awards were made. There were four classes judged by John L. Smith, Spokane.

The first class judged was bulls calved prior to September 1, 1915. Awards were:

T. B. Gibson estate, Woodland, Cal., first.

A. D. Dunn, Wapato, Wash., second and fifth.

Joe Turner, Meyers Falls, Wash., third and fourth.

D. E. Pearson, Boyds, Wash., sixth.

In the class for young bulls, calved after September 1, 1915, awards were:

Hercules Stock Farm, Sprague, Wash., owned by Day and Rothrock, first, second and fourth.

Frank Brown, Carleton, Ore., third.

Gibson estate, fifth.

Alex Morrison, Valley, Wash., sixth.

A. D. Dunn, seventh.

In the class for cows or heifers calved prior to September 1, 1915, awards were:

Alex Morrison, first and fourth.

A. D. Dunn, second and sixth.

Hercules Stock Farm, third and fifth.

In the class for heifers calved after September 1, 1915, awards were:

Hercules Stock Farm, first and second.

Frank Brown, third.

A. D. Dunn, fourth.

Gibson estate, fifth.

Competition for the two cups offered by the American Shorthorn Breeders' association aroused much interest. The cup for best bull went to the Hercules Stock Farm with the Gibson estate herd second.

The Hercules also got the cup for the best female.

The Banquet.

A banquet was held Wednesday night at the Spokane hotel and was presided over by E. E. Flood. Among the speakers were Colonel Kraschel, Harvey Burns, Reardan, Wash.; E. E. Sweet, Grangeville, Idaho; Joe Turner, Meyers Falls; O. M. Plummer, Portland, D. I. Raymond, L. L. Tennant and W. D. Roberts, Spokane; J. B. Hersperger, Oroville, Wash.; James Klengard and Professor William Hislop of Pullman; A. B. Willard, St. Paul.

Stanley Coffin Returns.

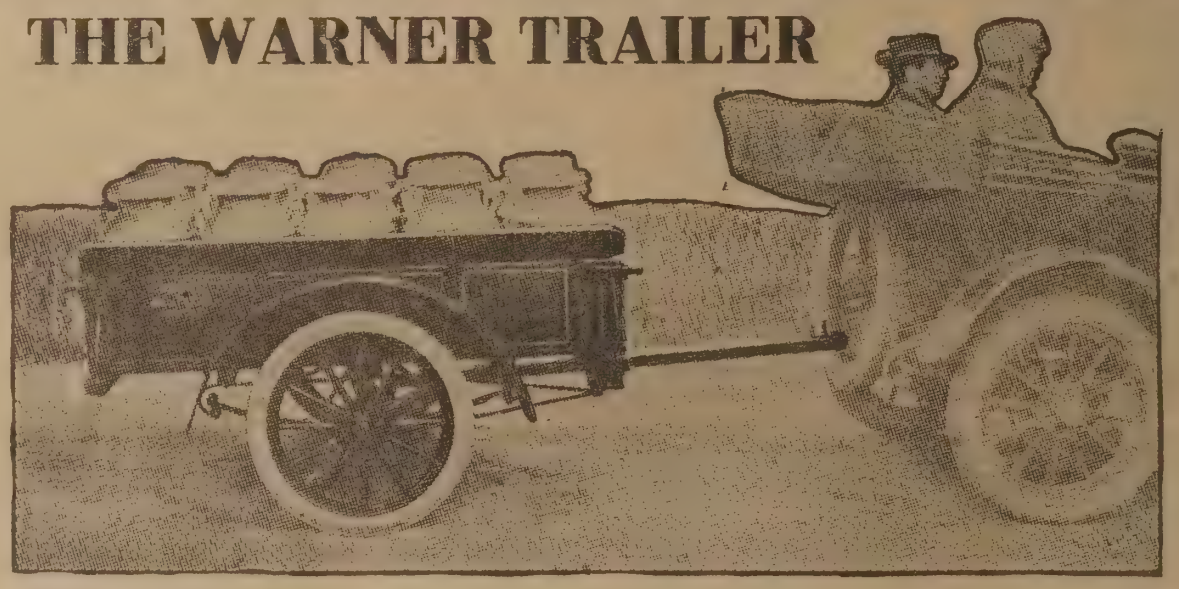
Relatives and friends of Stanley Coffin and family of North Yakima were greatly relieved to get a telegram Saturday that they had landed safe and sound at San Francisco, Cal. Mr. Coffin and family have been spending the winter in Australia and New Zealand. Mr. Coffin has been studying the sheep industry and brings back with him some valuable new blood for his flocks.

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In Germany a picture has been taken in one ten-millionth part of a second.



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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

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CHAPTER VI.

For three years we lived in the shadow of the Blue mountains in the Walla Walla valley. In summertime it was hot and dusty and the yellow fields of wheat reached to the very foothills of the mountains. In winter it was cold and snowy, and the blue mountains turned into great pyramids of white; but the white in winter or blue in summer, the mountains remained to me the abode of giants, fairies, elves and animals of the kind in my story books, ranging from the Asiatic tiger to the African lion and Arctic owl of the frozen north.

We spent one winter at Gilliam's ranch not many miles from the foothills of the Blue mountains. That winter the snow was four feet on the level. Gilliams were a pioneer family of the Walla Walla valley. Mr. Gilliam was a white-bearded, fine-eyed old gentleman, straight as a pine tree and full of dignity and politeness as a courtier in the court of an emperor; and, indeed, he was a good deal of an emperor himself. He had two stalwart sons, Mark and Ben; who, like many other stalwart sons of their age, liked to sleep late in the morning when the thermometer was anywhere from zero to 20 below.

Mr. Gilliam, as thrifty as a hen with 22 chicks, was at times annoyed by their morning slothfulness. He would stand with his back to the roaring, morning fire in the big fireplace while breakfast was cooking; and in ample time before the breakfast call he would stalk out in the hallway, look up the stairs impatiently and call:

"Mark! Ben! Breakfast!"

This preliminary notice usually did not produce much of a response from Mark and Ben. With a thoughtful air, Mr. Gilliam would take his stand before the fireplace, or throw in a few more apple boughs or pine knots; and wait just five minutes longer. Again he would stride to the stairway and call loudly:

"Mark! Ben! Get up at once!"

But Mark and Ben still lingered in their blankets. By and by, Mr. Gilliam would seize his cane, stride impatiently to the stairway, whack his cane on the railing, and call with the crack of a whip in his voice:

"Marcus! Benjamin! Come down at once!"

And before his last word was spoken, the four feet of Marcus and Benjamin would hit the floor as one, and there would be a mad scramble for clothing. They had learned by regrettable experience that if they did not move lively, the cane would whack something much more sensitive to its whacks than the hardwood railing of the stairway.

Striding sedately back into the living room where Mrs. Gilliam would be engaged in her morning knitting, he would say very gently:

"We have two very fine boys, my dear,—sons to be proud of, but they must learn to get up in the morning. Indeed they must!"

"They are just boys," Mrs. Gilliam would remark, placidly knitting.

"All the more reason why they should be taught to rise promptly in the morning," would be the decided rejoinder.

All the while Mr. Gilliam's ear would be cocked attentively in the direction of the stairway, down which Marcus and Benjamin would presently tumble pellmell.

"Good morning, young gentlemen," their father would remark pleasantly, as they galloped through the living room. "You slept well, I presume?"

Headed at full speed for the wash bench beside the kitchen door opening into the woodshed, and its morning offering of cold water, a clean but coarse crash towel of the circular kind that runs on a roller, a looking glass and a big, black comb, and knowing the dire necessity of finishing their matinal ablutions before the final call for breakfast, Marcus and Benjamin did not delay unnecessarily in acknowledging their father's courteous inquiry about their sleep. They went straight ahead, and a moment later, with ears poised attentively in their direction, Mr. Gilliam would hear, with a nod of approval, their clamor as they plunged faces and heads into pans of icy water.

Nothing pleased Mr. Gilliam more than to have me tell him stories—stories of the immense, cock-and-bull kind, which upon the slightest provocation, I wholesaled from the diameter, circumference and depth of my 7-year-old imagination. One morning I rushed into the living room, and, actuated solely by the desire to create a sensation, vowed that whole droves of big, white rabbits with bells on their necks were racing down from the Blue mountains. Mr. Gilliam instantly partook of my excitement. He went to the doorway and scandalized my mother and Mrs. Gilliam by asserting that he saw the rabbits coming and even asked me to listen to the bells.

He came into the house with a string of small fish he had caught down the creek, whereupon I told him of a pet whale I once had owned. At once he was all excitement. He wanted to know how I had brought the whale west, on the train. I explained that I had tied a string around its neck and tied it behind the train. He was wholly convinced, but wanted to know what I had done with my pet whale. I at once explained that it had gotten out of its pen one day and a hen came along and swallowed it. He said the hen should have been cooked and eaten for doing such a thing to my whale, and I at once told him how I had taken an ax and chopped off the hen's head, so that it could not eat the pet whales belonging to other little boys. That was right, said Mr. Gilliam, hens should not be permitted to eat anybody's pet whales.

One morning in winter when fresh snow lay deep on the ground, I fancied I saw huge tracks of some kind all over the yard, and besought Mr. Gilliam to explain. Despite his dignity and white hairs, Mr. Gilliam could tell a few "whales" himself. He explained to me that these were angel tracks in the snow. Instantly, I was aflame with excitement and curiosity. While Mrs. Gilliam and my mother alternately besought him to keep still, or put their fingers in their ears, he explained gravely that there were two kinds of angels: beautiful, white-winged angels that flew through the air at night and kept watch over little boys while they slept; and bad, sooty feathered angels with short, stubby wings, claws on their feet, and sharp, hooked beaks with which they twisted little boys' noses when little boys had been bad.

He went on to say that during the night one of the bad, sooty winged angels with big claws and sharp beak, had come to twist my nose because I pulled the head from my "Jack in the box," the day before. The good, white angel had come to my rescue. They had had quite a fight all over

(Continued on the following page.)

One of the Modern Farms Found in the Willamette Valley of Oregon



One of the most beautiful homes in Oregon is that of Yonder Lea Farm, owned by Mr. and Mrs. James Edson, within a mile or so of Carlton. Mr. Edson was born in Missouri and came west about 18 years ago. For 12 years he lived near Carlton and then went to Nevada and entered the ranks of range horse men.

"I had 41,000 acres of range and 600 acres in alfalfa," said he. "We had about 6000 horses and branded 1100 colts each year. We used about 70 stallions. I preferred Shires for use with range mares, as what they lack is bone and no horse puts bone on better than the Shire.

"Our market was San Francisco. We delivered the horses at the railroad and our responsibility stopped there, buyers taking them off our hands. It may interest you to know that I figured that it cost just about $10 per head to raise and deliver a 4-year-old horse."

Returning to Carlton, Mr. Edson purchased 275 acres from what was the old Reed place. Here he has established an up-to-date farm and home. In his barn is a pumping plant which supplies water in both house and barn, while a modern electric plant supplies lighting all over the place. Mr. Edson sticks to horses, being a well-known breeder of Percherons and Belgians. Formerly he bred swine, but he has practically retired from the field, and is commencing with some sheep, which he regards as money makers.

Two farming practices which he observes on his place deserve mention. He uses a side delivery rake and hay loader when making hay and says he believes he gets better hay than those who cook it up. He thinks it dries quicker and is handled better. His clover hay was sweet and good at all events, and "the proof of the pudding is the eating." He plants peas and wheat together and this he regards as a wise and sensible thing to do. He had harvested a good crop of peas and a fair crop of wheat as a result. The peas he uses for feed. The straw makes a very find feed, all stock relishing it.

Ups and Downs of a Bunch Grass Boy

(Continued from preceding page.)

the yard in the snow, and he had heard their wings banging against the roof and the sides of the house. That was why the tracks were in the yard, he said. Also, they had knocked a lot of snow off the roof, and to prove this he showed me snow in deep drifts piled under the eaves.

I worked most of that day, and besought my mother's aid to get Jack's clownish head back on its spring and under the lid. Until this was done and the lid latched down, I could not have been driven to bed.

But it was Mr. Gilliam, who entirely unwittingly, cured me of giving rein to childish flights of the imagination. It came about in this way. He loved to gather the eggs; and every evening he would take a pail and prowl through the hay loft and other places looking for hidden hens' nests. Nothing delighted him more than to find a new nest under a feed manger, or out in the bushes. In these quests I helped him with great enthusiasm, and frequently climbed to places which I could not reach.

One night I had a dream—such a wonderful dream! I dreamed that the big, deep culvert where the railway went through the orchard fence was almost level full of eggs. It was so real that I got up thinking I really had seen the eggs the day before.

So that evening when we went out to gather eggs I began to tell Mr. Gilliam about the stacks and stacks of eggs up in the railroad culvert. He supposed that I had found a new nest there, and started off briskly with me trotting at his heels.

We reached the culvert which consisted of a square hole under the railway bridged across with sharply edged timbers so that livestock would not walk through this gap in the fence. Confidently I looked into the hole, expecting to see it full of eggs. None was there. I was amazed. I pondered; then, suddenly, it flashed upon me for the first time that it had been a dream.

"I guess I just dreamed about those eggs, Mr. Gilliam," I explained, really feeling greatly humbled.

Mr. Gilliam laughed. He sat down on one of the steel rails and rocked back and forth with his head in his hands and laughed and laughed till tears stood in his eyes. All the way back to the house he laughed. At the supper table he told about my dream, and everybody laughed, except my mother, who scolded me for telling such stories.

I was beset alternately by grief and rage. I vowed I had dreamed it; went over each step of the wonderful dream very carefully, trying my best to convince all. But nobody was convinced. They laughed, and finally, to quiet my wrath, mother told me to be still and threatened to enforce her decree.

For days thereafter I grieved and pondered. Several times I went up to the culvert and looked to see if the eggs really weren't there after all. But they weren't! And I was confronted with a bitter pill. Tell the truth, vow it, weep it as I might, no one, not even my mother, would believe me. Finally mother tabooed the subject altogether, saying I told "whoppers" so often that I could make myself believe them.

I quit the whopper business. Thereafter I would make no statement of any kind, whether concerned with whales, rabbits, white or sooty-winged angels, till I had ascertained beyond all reasonable doubt that I was speaking strictly within the uninteresting confines of truth.

Years afterward I was on a college debating team which met the Whitman college team in Walla Walla. By that time Gilliams had moved in from their Dry creek ranch near Dixie, at the foot of the Blue mountains, though I did not know it. After the debate was over and the Whitman college people crowded up on the rostrum to compliment me and the other members of the team—which they did quite enthusiastically, since we had lost the debate—and presently I felt a gentle slap on my shoulder, and a familiar voice said in my ear:

"Well, Joe, have you dreamed about hens' nests lately?"

I whirled about, and there stood Mr. Gilliam, straight as a pine tree, his beard a trifle whiter, his face a trifle older, but with the fine light still bright in his smiling gray eyes. I opened my mouth to renew my argument of nearly 20 years ago to convince Mr. Gilliam that I had dreamed about that confounded culvert full of eggs, but closed it straightway, realizing without speaking the futility of the task. If Mr. Gilliam is still living, and I think he is, I hope that he will read this, and be convinced, at last, that when I told him about my dream of the wonderful nest of eggs that I was telling the truth.

IN THE FAMILY'S JOURNEY THROUGH THE SAGE BRUSH COUNTRY, MANY INDIANS ARE MET—YOUNG AND OLD, "RIDING THEIR SMALL, WIRY PONIES OF MOST OUTLANDISH COLORS." NEXT WEEK JOE ASHLOCK RELATES HOW HE WAS TOLD BY THE INDIANS THAT A HORSE WITH WHITE EYES AND A DARK STREAK DOWN HIS BACK WAS BAD, AND OF MUCH OTHER QUAINT AND CURIOUS HUMOR OF INDIAN LORE WHICH WAS STRIKINGLY FASTENED TO HIS CHILDISH MEMORY.

Gins With Knives.

Gins with knives are needed in Chile. England formerly supplied Chilean manufacturers with these machines.

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In this solemn hour of American history every reader of The WASHINGTON FARMER will want to fly the Stars and Stripes.

We have secured a limited number of American flags, 3x5 feet, muslin, fast colors; and while the supply lasts will send one with a new or renewal subscription to The Washington Farmer, both for only $2, which is the regular 3-year subscription rate. If you are paid ahead your subscription will be extended 3 years.

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Enclosed find $2 (your personal check, stamps or money order), for which send me American flag, as advertised, and The Washington Farmer for 3 years.

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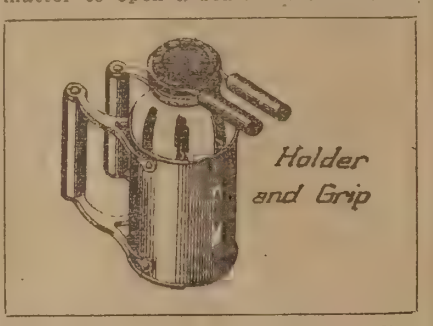
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Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Holder and Grip.

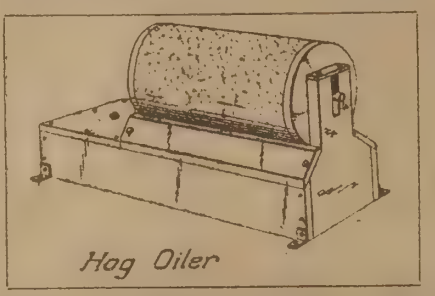
These implements make it an easy matter to open a sealer or to close it



securely. The more firmly the handles are grasped, the more securely the jar and cap are held.

Hog Oiler.

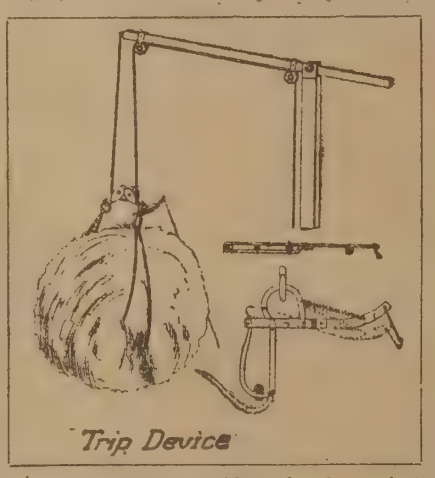
The roller shown here rests on a similar roller (not shown) in the tank beneath; both are made of wood and



are covered with felt or wound with rope or wire. The tank holds the disinfecting oil.

Trip Device for Hay Carriers.

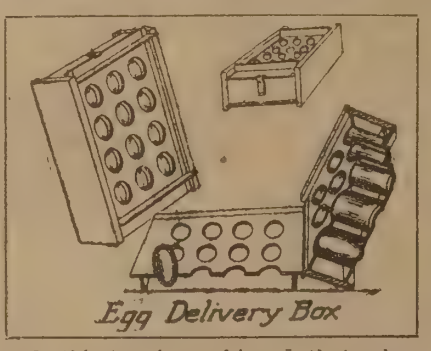
The bill of this simple trip is held



securely against accidental release, but drops readily when tripped.

Egg Tester and Delivery Box.

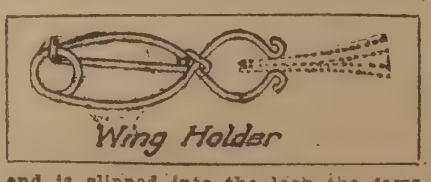
There are two special features of this box: First, the top and bottom have holes through which all the eggs can be candled at one time; and, sec-



ond, the top is so hinged that when the box is inverted and turned about the hinges, the eggs are left on the cover, from which they can be easily removed.

Poultry Wing Holder.

The central part of this holder is a locking device, which is so made that when its loop end is free the jaws of the holder can be moved, but when this



end is slipped into the loop the jaws are locked. The holder is used when hens are being dusted with germicide.

Canada Offers 160 Acres Land Free to Farm Hands

Bonus of Western Canada Land to Men who Assist in Maintaining Needed Grain Production

The demand for farm labor in Canada is so great that as an inducement to secure at once the necessary help required, Canada will **give one hundred and sixty acres of land free as a homestead** and allow the farm laborer, who files on land, to apply the time he is working for other farmers as residence duties the same as if he had lived on the land he had applied for. This offer made only to men working on Canadian farms for at least 6 months during 1917, thus reducing the necessity of actual residence to 2 years instead of 3 years, as under usual conditions. This appeal for farm help is in no way connected with enlistment for military service, but solely to secure farm laborers to increase agricultural output. A wonderful opportunity to earn good wages while securing a farm. Canadian government will pay all fare over one cent per mile from Spokane to Canadian destination. Information as to low railway rates, etc., may be had on application to

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Canadian Government Agent.
Cor. 1st and Post St., Spokane, Wash.

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Every acre put on the market last year was sold, indicating attractiveness of our proposition. Additional acreage now ready at prices from $7.50 an acre up, on terms to suit purchaser.

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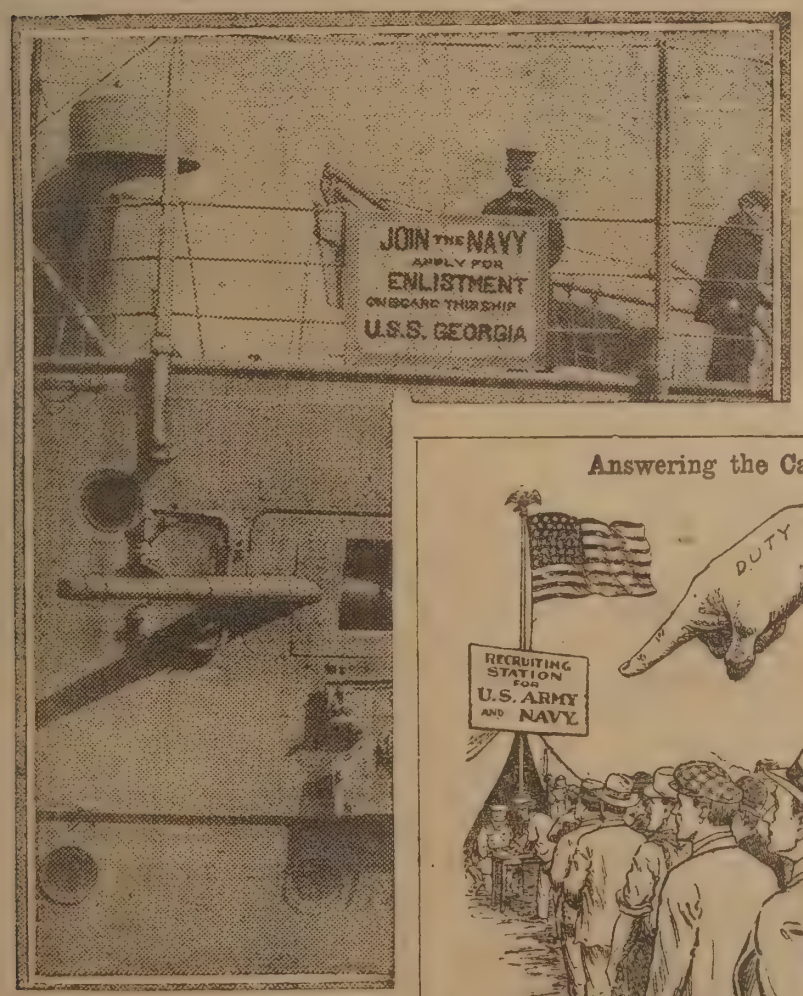
All the World's a Stage, and All the Men and Women Merely Players

Prisoners in Their Own Palace



The former ruler of Russia and his wife and family are prisoners in their own Tsarkoe-Selo palace, near St. Petersburg. The former emperor is not under detention, but in all respects is a prisoner and is treated accordingly. He is in good health and in fairly good spirits. The former emperor's chief occupation of shoveling snow in the garden he enjoys greatly. He shows boyish interest in what is said and written about him.

Attracting New Sailors at Boston



Copyrighted by Internat. Film Service.

Signs urging enlistment have been placed on some of the warships at the Charlestown navy yard at Boston. Many young men, thrilled by the sight of the ships and sailors, are influenced by these signs to apply for enlistment.

Armored Car, Wireless and Machine Gun

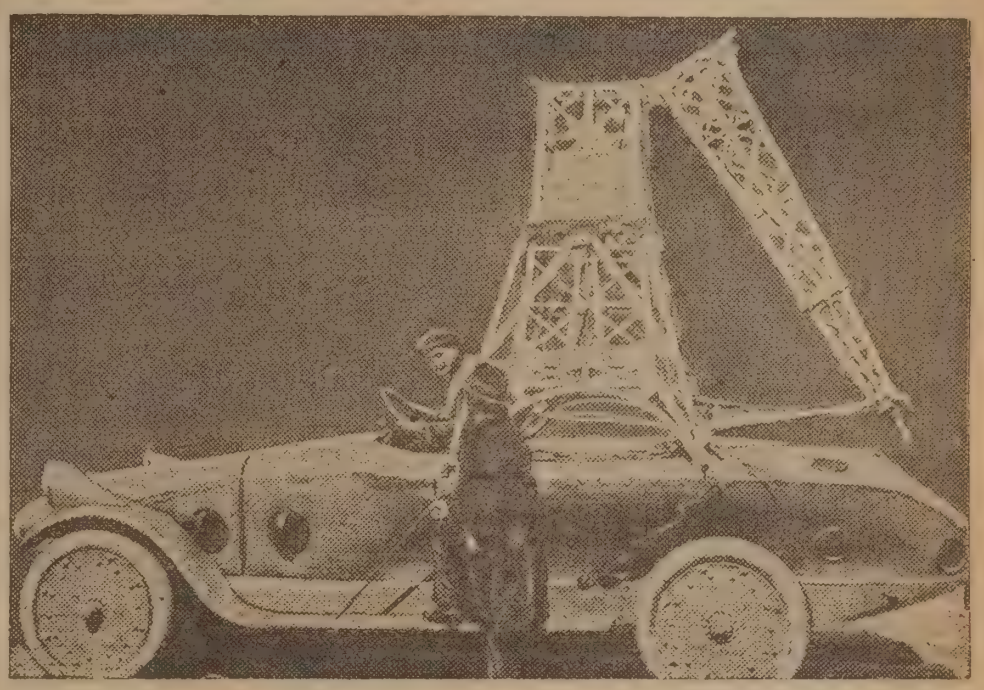


Photo by Kadel & Herbert. Supplied by International Film Service.

This new type of armored automobile, developed by Oscar Mirano of New York city, has been offered to the United States government. The car carries a combined observation, wireless and machine gun tower.

Protect Coasts With Mine Fields.



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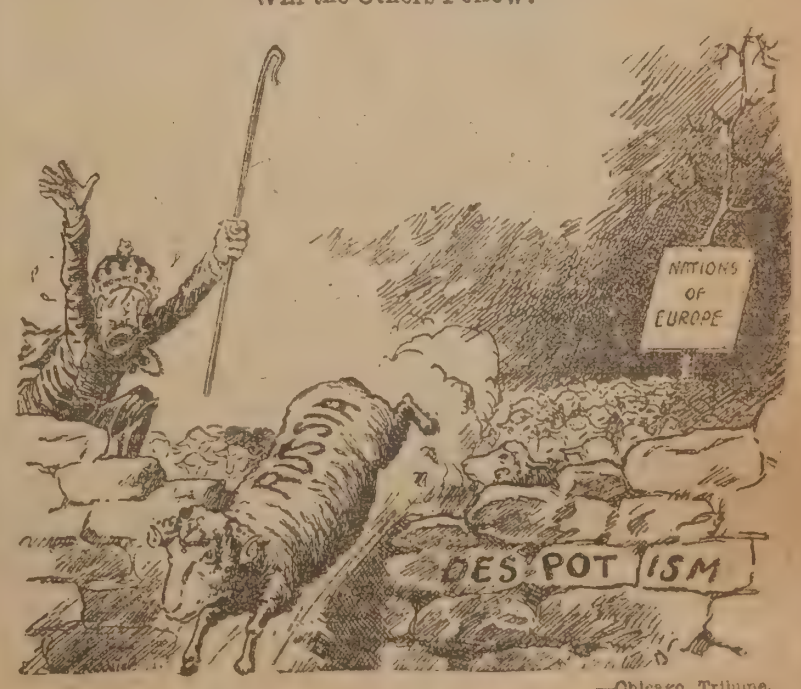
Filling a floating contact mine during mine laying practice off Fort Strong, Boston. In the event of war mine fields may be used to protect American harbors from attack by submarines.

Answering the Call.



—Los Angeles Times.

Will the Others Follow?



—Chicago Tribune.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merril Co.

CHAPTER XV.—(Continued.)

I have spoken before about the quality of bravery. What is it, after all, and how can we analyze it? Women, we say, are cowardly, but I have seen a woman take a risk that the bravest man's nerve would turn on edge against. How is it? Can it be possible that they are braver than we? That our bravery is of the vaunting kind that telleth of itself? My answer, made up from a long life of observation, is: "Yes! Given the motive, and a woman is the bravest creature on earth." Yet how foolishly timid they are at times!

I admitted the girls, and when the door was shut Mary unclasped the brooch at her throat and the great cloak fell at her heels. Out she stepped, with a little laugh of delight, clothed in doublet, hose and confusion—the prettiest picture mortal eyes ever rested on. Her hat, something on the broad, flat style, with a single white plume encircling the crown, was of purple velvet trimmed in gold braid and touched here and there with precious stones. Her doublet was of the same purple velvet as her hat, trimmed in lace and gold braid. Her short trunks were of heavy black silk, slashed by yellow satin, with hose of lavender silk; and her little shoes were of russet French leather. Quite a rainbow, you will say—but such a rainbow!

Brandon and I were struck dumb with admiration and could not keep from showing it. This disconcerted the girl, and increased her embarrassment until we could not tell which was the prettiest, the garments, the girl or the confusion; but this I know, the whole picture was as sweet and beautiful as the eyes of man could behold.

Fine feathers will not make fine birds, and Mary's masculine attire could no more make her look like a man than harness can disguise the graces of a gazelle. Nothing could conceal her intense, exquisite womanhood. With our looks of astonishment and admiration Mary's blushes deepened.

"What is the matter? Is anything wrong?" she asked.

"Nothing is wrong," answered Brandon, smiling in spite of himself; "nothing on earth is wrong with you, you may be sure. You are perfect—that is, for a woman; and one who thinks there is anything wrong about a perfect woman is hard to please. But if you flatter yourself that you, in any way resemble a man, or that your dress in the faintest degree conceals your sex you are mistaken. It makes it only more apparent."

"How can that be?" asked Mary, in comical tribulation; "is not this a man's doublet and hose, and this hat—is it not a man's hat? They are all for a man; then why do I not look like it is not a man's hat? They are all for a man; then why do I not look like one, I ask? Tell me what is wrong. Oh! I thought I looked just like a man; I thought the disguise was perfect."

"Well," returned Brandon, "if you will permit me to say so, you are entirely too symmetrical and shapely ever to pass for a man."

The flaming color was in her cheeks as Brandon went on. "Your feet are too small, even for a boy's feet. I don't think you could be made to look like a man if you worked from now till doomsday."

Brandon spoke in a troubled tone, for he was beginning to see Mary's perfect and irrepressible womanhood an insurmountable difficulty right across his path.

"As to your feet, you might find larger shoes, or, better still, jack boots; and as to your hose you might wear longer trunks, but what to do about the doublet I am sure I do not know."

Mary looked up helpless and forlorn, and the hot face went into her bended elbow as a realization of the situation seemed to dawn upon her.

"Oh! I wish I had not come. But I wanted to grow accustomed so that I could wear them before others. I believe I could bear it more easily with any one else. I did not think of it in that way," and she snatched her cloak from where it had fallen on the floor and threw it around her.

"What way, Mary?" asked Brandon gently, and received no answer. "But you will have to bear my looking at you all the time if you go with me."

"I don't believe I can do it."

"No, no," answered he, bravely attempting cheerfulness; "we may as well give it up. I have had no hope from the first. I knew it could not be done, and it should not. I was both insane and criminal to think of permitting you to try it."

Brandon's forced cheerfulness died out with his words, and he sank into a chair with his elbows on his knees and his face in his hands. Mary ran to him at once. There had been a little moment of faltering, but there was no real surrender in her.

Dropping on her knee beside him, she said, coaxingly: "Don't give up; you are a man; you must not surrender and let me, a girl, prove the stronger. Shame upon you when I look up to you so much and expect you to help me be brave. I will go. I will arrange myself in some way. Oh! why am I not different; I wish I were as straight as the queen," and for that first time in her life she bewailed her beauty, because it stood between her and Brandon.

She soon coaxed him out of his despondency, and we began again to plan the matter in detail.

The girls sat on Brandon's cloak and



"Goodby, my friend," and she flew her bird.

he and I on the camp-stool and a box.

Mary's time was well occupied in vain attempts to keep herself covered with the cloak, which seemed to have a right good will toward Brandon and me, but she kept track of our plans, which, in brief, were as follows: As to her costume, we would substitute long trunks and jackboots for shoes and hose, and as to the doublet, Mary laughed and blushingly said she had a plan which she would secretly impart to Jane, but would not tell to us. She whispered it to Jane, who, as serious as the lord chancellor, gave judgment, and "thought it would do." We hoped so, but were full of doubts.

This is all tame enough to write and read about, but I can tell you it was sufficiently exciting at the time. Three of us at least were playing with that comical old fellow, Death, and he gave the game interest and point to our heart's content.

Through the thick time-layers of all these years, I can still see the group as we sat there, haloed by a hazy cloud of tear-mist. The figures rise before my eyes, so young and fair and rich in life and yet so pathetic in their troubled earnestness that a great flood of pity wells up in my heart for the poor young souls, so danger-bound and suffering, and withal so daring and so recklessly confident in the might and right of love, and the omnipotence of youth. Ah! If God had seen fit in his infinite wisdom to save just one treasure from the wreck of Eden, what a race of thankful hearts this earth would bear, had he saved us youth alone to thereby compensate for every other ill.

As to the elopement, it was determined that Brandon should leave London the following day for Bristol, and make all arrangements along the line. He would carry with him two bundles, his own and Mary's clothing, and leave them to be taken up when they should go a-shipboard. Eight horses would be procured: four to be left as a relay at an inn between Berkeley Castle and Bristol, and four to be kept at the rendezvous some two leagues the other side of Berkeley for the use of Brandon, Mary and the two men from Bristol who were to act as an escort on the eventful night. There was one disagreeable little feature that we could not provide against nor entirely eliminate. It was the fact that Jane and I would be suspected as accomplices before the fact of Mary's elopement; and, as you know, to assist in the abduction of a princess is treason—for which there is but one remedy. I thought I had a plan to keep ourselves safe if I could only stifle for the once Jane's troublesome and vigorous tendency to preach the truth to all people, upon all subjects and at all times and places. She promised to tell the story I would drill into her, but I knew the truth would seep out in a thousand ways. She could no more hold it than a sieve can hold water. We were playing for great stakes, which, if I do say it, none but the bravest hearts, bold and daring as the truest knights of chivalry, would think of trying for. Nothing less than the running away with the first princess of the first blood royal of the world. Think of it! It appals me even now. Discovery meant death to one of us surely—Brandon; possibly to two others—Jane and me; certainly, if Jane's truthfulness should become unmanageable, as it was so apt to do.

After we had settled everything we could think of the girls took their leave; Mary slyly kissing Brandon at the door. I tried to induce Jane to follow her lady's example, but she was as cool and distant as the new moon.

I saw Jane again that night and told her in plain terms what I thought of her treatment of me. I told her it was selfish and unkind to take advantage of my love for her and treat me so cruelly. I told her that if she had one drop of generous blood she would tell me of her love, if she had any, or let me know it in some way; and if she cared nothing for me she was equally bound to be honest and tell me plainly, so that I would not waste my time and energy in a hopeless cause. I thought it rather clever in me to force her into a position where her refusal to tell me that she did not care for me would drive her to a half avowal. Of course, I had little fear of the former, or perhaps, I should not have been so anxious to precipitate the issue.

She did not answer me directly, but said: "From the way you looked at Mary today I was led to think you cared little for any other girl's opinion."

"Ah! Miss Jane!" cried I joyfully, "I have you at last; you are jealous."

"I give you to understand, sir, that your vanity has led you into a great mistake."

"As to your caring for me or your jealousy? 'Which?' I asked seriously. Adroit, wasn't that?

"As to the jealousy, Edwin. There, now; I think that is saying a good deal. Too much," she said, pleadingly; but I got something more before she left, even if it was against her will; something that made it almost impossible for me to hold my feet to the ground.

Jane pouted, gave me a sharp little slap and then ran away, but at the door she turned and threw back a rare smile that was priceless to me, for it told me she was not angry; and, furthermore, shed an illuminating ray upon a fact which I was blind not to have seen long before; that is, that Jane was one of those girls who must be captured vi et armis.

Some women can not be captured at all; they must give themselves; of this class preeminently was Mary. Others again will meet you half way and kindly lend a helping hand; while some, like Jane, are always on the run and are captured only by pursuit. They are usually well worth the trouble, though, and make docile captives After that smile from the door I felt that Jane was mine; all I had to do was to keep off outside enemies, charge upon her defenses when the times were ripe and accept nothing short of her own sweet self as ransom.

The next day Brandon paid his respects to the king and queen, made his adieus to his friends and rode off alone to Bristol. You may be sure the king showed no signs of undue grief at his departure.

CHAPTER XVI.

A few days after Brandon's departure, Mary, with the king's consent, organized a small party to go over to the Windsor for a few weeks during the warm weather.

There were 10 or 12 of us, including two chaperons, the old Earl of Hertford and the dowager Duchess of Kent. Henry might as well have sent along a pair of spaniels to act as chaperons—it would have taken an army to guard Mary alone—and to tell you the truth our old chaperons needed watching more than any of us. It was scandalous. Each of them had a touch of the gout, and when they made wry faces it was a standing inquiry among us whether they were leering at each other or felt a twinge—whether it was their feet or their hearts, that troubled them.

Mary led them a pretty life at all times, even at home in the palace, and I know they would rather have gone off with a pack of imps than with us. The inducement was that it gave them better opportunities to be together—an arrangement connived at by the queen, I think—and they were satisfied. The earl had a wife, but he fancied the old dowager and she fancied him, and probably the wife fancied somebody else, so they were all happy. It greatly amused the young people, you may be sure, and Mary said, probably without telling the exact truth, that every night she prayed God to pity and forgive their ugliness. One day the princess said she was becoming alarmed; their ugliness was so intense she feared it might be contagious and spread. Then, with a most comical seriousness, she added:

"Mon Dieu! Sir Edwin, what if I should catch it? Master Charles would not take me."

"No danger of that, my lady; he is too devoted to see anything but beauty in you, no matter how much you might change."

"Do you really think so? He says so little about it that sometimes I almost doubt."

Therein she spoke the secret of Brandon's success with her, at least in the beginning; for there is wonder-

Mark talked, and laughed, and sang, healthy little doubt.

We had a delightful canter over to Windsor, I riding with Mary most of the way. I was not averse to this arrangement, as I not only relished Mary's mirth and joyousness, which was at its height, but hoped I might give my little Lady Jane a twinge of jealousy perchance to fertilize her sentiments toward me.

Mary talked, and laughed, and sang, for her soul was a fountain of gladness that bubbled up the instant pressure was removed. She spoke of little but our last trip over this same road, and, as we passed objects on the way, told me of what Brandon had said at this place and that. She laughed and dimpled exquisitely in relating how she had deliberately made opportunities for him to flatter her, until, at last, he smiled in her face and told her she was the most beautiful creature living, but that

after all, 'beauty was as beauty did!'"

"That made me angry," she said. "I pouted for a while, and, two or three times, was on the point of dismissing him, but thought better of it and asked him plainly wherein I did so much amiss. Then what do you think the impudent fellow said?"

"I can not guess."

"He said: 'Oh, there is so much it would take a lifetime to tell it.'

"This made me furious, but I could not answer, and a moment later he said: 'Nevertheless I should be only too glad to undertake the task.'

"The thought never occurred to either of us then that he would be taken at his word. Bold? I should think he was; I never saw anything like it! I have not told you a tenth part of what he said to me that day; he said anything he wished, and it seemed that I could neither stop him nor retaliate. Half the time I was angry and half the time amused, but by the time we reached Windsor there never was a girl more hopelessly and desperately in love than Mary Tudor." And she laughed as if it were a huge joke on Mary.

She continued: "That day settled matters with me for all time. I don't know how he did it. Yes I do * * *" and she launched forth into an account of Brandon's perfections, which I found somewhat dull, and so would you.

We remained a day or two at Windsor, and then, over the objections of our chaperons, moved on to Berkeley Castle, where Margaret of Scotland was spending the summer.

We had another beautiful ride up the dear old Thames to Berkeley, but Mary had grown serious and saw none of it.

On the afternoon of the appointed day, the princess suggested a hawking party, and we set out in the direction of the rendezvous. Our party consisted of myself, three other gentlemen and three ladies besides Mary. Jane did not go; I was afraid to trust her. She wept, and, with difficulty, forced herself to say something about a headache, but the rest of the inmates of the castle of course had no thought that possibly they were taking their last look upon Mary Tudor.

Think who this girl was we were running away with! What reckless fools we were not to have seen the utter hopelessness, certain failure, and deadly peril of our act; treason black as Plutonian midnight. But, Providence seems to have an especial care for fools, while wise men are left to care for themselves, and it does look as if safety lies in folly.

We rode on and on, and although I took two occasions, in the presence of others, to urge Mary to return, owing to the approach of night and threatened rain, she took her own head, as everybody knew she always would, and continued the hunt.

Just before dark, as we neared the rendezvous, Mary and I managed to ride ahead of the party quite a distance. At last we saw a heron rise, and the princess uncapped her hawk.

"This is my chance," she said; "I will run away from you now and lose myself; keep them off my track for five minutes and I shall be safe. Good-bye, Edwin; you and Jane are the only persons I regret to leave. I love you as my brother and sister. When we are settled in New Spain we will have you both come to us. Now, Edwin, I shall tell you something: don't let Jane put you off any longer. She loves you; she told me so. There! Good-bye, my friend; kiss her a thousand times for me." And she flew her bird and galloped after it at headlong speed.

As I saw the beautiful young form receding ffrom me, perhaps forever, the tears stood in my eyes, while I thought of the strong heart that so unfalteringly braved such dangers and was so loyal to itself and daring for its love. She had shown a little feverish excitement for a day of two, but it was the fever of anticipation, not of fear or hesitancy.

Soon the princess was out of sight, and I waited for the others to overtake me. When they came up I was greeted in chorus: "Where is the princess?" I said she had gone off with her hawk, and left me to bring them after her. I held them talking while I could, and when we started to follow took up the wrong scent. A short ride made this apparent, when I came in for my full share of abuse and ridicule, for I had led them against their judgment. I was credited with being a blockhead, when in fact they were the dupes.

We rode hurriedly back to the point of Mary's departure and wound our horns lustily, but my object had been accomplished, and I knew that withing 20 minutes from the time I last saw her, she would be with Brandon, on the road to Bristol, gaining on any pursuit we could make at the rate of three miles for two. We scoured the forests far and near, but of course found no trace. After a time rain set in and one of the gentlemen escorted the ladies home, while three of us remained to prowl about the woods and roads all night in a soaking drizzle. The task was tiresome enough for me, as it lacked motive; and when we rode into Berkeley Castle next day, a sorrier set of bedraggled, rain-stained, mud-covered knights you never saw. You may know the castle was wild with excitement. There were all sorts of conjectures, but soon we unanimously concluded it had been the work of highwaymen, of whom the country was full, and by whom the princess had certainly been abducted.

The chaperons forgot their gout and each other, and Jane, who was the most affected of all, had a genuine excuse for giving vent to her grief and went to bed—by far the safest place for her.

What was to be done? First we sent a message to the king, who would probably have us all flayed alive—a fear in which the chaperons shared to the fullest extent. Next, an armed party rode back to look again for Mary, and, if possible, rescue her.

(To be continued in next issue.)

One for the Girl.

"Girls make me tired," said the fresh young man. "They're always going to some of these palmists to have their hands read."

"Indeed!" said she sweetly. "Is that any worse than men going into saloons to get their noses red?"

Insufficient Bait.

A teacher was one afternoon examining a class of young boys in geography. He said:

"Now, boys, what do you think that Noah did while he was in the ark?"

After waiting several minutes he saw one hand go up, and the little chap on being asked what he thought Noah did replied:

"Sir, I think that he might have fished some."

"Yes," said the instructor, "that is possible; he might have fished some."

Presently another small hand went up. The teacher asked this one also what he thought about it.

The small boy said: "I don't think that he fished very long, because he only had two worms."

Sidelights

Parodies on Nature.

The horsefly has no hoofs on its complacent feet; the angleworm is full of curves, without a corner neat. The bumblebee is not a bum, the hornet has no horn; and sound is silent when it breaks upon an ear of corn. The yellow jacket wears no clothes, the pieplant grows no crust; the rubber plant can not be stretched, the goldbug has no dust. A lighting plant don't grow from roots, a jailbird has no wings; a baseball diamond's on the square, and so are all prize rings.

But the Egg Was Good.

A middle-aged bachelor was in a Leadville restaurant at breakfast, when he noticed this inscription on an egg: "To Whom It May Concern: Should this meet the eye of some young man who desires to marry a farmer's daughter, 18 years of age, kindly communicate with —— Goodland, Kansas." After reading this he made haste to write to the girl offering marriage and in a few days received this note: "Too late. I am married now and have four children."

She Would Not Call Names.

The county superintendent of schools, Miss Whitehead (whose hair was almost white) was paying a visit to a country school. At the close of the school, when the children went trooping out, each one said, "Goodby, Miss Whitehead." But one little girl, with red hair, said nothing, and hung her head. As she was about to pass Miss Whitehead put out her hand and said:

"Nellie, are you not going to say goodby to me, as the others have?"

"No, I'm not," answered Nellie. "I know what it is to be called 'Miss Redhead,' and I'm just ashamed of the others."

Safety First.

Railroad Foreman—Sambo, if we had war, wouldn't you like to be a captain and get in front and holler, 'Come on, boys!'"?

Sambo—No, suh, boss. I'd ruther git behind and holler, "Go on, boys!"

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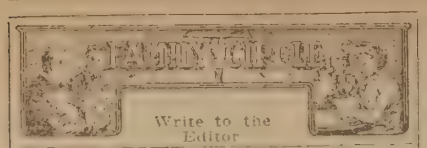
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ALICE W. BARLAND
Editorial Contributor

Fitting for Work

Occupations Are Open to Women

By ALICE W. BARLAND.

Dear Girls on the Farms: I read not long a go a list of trades and professions now being followed by women. It set me thinking about the difference in the times since I was a school girl. Among the things I used to wonder about in my moonlight communions with myself was what I should like to fit myself for. It did not take long at that time to run through in my mind the occupations common to women and girls.

There was teaching, dressmaking, millinery and occasionally a woman employed in a telegraph office. So far I can now remember, these were about all the avenues open for girls where special training was required. As to housework—we call it domestic service now—almost all the girls of my acquaintance at that time, were fitted to go into any ordinary home and assist with the housework and cooking. It was the good old-fashioned way with mothers to keep the little girls around with them while "doing up the work" and they learned how without knowing they absorbed the knowledge.

Don't imagine I am one of the croakers who are quoting "the good old times." No one believes stronger than I do, that we are now living in the very best age, but in the item of child training, I feel strongly that the new methods are no improvement on those of the past half century.

However, I did not intend to preach or moralize to you girls: I only set out to compare the few openings for young women when I was a girl with the almost limitless number now.

I never heard of a woman lawyer when I was a young girl, but from a paper called "The Woman Lawyers' Journal," I got some very wonderful statements.

I learned that there are in this country 238,077 women stenographers, 7300 physicians, 7395 preachers, 1010 lawyers, about the same number who are architects and designers, 429,000 in various other professions, such as nursing, hairdressing, etc. There are also over 480,000 in various trades, and now listen girls, there are in this country 770,055 women engaged in architecture. I am not mentioning the great number of teachers, for that field has always been open to girls. And I have not mentioned the great number of girls in telephone offices.

Surely with all these opportunities open to chose from, it is up to the girl, isn't it? The more one knows about all kinds of things the better fitted he is to hold any kind of position, but the solid old foundation of all book knowledge is the same now as it was a 100 years ago. Namely, reading, writing, spelling, arithmetic, geography and grammar.

These branches are all they used to teach in country schools, but many a great man and woman, having had only these branches, has, by persistent effort, added to that foundation till he or she has acquired a liberal education.

The schools now, even the country schools, teach many more branches than they used to and since the system of consolidated school districts is becoming popular, the farm girls and boys are having the equal chance with those who live in the cities, for an education.

I am sure life would have been much more interesting for me and I should have been more useful in the world if some one had taken more interest in impressing on my mind the value and purpose of school.

I was sent to school when I was four years old because I lived very close to the school house and I was safe and out of the way. I was quite a girl before I realized that school days were valuable and for the purpose of fitting me for usefulness in life. A realization of the value of education came to me finally, and with it a great longing to know all about things. That desire is still with me and increases with the years and I am sure it will never be satisfied, for the longer one lives the more there seems to be to learn.

The wish of my heart for you girls, is that you may have a wholesome curiosity concerning the common things with which we daily come in contact. A desire to know about them will set you to finding out and you will be busy and interested, which always makes one happy.

For instance, do you know about these common things? What is coal made of and what makes it hard? How many kinds of trees do you know the names of and what are many of them especially used for, and where do they grow? What kind of wood is best for lead pencils and what is the material in them that we call "lead?"

How many birds, that you see or might see, do you know the names of, and do you know where they build their nests?

Oh, my girls, this world is full of the most interesting things!

Get busy and see how many things you can discover, that are very common, that you know little or nothing about, then see how interested you will get learning about them.

Wouldn't it be jolly if we could meet and talk it over and tell each other that we have found out day to day? In my next letter I will tell you about some of my country school experience.

Plant Nasturtiums.

Every householder, in planning the flower and vegetable garden, should plant a goodly number of nasturtiums, not alone for their profusion of beautiful blooms, lasting from early summer until late autumn, but also on account of their condiment value. Both the leaves and seeds of nasturtiums have a sharp, peppery taste and add very much to the flavor of a salad. A few of the leaves mixed in with lettuce leaves in a salad almost take the place of pepper.

For use in sauces, the seeds should be gathered while still tender. They can be dropped, as gathered from day to day into a ready prepared pickling fluid of vinegar, salt and spices, and thus preserved for future use; or ground or pounded up, they may be sprinkled into soups, sauces and salad dressings, but it is well to remember, that like most finely ground up things, they easily lose their flavor after being put into that state, and should be tightly covered until used.

L. C. F.

They Had 'Em in Those Days.

"Why is George Washington described as 'First in war and first in peace'?"

"I dunno," replied Senator Sorghum. "I suspect somebody was trying to square him with both the preparedness people and the pacifists."—Washington Star.

Angels Could Do No More

Than One Puzzle Contestant Thinks He Did

By THE CONTEST EDITOR.

Contestants who submitted the correct solution on the figure puzzle have been entangled in a maze of dots and dotted lines during the last two weeks. Of the 919 persons who correctly solved the figure problem all but a few have managed to wade through the dots and the winners in this, the tie-breaking contest, will be announced as soon as the judges have examined the charts and determined the final winners. The names of all persons who tied also will be published.

As a result of delayed trains in many sections, due to blockades, an unusual length of time has been necessary for the return of the charts and all will be considered and examined carefully in all cases where the postmark shows the letters were forwarded on or before April 3, the date set for the closing of the last contest. It will be a week or 10 days before the contest editor knows who the winners are.

Good Nature and Merriment.

Marked by a great deal of good nature and merriment the last days of the contest have been almost pleasant ones for the contest editor who ordinarily thinks he is beset with all the woes of the universe. Some have expressed keen disappointment because the prize money could not be forwarded in time for the purchase of Easter bonnets.

Like many of life's contests, the number of disappointed participants far exceeds the number of victors and in times like this it is indeed refreshing to receive a letter like the following from Paul D. Porter of Port Blakely, Wash. As this is written no count has been made of the charts, so we don't know whether Mr. Porter is a loser or not. If he is, he is a good one:

"Angels Can Do No More.

To the Contest Editor: Attached herewith find my effort to win the capital prize of $275 in the tie-deciding contest following the figure puzzle:

I have counted the dots in accordance with your instructions and have been able to pass the line through 434.

If there are other contestants who submit a correct drawing with more dots than mine, I shall gladly bow to them. I have none of the "Arthur Lamb" feeling about a contest of this kind. In fact, about any kind of a contest, whether it be dependent upon skill, education or pure luck. I congratulate myself on being a good loser. In other words, I am for the man who beats me in anything. Those are generally the ones from whom we can learn something.

The wife thinks I am just about "it," anyway. She knows I have submitted the highest total of dots; knows that I will receive your check promptly, and, in addition, she has already figured out exactly what she is going to do with it. Needless to say $200 goes in the savings account for the kiddies, the balance—well, you know, spring, Easter and all those kind of things are in the air—and the shopping list is practically completed.

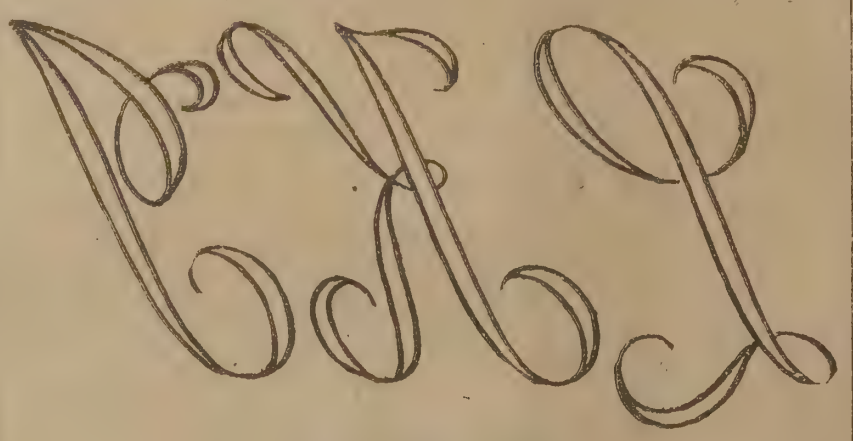
Seriously, I have enjoyed this contest, feel that I have profited by it, win or lose; and what impresses me most is the spirit of fairness that has pervaded the whole thing. My congratulations to the winner. I have done my "d—st," and, like the Texas cowboy's epitaph, "Angels can do no more." Very truly yours,

PAUL D. PORTER.
Box 25, Port Blakely, Wash.

Bossy Is Beloved.

All the shortcomings of the cantankerous "critter" that knocked the daylights out of you last summer when the flies were bad; all the golblasted maneuverings of the old lunkhead who refused to eat the carrots you had chopped with the cow-barn shovel; all the pesky, low-lived tricks a bellowing bovine ever was guilty of—everything is apparently forgiven and forgotten by those who have submitted answers to question 45 in the Farm Information contest which closes April 19. If Bossy could see herself framed in the word picture painted by the essay writers; if she actually knew what a beloved and adored individual she actually is, it is quite possible she would insist on an eight-hour day, an increase in her wage scale, six months' vacation and an old-age pension. Besides the very liberal prize offer, details of which are given elsewhere in this issue of The Farmer, the Farm Information contest has educational qualities of real worth and to many persons it has brought a store of much-needed information about the most ordinary things. There is still time to enter the contest if you act now.

Script Initials for Embroidery



By WINNIFRED WORTH.

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of a linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design.



Sweet is the breath of morn, her rising sweet,
With charm of earliest birds; pleasant the sun
When first on this delightful land he spreads
His orient beams on herb, tree, fruit and flower,
Glistning with dew; fragrant the fertile earth
After soft showers; and sweet the coming on
Of grateful ev'ning mild; then silent night
With this her solemn bird and this fair moon,
And these the gems of heaven, her starry train.

—Milton.

Cream That Will Whip.

Cream to whip well should contain at least 25 per cent of fat, while the cream ordinarily sold is required by North Dakota law to contain 18 per cent of fat. The cream should be cold, not over 40 degrees F., to whip well. Adding a little sugar sometimes improves the whipping qualities of cream. The cream should be aged at least 24 hours before whipping.

Meaning of "Amen."

The word "amen" literally means "true." Used as a substantive, "that which is true," or "the truth." In the synagogues and private houses of the Hebrews it was customary for the people or the members of the family to say "amen" to the prayers offered by the priest or the master of the house. The custom was carried into the early Christian church.

In Reverse Order.

It was just after the Christmas dinner and toasts were in order. The toastmaster arose to introduce a prominent elderly speaker, as follows

"Gentlemen, you have just been giving your attention to a turkey stuffed with sage. Now you will listen to a sage stuffed with turkey."—McClary's Wireless.

Increase in Wooden Toys.

Since the war has cut off the importations from Germany there is a great increase in the manufacture of wooden toys in the United States. The largest toy-producing center in this country is the town of Winchendon, Mass.

Patterns

2035-2020—Ladies' costume. Waist, 2035, cut in seven sizes—34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt, 2020, cut in seven sizes—22, 24, 26, 28, 30, 32 and 34 inches waist measure. The skirt measures about three and a third yards at the foot and will require four yards of 44-inch material for a 24-inch size. The waist requires two and a half yards of 44-inch material for a 36-inch size. TWO separate patterns, 10 cents FOR EACH pattern.

2029—Ladies' night dress. Cut in four sizes, small, medium, large and extra large. A medium size will require six yards of 36-inch material. Price 10 cents.

1807—Ladies' shirt waist. Cut in six sizes—34, 36, 38, 40, 42 and 44 inches bust measure. It requires three and a quarter yards of 27-inch material for a 36-inch size. Price 10 cents.

2032—Boys' blouse. Cut in five sizes—8, 10, 12, 14 and 16 years. It requires two and three-eighths yards of 36-inch material for a 10-year size. Price 10 cents.

2033—Play dress, with lower edge arranged for romper style. Cut in four sizes—1, 2, 3 and 4 years. Size four will require two and three-eighths yards of 36-inch material. Price 10 cents.

2019—Girls' one-piece yoke dress. Cut in four sizes—4, 6, 8 and 10 years. It requires four and three-eighths yards of 36-inch material for a 6-year size. Price 10 cents.

2017—Juniors' one-piece dress. Cut in three sizes—12, 14 and 16 years. It requires four and a half yards of 44-inch material for a 14-year size. Price 10 cents.

1596—Ladies' house or morning dress. Cut in six sizes—34, 36, 38, 40, 42 and 44 inches bust measure. It requires six and three-eighths yards of 36-inch material for a 36-inch size. The skirt measures about three yards at the lower edge. Price 10 cents.

2018—Girls' one-piece dress—Cut in four sizes: 6, 8, 10 and 12 years. It requires three and three-quarter yards of 36-inch material for an 8-year size. Price, 10 cents.

1778—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. It requires four and three-fourths yards of 44-inch material for a 12-year size. Price, 10 cents.

2024—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires seven yards of 36-inch material for a 36-inch size. The skirt measures about three yards at the foot. Price, 10 cents.

2034—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires eight yards of 36-inch material for a 36-inch size. The skirt measures about two and two-third yards at the foot. Price, 10 cents.

2031—Girls' dress with Bertha trimmings. Cut in five sizes: 4, 6, 8, 10 and 12 years. It requires four and one-half yards of 36-inch material for a 10-year size. Price, 10 cents.

2030—Boys' blouse suit with or without shield, and yoke facing. Cut in four sizes: 3, 4, 5 and 6 years. It requires two and one-half yards of 44-inch material for a 3-year size. Price, 10 cents.

2022—Ladies' apron. Cut in four sizes: Small, medium, large and extra large. It requires for a medium size four and three-eighths yards of 36-inch material. Price, 10 cents.

2028-2027—Ladies' costume. Waist 2028, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires two and three-quarter yards of 44-inch material for a 36-inch size. Skirt 2027, cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure and require four and one-quarter yards of 44-inch material for a medium size. The skirt measures three and one-quarter yards at the foot. Two separate patterns, 10 cents for each pattern.





He Saw the Light.

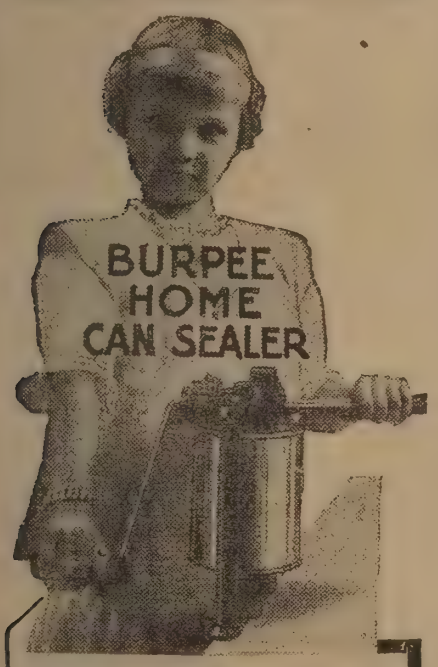
A minister received an invitation to the pastorate of a finer, wealthier church than any he had ever served, but as was his custom he deferred action until he could pray and think over the matter. One day a friend saw the preacher's youngest son and inquired: "Well, Charles, is your father going to take the new pastorate."

"Dad is still praying for light," replied the somewhat irreverent youngster, "but between you and me he's got most of the goods packed."

Slim Fodder.

"Get down out of that tree!" General Pershing ordered a Yankee trooper whom he saw up in a persimmon tree. "Those green persimmons aren't fit for food."

"I'm not using them for food," replied the private. "I'm eating them to draw my stomach up to fit my rations."



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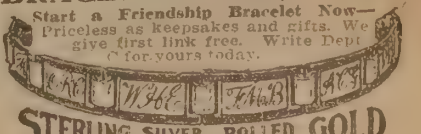
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Happy When Little Sister Was Found.

Dear Aunt Nellie: On one sunny October day when the leaves were golden brown and red, as I was walking home from school I met Mrs. Whitcomb and Mrs. Palmer. They told me that my 1-year-old sister, Myrtle, was lost. They had to go home to get supper for the hungry crew of men who were constructing a road nearby, but told me that if we didn't find her soon to send one of the kids over to camp and they would send the men over to help hunt. I hurried on to the "Little Hill" as we call our homestead. Mama had been hunting ever since 3 o'clock, and it was about 4:30 then. I went all over the small clearing which was nearly covered with blackberry briars. I hunted in the orchard and followed up a number of trails, but I didn't find her. Then papa came. He thought he could find her in a little bit. It was dusk when the boys got home and one of them went immediately to camp. It soon became pitch dark. The boys had a roaring fire of pine knots to take a little of the chill off, for it was very cold. There are a number of trails leading from Little Hill. We followed up every one of them, I believe, but still we found no trace of the girl, not even a track. Every hour of the night we met at the fire to exchange ideas, but no one had anything to tell except what they guessed. A man phoned Ollie Ford to bring his hunting dogs down. At 2:30 a. m., October 3, we all went home. Early the next morning we went back to hunt some more. At about 9:30, Eddie Eltrich found a single track in the soft ground. Mary and I went and looked at it and being sure it was her's we went back to Little Hill and when ever any one would come to the fire we would take them up to show them the track. At 10:30 Eddie Eltrich found our little sister and the men brought her back to the fire, where we warmed her. Mary and I were the happiest girls in the whole world. Myrtle was not able to walk well for about a half day on account of her feet being swollen so much, but that was all. When someone asked her where she slept she said: Oh, on a mossy log, but but if it had been a bed there I'd a-slept on it." When asked if she was afraid she said, "No, the tougars never tomed, did dey?"—Annie L. Hutsell, Mora, Wash.

Highest Ambition to Be a Teacher.

Dear Aunt Nellie: I live on a 12-acre farm. We have four calves and two cows. The names of the calves are Spot, Daisy, Rose and Lily, and the cows are Beauty and Bess. I have a black and white dog and a gray cat. The cat's name is Kitty Rose. The dog's name is Kazan. He is a very good dog and he will do lots of tricks. I have five sisters and two brothers. My brothers' names are George and James. I am 13 years old and I am in the fourth grade, but I am sick most of the time and do not get to go to school very much. I have to walk two miles to school every morning. My teacher's name is Miss Effie Mann. There are two rooms in our school. My playmate's name is Mildred. I like her very much. There are 32 pupils in our room and 20 in the other room. I can crochet and tat. I help mother in many ways. I wash the dishes and take care of my bedroom. I have only two brothers. The oldest is traveling and the youngest is only 5 years old. My highest ambition is to be a teacher. I would like to correspond with Agnes Lund—Anna Astel, East Stanwood, Wash.

Kitty Won't Scratch or Bite.

Dear Aunt Nellie: I am going to tell you about my pet kitten. She is 3 years old. I like her very much because we can play with her and she won't bite or scratch us. She is black and white with brown eyes. I have four brothers; one is 16 years old, another is 11 years old, another is 9 years old and the other is 4 years old. I will be 13 years old the 13th of June. I go to the Firwood school. I am in the seventh grade. I like school very much. We have about nine acres all together. We have 36 chickens, two geese, one horse, one cow and one pig. I like to feed the chickens and geese. My grandma and grandpa live about two blocks from us. They have a quarter of an acre. I go to Sunday school every Sunday. My teacher's name is Miss Nellie Gale. I like her very much. There are about 30 that go to church and Sunday school.—Hazel Rankin, R. F. D. 1, Box 219 Puyallup Wash.

Grandpa Caught a Bear This Winter.

Dear Aunt Nellie: I like the letters of the other children. I am the oldest child in our family. I am 10 years old and will be 11 the 19th of April. My oldest sister is 9 and will be 10 the 12th of June. Martha will be 9 in October. Dorothy, my youngest sister, is 5 years old. My youngest brother, Albert, is 6 years old. I live near Boundary Lumber company. We have a cow named Boss and a calf named Blackey. There are 12 children going to our school. Our teacher's name is Miss Sinclair. I like to go to school. I have nothing to do at home. I like my teacher. I am in the fifth grade. My grandpa killed a bear this winter. He shot him in the brain. His fur was thick. He caught him in a trap. Grandpa would not own up that he shot him. He tried to joke us, but he couldn't do it, for we knew he did. It was not very big. It was about 2 years old. One time we saw a deer in our back yard. He went up the hill, then I saw it on the plain about an hour after. The Indians live about one mile from our house. We live in a big log house. Our schoolhouse is of logs, too.—Cassius Franklin Orr, Northport, Wash.

More Pleasure From Their Homes.

Dear Aunt Nellie: My subject is "Fun on the Farm." In the summer we wade in the ponds and fish in the creek. We roll over the hay and play "Hide and Seek." We ride horseback. In the springtime we go into the woods and pick wild lilies and violets and Johnnie-Jump-Ups. Then in April there are the little purple May flowers that come out. In the autumn we have fun picking apples and getting in the garden vegetables, such as squash and pumpkins and the string beans. In the city some of the children have never seen birds or a field of wheat. The country children get more pleasure out of their home than the city children do. My birthday is just one day after Labor day, the 5th of September. I will be 10 years old this year. My father's birthday is the same day as mine, so we can celebrate it together. I would like to correspond with some girl who lives near me.—Grace Elizabeth Balsley, Enumclaw, Wash.

Snip, Snap and Pussy-Willow.

Dear Aunt Nellie: I enjoy reading the letters in the Corner. We have 10 acres. We have two cows, four calves and one horse. The cows' names are Molly and Buttercup, the calves' names are Beauty, Maidie, Brownie and Fussy and the horse's name is Dick. We have about 50 chickens. I have three cats. Their names are Snip, Snap and Pussy-Willow. They like to play. My papa built me a playhouse last summer. I like to play in it. I am 10 years old. My birthday is on the 20th of January. I am in the fourth grade. I have one sister. Her name is Mildred. She is 22 years old. I would like some of the girls of my age to write to me.—Margaret Binnings, Tacoma, Wash.

Just Loves That Baby Brother.

Dear Aunt Nellie: I am eight years old. I am in the third grade. I have three brothers and one sister. My mother has white leghorn hens. My teacher's name is Miss Hull. I live on a farm of 48 acres. One of my brothers is a baby. I just love him. He is not a year old yet. My sister is 2 years old. Her name is Helen. My brothers' names are Raymond, Ralph and Sidney. —Claire Beckwith, Elma, Wash.

Dog Hauls Him in His Wagon.

Dear Aunt Nellie: I enjoy reading the letters very much. I am seven years old and am in the first grade. I have read one book through and am almost through with another. I have two pets and they are dogs. One is big and the other is small. The big one's name is Shep and the little one's name is Chub. The big dog hauls me in my wagon.—Merton Mallory, Olalla, Wash.

Written Many Stories and Poems.

Dear Aunt Nellie: I am 12 years old and in the sixth grade at school. I have written several letters to the Corner and I hope I can win a prize. I have read many nice letters in the Corner and am always looking forward to the day when The Washington Farmer comes. I live on a farm of over 840 acres. We have an automobile and a phonograph and our home is equipped with electricity. I live two and a half miles east of Goldendale. I am sending you a poem I am author of. It is entitled "The Starry Firmament." I had no help in writing it so it is not very good. I like to write and to read and have written many stories and poems. —Harvey Norris, Goldendale, Wash.

Her Pets Are Spot and Snowball.

Dear Aunt Nellie: I am going to write about my school room. It has four windows on the west side. There is another room. I like my teacher fine. I was promoted to the fourth grade about the middle of January. I am getting along well in school. My teacher's name is Mrs. Wrye. I enjoy the letters of the nephews and nieces. I was 9 years old the fourth of July. I have one brother younger than I am. His name is Edgar. He is 7 years old and in the first grade. I have a little dog named Spot and we have a cat named Snowball. We have eight head of horses and four colts and three cows and three calves.—Delma Fouts, La Crosse, Wash.

We're Glad to Hear From Mary.

Dear Aunt Nellie: I am 9 years old. My birthday is October 24th. I am in the fourth grade. I have two sisters and five brothers. Their names are Clyde, Claude, Arthur, Owen, Jimmie, Gladys and Grace. They are all in school but two. There are 30 pupils in our school. Our teacher's name is Miss Olive Pope. My mother takes The Washington Farmer. I read the Children's Corner and like it very much. I would like for some of the cousins to write to me. We have about five inches of snow. I live on a 10-acre farm. We have four cows and some twin calves. We have one dog named Curly.—Mary Burgess, Box 14, Park, Wash.

The Bible Says:



Hazel Sold Her Horse for $100.

Dear Aunt Nellie: My chum, Josie Gustafson, sent you a letter and had it put in the Children's Corner, so I thought I would write one, too. I am 9 years old and like to ride horseback. We own a 1040-acre farm and we have a six-cylinder Super Six Hudson automobile. I had a horse given to me by my brother, Deane, when I was quite young. The horse was a colt then. I sold the horse and I will get $100 for her. I have five brothers and one sister. I like the Farmer very much. I live one mile and a quarter from school. I ride to school in a buggy. I like the country.—Hazel Miller, La Crosse, Wash.

Raymond Calls His Dog "Bum."

Dear Aunt Nellie: I read all the letters and think they are nice, so I thought I would write. I have a dog whose name is Bum. He is a Spitz and he is black and white. We have a horse. His name is Sam. He will come when you call him. We have a cow and about 18 chickens and I have a bantam rooster. I did have two cats, one was an Angora and it went away with the old one and has not come back yet. The other got killed on the railroad track. I am 13 years old and in the sixth grade. I am four feet eight inches high and weigh 88 pounds.—Raymond Patten, Factoria, Wash.

Buster and Rowdy Are Two Fine Dogs.

Dear Aunt Nellie: I have intended to write for a long time. We live on a 40-acre ranch. There are 20 acres in orchard and 10 acres of corn. We are milking nine cows and there are three calves. We have 22 chickens and two dogs and their names are Buster and Rowdy. They are fine dogs. We have a span of mules and a team of horses. I am 11 years old and in the fifth grade and my teacher's name is Miss White, and there are about 50 in our schoolroom. I have two sisters and six brothers. And I forgot to tell you that there are eight pigs on the place.—George W. Wilkins, R. F. D. 1, Zillah, Wash.

Hope It Won't Bet the Last Time.

Dear Aunt Nellie: This is the first time I have written to the Corner. I don't think it will be the last time. We take the Farmer and I always read the letters. We live on a 10-acre farm, but we are renting it. We have 70 acres that belong to us, but it is all in timber. We have three milking cows and five heifers, two pigs and two horses. Dan and Dick are the horses' names. I have three brothers and one sister. We have three cats—Nancy, Tom and Betty.—Sarah Clauson, Tumwater, Wash.

Hopes Viola Will Write to Her.

Dear Aunt Nellie: I was reading the letters this morning and saw one was from Viola Augst and one from Lyda Augst. Both were from Box 30, Beebe, Wash. I was very glad to see letters from them as I live at Beebe. Our box is No. 4. I was 17 the 15th of March. I stay in Chelan to go to school. I am a sophomore in high school. It is lonesome at Beebe in the summer as there are not any girls down there except my sister. Her name is Jean. She is 8 years old. I hope Viola will write to me. My address is just Beebe, Wash.—Willo A. Oules, Beebe, Wash.

Wants the Girls to Write to Her.

Dear Aunt Nellie: I have never written to the Children's Corner before. I am 11 years old and in the fifth grade at school. My birthday is July the 11th. My teacher's name is L. E. Hutt. I like him fine. There are eight children in our school. There are five girls and three boys in our family. Their names are Louise, Aline, Walter, Alta, Lester, Lillian, Johnnie and Mary. I wish some of the girls would write to me. Elma Eaton, Dayton, Wash.

Ginger Is Marie's Pet Pony.

Dear Aunt Nellie: I have never written to you before, so I will write to you now. I was 8 years old February 21. I am in the third grade. My teacher's name is Miss Greene. I have one sister, Cora; she is 13 and is in the sixth grade. I have a brother and his name is Elmer. He is 1 year old. I have a pet sheep and its name is Ida. We have a pony and his name is Ginger. I like to ride him very much.—Marie Hawk, White Bluffs, Wash.

Milks Two Cows and Feeds the Calf.

Dear Aunt Nellie: I have a mare and her name is Queen. Papa has two horses and seven cows. I have a dog. He is a good cattle dog and he catches rats and he kills some minks. I milk two cows and feed a calf. The calf has curly hair. I named the calf Blossom. I walk two miles to school. I am in the third grade. I am 9 years old. I live on a 48-acre farm.—Raymond Beckwith, Elma, Wash.

Cross the Columbia on a Ferry.

Dear Aunt Nellie: I am 9 years old. I am in the fourth grade. I like to go to school. I have two brothers and two sisters. We have one cow, one calf and 30 chickens. We live in a log house, five and one-half miles from Northport. The snow is one and a half feet deep here. I live across the Columbia river and we have to cross on the ferry every time we go to town.—Maxine Orr, Northport, Wash.

Goes to School in Union Valley.

Dear Aunt Nellie: I am 10 years old. My birthday is May 6. I am in the fifth grade. I go to school in Union Valley. I have three brothers and three sisters. My brothers' names are Ivan, age 18; John, age 5; Arthur, age 1, but nearly 2. My sisters' are Helen, age 16; Thelma, age 14; and Lola, age 8.—Irene Wesley, Chelan, Wash.

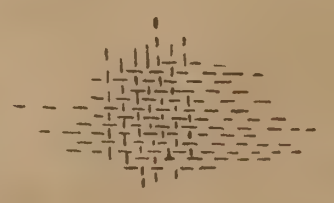
Wants to Be Happy All Her Life.

Dear Aunt Nellie: I wish I could be happy all my life. It is George Washington's birthday today. We have always had a holiday on Washington's birthday. I have a Mr. Tick Mouse Two-Minute Bedtime story baak. My little niece can write good. She sent mama a valentine. This is the first time I have written to the Corner.—Ethel Hawk, Tekoa, Wash.

The Washington Farmer is glad to announce the receipt of letters for the "Children's Corner" from the following during the last week: Stella Shaw, Louis T. Talbot, Georgia Buck, Esther Carslin, Robert Carter, Nellie E. Dorman, Madelyn Hughes, Letha Dwire, Evelyn Willey, Leonard Clark, Willie Righetti, Beatrice Hett, Arthur Elphick, Brenda Ward, Ronald Ward, Edna Light, Carrie Fjerlie, Theresa Wilson, Nellie Neil, Nellie Salvage, Violet Howell, Mary Limmet, John Carslin, Richard Lefors.

Mending Table Linen





When mending table linen it is well to have threads drawn from a piece of similar damask. If this can not be obtained use soft linen floss. A needle as fine as will hold the thread should be used. Fine long-eyed needles are best.

The following directions for mending table linen are given in a bulletin on sewing, prepared by Margaret Sweet of the Idaho State university:

For Very Small Hole.

For ordinary mending use plain weave as for mending stockings. Trim off only those threads which are badly frayed. Without making knot, begin weaving in the warp threads. Be sure to weave well beyond the worn place and place threads close together. The shape of the darned place should be irregular as such an edge wears better. Weave woof regularly over and under the warp threads, crossing them at right angles.

For Larger Hole.

For larger hole, place piece of damask as near like the table linen to be mended as possible. Baste in place and proceed as for darning woolen cloth in Bulletin 1, making stitches as in illustration below.

Davis Holstein Sale

Eighty-Six Animals Average $340 Per Head

By D. G. SUTHERLAND

The sale of H. C. Davis, held on his ranch at Granger, Wash., April 2, closes out one of the best herds of Holsteins in the United States. The day was ideal, the stock was all in fine breeding and producing condition.

A spectacular scene was enacted when No. 11 Model Bonnie Echo was led into the sale ring by Miss Opal Davis, the cow being the daughter's individual property. The affection shown for her owner, the gentleness with which she responded to every touch was almost pathetic. When the cow was knocked down at $525 the crowd seemed to think the auctioneer had stopped too soon.

It was a surprise to many when they learned that Emmons Blaine of Lake Mills, Wis., a grandson of the late James G. Blaine, had come out here specially to purchase the Davis-Marks herd bull Mutual Fobes Longfield De Kol, which he did at private sale, and bought 10 of his daughters at public sale. Mr. Blaine remarked that in the purchase of this bull and his daughters he had secured the nearest his ideal of the Holstein breed obtainable in the United States. This bull is very closely related to the cow which leads the world today as a butter producer.

Wisconsin, Idaho, Oregon and California breeders attended the sale and took home with them some of the Holstein herd that has helped to make the Yakima valley famous as a breeding place for "blacks and whites."

A total of 86 head was sold for $29,260, or a little better than $340 a head. When it is considered that 50 of the females sold were less than 15 months old, and 40 of these were born last August, or since that time, the record of the sale is even better than the average per head appears.

The heaviest buyer of the sale was Emmons Blaine of Lake Mills, Wis., who took home a carload of heifers, headed by the Davis-Marks herd bull Mutual Fobes Longfield De Kol. The top price of his auction purchases was a calf dropped last August, for which he paid $880.

J. von Herberg of Seattle topped the sale by the purchase of May Lilu Hylaard Segis II., a 3-year-old heifer, for $1000. It was the August calf of this heifer that cost Mr. Blaine $800. J. P. Iverson and Owen Duffy of the California state hospital purchased six heifers and Mr. Higdon of Tulare, Cal., took home nine to add to the 10 he purchased here from Davis & Marks about a year ago.

Auctioneers were George A. Gue, Harry Cranke, George Gochnour and Edward Hobson. George A. Gue did the selling.

Cows and Heifers.

Bessie Queen Fayne, 277579, born May 1, 1914, Emmons Blaine, Lake Mills, Wis.; $405.

Bessie Johanna Hill Black, 247861, born January 14, 1914, California State hospital, Napa, Cal.; $410.

Bessie Johanna Lucy, 247863, born January 20, 1914, W. J. Higdon, Tulare, Cal.; $350.

Bessie Johanna Fayne, 285177, born July 8, 1914, W. J. Higdon; $390.

Bessie Pearl Fayne, 244104, born June 19, 1913, J. von Herberg, Seattle; $375.

Bessie Fayne Rose, 247800, born May 5, 1914, George A. Gue, North Yakima, Wash.; $330.

Bessie Fokes Sunnyside, 244106, born June 9, 1913, W. J. Higdon; $625.

Heifer calf, daughter of Bessie Fobes Sunnyside, 244106, Harry Paul, Mabton, Wash.; $280.

Miss Model Fobes, 337334, born May 23, 1916, E. T. Robinson, Toppenish, Wash.; $165.

Corona Clothilde De Kol Girl II., 128314, born February 1, 1906, Dr. A. L. Pierce, Granger, Wash.; $225.

Tritomia Hengerveld Fobes, 247955, born November 9, 1913, W. F. Lovejoy, Sandpoint, Idaho; $290.

Miss Bonnie Fobes, 289045, born August 18, 1914, Emmons Blaine; $500.

Heifer calf of Miss Bonnie Tobes, born September 5, 1916, Emmons Blaine; $310.

Victoria De Kol Model, 168000, born December 9, 1911, George A. Gue; $505.

Heifer calf of Victoria De Kol Model, Morehead & Hobson, Outlook, Wash.; $290.

Model De Kol Bessie, 287825, born February 21, 1915, William McKinney, Naches, Wash.; $425.

Model Pietye Twisk, 287826, born July 18, 1915, Herman Younge, Centralia, Wash.; $355.

Model Terpstra Pontiac, 287827, born May 18, 1915, John L. Smith, Spokane, Wash.; $125.

Terpstra Pontiac, 226085, born February 19, 1913, John L. Smith; $825.

Spofford Pontiac, 226087, born May 2, 1913, W. J. Higdon; $750.

Heifer calf of Model Terpstra Pontiac, 287827, born the morning of the sale, Dr. L. G. Stickney, Toppenish, Wash.; $160.

Pride De Haan Pontiac, 226088, born April 26, 1913, Stanley Butcherd, Sunnyside, Wash.; $400.

Heifer calf of Pride De Haan Pontiac, 226038, E. B. Marks, Ahtanum, Wash.; $200.

Miss De Haan Pontiac Fobes, 337331, born December 29, 1915, Dr. A. L. Pierce; $360.

May Lilu Hylaard Segis II., 227489, born June 4, 1913, J. von Herberg; $1000.

Heifer calf of May Lilu Hiylaard Segis II., born August 17, 1916, Emmons Blaine; $850.

Princess Wynima Pontiac, 226086, born May 1, 1913, W. J. Higdon; $425.

Utopia Pontiac Wayne De Kol, 199901, born June 11, 1912, John L. Smith; $460.

Pride Pontiac Fobes, 337332, born January 5, 1916, W. F. Lovejoy; $325.

Bessie Trijutje 2d, 168127, born January 30, 1911, John L. Smith; $710.

Bessie Trijutje Fobes, 337438, born March 17, 1916, Emmons Blaine; $300.

Tobe De Kol 2d Johanna, 106328, born November 5, 1907, E. B. Marks; $500.

Heifer calf of Tobe De Kol 2d Johanna, 106328, E. B. Marks; $260.

Miss Fobes Tobe De Kol, born February 2, 1916, Emmons Blaine; $510.

Echo De Kol America, 135259, born October 5, 1909, J. Von Herberg; $500.

Heifer calf of Echo De Kol America, 135259, J. Von Herberg; $385.

Miss Bessie Hartog, 334144, born January 9, 1916, C. J. Corson, The Dalles, Ore.; $305.

Princess Hengerveld Tritonia, born October, 1916, E. B. Marks; $275.

Miss Idaho De Kol, 329489, born January 2, 1915, W. F. Lovejoy; $250.

Miss Starin Fobes, 334719, born August 25, 1915, Emmons Blaine; $560.

Fantasy Segis Fobes, 337437, born October 6, 1915, William McKinney; $205.

Miss Nudine Fobes, 337333, born February 11, 1916, W. F. Lovejoy; $255.

Jewell Queen 2d, born March 16, 1915, W. F. Lovejoy; $250.

Thanksgiving Moore Segis, 352657, born November 25, 1915, W. F. Lovejoy; $210.

Mona Fobes, 249391, born November 13, 1913, W. J. Higdon; $485.

Heifer calf of Mona Fobes, 249391, E. B. Marks; $200.

Miss Segis Fayne Finderne, born September 18, 1916, Dr. A. L. Pierce; $610.

Queen Artis De Kol Fobes, 217207, born May 27, 1913, Frank McKinnon, Alaciel, Ore.; $350.

Marie Midnight Piebe Segis, 277455, born March 1, 1915, Hugh Sheppard, Granger, Wash.; $250.

Bessie Helena Burke Fayne, 345213, born August 24, 1915, William McKinney, $205.

Gertrude Akkrum De Kol, 296374, born October 29, 1914, Roy Norval, Summerville, Ore.; $300.

Ilzaide Buffalo, 331432, born December 7, 1915, H. Yorst, Outlook, Wash.; $175.

Mazie Fobes 2d, 337436, born September 14, 1915, Dr. A. L. Pierce; $300.

Model Rose Abbekirk America, 171040, born October 29, 1911, W. J. Higdon; $370.

Artis Fobes, 334593, born September 3, 1915, R. P. Rozelle, Hanford, Wash.; $260.

Fly Brook Fobes Tritomia, born October 27, 1916, E. B. Marks; $175.

Heifer calf, dam Paula Segis Fobes, 289046, sire Sir Bessie Fobes Tritomia, 125864, born November 18, 1916, Emmons Blaine; $210.

Mazie Fobes, 249393, born September 14, 1913, W. F. Lovejoy; $765.

Heifer calf of Mazie Fobes, 249393, Frank McKinnon, $110.

Lucy Fobes, 294,214, born December 10, 1914, Frank McKinnon; $330.

Heifer calf of Lucy Fobes, 294,214, Frank McKinnon; $155.

Nazli Prilly Fobes, 294,392, born February 2, 1914, W. F. Lovejoy; $430.

La Reina Silentshade Hengerveld, born January 19, 1911, Fred Howard, Selah, Wash.; $420.

Heifer calf of La Reina Silentshade Hengerveld, Fred C. Sudwick, Mabton, Wash.; $110.

Edna De Kol, Sir Skylark II., 157,536, born May 11, 1909, Roy Norval; $305.

Miss America Model Segis, 233,359, born October 7, 1913, W. F. Lovejoy; $250.

Miss Madcap Johanna Fayne, 343,690, born January 6, 1916, California state hospital; $250.

Heifer calf; dam, Idlewhite Estella Posch, 136,037; sire, Mutual Lad Tritonia, 111,281, born September 8, 1916, California state hospital; $190.

Dam Silentshade Parthenea Ormsby, 165,488; sire, Mutual Piebe De Kol, 44,554, born April 20, 1916, E. T. Robinson; $200.

Snoflake Piebe De Kol, born June 10, 1916, John L. Smith; $250.

Queen of Wheat Hill II., 245,961, born April 10, 1914, E. T. Robinson; $265.

Ruby Posch Trilonna, born September 15, 1916, E. B. Marks; $150.

Mary Chiron Beets, 325,967, born February 2, 1916, E. T. Robinson; $160.

Pauline Beets, Inka of Rock, 340,080, born February 3, 1916, California state hospital; $200.

The following numbers were not catalogued: No. 67, W. F. Lovejoy, $345; No. 68, W. J. Higdon, $360; No. 70, A. H. Yost, $170; No. 71, W. F. Lovejoy, $180.

Bulls.

Mutual Lad Tritonna II., 163,471, born September 26, 1914, E. B. Marks; $550.

Model Bessie, 188,123, born February 7, 1916, B. F. Huggins, North Yakima; $225.

Bull calf, sire, Finderne Pieterje Fayne, 98,104; dam, Bessie Queen Fayne, 277,579, L. D. Allen, Granger, Wash.; $115.

Bull calf, born October 18, 1916; sire, Finderne Pieterje Fayne; dam, Bessie Johanna Will Black, 247,861, Abe Davis, Filer, Idaho; $200.

Bull calf, sire, Sir Bessie Fobes Tritonnia, 125,864; dam, Model Bonnie Echo, 171,055, W. F. Lovejoy; $175.

Bull calf, sire, Sir Bessie Fobes Tritornia, 125,864; dam, Princess Wynima Pontiac, 226,086, C. J. Corson; $110.

At the close of the Davis sale it was announced that all purchasers and members of the association were invited, as the guests of Mr. Davis, to a banquet to be served at the Commercial hotel. There were about 50 present. After a bountiful spread was served W. K. Newell, president of the association, called the meeting to order. The report of the secretary was read and approved.

Holstein Association.

The Northwest Holstein Breeders' association held its annual meeting at North Yakima April 2.

Mr. Gue called attention to what had been accomplished in the last year. For the first time in its history the association had secured representation on the board of the national association. He considered Mr. Bishop of Chimacum, Wash., a good representative and well able to take care of the interests of the northwest.

The following officers were elected for the ensuing year::

President, John L. Smith, Spokane.

Vice president, Alex Todd, North Yakima.

Secretary and treasurer, E. B. Marks, Ahtanum.

The entire executive board was reelected for another year.

H. C. Dempsay, who has had charge of the work of the cow-testing association of the Sunnyside district, leaves with a carload of Holsteins purchased at the Davis sale by Emmons Blaine of Lake Mills, Wis. While there Mr. Dempsay expects to visit other herds and study the work of other testing associations.

Inland Empire Milk Producers.

The Inland Empire Diary Producers' association met at Spokane Saturday and reported a total enrolment of 150.

"The problem of producing milk at the prices now paid by distributors was threshed out and it was unanimously agreed that a price of at least 20 cents a gallon, f. o. b. Spokane, for the entire year would be necessary before dairy cows would return a reasonable interest of 6 or 7 per cent on the investment," said P. E. Smead, the secretary.

The bylaws and constitution were changed to admit as honorary members men who are interested in dairying, but who are also members of the large distributing companies. These members will have a seat and the privilege of the floor, but not a vote.

Farm Sold for $40,000.

The Fred Johnson place of 320 acres of wheat land north of Freewater, Ore., has been sold to J. McEwen of Athena for $40,000.

Market Pork Without Shrinage.

It is estimated that a 320-pound hog will shrink 20 pounds on the way to market if conveyed in the old-fashioned springless farm wagon. Part of the loss is due to the jolting and vibration and the rest to loss of time on the road. With hogs quoted close to the $15 mark, this loss amounts to considerable on a good-sized load—particularly as at least part of the shrinkage is avoidable.

Roy Hickman of Colfax, Wash., points out one of the ways of remedying the trouble. Mr. Hickman has a three-and-a-half-ton G. M. C. truck, originally fitted with a flat wheat body. Having 30 hogs to market, this eastern Washington farmer put rack sides on the truck, loaded the hogs, and had them in Colfax before any of the precious pork had time to take unto itself wings.

In addition to this use in conveying live stock to market, the new arrangement enables Mr. Hickman to use his truck for hauling large loads of hay, machinery, etc., and, in fact, to do all the hauling on his large farm.

Certified Seed Potatoes.

B. W. Cooney, Klickitat county agricultural agent, makes the timely suggestion that "there is a wide open field in the state of Washington for the grower or growers that will enlighten themselves on the various factors governing the production of certified seed potatoes. There is one factor if overlooked that will defeat any grower, and that is the disease end of the business. Every man growing potatoes should acquaint himself with all the diseases affecting the potato in the state, so that he may be able to detect its coming to his field, and put into practice any control that has been found effective. This seems to me to be the corner stone on which rests the future of our state as a potato producing one."

A Silo or Two.

Donald Urquhart of Wilson Creek, in Grant county, has become interested in the matter of putting up one or two silos for his cattle. He is milking 25 or 30 head at present and intends to increase his herd. He has been talking with County Agriculturist Reaugh as to what is the best crop to grow for silage.

Stock on Forest Reserves.

L. E. McDaniels, deputy supervisor of the Okanogan forest reserve, declares that that reserve produces the best grass fatted stock in the state. "It is nothing uncommon for us to turn off 1400-pound steers from the range," he said. There are 10 cattle and horse associations and one sheep associtaion on that reserve.

Cows on Honor Roll.

Numerous farmers in the Hannaford valley, north of Centralia, have enrolled in the Chehalis District Cow Testing association, according to the February report of B. C. Wright, official tester of the association. The report also shows that of the 30 cows on the honor roll of the association last month, those fed ensilage produced milk at an average cost for feed of 70 cents per 100 pounds of milk, while the cost for feed for those not fed ensilage was $1.05 for each 100 pounds of milk.



BROCCOLI CROP SOLD
Flat Price Per Acre Offered.

Contracts to purchase the broccoli raised in the season of 1917-1918 on 300 acres of Lane county (Ore.) farm lands have been signed by H. A. Rasor and W. T. Langlois of the Western Broccoli association, which recently was organized in Eugene. The crop is expected to reach 60,000 crates. Nearly 50 growers have signed with the company to care for the crop under the direction of the broccoli association, and to turn over the crop to the company in the winter of 1917-1918.

Wealth in Fresh Manure.

With the absolute lack of potash in all commercial fertilizers due to the war, and the high price of nitrogen, there is the most imperative need for not only the saving, but the proper handling of all barnyard manure. On account of the potash it contains, manure may be estimated to be worth double its normal value. We have now had two full years of no potash in commercial fertilizers—examine the fertilizer sacks and see if you can find any potash in the analysis—and no soil on which fertilizer is used at all can stand two years of potash robbing. Therefore a load of barnyard manure, which is ordinarily worth $1 or $1.50, according to locality, is now worth $2 or $3.

Want Ads

HELP WANTED—MALE 3

HAWTHORNE AUTO SCHOOL,
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

SITUATION WANTED—MALE 21

CAPABLE, ACTIVE MAN DESIRES POSITION with progressive poultry man. L. E. Nevius, Sylvan, Wash.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free. BEHNKE-WALKER BUSINESS COLLEGE, 167 FOURTH ST., PORTLAND, ORE.

MISCELLANEOUS 57

WANTED—TRIMMING OF FRUIT AND shade trees and care of them; also shrubbery. 45 years' experience. All work first class, or no pay. W. V. Hubbard, 1544 Market st., Tacoma, Wash.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER:

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

SASH AND DOORS.

Order your sash and doors direct from O. B. WILLIAMS CO. We sell for less because we own our own mill. Large stock. Prompt shipment and safe delivery to destination guaranteed. Our big illustrated Catalog No. 27 mailed free, postpaid, on receipt of request. We do not handle rough lumber.

5 cross panel doors, No. 1	$1.33
3-ply veneer, 1 panel doors	2.00
Front glass doors, 2 ft. 8 in. by 6 ft. 8 in.	3.00
Kitchen glass door, 4 lights	2.25
Bungalow sash, as low as	.56
3x5, hot bed sash	2.25
20x25, medicine cabinet doors	2.25
Panel cupboard doors	.85
1-ply Gold Seal roofing	1.35

We carry a full line of building material, including frames, inside finish, builders' hardware, paint, etc.

O. B. WILLIAMS CO.
1043 1st AVE. SO. SEATTLE, WN.

TRACTOR BARGAINS.

Practically good as new:
1-8-16 I. H. C. Mogul.
1-12-18 Leader.
1-15-30 Gas Pull.
Also PORTABLE SAWMILLS, BOILERS, THRESHING MACHINES, GAS ENGINES.
Write us what you want to buy, sell or trade second hand.

AGENCY FOR
Samson, Wallis & Track-Layers Tractors.
WESTERN FARQUAR MACHINERY COMPANY.
303 EAST SALMON ST., PORTLAND, ORE.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MISCELLANEOUS—FOR SALE 60
Continued.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS—WANTED 63

—CREAM WANTED—
We pay cash for cream, poultry, eggs, veal, hogs and hides. Write for prices and shipping tags. Commercial Creamery Co., Spokane, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer,** and **The Idaho Farmer,** taking the information about your poultry into over 60,000 farm homes, the best possible class of customers for the products of your poultry yards.

HOGANIZED S. C. 1. REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels, $5 each. These birds are all sons of a magnificent male, from a 271-egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs, $6 in 100 lots; settings, $1.50, $3, $5. Mrs. H. V. Rominger, Underwood, Wash.

PLACE YOUR ORDER NOW
for White Leghorn chicks, $10 per hundred; safe delivery guaranteed. R. I. Reds and Barred Rocks $15 per hundred. Every chick a live one and hatched from heavy winter layers. Coal-burning brooder stoves, $15 and $18.50. Queen Hatchery, 89 Pike st., Seattle, Wash.

79,637 EGGS IN 1916 FROM MY FLOCK of 450 S. C. Black Minorcas, prize winners in the showroom and laying contest; eggs from my Hoganized and trap-nested breeding stock at $2 per 15, $3.50 per 30, $5 per 50, $8 per 100, $70 per 1000. No baby chicks or stock for sale. John Dollenbacher, R. 1, Selah, Wash.

BABY CHIX.
White Leghorns, the kind that are real dividend payers, bred for 16 years for eggs, size, VIGOR, VIM and VITALITY. $10 per 100, from the oldest established hatcher in the state. Delivery in good condition guaranteed. Lakeside Poultry Farm, Roy, Wn.

ORDER YOUR BABY CHICKS NOW FROM heavy laying strain; delivery guaranteed; our chicks please; R. I. Reds, March, $15 100; after Mar. $12. White Leghorns, March, $12 100; after March, $10. Maplebrook Poultry farm, Southworth, Wash., Box 3.

S. C. R. I. REDS, BEST WESTERN prize winning stock, crossed with my own trap-nested birds; eggs, $1.50 for 15; $7 100; baby chicks for May delivery, $8.50 for 50; $16 per 100; safe delivery guaranteed. F. H. Volland, Kennewick, Wash.

MY R. C. R. I. REDS HAVE WON EVERY first and second, except one, competed for in the past 3 years. Have mated 4 pens for the egg trade. Guaranteed satisfaction. Mating list on application. G. W. Baker, Colfax, Wash.

FAMOUS CARNATION WHITE LEGHORNS. Baby chicks; high-grade utility stock; birds of merit, quick maturing; heavy winter layers; free range. Breeding stock. Ernest Raush, Carnation Poultry Farm, Kent, Wn.

HUSKY, LIVABLE BABY CHICKS; HEAVY laying White Leghorns; bred right; hatched right; shipped right. Our honest value chicks always please $12—100. Free catalog. Freshlaid Farm, Colfax, Wash.

WHITE WYANDOTTES, BUFF ROCKS and Rouen ducks; prize winning stock; good layers; eggs $2 per 15, some breeders $3 to $5. P. H. Tomlinson, College Place, Wash.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

EGGS FROM TANCRED S. C. W. LEGhorn hens. $1.25 per 15, $6 per 100, prepaid. J. W. Hirons, R. 2, B. 55, Scio, Ore.

FOR SALE — S. C. WHITE LEGHORN eggs, 75c per 15, $4 a hundred. Mrs. Wm. Vercler, Rigby, Idaho.

BRONZE TURKEY TOMS, $5, $7, $10; FEW young hen turkeys. H. T. Cutler, Parker, Wash.

POULTRY 174
Continued.

$1.50 FOR 15. $2.50 FOR 30. PREPAID anywhere in Wash., Ore., Idaho or Mont. B. P. Rock eggs, for hatching, from first-class farm-raised utility stock. Ira H. Trimble, Palouse, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

WHITE BUFF AND BLUE ORPINGTONS, single and rose comb Anconas, the great winter layers, winners at leading Coast shows; eggs $1.50 to $3.00 for 15; chicks 20c each. Ira N. DeLine, Box D, Olympia, Wash.

BARRED PLYMOUTH ROCKS. PRIZE winners at shows. Near front in N. W. laying contest. Eggs $1.50. Folder free. Wm. H. Heimsoth, Baker, Ore.

PRIZE-WINNING BUFF ORPINGTONS—Settings $2 to $10. Lucy R. Scudder, Box 36F, North Yakima, Wash.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

LIVE STOCK 177

JACKS AND JENNETS FOR SALE.
$500 to $600 buys an elegent jack. The jennets are priced at ½ their value; the jacks at approximately the same. They are the largest and best herd in the United States to select from. Eastern Oregon Jack Farm, Lexington, Ore. B. F. Swaggart, Prop.

SHEEP, BUCKS FOR SALE—2 LINCOLNshire and 1 Oxford Down year old, large and splendid individuals. J. E. Redmon, Colville, Wn.

JOB PRINTING 372

BUTTER WRAPPERS BY PREPAID PARCEL POST, printed in waterproof ink, on vegetable parchment, 8x11, $3.00 per 1000; 9x12, $3.26 per 1000; cash with order; for third and fourth zones add 10c. Allen Printery, Spokane, Wash.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.
In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.
If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.
It will pay those who want good, acclimated seed to watch for offers under this classification.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flour seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request. ROUTLEDGE SEED & FLORAL CO., 145-147 2D ST., PORTLAND, Ore.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

FARM SEEDS, COMPLETE STOCK OF red and alsike clover, timothy, vetch grass seeds, seed grain, garden seeds. Send for free catalogue.
D. A. WHITE & SONS, Seedsmen,
SALEM, Ore.

ALFALFA SEED, RED CLOVER, SWEET clover; Early Ohio; Idaho Rural; Peachblow seed potatoes; Dicklow spring wheat—the big crop producer; blue barley. Jerome M. & E. Co., Jerome, Idaho.

ALFALFA, RED CLOVER, ALSYKE CLOver, white clover, sweet clover, timothy and other grasses; seed oats and wheat; at reasonable prices. Voegeler Seed Co., Salt Lake City, Utah.

SUDAN GRASS SEED,
40 cents pound.
J. E. JENKS & SON,
TANGENT, ORE.

SEED POTATOES, VERMONT GOLD COIN, hill selected, $5 per C. Fall-bearing strawberries, Progressive, Superb and Standpat, $1.75 100. Thos Grave, Gresham, Ore.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

NURSERY STOCK 621

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

FARM LANDS—FOR SALE 651

COME AND MAKE
YOUR HOME ON PUGET SOUND.

The Bellingham Real Estate association invites you to come and make your home in northwest Washington on Puget Sound. We welcome correspondence from you and will answer any inquiries concerning the farm described below, situated in Whatcom Co.

$25,000—160 acres; 115 acres under plow, rest easily cleared; all level, rich bottom land, all well ditched and drained; good road; fair buildings; near school; spring water piped to house and barn; 10 head of stock; good farm community.

Address all communications to Sec'y
BELLINGHAM REAL ESTATE ASS'N.
DOCK ST., BELLINGHAM, WASH.

LAND.
Montana grain and stock farms, in best part of the state, for sale at very reasonable prices and on easy terms. Improved places in Judith Basin at $36 to $50 per acre. Good grain lands in Great Falls and Miles City districts, $15 to $25 per acre, on easy terms. We have for sale in half sections and larger farms about 10,000 acres in the famous Shields River valley at prices ranging from $15 to $50 per acre, on easy terms. Several fine stock farms. Have several good farms on which owners will take some trade. Send for Montana land list, free for asking. Hege & Watkins Co., 715-17 Paulsen bldg., Spokane, Wash.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

218-ACRE GENERAL FARM, HALF MILE from Palouse, Wash., 190 acres in cultivation; south line only a few rods from city limits; complete set of farm buildings; water from deep well, springs, Palouse river. Price $17,000; $78 per acre; half cash; terms to suit purchaser on balance. Now leased at cash rental, subject to sale. After April 1 lessee entitled to 1917 crops. Purchaser can have rental money.
INTERSTATE LAND COMPANY.
GEO. N. LAMPHERE SR.
PALOUSE, WASH.

STOCK RANCH FOR SALE—160 ACRES; adjoins forest range, all under fence; two big springs; 8 acres alfalfa, 4 a. winter wheat, 17 a. rye; 76 a. in cultivation; can cultivate 25 a. more; 40 a. fair timber; all good soil; 6-room house, barn, hay and cow sheds; outbuildings; 2¼ miles to railroad town, ¾ mile school; telephone in house. Price $4200; $1000 encumbrance. Ferry County Farm Inv. Co., Republic, Wash.

FOR SALE—FIVE SECTIONS IN GOOD farming district in Montana, now 22 miles from railroad; dark loam soil; 60 per cent tillable; price $5.50 per acre; terms, $3 per acre down, balance long time at 6 per cent per annum. This price holds for short time only. H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

MUSSELSHELL VALLEY LANDS.
Will sell two sections raw Montana wheat land at $20 per acre. Two improved farms, in crop, at $40 per acre. Small payments down, and easy terms to right parties.
GILBERT GOTTFREY,
ROUNDUP, MONT.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2d and Cherry st., Seattle, Wash.

ON CROP PAYMENT.
N. E. ¼ 6-15-30, near Othello, Wash., all in cultivation; no waste land; no buildings; produced $3000 worth of wheat last year. Price $3000, on crop payments.
The Washington Trust Co., Spokane.

I HAVE THREE GOOD WHEAT AND STOCK RANCHES FOR SALE, $35 TO $45 PER ACRE; TERMS. WRITE ME.
C. W. BETHEL,
HARRINGTON, WN.

ALFALFA LAND.
140 a.; 60 a. tillable; 40 a. in cultivation; 30 a. in alfalfa. This is an extra good dairy ranch; 3 miles from good R. R. town. Price $8500. Box 222, Leavenworth, Washington.

FOR SALE OR EXCHANGE.
60 acres, 30 cultivation; good buildings, running water and lights, house and barn; ½ mile live town. B. A. Shoff, R. F. D. 1, Box 41A, Castle Rock, Wash.

FARM LANDS OBTAINED THROUGH foreclosure of mortgage offered at rare bargains and on easy terms. Send for list. Pennsylvania Mortgage Investment company, Spokane, Washington.

NORTHERN PACIFIC RAILWAY LANDS in eastern Montana at $2.50 to $18 per a. Suitable for farming or grazing. Easy terms. For information write or see W. E. HOLT, MILES CITY, MONT.

CALIFORNIA FARMS, NEAR SACRAMENto, for sale; easy terms. Write for list. E. R. Waite, Shawnee, Oklahoma.

IF YOU WANT LAND IN MONTANA, write to H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

IRRIGATED LANDS—For Sale 663

320 ACRES IRRIGATED LAND IN MOSES Lake country, adjoining C. & O. nursery, $60 per acre; especially adapted to orchard or alfalfa raising; unlimited water at 40 feet. No money down if purchaser will improve property and pay in 10 equal installments, commencing one year from date of sale, with 6 per cent interest.
A. R. MEAD, ODESSA, WASH.

IRRIGATED STOCK FARM FOR SALE.
The best bargain in Idaho. Good free and forest range for all stock. Good alfalfa, grain and potato land. Good markets, certain crops. Ample free water with independent ditches. Newton Higgs, Salmon, Idaho.

ACRE TRACTS—FOR SALE 669

10 ACRES FERTILE LAND; NEW 3-ROOM cottage; 5 acres cleared; orchard; near school; about 16 miles southwest of Seattle. Price $1750. Pinney & Street, 726 Third, Seattle.

Grain and Produce Markets

Chicago Grain.

CHICAGO, April 7.—Frantic buying and price advances of unparalleled rapidity and extent resulted in the wheat market today from a government crop report that was characterized as the most sensational ever issued in the United States. The closing was wild and in some instances at the zenith quotations reached, with the market as a whole 6c to 14½c net higher. May, $2.12 to $2.12¼, and July, $1.88 to to $1.88⅝. Corn gained 3⅝c to 5½c; oats, 1⅜c to 3⅜@3½c and provisions 32c to $1.65.

Cash Quotations.

CHICAGO, April 7.—Wheat—No. 2 red, nominal; No. 3 red, $2.24⅜; No. 2 and No. 3 hard, nominal.

Corn—No. 2 and No. 3 yellow, nominal; No. 4 yellow, $1.34.

Oats—No. 3 white, 68⅜@69c; standard, 69½@70¼.

Rye—No. 2, nominal.

Barley, $1.10@1.40.

Timothy, $4@5.75; clover, $12@18.

Pork, $37.15; lard, $21.20; ribs, $19.30 @19.65.

Pacific Northwest Grain.

PORTLAND, Ore., April 7.—Wheat strong; trading light; all records smashed; spot bids, 3 to 5 cents higher; bluestem, $1.86; fortyfold, $1.82; club, $1.81; red Russian, $1.78.

Oats advanced, $2.75 ton; No. 1 white feed, $45.25; new record.

Barley, $1.25 ton higher; No. 1 feed, $44.50, record.

SEATTLE, April 7.—Wheat—Bluestem, $1.90; turkey red, $1.90; fortyfold, $1.85; club, $1.85; fife, $1.85; red Russian, $1.81.

Barley, $44 per ton.

TACOMA, April 7.—Wheat—Bluestem, $1.85@1.86; fortyfold, $1.82; club and fife, $1.80; red Russian, $1.75.

WILBUR, Wash., April 7.—Bluestem, $1.70; club, $1.65. Oats, $37. Barley, $37. Flour is $2.35 per 50-pound sack.

WALLA WALLA, April 7.—Club wheat, $1.66; bluestem, $1.72. Barley, $40.

Minneapolis Grain.

MINNEAPOLIS, Minn., April 7.—Wheat prices shot upward on the bullish government report, corn and oats strengthening in sympathy. Wheat receipts, 714 cars, compared with 515 a year ago.

Wheat—May opened, $2.01 to $2.01 1-2; high, $2.10 7-8; low, $2.00 3-8; closed, $2.10 7-8.

July wheat opened, $1.96 to $1.96 1-2; high, $2.07 7-8; low, $1.95 1-2; closed, $2.07 7-8 to $2.07 3-4.

Cash, No. 2 hard, $2.24 7-8@2.26 7-8; No. 1 northern, $2.18 7-8@2.20 7-8; to arrive, $2.12 7-8; No. 2 northern, $2.14 7-8@2.20; No. 3 wheat, $2.10@2.14 7-8; No. 2 durum, $2.28 1-2@2.31; No. 2 hard, Montana, $2.17 7-8@2.19 7-8.

Corn—No. 3 yellow, $1.28 1-2@1.31.

Oats—No. 3 white, 65@67c.

Flax—$2.14@3.17.

Flour—Fancy patents advanced 40 cents, quoted at $10.80; first clears, advanced 40 cents, quoted at $9.40; second clears, advanced 50 cents, quoted at $[illegible]. Shipments, 131,501 barrels.

Barley—$1.02@1.31.

Rye—$1.69@1.70.

Bran—37@38.

Portland Market.

PORTLAND, Ore., April 7.—The scarcity of butter is responsible for another advance in city price quotations. The rise is thought to be only temporary and the buying price of butter fat has not been changed. A government order for 50,000 pounds was on the market, but could not be filled.

Oats—No. 1, $45.25@45.75 per ton.

Corn—Whole, $59; cracked, $60 per ton.

Millstuffs—Bran, $34 per ton; shorts, $37.

Barley—No. 1 feed, $44.50; brewing, nominal; rolled, $47@48.

Hay—Buying prices: Timothy, eastern Oregon, $20@22; alfalfa, $17@20; grain, $13@15.

Eggs—Oregon ranch, case count, 29@29½c per dozen; candled, 31c.

Poultry—Hens, 21@22c; ducks, 22@23c; turkeys, live, 20@22c; dressed, 23@28c; geese, 12@14c.

Butter—City creamery, prints, 44@45c per pound; cubes, 41c.

Cheese—Oregon triplets, 23c; young Americas, 25c.

Dressed meats—Veal, 14 1-2@15c; pork, 18c.

Hops—1916 crop, 3@7c per pound.

Potatoes—Oregon, jobbing price, $3.25@3.50.

Onions—Jobbing prices: No. 1, $12.50.

Wool—Eastern Oregon, fine, 30@35c; coarse, 40c; valley, 40c.

Beans—Oregon small white, 10c; California small white, 13c; large white, 12½c per pound.

Hides—Salted hides (25 lbs. and up), 18c, salted stags (50 lbs. and up), 14c; green and salted kip (15 lbs. to 25 lbs.), 18c; green and salted calfskins (up to 15 lbs.), 27@28c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 13c; dry hides, 30c; dry salt hides, 25c; dry horse hides, $1@2; salt horse hides, $3@5.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $3@3.25 cwt; sweet potatoes, $6.

Seed Potatoes—Early Ohios, 3½c lb; Early Rose, 3½c lb; white potatoes, 3½c lb; Early Six Weeks, 5c lb.

Apples—Washington apples, cooking, 75c @$1; eating, $1@1.25; Wageners, $1 box; Rome Beauties, $1@1.40 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 44c lb; Medo-Maid, 44c lb; Cascade, 44c lb; Gold Coin, 37c lb; Gold Leaf, 44c lb; Jersey Belle, 43c lb; Attalia, 44c lb; Diadem, 44c lb; Jersey, 40c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 22½c; Hazelwood full cream, triplets, 23c lb; Hazelwood Young America, 24c lb; Wisconsin limburger, 28@29c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 25c lb.

Eggs—Fresh local ranch eggs, $9@9.50 case.

Live Poultry—Hens, 18@19c lb; old roosters, 10c lb; ducks, 13c lb; turkeys, 20@25c lb; geese, 11c lb.

Dress Poultry—Hens, 22c lb; springers, 21c; old roosters, 13c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs; 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

Seattle Market.

SEATTLE, April 7.—With approximately 125 carloads of potatoes in storage here between the visible supply and actual famine, wholesalers are endeavoring to distribute holdings in such a way that they will reach the farthest in order to make it unnecessary for the government to commandeer foodstuffs or take any action toward fixing prices, a contingency that many now fear.

The market has once more touched the high point of last winter at $80@85 for Yakima gems and $70@75 for locals, with the visible supply reduced probably 50 per cent. Buyers of Chicago, Milwaukee and Minneapolis are actively in the market, although their bids of $60 for locals and $65 for Yakima gems have fallen on deaf ears. It is estimated that there is less than a dozen carloads of Yakima potatoes here and for these quotations have been withdrawn.

BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle.

Eggs—Local, 28@29c per dozen.

Poultry—Live hens, fat, over 4 lbs., 20c per lb.; do 3 lbs. and under, 9c; old roosters, 12c per lb; springs 21c; ducks, 20c per lb; squabs, large, 50c per dozen; geese, fat, 16c per lb.

Butter fat, 47c per lb; dairy butter, 30c per lb.

Beef—Buying price: Prime beef steers, 7@8c per lb; cows, fat, 7@8c per lb.

Hogs—Light, 14@15½c per lb; do heavy, 10@12c per lb.

Veal—Fancy light, 13@14c per lb; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb; salt kip, 22c per lb; salted calf, 32c per lb; green hides, 16c per lb; salted bulls, 15c per lb; dry hides (short trim), 36c per lb; dry calf (under 6 lbs.), 40c per lb; bull and dry salts, 4c per lb. less; green bulls, 12c per lb; dry butcher full wool sheep pelts, 25@28c per lb.

Butter, Eggs, Cheese.

SAN FRANCISCO, Cal., April 7.—Butter—Fresh extras, 40c.

Eggs—Extra pullets, 27 1-2c.

ELGIN, Ill., April 7.—Butter, 25 tubs at 44c.

CHICAGO, April 7.—Butter unchanged. Eggs lower; receipts, 17,671 cases; firsts, 29 1-2@30 1-4; ordinary firsts, 28 1-2@29 1-2; at mark, cases included, 28@30c.

Live Stock Quotations.

At Omaha.

OMAHA, April 7.—Hogs—Receipts, 6900. Higher. Heavy, $15.60@15.80; light, $15.25@15.65; pigs, $12.50@15; bulk of sales, $15.45@15.70.

Cattle—Receipts, 300; steady. Native steers, $9.50@12.80; stockers and feeders, $6.75@10.25; calves, $8@12; bulls, stags, etc., $7@9.75.

Sheep—Receipts, 100; steady. Yearlings, $13@13.75; wethers, $11.50@12.75; lambs, $14@15.25.

At Chicago.

CHICAGO, April 7.—Hogs—Receipts, 10,000; strong, mostly 5c above yesterday's average. Bulk, $15.70@15.95; light, $15.05@15.95; mixed, $15.35@16; heavy, $15.25@16; rough, $15.25@15.40; pigs, $11.25@14.75.

Cattle—Receipts, 500; steady. Native beef cattle, $9.35@13.15; stockers and feeders, $7.25@10; cows and heifers, $5.65@11; calves, $9.25@13.75.

Sheep—Receipts, 4000; steady. Wethers, $10.50@13; lambs, $11.75@15.50.

At Portland.

PORTLAND, Ore., April 7.—Hogs—Receipts, 292. Steady. Bulk of packing grades, $14.25@14.40; heavy packing, $14.35@14.50; light packing, $14.20 @14.35; rough heavies, $13@13.50; pigs and skips, $12.75@13; stock hogs, $11.50@12.75.

Cattle—Receipts, 11. Steady. Steers, prime light, $9.50@9.75; prime heavy, $9.35@9.65; good, $8.90@9.25; cows, choice, $8@8.25; medium to good, $7@7.75; ordinary to fair, $6.25@6.75; heifers, $6.50@8.50; bulls, $5@7.25; calves, $6@10.

Sheep—Receipts, none. Steady. Lambs, east of mountains, $13.25@13.50; lambs, valley, $13@13.25; lambs, shorn, $13.75@12.25; prime wethers, $11.50@12; choice ewes, $10.50@11; heavy ewes, $8.75@9.25.

At Seattle.

SEATTLE, April 7.—Receipts: 151 hogs, 16 cattle. Sheep and cattle steady; hogs 10 cents higher.

Hogs—Prime light, $14.65@14.75; medium to choice, $14.50@14.60; smooth heavies, $14@14.25; rough heavies, $13.50@14.75; pigs, under 150 pounds, $10@13.75.

Cattle—Prime steers, $9.75@9.90; medium to choice steers, $9.25@9.50; common to good steers, $6.50@9; best cows and heifers, $8.50@8.75; medium to choice, $8@8.25; common to good, $4@4.75; best bulls, $6.50@7; common to good bulls, $3.50@6; calves, $6.50@10.

Sheep—Prime lambs, $12.50@13.75; good lambs, $12.25@12.50; wethers, $10.25@10.50; ewes, $9.10.

Wool.

BOSTON, April 6.—The Commercial Bulletin will say tomorrow:

"The Boston wool market has been at a standstill since Tuesday, when the trade vountarily suspended all business pending the needs of the federal government in raw wool. Prior to this action speculation in scoured wools, upon the practical certainty of war, had become excited, and prices advanced 5 to 10 cents a pound. Greasy wools did not advance.

"Buying in the west has practically ceased. Manufacturers are well occupied on old contracts and fairly well covered for wool."

Oregon—Eastern No. 1 staple, $1.25 @1.30; eastern clothing, $1.10@1.15; valley, No. 1, 95c@$1.

Portland Wheat.

PORTLAND, Ore., April 7.—Wheat prices were lifted 5 cents at the close of the week in response to the eastern advances caused by the crop report. April bids at the exchange were: Bluestem, $1.86; fortyfold, $1.82; club, $1.81; red Russian, $1.78. There were sales.

The real feature of the market was the bulge in oats Saturday, bids being $2.75 a ton over those of Friday. The big demand from the government is supposed to be the cause of the strength of oats and the fact that stocks in the interior are much reduced. Barley kept pace with the advance in oats.

Flour prices were lifted another 40 cents to the $9.40 basis for patents. Mill feed prices are also climbing.

Crop and Live Stock Report.

A summary of the April crop and live stock report for the state of Washington and for the United States, as compiled by the bureau of crop estimates, and transmitted through the weather bureau, United States department of agriculture, is as follows:

Wheat.

State: Condition April 1, this year, 70 per cent of normal; 10-year average condition figures for April 1, 94 per cent.

United States: Condition April 1, this year, 63.4 per cent; 10-year average April 1 condition, 86.2 per cent.

Rye.

State: Condition April 1, this year, 86 per cent; 10-year average April 1 condition, 97 per cent.

United States: Condition April 1, this year, 86.0 per cent; 10-year average April 1 condition, 89.6 per cent.

Hogs.

State: Losses from disease last year, 1.6 per cent; 10-year average, 1.9 per cent.

United States: Losses from disease last year, 4.87 per cent; 10-year average, 6.78 per cent.

Cattle.

State: Losses from disease last year, 1.5 per cent; 10-year average, 1.6 per cent. Losses from exposure last year, 1.1 per cent; 10-year average, 1.5 per cent.

United States: Losses from disease last year, 1.94 per cent; 10-year average, 2.00 per cent. Losses from exposure last year, 1.45 per cent; 10-year average, 1.44 per cent.

Sheep.

State: Losses from disease last year, 1.3 per cent; 10-year average, 1.8 per cent. Losses from exposure last year, 2.5 per cent; 10-year average, 2.2 per cent.

United States: Losses from disease last year, 2.17 per cent; 10-year average, 2.45 per cent. Losses from exposure last year, 3.28 per cent; 10-year average, 3.06 per cent.

Horses and Mules.

State: Losses from disease last year, 1.5 per cent; 10-year average, 2.1 per cent.

United States: Losses from disease last year, 1.69 per cent; 10-year average, 1.94 per cent.

Prices.

The first price given below is the average on April 1, this year, and the second the average on April 1, last year.

State: Wheat, $1.55 and 84c per bu; corn, $1.05 and $1.03; oats, 59c and 40c; potatoes, $1.63 and 78c; hay, $14.30 and $16 per ton; eggs, 28c and 20c per doz.

United States: Wheat, $1.80 and 98.6c per bu; corn, $1.13 and 70.3c; oats, 62c and 42.0c; potatoes, $2.35 and 97.6c; hay, $13.05 and $11.78 per ton; cotton, 18.0c and 11.5c per lb.; eggs, 26.0c and 17.9c per doz.

Sells Big Farm.

County Commissioner B. T. Manchester of Whitman county, Wash., has sold his large farm of about 900 acres five or six miles south of Colfax to Ed. Reinhard, who owns adjoining land. The purchase price was $80 an acre. The total purchase price was $72,080.

Do You Want Market Quotations?

The Washington Farmer will stop publishing the market reports at once unless it hears to the contrary from its readers.

Do you want the market reports? If so, cut out this coupon and mail it at once to The Washington Farmer, Spokane, Wash.

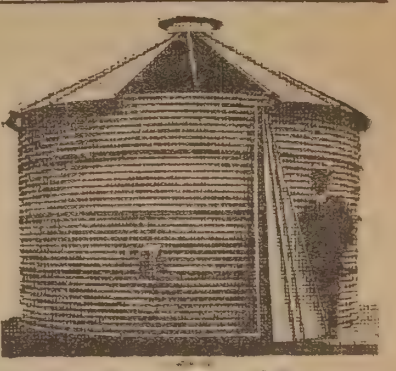
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SPOKANE, WASHINGTON

Portland Shorthorn Sale

Good Prices and Satisfied Lot of Buyers

By HORACE ADDIS

The annual Shorthorn sale at the North Portland stockyards, April 3, resulted in good prices and a satisfied lot of buyers. Fifty-one bulls went through the ring for an average price of $248.32, and 33 females for an average of $322.27. The total received for the 84 head was $23,325, or an average of $277.67, about $70 more than the average of last spring's sale.

Top price of $725 was paid for Supreme Goods, just a year old, a very perfect roan that was champion of the previous day's show, consigned by Day & Rothrock. He was bought by Elvin Witham of Corvallis, Ore., a beginner who has started right. Next in price for bulls was Hannah's Pride, another grand young bull, of the Cornett consignment. Mr. Hill of Payette got him and he was one of the best bidders, taking 16 head for a total of $5065. He has recently closed out a grade herd at good figures, and his selections prove that he is starting right in purebreds.

W. O. Minor's two-year-old, Maple's Violet, went at top price for females —$575, to Felzer Bros. of Tangent, Ore., his sweet Topsy Girl going for only $5 less to Dr. Armstrong of Tacoma, Wash., who also took the champion heifer, Lostine 5th, consigned by Day & Rothrock, for $540. Age determined price to a greater degree than usual, bred heifers and cows being much preferred to the younger animals.

W. F. Harding, president of the American Shorthorn association, was present and lent encouragement to the sale, and Colonel Kraschel of Iowa, who was on the block, was efficient, as he always is.

The steady growth in Shorthorn popularity is shown by the prices received at this sale, as well as the one last December. The breeders who sacrificed some of their best animals when the sale was young six years ago are now reaping their reward.

The following is a complete list of consignors, animals sold, buyers and prices paid:

FEMALES.

Consignor, W. O. Minor, Heppner, Ore.
Topsy Girl, born Sept. 25, 1915—Dr. Armstrong, Tacoma, Wash. $575
Maple's Violet, born March 6, 1914—Felzer Bros., Tangent, Ore. 575
Western Countess, born Jan. 17, 1915—John Hill, Payette, Ida. 300
Western Rosebud, born March 28, 1915—Mrs. E. F. Anderson, Albany, Ore. 380
Consignor, Day & Rothrock, Spokane, Wash.
Irene 2d, born May 20, 1915—John Hill 450
Roxanna 3d, born Aug. 1, 1915—E. P. Layton, Knab, Wash. 300
Lostine 5th, born Apr. 6, 1916—Dr. Armstrong 540
Red Beauty 4th, born Aug. 17, 1915—G. W. DeLay, Hot Lake, Ore. 280
Consignor, A. D. Dunn, Wapato, Wash.
Fairy's Last, born Sept. 30, 1915—John Hill 300
Sincerity, born Jan. 15, 1915—Felzer Bros. 520
Baron's Lady, born Sept. 4, 1915—John Hill 280
Dunbro Beauty, born Jan. 1, 1916—J. W. Townley, Union, Ore. 280
Consignor, J. B. Cornett, Shedd, Ore.
Miss Autumn, born Sept. 28, 1915—John Hill 310
Pretty Maid, born Dec. 27, 1915—A. H. Tarbell, Warren, Ore. 250
Lady Clifton, born Nov. 20, 1915—A. H. Tarbell 235
Spring Maid, born March 1, 1916—Bird N. Hawley, Cottage Grove, Ore. 195
Shamrock Maid, born March 17, 1916—W. A. Ayers, Eugene, Ore. 175
Consignor, Frank Brown, Carlton, Ore.
Silver Dahlia, born May 14, 1912—John Hill 300
Consignor, T. B. Gibson, Est., Woodland, Cal.
Ringleaders' Lass, born Aug. 4, 1915—Mrs. E. F. Anderson 175
Roselawn Flower, born Aug. 15, 1915—M. A. Wyatt, Corvallis Ore. 145
Roselawn Leaf, born Feb. 5, 1916—W. H. Daughtrey, president Portland Union stockyards, North Portland, Ore. 220
Consignor, Alex Chalmers, Forest Grove, Ore.
Fork Branch Mildred 14th, born April 20, 1915—John Hill 215
Consignor, O. A. C., Corvallis, Ore.
Marie Welcome, born April 2, 1916—A. H. Tarbell 235
Medora, born April 20, 1916—John Hill 220
Choice Marie, born April 21, 1916—W. A. Ayers 150
Bonnie Queen, born April 28, 1916—Bird N. Hawley 190
Choice Queen, born April 10, 1916—A. H. Tarbell 225
Chrysanthemum, born April 15, 1916—W. H. Daughtrey 225
Consignor, Mrs. M. J. Hughes, Cobble Hill, B. C.
Piety, born Aug. 20, 1914—John Hill 500
Consignor, Schmidt Bros., Oregon City, Ore.
Sapho, born Jan. 21, 1915—John Hill 320
Aethra, born July 9, 1916—John Hill 150
Consignor, C. W. Nottingham, Portland, Ore.
Princess, born Nov. 1, 1915—Macleay Est., Portland, Ore. 305
Dunbro Rose, born Aug. 11, 1915—John Hill 315

BULLS.

Consignor, W. O. Minor.
Golden Lad, born July 27, 1915—H. B. Whitman, Pendleton, Ore 270
Victor W., born March 22, 1916—N. C. Hall, Ridgefield, Wash. 300
Victor R., born Feb. 16, 1916—John Hill 200
Consignor, Day & Rothrock.
May Goods 90th, born May 1, 1914—A. H. Baldwin, Prineville, Ore. 275
St. Patrick, born March 17, 1914—C. Miles, Husum, Wash. 280
Royal Knight 2d, born April 16, 1916—T. M. Meikle, Castle Rock, Wash. 270
Royal Hero, born April 20, 1916—Harradon & Parker, Yalahill, Ore. 340
Supreme Goods, born April 5, 1916—Elvin Witham, Corvallis, Or. 725
Commander, born April 11, 1916—Fairview Stock Farm, Prineville, Ore. 190
Royal Goods, born April 9, 1916—R. E. Boyce, Baker, Ore. 250
Consignor, A. D. Dunn.
Lind's Delight, born Aug. 25, 1914—Black Butte Land & Cattle Co., Lower Bridge, Ore. 275
Scottish Lavender, born Sept. 15, 1914—W. H. Daughtrey 350
Director, born Oct. 22, 1914—Black Butte L. & C. Co. 275
Dunbro Donald, born April 25, 1916—Macleay Est. 205
Dunbro Bobby, born Oct. 12, 1915—C. C. Allen, Wallowa, Ore. 225
Highland Laddie, born Dec. 2, 1912—H. B. Whitman 260
Consignor, J. B. Cornett.
Big Five, born Sept. 28, 1915—Paul Scoggin, Tumalo, Ore. 275
Roan Chief, born Dec. 6, 1914—Black Butte L. & C. Co. 265
Red King, born Sept. 22, 1915—H. B. Whitman 240
Bunker Hill Pride 2d, born Feb. 1, 1915—J. P. Walker, Corvallis, Ore. 300
Truxton King, born Nov. 12, 1915—Fairview Stock Farm 170
Minority Goods, born Dec. 28, 1915—H. B. Whitman 200
Hannah's Pride, born June 2, 1915—John Hill 625
Consignor, Frank Brown.
Imperial Prince, born Feb. 20, 1916—Macleay Est. 305
Carlton Prince, born April 20, 1916—A. L. Dahlman, Castle Rock, Wash. 125
Consignor, T. B. Gibson Est.
Welcome Lad, born Jan. 3, 1916—Macleay Est. 305
Ring Glory, born April 1, 1916—Mrs. Anderson 400
Ringleader's Star, born May 2, 1916—W. H. Daughtrey 210
Roan Victor, born Aug. 27, 1913—W. H. Daughtrey 280
Scotch Ring, born March 27, 1916—R. A. Thompson, Heppner, Ore. 165
Consignor, Alex Chalmers.
Ocean Prince 2d, born Dec. 17, 1915—Macleay Est. 260
Baron's Prince, born Nov. 19, 1915—R. B. Stanfield, Echo, Ore. 250
Prince My Lad, born Oct. 8, 1915—Macleay Est. 265
Prince My Boy, born Sept. 19, 1915—H. B. Whitman 175
Golden Prince 5th, born Dec. 28, 1915—John Hill 180
Prince of Dawn, born Jan. 15, 1916—Forsyth Bros., Kingston, Wash. 180
Consignor, O. A. C.
Oak Shade Rambler, born Dec. 7, 1915—Bird N. Hawley 160
Consignor, Schmidt Bros.
Acamas, born Aug. 2, 1915—T. B. Brogan, Antelope, Ore. 235
Shakespeare, born April 12, 1915—Black Butte L. & C. Co. 250
Demophoon, born Sept. 25, 1915—John Hill 210
Consignor, Frank Robertson, Portland, Ore.
Village Duke, born Jan. 14, 1916—H. B. Whitman 210
Village Lawn, born Feb. 6, 1916—Fairview Stock Farm 150
Consignor, A. T. Cutting, Molalla, Ore.
Starlight Lad, born Nov. 12, 1915—H. B. Whitman 180
Starlight's Best, born Dec. 6, 1915—Fairview Stock Farm 200
Consignor, E. F. Anderson, Albany, Ore.
Joe, born Dec. 19, 1913—H. B. Whitman 265
Consignor, William Riddle & Sons, Monmouth, Ore.
Mystic Dew, born June 15, 1914—Fairview Stock Farm 240
Consignor, C. C. Beers, Lyons, Ore.
Some Class, born Oct. 8, 1915—Fairview Stock Farm 165
Consignor, Gust Jaeger, Sherwood, Ore.
Valley Chief, born Aug. 14, 1913—Fairview Stock Farm 165
Consignor, G. E. Wyatt, Corvallis, Ore.
Star Upward, born March 27, 1912—Fairview Stock Farm 135
Consignor, Peter Donker, Aumsville, Ore.
Jeffries, born Feb. 22, 1914—Joe Carstairs, Matlock, Wash. 150
Consignor, Joseph Schmidt, Scio, Ore.
Not catalogued, born March 20, 1914—W. H. Daughtrey 90

Northwest Shorthorn Association

In the evening after the sale there was a meeting of the Northwest Shorthorn association. F. W. Harding, secretary of the American Shorthorn association, gave a most interesting talk on Shorthorn conditions in the south and southwest.

O. M. Plummer presented the matter of raising money for the erection of a new coliseum for the Pacific International, and at the meeting $2000 worth of stock was subscribed. Among the subscribers were Day & Rothrock of Spokane, J. B. Cornett of Shedds, Ore.; Frank Brown of Carleton, Ore.; Frank Robertson of Portland, Alex Chalmers of Forest Grove, Ore.; W. J. Townley of Union, Ore.; A. D. Dunn of Wapato, Wash.; T. T. Miller of Los Angeles; the Rural Spirit, the American Shorthorn association, and the Northwest Shorthorn association.

An election of officers was also held and the following elected: President, A. D. Dunn; vice president, F. M. Rothrock; secretary-treasurer, E. J. Foster; directors, Alex Chalmers, Frank Brown, J. H. McCroskey, Joe Turne H. M. Elberg, William Mulhall and Harry Summers.

Eight Carloads of Horses.

During the month of February, Frank Burnett of Pullman, Wash., sold and shipped eight carloads of horses

A Gallon of Gasoline.

The Wall Street Journal names the following wonders which a single gallon of gasoline can accomplish on the farm: It will milk 300 cows, bale four tons of hay, mix 35 cubic yards of cement, move a truck 14 miles, plow three-fifths of an acre or generate enough electricity to illuminate the farmhouse for 30 hours.



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How Old was The Old Oaken Bucket?

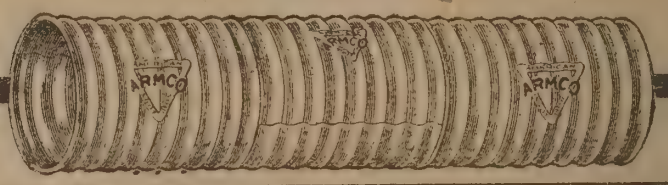
THE "iron-bound" bucket that hung in the well was covered with moss but the hoops were always tight and the bale was always secure. Time left its impress on the wood and on the metal but *rust* did not eat through the iron although the bucket was subjected to the severest of exposures. The iron was *pure* iron and pure iron resists rust.

"ARMCO" IRON CORRUGATED CULVERTS

By chemical analysis these are purer iron than were the hoops of the old oaken bucket. Under similar conditions "Armco" Iron should outlast even the old-fashioned iron. Under highways and railroads all over the country, "Armco" Iron Culverts give service like that of the old oaken bucket. They are the only metal culverts that can be counted on to outlast the generation that installs them.

For full information on "Armco" Iron Culverts, Flumes, Sheets, Roofing, and Formed Products, write the manufacturer in your vicinity, or

ARMCO IRON CULVERT AND FLUME MFRS. ASSOCIATION
CINCINNATI, OHIO



WE WILL PAY SALARY

to farmer with rig or saddle horse. The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are paying good salaries to those who can do the work and are offering these positions only to farm owners or renters.

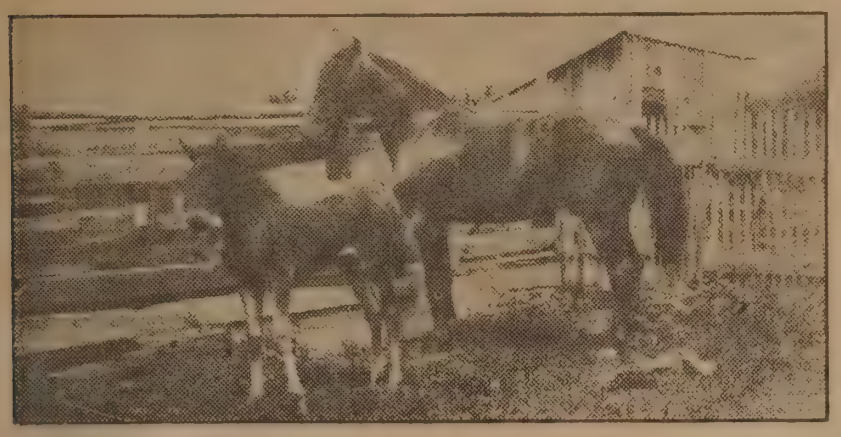
We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. For men with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter to The Washington Farmer, Review Building, Spokane, Wash.

Electra Light and First Get



To the Editor: I am sending you a photo of our stallion, Electra Light, and his first get, a little filly. This horse was raised by old Airlight, a 2-minute pacer, and we think him one of the best of his kind in the west. H. H. LITTLE.
Cove, Ore.

Shorthorn Show

Second of Its Kind in the West

By E. L. POTTER.

The Shorthorn show held in Portland April 2 in connection with the sale was the second event of its kind in the west. Only cattle listed in the sale the day following were entered in the show. The prime object of the show was to give the buyer opportunity to look the cattle over carefully before they were brought into the ring and to meet in this manner the very common objection that an auction sale does not afford the buyer sufficient opportunity to carefully examine the animals. A show of this kind also has a very considerable effect in stimulating better cattle.

The classes were very heavy and ranged from seven to 24. Twelve money prizes were offered in each class, but only six ribbons. The prices the day following did not in all cases follow the judging, but then that is to be expected, as there may be many things influencing the price of an animal other than its ability to win in the ring at that exact moment. The champions were in each instance very choice animals, and the champion bull topped the sale and was well deserving of that honor.

List of Awards.

The list of awards follows:

Bulls calved before Sept. 1, 1915—First, Cornett on Hannah's Pride; second, Minor on Lord Golden; third, Gibson Estate on Roan Victor; fourth, Dunn on Lind's Delight; fifth, Dunn on Director; sixth, Witham on Highland Laddie.

Bulls calved after Sept. 1, 1915: First, Day & Rothrock on Supreme Goods; second, Gibson Estate on Ring Glory; third, Day & Rothrock on Crescent Goods; fourth, Day & Rothrock on Royal Hero; fifth, Brown on Imperial Prince; sixth, Day & Rothrock on Royal Goods.

Cows calved before Sept. 1, 1915: First, Dunn on Sincerity; second, Day & Rothrock on Irene 2d; third, Minor on Maple's Violet; fourth, Gibson Estate on Roselawn Flower, fith, Dal & Rothrock on Roxana 3d; sixth, Gibson Estate on Ringleader's Lass.

Cows calves after Sept. 1, 1915: First, Day & Rothrock on Lostine 5th; second, Minor on Topsy Girl; third, Dunn on Fairy's Last; fourth, O. A. C. on Choice Queen; fifth, Cornett on Lady Clifton; sixth, Cornett on Pretty Maid.

Champion bull, Supreme Goods.
Champion female, Lostine 5th.

Outlook for Sheep Business.

State Senator C. L. Hawley of C. L. Hawley & Son, pioneer Lincoln breeder of the Willamette valley, says: "The outlook for the sheep business is splendid. I regard the future as propitious. The Willamette valley will always be the breeding ground for the stud flocks of the range, men who want sires of middle and long wool breeds. The market for wool, as well as for sheep of all kinds, is better than it ever has been. The demand for sheep, especially pure bred sheep, is several times over the supply and prices are higher than ever before. A golden opportunity for the farmers of the Willamette valley is to keep small flocks of sheep on the farm, pure-breds preferably, but good flocks with pure-bred sires will do and all rams can be sold if desired. The wonder is that more of our farmers do not keep small flocks of sheep. Nothing else goes so well with seed clover and it is a very profitable crop.



C. L. Hawley.

BIRMINGHAM SHOW AND SALE.

At the Birmingham show and sale just held in England the general average for the 198 sold was $319.14 as against $258.58 for 152 last year. Some people expected higher prices for the champion and reserve champion bulls, but the general average was in excess of the expectation, particularly after the slackness of the first day, says the London Live Stock Journal. The lower grade bulls sold at a higher range than anticipated. The top price was $3060 for the champion bull as against $2601 last year. Mr. Gill's winning group gave the grand average of $1515.44, and one worthy of the occasion, for we find no previous record where an exhibitor has owned both the champion and reserve champion at this show and sale. Last year the winning group averaged $805.20.

IMPORTS SHORTHORN SIRE.

Day & Rothrock of Sprague, Wash., breeders of Shorthorn cattle, have announced the purchase in Scotland of a high-priced bull to head the herd at their Hercules farm, near Sprague. The animal has been purchased by Leslie Smith of St. Cloud, Wis., who went abroad recently under commission to purchase a number of purebred animals for various producers in this country. The price of the animal coming to the northwest has not been announced.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have a few fall boars left. Now is the time to get in on spring orders. Correspondence solicited.

J. M. ROYSTON EST., C. ROYSTON, MGR., Payette or Fruitland, Idaho.

POULTRY

Rhode Island Reds

and Rhode Island Whites—both combs. Eggs $2, $3, $5 per 15. $6 and $8 per 100. Bronze turkey and Toulouse geese eggs. Pedigreed Belgian hares. Selling out. Bred does, $2.

J. Nonnenmacher, R. F. D. 3, North Yakima, Washington.

PRIZE WINNING STOCK.

S. C. White and Brown Leghorns and Rhode Island Reds; heavy layers; eggs, $1.50 per 15.

R. H. GREER, Hillsboro, Ore.

BAILEY'S BARRED ROCKS.

Eggs from my prize winners, $2, $3 and $4 per 15.

E. S. BAILEY, R. D. No. 4, Boise, Idaho.

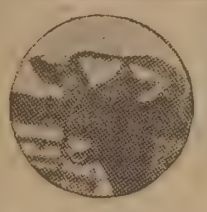
WINNERS OF THE BLUE.

Barred Rocks—S. C. Black Minorcas. Write for prices on high-class exhibition and breeding stock. Satisfaction guaranteed. WILBER CLAYTON, R. F. D. 1, Payette, Ida.

EGGS FROM SELECT S. C. White Leghorn pens of high average layers. Awards Boise Shows, 1916 and 1917; $1.50 setting 15, $8 per 100. Quality prices. ARCHIE M. LARSON, R. 3, Weiser, Idaho.

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EXTRARODINARY 30-day Special Sale of Imported and American Bred Percheron, Belgian, Shire and Clydesdale stallions and mares.

The very best of each breed can be found here, stallions of outstanding size, combined with superior quality.

Write us your wants or, better still, come and see us. LIBERAL TERMS, and prices that DEFY COMPETITION.

We have a few stallions on hand that we have taken in on deals that are proven sires, extra good individuals, and that we will sell at sacrificing prices.

PETER M'FARLANE, Mgr.

Address all correspondence to Colfax Blue Ribbon Stud, Colfax, Wash.

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Imported Percheron and Belgian Stallions that are extra good. Besides other Percheron, Belgian, English Shire and Clydesdales, with imported ancestors, that are young and good, with correct pedigrees, that are desirable. One pair extra Percheron mares. If you are a customer and want to save your money, take time to come and see me. Remember, Good Stallions and Low Prices. If You Have a Stallion That You Can Not Use Longer, I Might Change.

J. R. JUSTICE, Importer

Pendleton, Ore.

HOLSTEIN CATTLE

Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.

Write for pedigrees and terms.

H. R. BOOMER, New Plymouth, Ida.

Avalon Dairy

Registered bull calves by Hartwood Hello Hengerveld (129524) from cows with good A. R. O. records, DeKol, Korndyke and Pontiac blood. Prices right. Six per cent interest on time payments. Write today.

AVALON DAIRY, Kuna, Idaho.

RECORD HOLSTEINS.

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.

HOLSTEIN CATTLE

Young stock by richly bred grandson of King of the Pontiacs, out of high-producing advanced registry cows.

A. E. SMITH. Sumas, Wash.

BUFFALO DUKE DOEDE

(102228) heads my herd. He is a half-brother of world's record cow, Dutchess Skylark Ormsby, producing 1506 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.

H. H. STIYER. Buhl, Idaho.

WATERLOO HOLSTEIN FARM.

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje	King Segius 10th Segius Walker Pietertje 2d

C. F. JENNESS. Meridian, Idaho.

HOLSTEINS FOR SALE.

Purebred bulls of serviceable age, priced right. Correspondence solicited.

J. R. LONG, R. F. D. No. 4, Buhl, Idaho.

Purebred Stallions

We have for sale a few 1-year-olds, 2 this spring, Shire stallions, our own breeding; also a 5-year-old and an 8-year-old Shire stallion, both brown; a 3-year, a 7-year-old and 1 aged Percheron stallion, all black; one 2-year-old Brown Clyde stallion, bred by Canadian government. We sell at the barns only, and tell you all we know about each and every horse, guaranteeing them to be as represented or refund your money.

Our horses won all firsts and champions at Spokane Interstate Fair, N. W. Live Stock Show, Lewiston, Ida., and Pacific International, Portland, Ore., last year. If you need a horse, or want to exchange, write us, or come and see before buying. It will pay you.

G. M. WILSON, WILBUR, WASH.



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BIG BONE Kentucky Mammoth JACKS and JENNETS, 85 FIVE and CUBAN GAITED STALLIONS, geldings and mares. We ship jacks by express all over the U. S. A. and guarantee safe delivery.

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We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.

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JERSEY FEMALES.

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In fine condition; farrowed July 17, 1916. Dam a daughter of the grand champion and great breeding sow Primrose; sire a grandson of the twice grand champion, Golden Rod; $50 each if taken soon.

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LOOK THIS UP

The Breeders' Department in this issue contains the names of many prominent live stock breeders. Their offers are worthy your consideration.

In answering advertisements don't fail to mention this paper.



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College of Agriculture
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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. APRIL 19, 1917. ** NO. 16.

Big, Rugged, Two-Fisted Benson Plans to Crystallize Farm Intelligence



E. F. Benson who has just entered upon his duties as the new commissioner of agriculture in the State of Washington

Hogs Once Sold at Two Cents

Now They Are Hard to Find at Fourteen Cents on Foot; Seed Potatoes Command High Prices; Some Wheat Must Be Reseeded.



BRUCE, Adams county, Wash., April 4.—This is a very late spring; very little seeding was done before April 1, farmers are busy and in two weeks all will be in. Rye pastures are showing green and stock looks well. Feed is high. Potatoes are $4.75 per 100 pounds, for seed and a small acreage will be planted. Hogs are scarce and one can hardly realize a hog on foot at 14 cents when we once sold hogs at 2 1-4 cents. The high winds did a good deal of damage and caused some reseeding and a good deal of discouragement. Lands have been offered for $10 to $12 per acre and no deals to date. The roads are nearly impassable in spots because of sand drifts. The railroad track was covered for more than a mile up to four feet in depth and traffic was delayed. The annual picnic was held at Scootnai Springs on Easter Sunday. A community club has been organized at Othello and hopes are entertained that much good may be done. The officers are lice wires. A. O. LEE.

Hay Is $30 Per Ton.

MARIETTA, Whatcom county, Wash., April 7.—Farm labor is generally equal to demands in this community. Wages are on an average going to be about $10 per month higher this year. Dairy farms or farms that handle about 20 cows and raise grain enough to feed them, with a few acres of potatoes would pay to keep a man the year round. Stock is generally looking well, although as yet there has not been much signs of grass; while the winter was not severe, it has been a very long one. Some farmers are still trying to buy hay, but it has been mostly bought up and is very scarce here. Thirty dollars per ton is asked for hay and good straw is bringing $14 per ton.

F. B. MAYHEW.

Roads in Good Condition.

CENTERVILLE, Pacific County, Wash., March 21.—Our farm work here is mostly summer fallow work, as the main crop is winter wheat, with a small proportion of spring crop, and that starts as soon as the ground is in plowing shape. We don't do any fall plowing, as it is generally too dry, but the dry fall usually helps out the harvesting and late threshing. It has been too dry the last two fall seasons to sprout the wheat, so consequently we have a poor condition in winter wheat again this season, with a great deal of wheat to sow over again. It is hard to get the necessary amount of seed spring grain, as we raise principally winter grain. It is still storming here, making a very late season. There has been a complaint of short moisture gathered during the winter weather, but the late rains are helping out. There has not been many warm days so far, so that the fruit trees are not in a very advanced condition yet, with no chance of loss by frost. Help seems to be just fairly well supplied to the ranches, with a demand for all the extra men. Road work is progressing slowly on account of the rainy weather, but are in a good condition, generally, as the drag is used mostly here for leveling up the roads. Some stock men have already moved their stock toward the mountain pasture, which is in a fair condition, but has too much snow at the present time.

CLARENCE A. LESTER.

Rapidly Cutting Lands.

CHEHALIS, Lewis county, Wash., March 30.—Southwestern Washington is a mining, lumbering, and manufacturing country, paying larger wages than farmers and dairymen can stand. There seems to be plenty of men and boys not able or willing to take the risks of mining or working in mills and camps. On dairy farms they have very steady work, good homes and board, and in the long run will lay up on the average far more money than many that get more daily pay. All wages are a little better than in recent years. Lands are rapidly being cut up into small homes on which the family does most of the work; often the man and older sons work in the mills and camps most of the time and the girls, when through school, go to the cities for jobs. A 10-acre garden or fruit place can hire a man, but it takes 100 acres or more, at general farming, to afford a man the year round. Employers could pay far more if men would stay longer and strive more diligently to earn a little more every day for the owner and learn the ways of the place better. L. K. COGSWELL.

To Build Nine Silos.

SOUTH BEND, Pacific County, Wash., March 30.—Farm labor is not equal to the demands in this county. Wages are increasing with the advanced cost of living. All dairy farms that have 15 or more cows on the land employ help the whole year. The weather is cold and the fall crops develop very slowly. Very few have done much spring planting. It has rained continually through the month of March. The rains have been cold, often ending in a light fall of snow. The fruit buds have not been injured. Nine silos will be built this spring—there will be twice as many built this year as were built last year. Hay is increasing in price again due to the cold wet weather which keeps the pasture from growing. In the night of the 27th of March the cheese factory at Menlo owned and operated by the farmers of the vicinity burned. There is some insurance which covered half the loss. Reports are that it will be rebuilt.

MRS. WINNIFRED BUCKINGHAM.

Fall Planting Looks All Right.

LITTLE ROCK, Thurston county, Wash., March 31.—Farm labor is scarce as the mills and logging camps are in need of men and offer higher wages than the farmers can afford to pay. The average farm is only partly cleared and can't pay enough to keep a man the year 'round. It requires from 15 to 40 acres of tillable ground and about the same of pasture land to make it pay to keep a man all-year 'round. This depends on the ability of the employer, the quality of the soil and the success he has in getting the right man. There is a certain class that are either no good in the lumber business or are fraid of the risks that do most of the farm work. As a whole these are second-class farm hands but occasionally a good one is found among them. They do not care to stay long in a place and for that reason are not very efficient. Wages are about the same as usual. It has been cold and rainy which has kept back the spring work. Everything is late. Grain sown early in March is just coming up. The fall planting is looking all right. Live stock is in pretty good condition, but will soon show the effect from the raise in hay and grain unless spring comes on before long.

Season Is Backward.

CHIMACUM, Jefferson County, Wash., March 30.—Up to the present date in this part of the county we have been able to get the men needed to do farm work, and so far they have been satisfactory. Wages are about the same as last year this time. The old hands that stay the year around are apparently satisfied, but the new ones are not apt to stay long, only long enough to get enough money to pull out to some other part of the state or Alaska. The average farmer has to milk 20 cows the year around to afford to keep a man steady. The season is very late so far, and a little snow has been on the ground of late, with very cold winds. Live stock is looking good and have come through the winter in good shape.

JOHN VAN TROJEN JR.

Snow Hangs On.

TWISP, Okanogan county, Wash., April 2.—The time varies from March 15 for sowing wheat and oats. Farm work is started in a few days after the snow is gone. The snow is hanging on longer than usual this spring. We won't get much plowing and seeding done before April 15 this year. Some orchardists are pruning, but unless the one that is pruning has good warm foot wear, pruning soon becomes a very disagreeable task while the snow is on. Very little summer fallowing is done here. Fall seeding should be done in September. Grain harvesting is usually done from July 14 to the first of August. Alfalfa harvest begins about June 20 and again about August 1. Spring work is two weeks later than usual. Fall sown grain doesn't look very promising.

GEORGE LA RUE.

Cold Nights Hold Snow.

METHOW, Okanogan County, Wash., March 30.—Spring plowing generally starts about the second week of April and seeding the same time. Fall plowing when it rains, generally the first week in September, and seeding the same time. Summer fallowing is done the second week in May to the first of June; alfalfa haying starts the second week in June, grain haying the first week in July, wheat or oats for grain the first to the middle of August. I can't say this spring is coming in normal. February was much warmer than March. Cold nights seem to hold the snow from thawing. Farm work, I believe, will be normal providing it warms up in two weeks. As the fall wheat is still under the snow it is impossible to say how it will come out.

CHARLES GRANT.

Horses in Demand.

SUNSET, King county, Wash., March 25.—No farm work has been done here yet, but the snow is all off from the south slopes and mostly from the north slopes except where drifted. Under present weather conditions there will be very little farming done before the second week in April. Hay is getting scarce and very little offered at $20 per ton. There is very little fear here of having to reseed the fall sown land. A large portion of the water is going into the ground as the snow melts, which will insure a good crop if it can be put in in time. There is a good demand for horses and farm labor. Horses are commanding a good price. Very few hogs are offered for sale here. Prospects are good for fruit. Coal and other fuel is scarce and has been all winter. Last year's wheat is practically all sold. LUTHER GILES.

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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 16 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF April 19, 1917

What Is the State Department of Agriculture?

E. F. Benson, Its Newly Appointed Head, Issues a Statement to the Readers of the Farmer

The Washington state department of agriculture is an important part of the state government. It probably has more to do with the largest development of the state than any other department of the state government, yet how many of our readers are fully informed as to the work of the state department of agriculture, how it is organized, how it works and what are its chief purposes?

The following informative article was prepared by the newly appointed state commissioner of agriculture, E. F. Benson, at the request of the Washington Farmer, and will be read with much interest.

To the Readers of The Washington Farmer: Complying with your request that I say something now regarding the work of the state department of agriculture, I beg to remind you that one's knowledge of his work the first day he takes it up is necessarily limited.

I hope to find in it the possibilities that some of my enthusiastic friends prophesy. While the field is large, there are many other workers in it. The state college is the great force engaged in educational and demonstration work, and also directing the county agricultural agents wherever they may be employed and supervising the new bureau of markets created by the last legislature.

The work of my department is very largely of a regulatory nature, much of it being police work. The dairy and live stock division—working to eradicate tuberculosis in the dairy herds and to prevent diseased and impure milk being sold to an unsuspecting public; and working to improve creamery conditions and to establish, as much as possible, a uniform quality of creamery products.

The horticultural division—working to prevent the importation of dreaded insect pests and plant diseases from other states and foreign countries; and to combat the pests we already have; and working to maintain the established standard of horticultural products that the public may be protected against diseases, and that the grower may get paid a price that standard goods should command.

The division of food, feeds, fertilizers, drugs, oils and bakery inspection—doing its work in the interest of public health and safety in the discovery and destruction of impure and poisonous foods, and maintaining the standards of such commodities as come within its jurisdiction.

The seed-testing division—testing such seeds as merchants and farmers send in for the purpose, sampling seeds offered for sale in the various markets of the state in an effort to eradicate noxious weeds and maintaining a high standard on all seeds sold within the state.

While these are the duties prescribed by law, there are many incidental services of great importance.

Some of the horticultural inspectors find it absolutely necessary to conduct special research work, as well as investigational work, in order to render most efficient service in their different districts. The varying climatic and soil conditions in this state make it practically impossible for the state college to do all of this, hence the overlapping of effort seems justifiable at this time. This division gathers information as to orchard area and probable fruit output, and this has been found to be the most accurate data obtainable, and is of much benefit in connection with the problems of marketing the fruit.

The dairy and live stock inspectors can do something more than test the cows and examine the creameries. If they can gather data as to number of cows, quantity of milk and cream output and the cost and profits, and offer suggestions in some places that may be helpful, gather information as to where good milk cows are for sale, and give that to others who are anxious to buy such cows, they are serving the public by so doing.

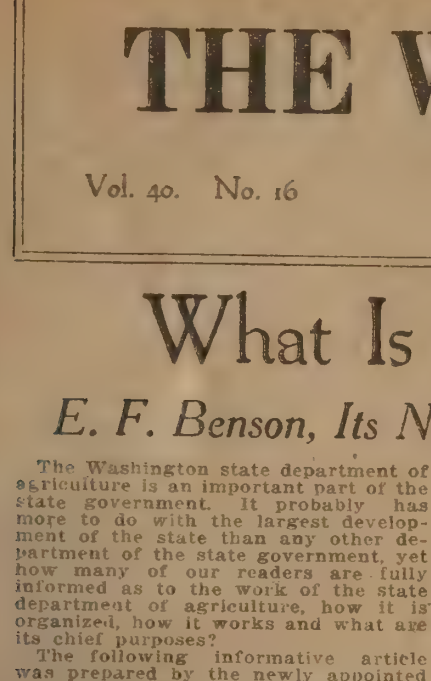
All this information will be available for the bureau of markets soon to be established. This work also laps over, and may be some duplication of the work of the county agricultural agents, and since less than half of the counties have agricultural agents, and since their work is confined to the counties in which they are located, while the work of this department extends over the entire state, it would seem that the only sensible course to pursue would be a generous cooperation by and with the county agents, county assessors and the farmers themselves. Unless the farmers understand that this work is primarily in their interest, that they help to pay for it any way, and ought to get everything possible out of it, the work can not be as successful as it should be.

Some of this work might be resented in some places, but it is hoped that any person who can offer suggestions that would improve the efficiency of this department and make it of more value to the farmers of this state, will not hesitate to come forward with their suggestions. We are more than anxious to consider the ideas and the viewpoint of the other fellow, and if our suggestions may in some cases seem unwarranted and of the butinski order, we will simply plead good intentions and try to make ourselves better understood.

If by honest team work on the part of every employe in this department, and by earnest effort on our part to cooperate with every other agency in the development and betterment of agricultural conditions in this state, something may be added to the pleasure and profit of the farmers and their families, and if I may be of some assistance in this work it will me the greatest pleasure to render such a service.

E. F. Benson

Washington Portraits No. 11.



R. V. Peringer.

The ambition of R. V. Peringer of Belmont, a prominent farmer of Whitman county, is to introduce as rapidly as practicable nitrogen producing crops in rotations, and live stock, believing that by so doing he will raise more grain and also add appreciable profits from the side issues. Mr. Peringer, with his parents, moved to Umatilla county, Oregon, from Seattle, when he was 10 years of age. He began immediately to do regular team work going through every job common to the wheat farm. He worked his way through Whitman college, graduating in 1908. He came directly to the Palouse country to take charge of 2000 acres rented from Whitman college, and has since bought 1280 acres of that land.

The next in the series of Washington portraits will be that of Arthur R. Brown of Centerville, and will be given in next week's issue of The Washington Farmer.

E. F. Benson, the Man

Washington State Commissioner of Agriculture

E. F. Benson, the recently appointed commissioner of agriculture for the state of Washington, was born at Swan's Island, Maine, February 2, 1861. He has been a resident of this state since March, 1883. His first work was at Cheney, then the county seat of Spokane county, where he was employed by the law firm of Nash, Andrews & Stout. He was a graduate of the Boston University Law school in 1881, and had been admitted to the Boston bar, but the lure of the land in the new west took him into the Big Bend country, where he used his preemption and timber culture rights near the present town of Creston.

In the fall of 1884, he was elected probate judge of Lincoln county, serving one term, the county seat then being at Sprague.

In the spring of 1887 he took up a homestead in the northern part of the county, a few miles north of Sherman postoffice. When the town of Wilbur was started, in 1888, he moved there and engaged in the real estate business, but continued to operate his ranch near Creston and run a small bunch of cattle and a few horses. During the severe winter of 1889 and 1890, he ran out of feed buying prairie hay and weeds shipped in from North Dakota at $35 a ton. This enabled him to bring his stock through, but by the time they could be turned out on bunch grass, he was broke.

In 1891, he moved to North Yakima to sell lands under the Sunnyside canal for Paul Schulze, then head of the Northern Pacific land department in the west, and the chief promotor of that irrigation system. His enthusiasm for those irrigation lands, which made him a successful land agent, naturally drew him into the farming game and he has continued to own and operate farm lands in the Yakima valley ever since.

A dull real estate business and farming operations during the panic years of 1893-94-95, left him broke again, and in '95, he went to work for the Northern Pacific Railway company as land examiner under Thomas Cooper, western land agent. Land sales were at a very low ebb and most real estate men either went broke or engaged in some other business. The Northern Pacific railway system of leasing its land grant ownership was introduced at this time and approximately 2,000,000 acres were leased in this state, Mr. Benson doing the field work, interesting the stock men in the importance of controlling their ranges and arranging for such range divisions as would be fair and businesslike to the company and to the stock men.

In 1899, the Prosser Falls Land company, an irrigation pumping plant, was sold at receiver's sale. A plant that had cost $160,000 was to be sold for at least enough to pay an indebtedness of $8000 resulting from a four years' receivership. Mr. Benson induced Mr. Levi Ankeny to put up the money and they bought it on a partnership basis, Mr. Ankeny furnishing the money, and Mr. Benson the experience.

In 1902 he left the railway employ

(Continued on page twelve.)

President Summons Farmers to War Needs

Urges Mobilization of Industrial Life of Country for Its Very Real Part in World Conflict

President Wilson, besides calling the army and the navy to arms in defense of human liberty and human rights, has issued a formal appeal to the industrial life of the country to mobilize for its very real part in the world war. His formal appeal follows:

"My fellow countrymen:

"The entrance of our beloved country into the grim and terrible war for democracy and human rights which has shaken the world creates so many problems of national life and action which call for immediate consideration and settlement that I hope you will permit me to address to you a few words of earnest counsel and appeal with regard to them.

"We are rapidly putting our navy upon an effective war footing and are about to create and equip a great army, but these are the simplest parts of the great task to which we have addressed ourselves. There is not a single selfish element, so far as I can see, in the cause we are fighting for. We are fighting for what we believe and wish to be the rights of mankind and for the future peace and security of the world. To do this great thing worthily and successfully we must devote ourselves to the service without regard to profit or material advantage and with an energy and intelligence that will rise to the level of the enterprise itself. We must realize to the full power how great the task is and how many things, how many kinds and elements of capacity and service and self-sacrifice it involves.

"These, then are the things we must do and do well, besides fighting—the things without which mere fighting would be fruitless:

"We must not only supply abundant food for ourselves and for our armies and our seamen, but also for a large part of the nations with whom we have now made common cause, in whose support and by whose sides we shall be fighting.

"We must supply ships by the hundreds out of our shipyards to carry to the other side of the sea, submarines or no submarines, what will every day be needed there, and abundant materials out of our fields and our mines and our factories with which not only to clothe and equip our own forces on land and sea, but also to clothe and support the people for whom the gallant fellows under arms can no longer work: to help clothe and equip the armies with which we are cooperating in Europe and to keep the looms and manufactories there in raw materials; coal to keep the fires going in ships at sea and in the furnaces of hundreds of factories across the sea: steel out of which to make arms and ammunition, rail here and there; rails for wornout railroads back of the fighting fronts; locomotives and rolling stock to take the place of those every day going to pieces; mules, horses, cattle for labor and for military service; everything with which the people of England and France and Italy and Russia have usually supplied themselves, but can not now afford the men, the materials or the machinery to make.

"It is evident to every thinking man that our industries, in farms, in shipyards, in the mines, in the factories, must be made more prolific and more efficient than ever, and that they must be more economically managed and better adapted to the particular requirements of our task than they have been; and what I want to say is that the men and the women who devote their thought and their energy to these things will be serving the country and conducting the fight for peace and freedom just as truly and just as effectively as the men on the battlefield or in the trenches.

"The industrial forces of the country, men and women alike, will be a great national, a great international service army—a notable and honored host engaged in the service of the nation and the world, the efficient friends and saviours of freemen everywhere. Thousands, nay, hundreds of thousands of men otherwise liable to military service will of right and of necessity be excused from that service and assigned to the fundamental, sustaining work of the fields and of the factories and mines and they will be as much part of the great patriotic forces of the nation as the man under fire.

"I take the liberty, therefore, of addressing this word to the farmers of the country and to all who work on the farms: The supreme need of our own nation and of the nations with which we are cooperating is an abundance of supplies, and especially of foodstuffs. The importance of an adequate food supply, especially for the present year, is superlative. Without abundant food, alike for the armies and the peoples now at war, the whole great enterprise upon which we have embarked will break down and fail.

"The world's food reserves are low. Not only during the present emergency but for some time after peace shall have come, both our own people and a large proportion of the people of Europe must rely upon the harvests in America. Upon the farmers of this country, therefore, in large measure, rests the fate of the war and the fate of the nations. May the nation not count upon them to omit no step that will increase the production of their land, that will bring about the most effectual cooperation in the sale and distribution of their food products? The time is short. It is of the most imperative importance that everything possible be done, and done immediately, to make sure of large harvests. I call upon young men and old alike, and upon the ablebodied boys of the land to accept and act upon this duty—to turn in hosts to the farms and make certain that no pains and no labor is lacking in this great matter.

"The government of the United States and the governments of the several states stand ready to cooperate. They will do everything possible to assist farmers in securing an adequate supply of seed, an adequate force of laborers when they are most needed at harvest time, and the means of expediting shipments of fertilizers and farm machinery, as well as of the crops themselves when harvested. The course of trade shall be as unhampered as it is possible to make it and there shall be no unwarranted manipulation of the nation's food supply by those who handle it on its way to the consumer. This is our opportunity to demonstrate the efficiency of the great democracy and we shall not fail short of it.

"This let me say to the middle men of every sort, whether they are handling our foodstuffs or our raw materials of manufacture, or the products of our mills and factories:

"The eyes of the country will be especially upon you. This is your opportunity for signal service, efficient and disinterested. The country expects you, as it expects all others, to forego unusual profits, to organize and expedite shipments of supplies of every kind, but especially of food, with an eye to the service you are rendering and in the spirit of those who enlist in the ranks, for their people, not for themselves. I shall confidently expect you to deserve and win the confidence of people of every sort and station.

"To the men who run the railroads of the country, whether they be managers or operative employes, let me say that the railroads are the arteries of the nation's life and that upon them rests the immense responsibility of seeing to it that those arteries suffer no obstruction of any kind, no inefficiency or slackened power. To the merchant let me suggest the motto: 'small profits and quick service,' and to the ship bulider the thought that the life of the war depends upon him. The food and the war supplies must be carried across the seas no matter how many ships are sent to the bottom. The places of those that go down must be supplied and supplied at once.

"Let me suggest also that every one who creates or cultivates a garden helps and helps greatly to solve the problem of the feeding of the nations; and that every housewife who practices strict economy puts herself in the ranks of those who serve the nation. This is the time for America to correct her unpardonable fault of wastefulness and extravagance.

"Let every man and every woman assume the duty of careful, provident use and expenditure as a public duty, and an act of patriotism which no one can now expect ever to be excused or forgiven for ignoring.

"In the hope that this statement of the needs of the nation and of the world in this hour of supreme crisis may stimulate those to whom it comes and remind all who need reminder of the solemn duties of a time such as the world has never seen before, I beg that all editors and publishers everywhere will give as prominent publication and as wide circulation as possible to this appeal. I venture to suggest also to all advertising agencies that they would perhaps render a very substantial and timely service to the country if they would give it widespread repetition. And I hope that clergymen will not think the theme of it an unworthy or inappropriate subject of comment and homily from their pulpits.

"The supreme test of the nation has come. We must all speak, act and serve together!"

"WOODROW WILSON."

Enormous Loans Sought

Farm Loan Bank Is Asked for Many Millions

By N. W. DURHAM, Chairman Spokane Committee on Federal Loan Bank.

While the officials of the Spokane federal bank can not set a definite date when they will begin the making of mortgage loans, they hope to open for business within 30 days.

"Some of the banks in the east were started ahead of us," said Secretary George W. Jewett, "but I do not know of any of the banks actually making loans. We are making every effort to get to actual results as soon as possible."

"The incorporation of all of these associations that have been organized and are being organized to borrow money from this bank will take time," said President Daniel G. O'Shea. "Once these associations are incorporated they are permanent, and we shall have

(Continued on page fifteen.)

The A B C of Road Construction

"Crown" Should Be About One Inch Rise to the Foot

By FRANK W. GUILBERT,

Chairman Executive Committee, Washington State Good Roads Association.

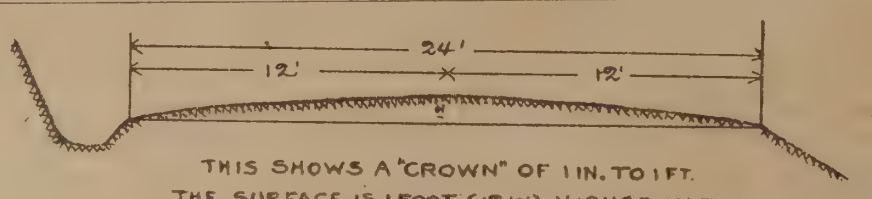
There are a number of fundamentals having to do with road construction and maintenance which are well worth naming and describing. The reasons certain things are done, such as shaping up the surface, giving pitch to the ditches, placing culverts and riprap, etc., will be taken up and discussed in several papers being prepared upon the different subjects. All fundamentals have to do with two principles which must be taken into consideration in all road work. These are drainage and elimination of excessive grades, or hills. Drainage is, of course, the most important thing to be considered.

We often hear persons who have to do with road matters use the term "the crown of the road." The assumption is that every one knows what that means. As a matter of fact a large percentage of people do not know what is being referred to when some of these simple designations are used and it will be the purpose of these articles to define, as simply as possible, these commonly used words so that the readers of this paper will understand what they mean.

The "crown" is the difference in height between the edges of the surface of the road and the center of the road. On ordinary earth roads the crown should be about one inch rise to one foot of distance from the edge to the center. If the surface of the road is 16 feet wide from edge to edge, the center of the road should be eight inches higher than the edge. If a road is surfaced with some hard, compact material the crown need not be so high. On a concrete road, as example, the crown is used as low as one-fourth inch to each foot of width.

On earth roads the crown should be greater on hills than on the level. The reason for this is to get the water to the sides of the road as quickly as possible so that it will not start down the road surface towards the bottom of the hill and wash it out. Of course the purpose of making the road higher in the middle than at the sides is to get the water to the side ditches quickly.

The only road which does not need to be crowned is one of sand. Moisture improves a sand road.



Announcement of Contest Winners Delayed by Tie for the Second Place.

Two persons are tied for second place in the dot puzzle contest and no announcement of the winners will be made until the tie has been broken. A second tie-breaking problem has been sent to the two tied contestants with the stipulation that their solutions are to be returned to the contest editor not later than April 24, as shown by the postmark on their envelopes.

Horses Sell Well

At Spokane Stock Yards Auction

With W. H. Ralph of Spokane wielding the hammer, over 100 horses were sold at auction last week at the Spokane Union stockyards, the sale being one of a series held at the yards every 20 or 30 days.

In numbers buyers were few, but on the whole a fair average price was received for the stuff offered. The best prices were paid by farmers seeking good heavy work horses. Work teams sold all the way from $375 to $567, George Smith paying the latter price for a team of 6-year-old mares consigned by J. R. Hindshaw. Norton Morrison of Fairfield bought a team of mares at $445.

H. W. Raymond of Rosalia paid $430 for a 6-year-old team of grays, consigned by E. S. Sweet of Grangeville, Idaho, while Mr. Morrison also bought a team—a gray and a black, 7 and 9 years old—from Mr. Sweet for $425. I. J. Davis, buyer from Miles City, Mont., paid $425 for a splendid team of bays consigned by Frank Pentecost of Seattle, while Wesley Hannan of Spokane paid the same price for a team of mares consigned by J. R. Hindshaw, Spokane. Mr. Davis bought two other teams of gray mares from Mr. Pentecost, paying $400 for one and $417.50 for the other, and one mixed team for $395. Myers of Buckeye, Wash., paid $575 for a heavy team consigned by J. Richardson of Colfax. Single animals, both horses and mares, brought anywhere from $100 to $245. Four mules were offered by Mr. Richardson, but no bid was made.

Among the principal horsemen offering stuff for sale were I. J. Davis, Miles City, Mont.; Wesley Hannan, A. J. Reed and J. B. McGinn, Spokane; E. S. Sweet, Grangeville, Idaho; B. Bartholomew, Deep Creek; J. Richardson, Colfax, and C. P. Myers of Buckeye.

Nearly all these men were also buyers.

Kegley Resorts to Childish Defense

Grossly Misuses the State Grange News to Boost Himself for Reelection

"Certain papers have tried to give the impression that some of the grange leaders lent their influence to induce members of our order to purchase stock in the Northwestern General Trading company when it was not flourishing. In the trial of the five men who were interested in that company there was nothing brought out to show that the company was not flourishing at the time the recommendation was given."

The foregoing quotation is from the editorial page of the Agricultural Grange News, the personal organ of C. B. Kegley, master of the state grange of Washington, who is now using its columns to boost himself for reelection. Mr. Kegley's name appeares at the head of the editorial page as an "associate editor," but the fact is well known that he is its editor in chief, dictating its policies and directing what it shall and shall not say.

Mr. Kegley is now misusing the Grange News, which is supported by the money of members of the grange, to excuse the swindling operations of the gang of financial pirates who plundered the farmers of the Pacific northwest out of hundreds of thousands of dollars of hard-earned savings.

If he and his personal organ were doing their duty, they would be helping The Washington Farmer to warn the grange members and other farmers against such predatory concerns as the Northwestern General Trading company. They would be commending us for the fight we are making to protect the farmers of this section.

The quotation from the Grange News is a bald falsehood. The five men who were ringleaders in this gigantic swindle stand convicted of crime in the United States court. After a long and fair trial, where they were defended by able counsel, 12 jurors found them guilty.

The record of that trial proves beyond all question that the Northwestern General Trading company was never in a flourishing business condition. It was unsound and a losing venture when Mr. Kegley gave it this indorsement.

> Patrons of Washington:
> Your executive committee have made a personal investigation of the resources and liabilities, methods of business and quality of merchandise of the Northwestern General Trading company. We are satisfied that it is on a sound financial and cooperative basis, and through the proposed plan of a distributing center with each subordinate grange, and the active cooperation of the patrons, can be made to fill the need of the wholesale supply house for the grange members.
> Executive committee Washington State grange.
> C. B. KEGLEY.
> J. O. WING.
> J. T. COMPTON.

Mr. Kegley declared to the members of the grange that he had made "a personal investigation" of this fraudulent concern and found it on a "sound financial and cooperative basis," and fortified with that statement the stock salesmen of the company went out and sold the worthless stock to farmers.

But when Mr. Kegley was on the witness stand in the United States court he was asked this question by United States District Attorney Garrecht:

"Did you examine the books when you were at the Trading company's store for two or three days?"

"It was impossible," replied Mr. Kegley. "We simply took the reports of the accountant, Wilson, Mr. Lawrence and Mr. Delivuk." The accountant, Wilson, and Mr. Lawrence were on the payroll of the swindling concern.

"Did Lawrence tell you of their stock sales commissions?"

"No, I already knew that myself."

"You knew of the rate of commission paid?"

"Yes, I knew they paid 20 and 25 per cent."

"Did you know how much had been paid on commissions?"

The witness had forgotten.

"Did you know how much was due on notes and whether the same was a collectable asset?"

"The sum due was then reported and the notes were said to be good."

"Did you know that 75 per cent of the notes were past due?"

"No."

"They did not tell you that?"

"No."

At the trial the fact was established beyond contradiction that the North western General Trading company never was on a sound basis. It was losing money continuously, and in the faces of those losses the stock was boosted up by stages from $20 to $75.

For instance, when Olin C. Fowler, one of the five defendants, was on the witness stand he was asked this question by Judge Van Fleet, before whom the case was tried:

"Did the books at any time show that the company was doing business at a profit?"

"Really, I never believed we were on a paying basis," admitted the witness.

Witness House, the government's expert investigator, who went all through the tangled affairs of the company, was asked this question when on the stand:

"Mr. House, what was the condition of the company as regards indebtedness June 30, 1912?"

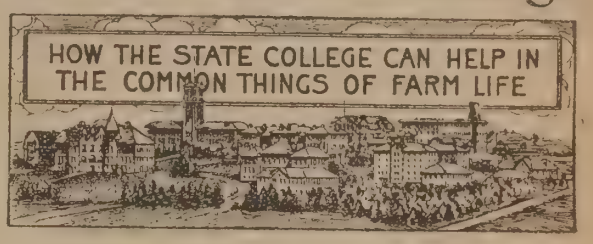
"It owed $15,000 on money borrowed and on merchandise bought, and on July 1, 1912, the stock was raised to $75 a share; the company operated at a loss that year," was the answer.

Witness testified that the company also operated at a loss in 1911.

Yet, in the face of that record, Mr. Kegley's personal organ has the audacity to say that at the trial "there was nothing brought out to show that the company was not flourishing at the time the recommendation was given" by him.

Learn to Use the State College

Make It Plain Just What You Want Experts to Tell You. Give Details.



In the series of articles on the ways in which the college can help the farmer, which I will now bring to a close, I have dealt with the different phases of farm life and have referred, very incidentally, to the instructional, the experimental and the extension functions of the state college. That you may use the college more advantageously in your work on the farm I want to emphasize these three very distinct functions.

First, there is the college proper. That is the buildings, shops, laboratories, barns, etc., here at Pullman, with the faculty of instruction, the library, the apparatus, the live stock, the tools and machinery for doing the different kinds of work. The college of instruction has its several departments. Those relating to your work include the departments of agriculture, horticulture and veterinary science, engineering and architecture. Closely akin is the department of home economics. Besides these there are various other departments, such as science, language, etc. There is also a department of elementary science, very practical, in which youths who have not completed high school may study in a practical way. This department of instruction ordinarily called "the college" is for your sons and daughters and yourself—if you are not too old to learn.

Not all things which the agriculturist should know are taught by the department of agriculture. For this great science rests on more fundamental sciences—chemistry, botany or plant life, entomology or insect life, physics, etc., without which we would be blind leaders of the blind. This great division of the institution—the instructional—is mainly for the farmers' sons and daughters who can attend for one or more years. But the short winter courses are for fathers and mothers as well as the sons and daughters, and happy it would be if every winter one or more of the family should spend from one to six weeks at the college and carry back into the home and on the farm, messages there received.

Then there is the experiment station. In more senses than one this is the most fundamental of the three grand divisions of the institution. It is constantly engaged in the investigation of important problems of the farm of the more fundamental sort and has already throughout the United States laid broad and deep the basis of agricultural science. You should receive all of the bulletins which relate to your kind of farming and should look to it as a sympathetic friend and helper.

The third division of the institution is the extension department. It is the business of this division to carry to the farm homes the gospel of the new agriculture. It will, in time, be a very great department. At its head is a director. At the head of one of the subdivisions is a state leader and under his direction are a county agriculturist, one in every county that will receive him and cooperate in the work. Then there are half a dozen or more state-wide leaders—each a specialist in his line—who will go into every county to aid with the work. Then there is a division for the boys' and girls' club work, with its canning clubs and pig clubs and crop clubs and its thousands of boys and girls organized and directed in the intelligent study of agriculture. Then there is the division of farm management, gathering data and advising locally. Then there are the dairy specialists, with their cow-testing associations, and their propaganda for good dairying. Then there is the division of publication with its vast quantities of free printed matter of a helpful character. It is a vast, beneficent organization for the betterment of every phase of farm life.

All of them taken together we call "The State College," and when we speak of it we mean not one of the buildings, but all combined—a trinity in unity under one head, guided by one governing board, animated by a single purpose, viz., the advancement of the industries of life and the betterment of the industrial classes.

E. A. Bryan

Reorganize Experiment Station

Director Cardiff Will Retire Within Short Time

Announcement has been made by the board of regents of the state college at Pullman that Dr. Ira D. Cardiff, director of the college experiement station, will sever his conection with the institution within a few weeks, and that another man will be appointed to fill the vacancy. The position has been offered to W. J. Spillman, head of the bureau of farm management of the U. S. department of agriculture, and who was for several years professor of agriculture at Pullman. Professor Spillman organized the department of which he is now head.

The board of regents declined to state the exact reasons for the retirement of Director Cardiff, but it is known that harmony between the experiemnt station and other departments of the agricultural college was imperfect under his administration.

Following a long meeting of the board of regents in Spokane, at which meeting the departure of Dr. Cardiff was determined upon, President W. M. Pease of the board said that "full cooperation has not been evidenced between the experiment station, the department of agriculture and the extension service of the college. Today is the time for full cooperation and the highest efficiency in the campaign for agricultural preparedness. There should also be full cooperation between the college and the agricultural organizations of the state."

State Is Active

In Furtherance of Preparedness

In accordance with the proclamation issued some time ago by Governor Ernest Lister urging united effort looking toward increased farm crops this season, meetings were called generally throughout the state last Saturday and organizations perfected.

Wide-spread interest was manifested throughout the state in the proposal to increase crop acreage, plant all vacant lands to some food articles and practice the greatest economy in the use and handling of foodstuffs during the war into which this country has been drawn.

The organizations have been drawn up so as to reach into nearly all communities of the state, both town and farming districts. Committees in many instances were appointed to carry the organizations and their work further.

The movement in this state is in accord with a nationwide movement looking toward maximum production of footstuffs to meet the unprecedented demands brought about by the world war.

Enrolment Blank for

THE PATRIOTIC LEGION OF WASHINGTON

Membership Open to Men, Women and Children.

I am a loyal and patriotic American. I most earnestly desire to do my share in helping to defend the honor of my country in time of war. I therefore request enrolment as a member of THE PATRIOTIC LEGION of WASHINGTON and pledge myself to the work of increasing our nation's food supply during the war into which our country has been plunged.

Signed .....

Date of Enrolment .....Address .....

WHEN SIGNED FORWARD THIS BLANK TO THE EDITOR OF THE WASHINGTON FARMER, SPOKANE, WASH.

Powdery Scab a Menace.

Horticultural Inspector S. Land reports the presence of powdery scab on potatoes produced last year in one of the West End ranches near Port Angelus, Wash., and cautions all who plant spuds this spring to be certain that they have healthy tubers for seed.

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Any subscriber who does not feel that The Washington Farmer is worth to him all and more than the subscription price may order the paper discontinued and the unusued portion of the amount paid for the subscription will be refunded. You must be satisfied.

Entered as second-class matter January 13, 1916, at the postoffice at Spokane, Washington, under the act of March 3, 1879.

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

State Grange Should Find Fit Leader to Replace Kegley

The assertion of C. B. Kegley's personal organ, that the Farmer is trying to "dictate whom the patrons of Washington shall elect as master" is wholly without foundation of fact, as our readers well know.

Equally false is its further assertion that this journal is striking at the members of the grange when it prints the facts—facts proved in the United States court—regarding Mr. Kegley's indorsement of the swindling Northwestern General Trading company.

The bared record of that deplorable transaction proves beyond question that Mr. Kegley is unfit for leadership of the grange of Washington. Instead of lending his influence to the swindling gang that buncoed the farmers of the Pacific northwest out of hundreds of thousands of dollars he should have thrown his counsel and influence against them. Instead of attacking the Farmer for its exposure of the dishonest methods of a disreputable concern, he should be commending it and using his personal organ to guard the public against similar pitfalls.

Mr. Kegley is laboring under the delusion that he is the grange, and its large membership has no one capable of serving it as master. The fact is he has proved his unfitness for that high and responsible office. The fact is that the grange has scores of capable, earnest men who are better qualified than he to direct its activities and stand guard over the welfare of its members. His plea that "there are certain papers that lose no chance to strike a blow at the grange through our leaders" is childish.

Boys and Girls as Money Makers

During the year 1916 the boys and girls of the state of Washington who were members of pig clubs, garden clubs, potato clubs, canning clubs, apple clubs and the like, under the leadership of the boys' and girls' club work organization, produced things with a market value of about $18,000.

Eighteen thousand dollars is a lot of money, and the report of the work in Washington indicates just how practical from the money standpoint the club work may be made, and just how great a part the boys and girls can play in earning money for their own needs.

This year affords another opportunity, an opportunity even greater than before. This year there is a nationwide movement looking toward increased production of food stuffs to supply the needs of war time. Prices are now high, and there is apparently no probability that they will be low at any time this season, though they may not remain abnormally high.

Every boy and girl of school age should produce something. Every one should have a potato patch, a garden, a pig, a berry patch or should be a member of a canning club, or sewing club or something by means of which something actually worth while could be grown or made.

Fathers and mothers should inspire their children to take up work of this kind. They should provide the ground or the "capital" for the enterprise, and should supervise the work and help make it worth while. Money considerations alone are sufficient to warrant the undertaking. But the value to the boy or girl in the form of appreciation of values, appreciation of nature, respect for toil and toilers, self confidence and self reliance is even greater.

This Is No Time for Luxury

If the present war is to result in good to the world, one element of that good will be the lesson of simple living and efficieney.

Germany is renowned for the simple, practical living of her people, and for her efficiency in production, and she alone of all the nations of the world was ready for the war that has come. She has battled against half the world with startling success because of this practical efficiency. Her enemies, if they are to succeed, must learn and apply her lessons.

Today our own country is entering upon the war that may last one year or several years. Our country has long nestled comfortably in the lap of luxury, but the hour to arouse ourselves is at hand. America must arise in all the power of her greatness, must shake off her love of creature comforts and play a part worthy of the Pilgrim fathers and colonists of 1776.

Simplicity is power; luxury is weakness. America must return to the simple life. She must produce necessities in abundance as never before. She must apply her resources to useful purposes. She can not win against enemy nations unless her latent and scattered powers are developed and unified.

Efficiency must become the watchword of the hour. America's every resource must be made available. Practical usefulness must be the measure of value. Nothing should be wasted on luxury.

That man or woman who produces more of life's necessities and dedicates them to the use of the nation in this trying time is as true a patriot as the young man who marches off to the trenches or the young woman who goes to the battlefield with the hospital corps. This is our opportunity not only to join in the world-wide battle for human rights and a world solidarity built on that principle, but to re-establish in this country an appreciation of service rather than show, of rugged enterprise rather than ease, of simplicity rather than luxury.

Ancestry of Plants.

The gardener plants his seed. Already the factor of heredity lies behind, for the parents of that seed, the variety and the strain, have imparted to it certain characteristics which not all the hoeing or the spraying in the universe can greatly modify. We do not sufficiently consider this matter of ancestry or heredity in planting; the dairyman is beginning to realize that the productive possibilities of his cows are to a large extent born with them, and the poultryman seeks by line breeding and other highly technical processes to get back of his flock the momentum of generations past; but the farmer still considers that wheat is wheat and corn is corn, no matter what its ancestry. Just as surely as sunshine and shadow, however, a time is coming when men will plant only seed of known and approved ancestry. We must have purebred seeds, just as we must have purebred live stock.

Washington Gleanings

A $20,000 cheese factory is to be erected at Toppenish.

Harry M. Bieberstein of Portland has opened the N. C. Hall cheese factory at Ridgefield.

Early estimates of the fall wheat crop in the Walla Walla country are for a 70 per cent crop.

According to President William Ford of the Whatcom county Poultry association, more than 1,000,000 chicks will be hatched in the county this spring.

A new warehouse is assured for the Kennewick District Fruit Growers' association at Kennewick, and facilities will be provided at Vista for packing and shipping.

Reports from the Yakima valley state that flockmasters are having good success with their sheep this spring. Lambing is well along in the valley and the losses have been small.

Peter Oliver of North Yakima has sold his sheep range of 4880 acres and 2270 sheep to W. A. McGuffie. This is one of the largest sheep deals that have been made in that vicinity this year.

The Winlock Cooperative creamery has awarded a contract for the construction of an addition to its plant. The creamery company will spend about $2200 in building and equipping the new structure.

Committees have been appointed to arrange for a big strawberry festival at Rochester in the midst of the season. It is proposed to make the festival an advertisement of the resources of that locality.

The Lewis county commissioners have begun to gravel the road between Tono and Centralia. Thurston county commissioners will start graveling the road between Tono and Tenino as soon as it is in proper condition.

Representatives of the Spokane Chamber of Commerce are soliciting business men for $40,000, Spokane's share of the $250,000 capital stock of the company being organized by W. H. Paulhamus to take the fruit canneries in the state and build a cannery in Spokane.

Snohomish county will receive $65,000, less 7 1-2 per cent, from the state highway appropriation made by the last legislature. State Highway Commissioner Allen will use this amount to construct a new bridge at Silvana and to build a new road between Silvana and Stanwood.

Peter Kurre and J. L. Murdock of Independence and Monmouth, Ore., have purchased the Kelso creamery from W. O. New. They plan to build a modern fireproof building. In addition to operating a creamery the new owners plan to install a commercial ice plant with a capacity of 10 tons or more a day.

To extend the market for Clarke county prunes the women of Clarke county are to take a hand in putting out a cook book containing many choice recipes, in which Clarke county prunes are to be the chief and prominent ingredient. Mrs. W. B. Burrell is chairman of a special committee to gather recipes.

Constructive National Service

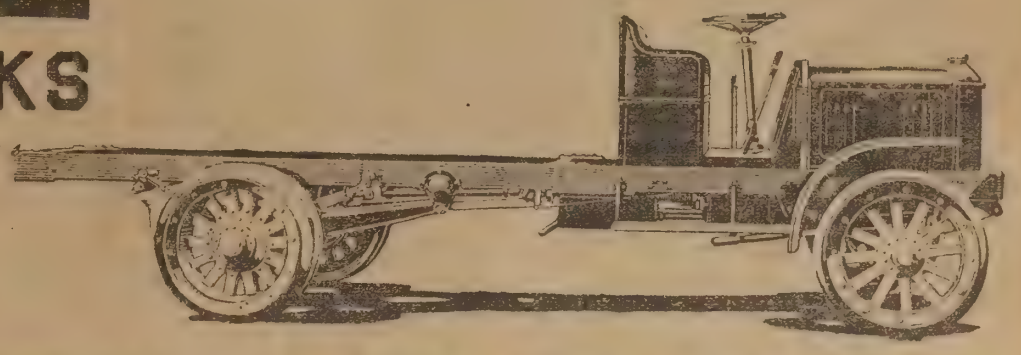
(From the Portland Oregonian.)

There is utility in the plan of the National Woman Suffrage association to set its members to work in promoting the home-garden plan. There are many things that women can do, and will do, to prepare the nation for any emergency, but as has been pointed out heretofore, there are few duties more important than providing a food supply. So, without abating the demand for the ballot, and without diminution of determination to prepare women to exercise the right of suffrage as fast as it may be granted, the association proposes to assume in addition a "new plan of gripping suffragists together for constructive national service," so the formal announcement reads.

Organization is to be complete in every detail. In addition to a "chairman of suffrage agriculture" in each state, there will be an agricultural chairman for each local league. It will be the duty of these officials to enlist women in the special work of feeding the nation. The idea is to induce as many women as possible to take up personally the work of spading, seeding and cultivating. It will be good exercise, all out of doors, and it will serve a good purpose, whether it produces a great quantity of food or not, if it only puts the men and boys on their mettle. It ought to stimulate enterprise and competition, and the home garden is admitted to be greatly needed. This is just the season of the year to begin.

There is serious purpose behind the project and it ought to succeed. The assault on the forces of General High Cost of Living needs only proper preparation and determination to result in victory. The suffragists, with their 2,000,000 members, and recruits coming in every day, ought to be a potent force.

FEDERAL
MOTOR TRUCKS



THE FARMER'S BEST FRIEND

The Motor Truck has reduced the distance to market for farmers to less than half the old way of drawing your grain to market by horses.

On the farm of William Reinboldt, seventeen and one-half miles northwest of Davenport, a three and one-half ton **FEDERAL TRUCK** made three round trips each day for ten consecutive days. **Seventy sacks of wheat was the smallest load carried** and eighty sacks the most; the average load was seventy-five sacks of wheat. Forty-five sacks would be a good load for four horses and Mr. Reinboldt informs us that it is impossible to haul a load each day with horses. Three loads a week is as much as the teams will stand. With this illustration it is easy to see the wonderful advantage of the **FEDERAL TRUCK** to do your hauling to and from the railroad.

The **FEDERAL TRUCK** is by far the leading truck in the Inland Empire. There are more **FEDERAL TRUCKS** in Eastern Washington and Northern Idaho than there are of any other two makes of trucks of a capacity of from one and one-half to three and one-half tons. The **FEDERAL COMPANY** has never made a smaller truck than one and one-half tons until this year.

We have and carry in stock in Spokane the largest stock of parts carried by any other two truck dealers in Eastern Washington and Northern Idaho.

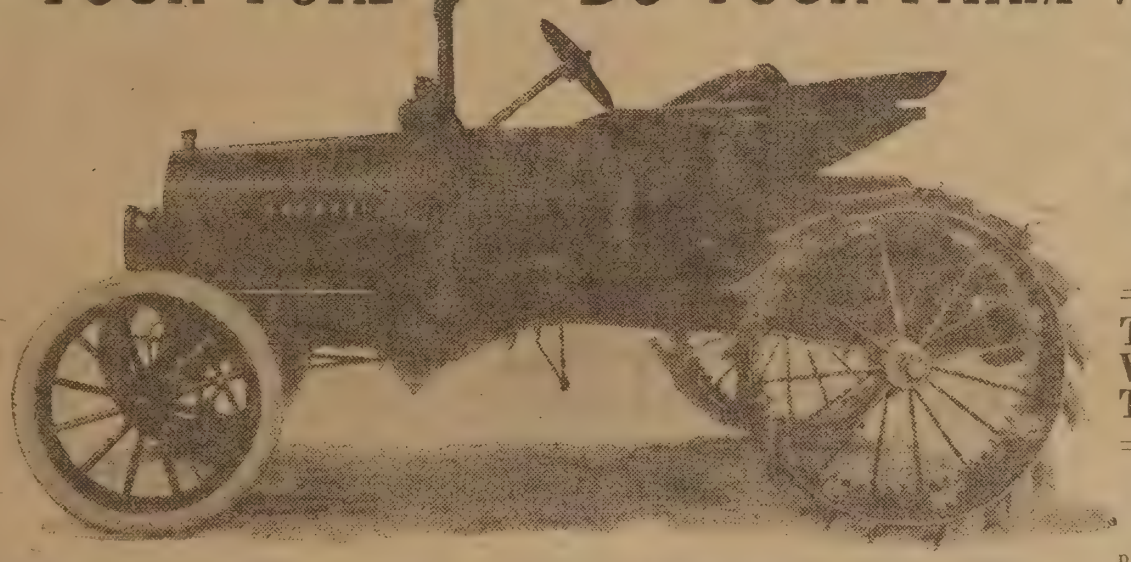
The **FEDERAL** is now made in five sizes with prices as follows, F. O. B. Spokane:

One Ton	**$1775.00**
One and one-half Ton	**$2250.00**
Two Ton	**$2475.00**
Three and one-half Ton	**$3200.00**
Five Ton	**$4250.00**

All models except one-ton have the four-speed transmission.

MAKE YOUR FORD DO YOUR FARM WORK

Common Sense, a Monkey Wrench, a Pair of Pliers is all that is Needed to Make the TracFord and Ford Combination



$160
F. O. B. SPOKANE

The Cost of One Horse Will Do the Work of Three Horses.

Nine Times Drawbar Power

A hardened steel roller pinion replaces the regular Ford rear wheels. This roller pinion engages an internal gear on the inside of the TracFord wheel rim. The result is a 9-to-1 reduction, which means that the speed of the Ford car is reduced nine times, thus increasing the power at the drawbar ninefold.

Where the TracFord Excels

The TracFord excels not only for open field work, but also as an ideal orchard tractor as well; the low construction permits the plows, disc, drag and harrow to be run close up to fences and trees. Our dead axle being placed in front of the Ford axle affords a short wheelbase, thus permitting the machine to turn in little space; in fact, the TracFord has a shorter turning radius than the Ford car to which our attachment is attached. All strain and pull is on the attachment. The combination of our attachment to a Ford makes a rigid, solid combination in every respect.

How to Get a Real Tractor for Little Money

Remove the rear wheels, fenders, rear springs and rear running-board and bore a single half-inch hole in the Ford frame on each side about half way of its length, replace the straight water pipe with our circulating pump to the left of the motor, then attach our TracFord equipment and you have a complete tractor, with which you can do everything that four horses will do—pulling plows, manure spreaders, drags, spring-tooth and disc harrows, drills, binders, corn harvesters, road scrapers, mowers, potato diggers and trailers. It is a wonder. The TracFord is not an experiment. In a single hour you can make the change and have a practical and economical tractor, which will cost much less to operate than four horses or mules. The TracFord has amazed us and it will surprise you. It has created a sensation and thousands of farmers are placing orders for the machine. The TracFord is simple in construction and you can easily connect the attachment yourself by following the instructions. The TracFord makes horses too expensive to keep.

Over 6000 TracFords Sold in Three Months

Good, live agents have the opportunity of getting their territory allotted now. Write at once and secure your agency.

Oldsmobile Co. of Washington

Distributors for the Inland Empire

1202-1204 First Avenue Spokane, Washington

COUPON

Fill in coupon, marking with a cross (x) before the item you are interested in.

Oldsmobile Company of Washington,
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Spokane, Wash.

Dear Sirs: Without any obligations to me, kindly send me:

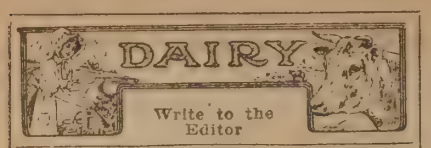
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A. B. NYSTROM, Editorial Contributor

Dairy Questions

Are Answered by A. B. Nystrom

We have a taste in our milk that we think comes from our silage, also in the butter. We feed silage after milkings, from a silo in the barn. The silage is whole hay, and has a very strong odor in the barn. It did not taint the milk when we fed it once a day, with roots, but our roots are gone, so we have been feeding the silage twice per day. What can be done to eliminate this trouble?

J. G., Ocosta, Wash.

If it is true that the silage odor in the barn is the cause of your not being able to make good butter, I believe that the only thing you can do is to see that very little silage is left in the manger and that the barn is properly aired. Is it not possible for you to shut off the silo chute so that the odor will not come directly into the barn? Aerating the milk should also help, and, of course, this should be done in a room that is strictly free from odor and dust. You can perhaps make better butter if you will use a starter in ripening your cream. This will tend to sour it in a shorter time, and perhaps the bad odors will not develop so easily.

Use of Rennet and Pepsin.

Will you advise me as far as possible as to the relative merits of a good starter, rennet and pepsin, in making cottage cheese? We have been using a starter entirely, but at times this seems to give a rather sour cheese. Does the use of rennet or pepsin make the cheese indigestible?

L. J. G., Seattle.

I have never used pepsin in making cottage cheese, but I have made this cheese with starter and with rennet, and I find that while the rennet extract makes a finer grained cheese it usually develops more acid than that obtained without the rennet, and the flavor is not nearly so good. I notice that you are getting a sour cheese by the use of starter, but I think that if you will control your temperatures properly you should be able to make the highest quality of cheese with the starter method.

We prefer putting the starter in at a temperature of 90 to 95 degrees F., and hastening the curdling process. If you ripen at a lower temperature the curd must be a good deal higher acid in order to have the curd firm enough. As soon as it is ready to cut we raise the temperature to about 104 degrees F., keeping the curd constantly stirred during this heating process. Continue stirring slightly for 30 to 40 minutes, when the whey may be drained off. The handling of the curd for the rest of the operation is, of course, the same as in handling any kind of cottage cheese curd.

Rennet cheese is not as digestible as is that which is made from good starter.

Silage the Year Around.

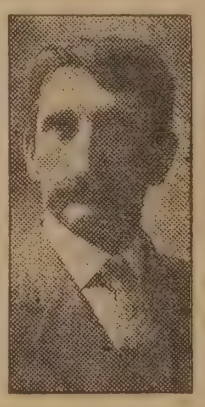
We will have very little or no pasture this summer, and were wondering if it would be advisable to feed ensilage all the year around. We wish to fill the silo with vetch for summer feeding or would field peas be better? About how much ensilage could we expect per acre if sowed with some other grain?

I. M., Moxee City, Wash.

We find that where it is impossible to get any pasture there is a decided advantage and no detrimental effects whatever from feeding ensilage all the year around. Vetch should make a food feed as silage, but I would prefer mixing it with some of the cereals, such as oats or barley, because we find that any legume makes better silage when mixed with one of these cereals. The field peas will make just as good silage as vetch, and while we have not had any experience at this station in making vetch silage, we have made some excellent pea and oat silage, and the kind that you should use would depend somewhat upon the yield that you can get. Our yields have been as high as 10 tons per acre.

Brown Swiss Is Dairy Breed.

Theo. Brugger of Gresham, Ore., breeder of Brown Swiss cattle, and a native of Switzerland, says: "Milk is now being sold from our plant to people who used to patronize saloons; there is no question but that prohibition is a help to the dairy business. Unless I want to predict general conditions, I would not predict the dairy market, as it is contingent on other conditions, but I think it is on the up-grade to stay. Still, a dairyman, to succeed, must raise most of his own feed. Brown Swiss cattle are more and more recognized as a dairy breed. At the same time, farmers now, more than ever, want a cow that has something to her besides milk. Brown Swiss put on flesh easily, are of good size. I sell readily all I can spare, most of the demand coming through my advertisement in the Oregon, Washington and Idaho Farmers, and Brown Swiss breeders all report a good demand. Our outlook is excellent."



Theo. Brugger.

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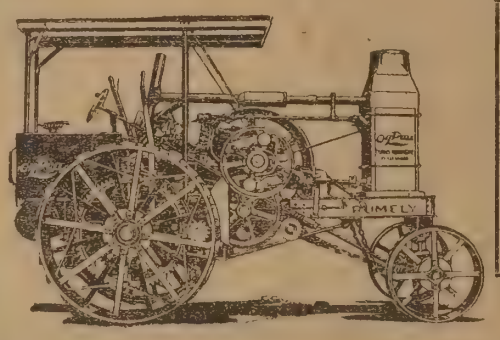
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Free Book Be sure to write today for a free copy of the "Home-Seekers' and Settlers' Guide," full of complete and authentic information. **A fortune is waiting for you.**

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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

Angora Goats

Mohair, Pasture and Breeding

To the Editor: I should like to find out something about Angora goats. How many pounds of mohair should an Angora goat produce? Is there much difference between the quantity and the quality? How about the price for the mohair, according to length? Is it necessary to have some kind of bushes in the pasture for them? Can they be kept like sheep? At what age can they be bred? How many females should there be to one buck? M. H. Vader, Wash.

Regarding the above questions, William Hislop, professor of animal husbandry at the Washington State college, says:

Professor Charles S. Plum, the well known live stock expert, states "that a registered Angora goat of good breeding will produce a fleece in a year that would weigh from five to six pounds." The average weight of fleece is two and one-half pounds. Inferior animals will shear about one-half of that weight. Both the quality and the quantity of the mohair produced is dependent directly upon two things: First, the breeding and individuality of the goat; second, the manner in which it is maintained. If the goat s poorly cared for at any particular season, the mohair produced will be poor. If the goat is well cared for throughout the entire year, the mohair will be most uniform. The care, feed supply and breeding determine the character and the quality of the fleece.

In reference to the price of long mohair, L. Levussove, 1523 Third avenue, New York city, an importer and manufacturer of mohair products, states that he is willing to pay $4 a pound for any part of the fleece where the staple measures 16 inches. He will pay $10 for mohair which measures 24 inches.

It is not necessary to have bushes in any pasture. Of course, it is better to have shade trees. For the most part, goats and sheep can be handled in a similar fashion, except at lambing time, when the goats are staked at different places in the kidding shed or about the pasture. They are kept staked for six or eight weeks, after which they are allowed to follow the flock.

Does may bred for the first time at 18 months of age. Forty to fifty females may be placed with one male, provided all are mature. A young buck will take care of 25 does his first year, with 40 to 50 the second, and 60 being about the maximum, depending upon the charactеd of the country or range and the vigor of the buck. The meat is marketable in any of the big packing centers. Packers buy it readily.

Veterinary

Dr. S. B. Nelson

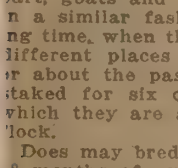
I have an old mare that has had bad feet for two years. Her hoofs break off in little pieces and she is very lame. I can not work her without irons at all. They break off clear up to the hair line. How can I cure a sweeney on a horse's shoulder? Odessa, Wash. D. G. R.

The trouble that you mention regarding your mare is a very serious one, and it would really take a personal examination to determine specifically what the cause of the brittleness of the hoof is. While you can get services from us in a general way, yet we can not definitely say that the treatment will be successful. However, I would recommend to you first to soak the mare's feet in a 3 per cent solution of creolin for say half of one day. The next day blister her just at the hair line about half to three-quarters of an inch wide, using the following blister: Red iodide of mercury, one part; cantharides, one part; lard, eight parts. After the blister has taken effect, which will take approximately three or four or five days, then begin painting the hoof with one part of lard and one part of pine tar. Heat the lard and mix the tar with it, then paint this just at the hair line morning and evening. It has taken a long time for the mare's feet to get into this condition and it will take a long time for them to get well.

For the sweeny, if it is just a light case, I would recommend rubbing it tolerably hard and picking up the skin once daily, also use her for light work, not for hard work. Sweenied horses generally do better if they are worked a little rather than letting them stand still.

I have a cow that was running with the herd that has not been doing very well. Noticing that she was getting thinner I gave her special care and one morning had to help her up. Now she can not get up at all.—J. L. R. Chesaw, Wash.

I wish you would advise me whether or not the cow is with calf and when you expect her to come fresh. Give details of just what you were feeding her when you noticed her getting thinner. I will be glad to advise you immediately.



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See the high narrow radiator, the double cowl, the sweeping body lines, the finish that denotes hours of patience and care. And provides beauty, not for a day, nor for a month, but for years.

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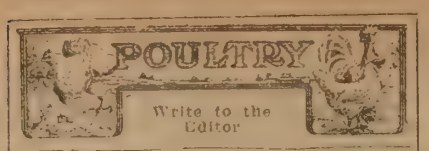
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JAMES ERYDEN
Editorial Contributor

SEASON FOR CHICKS
Brings Up the Same Old Troubles.

By O. G. SMALL.

The season for baby chicks, galore, is not far away, which gives rise to thoughts of the same old troubles of infertile eggs, chicks dying in the shell, hatched weaklings that live only a few days, and epidemics of white diarrhea. Every poultryman dreads these drawbacks, more or less, yet a very effective remedy has always been at hand.

It is safe to say that the increase in constitutional vigor, the more prolific egg yield, the quicker and larger growth of birds, the greater number of vigorous chicks hatched from a given number of eggs, would agreeably surprise the poultry keepers if they would refrain from mating breeders under 18 months old and none that had ever been infected with hereditary diseases, or that were closely related. This practice diligently followed up would almost entirely do away with these adversities, not to mention the fewer germs of tubercular nature that are transmitted from hen to man.

As it is; too many pullets matched late in the season are mated the following spring when 8 to 10 months old, male birds the same, although they can be matured ready for breeding in one year. Too many chicks also come from breeders closely related, or are hatched from the eggs of birds once badly infected with diseases of different character, the weakness of such breeders invariably being shown in the numerous puny specimens of the next generation. No pullet can be as strong as a two-year-old matured hen, all conditions but age being equal, and related blood can not give equal vigor of unrelated blood to the young, nor can breeders seriously weakened by disease sufficiently recover for their eggs, or the chicks hatched from them to escape being tainted with the same infection. Poultry is too short lived and is forced too hard for rapid yield to possess the vitality for quickly recovering from the ravage of infections developed to the last stages.

Strong embryo germs can be weakened or destroyed by eggs being exposed to extreme hot or cold temperatures; both before or after they are placed for incubation, and healthy chicks can be ruined for life through neglect after they are hatched.

Diseases that originate in constitutional weakness of breeders are deeply seated and difficult to cure, but infections starting with a cold or having their inception in filth, lack of proper nourishment, etc., will not seriously affect poultry if taken in time and the disease eradicated before it develops to dangerous proportions. If chicks could have a year and matured fowl at least six months in which to overcome unhealthy conditions before they are forced for yield, there might be fairly good chances for their eggs and young chicks to be healthy.

The conditions under which poultry must thrive are none too sanitary at the best, and in addition, they are subjected to the heavy strain of enforced abnormal yield which taxes even the most vigorous to the limit of their endurance. Much less should they be expected to supply the vitality for producing vigorous young when weakened by imperfect health. Constitutional vigor is the foundation for supporting heavy egg yield and for giving full strength to the succeeding generation, but when this foundation is undermined by disease, it is impossible to obtain thrifty poultry no matter how perfect the development of their other productive qualities.

The key note of good health is, not to breed baby chicks, father and daughter, mother and son, brother and sister, or specimens hopelessly diseased

Tells why chicks die

W. J. Reefer, the poultry expert, 466 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease over night and actually raises 95 per cent of every hatch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.

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and save your high-priced grain. "The fastest thresher and the best grain saver we have ever seen," says W. T. Wilson and three other farmers of Wanesville, Ohio.

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Battle Creek Michigan

White Diarrhea.

"In regards to the cure of white diarrhea in chickens I have some very good stock and several of them have got it somehow. Please let me know of a cure. J. H.,

"Paradise, Mont."

"There is no known curt for bacillary white diarrhea in chickens. The chick gets the disease from the egg from which it is hatched, the seat of the disease being the ovary of the hen. One diseased chick may infect a whole brooder lot. The infection is spread by the chicks picking up food that has come in contact with the droppings of the infected chick. The only way to be absolutely certain of the disease is to have a bacteriological examination made. You will be able to have this examination made, no doubt, by applying to the state experiment station.

The way to get rid of the disease is to get rid of the hens that lay infected eggs. A test, called the agglutination test, has been found very accurate in finding the infected hens. This test has been described in these columns before. A laboratory examination of a sample of blood shows whether the hen carries the disease or not. The poultryman can then kill off the infected hens. By breeding only from hens that have been tested and found free of the disease there should be no trouble from the disease in the chicks.

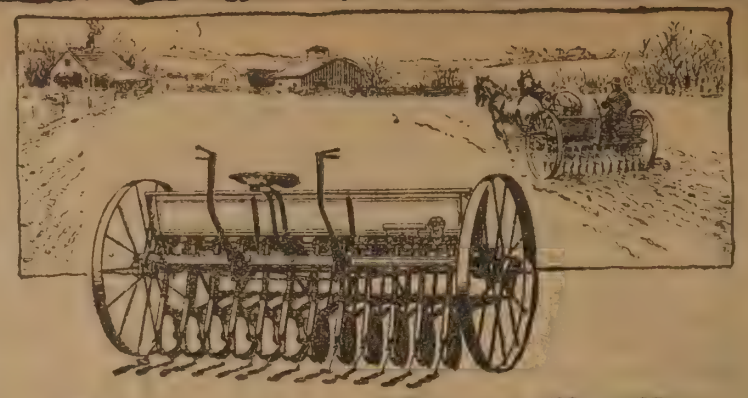
J. D.

A Color Question.

"My hens are White Orpingtons, and I have just bought a White Orpington cock and already have two Buff cockerels. There are over 30 hens. I'd like the pure White Orpingtons for next winter. Will the chickens hatched from these eggs show if they are pure White Orpingtons or if they are mixed with the Buffs?"

Buhl, Idaho. B. G. W.

No, it will not be possible to distinguish all the crosses from the pure Whites. White is a dominant color. The progeny of a cross of a pure white chicken with a black or a buff will be white, or a large percenetage of them will be white. As the White and Buff Orpingtons are similar in other characteristics, it will be impossible to tell the crosses from the purebreds in a large majority of cases. J. D.



Remember These Drills

WITH land values where they are today and crop prices at the top notch, it is a very important matter to handle every operation of your seed sowing and crop growing in the way that means getting every dollar of profit. Nowadays every bushel added to your harvest yield counts!

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These are the drills with the adjustable, fluted force feed that does the most accurate work measuring alfalfa, millet, broom and Kafir corn, small peas, navy beans, etc., as well as the usual small grains. They have a variety of furrow openers, interchangeable to fit your needs.

Your farm—no matter how "different" your soil or fields are—needs an **Empire Jr., Hoosier,** or **Kentucky drill.** This is a good time to know more about them. Send for our drill catalogues and folders. They are profitable reading.

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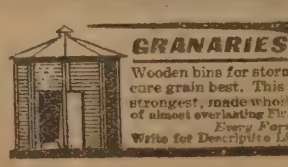


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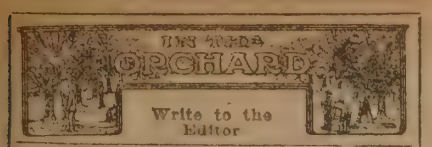


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Every Farmer needs good Grain and Feed Storage—that's Tung-Lok.
Write for Descriptive Literature. UNION LUMBER COMPANY, Box 300 Union Mills, Wash.



GRANVILLE LOWTHER
Editorial Contributor

Sulphur

Can Supply Our Orchard Needs

By GRANVILLE LOWTHER.

While I was in the south I learned that in Louisiana, near the gulf of Mexico, at Lake Charles, there is a deposit of sulphur that is perhaps the purest of any known in the world. I had seen samples of the Louisiana sulphur at the world's fair in St. Louis, but had forgotten it until my attention was called to it just a short time ago.

Now, since sulphur is one of the principal ingredients of the lime-sulphur spray, the fact that we have such a deposit in this country is important. Last year we shipped at great expense most of our sulphur used in the orchards from Japan. From the Encyclopedia Americana I copy the following:

"In the free state it occurs native in many parts of the earth, chiefly in volcanic regions, or in connection with gypsum and other allied rocks. The commercial supply comes largely from Sicily, though a considerable quantity is also obtained from the Chilean Andes and from certain parts of Mexico, China, Japan, India and the Philippine islands. The large deposits of southern Utah are now mined, and an extensive bed exists at Lake Charles, Calcasieu Parish, La. Three general methods have been employed for separating sulphur from the stony and earthy impurities with which it is usually associated in nature. (1) The 'ore' containing it may be heated to a temperature high enough to melt the sulphur and permit it to run out at the bottom; or (2) the 'ore' may be heated still more strongly, so as to cause the sulphur to volatilize and pass away in the form of vapor; or (3) the 'ore' may be lixiviated with a fluid (such as carbon disulphide) in which the sulphur is soluble, the sulphur being afterward recovered by evaporating the solvent. The method by melting is almost exclusively used in practice, the volatilization and solution methods being reserved for the subsequent purification of the product as first obtained by melting. The heat required for melting the sulphur in the original ore is obtained by various means. In some regions it is obtained by burning a part of the sulphur itself. This method is wasteful in sulphur, but it can be put into practice very simply, and hence its application does not call for skilled labor. In Nevada and California, and, to a more limited extent, in Italy and Sicily, the 'ore' is heated by steam under a pressure of 70 pounds or more, the yield by this method being considerably greater, though the expense of treatment is also much greater."

THE FARM GARDEN

Article 8.

The Garden Pests

Carelessness in many instances has resulted in the failure of some of the crops of the gardens. Cutworms, cabbage worms, turnip bugs, root maggots and the like must be combatted.

Some time ago Professor A. L. Lovett, crop expert of the Oregon Agricultural college, contributed the following directions for fighting these pests to one of the college's garden bulletins:

Cutworms—There is nothing better for cutworms than the regular poison bran mash—two pounds bran, one ounce paris green, two ounces sugar. Dissolve in water with a tablespoonful of salt. Place a heaping spoonful of this about each plant. Be sure to get the mash sloppy, as it will injure the plants if it packs.

Plant Lice—Use a solution of whale oil soap. Dissolve one pound of the soap in a gallon of boiling water and then dilute.

Leaf-Eating Insects and Worms—Make a dust of flour and paris green, using one part of paris green and 20 parts of the flour. Mix thoroughly and dust over the plants in the early morning, while the dew is on, if possible.

Cabbish and Radish Maggots—These are the small, dirty looking worms that often infest radishes, turnips and cabbage roots. Prepare a powder of five parts sulphur and one part tobacco dust. Treat the seed row with this powder when planting the radish or turnip seed.

Treating surface soil about the growing radishes or turnips with a lime carbolic solution will repel many of the maggots. This solution is prepared as follows: Slack rock lime and dilute to the consistency of whitewash. To one gallon of water add three pints of this whitewash and one tablespoonful of crude acid. Mix well and apply to the surface soil with a sprinkler. Repeat the treatment every 10 days.

When cabbage and cauliflower are set out, cut little tarred paper discs two and one-half inches in diameter with a slit running to the center. Slip over the stem of the plant and work them down flush with the surface soil. Where plants are already infested, use carbolic acid emulsion, prepared as follows: One pint crude carbolic acid, one pound whale oil soap, one gallon water. Dissolve soap in boiling water, remove from fire and add the acid with vigorous stirring. Dilute by using one part of this emulsion to 38 parts of water. Pour about the infested plants.

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Every pound of weight is placed where it counts in pounds pull. Simple construction—88 per cent of weight on the two drive wheels. Low in first cost and upkeep, too. Model "A," 8-16 H. P. Light Weight Tractor pulls 2 plows. Made a great 1916 record. **Write for Catalog.**

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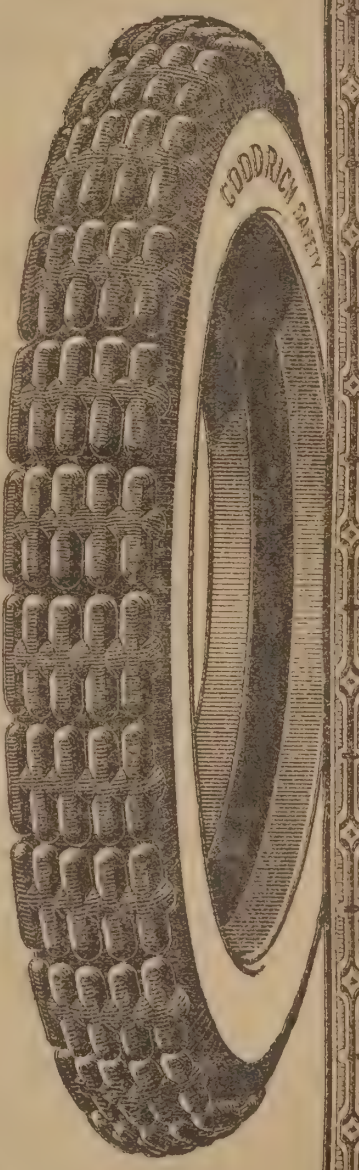
You must get full value service from a Goodrich tire, or Goodrich wants it back forthwith.

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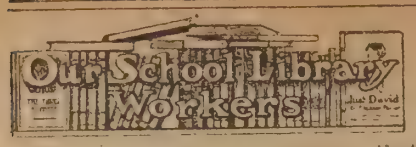
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"Best in the Long Run"



We are pleased to announce that Erma V. Bowman, teacher at Turner, Wash., will receive the book offered as a prize to the teacher whose pupils turned in the largest number of subscriptions on Library day.

The interest in Kittitas county still continues. Four new schools have taken up the work, and without doubt a fine report will soon be received from each Red and Blue team entering the field from the following schools:

Wasson school, Elma Wilson, teacher; Badger Pocket school, Anna Peterson, teacher; Montgomery school, Florence M. Foster, teacher; Hazelwood school, J. N. Spicer, superintendent.

Honor Roll.

Thelma and Alice Nelson, South Basin school, Orin, Wash.

Jennie E. Hughes, Pioneer school, Colville, Wash.

Charlie Landor, Pioneer school, Colville, Wash.

Some teachers have written us asking when the remainder of the books which they ordered will arrive. In most cases where books are ordered the full list goes forward at one time, but ofttimes there are a few books which are temporarily out of stock. In such cases an order is placed at once with the publishers and these books will be sent forward to the schools just as soon as they arrive, which is generally within two weeks.

Books have gone forward this week to the following teachers:

Noella Gendron, Toppenish, Wash.
Lucy Lindsay, Stevenson, Wash.
Sudie L. Lee, Colville, Wash.
Clara E. Gollehon, Ford, Wash.
Mrs. Clara Peterson, Everson, Wash.
H. W. Blackenburg, Colville, Wash.

W. F. Smith of Lake Bay, Wash., writes: The books all arrived in first-class shape and we are much pleased with the binding and print. Anything we can do toward furthering the introduction to your Washington Farmer will be cheerfully done.

There may be some of the boys and girls who would be interested in obtaining a nice flag for their homes. If they do and will write to "The Washington Farmer, care of the Bookman," we will tell them how to get one.

Individual Contest.

There is no change in the standing of the contestants this week, as reports have been delayed because of vacation week. But next week, when the reports are in, the change will be announced.

E. F. Benson, the Man

(Continued from page three.)

to engage in partnership with the late W. H. Babcock, then the wheat king of Washington, operating in the Eureka flat district, but who had bought three or four townships of railway lands near Trinidad and Quincy. The firm of Babcock & Benson finally acquired 86,000 acres of land and leased from the state about 20,000 acres more. This was stocked with cattle and sheep. This is probably the largest area of farming and grazing land owned by any individual or partnership in the state up to this time.

In 1905 he sold out his interest to Mr. Babcock and bought out the interest of Mr. Ankeny in the Prosser plant, moving to Prosser where he lived from 1905 to 1908, giving his entire time to the development of the irrigation plant, electric light and city water works and to his farming operations in that vicinity.

In 1908 he again entered the employ of the railway as chief land examiner maintaining headquarters at Miles City, Mont., until 1910, when he resigned as chief land examiner and moved back to Tacoma, but continuing in the railway company's employ as special land examiner until April 1st, when assuming the duties of commissioner of agriculture he resigned from the Northern Pacific's employment, having served that company in one capacity or another since 1889, with the exception of six years from 1902 until 1908.

In 1911 he sold out the power and light plant and the city water works at Prosser to the Pacific Power & Light company and has since been most actively engaged in improving the lands owned by him in that district. A dairy and sheep ranch near Prosser and a sheep ranch and winter range twenty miles north of Prosser constitute his principal ranch interests now.

From 1913 to 1915 he was receiver of the Hanford Irrigation company, having been appointed by Judge Rudkin, and during the last year has been receiver of the Attalia Land company, an irrigation pumping plant on the Columbia river between Pasco and Wallula.

Mr. Benson was one of the first presidents of the Northwest Live Stock association, acting in that capacity for two years, and has been actively identified with the fruit growing interests of the state, having been vice president for several years and president one year.

He was elected president of the Washington Irrigation Institute when that organization was formed four years ago, and has been elected president each year since. It is one of the very valuable agricultural organizations in the state and its reports are of such interest and profit that every irrigation farmer in the state should read them.

Mrs. Benson was a Boston girl. They were married in December, 1884, and have one daughter, Mrs. L. N. Knettle, of Pomeroy, and two of "the most interesting" grandchildren.

For more than two years past, it has been known that Governor Lister desired to get Mr. Benson to accept this office, but to abandon the railway work and neglect his own business seemed more of a sacrifice than he felt like making. The desire of Mrs. Benson to have him stay at home more than heretofore was one of the inducements that moved him to accept this work.

Gets Every Weed



Mulches and pulverizes, with greatest ease in handling and working. The

"Acme" Foot Lift Weeder

destroys all weeds, cutting deep as desired, and fills perfectly. It's knife edges, presented to the ground at a slicing angle, make draft easy. Foot lift lever clears off the weeds and lifts the blades for transportation. 5 sizes, cutting 5 ft. to 12 ft. wide. Write today for book, *"The Acme Way to Crops That Pay"*. Describes the entire "Acme" line.

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CHEAPER LAND CLEARING



A great artist was asked "With what do you mix your paints?" His reply was, "Brains."

Reducing land clearing costs is less a matter of lower priced explosives than of better use of explosives.

The Du Pont policy is (1) To make explosives as good as the knowledge of the world and our unsurpassed facilities permit; (2) To sell these explosives as cheaply as possible while maintaining the highest standard of quality, and (3) to tell users how to do their work with the smallest possible quantity of explosives.

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as is generally acknowledged, are unsurpassed for Pacific northwest requirements. Their prices are as low as explosives of such reliable quality can be sold on a basis of moderate commercial profit. To reduce land clearing costs use one of these highly efficient explosives by the money-saving methods described and illustrated in our book.



Developing Logged-off Lands

Every settler, farmer and orchardist should ask for a free copy. In addition to stump removal it covers boulder blasting, ditching and orchard blasting thoroughly, practically and plainly.

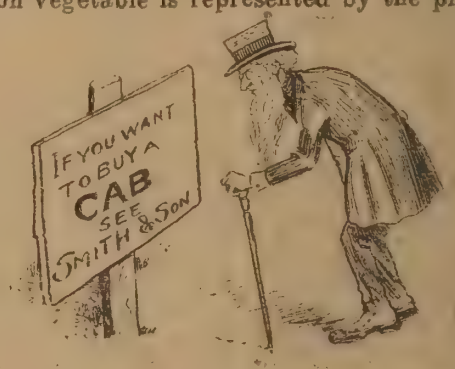
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SEEDS FOR PRIZES

What common vegetable is represented by the picture below?



Any person sending the correct answer to the above question before April 20th, together with $1.75, in the form of money order, 2-cent stamps or personal check, will receive THE WASHINGTON FARMER for 3 years and choice of any thirty of the packets of seeds listed below. The retail value of these is 5c per package, or $1.50 for the thirty packages.

CHECK THE 30 VARIETIES DESIRED

VEGETABLE SEEDS		FLOWER SEEDS	
Half Long Blood Beets	☐	Unwin Sweet Peas	☐
Detroit Turnip Beet	☐	Grandiflora Sweet Peas	☐
Golden Tankard Beet	☐	Sweet Alyssum	☐
Mammoth Red Beet	☐	Calliopsis, mixed	☐
Early Cabbage	☐	Four o'Clock	☐
Late Danish Cabbage	☐	Mignonette	☐
Oxheart Carrot	☐	Morning Glory	☐
Yellow Giant Carrot	☐	Dwarf Nasturtium	☐
White Plume Celery	☐	Tall Nasturtium	☐
Long Green Cucumber	☐	Phlox	☐
Pickling Cucumber	☐	Rose Moss	☐
Head Lettuce	☐	Sea Lavender	☐
Early Curled Lettuce	☐	Garden Sunflower	☐
Rockyford Muskmelon	☐	Verbena	☐
Monte Cristo Watermelon	☐	Poppy	☐
Australian Brown Onion	☐	Snapdragon	☐
Yellow Danvers Onion	☐	Rock Cress	☐
Long White Parsnips	☐	California Poppy	☐
Sugar Pie Pumpkin	☐	Larkspur	☐
Field Pumpkin	☐	Baby's Breath	☐
White Tipped Radish	☐	Pink	☐
Early Long Radish	☐	Sweet Rocket	☐
Chartier Radish	☐	Sweet William	☐
Purple Top Turnip	☐	Wallflower	☐
Longstanding Spinach	☐	Bachelor Button	☐
Crookneck Squash	☐		
Hubbard Squash	☐		

If you are not awarded a prize of 30 packets of seeds your money will be refunded. The subscription may be new or renewal, for yourself or some one else. Address

Seed Editor The Washington Farmer

Review Building, Spokane, Wash.

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With one hand stroke the hair the wrong way, with the other sift in Dr. Hess Instant Louse Killer. Rub well into the skin. Try it and see how easily you can rid your horses, cattle and calves of lice. You'll find

Dr. Hess Instant Louse Killer

an excellent thing in the poultry yard. Sprinkle freely in nests, on roosts, about pens, yards, houses, run-ways. Don't fail to put it into the dust bath. That's the easy way. Fowls and chicks will work it all through their feathers—no guilty louse escapes. It comes in handy sifting-top cans.

1 lb. 25c; 3 lbs. 60c (except in Canada)

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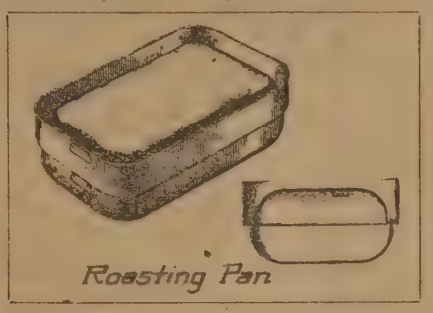
may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Cooking Utensil.

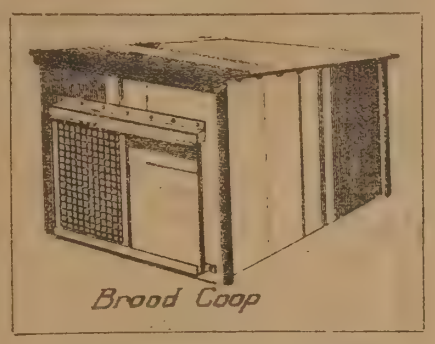
This self-basting roaster is similar to others, except that the space above the cover can be filled with water. This keeps the cover at or below the


Roasting Pan

temperature of boiling water and thereby prevents the top of the meat from burning and causes the condensed vapors to baste the meat.

Brood Coop.

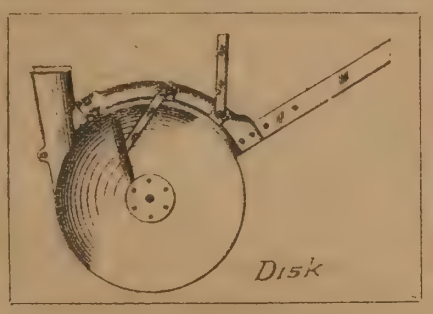
This sheet metal coop can be quickly set up or knocked down; the roof and floor are separate pieces, but the sides


Brood Coop

fold together on their rolled edges. It has two doors, one solid and the other of netting, which slide in parallel channels.

Single Disk Furrow Opener.

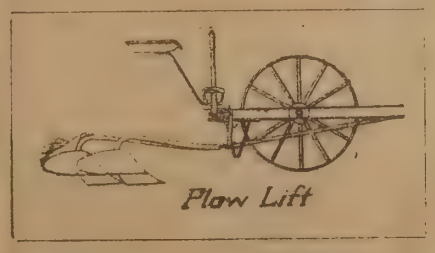
The improvement here is in the arch which supports the boot and toe scraper. It is made of pressed steel which has sufficient resiliency to hold the


Disk

scraper against the disk under all circumstances, and at the same time has sufficient rigidity to support the boot and scraper properly.

Plow Lift.

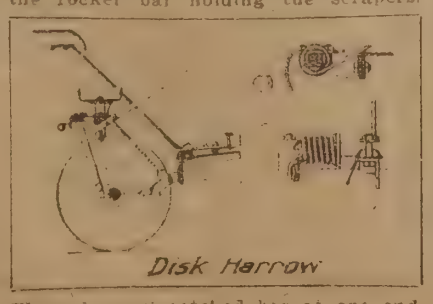
A traction engine sinks when it strikes soft ground and the plows cut deep; the lift shown here enables the


Plow Lift

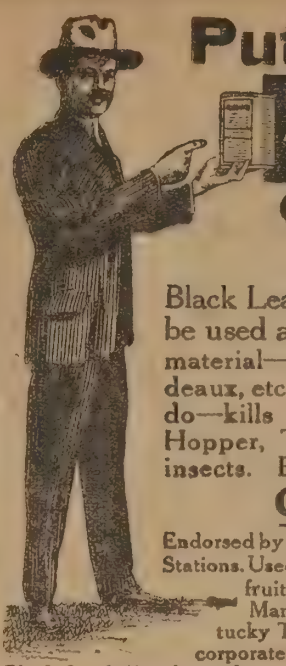
operator to avoid this by lifting the forward end of the plow beams at the proper time.

Disc Harrow.

The improvement on this harrow lies in the springs, on the scrapers and on the rocker bar holding the scrapers.


Disk Harrow

These have a notched bar at one end, by means of which they can be tightened or loosened as desired.



Put Black Leaf 40 Kills Aphis

40% Nicotine

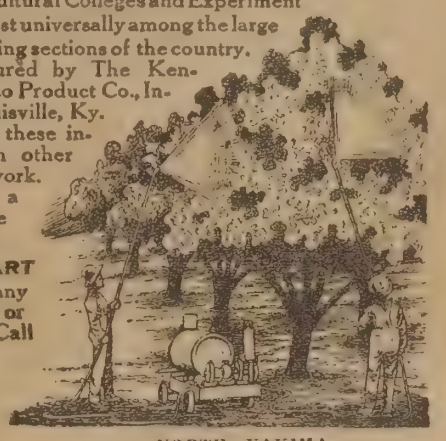
On Your Spraying Schedule

Black Leaf 40 is a spraying solution that can be used as recommended with other spraying material—Lime-Sulphur, Arsenate of Lead, Bordeaux, etc. It does what these solutions cannot do—kills Aphis, Woolly Aphis, Red Bug, Leaf Hopper, Thrips, and other soft-bodied, sucking insects. Black Leaf 40 helps you

Grow Better Fruit

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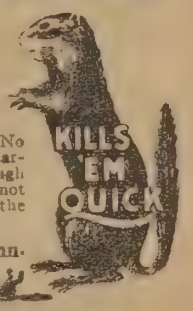
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Sure Death. Rodents like its odor and its sweet taste. The tiniest particle kills instantly. Easy to use. Simply stir into moistened oats or ground feed and drop into holes. Safe. No danger in handling. Scatters no weed seed. Money back Guarantee printed on every package. 2 sizes, 50c and $1.00, enough for 40 and 100 acres. Get it from your local dealer. If he cannot supply you, we express $1.00 size prepaid upon receipt of the price. Write for Free Squirrel Book.

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You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter to The Washington Farmer, Review Building, Spokane, Wash.

When you write to advertisers, be sure to say that you saw their advertisement in this paper.

Seven Billion Dollars

Is Appropriated to Carry on the War

Without an opposing vote, the house of representatives in congress, which has the power to make all appropriations, last week voted to raise $7,000,000,000 with which to carry on the war into which this country has been dragged. Of this huge amount, $5,000,000,000 will be raised by a bond issue, and $2,000,000,000 by the issuance of treasury certificates.

The government proposal for raising the funds with which to meet the bond issue and the treasury certificate issue is to extend further the income tax principle, and levy stamp taxes on all manner of so-called luxuries such as tobacco, cigars, liquors, patent medicines, perfumeries and the like. It has also been suggested that postage rates be increased from two to three cents on letters, and proportionately on other mail matter. It is argued that this would distribute the taxes more evenly than almost any other possible method. It is likely also that notes, checks, drafts and the like will be subjetced to war taxes also.

Neutral Nations Involved.

Following the example of the United States, a large number of the other nations until now attempting to be neutral, are taking active interest in the war. Cuba has formally entered into it. Brazil has severed diplomatic relations with Germany; Argentina is on the verge of similar action; the little republic of Panama has announced to the United States that its resources are available to help protect the Panama canal; even from Mexico comes semi-official word that that country is opposed rather than favorable to the German regime, and is friendly toward the part the United States is playing. Spain is on the verge of severing diplomatic relations with Germany.

Roosevelt Wants to Go.

Former President Roosevelt has asked congress for permission to organize an expeditionary force of men to sail for the fighting lines in France at the earliest possible date. He says he could put the United States flag on the firing line within three or four months.

Meantime, the plans and preparations are going forward for the development of a great army on the principle of universal service. It is proposed to raise not fewer than 500,000 men by voluntary recruiting of the regular army and the national guard, after which compulsory service applying to men from 19 to 23 years of age would be put into effect. The age limit would be raised as the numbers in the army were increased.

Allies Make Gains.

Continued reports come of victories by the armies of England and France over those of Germany and Austria. For more than a month, gains have been reported daily, until a considerable portion of the territory taken by Germany from France, has been recovered. Whether the retreat on the part of the Teutonic forces is one of necessity or of strategic planning is a question.

Hints of Peace Heard.

During the last week rumors of a d desire for peace on the part of Bulgaria and Austria, allies of Germany, have been heard. It is said that these nations have made diplomatic overtures to neutral representatives looking toward the possible discussion of peace. No results of this nature have been seen, however.

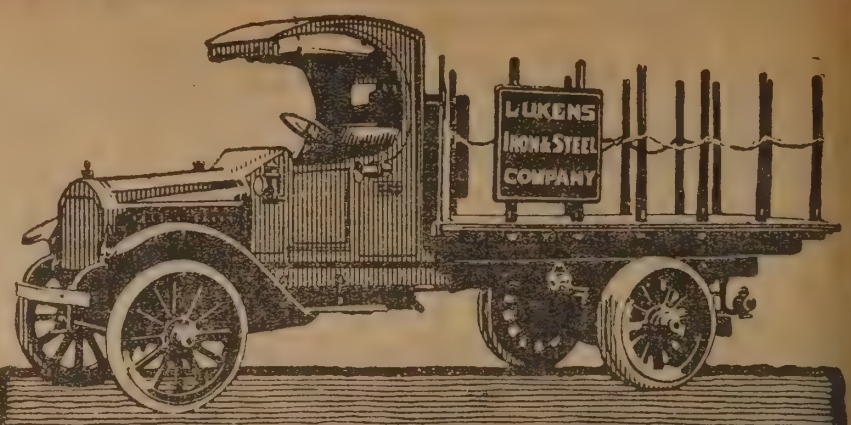
Spokane Cannery Assured.

Announcement has been made that the proposed by-products plant at Spokane will be ready for operation within two months, when it will open under the supervision of W. H. Paulhamus of Sumner, for the handling of vegetables and fruits.

The first article handled will be spinach, of which 28 acres have been pledged by growers. Other fruits and vegetables pledged by growers include 500,000 pounds of strawberries, 1,000,000 pounds of tomatoes, 300,000 pounds of beans, 200,000 pounds of sour cherries, 200,000 pounds of Royal Anne cherries, 100,000 pounds of prunes, 10,000 pounds of dewberries, 50,000 pounds of gooseberries and 100,000 pounds of Bartlett pears.

Thomas Carmichael.

In last week's issue of The Farmer there appeared an error in the identification of the photographs of the men who are leading in the promotion of the Pacific National Dairy show, which was recently organized at Portland. In the grouped photographs both No. 7 and No. 9 were inadvertently made to read as Walter K. Taylor, Corvallis, Ore., a director. No. 9 should have been identified as Thomas Carmichael, Gaston, Ore., a director.



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Capacities: 1 to 7½ tons

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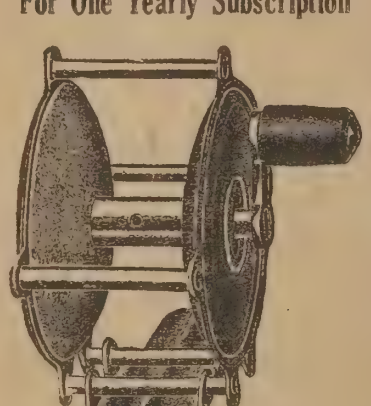
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Send one order for a new or renewal subscription to The Washington Farmer at the special three-year rate of $1.50, and we will send your boy or girl a certificate of membership and all details concerning the club.

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Advice by mail if desired.

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Cliff House and Seal Rocks, San Francisco.

SS. Northern Pacific leaves Flavel-Astoria upon arrival of connecting steamer express from Portland and Spokane, and reaches San Francisco, 3:30 p. m., next afternoon. Fast time, superior service. Low fares include meals and berth on ship.

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Rain Proof — Rat Proof
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THE SAFEST WAY TO STORE GRAIN

Metal Wagon Boxes and Portable Grain Loaders save grain and labor

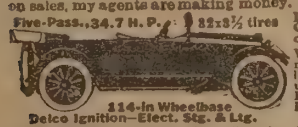
Write for information—Department C

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Bush Car Delivered Free

Ride in a Bush Car. Pay for it out of your commissions on sales, my agents are making money. Shipments are prompt. Bush Cars guaranteed or money back.



Write at once for my 48-page catalog and all particulars. Address J. H. Bush, Pres. Dept. 4-I'H

114-in Wheelbase
Delco Ignition—Elect. Stg. & Ltg.

BUSH MOTOR COMPANY, Bush Temple, Chicago, Illinois

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

Enormous Loans Asked Under Government Act

(Continued from page four.)

passed a period of work that brings slow results. However, we shall be actually loaning money to farmers as soon as possible. The directors are working hard and leaving nothing undone to accomplish an early relief to farmers who are waiting for funds to develop their land."

Four hundred national farm loan associations have been organized, or are in process of organization, in this district. Since $20,000 is the smallest sum that an association may borrow, this would mean that the system will start off in the four states of Montana, Idaho, Washington and Oregon with a demand for more than $8,000,000. Probably the average association will want $40,000. On that basis the Spokane bank would have to supply $16,000,000.

Its capital of $750,000 will mean only a beginning. When that is loaned it will have $750,000 in mortgages in its vaults. Against these it will issue and sell $750,000 of bonds at par, and that $750,000 will then be invested in more mortgages. Against these additional mortgages more bonds will be issued and sold, and thus the process will go on in an endless chain.

Necessarily considerable time will be needed for the bank to appraise and examine the thousands of farms that are to be mortgaged, and time will be needed to market the bonds. It therefore looks as though it will be several months before the bank will be able to meet all the demands that are now before it.

An association must have not less than 10 members, so that if all of the 400 associations were down to that minimum there would be 4000 applications to examine and farms to appraise.

But $8,000,000 or $16,000,000 is only a small fraction of the great sums now loaned on farm mortgages in these four northwestern states. Data compiled by the federal farm loan board at Washington show that more than $117,000,000 is now loaned on the farms of these states.

Following is the compilation believed to show, in a general way, the facts as to the volume and average rate of interest on farm loans in the several states, state by state:

State.	Present volume of loans.	Present interest. rate.
Maine	$ 13,727,000	6.2
New Hampshire	6,100,000	5.3
Vermont	17,113,000	5.6
Massachusetts	24,000,000	5.6
Rhode Island	2,514,000	5.9
Connecticut	17,013,000	5.7
New York	168,234,000	5.6
New Jersey	35,610,000	5.8
Pennsylvania	130,678,000	6.1
Ohio	130,678,000	6.1
Indiana	132,325,000	6.2
Illinois	355,802,000	6.0
Michigan	118,950,000	6.6
Wisconsin	206,681,000	5.8
Minnesota	145,181,000	6.8
Iowa	469,063,000	5.9
Missouri	223,107,000	6.8
North Dakota	100,364,000	8.7
South Dakota	92,467,000	8.0
Nebraska	165,015,000	7.1
Kansas	180,706,000	6.9
Delaware	6,857,000	5.6
Maryland	22,393,000	6.1
Virginia	25,007,000	6.8
West Virginia	78,725,000	6.4
North Carolina	21,005,000	7.7
South Carolina	24,967,000	8.4
Georgia	29,711,000	8.7
Florida	4,490,000	9.6
Kentucky	41,305,000	7.1
Tennessee	25,468,000	7.9
Alabama	25,943,000	9.4
Mississippi	34,419,000	8.5
Arkansas	21,023,000	9.6
Louisiana	21,141,000	8.6
Oklahoma	73,129,000	8.4
Texas	184,321,000	9.0
Montana	17,111,000	10.0
Idaho	21,568,000	8.9
Wyoming	7,148,000	10.0
Colorado	36,767,000	8.9
New Mexico	4,685,000	10.5
Arizona	4,161,000	9.4
Utah	6,818,000	9.0
Washington	43,470,000	8.7
Oregon	35,535,000	8.0
California	124,752,000	7.6

From the foregoing table it appears that Washington has $43,470,000 in farm mortgages, with an average interest rate of 8.7 per cent. The federal land banks will loan at a uniform rate of 5 per cent. If all the farm mortgages in this state were on a 5 per cent basis, the total annual saving would be $1,607,390.

Oregon has $35,535,000 in farm mortgage loans, with an average rate of 8 per cent. Its saving would be $1,066,050 a year.

Idaho farmers pay on the average of 8.9 per cent on $21,566,000. Their yearly saving would be $840,974.



"The Bull With the Pull"

The Tractor That Increases Crop Yields

If you got nearly three times as much wheat per acre as your neighbor on the same kind of land, by plowing with a Big Bull Tractor, would you be convinced that the "Big Bull" does increase crop yields with the subsoiling feature of its single bull wheel running in the furrow?

Then listen to this—Mr. S. R. Conner, Pauls Valley, Oklahoma, raised approximately 26.27 bushels of wheat per acre on his Bull Tractor plowed land in 1916, while his neighbor, plowing with horses in adjoining field, secured only 9 1-3 bushels per acre. He also raised 53.84 bushels of oats per acre, while his neighbor got 31 bushels. Another neighbor of Mr. Conner's, with the same kind of soil, raised 10 bushels of wheat per acre. We have sworn affidavits from everybody concerned in this case.

Furthermore, we have hundreds of other reports from Bull Tractor owners showing

Crop Increases of From 10% to 33⅓%

as a direct result of the "Big Bull" subsoiling feature.

Does it pay to delay any longer in ordering your "Big Bull," when by so doing you are losing maybe more than its cost in one season?

Burns Either Kerosene or Gasoline

The subsoiling feature is only one of many exclusive advantages you get in the "Big Bull."

There's a distributor at your farm implement trade center. Order now to be sure of getting your machine when you want it.

FREE Write for 3 months' free subscription to the Monthly Tractor Bulletin.

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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER VII.

SITTING on the coupling pole of our prairie schooner I bade farewell to my Blue mountains. Our wagon was a stout-wheeled, springless affair with arching bows fitted into metal sockets on either side of the wagon box and covered over with strong, white canvas, which was as yet unsoiled by the gray road dust. The front and rear pair of wheels were held together with a connecting pole of stout oak, the coupling pole; and the coupling pole extended out from under the wagon bed a couple or three feet. On the end of this pole I rode, balancing with the adeptness of a nine-year-old, and kicking at the sage brush and tall bunch grass which grew in the middle of the road and brushed my bare feet and legs.

We had crossed Snake river at Lyon's cable ferry and pulled up the steep hill on the ridge of which I had my farewell look at the far away Blue mountains with their imagined giants and fairies, and wild animals of the kind pictured in my story books; and their forest clad slopes and wonderfully high summits which were crowned with snow till late in summer. We were pulling out of the Walla Walla valley in midspring, and the snow still blanketed the highest of the distant mountain tops. As we passed over the ridge the distant mountains sank from view till only the snow-capped summits lingered above the southern skyline; and the whiteness of them was by distance and the slight haziness in the air, colored gray—not greatly different, after all, from the gray-green ocean of bunchgrass spread all around, and indistinguishable except to my sharp boy's eyes that followed sadly the sinking of the distant mountain summits. Father and mother had told me that we were going a long way into the grayish green ocean of bunchgrass to find a home—and that I might never see the Blue mountains again.

I thought of that home a great deal. I supposed that when at last we found the place we wanted, we would drive up and be welcomed by the people who had prepared our home for us. There would be a nice white house, a windmill, a creek with lots of trees and shade and fish and birds' nests; there would be lots of ducks and geese and guineas and turkeys—all stealing nests out in the brush! I would find their hidden nests at once. Also, there would be a lot of children for me to play with, and a school house just like the old union school in Walla Walla valley near Aldrich's place on Dry creek. I had it all pictured out—knew just what kind of a home we were going to.

Mother occasionally called back to me to see if I was still sticking to the coupling pole. Always I was. Mother and father filled up most of the wagon seat, which had springs of a kind—the only springs about our outfit! That left me to ride back under the canvas on the bedding or horse feed, and the perpetual jolting wearied me. The coupling pole had a little spring in it; so I rode it as much as half a day at a time, and only once when the bind wheel rose over a big rock and dropped into a deep chuck-hole, was I shaken loose. In falling, I hit my head on the rock that had unseated me from the coupling pole, and would have cried, I suppose, but for the fact that at that moment the team began to trot downhill, and I had to run to catch up and clamber on the coupling pole. By the time I had done this, the hurt had subsided, and it did not seem worth while to cry. Also, if I did cry, I might have to explain; and an explanation would likely lead to my being ordered up under the canvas to ride on the horse feed. So I rubbed my bruised head in thoughtful silence, and that evening was noncommital when mother wondered how in the world that big bump got on my head.

Day after day we jolted on, and so far as I could tell ,one day's travel was precisely like the others. About us were miles and miles of bunchgrass, with wild horses and cattle grazing in the distance. We passed Indians, young and old, riding their small, wiry ponies of most outlandish colors. Some of the Indian ponies were yellow or "buckskin" with black mane and tail and a black or a brown streak along the spine. Such horses often had a white and a dar keye. I was told that a horse with a white eye and a streak down his back, was bad. Others of the Indian ponies were white and black in huge, irregular patches, or white and sorrel in huge, irregular patches. I was told that one seldom, if ever, saw a pony of three colors in these big, irregular patches. Such ponies were called "calicos."

The Indians always, or nearly always stopped and wanted to trade something. They would trade horses, blankets, beaded moccasins—anything, almost. They had ropes made out of horsehair twisted together not unlike hemp rope. If a band of Indians camped near where we were camping, several of their number usually strolled over our way and wanted to know something about the road; which road to take to this or that place, how far to the next water, and so on. All the while the rascals knew perfectly well the information they pretended to seek, for they and their ancestors, and ancestors' ancestors had for generations uncounted roamed these very bunchgrass hills.

Also, they often wanted to borrow something, which might be a pan, a water bucket, a pair of horse "hobbles," stake ropes, axes, anything they saw. Often they would nudge you off to one side and slyly ask for "fire water," showing money, perhaps, and rubbing their stomachs and smacking their lips in anticipation. Such a request was always accompanied by a devout "Me no tell," for in this country selling whisky to an Indian was equivalent to shooting up a town or stealing your neighbor's cattle.

They were not hostile, however, and honest so far as I can remember. Unfailingly they brought back the things they borrowed before we broke camp the next morning. Very seldom did the borrowed articles show ony signs of having been used. The Indians simply were curious about the "Boston men" and desired an excuse to hang about his camps.

The night we camped at Snake river preparatory to ferrying over the next morning, the Indians living on the sandy point between the juncture of the Palouse and the Snake, on the other side, were holding a war dance—not a real war dance, perhaps, though the whites called it such. It was a ritualistic, tribal dance in celebration of something or other connected with the Indians' superstitutions or religion. There were thirty or forty of them I think. We could see them across the river leaping in circles about a bright campfire, running first this way and then another. All the while they kept up a queer, changing yelling which at times rose to a wild screeching that echoed fantastically in the deep canyon of the Snake. Accompanying this was a steady rattling sound—deer's hoofs being cracked together, I think; and there was the incessant beating of some sort of drum. They kept it up for a couple of hours.

While we were grouped about our own campfire listening, the ferryman, Mr. Lyons, came over to talk. He told father that the chief of the tribe was called "Old Bones." Bones had lived there about a hundred years, he thought. He was wrinkled, toothless, skinny and blind, but could hop like a cricket. No doubt Bones was over there now, hopping around and yelling with the rest of the Siwashes. Nobody knew how long the Indians had lived on the sand bar; but he supposed they had been there always, long before Columbus discovered America.

The conversation drifted on in this wise for some time, while I listened breathless and eager, drinking in every word. Some of the Indians living over there owned hundreds of horses, Mr. Lyons said, and sold a good many of them. Once in a while a Siwash got stylish and built a house; and then took up his residence beside it in the teepee dwelling of his forefathers while his various dogs inhabited the house in summer, when it was hot and in winter when it was cold. One of the Indian families had moved into a new house and lived there for a year, till a member of the family died, then out they went, and now, drunk or sober, not a member of the family, or any other Indian of the tribe, could be dragged into the house. They all thought that the dead Siwash's spirit was in the house and unable to get out. It had never occurred to the idiots that the spirit of a dead Siwash ought to be able to get out of a house by the way of doors or windows, the same as could the living Indian himself.

The men talked on till late in the night. Finally the Indian fire across the river died low, and our own fire died to embers. The red men yelled singly and in chorus a few times more, and the echoes tossed wierdly back and forth in the deep, black canyon of the Snake—wierd, clamoring, fading tones like the voices of Indians dead generations ago and speaking out of the illimitible drifts of time that were the wandering-places of their souls.

The ferryman left us presently. Mother called me to bed; and soon I was dreaming that an Indian with a big hatchet and painted face was chasing me.

The Will, the Way

(From Child Betterment.)

If you think you are beaten, you are;
If you think you dare not, you don't.
If you like to win but you think you can't
It's almost a cinch you won't.
If you think you'll lose, you're lost;
For out of the world we find
Success begins with a fellow's will.
It's all in the state of mind.
If you think you're outclassed, you are;
You've got to think high to rise,
You've got to be sure of yourself before
You can ever win a prize.
Life's battles don't always go
To the stronger or faster man;
But soon or late the man who wins
Is the one who thinks he can.

Geologist the Real Water Witch

By RICHARD HAMILTON BYRD

Thousands of people are firm believers in the potency of the apple twig or the peach, or witch hazel fork in the hands of certain people for locating wells or water veins. Yet the Geological Survey would seem to dispose of the question with the summing up popularly expressed, that "there's nothing to it." There are other water witches who are entirely honest and who instinctively know where water ought to be, but who are of such an intense psychic temperament that when they walk across a place they have subconsciously selected, the forked twig in their hands turns and twists irresistibly. But the geologist feels positive that the water twig in itself is a fraud, because he can, without it, by a study of the rock outcrops, the "lay of the land," etc., himself tell where the drill will strike water, and he even makes under ground maps covering whole regions showing the depth at which water will be found.



Use of divining rod in metal prospecting. Old print of year 1580.

The water-witch prophet usually confines his guess to a few score of feet beneath the surface, possibly 100 feet, but the geologist takes a look of a thousand feet down through the solid earth and rock or even more. Geologic "guesses" have been made to a depth of 3000 feet and with no well nearer than 50 miles, and upon drilling they have proven within 1 per cent correct. If you have dug a well 30 feet deep and quit because you failed to get water, you haven't 'ost a fortune; but if you are ready to go 200 feet before quitting, write the geological survey by all means. Many a well has been drilled 100 or 150 or 250 feet by some town or institution through hard rock at big expense with an entirely dry result, and then the geological survey has been appealed to. Too late, except to receive the advice perhaps that the rock is dry for another 1000 feet, but that a few rods to the east or the west plenty of water will be struck at 60 feet.

Rough Lawns

Easy to Make Smooth in Spring

By R. W. ALLEN

Superintendent Umatilla Experiment Farm.

It is not difficult at any time during the growing season to smooth a rough lawn. The most desirable time, however, is in the spring, about when the grass begins to grow. At the time all the slight irregularities in the surface of the ground can be seen readily, which is not always possible later on.

By filling all the depressions with loose, fine soil, the grass readily comes up through it, binds it down and renders the work immediately permanent. Where severe winds tend to remove soil placed on the lawn in this way, the low places can be filled after the grass has grown to two or three inches in height, so that it will stand above the loose soil and protect it from the wind. Deep holes can be filled in one season by filling in part at a time.

Raised, or high places, can best be removed by taking up the grass sod and removing sufficient soil to cause the surface of the land to be flat when the sod is replaced and firmly tamped down. This operation can be done quickly with a sharp spade or with an ax to cut the sod and a shovel to take it up and remove the necessary amount of soil to make the place level.

New War Munitions.

Going to the grocery where she deals, a woman of Irish nativity recently purchased a dozen of eggs for 30 cents. Going back a week or so later, she again bought a dozen of eggs, and to her amazement the grocer charged her 45 cents.

"Why, my dear woman," explained the grocer, "eggs have gone up on account of the war."

"Don't be tellin' me that," was the rejoinder. "Ye can't make me believe they're fightin' with eggs over there."—Chicago Journal.

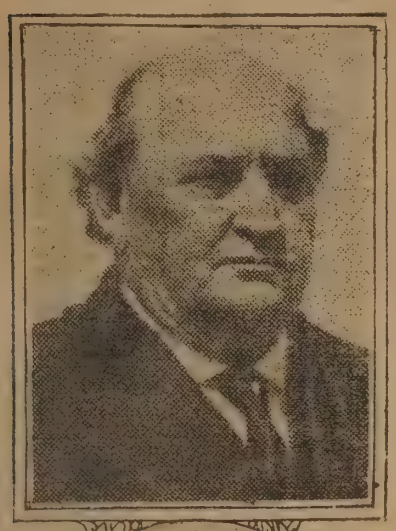
Expert at That.

"Some of those foreign potentates would starve to death if they had to earn their living at a trade."

"Oh, I don't know. The kaiser, for example, has had a lot of experience as a decorator."—Boston Transcript.

All the World's a Stage, and All the Men and Women Merely Players

Father and Son in Congress.





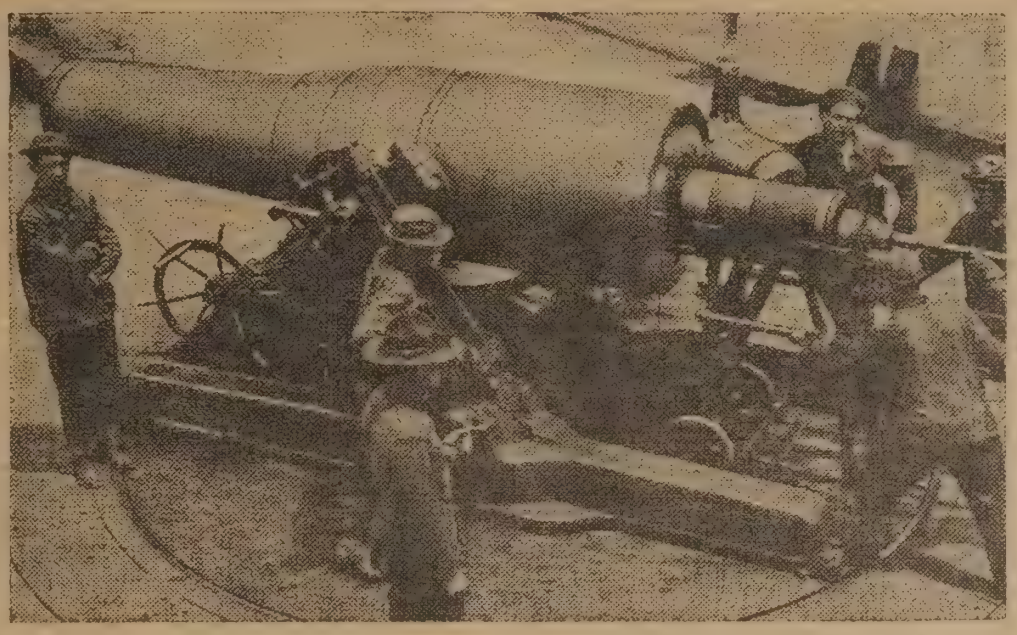
Alabama is pleased with Senator John H. Bankhead's 33-year-record in congress. That is why, for the first time, a father and son are sitting in the same congress. Representative William B. Bankhead is the sequel in this case. Alabama is "mighty proud" of its father-and-son combination.

Secretary to Premier.



Miss F. L. Stevenson, secretary to Premier Lloyd George of Great Britain, has the distinction of being the only woman secretary to a premier in the world today. Miss Stevenson is entrusted with many of the cares of state that rest upon the shoulders of Premier Lloyd George.

Steel Bodyguard of Uncle Sam



Copyrighted by International Film Service.

The above picture shows soldiers loading the big projectile into one of the 12-inch mortars at Fort Andrews, one of the protecting forts that surround the entrance of Boston harbor.

The general public is little aware of the preparations for coast defense that have been made, not only since the beginning of the war, but during past years.

Sunday's Son to Enlist.



George Sunday, a son of the famous evangelist, says that he will give up his job as his father's campaign manager and offer his services to his country.

Hurry Naval Commissions



Copyrighted by International Film Service.

The critical state of our relations with Germany has caused the naval authorities to advance the date of the graduation of Annapolis naval cadets by several months. The picture shows Secretary of the Navy Daniels handing a diploma to Ensign Clarence O. Ward.

Give War Hospital to Nation



A completely equipped hospital base unit, which will have 500 beds, 20-odd physicians, 50 nurses and a total working personnel of about 125 persons, has been presented to the government of the United States by Charles H. Mackay and his mother, Mrs. John W. Mackay. The equipment, which cost about $40,000, is now ready and in a few days the hospital will be prepared for action in case of necessity arising out of war with Germany. Most of the staff physicians and nurses have been selected from the Roosevelt hospital. The hospital will be known officially as the "Red Cross Base hospital No. 15." It will be operated under the direction of the Red Cross society.

Throughout the war the work of the hospital and Red Cross corps on all the battlefields has been the one bright spot, the one redeeming feature, the one unquestionable evidence that out of the titanic struggle will emerge a more humane humanity.

Another Call.



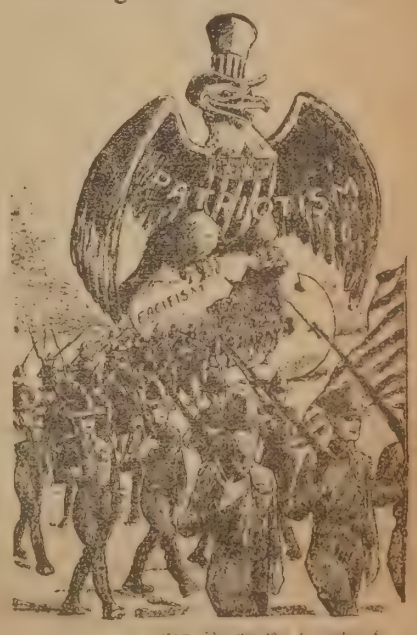
Los Angeles Times.

Spoiling Jackie Horner's Game.



—Wichita Eagle.

Nothing Left but the Shell.



—San Fran[illegible]



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merril Co.

CHAPTER XVI.—(Continued).

The fact that I had been out the entire night before, together with the small repute in which I was held for deeds of arms, excused me from taking part in this bootless errand, so again I profited by the small esteem in which I was held. I say profited, for I stayed at the castle with Jane, hoping to find my opportunity in the absence of everybody else. All the ladies but Jane had ridden out, and the knights who had been with me scouring the forest were sleeping, since they had not my incentive to remain awake. They had no message to deliver; no duty to perform for an absent friend. A thousand! Only think of it! I wished it had been a million, and so faithful was I to my trust that I swore in my soul I would deliver them, every one.

And Jane loved me! No more walking on the hard, prosaic earth now; from this time forth I would fly; that was the only sensible method of locomotion. Mary had said: "She told me so." Could it really be true? You will at once see what an advantage this bit of information was to me.

I hoped that Jane would wish to see me to talk over Mary's escape—so I sent word to her that I was waiting, and she quickly enough recovered her health and came down. I suggested that we walk out to a secluded little summer-house by the river, and Jane was willing. Ah! my opportunity was here at last.

She found her bonnet, and out we went. What an enchanting walk was that, and how rich is a man who has laid up such treasures of memory to grow the sweeter as he feeds upon them. A rich memory is better than hope, for it lasts after fruition, and serves us at a time when hope has failed and fruition is but—a memory. Ah! how we cherish it in our hearts, and how it comes at our beck and call to thrill us through and through and make us thank God that we have lived, and wonder in our hearts why he has given poor underserving us so much.

After we arrived at the summer-house Jane listened, half the time in tears, while I told her all about Mary's flight.

Shall I ever forget that summer day? A sweet briar entwined our enchanted bower, and, when I catch its scent even now, time-vaulting memory carries me back, making years seem as days, and I see all as I saw the light of noon that moment—and all was Jane. The softly lapping river, as it gently sought the sea, sang in soothing cadence of naught but Jane; the south wind from the flowery home breathed zephyr-voiced her name again, and, as it stirred the rustling leaves on bush and tree, they wispered back the same sweet strain; and every fairy voice found its echo in my soul; for there it was as 'twas with me, "Jane! Jane! Jane!" I have heard men say they would not live their lives over and take its meager grains of happiness, in such infinite disproportion to its grief and pain, but, as for me, thanks to one woman, I almost have the minutes numbered all along the way, and know them one from the other; and when I sit alone to dream, and live again some portion of the happy past, I hardly know what time to choose or incident to dwell upon, my life is so much crowded with them all. Would I live again my life? Aye, every moment except perhaps when Jane was ill—and therein even was happiness, for what a joy there was at her recovery. I do not even regret that it is closing; it would be ungrateful; I have had so much more than my share that I simply fall upon my knees and thank God for what He has given.

Jane's whole attitude toward me was unchanged, and she seemed to cling to me in a shy, unconscious manner, that was sweet beyond the naming, as the one solace for all her grief.

After I had answered all her questions, and had told her over and over again every detail of Mary's flight, and had assured her that the princess was, at that hour, breasting the waves with Brandon, on their high road to paradise, I thought it time to start myself in the same direction and to say a word in my own behalf. So I spoke very freely and told Jane what I felt and what I wanted.

"Oh! Sir Edwin," she responded, "let us not think of anything but my mistress. Think of the trouble she is in."

"No! no! Jane: Lady Mary is out of her trouble by now, and is as happy as a lark, you may be sure. Has she not won everything her heart longed for? Then let us make our own paradise, since we have helped them make theirs. You have it, Jane, just within your lips; speak the word and it will change everything—if you love me, and I know you do."

Jane's head was bowed and she remained silent.

Then I told her of Lady Mary's message, and begged, if she would not speak in words what I so longed to hear, she would at least tell it by allowing me to deliver only one little thousandth part of the message Mary had sent: but she drew away and said she would return to the castle if I continued to behave in that manner. I begged hard, and tried to argue the point, but logic seems to lose its force in such a situation, and all I said availed nothing. Jane was ob-



"I delivered the rest of Mary's message."

durate, and was for going back at once. Her persistency was beginning to look like obstinacy, and I soon grew so angry that I asked no permission, but delivered Mary's message, or a good part of it, at least, whether she would or no, and then sat back and asked her what she was going to do about it.

Poor little Jane thought she was undone for life. She sat there half pouting, half weeping, and said she could do nothing about it; that she was alone now and if I, her only friend, would treat her that way, she did not know where to look.

"Where to look?" I demanded. "Look here, Jane, here; you might as well understand, first as last, that I will not be trifled with longer, and that I intend to continue treating you that way as long as we both live. I have determined not to permit you to behave as you have for so long; for I know you love me. You have half told me so a dozen times, and even your half words are whole truths; there is not a fraction of a lie in you. Besides, Mary told me that you told her so."

"She did not tell you that?"

"Yes; upon my knightly honor." Of course there was but one answer to this—tears. I then brought the battle to close quarters at once, and, with my arm uninterrupted at my lady's waist, asked:

"Did you not tell her so? I know you will speak nothing but the truth. Did you not tell her? Answer me, Jane." The fair head nodded as she whispered between the hands that covered her face:

"Yes; I—I—d-did;" and I—well, I delivered the rest of Mary's message, and that, too, without a protest from Jane.

Truthfulness is a pretty good thing after all.

So Jane was conquered at last, and I heaved a sigh as the battle ended, for it had been a long, hard struggle.

I asked Jane when we should be married, but she said she could not think of that now—not until she knew that Mary was safe; but she would promise to be my wife some time. I told her that her word was as good as gold to me; and so it was and always has been; as good as fine gold thrice refined. I then told her I would bother her no more about it, now that I was sure of her, but when she was ready she should tell me of her own accord and make my happiness complete. She said she would, and I told her I believed her and was satisfied. I did, however, suggest that the intervening time would be worse than wasted—happiness thrown right in the face of Providence, as it were—and begged her not to waste any more than necessary; to which she seriously and honestly answered that she would not.

We went back to the castle, and as we parted Jane said timidly: "I am glad it is over."

She had evidently dreaded it; but I was glad, too; right glad. Then I went to bed.

CHAPTER XVII.

Whatever the king might think, I knew Lord Wolsey would quickly enough guess the truth when he heard that the princess was missing, and would have a party in pursuit. The runaways, however, would have at least 24 hours the start, and a ship leaves no tracks. When Mary left me she was perhaps two-thirds of a league from the rendezvous, and night was rapidly falling. As her road lay through a dense forest all the way, she would have a dark, lonely ride of a few minutes, and I was somewhat uneasy for that part of the journey. It had been agreed that if everything was all right at the dendezvous, Mary should turn loose her horse, which had always been stabled at Berkeley Castle and would quickly trot home. To further emphasize her safety a thread would be tied in his forelock. The horse took his time in returning, and did not arrive until the second morning after the flight, but when he came I found the thread, and, unobserved, removed it. I quickly took it to Jane, who has it yet, and cherishes it for the mute message of comfort it brought her. In case the horse should not return I was to find a token in a hollow tree near the place of meeting: but the thread in the forelock told us our friends had found each other.

When we left the castle, Mary wore under her riding habit a suit of man's attire, and, as we rode along, she would shrug her shoulders and laugh as if it were a huge joke; and by the



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CONCRETE FOR PERMANENCE

most comical little pantomime, call my attention to her unusual bulk. So, when she found Brandon, the only change necessary to make a man of her was to throw off the riding habit and pull on the jack boots and slouch hat, both of which Brandon had with him.

They wasted no time you may be sure, and were soon under way. In a few minutes they picked up the two Bristol men who were to accompany them, and, when night had fairly fallen, left the bypaths and took to the main road leading from London to Bath and Bristol. The road was a fair one; that is, it was well defined and there was no danger of losing it; in fact, there was more danger of losing one's self in its fathomless mud holes and quagmires. Brandon had recently passed over it twice, and had made mental note of the worst places, so he hoped to avoid them.

Soon the rain began to fall in a soaking drizzle; then the lamps of twilight went out, and even the shadows of the night were lost among themselves in blinding darkness. It was one of those black nights fit for witch traveling; and, no doubt, every witch in England was out brewing mischief. The horses' hoofs sucked and splashed in the mud with a sound that Mary thought might be heard at Land's End; and the hoot of an owl, now and then disturbed by a witch, would strike upon her ear with a volume of sound infinitely disproportionate to the size of any owl she had ever seen or dreamed of before.

Brandon wore our cushion, the great cloak, and had provided a like one of suitable proportions for the pricess. This came in good play, as her fine gentleman's attire would be but poor stuff to turn the water. The wind, which had risen with just enough force to set up a dismal wail, gave the rain a horizontal slant and drove it in at every opening. The flaps of the comfortable great cloak blew back from Mary's knees, and she felt many a



It was one of those black nights fit for witch traveling.

chilling drop through her fine new silk trunks that made her wish for buckram in their place. Soon the water began to trickle down her legs and find lodgment in the jack-boots, and as the rain and wind came in tremulous little whirrs, she felt wretched enough—she who had always been so well sheltered from every blast. Now and then mud and water would fly up into her face—striking usually in the eyes or mouth—and then again her horse would stumble and almost throw her over his head, as he sunk, knee deep, into some unexpected hole. All of this, with the thousand and one noises that broke the still worse silence of the inky night soon began to work upon her nerves and make her fearful. The road was full of dangers aside from stumbling horses and broken necks, for many were the stories of murder and robbery committed along the route they were traveling. It is true they had two stout men, and all were armed, yet they might easily came upon a party too strong for them; and no one could tell what might happen, thought the princess. There was that pitchy darkness through which she could hardly see her horse's head—a thing of itself that seemed to have infinite powers for mischief, and which no amount of argument ever induced any normally constituted woman to believe was the mere negative absence of light, and not a terrible entity potent for all sorts of mischief. Then that wailing howl that rose and fell hotimes; no wind ever made such a noise, she felt sure. There were those shining white gleams which came from the little pools of water on the road, looking like dead men's faces upturned and pale; perhaps they were water and perhaps they were not. Mary had all confidence in Brandon, but that very fact operated against her. Having that confidence and trust in him, she felt no need to waste her own energy in being brave; so she relaxed completely, and had the feminine satisfaction of allowing herself to be thoroughly frightened.

Is it any wonder Mary's gallant but womanly spirit sunk low in the face of all those terrors? She held out bravely, however, and an occasional clasp from Brandon's hand under cover of the darkness comforted her. When all those terrors would not suggest even a thought of turning back, you may judge of the character of this girl and her motive.

They traveled on, galloping when they could, trotting when they could not gallop, and walking when they must.

At one time they thought they heard the sound of following horses, and hastened on as fast as they dare go, until, stopping to listen and hearing nothing, they concluded they were wrong. About 11 o'clock, however; right out of the black bank of night in front of them they heard, in earnest, the sucking splash of horses' hoofs. In an instant the sound ceased and the silence was worse than the noise. The cry "Hollo!" brought them all to a stand, and Mary thought her time had come.

Both sides shouted, "Who Comes there?" to which there was simultaneous and eager answer, "A friend," and each party passed its own way, only too glad to be rid of the other. Mary's sigh of relief could be heard above even the wind and the owls, and her heart beat as if it had a task to finish within a certain time.

After this they rode as rapidly as they dared, and about midnight arrived at the inn where the relay of horses was awaiting them.

The inn was a rambling old thatched-roofed structure, half mud, half ood and all filth. There are many inns in England that are tidy enough, but this one was a little off the main road—selected for that reason—and the uncleanness was not the least of Mary's trials that hard night. She had not tasted food since noon, and felt the keen hunger natural to youth and health such as hers, after 12 hours of fasting and eight hours of riding. Her appetite soon overcame her repugnance, and she ate, with a zest that was new to her, the humblest fare that had ever passed her lips. One often misses the zest of life's joys by having too much of them, and must want a thing before it can be appreciated.

A hard ride of five hours brought our travelers to Bath, which place they rode around just as the sun began to gild the tile roofs and steeples, and another hour brought them to Bristol.

The ship was to sail at sunrise, but as the wind had died out with the night there was no danger of its sailing without them. Soon the gates opened, and the party rode to the Bow and String, where Brandon had left their chests. The men were then paid off; quick sale was made of the horses, breakfast was served, and they started for the wharf, with their chests following in the hands of four porters.

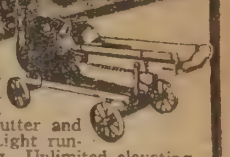
A boat soon took them aboard the Royal Hind, and now it looked as if their darling scheme, so full of improbability as to seem impossible, had really come to a successful issue.

(To be continued in next issue.)

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In answering advertisements don't fail to mention this paper.



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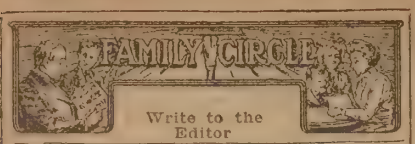
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ALICE W. BARLAND
Editorial Contributor

Dreams Fulfilled

Make the Most of Opportunities

By Alice W. Barland.

Dear Girls of the Family Circle: Let us imagine ourselves seated around a cheerful fireplace and telling some stories to each other. Your stories to me, some of them, would be about what you would like to do, places you would like to see, and what you hope to become some time. Mine to you, this time, will be about some things I used to dream about doing, often thinking how hopeless those dreams were likely to be. It has been quite a long time now, since I came to know by experience that a very great many things which years ago seemed hopeless of accomplishment and well-nigh impossible of fulfilment, do come my way.

I presume most of you have heard of Frances Willard, the great temperance worker and organizer of the Women's Christian Temperance union. It was my privilege to know her well. She was, like you and me, a country girl. Her parents were farmers in Illinois and lived quite a distance from any town. One day she was standing in the barn door. It was one of those rainy days when everything looks gloomy and people get the "blues." Frances was about 11 years old and had been playing in the barn with her brother and sister. Finally, she went to the open door and looking out into the drizzling rain, she said: "My but this is a lonesome old world. I just wonder if I shall ever do anything or go anywhere all my life." Her brother, a year or two older, said, "Oh, pshaw, Frank, cheer up. I bet you will do a lot of things and go a lot of places if you just behave yourself." Many were the things that Frances Willard did in her rather short life, a little longer than 50 years. She taught schools and colleges. She wrote books. She lectured to thousands and thousands of people both in this country and across the ocean and she organized women of all civilized countries of the world into a great temperance society and was president of that World's Temperance union at the time of her death. Frances was a little barefoot girl who used to go out to drive up the cows just as you do and as I did when a child. She did not have such good schools to attend in her childhood days as you girls of today have. She very early learned the lessons we spoke of in our little story about hunting the cows. Do you remember them? Obedience, that you know, comes first in the list and is most important. Obedience, perseverance, responsibility, patience, self-reliance and bravery.

If you dear girls will but keep your attention on the importance of cultivating these foundation stones of character there is almost nothing you can not do or become. Day by day, yes, hour by hour, you can be preparing your mind to measure up to some opportunity when it comes up before you. Youth is very apt to think all the good chances are passed, all the best things taken, but it is not so. It would be out of all reason to believe that each generation does not have an equal chance for development with any that are past or any to follow. A creator who can make such a world as we live in, surrounded by all the wondrous sun, moon and stars, is also great enough to control the march of events so that each one of his children may have his chance.

There are wonderful chances these days to learn to do things. There are such good schools and colleges, night schools for those employed by day and correspondence courses. There was never an age when the ambitious young person had so many opportunities for education and preparation for useful living. Don't for one moment think that because you are living in the country you have no chances. On the other hand there is no place equal to a farm for the beginner's course in all around usefulness.

Make the most of everything at hand that will fill your mind with useful ideas. Learn by observing, by study, reading and listening. Young people these days are not always good listeners. Cultivate the art of listening. When you have a settled idea as to what you want to become keep steadily to the thought that you can accomplish it and you will "arrive," never fear.

It will doubtless require time, study and patient perseverance, but some of those qualities we country girls learn you know driving up the cows. And as the years lengthen out you may find, like Frances Willard, that you will be able to do a lot of things and see many places. I would not be so presumptuous as to compare myself with so great a woman as Miss Willard for she was one in thousands, but in my humble experience I have learned that to use the gifts of a much less richly endowed mind, to strive to make the most of every opportunity, to have a purpose, and an aim in life, has brought to pass many girlhood dreams of the barefoot girl who listened for the tinkling of the cow bell and drove up the cows.

Not Tragedies

Mistakes Are Merely Sign Posts

What is the quotation or what are the words which have helped you in the journey of life?
Send it to the editor of The Farmer and let it help another.

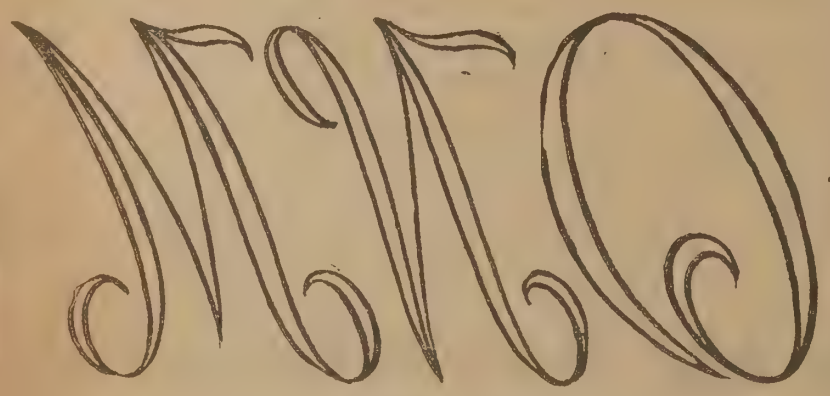
To the Editor: "Mistakes are not always tragedies. The foolish bury them with tears, but the wise use them as sign posts to warn themselves and others of the danger in the path of life."

Another is: "Good nature, like a bee, collects honey from every herb. Ill nature, like the spider, sucks poison from the sweetest flowers."

M. H. PORTER.

Sequim, Wash.

Script Initials for Embroidery



By WINNIFRED WORTH.

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of a linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design.



Ah, when shall all men's good
Be each man's rule, and universal peace
Lie like a shaft of light across the land,
And like a lane of beams athwart the sea,
Thro' all the circle of the golden year?

—Tennyson.

The Baby

A Few Hints As to the Clothing

Improper clothing may be harmful to babies in three ways, according to a bulletin on "The Care of the Baby," issued by the extension department of the University of Minnesota: First, by being so tight that it prevents normal movements; second, by keeping the baby too warm; and, third, by not keeping it warm enough. The first fault can be avoided by making all of the baby clothes loose and roomy. Do not put on so many clothes that the baby perspires. All clothing except the shirt, band and diaper may be removed in very hot weather. As the weather grows cooler, other clothing is added. The important thing for the mother to remember is that the baby is very sensitive to both heat and cold. She must be constantly on her guard to keep the baby cool enough in winter. The principal object of clothing is to insure a uniform body temperature. Loosely woven material should be used to allow proper ventilation for the skin. The use of a flannel belly-band is necessary until the cord drops off. After the first month it may be replaced by a knitted band with shoulder straps.

Clothes for Newly-Born Baby.

Three flannel binders (1-2 yard of 27-inch flannel).
Three shirts, wool and silk or wool and cotton.
Two flannel petticoats.
Two flannel or knitted sacques.
Two pairs of worsted socks.
Two dozen diapers, 22 by 44 inches.
One dozen diapers, 25 by 50 inches.
Four white muslin slips.
One cloak.
One warm cap.
One pair of mittens.
One veil.
Two blankets.
One box talcum powder.
Two dozen safety pins, large and small.
Two bath towels.

Later.

Three pairs of woolen stockings.
Three knitted bands with shoulder straps.
Additional diapers.

HELPS THROUGH LIFE

What is the most helpful thing you have learned during the last year in your experience with housekeeping? Let us pass it along to other housekeepers.

To the Editor: The most helpful thing I have learned during the last year in my experience with housekeeping—your question is too narrow. Let me put it as "the most helpful thing that has come to me as the experience of the years of life." I have learned in all things the need of:

1. To classify—for that makes for efficiency.
2. To simplify—for that makes for leisure, and the peace of mind where the soul may grow.
3. To jollify—for that adds the delicious flavor to life.
4. To glorify—for that means striving toward an ideal, and with high aims what may not be accomplished?

MRS. LEE R. GILLETTE.

Wenatchee, Wash.

Do You Know That

A merciful man is merciful to his beast?

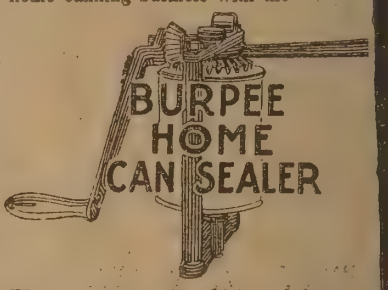
Anger actually poisons the body and makes it sick?



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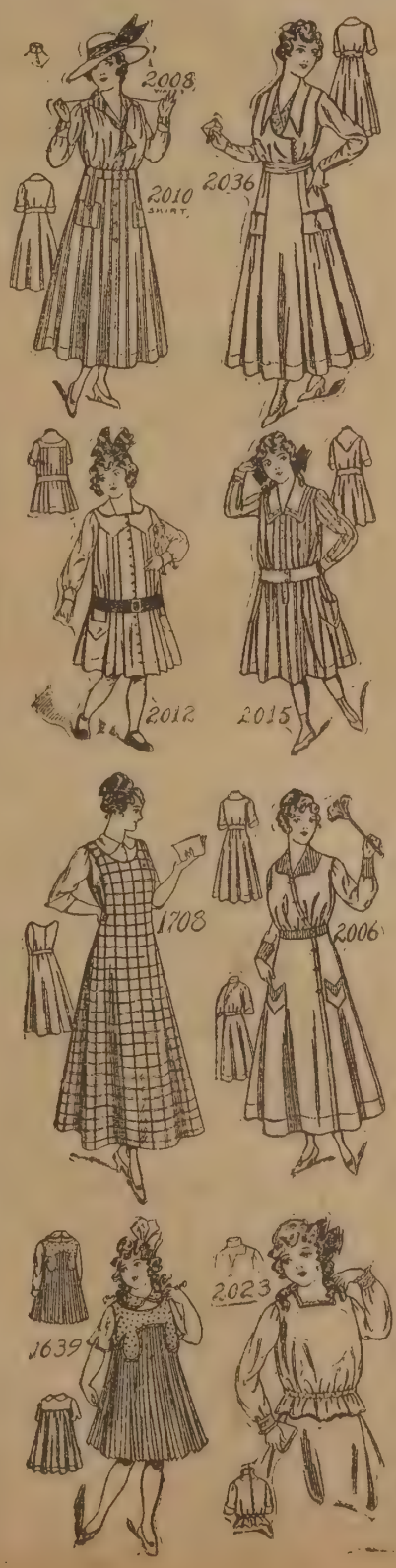
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2012—Girls' one-piece yoke dress. Cut in four sizes: 4, 6, 8 and 10 years. It requires 3 3-4 yards of 36-inch material for an 8-year size. Price, 10 cents.

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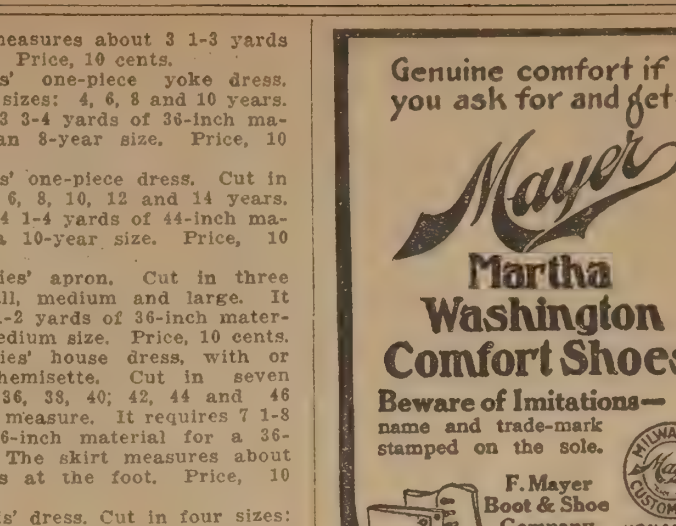
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Dear Nephews and Nieces: Now all nephews and nieces, too, please write your names and ages and addresses plainly on every letter you send me. Let me tell you what happened in one of our contests: I thought the name of one of the winners was that of a girl, and I sent a dainty little cup and saucer. Lo and behold! "she" was a boy! You can imagine how disgusted he was to get such a prize. Once a prize came back because there was no such postoffice as that on the letter. Twice, good letters that would have won prizes had no names or addresses at all. Careful writing and spelling of your name and address and your letter in general helps a great deal. There are so many letters that those which do not have names and addresses do not receive as much attention as others. Please bear all these things in mind, for I know that you realize our Corner is growing fast and we want to take care of you all. We are glad that the Corner is growing and that the letters are getting more interesting. Lovingly,

AUNT NELLIE.

Walk When the Roads Are Good.

Dear Aunt Nellie: I have never written to the Corner before, but I read all the letters the boys and girls write and enjoy them very much. I live on a farm about one and a half miles from town. I have two sisters and one brother—Ethel, who is 20 years old; Nettie, who is 7 years old, and Herbert, who is 9 years old. If it is nice weather and the road is good, we walk to school, but if the weather is bad, papa takes us. We have eight horses, three milch cows and four calves, about half a dozen cats and one dog. I like to ride horseback fine. I think it is great fun. I am 13 years old and in the sixth grade at school. I only weight 163 pounds, so you can imagine how small I am. My teacher's name is Miss Mary Mason. My birthday is January 20.—Irma B. Polson, Oakesdale, Wash.

Lots of Fun Fishing and Swimming.

Dear Aunt Nellie: I live on a 320-acre farm. It is on the Palouse river. I will be 14 years old July 10. I go to school, 10 miles away, and in winter it is pretty cold, so we don't go very much. My teacher's name is Miss Foote, and I like her very much. We have 16 head of cattle and eight head of horses. Their names are Peggy, Kate, Bill, Pete, Lucy, Jack and Maud. In summer we can go fishing and swimming and have lots of fun. I have a cat. Her name is Daisy. She is 12 years old. I have three brothers and one sister. In winter I go skating on the river when it freezes. It is just fine to skate or coast.—Anna Straube Pampa, Wash.

Can Get a Meal All by Herself.

Dear Aunt Nellie: This is the first time I have written to the Corner. I hope it won't be the last. I am 13 years old and my birthday is January 5. My weight is 86 pounds. My hair is light brown. I was operated on for appendicitis at the Colfax hospital and can't do any kind of work just now. I like to help mama cook and I can get a meal all by myself. I would like for some of the girls to write to me. We drive four miles to school in the buggy. We live 14 miles from Pullman.—Beulah May Wilson, Pullman, Wash.

Live on a Big Farm Near Pomeroy.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We live on a farm of 1000 acres. I have two brothers. Their names are Clifford and Wilbur. I am 9 years old. One of my brothers is 2 years old and the other is 7 years old. We have 100 head of cattle. I have a dog. Its name is Max.—Olive Long, Pomeroy, Wash.

"Snowflakes" Is Ora's Poem.

Dear Aunt Nellie: I wrote to the Corner about two years ago, but I have not written since. I live on a 15-acre farm, four miles from Kent and three aand one-half miles from Auburn. We have two horses, one cow, one dog and 10 chickens. The horses' names are Lady aand Laddie. The cow's name is Cherry and the dog's name is Jack. I have four brothers and three sisters. We go to Auburn to school. My oldest brother goes to Walla Walla college. I am 14 years old and in the seventh grade. I composed a poem called "Snowflakes." I have composed several, but that one is the best.—Ora McDonald, Kent, Wash.

All the Boys Are Trapping Now.

Dear Aunt Nellie: I saw three letters in the Corner that I knew the children who wrote them. One of them said that he would like to see me because I used to live there. We have three calves. I have been trapping and caught five moles and expect to catch more before the trapping is over. I get from 5 to 25 cents for moleskins. I passed in spelling at school. I am in the fourth grade. There are 17 of us in the fourth grade. I have three traps for muskrats. I have one for a cat and two for moles. The holes are all filled up that the moles run in. All the kids are trapping around here.—Clayton Beeson, Globe, Wash

Ethel's Another New Member.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and in the fourth grade. My birtnday is May 11. I like to go to school. I like my teacher very much. Her name is Miss Miller. I ride four and a half miles to school. I go to South Side school. I have four brothers and no sister. The brothers' names are Robert, Lloyd, Walter and Richard. We have 30 chickens and two pigs, three horses, their names are Molly, Buster and Prince. We have three cows, two heifers and two calves.—Ethel Gladson, Oroville, Wash.

Mama Reads the Letters to Her.

We're Glad You Joined, Margaret.

Dear Aunt Nellie: I have never written to the Corner before. I am 8 years old. I would like to correspond with any girl my age. I live on a 200-acre farm. We have five cows and I can milk. We have a team of horses. Their names are Doll and Fan. I have two sisters. Their names are Alice and Edith. Alice is 4 years old. Edith is 7 months old. I have one brother. His name is William. He is 6 years old. I have a cat. He is black and white. My brother and I go to school. My teacher's name is Mrs. Tope. I like her very much.—Margoret Helen Jolly, Olympia, Wash., R. F. D. 1, Box 120.

The Dog Barks at Every One.

Dear Aunt Nellie: I like to read the Corner. I have one sister and two brothers. My sister's name is Pauline. I have a horse and her name is Lil. We have seven mules and six horses. I have a calf and his name is Jiny. We have a little calf and his name is Daisy. I live on a farm of 480 acres. I am in the second grade. We have a dog that barks at everybody that comes in our yard. I am 7 years old and my big brother goes to school and he is 8 years old. He is in the third grade.—Irene Martha Slaughter, Mansfield, Wash.

Dog Will Sit Up on a Chair.

Dear Aunt Nellie: I live on a 91-acre farm and have lots of fun. I go to school and I am in the fourth grade. I am 11 years old. My birthday is the 12th of October. I am about 5 feet high and weigh about 100 pounds. For a pet I have a canary bird. We have five horses and nine cows. We have about three dozen chickens. We have a dog which can stand up and sit on a chair. We also have a cat that can jump through my hands. I have a pet calf which I call Jersey. I like my pets very much.—Helen Guenther, R. F. D. 1, Box 114, Winlock, Wash.

Taught Her Dog to Pull Her.

Dear Aunt Nellie: I have been reading the Children's Corner. I like it very much. I go to school. I am in the third grade. I am 12 years old. My birthday is January 23. My teacher's name is Miss Payne and I like her fine. I have a little pony and I ride to school. My pony's name is Prince. I have to go two miles and a half. We live on a 480-acre wheat farm. We have 17 horses and we have 10 cattle. We have two cats and one dog. My dog's name is Jip and I taught him to pull me.—Josephine Wagner, Tekoa, Wash.

A Rabbit, a Cow and a Calf for Pets.

Dear Aunt Nellie: I am 7 years old and in the second grade. For pets I have one rabbit, a cow and a calf. The cow and the calf are not mine. The cow's name is Pet and the calf's name is Valentine. She was born on Valentine's day. I have one sister and one brother. My sister's name is Beatrice. My brother's name is Edward. My sister was 11 the 22d of January. My grandpa takes The Farmer. My brother will be 4 the 15th of March. My birthday is the 2d of May.—Irene May Hett, Kelso, Wash.

Vera Lives Four Miles From School.

Dear Aunt Nellie: I enjoy the Corner very much. This is the first time I have written. We have five horses and five cows. I have one pony that I can ride. I like to ride. I will be 10 years old June 7. We live four miles from school. We have 36 pupils in our room. I am in the third grade.—Vera Maude Lyons, Kennewick, Wash.

Pretty Lake in Front of the Farm.

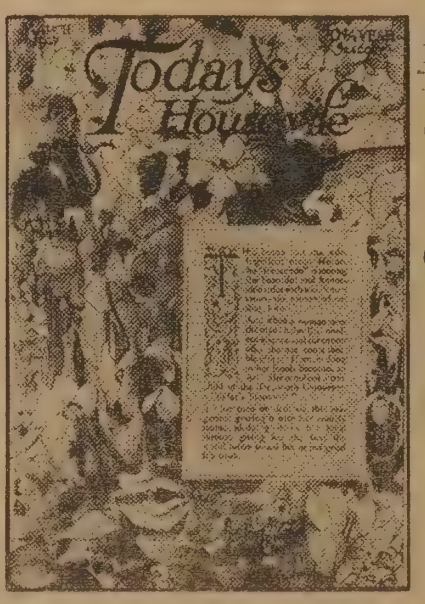
Dear Aunt Nellie: I have wanted to write to the Corner ever since we took the Washington Farmer. I look for the Children's Corner every time the paper comes. I am 9 years old and my birthday is the 21st of May. I am

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in the fourth grade. I have one sister, 17 years old, and her name is Ethyl, and my brother is 14 years and his name is Clifford. I have brown eyes and light brown hair and my sister has plue eyes and dark brown hair. My brother has dark blue eyes and real light hair and he keeps tormenting me all the time. We have only lived up here about four or five months. We lived in Olympia before we moved up here. We live on an 80-acre place and there is a pretty lake in front of our place and so we call it the Lillie Lake Place. I will be glad when summer comes so we can go swimming. My brother is a dandy swimmer. I have three little bantie hens and a rooster and I have two little puppies. I like school very much. My teacher's name is Mr. Grass. I have about one mile to walk to school. —Maud Shincke, Yelm, Wash.

Eight Pupils Go to Marie's Sschool.

Dear Aunt Nellie: I have been reading the letters in the Corner and have enjoyed them very much. We have 13 canary birds and 110 head of cattle. I have four sisters and five brothers. My oldest sister is married and has two little boys. We have three and a half miles to go to school. There are only eight pupils in our school. Our teacher's name is Miss Ella McKellar. We live in the country. We have two places, one in Garfield county and the other in Asotin. We have 480 acres on the ranch in Asotin county, but I don't know how many there are on the one in Garfield county. We live on the one in Asotin county. My sister, Bertha, plays the piano; my brother, Christopher, plays the violin, and my brother, Frank, plays the banjo. I will be 14 years old August the 14th. I am in the sixth grade. My youngest sister will be 11 years old April 29th. She is in the fourth grade. My youngest brother was 8 years old November the 28th—Marie Cecilia Wolf, Peola, Wash.

Kitty Is Black, White and Yellow.

Dear Aunt Nellie: I am a little girl 10 years old. I have not written to the Corner before, but I have read the paper almost every time it comes. I live with my grandma and grandpa. I have two brothers and one sister. My sister is younger than I am. Grandpa has a little half-breed Shetland pony that he calls Mary. She is not big enough for us to ride yet. We have two milch cows. Their names are Pansy and Bluebell. I have a pet kitten. I call her Spot. She is black, white, gray and yellow. She looks very queer. Daniel, Lacrosse, Wash.

Is Glad That Spring Has Come.

Dear Aunt Nellie: This is the second time I have written and I hope it won't be the last. I am in the seventh grade at school. I will be 14 years old the 13th of April. There are nine pupils in our school. We had a nice program down at our schoolhouse. We had ice cream and cake. I walk a mile to school. We have an automobile. I am glad that spring has come. I live on a large ranch of 1000 acres. We have 12 horses, 40 head of cattle, 10 hogs and two dozen chickens.—George Venneberg, Manson, Wash.

A Basket Supper at the School.

Dear Aunt Nellie: We live on a 480-acre farm. We have 20 horses and three cows and one calf, which is just five days old. We have a dog and his name is Don. The cows' names are Blossie, Rose, Dovie. We have not named the calf yet. I walk a mile from town. We had a basket supper at our school the 23d of January. I was in a dialogue. I took a basket. I have three brothers and two sisters. Their names are Wade, Dewey, Ina, Edith and Burl. Burl is my youngest brother. He is 5 years old. I am 11 years old. My birthday is the 27th of October. We take the Youth's Companion and I read the children's page in it. There are lots of good stories in it. Our teacher's name is Miss Hattie Hendicks. I like to go to school. I am in the fourth grade. I would like for some of the girls of my age to write to me.—Ruth Crabb, Marengo, Wash.

Have a New Organ at School.

Dear Aunt Nellie: I read my first letter in The Farmer and was glad to see it. I go to school every day. There are 11 pupils in our school. I have not very far to go to school. I am starting to crochet and I do some tatting and I like it fine. I crocheted around two handkerchiefs. My aunt taught me how to crochet. I had my teacher show me how to tat. We have two cars, one is an Overland and one is a Ford. We live eight and one-half miles from Odessa. The sun is shining today. My subjects at school are history, geography, arithmetic and spelling and language. I like them all. We have a new organ at our school. Our teacher can play it. Our schoolhouse is painted white. My height is 5 feet 6 inches.—Irene M. M. Gissler, box 357, Odessa, Wash.

Pick Berries All This Summer.

Dear Aunt Nellie: I enjoy reading the Children's Corner every week, although I have never written before. I am 10 years old and my birthday is the 24th of July. I have one sister and one brother. My sister's name is Bertha and my brother's name is George. Bertha is 12 years old and George is 7 years old. I have to pick berries all this summer. I have a pet dog. His name is Ned. I go to school. My sister and I are in the fifth grade. My brother is in the second grade. There are 80 pupils in our school. My teacher's name is Mr. Gwin.—Mamie Jennings, Elma, Wash.

Dear Aunt Nellie: I have not written to the Children's Corner yet, so I thought I would write. I like to have mama read the letters to me. I am 8 years old and in the third grade. I have four brothers and no sister. My brothers' names are Ronald, Chester, Kenneth and Roy. We have two calves and two cows. I live on a five-acre farm. I have one mile to walk to school. I am making four patchwork quilts. Papa takes The Washington Farmer.—Lucile Owen, route 1, box 38, Burlington, Wash.

They Are Building a New House.

Dear Aunt Nellie: I wrote to the Corner once before, but I never posted the letter and then I wrote once about the cows and horses. We have two horses and seven cows and three calves and some hens. We have two hens setting. We are building a new house. We will have 10 rooms downstairs and two rooms upstairs. We have a telephone. They are plenty of dogs here to keep the rabbits away from the haystacks. — Esther Mildred Erickson, Bend, Ore.

Playhouse in the Shade of the Trees.

Dear Aunt Nellie: I am writing to the Corner again. I am in the second grade. I am 8 years old. I have five sisters. We have had a very hard winter up here. The snow is three feet deep. I have two brothers and they go on the hill coasting and have a lot of fun. I will be very glad when spring comes so we can play on the bare ground. I always make a playhouse in the shade of the trees in the summer time.—Luzon Bates, Bates, Idaho.

Stella Was the Best in Language.

Dear Aunt Nellie: I am going to tell you how I earned my first money. One day at school my teacher said the one that was the best in language would get a prize. We all worked very hard and at the end of the school, my teacher gave me 50 cents. My teacher's name was Miss Matlock. I would like to correspond with Mary Lehman, Harrison, Idaho. — Stella Bates, Bates, Idaho.

Earned Four Dollars a Month.

Dear Aunt Nellie: I have never written to the Corner before. My subject is "How I Earned My First Money." I earned my first money when I was 7 years of age. We then lived one and one-half miles from the schoolhouse; the directors wanted one of the school boys to be janitor, and as no one else would do it I took the work and got $4 a month. I am 10 years old now.—K. B. Johnson, Camas, Idaho.

Room in the Corner for Mary.

Dear Aunt Nellie: I would like to join the Corner this year. I am going to school and am in the third grade. My teacher's name is Miss Hammar. We have had a great deal of snow here. I wish summer was here today.—Mary Burton, Virginia, Idaho

Aunt Nellie is glad to announce the receipt of letters for the "Children's Corner" from the following during the last week: Vega Danielson, Naomi Hansen, Ella McLean, May Rosenlof, Ellen Louma, Wieno Louma, Edna Pagan, Margaret Easton, Imogene May, Alice Crandell, Grace Sardam, Mamia Sardam, Bertha Lehr, Nellie Reid, Laurence Patrick, Eva Patrick, Fay Paulson, Harold Paulson, Verna Kanne, Mildred Guptill.

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58.—The name of what well-known burden bearer is formed by combining in the proper order the eleventh, fifth, fifteenth, twenty-fifth, fourth and fourteenth letters of the alphabet?

59.—How many rods around a quarter section?

60.—What was the date of the letter in which Abraham Lincoln wrote the words, "My father, at the death of his father, was but 6 years of age, and he grew up literally without education"? (Almost any life of Lincoln will give you this information; otherwise answer can be found in our CONTESTANT'S HELPFUL OUTFIT.)

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There are sixty questions in this contest. Our Contestant's Helpful Outfit gives all of them. It will be sent by return mail to any contestant who sends in a new, renewal, or extension subscription. Your answers must be mailed on or before midnight May 3, 1917, as shown by postmark on envelope.

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To secure the Contestant's Helpful Outfit and the FULL LIST OF QUESTIONS which have appeared in The Farmer, send $1.00 for one year's subscription or $1.50 for a three years' subscription to The Farmer. Use coupon on this page.

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Every effort is being put forth by the Farmer to see to it that all the advertisements contained in its pages are trustworthy and reliable and that whenever a mistake occurs it shall be corrected.

Nothing will please the Farmer better than to have the cooperation of all its readers and advertisers in this constant work of making a farm paper correct in statements of facts and practicable in the method advocated.

Write to the editor whenever you see a mistake and be sure to give your own experiences when you have a better method of doing anything on the farm or in the farm home.

In this connection the Farmer is glad to make a correction in one of the advertisements appearing in a recent issue in which a farm machine was described as the Aultman Bean and Pea Puller, when it should have been given as the Aultman Bean and Pea Huller.

New School at Thomas.

At the bond election held in school district No. 25, Thomas, Wash., recently, to decide whether $7500 should be spent in securing additional grounds and erecting a new schoolhouse, the bonds won out by a big majority, and we are informed that within a very short time bids will be called for the erection of as neat and convenient a school building as is to be found anywhere about here.

Want Ads

HELP WANTED—MALE 3

HAWTHORNE AUTO SCHOOL,
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

SITUATION WANTED—MALE 21

CAPABLE, ACTIVE MAN DESIRES POSITION with progressive poultry man. L. E. Nevius, Sylvan, Wash.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free.
BEHNKE-WALKER BUSINESS COLLEGE,
167 FOURTH ST., PORTLAND, ORE.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER:

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

SASH AND DOORS.

Order your sash and doors direct from O. B. WILLIAMS CO. We sell for less because we own our own mill. Large stock. Prompt shipment and safe delivery to destination guaranteed. Our big illustrated Catalog No. 27 mailed free, postpaid, on receipt of request. We do not handle rough lumber.

5 cross panel doors, No. 1	$1.33
3-ply veneer, 1 panel doors	2.00
Front glass doors, 2 ft. 8 in. by 6 ft. 8 in.	3.00
Kitchen glass door, 4 lights	2.25
Bungalow sash, as low as	.56
3x6, hot bed sash	2.25
20x25, medicine cabinet doors	2.25
Panel cupboard doors	.85
1-ply Gold Seal roofing	1.35

We carry a full line of building material, incluring frames, inside finish, builders' hardware, paint, etc.
O. B. WILLIAMS CO.
1943 1st AVE. SO. SEATTLE, WN.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 34c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS—WANTED 63

—CREAM WANTED—

We pay cash for cream, poultry, eggs, veal, hogs and hides. Write for prices and shipping tags. Commercial Creamery Co., Spokane, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer,** and **The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

HOGANIZED S. C. 1. REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels, $5 each. These birds are all sons of a magnificent male, from a 271-egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs, $6 in 100 lots; settings, $1.50, $3, $5. Mrs. H. V. Rominger, Underwood, Wash.

PLACE YOUR ORDER NOW
for White Leghorn chicks, $10 per hundred; safe delivery guaranteed. R. I. Reds and Barred Rocks $15 per hundred. Every chick a live one and hatched from heavy winter layers. Coal-burning brooder stoves, $15 and $18.50. Queen Hatchery, 89 Pike st., Seattle, Wash.

79,637 EGGS IN 1916 FROM MY FLOCK of 450 S. C. Black Minorcas, prize winners in the showroom and laying contest; eggs from my Hoganized and trap-nested breeding stock at $2 per 15, $3.50 per 30, $5 per 50, $8 per 100, $70 per 1000. No baby chicks or stock for sale. John Dollenbacher, R. 1, Selah, Wash.

BABY CHIX.

White Leghorns, the kind that are real dividend payers, bred for 16 years for eggs, size, VIGOR, VIM and VITALITY. $10 per 100, from the oldest established hatcher in the state. Delivery in good condition guaranteed. Lakeside Poultry Farm, Roy, Wn.

FRESH EGG KEEP PRESERVES EGGS perfectly one year. Indorsed by experiment stations and hundreds of individuals. Better than water glass. Enough to preserve 100 dozen, $1, postpaid. Testimonials on request. R. G. Bailey, Mfg., Lewiston, Idaho.

ORDER YOUR BABY CHICKS NOW FROM heavy laying strain; delivery guaranteed; our chicks please; R. I. Reds, March, $15 100; after Mar. $12. White Leghorns, March, $12 100; after March, $10. Maplebrook Poultry farm, Southworth, Wash., Box 3.

S. C. R. I. REDS, BEST WESTERN prize winning stock, crossed with my own trap-nested birds; eggs, $1.50 for 15; $7 100; baby chicks for May delivery, $8.50 for 50; $16 per 100; safe delivery guaranteed. F. H. Volland, Kennewick, Wash.

PACIFIC COAST CHAMPION BARRED ROCKS.

World's biggest winners at San Francisco and other large northwest shows. Write for catalogue. M. J. Myers, 1594 Division st., Portland, Ore.

MY R. C. R. I. REDS HAVE WON EVERY first and second, except one, competed for in the past 3 years. Have mated 4 pens for the egg trade. Guaranteed satisfaction. Mating list on application. G. W. Baker, Colfax, Wash.

FAMOUS CARNATION WHITE LEGHORNS. Baby chicks; high-grade utility stock; birds of merit, quick maturing; heavy winter layers; free range. Breeding stock. Ernest Raush, Carnation Poultry Farm, Kent, Wn.

WHITE BUFF AND BLUE ORPINGTONS, single and rose comb Anconas, the great winter layers, winners at leading Coast shows; eggs $1.50 to $3.00 for 15; chicks 20c each. Ira N. DeLine, Box D, Olympia, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

BARRED PLYMOUTH ROCKS, PRIZE winners at shows. Near front in N. W. laying contest. Eggs $1.50, Folder free. Wm. H. Heimsoth, Baker, Ore.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

EGGS FROM TANCRED S. C. W. LEGhorn hens, $1.25 per 15, $6 per 100, prepaid. J. W. Hirons, R. 2, B. 55, Scio, Ore.

PRIZE-WINNING BUFF ORPINGTONS—Settings $2 to $10. Lucy R. Scudder, Box 36F, North Yakima, Wash.

FOR SALE — S. C. WHITE LEGHORN eggs, 75c per 15, $4 a hundred. Mrs. Wm. Vercier, Rigby, Idaho.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

LIVE STOCK 177

SOME FINE COWS FOR SALE.
Both registered and grade Jerseys; also a few heifers. Cows fresh soon. Can supply from one to 10 or 15 head.
G. W. YORK,
SANDPOINT, IDAHO.

YOU FARMERS! MAKE BIGGER HOG profits with purebred, pedigreed
BIG TYPE POLANDS!
Write for free hog booklet, "The Bartwood Idea." Tells how to get the very finest Polands at 1-3 usual price. Bartwood Farm, Hamilton, Mont.

JACKS AND JENNETS FOR SALE.
$500 to $600 buys an elegent jack. The jennets are priced at ⅓ their value; the jacks at approximately the same. They are the largest and best herd in the United States to select from. Eastern Oregon Jack Farm, Lexington, Ore. B. F. Swaggart, Prop.

SERVICEABLE BOARS, BRED GILTS. Orders booked for spring pigs. Also few choice Holstein bull calves from best of families.
W. R. WHITE, SUNNYSIDE, WASH.

REGISTERED JERSEY BULL CALF FOR sale; none better. Price very reasonable. S. W. Hensel, Wenatchee, Wn.

REGISTERED ROAN SHORTHORN BULL to exchange for one of same breed. Box 21, Fernwood, Idaho.

THOROUGHBRED JERSEY BULL YEARling, $50. For particulars, E. T. Keene, Curlew, Wash.

JOB PRINTING 372

BUTTER WRAPPERS BY PREPAID PARCEL POST, printed in waterproof ink, on vegetable parchment, 8x11, $3.00 per 1000; 9x12, $3.25 per 1000; cash with order; for third and fourth zones add 10c. Allen Printery, Spokane, Wash.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Pelts tanned, made into rugs, mothproof, guaranteed. High prices paid for furs. Mohr, 82 Bernard, Spokane.

FURRIERS 429

BISSINGER & CO., DEALERS IN HIDES, pelts, wool, tallow and furs; consignments solicited; prompt remittance. P. O. Box 1553. Phone 503. Warehouse, 26th and R. R. st., Boise, Idaho.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flour seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, Ore.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.
Portland, Oregon.

FARM SEEDS, COMPLETE STOCK OF red and alsike clover, timothy, vetch grass seeds, seed grain, garden seeds. Send for free catalogue.
D. A. WHITE & SONS, Seedsmen,
SALEM, Ore.

ALFALFA SEED, RED CLOVER, SWEET clover; Early Ohio; Idaho Rural; Peachblow seed potatoes; Dicklow spring wheat—the big crop producer; blue barley. Jerome M. & E. Co., Jerome, Idaho.

ALFALFA, RED CLOVER, ALSIKE CLOver, white clover, sweet clover, timothy and other grasses; seed oats and wheat; at reasonable prices. Vogeler Seed Co., Salt Lake City, Utah.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEEDS 620 Continued.

SUDAN GRASS SEED,
40 cents pound.
J. E. JENKS & SON,
TANGENT, ORE.

FOR SALE—YELLOW FLOWERED SWEET clover seed; own raising. Otto Sundquist, Mound City, S. D.

NURSERY STOCK 621

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

HOMEST'DS, RELINQ'M'TS 642

160-A. RELINQUISHMENT; LEVEL VALley land; improvements; 10 feet to water; irrigation well and plant; 320 a. adjoining open under new homestead law. Box 332, Winnemucca, Nevada.

FARM LANDS—FOR SALE 651

MONTANA LAND.

Are you looking for a farm home or a land investment in grain or grazing lands in the great grain and stock country of Montana? If so, it will pay you well to see our Montana Land List, telling of improved and unimproved lands in several of the best districts of Montana — Judith Basin, where prices range from $36 to $60 per acre—Eastern Montana, where we can show you several fine tracts at $8 to $20 per acre—Shields River Valley, that famous grain and stock district, where good grain lands, partly improved, sell at $40 to $50 per acre, and sure to increase in value while producing a good income on your investment — Conrad and Great Falls districts, where good grain lands can be bought at $20 to $30 per acre. Lest you forget, we say again, if you are interested in Montana land in practically any good district in the state, don't fail to call or write for Montana Land List—it's free, and will probably save you time and money. We have made a careful study of the land situation in Montana the past few years, and believe we can be of service to you. Hege & Watkins Co., 715-17 Paulsen bldg., Spokane, Wash.

COME AND MAKE

YOUR HOME ON PUGET SOUND.

The Bellingham Real Estate association invites you to come and make your home in northwest Washington on Puget Sound. We welcome correspondence from you and will answer any inquiries concerning the farm described below, situated in Whatcom Co.

$25,000—160 acres; 115 acres under plow, rest easily cleared; all level, rich bottom land, all well ditched and drained; good road; fair buildings; near school; spring water piped to house and barn; 10 head of stock; good farm community.

Address all communications to Sec'y.
BELLINGHAM REAL ESTATE ASS'N
DOCK ST., BELLINGHAM, WASH.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay; $2000 loan in improvements, or ready-made farms. Loan of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

218-ACRE GENERAL FARM, HALF MILE from Palouse, Wash., 190 acres in cultivation; south line only a few rods from city limits; complete set of farm buildings; water from deep well, springs, Palouse river. Price $17,000; $78 per acre; half cash; terms to suit purchaser on balance. Now leased at cash rental, subject to sale. After April 1 lessee entitled to 1917 crops. Purchaser can have rental money.
INTERSTATE LAND COMPANY,
GEO. N. LAMPHERE SR.
PALOUSE, WASH.

STOCK RANCH FOR SALE—160 ACRES: adjoins forest range, all under fence; two big springs; 8 acres alfalfa, 4 a. winter wheat, 17 a. rye; 76 a. in cultivation; can cultivate 25 a. more; 40 a. fair timber; all good soil; 6-room house, barn, hay and cow sheds; outbuildings; 2¼ miles to railroad town, ¾ mile school; telephone in house. Price $4200; $1000 encumbrance. Ferry County Farm Inv. Co., Republic, Wash.

FOR SALE—FIVE SECTIONS IN GOOD farming district in Montana, now 22 miles from railroad; dark loam soil; 60 per cent tillable; price $5.50 per acre; terms, $3 per acre down, balance long time at 6 per cent per annum. This price holds for short time only. H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2d and Cherry st., Seattle, Wash.

ALFALFA LAND.

140 a.; 60 a. tillable; 40 a. in cultivation; 30 a. in alfalfa. This is an extra good dairy ranch; 3 miles from good R. R. town. Price $8500. Box 222, Leavenworth, Washington.

FARM LANDS OBTAINED THROUGH foreclosure of mortgage offered at rare bargains and on easy terms. Send for list. Pennsylvania Mortgage Investment Company, Spokane, Washington.

IMPROVED AND UNIMPROVED FARMS, dairy and fruit ranches, on easy terms; no irrigation. A most healthful climate. Deary Land Co., Deary, Idaho.

IF YOU WANT LAND IN MONTANA, write to H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

IRRIGATED LANDS—For Sale 663

IRRIGATED STOCK FARM FOR SALE.
The best bargain in Idaho. Good free and forest range for all stock. Good alfalfa, grain and potato land. Good markets, certain crops. Ample free water with independent ditches. Newton Hibbs, Salmon, Idaho.

TO EXCHANGE—REAL EST. 705

MONTANA LAND—WE HAVE SEVERAL Montana farms, on which the owners will take clear real estate as part payment. Call or write for Montana Land Exchange List. Hege & Watkins Co., 717 Paulsen bldg., Spokane, Wash.

Grain and Produce Markets

Chicago Grain.

CHICAGO, April 14.—Abnormally active demand for flour did a good deal today to make wheat prices soar to a new high point, $2.25 3-4 May delivery. The market closed strong at 1 1-8c to 4c net advance, with May at $2.24 1-2 to $2.25, and July at $1.91 1-2 to $1.92. Corn gained 1c to 1 7-8c, and oats 3-8c to 7-8c. In provisions the outcome varied from 2 1-2c decline to a rise of 35c.

Reports of free buying on the part of milling interests counted from the outset as powerful factors on the bull side of the wheat market. It was explained that such purchases were to provide for greatly enlarged flour business, but this information served to increase anxiety among wheat shorts. Attempts to cover disclosed that the market was virtually bare of offerings. Rapid lifting of bids ensued, but realizing sales on the bulge led to only comparatively moderate reactions in the May option.

Eager payment of big premiums for cash wheat tended to keep the bears anxious regarding nearby settlements.

Somewhat improved crop advices from the southwest, especially Kansas, eased off July and September wheat in the last half of the session. The better field outlook was ascribed to rains, and there were prospects of further moisture before Monday throughout the greater part of the winter wheat belt. Week-end adjustment of trades, however, brought about fresh advances as the market came to a finish.

Corn, as well as wheat, reached a new high level of prices. Strength of wheat was the chief bullish influence, but toward the end of the day appeared to be more or less offset by predictions of an increased movement soon from farms. Trade was of fair proportions and was well divided.

Provisions rose with grain. Packers sold on the advance.

Pacific Northwest Grain.

PORTLAND, Ore., April 14.—April delivery: Wheat, bluestem, $2.06; fortyfold, $2; club, $1.99; Russian, $1.97. Oats, No. 1 white feed, $47. Barley, No. 1 feed, $46.50.

Futures: Bluestem, May, $2.07½; fortyfold, $2.02; club, $1.99; Russian, $1.98. Oats, May, $47.75. Barley, May, $47.

TACCMA, April 14.—Wheat—Bluestem, $1.98; fortyfold, $1.94; club and fife, $1.87; red Russian, $1.82.

SEATTLE, April 14.—Wheat—Bluestem, $2.06; Turkey red, $2.07; fortyfold, $2; club, $1.99; fife, $1.99; red Russian, $1.97.

Barley, $46 per ton.

WALLA WALLA, Wash., April 14.—Club wheat $1.80, bluestem $1.88, barley $44.

San Francisco Grain.

SAN FRANCISCO, April 14.—Barley—May, $2.70 bid, $2.75 asked; December, $1.95 bid.

Portland Market.

PORTLAND, Ore., April 14.—Potato buyers are now offering $4 to farmers for the best stock. Only 50 cars are known to be left in first hands, not enough to see this market through the remainder of the season.

Eggs have advanced again, and at the close of the week storage operators were putting away stock on the 32-cent basis, which is 60 per cent more than storage pack cost them last year.

Butter production is gaining slightly, but the supply is still under the demand, and as the eastern markets are going up, prices here may be advanced.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $47.75 per ton.

Corn—Whole, $61; cracked, $62 per ton.

Millstuffs—Bran, $37 per ton; shorts, $40.

Barley—No. 1 feed, $47; brewing, nominal; rolled, $50.

Hay—Buying prices: Timothy, eastern Oregon, $22@25; alfalfa, $17@20; grain, $13@15.

Eggs—Oregon ranch, case count, 32c per dozen; candled, 33c.

Poultry—Hens, 21@22c; ducks, 22@23c; turkeys, live, 20@22c; dressed, 23@28c; geese, 12@14c.

Butter—City creamery, prints, 44@45c per pound; cubes, 41c.

Cheese—Oregon triplets, 24c; young Americas, 26c.

Dressed meats — Veal, 14@14 1-2c; pork, 18@18 1-2c.

Hops—1916 crop, 3@7c per pound.

Potatoes—Oregon, jobbing price, $4.25.

Onions—Jobbing prices: No. 1, $12.50.

Wool—Eastern Oregon, fine, 30@35c; coarse, 40c; valley, 40c.

Beans—Oregon small white, 11c; California small white, 13c; large white, 12½c per pound.

Hides—Salted hides (25 lbs. and up), 18c; salted stags (50 lbs. and up), 14c; green and salted kip (15 lbs. to 25 lbs.), 18c; green and salted calfskins (up to 15 lbs.), 27@28c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 13c; dry hides, 30c; dry salt hides, 25c; dry horse hides, $1@2; salt horse hides, $3@5.

Seattle Market.

SEATTLE, Wash., April 14.—To operators there is nothing strange in the fact that spuds have ascended to $90 for Yakima gems and $80@85 for locals, but to search out the possible high point, while at the same time conducting an investigation of the visible supply and how long it can hold out against the present brisk demand is of more importance.

Any dealer who cared to wager that the market would not touch $100 per ton, Seattle basis, could get all the opposition he desired. In fact, predictions were made on Western avenue today that holders would be compelled to get that figure before the end of next week.

Very little Yakima stock remains here.

The egg market is strong. Jobbers will begin Monday to quote 31@32c to producers and will sell at 34c. Conditions of demand and supply today are similar to those of midwinter, when there is barely enough stock coming to meet the current requirements. Storage has been practically out of the question. Alaska has bought heavily, including business for the railway construction crews, and the receipts have been insufficient to leave any surplus for storage after the supply has been drained from so many consuming sources.

Cheese is scarce almost to the vanishing point. Jobbers reluctantly admit that here at least is one commodity which consumers can do without when the market is abnormally high, and full advantage is being taken of the fact. Oregon manufacturers report a heavy drain upon a limited production, and are constantly in a battle, together with manufacturers of Puget sound, for milk against stiff bidding. The difficulties of the Washington cheese manufacturer are being intensified by competition from condensaries.

Poultry will remain steady next week, according to quotations by jobbers. The storage stock of frozen ducks has been cleaned up. Belgian hares are in good demand because of the high prices of other meats.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 31@32c per dozen.

Poultry—Live hens, fat, over 4 lbs., 21@22c per lb.; do 3 lbs. and under, 20@21c; old roosters, 12c per lb.; springs, 21@22c; ducks, 22c per lb.; squabs, large, $3.50 per dozen; geese, fat, 18c per lb.

Butter fat, 47c per lb.; dairy butter, 27c per lb.

Beef—Buying price: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.

Hogs—Light, 15@16c per lb.; do heavy, 10@12c per lb.

Veal—Fancy light, 13@14c per lb.; do heavy, 10@12c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 32c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 36c per lb.; dry calf (under 6 lbs.), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry butcher full wool sheep pelts, 25@28c per lb.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., April 14.—Hogs—Receipts, 7600; steady. Heavy, $15.70@16; light, $15.25@15.85; pigs, $13@15; bulk of sales, $15.60@15.90.

Cattle—Receipts, 100; steady. Native steers, $9.50@13; cows and heifers, $8@10.85; western steers, $9@11.50; stockers and feeders, $6.50@10.25.

Sheep—Receipts, 200; steady. Yearlings, $12@13.75; wethers, $11.50@12.75; lambs, $14.75@15.70.

At Chicago.

CHICAGO, April 14.—Hogs—Receipts, 7000; steady at yesterday's average. Bulk, $15.80@16.20; light, $15.40@16.15; mixed, $15.65@16.35; heavy, $15.65@16.35; rough, $15.65@15.80; pigs, $11.50@14.50.

Cattle—Receipts, 500; weak. Native beef cattle, $9.30@13.25; stockers and feeders, $7.30@10; cows and heifers, $5.75@11; calves, $9@13.25.

Sheep—Receipts, 2000; steady. Wethers, $10.70@13.10; lambs, $12.15@16.

At Portland.

PORTLAND, Ore., April 14.—Hogs—Firm; receipts, 936. Bulk of packing grades, $14.60@14.75; heavy packing, $14.75@14.85; light packing, $14.50@14.70; rough heavy, $13.60@14.25; pigs and skips, $13.25@13.75; stock hogs, $11.50@13.

Cattle—Steady; receipts, 76. Steers, prime light, $9.85@10; prime heavy, $9.50@9.75; good, $9.25@9.75; cows, choice, $8.25@8.75; medium to good, $7.75@8.25; ordinary to fair, $6.75@7.50; heifers, $8.25@9; bulls, $6@8; calves, $7@10.

Sheep—Firm; receipts, 13. Lambs, east of mountains, $13@13.50; lambs, valley, $12.75@13.25; lambs, shorn, $11@11.50; prime wethers, $11.50@12; choice ewes, $10@10.75; heavy ewes, $9@10.

At Seattle.

SEATTLE, April 14.—Receipts, 105 hogs; market, strong.

Hogs—Prime light, $14.90@15; medium to choice, $14.50@14.60; smooth heavies, $14@14.25; rough heavies, $13.50@14.75; pigs, under 150 pounds, $10@13.75.

Cattle—Prime steers, $9.90@10; medium to choice steers, $9.25@9.50; common to good steers, $6.50@9; best cows and heifers, $8.50@8.75; medium to choice, $8@8.25; common to good, $4@4.75; best bulls, $6.50@7; common to good bulls, $3.50@6; calves, $6.50@10.

Sheep—Prime lambs, $12.50@13.75; good lambs, $12.25@12.50; wethers, $10.25@10.50; ewes, $9.10.

Spokane Stockyards Saturday.

Hogs — Receipts, none; market, strong. Prime light, $14.50@14.60; prime heavy, $14.60@14.75; pigs, $12.60@13.35; stockers, $10@12.

Cattle—Receipts, 11; market, strong. Prime heavy steers, $9.50@9.75; prime light steers, $9.25@9.40; good steers, $8.50@9; prime cows, $8@8.50; good cows, $7.25@7.75; common cows, $6.25@7; best heifers, $8.25@8.75; bulls, $4@7; calves, $7@10; stockers and feeders, $6@7.50.

Sheep — Receipts, none; market, strong. Prime lambs, $12@12.50; common lambs, $11@11.50; choice yearlings, $10.50@11; good yearlings, $9.50@10; best mutton ewes, $10@11.

Portland Wheat.

PORTLAND, Ore., April 14.—The wheat market held an 11-cent advance at the close of the week, when 30,000 bushels of bluestem were sold at $2.08. Everything was higher, with a strong demand. Forty-fold was quoted at $2, club at $1.99 and red Russian at $1.98. The demand was from California and also for northern milling account.

Flour was raised another 50 cents, to $10.20 for patents, and mill feeds advanced sharply.

Many Quails in Egypt.

Quails, part of the food of the children of Israel when in the wilderness, are still numerous in Egypt; and during their yearly migrations descend in swarms.

Need Not Fear Federal Price Control

No recent topic has been of greater interest to the farmers of the Pacific northwest than the agitation that is developing in many cities for government control of food.

Our informants who have come in from attending farmers' meetings say it is the absorbing question everywhere discussed. Deep alarm is reported and in a few instances farmers have announced a purpose not to respond to the appeal of the president, the governors and other officials for enlarged planting this year. Facing high prices for seed and the difficulty of finding farm labor, they fear that government control might force them to market their products at a loss.

Reflection, however, will convince the farmer that no producer should hold back from that fear.

Conditions may make it expedient for the government to take vigorous action to stop speculation in food. It is even possible that it may adopt the European plan of fixing maximum prices which the growers can claim.

That, however, is "in the air," and growers who hold back till congress has threshed out the problem will later have reason to regret their mistake.

For in point of fact there never was a time in our history when the farmer could go forward with his spring activities in greater ease of mind—with the assurance he now has that his labor will bring generous reward.

Even though the government might later commandeer his crops, the prices he would be paid would be sufficient to insure him a generous return.

In ordinary times the farmer must take what the market will give, and it has frequently come about that the market price was less than the cost of producing a commodity. Always the farmer labored under the element of risk. Potatoes sometimes were ruinously low. Wheat we have seen sold at a price that hardly offset the cost of seed, sacks and threshing. Apples have been marketed at prices that put the growers in debt.

But under government control, in times like these, when the whole world is short of food, the United States government can be trusted to deal fairly and liberally with the farmer. He can better take a chance with Uncle Sam than with the speculating middleman.

Seattle Wheat.

SEATTLE, April 13.—Just how much more Washington wheat will stand without breaking into the nebulae of over strain is the problem of all traders this week. For the first time in the history of the grain growing industry in the state, $2.10 per bushel appeared in the transactions on change as asking prices for bluestem for prompt April and May delivery.

Generally the market responded only slightly to the violent fluctuations in the east. Opening at $1.90 bid for milling bluestem, prices moved guardedly in a radius of 10c to 16c. While the feeling was speculative, traders here were inclined to waive the strength put up by war conditions and to work from the basis of a short crop for 1917 as forecasted in the federal report. It would be difficult to convince grain operators here that the gloomy forecast of the '17 yield was not the most vital bull factor in the market.

Wheat traders enjoyed the spectacle of export wheats such as club and fife selling at $1.25 to $1.29 per bushel over the normal five-year average up to the outbreak of the war. In those days it was recalled that club and fife cargoes were worked overseas at 69c to 70c, occasionally 75c per bushel, and the prices was concededly healthy and profitable.

Wool.

BOSTON, April 13.—Accountants employed by the Boston Wool Trade association reported today that there were 59,734,812 pounds of wool on hand or in transit to this city, the largest wool market in the world. This entire stock was offered the government at prices quoted the day President Wilson asked congress to declare a state of war, but was declined yesterday because the government found it impossible to make use of it at this time.

The Commercial Bulletin will say tomorrow:

"The wool market this week was stronger, but without the wave of speculative trading that many doubtless awaited. However, asking prices were generally about 2 cents a pound higher in the grease, except for very low wools. There was doubtless a proportional advance in many scoured wools. Manufacturers are awaiting with interest modifications in army specifications, likely to be made by the government. Some buying in the west is reported at fully recent rates."

Scoured basis:

California, northern, $1.20@1.25; middle county, $1.10; southern, 85@87c.

Oregon, eastern No. 1 staple, $1.30; eastern clothing, $1.15@1.20; valley No. 1, $1@1.05.

Territory, fine staple, $1.35@1.40; half blood combing, $1.20@1.25; three-eighths blood combing, $1.10@1.12; fine clothing, $1.10@1.25; fine medium clothing, $1.10@1.15.

Pulled: Extra $1.30@1.35; AA, $1.20@1.25; A supers, $1.10@1.15.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes — Potatoes, $3.50 cwt; new potatoes, 12½c lb.

Seed Potatoes — Early Ohios, 4c lb; Early Rose, 4c lb; white potatoes, 4c lb; Early Six Weeks, 5c lb.

Apples—Washington apples, cooking, 75c@$1; eating, $1@1.25; Wageners, $1 box; Rome Beauties, $1@1.40 box; Winesaps, $1.75@2 box; Y. N. Pippins, $1.75@2 box.

Butter—Blanchard cartons, 47c lb; Medo-Maid, 47c lb; Cascade, 47c lb; Gold Leaf, 47c lb; Attalia, 47c lb; Diadem, 47c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25c lb; Hazelwood Young America, 25c lb; Wisconsin limburger, 29@30c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs — Fresh local ranch eggs, $10 case.

Live Poultry—Hens, 18@19c lb; old roosters, 10c lb; ducks, 13c lb; turkeys, 20@25c lb; geese, 11c lb.

Dress Poultry—Hens, 22c lb; springers, 21c; old roosters, 13c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs; 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

Butter and Eggs.

ELGIN, Ill., April 19.—Butter, 25 tubs at 46c. This is a record price for April.

CHICAGO, April 14.—Butter—Easier; creamery, 41@41½c.

Eggs—Higher; receipts, 21,450 cases; firsts, 32½@33½c; ordinary firsts, 31@32c; at mark, cases included, 30@33c.

Non-Skids Were Needed.

Thelma, 3, was trying to explain that her little friend needed rubber heels on her shoes, and said: "Mama, she needs a flat tire on her shoe."—Cleveland Plain-Dealer.

Cattle and Horse Raisers' Association

The following official call for the fourth annual meeting of the Cattle and Horse Raisers' association of Oregan, at LaGrande, has been issued by William Pollman, president, and S. O. Correll, secretary:

Call is hereby made for the fourth annual meeting of the Cattle and Horse Raisers' association of Oregon, to be held in LaGrande, Ore., on April 24-25, 1917, opening at 10 o'clock a. m., on Tuesday, April 24.

All railroads operating in Oregon, Washington and Idaho have published for this convention one and one-third fare for the round trip on the certificate plan, dates of sale from April 20 to 25 inclusive, with return limits of April 24 to 27 inclusive. Purchase your ticket to LaGrande at regular rates and take a certified receipt, and upon presentation of said receipt a return ticket will be sold at one-third the regular fare.

Many subjects of interest to live stock growers will be considered. Among the speakers who will be present are W. B. Webster of Kansas City, Mo.; T. W. Tomlinson of Denver, Col.; Governor James Withycombe of Salem, Ore.; George C. McMullen of Kansas City, Mo.; Professor E. L. Potter of Corvallis, Ore.; Ephriam Barnes of the United States national forest service; A. D. Dunn of Wapato, Wash.; Dr. W. H. Lytle of Salem, Ore., and J. F. Blanchard of Prineville, Ore.

The LaGrande Commercial club, and the stockmen of Union county are in charge of the arrangements for this convention and the entertainment of the members, delegates and visitors. Special entertainment has been provided for the ladies, and every one is assured a good time.

One feature of the entertainment will be a free exhibition of pure bred live stock which promises to be both interesting and instructive.

Reservations for rooms can be made by writing the LaGrande Commercial club. Ample accommodations have been made for all who come.

Our executive committee urges all stockmen to attend this convention, and the citizens of La Grande enclose you an invitation.

The term of office of all county brand inspectors expires June 1, 1917. Please have the cattle and horse growers of your county recommend to our association an experienced stockman suitable for this position.

Our Flag!



In this solemn hour of American history every reader of The WASHINGTON FARMER will want to fly the Stars and Stripes.

We have secured a limited number of American flags, 3x5 feet, muslin, fast colors; and while the supply lasts will send one with a new or renewal subscription to The Washington Farmer, both for only $2, which is the regular 3-year subscription rate. If you are paid ahead your subscription will be extended 3 years.

We suggest that you act at once, as our supply of flags will be quickly exhausted.

In ordering kindly use this coupon if convenient.

The Washington Farmer,
Review Bldg., Spokane.

Enclosed find $2 (your personal check, stamps or money order), for which send me American flag, as advertised, and The Washington Farmer ... years.

Name .....

Address .....

.....

News for Breeders

Prices received at six Shorthorn sales in Illinois and one in Iowa the first week in March averaged $374 per animal.

At the Harris & Sons Hereford sale at Harris, Mo., February 28 and March 1 the average price received was $1281, a new high record for Hereford sales. The bulls averaged $1545.

Several sales of Shorthorns have been held in the southern states since the first of the year and in every case rather high prices were received. Beef cattle men are gratified at the increase of interest in pure bred cattle in the south, especially Shorthorns.

The Evergreen Cooperative Cheese factory, a few miles southwest of Silverton, Ore., was opened March 5. Plenty of milk is being received and the farmers who own it expect the business to increase as soon as they can take care of it. L. B. Haberle is president; H. H. Kuenzi, secretary, and John Eahler, cheese maker.

At the Honks & Bishop Duroc Jersey sale in Iowa January 17 36 catalogued sows sold for an average of $253 and five boars at $278. At the Ira Jackson sale at Tippecanoe City, Ind., February 21, 45 sows of the same breed averaged $305, the top sow going at $570. It looks as if prices out here are not as high as they are yet sure to go.

The Guernsey Breeders' association of Tillamook county is arranging to send for a carload of high class Guernseys. They can not be found in the Pacific northwest and while they might possibly be secured in California the opportunity for selection there is small and the cattle will probably be purchased in Wisconsin. County Agriculturist Jones and some member of the association will make the selections.

N. C. Culy of Grants Pass, Ore., recently purchased from F. E. Lynn of Perrydale, Ore., six head of registered Jerseys, three cows and three heifers, paying $1500 for them. Included among the heifers was a full sister to Nashville Susie, Mr. Lynn's grand champion cow at the Panama-Pacific exposition. She promises to equal her famous sister, and the entire lot are desirable Jerseys. Mr. Cully has been dairying for years, and these are his first registered animals. He plans building up a Jersey herd.

U. G. Smith of Newburg, Ore., who owns a son of the great show bull, Peter Pan, has recently purchased nine registered Ayrshire heifers. Five are sired by a half brother of Lily of Willowmoor, that holds the world's long distance butter record, one of them from a heifer that produced 15,000 pounds of milk with her first calf. There is some Comet and some Netherat Brownie blood in the herd. The heifers were purchased from Shannon Bros. of Cloverdale, B. C., and H. W. Vanderhoof of Huntington, B. C.

On Wednesday, March 21, a number of cattle breeders of Yamhill county, Ore., met at McMinnville to plan ways and means of placing more registered bulls in the county. The meeting was called by County Agriculturist Shrock, who outlined the objects of the meeting. He spoke of the small number of purebred bulls used, of the high prices received by stallion dealers, who take notes for the entire amount, cashing them at local banks. While no positive agreement has been made by the banks, he had some assurance of local banks handling notes given for bulls. He asked the question of how best to get more interest in purebred sires, suggesting bull associations, and also spoke of the value of cow testing associations.

A general discussion followed, the following taking part: Thomas Carmichael, Gaston; T. A. Shelton, L. H. Baker and L. Horner, Carlton; J. U. Smith, Newburg; J. O. Boger, Amity; George Sully, W. A. Forrest, James Cruickshank, G. B. Lawson, E. J. Handley and I. B. Shirley, McMinnville.

It was decided to organize a Yamhill County Pure Breeders' association, and another meeting will be held at an early date at the call of Mr. Shrock.

W. L. Sheard, the Duroc breeder of Dayton, Ore., recently purchased a son of the great sire Pathfinder from Hanks & Bishop of Iowa. The young boar has the bone, good feet and strong back of his sire and promises to develop into a great hog. Mr. Sheard has several very nice litters of spring pigs and will probably exhibit at the state fair again this fall.

J. R. Cole of Molalla, Ore., owns in addition to his Big Type Poland Chinas and Jerseys, a little flock of 15 registered Cotswold ewes that have this spring made a record of slightly less than 200 per cent lamb production. Two yearlings had single lambs. All the older ewes had twins except one and she bore triplets, all of which lived. For a week after the last lamb was born only three had been lost and the others all seemed in the best of health. Mr. Cole would like to know of other flocks that may have lambed 200 per cent.

H. J. McInnes near Albany, Ore., recently purchased from J. C. Brown & Sons of Shedd, Ore., their Jersey herd bull Londseer Tormentor Boy, a very strongly bred Tormentor bull, with great producing blood lines in his pedigree. Mr. McInnes has only a grade herd of Jerseys, but they are good cows and he deserves much credit for securing so good a bull. It is understood that Mr. Brown has retained the privilege of buying him back in two years. The Messrs. Brown have also recently sold a young bull and two heifers to A. Foss of Terrebonne, Ore. The heifers were by their young bull, St. Mawes' Noble and the bull by the old herd sire. They report sales fairly good.

The meeting of the Oregon Cattle and Horse Raisers' association at La Grande, Ore., April 25 and 26, promises to be a great meeting, in attendance, in interest and in quality of program as well as from the fact that a large number of the best pure bred live stock of the Grande Ronde valley will be on display. Speakers of national prominence from the east, as well as some of the best known stock men in Oregon and Washington have been secured. A "cowboy breakfast" and a banquet and entertainment for the ladies as well as the men are included in the good things promised those who attend. H. A.

Canada Offers 160 Acres Land Free to Farm Hands

Bonus of Western Canada Land to Men who Assist in Maintaining Needed Grain Production

The demand for farm labor in Canada is so great that as an inducement to secure at once the necessary help required, Canada will **give one hundred and sixty acres of land free as a homestead** and allow the farm laborer, who files on land, to apply the time he is working for other farmers as residence duties the same as if he had lived on the land he had applied for. This offer made only to men working on Canadian farms for at least 6 months during 1917, thus reducing the necessity of actual residence to 2 years instead of 3 years, as under usual conditions. This appeal for farm help is in no way connected with enlistment for military service, but solely to secure farm laborers to increase agricultural output. A wonderful opportunity to earn good wages while securing a farm. Canadian government will pay all fare over one cent per mile from Spokane to Canadian destination. Information as to low railway rates, etc., may be had on application to

J. N. GRIEVE.
Canadian Government Agent.
Cor. 1st and Post St., Spokane, Wash.

POSTS Price List Free!

Genuine Red Cedar—they won't rot

Quit buying posts in small lots at high lumber yard prices. We ship direct from woods. FREE Price List shows sizes, prices, number in car.

Hewitt-Lea-Funck Co., 738 Funck St., Sumner, Wash.

POULTRY

Rhode Island Reds

and Rhode Island Whites—both combs. Eggs $2, $3, $5 per 15. $6 and $8 per 100. Bronze turkey and Toulouse geese eggs. Pedigreed Belgian hares. Selling out. Bred does, $2. J. Nonnenmacher, R. F. D. 3, North Yakima, Washington.

PRIZE WINNING STOCK.
S. C. White and Brown Leghorns and Rhode Island Reds; heavy layers; eggs, $1.50 per 15.
R. H. GREER, Hillsboro, Ore.

WINNERS OF THE BLUE.
Barred Rocks—S. C. Black Minorcas.
Write for prices on high-class exhibition and breeding stock. Satisfaction guaranteed.
WILBER CLAYTON, R. F. D. 1, Payette, Ida.

BARRED ROCKS
Both matings. Winners at the late Denver show. Sales, 60 birds. Hatchable eggs in season.
J. H. FIELD, Lander, Wyo.

BAILEY'S BARRED ROCKS.
Eggs from my prize winners, $2, $3 and $4 per 15.
E. S. BAILEY, R. D. No. 4, Boise, Idaho.

EGGS FROM SELECT S. C. White Leghorn pens of high average layers. Awards Boise Shows, 1916 and 1917; $1.50 setting 15, $8 per 100. Quality prices. ARCHIE M. LARSON, R. 3, Weiser, Idaho.

Dispersal Sale of HIGH PRODUCING JERSEYS

45 Registered Jerseys
55 High-Grade Jerseys

They will be sold at Farm, FAIRBANKS, WASH., ON MAY 10, 1917. (Fairbanks is 35 miles south of Spokane on the electric line.)

Herd rich in the blood of Stoke Pogis, Gertie of Glynllyn, Golden Glow and other famous animals of American breeding. WRITE FOR CATALOG.

A. G. WOODWARD, Owner Fairbanks, Wash.

COLFAX BLUE RIBBON STUD

Colfax, Washington.

EXTRARODINARY 30-day Special Sale of Imported and American Bred Percheron, Belgian, Shire and Clydesdale stallions and mares.

The very best of each breed can be found here, stallions of outstanding size, combined with superior quality.

Write us your wants or, better still, come and see us. LIBERAL TERMS, and prices that DEFY COMPETITION.

We have a few stallions on hand that we have taken in on deals that are proven sires, extra good individuals, and that we will sell at sacrificing prices.

PETER M'FARLANE, Mgr.

Address all correspondence to Colfax Blue Ribbon Stud, Colfax, Wash.

Read the Want Ads in This Issue

New ads appear each week in the "Want Ad" department of this paper. Just take a few moments to look them over you may find something you have been looking for to repay you for your effort.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. APRIL 26, 1917. ** NO. 17.

Railroad Managers Plan a Big Killing

Farmers Must Help to Pay the $375,000,000 Exacted by Increased Freight Rates

Unless the people vigorously protest, the interstate commerce commission will make permanent its temporary order granting the railroads an advance in freight rates of 15 per cent all around. This will mean an additional income of $375,000,000 for the railroads and every dollar of it will have to come out of the producers and consumers—the farmers, the stockmen, the orchardists, the miners, the lumbermen, the fishermen and others who toil in the great productive industries of the land.

When the Adamson law was before congress last summer The Washington Farmer said that if the government forced the railroads to pay the higher wages demanded by the trainmen, the railroad managers would ask the government to authorize higher freight rates, and in the end the people would be made to "pay the freight."

The expected has happened, only it is worse than the expectation. The roads have asked the interstate commerce commission for an advance of 15 per cent all round, and the commission has granted it in a temporary way. That is, the commission says the roads may start the higher rates on June 1, provided the commission is not convinced before that date that the advance is too high.

In this manner the commission brings the issue squarely before the railroads and the shippers in a definite way, and hearings are now in progress at the national capital.

Protesting shippers say a 15 per cent advance is unwarranted by the earnings of the roads.

The railway managers point to the Adamson law and higher prices for supplies, equipment and fuel, and say they can not operate profitably on less.

When the Adamson law was under discussion last summer The Farmer warned its readers that if it passed the roads would come back with a plea for a rate increase that would more than compensate them for the $50,000,000 to $100,000,000 increase in wages to their men. The managers claimed at first that the wage increase would cost them $100,000,000 a year, but subsequently scaled down that estimate. The trainmen said it would not exceed $25,000,000. Fifty millions is not far from the real mark.

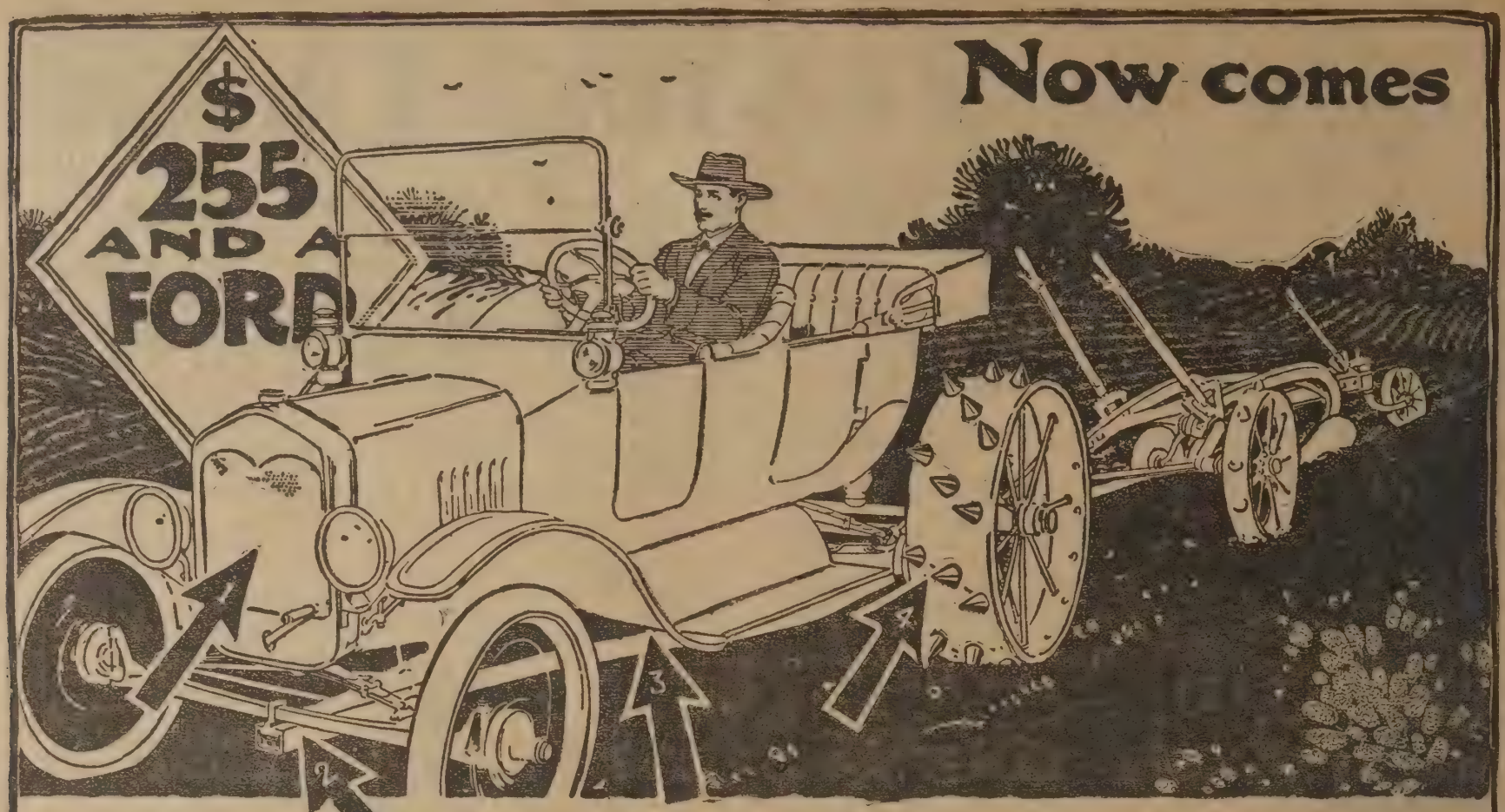
But the roads are now demanding nearly eight times $50,000,000, as a moment's calculation will show. They earned in the fiscal year ended June 30, 1915, in freight charges, exclusive of passenger earnings, $2,037,000,000. But their earnings have increased largely since then. The latest figures are not at hand, but their present freight earnings are known to be close to $2,500,000,000.

A 15 per cent increase on these earnings would give then $375,000,000 and that vast sum, if finally granted by the commission, will come out of the producers and the consumers of the United States.

As the farmer is both a producer and a consumer, he will pay both ways. It will come out of his wheat and other grain, his live stock, his fruit. And he will pay higher freight rates on all he buys at the store, because the middlemen will shove it along.

What can be done? Protest! Every grange, every farmers' union, every producers' organization should pass protesting resolutions and send them immediately to their senators and representatives at Washington.

Unless the people protest, the interstate commerce commission will make its temporary order permanent and the railroads will get that $375,000,000.



Now comes

1 This special radiator—ten times more efficient than the radiator of the Ford—guarantees perfect cooling—without this installation no automobile motor can work satisfactorily as a tractor.

2 Front end of Smith Form-a-Tractor frame fastens to front axle of Ford—a feature of strength and convenience not duplicated in any other construction.

3 Smith Form-a-Tractor frame extends full length of Ford frame, reinforcing it and leaving no part of the tractor attached to the Ford when used as a pleasure car.

4 Three rows of conical lugs—twenty-seven to each wheel—give unusual efficiency in soft soil—distinctive Smith Form-a-Tractor construction.

Smith Form-a-Tractor

Guaranteed To Do the Work of Four Big Horses

COMBINES with any Ford touring car or roadster to make a fully guaranteed tractor, duplicating, in amount of work it will do, the highest priced, biggest tractors you can buy, and giving you the most efficient tractor construction that you can get.

Fifteen minutes will change your Ford to tractor, and it takes only fifteen minutes to make the change back again. The tractor construction is complete and leaves nothing attached to the Ford with the exception of the new special Smith Form-a-Tractor Radiator and the patented Force Feed Oiling System.

Back your Ford over the Smith Form-a-Tractor frame—jack up the rear axle—pull off the Ford rear wheels—replace them with the Smith Form-a-Tractor roller driving pinions—connect up the Smith Form-a-Tractor axle to the Ford axle with special clamps—clamp the front end of the Smith Form-a-Tractor frame to the front axle of the Ford frame, and the conversion is complete. All the work is done by the Smith Form-a-Tractor attachment. The tractor wheels push the Ford ahead and pull the farm implements from the rear. You do not deface your Ford in any way. You do not injure its wonderful ability, but merely utilize its low cost of operation to give the cheapest form of doing farm work.

Use Smith Form-a-Tractor now for

Plowing	Spreading Manure	Cultivating	Grubbing	Crushing Clods
Mowing	Pulling Trees	Smoothing	Packing	Pulling Binders
Listing	Hoisting Hay	Drilling	Rolling	Pulling Stones
Disking	Hay loading	Irrigating	Spraying	Ditch Digging
Dragging	Stretching Wire	Loading Logs	Grading	Hauling Crops
Leveling	Pulling Diggers	Pulling Stumps		

and any other farm work that you have been doing with horses.



Smith Form-a-Tractor drilling—four horse work.

50,000 This Year

20,000 Smith Form-a-Tractors are now being built, even before this announcement.

50,000 will be sold this year.

Smith Form-a-Tractors will cut the cost of doing farm work from 40% to 70% on any farm in the country, large or small.

Use Smith Form-a-Tractor for your farm work—Smith Form-a-Truck for your farm hauling, and all the wasteful expense of horses is eliminated.

Wonderful Design

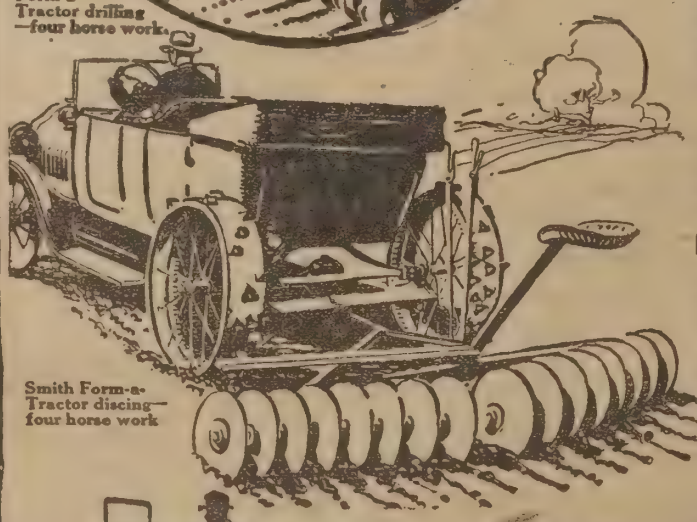
In quality—workmanship—design—materials—Smith Form-a-Tractor gives you tremendous value.

The special cellular type radiator, ten times as efficient as the regular Ford radiator, guarantees perfect cooling in all kinds of work, under all weather conditions. Even on the hottest days you can plow at the rate of seven acres a day with absolute certainty, where horses can only plow 4 acres, with the constant fear that they will drop dead in the harness from excessive heat.

The patented Force Feed Oiling System guarantees perfect lubrication—freedom from burned out bearings, scored pistons. These two features are absolutely essential to proper tractor operation.

The tractor wheels are exceptionally wide, equipped with strong, durable lugs for service in soft soil, the roller pinions meshing with the bull ring gear of the tractor wheels, are made of nickel steel, heat treated.

The tractor axle is back of the Ford axle. The driving power of the pinions is exerted downward, keeping strain away from the Ford and giving utmost efficiency.



Smith Form-a-Tractor discing—four horse work

Remarkable Power

Eleven-to-one gear reduction through the use of the Smith Form-a-Tractor roller driving pinion gives wonderful working power. Two and one-half miles an hour in plowing, binding, drilling and all other farm work—eleven times the pulling power of the Ford.

Smith Form-a-Tractor will start and work continuously, hauling a 28-inch gang plow or doing any other four-horse work, and do it all on high gear. We absolutely guarantee this amazing feature of performance.

Deliveries Now

You need your Smith Form-a-Tractor now, when you are busiest in the field, doing your hardest work. We can take care of your demands. Our big, complete dealer organization covering every section of the farming territory is ready to supply your demands immediately.

You can order from our dealer in the morning and have your Smith Form-a-Tractor at work, radiator installed, oiling system in, and the tractor itself ready for work in the afternoon of the same day. The first 12 hours you work Smith Form-a-Tractor will show you just what a tremendous saving it will make for you in your farm work.

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Smith Form-a-Tractor hauling largest size manure spreader

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Michigan Avenue and 16th St., Chicago

DEALERS WIRE! Get full details of the Smith Form-a-Tractor dealership. Make application by wire. One day now is worth ten days a month from now. This is the big selling season. Get in line on the sales.

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Gentlemen: Please send me full information regarding the Smith Form-a-Tractor and its application to my work.

I am operating a farm of.....

acres: my principal crops are.....

.....I am at present using

.....horses for my farm work.

Name.....

P. O. Address.....

State..... Washington F. 4-26-17.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 17 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF April 26, 1917

We Are For Cooperation

Will Not Boost Bogus "Cooperative" Schemes

It is the purpose of The Washington Farmer to print a series of portraits of representative farmers, and in furtherance of that plan it wrote recently to Fred W. Lewis, Tumwater, Wash., secretary of the Washington state grange. It has the following strange reply from Mr. Lewis:

"I thought at first I would not reply in any way, but after a second thought I decided that it was nothing more than fair to you to tell you why I do not accede to your request.

"In reply I wish to say that few farmers, indeed, would thank us for sending their photo and sketch without consulting them, and I assure you that very few if any of the farmers of Thurston county would be proud to have their portraits in your paper as long as it is devoting so much of its energy in fighting their organizations. * * *

"Of course, there are a few who will be hoodwinked into serving your purposes, but they will not be the really alive, wide-awake, up-to-date reading farmer, who recognizes the value to the farmer of organization.

"Of course, I realize, judging from your late editorial in which you suggested the names of several nonmembers of the organization as fit candidates for the office of master of the Washington state grange, that your idea and mine of who are influential farmers might seriously differ. Knowing this, I would recommend that you make your offer only to those who, like you, include only anti-organization farmers among those who may be termed influential. You should certainly realize that such an offer would not meet with the approbation of a true friend of the farmer."

That, of course, is an unfriendly letter, from one who is unfriendly to The Washington Farmer. Secretary Lewis is unfriendly because the Farmer gave its readers full and accurate reports of the recent trial and conviction, by a jury in the United States court at Spokane, of a coterie of dishonest officials of the Northwestern General Trading company who swindled farmers of the Pacific northwest out of hundreds of thousands of dollars by selling them worthless stock on fraudulent representations.

If the Farmer had glossed over the amazing revelations of that trial and had tried to conceal Mr. Kegley's indefensible boosting of the swindling schemes of the Northwestern General Trading company, his subordinate officer in the grange would not have written the foregoing unfair, untruthful and petulent letter to the Farmer.

The Farmer is for cooperation, "every jump in the road," and will be found working for every honest cooperative movement that will benefit the farmers and better the great agricultural interests of the Pacific northwest.

It is not going to boost bogus and swindling "cooperative" schemes like the Northwestern General Trading company. It is not going to excuse and palliate a criminal conspiracy simply because the master of the state grange has given it his indorsement as the official head of the Washington grange.

If Mr. Kegley had been "really alive, wide-awake and up-to-date"; if he had had sufficiently at heart the welfare of the farmers who were swindled outrageously through their misplaced confidence in a scheme that he had indorsed, he would not have misled his executive committee and through them the membership of the grange. For a careful investigation of the books, the methods and the manipulations of the Northwestern General Trading company would have shown him that it was something that the farmers should not touch with a 10-foot pole.

We wish to assure our readers that we shall not be driven from our course by menacing letters like the foregoing and others of similar intent that three or four hard and fast partizans of Mr. Kegley have sent in.

The Farmer has a mission and will hold to it. It will give its readers all the information at its command about swindling schemes. It will not swallow anything without investigation simply because some cunning promoter, seeking to clean the farmers out of hundreds of thousands of dollars, labels it "cooperative" and gets the unwise indorsement of Mr. Kegley or any one else.

Washington Portraits No. 12.



Arthur R. Brown.

Arthur R. Brown, who represents a type of a western hustler, was brought up on a farm in New York, had his early training under the watchful eye of a father who was reputed to be the best farmer in that section of the country, came west with the determination of making a home for himself, and took up land in eastern Oregon. Because of a rabbit invasion he left Oregon and settled in Klickitat county, Wash. He now has a well-improved farm between Goldendale and Centerville in one of the best wheat sections in the state.

The next in the series of Washington protraits will be that of H. W. Sparks of Fisher, and will be given in next week's issue of the Washington Farmer.

Twenty-Four Hours Plowing Test.

Between 12:30 one day and 12:30 the following day, a Bull tractor plowed 19 1-2 acres of heavy loam, frozen two inches deep during the night, on the farm of Chris Elliot, Wapato, Wash. The entire run was made without a stop, and no water was put into the radiator during the tryout.

The demonstration was in charge of Sam Robinson and John F. Rogers. Light was furnished by a Presto-Lite on the front of the tractor, as well as by the unclouded moon.

Thirty-eight gallons of gasoline were required to complete the job—less than two gallons to the acre. The total expense of operating, figuring oil at 60 cents a gallon and gasoline at 23 cents, was about 61 cents an acre. It would have taken six horses and three days to do the same work.

Must Join Association

To Borrow Money From Federal Land Bank

By N. W. DURHAM, Chairman Spokane Committee on Land Banks.

Records of the Spokane Federal Land bank show that 392 farm loan associations are now organized or in process of organization in the four states of this district. Washington leads with 139; Oregon comes next with 98; Montant is third with 78 and Oregon has 76.

Farm owners who have already joined these associations have received, or will soon receive, official directions telling them just what they must do in order to take advantage of the new law and borrow money at the low rate of 5 per cent. But thousands of other farmers not yet identified with a local association still lack a full understanding of the system. Inquiries come to the Farmer which show that some land owners do not yet understand that loans will be made only to farmers who are members of these local associations. To clear up this uncertainty we now print a number of questions and answers, taken from the "Farm Loan Primer," issued by the federal farm loan board.

"How do farmers go about it to borrow from the federal land banks?"

"By applying for membership in the nearest national farm loan association?"

If you do not know the location of the nearest association, write to the postmaster at your county seat. If he has not the desired information write to the secretary of the federal land bank at Spokane.

"What is a farmer to do if there is no national farm loan association within easy reach?"

"He should find 10 or more farmers or prospective farmers in his community who wish to borrow, and with them form a national farm loan association."

The term "community" as here used is indefinite. The law does not lay down exact geographical boundaries for a farm loan association. It may cover a county, if the farmers in that county all want to come into one strong association. Or one may be formed in a township, or even in an election precinct, provided at least 10 farmers who want to borrow in the aggregate not less than $20,000, want to organize it. On the other hand, there is no limit to the number of farmers who may join a single association.

"How may a national farm loan association be formed?"

"These 10 or more farmers should make application in writing to the federal land bank (in Spokane, for the states of Montana, Idaho, Washington and Oregon) for a charter to do business. The 10 or more farmers must sign articles of association, swear to them and forward them to the federal land bank (at Spokane). The federal land bank will then send its appraiser to inspect the securitiy, and if satisfactory the loans will be authorized when the charter is granted to the association. The bank then advances the money through the secretary-treasurer of the local association, who is a bonded officer. In the application signed by borrowers each must indicate how much money he desires and must list the value of the land to be used as security."

(Continued on page sixteen.)

The Foundation of Sheep Raising

Grade Ewes and Purebred Sires Should Make Farm Flock

By E. J. IDDINGS.

Those who have never handled sheep or have had but limited experience should use grades for the foundation flock. Ewes suitable for starting a flock may be had from other farmers in some sections. In other parts of the state good grade ewes can ordinarily be bought from range flocks at a reasonable price. Our range flocks as a rule show the predominance of either fine or long wool blood. In either case a good, purebred ram of one of the breeds that combines a well developed mutton form with heavy fleece should be selected to head the flock. The ewe lambs may be saved to increase the flock or replace those sold because of age or unsatisfactory performance. The continued discriminating use of good rams of the same breed, and flock rebuilding by retention of ewe lambs, results in rapid improvement, flock uniformity and a group of animals entirely suitable to the farm.

Care should be used in selecting ewes for foundation. Many that can be obtained very cheaply are later found to be useless for a breeding flock. Common defects are broken mouths, infertility, spoiled bags and undesirable and inferior confirmation. Ewes are at their best from 3 to 5 years of age, although many retain their teeth and breeding powers until 9 to 12 years of age. From year to year ewes with broken mouths, of inferior confirmation or unsatisfactory as breeders should go to the butcher and be replaced with ewes from the lamb crop or with drafts from other flocks. Unless ewe lambs are dropped in early spring and are unusually growthy they are not bred until yearlings. Ewes for a breeding flock should have deep, low-set bodies, wide, level, straight backs, fine fleeces of considerable length covering the body evenly, strong legs and neat heads of breedy appearance and should be vigorous and good milkers.

The purebred flock appeals to many farmers and offers an attractive field for those of some experience. Range sheep men call for a large number of purebred rams each year and as the advantages of sheep on the farm are more widely understood and thoroughly appreciated there will be calls for purebred rams and ewes for use in building up farm flocks. As compared with grades, greater experience is called for in establishing and managing the purebred flock. For the best success with purebreds the flock master should be well informed on the problems of animal breeding and have some knowledge of salesmanship of purebred live stock.

Use Purebred Ram.

The sire, as in building other live stock herds, is more than "one-half the flock." He should be a purebred and an excellent individual. One can effect flock improvement by purchasing and paying well for carefully selected ewes. To secure marked excellence through the ewes the entire flock must be chosen with that end in view and the ram must at least measure up to the ewe average of excellence. The quicker and cheaper method of improvement, however, is through an unusually good sire, even though he costs three of four times ordinary ram prices. With reasonably good ewes and an outstanding

(Continued on page twenty-six.)

Nice Dairying on a Palouse Farm

Sweet, Rich, Pure Milk From a Hundred Slick and Shapely Jersey Cows

By RALPH E. DYAR

A. G. Woodward conducts the Shady Lawn dairy farm at Fairbanks, Wash., on the Spokane & Inland Empire railway. It impresses the visitor as being a big business—a factory if you please; a factory designed and operated to turn out one product only—sweet, rich, pure milk. It does not sell cream or butter. The plant consists of up-to-date, well appointed buildings and a herd of more than 100 sleek and shapely Jersey cows. The product of this "factory" is marketed in Spokane, where the Broadview Dairy company holds somewhat the same relation to Mr. Woodward's plant as the wholesaler or jobber of hardware occupies with relation to the manufacturer of stoves, tools or building paper. After all, the dairy farm has exactly the same object as any other business, and that is to make money.

Hugh Chalmers, head of one of the largest automobile factories in the United States, thinks of the five big problems of business as consisting of materials, machines, methods, markets and men. It is not surprising that Mr. Woodward in producing milk encounters the same big Ms as Mr. Chalmers faces in making motor cars.

For the most part, Mr. Woodward's 190-acre farm of good black Palouse soil takes care of his raw materials. The main crops are alfalfa, and for silage peas and oats, which are found more satisfactory than corn. Some of the peas are also cured for hay. Mr. Woodward does not have a pasture for his cattle, and the ration of May day is, therefore, not radically different from that of Thanksgiving or New Year's. As a result the volume of milk produced does not vary as much from month to month as it does from some dairies.

Most of the cows have been bred to freshen in September.

If we take up machines as the second consideration of our dairy factory we shall have to modify the term to include the plant and the cows, as well as the incidentals of equipment. The general character of buildings at Shady Lawn, in fact, the whole lay of the land, brings with it the same thrill of approval that one feels in visiting a rightly built lumbering establishment or up-to-date flour mill. The Shady Lawn plant is strategically located within a stone's throw of the shipping point, Fairbanks station, toward which the ground slopes. Thus the output of the dairy, from 120 to 130 gallons of milk daily from the 60 cows now in milk, is transferred to the point of shipment with a minimum amount of effort and expense, and the finished product is dispatched to the point of distribution, Spokane, at a freight charge of only 2 cents per gallon, the milk bringing 25 cents per gallon delivered in Spokane.

Water for all purposes—flooding floors, watering stock, cooling milk—is pumped from a well by electric power to a reservoir which delivers it under pressure to all parts of the dairy. The entire plant is electric lighted, with globes and switches at points where just the right amount of illumination can be secured without waste of current. This is one of the many little niceties of arrangement for which Mr. Woodward is responsible and in which he takes just pride. The milk house is the building nearest the railway. The immense hay and horse barn and the great dairy barn are within convenient reach of this smaller building, where the milk is cooled with the chill well water, ice not being necessary, and strained through cloth directly into the cans. The dairy barn is built with the one purpose of keeping a large number of cattle in the best of condition with the smallest possible effort. There is a great roomy space in the center where grain is handled and ground and hauled in carts direct to the long troughs, where it is lapped up by the cattle. The silos are at the ends of the barn. There is a 20-horsepower motor in the central part to furnish power for grinding grain and filling the silos. One of these is still full, the mixture being oats and peas in both. The two units of the barn in which the cows are kept are fitted with windows on both sides, extending the full length of the building back of the cattle. These windows are easily opened and supply the ventilation. The stables are flooded daily with air and sunlight—better disinfectants than any that man has invented. Besides this, the cattle are given regular exercise in the open while the stables are being cleaned and a thick bedding of straw is being thrown in the stalls. In cleaning a carrier system is used and the animals are frequently carded. One understands why there has never been a reaction for tuberculosis in Mr. Woodward's herd. All of the manure is returned to the land and Mr. Woodward figures that this has increased the value of his land $10 per acre over adjoining farms, where this system has not been adopted. Swinging stanchions and deep gutters aid in keeping the cows clean. The name of each registered animal is printed above her stall. They stand according to age, the oldest at one end of the row, the youngest at the other.

One feels that the Shady Lawn Jerseys are deserving of their clean, commodious, comfortable, well aired and sunny quarters. Type and breeding have been dominant considerations in building up the herd. The manager of this dairy business has shrewdly taken our northern winters into account in arriving at his ideal of a Jersey cow. He has been breeding animals of a vigorous, sturdy, broad-backed type, and although they have the beauty and grace of the entire channel island extraction, they are unmistakably robust and hardy. Moreover, they have the lines which spell success in the show ring, as two handfuls of ribbons and several loving cups attest. For example, at the fifth Northwest Live Stock show in Lewiston, Shady Lawn won The Spokesman-Review cup for the best herd of Jerseys, and Sultan of Rockland, who heads the herd and was secured from the Waikiki ranch, was senior and grand champion at the Spokane Interstate fair in 1916. There have been other important awards, all of which give evidence that Mr. Woodward has not underestimated the need for the right sort of animals and that he has been fully equal to the exacting task of building up such a herd.

When we turn our attention to the matter of methods, there is new justification in viewing the Shady Lawn Dairy strictly as a business institution. The modern ideals of efficiency control each step in the dairy routine. Illustrations of these ideals have already been given. For further illustrations we might take the feeding system. The cows are fed three times daily. If a cow is fed too much at a time she will not eat as much, Mr. Woodward says, her breathing on the hay or silage seemingly spoiling its flavor. He likes to go from stanchion to stanchion giving each animal only a handful of hay at a time. A cupful of oil meal is added to the grain to provide a laxative and help balance the ration. We all know the modern business man's insistence upon exact records, revealing what machine or what worker is showing a profit or a loss, and it is in keeping with the way things are done at Shady Lawn that the record of every cow is entered in such a way that her total yield, cost and profit for any month or year can be readily ascertained down to a cent. The cost of feed is put down at its market value. For example, a cow consuming a ton of alfalfa hay has a charge for $10 set against her record. Each stands a share of the labor cost and general upkeep, and is credited with what she produces. A page for the year ending March 1, 1917, shows that when the manifold problems of the dairy industry are solved, it is possible to show a record of profits. For the period covered the whole Shady Lawn herd, including grades as well as pure breds, averaged over 300 pounds of butter fat per cow. Mr. Woodward uses a record book which is distributed free by the dairy division of the United States department of agriculture; and is a member of the Whitman County Cow Testing association.

One Year's Record.

Name of Cow.	Pounds. Butter Fat.	Profit.
Mandy	473.9	$137.95
Topsy	462.4	138.59
Pink	451.6	146.32
Goldie	403.7	99.54
Ruby	391.	138.64
Judy	387.	84.46
Redwing	384.8	86.86
Nelly	382.7	102.46
Nancy	376.9	123.67
Shorty	358.3	88.19
Bobby	354.4	87.36
Dot	348.	73.21
Blanch	346.3	99.23
Bridget	335.9	58.37
Effie	334.8	72.84
Margie	331.1	76.34
Naomi	330.9	104.58
Madge	325.7	98.13
Julia	319.7	70.03
Comitia	317.8	67.96
Carrie	314.2	98.72
Daisy	311.9	63.63
Laura	310.	68.63
Bell	308.7	63.61
Lily	308.4	80.51
Darkey	304.1	73.77
Java	301.5	55.87

In February the butter fat record of some of the cows was as follows: Kit, 50.3; Bobby, 41.5; Redwing, 40.6; Topsy, 51.5; Fido, 55.1; Nancy, 51.3; Brownie, 53.9; Effie, 46.6; Spot, 63.3; Lois, 52.2.

The matter of market has been touched upon. We come to the last of our five Ms, the need which must be dealt with by Major General Wood, Colonel George Goethals, Henry Ford, and, in fact, by any one and every one who attempts to put through a piece of work that requires something more than his own two fists. It is the need for men. Mr. Woodward is the kind of man who realizes the requirements of his business and grapples with them. He has grit and determination, a knack for doing things thoroughly. This matter of help has received his earnest consideration. He has a plastered, electric lighted bunkhouse for his men, and a single bed for each man. He pays the highest going wage. His helpers, although they start work around 2 o'clock in the morning, do not put in more than nine hours' work per day. Surely their tasks are not so grinding or confining as those which must be performed by the hordes which every morning answer the shrill whistles of the factories throughout the land. Yet it is extremely difficult to get and keep competent milkers.

The difficulty has become more marked on account of the recent efforts of the Canadian government to secure farm laborers from the United States.

This is a problem which isn't Mr. Woodward's alone; it affects the present and future of the entire Pacific northwest; and we respectfully pass it along to the Spokane Chamber of Commerce and other public-spirited organizations as a perplexity worthy of their attention.

This, then, is the situation: Shady Lawn dairy farm is a well arranged, conveniently equipped, efficiently managed plant for the production of milk, and it can turn out this product at a profit over the cost of raw materials and manufacture. It is advantageously located with respect to transportation. In February the dairy's bacteria count was only 3250, which is a tribute to right methods; its record for butter fat showed an even 5 per cent.

Mr. Woodward has a business—a growing business—in which difficulty after difficulty has been met and conquered, yet there remains the one problem which has not yet been completely solved even at Shady Lawn farm—that of labor. Who can provide an answer?



The top picture shows Big Monmouth chief of Shady Lawn farm. His first three dams averaged over 824 pounds of butterfat. Below is a picture of the dairy barns at Shady Lawn farm. At the lower left corner is A. G. Woodward and one of his Jersey calves. At the right is Sultan of Rockland, head of Shady Lawn herd, senior and grand champion at the Spokane Interstate fair in 1916.

The A B C of Road Construction

Should Provide All the Ditches With a Sufficient Pitch

By FRANK W. GUILBERT, Chairman Executive Committee, Washington Good Roads Association.

We referred in our preceding article to the need of getting the water off the road quickly. We told you the purpose of "crowning" a road was to force the watter to run to the sides of the road so that it will not stand on the road or run down the course of the road itself, thus seriously damaging the surface.

Everybody knows that a ditch is a water course provided to carry waste water to some place like a lake or stream where it can do no particular damage. I refer now to road drainage ditches, not those provided for carrying water for irrigation or any other purposes.

Frequently we see water drain from the road quickly enough, but when this has happened stand in pools at the sides of the road. This is very bad for the road, because the water will find its way under the road and soften the foundation material, and the road will surely suffer. All ditches should be provided with a sufficient pitch to make the water run away to an outlet to a lake, a stream or some low place where it will do no damage and finally evaporate. This is one of the most necessary items to be taken into consideration in constructing roads. The keeping open these channels for water to run away in is the most important consideration in keeping up our roads. If the outlets are not kept open much damage will follow.

Elochoman Grange.

Elochoman grange of Cathlamet, Wash., has installed: Master, W. W. Head; overseer, Elmer Thomas; chaplain, Mrs. Laura Thomas; lecturer, Mrs. W. Morfit; treasurer, Mrs. Fred Olson; secretary, Mrs. James R. Stott.

State Grange Meets June 5

Wenatchee Will Entertain Annual Convention

The 29th annual meeting of the Washington State grange will begin its four-day session at Wenatchee June 5. Fred W. Lewis, the secretary of the state grange, urges every member of the order going by rail, stage or boat to take a receipt for the amount of fare paid. In case of boat or stage a return trip should be paid for and receipt taken for full amount, as that will be the amount allowed by the mileage per diem committee. In case of rail buy only one way, and one-third is reckoned for return. Buy your tickets clear through to Wenatchee, no matter which road you start on. Going tickets may be purchased any time from May 31 to June 6, and return tickets may be purchased from June 4 to 12, inclusive. Delegates going by auto are entitled to 4 cents per mile for one way as shown by nearest practicable route. Those going by automobile from the east side of the state are advised to go to Waterville, thence to Wenatchee over the beautiful Pine Canyon road; those from the south by way of Ellensburg over the Blewett pass, nad those from the west side to Cle Elum and thence over the Blewett pass. The Blewett Pass road has received much attention during the past year, the roadway has been widened and the grades reduced, and it is reported the roads will be in fine shape by the first of June.

Governor Lister has accepted an invitation to meet with the grange at Wenatchee and will speak at the reception Tuesday evening. President E. O. Holland of the state college has sent word that he will be present and make an address.

The following are the chairmen of the committees of the coming state grange as announced by Master C. B. Kegley:

Finance, L. L. Snow, Olympia.
Credentials, Pomona Masters.
Order of business, John E. Taylor, Marble Mount.
Agriculture, S. B. Ellison, Sauk.
Cooperation, W. J. Langdon, Sumner.
Club work, C. E. Flint, Blaine.
Claims and grievances, J. S. Stout, Mossy Rock.
State college, E. E. Faville, Portland, Ore.
Mileage and per diem, E. A. Wall, Anacortes.
Transportation, B. F. Pratt, Wauna.
Division of labor and master's address, U. S. Case, Prosser.
Subordinate granges, William Bouck, Sedro-Woolley.
Good of the order, F. P. Waters, Rice.
Pomona granges, Fred Nelsen, Seattle, R. 5.
Publication, Fred W. Lewis, Tumwater.
Resolutions, Jacob Vercler, Opportunity.
Legislation, Henry A. McCormick, North Yakima.
Peace, Knute Hill, Prosser.
Temperance, W. E. Powell, Ferndale.
Education, Lura S. Bouck, Sedro-Woolley.
Woman's work, Jennie F. Snow, Olympia.
Farmers' institutes, W. S. Thornber, Pullman.
Horticulture, G. T. Files, Touchet.
Poultry, Grant Dunbar, Seattle, R. 3.
Dairy, Ed J. Stevens, Sultan.
Home Economics, Louise Bruehlman, Greenacres.
Memorial, Lura S. Bouck, Sedro-Woolley.
Political duties, Fred A. Hodges, Pullman.
Health, sanitation and pure food, Willis Chambers, Port Angeles.
Postal improvement, Fred J. Chamberlain, Puyallup.
Forestry and conservation, Charles F. Keiser, Wenatchee.
Good roads, C. A. Ferrin, Wenatchee.
Rural and personal credits, J. E. McGoran, Valleyford.
State and national marketing, J. F. Gates, Malaga.
Taxation, Alson W. Steers, Nooksack.
Trials and appeals, F. W. Thurber, Buckeye.
Irrigation, Joseph A. Slavin, North Yakima.
Entertainments, W. E. Powell, Ferndale.
Constitution and by-laws, J. T. Compton, Wenatchee.
National grange recommendation, O. C. Musgroce, Elma.
Program, C. F. Keiser, Wenatchee.
Fifth degree, C. F. Keiser, Wenatchee.
Sixth degree, Henry A. McCormick, North Yakima.

Stockmen Convene

To Solve Problems in Okanogan

Live stock men over a territory more than 100 miles in width convened at Okanogan last week and threshed out problems confronting the live stock industry in the Okanogan district. The meeting was that of the Okanogan County Live Stock association. Three hundred men were present, including leading breeders, shippers and bankers from all parts of the state.

Resolutions were adopted asking the railroads to grant reduced rates on shipments of purebred live stock as a means of assisting in improving the herds of the district; asking that all brands and marks be recorded with the county auditor; and asking for county assistance in eradicating coyotes.

It was declared at the meeting that the members of the association would go in together this spring to ship into the county at least 20 purebred sires, and a movement is strong to eliminate the use of grade sires altogether.

President P. D. Smith of the association was reelected, as were the other officers. Among prominent men from outside who were present were the following:

E. F. Averill, Pendleton, superintendent of biological survey; Elmer Williams, government trapper; E. E. Flood, Spokane; O. M. Plummer, Portland; J. N. Price, specialist at the state college, Pullman; Thomas P. MacKenzie, assistant district forester, Portland; J. H. Roberts, Spokane; F. M. Rothrock, Spokane; A. Morrison, president of the Stevens County Stock association, Valley; A. V. Overman, Spokane; Walter A. Holt, county agriculturist, Okanogan.

Holsteins Average $238

Fifty Are Sold at Snohomish Consignment

By PAUL E. TRIEM.

The Western Washington Holstein Breeders' association's fifth semi-annual consignment sale, which was held at Snohomish, April 11, reflected in bidding and sales something of the uncertainty of the present ecenomic situation. Bidding was brisk and it is probable that most of the consignors were satisfied, but it was, nevertheless, a bargain sale in respect to many of its entries. One farmer was heard to remark, as he left the grounds, "If I hadn't been on the point of leaving the farm, I'd have spent every cent I had available this afternoon. There were some grand animals in the ring, the prices were certainly fair to the buyers, and we all know that these pure-breds and high producers are the only ones that can return a profit on present feed prices."

Some of the buyers realized the state of affairs in time to profit by the condition. Ed Hoem, of Snohomish, bought nine head, and J. L. Smith profited by his trip up from Coquille, Ore., to purchase five animals which he evidently considered bargain counter offerings.

Fifty individuals were sold during the morning and afternoon, bringing an average price of $238.80. A. E. Smith's Tobe De Kol 5th, topped the sale, bringing $600, while Charles Eldridge's Netherland Baker Mercedes came in a close second, with a price of $560. Both of these cows belong in the one hundred pound milk production class, the Chimacum animal in particular being a veritable four-legged milk factory, with the sturdy constitution, size and milk formation typical of the black and white breed at its best. The young bull Sir Netherland Selah Johanna, also consigned by Mr. Eldridge, brought $430 and was generally admitted to be a bargain at any price under $500.

Auctioneers George Gue and Harry Cranke were ably assisted by William Bishop, whose presence in the show ring added both to the humor and the success of the occasion. Mr. Bishop is a walking encyclopedia of dairy and breeding lore, and often he was able to enlighten the buyers on the history and blood lines of an animal up for sale.

The sales follow:

THE SALES.

Miss Colantha Fayne Ormsby, No. 269043, born January 5, 1915, Barney Altena, $280.
Monroe Star De Kol Korndyke, No. 164055, born September 11, 1911, Ed Hoem, Snohomish, $450.
Skygomish Belle, born July 25, 1916, Ed Hoem, $160.
Katie Waldorf Girl, No. 241473, born February 16, 1914, J. C. Paulsen, Stillwater, $210.
Skykomish Pet, No. 333682, born September 16, 1915, T. H. Smith, Lynden, $185.
Skykomish Minita, No. 333684, born September 20, 1915, Ed Hoem, $145.
Sir Paul Fayne, born April 25, 1916, Joseph Kreatz, Arlington, $105.
Katie Waldorf Edgely, No. 207264, born January 26, 1913, J. W. Scudder, Sedro-Woolley, $205.
Queen Hartog Pietertje, No. 247393, born May 21, 1914, T. G. Bowen, Snohomish, $140.
Canary Fernwood 2d, No. 218988, born March 23, 1913, J. L. Smith, Coquille, Ore., $280.
Canary Pauline Piebe, No. 105024, born February 10, 1908, Guy M. Richards, Bothell, $195.
Pietertje Beauty De Kol 3d, born March 9, 1909, Barney Altena, $205.
Tobe De Kol 5th, No. 149888, born February 25, 1910, H. K. Stockwell, Monroe, $600.
Princess Clothilde Jewel, No. 201721, born February 24, 1912, J. W. Scudder, Sedro-Woolley, $305.
Cornucopia Bessie 2d, No. 203789, born October 14, 1912, J. L. Smith, $250
Lady Korndyke Hartog, No. 266985, born November 12, 1914, T. G. Bowen, $300.
Chimacum Lorinda, No. 277393, born March 7, 1915, W. E. Harbert, Mount Vernon, $290.
Chimacum Wayne Julia Beets, born August 23, 1916, J. L. Hulbert, Mount Vernon, $205.
Sir Chimacum Wayne Korndyke, born March 22, 1916, Max. Hegewald, Everett, $105.
Onda Dorothy Cornucopia, No. 238767, T. G. Bowen, $250.
Leda Hartog Newman, No. 213141, born May 3, 1913, Reuben W. Hoffman, Kent, $300.
North Star Korndyke Beets, No. 212714, born February 9, 1913, T. G. Bowen, $260.
Chimachum North Star Maid, No. 350343 born August 7, 1916, T. H. Smith, Lynden, $105.
Chimacum Korndyke Maid, No. 350344, born August 7, 1916, T. H. Smith, $105.
Polkadot Pietertje Korndyke, No. 246000, born January 6, 1914, Thomas G. Lockhart, Mt. Vernon, $170.
Maid Oak Grove Korndyke, No. 248418, J. W. Shield, $150.
Mercedes De Kol Burke Pietertje, No. 238380, born January 16, 1914, J. F. Stevens, Seattle, $185.
Johanna Mutual Girl De Kol, No. 199376, born October 30, 1912, Ed. Hoem, $275.
Winona Pietertje Mutual Friend, born September 8, 1907, Ed. Hoem, $250.
Netherland Violet Pietertje II., No. 258538,

(Continued on page twenty-four.)

Food Preparedness by Special Train

Intense interest in the food preparedness campaign of the O.-W. R. & N. company, in connection with the Washington State college, was manifested at rousing meetings throughout eastern and central Washington last week. Delegations of citizens met the train; and audiences, under the leadership of Frank W. Robinson of Portland, traffic manager of the O.-W. R. & N., who joined the party, lustily sang "The Star-Spangled Banner." Copies of this song, with flags and buttons were distributed by Mr. Robinson and William McMurray, general passenger agent.

At Colfax, for the afternoon meeting, Judge McCroskey gave up his courtroom, the meeting being attended by fully 350 high school and eighth grade pupils and parents. The third meeting was in the courthouse, at night, and all available space was taken. Food values were dealt with at length by Miss Mary E. Sutherland of the state college, who advised high school girls that carrots, peas, asparagus and tomatoes were far superior to mercolized wax for the complexion and health. She advised canning asparagus, peas, corn and using sterilized caps, rubbers and jars to prevent loss. Miss Sutherland said: "Have system. Make out lists a week ahead for the home kitchen. When a woman tells me she hates the kitchen I know she does not know much about it. It is a wonderful study to know all about vegetables, meats and other food products and their preparation."

Professor Hegnauer declared that the next 25 years will be the most tremendous we have ever lived in. "We must produce enough to support ourselves and help support others, including the dependents of those called to defend the honor of our nation," he said. "Surplus wheat is about all gone. We must meet the food situation and produce to full capacity, practice economy and cut out waste.

Professor Barnett said: "Potatoes at $2 a bushel or more is a crop deserving a great deal of attention. We can to a material extent increase tuber production this year without overstocking the market. The selection of your seed potatoes should have care. Early Ohios are good early potatoes. Burbank or Carman No. 3 are desirable late varieties. Potatoes with dry rot, scab or fungus growth should not be used."

At Tekoa Mrs. Helen Dow Whitaker of the state college said: "Down at the college we are running an egg-laying contest to continue for a year, ending in October. It might interest you to know that a Single Comb White Leghorn hen entered in the contest by Paul B. Towne of Tekoa, had the record to April 1. She has been known as No. 501, and will henceforth be known as Lady Tekoa. She laid 103 eggs to April 1. It cost 86 cents to feed her, and her eggs sold for $3.37. If you have any more layers like that here send them to me to help pay for feeding a lot of poor layers that have been sent to us."

Try a patch of navy beans or field peas this year.

The train visited Pullman, Colfax, Garfield, Farmington, Tekoa, Latah, Fairfield, Rockford, Winona, Endicott, LaCrosse, Bolles and Dayton last week. This week the train is at Waitsburg, Walla Walla, Touchet, Kennewick, Grandview, Sunnyside, Zillah, North Yakima and Wallula.

THE PATRIOTIC LEGION OF WASHINGTON

Membership Open to Men, Women and Children.

I am a loyal and patriotic American. I most earnestly desire to do my share in helping to defend the honor of my country in time of war. I therefore request enrolment as a member of THE PATRIOTIC LEGION OF WASHINGTON and pledge myself to the work of increasing our nation's food supply during the war into which our country has been plunged.

Signed.....

Date of Enrolment ..... Address .....

When signed forward this blank to the Editor of The Washington Farmer, Spokane, Wash.

The following are enrolled as members of the Patriotic Legion of Washington:

E. N. Routh, Mayview.
J. F. Koreski, North Yakima.
J. Henry Endsley, Harwood.
Miss Elsie Meays, Yelm.
J. W. Elliott, Leavenworth.
H. G. Maxwell, Bellingham.
S. B. Nelson, Pullman.
Mr. and Mrs. Willis E. Lamb, E1024 Ermina, Spokane.
Henry Stevenson, Rosalia.
Otis T. Wilson, Granger.
Orlie Wiley, Republic.
Mr. and Mrs. W. A. Miller, 4 sons, 3 daughters, Mayview.
Mr. and Mrs. Ross, Cogswell, Sharon.
C. A. Dietz, Park Rapids.

An additional list of members as received and enrolled will be given next week.

POTATO DISEASES

How to Use Corrosive Sublimate.

To the Editor: Will you please give me directions as to how to use corrosive sublimate for the diseases of potatoes. G. K.
North Yakima, Wash.

The following quotation from "Potato Growing in Washington" by Dr. F. D. Heald, will answer this question.

The following is the standard strength for this fungicide and it should be used unless special directions are given for deviation from it under the control of specified diseases:

Corrosive sublimate, 4 ounces.
Water, 30 gallons.

The corrosive sublimate should be dissolved in hot water and diluted to the requisite volume. The seed tubers should be dipped in this solution for an hour and a half to two hours. In carrying out the treatment the following points should be kept in mind:

Use wooden vessels as the solution will corrode metal.

Use a new solution after treating five or six lots of seed since the fungicidal value is rapidly weakened. The solution does not lost strength by standing.

Corrosive sublimate is a deadly internal poison. It is not injurious to the skin and hence may be handled without danger.

Potatoes treated with the poison should never be eaten nor fed to animals.

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Entered as second-class matter January 13, 1916, at the postoffice at Spokane, Washington, under the act of March 3, 1879.

GUARANTEE OF ADVERTISEMENTS.

We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Farms Should Produce Maximum, but Soil Must Be Conserved

Never before, perhaps, in the history of the country was there such need for the farms to produce their greatest possible yields of foodstuffs. No better indication of this is needed than the prices that are being quoted, and these prices and the prospects for their continuation are of themselves sufficient inducement to the farmers to produce large crops this year.

But there is a danger that must be guarded against. Lands must not be depleted. Too long already has it been common practice for crops to be taken from the soil year after year without adequate return to the soil of elements that replenish it with plant food.

The campaign for increased production must embody also a campaign for conservation of soil fertility. Fertilizers must be applied in some form. Vegetable matter must be put into the soil. Cultivation must be made scientific and intensive with a view to upbuilding the land at the same time that it is producing its crop. Rotations should be practiced with a view to adding to the soil the elements that have been, or are threatened to be, exhausted by the one crop methods. Live stock should be made as great a part of the production as possible, for they return to the soil much of the plant food that they take away.

The farmers of this northwest must realize this situation. They must not look only upon high prices for their products this year. They must look forward to a time when the war is over and their lands will emerge from their share in it. These lands are truly battlefields, but they must not be devastated.

Agricultural Schools Needed

One of the most urgent needs of many communities of the northwest at this particular time is something in the nature of intensive farming schools. The nationwide—in fact, the worldwide—demand for increased food production has placed upon large numbers of producers a special responsibility, and this responsibility requires practical knowledge which many do not possess because of lack of previous experience in intensive methods of crop production. Especially is this true in towns and cities where thousands of persons are anxious to do their small part by cultivating small tracts or vacant lots. It is needed also in rural communities.

Community meetings under the leadership of practical farmers or experts from some of the agricultural experiment stations could do much to protect large numbers of persons against failures, or to insure them greater success than they could attain otherwise. There is no doubt that such leaders would be glad to render this service. The people of the communities should get together and organize such meetings.

The Push and the Pull From the Country

The drift from the country to the town which has occurred since the close of the civil war has been brought about by both a push and a pull. The push came because of the fierce competition in farm products, the low standard of living which was possible under the conditions, and the hard grind of rural conditions. The farmer came to think of the day of rest from the overburden of toil as a sort of heaven to which he might look forward.

The "pull" came from the higher pay, the better houses and clothes, the lighter physical burden and the sights and sounds and activities of the town.

The economic push and the economic pull exerted more force than the physical or social.

Increasing population, the demands of a more complex social organization, the profits of manufacture, partly artificial, partly natural, the demand for builders and operators of railways and the building trades, made a place for the rapidly augmented urban population, and a commerce created by all of them made a demand which the hard pushed country was able to supply and ready to supply. It was not the love of the lights and music of the city, nor the bare condition of country life that caused the boy to leave the farm half so much as it was the price he was paid in hard cash to go. True, he did not then, nor does he now, properly or truly measure the respective reward offered for his labor by city and country. He did not and does not properly distinguish between real wages and money wages, measured over a period of any considerable length. But when, as a people, we felt that our activities must be more complex—that we must manufacture and mine and transport and buy and sell, as well as farm—then it was certain that we would pay the price to get the men to do this. And we did pay the price. And we got the men. And when all the allurements of the city had come to have their full force and effect upon its new inhabitants, new tastes were created which now hold them in the city. It was inevitable that we should go in this direction, but we have gone too far. What will check the tide? Profits in farming, and that alone. E. A. BRYAN.

The Workingman's Patriotic Duty

Three things are conspiring in the northwest this spring to place before the farm workingman a combined patriotic duty and opportunity. The spring is late, and as a result farm work must be rushed. There is nationwide urging that an unusually heavy crop be raised this season. Canada, short of help because of the large number of men who have gone to Europe to participate in the war, is offering inducements to American labor to cross the line and till the soil of the dominion. These are the three factors.

What is the patriotic duty of the American workingman? The answer comes very naturally: Remain in the United States and join wholeheartedly the great army of men who, as producers of foodstuffs, will play as effective part in the world war as will the men of the army or the navy. The appeal is not only a patriotic one, however, for wages promise to be considerably higher than usual. There is an unusual demand for workmen, and farm products are commanding prices that enable the farmers to pay good wages. Farm hands are therefore not required to make sacrifice as are the men who are called into the fighting ranks.

Already predictions are being heard of labor shortage at harvest time, and suggestions have been made even that it might be necessary to mobilize workingmen under military regulations to save the large crops that it is hoped will be produced. Such mobilization should not be necessary. Good wages and a sense of duty to the country should induce every man who lives by the wages he earns to accept work offered on the farms, and remain there faithfully and loyally until the United States emerges victorious from the war into which she has been dragged.

Washington Gleanings.

Farmers of Whitman county plan building six grain elevators.

A state fish hatchery will be built on Jim creek, near Granite Falls.

A $13,974 road contract has been let east of Cle Elum on Ellensburg road.

The next fair of the Western Washington Fair association at Puyallup will be held October 2 to 7.

It has been decided to hold the annual Palouse Harvest Fair and Live Stock show October 4, 5 and 6.

The contract has been awarded for the construction of the cold storage concrete and brick plant for the Selah Fruit and Cold Storage company to cost $45,000. The plant will have a capacity of 250 carloads.

A contract has been let at St. John for the erection immediately of probably the most capacious elevator in the northwest, outside of terminal points. The building will cost $25,000 complete and will carry 152,000 bushels.

Ten thousand dollars has been subscribed toward the completion of Sunset highway between Waterville and Coulee City. It is expected that $5000 more will be raised among farmers along the route and Coulee City residents.

The Willapa valley cheese factory has been totally destroyed by fire. The loss is $7000 with $3500 insurance. The factory was owned by Willapa valley farmers and provided a market at high prices for dairymen in the valley. It probably will be rebuilt.

The third cheese factory in Yakima county will be erected in Harwood. The organization of a cooperative association was perfected with E. M. Alexander of Harwood as president. The company will have the product of 200 cows at the outset and hopes to increase this number rapidly.

The fourth annual Doty school and community fair and exhibit will be held at the Doty high school on May 24, 25 and 26. The fair this year will include exhibits in home economics, manual training, academic subjects and an exhibit by the Doty Parent-Teacher association.

A. R. Hahner, assigned by the Washington State college at Pullman as horticulturist of Stevens county, has taken up his duties. His salary will be $1920, $1020 of which will be paid by Stevens county and the balance will be contributed equally by the state of Washington and the United States. His duties will be purely agricultural.

Gust Pearson and August Magnuson recently negotiated the purchase of Judge James Powers' hop farm east of La Conner. The consideration was $12,000. Instead of raising hops, they will engage quite extensively in cabbage seed raising. They will put in about 15 acres in cabbage seed, the remainder of the 40 acres being utilized for oats and pasturage.

A local stock association to cooperate with the forest officers in making better use of the mountain stock ranges has been formed in Pomeroy under the direction of J. M. Schnitiz, supervisor of the Wenaha forest reserve, and Forest Ranger Kendall. L. A. McNaught was elected president of the new association, Al Dick vice president and E. J. Wolf secretary. William Howard and William Jones were elected members of the advisory board.

What Others Say

Iowa Homestead: Wealth by no means spells independence.

St. Paul Farmer: The cooperative stock shipping idea, so far as we know, is original with the northwest.

Farm and Home: Prejudice causes a great many of the troubles that come to the individual and to government.

Farm and Fireside: Healthy, full-fed, lusty farm boys are easier led than driven. Well-earned, tactfully delivered words of appreciation provide a potent leading string.

Farmer's Review: The marketing problem is not simple, and needs some attention, but as yet a whole raft of us haven't mastered the problem of greatest production at least cost.

British Leader Here

Hold International War Conference

The arrival in this country of Arthur J. Balfour and other representatives of the British government Sunday was one of the most significant single events of the entrance of the United States into the world war. The object of the British government in sending its commission here headed by Mr. Balfour, who is British foreign minister, is to "make cooperation easy and effective between those who are striving with all their power to bring about a lasting peace by the only means that can secure it—namely, a successful war," to quote the words of Minister Balfour.

Evades Submarines.

While it has been known ever since the declaration of a state of war by the United States that England would send a commission to confer with President Wilson and other government officials, complete secrecy was kept as to the movements of the party so that they might evade the German submarine menace. From what port they sailed, the date of sailing, the route taken, and even the point of landing on American soil were veiled from the world, and no danger was known to have been near at any time during the trip.

American Viewpoint.

Foreign Minister Balfour will attempt to learn this country's point of view on all phases of the warfare, so that the ideas and war activities of his own country and those of the other allies may harmonize as fully as possible. His arrival at this particular time was appropriate from this standpoint in view of the fact that congress was in the midst of its struggle over the problem of how to raise an army.

Military System.

One of the most vital problems of the war for this country is that which congress has been struggling with for several days, but which may be settled before this is read. That is the problem of how to raise an army, whether by draft or by the volunteer system. President Wilson and his cabinet have been throughout fully convinced that the draft system must be relied upon, though a volunteer army of half a million men to fill up the regular army and the national guard is agreed to be necessary.

President Wilson's plan provides for the drafting into compulsory service of all able-bodied men in divisions according to age, beginning with the class from 18 or 19 years to 23 or 24 years. Exemptions would be made for other reasons than inability to pass rigid examinations, such as employment in necessary occupations or support of dependents.

"Slacker" Marriages.

While it is the intent of the war department to excuse from military service married men unless the developments of the war make it vitally essential that they be enlisted, the department has made it clear that no such exemption can be expected by young men who have married since the declaration of war. Charges were being made from all over the country that "slackers" were rushing to the marriage license bureaus to escape service in the army in case of the adoption of the draft system.

John L. Smith Honored.

The Minnesota State Fair association has engaged John L. Smith of Spokane as judge of Holsteins at their exhibition this fall. The Minnesota State fair has the reputation of being the greatest state fair in the country.

New Farm Loan Club.

The farmers of the Bay-Island country have organized a farm loan association with 14 members. The officers are: B. P. Green, president; C. E. Ludden, vice president and A. A. Miller, secretary-treasurer. The following are the directors: C. E. Ludden, R. T. Crosswell, B. P. Green, A. E. Strand and H. L. Flemings, and the appraisers are John Dulin, John Fredericks and A. E. Strand. The association will be known as the Bay Island farm loan association with headquarters at Tacoma.

Fruit Evaporator.

Yakima valley hears that the $100,000 beet pulp drier, to be erected at the sugar factory, can be converted into a fruit evaporator and its capacity for handling 700 tons daily utilized part of the year, at least. Of course the pulp drier is in use during the time most seasonable for fruit evaporation. Still some plan may be worked out and the drier utilized after the beet season closes or before the beet season begins.

DON'T BE A RENTER

You can buy fertile raw lands in Stevens county, Washington, on 10-year terms and receive free lumber and free use of stump puller. Ideal for stock raising and dairying. You can make good and be independent on your own land in Stevens county. Ask for particulars.

Phoenix Lumber Company

348 Wall St.
Spokane, Washington.

When you write to advertisers be sure to state that you saw their advertisement in this paper.

FULTON TRUCKS

Lowest priced, high quality one and a half ton truck in the whole world.

Only $1225 Spokane

Internal gear driven Russel Axle-Daimler type.

Some territory open for best live dealers.

Brewer Motor Car Co.

1130 Sprague Ave., Spokane, Wash., Distributors for Saxon Six Motor Cars.

$1150 F. o. b. Racine
Mitchell Junior—a 40-h. p. Six
120-inch Wheelbase

Mitchell SIXES

$1460 F. o. b. Racine
7-Passenger—48 Horsepower
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The Only Car

Built by John W. Bate—31 Extras in It

John W. Bate, the famous efficiency expert, built and equipped this whole great Mitchell plant.

It is all designed to build this one type of car at the lowest factory cost. On this year's output his methods save us at least $4,000,000.

All of this saving goes into extras. They make the Mitchell, in many ways, the finest car in its class. They give it many rare attractions which you ought to see.

His 19th Model

The latest Mitchell is the 19th model designed under Mr. Bate. It shows the result of 700 improvements which he has worked out in this car.

It represents the utmost in strength, beauty and equipment. It is his idea of what a lifetime car should be. Go see the result of his efforts.

All Extras Free

All these extras cost you nothing. They are paid for by factory economies — by saving waste. They include

31 extra features—
24 per cent added luxury—
100 per cent over-strength.

The 31 extras—like a power tire pump—are costly features which most cars omit. You will want them all.

The added luxury—24 per cent—is a 1917 extra. It is paid for by savings in our new body plant.

The vast over-strength is also a new extra. In the past three years, part by part, we have doubled our margins of safety. Every important part is given twice the strength it needs.

Over 440 parts are made of toughened steel. All safety parts are oversize. Driving and steering parts are built of Chrome-Vanadium. Gears are tested for 50,000 pounds per tooth. Not one Bate cantilever spring has broken in two years.

The object is a lifetime car, safe and economical. Cars of lesser strength cannot last like Mitchells.

A New $1150 Size

Beside the Mitchell, we now make the Mitchell Junior—a somewhat smaller size. Yet it has a 40 horsepower motor and a 120-inch wheelbase.

See the two sizes and the various styles of bodies. See the extras which come with them. If you don't know the nearest Mitchell dealer, ask us for his name.

MITCHELL MOTORS COMPANY, Inc.
Racine, Wis., U. S. A.

TWO SIZES

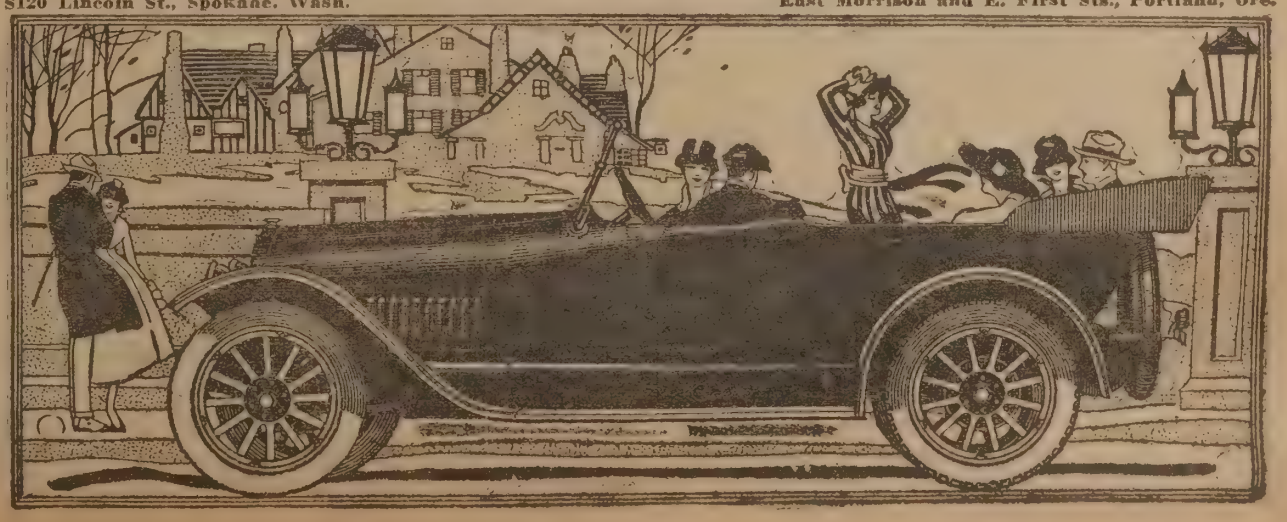
Mitchell—a roomy, 7-passenger Six, with 127-inch wheelbase and a highly-developed 48-horsepower motor.
Price $1460, f. o. b. Racine.

Mitchell Junior—a 5-passenger Six on similar lines, with 120-inch wheelbase and a 40-horsepower motor—½-inch smaller bore.
Price $1150, f. o. b. Racine.

Also six styles of enclosed and convertible bodies. Also new Club Roadster.

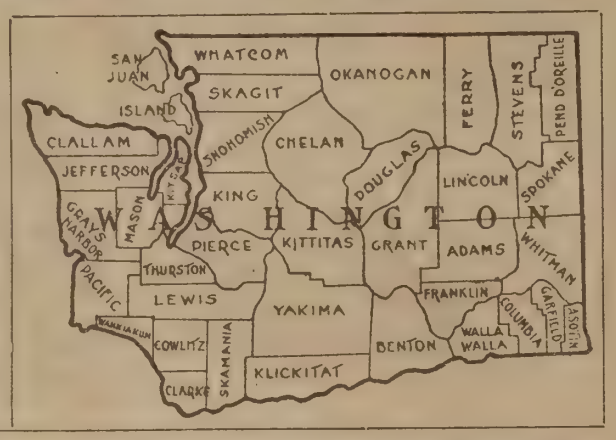
Mitchell, Lewis & Staver Co., Pacific Northwest Distributors

$120 Lincoln St., Spokane, Wash. East Morrison and E. First Sts., Portland, Ore.



Should Can Garden Vegetables

Winter Needs May Well Be Cared For by Canning Fruit and Vegetable Surplus; Many Varieties of Garden Truck Can Be Grown



FERNDALE, Whatcom County, Wash., April 16.—Pioneers claim that this spring has been the most backward one they have seen for 30 years. It has been cold and raining most of the time, which has hindered farming operations. There has not been any planting except on sandy soils. There is a scarcity of small pigs in the country. Farmers intend to plant larger gardens than they have ever done before, as the high prices of beans and other garden products which they were accustomed to buy before scared them out last winter. Every farmer should grow as many varieties of vegetables as will grow in his locality. By canning the surplus of the perishable varieties a continuous supply may be had through the winter months.

CARL J. MENZE.

Plowing Will Be Late.

VADER, Lewis County, Wash., April 16.—As soon as the soil is not too wet plowing begins, this condition usually coming in February and March. The farmers here are one month behind with their spring work. Little plowing has been done this winter and spring, and the outlook is that it will be delayed until April and that a great deal of the wet land will not be plowed until May. Very little planting has been done. In many cases grain that was planted last fall has resulted in a total failure. The hay crop is ready to cut here about the first of July. The oat crop is usually harvested in August and potatoes are dug in October.

S. S. WILSON.

Seeding Nearly Completed.

OTHELLO, Adams County, Wash., April 16.—The help question has not as yet been a serious one, as there seems to be plenty of men to be had. The wages are about the same as previous years, only occasionally a man getting a raise of $5 per month, the usual wage is $40 per month, including board. Most of our men are of the steady, industrious class and receive good treatment, so there is very little dissatisfaction. To keep a man here by the year one would need to farm at least two sections and then raise some hogs and cattle to keep a man busy in winter. We have had two inches of rain since January and more wind than usual for the last of March and first of April. Seeding is nearly done and the ground is in ideal condition. Some fields are green. Wheat, after all the farmers have sold, is now $1.85 and the profit goes to the man that doesn't labor to produce it.

A. O. LEE.

Wanderlust Claims Men.

MEAD, Spokane county, Wash., April 16.—There is sufficient farm help to be had, though at a somewhat higher price than heretofore. There are more efficient men than in the last few years of the "wet" period. Very few are content to work long at any one place. The wanderlust seems to have them in its grip. It will pay to keep the right sort of man the year round on a diversified farm of 80 acres. It does not pay to keep any other kind, no matter how large the farm. Weather conditions will not permit much farm work yet, though plowing has commenced. Early sown fall wheat looks well; much late sown land must be reseeded. Live stock has come through the winter well, but feed is now getting scarce.

GEORGE HINGSTON.

Prohibition Helps.

EPHRATA, Grant county, Wash., April 12.—Labor is very scarce in Grant county and in many cases the farmers are working short handed with their seeding. Owing to the scarcity of labor wages are higher this year than heretofore. Wages run from $40 to $45 per month, which is about $5 more than has usually been paid. The laborers are considered more efficient than a few years ago, one of the most important factors being that the state is dry and they do not run away as soon as they get a small amount of money earned. The most of the laborers seem to be contented and satisfied with their work. The wheat farmers do not usually keep a man the year round, but only from the beginning of spring work until the fall work closes in the fall. The dairy and stock farms usually keep men the year round.

Live stock is in much better shape this spring than last year. Owing to the small amount of snow on the ground this year and not such a cold winter the losses this year will not compare in any way with the losses last year.

H. W. REAUGH.

Are Getting Tractors.

GREYCLIFF, Sweet Grass County, Mont., April 13.—Farm labor is very scarce this spring and wages are higher than usual. The home laborers are usually best, but the traveling laborers are restless. As soon as they have a few dollars coming in they hike out again. Wages range from $40 to $50 per month with board. A man with a 160-acre farm can not afford to keep a man the year round unless every acre is good tillable land. Many dry farmers are getting tractors for plowing this spring in this community. The month of March has been quite wet and we have had lots of wet snow, even up to this date, with snow and rain two or three times a week. Spring is from two to three weeks later this year. The stock wintered fairly well. Alfalfa hay is from $20 to $25 per ton loose; timothy $30 loose and hard to get at that.

JOHN FORSTER.

Spring Seeding Done.

NEPPEL, Grant County, Wash., April 14.—Farm labor is scarce and wages are high, so high in fact that farm development is at a standstill, only the urgent work being performed. There is no remedy, but more and reasonable wages. Wages are 20 per cent higher than in previous years and the efficiency of labor in this line of business has to be installed at our own expense, and it is an endless chain. It does not pay to keep a hired man the year round on the average 160-acre farm unless in orchard and alfalfa farms. The weather for the latter part of March has been severe, but the present weather conditions are very favorable, with plenty of rain to germinate seed, the farmers wearing a smile accordingly. All the spring seeding is done with the exception of garden truck.

MARTIN PENHALLECK.

Live Stock Does Well.

PORT ANGELES, Clallam County, Wash., March 31.—The farming in Clallam county is principally dairying and in some cases a 10-acre farm will justify to keep a man hired the biggest portion of the year. Owing to the isolation of the county from the farming centers it is plainly evident that farm labor is a troublesome question at times. Just at present the reports come in from Sequim and Dungeness that farm labor is scarce and that wages range from 10 to 15 per cent higher than the previous year. The season is most backward, and from the western part of the county reports came March 31 that three inches of snow fell at Tyee prairie.

J. P. CHRISTENSEN.

No Plowing or Seeding Yet.

SHELTON, Mason county, Wash., April 2.—The farm labor question is of very little moment with soil cultivators in this county. Most of our farmers run their farms within the ability of their own families, not feeling able to pay the wages prevailing in the logging camps, hence hired help is resorted to only in cases of emergency. In such cases the usual hire is from $2 to $2.50 per day. The remedy is larger families of boys and girls to clear away these forests, subdue the soil and open larger farms. I know such a farmer. He is doing well and all like their home, which was lately equipped with electric lights. The farm laborer who has come here for a job has not been a farm hand, but a makeshift. A farm which can raise provender for 30 cows will justify hired help at $40 per month and board the year round. Weather conditions remain bad. In the vicinity of Shelton about an inch of snow fell last night. Such a thing has not been known before. Many are buying hay. No plowing has been done and no seeding this spring.

SCOTT HAYES.

Soil Remains Wet.

RAINIER, Thurston county, Wash., April 2.—I think farm labor will be rather scarce this season, as here the sawmills get most of the help and small farmers can not afford to hire very much. Wages are high and many are not efficient. The weather is the principal topic and the results therefrom. Our stormy weather commenced about March 18 and no signs of a let-up yet, with snow, rain, sleet and wind. There are no fruit blossoms yet and the soil remains very wet. No farming has been done since the middle of March and hay is running short. There is a big demand for hay, with no pasture. Winter grain is looking pretty well. With feed prices going up the egg crop is likely to be reduced. Wheat now is $4.10 per sack of 125 pounds, fat hens are 22 cents a pound and eggs 25 cents a dozen. Two weeks ago I sold 16 Plymouth Rock hens, weighing 108 pounds, at 20 cents per pound, which netted me $20.22 in Seattle.

L. F. DAVIS.

Stock in Good Condition.

LEAHY, Douglas County, Wash., March 24.—Spring wheat is generally sown the latter part of March and April, but it will be at least two or three weeks later this spring as there is a foot of snow on the fields yet and it is not thawing much. The spring plowing is begun as soon as the snow is gone and summer fallowing is done in May and June. There was not much fall seeding done here as it was too dry in the fall and there is not much moisture in the ground this spring. Harvesting generally begins about the first of September. The leading crops are wheat, oats, rye, barley and some corn and potatoes. Stock has stood the winter in fine shape with plenty of feed.

W. A. GRAY.

Work About Normal.

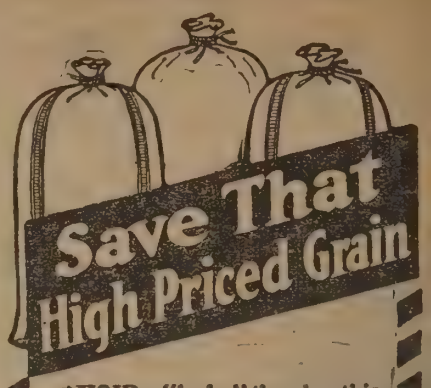
OMAK, Okanogan County, Wash., March 26.—Cultivation usually commences about March 10, but up to this time the ground is still frozen and the snow is not all gone yet, though the weather is generally pleasant. There is not much land summer fallowed in this county. Farm work will be about normal. It was too early to know what condition fall sown crops are in. Stock is coming through in good shape.

J. O. WOODS.

Work Well Under Way.

GRANDVIEW, Yakima County, Wash., March 26.—For a few years plowing has been done the last of March and the first of April. Seeding is done the last of April. Alfalfa is cut about the last of May or first of June. Spring is about normal, but a little colder with more wind than usual. Pruning has been completed. Quite a lot of potatoes have been planted and some gardens made.

E. H. FAULKNER.



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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

PIGS ON SMALL FARM

Amount of Waste Decides Number.

By E. L. POTTER.

The chief profit in pigs on a farm of any size lies in the consumption of products that would otherwise be wasted. The number of pigs on the farm must therefore be adjusted to the amount of waste products available, supplemented in all cases, however, with a liberal amount of grain. One good brood sow and her pigs are all that the average 10-acre farm will support unless there is an unusually large number of dairy cows. We usually figure on raising one pig to marketable age for each dairy cow and possibly one or two in addition for the house slops. With exceptional good cows the number of pigs may be somewhat increased. This is, of course, where the cream is sold, but the skim milk kept on the farm. The small farm without skim milk is no place for the pig. On the high priced lands of our small farms one can not raise pigs without some waste to feed. The proper use of pastures will lower the cost, but not the point where there is any profit. There are times when pigs may be profitably fed on grain alone or on grain and pasture, but in the long run it is a loosing game and especially on the small farm, where the grain must be purchased.

Veterinary

Dr. S. B. Nelson

Pig in Pain—What can I do for a pig that can not stand up or walk and seems to be sore and in pain.—E. A. G., Rockford, Wash.

Answer—Try giving your pigs form half an ounce to two ounces of castor oil, depending upon their age and size. The next day follow with 10 to 15 grains of potassium iodide in the feed the same way. Be sure that you have a place for them to sleep where there is no draft to get to them.

Contagious abortion—I have had some trouble this winter with what I think is contagious abortion. Have sold three cows to the butcher. Would you advise me to buy more cattle, as I have just one cow left?—C. G. P., Olympia.

Answer—If you will write to Dr. S. B. Nelson, Pullman, Wash., a letter will be sent you which will give you fairly complete treatment in the handling of contagious abortion. To stamp this disease out depends fully as much upon the careful detailed work of the owner every day as it does on the advice of the veterinarian.

Ailing Cows—I have a cow that has had a bloody discharge and an offensive odor since her calf was born. She has a poor appetite and only gives about half the usual amount of milk. Have a second one fresh now that acts the same way, only she has a fever, too, and is stiff when she walks. I also have a heifer that freshened a week ago that is starting the same way.—P. A. N., Lake Bay, Wash.

Answer—The fact that your cow had a bloody discharge after calving would indicate that there was some internal trouble with the genitive organs. I think that they should be washed out with a 2 per cent solution of lysol. This should be done daily for some time, say a week or such a matter. I am of the opinion that the other two have the same trouble and should receive the same treatment. After the first time, I think it will be well also to wash them out with a very weak solution of potassium permanganate. Take a pinch between the first finger and the thumb and drop that into a bucket of warm water. Stir it until it is dissolved and wash the genitive organs, womb and all, very carefully. If the bowels are not working correctly give from one-half pound to one pound of epsom salts in two to three quarts of water. Take away about half of the feed that you are giving.

Sweenied—I have a mare that was kicked in the stifle about a month ago by another horse that was rough shod. The wound is healed up, but she does not seem to want to use her leg, so it has also caused hip sweeny.—E. M. W., Fruitland, Wash.

Answer—The chances are that the bone was severely injured and soreness in bone takes a very long time to heal and for the soreness to go out of it. Sometimes it takes six months or even a year. When the mare gets so that she can walk, a slight rubbing of the muscles of the hip with gentle exercise will help fill them. Until she does walk, no treatment will cause the muscles to grow in the sweenied parts.

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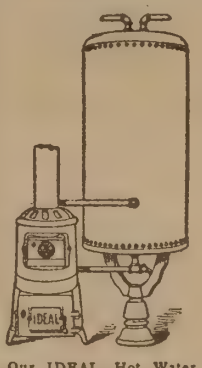
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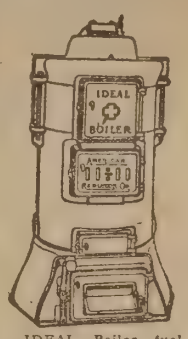


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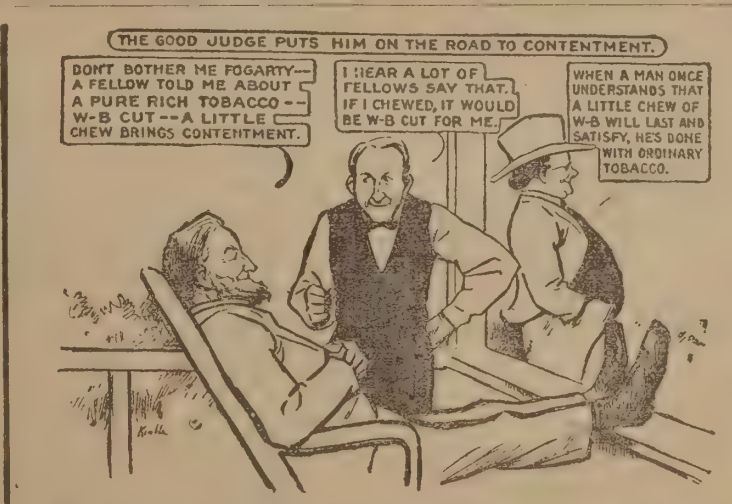
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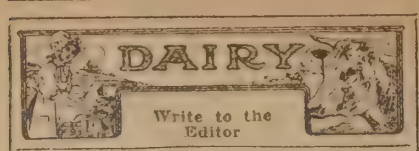
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A. B. NYSTROM, Editorial Contributor

Dairy Questions

Are Answered by A. B. Nystrom

Incomplete Churning.

We have a cow that has been fresh about eight months and with calf two months. On churning her cream we set the buttermilk back and there gathered on it a thick cream. The buttermilk frequently does this, but not nearly so much. Can you tell me what causes this and how it can be remedied? J. S. R., Elk, Wash.

I believe that the cause of your incomplete churning is due to not having the cream in the proper condition. Your cream should be well ripened and should be churned at a fairly low temperature if you are to have an exhaustive churning. You can regulate the temperature with the ripening so that it takes you about 30 minutes to churn. To ripen cream for churning mix all the cream in one vessel the day before you wish to churn and let it stand at a temperature of 70 to 75 degrees Fahr. to ripen for from six to eight hours. The sweeter the cream and the lower the temperature the longer it will need to stand before the ripening is complete. When the ripening is complete it should be cooled to churning temperature and held at that temperature until ready to churn. If the cream is of an unknown quality or if it has not been kept in good condition it often becomes necessary to ripen the cream artificially by the addition of a starter. This is simply a well ripened sour milk.

Leaky Teats.

Can you tell me what to do for a cow that can't hold her milk? Her udder is small and she does not give a large amount of milk. About an hour before milking time the milk begins to drip and then runs a small stream. She is milked regularly every 12 hours. A. C. B., Kettle Falls, Wash.

Leaky teats are usually very hard to cure and a veterinarian should be judge of the possibilities of curing them. Nothing satisfactory can be done for them while the cow is giving milk, but when the cow dries up it is possible that the veterinarian can sear the end of the teats in such a way that when they heal they will be closed or nearly so. Collodion will close them up from one milking to another, but such a treatment is not very satisfactory.

Cows Producing Over 50 Pounds of Butterfat

Following are the names and records of cows in the Stillaquamish Cow Testing association which have produced more than 50 pounds of butterfat during the period of 30 days ending March 31 of this year, according to the report of W. H. Henry, the official tester:

Owner.	Name of Cow		Breed.	Age.	When Fresh.	Lbs. Milk.	P.C. Fat.	Lbs. B. F.
Zenas Farrington	Bess	No. 6	Gr. Jer.	10	1-26	1089	4.7	51.2
W. G. Grimm	..	No. 9	Gr. Jer.	8	2-17	1311	3.9	51.1
W. G. Grimm	..	No. 10	Gr. Jer.	9	3-4	1377	3.8	52.3
W. G. Grimm	..	No. 11	Gr. Jer.	9	1-15	1134	4.4	50.0
W. G. Grimm	..	No. 18	Gr. Jer.	8	10-11	1041	4.8	50.0
W. G. Grimm	..	No. 19	P. B. Jer.	5	1-6	951	5.5	52.3
W. G. Grimm	..	No. 33	Gr. Jer.	8	9-19	1068	5.0	53.4
W. G. Grimm	..	No. 34	Gr. Jer.	9	2-4	1377	4.35	60.0
Ole Larson	Olga	No. 4	Gr. Hol.	7	2-12	1398	3.9	54.5
Christopher Olsen	Gracie	No. 9	Gr. Jer.	7	12-28	1137	4.5	51.2

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Contagious Abortion

Isolation of Cow Most Important

By HORACE ADDIS.

There is no more insidious disease with which dairymen and cattle breeders generally have to contend than contagious abortion; none that lays a heavier toll, once it gets into a herd, and none that seems less understood. Furthermore, I have heard several representatives of the United States department of animal husbandry lecture on the subject lately without imparting scarcely any information that could be of value in combating the disease. They frankly admit that none of the remedies used have yet proved to be effective and that several are proven useless. Carbolic acid and similar disinfectants, but neither methylene blue nor anything else is a specific nor even of any proven remedial value. Sanitation, isolation and caution against allowing it to get a start are about as far as the governmental representatives or any reputable veterinarians will go.

There is one fact in the treatment of the disease in a herd that seems very little known and which seems to me of the greatest importance. That is, that a cow bred immediately or soon after she aborts will abort again and then is likely to become barren, while if she is not bred for 90 days she will not abort and is free from the disease forever or at least until again contaminated from outside sources. One dairyman in the Willamette valley, who had a very trying siege of contagious abortion, and whose herd has been absolutely free from the disease for several years, learned this by his own experience. He found that the cow quickly bred was practically sure to abort again, while 90 days insured the disease having run its course and apparently set up a complete immunity. The cows so treated calved normally and did not carry the disease to other cows.

I have asked several government veterinarians their opinion on this question and all agree that 90 days—and probably 60 days—is a safe period if a cow's afterbirth is taken away properly and she is well disinfected. As to whether a range cow, with no disinfection, would reach the same immunity opigions differ. Unless there was a decaying substance left in her I believe she would. But it seems strange that veterinarians and dairy papers do not emphasize more strongly the need of delaying the breeding of an aborting cow, when it has been so



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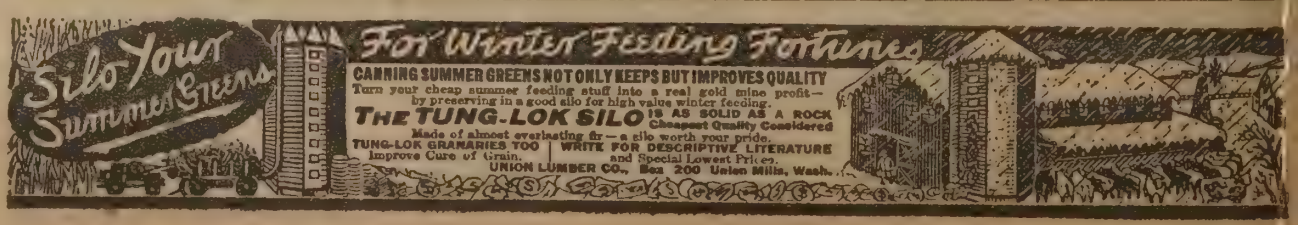
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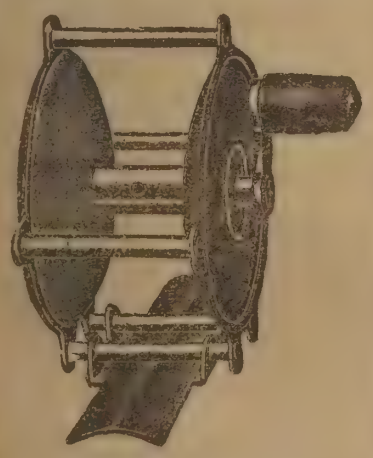
It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Factory, Dept. 58 Waukegan, Ill.

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well proven that it brings immunity and early breeding is disastrous.

Let me urge then that any dairyman or breeder who finds his herd a victim of the disease should not resort to the unworthy practice of selling his cattle and thus infecting other herds, nor of sacrificing his cows to a butcher. He should isolate suspicious cases until after calving, if possible. And every cow that aborts should be kept isolated until she is thoroughly disinfected and has ceased to discharge. Then breed her in three months and she is a "clean" cow, one that will be safe against a recurrence of the disease and safe against giving it to others. The dairyman who thus acts has lost one calf and possibly all or part of a season's milk from each aborting cow. But he is then safe and has not visited his affliction on some one else.

Commenting on the above Dr. S. B. Nelson, veterinarian at the Washington State college, says:

"Veterinarians, whether United States department of animal industry representatives or experiment station veterinarians, or those in private practice, practically agree that sanitation or rather sanitary hygienic measures are of very great value in stopping an outbreak of contagious abortion. There is a difference of opinion as to the value of the internal administration of carbolic acid and methylene blue. Some reputable veterinarians believe that there is value in this treatment, while others are just as sincere in their belief that there is no value. However, the fact remains that many veterinarians are demonstrating that the disease is overcome more readily if treatment, that is, internal treatment, is given along with external or sanitary treatment. The latter treatment is principally preventive in character. Nearly every lecturer who has spoken before audiences of dairy people or farmers and stockmen emphasize the important point that an animal must be well, that is, as far as external evidence of the disease is concerned, which is manifested by the lack of discharge from the genitive organs before the animal should be bred again, and that after there is no more sign of discharge. Whether this healthy, or apparently healthy condition, is hastened by treatment or not they advise allowing her to go over one or two periods of heat before she is bred. I can not see that the question of time enters into this; it is entirely a question of whether the animal is well or not and whether there is a discharge. If at the end of 60 or 90 days there still is a vaginal discharge the cow should not be bred. There are many cases on record where the cow was bred 60 and 90 days after losing her calf, where she again lost her calf, but this was not because of the time of breeding, but because of the condition which the cow was in, that is, she was still physically diseased when she was bred. I think the above is really a very good article and should receive the careful attention of the readers of this paper."

COOPERATIVE WORK
Of the Lower Columbia Farmers.

By H. H. BUSHNELL

The Lower Columbia Farmers' Creamery company began operations in January, 1913, at Astoria, but for months before, John Onkka, the manager, was interesting dairymen in the proposition. Mr. Onkka came from Minnesota where he was familiar with cooperative creamery work.

The capital was placed at $10,000. They paid $5500 for a lot and erected a building for $6500. They had to borrow some money from the bank to buy machinery, cans, etc. The creamery has proved a success so far. Mr. Onkka says they have 238 stockholders, every one of them farmers, and there are over 600 cream shippers. They are able to market practically all the output in Astoria. The largest output was last June and amounted to 72,139 pounds of butter. The system is strictly cooperative. The butter is sold, the expenses are paid and the balance all goes to the stockholders. The price for butterfat is determined at the close of the month.

Mr. Onkka furnished the following prices for fat paid by them under this system. Beginning with November, 1915, they paid 34 cents for November, December, January, February, March and April; 29 cents for May, June and July; 31 cents for August; 34 cents for September; 39 cents for October; 40 cents for November and December; 41 cents for January, and 43 cents for February of this year. The company makes two brands of butter, Shamrock and Suomi.

RECENTLY SURVEYED HOMESTEADS NOW OPEN.

Every reader of this paper should write at once for a free copy of "The Home Seekers' and Settlers' Guide." It tells all about the rich 160-acre free farms, excellent for growing grain and mixed farming, also what others are doing. Address Canadian Northern Railway. A. A. Brostedt, D. F. & P. A., 605 Hastings St., Vancouver, B. C., Canada. —Adv.



"This is for you, girls!

It's the most wonderful separator I ever saw. I just brought it from Johnson's Hardware Store where they were demonstrating it. You can't guess what it will do."

"I think I know, father. You told me last week about the loss of cream in our old separator when I turned it too slow. You timed me and pretty near scolded me when you found I was turning 37 revolutions instead of 50. This is the separator that "skims clean at any speed". It's a

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SUCTION-FEED CREAM SEPARATOR

"Mary is a smart girl, mother—she guessed it. We all helped to test it and it skimmed *to a trace* when turned as slow as 36 and equally clean when turned as fast as 55 turns. It simply skimmed *faster* when we turned it faster. And the cream remained at 35% thruout the varying speeds."

"Why, father—then we will know exactly what the cream check will be each week, wont we?"

"Indeed we will, mother. Now look at the bowl. It's a plain straight *tube* with a small ring like a napkin ring in it.

"Goody!—I'll get thru washing up in a jiffy, no discs!"

"Yes, girls, and note the knee-low supply tank, and the automatic once-a-month oiling—it has any other separator I ever tried, beat a mile. But then—it's made by the oldest and largest Separator Works in America."

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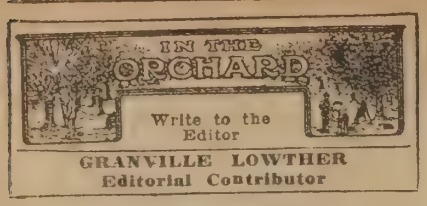
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GRANVILLE LOWTHER
Editorial Contributor

POTATO SEED DIP
For Fight Against Diseases.

As a general treatment for seed potatoes to destroy diseases that might greatly injure the crop, the following is considered effective:

Use corrosive sublimate at the rate of one pound to 120 gallons of water, or four ounces to 30 gallons, or one ounce to 7 1-2 gallons and soak the tubers, in a burlap sack, for an hour and a half to two hours. Remove and place them on a draining board and if necessary dump or pour the potatoes out so that they can be thoroughly dried. They can then be resacked or cut.

After each dipping add one ounce of corrosive sublimate (this is on the basis of one pound to 120 gallons of water) and add enough water to get the original volume. In this way you can keep the material up to the proper strength.

Use Is Limited.

By following this procedure the solution can be used about 12 times after which it should be discarded and an entirely new solution made up. If there is any trouble in dissolving the corrosive sublimate pour hot water over it. Potatoes after having been dipped in this solution are no longer fit for human consumption, or as feed for stock, as there would be danger of poisoning. Corrosive sublimate solution should be made up in either a wooden or earthen container and should not come in contact with metal.

G. L.

URGE SEED GROWING
In Localities Suited to It.

A movement has been started in Douglas county, Oregon, looking toward increased seed production in that section. The growing of spinach seed was urged by F. W. Nelson of Portland at a recent meeting of farmers. Mr. Nelson said that the locality was well suited to seed production and that farmers could make profit on the industry. Heretofore spinach seed has been imported largely from Holland.

USE TOBACCO SPRAY
Instead of Lime and Sulphur.

According to reports the Congdon orchards, the largest in the Yakima valley, will not be sprayed this year with lime-sulphur for scale. The experiments made last year with the tobacco spray leads them to conclude that if applied at the time of the codling moth spray it will kill the scale, the aphis, the red spider and the codling moth all at the same time, and this is cheaper than the extra sprays.

THE FARM GARDEN
ARTICLE 9.

Bean Growing

Beans are more than a garden vegetable, especially this season, when there is unusual requirement for production of food. There are few vegetables so well adapted to many conditions as beans, and in many localities of the northwest they should this year be made a real part of the farm products. If it is not desirable to grow them for market, it is certainly desirable to grow them for home use in sufficient quantities to last throughout the year. String beans make one of the most palatable and nutritious dishes, and by canning they can be had the entire year. Bean canning is practicable in the home. Any careful person can put them up with perfect assurance they will keep. Also, dry beans can be harvested, affording a second food article for the entire year, and seed for next season.

HOW TO GROW BEANS.

Beans can not be grown successfully where they will be subjected to even light frosts at any time prior to maturity. They are easily killed. Hence, in many localities, they must be grown on comparatively high ground.

It is inadvisable to plant them until the ground begins to grow warm, for, even though the seed should not decay before coming up, the plant is practically certain to be stunted if sprouting and early growth are slow.

Beans do not require as rich a soil as many other vegetables. They are of the leguminous family, having a peculiar root faculty for acquiring nitrogen from the air. If the soil is too rich in plant food, such as that from manure or decayed vegetation, the vines have a tendency to stay green until late in the fall, holding back the maturity of the beans until danger from early frosts appears. They will do well on almost any reasonably good soil, though the heaviest clay soils are not so satisfactory as a soil with some sandy loam characteristics.

They often do well when planted with corn, especially if they are of varieties that produce twining vines and need some support.

Ordinarily they should be planted in rows from 20 to 36 inches apart, depending on the character of the soil and the moisture that is available. They should stand in the rows from three to six inches apart, depending on soil and moisture condition and the variety. The more bushy or twining varieties require more space, of course.

Under no circumstances should their cultivation be neglected. The soil should be stirred to a depth of from one to two inches frequently, but deep cultivation is not advisable. Beans should be planted not more than two inches deep, and even shallower than this if moisture can be maintained near enough the surface to insure sprouting.

The soil should be prepared so that a root bed six or more inches deep will be ready, as many varieties of beans develop sturdy root systems which penetrate to considerable depth.

Pole beans are those that produce long, twining vines, and require posts or poles or cords to climb. They are in many cases popular and justly so, especially for string bean purposes. The pole bean is a fine vegetable to make use of the fence row or fence corner this year.

Lessons of Experience.

Life's little ills annoyed me,
When the little ills were few;
And the one fly in the ointment
Put me in a dreadful stew.
But experience has taught me
The infrequent good to prize,
Now I'm glad to find some ointment
In my little pot of flies.

—Dakota Farmer.

SPRAY NOW

Aphids, Red Bug and similar insects are a serious menace to orchards in spring. Do thousands of dollars' damage annually. Black Leaf 40 (nicotine sulphate) kills these pests. Recommended by Experiment Stations.

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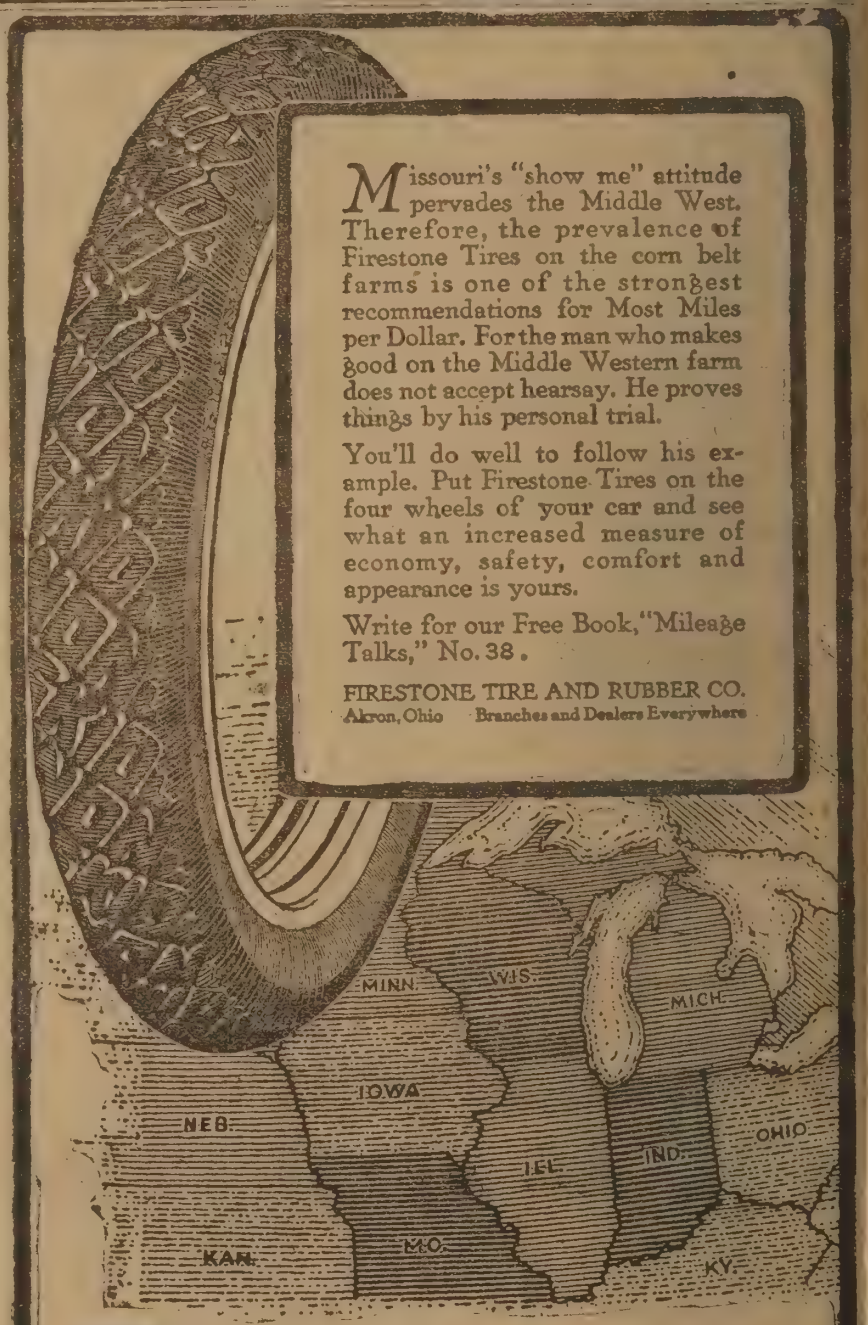
KELLY GARDENS, Sta. B., Spokane.

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STUMPING — AGRICULTURAL

always save them money because they go further than any other stumping powders. Also, because they are made especially to suit *western* farm conditions and because they are always uniform in composition and action.

Giant Farm Powders—the product of the oldest manufacturer of high explosives in the United States—are the only genuine "giant powders" for agricultural use. They are made in two brands—Giant Stumping Powder and Eureka Stumping Powder.

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Your Stumping Powder has a wide breaking power and less fumes to contend with after being exploded than any other on the market.
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In using a thousand pounds of your Stumping Powder neither I nor any of my men had the least bit of trouble in getting the very best results. I have used practically every powder on the market and find there is more strength in yours. J. L. EIDSON, Silverton, Ore.

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I find your Stumping Powder all you claim for it. ELI CLINKER, Camas, Wash.

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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

Nobody knows, of course what the price of eggs and the price of feed will be in the next 12 months, but the chances are that the price of eggs will be high enough to make a good profit on the feed fed to a good laying hen. Eggs never were so high in this country in the month of April. When speculators are paying over 30 cents a dozen for the eggs to put in cold storage it indicates a very high market next fall and winter from the storage man's point of view. Keep the good laying hens. They will make a profit and help win the war.

It is too late now to be setting eggs for hatching early fall and winter layers. The only excuse for hatching later is to get a start of some good breeding stock.

The chances are that there will be an unprecedented demand for eggs and poultry for the next two or three years. If the poultryman has not made the right start this year he should be planning his operations for another year. J. D.

Gravel and Digestion.

To the Editor: Can you tell me what dissolves glass, small particles of stone and coarse gravel in a chicken? Is it the process of digestion or what? Are all of these things dissolved before they leave the stomach of the hen?
Steel, Idaho. S. T. R.

You have raised a question that has never been very thoroughly investigated. I may say this, however, that the gravel or particles of stone or glass are acted upon in some way in the gizzard to dissolve them, but they are not always completely dissolved. I have often found pieces of grit in the droppings, passed by the fowl. The gizzard is a very strong muscular organ and the grinding of the food or reduction of the particles of grit is no doubt largely dne to the muscular contraction of the gizzard. To what extent acids in the stomtch act upon the grit and gravel I do not know, but undoubtedly they are an important factor in dissolving these hard substances as well as of the grain.

It is a live question whether the grit the fowl eats is used for grinding the grain in the gizzard or to serve some purpose of nutrition. So far as I know, that is an open question. The grit no doubt aids digestion by assisting in the grinding of the grain, but to what extent, if any, the dissolved mineral is a factor in nutrition of the fowl is another question. J. D.

Caused by Mites

Individual Treatment Necessary

To the Editor: Can you tell me what is the matter with my chickens and what to do for them. They are in good condition and lay just as well as if they were all right. Great knots are on the feet and legs. The chickens that had yellow legs, after they get it, are a dirty gray color. We killed one hen and its legs were three times their normal size. The knots could be broken off as easily as if it were mud. Where broken, the legs were deep pink color. Some of the chickens lose the feathers off their heads and necks. Some of them haven't any feathers from their beak to where the neck joins onto the body. The bare flesh is a bright red color and in some places looks a trifle swollen. I have looked for lice and mites but could never find any and I have dusted them with lice killing powders. There is not one chicken with a bare neck that has knotty legs. It may be the same disease and affect some differently than others, but I think not. If nothing can be done for them, can I prevent the others from taking it? E. J.
Rigby, Idaho.

This correspondent describes two different diseases, both of them caused by mites. The first is what is known as scaley leg. The specific name of the mite is Sarcoptes mutans. This mite burrows underneath the scales of the leg causing an irritation. White grayish crusts are formed, which enlarge and raise the scales.

Individual treatment is of course necessary to cure, but the cure is not difficult. The cure consists of killing the mite under the scales. One of the quickest and surest ways of doing this is to apply kerosene, and the best way to do this is to dip the leg in a can of the kerosene and hold them there about half a minute. An ordinary tomato can is about the right size. Care should be taken not to let the oil come in contact with the part of the leg covered with feathers; only the scaley part of the leg should be treated. Another treatment is to thoroughly soak the scales in warm water until they can be removed, and then to apply an ointment or vaseline. It may be necessary to give a second treatment. As the disease is contagious, it is well to disinfect the houses, especially the roost perches and nests.

The loss of feathers on the head is usually caused by a depluming mite. The head or parts affected should be treated with an ointment. Oil of caraway ointment, 1 to 5, is recommended. Creolin, 1 to 10, is also recommended. It may be necessary to give several applications. Carbolated vaseline may also be used. J. D.

Tells why chicks die

E. J. Reefer, the poultry expert, 466 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease over night and actually raises 98 per cent of every hatch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.

ALFALFA

A great deal of importance is being attached to the growing of alfalfa and much is being said about special strains by interested parties.

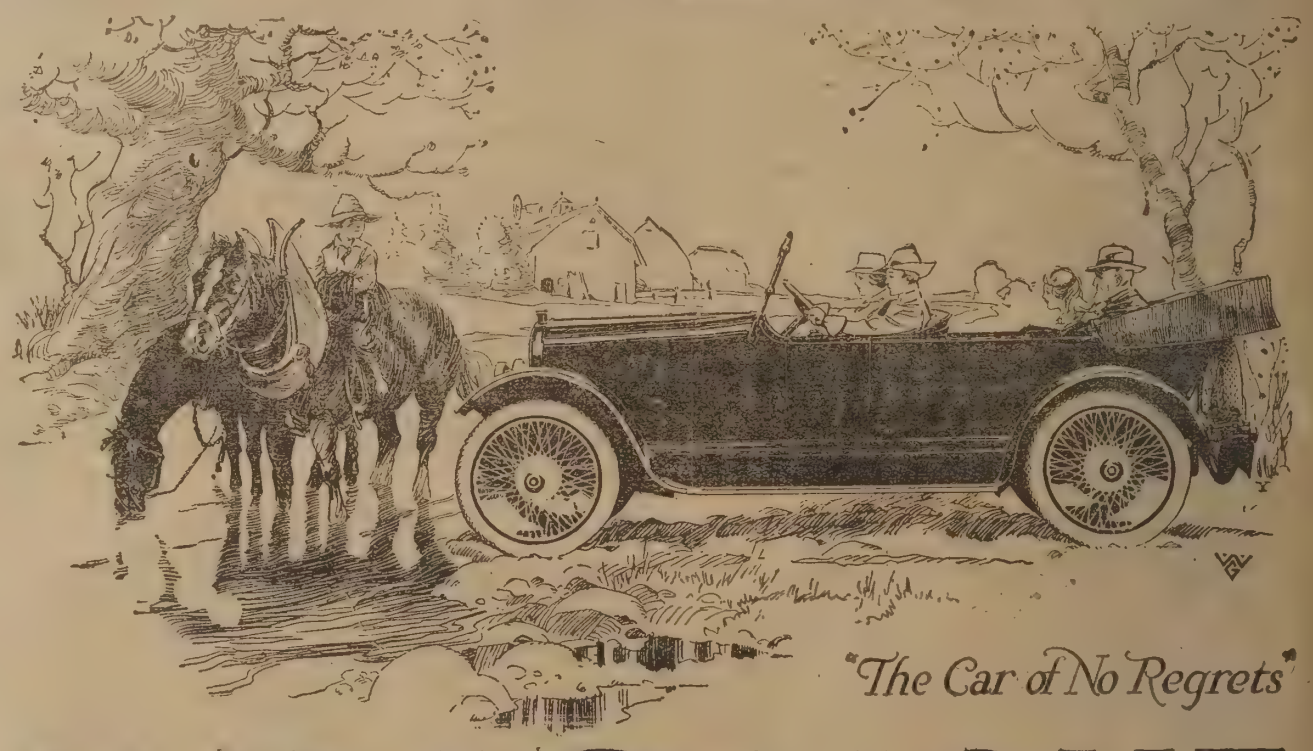
The United States Department of Agriculture has issued a very instructive bulletin on the different strains of alfalfa. This bulletin is known as **Farmers' Bulletin No. 757** and should be in the hands of every farmer interested in the growing of alfalfa.

It plainly shows that what is known as the **Common Alfalfa** is best suited to all this Inland Empire section.

We have just purchased another car of this alfalfa and the first test we have received is 99.71 pure and no noxious weeds.

Sample and prices on application.

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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

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CHAPTER VIII.

Dave Reavis, His Four Horses and Dusty Covered Wagon, His Cracking Whip, His Stories and His Songs.

As we drove northward through the seemingly limitless expanse of bunchgrass prairie in quest of our "home" other white covered wagons joined us; for many beside us were hunting for homes. Dave Reavis fell in with us one day soon after the Snake river crossing, driving four horses to a dusty covered wagon with the canvas torn and sagging between the bows, and "nosebags" from which his horses ate grain swinging from the rear of his wagon. Dave could crack a four-horse whip in a wonderful way; and when he cracked the whip he swore at his horses in a kindly but audible way.

He really was a good companion, and a skilful traveler through the bunchgrass country. He talked jovially to the Indians whom he met, singing out merrily, "Hello Six," to each one he met. Frequently he was vouchsafed the grunted reply, "Hello Seven." "Six" was the name the bunchgrass plainsmen used for all friendly Indians. "Hello Seven" from an Indian indicated that he was in a friendly frame of mind; and, also, that he had been educated in numbers from at least one to seven.

No difficulty which beset our trail disturbed Dave Reavis. We camped one noon with no water for the horses, and no wood for our campfire. Dave said it was cool, and the horses would not suffer till we got to the night camp and water 12 miles further on. As to wood—he'd get plenty in a minute.

He fished a burlap bag from his wagon and departed. Out in the bunchgrass a hundred yards from the camp he began picking up certain objects which he put in the sack; and presently returned with the sack full, and announced that he would have a fire right off.

He did. He had gone out in the grass and picked up sunbaked and perfectly dry pieces of cattle dung, with which he had filled his sack. With a little grass and some bits of sagebrush he kindled a tiny blaze, over which he broke pieces of the dried dung. In a few minutes he had larger pieces burning; and very soon he had a red-hot mass of dung burning slowly with a small flame but intense heat between three properly shaped stones on which a frying pan or camp kettle could sit. He fried potatoes, made coffee, warmed up the beans, and threw two double handfuls of dried prunes into a blackened tin can with a bent wire handle; dinner soon was simmering cherrily, its appetizing odor floating about camp. All the while, Dave sang softly to himself:

O, beat the drum slowly and play the fife
fife lowly
And play the dead march as you carry me
along,
Take me to the graveyard and lay the sod
o'er me,
For I'm a brave cowboy, although I've done
wrong.

The last line came out with a doleful and not wholly unmusical wail as he deftly turned the potatoes and slapped the lid back on. This changed the tune and song to:

A coyote sat down and howled at the moon
Because he was sad and f-o-l-o-r-n,
My sweetheart is gone and I'm all out of
tune,
And I'm going to howl till m-o-r-n-n.

So far and wide o'er the big prai-r-e-e
He howled for all to hear
My sweet heart d-e-a-r is false to me,
So I say to you be-w-a-r-e.
Chorus—
Beware of sweethearts, beware, I say
They'll throw you over some day,
Sweethearts are dear, but don't let 'em
near,
Beware, beware, I pray."

This song which he sang over and over again had a tune somewhat like the "Lone Prair-ee" song, except that it was a bit faster; though, as a matter of fact, Dave sang his songs to any one of half a dozen tunes; and if the music in his singing carried out beyond the end of the line, he pieced out the words with a "hum doodle dum doo," or something of that kind.

The most emphatic part of his singing, however, was its final ending—a loud, ringing shout of "grub for everybody and the cook!"

In spite of his rough ways, all but tuneless singing, and incessant swearing, Dave Reavis was a fine fellow, and in his heart there was a great love for small children. Nothing pleased him better than to have me climb in the seat beside him and ride there while he sang his odd songs and expertly cracked his whip. Often he would tell me about his home in Delaware by the seaside—the boats he used to sail, the apples he used to steal, and the sharks that swam in the deeper waters of the bay. Verily, he could tell shark stories that made one's hair stand on end, mine in particular.

He had odd names for the things stored in his "grub" or camp box. Bacon he called overland trout, or Cincinnati chicken. Beans he termed strawberries. He had an old squeaky violin—which he called a fiddle—and on it could play many tunes by ear. He proudly announced some of the tunes as of his own composing. At night when his and our horses were staked out on the grass and we were sitting about the campfire talking about the "home" we were looking for, Dave often would get out his fiddle and play and play. One night he played so long and loud that some coyotes sneaking about in the tall grass set up a vorciferous howling—wild, wailing cries terminating in rapid, explosve yapping which seemed to come from a hundred mouths and from many directions, though a couple of coyotes might be doing it all. Dave seemed a bit embarrassed at this competition, and put away his fiddle.

On and on into the sea of gray-green bunchgrass we drove, farther and farther from settlements and railways. The days were bright and sunny, with fleecy masses of clouds floating like mammoth ships and castles and mountains in the clear, blue sky. The air was clear and pure, and when you saw a hill that seemed a couple of miles distant it might be five. The bunchgrass teemed with wild animals of a small kind—small, lithe squirrels that whistled at us from screening

(Continued on following page.)

Need "Rotation" in School

Will Sustain Interest and Prevent Skimming

The teaching of agriculture in rural schools never will be a success so long as we teach the same thing over and over again, year after year, or allow the teacher to skim all the branches and leave a subject barren and uninteresting for the teacher who follows the next year, says Professor P. G. Holden of the agricultural extension department of the International Harvester company.

In one-room schools all children in the lower grades become as familiar with subjects taught in the seventh and eighth grades as do their older brothers and sisters. By rotating the subjects a new field is opened to the pupils each year.

Rotation of subjects means the teaching of but one class of subjects each year, such as:

First year. Farm crops.—Corn, alfalfa, weeds, seeds, gardens, and for girls, sewing, etc.

Second year. The making of things.—Tying and splicing rope, cement work, making fly traps, screens, canning, etc.

Third year. Animals.—Live stock, feeding, testing milk, diseases and remedies, cooking, etc.

Fourth year. Soil and home.—Saving moisture, rotation of crops, soil fertility, sanitation, flowers, pictures, etc.

Rotating of subjects:

Enables us to teach more agriculture.

Eliminates repetition.

Gives us a new subject each year.

Keeps interest alive and keen.

Does not kill the subject by skimming or teaching the same thing over and over again.

Makes the directing of the work much easier for the county superintendent, who always has more than he can do. Instead of having several lines of instruction to prepare each year he will have but one.

Agriculture will ultimately be taught in all rural schools. In Oklahoma it is required by the state constitution, in other states by law. Some states have tried it, but in a hit-and-miss fashion. They have skimmed through books; taught words, not things; repeated the same subjects every year; killed interest; made agriculture a dead letter.

If we would teach agriculture in a way to bring the best results we must keep it alive—must develop interest—must rotate the subjects.

Agriculture can not be successfully introduced in all the rural schools in any state or any county at the same time. It must grow into the schools. That is the basis of the plan adopted in Oklahoma.

Rise in Prices of Farm Products

A bulletin just isued by the United States department of agriculture gives a striking summary of the rise in the prices of farm products.

On March 1, 1917, the average price of wheat in this country was 62 cents per bushel more than on the same date in 1916. Rye is up 41 cents, corn 32 cents, and oats 14 cents. In the year potatoes have risen $1.46 a bushel, and cabbage shows an increase of $4.44 per hundred pounds.

Hogs have advanced $3.26 a hundred, beef cattle $1.37, and sheep $2.27. The detailed figures follow:

	March 1—		
Product.	1917.	1916.	1915.
Wheat, cents per bu....	164.4	102.9	133.6
Corn, cents per bu.....	100.9	68.2	75.1
Oats, cents per bu.....	56.9	42.7	52.1
Barley, cents per bu....	96.9	59.6	67.7
Rye, cents per bu.....	126.0	85.6	105.4
Buckwheat, cents bu...	124.8	83.2	85.5
Potatoes, cents per bu..	240.7	94.4	50.4
Sweet potatoes, cents bu.	110.7	77.3	84.7
Flaxseed, cents per bu.	263.1	202.5	157.9
Hay, dolls. per ton.....	12.14	11.62	11.71.
Apples, cents per bu....	123.3	92.0	....
Apples, dolls. per bbl...	3.70	2.64	....
Butter, cents per lb. ...	34.1	27.1	26.8
Eggs, cents per doz.....	33.8	21.2	21.3
Chickens, cents per lb..	15.5	12.2	11.7
Cotton, cents per lb.....	15.9	11.1	7.4

	February 15—		
Product.	1917.	1916.	1915.
Hogs, per 100 lbs....	$ 10.33	$ 7.07	$ 6.34
Beef cattle, 100 lbs..	7.36	5.89	5.93
Veal calves, 100 lbs..	9.88	7.87	7.62
Sheep, per 100 lbs. ...	8.17	5.90	5.14
Lambs, per 100 lbs...	10.51	7.78	6.67
Milch cows, per head	65.93	57.99	57.99
Horses, per head ...	131.00	129.00	132.00
Wool, unwashed, lb..	.327	.242	.202
Maple sugar, per lb..	.147	.126	.116
Maple syrup, per gal.	1.22	1.08	1.06
Peanuts, per lb.....	.053	.044	.04
Walnuts, black, bu...	.80	.89	.85
Hickory nuts, bu.....	1.40	1.14	1.24
Beans, dry, bu.....	6.07	3.43	3.02
Beans, soy, bu.....	2.45	2.39	2.26
Cowpeas, bu.	2.10	1.57	1.87
Kafir corn, bu.....	1.29	....	....
Turnips, bu.	.91	.58	.51
Onions, bu.	3.58	1.26	.98
Cabbage, per 100 lbs.	5.65	1.21	1.41
Timothy hay, per ton	12.91	13.39	14.28
Clover hay, per ton..	11.65	11.41	13.36
Alfalfa hay, per ton.	13.03	10.35	9.32
Prairie hay, per ton.	8.60	7.84	7.86
Clover seed, per bu..	9.87	10.47	8.60
Timothy seed, per bu.	2.46	8.19	2.66
Alfalfa seed, per bu.	7.75	9.20	7.86
Broom corn, per ton.	201.00	104.00	78.00
Cotton seed, per ton.	51.43	36.75	23.33
Pop corn, per bu. ...	2.19	1.64	1.78
Hops, per lb.....	.....	.120	.111
Paid by farms:			
Clover seed, per bu.	11.67	12.22	10.32
Timothy seed, bu..	3.22	3.96	3.56
Alfalfa seed, bu...	9.98	11.04	9.29
Bran, per ton.....	34.87	26.23	28.96

The average potato crop of the world is estimated to be some 5,200,000,000 bushels. Of this amount the undermentioned countries produce on an average of 2,925,000,000 bushels. Complete statistics for the world's crop of 1916 are not available, but from those received it is estimated that the countries named below produced in 1916 only 1,753,500,000 bushels, or 34 per cent of the world's average crop:

	Bushels—	
	1916.	1915.
United Kingdom ..	204,148,000	281,502,000
Canada	61,128,000	62,604,000
Germany	771,610,000	1,984,140,000
France	335,507,000	345,351,000
Netherlands	73,685,000	87,756,000
Switzerland	22,046,000	39,683,000
United States	285,437,000	359,721,000
Totals	1,753,561,000	3,160,757,000

The firewood used on farms of the United States in one year is valued at $225,000,000. Only six crops exceed this amount in value; namely, corn, wheat, oats, potatoes, hay and cotton. The quantity of firewood used per farm is estimated to average 12.5 solid cords, valued, last December, at $2.75 per cord on the farm. The total farm consumption is estimated to be about 81,785,000 cords.

The farmers of the four states of the Pacific northwest consumed a total of 2,019,000 cords, valued at $8,768,000, distributed by states as follows:

	Cords.	Value.
Idaho	324,000	$1,490,000
Washington	780,000	3,510,000
Oregon	600,000	2,340,000
Montana	315,000	1,418,000

Ye Have Heard That It Was Said by Them of Old Time

OTHER GODS.

"Thou shalt have no other gods before me."—Exodus xx, 3.

Out of the vagrant memory of the writer comes fragments of the shorter catechism, learned in childhood, particularly the very first, which says that "man's chief end is to glorify God and enjoy Him forever."

How often do we think of God? What is our God? Why, we suppose it is that which is the mainspring of life, which controls us and by which we govern our lives. What is it that makes us do what we do, say what we say and be what we are?

Is this being infinite, eternal, knowing all things, all powerful and all good? Is this being one of compassion and love and understanding? If this being one of dark and dreadful mien, which must be flattered and propitiated for fear of our lives? Is it merely some desire, some longing that dominates us?

Nobody can know what another may hold as God, but each may know for himself or herself. Let us understand for ourselves.

H. H. B.

Plant Trees Along Highway.

The beautiful Norway maples ordered by the ladies of the St. Helens club of Chehalis, Wash., for planting on the Pacific highway between the north city limits and the fair grounds have arrived, and work of setting them out will begin soon.

Sidelights

And That's All.

Customer—"What is the use of that article?"

Clerk—"I really don't know; I think it is intended for a Christmas present."—Providence Journal.

A Saving Scheme.

"I want portraits painted of the twins, hubby. They will cost $200 each."

"What's the use of having two pictures exactly alike? Get one portrait with two labels."—Louisville Courier-Journal.

Nervous.

"They are not going to cut me up if I go to the hospital, are they?"

"Of course not, when you're going for a rest. What makes you think they are?"

'Because, when I called up the hospital, a voice said, 'Operator'."—Baltimore American.

Desperation.

A small boy, after examining the contents of the window of a Glasgow sweet shop, went inside and inquired:

"How many o' the big sugar balls dae ye gie for a ha'penny?"

On being told that they were a penny each, he appeared very disconsolate, and was turning to the door, when suddenly an idea struck him, and, returning to the counter, he asked this time:

"How lang will yet le me keep ane in my mouth for a ha'penny?"—Tit-Bits.

Plant an extra acre of potatoes this season.

Ups and Downs of a Bunch Grass Boy

(Continued from preceding page.)

bunches of grass with only their heads showing as we drove by; badgers, the unfriendly hermits of the prairie, viewing us from a distance with small, suspicious eyes and upright, pointed ears; coyotes loping gracefully a safe distance away, and long-legged jackrabbits that hopped along the road in front of us, or paused to one side, partly erect, with ears alert and a forefoot reaching for the ground, ready to spring. The badgers were quite interesting; if you moved toward them they would scoot; tail-end first, into their burrows; or, lacking a burrow, would begin throwing dirt with mighty sweeps of their forepaws. Dave Reavis said a badger could dig itself out of sight before you could walk a hundred yards toward it.

We saw flocks of plump sage hens quite frequently. From a distance you might mistake a sage hen for a barred rock hen or guinea fowl. Dave stopped his team one day, took a .22 caliber rifle and followed a hundred feet behind a flock of sage hens, dropping them over one at a time till he had killed six. Desiring to shoot no more, he picked up his game, and the rest of the stupid hens waddled away through the bunchgrass with one occasionally showing its white throat as it looked back at us.

Cooking dinner one day, Dave looked up and asked us to listen. We did so, and there came out of the sky, as if from miles away, a slow, languid croaking.

Dave scanned the sky and so did we. Presently he tried to show us what he said was a flock of sandhill cranes drifting south. Their dismal, solemn croaking came at regular intervals from the great heights of the sky, first clearly, then faintly. We saw them soon—a triangle of slowly moving black specks moving across the face of a snow-white cloud and out into the pure blue, where we lost them. Dave said a sandhill crane flew a mile high, and that their coming presaged the coming of hot, dry weather.

One day while I was riding with Dave Reavis, with mother and father bringing up in the rear, he pointed out to me what seemed like a small range of smoky blue mountains rising out of the gray-green prairie many miles away. What we saw was the west wall of the Grand coulee, Dave said, visible to us because we were approaching it on the low side.

I wanted to know what the Grand coulee was, and he told me in his untutored way, and, as a matter of fact, in what he said he likely struck somewhere near the geological truth.

A long time ago, he explained, a devil of a long time ago, maybe a millions years, or maybe ten million, something had dammed up the Columbia river and turned it across this prairie country. It had flowed across a deuce of a long time, ten thousand years, maybe; or maybe ten million, for all he knew; and had cut out a river bed two to four miles wide with walls straight up and down for three or four hundred feet. Somehow, the Columbia got back into its old bed, finally, and was there now, leaving the Grand coulee of today high and dry, with its flat bottom covered with sagebrush, greasewood, bunchgrass and rocks, with some good salt grass meadows and creeks and springs—and no end of rattlebugs, that is, rattlesnakes. We were going to camp on the coulee bottom tonight, said he. It was steep as thunder going down and still steeper getting out on the west side; when we got to camp I should watch where I put my bare feet, or a rattlebug would get me.

What should I do if bitten? Holler for help, said he, and be darned quick about it. A good way of treating a bite was to take a sharp knife and cut in on each side of the bite, just as though you were going to cut out a notch, only not cutting quite deep enough to make a notch. Suck the thing dry then, or have some one else do it, being sure you didn't have gumboils or anything like that; for if you did it might be just the same as if the rattlebug had bitten you in the mouth. After sucking the wound dry, tie a bandage between the wound and your heart, and make it tight as the very devil. Twist it on with a stick, and then put soda on the wound.

Yes, whisky was good, said Dave; but he had never made any success in carrying whisky to cure snake bites. He always got thirsty before a snake bit him.

Dave Reavis with his cracking whip, his cheerful laugh and equally cheerful swearing left us at our camp in the coulee bottom near Lewises. He was impelled forward by a sort of rangeman's wanderlust, I suppose. Hitching up his four in readiness to "move on," Dave always sang this song:

I'm Captain Jinks of the horse marines.
I feed my horse on corn and beans,
I court young ladies in their teens,
An' I'm a captain in the army.

Thus he sang, the same verse over and over again, sometimes humming it and again shouting it; when he mounted his seat and took the lines he was usually singing loudly, merrily; and ended his singing by swinging his whip over his leaders with the crack of a pistol and a joyful shout of, "Roll out!" And he rolled.

Maybe he is rolling yet.

NEXT WEEK THE BUNCH GRASS BOY TELLS OF HIS SECOND WINTER ON THE FARM IN THE BIG BEND, WHEN THE SNOW CAME EARLY, BEFORE THE SETTLERS WERE READY FOR IT, AND STAYED LATE IN MARCH, LONG AFTER THEY WERE READY FOR IT TO GO; WHILE THE FAMILY HAD FLOUR AND POTATOES AND DRIED FRUIT BROUGHT FROM THE WALLA WALLA COUNTRY, THEY HAD NEITHER MEAT NOR BUTTER NOR MILK, AND HE TELLS HOW THE BUNCH GRASS BOY COVERED UP HIS MEAT HUNGER UNDER THE PHASE OF "LONESOMENESS" AND HOW ONE DAY HIS MOTHER DETECTED THE CAUSE OF THAT LONESOMENESS, AND THE CONSEQUENT JOURNEY THAT THE FATHER MADE ON SNOW SHOES.

Silo Committee Appointed.

The 34 new members of the Mount Angel (Ore.) Silo association have appointed their committee of five to investigate the various advantages of silage. In a month or so officers will be elected.

Must Join Association

To Borrow Money From Farm Bank

(Continued from page three.)

"Who passes on the value of the security?"

"The local national farm loan association has a loan committee of three members, who must agree unanimously upon the valuations. Then after they have made their written report it must be confirmed by the appraiser of the federal land bank."

"What is the maximum and minimum amount of loans?"

"No one farmer may borrow more than $10,000 nor less than $100. No association may start with less than $20,000 in loans."

"What percentage of the value of the security may be borrowed?"

"Up to 50 per cent of the value of the land and 20 per cent of the value of the permanent insured improvements."

"Will it cost anything to have titles examined?"

"No."

"Will the borrower pay for abstract of title?"

"Yes."

"Could the local association employ a man to provide abstracts and thus perhaps save expenses?"

"Yes, that is one of the advantages of cooperation."

Farm loan associations are being formed in the following commiunities of the state of Washington:

Arlington, Addy, Alderdale.
Bridgeport, Burton, Burlington, Bothwell, Barry, Bellingham, Bayview, Boyds, Brewster, Benton City.
Chelan, Colville, Conconully, Ceres, Cowiche, Curlew, Corfer, Colbert, Custer, Chehalis, Cashmere, Castle Rock Columbia River, Chewelah, Chesaw, Cathlamet, Clayton, Centralia.
Dolphin, Deep River, Dungeness, Dryden, Deer Park, Delrio.
Ephrata, Elma, East Stanwood, Edmunds, Eatonville, Entiat, Elk.
Ferndale, Forest.
Granger, Glenwood, Greenacres, Gifford, Goldendale, Gig Harbor, Goshen.
Hunters, Hartline.
Issaquah.
Kennewick, Kiona, Kelso.
Long Beach, Leavenworth, Lakewood, Low Gap, LaCenter, Long Branch.
Mead, Manson, Morrison, Menlo, Mount Vernon, Marcus, Mabton, Marysville, Mansfield, Moxee City, Monroe.
North Yakima, Naches, Neppel, Newport, North Bend, Norman, Noosack.
Olympia, Oakville, Oroville, Orondo, Oso, Omak, Oak Harbor, Olema, Orondo.
Pasco, Puyallup, Pateros, Palouse, Point Roberts, Port Angeles, Prosser.
Republic, Rock Port, Richland.
Snohomish, Sunnyside, Stevenson, Sedro-Woolley, Satsop, Sequim, Shelton, Spokane, Scotia, Silver Creek, Swofford, Southworth, Selah, Sumner, Sumas.
Tieton, Tonasket, Trinidad, Touchet, Trout Lake, Toppenish, Tacoma.
Usk.
Vancouver, Valley, Vashon.
Woodland, Wenatchee, Winthrop, White Salmon, White Bluffs, Wapato, Winlock, Walla Walla.
Yale, Yakima.
Zillah.

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Keeping OUT DUST and RAIN - Keeping IN OIL.



DOUBLE GEARS — Each Carrying Half the Load
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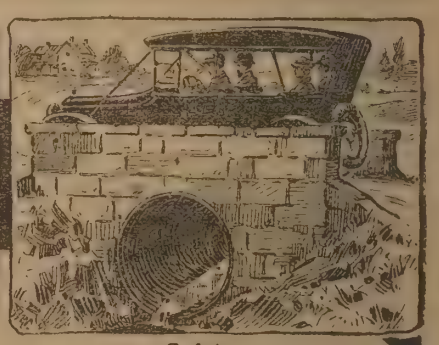
Apply to any agent of Great Northern, Northern Pacific or S., P. and S. Rys.

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A. B. Jackson, Gen. Agt., Davenport hotel, Spokane.

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Vaughan's
Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches, saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $150 f. o. b. Spokane and common points.

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All the World's a Stage, and All the Men and Women Merely Players

Colfax Students Hear Food Preparedness Talks



High school and grade pupils in front of the courthouse at Colfax, Wash., listening to talks on food preparedness by state college instructors traveling with the O.-W. R. & N. State college train in the campaign for increased crop production. A short morning meeting was held at the high school and the students of all the schools were dismissed to attend the afternoon meeting and to visit the demonstration cars being used in the campaign to urge greater productiveness and conservation of food products.

Oil King on the Links.



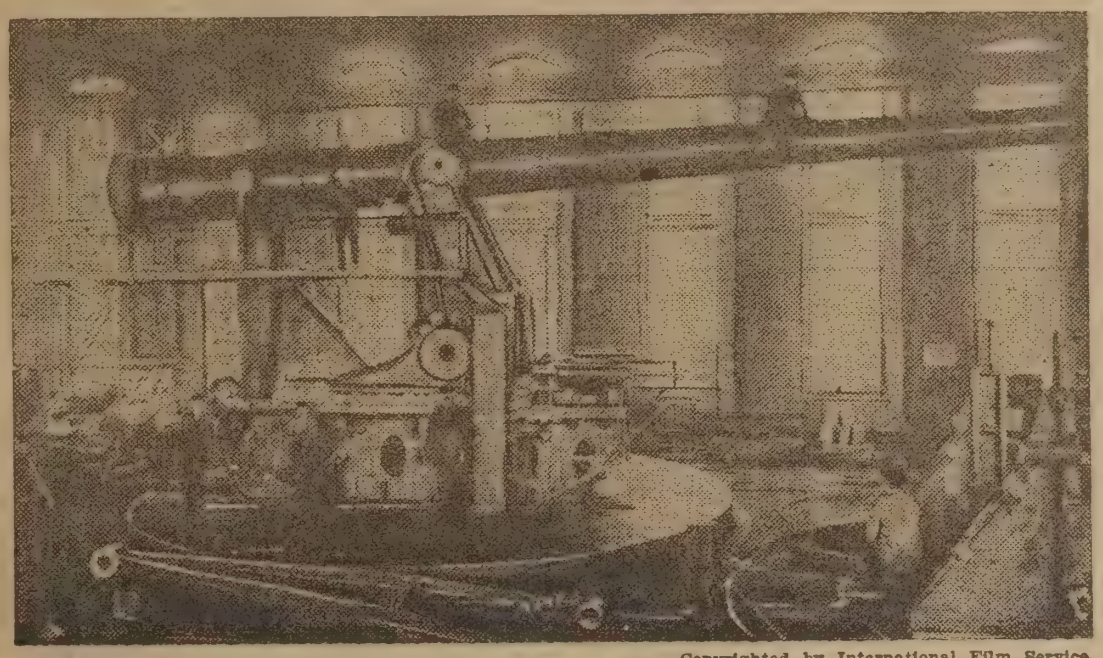
Although nearly 78 years years of age, John D. Rockefeller is still an ardent golf enthusiast and often indulges in his favorite sport. The picture above was made just as Mr. Rockefeller had made a particularly fine shot on the links at Daytona, Fla. Latest reports have it that the Rockefeller estate at Pocantico Hills, which consists of 6000 acres, will be transformed into a vegetable garden for the benefit of the residents of Tarrytown, N. Y. The tillable land of the estate will be divided into small farms and apportioned among those who volunteer to till them. In 1913 Rockefeller established the Rockefeller Foundation, which donated over $1,000,000 for war relief in Europe.

Consuelo's Son in War.



The younger peerage of Great Britain is well represented on the fighting front in northern France. The picture shows John Albert Edward William, the marquis de Blandford, son of former Consuelo Vanderbilt, of New York, who will become the tenth duke of Marlborough. Although not yet 20 years of age, he has been in active service for some time.

Uncle Sam's Powerful Bodyguards



Copyrighted by International Film Service.

Putting the finishing touches on one of the giant coast defense guns at the Watertown, New York, arsenal. An order indicating defense sea areas on coasts of the United States and its insular possessions, including Port Orchard and the Columbia river in the northwest, has recently been made public. According to the executive order it is expressly prohibited for any vessel to enter the limits of a defensive area otherwise than at a designated entrance and after authorization by the harbor patrol.

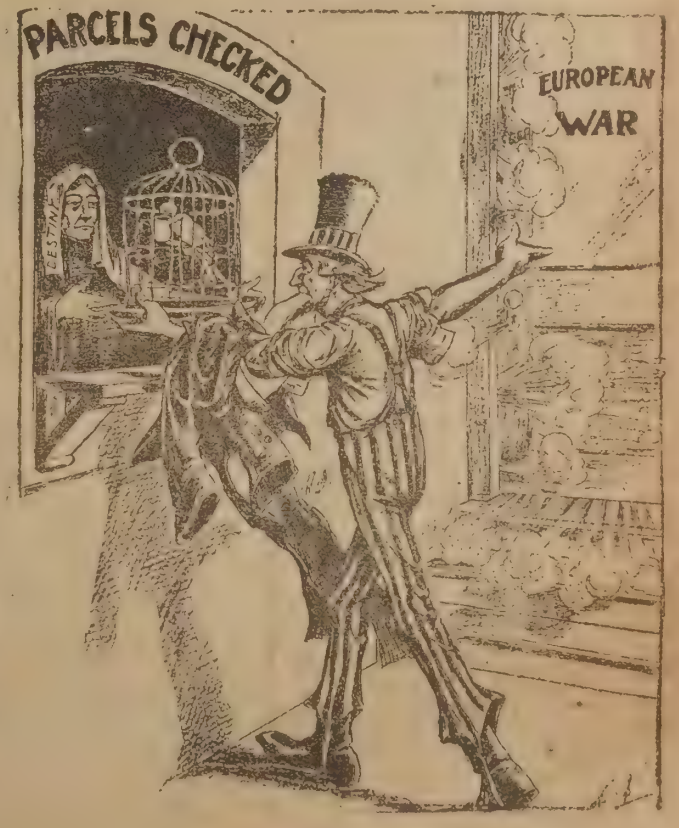
British Armies in the Holy Land



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The above photograph shows a street scene in the holy city of Jerusalem at Easter time. The British armies in the Holy Land are rapidly approaching the ancient city, and for the first time since the days of the Crusades the birthplace of Christianity promises to fall into the hands of Christians. The photograph shows the arrival of the Catholic patriarch for a visit to the Holy city.

Excess Baggage.



—San Francisco Chronicle.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

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CHAPTER XVII—(Continued).

From the beginning, I think, it had never occurred to Mary to doubt the result. There had never been with her even a suggestion of possible failure, unless it was that evening in our room, when, prompted by her startled modesty, she had said she could not bear for us to see her in the trunk hose. Now that fruition seemed about to crown her hopes she was happy to her heart's core; and when once to herself wept for sheer joy. It is little wonder she was happy. She was leaving behind no one whom she loved excepting Jane and perhaps me. No father or mother; only a sister whom she barely knew, and a brother whose treatment of her had turned her heart against him. She was also fleeing with the one man in the world for her, and from a mariage that was literally worse than death.

Brandon, on the other hand, had always had more desire than hope. The many chances against success had forced upon him a haunting sense of certain failure, which, one would think, should have left him now. It did not, however, and even when on shipboard, with a score of men at the windlass ready to heave anchor at the first breath of wind, it was as strong



Those fellows gathered around my Mary to inspect her personally.

as when Mary first proposed their flight, sitting in the window on his great cloak. Such were their opposite positions. Both were without doubt, but with this difference; Mary had never doubted success; Brandon never doubted failure. He had a keen analytical faculty that gave him truthfully the chances for and against, and, in this case, they were overwhelmingly unfavorable. Such hope as he had been able to distill out of his desire was sadly dampened by an ever-present premonition of failure, which he could not entirely throw off. Too keen an insight for the truth often stands in a man's way, and too clear a view of an overwhelming obstacle is apt to paralyze effort. Hope must always be behind a hearty endeavor.

Our travelers were, of course, greatly in need of rest; so Mary went to her room, and Brandon took a berth in the cabin set apart for the gentlemen.

They had both paid for their passage, although they had enlisted and were part of the ship's company. They were not expected to do sailor's work, but would be called upon in case of fighting to do their part at that. Mary was probably as good a fighter, in her own line, as one could find in a long journey, but how she was to do her part with sword and buckler Brandon did not know. That, however, was a bridge to be crossed when they should come to it.

They had gone aboard about 7 o'clock, and Brandon hoped the ship would be well down Bristol channel before he should leave his berth. But the wind that had filled Mary's jackboots with rain and had howled so dismally all night long would not stir, now that it was wanted. Noon came, yet no wind, and the sun shone as placidly as if Captain Charles Brandon were not fuming with impatience on the poop of the Royal Hind. Three o'clock and no wind. The captain said it would come with night, but sundown was almost at hand and no wind yet. Brandon knew this meant failure if it held a little longer, for he was certain the king, with Wolsey's help, would long since have guessed the truth.

Brandon had not seen the princess since morning, and the delicacy he felt about going to her cabin made the situation somewhat difficult. After putting it off from hour to hour in hope that she would appear of her own accord, he at last knocked at her door, and, of course, found the lady in trouble.

The thought of the princess going on deck caused a sinking at his heart every time it came, as he felt that it was almost impossible to conceal her identity. He had not seen her in her new male attire, for when she threw off her riding habit on meeting him the night before, he had intentionally busied himself about the horses, and saw her only after the great cloak covered her as a gown. He felt that however well her garments might conceal her form, no man on earth ever had such beauty in his face as her transcendent eyes, rose-tinted cheeks, and coral lips, with their cluster of dimples; and his heart sunk at the prospect. She might hold out for a while with a straight face, but when the smiles should come—it were just as well to hang a placard about her neck: "This is a woman." The tell-tale dimples would be worse than Jane for outspoken, untimely truthfulness and trouble-provoking candor.

Upon entering, Brandon found Mary wrestling with the problem of her complicated male attire; the most beautiful picture of puzzled distress imaginable. The port was open and showed her rosy as the morn when she looked up at him. The jack-boots were in a corner, and her little feet seemed to put up a protest all their own, against going into them, that ought to have softened every peg. She looked up at Brandon with a half-hearted smile, and then threw her arms about his neck and sobbed like the child that she was.

"Do you regret coming, Lady Mary?" asked Brandon, who, now that she was alone with him, felt that he must take no advantage of the fact to be familiar.

"No! no! not for one moment; I am glad—only too glad. But why do you call me 'Lady?' You used to call me 'Mary.'"

"I don't know; perhaps because you are alone."

"Ah! that is good of you; but you need not be quite so respectful."

The matter was settled by mute but satisfactory arbitration, and Brandon continued: "You must make yourself ready to go on deck. It will be hard, but it must be done."

He helped her with the heavy jack-boots and handed her the rain-stained slouch hat which she put on, and stood a complete man ready for the deck—that is, as complete as could be evolved from her utter femininity.

When Brandon looked her over, all hope went out of him. It seemed that every change of dress only added to her bewitching beauty by showing it in a new phase.

"It will never do; there is no disguising you. What is it that despite everything shows so unmistakably faminine? What shall we do? I have it; you shall remain here under the pretense of illness until we are well at sea, and then I will tell the captain all. It is too bad; and yet I would not have you one whit less a woman for all the world. A man loves a woman who is so thoroughly womanly that nothing can hide it."

Mary was pleased at his flattery, but disappointed at the failure in herself. She had thought that surely these garments would make a man of her in which the keenest eye could not detect a flaw.

They were discussing the matter when a knock came at the door with the cry, "All hands on deck for inspection." Inspection! Jesu! Mary would not safely endure it a minute. Brandon left her at once and went to the captain.

"My lord is ill, and begs to be excused from deck inspection," he said.

Brandhurst, a surely old half pirate of the saltiest pattern, answered: "Ill? Then he had better go ashore as soon as possible. I will refund his money. We can not make a hospital out of the ship. If his lordship is too ill to stand inspection, see that he goes ashore at once."

This last wa saddressed to one of the ship's officers, who answered with the usual "Aye, aye, sir," 'and started for Mary's cabin.

That was worse than ever; and Brandon quickly said he would have his lordship up at once. He then returned to Mary, and after buckling on her sword and belt they went on deck and climbed up the poop ladder to take their places with those entitled to stand aft.

Brandon has often told me since that it was as much as he could do to keep back the tears when he saw Mary's wonderful effort to appear manly. It was both comical and pathetic. She was a princess to whom all the world bowed down, yet that did not help her here. After all she was only a girl, timid and fearful, following at Brandon's heels; frightened lest she should get out of arm's reach of him among those rough men, and longing with all her heart to take his hand for moral as well as physical support. Lt must have been both laughable and pathetic in the extreme. That miserable sword persisted in tripping her, and the jack-boots, so much too large, evinced an alarming tendency to slip off with every step. How insane we all were not to have foreseen this from the very beginning. It must have been a



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Read the Want Ads in This Issue

New ads appear each week in the "Want Ad" department of this paper. Just take a few moments to look them over you may find something you have been looking for to repay you for your effort.

unique figure she presented climbing up the steps at Brandon's heels, jack-boots and all. So unique was it that the sailors working in the ship's waist stopped their tasks to stare in wonderment, and the gentlemen on the poop made no effort to hide their amusement. Old Bradhurst stepped up to her.

"I hope your lordship is feeling better;" and then, surveying her from head to foot, with a broad grin on his features, "I declare, you look the picture of health, if I ever saw it. How old are you?"

Mary quickly responded, "Fourteen years."

"Fourteen," returned Bradhurst; "well, I don't think you will shed much blood. You look more like a deuced handsome girl than any man I ever saw." At this the men all laughed, and were very impertinent in the free and easy manner of such gentry, most of whom were professional adventurers, with every finer sense dulled and debased by years of vice.

These fellows, half of them tipsy, now gathered about Mary to inspect her personally, each on his own account. Their looks and conduct were very disconcerting, but they did nothing insulting until one fellow gave her a slap on the back, accompanying it by an indecent remark. Brandon tried to pay no attention to them, but this was too much, so he lifted his arm and knocked the fellow off the poop into the waist. The man was back in a moment, and swords were soon drawn and clicking away at a great rate. The contest was brief, however, as the fellow was no sort of a match for Brandon, who, with his old trick, quickly twisted his adversary's sword out of his grasp, and with a flash of his own blade flung it into the sea. The other men were now talking together at a little distance in whispers, and in a moment one drunken brute shouted, "It is no man; it is a woman; let us see more of her."

Before Brandon could interfere, the fellow had unbuckled Mary's doublet at the throat, and with a jerk, had torn it half off, carrying away the sleeve and exposing Mary's shoulder, almost throwing her to the deck.

He waved his trophy on high, but his triumph was short-lived, for almost instantly it fell to the deck, and with it the offending hand severed at the wrist by Brandon's sword. Three or four friends of the wounded man rushed upon Brandon; whereupon Mary screamed and began to weep, which of course told the whole story.

A great laugh went up, and instantly a general fight began. Several of the gentlemen, seing Brandon attacked by such odds, took up his defense, and within 20 seconds all were on one side or the other, every mother's son of them fighting away like mad.

You see how quickly and completely one woman without the slightest act on her part, except a modest effort to be let alone, had set the whole company by the ears, cutting and slashing away at each other like very devils. The sex must generate mischief in some unknown manner, and throw it off, as the sun throws off its heat. However, Jane is an exception to that rule—if it is a rule.

The officers soon put a stop to this lively little fight, and took Brandon and Mary, who was weeping as any right minded woman would, down into the cabin for consultation.

With a great oath Bradhurst exclaimed: "It is plain enough that you have brought a girl on board under false colors, and you may as well make ready to put her ashore. You see what she has already done—a hand lost to one man and wounds for 20 others—and she was on deck less than five minutes. Heart of God! At that rate she would have the ship at the bottom of Davy Jones' locker before we could sail half way down the channel."

"It was not my fault," sobbed Mary, her eyes flashing fire; "I did nothing; all I wanted was to be left alone; but those brutes of men—you shall pay for this; remember what I say. Did you expect Captain Brandon to stand back and not defend me, when that wretch was tearing my garments off?"

"Captain Brandon, did you say?" asked Bradhurst, with his hat off instantly. "Yes," answered that individual. "I shipped under an assumed name, for various reasons, and desire not to be known. You shall do well to keep my secret."

"Do I understand that you are Master Charles Brandon, the king's friend?" asked Bradhurst.

"I am," was the answer.

"Then, sir, I must ask your pardon for the way you have been treated. We, of course, could not know it, but a man must expect trouble when he attaches himself to a woman." It is a wonder the flashes from Mary's eyes did not strike the old sea-dog dead. He, however, did not see them, and went on: "We are more than anxious that so valiant knight as Sir Charles Brandon should go with us, and hope your reception will not drive you back, but as to the lady—you see already the result of her presence, and much as we want you, we can not take her. Aside from the general trouble which a woman takes with her everywhere"—Mary would not even look at the creature—"on shipboard there is another and greater objection. It is said, you know, among sailors, that a woman on board draws bad luck to certain sorts of ships, and every sailor would desert, before we could weigh anchcor, if it were known this lady was to go with us. Should they find it out in midocean a mutiny would be sure to follow, and God only knows what would happen. For her sake, if no other reason, take her ashore at once."

Brandon saw only too plainly the truth that he had really seen all the time, but to which he had shut his eyes, and throwing Mary's cloak over her shoulders, prepared to go ashore. As they went over the side and pulled off, a great shout went up from the ship far more derisive than cheering, and the men at the oars looked at each other askance and smiled. What a predicament for a princess! Brandon cursed himself for having been such a knave and fool as to allow this to happen. He had known the danger all the time, and his act could not be chargeable to ignorance or a failure to see the probable consequences. Temptation, and selfish desire, had given him temerity in place of judgment. He had attempted what none but an insane man would have tried, without even the pitiable excuse of insanity. He had seen it all only too clearly from the very beginning, and he had deliberately and with open eyes brought disgrace, ruin, and death—unless he could escape—upon himsesif, and utter humiliation to her whom his love should have prompted him to save at all cost. If Mary could only have disguised herself to look like a man they might have succeeded, but thta little "if" was larger than Paul's church, and blocked the road as completely as if it had been a word of 20 syllables.

When the princess stepped ashore it seemed to her as if the heart in her breast was a different and separate organ from the one she had carried aboard.

As the boat put off again for the ship its crew gave a cheer coupled with some vile advice, for which Brandon would gladly have run them through, each and every one. He had to swallow his chagrin and anger, and really blamed no one but himself, though it was torture to him that this girl should be subjected to such insults, and he powerless to avenge them. The news had spread from the wharf like wildfire, and on their way back to the Bow and String, there came from small boys and hidden voices such exclamations as: "Lock at the woma nin man's clothing"; "Isn't he a beautiful man?" "Look at him blush"; and others too coarse to be repeated. Imagine the humiliating situation, from which there was no escape.

At last they reached the inn, whither their chests soon followed them, sent by Bradhurst, together with their passage money, which he very honestly refunded.

Mary soon donned her woman's attire, of which she had a supply in her chest, and at least felt more comfortable without the jack-boots. She had made her toilet alone for the first time in her life, having no maid to help her, and wept as she dressed, for this disappointment was like plucking the very heart out of her. Her hope had been so high that the fall was all the harder. Nay, even more; hope had become fruition to her when they were once a-shipboard, and failure right at the door of success made it doubly hard to bear. It crushed her, and, where before had been hope and confidence, was nothing now but despair. Like all people with a great capacity for elation, when she sunk she touched the bottom. Alas! Mary, the unconquerable, was down at last.

(To be continued in next issue.)

What Did Teacher Mean?

The school teacher needed a few plums to assist her in giving an object lesson, and requested Willie to purchase them at the market. "Before you pay the man," she cautioned, "pinch one or two to see if they are ripe."

Willie returned with a smiling face, and proudly deposited a bag of plums on the teacher's desk.

"Thank you, dear," said the teacher. "Did you pinch them to make sure they were ripe?"

"Did I!" was the gleeful answer. "I pinched the whole bagful, and here is the sixpence!"



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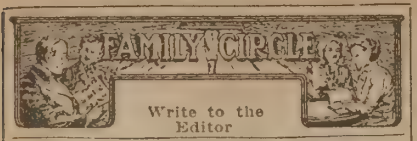
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ALICE W. BARLAND
Editorial Contributor

School Days

The Old Methods a Big Joke Now

By ALICE W. BARLAND.

Dear Girls of the Family Circle: I visited a schoolroom this week, a real up-to-date schoolroom. There were pictures on the walls, lots of them, and there were fine maps. There was a globe and every convenience imaginable for teaching. The room was arranged just as it should be as to windows, so the light would be good for the pupils. The seats and desks were comfortable to use and the whole room delightful to look at.

Let me give you a pen picture of the schoolroom where I spent the first 10 years of my school days.

It had seating capacity for 24 people with desks and six more seats where there were none. The building was put up as cheaply as possible. Everything was of pine boards, entirely without paint inside and out. There were windows on every side, with no sort of shade, not even a newspaper pinned up. The sun poured in from one side or the other all day till I wonder we did not all become blind. The building was so cheaply constructed and the outside walls so thin it was impossible in winter to keep warm a few feet away from the great stove. It was set up in the center of the room, with the long pipe running across the building, making great heat over the heads of those whose seats were under it. On cold days some one of the large boys kept the big long stove red hot and there was generally a row of half frozen scholars thawing out on the seats next to the stove.

There was an old wooden pail, with a rusty dipper, always standing in one corner of the room, where we poor youngsters were allowed to refresh ourselves with a drink of stale water. There was not a map or picture on the bleak, white walls. A long procession of teachers came and went during that 10 years, nine all together. The first one taught me my "A, B, Cs," holding me on her lap during the process. Each of those nine teachers during those 10 years set copies for the pupils to follow and each wrote differently. After we had followed the special turns and twists of one teacher for a year another one came and gave us an entirely new set to follow. After we had practiced a different style of writing every year for 10 years it isn't any wonder that some of us turned out pretty poor writers.

There were about as many classes as there were scholars and quite frequently there would be but 10 or 15 minutes for a class to recite. I often wonder how any of us ever learned anything, but we did. I am sure much was learned by the younger ones in listening to the older classes recite. At any rate, after 10 years of country school, when changed to the city schools, I was able to take my place with young people my age and in several branches I was more advanced. I remember well one of those nine teachers used to allow us to dance during the noon hour. There was one big fellow she was quite interested in and they used to dance together the old-fashioned square dance called a quadrille. Sometimes she became so interested in dancing that she let the time slip by and the school work had to be rushed through.

Plan to can some garden stuff for winter use.

We used to "spell down" on Fridays and we used to sing the multiplication table for an opening exercise mornings preceded by a chapter from the Bible.

Cleaning Day was a Big Day.

Once a year we used to clean house. Oh, but that surely was one great day! It was always in the spring when the days were warm. All the books were carried to the "entry" and pure white sand was brought from the creek which I used to dread to cross when hunting the cows. Different scholars brought pails and mops and scrubbing brushes and "soft soap." I usually took the soap for I lived very close to the school house and my father made two and some times three barrels of the slippery, slimy stuff every year. It was warranted to take most of the skin off the hand every wash day. How we used to scour those soft pine desks, floors, teacher's table, doors, window casing! Every inch of wood inside was scoured with that soap and sand till it was almost as white as snow. Then the pails and pails of water we had to carry to rinse off all the soap and sand! When all was done under the supervision of the teacher we were a sloppy and bedraggled group of youngsters, but very happy and satisfied with our finished work. One other great day was when the county superintendent of schools came to visit. We were all about scared to death, including the teacher.

The same teacher who used to dance had a system of showing off my class in arithmetic to the best advantage. It did not matter where we were studying,

(Continued on page twenty-two.)

The Baby

As to Required Sleep and the Bath

Every baby needs 20 hours of sleep a day in its first month and not less than 16 up to the twelfth month of its first year, says a bulletin of the University of Minnesota.

It should sleep alone, not in a cradle, but in a crib. If no crib is available, a clothes basket or a box of sufficient size is a good substitute. An expensive mattress is not necessary. A simple mattress made of excelsior and covered with a heavy blanket will answer very well. A sufficient quantity of clean bed clothing should be provided.

The room should be darkened and well ventilated; the windows should always be open at the top at least 6 inches, except in the coldest weather. If the baby cries when it should be asleep, it is probably sick, overfed, or hungry.

All children should take a nap of from one to two hours in the middle of the day until they are 6 years old.

The Bath.

Every baby should be bathed at least once a day; during the hot weather two or three sponge baths may be given in 24 hours. The temperature of the bath should be from 90 to 95 degrees F. in the early months. By the end of the first year the temperature may be lowered to from 80 to 85 degrees F. If you have no thermometer, a practical test for the correct temperature is to use water that feels warm to the elbow.

When bathing the baby in a tub let it rest upon your left arm, which is slipped under its back from the baby's right side. By grasping the baby under the armpit with the left hand a good hold is secured, which prevents slipping. The right hand is left free for washing the baby. A special wash cloth, preferably of cheesecloth, should be provided for washing the baby's face and head.

After the baby is taken out of the tub it should be dried in a large soft bath towel.

Do not wash a healthy baby's mouth; it will do no good and may do harm. As soon as the baby has teeth, clean them carefully with a soft clean cloth or gauze, and later with a soft toothbrush and cooled, boiled water.

After the baby is dressed it is wise to keep it indoors for at least an hour after bathing and to protect it from drafts.

The best time for bathing the baby is just before its morning feeding, between 8 and 10 o'clock. After its bath the baby will be ready to take its food and go to sleep.



The year's at the spring,
The day's at the morn;
Morning's at seven,
The hillside's dew-pearled;
The lark's on the wing,
The snail's on the thorn—
God's in his heaven,
All right with the world.
—Browning.

Unable to Sleep

Often Something to Eat a Cure

By Mariella Kidwell, Garfield, Wash.

When a child cries in the night for no apparent reason try giving it something to eat.

Our little girl is just recovering from the measles. She was too sick to cry while at the worst, then one night she cried for an hour. I told stories. I tried everything. She insisted she wasn't hungry, but in desperation I had a cup of cocoa prepared. She drank some and went right to sleep. After a week's fast I knew that must be the trouble. Last night when she started to cry daddy hurried to get a fire and some cocoa made, not for her, she "wasn't hungry," she wanted the kitty cat in bed," but she did drink a whole cupful and slept like a top for six hours. Grown people also often lie awake from hunger, although unconsciously. I have often, after trying in vain till 1 or 2 o'clock to go to sleep, got up and built a fire and made cocoa and toast and then slept fine until morning. Often hot water will answer the same purpose.

Do You Know

That every bit of uneaten cereal can be used to thicken soups, stews, or gravies?

That stale bread can be used as the basis for many attractive meat dishes, hot breads, and desserts?

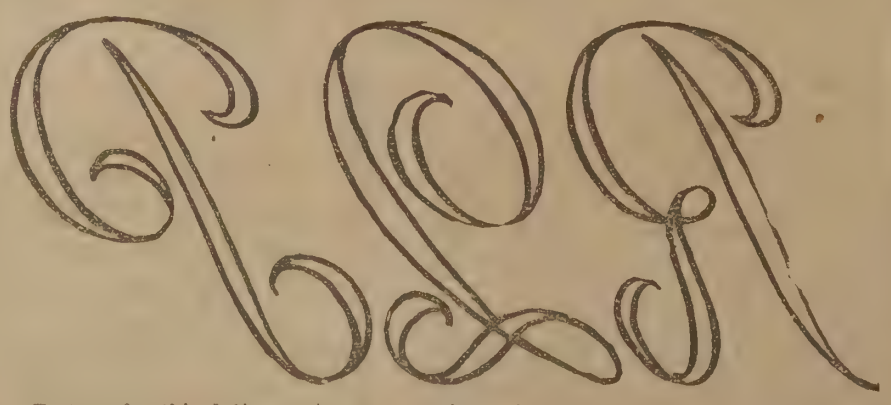
That every ounce of skimmed milk or whole milk contains valuable nourishment? Use every drop of milk to drink or to add nourishment to cereals, soups, sauces, and other foods. If you do not want milk to sour, keep it cool, clean, and covered continually. Remember, too, that sour milk, buttermilk, and sour cream are valuable in cookery, so do not waste any. Sour milk and buttermilk can be used with soda in making hot breads, or sour milk can be turned easily into cottage cheese, cream cheese, or clabber. Sour cream is a good shortening in making cakes and cookies and useful for salad dressings and gravies for meat.

Peg Tops and Barrels Defined.

Pegtop skirts and barrels are often confused. The pegtop is full at the top, often gathered at the waist line or draped in folds or loops over the hips and tapering to a very narrow skirt at the bottom. The barrel skirt has no fullness at the waist line and is not draped, but is merely round, like a barrel, bulging at the knees.

Script Initials for Embroidery

By WINNIFRED WORTH.



To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of a linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design.

Hosiery That Stands for Children's Romping

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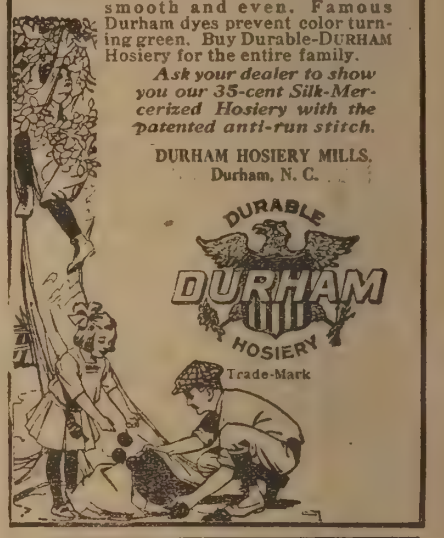
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Awarded GRAND PRIZE at the P.P.I.E.

Patterns

1812—Child's dress. Cut in four sizes: 2, 4, 6 and 8 years. It requires two and a half yards of 36-inch material for a 4-year size, with three-quarter yard for bolero. Price, 10 cents.

1797—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. It requires two and three-quarter yards of 36-inch material for a 6-year size. Price 10 cents.

1751—A charming summer frock. Cut in four sizes: 14, 16, 18 and 20 years. It requires four yards of 44-inch material for the dress with ruffles, and three yards without ruffles, for a 14-year size. The skirt measures about two and seven-eighth yards at its lower edge. Price, 10 cents.

1726—Ladies' house dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires seven yards of 36-inch material for a 36-inch size. Price, 10 cents.

1922—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. It requires three and three-quarter yards of 36-inch material for an 8-year size. Price, 10 cents.

1592—Dress or apron with bloomers for girls. Cut in five sizes: 2, 4, 6, 8 and 10 years. It requires for a 6-year size three and a quarter yards of 27-inch material, with two and a quarter yards for the bloomers. Price, 10 cents.

1813—Misses' dress. Cut in three sizes: 16, 18 and 20. It requires seven and three-eighth yards of 36-inch material for an 18-year size. The skirt measures about three yards at its lower edge. Price, 10 cents.

1522—Ladies' house dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires six and a quarter yards of 44-inch material for a 36-inch size. The skirt measures about three yards at its lower edge. Price 10 cents.

1143—Dolly's wardrobe—Cut in 6 sizes. The set, comprising all illustrated for dolls: 14, 16, 18, 20, 22 and 24 inches in length. To make the dress it will require 1 1-8 yards of 24-inch material. The cape, 1 yard of 44 inch material. The combination and the petticoat require 1 1-4 yards of 36-inch material for a 22 inch doll. Price 10c.

8390—Dolls' set of long clothes—Cut in 3 sizes for dolls: 16, 18 and 20 inches in length. It requires 2 1-8 yards of 27 inch material for the dress, 1 7-8 yards of 24-inch material for the wrapper, and 2 1-8 yards of 24-inch material for the coat, for an 18-inch doll. Price 10c.

9422—Dolls' Rompers—Cut in 4 sizes: 18, 20, 22 and 24 inches in height. It requires one yard of 27 inch material for the 20 inch size. Price 10c.

9423—Dolls' Norfolk Dress. Cut in 4 sizes: 18, 20, 22 and 24 inches in height. It requires 1 yard of 36-inch material for the 18-inch size. Price 10c.

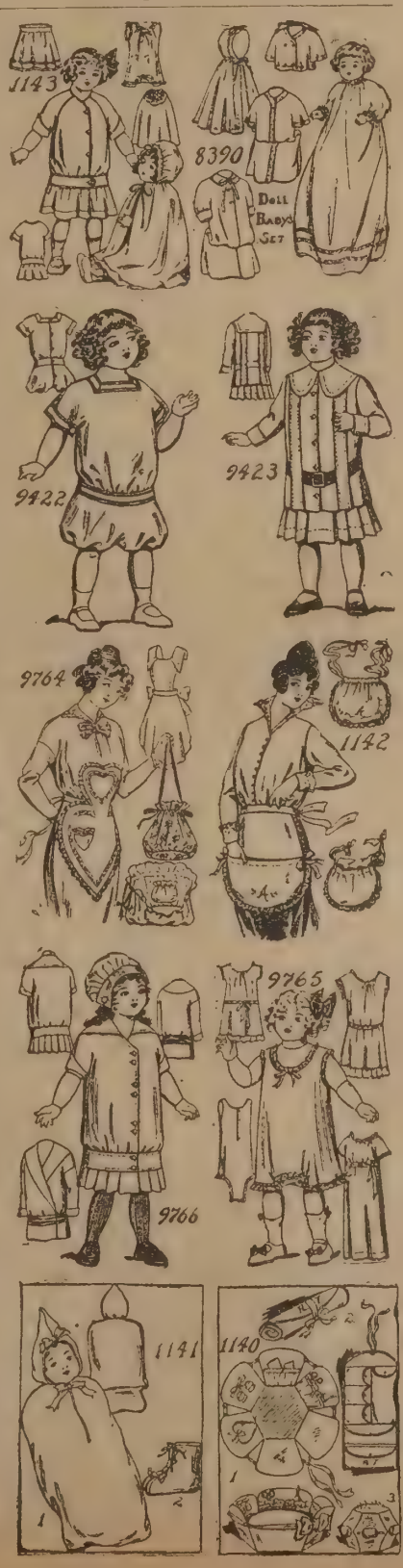
9764—Ladies' Fancy Aprons and Sewing Bag—Cut in one size—Medium. It requires 7-8 yard of 27-inch material for heart apron, 2 1-2 yards for bretelle apron, and 1 yard for bag of 36 inch material. Price 10c.

1142—A Ladies' Sewing Apron and Bag Combined. Cut in one size—Medium. It requires 1 1-4 yards of 36-inch material. Price 10c.

9766—Dolls' set, comprising a Balkan dress, a coat and a "Billie Burke Bonnet." Cut in 6 sizes for dolls: 14, 16, 18, 20, 22 and 24 inches in height. It requires 1-2 yard of 24 inch material for the cap, 1 1-2 yards for the dress, and 1 3-8 yards for the coat for an 18-inch size. Price 10c.

9765—Dolls' one-piece set of underwear—Cut in 6 sizes: for dolls: 14, 16, 18, 20, 22 and 24 inches in length. It will require 2 yards of 36 inch material for a doll 24 inches long, for the entire set. Price 10c.





Fill in this coupon and mail to Pattern Dept.
THE PACIFIC NORTHWEST FARM TRIO
36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

The Mark We Make on Others.

What sort of impression do you make on acquaintances?

Think of all the different impressions you get yourself in a day, and how important it is that you should appear favorably to others.

You may be sure every man or woman leaves some sort of mark on the mind and memory of those with whom he or she comes in contact.

Figure it out. What are your strong points—or weak ones?

Talkative? Very well. But is it only chatter, or do you really say something which is worth listening to?

Do you constantly talk of your aches and pains?

Do you tell things about other people which you would dislike to have said of yourself?

How do you think your conversation impresses those who hear it daily?—Pittsburg Dispatch.

You Can Make It at Home.

A very cheap, serviceable clothes hamper may be made in this way. Procure from your grocer an ordinary coffee drum and cover. With a nail and a hammer make a few holes in the sides of the drum to allow for ventilation. Fasten a knob or handle on the cover. Stain and varnish or paint any desired color. If stained or painted to match the surrounding woodwork and placed at the end of the hall or in the bathroom, this hamper will prove very serviceable and inconspicuous.—New York Tribune.

One on the Doctor.

The proprietor of a new restaurant, with a view of attracting cutomers, hung out a sign which read:

"When you wish to dine, you can not do better than to patronize me."

Two students, returning home in the small hours of the morning, saw this announcement and determined to have some fun. One stood on the other's shoulders and detached the sign. They next proceeded to touch up the lettering and conveyed it to the other end of the road, where a ruby lamp indicated the residence of a doctor. To the lamp they attached their burden, and departed on their way rejoicing.

When the doctor came downstairs in the morning he was astonished to find a grinning crowd gathered around the gateway. Angrily looking for the cause, his eye fell upon the sign:

"When you wish to die, you can not do better than patronize me."—Chicago News.

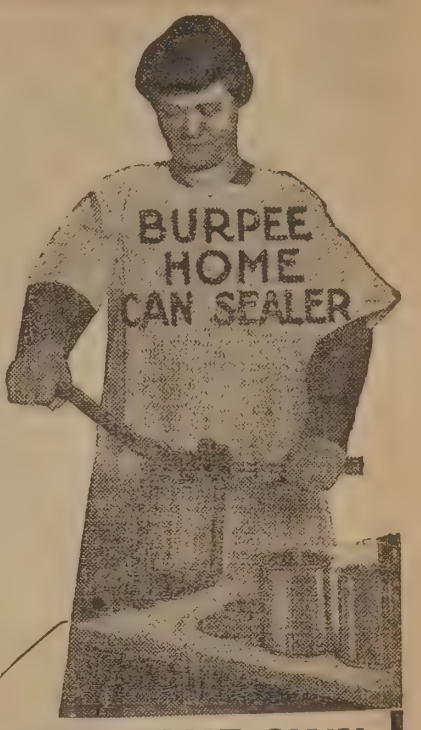
Curried Eggs.

Slice two onions and fry in butter, add a tablespoonful of curry powder and one pint of good broth or stock, stew until onions are quite tender, add a cup of cream thickened with a little flour, simmer a few minutes, then add eight hard-boiled eggs, cut in slices, and heat them well, but do not boil.

An Optimist.

"What's an optimist?"

"An optimist is a person who'll go into a restaurant without a cent in his pocket and figure on paying for the meal with the pearl he hopes to find in the oysters."—Illinois Siren.



CAN YOUR OWN PRODUCTS

Don't throw your surplus fruits and vegetables to the hogs. Turn them into profit. Can them with a BURPEE HOME CAN SEALER. Then sell them at top prices, or keep them for your own use.

No Solder Needed!

No solder nor acid are required with the BURPEE HOME CAN SEALER. Seals sanitary cans absolutely airtight. So simple a child can use it. So cheap that no home can afford to be without it. It's the greatest canning device of the age. Clamps to any kitchen table. Satisfaction absolutely guaranteed or money back.

Complete—Only $10

Our $10 machine seals the popular pint-size cans. Small, inexpensive attachments for other sizes. Write for free book telling how to start a profitable business with this machine. Free book of complete recipes goes with each sealer. Write us today.

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South Bellingham, Wash.
Canning Machinery Mfgrs.

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BURPEE & LETSON, LTD.,
So. Bellingham, Wash.

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The regiment of young people who enter our school every year for a summer course in bookkeeping, shorthand and typewriting.

We train you for a real money earning position—and help you secure it after graduation.

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STERLING SILVER ROLLED GOLD

A. J. STEVENSON, S114 Post, Spokane.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.



Many Have Died for Our Country.

Dear Aunt Nellie: For my subject I have chosen "My Country." There is a broad, fair land stretching many miles east and west, north and south, which all Americans call their country. This country is divided into 48 states, each state represented by a star in that great emblem which floats daily over that beloved country. The great country is loved by all and many a brave man died that this country might be born and later that it might not fall into the hands of its enemies. Of course, we all agree with Longfellow in his poem, "Paul Revere's Ride," that: "In the hour of darkness and peril and need, the people will awaken to listen and hear the hurrying hoof-beats of that steed and the midnight message of Paul Revere."—Berthold Conrad, R. F. D. 1, box 44, Renton, Wash.

Write Again Soon, Won't You, Mabel?

Dear Aunt Nellie: I am 8 years old and in the third grade at school. I have three brothers and one sister. My brothers' names are James and George and Robert. Robert is the baby. My sister's name is Lydia. Our school is one-half mile away. Our teacher's name is Miss Fink. I like her very much. My birthday was June 11. We live on a farm. We have four horses and six cows, two yearlings and two calves and two hogs, two dogs and two cats and about 60 chickens. The horses' names are Bess, Black Babe, Gray Babe and Maude. The cows' names are Rosy, Molly, Dolly, Brownie, Daisy and Bessie. The yearlings' names are Nellie and Nigger. The calves' names are Star and Dick. Shep and Prince are the names of the dogs. —Mabel Ervin, Valley, Wash.

Likes Stories About Girls Best.

Dear Aunt Nellie: I am a girl 12 years old and am in the seventh grade. My birthday is the 24th of March. I have been watching for a twin for about two years, but have not found one. The subject I am going to write about is "My Favorite Book." I love to read. My favorite books are stories about girls. Some of the books that I've read and like are: "The Wide, Wide World," "The Girl of the Limberlost," "Michael O'Halloran," "Little Women," "Peg o' My Heart,' "Under the Lilacs,' "Grace Lawlowe Series,' "Little Nell" and "Grandpa's Little Girls," I think I like "Grandpa's Little Girls" best of them all. There is a series of them, but I have only read two. The ones I have read are the first book, when they first went to live with their grandparents, and "Grandpa's Little Girls and Their Friends."—Margaret Collaer, R. 2, Box 171, Vancouver, Wash.

The Glad Game's a Good Game for All.

Dear Aunt Nellie: I am going to tell you about my favorite book. It is "Pollyanna." You, who have read it, will understand why I like it so well. It is the story of a little girl whose mother was dead and whose father was a minister. She got most of her things from missionary barrels. One time she wanted a doll very badly. When the missionary barrel came there was a pair of crutches instead of a doll. Right there she began the Glad Game by being glad she need not use the crutches. And so she played the Glad Game all her life, finding something to be glad about in everything. She made many friends and was loved by all. Don't you think the Glad Game would be a nice one for all of us to play?—Grace Wills, Mayview, Wash.

Wishes All Animals Had a Good Home.

Dear Aunt Nellie: I will write about my favorite book, "Beautiful Joe." I like it because it is about a dog. He had a very cruel master at first, but one day his master, whose name was Mr. Jenkins, killed this dog's sisters and brothers, and after a while, his mother, who was half starved. Then the dog bit Jenkins on the leg and Jenkins cut the dog's ears and tail off. A man who was passing by heard the dog crying and came to see what was the matter. He gave Jenkins a whipping and took the dog home. He had a very good home there. His mistress, Miss Laura Morris, was very kind to him and had the cruel man Jenkins punished for his cruelty. When the poor dog went away in the corner to die, Miss Laura took him in the house and took care of him and made him well again. She named him Beautiful Joe. This dog was very faithful. He saved Miss Laura from death, which came near occurring when the dog's old master tried to burn up the house where his dear mistress slept. He barked until help came, then chased him and caught the cruel man by the leg. He held him until the policeman came and took him to jail. I wish all dumb animals had a home like Beautiful Joe. I hope all other children are kind to dumb animals.—Laverne Virginia Nunn, Meyers Falls, Wash.

Seemed Quite a Task at That Time.

Dear Aunt Nellie: One evening when I was 6 years old a gentleman came to our home on a business trip. After supper was over he wished to get me to talk to him, but I was very timid and did not want to do so. The next morning he asked me if I could write my name. I was nearly afraid to speak to him, but I said I could. I had never learned to write, but I meant I could print it. He gave me his note book and a pencil and said that if I would write my name he would give me a penny or the smallest piece of money he had. I took his book and thought I had written my name, but it was only in large print. When I gave it to him he said it was very good and looked in his purse to find a penny to give me, but he did not have a penny or a nickel, a dime or a quarter. The smallest piece of money he had was a half dollar so he gave it to me. I was very happy and ran to show mother. Then I put it in a little tin bank and kept it for a long time. This was my first money and I think I earned it quite easily, though at the time I thought it quite a task to write my name for a stranger. Then I was only a little girl of six, and now I am 18 and in the sixth grade in school.—Alice Clinesmith, Lantz, Wash.

Is a Happy Little Country Girl.

Dear Aunt Nellie: For my subject I have chosen "How I Earned My First Money." It was one bright June morning when I walked down the trail to the strawberry patch. The sun was just peeping above the trees. I heard the larks in the meadow singing their morning song. The swallow was flying overhead with bits of grass and mud to build nests for their young. I picked berries for my uncle and I earned 75 cents the first day, 90 cents the second and 75 cents the third. Every Friday at school we have an assembly. We have dialogues, recitations and singing. I live in the country and I wouldn't live in the city for all the money any one could give me. I am 12 years old and in the sixth grade. I have blue eyes, brown hair and dark complexion. I am four feet and nine inches tall and weigh somewhere in the 90s. I would like to correspond with Elsie Wiseman and Clara Olson if they would write to me.—Esther Carslin, Olalla, Wash. R. F. D. 1, Box 21.

Daisy Calls the Cat "Kitty Gray."

Dear Aunt Nellie: I live on a 220-acre farm. We have about 50 chickens and 11 ducks and two turkeys. I have one old hen and one young pullet. The old one's name is Yellow-Neck and the young one is Goldie. I have a kitten and her name is Kitty Gray. My subject is "How I Earned My First Money." Papa gave my two sisters and me a pig and we pulled weeds for it and gave it water and the rest, too, till it got big enough to sell, and we sold it and got $7.50 for it. I was 10 years old February 26, and I am in the fourth grade in everything. I have three brothers and two sisters. My brothers' names are Loren, Alfred and Judson and my sisters' names are Lizzie and Ada. We have nine horses and one baby colt. She's nine days old today. We have eight head of cattle and one baby calf.—Daisy Alberta Laird, Macall, Wash.

Very Proud of Her First Money.

Dear Aunt Nellie: My subject is "How I Earned My First Money." After vacation I wanted to help my mother, so I decided to work in the road camp washing dishes and helping around the cookhouse. I made $25 a month and I was very proud of my first money. I helped buy my winter clothes, for my father is dead and I am next to the oldest one at home. It helps a great deal to buy my own clothes. I walked a mile and one-quarter to work each morning. I got up at 5 o'clock and got up to camp in time to set the table and wait upon the men. We have one cow and calf, 10 chickens, two dogs, one kitten. We live on a ranch containing three acres of land. My oldest brother, who is 16, is working in camp, helping my mother as much as possible. I think our corner is growing nicely—Florence Stephens, Menlo, Wash.

Going to Write a Story Soon.

Dear Aunt Nellie: I like to read the letters very much. I am going to write a story soon. I am 12 years old. My birthday is the 15th of October. I have a twin at school. He is my classmate. I have one brother, Elton, he is 5 years old. His birthday is the 23d of December. We live on a farm seven and one-half miles west of Spokane. I go to Normandy school and am in the sixth grade. I have to walk one and a half miles. We have five horses, five colts, five cows and seven calves. We also have two dogs, Laddie and Sport. Our cats are Buster and Nice Kitty. We have about six dozen chickens and 10 pigs. One of the dogs, Laddie, is just a pup. He quarrels with Buster. He also tries to bother Nice Kitty, but she scratches him.—Selena Deno, R. F. D. No. 1, Spokane, Wash.

A Birthday Lunch on the Beach.

Dear Aunt Nellie: I am going to write and tell you about my birthday party last summer. The children of our neighborhood gave me a surprise party. I was out playing when they came. They gave me two handkerchiefs, a nice string of beads, a little looking glass, some clothes pins, a little wash boiler, a clothes basket, a pepper and salt shaker and toothpick holder, a flower vase and a cup. We went to the beach and ate our lunch.—Eleanor Dobers, Anacortes, Wash.

Earned His Money Picking Cherries.

Dear Aunt Nellie: I was 8 years old September 20th. I earned my first money, which was 50 cents, for picking cherries for my father. We have four cows and two horses. I have three brothers and two sisters.—Kenneth Duncan, Chewelah, Wash.

Boat Riding in the Back Yard.

Dear Aunt Nellie: I saw three subjects in the Farmer and thought I would write on "How I Earned My First Money." My papa planted some onions and I weeded and cared for three rows. When it was time for green onions and my onions were ready to sell I would pull and clean them at night and in the morning I would take them to town and sell them. This year we have no green onions as the high water killed most of them. The rest my 13-year-old brother sacked and sold. My aunt has some and we children sell them for her and she gives us half the money. This year the high water lacked six inches to coming into the house. Papa took the cows up on the hill but mama and we children stayed at home. We waded in water to feed the chickens. We could bring a boat right up to our door. We couldn't go all the way to the chicken yard because the water wasn't deep enough in one place. I want to thank Leona Waldron for the pretty card she sent me. I was very glad to see my letter in the last Farmer.—Lydia Guild, Woodland, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Retta Gray, Eunice Martin, Gladys May Plemon, Nettie Ruark, Graham Potter, Edna Webb, Harry Wegele, Edith Peterson, Leona Machlied, Helen Blanchard, Hattie Hayden, Neta Gallaher, Wilber Davis, Esther Dale.

School Days

Old Methods a Great Joke Now

(Continued from page twenty.)

even though it might be in the back of the book, she always sent us to the board to do examples in long division when the superintendent came because we could do those with speed and accuracy.

The Old Wooden Water Pail.

Those were surely great old school days. That old wooden pail that held the drinking water came in for a scrubbing in the annual cleanup and the rest of the year it was left in place with all the "germs" it might accumulate. Happy the youngster whose turn it was to go up and down the aisles "passing the water" and many a time I have seen boy or girl all ready to drink from the old rusty dipper when some one behind would jog the arm holding the dipper and the water would splash all over the would-be drinker and his clothes and books. Those were the days of slates and when I think of the noise we used to make getting them out and back into our desks I wonder all the country teachers of those days did not die of nervous prostration.

Our recesses in summer were spent in playing "crack the whip," "pom pom pull away" and "ante kiely over." I believe I could enjoy playing some of those old games yet—for perhaps five minutes.

I am sure the methods of teaching in those days in the country schools would seem a big joke to you young folks today. The mysterious thing about it all is how we ever learned anything, but we did learn, as I said before. Nearly all the scholars came long distances, some as far as three miles, and through all kinds of snow. When the roads were deep with snow farmers would hitch up their teams to bobsleds and gather up all the children along their road.

Novel Mode of Punishment.

I must tell you how one teacher punished a couple of big boys who continued to laugh and play after being warned to stop. The teacher set a common wooden-bottom chair in the middle of the floor and required those boys sit on the floor and put their feet up onto the seat of the chair. One tried to rest himself by holding onto his boot straps, but was not permitted to do it. The teacher kept them in that position till they both shed tears, big fellows though, they were of 16 years.

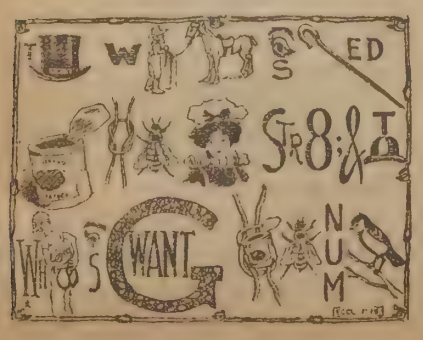
If you think it an easy position to take for an hour or more just try it. I could tell you many amusing things that happened during those years, but I must not make my story so long. I will tell you just one.

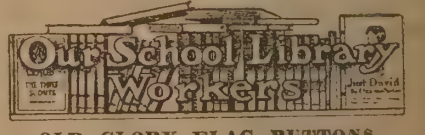
Funny Roasted Pig's Tail.

There was a big overgrown boy of 12 years who was his mother's pet. One day this boy's father had been killing hogs in the morning, and along about 2 o'clock in the afternoon the "hired girl" came knocking at the schoolhouse door, and when the teacher opened the door she handed in a pig's tail very nicely roasted, and said it was for Byron, which was the boy's name, and that he should eat it at once while it was warm. I can still see, in my mind, that funny, curly roasted pig's Can't you imagine the envy with which the rest of us watched that boy chew away at that bit of roast pork?

I can not imagine a boy living through the teasing he would get these days if his mother should send him a roasted pig's tail to school with instructions to eat it immediately. He would be called "pig's tail" the rest of his school days, if not for the rest of his natural life.

The Bible Says:





OLD GLORY FLAG BUTTONS.

We know every boy and girl who are members of a Red or Blue library team would like to have an Old Glory flag button to wear wherever they go. So an opportunity will be given to all to secure one. We have obtained for their benefit a number of metal flag buttons, indestructible, in bright flag colors, and will send one of these to each boy or girl who secures one subscription through their own efforts for the school library within the next two weeks.



The subscription may be either new or renewal. This subscription counts just the same on library contests, but the boy or girl who gets the subscription will get the button as a Special Flag Honor Prize. The flag buttons will be mailed either to your own address, if noted on the subscription card, or will be sent to the teacher to be distributed to the pupils who are entitled to them just as soon as the subscription cards come in at the end of each week.

Library Day Prize.

Miss Erma V. Bowman, Turner, Washington, is the winner of the book as the teacher of the school securing the largest number of subscriptions on library day. We are unable to tell you the title of the book she desires, since Miss Bowman has not yet informed us.

Banner Schools.

Cowiche school, district No. 10, S. S. Busch, principal, holds the record in total number of subscriptions turned in to date, having 33 subscriptions to their credit. Other schools, however, are pushing this school closely for first place. Upper Hunters Creek, Ruth E. Collins, teacher, 28; Selah school, A. C. Kellogg, superintendent, North Yakima, 25; White Swan school, C. A. Payne, superintendent, White Swan, 25.

Books have been forwarded this week to the following schools:

Deer Lake school, Loon Lake, Wash.
River school, Almira, Wash.
Denison school, Denison, Wash.
Onion Creek school, Northport, Wash.
Fairview school, Plaza, Wash.
Parker school, Parker, Wash.
Deep Creek school, Espanola, Wash.
Wiley City school, North Yakima, Wash.
Turner school, Turner, Wash.
Highland school, Sundale, Wash.
Wolf Lodge school, Coeur d'Alene, Idaho.

Individual Prize Contest.

There is little change in the standing of the contestants this week. The three leaders have subscriptions as follows:

Dorothy Rauch, Chewelah, Wash., 28.
Bessie Webb, Ford, Wash., 14.
Loyel C. R. Snyder, White Swan, Wash., 12.

Honor List.

Dorothy Rauch, Chewelah school, Chewelah, Wash.; Bennie Shelton, Lyons school, Ellensburg, Wash.; Richard Chamberlain, Don Chamberlain, Louise Counts, James H. Meyer, Agnes Wain (2), Ellen Krekola, Highland school, Sundale, Wash.

Acknowledgment.

EVERSON, Wash., April 10, 1917.

Dear Sirs: I received the books in good condition yesterday. We are quite pleased with them and wish to thank you again for the opportunity of obtaining them.

Yours truly,
MRS. CLARA G. PETERSON,
Teacher.

There's Profit in HOME CANNING

Turn you surplus products and time into money this year and have a business of your own—home canning. There is good money to be made in home and community canning every year, but there never was a better year than this to start.

START RIGHT.

Don't experiment with makeshifts, do your canning by steam pressure; "the safe and only thorough way to sterilize." By our new selling plan you get all your supplies from one source. We furnish retorts, cans, modern can-sealing machine, instructions—everything for canning work in home, orchard or community, showing how to market your product to best advantage. Outfits include 60-page book of recipes on goods you can put up.

Simply send a postal for free literature on how to can for profit.

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Portland, Oregon.

Boys!



M100.

Full-sized mitt, with special brown tan, with laced thumb and buckled back; made with deep packet and firm padding. Retails for $1.50. Sent postpaid to any boy for one three-year and one yearly subscription to The Farmer.

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3 years, special $1.50

Address
BOYS' AND GIRLS' DIVISION,

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Review Building,
Spokane, Wash.

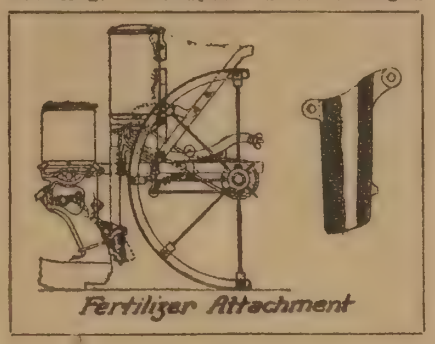
The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Fertilizer Attachment for Seed Planters.

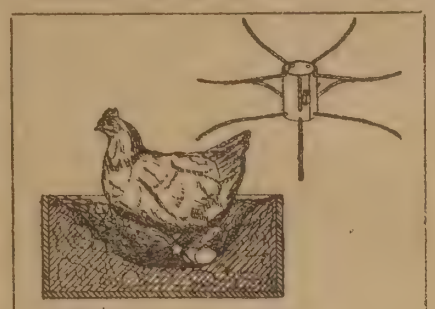
The object of this invention is to provide a fertilizer spout which will not clog. The spout is so arranged


Fertilizer Attachment

that when the seed valves are opened it moves back and strikes a lug which stops it suddenly; this shakes the fertilizer out of the spout and prevents clogging.

Anti-Set for Hens.

This device is a leg band with long, sharp spikes. It is free to rotate on the leg and therefore does not prevent


Antiset for Hens

the hen from walking, but it does prevent her from setting, because the spikes prick her body when she attempts it.

The Motor Car
On the Farm

Census of Automobiles.

There is one automobile in the United States for every group of 29 persons, according to a comprehensive article by Donald McLeod Lay in the Automobile Magazine.

Following is the statistical table quoted to show the population and automobile registration of the respective states:

State—	Population July 1, 1916 Census	Cars and Trucks	Pop. Per Car
Iowa	2,220,321	172,791	13
Nebraska	1,271,375	101,201	13
California	2,938,654	212,918	14
Kansas	1,829,545	114,364	16
South Dakota	698,509	44,271	16
Minnesota	2,279,603	137,500	17
North Dakota	739,201	41,761	18
Arizona	255,544	12,122	19
Michigan	3,054,854	159,639	19
Montana	459,494	24,585	19
Indiana	2,816,817	139,138	20
Ohio	5,150,356	252,179	20
Wisconsin	2,500,350	117,603	21
Colorado	962,060	44,180	22
Connecticut	1,244,479	56,048	22
Texas	4,429,566	197,687	22
Nevada	106,734	4,609	23
Wyoming	179,559	7,125	25
Illinois	6,152,257	251,300	25
Washington	1,534,221	62,546	25
Vermont	363,699	14,251	26
Maine	772,489	28,951	27
Massachusetts	3,719,156	136,790	27
Oregon	835,741	30,917	27
Delaware	213,380	7,520	28
Dist. of Columbia	363,980	13,118	28
Rhode Island	614,315	21,406	29
New Hampshire	442,506	14,338	31
Missouri	3,410,692	107,865	32
Utah	434,083	13,507	32
Idaho	428,586	12,996	33
Pennsylvania	8,522,017	230,648	37
New York	10,273,375	279,406	37
New Jersey	2,948,017	75,108	39
Maryland	1,362,807	33,364	41
Oklahoma	2,202,081	52,718	42
New Mexico	410,283	8,028	50
Virginia	2,192,019	35,426	62
Georgia	2,856,065	45,775	62
Florida	893,493	14,220	63
North Carolina	2,402,738	35,150	68
West Virginia	1,386,038	20,437	68
Tennessee	2,288,004	31,400	73
Kentucky	2,379,639	31,500	76
South Carolina	1,625,475	19,000	86
Mississippi	1,951,674	20,474	95
Alabama	2,332,608	22,354	104
Louisiana	1,829,130	16,800	108
Arkansas	1,739,723	14,704	118
Total	102,017,312	3,541,738	

Average for United States, 29.

Community Sing a Success.

Community sings are henceforth to be monthly features of North Yakima.

THE HUDFORD

TRUCK ATTACHMENT

For Fords and Other Standard Cars.

INTERNAL GEAR DRIVEN

No Chains to Wear. Protected from Dust.

Best Dealers, Only, Wanted

Prices, Spokane:

One ton ..... $390 1½ to 2 ton $495

Orders filled in rotation as received.

Price Raises $30 Soon.

Brewer Motor Car Co.

Cor. Sprague and Jefferson, Spokane, Wash.

Are You in the Poultry Business?

If so ADVERTISE your surplus stock and eggs in the Pacific Northwest Farm Trio, comprising The Washington Farmer, The Oregon Farmer and The Idaho Farmer and reach more than 50,000 prospective buyers of poultry and hatching eggs in these three states. Special rates for one month or more in our classified columns. Write us for particulars.

Pacific Northwest Farm Trio 36 Review Building Spokane, Wash.

Take This Genuine Victrola Outfit

Pay Only $2.50 Down.



Nowadays it is easy for every one to hear and understand all that is best in music. Having a Victrola in your home is just like having the world's greatest artists always at your instant command. And it is a pleasure that every home can afford.

With the children growing up and their friends dropping in, don't you think it would be nice to have a Victrola for them? They'll appreciate its splendid music and you'll get just as much enjoyment from it as they do.

Victrola Style VI., as Pictured, and 9, Ten-Inch 75c Double-Faced Records $31.75

$2.50 Down, $2.50 Month

We have arranged to place this Victrola outfit in your home on terms so liberal that you will never miss the cost—order it today.

TULL & GIBBS
SPOKANE
WASH.

MAIL THIS COUPON TODAY

TULL & GIBBS, SPOKANE, WASH.
Please send me free of all cost, your catalog of homefurnishings and full information about the Victrola outfits.

Name .....
City ..... State .....
R. F. D. ..... P. O. Box .....

Holsteins Sell

At Average of $238 Per Head

(Continued from page five.)

born April 6, 1914, Barney Altena, $200.

June Korndyke, No. 113716, born February 21, 1908, Ed. Hoem, $295.

Lady Pauline Denver II., No. 247930, born January 12, 1914, Ed. Hoem, $155.

Bos Pioneer, No. 263757, born December 18, 1914, George Bound, Monroe, $210.

Bos. Sadie Vale, born April 14, 1916, J. L. Smith, $260.

Bonne Nelson Vale, No. 345323, born March 22, 1916, M. Tieosti, Snoohmish, $250.

Lady Rhoda May Clyde Madeira, born December 15, 1913, A. M. Bailey, Snohomish, $220.

Easle Groton De Kol Johanna, No. 223030, A. M. Bailey, $230.

Paul Pauline Pontiac, born July 6, 1916, H. B. Stallcop, Snohomish, $175.

Belle Sadie Vale, No. 345324, born April 9, 1915, J. L. Smith, $250.

Lunde Artis Korndyke, No. 337372, born May 27, 1916, M. Tieosti, $130.

Star Hengerveld Cornucopia, No. 335907, born April 16, 1916, Ed Hoem, $155.

Oregon Karel Belle, No. 334285, born March 18, 1915, J. L. Smith, $155.

Hollywood Segis Aaggie, No. 247636, born August 28, 1913, Charles J. Lee, Alpha, $180.

Numa De Kol Pledge 2d, No. 175367, born September 5, 1911, Ed Hoem, $150.

Pietertje Ondine Lansing 2d, No. 201183, born February 15, 1912, W. E. Harbert, Mt. Vernon, $225.

Sir Netherland Selah Johanna, No. 174050, born September 19, 1915, Yarr Bros., Chimacum, $430.

Netherland Baker Mercedes, No. 154230, born June 10, 1909, Yarr Bros., $560.

Jefferson Wayne Boon, No. 236173, born September 26, 1913, Yarr Bros., $475.

Josephine Wayne Boone, No. 236172, A. M. Bailey, $350.

Sir Sadie Vale Wayne, born March 28, 1916, A. M. Bailey, $150

Victoria Powpem 2d, born June 4, 1914, H. B. Stallcop, $175.

Corn Show at Spokane.

So successful was the last year's corn show in Spokane, held under the auspices of the Exchange National bank, that more elaborate preparations will be made for this year's show, to be held November 19-24.

"Prizes will be doubled this year," said E. E. Flood, assistant to the president of the bank, "and there will be the same number of districts as last year with 40 premiums in all to go to the most successful growers of corn. These premiums will be 20 cultivators, each worth $65, and 20 cornmeal mills, each worth $54.

"We are encouraging the growth of corn by giving away enough seed corn to each of 500 persons to seed one acre."

Officials of the bank estimate that this show will cost about $5000.

Will Raise Strawberries.

Lee M. Lampson, county agriculturist of Benton county, has sold his reservation holdings to E. A. Matting of North Yakima. Mr. Matting will make a specialty of strawberries and asparagus on the land.

Want Ads

HELP WANTED—MALE 3

OUTSIDE SITUATION.

Good salary can be earned selling our complete line high class nursery stock. Cash advanced. Write for terms.

ALBANY NURSERIES, ALBANY, ORE.

HAWTHORNE AUTO SCHOOL.
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free.
BEHNKE-WALKER BUSINESS COLLEGE,
167 FOURTH ST., PORTLAND, ORE.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER:

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Exc., Spokane, Wash.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MISCELLANEOUS—FOR SALE 60 Continued.

SASH AND DOORS.

Shipped anywhere, to any one, at factory prices. We own our own mill, and guarantee first quality goods, and safe delivery to destination. Send for our big illustrated catalog No. 27, mailed free, postpaid, promptly on receipt of request.

5 cross panel doors, No. 1	$1.33
4 panel craftsman doors	1.75
Glass doors, as low as	2.25
24x24, two light windows	1.46
10x12, twelve-light windows	1.51
10x12, four-light barn sash	.68
24x80, 3-ply panels	.65
16x16x26, spruce flour bins	1.50
Plain window frames	1.00

We carry a full line of inside finish, mouldings, sash, cupboard doors, hardware, mixed paints, etc. Prompt shipments.
O. B. WILLIAMS CO.
1943 1ST AVE. SO. SEATTLE, WASH.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

MISCELLANEOUS—WANTED 63

—CREAM WANTED—

We pay cash for cream, poultry, eggs, veal, hogs and hides. Write for prices and shipping tags. Commercial Creamery Co., Spokane, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer, and The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

HOGANIZED S. C. 1. REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels. $5 each. These birds are all sons of a magnificent male, from a 271-egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs, $6 in 100 lots; settings, $1.50, $3, $5. Mrs. H. V. Rominger, Underwood, Wash.

PLACE YOUR ORDER NOW
for White Leghorn chicks, $10 per hundred; safe delivery guaranteed. R. I. Reds and Barred Rocks $15 per hundred. Every chick a live one and hatched from heavy winter layers. Coal-burning brooder stoves, $15 and $18.50. Queen Hatchery, 89 Pike st., Seattle, Wash.

79,637 EGGS IN 1916 FROM MY FLOCK of 450 S. C. Black Minorcas, prize winners in the showroom and laying contest; eggs from my Hoganized and trap-nested breeding stock at $2 per 15, $3.50 per 30, $5 per 50, $8 per 100, $70 per 1000. No baby chicks or stock for sale. John Dollenbacher, R. 1, Selah, Wash.

BABY CHIX.

White Leghorns, the kind that are real dividend payers, bred for 16 years for eggs, size, VIGOR, VIM and VITALITY. $10 per 100, from the oldest established hatcher in the state. Delivery in good condition guaranteed. Lakeside Poultry Farm, Roy, Wn.

WHITE LEGHORN BABY CHICKS
from strong, superior stock, bred for eggs, vigor, size; $10 per 100. Safe arrival guaranteed. Free catalog. Free book on raising the chicks. Oak Heights Poultry Farm, R. R. 3, Box T67, Tacoma, Wash.

OUR R. I. RED CHICKS TAKE SO WELL, they are all sold to June 9. Order for June now. $12, 100. A few W. Leghorns for May left, $10, 100. Safe arrival guaranteed. Maplebrook Poultry Farm, Southworth, Wash., Box. 3.

WHITE BUFF AND BLUE ORPINGTONS, single and rose comb Anconas, the great winter layers, winners at leading Coast shows; eggs $1.50 to $3.00 for 15; chicks 20c each. Ira N. DeLine, Box D, Olympia, Wash.

WHITE-FACED BLACK SPANISH (REAL Spanish) eggs for hatching, from first-prize pen at Panama exposition. Settings, $2, $3 and $5.50, 15 eggs. A. Emskamp, So. 1903 Chestnut st., Spokane, Wash

POULTRY 174 Continued.

MY R. C. R. I. REDS HAVE WON EVERY first and second, except one, competed for in the past 3 years. Have mated 4 pens for the egg trade. Guaranteed satisfaction. Mating list on application. G. W. Baker, Colfax, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

GOLDEN MAMMOTH BRONZE TURKEY eggs from prize-winners; setting of 10, $2.50 and $3.50. Special prices owing to lateness of season. C. L. Haworth, R. D. 2, Boise, Idaho.

IF YOU ARE INTERESTED
in Reds, write me for mating list and price of eggs. I have what you want at the right price. S. W. Berry, Post Falls, Idaho.

BARRED PLYMOUTH ROCKS, PRIZE winners at shows. Near front in N. W. laying contest. Eggs $1.50, Folder free. Wm. H. Heimsoth, Baker, Ore.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

EGGS FROM TANCRED S. C. W. LEGhorn hens, $1.25 per 15, $6 per 100, prepaid. J. W. Hirons, R. 2, B. 55, Scio, Ore.

PRIZE-WINNING BUFF ORPINGTONS—Settings $2 to $10. Lucy R. Scudder, Box 36F, North Yakima, Wash.

FOR SALE — S. C. WHITE LEGHORN eggs, 75c per 15, $4 a hundred. Mrs. Wm. Vercler, Rigby, Idaho.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

LIVE STOCK 177

FOR SALE, JERSEY BULL.

Fox of Hollyhurst, reg. No. 145529, solid color, pink tongue, black switch, dropped Nov. 28, 1914.

His dam, Fraulein of Hollyhurst, as a two-year-old heifer, made 5075 lbs. milk, with an average test of 5.66 per cent, or 287 lbs. butter fat, equivalent to 359 lbs. butter in one year. She will reach or exceed at maturity 500 lbs. butter in one year. His mature granddam made 7379 lbs. milk and 407 lbs. butter in one year.

Am going out of the dairy business and will sell this bull at a very reasonable price. H. L. Willis, Mt. Vernon, Wash.

SOME FINE COWS FOR SALE.
Both registered and grade Jerseys; also a few heifers. Cows fresh soon. Can supply from one to 10 or 15 head.
G. W. YORK,
SANDPOINT, IDAHO.

YOU FARMERS! MAKE BIGGER HOG profits with purebred, pedigreed
BIG TYPE POLANDS!
Write for free hog booklet, "The Bartwood Idea." Tells how to get the very finest Polands at 1-3 usual price. Bartwood Farm, Hamilton, Mont.

JACKS AND JENNETS FOR SALE.
$500 to $600 buys an elegent jack. The jennets are priced at ½ their value; the jacks at approximately the same. They are the largest and best herd in the United States to select from. Eastern Oregon Jack Farm, Lexington, Ore. B. F. Swaggart, Prop.

FOR SALE, OR TRADE
for Jersey heifers or stock cattle, one very fine imported 2-year-old registered Jersey bull, son of Golden Fern's Noble. Cash price $300.
J. H. ROWLEY, WESTFALL, ORE.

SERVICEABLE BOARS, BRED GILTS. Orders booked for spring pigs. Also few choice Holstein bull calves from best of families.
W. R. WHITE, SUNNYSIDE, WASH.

JOB PRINTING 372

BUTTER WRAPPERS BY PREPAID PARCEL POST, printed in waterproof ink, on vegetable parchment, 8x11, $3.00 per 1000; 9x12, $3.25 per 1000; cash with order; for third and fourth zones add 10c. Allen Printery, Spokane, Wash.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Pelts tanned, made into rugs, mothproof, guaranteed. High prices paid for furs. Mohr, 82 Bernard, Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

ALFALFA SEED, RED CLOVER, SWEET clover; Early Ohio; Idaho Rural; Peachblow seed potatoes; Dicklow spring wheat—the big crop producer; blue barley. Jerome M. & E. Co., Jerome, Idaho.

ALFALFA, RED CLOVER, ALSIKE CLOver, white clover, sweet clover, timothy and other grasses; seed oats and wheat; at reasonable prices. Vogeler Seed Co., Salt Lake City, Utah.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEEDS 620 Continued.



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS,
VETCH OR "TARES,"
A Great Forage or Seed Crop.
RED CLOVER, ALSIKE.
"THREE GRAIN OATS," Wonderful Yielder.
COMPLETE LINE OF FARM SEEDS.
CORVALLIS FLOURING MILLS.
Corvallis, Oregon.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flour seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, Ore.

FOR SALE—YELLOW FLOWERED SWEET clover seed; own raising. Otto Sundquist, Mound City, S. D.

NURSERY STOCK 621

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

STRAWBERRY PLANTS—MAGOON, GOLD Dollar, Brandywine, New Oregon, $2.50 per 1000. 200 plants, any varieties, $1, prepaid. J. W. Vinacke, Canby, Ore.

FARM LANDS—FOR SALE 651

MONTANA LAND.

Are you looking for a farm home or a land investment in grain or grazing lands in the great grain and stock country of Montana? If so, it will pay you well to see our Montana Land List, telling of improved and unimproved lands in several of the best districts of Montana—Judith Basin, where prices range from $36 to $60 per acre—Eastern Montana, where we can show you several fine tracts at $8 to $20 per acre—Shields River Valley, that famous grain and stock district, where good grain lands, partly improved, sell at $40 to $50 per acre, and sure to increase in value while producing a good income on your investment—Conrad and Great Falls districts, where good grain lands can be bought at $20 to $30 per acre. Lest you forget, we say again, if you are interested in Montana land in practically any good district in the state, don't fail to call or write for Montana Land List—it's free and will probably save you time and money. We have made a careful study of the land situation in Montana the past few years, and believe we can be of service to you. Hege & Watkins Co., 715-17 Paulsen bldg., Spokane, Wash.

A GOOD FARM.
NEAR BELLINGHAM, WASHINGTON, ON PUGET SOUND.

$6000—68 acres of good land; 30 acres thoroughly cleared, balance good timber land pasture; only six miles from Bellingham, a city of 30,000; excellent roads; good water; buildings only fair; school across road; a good dairy farm for the right man. Terms. Address secy. Bellingham Real Estate Assn., 1321 Dock st., Bellingham, Wash.

FOR SALE—FIVE SECTIONS IN GOOD farming district in Montana, now 22 miles from railroad; dark loam soil; 60 per cent tillable; price $5.50 per acre; terms, $3 per acre down, balance long time at 6 per cent per annum. This price holds for short time only. H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2d and Cherry st., Seattle, Wash.

FARM LANDS OBTAINED THROUGH foreclosure of mortgage offered at rare bargains and on easy terms. Send for list. Pennsylvania Mortgage Investment Company, Spokane, Washington.

NORTHERN PACIFIC RAILWAY LANDS in eastern Montana at $2.50 to $18 per a. Suitable for farming or grazing. Easy terms. For information write or see W. E. HOLT, MILES CITY, MONT.

IMPROVED AND UNIMPROVED FARMS, dairy and fruit ranches, on easy terms, no irrigation. A most healthful climate. Deary Land Co., Deary, Idaho.

IF YOU WANT LAND IN MONTANA, write to H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

IRRIGATED LANDS—For Sale 663

IRRIGATED STOCK FARM FOR SALE.

The best bargain in Idaho. Good free and forest range for all stock. Good alfalfa, grain and potato land. Good markets, certain crops. Ample free water with independent ditches. Newton Hibbs, Salmon, Idaho.

TO EXCHANGE—REAL EST. 705

MONTANA LAND—WE HAVE SEVERAL Montana farms, on which the owners will take clear real estate as part payment. Call or write for Montana Land Exchange List. Hege & Watkins Co., 717 Paulsen bldg., Spokane, Wash.

Grain and Produce Markets

Chicago Grain.

CHICAGO, April 21.—Wheat prices underwent sharp setbacks today, influenced to a considerable extent by news of serious disturbances in Germany and by unconfirmed rumors of revolutionary outbreaks in Hungary and Bulgaria. After fluctuations which covered a range of 10½c the market closed unsettled 1⅛c to 5½c net lower, with May at $2.31 and July at $1.98¼ to $1.98⅞. Corn lost 2¼c to 4¾c and oats ½c to 1½c. Provisions finished unchanged to 7½c down.

Indications of great unrest in Germany gave evident emphasis to bearish sentiment at the outset in the wheat trade and inclined dealers to attach more credence than otherwise would be the case to rumors regarding Hungary and Bulgaria.

Decreased buying interest and a disposition of numerous holders to sell out was ascribed also to federal diligence toward gaining control of the food situation. Efforts of board of trade officials to curb undue speculation tended further to prevent new upturns in values. It was said, however, that action of the directors of the board in setting official marginal prices of $1.85 for July and $1.65 for September was not to be construed as determining intrinsic values.

Weakness was most acute in the May delivery, and in this connection a leading authority said hysteria as to laying in household supplies of flour was materially abating. Week-end adjustment of trades rallied the wheat market somewhat at the last, and also, too, did prospects of a fairly large decrease in the United States visible supply total on Monday.

Corn was governed chiefly by the bearish action of wheat. There were some signs of a loosening of the car scarcity and rural offerings of corn for 10 to 15 days shipments were said to be larger.

Oats showed relative steadiness as a result of the purchase of 1,000,000 bushels said to be for the British commission.

Provisions weakened with corn. It was said, too, that cash demand had dropped off.

Pacific Northwest Grain.

TACOMA, Wash., April 21.—Wheat—Bluestem, $2.42; fortyfold, club and tife, $2.27; red Russian, $2.25.

SEATTLE, Wash., April 21.—Wheat—Bluestem, $2.36; Turkey red, $2.33; fortyfold, $2.27; club, $2.27; fife, $2.27, red Russian, $2 24.

Barley, $50.50 per ton.

PORTLAND, Ore., April 21.—April delivery: Wheat—Bluestem, $2.32; fortyfold, $2.26; club, $2.25; red Russian, $2.25.

SAN FRANCISCO, April 21.—Barley—May, $3; December, $1.97.

WALLA WALLA, April 21.—Club wheat, $2.05; bluestem, $2.12. Barley, $48@50.

Seattle Market.

SEATTLE, Wash., April 21.—The blow may be said to have fallen with the highest price ever known on this market for potatoes. Wholesalers here began quoting $100 per ton today for No. 1 Yakima gems, and when the scanty supply now on hand gives out prices will go still higher, as farmers in the Yakima valley today began asking $100 at shipping point. Brokers here report sales of gems, grade unknown, at $82.50 within the last two days, but the same authorities declare that all stock now on hand, estimated at less than 50 carloads, will cost buyers $100 f. o. b.

Published quotations on fresh ranch eggs today are only figurative, wholesalers secretly outbidding each other in the country by raises of half a cent at a time. The bulk of stock is now being bought at 35c, the new price to producers for Monday. Selling will be at 37@38c, with the bulk probably at 38c.

Despite the lack of sunshine the supply of cream arriving on this market is increasing. Jobbers are endeavoring to meet the demand for secondary butter, but they can not turn out the product fast enough and California markets are too high to use butter from there. City creamery extras at 44c are plentiful, with occasional streaks of weakness.

Cheese quotations have been advanced steadily to 27c for Oregon and Washington triplets. The old differential between Oregon and Washington cheese based on quality and pack has long since disappeared.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 34@35c per dozen.

Poultry—Live hens, fat, over 4 lbs., 23c per lb.; do 3 lbs. and under, 22c; old roosters, 12c per lb.; springs, 21@22c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 16c per lb.; broilers, live, 35c lb.

Butter fat, 47c per lb.; dairy butter, 27c per lb.

Beef—Buying price: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.

Hogs—Light, 15@16 1-2c per lb.; do heavy, 10@12c per lb.

Veal—Fancy light, 13@14c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt hip, 22c per lb.; salted calf, 32c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 36c per lb.; dry calf (under 6 lbs.), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry butcher full wool sheep pelts, 25@28c per lb.

SELLING PRICES.

City Prices—Team Lots.

Apples—Winesaps, $1.50@2.50 a box; cooking, 85c@$1.25 a box; Newtowns, $1.25@2.25 a box.

Feed—Scratch feed, $67 per ton; all grain chop, $58 per ton; oats, $55 per ton; rolled oats, $56 per ton; rolled barley, $56 per ton; wheat, $78 per ton; bran, $39 per ton; shorts, $42 per ton; oil meal, $55 per ton; whole corn, $68 per ton; cracked corn, $69 per ton.

Hay—Eastern Washington timothy, $30 per ton; alfalfa, $27 per ton; double compressed, $34 per ton; straw, $12 per ton; wheat hay, $24 per ton; Puget sound, $23 per ton.

Onions—Oregon, 10c per lb.

Potatoes—Local $90 per ton; Yakima Gems, $95@100 per ton.

Rutabagas—$2.50 sack.

Butter—Washington creamery extras, cubes, 43c per lb.; do bricks, 44c per lb.; creamery firsts, cubes, 42c per lb.; do bricks, 43c per lb.

Eggs—Fresh ranch, 37c.

Live Stock Quotations.

At Omaha.

OMAHA, April 21.—Hogs—Receipts, 5000; steady. Heavy, $15.35@15.70; light, $14.75@15.50; pigs, $12.50@14.60; bulk, $15.20@15.60.

Cattle—Receipts, 100; steady. Native steers, $9.50@13; cows and heifers, $8@11; western steers, $9@11.60; stockers and feeders, $6.50@10.25; calves, $8@12.25; bulls, stags, etc., $7.50@9.75.

Sheep—Receipts, 100; steady. Yearlings, $12@13.75; wethers, $11.50@12; lambs, $13.75@15.80.

At Chicago.

CHICAGO, April 21.—Hogs—Receipts, 8000; steady at yesterday's average. Bulk, $15.45@15.85; light, $14.65@15.75; mixed, $15.20@15.95; heavy, $15.20@15.95; rough, $15.20@15.40; pigs, $10@13.85.

Cattle—Receipts, 600; weak. Native beef cattle, $9@13.25; stockers and feeders, $7.15@9.90; cows and heifers, $5.60@11; calves, $8.50@12.75.

Sheep—Receipts, 1000; slow. Wethers, $10.60@12.80; lambs, $12@16.

At Portland.

PORTLAND, Ore., April 21.—Hogs—Steady; receipts, 160. Bulk of packing grades, $15.25@15.35; heavy packing, $15.35@15.50; light packing, $10.10@15.25; rough heavies, $14@14.75; pigs $9.75@9.90; good steers, $9.50@9.75. prime cows, $8.25@8.75; good cows. $7.75@8; common cows, $7@7.50; best heifers, $8.50@9; bulls, $6@8; calves. $7@10.50; stockers and feeders, $6@8.50.

Sheep—Receipts, none; market strong. Prime lambs, $13@13.50; common lambs, $12@12.50; choice yearlings, $11.25@12; good yearlings, $10.75@11.25; best mutton ewes, $10@11.

New Horticultural Inspector.

A. L. King, a graduate of the state college, is the newly appointed horticultural inspector for Okanogan county. For the last two years Mr. King has been in charge of the inspection work in the Wenatchee valley.

At Seattle.

SEATTLE, April 21.—Receipts, 204 cattle; 41 hogs; market strong on all lines with upward tendency.

Hogs—Prime light, $15.85; medium to choice, $15.50@15.60; smooth heavies, $15@15.30; rough heavies, $14.50@14.80; pigs, $13.50@14.75.

Cattle—Prime steers, $9.90@10; medium to choice steers, $9.25@9.75; common to good steers, $6@9; best cows and heifers, $8.50@8.75; medium to choice cows and heifers, $8@8.25; common to good cows and heifers, $4@7.75; best bulls, $6.50@7.50; common to good bulls, $3.50@6; calves, $6.50@10.

Sheep—Prime lambs, $12.50@13.75; good lambs, $12.25@12.50; wethers, $10.25@10.50; ewes, $9.10.

Spokane Stock Yards Saturday.

Hogs—Receipts 254; market strong. Prime heavy packing, $15.65@15.80; prime light packing, $15.50@15.60; rough heavy, $14.65@14.80; pigs, $13.75@15; stockers, $13.@15.

Cattle—Receipts, 95, including 25 calves; market strong. There is a heavy demand for stocker and feeder cattle of the beef type. Prime heavy steers, $9.90@10.15; prime light steers,

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $4.50 cwt; new potatoes, 12½c lb.

Seed Potatoes—Early Ohios, 4c lb; Early Rose, 4c lb; white potatoes, 4c lb; Early Six Weeks, 5c lb.

Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; Y. N. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 47c lb; Medo-Maid, 47c lb; Cascade, 47c lb; Gold Leaf, 47c lb; Better Butter, 47c lb; Attalia, 47c lb; Diadem, 47c lb; Hazelwood, 47c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25c lb; Hazelwood Young America, 27c lb; Jersey Bell, uncartooned, 45c; Wisconsin limburger, 29@30c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $10.50 case.

Live Poultry—Hens, 18@19c lb; old roosters, 10c lb; ducks, 13c lb; turkeys, 20@25c lb; geese, 11c lb.

Dress Poultry—Hens, 22c lb; springers, 21c; old roosters, 13c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs; 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

The Washington Farmer Will Continue Market Reports

The Washington Farmer will continue the publication of market reports. This is in response to the return of many coupons from all parts of the state, insisting upon the continuance of the publication of these quotations. The Washington Farmer will, moreover, try in every way to add to the value of this market page to its readers, and will be glad to receive letters from its subscribers as to any additional quotations which may be desired, or any other suggestion which the market page may better meet their demands. The following are among the letters received on this subject:

L. O. Libby, Charleston, Wash.—I say, by all odds, keep them (market reports) going. Farmers like to know what the prices are on the stuff they buy and sell.

O. W. Blanchard, Rainier, Wash.—A farm paper should contain all subjects pertaining to farming, and the markets are one of the important ones.

B. T. Bouslog, Keystone, Wash.—Please do not omit the markets from The Washington Farmer. We all like The Washington Farmer as it is, and the markets are about the first thing I look at.

Charles Hartnett, Colville, Wash.—I have been taking The Washington Farmer and consider it one of the best farm papers I have ever read, but it would not seem complete without the market quotations.

J. S. Fisher, Spokane, R. 2—I sure hope you will continue the market reports and wish we might add to the Spokane market the prices charged by milling companies and jobbers for millstuffs and grains to consumers in ton lots or by the hundredweight.

Hurley A. Kanoase, Elma, Wash.—I want the market reports in the paper.

H. E. Yeager, Monroe, Wash.—I appreciate the market reports.

Albert J. Kratz, Goshen, Wash, R. 1—I would not like to see you stop publishing the markets, and that page is the first page that I turn to on Friday noon, when I get my Washington Farmer. That page, like all other pages of The Washington Farmer, is most interesting and helpful to me. I am now receiving three farm papers, but believe me, The Washington Farmer is first, last and all the time.

J. Henry Endsley, Harwood, Wash.—There is no other feature of any paper the farmer takes so important as accurate market reports.

J. H. Watson and wife, Gig Harbor, Wash.—To omit the markets would be to deduct one of the paper's best items.

Grade Your Seed

It is a matter of common knowledge now-a-days that grading seed of any kind, whether it be wheat, oats, peas or beans, can not help but increase and improve the crop to be harvested.

WAR is bound, as is now also a matter of common knowledge, to increase the price of foodstuffs.

THE NATION, in order to avoid the great calamity which has practically overtaken the whole of Europe and which is called starvation, begs its FARMERS to use every means at their disposal to produce a record crop for 1917.

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SEATTLE
BE SURE AND MENTION THIS PAPER.

Foundation of Flock

For Farms Outlined by Expert

(Continued from page three.)

ram the sire exerts a distinct improving influence on all the offspring.

The farmer should look to heavy fleeces of quality, improvement in size, unless fortunate in selecting foundation stock, desirable confirmation and early maturity and good feeding qualities. Mutton is now the more important side of the sheep industry and one must look toward lambs that get size and condition early for the butcher. Spring or early summer marketing not only enables one to turn invested money more cheaply, but secures in addition a price much more satisfactory as a rule than can be obtained late in summer or fall. In looking thus well to the mutton side, wool must not be neglected, since ewe lambs are kept to supply losses or sales from the flock and since the wool crop on farms where a great deal of feed is available and good management prevails, meets the cost of a year's keep of a ewe and leaves the lamb for net profit.

The desirable ram selected, with the view of meeting the above suggestions, should be of medium length, deep, thick, low-set, with a straight, strong back, should be well developed in all details of mutton confirmation and have an excellent fleece. In addition he should have style, vigor, masculine bearing and should conform as closely as possible to the standard set for his particular breed.

SHEEP BEST SUITED TO FARMS.

Merinos, more especially adapted for wool production, form one of the two main divisions of sheep. Another class, comprising the Downs, or medium wools and the long wools, has been bred especially for mutton or for a combination of large mutton frame and for a heavy-weighing fleece of long wool.

The Merinos in general are rather long-legged, lack in depth of body, are flat in the rib, sharp at the shoulder, narrow of back, have comparatively long necks, lack in loin and leg of mutton, and in entire body conformation fall short of the ideals of the mutton type. Body deficiencies, however, are compensated for by weight and quality of wool. The fleece is very dense and compact, of extremely fine fiber; is from two to four inches in length, and, for many commercial purposes, the finest and best wool that can be obtained. The grease or yolk exuded by the skin of these sheep preserves the luster and quality of the wool fiber and assists in keeping rain and snow from the skin. Merinos are hardy, flock well together, make wonderfully good use of scanty feed and are, as a rule, good mothers.

The common Merino breeds are the Spanish, the American, the Delaine and the Rambouillet. In purebred flocks and as rams for flock headers, the Rambouillet is of much importance.

The Rambouillet.

The Rambouillet take their name from the royal farm at Rambouillet, France, where this strain started in 1783, from old Spanish Merino stock. They have been bred for size and mutton form and for weight of fleece and length and fineness of wool fiber. Grade ewes, and in many cases purebreds not registered, are popular on ranges because of size and of grazing and flocking qualities. Purebred Rambouillet rams are bred to grade ewes in order to retain in the offspring of the flocks the ability to do well in large bands on ordinary range pasture. This flocking instinct and ability to rustle is characteristic of all Merino strains. Purebred Rambouillets do well on the farm, and the male offspring find a rather steady demand from the range flockmaster. The Idaho university experiment station flock management studies indicate the Rambouillet to be one of the cheapest maintained of our well-known breeds.

The popular Rambouillet of today is smooth-bodied, with the exception of a few folds on the neck, and has an excellent mutton conformation. The frame is large, bone heavy, body deep, the back, loin and leg-of-mutton well developed. The legs are a bit long, and the mutton form hardly to be compared with some of the special mutton breeds. Rambouillet ewes are prolific and good mothers. Rams weigh 185 to 200 pounds. More growthy ones sometimes reach 75 to 100 pounds more. Ewes average 150 to 160 pounds. The ewes are polled. The rams have large horns with spiral curves. The wool of the breed is of medium length and fineness. The rams shear 15 to 20 pounds and the ewes 10 to 14.

The Corriedale.

It is only recently that America has heard of the Corriedale. This is a new type, so well established in New Zealand that it is designated as a distinct breed, produced by continuous selection from the cross of the Lincoln and Merino. The Romney-Marsh-Merino and the Leicester-Merino crosses have also been used successfully.

Despite the intricate problems of heredity which are involved, the type has become well established and is transmitted reasonably faithfully from generation to generation. In conformation the Corriedale is quite thick and deep and well fleshed. The wool partakes of the fineness and density of fleece and gets a considerably increased length of staple from its long wool inheritance. The range men are taking much interest in this new breed, and it may, in time, find a place on the farm.

Forest Supervisor Resigns.

H. M. Hale, supervisor of the Okanogan National Forest during the past seven years, has resigned and will go into the automobile business. During his seven years work as supervisor of the forest Mr. Hale has made a record for efficiency and square dealing that has brought the service into closer and better relations with settlers on and near the government domain than ever before existed in that part of the state. No announcement has been made as to who will succeed Mr. Hale as supervisor of the Okanogan forest.

NEWS FOR BREEDERS

Judge Dimick of Oregon City, Ore., who believed hog prices would stay high during the winter, has sold $5000 worth of hogs since the first of last November, a good part of them bought while pigs and fattened.

Thomas Carmichael of Gaston, Ore., recently sold a young Holstein bull to the Gaston Gardens company. This corporation is headed by ex-Governor Moore of Walla Walla, Wash., and most of the stock is held by his family. T. E. Armstrong is manager. The corporation owns Wapato lake, consisting of 1000 acres of rich bottom land covered by water and making a great duck-hunting field for Portland sportsmen. A small dairy of grade cows is owned, which will be increased. Louis Herring of Gaston is another purchaser of a bull. Both are new converts to the



What Grain Does This Represent?



Any person sending the correct answer to the above question before May 4, together with $1.75, in the form of money order, 2-cent stamps or personal check, will receive THE WASHINGTON FARMER for three years and choice of any 30 of the packets of seeds listed below. The retail value of these is 5c per package, or $1.50 for the thirty packages.

CHECK THE 30 VARIETIES DESIRED

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Mammoth Red Beet	☐	Calliopsis, mixed	☐
Early Cabbage	☐	Four o'Clock	☐
Late Danish Cabbage	☐	Mignonette	☐
Oxheart Carrot	☐	Morning Glory	☐
Yellow Giant Carrot	☐	Dwarf Nasturtium	☐
White Plume Celery	☐	Tall Nasturtium	☐
Long Green Cucumber	☐	Phlox	☐
Pickling Cucumber	☐	Rose Moss	☐
Head Lettuce	☐	Sea Lavender	☐
Early Curled Lettuce	☐	Garden Sunflower	☐
Rockyford Muskmelon	☐	Verbena	☐
Monte Cristo Watermelon	☐	Poppy	☐
Australian Brown Onion	☐	Snapdragon	☐
Yellow Danvers Onion	☐	Rock Cress	☐
Long White Parsnips	☐	California Poppy	☐
Sugar Pie Pumpkin	☐	Larkspur	☐
Field Pumpkin	☐	Baby's Breath	☐
White Tipped Radish	☐	Pink	☐
Early Long Radish	☐	Sweet Rocket	☐
Chartier Radish	☐	Sweet William	☐
Purple Top Turnip	☐	Wallflower	☐
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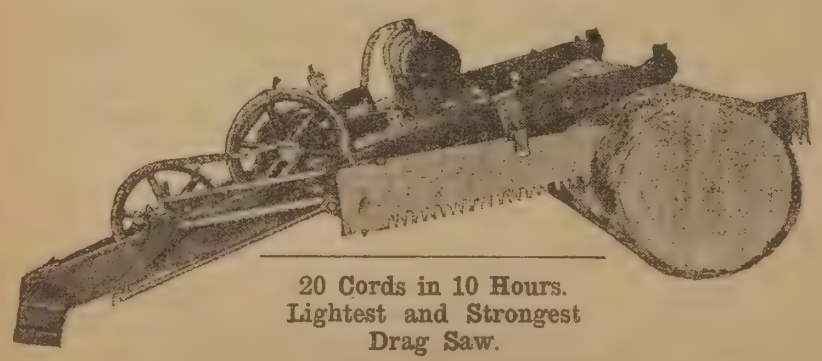
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Holstein ranks, and Messrs. Carmichael and Newell are hopeful of yet making the Holstein cow a community proposition in the vicinity of Gaston.

Fifteen hundred sheep in Morrow county, Ore., scab-infected or exposed to the disease, were all twice dipped, beginning the latter part of January. This is the first outbreak to amount to anything in Oregon in 10 years. The work was done under joint supervision of Dr. Lytle, state veterinarian; Deputy E. B. Osborne, representing the state, and W. B. Henneberger, representing the U. S. bureau of animal industry. It is believed that this put the scabbies under complete control, as the ranges have been cleared up by freezing weather.

A. E. Westcott of Banks, Ore., who owns a small but select herd of Jerseys, recently added to it by the purchase from William Schulmerick of Hillsboro, Ore., of five registered cows. Four of the five have Register of Merit records and two of them, by Mr. Schulmerick's bull (Monmouth Noble), qualified as 2-year-olds. Mr. Schulmerick says there is a better demand for Jerseys now than for years, right in Washington county, as well as other parts of the state. Mr. Schulmerick's cow, Melissa of Farmington, qualified for the Register of Merit when over 12 years old, with 10,397 pounds of milk and 507 pounds of butter. She is one of seven in the United States to produce over 10,000 pounds of milk on official test when past 12 years old and one of the 58 in the Register of Merit past that age. H. A.

Field Notes.

J. W. Fruit, the Duroc Jersey breeder of Brooks, Ore., has recently purchased from the Economy stock farm of Iowa the young boar Fruits Good Enuff by Burk's Good Enuff, a boar that was grand champion at the Illinois state fair and is sire of many blue ribbon winners. The young boar's dam is Chief's Maid by the grand Chief's Col. He is growthy, has great bone, good length, a deep body and promises to make a show boar. Mr Fruit will probably show a young herd at the Oregon state fair this fall, but has not the stock on hand to show a full herd.

A profit of $500 was made from the sale of Holstein cattle by the Tillamook County Dairy association last winter. County Agriculturist Jones and Charles Kurze went to Wisconsin and selected a carload of cattle and they were sold at auction. The prices received at Tillamook gave the profit referred to, over the purchase price and cost of the trip. The association will devote the money to special premiums at the county fair this fall. The Tillamook County Holstein association, which has quite a membership, 22 of whom now have purebred females, is showing a commendable spirit of enterprise and the giving of this money for prizes—part of which should be for milk production—is one of the best methods of promoting interest in the breed. A sale of Tillamook bred Holsteins may be held this fall.

The Oregon Jersey Cattle club, at its session at Salem, Ore., April 7, recommended Ed Cary of Carlton, Ore., as director of the American Jersey Cattle club, to represent the Pacific coast. The club also recommended Harry Jenkins of Chicago as judge at the state fair and A. P. Walker of Rushville, Ind., as judge at the new dairy show at Portland this winter. A committee, consisting of J. M. Dickson, Robert Burkhart and Harry West, were appointed to draft resolutions on the death of Captain Apperson, one of the oldest members of the club, lately deceased.

Not content with the already high reputation of Tillamook cheese the dairymen of that county have devised a new plan for advertising their product. They succeeded in having a bill passed by the last legislature providing for a veterinarian to test all the cows in the county for tuberculosis, the money for his salary to be appropriated by the county court. The plan is to have placards furnished retail dealers and attached to every piece of cheese sold, announcing that Tillamook cheese is from tuberculosis tested cows. Long since the Tillamook cheese factories employed their own inspector to assure all the cheese branded being up to standard, and now they plan to assure the world of the healthfulness of this product in every respect.

One of the well-known and most successful swine breeders of the Willamette valley recently ordered a boar from a well-known and supposedly reputable eastern breeding point. When the young boar arrived he was under size, of very ordinary type and disappointing in every way. His appearance was so different from other pigs of the same blood lines as to raise a doubt as to the genuineness of his pedigree. The gentleman who bought the boar has a reputation as a breeder and paid a long price. He was entitled to an animal of extra quality, but did not get it. The pig may only be stunted and grow out of it. But this gentleman's experience once more calls attention to the risk in ordering breeding stock from the east where they still think anything will do for the west. We have in the northwest as good breeders of registered hogs, dairy and beef cattle and sheep as there are in the United States. A few of them make trips east and personally select breeding stock and, as they are able to judge of both breeding and individuality, this is a safe practice. But the man who is commencing as a breeder or who can not afford to make a mistake is far safer to buy his breeding stock from some reputable breeder in one of the northwestern states, as near a neighbor as he can, where any mistakes or misunderstanding can be made good. The gentleman referred to is in a position where he can no doubt force satisfaction. But the small or new breeder would do better to be on the safe side by buying near home. H. A.

Perforated Irrigation Pipes.

An Australian has invented a process for irrigating, aerating and fertilizing soil by perforated pipes laid in it, thereby avoiding waste.

Dispersal Sale of High Producing Jerseys

45 Registered Jerseys
55 High-Grade Jerseys

They will be sold at Farm, FAIRBANKS, WASH., ON MAY 10, 1917. (Fairbanks is 35 miles south of Spokane on the electric line.)

Herd rich in the blood of Stoke Pogis, Gertie of Glynllyn, Golden Glow and other famous animals of American breeding. 22 of the grade cows offered have completed a year's record in the Whitman cow testing association, the yearly average for the 22 being 7328.7 pounds of milk and 367.6 pounds of butter fat. WRITE FOR CATALOG.

IRA P. WHITNEY,
Sale Mgr.,
R. 7, Spokane.

A. G. WOODWARD,
Owner.
Fairbanks, Wash.

COMPLETE DISPERSION SALE

37 HEAD REGISTERED JERSEYS, JUNE 14, 1917.

On account of ill health I am forced to sell my herd of Jerseys that I have spent years of time in selecting and developing—this includes cows in milk, herd bull and young stock. Milking herd has an average official record of 510 pounds yearly. Catalogue giving full description will be published. Send name and one will be mailed when published.

W. A. FORREST, McMinnville, Oregon.

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WAIKIKI FARM JERSEYS.
We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.
WAIKIKI FARM, R. 7, Spokane, Wash.

JERSEY FEMALES.
Two high-bred registered Jersey cows and one heifer; good producing blood lines. Priced to sell.
F. E. YERGEN, HUBBARD, ORE.

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For particulars write
DAY & ROTHROCK
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Spokane, Washington.

GUERNSEY CATTLE

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We can supply some choice young herd sires, also a few young registered cows and a promising lot of young grade heifers.
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POLAND CHINA SWINE

Fruitland Stock Farm
Poland China Hogs.
Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have a few fall boars left. Now is the time to get in on spring orders. Correspondence solicited.
J. M. ROYSTON EST., C. ROYSTON, MGR., Payette or Fruitland, Idaho.

ROYAL POLAND CHINAS
Five undefeated herd boars for sale. Weaned pigs from grand champion boar and sow at $25 each or one boar and two sows for $65. Bred gilts $60 each.
C. W. SHUMATE, TUMWATER, WASH.

DUROC-JERSEY SWINE

DUROC PIGS
Weaned Durocs
At $20 each.
C. W. SHUMATE, TUMWATER, WASH.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR JAMES N. PRICE. Pullman, Wash.

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Rhode Island Reds
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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

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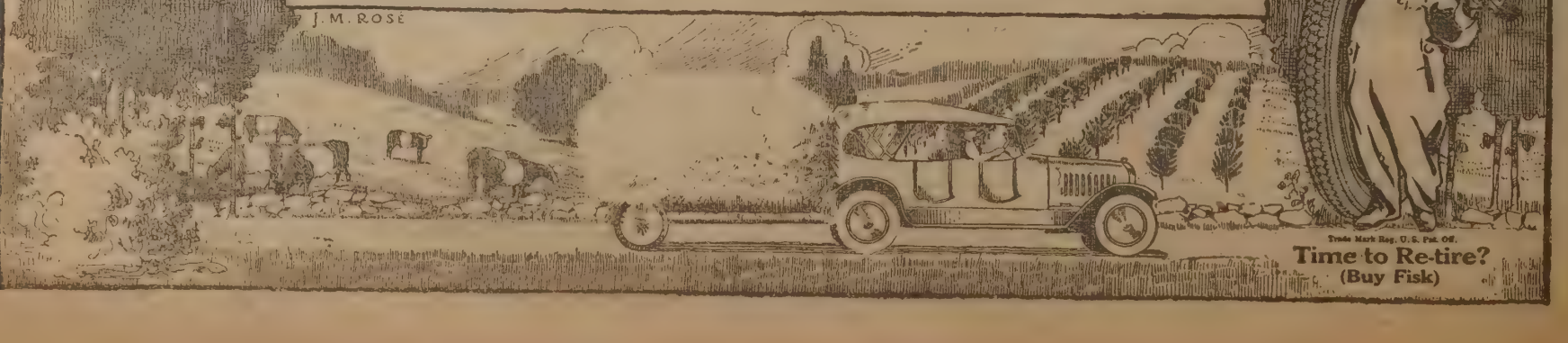
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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. MAY 3, 1917. NO. 18.

A Hundred Thousand for Agriculture

State College Gives Up Building Plans to Give Money and Time to Farms

The State College of Washington has abandoned its building plans for this and next year and will spend about $114,000 doing "its bit" in the nation-wide agricultural preparedness campaign that would otherwise have been expended in completing two new buildings on the campus at Pullman. This amount of money will go to increase the efficiency of the work of the experiment stations at Pullman, Puyallup and other places about the state, the boys' and girls' clubs, the farm extension division and other agricultural and live stock activities of the institution.



Dr. E. O. Holland

"The state college is awake to the fact that the winning armies in this titanic war of nations will be the armies that have back of them, at home, the most perfectly mobilized productive industries, and that the foundation of all productive industry is agriculture," says President E. O. Holland in a statement to The Washington Farmer. "In mobilizing and perfecting the agriculture of Washington, the college desires to do its part and seeks the cooperation of the citizens of Washington. Even if the war clouds were to disappear tomorrow, the work of agricultural preparedness must continue.

"The war emergency and the general need for agricultural development in Washington which obtains in peace as well as in war led the regents of the state college at their April meeting to make increases in the agricultural budget of from 50 to 100 per cent."

In outlining the program of the college, President Holland continues:

"In planning the work of the next two years the board of regents had, at the outset, hoped to put $120,000 into the completion of new buildings. Upon a close examination of the college finances, and of acute needs pressing in from many directions, the board reduced the building program from $120,000 to $6000; and decided to use the $6000 to complete additional space in the new agricultural building, James Wilson Hall, in order to have increased facilities for the rapidly growing enrollment in agriculture. There are now over 300 students specializing in agriculture, and if the institution is allowed to develop in the normal way, the enrollment next year will not be far below 500.

"In working out the details of the agricultural budget, the regents proceeded upon the theory that agricultural extension, which takes the results of agricultural investigation to the people, is quite often as important as the agricultural investigations. Obviously this is true, since so long as agricultural knowledge is confined to the laboratories it is not doing the public any good.

"From the millage income of the college, an expenditure of $65,000 was approved for the western Washington experiment station at Puyallup, for the two-year period beginning April 1, 1917. This is an increase of approximately 12 1-2 per cent over the expenditure at Puyallup during the two years ending March 31, 1917.

"The funds derived from the United States under the Hatch and Adams acts for the two years following July 1, 1917, amount to $60,000. This money is for state-wide investigation, and does not include teaching.

"From the millage income of the state college, the board authorized an increase for experiment station work during the next two years, the amount being $50,000 for two years and three months follow-

Continued on page four.

Is the Farmer Going to Get Rich?

To the Editor of The Washington Farmer: It is a mistaken idea that the farmer is going to get rich at the expense of the city dweller because of the war prices, when he has to pay correspondingly high prices for flour, sugar, shoes, etc.

FRED ROSMOND.

Elma, Wash.

Scores of other replies received from farmers on government control of prices of wheat, potatoes, butter, eggs, wool, cotton and other staple farm products during the war will be given in next week's issue of The Washington Farmer.

Recruit Farm Help From Cities

Many People in the Cities Need the Work and There Is Great Demand on the Farms for Workingmen at Good Wages.



BICKLETON, Klickitat County, Wash., April 22.—Spring work is now in full swing after a very backward season, cold and stormy. We need warm weather to bring up the spring grain. Many farmers are reseeding their fall acreage. I think about 40 per cent of the fall wheat was winter killed or rotted in the ground. Farm labor is more scarce than usual, and wages about double the usual price. In the cities people are clamoring for food and can not get work, while in the country the farmers are paying $2 and $3 per day and board, and can not get enough hands to put in or harvest our crop. Now isn't there some way in which our county agriculturist can get in touch with these people and get them out where the farmers can get hold of them? I don't believe a man can afford to keep a laborer the year round with less than 500 acres of land in cultivation, and over half the farms are below that amount around here.

BERT H. FAULKNER.

Prospects Are Good.

BOSSBURG, Stevens County, Wash., April 23.—This is the most backward spring we have had for several years. The weather is fine now and spring seeding has started. Farm labor is scarce, and wages will be a little higher than usual this spring. Most of the working men go to the mines and smelters where wages are high, rather than work on the farms. There are but few farms here that can afford to keep men all the year. All kinds of stock came through the long winter in good shape, but there is little feed left, as no one has been able to turn stock out on the open range until the last few days. Every one will plant all the land they have this spring to some of the staple crops. There will be a large acreage put into potatoes, some will plant beans and peas, but the main crop will be wheat. The prospect for fruit was never better. The cold, late spring has held the trees back and no blooms are showing as yet. We have had some fine rains the last few days, and now it is warm so the fall grain and grass has started to grow. Prospects for the farmer in this part of the county are good.

W. W. PALMER.

Cottages for Workingmen.

SPOKANE, Spokane County, Wash., April 26.—There is quite a scarcity of farm labor this season on account of the acreage of peas in Spokane county, and there is quite a demand for competent farm help. This diversifying of our cropping system here will mean a chance for men to get good wages the year around. Some of our farmers who have been diversifying for several years are employing steady labor 12 months out of the year to handle the work properly. Ample provision must be made for housing and boarding these men in a satisfactory way. Several of the men have small cottages in which the farm hands live with their families, and this I think will be the solution, in a large way, for the labor problems for this country. Where the farmers have provided the laborers with a cottage, garden and a cow, there is no difficulty, whatsoever, in keeping the men contented. This is a very similar system to what has been employed for several years in the middle western states, and I believe it will gradually become the custom here. Farms on which the men are employed the year around, and where diversified farming is practiced range in size from 240 to 600 or 700 acres. There is no doubt but that a farm which is planted entirely each season to 200 acres of crop can readily furnish labor the year around for the landlord and one hired man. Usually the price during the heavy work season is more than during these slacker times in winter.

J. R. SHINN.

Keep Stock Off Wet Meadows.

FERNDALE, Whatcom County, Wash., April 14.—The recent heavy rains here have made it necessary for most of the farmers to buy hay, for, while the grass is green, the meadows are too soft to put cattle on. This is one of the largest dairy centers of the state. Holstein cows furnish milk for the large branch of the Mount Vernon condensery that was built here a few years ago while Jerseys and Guernseys supply cream for a creamery that, though small, does a rushing business and makes what is considered the best creamery butter in the state. Some fine registered stock have made their appearance here in the last few years, Holsteins being the most numerous, with Guernseys as a close second. In the Nooksack valley the spring is very late. Plowing is now being done for the large crops of potatoes and oats that will be planted soon. Eighty acres is considered a large farm, while 20 acres, if well stocked and free from debt, makes a comfortable living for a small family. Very few farms are without silos and those few will not be by fall. Land sells at from $250 to $350 per acre and taxes are correspondingly high.

MRS. JACK PLASTER.

Stock in Good Condition.

OKANOGAN, Okanogan County, Wash., April 13.—The diversity of soils and climates of this county makes it possible to produce nearly any crop that is grown any place in the state. The weather has been unusually cold for the spring season and crops are greatly retarded. Live stock in general is in good shape and the hay problem does not appear to be a bad one here.

WALTER A. HOLT.

Help Problem to Be Adjusted.

LA CONNER, Skagit County, Wash., April 13.—With the coming on of spring the question of farm labor seems to be getting a little perplexing. Every day we hear the call for farm help and the calls are getting more frequent. It seems as though the farmer will have to put in longer hours in order to see that the planting of the crop in accomplished. It will be hard to suggest a remedy at this time, as the nation has plunged into the war and a great deal of the surplus men, if not all of them, will be needed by the government. There is no question but that the help problem will be adjusted, as we must keep up with the food production. As yet we have had no gardening weather. The ground is cold and wet and there is little or no advantage in putting most seeds in the ground.

I. W. ALEXANDER.

Need Trained Farm Help.

COLVILLE, Stevens County, Wash., April 15.—I believe that there is no scarcity of laboringmen, but many farmers complain of the lack of laboringmen trained along farming lines. Most of them desire to work at only one type of work and not do general diversified farm labor. Wages as a whole are higher than in previous years. Much of the farm labor is seasonal. In order to keep labor the year round it will be necessary to keep more live stock and even then there will be some farm labor of short duration. The number of live stock is largely the determining factor in keeping labor the year round.

A. R. HAHNER.

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If you happen to live hundreds of miles away, we will extend you as much credit and on just as easy payments as if you lived right here in our city. Get acquainted with our wonderful and easy out-of-town credit-giving service. Our mail order catalog brings this store—the finest, largest, most complete exclusive home-furnishing store in America—right to your home. If you have not one of our new 140-page catalogs send for one by filling in the coupon in this ad—it will be mailed to you free.

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A wonderful value and positively one of the biggest bargains ever offered. A splendid kitchen cabinet with an ideal arrangement; it has a place for practically everything needed in the kitchen.

Made entirely of thoroughly seasoned and kiln dried spruce, assuring splendid service. The finish is natural, which is the most practical kind, giving the cabinet a clean and inviting appearance. Entire height 65 inches. Base has 26x42-inch top. Two large drawers under the top are for cutlery and linen. Two dustproof flour bins, each having the capacity of holding 45 pounds of flour or meal. Two removable kneading and chopping boards; these can be taken out and placed on top of cabinet base or on any table. This feature makes cleaning easy and convenient. Top section of this cabinet has a roomy china cupboard with glass panel door. On each side of cupboard are three small drawers to be used for spices, etc. Under cupboard is a broad shelf for cans, jars, packages and utensils. All drawers, also bins, and door are fitted with good quality brass finished pulls or wood knobs of selected materials and will give years of good service.



The cabinet is just like the picture. The dishes, glassware, jars, etc., shown on shelves are not included in this price. Order by number: No. 2042. Price $11.80. Order one today. First payment 95c, balance $5c a month until paid for.

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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 18 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF May 3, 1917

Fruit Growers First to Protest

Would Cost Pacific Northwest Apple Industry $750,000 Annually

Fruit growers of the Pacific northwest are "mobilizing" to fight the proposed advance in freight rates.

As Farmer readers were informed last week, the railroads of the United States are asking authority of the interstate commerce commission to make a blanket advance of 15 per cent on all commodities. They say that the Adamson law wage increase and the advance in all kinds of materials and supplies justify that much increase, and on their petition the interstate commerce commission has made a temporary order granting the request unless an adverse showing can be made by the shippers, producers and consumers by June 1.

That seems to throw the burden of proof on the public.

The fruit growing industry is first to protest, probably because it has been of late years the least profitable of the agricultural industries of the northwest. Boxed apples now pay $1 per hundred pounds to all points east of the Mississippi river. Seventeen thousand carloads were shipped last year, on which more than $5,000,000 freight was paid. A 15 per cent increase would take $750,000 yearly out of the pockets of the apple growers.

An increase of 15 cents per hundred would mean 7 1-2 cents per box. Some authorities say that this added burden, following higher prices for labor, spraying materials, wrapping paper, boxes and other necessaries would strike an almost fatal blow to the orchard industry.

If there exists a disposition among the prosperous wheat farmers and well-to-do growers of live stock to let the rates be advanced without protest, on the theory that they can stand them, we warn them that that fallacy is dangerous. A few years ago, when apple growers were making handsome profits, a matter of 7 1-2 cents on a box of apples did not seem vital. A time may come when the margin of profit in growing wheat and other farm products would be materially cut into by a 15 per cent advance in the freight rate.

A general advance of 15 per cent would increase the yearly earnings of the railroad nearly $400,000,000. Their present gross freight earnings are about $2,500,000,000—probably more rather than less that gigantic sum. A special report by the interstate commerce commission last September gave the earnings of 137 important steam railroads for the year ending June 30, 1916. These 127 roads had freight earnings of $2,409,393,699, and that was exclusive of roads having revenues of less than $1,000,000 a year.

A 15 per cent advance on present freight earnings of $2,500,000,000 would take $375,000,000 yearly from the producers and consumers of this country for the benefit of the railroads. That is about eight times as much as it is costing the roads to comply with the Adamson law advancing the wages of their trainmen.

It is plain that if the interstate commerce commission should make its recent order permanent, a large part of that $375,000,000 will come out of the pockets of the farmers. It will mean something taken from every bushel of wheat, every box of apples, every sack of potatoes, every ton of hay and every animal sent to marekt.

Now is the time to remonstrate. Unless the commission shall rescind its order, the higher rates will take effect June 1, and it will then be too late.

Every farmers' organization should adopt protesting resolutions and send them to its members of congress. Granges, farmers' unions, farm loan associations should act without delay.

If you have not already sent a protest against the proposed advance of 15 per cent in railorad freight rates, which means that you must pay your share of the additional $375,000,000 annually exacted by the railroads, then do so at once. At least fill out the coupon herewith published and mail it at once to either Senator Miles Poindexter or Senator Wesley L. Jones, or if you prefer to Representative John F. Miller, Representative Lindley H. Hadley, Representative William L. LaFollette or Representative C. C. Dill, at Washington, D. C.

To ....., Washington, D. C.

As a Washington farmer, who pays the freight, both as a producer and as a consumer, I hereby most earnestly protest against the proposed advance of 15 per cent in railroad freight rates, which I believe is unwarranted by present railroad earnings.

Name .....

Postoffice .....

Northwest Wheat

Above Average, Says U. S. Report

The United States government's crop report for April shows that the condition of winter wheat in the four states of the Pacific northwest is far above the general average for the United States.

While the general condition on April 1 was down to 63.4 per cent of normal, winter wheat in Washington was rated at 70 per cent; in Oregon, 84 per cent; in Idaho 90 per cent, and in Montana 93 per cent.

Montana is up to its 10-year average, but Washington is 24 per cent below its 10-year average. Oregon is down 12 per cent and Idaho 6 per cent. The government's comparisons for these four states are as follows:

	Condition April 1,			Price April 1,	
	1917.	1916.	10-Yr. Av.	1917.	1916.
Washington	70	85	94	$1.55	$0.84
Oregon	84	95	96	1.54	.84
Idaho	90	94	96	1.55	.78
Montana	93	85	93	1.68	.89

The big damage to winter wheat is in Illinois, Iowa, Missouri, Nebraska and Kansas. On April 1, 1917, Illinois' condition was 60 per cent of normal, Iowa's 57 per cent, Missouri 62 per cent, Nebraska 35 per cent and Kansas 45 per cent.

Five Mutton Breeds for Farms

Farmer Can Hardly Go Wrong in Trying the Shropshire

ARTICLE 2. By E. J. IDDINGS.

The term "mutton sheep" is a common designation for what we call the Down or Medium Wool breeds and the Long Wools. The Downs are dark faced and take their name from chalk hills called Downs, over which they graze in Kent, Hampshire, and other counties in England.

The medium wooled breeds are low-set, deep, thick, compact sheep, with broad heads, short faces, short necks, deep shoulders, wide sprung ribs, thick loins, full rumps, full legs and deep twists. The vigorous thick-meated sheep with little evidence of roughness and waste, adapted to yielding the highest percentage of high priced cuts is one sought for in the mutton breeds both for the market and for the show ring.

Five popular mutton breeds are the Shropshire, the Hampshire and the Oxford, Medium Wools or Downs, and the Cotswold and Lincoln, belonging to the long wool type. Other breeds found in some sections are the South Down and the Dorset Horn.

The South Down.

The South Down has hardly sufficient ruggedness, prolificacy and ability to thrive under rather severe conditions, quite often demanded of western range and farm sheep, to give it a place on the average western farm. It has a place, however, where special attention can be given it and a fancy mutton product is desired. In mutton form this breed averages the lowest set, thickest, and most compact of all of our well known breeds. The ewes have been found at the Idaho university station to be easy keepers. The lambs mature early and yield fine carcasses.

The Shropshire.

The Shropshire comes from the midland counties of England, and is descended from an old very hardy type known as the Morfe Common. The breed is widely distributed over the world and does well under such variety of conditions as to have been designated as the "cosmopolitan breed." Next to the Southdown the Shropshire nearest meets the ideals of the mutton type. Sheep of this breed are medium in size, the rams averaging 225 and the ewes 150 to 160 pounds. The body should be long and deep and squarely set on short legs. The head is wide, the ears small, and the face refined in the ewes. The neck is short, blending smoothly into the shoulders. The back and loins are wide and well covered and the leg of mutton thick and plump. Well-bred specimens are well wooled over the legs and face and the fleece is compact and of considerable length. Rams shear 12 to 15 pounds and the ewes 8 to 12 pounds. The face and legs are brown and the fleece clear white.

The Shropshire has a wide reputation as a farmer's sheep. This is due to the excellent combination of mutton form, fleece, prolificacy (the ewes average at least one and one-half lambs) and to early maturity. Gains are not so great as with some breeds, but both frame and flesh grow together, bringing the lambs to marketable size and condition at an early age. The farmer can hardly go wrong in selecting Shropshire sheep.

The Hampshire.

The sheep of this breed are descended from an old type of the same name that existed in Hampshire, England, and have been improved by feeding and selection and by the infusion of Southdown blood. The Hampshire is larger

(Continued on page nineteen.)

SUFFOCATES SQUIRRELS

Carbon Bisulphide Is Effective.

Carbon bisulphide, when properly applied, is one of the most humane, economical and effective agencies in ground squirrel extermination, says a bulletin of the Washington experiment station.

It is a liquid, which, when put into the burrows on some cotton or waste, very rapidly forms a heavy gas which sinks down into the burrows and suffocates the squirrel. It should be applied in doses of about two tablespoonful, one dose to each hole of a den. As treated, each hole should be closed with a shoveful of earth, and when the holes have been filled, two or three of the holes should be opened and exploded by throwing a lighted match down into them. The holes should be closed immediately and the work is done. Great care should be taken to keep the fire away from the carbon bisulphide your are using. Carbon bisulphide may be used at any time of the year, but is more effective in spring and early summer when the ground is moist.

A den can be told by the fact that all of the burrows belonging to it run toward its center. It may cover a radius of 50 to 70 feet.

It is humane in that its action is similar to that of chloroform, and there is none of the terrible suffering as in the trapping method and unlike trapping or poisoning, there are no young left behind in the dens to starve to death. It kills no beneficial game or song birds.

Tests on a large scale are showing that it is not as expensive as trapping, for when thoroughly done you need go over the territory but once.

SLUGS OR SNAILS

Much Trouble With These Pests.

To the Editor: We are bothered very much in our garden by slugs or snails (they do not carry a shell on their back). These pests are from half an inch to one inch in length. Everything that we try to plant in the garden is destroyed. We have tried to plant beans, and peas, and if they succeed in coming up the first thing we know the leaves are eaten off and possibly the next morning the stalks are completely gone. We can not raise cabbage, as the snails burrow into the head from the bottom part next to the ground. It is the same with lettuce. They do not seem to bother radishes or turnips so much.

Our garden spot is on the north side of the house, and is quite sheltered. The spot is only about 50 by 50 feet. At the southehrly side we have a few raspberry bushes. Could they have anything to do with the slugs?

Our soil is a black soil made very rich by stable manure. The soil is inclined to be wet and hold the moisture nearly all summer without watering. We have had splendid gardens up to two years ago, when we began to be bothered by these slugs.

P. BENTZEN.

Ferndale, Wash.

In answer to this question O. M. Morris of the department of horticulture of the state college of Washington says:

One of the best ways in which to protect your young plants from slugs is the use of a little poisoned bran. Use a quart of bran and about a teaspoonful of lead arsenate or Paris green; dampen this with water in which has been dissolved enough sugar to make a very thin syrup. A little lime juice added also serves as a flavoring extract that makes the bait more attractive. Scatter this material along the rows or around the plants that are on the outside of the garden. The snails usually come in from the litter along the edges of the plant beds. They will take the first eatable material they find and are especially fond of a bait prepared as just directed. This material will have to be used several times during the spring to keep the slugs away. It is unlikely that your berry bushes have any relation to the slug trouble. Any kind of foliage or litter, old grass or anything of that kind along the edge of the garden bed is apt to harbor the slugs during the daytime. The careful cleaning up of all such litter and material is especially helpful in getting rid of this trouble.

High School Boys to Farm.

The mobilization of 5000 high school boys to work on farms in Massachusetts from May 1 to harvest time has been provided for at a conference just held in Boston. The boys will be paid $7 a week, with quarters and clothes provided. Only boys between 16 and 18 years of age will be engaged.

Two Cooperative Stores Have Done This

From One Car of Hay to a Business of $326,000 in Four Years, With $30,000 in Profits

Here is a farmer's cooperative organiaztion that helps to point the way to many similar ones, and here is a statement for a month's business that makes a remarkable showing.

If the reader will consult any business man, he will ascertain that the statement submitted herewith is an unusual one. The average mercantile house that has a "turn-over" or what might be better understood by the average reader of The Farmer, if the merchant sells each year seven times as much stock as he carries, he is usually doing a successful business. This statement shows that in the month of March with a merchandise stock of $45,000 the association did $39,000 of business. If this ratio is kept up during the entire year, it means 10 to 11 times the amount of stock carried.

The net profit of practically 8 per cent on the gross business is a wonderful showing.

Another item that should attract attention of the reader is the low cost of conducting the business—practically 7 per cent. An ordinary grocery store pays more than 7 per cent to cover the expense of their delivery system alone.

By W. H. PAULHAMUS

The extremely bad failure of the Spokane-Seattle-Portland - Wenatchee - Chehalis cooperative farmers' stores—the Northwestern General Trading company and its allied branches—may have an unfortunate tendency to give a black eye to the establishing of stores conducted upon a cooperative basis. But it should be remembered that the collapse of the Northwestern Trading Company was the result of bad and dishonest management and is in no wise attributable to the cooperative principle.

Cooperative stores are exactly like banks, sawmills, blacksmith shops or any other business enterprise. No difference what the industry is or what opportunities for success, if reasonable business principles are not adopted the result will be bad. The greatest trouble with large enterprises is that the management too often is not capable of handling the money end of the transactions.

Most of us are not sufficiently conservative to realize that the sun does not shine all of the time with the result that the rainy days arrive and we find that we have not arranged for an umbrella and overshoes.

The above mentioned cooperative stores had an excellent opportunity to do a successful business. Every condition was right except lack of proper management. The question that would naturally arise in the minds of the stockholders of the defunct Northwestern General Trading company would be, is it possible to conduct cooperative stores successfully so that the stores will be an asset to the community as well as a profit to the stockholders?

Some years ago, the Puyallup and Sumner Fruit Growers 'association located in the Puyallup valley nine miles from Tacoma, 30 miles from Seattle on the main line of the Northern Pacific and Great Northern railways, decided to purchase their alfalfa hay in carloads so as to obtain reasonable prices for their members. Some of the local merchants found fault with the management of the Fruit Growers' association for meddling in hay trade, with a result that the friction aroused resulted in the Fruit Growers' association not only purchasing their hay requirements, but at the present time are purchasing and distributing to their members through their two stores, practically all their groceries, hay, grain, flour and feed.

The industry has grown in four years from one car of alfalfa to a total volume of business for the year 1916 of $326,000. The business has been conducted on a large scale as the management believes in volume of business at a low profit rather than a small line of business at the ordinary profit and as most of the members of the association are farmers having their own wagons and automobiles, it was decided that no deliveries should be made or no credits extended. It doesn't make any difference how much fruit a member has with the association, it doesn't grant him any credit at the stores.

With no expensive delivery system and with no credits extended to the members, two sources of serious difficulty were eliminated; in fact, these two items are the serious stumbling blocks in merchandising.

Most farmers' organizations are conducted as cheaply as possible; in other words, the directors usually employ a manager who will offer his services at the cheapest possible price with a result that they usually obtain a "cheap man" rather than a capable man. The merchandise department of the Puyallup and Sumner Fruit Growers' association is conducted on a different plan. They believe in paying the employe what his services are worth and instead of conducting the business in a haphazard way, they keep a competent set of bookkeepers under the leadership of a gentleman who thoroughly understands the difference between debit and credit, so that at the end of each month the directors of the association know definitely not only how much business has been done during the month, but whether it has been conducted at a profit or at a loss.

The statement of the two stores of the association for the month of March, 1917, is herewith submitted. It will be noted that the association makes a deduction not only for rent and taxes, but also interest on the investment at the rate of 10 per cent per annum.

By establishing the store department, the growers were able to cut down the overhead operating expenses of their fresh shipping and canning department. The president of the association for several years has been paid a salary of $3600 per annum, but since the establishing of the stores, one-third of this sum is carried by the store department.

Of course, it must be borne in mind that these are unusual times and that greater profit is derived in merchandising today than under ordinary times for the reason that what you purchased yesterday is of greater value tomorrow, but during the four years that the cooperative stores of the association have been operated in the Puyallup valley, they have paid to the growers' association in the neighborhood of $30,000 profit.

Instead of distributing profits to the buyers of the merchandise, they adopted a policy of adding 10 per cent to the cost of their merchandise to cover the cost of doing business, and placing this as the selling price except in case where this would make the product sell for much less than its intrinsic value. Under such conditions, the price is increased so that the large customers will not buy up all of the commodity and deprive the smaller customers of their fair share.

For example—one year ago the association purchased 2000 barrels of hard wheat flour at a cost of $5 per barrel. Before this flour was disposed of, it was worth $6.50 per barrel, wholesale. Had the association priced it all at 10 per cent above the wholesale price when purchased, making a selling price of $5.50 per barrel, other storekeepers and those who had money to spare would have purchased all of the flour resulting in the association being compelled to go into the market and purchase an additional supply at $6.50 per barrel, but the association management adopted a policy of keeping from 25 to 50 cents per barrel under the wholesale price, therefore protecting all of their customers.

The English method of operating cooperative stores is to sell at the same price as other stores and then declare a dividend at the end of the year to the customer. This results in taking from the customer each day of the year a surplus of money for the food products and keeping the money for the customer until the end of the year and then returning it to the customer. Very frequently the customers at cooperative stores have a serious time in aequiring sufficient funds to make their purchases. If this is true, what can be gained by charging them more for their purchases than is intended and refunding it to them at the end of the year?

It is in the nature of deception and really doing something that you "do not mean."

The net earning of the stores are turned into the association to be distributed pro rata upon the number of pounds of fruit that each grower delivers to the association.

What has been done in the Puyallup valley can be done in every other community of the Pacific Northwest providing the board of directors manage the business as it should be managed.

PUYALLUP AND SUMNER FRUIT GROWERS' ASSOCIATION

Statement covering business done by its two stores during March, 1917:

Merchandise on hand March 1	$45,113.12
Merchandise purchases during month	31,168.92
Transportation paid on same	1,176.63
Making total cost of	77,458.67
Actual cost of goods sold during the month	33,930.48
Stock on hand March 31 at actual cost	43,528.19
Total sales of month at selling price	39,799.67
Sales same month, 1916	28,102.17
Sales increase over same month one year ago, 41.6%	11,697.50
Gross profit on sales made during month, 14.75%	5,869.46
Expenses for the month, 6.8%	*2,706.13
Net profit for the month, 7.95%	3,163.33
Expenses for the month are divided up as follows:	
Salaries	$ 1,612.91
Insurance	74.19
Taxes	33.82
Rent	170.00
Heat	30.00
Light and power	51.30
Interest on Investment	470.00
	*$ 2,706.13
General and incidental expenses	263.91

"Our Own Store" at Puyallup



Owned and operated by the Puyallup & Sumner Fruit Growers' association. The building is of interlocking tile reenforced with steel and is 60x120. It is fireproof.

Hundred Thousand For Agriculture Is College Plan

(Continued from page one.)

ing April 1, 1917, or $22,222 each year for the next biennium. The amount for the preceding biennium was $33,000.

"In forage crop investigations there will be a net increase of $16,000 over the expenditure during the last two years, $8000 of which is from the state and $8000 from the United States.

"Ahe federal appropriation in behalf of dry-land investigation will continue at the rate of $2500 a year, making $5000 for the two years, and to this the board expects to add funds from the millage income of the college which will raise the total expenditure above the expenditure for dry land work in the last two years.

"The expenditure authorized for agricultural extension and extension work supplementary to agriculture include, for the two-year period after July 1, 1917, $60,224. From the legislature the college has an appropriation in behalf of extension amounting to $29,352 for the two-year period following April 1, 1917. At its meeting of April 4 the regents authorized from the millage income of the college an additonal appropriation of $30,000, to which further increases are anticipated.

"The present college farm, which is a highly important adjunct to agricultural teaching and investigational work of all kinds, was increased by a purchase of 150 acres of land for approximately $15,000. The farm of the experiment station at Puyallup was increased by a purchase of 30 acres of land for $5000.

"The appropriation for the department of agriculture, exclusive of salaries, was set at $25,000 for the one-year period beginning April 1, 1917, to which will be added the total departmental income. This appropriation does not include, of course, the appropriations for the departments of horticulture, forestry and the science departments such as botany, zoology, geology and chemistry, whose work is fundamental to all well-organized agricultural teaching, extension and investigation.

"Summarized, the expenditures authorized for the next two years for the various lines of agricultural work conducted by the state college, stand as follows:

Puyallup station, millage income	$ 65,000
U. S. funds (Hatch and Adams) for experiment station work	60,000
Regents' appropriation from millage for experiment station	44,444
Forage crop investigation	16,000
Dry-land investigations (U. S. funds)	5,000
For extension work, federal funds	60,224
From federal department of agriculture for cooperative work in approved extension projects	30,000
State appropriation for extension work	29,352
Regents' appropriation from millage for extension	22,222
Completion of floor in James Wilson hall	6,000
Addition to college farm	15,000
Appropriation for department of agriculture at state college (exclusive of horticulture, forestry and all sciences)	45,000
	$393,242

Field to Manage Quincy Creamery.

W. D. Field has been appointed manager and Arnold Omlin butter maker of the creamery at Quincy, Wash.

Spokane Milk Prices Raised

Consumers Resent Action of the Distributors

Spokane milk distributors have raised milk prices and considerable resentment is voiced by consumers.

Quarts, which had been selling all winter at 10 for $1 are now 9 for $1, and pints sell at 16 instead of 18 for $1.

Milk prices in Portland are 10 cents a quart and 5 cents a pint. Deliveries of a quart a day are charged for at the rate of $2.75 a month if paid in advance.

Tacoma dairies quote 10 quarts for $1, although some of them sell as many as 13 quarts for that sum.

Seattle dairies sell milk at 8 cents a quart.

"Our legislative committee considered the milk increase today, and we have resolved to fight it to a finish," said F. C. Campbell, corresponding secretary of the associated committees of fraternal, benevolent and labor organizations. "The large distributors who have made this advance of 1 cent a quart, or 4 cents a gallon, to the consumer say it is to reimburse the producer. Yet we are informed that the producer will get only 1 to 2 cents more on the gallon, while the distributor gobbles up the rest."

Mrs. J. M. Simpson, president of the city federation of women's clubs, said: "This seems a poor time to raise the price of milk, with fresh pastures coming on. I have purchased 11 quarts of the very best milk all winter long from the Hiawatha-Holstein dairy for $1. I understand this company will now ask 10 cents a quart. Why any distributor should ask more is not plain to me."

That tells one side of the story—the consumer's point of view. Here is the other side, as stated by David Brown, president of the Hazelwood company, the largest distributors in the Spokane district:

"Twenty-five years ago I personally delivered 24 quarts of milk for $1. Nearly every one at that time could not afford to take over a pint of milk a day and therefore it required 48 deliveries before I received a dollar, and most of them asked me to wait until the next time, which made 96 deliveries for a dollar.

"At that time wheat was selling at 15 cents per bushel and hogs between 2 and 3 cents per pound. We sold a number of fat beeves at from $12 to $15 a head that would today bring $150 a head.

"The producer is being paid 25 per cent, or 5 cents per gallon, more than at this period a year ago; 2 cents of this advance being paid them at the present time.

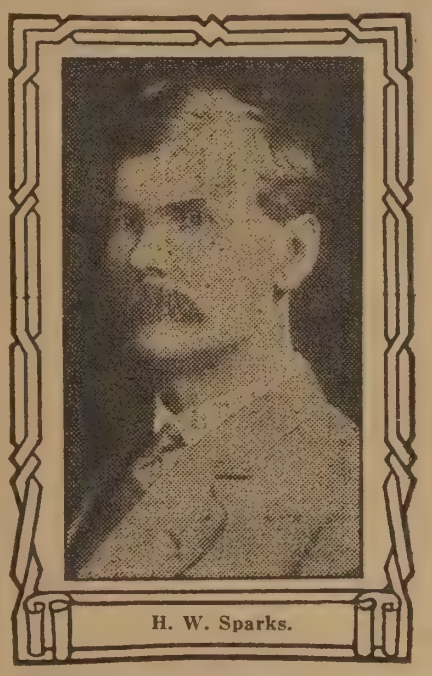
"I believe that every dairy with an average score above 95 points, and there are a lot of good ones, both large and small, can not make any money with the present price of feed and milk.

"We have confronting us today a crisis in the food market such as the world has never known. If we refuse to recognize this and attempt to buy milk at anywhere near the prices of the past it would simply bring about one result. The farmers would dispose of their cows and discontinue the business and go into the wheat and meat production, which is more profitable.

"Practically any cow that is in meat condition will bring from $100 upward.

"The season has been abnormally late, preventing the dairymen from getting their cows on grass, and it has forced them to buy feed at unheard-of prices, and this has caused us to decide at the present time to pay them 25 per cent more than we have in the past for their product. We feel that if we do not do this that there will be but one result; there will not be enough milk of the high grade that is now demanded for this city to supply the business. In fact, I understand that in the last winter some milk was shipped in to different distributors from the Coast, owing to the short supply of the right quality of milk here."

Washington Portraits No. 13.



H. W. Sparks.

H. W. Sparks of Fisher was born in Clinton county, Iowa, May 23, 1856. During his boyhood and youth Mr. Sparks went through the routine so common on Iowa farms a generation or so ago of working on the home farm, working for other farmers, attending school when he could be spared, and finally of renting a farm for himself. He attended Cornell college one year, and left with the intention of returning to complete his course. That which occurred to frustrate this plan is a matter of history, for it was during the famous "grasshopper years" of 1876-1878 that young Sparks farmed it for himself, intent on making enough to carry him through the remainder of his college course. Many an older farmer was put out of business by the brown hordes which descended on every growing thing, and after viewing the wreck of his fortune the youngster turned his back on Iowa and became a Kansas homesteader. And there, to quote his own words, "we sowed and planted, and the hot winds harvested." Those were the days when men left home in the morning with green fields waving on each side of the road and returned at night to find those same fields parched and brown.

After this came a succession of adventures. The young man followed the line of a new railroad into Montana in 1883, tarried there long enough to become superintendent of mine and mill; and thereafter, on the advice of his physician, sought the lower altitude of Kettle Falls, Wash. Here Mr. and Mrs. Sparks bought and cared for one of the first orchards in the upper Columbia valley. They read all the farm journals they could secure, and soon were taking a prominent part in the development of the community. A fruit association was formed with 22 members and a subscribed capital of $55. Within two years the membership had increased sixfold, a warehouse had been built and the association had money in the bank.

Again sickness intervened to break up the young family on the farm, but after various vicissitudes and misfortunes Mr. Sparks became connected with the extension department of the Washington State college, then commissioner for Stevens county at the Alaska-Yukon-Pacific exposition, and was finally made supervisor of demonstration farms for the state college. In this capacity he did a great work in advocating the growing of corn and alfalfa in western Washington, the use of lime on agricultural lands, charpitting as a method of clearing stump land and was one of the pioneers in boys' and girls' club work.

At the present time Mr. Sparks is farming in Clark county, where he is putting into practice the things he advocated during his connection with the Washington State college. His plant-breeding experiments have progressed to a point where he expects soon to have something of value to present to the public.

The next in the series of Washington portraits will be that of W. J. Blanchett of Quincy, and will be given in next week's issue of The Washington Farmer.

Bean Meetings.

County Agriculturist J. R. Shinn will hold a series of bean meetings throughout the Spokane valley in the irrigated districts, urging the owner to sign contracts with an eastern seed house offering to pay 5½ cents a pound for the beans and to furnish the seed to the growers.

Spokane Land Bank

Gets Capital Stock of $750,000

Having received $750,000 as capital stock, the federal farm land bank of Spokane will be able to make actual loans just as soon as the appraisals are completed. The appraisers already appointed are W. D. Graves and T. S. Hogan of Montana, C. B. Kegley of Palouse and A. L. Davison of Stevenson, Skamania county, and C. E. B. Roberts of Idaho.

Indications are that the first loans will be placed in Montana, where the first work of appraising probably will be finished.

George C. Jewett, secretary of the farm land bank reports that the total number of associations is over 500, with additional applications being filed daily.

While the minimum loans to one association must total $20,000, it is estimated that the average of those on file will run approximately $40,000. With 500 associations organized, the loans for which aplications have been made, on that basis, would aggregate about $20,000,000.

Funds will be placed at the disposal of the associations as soon as the appraisers have completed their work with the charter members of one association. Turner Oliver, attorney and fiscal agent of the bank, then passes on title. All mortgages will be in his custody and will be the security of the bond issues, which will begin as soon as $50,000 has been loaned.

Stockmen Convene

In Great Session at La Grande

The fifth annual session of the Oregon Cattle and Horse Raisers' association was held at La Grande, Ore., last week, with a large, enthusiastic attendance. Numerous matters of interest were considered and acted upon. A considerable number of the most prominent citizens and stockmen of the state, and some from other states of the northwest were in attendance and took part in the deliberations, among them being Governor Withycombe of Oregon.

One of the significant features of the resolutions was one taking the governor to task for having pardoned a man convicted through the efforts of the association of cattle stealing. The association urged that it be consulted in the future before such action be taken.

The resolutions indorse the work of the market committee of the National Live Stock association and appropriate $300 toward its maintenance;

Indorse the request of the Washington Pure Breeders' association for half rates on purebred animals when accompanied by the pedigrees.

Ask the secretary of the interior to continue suspension of the 640-acre homestead act until after the war, and that prefeence be given soldiers.

THE PATRIOTIC LEGION OF WASHINGTON

Membership Open to Men, Women and Children.

I am a loyal and patriotic American. I most earnestly desire to do my share in helping to defend the honor of my country in time of war. I therefore request enrolment as a member of THE PATRIOTIC LEGION OF WASHINGTON and pledge myself to the work of increasing our nation's food supply during the war into which our country has been plunged.

Signed.....

Date of Enrolment ..... Address .....

When signed forward this blank to the Editor of The Washington Farmer, Spokane, Wash.

The following are enrolled as members of the Patriotic Legion of Washington:

R. L. Thonney, Pullman; W. Thonney, Pullman; E. H. Ohles, Spangle; George W. Kimber, Deer Park; Alex. Morrison, Valley; Edwin Beeman, Sultan; C. A. Boberg, Mica; A. M. Bollinger, Tumwater; Forest Decker, Cashmere; H. L. Sanderson, Chewelah; L. H. Osborn, Burley; Hans Jensen, Port Blakeley; A. Erb, Port Stanley; Mrs. May Bradbury, Wenatchee; James I. Paul, Big Lake; J. A. Pennington, Yale; Harlan Nelson, Meyers Falls; R. L. Pierce, Cloverland; C. A. Casebolt, Waitsburg; Fred E. Fuller, Mansfield; F. R. Judd, Silverdale; I. F. Schmelzer, Pomeroy; George Turner, Port Blakeley; M. P. Lillard, Pasco; Mrs. M. P. Lillard, Pasco; Delia Lillard, Pasco; John Ramsey, Mead; Rudolph Johnson, Yelm; W. H. Harding, Chelan; Frank Wilcox, Reardan; D. D. Lamson, Camden; Arnold W. Rex, Shelton; W. G. Rex, Shelton; Ethel Allen, Colville; W. H. Philips, Waitsburg; F. V. Hanson, Chelan; John Klingele, North Yakima; Esther N. Taft, Lebam; Frank Griffin, Lebam; Alda Griffin, Lebam; O. H. Dixon, Lebam; Ruth Dixon, Lebam; Lenore Dixon, Lebam; Neta Dixon, Lebam; Guy Dixon, Lebam.

An additional list of members as received and enrolled will be given next week.

The A B C of Road Construction

Protect Culverts at Both Ends by Concrete Wings

By FRANK W. GUILBERT, chairman executive committee Washington State Good Roads association.

III.

Going a little further in drainage matters. We have taken into consideration the getting of the water off the road quickly by having the center of the road higher than the edges. We have also written about getting the water away from the road by having our ditches so built that the water will surely run to some lake, river or low spot away from where any damage can be done to the road bed or surface.

Often it is impossible to take the water to an outlet so it can be carried away from any possible damage to the road by keeping it to the ditches on one side of the road or the other. In this case it becomes necessary to employ some means of taking the water to the opposite side of the highway in order to get the result desired. To do this a means of getting under the road must be found. "Culverts" of wood, iron or concrete are employed for this purpose. This term is used for pipes or boxes made of the above named materials which must have a large enough opening to permit the water to flow through it under all conditions. This culvert must also have sufficient pitch to make the water flow through it easily. Sometimes it is difficult to get enough fall between the inlet of the culvert and the outlet, but enough pitch should be given the pipe, if possible, so that it will scour or wash clean as the water runs through it. Culverts should be protected at both ends by concrete wings, so the water will be sent into the pipe. Often if the ends are not protected the water will force its way through the foundation of the road outside of the culvert and finally wash the road out.

The selection of the location for culverts is very important. They should be placed at a point where they will serve the purpose they were placed for. Many times one will see culverts in place that haver been wet inside since they were laid. Others are placed and not covered with sufficient material to protect them from the shock of the traffic. Some are made to carry a greater weight of material than the type was intended for and they fail.

The methods of culvert placing are worth a lot of study. A great sum of money is wasted every year by thoughtless placing of culverts in our roads.

NEXT WEEK MR. GILBERT WILL SHOW HOW A TWO-HORSE TEAM CAN DO THE WORK OF FOUR HORSES IF YOUR HILL IS CUT FROM 10 PER CENT TO FIVE PER CENT GRADE.

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Entered as second-class matter January 13, 1916, at the postoffice at Spokane, Washington, under the act of March 3, 1879.

GUARANTEE OF ADVERTISEMENTS.

We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Why Kegley Is Unfit to Lead the State Grange

If you believe that C. B. Kegley was both clear-headed and sincere in indorsing the swindling Northwest General Trading company, and recommending granges as local organizations, as well as members of the grange individually, to patronize that fraudulent business institution after his "personal examination" of its business affairs—then The Washington Farmer does not expect your agreement in the proposition that the state grange deserves to be put into more capable hands.

If you believe that the Washington State grange is bigger than any man in it, that it is too big and too important and too valuable a farm organization to be dominated by the selfish and ambitious schemes of any one man, then you will uphold The Washington Farmer in its vigorous attacks against aligning the state grange with fraudulent concerns.

If you believe that The Washington Farmer is taking a long look ahead and sees clearly that the highest interests of the grange lie along the line of advocating true cooperative principles and fighting to the bitter end all concerns and institutions which misuse the name of cooperation to further their own swindling practices—then you will lend a hand in the determined effort to put at the head of the state grange a man of clear brain and rugged honesty.

Producer Must Receive More for Milk or Quit the Business

On another page we give the news facts about the advance in Spokane milk prices. Consumers are protesting, but so far their protests show a failure to understand or to consider the irresistible economic laws that are forcing the producers to ask more for their product.

The farmer must pay more for labor, more for feed and more for his cows. He must receive more for his product or get out of the business. People who can not comprehend that fact are either blind or unreasonable.

And a word can fairly be said in support of the distributor. Every cost item has advanced upon him. Labor, bottles, caps, ice, horseflesh and feed, if he delivers in the old way; gasoline if he uses automobile delivery—all these cost factors have shot up tremendously.

The real question in the Spokane controversy is not whether the consumers should pay more for milk. All facts weighed in a spirit of fair dealing, it must be seen that the advance is reasonable. The real question in this case is on the equitable division of the increase between the producers and the distributors.

Ups and Downs

The same people who shipped their brood sows to market with the early rise of the hog market are now tumbling over each other in a search for breeding stock. When hogs bring as much as $15 per hundred pounds it isn't surprising that there is a rush to enter the ranks of producers again.

Extremes work harm to a great industry. Hogs are profitable under ordinary conditions; some years, under extreme and unusual surroundings, the raisers have lost money on them; generally the next few years have restored the balance and evened things up.

As we reenter the hog raising business let us do it soberly, seeking a fair and legitimate profit rather than an extreme one. If we expect too much we will surely be disappointed in a series of years.

Prepare for Harvest Now

The opening of spring is reported to be finding many farmers unprepared for the unusual rush of work putting in the crops. Spring is late, and there is demand for extra large acreage of crops. Hence, everything should be in the best possible condition to rush the work to its earliest possible completion.

The difficulty now being experienced should prove a valuable lesson. Get ready for harvest now. Do not wait till the grain begins to ripen before overhauling the machinery or ordering new machinery where it is needed. Communities should see to it now that there will be enough binders or headers or threshers or combined harvesters in the districts to handle the crops in the time nature allots for harvesting. There is a possibility that out of the need something of a cooperative harvesting scheme might be evolved. A few farmers could own a harvesting outfit cooperatively and operate it cooperatively. The men in the average community, if they combined their efforts, could go a long way toward making up a cooperative harvest crew, though transient labor in large numbers will be required throughout the country.

But whatever be the plan, every harvest problem should be thought out now, and the first day crops are ready to harvest should find men and machinery and storage equipment ready.

Mobilize a Million Boys to Work

No more interesting wartime announcement has come from Washington than the statement that the United States department of labor has undertaken the mobilization of 1,000,000 boys as active farm workers.

If that plan is carried out with energy and intelligence it will go far toward solving the farm labor problem in the United States this year.

The department's mobilization plan contemplates the establishment of enrolling stations in every city in the country. Boys from 15 to 19 years of age, under proper supervision, would camp on farms wherever their services are needed.

For three reasons The Farmer hopes that the project will be put through.

First, the farms will need this labor.

Second, the experience will do the boys a world of good.

Third, it will lead to a better understanding between the boys in the towns and the boys out on the farms.

That it will be beneficial to the boys those of us who knew farm life when we were young have not a doubt. It will help them physically and morally as well. It will tone down their superficial "city smartness" and teach them that they can learn a lot of things that really count from their cousins who are closer to nature than they have been.

At the same time the country boys will also gain from this closer association with the youths from the towns. They will soon discover that while the strangers seem "green" about farm life, the planting and harvesting of crops and the care of live stock, they will be eager and quick to learn, and before long will be pressing the country boys pretty hard in a friendly rivalry to outshine.

It is good to note this closer drawing together of the people of the cities and the countryside. Town and country have been slowly drawing apart. The automobile and good roads have done much to correct that tendency; systematic utilization of city labor in helping to produce and harvest crops will do more. The relation between those who dwell in the cities and those who live out in God's beautiful open spaces should be broader than a mere exchange of products for wares. There should be a generous and constant exchange of spirit, of point of view, of friendly regard and genuine neighborliness.

Washington Gleanings.

Walla Walla is to build a 130,000-bushel grain elevator.

Spokane county commissioners have passed resolutions calling for $150,000 highway work this summer.

The farmers' organization at Plaza, formed recently, will build a $75,000 elevator at that place this summer.

Cowlitz farmers have formed a federal farm loan association. Subscriptions to the amount of about $27,000 were represented.

The Chehalis Valley Egg and Poultry association sold more than 1300 dozen eggs during March at an average price of over 25 cents a dozen.

New fruit warehouses at Toppenish under contract show an aggregate of more than 1000 cars of common storage and from 375 to 500 cars of cold storage.

Estimating on a basis of a minimum of $20,000 for each association, loan applications on file with the Spokane farm loan bank aggregate more than $8,000,000.

Broccoli, a hardy variety of cauliflower, can be raised in the Puyallup valley as a commercial product with the proper care in planting and cultivation, in the opinion of Henry Benthien, the well-known vegetable expert of Gardenville.

War has caused the Colfax Commercial club to abandon plans for holding a horse show in that city this spring. It was stated that it will require about $400 to put on a show and that the money may be needed more for some other upurpose.

Improvements to cost approximately $10,000 that will practically double the floor space and the efficiency of the plant are being made by the Olympia Canning company. The output of the plant will be increased from 55,000 cans of fruit and vegetables put on the market last year to 100,000 cans this year. More than 200 persons, mostly women, will be employed at the cannery during the coming season. The fruit and vegetables will be bought in Thurston county.

The Citizens' league of eastern Lewis county has decided definitely to build a warehouse at Morton. It will also build warehouses elsewhere in eastern Lewis county as the development of that section demands. The committee appointed to make plans for building the warehouse is composed of R. T. Siler of Randle, J. A. Ulsh of Glenoma, W. A. Davis of Randle, Zack Anderson of Randle, John Snyder of Lewis, A. R. Rutherford of Morton, E. D. Overstreet of Swofford, George H. Landes of Mossyrock and W. W. Morse of Morton.

What Others Say

The Farm Journal: The sharper the disks the easier the day's work.

Southern Agriculturist: There is always something which we can do better than anything we have yet done.

Farmer's Review: As a matter of fact, the man who keeps sheep well and stays by them, is always pleased, because they make money.

Kimball's Dairy Farmer: The day is not far distant when in all parts of the United States more of the gross farm income will have to be spent for feed and fertilizers.

Iowa Farmer: The first important consideration that ought to claim the attention of the milk producers is to provide for a more equal supply of milk. This can be done by having more cows freshen in the fall or early winter.

Will Draft Big Army

Selective Conscription Bill Passed

Both houses of congress last week passed by overwhelming majorities the bill asked by President Wilson providing for selective conscription of men to build up a big army for this country. There still remain to be decided many of the details of the bill, a prominent one being the ages between which men may be drafted into the service.

The measure passed by the senate places the maximum age at 27 years, while that passed by the house places it at 40 years, meaning that only men under these ages could be drafted into the proposed army. It is probable that a compromise will be reached.

Nothing definite is yet decided upon as to the immediate carrying out of the provisions of the bill when finally agreed upon as to details, but it is the intention of the administration leaders to begin at once the building up of an army as rapidly as the recruits can be trained. Already large numbers of the best young men of the nation are in training camps, to which they have volunteered, preparing for officers' positions preparatory to taking a part in the later training of the enlarged army. An army of half a million men within six months to a year after the final enactment of the draft bill, and possibly as high as 2,000,000 within two years, is a possibility suggested by men prominent in the movement for preparedness.

Allied Gains Continue.

Reports from Europe continue to indicate that the allied armies are making consistent gains against those of Germany. No German victory has been reported for several weeks. Whether this is a series of real victories over the Germans or whether the latter are deliberately retreating in a great, strategic move, is a question that many are asking, but none are capable of answering.

Want Troops in France.

General Joffre of France, who is in this country as a leading member of the international conference now at Washington, D. C., has given out a formal statement declaring that it is the ardent hope of the people of France that very early a detachment of American troops may be fighting side by side with the French in the trenches of Europe. This sentiment finds a warm appreciation with many citizens of this country, who believe that the United States should send soldiers to Europe, but with others who believe that this country's greatest service to the cause of humanity is the supplying of food and munitions to the allies the idea is not popular.

The Submarine Menace.

No longer are the allied nations making light of the submarine menace. Statements from the leading statesmen of England and France indicate that it is being keenly felt, and that as a result food conditions in those countries are grave. Whether the United States entered the war early enough to prevent much suffering from food shortage among the peoples and the armies of her allies, and a consequent weakening of resistance and agression against the forces of the Teutonic allies, is a question being seriously asked.

Much Food Needed.

The greatest need of England and France and their European allies, as well as of this country, is food and means of transportation. While the United States is moving rapidly toward the establishment of a great army, an even greater effort is being made to insure a large production of foodstuffs and means of conveying it to the stricken people of Europe who are fighting against the German-Austro allies.

Here Is One Solution

To the Problem of Competent and Contented Farm Help

The following is an extract from a letter received from a farmer living in Idaho, setting forth one method of solving a part of the problem not only of farm labor, but of country life as a whole:

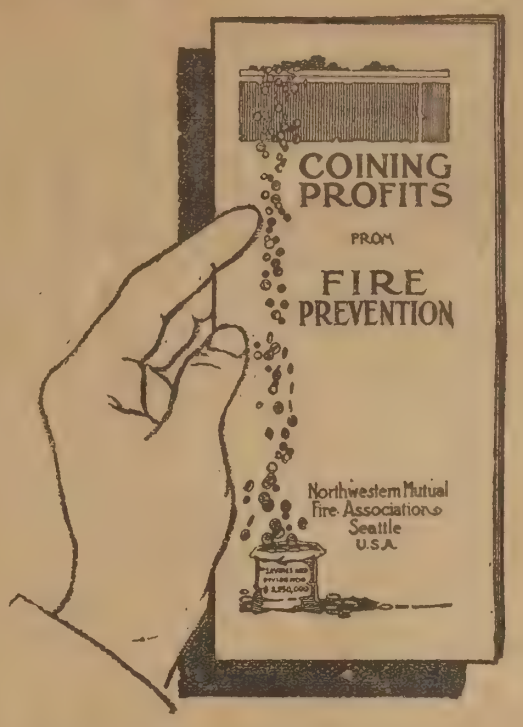
"The man with one or more sons large enough to take the place of hired men is indeed fortunate, providing he can keep them contented on the farm, which seems to be getting more difficult all the time. I am giving my boys a small bunch of sheep for their own, purchasing a few purebreds this spring to head their little flock, and I am trying to make it as easy as possible for them, with plenty of good reading matter, a good home, and labor-saving machinery as fast as I can get it in order to take out as much of the drudgery as possible. The oldest son has a strong desire to become a blacksmith, so I have purchased a forge and a blacksmith outfit, and there is nothing he would rather do than tinker on a rainy day, and at the same time he is learning to sharpen plows and cultivator shovels and do all kinds of repairing. While our farm is less than a mile from town, my boys very seldom care to go to town, as they have about all they care for at home."

Can Raise Beans.

"Many farmers can raise beans on west and north slopes," says F. P. Hardin of Lincoln county, "and the farmers along Hawk creek, Indian creek and on Sand Flat have good bean ground. East and south slopes are not good for beans, as they almost invariably frost, the sun striking them early in the morning causes them to die after even the slightest frost. On the north and west slopes they are protected from the sun until the frost has a chance to melt, and then they will get more moisture also. So far as potatoes are concerned any of us can raise any amount on our summer fallow."

County Road Crews Start.

The Burlingame road crew has started the rock crusher at the Feider farm near Pomeroy, Washington, and will crush enough rock to improve about one-fourth mile of the McKelrnan grade. Contract has been let for crushing the rock for the street improvement in the east end of Pomeroy and construction work will probably begin within the week.



To Our Farm Policyholders:

THIS book may save your **home from fire**—your barn, your warehouse, and priceless **human lives.**

It points the way to Safety and to Profit by **Preparedness against fire,** the effective way—the Northwestern Mutual way.

This book has gone forward to you by mail.

READ IT CAREFULLY.

Study its lessons. Learn what fire dangers lie in wait to destroy your property—then "clean house"; prepare!

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The fewer the fire losses the more money to return to YOU in dividends.

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After you have read the book, get it into the hands of some neighbor or friend.

Don't let the good work stop; let every one join this Fire-Fighting Army!

TO THE PUBLIC:

Send your name and address; we want YOU to have a copy of this book. Write today; by tomorrow you may not need it.

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General Offices, 208 Columbia St.
SEATTLE, WASH.

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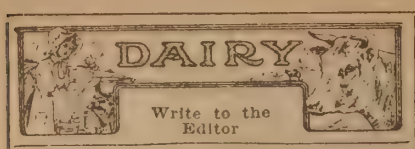
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A. B. NYSTROM, Editorial Contributor

Questions
Are Answered by A. B. Nystrom

Please furnish me with a recipe for making whitewash for dairy barns.
E. W. M., Tekoa, Wash.

The best formula for whitewash that I know of is that which is recommended by the United States department of agriculture and is as follows:

Take a half bushel of unslaked lime, slack it with boiling water and cover it during the process to keep in the steam. Drain the liquor through a fine strainer and add it to a peck of salt previously dissolved in warm water. Three pints of ground rice, boiled to a thin paste, should be stirred in while hot. Add five gallons of hot water to the mixture, stir well and let stand a few days covered as nearly tight as possible. It should be applied hot.

The above formula makes a very durable whitewash. If you want one less durable I would suggest that you simply slack some lime in the ordinary way and add to it some disinfectant, such as zenoleum or other coal tar disinfectants, or a very small quantity of mercury. This must be applied with a brush.

Breeding Ability of Twins.

I have a pair of twin calves that I should like to keep. One is a heifer and the other a bull calf. I am told that the heifer calf will not breed unless the other twin is also a heifer. Kindly advise me on this point.—L. K., Lyman, Wash.

In case of twin calves, one being a heifer and the other a bull calf, there is doubt that the heifer will breed. In some cases she will, and in other cases not, and I would be inclined to think that it would be safe to dispose of the calf rather than take the chance on her being a breeder. In cases of pure bred calves, however, it usually is wise to raise them and try them out. So far as I know one can not tell whether they will breed except by a careful examination of the reproductive organs, which, of course, should be done by an experienced veterinarian, and even then it is a difficult matter to determine.

Do You Know That

You should never put off till tomorrow what you can do today?

Balanced Ration for the Dairy Cow

To the Editor: We have been well satisfied with your paper and think every farmer should have it. I would like to see printed in The Farmer a balanced ration for the dairy cow. Make up a ration showing the feed required, the digestive nutrients and the value at the present market prices. I believe it would be of great interest and much value to your subscribers. Please give the digestive value of corn silage in fat, protein and carbohydrates; also for oats, peas and vetch silage.
G. F. R.
Ellensburg, Wash.

On page 10 of the February 15 issue of this paper you will find a balanced ration worked out, together with the cost of our ration. If our correspondent has other feeds to select from we shall be pleased to make an exact calculation for him if the list of feeds is supplied.

The following table shows the comparative feeding value of different kinds of silage, taken from Henry & Morrison's "Feeds and Feeding":

Digestible Nutrients in 100 Lbs.

	Protein	C. H.	Fat.	Nutritive ratio.
Corn silage (well matured)	1.1	15.0	.7	1:15.1
Oat and pea silage	2.8	12.6	1.0	1:05.3
Vetch silage	2.0	15.2	.8	1:08.5

Obviously the condition under which the crop is grown and harvested will affect these figures, and in the case of silage mixtures the variation in relative amounts of each crop will make a difference in feeding value.

Best Fed Herds Make Double Profit

Three hundred and ninety individual cows were tested in 1916 in the Marion County (Oregon) Cow Testing association, 241 completing the year's work, including 50 2-year-olds. K. Hannerman is the tester.

The association averages per cow were as follows: 6343 pounds of milk, 309.3 pounds butterfat, .3346 average butterfat price received, $103.49 value of butterfat per cow, $58.46 feed cost, $45.03 profit per cow.

In answer to the question: Does it pay to feed? The average profit per cow in the four best fed herds was $58.70, while the average profit per cow in the four poorest fed herds was only $33.31. Considering the difference of value of the skimmilk, manure and calf of the two groups, the value of which products being left to offset the cost of labor, the profit of the first group would be fully twice that of the latter.

Only 33 cows finished the year with no ensilage. Their average net profit was $13.51 less than that of the cows receiving some ensilage during the year.

The high cow of the association is owned by W. T. and F. A. Garbe of Aumsville. She produced 12,935 pounds of milk and 652.5 pounds of butterfat in 12 months of milking at a net profit of $132.63. Her age is 14 years and she is a cross between registered Durham and Jersey stock. While she is a wonderful cow with the good qualities of both breeds, she has no profitable daughters in milk. Two other cows produced more than 600 pounds of butterfat. My Mowat, a registered Jersey cow, owned by Warren Gray, made 631.4 pounds of fat, with an average test of 6.48. Poanie I. is a grade Jersey owned by J. B. Bowne of Turner, Ore., produced 11,874 pounds of milk and 630.6 pounds of butter in 10 1-2 months. She was sired by Hazel's Fern Tormentor, a registered Jersey, all of whose daughters are exceptional cows.

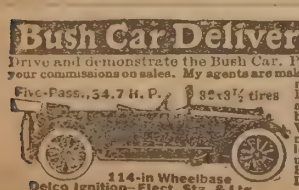
The high 2-year-old is a grade Jersey owned by L. W. Potter of Salem. Her record is 415.9 pounds of butterfat in 10 1-2 months, with an average test of over 6.6 per cent. The high yearling heifer, Untwood Figgis, a registered Jersey, owned by F. A. Doerfler, made 391.1 pounds of butterfat in 10 months.

GOOD NEWS FOR RENTERS AND FARM OWNERS' SONS

You can get a rich 160-acre farm free this spring, excellent for growing grain and mixed farming. Write for copy of "The Home Seekers' and Settlers' Guide." It gives full facts and tells what others are doing. Address Canadian Northern Railway, A. A. Brostedt, D. F. & P. A., 605 Hastings St., Vancouver, B. C., Canada.—Adv.

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Five-Pass., 34.7 H. P. 32x3½ tires
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Bush Cars guaranteed or money back. Write at once for my 48-page catalog and all particulars. Address J. H. Bush, Pres. Dept. 5PH
BUSH MOTOR COMPANY, Bush Temple, Chicago, Illinois

Does the Work of Two Men and Six Horses

"ONE man with the Advance-Rumely "8-16" tractor can do as much or more work than two men and six horses", says an "8-16" owner who has proved it.

The "8-16" is strictly a one-man outfit. Tractor and plows are combined in a single machine and plowing is made a one-man job.

"It beats any tractor handling the plows that I've ever seen."

With the Advance-Rumely "8-16" you plow the same as you do with a horse-gang—the plows are right in front of you, the work always in sight.

You can back up with the plows, cut square corners and work close up to the fences.

"It has lots of power on the belt and at the draw-bar."

Besides handling your ground working equipment, the Advance-Rumely "8-16" will give you equal efficiency on the belt,—in fact at any power job, draw-bar or belt.

Successfully burning distillate and similar cheap fuels, the cost of operation is low.

The "8-16" has a powerful four cylinder motor, all working parts are well protected and the carburetor is equipped with a special air cleaner.

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Wooden bins for storage cure grain best. This is strongest, made wholly of almost everlasting Fir.

TUNG-LOK SOLID AS A ROCK

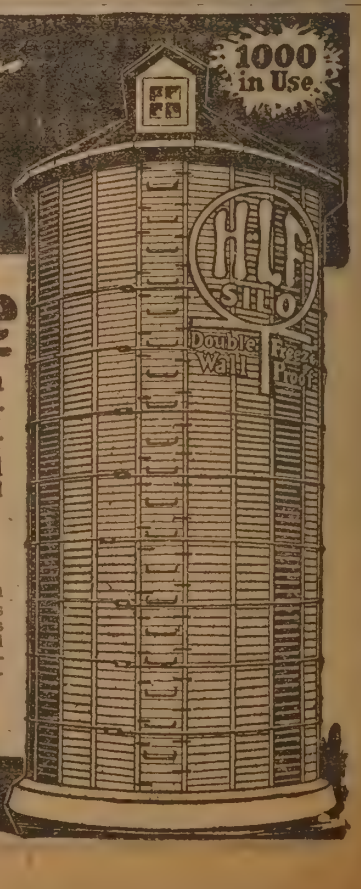
The Wonderful SILO
Add 30 to 50% increased value to your cheap summer feeds by canning or siloing it. This is the silo you'll always praise enthusiastically. Fir lasts and its reasonable.

Every Farmer needs good Grain and Feed Storage—that's Tung-Lok.
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DOUBLE WALL, AIR-TIGHT SILO FOR LESS THAN SINGLE WALL SILOS COST

We sell direct at bedrock prices—actually less than common stave silos cost. Big illustrated folder shows prices, terms, letters from users, and explains FREE ROOF OFFER. H-L-F Silo is built of four-by-six one-piece studs with double walls of matched fir lumber—wonderfully strong, tight, and proved satisfactory by over one thousand users. Send for folder immediately or you will be too late for free roof.

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Gentlemen:—Send me quick your big folder describing H-L-F Silo with delivered prices, and FREE ROOF OFFER.

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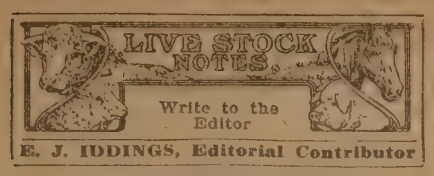
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Use Coupon Quick



E. J. IDDINGS, Editorial Contributor

FATTENING HOGS

How Much Wheat Is Required?

To the Editor: I wish you would tell me the amount of ground wheat it takes to fatten a hog, the hog having its full growth. How much more wheat would it take were the wheat not ground? How much wheat does it take to put on a pound of fat? At what age is it most profitable to fatten a hog, provided it had the full benefit of growing? H. J. K.

The above question was answered as follows by William Hislop, professor of animal husbandry at the Washington State college:

It will take approximately 500 pounds of whole wheat to make a hundred pounds of gain in a mature, fattening hog. It will take 472 pounds of ground wheat to make a hundred pounds of gain in a mature fattening hog; therefore, in the first case, five pounds of whole wheat are required to make a gain of one pound; and, in the latter, 4.72 pounds of ground wheat for a pound of gain.

If one assumes that at weaning time a pig will weigh 50 pounds, it will take 180 pounds of ground wheat to make the pig weigh 100 pounds and an additional 472 pounds of ground wheat to make the hog weigh 200 pounds. So far, the total amount of wheat would be 652 pounds of ground wheat. This amount could be materially reduced by using 10 per cent of digester tankage of the 60 per cent grade.

It is customary nowadays to fatten a hog while it is growing. It never pays to grow a hog first and then fatten him. The best practice is never to allow a little pig to lose the milk fat that it receives from its mother. Keep the pig growing continuously, and you will net the greatest profit by marketing him at a weight of 200 pounds. A well-bred hog should reach this weight at 6 1-2-7 1-2 months of age.



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In terms of dollars and cents the Holsteins are talking most effectively for themselves. Purebred Holstein cattle are the choice of every public institution or organization which attempts to produce milk in a scientific manner. Just ask a man who owns Holsteins, if you want to hear a story of prosperity. Every angle of Holstein superiority is fully covered in the books and pamphlets which are sent free for the asking. There's big money in the big "Black and White" Holsteins

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Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.

Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

Prices:

10 dose pkge. Single pills	$1.00
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10 dose pkge. Double Pills	1.50
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Cutter's Pill Injector....	1.50

Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about **Anti-Blackleg Serum** which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

The Cutter Laboratory, Berkeley, Calif.

The Cutter Laboratory of Illinois, Chicago Eastern Agent

To Raise Goats

How Best to Start, Feed, Etc.

To the Editor: I am thinking of raising goats. How would you advise me to buy them—old or young? What kind of food is best for them? Do creameries buy goats' milk? How soon would you wean a young goat? How much do you have to feed them? How uong?? How long should you keep the young goat before butchering?

A. F. S.

The above question was answered as follows by William Hislop, professor of animal husbandry at the Washington State college:

You should purchase yearling does that are carrying young, so that you will immediately begin to realize returns from your investment. To buy young kids means to lie out of your money for a year at least. To buy old does means that their period of usefulnuess will be short. At best the breeding season is about six years.

The best winter feed for goats is alfalfa hay, clover hay, oat hay or wheat hay. Silage is most excellent, if obtainable. Two to four pounds of silage is sufficient for a pregnant doe in winter, supplemented with 3-4 lb. of any of the above mentioned hays. In summer no hay, grain or silage is necessary, provided good browsing or grass is obtainable, either in the forest reserves or on your own farm.

Creameries are not in the habit of buying goat's milk, but many construction companies, particularly in western Washington, who employ foreigners would be glad to buy such material.

A young goat, or kid, is weaned at from four and one-half to five months of age. A kid will begin to nibble grain and hay or grass at the age of 14 to 21 days. They should be fed in a "creep," so that when the weaning time arrives they will never miss their mother's milk. At that time they will eat 1-10 to 1-4 pound of grain, sifted oats, per head per day, but it is not necessary to feed them any grain if pasturage is abundant. A kid may be butchered at any time after three or four weeks of age; but I advise you to market them at the same age as lambs and weighing from 55 to 65 pounds.

Veterinary

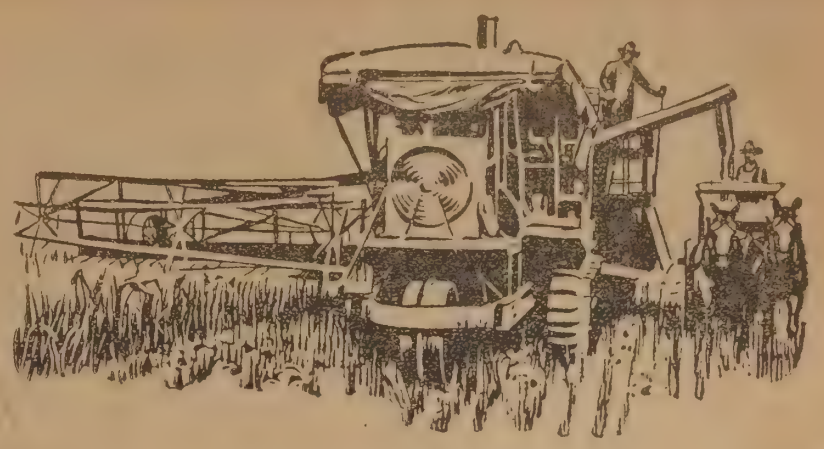
Dr. S. B. Nelson

Boils.—I have a horse that has small boils about the size of a pea which break out all over him. At times they disappear except where the collar rubs him. They swell until they are the size of a black walnut and then break.—R. C. S., Blaine, Wash.

Answer.—Your animal has what is known as summer boils, and there is no specific treatment that will absolutely cure it. You can help him materially by giving him an eight dram ball of aloes after he has missed one meal. When the purging has stopped, give him half an ounce of Fowler's solution of arsenic morning and evening for 10 days to two weeks. Rest him a week, and resume the treatment.

Cattle Die.—I had 20 head of young cattle in thrifty condition vaccinated on March 31, and on April 2 or 48 hours after vaccination, three head were dead. The veterinarian vaccinated them in the right hip, inserting the instrument straight down into the flesh. Have been told that proper place to vaccinate is in shoulder or neck and that it should be placed just under the skin. The animals became sick 24 hours after vaccination, their right hip was badly swollen and they were almost completely paralyzed in this leg. What was the cause of their death and who was the responsible party?—J. J. D., Uniontown, Wash.

Answer.—It does not make any particular difference where the vaccine is injected. In is generally more convenient to get the vaccine under the skin of the neck or behind the shoulders because the skin is thinner there than any where else. It is impossible for me to express any opinion as to the cause of their death and as to the responsibility in the matter of the vaccination, only the fact upon investigation of the animals would determine that. An outside party could not give any opinion of any value on that.



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PUTS your standing grain in bag or wagon with a Holt Gas Harvester. Makes one-third more acres with one-third less horses than a "ground drive." Moves evenly over hills and ashy soil; handles tangled down grain a binder can't reach. And it's **long lived.**

You can't stall the 4 cyl. Holt Harvester Motor—slow speed, big bearings, dust proof, high tension Magneto, impulse starter. (We mount them on old machines too.)

The 1917 HOLT JUNIOR Combined Harvester A popular size, 16 or 18 ft. cut; gas or ground drive; pulled with tractor or horses. The Junior is made light on the Holt Holley design. Wide rear—bulk grain attachment if desired. The Gas Junior also makes a complete stationary outfit. Sold f. o. b. Spokane.

Purchasers or their Sons entitled to free annual Motor School Course in Spokane.

From L. F. Anderson, Palouse, Wash.

"Last Wednesday the Harvester threshed 451 sacks of wheat in 4 hours. With only 320 acres to cut, I figure I saved $1500 on my harvest bill; 4 cents a bushel will cover my expenses."

THE HOLT MANUFACTURING COMPANY, Spokane, Wash.

Please mail us FREE 1917 36-Page Illustrated Harvester Book describing the Holt Oregon Special, Holt Junior and Baby Holt Special Side Hill Combined Harvesters.

I farm.....acres.

Name.....

W. O. I. 522 Address.....

THE HOLT MANUFACTURING COMPANY

SPOKANE, WASHINGTON

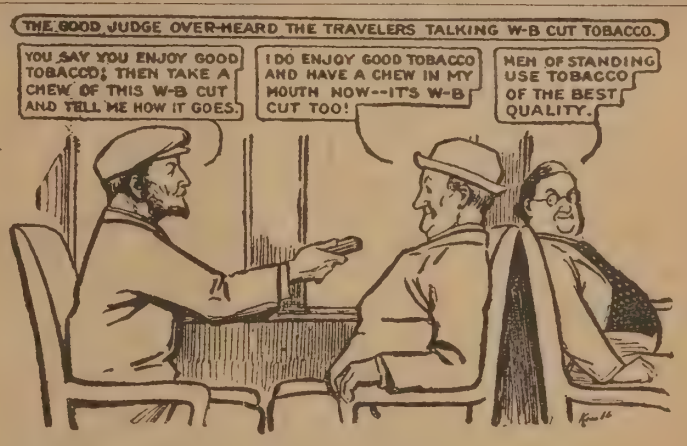
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The common-sense of it appeals to people with brains. There's no getting 'round facts, W-B will save a man money—a little chew lasts and satisfies. A 10c. pouch goes twice as far as ten cents' worth of the old ordinary kind of chewing.

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GRANVILLE LOWTHER
Editorial Contributor

The government reports show that the cold wave of January 29 to February 26 destroyed the entire fruit and bloom of strawberries in the states of Florida, Alabama, Mississippi, Louisiana and Texas. Little domage was done to plants, but the shipments were heavily reduced in sections from which the crops had started to move, pending the refruiting of the plants, which delayed the movements from four to five weeks.

It seems to me strange that the percentage of apple production in the United States is largest in those varieties which we consider in our northwest country the poorest. Of course, we understand that the Baldwin is a good apple for New York and New England, but that it is not well adapted to this country, yet it seems strange that the Ben Davis should be the second largest in the percentage of production in the United States. The percentages given for 1916 are as follows: Baldwin 17.3, Ben Davis 14.2, Winesap 6.1, York Imperial 5.0, Rome Beauty 4.4, Jonathan 4.2, Northern Spy 3.5, Greening (R. I. Gr.) 3.4, Grimes Golden 2.9, Wealthy 2.7, Oldenburg 2.5, Yellow Newtown 2.5, Staymen Winesap 2.4, Gano 1.9, Yellow Belleflower 1.5, Wagener 1.4, Tompkins King 1.2, McIntosh 1.1, Fameuse (Snow) 1.1, Gravenstein 1.0, Golden Russet 0.8, Limbertwig 0.7, other varieties 18.2. Total, 100.0. Plant only the best. G. L.

FRUIT GROWERS ELECT
Organization Passes Good Year.

Paul H. Weyrauch of Walla Walla, Wash., has been elected president of the Fruit Growers' agency, an organization of fruit growers and shippers of Washington, Oregon, Montana and Idaho at the first annual convention of the organization, recently held at Spokane. J. B. Adams of Leavenworth, Wash., was elected vice president and L. J. Blot of Spokane, secretary.

The following trustees were elected: J. B. Adams and J. F. Sugrue, Wenatchee; C. H. Swigart and W. N. Irish, North Yakima; W. M. Sackett, Montana; B. L. Ingard, Idaho; Paul H. Weyrauch, Walla Walla; L. J. Blot, Spokane; C. A. Malboeuf of Portland, western Oregon; W. T. Gwin, at large; the Hood River trustee to be named later.

The organization decided to retain its present name, there having been an agitation for a change; to organize a traffic bureau within the agency and to reduce the dues of the active members from $100 to $25.

THE FARM GARDEN

Article 10.

Onion Growing

The onion can be grown successfully on most good soils in the northwest. The better the soil the more successfully they can be grown, however. Onions are distinctly a surface vegetable, and, therefore, the plant food they require must be near the surface.

Onions should be planted with a drill or by hand in rows from 10 to 15 inches apart. The large varieties should be thinned to stand from two to four inches apart in the row, but the smaller varieties, such as pickling onions, can stand closer.

One ounce of seed ordinarily will sow a row of 200 feet in length and give a stand that will be satisfactory after a little thinning. It is not safe to plant them much more sparingly than this, though if the seed was distributed evenly and all came up an ounce would plant a considerably longer row. The seed should be planted only deep enough to insure moisture to bring them up. If this moisture can be had at half an inch deep, it is better than if it is necessary to cover the seed an inch.

Onions should be cultivated frequently during the growing season, but the cultivation should be shallow. It is not well to have the bulbs exposed too much to the light, but neither is it well to have any considerable amount of dirt over them. They must grow practically on the surface to do best.

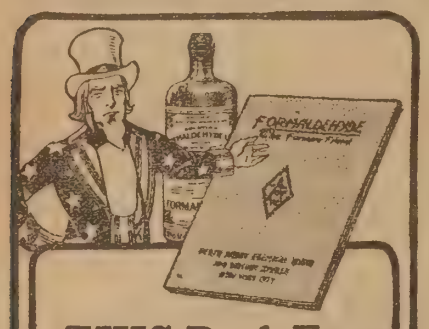
Make practical use of waste land on the place.

In most localities the onion will mature readily without any artificial assistance, but where cool weather and much moisture retard ripening, it is well to break the tops over. This will hasten maturing. They should not be harvested while the tops are green. After breaking the tops down, several days should elapse before the onions are harvested. Then they should be dug and spread out in the air in a dry place to cure, after which they may be stored away for the winter in a cool place.

Onion Sets.

To produce green onions for early spring use, sets should be used. These may be purchased in the spring, or they may be grown. A good, commonly followed plan is to plant several feet of onion row in the spring, very thick. Let them live during the summer without thinning. Harvest them in the fall the same as large onions, and the small, dwarfed bulbs will be your sets for early green onions the next spring.

The "potato" onion, which is a common large onion with a number of hearts, is also used for sets. The multiplier, which grows a cluster of small bulblets at the top of the stalk, is also used frequently with good success.



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is the best and most economical disinfectant—officially endorsed as *the* standard treatment for seed grains. It absolutely rids seed grains of smuts and fungus growth, also scab and blackleg diseases of potatoes—destroys germs in stables, cellars, kennels and chicken houses. One pint bottle costing 35c treats 40 bushels of seed. Write for the new illustrated Hand Book—FREE.

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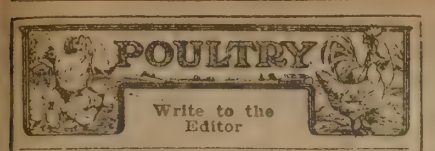
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Capital $1,000,000. Write for Particulars.



JAMES DRYDEN
Editorial Contributor

Laying Contest

All Northwest Report for March

The pens making highest records from October 15, 1916, to March 31, 1917, in the contest at Pullman are as follows:

	Eggs.
J. A. Hanson, Corvallis, Ore., W. Leghorns	358
Oregon Agricultural college, W. Leghorns	327
J. R. McRae, Milwaukie, Ore., W. Leghorns	317
Bliss & Bliss, Southworth, Wash., Barred Rocks	310
P. W. Harres, Seattle, Wash., W. Leghorns	307
Abercrombie & Witbeck, Kerrisdale, B. C., S. C. Reds	307
G. M. Brown, Los Angeles, Cal., S. C. Reds	301
J. D. Balmat, Spokane, Wash., W. Leghorns	300
A. Unsworth, Sardis, B. C., W. Leghorns	297
C. Daniels & Sons, Hoquiam, Wash., W. Rocks	294
B. O. Longsdorf, Lebanon, Ore., W. Minorcas	294
Auburn P. Farm, Auburn, Wash., S. C. Reds	293
L. F. Solly, Westholme, B. C., W. Leghorns	287
Ill-a-hee, Grants Pass, Ore., Barred Rocks	284
D. Tancred, Kent, Wash., Leghorns	283
Mrs. W. T. Thompson, Bozeman, Mont., W. Orpingtons	282
George D. Adams, Victoria, B. C., W. Wyandottes	280
Oregon Agricultural college, Corvallis, Ore., Barred Rocks	279
V. L. Garner, Wenatchee, Wash., W. Wyandottes	279
Martin Bros., Dolphin, Wash., C. Wyandottes	273
C. C. Coolidge, La Grande, Ore., W. Leghorns	271
Valley Farm, Boerne, Texas, W. Leghorns	266

The best individual record for the month was 27 eggs, made by a Rhode Island Red hen owned by Williams of St. Helens, Ore.

Raising Pullets

Experiments on Average Cost

By JAMES DRYDEN.

With good average results a Leghorn pullet should be raised for from 45 to 50 cents, this being reduced according to the income from the sale of cockerels, says A. G. Phillips in Bulletin 196 of the Indiana experiment station.

The extract given herewith is taken from a popular edition of the bulletin, which does not give the prices of the feed on which the figures are based. The full report will doubtless supply the omission. At present prices of grain the cost would be greater. There were 999 chicks used in the experiment, and the mortality was 17 per cent, or 170 chicks. The test ran for 24 weeks, up to about laying maturity of the pullets.

The data on the subject is not very extensive. The bulletin therefore fills a long-felt want. The following is a summary of the experiment:

1. Based on four seasons' work and several thousand chicks hatched it required 1.83 eggs set for every Leghorn chick hatched.

2. The cost of hatching these eggs was $.021 per chick, which when added to the cost of eggs increased the total cost of a chick when hatched to $.057.

3. Based on the first 12 weeks of life it took 5.69 pounds of grain and mash and 5.07 pounds of milk, costing $.1434 to feed a Leghorn chick.

4. During the same time it took 2.59 pounds of grain and mash and 3.41 pounds of milk, costing $.084, to produce one pound of gain.

5. When figuring cost of feed, fuel, labor and litter the whole cost of one pound of gain was $.154.

6. The average Leghorn pullet 24 weeks old and ready to lay weighed 2.75 pounds.

7. The feed was by far the most expensive item in the cost of rearing chicks.

8. On the basis of 100 chicks hatched and a 17 per cent mortality the per cent pullets and the per cent cockerels were 40.1 and 42.9, respectively.

9. The time of hatching greatly influenced the rate of growth of chicks, price of broilers, net cost of growing and weight of pullets at laying age. Early hatching paid best.

10. Early cockerels were sold at a profit. May-hatched broilers sold at a loss.

11. The gross average cost of a pullet was $.434. This, less profits in cockerels, made the net cost $.381.

12. Mortality varied and influenced the final cost. The average mortality of 999 chicks was 17 per cent.

OPEN-FRONT HOUSE

How Much Floor Space Is Needed?

To the Editor: Will you please define an "open-front" hen house? Do you mean a house with muslin front, or with absolutely no covering for opening? What is the proper height for roosts above dropping boards to prevent hens from walking in droppings when getting on and off the roosts? How much floor space should be allowed each hen when confined?

L. C. B., Belmont, Idaho.

An open-front poultry house is one that has its front one-half (more or less) entirely open, or covered with poultry netting. If the opening is covered with muslin or canvass I would call it a curtain-front house. It is not always understood this way. Some poultrymen look upon the open-front and curtain-front as synonymous. Some use the house as an open-front all the year except during very cold weather, when curtains are put on the windows. When I have spoken of open-front houses I have meant houses without any curtains at any time of the year, but I am aware that some writers do not make the distinction.

As to the question about roost perches they are usually placed about eight or 10 inches above the platform, or high enough to allow the use of a hoe in cleaning the boards. About the only way to keep the fowls from walking on the droppings is to use wire netting under the perches covering all the platform. This is sometimes done, though most poultrymen think it is hardly worth the trouble. The fowls do not usually walk on the droppings board very much if they have outside yards or free range. If they were confined in the house all the time it would be a good idea to use the wire netting.

If the fowls are confined in the house all the time they should have about five square feet floor space per fowl. With free range all the year they will do with about half that space.

J. D.

Over 800 Pullets Working.

The L. K. Cogswell poultry yards at Chehalis, Wash., have a flock of over 800 pullets, from which they get about 3000 eggs a week. The poultry stock is White Leghorns and Wyandottes. Mr. Cogswell sells eggs all over the country, as well as supplying a large local demand. He has 12 incubators at work

Many Farm Sales.

Many farms are changing hands these days at Burley, Idaho. Ed. Vieth sold his 160 to Simmons Bros., of Layton, Utah; A. B. Chapman sold 85 acres to Dave Jones of Ogden at $150 per acre; Melvin Walker sold an 80 south of Springdale to Joe Fife, and A. W. Anderson sold to Elmer Brothers.



Save the Thresh Bill From the Stack

"We easily saved our thresh bills by using the Red River Special," says E. L. Hall and 14 other farmers near Densmore, Kansas. Here's the thresher that's *different*. It *beats out* the grain—gets it by force. Built for *fast work* too. Saves the thresherman's time—crowds more bushels into the day's work and more pleased customers into the season's run. Write and learn why the big money makers use the

Red River Special

It Saves the Farmer's Thresh Bill

If you own a tractor, hook it to Junior Red River Special and clean up an extra income this fall. Thresh your own grain and your neighbors' too. Our "Junior" is the ideal thresher for working with a tractor or gasoline engine. It is a younger brother to the Red River Special. Small enough to make home threshing pay—big enough to make money in custom work.

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DOUBLE CABLE BASE

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The constant grind, twist and shock will soon show what they are made of.

Federal Tires are built with tough treads to better withstaand this wear and tear and give best possible traction.

They are safe tires, too. For in the base, next to the rim, are four strong steel cables which hold the tire securely to the rim under severest strains. Yet it slips off easily when necessary.

Made in white Rugged and black Traffik non-skid treads. Sold by leading dealers everywhere.

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10 Day Try-out

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SEATTLE
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The Motor Car
On the Farm

Tractors in Use on Farms.

To secure data as to the number of gasoline and kerosene tractors in actual use on farms during the coming season, the office of farm management in cooperation with the bureau of crop estimates, addressed in February, 1917, inquiries to 32,000 selected correspondents. They were asked to report all tractors which were to be actually used in farm operations this season. Steam driven tractors, tractors purchased but not delivered, tractors out of commission or not to be used this season, and tractors employed for road or work other than farming wer to be excluded.

The figures given below indicate the number of tractors the actual ownership of which was clearly established and the intention to use which during the season, implied. The figures are offered not as an actual count of all tractors, but as indicating the relative employment of tractors in farming in the different sections.

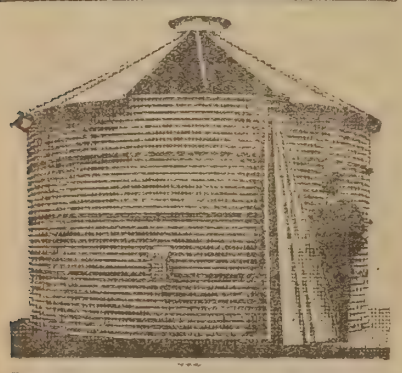
Alabama	313	Nebraska	1,773
Arizona	23	Nevada	19
Arkansas	336	New Hampshire	23
California	1,358	New Jersey	107
Colorado	525	New Mexico	83
Connecticut	47	New York	1,210
Delaware	34	North Carolina	452
Florida	71	North Dakota	2,137
Georgia	543	Ohio	1,305
Idaho	262	Oklahoma	795
Illinois	3,202	Oregon	318
Indiana	1,852	Pennsylvania	595
Iowa	2,223	Rhode Island	30
Kansas	2,287	South Carolina	387
Kentucky	348	South Dakota	1,527
Louisiana	343	Tennessee	442
Maine	53	Texas	2,235
Maryland	190	Utah	88
Massachusetts	91	Vermont	75
Michigan	945	Virginia	434
Minnesota	1,575	Washington	209
Mississippi	377	West Virginia	90
Missouri	1,141	Wisconsin	904
Montana	808	Wyoming	186
Total			34,371

One Tractor Demonstration.

The manufacturers of farm tractors have arranged to put on one national tractor demonstration for 1917. There is to be no restriction of any kind placed upon private demonstrations that may be either put on by manufacturers or dealers. Every entry in the national demonstration must be by a bona fide manufacturer of tractors, tractor plows or other tractor drawn implements and a member of the National Association of Tractor and Thresher Manufacturers or the National Implement and Vehicle association.

The manufacturers regard this class of machinery as the most important element of farm equipment; at the present time the scarcity of farm help and the shortage of horses make it necessary for the farmer to look to this new system of farming as a relief and an aid to increased production, which is so much required by the country under prevailing conditions, and will be, for the next few years.

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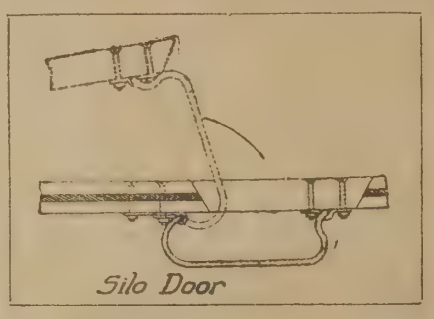
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Inventions
By C. J. LYNDE, Macdonald College, Quebec.

Silo Door.

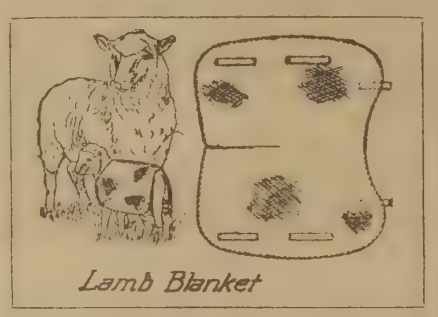
The hinges here are so shaped that they swing the door in and sidewise to leave a clear passage; also they


Silo Door

serve as the rungs of a ladder when the door is closed. The door is beveled and is held closed by the ensilage.

Lamb Blanket.

This blanket is used to protect lambs on the open range for the first few days after birth; it is attached by an


Lamb Blanket

elastic band under each leg and by tapes across the breast. The head, neck and tail are left exposed to enable each ewe to identify her lamb by the odor.

Art of Tree Surgery.

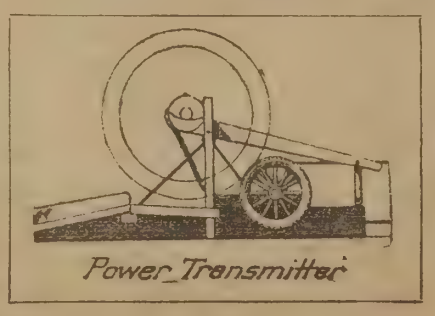
The usual method of repairing trees by filling the cavities with cement or asphalt is unsatisfactory, it is stated, because these materials do not possess the physical properties of wood.


Tree Surgery

This invention describes a method of reenforcing trees by means of blocks of wood which have the same physical properties as the wood of the tree.

Power Transmitting Apparatus.

This simple device has two long levers by means of which the rear


Power Transmitter

wheel of the automobile are elevated and held in contact with two friction wheels.

Make One Spraying Do the Work

Combine your sprays. Lime-Sulphur, Arsenate of Lead and Bordeaux are death to Scale, Codling Moth, and Fungus, but harmless to Aphis, Pear Psylla, Leaf Hopper, Woolly Aphis, Thrips and other soft-bodied, sap-sucking insects that are destroying fruit and fruit profits. For these pests spray with

Black Leaf 40
40% Nicotine
Kills Aphis

Manufactured by The Kentucky Tobacco Product Co., Incorporated, Louisville, Ky.
By using it with other sprays, you make one spraying do the work of two, or even three. Experiment Stations and Agricultural Colleges recommend combined sprays.

Now is the time to spray. Do you realize that Aphis is a positive menace to your orchard profits? Black Leaf 40 won't fail you. It's highly concentrated. Requires only small quantity. Cost is low. Use it, and grow better fruit.

FREE SPRAY CHART AND BOOKLETS
Come in and get a Spray Chart free. Shows when to spray and what strength of Black Leaf 40 to use.

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Yakima Rex Spray Co.
Yakima Valley Fruit Growers' Association.

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Wenatchee North Central Fruit Distributors.
Wells & Wade.
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And many other dealers in important fruit districts.

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For Every Man to Do His Duty.

It is not necessary that all enlist, but it is necessary that all put forth their best effort in the production of food.

Plant every available space, plant with seeds especially selected for the Inland Empire.

PLANT THE INLAND COMPANY SEEDS.

They Are Reliable and Dependable. In Catalog 35.

INLAND SEED CO.
Spokane, Washington

Settle Their Hash—

It's easy to exterminate squirrels with Kill-Em-Quick. They love it and it gets 'em every time. Put it out, next day they're all dead. Costs only 1 cent an acre.

Kill-Em-Quick GOPHER AND SQUIRREL POISON

It's safe and easy to use. Simply stir into moistened oats or ground feed and drop into burrows. They'll find it. The odor attracts 'em. We guarantee it—money back if it fails. 100-acre size $1.00, 40-acre size 50c. Get it from your local dealer. If he cannot supply you, we express $1.00 size prepaid upon receipt of the price. Send for Free Squirrel Book.

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When you write to advertisers, be sure to say that you saw their advertisement in this paper.

Till the Sea and Reap a Harvest

Fisherman and Farmer Are Brothers in the Work of Food Production

By H. H. BUSHNELL

The last week in March I spent a day in Astoria and another at Seaside and still another in between and along the road. I suppose somebody will wonder what connection I could find between farming and fishing and beaches. There is a close connection, nevertheless.



Tilling the Sea.

The fisherman tills the sea as surely as the farmer tills the land, and he reaps in toil and peril a harvest which he never sowed. The government is beginning to sow his seed for him, however. Think of the fisheries that are established over the country nowadays. Just as surely as the farmer, he produces food for the consumer. The farmer and the fisherman are brothers in work.

Look at this picture and see the wagons of the fisherfolk. See their tools spread out to dry. Their tasks are different, but both bring food to the hungry.

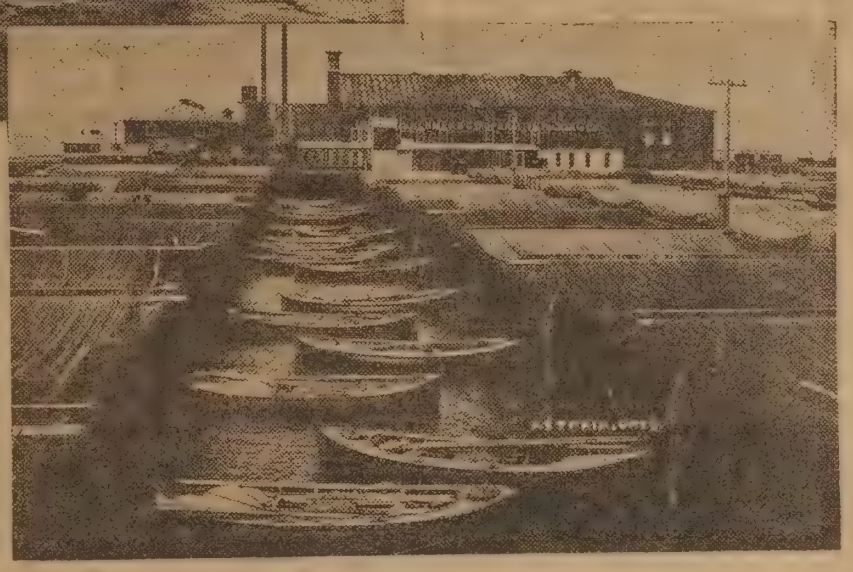
At Flavel the enthusiastic citizens are confident that a great industry will build up, and perhaps they are right. Here are to be the wharves and docks for the reception and loading of grain from the farms of the Inland Empire. Here, they feel confident, will be the last port for the wheat before it leaves its native land.

Has the ocean no nearer relationship than that of a workshop for a kindred class? Yes, for it is the source of salvation for our crops. I stood on the beach at Seaside and looked right into the rain factory and saw it manufactured before my eyes. The clouds stooped down and drank deep from the cup of the Pacific; they grew big with water, and when they rose with moisture dripping from their mouths and floated inland across the hills that sought to bar them out, their fog garments sifted and tore on the cedars and firs as they went.

Many a rich and fertile land far from the sea was once an ocean bed and an ocean beach. There, as here, waves patiently, endlessly toiled in from the great deeps, beating with their feet upon the sand, dragging shell and ocean ooze with them and leaving it a faint deposit upon the shelving shore. What dark designs are held by the surf at Seaside?

Each day it advances and retires, advances and retires, responding to the touch of another planet and working slowly to some great end. The treasure trove for which one looks along the beach is small, provided he looks for pieces of eight or Spanish doubloons or rare wonders floated in from foreign lands. Perhaps the task of the waves is infinitely more dignified and important than to bring some odd shell or queer memento to a curious stranger.

As I stood on the shore and looked westward across the miles of tumbling water it seemed to me that never had I felt the immensity of nature and the pettiness of man so much before. I saw the sun sink like a ball of fire, quenched in a waste of blazing water, and I heard the dull reiteration of the ocean—the boom of the great sea knocking at the door of a continent.



Wagons of the Fisherfolk.

Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER IX.

Red letter day of the cold winter when father returns "with some very fat and very salty bacon."

For the same reason that a stone rolling downhill gathers no moss, I doubt if Dave Reavis has ever gathered unto himself a bunchgrass farm. Around our Coulee camp was 60 to 100 miles of bunchgrass, riding in any direction you chose, with occasional springs and shading clumps of willow and "sarvice" bushes—ideal locations for stock farms. But Dave was "jest lookin' around." He liked to unhitch at night; but when morning came and the horses were full of grass, it "jest seemed a sin not to hitch up." So on our last morning together in the Coulee bottom he sang "Captain Jinks," hitched up, cracked his whip and departed. We saw him no more.

In spite of the monotony of our first winter on the claim which father selected the spring Dave left us, I remember a good deal about it. Our house was a double-boarded, one-room shanty, built with an ax, a saw and a hammer. It was rather flimsy, with walls two boards thick with no studding and air space between; so when the thermometer went to 20 below outside it was apt to be about 10 below inside. However, we had a good deal of woolen bedding, and a thick feather mattress, and we managed to get through the winter in fair comfort, though the loneliness and silence of the days and nights was a severe trial, and I know that it was only the hope of "a home of their own" which nerved my mother and father for the ordeal of the silent, lonely winter days.

My bed was a sort of trundle affair, with no wheels. At night I dragged it from under the larger bed, and in the morning it was my duty to make it up neatly, being sure to pack the covers down tightly so that the whole affair could be shoved under the larger bed and out of the way. During the coldest weather I would have gotten cold, I think, except for my two cats. One curled up under the covers by my feet, the other insisted in curling up on my pillow, often against my hair. Their bodily warmth really helped a good deal when the temperature in the room ranged sufficiently below zero to freeze a two-gallon pail of water solid during the night.

A good deal of joking went the rounds of our scattered pioneer neighborhood in reference to our various trials and tribulations, among which was the freezing in the houses at night. Dave Reeves, who kept a small store several miles from us, told his customers that one night he had a 50-gallon barrel of vinegar freeze and burst three feet from a stove which he kept red-hot all night.

The second winter on our prairie farm in the Big Bend was a hard one. The snow came early, before we were ready for it; it stayed late in March, long after we were ready for it to go. Before the big snow, which virtually bottled us in, father had gotten in a ton or so of oats to feed the horses. He hoped to supplement the oats with bunchgrass; but the snow was four feet on the level, with a crust on top over which you could drive a narrow-tired wagon without breaking through. In addition to the oats he managed to get a small load of straw from a settlement 20 miles away; but the straw gave out in midwinter.

I remember clearly how worried father was about his two horses, and how eagerly the hungry animals plunged their noses into the oats he gave them thrice daily; but they wanted hay, straw, any kind of roughage on which to "fill up." In desperation father chopped through the ice crust here and there, hunting for the tops of the taller clumps of prairie sage which he occasionally found. Often it took a whole day to find what he could carry under one arm. This he offered to the horses in lieu of hay, and they nibbled at it, but it was rough fare.

It was the bark and tules of our dugout stables which saved our team, I think. The stable had been dug into a side hill and roofed over with willow poles of good size, covered with large masses of tules overlaid with earth. The horses ate all the bark from the poles, thrust their noses between the poles and pulled out the tules, and even gnawed the wood itself.

It seemed that the four feet of snow never would melt. Toward spring the warm Chinook winds blew in from the southwest, and the snow began to melt. Squirrels, thin and weak, got tired of hibernating and burrowed up through the snow to nibble at the tops of sage and rye grass. At last the bunchgrass appeared. Then father turned the horses out and went out with a shovel to help them hunt a meal. He would dig out a bunch of grass, and the starving animals would crowd each other to be at it first. It was a thankful occasion.

That winter our own supplies were

(Continued on page twenty-three.)

Ye Have Heard That It Was Said by Them of Old Time.

THE SECOND LAW.

"Thou shalt not make unto thee any graven image, or any likeness of anything that is in the heaven above, or that is in the earth beneath, or that is in the waters under the earth; thou shalt not bow down thyself to them nor serve them; for I, the Lord, thy God, am a jealous God, visiting the iniquity of the fathers upon the children unto the third and fourth generation of them that hate Me, and showing mercy to thousands of them that love Me and keep My commandments." — Exodus 20: 4-6.

We do not bow down and worship graven images here and now, not literally, but the principles on which this second commandment are founded are of as much importance and apply as well today as they did when they were first traced on the tables of stone.

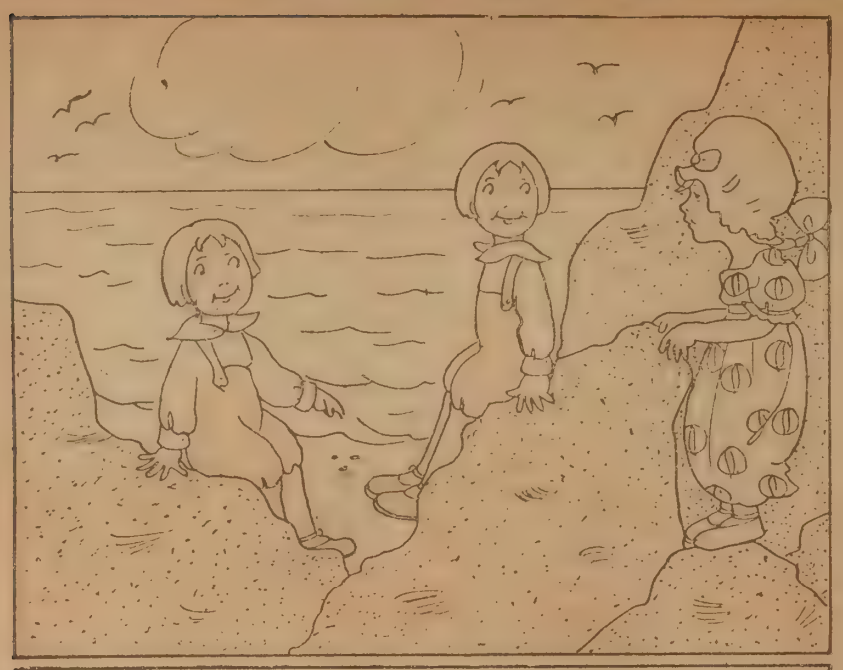
There is but one right and proper attitude of man toward God, and that is an attitude of love and worship. This is just as true and just as necessary as that the bones of our bodies belong in certain positions. If we get a bone out of place—out of joint, we call it—first comes pain and agony, then follows a crooked growth and we are cripples unless we put it back in its right place. It is the same with our position toward the Almighty, and if we persist in not loving and worshipping our souls grow crooked and distorted.

The penalty reaches farther, for it embraces the law of heredity, and our limping and diseased spirits are handed down as a handicap to our children, our grandchildren and our great grandchildren. Bodily tendencies are not the only things inherited.

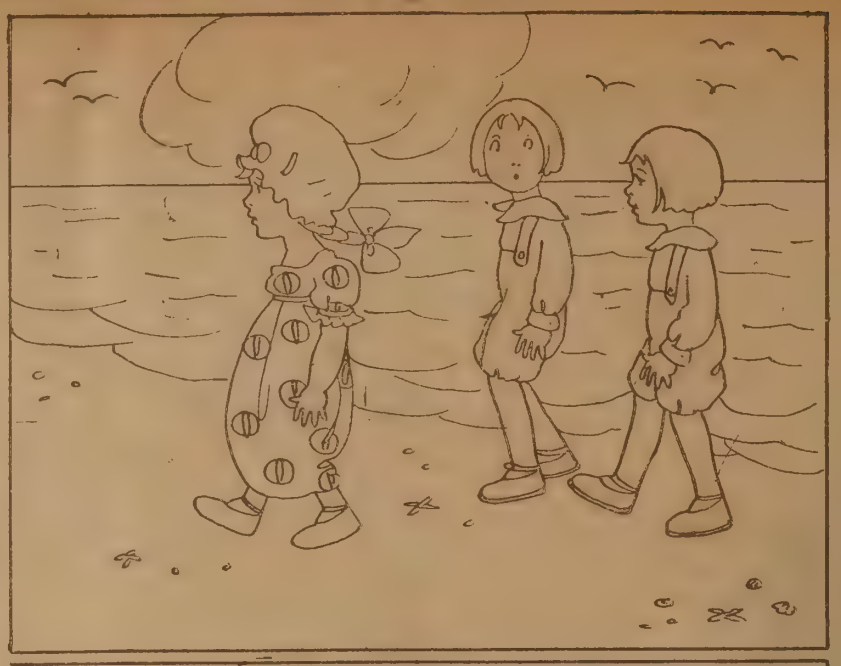
However stern this law appears, the last clause of the commandment indicates that it works for good as well as for evil. A right relationship with God brings a blessing which may be enjoyed by us and handed down to our descendents as a more valuable heritage than lands or money in the bank.

One of the tenets of our human law is that ignorance of law is no excuse. There is no excuse for being ignorant of these great foundation stones of truth and justice—the ten commandments. —H. H. B.

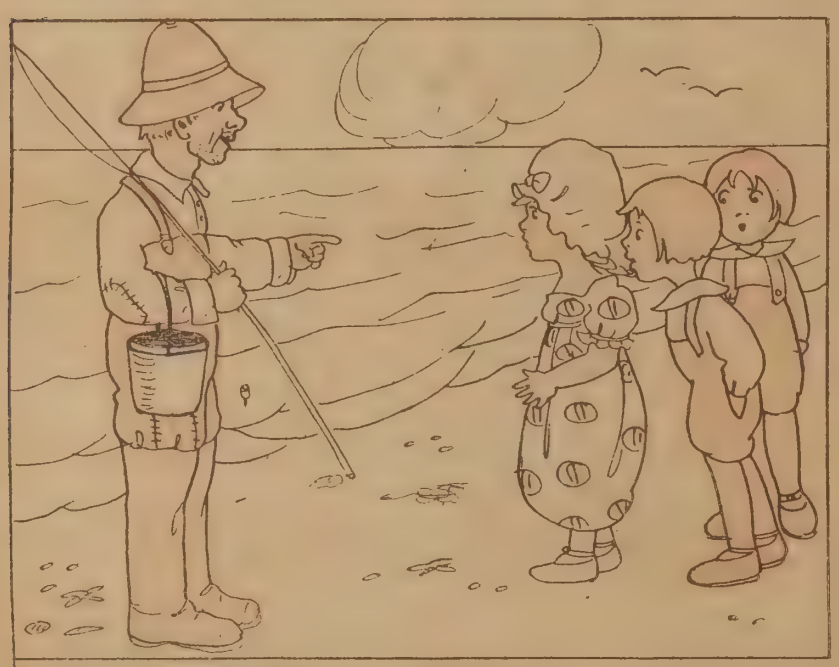
SUSIE AND THE TWINS ARE SHIPWRECKED



The children three were shipwrecked on
A lone and rocky shore,
And now they're climbing down the rocks
The country to explore.



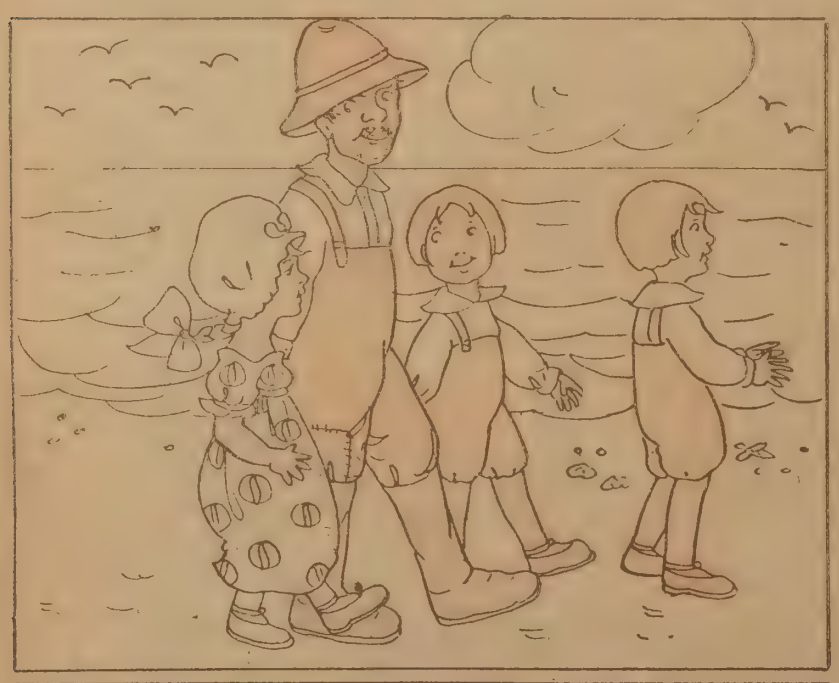
"I wish I was at home again," said Sue.
"And so do I,"
Said Snicks and Snooks, and then the three
Of them began to cry.



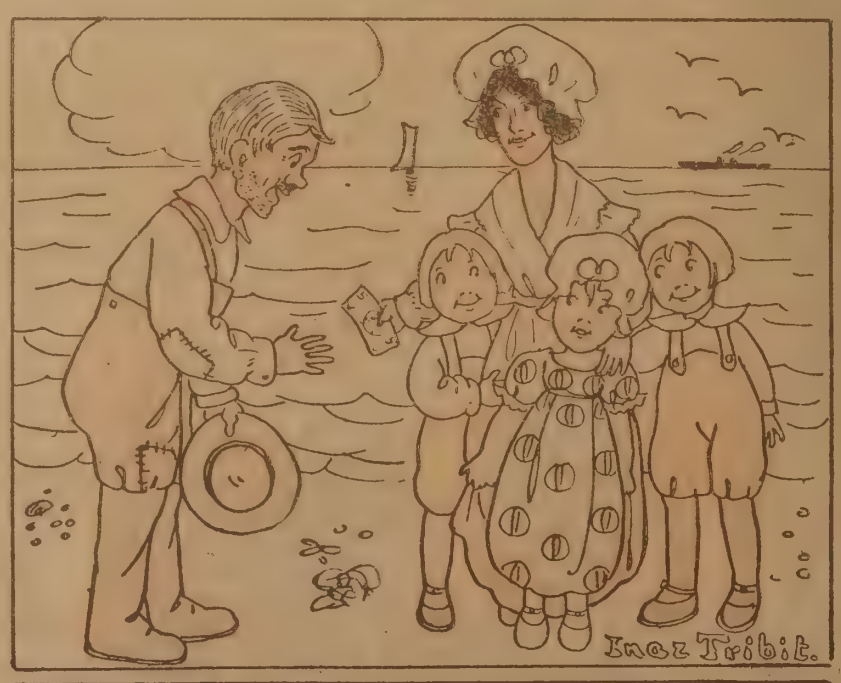
A fisherman soon met them, and
They told their mournful tale.
Said he, "I'll quickly take you to
Your mother without fail."



Now when their mother came to call
The children in for tea
And found that they were lost, alas!
How full of grief was she!



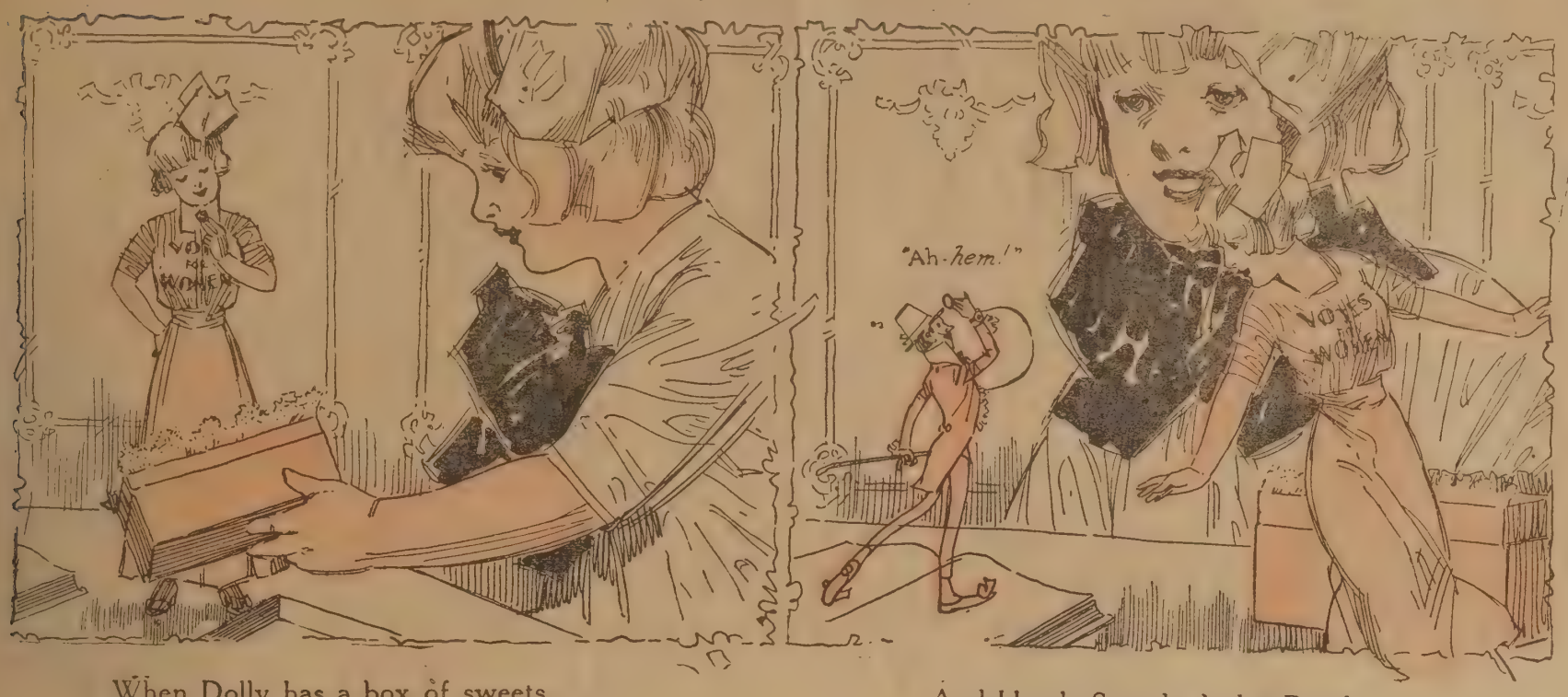
The man then told the children that
Their boat had turned around
And had not brought them far from home—
Soon they'd be safe and sound.



He took them to their mother,
Who rewarded him, and said:
"Oh, thank you, sir! I was afraid
My children dear were dead."

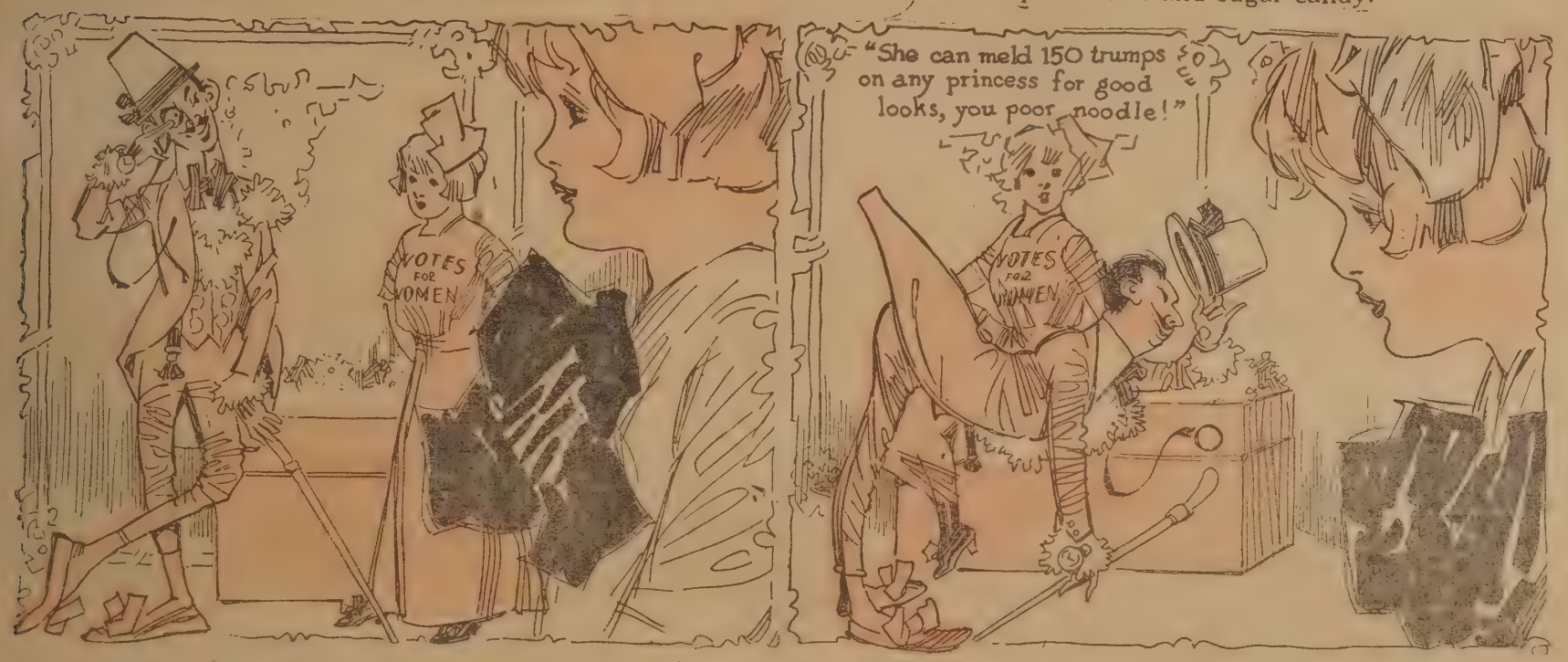
DOLLY DIMPLE LEARNS THAT SPEECH IS OFTEN SUGARY





When Dolly has a box of sweets
She's generous with whom she treats—

And Handy-Spandy Jack-a-Dandy
Loves plum cake and sugar candy.



So out he comes from Dolly's book.
"Why, Dot," he says, "how well you look!

"Quite like a princess fair, I vow."
"The candy's gone," says Dolly, "now.

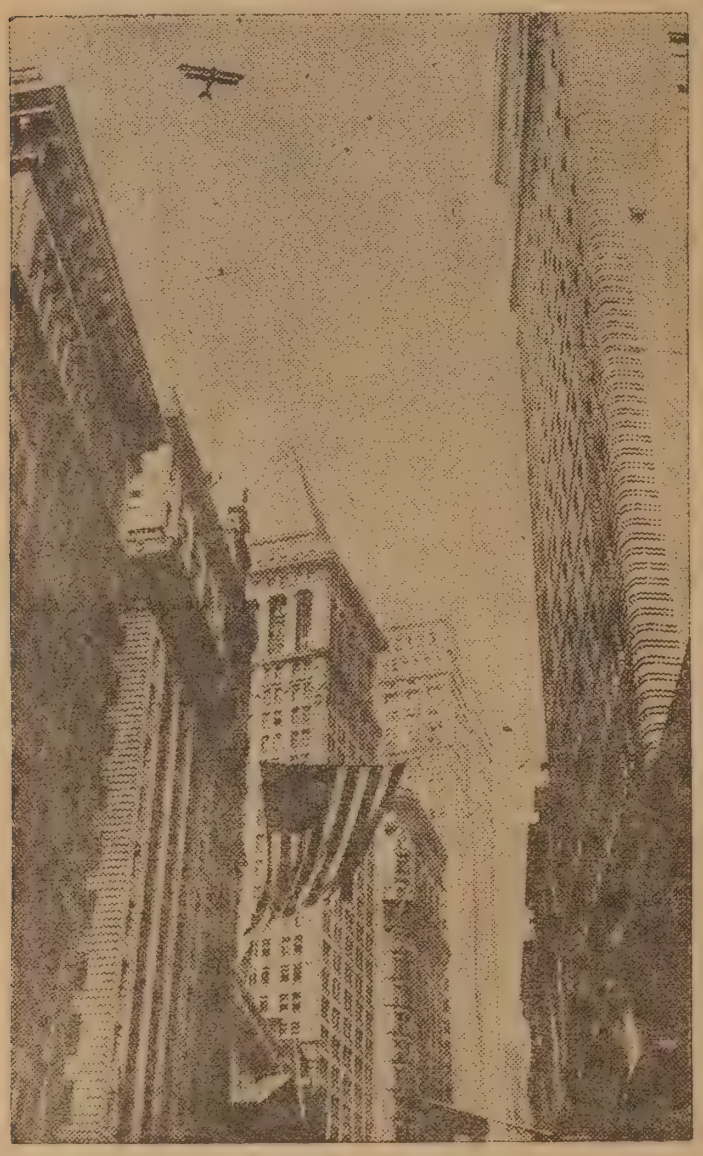


"Too bad there's nothing left for you.
No sooner said than Jack's gone, too.

Says Dot, "With some who compliment
The speech is not the main intent."

All the World's a Stage, and All the Men and Women Merely Players

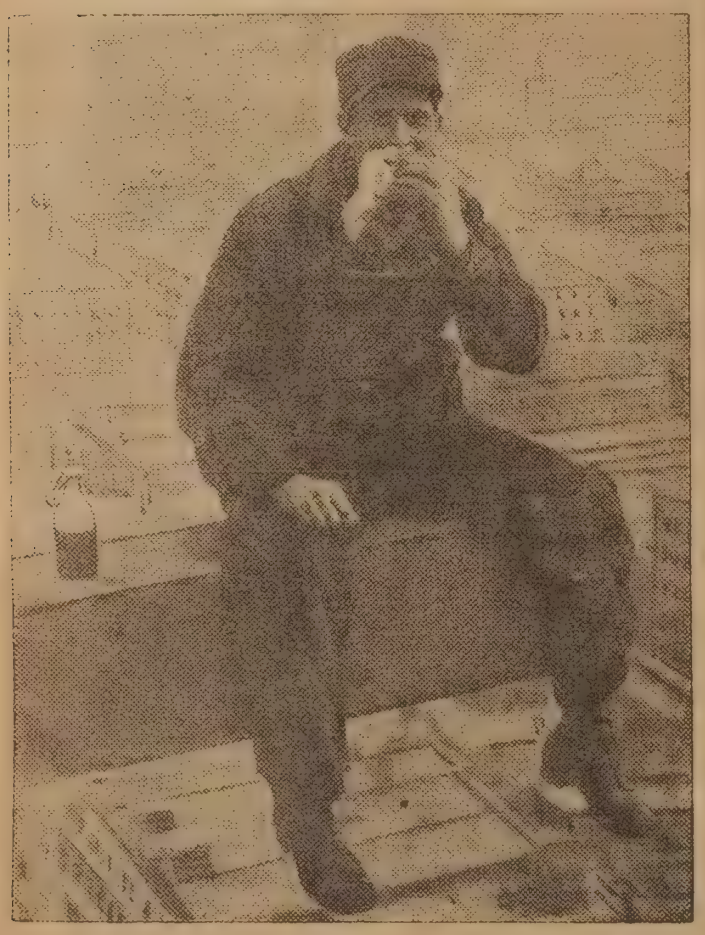
The "Modern Paul Revere"



Copyrighted by International Film Service.

The anniversary of the battle of Lexington was celebrated in many cities throughout the country. In New York a dozen "modern Paul Reveres" rode over the city of skyscrapers in aeroplanes and bombarded the streets with recruiting literature. This picture shows an aeroplane flying over lower Manhattan, far above the skyscraper canyons.

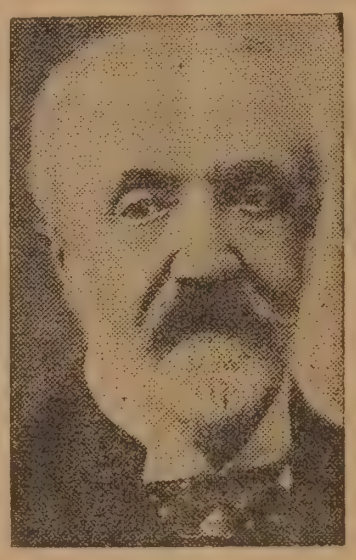
Daredevils of Industry



Copyrighted by International Film Service.

The "Flying McGintys" of "Skinnum's Circus" have nothing on "Fatrick Casey, structural iron worker," when it comes to taking startling risks and performing hair-raising feats. Here you see a structural iron worker calmly seated on a beam 325 feet above the sidewalk of New York's financial district having his lunch.

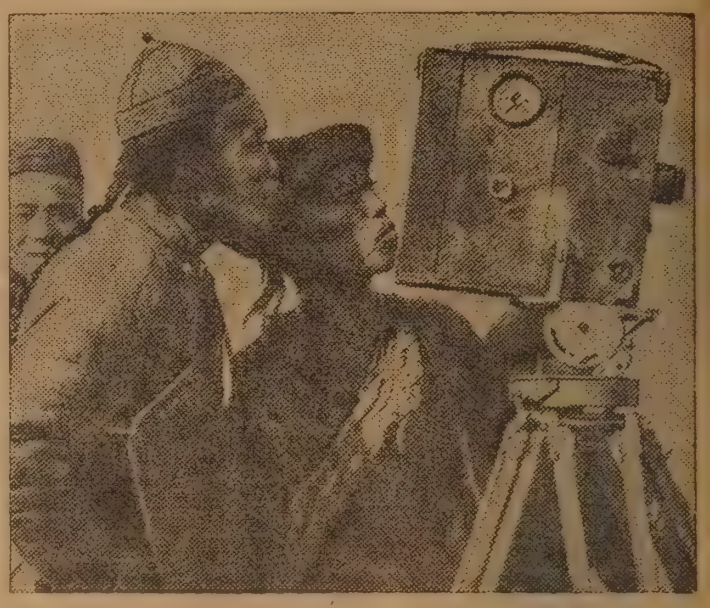
To Be Russian Ambassador



Copyrighted by Purdy, Boston.

Baron Roman Romanovitch Rosen is now on his way to the United States to take up his duties as ambassador representing the new Russian government. Baron Rosen was Russian ambassador to the United States from 1905 to 1911, when he was succeeded by M. Bakhmetieff, who tendered his resignation after the revolution which overthrew the czar.

The "Movies in China"



Copyrighted by International Film Service.

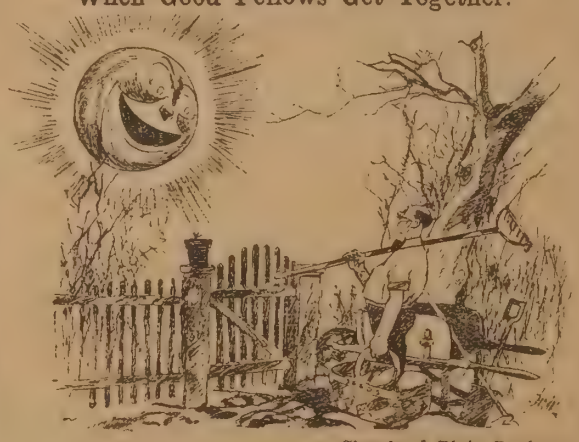
The "movies" have at last invaded China and it is reported that they are making a tremendous hit there. Not only have films which were produced in the United States and other countries been exhibited with Chinese titles, but also films which were produced in China with Chinese actors are now being shown. Wherever the producing companies work the most intense interest is aroused among the local populace. In the above picture is shown two citizens of the Chinese republic in the act of having the mysteries of a moving picture camera explained to them.

She'll Feel So Much Better When All Those Troublesome Old Crowns are Out



—Kansas City Star.

When Good Fellows Get Together.



—Cleveland Plain Dealer.

Packers Are Loyal.



The head of the Armour Packing commpany has tendered the entire billion-dollar beef industry of Chicago to the United States government for the duration of the war. Mr. Armour acted for himself and for the Swift, Cudahy and other interests.

First Aid.



—Brooklyn Eagle.

She'd Be a Dandy Recruiting Officer.



—El Paso Times.

Contest's Over; We Still Live

We Congratulate and Commiserate Ourselves and You

By the Contest Editor.

After long delay occasioned by the necessity of conducting a second tie-breaking contest, winners in the figure puzzle have been determined. First prize goes to August Anderson of Pullman, Wash. It amounts to $275, representing the original prize of $200, plus 50 times the amount paid by Mr. Anderson on subscription. Mr. Anderson drew a line through 500 dots in the first tie-breaking puzzle which was participated in by 919 persons who obtained the correct solution of the figure puzzle, 6971.

For second prize Mrs. N. M. Lauby, of Nez Perce, Idaho, and Joseph Vitek, of Northport, Wash., were tied with a total of 491. A letter puzzle, requiring the participants to draw lines around letters and spell as many words as possible, was sent to Mrs. Lauby and Mr. Vitek. Mrs. Lauby succeeded in ringing 109 words and Mr. Vitek 74. This put Mrs. Lauby in second place and entitled her to $145. Mr. Vitek dropped to third place and received $90.

The complete list of prize winners follows, the number first appearing after the name and address being the number of dots pierced and the last figures representing the amount of money received as a prize:

LIST OF PRIZE WINNERS.

August Anderson, route 1, box 70, PULLMAN, Wash., 500, $275; Mrs. N. M. Lauby, NEZ PERCE, Idaho, 491, $145; Joseph Vitek, NORTHPORT, Wash., 491, $90; Mrs. O. C. Ethell, CHENEY, Wash., 490, $65; Asa Simmons, 138 E. Gallaway street, WEISER, Idaho, 489, $40; Willis M. Fisher, COLBERT, Wash., 488, $20; E. C. Martin, box 148, OAKESDALE, Wash., 487, $20; George W. Harris, OAKESDALE, Wash., 486, $7; Roy Grinstead, SILETZ, Ore., 483, $7; Harry L. Bailie, CHENEY, Wash., 482, $7.

James Whitelaw, E211 17th avenue, SPOKANE, Wash., 482, $7; H. C. Foos, 335 S. Cedar street, COLVILLE, Wash., 481, $7; Rufus E. Wood, NORTONS, Ore., 481, $7; Mrs. R. V. Peringer, box 1, BELMONT, Wash., 480, $7; E. F. Pitman, PAISLEY, Ore., 479, $7; E. F. PITMAN, PAISLEY, Ore., 479, $7; E. A. Schilling, WITHROW, Wash., 479, $7; William L. Borthwick, 142 E. 61st street, PORTLAND, Ore., 478, $2; Mrs. John French, box 49, TIETON, Wash., 477, $2; Charles A. Stratton, route 5, box 95, WALLA WALLA, Wash., 472, $2; Charles E. Frey, route 1, box 29, SHERWOOD, Ore., 472, $2; LeRoie Hutchinson, ROCKLAND, Idaho, 472, $2.

G. W. Harlow, box 455, WALLACE, Idaho, 472, $2; J. S. Lee, box 288, GOLD HILL, Ore., 471, $2; J. E. Throw, box 302, LEAVENWORTH, Wash., 470, $2; C. J. Homme, MARSHFIELD, Ore., 467, $2; P. K. Ahlquist, 2409 West Mission avenue, SPOKANE, Wash., 467, $2; N. W. Sine, DIETRICH, Idaho, 467, $2; M. A. Harrison, route 1, DEEP CREEK, Wash., 466, $2; W. G. Greenslade, OAKESDALE, Wash., 466, $2; J. W. Lewis, IONE, Wash., 465, $2; Perry W. Bradley, LOWGAP, Wash., 465, $2; Paul W. Johnson, route 1, BURLINGTON, Wash., 465, $2.

Contestants Enjoyed It.

That the contestants enjoyed the work is proved by the large number of solutions returned on the first tie-breaking contest. Nearly 900 solutions of the dot puzzle were submitted and the totals ran surprisingly high.

To the winners The Farmer extends congratulations. To those who did not win we extend hearty good wishes and believe you all have gained something from the effort. The Contest Editor has enjoyed the fun and has escaped with a whole neck in spite of Arthur Lamb's halter. In fact, he is almost sorry to break up the party.

Following appear the names of those persons who submitetd correct solutions of the figure puzzle and who participated in the dot puzzle contest:

Washington.

ASOTIN—Mrs. George A. Tuttle, K. G. Ramsdell, Harry Palmer; **ALBION**, C. E. Nafzger; **APPLETON**, Carl Anderson; **AMERICAN LAKE**, George A. Southwell; **AUBURN**, J. H. Schwartz; **ANATONE**, Nettie Shearer; **AMBER**, Mrs. Nora L. Shinn.

BOUNDARY—Felix Schultz; **BEVERLY**, Ray Grove, Eva L. Steele; **BLUESTEM**, M. McKee; **BREWSTER**, W. S. Holcomb; **BELLINGHAM**, E. S. Brown, Lizzie Larsen, Christina H. Randrup, Mrs. W. C. Getz; **BURKE**, Harry E. Dodge; **BELMONT**, J. H. Watt, Mrs. R. V. Peringer; **BURLINGTON**, Paul W. Johnson, Mrs. Ada B. Jewell; **BENTON CITY**, Mamie McKnight; **BOSSBURG**, Carl Brauner, V. I. Tucker.

COVELLO—Mrs. Mona Low; **CARLTON**, John L. Cook; **CHRISTOPHER**, James L. Stewart; **CHEWELAH**, A. D. Plumb, C. H. Clendenon, H. L. Sanderson; **CHENEY**, Harry L. Bailie; **COLVILLE**, Miss Mildred Mauser, Mrs. H. C. Adkins, H. C. Foos, D. R. Dealy, Mrs. D. J. Knauss, C. C. Pollock, J. W. Norton, W. P. Forbes, M. H. C. Allen; **COULEE CITY**, Nels Jensen; **COLBERT**, William C. Durgin, Willis M. Fisher, Mrs. W. C. Burchett; **CARROLLS**, Frank Palmer, Helen Palmer; **CLARKSTON**, Mrs. J. W. Horton, J. D. Carman; **COLLEGE PLACE**, P. H. Tomlinson, Mrs. Fred Brown; **CRESTON**, Paris J. Kern; **COLUMBIA FALLS**, Mrs. Leroy Johnston; **CHELAN**, W. H. Harding, P. W. Cole; **CHEHALIS**, Fred S. Mathias, Emil Bicker, H. S. Atkins; **CASTLE ROCK**, G. H. Huntington; **CAMANO**, L. C. Regnier; **CARLTON**, A. W. Sweat; **CLE ELUM**, Mrs. W. G. Taylor; **CURLEW**, Mrs. W. C. White; **COLFAX**, C. E. Walker, Arthur Brenner, Mrs. Walter C. Johnson; **CHENEY**, Mrs. O. C. Ethell; **CHATTAROY**, George S. Davis; **CHESAW**, Charles E. Wiltfong; **CEDONIA**, Sidney Singleterry; **CUNNINGHAM**, Mrs. R. H. Phillips; **CONWAY**, Alfred H. Utgard.

DAISY, Mrs. W. L. Hagler; **DALKENA**, E. C. Sontag, Johnny L. Davaz, Weston Larkin; **DEEP CREEK**, Mrs. Lizzie Postlewait, M. A. Harrison, Mrs. Fred Moeller; **DUNGENESS**, Donald McInness, Ralph Towne; **DENISON**, John H. Milius; **DAVENPORT**, Will Williams, Mrs. May R. Yale, Mrs. R. H. Rodgers, Walter M. Morgan, Fred Mayer; **DEER PARK**, Guy Edwards, Evan Berg.

ELBERTON—J. S. Baumgartner; **ELLENSBURG**, E. D. Collins, J. H. Glidden; **ELK**, C. L. Carver; **EVERETT**, Fred A. Howard, P. D. Webb; **ELMA**, Henry B. King, James F. Crook; **ESPANOLA**, E. Hedin, Albert A. Hedin; **ENDICOTT**, Bernice Jones; **EDWALL**, J. Hall Adams; **EPHRATA**, S. G. Bise, Mrs. T. R. Holland; **EVERSON**, J. D. Lakin; **ENUMCLAW**, H. D. Boardman.

FREEMAN — Mrs. Hattie Faulkner; **FARMER**, Edith E. Larson; **FRIDAY HARBOR**, Peter Hansen; **FAIRBANKS**, C. F. Zimmerman; **FERNDALE**, Carl J. Menze, A. C. Palmer; **FAIRFIELD**, Ben H. Burtch, Noma Fine, Fred Fine, W. A. Tuttle; **FRANCES**, John Kuttel; **FAIRMOUNT**, Walter Moa; **FIR**, John F. Conrad, Carl Danielson; **FORT CANBY**, B. J. Goodall; **FORD**, Charles Holdridge; **FREELAND**, Emerson Jones; **FLORENCE**, E. W. Goodridge.

GALVIN—H. L. Gillingham; **GRANGER**, L. J. Wangarden, Miss Minnie Lambers, Rollin E. Morris; **GORDON**, George W. White; **GARFIELD**, Mrs. Paul Kilde, Charles Carter, Harry C. Conklin, Frank Dicus; **GRAY**, Charles L. Higbee; **GOVAN**, Homer Johnson; **GIG HARBOR**, William Murray; **GLOYD**, R. Miller Larsen.

HILLYARD—Mrs. Ernest A. Haydon; **HARTLINE**, Mrs. A. W. Liles; **HANFORD**, John Loson, F. E. Goodell, W. Thomas; **HATTON**, Jacob Schaefer, **HUNTERS**, Roy Stevenson; **IRBY**, Samuel Schafer; **IONE**, J. W. Lewis; **ISSAQUAH**, V. C. Dechesne.

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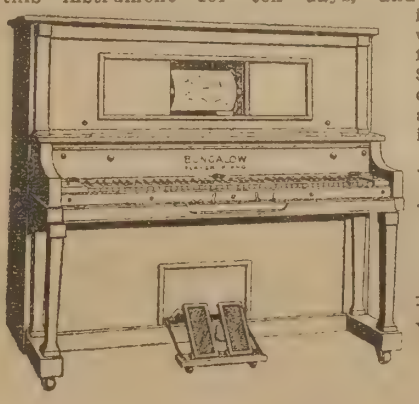
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Farm Loan On City Plot?

A. S. Porter writes from Sedro-Woolley, Wash.:

"Can a person borrow money on acreage inside the city limits through the federal land bank? For instance I have a little less than an acre of land in Sedro-Woolley, which I call my poultry ranch, and on which I can carry 1000 head of poultry

I wish to buy more land adjoining this, but have been told that I can not borrow money from the federal land bank on land within the city limits."

While we can not answer this question authoritatively we are of opinion that Mr. Porter would be a qualified borrower. The clear intent of the law is to make loans for agricultural needs and the test is the use to which the land is put, not artificial distinction like town boundaries. There is a great deal of land in the country on which loans could not be made. Lands used, for illustration, as a brickyard or for mining or lumbering could not be made security for loans under this law.

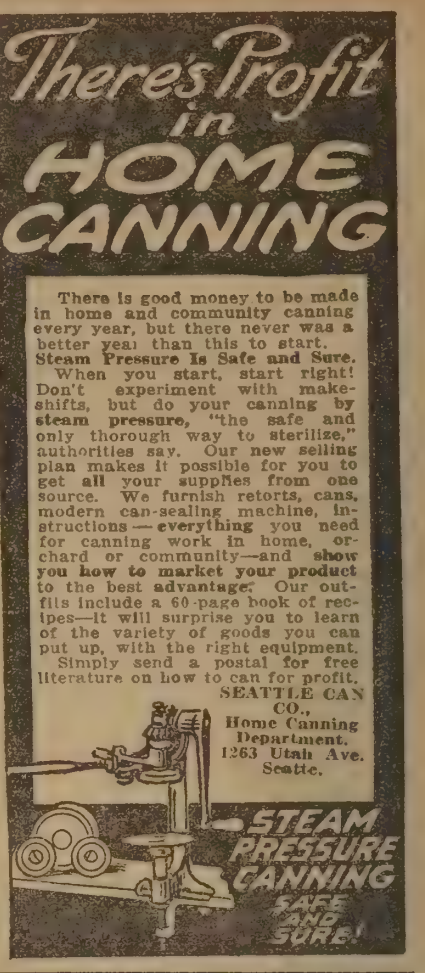
We should think that the owner of a little farm, even though within town limits, would be permitted to join an association and borrow the same as any other member up to 50 per cent of the farm land value of his holdings plus 20 per cent of the insured value of his improvements.

"YOU ARE DOING FINE"

Please find my check enclosed for subscription to your good paper. You are doing fine. I very much appreciate the paper.

W. G. JONES.

Issaquah, Wash.



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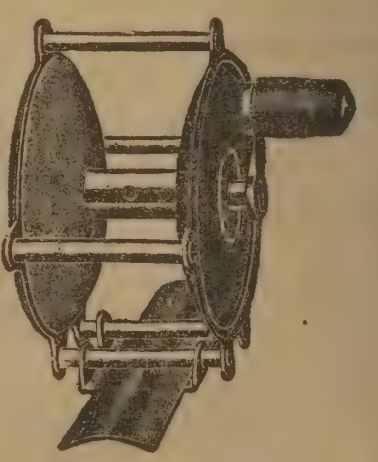
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WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merril Co.

CHAPTER XVII.—(Continued.)

This failure meant so much to her; it meant that she would never be Brandon's wife, but would go to France to endure the dreaded old Frenchman. At that thought a recoil came. Her spirit asserted itself, and she stamped her foot and swore upon her soul it should never be; never! never! so long as she had strength to fight or voice to cry, "No." The thought of this marriage and of the loss of Brandon was painful enough, but there came another, entirely new to her and infinitely worse.

Hastily arranging her dress, she went in search of Brandon, whom she found and took to her room.

After closing the door she said: "I thought I had reached the pinnacle of disappointment and pain when compelled to leave the ship, for it meant that I should lose you and have to marry Louis of France. But I have found that there is still a possible pain more poignant than either, and I can not bear it; so I come to you—you who are the great cure for all my troubles. Oh! that I could lay them here all my life long," and she put her head upon his breast, forgetting what she had intended to say.

"What is the trouble, Mary?"

"Oh! yes! I thought of that marriage and of losing you, and then, oh! Mary Mother! I thought of some other woman having you to herself. I could see her with you, and I was jealous—I think they call it. I have heard of the pangs of jealousy, and if the fear of a rival is so great what would the reality be? It would kill me; I could not endure it. I can not endure even this, and I want you to swear that——"

Brandon took her in his arms as she began to weep.

"I will gladly swear by everything I hold sacred that no other woman than you shall ever be my wife. If I can not have you, be sure you have spoiled every other woman for me. There is but one in all the world—but one. I can at least save you that pain."

She then stood on tip-toes to lift her lips to him, and said: "I give you the same promise. How you must have suffered when you thought I was to wed another."

After a pause she went on: "But it might have been worse—that 's, it would be worse if you should marry some other woman; but that is all settled now and I feel easier. Then I might have married the old French king, but that, too, is settled; and we can endure the lesser pain. It always helps us when we are able to think it might have been worse."

Her unquestioning faith in Brandon was beautiful, and she never doubted that he spoke an unalterable truth when he said he would never marry any other woman. She had faith in herself, too, and was confident that her promise to marry no man but Brandon ended that important matter likewise, and put the French marriage totally out of the question for all time to come.

As for Brandon, he was safe enough in his part of the contract. He knew only too well that no woman could approach Mary in her inimitable perfections, and had tested his love closely enough, in his struggle against it, to feel that it had taken up its abode in his heart to stay, whether he wanted it or not. He knew that he was safe in making her a promise which he was powerless to break. All this he fully explained to Mary, as they sat looking out the window at the dreary rain which had come on again with the gathering gloom of night.

Brandon did not tell her that his faith in her ultimate ability to keep her promise was as small as it was great in his own. Neither did he dampen her spirits by telling her that there was a reason, outside of himself, which in all probability would help him in keeping his word, and save her from the pangs of that jealousy she so much feared; namely, that he would most certainly wed the block and ax should the king get possession of him. He might have escaped from England in the Royal Hind, for the wind had come up shortly after they left the ship, and they could see the sails distinctly through the gloom as she got under way. But he could not leave Mary alone, and had made up his mind to take her back to London and march straight into the jaws of death with her, if the king's men did not soon come.

He knew that a debt to folly bears no grace, and was ready with his principal and usance.

CHAPTER XVIII.

Whether or not Brandon would have found some way to deliver the princess safely home, and still make his escape, I can not say, as he soon had no choice in the matter. At midnight a body of yeomen from the tower took possession of the Bow and String, and carried Brandon off to London without communication with Mary. She did not know of his arrest until next morning, when she was informed that she was to follow immediately, and her heart was nearly broken.

Here again was trouble for Mary. She felt, however, that the two great questions, the marriage of herself to Louis, and Brandon to any other person, were, as she called it, "settled"; and was almost content to endure this as a mere putting off of her desires—a meddlesome and impertinent interference of the Fates who would soon learn with whom they were dealing and amend their conduct.

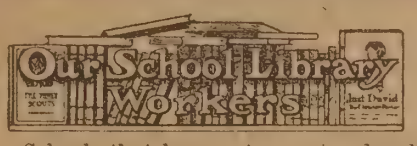
She did not understand the consequences for Brandon, nor that the Fates would have to change their purpose very quickly or something would happen worse, even, than his marriage to another woman.

On the second morning after leaving Bristol, Brandon reached London, and, as he expected, was sent to the Tower. The next evening Lady Mary arrived and was taken down to Greenwich.

The girl's fair name was, of course, lost—but, fortunately, that goes for little with a princess—since no one would believe that Brandon had protected her against himself as valiantly and honorably as he would against an-

(Continued on following page.)

To The Washington Farmer: "Enclosed find my remittance for $1.50 for three years' subscription to The Washington Farmer.. It has got real life for the present farmers." H. CAUSLAND.
Anacortes, Wash.



Schools that have not as yet ordered books for what subscription credits are due, should not delay too long. A good many books have to be ordered from the publishers direct and this causes from 10 days to three weeks' delay oftimes. So send in your choice of books at the earliest possible date.

Books have gone forward this week to the following teachers: A. D. Plumb, Chewelah, Wash.; Mrs. G. C. Lorenz, Colville, Wash.; May McCorkell, Route. No. 2, Spokane, Wash.; Miss Erma V. Bowman, Turner, Wash.; Clara Philips, Prescott, Wash.; Miss Viola Willey, Richland, Wash.; Clara E. Gollehon, Ford, Wash.; Jennie Neat, Olympia, Wash.; H. W. Blackenburg, Colville, Wash.; F. V. French, Athol, Idaho; Rita Mahoney, Spokane, Wash., route No. 6; Margaret Spicer, Spokane Wash., route No. 4.

The boys and girls have all worked hard and faithfully to get books for their school libraries. We take this opportunity to thank both the members of the Red and Blue teams, as well as the teachers, for the fine spirit of cooperation that has been shown throughout the whole school season, with a hope that we may be able to again work as congenially with them during the coming season.

INDIVIDUAL SUBSCRIPTION CONTEST.

This is the last week of the contest. The winner of the $5 in gold will be announced in a coming issue. The three leading candidates have the following subscriptions to their credit:

Dorothy Rauch, Chewelah, 23.
Bessie Webb, Ford, Wash., 14.
Loyal C. R. Snyder, White Swan, Wash., 12.

APPRECIATION.

Ford, Wash., April 10, 1917.
The Washington Farmer,
Spokane, Wash.

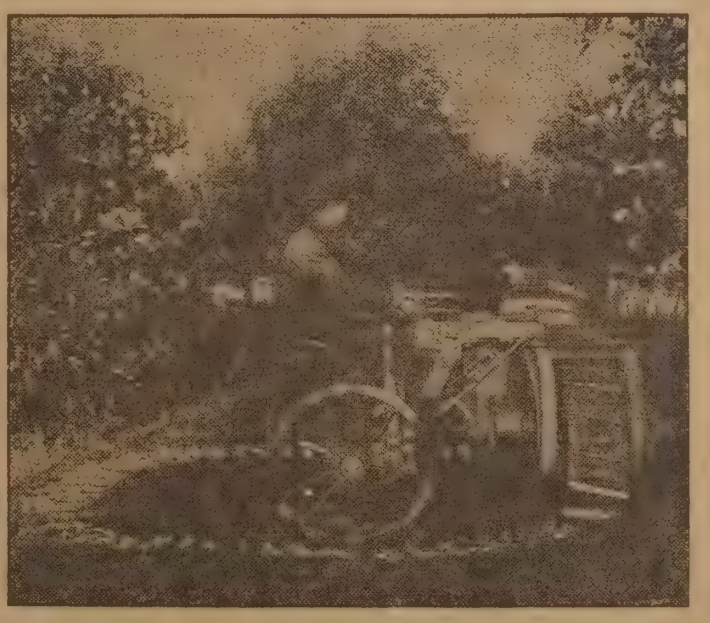
Dear Sirs: I am glad to state, not only for myself, but also on behalf of the children of the Ford school, that we are more than pleased with the shipment of books received yesterday. We feel well paid for our work in the school library contest. Very truly,
CLARA E. GOLLEHON,
Teacher.

School Savings Bank.

A savings bank has been started in the school at Lind, Wash., with David Philips as cashier. The children will receive 4 per cent interest, compounded semi-annually, upon their savings. During the first three days that the bank was in operation 15 children made deposits amounting to nearly $12.

Buys Carload Hogs.

Doss Gallaher, one of the Big Bend wheat growers, as well as being a hog king, recently returned from Okanogan, at which place he purchased a carload of porkers. He also bought considerable stock, as well as other holdings belonging to A. Demery of Okanogan. He has shipped between 20 and 30 cars of cattle and hogs from Mansfield recently.



A TrackPULL tractor doing 10-foot circle turn in orchard cultivation. It will be seen that the track is at right angles to the operator.

Five Mutton Breeds

Suitable for Place on the Farm

(Continued from page three.)

than the Shropshire by 25 to 50 pounds. It is more rugged of frame, a little less compact and more upstanding. The ears and face are a characteristic blackish brown. The face is longer than that of the Shropshire. The nose inclines to be Roman and the ears are heavy, carried to the side and facing forward. The necks are a trifle longer than the ideal mutton standard would dictate and the shoulderblades average rather high and prominent. The body is deep, the back strong and broad, the rump long and the leg well developed. The bone is heavy, the entire sheep rugged and vigorous of build. The fleece is lacking in length, density and quality as compared with the Shropshire. The average ewe shears 6 to 9 pounds and the ram 9 to 12.

The Hampshire is now one of our most desirable farm breeds. It has popular size and in prolificacy compares well with the Shropshire. The ewes are good mothers excelling the Shropshire. Idaho experiment station results show that the lambs of this breed make more rapid gains than do the lambs of any of the breeds under investigation. Three years' records of relative gains of lambs comparing five of our leading and more popular breeds, show that Hampshire lambs make daily gains approximately 20 per cent greater than the gains of any of the other breeds in the test. Either as pure bred or grades, Hampshire lambs make the most desirable kinds of feeders.

The Oxford.

The Oxford Down sheep comes from Oxford county in central England and is the result of a Hampshire-Cotswold cross. In some characteristics the Oxford, as might be inferred from its ancestry, resembles the Hampshire. The Oxford, however, is larger, averaging for the rams 275 pounds and 200 pounds for the ewes, is more rangy and bigger framed in every way, the face a lighter brown, the nose with less tendency to Roman and cars smaller and more erect as compared with the Hampshire. The fleece is the longest of the down breeds, covers the body well with a characteristic foretop on the poll of the head.

The Oxford has size over the breeds just described, ranks with them in prolificacy and stands a little above the Shropshire in average weight of fleece. The lambs are good feeders, but hardly rank with Hampshire lambs in growthiness and with the Shropshire in early maturity. The breed makes an excellent sheep for the farm, but is not as popular as the other five mentioned.

Sells Choice Stock.

S. W. Shoemaker of Garfield has sold three head of choice Holstein stock to W. F. Smith, a Colfax dairyman. The stock consisted of two head of milk cows, grade Holsteins, and one registered bull calf, and brought Mr. Shoemaker the neat sum of $260. He sold another Holstein grade cow to a Colfax party for $100.

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from preceding page.)

other. The princess being much more unsophisticated than the courtiers were ready to believe, never thought of saying anything to establish her innocence or virtue, and her silence was put down to shame and taken as evidence against her.

Jane met Mary at Windsor, and, of course, there was a great flood of tears.

Upon arriving at the palace, the girls were left to themselves upon Mary's promise not to leave her room; but, by the next afternoon, she, having been unable to learn anything concerning Brandon, broke her parole and went out to seek the king.

It never occurred to Mary that Brandon might suffer death for attempting to run away with her. She knew only too well that she alone was to blame, not only for that, but for all that had taken place between them, and never for one moment thought that he might be punished for her fault; even admitting there was fault in any one, which she was by no means ready to do.

The trouble in her mind, growing out of a lack of news from Brandon, was of a general nature, and the possibility of his death had no place in her thoughts. Nevertheless, for the second time, Brandon had been condemned to die for her sake. The king's seal had stamped the warrant for the execution, and the headsman had sharpened his ax and could almost count the golden fee for his butchery.

Mary found the king playing cards with de Longueville. There was a roomful of courtiers, and as she entered she was the target for every eye; but she was on familiar ground now and did not care for the glances nor the observers, most of whom she despised. She was the princess again and full of self-confidence; so she went straight to the object of her visit, the king. She had not made up her mind just what to say first, there was so much; but Henry saved her the trouble. He, of course, was in a great rage, and denounced Mary's conduct as unnatural and treasonable; the latter, in Henry's mind, being a crime many times greater than the breaking of all the commandments put together, in one fell, composite act. All this the king had communicated to Mary by the lips of Wolsey the evening before, and Mary had received it with a silent scorn that would have withered any one but the worthy bishop of York. As I said, when Mary approached her brother, he saved her the trouble of deciding where to begin by speaking first himself, and his words were of a part with his nature—violent, cruel and vulgar. He abused her and called her all the vile names in his ample vocabulary of billingsgate. The queen was present, and aided and abetted with a word now and then, until Henry, with her help, at last succeeded in working himself into a towering passion, and wound up by calling Mary a vile wanton in plainer terms than I like to write. This aroused all the antagonism in the girl, and there was plenty of it. She feared Henry no more than she feared me. Her eyes flashed a fire that made even the king draw back as she exclaimed: "You give me that name and expect me to remember you are my brother? There are words which make a mother hate her first-born, and that is one. Tell me what I have done to deserve it? I expected to hear of ingratitude and disobedience and all that, but supposed you had at least some traces of brotherly feeling—for ties of blood are hard to break—even if you have of late lost all semblance to man or king."

This was hitting Henry hard, for it was beginning to be the talk in every mouth that he was leaving all the affairs of state to Wolsey and spending his time in puerile amusement. "The toward hope which at all poyntes appeared in the younge kynge" was beginning to look, after all, like nothing more than the old-time, royal cold fire, made to consume but not to warm the nation.

Henry looked at Mary with the stare of a baited bull.

"If running off in male attire, and stopping at inns and boarding ships with a common captain of the guard doesn't justify my accusation and stamp you what you are, I do not know what would."

Even Henry saw her innocence in her genuine surprise. She was silent for a little time, and I, standing close to her, could plainly see that this phase of the question had never before presented itself.

She hung her head for a moment and then spoke: "It may be true, as you say, that what I have done will lose me my fair name—I had never thought of it in that light—but it is also true that I am innocent and have done no wrong. You may not believe me, but you can ask Master Brandon"—here the king gave a great laugh, and of course the courtiers joined in.

"It is all very well for you to laugh, but Master Brandon would not tell you a lie for your crown—" Gods! I could have fallen on my knees to a faith like that—"What I tell you is true. I trusted him so completely that the fear of dishonor at his hands never suggested itself to me. I knew he would care for and respect me. I trusted him, and my trust was not misplaced. Of how many of these creatures who laugh when the king laughs could I say as much?" And Henry knew she spoke truth, both concerning herself and the courtiers.



Mary was the target for every eye.

With downcast eyes she continued: "I suppose, after all, yo uare partly right in regard to me; for it was his honor that saved me, not my own; and if I am not what you called me I have Master Brandon to thank—not myself."

"We will thank him publicly on Tower Hill, day after tomorrow, at noon," said the king, with his accustomed delicacy breaking the news of Brandon's sentence as abruptly as possible.

With a look of terror in her eyes, Mary screamed: "What! Charles Brandon.....Tower Hill?....You are going to kill him?"

"I think we will," responded Henry; "it usually has that effect, to separate the head from the body and quarter the remains to decorate the four gates. We will take you up to London in a day or two and let you see his beautiful head on the bridge."

"Behead—quarter—bridge! Lord Jesu!" She could not grasp the thought; she tried to speak, but the words would not come. In a moment she became more coherent and the words rolled from her lips, as a mighty flood tide pours back through the arches of London Bridge.

"You shall not kill him; he is blameless; you do not know. Drive these gawking fools out of the room, and I will tell you all." The king ordered the room cleared of everybody but Wolsey, Jane and myself, who remained at Mary's request. When all were gone the princess continued: "Brother, this man is in no way to blame; it is all my fault—my fault that he loves me; my fault that he tried to run away to New Spain with me. It may be that I have done wrong and that my conduct has been unmaidenly, but I could not help it. From the first time I ever saw him in the lists with you at Windsor there was a gnawing hunger in my heart beyond my control. I supposed, of course, that day he would contrive some way to be presented to me * * *"

"You did?"

"Yes, but he made no effort at all, and when we met he treated me as if I were an ordinary girl."

"He did?"

"Yes."

"Horrible."

Mary was too intent on her story to heed the sarcasm, and continued: "That made me all the more interested in him since it showed that he was different from the wretches who beset you and me with their flattery, and I soon began to seek him on every occasion. This is an unmaidenly history I am giving, I know, but it is the truth and must be told. I was satisfied at first if I could only be in the same room with him, and see his face, and hear his voice. The very air he breathed was like an elixir for me. I made every excuse to have him near me; I asked him to my parlor—you know about that and—and did all I could to be with him. At first he was gentle and kind, but soon, I think, he saw the dawning danger in both our hearts, as I too saw it, and he avoided me in every way he could, knowing the trouble it held for us both. Oh! he was the wiser—and to think to what I have brought him. Brother, let me die for him—I who alone am to blame; take my life and spare him—spare him! He was the wiser; but I doubt if all the wisdom in the world could have saved us. He almost insulted me once in the park—told me to leave him—when it hurt him more than me, I am sure; but he did it to keep matters from growing worse between us. I tried to remember the affront, but could not, and had he struck me I believe I should have gone back to him sooner or later. Oh! it was all my fault; I would not let him save himself. So strong was my feeling that I could bear his silence no longer, and one day I went to him in your bed-chamber anteroom and fairly thrust myself and my love upon him. Then, after he was liberated from Newgate, I could not induce him to come to me, so I went to him and begged for his love. Then I coaxed him into taking me to New Spain and would listen to no excuse and hear no reason. Now lives there another man who would have taken so much coaxing?"

No! by heaven! your majesty," said Wolsey, who really had a kindly feeling toward Brandon, and would gladly save his life, if, by so doing, he would not interfere with any of his own plans and interests. Wolsey's heart was naturally kind when it cost him nothing, and much has been related of him, which, to say the least, tells a great deal more than the truth. Ingratitude always recoils upon the ingrate, and Henry's loss was greater than Wolsey's when Wolsey fell.

(To be continued in the next issue.)

The Difference.

"Who was Gladstone?" asked a member of the examining board.

"A statesman," said one boy. "An orator," said another.

"But what is a statesman?" asked the examiner.

"A man who goes around making speeches," answered the small boy.

"That's not just exactly right," said the gentleman, smiling. "Now I go around making speeches once in a while, but I'm not a statesman at all."

"I know," spoke up a bright little fellow. "It's a man who goes around making good speeches."—Tit-Bits.

Getting It Over With.

"Do you believe in the Darwinian theory?"

"Yes."

"Then, so do I. I'd rather believe in it temporarily than have to argue about it."—Washington Star.

What Flower Does This Represent?



Any person sending the correct answer to the above question before May 11th, together with $1.75, in the form of money order, 2-cent stamps or personal check, will receive THE WASHINGTON FARMER for three years and choice of any 30 of the packets of seeds listed below. The retail value of these is 5c per package, or $1.50 for the thirty packages. The correct answer will be found in the list below.

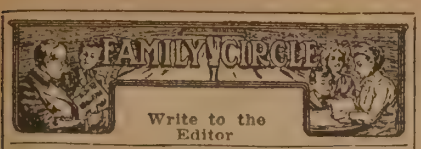
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Yellow Giant Carrot	☐	Dwarf Nasturtium	☐
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Monte Cristo Watermelon	☐	Poppy	☐
Australian Brown Onion	☐	Snapdragon	☐
Yellow Danvers Onion	☐	Rock Cress	☐
Long White Parsnips	☐	California Poppy	☐
Sugar Pie Pumpkin	☐	Larkspur	☐
Field Pumpkin	☐	Baby's Breath	☐
White Tipped Radish	☐	Pink	☐
Early Long Radish	☐	Sweet Rocket	☐
Chartier Radish	☐	Sweet William	☐
Purple Top Turnip	☐	Wallflower	☐
Longstanding Spinach	☐	Bachelor Button	☐
Crookneck Squash	☐		
Hubbard Squash	☐		

If you are not awarded a prize of 30 packets of seeds your money will be refunded. The subscription may be new or renewal, for yourself or some one else. Address

Seed Editor, The Washington Farmer

Review Building, Spokane, Wash.



ALICE W. BARLAND
Editorial Contributor

Little Things

That Make Up the Sum of Life

Dear Girls of the Family Circle:

There are so many things I want to say to you this time I hardly know how to begin. No, that is not quite what I mean. There are a few things I want to say to you in such a way that you will always remember them. How I wish I had all of you sitting around in a great, big circle. It would add to the coziness and "chuminess" if we had a big campfire and a lot of pop corn and fudge. My, what a visit we would have! Well, we can't do that so I will gather you about me in imagination.

We have talked much of obedience, of its great importance. Let us not forget that. There are many things all of us should obey instantly. I am not speaking of obedience to parents now as I have emphasized that repeatedly in other letters.

We should each cultivate the habit of obeying instantly every impulse that prompts us to kindly, upright living. If we have an impulse to do a kind deed, say a pleasant word, give a word of encouragement, it should be instantly obeyed. Try this for even one day and see how full of brightness the world will be. This is one of the things, dear girls, I want you to remember and to practice, for it will bring happiness into your lives.

I think we were to talk about ambition and concentration in this letter.

We will take ambition first. The word has two very different meanings. The first is an eager desire for power or distinction just for its own sake, and the second meaning is a worthy eagerness to accomplish something great and good. In one of the art galleries in Italy there hangs a wonderful picture. It represents a handsome youth on a beautiful horse. He is riding at a great rate of speed. Behind him are people he has frightened out of his path. The road he is traveling is bridged by his sweetheart and he urges his steed right over her prostrate form. Childhood, youth, old age are disregarded, thrust aside or trodden upon in his mad course. The name of this picture is "Ambition."

This is not the kind I want to urge you to cultivate, but it is the other, the worthy desire to accomplish something great and good. This sort of ambition is necessary beyond expression almost, for without it one never amounts to much.

Perhaps you would mention some of the world's great men and women, such as great artists like Raphael, great poets like Tennyson, great inventors like Edison, great reformers like Frances Williard. All of these and very many more have gone into history.

What do you imagine made these people great?

I can tell you. They had ambition which spured them on to accomplish something worth while.

These people who attained to such eminence in their several lines of work reached that high standard only by having first an ideal to work up to, then constantly striving toward that mark. Ambition alone, however, is not sufficient to bring about success. It must be balanced with concentration and the faculty to stick to the undertaking. I have in mind a young girl of 15, whom I observed last Christmas. She was very prompt with her Christmas plans. She had some money to spend and six weeks before Christmas she bought material for making gifts. She bought muslin, silk, lace, ribbon and crochet cotton. She was the first of about 30 girls in her school to stock up with material to work with. She began one thing after another, making mistakes, wasting her material, changing her mind, till she had spoiled most of her material and when Christmas arrived not one present did she have ready to give.

There was another girl in that boarding school the same age, who spent about an equal amount of money for materials. She finished up one dainty article after another, so that each member of her family was included in her list for gifts. There was a dainty little wrapper of soft flannel, all beautifully made with much hand work. A pair of pillow cases hemstitched as nicely as possible, and hemstitched handkerchiefs. Each article was as beautifully done as it was possible to make them and all in good time for getting off by mail.

What made the difference in these two girls? Both had equal ambition at the start, but one lacked persistent "sticktoitiveness." There is no such word, but there ought to be. Concentration of mind on the work at hand is also something we should all practice. Did you ever start upstairs for some article and after getting up there find you had forgotten what you went for? That was lack of concentration. Did you ever find you were reading a book or paper without sensing what the thing was all about? That was lack of concentration. One never gets any good from such reading. The way to accomplish something is to set one's mind to the task till it is finished.

As we come to the close of these friendly letters, girls, I feel rather sorry, for as I have written to you week after week, I have imagined I really knew each one of you. Girls are very interesting and dear to me. I want every girl who reads this page to feel that I am her friend and to understand that I feel a personal interest in each one. Let us remember how we build our characters day by day like the laying of a stone wall. Let us get a vision of the beauty and usefulness of people who stand out strong and true for what is right and live up to the highest ideal we have. Let us be faithful in the small duties and patient in the performance of them, for it is the little things that make up the sum of life.

May each of you girls strive to grow up into pure, well educated, useful women, for the world needs you.

ALICE W. BARLAND.



I slept, and dreamed that life was Beauty;
I woke, and found that life was Duty.
Was thy dream then a shadowy lie?
Toil on, poor heart, unceasingly;
And thou shalt find thy dream to be
A truth and noonday light to thee.
—Hooper

Stop Food Waste

How Thoughtful Women Can Help

"What part of the $700,000,000 annual food waste in the American homes is charged to your home?" is the question put to Yamhill county women by Miss Anna M. Turley, state leader in home economics extension. Continuing, she says: "This $700,000,000 is a conservative figure recently made by the secretary of agriculture.

"The interest of the nation demands that every thoughtful woman in Yamhill county give her sober and earnest consideration to this problem of food conservation.

"Every one may serve her country and her family well by establishing a close guard around the following:

"1. Food preparation—cooking inexpensive foods attractively and so they will be palatable.

"2. Store house—that no food spoils in the house.

"3. Paring and trimming of vegetables and meats to save.

"4. The garbage pail or kitchen sink—that no water in which vegetables are cooked shall go through, and that no left-over scraps get into the garbage.

"5. Food servings—not too much, but enough to meet the needs of the individuals.

"Demonstrate thrift in your home.

"1. By keeping account of expenditures for food and clothing to find out where the leaks are and to stop them.

"2. By planning the meals for your family several days or a week in advance instead of living from 'hand to mouth,' thus providing better balanced meals, saving time and money.

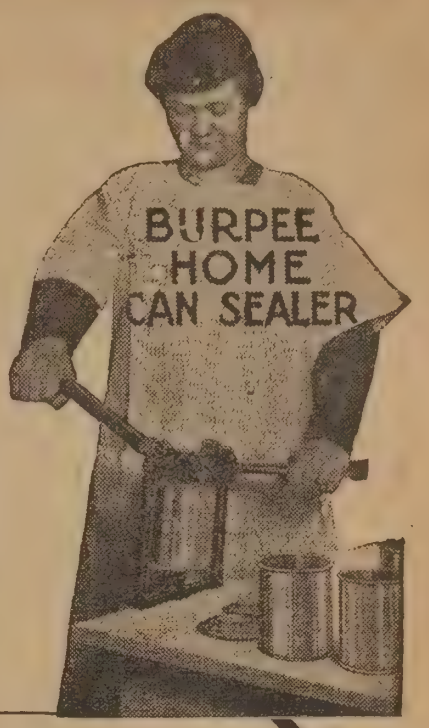
"3. By substituting simpler, less expensive foods, as milk, whole cereals, beans, etc., for the more expensive meats of the same food value, and by using more brown rice instead of the potato, etc.

"4. By keeping your garden working all season by making successive plantings. As fast as the ground is cleared of one crop start a new one.

"5. By canning all you can can of fruits, vegetables and meats in the home.

"If you are not just sure of how to begin work along these various lines, write to your state agricultural college or ask your county agriculturist for instructions and suggestions on vegetable gardening, home canning, household account keeping, meals planning, and the use of less expensive foods.

"Join the army of home guards to conserve our nation's foods."



Follow President Wilson's Advice

SAVE ALL
YOUR PRODUCTS—
DON'T WASTE ANYTHING

Help to correct America's great fault of wastefulness. Raise big crops, and put into cans all that you cannot sell now. There'll be a big demand for them next winter.

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BURPEE HOME CAN SEALER

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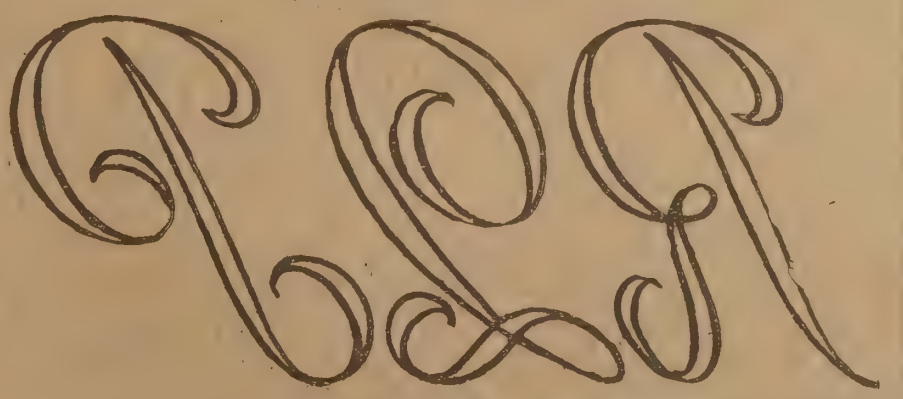
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Script Initials for Embroidery

By WINNIFRED WORTH.



To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of a linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design.



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MINNEAPOLIS, MINN.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Patterns

1306—Ladies' "cover all" apron. Cut in three sizes: Small, medium and large. It requires five yards of 36-inch material for a medium size. Price 10 cents.

2056—Girls' dress. Cut in five sizes: 6, 8 10, 12 and 14 years. Requires 3 3-4 yards of 44-inch material for a 12-year size. Price 10 cents.

1307—Ladies' corset cover and petticoat. Cut in three sizes: Small, medium and large. It requires 3 1-4 yards of 36-inch material for a medium size, without the ruffle, which will require 3 5-8 yards of embroidery. Price 10 cents.

2044-2045—A separate blouse and skirt for sports or dress wear. Blouse 2044 and skirt 2045 are both cut in three sizes, 16, 18 and 20 years. Size 16 will require three yards of 44-inch material for the waist and 2 1-2 yards for the skirt, which measures 2 3-8 yards at the foot. Two separate patterns; 10 cents for each pattern.

1739—Ladies' dress. Cut in six sizes; 34, 36, 38, 40, 42 and 44 inches bust measure. It requires seven yards of 36-inch material for a 36-inch size. Price 10 cents.

1631—Girls' jumper dress, with guimpe. Cut in four sizes: 4, 6, 8, and 10 years. It requires two yards of 27-inch material for the guimpe, and 2 1-8 yards for the dress, for a 6-year size. Price 10 cents.

2055—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Requires 3 3-8 yards of 44-inch material for an 8-year size. Price 10 cents.

1727—A smart suit for the little boy. Cut in four sizes: 2, 3, 4 and 5 years. It requires 2 5-8 yards of 44-inch material for a 4-year size. Price 10 cents.

2065—Ladies' skirt in raised waistline. Cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires 3 3-8 yards of 44-inch material for a 24-inch size. The skirt measures about 3 yards at the foot. Price 10 cents.

2037-2060—Ladies' costume. Waist 2037 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 yards of 44-inch material for a 36-inch size. For the skirt of the same width material, 4 3-8 yards will be required. Skirt 2060 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It measures with plaits drawn out, 3 1-2 yards at the foot. Two separate patterns, 10 cents for each pattern.

2046—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 1-2 yards of 44-inch material for a 38-inch size. The skirt measures about 2 2-3 yards at the foot. Price 10 cents.

2062—Ladies' waist. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 2 1-2 yards of 44-inch material for a 36-inch size. Price 10 cents.



Fill in this coupon and mail to Pattern Dept.

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Enclosed find ..... cents, for which send me the following patterns:

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Pattern No. ..... Size .....

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Postoffice ....

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BE SURE TO GIVE NUMBER AND SIZE.

Reasonable.

Two young women, who had recently become proud mothers, were earnestly discussing the question of milk for infants, when the younger of the mothers asked:

"Do you believe in one cow's milk, Ethel?"

"Well," returned the other, with the excessively patronizing air of one who knows it all, "that depends a great deal on the child. If it's a good, strong, healthy baby and wants it I'd give it two cows' milk; but it does certainly seem that any ordinary infant wouldn't need more than one cow could furnish."—Country Gentleman.

Canada Offers 160 Acres Land Free to Farm Hands

Bonus of Western Canada Land to Men who Assist in Maintaining Needed Grain Production

The demand for farm labor in Canada is so great that as an inducement to secure at once the necessary help required, Canada will **give one hundred and sixty acres of land free as a homestead** and allow the farm laborer, who files on land, to apply the time he is working for other farmers as residence duties the same as if he had lived on the land he had applied for. This offer made only to men working on Canadian farms for at least 8 months during 1917, thus reducing the necessity of actual residence to 2 years instead of 3 years, as under usual conditions. This appeal for farm help is in no way connected with enlistment for military service, but solely to secure farm laborers to increase agricultural output. A wonderful opportunity to earn good wages while securing a farm. Canadian government will pay all fare over one cent per mile from Spokane to Canadian destination. Information as to low railway rates, etc., may be had on application to

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Have a Little Canary Bird.

Dear Aunt Nellie: I have been sick since I wrote the other letter. I had appendicitis and was operated on. I am improving now. I live on a 640-acre farm. I saw my friend, Ella Love,'s, letter in the corner. We have a little canary bird.—Lyda Augst, R. R. 1, Box 30, Beebe, Wash.

Goes to Pleasant Hill School.

Dear Aunt Nellie: I enjoy the letters very much. I am 11 years old and will be 12 the twelfth of May. We have hree cats and one dog and his name is Mike. I live on a 40-acre ranch. I live a quarter of a mile from school. I am in the sixth grade. I go to Pleasant Hill school. My teacher's name is Miss Hemmingsen. — Goldie Christensen, East Stanwood, Wash.

Killed the Coyote in the Hen House.

Dear Aunt Nellie: I have written to you once before. I like to read the other girls' and boys' letters. We have about 50 lambs now. I feed two lambs by hand. The first of March we had a coyote come into our chicken yard and papa killed it in the hen house. That was the second one we have killed on our ranch. We have 34 little chickens now.— Frances McManamon, Othello, Wash.

Move to Their Country Home Soon.

Dear Aunt Nellie: I will be 7 years old on the 25th of March. I am in the first grade. I am living in town now but will soon be going to our farm. We have five horses. Their names are Jocker, Ned, Pearl, Ruby, Flossie. Then we have four mules. Their names are Jessie, Josie, Midget, Julie and one mule colt named Peter. I have a pet chicken named Peck.—May Drew, Bridgeport, Wash.

Daddy Is Cashier of the Bank.

Dear Aunt Nellie: I am living in a town named Johnson. I am 10 years old. My birthday is on the 20th of June. I have two brothers. Their names are Fred and Ray. My daddy is cashier of the bank of Johnson. I am at my best friend's home tonight. I am going to school all the time. I am in the sixth grade.—Grace Willoughby, Box 28, Johnson, Wash.

Baby Waves His Hand to Lillo.

Dear Aunt Nellie: My father takes the Washington Farmer and I read the Children's corner. My subject is "My Best Friend." My best friend is my baby brother. He will be one year old May the eighth. His name is William. He can't crawl but stands up alone. When I go to school he waves his hand at me. I am 14 years old and I'm in the seventh grade at school.—Lillo Pollastrini, Pasco, Wash.

Another New Member for Our Club.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 8 years old. I am in the second grade. I live on a farm nine miles from town. My height is four feet three. I have blue eyes and light brown hair. My sister's name is Lucile. She is 6 years old. Her birthday is the 28th of November. My teacher's name is Miss Lehan. We walk two miles to school.—Paul Helme, Washtucna, Wash.

Twenty-eight in Harriet's School.

Dear Aunt Nellie: I enjoy the letters very much. I am 12 years old and I am in the fifth grade. I have a mile and a quarter to walk to school. I live on a farm. We have 10 cows, two calves, two horses and a colt. We also have three geese. I have three brothers and four sisters. Two of my brothers go to school. My teacher's name is Miss Hemmingsen. She is a very good teacher. There are 28 children in the school.—Harriet Imislund, East Stanwood, Wash.

To Move to Idaho This Spring.

Dear Aunt Nellie: My father has taken The Farmer for a long time and I have read the letters. I am 7 years old and in the third grade. I have six sisters and one brother. I am taking music lessons from one of my sisters. I go to school at Wilcox. My teacher's name is Mrs. Brown. There are 21 pupils in my room. My father sold his ranch last fall and we are going to move to Idaho in the spring.—Kathryn Chamberlin, Wilcox, Wash.

Pearl's Trip to California.

Dear Aunt Nellie: I live on a 290-acre farm. We have 13 head of horses, 52 cattle and about 100 chickens. I am 11 years old. My birthday is the 19th of February. I have a little brother named Perry. We ride a sorrel pony named Queen to school. I have gone to school three terms of school without missing a day. I am in the fifth grade at school. I like my teacher. Her name is Miss Macy. I have missed three months of school this term with sickness. My subject is "Our Trip to California." We started to California the day before Thanksgiving and got there the 2d of December. We stayed there about one month and then we went to Los Angeles for a while. From there we went back to my grandpa's and grandma's and stayed another month. We started home the 28th of January and got here the 1st of February. We found it much cooler up here than it was down there.—Pearl Smith, Elberton, Wash.

Esther Can Milk One of the Cows.

Dear Aunt Nellie: I like to read the letters. I live on a 44-acre farm. We have six milk cows. We have five calves. I can milk one cow. I like to wilk. We have some little pigs. There was one little one that was not strong so I had him in the house one whole day. I am 10 years old and I am in the fourth grade at school. There are 36 children in school. There are four children in my class.—Esther Bergman, Ridgfield, Wash.

A Lovely Time Earning Her Money.

Dear Aunt Nellie: My subject is "How I Earned My First Money." I went and stayed with a woman and she gave me 50 cents a day. We planted flowers and hoed the garden and fed the chickens and the horses when her husband wasn't home. I had a playhouse and a swing and a set of dishes and a rocking chair and a table, a mat and stove. I used to cook on my stove and she used to play with me and we used to eat our dinner there some times. Now the lady whom I stayed with moved to Canada.—Margaret Cox, Leahy, Wash.

Glad That William Has Joined Us.

Dear Aunt Nellie: I will write a letter to the Corner and tell you what I do. I go to school at the Davis school. My teacher is Zula Babcock. I am in the fifth grade. I have a good time at school. I joined the Chronicle Children's Corner and got a pin with a picture of Uncle Wiggily on it, and it said Chronicle Juniors. I have a brother by the name of Leonard Harmanes. He is in the third grade in school. Leonard and I are the only ones in our school. I am 11 years old and Leonard is 9 years old.—William Harmanes, Colton, Wash.

Out of School for a Long Time.

Dear Aunt Nellie: I am a girl 12 years old and in the sixth grade at school. My birthday is the 17th of September. Irene Glissler of Odessa is just one year older than I. I hope our corner will grow larger than it is now. It is growing a little every week. I have not been to school for a long time. I took sick in the latter part of November and I have been out ever since then. I have a little brother 3 years old. His name is Earl. We have a dog named Teddy. We have four horses and six cows. My uncle lives right close to us and he lives across the line in Canada. I will write again.—Jeannette Samson, Sumas, Wash.

The Story of a Little Girl.

Dear Aunt Nellie: I will write on the subject, "My Favorite Book." My favorite book is "Whiter Than Snow." It is a story of a poor little girl. I like the story very much. There are three children in our family. I was 11 years old the 23d day of September. I am in the fifth grade at school. There are 33 children in our school. There are eight children in my class. We have only one room in our school. There is no sixth grade at all. I like to go to school. We have 10 more weeks of school. I like to read the letters in the Corner.—Martha Arndt, box 14 A, R. 2, Ridgefield, Wash.

Knows a Lot of Psalms by Heart.

Dear Aunt Nellie: We have 12 chickens and only got six eggs yesterday. I am 9 years old and in the second A grade. My birthday is October 10. I can say the books of the Bible. I live on an 80-acre farm. I can say the 23d, 117th, 8th, 15th, 1st and the 19th psalms. I can say all the Ten Commandments by heart. I have a big pet dog. His name is Nick. I have three sisters. I ride to school three miles. I have one brother. One of my sisters' names is Marion, the others are Neva and Dorothy. My brother's name is David.—Margarette Dye, Lagrande, Wash.

Glad the Cousins Wrote to Her.

Dear Aunt Nellie: I got three letters from my cousins since I wrote to the Corner. My brother or father takes us to school every morning. I will tell you about our school room. There are 17 seats in our room. The organ is up on the platform. We have a heater in our schoolroom and three windows on each side of the room. We have one big blackboard in front of the schoolroom and three little ones on the sides. The teacher said that when the snow goes off we can plant some shade trees and flowers. I have a horse named Bessie and I ride her after the mail. I was glad the cousins wrote to me.—Margaret Cox, Leahy, Wash.

Glad That Tillie Wrote to Us.

Dear Aunt Nellie: My papa takes The Farmer. I always look for the Corner because I enjoy reading the letters that the cousins write. I will tell you about our school. There are two rooms. I am in the big room. I am in the sixth grade. My teacher's name is Mr. Rosenquist, and I like him very much. There is a bookcase, an organ and lots of pictures and a Victrola. I live on a farm. We have six cows, four calves, one horse and one pig and some chickens. I have three brothers and one sister. My brothers' names are Oscar, Clarence and Melvin. My sister's name is Mabel.—Tillie Helde, Mount Vernon, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Effie Luddington, Florence Hwang, Louise Hwang, Ethel Miller, Esther Bower, Raymond Geissler, Theresa Wilson, Beulah Walker, Rosalie Arledge, Bernice Baker, Rosa Sahli, Amy Lauth, Pernille Hanson, Hilma Anderson, Glenn Faber, Mabel Kessey, Avah Sharpe, Arthur James, Clifford Zimmerman, Mabel Iverson,

Ups and Downs of a Bunch Grass Boy

(Continued from page thirteen.)

fairly ample, such as they were. We had brought considerable quantities of dried fruit from Walla Walla—dried peaches, dried apples, dried prunes, dried apricots and a good deal of canned fruit. We had plenty of flour and potatoes, some onions and carrots and sufficient seasoning condiments to enable mother to cook a palatable meal; but we were short of meat. When the snow was banked high about the eaves of our house we used up the last scrap of meat in the house.

We had neither butter nor milk, so the loss of meat was a pretty hard blow. Mother had used the bacon fat for seasoning and shortening, to make gravy, and in other ways to splice out in her simple cookery. I remember yet how utterly repellent boiled potatoes, with no gravy or bacon fat, were to me. It had been my habit to take an ample helping of potatoes seasoned with bacon gravy or bacon fat, and made more palatable with pepper and salt. When the last of the bacon was gone my 9-year-old wisdom was sufficient to enable me to realize that it was useless to weep, rebel or otherwise be unpleasant. Mother and father made light of their hunger for meat, and I tried to do likewise; but I remember

The Bible Says:



going about the house with an empty feeling that went clear to my shoes. Mentally I compared fat bacon with other things I liked—bananas, oranges, candy, licorice, and so on; but they all lost in the comparison.

A neighbor who lived several miles distant came to our place on snowshoes one day. The conversation turned to table fare, and the neighbor said his folks had run out of fruit. In the course of the conversation he said they had plenty of meat—at which I pricked up my ears. When he left it was with a half flour sack full of dried prunes, peaches and apricots mixed, over his shoulder. I took it for granted that he would return the next day with some of his meat; but he didn't. Day after day I watched for him to appear, and at last gave up, and at the supper table that evening broke down and wept.

But I would not tell why. I thought mother and father would feel badly if they knew I was hungry for meat, so I explained that I was just lonesome and thought that if I cried I would feel better.

They were deceived, and I was glad that they were. I moistened my boiled potatoes with water, peppered and salted it rather excessively and made a brave endeavor to eat with a smile, which I did, though once or twice was on the point of gagging.

Mother was sorry I was so lonesome; so after supper she got out a book, the name of which I do not know, and read a part from it which told about an old porter in London town of long ago whom everybody called Trotty because of the funny way he walked. She came to the place where Trotty was sitting on a doorstep eating tripe—and got no further. I wanted to know what tripe was. She told me it was a kind of meat which poor folks like Trotty ate in those days. A thought flashed through my mind—perhaps here was a resource in the meat line which we had overlooked. I next asked, so guardedly as to arouse her suspicions, if folks like us were too poor to eat tripe. Mother saw through my question. She asked me abruptly if I was hungry for meat.

I evaded the question and was convicted thereby. She knew; and led me on adroitly, laying first one pitfall, then another, like a skilful lawyer conducting a cross-examination, and presently had the whole story—how I had longed to trade some prunes for some meat; how I had tasted bitter inside, and the bitterness began at my teeth and reached to my very toe nails.

The next morning, bright and early, father struck off on snowshoes. All that day mother seemed to be worrying, and asked me several times how I felt. Father had gone to hunt meat, of course, though they did not tell me, fearing to raise false hopes. He came back at night with a can of salmon, the oil of which mother poured into a teacup and gave to me to drink. I took it in small sips, pretending to be disinterested; but I took small sips and tasted each for a long while. Afterward I mixed small pieces of the canned salmon with my potatoes.

That night after I had pulled out my trundle bed and was in it pretending to be asleep, father told mother that as soon as freight could be hauled into the country Mr. Reeves—the pioneer storekeeper—would have in some bacon; meanwhile we could get nothing but salmon and oysters, and that Reeves would sell only a few cans to any one man, as the whole country was out of meat.

Father made a few more trips, and each time came back with salmon; and at last he returned with some very fat and very salty bacon! It was a red-letter day.

I hung to mother's skirts while she cut off thin, white slices of the fat bacon and dropped them into the frying pan; and when I saw the bacon fat poured off into a small cup and a little bit saved for my potatoes, I jumped up and down and whooped for joy.

The long, cold, dark, silent winter passed finally, and there was grass for the horses and meat for us. Cowboys passing by and stopping for a meal said that down in the rocky scab land south of us the "potholes" were heaped with dead cattle that had bunched there during the big storms, and perished—tons of beefsteak freezing up and going to waste while we lonesome settlers were fairly praying for fat, salty bacon!

Next week the bunchgrass boy will tell how he devoured every scrap of print that came his way, about the approaching battle between John L. Sullivan and James J. Corbett for the championship of the world and how in fact, he read everything that came in sight. Finding some papers in a shack about the execution of a number of criminals, the young bunchgrass boy carries out the details to the minutest particular with the pestiferous squirrels as convicted and sentenced criminals.

Boys!



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Full-sized mitt, with special brown tan, with laced thumb and buckled back; made with deep packet and firm padding. Retails for $1.50. Sent postpaid to any boy for one three-year and one yearly subscription to The Farmer.

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Give Good Results on Dry Soil.

R. H. Chick of Spokane, but who has farming interests in the vicinity of Reardan, Lincoln county, is this year putting in 2000 pounds of field peas of the Brown Carleton variety. These peas are claimed to be more productive than other varieties in the dry regions, and it is claimed that they stand up more sturdily and are therefore more easily harvested, and with less loss from shattering.

They are grown by a number of ranchers in Oregon, 20 bushels per acre having been produced where the annual rainfall was only nine inches.

Can Add Ten Per Cent to Crops, Says R. C. McCroskey.

"Ten to 15 per cent increase in the production of grain and other farm stuff can be had this year by intensified farming," says R. C. McCroskey of Garfield, veteran banker and farmer of the Palouse country.

"High prices in prospect are the inducement which will appeal to farmers to give the care to their operations which will bring these results. Farmers in the west in many instances are careless or wasteful in their methods.

"Fall-sown grain can be gone over even after the grain is up in the spring and by the use of a fine-tooth harrow a mulch is produced by pulverizing the packed soil and this mulch keeps the moisture in the ground, greatly increasing the yield."

Can Not Limit Discussion to Any Six-Inch Boxes.

In a circular letter to the newspapers and periodicals of the state E. F. Benson, commissioner of agriculture, suggests that a double column space six inches deep be boxed in and used in each issue of the publications for the dissemination of such information along lines of agricultural preparedness as seems most timely. Commissioner Benson adds: "Personally I would be glad to do any work, whether in the office, the field or the trenches, that would seem to be the best work possible for me to do. Just now I find it necessary to spend 14 to 16 hours a day in the office. It is a pleasure to do this in the hope that that work may be of some benefit to our country."

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

HELP WANTED—MALE 3

OUTSIDE SITUATION.

Good salary can be earned selling our complete line high class nursery stock. Cash advanced. Write for terms.

ALBANY NURSERIES, ALBANY, ORE.

HAWTHORNE AUTO SCHOOL,
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

SITUATION WANTED—General 24

FARM WORK BY MAN WITH FAMILY; man and son work on farm, wife cooks for men. R. L. Boone, 916 Forest st., Bellingham, Wash.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free. BEHNKE-WALKER BUSINESS COLLEGE, 167 FOURTH ST., PORTLAND, ORE.

MISCELLANEOUS 57

CARBON, MOTORISTS' GREATEST ENEMY. Our famous lubricant carbon remover makes and keeps your engine clean as a watch. No need to take down when applying. Postal brings full particulars. Wagner Bros. Co., Hancock, Mich.

MISCELLANEOUS—FOR SALE 60

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER:

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do it. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS—FOR SALE 60 Continued.

SASH AND DOORS.

Shipped anywhere, to any one, at factory prices. We own our own mill, and guarantee first quality goods, and safe delivery to destination. Send for our big illustrated catalog No. 27, mailed free, postpaid, promptly on receipt of request.

5 cross panel doors, No. 1	$1.33
4 panel craftsman doors	1.75
Glass doors, as low as	2.25
24x24, two light windows	1.46
10x12, twelve-light windows	1.51
10x12, four-light barn sash	.68
24x60, 3-ply panels	.65
16x16x26, spruce flour bins	1.50
Plain window frames	1.00

We carry a full line of inside finish, mouldings, sash, cupboard doors, hardware, mixed paints, etc. Prompt shipments.
O. B. WILLIAMS CO.
1943 1ST AVE. SO. SEATTLE, WASH.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

MISCELLANEOUS—WANTED 63

—CREAM WANTED—

We pay cash for cream, poultry, eggs, veal, hogs and hides. Write for prices and shipping tags. Commercial Creamery Co., Spokane, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer,** and **The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

HOGANIZED S. C. I. REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels, $5 each. These birds are all sons of a magnificent male, from a 271-egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs, $6 in 100 lots; settings, $1.50, $3, $5. Mrs. H. V. Rominger, Underwood, Wash.

79,637 EGGS IN 1916 FROM MY FLOCK of 450 S. C. Black Minorcas, prize winners in the showroom and laying contest; eggs from my Hoganized and trap-nested breeding stock at $2 per 15, $3.50 per 30, $5 per 50, $8 per 100, $70 per 1000. No baby chicks or stock for sale. John Dollenbacher, R. 1, Selah, Wash.

BABY CHIX.

White Leghorns, the kind that are real dividend payers, bred for 16 years for eggs, size, VIGOR, VIM and VITALITY. $10 per 100, from the oldest established hatcher in the state. Delivery in good condition guaranteed. Lakeside Poultry Farm, Roy, Wn.

S. C. R. I. REDS, BEST WESTERN prize-winning stock, crossed with my own trap-nested birds; eggs, $1.50 for 15; $7 100; baby chicks for May delivery, $8.50 for 50; $16 per 100; safe delivery guaranteed. F. H. Volland, Kennewick, Wash.

WHITE LEGHORN BABY CHICKS from strong, superior stock, bred for eggs, vigor and size. Safe arrival guaranteed. Free catalog. Free book on raising the chicks. Oak Heights Poultry Farm, R. R. 3, Box T67, Tacoma, Wash.

OUR R. I. RED CHICKS TAKE SO WELL they are all sold to June 9. Order for June now. $12, 100. A few W. Leghorns for May left, $10, 100. Safe arrival guaranteed. Maplebrook Poultry Farm, Southworth, Wash., Box. 3.

WHITE BUFF AND BLUE ORPINGTONS, single and rose comb Anconas, the great winter layers, winners at leading Coast shows; eggs $1.50 to $3.00 for 15; chicks 20c each. Ira N. DeLine, Box D, Olympia, Wash.

WHITE-FACED BLACK SPANISH (REAL Spanish) eggs for hatching, from first-prize pen at Panama exposition. Settings, $2, $3 and $5.50, 15 eggs. A. Emskamp, So. 1903 Chestnut st., Spokane, Wash.

WHITE LEGHORN CHICKS, $10 PER 100 for May and June; special price of $6 for 50 White Leghorn chicks and fireless brooder. Queen Hatchery, 89 Pike st., Seattle, Wash.

POULTRY 174 Continued.

MY R. C. R. I. REDS HAVE WON EVERY first and second, except one, competed for in the past 3 years. Have mated 4 pens for the egg trade. Guaranteed satisfaction. Mating list on application. G. W. Baker, Colfax, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

GOLDEN MAMMOTH BRONZE TURKEY eggs from prize-winners; setting of 10, $2.50 and $3.50. Special prices owing to lateness of season. C. L. Haworth, R. D. 2, Boise, Idaho.

IF YOU ARE INTERESTED in Reds, write me for mating list and price of eggs. I have what you want at the right price. S. W. Berry, Post Falls, Idaho.

BARRED PLYMOUTH ROCKS, PRIZE winners at shows. Near front in N. W. laying contest. Eggs $1.50. Folder free. Wm. H. Heimsoth, Baker, Ore.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

EGGS FROM TANCRED S. C. W. LEGhorn hens, $1.25 per 15, $6 per 100, prepaid. J. W. Hirons, R. 2, B. 55, Scio, Ore.

FOR SALE — S. C. WHITE LEGHORN eggs, 75c per 15, $4 a hundred. Mrs. Wm. Vercler, Rigby, Idaho.

BUFF ORPINGTON EGGS, $3 SETTING. Prize winners. Baby chicks. Julia Stewart, Moscow, Idaho.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

LIVE STOCK 177

FOR SALE, JERSEY BULL.

Fox of Hollyhurst, reg. No. 145529, solid color, pink tongue, black switch, dropped Nov. 28, 1914.

His dam, Fraulein of Hollyhurst, as a two-year-old heifer, made 5075 lbs. milk, with an average test of 5.66 per cent, or 287 lbs. butter fat, equivalent to 359 lbs. butter in one year. She will reach or exceed at maturity 500 lbs. butter in one year. His mature granddam made 7379 lbs. milk and 407 lbs. butter in one year.

Am going out of the dairy business and will sell this bull at a very reasonable price. H. L. Willis, Mt. Vernon, Wash.

YOU FARMERS! MAKE BIGGER HOG profits with purebred, pedigreed BIG TYPE POLANDS! Write for free hog booklet, "The Bartwood Idea." Tells how to get the very finest Polands at 1-3 usual price. Bartwood Farm, Hamilton, Mont.

FOR SALE, OR TRADE for Jersey heifers or stock cattle, one very fine imported 2-year-old registered Jersey bull, son of Golden Fern's Noble. Cash price $300.

J. H. ROWLEY, WESTFALL, ORE.

SERVICEABLE BOARS, BRED GILTS. Orders booked for spring pigs. Also few choice Holstein bull calves from best of families.

W. R. WHITE, SUNNYSIDE, WASH.

HOLSTEIN BULLS, REGISTERED, PEDIgreed; acclimated to northwestern conditions; $75 up. Catalog on request. Ford & Hollister Ranch, Inc., Darby, Montana.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

FURRIERS 429

BISSINGER & CO., DEALERS IN HIDES, pelts, wool, tallow and furs; consignments solicited; prompt remittance. P. O. Box 1553. Phone 503. Warehouse, 26th and R. R. st., Boise, Idaho.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.

In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

SEEDS 620 Continued.

OREGON SEEDS.
VETCH OR "TARES."
A Great Forage or Seed Crop.
RED CLOVER, ALSIKE.
"THREE GRAIN OATS," Wonderful Yielder.
COMPLETE LINE OF FARM SEEDS.
CORVALLIS FLOURING MILLS,
Corvallis, Oregon.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flour seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, Ore.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

NURSERY STOCK 621

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

HOMEST'DS, RELINQ'M'TS 642

THE UNITED STATES HAS TAKEN TITLE to about 2,300,000 acres of railroad grant lands in 18 counties in western Oregon from Washington to California, part on each side of Southern Pacific railroad. The agricultural lands will be opened to homestead under government laws. For $1.00, we will mail you a large map showing sections of all lands taken in 18 counties; entry modifications; information about each county, its soils, crops, rainfall, climate, etc. CONLAN & CO., 234 North 19th street, Portland, Ore.

FARM LANDS—FOR SALE 651

MONTANA LAND.

Are you looking for a farm home or a land investment in grain or grazing lands in the great grain and stock country of Montana? If so, it will pay you well to see our Montana Land List, telling of improved and unimproved lands in several of the best districts of Montana—Judith Basin, where prices range from $36 to $60 per acre—Eastern Montana, where we can show you several fine tracts at $8 to $20 per acre—Shields River Valley, that famous grain and stock district, where good grain lands, partly improved, sell at $40 to $50 per acre, and sure to increase in value while producing a good income on your investment—Conrad and Great Falls districts, where good grain lands can be bought at $20 to $30 per acre. Lest you forget, we say again, if you are interested in Montana land in practically any good district in the state, don't fail to call or write for Montana Land List—it's free, and will probably save you time and money. We have made a careful study of the land situation in Montana the past few years, and believe we can be of service to you. Hege & Watkins Co., 715-17 Paulsen bldg., Spokane, Wash.

STEVENS COUNTY STOCK RANCH.

240 acres, all choice soil, with 150 acres bottom land; 110 acres under cultivation, 30 acres in alfalfa, 25 acres in timothy, balance to be put in grain this spring; good 6-room house, 2 large barns, all kinds of outbuildings; family orchard; running water and spring piped to buildings; ½ mile to school and shipping point, and has lots of outside range adjoining. Will include 5 good, young horses, 21 head of cattle, 2 hogs, chickens and all farm machinery necessary to run the place, which is in good condition. Give immediate possesion and clear title for $17,000; $7000 will handle. See Mr. Tipton.
HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG.

A GOOD FARM.
NEAR BELLINGHAM, WASHINGTON,
ON PUGET SOUND.

$6000—68 acres of good land; 30 acres thoroughly cleared, balance good timber land pasture; only six miles from Bellingham, a city of 30,000; excellent roads; good water; buildings only fair; school across road; a good dairy farm for the right man. Terms. Address secy. Bellingham Real Estate Assn., 1321 Dock st., Bellingham, Wash.

40-ACRE DAIRY FARM NEAR BOISE; mile from interurban line and cheese factory; 24 acres of pasture and alfalfa; 10 acres a little too high for gravity water, balance under plow. Cross fenced. Ridenbaugh water right. Family orchard; plastered house; barn 40x33; silo. Price $4500. Good terms. Hub Realty Company, Boise, Idaho.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2d and Cherry st., Seattle, Wash.

30-ACRE FARM FOR SALE; 20 A. CLEARed, 6 a. peas, 3 a. wheat, 7 a. clover, about 3 a. first class potatoes; land ready to plant; house, barn, plenty water. Write D. DeWit, Oak Harbor, Wash.

FARM LANDS OBTAINED THROUGH foreclosure of mortgage offered at rare bargains and on easy terms. Send for list. Pennsylvania Mortgage Investment Company, Spokane, Washington.

800-A. IMPROVED FARM 4 MILES FROM Eltopia, Wash.; $20 per acre; $2500 cash, balance 10 years, time at 5 per cent. F. M. Beckwith, R. 2, Escondido, Cal.

FOR MEADOWS VALLEY AND LONG Valley farm lands at $25 an acre, write A. B. Lucas, New Meadows, Ida.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

IRRIGATED LANDS—For Sale 663

IRRIGATED STOCK FARM FOR SALE. The best bargain in Idaho. Good free and forest range for all stock. Good alfalfa, grain and potato land. Good markets, certain crops. Ample free water with independent ditches. Newton Hibbs, Salmon, Idaho.

In answering advertisements don't fail to mention this paper.

Grain and Produce Markets

Chicago Grain.

CHICAGO, April 28.—Feverish advances of 12 1-2 cents here in the price of wheat today were followed by a sudden collapse of 15 1-2 cents owing largely to official denials that the entente allies had been purchasing future deliveries at Winnipeg, and because of the action of the Winnipeg exchange in summarily prohibiting all speculative trade. A wild finish in the Chicago market resulted, with the price varying from 2 1-2 cents under yesterday's close to 7c advance, with May at $2.74@2.74 1-2 and July at $2.25 to $2.26. Corn closed 3-4c off to 1c up, and oats off 1 1-4c to 1 1-2c.

In provisions the outcome ranged from 7c decline to an equal gain.

Uncertainty of wheat traders at the finish was due in a great degree to the fact that the recent great advance in Chicago prices was based largely on the assumption that upturns in the Winnipeg market were due mainly to purchases for Great Britain and her allies.

Corn broke sharply with wheat after having jumped with that cereal to new high levels.

Business in oats attained large proportions, but otherwise the cereal duplicated the course of other grains.

Provisions like other commodities advanced to fresh top records and then crumpled down.

Cash Quotations.

CHICAGO, April 28.—Wheat—No. 2 and No. 3 red and No. 2 and No. 3 hard nominal.

Corn—No. 2 yellow, $1.59 1-2@1.62; No. 3 yellow, $1.56@1.60 1-2; No. 4 yellow nominal.

Oats—No. 3 white, 71 1-4@74; standard, 72@74c.

Rye—No. 2 nominal.

Barley, $1.25@1.62. Timothy, $5@6. Clover, $12@17.

Pork, $38.60. Lard, $21.75@21.92. Ribs, $20.25@20.75.

Pacific Northwest Grain.

TACOMA, Wash., April 28.—Wheat—Bluestem, $2.70; fortyfold, club and fife, $2.65; red Russian, $2.60.

SEATTLE, Wash., April 28.—Wheat—Bluestem, $2.71; Turkey red, $2.71; fortyfold, $2.65; club, $2.64; fife, $2.64; red Russian, $2.61.

Oats—No. 1 white feed, $53.50.

Barley—No. 1 feed, $55.25.

Futures—Bluestem, May, $2.71; June, $2.72; fortyfold, May, June, $2.65; club, May, June, $2.65; Russian, May, June, $2.61.

Oats—May, $53.75; June, $54.50.

Barley—May, $55.50; June, $53.50.

San Francisco Grain.

SAN FRANCISCO, April 28.—Barley—December, $2.17; July new, $2.34 1-4.

Minneapolis Grain.

MINNEAPOLIS, April 28.—Wheat prices again shot upward today in a wild session. Corn and oats strong. Wheat—Receipts, 277 cars, compared with 135 a year ago.

Wheat—May opened $2.65 to $2.67; high, $2.69 7-8; low, $2.54 1-2; closed, $2.58.

July opened $2.38 to $2.40; high, $2.42 1-4; low, $2.28; closed, $2.32 1-4@2.33.

Cash—No. 1 hard, $2.86@2.90; No. 1 northern, $2.74@2.80; to arrive, $2.68; No. 2 northern, $2.70@2.80; No. 3 wheat, $2.58@2.72; No. 2 durum, $2.65@2.73; No. 2 hard Montana, $2.80@2.83.

Corn—No. 3 yellow, $1.51@1.53.

Oats—No. 3 white, 70 1-2@72c; flax, $3.33@3.39.

Flour—Fancy patents, 40c higher. Quoted at $14.60; first clears, 40c higher, quoted, $12.40; second clears, 50c higher, quoted at $7.50.

Other grades unchanged. Shipments, 66,907 barrels.

Barley, $1.18@1.51. Rye, $1.99@2; bran, $39.50@40.

San Francisco Produce Market.

SAN FRANCISCO, April 28.—Butter—Fresh extras, 33c; prime firsts, 32½c.

Eggs—Fresh extras, 31½c; extra firsts, 31c; fresh extras, pullets, 29½c; extra firsts, pullets, 29c.

Cheese—New firsts, 19½c; Young Americas, 25c.

Poultry—Hens, 25@26c; old roosters, 15@16c; fryers, 35@40c; broilers, 32@35c; squabs, $2@2.25; pigeons, $1.75@2.25; ducks, 18@20c; geese, 19@20c; turkeys, nominal.

Vegetables—Summer squash, $1.25@1.75; asparagus, 75c@1.50 per box; Southern iced lettuce, 75@85c; uniced, 50@65c; Sacramento, 50@75c; Bay peas, 3½@4c; Mexican tomatoes, $2.25@2.75 repacked.

Potatoes—Rivers, $4.75@5; Oregon Burbanks, $4.75@5.50; new, 5@6c.

Onions—Australian, $7.50 on street; crystal wax, $3@3.15.

Fruit—Strawberries, Southern, $1@1.25. Apples, Newtown Pippins, unquoted; Washington Winesaps, $2.50@2.60.

TURPENTINE AND ROSIN.

SAVANNAH, Ga., April 28.—Turpentine, firm, 47½; sales, none. Receipts, 145. Shipments, 18. Stock, 8997.

Rosin—Firm. Sales, 511; receipts, 670; shipments, 220; stock, 88,231.

Quote: A, B, $5.70@5.80; C, D., $5.80; E, F, $5.80@5.90; G, $5.90@5.95; H, $5.95; I, K, $6; M, $6.10; N, $6.15; WG, $6.20; WW, $6.25@6.30.

LINSEED.

DULUTH, April 28.—Linseed on track and arrive, $3.38@3.39; May, $3.27 asked; July, $3.29 bid; September, $3.16; October, $2.93 bid.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $4.50 cwt; new potatoes, 12½c lb.

Seed Potatoes—Early Ohios, 4c lb; Early Rose, 4c lb; white potatoes, 4c lb; Early Six Weeks, 5c lb.

Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; Y. N. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Leaf, 40c lb; Better Butter, 40c lb; Attalia, 40c lb; Diadem, 40c lb; Hazelwood, 40c lb; Solid Pack, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $10.50 case.

Live Poultry—Hens, 18@19c lb; old roosters, 10c lb; ducks, 13c lb; turkeys, 20@25c lb; geese, 11c lb.

Dress Poultry—Hens, 22c lb; springers, 21c; old roosters, 13c; ducks, 16c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs; 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

Fierce Battle in Wheat Between Bulls and Bears.

Violent fluctuations continue in the wheat market, with powerful influences on both sides in the fierce battle between the bulls and the bears.

The bulls emphasize the world shortage, the war, the run-down condition of agriculture in Europe, the low and dwindling stocks in this country, and the discouraging prospects for the 1917 harvest.

The bears counter with reports that Canada has 100,000,000 bushels, which is 50,000,000 bushels more than its own requirements, and that this surplus can now come into the United States free of tariff tax. But they are relying more on the probability of the government's taking control of food supplies and fixing prices. Some of them are whistling loud to sustain their courage. Here is the way that a New York dealer puts it:

"Thanks to the newspapers, coupled with government admonition to the farmers to produce food supplies, we have an unheard-of price level, wholly unwarranted in view of the facts. At the worst, we have prospects of an average winter wheat crop and a splendid chance of present prospects being improved. A record spring acreage is inevitable. There never was greater incentive to plant wheat, corn and oats. Who can successfully dispute the United States has a chance to produec 800,000,000 bushels of wheat, winter and spring? A spring crop of 350,000,000 bushels will just about make this figure. Our spring is late and unusually backward. As a result we have had no growing weather, crop reports could not be more gloomy. We are sure to get seasonable weather, followed by cheering crop reports. Then fears of famine in this land of plenty of ours will fade like mist. We will gaze at the price and wonder if anything but 'the bunk of a busy brain' made present price levels possible. It required courage to advise caution on the long side of stocks and cotton last fall. Yet the equilibrium of the bulls was badly upset. Wonder if history will repeat itself in grain. Is it not time to stop, look and listen? The wise man will feel for the top from now on in distant months of all grains."

And after all is said, no one can be sure that the man is wrong in his forecast.

Wheat prices may decline sharply from the present extraordinary level, but cheap wheat seems far in the future. These are war times, and war and high wheat travel together.

In 1904-1905 during the war between Japan and Russia, wheat advanced from 74 cents in 1903 to 121 in 1904. Following this, May wheat sold at 131 in 1909, and cash wheat 160.

In 1897 wheat sold at 63 cents, but in 1898 the May option reached 185. The Leiter deal, however, had more to do with this than the Spanish-American war.

Russo-Turkish war came in 1876 and wheat which was selling at 83 cents went to 175 in 1877. Although it went down to 77 after the war, yet, in 1882 it was up to 144.

In 1861 wheat at Chicago sold at 62 cents. In 1864 it saw 228, and in 1867 285.

In the Crimean war 1854-56 wheat ranged from 38 cents to 185.

Price in 1815 would average 175. Two years after Waterloo it advanced 285.

The close of the revolutionary war, followed by the French revolution and the Napoleonic wars, and the war of 1812 was another era of high prices for wheat, wherein it was higher at the close than at the beginning of hostilities.

Seattle Wheat.

SEATTLE, April 28.—All speed records for buoyancy of Washington wheat were broken this week and singularly enough soft wheat has followed automatically the lifts in the eastern hard wheat market, a feature never known before this year. Wild, impetuous, unrestrained, the market ran away with itself to the extent of 37@41c higher.

Just at the close of last week millers were bidding $1.75@2 farm price. The sales had no more than been concluded than country prices began soaring, starting at $2, then $2.12 and finally to $2.40. This figure has been twice refused by farmers of eastern Washington. Country bids advanced faster than bids on 'change, indicating the fierceness of the battle of buyers for possession. By midweek millers were offering $2.35 to $2.50. A little wheat was picked up on that level, and all farmers are now inclined to sell. A few are holding out for $2.50, and will get it next week, according to the attitude of millers of Puget sound. The advance on the week on 'change was 30@33c, as against a lift of 50@60c in the country.

Washington farmers are rather well out of grain. Millers have quit quoting wheat for reshipment east, as they are now compelled to watch their holdings to carry them to the new crop years.

Estimates of the wheat remaining in the three northwestern producing states that must be moved vary from 15,000,000 to 18,000,000 bushels. The yield of these states for 1916 was about 70,000,000.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., April 28.—Hogs—Receipts, 8100; steady. Heavy, $15.35@15.70; light, $15.10@15.60; pigs, $13@14.50; bulk of sales, $15.25@15.50.

Cattle—Receipts, 700; steady. Native steers, $9.50@13; cows and heifers, $8@11; western steers, $9@11.50; stockers and feeders, $6.50@10.25.

Sheep—Receipts, 300; steady. Yearlings, $13.50@14; wethers, $12.25@13.25; lambs, $15.15@16.25.

At Chicago.

CHICAGO, April 28. — Hogs—Receipts, 8000; steady at yesterday's average. Bulk, $15.60@15.90; light, $14.75@15.85; mixed, $15.30@15.95; heavy, $15.30@16; rough, $15.30@15.50; pigs, $10@13.75.

Cattle—Receipts, 1000; steady. Native beef cattle, $9@13.40; stockers and feeders, $7.15@10; cows and heifers, $5.70@11.20; calves, $8@12.

Sheep — Receipts, 1000; steady. Wethers, $10.25@13.25; lambs, $12.50@16.90.

At Seattle.

SEATTLE, April 28.—Receipts, 446 hogs; 3 cattle. Market strong.

Hogs—Prime light, $15.85@16; medium to choice, $15.50@15.60; smooth heavies, $15@15.30; rough heavies, $14.50@14.80; pigs, $13.50@14.75.

Cattle—Prime steers, $10.25@10.50; medium to choice steers, $9.25@9.75; cows and heifers, $8.50@8.75; medium to choice cows and heifers, $4@7.75; best bulls, $6.50@7.50; common to good bulls, $3.50@6; calves, $6.50@10.

Sheep—Prime lambs, $12.50@13.75; good lambs, $12.25@12.50; wethers, $10.25@10.50; ewes, $9.10.

At Portland.

PORTLAND, Ore., April 28.—Hogs—Steady; receipts, 253. Bulk of packing grades, $15.55@15.60; heavy packing, $15.65@15.80; light packing, $15.55@15.80; rough heavies, $14.25@15; pigs and skips, $13.75@14.25; stock hogs, $12.25@13.50.

Cattle—Steady; receipts, 3. Steers, prime light, $10@10.50; prime heavy, $9.55@10.25; good, $9.75@10; cows, choice, $8@8.75; medium to good, $7.75@8.25; ordinary to fair, $6.75@7.50; heifers, $8.25@9; bulls, $5.50@8; calves, $8@10.

Sheep—Firm; receipts, none. Lambs, east of mountains, $13@13.50; lambs, valley, $12.75@13.25; lambs, shorn, $11@11.50; prime wethers, $11.50@12; choice ewes, $10.50@10.75; heavy ewes, $9@10.

Spokane Stock Yards, Saturday.

Hogs — Receipts, none; market, strong. Prime heavy packing, $15.65@15.80; prime light packing, $15.50@15.60; rough heavy, $14.65@14.80; pigs, $13.75@15; stockers, $13@15.

Cattle — Receipts, none; market, steady. Prime heavy steers, $10.25@10.50; prime light steers, $10@10.25; good steers, $9.50@10; prime cows, $8.25@8.75; good cows, $7.75@8; common cows, $7@7.50; best heifers, $8.50@9; bulls, $6@8; calves, $7@10.50; stockers and feeders, $6@8.50.

Sheep — Receipts, none; market, strong. Prime lambs, $13@13.50; common lambs, $12@12.50; choice yearlings, $11.25@12; good yearlings, $10.75@11.25; best mutton ewes, $10@11.

Portland Market.

PORTLAND, Ore., April 28.—Local agitation against the high price of potatoes and a subsidence of the eastern demand have weakened the market. Buyers are not now offering over $3.75 at country points.

Butter prices were cut 2 1-2 cents and the market is weak at the reduction. Cheese continues very firm.

Eggs declined to the 31 cent level, but there are indications that storage operators are about to enter the market again and buying cards sent into the country are quoting as high as 31 1-2 cents.

Dressed poultry and meats were slow in the latter part of the week.

The only wool business done during the week was in the Yakima section. Shearing is under way in the Willamette valley and buyers are quoting 45 cents on this class of wool. Bids for mohair hold at 65 cents. The hide market is firmer with the eastern advance.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats No. 1, $53.50 per ton.

Corn—Whole, $71; cracked, $72 per ton.

Millstuffs—Bran, $41 per ton; shorts, $44.

Barley—No. 1 feed, $55.25; brewing, nominal; rolled, $55.

Hay—Buying prices: Timothy, eastern Oregon, $26@30; alfalfa, $23; grain, $18@19.

Eggs—Oregon ranch, case count, 31@31 1-2c per dozen; candled, 33c.

Poultry—Hens, 19@20c; ducks, 22@23c; turkey, live, 20@22c; dressed, 23@28c; geese, 12@14c.

Butter—City creamery, prints, 39@40c per pound; cubes, 35c.

Cheese—Oregon triplets, 25c; young Americas, 26c.

Dressed meats—Veal, 14@14 1-2c; pork, 18 1-2@19c.

Hops—1916 crop, 3@6c per pound.

Potatoes—Oregon jobbing price, $4.25@4.50.

Wool—Eastern Oregon, fine, 35c; coarse, 40@44c; valley, 40@45c.

Beans—Oregon small white 12 1-2c; California small white, 13c; large white, 12 1-2c per pound.

Hides—Salted hides (25 lbs. and up), 20c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 32c; green hides (25 lbs. and up), 18c; green stags, (50 lbs. and up), 13c; dry hides, 34c; dry salt hides, 29c.

Seattle Market.

SEATTLE, April 28.—Eastern Washington asparagus from all sources is coming into market at the rate of half a carload per day and is selling at 12 1-2@15c per pound in cube and pyramid packs. Practically every producing district is now represented, including Kennewick, Granger, White Bluffs, Prosser and Hood River. The quality was high almost from the start.

All the needs of this market are now being supplied and California orders have been cut off.

The apple and potato seasons are closing simultaneously this year. Both commodities will exhaust themselves at about the same time on the highest market ever known here. Jobbers are quoting $95@$100 for No. 1 Yakima gems, but will sell freely to the extent of their present holdings at $95. Locals are $90.

This has been the heaviest season for local spinach in the history of the street. Prices are $1.15@1.25 per crate. It is estimated that double the amount of any former year has been sold and at higher prices.

Rhubarb is beginning to flood the street again, and present quotations of 2c per pound promise next week to break to 2c.

The sunshiny weather today, so long deferred, is having a bearish effect on butter. Country reports indicate that the flow of cream will be heavy next week, with a sharp increase in the seconds which will supply the market with city creamery firsts, now being brought from California. Jobbers take contrary views of the effect of mild weather on eggs, some asserting that the lay will be reduced. Storage is practically at an end for the season, the crop being about 70 per cent of the normal.

Butter and Eggs.

SAN FRANCISCO, April 28.—Eggs—Fresh extras, 31½c; fresh extra pullets, 29½c; extra firsts, pullets, 29c.

Cheese—New firsts, 19½c.

ELGIN, Ill., April 28.—Butter—Seventy-five tubs at 37c, 55 tubs at 38c.

PORTLAND, April 28.—Butter—Prints, extras, 39@40c; cubes, extras, 35c; prime firsts, 34c; dairy, 27c.

Butter fat, Portland delivery—No. 1 sour cream, 39c; No. 2, 37c.



Pay Highest Prices for Wool

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

NEWS FOR BREEDERS

There has been considerable loss of sheep in the Willamette valley this spring, mainly on account of leeches and lung worm, the wet, backward season favoring their ravages. There have been some cases of lip and leg disease, which is rated as a form of foot rot. A rather smaller percentage of lambs than usual have been saved.

Professor Hyslop of the agronomy department of the O. A. C. urges the planting of as much spring grain as possible this spring—wheat, barley and oats, but especially oats, which yield the greatest production per acre. Professor Hyslop expects hay to be scarce this fall and advises the planting of spring oats for hay. He says there will be four times the acreage to beans that there has ever been, but does not even then expect the supply to equal the demand, and considers beans a safe and profitable crop. For hog feed he would plant early corn and hog it off or feed soft.

Behrman Bros. of Hillsboro, Ore., recently purchased from J. S. Hiatt of Cresswell, Ore., 16 head of registered Jerseys of extremely fine breeding. The herd bull is a grandson of the great show bull Noble of Oakland, out of a dam that made over 400 pounds of fat on private test as a two-year-old, and she has a sister with an official test of 466 pounds of fat, or 543.2 pounds of butter as a 3-year-old. But it is the females that are strongest along producing lines, four of them being granddaughters of Hood Farm Torono, the sire of four cows with over 1000 pounds of butter and over 50 others with high records. Nearly the entire herd is bred to a double grandson of Hood Farm Torono, that Mr. Hiatt retains with just a few head of females on his place near Cresswell. H. A.

Creditable Record for Twins.

Two cows from the herd of J. W. Clise, Redmond, Wash., 5-year-old twins, Willowmoor Blush and Willowmoor Bloom, have just finished a year's test with official records averaging 14,509 pounds of milk, 671.95 pounds of fat and 4.63 per cent of fat, which seems a creditable record for twin heifers and shows a high standard of dairy production of the Ayrshire breed, says C. M. Winslow, secretary of the Ayrshire Breeders' association.

Oregon Half Ton.



Here is the big Poland China boar, Oregon Half Ton, that has been in use by George W. Buck of Oregon City as his junior herd boar, and that was recently sold to George Burkhead of Hillsboro, Ore., for $100. He was bred by A. D. Severes of Iowa.

Mr. Buck reports a great demand at present for breeding stock. It seems to him a shortage now exists and that it will get worse. He recently sold to Raymond Murphy of Hillsboro the good sow Giantess Equal, for $75, and to M. T. Pfeffer of Dayton, Ore., Miss Orange Knox for $75. He also sold Mr. Pfeffer an Orange Belle boar pig. He reports a number of other good grades.

WESTMORELAND SQUIRE.



The above picture shows Westmoreland Squire, grand champion Guernsey bull at the Pacific International Stock show at Portland, Ore., last December. He was purchased during the show by Floyd Reith of Astoria, Ore.

Goes East for Stallions.

C. W. Brown of the firm of Brown & Mood, Moscow, Idaho, was in Spokane Monday night on his way east to purchase some pure-bred Percheron stallions for distribution in the Inland Empire. The French government has permitted a consignment of 100 animals to leave the country, these being among the few exportations allowed since the war began. Mr. Brown hopes to secure six or seven head for the northwest.

Sell Bull Calf for $400.

H. H. Curtiss of Pullman, Wash., dairyman, has shipped an 8-months-old Jersey bull to Benton county, receiving $400 for the animal. The bull goes to an association of Benton county farmers, who made the deal for the pedigreed animal through their county agriculturalist, Lee M. Lampson.

Holstein Herd for Sale.

James C. Graham of Palouse, Wash., having sold his farm will shortly sell his herd of 78 Holsteins, half of them registered.

CLARK BUYS BOAR.

E. M. Clark of Nehalem, Ore., who purchased 13 of the best gilts sold at the Kiger sale near Gresham in February has purchased the great boar, Chief's Col. Jr., from J. M. Fruit of Brooks, Ore. Chief's Col. Jr. was sired by Chief's Col. a hog that has been a grand champion of the Illinois state fair and sired the greatest number of winners in the Duroc classes there. His dam is Lucy Wonder 184, by Volunteer, grand champion of the Chicago International in 1913. She was purchased, bred by Mr. Fruit from H. E. Browning of Illinois and out of the litter Mr. Fruit kept Chief's Col. Jr. for his own use and developed him into a great hog. He sired the junior champion sow and first get of sire group at the Oregon state fair last fall. With the very fine lot of richly bred young sows Mr. Clark has this boar is worth to him more than the reputed price of $100 paid for him. Breeders and show men will do well to keep an eye on Mr. Clark.

RICHLAND JERSEY CATTLE CLUB.

H. H. Curtis of Pullman has just shipped to Lee Lampson, county agriculturist of Benton county, Wash., for one of his cattle clubs, St. Mawes Pilot, a young Jersey bull. His sire is Poppy's Golden St. Mawes, whose dam has a record of 1120 pounds of butter in one year and 3001 pounds in three years.

WE WILL PAY SALARY

to farmer with rig or saddle horse. The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are paying good salaries to those who can do the work and are offering these positions only to farm owners or renters.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. For men with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter to The Washington Farmer, Review Building, Spokane, Wash.

The Board of Trustees of the Leland Stanford Junior University begs to announce a *complete dispersal sale of the Stanford Herd of 300 Registered Holsteins* at the Stanford Ranch, Vina, California, *June 5, 6 and 7.* For information or catalog address M. H. TICHENOR, Sale Manager Palo Alta, California.

25 - STALLIONS - 25

GREAT PUBLIC SALE

At W. H. BEGGS' Stable, Back of Baker Theatre, Baker City, Ore.

WEDNESDAY, MAY 9, 1917

AT ONE O'CLOCK

Imported and American Bred Percherons, Shires, Belgians and Clydesdales From Two to Eight Years Old.

REMEMBER you will have an opportunity to buy stallions sale with size and bone (also correct pedigree, are extra good and are equal in conformation to any you can find in the northwest. Also a few stallions that I have taken in exchange that I can recommend, that are broken to work. One pair extra good Percheron mares, one good standard bred trotting stallion, 16 hands high, weighs 1300; one imported German coach stallion.

Last year I sold 16 stallions at public sale at Pendleton. While they sold low, I **SOLD ALL.** Arrange to see horses before sale. THIS IS YOUR OPPORTUNITY.

If you are a member of a company and want an extra good stallion, get together; come to sale; you will find him.

If you want a good rugged colt, he will be here, and if you want a ranch stallion with or without a pedigree, broken to work, I will have him.

Terms will be one-third cash, balance 6 months' time; approved security. Two per cent discount for cash.

J. R. JUSTICE, Importer

Phone 38. Baker City, Ore.

Dispersal Sale of High Producing Jerseys

45 Registered Jerseys
55 High-Grade Jerseys

They will be sold at Farm, FAIRBANKS, WASH., ON MAY 10, 1917. (Fairbanks is 35 miles south of Spokane on the electric line.)

Herd rich in the blood of Stoke Pogis, Gertie of Glynllyn, Golden Glow and other famous animals of American breeding. 22 of the grade cows offered have completed a year's record in the Whitman cow testing association, the yearly average for the 22 being 7328.7 pounds of milk and 367.6 pounds of butter fat. WRITE FOR CATALOG.

IRA P. WHITNEY, Sale Mgr., R. 7, Spokane.

A. G. WOODWARD, Owner. Fairbanks, Wash.

COMPLETE DISPERSION SALE

37 HEAD REGISTERED JERSEYS, JUNE 14, 1917.

On account of ill health I am forced to sell my herd of Jerseys that I have spent years of time in selecting and developing—this includes cows in milk, herd bull and young stock. Milking herd has an average official record of 510 pounds yearly. Catalogue giving full description will be published. Send name and one will be mailed when published.

W. A. FORREST, McMinnville, Oregon.

Notable Herd Dispersal.

Many years ago Governor Stanford, started to found a great ranch at Vina, Cal. With a great fortune and with 58,000 acres of land it was not long before it blossomed like a rose.

Long before he had considered the founding of a great university, Governor Stanford was casting about for wise and helpful ways of spending his money. While traveling in southern Europe he was struck with the absence of drunkenness among the wine drinking peoples; he conceived the idea that by establishing a great vineyard and manufacturing wine he could end drunkenness in Vina too. It is interesting to know that the trustees of the university decided against the plan three years ago. The great vineyard has given way to an orchard and wide alfalfa fields.

More than 30 years ago, in the early 80s, Governor Stanford laid the foundation for a great herd of Holsteins. Year after year the blood of the best producing strains has been introduced and it is said that some of the cows on the place have most gratifying records.

Word comes from the university now that the trustees have decided upon a policy which will eliminate the Holstein herd altogether. There are about 300 of them and they are to be sold at public auction on the ranch at Vina, June 5, 6, and 7. M. T. Tichenor, one of the owners of the Palo Alto stock farm at Palo Alto, is sales manager. Holstein breeders and dairymen will be much interested in this announcement.

BUYS BULL FOR $10,000.

Joseph Shepherd, buyer of cattle for the Argentine, gave $10,710 for James McWilliam's young Shorthorn bull, Garbity Golden Victor, a roan by Edgcote Actor, and champion at Perth sale in February.

DUROC-JERSEY SWINE

DUROC PIGS, PAIRS AND TRIOS.

I have a choice lot of the best bred weanling pigs, will sell singly or in pairs or [illegible] not related. Matings will be made [illegible] special reference to best results, both [illegible] and conformation.

[illegible]
$2.7[illegible]
Ma[illegible]

Grandview, Wash.

[illegible]ofitable Durocs

Pigs [illegible] Sow, bred by Exhibitor of [illegible] Washington, and other blue-ribbo[illegible]d by the great 900-lb. boar, Red [illegible]453. Choice boars and gilts for sale from these prize-winning sows.
JNO. B. PETERSON, Montbourne, Wash.

Mellow Lawn Farm Jerseys

Young bulls from high-producing ancestry, whose dams are on official test and making large records. Buy the best.
DOERFLER BROS. Silverton, Ore.

TWO YOUNG DUROC BOARS
Sire, Orion Top Col., dam Will Advance 3d. Excellent individuals.
MT. ANGEL COLLEGE STOCK RANCH.
St. Benedict, Ore.

DUROC PIGS

Weaned Durocs
At $20 each.
C. W. SHUMATE, TUMWATER, WASH.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Pullman, Wash.

BERKSHIRE SWINE

Kintyre Farm Berkshires

Exceptionally fine breeding stock for sale at reasonable prices.
CLARK BROS., R. F. D. 2, Prosser, Wn.

RIVERBY ORCHARD BERKSHIRES
won 12 out of 15 first prizes at the Washington State Fair, 1916. A few outstanding boars for sale at reasonable prices.
D. C. BUNN. Prosser, Wash.

GALBRAITH RANCH BERKSHIRES
Best breeding stock obtainable. Prices reasonable. Phone 20F.3.
T. A. GALBRAITH, Kent, Wash.

HAMPSHIRE SWINE

HAMPSHIRE SWINE.
Choice stock of all ages at bargain prices.
HIGHLAND FARM, Box 22, Underwood, Wn.

POULTRY

BARRED ROCKS
Both matings. Winners at the late Denver show. Sales, 60 birds. Hatchable eggs in season.
J. H. FIELD, Lander, Wyo.

Breeders' Department

HOLSTEIN CATTLE

Holstein Friesian Cattle

All our own breeding. A herd equally strong at both ends. Herd head, Sir Korndyke Ormsby Piebe, sired by Sir Korndyke Hengerveld De Kol 36th; dam Queen Piebe Ormsby Mercedes, record junior 2-yr.-old, 24.65 lbs. butter in 7 days, 3-yr.-old in 365 days, 952.28 lbs. butter, 20,286.20 lbs. milk; 4-yr.-old, 35.16 lbs. butter in 7 days. She is ¾ same blood as Queen Piebe Mercedes, world's record 4-yr.-old, record 1389.45 lbs. of butter in 365 days.

Most of the cows are sired by Sir Johanna Ruth Fayne, now 9 yrs. old, still in service. For average A. R. O. test of daughters, age and production considered, he stands near the top of the list.
WM. TODD & SONS, R. 4, North Yakima, Wn.

GLENWOOD HERD

Registered Holstein Friesian cattle.

"A breeder is known by his Herd Sire."

Prince Aralia De Kol Burke—No. 142092. His 3 nearest dams, Sadie De Kol Acme, Riverside Sadie De Kol Burke and Arillia De Kol, have an average yearly record of 25,300 pounds milk and 1037 pounds butter. Bull calves of his get, from good cows, for sale at farmers' prices.
A. H. BUCK AND ED HOEM, Monroe, Wn.

Holstein Bull Calves

One from grand champion cow with 24-pound record. One from 20,000-pound-year cow, as well as several other calves from a bull whose dam has a record of 133 pounds in 30 days, granddam 26 pounds 2-year-old, great granddam 31. All winners at National Dairy Show. These calves are priced right. Send for particulars.
J. L. SMITH, Hazelwood Farm, Spokane, Wn.

Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.
Write for pedigrees and terms.
H. R. BOOMER, New Plymouth, Ida.

Avalon Dairy

Registered bull calves by Hartwood Hello Hengerveld (129524) from cows with good A. R. O. records, DeKol, Korndyke and Pontiac blood. Prices right. Six per cent interest on time payments. Write today.
AVALON DAIRY, Kuna, Idaho.

Ouirinus Hengerveld Vale

Sire a son of the world record milk cow, Lutscke Vale Cornucopia. 31,343.4 lbs. milk in a year, and brother of Chimacum Wayne Boone 2d, with 22.50 lbs. butter in 7 days, as two-year-old; and several other good A. R. O. heifers, two years old; good disposition; priced to sell.
F. R. BEALS, Tillamook, Ore.

BROWN SWISS CATTLE

Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.
THEO. BRUGGER, Route 3, Gresham, Ore.

GUERNSEY CATTLE

WHATCOM CO. GUERNSEY B. ASSO.
We can supply some choice young herd sires, also a few young registered cows and a promising lot of young grade heifers.
Address Lynden, Wash.

SHORTHORN CATTLE

Hercules Shorthorns

For particulars write
DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

For Sale—Shorthorn Bulls

Fine individuals, sired by Lavender Gord's No. 370358, a bull produced by the blending of the blood of two great families, one headed by Count Lavender, the other by Choice Gords.
ANDREW OLSEN, R. 4, Ellensburg, Wash.

H. H. SCHILDMAN,
breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.
Filer, Idaho.

Holstein Bull Calves

Two bulls ready for service, one out of an A. R. O. cow. Also seven bull calves of excellent breeding—A. R. O. cows—and good conformation. Registered and sired by bulls of high breeding, and out of highest producing cows in the "U" herd. For particulars write
DAIRY DEPARTMENT, UNIVERSITY OF IDAHO, Moscow, Idaho.

Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high record A. R. O. dams. Priced to sell.
ERNEST WERNER, AURORA, ORE.

HOLSTEIN CATTLE

Young stock by richly bred grandson of King of the Pontiacs, out of high-producing advanced registry cows.
A. E. SMITH. Sumas, Wash.

HOLSTEIN BULLS
and a few females for sale out of A. R. O. dams of the noted Segis family. Herd bull, Model Annie De Kol Segis, No. 81071, dam's record, 30.91 lbs. butter in 7 days, his 4 nearest dams' average, for 7 days, 29.63 lbs.
MOREHEAD & HOBSON, Outlook, Wn.

Holsteins—Berkshires

A splendid lot of young bulls for the fall trade, also a few heifers. A son of the world's champion milk cow, Lutske Vale Cornucopia, now heads our herd. A few cows accepted for service. CLOVERIDGE FARM.
W. K. NEWELL, Seghers, Wash. Co., Ore.

BUFFALO DUKE DOEDE
(102228) heads my herd. He is a half-brother of world's record cow, Dutchess Skylark Ormsby, producing 1506 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.
H. H. STIVER. Buhl, Idaho.

WATERLOO HOLSTEIN FARM.
Holstein bull calves for sale.
Herd Sire—Prince Walker Pietertje | King Segius 10th Segius Walker Pietertje 2d
C. F. JENNESS. Meridian, Idaho.

MEADOW VEIW HOLSTEIN FARM.
Choice young heifers and cows, good producers; also a few young bulls. Send for pedigree and prices.
ARTHUR EDWARDS, Turner, Ore.

HOLSTEINS

Well bred young bulls for sale.
THOS. CARMICHAEL, Gaston, Ore.

O. I. C. SWINE

John Van Trojen, Sr., Breeder

O. I. C.

of the famous Ohio Improved Chester White Hog. Spring boars only. Stock registered. Write for prices.
Chimacum, Jefferson County, Washington.

TAMWORTH SWINE

Sold Out With the Exception

of pigs for May and June delivery. Keep in mind that Tamworths are the best of hogs and that Beinhart breeds the best of Tamworths. First come, first served. Send your order early to
ORIN BEINHART. Kennewick, Wash.

HORSES AND MULES

Purebred Stallions

We have for sale a few 1-year-olds, 2 this spring, Shire stallions, our own breeding; also a 5-year-old and an 8-year-old Shire stallion, both brown; a 3-year, a 7-year-old and 1 aged Percheron stallion, all black; one 2-year-old Brown Clyde stallion, bred by Canadian government. We sell at the barns only, and tell you all we know about each and every horse, guaranteeing them to be as represented or refund your money.

Our horses won all firsts and champions at Spokane Interstate Fair, N. W. Live Stock Show, Lewiston, Ida., and Pacific International, Portland, Ore., last year. If you need a horse, or want to exchange, write us, or come and see before buying. It will pay you.
G. M. WILSON, WILBUR, WASH.

ELMENDALE FARMS FAIRBURY, NEBRASKA
Registered
SHORTHORN AND HEREFORD BULLS AND FEMALES
IN CAR LOTS OR SINGLY
Address the Farm or
J. F. WREN, 430 30TH STREET, ODGEN, UTAH

JERSEY CATTLE

Jersey Isle Stock Ranch

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castilian Lady 266628 made 603.3 lbs. fat (713.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow-Testing association. Young stock for sale.
C. E. LONG, Buhl, Idaho.

Glen Thelma Farm Heifers

Two yearlings and five calves, all granddaughters of the great Rosaire Olga Lad, sire of 18, including one with 690 lbs., begun under 2 years, and 879 lbs. as junior 3-year-old. All from heavy milking dams. Priced to sell. Also one bull, 15 months old, by Poppys St. Mawes.
E. P. CASEY. McMinnville, Ore.

HUEBNER'S JERSEYS.
For Sale—A yearling bull, solid color, black tongue and bush. Son of imported Oxford You'll Do Jr., he by Oxford You'll Do. Sire of 933-lb. cow.
Dam Creoles Belinda, a close descendant of Governor Marigold, one of the best of the breed.
Priced for quick sale, $125.
A. H. HUEBNER, North Yakima, Wn.

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Buy butter blood—bulls from our high testing Register of Merit cows, and increase production.
WARREN GRAY. Jefferson, Ore.

WAIKIKI FARM JERSEYS.
We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.
WAIKIKI FARM, R. 7, Spokane, Wash.

MERIDIAN DAIRY AND FRUIT FARM.
Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams.
B. C. CRABTREE. Lynden, Wash.

ROLLING MEADOWS JERSEYS.
Five good registered cows and a few choice young bulls; prices very reasonable.
S. A. RICHES. Silverton, Ore.

JERSEY FEMALES.
Two high-bred registered Jersey cows and one heifer; good producing blood lines. Priced to sell.
F. E. YERGEN, HUBBARD, ORE.

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Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the breed.

At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

Congdon & Battles
Otto V. Battles, Mgr.
North Yakima, Wash.

ABERDEEN ANGUS BULL
for sale, ready for service; large, in fine condition; Sir Print K 2, dam: Queen Only of South Oak.
MT. ANGEL COLLEGE STOCK FARM
St. Benedict, P. O., Oregon.

HEREFORD CATTLE

BULL RANCH,

Registered Hereford cattle.
CHAS. BULL, Prop. Mabton, Wn.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.
Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have a few fall boars left. Now is the time to get in on spring orders. Correspondence solicited.
J. M. ROYSTON EST., C. ROYSTON, MGR., Payette or Fruitland, Idaho.

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Five undefeated herd boars for sale. Weaned pigs from grand champion boar and sow at $25 each or one boar and two sows for $65. Bred gilts $60 each.
C. W. SHUMATE, TUMWATER, WASH.

QUALITY HERD.
If you want to improve your herd, try stock from my winners at the Oregon state fair.
RAY J. FOX. Lyons, Ore.

POLAND CHINA BOARS.
Heavy-boned pigs, both spring and fall boars, of best quality, shipped C. O. D., subject to approval.
HERBERT WILLARD. Dayton, Ore.

BIG TYPE POLANDS

Weaned pigs, $25.
GEO. W. BUCK. Oregon City, Ore.

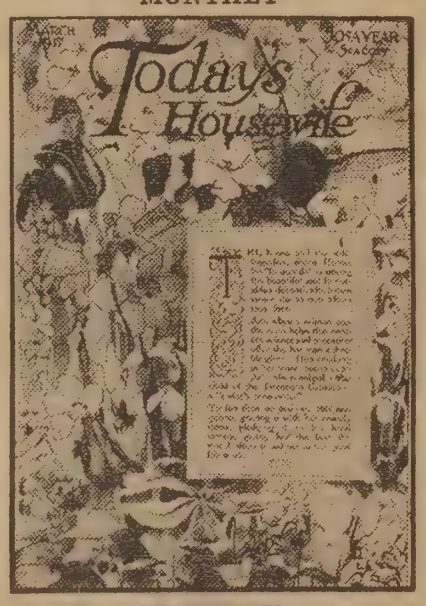
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MONTHLY



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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HOR[illegible] HOOF

VOL. XL. NO. 19. MAY 10, 1917. WEE

Boys' and Girls' Clubs Earn $118,000



James Dickey of the Plaza Potato club, cultivating his patch with a spike tooth implement that he made himself.

Great Chance Is Open This Year to Boys And Girls to Do Something Worth While In Nation-wide Campaign for More Products



Emery Donoho of Valley prairie, demonstrating the confidence that his pig has in him. Emery raised two pigs.

The boys and girls of Washington who were members of pig clubs, garden clubs, potato clubs, apple clubs, sewing clubs, canning clubs and the like earned $118,000 last year. That ought to be enough inspiration for twice as many to join the clubs this year, and for all of them to work twice as hard as last season. Besides this, the whole nation—in fact, the whole world—is calling for the greatest production of things to eat ever grown on the farms of the country, and the boys and girls can do much for themselves and at the same time prove themselves real patriots by making special effort in their club work and individually this season.

Last year the products of the canning clubs in the state totaled about 170,000 quarts of fruit and vegetables worth over $4000. The Broadway pig club of North Yakima raised and sold pigs worth $450. One Whitman county boy, Oren Little, produced pork at a cost of 3 cents a pound.

Maud and Mabel Farish of Garfield painted pictures and sold them for $15, investing the money in eggs. They made a profit of $92 from the poultry hatched.

The Lane boys of Roosevelt, in Klickitat county, took charge of some orphan lambs not wanted with the herds of sheep, raised them, sold them and invested their money in a little second hand automobile which they used as a passenger and express vehicle, increasing their profits.

These are some of the results, showing some of the ways the boys and girls worked to make money. There are scores of others. Girls can make money sewing, raising flowers, growing vegetables, canning fruits and garden truck and in other ways, and by doing so will also be helping the United States to win the war into which it has been dragged. Boys can raise pigs and potatoes, sheep and calves, care for apple trees and harvest the crop, and in scores of ways produce things greatly needed by the people of the country and the soldiers who are fighting in the battlefields.

All over the United States boys and girls are rallying to the call of Uncle Sam as loyally as any regiment of soldiers. They are ready to "do their bit" in winning the war, and if they produce as much in every state as they produced in Washington last year they will have added over $5,500,000 to the wealth of their country. They will do even more.



Paul Adams of Vera Apple club, working in the orchard.



A session of the Freeman Pig club. Those present are, reading from left to right in the picture: Top row, Lyndell Shields, Harry Jones, W. J. Boy (leader), Burton Rubeck and Gale Boy. Lower row, Ellis Womack, Cecil Wycoff, Claude Haller and Meredith Haller.

In This Issue

will be found such subjects as

Price Control
Freight Rate Case
Labor Problems
Orchard Blight
Coyote Menace
War Review



Maudie Adams of Valley prairie, holding her 300-pound pig. That is, the pig that weighs 300 pounds now. Maudie hauled the brush and refuse off her acre of land and cultivated it herself, raising her own pig feed. She was the only pig club girl in Spokane county last season.

$[illegible] F. o. b. Racine

Mitche[illegible] p. Six

Mitchell SIXES

$1460 F. o. b. Racine

7-Passenger—48-Horsepower
127-inch Wheelbase

Trust John W. Bate

To Build a Car As You Want It

The latest M[illegible] show you that John W. Bate[illegible]er at building cars.

You have nev[illegible]rice, seen a car so complete. Y[illegible]ever seen such luxury, so muc[illegible]ength, at anywhere near our price.

How Mr. Bate Works

Mr. Bate, the great efficiency expert, has spent 1[illegible] on Mitchells. The latest Mitchell is [illegible] model. It is the final result of 700 [illegible]ments.

But he started [illegible]ding this model plant, which now covers [illegible]5 acres. He spent millions of dolla[illegible] to build and equip it to build this one type economically.

Nowhere else in the world could a car like the Mitchell be built at the Mitchell cost. His methods will save us on this year's output about $4,000,000.

It is that saving which pays for all the Mitchell extras, and gives men these matchless cars.

31 Extra Features

There are 31 features in the Mitchell which nearly all cars omit. Things like a power tire pump, reversible headlights, dashboard engine primer, ball-bearing steering gear.

There is more beauty and luxury than was ever before combined in a modest-priced car. The reason is, we build our own bodies. And all we save goes into this extra luxury.

And no other car has Bate cantilever springs. They make the Mitchell ride like an aeroplane. In two years' use, on many thousand cars, not one of these springs has broken.

100% Over-Strength

But the chief Mitchell extra is double strength in every vital part. In the past three years we have doubled our margins of safety. We are making the Mitchell a lifetime car. Three of these cars have already run over 200,000 miles each. That's 40 years of ordinary service.

Over 440 parts are built of toughened steel. All safety parts are vastly over-size. All parts which get a major strain are built of Chrome-Vanadium.

In these days of high steel prices, any car which is built this way is either rare or costly.

TWO SIZES

Mitchell—a roomy, 7-passenger Six, with 127-inch wheelbase and a highly-developed 48-horsepower motor.

Price $1460, f. o. b. Racine

Mitchell Junior—a 5-passenger Six on similar lines, with 120-inch wheelbase and a 40-horsepower motor—¼-inch smaller bore.

Price $1195, f. o. b. Racine.

Also six styles of enclosed and convertible bodies. Also new Club Roadster.

Everything You Want

Mr. Bate has worked 14 years to combine in Mitchells everything you want. He spent one year in Europe, to glean the best ideas from there.

Before designing this year's Mitchells, his artists and experts examined 257 new models. So all the known attractions are combined in these Mitchell cars.

One Size, $1195

The smaller Mitchell—Mitchell Junior—costs only $1195. Yet it is a powerful Six, with a 120-inch wheelbase. You never saw such value in a car around this price.

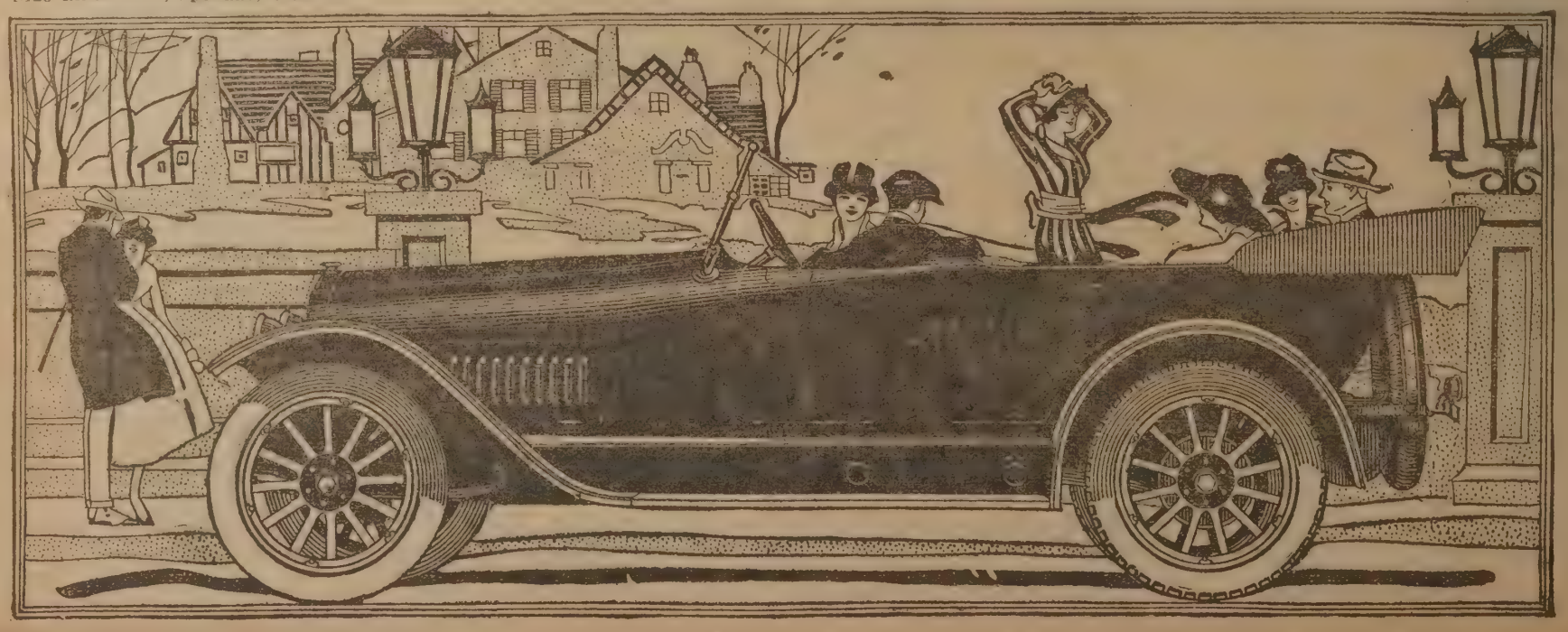
But the larger Mitchell offers special value. See both sizes. See the extra features, the extra beauty and the extra strength. You will want a Bate-built Mitchell then for the car you buy to keep.

If you don't know the nearest Mitchell dealer, ask us for his name.

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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 19 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF May 10, 1917

Price Control Rouses Farmers of Washington

Big Majority Apparently Is in Favor of Regulation by the Government During the War

A few days ago The Washington Farmer sent out a letter of inquiry to representative farmers here and there throughout the state of Washington, stating:

The farmers of this country face two very vital questions at the present time: Government regulation of prices and ways and means of meeting the demands for maximum yields.

Do you favor government control of prices of wheat, potatoes, butter, eggs, wool, cotton and other staple farm products during the war? Please give the reasons for your attitude.

Are you or your neighbors attempting to increase your crops this year? If so, what crops, and how?

There was no attempt to make a complete survey of the state by counties but the remarkable number of responses from the scattered points throughout the state give a most valuable indication of the attitude of the farmers on this subject.

The answers to the second question as to how the farmers are responding to the call for increased crops are fully as remarkable, and these will be given in the Farmer of next week.

A similar survey was made throughout the farming districts of Idaho and Oregon.

Out of 118 replies received from 47 counties of the three states—Washington, Idaho and Oregon—97, or a little over 82 per cent, are in favor of government control of prices of staple farm products, 13, or 11 per cent, are opposed, and eight, or nearly 7 per cent, are in doubt. It should be stated here that of the 97 favoring government control of prices 40 also expressed the belief in the government control of products which the farmers have to buy, such as farm machinery and manufactured goods generally, some of these even saying that they would not favor government control of prices of farm products unless these other products were included.

Out of 41 replies received from Washington 34, or nearly 83 per cent, are in favor of government control of prices of farm products, four, or a little over 9 per cent, are opposed, and three, or a little over 7 per cent, are in doubt.

Out of 43 replies received from Idaho 33 of these, or a little over 76 per cent, are in favor of government control of prices of farm products, six, or nearly 14 per cent, are opposed, and four, or a little over 9 per cent, are in doubt. Of the 33 favoring government control 12 also expressed their belief that the government should fix the prices of farm machinery and other products which the farmers have to buy.

From Oregon came 34 replies, of which 30, or a little over 88 per cent, are in favor of government control of prices of farm products, three, or nearly 9 per cent, are opposed, and one, or nearly 3 per cent, are in doubt. Of the 30 in favor of government control 12 also expressed their belief that the government should fix the prices of farm machinery and other products which the farmers have to buy.

Taking the Washington replies in detail it is found that 13 counties were represented in the 41 answers—Adams, Benton, Clallam, Douglas, Grant, Grays Harbor, Klickitat, Okanogan, Snohomish, Spokane, Wahkiakum, Walla Walla, Whitman. Vitally interesting points are brought out in these letters, which are given below:

Adams County.

M. R. Fox, Hatton, Adams county, replies: "I am confident the government could and should regulate the prices of all food grown," adding, "I have always been in favor of a law forbidding gambling in farm products, also making it illegal for a board of trade to exist."

K. F. Gerhardt, one of the biggest farmers of Adams county, says:

"I do not favor government control of farm products, whatever, not even during the war."

Dan Krehbiel of Lind is in favor of government control of "what the farmer has to buy as well as what the farmer has to sell."

Otis Robinson of Lantz has this to say: "I do not favor government control of prices of farm products until after it has left the hands of the producer. My reason is that in about nine cases out of every 10 prices advance after the product is out of the hands of the producer."

Another of the wheat producers of Adams county, T. R. Booker of Othello, writes: "It looks like something should be done by our government at

(Continued on page fifteen.)

George Severance

Is Experiment Director at W. S. C.

Announcement has been made at Pullman that Professor George Severance, now head of the department of agriculture of the state college at Pullman, has been appointed acting director of the experiment station to succeed Ira



Professor George Severance.

D. Cardiff, whose resignation was recently accepted by the board of regents.

Professor Severance will continue in the capacity of director until a permanent appointment is made and accepted. The position has been offered to W. J. Spillman of the federal bureau of farm management, who was formerly with the state college.

To assist Professor Severance in his station work, President Ernest O. Holland of the college has appointed an advisory committee consisting of the following members of the college faculty:

George A. Olson, department of chemistry; Frederick O. Heald, plant pathologist; O. L. Waller, engineering department; J. W. Kalkus, veterinary department, and A. L. Melander, entomologist.

Crying Need of Farm Workers

France Adopted Method of Temporarily Bringing In Oriental Labor

Germany has one chance of winning the war—the chance that food supplies may fail and France and Great Britain be conquered by famine.

That danger is confessedly grave. Conferences at Washington with the visiting French and British commissioners and reports from American diplomats and commercial attaches abroad have convinced administration officials that the food problem is serious, and that the situation is constantly growing worse.

If the United States can feed its allies, Germany will be defeated. Hence the tremendous importance of the nation-wide campaign for increased farm production.

"You must produce more food," says the president, the secretary of agriculture and the governors of the 48 states of the union.

"We are willing," say the farmers, "and will do it if we can get the necessary labor. But we need workers, and it is your duty to find them."

A plan to supply the needed farm labor has been brought forward in the east. It is the French method of temporarily bringing in Oriental labor, with the requirement that the imported Chinese and Japanese workers be sent back at the end of the war.

In New York an effort will be made to array organized labor against this bill. When this opposition was reported to Willian H. Gibson, the originator of the plan, he said:

"I don't see any reason why organized labor should oppose the measure to supply this country quickly with agricultural laborers. The bill has been carefully drawn, and vests discretion in the president to act in the present labor shortage emergency. In any event, the Chinese and Japanese labor could not be retained here more than one year after peace was declared. The bill aims to furnish adequate help to take care of this year's crops, as the war from present indications will be over before it comes time to plant and gather another crop. The bill, if enacted, will furnish labor which the unions are unable to supply."

Frank S. Gardner, secretary of the New York board of trade and transportation, made this comment:

"I don't see how a labor man with a spark of patriotism could oppose this bill, and I don't believe organized labor will oppose it when it knows its full provisions. The bill is closely along the lines of the law enacted in France to furnish that nation with man power at a time when the very life of the republic was threatened by a lack of labor. The French law expressly provides that at the end of the war, the Chinese laborers shall be shipped out of France. Just the same thing is proposed in the bill drawn up by Mr. Gibson and indorsed by the board. This war may be won or lost through a scarcity of food, and it behooves us to make every effort to gather the biggest harvest this year that intelligent application is capable of."

The Farmer hopes that organized labor in the Pacific northwest will take a broad and patriotic view of this problem. As enlistment goes on in the army and navy, the shortage of men will become increasingly severe. The plan of temporarily importing Orientals to work on the farms would help out immensely, and hurt no one. It would cheapen farm products, and the cost of living, because the farmer could cultivate much land that is now neglected from lack of labor, and that would benefit the city wage-earner and his family.

America is in a world war, and ordinary methods will not meet extraordinary conditions. Union opposition to measures to strengthen the nation and feed its allies on the firing lines, would be of a price with the attitude of selfish speculators and manufacturers trying to make exorbitant war profits out of the country's peril.

Under all ordinary conditions the Farmer would resolutely oppose additional Oriental immigration. But we must deal now with a condition, not a theory. We must help our brave allies win this terrific war for liberty, civilization and the future peace and security of free governments.

THE PATRIOTIC LEGION OF WASHINGTON

Membership Open to Men, Women and Children.

I am a loyal and patriotic American. I most earnestly desire to do my share in helping to defend the honor of my country in time of war. I therefore request enrolment as a member of THE PATRIOTIC LEGION OF WASHINGTON and pledge myself to the work of increasing our nation's food supply during the war into which our country has been plunged.

Signed.....

Date of Enrolment ..... Address .....

When signed forward this blank to the Editor of The Washington Farmer, Spokane, Wash.

The following were enrolled during the last week as members of the Patriotic Legion of Washington:

Frank C. Greene, Cheney; Mrs. Addis E. Vercoe, Mount Vernon; Mrs. H. C. Adkins, Rice; R. N. Rathart, Prosser; Mr. and Mrs. Cecil Ackerman, four sons and two daughters; Mr. and Mrs. LaFollette, Rockford; Martin Hansen, Walla Walla; Walter Burnen, Pomeroy; J. M. Pulliam, Deer Park; J. B. Rore, Ellensburg; D. Fowler, Withrow; Rev. H. M. Course, Neppel; Charles E. Wiltfong and family, Chesaw; C. E. Ludden, Arletta; Nelson S. Pierce, Colville; George F. Richardson, Ellensburg.

An additional list of members as received and enrolled will be given next week.

Big Fight Before I. C. C.

Railroads Seek $375,000,000 More Yearly

The greatest battle ever fought out before the interstate commerce commission is now in progrss at the national capital. The railroads have asked for authority to advance freight rates 15 per cent. Their annual freight earnings now aggregate $2,500,000,000. A 15 per cent blanket advance would enable them to take an additional $375,000,000 yearly from the producers and consumers.

The commission has tentatively granted the petition of the railroad managers. It has said that unless an adverse showing is made by protesting interests, it will make permanent its temporary order and grant the 15 per cent advance to take effect June 1.

The commission has set the week from May 7 to 14 for hearing the railroad side of the contest. Hearings will be resumed May 23 for the opposing side. The commission's statement is as follows:

"The interstate commerce commission has readjusted its calendar for the month of May so as to set apart the week beginning may 7 for hearings before the commission on carriers' proposals to generally increase freight rates and the protest thereto. The hearings will be held in the ballroom of the Raleigh hotel in Washington, D. C., beginning at 10 o'clock a. m. During those six days it expects that the carriers will put in their case. Hearings will be resumed on May 23, and it has been suggested that the full presentation of the carriers' side may be facilitated if cross-examination of their witnesses is deferred until the subsequent hearings. This will give the representatives of shippers and the public additional opportunity in which to prepare to cross-examine, as well as to prepare their case in chief against the proposed increases."

This gives time for the producers to protest, but there is no time to lose.

Organizations of farmers should meet immediately and adopt protesting resolutions and send them to their senators and representatives at Washington. Granges, farmers' unions, farm loan associations, organizations of fruitgrowers, stockmen, woolgrowers, local improvement societies, should busy themselves now before it will be everlastingly too late.

Farmers and other producers should also take immediate action to stir up the merchants in their trading towns.

Orchard men are aroused and in action, but theirs is relatively a minor industry, and unless they have powerful support their interests may not avail.

Remember that if the 15 per cent increase is granted, the farmer will contribute a large part of that $375,000,000. He will pay both ways and down the midle. The railroads will take increased toll out of all his products, and will pay higher prices for all he buys. The time to "holler" is before you are hit.

Food Preparedness

State Papers Hot on the Trail

Empire, Waterville: Plant, Mr. Farmer, plant with care, plant something everywhere.

Journal, Burlington: The government should control and regulate food products and prices.

Review, Toppenish: Overnight almost the farmer has become the center of national consideration.

Pioneer, Stevenson: Let us all get together in a friendly understanding and pull together for a bumper crop of everything we raise this year.

East Washingtonian, Pomeroy: Some of our farmers plan to grow corn on considerable tracts of land, while others will plant more land to potatoes. Still others will seed to grain lands intended for summerfallow.

Republic, North Yakima: The response of the farmers of the Yakima valley to the government's call for increased food production is magnificent. No matter where one goes new land is being opened up, and the old farms are being pushed to the limit of their capacity.

Tribune, Oakesdale: While we are doing all this charging on the capitalists as being the instigators of war for profit, why not charge the cause of war to the farmers of the Palouse country in the interest of two-dollar wheat?

Tribune, Puyallup: There is every reason to believe that a substantial recompense awaits those who will give their best efforts to meeting the demands imposed upon the producers of the nation; but, even though there were no prospect of personal gain involved, the dictates of patriotism, in its purest and noblest form, of humanitarianism—love of country and of fellowmen—will stimulate to action.

Pullman Land Is Sold.

Mrs. Elizabeth Bryant of Pullman, Wash., has sold a 80-acre tract of land to J. K. Smalley for $3000. Mr. Smalley will improve the tract.

Better Potatoes

Where Small Piece Seed Was Used

To the Editor of The Washington Farmer: If you ever took particular notice when digging potatoes you never find a good hill where the seed piece was large enough that the growing of the young plant failed to use up the food stored in the seed piece and left it to rot in the hill. Our first start here in potatoes was from some small pieces I saved as I used the potatoes. I saved only the perfect eyes with a well-developed, healthy sprout, about one-fourth inch long. These sprouts will continue to grow after planting. Our seasons are so late and the growing season so short that we have found it pays us when planting to use only the eyes that are showing development and to cut small pieces, reserving the balance for cooking. Often I have not cut over three or four eyes from the potato and these from the seed end, as they are more apt to grow than the ones near the stem end. I do not know as our plan would work on a large scale, but I do know that it has resulted in a perfect stand for us.

Last spring I had set out a box with small potatoes in it. They had turned green and had the prettiest little purple sprouts. We had used every available potato eye from the potatoes in the cellar and as a last resort planted these. They came up at least a week before those from the cellar and surely showed me how to get earlier potatoes, for there were big potatoes in the hills from the green potatoes long before there were in the other hills.

I do not know how long before planting eyes could be saved, but have thought of having a box of dry dirt on hand and placing them in it, though so far have always just dropped them into a can or box and kept cool and dry.

Other neighbors here also make a practice of saving the potato eyes for seed when using potatoes in late spring.

MRS. PAUL GRAFF.

Benewah, Idaho.

What do you think of the two pages of the colored comic picture in The Farmer last week? If you wish to see them continued, mark a cross (X) in the little square opposite the word "YES." If you do not wish to see them continued, mark a cross in the little square opposite the word "NO." These colored pictures are designed especially for the children and the editor of The Farmer will be glad to have the children also vote on this question by filling out this coupon and mailing it to the Editor of The Washington Farmer, Spokane, Wash.

YES [ ] NO [ ]

Name .....

Postoffice .....

RAISING BROCCOLI

How to Plant and Fertilize It.

To the Editor: I should like to know something about broccoli—the best variety for market, how to plant and fertilize it and so on.—H. S., Vancouver, Wash.

Professor O. M. Morris, of the state college of Washington, answers this question:

The only variety of brocolli which I know of as being grown in the northwest to any extent is the large, white French. This plant is always used as a substitute for cauliflower, but is by most people considered distinctly inferior to that crop. It can be developed as a winter crop for winter supply, because it is capable of greater storage than cauliflower. It is grown by the same general methods used in cauliflower production, and is grown as a late crop. It is frost resistant to a very considerable extent, and on that account can be left in the field until hard frosts have come.

School Children Active.

Reports come that practically all available vacant lots in Clarkston and Vineland, Wash., are being cultivated. the school children taking an active part in the campaign.

First Farm Loans

Made Through Spokane Land Bank

The first farm loans to be made through the Spokane Land bank have been authorized by President D. G. O'Shea, who has just forwarded to Washington, D. C., the application for a charter for the Eureka (Mont.) Farm Loan association, carrying approximately $50,000 worth of mortgages, approved by Appraiser W. E. Craves of the Spokane bank.

The Eureka local will probably be No. 1 in the list of over 500 local associations now in process of organization the northwest.

The Spokane bank has already reported to the national board that it can led $10,000,000 in this territory during the coming year.

FROM A DAIRY FARMER.

To the Editor of The Washington Farmer: I am in the dairy business in a small way and I find The Washington Farmer is the very farm journal needed on the dairy farm.—STEVENSON E. BARR, Tacoma, Wash.

The A B C of Road Construction

When Two-Horse Team Can Do the Work of Four Horse

By FRANK W. GUILBERT, Chairman Executive Committee Washington State Good Roads Association.

IV.

"It has been often said "a chain is only as strong as its weakest link." With a road the traffic is limited by the "weakest" mile. Usually the limiting mile is a hill or grade. Therefore, it is desirable to reduce the grades on our roads to a reasonable rise. Every grade reduction means a saving to every vehicle which may pass over the stretch of road affected. The greater the amount of tonnage moved over the lower hill the greater the saving to the community. It costs twice as much to pull a load on a steady 5 per cent grade as it does to pull the same load on a level road of the same character of surfacing. It costs four times as much on a 10 per cent grade to transport a load as it costs to move the same load on a level. Your two-horse team should do about the work of your four horses, if your hill is cut from 10 per cent to a 5 per cent grade. The generally accepted maximum grade is now 5 per cent. In certain cases on account of very difficult construction, a steeper grade is permitted.

Now then, what does a 5 per cent grade mean? Just this: A rise of five feet in going a horizontal distance of 100 feet. A 10 per cent grade is a rise of 10 feet in elevation on a base of 100 feet. Two per cent then is going up two feet in 100 feet of horizontal distance. Draw a line 10 inches long on paper. Set a point directly above one end of the line one inch. Draw a line from the point to the other end of the 10-inch line and you will have a 10 per cent pitch on paper which will give you a very good idea of the grade on the ground.

What Uncle Sam Will Ask of the Men Who Are to Serve in the Country's Army

Form 1. **REGISTRATION CARD** No.....

1 Name in full..... Age, in years.....
(Given name) (Family name)

2 Home address .....
(No.) (Street) (City) (State)

3 Date of birth.....
(Month) (Day) (Year)

4 Are you (1) a natural born citizen, (2) a naturalized citizen, (3) an alien, (4) or have you declared your intention (specify which)?.....

5 Where were you born?.....
(Town) (State) (Nation)

6 If not a citizen, of what country are you a citizen or subject?.....

7 What is your present trade, occupation or office?.....

8 By whom employed?.....
Where employed?.....

9 Have you a father, mother, wife, child under 12, or a sister or brother under 12, solely dependent on you for support (specify which)?.....

10 Married or single (which)?..... Race (specify which)?.....

11 What military service have you had? Rank.....: branch.....
years .....: nation or state .....

12 Do you claim exemption from draft (specify grounds)?.....

I affirm that I have verified above answers and that they are true.

If a person is of African descent tear off this corner.

.....
(Signature or mark)

Make the Farm a Training Camp

Manhood of Seven Hundred Thousand High School Boys Is Challenged by Great Opportunity

Here are two outstanding facts:

First, there are approximately 700,000 high school boys in the United States averaging about 16 years of age.

Second, the world-wide need for increased food supplies has created a demand for farm help such as never before known in this country.

These facts may well be considered together. May not the former be in part a solution of the problem raised by the latter? And does not the latter place an unprecedented opportunity before the boys enrolled in the high schools?

In the state of Washington there are at least 10,000 high school boys not old enough to enlist in the army or the navy, but who, in most cases, are old enough and physically fit to enlist in the equally needed and equally honorable army of agriculture for service during June, July, August and September. What would such enlistment offer?

A Patriotic Opportunity.

It would offer food for the armies of this country and those of England and France and their allies. It would offer triumph for the cause of honor and humanity. It would offer to the boys who enlist as soldiers of the soil a test of manhood, which, if successfully endured, would insure them admission into the uniformed and armed ranks of the army as soon as they reach military age. It would offer as good money income as any occupation open to the average high school boy in the city. The average high school student, whose knowledge of farm life is very limited, probably would be worth to his employer on the farm $1 a day for the first month or two. The third month, which would find harvest beginning, should bring him $2 a day at least, with considerably more if he proved equal to the tasks before him. The fourth month should show an increase rather than a decrease, with wages for some harvest jobs in the cases of boys who developed into capable men of $3 to $5 a day. This should make his summer's wages approximate $150, if he proves capable, out of which, unlike the case in city employment, no board bill would have to be paid. The same boy, working in the city, probably would earn an average of $40 a month, out of which would go living expenses and other expenses incidental to city life that would eat at least half of it up.

From a purely monetary standpoint, the summer on the farm is to be preferred to the summer in the city. But the call of the farm is not a call to a lazy vacation. It is a call to hard work, overalls, hot sun, sore hands and feet (for the first few days), and abandonment of the movies, the white collar, the tennis court and the eight-hour day. It is a call to a life ideally adapted to develop manhood—physical manhood and rugged character that would shorten the preliminary training for the army day for day of the time put in in the farm fields.

Every high school boy who can make good in the army can make good on the farm, and a boy who can not make good on the farm can not make good as a soldier.

The opportunity is a challenge to the manhood and patriotism of several hundreds of thousands of the youthful young men of this country. It is a challenge to 10,000 in Washington.

But the challenge can not be accepted by the boys without the cooperation of the farmers who need them and some organization to provide the enlistment machinery—probably the government, which is already taking definite steps toward the formation of a great agricultural army.

The farmers, if they require the service of the boys, must realize that they are not seasoned, experienced "hands," but raw recruits. They must take precautions to make the work endurable during the "training season" of the first couple of weeks. They must temper the work just as they must temper the work of a colt just placed in the harness.

Must Organize Thoroughly.

And what of the machinery by which the recruits may be assembled for duty? The army and navy have recruiting stations. So must the army of soldiers of the soil, and toward this end the government is already working. Definite, specific methods must be devised for enlisting the workers and listing the farms where their labor is needed. A definite aim must be to so organize the work that boys fitted for certain classes of farm labor will be directed to places where those classes are required to be performed. Wherever possible enlistment should be in squads for communities, not only to afford the boys means of self-entertainment to make up in part for what would be comparative isolation for them, but to indulge the spirit of cooperative army life.

The opportunity and the responsibility stretch in three directions. Three-quarters of a million boys, hundreds of thousands of farmers and the government of the United States are involved.

Land Bank Appraisers Named

Men of Sound Judgment and Absolute Fairness

By N. W. DURHAM, Chairman Spokane Committee on Federal Land Banks.

Five land bank appraisers for the Spokane farm loan bank have been appointed by the national board at Washington and other appointments are expected. Appointments to date are, as stated last week:

Washington—C. B. Kegley, master of the state grange, and A. D. Davison of Stevenson.

Montana—W. D. Graves of Missoula and T. S. Hogan of Billings.

Idaho—C. E. B. Roberts.

The law does not limit the number of these appraisers. The federal farm loan board is authorized to make as many appointments as may be found necessary, and to fix their salaries Their pay has been set at $2400 a year. The law says: "Land bank appraisers shall receive such compensation as the federal farm loan board shall fix, and shall be paid by the federal land banks and the joint stock land banks which they serve in such proportion and in such manner as the federal farm loan board shall order." So far no joint stock land banks have been chartered in the Spokane district, so at present the Spokane bank will pay all the salaries of these appraisers.

The position carries much responsibility and calls for sound judgment and a spirit of absolute fairness. The law provides that—

"Before any mortgage loan is made by any federal land bank, or joint stock land bank, it shall refer the application and written report of the loan committee (of the applicant farm loan association) to one or more of the land bank appraisers, and such appraiser or appraisers shall investigate and make a written report upon the land offered as security for said loan. No such loan shall be made by said land bank unless said written report is favorable."

The law makes these appraisers the watchdogs of the treasury. No loan can be made without their approval, and an appraiser's approval will practically be final, for the bank will be guided by his judgment. While it has power to deny a loan over his recommendation, extraordinary circumstances would have to arise to lead it to take that action.

These appraisers will have to be on guard against over-appraisal by local committees. While it is not likely that a loan committee would deliberately inflate valuations, it might be carried away by local spirit, or in periods of real estate speculation a loan committee might, honestly, and with the best of intention, make appraisals not justified by permanent conditions.

The law lays down a wise general guide. It says that "in making said appraisal the value of the land for agricultural purposes shall be the basis of appraisal and the earning power of said land shall be a principal factor."

But we have seen by experience that there have been periods when the earning power of land was not an infallible factor. Take even so staple a product as wheat. We have seen it sell as low as 25 cents a bushel, and at that price the earning power of the land vanished. Upon the other hand, it would not be wise to capitalize land on the basis of present high prices for wheat.

The market prices of orchard and irrigated lands also have fluctuated widely. All these factors should be weighed with careful judgment, and the duties of the appraisers call for men of the soundest discretion. Twenty-four hundred dollars a year is none too much to pay for the services of officials entrusted with such heavy responsibilities, provided they are upright, efficient and industrious.

Favor New Open Season.

Whatcom county sportsmen favor the opening of the season for upland game birds October 15 and the closing of the season November 30, in place of the present season of six weeks from September 15 to October 31.

Washington Portraits No. 14.



W. J. Blancheft.

W. J. Blanchett has been farming near Quincy, in Grant county, since 1904, and at present has 640 acres, on which he raises wheat, some horses, enough hogs for his own use, and a large amount of chickens. Mr. Blanchett believes in plowing the ground as soon as the crop is harvested, to a depth of six or seven inches, so as to catch the spring moisture. In the spring, as soon as the weeds start, he keeps the weeder busy, so as to keep the land clear. Mr. Blanchett does not farm all of his land each year, but has half of it in summerfallow.

The next in the series of Washington portraits will be that of W. W. Wrenn, of Castle Rock, and will be given in next week's issue of The Washington Farmer.

First Live Stock Entry for Spokane Interstate Fair

The first live stock entry for the Spokane Interstate fair has been received from Julius M. Fisk, head of the Fisk farm at Spring Valley, who entered 22 head of sheep and horses. An entry five months ahead of fair time, accompanied by a check for stall rent and a request for preference location, is something new at the fair office and breaks a record for the Spokane institution. President Thomas S. Griffith already has the assurance of an excellent live stock show in September.

Irrigate Seleen Valley.

The Seleen ranch and other land owned by T. Claud Bennett in the Seleen valley, Wash., is to be put under irrigation through the use of overflow water, according to the plans of Mr. Bennett.

The Bunch Grass Boy Falls in Love

But before falling under the 'thralling spell of puppy love he distinguished himself by being the solitary scholar of one of the first Sunday schools ever held in the Big Bend country. His teacher was Daddy Utt, a patriarch with a long white beard, a herd of Holsteins and seven daughters. You'll enjoy reading about Daddy Utt.

Then came the first district school—and a variety of love affairs. First there was Frances, who caused a heroic attack on the spelling book; then "Minervy"; then Laura, who made our hero waver between the passionate desire to be a bronco buster and the wish for the less exalted position of president of the United States.

ALL THIS IS NARRATED IN JOE ASHLOCK'S MOST AMUSING VEIN IN THIS ISSUE ON PAGE 17. There's one of these Bunch Grass Boy's narratives in every issue of The Farmer. You're reading them, aren't you?

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Farmer's Ox About to Be Gored

The railroads are pressing with great vigor their petition to the interstate commerce commission for a 15 per cent blanket advance in freight rates on all the lines in the United States. It was not a false alarm when The Farmer urged its readers to busy themselves with earnest protests.

The New York Journal of Commerce, a daily newspaper that specializes on business and railroad news, says railroad officials interviewed by its reporters "appeared confident of a substantial increase, probably the full 15 per cent."

> "They were encouraged in this view by the fact that important business associates have urged that the advance be allowed, and by the absence of any large opposition. The railroads must have additional revenue to operate efficiently and the commission will recognize this, is the view generally taken."

It is safe to say that such business associations as have spoken for the proposed higher rates are composed of interests that can pass them along to the producers and consumers. It is not their ox that is being gored.

The railway managers are counting much on "the absence of large opposition." This bears out The Farmer's first warning, that unless there is stout opposition the interstate commerce commission will grant the advance.

Already the fruit growers of the Pacific northwest have rallied to the defense of their endangered industry. The lumber manufacturers have followed suit. They need as earnest, active allies the grain growers and stockmen.

Immediate action is needed. All organizations of farmers should pass protesting resolutions and transmit them to their senators and representatives with instructions to file them with the commission.

Prepare to Save What You Grow

The schools, country as well as city, have a great opportunity before them in this time of need for increased food production. Many are taking advantage of this opportunity. In a general letter sent to every teacher in his county, one county superintendent sends this message to the farmers of the districts:

"Have you cellars and roothouses? If not, build now. Provide at once for the coming winter. Grow all your soil will produce and then save all you grow. Do this by canning, curing, preserving and storing. Home garden clubs should cooperate this year with home life as never before. Teachers should talk agriculture, thrift and economy in a way that children can become actual helpers in this time of need."

State Grange Master Should Be Farmer of Ability and Character

Mr. Kegley's acceptance of the position of appraiser for the federal land bank will mean the election of a new master of the state grange at the annual meeting in June at Wenatchee, since it would be manifestly impossible for him to hold both positions and do justice to either.

The federal government will properly expect the appraisers to devote their undivided time and thought to the duties for which they are employed and paid $2400 per annum.

On the other hand, the state grange will need as master a man who will be practically free to devote his entire time, zeal and energy to its unbuilding.

The state grange master should be a farmer of exceptional ability and character. He should put the welfare of the agricultural industry above all petty personal considerations. While having a broad grasp and knowledge of public questions and problems, he should refrain from playing politics as a game and always remember that the grange comprises members of all shades of political belief.

He should be above petty hates and resentments. He should have sound business judgment, with ability to discriminate between worthy and genuine cooperative undertakings and bogus schemes like the swindling Northwestern General Trading company.

Within its membership the state grange of Washington has scores of able men who can measure up to these requirements. The Farmer has no candidate to back at the Wenatchee meeting. It has no desire to dictate to the grange, the farmers' union or any other organization. It does have deeply at heart the welfare of the agricultural industries—the prosperity and happiness of the farmers and their wives, sons and daughters. Naturally and rightly it wants to see men of the highest fitness at the head of the grange and other farmers' organizations, and it is confident that the Wenatchee convention will choose a successor to Master Kegley who will command the respect and confidence of the public of Washington and neighboring states.

Can a Farm Support Two Homes?

The farm labor problem is more acute this season than usual, due not only to actual shortage of men, but to the fact that late spring has brought farm work on with an unusual rush. In addition to these two conditions, reports from many sources indicate that many men are unwilling to work on the farms for the wages they receive and under the conditions which often, possibly generally, prevail.

Especially this latter brings forward the question: Can it be made practical on the average farm for a man to be employed the year 'round, and if so, can such man be provided with real home life, such as will make him a contented and willing and efficient worker?

Inquiries bring a variety of replies to the year-round labor question, but one general statement is made by nearly all—that farming must be done intensively, and that live stock must be made a considerable part of the production to enable the farmer to keep help all months of the year. And the suggestion also comes that the way to remove the discontent from the laborer's mind is to provide him with a home of his own where he can live his own life with his wife and children. Is this practical? In other words, can the average farm support two homes? Some farms do, but possibly they are not "average" farms. Possibly the very fact that they do provide separate houses and separate conveniences and separate garden patches and household equipment lifts them out of the average class. But here is a possibility that deserves serious consideration.

How large a farm would it take to support two homes? In the dry farming regions it might take a thousand acres. In the fruit-growing regions maybe twenty-five acres, or maybe one hundred. In the dairying sections from ten to fifty. Soil and climate conditions would do much to determine this, but possibly the administrative ability of the farmer himself would do more to determine it.

But whatever the practicability of the plan, it remains unquestioned that the permanent, stable, contented laborer alone can or will perform the kind of service that makes farming pay.

Washington Gleanings.

Principal F. C. Barker and his students of the Ahtanum school, North Yakima, have flourishing pig, sheep and garden clubs busily at work, all of them with good membership.

Spokane's fruit and vegetable cannery plans to can this summer 3,000,000 pounds of fruits and vegetables and will employ a maximum of 200 persons at the height of the season.

The dairy herd at the state prison is being increased steadily, and by fall Warden Drum hopes to have about 90 Holstein cows. A butter plant will be put in and butter supplied other state institutions.

J. W. Phillips of Bluestem has sold his half section near Bluestem to A. C. Carlyle of Davenport for $24,000. He then bought the E. E. Noble ranch near Reardan, consisting of 800 acres, the price paid being $50,000.

Herman Curtis, the well-known farmer and dairyman of the Cedar creek district, north of Palouse, has closed a deal for the purchase of 160 acres adjoining his home farm from J. B. Harding. The price paid was $77.50 per acre.

Ten pupils of the Moxee schools have formed a Moxee bean club. Each of them is to grow a quarter of an acre of Kentucky Wonder beans in competition for honors and also for the $40 a ton which the Libby, McNeill & Libby cannery has agreed to pay them for the product.

Preliminary arrangements have been made to get the Lynden cannery ready for the season's work. Berries of all kinds, cherries and beans will be packed by the cannefy the first year, and contracts are being offered the farmers for a period of four to six years for their crops.

Fourteen pupils of the Lower Naches schools have organized a pig club and will do their share toward raising the meat production of the county. Under the direction of Superintendent W. P. Tyler the boys are already launched on the enterprise. They will grow the Hampshire breed.

Frank M. Rothrock and John Napier, herd superintendent of the Hercules stock farm at Sprague, have left for the east on a buying trip. They are going primarily to receive the $5500 purebred Shorthorn bull recently purchased in Scotland. Mr. Rothrock will purchase two or three cars of purebred Shorthorns from middle western breeders.

The Washington state commission for food production has requested Secretary of the Interior Lane to expedite the issuance of certificate of title on Indian lands sold to whites who wish to place the land under cultivation but whose deeds have not yet arrived from Washington. Many thousands of acres of land in the Yakima valley are tied up awaiting issuance of deeds.

Calvin Casteel, manager of the Okanogan government irrigation project, states that within all probability the government this year will invoke the reclamation regulation that requires all landowners with subscribed water under the government project to have at least one-fourth of their land under cultivation during the year 1917. This will affect about 2000 acres of the project and will mean the cropping of at least 500 acres of rich land that has heretofore lain dormant.

What Others Say

The Farmer: If the farmer will only get the crop in the ground, the labor question must and will be solved.

The Farmer and Stockman: Everybody seems to be agreed that in times of war the farmer is the most important man of any nation.

The Farmer's Review: Sickness and death among farm animals may be prevented in a great majority of cases by observing sensible sanitary precautions.

American Agriculturist: The slogan should be, "A silo on every farm." What a splendid contribution this would be to the preparedness campaign.

California Cultivator: In any case, don't fear overproduction. If the war should stop today Europe will still starve unless America feeds her.

Trees in BLASTED soil bear better



Fruit growers have proved—by planting some trees in blasted beds and others in ordinary ground—that trees planted after the use of explosives root deeper, grow faster and better—that they are thriftier in every way, bear earlier, and yield larger crops.

They have proved also that when the soil of established orchards is properly blasted the trees immediately take on new vigor and bear better fruit thereafter. Orchardists know that this condition is due to the increased moisture-storage capacity induced by blasting and to the consequent release of plant food from the subsoil.

Fruit growers in every Pacific Coast State have used tons of

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

for planting trees and deep-tilling their orchards. These powders are made in two brands, Eureka Stumping Powder and Giant Stumping Powder, and are prepared especially for farm work. prepared especially for farm and orchard work. They are more effective and do their

Eureka Stumping Powder pulverizes the soil instead of caking and packing or throwing it high in the air. This is the action that is wanted in stump and soil work, and the action that the so-called "high strength" dynamites will not give. When you use Eureka Stumping Powder the finished job costs you less money.

Giant Stumping Powder, which is also used for subsoil blasting, is the most efficient explosive for many other kinds of farm work, including blasting dead trees or stumps in wet soil.

WASHINGTON Fruit Growers Say:

"Generally speaking, the growth of plants depends upon the condition of the soil into which the roots penetrate. If the depth of loose soil is too limited or the surface water is permitted to stand too long, the growth is impaired. Explosives properly used in such instances have invariably relieved the condition and resulted in excellent growth. The yield is often three times as great on blasted soil as from those untreated in the same vicinity."
ROSECROFT FRUIT FARM, Sumner.

"We consider the use of explosives an important factor in planting orchards. It is important to secure good drainage and the roots should be able to penetrate deeply into the subsoil. Young fruit trees newly planted should make at least one foot of new growth the first year, and this is hardly possible unless the land is put into good mechanical condition, with plenty of room for the roots to spread in the loosened subsoil."
A. LINGHAM, Puyallup.

Experiment Stations Say:

"I have seen orchards in Hood River greatly benefited by the use of dynamite, where the dynamite opened up the soil to give better drainage." C. I. LEWIS.
Oregon Experiment Station.

"The use of explosives is not simply a benefit in the case of hardpan, but is beneficial to all soils and is necessary in any heavy, impervious soil. Its effect is to loosen, drain, and aerate, and give additional feeding ground for the roots."
UNIVERSITY OF SOUTHERN CALIFORNIA.

"Without the use of dynamite in tree-planting the roots soon meet with the smooth and compacted sides of the hole, through which they have great difficulty in penetrating. The tree is in about the same situation as if it had been planted in a large tub. When dynamite is used cracks are formed in the soil to distances of five or sometimes six feet on all sides. This makes the very best conditions for the continued growth of the tree. For tree planting dynamite is recommended confidently as the best method of preparing the soil."
U. S. BULLETIN No. 38.

Make this test of Giant Powders

By *using* the Giant Farm Powders you can demonstrate their superiority for tree planting and orchard tillage. Fill out the trial order blank in the coupon to the right. We will have our nearest distributor supply you—at lowest market price—with a 25- or 50-pound case of either of the Giant Farm Powders. Test this in comparison with any dynamite. The results will show you why fruit growers in every section insist upon having the Giant Farm Powders for orchard tillage work.

Giant Farm Powders and other Giant blasting supplies are sold by distributors everywhere. Your own dealer has them or can get them for you. If he offers you a substitute, write us and we will see that you are supplied with the genuine. Giant Powder is the trade name of explosives manufactured by The Giant Powder Co., Con. Because Giant Powders are best known everywhere, many have assumed that all high explosives are Giant Powders. Insist upon having the genuine.

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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

Care of Litter

Treatment of Pigs to Avoid Disease

By E. J. Fjeldsted.

At the age of from 3 to 4 days catch each pig, and with the aid of a pair of pinchers, remove the black teeth. In removing these teeth be sure to break them off. Never pull them, as this would leave a wound open to infection. The above precaution will materially reduce the canker sore mouth trouble so common among your young pigs.

Do not allow your little pigs to become excessively fat. In the event they begin to show excessive fatness around the throat, reduce the dam's feed materially. If this condition is not checked a disease commonly known as "thumps" will result. This disease is very difficult to cure, though it is easily prevented. Lack of sufficient exercise will oftentimes result in thumps. Provide an opening leading from the dam's quarters which will allow the pigs to escape at any time. If the weather is such that the little pigs can not leave the quarters, either of the following methods has proved effective: Keep them moving in the pen by the aid of the whip, from a quarter to a half of an hour each day until normal conditions are restored; or provide a barrel of sufficient size to accommodate the litter, placing the pigs inside, closing the end with slats close enough to prevent the pigs from escaping, though providing abundant air. If these precautions are followed thumps will cause very little loss.

When the pigs are two weeks old they should be taught to eat. Provide a trough and a feeding floor out of reach of the dam, but accessible at all times for the little pigs. Keep skim milk in the trough most of the time if possible. Sprinkle oats on the feeding floor. If you have no oats, cracked wheat or shorts may be used. It will be found that the pigs will soon be regular visitors to the feeding quarters, and at the time of weaning, eight weeks, the pigs will be taking a full ration. By following this system the usual check at weaning will be prevented.

At seven weeks of age, all males that are not purebred and eligible to registry should be castrated. This operation is very simple and, with sanitary precautions, the loss should be very small.

Veterinary

Dr. S. B. Nelson

I have a mare that has been bred several times but still is not with foal. —M. T.

Tonasket, Wash.

There are so many things which cause sterility in mares that it is difficult for me to answer your question in this column with its limited space. Therefore if you will write me personally, giving more detailed symptoms regarding the mare, I will be glad to answer you with a personal letter.

I have a cow that freshened four or five days ago that gives bloody milk from one teat, the milk having a chocolate color. The milk from the other teats seem O. K.—M. S. G.

Issaquah, Wash.

I do not know the cause of the condition which you mention—there are a good many causes for it. I am going to recommend that you try giving your cow a teaspoonful of hydro-sulphite of soda in a quart of water once daily for 10 days to two week's time. Give the cow a purge of 1 1-2 pounds of epsom salts in three quarts of water also.

I have a six-year-old horse that has not been eating his hay for two weeks. He eats 10 pounds of oats and carrots a day. The horse is losing flesh rapidly. Had a veterinarian examine his teeth and he said they were in perfect order.—H. M.

Orcas, Wash.

From the very simple symptom that your horse does not eat his hay and the fact that you have had a veterinarian examine the horse's teeth, and you say they are all right, I have no symptoms from which to make a diagnosis. I regret that I can not be of service to you.

I have a large 3-year-old colt that got a bad sprain by getting her foot on a timber. The cords above the pastern joint are puffed. There is no swelling or inflammation or soreness anywhere else. She has been lame for three weeks. She has been out in the yard during the day. G. M. C.

Grandview, Wash.

Rest is the proper thing for a sprain. I would advise the shoeing of the mare on the lame foot with a shoe with a high one-inch heel, large, so that it will not sink into the dirt any more than is necessary. Raising the heel an inch will rest the tendon. After two or three weeks' rest of this kind I would apply a blister, or have a veterinarian fire the tendon and blister it, after which I would rest her for two or three weeks longer and then gradually begin to let the heel down. It will take from two to three or four months for the mare to get well, I think.

Rheumatism.—What is wrong with our hogs? First, they show lameness, then they get worse as if they might have rheumatism, then after a time they get down in their backs and unable to walk.—G. F. S., Uniontown, Wash.

Answer.—The disease which you describe has some of the earmarks of rheusatism. I would advise providing dry quarters, which they may already have, without draft. Be sure and eliminate the drafts. If they are on a board floor see that there are no cracks in the floor. Then give from one to two ounces of castor oil to each hog, the following day begin giving 15 grains of potassium iodine to each animal for a week or 10 days. Give this once daily.

Warranted to Give Satisfaction.

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Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

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Remember that warmth, moisture and dirt make a great breeding place for disease germs. Dr. Hess Dip and Disinfectant purifies the air and establishes health conditions.

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GARBAGE

Government Tests *prove* Sharples claims:



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Auburn, Ala., Jan. 5th, 1917.

M. I. Bloch,
Agent Sharples Separators,
Selma, Alabama.

On August 2nd, 1916, we made a series of tests with the Sharples Suction-feed Separator at our creamery, with the following results:

Revolutions per minute	Per cent cream	Per cent skim milk
35	28	.01
45	27	.01
55	26	.02
60	26	.01

So far as my knowledge goes in working with separators, the Sharples Suction-feed is the *only* separator that will give a uniform test with cream and skim-milk at varying speeds of the handle, and that it is the *only* one that does not lose more butterfat at low speed than at the proper speed.

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Instructor in Animal Husbandry

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Famous Suction-feed
Skims clean at any Speed
SEPARATOR

—the *only* separator that will skim clean at widely-varying speeds
—the *only* separator that gives cream of unchanging thickness—all speeds
—the *only* separator that will skim your milk quicker when you turn faster
—the *only* separator with just *one* piece in the bowl—no discs, easiest to clean
—the *only* separator with knee-low supply tank and once-a-month oiling

Over a million users! Made by the oldest and greatest separator factory in America. Write for catalog to Dept. 49.

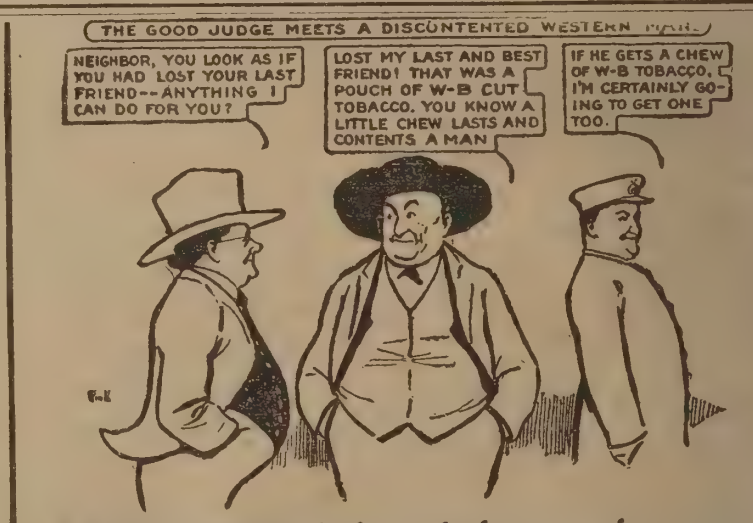
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Sharples Milkers—used on over 300,000 cows daily

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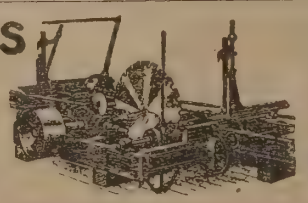
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Ten 16 foot logs averaging 14 inches thick make 1000 feet of lumber, worth $25 to $40 in your local market. Costs you only $4 to $5 to saw 1000 feet with an "American" Portable Saw Mill. Think of the profits! Why, that timber on your wood-lot is just like wheat. Reap it with an axe. Harvest it with an inexpensive, light running "American" Portable Saw Mill you can operate yourself. No experience needed. An 8 H. P. gas engine and an "American" mill saws up to 2500 feet per day. Get an "American" because it saws more and better lumber with less help and power than any other. Make big money every winter when the farm doesn't need you. Hundreds of farmers are doing a paying lumbering business with "American" mills. You can do the same, for there are wood-lots around you if you have none yourself. Read enthusiastic letters from farmers in our free Book No. 7 that tells all about farm lumbering.

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A. B. NYSTROM, Editorial Contributor

Questions
Are Answered by A. B. Nystrom

Will you please tell me how to ripen cream ready for churning without keeping it too long? Is there not some commercial ripener, such as the creameries use, which I can obtain? —Mrs. J. R., Springdale, Wash.

I believe you will have little difficulty in ripening the cream if you will heat it to a temperature of 70 or 75 degrees Fahr., and introduce some sour milk, leaving it stand at this temperature for some six to eight hours. You can make a commercial starter by taking some clean glass jars that have been thoroughly scalded and putting into these some clean milk. Set them away at a temperature of about 75 degrees F. until they coagulate. Then taste each jar and see which one has the cleanest flavor. Select this one to use as the starter for your buttermilk.

Fattening Aged Cow.

I have a Jersey cow 8 years old with a R. O. M. record of 478 pounds fat. She freshened in January and has only averaged about 2 gallons a day of 5.5 per cent milk since. She is thin and her hair is rough. She eats well, but does not look thrifty. I wish to sell her if possible and would like to know what to feed her to bring her to greatest possible flow of milk and more fleshy condition. I have been feeding alfalfa hay and large feed of mill-run shorts, dry, with some oil meal, soy bean meal, and beet pulp. Have no roots. I do not care about the economy of her feetd ,but wish to get her in selling condition.—B. E. S., Opportunity, Wash.

It is very difficult to fatten an old cow in the condition that you state this one is. I wonder if you have not had her tested for tuberculosis. In case you have not I would suggest that you would, and if she passes the test then begin to feed her to put her in better condition. I do not believe you will be able to fatten her as long as she is giving milk. Feed the cow plenty of good nutritious hay, such as alfalfa or clover and soak your beet pulp. It is not necessary to get any roots. In fact, I believe you can get as god results from feeding the soaked beet pulp. Give her linseed oil meal to keep her bowels open and be sure to give her plenty of exercise. Aside from this I can give you no further suggestions.

Two Money-Making Cows.

During March M. H. James of Ebeys prairie, in Island county, Washington, milked two cows, sold $33.38 worth of butter fat and $3.60 worth of milk to home customers. There is no need to add that Mr. James keeps cows which test well in butter fat and practices the best methods of feeding.

Those Having Silos.

The manager of the Pend Oreille creamery at Sandpoint, Idaho, says that it is noticeable that patrons having silos are keeping their output up to the mark in spite of the hay famine.

Value of Oil Meals in the Ration

To the Editor: In figuring a balanced ration for dairy cows, which kind of oil meal should be purchased—linseed, flaxseed, or cottonseed—and what are the different values?

H. D. P., Kelso, Wash.

It makes very little difference whether you buy linseed meal or cottonseed meal for feeding dairy cows if it is a matter of furnishing protein. However, you will find that the linseed is more laxative than the cottonseed and perhaps a mixture of the two would give the best results. This will depend somewhat upon the other feeds you are using in connection with it. I should not advise feeding ground flax seed, but rather the linseed oil meal, which has the oil pressed out. We find different grades of linseed meal and different grades of cottonseed meal. You should insist on having one with a high protein content; for, no doubt, you are feeding this expensive feed for the purpose of furnishing protein rather than any other nutrient.

Henry and Morrison, in their "Feeds and Feeding," give the following compositions of these feeds:

Digestible Nutrients in 100 Pounds.

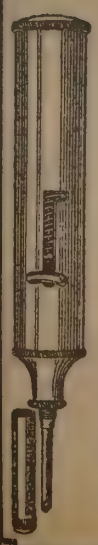
	Crude protein.	C. H.	Fat.
Cotton seed meal, choice	37.0	21.8	8.6
Cotton seed meal, good	31.6	25.6	7.8
Linseed meal, new process	31.7	37.9	2.8
Flax seed meal	20.6	17.0	29.0

A. B. N.



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Used and endorsed everywhere that Blackleg is known.

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DAIRY CATTLE
No Shortage Expected in Oregon.

"There is no shortage of dairy cattle likely in Oregon," said Dairy Commissioner J. D. Mickle, in reply to a question as to the truth of the rumor that there was danger of such a condition.

"We have made inquiry at the principal slaughter houses throughout the Willamette valley," he continued, "and, while the percentage of cows coming in is heavier than it was last year, still, investigation shows that they are culls, old or with defective udders. These are the unprofitable cows, anyhow—the cows everybody has been urging the farmer and dairyman to get rid of.

"As nearly as we can tell about 8000 cows of dairy type have gone through the Portalnd Union stockyards in 1916. Compared with the 200,000 dairy cows which are supposed to be in Oregon, this is not a great reduction. In the first two months of 1917 the number of cows of dairy type received were double those received in the cofresponding months of the preceding year, but as these are not first-class animals it is evident that there is no real danger so far of a serious reduction of milk cows. The high prices offered for beef animals have brought this inferior stuff in and it is, in the main, a good thing.

"I think the farmers are realizing that it does not pay to kep an inferior type of dairy cow and have wisely taken the opportunity of disposing of their poor producers at a time when prices are the highest."

Welch Secretary of Dairy Show.

Frank Welch, formerly secretary of the Oregon state fair, and well known to the live stock men of Oregon, has taken the position of secretary of the Oregon Dairy show. George H. Dammeier resigned on account of the demands of his business.

Jersey Cow's Record.

The Jersey cow, "Owl's Golden Queen," belonging to E. L. Brewer of Satsop, Grays Harbor county, Washington, made a test production of 110.38 pounds of butter fat in March.

PATRIOTISM DEMANDS
That All Butter-Fat Waste Be Stopped

President Wilson's powerful appeal for the conservation of the nation's resources is still ringing in our ears. "The supreme need," he says, "of our own nation, and of the nations with which we are cooperating, is an abundance of supplies, and especially of foodstuffs;" and again, "Upon the farmers of this country, therefore, in large measure rests the fate of the war and the fate of the nation."

Wastful methods must be abolished. Every device that makes for the saving of time and labor on the farm must be utilized. Every plan that makes for the conservation of our food products must have the farmer's hearty cooperation.

And nowhere is there greater opportunity than in the production of dairy products, particularly butter-fat.

"Fats, fats, fats, more fats," that is the demand of the warring nations in Europe. The men who toil and the men in the trenches must have fats. They are the fuel that the human machine must have.

And no fat is so palatable or so easily assimilated as butter.

When it was simply a question of the farmer's own loss of profit, the tremendous waste of butter-fat on American farms was bad enough, but under present conditions such waste is nothing short of criminal.

And it is wholly unnecessary.

It is conservatively estimated that about a million cow owners in the United States are still skimming milk by some wasteful "gravity" method.

At an average of four cows to the farm, and an average waste of thirty-five to fifty pounds of butter-fat per cow, all of which could be saved by the use of a De Laval Cream Separator, this alone represents an annual waste of at least 140,000,000 pounds of butter-fat.

Then there are, perhaps, a million inferior or half-worn-out separators in use whose owners could save fifteen to twenty pounds of butter-fat per cow by replacing each machine with New De Lavals; and this represents another waste of at least 60,000,000 pounds of butter-fat annually.

Also there is the loss of time and labor that a De Laval would save and which could be better devoted to other productive work on the farm. This waste is hard to compute, but it is almost as important as the loss of butter-fat.

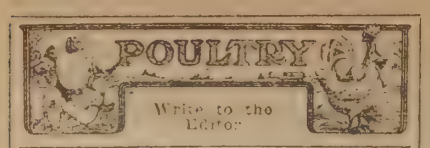
These are startling statements, but any dairy or creamery authority will agree that these estimates of waste are really very conservative.

Shall this tremendous waste continue? Will the loyal American farmer permit such waste when he appreciates the duty that is laid upon him to conserve the one article of food that above all others is necessary to the life and health and energy of the men who serve the nation in the field, the factory, the mine—and soon in the trenches?

We have always had an abiding faith in the American farmer, and we believe that if he is made to appreciate the full purport of the president's appeal to him, the appeal will not be in vain; and when he further appreciates what the De Laval can do to save the butter-fat which is now being wasted, and that his patriotic duty demands that such waste be stopped—NOW—our plants will not be big enough to take care of one-half the demand for De Laval Cream Separators.

DE LAVAL DAIRY SUPPLY CO.

61 BEALE STREET, SAN FRANCISCO.



JAMES ERYDEN
Editorial Contributor

Incubator Chicks.

To the Editor: All my life I have wanted an incubator, yet I never even saw one in operation until a month ago when I set my own. I can hardly realize that I am the happy foster-mother to 50 lively chickens and in another two weeks will have at least 100 more.

I fixed up an old smoke-house for a brooder house, eight feet square with ceiling six feet. I tacked papers thick on the walls, laid a new floor over the old with several thicknesses of paper between and set in a small heater. The brooder is simply a box three feet square, with a drop lid, on the lid are tacked flannel strips double, two inches apart each way.

I cut a heavy paper a little larger than bottom and tacked lightly, over this I laid newspapers, so I can keep their quarters fresh. I carry the brooder outdoors pleasant days and they soon learn to go in when they get cold. I warm it with quart jars filled with boiling water and a woolen sock slipped over each; a jug is better, but the jars just fit in my brooder and being apart prevents crowding. A chicken fountain is so simple, just a tin can or bucket with a lid two inches larger in diameter. With a nail punch a hole three-fourths of an inch from the top of can. Clap on the lid, turn upside down, and there you have it, fresh water all the time and they can't get into it.

MARILLA KIDWELL.
Garfield, Wash.

Poultry Preparedness and Kale.

Preparedness is one of the first essentials of the poultry campaign. The successful poultryman must lay out his campaign months ahead. He should now prepare for his summer and fall campaign for more eggs and better profits by planting kale or other green food crops. Where kale thrives as it does in western Oregon and Washington there is no better and more profitable crop to grow for poultry. For summer and early fall use it should be planted just as soon as possible now. For winter use it is planted in July from seed sown in May or June. A hen will eat about as much kale by weight as grain if she has no other green food of any kind. If the fowls have range or are kept in yards where they have more or less green food they will not eat this amount. With more or less range about 200 plants, averaging 20 pounds to the plant, will be sufficient for 100 hens for a year if planted so that it will come to maturity during the different seasons. The fowls eat a little more than half the weight of the plant, the balance being stalk.

The plants are set about three feet apart each way. The ground should be well fertilized and well cultivated. A piece of rich, well cultivated and well watered soil, 16 by 100 feet, should furnish about enough green food for 100 hens for a year; but to be sure of a sufficient supply this area had better be doubled. The kale will also furnish shade for the fowls in summer, as well as food. It will help to reduce the feed bill; at any rate it will help to make the feed more efficient for egg production.

Prepare for the egg campaign by planting kale and more kale. J. D.

Was Probably Over-Fed.

To the Editor: One of my geese went on the nest in the morning as if she were going to lay. At 5 o'clock p. m. it was still on the nest, which caused me to think that she was setting. At 6:30 I found the goose lying on her back dead. We found a shelless egg in the goose and she was quite fat. I had been feeding the geese one handful of wheat to each pair three times a day and all the carrots they would eat. They had been running out in the water and snow six hours a day.

T. G., Wallowa, Ore.

So far as the letter describes the symptoms the trouble was probably due to the feeding. If the goose had not been laying the feeding was too heavy. Geese should not be heavily fed on grain or concentrates. They live largely on roughage or pasture. They should have all the vegetables or roughage they will eat, such as kale, alfalfa, mangels, or anything of that nature. Another point, they should not be fed much whole grain. A feed of mash in the morning and a light feed of grain in the evening is all the feeding they should have during the laying season, and at other times less food. Mix the mash with milk or buttermilk and give them milk to drink. In the absence of milk a little beef scrap may be fed during the laying period only. They should also have grit and oyster shell before them at this season. J. D.

Might Be Tuberculosis.

To the Editor: Some of my chickens get paralyzed in their legs and can't walk. They eat but they soon die. Could you tell me any remedy for it?

A. D.

North Powder, Ore.

It is impossible to say positively what the trouble was without further information. The only symptoms mentioned might indicate tuberculosis, but it would be little more than a guess. Cut one open and let us know what you find. Look for spots on the liver and tubercules on the intestines. J. D.

Chicks Die.

To the Editor: Can you tell me why three weeks' old chicks are dying. Their feathers all seem to be growing the wrong way, and they will hang their wings down a few days and then die. What can I do for them?

MRS. R. R., Rosalia, Wash.

There is nothing here to indicate any one special chick disease. If the correspondent will write us giving fully her system of brooding and feeding and general care it might be we could find a clue to the trouble and suggest a remedy. It might also be well if the trouble appears to be epidemic to send one or two of the sick chicks to the state experiment station for examination. J. D.

To Correspondents.

In writing about poultry diseases, correspondents should be very explicit in giving the symptoms. A great many letters are coming in now regarding losses in small chicks, but very few of the letters give information enough to enable one to decide what the trouble is or to suggest treatment. All the symptoms should be fully described, then the fowl should be dissected and the internal organs examined. The feeding and methods of brooding should also be given, fully and clearly. Even then it will not be possible in all cases to tell what the disease is. That can only be done by an expert examination. J. D.

Tells why chicks die

E. J. Reefer, the poultry expert, 4665 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease over night and actually raises 98 per cent of every hatch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.

REAL HOMES at Milan Farms

on Great Northern Railroad, only 25 miles from Spokane, the metropolis of the Inland Empire and live stock, fruitgrowing and grain center of the Pacific Northwest.

Especially adapted to dairying, diversified farming, stock and poultry raising. Free rural delivery daily, excellent schools, splendid roads, long distance telephones and near fine lakes and streams. Soil rich, with ample moisture.

Every acre put on the market last year was sold, indicating attractiveness of our proposition. Additional acreage now ready at prices from $7.50 an acre up, on terms to suit purchaser.

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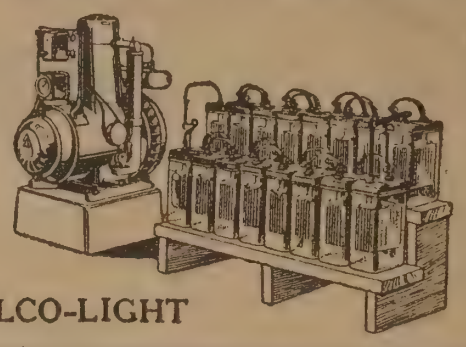
All purchases to June 1 secure service of man with team, stump puller and carpenter for one week free.

Write for attractive folder giving exact facts about these lands and the best opportunity for securing the most attractive farm home in the northwest.

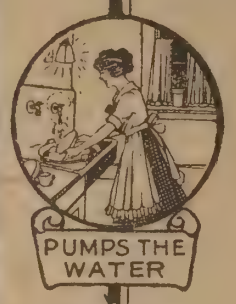
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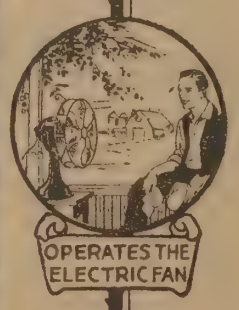
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"The neighbors speak of it as the best lighted farm in the county—

"But it is more than that—it is the best place in which to live—and to raise a family."

Delco-Light brings city comforts and conveniences and economies to the farm.

It lights the house and barn—it furnishes power to pump the water, wash the clothes, churn the butter, separate the cream—run the vacuum cleaner and the electric fan.

It is so simple that a child can operate it and so economical that it actually pays for itself in time, labor and fuel saved.

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E. H. Epperson, 314 E. Pike St., Seattle.

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A properly constituted Calf Meal is equal to and better than cow's milk for raising calves, because it takes the place of milk, thus saving 50% of your feed bills.

LILLY'S Calf Meal

is thoroughly cooked under 60-lb. steam pressure. It is all food, easily digested, fresh and sweet with that nutty flavor so relished by calves.

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Established 1885.

When you write to advertisers be sure to say that you saw their advertisement in this paper.



IN THE ORCHARD

Write to the Editor

GRANVILLE LOWTHER
Editorial Contributor

Attack Blight Now

Cut Out Every Evidence of Canker

By T. O. MORRISON,
State Horticultural Commissioner of Washington.

At this season of the year it is particularly important that all orchard owners in the fruit districts of the northwest east of the Cascade range examine their trees for fire blight to determine whether or not there are any holdover cankers present.

Just before blossoming time the rise of sap in furnishing food and moisture stimulates into activity all blight bac-

(Continued on page twenty-six.)

THE FARM GARDEN

ARTICLE 11.

CUCUMBER GROWING

Advice on the growing of cucumbers should begin with an —emphasized Don't.

Don't plant cucumbers till the ground has warmed up, even though all danger from frost may have passed. Cucumbers will not come up well unless the ground is warm, and those that do get through will be stunted till they probably will not be thrifty.

They are among the most sensitive garden plants from the standpoint of frost. The slightest frost kills them.

Cucumbers should have rich soil, but not a heavy clay soil. Where small patches are all that is desired, increased yields may be had by burying an old can of stable manure at the side of each hill and watering them through this can, which must have holes in the bottom.

The hills should be from four to six feet apart, and five or six seeds should be planted in each to insure a stand of about three strong plants. While the vines are young, frequent, shallow cultivation is advisable, but after the vines begin to run cultivation must be done very carefully. The vines are very sensitive, and can not be handled roughly without injury. Above all, dirt should never be allowed to be thrown onto the leaves while they are wet from dew or irrigation. Too much watering with a hose or springler is not advisable after the bloom appears, as it tends to wash off the pollen, without which fruiting can not take place. In many instances this practice accounts for vines having many blossoms, but few cucumbers.

Opinions differ as to the proper time to pick cucumbers, but all authorities are agreed that to allow them to stay on the vines till they begin to show signs of ripening greatly reduces the bearing of the vines during the rest of the season. The young cucumbers are more suitable for pickling, and probably should be picked when about half the stage of ripening, though this is a matter for personal choice. They develop with great rapidity, and the picking should be done every day that the older ones may be gathered before approaching maturity too closely.

STRAWBERRIES

Everbearing and Standards; Tomato, Celery and all plants. Catalogue free.

Kelly Gardens
Station B, Spokane.

Grow Better Fruit

Are you prepared to fight Aphids, Red Bug and other similar pests that are reducing apple profits? Black Leaf 40 (Nicotine Sulphate) is used by leading growers. Recommended by Experiment Stations.

THESE BOOKLETS WILL HELP YOU

Just what you need to know to control Aphids—which are very destructive in many districts—and other sucking insects. Valuable spray chart included. Information worth many dollars FREE. Write today.

The Kentucky Tobacco Product Co. Incorporated
Dept E Louisville, Ky.

When To Spray

Kills Aphis

Black Leaf 40
40% Nicotine

Gives any speed you want-instantly



CEDAR RAPIDS SPEED GOVERNOR

—as low as $12.00

Includes line shaft, pulleys and hangers, attached to heavy plank

—the speed governor of a thousand different speeds. Every turn of the hand wheel gives a different speed and each speed is absolutely steady and uniform.

Install it yourself with a screw driver. No figuring pulleys, no chance of installing it wrong for it runs in either direction, attached to the floor, the wall or the ceiling. It's *as cheap as an ordinary line-shaft* with the governor pulley thrown in.

THE Cedar Rapids Speed Governing Line Shaft is as cheap as the average friction-clutch pulley, yet it controls the speed of several pulleys at once without stopping your engine. The engine operates the governor—the governor controls the line-shaft.

The governor absorbs all jerky vibration. The power transmitted is steady and smooth. Runs all machinery at uniform speed. If you own an engine you need the Cedar Rapids Speed Governing Line-Shaft. One man saved enough labor fanning 50 bushels of clover-seed to more than pay for his governor outfit.

Go To Your Dealer and see it. He'll demonstrate it and he'll show you what a profit-producer it will be for you. Get ALL THE FACTS. THEY ARE WORTH KNOWING.

CEDAR RAPIDS FOUNDRY & MACHINE COMPANY
432 Second Street, West
Cedar Rapids . . Iowa

Controls Them All

Cream separators require starting at slow speed. The Speed Governing Line Shaft *makes any separator run smoothly.*

Butter Churning necessitates slowing down the machinery to gather the butter. It regulates this.

Your Grindstone can best be run from a pulley on the Speed Governing Line Shaft.

Lighting plants require regular power without "miss-fire" or "break." Controlled by the Speed Governing Line Shaft.

Your Washing Machine should be operated slowly when washing large pieces. The Governing Line Shaft controls it.

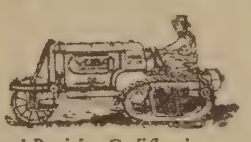
$50 in Cash Prizes

to be awarded July 1st. Present *owners* and *prospective buyers* should write for full particulars.



It sells best to the best informed.

The Business Farmer



HE runs his farm by efficient plan and *system.* He figures on the *cost of production.* Where he can save *time, money* and *crops* by using a tractor—*he does it.* He is an investigator and thorough business farmer—that's why he buys the Yuba—*what about you?*

for long life and low upkeep cost:
BUY A YUBA

Factories at Marysville and Benicia, California

Yuba Manufacturing Company Dept. C4
433 California St., San Francisco, California

Gentlemen: Kindly send me catalog and prices on the Yuba Ball Tread Tractor.

I am interested in Model 12-20____ Model 20-35____

Name____

Town____ State____

P.O. Box____ Size of farm____

[Check main crop raised]

____Fruit ____Rice ____Grain
____Grapes ____Hops ____Alfalfa

and there have just been issued new Pump and Plow Catalogs which we will be glad to send prospective buyers.

Yuba Manufacturing Company, Office: 433 California Street, San Francisco
(*Formerly The Yuba Construction Company—change in name only*)

May Do Community Buying

Purchases at Wholesale to Secure Better Prices for a Large Number of Farmers Is Plan Under Consideration



MALAGA, Chelan County, Wash., April 27.—A move is being made here with the farmers to buy their supply through the grange. Every one here plans to put in all the plowable land to potatoes, beans and corn. There are so many things that will help the farmer on the high cost of living. The greater part of the grange talk now is on the plan of increasing the production of foodstuff. A committee was appointed through the grange to find out what can be raised here. Farm help has been very had to get here this spring, but the farmers are trying a plan of getting along on less help than they ever have before. So many of the farmers were keeping a hired man the year 'round when the farm hardly paid the man's wages in the winter time. What the farmer needs and is trying to accomplish is more system and less manual labor. Very few farms here can afford to keep a man the year 'round. Most of the spring wheat is in and some of it is up. Gardening is under way now and it will be on a larger scale than ever before. The spring rains have made the outside pasture good, so the stock look fine.

MRS. O. ALLENBAUGH.

Community Plans Work.

KENNEWICK, Benton County, Wash., April 19.—There is a great scarcity of help to do the spring work and especially to handle an increased production of food supply. The Prosser community is working on a plan about as follows: Close the stores one and one-half hours each day. It is expected that this plan will make a great deal of town help available for work on city lots and land adjoining the town. It is planned to organize the forces from the business houses into companies, with a captain and lieutenants. The citizens will be asked to sign an agreement to report for work at any time at the call of the lieutenants. The profits from the growth of these crops will be used for Red Cross work; to assist the families of those who enlist for army service, or something of that kind. The farmers are paying much higher wages than usual; the labor is more efficient, because since the state went dry there is a much smaller per cent of the classes who want a job but who do not want to work. A diversified farm of 30 or 40 acres is generally necessary to warrant employing a man the year around. The weather is still very cold for this time of year, and the crops are still being delayed. This is not detrimental, however, to the fruit, although the weather in the early part of the spring was very detrimental to fall wheat. Live stock are in good condition.

LEE M. LAMPSON.

Uncle Sam Competes.

GIG HARBOR, Pierce County, Wash., April 19.—There is very little seen of the farm "hired man" in this neck of the woods. The ranches are mostly small and the work done mainly by the owner and his family. Help is occasionally hired by the day. It is, as elsewhere, an uncertain quantity and is but little depended on in this region. Wages are at least 25 per cent higher than "before the war." The hired man's efficiency here is not gaged so much by his intimate knowledge of farm operations as by his willingness to work and his general ability to turn his hand to all sorts of rough labor that farming under these conditions calls for. In the river valleys among the berry, truck and dairy farms where much more help is required, the conditions are far from satisfactory this season. Uncle Sam, while trying hard to help the farmer, is certainly a hard competitor on the labor question. He wants thousands of men in all lines of service, hundreds of ships built, with a vast acceleration of all industries directly and indirectly conected therewith. Is it any wonder that the farmer has hard work to hold his help?

Weather is cold and wet and the season is quite backward, but there is still ample time for all crops that are grown here. The freeze last fall seems to have done quite serious injury to the raspberry and loganberry canes in the Puyallup and Sumner valleys. Butter fat, eggs and feeds are about neck and neck in the race upward, but the dairyman who also has to buy hay, wears a long face these days.

W. D. BOYNTON.

Winter Wheat Resown.

CENTERVILLE, Klickitat County, Wash., April 20.—The farm labor question is going to be a serious affair here soon and at the present time everybody is doing just as much as they can, as all the available extra men are leaving to join the army or for other places where wages are higher than here. We are giving $45 to $55 per month, but I am afraid it will not hold the help at that. We hire help, as a rule, by the year, generally hiring for about four months at a time. The average help wants steadier work, consequently they are shifting around all the time. It would probably take a 400-acre ranch to make it very profitable to hire help all the year round. The weather at present is very rainy, hindering the spring work considerably, which is at least a month behind now. Very few potatoes have been planted yet. Everybody is rushing the reseeding as hard as the weather will permit. The crop prospect at present is changing for the good, as there has been a great deal of resowing of the winter wheat crop. The stock are going on to the summer ranges with a fair amount of feed for the season.

CLARENCE A. LESTER.

Grow Beans and Get Rich.

METHOW, Okanogan County, Wash., April 21.—Farm labor is equal to the demand, wages being 50 cents higher per day; most men being fairly efficient. Small homesteaders are restless to put in potatoes and beans and get in the rich class. A farm able to keep a man the year round must have at least 20 head of milch cows or 100 head of stock cattle. The weather is cold and rainy. Crop conditions are fairly good. The writer's red winter wheat looks 75 per cent good, but the white amber, so far, doesn't look over 50 per cent good. Live stock conditions are good. The green grass on the Columbia breaks is six inches high and cattle are doing fine. Prices for steers are 9 cents per pound and 14 1-2 cents per pound for hogs at Pateros.

CHARLES GRANT.

Need More Live Stock.

FAIRFIELD, Spokane County, Wash., April 17.—There seems to be plenty of farm hands just now, but as no farm work has been done yet it is hard to predict what the future will be. Wages are from 25 to 50 per cent higher than last year. Our present cropping system makes it impossible to keep the farm help the entire year. More live stock on the farms would remedy this condition very materially. Fall sown wheat is coming through in good condition. Live stock is in good shape. There is plenty of feed to carry all the stock until spring opens. Spring is a month late so far.

ROY G. ADAMS.

To Build Elevator.

PLAZA, Spokane County, Wash., April 19.—This is a very late spring and very few farmers have been plowing so far, as the ground is too wet. Feed is getting scarce, hay selling at $25 per ton and very little offered at that. Farmers are selling off most of their cattle, due to shortage of feed. Plaza is going to build an elevator this year, which will be a great benefit to this neighborhood, and grain can then be handled in bulk and do away with the sacks, which have always been a great expense. Many farmers are planning to build a private elevator on their farms. Great interest is being taken in the pea growing plan; some farmers are going to sow as much as 150 acres, which will be sown on summer fallow and will be harvested in time to sow the winter wheat in the fall. This will save much land from lying idle, as it is all good farm land. Every farmer ought to produce something on every foot of land tillable.

MRS. LENA HARDESTY.

Seed Prices Troublesome.

PORT ANGELES, Clallam County, Wash., April 28.—The tendency in this section is to plow and put into grain, oats, barley and peas all available land, including thin meadows and pastures. There is quite a good deal of activity displayed in potato growing, although the high price of seed may keep down the large acreages. The cultivation of town lots is receiving considerable attention at Port Townsend. Mr. Drake, superintendent of schools, has been instrumental in having a large number of vacant city lots placed under cultivation. In Port Angeles the commercial club and the secretary of the merchants' associaton have taken an active hand in this matter, which has resulted in many vacant lots being placed under cultivation.

O. T. M'WHORTER.

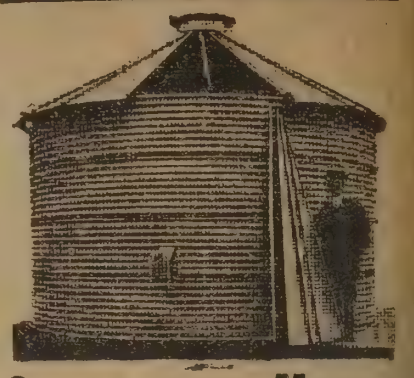
Fruit Trees in Bloom.

PROSSER, Benton County, Wash., April 21.—The weather is too cold for crops to grow much. Apricots are in full bloom; peach blooms are not out yet, but alfalfa is getting a good start Farmers have to pay from $40 to $50 per month for help and the men don't care to work for that. The farmers can't afford to pay that price on 20 and 40 acre tracts. A farmer must have at least 100 acres in the valley or 150 acres on the upland to keep a man the year around. Wages on the farm are from $10 to $15 higher than previous years. My way would be to farm just what I could farm myself without any help, or exchange work with the farmers in my community in haying and harvesting time, and in this way no money is paid out. G. W. WILGUS.

Hire Men by the Day.

GRANDVIEW, Yakima County, Wash., April 24.—There are not many farmers who hire help by the month and only one or two that hire by the year. For day work men are scarce. Most of the farms are small and only need help for a short time. The laborers seem restless and only stay long enough to get a few dollars and then go. I think a farm of 60 to 100 acres, with stock, could keep a man the year round. The weather is cold, with some frosty nights. The crops are a month late; live stock is in good condition and in bigger demand; hogs are very scarce.

E. H. FAULKNER.



CORRUGATED METAL GRAIN BINS

Rain Proof — Rat Proof
Rust Proof — Fire Proof

500 to 5,000 bushels capacities
Portable or stationary

THE SAFEST WAY TO STORE GRAIN

Metal Wagon Boxes and Portable Grain Loaders save grain and labor

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SPOKANE, WASHINGTON

SELF-OILING WINDMILL
With INCLOSED MOTOR
Keeping OUT DUST and RAIN — Keeping IN OIL



SPLASH OILING SYSTEM
Constantly Flooding Every Bearing With Oil, Makes It Pump In The Lightest Breeze And Prevents Wear
OIL SUPPLY REPLENISHED ONLY ONCE A YEAR
DOUBLE GEARS — Each Carrying Half the Load
Every feature desirable in a windmill in the AUTO-OILED AERMOTOR
Gasoline Engines — Pumps — Tanks
Water Supply Goods — Steel Frame Saws
WRITE AERMOTOR CO. 2500 12TH ST. CHICAGO



Save Lumber Money
Why pay high, local prices for lumber when you can buy from us at wholesale? We save you enough to pay carpenter's bill. Send us your carpenter's list for bedrock estimate. Free Building Material Catalog on request. Write.
Hewitt-Lea-Punck Co.
458 Punck St., Sumner, Wash.

In answering advertisements don't fail to mention this paper.

BALE YOUR HAY
With the Lightning Line
MAKE BIG PROFITS
Simplicity, strength, durability, make the Lightning Press the most economical to buy; big capacity, quick work, no trouble, lasts for years, best farm money-maker.
We make a complete line of both heavy and light presses, horse, engine and tractor power. We will make good terms to right customers.
Send name today for complete catalog, showing all styles and prices.



30 YEARS THE LEADER
KANSAS CITY HAY PRESS CO., - KANSAS CITY, MISSOURI.

CORN
Supply Short
If you are going to plant corn for grain or fodder
Order Now
PREMIUM HOMEGROWN YELLOW DENT
Best for Grain
WISCONSIN WHITE DENT, LEAMING, PRIDE OF NORTH YELLOW DENT, AND CANADA FLINT.
Best for Forage
Write for prices on your requirements.



Spokane Seed Co.
Recleaners of Grain and Grass Seeds
SPOKANE, WASH.

Momentous Events

Of War Vitally Affect the Farms

The United States is lending to the allied governments of Europe that are at war with Germany $2,000,000,000, with which to finance their war operations.

Claims have been made that in one recent week submarines sank enemy shipping vessels, including some belonging to this country, with a total carrying capacity of 400,000 tons.

Congress has been asked to pass legislation looking toward government control of prices of foodstuffs and seems practically certain to do so.

A nation-wide campaign is under way designed to bring about the greatest possible production of foods and supplies.

Legislation providing for creation of an army of 2,000,000 or more soldiers through the system of cumpulsory service is practically enacted.

These and other events too great and far reaching for the human mind to grasp in their full significance are transpiring in the world today, and not a man or woman or child in the world is untouched by them. The farmers of Washington are directly and vitally affected by them. The farms of the state must be cultivated as never before to produce crops, the prices for which depend in large degree on the control to be exercised by the government. Not an article that the farmer buys for himself or his family but bears the mark of war in its quality or its cost. Labor shortage is felt and will be more keenly felt as a result of enlistment, and many of the boys who have driven the plow or the drill will go to wear the uniform of their country and perhaps lay down their lives on the altar of humanity.

The course of the world is undergoing change impossible of prediction. Whether for better or for worse, the human race and the governments expressing its thought and ideals will emerge from the crucible of this unprecedented period a different race and different governments.

The Washington Farmer is not unmindful of its readers' interest in the momentous problems of civilization that are being solved through the relentless rampage of a war that has long since gone beyond the control of the nations involved in it. While the war lasts it will continue each week to give a digest of the week's leading events. It believes confidently that out of the struggle the world will emerge freed of much of its errors; that humanity will replace injustice; unity replace contention and jealousies; democracy replace despotism and militarism; world peace come in the stead of war, and as a result of the conflict the time come quickly when "the war drums throb no longer and the battle flags are furled in the parliament of man, the federation of the world"—and, again quoting the vision of the great English poet, "The common sense of most shall hold a fitful realm in awe, and the quiet earth shall slumber, lapt in universal law."

Solving the Submarine.

All the nations now fighting Germany openly admit that the submarine menace is threatening their existence, and that the one great thing they must do if they are to win the war is to discover some method of combatting the undersea boats. Especially active in this investigation is the naval advisory board in this country, appointed several months ago. It includes some of the most noted scientific men in the country, including Thomas A. Edison, the famous inventor of the phonograph record and many noted electrical appliances.

May Have a Weapon.

Reports from this advisory board indicate that an effective means of fighting submarines is about to be discovered. Absolute secrecy is maintained as to the character of the means to be used, but official statement from the board expresses confidence that the submarines can now be successfully met.

Senate Would Send T. R.

The senate will insist on the enactment of a measure by which Theodore Roosevelt would be permitted to conduct an expeditionary force of American soldiers to Europe to join the allies. The house has rejected such a proposal. This will be fought out this week, likely.

Measures Before Congress.

The selective conscription bill, under which a large army would be drafted into service, continues to be the one most interesting subject before congress. While both houses of congress have agreed to the conscription idea, they are not agreed at this writing on the ages between which men would be drafted. Originally the senate placed the ages as 21 to 27 years, while the house of representatives asked that the higher age limit of 40 years be placed. It is expected that this week will see an agreement at either 21 to 30 or 21 to 35 years.

Food Control Coming.

Another measure to be considered is that of control of food prices, and it seems practically certain that congress will take some action designed to regulate and standardize the prices of food products.

An important measure being considered is that desired by the administration of President Wilson placing in the hands of the government enlarged espionage powers.



Vaughan's Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cards of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $150 f. o. b. Spokane and common points.

FOR SALE BY

Washington Machinery & Supply Company

S122 MONROE SPOKANE, WASHINGTON

In answering advertisements please mention this paper.

WHO WILL TILL AND HARVEST YOUR CROPS?

The Washington farmer is face to face with the most serious problem in years—THE PROBLEM OF FARM LABOR.

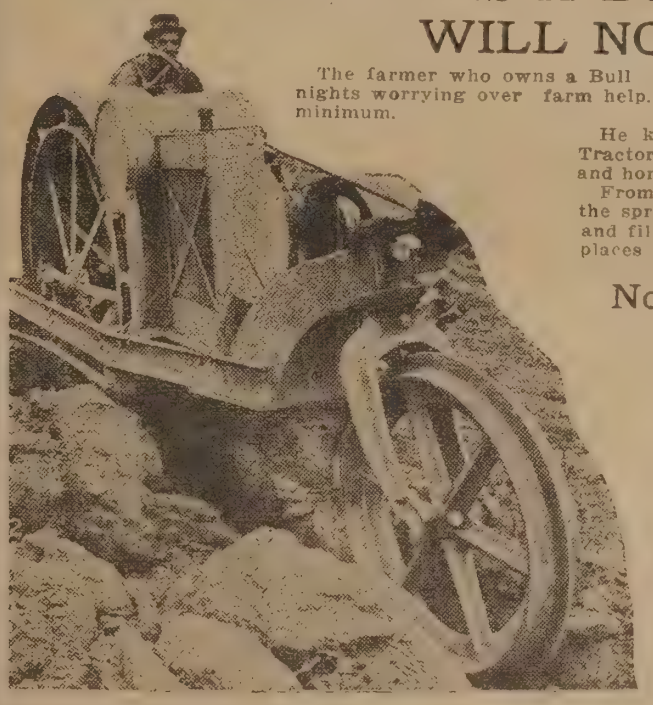
With the greatest scarcity of "hired help" in years already confronting him, what will be the condition next fall when the crops must be harvested, under what government officials promise to be the greatest labor shortage in the history of the country.

The past two months have seen thousands of Americans answer Canada's call for help. The United States government has already adopted conscription and is at work raising her first army of two million men for the European battlefield.

This means that the progressive farmer must adopt every expediency to overcome the labor shortage.

HE WHO OWNS A BULL TRACTOR WILL NOT WORRY

The farmer who owns a Bull Tractor will not spend any sleepless nights worrying over farm help. His labor problem is reduced to a minimum.



He knows from experience that the Bull Tractor will do the work of a dozen men and horses—better and cheaper.

From plowing, discing and harrowing in the spring, to digging potatoes, baling hay and filling his silo in the fall, the BULL replaces many men.

No Skilled Labor Needed

The Bull Tractor is mechanically perfect. You or your son can operate it. You need no skilled labor. It is the most simple and efficient tractor on the market today.

The Supply Limited Be Far Sighted

Write today for full details about what the Bull Tractor will do for you. Don't put it off. The labor situation is getting more serious every day. We have a very limited supply of Bull Tractors left, and can not get any more this season. If you act now you may save your crop and thousands of dollars.

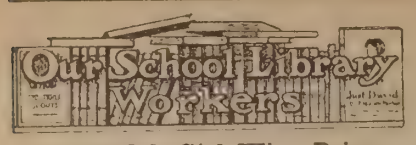
What the Bull Tractor Will Do

Clearing Land	Harvesting	Digging Potatoes
Digging Ditches	Threshing	Filling Silo
Plowing	Moving	Shredding
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Harrowing	Loading Hay	Husking
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Spreading	Hulling Clover	Pulling Stumps
Dragging Roads	Hauling Crops	Stretching Wire
Grinding Feed	Grinding Tools	Loading Logs
Sawing	Pumping	Operate Machinery
Irrigating	Shelling Corn	

Mail This Coupon Today

Northwest Buick Co., Seattle-Spokane:
Please send me your latest descriptive Bull Tractor literature.
Name .....
Address .....
Send to nearest office.

Northwest Buick Co., Seattle, Spokane



Chewelah Girl Wins Prize.

Miss Dorothy Rauch of Chewelah, Wash., is the winner of the first prize in the individual prize contest for the pupil in the state of Washington securing the largest number of subscriptions up to the first of May, 1917, through individual effort in the Washington school library contest. This secures to Miss Rauch the $5 gold cash prize.



Dorothy Rauch, who wins $5.

Miss Bessie Webb of Ford, Wash., is winner of the second prize, a $1.25 book of her own choice. Loval C. R. Snyder of White Swan, Wash., is winner of the third prize, a $1.00 book of his own choice.

These pupils have worked very earnestly in their own districts to secure these prizes and we take this opportunity to congratulate each one for the success which has come through their efforts. These prize winners have not only added much to the value of their own school libraries through their work, but at the same time have secured these small mementos for their own personal use.

Pupils from other schools have done earnest and sincere work and all are entitled to much credit for the same. Eighty-nine schools in the state of Washington to date have secured books for their school libraries through the Washington school library plan, and we know that all the pupils who have aided in securing these books in their own school districts will enjoy them to the fullest extent

WANTED
Cascara Bark

We buy cascara bark, Oregon grape root and Oregon balsam of fir at the prevailing market. Submit samples and quantity you have for sale.

BLUMAUER-FRANK DRUG CO.
357 Everett, Portland, Oregon.

88 Bu. Oats Per Acre

Mr. A. Taylor writes: "I had **315 acres in oats** that averaged 88 bushels an acre, 30 acres in **wheat** that averaged 50 bushels an acre, 20 acres in **barley** that averaged 50 bushels an acre." This is **only one of thousands** of good reports from Western Canada. Yet nowhere can you buy good farm land at such low cost as along the Canadian Northern Ry.

BEST FARM LANDS at $15 to $20 per acre

Here you can buy specially selected, centrally located lands **close to the railway,** that will produce crops that can only be equaled on farms costing $150 to $200 the acre in a more densely settled community. This includes the **best grain land,** land also adapted to **dairy** and **mixed farming.** Here the man with limited cash can become the owner of one of these fertile farms through the liberal installment payment plan.

Low Fares Low round-trip home-seekers' fares to Western Canada are in effect every Tuesday, to November 27th inclusive.

Free Homesteads

If you have not the capital to buy land you can still get one of the **recently surveyed 160 acre fertile Homesteads** along the Canadian Northern Railway, the newest transcontinental railroad, 'The Road to Opportunity."

Free Book Be sure to write today for a free copy of the "Home-Seekers' and Settlers' Guide," full of complete and authentic information. A fortune is waiting for you.

CANADIAN NORTHERN RY.

A. L. BROSTEDT, D. F. & P. A.
605 Hastings St.
Vancouver, B. C.
Canada.
A. L. DAVIS, G. A.
Cor. 4th & Jackson St.
St. Paul, Minn.

In answering advertisements don't fail to mention this paper.

The Motor Car
On the Farm

A few weeks ago the sales depatment of a big middle western factory that makes spark plugs received an order for a carload of plugs to be shipped to a dealer in the Pacific northwest. This was the largest single order from one firm the factory had ever received. The sales manager took it to the president of the firm, and other officers of the institution as well as the credit man were called into hasty conference.

"Have we been doing much business with this Pacific coast concern before?" the president wanted to know.

"A little," replied the sales manager. "This house has ordered something like a million of our plugs during the last few months."

"My eye, you don't tell me!" cried the president. "And what do you reckon they do with so many spark plugs away out there in that neck of the woods? Is the firm ordering them financially and otherwise sound?"

"Pay their bills right on the dot when they don't discount for cash with order," answered the credit man.

"Well, well," said the president with a keen show of interest. "They must be mighty hard on plugs out there or else the several hundred car owners must be buying them in gross lots."

"Several hundred car owners, did you say?" politely inquired the sales manager. "Why there are something like a hundred and forty thousand motor cars in the three states of Washington, Oregon and Idaho right now, not to mention a quarter of a million or so of gas engines and several thousand tractors!"

"Whee, whee!" chuckled the president. "Send 'em along, send 'em along." And the gathering of officials dispersed.

About a month later came another order for another carload of plugs from the same Pacific coast dealer. Again the president and the sales manager conferred.

"I've been looking up that strip of territory beyond the Rockies," said the president, "and I find only two or three cities out there and not more than a dozen sizeable towns. What's bothering me is who is driving all those cars around."

"This might help to explain," replied the sales manager, taking out his notebook and removing therefrom a newspaper clipping.

The president adjusted his glasses, picked up the clipping and read it carefully through.

WALLA WALLA, Wash., May 3.—George Drumheller, Walla Walla county's largest wheat rancher, yesterday added another to his fleet of automobiles. He has six other high priced cars. Drumheller recently received a check for $245,000 for last year's wheat crop.

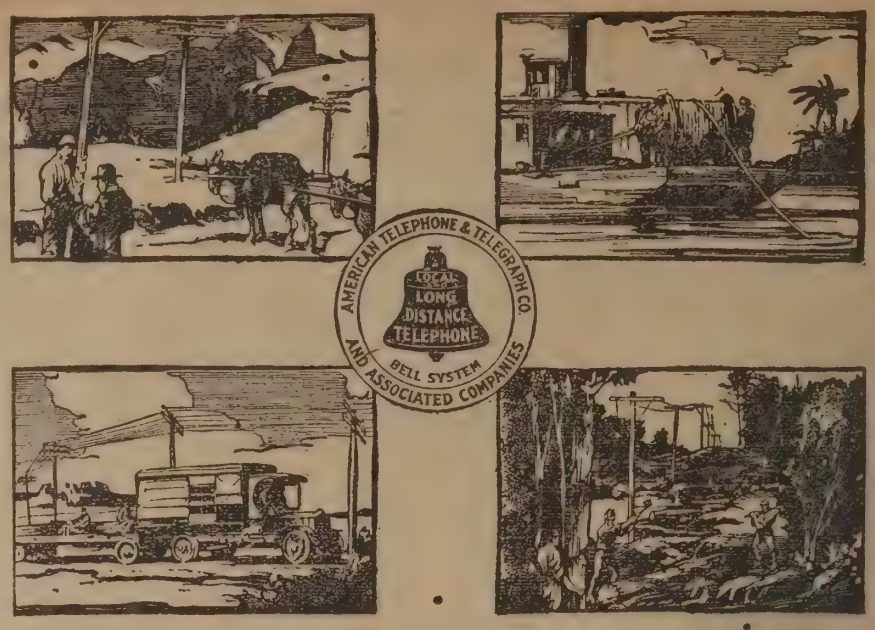
"That explains it," he said with a sigh of relief.—"If one farmer out in the northwest owns seven motor cars, I can begin to understand something of that market. Some day I'll have to go out and look that country over. Anyhow, I'm going to read up a bit on it. Let me know whenever you get any more news of this kind." And as the sales manager went out the president was saying, "Some market, some market!"

Care Means Economy.

"Probably the best advice, and one of the most important things for the motorist to do is carefully to maintain their tires at the required pressure for the size of the tire and load carried," says a representative of the B. F. Goodrich Rubber company. This can be done accurately with a tire caliper gage. "A much neglected care is the examination of the tires for cuts and tears on the tread and side walls. Too much attention can not be given, for a neglected cut will allow dirt and sand to separate the tread from the fabric, with the sure result of moisture working in and rotting the cotton framework of the tire."

WASHINGTON FARMER SUITS.

To the Editor of The Washington Farmer: I can't praise The Washington Farmer enough. It's the best agricultural school in the U. S. A. I can't see how a farmer can keep up with his neighbors who read The Washington Farmer. Every farm and land owner should subscribe for it. It's worth its weight in gold. I will boost for The Washington Farmer all I can in our district. —G. H. HAUVER, Three Forks, Wash.



Meeting the Universal Need

In the high passes of the mountains, accessible only to the daring pioneer and the sure-footed burro, there are telephone linemen stringing wires.

Across bays or rivers a flat-bottomed boat is used to unreel the message-bearing cables and lay them beneath the water.

Over the sand-blown, treeless desert a truck train plows its way with telephone material and supplies.

Through dense forests linemen are felling trees and cutting a swath for lines of wire-laden poles.

Vast telephone extensions are progressing simultaneously in the waste places as well as in the thickly populated communities.

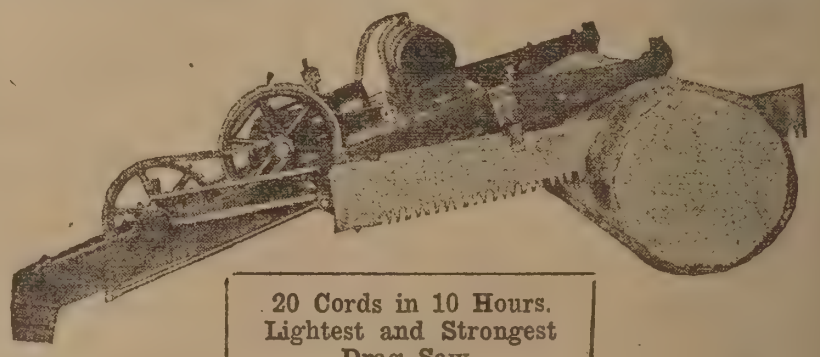
These betterments are ceaseless and they are voluntary, requiring the expenditure of almost superhuman imagination, energy and large capital.

In the Bell organization, besides the army of manual toilers, there is an army of experts, including almost the entire gamut of human labors. These men, scientific and practical, are constantly inventing means for supplying the numberless new demands of the telephone using public.

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Price Control

Arouses Farmers of the Northwest

(Continued from page three.)

the present time to stop speculation in all food stuffs.'

Douglas County.

One of the representative farmers of Douglas county, Garfield Cox of Mansfield, is "opposed to government control of prices of agricultural products unless we also have government control of prices in all other lines of production and of wages. Any other course is unjust to the farmer." Mr. Cox adds: "In my opinion, government control of prices of farm products would eventually have the effect of increasing prices, unless the government prices were extremely high it would lessen production."

Grant County.

W. J. Blanchett, one of the wheatgrowers of Grant county, writes that he is not in favor of the government control of prices of farm products unless manufactured and other products are also controlled by the government.

George DeBolt of Adrian, not only favors government during the war, but after the war as well.

Ed Tiedt of Soap Lake favors government control, "as it ought to cut out some middlemen."

Benton County.

E. H. Dunning of Richland, Benton county, who is practicing diversified farming, including dairying, says: "I believe in government control of prices of all staple farm products, provided that the government find market for the same."

George Sellick of Kennewick: "I am most emphatically in favor of government control of food prices during the war, as surely the government can effect a more equable and reasonable state of affairs than now exists."

E. O. Rice, Prosser: "I am not in favor of control of prices of farm products, unless at the same time the prices of farm machinery, clothing, tools, implements, household furniture, groceries and wages are likewise controlled."

H. S. Smith, Prosser, another representative farmer of Benton county, is also in favor of government regulation of all staple and necessary products of farm, factory and mine during the war."

J. R. Ayers, prominent member of the grange at Kennewick, Wash., believes that government control of prices is necessary to keep speculators from taking advantage of the people during the time when all our resources are to be taxed to the limit.

Okanogan County.

An Okanogan county farmer, W. H. Blackler of Pateros, has not decided on the matter, but is inclined to believe he would not favor control, with the exception possibly that of guaranteeing a minimum price to the priducer.

Wellington French of Conconully is "afraid the question is beyond me."

U. E. Fries of Brewster "will gladly submit to any regulation our government will deem wise to adopt in order to help our cause and the nation as a whole, even to the control of prices of different kinds of farm products; in return for that control I expect there will also be a control on the profit the middleman will be allowed to take from the consumer, also the price we farmers must pay for farm machinery."

Spokane County.

One of the farmers on the rural route out of Spokane, C. W. McReynolds, writes: "I do not favor government control of staple farm products during the war or at any other time, unless they follow it up on all products of every kind."

One of the representative farmers in the vicinity of Latah, D. Michel, is in favor of government control because "we farmers would get just as good prices for our products and it would cut out lots of speculation and gamble on grain and other staple products and be better for the consumer."

Julius M. Fisk, farmer and stockgrower of Spring Valley, believes government control would be better for both producer and consumer.

K. A. Speith of Spokane county writes: "Within the last five years I and all my neighbors have been unable to dispose of our crops, at least some of them, at a price that would pay to haul to market. Did we 'holler'? NO. There was no asking of the government to regulate prices. It is my opinion that what needs regulating is the speculator. If these city chaps don't like their jobs, let them get out on the farm and dig in the dirt from 5 a. m. to 9 p. m. and get some of this 'easy money' we are getting."

Walla Walla County.

O. A. Montgomery, Walla Walla county, writes: "Make a standard price for everything—$1 for wheat is high enough, $1 a sack is enough for potatoes, $1 per hundred for barley, corn, oats and all grain, and $10 to $12 is enough for a ton of hay. Equalize the price between producer and consumer. Congress should appoint a committee to take charge of all foodstuff, arrange, pay and establish a standard price that would give the producer a living price and that would give the consumer the goods at a living price. Take it way from the rich syndicates and distribute it out to the needy at a living price—$1 for wheat, $1 per hun-

(Continued on page twenty-six.)

Farm Labor

Wages According to the Season

To the Editor: I have been reading the articles written by Dr. E. A. Bryan and others concerning the wages for farm help and consider them very interesting. I think in regard to this matter that the wages should be paid according to the season, the ability of the man, and to the locality in which he is working. I do not believe that ranchers in this section of Washington, where diversified farming is carried on extensively, can pay the wages that the ranchers in the great wheat regions can afford to pay.

I find it more difficult to get men to do diversified work than it is to do one or two kinds of labor, as I am located in Stevens county, where diversified farming is practiced, and find it very difficult to get men for my work. I am engaged in raising Shorthorn cattle, Percheron horses and Berkshire hogs. Sometimes I get men who can attend to the horses fairly well, but who know absolutely nothing about the care of cattle and hogs. The most of the men I get from Spokane are good to work in the field, can use the plow, harrow and most of the farm implements, but can not do the chores, nor attend to the stock satisfactorily.

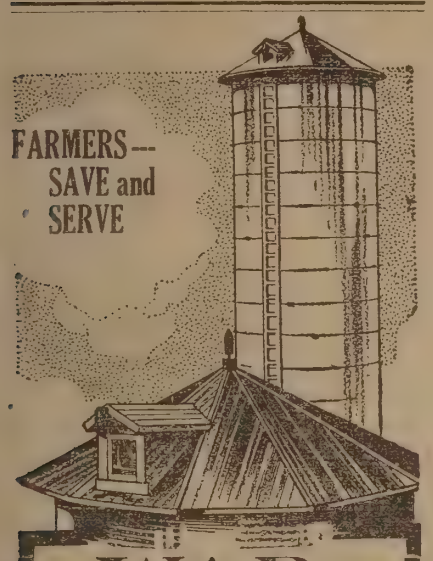
I have lived in several different states and after 14 years' residence in Stevens county firmly believe that this is the most pleasant and satisfactory place that I have ever been in, as the price of land is very reasonable, the climate is good, with no extremes of hot or cold weather, no deep mud nor any electric storms. The soil and climate are suitable for the production of all kinds of farm products, as wheat, oats, fruit, barley, peas, alfalfa, clover, timothy, garden vegetables and crops grow in abundance. Fine corn is grown in some localities.

C. M. BAKER.

Colville, Wash.

Work for Pickle Factory.

Officers of the commercial club of Kent, Wash., report that considerable progress is being made in the securing for Kent of a pickle factory branch of one of the largest concerns of this nature in the United States.



FARMERS—
SAVE and
SERVE

WAR

the destroyer of man and everything he produces, is ravaging the earth. The farmer must bear the food burden. Every waste must be eliminated. More than ever the

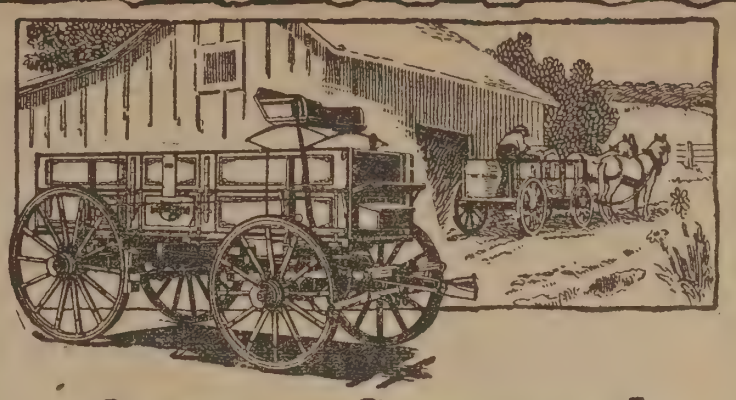
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TELL the dealer you want a wagon that the manufacturer will guarantee to carry your biggest load. If he is up to date, he will show you a **Weber** or **Columbus** wagon with its capacity stenciled in plain figures on the rear bolster. That is the new idea for protecting you in your purchase of a wagon.

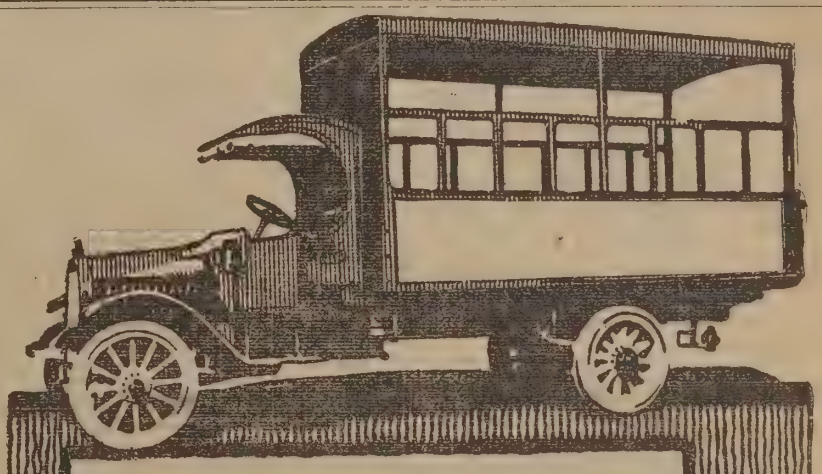
When you bought by skein size, you could not be sure that you were buying the most economical wagon. Now you can be sure. Every **Weber** and **Columbus** wagon that leaves the factory is guaranteed by the manufacturer to carry a known load over the roads that you have to travel.

Nor is that all you get when you buy a **Weber** or **Columbus** wagon. The folding end gate and link end rods save you a world of time. The fifth wheel, which only **Weber** and **Columbus** wagons have, makes your wagon run easier and last longer. Write us for complete information about these wagons. You'll be surprised at the number of good features they have.

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Food Preparedness Is Not a Scare; Crisis Faces Country

George E. Ferrill of the United States department of agriculture is making a tour of the country to study crop and fruit conditions for the government. According to Mr. Ferrill, present indications are that by next winter there will not be enough food in the United States to feed the nation's own people, let alone sending supplies to the suffering multitudes of Europe. The only salvation lies in the planting of millions of additional acres to foodstuffs and in cutting off all wastes.

Use of baseball parks, golf links and all greenhouses for the growth of garden products was recommended by L. W. Hill, president of the Great Northern railroad. They are not playing golf in Berlin, nor spending the afternoon shouting at ball parks," he said Saturday.

"The government should commandeer men to work the nation's farms if necessary," says Colonel Theodore Roosevelt, because "in the next few months farm work will be just as necessary as any military work."

The education authorities of Idaho are considering a proposition of closing the schools from the eighth grade up for the balance of the school year so that the scholars may help out the farm labor situation.

Do You Know That

You should not work from sun to sun no matter how much you have to leave undone?

Prefers Medium-Sized Potatoes True to Type

To the Editor of The Washington Farmer: I know by experience that if I take a potato with only one protruding knob and cut out the knob and throw it away and cut up the rest of the potato and plant it that invariably all the potatoes that grow from it will be knobby and unsalable. I find that nothing but the choicest kind of selected seed potatoes are fit to use. I use medium sized potatoes, true to type, from one-half to two and one-half inches long. The small ones I use whole, the others I split once and plant the pieces 12 to 14 inches apart, and the rows three and one-half to four feet apart. I plow eight to ten inches deep and plant the spuds as I plow. When through planting I give the patch an extra good harrowing, then go over it with a clod smasher. When the spuds commence to peep out of the ground I give them another good harrowing, and all I do after that is to pull out the weeds. I planted 100 pounds last year and dug five and one-half tons planted that way, only I did not pull the weeds, as that was too much work, besides I only wanted enough to do us.

CHARLES H. DAVIDSON.
Thorp, Wash.

STRAWBERRY PATCH
What to Do With Old Foliage.

To the Editor:—I have a strawberry patch which I set out last spring, and they are doing fine. There are lots of new foliage coming out now, but the old foliage of last summer is still there. What can I do with the strawberries to keep the vines in good trim? —E. H., Port Orchard, Wash.

The foliage of last year's growth will do no harm to the present season's growth, and may be used, in part, as a mulch around the base of the plants to prevent the fruit from falling on the earth, and in that way becoming covered with sand and soil, says O. M. Morris of the department of horticulture of the state college of Washington. In districts where the leaf blight is becoming widely spread go over the strawberry fields with a mower in late autumn or after midsummer, and then turn over the entire field. In all probability there is no need for that in your case.

If you can use straw, hay or leaves that are practically free from weed or grass seed, as a mulch along the sides of the rows you will do a great deal to protect your plants from the soil that will be thrown up by the operations of tillage, and by this means you may even delay tillage until after the crop is harvested.

Live Improvement Club at Riverside

At the annual meeting of the Good Roads and Improvement club at Synarep, Okanogan county, Wash., T. J. Harrah was elected president, B. F. Cubbage vice president, C. J. Clepper secretary and G. S. Brown treasurer. The following district committeemen were chosen: A. Hosheit of Upper district, J. L. Rickle of Synarep district and E. E. Stowe of lower district. Frank Utzinger received the highest number votes cast for road foreman.

Good Shipment of Hogs.

J. L. Briggs of Carlton, Ore., shipped a car of 100 hogs recently. Among them was a Poland-China animal that weighed 780 pounds

"I Do Certainly Like The Washington Farmer"

I do certainly like The Washington Farmer. It gives so much interesting information that is so much needed and to the point. No need of any one being ignorant in many things if he will read The Washington Farmer.

I wish you continued success with The Washington Farmer. I truly can give my recommendation to those whom I meet who know not of The Washington Farmer.

MRS. N. M. STRAHLEM.
Kennydale, Wash.

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SPOKANE, WASH.

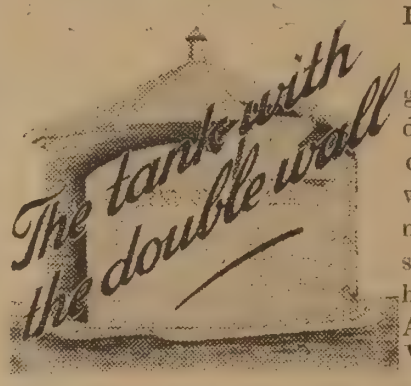
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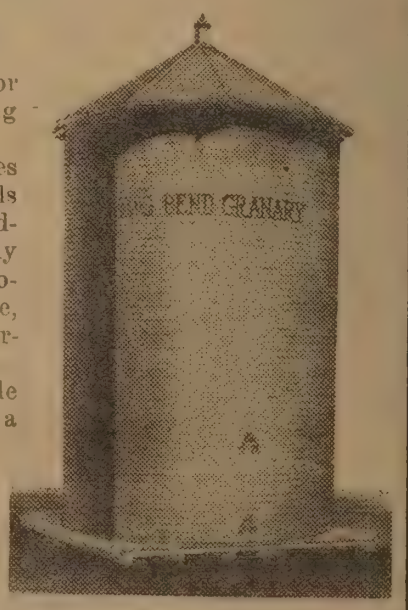
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Low In Cost — Last a Lifetime
Of course, you'll store your grain in bulk this year and in the seasons to come. The experience of the past few years has proven to every northwest wheatgrower the NECESSITY of bulk storage.
Build "BIG BENDS" and Build to Last!
DOUBLE WALLS. NO HOOPS


"Big Bend" grain tanks and granaries for bulk storage are designed on a double wall principle that makes a permanent, weather-resisting tank that will not buckle nor bulge under any strain. Made entirely without hoops, but STRONGER THAN A HOOPED TANK COULD BE. We guarantee this.
Trouble-Proof—Tight as a Drum
"Big Bend" tanks and granaries are literally "tight as a drum" and THEY STAY THAT WAY—proof against trouble and severest weather conditions. The portable sizes weigh fully one-third less than the old-style steel-hooped tanks, and are THREE TIMES AS STRONG. They are low in first cost and cost much less per year of life than any other tank made.
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Securely fastened at right angles to upright staves with barbed nails is our special 3-8-inch wood binding, lapping and fitting perfectly from bottom to top, every joint protected by a galvanized steel plate, covering it securely and thoroughly.
That is "BIG BEND" double wall construction—a tank within a tank.


Write quick for illustrated circular describing this remarkable tank and showing authority for every statement we make about its great strength.
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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

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CHAPTER X.

For company we had a tame old cream-colored pony we called Chub, a cat, part of the time a black hound of monstrous size and appetite, the chickens and a pile of magazines and papers.

The years sweep by with amazing swiftness as I look back on my boyhod in the Big Bend. I can see myself at several ages, amusing myself in various ways, but always alone. Most distinctly of all I see myself as a boy of 10 or 12, unused to playmates, and grown so shy from playing always alone that I had developed somewhat the attitude toward boisterous, merry children that is seen in an aged couple which, having lived childless all their lives, "don't like children because they muss the house up."

As far back as I can remember clearly I was reading, or trying to read, magazines and newspapers and tagging at mother's heels clamoring to know what the "big words" meant. I think children with hearts set on learning a thing, learn it much more quickly than do grownups, for example, I doubt if ever I failed to remember the meaning of one of the big words when once it was explained to me clearly.

Along with the meaning of big words I wanted to know how to pronounce them, and I wanted to know where they came from. Words were to me most fascinating things. As I grew older I traced each new, big word that crossed my mental horizon clear back to its Latin, Celtic or other foundation. The words stood before me as mysterious, connecting links between the now and the mysterious, fascinating long ago, dating clear back, maybe to King Arthur and the round table. Finding a new word I traced it clear back to its beginning as industriously and persistently as a cat stalking a bird, and with an appetite for my task every whit as keen. Back at the beginning of my words I began to study their historic environs, that is, mediaeval and ancient history, and the more ancient the history was the better I liked it. The forefathers of many of my big words were discovered in hiding among the ancients, and it was with a feeling of awe that I looked upon and eventually sought to make use of words of such illustrious lineage.

My mania for words provoked from my mother a story of slave days in the south. It was of an aged darkey who came to his master and asked to know the meaning of the word "pecoolar." Having been told the meaning of the word, that is, peculiar, he said:

"It's jest this way, massa. I has to use the word a heap, so I thought I betta' know its meanin'."

A good deal of what I read I failed to understand, of course, for I waded into everything—political news, financial, society, foreign correspondence, all! And assailed my parents, visitors and passersby for explanations of the things I read.

For weeks I devoured every scrap of print that came my way about the approaching battle between John L. Sullivan and James J. Corbett for the championship of the world. The day of the fight I was so wrought up that I could hardly eat. It was several days later that the news reached our pioneer neighborhood, for we had no dailies and mail only once a week. When finally the news of Corbett's victory reached our section every bachelor's cabin resounded with heated arguments. One side of the argument held that in his blooming youth John L. could have knocked Jim Corbett to kingdom come in one round; the other faction held that Jim Corbett belonged to a new school of pugilists and could have taken care of John L. any day. These arguments at times became acrimonious.

One of our bachelor neighbors who had the interior of his ten by twelve cabin papered with pink sheets of the old Police Gazette, used in lieu of wall paper, was an enthusiastic fight fan, and in an argument could illustrate his points by reference to the pictures and reading matter on his walls.

The summer I was 11 father went away to work in the harvest fields of the Walla Walla valley, 160 miles away, leaving mother and I alone on the claim. For company we had a tame old cream colored pony we called Chub, a cat, part of the time a black hound of monstrous size and appetite, the chickens, and, what meant much to me, a pile of magazines and papers. I read and reread them; when tired of reading I used to mount old Chub and ride over the prairie "just to be riding." There was no place to go and no one to see, for our neighbors, near and far, bachelors mostly, had also gone away to the harvest fields to earn a "grubstake" for the winter, leaving their small, boxlike cabins deserted.

I rode over to Charley Gifford's cabin one day, pretending I was going to see Charley. Charley was gone, of course, but I was just pretending that I was going on a visit. There was an empty water barrel in the yard, the staves of which were beginning to show large cracks between. If it didn't rain soon, Charley would be minus a water barrel when he got back, I reflected. There was a pine box by the door, and on it sat his wash pan and a partly used cake of tar soap which was warped and dried by he sun.

As the crowning courtesy of my call, I thought I would ride up and look in the window, which I did. The single sash of the window was partly covered by a yellowed newspaper, and it was the newspaper, not the interior of Charley's cabin that caught my eye and held it. I made Chub stand beside the window while I read through the glass, every word in the paper. It was the first chapter of a wonderful story—a story of giants, queer animals that snorted fire from their nostrils and had spear-headed tails, a beautiful girl whose father was an ogre of a most ogrish kind, and a sorcerer—my, what a sorcerer! He could prophesy all things; and when engaged in prophesying he smiled and grinned broadly to himself. When his grin was most broad he called an assistant sorcerer to come and measure his grin; and the dimensions of the grin was the key to his prophesy and mysterious divinations, by which he never failed to knock a three-bagger.

My soul was athirst for the rest of the story. I peered in at the window and saw a big pile of papers and magazines on a box in the corner of the cabin. For a long time I sat there on Chub, pondering what to do. Two ways of getting the papers inside the house were available. One was to dig under the foundation and come up through the dirt floor inside, which I could do with a broken handled spade lying in the yard. The other was to go in through the window, which also was easy. The window was the kind which can be shoved to one side in loosely fitting runways at top and bottom. Charley had bored an auger hole in the lower runway, placing the hole so that a peg dropped into it would come flush against the window sash and keep it from being shoved aside from outside; but there was a broken pane! All I had to do was to reach in and lift out the peg.

I debated the question mentally. Had the door been unlocked I could have gone in with good conscience. A stranger who came along was at liberty to enter the unlocked door, cook his meal, eat it, rest and depart. He

(Continued on page twenty.)

Ye Have Heard That It Was Said by Them of Old Time

THE NAME OF GOD.

"Thou shalt not take the name of the Lord, thy God, in vain; for the Lord will not hold him guiltless that taketh His name in vain."—Exodus 20:7.

Perhaps of all the Ten Commandments none is broken more persistently and carelessly than this. Nor is it characteristic of this age in particular; if we search history and literature of every age, we find every page interlarded with strange oaths.

It is a common belief that profanity is peculiarly a country vice. This we do not believe; we find it everywhere. It is almost universal.

Of all the commandments, it forbids the most useless and senseless of things; profane language, even vulgarity or extreme slang, does harm. It does not add force to what we say to fill our speech with protestations. It steals away the purity of our native tongues.

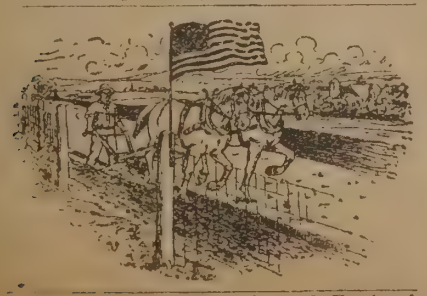
"But what is the harm?" somebody asks. Anything which destroys the fiber of purity and high homage for God is assuredly harmful. Swearing does not perceptibly affect our physical well being, but it has an insidious and harmful effect on our souls.

With many men profanity has become a habit, and they curse without knowing it. Swearing is silly and foolish; it is impolite and degrading; it is wrong and wicked. It has no redeeming feature.

The punishment for the violation of the third commandment is sure, though deliberate. It comes as a weakening of moral stamina and a general coarsening of our beings. The finer touch, the finer sense, the closeness with the beauty and harmony of good and great things goes from us.

Britain's Appeal Applies to U. S.

The national department of agriculture is sending out a letter issued by the British premier, David Lloyd George,



addressed to the people of England, conveying "advices distinctly applicable to the United States and which should be heeded by every one who can do anything to produce food of preserve food from waste." In his appeal the British premier says: "We have now reached the crisis of the war when to insure victory the heroism of our armies at the front must be backed by the self-sacrifice and loyal labor of every one at home. To this end the products of each quarter of wheat ad oats and of every bushel of potatoes is of vital importance." The appeal closes with the following sentence: "The farmers of this country can defeat the German submarine, and when they do so they destroy the last hope of the Prussians."

We Live Because Millions Have Died

By GRANVILLE LOWTHER.

A few weeks ago the winter was passing, the spring was advancing, the sun was warming the valleys, melting the snow on the hills, and shining with beautiful splendor on the pure white mountain peaks. As I breathed the warm air and thought of the approaching summer, I felt that mysterious longing, the back to the land hunger. How this instinct originated in human nature I do not know, but it was probably induced by the habits of our ancestors who felt nature responding to their efforts by giving back to them in return for their labor the comforts and blessings of life. But, however it may have come into our lives, there is in every normal soul the desire to get near to nature from whence we have sprung; the soil whose elements give us the bodies in which we live. Then too, there was the social stimulous of the movement taking form all over the country; a movement to produce more food, to compensate for the shortage of crops, the scarcity of labor caused by the war, and the losses that will probably occur on account of the submarines sinking our merchant ships.

A kind of world patriotism impelled me, so I grabbed my shovel and went to digging in the garden.

As I turned up the rich brown earth, every now and then I would strike a spot darker and richer than the mass of the soil in which I was digging. Why were there these differences? The answer is simple. It was because two years ago we had put on a very heavy coating of barnyard manure and had turned it under with a plow. The dark spots were those where the manure had not been well distributed and, therefore, had not yet become completely mixed with the soil. Last year the benefit received from this fertilization was much greater than the first year, after the manure was turned under, and this year it seems like it would be greater than last year.

What is that which, when added to the soil, gives it power to produce larger, better forms of life than it would otherwise grow? In this particular case we can trace it, for the manure was made from alfalfa hay. The alfalfa represented a form of life. We cut it, the life passed out of it, and we say it died. In this dead form it is of no value as a fertilizer. Before it can fertilize it must decay. This is what scientists call disintegration or disorganization, because the elements taken from earth and air and organized into forms become disorganized and are set free to return to the sources from whence they came. Had disorganization not occurred, the alfalfa would have obstructed rather than aided fertility. It was because the elements that were organized could become disintegrated that the horses could get out of the alfalfa the food substances necessary for their life. It was because the excrements from the horses could be further disorganized that it enriched the soil and made it produce better vegetables. This raises the question, if there were no deaths how long could the earth sustain the life manifest upon it, and if there were no decay or disorganization, how long before there would be no organization.

We live because countless millions have died.

A few months ago, while in Arizona, I saw that one reason why the process of reclaiming the Arizona desert without irrigation is so slow is in the fact that the air is so dry that dead vegetable and animal bodies live for years upon the surface of soil without decay. Tufts of grass, broken stems of grease wood, bodies of animals and other forms of life lie bleaching in the sun in an atmosphere too hot and too dry for disintegrating bacteria to live. Oxygen, hydrogen, nitrogen, potassium, sodium, and other elements upon which life seizes in order to organize forms for its habitation must be set free in order that other and higher forms may be organized, and adapted to the higher conditions of evolving life.

May it not be then that organization and disorganization, integration and disintegration and what we call life and death are two aspects of the same thing?

I know this is philosophy, that it is more or less speculative, and that some very practical folks do not like to think in this sphere. Well, let it be so, but if we went to raise the best potatoes, cabbages, and crops in general, put on the manure, turn on the water, aerate the soil, set the chemical elements free, and the new forms of life will feed upon them and feed you. Not a germ or bacteria or leaf or flower or blade of grass or vegetable or animal has lived without contributing something to make this world richer. We live and die for others as others have lived and died for us, and this is one of the lessons we are now being compelled to learn by the great world war.

All the World's a Stage, and All the Men and Women Merely Players

House Speaker in a New Role



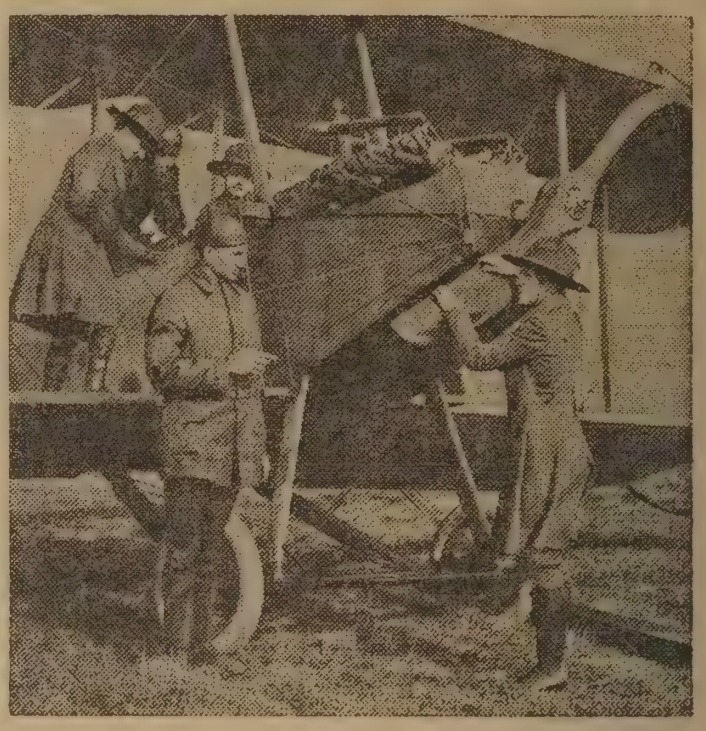
Speaker Champ Clark, who has been reelected, is shown in the picture above, in a new and interesting role. He is holding his infant grandson, Champ Clark Thomson, as carefully as any grandfather can. The picture was made on the occasion of the speaker's recent visit to his daughter, Mrs. Genevieve Clark Thomson, at New Orleans.

Plans Regiment of Women



A cavalry regiment of women combining the attributes of Joan of Arc and Annie Oakley has been suggested to the military authorities by Miss Marion Weston Cottle, a former student at Wellesley and the Boston University Law school and now a member of the Massachusetts bar. Miss Cottle wants to enlist and believes that she could raise a dashing cavalry regiment among the horsewomen of greater Boston. She applied at a recruiting station and found that clerical work seemed to be the only opportunity for women in the service.

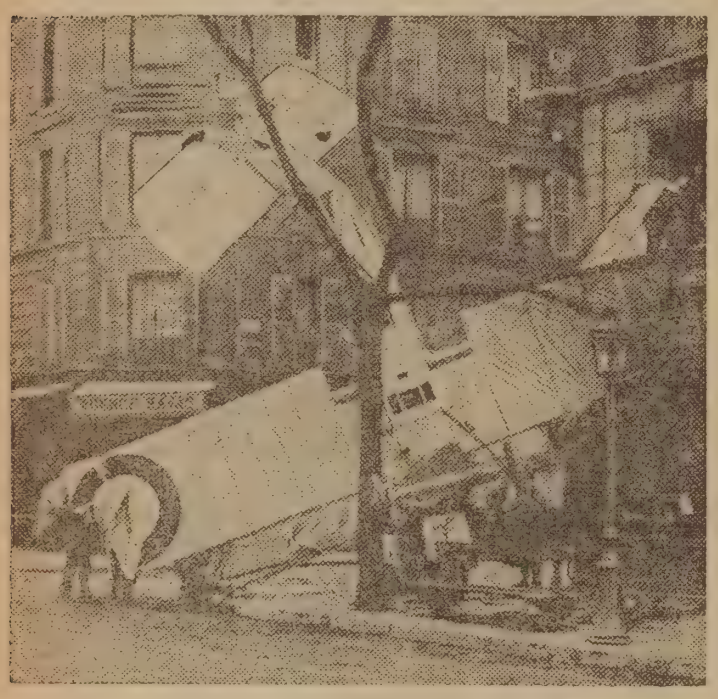
New York Women Learn Aviation



—Photo by International Film Service.

Women members of the newly organized New York flying corps learning how to operate an airplane at the Speedway, Sheepshead Bay, N. Y. Mrs. Waldo Pierce of New York, an aviatrice, has offered to train a corps of women aeroplane pilots and to supply several machines.

Ruins of Airplane in Paris Street



—Photo by International Film Service.

The wreckage of a French aeroplane in one of the streets of Paris is shown. The machine was one of an aerial patrol that took the air on receipt of reports that a squadron of German planes was approaching. A French machine in some manner met with an accident in the air and crashed to the street. The pilot was seriously injured.

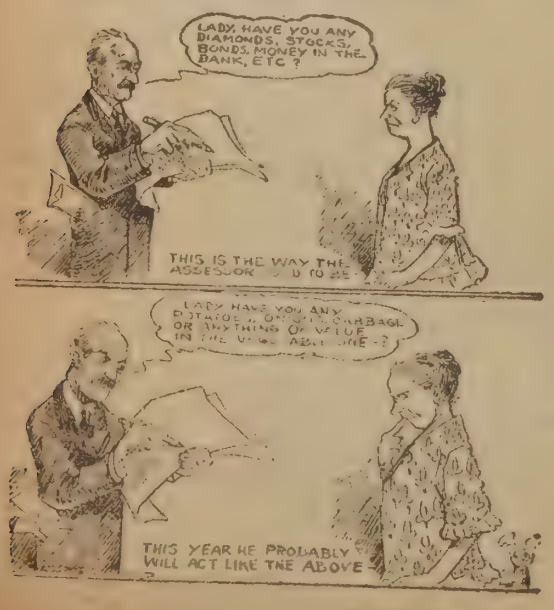
China Ready to Enter the World War



—Photo by International Film Service.

As fit, man for man, and in equipment, as any army now engaged in the world war, is the modern Chinese army which may be drawn into the conflict almost any day. The photograph just received in this country, shows what a fine body of men compose the army of the celestial republic.

The Melancholy Days Are Here.



—Kansas

He Tried to Throw the Bull.



—Fresno Herald.

The New Recruit.



—Kansas City Star.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merril Co.

CHAPTER XVIII.—(Continued.)

Henry really liked, or, rather admired, Brandon, as had often been shown, but his nature was incapable of real affection. The highest point he ever reached was admiration, often quite extravagant for a time, but usually short-lived, as naked admiration is apt to be. If he had affection for any one it was for Mary. He could not but see the justice of his sister's position, but he had no intention of allowing justice, in the sense of right, to interfere with justice in the sense of the king's will.

"You have been playing the devil at a great rate," he said. "You have disobeyed your brother and your king; have disgraced yourself; have probably made trouble between us and France, for if Louis refuses to take you now I will cram you down his throat; and by your own story have led a good man to the block. Quite a budget of evils for one woman to open. But I have noticed that the trouble a woman can make is in proportion to her beauty, and no wonder my little sister has made so much disturbance. It's strange, though, that he should so affect you. Master Wolsey, surely there has been witchery here. He must have used it abundantly to cast such a spell over my sister." Then turning to the princess: "Was it at any time possible for him to have given you a love powder; or did he ever make any signs or passes over you?"

"Oh, no! nothing of that sort. I never ate or drank anything which he could possibly have touched. And as to signs and passes, I know he never made any. Sir Edwin, you were always present when I was with him until after we left for Bristol; did you ever see anything of the sort?"

I answered "No," and she went on: "Besides, I do not believe much in signs and passes. No one can affect others unless he can induce them to eat or drink something, in which he has placed a love powder or potion. Then, again, Master Brandon did not want me to love him, and surely would not have used such a method to gain what he could have had freely without it."

I noticed that Henry's mind had wandered from what Mary was saying and that his eyes were fixed upon me with a thoughtful, half vicious, inquiring stare that I did not like. I wondered what was coming next, but my curiosity was more than satisfied when the king asked: "So Caskoden was present at all your interviews?"

Ah! Holy Mother! I knew what was coming now, and actually began to shrivel with fright. The king continued: "I suppose he helped you to escape?"

I thought my day had come, but Mary's wit was equal to the occasion. With an expression on her face of the most dove-like innocence, she quickly said:

"Oh! no! neither he nor Jane knew anything of it. We were afraid they might divulge."

Shade of Sapphira!

A lie is a pretty good thing, too, now and then, and the man who says that word of Mary's was not a blessed lie must fight me with lance, battle-ax, sword and dagger till one or the other of us bites the dust in death, be he great or small.

"I am glad to learn that you knew nothing of it," said Henry, addressing me; and I was glad, too, for him to learn it, you may be sure.

Then spoke Wolsey: "If your majesty will permit, I would say that I quite agree with you; there has been witchery here—witchery of the most potent kind; the witchery of lustrous eyes, of fair skin and rosy lips; the witchery of all that is sweet and intoxicating in womanhood, but Master Brandon has been the victim of this potent spell, not the user of it. One look upon your sister standing there, and I know your majesty will agree that Brandon had no chance against her."

"Perhaps you are right," returned Henry.

Then spoke Mary, all unconscious of her girlish egotism: "Of course, he had not. Master Brandon could not help it." Which was true beyond all doubt.

Henry laughed at her naivete, and Wolsey's lip wore a smile, as he plucked the king by the sleeve and took him over to the window, out of our hearing.

Mary began to weep and show signs of increasing agitation.

After a short whispered conversation the king and Wolsey came back and the former said: "Sister, if I promise to give Brandon his life, will you consent decently and like a good girl to marry Louis of France?"

Mary almost screamed, "Yes, yes; gladly; I will do anything you ask," and fell at his feet hysterically embracing his knees.

As the king stooped and lifted her to her feet he kissed her, saying: "His life shall be spared, my sweet sister." After this Henry felt that he had done a wonderfully gracious act and was the kindest-hearted prince in all Christendom.

Poor Mary! Two mighty kings and their great ministers of state had at last conquered you, but they had to strike you through your love—the vulnerable spot in every woman.

Jane and I led Mary away through a side door, and the king called for de Longueville to finish the interrupted game of cards.

Before the play was resumed Wolsey stepped softly around to the king and asked: "Shall I affix your majesty's seal to Brandon's pardon?

"Yes, but keep him in the Tower until Mary is off for France?"

Wolsey had certainly been a friend to Brandon in time of need, but, as usual, he had value received for his friendliness. He was an ardent advocate of the French marriage, notwithstanding the fact he had told Mary he was not; having no doubt been bribed thereto by the French king.

The good bishop had, with the help of de Longueville, secretly sent Mary's miniature to the French court in order that it might, as if by accident, fall into the hands of Louis, and that worthy's little, old, shriveled heart began to flutter, just as if there could be kindled in it a genuine flame.

Louis had sent to de Longueville, who was then in England, for confirmation of Mary's beauty, and de Longueville grew so eloquent on the theme that his French majesty at once authorized negotiations.

As reports came in Louis grew more and more impatient. This did not, however, stand in the way of his driving a hard bargain in the matter of dower, for "the father of the people" had the characteristics of his race, and was intensely practical as well as inflammable. They never lose sight of the dot—but I do not find fault.

Louis little knew what thorns this lovely rose had underneath her velvet leaves, and what a veritable tartar she would be, linked to the man she did not love; or he would have given Henry four hundred thousand crowns to keep her at home.

CHAPTER XIX.

So the value received for Wolsey's friendship to Brandon was Mary's promise to marry Louis.

Mary wanted to send a message at

(Continued on following page.)

Now Is the Time to Kill Coyotes

Spread of Rabies Makes Their Destruction Imperative

The idea that the coyote is merely a chicken thief and a sort of picturesque relic of pioneer days is rapidly being abandoned, and should be altogether. The coyote is the most costly predatory animal in America. He destroys thousands of sheep, calves, pigs and even colts every year, and it is estimated that he costs the stockmen of the western territory, including Washington, Idaho, Oregon, California, Nevada and parts of adjoining states a million dollars annually, largely through the rabies which he spreads.

Therefore, says E. F. Averill, federal representative for Washington and Oregon of the United States biological department, "swat the coyote." Inspector Averill has a force of two or three score experienced trappers and poisoners at work the year round in this territory, and they are destroying large numbers of coyotes, bob cats and cougars, but they are urging the farmers and ranchers to take up active warfare against the pests.

Right now is the coyote denning season. In scores of coves and waste patches, even on the wheat farms of the northwest, litters of from four to 12 coyote pups are being reared and now above all times is the opportunity to destroy them. Special effort should also be made to capture the old also, but never again will it be so easy to destroy half a dozen predacious animals as it is right now and the opportunity should not be overlooked.

Rabies a Real Scourge.

Inspector Averill declares the rabies to be a real menace, such as to warrant the utmost effort of everybody, whether owner of live stock or not, to stamp out. The history of the spread of the present rabies epidemic is easily traced, according to Mr. Averill. He says:

"The first cases of rabies developed about four years ago in Asotin county and spread fanlike into Oregon, where large herds of sheep run the ranges. Many of these herds later are driven through Washington into the Okanogan district to graze on the ranges there. The rabies epidemic is slowly but surely following this trail up the Columbia river basin and is at its worst now in the Columbia valley in central Washington. It is unquestionably carried by the dogs, which have been bitten by coyotes with the disease, and they are always fighting.

"There is probably not a sheepman in Oregon who does not have at least one dog a season develop rabies. Rabies do not develop for some weeks after an animal has been bitten and in the meantime the dogs may follow the herds into another section of the country and in this way the disease is spread. The Indians moving from place to place between Oregon and Washington with their dogs have also contributed no small part in spreading the epidemic. There was a time when rabies could have been suppressed in the northwest.

"It was done in England by muzzling all the dogs and keeping them muzzled. The worst is yet to come. The thing has just started. We are carrying on a campaign of education among the live stock men to secure their active cooperation and are increasing our trappers in an effort to keep steadily at work in the long hard struggle.

In the winter the coyotes come down around the feed lots on the ranches and that is where the trouble begins. One coyote often bites 25 to 30 head in one herd. Instances are reported where live stock men in the west have lost 200 head of choice cattle in a season through the depredations of coyotes with the rabies.

"Dogs and coyotes do not go mad spontaneously as some people imagine. Rabies can be spread by a bite of one animal to another and in no other way. The animal must be mad at the time it bites or rabies will not develop.

"It is a common fallacy that animals or people bitten by a dog that subsequently goes mad will also go mad. That is not true.

"An animal suffering from rabies never lives more than six days, usually only three or four, and talk about mad dogs being at large for weeks is nonsense. There is a period of two days only during the time when the animal is inclined to bite. This is during the irritable period when he snaps and bites at everything within reach and spreads the infection."

Inspector Averill has organized a force of expert trappers and poisoners, and the methods they use will be described in another article on this subject to appear soon in the Farmer.

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Tell me why the Simplex is silo I should have. Send free literature.

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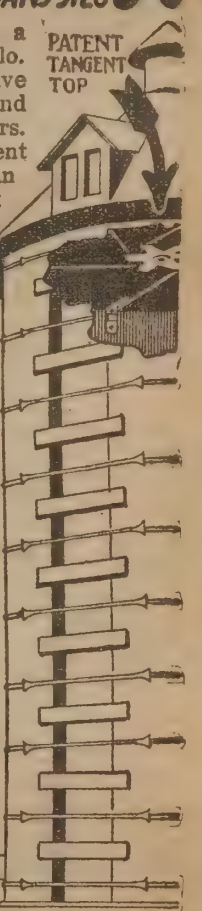
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You can buy fertile raw lands in Stevens county, Washington, on 10-year terms and receive free lumber and free use of stump puller. Ideal for stock raising and dairying. You can make good and be independent on your own land in Stevens county. Ask for particulars.

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DAISY FLY KILLER placed anywhere, attracts and kills all flies. Neat, clean, ornamental, convenient, cheap. Lasts all season. Made of metal, can't spill or tip over; will not soil or injure anything. Guaranteed effective. Sold by dealers, or 6 sent by express prepaid for $1.



HAROLD SOMERS, 150 DeKalb Ave., Brooklyn, N. Y.

In answering advertisements don't fail to mention this paper.

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from preceding page.)

once to Brandon, telling him his life would be spared, and that she had made no delay this time—a fact of which she was very proud—but the Tower gates would not open until morning, so she had to wait. She compensated herself as well as she could by writing a letter, which I should like to give you here, but it is too long. She told him of his pardon, but not one word upon the theme he so wished yet feared to hear of—her promise never to wed any other man. Mary had not told him of her final surrender in the matter of the French marriage, for the reason that she dreaded to pain him, and feared he might refuse the sacrifice.

"It will almost kill him, I know," she said to Jane that night, "and I fear it is a false kindness I do him. He would, probably, rather die than that I should marry another; I know that I should rather die, or have anything else terrible to happen, then for another woman to possess him. He promised me he never would; but suppose he should fail in his word, as I have today failed in mine. The thought of it absolutely burns me." And she threw herself into Jane's arms, and that little comforter tried to soothe her by making light of her fears.

"Oh! but suppose he should?"

"Well! there is no need to borrow trouble. You said he promised you, and you know he is one who keeps his word."

"But I promised, too, and think of what I am about to do. Mary in heaven, help me! But he is made of different stuff from me. I can and do trust his word, and when I think of all my troubles, and when it seems that I can not bear them, the one comforting thought comes that no other woman will ever possess him; no other woman; no other woman. I am glad that my only comfort comes from him."



I was permitted to see Brandon at once.

"I hoped that I might have been some comfort to you; I have tried hard enough," said Jane, who was jealous.

"Oh! yes! my sweet Jane; you do comfort me: you are like a soothing balm to an aching pain," and she kissed the hands that held hers. This was all that modest little Jane required. She was content to be an humble balm and did not aspire to the dignity of an elixir.

The girls then said their prayers in concert and Mary gently wept herself to sleep. She lay dreaming and tossing nervously until sunrise, when she got up and added more pages to her letter, until I called to take it.

I was on hand soon after the Tower gates had opened and was permitted to see Brandon at once. He read Mary's letter and acted like every other lover since love letters first began. He was quick to note the absence of the longed for, but not expected, assurance, and when he did not see it went straight to the point.

"She has promised to marry the French king to purchase my life. Is not that true?"

"I hope not," I answered evasively; "I have seen very little of her, and she has said nothing about it."

"You are evading my question, I see. Do you know nothing of it?"

"Nothing," I replied, telling an unnecessary lie.

"Caskoden, you are either a liar or a blockhead."

"Make it a liar, Brandon," said I, laughtingly, for I was sure of my place in his heart and knew that he meant no offense.

I never doubt a friend; one would better be trustful of 99 friends who are false, than doubtful of one who is true. Suspicion and supersensitiveness are at once the badge and the bane of a little soul.

I did not leave the Tower until noon, and Brandon's pardon had been delivered to him before I left. He was glad that the first news of it had come from Mary.

He naturally expected his liberty at once, and when told that he was to be honorably detained for a short time, turned to me and said: "I suppose they are afraid to let me out until she is off for France. King Henry flatters me."

I looked out of the window up Tower street and said nothing.

When I left I took a letter to Mary, which plainly told her he had divined it all, and she wrote a tear-stained answer, begging him to forgive her for having saved his life at a cost greater than her own.

For several days I was kept busy carrying letters from Greenwich to the Tower and back again, but soon letters ceased to satisfy Mary, and she made up her mind that she must see him. Nothing else would do. She must not, could not, and, in short, would not go another day without seeing him; no, not another hour. Jane and I opposed her all we could, but the best we could accomplish was to induce her for Brandon's sake—for she was beginning to see that he was the one who had to suffer for her indiscretions—to ask Henry's permission, and if he refused, then try some other way. To determine was to act with Mary, so off she went without delay to hunt the king, taking Jane and me along as escort. How full we were of important business, as we scurried along the corridors, one on each side of Mary, all talking excitedly at once. When anything was to be done, it always required three of us to do it.

We found the king, and without any prelude, Mary proffered her request. Of course it was refused. Mary pouted and was getting ready for an outburst, when Wolsey spoke up: "With your majesty's gracious permission, I would subscribe to the petition of the princess. She has been good enough to give her promise in the mattey of so much importance to us, and in so small a thing as this I hope you may see your way clear toward favoring her. The interview will be the last and may help to make her duty easier." Mary gave the cardinal a fleeting glance from her lustrous eyes full of surprise and gratitude, and as speaking as a book.

Henry looked from one to the other of us for a moment and broke into a boisterous laugh.

"Oh, I don't care, so that you keep it a secret. The old king will never know. We can hurry up the marriage. He is getting too much already—400,000 crowns and a girl like you—he can not complain if he have an heir. It would be a good joke on the miserly old dotard, but better on 'Ce Gross Garcon.'"

Mary sprang from her chair with a cry of rage. "You brute! Do you think I am as vile as you because I have the misfortune to be your sister, or that Charles Brandon is like you simply because he is a man?" Henry laughed, his health at that time being too good for him to be ill-natured. He had all he wanted out of his sister, so her outbursts amused him.

Mary hurriedly left the king and walked back to her room filled with shame and rage—feelings actively stimulated by Jane, who was equally indignant.

Henry had noticed Jane's frown, but had laughed at her and had tried to catch and kiss her as she left, but she struggled away from him and fled with a speed worthy of the cause.

This insulting suggestion put a stop to Mary's visit to the Tower more effectually than any refusal could have done, and she sat down to pour forth her soul's indignation in a letter.

She remained at home then, but saw Brandon later, and to good purpose, as I believe, although I am not sure about it, even to this day.

I took this letter to Brandon, along with Mary's miniature—the one that had been painted for Charles of Germany, but had never been given—and a curl of her hair, and it looked as if this was all he would ever possess of her.

De Longueville heard of Henry's brutal consent that Mary might see Brandon, and, with a Frenchman's belief in woman's depravity, was exceedingly anxious to keep them apart. To this end he requested that a member of his own retinue be placed near Brandon. To this Henry readily consented, and there was an end to even the letter-writing. Opportunities increase in value doubly fast as they drift behind us, and now that the princess could not see Brandon or even write to him, she regretted with her whole soul that she had not gone to the Tower when she had permission, regardless of what any one would say or think.

(To be continued in the next issue.)

Ups and Downs of a Bunch Grass Boy

(Continued from page seventeen.)

must leave the woodbox as full of cut wood as he found it, and leave the water pail also full; and he must wash the dishes. That was all—he was not even expected to write "Thank you" on a slip of paper for the houseowner to read when he returned.

But that was a wholly different proposition from slipping a man's window peg and going through the window. Uncle Daddy Utt would have stated the case this way:

"Verily, verily, I say unto you, he that entereth not by the door into the sheepfold, but climbeth up some other way, the same is a thief and a robber."

So it took me a long time to make up my mind to go into Charley's "sheepfold" by the window in lieu of the door. I knew that Charley would not care if I did so; knew also that if I did not take the papers home the mice would make nests of them before Charley returned; so finally went in through the window and took possession of the papers, and so fine reading I had the rest of the summer.

I read in these papers about the execution of a number of criminals. As I remember it, there must have been two sets of criminals, one set being hanged and the other guillotined. My boy's imagination was fired by what I read. Squirrels were thick in the prairie and were making costly inroads on our small garden. I conceived the idea of treating the squirrels like criminals, and laid cunning plans to catch and execute the criminals. They were fairly easy to catch. I would lay a loop about a squirrel hole and back 50 feet at the other end of the string, would wait for the criminal to put forth his head from his lair, which soon he did, and then I yanked the string! I had him!

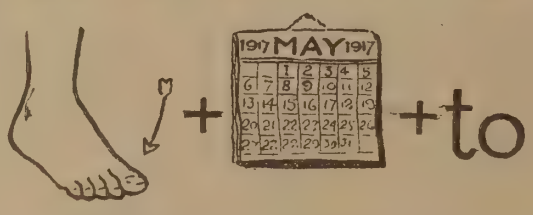
Then came the execution. I decided to hang them. From descriptions I read, I built a scaffold, then worked out what I thought was a first-class hangman's knot, and proceeded to execute a half dozen of the criminals.

They were quite expert with their teeth, which were sharp as needles, and had a way of connecting up with my fingers as I worked the hangman's noose around their furry necks. However, I persisted, and finally halted their biting by slipping on "black masks" made of the toes of stockings I had cut out, thinking I likely would not need the stockings any more.

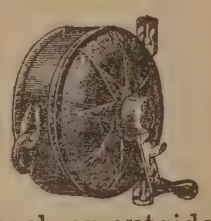
But criminals of this type hung by their necks quite comfortably and one by one either clawed or chewed the strings in two and escaped under the house, where presently they also clawed off the "death masks" and capered about quite joyfully and safe beyond the reach of the hangman.

To the uninitiated my pastime will seem cruel, but remember, please, the troubles we prairie boys had with ground squirrels. They infested the bunchgrass range by the million and descended upon our small crops and gardens in droves. We fought them with poison, traps, guns, every conceivable way and many times futilely. It therefore did not seem at all cruel to kill squirrels. Doing so was not classed as idle pastime or play—it was a small boy's principal and at times very tiresome business.

Add This Up and Get a Prize



Any person sending the correct answer to the above question before May 17th, together with $2 in the form of money order, 2-cent stamps or personal check, will receive THE WASHINGTON FARMER for three years and one of our special Star clothes reels described below. The reel is worth $1.25 at retail, while the subscription costs $1.50 even at our special rate, a total value of $2.75.



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With the Star Clothes Reel you can pull out 75 feet of strong, braided clothes line or reel it up instantly. Hang up clothes in kitchen, attic, porch or outside. When not in use cord is wound up in dust-proof metal case which is easily attached to casing, post or wall and easily taken down. Worth its retail cost of $1.25 in the steps it saves every month.

If you are not awarded the prize your money will be refunded. The subscription may be new or renewal, for yourself or some one else. Address

Quiz Editor, The Washington Farmer

Review Building, Spokane, Wash.



ALICE W. BARLAND
Editorial Contributor

Compensations

One Only Has to Look for Them

What is the quotation or what are the words which have helped you in the journey of life? Send it to the editor of The Farmer and let it help another.

To the Editor: Many quotations have influenced my life, but I think nothing has meant more to me than this simple line, "For compensation's the law of life." Particularly do I apply it to the weather, and when it seems too bad to endure without complaint I try to recall some of the sunny days that have been and to look forward to the ones that I know must be in store for us. Every day has its compensations if we but look for them.

AGNES JUST REID.

Shelley, Idaho.

School Day Fun

When Four Girls Lived Together

To the Editor: I think the most interesting years in my life were the two years between 16 and 18. As we had always lived in a thinly settled country our school consisted of one room and all grades from one to seven. At the age of 14 I finished the seventh grade, as I was the oldest scholar. I then stayed home for two years waiting for my sister to finish so we could go to high school together. In the fall of 1910 she was ready, and also two girl friends of about our age. But disappointment came. Our fathers could not leave their ranches to move to town, and we had no friends in Greenwood, B. C., the town which offered us the best school service. We were just about in despair, when our school teacher took a hand and told us her mother had a two-room apartment to rent in Greenwood and she would act as a kind of chaperon for us. Our parents decided to give us a trial. They gave orders to the landlady never to let us go out at night and have no beaus.

Our first investment was a big Queen cook book, and we decided to take week-about with the cooking. Our folks supplied us with all the vegetables, butter, eggs and fruit and also brought us groceries from our home town. Such fun as we had, and such banquets—and sometimes such failures with that old cook book.

We never could get sugar enough. Our allowance was just five pounds a week, and whenever we had any spare money it went for sugar. Then a few invitations to a few schoolmates and a big taffy pull in the evening. For those two school terms of nine months each life was just a girl's dream. In the summer after school hours we would get one of our girl friends to loan us her mother's ice cream freezer, and after a long afternoon walk or tennis game we all (generally about six of us girls, our landlady was strict on the "no males allowed" rule) would go to our apartment and turn that freezer until our arms ached; but, My! how good it tasted, though! Sometimes the cake that accompanied it was burnt and sometimes heavy. The suppers most appreciated by our city schoolmates were on the days when father would bring in some young fries and perhaps some home-baked pies. I don't think those girls have forgotten their glimpse of country life yet. I have never seen them since, as we came to Washington the summer of 1912.

However, with all the fun I had during those two years of city life, I still love the farm best.

IVY DRENNAN.

Marble Wash.

The Farmer welcomes the above writer ipto its Experience Circle and will be glad to print interesting bits of experience from other readers.

A Swat at H. C. of L.

To the Editor: This spring more than ever before, farm housewives experience great difficulty in thinking up something to cook "for a change." Before the garden is ready for use we all have a hunger for something green. So few housekeepers seem to realize the possibilities of greens, nor the many different kinds of wild plants that can be utilized in this way. Earliest of all, perhaps, are the nettles. Though they are disagreeable to gather, if the hands are encased in heavy gloves their stings are not so noticeable. Parboiled with a pinch of soda, then boiled until tender with a few slices of bacon, they are really delicious. Wild mustard, dandelion leaves, mangels that have been thinned out and would otherwise be thrown away, radish tops, turnip tops, beet tops and lamb's quarter all make excellent greens and are certainly a swat at the high cost of living. A few of the tender stalks and leaves of the rhubarb plant make a nice seasoning when cooked with any variety of greens.

MRS. JACK PLASTER.

Ferndale, Wash.

To Make Vinegar

No Need for Farmer's Wife to Buy

By Mrs. L. T. Hall.

There is no need for the farmer's wife to buy vinegar when she can make it so easily and in much better quality at home. Vinegar may be made from various fruits and cereals, such as grapes, apples, pears, prunes, peaches, raspberries, apricots or crabapples, also corn or navy beans, all make good vinegar. While apple and crabapple vinegar are considered the best standard vinegars they are not to be compared for flavor with peach vinegar, which is best of all to an epicurean. Prune vinegar is fairly good, but better if mixed with apple or peach.

Take a 50-gallon hogshead and put into it three gallons of pure water (pure rain water, filtered if possible, and not from a cedar roof); fill the barrel to within eight inches of the top with fruit juice; put in one pound of raisins and a pinch of yeast (not quite half a cake). If the juice be pear or prune add two pounds of brown sugar or white beet sugar will do. The barrel must, of ccuse, be headed. Set in a warm room, with bunghole up. Leave bunghole open, but tack a wire screen over it.

As soon as the vinegar has ceased working place the barrel in a clean cellar, with bung lightly corked, so that any gas will be able to escape. It should set a year before being sold, as it does not acquire the desired quota of acid until thoroughly ripened, and the inspector often destroys good vinegar simply because in his ignorance he does not know how to distinguish the unripe article from that adulterated with water. If you are out of vinegar and far from market the bean vinegar is quickest made. Take a two-gallon glass jar; fill nearly full of water and sweeten it quite sweet with brown sugar. Wash a large teacupful of navy beans and put into the sweetened water, and set in a warm room where the sun will strike it most of the day. In a week you can strain and use. Corn meal vinegar is made the same way; instead of the beans add to the sweetened water two cups of corn meal. Apple, crabapple, pear and peach vinegar are good for all purposes. Raspberry vinegar makes a good summer drink, especially combined with unfermented pineapple or orange juice, and sweetened ice water. Cherry vinegar, like peach vinegar, is fine for making sweetened salad dressing for fruit and nut salads. The bean and corn vinegar are also good for general use, and, being perfectly clear, are preferred by some for such salads as cucumber or artichoke.

Vinegar is usually made from raw juice, but when one has no press and wishes to make a small quantity the apple and peach parings may be cooked in a minimum of water and put through a jelly bag, then a little sugar, raising and yeast added in proper proportions. I have made a pint at a time, and set it away to ripen in a fruit jar, and have helped my father make hundreds of gallons.



Sweet are the uses of adversity,
Which like the toad, ugly and venomous,
Wears yet a precious jewel in his head;
And this, our life, exempt from public haunt,
Finds tongues in trees, books in the running brooks,
Sermons in stones, and good in everything. —Shakespeare.

BABY'S WELFARE

Much Depends Upon Surroundings.

The welfare of the baby depends largely upon the condition of its home and surroundings, says a bulletin on "The Care of the Baby," issued by the extension department of the university of Minnesota:

A satisfactory home for a baby should provide plenty of fresh air and sunshine. Much of the baby's time should be spent out of doors after it is 3 months old, on a porch or in the yard. A healthy baby should be kept out of doors at least four hours each day, even in winter, except when it is colder than 22 degrees F. During the summer a newly born baby may be taken out of doors in the first week. During the winter months the baby should be gradually accustomed to the outside air. A good plan is to begin with an outing of 15 minutes at noon and gradually lengthen the time into the forenoon and afternoon, until the baby is out from 10 a. m. to 2 p. m. The baby must be properly clothed according to the weather.

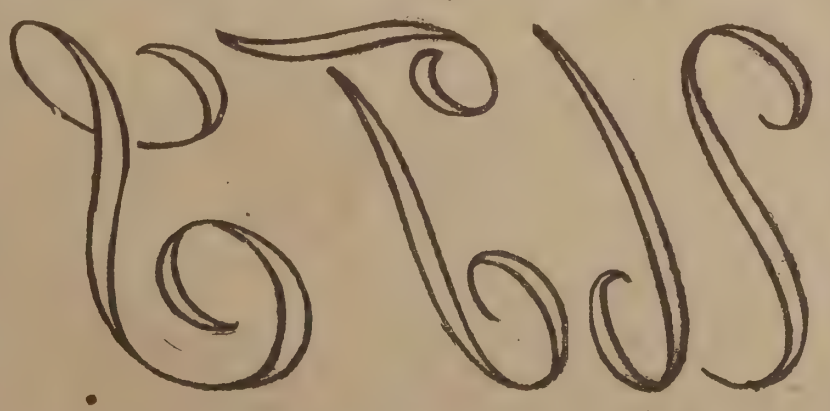
The surroundings of the home should be free from uncovered garbage, rubbish and manure. All of these attract flies and other disease-carrying insects.

Washable Window Shades.

Take unbleached muslin, with the length and width of window, allowing for hem in the bottom for stick and a very narrow hem on each side; wash, starch, iron and tack on roller the same as any shade.

Have found these shades most satisfactory and a great help in keeping the kitchen clean, as I can launder them easily and keep them free from grease, and they make the kitchen nice and bright.—Philadelphia Record.

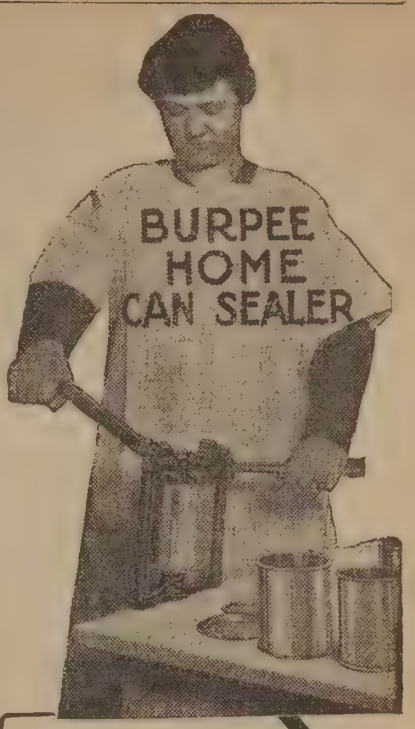
Script Initials for Embroidery



By WINNIFRED WORTH.

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of a linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design.



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Fruits and vegetables will soon be ready for market. Are you sure that you can sell all you produce? Insure yourself against glutted markets, waste and loss by buying a

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Patterns

1501—Lady's shirt waist, with convertible collar. Cut in 7 sizes: 32, 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 2 3-4 yards of 40-inch material for a 36-inch size. Price 10c.

1644—Child's rompers. Cut in 5 sizes: 1, 2, 3, 4 and 5 years. It requires 3 yards of 27-inch material for a 4-year size. Price 10 cents.

Blouse 1837. Skirt 1834—A popular suit in sport style. Blouse 1837 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure.

1824—Lady's dress. Cut in 6 sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. It requires 7 3-4 yards of 44-inch material for a 36-inch size. The skirt measures 3 2-3 yards at the foot. Price 10 cents.

Skirt 1834 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It will require 7 3-8 yards of 44-inch material for the entire suit in a 36-inch size. The skirt measures about 3 1-2 yards at the foot. Two separate patterns, 10 cents for each pattern.

1557—Girl's dress. Cut in 4 sizes: 4, 6, 8 and 10 years. It requires 4 1-4 yards of 36-inch material for the dress with double skirt, and 3 1-2 yards with single skirt for an 8-year size. Price 10 cents.

1851—Girl's dress, with guimpe. Cut in 4 sizes: 4, 6, 8 and 10 years. The dress requires 2 7-8 yards of 27-inch material for a 6-year size, with 2 1-4 yards for the guimpe. Price 10 cents.

1728—Lady's yoke petticoat. Cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires 3 5-8 yards of 36-inch material for a 24-inch size. Price 10 cents.

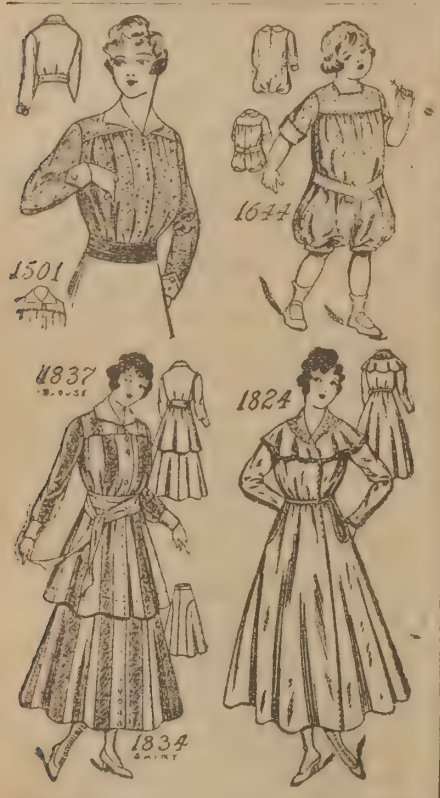
1748—Lady's dressing sack. Cut in 3 sizes: Small, medium and large. It requires 3 5-8 yards of 36-inch material for a medium size. Price 10 cents.

1791—Lady's house dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 1-2 yards of 44-inch material for a 36-inch size. The skirt measures about 3 yards at its lower edge. Price 10 cents.

1805—Lady's apron. Cut in 3 sizes: Small, medium and large. It requires 3 1-4 yards of 36-inch material for a medium size. Price 10 cents.

1131—Vestee, collars and cuff for ladies. Cut in 3 sizes: Small, medium and large. It requires for No. 1, 5-8 yard of 18-inch material; for No. 2, 3-8 yard of 20-inch material, and No. 3, 1-4 yard of 27-inch material, and 1-2 yard for one pair of cuffs, of 20-inch material for a medium size. Price 10 cents.

1201—Child's set of dress, petticoat and drawers. Cut in 4 sizes: 1, 2, 3 and 4 years. It requires 2 3-4 yards of 27-inch material for the dress, 2 3-8 yards for the petticoat and 3-4 yard for the drawers for a 3-year size. Price 10 cents.





Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

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Enclosed find ..... cents, for which send me the following patterns:

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Pattern No. ..... Size .....

Pattern No. ..... Size .....

Name ....

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BE SURE TO GIVE NUMBER AND SIZE.

Not Disconcerted.

The new maid would not rise early enough. Gentle reproof seemed vain, and finally the master and mistress tried the inferential method of blame, and left the damsel asleep while they prepared the breakfast for themselves.

"We'll shame her to it," said the master.

Not a word was said until 9 o'clock the same evening, when the girl tapped at the dor of the sitting room.

"Is there anything else I can do, mum?" she respectfully inquired.

There was nothing, and she turned to go to bed, but at the door remembered something.

"If you're down before me in the morning, mum," she observed, "you'll find the eggs in a box in the scullery."—Exchange.

Compromise.

A little colored girl, newcomer in Sunday school, gave her name to the teacher as "Fertilizer Johnson." Later the teacher asked the child's mother if that was right.

"Yes, ma'am, dat's her name," said the fond parent. "You see, she was named for me and her father. Her father's name am Ferdinand and my name is Liza. So we named her Fertilizer."—Boston Transcript.

Home Helps

Making a Home More Homelike

What is the most helpful thing you have learned during the last year in your experience with housekeeping? Let us pass it along to other housekeepers.

When we moved from a mill camp, where my husband and I had been working for the better part of a year, it certainly was not very encouraging to find the house on the farm we had leased, badly in need of paint within and without, the paper badly soiled and torn.

The owner did not feel able to have the house repapered and painted and I did not think I could live two years in the house the way it was. I did not have much money to work on and no one to help me. So this is what I have done:

I bought a few rolls of cheap wall paper, a gallon of lacquer, a half gallon of good furniture varnish and a quart of linoleum varnish. Our furniture was rather badly worn, for we have moved more than the average and then I had bought some second-hand furniture that was substantial, but had the new worn off.

The living room had a coarse wainscoating about two and one-half feet, which I removed. The woodwork was all painted white, which was yellowed and dirty.

The walls were papered with what had been a light paper, but was far from light now, as it had been several years since the paper had been put on, and there had been four or five different families in the house in that time.

I repapered the ceiling and walls with a light tan paper with a tiny rose in it. The doors and other woodwork I stained with a gloss lacquer that could be put over the white paint. For curtains I used some cheap unbleached muslin, usually known as house lining, which I stenciled.

I had only a rag carpet for the floor but my room looks as homey and comfortable as any one could desire.

The dining room and kitchen also received a new dress of wall paper and paint, the furniture a new coat of varnish and with my scrim (?) curtains, the three rooms are greatly improved. The paper and paint for the three rooms did not cost more than $6 or an average of $2 a room, and I know we are over $6 happier and cleaner than before.

I did all the work myself although I only weigh a little over 100 pounds. I really believe most any one can improve their homes at a very reasonable cost. If my experience will help even one woman who needs it I shall be very glad I have shared it.—N. B., Elgin, Ore.

Sidelights

Now They Don't Speak.

"What did you say that your age was?" he asked between dances.

"I didn't say," smartly returned the girl, "but I've just reached 21."

"Is that possible!" he consoled. "What detained you?"

That's the Point.

Lawyer—On the night in question, Mr. Witness, did you not have several drinks of whisky?

Witness—That's my business.

Lawyer—I know it's your business, but were you attending to it?—Boston Transcript.

Progress.

"How's your boy Josh getting along in college?"

"Fine," replied Farmer Corntassel. "He has studied so hard that he thinks he knows more about how the school ought to be run than the teachers themselves."—Washington Star.

Wanted to See It Work.

As a reward for good conduct Johnny was taken to the zoo by his mother. Just before starting Johnny and his Aunt Mary had a decided difference of opinions as to what did or did not constitute clean ears and a clean neck.

Arriving at the zoo they soon came across a curious-looking animal.

"What's that?" asked Johnny.

"That's an anteater, dear," said his mother.

A determined look came over Johnny's face.

"Say, mummy," he said, "tomorrow let's bring Aunt Mary out here."—Ladies' Home Journal.

There's Profit in HOME CANNING

Turn you surplus products and time into money this year and have a business of your own—home canning. There is good money to be made in home and community canning every year, but there never was a better year than this to start.

START RIGHT.

Don't experiment with makeshifts, do your canning by steam pressure; "the safe and only thorough way to sterilize." By our new selling plan you get all your supplies from one source. We furnish retorts, cans, modern can-sealing machine, instructions—everything for canning work in home, orchard or community, showing how to market your product to best advantage. Outfits include 60-page book of recipes on goods you can put up.

Simply send a postal for free literature on how to can for profit.

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Every garment is guaranteed
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The most practical, healthful, playtime garments ever invented for children 1 to 8 years of age. Made in one piece with drop back. Easily slipped on or off. Easily washed. No tight elastic bands to stop circulation. Made in blue denim, and genuine blue and white hickory stripes. Also lighter weight, fast-color material in dark blue, cadet blue, tan or dark red, all appropriately trimmed with fast-color galatea. All garments made in Dutch neck with elbow sleeves for high neck and long sleeves.

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If your dealer cannot supply you we will send them, charges prepaid on receipt of price, 85c each. Satisfaction guaranteed or money refunded.

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PHOTO CRAFT SHOP, Pittock Block.
P. O. Box 735, Portland, Ore.



My Dear Children: We had some splendid letters in the last contest, didn't we? I read them all, 621 of them. Can you imagine getting so many? But some of you did not follow the rules.

You must write on one side of the paper only. You must be very careful of your writing and spelling. Try and have your paper neat and clean. You must write your name and address plainly. I am going to ask you to put your age on each letter; that will help me a great deal. Even though you have put your age on previous letters just add it each time you write. You may put it after your name and address.

Answering one of the cousins' questions: There is no charge for printing your letter. Some member of your family must be a subscriber to the paper and you must write your own letter. I wonder how many of the cousins can spell "write" right. This word is misspelled more often than any other. Now, let's see how many can spell it correctly in their next letters. Don't you remember, we had a motto a long time ago that read something like this: "We are going to do something better today than we did it yesterday." Perhaps some of our newer cousins can think of a better one. If you can, I should like to have it, and maybe some time we can have it at the head of our page. Lovingly,

AUNT NELLIE.

Prize Winners for March-April.

Annie L. Hutsell, Mora, Wash.
Gertrude Park, Cowiche, Wash.
Grace E. Balsley, Enumclaw, Wash.

Roll of Honor.

Florence Cox, Leahy; Carrie Fjerlie, East Stanwood; Gladys May Plemon, Burbank; Laverne Nunn, Meyers Falls; Kenneth Duncan, Chewah; Eugene Pollastrine, Pasco; Harvey Norris, Goldendale; Berthold Conrad, Renton; Margaret Collaer, Vancouver; Ora McDonald, Olalla; Grace Wills, Mayview; Goldie Gaskill, Chesaw; Mary Synington, Selleck.

Every Season Has Its Fun.

Dear Aunt Nellie: My favorite book is "Black Beauty." If you are always kind to a horse when they are colts until they are grown they will be your friend always, but if you are unkind to them they will be your enemy. I don't always think of this rule, but will try to hereafter. I think most children who have read the book will sympathize with me. I live in a country called the Methow valley. In the winter it gets about 13 or 14 degrees below zero and generally there is over three feet of snow. There are lots of mountains and hills around here so we have lots of fun coasting. In the spring, after the snow goes off, there are lots of flowers of all kinds. The hills are real pretty with the grass and sunflowers on them. In the summer all kinds of berries get ripe. I hate to see fall come because all of the pretty leaves and flowers are killed by Jack Frost, but we have lots of fun gathering in the fruit and vegetables.—Maud Burns, Twisp, Wash.

Planning for a Swimming Dock.

Dear Aunt Nellie: I am 12 years old and my birthday is January 28. I am in the sixth grade and my teacher's name of Mr. Gwin. I have read all of the cousins' letters since September, 1916, and I enjoyed they very much. I know three of the cousins. They are, Harry Burke, Cora Kanouse and Mamie Jennings. My best friend is Aaron Kanouse. We go swimming in summer; we are planning to make a swimming dock for the coming summer. The farm I live on contains 17 acres. We have two horses, four milch cows, a heifer, a calf, three little pigs and one large pig. The horses' names are Trig and Fanny." The cows' names are Brownie, June, Bessie and Susie. The heifer's name is Topsy and the calf's name is Beauty. My home is in Astoria, Ore., but I live in the country for the present.—Oscar Berg, Box 29, Elma, Wash.

Hopes We'll Read Her Favorite Book.

Dear Aunt Nellie: One of the best books I have ever read is "Little Lord Fauntleroy." It is a story of a sweet, innocent little boy, who has never been ill-used and his friends, though poor, all think much of him. His mother is his dearest friend and he has contracted the habit of calling her "dearest," which was the term he had always heard his father address her. His father had been the son of an English earl who was so angry when his son married an American lady that he disowned him and while the little boy was yet a baby the father died. The old earl has other sons, but they die also, and then the little boy suddenly finds himself heir to the rich English castles which belong to his uncle, whom he has never seen. Although his uncle is a cross, grouchy old gentlemen and has never been heard to speak a kind word to any one, Cedrick, for such is the boy's name, has an idea that his uncle is the most kind and generous man in the world. Cedric is very sorry to leave his friends and go to England, but at last he goes away. His mother is with him and although she can not stay in the palace with him, she is installed in a comfortable little cottage. His uncle, the earl, loves the boy and when news comes that Cedric is an impostor and the real earl is waiting an interview, he discredits it and at last it eurns out that Cedric is the real earl and in response to the little lord's wishes he has his mother come to the palace and the earl, who has become good tempered and generous, is made very happy by the little boy, and he declares that he is fitted in every way to be an earl or even a king.—Calla Foster, South Bend, Wash.

Had to Shoot the Old Pet Horse.

Dear Aunt Nellie: We had an old horse. Her name was Nellie. She had a cancer and papa had to shoot her. She was 26 years old. She was our pet. We live on an 80-acre farm. I have one sister. Her name is Ima. I have three brothers. Their names are Earl, Leslie and Lloyd. I am 10 years old. My birthday is the 18th of September. I go to school and I am in the fourth grade. My teacher's name is Miss Frazier. I like her very much. There are 32 pupils in our room. We have one cow, one little calf, three horses and 32 hens. I have one mile and a half to go to school. I go to Sunday school every Sunday except when I am sick. I can tat and crochet some. I help with the housework and make the light bread.—Hazel Slinkard, R. F. D. 2, Rockford, Wash.

Springtime's the Happiest of All.

Dear Aunt Nellie: I have been reading the Children's Corner for a long time, and I like to read the many interesting letters. I am 10 years old and in the fourth grade. I like the spring, when all the flowers are in bloom and the birds are singing. I like to go on the hill with my father and gather Easter lilies while he hunts. It does not take long before I have my arms full of flowers and then I bring them home. I like to go barefooted and play in the creek which runs behind our house. I have a large dog who likes to play with me. I think that the springtime is the happiest time of all. Don't you think so, too?—Myrtle Veronica Faye, Monroe, Wash.

Pearl Is One of Our New Cousins.

Dear Aunt Nellie: I am 11 years of age and my birthday is January 16th and I am in the fifth grade at school. I take music lessons and like it very much although it is quite hard. I live on a farm of 18 acres. We have a nice big house with 10 rooms in it and two halls, one downstairs and one upstairs. We have two cats, two cows and one calf. The cows' names are Spotty and Reddy. The calf's name is Blossom. We have one horse. Her name is Fannie. We also have chickens. I have one sister 13 years old. Her Birthday is February 22, George Washington's birthday. Her name is Ruby. I have four brothers also, Horton, Vernon, George and O'Neil.—Pearl Sarff, Puyallup, Wash.

"Mildred" Is Inez's Favorite Book.

Dear Aunt Nellie: I have written many times before. This time my subject is going to be "My Favorite Book." My favorite book is "Mildred." This is the story of a child that was adopted by an old judge and it turns out to be his grandchild and Mildred does not see her father until she is 20 years old. I have read many other books, but can't just remember the names of all of them just now. I am reading at present "The House of Seven Gables." Every time the Farmer comes I always go to the buggy to meet father when he comes from town. I read all the stories in the Farmer and I like the continued story. —Inez Lockwood, Raymond, Wash.

So Mischievous She Had to Sell It.

Dear Aunt Nellie: Once a poor little crippled sheep was given to me, it not being able to follow with the herd. After faithful nursing and tender care it soon was well again. I had good pasture, and so it soon was fat and sleek and, worst of all, was very mischievous, which made me very angry sometimes, so I thought I would sell it, which I did one day. The section foreman of the railroad gave me $3.50 for it. This was the first money I ever earned by myself. I used it in the purchase of jewelry, of which I am very fond.—Laura E. Hatley, R. 2, Waitsburg, Wash.

Interested in the School Exhibits.

Dear Aunt Nellie: I have been reading the Corner for a long time and I like it very much. I was 15 years of age, February 22. I went to school that day and when I came home mama had a nice big cake made for my birthday. I do most of the work at home. I like to work at home. I go to the Deer Creek school. Our teacher's name is Miss Hamilton. She is certainly a lovely teacher. I missed an awful lot of school this term because of so much sickness in the family. There are only five pupils in our school now. My father takes The Farmer and he and mama are very deeply interested in it. I am very much interested in the school exhibits. We raised some rutabagas that took the first prize at the exhibition at Leahy.—Florence Cox, Leahy, Wash.

There's a Nice Orchard on the Farm.

Dear Aunt Nellie: I would like to join the Corner. I am a little girl 9 years old and in the third grade. My birthday is May 3. My teacher's name is Miss Loretta Hinckly and I like her fine. I live on a 40-acre farm. We have three calves, five cows, three horses and 80 chickens. We have a nice orchard of apples, pears, plums and cherries. I have two brothers and sisters. My sister wrote to the Farmer, too. My best friends are Yerda Johnson and Viola Wilson. There are 42 pupils in our room, 22 in the third grade and 20 in the fourth. We have a dog and a cat for pets. I go to Sunday school nearly every Sunday. I would like to correspond with Rita Helen Knerton or any girl of my own age.—Ruth Forsman, Rochester, Wash.

Made Tomato Boxes Last Summer.

Dear Aunt Nellie: I am 9 years old and in the fourth grade. My birthday was on the 26th of February. I saw all the nice letters in the Children's Corner so I thought I would send a letter to you. I have three pet cats. They are Dapple and Spot and Snowball. I have a brother younger than I and a sister older than I. She is teaching school and she is 19. I live on a 10-acre ranch on the Columbia river. I live three-quarters of a mile away from school and I walk. We have one horse and one cow. My riding horse and both of my dogs were killed on the railroad. The horse's name was Daisy and the cow's name is Bossy and the horse's name that got killed was Bobby. We have 21 hens. I have $2.50 making tomato boxes last summer.—Charles G. McDonald, Longview, Wash.

Myrtle Had to Muzzle Her Dog.

Dear Aunt Nellie: My little friend is over here tonight and she is going to write to you, too. Today my sister was over in the domestic science room sewing, and as she was trying to pull a thread out of the goods she accidentally run a needble through her finger. My daddy and mother went to lodge tonight and just my sister, my friend and myself are here. I have two sisters married and they each have a little boy. Their names are Gordon Oman and Wilbur Gilbert. I have a pony named Buck, a cow named Bell and a dog named Snow. I have muzzled him now as that is the law.—Myrtle Sodorff, Johnson, Wash.

Piled Sagebrush for Her Money.

Dear Aunt Nellie: I am 7 1-2 years old and am in the second grade. I have had to miss two weeks of school because I have the whooping cough. I have two sisters and one brother. I will tell how I earned my first money. Papa bought 20 acres of new land near my home and had to clear the sagebrush off of it, so he gave me 5 cents a day to pile it up for him, and he told me I could buy a pair of bantam chickens with my money. My sister is going to buy a pet rabbit with the money she earns. We each have a little pet pig and feed them on a bottle.—Gertrude Park, Cowiche, Wash.

First Time We've Heard From Marie.

Dear Aunt Nellie: I am 9 years old and I am in the fourth grade. My birthday is the 17th of August. My teacher's name is Miss Turple. We have one cow, a pig, a dog and a cat. I have one sister and one brother. My sister is 6 years old and my brother is 12 years old. My brother's name is Wilhelm and my sister's name is Ruth. This is my first letter to the Corner.—Marie Anderson, Redmond, Wash.

To Have a Nice New Schoolhouse.

Dear Aunt Nellie: I enjoy reading the cousins' letters very much. I am 8 years old and in the fourth grade. My teacher's name is Miss Neill. I like her very much. I go to the Lambert's school. I go across a deep canyon to school. Maybe we are going to have a new schoolhouse. Our schoolhouse is an old one. I would like a take the trip Inez had. I would like to correspond with any of my cousins about my age. I have a cat. His name is Pepper. He is white, orange and black. We have about 35 chickens, three cows and two horses. The horses's names are Dandy and Ginger.—Mildred Widmer, R. F. D. 2, Ridgefield, Wash.

Going to Raise Some Geese.

Dear Aunt Nellie: I enjoy reading the cousins' letters and also like to write to the Corner. I live on a 640-acre farm. I have two geese. I am going to raise geese this summer. My little sister, Alice, and I go to school every day. My sister, Lyda, has been sick and can't go for some time. I like my teacher and my school friends. There are 18 pupils going to our school. Our school will be out the 25th of May. The 15th of May will be my birthday. I will be 14 years old. I weigh 102 pounds.—Viola Augst, Box 30, Beebe, Wash.

Had a Chicken Dinner at School.

Dear Aunt Nellie: I like to read the letters in the Washington Farmer. I am a girl 8 years old and in the second grade. My birthday is June the 23d. We have three teachers. My teacher's name is Miss Leota McLaughlin. We live on a 20-acre farm. There are 23 pupils in our room. I have two sisters and their names are Florence and Lela. I have a brother and his name is Glen, but my little sister and brother are not big enough to go to school. We had a chicken dinner at our school the other night. —Josephine Edna McAndrew, Box 141, R. F. D. Winlock, Wash.

At Last Maud Has Found a Twin.

Dear Aunt Nellie: I like to read the letters. I have been reading them quite a while and at last I have found my twin. I am 13 years old. My birthday is August 26. I am in the eighth grade. I have three sisters and four brothers. My oldest brother is in Alaska. He works on a boat there. He likes the work very much. He is 17 years old. My sisters are all smaller than I am. We have two pets, a cat and a dog. My smallest sister is 3 years old. She likes the cat and dog very much.—Maud Winston, 406 Wood street, Snohomish, Wash.

Necia Hasn't Missed a Day of School.

Dear Aunt Nellie: I have not written to the Corner for a long time. I like to read the other children's letters. I want to see if I can write one just like them. I have not missed one day of school. I haven't been late either. We had one week vacation in school. My teacher is in Spokane this week. We have seven little pigs—Necia Hire, Odessa, Wash.

Deo's Father Runs the Warehouse.

Dear Aunt Nellie: I am 10 years old and I am in the fourth grade. My papa runs the warehouse. We have three big horses and two little colts. My mama runs the postoffice. I have one big black dog with brown spots on him. I have two sisters and two brothers. There are nine scholars in our school. —Deo Weir, Hanmer, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Esther Anderson, Irene Mae Hett, Laura Smith, Beulah Coatney, Kathryn Tattler, Jennie Peterson, Ruby Werz, Frank Saeger.

The Bible Says:



Join the New Regiment

The regiment of young people who enter our school every year for a summer course in bookkeeping, shorthand and typewriting.

We train you for a real money earning position—and help you secure it after graduation.

Write for free catalog.

Northwestern
Business College
Spokane, Wash. M. M. Higley, Pres.

WE WILL PAY SALARY

to farmer with rig or saddle horse. The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are paying good salaries to those who can do the work and are offering these positions only to farm owners or renters.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. For men with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

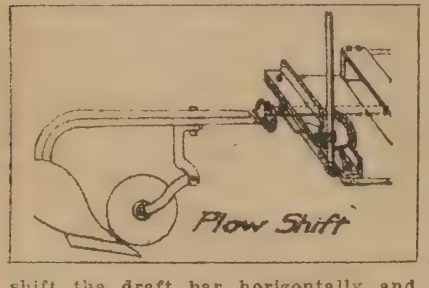
Give full details in your first letter to The Washington Farmer, Review Building, Spokane, Wash.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Plow Shifting Mechanism for Tractors.

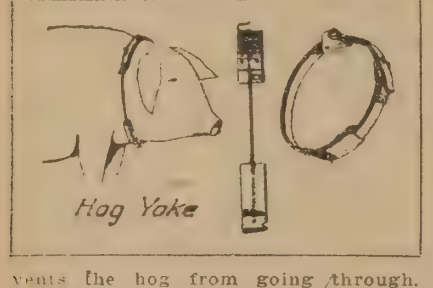
With this mechanism to the frame of a tractor, the operator is able to



shift the draft bar horizontally and hold it in any desired position.

Hog Yoke.

This yoke consists of two curved metal bands held in place by a stout wire, each band carries a hook which engages the wires of a fence and pre-



vents the hog from going through. The yoke on the right is somewhat similar but is attached by means of a leather strap.

How He Felt.

After the battle of Mons an officer congratulated an Irishman on his conspicuous bravery under fire.

"Well, Pat," he said, " how did you feel during the engagement?"

"Feel, captain," answered Pat. "I felt as if ivvery hair on me head was a band of music, and they were all playing 'Home, Sweet Home.'"—Everybody's.

With Open Palms.

"He went to get a change of air
In Florida bewitching,
And found along his pathway there
The spreading palm was everywhere,
And every palm was itching!"

Want Ads

HELP WANTED—MALE 3

OUTSIDE SITUATION.

Good salary can be earned selling our complete line high class nursery stock. Cash advanced. Write for terms.

ALBANY NURSERIES, ALBANY, ORE.

HAWTHORNE AUTO SCHOOL.
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

WANTED—MEN WITH AUTOS, TO SELL Anti-Carbon Gas Saver; county and state rights available. Pacific Auto Accessory Co., 512 Journal bldg., Portland, Oregon.

AGENTS—WANTED 9

$11 DAILY AVERAGE SELLING IMproved advance pump governors. They make the hardest working pumps work easy, windmills turn in the slightest wind, pumping engines work with less than half the gas or steam; fit all pumps; warranted five years; exclusive territory; price $5.90 each. Honorable men wanted to sell them everywhere, International Foundry Co., 310 Newton bldg., St. Paul., Minn.

SITUATION WANTED—General 24

MAN WITH FAMILY, ALL WORKERS, want ranch work. State what you have. O. Falhnell, Bayview, Ida.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free. BEHNKE-WALKER BUSINESS COLLEGE, 167 FOURTH ST., PORTLAND, ORE.

MISCELLANEOUS 57

CARBON, MOTORISTS' GREATEST ENEMY. Our famous lubricant carbon remover makes and keeps your engine clean as a watch. No need to take down when applying. Postal brings full particulars. Wagner Bros. Co., Hancock, Mich.

MISCELLANEOUS—FOR SALE 60

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MISCELLANEOUS—FOR SALE 60 Continued.

BARGAIN PRICES ON LUMBER!

SASH AND DOORS, MILLWORK, PAINTS, GLASS, HARDWARE.

BIG SAVINGS FOR EVERY BUILDER:

We have a $30,000 stock to sell and we're going to make this the biggest year this big business ever knew if prices will do. It's an opportunity for you, Mr. Builder, such as you never had before. There has been some advance in lumber and building materials, but don't pay too much attention to "scare" rises. Buy from the Big Bargain House, where tremendous stocks are right on hand and prices are always low. Just look here for prices:

2x4s, 12 ft., 8c each.
Boyd's famous 5x-panel fir doors $1.00.
2-ft. check rail windows, 76c and up.
Prepared roofing, $1.25 square.
Shingle stain (nonfade), 60c gal.
Hundreds more bargains like them. Get the big BOYD catalog, the biggest 10c worth you ever saw. Stamps for mailing.

FREDERICK BOYD CO.
2210 WESTLAKE AVE., SEATTLE.

SASH AND DOORS.

Shipped anywhere, to any one, at factory prices. We own our own mill, and guarantee first quality goods, and safe delivery to destination. Send for our big illustrated catalog No. 27, mailed free; postpaid, promptly on receipt of request.

5 cross panel doors, No. 1	$1.33
4 panel craftsman doors	1.75
Glass doors, as low as	2.25
24x24, two light windows	1.46
10x12, twelve-light windows	1.51
10x12, four-light barn sash	.66
24x60, 3-ply panels	.65
16x16x26, spruce flour bins	1.50
Plain window frames	1.00

We carry a full line of inside finish, mouldings, sash, cupboard doors, hardware, mixed paints, etc. Prompt shipments.
O. B. WILLIAMS CO.
1943 1ST AVE. SO. SEATTLE, WASH.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS—WANTED 63

—CREAM WANTED—
We pay cash for cream, poultry, eggs, veal, hogs and hides. Write for prices and shipping tags. Commercial Creamery Co., Spokane, Wash.

SITUATION WANTED—General 24

INDIAN RUNNER DUCK EGGS, 15C EACH. J. F. Medaris, R. 1, Wapato, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer,** and **The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

HOGANIZED S. C. I. REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels, $5 each. These birds are all sons of a magnificent male, from a 271-egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs, $6 in 100 lots; settings, $1.50, $3, $5. Mrs. H. V. Rominger, Underwood, Wash.

79,637 EGGS IN 1916 FROM MY FLOCK of 450 S. C. Black Minorcas, prize winners in the showroom and laying contest; eggs from my Hoganized and trap-nested breeding stock at $2 per 15, $3.50 per 30, $5 per 50, $8 per 100, $70 per 1000. No baby chicks or stock for sale. John Dollenbacher, R. 1, Selah, Wash.

WHITE LEGHORN BABY CHICKS from strong, superior stock, bred for eggs, vigor and size. Safe arrival guaranteed. Free catalogue. Free book on raising the chicks. Oak Heights Poultry Farm, R. R. 3, Box T67, Tacoma, Wash.

POULTRY 174 Continued.

MY R. C. R. I. REDS HAVE WON EVERY first and second, except one, competed for in the past 3 years. Have mated 4 pens for the egg trade. Guaranteed satisfaction. Mating list on application. G. W. Baker, Colfax, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

GOLDEN MAMMOTH BRONZE TURKEY eggs from prize-winners; setting of 10, $2.50 and $3.50. Special prices owing to lateness of season. C. L. Haworth, R. D. 2, Boise, Idaho.

WHITE LEGHORN CHICKS, $10 PER 100 for May and June; special price of $6 for 50 White Leghorn chicks and fireless brooder. Queen Hatchery, 89 Pike st., Seattle, Wash.

IF YOU ARE INTERESTED
in Reds, write me for mating list and price of eggs. I have what you want at the right price. S. W. Berry, Post Falls, Idaho.

BARRED PLYMOUTH ROCKS, PRIZE winners at shows. Near front in N. W. laying contest. Eggs $1.50. Folder free. Wm. H. Helmsoth, Baker, Ore.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

EGGS FROM TANCRED S. C. W. LEGhorn hens, $1.25 per 15, $6 per 100, prepaid. J. W. Hirons, R. 2, B. 55, Scio, Ore.

FOR SALE — S. C. WHITE LEGHORN eggs, 75c per 15, $4 a hundred. Mrs. Wm. Vercler, Rigby, Idaho.

THOROUGHBRED BUFF LEGHORN EGGS, $1.25 per 15, postpaid. E. W. Wehtje, R. 2, Freewater, Ore.

BUFF ORPINGTON EGGS, $3 SETTING. Prize winners. Baby chicks. Julia Stewart, Moscow, Idaho.

COOK AND PHILO W. ORPINGTONS. Eggs, stock. J. N. Scott, Naches, Wn.

LIVE STOCK 177

FOR SALE, JERSEY BULL.
Fox of Hollyhurst, reg. No. 145529, solid color, pink tongue, black switch, dropped Nov. 28, 1914.

His dam, Fraulein of Hollyhurst, as a two-year-old heifer, made 5075 lbs. milk, with an average test of 5.66 per cent, or 287 lbs. butter fat, equivalent to 359 lbs. butter in one year. She will reach or exceed at maturity 500 lbs. butter in one year. His mature granddam made 7379 lbs. milk and 497 lbs. butter in one year.

Am going out of the dairy business and will sell this bull at a very reasonable price. H. L. Willis, Mt. Vernon, Wash.

YOU FARMERS! MAKE BIGGER HOG profits with purebred, pedigreed
BIG TYPE POLANDS!
Write for free hog booklet, "The Bartwood Idea." Tells how to get the very finest Polands at 1-3 usual price. Bartwood Farm, Hamilton, Mont.

FOR SALE, OR TRADE
for Jersey heifers or stock cattle, one very fine imported 2-year-old registered Jersey bull, son of Golden Fern's Noble. Cash price $300.
J. H. ROWLEY, WESTFALL, ORE.

SERVICEABLE BOARS, BRED GILTS. Orders booked for spring pigs. Also few choice Holstein bull calves from best of families.
W. R. WHITE, SUNNYSIDE, WASH.

HOLSTEIN BULLS, REGISTERED, PEDIgreed; acclimated to northwestern conditions; $75 up. Catalog on request. Ford & Hollister Ranch, Inc., Darby, Montana.

SIGN PAINTING 366

PAINT YOUR OWN FARM SIGNS. EASY with our patterns and instructions. Send for copyrighted booklet entitled "Naming the Farm," containing 200 suitable names, and sample pattern and introductory offer. C-N Sign Co., Box 19, Jackson, Minn.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish, Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

OREGON SEEDS.
VETCH OR "TARES."
A Great Forage or Seed Crop.
RED CLOVER, ALSIKE.
"THREE GRAIN OATS," Wonderful Yielder.
COMPLETE LINE OF FARM SEEDS.
CORVALLIS FLOURING MILLS,
Corvallis, Oregon.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flour seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, Ore.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEEDS 620 Continued.



ACCLIMATED SEED.
In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

NURSERY STOCK 621

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. L. Moffet, Ellensburg, Wash.

FARM LANDS—FOR SALE 651

MONTANA LAND.
COMBINATION STOCK AND GRAIN FARM, IMPROVED, $22 PER ACRE; 960 acres in one of the best stock districts of the state of Montana; about 700 acres tillable land, balance excellent pasture; only 4 miles to town; 100 acres in winter wheat; 40 in spring wheat; all goes to the buyer. For immediate sale we can deliver this place at $22 per acre.

If interested in Montana land call or write for our land list, giving descriptions of some of the best buys in the state of Montana.
HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG.

A GOOD FARM.
NEAR BELLINGHAM, WASHINGTON, ON PUGET SOUND.

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Grain and Produce Markets

Chicago Grain.

CHICAGO, May 5.—Offerings of wheat today were so meager that it took only scattered anxious buying to cause a material advance. Lightness of stocks formed one of the chief bullish factors. There was an unsettled close, 3¼c to 6c net higher, with May at $2.78½ and July $2.25 to $2.24½. Corn gained ½c to 1½c and oats ¼c to ⅞c.

Provisions finished unchanged to 25c lower. Concern over difficulties of securing ownership of enough wheat to fill outstanding contracts for May delivery was evident throughout the session.

Announcement that British government representatives at Winnipeg had made liberal concessions in regard to purchase terms on cash wheat seemed to have considerable bullish influence on the market here. In this connection it was said necessities abroad were so urgent that demand would equal whatever ocean tonnage was available.

Corn hardened in value with wheat. Besides there were complaints that owing to the cold weather corn germination was poor.

Oats were helped upward by purchases that were attributed to seaboard interests. Gossip was current that 1100 cars had been ordered here to convey oats away for export.

Active commission house demand for lard upheld prices on that product. Pork and ribs lacked support.

Pacific Northwest Grain.

TACOMA, May 5.—Wheat—Bluestem, $2.75; fortyfold, $2.70; club and fife, $2.70; red Russian, $2.67.

SEATTLE, May 5.—Wheat—Bluestem, $2.75; turkey red, $2.76; fortyfold, $2.71; club, $2.71; fife, $2.71; red Russian, $2.69.

PORTLAND, Ore., May 5.—Grain—May delivery: Wheat, bluestem, $2.75; forty-fold, $2.72; club, $2.70; red Russian, $2.68.

Oats—No. 1 white feed, $52.75.

Barley—No. 1 feed, $52.50.

Sales, 100 tons; May oats at $53.

Futures—June — Bluestem, $2.75; fortyfold, $2.72; club, $2.70; Russian, $2.68.

June oats, $52.75; barley, $50.

Portland Market.

PORTLAND, Ore., May 7.—The wool market has opened up in eastern Oregon. Several hundred thousand pounds were contracted for in the last week at 40 cents for fine and better than 45 cents for coarse. Growers, however, are not selling freely. They want 45 cents for fine and 50 cents for medium and, unless they get it, will hold the bulk of their clips for the regular sealed bid sales. The demand for Oregon wool is very keen and dealers expect to soon pay the prices now demanded by sheepmen.

In the Willamette valley small lots are being marketed at 46 to 50 cents. Wool shearing is general there, and in eastern Oregon is progressing around Echo, Heppner and Arlington.

Mohair is not sharing in all the strength of wool; in fact dealers claim the prices asked by growers, around 70 cents, are fully 15 cents too high. Very little of the goat clip has been sold to date. Where pools were offered, the bid prices of 65 to 67 cents have been usually rejected.

The potato market is easing off. Buyers are offering $3 to $3.50, where a fortnight ago they were paying as high as $4.10. The local as well as the eastern demand is slack and jobbing prices are being scaled down.

Egg speculators are still competing for the libural receipts and the market is slightly higher than a week ago.

Butter is also firmer and stocks are regularly cleaned up on outside orders. Cheese prices are expected to weaken as the spring make increases.

Oats—No. 1, $53 per ton.

Corn—Whole, $72; cracked, $73 per ton.

Millstuffs—Bran, $44 per ton; shorts, $47.

Barley—No. 1 feed, $52.50; brewing, nominal; rolled, $59.

Hay—Buying prices: Timothy, eastern Oregon, $26@30; alfalfa, $23; grain, $18@19.

Eggs—Oregon ranch, case count, 32@32½c per dozen; candled, 33@34c.

Poultry—Hens, 18@18½c; ducks, 22@23c; turkeys, live, 20@22c; dressed, 28@28c; geese, 12@14c.

Butter—City creamery, prints, 36½@37½c per pound; cubes, 34½c.

Cheese—Oregon triplets, 25c; young Americas, 26c.

Dressed meats — Veal, 14½@15c; pork, 19c.

Hops—1916 crop, 3@6c per pound.

Potatoes—Oregon jobbing price, $4@4.25.

Wool—Eastern Oregon, fine, 40c; coarse, 45@47c; valley, 46@50c.

Beans—California small white, 16½c; large white, 16c per pound.

Hides—Salted hides (25 lbs. and up), 20c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 32c; green hides (25 lbs. and up), 18c; green stags (50 lbs. and up), 13c; dry hides, 34c; dry salt hides, 29c.

Seattle Market.

SEATTLE, Wash., May 5.—Spuds are weak. Probably the most pronounced concession from growers to a bear market are quotations today at $70 f. o. b. for No. 1 gems. There have been a few inquiries for locals from the east, but no bids over $50@55 Seattle basis have been made. The potato market since the last break has declined $10@15 per ton. All holders are desirous of cleaning up.

Receipts of eggs are normal with a surplus showing daily. A little storage is still going on, but theoretically the season is closed.

Poultry will be a trifle lower next week. Receipts have been heavy and buyers are not spending the money that they did a year ago in this division of the wholesale food trade.

Just where the butter level will rest for the season is the problem that city creamery men are endeavoring to solve. Concensus of opinion is that the market is today resting on the bottom and that futures must be built up from present quotations. Cross currents of weather, uncertainty as to what the yield of cream will be, erratic markets in Oregon and a tendency in California to quote higher for Seattle account are factors which are driving wholesalers from one viewpoint to another.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers. The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 32@33c per dozen.

Poultry—Live hens, fat, over 4 lbs., 21c per lb.; 3 lbs. and under, 21c; old roosters, 12c per lb.; springs, 22c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 16c per lb.; broilers, live, 30c lb.

Butter fat, 41c per lb.; dairy butter, 27c per lb.

Beef — Buying price: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.

Hogs—Light, 15@15½c per lb.; do heavy, 10@12c per lb.

Veal—Fancy light, 13@14c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb. salt kip, 22c per lb.; salted calf, 32c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 36c per lb.; dry calf (under 6 lbs.), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry butcher full wool sheep pelts, 25@38c per lb.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $4.25 cwt; new potatoes, 12½c lb.

Seed Potatoes — Early Ohios, 4c lb; Early Rose, 4½c lb; white potatoes, 4c lb; Early Six Weeks, 5c lb.

Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; Y. N. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Leaf, 40c lb; Better Butter, 40c lb; Attalia, 40c lb; Diadem, 40c lb; Hazelwood, 40c lb; Solid Pack, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $9.50 case.

Live Poultry — Hens, 20c lb; old roosters, 10c lb; ducks, 13@14c lb; turkeys, 20@25c lb; geese, 11c lb.

Dress Poultry—Hens, 23c lb; springers, 21c; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs; 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

Seattle Wheat.

SEATTLE, Wash., May 5.—All forecasts of wheat market conditions and plans for the future were shattered on Friday when the announcement of the government to commandeer wheat and fix minimum prices reacted on the Chicago wheat pit. Sympathetic emotions were roused here and, while the fluctuations as to prices were reasonably calm, the feeling that went with it was oneof extreme nervousness. Traders were not frightened, as they had been hoping for descending prices and now desire to know something about where they stand.

Grain dealers are in a peculiar position, and the proposed action at Washington has added to the burden. The market has been in such condition all week that a trade consummated today spells a loss when the grain is delivered. Buyers fear to operate or to take any stocks of size. This does not necessarily carry a bearish feeling, trades declare, but it is worse in the uncertainty of what lies right ahead.

Erratic and nervous sentiment followed all trading through the week. Brokers were so badly scared at the opening Monday that they were at a loss for a level on which to start the bidding at the opening session. The first tender made was $2.60 for prompt bluestem.

New high records for the week carried wheat only 3c to 4c over the highest point of the preceding week. Declines were intermittent, but with one or two exceptions only nominal. The undertone was unsettled.

No Duty on Wheat

Between This Country and Canada

How it came about recently that the tariff on wheat and wheat products imported from Canada into the United States was suddenly removed without act of congress has caused some questioning throughout the country. The explanation lies in the reciprocal agreement between the two countries under which each maintained a duty on these articles as long as the other did. Canada, by act of its parliament, removed the duty on United States wheat, with the result that the duty in this country on imports from Canada was automatically removed.

It is worthy of notice that the removal of these duties had comparatively no effect on the wheat market, except for a few hours, when a drop of several cents in quotations at Chicago resulted.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., May 5.—Hogs—Receipts, 9500; steady. Heavy, $15.35@15.75; mixed, $15.20@15.50; light, $15.10@15.60; pigs, $13.50@14.75; bulk, $15.15@15.60.

Cattle—Receipts, 200; steady. Native steers, $9@12.75; cows and heifers, $7.50@10.15; western steers, $7.55@11.25; Texas steers, $7.50@9.50; cows and heifers, $7.50@9.75; canners, $5.50@7; stockers and feeders, $6.50@10.50; calves, $9.50@12.50; bulls, stags, etc., $7@9.55.

Sheep—Receipts, 100; steady. Yearlings, $13@14.50; wethers, $12.50@14; ewes, $11.75@13.25; lambs, $16.25@17.35.

At Chicago.

CHICAGO, May 5.—Hogs—Receipts, 10,000; weak; market 5c under yesterday's average. Bulk, $15.50@15.75; light, $14.65@15.70; mixed, $15.25@15.80; heavy, $15.20@15.80; rough, $15.20@15.40; pigs, $10@13.75.

Cattle—Receipts, 400; steady. Native beef cattle, $8.90@13.40; stockers and feeders, $7.15@9.90; cows and heifers, $6.25@11.15; calves, $8.75@13.25.

Sheep—Receipts, 20,000; steady. Wethers, $14.25@13.75; lambs, $13.50@17.65.

At Seattle.

SEATTLE, May 5.—Receipts, 871 hogs, 43 cattle. Market steady on all lines.

Cattle—Higher. Prime steers, $11@12; common to medium, $6.50@10; best cows and heifers, $9@10; common to medium, $6.50@8.50; bulls, $4@8.50; calves, $6.50@11.40.

Hogs—Prime light, $16@16.15; medium to choice, $15.65@15.75; smooth heavies, $15.15@15.45; rough heavies, $14.65@14.95; pigs, $13.65@14.30.

Sheep—Prime lambs, $12.50@13.75; good lambs, $12.25@12.50; wethers, $10.25@10.50; ewes, $9.10.

At Portland.

PORTLAND, Ore., May 5.—Hogs—Steady; receipts, 190. Bulk of packing grades, $15.55@15.65; heavy packing, $15.65@15.85; light packing, $15.65@15.75; rough heavy, $14.2@15; pigs and skips, $13.75@14.25; stock hogs, $12.25@13.50.

Cattle—Steady; receipts, 50. Steers, prime light, $10.50@11.25; prime heavy, $10@10.50; good, $9.75@10; cows, choice, $8.50@9.50; medium to good, $8@8.50; ordinary to fair, $6.75@7.50; heifers, $9@10.25; bulls, $5.50@8; calves, $8@10.

Sheep—Steady; receipts, none. Lambs, east of mountains, $13@13.50; lambs, valley, $12.75@13.25; lambs, shorn, $11@11.50; prime wethers, $11.50@12; choice ewes, $10@10.75; heavy ewes, $9@10.

Spokane Stockyards Saturday.

Hogs—Receipts, 37; market firm. Bulk of sales, $15.50@15.60; prime heavy packing, $15.65@15.80; prime light packing, $15.50@15.60; rough heavy, $14.65@14.80; pigs, $13.75@15; stockers, $13@15.

Cattle—Receipts, 11; market strong. Prime heavy steers, $10.50@11; prime light steers, $10.25@10.50; good steers, $10@10.25; prime cows, $8.50@9.25; good cows, $8@8.50; common cows, $7@7.75; best heifers, $9@10.35; bulls, $6@8; calves, $8@10.50; stockers and feeders, $6@9.

Sheep—Receipts, none; market strong. Prime lambs, $13@13.50; common lambs, $12@12.50; choice yearlings, $11.25@12; good yearlings, $10.75@11.25; best mutton ewes, $10@11.

Butter and Eggs.

ELGIN, Ill., May 5.—Butter, 25 tubs at 38c.

CHICAGO, May 5.—Butter unchanged.

Eggs higher; receipts, 17,701 cases; firsts, 32 3-4@33 3-4c; ordinary firsts, 30 1-2@31 1-2; at mark, cases included, 30@33c.

PORTLAND, Ore., May 5.—Butter—Prints extras, 36 1-2@37 1-2c; cubes extras, 34 1-2c; prime firsts, 33 1-2c; dairy, 27c.

Butter fat, Portland delivery, No. 1 sour cream, 37c; No. 2, 35c.

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Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

Price Control

Rouses Farmers of the Northwest

(Continued from page fifteen.)

dredweight for feed stuff, $1 per hundred for vegetables, and other things in proportion. Sugar corn can be produced at $5 per hundred. Cut this thing of allowing supply and demand to govern prices, establish a standard price on everything."

Whitman County.

The Rosalia section of Whitman county has many representative farmers. One of these, L. H. Howell, believes in government control of prices of farm products, and gives as one reason "in case the government sets a price, we, the producers, would know then how to make arrangements for selling."

R. V. Perringer of Belmont, who is farming extensively, writes: "I would favor a maximum price for farm products, beyond which they must not advance. It seems almost like a species of robbery for farmers and speculators to get $2.25 per bushel for wheat and $4.50 per bushel for potatoes. Such a state of affairs is absolutely unjust to the great mass of consumers whose incomes have not increased proportionately. Ordinarily, I would favor the idea of allowing the law of supply and demand to operate naturally, feeling that the farmer is entitled to the sweet, as well as the bitter, of which he has had a plenty, but the present abnormal world condition justifies control."

J. S. Klemgard, than whom few farmers and landowners are better known in Whitman county, writes: "I am not in favor of government control of wheat and other crops unless they also fix prices on farm implements and other articles required in producing the crops," and adds, "should the government fix a price now for the coming crop, also on labor and the things required to produce a crop, I should like to see it tried out."

Clallam County.

"Yes, I do favor government control of prices of farm products, also of other products that farmers have to buy just during the war," is the way that P. A. McNamara of Sequim, Clallam county, looks at it.

Another representative farmer of Clallam county, Charles Palmer of Forks, says that government control of prices seems "about the only solution for the city people, yet if they do not control what the farmer has to buy it would be distinctly unfair."

Yet another representative farmer in Clallam county, Homer Hart of Dungeness, believes in government control of prices of all food supplies, also prices of all farm machinery.

Klickitat County.

Peter Conboy of Glenwood, Kickitate county, is a well-known farmer, who favors all around government control of prices, adding: "I think if the government regulated prices the speculator would be a thing of the past."

C. M. Babcock, another representative farmer of Glenwood, is greatly in favor of government control of farm products, "providing the government will also take over and control prices on that which we farmers are obliged to buy."

Thinking that "it would be better for both the producer and the consumer," F. S. Calvin of Goldendale favors government control of prices on all staples.

A. P. Bertschi of Glenwood does not have convictions on the subject, but thinks if the prices of farm products are fixed by the government the prices of things the farmer has to buy should also be regulated in order to give a fair deal.

One of the representative farmers of Wahkiakum county, F. O. Hampson, of Skamokawa, has several reasons for government control of prices: It would stop speculation; it would stop exporting to some extent; it would enable the poor people to live like the wealthier classes; it would enable the farmer to secure cheaper mill feed for his dairy stock.

W. N. Meserve of Grays River believes that the subject of production of farm crops will solve itself "if you let the prices be high long enough to make farming profitable."

I. B. Crungstad of Skamokawa declares "the farmer will not be the loser; it will be the middleman and speculator that will lose by government control."

Alvin Anderson of Oneida favors the government control of prices of food stuff, "especially so after they have left the hands of the producer,."

Snohomish County.

N. J. Bishop of Snohomish, Snohomish county, is a believer in all around government control of prices, while Nick Pierson of Monroe does not favor government regulation for the reason that he does not believe "that the farmers will respond very readily to the government call for larger crops unless they fix a price so he is assured of making a fair wage for his labor."

Charles Roth of Arlington says that all the farmers ask is a guarantee for expenses, "no profit, no interest on the investment, and we were gently turned down," referring to a meeting at the county seat, where the bankers and merchants and lawyers wanted the farmers to plant more than ever before.

Grays Harbor County.

Two representative farmers of Grays Harbor county, both of Elma, rural route No. 1, make replies. Fred Rosmond would have all around government control, while O. M. Gordon would answer "no," if the broker and commission man is allowed to demand the profit that they are taking.

J. T. Chambers of Elma thinks the government control of prices "would be a great thing, because the farmers are not getting the prices paid for potatoes, wheat and so forth. It is the middleman. The sooner it comes direct from the farmer the better.

Fight Blight Now

Advice of Horticultural Expert

(Continued from page eleven.)

teria that have lived through the winter. Those familiar with fire blight know that the work of the disease during the previous season produced the characteristic blight cankers, and in the margins of these cankers the bacteria rests in a dormant condition until temperature and moisture conditions in the spring become favorable to stimulate their activity and development. As a result of their activity about the margins of old cankers a form of fermentation is set up, and as a result a gummy, sticky ooze is produced, resulting from the fermentation. Later on during the growing season this exudate will, in most cases, be present in active cankers throughout the season. Unless all the holdover cankers are carefully cut ont now the ooze will bgein to flow within a short time. This ooze will contain countless millions of bacteria, and as it is somewhat sweetish to the taste it will be attractive to insects.

Many of the flower visiting insects, as well as aphis, ants, bark boring beetles, etc., will feed upon this exudate, and as they move about over the trees may spread the infection. The nectar of apple and pear trees seems to be a good medium for growing blight bacteria, and it is in this way that the insects, in feeding on the ooze and visiting the flower blossoms, transmit the bacteria for the many new infections which may occur if conditions are favorable. In some cases the infection may be spread by means of pruning, the tools becoming infected and not being disinfected before making other cuts.

In the control of blight there are a number of things important and necessary.

1. It is important that the entire community appreciate the seriousness of the disease and act accordingly by removing all hold-over blight cankers immediately.

2. It must be remembered that hold-over cankers are a source of infection for any fire blight that may show up during the next few weeks, and that in order to prevent the new infection from taking place every hold-over canker should be cut well below any visible signs of discoloration.

3. It is important that in the cutting operation the work be done under surgical conditions; that is, that the pruner use a solution of corrosive sublimate in which to disinfect the tools after each cut is made. This solution should be carried in a glass vessel and not in a metal container on account of the fact that the corrosive sublimate is acted upon chemically in the presence of metal and its disinfectant principles weakened.

4. All the prunings should be burned in order to destroy any cankers or diseased timbers that may have been cut from the trees, and if the grower is not supplied with a regular brush burner, the pruning should at least be thoroughly scorched by piling them over a supply of straw and burning the straw.

We should all bear in mind that blight could be eradicated theoretically if every hold-over blight canker were destroyed before the blooming season comes on. In most blight-infested districts it has been the experience that at least some hold-over cankers have been overlooked in the spring, and generally most all the blight can be traced to hold-over cankers in that vicinity.

Winners Next Week

Information Contest About Over

By THE CONTEST EDITOR.

If the contest editor's eyesight does not fail him examination of the farm information papers will be completed this week in time to announce the winners in the next issue of The Farmer. The final announcement is somewhat contingent also upon the ability of the contest editor to hold fast to his mental equilibrium, for, after having added thousands of figures, counted many more thousands of dots on dotted lines and waded through stacks and stacks of answers to the 60 questions, I feel it would not be safe for me to meet the office squirrel without adequate means of defense. If I am not a nut now, a few more ordeals of this character certainly will make me a full-fledged candidate.

A great deal of wisdom and near wisdom has been displayed in the farm information contest. Some of it has been dug out of almost forgotten school books and I am sure there has been a careful search of the scriptures in many farm households of late. Some insisted such a book as Hezekiah was not to be found either in the old or the New Testament. How about it?

Just what to call young rats has puzzled not a few. One contestant answered this way: "You don't have to call them; they come without calling." Those living in districts where apples are not well known had some trouble with question No. 30. One contestant evidently is much impressed with Germany's spy system because he said an apple having the same name as a high political position in the United States is called the "Spy." Another one thought such an apple should be called a "plum" inasmuch as most political positions are regarded as plums.

Old Brindle has had to undergo a most careful examination of her upper jaw lately. One contestant, after completing the operation, answered the question by saying a cow's upper front teeth are as scarce as hen's teeth.

Most everybody was able to name the common ailment of chickens. One person said the common ailment is "epidemics" and I guess those who have tried to raise them in cold, wet weather will agree that that just about discribes it.

Ever hear of Robert Strahorn mustard? I never did, but a lot of the contestants saw fit to honor the well-known Inland Empire promoter by giving him the distinction accorded the late James J. Hill.

A large number failed to find the key of the Bastile. Several said it was in the jailer's pocket.

A good many people would go into the business of buying $99.99 money orders if they could be picked up as cheaply as some of our contestants say they can. Thirty cents is the prevailing quotation.

Well, it's been good, clean fun, hasn't it.

Prize Winners Get Checks.

While it isn't Christmas I know of a few persons who experienced the sensation of finding a well-filled stocking week before last. August Anderson, R. F. D. 1, Pullman, Wash., was one of them. He received a $275 check because he won first prize in the dot puzzle. Here is what he says:

To the Contest Editor: I received your check for $275 today and wish herewith to express my gratefulness to you for the generous prize I received. The check was received unexpectedly. I did not think I would win, for just after I had mailed the solution upon looking at an old, nearly worn out chart I noticed I could have changed my line and thereby secured four additional dots. I surely enjoyed the figure puzzle, but the best and most interesting one was the tie-deciding dot puzzle, which was simply a dandy. I want to commend the management for the fairness in which the contest was conducted and thanking you again for your liberal gift I am yours truly,

AUGUST ANDERSON.

Mrs. N. M. Lauby of Nez Perce, Idaho, who won second prize, writes as follows:

To the Contest Editor: I am in receipt of your letter of the 26th inst. inclosing check for $145 in payment of second prize in the Dot Puzzle Contest, for which accept my thanks. I wish to say the work was very interesting to me and particularly so in the end when I received a third puzzle to break the tie for second place. Thanking you for the courtesy shown me and for the fair treatment received I am yours very truly,

MRS. N. M. LAUBY.

YOU CAN'T CUT OUT A
Bog Spavin or Thoroughpin
but you can clean them off promptly with



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TRADE MARK REG. U. S. PAT. OFF.

and you work the horse same time. **Does not blister** or remove the hair. $2.00 per bottle, delivered. Will tell you more if you write. **Book 4 M free. ABSORBINE, JR.,** the antiseptic liniment for mankind, reduces Varicose Veins, Ruptured Muscles or Ligaments. Enlarged Glands, Wens, Cysts. Allays pain quickly. Price $1 and $2 a bottle at druggists or delivered. Made in the U. S. A. by W. F. YOUNG, P.D.F., 371 Temple St., Springfield, Mass.

The big feature in motoring. An all-refinery gasolene—not a mixture.

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160 ACRE FARMS IN WESTERN CANADA FREE



Canadian Farmers Profit From Wheat

The war's devastation of European crops has caused an unusual demand for grain from the American Continent. The people of the world must be fed and wheat at over $2 per bu. offers great profits to the farmer. Canada's invitation is therefore especially attractive. She wants settlers to make money and happy, prosperous homes for themselves by helping her raise immense wheat crops

You Can get a Homestead of 160 acres FREE and other lands at remarkably low prices. During many years Canadian wheat fields have averaged 20 bushels to the acre—many yields as high as 45 bushels to acre. Wonderful crops also of **Oats, Barley and Flax.**

Mixed Farming as profitable an industry as grain raising. The excellent grasses full of nutrition are the only food required for beef or dairy purposes. Good schools, churches, markets convenient, climate excellent.

There is now an extra demand for farm laborers to replace the many young men who have volunteered for service in war. The government is urging farmers to put extra acreage into grain. Write for literature and particulars as to reduced railway rates to Supt. of Immigration, Ottawa, Canada, or

J. N. GRIEVE,
Cor. 1st and Post Sts., Spokane, Wash.
Canadian Gov't Agt.

Is It Nobody's Business

But Ours What We Do With Our Own Property?

By E. L. POTTER.

That the present emergency will demand of the stockmen their utmost effort goes without question. There was a time when preparedness was conferned only with guns and military revolutions, and armies were expected to "forage" for their living, but the enormous scale of the present war makes the production and distribution of food stuffs assume an importance not surpassed by the production and distribution of munitions; in fact it is maintained by many that the war will be eventually won by the side best able to solve the food problem.

It is therefore going to be up to the live stock man to put forth his very best efforts, and the man who prevents the loss of a good steer or a fat pig, or who converts into meat, feed that would otherwise have been wasted, will be performing a patriotic duty of fundamental importance to the nation.

Generally speaking, war does not tend toward any great increase of live stock. Grain prices and hay prices usually go so high as to discourage the live stock men. We doubt, if in a serious emergency, whether a marked increase in live stock in the United States would be desirable, since it would have to be supported with grain that might be more valuable in some other form. It will, however, be necessary that we do not allow our supply of stock to become depleted. We have great quantities of grass and hay, along with stubble fields, fence corners, and other wastes, which, converted into live stock become most useful to our nation, and to the world at large. We let thousands of animals die from neglect, that a little care would have saved. We ship half fat stock to market and practically sacrifice it, when a little more time would have made them not only more profitable to the producer, but to the country. We are a rich country and can afford to waste things, at least that is the common argument, but the hour of trial is at hand and it is for us to show what we can do. It is not for ourselves that we must do these things, but for our country. A prominent stockman said to me the other day, "the waste of the average sheep camp will support a family." If this is the case, and it seems to be, there must be changes. That waste must be conserved. The sheep men are not the only wasteful ones; they merely do business on a little bigger scale. The man who lets a pig chill to death at farrowing time is just as guilty. There is no getting around the fact that the man who lets a colt die with navel ill is helping the enemy. No longer can we say, "it is nobody's business what I do with my own property." Whenever live stock or any agricultural or other useful product is wasted, the enemy gains by just that much.

Now is not the time for the stockman to get excited and start off on a lot of new schemes. It is the time to buckle down, work harder, produce more, and save more than ever before. We must not overlook that proposition of work. Every man wo does not get to the front in this war is going to have to do two men's work at home.

We should not forget, however, there is a great service to be performed right now before the big call for soldiers is made. We are having the most backward spring known, yet we are facing our greatest need for agricultural products. The young man who is planning to do great things for his country can do no greater service right now than to pull off his coat and help get in the spring crop. What a splendid thing it would be if the city boys who expect to enlist could spend the next two or three months on the farm. They would do their country a great service, and at the same time would be getting a physical training that would shorten by just that much the time they would have to spend in the military training camps. It appears now that there will be about time to get the crop in and possibly to do some farming before there are military camps ready to receive an enormous number of men.

NEWS FOR BREEDERS

Portland Stock Yards Completes Building

The new building of the Portland Union Stock Yards company at North Portland is completed as shown in the accompanying picture. The building itself cost about $75,000 and by the time it is completed the total cost will amount to somewhere near double that figure. It is 188 feet in length by 90 feet in depth and stands three full stories high. It will be occupied officially the coming Saturday.



The building is said to be a model in every particular, containing, among other things, a convention hall which will seat nearly 400.

Besides the offices of the Portland Union Stock Yards and the allied offices of the live stock show, the publication and the like, the building will house a postoffice, telegraph office, telephone station, producers' traffic bureau, stockmen's state bank, joint railroad agency, offices of the United States inspector, brand inspector, veterinarian and the buyers for the packing houses.

Demand Registry Certificate.

The Farmer has received a communication from Frank D. Tomson, editor of The Shorthorn in America, and a trustee of the American Shorthorn Breeders' association, in which he gives this valuable pointer:

"We are advised that frequent injustice has been done to western ranchmen who have accepted the word of dealers and shippers of bulls from the middle west as to their eligibility for registartion. The only safeguard is to require of the seller the registry certificate. It happens that a great many grade bulls are assembled and shipped west and the sellers find it to their advantage to pass them on as 'full blood' bulls or 'eligible to registry.' This assurance on the part of the seller naturally encourages a little higher bid from the purchaser, but such practice is a gross injustice. In short, it is a fraud.

"In certain western states legislation has been enacted which makes it unlawful to run a grade or non-registered bull on the open range. This is a positive step in the right direction, but can only be effective when there is satisfatcory assurance that the bulls purchased as purebred bulls are what they are represented to be—in other words, when the certificate of registry is transferred with the animal."

JERSEY SALES COMING.

A rather unusually large number of sales of Jerseys will be held in the Willamette valley this spring and the man who wants a high-class foundation herd will have opportunities for selection such as seldom occurs in one season. W. A. Forrest, whose sale will be held at his home, one-half mile from Whiteson, Ore., has set the date for his sale for Thursday, June 14. Mr. Forrest will have 37 head in the sale. Twelve of the cows have official records averaging 510 pounds of butter in a year. They are on test again and milking still better. Mr. Forrest only milked twice a day and the cows stood in 3½ foot stalls. Six of the cows were sired by Oonan's 23d grandson, sire of one of the money winners in the famous four months butter test at the St. Louis world's fair. The herd bull is Pussy's Noble, an Island bred bull. The young stock are sired by him and are good, typy bulls and heifers. Mr. Forrest's postoffice is McMinnville, Ore.

Henry Zorn, whose big farm is at old Champoeg, his postoffice Aurora, and the nearest shipping station is Donald, will sell about 50 head. The date is not yet set, but it will probably be early in June. Mr. Zorn will sell about six head of Ed Cory breeding, from some of the best cows in the herd, and probaby 20 of the heifers will be bred to a Cory bull, out of St. Mawes' Koffe Violet, that has record of 916 pounds of butter in a year, and is a grandson of St. Mawes' Susie, with 938 pounds. His herd bull, Beauty Lad, is out of Beauty of Browndale, going back to Hood Farm breeding.

W. B. Davis, Shedd, Ore., will sell 90 head. His date has not been set, but will probably be before the middle of June. He has about a dozen granddaughters of the great bull Golden Glow's Chief, sire of about 30 Record of Merit cows and at least three proven sons. He also has a line of Melia Ann's King breeding that have given him equally as good results as the others. Mr. Davis will have a sufficient number to allow of buying a foundation herd all of bred heifers, heifer calves or mature cows, and all of approved producing breeding.

McArthur & Stauff, Independence, Ore., but the farm close to Derry station will have a dispersion sale in June if it is determined that congress will adjourn in time so Mr. McArthur can be at home, otherwise the sale will not be held till fall. They will sell every cow in milk and keep only the daughters of their bull, Holger. This bull is proving himself a great sire and they intend to confine their breeding to the one line. Every one of their cows has a good Register of Merit record, at least one being over 700 pounds. It will be a uhique sale in this respect.

A request for a catalogue addressed to the owner will have you put on the list for any of the catalogues as soon as issued. Further reviews of the cattle to be sold will be given later.

H. A.

SHIRES CHANGE HANDS.

W. R. Ledbetter of Alicel, Ore., recently sold his great Shire stallion, Gore's Fashion, to James Sturgiss and Mr. Campbell of Pendleton, Ore., who have put him in the stud there. Gore's Fashion has been grand champion at the Union Stock show several times, at the Oregon State fair twice, and at the Northwest Stock show at Lewiston, Idaho, once. Mr. Ledbetter has purchased Wilson's Idol, a Shire that was fourth at the Chicago International in 1916. He will be 4 years old this spring. Mr. Ledbetter also purchased two very fine young Shire mares, all from the Blue Ribbon stud at Colfax, Wash.

Breeders' Department

HOLSTEIN CATTLE

Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.

Write for pedigrees and terms.

H. R. BOOMER, New Plymouth, Ida.

Avalon Dairy

Registered bull calves by Hartwood Hello Hengerveld (129524) from cows with good A. R. O. records, DeKol, Korndyke and Pontiac blood. Prices right. Six per cent interest on time payments. Write today.

AVALON DAIRY, Kuna, Idaho.

WATERLOO HOLSTEIN FARM.

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje | King Segius 10th Segius Walker Pietertje 2d

C. F. JENNESS. Meridian, Idaho.

SHORTHORN CATTLE

Hercules Shorthorns

For particulars write

DAY & ROTHROCK

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Spokane, Washington.

JERSEY CATTLE

WAIKIKI FARM JERSEYS.

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.

WAIKIKI FARM, R. 7, Spokane, Wash.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have a few fall boars left. Now is the time to get in on spring orders. Correspondence solicited.

J. M. ROYSTON EST., C. ROYSTON, MGR., Payette or Fruitland, Idaho.

POULTRY

PREMIER WHITE WYANDOTTES,

won at Dayton, Wash.; 1st cock; 1st, 2d, 3d cockerel; 1st, 2d, 3d hen; 1st pen; cup, best pen in American class; cup, best pen Wyandottes in show. Tied for best bid in show. Won at Moscow, Idaho, on three entries, 1st cockerel, 2d hen, 1st pullet. Sweepstake cup for highest scoring bird in show. Have some extra good cockerels for sale. Eggs, $1.50, 15; $8, 100.

W. CLAUDE COX, Box 361, Heppner, Ore.

Holstein Bull Calves

Two bulls ready for service, one out of an A. R. O. cow. Also seven bull calves of excellent breeding—A. R. O. cows—and good conformation. Registered and sired by bulls of high breeding, and out of highest producing cows in the "U" herd. For particulars write

DAIRY DEPARTMENT, UNIVERSITY OF IDAHO, Moscow, Idaho.

HOLSTEIN CATTLE

Young stock by richly bred grandson of King of the Pontiacs, out of high-producing advanced registry cows.

A. E. SMITH. Sumas, Wash.

BUFFALO DUKE DOEDE

(102228) heads my herd. He is a half-brother of world's record cow, Dutchess Skylark Ormsby, producing 1506 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.

H. H. STIYER. Buhl, Idaho.

DUROC-JERSEY SWINE

DUROC JERSEY PIGS FOR SALE

Weaned and in prime condition; $6.00 each. J. H. ZIMBRICK, White Rock Farm, on Pacific Highway, one mile west of La Center, Wash.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR JAMES N. PRICE. Pullman, Wash.

BERKSHIRE SWINE

GALBRAITH RANCH BERKSHIRES

Best breeding stock obtainable. Prices reasonable. Phone 20F.3.

T. A. GALBRAITH, Kent, Wash.

HORSES AND MULES

Purebred Stallions

We have for sale a few 1-year-olds, 2 this spring, Shire stallions, our own breeding; also a 5-year-old and an 8-year-old Shire stallion, both brown; a 3-year, a 7-year-old and 1 aged Percheron stallion, all black; one 2-year-old Brown Clyde stallion, bred by Canadian government. We sell at the barns only, and tell you all we know about each and every horse, guaranteeing them to be as represented or refund your money.

Our horses won all firsts and champions at Spokane Interstate Fair, N. W. Live Stock Show, Lewiston, Ida., and Pacific International, Portland, Ore., last year. If you need a horse, or want to exchange, write us or come and see before buying. It will pay you.

G. M. WILSON, WILBUR, WASH.



The Road to Happiness

The automobile has come into your life permanently—or it soon will—to serve your convenience and pleasure, day in, day out, on down through the years.

Its appeal is irresistible.

It is a fundamental factor in modern every day life.

It rides the road to happiness.

If you purchase a car this season, there are *new* facts for your consideration which should simplify the task of selection.

This year Willys-Overland Motor Cars comprise the most comprehensive and varied line ever built by any one producer.

The economies of our greater production are shared alike by every car in the line.

In thus broadly applying the established Willys-Overland policy of greater production—greater economy, higher quality, lower price—we extend the benefits of our economical advantages to include virtually every class of purchaser.

The Willys-Overland dealer is in a peculiarly pleasant position to frankly and honestly discuss with you your needs and requirements in a motor car.

For whatever your need he has the car to fill it and he is prepared to demonstrate to you that he is offering you the dominant value among cars of its kind.

See him today—talk it over—let him show and demonstrate the car you ought to own to ride the road to happiness.

Light Fours

Five Passenger Touring	$695
Two Passenger Roadster	$680
Four Passenger Sport Model	$795

Big Fours

Five Passenger Touring	*$895
Three Passenger Roadster	*$880

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Manufacturers of Willys-Knight and Overland Motor Cars and Light Commercial Wagons

"Made in U. S. A."

*Effective May 1.

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Five Passenger Touring	*$1025
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Seven Passenger Four, Touring	$1395
Seven Passenger Eight, Touring	$1950

College of Agriculture
ersity of Illinois

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 20. MAY 17, 1917. WEEKLY.

Europe Asks U. S. for Food, Munitions and Men



—Photographs by Underwood & Underwood.

The war-weary people of England, France and their allies have appealed to the people of this country for aid in combating the menace of German frightfulness. The men whose photographs are shown above are their messengers, come to lay their needs before the American people and bare the national secrets of their countries to the government at Washington that America may avoid the pitfalls that they found through the bitter experiences of the first three years of the war. They have brought to the people of this country an appeal for food, for munitions, for naval vessels, for soldiers, and for the Stars and Stripes on the battle fields of Europe.

From left to right these messengers are: Arthur J. Balfour, British secretary of state for foreign affairs; General Joffre, head of the French military advisory council and the officer whose mastery of military affairs saved France in the early days of the war; and M. Viviani, former premier of France.

For two weeks these representatives have joined with President Wilson and other United States officials at Washington in one of the most far-reaching councils of war in the world's history. They have consulted and advised with this government on the ways and means of most successfully conducting the war against Germany. Largely through this conference the efforts of all the nations now aligned against Germany will be coordinated with a view to early and permanent peace. And in large degree through this conference will come a coordination of national sympathies and ideals that will guarantee future generations against the inhumanities of war such as the present struggle has so well illustrated.

Government Will Mobilize Boys for Farms

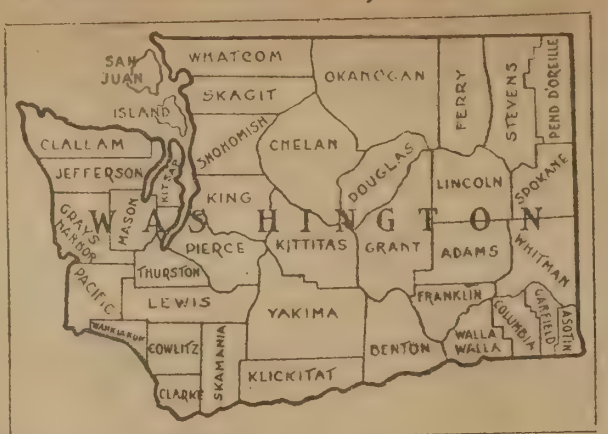
The United States very soon will put into operation a definite organization through the bureau of labor at Washington for the enlistment of high school boys and the older grade school boys for work on the farms. The state of Washingon, through its department of education, bureau of labor and department of agriculture, will cooperate. Last Tuesday these state departments and the agricultural advisory council of the state held a meeting at Tacoma at which practical plans were laid for the work. The county superintendents, principals and city superintendents, many of the boys themselves and many farmers who need laborers are entering into the movement loyally. There are 10,000 or more boys of from 14 to 19 years of age in the schools of the state who will be affected by the agricultural preparedness move.

In a telegram from Washington, D. C., in reply to inquiry from The Washington Farmer, W. E. Hall, national director of the boy labor division of the department of labor, announced the plans for this state. His telegram to The Farmer reads as follows: "We will work through the state organization and boys' organizations where they already exist. Boys must be 16 and pass medical examination and be placed under competent leaders when worked in farm camps. Badges with United States seal will be given when a short term of service has been performed, and a bar giv-

Continued on page four.

Cannery Wants Lots of Beans

Gardening Is the Order of the Day Now; Lumber Mills Require Many Men, Leaving Boys to Do Farm Work



SOUTH BEND, Pacific County, Wash., May 2.—Every one is making garden. A new cannery is nearing completion in South Bend that will can fruit and vegetables. They want lots of beans. Farm labor is scarce. The mills are offering $3 a day for unskilled labor and it is almost impossible to keep sufficient help on the farms. Maybe the best solution to the problem will be to hire the school boys from 14 to 20 years of age to work after school hours and during the summer vacation. The weather is still cold and wet, only a few spring-like days. Early potatoes and peas are up. These with beans will constitute the most favored crops this season. Beef and dairy products are high in price. Eggs are 40 cents per dozen and will not get cheaper. Local radishes and onions have appeared in the markets.

MRS. WINNIFRED BUCKINGHAM.

Spraying Will Be Late.

HUNTERS, Stevens County, Wash., May 3.—Farm labor in this section is nearly equal to demands as the farms are small and a great deal of help is not hired. Wages are about the same as last year or a little higher. It is only on farms where much stock is kept or where dairying is engaged in that a hired man is kept the year around. Hired men are pretty well contented. Those, however, who board themselves and have families keenly feel the high cost of household necessities. The season is very late and most of the spring seeding of grain is yet to be done. Fruit trees are not yet in bloom and spraying will be much later than in average seasons. ELIAS NELSON.

Finance Seed Buying.

OLYMPIA, Thurston County, Washington, April 27.—Funds have been secured to help those who are willing to furnish land, work, etc., but are not financially able to buy seed. Data secured to date show great willingness to increase acreage wherever possible. Shortage of horse labor is a big factor in certain localities against such an increase. The great majority of farms here are small, one-man farms normally, and I do not believe it would be practicable, nor in many cases possible, to keep an all-year round man.

C. H. BERGSTROM.

Much Grain Reseeded.

LACROSSE, Whitman County, Wash., May 1.—The acreage of grain for this year is possibly slightly larger than in former years, with the bulk in spring grain. Very little fall wheat is left, possibly 20 per cent of what was seeded last fall. Some farmers estimate less than that. Winter wheat conditions are poor. Possibly 50 per cent of a normal stand. At least 175 per cent or more of this year's crop is spring seeding. Crops were put in in excellent shape and the worst drawback will be the extreme lateness of the season. The month of April was very wet and cloudy and cold, although the temperature at no time went lower than 29 degrees. The precipitation was 3.26 inches, being exceeded only once since 1884. In 1893 the precipitation was 3.52 inches. The cattle are in a very poor condition, as there is practically no pasture.

M. E. SCHRECK.

Promising for Dairymen.

VADER, Lewis County, Wash., April 27.—This is the most backward spring we have had for several years. There is still snow in the hills between Vader and the Columbia river. But little planting has been done yet on account of so much bad weather. Farmers are nearly all one month late with their spring work. The dairymen are the only ones here who hire help on the farm the year around. The hired man on a dairy farm has a good home, good board and usually lays up more money than the man who works in a mill or logging camp with larger wages. Many of the farmer's sons go to the logging camps to work, but they soon get shiftless going from camp to camp and are not much good for the farm after that. But few farm hands are thoroughly efficient. Wages are about the same as usual. Lands here are rapidly being cut up into small homes of five or ten acres, on which the family do most of the work. The men usually work in the mills or camps. Stock of all kinds got through the winter in fairly good shape. Hay is scarce and hard to find at any price. Butter fat is high. The coming season looks promising to the dairyman and the high price of butter fat will soon bring up the price of dairy cows.

S. S. WILSON.

Plant Many Potatoes.

MARIETTA, Whatcom County, Washington, May 2.—The high prices are having a tendency to make farmers raise larger crops. Most everybody has already started a larger field of potatoes this year than formerly. Persons in small towns and even in Bellingham that never before thought of raising vegetables have taken the idea of raising small gardens. It would not be practicable to build a home for a hired man as most of the acreage is too small in this vicinity. Farmers are looking for better weather now. In some places the ground has been too damp to seed. Rainfall for the month of April was 4 1-2 inches. S. B. MAYHEW.

Plan Food Increase.

CHIMACUM, Jefferson County, Wash., April 27.—This part of the county is not a grain country, but there is an increase in what is planted over other years. Potatoes will be about twice the acreage over other years, also hay and root crops will be greatly increased for the cows. Most everybody has planted a garden to increase the food production. I think that if every farmer would build a small home for a married man there would be less trouble in keeping men on the farms.

JOHN VAN TROJEN, JR.

Increase Tillable Land.

PORT ANGELES, Clallam County, Wash., April 26.—The recent high prices of farm products will encourage the farmers over here to spend considerable money for clearing land, and while all of this new area will not be available for this year's crop, it is estimated that producing soil will be increased about 5 per cent. The most of this will be planted in potatos, as raw land gives excellent returns in tubers. It could be made practicable for a farmer to build a small home for a year 'round hired man and his family, I think, but this is true in a general way and not in a hard-and-fast fashion, inasmuch as so many things enter into this phase of farm life.

J. P. CHRISTENSEN.

Hired Man's Home Practical.

MONTBORNE, Skagit County, Wash., April 30.—As a result of the high prices farmers in this community are increasing the acreage of grain and hay crops, and also potatoes and garden vegetables. A larger amount of roots and tubers are being planted for feeding of live stock next winter than ever before and there are a good many silos being contemplated. Housewives are figuring on canning considerable fruit and vegetables. In order to increase our soil to a greater production we are placing greater stress on the preparedness of our seed bed and the selection of our seed, and also to supply the ground with such fertilizer as the soil is deficient in, which is principally lime. Where a farmer hires a man the year 'round it is practicable to build a small, comfortable house and let him have a garden spot on which to raise his own vegetables for table use. One can, as a rule, get a better farm hand and one that will be contented if provided with a home. There are a number of large dairy farms and chicken raisers in the Skagit valley who find it profitable to do this. As a result of our cold, wet spring very few farmers have more than a small portion of crops yet planted.

JOHN B. PETERSON.

Plant Larger Acreage.

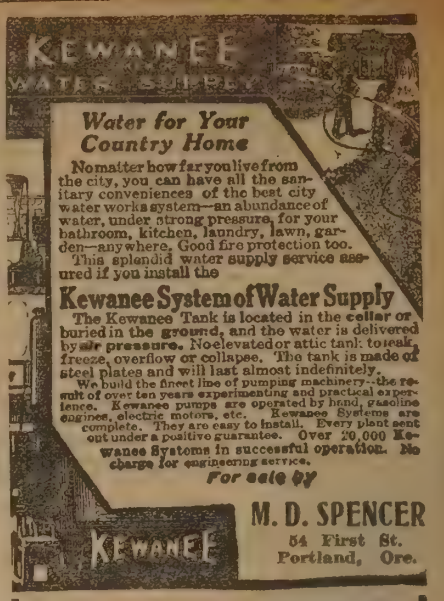
OMAK, Okanogan County, Wash., April 21.—There seems to be plenty of help for farmers and wages are about the same as usual. There is not much demand for farm help in the winter except where considerable stock is raised. The season is unusually late, but the soil is in good condition. There will be much larger acreage planted this spring. J. O. WOODS.

New York's Unique Burglar.

New York's unique burglar, the Count, is back. He takes only odd things that catch his fancy, regardless of their value. In his last haul he took a shark skin cigaret case and left a $500 snuffbox.

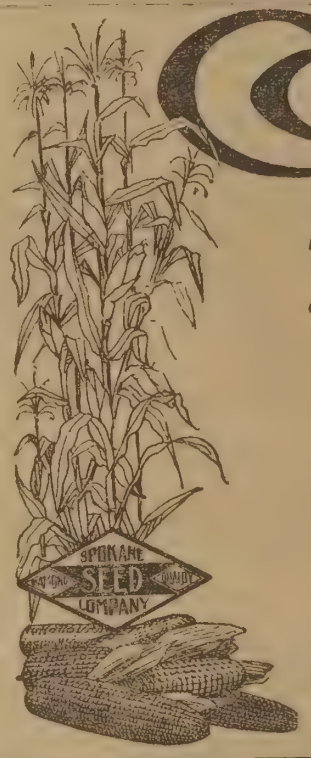
A CORRECTION

Last week's issue of this paper contained an advertisement of Vaughn's Portable Drag saw by the Washington Machinery and Supply Co. of Spokane, in which the price was quoted as $150 f. o. b. Spokane. The correct price is $140, a reduction of $10 from the former price. The Farmer is glad to make this correction.—Adv.



LIVE AGENTS WANTED

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.



CORN

Supply Short

If you are going to plant corn for grain or fodder

Order Now

PREMIUM HOMEGROWN YELLOW DENT
Best for Grain

WISCONSIN WHITE DENT, LEAMING, PRIDE OF NORTH YELLOW DENT, AND CANADA FLINT
Best for Forage

Write for prices on your requirements.

Spokane Seed Co.

Recleaners of Grain and Grass Seeds
SPOKANE, WASH.

MORSE'S SEEDS FOR FARM AND RANCH

Plant Morse's

Alfalfa, Clover, Beans, Peas, Grass, Tomatoes, Onion, Corn, Mangold, and all farm, field and vegetable seeds.

Strong germination and vitality

Sold by all leading Dealers or direct from

C. C. MORSE & CO.
SEEDSMEN
745 Front Street San Francisco

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 20 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF May 17, 1917

Don't Neglect Live Stock

World Is Threatened With Shortage of Meats

By E. J. IDDINGS.

In a recent issue of The Farmer attention was called to the necessity for carefully organized plans to effect the greatest possible agricultural production and wise use and distribution of products of the soil. This movement has received widespread support and effective measures for realization of its aims of the campaign are almost under way.

There is grave danger, however, that in the general desire to increase the supply of cereals and other staple foodstuffs the animal side will be neglected. The need of meat for food and of animal oils and fats both for household and army uses has been found in European experience to be of fundamental importance. It is a necessity from the standpoint of national effectiveness that we maintain live stock production during the coming months with special reference to quality.

There are several facts that point to a possibility of serious live stock shortage. In the first place, the homesteading of western range land has during the last 10 years operated to withdraw from grazing a large portion of the west's free range. This has operated to decrease the available supply of beef cattle and sheep. The hog situation was vitally affected by the low prices that prevailed 15 months ago and by the high prices paid for wheat and other grains during the last two years. In many sections of the west the number of hogs has fallen off more than one-half during the last two years. On a certain irrigation project, where an accurate census has been made, there are 46 per cent fewer hogs than one year ago.

In a former issue of The Farmer there was a statement of serious live stock losses in large areas of the western range territory. In some districts feeds purchased at four to 10 times normal prices have been a saving factor, but the total loss is unquestionably large and very serious for the people of the nation, in view of the vast enterprise in which we are now engaged. More losses are almost certain to take place. Horses are thin, and in some districts will not be able to endure hard spring service. Cattle, weakened by starvation and with vitality at a low ebb, will go too early on "washy" spring grass, and loss under such conditions must be expected. Lambs have not had sufficient milk from ewes that are under-nourished, and lamb weights can hardly be expected to be normal. Lambing percentages run from 10 to 50 per cent below normal, depending on location, available feed for ewes and shelter and care.

This is all of utmost importance in relation to our food supply problem. Further and additional difficulties, however, seem to be facing the stockman. Hay and other feed supplies are probably at the lowest ebb for many years. In the face of no surplus to be carried over the supply for the coming fall and winter does not now promise well. Pastures are late, and, due to lack of other feed, will receive hard use and early fall feeding may be necessary. Due to high grain prices and the national need of cereal production,

(Continued on page twenty-five.)

Purebred Jerseys Average $100

Shady Lawn Dairy Closes Out at Farm Near Fairbanks

Compelled to quit the dairy business in eastern Washington largely because of inability to secure competent and permanent help, A. G. Woodward of Fairbanks, Wash., disposed of his entire herd of 40 purebred Jerseys and about the same number of good grade cattle at auction on May 10.

The purebreds averaged slightly less than $100 each, a comparatively low price, while the grades averaged slightly above $70.

The crowd was small, presumably, because of the rush of spring work. Only persons interested directly in the purchase of dairy stock were in attendance.

J. W. Hughes of Forest Grove., Ore., conducted the sale.

The sale marks the passing of one of the excellent dairies in the Inland Empire, built up to a remarkable standard of efficiency by Mr. Woodward. Some animals of excellent records as milk and butterfat producers were among those sold.

The following is a list of the registered stock sold, buyers, prices, etc.:

Margie of Shady Lawn farm 269187, calved March 15, 1910—J. H. McCoy, Oakesdale, Wash., $125.

Doris of Shady Lawn farm 372861, calved August 30, 1914—J. D. Carson, Pullman, Wash., $120.

Dolly III. of Shady Lawn farm, calved January 18, 1916—J. D. Carson, $55.

Polly's Jude 285833, calved October 11, 1910—J. D. Carson, $120.

Jersey Isle Hazel 283714, calved December 10, 1908—J. D. Carson, $100.

Ethel of Shady Lawn farm, calved April 8, 1915—Waikiki farm, Spokane, $75.

Molly II. of Shady Lawn farm, calved November 17, 1915—J. D. Carson, $60.

Miss Isabelle of Shady Lawn farm 341447, calved September 17, 1913—Fred Blood, Palouse, $87.50.

Florence of Shady Lawn farm 259531, calved October 15, 1909—Fred E. Middlestodt, Malden, Wash., $107.50.

Golden Louise's Lois 331408, calved April 6, 1913—T. S. Griffith, Spokane, $146.

Lisbet of Shady Lawn farm 341449, calved October 4, 1913—J. A. Anderson, Colfax, Wash., $85.

Suzanne of Shady Lawn farm 345125, calved October 1, 1914—T. S. Griffith, $112.50.

Cornitia 285837, calved May 18, 1911—J. D. Carson, $115.

Nelly of Shady Lawn 299340, calved November 6, 1911—Waikiki farm, $105.

Santa Claus' Josephine 374631, calved January 4, 1915—J. Hepton, Spokane, $60.

Nelly's Gilda of Shady Lawn 341450, calved October 7, 1913—Waikiki farm, $150.

Cherry of Shady Lawn farm 306230, calved May 14, 1912—J. A. Anderson, $90.

Madge of Shady Lawn farm 269186, calved March 12, 1910—T. S. Griffith, $130.

Janch of Shady Lawn 299341, calved December 14, 1911.—T. S. Griffith, $105.

Dorothy of Shady Lawn farm 306231, calved May 29, 1912.—T. S. Griffith, $150.

Ruby of Shady Lawn farm 269190, calved July 15, 1910.—C. W. McCabe, Oakesdale, Wash., $80.

Rosa of Shady Lawn farm 306226, calved March 11, 1912.—C. F. Eigenberry, Spokane, $35.

Golden Louise II. 379733, calved August 21, 1915.—Waikiki farm, $95.

Shady Lawn Daisy 285835, calved April 2, 1911.—Waikiki farm, $140.

Bridget of Shady Lawn farm 317570, calved September 24, 1912.—G. Hepton, $100.

Peggy of Shady Lawn farm 345124, calved September 18, 1914.—G. Hepton, $67.50.

Lady Betty of Shady Lawn farm 317517, calved October 21, 1912.—G. Hepton, $80.

Juliet of Shady Lawn farm 345123, calved May 25, 1914.—T. S. Griffith, $100.

Pride's Blue Bell 285838, calved July 8, 1911.—J. D. Carson, $112.50.

Edith of Shady Lawn farm 379932, calved June 9, 1915.—G. Hepton, $55.

Emeline of Shady Lawn farm 379434, calved September 14, 1915.—J. D. Carson, $95.

Gertie of Shady Lawn farm 379735, calved January 9, 1916.—J. D. Carson, $50.

Prinn of Shady Lawn farm 317572, calved November 6, 1912.—J. D. Carson, $135.

Judith of Shady Lawn farm 379739, calved October 18, 1916.—Waikiki farm, $51.

Dorcas of Shady Lawn farm 379740, calved November 16, 1916.—Waikiki farm, $51.

Nettie of Shady Lawn farm 372862, calved October 28, 1914.—Waikiki farm, $115.

Heifer, not catalogued, to Fred Blood, $65.

Bulls.

Sultan of Rockland 121150, calved October 20, 1913.—T. S. Griffith, $205.

Jersey Isle Hazel's Sultan 151014, calved August 3, 1916.—E. C. Scott, Harrington, Wash., $40.

Doris' Jolly Boy 151013, calved August 1, 1916.—Fred Blood, $40.

Crop 480 Acres as Their "Bit."

Yakima Republic: Plowing 480 acres of sagebrush land with as large a number of tractors as can be secured and working the tractors in 10-hour shifts day and night are the means taken by W. L. Lemon, J. H. Dills and W. A. Bell to do their "bit" in the matter of increasing the amount of land under cultivation. The farm to be operated by the three men is 12 miles west of Wapato and composed entirely of raw land. All of it is to be planted this season, the sections first plowed being put into grain and those prepared later put into fall vegetable crops.

Only Exclusive Turkey Farm.

Press, Waterville: Douglas county has the only exclusive turkey farm in the state of Washington. It is owned and run by Edward Stauffer, who lives on the river and whom everybody knows. Ed has the business down to a science and last year raised over 1000 turkeys after losing 600 or 700 from the depredations of coyotes and bobcats.

The Washington Farmer Will Always Be Found Exposing Swindling Schemes

To the Editor of The Washington Farmer: It may not be without interest to you to know of the very general approval manifested by the farmers of this county of the stand you are taking in exposing and condemning the various schemes practiced to cheat and defraud the man on the farm. Every man with whom I have talked, or who has expressed his views in my presence upon this phase of your policy in publishing a paper for the farmer, has expressed his very great satisfaction at finding at last a publication willing to stand out boldly against all such schemes and practices.

They realize that as a class they are so situated that it is practically impossible for them to thoroughly investigate and dig up the true condition and ascertain the actual facts in regard to the many propositions that are and will be put up to them. They feel that now they have some one upon whom they can depend who is able to make these necessary investigations and fearless and independent enough to publish the result. I can assure you the people of this section are with you. Many of them know from personal investigations made a number of years ago that what you have said of the Northwest General Trading company is true without a doubt. They also feel that what you have said as to the $21,500 sale at Portland was also justified.

Mead, Wash. GEORGE HINGSTON.

Washington Portraits No. 15.



W. W. Wrenn.

W. W. Wrenn of Castle Rock is considered one of the most substantial farmers of Cowlitz county, having the faculty of combining common sense with hard work and making them win. He has lived in the county for 12 years and the state a lifetime, and his farm buildings are the best in that part of the country. Mr. Wrenn is president of the Castle Rock Farm Loan association and a prominent member of the grange.

The next in the series of Washington portraits will be that of C. D. Mitchell of Richland, and will be given in next week's issue of The Washington Farmer.

Publish Dairy News

Inland Association to Run Paper

The Inland Empire Dairy association, formed several weeks ago in Spokane, has announced that very soon it will begin the publication of a monthly dairy newspaper to be known as The Inland Empire Dairy News. The paper will be sent to the 200 or more members of the association, and to large numbers of other dairymen of the Inland Empire whom it is desired to enroll in the association. The paper will carry news and information designed to assist the dairymen in building up their industry, especially waging a campaign looking toward better prices for dairy products to the producers.

"People see shoes and bread and flour and meat boosted in price from 50 per cent to several hundred per cent and do nothing more than complain a little," says B. E. Smead of Opportunity, Wash., secretary of the Inland association. "But let the dairymen raise their price a few per cent and they make organized protest. Nevertheless, the dairymen must secure more for their milk or go out of the business, for a great many of them have been operating at a loss for several months. The people must pay the increase or do without milk and cream, for the dairymen cannot produce them for the old prices." Secretary Smead will be editor of the Dairy News.

Get Busy With Spade and Hoe.

Monitor, Monroe: It is up to you small town man and woman, boy and girl, to get busy. Green grass and smooth lawns are nice to look on, but they will not fill your stomach next winter. Get busy with the spade and hoe.

A Chance to Demonstrate.

Times, Sedro-Woolley: Culturists who never cultivated anything but roll-top desks and chairs to match now have an opportunity to demonstrate their knowledge of agriculture by raising a patch of spuds.

Washington Has "Soldiers of the Soil"

Farmers of State Respond to the Call for Greater Food Production

The Washington Farmer sent out a circular letter to representative farmers over the state asking: "Are you or your neighbors attempting to increase your crops this year? If so, what crops, and how?" The following replies will serve in the nature of pointers as to the hearty response the farmers of the state are making to the urgent call for food preparedness:

EASTERN WASHINGTON.

GEORGE DE BOLT, Adrian — There will be one-third more wheat put in this spring than usual. Wheat is the main crop in this part of the neighborhood. All the winter wheat is being sown over.

C. M. BABCOCK, Glenwood—We are endeavoring to increase in wheat, oats, hay, pork, beef and spuds.

E. O. RICE, Prosser—It does not look at this time as if a much greater crop than usual will be raised in this vicinity, the reasons are scarcity of help, high price of seed and unfavorable weather conditions. Considerable work is being done to get the farmers to raise more, but the conditions on these irrigated farms do not promise an increase in crops.

DAN KREHBIEL, Lind—Every farmer is seeding as much ground as possible and it seems also that the seeding is done very carefully. High prices for farm products in the last few years have increased the acreage for wheat in our vicinity 10 per cent. This year considerable land not cultivated for a number of years will be plowed again.

DANIEL MICHEL, Latah—We are attempting to increase our crops, as we will not summer fallow much this year. We will raise field peas and potatoes on land which we otherwise would leave idle.

L. H. HOWELL, Rosalia—There is some movement among the farmers here to increase the farm production to a limited extent, especially along the line of growing peas.

OTIS ROBINSON, Lantz—We are trying as we always have to produce all we can—wheat, oats, barley, rye and potatoes with some corn.

M. R. FOX, Hatton—The farmers here are doing all they can to produce a bumper crop of wheat this year, and with an abundance of April rains prospects are good. Seeding is now done and farmers will summer fallow all they can do profitably for the next crop.

GARFIELD COX, Mansfield.—In this locality we are not increasing our production this year to any extent for two reasons. First, any increase in crops must be provided for a year in advance; second, most of us are now producing all we can with the scarcity of labor.

ED TIEDT, Soap Lake—I have only a quarter section to farm. I am putting in about 30 acres of oats and 10 acres of corn more than before. My neighbors are seeding over quite a little winter wheat that is making them a little late.

K. A. SPIETH, Route 2, Spokane—I am more than doubling the acreage of crops and I think my neighbors are putting in a maximum crop also this season. I am planting 20 acres to peas.

J. S. KLEMGARD, Pullman—Some attemps would have been made to increase acreage this season, but on account of the lateness of spring I doubt if it will be up to the average.

R. V. PERINGER, Belmont—Every-

(Continued on page twelve.)

Government Will Mobilize Boys

Nationwide Enlistment for Farm Labor Is United Plan

(Continued from page one.)

en for a year. Will announce soon the director for your district, to be located at Seattle, and a state director from state council of defense. Local and federal agricultural departments will cooperate in finding places for workers."

Mrs. Josephine Preston, state superintendent of schools, has announced that the department of education will not oppose an extension of the summer vacation through September and part of October if it is found necessary to allow the boys to work longer assisting in harvesting the crops. Commissioner E. F. Benson of the state department of agriculture, and Commissioner C. H Younger of the state department of labor, express hearty approval of the movement, and are taking active part in putting the plans into effect.

Henry M. White, immigration inspector at Seattle, has taken an active part in the work of enlistment of both boys and girls in the schools of the state. He has asked that a special day, probably May 18, be set aside as enlistment day in all the schools. He declares that the state should have 25,000 boys and girls actively enlisted in food production work.

SCHOOL PRINCIPALS FAVOR.

In last week's issue of The Washington Farmer an article was published advocating the enlistment of high school boys. In reply to inquiries as to the practicability of the movement, a large number of school principals and superintendents expressed warm approval. Extracts from some of the replies follow:

H. F. Hunt, Tacoma high school—I feel very sure in my own mind that the plan is a good one, providing we are not too optimistic in our belief that all high school boys, or that any large per cent of high school boys, would make good. I know from actual facts that many of the boys of this high school have made good, and do make good, every summer on the farms of western and eastern Washington, but there are a good many boys in every high school who have never been tested anywhere yet by the requirements of any serious job. I am, of course, speaking from the standpoint of a large city high school.

R. T. Hargreaves, North Central high school, Spokane—I get quite varying reports from the farmers. Less than a week ago one man told me that he had two high school boys on his ranch last year and they were no good as farm workers. On the other hand, we are constantly receiving inquiries from farmers asking us to recommend boys who are willing to go out on the farm for the summer.

Otto L. Luther, Queen Anne high school, Seattle—I think your suggestion an excellent one; I think the boys will respond generously to the appeal; I think the high school boys under proper direction would prove serviceable to the farm and should, of course, command a reasonable wage. An adequate organization is absolutely indispensable in carrying out the scheme.

E. T. Robinson, Toppenish—There are thousands of high school boys in this state who would gladly respond. The average high school boy can and will render a valuable service on the farm if given a chance.

F. E. Schmidtke, Hoquiam—The average high school boy can do about two-thirds of a man's work if he has good, common sense and ambition. The only question of success that comes to me as I write is whether any considerable number of the boys would get "cold feet" when their hands got sore and their backs ached the first few days of breaking in.

A. E. Heaton, Elma, Grays Harbor county—Our boys all have their jobs for the summer.

H. J. McMacken, Marysville, Snohomish county—Our boys do know how to work and would make good at farm work.

A. C. Roberts, Everett—At a recent high school assembly we asked for a showing of hands of the boys who would be willing to go east of the mountains and work this summer and about 50 boys responded.

WHAT THE FARMERS THINK.

The following are extracts from some of the letters received from farmers on the subject of high school boy labor:

Philip J. Ochs, Winona—Boys from 16 to 18 years are the stuff for me, knowledge or no knowledge of farm work. As long as a man keeps cool and don't get rattled things will go all right. About eight years ago I worked some boys. I kept one extra chore boy to change off with the other boys when they got too tired or a little sick. In harvest I gave them a lunch about 9:30 o'clock in the morning and again about 3:30 in the afternoon, and things went finer than silk. The high school boys are all right. I will try the boys this summer and I know they are all right.

H. W. Desgranges, Kennewick—A willing boy 16 to 18 years old will fit in in many places on the farm, especially on the smaller farms, where diversified farming is carried on. He can soon learn to run the cultivator or wield the hoe, feed the pigs and milk the cows, and in the strenuous outdoor life he can soon develop an amazing appetite and in the fall he will return to his studies with some money in his pocket and with a greater value in robust health.

F. C. Beindorf, Richland, Benton county—I could not afford to pay over $12 to $15 per month.

L. J. Campbell, Walla Walla—I find that there will be about 150 boys here ready to go to the fields as soon as school closes. You can bank heavily on the boys this year. If a boy ever wanted to make good it is now.

A. C. Eriksen, St. Andrew, Douglas county—Harvest here is pretty hard work even for a grown man. One or more boys in a crew makes it harder on the rest of the crew. I would suggest that a dairy country would be a better place to send boys.

Will Give Credit for Work on Farms

Boys who lose time out of school this year working on the farms to assist in the food preparedness campaign, will be given full school credit for it. This is the announcement of Mrs. Josephine Preston, state superintendent of schools, in a statement made to The Washington Farmer. Mrs. Preston is enthusiastic over the possibilities of farm labor from the school boys, especially of the high schools. To the Farmer she says:

"With approximately 14,000 boys of 15 years of age, or over, and with the fine spirit of enthusiasm in this state regarding the agricultural production, these high school boys should be able to contribute valuable service to the food production of our state.

"Full school credit will be given every boy who renders an honest service in the harvesting of this year's crops."

Both Farmers and Boys Must Bear Responsibility

Under the systematic methods being put into practice for the enlistment of workers and farms needing their help, the coordinated authorities in charge are placing blanks in the hands of both the boys and the farmers. These blanks, when signed, virtually constitute contracts between the workers and the employers.

WHAT THE BOY MUST DO.

The following are the points of information which the boy enlisting must give:

Name, address, name of parent or guardian, name of school, class, age, height, weight, physical condition, experience if any previously had in farm work, what other kind of physical labor he is used to, and what particular line of farm work he is best suited for.

The blank which he signs must also bear a statement of the wages to be paid and a pledge of faithful service similar to the following, which is being used in some states in these exact words:

Wage Scale—The following wage scale is established: Class A. (Able bodied boys 16 years old or over, who have had satisfactory farm experience) shall receive a minimum wage of $27.50 per month and board, or if capable of doing regular farm or harvest hands work shall receive going wage for the same. They shall receive going wages for any piece work, such as picking apples by box, etc.

Class B. (Able bodied boys 16 years old or over, who have not had satisfactory farm experience) $17.50 and $22.50 per month and board respectively for the first and second month's service or the going wage for piece work or work in which the place or regular farm or harvest hand is satisfactorily taken. After two months' satisfactory service all class B men shall be graduated to class A.

Class C. (Boys and girls of any age not capable of doing regular farm work, but qualified for berry picking, work in canneries, etc.) shall receive going wages for the class of service in which they are employed.

Enlistment Pledge—I hereby enlist as a member of the United States boys' working reserve and pledge my services to the country as a farm laborer, to the end that the nations now engaged in war for the preservation of democracy may be adequately fed, I will continue my regular school duties while school is in session unless assigned to active service, but I will hold myself in readiness to respond immediately to assignment to duty. I am willing to accept the wage scale as printed hereon. I offer my services in the spirit of patriotism. I will stay with the job and endure hardship like a patriotic American.

WHAT THE FARMER MUST DO.

The blank which the farmer desiring help must sign in order to secure the help of enlisted boys must contain the following information:

Number of men (or boys) wanted, kind of farm work to be done, approximate dates when such help will be needed, railroad point to which employe should go, and the location of the farm.

The farmer must also sign a statement pledging reasonable wages and working conditions, the following being the exact wording of the blank in use in certain states:

"I agree to pay at least the minimum wage scale for men enlisted in the Boys' Working Reserve, and to provide clean, wholesome quarters and sufficient clean, wholesome food for those in my employ and not to require to exceed 12 hours' actual labor per day."

He must also give the names of two neighbors as reference to his character and means of properly caring for the persons whom he employs.

Schoolgrounds to Potatoes.

Empire, Waterville: The boy scouts are going to plant the schoolgrounds to potatoes, and to encourage them in this work the Douglas County bank has loaned them the money, without interest, to buy the seed.

THE BEST FARM PAPER.

To the Editor of The Washington Farmer: I will say that The Washington Farmer is the best farm paper that I ever read. It gives me great pleasure and good information to read its columns. I think all farmers should read it. It would do them good. I can not praise your paper too highly.—L. S. WILSON, Vader, Wash.

Cooperative Egg Association Wins

The recently organized Washington Cooperative Egg and Poultry association, with headquarters in Seattle, has already begun to catch its pace. Its membership has increased steadily until now there is an enrollment of about 550, while the eggs handled have increased from 500 cases the first week to nearly 1000 the last week of April.

"It is too early to say that our fight is won," says J. H. Guffey, general manager, "but nothing but an entirely improbable setback can keep us from making good even beyond the hopes and expectations of our charter members. There has been some unpleasantness in the course of this growth, naturally, but we are not putting much emphasis on that. The point is that we are making good, and that we are doing it by handling the best eggs procurable anywhere, by grading them honestly, and by conducting our business on business principles. I think it is safe to say that we have held the price for our product up from one to two cents from the very first."

Mr. Guffey is just the kind of man to lead an organization of this sort to victory. He has had a broad and successful business experience; he is a farmer, as well as a business man; and he admits that he is enough of an Irishman to enjoy a little argument, when competition forces him into it. It is safe to say that under such capable generalship and with the loyal support of all the members, the association will accomplish for the poultrymen of Washington a work which has long been needed.

Washington Must Face Big Issue

Governor Brings Message From President Wilson to People of This State

President Wilson, through Governor Lister, has thanked the people of this state for their activity in assuming their share of the responsibility of the present international crisis, and urges that every man, woman and child bear with increasing loyalty an increasing responsibility in the cause of their country and humanity.

The governor has just returned from Washington, D. C., where he took part in the national conference of governors and also conferred with President Wilson.

Governor Lister spent a few hours in Spokane Sunday, May 13, and delivered his message to an audience of 3500 persons who packed the armory at that city. He left immediately for Olympia to attend to matters of state and begin a vigorous campaign through all means at his command to arouse the people to a full sense of their responsibility and of the gravity of the situation that has been thrust upon them.

Situation Is Grave.

That the war situation is extremely grave was the governor's central message, and demanded the utmost that the United States could give in the way of men, munitions and foodstuffs. He declared that the shipbuilding resources of the United States would be operated at maximum capacity; that the movement for the creation of a large and effective army would be carried to completion as rapidly as possible, not only to have a large force for home service but to place a powerful force with the allies in Europe; that the railroads were doing their utmost to facilitate transportation of necessary articles; that every waste of every ounce of foodstuffs or of materials or strength of all kinds must be stopped, and that every man and every woman and every child able to do manual labor should do some little or great piece of work to produce something needed.

Must Have Big Crop.

He said that conditions at the present time in this state indicated a short crop, but that the people must not allow such conditions to reduce the output. He urged the need that every available acre of land be seeded to something of food value, and that no land be allowed to lie waste. He said that it was estimated that there were a million family gardens in the United States this year, and leaned over toward his audience and shouted the question to them: "Have you planted yours? Have you done your little part? If not, you are not doing what you might to aid your country in this grave crisis."

He called attention to the large amount of fruit that goes to waste in Washington annually, and urged the planning now of facilities to can or dry this fruit for use when it will be greatly needed next winter, probably in this country as well as in the allied countries.

Prevent Household Waste.

He said that official estimates placed the household waste of foodstuffs in this country at over $700,000,000 a year, which would be an average of $35 a family, and declared that the housewife who used special care in preventing waste now was doing a very vital service to the country.

It is considered probable that May 28 will be designated by the president as registration day for the men who will be subject to army service under the conscription bill about to be enacted by congress, and Governor Lister announces that, in conformity with the president's wish, he will declare army registration day a legal holiday. He said he expected the conscription bill to pass soon, with the ages of eligible men fixed at 21 to either 30 or 31 years.

To Give President War Powers to Control Food Stuffs Situation

Chairman A. F. Lever of the house committee on agriculture has introduced in the house a bill supplemental to the measure previously introduced by him for carrying into effect the recommendations of Secretary of Agriculture Houston as to the food situation.

The new bill deals with all the necessaries of life, including foods, feeds, shoes, clothing, fuel and articles required for their production. The measure is intended to meet only the present emergency. It is limited to the period of the war and a sufficient time thereafter for readjustment. It is based on the war clauses of the Constitution and is applicable throughout the country, irrespective of state lines. The purposes are

To stimulate production;
To reduce rates;
To clear the channels of distribution;
To prevent hoarding;
To assure fair prices;
To eliminate injurious speculation;
To prohibit evil practices on exchanges, and
To protect public against extortion.

The suggested legislation recognizes that the war will disturb the normal course of trade. Accordingly it provides machinery

1. For stimulating production and regulating distribution so as to assure a fair profit to those entitled to it.

2. For preventing the exploitation of necessaries of life by those who aim to take advantage of the war emergency to amass unearned fortune.

The mere conferring of the more extreme new powers, it is hoped, may be sufficient, without its becoming necessary to exercise them. There is nothing in the measure to disturb business activities. If it hereafter appears essential to exercise the new powers, provision is made for prescribing the limitations on the conduct of these activities with such certainly that those affected should experience little difficulty in meeting the requirements. On the other hand heavy penalties are provided for those unwilling to fall in line.

The president is empowered

To effect preference movements by common carriers in order to assure an adequate and continuous supply of necessaries;

To prescribe limitations, regulations of prohibition upon the use of foodstuffs in the production of alcohol and of alcoholic and non-alcohonic beverages, and may require reduction of the alcoholic content of beverages.

To requisition and operate by the government, if it be essential, factories, plants, mines or other establishments engaged in producing necessaries, just compensation for the use being provided;

To purchase, produce or otherwise procure necessaries and sell them at cost;

To compel holders to disgorge and put on the market necessaries held by them in excess of amounts reasonably needed to supply their legitimate individual or business requirements for a reasonable time;

To regulate exchanges, including their practices, quotations and the like, so as to avoid their employment as instrumentalities to effect unjust market manipulations, injurious speculation and undue enhancement of prices;

To fix minimum prices, assuring fair and just returns to producers or owners, whenever, in an emergency, he finds such action essential in order to encourage greater production, the government guaranteeing producers that they shall receive not less than the minimum price prescribed for their products;

To prevent the flooding of American market with excessive importations to defeat the minimum price plan;

To fix maximum prices of necessaries, if essential in order to prevent extortion; making it unlawful thereafter to deal in the article at a higher price.

The secretary of agriculture is authorized

To establish and enforce standards for grades of foods, food materials, feeds, seeds, other agricultural products and fertilizers and for the capacity of their receptacles;

To require proper labeling so as to prevent deception;

To license and control the manufacture, storage and distribution of foods, food materials and feed;

To prescribe the percentages of flour which shall be milled from wheat and, when essential, to increase the food supply to regulate the mixing of wheat, wheat flour or other wheat products with any other cereal, cereal flour or material of vegetable origin in the production of food.

With these objects in view the bill vests wide authority in the government to control the situation.

In last week's issue some interesting opinions from representative farmers of the state concerning price control were given by the Farmer. Others continue to be received and will be published in a later issue.

More Appraisers

Are Named for Farm Loan Bank

A total of 12 farm land appraisers have now been announced to place valuations on land in the northwestern states for the purpose of determining the amount of loans that may be negotiated under the federal farm loan bank organizer at Spokane.

The list of appraisers so far, with others probably to be announced soon, at least for Idaho, which has only one up to this time, are as follows:

Washington: C. B. Kegley, Palouse; A. D. Davison, Stevenson; T. O. Morrison, Olympia; and T. D. Davies, Everett.

Oregon: V. C. Brock, Hood River; Curtis E. Widdoes, Klamath Falls; Clifford K. Crosno, Toledo; S. A. Sanford, Roseburg, and William Galloway, Salem.

Montana: W. D. Graves, Missoula, and T. S. Hogan, Billings.

Idaho: C. E. B. Roberts, Rupert.

Pea Contracts With Farmers

Depend on Fairness and Honesty of the Seed House

"I would like to know your opinion of the contract County Agriculturist Shinn is putting up to the farmers on behalf of a seed company for the growing of peas," writes George Hingston, a well-known Spokane county farmer and former master of Pomona grange.

"I refused to sign it as altogether in favor of the seedsman," continues Mr. Hingston, "and was astonished that Mr. Shinn should present such a contract to the people whose interests he is supposed to be looking after, and is paid for. I believe Mr. Shinn is perfectly honest in the matter, but feel he should be set right. As a personal friend of his, and instrumental in a measure in having him employed, I would like to see him with a better contract for the farmer."

The Farmer has examined the contracts in question. In one of them the growers—

"Agree that if the seeds delivered by me are an acceptable sample and of satisfactory vitality, but require further cleaning, milling or hand-picking in order to make them suitable for seed purposes, ——— (the seed house) may do such extra work at their own expense and settlement shall be made at net weight after such cleaning, milling or hand picking; provided, however, that if the said seeds delivered by me are in such condition that they can not be made acceptable and suitable for seed purposes without an unreasonable amount of labor and expense ——— (the seed house) may reject them and shall not be made liable for any portion of them."

The grower further agrees to plant under this contract such seed stocks only as shall be furnished me by ———, which shall be returned to them out of the crop therefrom when delivered, and that said seed stocks and the crop therefrom shall be and remain at all times the property of ——— (the seed house) and I will in no wise dispose of any portion of them except as provided in this contract, and should the crop through any legal process or any other cause pass from my control ——— may take possession of same wherever found."

Under another clause of the contract "it is mutually agreed that all the splits, damaged grains or other material removed from the crop in order to make it a merchantable sample and suitable for seed purposes, shall be the property of the party to this contract removing it."

Under this contract the grower undoubtedly puts himself at the grace and mercy of the seed firm, and much will depend on the fairness and honesty of the contracting firm. It constitutes itself the sole judge of the quality of the crop. It could winnow out half or any other percentage of the delivered product, pay nothing for the rejected part, and then sell it for table food or animal feed.

Or it could pretend to reject a large part of the product, pay the grower for only a fraction of his crop and yet sell it all as merchantable seed.

Of course an honest house would not resort to such base trickery, and we do not think that any reputable seed house would practice such swindling methods. But the opportunity is there under the contract.

In other words, the grower who signs this contract is in pretty much the same situation as a grower of farm produce who consigns his products to a distant commission house. Everything turns on the uprightness of the firm at the other end. If it wants to eucher the grower it has abundant opportunity to do it.

Another contract form offered by another seed house provides that—

"The crop shall at all times remain the property of the party of the second part, and he or his agents shall have the right at any time to enter the field and make such examinations, selections or rejections as they shall deem necessary for the betterment of said crop, and shall not be liable for any damages done by so doing. Said party of the second part also reserves the right to reject any and all crops that do not show an 85 per cent vitality test; and at any time there is any dispute over vitality of any crop, a sample of said crop shall be sent to the agricultural department of the state in which crop was grown for test, and this report shall be final and binding to both parties to this contract.

"The party of the first part agrees that he will not grow any crop of like nature for any other seed house during the life of this contract; that he will properly cultivate and harvest crop in a thorough and workmanlike manner; to thresh and clean as well as can be done by ordinary farm machinery the entire crop without feeding, wasting or reserving or allowing any portion of said crop to pass from his possession except to be delivered to the SEED CO., to whom complete delivery shall be made at such time as shall be notified and between August 1 and December 15, 19....

"If from any cause the crop should be destroyed, said party of the first part agrees to pay to said party of the second part the amount the seeds comes to at the contract price for crop. It is mutually agreed that all covenants and agreements herein contained shall extent to and be obligatory upon the heirs, executors, administrators and assign of the respective parties to this contract, and that all of the above agreements shall be construed and be adjustable according to Michigan laws."

Suppose the seed house rejects a crop under this contract, or pretends to reject it. What then becomes of the rejected product? Suppose the

(Continued on page seven.)

The A B C of Road Construction

Two Implements Within the Reach of Every District

By FRANK W. GUILBERT,
Chairman Executive Committee Washington State Good Roads Association.

V.

Two implements within reach of every district, no matter how poor, are a light grader and a split log drag. The grader will cost around $225 and the drag about $5 if made at home.

Without these two tools it is very difficult for any district to keep their roads in any kind of shape.

The grader is for bringing the material from the sides of the road to the center and "turnpiking" the road. This tool, in fact, builds your road, shapes it and puts it in such condition that the drag will keep it packed and in very good shape nearly all the year. Too often drags are used on roads which are not shaped up, and when results are not forthcoming the operator condemns the tool. It must be used persistently and intelligently. No road should be dragged when dry. Gravel can be dragged during a rain. Clay possibly two or three days after the fall of rain, and the other soils range in between. Just as the soil begins to show signs of drying out is the time to use the drag. The "puddling" of the road is the desired result you are after. Each process of dragging after a rain makes your road surface more resistant to the next rain. The drag should have a trail in every community. It will help a lot. Just because it happened to rain soon after you have done the job, don't quit, do it again. Twelve draggings a year, two round trips each time, will only cost you $15 a mile. That is less than you can get results for by any other method.

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The Farmer Wants Closer Relations With the Consumer

Senator Nelson of Minnesota is usually a pretty level-headed, clear-thinking old farmer, but he slipped a cog in a recent senate debate on the high cost of living.

Senator Borah of Idaho had just declared that if the war lasts two years, and extraordinary and sustained effort were not made to meet the food problem, the whole world would face famine conditions. He attacked the packers, saying they made enormous profits, and added that food speculation would not be ended until the speculators are "put in stripes behind the bars."

Then the Minnesota senator got off on the wrong foot. "The packers are getting big profits," he said, "but we farmers and stock raisers, too, are getting them. I sold an old, superannuated cow for $50 or $60 for which I would have been glad to have gotten $10."

In a False Light.

Assertions like that, made in high places and coming from men who are supposed to know what they are talking about, put the American farmer in a false light before the public. He is classed in with the packers as part of a combination that is bent on holding up the consumers. In effect Senator Nelson held the farmers up as saying cynically, "Let the packers and speculators alone; give them a free hand, so long as we can get good prices for our products."

Unfortunately there is always an element in the big cities that has an ever-willing ear to listen to unfair and libelous attacks on the farmer.

Wants Fewer Middlemen.

The truth is that the men and women who feed the nation have nothing in common with the speculators who have grown wealthy by shoving up prices on the consumers. The farmer wants closer relations with the consumer. He wants elimination of unnecessary middlemen. He knows that in the long run he also must pay heavy toll toward the great fortunes amassed by lucky speculators. He would be delighted if he could be assured of prices over a range of years that would maintain himself and family in a fair degree of comfort, let him educate his children and lay by a moderate saving for his old age.

His Occupation Is Hazardous.

Mining probably excepted, his occupation is the most hazardous in the land. He must war perpetually with the elements—with winter frosts, with springtime floods and summer drouth; with insect pests and animal diseases.

When he plants his crops and puts in his labor he can never know what the markets will be. He may have to sell, and often does, his products at prices which fall short of the cost of production.

Against these cares, risks and losses he must have an occasional fat year. It is the only thing that keeps going the great agricultural industries of the world. Take that enticement away and the world would soon go hungry, sure enough.

Quarter Billion Dollar Grain Loss

There is no way of accurately checking up on the actual amount of grain wasted in this country by preventable means every year, but it is enormous. It has been estimated in a semi-official way as high as $250,000,000, a stupendous sum, but altogether possible in the light of the large number of known wastes.

Destructible pests prevent much grain from reaching maturity. In the process of harvesting heads of grain are allowed to fall to the ground and machinery shatters out much of it. Threshers blow much of it into the strawstacks. It is often put into sacks with holes or with the sewing improperly done. Granaries and wagon beds and warehouses have holes or cracks where leakages occur. Mice and rats are allowed to multiply and feed upon the waste grain in the fields and in the storage quarters. Much grain is converted into intoxicants, which many people are agreed is a waste of its food value. Millers convert only a part of the grain into flour, disposing of the other parts as mill feed. In live stock feeding careless methods, such as poor feeding mangers or racks and over-feeding at times result in considerable losses.

Some of these losses are inevitable, but many can be prevented by care. This season, when the world is calling for the maximum output of the farms, every producer and every shipper and every miller and every stockman should make special effort to save what is produced. Stop the leaks. In his message to the people of the United States recently President Wilson made a declaration that is admirably applicable in this connection. He said: "This is the time for America to correct her unpardonable fault of wastefulness and extravagance." It is unpardonable for any one to waste food material either through carelessness or extravagance.

Filling Uncle Sam's War Chest

"War borrowing leads to extravagance; war taxation leads to economy."

So affirms a special committee of the chamber of commerce of the United States that was charged with the task of formulating a schedule of war taxes for recommendation to congress and the president.

The United States ought to take a lesson from the mistakes of England. "We have gone wrong from the very start," declared Sir Alfred Booth, chairman of the board of directors of the Cunard Steamship company, at the recent annual meeting of that company. "We have borrowed where we should have taxed, and now when we have begun to tax we are taxing production and leaving consumption to run riot."

Congress could not go far wrong if it adopted the plan recommended by the committee of the National Chamber of Commerce. It would raise approximately $1,600,000,000 yearly. It would increase the income tax on individuals and the excess profits tax. It proposes a 50 per cent increase in the first-class postage rates, the imposition of stamp taxes, the levy of excise taxes on liquors, luxuries and amusements, and increases in some customs duties.

Some talk is heard in Washington of taxing sugar, tea and coffee, but that suggestion is not popular. A tax on tea and coffee would be economically sound, as tending to check waste and curtail indulgences, but a tax on sugar would be economically unsound, for sugar is needed in great quantities for the precuration of food, and when sugar is excessively high enormous quantities of fruit will be allowed to waste in the orchards of the country.

Washington Gleanings.

June 15th and 16th are the dates for the Waitsburg thirteenth annual exhibition and racing matinee.

State road No. 12, traversing the Methow valley, will get the sum of $10,000 for improvement from the state.

H. B. Carroll of Ellensberg, practical farmer and a graduate of the Minnesota Agricultural college, has been appointed to the position of farm adviser for Whatcom county.

The fruit growers' association of Peshastin, realizing the necessity of more room to take care of this year's crop, have decided to build an addition to their present warehouse.

That the county agricultural agents will be used for agricultural preparedness in war time is the intimation received from government sources by R. B. Coglon of the State college of Washington.

Because dried fruit will be the staple article of diet for soldiers during duty in defense of the country, State Horticultural Commissioner Morrison urges the fruit growers to devote more time to drying and evaporating fruits.

Contracts have been made at Tekoa for more than 3000 acres of field peas for three large seed companies. Seventy farmers have already entered into contracts and 25 or 30 more are expected to do so. It is possible that the acreage near Tekoa will reach 5000.

County Agriculturist O. T. McWhorter of Clallam county reports that five clubs have been organized among the boys and girls of that county. The following boys' and girls' clubs have been organized: Ramapo Garden club, Eden Valley Canning club, Eden Valley Potato club, Fairview Canning Garden club and the B. B. Potato club.

A military highway that would connect the proposed military post at American lake with the navy yards and Sound forts is being proposed. A road for this purpose would have to be hard surfaced and would be used for all purposes and save the counties most of the cost, as the government would probably bear the burden. The route would shorten the distance by half.

The chamber of commerce of Montesano is listing all of its able-bodied men and boys, and whenever any farmer sends in a call for help for either planting or harvesting the committee will announce the call to those who are listed and send them out to the farmer. Every business man is expected to give some portion of his time as well as a portion of the time of his clerks. School boys will also be called upon to serve when needed.

The announcement is made that a number of fruit and vegetable growers in the Walla Walla-Waitsburg-Dayton and Milton-Freewater districts have banded themselves together in an organization to be called the Associated Fruit and Vegetable Growers, with permanent headquarters at the central city of Walla Walla. The present membership of this association is composed of the Milton Fruit Growers' Cooperative union, the Baker-Langdon Orchard company and Leome Orchard company, the Israel company, Pomona Orchard, Taggard Orchard, Morrow Orchard and other large growers in the Touchet, Gardena and Walla Walla sections.

What Others Say

Express, Pasco, Wash.: The growing of spring wheat in this country has been well established, and the opportunity should not be overlooked.

Vidette, Montesano, Wash.: Thomas Jefferson said that in 50 years the sun never found him in bed. His example of early rising, if applied today, would settle the food famine if the riser put in his time before breakfast in wielding the hoe.

Tribune, Lynden, Wash.: Twelve years is just a mere sliver of time, and yet it is just that and no more the "Dozen Years Ago" items tell us, that the town of Lynden turned out to see Arthur Swim drive the first home auto up the streets of the city.

Republic, North Yakima, Wash.: Why tell the farmer to plant more acres unless arrangements are perfected to furnish him the necessary labor? How will the prevention of unjust exactions in food prices be effected unless the governmental authorities be given the fullest powers to enforce their mandates?

Send Men to Europe

American Army Needed in Trenches

Reliable reports from Washington, D. C., say that it is the plan of the president and his administration advisers to prepare a detechment of soldiers for warfare in Europe with the allies against the Germans at the earliest possible date. This probably will not be for a few months, however, owing to the slow movements of congress in enacting the needed legislation.

After a long, bitter controversy in congress, both the house and the senate have agreed to pass the measure allowing former President Roosevelt to conduct an expeditionary force to Europe if such plan secures the approval of the president and the department of war. It is officially stated that Mr. Roosevelt has pledged to such expedition a total of 200,000 men experieced in methods of war.

Congress Acts Slowly.

The unwieldly character of the United States congress and this country's high degree of unpreparedness are brought out in the comparison of action here now and in France at the time of the declaration of war between France and Germany. Thirty-three days after the France-German declaration of war the greatest battle of the war, if not of the world's history from the standpoint of ultimate effect, was fought between the Germans and French on the river Marne. But 40 days after the declaration by congress that a state of war exists between the United States and Germany, the measures to finance the war and to raise an army to fight its battles are still unpassed, and even the people themselves are not aroused to the true seriousness of the situation.

Peace Rumors Persist.

Rumors of peace between various parties to the war are constantly heard, but so far there is no tangible evidence that peace is an early possibility. It is generally conceded that the prospects are for a continuation of the war at least one year and probably several years. Talk that Russia might make a separate peace with the Teutonic powers has been repudiated by representatives of the new Russian government. Talk that Austria was planning to negotiate a separate peace with France also seems virtually unfounded.

Ship Building Important.

The building of large numbers of ships for use in transporting food and munitions, and also men if this country sends an army to Europe, is urged by the government as one of the greatest needs of the present time, second perhaps only to the production of foodstuffs for home and foreign consumption. The government plans to have at least 1000 new ships built within the next 18 months, having a total carrying capacity of 3,000,000 tons. Both wooden and steel ships are to be built. The first contract for the building of steel ships has been let to a California firm under the government's building appropriation.

Sell U. S. War Bonds.

One of the leading financial movements of the country is the disposition of the United Statess war bonds to finance the immediate needs of the war. These bonds are being sold throughout the country in denominations of $50 to $10,000, and bear 3 1-2 per cent interest payable semi-annually. The treasury department is making a special effort to have the mass of the people purchase small issues of the bonds not only to furnish cash for the government, but to insure a patriotic spirit on the part of the people at large through their investment in the government bonds for war purposes. Local banks are cooperating with the government in selling the bonds. Secretary McAdoo of the United States treasury is making a personal trip into the middle west with a view to stimulating purchase of the bonds.

Food Supplies Needed.

The production of a maximum food supply continues to be the most vital proposition of the war period. It is reliably stated that the food situation in the allied countries is serious, and that the submarine warfare is becoming a greater menace as time passes. The government is taking every means possible to induce the people of this country to produce every pound of food material possible.

Submarine Problem.

The naval departments of all the allied nations are still bending their best efforts toward the solution of the submarine problem. Many express the belief that the solution of this problem would mean an early end to the war, as Germany's only hope lies in starving England and France into submission. What progress is being actually made in the combating of the menace is withheld through naval secrecy.

Potato Cultivation in Egypt.

The British government, having in its possession a large quantity of Italian potatoes suitable for cultivation in Egypt, has agreed to deliver them to Egyptian agriculturists who are desirous of growing potatoes on their land, on condition that when the potato crop comes out they will sell to the British government a certain quantity in proportion to the amount of Italian potatoes taken, at $38.93 per ton.

Pea Contracts

Depend on Company's Fairness

(Continued from page five.)

grower disputes the rejection. Who selects the sample to be sent to the state agricultural department? Presumably the seed house.

Here again it all depends on the fairness and honesty of the seed house, for the contract is vague and the grower a thousand miles or more away from his delivered crop would stand at a severe disadvantage.

The Farmer wants to make it clear that it is not charging the seed houses that are putting out these contracts with any such tricky designs. It is simply analyzing the contracts and pointing out the possibilities under them. If it were a grower it would want to have assurance that the other party to the contract had built up a reputation for square dealing with growers in other parts of the country.

After the above was written The Washington Farmer has learned from J. R. Shinn, Spokane county agriculturist, that these contracts have been modified before being signed by the growers, to the extent of receiving and accepting of the seed f. o. b. at the point of delivery by the grower.

This puts the grower much less at the grace and mercy of the seed firm and is a clause which should be insisted upon by every grower.

Argentine Wheat Shortage.

A material shortage in the Argentine wheat crop is one of the factors in the strong world's wheat market. The International Agricultural Institute of Rome estimates the Argentine wheat crop at 77,395,000 bushels, as against 172,651,000 bushels last year.

Patriotic Legion

The following have been enrolled during the last week as members of the Patriotic Legion of Washington: Merrill Kimple, East Sound; Freeman W. White, Wapato.

Fair List Prices — Fair Treatment

GOODRICH

BLACK SAFETY TREAD TIRES

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WHEN a Goodrich Black Safety Tread Tire is sent from the factory of the B. F. Goodrich Company, it carries Goodrich's avowal that it is free from imperfection of material and workmanship.

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It *must* render service worthy of the good name it bears—the high service Goodrich requires of it.

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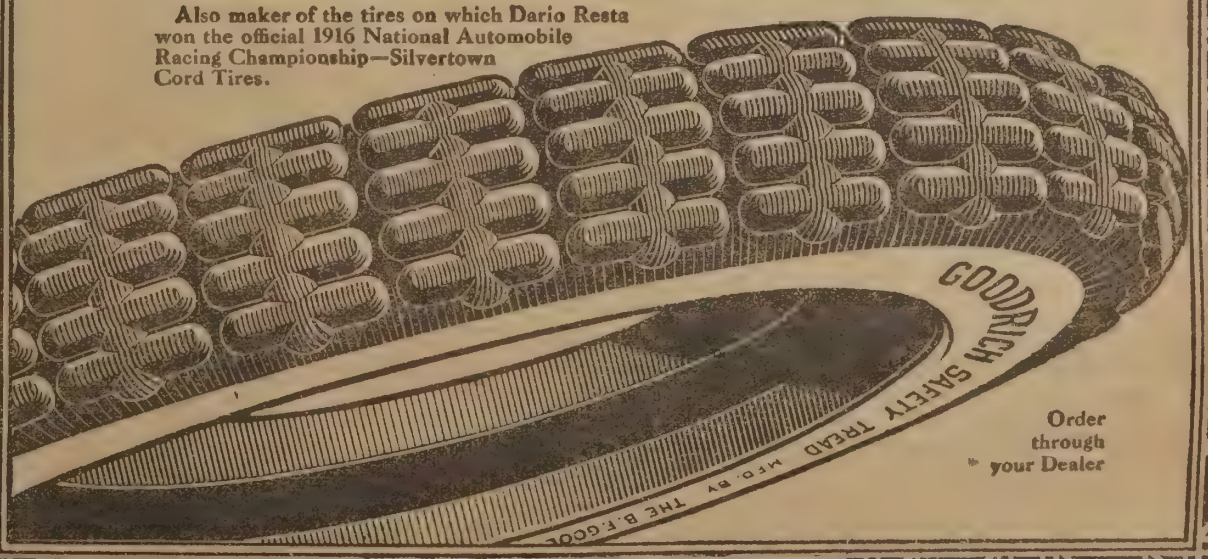
Fair Treatment Open-Handed

The B. F. Goodrich Company *courts* honest fault-finding with its tires. Goodrich Fair Treatment will meet these complaints with adjustments, quick and square,—will make these adjustments gladly and generously.

It will not permit a Goodrich patron to feel that a Goodrich tire owes him anything. *It wants back any Goodrich tire you feel owes you anything.*

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Also maker of the tires on which Dario Resta won the official 1916 National Automobile Racing Championship—Silvertown Cord Tires.



Order through your Dealer

"Best in the Long Run"



A. B. NYSTROM, Editorial Contributor

Sixty Pounds Butterfat.

E. A. Doerfler of Silverton, Ore., is feeling pretty good over the fact that his purebred Jersey herd had the highest average of any herd in the Marion County Cow Testing association for January, February and March. The April report had not been made when this was written. Mr. Doerfler has 12 head on test, and they averaged over 60 pounds of butter fat per month, per cow, for each of the three months. Several of them are heifers. The three Foxhall heifers purchased at the late Charles Miller sale have all milked over 45 pounds a day and one as high as 53 pounds.

Butter and Cheese Scoring.

The first of the 1917 Oregon educational scoring exhibits of butter and cheese was recently held at the college dairy department, Corvallis, Ore. There were 19 samples of butter and three samples of cheese sent in to be scored. The judges for the butter were E. V. Ellington of the dairy division, from Salt Lake City; L. B. Ziemer, state creamery inspector; E. B. Fitts and R. I. Scoville of the college dairy department.

The average score of the 19 samples of butter was 90, the scores ranging from 94 down to 85.2, while the average moisture was 13.92 per cent and the average salt was 2.46 per cent.

It is planned to continue these scoring exhibits monthly at the college. Notice will be sent to all butter and cheese makers having entries at this scoring, and any others interested may have information and blanks from the dairy department at Corvallis.

Commends Condensed Milk Law

William Bishop Points Out Features of New Measure

Because of the interest aroused by the passage of a new law effecting the manufacture of condensed milk, The Washington Farmer has endeavored to secure the opinion of various men throughout the state who might be expected to be able to speak authoritatively upon the subject. Some of these gentlemen have shown an unsuspected bashfulness in expressing themselves for publication, so that it is not possible at this time to quote many of them. We are fortunate, however, in being able to give our readers the views of William Bishop, who is not only a successful dairyman and breeder, but who, as state representative, took the floor for the new bill.

"The law just passed is as fair as it is possible to make it," Says Mr. Bishop. "The claim has frequently been made that this new enactment, which aims to make the federal standards effective within the state as well as in interestate commerce, will put the small cannery out of business. This is absurd on the very face of it; if the small concern can put out cheap milk, so can the big one. We can't be expected to pass a law discriminating against any manufacturer, and without that competition must be on the basis of the quality of goods turned out. A law that will let one plant manufacture milk below the federal standard will also let all the others do the same thing. You can't get round that.

"But the biggest point in the whole matter," Mr. Bishop continued, "is one which has been entirely overlooked in most discussions; it is not altogether, 'How will this effect the dairymen,' or 'will the manufacturer suffer from this?' We must consider the public, which buys our milk, and I would like to ask right here if our people here in the state of Washington are not entitled to as high a quality of condensed milk as any people in the country? Why should our canners be allowed to turn out a product which other states or the United States as a whole does not consider the best? The producer has a right to consideration, but not to the extent of forgetting the men and women and particularly the little children who are the ultimate consumers of our food products."

Another Record Broken.

A notice from Malcolm H. Gardner, superintendent of advanced registry, dated April 11, says:

"I am advised through preliminary reports and by wire that the Holstein-Friesian heifer Glen Alex Queen De Kol 275362 has broken the record for fat production in the senior two-year class of the seven-day division, by producing in seven consecutive days 603.8 pounds milk containing 33.88 pounds fat. She freshened at the age of 2 years, 11 months, 20 days. Her sire is Sir Pontiac Korndyke 6th 66229; her dam is Titje Queen De Kol 95772. She was bred by W. L. Keyes of Deerfield, New York, and she is now owned by A. C. Howe of New Hartford, New York."

Speed up the Separator.

Thousands upon thousands of tests made with different cream separators during the last two or three years by government experiment stations and other dairy authorities have proved conclusively that many thousands of dollars' worth of cream were being lost by farmers because they turned their cream separators too slowly. It was shown that in many cases, with a herd of 10 cows, this loss ran from $50 to $100 a year and often more.

First Grade Milk.

The five essentials for production of first-grade milk, as given by Percy Werner Jr. of the Missouri College of Agriculture are: 1. Healthy cows and men. 2. Clean cows and men. 3. Clean cans and pails. 4. Covered milking pails. 5. Cooling milk to 55 degrees or below within an hour after production and holding it as low as possible until delivered.

$3500 Cash Prizes for Potatoes.

One of the closing acts of the 87th annual conference of the Mormon church in the tabernacle at Salt Lake was the offering of $3500 in cash prizes for the best yields of potatoes and spring wheat from acreage supervised this year by ward organizations as a stimulus to increased production of food supplies in the present state of war with Germany. The yield prizes are as follows: Best one-acre yield potatoes, first prize, $1000; second, $500; third, $250. Best five-acre yield spring wheat, first prize, $1000; second, $500; third, $250.

Special Holstein Prizes.

Among the schedule of prizes announced for 1917 by the Holstein-Friesian Association of America are the following:

Idaho.

Gem State fair, Boise, Idaho. Twenty per cent cash to be paid on the general classification.

Idaho State Fair association, Caldwell, Idaho. Twenty per cent cash to be paid on the general classification.

Montana.

Midland Empire fair, Billings, Mont. Twenty-five per cent cash to be paid on the general classification.

Montana State fair, Helena, Mont. Twenty per cent cash to be paid on the general classification.

Oregon.

Oregon State fair, Salem, Ore. Twenty-five per cent cash to be paid on the general classification.

Pacific International Live Stock exposition, North Portland, Ore. Fifty per cent cash to be paid on the general classification.

Washington.

Spokane Interstate Fair and Live Stock show, Spokane, Wash. Forty per cent cash to be paid on the general classification. Dairy department, farm butter, trophy or silver cup to each prize winner, if made from the milk of a registered Holstein-Friesian herd.

Washington State fair, North Yakima, Wash. Twenty per cent cash to be paid on the general classification. Milch cow test, each prize won by a registered Holstein-Friesian will be duplicated; also each prize won by butter made from the milk of a registered Holstein-Friesian herd.

General Classification.

The term "general classification" as used above is held to cover the following classes:

Bull, 3 years and over.
Bull, 2 years and under 3.
Bull, 1 ylear and under 2.
Bull calf, 2 months and under 1 year.
Cow, 5 years and over.
Cow, 3 years and under 5.
Heifer, 2 years and under 3.
Heifer, 18 months and under 2 years.
Heifer, 12 months and under 18 months.
Heifer, 2 months and under 1 year.
And the following herds or groups:
Exhibitor's herd.
Breeder's young herd.
Calf herd.
Get of one sire.
Produce of one cow.

Slight modifications of this classification will, however, be accepted.

In the list of judges designated for the season of 1917 is the name of W. Bishop Jr. of Chimacum, Wash., and that of John C. Smith of Spokane, Wash.

Will Build Elevator.

The Heppner farmers' union will build a grain elevator of 100,000 bushels capacity at an estimated cost of $18,000.

Ocean Trip to CALIFORNIA

An Ideal Vacation.



Entrance to the Golden Gate

Summer excursions to the Columbia river and Clatsop beach resorts.

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S. S. NORTHERN PACIFIC
S. S. GREAT NORTHERN

leave Flavel-Astoria upon arrival of connecting steamer express from Portland and Spokane, and reaches San Francisco 3:30 p. m. next afternoon.

Apply to any agent of Great Northern, Northern Pacific or S., P. & S. Rys.

R. H. Crozier, Asst. Gen. Pass. Agent, Portland, Oregon.

H. S. Wagner, City Pass. Agt. Davenport Hotel, Spokane.

State College of Washington

SUMMER SESSIONS 1917.

PULLMAN June 18-July 28 | PUYALLUP June 25-Aug. 4

Practically every department open at Pullman. Courses in Agriculture, Home Economics, Manual Arts, Education, etc., at Puyallup. Special features: Conference on Homecraft, June 18-30; Conference for Rural Ministers, June 18-30; Preparation for Leadership of Boys' and Girls' Clubs; School for Coaches and Physical Directors.

For Catalogue Write the REGISTRAR, PULLMAN, WASH.

Silo Filling —done in 1 day

with Blizzard Ensilage Cutter. Take your time if you want to, but if you have to have big capacity you get it in the Dickes Blizzard Ensilage Cutter



Knives and elevating fans both on heavy-ribbed fly wheel.

Every ounce of power counts. Light running. Eats work. Unlimited capacity (according to model and power used.) Elevates any height. Cuts evenly always. Steady as a clock. Very long life, as parts of wear are replaceable. Write today for catalog. Tells all about the new double feed model.

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Distributors for Washington, Oregon and Idaho



Purebred Registered HOLSTEIN CATTLE.

The broad highway to success is persistent and intelligent application to something worth while. A successful 60 year old dairyman said, "I have made the greater part of my money since I was forty-five. Up to that time I was making mistakes. I corrected a host of mistakes and ideas about cows and have made nearly all the money I have since that time." The difficulty is that some dairymen never wake up. Any farmer who will devote a short time to a study of the supremacy of Holstein-Friesian cattle as profitable milk producers and as dual purpose cattle will be able to turn his dairy operations to a profitable basis. Send for free literature. There's big money in the big "Black and White" Holsteins.

Send for FREE Illustrated Descriptive Booklets.

THE HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA,
F. L. HOUGHTON, Sec'y, Box 205, Brattleboro, Vt.

PAPEC CUTTER

A reliable cutter—one you can depend on when time means money. Read this:

"On account of frost killing the corn, we were rushed to fill our 16 x 96 ft. silo, feeding Papec cutter to full capacity. Not least bit of trouble."—H. M. Seivert, Excelsior Dairy, Portland.

Takes less power than big cutters—that means less expense. Read this:

"I surprised a man this Fall with the little Papec. Last Fall he had a No. 40 cutter (another make) and 25 H. P. engine. It took him 18 hours. This year I filled the same silo with No. 13 Papec and 8 H. P. engine in the same time and waited for corn."—Elwood & Morrison, Caldwell, Idaho.

Cuts all kinds of hay and straw—stock eat it up clean. Read this:

"I have enough power and after filling up my silo am using outfit for cutting up all my hay. I find the stock will eat it up clean when cut, where they would leave a large part if fed without cutting."—Charles Robstock, Route 1, Lents, Oregon.

FREE Cutter Books—Fill in the coupon, or write a postal today for valuable books on feed-cutting and silo-filling, FREE.

Address Desk B, nearest house,

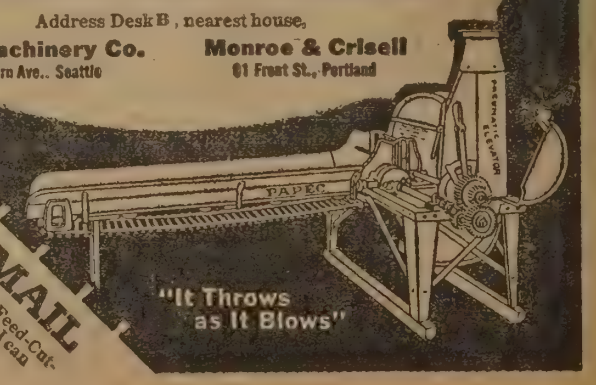
Dairy Machinery Co. 907 Western Ave., Seattle
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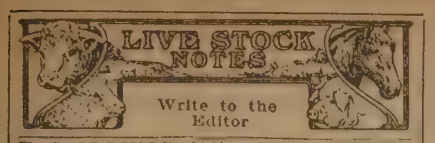
SIGN AND MAIL

Gentlemen:—Send FREE Books on Feed-Cutting and Silo-Filling. Tell me how I can reduce my costs.

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Address.....





E. J. IDDINGS, Editorial Contributor

RAISE FALL PIGS.

Is Advice of U. S. Government.

Every breedable sow should be bred to bring a fall litter. It is important that all sows be used to increase the food supply and no sow should be carried over the summer unbred. Fall litters under common sense management are profitable, is the advice from the national department of agriculture. The pigs should come in early fall—September and October—so that they may be weaned and have attained suffjcient growth to shift for themselves before cold weather arrives. The earlier the pigs come in the fall the cheaper their growth will be made on available pastures and the stronger they will be to withstand the winter. The period of gestation for a sow is approximately 112 days, so that a sow bred on May 15 would farrow about September 5. This means the sow must be bred for fall litters during the months of May and June.

All sows should be bred. Scruples over breeding immature sows should be forgotten. While in normal times most hog raisers do not breed the gilts earlier than eight months of age, sows will breed as early as five to six months of age.

Larger litters are obtained by flushing sows before breeding. This is done by feeding in such a way as to have the sows putting on weight at the time of breeding. The suckling sow should have her pigs weaned shortly before being bred. Her udder should be dried up by a reduction of feed. She should then be flushed and in a few days can usually be bred. After breeding, the sow should be watched to be sure she has caught. If she has not, 21 days later she will again show indications of heat and can again be bred.

The pregnant sow should be fed a ration consisting of bone-making and muscle-making feeds. She should gain weight but not be made fat. Pasture with a small grain ration proves excellent for carrying the pregnant sow until she is almost ready to farrow.

Embargo on Wheat.

Executive decree signed yesterday prohibits until further notice the exportation of wheat and wheat flour from Argentina on account of limited stocks and harvest prospects.

CUTTER'S
BLACKLEG PILLS
"California's Favorite" for nearly 20 years
For the Prevention of Blackleg in calves and young cattle

Their superiority is due to nearly 20 years of specializing in "Vaccines and Serums only."

Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.

Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

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10 dose pkge. Double Pills 1.50
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Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

The Cutter Laboratory, Berkeley, Calif.

The Cutter Laboratory of Illinois, Chicago
Eastern Agent

Veterinary

Dr. S. B. Nelson

Filing of Teeth—I am using mules on my farm with good success, but their teeth seem to get corners on them and I am told it will make them rot to file them down with a rasp.—L. D. R., Mabton, Wash.

Answer—It does not cause decay in horses' teeth to rasp off the sharp points, which the difference in the hardness of the teeth causes during chewing. It is done in thousands of horses each year with good effect upon the horse and horse's welfare.

Will It Poison Hogs? Will potatoes that have been treated in a solution of formaldehyde, one pound to 30 gallons of water for two hours, poison hogs if fed in small quantities with other feeds.—J. M., Marcus, Wash.

Answer—If the potatoes have been allowed to dry there is no danger from the formaldehyde treated potatoes as a food for hogs. If they have not been allowed to dry and are fed wet, then there may be some danger if the animals are allowed to eat a large quantity of the potatoes. They should not be fed then.

Odor to Milk—Have a young heifer that has been fresh about three weeks. Her milk has rather a "cowie" odor and when added to the other cream and churned the butter does not keep well, and in a few days has a rancid odor. Then just a few days ago she gave several streams of bloody milk from one teat.—H. A. P., Sunset, Wash.

Answer—Give your cow a good purge of a pound to a pound and a half of epsom salts in three quarts of water. Then give your cow one teaspoon full of sodium hyposulphate in a pint of water in the morning. At night give her one ounce of fluid extract of pokerroot in a pint of water. Use the treatment for a week or so.

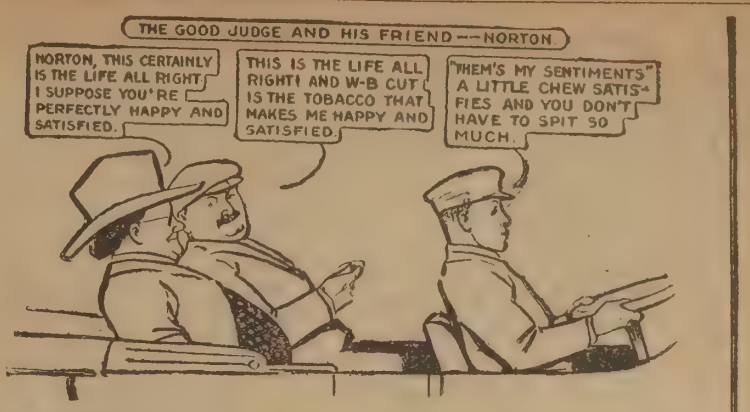
I have a 3-year-old cow that calved March 18, 1916. She gave 10 quarts of milk daily. On January 20 she was dried up and was due to calve on March 2 this year. February 14 she lost her calf, which would have weighed about 20 pounds. It only lived five hours. The cow was slow to clean and has never given more than a half teacup of milk. We have kept her on good feed, such as oat hay, shorts and carrots, also have fed her one pound of hyposulphate soda at the rate of one tablespoonful each feed. There was never any swelling or fever in her udder. Will she ever give any milk?

Pomeroy, Wash. W. H. W.

It may be possible that there is an inflammatory lesion yet remaining in the uterus, and that might cause trouble, such as you mention, of her failing to give the quantity of milk which you would expect. I think that a physical examination should be made of the womb and see if this is not the case, and then correct treatment administered until the womb is healed. This treatment, of course, would consist of daily uterine injections of disinfectant solutions, which would overcome the trouble in a short period of time. There is no internal treatment that would help her that I know of.

To Disinfect Pen—I bought six nice shoats about three months old, took them straight from the sow and fed them on slop made with middlings and water, also gave them small raw potatoes, apples, etc., and plenty of good water to drink and a warm, dry bed to sleep in. They did fine for a week, then one got sick and died in 48 hours; now three are dead and the other three are dying. They almost totally quit eating, got weak in their hindquarters, some seemed nearly blind, and did not seem to care for anything but water. What was wrong with them, and how should I disisfect the pen?—F. W., Seattle, Wash.

Answer—I am not able to make a definite diagnosis of the trouble affecting your hogs. You do not give me sufficient data upon which to base the diagnosis. I can not tell whether they may have died from hog cholera or whether they have died from being over-fed, which resulted in an indigestion. Regarding your second question as to what to disinfect the pen with, I would recommend disinfecting the pen with a lime whitewash mixed with creolin so that the creolin will be a 5 per cent solution in the whitewash. When I say creolin I would say that any of the coal tar disinfectants in that strength are good. Disinfect the pen two three or four days apart, also disinfect the floor and the feeding trough, and if any yard thoroughly by spraying the whitewash into the soil, onto the boards and into the cracks. This disinfectant you can put on with a spray pump.



THERE is something mighty democratic about rich, sappy tobacco. Now that men have W-B CUT Chewing, a good tobacco, to lend each other, it cements friendship. Common-sense about tobacco is getting mighty general now—no one wants the over sweetened kind when he can get rich tobacco shredded and lightly salted to bring out the good tobacco taste.

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We have a good supply of EXTRA FANCY seed on hand. Prices reduced to clean up. Write us.

SEATTLE SEED CO., SEATTLE, WASH.

BABY CHIX ALL GONE

"My (two line) ad in your papers has brought excellent results, the only trouble being a larger demand than we were able to supply. If I could change my ad, would change to 'Sold out on baby chicks.'"

J. N. SCOTT, Naches, Wash.

As it makes its regular visits to tens of thousands of homes in Washington, Oregon and Idaho, week after week, what a hard-working and efficient little selling agent is a "want Ad" in the Pacific Northwest Farm Trio.

Whether you have something to sell or want to buy something, just set a "Want Ad" in these three state farm papers to work for you and see how quickly and cheaply it will bring you in touch with a host of buyers and sellers.

The Washington Farmer, The Oregon Farmer and The Idaho Farmer will carry your ad straight into more than 50,000 farm homes in these three states each week. Write for rates and good suggestions.

POULTRY

Write to the Editor

JAMES ERYDEN
Editorial Contributor

The shape or size of the egg has nothing to do with the sex of the chick.

Eggs that are not normal in shape and size should not be used for setting.

Moistening the eggs before hatching is not necessary. The hen attends to that herself.

An infertile egg looks just like a fresh egg, except that it has a larger air space.

Test the eggs after the sixth or seventh day of incubation, and remove infertile and rotten eggs.

It is well to use the larger eggs for hatching because it will be possible in that way to breed up a strain of fowls that lay large eggs. The size of eggs is a question of heredity very largely.

Experiments have shown that eggs from free range fowls hatch better than those from hens confined in small yards.

Fresh eggs should be used for hatching—the fresher the better. If necessary to keep them a week or two before setting, keep them in a cool, dry place and turn them daily.

J. D.

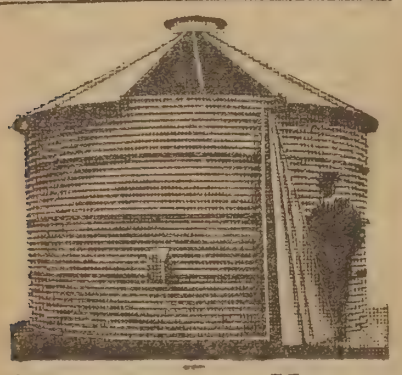
Feeding Wheat to Chickens.

At this writing wheat and other grains are still climbing in price. The price of wheat is more than double what it was last fall. Will it pay to feed it to chickens? It depends on the kind of hens it is fed to and the way it is fed. With good layers, a profit may still be made at the prices for eggs. Eggs are 60 per cent higher than a year ago in April. If they should be proportionately higher next fall and winter they will reach a price of 85 cents At such prices there will be money in eggs, even at the present high price of feed—if the hens lay fairly well. A nonlaying flock will soon run up a big deficit. The poultryman must keep none but good layers, and then he should study up on the very best methods of feeding. Expert knowledge is in demand now.

J. D.

RECENTLY SURVEYED HOMESTEADS NOW OPEN.

Every reader of this paper should write at once for a free copy of "The Home Seekers' and Settlers' Guide." It tells all about the rich 160-acre free farms, excellent for growing grain and mixed farming, also what others are doing. Address Canadian Northern Railway. A. A. Brostedt, D. F. & P. A., 605 Hastings St., Vancouver, B. C., Canada. Adv.



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THE SAFEST WAY TO STORE GRAIN

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AGENTS WANTED

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SPOKANE, WASHINGTON

Breeding for Large Eggs.

Breeding for size of egg is a simple matter compared with breeding for number. If one wishes to breed for a certain size egg, all he needs to do is to pick out the eggs for setting of the size that he wishes to breed for. He needs no trapnest to do this. If a large egg is wanted, the large eggs should be set, because a pullet that comes from a large egg is likely to lay eggs of good size, assuming that the male also is from a large egg and assuming further that the size of the egg is inherited, which is undoubtedly a fact.

However, faster progress can be made in increasing the size of the egg by breeding, if the pedigree of the breeding stock is known. A hen that lays a large egg may not come from a large-egg family, just as a good layer sometimes comes from a poor layer. But if he knows that the eggs he sets come from a strain or family of large eggs for several generations, he is pretty sure to get large eggs from the pullets hatched from them. Small eggs will not always produce pullets that lay small eggs, but on the average they will. Large potatoes are sometimes raised from small seed potatoes, but if the small seed is selected each year for planting, in a few years the potatoes would be smaller. Like begets like—not always, but on the average. There are variations. Select the large eggs to produce large eggs.

This is a simple matter, but, by following this method, the poultryman will be able to increase the size of egg. It is a somewhat hit or miss method, that is, he is taking some chances. The more certain method is to select not only the large egg, but to keep pedigrees of all the hens. This makes it possible to select for breeding not only the hens that lay large eggs, but those that produce other hens that lay large eggs. In other words, it is a question of selecting breeders of large egg producers. The hen must be a good breeder as well as a good layer. This means trapnesting and keeping pedigree records. Not many poultrymen will do this, but every one can select large eggs for hatching.

He should not necessarily select the largest. Abnormally large eggs should not be used. An egg weighing two ounces fills the market demand. We might select two-and-a-half-ounce eggs and finally get a strain that lays two-and-a-half-ounce eggs, but there would be little, if any, profit in it. The hen that lays the large egg will naturally lay fewer of them, and the poultryman may not get any more for them, speaking of the two-ounce egg and larger eggs.

J. D.

Send the Old Hens to Market.

With wheat at $2 a bushel the old hen should certainly be sent to market. After a certain age she is never a paying proposition, but with present war prices of grain she is eating wheat that had far better be made into flour. It has been abundantly proved by experient that the average hen lays most in her pullet year and that there is a gradual decrease in production each year. A flock that averages 150 eggs the first year will lay about 120 in the second year and 100 or less in the third year. A good hen will make a profit in the first two years, but after that it will pay to replace her with a pullet. Feeding $2 wheat to toothless hens is a waste of ammunition. Crate up the old hens tomorrow and ship them to a reliable commission firm in the city.

The above will not apply in the case of hens that are specially valuable for breeding purposes. If a breeder has trapnested his flock and knows which are the good layers he can cull out the poor layers at the end of the first year, and the good layers he can keep at least three years for breeding. The good layer in the first year is the good layer in the second year in the great majority of cases.

J. D.

Eggs for Cold Storage.

"Could you give me any information of the system by which they put eggs in cold storage?"

Grangeville, Idaho. G. M. G.

This business is controlled by large corporations, that buy up eggs in the spring when they are cheap, and sell them in the fall and winter at the time of scarcity. I do not think much business is done by poultrymen sending their eggs to the storage companies on commission. I doubt if it would pay the poultryman or producer to speculate on storing eggs, under present conditions at least, by sending them to the storage companies. The storage companies do not encourage it as a rule. Before doing this, the poultryman should be assured of an outlet for his storage eggs before putting them in storage. As a rule it is much better for the poultryman to sell his fresh eggs if he has eggs of good quality and can get the price that fresh eggs of first quality should command.

J. D.

Select Breeding Turkeys

"I want to start in to raise turkeys next year. I can get plenty of information on the care and feeding, etc., but I seem unable to learn anything as to how to select the breeding stock. How old should the gobblers be and how old should hens be in order to get the best fertility and to produce the hardiest poults?—Mrs. W. H. L., Tumwater, Wash.

Some of the best turkey raisers use an early hatched Tom (cockerel) to mate with early hatched pullets or yearling hens. The main objection to using older toms is on account of their size. Heavy males are likely to injure the hens. By paring off the spurs and filing the sharp points of the toe nails, there is not much danger in using the heavy males. It is not the best plan, however, to select the largest males or hens for breeding. The medium sized birds are in greatest demand in the market. No immature stock should be used. A good plan is to use yearling hens, or hens in their second year and early hatched fully matured vigorous cockerels. This should produce the hardiest poults. After the third year the turkey hens should be marketed. They begin to fall off in laying the third year. Inbreeding should be avoided.—J. D.

Snohomish Egg Circle Grows.

The Snohomish, Wash., egg circle, which was formed last December reports that their membership has increased from 10 to 50 and the weekly output from five cases to 25 and 30 cases The market demand is growing for their product and they are able to get better prices for their product, which they sell direct to the merchant.

Marsters on Fair Board.

Governor Withycombe of Oregon has reappointed A. C. Marsters of Roseburg, a member of the state fair board.

Tells why chicks die

E. J. Reefer, the poultry expert, 4665 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease over night and actually raises 98 per cent of every hatch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.

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"Where Stockraising and Dairying Pay"
— SOLD AT LOW PRICES AND ON LONG TERMS.

You can make good and be independent on your own land in Stevens County. Send for illustrated booklet. It will pay you.
—Write NOW—

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THE SUCCESS GOPHER TRAP



THIS TRAP WILL FREE YOUR LAND FROM THE GOPHER PEST. IT IS SIMPLE. REQUIRES NO DIGGING. NO BAIT. IS QUICKLY AND EASILY PUT IN PLACE. AND WHEN SET RIGHT. GETS THE GOPHER EVERY TIME. IF YOUR LOCAL DEALER IS NOT SUPPLIED WITH THESE TRAPS. I WILL SEND YOU PREPAID. ONE HALF DOZEN, UPON RECEIPT OF $1.80
O. P. WYLAND, HARLAN, IOWA

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Write for catalogue and prices today.

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The Growth of your Flock Depends on Proper Food



Does the feed you throw your chickens come back two-fold into your pocket? Are your hens developing so they will bring the highest market value? Do they give the maximum of eggs?

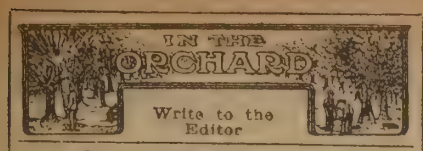
Albers "Progressive" Chick Developer and Scratch Food

are scientifically compounded, and contain the necessary ingredients to produce results. Albers Progressive Poultry Feeds are made in the best equipped plants in the west. All formulas by practical poultrymen. No guess work. Every sack uniform in quality and results.

When buying Poultry Foods, ask for Albers "Progressive" Feeds. Get your flock in the best condition for your share of Poultry profits. Ask your dealer or write our nearest plant.

Albers Bros. Milling Co.
Portland Seattle Tacoma
San Francisco Los Angeles





GRANVILLE LOWTHER
Editorial Contributor

Codling Moth

A Standard Spray for This Pest

It is now nearly time to spray for codling moth. Every year we have directions about how to spray and what to spray with, so that most orchardists know. But some may be just beginning, others may need to be reminded, so here is the formula. Spray after the petals fall and before the calyx cup closes. In order to meet the irregularity of blooming it may be necessary to spray twice for what is called the calyx spray. Use plenty of pressure so as to force the spray into the calyx cup. About 200 pounds is considered enough.

Arsenate of Lead.

Arsenate of lead is the spray mostly used for codling moth, and is recommended to be used as follows:
Arsenate of lead (poison) ....1 lb.
Water .....50 gals.

For newly hatched insects it is not necessary to use it stronger. For old or large insects use double the quantity. Mix the paste well with a small amount of water. Powdered arsenate of lead is about twice as strong as the paste. Do not use arsenate that settles quickly or feels gritty. Agitate while spraying.

Arsenate of zinc powered is about four times as strong as paste lead. It may scorch in a damp season.
Arsenate of lead .....4 lbs.
Water .....100 gals.

It is better to purchase arsenate of lead than to attempt to make it. In mixing, preparatory to spraying, the amount of arsenate of lead for each spray tank full should be worked into a very thin paste having the appearance of milk of lime. It should never be thrown as a mass into the spray tank. This is the standard spray for codling moth and other eating insects. It is possible, however, that we may increase the use of arsenate of zinc in the future. G. L.

Storing Frozen Apples

Last fall, in common with a large number of fruit growers throughout the northwest, we had some apples frozen. The difficulty of getting sufficient labor, enough boxes, cars for shipment, proper storage, and the fact that the freeze came earlier than usual, all combined to cause considerable loss.

We had several boxes of Winesaps that were engaged to a man in Seattle. After the freeze they were as hard as Bethman von Hollweg's head, or, to put it mildly, as hard as bullets. The Seattle man concluded not to take them, and we did not blame him. But we had them nicely wrapped and boxed before the freeze came, so we concluded to put them away carefully in the cellar and leave them until spring. The cellar was not much different from the ordinary home cellar. It was kept as cool as practical during the winter, except we were careful that the temperature did not reach the freezing point.

On the third of May we opened a box and found they had kept as nicely as any of our fruit, and, in fact, there was less tendency to decay than in the apples that were not frozen when they were stored. We then examined several boxes with the same results. I have never seen apple that kept better than these.

The flavor is not the same, and this seems the only injury. They are not unpleasant to the taste, in fact, some might prefer them to the more acid flavor of the unfrozen fruit; but for the choice of the general public they are injured. However, the injury is not comparable to what we generally expect. G. L.

STRAWBERRIES
Everbearing and Standards; Tomato, Celery and all plants. Catalogue free.
Kelly Gardens
Station B, Spokane.

LAND PLASTER
HOW TO USE IT
SPOKANE SEED CO.
FERTILIZER Dept.
SPOKANE, WASH.

Nicotine Destroys Moth.

In his report to the state department of agriculture Horticultural Inspector F. E. DeSellem of North Yakima, Wash., gives facts concerning his experiences with nicotine spray, which seem to show that this form of spray may be made as effective or more so than the usual arsenate of lead.

"In comparing the results obtained from nicotine with those obtained from arsenate of lead it was found that on plots carefully sprayed at identically the same time and in the same manner with paste arsenate of lead at two pounds to 50 gallons of water there was an average of 97.33 per cent clean fruit as against over 99 per cent for nicotine," he says. "While other factors might explain such a small difference in favor of the nicotine, still in view of the fact that all plots were located in the same orchard, only a short distance apart; and that the trees were of the same age and variety, it seems at least reasonable to believe that nicotine sulphate used at the rate of 1 to 800 is as efficient as arsenate of lead at the rate of two pounds to 50 gallons of water in the control of codling moth. In addition the nicotine possesses additional killing properties against sucking insects."

THE FARM GARDEN

ARTICLE 12.

FOR WINTER USE

It is always a great mistake to plant a garden of radishes, turnips, early cabbage, string beans, lettuce and the like with a view of having garden truck for summer use only. This year it is a greater mistake. The farm garden should provide a large percentage of the food of the family during the winter months. The summer vegetables are all right and greatly to be desired for summer use, and some of them can be canned or dried for winter use the same as fruit. But a garden cultivated without full regard for the possibilities of winter supplies is only half a garden.

The progress of the last decade in canning and preserving perishable food stuffs is remarkable. It is now a fact that almost anything can be preserved in some way—even spinach or dandelion greens. The farmer and his family should plan definitely to produce vegetables that may be stored in some form, for, even though the prices now prevailing should be greatly reduced, it is good business for the farmer to produce food for his own family the year round, and bad business for him not to. The boys and girls can do much toward making the garden a success, but a far-seeing supervision should be maintained by the father or the mother. Gardens this year are a vital part of the farming operations.

There is no reason why the average farm in the northwest should not produce such food articles as these capable of being stored without special preservation methods: Potatoes, onions, dry beans, peas, parsnips, carrots, beets, salsify (oyster plant), pumpkins, squashes, cabbage and the like. Incidentally, why not grow a bushel of popcorn for the winter's evenings?

There is no reason, also, why the average farm should not produce such food articles as these, capable of being canned or dried or pickled or otherwise preserved in first-class condition for winter table use: Sweet corn, green beans, green peas, cucumbers, pickle onions, tomatoes, spinach or other greens and many others that can be grown successfully in many localities.

Methods of canning are not difficult to learn and put into practice. Many farm housewives are already capable in this line. Beginning in an early issue, The Farmer will publish a number of articles dealing with methods, drawing upon the experiences of those who have succeeded and upon the authorities at the college and university experiment stations.

Plant Food.

Plant food consists of 10 essential elements: Carbon, hydrogen, nitrogen, oxygen, sulphur, phosphorus, calcium, magnesium, potassium and iron. Chlorine, silicon and sodium are usually found in the ash, but are not essential to plant growth. If we knew what any particular soil contains and what any particular crop requires we would know what to supply, but here is the secret. G. L.

KILL This Bug
Before it Kills Your Profits



It's Aphis, and is destroying Apple profits everywhere. Already regarded by many growers the most destructive apple insect. It weakens the trees and injures the fruit. You can control Aphis, Red Bug, Leaf Hopper and other soft-bodied, sap-sucking insects with

Black Leaf 40
40% Nicotine
Kills Aphis

Manufactured by The Kentucky Tobacco Product Co., Incorporated, Louisville, Ky. Can be used with Lime-Sulphur, Arsenate of Lead, Bordeaux and other sprays as recommended. May be used separately, if desired, and at almost any time. Mixes perfectly with water. Costs about one cent per gallon diluted for the trees.
Recommended by Agricultural Colleges and Experiment Stations. Guaranteed by us and its manufacturers.

Free Spray Chart and Booklets
showing when and how to spray, and how to protect trees, vines and vegetables from insect pests.

Washington Dealers Listed Below

SPOKANE, WASHINGTON.
Spokane Seed Co
Inland Seed Co
McGowan Bros. Hardware Co.

SEATTLE, WASHINGTON.
Chas. H. Lilly Co.
Aabling-Boyce Seed Co.
Jacob Kaufman Co., Incorporated.
Seattle Seed Co.

KENNEWICK.
The Produce Co.

NORTH YAKIMA.
Morgan-McKaig Co.
Yakima County Horticultural union.
Yakima Rex Spray Co.
Yakima Valley Fruit Growers' Association.

WENATCHEE.
Wenatchee Produce Co.
Wenatchee Rex Spray Co.
Wenatchee North Central Fruit Distributors.
Wells & Wade.
Morris Hardware Co

And many other dealers in important fruit districts.

1 plus 1
High-grade grease plus powdered mica makes Mica Axle Grease go twice as far as ordinary grease, and results in far better lubrication.
STANDARD OIL COMPANY (California)
MICA AXLE GREASE

Home Grown CORN

In the arrangement of your crops do not forget CORN.

Our home grown varieties are well adapted to the Pacific northwestern states and will mature any place where corn will mature. See our catalog for varieties, description and prices.

The Inland Seed Co. Spokane, Wash.

Boyd's
Sash, Doors, Millwork, Roofing, Hardware, Paints.
Let the Builders' Bargain House save you money on all building materials. Send your building list for Boyd's low estimate or write for our free catalog of a thousand building bargains.
The Frederick Boyd Co.
2210 Westlake Avenue, Seattle

Washington Has Soldiers of Soil

Farmers of State Respond to Call for Great Production

(Continued from page four.)

body in this neighborhood is planning to increase their crops, but the backward spring will interfere very much. Peas and potatoes are the principal lines of increase.

W. H. BLACKLER, Pateros—I think there is a marked tendency on the part of the farmers in this community to increase the acreage of wheat, potatoes, corn, etc.

E. H. DUNNING, Richland—The farmers of this section are attempting to increase their crops this year by putting in more acreage and intensively farming. Potatoes and corn seem to be the leading crops for this year, beans next. Of course, the strawberry is the standard crop here.

JULIUS M. FISK, Spring Valley—If we can only get a normal yield of crops we will have done wonderfully well, owing to the late spring and scarcity of help. I and my neighbors are doing our level best.

PETER CONBOY, Glenwood—We are trying to increase our crops this year by getting more land in cultivation and raising more wheat, oats, hay, potatoes, as well as producing more butter, wool and meat—pork, beef and mutton.

T. R. BOOKE, Othello—We are doing all we can to produce what we can. About the only crop we market is wheat in this locality and that crop is all spring wheat this year. All winter wheat had to be reseeded.

H. S. SMITH, Prosser—There has been an effort inaugurated through the governor's proclamation to put all available lands under cultivation. I believe there is a county central committee with a representative in every community. The crops urged to be grown are the grains, potatoes, etc.

WELLINGTON FRENCH, Conconully—We are trying to increase our crops this year if we can get help, especially potatoes and beans, and, of course, wheat.

U. E. FRIES, Brewster—We are all trying to raise all the wheat and potatoes we possibly can and nobody in this locality is going to let land be idle.

CHARLES PALMER, Forks—We are not increasing our crops. We are 30 miles from a boat landing with no railroad. We keep all the stock we can feed. We raise some potatoes, but unless they are very high we have to feed them to the stock.

HOMER HART, Dungeness—I am putting every foot of land I can in crops of one kind or another. Also breaking up all of my old meadows. I am also keeping all my calves this year, vealing the bull calves and keeping the heifers. A good many of my neighbors are doing the same thing, where we used to knock them in the head as soon as they were born before. I think it is the duty of every American citizen to help the country out in the great problem that is before it at the present time.

A. P. BERTSCHI, Glenwood—I am doing all I can to increase crops by putting them in the best way I know how and clearing and breaking my land and starting a herd of Tamworth hogs. I believe every one here is doing his best towards raising hay, grain, dairy products, meat and potatoes.

J. R. AYERS, Kennewick—In our neighborhood little increase in production can be made, as the land is high-priced, therefore it is made to yield as much as possible every year.

J. T. CHAMBERS, Elma—There is a greater attempt than ever before to increase crop production, especially of wheat, potatoes and pork.

F. S. CALVIN, Goldendale—We are trying to raise more general farm produce and also more stock.

WESTERN WASHINGTON.

C. L. GELL, Cathlamet.—I intend to increase all my crops this year if I can get help and the weather to do so.

I. B. GRUNGSTAD, Skamokawa.—This is an exclusive dairy section. The dairymen here have a maximum number of cows at all times, so I do not believe there will be any increase in dairy products. As to other farm products there perhaps would have been an increased acreage of potatoes if the season had not been so late.

O. M. GORDON, Elma.—I have just finished clearning a new piece of land for the plow at a cost of $125 an acre. This land will produce oats at from 100 to 120 bushels per acre at a normal price of oats at $25 per ton. I have seen very little new land going under cultivation in this part of the country.

CHARLES ROTH, Arlington.—I have 20 acres more this season than last year. It costs $100 to $250 an acre to clear the land. We are paying from $28 to $30 a ton for hay; $80 for one ton of wheat chicken feed and other things in proportion. As we are in the dairy business mostly, our clearing will go into hay and oats. There will be more potatoes planted than last year. I am going to put in one-fourth acre of beans, also there will be more pigs raised, but not as many chickens.

NICK PEARSON, Monroe.—As for raising more crops in this locality, we are more interested in the dairy business but we are planning to raise crops so as to be more self-sustaining; that is, larger vegetable gardens and more hay and grain for our cows.

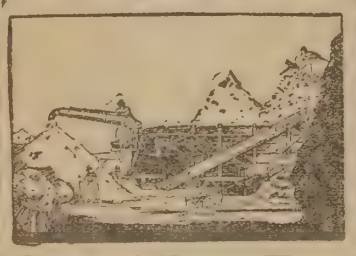
P. A. M'NAMARA, Sequim.—I am trying to raise more feed on my place for my dairy, mostly pea and oat hay and silage. Most of my neighbors are doing more plowing and putting in more grain than usual.

OTTO HAMPSON, Skamokawa.—I am arranging to plant a larger amount of corn, potatoes, rutabagas and cabbage, providing Mother Nature will cease the rain for a few days and give us a little sunshine.

M. J. BISHOP, Snohomish.—We are trying to encourage all families of timber workers to grow as much of their own living as possible. We will get behind our county committee. I am trying to increase in milk and eggs. Yours for a well fed common people.

Contestants Must Wait a Week More

The Farmer regrets that publication of the results of the farm information contest will have to be delayed a week. We expressed the hope last week that the prizes would be awarded in time to permit the announcement of the winners in this week's issue. The work of examining the papers has progressed slowly as we have taken great pains to insure fair and just consideration of each and every one.



Save Time For More Jobs

GET the big run with a Red River Special. It's built for fast work and GOOD work. *Beats out* the grain by *force*. You can speed up without losing grain or risking breakages. Make every minute count. Write us for the Red River Special paper. Learn about the big cylinder with its surplus teeth and extra large concave surface, and the "Man Behind the Gun" which gets 90 per cent of the grain. Farmers look for and hire the man with the

Red River Special

It saves enough more of your grain and time over other machines to pay your thresh bills. "We know we saved our thresh bill," says Joe Goetle and 10 other farmers of Herndon, Kan. Every bushel counts in the profits you make, and when you put the farmer's grain in the granary instead of the stack you can be sure of his business next year. Write us—also learn about our "Junior," the younger brother to the Red River Special. Just the right size for home threshing. Write

Nichols & Shepard Co.
In Continuous Business Since 1848
Builders Exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam Traction Engines and Oil-Gas Tractors
Battle Creek Michigan

Culbertson
GROTE-RANKIN CO
SPOKANE, WASH.

An Extra Special Waist Bargain

Limited Number Only on Sale

The illustration shows the exact appearance of this handsome garment as it is shown in our waist department.

Made of a good grade tub silk, that can be easily washed with any pure soap and water.



Ground of silk is in white and the stripes are in different popular sports shades.

Made with fashionable long sleeves. Collar can be worn either high or low. Sizes 36 to 44.

This waist on sale to our mail order customers for

$2.50

STATEMENT OF CONDITION OF

THE EXCHANGE NATIONAL BANK

SPOKANE, WASH.

At the Close of Business Tuesday, May 1, 1917.

RESOURCES		LIABILITIES	
Loans and discounts	$6,452,664.50	Capital stock	$1,000,000.00
U. S. bonds	1,181,000.00	Surplus	200,000.00
Banking house and other real estate	615,286.17	Undivided profits	70,411.42
Bonds and warrants	1,374,264.81	Circulation	1,000,000.00
Cash and due from banks	3,588,726.36	Deposits	10,941,530.42
	$13,211,941.84		$13,211,941.84

OFFICERS		DIRECTORS	
Edwin T. Coman, President		William Huntley	L. F. Connolly
William Huntley, Vice President	C. E. McBroom, Cashier	Albert Held	Edwin T. Coman
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		J. W. Wentworth	Geo. H. Huntley

We take an interest in the farmer and stockman as well as from him.

Read the Want Ads in This Issue

New ads appear each week in the "Want Ad" department of this paper. Just take a few moments to look them over you may find something you have been looking for to repay you for your effort.

Silos Too Expensive

So Say Some Who Have Not Used Them

By C. F. MONROE.
County Agriculturist, Montesano, Wash.

A number of farmers and dairymen state as their reason for not using silage, that the silo is expensive in original cost, is too expensive to fill, and the silage cannot be produced cheaply enough. Wishing to be "shown" the writer has secured information from a large number of silo owners.

Computations were made showing cost of silos per ton capacity, cost of filling per ton, and cost of silage per ton. The average cost (including foundation) of 24 silos in Grays Harbor county, Washington, was $2.63 for each ton they would contain. We find that the size of the silo has an indirect relation to cost per ton capacity. The average price per ton capacity of all silos having more than 80 tons capacity was $2.20. For that group of silos under 80 tons in capacity the average cost was $3.06. It would evidently not pay to cut down on the size of silo below the capacity desired just to save on the original cost. There is not a great difference in cost between any two makes of stave silos of equal capacity. The home made stave silo is proven cheaper per ton of capacity than the so-called patent silo. However, ease in getting the silage out and greater convenience in the use of the doors would be advantages of the latter over the former.

The Cost of Filling.

In figuring cost of filling these silos, the actual cost of labor, teams and machinery employed was taken into consideration. This cost varied from 43 cents to $1.76 per ton. This great variation may be better understood when we consider all the factors that have a bearing on the cost of this operation. These factors are size of machine, size of crew, distance from field to silo, management of labor and freedom from machine trouble.

The small machine also requires a smaller crew and less cash needs. The average cost of filling the twenty silos mentioned above was 92 cents per ton. When we consider that this cost was made under all conditions and comparing it with the cost of harvesting and preparing other home grown crops for use as feed, I am sure that it cannot be justly said that the filling cost is prohibitive.

In determining the cost the following factors were considered:

Rent of land, cost of seed, labor in putting in crops, total cost of filling, and depreciation. The latter item was taken as one-fifteenth of the silo cost, considering the life of a silo as 15 years. Rent of land was figured at $15 per acre. Cost of filling was actual cost as mentioned in the previous article. Labor of putting in crops was computed on the basis of $1.50 per man per day and $2 per day's work of a team. Here, as in other cases where labor was involved and where outside help was employed, the actual cost of the labor was considered. The time used in putting in the crops was the actual time as the owner gave it. Seed was figured on the following basis: Oats, 60 cents; wheat, $1.50; peas, $2.50; vetch, $3, and rye, 60 cents, per bushel, and corn at 6 cents per pound where used. The factors mentioned above were added for each silo and divided by the tonnage secured from the 1916 crop. The average cost of silage made in 20 silos in this county was $3.29. There is a difference in cost due to yield of the silage crop. The costs were averaged for all those silos where the crops used exceeded nine tons per acre. This group produced silage at a cost of $3.03 per ton. The other group where yields were less than nine tons per acre made silage costing $3.68 per ton. This marked difference is a great argument in favor of growing those crops that yield the heaviest tonnage.

In summing up the silo investigation, it is clear showing that the cost of a ton of silage depends on the following factors, ranked in the order of their importance:

First: Yield per acre, which, of course, determines in large measure the rental charge made against the silage.

Second: Cost of filling the silo.

Third: Labor of putting in silage crop.

Fourth: Cost of seed, and

Fifth: Which is of the least importance in determining the cost of a ton of silage—the original cost of the silo.

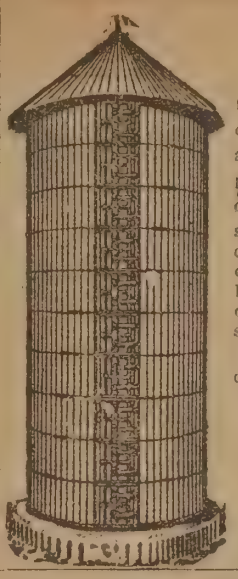
Thinning Sugar Beet Crop.

The first work in thinning the Yakima valley's 9000-acre sugar beet crop is in progress, requiring 600 to 800 laborers. German and Russian families have been brought in for part of the labor.

THE WASHINGTON FARMER.

Enclosed please find check for one dollar and a half to pay for The Washington Farmer, that is, continued for three years from the date of this check enclosed. I think this farm paper is one of the best, if not the best, farm paper I have ever received.

THOS. B. GOODWIN.
Thorp, Wash.



Your Country Is Calling

for a greater production. We must increase our supply of beef. There is only one way, and that is to buy a silo and have cheap feed for the winter months. Seventy-five per cent of the silos made in the United States are made of wooden staves. The McGoldrick Lumber company are selling a wooden stave silo with the most wonderful silo-door. (Get the reason why.) It swings as true as a safe door, under all conditions. It closes the opening airtight. It can not sag, swell or freeze into the frame. It is the only door that will make a silo frost and air proof at all seasons of the year.

Compare the above vital points with all other doors and door equipment.

McGoldrick Lumber Co., Spokane, Wash.

Please mail me your 1917 catalogue.

Name .....

Address .....



When you come to Spokane

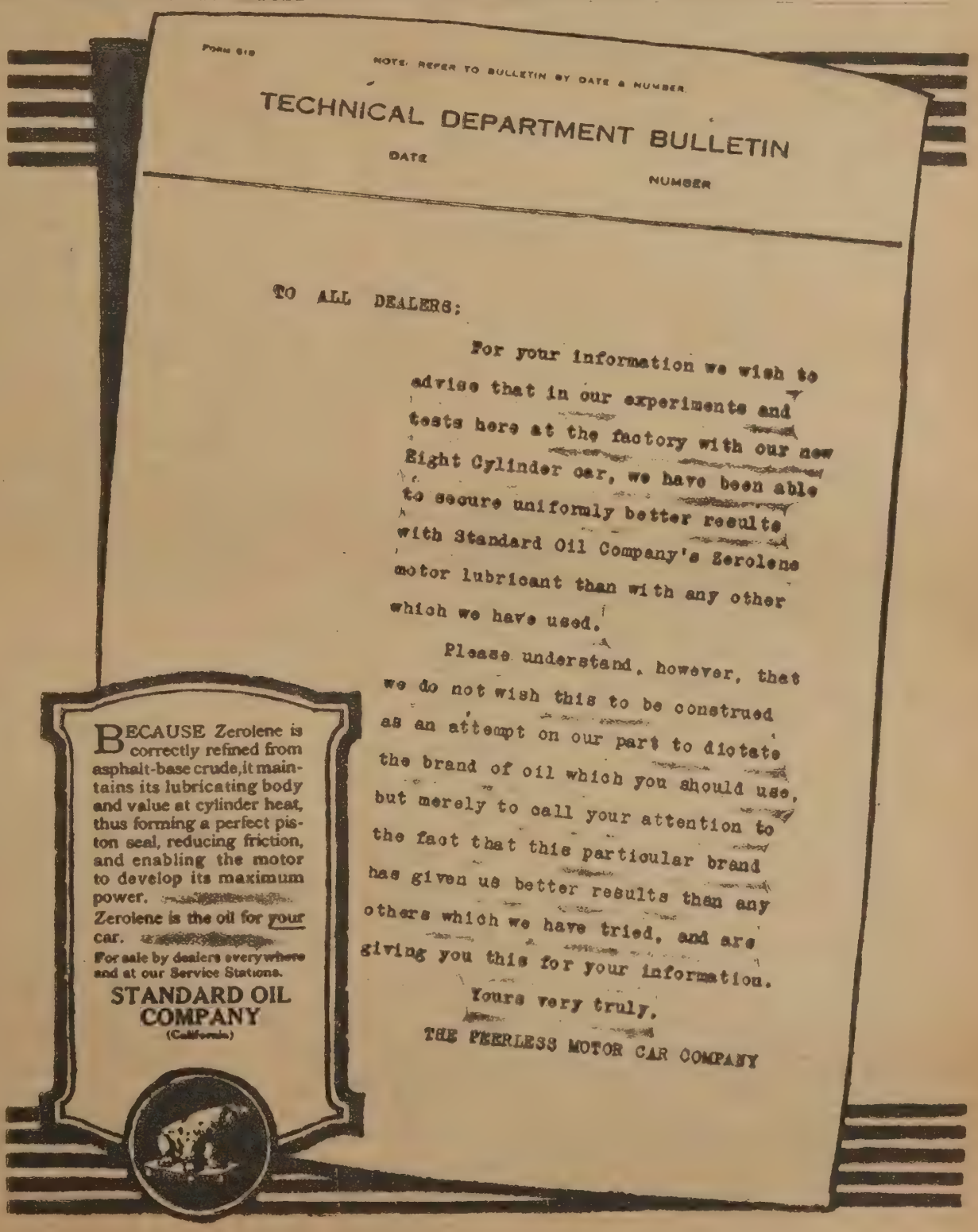
Stop at White's Hotel

Most centrally located hotel in city. Fine restaurant in connection. Rooms with hot and cold water 75c and up. Corner Stevens and Sprague.

JOSEPH A. WHITE, Prop.

Do You Need Live Stock?

Our **BREEDERS' DEPARTMENT** offers many splendid opportunities to purchase registered and, in some cases, grade stock of merit. Before you buy look these offers over.



Meier & Frank Co.—

Goods in the



The originators of a guarantee on Hosiery We are agents for Holeproof—perfect-fitting lisle and silk. Men's, women's, children's—30c to $1.

NEVER was there a time when the guarantee of a well-kn linked with the guarantee of a firm like Meier & Frank, me public. This great fourteen-story, block-wide store is a towe inferior goods and unfair prices.

Our immense buying power is being used to keep prices instance, we buy thirty thousand pairs of women's silk hose single price.

All over the store are illustrations of the great quantities i

Write for Our Big New Spring Catalog—IT'S FREE

If you have not already received a copy, **SIGN AND MAIL THE ATTACHED COUPON NOW.** Not a cheap, poorly printed catalog, but filled with thousands of illustrations, and articles all minutely described. Write for it TODAY. No cost or obligation. Tear out the coupon before you lay this issue of the Farmer aside.

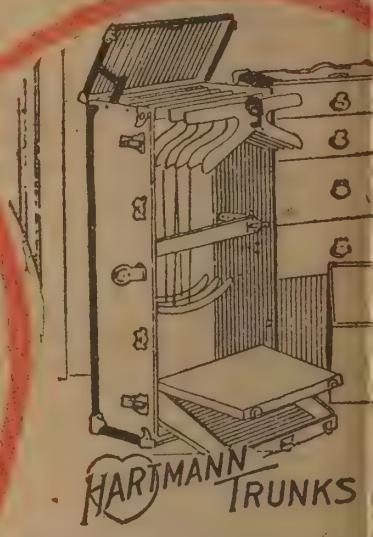
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THE QUA



The corset that always keeps up with style, but never forgets quality. A Warner will give you the correct figure for spring and summer. Largest stock in the northwest—$1 to $5.



Quit winding bobbins—the Eldredge Two-spool takes this burden out of sewing. Send for special catalog. Sold on small payments, as low as $1 week.



The originators of all that is mode and luggage. Hartmann Wardro cushion top, are the peer of a for special catalog. $23.50





Woven of long fleece wool, beautiful fade-proof designs, plain or fringed edges. Oregon City quality—famous for fifty years. Indian and Auto Robes $5 to $18.



"The Koverall keeps kids clean" child's play suit—better materia workmanship. All sizes—

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orthwest!

turer, the gainst For at a .

Just as the Meier & Frank Store of Civil War days was known all over Oregon for protecting its customers against unfair prices, so this giant store of today is **YOUR STORE, no matter where you live.** On thousands of ranches, in lumber and mining camps, in nearly every town and hamlet of the northwest, you will find discriminating people who trade with Meier & Frank of Portland.

Our big mail-order service, with its personal attention to every order—its prompt facilities—brings every one of the seventy-five Meier & Frank departments to your doorstep.

When You Come to Portland, Shop in This Great Complete Store—the Store for You.

Mail This Coupon Now for the Big Spring and Summer Catalog.

ank Co.
1857
E OF PORTLAND
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Sampeck Clothes
The Standard of America

Real New York style in Boys' Clothing. "Sampeck" outwears two ordinary suits. Handsome patterns. Prices, $10 to $20.



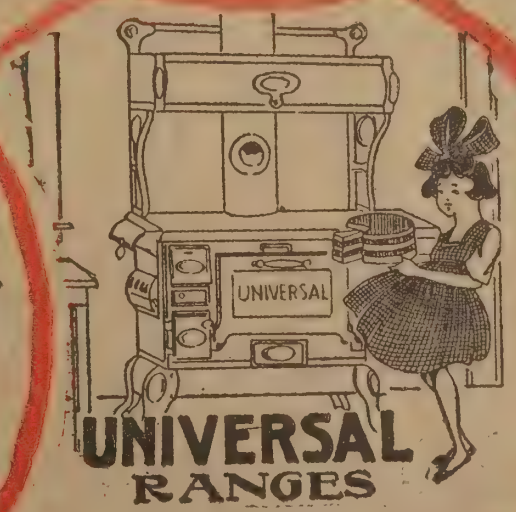
MUNSING WEAR

Munsingwear means good underwear. Well proportioned, well-made garments. Women's Munsingwear, 65c-$2.75; men's, $1-$6; children's, 65c-85c.



Eppo PETTICOAT

The original perfect-fitting Petticoat. Invisible elastic waistband and side opening make the Eppo fit perfectly. New colors and styles in silks —$5.95-$11.



UNIVERSAL RANGES

Justly famed for their stability of construction, fuel-saving and service-giving qualities. Write for special catalogs. All sizes and styles—$47.50 to $115.



Kayser GLOVES

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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

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CHAPTER XI.

In which the bunch grass boy tells of his Sunday school experiences, the first district school in his locality and of his several "love" affairs.

Going to church or Sunday school was a rare experience to me during the earlier years of my childhood on our farm in the Big Bend. This was not because my parents lacked in religious inclinations. Preachers and Sunday schools were lacking. After we had lived on our pioneer farm three or four years and I had reached the age of 12 or 13, we had preaching at Hartline, five miles away, once a month. The whole countryside turned out, the irreligious as well as the religious, and I am sure that in the collection plate quarters and half dollars outnumbered nickels and dimes, though these were bad wheat years and the people were dreadfully poor.

One summer Uncle Daddy Utt started a Sunday school in a small school house about six miles from our place. In a radius of six miles from Daddy Utt's Sunday school there were 10 or 12 children of Sunday school age, I being one. The school started out with a fair attendance, but it dwindled away till only Uncle Daddy and I were going.

I know now that those lonely Sunday schools which Uncle Daddy Utt and I held that summer have been a moulding influence on my life of great power. He counseled me to walk not in the ways of the ungodly, nor to stand in the way of sinners, nor to sit in the seat of the scornful. The righteous were like unto trees planted by the rivers of water, bringing forth fruit in season: and the foes of the righteous were but wind-driven chaff, doomed to be broken with rods of iron.

From Daddy Utt I heard the story of Job; and as I look back now to twenty-three or four years ago, I can not help likening Uncle Daddy to the Bible patriarch, Job, who had fourteen thousand sheep, six thousand camels, a thousand yoke of oxen and a thousand she asses. Daddy Utt's herd of live stock consisted only of horses and a large number of Holstein cows he had brought from Wisconsin. He had a huge, patriarchal beard, and in stature was a giant. Job was something like that, I think. But, unlike Job, who had seven sons and three daughters, Daddy Utt had seven daughters and no sons. He was a grand old man and put some great things into my life.

The first district school we had was opened in Pete King's house, which consisted of one 12x16 room. Pete certainly was a public-spirited man. The district was too poor to build a schoolhouse, so Pete moved out and lived with a near neighbor, turning his house to the uses of a schoolroom. Our teacher, Miss Minton, was a westerr bred girl and one of undoubted nerve. Her pupils ranged in size from tiny tots learning their A, B, Cs to young men and women—and some of the boys were pretty bad. One of the boys, who couldn't have been under 19 or 20 years of age, got recalcitrant, and she bravely waded into him with a long ruler, with which she whacked him on the back. In a flash of anger he sprang up, backed her struggling into a corner of the room and, with one hand, took the ruler from her and broke it to bits. For a moment or two he held her there in the corner, apparently not knowing what next to do.

That girl surely had courage. She coolly ran her eyes from one terrified face to another in the room, and finally, smiling as if nothing were wrong, asked one of the big boys if he would help her. The big boy was a coward. He grinned and said he "couldn't handle 'im." Still held there in the corner she again surveyed the situation, and this time quietly asked me if I would ride to Mr. Utt's and tell him that she wished a meeting of the school directors that afternoon. I was out of the room like a shot, and in another moment was fanning the breeze for Daddy's. Daddy Utt and his colleagues on the board arrived in due time, and the bad boy was then and there expelled from school.

The winter I was 14 school opened in the new Hartline school house, and I rode in the six miles, not missing a day, I believe, on account of storm or cold. I got up at 6 and hurried out to feed and saddle my pony, while mother got breakfast and father did the morning chores. At a quarter to 7, or 7 if I was a little slow, I would be in the saddle and away at swift gallop with my dinner pail on my arm. By 8 o'clock, when school took up, I would be in my seat.

There were 20 or 25 pupils, I think. Among them were Ola and Emma Hart, Lew Ames and his sister Ella; the two Dildine girls, who were grown up young ladies: Edna East and her brother Tommy, now cashier of a bank at Brewster. Willie Bundschue was the foot racer and wrestler of the school. Joe Mires' girls just about populated one whole side of the school room, and they ranged in size from tiny, tow-headed tots to quite mature young ladies. Others in the school I can not recall.

It is about as natural for a 14 or 15 year old boy to fall in love as it is for a baby to have colic, I think; and I am sure that I had my share of the 15-year-old colic. My first affinity was Frances. She was a town girl, however, and I plainly was a country jake. In other words, I was beneath her caste. Her father sold lumber and mine sold wheat when he raised any. I met her out in the country, the habitat of the lowly proletariat from which I sprang, one time; and politely doffed my hat. She impolitely turned up her nose. Then and there my love was turned to hate.

The desire for revenge brooded deep in my soul. The teacher let us "spell down" every Friday night; and it was assumed that the members of the country proletariat could not spell, and they were the last to be "chosen" by the leaders—Frances and one other.

But there was one of the plebian crowd in the school that learned to spell in a hurry. I went to bed with my spelling book and got up with it—late, very often. I carried it when I went to hunt the cows. I studied it in school when I was supposed to be studying something else. It was all because I wanted to "spell Frances down." She studied her spelling book too, but there was in my attack a sort of primitive savagery which was too much for her: so all through that term I spelled her down every Friday night as regularly as I had the opportunity.

Years later I matriculated at the state college of Washington, in which one of the requirements for final graduation was the passing of a spelling examination. I sailed triumphantly through the examination at the first trial, missing only one word in a hundred. My error, by the way, was really not in my spelling; for I spelled "crevasse" instead of "crevice." I was all because Frances had turned up her nose many years before, in response to my worshipful salutation.

My next love was Minervy. "Minervy" was the name we and her parents called her. Minerva was her name, of course. And with odds in her favor, she was a worthy namesake of the daughter of Jupiter, old Rome's Minerva, goddess of invention, intelligence, art, and other things, including schoolmasters and school children. I was a school child and she was my goddess for a time, but she plainly preferred another. So, like the psalmist of old, I "watered my couch with my tears" and relinquished this hope of love.

The next, and nearly the last, was Laura. She eventually transferred her facile affections to another, whose superior qualifications seemed to be that he was a famous "broncho-buster." He was in demand for exhibition riding at Fourth of July "scratching matches" and so on. He acquired fame by riding to a finish, one "Boxcar," an outlaw horse of most evil reputation. I couldn't have gone safely into a 10-acre corral wherein Boxcar was tied down. So I again lost in competition for the favor of Beauty. My burning desire after this was "to make something out of myself" so that this girl would regret her choice. But I could not think of any route to fame except broncho-busting, which would enable me to compete successfully with my competitor. In school, the teacher had said that "any boy might be president of the United States if he tried." I thought that an expedient worthy of consideration; though as between the presidency of the United States and "scratching" Boxcar in the presence of an applauding multitude I would have chosen the latter without an instant's hesitation.

In next week's issue, the Bunch Grass boy leads the 12th chapter of his unique remembrances with the following:

"Among the friends of my boyhood in pioneer eastern Washington, I remember none better than Rip Van Winkle, whom we called "Rip." "Rip's" real name was Baskerville, and he was a hunter, a trapper, a "water witch," a teller of bear stories of the kind that delighted the ear of a 10-year-old boy; and a southerner of the old south of the genuine, fire-consuming kind."

Tin Cans and Cold Storage

Food Preservation Was a Long Time Coming

By E. A. BRYAN

In this article Dr. Bryan makes it clear that the establishment of commercial canneries and cold storage plants have been a God-send alike to producer and consumer notwithstanding all the abuses of monopolies and trusts with which the public associates them.

Cold storage monoply and cannery trusts come in for their full share of cursing in a modern world in which "to rap" is the most pleasing occupation of the great majority. Doubtless there are monopolies and trusts in this as in every other field where there is a sharp demand for commodities. This ought not so to be and criminal prosecution and punishment ought to follow this crime against human society. Laws to prevent plans and conspiracies to raise artificially the price of food stuffs to the injury of the many for the benefit of the few are well night a thousand years old in Anglo-Saxon law. "Forestalling," or the purchase of the entire amount of fish or other food on its way to market was a criminal act as early as Edward III., as were any attempts to create an artificial scarcity of food. But no matter what evils have followed on the heels of quantity canning and cold storage, a little consideration will make one see that the processes themselves are unmixed blessings to the human race, of countless value to the vast multitude of producers of foodstuffs— that is to say, the farmers.

The race was a long, long time in discovering means and methods of food preservation. There was found enough for all but it came in gluts and much of it wasted before it could be used. The hunter made a great killing and he and his tribe gorged themselves and grew fat for a time, but the poor attempts to preserve the meat left them the victims of famine before another year rolled around.

Fishermen's luck was to scoop out a net full from a school of fish and fish long and catch nothing.

Native fruits and berries follow the same law.

One of the most useful means of preservation of food stuffs was by drying. Dried meats, dried fish, dried corn and squash, dried fruits and berries early helped to equalize the difficulties of nature's method of preparing a bountiful harvest once a year—and most harvests at the same time of year.

Preservation with salt is very old and with spices, including peppers, likewise old but not so ancient. Four hundred years ago all Europe depended on the pepper and spice trade—for it used cured meats almost exclusively, and peppers and spices were used far more extensively than in modern times to preserve meats or to cover up tastes and odors, that civilized man might not otherwise endure so easily. In fact, Columbus's discovery of America was closely connected with the necessity for these means of food preservation. The importance of the East Indies lay in the fact that they yielded these rich

(Continued on page nineteen.)

Chickadee Is Codling Moth's Doom

At a recent meeting of the Spokane Bird club, Professor J. W. Hungate of the Cheney (Wash.) normal school gave a lecture illustrated with charts showing the food of different birds.



Black-capped chickadee. Length, about 5 1-4 inches.

To show how beneficial are birds in exterminating insects, Professor Hungate stated that the chickadee was known to feed on the female of the codling moth, as many as 80 of them being found on examination in the bird's stomach. As the codling moth lays 185 eggs, the chickadee, eating 80 a day of the pests, performs a great service to fruit men. Other birds, such as woodpeckers and nuthatches, are similarly beneficial.

The lecturer insisted that, a few species excepted, hawks and owls were more beneficial than harmful and should be protected.

Birds like the robin, which have a bad character for feeding on fruit, in a great many cases, Professor Hungate said, more than made up for their forays in gardens and orchards by their usefulness in other ways and that if they had more wild fruit to have access to they would levy less tribute on domestic fruit.

Ye Have Heard That It Was Said by Them of Old Time

THE SABBATH DAY.

"Remember the Sabbath day to keep it holy. Six days shalt thou labor and do all thy work; but the seventh day is the Sabbath of the Lord, thy God; in it thou shalt not do any work; thou nor thy son, nor thy daughter, thy man servant, nor thy maid servant, nor thy cattle, nor thy stranger that is within thy gates; for in six days the Lord made heaven and earth, the sea and all that in them is, and rested the seventh day; wherefore the Lord blessed the Sabbath day and hallowed it."—Exodus 20:8-11.

We suppose of all the 10 commandments, there is none so utterly disregarded as this one. For every reason that can be mustered up under the sun, we disobey the injunction and command to remember the Sabbath. We are told it is not scientific, and we are told that it does not mean what it says.

We do not do any thundering over it; it thunders enough itself.

A man-made law which has not a penalty attached in plain language is regarded as of no effect. Not so God's laws. There is a penalty, whether it is written or not, and it is enforced rigidly by the very nature of our humanity. If we disobey we pay.—H. H. B.

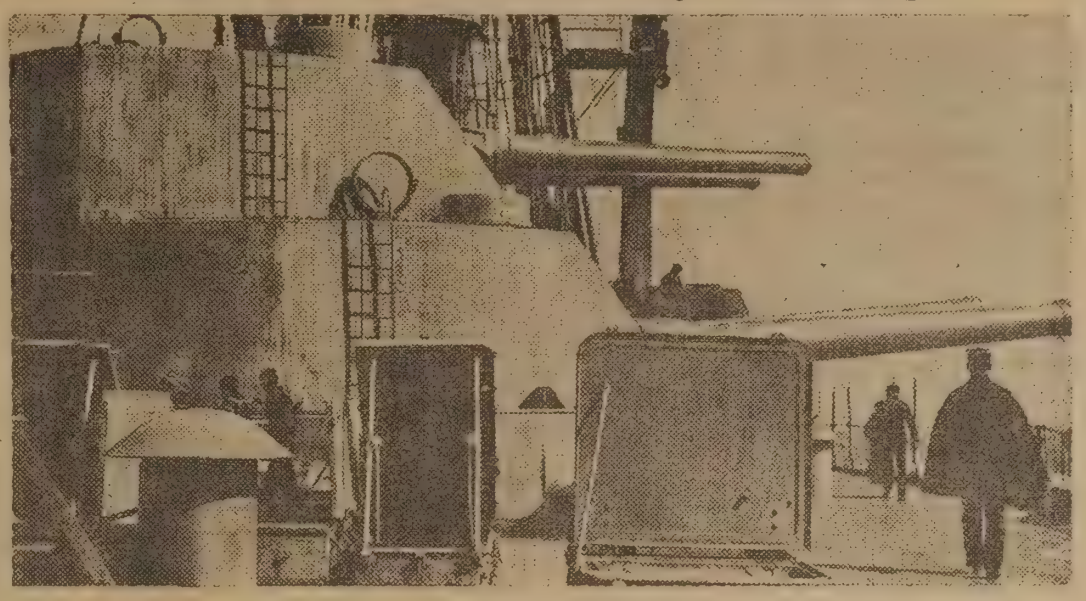
All the World's a Stage, and All the Men and Women Merely Players

Soon to Become Bride.



Miss Alice Ford Huntington, debutante sister of Mrs. Vincent Astor, whose parents, Mr. and Mrs. Robert Huntington of Hopeland house, Staatsburg, N. Y., have announced her engagement to Charles H. Marshall of New York. Miss Huntington was introduced to eastern society at a ball given by Mrs. Astor last January.

Turret of U. S. Pre-Dreadnaught Battleship



—Photo by International Film Service.

Two of the four 12-inch guns of the U. S. S. Georgia, one of Uncle Sam's pre-dreadnaught battleships. In addition the Georgia carries eight eight-inch, 12 six-inch and 12 three-inch rapid-fire rifles.

Commander of Marines.



Major General George Barnett, commander of the United tates marine corps, known as "the soldiers of the sea." The marine corps is an independent branch of the military service serving generally under the direction of the secretary of the navy. The corps may be detached by order of the president for service with the army and on various occasions the corps has so served. The term of enlistment in the marine corps is four years.

Commanders of U. S. Destroyers



These are the commanders of the various divisions of the United States Atlantic destroyer flotilla, the men who will keep Atlantic steamer lines open and suppress the activities of German submarines. Lieutenant Commander Charles Courtney (upper left) commands a flotilla of nine destroyers, Lieutenant Commander Joseph Taussig (upper right) commands eight destroyers, Lieutenant E. A. McIntyre (lower left) is in command of the oil-burning destroyer Henley, one of the fastest vessels of its kind; Lieutenant Neal Nichols (lower right) commands seven destroyers.

Resisting a Bombing Attack



—Photo by International Film Service.

In the picture are shown rookies in training at the Great Lakes naval training station resisting a bombing attack upon a naval landing party.

General Joffre.



General Marechal Joffre, former commander-in-chief of the allied armies, is a distinguished member of the French war mission to the United States.

Altogether Too Small.



—Kansas City Star.

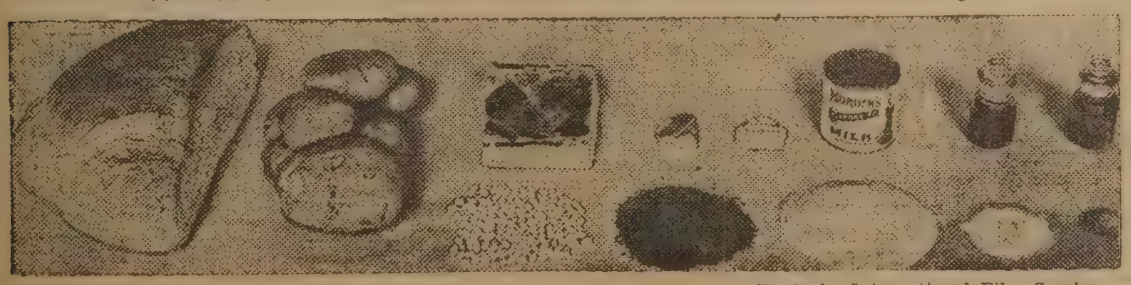
Most of us are underestimating the size of our adopted child.

Will He Get Through?



—Cleveland Leader.

What Uncle Sam Feeds His Men of the Army



—Photo by International Film Service.

The picture above gives one an idea of the typical daily field ration of the soldiers of the United States army. The photograph is by courtesy of the American Museum of Safety.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merrill Co.

CHAPTE XIX.—(Continued.)

Mary was imperious and impatient by nature, but upon rare and urgent occasions could employ the very smoothest sort of finesse.

Her promise to marry Louis of a France had been given under the stress of a frantic fear for Brandon and without the slightest mental reservation, for it was given to save his life, as she would have given her hands or her eyes, her life or her very soul itself; but now that the imminent danger was passed she began to revolve schemes to evade her promise and have Brandon notwithstanding. She knew that under the present arrangement his life depended upon her marriage, but she had never lost faith in her ability to handle the king if she had but a little time in which to operate, and had secretly regretted that she had not, in place of flight, opened her campaign along the line of feminine diplomacy at the very beginning.

Henry was a dullard mentally, while Mary's mind was keen and alert—two facts of which the girl was perfectly aware—so it was no wonder she had such confidence in herself. When she first heard of Brandon's sentence her fear for him was so great and the need for action so urgent that she could not resort to her usual methods for turning matters her way, but eagerly applied the first and quickest remedy offered. Now, however, that she had a breathing spell and time in which to operate her more slowly moving, but, as she thought, equally sure forces of cajolery and persuasion, she determined to marshal the legions of her wit and carry war into the enemy's country at once.

Henry's brual selfishness in forcing upon her the French marriage, together with his cruel condemnation of Brandon, and his vile insinuations against herself, had driven nearly every spark of affection for her brother from her heart. But she felt that she might feign an affection she did not feel, and that what she so wanted would be cheap at the price. Cheap? It would be cheap at the cost of her immortal soul. Cheap? What she wanted was life's condensed sweets—the man she loved; and what she wanted to escape was life's distilled bitterness—marriage with the man she loathed. None but a pure woman can know the torture of that. I saw this whole disastrous campaign from start to finish. Mary began with a wide flank movement conducted under masked batteries and skilfully executed. She sighed over her troubles and cried a great deal, but told the king he had been such a dear, kind brother to her that she would gladly do anything to please him and advance his interests. She said it would be torture to live with that old creature, King Louis, but she would do it willingly to help her handsome brother, no matter how much she might suffer.

The king laughed and said: "Poor old Louis! What about him? What about his suffering? He thinks he is making such a fine bargain, but the Lord pity him, when he has my little sister in his side for a thorn. He had better employ some energetic soul to prick him with needles and bodkins, for I think there is more power for disturbance in this little body than in any other equal amount of space in all the universe. You will furnish him all the trouble he wants, won't you, sister?"

"I shall try," said the princess demurely, perfectly willing to obey in everything.

"Devil a doubt of that, and you will succeed too, or my crown's a stew-pan," and he laughed at the huge joke he was about to perpetrate on his poor, old royal brother.

It would seem that the tremendous dose of flattery administered by Mary would have been so plainly self-interested as to alarm the dullest perception, but Henry's vanity was so dense, and his appetite for flattery so great, that he accepted it all without suspicion, and it made him quite affable and gracious.

Mary kept up her show of affection and docile obedience for a week or two until she thought Henry's suspicions were allayed; and then, after having done enough petting and fondling, as she thought, to start the earth itself a-moving—as some men are foolish enough to say it really does—she began the attack direct by putting her arms about the king's neck, and piteously begging him not to sacrifice her whole life by sending her to France.

Her pathetic soul-charged appeal might have softened the heart of Caligula himself; but Henry was not even cruel. He was simply an animal so absorbed in himself that he could not feel for others.

"Oh! it is out at last," he said with a laugh. "I thought all this sweetness must have been for something. So the lady wants her Brandon and doesn't want her Louis, yet is willing to obey her dear, kind brother? Well, we'll take her at her word and let her obey. You may as well understand, once and for all, that you are to go to France. You promised to go decently if I would not cut off that fellow's head, and now I tell you that if I hear another whimper from you off it comes, and you will go to France, too."

This brought Mary to terms quickly enough. It touched her one vulnerable spot—her love.

"I will go; I promise it again. You shall never hear another word of complaint from me if you give me your royal word that no harm shall come to himt—o him," and she put her hands over her face to conceal her tears as she softly wept.

"The day you sail for France, Brandon shall go free and shall again have his old post at court. I like the fellow as a good companion, and really believe you are more to blame than he."

"I am all to blame, and am ready this day to pay the penalty. I am at your disposal to go when and where you choose," answered Mary most pathetically.

Poor, fair Proserpina, with no kind mother Demeter to help her. The ground will soon open, and Pluto will have his bride.

That evening Cavendish took me aside and said his master, Wolsey, wished to speak to me privately at a convenient opportunity. So, when the bishop left his card-table, an hour later, I threw myself in his way. He spoke gayly to me, and we walked down the corridor arm in arm. I could not imagine what was wanted, but presently it came out: "My dear Caskoden;" had I been one for whom he could have had any use I should have grown suspicious. "My dear Caskoden, I know I can trust you; especially when that which I have to say is for the happiness of your friends. I am sure you will never name me in connection with the suggestion I am about to make, and will use the thought only as your own."

I did not know what was coming, but gave him the strongest assurance of my trustwórthiness.

"It is this: Louis of France is little better than a dead man. King Henry, perhaps, is not fully aware of this, and, if he is, he has never considered the probability of his speedy death. The thought occurred to me that although the princess can not dissuade her brother from this marriage, she may be able, in view of her ready and cheerful compliance, to extract some virtue out of her sore necessity and induce him to promise that, in case of the death of Louis, she herself shall choose her second husband."

"My lord," I replied, quickly grasping the point; "it is small wonder you rule this land. You have both brain and heart."

"I thank you, Sir Edwin, and hope that both may always be at the service of you and your friends."

I gave the suggestion to Mary as my own, recommending that she proffer her request to the king in the presence of Wolsey, and, although she had little faith or hope, she determined to try.

Within a day or two an opportunity offered, and she said to Henry: "I am ready to go to France any time you wish, and shall do it decently and willingly; but if I do so much for you, brother, you might at least promise me that when King Louis is dead I may marry whomsoever I wish. He will probably live forever, but let me have at least that hope to give me what cheer it may while I suffer."

The ever-present Wolsey, who was standing near and heard Mary's petition, interposed: "Let me add my prayer to that of her highness. We must give her her own way in something."

Mary was such a complete picture of wretchedness that I thought at the time she had really found a tender spot in Henry's heart, for he gave the promise. Since then I have learned, as you will shortly, that it was given simply to pacify the girl, and without any intention whatever of being kept; but that, in case of the death of King Louis, Henry intended again to use his sister to his own advantage.

To be a beautiful princess is not to enjoy the bliss some people imagine. The earth is apt to open at any time, and Pluto to snatch her away to—the Lord knows where.

Mary again poured out her soul on paper—a libation intended for Brandon. I had made a dozen attemtps, in as many different ways, to deliver her letters, but every effort was a failure, and this missive met the fate of the others. De Longueville kept close watch on his master's rival, and complained to Henry about these attempts at communication. Henry laughed and said he would see that they were stopped, but paid no more attention to the matter.

If Mary, before her interview with Henry, had been averse to the French marriage, she was now equally anxious to hurry it on, and longed to go upon the rack in order that Brandon might be free. He, of course, objected as strenuously as possible to the purchase of his life by her marriage to Louis, but his better judgment told him—in fact, had told him from the first that she would be compelled eventually to marry the French king, and common sense told him if it must be, she might as well save his life at the same time. Furthermore, he felt a certain sense of delight in owing his life to her, and knew that the fact that she had saved him—that her sacrifice had not all been in vain—would make it easier for her to bear.

The most beautiful feature of the relations between these two lovers was their entire faith in each other. The way of their true love was at least not roughened by cobblestones of doubt, however impassable it was from mountains of opposition.

My inability to deliver Mary's letters did not deter her from writing them; and she was to be married in a few days—de Longueville to act as proxy—she devoted her entire time to her letters, and wrote pages upon pages, which she left with me to be delivered "after death," as she called her marriage.

At this time I was called away from court for a day of two, and when I returned and called upon Brandon at the Tower, I found him whistling and singing, apparently as happy as a lark. "You heartless dog," thought I, at first; but I soon found that he felt more than happiness—exaltation.

"Have you seen her?" I asked.

"Who?" As if there were more than one woman in all the world for him.

"The princess."

"Not since I left her at Bristol."

I believed then, and believe now, that this was a point blank falsehood—a very unusual thing for Brandon—but for some reason probably necessary in this case.

There was an expression in his face which I could not interpret, but he wrote, as if carelessly scribbling on a scrap of paper that lay upon the table, the words, "Be careful," and I took the hint—we were watched. There is an unpleasant sensation when one feels that he is watched by unseen eyes, and after talking for awhile on common topics I left and took a boat for Greenwich.

When I arrived at the palace and saw Mary, what was my surprise to find her as bright and jubilant as I had left Brandon. She, too, laughed and sang, and was so happy that she lighted the whole room. What did it all mean? There was but one explanation; they had met, and there was some new plan on foot—with a fatal ending. The next failure would mean death to Brandon, as certainly as the sun rises in the east. What the plan was I could not guess. With Brandon in the Tower under guard both day and night, and Mary as closely guarded in the palace, I could not see any way of escape for either of them, nor how they could possibly have come together.

Brandon had not told me, I supposed, for fear of being overheard, and Mary, although she had the opportunity, was equally noncommunicative, so I had recourse to Jane upon the first occasion. She, by the way, was as blue and sad-

Gun Is Poor Weapon for Coyotes

Strychnine and Steel Traps Giving Best Results

Government hunters rarely shoot a coyote, even though they have a good opportunity. The reason is manifest. Though the shot may bring down one animal, it arouses in others a suspicion of man that makes them much harder to capture by means of poison and traps. It also requires excellent marksmanship to hit a coyote under ordinary conditions.

In discussing the methods used by the government men in the northwest, E. F. Averill, predatory animal inspector for the district of Washington and Oregon, urges upon hunters, farmers and stockmen to make special effort to kill the old coyotes, at least the mother, at this season of the year when destroying a den. This can be done by the use of traps with a little care and cunning.

If the pups are dug out or smoked out of the den and killed, the old coyotes will come around looking for them and unless they are left so they can be readily found, will linger about the den a few days. Hunters are familiar with the sight of a pair of ears sticking up above a sage brush on a hilltop near the den, or a coyote face peering around the brush, or some other similar protection. This suggests immediately the proper place for traps—behind some such obstruction on the sky line. Another place where the trap may be placed with a chance of results is at the den. While the old animals are wary, and will enter the den only after much precautionary watching and investigations, it is possible to catch at least the mother at the opening. Sometimes, also, says Mr. Averill, she will dig into the den from above a few feet back from the original mouth, or enter through a side entrance that has not been much or any used. Traps at such places may bring results.

Traps must always be hidden from view and must bear no odor of human beings or other enemies of coyotes. To set a trap to meet these requirements is a real art. As an aid in preventing the coyote's caution keeping him away, hunters frequently capture one alive, keep it in captivity for a few days and then scatter "scent" in the vicinity of the trap from the excretions obtained This method has proved highly effective.

How to Use Poison.

Inspector Averill does not recommend the use of poison during the summer months, considering trapping much more effective at this season. Winter is the best time for poisoning.

In poisoning, it is a great mistake to place strychnine in the bait in any other form than capsule. If the poison is placed in the crystal or powdered form, it quickly penetrates all parts of the bait and gives it a bitter taste that the coyotes dislike, and which also puts them on their guard. It is found successful to use No. 2 capsules, which will contain enough strychnine to kill the animal. This capsule should be placed in an animal carcass promiscuously, but in a small piece of fat from some animal, such as a beef or a dead horse or chicken. The fat should be handled at all times with wooden tools if possible, or should at least be dropped with a wooden tool when distributed for the coyote to pick up. If handled at all with the hands, the bait should be dipped in blood before scattering.

Such bait may be used about a half-eaten carcass, or other place frequented by coyotes, and should always be dropped from horseback, as the slightest evidence of human beings puts the coyotes on guard against trouble.

At hog-killing time is an appropriate time to poison. Small bits of the hog offal, occasionally dropping one of the poisoned baits. Equal care should be taken in handling this bait as in the case of the fat balls.

faced as Mary was joyous. I asked her if the princess and Brandon had met, and she asdly said: "I do not know. We went down to London yesterday, and as we returned stopped at Bridewell House, where we found the king and Wolsey. The princess left the room saying she would return in a few minutes, and then Wolsey went out, leaving me alone with the king. Mary did not return for half an hour, and she may have seen Master Brandon during that time. I do not understand how the meeting could have occurred, but that is the only time she has been away from me." Here Jane deliberately put her head on my shoulder and began to weep piteously.

"What is the trouble?" I asked.

She shook her head: "I can not, dare not tell you."

"Oh! but you must, you must," and I insisted so emphatically that she at length said:

"The king!"

"The king God in heaven, Jane, tell me quickly." I had noticed Henry of late casting glances at my beautiful little Jane, and had seen him try to kiss her a few days before, as I have told you. This annoyed me very much, but I thought little of it, as it was his habit to ogle every pretty face. When urged, Jane said between her sobs: "He tried to kiss me and to—mistreat me when Wolsey left the room at Bridewell House. I may have been used to detain him, while Mary met Master Brandon, but if so, I am sure she knew nothing of it."

"And what did you do?"

"I struggled away from him and snatched this dagger from my breast, telling him that if he took but one step toward me I would plunge it in my heart; and he said I was a fool."

"God keep you always a fool," said I prayerfully. "How long has this been going on?"

"A month or two; but I have always been able to run away from him. He has been growing more importunate of late, so I bought a dagger that very day, and had it not one hour too soon." With this she drew out a gleaming little weapon that flashed in the rays of the candle.

This was trouble in earnest for me, and I showed it very plainly. Then Jane timidly put her hand in mine, for the first time in her life and murmured:

"We will be married, Edwin, if you wish, before we return from France." She was glad to fly to me to save herself from Henry, and I was glad even to be the lesser of two evils.

As to whether my two friends met or not that day at Bridewell I can not say; but I think they did. They had in some way come to an understanding that lightened both their hearts before Mary left for France, and this had been their only possible opportunity. Jane and I were always taken into their confidence on other occasions, but as to this meeting, if any there was, we have never been told a word. My belief is that the meeting was contrived by Wolsey upon a solemn promise from Brandon and Mary never to reveal it, and if so they have sacredly kept their word.

On the 13th of August, 1514, Mary Tudor, with her golden hair falling over her shoulders, was married at Greenwich to Louis de Valois; De Longueville acting as his French majesty's proxy. Poor, fair, Proserpina!

CHAPTER XX.

So it came to pass that Mary was married unto Louis and went down into France.

(Again the editor takes the liberty of substituting Hall's quaint account of Mary's journey to France.

Then when all things were redy for the conueyaunce of this noble Ladye, the kyng her brother in the moneth of Auguste, and the xV daye, with the quene his wife and his sayde sister and al the court came to Douer and there taryed, for the wynde was trobious and the wether fowle, in so muche that shippe of the kynges called the Libeck of IXC, tonne was dryuen a shore before Sangate and there brase & of VIC. men scantely escaped iiiC and yet the most part of them were hurt with the wrecke. When the wether was fayre, then al her wardrobe, stable, and riches was shipped, and such as were appoyncted to geue their attendaunce on her as the duke of Norfolke, the Marques of Dorset, the Bysshop of Durham, the Earle of Surrey, the lorde Delawar, sir Thomas Bulleyn and many other knights, Squyers, getlemen & Ladies, al these went to shippe and the sayde ladye toke her leaue of the quene in the castell of Douer, and the king brought her to the sea syde, and kissed her, and betoke her to GOD and the fortune of the see and to the gouernaunce of the French king her husband. Thus at the hower of foure of the clodck in the morenynge thys fayre ladye toke her shippe with al her noble compaignie; and when they had sayled a quarter of the see, the wynde rose and seuered some of the shippes to Cayles, and some in Flaunders and her shippe with greate difficultie to Bulleyn, and with great leopardy at the entrying of the haven, for the master ran the shippe hard on shore, but the botes were redy and receyed this noble ladye, and at the lanndyng Sir Christopher Garnysha stode in the water and toke her in his armes, and so caryed her to land, where the Duke of Vandosme and a Cardynall with many estate receyued her, and her ladies, and welcommed all the noble men into the countrey, and so the quene and all her trayne came to Bulleyn and ther rested, and from thence she remoued zy dyuerse lodgynges tyll she came all most within iii miles of Abuyle besyde the forrest of Arders and ther kynge Loyes vppon a greate courser met her (which he so longe desired) but she toke her way righte on, not stopping to conurse. Then he returned to Arbuyle by a secret waye, and she was with greate triumphe, procession and pageantes receiyued into the toune of Abuyle the VIII day of October by the Dolphin, which receyued her with greate honor. She was appareiiled in cloth of siluer, her horse was trapped in goldsmythes work very rychly. After her followed xxxvi ladies al their palfreys trapped with crymsyn veluet, embraudered; after the folowed one charyott of cloth of tyssue, the seconde clothe of golde and the third crymsyn veluet embraudered with kynges armes and hers, full of roses. After them folowed a greate nomber of archers and then wagons laden with their stuf. Greate was the riches in plate, ieuls, money and hangynges that his ladye brought into France. The Moday beyng the daye of Sayncte Denyce, the same kynge Leyes maried the lady Mary in the greate church of Abuyle, bothe appareled in goldesmythes worke. After the masse was done ther was a greate banket and fest and the ladyes of England highly entreteyned.

(To be continued in the next issue.)

Tin Cans and Storage

Bring in Era of Food Conservation

(Continued from page sixteen.)

spices. The Turks were threatening the caravan routes by which these were brought from the far east and under Selim, the Magnificent, the trade routes were finally cut off. To meet this and save the rich trade of India, the doubling of the Cape of Good Hope was attempted and accomplished by the Portugese, while the bolder spirit of Columbus, believing the earth to be round, sought a western path to the East Indies and found the West Indies and a new world.

Sugar is by no means a very ancient commodity and its production in large quantities is strictly modern. Excellent preservative as it is, its relative costliness has restricted it to a list of dainties in which "preserves" and jams and marmalade and "butters" have played, for some generations, a conspicuous part.

The discovery of a method of preservation by sterilizing with heat and, while hot, sealing in an air tight container, finally ending with the triumph of the tin can as the prince of containers, was a discovery deserving to be ranked with the invention of the cotton gin, the spinning jenney and the power loom in its beneficence to mankind. At first, the use of the canning device was almost purely domestic, and was confined to a few things, chiefly the standard fruits. The other day I ate canned sauer kraut and the boys' and girls' canning clubs will convince you that there are few products—animal or vegetable—that you can not successfully can.

The establishment of commercial canneries was inevitable and has been a God-send, alike to producer and consumer. In regions of good production of perishable products, the only hope for a market lies in taking care of the surplus by drying, canning or other means of preservation. What otherwise would be utterly wasted, ultimately finds its way and at low cost, to the ultimate consumer.

Preservation by cold is not so new as its application in cold storage plants. When I was a boy, a radius of a few miles and a short month were limitations which made the peach crop largely a waste to the producer and an unknown quantity to the bulk of possible consumers. Contrasted with that, the era of cold storage has given to a vast multitude at low cost, relatively, fresh meats, fruits, eggs and dairy products for 12 months in the year. Its effect on stablizing the price of butter, eggs and fruits during the productive season and the non-productive season can hardly be estimated.

The possibilities of cold storage on the farm—I do not now refer to well ventilated cellars and other cool rooms, but to genuine cold storage—has hardly been considered. Wherever small power units are installed on the farm, their use for the production of artificial refrigeration or at least cooling, can hardly be overlooked. Such a plant as every modern small butcher shop now uses is not costly and can be operated as satisfactorily as farm lighting or pumping or grinding can be done.

In this day when farm labor will not put up with a fat pork diet day in and day out, but demands its alternation with fresh beef or mutton, a small refrigerating unit would be a matter of economy as well as of comfort on the larger and more remote farms.

Even the farm buys enormous quantities of canned goods in the aggregate and mostly goes without the storage. Both of these means of saving the surplus products and supplying a strong demand on the farm are now available.

The attitude of the farmer toward commercial canning and commercial cold storage should be, from the point of self interest as well as the public welfare, one of encouragement and development. It is a wholly distinct problem from that of monopoly, against which strong blows should always be directly aimed.

GOES AFTER THE GRAFTERS.

To the Editor of The Washington Farmer: Your paper suits me better than any farm paper I take. I appreciate the market reports and the way you go after grafters, etc. Yes, and the experiences of so many different farmers in different localities, and many other things.—H. E. YEAGER, Monroe, Wash.

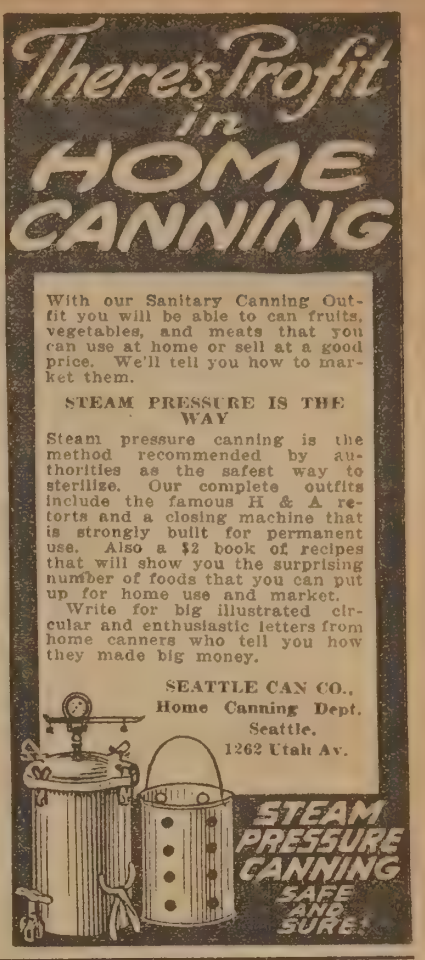
No Encouragement.

Brother—Mabel told me this morning she couldn't sleep thinking of me.

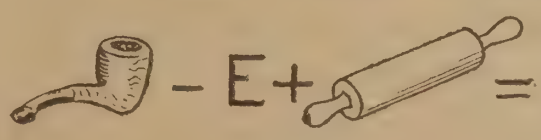
Sister—That means nothing. A lobster, my dear Charley, often has the same effect.—Judge.

Edging Close to the Truth.

A farmer who understood human nature said. "If you ant your boy to to stay at home, don't bear too hard on the grindstone when he turns the crank."—Christian Herald.



STAR CLOTHES REEL IS THE PRIZE



Any person sending the correct answer to the above question before May 22nd, together with $2 in the form of money order, 2-cent stamps or personal check, will receive **THE WASHINGTON FARMER** for three years and one of our special Star clothes reels described below. The reel is worth $1.25 at retail, while the subscription costs $1.50 even at our special rate, a total value of $2.75. If your subscription is paid ahead it will be extended.

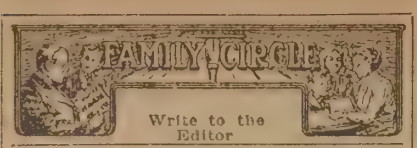


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Quiz Editor, The Washington Farmer
Review Building, Spokane, Wash.



ALICE W. BARLAND
Editorial Contributor

Favorite Mottoes

What is the quotation or what are the words which have helped you in the journey of life?

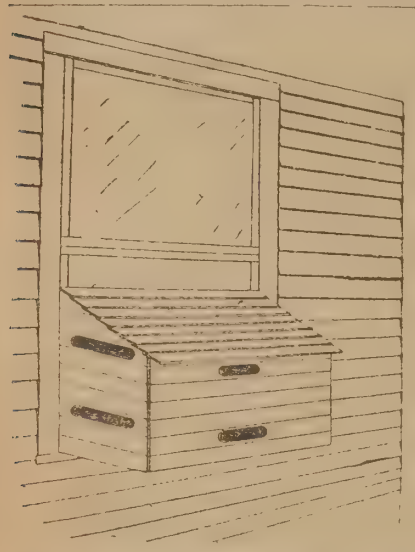
Send it to the editor of The Farmer and let it help another.

To the Editor: My favorite motto in life is to live for others. We are taught that no man lives unto himself. No matter how he lives, he is living for others, either for good or bad. (Romans 14-17). A. G. BARBER.
North Bend, Wash.

Cold Closet

Box Fastened to the Outer Wall

A properly ventilated cold closet built into an outer wall is an excellent means for lessening the ice bills, especially during the spring and fall months, when the nights are cool, says a bulletin of the University of Missouri agricultural extension service. It is in reality a box fastened against the outer wall with a door opening into the kitchen. Holes for ventilation may be bored through the lower shelves and at the top of the outside wall and these protected by screen cloth. Heavy



Such a convenience saves many steps to the cellar or cave, especialy in the fall and spring when the nights and mornings are cool enough for milk and other foods to remain outside.

screening may be used for shelves instead of the boards. The closet may have double insulated walls, but it is usually a simple box. It may be of any dimensions desirable, but one 24 inches wide, 36 inches high and 15 inches deep is large enough for the ordinary family, and 30 inches from the floor is a good height. The north exposure is the coolest.

A cold closet may be made by removing the lower sash of a window and making the box extension on the outside slightly larger than the opening. Or the sash may be left in place, a curtain adjusted and access gained by raising the window. By such arrangement the light from the upper half of the window is still available.

Cottage Cheese

An Inexpensive Meat Substitute

Cottage cheese is one of the important meat substitutes, say specialists of the United States department of agriculture. It contains a larger percentage of protein (the chief material for body building) than most meats and furnishes this material at a lower cost. In every pound of cottage cheese there is about one-fifth of a pound of protein, nearly all of which is digestible. Meats, on the other hand, usually contain less protein and, besides, have a certain waste, such as bone and other inedible material. A pound of cottage cheese daily would supply all the proten required by the ordinary adult engaged in a sedentary occupation.

The following table shows that cottage cheese, obtainable at from 12 to 17 cents per pound, is much cheaper than most meats in furnishing protein for the diet.

For supplying protein, one pound of cottage cheese equals:

1.27 pounds sirloin steak.
1.09 pounds round steak.
1.37 pounds chuck rib beef.
1.52 pounds fowl.
1.46 pounds fresh ham.
1.44 pounds smoked ham.
1.58 pounds loin pork chops.
1.31 pounds hind leg of lamb.
1.37 pounds breast of veal.

In addition to protein, energy for performing body work must be furnished by food. As a source of energy also cottage cheese is cheaper than most meats at present prices. The following table shows the comparison when energy is considered.

On the basis of energy supplied, one pound of cottage cheese equals:

8 1-3 ounces sirloin steak.
11 1-4 ounces round steak.
11 1-4 ounces chuck rib beef.
10 3-4 ounces fowl.
5 1-2 ounces fresh ham.
5 ounces smoked ham.
6 ounces loin pork chop.
7 1-3 ounces hind leg of lamb.
12 3-4 ounces breast of veal.

Save Bread From Waste

Bread is one of the items most commonly wasted in many American households, say the specialists of the United States department of agriculture. This waste is probably due to the fact that many housekeepers do not think of bread as costing much and are careless about its use or do not know what to do with the odds and ends frequently found in the bread box. A number of recipes for using left-over bread follow:

Vegetable Soup With Bread Crumbs.

One quart skim milk, one cup bread crumbs, salt, small amount spinach or outer leaves lettuce (not more than four ounces), one small slice onion.

Cut the vegetables into small pieces and cook with the bread crumbs in the milk in a double boiler. If a large quantity is being prepared, as in a school lunch room, for example, put the vegetables through a meat chopper. In this case slices of bread may be ground with the vegetables, in order to absorb the juice.

Bread Crumb Pancakes.

One cup crumbs, two and one-fourth cups skim milk, half cup flour, four teaspoons baking powder, one teaspoon salt, one teaspoon sugar, one teaspoon melted fat, one egg.

Soak crumbs in milk for three quarters of an hour. Then add other ingredients and cook on a hot griddle like ordinary pancakes. If sour milk is used substitute a half teaspoon baking soda for the four teaspoons baking powder.

Gingerbread With Crumbs.

One cup molasses, one-half cup boiling water, one and a half cups fine bread crumbs, two-thirds cup flour, one teaspoon baking soda, one and a half teaspoons ginger, one-half teaspoon salt, four teaspoons melted lard or other fat.

Add water to molasses and combine with the dry ingredients mixed together. Then add fat and beat. Bake for about 25 minutes in a hot oven.

Indian Pudding.

One cup fine crumbs, one quart skim milk, one-third cup sugar, two tablespoons melted butter or other fat, one-fourth cup molasses, one-fourth teaspoon ginger, one-fourth teaspoon cloves, one-fourth teaspoon cinnamon.

Scald the crumbs in milk, add the other ingredients, and bake one and one-half hours in a slow oven. This pudding may be made with any kind of bread crumbs, but it furnishes an especially good means of using up corn bread.

Egg Toast With Bread Crmbs.

Six slices bread, one egg, one cup milk, skim milk or water, one-fourth teaspoon salt.

Beat the egg, and add the liquid and salt. Let the bread soak in the mixture until slightly soft. Then fry to a light brown on a hot, well-greased pan or griddle. More eggs may be used if available.

Music Makes Work Pleasant.

What is the most helpful thing you have learned during the last year in your experience with housekeeping? Let us pass it along to other housekeepers.

To the Editor: In reply to your request I will say the most helpful thing to me in the last year, first of all, is a phonograph. That may sound strange, but it is a fact. I set it playing to dish washing, sweeping and dusting, cleaning the floor, etc. It makes work easy and adds cheer to drudgery. It is not an expensive machine, but the records are from the best operas, bands, trios, soloists, etc. I could not work without it now.

Another thing I learned is to use for cleaning enamel sinks, bath tubs, etc., a swab of kerosene and soda solution. It is much quicker and more effective than any boughten cleanser.

Then in making the drop soft cookies, instead of mixing the dough and cutting out, make same as any cooky, drop from spoon and put raisin in top, cut with knife when baked. This is splendid. MRS. KNICKERBOCKER.
Sheridan, Ore.

Toast Served in Many Ways.

Toast is one form in which partly stale bread can be made attractive. In many families it is served only for breakfast, luncheon or supper, but the custom which many high grade restaurants have adopted of serving thin, crisp, hot toast with the more substantial meals might well be followed at home.

Such dishes as chopped meat with gravy, creamed chicken or fish, poached eggs, melted cheese, cooked asparagus, Swiss chard, baked tomatoes, etc., are served very commonly on toast. Cream or milk toast (that is, toast with a cream sauce or milk gravy, perhaps flavored with a very little chipped beef, salt fish or other savory) may be used as the main dish at breakfast, luncheon or supper.

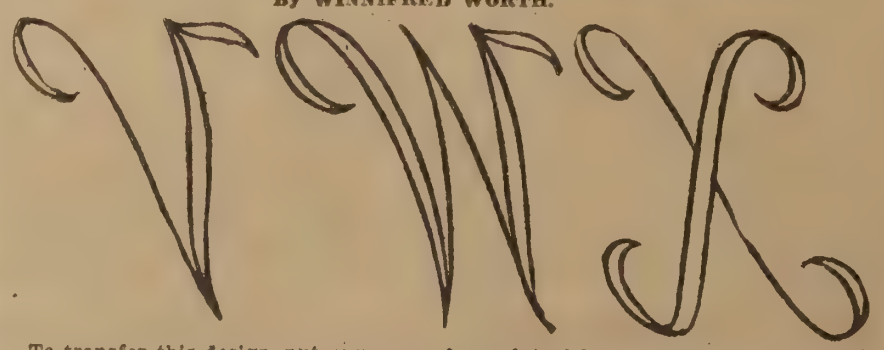
Slices of toast may also be dipped in water or milk and beaten egg and lightly browned on a hot greased pan. It may be used at breakfast and has the advantage of making the eggs "go further" than if used in a separate dish, or it may be served with cinnamon and sugar, sirup, or any sweet sauce for dessert.

Peeling Potatoes Raw Is Wasteful.

One-fifth of the potato is removed when potatoes are peeling raw, according to an experiment made by the home economics department of the North Dakota Agricultural college. Most of the protein and mineral salts in the potato lie near the skin. These go with the peel when the potatoes are pared raw. So that the loss in food value is more than 1-5. With small potatoes the loss in paring raw was 1-4. The potatoes boiled in their jackets have more flavor too. If the potatoes are wilted, soak before using.

Script Initials for Embroidery

By WINNIFRED WORTH.



To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of a linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design.



Gather ye rosebuds while ye may,
Old Time is still a-flying,
And this same flower that smiles today
Tomorrow will be dying.
—Herrick.

Leftovers

Small Bits Make Excellent Soup

By Alvara P. Williams.

With all the sharp criticism of her methods occasioned by comparisons with the French and German housewives it will be small wonder if the American housewife does not add a few tricks to her cooking. I myself have been practicing up on the sly, with the result of one permanent addition to my menu, which up to this time has been only occasional.

After much thought I thinned out certain leftovers which do not naturally go well in lunch buckets, and which are too valuable to give to the hens, and determined to start a real French pot-au-feu. There is scarcely room on the average range for a large kettle all the time, and this, more than anything else, had prevented my carrying out this plan before. A five-pound earthenware jar, which butter came in originally, made a much better soup pot, as it takes up only one hole on the range and never burns as most kettles do if left over the fire constantly. It seems to cook much more slowly and thoroughly than any kettle I ever had, and holds plenty for our family of four. A larger family could use the eight-pound butter jar.

I started this with the end of a rump roast of beef, perhaps two or three inches long, cooked slowly with a carrot, an onion, the dried tops of celery and a small handful of barley. This made a delicious thin soup, much more "Frenchy" than anything I had ever achieved. Some of the things which have gone into the soup since then have been potato, hominy, a tablespoonful of canned corn, small bits of bacon and ham, lean portions only, remains of beef cooked in half a dozen ways, tomato, string beans, peas, small bits of cold cereals, macaroni, noodles, rice. There is scarcely anything which does not improve the flavor and consistency, if left long enuogh and thoroughly blended together. This seldom happens with the ordinary soup as cooked by Americans, which takes but an hour or so in its making. Unless you have tried the all-day and day-to-day cooking in a thick earthen jar you can not know the difference between the two varieties of soup.

Why have soup at all? There have been many claims for and against, regarding its nutritive value, its effect on the digestion, etc. Like most other foods, I am inclined to think soup has a value entirely depending on what one puts into it. It may be a thin soup, chiefly valuable as an appetizer, or one with more nourishment in it, taking a large part in the menu for a meal. Its place in the meal must be determined by the other items in that same meal, and it can no more be abused in this respect than can the meat course.

While the greatest skill in soup making is exhibited in the flavoring employed, that is simpler than is sometimes thought. Salt, pepper, onion, celery and perhaps kitchen bouquet offer all kinds of combinations. Decidedly not least in the list of values for the continual soup pot is the fascinating aroma from it all day long, instead of a few minutes a day.

Not His Complaint.

"Read the directions on the bottle, Mandy."

"It sez: For adults, one teaspoonful——"

"Thunder! That ain't what ails me—what else does it say?"

Age Problem.

If to my age there added be
Its 1-2, its 1-3 and 3 times 3,
Three score and four the sum will be,
What is my age, can you tell me?

Crumbs Valuable in Cookery.

There is nothing new in the idea of using bread crumbs in cookery and most housekeepers are in the habit of having some on hand for use in scalloped dishes, stuffing for meat, puddings, etc. Few realize, however, how much more generally they might be utilized. Many commercial bakers use bread crumbs to some extent as a substitute for flour in many sorts of cakes, cookies, puddings, etc. Crumbs may also be used instead of flour and starch for thickening soups and sauces.

Any bits of bread which can not be eaten on the table should be saved and crumbed for use in cooking. Some housekeepers keep two kinds on hand; one, stale crumbs made chiefly from the inside of the loaf and suitable for use in the place of flour, and dried crumbs made from any part of the bread browned a little in a very slow oven and crushed fine to be used in scalloped dishes, for the coating of croquettes or other fried foods, or wherever a crusty, fine crumb is needed. To prevent their growing musty, crumbs should be kept in dry, air-tight containers. Fruit jars are often convenient for the purpose.

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Patterns

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2073—Child's rompers. Cut in four sizes: 2, 3, 4 and 5 years. It requires 2 3-4 yards of 36-inch material for a 4-year size. Price 10 cents.

2029—Sports suit. Cut in three sizes: 16, 18 and 20 years. It requires 4 yards for the coat and 3 yards for the skirt, of 36-inch material, for a 16-year size. The skirt measures about 2 3-8 yards at the foot. Price 10 cents.

1791—Ladies' house dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 1-2 yards of 44-inch material for a 36-inch size. The skirt measures about 3 yards at its lower edge. Price 10 cents.

2089—Ladies' negligee. Cut in four sizes: Small, medium, large and extra large. It requires 6 1-4 yards of 44-inch material for a medium size. Price 10 cents.

2097-2076—Ladies' costume. Waist 2097 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure, and requires 3 1-8 yards of 36-inch material for a 36-inch size. Skirt 2076 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It measures about 3 yards at the foot, and requires 3 3-8 yards of 44-inch material for a 24-inch size. Two separate patterns, 10 cents for each pattern.

1736—Ladies' apron. The pattern is cut in three sizes: Small, medium and large. It requires 6 1-8 yards of 36-inch material for a medium size. Price 10 cents.

2069—Girls' dress with bloomers. Cut in six sizes: 2, 4, 6, 8, 10 and 12 years. Size 8 requires 3 yards for the dress and 1 5-8 yards for the bloomers of 44-inch material. Price 10 cents.

1969—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years Size 8 years requires 3 yards of 44-inch material. Price 10 cents.

2091—Ladies' skirt. Cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 3 1-2 yards of 44-inch material for a 24-inch size. The skirt measures about 2 yards at its lower edge. Price 10 cents.

1668—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. It requires 3 1-8 yards of 44-inch material for an 8-year size. Price 10 cents.

1849—Ladies' blouse. Cut in six sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. It requires 3 1-4 yards of 36-inch material for a 38-inch size. Price 10 cents.

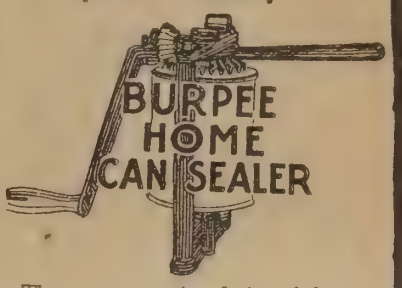




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lies in perfect sealing. To handle dangerous solder and acid successfully requires experience. Lack of this experience causes poor sealing and failure. No experience is necessary with the



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No Solder—No Acid

The Burpee Sealer brings the sanitary non-solder, non-acid tin can into the farm or home kitchen and is a guarantee of perfect air-tight sealing. With each machine we send full directions, including a book of recipes, compiled with the assistance of experts of U. S. Dept. of Agriculture.

The machine is a complete sealing device requiring no expensive equipment. So simple a child can operate it. Lasts a life time. Clamps to any kitchen table. Covered by a money-back guarantee.

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Canning Machinery Manufacturers
So. Bellingham, Wash.

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So. Bellingham, Wash.

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Placed anywhere, Daisy Fly Killer attracts and kills all flies. Neat, clean, ornamental, convenient, and cheap. Lasts all season. Made of metal, can't spill or tip over; will not soil or injure anything. Guaranteed effective. Ask for



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HAROLD SOMERS, 160 DeKalb Ave., Brooklyn, N. Y.

LOOK THIS UP

The Breeders' Department in this issue contains the names of many prominent live stock breeders. Their offers are worthy your consideration.

In answering advertisements don't fail to mention this paper.



Let Us Do Our Best.

Dear Nephews and Nieces: I wonder how many of our farm boys and girls are making their work a pleasure, trying to do their best and add interest and gain the approval of their parents?

Many of our girls and boys milk cows, set hens and care for the hatched chicks; feed the baby lambs and pigs and calves that have been left motherless, have garden of their own and sell the vegetables; help make soap; build birds' nests so that the cats and preying animals will not get the young; help trap the gophers and moles; have a flower warden in the back yard and make the once eyesore places beautiful with flowers. AUNT NELLIE.

So Glad That She Has Found a Twin.

Dear Aunt Nellie: The other cousins' letters are very interesting to read and are getting more so all the time. In my other letter I forgot to tell you the name of my little sister, so I will tell you what it is now. It is Mary Fay and she is in the third grade. I have found a twin and her name is Marie Born. I can not express how glad I am that I have found a twin. Marie is 5 feet 8 inches tall, while I am 5 feet 1 inch. She is seven inches taller than I am. I now weigh 106 1-2 pounds and Marie weighs 125 pounds. Marie is in the seventh grade, while I am in the eighth. She has blue eyes, light hair and I have also. I now have one more pet than I had when I wrote to you before. I have a little calf. It will run and play with me. Her name is Lady Jane. Lady Jane is black and is a month and eight days old. We have an hour noon now. I expect to write to the Corner again.—Evalena Clement, Tampico, Wash.

Got Her Ankle Burned One Night.

Dear Aunt Nellie: I was getting ready for bed and got my ankle burnt, and it is still sore. That was about three weeks ago. I am 11 years old. My birthday is October 21 and I am in the fourth grade. The school is across the road from here and the name is Mountain View. There are 20 pupils that come to school here and the school has only one room. Our teacher's name is Miss Samko. I have two sisters and their names are Jeanette and Viola. Jeanette is 8 years old and in the third grade and Viola is 1 1-2 years old. I have two brothers. Their names are Kenneth and Sherman. Kenneth is 5 and Sherman is 12 years old. We have a nice Sunday school started here. I love to read the Children's Corner. We have one cow and one horse and 18 chickens. We are living on a 10-acre farm and live two and one-half miles from town.—Edna McClelland, Burlington, Wash.

Grace Has Lots of Relatives Now.

Dear Aunt Nellie: My subject is "The Best Book." I have read quite a few books. I read "Pete, Cow Puncher," "Anne of Green Gables," "The Adventures of Unc' Billy Possum," and "With the Indians in the Rockies." All of them are very good books. I can make beds and wash and wipe dishes, set the table and make a chocolate cake. I am making a crocheted yoke. My father got 225 marbles for us. I have 63 marbles myself. Our daffodils are budding. They are quite high now. Pretty soon the roses and lilacs will be blooming too. I like the great big roses and purple lilacs. Our hired man can play the guitar and mouth harp both at the same time. I am rather lonely and I would like some of the little girls of the Corner to write to me. I have a lot of relatives to write to now as I have joined the Corner.—Grace L. Balsley, Enumclaw, Wash.

Thr[illegible]rses That Ruby Can Ride.

Dear Aunt Nellie: I am 7 years old. I am in the second grade. I have two sisters and three brothers. Their names are Blanche, Kathy, Ralph, Kenneth and Robert. My name is Ruby. There are 16 of us in our school, nine girls and seven boys. My teacher's name is Miss Perry. We have three dogs, one cat, eight horses and 17 calves. We have a pig and 21 cows. We have three horses I can ride.—Ruby Cantrell, Lacamas Stock Farm, Winlock, Wash.

Vere, the Baby Boy, Is Very Cute.

Dear Aunt Nellie: I have read many letters in the Corner, but this is the first time I have written, so I thought I should like to see one of mine in print. I am 8 years old and in the second grade. My teacher's name is Miss Helen Stack. I have three sisters and three brothers. We all go to school except Violet, my youngest sister, and Vere, the baby boy. He is very cute. He is 2 years old.—Gladys Brummund, Connell, Wash.

Tells How to Make a Doll Hat.

Dear Aunt Nellie:: I have been reading the letters of the children and I like them very much. I have three brothers—Marvin, Elworth and Everett. I am going to tell about making a doll hat. First take a custard cup and cover with crepe paper, then cut three strips of the crepe paper and braid lightly, then begin at the top of the crown and going down cover with it (first put on paste). First of all, when you put the crepe paper on the custard cup tuck under the end inside. After all this is done bring out the paper tucked in and cover with the braided crepe paper. Now let it dry and remove from the cup and trim it up. I was 10 years old March 18, 1917.—Imogene Nelson, Mount Vernon, Wash.

Best Composition on "Farming."

Dear Aunt Nellie: We take the Washington Farmer and I like to read the letters from the other boys and girls. I am a little girl 12 years old. I live on a large wheat ranch. I have three brothers and one sister. My sister is married. My youngest brother rides a pony two miles to school. I have been staying in town with my cousin and going to school, but I took sick and came home. I won the prize for the best composition in my room at school. It was about "Farming." I like to help my mother with the work in the house, washing dishes or sweeping the floor. I like to feed the chickens and gather the eggs too.—Clara Burton, Baird, Wash.

Belgian Hares Are Her Favorites.

Dear Aunt Nellie: I am a country girl 14 years old. I live on a farm and love to milk the cows, feed the pigs and go to school. I have one mile to go to the rural school. I have many pets, among them Belgian hares are my favorites. I love to read the children's page in the Farmer so well that papa said I could send you 50 cents and that would pay for it awhile.—Josie Read, R. 2, Touchet, Wash.

Habit of Hanging Up Their Coats.

Dear Aunt Nellie: I am going to write on "How I Earned My First Money." I know I have had money that I did not earn and some that I did earn. When my sister, Clara, and I came home from school we would throw our coats on the floor or any chair. So my auntie said she would give us each $10 if we would hang our coats up all the time and our other clothes as well. Then she thought we would have to wash and wipe our dishes right after meals. We had to keep it up for about a year. We tried and we got into the habit of hanging up our clothes and doing the dishes. We got $10 and we have not spent it yet.—Rubie Amley, Kirkland, Wash.

Enjoys the Letters All the Time.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I enjoy the letters all the time. I live on a farm out in the country called Tualco valley. We have six cows, two calves, two working horses and about 16 chickens. I have two brothers, the oldest is Howard and the youngest is Warren. I am the oldest. My birthday is July 9 and I am in the third grade in school. My teacher's name is Miss Ada English. I like her fine. The name of the school which I go to is Tualco school and district No. 7.—Ethel Harriman, Monroe, Wash.

"Springtime" Is Avah's Subject.

Dear Aunt Nellie: The subject I chose is "Springtime." I like spring because everything is green and the flowers are so pretty and the little chickens running everywhere are so pretty. We have two little calves. Their names are Mutt and Jeff. I saw my brother's letter in the paper. I would like to correspond with Inza Staiff and Emma Short if they will write to me. I write to Inez Swanson. I am 11 years old and in the sixth grade at school.—Avah Marie Fox, Cunningham, Wash.

Be Sure to Write Again, Ellen.

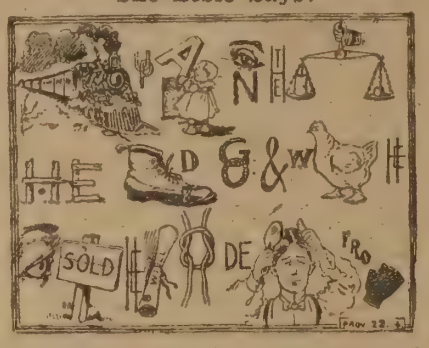
Dear Aunt Nellie: I enjoy reading the letters of the other children and I thought they would enjoy reading a letter of mine. I am 13 years old. My birthday is August 26. I am next to the oldest one in the family. I have two brothers and three sisters. My brothers' names are Frank and Thomas. My sisters' names are Rosa, Marie and Gertrude. We do not live very far from school. I like my teacher. Her name is Miss Olive Russel. I am in the seventh grade and will be glad when I am in the eighth.—Ellen Purcell, Pomeroy, Wash.

Live Twelve Miles From Spokane.

Dear Aunt Nellie: My father takes The Washington Farmer. I like it very much as I read the Children's Corner. My father also thinks it is a very good paper. I am a girl 12 years old. I am in the sixth grade at school. I have a sister 6 years old going to school. She is in the first grade. We like to go to school. We have three-quarters of a mile to go. My father owns 320 acres of land. We have chickens, cows and horses. I am 5 feet 2 inches tall. I have light hair and light eyes. The name of our school is Bonser. Our teacher's name is Miss Sherer. We live 12 miles from Spokane. My brother and cousin have a Ford auto. It is a 1916 Ford.—Eva Wees, Cheney, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Pearl Droullard, Selena Elizabeth Dero, Elsie Sanford, Daisy Laird, Ruby Prather, Nina Drunry, Naomi Miller, Marie Anderson, Lloyd Stannard, Gerald Stannard, Lola Stannard, May Milam, Basil Milam, Margaret Kessell.

The Bible Says:



The safe food for children all the time



Good white bread is all of that—and more. It is the most economical food used by human kind. It is 90% convertible into tissue and energy to run the body.

DRIFTED SNOW FLOUR
A SPERRY PRODUCT



makes it possible for you to have good bread all the time. Its uniform high standard of quality is the result of the most rigid tests in the laboratories located in the great Sperry Mills. Order a sack today.

SPERRY FLOUR CO.

Buy Sperry Quality Cereals.

They come in red packages.

Hides From East Africa.

During the last 10 years cattle hides from British East Africa and Uganda have become an important factor in the importation of that product into England, France and Italy. The total exportation for the fiscal year ended March 31, 1915 (the last available detailed statistics), amounted to 48,054 hundredweight, of 112 pounds, valued at $1,034,982, of which Great Britain took 55 per cent, France 15 per cent, Italy 12 per cent and Germany about 5 per cent. It is believed that some of these hides reach the United States by reexportation from Liverpool and Genoa, and especially during the last year, when several large shipments were made indirectly.

New Zealand Crop Conditions.

The New Zealand government statistician gives out the average yield per acre of wheat for the 1916-17 harvest at from 20 to 30 bushels, according to location, with a general average for the whole country at 25.15 bushels; while the oat crop is given at from 29 1-2 to 43 bushels per acre, with a general average of 30.88 bushels. The estimated total yield for this season is 5,300,000 bushels of wheat and 5,600,000 bushels of oats, as compared with 7,-108,360 bushels of wheat for the 1915-16 season and 7,653,208 bushels of oats.

Ship Douglas County Broccoli.

Six cars of broccoli have left Douglas county, Ore., during the season for eastern markets. These six cars represent 2430 crates of the product, and on the basis of $1.35, realized by growers last year, will bring approximately $3280.50 of eastern money into Douglas county.

Want Ads

HELP WANTED—MALE 3

OUTSIDE SITUATION.

Good salary can be earned selling our complete line high class nursery stock. Cash advanced. Write for terms.

ALBANY NURSERIES, ALBANY, ORE.

HAWTHORNE AUTO SCHOOL,
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

WANTED—MEN WITH AUTOS, TO SELL Anti-Carbon Gas Saver; county and state rights available. Pacific Auto Accessory Co., 512 Journal bldg., Portland, Oregon.

AGENTS—WANTED 9

$11 DAILY AVERAGE SELLING IMproved advance pump governors. They make the hardest working pumps work easy, windmills turn in the slightest wind, pumping engines work with less than half the gas or steam; fit all pumps; warranted five years; exclusive territory; price $5.90 each. Honorable men wanted to sell them everywhere. International Foundry Co., 310 Newton bldg., St. Paul., Minn.

SITUATION WANTED—MALE 21

W. S. C. STUDENT WANTS A YEAR'S DIversified farm work, beginning June 20. O. A. F., 361 College Station, Pullman, Wash.

SITUATION WANTED—General 24

MARRIED COUPLE WANT FARM WORK; experienced; wife good cook. P. O. Box 2099, Spokane.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free. BEHNKE-WALKER BUSINESS COLLEGE, 167 FOURTH ST., PORTLAND, ORE.

MISCELLANEOUS 57

CARBON, MOTORISTS' GREATEST ENEMY. Our famous lubricant carbon remover makes and keeps your engine clean as a watch. No need to take down when applying. Postal brings full particulars. Wagner Bros. Co., Hancock, Mich.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Shipped anywhere, to any one, at factory prices. We own our own mill, and guarantee first quality goods, and safe delivery to destination. Send for our big illustrated catalog No. 27, mailed free, postpaid, promptly on receipt of request.

6 cross panel doors, No. 1	$1.33
4 panel craftsman doors	1.75
Glass doors, as low as	2.25
24x24, two light windows	1.46
10x12, twelve-light windows	1.51
10x12, four-light barn sash	.68
24x80, 3-ply panels	.65
16x16x26, spruce flour bins	1.50
Plain window frames	1.00

We carry a full line of inside finish, mouldings, sash, cupboard doors, hardware, mixed paints, etc. Prompt shipments.
O. B. WILLIAMS CO.
1043 1ST AVE. SO. SEATTLE, WASH.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MISCELLANEOUS—WANTED 63

—CREAM WANTED—
We pay cash for cream, poultry, eggs, veal, hogs and hides. Write for prices and shipping tags. Commercial Creamery Co., Spokane, Wash.

HIGHEST PRICES PAID FOR COTTONWOOD BOLTS. Inquire of F. S. HARMON & CO., Tacoma, Wash.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

PETS—DOGS, BIRDS, ETC. 171

COLLIE BARGAINS—12 REGISTERED Collie bitches, bred to registered dogs at a sacrifice. Pioneer breeder retiring. C. D. Nairn, Amity, Ore.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer,** and **The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

HOGANIZED S. C. L REDS, S. C. W. LEGhorns. Only high test egg type birds allowed in my pens and flocks. Red cockerels, $5 each. These birds are all sons of a magnificent male, from a 271-egg record pen; he has proved himself a very strong breeder of heavy laying females. Eggs, $6 in 100 lots; settings, $1.50, $3, $5. Mrs. H. V. Rominger, Underwood, Wash.

79,637 EGGS IN 1916 FROM MY FLOCK of 450 S. C. Black Minorcas, prize winners in the showroom and laying contest; eggs from my Hoganized and trap-nested breeding stock at $2 per 15, $3.50 per 30, $5 per 50, $8 per 100, $70 per 1000. No baby chicks or stock for sale. John Dollenbacher, R. 1, Selah, Wash.

BABY CHIX.
White Leghorns, the kind that are real dividend payers, bred for 16 years for eggs, size, VIGOR, VIM and VITALITY. $10 per 100, from the oldest established hatcher in the state. Delivery in good condition guaranteed. Lakeside Poultry Farm, Roy, Wn.

WHITE LEGHORN BABY CHICKS
from strong, superior stock, bred for eggs, vigor and size. Safe arrival guaranteed. Free catalogue. Free book on raising the chicks. Oak Heights Poultry Farm, R. R. 3, Box T67, Tacoma, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

WHITE LEGHORN CHICKS, $10 PER 100 for May and June; special price of $6 for 50 White Leghorn chicks and fireless brooder. Queen Hatchery, 89 Pike st., Seattle, Wash.

IF YOU ARE INTERESTED
in Reds, write me for mating list and price of eggs. I have what you want at the right price. S. W. Berry, Post Falls, Idaho.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

FOR SALE — S. C. WHITE LEGHORN eggs, 75c per 15, $4 a hundred. Mrs. Wm. Vercler, Rigby, Idaho.

INDIAN RUNNER DUCK EGGS, 15C EACH. J. F. Medaris, R. 1, Wapato, Wash.

LIVE STOCK 177

FOR SALE, JERSEY BULL.
Fox of Hollyhurst, reg. No. 145529, solid color, pink tongue, black switch, dropped Nov. 28, 1914.
His dam, Fraulein of Hollyhurst, as a two-year-old heifer, made 5075 lbs. milk, with an average test of 5.66 per cent, or 287 lbs. butter fat, equivalent to 359 lbs. butter in one year. She will reach or exceed at maturity 500 lbs. butter in one year. His mature granddam made 7379 lbs. milk and 407 lbs. butter in one year.
Am going out of the dairy business and will sell this bull at a very reasonable price. H. L. Willis, Mt. Vernon, Wash.

FOR SALE, OR TRADE
for Jersey heifers or stock cattle, one very fine imported 2-year-old registered Jersey bull, son of Golden Fern's Noble. Cash price $300.
J. H. ROWLEY, WESTFALL, ORE.

LIVE STOCK 177 Continued.

HOLSTEIN BULLS, REGISTERED, PEDIgreed; acclimated to northwestern conditions; $75 up. Catalog on request. Ford & Hollister Ranch, Inc., Darby, Montana.

SIGN PAINTING 366

PAINT YOUR OWN FARM SIGNS. EASY with our patterns and instructions. Send for copyrighted booklet entitled "Naming the Farm," containing 200 suitable names, and sample pattern and introductory offer. C-N Sign Co., Box 19, Jackson, Minn.

FOR SALE—43 LINCOLN AND SHROP ewes with lambs. P. C. Jensen, Ilo, Ida.

RUG and CARPET WEAVING 270

FLUFF RUGS AND RAG CARPETS.
Your old rugs and carpets can be made into beautiful NUSTYLE Fluff rugs at a small expense to you, by our new and improved process. Send for booklet and prices.
Nustyle Rug Co., Sellwood, Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620



ACCLIMATED SEED.
In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.
If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.
It will pay those who want good, acclimated seed to watch for offers under this classification.

OREGON SEEDS,
VETCH OR "TARES."
A Great Forage or Seed Crop.
RED CLOVER, ALSIKE.
"THREE GRAIN OATS," Wonderful Yielder.
COMPLETE LINE OF FARM SEEDS.
CORVALLIS FLOURING MILLS,
Corvallis, Oregon.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flour seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
146-147 2D ST., PORTLAND, Ore.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

NURSERY STOCK 621

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

FARM LANDS—FOR SALE 651

MONTANA LANDS.

1M-2—$3000 will handle 320 acres, 130 in crop, 280 tillable. Well and buildings; 3 mi. to station. $35 acre; 1-3 crop.
1M-3—$15,000 will handle 920 acres; 400 in winter wheat; 200 in flax stubble for spring seeding. Nearly all tillable. Wells and buildings; ½ crop included at $50 acre.
2P-1—$17 acre; 800 acres 3 mi. from town. Nearly all tillable. Buildings, water. $5000 cash.
Relinquishments for about $1000 cash.
Lands throughout state $5 to $75 acre.

PRATT SALES AGENCY, 313 FIRST NAT'L BANK, GREAT FALLS, MONTANA.

FOR SALE—160-ACRE WHEAT FARM, IN the wheat belt of N. E. Oregon; 90 acres ready for wheat this spring; 30 pasture and the bal. cut-over land; fine spring; 100,000 feet of timber; fenced, cross-fenced; small house, log barn; $30 an acre; $1500 cash can be borrowed from govt.; bal. mtge. back. Fine range outside. Correspond with owner, E. G. Bailey, Elgin, Ore.

IF YOU WANT LAND IN MONTANA, write to H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

FARM LANDS—FOR SALE 651 Continued.

WHEAT LAND.
4000 acres in Walla Walla county, Washington, of which 2000 acres is in crop this year and 1800 acres in summer fallow; fine, drilled well and several concrete reservoirs; crop goes with place, except on one section, which is leased, and only one-fourth of crop goes on this piece; only four miles to station. This is thirty-bushel land. $32.50 an acre, and the best buy in the state of Washington at this price.
THE FRED B. GRINNELL COMPANY.
ESTABLISHED 1887.
815 OLD NATIONAL BANK BLDG.
SPOKANE, WN.

CHOICE TIMOTHY RANCH.
360 acres, in Idaho, of which 290 acres is as fine timothy bottom as there is in the country; irrigated from fine stream on the property, if desired; produces better than two tons to the acre; good house and two barns; 200 yards from railroad station; $25,-000, and an absolute bargain at this price.
THE FRED B. GRINNELL COMPANY.
ESTABLISHED 1887.
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SPOKANE, WN.

MONTANA LAND.
COMBINATION STOCK AND GRAIN FARM, IMPROVED, $22 PER ACRE; 960 acres in one of the best stock districts of the state of Montana; about 700 acres tillable land, balance excellent pasture; only 4 miles to town; 100 acres in winter wheat; 40 in spring wheat; all goes to the buyer. For immediate sale we can deliver this place at $22 per acre.
If interested in Montana land call or write for our land list, giving descriptions of some of the best buys in the state of Montana.
HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG.

COLUMBIA RIVER
LOGGED-OFF LAND FARMS.
20 to 4000 acres, adjoining improved farming districts; for sale by lumber companies, to settlers only; 25 to 40 miles from Portland; rail, water and auto transportation to markets. Cooperative creameries and canneries. Deep, rich soil; light clearing; spring water. Plenty of employment. Easy terms.
CHARLES L. WHEELER CO.
517 CH. OF COM. BLDG., PORTLAND.

A GOOD FARM.
NEAR BELLINGHAM, WASHINGTON,
ON PUGET SOUND.
$6000—68 acres of good land; 30 acres thoroughly cleared, balance good timber land pasture; only six miles from Bellingham, a city of 30,000; excellent roads; good water; buildings only fair; school across road; a good dairy farm for the right man. Terms. Address secy. Bellingham Real Estate Assn., 1321 Dock st., Bellingham, Wash.

MONTANA LAND.
IMPROVED PLACE, JUDITH BASIN, $35 PER ACRE; 1000 acres in the Judith basin, nearly all good land; 400 acres in winter wheat, one-third to the buyer; located 3½ miles from town; nearly all steam plow land; fair set of buildings; price $35 per acre, reasonable terms, but no trade.
If interested in Montana land call or write for land list.
HEGE & WATKINS CO.
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MONTANA WHEAT FARM, PARTLY IMPROVED, $15 PER ACRE; 320 acres in northern Montana; average rainfall 15 inches; nearly all good land; 40 acres in crop, half to buyer; only 3½ miles to town. Owner needs money and orders sale at $15 per acre on good terms.
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3 SECTIONS OF LINCOLN CO. LAND; over 700 a. under cultivation; good buildings. Only $11 per acre. Wadham & Leggett, 506 Sherwood blk., Spokane, Wash.

800-A. IMPROVED FARM 4 MILES FROM Eltopia, Wash.; $20 per acre; $2500 cash, balance 10 years, time at 5 per cent. F. M. Beckwith, R. 2, Escondido, Cal.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

FOR SALE OR EXCHANGE 702

FOR SALE, OR EXCHANGE FOR SMALLer place—My 552-a. stock and grain ranch, 3 miles to town. Address owner, R. E. Warner, Crawfordsville, Oregon.

Grain and Produce Markets

Chicago Grain.

CHICAGO, May 12.—Excited buying of wheat, far from being diminished, took on wilder aspects today because of drastic measures to stop the upward flight of prices. The market rose quicker and farther today than in all the rest of the week put together. There was a flurried close at the top-most point reached, a net advance of 22 3-4c to 29c, with July at $2.73 to $2.75, and September at $2.44 to $2.46. Corn gained 1 3-4c to 3 3-4c, and oats 3-4c to 2 1-2c. Provisions finished unchanged to 12 1-2c higher.

Cash Quotations.

CHICAGO, May 12.—Wheat—Nos. 2 and 3 red and Nos. 2 and 3 hard, nominal.

Corn—No. 2 yellow, $1.67@1.68; No. 3 yellow, $1.65½@1.67; No. 4 yellow, $1.64½.

Oats—No. 3 white, 72½@73½c; standard, 72¼@74¼c.

Rye, nominal. Barley, $1.25@1.63.

Timothy, $5@7.50. Clover, $12@17.

Pork, $38.80. Lard ,$22.37@22.47. Ribs,$20.50 to $24.

Chicago Futures.

	Open.	High.	Low.	Close.
Wheat—				
July	2.46	2.75	2.46	2.73
Sept.	2.14	2.45	2.14	2.44
Corn—				
July	1.46¾	1.50¼	1.46¾	1.49¾
Sept.	1.38	1.42¼	1.38	1.41⅛
Oats—				
July	.65¼	.67½	.65¼	.67½
Sept.	.55¾	.58	.55¾	.58
Pork—				
May				38.80
July	39.00	39.10	38.87	39.00
Lard—				
July	22.50	22.50	22.40	22.50
Sept.	22.62	22.65	22.52	22.62
Ribs—				
July	20.77	20.82	20.67	20.82
Sept.	20.95	20.97	20.85	20.97

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer:

Potatoes—Potatoes, $4.00 cwt; new potatoes, 12½c lb.

Seed Potatoes—Early Ohios, $4.50 cwt; Early Rose, $4.50 cwt; white potatoes, $4.50 cwt; Early Six Weeks, $4.50 cwt.

Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; N. Y. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 39c lb; Medo-Maid, 39c lb; Cascade, 39c lb; Gold Leaf, 39c lb; Better Butter, 39c lb; Attalia, 39c lb; Diadem, 39c lb; Hazelwood, 39c lb; Solid Pack, 39c lb.

Cheese—Wisconsin full cream, twins, 23c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $9.50 case.

Live Poultry—Hens, 20c lb; old roosters, 10c lb; ducks, 13@14c lb; turkeys, 20@25c lb; geese, 11c lb.

Dress Poultry—Hens, 23c lb; springers, 21c; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs., 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

Seattle Market.

SEATTLE, May 12.—Seattle consumers have been benefited by the avalanche of California asparagus that has flooded the market this week in the fact that they have learned what not to buy. The difference between Californias and locals is so marked and the economic value of the home product so general that prices are being ignored and buyers are insisting upon the full, round, long green stalks, good to eat from end to end, that are packed in boxes bearing the label of Washington shippers.

Potatoes are steady. Jobbers who are short are buying as needed in sack lots and can sell to advantage at $75. Yakimas are dull at $90, the local demand for this stock having reached the minimum. The price differentials for the 1916 crop are still attractive to buyers, as new California garnets at 8@8½ cents are not selling, and jobbers are losing money on them.

Local cauliflower at $1@1.25 per dozen, local celery at 75 cents per dozen bunches and parsley and spinach are being supplied by Washington growers to the exclusion of Oregons.

Live Stock Quotations.

At Omaha.

OMAHA, May 12.—Hogs—Receipts, 6400; market, 5c to 10c higher. Heavy, $15.90@16.15; mixed, $15.75@16; light, $15.60@16; pigs, $12.50@14.50; bulk, $15.75@16.

Cattle—Receipts, 200; steady. Native steers, $9@13; cows and heifers, $7.50@11; western steers, $8@11.25; Texas steers, $7.50@10.25; cows and heifers, $9@13; canners, $7@8; stockers and feeders, $7@10.90; calves, $9@13; bulls, $7@10.

Sheep—Receipts, 400; steady. Yearlings, $14.75@16; wethers, $13.75@15; ewes, $12.50@14.50; lambs, $17.30@19.

At Chicago.

CHICAGO, May 12.—Hogs—Receipts, 10,000; strong; 10c above yesterday's average. Bulk, $16@16.35; light, $15.20@16.30; mixed, $15.75@16.40; heavy, $15.70@16.40; rough, $15.70@15.90; pigs, $15.10@15.40.

Cattle—Receipts, 700; steady. Native beef cattle, $9.40@13.70; stockers and feeders, $7.50@10.35; cows and heifers, $6.65@11.50; calves, $9.50@14.25.

Sheep—Receipts, 500; steady. Wethers, $12@14.75; lambs, $14@19.

At Portland.

PORTLAND, Ore., May 12.—Hogs—Steady; receipts, 267. Bulk of packing grades, $15.55@15.65; heavy packing, $15.65@15.75; light packing, $15.55@15.60; rough heavies, $14.25@15; pigs and skips, $13.75@14.25; stock hogs, $12.25@13.50.

Cattle—Steady; receipts, 539. Steers, prime light, $10.50@11.25; prime heavy, $10@10.50; good, $9.75@10; cows, choice, $9.25@9.85; medium to good, $8@8.50; ordinary to fair, $6.75@7.50; heifers, $9@10.25; bulls, $5.50@8; calves, $8@10.

Sheep—Steady; receipts, 93. Lambs, east of mountains, $13@13.50; lambs, valley, $12.75@13.25; lambs, shorn, $11@11.50; prime wethers, $11.50@12; choice ewes, $10@10.75; heavy ewes, $9@10.

At Seattle.

SEATTLE, May 12.—Receipts—100 hogs, 5 cattle; market strong on all lines.

Cattle—Higher. Prime sters, $11@12; common to medium, $6.50@10; best cows and heifers, $9@10; common to medium, $6.50@8.50; bulls, $1@8.50; salves, $6.50@11.10.

Hogs—Prime light, $15.85@16; medium to choice, $15.50@15.60; smooth heavies, $15@15.30; rough heavies, $14.50@14.80; pigs, $13.50@14.15.

Sheep—Prime lambs, $12.50@13.75; good lambs, $12.25@12.50; wethers, $10.25@10.50; ewes, $9.10.

Spokane Stock Yards Saturday.

Hogs—Receipts, 111; market slow. Prime heavy packing, $15.60@15.75; prime light packing, $15.25@15.55; rough heavy, $14.50@14.75; pigs, $13.75@14.75; stockers, $13@15.

Cattle—Receipts, 351; market steady. There is a steady demand for prime beef steers and cows also for stocker and feeder cattle of the beef breeds.—Prime heavy steers, $10.50@11; prime light steers, $10.25@10.50; good steers, $10@10.25; prime cows, $8.50@9.25; good cows, $8@8.50; common cows, $7@7.75; best heifers, $9@10.35; bulls, $6@8; calves, $8@10.50; stockers, $6@9.

Sheep — Receipts, none; market, stead. Prime lambs, $13@13.50; common lambs, $12@12.50; choice yearlings, $11.25@12; good yearlings, $10.75@11.25; best mutton ewes, $10@11.

Portland Market.

PORTLAND, Ore., May 14.—Egg storers are again out of the market temporarily and this has caused some weakness in egg prices. Dealers do not look for the market to fall under 31 cents, as receipts are diminishing.

Butter is very firm with a strong shipping demand for cubes.

Poultry prices continue to sag. Receipts are not large, but the outside demand has fallen off.

There is no snap to the potato market. The eastern demand has ceased and remaining supplies are more than equal to home requirements. It is estimated that the increased acreage in Oregon will produce a surplus of 10,000 cars of potatoes in the coming season.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $53 per ton.

Corn—Whole, $72; cracked, $73 per ton.

Millstuffs—Bran, $44 per ton; shorts, $47.

Barley—No. 1 feed, $51; brewing, nominal; rolled, $58.

Hay—Buying prices: Timothy, eastern Oregon, $30; alfalfa, $23; grain, $18@20.

Eggs—Oregon ranch, case count, 32c per dozen; candled, 33c.

Poultry—Hens, 33c; ducks, 20@22c; turkeys, live, 20@22c; dressed, 23@28c; geese, 12@14c.

Butter—City creamery, prints, 38@39c per pound; cubes, 36 1-2c.

Cheese—Oregon triplets, 24c; young Americas, 25c.

Dressed meats—Veal, 15@15 1-2c; pork, 19@19 1-2c.

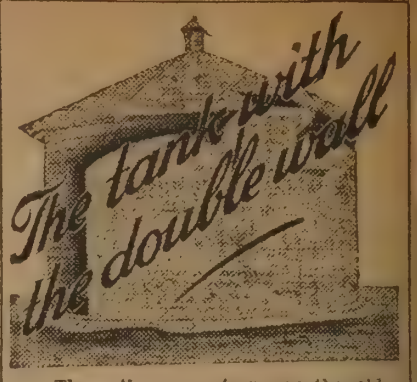
Hops—1916 crop, 3@6c per pound.

Potatoes—Oregon jobbing price, $3.50@4.

Wool—Eastern Oregon, fine, 40@45c; coarse, 45@50c; valley, 46@50c.

Beans—California small white, 16 1-2c; large white, 16c per pound.

Hides—Salted hides (25 lbs. and up), 20c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 32c; green hides (25 lbs. and up), 18c; green stags (50 lbs. and up), 13c; dry hides, 34c; dry salt hides, 29c.



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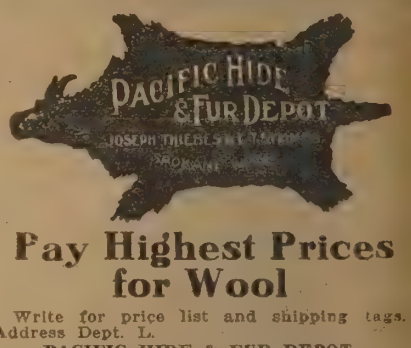
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BE SURE AND MENTION THIS PAPER

Unprecedented Winter Killing of Wheat

Never in our history has there been such an extensive winter killing of wheat in the United States. The government May crop report makes that convincingly clear.

Forty million acres were seeded last fall. Twelve million acres were winter killed and must be turned up and planted to other crops. A shrinkage of 64,000,000 bushels in the estimated yield is the result.

This loss from winter killing more than offsets the gain of nearly 10 points in the condition of the winter wheat that came through.

The severity of this year's loss is shown in the following comparison with previous years:

	Acres Sown.	Abandoned.	Yield.
1917	40,000,000	12,437,000	.....
1916	39,203,000	4,374,000	481,744,000
1915	42,012,000	810,000	673,947,000
1914	33,618,000	1,919,000	523,561,000
1913	33,215,000	6,676,000	399,919,000
1912	32,648,000	3,118,000	430,656,000

The condition of growing winter wheat on May 1 was 73.2 per cent, as compared with a 10-year average of 86.6 per cent. Pacific coast states, with the exception of California, are reported as being well above the general avxerage:

	May 1, 1917.	May 1, 1916.	10-Yr. Av.
Idaho	85	93	96
Montana	84	83	93
Oregon	83	95	96
Washington	80	84	95
United States	73.2	82.4	86.6

Aside from the loss of so much winter wheat the May report is encouraging, as grass lands are in good condition, plowing generally is in advance of a year ago, and, notwithstanding the unfavorable weather conditions, spring planting is farther ahead than the average of the last 10 years.

This is cheering proof that the farmers of the United States are responding splendidly to the country's call and are putting forth extraordinary efforts to make the most of unfavorable conditions. Manifestly they are working long days and driving their work with fine energy.

WE WILL PAY SALARY

to farmer with rig or saddle horse. The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are paying good salaries to those who can do the work and are offering these positions only to farm owners or renters.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. For men with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter to The Washington Farmer, Review Building, Spokane, Wash.

Don't Neglect Stock

Says Observer of the Industry

(Continued from page three.)

meadows and fields have been plowed up and turned over to grain production.

Alfalfa Is Damaged.

Finally, the fact is now evident for the first time that many alfalfa fields in some of the large irrigated belts have been winter killed, with a loss ranging from 25 per cent to total loss of the field as an alfalfa producer. The writer has had first-hand reports from owners, and the situation is in some sections so precarious as to cause farmers to seriously consider the unloading of their live stock.

There is only one constructive way to lend bright color to this dark and unpromising picture. Prompt, thorough and energetic measures must be taken to remedy defects and provide for the future. In the first place, no live stock that is not ready for market should be sent to slaughter. If one farmer has a surplus his neighbors may be able to handle the extra animals. In some districts cooperative ownership of herd sires and joint or cooperative grazing and feeding may save the situation.

Build Up Pastures.

There may be lack of pasture. This can be met by special spring-sown green forage crops, such as rape, kale, peas and oats, vetch and root crops for early fall and winter use. Rape and kale grow rapidly, and when moisture is sufficient last throughout the summer until the fall. The best method of seeding is with a hand or grain drill. The rate of seeding is from three to five pounds per acre. Rape and kale are especially valuable for sheep and hogs, but can also be used for dairy cattle, especially when cut and carried to the cows. Peas and oats make a good summer pasture crop for cattle, sheep and swine and the crop is one easily grown. The peas and oats may be seeded with a grain drill on a well prepared seed bed. The rate of weeding is 60 to 70 pounds of field peas with 35 to 40 pounds of oats. Vetch or vetch seeded with a cereal is used for green forage, especially across the Atlantic.

Silos Especially Advisable.

The preservation of feed in the silo is an approved method of making wise use of the forage. This method becomes especially advisable this year. Corn may be seeded up to the middle of June and is especially desirable as a means of uitlizing summer fallow. Corn silage is considered a staple live stock feed. We have found, however, as a result of two years' experience in growing and feeding on a rather large scale at the University of Idaho experiment station, silages other than corn, that several other silage crops or silage crop mixtures give results fully equal, or almost equal, to results secured with corn. Among crops successfully used for silage are peas and oats, peas and wheat, vetch and wheat and wheat alone. Peas and others have been grown in areas of six to 10 acres, and we consider a ton of peas and oats silage fully equal in feeding value to a ton of corn silage. Peas and wheat gave good returns this year both in yields and feeding value, as did vetch and wheat. Wheat silage was found not so palatable as the silage made from mixtures mentioned. The beginner with silage made from crops other than corn should seed peas and oats, 60 pounds of field peas (preferably Canadian White) and 40 pounds of oats per acre. There is ample time yet for seeding silage crops.

One of the pressing needs is that there may be sufficient dried forage to carry both farm and range live stock through the next winter. There is time yet in all the districts where spring is not forward to seed special crops for hay and dried roughage. As before indicated, the alfalfa and other hays will scarcely suffice for work stock. The ordinary meadow acreage that started into winter was in all probability below normal and in some sections much of the alfalfa is winter killed. Among the many special crops that may be used to replace alfalfa, timothy and other hays are wheat, oats, barley, peas and oats, vetch, vetch and wheat, millet, corn to be cut for fodder and sorghum.

For many years wheat hay and oat hay have been commonly used, and when properly cured such hays make excellent forage. Such cereal crops may be seeded on fall or spring plowed land. If the hay is to be used for sheep, peas and oats make an excellent mixture, seeded 65 pounds of field peas and 35 pounds of well cleaned oats. This hay is also well adapted for dairy cows and brood sows and hogs can derive a considerable portion of winter sustenance from such a hay when it is well cured and properly sheltered. In districts where the alfalfa is badly damaged so that it will not yield a baling crop, oats can be made to yield a good crop of grain or hay. Where the soil is in good condition for working a double disking can in all probability be made to successfully take the place of the laborious and long task of breaking the alfalfa sod. Should considerable alfalfa come and grow with the oat crop the hay crop will be all the more palatable and nutritious for live stock.

Vetch alone or seeded with grain is a crop that deserves more consideration. Millet in the middle west is often most successfully used for an emergency crop, and seeded in the late spring will yield abundant forage. It is not advisable, however, to plan to use millet as a continuous diet for horses. In the districts of lower altitude and earlier spring sorghum is a possibility.

The Motor Car

On the Farm

The other evening my next neighbor and I fell to "chinning" about the evolution that gasoline power has worked in the business of farming.

Our talk was the outgrowth of a purchase he has recently made of a motor truck. I have been a little hesitant about buying a truck because of the love I inherited and have developed for fine horse flesh. Of course, I have to admit that the use of gasoline power has reversed the belief that most of us farmers clung to for quite a long time, namely, that the horse is always a necessity and the motor car, motor truck and tractor always a luxury.

For if the old saying that "time is money" is true of the business man in town it is even more true of those of us who are in the business of farming. Not so many years ago we farmers would spend the better part of a day driving to town on some more or less important errand even though we were only a few miles out. Now a 10 or 20 mile drive in and back in our car is a matter of only a couple of hours.

Those of us who had considerable land to break had to keep a lot of horses and had to be satisfied with the plowing of as many acres in a day as an ordinary tractor will do in a fifth of the time.

Nobody appreciates and likes good horses better than I; but there is no side-stepping the plain fact that with hay anywhere from $20 to $30 a ton and other feed proportionately high the horse is doubly expensive; first because of what it costs to keep him and second, because of the time he consumes in getting things done.

Just take the hauling problem for example. My neighbor has a truck capable of hauling three tons. At one load he can haul as much as I could haul over our roads with two average two-horse teams. He can travel at least three times as fast, too. So that in the same length of time he can get three times the amount of hauling done with his truck as I do with two teams.

His truck requires one driver; my teams two drivers. And when it comes to upkeep I frankly confess that he has me badly beaten. They say that sentiment has no place in business, and even though we all know it has there is no getting around the fact that motor driven machinery makes the efforts of the very best, most faithful and most hard working of horses look slow and inefficient. So I'm going to dispose of most of my horses and buy a truck for hauling and a tractor for plowing, keeping only two or possibly only one team for odd jobs. Such a plan, I believe, will enable me to do with less help and enable me to operate my farm on a much better margin of profit.

There are always two sides to any question and if some other lover of horses disagrees with me I should like to hear from him through this department of the Farmer, especially if he has made any comparisons between horse power that is produced with hay and oats and horse power produced with gasoline fed to a motor.

C. V. R.

NEWS

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NEWS FOR BREEDERS

Union Stock Show.

The Union, Ore., stock show association has adopted as its slogan this year "The best we'll breed for America's need," a slogan that means much and has a catchy ring to it. It was submitted by Lulu McDermott Smith, librarian of the public library at Baker, and was selected out of over 100, offered from Oregon, California, Idaho and Colorado.

While the Union Stock show was primarily a horse show, and for several years the horses made almost the entire show, and while it will be a great horse show this year, it is now certain there will be a cattle show many times greater than ever before, one that will be surpassed or equaled in the state only by the Oregon State Fair and Pacific International at North Portland. This will be principally a beef cattle show, with Shorthorns predominating. Fifteen exhibitors of Shorthorns are expected, and they will make a show worth going far to see.

While the old plan of free feed and free stall room will be continued for the first time cash premiums will be given. It is practically certain that the county fair money will be given the show, as there is no longer a county fair. The American Shorthorn Breeders' association has recognized the show to the extent of $250 and an equal amount is promised from the stockyards, the commission men and the packers of North Portland, making the Shorthorn prizes worth striving for.

Amusements in the way of riding, roping and other buckaroo stunts will furnish all the thrills any one can ask and the greatest show yet given by this great "Union International" is absolutely assured. H. A.

Fine Shorthorn Heifer.



One of the fine Shorthorn heifers owned by W. O. Minor, the well-known breeder of Heppner, Ore. She sold in the Portland sale April 3 for $570.

PERCHERONS AND SHORTHORNS.

Mulhall's first annual sale of Percherons and Shorthorns will be held on their farm joining the town of Fenn, Idaho, located on the Camas Prairie branch of the O.-W. R. & N. and N. P. R. R., eight miles west of Grangeville, Idaho, and about 50 miles southeast of Lewiston, Idaho, on Wednesday, May 23, 1917.

SALE DATE CHANGED.

On account of conflicting dates the date of the complete dispersal sale of Jerseys of W. A. Forrest of McMinnville, Ore., has been changed to June 12.

is not safe in working under irrigation.

Special forages may be used entire to sustain the flock or may be sowed only for the purpose of supplementing permanent pastures. For early spring pasture, fall seeded rye and wheat are well adapted. Peas and oats, peas and barley, rape and kale, seeded rather early in the spring, yield abundant late spring and summer feed. Where summer moisture for germinating the seed and starting the growth of the plans can be depended upon, rape, kale, or peas and oats may be seeded in late spring or early summer for late summer and fall forage. This plan is followed by some sheep men. If moisture conditions are satisfactory, one may range a series of forage crops for sheep as is done in England. Crops are seeded according to their adaptation to season and are seeded at such times as bring on a succession of green forage from early spring until late fall. The last crop of the fall under the English system is roots.

Clean Up Waste Places.

In addition to permanent or annual pastures especially provided as suggested, the flock may be used to clean up underbrush, clean out lanes and other uncultivated areas, do well on aftermath of meadows and, in general, save for the farmer forage either of no value for other live stock or that could in no other way be so well utilized. If the flock is of much size, however, it can not be entirely maintained on the basis of utilizing waste material. Sheep make mighty good use of rough forage and poor pasture, but too heavy dependence on the flock in this direction often results in abuse. Forcing the flock to rustle" sometimes brings it near to starvation. In general, the keep of the flock in summer is a comparatively light charge. Enough pasture must be provided to maintain the ewes in thrifty condition, keep them milking well and give opportunity for the lambs to supplement their milk with grass.

In many sections pastures get short and dry in midsummer. Specially sowed crops before mentioned can be used to advantage to tide over this period In using pastures containing alfalfa or clover in at all large amount, the animals should not be turned to pasture when extremely hungry. It is also safer to keep them off legumes directly after rains or heavy dews. In non-irrigated sections mixtures with clover and alfalfa prominent are safe for sheep if precautions mentioned above are observed.

Sheep need water and should have it at frequent intervals. Clean and, if possible, fresh water is most advisable. As spring days become warmer and summer is at hand, the flock prefers to graze in early morning and later afternoon and evening. If permitted a choice in the matter, sheep spend the heated portions of the day quietly in a shady place. Shade trees or special structures permitting free circulation of air suffice for this purpose. Protection from the sun in summer during the middle hours of the day is necessary if the flock is to do well.

The rams should be kept separate from the ewes in summer. Otherwise the sheep man may later find himself possessed of some fall lambs.

PUREBRED ASSOCIATION.

The breeders of purebred live stock in Union county, Ore., have recently organized a purebred live stock association, with 32 members. They include breeders of horses, beef and dairy cattle, sheep and hogs. Union county is the home of the Union stock show, and there is already much interest in improved live stock. One of the first things the assoociation did was to issue a little directory showing the addresses of the members and the kind of stock bred. Later on some community advertising will be done.

Long Wool Breeds Larger Sheep

Mature More Slowly; Flesh Inferior to Downs

ARTICLE 3, by E. J. IDDINGS.

The Long Wools bring size and length and weight of fleece to the farm flock. They are somewhat more leggy and rangy and are larger framed than the Down breeds. On account of their size and conformation they are a little later in maturing. The matured animals tend to lay an external fat, and on account of this tendency the carcass is not so highly regarded by meat specialists. The wool is long, strong and rather coarse in fiber. It grades as coarse combing and for two years has been in great demand at good prices for army clothing and other cloth of coarse texture. Present conditions indicate a continued popularity for the longer wools.

The Cotswold.

One of the most popular Long Wool breeds and one of our oldest breeds of sheep is the Cotswold. It was so named from "cots" or small houses used to shelter sheep and "wold" or rolling upland pasture. The improving blood was Leicester.

The modern Cotswold is a massive sheep of impressive bearing. The body is long and deep and the back broad and level. The head is carried stylishly and notwithstanding the size of the sheep the body is smoothly turned. The face is white or gray and the legs of the same color. The wool is long, finer than that carried by most breeds of this type and covers the body well. A marked characteristic is a foretop of spirals, which in well-bred specimens hangs almost to the tip of the nose.

This breed ranks high among wool breeds in grazing, but individuals in it are sometimes found none too vigorous. They stand especially high as milkers and are consequently good mothers. Some of the Idaho sheepmen claim that Cotswolds are the best mothers of all the breeds. On account of these qualities Cotswold blood is especially desired in the ewes. In prolificacy the breed is average. Good flocks should shear an average of 12 to 14 pounds per head.

The Lincoln.

The Lincoln came from the north of England and is considered by many authorities to be our largest breed of sheep. Improvement was brought about by selection in the use of Leicester blood. The breed is larger and more rugged of frame, the head somewhat coarser, the back broader and the bone heavier than that of the Cotswold. Likewise the fleece is longer, not infrequently reaching from 15 to 18 inches in length after a year or more of growth, and the fiber is coarser. The rams occasionally weigh 400 pounds and the ewes 300. Good average weights are 275 to 300 pounds for mature rams and 230 to 275 for mature ewes. Ram fleeces run 16 to 22 pounds and ewe fleeces 12 to 15. This breed lacks the spiral hanging from the forehead but has in their place a tuft of wool.

Lincolns bring weight and substance and ruggedness to a flock, and are especially well adapted to the farm where plenty of feed is available. They also bring increased weight of fleece and length of staple. The annual increase from average ewes is 125 per cent to 135 per cent.

Both Cotswolds and Lincolns are later in maturing than the Downs. Both, however, have been of great value in giving size, substance and length and weight of fleece to range flocks. Both breeds do well on the farm, the Lincoln excelling in size and weight and length of fleece and Cotswolds standing first as mothers and in quality of fleece.

Pasture is the foundation of successful flock husbandry. Pasture means reasonable cost of ewe keep, adequate milk flow from the ewes, and more vigorous growth of lambs. The kind of pasture is not so material since it may be in the form of permanent grasses, seeded pastures, or special forage crops seeded annually for the sheep.

In some of the irrigated districts blue grass and white clover, watered at 10-day to three-week intervals, has been found to yield a wealth of feed. On the Gooding, Idaho, experiment station, it has been found that 15 to 25 head of sheep can be carried per acre on mixed irrigated pasture. There a mixture of Kentucky blue grass, orchard grass, smooth grown broom grass, meadow fescue, timothy and white clover has been used. Irrigation water is used each 10 days. On the University of Idaho farm at Moscow, Idaho, a mixture of timothy, orchard grass, blue grass, clover and alfalfa has been found successful for sheep pasture.

But little alfalfa should be seeded in a mixture intended for sheep, and alfalfa, even in a very small amount,

FOR SALE— Percherons, Shire Stallions and Mares

Jerico 110196, a dark iron gray Percheron stallion, 3 yrs., wt. 1850; sire Jube 81251 by Coco, dam, Bird 81977 by Brilliant Jr. His 1st, 2d and 3d dams are close descendants of Brilliant. Winnings at Northwest Live Stock show, Lewiston, as suckling colt, first in class and Percheron society gold medal as best stallion under three years, owned and bred by exhibitor. As 2 yr. old, 1st in class and champion under 3 years, three Society medals, best under three years owned and bred by exhibitor, grand champion and best stallion owned and bred by exhibitor and in open class reserve grand champion.

Aaron 117566, a 2-yr.-old half-brother, dark bay, wt. 1550. Sire Salvador 51340 by Calypso. Equally good, (some say better). He has never been shown.

Callie 88642, a dark gray mare, 6 yrs. old, wt. 1750. Sire Apollon 26130. She is very strong in Brilliant blood; has mare colt by Halicite.

Lady Grace II., 15452, a 3-yr.-old Shire, bay, white face and white hind legs, wt. 1650. Sire Imp. Toga VII. 9283; dam Bay Lily 13577, by Imp. Greenham Champion.

All first class in every respect, mostly our own breeding, reserved for our own special use.

On account of the death of one of the partners, must sell to close estate.

FOLLETT & SCHOOLER, Genesee, Idaho.

Just Received a Shipment of Percheron and Shire



STALLIONS

from 2 to 4 years old

BIG BONED, SOUND DRAFTERS

This shipment with what we have at our barn in Moscow makes the largest collection of draft stallions in the northwest. These animals are inspected and guaranteed sure breeders and priced to sell quick. Write, wire or call.

BROWN & MOOD

Moscow, Idaho

DATE CHANGED

On account of conflicting dates the date of the complete dispersion sale of my jerseys has been changed to

June 12, 1917

37 HEAD REGISTERED JERSEYS

will be included in this sale. Among them are many with good official records of production. This is my complete herd, that on account of ill health I am forced to sell—milking herd has an average official record of 510 lbs. (Additional announcement in these columns in our issue of May 31.) Catalogue giving full description will be published. Send name and one will be mailed when published. Farm easily reached by railroads.

W. A. FORREST, Owner

McMinnville, Ore.

COL. J. W. HUGHES, Auctioneer

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 21. MAY 24, 1917. WEEKLY.

Will Not Call Army Till Early in Fall

Draft Bill Favors Farming Industry; Farm Workers to Be Exempted in Many Cases

The army conscription bill fixing the ages of men to be drafted into the service at 21 to 30 years has finally been passed and has become law.

Simultaneously came the announcement from Secretary of War Baker that the first call of men to the colors under the new law would not be made until about September 1, which announcement has had the effect of relieving much of the fear of extreme harvest labor shortage.

"The matter of obtaining labor during the harvest season is a very important one, and is now receiving very earnest consideration by all the departments of the government." said Secretary Baker. "Owing to the depleted state of our supplies, it will not be practicable to call out the first 500,000 under the provisions of the army act until about September 1, so there will be no appreciable interference with the labor supply of the country until that date."

Farm Labor Exempted.

The army draft bill is calculated to interfere as little as possible with the operations of the farms and the other staple industries of the country. One provision of the measure is the exemption from service, at least for the present, of young men who are actively engaged in the farming industry, considering that the cultivation of the farms of the country is of equal importance to the training and operation of an army.

By special proclamation President Wilson has designated June 5 as registration day throughout all the states. Local officials will assist in the registration, which will be conducted by precincts in much the same manner as elections or registration for elections are held. President Wilson's selective draft proclamation will be found on page 4 of this issue.

The Army Bill.

The chief provisions of the army bill are as follows:

Raising of armed forces by the selective draft system, imposed upon all males between the ages of 21 and 30 years, inclusive.

Increasing the regular army to maximum war strength.

Drafting into the federal service of national guard units.

Raising of an initial force by conscription of 500,000 men, with addition of 500,000 if deemed necessary.

Raising, if the president sees fit, of four divisions of volunteer infantry, designed by its framers to permit the sending abroad of the expeditionary force proposed by Theodore Roosevelt.



Newton D. Baker, who, as secretary of war, has announced that the first draft of soldiers under the new conscription bill will not be made till about September 1.

Increasing the pay of all enlisted men, as follows: Fifteen dollars additional monthly for those now receiving less than $21, comprising the bulk of the army, graduated downward to $6 additional monthly for those receiving $45 or more.

Prohibition of liquor sales at or near army training camps, and otherwise protecting morals of the soldier.

Following the proclamaton by the president, Governor Lister has designated June 5, Army Registration day, as a state holiday, and has appointed Lieutenant Governor Hart as director of registration.

Governor Lister's statement says:

"While June 5 will be declared a legal holiday, it will not be so declared for amusement purposes, nor for fixing a day for rest, but rather so that it may be used to the fullest degree as a day of service for our country. Many states have already informed the federal authorities that registration will be handled as a volunteer service and accomplished without cost. I am sure Washington will be no less patriotic in this matter than other states.

Registration Officials.

"In the different counties the details of registration will be in charge of a board consisting of the sheriff, the county auditor and county physician. In counties having no regularly appointed county physician, the sheriff and county auditor will be authorized to appoint a physician as the member of the board.

"The registration cards and certificates are already in the hands of the sheriffs. An extra supply has been received by the governor for distribution to counties whose supply furnished direct from the war department is insufficient to meet the needs of the county. As the supply of cards furnished is based on the 1910 census and there has been a marked increase in population in many of the districts since that time, it will be necessary to conserve carefully the supply furnished. Any cards left on hand in the different precincts at the close of registration must be returned to the county sheriff, as these will be used in making up duplicate sets of the registration cards. A careful following of instructions by the registrars and a cheerful loyal cooperation on the part of all citizens will make the registration in the state of Washington a success."

Farmers Will Can Vegetables

Interest in Movement to Store Away Greater Food Supply Means More Gardens In Vicinity of Ephrata.



EPHRATA, Grant county, Wash., May 11.—The acreage of grain in Grant county will be approximately the same as other years. Possibly a 10 per cent increase, owing to the exceptionally wet spring and the high cost of grain. The acreage of potatoes will be very materially increased, possibly 150 per cent increase. Peas and beans will probably be increased to the amount of 500 per cent. Hogs are very scarce, however, many wish to purchase a pig or two to keep for breeding purposes. Must interest is being manifested in the canning of vegetables for home use next year. This will mean that more gardens will be raised on the farms in order to grow the vegetables that can be canned. A number of the farmers are building small houses on their ranches in order to keep a man and family on the ranch the year round. They feel that by this method they will be able to get more efficient and dependable help than by the old method of hiring a single man. Also a number of the farmers who are hiring single men are putting up better bunk houses and giving them better accommodations than heretofore.

H. W. REAUGH.

Beans and Buckwheat.

GIG HARBOR, Pierce county, Wash., May 10.—While this is not at all a grain country, there is an earnest effort this season to grow the greatest possible amount of chicken feed and pig feed—mostly oats, peas and wheat—to be threshed out by hand or to be fed in the bundle. There is also a much stronger effort than common to grow enough roughage for the home stock. The potato crop will surely be well attended to in this section, as the farmers had mostly retained plenty of seed, which will no doubt be lacking in many parts of the country, and which must certainly go far toward preventing an over-planting, as many seem to fear. The two crops which may yet be pushed in this section of the state are beans and buckwheat, and it is to be hoped that the farmers will take advantage of the fact that these are late crops and may be safely planted up to June first.

There is occasionally a farm hereabouts that is equipped with a little house suitable for the occupancy of a tenant laborer. Odds and ends of lumber suitable for the building of such houses are so cheap here on the Coast that it is surprising that more farms are not thus equipped. It is a decided advantage to the farmer who has to have more or less labor outside of his family.

W. D. BOYNTON.

Greater Production Is Slogan.

CASTLE ROCK, Cowlitz County, Wash., April 27.—The question has often been asked whether it would pay or not to build a house with a good size garden lot enclosed, suitable small buildings for a few chickens, and a pig or two for the farm help, hiring only married men. This question is answered by citing a number of cases where it has been tried out to the disappointment of the farmer. In Cowlitz county our help consists mostly of men that are looking for the best wages and do not hesitate to pick up and travel if they hear of a better place, so in that case the house would be left empty. However, farmers as a rule manage to get their crops in the ground in suitable season. Greater production is the motto, and the farm papers help materially in this by studying out the experiences of others. In the towns in the county the back and front dooryard is spaded up, raked over, and some kind of a seed is put in the ground, some say "scabbing on the farmer." Be it this or that, there is plenty of room for all.

The high prices have a tendency to speed them up; potatoes, $5 per hundred; eggs, 35 cents; flour, $13 per barrel; beans, 13 cents a pound, and even rice has come up with an ante. But the farmers are planting apparently as much, if not more, regardless of the high price of seed, cutting the potato a little smaller giving two eyes to the piece planted, which will give the plant growth, making a bushel plant nearly twice as much as the old way of cutting in half. Twenty-five silos have been sold in the county to to be placed in readiness for the fall crop. Corn will be the principal crop for the silo. Dairy products are demanding that every available means be used to conserve the food supply for the cows. Sheep and some goats are used for the stump land pastures. We are up against it for plaster and lime. Several carloads have been ordered in the county and but few delivered. This will have a tendency to reduce the crop supply as this stimulant is what most of our soils lack for growing a crop. The slogan for the county is "greater production at least cost."

C. C. BROWN.

High Water Is a Handicap.

LITTLE ROCK, Thurston County, Wash., April 30.—High prices do not seem to have the effect on the acreage being put into crops that the high water does. This has been an unusually wet spring and lots of the low ground is covered with water. It is common to see signs tacked up: "No Hunting or Trespassing" over a piece of ground that resembles a lake. The upland is nearly all planted. No one crop seems to be leading in acreage. Every effort is being made to raise as much food as can possibly be grown. Every foot of available ground is being used and more ground being cleared. There is some increase in meat production, but not as great as should be. Farmers in this locality are bothered by coyotes, coons, skunks, weasels, rats, hawks and owls, which do a great deal of damage to sheep and poultry. If these pests were killed off there would be a greater increase in sheep and poultry. The coyotes and hawks are the hardest to get and do the most damage. Only a very few farms could afford to build a home for a hired man and his family and keep them the year 'round.

LEE KEGLEY.

Plymouth Rocks Lead.

FERNDALE, Whatcom County, Wash., May 5.—This section of the state has just completed one of the longest winters on record. Since May 1 the weather has been pleasant and farm work is being rushed. Nearly all the farmers have finished planting their oats and early potatoes are making a splendid showing. Oats and vetch and corn will be grown by silo owners this year, as they have proved to be the most practical filling for silos here. Corn grows remarkably well along the Nooksack river, where the soil is sandy. Mangels and kale are also staple crops. Milk is selling at $2.50 a hundred and butter fat brings 48 cents a pound. The men are not the only workers this spring, as the farmers' wives are raising more chickens than ever before, besides doing the gardening. More Plymouth Rocks are raised than any other kind of chickens. MRS. JACK PLASTER.

Few Pigs; Fewer Sheep.

CHEHALIS, Lewis County, Wash., May 7.—We have had a fine winter here of seven months, about the longest ever known. Hay and all feeds started in high and have steadily gone higher, with the exception of the big drop in hay in January and February, followed by a steady advance to $30 a ton. Wheat is $80 per ton, oats $60, potatoes $60, peas 5 cents per pound, beans 10 cents per pound, onions 10 cents per pound, butter fat 39 cents per pound, eggs 35 cents per dozen, milk $2.35 per 100 pounds, calves $1 to $4 each, cows $25 and up. There is scarcely a sheep in Lewis county and not many pigs. Hens are going to the butchers at 17 cents per pound. Every vacant patch of ground will go into gardens as soon as the weather permits. If we have a good crop season we will gather decidedly the largest supply ever known of grain, hay, potatoes, garden stuffs and fruit for the canneries. Women, children and business men all seem determined to do everything possible to supply better tables at less cost. Housewives are preserving lots of eggs for winter use and in season will can a double supply of fruit and garden products. The hired help question for years has been a vexation and is growing worse. Most of the larger farmers would gladly build cozy cottages for permanent help, but help is so changeable it does not work. A good man working with his family three to five years on the same farm, can start farming for himself in less than 10 years, and be worth more than three or four men that are roving the country for high price jobs.

L. K. COGSWELL.

Need Cheaper Money.

OTHELLO, Adams County, Wash., May 14.—The acreage of grain has not materially increased because of advanced prices. The grain is practically all out of the hands of the producer, a few belated loads brought the lucky ones $2.75 per bushel. Because of $4.75 per sack for seed very few spuds were planted, really less than last year. Early plantings are now coming up. One farmer here is planting some 15 acres of corn. There is practically nothing out of the usual in the way of increased food production. Many isolated tracts of land could have been prepared for next season crops but for lack of funds and difficulty in getting loans to meet the expense. Interest is high and banks demand gilt edge security and farmers are reluctant to bind their stock and tools to get the loans, hence many tracts that had been farmed are weed patches. Here is where government aid could increase the crop production to a marked degree. We are urged to be patriotic and do our utmost to prepare to feed the hungry, but the finances of this vicinity has prevented hundreds of acres from being prepared for seed. No farmer here hires by the year, as the farm help is mostly either of the home grown boys or transients who migrate when the notion takes them. Wages here are $40 to $50 per month, an average of about $45. The wage for harvest will be $3 to $3.50 per day, although the transients are agitating for $5 per day. Many farmers will do their own work and use machinery to reduce expenses.

A. O. LEE.

Lightest Known Wood.

Balsa wood, found in Central America, is said to be the lighest known wood. It is lighter than cork, and has an average specific gravity of only .104.

It Takes Punch In the Power To Do Farm Work

TOY tractors have fooled a great many people, makers and buyers alike. Theory won't plow a stony field or steadily drive a threshing machine. Nothing but strength, weight and power will do this kind of work. The Nichols & Shepard Co. build *work* engines and build them so that you get *paying results* when they are at work.

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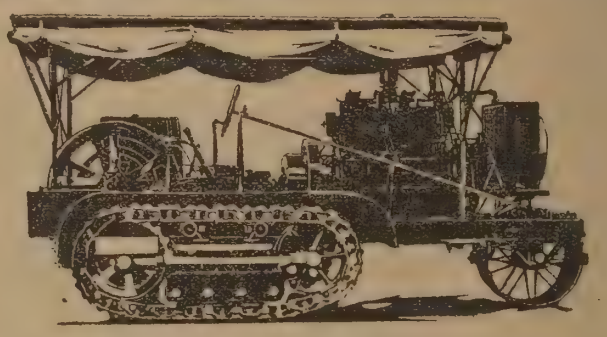
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Holt design and Holt construction have put into the Caterpillar endurance, long life with low upkeep, the sort of dependability that makes the work run smoothly without annoying and costly delays

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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 21 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF May 24, 1917

Must Not Sacrifice Breeding Stock

High Prices and Feed Shortage Tempt Many to Let Stock Animals Go

Are high prices, feed shortage and the nationwide demand for increased production of grains for food manufacture a menace to the live stock industry of the northwest, or, in fact, of the entire nation? Such statements as the above from President Daughtrey of the Portland yards indicate such a menace.

A widespread agitation against the slaughter of breeding animals and immature stock has been launched and there is evidence that this agitation is bearing fruit and that there is a rapidly increasing tendency among owners of live stock to cling to their breeding stock with a view of assuring a supply of meat animals as well as work horses in years to come.

Roberts Is Optimistic.

With a view to learning the true facts, the Washington Farmer secured interviews with some of the men most closely in touch with the industry. It is gratifying to be able to report the declaration of W. D. Roberts of the Spokane union stock yards that the tide of cows and sows and ewes to the slaughter in the territory of the four states tributary to Spokane is being checked, and that farmers are beginning not only to hold such stock, but to buy to replenish their breeding herds. Mr. Roberts stated that the Spokane yards are doing everything in their power to induce owners to hold their stock, and that when such animals are received at the yards for sale to butchers or packers effort is made to resell them to farmers who will take them and use them for purposes of increased production. The Spokane yards have now a number of applications for breeding stock, and when such come in notice is immediately sent to such applicants. Recently a carload of small stocker hogs were shipped into the Wenatchee district from Spokane, and were eagerly competed for by the farmers of that region to replenish their depleted herds.

Are Selling Dairy Cows.

B. E. Smead of Opportunity, Wash., secretary of the Inland Dairy association, is less optimistic. Mr. Smead says that the dairymen are unloading many of their cows by way of the butcher's block because high prices for beef tempt them, and because high prices of feed and comparatively low prices for milk and cream make it unprofitable to keep anything but the very best producers. He is agreed with both Mr. Roberts of the Spokane yards and President Daughtrey of the Portland yards, that where cows that are not profitable producers are slaughtered, it is probably a good thing for the dairy business.

The following is the reply of President Daughtrey to the inquiry of The Farmer:

"With an ordinary dairy cow, in fairly good condition bringing from $75 to $125, it is a hard matter for most farmers to withstand the temptation to dispose of them, especially with the present high cost of feed, taking a chance later on when they expect prices might be lower to replace them. Carload after carload of what appears to be fairly good milch cows are coming here to the yards. In many cases, perhaps, these cows have been tested, and found wanting in butterfat—if this is so, they should be sold, but in other cases cows give evidence of heavy production.

See High Prices Ahead.

"The same thing is happening with breeding sows, many of which are selling on the market from $30 to $60 and $75 per head, according to weight.

"I do not care to prophesy, but can see nothing but high prices for breeding stock for several years to come—prices probably 50 per cent higher than at the present time.

"Every farmer who possibly can should save his best breeding animals. We know of no means to prevent farmers from marketing their breeding stock; we can only appeal to their common sense.

Government Control?

"The question of the government's prohibiting the sale of breeding stuff would be very difficult to handle and under many circumstances might work a disastrous hardship. No doubt the biggest tendency causing farmers to market their live stock is the fear that the present high prices will not be maintained. Experience in the past has taught them that there are ups and downs in prices—they are not willing to take a chance on a lower market. This brings up the question of the government fixing a minimum price for a long period of years on all farm products. A few months ago this proposition would have been dismissed without a thought, but at the present it looms large in the immediate future.

"Packing house and stock yards facilities are such that there is no danger of overproduction in this northwest country. Live stock will always have a fair value and is one of the most liquid assets on the farm."

Associations Are Active.

In common with others actively interested in the live stock industry, the pure bred live stock associations are urging their members to conserve breeding stock. The following is in part a letter sent out to its members by the executive committee of the Washington Pure Bred Live Stock association, made up of Charles M. Talmadge, F. M. Rothrock, J. H. McCroskey, G. M. Wilson, J. N. Clise and J. L. Smith:

"The members of our association can do their country no greater service at this time than by lending their aid in a concerted effort to prevent the marketing for slaughter of immature live stock and especially pregnant females. Also, we want to emphasize the necessity of the prevention of the sale of heifer calves for veal.

"The live stock men of our state have made a splendid start in pure bred live stock and as members of our association, we should do everything possible to prevent the needless slaughter of breeding animals. There is a dearth throughout the nation of mature stock. This is particularly true in the state of Washington.

"What is needed most is the influence you can bring to conserve our herds and to encourage and keep on the farms all breeding stock that will be needed during the war and after it is ended."

Information received from F. C. Sharkey of the Seattle Union stock yards, indicates that there is little tendency at the present time in the territory tributary to Seattle, for breeding stock to be placed on the block.

New York Largest City.

New York is the largest city in the world, according to the census of 1910.

Steam Pressure

Makes for Success in Canning

By PAUL E. TRIEM.

Now that the drive for increased food production is on in earnest it will be well for professional and amateur gardeners to consider the important matter of preserving the surplus from the vegetable and fruit areas. We Americans are a notoriously wasteful nation in this respect.

The remedy for past mistakes lies; first, in planting largely those vegetables which can be preserved in one way or another, provided there happens to be a surplus above present needs; and, second, in learning how to preserve or "can" this surplus so that it will keep. E. F. Benson, Washington state commissioner of agriculture, has suggested, under the first head, that we will find corn and beans of greater value as actual supporters of life and energy than potatoes. Corn, peas and beans are types of the really substantial food materials that can be realized in the garden, as contrasted with radishes, turnips, etc., which are of value chiefly for their mineral salts.

Plant a generous acreage of peas, beans and corn; and after you have made this beginning follow it up by preparing to care for the surplus. All of these food crops can be preserved by drying, but much of their flavor is sacrificed in this method of holding over. Canning is undoubtedly the best method of preservation.

There was a time not so far back when the average housewife would tell you that peas, beans and corn couldn't be canned successfully; that they would ferment, bulge the covers, and even explode the cans in spite of the most careful canning. The fact of the matter is that all of these garden crops furnish an ideal camping ground for the germs of fermentation and putrefaction; but that if these germs and their spores are really killed by heat, and if the sterilized corn or beans or peas is sealed air-tight in a sterilized receptacle fermentation is a scientific impossibility.

All the misunderstanding has arisen because of a lack of knowledge of some of the peculiarities of spores, which may be roughly called the "eggs" from which the germs of fermentation develop. These spores are incredibly resistent to the action of heat. Boiling for half an hour or so merely warms them up and makes them feel good, although the average germ is rendered harmless by this treatment. Now, remember that a spore is a germ in embryo, that it will soon hatch out into a germ; and see what happens when beans or corn are canned in the usual manner of boiling for half an hour or even an hour. The germs are killed, but the spores are merely hastened toward hatching.

Long-continued boiling is one of the remedies. Three hours' submersion in water at a "jumping boil" will do the work. Where time is a consideration, however—and it usually is in the kitchen—the steam pressure method presents the great advantage of cutting down the time of sterilization to about 40 minutes. The principle involved is that there is a gain in effectiveness of 2½ degrees in temperature for every pound of pressure, so that with the modern pressure canning outfit it is possible to raise the temperature to which the cans are subjected to a point where even a spore can not long retain vitality.

In addition to pressure outfits for the small or the large kitchen moderu manufacturers are now turning out a home sealer for tin cans, which puts the housewife on an equal footing with the biggest factory, as far as the effectiveness of equipment goes. Tin cans are cheap, easily stored, can be shipped by parcel post and do not have to be held from one season to another.



Chemawa Indian school girls and their fair exhibits of canned goods.

May Leave Fruit Unwrapped

Paper Prices Too High, Claim Orchardists

Large quantities of fruit in the northwest will be marketed in some way without wrapping unless the price of paper is reduced, declare growers throughout the fruit districts.

"A producer can not afford to wrap the cheaper grades of fruit at all at the present prices of paper," said C. J. Webb of the Spokane Fruit Growers' association. Mr. Webb added that the fruit organizations were going to fight the alleged combine of paper companies to a finish, and that the office of district attorney and the federal trade commission would probe the charges to the bottom.

Already through the agitation that has been begun a noticeable reduction in the price of paper has been made, though it is claimed to be still far in excess of what conditions justify.

Boost Prices Simultaneously.

It is claimed that several months ago the paper concerns raised their prices simultaneously to as high as 75 per cent to 100 per cent above the prices of last year. Even now the increases range from 35 per cent to 75 per cent above last year's quotations, it is claimed. Paper of the most commonly used variety which sold last season at 4 cents a pound is this year offered at 6 cents. The higher grade, which sold last year at 8 cents, can now be contracted at about 10 1-2 cents per pound.

May Mean Evaporators.

One result of the excessive prices of wrappers probably will be an enormous increase in the fruit canned or cried this season, as much fruit of other than strictly high grade will be marketed as a byproduct rather than as packed fruit. An unusual interest is being manifested in the development of byproducts plants in the northwest, and it is believed that many growers will lay early plans for the conversion of their fruit rather than contract their wrapping paper at present prices.

The unusual demand for investigators of the federal department of justice to handle the foreign spy situation and other matters coming up in connection with the war has caused the investigation of the paper charges to be delayed, but efforts are being made to complete the inquiry before the fruit season in order to determine the grounds, if any exist, for the enormous increase in prices, and to secure justice to the fruit men if such increase is found without adequate justification.

A Profitable Bantam.

L. T. Gibson of North Roseburg, Ore., has a Buff Cochin bantam pullet that has won for herself a place in the egg-laying contests. At six months of age she began laying and for 84 days without a break enriched the family egg basket with an egg each day. Then she was set on 14 eggs and hatched 14 chicks.

Wheat Sales.

Club wheat reached $2.10 at Walla Walla, April 19. W. P. Hill sold 4200 bushels of wheat to the Harrington Milling company for $2 a bushel last week. John S. Schmick of Endicott, Whitman county, Wash., sold 10,000 bushels of wheat at $2.07 1-2 last week and H. J. Miller sold 23,000 bushels at $2.01.

Selective Draft Proclamation

President Calls to Colors Young Men 21 to 30 Years, Inclusive

With the passage by congress of the selective draft bill comes the announcement from Secretary of War Baker that the first call of men to the colors under the new law would not be made until about September 1.

President Wilson's proclamation putting into effect the selective draft provision of the war army bill follows:

Whereas, congress has enacted and the president has, on the 18th day of May, one thousand nine hundred and seventeen, approved the law which contains the following provisions:

Section 5—That all male persons between the ages of 21 and 30, both inclusive, shall be subject to registration in accordance with regulations to be prescribed by the president; and upon proclamation by the president or other public notice given by him or by his direction stating the time and place of such registration it shall be the duty of all persons of the designated ages, except officers and enlisted men of the regular army, the navy and the national guard and naval militia while in the service of the United States, to present themselves for and submit to registration under the provisions of this act, and every such person shall be deemed to have notice of the requirements of this act upon the publication of said proclamation or other notice as aforesaid given by the president or by his direction; and any person who shall wilfully fail or refuse to present himself for registration or submit thereto as herein provided shall be guilty of a misdemeanor and shall, upon conviction in the district court of the United States having jurisdiction thereof, be punished by imprisonment for not more than one year, and shall thereupon be duly registered; provided further, that in the case of temporary absence from actual place of legal residence of any person liable to registration as provided herein such registration may be made under regulations to be prescribed by the president.

Registration Duties.

Section 6—That the president is hereby authorized to utilize the service of any or all departments and any or all officers or agents of the United States and of the several states, territories, and the District of Columbia and subdivisions thereof in the execution of this act, and all officers and agents of the United States and of the several states, territories and sub-divisions thereof, and of the District of Columbia, and all persons designated or appointed under regulations prescribed by the president, whether such appointments are made by the president himself or by the governor or other officer of any state or territory to perform any duty in the execution of this act, are hereby required to perform such duty as the president shall order or direct, and all such officers and agents and persons so designated or appointed shall hereby have full authority for all acts done by them in the execution of this act by the direction of the president. Correspondence in the execution of this act may be carried in penalty envelopes bearing the frank of the war department. Any persons charged as herein provided with the duty of carrying into effect any of the provisions of this act or the regulations made or directions given thereunder shall fail or neglect to perform such duty; and any person charged with such duty or having and exercising any authority under said act, regulations or directions, who shall knowingly make or be a party to the making of any false or incorrect registration, physical examination, exemption, enlistment, enrolment, or muster; and any person who shall make or be a party to the making of any false statement or certificate as to the fitness or liability of himself or any other person for service under the provisions of this act, or regulations made by the president thereunder, or otherwise evades or aids another to evade the requirements of this act or of said regulations, or who, in any manner, shall fail or neglect fully to perform any duty required of him in the execution of this act, shall, if not subject to military law, be guilty of a misdemeanor, and upon conviction in the district court of the United States having jurisdiction thereof be punished by imprisonment for not more than one year, or, if subject to military law, shall be by court-martial and suffer such punishment as a court-martial may direct.

Register on June 5.

Now, therefore, I, Woodrow Wilson, president of the United States, do call upon the governor of each of the several states and territories, the board of commissioners of the District of Columbia and all officers and agents of the several states and territries of the District of Columbia and of the counties and municipalities therein to perform certain duties in the execution of the foregoing law, which duties will be communicated to them directly in regulations of even date herewith.

And I do further proclaim and give notice to all persons subject to registration in the several states and in the District of Columbia in accordance with the above law that the time and place of such registration shall be between 7 a. m. and 9 p. m. on the 5th day of June, 1917, at the registration place in the precinct wherein they have their permanent homes. Those who shall have attained their 21st birthday and who shall not have attained their 31st birthday on or before the day here named are required to register, excepting only officers and enlisted men of the regular army, the navy, the marine corps and the national guard and naval militia while in the service of the United States and officers in the officers' reserve corps and enlisted men in the enlisted reserve corps while in active service. In the territories of Alaska, Hawaii and Porto Rico a date for registration will be named in a later proclamation.

Absentees Must Register.

And I do charge those who through sickness shall be unable to present themselves for registration that they apply on or before the day of registration to the county clerk of the county where they may be for instructions as to how they may be registered by agent. Those who expect to be absent on the day named from the counties in which they have their permanent homes may register by mail, but their mailed registration cards must reach the places in which they have their permanent homes by the day named herein. They should apply as soon as practicable to the county clerk of the county wherein they may be for instruction as to how they may accomplish their registration by mail. In case such persons as, through sickness or absence, may be unable to present themselves personally for registration shall be sojourning in cities of over 30,000 population, they shall apply to the city clerk of the city wherein they may be sojourning rather than to the clerk of the county. The clerks of counties and of cities of over 30,000 population in which numerous applications from the sick and from nonresidents are expected are authorized to establish such subagencies and to employ and deputize such clerical force as may be necessary to accommodate these applications.

Whole Nation Must Fight.

The power against which we are arrayed has sought to impose its will upon the world by force. To this end it has increased armament until it has changed the face of war. In the sense in which we have been wont to think of armies there are no armies in this struggle. There are entire nations armed. Thus, the men who remain to till the soil and man the factories are no less a part of the army that is in France than the men beneath the battle flags. It must be so with us. It is not an army that we must shape and train for war; it is a nation. To this end our people must draw close in one compact front against a common foe. But this can not be if each man pursues a private purpose. All must pursue one purpose. The nation needs all men; but it needs each man, not in the field that will most please him, but in the endeavor that will best serve the common good. Thus, though a sharpshooter pleases to operate a trip hammer for the forging of great guns, and an expert machinist desires to march with the flag, the nation is being served only when the sharpshooter marches and the machinist remains at his levers. The whole nation must be a team in which each man shall play the part for which he is best fitted. To this end congress has provided that the nation shall be organized for war by selection and that each man shall be

(Continued on page seven)

Home Canning Habit

Charles Briffett, principal of the Fife school in Pierce county, is a great believer in home canning for home consumption.

"I don't look for home canning to make much of a change in the market for canned goods," says Mr. Briffett, "for the reason, among others, that the bulk of this kind of trade calls for a medium-priced article and there the big canner can dominate the field. Home canning, when it is done right, turns out a quality product; and if quality prices can be obtained, the transaction will be successful.

"However," continues Mr. Briffett, "it is not necessary that home canning should open up a big commercial field in order to make good. Its greatest service to the world will be in saving to the producer those fruits, vegetables and meats which would otherwise go to waste. Recently, for instance, one of the farmers near here butchered a good sized calf and, after disposing of about half the meat by immediate use in the family and by giving much away, found that he had half the veal left. More as a joke than anything else, he said to me: 'I suppose I ought to can the rest of this meat.'

"'Why not?' I asked him.

"We took one of the pressure canning outfits and a home can sealer to the farm, cooked the meat till it would slip off the bones and canned it, then boiled the bones and canned the liquor when it was ready for soup stock. That is an illustration of the real value of home canning, to my mind, it makes for better living on the farm."

P. E. T.

Would Freeze Out Speculators

Let Government Fix Prices of Farm Products Is General Opinion

"Do you favor government control of prices of wheat, potatoes, butter, eggs, wool, cotton and other staple farm products during the war?"

Replies to this question, sent out by The Washington Farmer, continue to pour in. No subject has stirred our readers more profoundly. Most of the additional replies favor government control of prices of staple farm products, provided the prices of supplies bought by the farmer are also fixed by the government. More vitally interesting reading follows:

Minimum Price Guaranteed.

To the Editor of The Washington Farmer: I favor the guarantee by the government of a minimum price for staple farm products and for the reason that it will enable the farmer to so shape his farming operations for a period of years that a maximum yield would be secured. If we are to have maximum production of food products, the elimination of gamble will do more to this end than anything else. For example, we need more meat and to produce any real amount of meat takes capital, special equipment and years of time. It would be foolhardy to enter the business with a possibility of no fair and adequate return.

I favor too, the simplication of the present methods of distribution of food products. Briefly, we need cheaper, better methods of transportation, better rural roads, and in the cities of handling quantities of products for distribution of dealers by street cars of some similar means. We also need better cold storage and warehouse terminal facilities, the same could be available at reasonable cost. We need to handle food products in greater bulk and a less number of times.

The farmer needs more for what he sells and the consumer should pay less for what he gets. To this end food products must be handled more easily and through less hands.

In this section, a strictly wheat-growing section, all available land is being sown. In towns potatoes and other garden truck are being planted on vacant lots.

HARRY LOVEJOY.
Waterville, Douglas County.

Will Make Times Easier.

To the Editor of The Washington Farmer: In replye to your inquiry for information will say that I do favor government regulation of prices during the war because:

First—It will prevent some of the people from reaping large profits at the expense of others.

Second—It will make times easier for all concerned.

Third—It will reduce the great expense of the war both for ourselves and our allies.

Fourth—Because if farm products prices are regulated by government control so will other things be regulated accordingly.

Everybody around here is trying to raise more wheat and all are planting more wheat and all are planting gardens to raise as much of their own necessities as possible.

D. A. LENOCKER.
Schragg, Wash.

Other Replies.

No one can doubt the fundamental patriotism of Frank Bean of Winthrop, Okanogan county. "As for myself I stand by the president and cooperate with him in the fullest sense of the word. If he needs me on the lines in France or anywhere else I am ready and willing to go. I have seen four years of service and am a trained soldier; but if I am of more use as a tiller of the soil and a herder of the stock I am willing to serve there. A good soldier's duty is to obey orders." Mr. Bean adds that the farmers in his vicinity are doing their very best in adding to crop production especially along the line of beans and potatoes. He believes in the government control of farm produce, of manufacturers and of railroads and he thinks that the country is about to get rid of the middleman. Even if it does take a bloody war with its shot and shell to do it.

Peter Hanson of Withrow, Douglas county, sums up his ideas in the following: "I believe in government regulation of prices on farm products for the simple reason that it will cut out the speculator and the poor working people will get their rations at a more reasonable price."

Arthur Wells of Okanogan county favors government control because "it would stop the false prices made by grain and other produce gamblers." As to what the farmers are doing in his section he says: "The farmers raise all they can with the help obtainable every year. Do not know of any extra effort. We would be very foolish to kill ourselves working to make big crops and then get less for them than when we have small crops, which is the rule and not the exception."

B. F. Sparrow of Adams county, who has 3500 acres in wheat this year, and who expects "to raise our vegetables also," says in reply to the question of government control of staple farm crops: "Will say that I favor government control of prices on farm produces, mainly for the benefit of those who have families to support and nothing to sell."

Benson Heads Food Products Campaign

Cooperation With State Commissioner of Agriculture Is Towering Demand of the Hour

Active patriotism is not doing what you want to do or what you yourself think ought to be done; it is the doing of what you are told to do and to do it off the bat.

Patriotic talk and patriotic parades must give place to patriotic deeds, and if you are going to have patriotic deeds you must have patriotic leadership supported by patriotic loyalty.

These conclusions remain in my mind as the big result of the Washington State War Food commission meeting at Tacoma last week.

The two most important resolutions brought in by the committee, composed of E. F. Benson, E. E. Flood, W. S. Thornber, W. H. Paulhamus and H. M. White, and unanimously adopted, follow:

Be it resolved that this committee recognizes Hon. E. F. Benson, commissioner of agriculture, Olympia, Wash., the directing head of the agricultural industry of the state of Washington in the present food products campaign, and that in the present crisis we especially call upon the citizens, public officials and organizations of every character to cooperate with Mr. Benson, giving him all possible support, furnish him complete data and information, and carry on such suggestions and instructions as are issued from his office from time to time.

Be it further resolved that we recognize Mr. Henry M. White, the state representative of the United States department of labor, the directing head of the labor problems in this state wherein food products are produced and harvested and call upon all citizens, public officials and all organizations to cooperate with him, lending every aid and help to carry out his suggestions.

This means that in the matter of increased food production in the state of Washington

WHAT BENSON SAYS—GOES

After quite a lot of talk, talk of more than usual seriousness, Mr. Paulhamus sounded the keynote embodied in the above resolutions by declaring: "What we must have in this matter of increased food production is a boss." Nothing could be farther from the mind of E. F. Benson than the objectionable features of "bossing." He has been handing out his orders thus far under the guise of appeals and advice. As a matter of fact, they are not appeals and advice, not simply practical farm information; they are war orders.

Governor Lister searched long for the best man to fill the important position of state commissioner of agriculture, a position which has leaped into one of first importance since the country declared war. Mr. Benson is recognized as a man of wide executive experience, and the fact that he has put forth his war edicts as familiar talks with food producers should not detract from the full significance of those directions as war orders to be loyally obeyed.

Other Resolutions.

Here are the other resolutions adopted at the meeting:

Be it further resolved that we urge upon all citizens of the state the vital necessity of producing the maximum amount of staple food crops and meat products during the year 1917 and until the present crisis is passed: and that this season we especially recommend the planting of the following crops for eastern Washington: Early Bard and Marcus wheat, beans, (both field and string), corn, potatoes and field peas; and in western Washington: Root crops, consisting of potatoes, carrots, beets, parsnips, cabbage and all possible forage crops for milk cows.

Be it further resolved that the State Bankers' association arrange in each and every community for the local bankers to arrange such organizations as is necessary to supply seed to all worthy who are unable to purchase the same.

Be it further resolved that we call to the attention of county officials the fact that there is a serious shortage of horses and men to do the necessary farm work at this period of the year, and we respectfully recommend to such county officials that they discontinue all public works temporarily so as to relieve all available horse power and men during seed time and harvest.

Bt it further resolved that county commissioners of all counties are requested to report to the United States department of labor, either at the head office at Seattle or at any sub-station, as follows: Spokane, Walla Walla, Aberdeen, Tacoma, Bellingham or Everett, their ability to furnish horses or men for farm work; also their demands and needs for horses and men for farm work, separate reports to be made continuously throughout the year.

Be it further resolved that the county commissioners in each county be requested to make a careful survey of farm machinery, especially threshing outfits, and the need for said farm machinery in their counties and to report the conditions existing in their counties to the Washington State college at Pullman, Wash., these reports to be made weekly during the harvest season and threshing season, and call special attention to the farm machinery that is available elsewhere and to the need of additional farm machinery in their counties.

Be it further resolved that we recommend to the county commissioners of every county in the state of Washington the immediate necessity for the employment of a county agriculturist agent and to communicate with the Washington State college of Pullman, Wash., their action.

Be it further resolved that we sound a note of warning to the citizens of the state of Washington against reducing their herds or flocks at this time, calling attention to the fact that the present high prices of grain values is temporary in character and conditions will reconstruct themselves and that the future of the live stock industry is at a critical point and demands careful preservation.

Be it further resolved that we recommend to the public service commission of the state of Washington, that they make a thorough investigation of the possibility of the growers of our perishable fruit being able to obtain cars to move their product in reasonable and seasonable time and that the public service commission report conditions to and consult with the commissioner of agriculture.

Be it further resolved that we recommend that all employers of labor, where it is possible to do so, to employ girls and women to do such work as can be done by them for the purpose of making available men and boys for outside work of strenuous nature.

Be it further resolved that we ask the hearty cooperation of all school authorities in the circulation of employment cards as issued by the labor commissioner, Henry M. White of Seattle, Wash., for employment among the high school students of the state of Washington, both boys and girls, so that their services may be available.

The above resolutions are passed for the purpose of the production of the crops during the season of 1917 and that recognizing the welfare of the state of Washington, and the necessity for continual increased production of all food products in the state, we respectfully recommend to E. F. Benson, commissioner of agriculture, Olympia, Wash., that plans be immediately outlined for a continual increase of the yearly output of all food products in the state of Washington, and we suggest that through the assistance of state and county officials, that an effort be made before the first of the year to locate available agricultural lands in the state not now under cultivation with a view to bring the same under cultivation in 1918.

The members of the food commission present were: E. F. Benson, state commissioner of agriculture; R. B. Coglan, at the head of the county agriculturists of the state; Mrs. Josephine Preston, state superintendent of schools; Professor George Severance, head of the agricultural department of the state college at Pullman; Professor W. A. Linklater, director of the Puyallup experiment station; Professor W. S. Thornber, head of the extension department of the state college; Professor Edwin A. Start of the state University of Washington; E. E. Flood, chairman of the agricultural committee of the State Bankers' association; Ernest P. Marsh, president of the State Federation of Labor; J. P. Powells of Seattle, and Mr. Younger of Tacoma.

Among others present at the meeting were: H. M. White, government representative of immigration, labor and employment; President Beaton of the Harvesters' league of Seattle; Chauncey E. Beach of Olympia; F. W. Rader, C. F. Monroe and C. H. Bergstrom, respectively, county agriculturists of Gray's Harbor, King and Thurston counties; James A. Hayes of the Tacoma Chamber of Commerce; James A. Ford and Charles Hebberd of the Spokane Chamber of Commerce; F. W. Graham of the Great Northern; J. D. Farrell and C. L. Smith of the O.-W. R. & N. company; Walter J. Thompson of Tacoma, President E. O. Holland of the state college, John Hartman of Seattle, W. H. Paulhamus of Puyallup, C. S. Whitmore of the Northwest Horticulturist, and E. A. Smith of The Washington Farmer.

Governor's Urgent Plea.

"The food question is the most important now before the country," said Governor Lister in his address before the Tacoma meeting. The seriousness of the situation as pointed out by the governor:

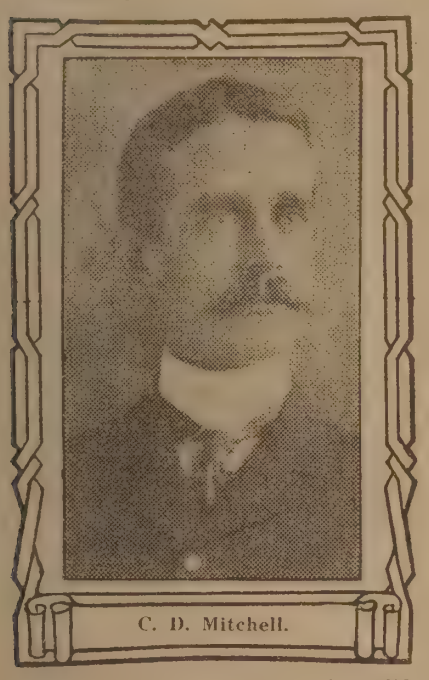
"When I left for the east I believed, and most of the people of the state believed, that the war would last but a few months. Today, after conferring with many government officials and seeing many confidential reports, I feel that the United States authorities will make a fatal mistake if they fail to prepare for a long, long war.

"Our chief fault as a people is that we have the idea of victory; easy victory, constantly in our minds. We never think of defeat. Right now too many people see an easy victory and too few what defeat would mean to the country. I urge you all to stop and think for a moment what defeat would mean. We have the lessons of Belgium, Serbia and Rumania to study."

In opening the meeting Mr. Benson, as chairman of the committee, stated

(Continued on page twenty-four.)

Washington Portraits No. 16.



C. D. Mitchell.

Always having a liking for farm life and lured by the call of the west C. D. Mitchell, moved to Richland in December, 1908, from the south, after an inspection of several of the fruit districts of the state. He purchased 20 acres of land and set most of it to apples, which are now in bearing. Certain lowlying lands on the Columbia and Yakima river bottoms are best adapted to corn and alfalfa, and dairying and hogs have been very profitable. Nearly all of the farmers keep a few cows to consume the surplus hay and produce manure to return to the soil. On account of the dry climate and the ability to grow good corn, turkey raising has been undertaken on quite an extensive scale by several farmers in the immediate vicinity of Richland and has also been profitable. The greatest success, Mr. Mitchell says, has been made in that country with strawberries and early potatoes, although it has been proven that good apples can and do grow there. However, Mr. Mitchell recommends a diversity of crops with preference in the following order: Strawberries, tomatoes, asparagus, early potatoes, grapes, cherries, apples and peaches.

The next in the series of Washington portraits will be that of John Van Trojen Sr. of Chimacum, and will be given in next week's issue of The Washington Farmer.

Preparing for the Lamb Crop

The Sheep Men Should Follow Definite Breeding System

ARTICLE 4, by E. J. IDDINGS.

The first business of the sheep man on the approach of the breeding season is the elimination of undesirable ewes. Some ewes plainly indicate by their appearance that there is a probability of their not surviving the winter. Others have been found barren, have developed spoiled bags, or in other ways are no longer a source of profit to their owner. Barren ewes are nearly always in good condition and easily distinguished from those that have suckled lambs.

Vigorus Ewes Needed.

Ewe lambs are saved by many to replace ewes that are weeded out, but are not generally bred until yearlings. In late summer good ewes may often be had from those who are changing stock or reducing their holdings. It is one of the essentials of good flock husbandry that a uniform, vigorous, fertile and sound bunch of ewes, whether large or small, should be selected as the first step in the plans for a good lamb crop the following spring.

Ewes come in heat with the cooler weather of late summer and fall. The Dorset Horn is an exception. Ewes of this breed come in season in spring and drop their lambs in early fall. On one occasion on the University of Idaho farm, several fall lambs were dropped by Rambouillet ewes.

In England and some parts of America "flushing" of the ewes is practiced to prepare them for mating with the best results. Many ewes are in thin flesh and low in vitality after their lambs have been weaned. Flushing is a system of good feeding to get the ewe in vigorous condition before conception. Rape, roots, or rich pasture is used quite widely as a feed for this purpose and is sufficient without grain. If grain is used a small feed of oats will be found to give satisfactory results.

Choice of time for breeding should depend on shelter and facilities for lambing, kinds of feed available in spring and conditions under which the lambs are marketed. Lambing in February or March often requires shelter and adequate means of taking care of the lambs and protecting both ewes and lambs from storms. If the ewes suckle their lambs properly they must have grass or other stimulus to milk production within two weeks after lambing. In case of winter lambing, grains and root crops, or silage, must be made to take the place of grass.

If ram lambs are to be sold for fall service they must come early to be big enough for service. In some communities winter or early spring lambs that can be made to weigh 50 to 60 pounds in May find ready sale to the packer at especially good prices. The ewe's average period of gestation is 147 days. The rams should be first used then 21 weeks previous to when first lambs are wanted.

The ordinary method of breeding is to permit the ram to run with the ewes during the breeding season. This results in favoritism to particular ewes and in unnecessary service. It is better to keep the ram separate and turn him in with the flock for a short time at night and in the morning. As each ewe is served she may removed from the flock. By this system a single ram may be made to successfully breed 80 to 100 ewes. Attention must still be paid to ewes served and separated. Some ewes pass through several periods of heat before conceiving. When the ram runs at large with the flock not more than 40 to 50 ewes should be allowed to each ram. A ram can be depended upon for better service if given some grain in addition to pasture.

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Half Crop Better Than No Crop

When Governor Ernest Lister of Washington state returned from the national capital, where he attended the national conference of governors and conferred with President Wilson on what the northwest should do to further the nation-wide preparedness program, he brought back a vigorous message.

"That man or that woman who is not planting a family garden this year on the vacant lot or corner is failing by just that much in doing his or her duty in this crisis. Some people will say: 'I know nothing about gardening. I would not succeed if I tried.' But I want to say to such person that if he puts in a garden on a vacant plot of ground and raises only half a crop he has added just that half crop to the food supply of the world in addition to what would have been the supply if he had not put in that garden."

The message was more far-reaching than it might seem. It touches every possible activity of production—whether of food or of clothing or of munitions or of transportation facilities, or whether a matter of waste prevention. Every person, old or young, can do a little, and a hundred littles make one big thing. Every man, every woman, every boy and every girl can feed a soldier.

Individual Effort Is Needed

There is too great a tendency to expect the government or the local authorities or some company—anybody but ourselves—to do the thing that is needed to be done. Individual responsibility is the most needed thing in the economic life.

This year there is need of making practical use of every bit of foodstuffs that is grown. Nothing should be allowed to go to waste.

This applies with particular force to the fruit industry. In all fruit-growing localities, especially the farming districts where fruit is grown for home use only, there is annually a large amount of waste. Thousands of bushels of apples, not first class, but well worth saving, went to waste under the trees last fall or were thrown out of the storage rooms this spring spoiled because improperly cared for. This fruit should be saved—canned or dried. Every farmer and his family can do this saving themselves if they put forth the effort, or they can join in a community effort to do it cooperatively or through a private plant financed by their patronage. It must be done. There must not be a dollar's worth of fruit go to waste this year. There are people starving in this world right now, while large quantities of food are going to waste here. Next fall and winter will see a large percentage of the people of the world reduced to absolute want through the deplorable ravages of war. And every man or woman who fails to conserve every possible pound of edible material will be a party to the suffering, not, of course, because of having helped bring it about, but because of having failed to prevent some little of it.

The Two Great Weapons Are Arms and Starvation

Gifford Pinchot, the man who led the long, hard fight for conservation of the nation's resources, goes to the heart of matters in one of the clearest and most inspiring statements we have seen on the world situation. Mr. Pinchot says:

"The safety of our country just now is in the hands of our farmers. The two great weapons in this war are arms and starvation. The war against German arms will be won or lost in France—the war against starvation in America. The kaiser can not whip French and English armies and the English navy, while England has food.

"If the submarines win, the first item in the kaiser's terms will be the English fleet. With the English fleet he will be master of the world.

"What will happen to us? Every man who stops to think knows the answer. We shall have money, food, labor, land—everything desirable in the world except power to protect what we have. Experts estimate it will take us nine months to get ready to meet a German army of even 150,000 with modern artillery. Under such circumstances, would the Germans treat us better than Belgium and France?

"Even if the armies of our allies should crush German military power this summer before a shortage of food, the world would still need vast quantities of American food.

"If the war lasts beyond this summer the American farmer will win or lose the war, overcome militarism and autocracy, or allow them to spread over and control the world, ourselves included.

"We can greatly increase available food supply out of grain used in making liquors and by reducing household waste. But these two things will not be enough.

"The clear duty of the nation is to guarantee the farmers a fair price and a reasonable supply of labor at harvest. The clear duty of the farmer is to raise food enough to win this war for democracy.

"No such responsibility has ever rested on any class of men since the world began."

Farmers of the great northwest, cut out these words of inspiration and wisdom, and when the day seems long and you are depressed with weariness you will find them a reviving tonic.

"No such responsibility has ever rested on any class of men since the world began." To labor for the great world cause of human freedom. To do your bit to make this war-scourged world safe for democracy and popular government. To know and feel that when the victory is won mankind can go forward to a long and righteous peace.

What an inspiration for the farmer, and his good wife, and his dutiful sons and daughters!

Cooperation Is Very Much Alive

In the development of every big movement three phases of growth usually can be traced. First comes the period of enthusiastic acceptance, when everything connected with the new idea is looked upon with a confidence amounting almost to worship. In due time follows a reaction, during which it becomes the fashion to scoff at the dethroned idol, and to declare that it never was worth considering. Finally comes the period of maturity, when all that is sound and worth while in the movement has been sifted out of the mass of irrelevant detail, so that its potential "horsepower" can be fully developed for society.

"Cooperation," as a social and economic ideal, has passed through the first phase of this series and for some time has been journeying through the second—that of incredulity and disparagement. There was a time when the very word "cooperation" had in it a sort of potency and magic which set men's minds to jubilating. More recently we have had a reaction, during which the whole cooperative idea has been declared impractical and visionary. Looking below the surface, however, it becomes apparent that this factor of cooperation, destined to take so momentous a part in the affairs of men, is even now entering into the third stage of its developmtnt, and is being put to work by sober-minded, practical business men.

Washington Gleanings.

John Galvin, agent for the O.-W. R. & N. has announced that the entire right of way between Centralia and Galvin has been leased for agricultural purposes.

After making contracts for more than 500 acres of fruit and vegetables in Clarke county the Oregon Packing company is after another 200 acres of corn in that county.

C. A. Helmer of Rosalia recently purchased the Orwiler place, a few miles west of Plaza. The farm consisted of 352 acres and sold for $85 an acre, aggregating $29,920.

The Independent National Farm Land bank of Malott was organized at that place recently with 37 applications for loans. The aggregation of the loans applied for totals over $65,000.

It is announced that because of the shortage of tin plate brought about by the war conditions, the Lynden cannery will be unable to handle any vegetables this year and will confine its activities to fruit alone.

Charles H. Greeley of Pioneer hauled the most valuable single load of produce ever taken from a farm in this state, having taken a load of potatoes that sold for $330.20 to Ridgefield recently. The load weighed 8280 pounds.

Mrs. Daniel Setchfield has been elected leader of the club work in Thurston county by the county agricultural board. She will superintend the work of all the clubs of the county, such as gardening, canning, poultry and rabbit and will give demonstrations.

The Indian farmers of the Colville reservation will take an important part in the Okanogan county grange fair to be held in Okanogan October 11, 12 and 13 next. The Indians are putting in an immense acreage this year and many of them are making a special effort to produce exceptionally fine stuff for exhibition purposes.

Several thousand extra acres of land in Okanogan county have been pledged to be placed under cultivation as the result of patriotic meetings held during the past few weeks. From upper Tunk creek alone it was estimated that at least 2500 acres more of grain would be sown, while the acreage of potatoes, onions and beans would be double that of last year.

What Others Say

Press, Waterville: The food speculator is becoming as unpopular as was the "malefactor" in the days of one Roosevelt.

Republic, North Yakima: Nearly everybody has a scheme to conserve something. In order not to appear odd or unusual we hereby offer our suggestion. It is that an effort be made to save the supply of hot air.

East Washingtonian, Pomeroy: To what extent our food supply can be increased under present conditions is but a matter of conjecture, but we are confident Garfield county will take high rank in the per cent of increased production among the grain growing communities of eastern Washington.

Republic, Pomeroy: It hurts like sin to pay $2.50 a bushel for Palouse wheat to be used in reseeding. But there is another side to the proposition. Think what a grand and glorious feeling it will be when a fellow sells the wheat from that seed, perhaps 30 bushels to one, for $2.50 next fall.

Bee-Nugget, Chehalis: Patriotic economy means the elimination of waste and extravagance. It means the conservation of our food products, our natural wealth, our health, our energies, our labor, our very lives. It means putting more efficiency in everything we do so that each unit of money, energy and intelligence may accomplish the utmost.

Will Send Pershing

President Rejects Roosevelt Plan

In connection with the signing of the army draft bill last week President Wilson announced that the war department had agreed to send a portion of the regular army to Europe to join the allies against Germany, and that the expedition of volunteers which Colonel Roosevelt had proposed to raise would not be sent. The army to be sent will be under the command of General John J. Pershing.

President Wilson has designated June 5 as national registration day under the new army conscription measure, and on that day approximately 10,000,000 young men between the ages of 21 and 30 years will be required to register. The full text of the president's proclamation will be found on another page of this issue.

On this page, under another heading, will be found a digest of the duties placed upon Herbert C. Hoover by President Wilson, who has just announced officially Mr. Hoover's appointment as head of the food control movement for the government during the war.

Hoover Given Power

To Direct Food Campaign in U. S.

President Wilson announces that Herbert C. Hoover, who won international fame by feeding Belgium, has accepted the all-important task of food administration.

Moreover, the president has come out squarely behind the views of Mr. Hoover as a substitute for the food control measure devised by Secretary of Agriculture Houston.

Mr. Hoover will administer an agency separate and distinct from the department of agriculture.

It will be his business, according to the president, to do these things:

1. Investigation of the existing available stocks of foodstuffs and of the costs and practices of the various food producing and distributing trades.
2. Prevention of hoarding and control of food by persons other than producers, dealers and traders.
3. Requisitioning, when necessary, of food supplies for public use and necessary handling equipment.
4. Licensing of wholesome and legitimate mixtures and milling percentages.
5. Prohibition of the unnecessary or wasteful use of foods.
6. Establishment of a minimum price.
7. Temporary fixing of reasonable prices, to break up corners and attempts at speculation.

The department of Agriculture will devote itself to:

1. Food production.
2. Food conservation.
3. Marketing of food.

The president asserts the powers are no greater than those lodged in other governments and are intended to stimulate food production and conserve food and not to restrain arbitrarily or injuriously interfere with the normal processes of production.

The president adds:

"It is proposed to draw a sharp line of distinction between the normal activities of the government represented in the department of agriculture in reference to food production, conservation and marketing on the one hand and the emergency activities necessitated by the war in reference to the regulation of food distribution and consumption on the other. All measures intended directly to extend the normal activities of the department of agriculture in reference to the production, conservation and the marketing of farm crops will be administered, as in normal times, through that department, and the powers asked for over distribution and consumption over exports, imports, prices, purchase and requisition of commodities, storing and the like, which may require regulation during the war, will be placed in the hands of a commissioner of food administration appointed by the president and directly responsible to him.

"Authority is asked also to establish prices—but "not in order to limit the profits of the farmers, but only to guarantee to them when necessary a minimum price which will insure them a profit where they are asked to attempt new crops and to secure the consumer against extortion by breaking up corners and attempts at speculation when they occur by fixing temporarily a reasonable price at which middlemen must sell."

Selective Draft

Proclamation Issued By President

(Continued from page four.)

classified for service in the place to which it shall best serve the general good to call him.

New in Our History.

The significance of this can not be overstated. It is a new thing in our history and a landmark in our progress. It is a new manner of accepting and vitalizing our duty to give ourselves, with thoughtful devotion to the common purpose of us all. It is in no sense a conscription of the unwilling; it is rather selection from a nation which has volunteered in mass. It is no more a choosing of those who shall march with the colors than it is a selection of those who shall serve an equally necessary and devoted purpose in the industries that lie behind the battle line.

The day here named is the time upon which all shall present themselves for assignment to their tasks. It is for that reason destined to be remembered as one of the most conspicuous moments in our history. It is nothing less than the day upon which the manhood of the country shall step forward in one solid rank in defense of the ideals to which this nation is consecrated. It is important to those ideals no less than to the pride of this generation in manifesting its devotion to them, that there be no gaps in the ranks.

Day of Patriotic Devotion.

It is essential that the day be approached in thoughtful apprehension of its significance and that we accord to it the honor and the meaning that it deserves. Our industrial need prescribes that it be not made a technical holiday, but the stern sacrifice that is before us urges that it be carried in all our hearts as a great day of patriotic devotion and obligation when the duty shall lie upon every man, whether he is himself to be registered or not, to see to it that the name of every male person of the designated ages is written on these lists of honor.

In witness whereof I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington, this 18th day of May, in the year of our Lord, one thousand nine hundred and seventeen and of the independence of the United States of America, the one hundred and forty-first.

By the President.
Robert Lansing.
Secretary of State.

Larger Crops, Says Grange.

The announcement has been made that Whatcom county will employ its new agricultural advisor on May 1, following negotiations between the department of agriculture and the county commissioners. The salary will be $2160 per year and expenses, of which the state college at Pullman will pay $900.

$1195 F. o. b. Racine

Mitchell Junior—a 40 h. p. Six
120-inch Wheelbase

Mitchell SIXES

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7-Passenger—48 Horsepower
127-inch Wheelbase

Mr. Bate's Lifetime Car

Sturdy—Enduring—100% Over-Strength

The latest Mitchell is the 19th model built under Mr. Bate. It is the final result of 700 improvements.

It is the first car to announce our 100 per cent over-strength. Our former standard was 50 per cent over-strength. In the past three years, that standard has been doubled.

Over 440 parts are built of toughened steel. All safety parts are vastly over-size. All parts which get a major strain are built of Chrome-Vanadium. The gears are tested for 50,000 pounds per tooth. The springs we use—Bate cantilevers—have never yet been broken.

Several Mitchells have already run over 200,000 miles each. The Mitchell of today is built to be a lifetime car.

Costly Extras

This vast over-strength is a costly extra in these days of high-cost steel.

But the Mitchell, in addition, has 31 features which nearly all cars omit. Things like a power tire pump, ball-bearing steering gear, dashboard engine primer, etc.

And this year we have added 24 per cent to the cost of finish, upholstery and trimming. This makes the Mitchell the luxury car of its class.

All Are Free

These Mitchell extras, on this year's output, will cost us $4,000,000. But they cost you nothing, because we save this on our factory cost.

TWO SIZES

Mitchell—a roomy, 7-passenger Six, with 127-inch wheelbase and a highly-developed 48-horsepower motor.

Price $1460, f. o. b. Racine

Mitchell Junior—a 5-passenger Six on similar lines with 120-inch wheelbase and a 40-horse-power motor—¼-inch smaller bore.

Price $1195 f. o. b. Racine.

Also six styles of enclosed and convertible bodies. Also new Club Roadster.

John W. Bate built and equipped this mammoth plant to build this one type economically. He has spent millions of dollars and years of time to do that. His methods have cut our factory cost in two. And the savings pay for these extras.

All the added luxury on this year's models is paid for by savings in our new body plant.

See Our $1195 Six

Mitchell Junior—the smaller Mitchell Six—costs only $1195. Yet the wheelbase is 120 inches. You have never seen anything like this value in a car around this price.

See also the larger Mitchell. Note all its extra values. You will want all these extras, when you know them, in the car you buy to keep.

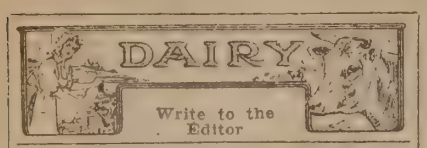
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A. B. NYSTROM, Editorial Contributor

A Jersey cow in New Hampshire last year won a profit test over a flock of 100 hens. The hens beat three other cows entered in the same contest.

This is no time to send the dairy cow to the butcher, if she is a reasonably good animal. "Boarders" should be culled out, to be sure, but a fair producer should not be sacrificed in these abnormal times.

The possibility of certain root crops as valuable winter feed for the dairy cow should not be forgotten while the crops are being planned and planted.

A little study of the silage possibilities now might lead to greater profit from certain lands or certain crops already planted than would otherwise be obtianed.

The best man in the world can not get results from a cow that is not capable of producing results. Neither can a misfit man get results from the best cow in the world.

Shortage of Feed Lowers Standard

The following table gives the names and records of the cows in the Montesano Cow Testing association which have produced more than 50 pounds of butter fat during the month of April, 1917. H. P. Hansen is the tester.

Name of cow.	Breeder.	Breed of cow.	Age yrs.	When fresh.	Lbs. milk.	Pct. fat.	Lbs. butter fat.
The Owl's Golden Queen	E. L. Brewer	Jersey	6	2-16-17	1758.2	5.994	105.39
Lad's June	E. L. Brewer	Jersey	7	3-25-17	1391.7	5.981	83.24
Golden Massy Polo 3d	J. H. Taylor	Jersey	7	2-3-17	1352.8	4.806	86.02
King's Dulcet Primrose	E. L. Brewer	Jersey	3	2-3-17	1126.4	5.539	62.39
Number 26	Murphy Bros.	Grade Jer.	6	2-4-17	1194.0	4.9	58.5
Number 22	Murphy Bros.	Grade Jer.	5	3-22-17	933.0	6.0	56.0
Number 12	Murphy Bros.	Grade Jer.	9	1-23-17	1020.0	5.3	54.1

On account of the shortage of feed and very late pasture there are only half the number of cows above 40 pounds of butterfat in comparison with April, 1916. On April of last year there were 48 cows above 40 pounds of butterfat and 19 above 50 pounds. I am confident that the shortage of feed is responsible for the decreased production, says Mr. Hansen. On account of not being able to obtain hay many of the herds were turned on gress when there was but little value in it. Last April the high cow produced 83.2 in comparison with the accompanying list.

Besides the 50 pounds list the following dairymen had cows as follows between 40 and 50 pounds fat:

J. H. Taylor, five cows; James Foster, three cows; John R. Martin, two cows; Murphy Brothers, two cows; E. L. Brewer, two cows; Porter Brothers, one cow; Parker Askew, one cow; William Peterson, one cow, and H. M. Vogdes, one cow.

Out of the total number of cows in the association 303 cows averaged 594 pounds milk, and 22.3 pounds fat, with a feed cost of $5.21.

Cow Ranks First

As a Food Producing Animal

As food producing animals the cow ranks first, the hog second, poultry third and steer and sheep last of all, says E. L. Benson, Washington state commissioner of agriculture. A 1200-pound steer, ready for market, contains only about 360 pounds of actual food. A fair dairy cow at 2 years of age begins to yield a daily average for 10 months of about 24 pounds of 4 per cent milk or its equivalent, or about 900 pounds of edible nutrients in the year and continues to produce the same amount for seven years thereafter. In all she produces during her actual life about 6300 pounds of the best of human food. Remember these figures do not refer to milk, but to the actual solids—the food contained in the raw product. Beef requires several years of feeding while the dairy cow gives to us in a palatable form, day by day, the food consumed during the previous night.

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.

Reduces Strained, Puffy Ankles, Lymphangitis, Poll Evil, Fistula, Boils, Swellings; Stops Lameness and allays pain. Heals Sores, Cuts, Bruises, Boot Chafes. It is a SAFE ANTISEPTIC AND GERMICIDE

Does not blister or remove the hair and horse can be worked. Pleasant to use. $2.00 a bottle, delivered. Describe your case for special instructions and Book 5 M free.

ABSORBINE, JR., antiseptic liniment for mankind, reduces Strains, Painful, Knotted, Swollen Veins. Concentrated—only a few drops required at an application. Price $1 per bottle at dealers or delivered.

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THE BEST LINIMENT
OR PAIN KILLER FOR THE HUMAN BODY
Gombault's
Caustic Balsam
IT HAS NO EQUAL

For the Human Body —It is penetrating, soothing and healing, and for all Old Sores, Bruises or Wounds, Felons, Exterior Cancers, Boils, Corns and Bunions, CAUSTIC BALSAM has no equal as a Liniment.

We would say to all who buy it that it does not contain a particle of poisonous substance and therefore no harm can result from its external use. Persistent, thorough use will cure many old or chronic ailments and it can be used on any case that requires an outward application with perfect safety.

A Perfectly Safe and Reliable Remedy for
Sore Throat
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Sore Lungs
Rheumatism and
all Stiff Joints

REMOVES THE SORENESS—STRENGTHENS MUSCLES

Cornhill, Tex.—"One bottle Caustic Balsam did my rheumatism more good than $120.00 paid in doctor's bills." OTTO A. BEYER.

Price $1.50 per bottle. Sold by druggists, or sent by us express prepaid. Write for Booklet R.

The LAWRENCE-WILLIAMS COMPANY, Cleveland, O.

MUST MAINTAIN DAIRIES.

Dairy Products Vital as Food.

Too much stress can not be laid on the necessity of producing cereals and meats to supply the peoples of the world during this critical period, but stress must be laid with like vigor and persistence on the necessity of maintaining dairy production. Milk and cream and butter and cheese of various kinds are among the most valuable foods. Every effort should be made to increase rather than diminish the supply and continued production.

There is great agitation for converting every rod of land into a producing area. It should not be forgotten that alfalfa and clover and corn for silage and all manner of forage crops are as truly products as are wheat and potatoes and beans. They are the basis of the live stock industry, especially the dairy industry, and should not be neglected.

One Year's Butterfat.

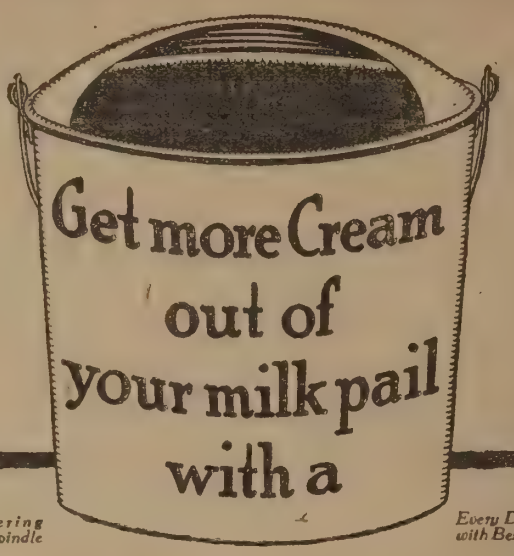
The world's record for one year's butterfat production is held by the registered purebred Holstein-Friesian cow Duchess Skylark Ormsby, according to a bulletin of the Holstein-Friesian Association of America. Her figures for 365 consecutive days are 27,761 pounds of milk containing 1205 pounds of butterfat, equivalent, on the 80 per cent basis, to 1500 pounds of butter. The breed has 67 cows that have produced above 850 pounds of butterfat in one year.

Dairymen Win Out.

The Springfield (Mass.) market division of the New England Milk Producers' association has won another victory through cooperation and organization. The majority of the Springfield milk dealers have agreed to accede to the demands of the farmers for 6½ cents per quart for the next two months, a raise of ½ cent per quart. The retail price is to be advanced to 11 cents.

Herd Average of 62 Pounds Butter.

F. A. Doerfler, proprietor of Mellow Lawn Farms at Silverton, Ore., reports that 11 head of Jersey cows on the place were on test during the month of April and that the herd average was 62 pounds of butter, including strippers, heifers and all. Eight cows out of the 11 made 50 pounds of fat.



Has self-centering bowl; detached spindle

Every De Laval equipped with Bell Speed-Indicator

NEW DE LAVAL
CREAM SEPARATOR

THESE are the days when you are getting *more milk in the pail,* and with butter-fat at its present high price you want to be dead sure that you are getting *all the cream out of the pail.*

You certainly can't afford to feed butter-fat to the calves and pigs at from 30 to 40 cents a pound.

All sorts of "*claims*" are made for various cream separators, but what you are looking for is "*proof.*"

Here is the most convincing kind of proof that the De Laval is the cleanest skimming machine:

Fifteen years ago there were a dozen different makes of creamery or factory separators in use.

Today the creamerymen and large milk plants the world over use the De Laval almost exclusively. In fact, it's hard to find a large cream producer or creameryman who will allow any separator other than a De Laval in his plant, no matter what the price.

Why? Because they have found that it makes a difference of several thousand dollars a year to them whether a De Laval or some other make of machine is used. They simply can't afford to use any other machine.



This is proof of De Laval closer skimming that you can't afford to ignore. Even if you don't separate as much cream as the creameryman, you can't afford to waste it any more than he can.

Your local De Laval agent will be glad to let you try out a New De Laval on your own place. If you don't know the local agent, write to our nearest office for catalog or other information.

DE LAVAL DAIRY SUPPLY CO.

LARGEST DAIRY SUPPLY HOUSE ON THE PACIFIC COAST.
We specialize in Alpha Gasoline and Distillate Engines, Ideal Green Feed Silos, Irrigation Equipment, Centrifugal and Deep Well Pumps and Alpha Spraying Outfits. Send for special catalog.

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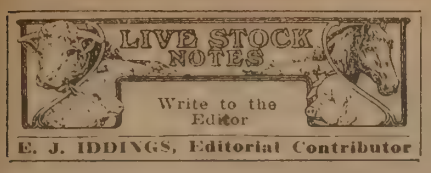
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Established 1885.



E. J. IDDINGS, Editorial Contributor

Shortage of Horses

It is not a labor shortage, but a horse shortage that is puting worry wrinkles into the foreheads of the Palouse farmers these days, according to B. A. Hunter, in charge of the government labor bureau at the federal building in Spokane.

"Horses," he said, "are needed much worse than men in the Palouse. If it were not for the late season this year everything probably would have been all right, but many of the farmers sold off just about all the horses for war purposes that they could possibly spare and now they are being crowded for time because of the lack of them.

Buy Calves in Washington and Raise Them in Oregon

Jabez Warner, stockman, living near Bend, Ore., has made extensive purchases of young calves throughout Lewis county, Wash., the animals ranging from one to five days old, says the Hub of Chehalis, Wash. Prices range from $1 to $5 per head, depending on the breeding. Mr. Warner ships the calves by express to Bend in crates made especially for the purpose. A supply of bottle milk accompanies each.

Veterinary

Dr. S. B. Nelson

Disinfectants—What are disinfectants and how should they be used for tubercular disease in cattle?—Subscriber, Dayton, Wash.

Answer—No disinfectant will do cattle affected with tuberculosis any good. Constant use of the disinfectant may to a certain extent prevent its rapid spread. First, you should get the cows examined for tuberculosis and remove those that are affected. Then the stable should be thoroughly disinfected with first one to 1000 solution of corrosive sublimate in water. This should be followed by a thorough whitewashing of the stable—floors, walls, ceilings, everywhere—and then about once a month the stable should be re-whitewashed and daily slacked lime should be kept in the gutter and on each side of the gutter.

Grease Heel.—There is an epidemic of grease heel among the horses of this locality and it is slowly spreading. Some have had it over a year and with best care and treatment do not recover. The doctors here have so far failed. My horses are free from it, but I expect it any time. Is there a cure or preventive?

J. A. P., Palouse, Wash.

Answer—An epidemic of grease heel as severe as you state the one is in your neighborhood needs very careful attention of a person who can see the diseased animal and make a careful examination of it. If the local veterinarian has failed in the treatment it may be possible that if one of the horses was taken to the veterinary hospital at the college at Pullman that they might make a more detailed examination and give advice to date on such findings. It is nearly impossible in a severe epidemic as you state this is for a person to give you advice by letter.

Hair Falls Out—The hair on the neck and shoulders of my cow gets full of a dry scale then dies and falls out. I can pull the hair out in patches with my thumb and fingers. There is a yellowish scab on the roots. New hair comes in, but it is full of that scale. Will potato parings dry a cow up if fed to her?—H. B. F., Centralia, Wash.

Answer—Try applying to the neck a solution of one to one thousand parts of water and corrosive sublimate. Do this once every three or four days. Then between times rub a little benzoated ointment into the neck. Potato parings will not dry up your cow provided you give them in small quantities along with her regular ration. This time of the year you want to watch pretty carefully that the potatoes have not sprouted, because when the potatoes sprout they form in the peelings a poisonous substance called solanin, and depending upon the quantity this is very poisonous.

Use Lysol Wash—I have a cow that is not doing well. She eats good and is contented, but is not in good shape. Was bred about five or six weeks ago, but I do not know if she is with calf or not. She has a discharge through the vagina of a milky white substance, probably an ounce or two a day.—C. L., Sunnyside, Wash.

Answer—I would recommend the washing out of the vaginal tract with a 2 per cent solution of lysol, followed by a hot solution of potassium permanganate. Use from one to two gallons of the latter solution and have it the strength so that you can see the bottom of the vessel. If you use a bucket or any vessel of that type into the two gallons put about a pinch of potassium permanganate. It would take a personal examination to find out whether or not the discharge came from the womb, but I would not advise attempting this until this other treatment has been tried.

Soft Growth.—My cow has a soft growth like a bag of water under her belly. It begins just front of the udder and extends nearly to the forelegs. Near the udder it hangs down two inches. It does not show when she is dry and is worse just after calving.—E. E. C., Langley, Wash.

Answer.—The condition which you find affecting your cow is due to a disturbance in the circulation when the circulation through the udder is the greatest. Possibly giving her a drachm of tincture of iron in a pint of water once daily for a couple of weeks may be of assistance. It is not a matter that hurts her any particularly.

Small Flow of Milk.—I have a 6-year-old cow which is not giving her usual amount of milk. She was fresh 10 days ago, but made only a small udder. I fed her heavy the last year and all the grain and hay she could eat while she was dry, about six weeks, so she is very fat.—P. M. F., Port Stanley, Wash.

Answer.—Try feeding your cow a fairly heavy, succulent ration, beginning with five to 10 pounds of succulence, and increasing up to 20 to 40 pounds, according to what the succulence is. Try roots or silage or cooked mashes or steamed alfalfa hay, the latter steamed would make succulence, although it also is rich in nitrogen. I do not know anything that would help except to change over to a succulent feed.

Farmers Excused From Jury.

All farmers who can do any planting this season will be excused from attendance as jurors in the district court of Fergus county, Montana, as a patriotic contribution to the country's need.

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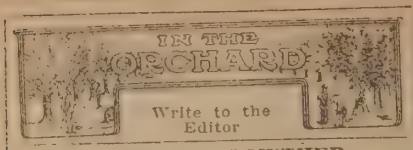


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GRANVILLE LOWTHER
Editorial Contributor

Grub Out Trees

Trees That Board Are Useless

By T. O. MORRISON, State Horticultural Commissioner of Washington.

The home orchard has not been of any particular importance up to the present time in our state so far as supplying any great quantity of fruit for the commercial trade is concerned. It has been quite commonly an object of the farmer to plant trees of several varities, in order to secure for his family and hired help sufficient fruit for the season's suply. Generally these orchards have yielded plentifully, and in many cases, after coming into bearing, have proved to be larger than was necessary. Since they were not intended to produce fruit for the trade, there are now some of them double the size required to furnish the family fruit supply. It would therefore seem that some farmers could profitably pull up some of their home orchard, particularly undesirable varieties and individual trees that were not paying for their keep.

The progressive dairyman carefully tests and weighs the milk from each cow, to find out what cows are the money makers and which ones the "boarders." Why not apply the same principle to the home orchard? For in the home orchard, as well as in some of the commercial orchards, there are many trees that must necessarily be classed as "boarders." A small home orchard, consisting only of trees necessary for the home fruit supply, neatly planted, pruned, well cultivated, and carefully sprayed, ought to prove more satisfactory and economical.

THE FARM GARDEN

ARTICLE 13.

The Use of Lime

That lime may be used effectively at this time in the movement for increasing crops is the declaration of Carl Vrooman, assistant secretary of agriculture at Washington, D. C.

The following are portions of a statement recently issued by him in connection with the subject:

Prices of most commercial fertilizers at present are high. Potash is almost unobtainable. Only by most scrupulous conservation of stable manure and an increased use of legumes as green manure and of ground rock phosphate can the commercial fertilizer shortage be met, even temporarily. There remains one thing, however, that may be done to increase yields, which costs no more now than it did before. It may be safely said, I believe, that if all sources of artificial chemical fertilizers failed our total farm output in many sections could not only be maintained, but even increased for a considerable time by the aplication of lime to acreages that now are low in yield or lying fallow because they are too sour to grow profitable crops. Lime can and should be put on all sour land. By a plentiful use of lime we can, figuratively speaking, make our 'war bread' of stones.

"There is, perhaps, no considerable section of the United States without some local supply of limestone, marl or oyster shells. Ground limestone for direct application to the soil costs, delivered on the nearest siding, from $1 per ton up, depending on the length of the haul. If crushed limestone is not available, burned lime, either ground or hydrated for agricultural use or the ordinary lump lime carried by all dealers in building materials, may be used in emergency, though lime in this form is frequently more expensive. On the other hand, if burned or hydrated lime is used the applications should be less than one-half those of ground limestone.

"Thus there is available for almost every farmer at normal cost, in spite of war conditions, a material which, for the time being may avail to increase our agricultural output enormously. The initial returns from the application of lime to sour land are sometimes remarkable. An investment in limestone often pays a dividend of 100 per cent or more the first year if care is taken at the same time to maintain the organic content of the soil.

"It is the duty of American farmers in this national crisis to make the most of this, our cheapest and most easily available agency for speeding up production. War or no war, a carload of crushed limestone where needed is always money in the farmer's pocket at the end of the crop year. And a carload of limestone judiciously used by each farmer whose land is too acid will augment our supply of breadstuffs by a surprising number of millions of bushels."

Strawberry States.

In the circular on the commercial acreage and production of strawberries, issued by the United States Department of Agriculture, it appears that Tennessee produced 1,271,250 crates of strawberries on 16,950 acres in 1916. Louisiana came next with a production of 1,917,100 crates on 16,900 acres. Arkansas produced 1,657,500 crates on 14,100 acres; Missouri, 637,500 crates on 6800 acres; California, 395,800 crates on 1750 acres; Kentucky, 283,300 crates on 2000 acres; Alabama, 156,700 crates on 2350 acres, and Mississippi came last with a production of 119,600 crates on 2050 acres. The total production of these states in 1916 was 5,118,750 crates on a total acreage of 65,900 acres.

The yield per acre ranged from 3400 quarts in Kentucky to 1400 quarts in Mississippi. The average yield per acre was 1864 quarts of strawberries.

The forecast of production for 1917 of strawberries is 4,606,850 crates against 5,118,750 crates in 1916.

Fruit Men Elect McCullagh.

C. W. McCullagh has been elected sales manager for the Hood River (Ore.) Apple Growers' association and began work with the strawberry crop May 1. Previously he was salesmanager for the Yakima Valley Fruit Growers' association.



BEES and Honey make Easy Money

Bees work for nothing and board themselves. Do you want bees? We have a few stands for sale.

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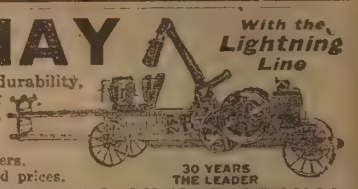
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Best from the mileage standpoint, toughness of tread and strength of body. And this toughness is combined with the resiliency demanded for easy riding and car protection.

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It will pay you to test Giant Farm Powders in competition with any other stumping powder.

In the last year more than 2,000,000 pounds of these Giant Powders were used for stump blasting in Washington and Oregon alone. The users included farmers in every county in both states, the largest lumber and development companies, and the United States Government. They use the Giant brands because they have found that

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

always give satisfaction and do their work at the lowest possible cost and in the most thorough manner.

In the Pacific Coast states the farmers require explosives that will disrupt, crack, split and heave the stumps and at the same time lift and loosen the roots for easy handling. Giant Farm Powders do this because they are made especially to suit western conditions. Because of their wider-spread force, they remove the stumps more economically than powders or dynamites that merely shatter and pulverize.

Test one case. Compare it with any explosive that you have ever used for stump blasting. After you have blasted a dozen stumps you will understand why farmers who have once used them always continue to use the Giant Farm Powders. Fill out and mail the coupon at the right, and we shall arrange with our nearest distributor to supply you promptly at the lowest market price.

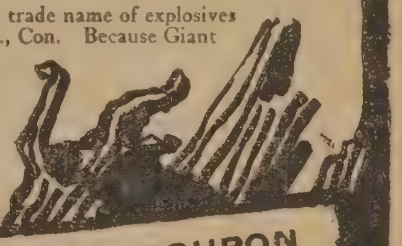
There are two Giant Farm Powders—Giant Stumping Powder, used for blasting in wet soil, and Eureka Stumping Powder (which costs a little less) for blasting in dry soil. Both resist cold to a remarkable extent, seven days' exposure to a temperature of 32 degrees failing to freeze them. Ask your dealer for these brands.

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CONSOLIDATED *"Everything for Blasting"* ESTABLISHED 1866
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It is the most helpful and interesting book ever issued on Stump Blasting. It tells and shows how to save money and make land-clearing easier. It is written by Western men, from the Western viewpoint, and is full of pictures showing latest methods of blasting. Mark and mail the coupon and get it free. Other books—on boulder blasting, tree planting, ditching and subsoiling with explosives—also free on request. Mail the coupon *now*, before you lay this aside.

Warning. Giant Powder is the trade name of explosives manufactured by the Giant Powder Co., Con. Because Giant Powders are best known everywhere, many have assumed that all high explosives are Giant Powders. Insist upon having the genuine, made only by the Giant Powder Co., Con. If your dealer has only ordinary dynamite, write us and we will see that you get the genuine.



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San Francisco.

Send me your illustrated books on the subjects which I have marked X.

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POULTRY

Write to the Editor

JAMES ERYDEN
Editorial Contributor

Kills Chicken Lice

Sodium Fluorid a New Remedy

One application of sodium fluorid will kill all lice of chickens, entomologists of the department of agriculture have discovered. This inexpensive white powder, they find, will rid a flock of all the seven common species of chicken lice in a few days. One pound, costing only 40 or 50 cents at the time of this writing, is enough to treat 100 fowls, if dusted on. If dissolved in water and used as a dip, the same amount will go three times as far. It is easily applied, economical, gives immediate results, and does not injure the fowls or the poultryman.

The complete effectiveness of the sodium fluorid remedy and methods of using are discussed in Farmers' Bulletin 801 of the United States department of agriculture, "Mites and Lice on Poultry," by F. C. Bishopp and H. P. Wood. The bulletin deals also with mites, the night pests of chickens, which requires a different treatment.

Sodium fluorid—say it plainly to the druggist or you may get sodium chlorid, common salt, which it not only resembles in name but in appearance—may be obtained at most large drug stores.

To apply the material in dust form, place it in an open vessel on a table and with one hand hold the fowl by the legs or wings. With the other hand place small pinches of the chemical among the feathers next to the skin, according to what is known as the "pinch" method, which proceeds as follows: One pinch on the head, one on the neck, two on the back, one on the breast one below the vent, one on the tail, one on either thigh, and one scattered on the under side of each wing when spread. Each pinch can be distributed by pushing the thumb and fingers among the feathers as the material is released. If the chicken is held over the vessel, the material which falls from the fowl during the operation is recovered.

The material also may be applied by means of a shaker, but this method has some disadvantages as compared with the "pinch" method.

Figure Up Costs

The poultryman is doing some close figuring these days. The man who put in a supply of feed last fall, enough to last him a year, is surely in luck. The other fellow who has to buy his supply now may well ask where he is at. It is good to take an inventory and figure up costs. The war is compelling a good deal of bookkeeping. After it is over it is safe to say that the farmer will have a clearer idea of the cost of production. The only salvation of the poultry keeper is to exact the utmost efficiency both in the hen herself and her breeding and in the care and feeding given her.

Does it pay to keep hens now? At present prices of food it does not pay to keep the average hen and it does not pay to give good hens only average care and feeding. With good laying hens at present prices for feed and for eggs there may still be made a profit. At present prices a hen must lay a dozen eggs a month to pay for her feed. Good layers will average in the spring months 15 to 20 eggs a month. The poultryman with such a flock will more than make ends meet. A little later eggs will be higher, and with good feeding the production will keep up well throughout the summer until October, when the chances are that the prices of eggs will be about double what they are now, and with a good grain crop the price of feed should be lower. The man who has a flock of pullets of good laying strain coming into laying in October and November is likely to make a good profit. So keep the pullets growing and kill off the old hens.

The farmer with 50 hens of good laying strain need not worry a great deal about feed prices. The waste food and byproducts found on every farm are an important part of the poultry ration and reduce the feed bill considerably. It is the farmer who must come to the rescue and furnish the poultry and eggs required. J. D.

The Laying Contests.

The New Jersey contest shows an average production of 67.85 eggs per hen at the end of the 23d week. The Storrs (Conn.) contest shows an average of 60.20 per hen in the same period. At New Jersey the highest record of a pen is 1025; at Storrs the highest is 980, with ten hens in a pen in each case. This is very good laying. Were other conditions the same this difference in favor of New Jersey might be credited to the milder climate. At Storrs the winter climate is rather severe. Whatever effect the difference in climate may have on winter production the differences in summer production may be such as to equalize the production. J. D.

Cost of Raising Pullets.

A summary of an experiment at the Indiana station on the cost of raising pullets was given in the Farmer of May 3. The bulletin from which the summary was taken did not give the prices of the feed that were fed. Since then I have received the full report containing this data. The experiments began in 1912 and ended in 1915. The prices on which the cost was based were therefore higher than they are now. Corn ranged from $1.60 to $2 per hundred; wheat $1.45 to $1.60, and other foods in proportion. Meat scrap was $2.50 to $2.60 and skim milk 30 cents a hundred. At these prices the cost of raising a pullet to 25 weeks of age was 43.4 cents. This included the cost of incubation and of the eggs used and the fuel for incubators and brooders, also for labor and feed. Of the total cost some two-thirds was for feed. On this basis the cost of feed was 30 cents per pullet. At present prices of feed, the feed cost would be 60 cents per pullet. Add to this the labor, fuel and other items which totaled about 15 cents and we have a cost of 75 cents for a six months' old pullet.

This does not take into account what may be made or lost on the cockerels. In the experiments a profit of 5 cents was made on the cockerels; so that the net cost of the pullet was 38 cents. At the present prices of feed this profit would run into a loss

It may safely be concluded that should the present prices of feed obtain for the next six months, a good pullet of the small breeds will have cost the grower close to $1.

The earning power of the pullet next year must be greater to pay for the increased cost of raising her. The chances are that it will be. J. D.

THE SUCCESS GOPHER TRAP



THIS TRAP WILL FREE YOUR LAND FROM THE GOPHER PEST. IT IS SIMPLE, REQUIRES NO DIGGING, NO BAIT, IS QUICKLY AND EASILY PUT IN PLACE, AND WHEN SET RIGHT, GETS THE GOPHER EVERY TIME.
IF YOUR LOCAL DEALER IS NOT SUPPLIED WITH THESE TRAPS, I WILL SEND YOU PREPAID, ONE HALF DOZEN, UPON RECEIPT OF $1.00
O. P. WYLAND. HARLAN, IOWA

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.



"The Car of No Regrets"

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You "make hay" when you buy a King

IT is an automobile sufficiently reliable under severe official road tests to have its chassis adopted by the United States Government for armored cars, though it shares this honor with several other good makes of cars, some of higher price.

Its four bodies were designed for unusual grace of line and elegance of finish, and one of them may appeal to you as being more beautiful than any other car among the many attractive models now on the market.

The King is build by a long-established company with a reputation for good cars and fair dealing, ranking high among a number of worthy competitors.

It is a car which may be conservatively described as economical, considering its high power and bigness, and one that "handles" easily,—its all-round road competence, especially on hills, has surprised and delighted many.

In all, we believe the King Eight does offer a quite remarkable combination of power, economy, reliability, comfort and style, which, considered with the price, makes it a purchase absolutely safe for anybody and one thoroughly consistent with our slogan "The Car of No Regrets."

Foursome (shown above), $1700; 7-passenger Touring model, $1650; Sedan, $2300; Roadster, $1585. Prices F. O. B. Detroit and subject to increase at any time. A catalog in color will be sent on request together with the name of a near-by King dealer.

KING MOTOR CAR COMPANY, DETROIT, MICHIGAN

SNYDER MOTOR CAR COMPANY
E. B. Snyder, Manager, Distributor for Eastern Washington and Northern Idaho
1311 Sprague Avenue Spokane, Washington

Give Cows a Chance

Common Grade Cow Must Have Fair Treatment

To the Editor: I have followed with interest the discussion on dairying carried on through the medium of your columns, hoping thereby to gain information that would really help the average dairyman or breeder to make his business a success financially.

After analyzing the situation we must come to the conclusion that the average cow is not quite good enough, and must in some way be improved, and that she does not produce enough dollars of butter fat for the dollars of labor and feed expended on her. This is not her fault; you can attribute the difficulty to her breeding. We can not, as one correspondent suggests, slaughter all of these cows that fall below the standard of profitable production. We need them, for they supply a very large percentage of the total of our dairy products.

Improved Breeding.

We can, however, give them an opportunity to repay the feed bill they owe us by breeding them to good bulls and improving the stock in the succeeding generation. This process carried on for a few years, together with the constant weeding out of the poorest, would in a few years eliminate the "boarder" from the cow stable of the country. This can be accomlished only by active cooperation in cow testing and by educating dairymen to realize their stupidity in maintaining that common nuisance, the scrub or grade bull.

There are others, too, who still persist in crossing such breeds as Holsteins and Jerseys, fondly believing that they can secure in the resulting cross all of the good qualities of the parents and none of the defects. In rare cases profitable animals result from such a mingling of the breeds, in the first generation only, but invariably in the second the result is failure.

Indiscriminate crossing of different breeds is always a step downward.

The preponderance of evidence indicates that for the average dairyman there is little or no profit in the production of milk and butter fat. A multitude of reasons, consisting mainly of the various problems of feed, sales and distribution of these products, is elicited in explanation of this phenomenon.

Some of our correspondents have even started nice little arguments among themselves concerning the relative merits of high versus low producing cows. One intelligent (?) farmer even proved to his own satisfaction, if to no one else's, that there is profit in feeding his 180-pound cow at the county's expense. We will grant this, of course, for free feed is the cheapest I know of; but we must dismiss that part of the discussion as sheer nonsense and as having no bearing on the production of dairy products, considered from the standpoint of a legitimate industry.

Some High Records.

Another correspondent rightly takes a crack at some of the high records made by our greatest cows; inasmuch as many of these records are made at the expense of the cow's health as well as the owner's pocketbook when he settles his feed bill.

The modern dairy cow is primarily a machine for the transformation of various farm products into the so-called dairy products. When the value of these products is greater than the feed consumed and the labor expended, we have a profitable cow.

That there are not many such is generally conceded. Lack of intelligent breeding practices is mainly responsible for this condition of affairs.

For many years now the most intelligent breeders, extension workers, dairy papers and our college professors have tried to impress on us all the importance of the herd sire. That the bull is half the herd is a common expression, and that he is much more than that is the belief of well-informed breeders.

The common practice, so much in vogue, of discarding a bull at 5 or 6 years of age and replacing him with a calf of unknown ability as a sire is the real reason for the extremely small improvement in recent years of our dairy herds.

Feeding Versus Breeding.

In this regard, I refer to breeders of purebreds as well as grades. With the great numbers of intelligent men engaged in this industry, the improvement should be tremendous. As a matter of fact, the improvement in production is mainly a question of feeding, not breeding. Too many bulls are purchased for herd headers solely by virtue of their carriage, straight back or proud crest. The blue ribbon of the state or county fair too often sways the judgment of the prospective purchaser.

Type, quality and conformation are

(Continued on the following page.)



CORRUGATED METAL GRAIN BINS

Rain Proof — Rat Proof
Rust Proof — Fire Proof

500 to 5,000 bushels capacities
Portable or stationary

THE SAFEST WAY TO STORE GRAIN

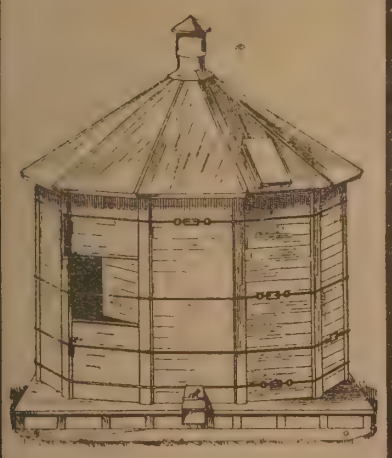
Metal Wagon Boxes and Portable Grain Loaders save grain and labor

Write for information—Department C

AGENTS WANTED

SPOKANE CULVERT & TANK CO.
SPOKANE, WASHINGTON

MOBILIZE



YOUR Grain Tanks NOW!

WEYERHAEUSER FIR GRAIN TANKS are in big demand. Do not rush us with orders when the harvest is on. BUT GET READY NOW—IMMEDIATELY. This is important advice. You will need Grain Tanks this year. The farmer must win this war. Grain Tanks will help him. MOBILIZE THEM NOW. Send us your orders IN TIME so that we can fill them ready for your needs.

FREE "Bulk Your Grain" FOLDER. Send for it today. Tells all about our "Tanks" and "Granaries" for Bulk Grain.

WEYERHAEUSER TIMBER CO.
Everett, Wash.



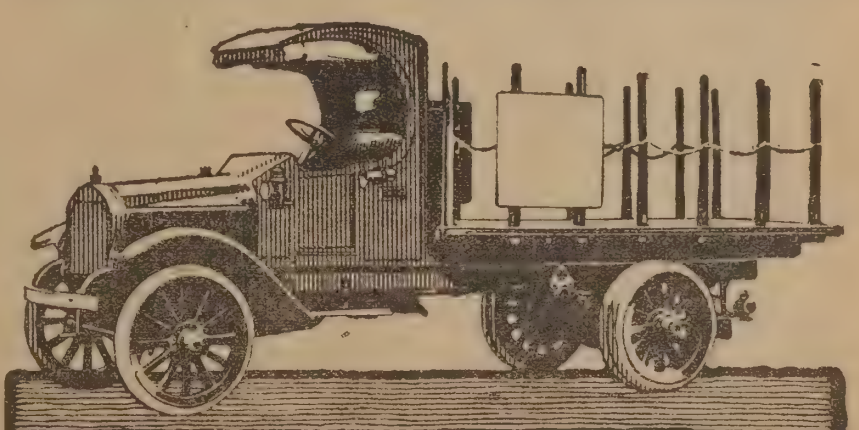
Wagons That Stand Up

BEAR this point in mind the next time you buy a wagon—**Columbus and Weber wagons are guaranteed to stand up under capacity loads.** You don't have to be a wagon expert to buy a **Columbus** or **Weber** wagon safely. All you really need to know is the weight of your heaviest loads. Buy a wagon marked to carry that load and we guarantee safety and satisfaction worth more to you than all the talking points of all the wagons in the market put together.

Ask any dealer who carries **Columbus** or **Weber** wagons to show you just what we mean by this statement, or write to us for full information. Our wagons have many good features—the International fifth wheel, the sandboard wear plate, link end rods, folding end gate, superior material—more features than you will find on any other wagon. All these help to give the good service, long life and economy that you get with **Columbus** or **Weber** wagons. See the wagon or write to us before you buy again.

International Harvester Company of America
(Incorporated)

Crawford, Neb. Denver, Colo. Helena, Mont. Los Angeles, Cal.
Portland, Ore. San Francisco, Cal. Spokane, Wash. Salt Lake City, Utah



For Every Purpose on the Farm

***Mack* TRUCKS**

Capacities: 1 to 7½ tons

Built for long life and hard usage; value in every ounce. The truck that is adaptable to your needs, whatever they may be. Let us know your requirements and we will suggest the Mack Truck to serve you best. Especially we want you to have our interesting new literature on the truck whose

"Performance Counts."

T. G. YOUNG

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T. G. Young, Distributor,
I want to know more about Mack Trucks.
MAIL THIS COUPON
Name .....
Address .....

OREGON GROWN

SEED CORN

Acclimated, Properly Matured

FIELD CORN

OREGON YELLOW DENT

MINNESOTA KING AND NORTHERN GROWN

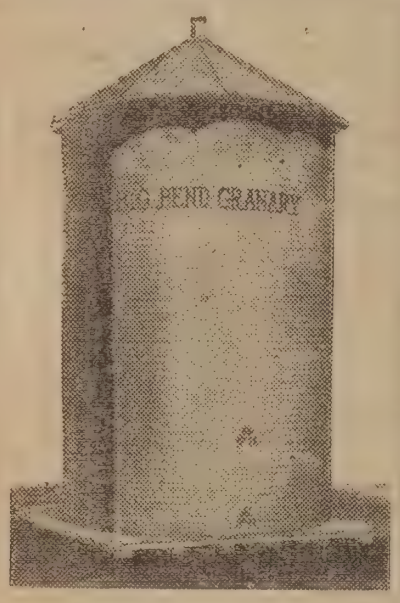
PRIDE OF THE NORTH

Prices on request subject to market changes. Ask for circular No. 40

PORTLAND SEED CO.

PORTLAND SEED COMPANY

PORTLAND, OREGON



"BIG BEND"

TANKS AND GRANARIES FOR BULK STORAGE OF GRAIN.

Built on a new, double-walled design that makes them three times as strong as the old-style, steel-hooped tanks.

NO HOOPS. NO BULGING.

"Big Bends" are built to last. Proof against wind and weather. Tank capacities 750 to 2000 bushels; granaries up to 10,000 bushels.

Write for big illustrated circular.

Pacific Tank & Silo Co.

Central Building. Seattle.

SPRAY NOW

Aphids, Red Bug and similar insects are a serious menace to orchards in spring. Do thousands of dollars' damage annually. Black Leaf 40 (nicotine sulphate) kills these pests. Recommended by Experiment Stations.

Free "WHEN TO SPRAY" "BUG BIOGRAPHIES" "APPLE APHIS" Booklets

Contain facts worth hundreds of dollars to orchardists, especially apple growers. Latest information on spraying for aphis and other soft-bodied, sap-sucking insects. Spraying time is here, so write at once.

When To Spray

The Kentucky Tobacco Product Co. Incorporated

Dept. E Louisville, Ky.

Kills Aphis

Black Leaf 40

40% Nicotine

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Give Cows a Chance

Grade Must Have Fair Treatment

(Continued from the preceding page.)

important, but secondary to production. Not one bull in a hundred is of such a dominating prepotency that he leaves his impress on his descendants for more than a generation or so, and all too many of those that might have proven themselves great were sent to the butcher to make room for some fashionably bred young calf that had impressed the eye of its owner.

A case in point is the recent much-advertised sale of the $21,500 bull calf. The purchaser may have in him a great sire of producing females, but it is extremely questionable, and he may even produce very indifferent progeny.

The best breeding in the world does not necessarily result in a prepotent sire. It does, however, indicate certain tendencies in that direction, but not sufficient to warrant the speculation usually indulged in by dairymen and breeders in their purchases of bull calves. The results of many sales of dairy cattle of various breeds disclose the fact that the buyers literally fall over each other in their efforts to buy calves of unknown value for sires, simply because they are out of good cows, and usually pass up a mature bull of tried ability and recognized worth.

Their loss lies not in the purchase price of the calf, for they are generally cheap enough, but in the lack of improvement in the offspring. They would undoubtedly secure more satisfactory results by the purchase of an aged bull of proven value and be a little more careful in crossing different strains of their particular breed.

I have no intention to discuss the psychology of this point, but simply attribute it to the fact that most of us like to take a gambler's chance, and we do; with the result that a great many of our cows are bred to very poor sires. The resulting progeny does not usually improve the breed. I must say, however, that far better judgment is used in the purchase of young females, for there is no doubt that their relative value may better be gaged than that of the males. This is natural, of course, for the young male's value lies solely in an unborn generation.

An interesting comparison can be made of the methods of our dairy stock breeders with those of the great breeders of thoroughbreds. The English running horse has been brought to the highest stage of specialized development of any breed of domestic live stock. The dominant characteristics are more certainly transmitted from generation to generation than any other breed or class of stock. This result has been attained mainly by the consistent judgment used in selecting their sires and by keeping the blood pure through 150 years of effort.

Ninety per cent of the great sires of the breed were great race horses before they were retired to the stud; and once they demonstrated their fitness as sires they were kept in service until incapacitated by old age. The huge prices paid for such stallions as Cyllene, Prince Palatine and Rock Sand were after they had proved their possibilities as sires, not as colts.

So, also, should it be with the bull; if you are fortunate enough to own one that is producing results indicating an improvement in your herd, by all means keep him in service as long as he continues to secure results. Don't kill him off and try another youngster in a general breeding scheme until he has proven himself on a few cows. That method of slow but sure improvement is faster than would be attained by the use of an occasional poor bull that would result in a very considerable setback.

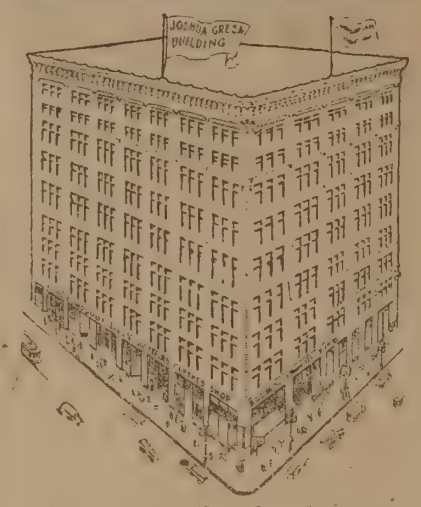
Fairs and Stock Shows.

Please do not imply from the foregoing remarks that I intend to knock the fairs and stock shows, for there is certainly no better method of educating farmers and stockmen of all kinds in the results to be obtained by intelligent selection. The one exception that I do take, however, is the method of selecting a champion bull, for certainly his only value is in his progeny, and by that he should be judged.

W. G. E. SMITH.

Hood River, Ore.

Real $25.00 Value



Suits and Overcoats for $15

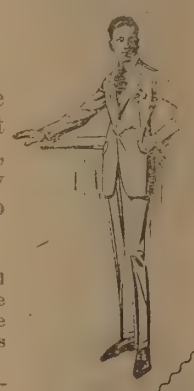
ORDER SUITS BY MAIL

We Pay Delivery Charges Anywhere.

Our new mail order department brings our immense stock of ten thousand suits and overcoats direct to your home. It is now possible to purchase from us at the same low price and with the same guarantee of fit and service as the thousands of our customers in the city.

Save $10.00

Buy your clothes the modern upstairs way, the money-saving way. Ten thousand suits to select from—blue serges, pencil stripes, clay worsteds, tweeds, cassimeres, velours—any fabric you may fancy, all hand tailored, at a saving of $10.00 to you.



Selling clothes upstairs on the second floor is a radical change from the old way—the low rent, the inexpensive fixtures, the cash selling plan and the fact that we are willing to accept a small profit—these are the reasons why we are able to save $10 to every purchaser.

Thousands of men in the northwest have taken advantage of our selling plan and proven to themselves that they save money—you can do the same.

Mail Coupon Today

Cut out coupon and mail today for samples and measure blanks. State the kind of suit wanted. You can easily take your own measure. No trouble, no delay. You pay only on delivery and if not satisfied don't pay.

We guarantee satisfaction or your money back.

We also pay express or parcel post charges.

Lundquist-Lilly

Upstairs Clothes Shop.

Josuha Green Bldg., Seattle

L.-L. Seattle.

Gentlemen: Please send samples and self measure-ment blank with full instructions. Also latest style chart showing 26 new spring and summer models.

Name .....

Address .....



Vaughan's Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $140 f. o. b. Spokane and common points.

FOR SALE BY

Washington Machinery & Supply Company

8122 Monroe SPOKANE, WASHINGTON

Home Grown CORN

In the arrangement of your crops do not forget CORN.

Our home grown varieties are well adapted to the Pacific northwestern states and will mature any place where corn will mature. See our catalog for varieties, description and prices.

The Inland Seed Co. Spokane, Wash.

Winners of Contest Are Announced

Farm Information Replies Are Scored and Prizes Mailed

By the Contest Editor.

By the time this announcement reaches you, winners in the Farm Information Contest will be in possession of their prize money. As this is written the auditor is issuing the checks, the largest of which, $200, goes to I. J. Longeteig of Vollmer, Idaho, who, although winner of the second prize, receives more than the first prize winner because he mailed his answers in an earlier period. It will be remembered that those who used the Contestant's Helpful Outfit had an opportunity to try for the larger prizes by sending their answers during the early periods. Mr. Longeteig was one of these. His answers came in the first period. H. N. Whitelaw of Oakesdale, Wash., had the highest score, but as his answers did not come in until the fourth period, his prize was only $175.

Prize winners follow: H. N. WHITELAW, Oakesdale, Wash., box 102, fourth period, $175, score 5959; I. J. LONGETEIG, Vollmer, Idaho, first period, $200, score 5942 1-2; J. T. SULLIVAN, Nez Perce, Idaho, fifth period, $50, score 5929; MRS. J. B. ROSE, Ellensburg, Wash., Route 1, fourth period, $22, score 5872; M. A. TUTTLE, Fairfield, Wash., first period, $20, score 5856; JAMES W. SMITH, Drain, Ore., fifth period, $5, score 5852; F. S. MILLER, Inkom, Idaho, second period, $8.75, score 5851; MRS. T. H. GRAGG, Monroe, Ore., Route 1, second period, $8.75, score 5849; MRS. T. J. GOLDEN, Oakesdale, Wash., Route 1, fifth period, $5, score 5847; MRS. C. L. SOMMER, Boundary, Wash., third period, $7.50, score 5846; J. WESTON MARTIN, Oakesdale, Wash., second period, $3.75, score 5845; H. J. NILLSON, Union, Ore., Box 723, second period, $3.75, score 5841; ANNA L. WEST, Davenport, Wash., $2, score 5840; MRS. FLORENCE E. BEMIS, Deer Park, Wash., Route 2, second period, $3.75, score 5839; M. C. VERSTEEG, Amity, Ore., Route 1, first period, $4, score 5837 1-2; J. R. COWAN, Hooper, Wash., first period, $3, score 5832 1-2; JOHN DENNEY, Monmouth, Ore., fifth period, $1, score 5826; MRS. NORMA WHEATLEY, Sorrento, Idaho, fifth period, $1, score 5779; GEORGE F. RICHARDSON, Ellensburg, Wash., Route 1, second period, $2.50, score 5774; MRS. H. W. REAUGH, Ephrata, Wash., first period, $3, score 5753; MRS. J. H. SHAFER, Genesee, Idaho, Route 3, third period, $2, score 5751; MRS. M. V. YALE, Davenport, Wash., first period, $3, score 5751; E. E. HAMMERSLEY, Alsea, Ore., third period, $2, score 5749; MRS. BERT DUFFIELD, Moscow, Idaho, Route 2, first period, $3, score 5747; EFFIE HILTON, Rexburg, Idaho, $1, score 5746 1-2; MISS CARRIE BROWN, Moscow, Idaho, Route 2, Box 90, fourth period, $1.50, score 5746; J. A. STRUSS, Redmond, Ore., third period, $2, score 5746; MAMIE ROBBINS, Eddyville, Ore., $1, score 5745; E. W. KENT, Portland, Ore., 303 East Forty-seventh street, first period, $3, score 5744 1-2; MISS MABEL HEDIN, Spokane, Wash., E413 Mission avenue, $1, score 5744; J. M. KALSTROM, Medford, Ore., Route 1, Box 80, fifth period, $1, score 5742 1-2; JOHN T. BUSH, Plummer, Idaho, second period, $2.50, score 5742; S. H. HORNER, Goldendale, Wash., second period, $2.50, score 5740 1-2; CHARLES E. INMAN, Cusick, Wash., third period, $2, score 5739; MRS. E. M. FRAKER, Pendleton, Ore., R. F. D., fourth period, $1.50, score 5738; JOHN R. GOW, Roy, Wash., third period, $2, score 5738.

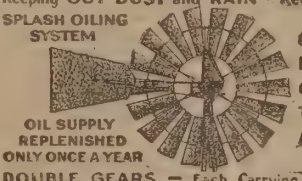
The Correct Answers.

Following appear the questions and the correct answers:

1. (a) In getting up from the ground what part of its body does a cow raise first? (b) horse? (a) rear (b) fore.
2. How many upper front teeth has a cow? None.
3. What letter added to a common ailment of chickens will spell something generally used in smoking? Pip, with "e" added makes pipe.
4. What piece of harness has the same name as a small boat used in pulling a larger vessel? Tug.
5. What weed very common in the northwest is named after a great railroad builder? Jim Hill mustard.
6. What is the heaviest package which can be sent by parcel post? 50 pounds.
7. What domestic fowl requires from 20 to 22 days in which to hatch its eggs? The hen.
8. What is the common name for maize? Corn.
9. In what year was the edition of the Bible known as the "Vinegar Bible" published? 1717.
10. What important part of a wagon has the same name as an important part of the human body? Tongue.
11. When will the moon be full in March, 1917? March 8.
12. What part of a wagon and what

(Continued on the following page.)

SELF-OILING WINDMILL
With INCLOSED MOTOR
Keeping OUT DUST and RAIN — Keeping IN OIL



DOUBLE GEARS — Each Carrying Half the Load
Every feature desirable in a windmill in the
AUTO-OILED AERMOTOR
Gasoline Engines — Pumps — Tanks
Water Supply Goods — Steel Frame Saws
WRITE AERMOTOR CO. 2500 12TH ST., CHICAGO.

Silage Wins This War



The Perfect Silo Door.

Farmers! It's Up to You

Thrift on the farm today spells in huge letters "HUMANITY'S CAUSE." Every silo is a soldier—a battalion of soldiers. Order NOW a

Weyerhaeuser Silo

and "SAVE, CONSERVE, SERVE" as every awakened farmer in America is doing.

WEYERHAEUSER TIMBER CO.
Everett, Wash.

In answering advertisements don't fail to mention this paper.

TEN FARMERS



of personnel ... to ... come to ... on missions.
... have access only to the ... censored announcements of the department.

SAY ASIATICS NEEDED TO HARVEST CROPS.

STOCKTON, Cal., May 8.—Directors of the Stockton Chamber of Commerce went on record today asking congress to pass legislation to permit immigration of 100,000 Asiatics to harvest California's crops. A vote on the question will be taken from the chamber membership.

WANT TRACTORS

EUREKA, Cal., Monday, May 7.—Six hundred farmers at a conference adopted resolutions appealing to the State Council of Defense for farm tractors when the time shall come for the harvesting of their bean crop. The bean acreage is thrice that of last year, and the potato crop double.

Can Save Thousands of Dollars If They ACT NOW!

The labor problem is getting more and more acute every day. The appeal for help is coming from all parts of the state.

What will the condition be when the harvest time comes?

Labor-saving machinery is the only solution today.

Just Ten Bull Tractors Left!

Out of the largest shipment of tractors ever brought to the northwest—15 carloads—there are but ten tractors left.

The last two weeks has seen an unprecedented demand for **BULL TRACTORS.**

Wise farmers, looking into the future, have purchased **BULL TRACTORS** to offset the labor shortage in planting now and harvesting later on.

The possibility of the government taking over the railroads in the very near future—the present congestion, car shortage, etc., practically preclude any more Bull Tractors for the northwest this season.

Ten Golden Opportunities Await Ten Wide Awake Farmers

We don't need to tell you what the Bull Tractors will do on the farm. Sufifce to say that there are more Bull Tractors in use on Washington farms than any other make.

Bull Tractor owners in the northwest are always within reach of BULL TRACTOR PARTS—and BULL TRACTOR service.

From planting in the spring to harvesting in the fall, the Bull does the work of a dozen men or horses.

After these ten are gone we can promise no more this season. He who owns a Bull Tractor need not worry about the labor shortage.

Quick Action Necessary

This is no time to hesitate. Labor is getting scarcer every day. What will be the condition when conscription starts?

Many farmers have expressed a desire to buy a Bull Tractor, but are hesitating. Some one will get left. Ten can not supply the demand.

Act Now! Wire the Nearest Branch Today

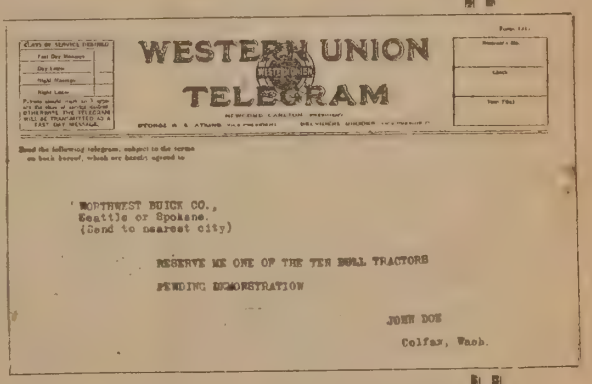
If you want to harvest your crops surely, get wartime prices, you can't afford to delay. One day may be too late.

To enable those farmers who haven't had a chance to get a tractor—or to see what it will do—we have decided to hold these tractors for those who wire in reservation orders.

Very Important

This wire will hold one of the ten remaining tractors for you until we can demonstrate what it will do for you. You are obligated only to take the Bull Tractor after satisfactory demonstration of what it will do. We are prepared to make immediate shipment from Seattle or Spokane.

Are You Going to Be One of the Ten?



WESTERN UNION TELEGRAM

Send the following telegram, subject to the terms on back hereof, which are hereby agreed to

NORTHWEST BUICK CO.,
Seattle or Spokane.
(Send to nearest city)

RESERVE ME ONE OF THE TEN BULL TRACTORS
PENDING DEMONSTRATION

JOHN DOE
Colfax, Wash.

Northwest Buick Co.

Seattle — Distributors — Spokane

Contest Winners
Are Announced; Prizes Mailed

(Continued from the preceding page.)

piece of furniture have the same name? Bed.

13. In what state of the United States did the child live who was the original of the Mary in the poem beginning "Mary had a little lamb, its fleece was white as snow?" Massachusetts.

14. Will a bar of iron measuring, when ice cold, one inch thick and one inch wide and 12 feet long contain more than one cubic foot if its temperature is raised 100 degrees? No.

15. How many stars are there in the great dipper? Seven.

16. How many stars in the American flag? Forty-eight.

17. What grain is used in making graham flour? Wheat.

18. Does the book of Hezekiah come in the old or new testament of the Bible? In neither.

19. Which anniversary of a marriage is known as the golden wedding anniversary? Fiftieth.

20. What breed of chickens bears the same name as the landing place of a group of early American colonists? Plymouth Rock.

21. What farm fowl has the same name as one of the warring nations of Europe? Turkey.

22. Where is the key of the Bastile? Washington's mansion at Mount Vernon, Va.

23. If young swine are called pigs, what are young rats called? Rats.

24. What common bird has a name pronounced the same as a letter of the alphabet? Jay.

25. What will be the cost of running a six-line "want" ad for three times in the Washington Farmer, The Oregon Farmer and The Idaho Farmer? $6.40.

26. How many seconds in the month of February, 1916? 2,505,600.

27. What article of diet is commonly called the "staff of life?" Bread.

28. When did the law go into effect which prescribes the number of stars and the number of stripes which there shall be in the flag of the United States? July 4, 1818.

29. On what horizon does the new moon set; east, west, north or south? Western horizon.

30. What apple has the same name as a high political position in the United States? Senator.

31. The abbreviation of what state means "to launder?" Washington.

32. What breed of swine has a name made up of the names of an Asiatic nation and a European nation? Poland China.

33. What bird with the name of a domestic animal uses the nests of other birds in which to lay its eggs? Cow bird.

34. How many women have been legal rulers of France? Ten.

35. How much must you pay to get a United States postal money order for $99.99? $100.29.

36. The name of what fungus disease extremely destructive to wheat will be changed to the nose of a farm animal if for one letter is substituted the two letters directly fallowing it in the alphabet? Smut.

37. What does the government estimate as the amount of sugar beet seed produced in the United States in the year 1916? 5,211,000 pounds.

38. What root vegetable is most used in making sugar? Sugar beet.

39. What brand of oil widely advertised in this paper is formed by combining a word meaning a very low temperature with a word meaning thin? Zerolene.

40. In six to 10 words tell three reasons why it is beneficial to cultivate the soil around growing plants? Conserves moisture, kills weeds, facilitates root respiration.

41. What great general requested that his heart be buried in one place and his body in another? Francois Christophe Kellerman, duke of Valny and marshal of France.

42. A wagon box 10 feet long, 3 feet wide and 24 inches deep will hold how many bushels of wheat? 48.2 bushels.

43. What member of Wilson's cabinet has the same name as an important city in Texas? Houston.

44. What day of the week was July 4, 1909? Sunday.

45. Why is the cow a useful farm animal? (Scored on a point system, credit being given for the various reasons enumerated as to why a cow is a useful farm animal.)

46. From what fruit are raisins made? Grapes.

47. For what product advertised in this paper is the phrase used, "chases dirt?" Old Dutch Cleanser.

48. Will an iron bar measuring, when ice cold, one inch wide, one inch thick and 12 feet long contain more than 144 cubic inches when its temperature is raised 100 degrees? Yes.

49. Is a subscriber of The Washington Farmer, The Oregon Farmer or The Idaho Farmer guaranteed against loss in dealing with advertisers in these papers? Yes.

50. What is the meaning of the words "E. Pluribus Unum" found on many of our United States coins? One from many, or from many one.

51. What boy's name is also the name of an animal and a device for lifting? Jack.

52. When it is 12 o'clock noon in Washington, D. C., what time is it in Hong Kong? 12:35 a. m. the next day.

53. What is the document called which shows that a piece of land is given as security for a loan? Mortgage.

54. What advertiser in various issues of The Farmer has offered to send an illustrated book entitled "Tree Planting?" The Giant Powder company of San Francisco, Cal.

55. How many feet in a surveyor's chain? 66 feet.

56. The name of what farm implement can be formed by rearranging the following letters: R u t y o c t a i l? Cultivator.

57. From what plant is sorghum molasses made? Sugar cane or sorghum.

58. The name of what well-known burden bearer is formed by combining in the proper order the 11th, 5th, 15th, 25th, 4th and 14th letters of the alphabet? Donkey.

59. How many rods around a quarter section? 640 rods.

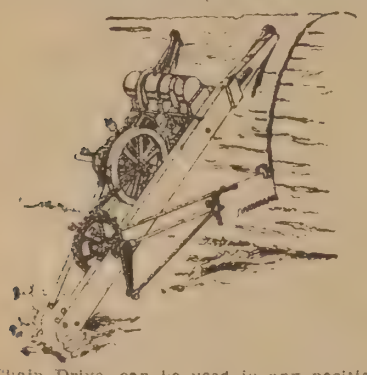
60. What was the date of the letter in which Abraham Lincoln wrote the words: "My father, at the death of his father, was but six years of age, and he grew up literally without education?" December 20, 1859.

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Sidelights

Fishing.

"Oh! I just love animals!" cried the enthusiastic girl.

"Perhaps you have noticed that I am a little hoarse," insinuated the young man who had a cold.

No Allurement.

"Some day you'll be rich enough to retire from business."

"Give up my nice pleasant office and stay home?" rejoined Mr. Groucher. "I should say not!"—Washington Star.

Everybody Knew.

Bridegroom: "What is the matter, driver?"

Coachman: "The horse has just thrown a shoe, sir."

Bridegroom: "Great Scott! Do even the horses know we are just married?"

One Difficulty Overcome.

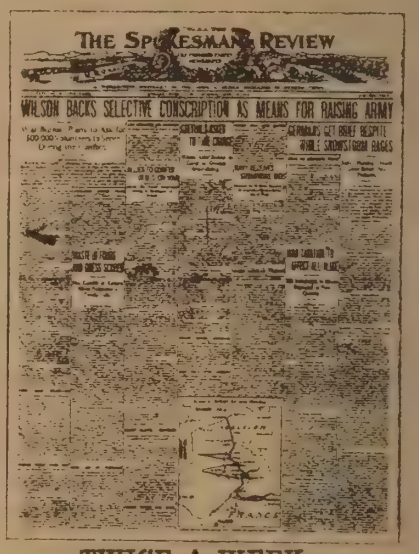
When Jimmy Martin announced that he was going to give up barbering and study dentistry, his friends gathered to congratulate him.

"Wal, Jimmy," said Uncle 'Si' Grannis, after a period of cogitation, "it'll be about the easiest thing you can take up, I reckon. 'Cause, of course, you already know how t' work the chair."

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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER XI.

Among the friends of my boyhood in pioneer eastern Washington I remember none better than Rip Van Winkle, whom we called "Rip." Rip's real name was Baskerville, and he was a hunter, a trapper, a "water witch," a teller of bear stories of the kind that delighted the ear of a 10-year-old boy, and a southerner of the old south, of the genuine fire-consuming kind.

Rip had a claim of some sort far back in the Okanogan mountains, where he and his patient old horse Billy wintered. In harvest he drove in a two-wheeled cart down into the Big Bend country and stacked straw for a dollar a day. He swore that no man living was entitled to more than a dollar for a day's work, and would take no more than that.

Rip's "water witching" was the wonder of our small pioneer neighborhood. He would cut out the fork of a young willow, grasp a branch in each hand with the fork up, and pace about in circles till presently, for some unaccountable reason, the switch would begin to twist downward. When the switch turned down water was below, and Rip said he could tell by the downward "pull" of the switch how deep one would have to dig for water. He witched for my father's well, and staked a spot where we would strike water in 60 feet, he said. My father dug there, though he was a skeptic of water-witching. He struck "signs" of water at 56 feet, and, to his utter astonishment, reached a strong water vein with just four more feet of digging.

My earliest lessons in diplomacy were extracting bear stories from Rip. One summer he had his camp up the ravine from our house, and I spent most of my time either listening to his bear stories or in devising schemes for getting him to talk. I finally worked out a method which was sure fire in getting bear stories, with now and then a yarn about a mountain lion, or an Indian fight, in which Rip had participated on the frontier plains.

I would saunter carelessly into Rip's camp at about 10 in the morning, taking a loaf of bread or a pie which mother had sent. This he would receive with thanks. At the time of my arrival most often he would be undressed except for his red flannel shirt, hat and pipe. He was not quite right in the head, I think.

Rip would finish dressing after I arrived, water old Billy and swear at him for having tried to get away during the night. Then he would come back and sit down near me in front of the tent, and put a fresh charge in his pipe.

As soon as his pipe was going at a good race I would mention having read a story about some hunters who had killed a bear, a lion, a tiger, a rhinoceros—any kind of an animal that fitted the story I had invented. If Rip seemed fairly attentive I would invent further details of the hunt, making the slain animal very fierce and the hunters very brave. I would conclude my narrative with an expression of admiration for the bravery of the hunters, and said that I was glad such fierce animals did not roam at large in the Big Bend.

At this point Rip would break loose with a loud snort. In language wholly unconventional he would swear that the animal I had mentioned, bear, panther, lion, tiger, rhinoceros, or what not, was not fierce at all; was unworthy of the attention of any man who was really a hunter. His wrath gathered momentum. With great oaths he would declare that the only animal in the world that was really dangerously fierce was a "bald-faced b'ar."

Just why Rip had such a wholesome respect for "bald-faced b'ars" I never discovered, but certainly he regarded this beast of the grizzly tribe as a bad one. Of panthers he was unafraid. One had climbed on top of his log house one night in winter and tried to dig through the roof. He awoke just as the beast had made a hole sufficiently large to admit its head. No, he didn't shoot it. He was short of ammunition—had none to waste. He simply yelled at it to "git away." It got. Two or three days later, when he became tired of having the damn thing hollering about his camp at night and trying to dig through his roof he waded out in the snow and shot. He hated to waste a bullet on it, but it was hungry, he reckoned, and he thought he might as well rid it of its misery.

Here he would stop to refill his pipe, and the situation was delicate. If he went ahead I would get a whole afternoon of stories. The trick was to jar him loose, so that he would proceed with his stories.

Usually I would ask him if he could have scared a bald-faced bear from his housetop by yelling at it to "git away." He would say he couldn't—not by a damn sight! No bald-faced b'ar would ever live long enough to get on top of his house, he said, for he could smell one of 'em a mile away. And whenever he smelled one he just naturally began to unlimber the artillery, for it was time to be up and doing.

At this point I would interrupt him to ask if he had ever killed a bald-faced bear. He would glare at me a full minute without winking. Then, with many oaths, would shout that he had killed enough bald-faced b'ars to load up a freight train.

By this time Rip would be warmed up to his job, and it was simply a matter of sitting still and listening. He would begin by telling how he had raided the den of a mother bald-faced b'ar and her six bald-faced cubs. From his description I gathered that the cubs were as large or larger and as fierce or fiercer than their extremely large and fierce mother, whom Rip shot so dead that she never kicked once, and then went after the cubs.

The bears were hived up in their parental den, it seemed, which was open at two ends, and at one end of which Rip kindled a fire and fanned the smoke into the hole, trying to smoke the cubs out. But they didn't smoke out worth a cent. He fanned smoke into the hole for an hour, and the bears refused to come forth.

Finally, he quit fanning smoke into the hole and went around to the other end and looked in. There were those six bears, each with its nose sticking in the earth so that it couldn't smell the smoke. Rip concluded that if the bears were that smart he would just let 'em live, even if they were bald-faced; which he did.

Next would be the story of the bald-faced b'ar that struck an ox with its forepaw, crushing its head to pulp; stories of narrow escapes, of bears he had shot through the heart, the brain, the backbone and all four legs, but which kept coming till they had dropped dead within a foot of him; stories of Indian fights, and, if the pipe lasted, stories of the civil war, winding up with his part in the battle at Pittsburg landing, and his sworn belief that if General Albert Sidney Johnson had not been killed in the fight Grant would have been licked right there. "And the south would be slave today," he would thunder; "and it ought to be; niggers are better off with a master!"

Years later I attended an opera in Spokane, and the leading man sang a song improvised apparently from the legend of Rip Van Winkle and the rhyme of my childhood, "Old Dan Tucker." The song started thus:

"R-r-r-rip Van Winkle was a happy man;
He combed his hair with the frying pan"

I can not remember more. The song, the orchestra and the capering, singing, prettily costumed dancing girls were a strong contrast to the picture that rose in my mind—old Rip as I last saw him by the fireside in our pioneer home, his black eyes aflash with rage as he said that "they" had been trying to steal his horse, and he was leaving the country for good.

Rip was possessed of the insane notion that some one was ever trying to steal his fat, lazy old horse, that most people would not have taken as a gift. In camp he often did sentry duty till far into the night, watching his horse. He could shoot a nail through a board 50 feet away, four in five shots, and I am certain that if any one had by design or chance approached his horse at night he would have fired instantly to kill.

That evening was the last which Rip spent in our home, and he was never seen again in the Big Bend. Two winters afterward I heard that he had been found dead in his bed on a cold winter morning in the Okanogan, his gun beside him and his boots on. He always said that when he died it would be with his boots on.

"Old Bachelor" a Social Fact

In the next instalment the Bunch Grass boy tells of the "old bachelor" of pioneer days in the Big Bend. Here is a paragraph:

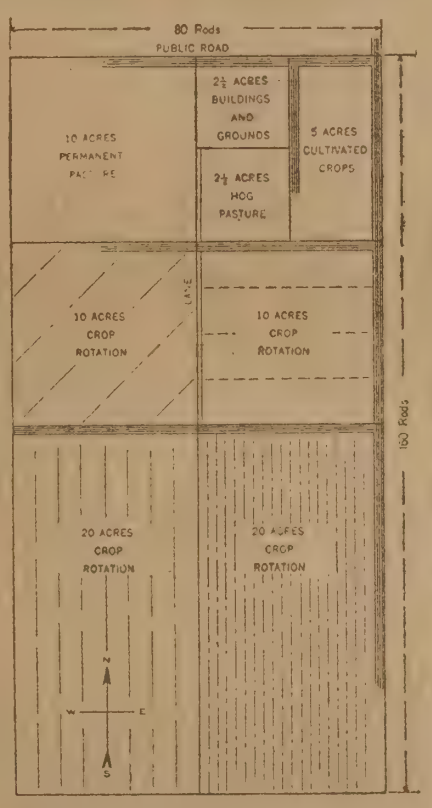
"A few of the old bachelors married young girls of the neighborhood, but this was regarded as hazardous. 'There's old Dave Blank going to marry Hettie Williams and she's just a kid,' remarked one of the neighbor women. 'Why, he'll soon have one foot in the grave and she'll be as spry as a colt, wanting to go to all the dances and things! A fine time she'll have pulling him loose from the fire in cold weather! Mark my words—they won't agree!' They didn't."

Layout for 80-Acre Farm

In the May number of the Reclamation Record I. D. O'Donnell, supervisor of irrigation, gives an 80-acre farm layout where the slope and general conditions favor the farmers in every respect.

The farm is divided to provide two 20-acre fields which may be used for the field crops in a general crop rotation; two 10-acre fields for crop rotation uses; 10 acres for permanent pasture; five acres for cultivated crops; two and one-half acres for hog pasture and two and one-half acres for buildings and grounds.

The permanent pasture could be further divided into two tracts to permit of continuous use by irrigating one part at a time. The other two 10-acre



One way to lay out an 80-acre farm.

tracts could be diverted to use for permanent pasture in turn if desired. The five-acre tract could be used permanently if desired or the production of crops to be harvested by hogs or sheep. The length of farm lane necessary to connect up all these fields is small and no great distance is traveled in reaching any field on the farm.

The irrigation water is shown as entering the field at the northeast corner and the slope is south and west. It would be necessary to run a small farm ditch across the north end of the farm to provide irrigation for the east 20 acres. The main farm ditch would extend down the east side of the farm and carry water for the 60 acres in the four larger fields.

Ye Have Heard That It Was Said by Them of Old Time

A COMMANDMENT AND A REWARD.

Honor thy father and thy mother that thy days may be long upon the land which the Lord thy God giveth thee.—Exodus 20:12.

We doubt if there is any commandment which is more generally forgotten than this. Even those who have read it and committed it to memory disregard it and look upon its violation by others in the light of a small offense. They consider it a violation of good taste and courtesy rather than a commandment which has equal rank with the other nine.

When you boil them down it has equal standing and importance with the others, and we know of no authority which authorizes the observance of one and the disregarding of another.

This commandment is peculiar in it that it promises a definite and plain reward for those who obey it—long life for those who honor their parents. Or, is it long life? Is it, rather, security in one's possessions and peaceful certainty with no fear of the foe about us?

Parenthood is one of the most sacred of all relationships; it has suffered from the hands of iconoclasts, and yet its beauty and mystery persists. It is connected with the deepest emotions and feelings of which we are capable, and hallowed by the most reverential thoughts, or it is disgraced and made the subject of coarse and silly gibes.

We want our children to have the reward of the fifth commandment, and how can they unless we parents are worthy of the honor that is due? It seems that there is a double duty connected with this commandment.

Fatherhood and motherhood should be respected by the offspring, for it is sacred and so declared by the Almighty. A little serious thought about this commandment might prove of benefit to children and fathers alike. Let it not be said of Christian people that they observe one of the principles of their own belief less well than do the heathen. H. H. B.

Recessional.

God of our fathers known of old.
Lord of our far flung battle line,
Beneath whose awful hand we hold
Dominion over palm and pine,
Lord, God of hosts, be with us yet,
Lest we forget, lest we forget!

The tumult and the shouting dies,
The captains and the kings depart,
Still stands thine ancient sacrifice,
An humble and a contrite heart,
Lord, God of hosts, be with us yet,
Lest we forget, lest we forget!

Far called, our navies melt away.
On dune and headland sinks the fire,
Lo, all our pomp of yesterday
Is one with Nineveh and Tyre.
Judge of the nations, spare us yet,
Lest we forget, lest we forget!

If drunk with sight of power we loose
Wild tongues that have not thee in awe,
Such boasting as the Gentiles use,
Or lesser breeds without the law,
Lord, God of hosts, be with us yet,
Lest we forget, lest we forget!

For heathen heart that puts her trust
In reeking tube and iron shard,
All valiant dust that builds on dust,
And guarding, calls not three to guard,
For frantic boast and foolish word,
Thy mercy on thy people, Lord.

—Rudyard Kipling.

All the World's a Stage, and All the Men and Women Merely Players

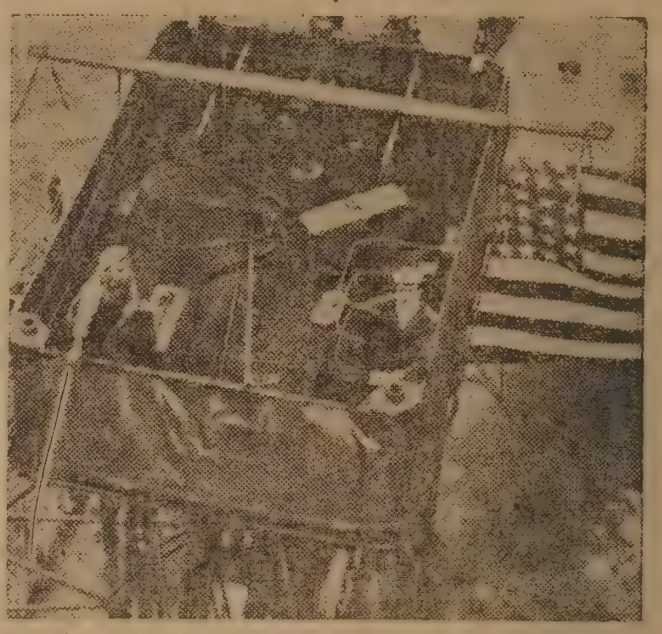
Foreign Instructors for Harvard Reserve Corps



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The six French army officers who will assist in the military instruction of the Harvard reserve corps are shown reviewing the Harvard regiment from the steps of the Harvard club, Cambridge.

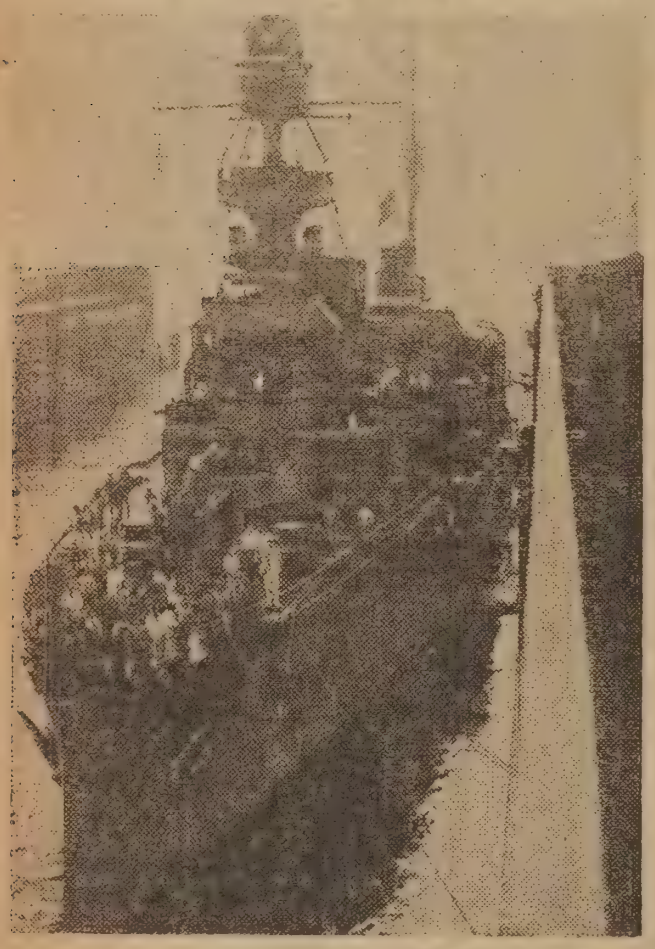
Aloft During Battle Practice



Copyrighted by International Film Service.

The above photograph shows the fighting top of the United States ship North Dakota, during one of the battle practices at sea.

French Warship in Hudson River



Copyrighted by International Film Service.

The French battleship Amiral Aube, which escorted the French war mission of distinguished men on their visit to the United States. The picture shows her at anchor in the Hudson river.

Members of the U. S. Labor Board



Copyrighted by International Film Service.

Executive committee of the committee of labor, organized to handle labor problems which arise during the war with Germany. In the photograph are Samuel Gompers, Secretary of Labor Wilson, James O'Connel, H. E. Wills, Lee Frankel, G. Bucks, Frank Morrison, Everitt Macy, L. B. Schram, E. P. Nevin, Elisha Lee and James Ford.

"Why, the very idea."



—Cleveland Plain Dealer.

MAKEUP OF FIGHTER IN DESERT WARFARE.



(International Film Service.)

Cuba's Chief Executive and Aides



President Mario Garcia Menocal of Cuba is shown surrounded by his military and naval staffs. Cuba is prepared to place at the disposal of the United States an army of 30,000 thoroughly trained and equipped troops for service with the American forces that are to be sent to France.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merril Co.

CHAPTER XX.—(Continued.)

Madame Mary took her time, since a more deliberate journey bride never made to waiting bridegroom. She was a study during this whole period—weeping and angry by turns. She, who had never known a momen't illness in all her days, took to her bed upon two occasions from sheer antipathetic nervousness, and would rest her head upon Jane's breast and cry out little, half-articulate prayer to God that she might not kill the man who was her husband, when they should meet.

When we met the king about a league this side of Abbeville, and when Mary beheld him with the shadow of death upon his brow, she took hope, for she knew he would be but putty in her hands, so manifestly weak was he, mentally and physically. As he came up she whipped her horse and rode by him at a gallop, sending me back with word that he must not be so ardent; that he frightened her, poor, timid little thing, so afraid of—nothing in the world. This shocked the French courtiers, and one would think would have offended Louis, but he simply grinned from ear to ear, showing his yellow fangs, and said whimperingly: "Oh, the game is worth the trouble. Tell her majesty I wait at Abbeville."

The old king had ridden a horse to meet his bride in order that he might appear more gallantly before her, but a litter was waiting to take him back to Abbeyville by a shorter route, and they were married again in person.

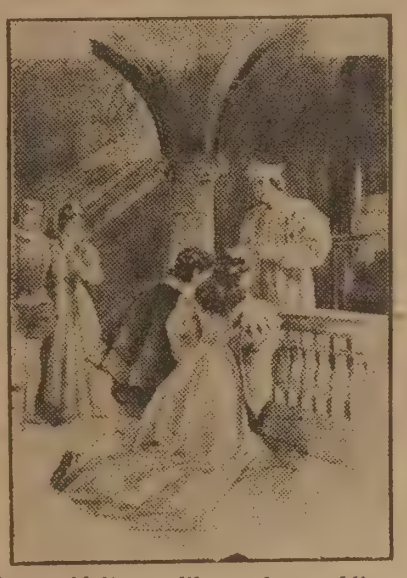
(Again a quotation from Hall is substituted):

Mondaye the vi daye of Noueber, ther the sayde quene was receyued into the cytee of Parys after the order thar foloweth. First the garde of the cytee met her with oute Sayncte Denyce al in coates of goldsmythes woorke with shippes gylt, and after them mett her all the prestes and religious whiche were estemed to be iliM. The quene was in a chyre coured about (but not her ouer person) in white clothe of golde, the horses that drewe it couered in clothe of golde, on her hed a coronall, al of greate perles, her necke and brest ful of Iuels, before her wente a garde of Almaynes after ther fascion, and after them al noblemen, as the Dolphyn, the Duke of Burbon, Cardynalles, and a greate nomber of estates. About her person rode the kynge's garde the whiche wer Scottes. On the morowe bega the iustes, and the queen stode so that al men might see her, and wonder at her beautie, and the kynge was feble and lay on a couche for weakness.

So Mary was twice married to Louis, and, although she was his queen fast and sure enough, she was not his wife.

You may say what you will, but I like a fighting woman; one with a touch of the savage in her when the occasion arises; one who can fight for what she loves as well as against what she hates. She usually loves as she fights—with all her heart.

The Tewesdaye beying the x daye of October all the Englishmen except a fewe that wer officers with the sayde quene were discharged whiche was a greate sorowe for theim, for some had serued her longe in the hope of preferment and some that had



Mary said it was like a play wedding.

honest romes left them to serue her and now they wer out of seruice, which caused the to take thought in so much, some dyed by way returning, and some fell mad, but ther was no remedy. After the English lordes had done their commission the French kynge wylled the to take no lenger payne & so gaue to theim good rewardes and they toke ther leaue of the quene and returned.

Then the Dolphyn of Fraunce called Frauncys duke of Valoys, or Fraunceys d'Angouleme, caused a solempne iustes to be proclaymed, which shoulde be kept in Parys in the moneth of Noueber next ensuying, and while all these thinges were prepearying, the Ladye Mary, the V. daye of Noueber, then beying Sondaye was with greate solempnitee crowned Queen of Fraunce in the monasterye of Caynct Denyce, and the Lorde Dolphyn, who was young, but very toward, al the season held the crowune ouer her hed, because it was of greate waight, to her greuaunce.

So Mary was crowned, and was now a queen, hedged about by the tinseled divinity that hedgeth royalty.

It seemed that she was climbing higher and higher all the time from Brandon, but in her heart every day brought her nearer to him.

There was one thing that troubled her greatly, and all the time. Henry had given his word that Brandon should be liberated as soon as Mary had left the shores of England, but we had heard nothing of this matter, although we had received several letters from home. A doubt of her brother, in whom she had little faith at best, made an ache at her heart, which seemed at times likely to break it—so she said. One night she dreamed that she had witnessed Brandon's execution; her brother standing by in excellent humor at the prank he was playing her, and it so worked upon her waking hours that by evening she was ill. At last I received a letter from Brandon—which had been delayed along the road—containing one for Mary. It told of his full pardon and restoration to favor, greater even than before—and her joy was so sweet and quiet, and yet so softly delirious, that I tell you plainly it brought tears to my eyes and I could not hold them back.

The marriage, when once determined upon, had not cast her down nearly so deep as I had expected, and soon she grew to be quite cheerful and happy. This filled me with regret, for I thought of how Brandon must suffer, and felt that her heart was a poor, flimsy thing to take this trouble so lightly.

I spoke to Jane about it, but she only laughed. "Mary is all right," said she; "do not fear. Matters will turn out better than you think, perhaps. You know she generally manages to have her own way in the end."

"If you have any comfort to give, please give it, Jane. I feel most keenly for Brandon, heart-tied to such a willful, changeable creature as Mary."

"Sir Edwin Caskoden, you need not take the trouble to speak to me at all unless you can use language more respectful concerning my mistress. The queen knows what she is about, but it happens that you can not see it. I see it plainly enough, although no word has ever been spoken to me on the subject. As to Brandon being tied to her, it seems to me she is tied to him, and that he holds the reins. He could drive her into the mouth of purgatory."

"Do you think so?"

"I know it."

I remained in thought a moment or two, and concluded that she was right. In fruth, the time had come to me when I believed that Jane, with her good sense and acute discernment, could not be wrong in anything, and I think so yet. So I took comfort on faith from her, and asked: "Do you remember what you said should happen before we return to England?"

Jane hung her head. "I remember."

"Well?"

She then put her hand in mine and murmured, "I am ready any time you wish."

Great heavens! I thought I should go out of my senses. She should have told me gradually. I had to do something to express my exultation, so I walked over to a bronze statue of Bacchus, about my size—that is, height—put my hat—which I had been carrying under my arm—on his head, cut a few capers in an entirely new and equally antic step, and then drew back

(Continued on the following page.)

Kill Lice

Begin now, in the spring-time—clean up your poultry, keep hens and little chicks free from lice so they will do their best. When hens pick feathers you have a sure sign of lice.



Dr. Hess Instant Louse Killer

means easy and sure lice riddance. Dust into hens' feathers, about roosts and houses. Put it into the dust bath, both hens and chicks will work it all through the feathers, bringing the Louse Killer right home to the lice. You can do your poultry no better service. Don't neglect them.

Also destroys bugs on cucumber, squash and melon vines, cabbage worms, slugs on rose bushes. Sold in sifting-top cans.

Price, 1 lb. 25c; 3 lbs. 60c (except in Canada).

DR. HESS & CLARK, Ashland, Ohio

There's Profit in HOME CANNING

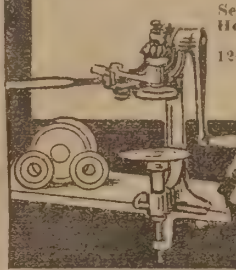
Profitable whether you put up goods for home use or to sell. Scores of users of our Sanitary Outfits tell us of their success. "I shall never be without a Steam Pressure Canner again," says one. And another: "We have worked up a good sale for our canned goods and intend to increase our plant."

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It is "the safest way to sterilize" say authorities. Our Complete Sanitary Outfits include the famous H. & A. retorts and can closing machine. Also a $2 book of recipes and directions that tell you what to put up and how to do it. We will tell you where to sell your output.

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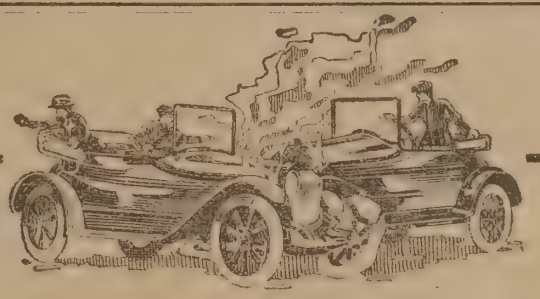


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When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from the preceding page.)

and knocked that Bacchus down. Jane thought I had gone stark mad, and her eyes grew big with wonder, but I walked proudly back to her after my victory over Bacchus, and reassurred her—with a few of Mary's mesasges that I had still left over, if the truth must be told. Then we made arrangements that resulted in our marriage next morning.

Accordingly Queen Mary and one or two others went with us down to a little church, where, as fortune would have it, there was a little priest ready to join together in the holy bonds of wedlock little Jane and little me. Everything so appropriate,' you see; I suppose in the whole world we couldn't have found another set of conditions so harmonious. Mary laughed and cried, and laughed again, and clapped her hands over and over, and said it was "like a play wedding"; and, as she kissed Jane, quietly slipped over her head a beautiful diamond necklace that was worth full ten thousand crowns—aside, that is, from the millions of actual value, because it came from Mary. "A play wedding" it was; and a play life it has been ever since.

We were barely settled at court in Paris when Mary began to put her plans in motion and unsettle things generally. I could not but recall Henry's sympathy toward Louis, for the young queen soon took it upon herself to make life a burden to the Father of his People; and, in that particular line, I suppose she had no equal in all the length and breadth of Christendom.

I heartily detested King Louis, largely, I think, because of prejudice absorbed from Mary, but he was, in fact, a fairly good old man, and at times I could but pity him. He was always soft in heart and softer in head, especially where women were concerned. Take his crazy attempt to seize the countess of Croy while he was yet duke of Orleans; and his infatuation for the Italian woman, for whom he built the elaborate burial vault—much it must have comforted her. Then his marriage to dictatorial little Anne of Brittany, for whom he had induced Pope Alexander to divorce him from the poor little crippled owlet, Joan. In consideration of this divorce he had put Caesar Borgia, Pope Alexander's son, on his feet financially and politically. I think he must have wanted the owlet back again before he was done with Anne, because Anne was a termagent—and ruled him with the heaviest rod of iron she could lift. But this last passion—the flickering, sputtering flame of his dotage—was the worst of all, but subjectively and objectively; both as to his senile fondness for the English princess and her impish tormenting of him. From the first he evinced the most violent delight in Mary, who repaid it by holding him off and evading him in a manner so cool, audacious and adroit, that it stamped her queen of all the arts feminine and demoniac. Pardon me, ladies, if I couple these two arts, but you must admit they are at times somewhat akin. Soon she eluded him so completely that for days he would not have a glimpse of her, while she was perhaps riding, walking or coqueting with some of the court gallants, who aided and abetted her in every way they could. He became almost frantic in pursuit of his elusive bride, and would expostulate with her, when he could catch her, and smile uneasily, like a man who is the victim of a practical joke of which he does not see, or enjoy, the point. On such occasions she would laugh in his face, then grow angry—which was so easy for her to do—and, I grieve to say, would sometimes almost swear at him in a manner to make the pious, though ofttimes lax-virtued, court ladies shudder with horror. She would at other times make sport of his youthful ardor, and tell him in all seriousness that it was indecorous for him to behave so and frighten her, a poor, timid little child, with his impetuosities. Then she would manage to give him the slip; and he would go off and play a game of cards with himself, firmly convinced in his own feeble way that woman's nature had a tincture of the devil in it. He was the soul of conciliatory kindness to the young vixen, but at times she would break violently into tears, accuse him of cruelly mistreating her, a helpless woman and a stranger in his court, and threaten to go home to dear old England and tell her brother King Henry all about it, and have him put things to right and redress her wrongs generally. In fact, she acted the part of injured innocence so perfectly that the poor old man would apologize for the wrongs she invented, and try to coax her into a good humor. Thereupon she would weep more bitterly than ever, grow hysterical and require to be carried off by her women, when recovery and composure were usually instantaneous. Of course the court gossips soon carried stories of these quick recoveries to the king, and, when he spoke to Mary of them, she put on her injured air again and turned the tables by upbraiding him for believing such calumnies about her, who was so good to him and loved him so dearly.

I tell you it is a waste of time to fight against that assumption of injured innocence—that impregnable feminine redoubt—and when the enemy once gets farily behind it one might as well raise the siege. I think it the most amusing, exasperating and successful defense and counter-attack in the whole science of war, and every woman has it at her finger-tips, ready for immediate use upon occasion.

Mary would often pout for days together and pretend illness. Upon one occasion she kept the king waiting at her door all morning, while she, having slipped through the window, was riding with some of the young people in the forest. When she returned—through the window—she went to the door and scolded the poor old king for keeping her waiting penned up in her room all morning. And he apologized.

She changed the dinner hour to noon in accordance with the English custom, and had a heavy supper at night, when she would make the king gorge himself with unhealthful food and coax him "to drink as much as brother Henry," which invariably resulted in Louis de Valois finding lodgment under the table. This amused the whole court, except a few old cronies and physicians, who, of course, were scandalized beyond measure. She took the king on long rides with her on cold days, and would jolt him almost to death, and freeze him until the cold tears streamed down his poor pinched nose, making him feel like a half animated icicle, and wish that he were one in fact.

At night she would have her balls, and keep him up till morning drinking and dancing, or trying to dance, with her, until his poor old heels, and his head, too, for that matter, were like to fall off; then she would slip away from him and lock herself in her room. December, say I, let May alone; she centainly will kill you. Despite which sound advice, I doubt not December will go on coveting May up to the end of the chapter; each old fellow—being such a fine man for his age, you understand—fondly believing himself an exception. Age in a fool is damnable.

Mary was killing Louis as certainly and deliberately as if she were feeding him slow poison. He was very weak and decrepit at best, being compelled frequently, upon public occasions, such, for example, as the coronation tournament of which I have spoken, to lie upon a couch.

Mary's conduct was really cruel; but then, remember her provocation and that she was acting in self-defense. All this was easier for her than you might suppose, for the king's grasp of power, never very strong, was beginning to relax even what little grip it had. All faces were turned toward the rising sun, young Francis, duke of Angouleme, the king's distant cousin, who would soon be king in Louis' place. As this young rising sun, himself vastly smitten with Mary, openly encouraged her in what she did, the courtiers of course followed suit, and the old king found himself surrounded by a court only too ready to be amused by his lively young queen at his expense.

This condition of affairs Mary welcomed with her whole soul, and to accent it and nail assurance, I fear, played ever so lightly and coyly upon the heart-strings of the young duke, which responded all too loudly to her velvet touch, and almost frightened her to death with their volume of sound later on. This Francis d'Angouleme, the dauphin, had fallen desperately in love with Mary at first sight, an effect against which the fact that he was married to Claude, daughter of Louis, in no way militated. He was a very distant relative of Louis, going away back to St. Louis for his heirship to the French crown. The king had daughters in plenty, but as you know, the gallant Frenchmen say, according to their Law Salic: "The realm of France is so great and glorious a heritage that it may not be taken by a woman." Too great and glorious to be taken by a woman, forsooth! France would have been vastly better off had she been governed by a woman now and then, for a country always prospers under a queen.

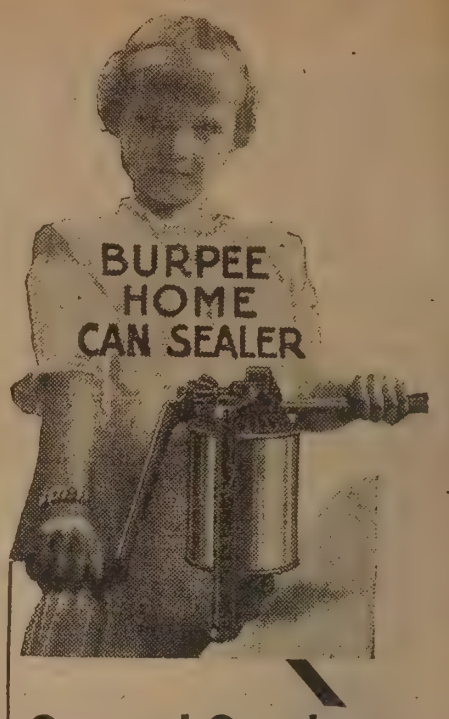
Francis had for many years lived at court as the recognized heir, and as the custom was, called his distant cousin Louis, "Uncle." "Uncle" Louis in turn called Francis "Ce Gross Carcon," and Queen Mary called him "Monsieur, mon beau fils" in a mock-motherly manner that was very laughable. A mother of 19 to a "good boy" of 22! Dangerous relationship! And dangerous, indeed, it would have been for Mary had she not been as pure and true as she was willful and impetuous. "Mon beau fils" allowed neither his wife nor the respect he owed the king to stand in the way of his very marked attention to the queen. His position as heir, and his long residence at court, almost as son to Louis, gave him ample opportunities for pressing his unseemly suit. He was the first to see Mary at the meeting place this side of Abbeville, and was the king's representative on all occasions.

"Beau fils" was quite a handsome fellow, but thought himself vastly handsomer than he was; and had some talents, which he was likewise careful to estimate at their full value, to say the least. He was quite well liked by women, and in turn considered himself irresistible. He was very impressionable to feminine charms, was at heart a libertine, and, as he grew older, became a debauchee whose memory will stain France for centuries to come.

Mary saw his weakness more clearly than his wickedness, being blinded to the latter by the veil of her own innocence. She laughed at, and with him, and permitted herself a great deal of his company; so much, in fact, that I grew a little jealous for Brandon's sake, and, if the truth must be told, for the first time began to have doubts of her. I seriously feared that when Louis should die, Brandon might find a much more dangerous rival in the new king, who, although married, would probably try to keep Mary at his court, even should he be driven to the extreme of divorcing Claude, as Claude's father had divorced Joan.

I believed, in case Mary should voluntarily prove false and remain in France, either as the wife or mistress of Francis, that Brandon would quietly

(Continued on page twenty-six.)



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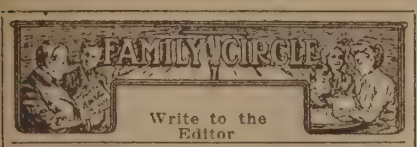


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The government this year is asking farmers to put increased acreage into grain. There is now a great demand for farm laborers to replace the many young men who have volunteered for service in the war. The climate is healthful and agreeable, railway facilities excellent, good schools and churches convenient. Write for literature as to reduced railway rates to Supt. of Immigration, Ottawa, Canada, or to **J. N. GRIEVE,**
Corner First and Post Sts., Spokane, Wash.
Canadian Government Agent.

In answering advertisements don't fail to mention this paper.



ALICE W. BARLAND
Editorial Contributor

Being, Not Seeming

What is the quotation or what are the words which have helped you in the journey of life? Send it to the editor of The Farmer and let it help another.

To the Editor: I want to send you a quotation that has helped me, and I think it fits old and young: "True worth is in being, not seeming; in doing each day that goes by some little good, not in dreaming of great things to do bye and bye."

MRS. DYSART.

College Place, Wash.

KeepChild'sConfidence

Dear Mothers and Others of the Family Circle: I have been having some little confidential talks with your girls. In my imagination I have had them gathered about me and have told them little stories out of my own experience.

I love girls and am interested in what interests them and next to them I love their mothers. I wonder if we study our girls enough. I wonder if we judge things from their viewpoint as much as we should. I wonder if we look back to our own girlhood days when we were passing through the period when we hated to mend our clothes, hated to wash dishes, hated to make beds, in short, when we found it easier to giggle than to do anything else. I can remember seeing the look of patient endurance on the face of my mother when I would be especially foolish or aggravating.

There is a period in the growth of girls, even good, obedient ones, when it requires a great deal of patience to put up with their antics and headstrong behavior, but we should remember that we also have been girls with foolish notions of one kind or another.

I heard a man talk to an audience of boys not long ago. It was a good talk, but I don't remember much what it was all about. There was one sentence, however, that held my attention and remained with me. It was this: "Boys, I want you to be good boys. Remember, I am putting the emphasis on 'boys,' not on 'good.' Too often we expect boys to be good like men rather than good like boys." After the speaker got this far I lost most of the rest of his talk, for I got to thinking how often we grownups expect the boys to be good like men rather than like boys. We expect our girls to be good like women instead of good like girls. If we would but try to think the thoughts of our girls and look at life from their standpoint I am convinced we would understand them better and when we understand them we can guide them more skilfully through the danger period of their early teens.

It is so important, dear mothers, to be companions to your children. It means much self-sacrifice to do it, especially when they are small, because their little plans and games must of necessity be tiresome to follow up and there is always so much for busy mothers to do, but the companionship must be started while the children are small. If mothers manifest no particular interest in the plans and friends of the children they need not hope to be included in their plans or their friendships as they grow older.

I remember a little incident that occurred when my son was about 12 years old. He and a boy friend were planning to build a "shack," as they called it. They had gone to town and gathered up quite a load of packing boxes, but needed something to make their framework of. I heard them talking it over when they did not know I heard. The friend was for cutting down some small trees which were growing along the lower part of the farm without asking permission because they had no 2x4s. But my boy said "No, we better ask mother"; the other boy said, "She don't care about our shack and maybe she won't let us build it if we talk to her about it first." My boy answered, "Yes, she does care; she always cares about my stuff. I bet she will let us cut the trees, and, anyway, if she won't she will think up something else for us to use. She is that kind of a mother."

If we will but realize that "the thoughts of youth are long, long thoughts." They seem foolish to us, but their thoughts, their plans are their own and belong to the particular period of their existence in which they happen to be living. We must not expect 15 to have the plans or think the thoughts of 50 years. We do not want our young people to be little old men and women. Occasionally we meet with such a child and we always feel he is missing his birthright. Let the children be children as long as it is possible to keep them so and maintain a normal development, but keep close to them. To quote from my small son, "care about their stuff."

Happy indeed is the mother who has the confidence of her children and retains it as they grow up. Next time we will think of mutual plans for mother and children.

A. W. B.

"Lifting" Flour in

What is the most helpful thing you have learned during the last year in your experience with housekeeping? Let us pass it along to other housekeepers.

To the Editor: Some of the most helpful things that I have learned are: In mixing bread sponge into a dough, lift it until you have in enough flour instead of kneading it. Lifting the flour makes muscle in the arms and does away with lots of backache. When enough flour is "lifted" in, knead for one minute and put to raise.

Add a teaspoonful of butter to rice or any cereal when put on to cook, and they will not stick or burn readily.

The most helpful thing is to do the hard things, the ones you dislike, first. The longer we put them off the harder they are to do.

MARY RINGHISEN.

Withrow, Wash.

Planting Garden Roses.

Before setting dormant rose plants they should be examined and all broken roots cut off. Budded roses should be examined for buds or incipient shoots from the stock, which should be cut out, says the New York State College of Agriculture. Large, deep holes should be dug for the plants, the roots spread out evenly and the holes filled with well pulverized soil. To prevent any unfilled crevices among the mass of roots the plant should be shaken lightly while filling in the soil. When the hole is almost full pack the soil firmly by treading on it. If the soil is not too wet to handle, firming it will do no harm and is an essential to success. Budded roses should be planted so that the bud union, generally indicated by a crook in the stem, is two inches below the surface of the bed. If thus planted the number of suckers is reduced to a minimum, if not entirely eliminated. Rose bushes on their own roots should be set the same depth as before transplanting. If the ground is dry a good watering should be given.

Growing plants are easier to set, but it is essential that the balls of soil and roots are thoroughly moist before planting. A thorough watering given a few hours before setting will leave the plants in better condition to handle than if given immediately beforehand. The depth to set is the same as that for dormant plants.

The uppermost bud left in each cane should point outward since these buds grow vigorously and would soon interlace if pointing inward. Cutting back after planting is necessary if a strong and vigorous growth is desired the first season.



There is a pleasure in the pathless woods;
There is a rapture on the lonely shore;
There is society, where none intrudes,
By the deep sea, and music in its roar:
I love not man the less, but Nature more.

—Byron.

Don't Coddle the Chicks.

Don't shut the chicks up when a raincloud appears above the horizon; give them their liberty. That means a dry warm shelter and the cool outdoors. A few drops of rain won't hurt them if they have the liberty of going into a clean warm coop when they want to. It is a serious mistake to keep them shut in a warm room all the time.

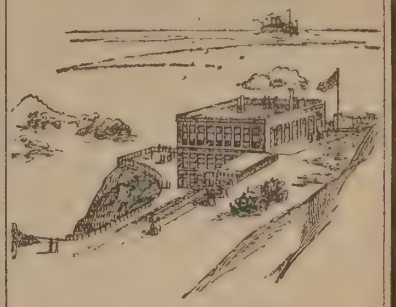
J. D.

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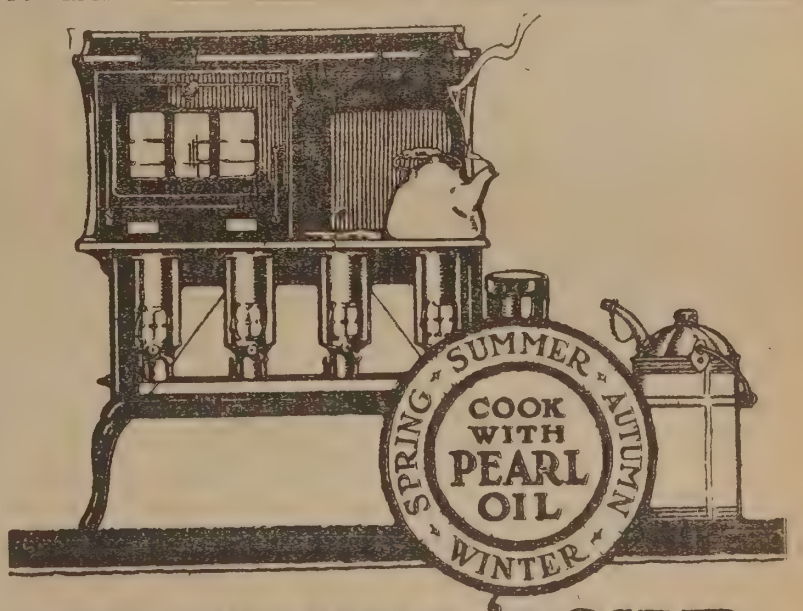
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The long blue chimneys prevent all smoke and smell.

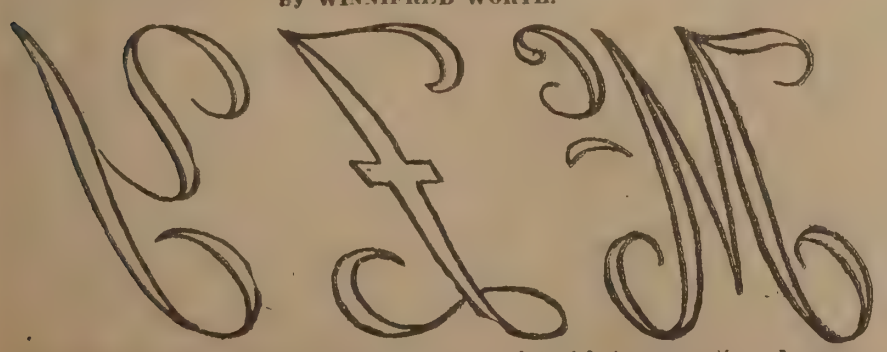
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By WINNIFRED WORTH.



To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of a linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design.

Must Know Business

By Paul E. Triem.

Senator W. H. Paulhamus of the Puyallup-Sumner Fruit Growers' association reports the purchase during the last canning season of 1200 tons of windfall apples from Yakima county. These apples are steam cooked, and the juice is extracted, to be used in giving body to various jams which have not in themselves sufficient pectin to stiffen them. Twenty carloads of this apple-base jam were sold last season.

Mr. Paulhamus reports also that in the production of Damson plums, sour cherries and Italian prunes the producing districts tributary to the canneries are deficient. The market for Puyallup and Sumner canned goods is constantly extending. Recently an inquiry coming in from a St. Louis baker for plums, etc., in gallon cans. Last spring many berries were put up in barrels, without sugar, by the simple process of putting 380 pounds of berries into the barrel and freezing them. Discovery of this process was entirely accidental and was due to the fact that the high price of sugar last season caused a shortage in this necessary ingredient to the older method of barreling. Berries were coming in every hour of the day till the cannery was full and the platform was full and the street was full. It was the old story of the horse that climbed a tree. Horses don't climb trees, but this one had to—so he did. Berries aren't canned without sugar, but these had to be—so they were.

The man from Puyallup warns other communities from building a cannery without knowing something definite about the matter.

CHECK FOR THREE YEARS.

Please find check for one dollar and a half to pay in full for three years for The Washington Farmer. Think your paper is improving very fast.

FRANK STEPHENS.
Bickleton.

Make Themselves Self-Supporting.

It was the sense of an agricultural preparedness meeting held at Wenatchee that if the apple growers of the state could make themselves self-supporting in the way of garden stuff now imported, milk and other canned goods, and would grow sufficient garden stuff to can to carry them over the entire season; also put up eggs for storage and, in a word, make themselves independent of imports, the usual quantity of food stuff brought into this district can be used in sections where the stuff can not be produced and the surplus, if any, can be sent across the waters.

To Drop Other Work.

Pierce County Agriculturist Charles A. Cole has been instructed to drop other work for agricultural preparedness. Farmers will be advised to plant peas, beans and corn, products which have a high food value and can be dried or canned.

Agriculturist for Pend Oreille.

Milton J. Newhouse, who has been doing senior work in the department of agriculture and instructing in the department of elementary science at Washington State college, has accepted the position of county agriculturist for Pend Oreille county.

Patterns

1925—Girls' slip. Cut in five sizes: 2, 4, 6, 8 and 10 years. It requires for size 6, 2 yards of 36-inch material. Price, 10 cents.

2088—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. It requires 4 1-4 yards of 36-inch material for an 8-year size. Price, 10 cents.

1696—Boys' blouse suit with shield. Cut in four sizes: 3, 4, 5 and 6 years. It requires 3 yards of 44-inch material for a 4-year size. Price, 10 cents.

1960—Dress for misses and small women. Cut in four sizes: 14, 16, 18 and 20 years. It requires 4 1-2 yards of 44-inch material for an 18-year size. The skirt measures about 2 2-3 yards at the foot. Price, 10 cents.

2090-2079 — A smart sports dress. Waist 2090 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 yards of 36-inch material for a 38-inch size. Skirt 2079 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure, and requires 3 1-4 yards of 44-inch material for a 24-inch size. It measures 2 7-8 yards at the foot. Two separate patterns, 10c for each pattern.

2070—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 1-2 yards of 36-inch material for a 36-inch size. The skirt measures about 3 yards at the lower edge. Price, 10 cents.

1672—Child's rompers. Cut in 4 sizes: 2, 4, 6 and 8 years. Size 6 years requires 2 7-8 yards of 36-inch material. Price, 10 cents.

1796—Lady's dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 7 yards of 44-inch material for a 36-inch size. The skirt measures about 3 1-8 yards at the foot. Price, 10 cents.

2083—Lady's brassiere and drawers. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 1-2 yards of 36-inch material for a 36-inch size. Price, 10 cents.

1673—Girl's middy dress, with skirt attached to an underwaist. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. It requires 4 1-8 yards of 40-inch material for an 8-year size. Price, 10 cents.

2084—Girl's dress. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 8 will require 3 1-4 yards of 44-inch material. Price, 10 cents.

1663—Lady's one-piece apron. Cut in 3 sizes: Small, medium and large. It requires 4 7-8 yards of 36-inch material for a medium size. Price, 10 cents.

Fill in this coupon and mail to Pattern Dept.

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Enclosed find ..... cents, for which send me the following patterns:

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Pattern No. ..... Size .....

Pattern No. ..... Size .....

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R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.





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Join the New Regiment

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Spokane, Wash. M. M. Higley, Pres.

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Rode Down the Dragon's Mouth.

Dear Aunt Nellie: It has been quite a while since I wrote to the Corner, but I am going to write again. My subject will be "My Vacation Trip." One morning we got up very early to go on our trip. About 20 cars lined up at Pine City. It was about 8 o'clock when we started. We arrived in Spokane about 10 o'clock. We stayed in town until about 11. Then we went out to the Manito park. There we saw all the animals. One of the cougars was named Tige and he would put his paw out at the people who passed. There were some coyotes in a cage and a man was standing by the cage. He would whistle with his fingers and oh, how the coyotes would howl. Then at 12 o'clock we ate dinner. After dinner we all went down to Natatorium park. I rode down the dragon's mouth. It went like a flash. Then I rode through the old mill and on the merry-go-round. Then about 6 o'clock we started home. We came to Rosalia, where we took supper and had all the ice cream we could eat.—Myrtle Ledbetter, St. John, Wash.

Out for a Tramp on the Bluffs.

Dear Aunt Nellie: I have never written to the Children's Corner before, but I read all the letters that the cousins write and think they are very interesting. We live on a ranch. The schoolhouse is just across the road from our house. I come home for dinner. My teacher comes home with me for she boards at our place. Her name is Miss Newman. I like to go to school very much. We have so much fun there. Today we went out for a tramp on the bluffs. We discovered caves of great interest. I wish some of our little cousins could have gone with us. Some of the scholars of our school were leaving today and so we thought we would give them a good time before they left. They are going to the Colville reservation in Okanogan. Their name is Launtenschleager. Don't you think it is a long name? Well, Aunt Nellie, I must have been named for you because my name is Nellie. My nickname is Ned.—Nellie E. Dorman, St. John, Wash.

Spring With All Things Beautiful.

Dear Aunt Nellie: My subject is "My Favorite Book." My best book is a book mama gave me for Christmas. It has such nice stories in it. The name of the book is "The King's Daughter." It is spring now and everything is beautiful here. Our flowers are in bloom now. We have lots of different kinds of flowers. We have five horses and one colt, seven cows, three calves, 24 chickens and eight bantams. I am 10 years old and in the fifth grade at school. My birthday is November 15. Have I a twin? I would like some girl to write to me that is about my own age. My sister runs the gasoline engine when papa is not home. I milk two cows and my sister milks five cows. I have two pets. They are cats. One is a white one and the other is gray. I live on a farm of 95 acres, and I like to live on the farm better than in the city.—Evelyn Willey, Ferndale, Wash.

Only Log Schoolhouse in the County.

Dear Aunt Nellie: I am going to school and am in the fifth grade. My teacher's name is Miss Vera Sexsmith, and I like her very much. I am 11 years old, and will be 12 the 18th of December. We have one pig, three calves, five cows, three horses and about 25 chickens. We have one sheep, one dog and six cats. I have three sisters and one brother. The oldest of the sisters' name is Floy, then Esther, and the next is Ruth. My brother's name is John. We live on a farm of 156 acres. My best girl friends are Wilma Peterson and Edna Knox. We have lots of fun at school. Our schoolroom has nine seats in it, and there are six pupils, four girls and two boys. The girls' names are Esther, Wilma, Edna and Mabel, and the boys are Fred and James. Our schoolhouse is made of logs, and is the only log schoolhouse in Spokane county.—Mabel Margret, Crofoot, Wash.

Ray's Horse Is as White as Snow.

Dear Aunt Nellie: We live on a farm of 160 acres. We live one mile and a half from school. I like my teacher this year. His name is Mr. Heckman. He teaches us music twice every day. I have a saddle horse. His name is Roy. He is pretty and white as the snow. My birthday is the 10th of April. I was 11 years old. Have I a twin? If I have I would like to hear from him or her.—Louis T. Talbot, Wauconda, Wash.

Has Planted Her Flower Garden.

Dear Aunt Nellie: For my subject I have chosen "My Favorite Books." My favorite books are Kazan, White Fang, the Call of the Wild, and The Little Shepherd of Kingdom Come. If the nieces and nephews have not read these I hope they will get to read them some time. The books tell of many hardships and battles. They teach people to be kind to animals. My favorite studies in school are arithmetic and geography. Geography is interesting because we can learn many things about Mother Earth, the inhabitants, the scenery, etc. I suppose all the cousins of the Corner are planting flower gardens. I have just finished planting mine. In it I have planted lilac bushes, rose bushes, primroses and sweet peas. I am 12 years old and in the sixth grade at school. My birthday is the 25th of August. Have I a twin?—Esther Carslin, Olalla, Wash.

Brother Has Joined the Marines.

Dear Aunt Nellie: We have had some bad weather this month. My papa has been working at Cosmopolis and came home because he was sick. He is improving very slowly. Frank is going to Montesano today. My teacher's name is Miss Glamey. There are 30 children in our room. I am in the fifth grade. I have two brothers going to school. Their names are Frank and Walter. Frank is 15 years old and in the ninth grade. Walter is in the seventh grade and is 12 years old. I was 11 last December the 19th. My sister is too little to go to school. Almon has joined the United States marines. He went to Portland, Ore., to take the last examination and he passed O. K. Then he went to Vancouver, Washington. From there he went to Port McDowell in California. We can hear some coyotes barking at night. I don't like to hear them.—Ruby Warren, route 1, Box 2B, Elma, Wash.

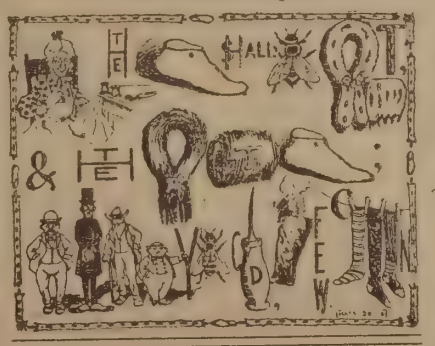
Her Twin Got in Ahead of Her.

Dear Aunt Nellie: I just love to read the Children's Corner and have often thought I would like to write and find out whether I have a twin or not. Blanche Bell, Mold, Wash., is my twin. She got in ahead of me. She writes she is 9 years old. So am I. And she says she is in the fourth grade. I am too. My teacher's name is Miss Helmer. Our school is called the Lone Pine school. I love my teacher, and, of course, like to go to school. We have only been here since last October. We moved from Rathdrum, Idaho. I like farm life best of all. I have three brothers and three sisters. We have lots of fun when our work is done. Maybe Blanche will write to me some time. I am very anxious to join the Children's Corner and be a member.—Ella Liere, Tekoa, Wash.

Sold Her Puppy for $2.

Dear Aunt Nellie: I live about 50 miles from Seattle in King county. There are quite a few farms in this country. It is very pretty around here in some places. I like to live out here quite well. I was born in King county in Seattle. We have many flowers out here, including lilies, violets, buttercups, stars of Bethlehem or another name for them is star flowers. I will now write about my favorite book, which is Uncle Tom's Cabin. I like it because it has a good deal in it about colored slaves. I think it a rude thing that they should sell people like they did then and take their children away from them. I will always be thankful to Abraham Lincoln for setting them free. I think this story is a very interesting one. My next subject is how I earned my first money. I had a pup and was going to sell it. A girl bought it and paid $2 for it. I have gotten other money for pups that I raised.—Mary Symigton, Kangley, Wash.

The Bible Says:



This Cousin's Name Is Nellie, Too.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I want to know if I have a twin? I was 9 years old the 7th of March. My name is Nellie, also. I am in the 3A grade at school. My teacher's name is Miss Fylpa and I like her very much. I have four brothers. I have a puppy, three cats and eight cows and two horses.—Nellie Neil, Kennewick, Wash.

Billy Is the Name of Hazel's Pony.

Dear Aunt Nellie: I like to read the letters. I am 11 years old. I am in the fifth grade. We live on a 640-acre wheat ranch. We have 10 mules and two horses. I have a pony. His name is Billy. I ride him to school. I live two and a half miles from school. I have one brother. His name is Ora. I go to the Ochs school. My teacher's name is Mabel Snider.—Hazel M. Ethredge, Mohler, Wash.

Swimming Races in the Nearby Lake.

Dear Aunt Nellie: I am 12 years old and I am in the eighth grade. My teacher's name is Miss Mendham. She is very jolly and plays many jokes on us and then she joins in our laughter. My subject is "Farm Life." We did live in the city, but have now moved three miles out of Pasco on a farm. We have much fun especially in the winter. A big hill lies behind our farm and in the winter time we pour water on it at night, which is frozen in the morning. Then we take our sleds and have the time of our lives. Once I ran into a rabbit hole, which was covered with snow. I did not know it was there. My wound proved partly serious. When summer comes we have some fun going swimming in the nearby river, where we race and slap the water on each other. —Eugene Pollastrini, Pasco, Wash.

Toodles Is a Pretty White Spitz.

Dear Aunt Nellie: I have been reading the letters in the Children's Corner and like them very much. I was 12 years old the 10th of March. I am in the sixth grade. I like to go to school. My teachers' name is Miss McCabe. I like her very much. Her home is in Cheney. I walk to school. I have half a mile to go. We have a car. It is a King. I like to ride in a car. We can go to town in a few minutes. I live six miles from town. We have three dogs. Their names are Cimmie, Bulgar and Toodles. Toodles is a little white Spitz. She is very pretty. I have no sisters or no brothers. I have a friend I like very much. Her name is Mary Dixon.—Madelyn Hughes, Pomeroy, Wash.

Saving for the Starving Children.

Dear Aunt Nellie: I am 13 years old, in the seventh grade. My teacher's name is Miss Mary Wardrobe. She is very nice and I love her. I am going to write about the program at our church. We had a program at Easter time. The name of it was "Dorothy Indifference." She is one of my best friends, for the girl who takes her part is my friend. I played a piano solo. All the juniors of our church are saving for the starving children in Europe and a new tuberculosis hospital in India. I guess we're going to have spring some time for I have seen bluebirds and robins and many pussy willows. We live in town now, but this fall may move out on our ranch.—Letha Dwire, Garfield, Wash.

Just Moved From Eastern Washington.

Dear Aunt Nellie: I read all the letters and enjoy them very much. I always turn to the cousins' page as soon as we get the paper. We just moved to this city from eastern Washington a few weeks ago. My papa bought us a home here. I think it is a very pretty place. I haven't gone to school yet because my brother took the measles a few days after we arrived. My little sister and I haven't got them yet. My little sister and brothers' names are Louise and Wayne. Louise is 2 years old and Wayne is 5 years old. I am 9 and in the fourth grade.—Hattie Litchfield, 1126 Cedar street, Raymond, Wash.

The Sheep's Name Is Billie.

Dear Aunt Nellie: My birthday is December 6 and I am 12 years old. I am in the fourth grade. I have light hair and blue eyes. I go to school every day. My teacher's name is Mrs. Shold. There are 15 going to our school. I have just a half a mile to go. We are milking six cows now. Sometimes I milk one and two. We have four little calves that we feed from the bucket. We have 18 head of cattle altogether. We have 14 heads of horses. I have a pony, saddle and bridle. My pony's name is Star. I have a sheep. His name is Billie.—Georgia Buck, box 111, Coulee City, Wash.

Go a Mile and a Half to School.

Dear Aunt Nellie: My father takes The Washington Farmer and I enjoy reading the letters very much. I was 14 years old the 25th of February and I am in the sixth grade at school. We go to the Heart school district No. 47. We go about a mile and a half. Our teacher's name is J. E. Tomblin. I have six brothers and one sister. We live on a rented farm. We have five head of cattle, five horses, one dog and 38 chickens.—Jessie Moss, R. F. D. 1, Box 36A, Davenport, Wash.

Have Seven Cats Altogether.

Dear Aunt Nellie: I like to read the letters in the Corner very much. I was eight years old February 20. I go to school. I am in the second grade. My teacher's name is Miss M. Herren. I live on a 600-acre farm. We have about 170 cows, nine horses, two dogs, one named Mick and the other Scott, and seven cats, four that stay around the barn and three stay by the house.—Willie Righetti, Monroe, Wash.

The Worst Day in the Whole Year.

Dear Aunt Nellie: I like to read the Children's letters. I think that I will write about the worst day in the year. I like to skate and can skate as good as anybody in my class. Well the worst day is when the ice melts and I can not skate. I am in the fourth grade. I will be glad to hear from other children in the Corner. My age is 11. My birthday is the 1st of December.—Robert Carter, Jonathan, Wash.

Write Short Stories Every Day.

Dear Aunt Nellie: I have not written to the Corner for a long time. We have to write short stories every day for language. I had to write about A Dutch Windmill, A Tree Fell With an Awful Crash, What the School Clocks See, Seeing Things at Night, A Light in the House by the Side of the Road. Today we had to write a poem. Mine was "Grandma's Story."—Theresa Wilson, Grays River, Wash.

Ida Wishes We Had Two Pages.

Dear Aunt Nellie: I have been reading the children's letters and thought I would like to write also. I am 10 years old and in the fourth grade. I live on a 400-acre farm, but my father owns 1040 acres of land. We have 17 cattle; one of them is mine. Her name is Spot. We have 53 horses; two of them are mine. Their names are Mike and Belle. We have one dog. His name is Bob. We have five cats, but they have no names. I have four brothers. Their names are John, Jake, Thomas and Robert. I wish we had two pages of the children's corner instead of one.—Ida Eliabeth Shaw, Govan, Wash.

Likes the Baby Best of All.

Dear Aunt Nellie: I am 8 years old and in the second grade. I have two sisters and one brother. My sisters' names are Irene and Norma and my brother's name is Loren. Norma is a baby 6 weeks old. I like her the best of all. My father takes the Farmer. I read all the Children's letters and like them very much. I think that one of my cousins is going to write. Her name is Vera James. I live on a farm. We have a dog and two cats.—Louise James, Rochester, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Mae Lenderman, Henry Crabtree, Agnes Lund, Linda Haquist, Harriet Johnston, Stanley Stewart, Albert Needham, Beulah Weyrich.

Save Time--Labor

Load your big auto truck in 5 minutes with a

Brown's All Steel Wagon Loader

Loads all kinds of sacked produce. Write for cat. and prices today.

COLFAX MFG. CO.
Colfax, Wash.
Mfrs. all kinds harvesting drapers.

NEW SUPPLY OF FLAGS



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We have at last secured a limited number of flags which we offer on the following terms:

OFFER NO. 1

3x5 flag together with The Washington Farmer for three years. Both for $2.50.

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We would suggest prompt action; orders will be filled as received.

The Washington Farmer, Review Bldg., Spokane.

Enclosed find $.... (your personal check, stamps or money order), for which send me American flag, as advertised, and The Washington Farmer for 3 years.

Size of flag ...../.....

Name ....

Address ....

....

Benson Heads Program

(Continued from page five.)

that each county had been asked to organize for the work of greater food production and the reports received so far were most encouraging. These showed that 28 counties were fully organized, six were partly organized and five had not reported.

In regard to the employment of school children, Mrs. Josephine Corliss Preston, state superintendent of public instruction, declared it was the plan to close the high schools in June and not reopen them until November. Out of 25,000 high school pupils in the state 40 per cent are boys, she said. The elementary schools will not be affected as no children under 15 years of age should be employed in the fields. The younger children, she declared, are giving much assistance with their home garden work.

E. B. Marsh, president of the state federation of labor, said that it may become necessary to conscript labor for work in the fields as well as for military services. He predicted an acute labor shortage, which can be overcome by cooperation between employers and workmen. There will be no labor troubles, he declared, if both sides try to be fair and use arbitration for all disputes.

The above resolutions are passed for the purpose of the production of the crops during the season of 1917 and that recognizing the welfare of the state of Washington, and the necessity for continual increased production of all food products in the state, we respectfully recommend to E. F. Benson, commissioner of agriculture, Olympia, Wash., that plans be immediately outlined for a continual increase of the yearly output of all food products in the state of Washington, and we suggest that through the assistance of state and county officials, that an effort be made before the first of the year to locate available agricultural lands in the state not now under cultivation with a view to bring the same under cultivation in 1918.

Labor Situation.

H. M. White, representing the National Government Bureau of Immigration, Labor and Employment in this state, told of the 10 branch offices now established about the state and of three or four more to be established shortly. His office last year placed 50,000 men and women upon the farms of Washington. The shortage of farm labor in this country, said Mr. White, is due to two principal causes, men going into the fighting forces and the 100 a day which he says are going onto the farms in Canada. The public schools, he said, offer the only solution for a relief of labor shortage. He advocated the discontinuance of all unnecessary public work that the men and horses might be used on the farms. He also said he did not believe it practical to have office men spend a two weeks' vacation doing farm work, as he believed they would not be able to earn their board, being unused to the hard work and warm sunshine.

It was announced that the bill introduced in congress appropriating $25,000,00 for the department of agriculture to be expended in the cause for food preparedness would result in adding nearly $80,000 to the campaign in this state. Tentative plans have already been made by the state college authorities for the expenditure of this money in putting 10 or a dozen more county agents at work in the state, as well as a score of other specialists along different lines of food production, food preservation, and the prevention of food waste.

DEALS WITH INTERESTING SUBJECTS.

To the Editor of the Washington Farmer: I get more good out of The Washington Farmer than all the other ones put together. It may be, of course, because it deals direct with the subjects we are most interested in and what we farmers want to know. May you live long and prosper.—E. E. FERSEN, Sunnyside, Wash.

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Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

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School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

WANTED—MEN WITH AUTOS, TO SELL Anti-Carbon Gas Saver; county and state rights available. Pacific Auto Accessory Co., 512 Journal bldg., Portland, Oregon.

WANTED—ON DAIRY FARM, WORKING foreman, single preferred; sixty dollars per month; board and room. McConaghy, Port Ludlow, Wash.

SITUATION WANTED—MALE 21

W. S. C. STUDENT WANTS A YEAR'S DIversified farm work, beginning June 20. O. A. F., 361 College Station, Pullman, Wash.

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MARRIED COUPLE WANT FARM WORK; experienced; wife good cook. P. O. Box 2099, Spokane.

EDUCATIONAL 45

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MISCELLANEOUS 57

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Shipped anywhere, to any one, at factory prices. We own our own mill, and guarantee first quality goods, and safe delivery to destination. Send for our big illustrated catalog No. 27, mailed free, postpaid, promptly on receipt of request.

5 cross panel doors, No. 1	$1.33
4 panel craftsman doors	1.75
Glass doors, as low as	2.25
24x24, two light windows	1.46
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We carry a full line of inside finish, mouldings, sash, cupboard doors, hardware, mixed paints, etc. Prompt shipments.
O. B. WILLIAMS CO.
1943 1ST AVE. SO. SEATTLE, WASH.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

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$550 TAKES $1700 MEDIUM SIX TOURING, used about 6 months, good as new. Write 308 Empire State bldg., Spokane.

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PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

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COLLIE BARGAINS—12 REGISTERED Collie bitches, bred to registered dogs at a sacrifice. Pioneer breeder retiring. C. D. Nairn, Amity, Ore.

POULTRY 174

BUFF ORPINGTONS, BUFF LEGHORNS, BOURBON RED TURKEYS, BUFF DUCKS—Blue ribbon winners at the worthwhile western shows. Eggs, settings and incubator lots; baby stock. Free illustrated mating list. THE FERRIS RANCH, R. 2, Box E, Pomona, Cal.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

TURKEYS—BOURBON RED AND WHITE Holland males. Yearlings, $7. Two-year-olds, $9. Beautiful, vigorous birds. Hens, $5 each after June 1. Mrs. B. Hocking, Guasti, Cal.

WHITE LEGHORN CHICKS, $10 PER 100 for May and June; special price of $6 for 50 White Leghorn chicks and fireless brooder. Queen Hatchery, 89 Pike st., Seattle, Wash.

IF YOU ARE INTERESTED
in Reds, write me for mating list and price of eggs. I have what you want at the right price. S. W. Berry, Post Falls, Idaho.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

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POULTRY 174 Continued.



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FOR SALE—43 LINCOLN AND SHROP ewes with lambs. P. C. Jensen, Ilo, Ida.

SIGN PAINTING 366

PAINT YOUR OWN FARM SIGNS. EASY with our patterns and instructions. Send for copyrighted booklet entitled "Naming the Farm," containing 200 suitable names, and sample pattern and introductory offer. C-N Sign Co., Box 19, Jackson, Minn.

RUG and CARPET WEAVING 270

FLUFF RUGS AND RAG CARPETS.
Your old rugs and carpets can be made into beautiful NUSTYLE Fluff rugs at a small expense to you, by our new and improved process. Send for booklet and prices.
Nustyle Rug Co., Sellwood, Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

ACCLIMATED SEED.
In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.
If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.
It will pay those who want good, acclimated seed to watch for offers under this classification.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

SEEDS 620 Continued.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flour seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, Ore.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

NURSERY STOCK 621

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

FARM LANDS—FOR SALE 651

MONTANA LANDS.

1M-2—$3000 will handle 320 acres, 130 in crop, 280 tillable. Well and buildings, 3 mi. to station. $35 acre; 1-3 crop.

1M-3—$15,000 will handle 920 acres, 400 in winter wheat; 200 in flax stubble for spring seeding. Nearly all tillable. Wells and buildings; ⅓ crop included at $50 acre.

2P-1—$17 acre; 800 acres 3 mi. from town. Nearly all tillable. Buildings, water. $5000 cash.

Relinquishments for about $1000 cash.
Lands throughout state $5 to $75 acre.

PRATT SALES AGENCY, 315 FIRST NAT'L BANK, GREAT FALLS, MONTANA.

MONTANA LAND.
COMBINATION STOCK AND GRAIN FARM, IMPROVED, $22 PER ACRE; 960 acres in one of the best stock districts of the state of Montana; about 700 acres tillable land, balance excellent pasture; only 4 miles to town; 100 acres in winter wheat; 40 in spring wheat; all goes to the buyer. For immediate sale we can deliver this place at $22 per acre.

If interested in Montana land call or write for our land list, giving descriptions of some of the best buys in the state of Montana.

HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG., SPOKANE

MONTANA LAND.
IMPROVED PLACE, JUDITH BASIN, $35 PER ACRE; 1000 acres in the Judith basin, nearly all good land; 400 acres in winter wheat, one-third to the buyer; located 31 miles from town; nearly all steam plow land; fair set of buildings; price $35 per acre, reasonable terms, but no trade.

If interested in Montana land call or write for land list.

HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG., SPOKANE

A GOOD FARM.
NEAR BELLINGHAM, WASHINGTON, ON PUGET SOUND.

$6000—68 acres of good land; 30 acres thoroughly cleared, balance good timber and pasture; only six miles from Bellingham, a city of 30,000; excellent roads; good water; buildings only fair; school across road. A good dairy farm for the right man. Terms. Address secy. Bellingham Real Estate Assn., 1321 Dock st., Bellingham, Wash.

301-ACRE ALFALFA AND DAIRY FARM; 4½ miles out; can farm and irrigate all; private elec. pumping plant; part in alfalfa; bearing orchard and other crops; excellent soil; 5-room house with cellar, barn, chicken house, buggy shed, shop, ice house, outside cellar, good well, county road; school ½ mile; R. F. D.; elec. lt. and power can be had; fine shade. $20,000, part cash, bal. good terms at 6 per cent. R. C. McKinney, Weiser, Washington County, Idaho.

640 ACRES GOOD WHEAT LAND, FOUR miles from good town and 34 miles from Butte, Mont., one of the best markets in world; small house, barn, granary; excellent well, 125 acres irrigable; price $16 per acre; terms, $1500 down, balance 10 years, 6 per cent interest. H. O. Clark, 125 W. Broadway, Butte, Mont.

BUY A FARM IN PROSPEROUS COMmunity. One high-priced wheat crop will pay for it. My 80, 160, 320 and 640 acre farms will produce abundantly. Water, climate, soil excellent. Low prices. Easy terms. J. W. Heffernn, Livingston, Mont.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C. M. & St. P. Ry., 2d and Cherry st., Seattle, Wash.

BIG MONEY RAISING VEGETABLES and chickens, greenhouse and 160 acres of land, near Spokane, cost $15,000, offered at $4500; easy terms.
PENNSYLVANIA MORTGAGE INV. CO.
SPOKANE, WASHINGTON.

IF YOU ARE LOOKING FOR GOOD farms, we have improved and unimproved farms for sale; also relinquishments and homesteads. Write Hall & Vollmer, Sumatra, Mont.

FOR SALE — 28 ACRES FARM LAND, partly cleared; good dairy proposition, $100 per acre. Will give terms. Sedro Veneer Company, Sedro-Woolley, Wash.

NORTHERN PACIFIC RAILWAY LANDS in eastern Montana at $2.50 to $18 per a. Suitable for farming or grazing. Easy terms. For information write or see W. E. HOLT, MILES CITY, Mont.

800-A. IMPROVED FARM 4 MILES FROM Eltopia, Wash.; $20 per acre; $2500 cash, balance 10 years, time at 5 per cent. F. M. Beckwith, R. 2, Escondido, Cal.

IF YOU WANT LAND IN MONTANA, write to H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

FOR SALE OR EXCHANGE 702

FOR SALE, OR EXCHANGE FOR SMALLer place—My 552-a. stock and grain ranch, 3 miles to town. Address owner, R. E. Wagner, Crawfordsville, Oregon.

LOOK THIS UP

The Breeders' Department in this issue contains the names of many prominent live stock breeders. Their offers are worthy your consideration.

Grain and Produce Markets

Chicago Grain.

CHICAGO, May 19.—Sellers of wheat overreached themselves today trying to profit by a report that European entente nations had agreed to liquidate holdings of American grain futures. No evidence of such liquidation developed, and the market, after a moderate decline, went soaring when sellers who wished to even up trades attempted to switch to the buying side. The close was unsettled, 12c net higher, with July at $2.40 and September at $2.17. Other commodities, too, scored gains—corn, 3c to 4 1-4c, oats 1 1-4c to 1 1-2c, and provisions, 15c to 25c.

Mention of a proposed pooling system whereby exports from this country would be apportioned with due regard to domestic needs tended somewhat to act as a transient further handicap on the bulls, and so, too, did word that the federal government was directing the overland export movement from the Pacific coast.

Once the wheat market started upgrade the ascent of prices was rapid. In some cases the jumps were as much as 5 cents betwen trades.

Corn rose sharply, owing to the scarcity of offerings and owing to smallness of receipts. Oats were strong as a result of dry weather complaints from Illinois and Indiana and because of good export business.

Higher quotations on hogs and grain lifted provisions.

Pacific Northwest Grain.

TACOMA, May 19.—Wheat—Bluestem, $2.72; fortyfold, $2.67; club and fife, $2.66; red Russian, $2.63.

SEATTLE, May 19.—Wheat—Bluestem, $2.72; turkey red, $2.72; fortyfold, $2.66; club, $2.66; fife, $2.66; red Russian, $2.63.

PORTLAND, Ore., May 18.—Grain—Cash quotations: Wheat—Bluestem, $2.72; fortyfold, $2.67; club, $2.66; red Russian, $2.63.

Oats—No. 1 white feed, $50.75.

Barley—No. 1 feed, $49.50.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at coast points for the fiscal year beginning July 1 up to Saturday night for 1916-17 and 1915-16 were as follows:

	Wheat	Oats	Barley	Hay
Seattle—				
1916-17	5,876	1,556	319	4,819
1915-16	7,596	1,014	1,375	4,148
Portland—				
1916-17	5,830	2,218	254	2,481
1915-16	10,063	1,007	1,513	2,465
Tacoma—				
1916-17	5,837	297	123	1,822
1915-16	6,761	374	501	2,309
Totals—				
1916-17	17,543	4,071	696	9,122
1915-16	24,420	2,395	3,389	8,922

Portland Market.

PORTLAND, Ore., May 19.—Egg buying for northern account ceased at the end of the week when the California market dropped, and a readjustment of local prices is expected in the next day or two.

The butter market is firm and higher with a better outside demand. Another advance in cheese prices is looked for in the immediate future.

Trading in the poultry and dressed meat markets has fallen off and all prices, except on pork are weak.

There is practically no demand for potatoes for either local or shipping use. But for the very light stocks, a sharply lower market could be looked for.

Oregon strawberries have made their appearance in valley towns, but no large quantities will be available for some time, owing to the cool weather.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $50.75 per ton.

Corn—Whole, $72; cracked, $73 per ton.

Millstuffs—Bran, $41 per ton; shorts, $45.

Barley—No. 1 feed, $49.50; brewing, nominal; rolled, $53.

Hay—Buying prices: Timothy, eastern Oregon, $30; alfalfa, $23; grain, $18@20.

Eggs—Oregon ranch, case count, 32½@33c per dozen; candled, 34c.

Poultry—Hens, 17c; ducks, 18@20c; turkeys, alive, 20@22c; dressed, 23@28c; geese, 12@14c.

Butter—City creamery, prints, 39@40c per pound; cubes, 36½@37c.

Cheese—Oregon triplets, 25c; young Americas, 25c.

Dressed meats—Veal, 14c; pork, 19@19½c.

Hops—1916 crop, 3@6c per pound.

Potatoes — Oregon jobbing price, $3.25@3.75.

Wool—Eastern Oregon, fine 45@48c; coarse, 50c; valley, 46@50c.

Beans — California small white, 16½c; large white, 16c per pound.

Hides—Salted hides (25 lbs. and up), 20c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 32c; green hides (25 lbs. and up), 18c; green stags (50 lbs. and up), 12c; dry hides, 24c; dry salt hides, 24c.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., May 19.—Hogs—Receipts, 5200; steady to 5c higher. Heavy, $15.80@16.15; mixed, $15.70@15.90; light, $15.60@16; pigs, $12.75@15; bulk, $15.70@16.

Cattle—Receipts, 100; steady. Native steers, $10@13.25; cows and heifers, $8.50@11.25; western steers, $8.25@11.50; Texas steers, $8@10; cows and heifers, $8.50@10.50; canners, $7@8.50; stockers and feeders, $7@11; calves, $9.25@13.25; bulls, $7@10.

Sheep—Receipts, 100; steady. Yearlings, $13@15; wethers, $12@14; ewes, $11.50@13.50; lambs, $19@20.

At Chicago.

CHICAGO, May 19.—Hogs—Receipts, 7000; strong, 5c to 10c above yesterday's average. Bulk, $15.90@16.35; light, $15.15@16.30; mixed, $15.70@16.45; heavy, $15.70@16.40; rough, $15.70@15.85; pigs, $10.50@14.50.

Cattle—Receipts, 600; steady. Native beef cattle, $9.60@13.70; stockers and feeders, $7.60@10.40; cows and heifers, $6.65@11.60; calves, $10@14.75.

Sheep—Receipts, 1000; steady. Wethers, $12.75@15.75; lambs, $15.75@20.40; springs, $15@21.

At Seattle.

SEATTLE, May 19.—Receipts, 631 cattle, 80 hogs; market steady on all lines.

Cattle—Prime steers, $10.25@11.75; common to medium, $6@9.75; best cows and heifers, $8.25@9.25; common to medium, $6.25@8.25; bulls, $3.50@8; calves, $6.50@11.10.

Hogs—Prime light, $16@16.25; medium to choice, $15.75@15.85; smooth heavies, $15.25@15.55; rough heavies, $14.75@15; pigs, $13.50@14.45.

Sheep—Prime lambs, $12.50@13.75, good lambs, $12.25@12.50; wethers, $10.25@10.50; ewes, $9.10.

At Portland.

PORTLAND, Ore., May 19.—Hogs—Receipts, 179; market steady. Bulk of packing grades, $15.65@15.85; heavy packing, $15.85@16; light packing, $15.50@15.75; rough heavy, $14.50@15; pigs and skips, $13@13.75; stock hogs, $12@13.

Cattle—Receipts, 65; market steady. Steers, prime light, $10.50@10.75; prime heavy, $10.25@10.50; good, $9.75@10; cows, choice, $9.25@9.75; medium to good, $8.50@9; ordinary to fair, $7.75@8.50; heifers, $9.50@10; bulls, $6@8.50; calves, $8@10.

Sheep—Receipts, 9; market steady. Lambs, east of mountains, $13.50@14; lambs, valley, $13.25@13.50; lambs, shorn, $11@11.50; prime yearlings, $12.50@13.50; choice ewes, $11@11.50; heavy ewes, $9@11.50; prime shorn wethers, $9.75@10.

Spokane Stockyards Saturday.

Hogs — Receipts, none; market steady; stockers lower. Prime heavy packing, $15.60@15.80; prime light packing, $15.45@15.50; rough heavy, $14.50@14.80; pigs, $12.50@13.50; stockers, $12@13.25.

Cattle—Receipts 268, mostly stockers; market steady. Prime heavy steers, $10.50@11; prime light steers, $10.25@10.50; good steers, $10@10.25; prime cows, $8.75@9.50; good cows, $8.25@8.75; common cows, $7.50@8; best heifers, $9@10.35; bulls, $6@8.50; calves, $8@10.50; stockers and feeders, $6@9.

Sheep — Receipts, none; market strong. Prime lambs, $13@13.50; common lambs, $12@12.50; choice yearlings, $11.25@12; good yearlings, $10.75@11.25; best mutton ewes, $10@11.

Portland Wheat.

PORTLAND, Ore., May 21.—The wheat market at the close of the week appeared to be well on the way of another advance, impelled by a sharp demand and a scarcity of offerings. The trade here believes that prices in all domestic markets will get back to the former high level in spite of the restriction of option trading. The cash demand is making itself more felt here now that shipping facilities for business with the east have improved. As indicating the trend of the market, a sale of Washington bluestem at St. Louis at $3.16 was reported. This price is equal to $2.96 here, which is about as high as wheat went during the recent boom.

At the Merchants' exchange closing bids for prompt delivery were as follows: Bluestem, $2.72; fortyfold, $2.67; club, $2.66; red Russian, $2.63. In the open market bluestem was held to be worth fully $2.80 and club $2.75.

But little business is passing in the oats market, and prices are no more than steady. Barley is wholly nominal.

Millfeed prices have been reduced. There is a good California inquiry, but little local demand.

Fleece Clip Is 12 Pounds.

An average of 12 pounds of wool to the fleece is the record made by Fred Smith, a prominent sheepman of Granddalles. Some of the fleeces ran to 18 pounds. This remarkable average in weight of fleeces may be the result of using a power shearing machine, which saves wool and time. Mr. Smith sheared 2600 sheep and with the price of wool hovering around the 40-cent mark the fleece will bring in a tidy sum.

Seattle Market.

SEATTLE, May 19.—Estimated holdings of old crop potatoes, including eastern and western Washington, are 75 carloads, 50 cars of which consist of locals and are held here. The market is cleaning up rapidly, due to a spurt in the demand from east of the Rockies, principally Chicago, and it is now expected that the cleanup will be made on existing quotations of $75 for locals and $90 for Yakimas. Very few gems are held in Seattle.

Eastern Washington holders are bullish and are quoting $80 f. o. b. shipping point, a level which buyers are not disposed to pay. During the week there have been sales at $75 f. o. b., and buyers feel that they can jar holders loose for what they have at that level. The weather all along has helped the potato bull, as new Californias do not sell even at a distinct loss to the dealer. Consumers evidently have no fancy for the stock.

Jobbers have advanced the bid and selling price of fresh ranch eggs to 33 and 34 cents and 37 and 38 cents, respectively. The season for a surplus is here, but wholesalers report almost without exception that the element that produces easy prices is missing, and it is doubtful whether there will be any lower quotations this year. Storage is completed for the season, but orders for Alaska and heavy shipping and consumption locally is absorbing all that is offered as fast as it comes in.

City creamery men are unable to get hold of any surplus of butter for necessary storage, although the increase in cream production during the last 30 days has been very heavy. The more butter that is produced the greater the current demand. A few cubes have been placed in the coolers, and every manufacturer on Western avenue is inquiring constantly for country offerings for the reserve supply, but it has not been available. Condensaries have begun to encroach upon the field of cream production, and with stronger bids that creameries can afford are getting the milk which formerly was sold for its butterfat, skim milk returned for young stock.

Information has been received by city creamery men to show that several large herds of milch cows have been shipped from the Yakima valley this spring to Skagit county and are producing milk for condensaries in place of cream for creameries as before.

Cheese is about steady at 25@25½ cents for Oregon and Washington triplets, and there is a slight undertone of strength for the week. Greater care in quality and pack has eliminated the former differential in favor of Oregon cheese over the staple turned out in the neighboring state, and the market is on an equality.

Seattle Wheat.

SEATTLE, May 19.—The support for North Coast flour, the local wheat market, was badly shaken early this week by sympathy with Chicago, and millers who had been working against inclines found themselves in the position of being compelled to fight declines. Wheat fell by gradual stages 33c to 35c per bushel on the Seattle market for the week, with only a slight recovery, that of Thursday, when quotations were raised 10c from the receding market. The market for the week-end stiffened and showed a total advance of 17c from the lowest point.

Bluestem, on which the principal bear attack seemed to be directed, declined 35c from the opening of the market on Monday. There was no excitement. A feeling of apprehension and uncertainty pervaded all transactions, but there was considerable confidence in ability of the market to right itself, inasmuch as May wheat was being bought and sold and traders had something more on which to base values with cash transactions behind them than did the dealers of the east.

One of the representative sales on 'change for the week-end was 5000 bushels of May club at $2.62.

Butter and Eggs.

SAN FRANCISCO, May 19.—Butter—Fresh extra, 36 1-2c; prime firsts, 36c. Eggs—Fresh extras, 33 1-2; extra firsts, 33c; fresh extra pullets, 30c; extra firsts pullets, 29 1-2c.

CHICAGO, May 19.—Butter, higher; creamery, 33@38c.

Eggs higher; receipts, 21,768 cases; firsts, 34@35c; ordinary firsts, 31 1-2@32 1-2c; at mark, cases included, 31@34 1-2c.

ELGIN, Ill., May 19.—Butter, 100 tubs at 38c.

PORTLAND, Ore., May 19.—Butter—Prints extras, 39@40c; cubes, extra, 36 1-2@37c; prime firsts, 35 1-2c; dairy, 27 1-2c.

Butter fat, Portland delivery; No. 1 sour cream, 40c; No. 2, 38c.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—$3.25 cwt; new potatoes, 12½c lb.

Seed Potatoes—Early Rose, $4 cwt.

Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; N. Y. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 39c lb; Medo-Maid, 39c lb; Cascade, 39c lb; Gold Leaf, 39c lb; Better Butter, 39c lb; Attalia, 39c lb; Diadem, 39c lb; Hazelwood, 39c lb; Solid Pack, 37c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 28c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $9.50 case.

Live Poultry—Hens, 20c lb; old roosters, 10c lb; ducks, 13@14c lb; turkeys, 20@25c lb; geese, 11c lb.

Dress Poultry—Hens, 23c lb; springers, 21c; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs., 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

Urged to Grow Beans.

Lane county, Oregon, farmers are urged to grow beans.



Pay Highest Prices for Wool

Write for price list and shipping tags. Address Dept.-L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

Stevens County Logged-off Lands

"Where Stock Raising and Dairying Pay"

These lands offer you the opportunity of independent farming on your own property.

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Profit by the high market prices of all farm products. You can not expect another chance like the present one during the rest of your life.

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ADDRESS .....

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from page twenty.)

but surely contrive some means to take her life, and I hoped he would. I spoke to my wife, Jane, about the queen's conduct, and she finally admitted that she did not like it, so I, unable to remain silent any longer, determined to put Mary on her guard, and for that purpose spoke very freely to her on the subject.

"Oh! you goose!" she said laughingly. "He is almost as great a fool as Henry." Then the tears came to her eyes, and half angrily, half hysterically shaking me by the arm, she continued: "Do you not know? Can you not see that I would give this hand, or my eyes, almost my life, just to fall upon my face in front of Charles Brandon at this moment? Do you not know that a woman with a love in her heart such as I have for him is safe from every one and everything? Have you not wit enough to know that?"

"Yes, I have," I responded, for the time completely silenced. With her favorite tactics she had, as usual, put me in the wrong, though I soon came again to the attack.

"But he is so base that I grieve to see you with him."

"I suppose he is not very good," she responded, "but it seems to be the way of these people among whom I have fallen, and he can not harm me."

"Oh! but he can. One does not go near smallpox, and there is a moral contagion quite as dangerous, if not so perceptible, and equally to be avoided. It must be a wonderfully healthy moral nature, pure and chaste to the core, that will be entirely contagion proof and safe from it."

She hung her head in thought, and then lifted her eyes appealingly to me. "Am I not that, Edwin? Tell me! Tell me frankly; am I not? It is the one thing of good I have always striven for. I am so full of other faults that if I have not that there is no good in me." Her eyes and voice were full of tears, and I knew in my heart that I stood before as pure a soul as ever came from the hand of God.

"You are, your majesty; never doubt," I answered. "It is pre-eminently the one thing in womanhood to which all mankind kneels." And I fell upon my knee and kissed her hand with a sense of reverence, faith and trust that has never left me from that day to this. As to my estimate of how Francis would act when Louis should die, you will see that I was right.

Not long after this Lady Caskoden and I were given permission to return to England, and immediately prepared for our homeward journey.

Ah! It was pretty to see Jane bustling about, making ready for our departure—superintending the packing of our boxes and also superintending me. That was her great task. I never was so thankful for riches as when they enabled me to allow Jane full sway among the Paris shops. But at last, all the fine things being packed, and Mary having kissed us both—mind you, both—we got our little retinue together and out we went, through St. Denis, then ho! for dear old England.

As we left, Mary placed in my hands a letter for Brandon, whose bulk was so reassuring that I knew he had never been out of her thoughts. I looked at the letter a moment and said, in all seriousness: "Your majesty, had I not better provide an extra box for it?"

She gave a nervous little laugh, and the tears filled her eyes, as she whispered huskily: "I fancy there is one who will not think it too large. Good-bye! good-bye!" So we left Mary, fair, sweet girl-queen, all alone among those terrible strangers; alone with one little English maiden, 7 years of age—Anne Boleyn.

(To be continued in the next issue.)

Grange Against Road Bonds.

With over 100 delegates in attendance from 18 of the granges, the Pomona grange at its meeting at Oregon City, Ore., went on record practicaly unanimously against the $6,000,000 road bond issue in resolutions adopted.

The grange also voted to support Secretary of Agriculture Houston in his recommendation that the farmers plant increased acreage with a view to supply the needs o fthe nation during the war with Germany.

Buys Improved Ranch.

Wade Headrick of Burley, Idaho, has purchased the I. N. Sly place, consisting of 40 acres, on Driscoll ridge. There are about 35 acres in cultivation and the land is very productive. It is improved with a pretty five-room house, a fine large barn, besides other outbuildings.

A War Effect.

The isolation of tongue, characteristic of the British people—especially the lower classes—has been done away with by the war. The huge army sent over to France has out of necessity learned something of the French language.

Could Northwest Manufacture War "Tanks"?



In the recent patriotic parade at Tacoma, Wash., one of the features which attracted attention was a "war tank," an ingenious counterpart of the fighting machines of Flanders. The "tank" was no other than a common tractor attachment coupled with a chassis and "armored," the latest production of a Tacoma factory.

The picture here is an intimation that the northwest could manufacture armored cars if called upon.

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to farmer with rig or saddle horse. The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are paying good salaries to those who can do the work and are offering these positions only to farm owners or renters.
We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. For men with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary. We give you full instructions and the right kind of help.
You will be able to earn a salary of from $25 to $150 per month or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.
We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.
Give full details in your first letter to The Washington Farmer, Review Building, Spokane, Wash.

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If you have something you want to sell, offer it to our big family of over 50,000 subscribers. A want ad is the cheapest way we know of to get in touch with buyers.

NEWS FOR BREEDERS

Made Record as a Two-Year-Old

When Ernest Werner of Aurora, Ore., purchased his first pure-bred Holstein five years ago he bought two from the pioneer herd of P. A. Frakes and two from Albert Johnson—herds that have furnished some of the best foundation stock in the northwest. Mr. Werner went contrary to the best advice of breeders and colleges and bought untested cows, so he got busy and gave them official records himself. He paid long prices for the cattle, and the fact that he made good selections was proven by the official records the cows made. Lundy Gerben, almost 10 years old, produced 25.45 pounds of butter in seven days. Nor do these cows stop at making records. Their daughters were tested with first calves and Mr. Werner got very satisfactory records. Jantilna Colantha Johanna, one of the daughters, whose photo appears on this page, made a record of 22.75 pounds of butter in seven days as a junior 2-year-old. This was the highest record in the northwest and remained so for some time, and now has only been beaten a very little by one junior 2-year-old heifer. The week Jantilna's record was made 168 other 2-year-old Holsteins were tested and she stood at the head of the list. She freshened February 5 as a 4-year-old, and in March produced 2402.2 pounds of milk.



Jantilna Colantha Johanna.

Mr. Werner's senior herd bull is Toge De Kol 2d Johanna Duke. His dam has a record of 29.67 pounds of butter in seven days and milked over 100 pounds a day three days. His sire, Sir Korndyke Manor De Kol Jr. 2d, is the sire of Lady Tobe De Kol, whose 36.59 pounds of butter in seven days and 141.23 pounds in 30 days as a senior 3-year-old were world's records when made and remained so for two years. He is the sire of three more daughters with over 30 pounds.

Mr. Werner now has eight official records, three of them by daughters of his herd bull, and all but one made as 2-year-olds. Oregon Inka's record is 24.8 pounds of butter in seven days; Johanna Oregon has 17.93 pounds, and Toge De Kol Johanna Oregon 15.03. Mr. Werner has made these records with ordinary herd care. He feels that he can not give his cattle quite the chance they should have, but he will continue to test and expects more good records. H. A.

RANCH'S ROSIE.



Last winter J. M. Fruits of Enterprise, Ore., purchased Ranch's Rosie, the Hampshire sow shown above, from J. Crouch & Sons of Indiana, after she was grand champion at the Chicago International, the highest honor that can come to a hog. She was 5 years old when exhibited. She weighs 800 pounds in show condition and still has a great back and good, strong legs. When Mr. Fruits began breeding and exhibiting Hampshire swine they were but little known in the Pacific northwest and were considered a joke. He has made for them a place as reputable as any of the better known breeds and no exhibit of hogs at the leading fairs is looked at with more interest than the "hogs with the white belt across their shoulders." Mr. Fruits has always bought the best that money would buy for breeding stock. He paid $456 for Lead Me to It, at R. L. Bollman's auction in Illinois, generally considered the greatest Hampshire hog in America. Other great boars he has owned are Bollman's Wonder and Chief Joseph. Dan Patch, of his own breeding, is a great show boar and last winter a purebred barrow of Mr. Fruits' breeding was first prize aged Hampshire barrow at the Chicago International. His hogs are also making good in the herds where he has sold.

THREE-YEAR-OLD PERCHERON.



Jerico No. 110196, a 3-year-old Percheron stallion, owned by the firm of Follett & Schooler of Genesee, Idaho. It will be with regret that the farmers of eastern Washington and northern Idaho will learn that this firm is to retire from the horse business, on account of the death of Mr. Schooler. D. G. S.

SALE AT FOREST GROVE.

A. T. Buxton & Sons of Forest Grove are to hold a sale June 5. They are disposing not only of their purebred Jerseys, their Shropshire sheep and Berkshire swine, but of their farm implements and equipment. Mr. Buxton says, however, that the land will produce just the same, even though he is compelled to retire for the present. Mr. Buxton has one son in the navy.

Public Sale Announcement

On TUESDAY, JUNE 5, 1917
at their farm near FOREST GROVE, ORE.,

the undersigned will sell their entire farm equipment. The live stock will include the following: One registered BERKSHIRE boar, also eight registered sows; registered SHROPSHIRE ram, 40 registered SHROPSHIRE ewes with crop of lambs; one registered Jersey bull, FANCY'S RALEIGH, grand champion Panama-Pacific International exposition, Cascade International, Pacific International 1915; this bull is fit to head any herd on the Pacific coast; 15 registered Jersey females and two bull calves.

J. W. Hughes
Forest Grove, Ore.,
Auctioneer.

A. T. Buxton & Sons
OWNERS,
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Senior herd bull, Majestic Fairfax 437657, by Corrector Fairfax.

Cows of most approved breeding, size and quality.

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Holstein bull calves for sale.
Herd Sire—Prince Walker Pietertje | King Segius 10th Segius Walker Pietertje 2d
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Fruitland Stock Farm
Poland China Hogs.

Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have a few fall boars left. Now is the time to get in on spring orders. Correspondence solicited.
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Big type breeding, foundation stock of leading strains from best herds in the northwest; seven to eight months old, well grown and of excellent quality.
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A few fall boars and bred gilts, sired by grand champion boar and out of prize winning sows. Also spring pigs.
J. E. FERRELL, WEISER, IDAHO.

80—Holsteins for Sale—80

Having sold "The North Slope Dairy Farm" I will soon offer at public auction my entire herd, half registered, half high grades. All with good milk records. Watch for sale date.
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Young stock by richly bred grandson of King of the Pontiacs, out of high-producing advanced registry cows.
A. E. SMITH. Sumas, Wash.

BUFFALO DUKE DOEDE
(102228) heads my herd. He is a half-brother of world's record cow, Dutchess Skylark Ormsby, producing 1506 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.
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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 22. MAY 31, 1917. WEEKLY.

Marketing Problem Alarms Fruit Growers

United, Courageous and Quick Action May Be Needed to Prevent Ruin of Industry

Fruit growers in all the orchard districts of the Pacific northwest are alarmed over the gravity of the marketing problem. Warnings have come from railroad managers that it may be found impossible to provide cars to move the tonnage. Fears are expressed that cars will be diverted by government orders to other commodities, and that the council of national defense may class fresh fruits as a luxury, not to be moved to market so long as cars are needed for movement of other products.

Against the above possibility orchard communities are urged to bestir themselves to provide ways for drying and otherwise preserving as much of the crop as possible.

This danger was the subject of earnest discussion at the recent Spokane conference of the Northwestern Fruit Growers' agency, and the following telegram was sent to the congressional delegations of the four northwestern states:

"Fruit growers' agency, representing the fruit interests of Washington, Oregon, Idaho and Montana, urge our congressional representatives to confer and make a united effort with representatives from other fruit sections to have the government classify fresh fruit as food so as to secure transportation preference and save our farm laborers from conscription. Without such action our fruit industry is doomed."

Contracting Endangered.

Professor J. C. Caldwell, by-product specialist of the Washington State college experiment station, thinks the situation is most critical. At a massmeeting in Walla Walla he declared that if he were a buyer he would not dare to contract with local growers for their apples to be delivered next fall at 25 cents per box, for the reason that there will be an unprecedented crop in the United States and that transportation facilities will be insufficient to move it owing to the munitions business.

Professor Caldwell urged growers to build drying plants to take care of their cull apples and possibly a part of the better grades. He also advocated sun-drying and individual kiln-drying in the orchards for the earlier fruits, and asserted that the allied government buyers would take all the dried fruit that could be marketed next fall.

The danger is so great, the threatened loss would be so vast and irreparable, that The Farmer feels justified in emphasizing its editorial suggestion of quick and courageous state action.

Must Have State Aid.

The problem is too stupendous for quick solution by individual or even community effort. It calls for state aid.

Professor Caldwell says: "To be commercially profitable, an evaporator must have a daily capacity of at least 400 bushels of apples, and must be equipped throughout with modern labor-saving machinery and equipment. The cost of such a plant, completely equipped, will be from $3700 to $4800, depending upon the cost of materials in the locality."

The Farmer believes that the governors of the four northwestern states should call extra sessions of their legislatures to consider the feasibility of state action on a great scale to save the orchard industry.

Should Rush Construction.

Suppose the state appropriated $1,000,000 to build evaporating plants of the type described by Professor Caldwell. That sum would construct 200 such. They could evaporate 80,000 bushels a day—2,400,000 bushels a month.

By rushing construction, the state-owned evaporators might be made ready for late summer or early autumn service. They could begin on berries, soft fruits and such vegetables as were in danger of loss from lack of cars to move them to market. They could run into the late autumn on these products and then take up the work of evaporating apples, or if necessary, also potatoes, and operate continuously during the winter.

Perhaps the state could not buy and carry the produce, but it could give service at actual cost computed on a business-like basis. The evaporated products could be stored at slight expense and could keep indefinitely until a ready market could be provided. They would be a valuable food reserve against a known world shortage of foodstuffs. By organizing local units, growers could pool their dried products and get financial aid from the banks to carry them over until a market opened, if a market was not immediately available.

Might Aid Cooperation.

After the war the state could sell its plants to cooperative associations of growers and withdraw from the business if it wanted to.

The problem is great, and the difficulties apparent, and The Farmer proposes this solution with cognizance that full discussion might show that it was not feasible.

But we face extraordinary conditions that call for extraordinary action. Governments are doing things now they would not have thought of doing three years ago. If the state governments of the Pacific northwest can save the great orchard industry from ruin or appalling losses, it is their duty to do it at almost any cost.

Continued on page two.

Let More People Become Farmers

Get more to take to the land as real farmers, is the best way to increase the production of foodstuff.



PROSSER, Benton County, Wash., May 21.—The weather is fine; some frost last week, but it did no damage. There never was a better prospect for fruit in this valley. The wheat looks good, but it will be late; the high price of seed wheat made the acreage short this spring and farmers did not have the money to get the seed. Almost every farmer is doing something for greater food production. I would suggest to aid in greater food production or general farm betterment to put each and every family on a farm, if it is not but 10 acres, and give him a chance to pay for it out of the crops. One-third of the land in the Yakima valley is not farmed. If that land was farmed, would not the production in this valley be one-third greater? Instead of building a small house for a year 'round hired man and his family, put him on a farm and give him a chance with the rest of us.

G. W. WILGUS.

Wants Prisoners of War.

FITZVILLE, Adams County, Wash., May 15.—The high price of food certainly makes the producers go some this part of the county. Every little tract of ground is being used for something and a large acreage is being seeded into the stubble which will make a fair crop if the weather permits. At the present time it is not practicable for the farmer to build homes for a year 'round hired man and his family for the simple reason that families do not apply for those positions. The working men today will not a good, steady job too easy when-ever an offer of attractive wages is offered some other place. The crops are coming on fine and with rain we have a right to expect a bumper crop. But who will help us harvest it? Wouldn't it be a good thing for all of us and for humanity if France and England would send us their prisoners of war. We could take good care of them and they in turn would help us to raise feed for this and other nations.

JACOB HARDER.

More Thought and Toil.

SHELTON, Mason County, Wash., May 10.—Every available square yard of cultivated land is subject to doing duty in the great preparedness campaign. It is not a question of high prices but one of 'beatum' with plenty to eat. It means a little more hay, peas, beans, a lot more potatoes, and preserved fruit. The ultimate results will be better than present achievements. The suggestions I would offer for greater production and farm betterment are more thought and more effective toil. There are a few cases in Mason county where a suitable house with attractive conveniences and environments all for the hired man and his family could serve a good purpose and pay big dividends. It would help solve the farm labor problem, both as to supply and reliability. The subject should have practical consideration. Cherry trees are in full bloom, and early apple trees are beginning to bloom. Lots of plowing remains to be done.

SCOTT HAYES.

No Greater Production.

COLFAX, Whitman County, Wash., May 17.—High prices of seed are curtailing production somewhat. It is hard to say just how much. Nothing is being done towards greater food production as the conditions of winter wheat will take all the extra time farmers have in reseeding. Farmers here will do well if they produce as much food as last year.

E. C. HUNTON.

Planting Each Inch.

DARRINGTON, Snohomish County, Wash., May 20.—As a result of the high prices paid for grain, farmers in this section are planting every inch of land to either oats or roots for the milch cows next winter, for it is not likely that dairymen will be able to buy much grain and make a profit. There will be about one-third more ground planted to potatoes than usual and the same as to other garden stuff. Spring has been very backward, but most of the planting is done. Strawberries and cherry trees are loaded down with blossoms, but loganberries and raspberry bushes suffered by the frost last fall, in particular the improved Cuthberts. Pasture is getting fairly good now and stock is doing reasonably well. Farm help is very scarce and wages high. The Darrington school district is going to build an up-to-date schoolhouse this summer costing $10,000.

C. B. NEIDERPRUM.

Strawberry Harvest Is On.

KENNEWICK, Benton County, Washington, May 19.—There is some scarcity of help, yet the labor problem has not, so far, become serious. Strawberry harvesting will begin next week and we hope, with the assistance of the federal employment agent which the department will locate here at least during the strawberry season, that we will be able to save all of the crop. There are a small percent of farmers in the country who could employ help the year round. Those who have sufficient work for a man the year round could assist themselves materially in getting satisfactory help by providing a small house where a man with his family could live, even to handle the short season work. Much better class of farm labor could be secured if the farmers would provide comfortable quarters.

LEE M. LAMPSON.

Government Must Do Its Best.

METHOW, Okanogan County, Washington, May 21.—The effect of high prices of grain is that more will be harvested for the grain than ever before and less cut for hay. There is twice the acreage of potatoes sown this year. The hay crops are going to be light, as it looks as though 25 per cent of the alfalfa was frozen out. In regard to any suggestions in aiding greater production, will say that the farmers here and elsewhere are heeding the government's call to raise more foodstuff and will do their part, but the farmers want the government to do its part in setting a price on all food products and not let the price of products drop down 500 per cent while in the hands of the farmer and as soon as the food speculators get hold of it, raise it 500 per cent. If the government allows this the next call for greater food production will be in vain and it will find out the wisdom of Lincoln's saying in regard to fooling the people. The way the farms are at present, it would not pay to build a small home for the hired man and his family. That eventually will come, but not yet.

CHARLES GRANT.

House for Hired Man.

COLVILLE, Stevens County, Wash., May 12.—It is estimated that the total acreage of crops in this county has been increased about 20 per cent. Many of the thin meadows are being plowed up and seeded to grain. Most of the grasses being seeded this spring are being seeded with a nurse crop. On some of the larger farms the farmers have provided a house for a hired man and his family. These cases, however, are few, as most of the farms are small and labor is only seasonal.

A. R. HAHNER.

Season Unusually Wet.

RAINIER, Thurston County, Washington, May 12.—About all the available land is being put into a crop, although there is lots of land too wet to crop yet. The season is very wet and backward. A good many potatoes are planted, and also hay crops and feeds for cattle. In this vicinity I know of very few farms where it would be practicable for a farmer to keep a hired man the year round and make a living profit for himself. While there are many farms that need the extra help, the cash returns would not pay the extra expense, because we are in a timber country and clearing the land of wood and stumps would be a leading job and this is a very slow job at the best with no cash returns until the land can be cropped.

L. F. DAVIS.

Change Farming System.

TWISP, Okanogan County, Wash., April 30.—Farm help is short here; desirable men that are looking for farm work are very scarce. The only solution that I can think of for the labor problem is to engage in farming that won't require so much help. Plowing and seeding each spring is a very important and essential item to be considered. That can be eliminated by seeding the place to alfalfa or some other perennial that requires but little attention except at harvest time. Stock raising and dairying on much of a scale is the only kind of farming that pays to keep a man the year round. The spring continues backward. More wheat than usual is being sown, but it is slow in getting started. Most of the live stock is in good condition and in demand at a good price.

GEORGE LA DUE.

Marketing Problem

Alarms Northwest Fruit Growers

(Continued from page one.)

Statements have come from Washington city designed to relieve the anxiety over the problem, and no doubt they indicate the hope and the desire of officials to be able to avert any such crisis as seems imminent. Herbert C. Hoover, who is being put at the head of the food control organization, has assured members of congress from the northwest that there is no intention on the part of the government to permit fruit to be discriminated against. Secretary Houston of the department of agriculture makes similar statement.

But it is a condition and not a theory that confronts the fruitgrowers. Physical problems of transportation difficult of solution face the railroads and the government. The fruit crop is going to be unusually large. The growers face also the threatened increase of 15 per cent in freight rtaes. Car shortage is not an impossibility, in the light of last season's experience. Hopes and promises are not sufficient. The growers must be ready to protect themselves and every effort should be made at once with this in view.

Purchase Farm for $16 000.

C. C. Pressely of Grants Pass (Ore.) has purchased the Parkey ranch of 148 acres at New Hope, the purchase price being $16,000.



More Grain for the Farmer; More Profits for the Thresherman

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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 22 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF May 31, 1917

Farmers Should Own Liberty Bonds

Investment Is Safe; Bond Can Not Be Taxed; May Be Sold at Any Time

The Farmer would like to see a Liberty bond in every farm home in the Pacific northwest. Or two or three of them, for they are within the reach of thrifty boys and girls, and mother is deserving of one that will be entirely her own.

It is not often in the country's history that one can be both patriotic and thrifty in a single transaction like this. When you buy your share of the $2,000,000,000 bond issue the government is now selling to finance the war, you have the satisfaction of knowing that you are helping your country's cause in the greatest war for world freedom and popular government that history records.

At the same time you will possess something that is well worth white to acquire and hold. "As good as a government bond" is the highest mark that can be placed on the value of anything.

Semi-Annual Interest.

Suppose that mother has her $500 bond. The interest on it, coming in every six months, will buy her little comforts and luxuries all her life. When she gets her bond she will find attached to it 60 little coupons (the bonds run for 30 years, and there will be two coupons for each year.) Every six months she has only to clip off one of these coupons and draw $8.75 interest in gold.

A U. S. government bond has two point of superiority over almost any other kind of property.

It can not be taxed as other property ordinarily is taxed.

It can be readily sold.

If you want to sell a horse, or a house or a farm, you may find that when times are dull you must take a sacrifice price. Or you may not be able to sell at any price, or have to pay a large commission. But there is always a ready market for U. S. government bonds, and the cost of selling one of them is trifling.

The Instalment Plan.

You can buy your bond on instalments, paying only 2 per cent on application, 18 per cent on June 28, 20 per cent on July 30, 30 per cent on August 15, and the final 30 per cent on August 30. Coupon Liberty bonds will be issued in denominations of $50, $100, $500 and $1000. To draw the interest on these you clip your coupons and your banker will collect the interest for you. Or you can mail the coupon yourself and get your interest by mail from Washington.

Then there will be another kind of Liberty bond known as registered bonds. These will be issued in denominations of $100, $500, $1000, $5000, $10,000, $50,000 and $100,000. These bear no coupons. You simply hold the bond, which is registered in your name at Washington, and every six months the treasury department will send along your interest.

The bonds will be dated June 15, 1917, and will bear interest at the rate of 3 1-2 per cent per annum from that date, payable semi-annually on December 15 and June 15.

The bonds will mature June 15, 1947, but the issue may be redeemed on or after June 15, 1932, in whole or in part, at par and accrued interest, on three months' published notice, on any interest day; in case of partial redemption the bonds to be redeemed to be determined by lot by such method as may be prescribed by the secretary of the treasury.

The principal and interest of the bonds will be payable in United States gold coin of the present standard of value, and the bonds will be exempt, both as to principal and interest, from all taxation, except estate or inheritance taxes, imposed by authority of the United States or its possessions, or by any state or local taxing authorities.

If any subsequent series of bonds shall be issued by the United States at a higher rate of interest than 3 1-2 per cent per annum before the termination of the war between the United States of America and the imperial German government (the date of such termination to be fixed by proclamation of the president of the United States), the holders of any of the bonds of the present issue shall have the privilege of converting the same, within such period and upon such further terms and conditions covering matters of details as the secretary of the treasury may prescribe, into an equal par amount of bonds bearing such higher rate of interest and substantially identical with the bonds of such new series, except that the bonds issued upon such conversion are to be identical with the bonds of the present series as to maturity of principal and interest and terms of redemption.

This opportunity to buy liberty bonds is well worth inquiring into. Ask your banker to get a bond for you.

President Wilson Says:—

"The entrance of our beloved country into the grim and terrible war for democracy and human rights which has shaken the world creates so many problems of national life and action which call for immediate consideration and settlement that I hope you will permit me to address to you a few words of earnest counsel and appeal with regard to them.

"To do this great thing worthily and successfully we must devote ourselves to the service without regard to profit or material advantage, and with an energy and intelligence that will rise to the level of the enterprise itself. We must realize to the full how great the task is and how many things, how many kinds and elements of capacity and service and self-sacrifice it involves.

"The simplest part of the stupendous undertaking is to place the navy on an effective war footing and to create and equip a great army. Those men and women engaged in industry, agriculture and commerce will be serving the country and conducting the fight for peace and freedom just as truly and just as effectively as the men on the battlefields or in the trenches.

"These, then, are the things we must do, and do well, besides fighting—the things without which mere fighting would be fruitless.

"We must supply abundant food, not only for ourselves and for our armies and our seamen but also for a large part of the nations with whom we have now made common cause, in whose support and by whose sides we shall be fighting; to help clothe and equip the armies with which we are cooperating in Europe, and to keep the looms and manufactories in raw materials; coal to keep the fires going in the ships at sea and in the furnaces of hundreds of factories across the sea; steel out of which to make arms and ammunition, both here and there; rails for railways, locomotives and rolling stock; mules, horses and cattle for labor and military service—all must increase output. The supreme need of our own nation and of all the nations with which we are cooperating is an abundance of supplies, and especially of foodstuffs. The importance of an adequate food supply, especially for the present year, is superlative. Without an abundance of food, alike for the armies and the peoples now at war, the whole great enterprise upon which we have embarked will break down and fail.

"Let me suggest that every one who creates or cultivates a garden helps, and that every housewife who practices strict economy puts herself in the ranks of those who serve the nation. This is the time for America to correct her unpardonable fault of wastefulness and extravagance."

To Control Food Supplies

Administration's Bill Will Ferret Out Speculators

If congress will quit fiddling and pass the administration's food bill, the speculators will run to cover like rats stirred out of an old barn.

It is true the bill is the most radical measure of the kind ever offered congress and the American people, but it deals with a great emergency and is carefully drawn and revised on the advice of eminent and patriotic authorities.

It is the product of a series of conferences between President Wilson, Herbert C. Hoover, the man who saved the Belgians from starvation by ably administering American relief supplies, Secretary of Agriculture Houston and members of the agricultural committees of both houses. Mr. Hoover, who will hold the post of food administrator if the measure is passed by congress, says it will meet the food problem.

It is called a food bill, but it is more than that. It gives the government control of all necesaries of life and manufactured products and articles.

It will have the approval of an overwhelming majority of the American farmers, for it makes war on long-standing evils which they have been fighting for decades. Briefly the measure would do these things:

Declare the production, manufacture, storage, distribution and sale of necessaries to be affected with a public interest.

Make it unlawful to commit or permit preventable waste or deterioration of necessaries; to restrict supply or distribution or to enhance prices to excessive levels.

Authorize the president to establish standards, and grades of foods to establish their quality and value.

Authorize licensing of manufacturing, storage and distribution of foods to prevent uneconomical manufacture or inequitable distribution; empower the president to order disposition of hoarded stocks.

Would Prevent Hoarding.

Authorize the president to prevent hoarding, monopolizing or the exaction of excessive profits by having the government either manufacture or deal in necessaries; authorize the taking over of factories or plants for government operation if necessary to provide proper distribution at fair prices.

Authorize the president to prescribe rules for the conduct of exchanges and boards of trade or to prohibit entirely their operations if in the public interest.

Authorize the fixing of minimum prices to the producer to stimulate production; authorize import duties if importations threaten operation of guaranteed minimum prices; authorize purchase by the American government at the prescribed minimum prices supplies for the allies of the United States.

Restrictions on Grains.

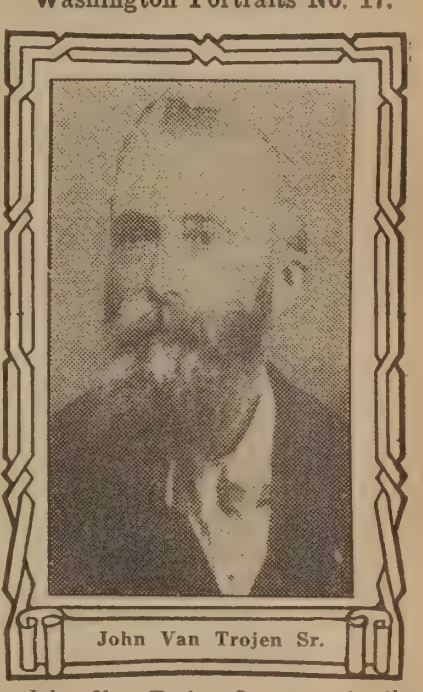
Establishment by the president of maximum prices to break food corners or to prevent hoarding and speculation.

Authorize the changing of milling grades or the mixing of grains in making flour.

Authorize the president to prescribe restrictions on the use of foodstuffs in the manufacture of alcoholic liquors.

The measure is based on the war powers of congress and operates throughout the country irrespective of state lines.

Washington Portraits No. 17.



John Van Trojen Sr.

John Van Trojen Sr. came to the Chimacum valley in 1869, at which time there was but three or four settlers in the valley, and during that winter he worked for a Mr. Robinson on the same farm where William Bishop now has his famous herd of Holsteins. A few years later he took up a homestead about two miles west of Chimacum, cutting a trail through the woods and carrying his food on his back; he built a cabbin and commenced to hew his home out of the winderness. Mr. Van Trojen has gradually developed this farm into a stock ranch. At present he keeps over 600 laying hens and hatches over 2000 young chicks each year, and sends young chicks all over the state. He is also a breeder of Chester White hogs, having had this breed for over 25 years. Another branch of the farm is the cows. The butter he delivers to private families once a week in Port Townsend. Mr. Van Trojen has made the trip every Wednesday for over 28 years, and, although he is 68 years old, he still is on the job.

The next in the series of Washington portraits will be that of John C. Martin of Castlerock, and will be given in next week's issue of The Washington Farmer.

Buys a Dairy Herd.

Ben Porter has purchased a herd of dairy cows of Thomas Coon and returned to his homestead up the Twisp, where he has an active dairy business going, and shipping cream regularly to the local creamery, says the Twisp News.

Lights on Automobiles

New State Laws on Regulation of Speed

Chapter 155 of the session laws of Washington for 1917 relates to the licensing of motor vehicles and other regulations for automobiles, motorcycles, etc. A large part of the law relates to the obtaining of licenses, all of which regulations may be obtained from any county auditor. Other matters are taken up, beginning with section 15, which will be of much interest, especially as the act goes into effect June 6, 1917.

Sec. 15.—That section 21 of chapter 142 of the laws of 1915 be amended to read as follows:

Section 21. Every motor vehicle shall exhibit during the hours of darkness, at least two lamps, one on each side, showing white lights visible 200 feet or more in advance of said vehicle. Such motor vehicle shall have attached to the rear not less than one lamp showing a red light, visible at least 200 feet in the rear of such machine, and the same light or additional light casting white rays of sufficient strength on the rear of number plate thereof, so that such number plate may be easily read at a distance of at least 60 feet: Provided, That motor cycles shall be required to carry only one light in the front thereof, which shall show white rays visible at least 200 feet in advance of such motor vehicle: Provided, further, That it shall be unlawful to display any light showing red to the front of any motor vehicle. Every motor truck, the body of which exceeds six (6) feet in width shall exhibit during the hours of darkness, in addition to the above required lights, a white light on the left side of the machine defining the limit of the body of the machine or the overhanging load, if any there be, and beyond the outside thereof, so fixed or carried that the light therefrom may be seen both from the front and rear of said motor truck. Every motor truck, automobile or trailer carrying a load which projects over the rear end three feet or more shall be required to display a red flag by day and a red light by night, on the extreme end of such overhanging load. It shall be unlawful to use on a vehicle of any kind operated on the puolic highways of this state any lighting device of over four candle power equipped with a reflector, unless the same shall be so designed, deflected or arranged that no portion of the beam of reflected light, when measured 75 feet or more ahead of the lamps, shall rise above 42 inches from the level surface on which the vehicle stands under all conditions of road: Provided, That any vehicle coming under the provisions of this section not equipped as herein provided shall, when meeting another vehicle after dark, reduce speed to not more than four miles an hour until such approaching vehicle has passed. This shall not apply to spotlights, but a spotlight shall not be directed at an approaching vehicle. From and after the first day of July, 1918, it shall be unlawful to sell or offer for sale, or have in possesion with intent to sell, any vehicle of any kind for operation on the public highways of this state equipped with any lighting device of over four candle power with a reflector unless such lighting device shall conform to the provisions of the preceding paragraph of this section.

Sec. 16. That section 24 of chapter 142 of the laws of 1915 be amended to read as follows:

Section 24. In no case shall any motor vehicle be driven, operated or moved at a rate of speed faster than one (1) miles in five (5) minutes at any crossing within the main thickly settled or business portion of any city or town nor within 100 yards of any school house, on school days between 8 o'clock in the morning and 5 o'clock in the evening within this state, nor in any portion of any city or town faster than one (1) mile in three (3) minutes, nor outside the limits of any city or town on any road, street or public place at a rate of speed faster than one (1) miles in two (2) minutes. No motor vehicle of a carrying-capacity of two (2) tons and under three (3) tons shall be driven at a speed faster than at the rate of fifteen (15) miles per hour. Vehicles of a capacity of three(3) tons and under four (4) tons faster than fourteen (14) miles per hour. Vehicles of a capacity of four (4) tons and under five (5) tans faster than twelve (12) miles per hour. Vehicles of five (5) tons and over at a rate of speed not faster than ten (10) miles per hour. Auto stages of more than 10 passengers capacity shall not be permitted to exceed a speed of 20 miles an hour on other than paved roads.

Sec. 17. There shall be constructed and maintained within one hundred (100) yards of each approach to each school house in the state, a conspicuous wooden or suitable sign with the words, "school, slow down" printed thereon in letters of the following dimensions:

Description of School Sign.

The size of the board shall be 15 inches by 27 inches over all, with a black border on the outer edges, one-fourth inch in width. The following directions shall be painted on the board in plain block letters in black on white background:

SCHOOL!

Slow Down.

The word "School" shall be written above the words "Slow Down." The size of the letters shall be four (4) inches in height, about two and three-eighths (2⅜) inches in width, and spaced approximately four (4) inches from center to center. The lines forming the letters shall be one-half (½) inch in width.

The size of the letters in the word "Slow Down" shall be three (3) inches in height, about one and three-fourths (1¾) inch in width, and spaced approximately two and three-fourths (2¾) inches from center to center. The lines forming the letters shall be three-eighths (⅜) inch in width. The words "Slow Down" shall be underlined with a black line one-fourth (¼) inch in width.

A margin of approximately two and one-fourth (2¼) inches shall be left between the outer edge of the letters and the edge of the board. Said sign shall be constructed and maintained by the local authorities of the city or town in which any of said schoolhouses are situated and at the expense of said city or town. For all schoolhouses located outside the limits of any town or city said sign shall be constructed and maitained by the county in which any of said schoolhouses are situated and at the expense of said county.

Sec. 18. That section 30 of chapter 142 of the laws of 1915 be amended to read as follows:

Section 30. Any person who shall make falsely any statement herein required to be made or who shall obtain any license by any misrepresentation or deceit, or who shall display any number of license not authorized by law to be used, or who shall in violation of the provisions of this act, loan or permit to be used any license or number issued to him or who shall in any manner violate the provisions of this act, shall be builty of a misdemeanor, and upon conviction thereof shall be punished accordingly: Provided, That in no event shall the minimum fine be less than five dollars ($5).

Sec. 19.—That section 31 of chapter 142 of the laws of 1915 be amended to read as follows:

Section 31. All moneys received from fines assessed or forfeited bail for the violation of any of the provisions of this act shall be paid into the permanent highway fund, for the maintenance and repair of permanent highways in addition to the funds heretofore provided by law, to be distributed in accordance with the amounts of money paid into the permanent highway fund by the various counties of the state.

Sec. 20. That section 34 of chapter 142 of the laws of 1915 be amended to read as follows:

(Continued on page seven.)

Ready for Grange Meeting

Wenatchee Will Welcome Large Delegation

The city of Wenatchee is ready to welcome 800 delegates to the annual convention of the Washington state grange which meets here Tuesday, June 5, for a three-day session. One of the greatest sessions in the history of the organization in this state is anticipated in the preparations being made for the gathering.

In attendance will be some of the leading persons of the state, including aside from active members of the grange, Governor Ernest Lister, State Superintendent Josephine Preston, Dr. E. O. Holland, president of the state college at Pullman, and George Severance, head of the state college department of agriculture. President Holland will attend as the representative of the city of Pullman and will present its strong appeal to the grange to hold its 1918 convention in the college town.

The committee of the Chelan county Pomona grange who will have charge of the Wenatchee arrangements is composed of C. A. Ferrin, H. I. Shotwell, C. F. Kaiser, Mrs. Pyle and J. T. Compton. This committee has announced an auto excursion throughout the orchard districts surrounding Wenatchee, and a banquet and reception for Tuesday evening.

The grange will handle a large number of important problems, some of them made specially important because of the conditions growing out of the war situation.

The election of a successor to C. B. Kegley, for many years master of the state grange, will be one of the important matters of business in addition to the selection of other officers. Master Kegley is not a candidate to succeed himself, owing to having accepted appointment as one of the farm property appraisers for this state under the federal farm loan banking act.

SUCCEED WITH SHEEP.

Thirty-one Thousand Sheared.

Ephrata is gradually becoming a center for the wool industry. Approximately 217,000 pounds of wool was sheared at the shearing pens in Ephrata from 31,500 sheep. This year's clip is worth about $75,000. The sheep from which this wool was clipped are worth at least $472,500. Besides the wool there is about 21,000 increase of lambs valued at $160,800. This would give a grand total value of the sheep that were sheared and their lambs of $635,000. It takes 10 cars to ship the wool that was sheared at Ephrata. This gives a large income for the sheep-grower not only in wool, but also in the increase of the lambs. The sheep are wintered in Grant county owing to the dry, open winters and the available forage which can be purchased.

H. W. REAUGH.

Will Not Lose Credits.

The faculty of the State College of Washington has made arrangements for all students who are up in their work to receive credit if they leave school now to enlist in the army, navy, reserve officers' training corps, as farm laborers or as leaders of boys' and girls' club work.

Ten Million Men Must Register

June 5 Is Nation's Great Day to Prove Its Patriotism

Next Tuesday, June 5, is America's great opportunity to show her patriotism. On that day, which is the day set aside by President Wilson for registration under the recently enacted selective conscription army bill, 10,000,000 young men will be required to register. In many states the day has been declared a legal holiday, and citizens generally are urged to join heartily in a serious, patriotic observance of the occasion. Registering officers are tendering their services free. Thousands of automobiles are being offered to carry the young men eligible to registration to the registration places. Women are being asked to supply meals to the registration officers, and every one is urged to "do his bit" to make the day successful as the greatest demonstration of patriotism in the recent history of the United States.

The war department has issued a special notice setting forth the principal features of the registration requirements, emphasizing the fact that persons eligible must register on June 5 or face severe penalty. The points to be remembered are given as follows:

1—There is only one day for registration—June 5, 1917.

Registration booths will be open from 7 a. m. to 9 p. m. on registration day, June 5, 1917,

2—Every male resident of the United States who has reached his 21st and has not reached his 31st birthday must register on the day set, June 5, 1917.

The only exceptions are persons in the military or naval service of the United States, which includes all officers and enlisted men of the regular army, the regular army reserve, the officers' reserve corps, the enlisted reserve corps, the national guard and national guard reserve, recognized by the militia bureau of the war department; the navy, the marine corps, the coast guard and the naval militia, the naval reserve force, the marine corps reserve and the national volunteers, recognized by the navy department.

3—Registration is distinct from draft. No matter what just claim you have for exemption, you must register.

4—Registration is a public duty. For those not responsive to the sense of this duty, the penalty of imprisonment, not fine, is provided in the draft act.

5—Those who through sickness shall be unable to register should cause a representative to apply to the county or city clerk for a copy of the registration card. The clerk will give instructions as to how this card should be filled out. The card should then be mailed by the sick person, or delivered by his agent, to the registrar of his home district. The sick person will enclose a self-addressed stamped envelope for the return to him of his registration certificate.

6—Any person who expects to be absent from his voting precinct on registration day should apply as soon as practicable for a registration card to the county clerk of the county where he may be stopping, or, if he is in a city of over 30,000, to the city clerk. The clerk will record the answers on the card and turn it over to the absentee. The absentee should mail this card to the registrar of his home district so that it will reach that official by registration day. A self-addressed, stamped envelope should be enclosed with the card to insure the return of a certificate.

A Skamokawa Dairy Barn



The dairy barn of Howard L. Wiester of Skamokawa. Mr. Wiester is a prominent and successful farmer who has developed rapidly in the past few years. He has 40 head of Jerseys, some of them registered. He is past master of the grange and present master of his Pomona grange.

To The Washington Farmer: I think so much of the paper that every one is filed away. There are topics that I refer to occasionally. You can always count on me as a subscriber to The Washington Farmer.

LOU SANDERS.

Richland, Wash.

Wool Sells at Half Dollar a Pound

Demand at Fever Heat, With Prices at 100 Per Cent Over Last Year

By J. M. LOWNSDALE

Wool trading in the northwest is now on in full swing, with prices 100 per cent higher than a year ago, and last year's prices were the record.

The Washington clip is now well sold up. Considerable progress was made in disposing of the Idaho clip before shearing, but in Oregon only a small part of the wool has passed out of the growers' hands.

The shearing season is later than usual and this has held back trading operations in Oregon. The Oregon clip this year is estimated at about 11,000,000 pounds, against over 12,000,000 pounds in 1916, the decrease being due to the selling off of flocks last summer. The Washington and Idaho clips are figured about the same as last year.

Of the million pounds or so of Oregon wool that had been disposed of up to March 20 about 500,000 pounds were moved immediately prior to that date. Most of these sales were in the Echo section, where the first shearing was done. Prices there ranged from 48 to 50 cents for medium grades, and in Baker county one large clip was taken at 50 1-2 cents, the best price paid so far in eastern Oregon. Fine wools have been bid for at prices ranging all the way from 43 to 48 cents.

At Pendleton recently a buyer offered 50 cents to Manuel Pedro for 30,000 pounds and the bid was accepted, the deal topping the Umatilla county market.

The majority of Oregon growers are holding back their clips for the regular sealed bid sales. The Oregon Woolgrowers' association has announced the following wool sale dates: Heppner, June 15; Echo, June 18; Pilot Rock, June 19; Condon, June 21; Shaniko, June 23; Bend and Redmond, June 25; Madras and Maupin, June 26; Enterprise and Joseph, June 27; Baker, June 28.

The Yakima market, which is covered by Portland buyers, has seen considerable activity in the past weeks. Isidore Koshland and Harry Armitage have just bought 112,000 pounds there at prices running from 45 to 50 cents, according to grade. The clips purchased were: L. Warden, Ephrata, 18,000 pounds; Forrest Wenner, Ellensburg, 20,000 pounds; Buckholz, Prosser, 24,000 pounds; Desert Sheep company, 30,000 pounds; Shockley Sheep company, Kennewick, 20,000.

Only early sales of fine wools in that section brought less than 35 cents. As indicating the condition of the market for Yakima wools, the buyer of a leading Boston house purchased a 100,000-pound clip at 43 cents. Last year he bought the same clip at 23 cents.

Yakima sheep men estimate that their wool clip this year will return them at least $1,000,000. They figure the output at 2,500,000 pounds. The 1916 production was 2,052,000 pounds and it returned growers $471,000.

They are also fortunate in having an extremely high sheep market and expect to realize an average of at least $9 per head for lambs, against $7.50 last year. Sales of Yakima sheep and wool this year are likely to aggregate $3,400,000 as compared with $2,500,000 in 1916.

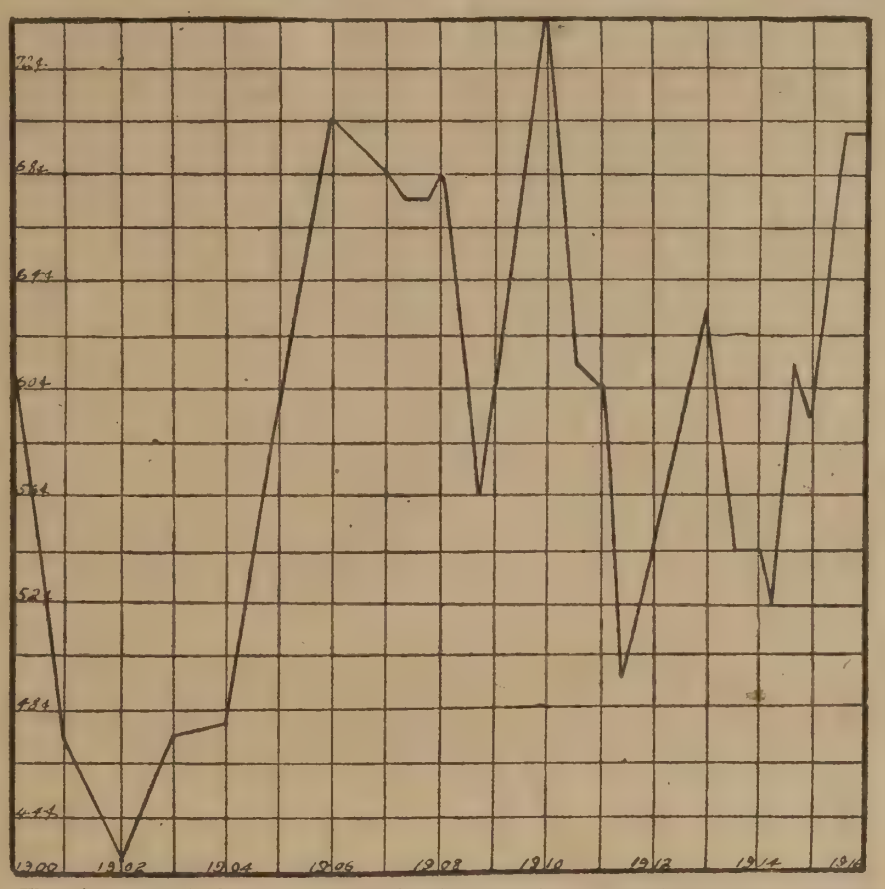
According to reports received by the trade in Portland there is a keen demand in Montana for all sorts of wool, with medium clips most in favor and half bloods and fine wools following close after. A Boston firm bought a large clip of 300,000 pounds in the Great Falls district at 52 cents. This was fine, medium wool. Later, it is said, 55 cents was paid for a very good staple clip running half blood to fine medium in grade.

Buyers as well as sellers are satisfied that the market will continue to advance. They have no fear of the government regulating prices, as a great actual shortage exists in the United States. Only a short time ago dollar scoured wool was considered a marvel. Now predictions are freely made that $2 scoured wool will soon be in evidence. Purchases made one day look cheap the next and therefore the demand is at fever heat. Growers have adopted the same line of reasoning, and, in Oregon at least, the purpose is to speculate by holding as long as it is safe.

Special correspondence to The Farmer from Boise says:

"Idaho wool has gone beyond even the most optimistic expectations of the sheepmen of this state. It has passed

(Continued on page twenty)



The above chart shows the fluctation in the price of "territory fine medium scoured" wool on the Boston market from 1900 to 1916. At the left are the prices in cents, while at the bottom are the years. To illustrate the reading of the chart, the dark line touches the lowest quotation of the six years in 1902, when it goes down to approximately 42 cents. It reaches the highest point of the period in 1910, when it goes to 74 cents.

The Boston market is accepted throughout the United States as the basis for wool quotations, though there is no fixed differential by which the exact market value at any other given point may be calculated from the Boston quotations. At the present time, however, the price of wool is practically the same in the northwest as at Boston.

One important feature to be considered, however, is the fact of shrinkage in the scouring process. The Boston quotation is on scoured wool, and in the scouring process western wools shrink from 25 to 80 per cent, depending upon the amount of natural grease primarily, though the coarseness or firmness and the sand, dirt, weed seed and the like also influence the shrinkage greatly. Graders must become expert in estimating the shrinkage and determining the fineness and length at the shearing pens. With the latter determined so that the clip may be placed in a certain class as quoted on the Boston market, the scoured value may be calculated on the basis of the estimated shrinkage.

Thus, a wool quoted at 50 cents per scoured pound would be worth 20 cents "in the grease" if the shrinkage were 60 per cent, which is approximately the average shrinkage. In like manner a 60-cent scoured wool would be worth 24 cents in the grease on a 60 per cent shrinkage basis, or a 70-cent scoured wool worth 28 cents in the grease on the same shrinkage basis.

This Map Shows Where the World Gets Its Wool



Notice the great number of sheep grown in England, Italy, Greece, part of Australia, southern Africa and southern South America, as indicated by the dark places on the map.

Must Carry Lights

On All Vehicles Drawn by Horses

An act of the last session of the Washington state legislature provides:

Section 1. Every vehicle drawn or propelled by horses, mules or other animal power shall, when driven on any public road, highway, park, parkway, street or avenue within this state during the hours of darkness, have fixed or carried thereon in some conspicuous place on the left side of said vehicle at least one lighted lamp, so fixed or carried that the light therefrom may be seen both from the front and rear of said vehicle.

Section 2. Every person violating this act shall be guilty of a misdemeanor.

This law goes into effect June 6, 1917.

Inoculation Methods

To the Editor of The Washington Farmer: Will you please send me all the information possible on the inoculation of soil for different crops? Where can I get the preparation, and about what would the cost be? We raise wheat, oats, clover, alfalfa and other small truck.—J. E. N., Orin, Wash.

Leonard Hegnauer, extension specialist in soils and crops at the state college of Washington, says in reply to the above question:

For inoculating alfalfa, clovers, peas or vetch, use soil taken from fields where the particular crop is grown and on which the plants are known to be inoculated. A soil of this kind will carry sufficient bacteria to inoculate a new seeding. From 300 to 500 pounds of the soil scattered on each acre of the new field sod and harrowed in at the time of seeding should give satisfactory inoculation.

Another method of inoculation, which is frequently used and is quite successful, consists of taking a small amount of infected soil and fastening it by means of glue to the seed. A description of this method is found in Extension Circular 21. Another method of inoculation is by the pure culture method. This material is sent out by the Washington experiment station, Pullman, Wash., and costs about 25 cents per acre. When properly used this material gives splendid results.

Clarke Bean Crop Gains.

A larger acreage of shell beans than ever before will be grown at Ridgefield, Pioneer, La Center, Sara and Feldia, Clarke county, this season. The growing of beans is expected to be a real factor in the food production of the county. The small navy bean will be most extensively planted.

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GUARANTEE OF ADVERTISEMENTS.

We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Are You Doing Your Part?

Governor Lister told an audience of 4000 that came out to hear his address in Spokane that President Wilson informed him that the food problem of the allies is very grave; that Great Britain has food stocks for "considerably less than six months."

The Farmer has reliable advices that England's reserves are nearer 60 days than six months. Some students say that her wheat and flour reserves, if not reenforced by new supplies, would hardly last for 30 days.

England has 200,000,000 bushels of wheat in Australia—enough to feed her people for a year. But that wheat is 13,000 miles away and she lacks the ships to transport it so far. A grain vessel can make four voyages from the United States or Canada to Liverpool in the time required for a single voyage on the long Australian run. That is why Great Britain wants the wheat of the United States.

With shipping scarce and growing scarcer all the time from submarine sinkings, it looks as though that 200,000,000 bushels in Australia is pocketed for the war.

That lays a grave duty on the American farmer. England and America are fighting a common foe. It is imperative that America feed not only her own people the coming year, but grow a surplus for France, England and Italy as well.

Are you doing your part? Are you working early and late to produce the last pound of food that can be taken from your soil?

Building a Cooperative Association

In building a working association of American farmers the fact must always be kept in mind that the raw material comes from many parts of the world—that we Americans are a cosmopolitan nation. Perhaps this is one reason for the diversity of thought and effort among us. At any rate, this fact of diversity of origin and of methods of thinking suggests the necessity of utilizing every means to promote loyalty to a single ideal, in every cooperative organization.

The first of these means is a definite and possible aim, or ideal; and the second is such a system of distributing exact knowledge of the facts bearing upon production and marketing as shall enable every member to see the wisdom of every proposed action. The members of potato associations who broke away from their organizations and sold on the field market, last fall, for instance, would not have done so had they been fully informed as to market conditions.

It is not enough to tell an American farmer that he must do a thing. He is not a child, to be commanded, but a man, to be convinced. Tell him why.

Fruit Growers Should Be Ready for Any Emergency That May Arise

The Farmer is not pessimistic, but believes in preparedness against bad luck.

There is danger that bad luck may fall upon the orchard districts this year. The fruit industry is menaced with a 15 per cent advance in freight rates on July 1. But that is not all. There is danger that cars may not be had when the fruit is ready to ship. There is talk that the railroads may decide that fresh fruit is a luxury and cars must be used exclusively for transporting the essentials of life—like grain, hay, meat products, canned salmon and milk, or for lumber needed in the great shipbuilding plants of the east.

That situation would spell disaster for the orchard industry unless ways were found to evaporate and preserve the fruits of the Pacific northwest.

We live in extraordinary times and must do extraordinary things. Rather than let our fruit go to waste, the governors of Washington, Idaho, Montana and Oregon would better convene their legislatures and urge appropriations to put in state-owned and state-operated evaporating plants. We could better spend millions in that way than to suffer the loss of greater millions at this time, when the nation can not afford any wastage of food.

The time may be too limited to establish canneries this year, but dehydrating plants can be built, and there will be ample markets for the product, which, thus preserved, could be moved to eastern centers and Europe later on.

Think this over and be prepared to act quickly if the necessity should arise.

A Problem That Staggers the Experts

Consumers complain that meat prices are almost prohibitory. But the grower protests that he is not to blame; that conditions bear as hard on him as on the consumers, as prices of feed, labor and supplies have run ahead of the prices he is getting for his produce, and he is actually losing money instead of piling up profits, as many city dwellers think.

The facts bear him out. He is quitting the business here and there, and that is the real test, for the farmer is not going to relinquish a profitable line of industry to engage in something new.

At a recent conference at Lincoln, Neb., of men interested in the live stock industry and professors from western agricultural colleges the alarming statement was made that there are 6,000,000 less breeding cattle in the United States than there were 15 years ago.

Yet population has grown and Europe is making extraordinary demands. Is it surprising that meat prices are up and going higher every month?

The further information was given at the Lincoln conference that the first four months of the present year showed 951,000 fewer hogs on the market than the same four months of last year. That is a decrease of 10 per cent. With feeders all over the country virtually gone, brood animals sold, hay and grain at prohibitive figures and slight prospects of relief, the conference decided drastic action was necessary.

To supply the country with meat under present conditions, to say nothing of sending provisions abroad, presents a serious condition, and the Lincoln conference threw little light on its solution.

The problem staggers the experts and alarms the nation.

The First Essential to Live Stock

The unusual demand for live stock at the present time, with prospects for a like demand for the future, produces another demand that the farmers and stockmen must not overlook. Feed!

There is danger that there will be shortage of hay and pasture on many farms this season because of the unprecedented demand for grains at high prices. But the man who has live stock or who is planning to add to his herd or flock must not allow himself to be drawn into winter with insufficient feed. Systematic plans must be laid and systematic calculations made to determine the amount of stock to carry under the particular possibilities of feed production on a given farm. So much pasture of such and such kind will carry so many cattle or hogs or sheep or horses so many weeks during the ordinary season. So much hay or silage will be required to carry them so much farther, and then so much grain will be required to keep them in proper flesh or finish them for market.

These things must be calculated by every man who would succeed. Hit-or-miss methods will not pay, especially at this time, when every loss of a pound of feed or the possibilities of producing a pound of feed means a loss of actual cash value.

Washington Gleanings

The Arcadia Orchard company will put in 1200 acres of peas this year, especially on the open sections. The apple trees never looked better, it is reported.

The Vancouver cannery will open about June 1 on spinach. This will be followed by gooseberries, then strawberries will come and other fruit as the season advances.

The boys and girls' club movement in Pierce county is well under way and 41 clubs have reported their enrolment to T. J. Newbill, state leader of boys and girls' clubs.

The Okanogan County Grange fair is to be held in Okanogan October 11, 12 and 13 and is expected to be the greatest exhibit of live stock in the history of Okanogan county.

P. K. Lewis has sold his ranch between Sultan and Startup to Mrs. Shaddinger of Oregon at an approximate consideration of $9000. The ranch comprises an area of 60 acres.

A peppermin farm of nearly 100 acres is to be located near Sifton in Clarke county at once. A shipment of 75,000 pounds of roots for use in starting the new enterprise have arrived.

Walla Walla high school students have enlisted in the cause of American agricultural preparedness. They will be used this summer in getting the crops of the valley properly harvested.

Under the direction of T. J. Newbill, state leader of the boys and girls' clubs, a gardening and canning club and a boys' stock-raising club have been formed by the high school students of Pullman.

The farmers and stock raisers of the Beaver Creek district, north of Deer Park, have formed an association to be known as the Stock Breeders' Protective association. Their object is to promote the breeding of better live stock.

A modern warehouse is being erected at Leavenworth by the Peshastin Fruit Growers' association. The stock of the Peshastin Fruit Growers' association is owned entirely by the growers and financed through the Leavenworth State bank.

A contract for 30,000 pounds of butter has been awarded the Lynden Creamery company by the United States government for the use of the Alaska Engineering commission. The award was made on a basis of 45 cents a pound and amounts to $13,500.

Business conditions this season in the fruit-growing districts of the state of Washington will depend largely upon transportation facilities and the market situation at harvest time, according to Conrad Rose, well-known operator in apples and produce.

What Others Say

Kent Journal—A good brood sow and a few good ewes would soon pay for themselves and bring a good return besides.

Port Angeles Tribune—The boys from the farms and the colleges have been the first to offer themselves for enlistment in the army and navy.

The Washington Call—Congress can well afford to forget all about the war for a day and enact legislation prohibiting the buying and selling of grain unless the parties actually have the goods.

Snohomish County Tribune—It looks as though high or war prices are to be accompanied by unusual prosperity.

Centralia Daily Hub—Time spent in the cultivation of the fields passes very pleasantly.

Air Ships Make Raids

Women Killed by Germany's Bombs

After a lapse of several months, the German airmen have resumed their raids on coast towns of England. Last week some 16 airships dropped bombs into the streets of two small cities, killing 76 persons. Of those killed, considerably more than half were women or children. No apparent object in the raid is known save to spread terror among the people of England and other enemy countries subject to such possible attacks.

Freight Under Sea.

Simon Lake, the man who invented the submarine, is reported to have developed the undersea idea now so that submarine freight boats capable of carrying 8000 tons of freight are not only a possibility but a probability. It is declared that such ships can be turned out rapidly, and that the first few of them can be ready for service within a few months. If successful, as officials are said to anticipate, such vessels would be able to evade the torpedoes of the German submarines.

World Purchasing Agent.

Plans are said to be under way for the centralizing of all the purchasing business of all the allied countries now at war with Germany in the hands of one man or a small commission of men. Such agent would expend about $10,000,000,000 a year, it is estimated. The purchases would include foods, clothing and munitions. The United States would place its purchasing under the same control, it is contemplated.

Spies Are Operating.

That German spies are operating successfully in this country seems evident from the official statement that the German government knew beforehand of the sailing of the American flotilla of ships for England to take part in the war on the submarines. The destination of the flotilla was also known to the enemy, notwithstanding that the admiral in charge of the expedition did not himself know his destination until he opened his sealed orders after reaching the sea.

Submarines Conquered?

Officials report from England that the losses of vessels at sea from the submarine menace were much less during the last several days than for other recent weeks. British statesmen declare openly that such progress has been made as to insure England and her allies against the threatened starvation which Germany has been trying to bring about. The United States navy is now actively engaged in the war on the submarines, though reports of its operations are strictly censored so that no definite reports of such operations are available.

Lights on Automobiles

(Continued from page four.)

Section 34. The local authorities shall have no power to pass or enforce any ordinance, rule or regulations governing the speed of any motor vehicle, or requiring of the owner or operator of any motor vehicle, any license other than an occuaption license or a tax which may be levied in only one city or town when such motor vehicle is engaged in intercity service, or permitted to use the public highways except as herein provided or to exclude or to prohibit any motor vehicle whose owner has complied with the provisions of this act from the free use of the public highways, and all such rules, ordinances and regulations now in force are hereby declared to be of no validity or effect: Provided, however, That nothing herein shall be construed as limiting the power of the county commissioners or local authorities to make, enforce, and maintain ordinances, rules and regulations governing traffic in addition to the provisions of this act affecting motor vehicles, but not in conflict therewith.

Sec. 21. At the time any application is made to the county auditor for a license, as provided elsewhere in this act, the applicant shall pay to the county auditor the sum of twenty-five cents for each application, in addition to the license fee provided for in section 15 of this act, which shall be paid to the county treasurer in the same manner as other fees, collected by the county auditor and credited to the county current expense fund.

Sec. 22. Every owner or operator of any motor truck or auto stage using the public highways in this state shall equip such truck or auto stage with a mirror or other device to enable the driver thereof to have such a clear and unobstructed view of the rear as will enable him to obey the "rule of the road" when overtaken by any other vehicle.

Sec. 23. Drivers of all motor vehicles carrying passengers for hire on any of the public highways of this state outside the incorporated limits of any city or town, shall bring said vehicles to a full stop within fifty feet of any unguarded grade crossing of any railroad or interurban track before crossing the same.

The Motor Car
On the Farm

What has the motor car done for the farming business? A whole lot, say those who have studied the matter. But, by the same token, what have the farm folks of the country done for the automobile business? Well, there were pretty nearly 3,000,000 motor vehicles registered in the United States of America in 1916; and if the farm folks of other parts of the country are as good buyers as we are here in the Pacific northwest (which, generally speaking, they are not) about three-fourths of the billion and so odd million dollars contributed toward the upbuilding of the automobile business came from off the farms.

The motor car has made life on the farm more attractive and more enjoyable; it has made work on the farm more efficient and more profitable. And in recognition of these benefits no class of American citizens today are causing motor car manufacturers so much anxiety and worry—so much of "jumping sideways" to keep the supply up to the demand—as are farmers.

The other day a boy just within the age limit for drivers walked into the office of a motor car company of Spokane and said he wanted to buy a car.

He had come to Spokane from Elmira, Wash. He wasted no time in getting right down to business. He knew what car he wanted, saying he had examined the car he wished to buy in Elmira and that it suited him.

The price of the car was $1725—and extra equipment purchased brought the amount of the transaction up to around $1800—which was promptly paid, out of this young man's own funds.

Not only does this show that motor car buying begins at an early age in the Pacific northwest, but it shows the kind of stuff that is in the young folks of this section of the country.

For, be it remembered, this boy had a bank account which permitted an investment of $1800 in a car, which speaks well both for himself and his parents. Of course he was a farmer boy—one of the oncoming generation of business farmers who are to carry on the efficient work that today makes the Pacific northwest one of the greatest zones of specialized and successful farming in the country.

He drove his car away—handling it with the easy assurance of a "professional." He said, however, that he had been driving his father's car since he was 9 years old and assured solicitous bystanders that he never "speeded" nor took unnecessary risks of any kind in his driving and that he had never had an accident.

Not a bad example—this boy—to many older motorists.

ONE FLAG AFLOAT.

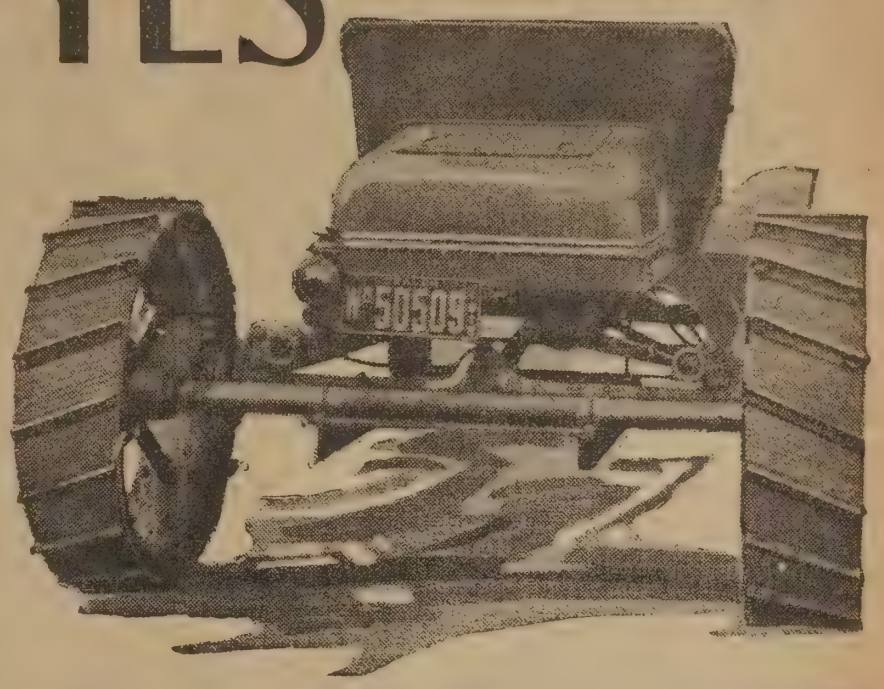
Lewis County Boy Wins Emblem.

Reuben A. Gilleland, a farmer boy living on the Cowlitz river in Lewis county, a few days ago set afloat a United States flag that he says in a letter to the Farmer is the first to fly in his community. He earned it working for the Farmer securing subscriptions, and says in a letter just received:

"The flag has arrived safely. When I saw what a nice flag it was it nearly tickled me out of my shoes. I received your letter stating that I was credited 120 points, but the flag required 125 points, which left me owing you five points. I thank you a thousand times for sending it. I will send in some more subscriptions soon to pay the points I owe. I am trying very hard to get some more premiums which are in the catalogue. The flag that you sent me is the only flag that is flying in this part of the country."

The flag offer to boys and girls throughout the state is still open, and may be found in an advertisement in this issue.

YES We Have Solved It!



HERE IT IS, the TRACTOR EVERY MAN CAN BUY—MADE TO MEET THE SPECIAL DEMAND for LOWEST POSSIBLE COST with POSITIVE, ABSOLUTE EFFICIENCY—THE BEST LOW COST LIGHT TRACTOR EVER BUILT—The

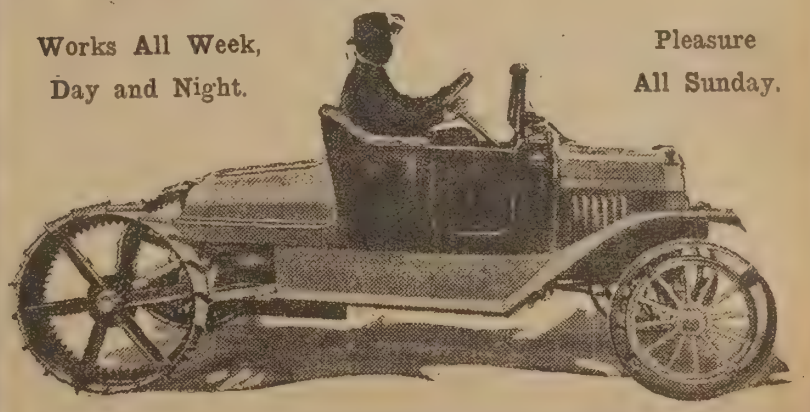
UNIVERSAL Junior

$150.00 TRACTOR ATTACHMENT

F. O. B. Tacoma

A FORD CONVERTED IN 30 MINUTES TO A TRACTOR—and BACK AGAIN TO AUTO IN SAME TIME—NO MECHANICAL CHANGES WHATEVER.

Works All Week, Day and Night.



Pleasure All Sunday.

It's now up to you. But it won't win the war in our factory. Get it on your farm, hitch your plow to it. No use telling you a lot of technical things in this advertisement. The pictures here prove it—looks as if it would do work of four horses, doesn't it? And it does—no more, no less—and made in the west. No delays. Meets the soil conditions of the west—made by men of the west—then why not keep your money in the west? No big freight costs, but your money is all in the tractor. Investigate. Write us for details. Prompt action. Our tractors and not our cannon will win this war! Write today!

FREE

Write for "A Tractor — a Matter of Course." Gives details of the Universal Junior. Don't hesitate. Investigate it. Get ready for the crops.

The FIRST TRACTOR ATTACHMENT on the market was put on by our company. We are the Absolute Pioneers. Others may copy, but they will go through the experimental stage we passed through long ago. We are taking orders every day for our "UNIVERSAL" ($275.00) and have doubled the size of our plant in the last sixty days to meet our orders.

GERLINGER Motor Car Co.

Manufacturers of "Universal Junior" Tractor Attachment "Gersix" Motor Trucks.

TACOMA, WASH.

Agents Wanted

Certain territory still open. Responsible firms or individuals wanted as agents and distributors. Write or wire. Our field manager may be near you.



A. B. NYSTROM, Editorial Contributor

Dairy Questions

Are Answered by A. B. Nystrom

I want to build a silo this spring and would like to have you give me information on the following questions: How big a silo would I need for four or five cows? What kind of a foundation would I need? When is the proper time for filling the silo with corn?—C. J., Marysville, Wash.

Ordinarily we do not consider it wise to build a silo for as small a herd as four cows, but presumably you have other stock to which you can feed this silage, so that you will probably have the equivalent of 10 cows. A silo 10x20 will hold 30 tons of silage and it will keep eight cows, feeding them six months in the year and 40 pounds per day. A silo 10x24 will hold 36 tons and will keep 10 cows, feeding them the same amount for the same length of time.

Build a good, substantial foundation, preferably of concrete.

The proper time to put corn into the silo is when the kernels have begun to dent. In this connection allow me to suggest that you get home-grown seed if possible, so that you will be sure it will mature sufficiently for good silage before the frost comes. Some of the dairymen in the Puget sound region have experienced a little difficulty at times in getting the corn to mature properly. Hence they have taken to using other crops, such as clover, peas and oats, vets and oats, and the like, for silage purposes. No doubt corn is the best silage crop; that is, it makes the best silage; but sometimes heavier yields can be obtained from other crops.

Smallest Economical Silo.

What is the least number of cows and the smallest silo possible to have for success in feeding and keeping silage fresh?—O. A. V., Port Orchards, Wash.

We usually consider that it is not wise to have a silo for less than 10 cows. However, if you are so located that you can feed silage to other animals, such as sheep, and perhaps horses and hogs, you will be able to put up a silo for fewer cows. The important point here is to keep enough feed off every day to keep it from spoiling. From one and a half to two inches per day must be fed off. If the silage is to be used in the summer time you must have a larger herd than when it is used in the winter time. In other words the silage spoils faster in summer than in winter. For example, for a silo 10 feet in diameter it is necessary to have 13 cows to keep it from spoiling, in the summer time. However, in the winter time only about seven or eight cows would keep it from spoiling.

Preserving Butter.

Kindly let me know whether butter will keep and how long by preserving it in the following way? Salt as for table use and wrap and lay in a crock over a layer of salt and cover with salt. I have been told that this method was very satisfactory, but would like your advice or any other suggestions about it.—Mrs. F. C. H., Wenatchee, Wash.

I believe that you will be able to keep good butter by the method that you have mentioned, especially if you put the butter away in a very cool place. However, I have found that using a saturated solution of salt brine instead of pure salt gives just as good results, and in fact leaves your butter in such a condition that you can take some out at any time without disturbing the brine. Fill your crock to within four inches of the top and then fill in the four inches with a saturated solution of salt brine made from pure water and a good clean butter salt.

The most important point regarding packing butter in either of these ways is to have good butter to start with. It is impossible to make butter that will keep out of a poor quality of cream.

Do You Know That

Perseverence often outruns genius?

C. A. Swenson Holds High Herd Average

According to the report of Ira J. Wolfe, tester, there were 28 herds, comprising 582 cows, on test in the Tillamook Cow Testing association during the month of April.

Of this number 141 produced over 40 pounds of butter fat, 74 made the honor list of 45-pound cows, 31 producing over 50 pounds of fat. The high herd average production is held by C. A. Swenson's herd, with an average milk yield of 1050 pounds, and butterfat yield of 44.61 for 27 cows. 44.40 pounds of butterfat is the best 2-year-old record for the month, and the honors go to a pure bred Holstein belonging to John Ebinger.

Below are listed the cows producing 50 pounds of fat during the 30-day period of test ending April 30. The list is not as full as might be expected for this season, but the backward spring is chiefly responsible. Many farmers did not turn out on grass till the latter part of the month, and because hay and grain were scarce or unobtainable cows were in many cases underfed. The cows are rapidly coming to their own since grass conditions have become normal and a considerable increase over April is expected for May.

Owner.	Name of cow.	Breed.	Age.	Month fresh.	Milk.	Av. test.	Lbs. fat.
1. Mark Harrison	No. 17	G. J.	7	March	1230	5.3	65.19
2. Mark Harrison	No. 15	G. J.	7	February	1365	4.5	61.43
3. Frank Blaser	Woody	G. J.	7	March	1440	4.2	60.48
4. William Williams	Gem	G. J.	6	April	1395	4.3	59.99
5. C. A. Swenson	DeKol	G. H.	8	February	1455	4.0	58.20
6. John Ebinger	No. 22	H.	4	April	1590	3.6	57.24
7. Mark Harrison	No. 16	G. J.	8	March	1095	5.0	54.75
8. Mark Harrison	No. 6	G. J.	7	March	1095	5.0	54.75
9. William Williams	Tenona	G. J.	5	February	1140	4.8	54.72
10. Mark Harrison	No. 12	G. H.	4	February	990	5.5	54.45
11. C. A. Swenson	Queen	G. H.	8	April	1350	4.0	54.00
12. C. A. Swenson	Suck	G. J.	8	March	900	6.0	54 00
13. William Williams	Marigold	J.	6	February	990	5.4	53.46
14. Mike Seifer	Midget	G. J.	7	February	1020	5.2	53.40
15. A. G. Beals	Gladys	G. J.	4	April	915	5.8	53 07
16. William Maxwell	Pink	G. J.	8	March	1080	4.9	52.92
17. Leonard McCormack	Nig	G. J.	7	March	1035	5.1	52.79
18. N. G. Boquist	Jessie	G. J.	10	March	1245	4.3	52.54
19. B. A. Folks	Hattie	G. H.	7	February	1590	3.3	52.47
20. Dave Fitzpatrick	Tiny	G. J.	6	February	1140	4.6	52.44
21. T. H. McCormack	Lucile	J.	6	February	960	5.4	51.84
22. N. G. Boquist	Queen	G. H.	7	February	1125	4.6	51.75
23. Frank Blaser	Jersey	G. J.	9	March	1230	4.2	51.66
24. Mark Harrison	No. 27	G. H.	4	March	915	5.6	51 24
25. C. A. Swenson	Pearl	G. J.	5	February	1110	4.6	51.06
26. John Ebinger	No. 4	G. H.	8	March	1305	3.9	50.90
27. N. G. Boquist	Topsy	G. H.	8	February	1155	4.4	50.82
28. T. H. McCormack	Dolly	J.	6	February	975	5.2	50.70
29. Joe Durrer	Jersey	G. J.	8	February	1125	4.5	50 63
30. Frank Hunter	Marie	G. J.	7	February	900	5.6	50 40
31. Joe Durrer	Ruby	G. J.	5	March	1065	4.7	50.06



Purebred Registered HOLSTEIN CATTLE

All records for butterfat production in 365 days, not only Holstein-Friesian, but those of all other breeds, were broken in 1915 by the registered purebred Holstein cow, Duchess Skylark Ormsby 124,514, when she produced 27,761 pounds of milk containing 1,205.09 pounds of butterfat. The test was made under the supervision of the Minnesota Agricultural college, thirteen different supervisors being employed. This wonderful cow freshened at the age of 3 years and 3 days. Holstein cows as a rule milk longer and produce much larger quantities of milk than any other breed, a fact that has made them the choice of progressive dairymen everywhere.

Send for FREE Illustrated Descriptive Booklets.

THE HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA.

F. L. Houghton, Sec'y, Box 205, Brattleboro, Vt.

$97.05 Profit Per Cow Per Year.

Pure bred sires, careful testing and careful feeding are the means which Ernst Dengler of Davenport, Iowa, has used to make his herd one of the most profitable in the state. At the close of last year's work in the Iowa cow testing association his herd stood among the highest of the 500 herds in the 23 associations. The highest five cows in the Davenport association were from his herd, as were eight out of the first nine.

The average production of his 24 cows for the year was 7094 pounds of milk and 380.1 pounds of butter fat. A feed cost of $56.81 per cow deducted from the gross income of $153.86 per cow left him a profit of $97.05 per cow for the year.

The herd was made up of two pure bred and 22 grade Guernsey cows.

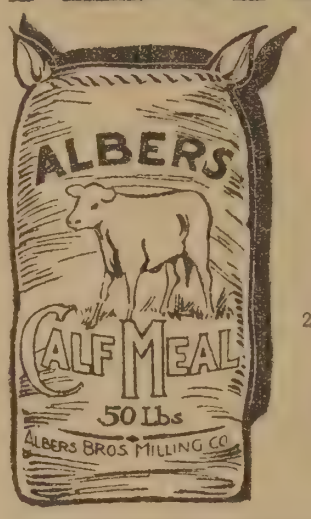
Calves thrive on Albers Meal



Why continue to feed them whole milk with butter-fat at 40c pound? Albers Meal contains all the nourishing elements needed for quick, sturdy growth.

Albers' has for a basis, ground oatmeal. The superiority of oatmeal over shorts for raising young stock is recognized by all feeders.

Albers Calf Meal



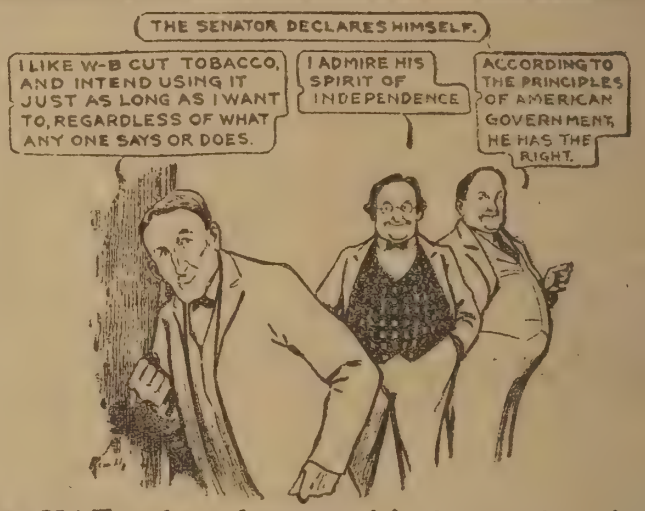
is used and endorsed by the most successful stockmen and dairy farmers in the Northwest. Read this letter.

"A Guernsey heifer was given to us at 14 days old. We had no cow milk at that time, so fed her on Albers Calf Meal and water straight until 6 weeks old. She then refused to drink fresh milk, so we continued Calf Meal. She never had a sick day and developed into a fine, large cow. We have tried three other calf meals—none give results like Albers."—*Edwin Dow, Malott, Wash.*

Ask for Albers Calf Meal—your dealer sells it in 25, 50 and 100-lb. bags—or address our nearest branch.

Albers Bros. Milling Co.

Portland Seattle Tacoma
San Francisco Los Angeles



WHAT makes tobacco good is the sap there is in the leaf to start with and the way it's cured—some tobacco is sappier than others. If you take a big chew of W-B CUT, you may find it too rich for you. Take a *little* chew—it's made of fine, sappy, leaf; there's a lot of *tobacco satisfaction* stored away in it. The touch of salt brings it out, without so much chewing; and a *little* chew *lasts* and *satisfies*.

Made by WEYMAN-BRUTON COMPANY, 1107 Broadway, New York City

WE WILL PAY SALARY

to farmer with rig or saddle horse. The publisher of The Washington Farmer wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are paying good salaries to those who can do the work and are offering these positions only to farm owners or renters.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. For men with these qualifications the opportunity is a splendid one. This work isn't easy; but you can do it and earn a good salary. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month, or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter to The Washington Farmer, Review Building, Spokane, Wash.

When you write to advertisers be sure to say that you saw their advertisement in this paper.

LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

Hog Shortage.

County Agent Birch and E. J. Fjlstead were in Buhl and stated to a Herald reporter that after having made a canvass of the territory comprising Twin Falls county and on the north side of the river they learned that few hogs remained on the farm. They said that the Twin Falls tract has only about 20 per cent of the number of hogs kept here under normal conditions and that the north side has but 35 per cent of normal quantity. The alfalfa crop will be shorter this year, said Mr. Birch, because of the fields which have been plowed up and the lateness of the first crop.

Veterinary

Dr. S. B. Nelson

Loses Flesh.—I have a mare that foaled a colt about five months ago. She kept falling off in flesh. I weaned the colt, but she does not pick up. Have been giving her three gallons of grain and what hay she would eat, but lately she will only eat the grain at times. She has plenty of exercise. Have also given her stock tonic.—W. E. I., Elma, Wash.

Answer.—The fact that the mare will not eat is very indefinite symptom upon which to base a diagnosis. She must have some indigestion or possibly she may have some teeth trouble. I can not make a diagnosis. You have, I believe, a very competent veterinarian at Elma and I would advise you to consult him. I regret that I can not be of definite service to you.

Lumpy Jaw—I have a 2-year-old steer that has had a large lump on his jaw for five or six weeks. About two months ago there was a little poke or sack underneath his jaw which I opened and a good deal of pus came out; a week later I opened it again, with the same result; the third time I opened it it would not run any more. I also stuck a knife in the big lump on the side of his jaw, but it just bled. The poke underneath has almost disappeared, but the hard lump has never diminished. It does not seem sore to the touch, in fact he seems to enjoy having it rubbed. His appetite is good, but it bothers him somewhat in chewing.—S. C. L., Clinton, Wash.

Answer—Your animal is affected with lumpy jaw or actinomycosis and the fact that you state that he is bothered in chewing would indicate that the disease has gone so far into the bone that the roots of the teeth are affected. I do not believe that he would yield to medicinal treatment at all and perhaps the only thing that he would yield to would be the radical operation by a competent operator. This operation would require the removal of the teeth infected, and a portion of the jaw. I doubt whether it would pay that he should be operated upon. I think it would be much better if he was destroyed. This type of animal is very dangerous to have about the place because everywhere where the pus drops the germ is left and that means that every animal from one to four or five, according to the number on the place, will become affected every year and it will be a constant source of loss, which in a large number of years will run into a large sum of money.



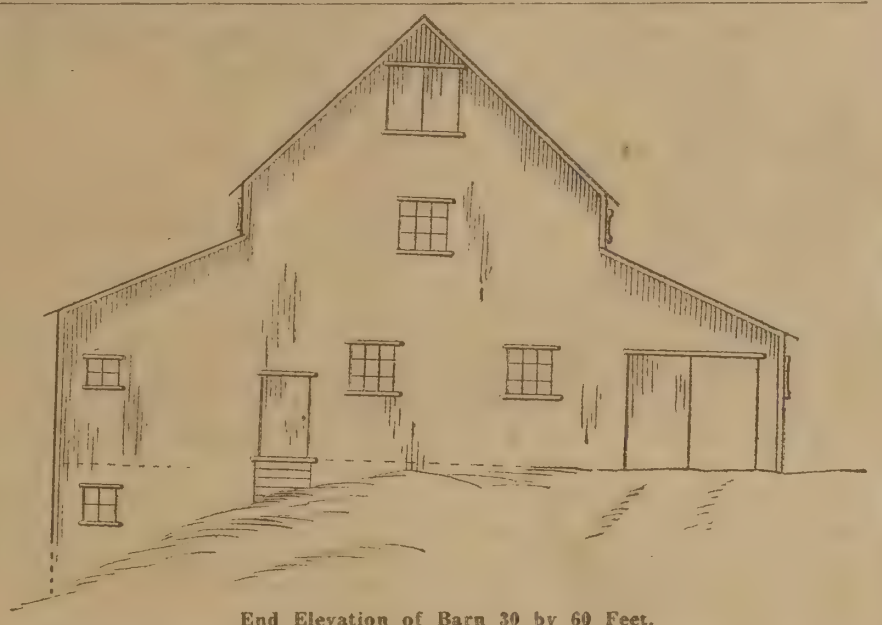
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Central Building. Seattle, Wash.

An All 'Round Barn

Is Built on a Side Hill for Good Drainage

By ROBERT S. DOUBLEDAY

Barns have to be adapted to so many conditions and requirements and fit so many pocket books that there is no "best barn"—for everybody. But I recently built a barn, 30x60 feet, outside dimensions, which is satisfactory enough to me. I believe it has enough good points to be worth describing and that it will meet the needs of a very large number of farmers. In the description to follow I can not refrain from some slight modifications, for you know we build nothing in this world that we would not alter just a trifle, at least.



End Elevation of Barn 30 by 60 Feet.

This barn is built on a slope, or a side hill. I like a side hill barn. There is always good drainage—there is an extra story or half story at very little expense, the basement is always warm in winter and cool in summer, and you can drive in or mow away hay in what is nominally the ground floor but is in reality the second story, and do it handily.

The main part of the barn is 30x30, and there is a 15-foot extension on both the uphill side and the low side.

The basement proper, on the lower side, should be concreted and should have 8-foot walls. It should occupy only the space under the 15-foot extension, and 5 or 6 feet under the main part of the barn for passageway in front of the cattle mangers. The 30x15 foot space in the extension to be in cattle stalls. Entrance for stock at either end, or in the side, according to desired location for the manure pit. The upper part of the 15-foot extension on that side is cut up into five 6-foot sections, four for horse stalls and one used as a passageway and harness room.

Entrance for Horses.

A way into the barn for the horses, and without taking up any barn space and without the undesirable steep incline, is provided for in a wide, substantial platform running along the end of the barn, on the outside, very nearly level with the main floor. This platform passageway is made of six-inch saplings, or roughed timbers, to provide against a slippery passage, and is given a slight slant so as to readily carry off rain and slush. There is a wide door opening onto this platform from the passageway in the rear of the horse stalls, of course, and also a door opening onto it at the end of the wide passageway in front of the horse mangers. There is also a door in the opposite side of the barn at the other end of this passageway, and alongside this door is a stairway going up to the top floor of the barn. This main floor of the barn is subject to a variety of arrangements, but a feed room should be built in somewhere, with a door opening into the passage in front of the mangers.

The posts and studding should be 16 feet, allowing 12 feet for the main floor, and 4-foot side walls to the top story. This top floor may, of course, be omitted altogether and the whole interior of the main part of the barn, except for the grain room and the passageway in front of the mangers, be made one big hay mow.

Slope of One to One.

The roof should have a slope of one to one, which would make the center posts 19 feet high from the top story floor, if a top story is used and if center posts are used. The roofs of the two extensions begin four feet below the eaves of the main roof, allowing upper side walls in which windows may be placed. There are windows, of course, in the ends of the barn and in the wall back of the horse stalls, and in the wall of the basement, back of the cattle stalls.

The 15-foot extension on the high ground side is simply a wide driveway, a place to keep wagons and many tools and from which unloading of hay or grain may be done in the dry. Or this may be made into a place for young stock. There is a wide, sliding door in the middle of the side of the main portion of the barn from this extension.

Underneath the main part of the barn, in front of the cow basement and passageway, there is some space which may be used for storing lumber, or it makes a fine room for hogs—if one wants to keep hogs at the barn—which I do not.

Schutes are provided through the main floor, for hay and feed for the basement. Put railings around these schutes.

Everything is compact and convenient. Stock may be fed, or fastened in, or let out without going around in the stalls at all. There is no wasted room. Large hay doors are provided at either end for horse hay fork or for pitching in.

It is the most satisfactory all 'round barn, to me, that I have seen—but that may be because I planned it—to suit my own ideas and needs.

For convenience in feeding, the floor of the extension part, containing the horse stalls, may be dropped about a foot below the floor level of the main part of the barn. I did that and I like it.

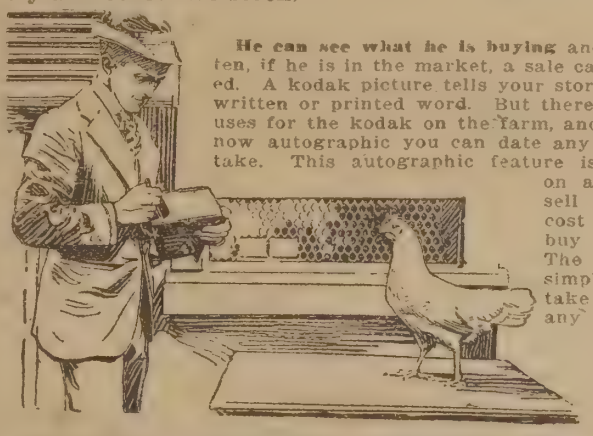
The top story floor may be made to cover only the main floor passageway, in front of the horse mangers, or a little more, if desired, the interior arrangement of this main part of the barn being, as previously stated, adaptable to the individual notions and requirements.

More Stock on Forest Range.

Approved grazing allowances for the national forests during the coming season provide for the pasturing of 8,400,155 sheep, 2,120,145 cattle and horses, and 54,680 swine. These figures, compared with those of last year, represent an approximate increase of 111,000 cattle and horses and a decrease of about 200,000 sheep. Grazing experts of the forest service figure that for purposes of range allotment one cow is equal to five sheep. Consequently the increase of 111,000 cattle and horses is held to be equivalent to a net increase of 355,000 sheep, or of 71,000 cattle, over the total number of stock grazed last year.

Kodak Pictures Will Sell Your Poultry and Live Stock

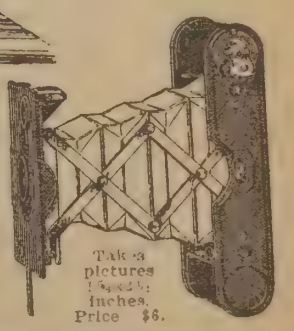
Send your prospective customer a kodak picture of your poultry and other live stock.



He can see what he is buying and nine times out of ten, if he is in the market, a sale can be readily effected. A kodak picture tells your story better than the written or printed word. But there are many other uses for the kodak on the farm, and as every kodak is now autographic you can date any picture that you take. This autographic feature is now obtainable on any kodak that we sell without additional cost to you; so do not buy an old style camera. The new kodaks are simple to operate and take perfect pictures any day in the year.

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Takes pictures 2½x4½ inches. Price $6.

This store is the Complete Kodak Agency of the Northwest—all the latest models carried in stock—Kodaks $6.00 to $106. Brownie Cameras, $1.25, $2.00 and more.

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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

Mites on Chickens

The warm weather brings out great armies of chicken mites. They come from eggs laid by other mites, and it requires a warm temperature to hatch them. Millions of them are now being hatched every day. Poultry-keepers who wish to do their "bit" for the food campaign, can do nothing better than make war on the mites. It will mean more eggs and more food for the consumers and more profit for them.

Look for mites first on the roost perches. They do not bother the fowls during the day but attack them at night on the roost. They gorge themselves with blood from the hen, and crawl back to their hiding places, mostly on the underside of the perches. Rough, unplaned perches offer better hiding places and breeding ground than planed perches. They will also be found on the walls at the ends of the perches, and if not destroyed they will soon be found all over the interior of the house, especially in the cracks or where the dust accumulates. They will also be found on the droppings boards. The nests must also be carefully watched.

There are many ways of killing the mites. Crude carbolic acid with kerosene, one part of the former to three of the latter is an effective spray or paint. Creosote is also effective. Crude petroleum mixed with kerosene one part to four of the crude oil is also good. Among the commercial articles, carbolineum, kreso dip and zenoleum are satisfactory.

Farmers' bulletin 801, United States department of agriculture recommends the following: "Of the several materials that have proved effective, one of the so-called wood preservers, consisting of certain coal-tar products, known as acthracene oil with zinc chlorid added, has given particularly good results. Its repelling power lasts for months. The cost is about $1 a gallon, but twice the quantity may be obtained by reducing with equal parts of kerosene."

Thorough spraying or painting with one of these remedies will rid the poultry house of the mites. After that it will usually be sufficient to make the application to the roosts and nests only. This should be done whenever there is a sign of mites. The spray or paint should be applied early in the day so that it will be dry before the fowls go to roost.

Swat the mites and add to the food supply.

J. D.

Chicks Dying in the Shell.

To the Editor: "To prevent little chicks dying in the shell dip the eggs in warm water three or four days before and again the day that they are to hatch."—Maud Merriam, St. Joe, Idaho.

This will help some in incubators that have considerable ventilation, but it will be better to keep moisture in such machines throughout the hatch. A pan of water or moist sand under the egg tray is the best way to furnish the moisture. As to the amount of moisture required the amount of ventilation the particular machine has should determine.

Saves the Waste.

Some milk is wasted in most families. Skim milk, buttermilk and sour milk is thrown away. Whether sour or sweet, milk is one of the best feeds for chickens. Why not save every pint of it? Those who have no chickens should save it for those who have. Give it to the chicks or hens to drink or mix it in a bran mash. Milk is rich in lime and phosphorus, and puts strength and vigor into the chick.

J. D.

1000 Tons Scrap Iron Wanted

Shipments must not be less than 25-ton cars.

Combine with your neighbors and turn your worn out machinery into ready cash.

Write quick for quotations and shipping instructions.

Pacific Hide & Fur Depot
Joseph Thiebes and C. T. Symmes.
1101 R. R. Ave., Spokane, Wash.

Against Late Turkeys

C. M. Wilson, a turkey raiser, located a few miles north of Caldwell, is pronounced against late turkeys. He says that late birds are not a success, and he, based upon his own experience, would never hatch anything later than June 10, and that May 1st turkeys will add five pounds more than June 1. The poor stuff in his flocks last season were all late birds.

He has not found the artificial brooder a success with turkeys. They easily smother, and do not seem as thrifty. He would not give over 19 eggs to the hen for hatching, and especially cautions against overfeeding the young the first month; also against letting the youngsters range by the irrigation ditches. Too many of them are liable to drown.

A. E. G.

Preserving Eggs.

The Lime Method.—Some experiments have shown that the lime method gives as good results as waterglass for preserving eggs, and it is much cheaper. Dissolve a pound of lime in five gallons of water. Some authorities say two pounds of lime. What is wanted is a saturated solution of lime, or as much lime as the water will hold in suspension. Stir thoroughly and let settle. Then pour off the clear liquid into a wooden or earthen jar or tub. Then put the eggs in each day as they are gathered, the fresher the better. The eggs must be kept covered with the liquid. When filled with eggs to within an inch of the top of liquid, cover with coarse muslin, and spread over it a paste of lime to exclude the air. Keep the eggs in the coolest place in the basement.

Feeding Lawn Clippings.

"How much green food in the form of lawn clippings do you advise to feed chickens? I have access to more than they would eat if given nothing else." D. H. Erickson, Mount Vernon, Wash.

The answer to that is easy. Give them all they will eat every day. It will not do to starve them for several days then give them all they will eat. Give it to them regularly and they will eat just what they want every day. No other green food will be necessary. Feed it when fresh cut. They will not eat as much when it is dry or wilted.

J. D.

Kale for Chickens.

If you have not yet planted some kale for use of the chickens in the summer and early fall it is not too late yet. Nothing will pay a better investment than the planting of kale for poultry. It should have been planted in March or April for summer use, but if it hasn't been done it may be planted now for late summer use. Then plant some seed to make plants for transplanting in July for the winter supply of kale. More kale will mean thousands of dozens of eggs from the hens of western Washington and western Oregon.

J. D.

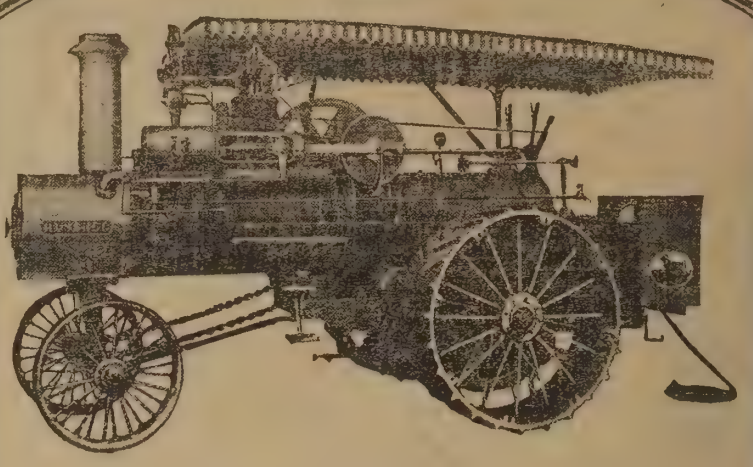
Railroads Will Help.

In a circular letter to all employes of the Oregon Short Line, Union Pacific system M. V. Platt, vice president and general manager, called their attention to the important matter of food preparedness, saying: "I would offer the following suggestion as indicating practical ways in which you may assist in this matter: First, by planting a garden on your own ground, if you have any, otherwise on railroad right of way where suitable, or on vacant lots you might lease for the purpose; second, by urging your neighbors to plant gardens; and, third, by taking up with your commercial clubs or other organizations and urging upon them the desirability of organizing within the limits of their community a concerted plan for carrying on this work. If the railroad company can be of assistance in providing help or giving advice it will be pleased to do so to the fullest possible extent through its various representatives."

Reports Splendid Results.

Mrs. H. J. Cortner and Mrs. Lowery of Payette, Idaho, who advertised mammoth bronze turkeys in The Farmer the past winter, report splendid results. They advertised in seven papers, including one other farm journal, yet fully 90 per cent of their inquiries and practically all their sales were made through The Farmer. They sold over $670 worth of turkeys in Idaho, Oregon, Washington and Montana. The Cortner ranch has been sold, and the ladies have sold their turkeys to C. L. Haworth of Boise. Mrs. Cortner's turkeys have a reputation all over the northwest for size and quality, and Mr. Haworth is fortunate in securing them.—H. A.

"THE OLD RELIABLE RUSSELL LINE"



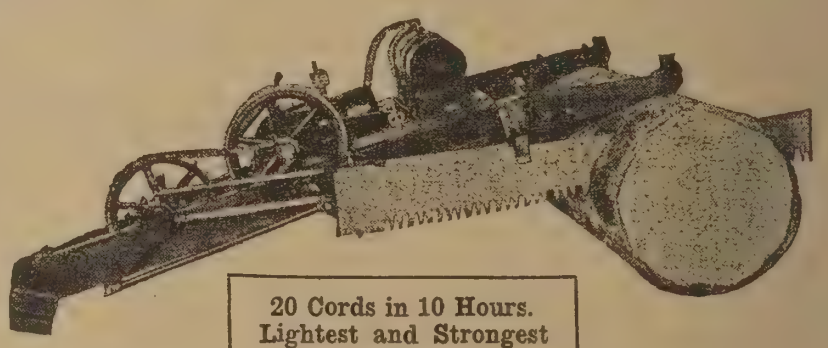
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Now $145.00 4 H. P. Was $165.00



20 Cords in 10 Hours.
Lightest and Strongest Drag Saw.

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Preserve Eggs
Raise More Poultry

The U. S. Department of Agriculture urges the increase of poultry raising.

One hundred million additional pounds wanted this year. Take off one more hatch.

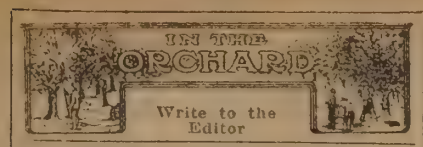
EGG-O-LATUM (***Preserves Eggs 50c for 50 Doz.***)
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Water glass, 15c pt., 25c qt., 75c gal.

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GRANVILLE LOWTHER
Editorial Contributor

Why Should I Spray?

The following unique way of presenting excuses given by growers for not spraying is from the pen of V. I. Safro, who was formerly entomologist at the Oregon Agricultural College and also connected with the California Experiment Station before taking up his work with the Tobacco Products people:

Excuse: My neighbors don't spray, why should I?

Answer: A very frequent excuse. It has as much logic as though the grower were to say, "My neighbors all have the measles, why shouldn't I?" It is the progressive grower in every community who points the way and if your neighbors are not progressive, bring them up to your heights rather than go down to their level. Competition is a factor in agricultural production as well as in other lines of endeavor and the grower who calls to his assistance all possible factors that will help him to put out a larger or better product than his neighbor, will reap the benefit of his progressiveness.

Excuse: I have been growing crops for quite a few years and have never sprayed and yet have made money each year.

Answer: The fact that a grower has made money, notwithstanding his neglect in spraying, is no indication whatever that he might not have made more had he adopted modern methods. To cease activity merely because one is making money or making a profit on his product is as illogical as accepting just any price offered for his product, so long as that price is above the cost of production rather than attempting to obtain the highest price the market affords.

Excuse: I have lost money on my crops. Had I sprayed it would have involved a still greater expense.

Answer: Spraying as an essential part of farm or orchard management passed out of the experimental stage into the practical a long time ago. The slight expe
following up-to-date spraying recommendations brings its returns in many ways and in many times
cost of the item itself. The grade of product is improved, the yield is increased, the plants become hardier. In the case of fruit trees, the health, and therefore the value of the trees in later years, is not impaired as it may be if permitted to be infested with insects or diseases.
the difference between profit and loss may be attributed to proper use of sprays.

Excuse: My trees are not in bearing, therefore it is not necessary to spray.

Answer: In the spraying of trees in orchard and grove, it is not alone the immediate crop that receives the benefit of the spray, but the whole tree. A fruit tree is supposed to become more valuable each year and any care taken of it in its younger period of development, will u.
edly have its effect when the tree becomes self-supporting. Very often the injury done by insects does not stop in one year, but may run through a series of years. The potential value of young trees not yet bearing and the expense involved in bringing them to the point where they become self-supporting, and, profitable, makes it all the more important that they be sprayed properly taken care of in their younger period of development.

Growers who are inclined to neglect spraying because their trees are too young to bear should keep this point in mind: In spraying a young tree in 1917, they are spraying the tree they expect to

of five, 10 and 20 years hence, and the slight expense involved in additional care is certainly worth while.

Excuse: I have noticed the insects, but they don't cause much damage to my crops.

Answer: The grower here fails to take into consideration that the greatest damage done to crops by insects, particularly in orchards, is the decreased yield and the checking tree growth; in other words, the grower does not notice the fruit that is not there; or he doesn't notice the growth and vitality and ability to bear fruit is lower than they would have been had the trees been protected; or, and this is most often the true explanation, the grower has no means whatever of comparing his crops, unsprayed, with a similar crop grown under similar conditions, but sprayed.

Too many growers consider that a certain percentage of culls is "natural" and that an "extra fancy" grade of fruit must necessarily occur to a very slight per cent. In this connection we are reminded of the story of the city boy who was brought up on storage eggs. When he visited a farm in the country and was served with fresh eggs, he complained that he couldn't eat them because they had no flavor.

Excuse: The total crop this year will be a big one and prices probably low; therefore why should I try to increase my yields or grade of fruit by spraying?

Answer: Whether the size of the total crop is large or small, whether the prices are good or bad, it is certainly to the interest of the individual grower to put out as large a yield and as high a grade as possible. The fact that the crop over the country is very large and the prices low, will not be altered by the individual grower cutting down his own output. Some growers take the following attitude and it is a good one: Win or lose, it is best to spray; if for no other reason than to build up the tree, thereby assuring its continuous normal, healthy growth and insuring against insect and disease epidemics.

THE FARM GARDEN

ARTICLE 14.

Growing Beets

Beets make one of the valuable garden crops for both summer and winter use. In many localities of the northwest they can be grown as a succession crop, but require comparatively long growing season to mature two crops.

Beets should be planted in rows some 15 to 18 inches apart for hand cultivation, or 30 to 36 inches apart for horse cultivation. They should stand from three to six inches apart in the row after thinning. They should be planted about one inch deep in a soil not too heavy, and one in which the moisture can be reasonably well conserved.

The young beets make an excellent kind of greens, and the thinnings may be made use of in this way. Many cooks prepare them by using the root as well as the top in preparing the greens.

The round turnip type of beet is best for early and summer use, while the long varieties are best for winter keeping. They must not be allowed to stand in the ground during the winter like parsnips, but must be harvested and stored away in a dry, cool, but not frosty place. Some persons prefer the sugar beet to the ordinary red kind. One may be grown as readily as the other and stored with equal success.

Will Move to Palouse Farm.

E. L. Meeks, who has been a resident of the Harvard district for a number of years, has leased the Robinson farm south of Palouse, Wash., and will move his family to that place at once, and make preparations to put in a spring crop.

I Will Make $500.00 Easy This Fall With—

"—our 20 x 32 Owens Bean and Pea Thresher. Threshed 60 bushels an hour" — T. A. Cox, R. R. No. 1, Midland, Mich. Takes vines just as they come off the field. Separates peas—beans without splitting. Cuts up vines into splendid fodder. Adds 50% to bean or pea grower's profits.

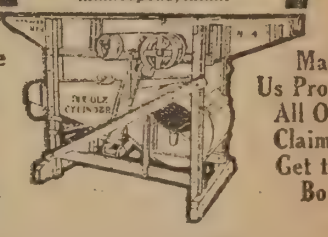
OWENS Double Cylinder
Bean and Pea Thresher

In 4 sizes—a size for every size farm. Pays for itself over and over again in one season. Guaranteed not to split the seed—and to take all from the vines. Saves all waste. Sold on easy payments if you desire.

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A full supply of bee supplies on hand. Ask for catalog.

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ASPHALT BASE—THE CHOICE OF EXPERTS

Factory experts, and leading coast distributors for all makes of cars, testify that Zerolene, correctly refined from California asphalt-base crude, gives perfect lubrication with least carbon deposit.

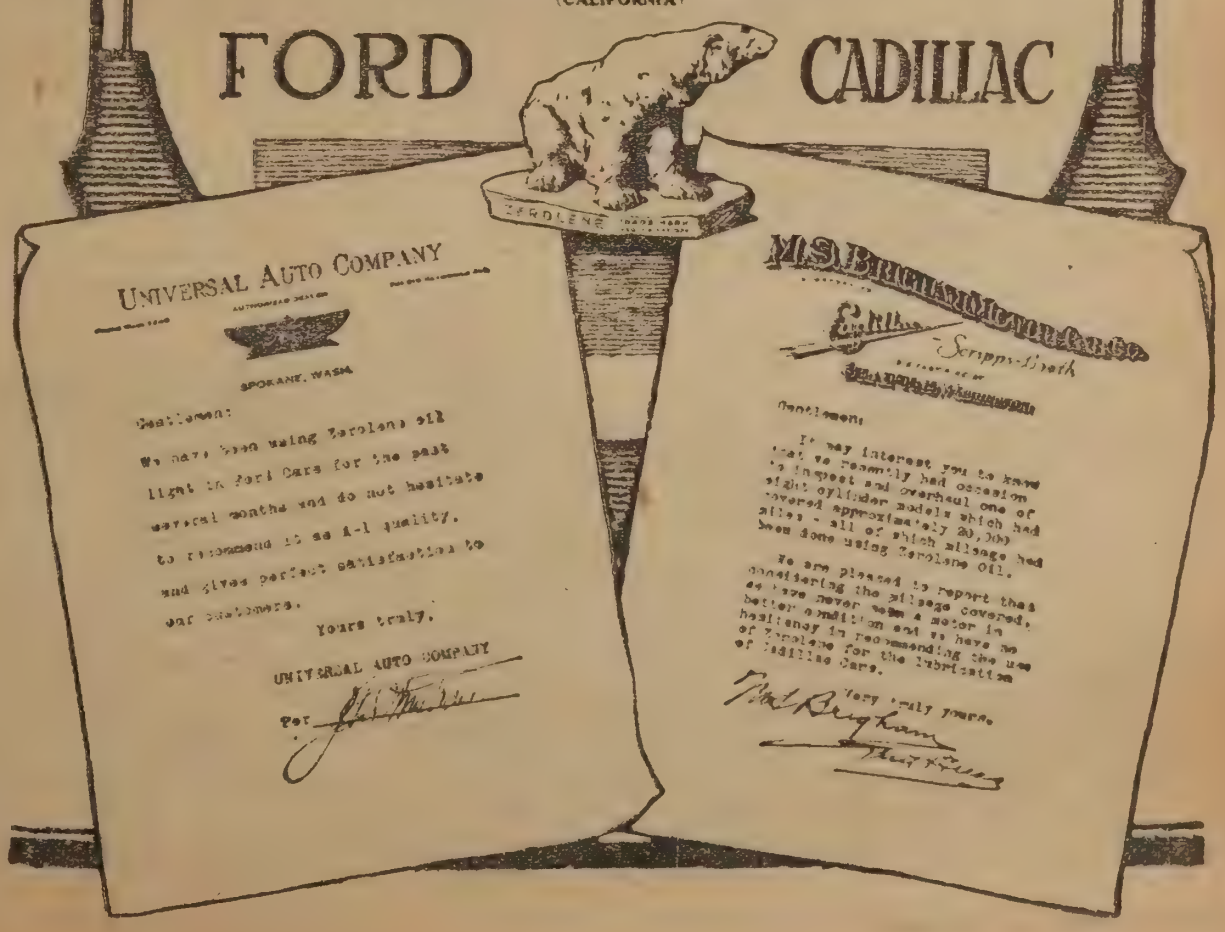
Less wear and more power because Zerolene keeps its lubricating body at cylinder heat. Less carbon because, being made from asphalt-base crude, it burns clean and goes out on exhaust.

Zerolene is the oil for *your* car—whatever the make—the oil for all types of automobile engines. For correct grade get our lubrication chart covering your car

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STANDARD OIL COMPANY
(CALIFORNIA)

FORD CADILLAC



A Little Town With a Big Chautauqua

Washington Village With Three Hundred Inhabitants Successfully Holds Six-Day Affair

Three years ago the village of La Crosse, Whitman county, Wash., won for itself the distinction of being the smallest town in the United States to hold a six-day Chautauqua. It continues to hold the Chautauqua, but it can no longer claim the record it won that first year, for it has doubled in population since them.

This story is told not to exploit La Crosse nor to entertain the reader, but rather to indicate to a hundred or so other small towns in the northwest how they can do likewise—provide a great, entertaining and educational attraction for their people and the country folk around them, stimulate the community spirit and bind town and country together in a way that modern progression requires.

How to Go About It.

Somebody must grasp the idea before a community can have a Chautauqua. At La Crosse that man was E. S. Knowlton, one of the leading business men of the little town, which then had a population of about 300 souls. Mr. Knowlton had heard that Chautauquas were a good thing, and it sounded reasonable to him. So he confided the idea to his friends.

Most of them were willing. Quite a few really liked the suggestion. Eighteen believed in it and joined with him in the formation of an association, making him secretary-treasurer. They also signed with him a contract with a Chautauqua company for a six-day program to be furnished on a guarantee of $1000, which meant a personal guarantee of $52.65 for each of the 19 signers.

The dates were fixed for a week just before the Fourth of July, the celebration of which was dispensed with in view of the greater event.

Twelve Hundred Attend.

The company came and conquered. Notwithstanding that the population of the town was only 300, one of the programs drew an attendance of 1200 persons, four times the population of the town itself. The people for 25 miles around came in and were treated to a series of 12 high-class entertainments, some humorous, some musical, some heavy, but all both entertaining and educational. There were comic lectures, musical programs (including one 24-piece band) and addresses by men of national reputation.

The 19 signers of the guarantee paid a deficit of $2 each, the net receipts totaling $962.

But La Crosse and the community about it were aroused. The Chautauqua was contracted for a second season. Whereas there were 19 persons willing to sign the guarantee the first year 40 willingly signed up the second, and whereas there was a deficit of a few dollars the first year, there was a small profit the second.

This year the third series of entertainments is contracted for, and there are 100 men guaranteeing the $1000, of which number 60 are farmers living within a radius of 25 miles of La Crosse.

The first year the committee worked hard to sell the allotted number of season tickets. Last year they did not have to work much. This year the people are hunting up the members of the committee and purchasing their tickets weeks in advance of the dates—June 28 to July 3.

An Annual Affair.

"La Crosse would not do without its Chautauqua now under any consideration," said Mr. Knowlton to a representative of The Farmer recently. "It is our great annual educational and entertainment feature. It has brought the country and the town together as nothing else could have done.

"I should say that three-fourths of the patronage is by country people who come in for miles around. Many of them come in their automobiles 10 or 20 miles, attend the afternoon performance, return to their chores and are back for the evening entertainment.

"We begin with a rousing number—something strictly entertaining and not too heavy. Gradually we work up till the last couple of days include big educational features, like lectures by such men as Senator Vardaman of Mississippi or Victor Murdock of Kansas This year Senator Burkett of Nebraska is to deliver a lecture. And it is a fact that the people enjoy these larger things even more than the lighter features."

A Lyceum Course Also.

It is hardly fair to say that the Chautauqua is "the" big annual attraction, for each winter a lyceum course is given by one of the big national companies. Its programs are given in the evenings, there being five such entertainments during the winter evenings some two weeks apart. Though less pretentious, the lyceum has proved itself as successful in its field as the Chautauqua, and the people in and about La Crosse would be almost as loath to let a winter pass without it as to have a summer season go by without the Chautauqua. The lyceum course is given for a guarantee of $400, and the patronage assures those who sign the contract that no deficit need be feared.

Mr. Knowlton, who took the leading part in securing the Chautauqua and the lyceum for LaCrosse, told the Farmer that he would be glad to give any community interested the result of his experience in order that such community might undertake to hold like entertainments and make a success of them. Scores of little towns in the northwest could do it, and it is one very practical way to build up the spirit of unity, which is a vital need of so many towns and their surrounding communities.

Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER XIII.

The "old bachelor's" place in society of Eastern Washington of 25 to 35 years ago.

One of the important social "facts" in pioneer eastern Washington of 25 to 30 years ago was the "old bachelor." An old bachelor was not always old—he might by anywhere from 35 to 40 and rarely were they above 45 or 50. Most of these men had come into the new country, took up their claims, and settled down in a small, one-room cabin with a cellar outside. Men greatly outnumbered the women, hence, mating off in pairs was difficult. Occasionally an old bachelor would "go east" and marry a sweetheart of his youth who, in her youth maybe, had married some one else, and had since become a widow. One or two old bachelors of my acquaintance "advertised" for a mate, and got one, and the others profited by their example, and kept clear of this route to connubial bliss.. Among all but the "soft ones" among the bachelors, advertising for a wife was regarded as an indication of idiocy.

A few of the old bachelors married young girls of the neighborhood; but this was regarded as hazardous.

"There's old Dave Binak, going to marry Hettie Williams, and she's just a kid," remarked one of our neighbor women. "Why, he'll soon have one foot in the grave, and she'll still be as spry as a colt, wanting to go to all the dances and things! A fine time she'll have pulling him loose from the fire in cold weather! Mark my words—they won't agree!"

They didnt.

One of our neighbor girls who had been assiduously courted by a bevy of old bachelors and had turned them all down, gave her reason for this wholesale rejection of suitors:

"An old bachelor is a good deal like an outlaw horse that has been lose on the range for 10 years without being corraled," she explained. "Put him in a corral and he'll either smash through or jump over. Put 'blinkers' on him and he'll either balk or kick up. You can't break 'em gentle when they've been loose on the range too long."

One of our bachelor neighbors who was confirmed in the ways of bachelorhood and vowed that he never would marry under any conditions was he whom we called "Missouri Pete." In the space of a few years his nickname by a process of evolution became "Misroury" minus the Pete; and later, simply "Misery." I knew him and greeted him as Misery..

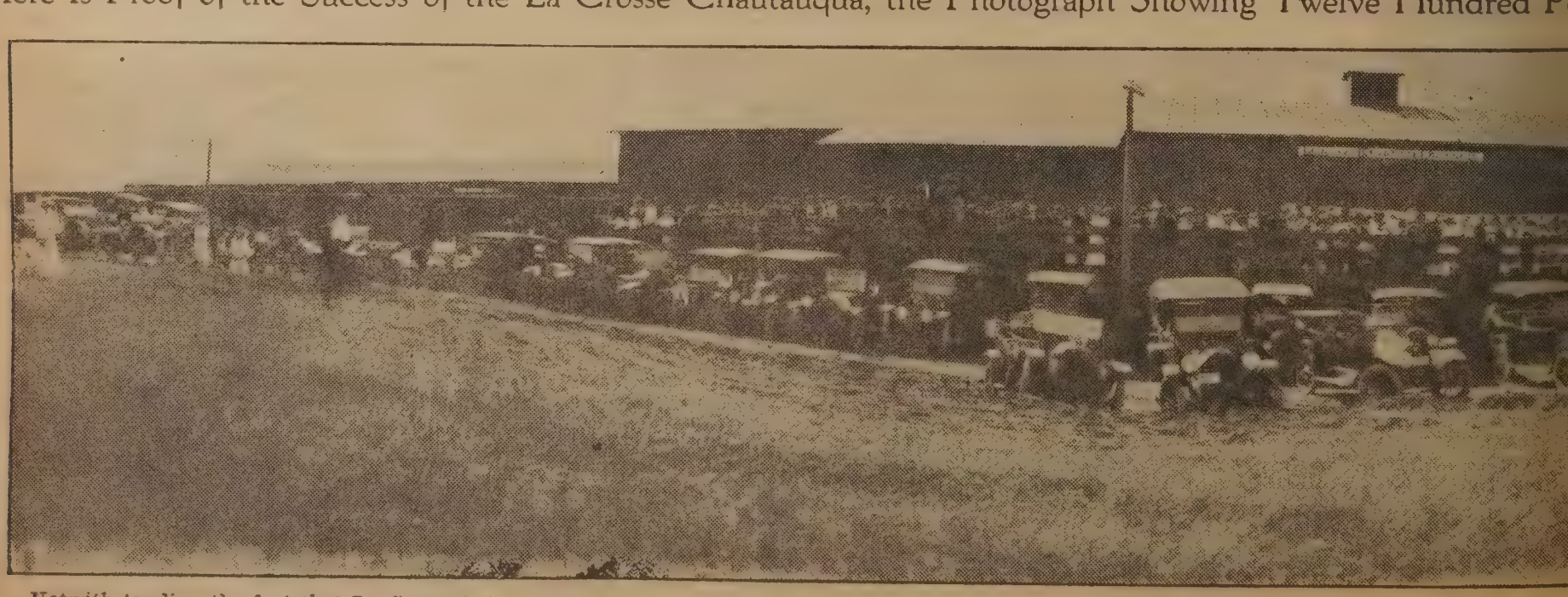
Missouri Pete, that is, Misery, was nicknamed as indicated because he was always complaining about his bad stomach. He was a great reader of patent medicine literature, and in the consumption of patent medicine was simply omniverous. He was always finding a new medicine which was just what his ailing stomach needed. His yard was littered with bottles which he had emptied. Misery must have had a constitution of iron, else he could not have consumed with impnuity, such vast quantities of patent medicine.

Rather late in the period during which I knew him, he had found a medicine which he preferred to all others, and was known as "bull bitters." Bull bitters was not greatly different from that atrocious liquor, "Injun whisky." It may have contained less alcohol, and perhaps was flavored with medicinal bark, herbs, or the like.

Misery scorned whisky. In pioneer Coulee City, the office of the Star Livery barn and Hutton's saloon rivaled each other as social centers of the town, and on many winter days Misery could be found in one place or the other. If any one passed a "bottle" at the stable, or treated the crowd at the saloon, Misery declined, saying his stomach had just been troubling him

(Continued on page twenty-two.)

Here Is Proof of the Success of the La Crosse Chautauqua, the Photograph Showing Twelve Hundred P



Notwithstanding the fact that La Crosse is in the center of a strictly farming country, the photograph herewith shows no horse vehicle, but auto

All the World's a Stage, and All the Men and Women Merely Players

Chieftains of French Armies



Here are three active war chieftains of the armies of France. General Petain has been named gneralissimo of the armies, with supreme command of all the armies in the field. General Foch, who commanded the French center at the battle of the Marne, has been named to succeed Petain as chief of staff. General Nivelle will have command of certain great army groups. General Joffre remains military adviser to the French war council.

Youngest Licensed Operator



Copyrighted by International.

In the above picture is shown Walter Siddell, Washington's wireless prodigy. He is said to be the youngest licensed wireless operator in the United States. Walter is but 14 years of age, yet he holds a first-class wireless operator's license granted him by the federal government. Since the declaration of war with Germany he has offered his services in this capacity to the war department of the United States.

On Italian Mission.



Copyrighted by International.

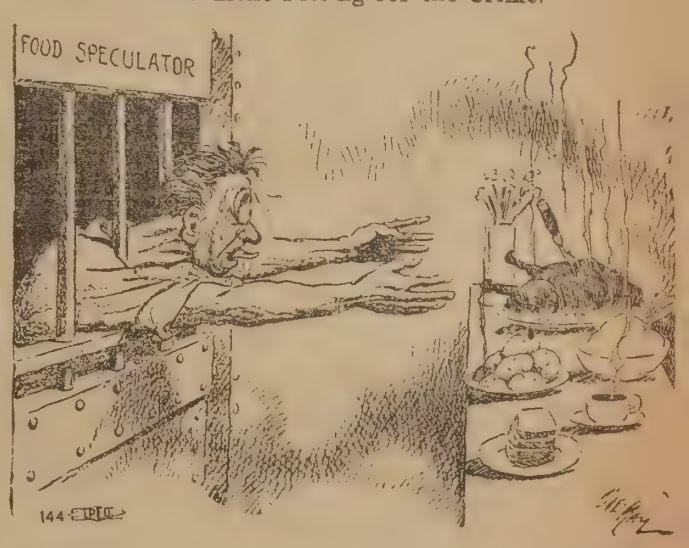
Signor Enrico Arlotta, the minister of marine and transportation of the Italian cabinet, is here shown. He is a member of Italy's war mission, which is now in Washington, D. C., for discussions with American officials along the general lines of war cooperation. The scope of the work outlined for the envoys will take into account many peculiar problems which confront the government of Rome.

When They Met as Good Friends



The above photograph was taken in the year of 1910, when Roosevelt was in Germany. On this occasion the ex-president of the United States and the ruler of Germany met as good friends. The picture shows the kaiser and Colonel Theodore Roosevelt reviewing a large body of German troops after a sham battle which was staged for the special benefit of the ex-president of the United States.

Punishment Fitting for the Crime.



—The Detroit Journal.

t an Afternoon Program of the Series Held in the New Warehouse of the La Crosse Elevator Company



. While the automobile played a great part in the success of the Chautauqua, search of stables and grounds would reveal many buggies and hacks.

Our "Want" Ads Can Help You Get What You Want

Testimony of Others Who Have Used Our "WANT" Ads:

Results From Poultry Ad.

"As to my ad in The Farm Trio, I had splendid results; in fact, more than I could supply."—A. O. Laabs, Coeur d'Alene, Idaho.

17 Poland Chinas Sold in Week.

"It pays to advertise. Sold seventeen last week, all registered stock, for breeding purposes. Nothing cheap about my stuff except the price."—F. P. Farrington.

Sells His Seed Corn.

"I have a great deal of confidence in the Trio as an advertising medium, as I have just had some success in selling some seed corn through the three papers. Enclosed you will find my check for $7.42, covering the ad for January. Please run this ad as per my letter of January 25, through February."—L. F. Courtales, Oroville, Wash.

Ad Sells $1000 Worth of Live Stock.

"We feel more than pleased with the results secured so far through our advertising in your papers. We have sold to buyers in these states to the amount of $1000 in the last four months, every one having mentioned one or another of your papers."—Pomeroy & Son, Scappoose, Ore.

Best for Selling Turkeys.

"Results from my turkey ad in The Farm Trio: Aside from one local order all shipments have been one, two or three birds in a shipment, going to all parts of Washington, Oregon and Idaho, and some to Montana. We have been carrying ads in six or seven weeklies, and can safely say that 85 per cent of our inquiries come from The Farm Trio."—Mrs. H. J. Cortner, Payette, Idaho.

Sells Farm and Raw Lands.

"No doubt it will please you to know that the classified 'want' ad service of your three state papers has been productive of very good results for us. Your papers are bringing us a constant stream of good, live inquiries from all three states, which shows plainly that a good proportion of your subscribers in all sections of Washington, Oregon and Idaho are always on the lookout for promising real estate investments and that they must watch your 'want' ad pages pretty closely for legitimate snaps in farms, raw lands and city property."—J. Melvin Thomas & Co., Spokane, Wash.

Do You Want to Buy or Sell a Farm?

Do You Want to Buy or Sell Live Stock, Machinery, Seed, Poultry?

If you are in the market for any of these, or if you want to find buyers for some of your stock or products, try a "want" ad with us.

Every time your ad is printed in this paper it will also appear on the "want" ad page of the two other big state papers of the Pacific northwest, thus bringing you into communication with thousands of prospective buyers or sellers in every section of Washington, Oregon and Idaho.

Examples showing cost of different sized "WANT" ads inserted in The Washington Farmer, The Oregon Farmer and The Idaho Farmer.

(2 LINES.)

FOR SALE—43 LINCOLN AND SHROP ewes with lambs. P. C. Jensen, Ilo, Ida.

Cost of 4 insertions, $2.28.

(3 LINES.)

W. S. C. STUDENT WANTS A YEAR'S DIversified farm work, beginning June 20. O. A. F., 361 College Station, Pullman, Wash.

Cost of 4 insertions, $3.42.

(4 LINES.)

FOR SALE, OR EXCHANGE FOR SMALLer place—My 552-a. stock and grain ranch, 3 miles to town. Address owner, R. E. Watner, Crawfordsville, Oregon.

Cost of 4 insertions, $4.56.

(5 LINES.)

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

Cost of 4 insertions, $5.70.

(6 LINES.)

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 141-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, Ore.

Cost of 4 insertions, $6.84.

Send Your Want Ad Orders to

THE WASHINGTON FARMER

Review Bldg., Spokane, Wash.



WHEN KNIGHTHOOD WAS IN FLOWER



or, the Love Story of Charles Brandon and Mary Tudor, the King's Sister, and Happening in the Reign of His August Majesty, King Henry the Eighth.

By EDWIN CASKODEN (Charles Major).

Copyright, 1898, The Bobbs-Merril Co.

CHAPTER XXI.

Upon our return to England I left Jane down in Suffolk with her uncle, Lord Bolingbroke, having determined never to permit her to come within sight of King Henry again, if I could prevent it. I then went up to London with the two-fold purpose of seeing Brandon and resigning my place as master of the dance.

When I presented myself to the king and told him of my marriage, he flew into a great passion because we had not asked his consent. One of his whims was that every one must ask his permission to do anything; to eat, or sleep, or say one's prayers; especially to marry, if the lady was of a degree entitled to be a king's ward. Jane, fortunately, had no estate, the king's father having stolen it from her when she was an infant; so all the king could do about our marriage was to grumble, which I let him do to his heart's content.

"I wish also to thank your majesty for the thousand kindnesses you have shown me," I said, "and, although it grieves me to the heart to separate from you, circumstances compel me to tender my resignation as your master of dance." Upon this he was kind enough to express regret, and ask me to reconsider; but I stood my ground firmly, and then and there ended my official relations with Henry Tudor forever.

Upon taking my leave of the king I sought for Brandon, whom I found comfortably ensconced in our old quarters, he preferring them to much more pretentious apartments offered him in another part of the palace. The king had given him some new furnishings for them, and as I was to remain a few days to attend to some matters of business, he invited me to share his comfort with him, and I gladly did so.

Those few days with Brandon were my farewell to individuality. Thereafter I was to be so mysteriously intermingled with Jane that I was only a part—and a small part at that I fear—of two. I did not, of course, regret the change, since it was the one thing in life I most longed for, yet the period was tinged with a faint sentiment of pathos at parting from the old life that had been so kind to me, and which I was leaving forever. I say I did not regret it, and though I was leaving my old haunts and companions and friends so dear to me, I was finding them all again in Jane, who was friend as well as wife.

Mary's letter was in one of my boxes which had been delayed, and Jane was to forward it to me when it should come. When I told Brandon of it, I dwelt with emphasis upon its bulk, and he, of course, was delighted, and impatient to have it. I had put the letter in the box, but there was something else which Mary had sent to him that I had carried with me. It was a sum of money sufficient to pay the debt against his father's estate, and in addition, to buy some large tracts of land adjoining. Brandon did not hesitate to accept the money, and seemed glad that it had come from Mary, she, doubtless, being the only person from whom he would have taken it.

One of Brandon's sisters had married a rich merchant at Ipswich, and another was soon to marry a Scotch gentleman. The brother would probably never marry, so Brandon would eventually have to take charge of the estates. In fact, he afterward lived there many years, and as Jane and I had purchased a little estate near by, which had been generously added to by Jane's uncle, we saw a great deal of him. But I am getting ahead of my story again.

The d'Angouleme complication troubled me greatly, notwithstanding my faith in Mary, and although I had resolved to say nothing to Brandon about it, I soon told him plainly what I though and feared.

He replied with a low, contented little laugh.

"Do not fear for Mary; I do not. That young fellow is of different stuff, I know, than the old king, but I have all faith in her purity and ability to take care of herself. Before she left she promised to be true to me, whatever befell, and I trust her entirely. I am not so unhappy by any means as one would expect. Am I?" And I was compelled to admit that he certainly was not.

So it seems they had met, as Jane and I suspected, but how Mary managed it I am sure I can not tell; she beat the very deuce for having her own way, by hook or by crook. Then came the bulky letter, which Brandon pounced upon and eagerly devoured. I leave out most of the sentimental passages, which, like effervescent wine, lose flavor quickly. She said, in part:

"To Master Brandon:

"Sir and Dear Friend, Greeting: After leaving thee, long time had I that mighty grief and dole within my heart that it was like to break; for my separation from thee was so much harder to bear even than I had taken thought of, and I also doubted me that I could live in Paris, as I did wish. Sleep rested not upon my weary eyes, and of a very deed could I neither eat nor drink, since food distasted me like a nausea, and wine did strangle in my throat. This lasted through my journey hither, which I did prolong upon many pretexts, nearly two months, but when I did at last rest mine eyes for the first time upon this King Louis' face, I well knew that I could rule him, and when I did arrive, and had adjusted myself in this Paris, I found it so easy that my heart leaped for very joy. Beauty goeth so far with this inflammable people that easily do I rule them all, and truly doth a servile subject make a sharp, capricious tyrant. Thereby the misfortune which hath come upon us is of so much less evil, and is so like to be of such short duration, that I am almost happy—but for lack of thee—and sometimes think that after all it may verily be a blessing unseen.

"This new, unexpected face upon our trouble hath driven the old gnawing ache out of my heart that I love to be alone, and dream, open-eyed, of the time, of a surety not far off, when I shall be with thee. * * * It is oft-times sore hard for me, who have never waited, to have to wait, like a patient Griselda, which of a truth I am not, for this which I do so want; but I try to make myself content with the thought that full sure it will not be for long, and that when this tedious time hath spent itself, we shall look back upon it as a very soul-school, and shall rather joy that we did not purchase our heaven too cheaply.

"I said I find it easy to live here as I wish, and did begin to tell thee how it was, when I ran off into telling of how I long for thee: so I will try again. This Louis, to begin with, is but the veriest shadow of a man, of whom thou needst have not one jealous thought. He is abed of sickness most of the time, of his own accord, and if, perchance, he be but fairly well a day or so, I do straightway make him ill again in one way or another, and, please God, hope to wear him out entirely ere long time. Of a deed, brother Henry was right; better had it been for Louis to have married a human devil than me, for it maketh a very one out of me if mine eyes but rest upon him, and thou knowest full well what kind of a devil I make—brother Henry knoweth, at any rate. For all this do I grieve, but have no remedy, nor want one. I sometimes do almost compassionate the old king, but I can not forbear, for he turneth my very blood to biting gall, and must e'en take the consequences of his own folly. Truly he is wild for love of me, this poor old man, and the more I hold him at a distance the more he fondly dotes. I do verily believe he would try to stand upon his foolish old head, did I but insist. I sometimes have a thought to make him try it. He doeth enough that is senseless and absurd, in all conscience, as it is. At all of this do the courtiers smile, and laugh, and put me forward to other pranks; that is, all but a few of the elders, who shake their heads, but dare do nothing else for fear of the dauphin, who will soon be king, and who stands first in urging and abetting me. So it is easy for me to do what I wish, and above all to leave undone that which I wish not, for I do easily rule them all, as good Sir Edwin and dear Jane will verify. I have a ball every night, wherein I do make a deal of amusement for every one by dancing La Volta with his majesty until his heels, and his poor old head, too, are like to fall off. Others importune me for those dances, especially the dauphin, but I laugh and shake my head and say that I will dance with no one but the king, because he dances so well. This pleases his majesty mightily, and maketh an opening for me to avoid the touch of other man, for I am jealous of myself for thy sake, and save and garner every little touch for the. * * * Sir Edwin will tell you I dance with no one else and surely never will. You remember well, I doubt not, when thou first did teach me this new dance. Ah! how delightful it was! and yet how at first it did frighten and anger me. Thou canst not know how my heart beat during all the time of that first dance. I thought, of a surety, it would burst; and then the wild thrill of frightened ecstacy that made my blood run like fire! I knew it must be wrong, for it was, in truth, too sweet a thing to be right. And then I grew angry at thee as the cause of my wrong-doing, and scolded thee, and repented it, as usual. Truly didst thou conquer, not win me. Then afterward, withal it so frightened me, how I longed to dance again, and in no way stay myself from asking. At times could I hardly wait till evening fell, and when upon occasion thou didst not come, I was so angry I said I hated thee. What must thou have thought of me, so forward and bold! And that afternoon! Ah! I think of it every hour, and see and hear it all, and live it o'er and o'er, as it sweeter grows with memory's ripening touch. Some moments there are that send their glad ripple down through life's stream

(Continued on the following page.)

Don't Let Pests Destroy Crops

Diligent Warfare Against Insects and Fungi Is Needed

By T. O. MORRISON.

At this time, when so many of us are urging the planting of increased acreage of the various staple food crops in order to secure a plentiful supply of food for another year, I believe that many of us may probably overlook some of the very important factors that enter into the essentials for growing a maximum crop on the ordinary acreage that has been heretofore planted.

In this connection I am thinking of the great loss due annually to the ravages of insects and fungi, and that much of this loss could be averted if greater care were exercised on the part of the planter. Think what it would mean to wheat ranchers in crop production and wealth if the loss from smut could be averted or the total loss reduced by one-half!

Imagine, if you can, what would be the result if every one planting a crop of any kind, would adopt and use every possible precaution in the selection of the seed and in treating it, to be assured that the disease would not be transmitted to the crop through this means. How many potato growers in this great potato growing state observe, and how many ignore the principles of disease control by examining their seed for disease. If there is any one crop wherein disease control can be marked up against the cleanliness or the diseased condition of the seed planted, it is our common old standby, the potato crop.

The fusarium wilt disease of potatoes can be detected by clipping off the stem end of every potato to be planted, and if potatoes infected with this disease are planted it is almost an absolute certainty that the new crop will be diseased. Great loss is sure to follow in storage as a result of this disease, and will mean that thousands of tons will spoil and be unfit for human food. Therefore in order to be assured of a good supply of potatoes next fall, that will stand up in storage, every planter should most diligently inspect his seed and discard any potatoes infected with fusiarum wilt.

The harmless looking rhizoctonia disease (dirt that won't rub off) does not interfere with the keeping quality of the stored potatoes. Its serious effects, in seasons such as the coming one, will be on account of its peculiar characteristics of attacking the buds of the root stems where it prevents the development into potatoes of a certain per cent of buds that would ordinarily develop into potatoes.

In reducing the crop tonnage rhizoctonia becomes one of our most effective enemies in times like this when it is the total amount of food that every one is clamoring for.

Horses for the First Million Men

By E. L. POTTER.

Wayne Dinsmore of the Percheron Society of America has compiled some interesting figures on the equine requirements of an army of 1,000,000 men. A regiment of cavalry requires 1728 horses and mules, a regiment of infantry 212 horses and mules and a regiment of artillery 1189. It is generally understood that there will be about 500 regiments of infantry, 125 of artillery and 100 of cavalry. In view of the great use of artillery in modern warfare the proportion of artillery may be increased over that estimated. It might be assumed that cavalry is less used in Europe and that less than the usual proportion might be used in the present emergency. We can not forget, however, the Mexican situation and the necessity for preparedness in that direction. Every one will understand that cavalry is the big need on the Mexican border and that infantry and 16-inch artillery would hardly get much chance to fight a Mexican bandit. Mr. Dinsmore therefore figures that it will require about 350,000 horses and mules in addition to what the army already has to equip the first million men.

Something of what this means is shown by the fact that we have exported since the beginning of the war and up to March 1, 1917, a total of 1,142,118 horses and mules, in other words it will take to equip this million men of our own one-third as many horses as we have sent to Europe. As compared with the total number of horses in the United States the army will require one out of every 60.

The present method of buying by contract is especially expensive and unsatisfactory, more so for the United States than for the allies. Contractors can never be certain just what horse will be accepted, and every one rejected means a heavy loss. There is always a sentiment against buying rejected horses, and they must be sacrificed. Furthermore, the expenses of buying and shipping has been entirely wasted. The proper way would be to buy these horses direct from the producers. In this way the moment the horse left the producer's hands he would be directly on the road to the remount stations and no unnecessary expense need be incurred. Of course, contractors' profits would be saved, but that does not amount to much. Some have made big profits and others have had heavy losses. On the average, dealers and contractors have only made wages and expenses, so there would be no saving on that score.

The big saving would be the waste of buying and handling rejects. It has been a common practice for contractors to ship all horses rejected at one inspection point to another inspection and try to pass them there. A considerable number of rejects will pass under the eye of another officer. This may be repeated several times.

Another waste is the uncertainty of the number the United States inspectors will take. Buyers often come in with a lot of good horses well bought, only to find inspections temporarily closed down. He must either sell elsewhere and at a loss or must wait on heavy expense until inspection. In either case his loss is no one else's gain.

Another thing to be considered is that the government has never paid a profitable price for horses. Even in war times when horses are needed most the prices seldom justify raising horses for that especial purpose. Today horses are the cheapest animals on the farm. Good draft horses would have to be worth $700 a head to be in line with sheep or hogs. A common grade sow is now worth the price of a cavalry horse.

When Knighthood Was in Flower

BY EDWIN CASKODEN

(Continued from the preceding page.)

to the verge of the grave, and truly blest is one who can smile upon and kiss these memory waves, and draw from thence a bliss that never fails. But thou knowest full well my heart, and I need not tease thee with its outpourings.

"There is yet another matter of which I wish to write in very earnestness. Sir Edwin spoke to me thereof, and what he said hath given me serious thought. I thank him for his words, of which he will tell thee in full if thou but importune him thereto. It is this: The Dauphin, Francis d'Angouleme, hath fallen desperately fond of me, and is quite as importunate, and almost as foolish as the elder lover. This people, in this strange land of France, have, in sooth, some curious notions. For an example thereto: No one thinks to find anything unseeming in the dauphin's conduct, by reason of his having already a wife, and more, that wife the Princess Claude, daughter to the king. I laugh at him and let him say what he will, for in truth I am powerless to prevent it. Words can not scar even a rose leaf, and will not harm me. Then, by his help and example I am justified in the eyes of the court in that I so treat the king, which otherwise it were impossible for me to do and live here. So, however much I may loathe them, yet am I driven to tolerate his words, which I turn off with a laugh, making sure, thou mayest know, that it come to nothing more than words. And thus it is, however much



The widdowed queen was a prisoner in her own apartment.

I wish it not, that I do use him to help me treat the king as I like, and do then use the poor old king as my buckler against this duke's too great familiarity. But my friend, when the king comes to die then will I have my fears of this young Francis d'Angouleme. He is desperate for me, and I know not to what length he might go. The king can not live long, as the thread of his life is like rotten flax, and when he dies thou must come without delay, since I will be in deadly peril. I have a messenger waiting at all hours ready to send to thee upon a moment's notice, and when he comes waste not a precious instant; it may mean all to thee and me. I could write on and on forever, but it would be only to tell three o'er and o'er that my heart is full of thee to overflowing. I thank thee that thou hast never doubted me, and will see that thou hast hereafter only good cause for better faith. MARY, Regina."

"Regina!" That was all. Only a queen! Surely no one could charge Brandon with possessing too modest tastes.

It was, I think, during the second week in December that I gave this letter to Brandon, and about a fortnight later there came to him a messenger from Paris, bringing another from Mary, as follows:

"Master Charles Brandon:

"Sir and dear friend, greeting—I have but time to write that the king is so ill he can not but die ere morning. Thou knowest that which I last wrote to thee, and in addition thereto I would say that although I have, as thou likewise knowest, my brother's permission to marry whom I wish, yet as I have his one consent it is safer that we act upon that rather than be so scrupulous as to ask for another. So it were better that thou take me to wife upon the old one rather than risk the necessity of having to do it without any. I say no more, but come with all the speed thou knowest. MARY."

It is needless to say that Brandon started in haste for Paris. He left court for the ostensible purpose of paying me a visit and came to Ipswich, whence we sailed.

The French king was dead before Mary's message reached London, and when we arrived at Paris, Francis I. reigned on the throne of his father-in-law. I had gussed only too accurately. As soon as the restraint of the old king's presence, light as it had been, was removed, the young king opened his attack upon Mary in dreadful earnest. He begged and pleaded and swore his love, which was surely manifest enough, and within three days after the old king's death offered to divorce Claude and make Mary his queen. When she refused this flattering offer his surprise was genuine.

"Do you know what you refuse?" he asked in a temper. "I offer to make you my wife—queen of fifteen millions of the greatest subjects on earth—and are you such a fool as to refuse a gift like that, and a man like me for a husband?"

"That I am, your majesty, and with a good grace. I am queen of France without your help, and care not so much as one penny for the honor. It is greater to be a princess of England. As for this love you avow, I would make so bold as to suggest that you have a good, true wife to whom you would do well to give it all. To me it is nothing, even were you a thousand times the king you are. My heart is another's, and I have my brother's permission to marry him."

"Another's? God's soul! Tell me who this fellow is that I may spit him on my sword."

"No! no! you would not: even were you as valiant and grand as you think yourself, you would be but a child in his hands."

Francis was furious, and had Mary's apartments guarded to prevent her escape, swearing he would have his way.

(To be continued in the next issue.)

Necessary to Disk

To the Editor: Should alfalfa which has been infested with bluegrass or other grasses be disked now, or is there a better treatment?

MRS. C. H. P.

Leonard Hegnauer, extension specialist in soils and crops at the state college of Washington, answers the above question as follows:

Where bluegrass and other grasses are getting into alfalfa, it is necessary to disk or spring tooth the alfalfa in order to free it from these grasses. This disking might well be done early this spring as soon as the ground is in condition to work. It must not be done, of course, as long as the ground is wet, since if disking is done at this time the ground will bake and the alfalfa will be injured rather than benefitted by the treatment. Thoroughly working the ground in this way will greatly lessen the danger from weeds and grasses and the cultivation will help to strengthen the alfalfa plants and improve the land. If danger from weeds continues, disk the alfalfa again after the first cutting.

To Preserve Harness.

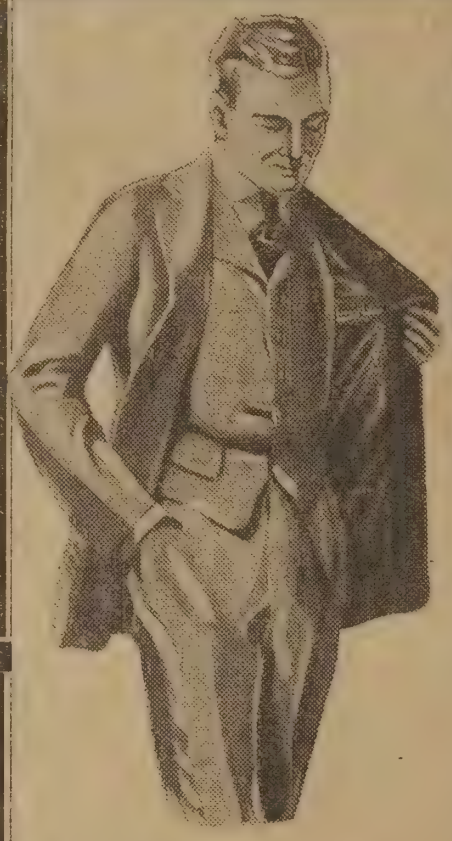
Harness leather can not be neglected without injury that lessens its durability. It should be washed and oiled frequently. The washing should be done in tepid water, with a neutral soap and a sponge or stiff brush. After rinsing in clean tepid water the harness is hung up to drain a little while before oiling.

For driving harness neatsfoot or castor oil is best, but for heavy harness there may be some tallow in the oil. The applications should be light for driving and liberal for heavy harness. The oil, warm to the hand, is rubbed thoroughly into the deather while it is still wet from the washing. Excess oil which the leather is unable to take up should be removed with a clean, dry cloth.

Sheep Sheds Finished.

William Hoggard has just finished building five large sheep sheds on the Stanfield ranch in the sand west of Standfield, Ore. These sheds are for use in the shearing time. They are 144 feet long by 16 feet wide.

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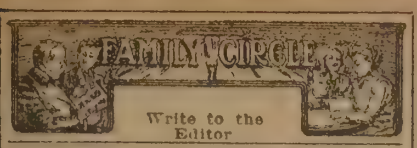
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ALICE W. BARLAND
Editorial Contributor

Understand Others

What is the quotation or what are the words which have helpld you in the journey of life? Send it to the editor of The Farmer and let it help another.

To the Editor: I am glad to see your request for quotations or words which have helped in the journey of life. Mottoes, I believe, have helped to mold many a life. They have been very influential in my own. Some one has said: "A high ideal crystallized into a motto and constantly held up before a young man has often determined a whole destiny." "Our motto should not be 'Forgive one another,' but 'Understand one another.'" This motto has given me the key to solve many misunderstandings, by tracing effects back to their causes, looking more deeply into human nature. I find there is seldom any cause or need of forgiveness if we "understand our brother."

Another quotation which has worked well with the one just mentioned is: "More love is the great need of mankind. A pure affection concentric, forgetting self, forgiving wrongs and forestalling them, should swell the lyre of human love,"—M. B. Eddy.

MRS. IDA M. HART.

Eagle Creek, Ore.

Cottage Cheese Salad.

The first days of spring bring a proper craving for salads and green stuffs. This salad is nourishing and appetizing: To a pint of cheese add two teaspoonfuls of minced onion and a bit of minced pimento, if there is any left from some previous meal; mix well, adding cream or milk and a little butter till of the right consistency. Season with salt and a sprinkling of paprika, and serve on crisp lettuce. This needs no dressing.

Some Simple Recipes.

To make rhubarb pie, skin and cut into half-inch pieces enough rhubarb to make a cupful and a half. Mix three-fourths cupfuls sugar with two heaping tablespoonfuls flour, adding to the mixture one beaten egg. Add to the rhubarb and bake between two crusts. The flour and egg add to the nourishment as well as give body to the watery "pie plant."

To Save Shoes

Shoes should be oiled or greased whenever the leather begins to get hard or dry, according to experts of the U. S. department of agriculture. They should be thoroughly brushed and then all the dirt and mud that remains washed off with warm water, the excess water being taken off with a dry cloth. While the shoes are still wet and warm apply the oil or grease with a swab of wool or flannel. It is best to have the oil or grease about as warm as the hand can bear, and it should be rubbed well into the leather, preferably with the palm. If necessary, the oil can be applied to dry leather, but it penetrates better when the latter is wet. After treatment the shoes should be left to dry in a place that is warm, not hot.

Castor oil is satisfactory for shoes that are to be polished; for plainer footgear neatsfoot, fish oil or oleine may be substituted. If it is desired to make the shoes and boots more waterproof beef tallow may be added to any of these substances at the rate of half a pound of tallow to a pint of oil. The edge of the sole and the welt should be greased thoroughly. Too much grease can not be applied to these parts.

A simple method of making the soles more durable, pliable and water resistant is to swab them occasionally with linseed oil, setting them aside to dry overnight.

Many of the common shoe polishes are harmful to leather. All those which contain sulphuric, hydrochloric or oxalic acids, turpentine, benzine or other volatile solvents, have a tendency to harden the leather and make it more liable to crack.

It is poor economy, too, to wear a shoe with the heel badly worn on one side. This throws the shoe out of shape, and may soon result in its ruin. It is also likely to cause temporary injury to the foot.

Chicken Fat Valuable

Do you throw away the body fat of poultry—big layers of clean, sweet, yellow fat around the gizzard and found elsewhere around the intestines of the chicken? If you do, say specialists of the United States department of agriculture, you are throwing away fat which French housewives consider the finest of fats for making cakes and especially puff paste. In certain seasons in New York and other big cities, this fat is so highly esteemed that it brings as much as $1.10 per pound. So great is the demand for this fat that many people make a business of collecting it from butchers and others who dress poultry before delivering it to customers. Housewives would do well to insist on having it delivered if they buy their poultry dressed. By using chicken fat in cooking they can cut down the amount of fat they must buy for that purpose. To prepare it, try it out in a double boiler, or other vessel set in hot water, until the fat just melts away from the tissues and can be poured off. This fat becomes rancid easily and should be kept cool and covered like butter and used in a very few days. Chicken fat, like goose fat, may be used for shortening in cakes such as spice cake where the seasoning used will mask any flavor which the fat might have. It can also be used for frying the chicken itself or other meats and for warming vegetables.



Happy the man, and happy he alone,
He who can call today his own;
He, who, secure within, can say,
Tomorrow, do thy worst, for I have liv'd today.

—Dryden.

Food Restrictions In Great Britain.

By order of the food controller of Great Britain no cake shall contain more thean 15 per cent of sugar or more than 30 per cent of wheaten flour and no biscuits more than 15 per cent of sugar. Another order prohibits any individual from being served with any meal which begins between the hours of 3 p. m. and 6 p. m. with more than two ounces in the whole of bread, cake, bun, scone or buscuit, except in those places where no customer is charged more than six pence for meal and beverages included and which does not include meat, fish or eggs.

The food controller also has been empowered to take over all flour mills of the United Kingdom which use wheat in the making of flour except those where the output capacity is less than five sacks of flour per hour. By this order these mills pass into the possession of the food controller and are to be carried on according to his directions.



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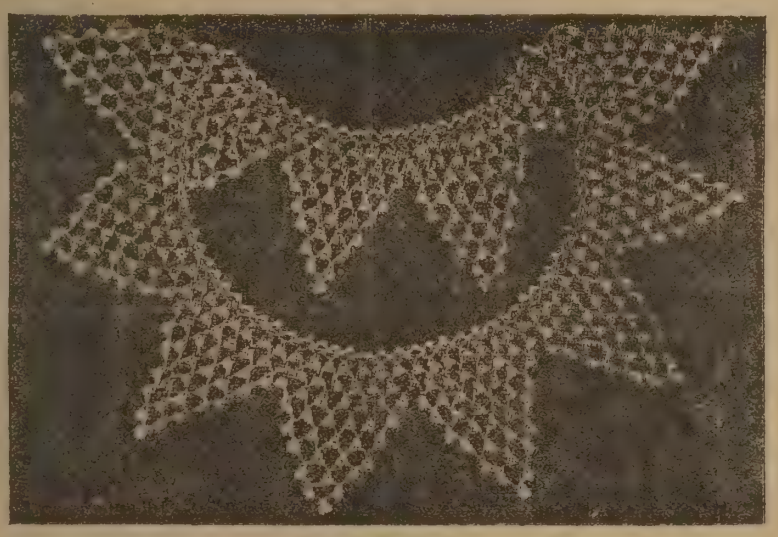
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Use 2 balls No. 50 Cordonnet.

Ch. 420, join.

1st Row—Ch. 9, sl. st. in 2d ch. to form L. (loop), ch. 1 ch. in 3 st. of 1st ch.; repeat until 84 are made.

2d Row—Sl. st. to top of L., ch. 3, 4 t. in L., ch. 9, sl. st. in 2d ch., ch. 2, 5 t. in next L.; repeat to end of row.

3d Row—Same as 2d.

4th Row—Sl. st. to top of L., make 7 shells, turn.

5th Row—St. st. to top of L., make 6 shells, turn.

6th Row—Sl. st. to top of L., make 5 shells, turn.

7th Row—Sl. st. to top of L., make 4 shells, turn.

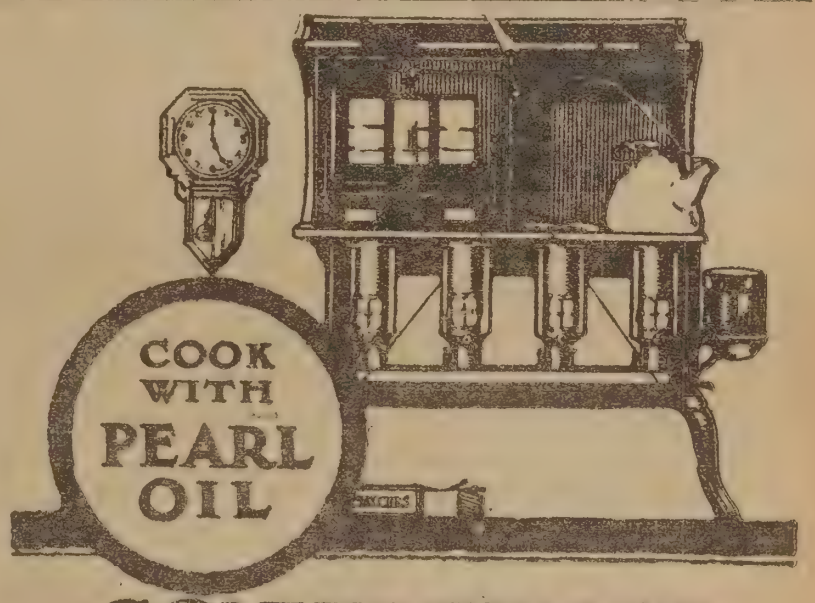
8th Row—Sl. st. to top of L., make 3 shells, turn.

9th Row—Sl. st. to top of L., make 2 shells, turn.

10th Row—Sl. st. to top of L., make 1 shell, fasten off.

Begin with 8th shell of 3d row and repeat 4th to 10th row. Continue in this manner until 12 points are made.

To make more points, make as many loops as needed and divide by 7, so points will come out even.



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1945—Child's set of short clothes. Cut in five sizes: Six months, 1 year, 2, 3 and 4 years. It will require for the dress two and five-eighth yards of 36-inch material. For the drawers, three-quarters of a yard. For the slip one and a half yards, for a 2-year size. Price, 10 cents.

2087—Child's coat. Cut in four sizes: 2, 4, 6 and 8 years. It requires two and seven-eighth yards of 44-inch material for a 4-year size. Price, 10 cents.

2098—A smart, one-piece model. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires three yards for the guimpe and five and five-eighth yards for the dress, of 36-inch material, for a 36 inch size. The skirt measures about three and five-eighth yards at the foot, with plaits drawn out. Price, 10 cents.

2082—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. It requires five and three-quarter yards of 44-inch material for an 18-year size. The skirt measures about two and seven-eighth yards at the foot. Price, 10 cents.

1660—Ladies' house dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires seven yards of 36-inch material for a 36-inch size. The skirt measures about three and one-eighth yards at the foot. Price, 10 cents.

2086—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. It requires two and three-eighth yards of 44-inch material for a 4-year size. Price, 10 cents.

2074—Ladies' "Cover All" apron. Cut in four sizes: Small, medium, large and extra large. It requires five and a half yards of 36-inch material for a medium size. Price, 10 cents.

1628 — Ladies' corset cover and drawers. Cut in three sizes: Small, Medium and large. It requires three and a half yards for a medium size, in 36-inch material. Price, 10 cents.

2075—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 10 will require two and seven-eighth yards of 44-inch material. Price, 10 cents.

1542-1543—Boys' suit. Blouse 1542 cut in five sizes: 6, 8, 10, 12 and 14 years. Size 10 will require two yards of 36-inch material. Trousers 1543 cut in five sizes: 6, 8, 10, 12 and 14 years. It requires one and three-quarter yards of 27-inch material for a 12-year size. This calls for two separate patterns, 10 cents for each pattern.

1950-1959—Ladies' costume. Waist 1950 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 1959 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires five and seven-eighth yards of 44-inch material for a 36-inch size. The skirt measures about three and one-eighth yards at the foot. Two separate patterns, 10 cents for each pattern.



Ye Have Heard That It Was Said by Them of Old Time

THE SIXTH COMMANDMENT.

"Thou Shalt Not Kill"—Exodus 20:13.

There are no modifying clauses to this commandment. It is plain and short. And yet the Jewish law did not abolish capital punishment, and it allowed for the defense of one's life. The crime of murder has to be punished. A life for a life was the Mosaic law.

If it is wrong—so wrong that a life must be paid for a life—to kill, what can be said of any man or group of men who deliberately plan operations which result in the death of thousands and tens of thousands and more—whole hecatombs of slain? What can be said of the guilt of the men or group of men who regard it as legitimate that wholesale murder be committed on battlefields that some political tenet be established or some selfish policy advanced?

How many lives will some of these gentlemen have to supply to satisfy the stern law of justice?

A world war sweeps bloody pennons over most of the globe today. Men and nations seek to place the blame, and to a certain extent they are probably right; but nobody can nicely weigh and balance degrees of guilt for breaking this commandment in this last war. God alone can do that, and, we may rest assured, he will. Let us be sure he finds our skirts clear. This does not prevent our entrance into the war; as the agency of justice and right we may act as executioners, and protect the peace of others. Our position today is one of uprightness. Let us maintain our attitude of high purpose, and let our share in this war be for ultimate good and blessing to ourselves and our neighbors.

H. H. B.

195 Hogs; Paid $5807.

Herman Rayer of Arco, Idaho, disposed of two carloads of hogs, 195 head, at Salt Lake City, and as payment for same he pulled down a check for $5807.

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Dear Old Summer's Coming Back.

Dear Aunt Nellie: It made me feel happy today to see papa, my brother and the man that works here go to the field with the horses and plows and the potatoes to plant. It made me think of the dear old summer coming back to us. Buttercups are growing on the hills and the dear little summer birds are singing. I think the meadow lark sings the most beautifully of all the birds. I have read your letters, Aunt Nellie, and to my fancy and I should think every one else's, you write the kindest and nicest letters I have ever read. You never slight one niece or nephew. You are the same to all the children and that is what I certainly like. My favorite book, after the Bible, used to be The Merry Children, but since I am acquainted with the Children's Corner it seems to be the most interesting and pleasant to me, because it tells of so many nice and pleasant things, but sometimes I see some things very sad. We wish those cousins all the best joy and happiness.—Florence Cox, Leahy, Wash.

The Story of a Clever Dog.

Dear Aunt Nellie: For my subject I have chosen, "A Very Clever Dog." One bright morning two little children, Lee and Alice, were sent to the nearby store by their mother to buy some groceries. When they were on their way home they saw some children playing hop scotch. They stopped and watched, set their basket down behind them. A dog sneaked very quietly up and took the basket. When the children found that it was gone they began to cry. It was growing dark so off they started for home. When they got home their mother asked, "How is it that the basket came home before you?" "Do tell us," the eager children cried. "Well it is like this," the mother began, "Mrs. Smith came over with the basket and said her dog had brought it to her place. She has trained her dog to carry her basket. Every time he carries it she gives him a piece of cake." "Did she give him a piece when he carried ours?" "Yes, she did," replied the mother. "Mother, mother," cried Alice, "Please buy that dog from Mrs. Smith so he can pack our basket." 'No, she needs him herself. She has no children to pack her basket and I have." I am 11 years old and in the sixth grade. I am four feet eight inches tall. I have a light complexion and wheigh somewhere in the ninety's. My father is dead. He has been dead for five years last Christmas eve.—John Carslin, Olalla, Wash.

They Earned Their Money Easy.

Dear Aunt Nellie: I like to read the Children's Corner. Lately I have read two letters from our school in The Washington Farmer, but I will write about something else. Only I will say that the Norman school is the best schoolhouse around here.. I will tell you how easy we made money and how we lost it. Ole is 12 years old and I am just three years younger. We started to count the figures in The Washington Farmer but we soon got mixed up.. Then my father started to count them. He got 6959. After awhile my mother thought she too, would get some of that easy money and so she counted the figures and got the same answer as my father did. Of course my father would get first prize and my mother second prize. So we all figured what to do with all that money. I wanted a piano, Ole a flying machine and my father a Ford car. My mother, she too liked to have the piano and the automobile but did not care very much for the flying machine. But we all laughed when we read about the fellow who counted four times and got a different answer every time and then wanted to hang the contest editor.—Carrie Fjerlie, box 621 East Stanwood, Wash.

Bible Is the Book of All Books.

Dear Aunt Nellie: Of the three subjects, I believe "My Favorite Book" is the best. I have looked in the Children's Corner every time to see if I could find a cousin of my own age and the same birthday. Ruth Marie Eaton is in the same grade as I am. She is the same age and we were born on the same day, so you see we are twins. My favorite book is the Bible. It teaches us to love and serve God and to do that which is right. Christ, through the Bible, teaches us in parables, for instance, the prodigal son, the good Samaritan, Lazarus and the rich man and the parable of the sower and the seed. The Bible is the book of all books. It contains God's word and his teaching. It leads us to do right and to love God. Other of my favorite books are Robinson Crusoe, Pilgrim's Progress, A Dozen Bees for Boys and Black Beauty, but the Bible reigns over all other books. It is the book of all books.—Harvey Norris, Goldendale, Wash.

Martha Got a Piano for Christmas.

Dear Aunt Nellie: I go to school and I am in the sixth grade. I am 12 years old. My birthday is October 27. I would like to hear from a girl of my own age. I have two sisters and one brother. They are all older than I am. I am the baby of the family. We have three dogs. Their names are Cora, Rover and Daisy. Rover is a big shepherd dog. He gets the cows for me when I tell him to. I got a piano for Christmas and I can play many marches and many other songs on it. I can make cake, pie, cookies and biscuits and a few other things. Our school will be out the 25th of May. Then I can stay home from school and help mama with the little chickens and help her milk cows. We have some ducks, turkeys, guineas and chickens. We live four miles west of town. I enjoy country life better than city life.—Martha Entel, Colton, Wash.

Pony Goes Home All By Herself.

Dear Aunt Nellie: I wrote about my dog, "Matt," the other time, but will have to change my subject as Matt ran away and never came back. I will tell you about my pony this time. Her name is "Minnie." She isn't very large. She is a brown roan. Sometimes I ride her to school and as we have no barn at school to keep her in, I tie the reins up over her head, and she goes home by herself. I ride her after the cows, horses and nearly every place I go. She is afraid of automobiles sometimes, but she never threw me off yet. She runs away sometimes when she is with another horse and I can not hold her. I am going to an Easter Egg hunt at our schoolhouse. The teachers and all the pupils colored 15 dozen eggs to hide. The one that got the most eggs gets a prize.—Byron Robertson, Pomeroy, Wash.

Thelma Has Three Teachers.

Dear Aunt Nellie: I hope this letter will be a success for it is my first letter. My grandfather takes The Washington Farmer and I am very much interested in the Children's Corner. I am in the sixth grade at school. I have three teachers. Mr. Craig is one. He teaches History. Miss Baker teaches arithmetic and another. Miss Baker teaches writing, hygiene, geography, spelling and reading. I am 12 years old and I have a little brother 5 years old. His name is Noble. I have been writing to one of the cousins, Grace Wills. I used to live where she does now.—Thelma Hinkle, Prosser, Wash.

Her Side Won the Spelling Match.

Dear Aunt Nellie: I am 11 years old and am in the fifth grade at school. My birthday is the seventh of February. My teacher's name is Miss Knapp. I like her very much. We have one cow and two calves. I have four brothers and one sister. My brothers' names are Henry, Milton, Rodney and Earl.

The Bible Says:



My sister's name is Harriet. We had a spelling test including from the fourth to the 12th grades. My friend and I chose up sides. My side won. I have two miles to walk to the school wagon and ride three miles in the school wagon. There are 32 children in my room.—Evelyn Hanson, Menlo, Wash.

Dicky, the Canary, Will Fight.

Dear Aunt Nellie: I have been reading The Washington Farmer. I got quite interested in the letters and thought I would write one, too. I am 10 years old and in the sixth grade and partly in the seventh. We have a canary bird and it will fight if you poke your finger at him. His name is Dickie. My Aunt Edna has a bird and its leg is cut off above the foot, but he will fight. His name is Sam. I have many pets. I have two canaries, one dog, two cats and a pony. My pony's name is Dot. She is a very pretty pony, white and black. She is a Shetland pony. She will eat cake, pie, candy, apples and ice cream.—Edna Light, Pomeroy, Wash.

Tries to Get the Paper First.

Dear Aunt Nellie: This is the third time I have written. Every time we get The Washington Farmer I always try to get the paper first. I would like to correspond with Gertrude Nelson, Box 141, Puyallup, Wash. We have four cows and four calves. We have four old sheep and six little lambs. The snow is all off here now. I have a sister. She said she was going to write to the Corner. Her name is Effie. I wish my sister and I could join this club. We would like to join it.—Nellie Salvage, Addy, Wash.

Good Time Visiting Her Aunt.

Dear Aunt Nellie: Papa takes The Farmer and I enjoy reading the letters in the Corner. I am 13 years old. My birthday is June 16. I am in the seventh grade at school. My teacher's name is Miss Emma McCabe. I like her very much. I have one brother but no sisters. My brother's name is Ronald. He is 6 years old. For pets I have an old dog and two little pups. The old dog's name is Brownie. We had to muzzle her, as there were mad coyotes not far from here. Last summer I visited my aunt in Idaho. I stayed a month with her. I had a very good time while I was there.—Brenda Ward, Pomeroy, Wash.

Harry Will Stay All Summer.

Dear Aunt Nellie: I am a girl 12 years old the first of June. I have four sisters. Their names are Cora, Nellie, Ethel and Gertie. I have one brother. His name is Victor. My sister, Gertie, is the baby. She is very cute and is only 1 year old. Her birthday is the 21st of July. I had three cousins out here. Their names are Dee, Elmer and Harry. Dee and Elmer went away about two weeks ago, but Harry did not. He is not going away. He is going to stay here all summer.—Effie Salvage, Addy, Wash.

The School Where Father Went.

Dear Aunt Nellie: I am a farmer boy. I am 9 years old and in the third grade. I go to the Bell school, the same school where my father went about 35 years ago. I live on the farm two and a half miles east of Latah. I have about 100 chickens to take care of mornings and evenings, also pigs and lambs to look after. I enjoy reading the Children's Corner every week.—Leonard Clark, Tekoa, Wash.

Violet Lives on a Dairy Farm.

Dear Aunt Nellie: I live on a dairy farm 14 miles from Chehalis. I am in the fifth grade at school. My teacher's name is Mr. Elder. I go to the Glen Alder school. I have one little sister. Her name is Dorothy. My father has taken the Farmer for two years, but this is the first time I have ever written to you. I have always read the children's letters.—Violet Howell, R. F. D. 2, Box 171, Chehalis, Wash.

Two Puppies, Tip and Robin Hood.

Dear Aunt Nellie: Papa takes The Washington Farmer and I like to read the letters in the Corner. I go to school and am in the first grade. I am 6 years old. I will be 7 years old in May. I have two little puppies. Their names are Tip and Robin Hood. We have a little black and white calf. We call her Spot. I have a pony. She is 11 years old. Her name is Nellie. I have a sister. Her name is Brenda. She is 13 years old.—Ronald Ward, Pomeroy, Wash.

Arthur Is Making Garden.

Dear Aunt Nellie: I am 8 years old and am in the third grade. I go to school every day and like it fine. My teacher's name is Miss Gray. My papa takes The Washington Farmer and I like to read the letters in the Children's Corner very much. I live on a farm in the Satsop valley. We have a lot of pet rabbits, a dog, a cat, three horses, five cows and some chickens. I am making a garden this spring. I like it very much. I have four sisters and no brothers. My birthday is on the 18th of April. I wonder if I have a twin.—Arthur Elphick, Elma, Wash.

Beatrice's First Corner Letter.

Dear Aunt Nellie: I am writing to you for the first time. I am 11 years old and am in the sixth grade at school. We go to the Freeport school. I have one brother and one sister. My brother will be four in March. My sister is 7 years old. My sister goes to school too. We only have one acre of land, but we have a cow and a calf, a rabit and 59 chickens. We get about 24 eggs a day from the chickens. We do not take the Farmer, but Grandpa lives right by us and I get his. I have read the leters and so I thought I would write. I will write again.—Beatrice Hett, Kelso, Wash.

Little Tom, Big Tom and White Mose.

Dear Aunt Nellie: I have never written to the Children's Corner before. I live on a farm six miles from town. I have to go to school one and a fourth miles. I have a pony named Bolley. I ride a mile and put my horse in the barn. I have one dog and three cats. My dog's name is Brownie. My cats' names are Little Tom, Big Tom and White Mose. I am 11 years old and my birthday is the 11th of July. I am in the sixth, seventh and eighth grades. There are 16 in our school. In the summertime my brother and I go to town every day to take eggs and butter and vegetables.—Richard F. Lefors, Tekoa, Wash.

Merna Has a Pony Named Babe.

Dear Aunt Nellie: I am 12 years old the 7th of April. I have two brothers and no sisters. My brothers' names are William and Frank. We have a pony named Babe. I go to school. My teacher's name is Miss Mary O'Laughlin. She is a good teacher. I live on a farm. I have a rabbit and three chickens.—Merna Elliott, Alpha, Wash.

Willie Has Never Written Before.

Dear Aunt Nellie: I like to read the letters in the Corner and thought I would write a letter too, for I have never written before. I am 10 years old and in the fifth grade. There are 25 in our room. My teacher's name is Miss Moultrop. I live about one mile from school. We live on Blalock ranch. We have 37 little chickens, two dozen large chickens and 19 cows and a cat named Tabby. I have three sisters and two brothers. My sisters' names are Lulu, Dot and Mildred. My brothers' names are Carl and Dea.—Willie Bell Dysart, College Place, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Ovey Van Horn, Nettie Johnson, Hazel Covert, Helen Davis, Gertrude Sande, Myrtle Sodorff, Vena Henning.



To Get a Flag Write Soon



With the declaration of a state of war our first supply of flags was quickly exhausted and we have had great difficulty in securing more.

We have at last secured a limited number of flags which we offer on the following terms:

OFFER NO. 1

3x5 flag together with The Washington Farmer for three years. Both for $2.50.

OFFER NO 2.

4x6 flag together with The Washington Farmer for three years. Both for $3.00.

We would suggest prompt action; orders will be filled as received.

The Washington Farmer, Review Bldg., Spokane.

Enclosed find $.... (your personal check, stamps or money order), for which send me American flag, as advertised, and The Washington Farmer for 3 years.

Size of flag .....

Name .....

Address .....

.....

In answering advertisements don't fail to mention this paper.

Wool Brings 50 Cents

(Continued from page five.)

the 50-cent mark, clips having sold for 50 1-4 cents per pound. Even 60-cent wool is predicted by some of the sheepmen. The more conservative, however, believe that the high-tide price has been reached and that it will not go higher. Neither do they expect to see any material decline while the present war is in progress. While they do not look for a raise, they are inclined to the belief that prices are more likely to rise than they are to decline.

"Last year wool went up to 36 cents, but only in exceptional cases. The average paid was 25 cents per pound. Not many years ago wool was bringing a big price at 20 cents. The present year, however, is starting out with 50-cent wool and a heavy demand."

Some idea of the extent of the sheep industry in Idaho can be obtained by the statement issued by Hugh Sprout, president of the Idaho Woolgrowers' association, covering 1916. Mr. Sprout showed that the number of sheep going into the winter was approximately 2,250,000. He estimated the wool clip at 18,000,000 pounds, with a value of $4,700,000, averaging the price paid at 25 cents a pound. The number of lambs sold in 1916 he estimated at 1,500,000, netting to the grower about $6 per head or a total of $9,000,000. The older sheep sold he valued as worth $1,000,000, so that the total income from sheep in 1916 was, according to his figures, $15,000,000. The total investment in sheep he estimated at $22,500,000 in ranches, and necessary equipment $12,000,000, or a total investment of practically $35,000,000.

Correspondence from Butte indicates the same strength of wool market as noted in other states. The writer says:

"Opening at around 40 cents a pound the price of wool in Montana has skyrocketed to a height of 52 cents, a figure little dreamed of by the flockmasters of this state. Sales are frequent at the present time at 50 cents.

"Union Woolen company of Boston started the ball to rolling in earnest in the Montana wool by bidding up eastern Montana clips to the amount of nearly 250,000 pounds from 48 to 50 and 52 cents a pound, approximately 280,000 pounds being taken at the high figure. With this quotation established southern Montana flockmasters rapidly boosted their asked prices to 50 cents, followed by the growers in Fergus county. In the latter a number of small clips were held over from last year, when wool brought around 40 cents, and these were disposed of at 50 cents, the last reported sale being a clip ranging from 35,000 to 40,000 pounds going at that figure.

"Two million pounds of wool were purchased by the American Woolen company in Beaverhead county the past month at 50 cents a pound. The wool production from this part of Montana, one of the largest wool sections in the staet, will approximate 3,700,000 pounds.

"The total wool clip of the state is expected to be around 18,000,000 pounds, with the prospects good of this estimate being considerably exceeded, some prominent flockmasters predicting 20,000,000 pounds. This estimated production is somewhat smaller than in years past, due to heavy shipment of sheep eastward to the live stock markets, lambs commanding a particularly high price. The limitation of the large ranges of Montana, too, is curtailing the size of the bands of sheep and materially affecting the wool output. However, farmers are beginning to raise small flocks of sheep and many of these bands are serving to offset the loss suffered in the diminution of the one time famous large bands."

Field Peas for Seed

To the Editor of The Washington Farmer: Will you kindly tell me what you can about field peas? What is the Blue Bell variety? Is it a field pea for stock, or for the market green or dry? Would you raise Canada peas for hogs instead of corn? How can insect injury be prevented?—H. S. S., Vancouver, Wash.

Leonard Hegnauer, extension specialist in soils and crops at the state college of Washington, says in answer to this question:

Field peas are most commonly grown for feed. The Blue Bell variety is one of the best varieties for your section. These field peas are not commonly grown for market, as they do not contain enough sugar. However, many of the field peas are grown as split peas, and are thus used for soups. Canada field peas make a splendid hog feed, and while they would not necessarily take the place of corn, yet they would make a splendid combination when fed with corn. There is no treatment that you could give pea seed in order to free it from possible insect injury.

Do You Know That

A stingy man cheats himself?

Universal Tractor Attachment



$275 F. O. B. Tacoma

MAN WANTED

Farmer's son preferred.

To take care of the sale of the UNIVERSAL TRACTOR ATTACHMENT in your own or adjoining county. Agents selling one a day. Big demand. Big profits for you. References required.

GERLINGER MOTOR CAR CO.
Desk C, Tacoma, Wash.

Want Ads

HELP WANTED—MALE 3

HAWTHORNE AUTO SCHOOL.
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

WANTED—MEN WITH AUTOS, TO SELL Anti-Carbon Gas Saver; county and state rights available. Pacific Auto Accessory Co., 512 Journal bldg., Portland, Oregon.

SITUATION WANTED—General 24

MARRIED COUPLE WANT FARM WORK: experienced; wife good cook. P. O. Box 2099, Spokane.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free.
BEHNKE-WALKER BUSINESS COLLEGE,
167 FOURTH ST., PORTLAND, ORE.

MISCELLANEOUS 57

GET OUR PRICES ON IRRIGATING PROJects, stationary spraying systems before you buy. H. L. Hurst Mfg. Co., 264 Front st., Portland, Ore.

SMALL CLOVER HULLER WANTED. Particulars to A. Woolcott, Cottage Grove, Ore.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
Manufactured in our own mill and sold at factory prices. We ship to any one, anywhere. One price to everybody. Prompt shipments. Safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request.

5 cross panel doors, 2 ft. 6 in. by 6 ft. 6 in.	$1.44
Craftsman bungalow doors	1.90
One panel, 3-ply veener doors	2.00
French doors, 15 lights	3.00
Screen doors, 2 ft. 8 in. by 6 ft. 9 in., galvanized wire	1.50
Standard two light windows, from, up	1.13
8x10, 4-light sash	.52
16x16x26 spruce flour bins	1.50
Drain boards, 20x24	.75
Williams' "Gold Seal" mixed paint, gal.	2.50

Frames, mouldings, builders' hardware, mill work.
O. B. WILLIAMS CO.
1943 1st Ave. So. Seattle, Wash.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES SAVE labor and are carried in stock by HIGGINS MACHINERY COMPANY, 312 1st ave. South, Seattle. Write for catalog.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in **The Washington Farmer, The Oregon Farmer,** and **The Idaho Farmer,** taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

BABY CHIX.
White Leghorns, the kind that are real dividend payers, bred for 16 years for eggs, size, VIGOR, VIM and VITALITY. $10 per 100, from the oldest established hatcher in the state. Delivery in good condition guaranteed. Lakeside Poultry Farm, Roy, Wn.

BUFF ORPINGTONS, BUFF LEGHORNS, BOURBON RED TURKEYS, BUFF DUCKS—Blue ribbon winners at the worthwhile western shows. Eggs, settings and incubator lots; baby stock. Free illustrated mating list. THE FERRIS RANCH, R. 2, Box E, Pomona, Cal.

WHITE LEGHORN BABY CHICKS from strong, superior stock, bred for eggs, vigor and size. Safe arrival guaranteed. Free catalogue. Free book on raising the chicks. Oak Heights Poultry Farm, R. R. 3, Box T67, Tacoma, Wash.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

WHITE LEGHORN CHICKS, $10 PER 100 for May and June; special price of $6 for 50 White Leghorn chicks and fireless brooder. Queen Hatchery, 89 Pike st., Seattle, Wash.

PARKS' BRED TO LAY BARRED ROCKS, winter layers; eggs, $1.50 per 15, $7 per 100. W. G. Neyland, Spokane Bridge, Wn.

LIVE STOCK 177

FOR SALE—PUREBRED, REGISTERED Hampshire pigs, either sex, March farrow. H. E. Richardson, R. F. D. No. 1, Chico, Cal.

FOR SALE—43 LINCOLN AND SHROP ewes with lambs. P. C. Jensen, Ilo, Ida.

RUG and CARPET WEAVING 270

FLUFF RUGS AND RAG CARPETS.
Your old rugs and carpets can be made into beautiful NUSTYLE Fluff rugs at a small expense to you, by our new and improved process. Send for booklet and prices.
Nustyle Rug Co., Sellwood, Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flour seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p. 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, Ore.

SEEDS 620 Continued.



ACCLIMATED SEED.
In this classification we will run ads of seed acclimated to conditions in the Pacific northwest.

If you have seed of any kind for sale, including corn, alfalfa, sweet clover, peas, beans, wheat, oats, barley, potatoes, or other farm or garden seeds, it will pay you to describe the quality of what you have in this column. Let us know what you have in this line and write for rates.

It will pay those who want good, acclimated seed to watch for offers under this classification.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

NURSERY STOCK 621

JUST THINK! STRAWBERRIES FROM June to November. Bear first year set out. Americus everbearing, $1.50 per 100. F. I. Moffet, Ellensburg, Wash.

FARM LANDS—FOR SALE 651

MONTANA LAND.
COMBINATION STOCK AND GRAIN FARM, IMPROVED, $22 PER ACRE; 960 acres in one of the best stock districts of the state of Montana; about 700 acres tillable land, balance excellent pasture; only 4 miles to town; 100 acres in winter wheat; 40 in spring wheat; all goes to the buyer. For immediate sale we can deliver this place at $22 per acre.

If interested in Montana land call or write for our land list, giving descriptions of some of the best buys in the state of Montana.

HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG., SPOKANE.

MONTANA LAND.
IMPROVED PLACE, JUDITH BASIN, $35 PER ACRE; 1000 acres in the Judith basin, nearly all good land; 400 acres in winter wheat, one-third to the buyer; located 3½ miles from town; nearly all steam plow land; fair set of buildings; price $35 per acre, reasonable terms, but no trade.

If interested in Montana land call or write for land list.

HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG., SPOKANE.

640 ACRES GOOD WHEAT LAND, FOUR miles from good town and 34 miles from Butte, Mont., one of the best markets in world; small house, barn, granary; excellent well, 125 acres irrigable; price $16 per acre; terms, $1500 down, balance 10 years, 6 per cent interest. H. O. Clark, 125 W. Broadway, Butte, Mont.

BUY A FARM IN PROSPEROUS COMmunity. One high-priced wheat crop will pay for it. My 80, 160, 320 and 640 acre farms will produce abundantly. Water, climate, soil excellent. Low prices. Easy terms. J. W. Hefferlin, Livingston, Mont.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C., M. & St. P. Ry., 2d and Cherry st., Seattle, Wash.

BIG MONEY RAISING VEGETABLES and chickens, greenhouse and 160 acres of land, near Spokane, cost $15,000, offered at $4500; easy terms.
PENNSYLVANIA MORTGAGE INV. CO.
SPOKANE, WASHINGTON.

80-ACRE FARM, 3 MILES FROM RAILroad town; 15 head registered Holsteins, 3 with official records, bull out of 30-lb. cow, few grades, young stock; 20 acres bearing orchard; terms. W. Fred Harper, New Plymouth, Idaho.

IF YOU ARE LOOKING FOR GOOD farms, we have improved and unimproved farms for sale; also relinquishments and homesteads. Write Hall & Vollmer, Sumatra, Mont.

80 ACRES, GARDEN SPOT OF IDAHO; 50 in crops; alfalfa, fruit, grain; terms. E. Cope, Ontario, Ore.

IF YOU WANT LAND IN MONTANA, write to H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

FREE BOOKLET, STATE AND U. S. LAND maps. Joseph Clark, Sacramento, Cal.

SUBURBAN TRACTS—For Sale 672

JUST WHAT YOU ARE LOOKING FOR. 2½ acres ground, good 5-room house, chicken houses for 800, brooder and incubator houses; water piped all over place from private spring, gasoline engine; incubators, brooders, feed-cutter and small tools; about 100 fruit trees of various kinds, loaded with blossoms. A money maker from the start. Near navy yard and Seattle, 25c fare. Reasonable terms.
RALPH C. M'ALLASTER.
719 CENTRAL BLDG., SEATTLE.

FOR SALE OR EXCHANGE 702

FOR SALE, OR EXCHANGE FOR SMALLer place—My 552-a stock and grain ranch, 3 miles to town. Address owner, R. E. Warner, Crawfordsville, Oregon.

Grain and Produce Markets

Chicago Grain.

CHICAGO, May 26.—Announcement that foreigners were getting rid of some of their future delivery holdings had a bearish influence on the wheat market today. The outcome was a heavy close at 4c to 6 1-2c net decline. Corn finished 3 3-4c to 6c down, oats off 5-8c to 1 7-8c and provisions off 25c to 57c.

Notwithstanding that week-end evening up of trades gave the wheat market at one stage an appearance of strength, breaks in prices became pronounced during the last half of the session. Messages from the seaboard said European interests were fairly active in letting go of future contracts and taking instead wheat for immediate delivery. In this connection it was said that premiums for cash wheat had dwindled 20c a bushel from the recent high point and that much more wheat was being offered than was the case when premiums were extreme. Other bearish influences included an authoritative estimate that the total yield in the United States this season would be as much as 750,000,000 bushels. Assertions also were current that the domestic consumption this season would be 4 3-4 bushels, as against a normal average of 5 1-4 bushels. Such a reduction would mean a saving of about 50,000,000 bushels.

Corn prices fell sharply owing to arrival of Argentine corn in New York, and as a result of the improved car supply, which was said to be taking much corn east for which there was not immediate domestic or export demand. Besides, crop reports were bearish.

Oats went lower with corn. Field advices were favorable and nothing was heard of any revival of export call.

Provisions dropped because of the break in grain value. Smallness of prospective hog supplies next week acted as only a temporary support for the market.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—$3.50@3.75 cwt; new potatoes, 8c lb.

Seed Potatoes—Early Rose, $4@4.50 cwt.

Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; N. Y. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Leaf, 40c lb; Better Butter, 40c lb; Attalia, 40c lb; Diadem, 40c lb; Hazelwood, 40c lb; Solid Pack, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 40c lb; brick cheese, 30c lb; domestic Swiss, 35c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $10.50 case.

Live Poultry—Hens, 20c lb; old roosters, 10c lb; ducks, 13@14c lb; turkeys, 20@25c lb; geese, 11c lb.

Dress Poultry—Hens, 23c lb; springers, 21c; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs. to 25 lbs., 23c; calf skins up to 15 lbs., 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under seven lbs., 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10 to 75c each; green horse hides, $3 to $5 each; dry horse hides, $1 to $2.50 each.

Wool in Oregon.

PORTLAND, Ore., May 23.—The wool market in eastern Oregon was greatly excited at the close of the week with buyers freely offering 50 cents for fine wool and in some sections even more. A dozen clips at Echo, Heppner, Pendleton and Pilot Rock were sold at that price. The sales, however, were only about 200,000 pounds as the majority of growers wanted more money. Wool dealers said the entire clip of the state could be cleaned up in 24 hours, so strong is the demand, if growers would accept the prices bid. The call just now is for fine wool with coarse grades more or less neglected. Growers are asking 55@60 cents for coarse and some are asking that much for fine wools.

Shearing is still delayed by cold weather and probably not 10 per cent of the normal amount has been taken off to date. The quality of the staple is pronounced the best in years.

HAY WANTED.

This paper is constantly receiving inquiries wanting the names of farmers who have hay to sell. If you have any to dispose of you can sell it through a small classified ad at but very little cost and save the middleman's profit. Try it.—Adv.

Portland Market.

PORTLAND, Ore., May 26.—In the egg market the supply and demand are even, and prices are holding steady.

Butter is also steady, although the make is gradually increasing. Shipments of cheese to eastern cities have been resumed, three cars going out in the last week. San Francisco is drawing heavily on the Tillamook factories.

Receipts of poultry and dressed meats have been light, and the market is fairly steady.

Potatoes are cleaning up slowly at unchanged prices. There is still a good eastern demand, but the local inquiry is unimportant.

A few crates of Oregon strawberries have arrived. Oregon gooseberries are also on the market.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $47 per ton.

Corn—Whole, $72; cracked, $73 per ton.

Millstuffs—Bran, $37 per ton; shorts, $40.

Barley—No. 1 feed, $45; brewing, nominal; rolled, $58.

Hay—Buying prices: Timothy, eastern Oregon, $30; alfalfa, $23; grain, $18@20.

Eggs—Oregon ranch, case counts, 32 1-2@33c per dozen; candled, 34c.

Poultry—Hens, 17@18c; ducks, 18@20c; turkeys, alive, 20@22c; dressed, 23@28c; geese, 12@14c.

Butter—City creamery, prints, 39@40c per pound; cubes, 36c.

Cheese—Oregon triplets, 24c; young Americas, 25c.

Dressed meats—Veal, 13 1-2@14c; pork, 19 1-2c.

Hops—Nominal.

Potatoes—Oregon jobbing price, $3.50@4.

Wool—Eastern Oregon, fine, 50c; coarse, 55c; valley, 50c.

Beans—California small white, 16 1-2c; large white, 16c per pound.

Hides—Salted hides (25 lbs. and up), 20c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 32c; green hides (25 lbs. and up), 18c; green stags (50 lbs. and up), 13c; dry hides, 34c; dry salt hides, 29c.

Seattle Market.

SEATTLE, May 26.—Advices from Kennewick today indicate that express lots of berries will be available about Wednesday and that by the end of next week receipts will be ample for the needs of this market and in recognition of the high prices at which the fruit is selling.

Kennewick-Richland growers are quoting $5.50 f. o. b. shipping pount for the initial lots next week, or approximately $6.50 here.

Some select old crop local spuds, with cutouts removed and well sized as to uniformity, were shipped to Alaska today at $90 f. o. b. Seattle. General quotations are $75 to $85, with Yakimas firm at $90. Only a few carloads, probably 30, are held here, locals almost exclusively, and jobbers and brokers alike now concede that today's quotations will go through to a cleanup.

The market for turnips, cauliflower and other new vegetables is slowly declining.

The week-end shows a general softening of the sharp outlines of the market in butter, eggs and cheese. While there is not much of a surplus of butter, city creamerymen in place of quoting lower markets are storing the surplus of daily churnings, together with such country creamery stock as they can put together. Only a few cubes have been spared to date for the coolers, but manufacturers take comfort in the thought that summer will come some day and the production of cream will increase in this territory to the point where they can extract daily allowances for reserve stocks in low temperatures.

The receipts of fresh ranch eggs have increased to the point where the market must be weakened. The eggs are not moving in keeping with the arrivals. Short holding for storage is not regarded as longer advisable, and a few days of sunshine would compel a decline in a part of the season where downward movements have practically been unknown.

Cheese is barely steady. There has been considerable storage, and jobbers are applying still more pressure in order to force prices to safe levels for a summer and fall movement.

Poultry quotations will be steady for Monday with the exception of broilers, which will bring producers 2c less.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 33@34c per dozen.

Poultry—Live hens, fat, over 4 lbs., 19c per lb.; 3 lbs. and under, 17c; old roosters, 12c per lb.; springs, 22c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 14c per lb.; broilers, live, 18@23c per lb.

Butter fat—42c per lb.; dairy butter, 28c per lb.

Beef—Buying price: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.

Hogs—Light, 15@17c per lb.; do heavy, 10@12c per lb.

Veal—Fancy light, 13@14 1-2c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 32c per lb; salted calf, 32c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 36c per lb.; dry calf (under 6 lbs.), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry butcher full wool sheep pelts, 30@33c per lb.

SELLING PRICES.

City Prices—Team Lots.

Apples—Winesaps, $2.25@2.75 a box; cooking, $1.50 a box; Newtowns, $1.25@2.25 a box.

Asparagus—Local, 12 1-2@15c per lb.

Feed—Scratch feed, $79 per ton; all grain crop, $69 per ton; oats, $57 per ton; rolled oats, $58 per ton; rolled or ground barley, $57 per ton; clipped barley, $60 per ton; wheat, $95 per ton; bran, $40 per ton; shorts, $43 per ton; oil meal, $55 per ton; whole corn, $75 per ton; cracked corn, $77 per ton.

Hay—Eastern Washington timothy, $35 per ton; alfalfa, $26 per ton; double compressed, $38 per ton; wheat hay, $26 per ton; Puget sound, $26 per ton; straw, $15.

Potatoes—Local, $75@85 per ton; Yakima Gems, $90 per ton.

Cauliflower—Local, $1@1.25 dozen.

Rutabagas—$3 sack.

Butter—Washington creamery extras, cubes, 38c per lb.; do bricks, 39c per lb.; creamery firsts, cubes, 37c lb.; do bricks, 38c per lb.

Eggs—Fresh ranch, 36@37c.

Portland Wheat.

PORTLAND, Ore., May 28.—Wheat prices have declined steadily with an absence of demand in any quarter of the local market, though it is said exporters have taken small amounts in the country for shipment east. Eastern buyers do not want wheat, in fact have tried to resell wheat here bought earlier in the season. Closing bids for cash wheat at the exchange were: Bluestem, $2.47; fortyfold and club, $2.45; red Russian, $2.43.

Oats and barley are weak and nominal in the absence of buying.

The flour market had another 40-cent decline at the close of the week, which put the price of patents at $12.10. The total flour decline to date has been $1.60 a barrel.

Mill feed prices have also dropped sharply $4 to $6 a ton. Hay continues firm, but trade is quiet.

Early Irish Potatoes.

A forecast of the production of early Irish potatoes in 1917 is made by the bureau of crop estimates in the department of agriculture and shows the total of 33,516,000 bushels as against 26,481,700 bushels in 1916. The acreage harvested in 1916 amounted to 242,900, while the acreage planted this year is given at 281,700. Virginia is by far the largest producer of early potatoes, having produced 14,000,000 bushels last year, with an estimate of 16,000,000 bushels this year. New Jersey comes next with over 3,000,000 bushels. California produced over 800,000 bushels last year and is estimated to produce over 2,000,000 this year.

Butter and Eggs.

SAN FRANCISCO, May 26.—Eggs—Fresh extras, 34 1-2c; fresh extra pullets.

CHICAGO, May 26.—Butter higher; receipts, 10,332 tubs; creamery extra, 41@41 1-2c; extra firsts, 40 1-2c; firsts, 38 1-2@40c; seconds, 37@38c.

Eggs lower; receipts, 27,733 cases; firsts, 33 1-4@34 1-4c; ordinary firsts, 31 1-4@32c; at mark, cases included, 31 1-2@34c.

ELGIN, Ill., May 26.—Butter higher; 125 tubs at 43c; 40 tubs unsold.

Mirror Pie.

Line a deep pie plate with rich crust and turn it into a clear lemon jelly (after baking the crust) and let it set until the jelly is hard. Serve with whipped cream.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., May 26.—Hogs—Receipts, 7600; steady. Heavy, $15.60@15.80; mixed, $15.50@15.70; light, $15.40@15.70; pigs, $12.50@14.50; bulk, $15.50@15.70.

Cattle—Receipts, 100; steady. Native steers, $10.25@13.25; cows and heifers, $8.50@11.50; western steers, $9@11.50; Texas steers, $8.75@10.75; cows and heifers, $8.50@10.25; canners, $7@8.50; stockers and feeders, $7@11; calves, $9.50@13.50; bulls, $6.75@10.25.

Sheep—Receipts, 100; steady. Yearlings, $13.50@15.50; wethers, $12.50@14.25; ewes, $11.75@14; lambs, $19.25@20.35.

At Chicago.

CHICAGO, May 26.—Hogs—Receipts, 8000; easy, 5c lower than yesterday's average. Bulk, $15.45@15.95; light, $14.65@15.85; mixed, $15.35@16.05; heavy, $15.25@16.10; rough, $15.25@15.40; pigs, $10.50@14.50.

Cattle—Receipts, 700; steady. Native beef cattle, $9.40@13; stockers and feeders, $7.40@10.30; cows and heifers, $6.50@11.40; calves, $10.50@15.50.

Sheep—Receipts, 1000; steady. Wethers, $12.25@14.75; lambs, $13@17.25; springs, $14.50@21.

At Seattle.

SEATTLE, May 26.—No receipts today; market steady.

Cattle—Prime steers, $10.25@11.75; common to medium, $6@9.75; best cows and heifers, $8.25@9.25; common to medium, $6.25@8.25; bulls, $3.50@8; calves, $6.50@11.10.

Hogs—Prime light, $16@16.25; medium to choice, $15.75@15.85; smooth heavies, $15.25@15.85; rough heavies, $14.75@15; pigs, $13.50@14.45.

Sheep—Prime lambs, $12.50@13.75; good lambs, $12.25@13.50; wethers, $10.25@10.50; ewes, $9.10.

At Portland.

PORTLAND, Ore., May 26.—Hogs—Steady; receipts, 739. Heavy packing, $15.85@16; light packing, $15.50@15.85; bulk of packing grades, $15.50@15.75; rough heavy, $14.25@15.25; pigs and skips, $13@13.50; stock hogs, $12@13.

Cattle—Easier; receipts, 553. Steers, prime light, $10.25@10.50; prime heavy, $10@10.25; good, $9.75@10; cows, choice, $9@9.50; medium to good, $8.25@8.75; ordinary to fair, $7.25@8; heifers, $7@10; bulls, $6@8.50; calves, $8@10.

Sheep—Firm; receipts, 1099. Lambs, east of mountains, $13.50@14; lambs, valley, $13.25@13.50; lambs, shorn, $11@11.50; prime yearlings, $12.50@13.50; choice ewes, $11@11.50; heavy ewes, $9@11.50; prime shorn wethers, $10.25@11.

Spokane Stock Yards, Saturday.

Hogs—Receipts, none; market steady. Prime heavy packing, $15.75@16; prime light packing, $15.60@15.75; rough heavy, $14.60@15; stockers, $12.60@3.75.

Cattle—Receipts, 154; market steady—Prime heavy steers, $10.25@10.75; prime light steers, $10@10.25; good steers, $9.75@10; prime cows, $8.75@9.25; good cows, $8@8.75; common cows, $7.25@7.75; best heifers, $9@10; bulls, $6@8.50; calves, $8@10.50; stockers and feeders, $8@9.

Sheep—Receipts, none; market strong. Prime lambs, $13@13.50; common lambs, $12@12.50; choice yearlings, $11.25@12; good yearlings, $10.75@11.25; choice ewes, $10@11; prime shorn wethers, $10.25@11.

Foot Power Can Opener.

A foot power can opener for restaurants cuts the entire top from a can as a pedal is pressed.



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Care of Sheep in the Winter

Proper Housing and Feeding Essential to Best Success

For several weeks The Farmer has been publishing the articles of this series on sheep management by Dean Iddings of the agricultural college of the University of Idaho. This week the article deals with winter management. Next article will treat of the management of the flock during the lambing season. These instalments will not be directly applicable for several months, but it is necessary to publish them in regular order in the series. Every person who has sheep or is at all interested in sheep should file away the paper containing each of Dean Iddings' articles, or at least clip the article itself and keep it carefully with the others of the series for use at the particular time when most applicable. The entire series comprises an unusually simple and comprehensive text book on the management of sheep on the farms of the northwest.

ARTICLE 5, By E. J. IDDINGS.

The first problem in winter feeding is to start the ewes into the winter period in good flesh and vigorous condition. If this is done hay and various other fodders are sufficient for the greater part of the time. In some sections where corn is one of the leading crops corn fodder with the ears removed has given quite good results, without grain in addition. Clover, alfalfa or other legume hays are very palatable for sheep and are a sufficient feed for the greater portion of the period of pregnancy. Root crops, silage free from mold, both in moderate amounts, give splendid results along with clover or alfalfa hay. Heavy feeding of root crops previous to lambing, it is claimed by some sheep men, results in flabby lambs of low vitality.

One of the problems of the flockmaster is to have his ewes give sufficient milk for the new lambs. Ewes fed the entire winter on dry feed, particularly true of young ewes, frequently have no milk after lambing and refuse to own their lambs. Old ewes take care of their lambs, but have an insufficient milk flow. This difficulty can be almost entirely overcome by light grain feeding beginning four to six weeks previous to lambing. Root crops, silage or other succulent feed in addition are very desirable. Oats or bran and oats are to be preferred among the grains and the daily allowance per head need not exceed one-half pound. The proportion used in handling bure-bred ewes at the University of Idaho is two parts of oats to one of bran. Range sheep men have success in feeding to their range ewes previous to lambing time a small daily allowance per head of cottonseed meal.

Open Shelter Preferable.

Tightly enclosed shelters for sheep in winter are neither necessary nor advisable. The sheds or barns need first of all to be kept dry underfoot and there should be sufficient room under shelter or in outside yards for exercise. If weather permits a good plan is to compel the ewes to walk a reasonable distance to a field or another yard for their hay. For shed room some authorities recommend 15 square feet per sheep. The fleece keeps the body warm and the overhead protection needed is such as will keep off storms and prevent drafts. In quite cold weather, if the nights are dry, sheep are found to prefer the open air to enclosed sheds.

Where the flock varies as to size, and some are much more timid than others, good results follow dividing them into uniform bunches. The rams must be kept separate and kept in no more than good condition. Legume hay and from one-quarter to one-half pound of bran and oats daily per ram is ordinarily sufficient.

Ups and Downs of a Bunch Grass Boy

(Continued from page twelve.)

and he had merely come to town for some medicine—that is, bull bitters.

At his home, Misery took his bull bitters morning, noon and night; and, of course, since it was "medicine," not real Injun, that he was taking, he could not be expected to share his bottle with a guest, which occasionally he had. Misery's little dissipation carried with it no social obligations, such as treating or sharing up with a neighbor—hence was less costly. I am sure now that he took this into account, for he was notoriously a tightwad.

He made money, too; in fact, there were years in the neighborhood when Misery was about the only one of the farmers who farmed at a profit. He raised rye hay — never tried to raise anything else. All the others raised wheat, the yields being light and the price low. Misery merely cut and stacked his rye hay, which yielded at least two tons per acre, and then waited for the stockmen on Wilson creek, 10 miles south, to come out and buy it in midwinter, when their feed ran low. This they almost invariably did, hauling it away themselves and paying $5 a ton for the privilege. Yet, most of the neighboring farmers thought Misery was a "damfool" for sticking to rye.

His hay crop sold and the money in his pocket, Misery's stomach began to trouble him, and he sought surcease from pain by turning to his beloved bull bitters. It is clear to me now that between Misery's stomach trouble and the price of rye hay there was a sympathetic relationship. If the winter was mild and the stockmen failed to buy Misery's rye hay at a good price, he said very little about his bad stomach, and treated it with only meager doses of bull bitters. But if the winter was long and cold, and all his hay went at top-notch prices, then he talked to all the neighbors about his paining stomach and made many trips to Coulee City to renew his stock of bull bitters. He was the shrewdest, the most conservative, actually the wisest drunkard I have ever known.

There is a saying that "Misery likes company." It was not exactly true in Missouri Pete's case, for he was not far removed from pessimism so far as the gentler sex was concerned. No, he would never marry—didn't want any women folks about. They were fussy and always talking about their neighbors. Also, he disliked dogs; but he liked cats—had an old maid's affinity for them, especially for the one he called Crook. This cat Misery had reared from a small, half starved kitten. When he wished it to leave the room and it did not respond at once to his bidding he picked it up by the tail and flung it from the door. This act repeated many times while the kitten was attaining the dimensions and dignity of a tolerably large, passably fat cat, gave the creature's tail a permanent crook to the left; hence, the name Crooked Tail, which Misery eventually shortened to Crook.

Crook was a great hunter, said Misery. The floor of his shanty had been made of rough, pine boards with a few small knots in the boards. As the boards dried, the knots worked loose and fell out, leaving several small, round roles in the floor of Misery's house. Squirrels playing under the house, not infrequently poked their heads through the holes. Right here, Crook did some fine work. The cat seemed to know just which knot hole to watch. Just as surely as a squirrel poked up through a knot hole, Crook would shoot out his paw, claw the squirrel up through the knot hole, and devour it then and there. Missouri Pete never tired of boasting of Crook's achievements as a watcher of knot holes. He said that one Sunday afternoon while he dozed or watched the cat in mute admiration, Crook hooked five squirrels through the knot holes, and ate them all.

But there was one squirrel which Crook failed to get. I dropped in on Missouri Pete one day at dinner time. He had bacon, potatoes boiled with their skins on, dried prunes, coffee and cabbage, but no bread, notwithstanding the fact that he was a famous maker of "sour dough" biscuits. He explained.

He guessed he had shut Crook out of the house when he went to work, or something. A squirrel had come through a knothole and the darned thing had tumbled into his sour dough can, which was sitting on the floor near the wood box, so as to keep warm. Unable to get out of the can, the squirrel eventually had perished and sunk to the bottom.

Several days later, he didn't know how many, Misery chanced to pour his sour dough from one can to another—and discovered the dead squirrel. The sight of it had made him sick. His stomach was bad anyway, and he was out of bull bitters. He was sure, though, that it was merely the looks of the squirrel that had made him sick. If he hadn't seen the darned thing he could have gone right on making bread out of the can without knowing the difference. As it was, he didn't think he would ever care to see, smell or bite sour dough bread again.

The next instalment of "The Bunch Grass Boy" tells of a recitation by "Joey Ashlock," who already had acquired considerable fame as an "elocutionist" in the Hartline Literary society. Neither should you lose the debates and debaters of the Hartline Literary, as they are recounted also in the next instalment.

Clackamas Crops Gain.

There has been an increase of about 10 per cent in the area of cultivated land in Clackamas county during the last year, if the first 150 reports of Clackamas county farmers in the agricultural defense movement may be taken as a guide. These reports, filed with T. D. Case and E. B. Fitts, district representatives in the movement to centralize agricultural resources, are coming in much more rapidly than had been expected.

NEWS FOR BREEDERS

Own Registered Stock

There are in the Grand Ronde valley in eastern Oregon, rather a surprising number of stockmen owning registered Shorthorn females. Speaking about the fact with W. J. Townley of Union, one of the pioneer Shorthorn breeders of that valley, I learned several interesting facts. Most of these men, said Mr. Townley, are not new comers to Oregon. Among them are the oldest cattlemen of the state and their sons and grandsons. I asked him the reason why there is now such a movement toward pure bred cattle, and especially Shorthorns, and his answer was: The reduction of the range, making it harder to run large bands of cattle; thus a necessity for fewer and better cattle, and this, with the high cost of keeping cattle, both in feed and labor, makes the wise stockman turn naturally to the best beef breed on earth, especially for the farm—the Shorthorn.

Among the breeders to have one or more registered females are the following:

At Union—W. J. Townley, W. W. Green & Sons, newcomers, but cattlemen back in Oklahoma; Hutchinson & Sherman, the former's father a cattleman away back in 1864; W. E. Fickle, E. C. Keckritz, Davis Bros., Donald Gale and A. D. Bideler.

At Hot Lake—G. W. DeLay, whose father was an oldtime cattleman.

At Alicel—G. G. Gray, who bought his first registered bull from Mr. Townley on October 23, 1902; G. M. Gray, J. T. Gray and N. T. Gray.

At La Grande—G. G. Taal, quite an oldtime cattleman himself.

Besides these there are Cleris Olsen, Haines; R. E. Boyce, W. A. Payton and others at Baker, just over in the Powder River valley, and every one of these named except two are expected to exhibit at the Union Stock show June 13-6, or some 15 exhibitors. The Shorthorn breeders are feeling pretty good over the situation. H. A.

IN THE WRONG CORRAL.



In a recent issue The Farmer identified a fine looking Holstein cow as a "Fine Shorthorn Heifer." Somebody in the office—it hasn't yet been decided who—left the gate open, as it were, and she got into the wrong corral. The animal shown herewith is the Shorthorn heifer, the photographs having become interchanged. This animal belonged to W. O. Minor of Heppner, Oregon, and sold at a Portland sale in April for $570.

Poland China Futurity.

At a meeting of the Idaho State Poland China association, presided over by President W. F. Howard of Parma, held at Caldwell May 17, it was voted to hold the 1917 Poland China futurity at the state fair in Boise this year, providing the fair management would meet the necessary conditions. A. L. Wilson of Greenleaf was one of the prominent speakers at the meeting. This was the unanimous agreement and, as Canyon county is the center of a large number of Poland China breeders, probably the largest number in the entire state, the action reflects the desire of the breeders to help out the fair by a large exhibit. The matter of running special live stock cars from Canyon county to some of the fall shows was also brought up and received favorable consideration. This was particularly urged in view of the fact that Canyon county is becoming noted for its high class live stock, and it believed that this would be good publicity, as well as in the line of a proper public spirit.

On the Ratcliff Farm.



The above picture is of a registered Shire stallion, owned by Grant Ratcliff of Lancaster, Wash. Mr. Ratcliff recently purchased this horse and two fine registered Shire mares from Metz & Sons of Pendleton, Ore.—D. G. S.

Buys Entire Herd.

To the Editor: I have just returned from a six weeks' trip through the east for the purpose of securing additional Aberdeen Angus cattle. We succeeded in purchasing the entire herd of John D. Evans, Aurora, Ill. This herd comprises 70 head of excellent breeding cows and heifers and five extra good bulls. In addition to this herd we purchased five very choice cows at public auction in Iowa, from the herds of F. J. Roberts of Atlantic and B. J. Donohue of Holbrook. These cattle will arrive at the ranch the fore part of June. Our herd will then number about 250 head of breeding cattle.

Our sales have been exceptionally good of late. Some of the recent sales are as follows:

George Dixon, Prineville, Ore., bull calf and yearling bull; Edward H. Minden, Clarkston, Wash., two bull calves; University of Idaho, two bull calves; H. Lundberg, Cle Elum, Wash., bull calf; L. C. Bunnell & Son, Enterprise, Ore., yearling bull; P. F. Fassler, Akron, Col., yearling bull; J. A. Scollard, Chehalis, Wash., two-year old show bull and six outstanding heifers; John Smithson, Ellensburg, Wash., five yearling bulls; Pope Bros., Notus, Idaho, yearling bull; W. A. McLeod, Grass Valley, Ore., two bulls.

OTTO V. BATTLES.

Live Stock Sales.

Auctioneer J. W. Hughes of Forest Grove announces the following sales:

W. A. Forrest will hold a Jersey sale at McMinnville, Ore., June 12. The farm is close to Whiteson station. C. W. Jensen joins in the sale with six purebred Duroc Jersey sows and a boar. The cows are all Record of Merit animals.

McArthur & Stauff will hold a sale of purebred Jerseys at the farm near Rickreall, Ore., June 27. Twenty head are Register of Merit cows.

On June 27 the entire dairy herd of J. C. Graham, including both grade and purebred stock, in all nearly 80 head, will be sold at auction at the Graham place, two and a half miles southwest of Palouse, Wash. Auctioneers Gue and Cranke will conduct the sale.

Refuse 66½ Cents for Mohair.

The mohair pool at Eddyville, Ore., refused an offer of 66½ cents a pound. This indicates the high range of prices being paid for both mohair and wool. Last year much of the hair was sold at 40 cents.

Jersey Cattle Club.

The Marion County Jersey Cattle club will meet at the commercial club at Salem, June 6 at 10 a. m.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 23. JUNE 7, 1917. ** WEEKLY.

Apples Are Important as Food Necessity

As a Dried Product They Surpass Evaporated Potatoes in Nutritive Value

If an American Robinson Crusoe of this year 1917 knew that he was to be cast upon an island with a limited supply of food, he would be pretty careful to pick out what he thought would contain the most nourishment. He would very likely center on bread and meat and potatoes as representive food products. As much as he might like apples and other fruits he would probably classify them as luxuries, which should not be permitted to take the place of food necessities.

This is evidently the view taken by the Northern Pacific railroad when the company served notice on the apple growers of the Pacific northwest that cars would not be furnished for the movement of apples next fall and winter, as apples are regarded by the railroad as luxuries and not necessities.

This matter was taken up at Washington with Senator Poindexter by Frank Reeves and W. T. Clark of Wenatchee, Wash., representing the apple growers of the northwest. A Washington dispatch says that Senator Poindexter, accompanied by the two apple men, called on Herbert N. Hoover, government food administrator, and Secretary Houston, laid before them the situation which had arisen and received positive assurance that the position taken by the railroads would not stand. Mr. Hoover added that apples constitute a highly important article of diet, more important than potatoes and especially in time of war. He explained that much of the suffering among the people of Belgium, with whom he worked so long, was due not so much to the fact that they had insufficient food as to the fact that they could get no fruit.

It is possible that Mr. Hoover and even Secretary Houston may not have had the opportunity of looking into the energy value of apples as measured by the calories of the food scientists, or their distinctive nutritive value as distinguished from the health giving qualities usually attributed to the eating of fruit. A caloric is the unit of measurement by which food scientists calculate the energy, or nourishment value, of foods.

While at Pullman the other day I met Professor O. L. Waller, who gave me a compilation just prepared by several of the experts of the state college on this very matter of the food value of apples and other fruits as compared with other foods. Professor Waller himself said that he preferred apples to potatoes. He ate apples at every meal, eating baked apples without the usual accessories of sugar and cream.

The facts brought into the light by the state college experts are not only of great importance, but of especial timeliness. For instance they dig up Bulletin 28 of the bureau of chemistry of the national department of agriculture, which gives the fuel or nutritive value of dried products in calories per pound as follows:

Dried apples	1386
Dried prunes	1170
Dried potatoes	1168

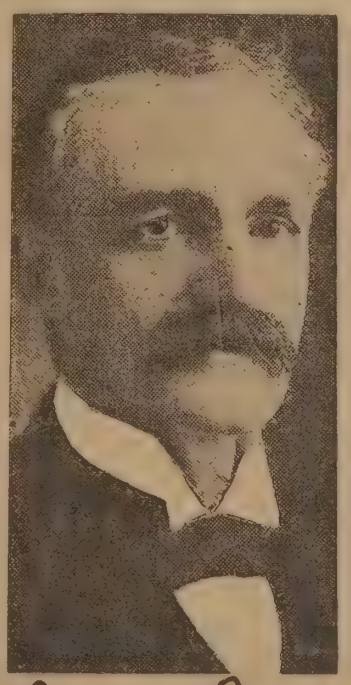
These figures are astounding in connection with the all-important agitation for the saving and preserving of fruit products by home drying devices as well as by community and commercial hydrating plants.

The following tables are from Graham Lusk's "The Science of Nutrition."

(Continued on page five.)

U. S. Safety In Hands of Farmers

The Farmer has already printed the clear and powerful appeal of Gifford Pinchot to the farmers of America. As president of the National Conservation association and former United States forester, Mr. Pinchot has made the plea of the farmers heard in high places, fighting the special interests with telling force. Two or three sentences from Mr. Pinchot's appeal can not be published too often or sink too deeply into the hearts of the readers of the Farmer:



Gifford Pinchot

"The two great weapons in this war are arms and starvation. The war against German arms will be won or lost in France; the war against starvation will be won or lost in America.

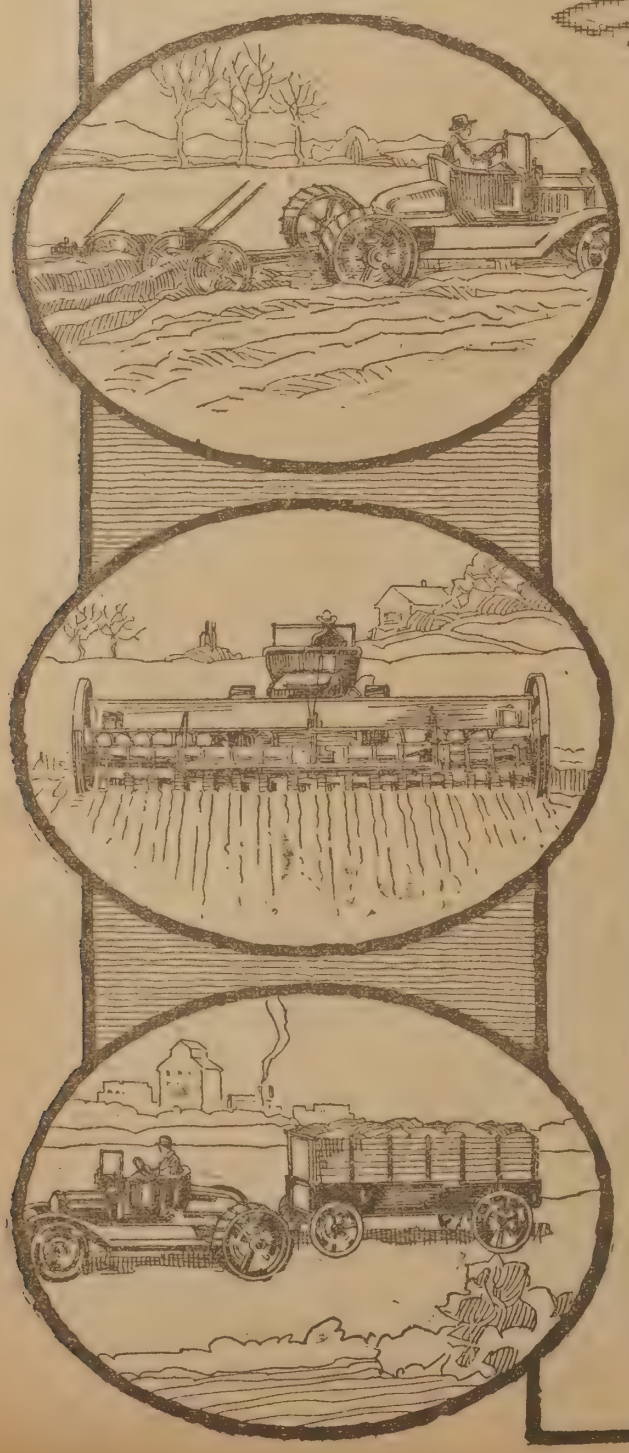
"The safety of our country just now is in the hands of our farmers. What I mean is not merely the safety of our lives in the matter of food, I mean that the safety of the United States against foreign invasion hangs on the decision of the farmers of the 48 states.

"The great duty of the nation is to guarantee the farmers a fair price for their crops when grown, and a reasonable supply of labor at harvest. The great duty of the farmer is to raise food enough to win this war for democracy against kaizerism.

"No such responsibility has ever rested on any class of men since the war began as rests today on the farmers of America."

WE FINANCE THE FARMER





YES!
He Is Happy—He Paid
$50.00 Down and Balance $10.00 Per Month

Universal Junior Tractor Attachment, $150

On Installments

WE REMOVE THE LAST OBSTACLE. EVERY FARMER CAN NOW HAVE A TRACTOR.

How You Can Buy The Universal Junior

The Gerlinger Motor Car Company announces the most business-like and most liberal Tractor proposition ever offered the Farmer! You need the Tractor, but you can't afford the money right now. Well, here's our proposition: It's very simple. You make us a small payment and the balance on time—**$50.00 down, $10.00 per month.**

WHAT MADE US DO THIS? WELL, READ THIS LETTER! IT SET US TO THINKING.

Keating, Oregon, April 5, 1917.

Gerlinger Motor Car Co.,
Tacoma, Washington.

Gentlemen:

I have seen your Universal Tractor Attachment at the Ford Garage, Baker City, Oregon, and I would have the attachment had I the money to spare just now. I am putting in 50 acres of grain this spring and would put in more had I this attachment. Since I have a 1916 Ford car, I wish you would meet me part way in this matter. This is what I will do: I will pay the freight from Tacoma, Wash., to Baker City, Ore., on the attachment, complete. I will give you a mortgage on my car and all of the crop from 50 acres, and at the end of 8 months' time I will promise to pay you in full for the tractor attachment. If you can do anything for me, please write me right away, for spring is here now. Address me, Keating, Baker County, Oregon.

I am, Yours truly, ANDREW DAHL.

My references: Basche Sage Hardware Co., First National Bank, Hansen-Weis Gen. Merc. Co., all of Baker City, Ore.

THE UNIVERSAL JUNIOR

(for Ford car only); attaches without mechanical change whatever in 30 minutes; reconverted to pleasure car in same time.

And there you have it! — every ounce a real tractor. All wrought steel. Made right in the West. No freight delays. No obstacles of distance. Made to suit the soils and conditions of the West. Works on a gallon an acre. Lowest cost per working hour. Any day, any hour, any task. And, remember—the Gerlinger Motor Car Company are the pioneers in tractor attachments. We put the first attachment on the market. The Universal Junior is a PRACTICAL FARMER'S tractor, every ounce and inch of it. We long ago got out of the experiment stage. Simple as a wagon; just as workmanlike. All the power you'll need for average work. Gear reduction 40 to 1. Plows, hauls, is all-around, all-purpose, and practically indestructible. The Sturdiest, Simplest, Most Satisfying, Honest Tractor at the Price Ever Built.

OUR COUNTRY IS CALLING FOR MEN, horses and more land to be tilled. Every horse set free for the army is another trench won for America. A tractor will set free four horses, and every tractor on the farm is more than cannon—it is food, more food, more grain, more hogs, more cattle. Do your part, buy a Universal, **TEN MONTHS TO PAY FOR IT.**

Orders filled in order received.

NOW IS YOUR CHANCE—DON'T EVADE IT!

GERLINGER MOTOR CAR CO.

Manufacturers of

UNIVERSAL JUNIOR AND UNIVERSAL TRACTOR ATTACHMENTS.

(We are also manufacturing the "Universal," $275 f. o. b. Tacoma, adapted to most all cars, such as Dodge, Buick, Overland, Maxwell, Studebaker and Ford. Orders will be filled in order received.)

Tacoma, Wash.

Agents Wanted Responsible firms or individuals wanted. Some territory still open. A golden opportunity for the right parties. Wire or phone.

THIS COUPON ALSO BRINGS YOU OUR UNIVERSAL JUNIOR FOLDER—"A Tractor A Matter of Course."

Gerlinger Motor Car Co., Tacoma, Wash. Gentlemen: I am interested in your installment plan offer on the Universal Junior Tractor Attachment.

Name .....

Town .....County and state .....

Kind of farm.....Acres in cult. .....

Enclose with this coupon check or money order for $50.00 and order will be booked and shipment made in turn. Contract blank for purchase of Universal Junior being meanwhile sent to you in regular way. If no money accompanies coupon, said contract blank will be sent with any particulars asked for. Our installment offer is to be understood as meant for farmers of character and references will be appreciated.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 23 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF June 7, 1917

Producers File Protests

Enormous Freight Rate Increases Draw Fire

Whether or not the railroads of the country shall be permitted to increase their freight rates 15 per cent, thereby increasing the freight to be paid by the producers and consumers approximately $375,000,000 a year, is the question that is now being fought out in Washington, D. C., at this writing.

From all over the nation protests have poured into the interstate commerce commission against the proposed increase, and the states of the northwest have just had a hearing before the commission.

Some months ago, when the Adamson law was enacted providing for increased pay to the railroad operatives as the price of their continuance in service without the threatened strike, the Farmer warned the producers and consumers of the northwest that the railroads would sooner or later come back with a petition for increased freight rates to counteract the wage increase. They did as predicted, except that they asked for increased revenues of something like eight times the wage increase that the Adamson law required them to pay, and the interstate commerce commission granted the request, subject to final conclusion after opportunity to hear protests from those who must pay the costs. These protests are now being heard.

Last week Washington, Oregon and Idaho joined in a presentation in part of the case of the farmers, fruit growers, live stock producers and general consuming public of the northwest.

Prominent Men Take Part.

Among those taking part in the presentation of the case for the three states were the following: E. F. Blaine, chairman, and O. O. Calderhead, traffic expert of the Washington state public service commission; Commissioner H. H. Corey and Secretary Edward Ostrander of the Oregon state public service commission; J. Curtis Robinson of the Northwestern Fruit exchange; Assistant Attorney General Hance Cleland of Washington, and W. L. Clarke of Wenatchee, Wash.

Representing all the western states, H. B. Warren of Minnesota presented statistical data showing the mileage, capitalization and present earnings of the railroad companies.

Industries from all over the nation were represented in the week's grist of protests, practically all the states joining in the united move to prevent the enormous increase of freight rates.

Fundamental Principle.

Speaking specifically for the fruit-growing industry of the northwest, but sounding a fundamental principle, W. T. Clarke of Wenatchee, who was called as a witness before the interstate commerce commission, said:

"We are not unfriendly to the railroads. In fact, they are our partners in interest. If our industry fail they lose the tonnage. If we are prosperous they share equally."

He testified that at the present time when the railroads ship northwestern apples to points east of the Missouri river, where the greater portion of them are consumed, they receive approximately 50 cents a box for the service.

"The biggest part of all we earn goes to the carriers," he testified. He said that if the government places a 3 per cent war tax on freight shipments, as proposed, it will mean an 18 per cent increase instead of only 15 per cent, and would amount to 9 cents a box.

When the commerce commission will render its final decision on the case is not announced, but producers should continue their protest relentlessly until decision is made beyond all appeal. The farmer pays the freight both ways, on produces en route to markets and on manufactured goods coming back. His profits from wheat, fruit, beef or what not will be reduced by a certain portion of that $375,000,000 if the increase is allowed, and the cost of his machinery, clothing, manufactured foodstuffs and whatever else he uses will be increased by an additional portion of it.

Meeting of State Grange

By the time this issue of The Washington Farmer reaches our readers the 29th annual session of the Washington State grange will have assembled at Wenatchee. A full report of the sessions of the grange will be given in the next issue of The Farmer. In the meantime the following extracts are taken from an advance copy of the address of State Master C. B. Kegley:

This is a war, as President Wilson has said, for democracy, but our army and navy are not built on democratic lines. The resolutions asking for the reorganizing of the army and navy on democratic lines adopted at our last session should again be indorsed and plans made to see that support is aroused throughout the country to carry them into effect. An army organized on the lines of the old monarchial ideas of common soldiers and aristocrat officers, a class apart, is most inefficient for fighting for world democracy and would be a constant menace to democracy at home.

How shall the cost of the war be met? To me it seems very clear that we should insist with all our might that the war be paid for as we go and that not a single dollar shall be left for our children, or our children's children to pay, until the last dollar of the accumulated wealth has been exhausted. We have assisted in organizing a farmers' national committee on war finance and have affiliated with the American committee on war finance, both of which organizations have done and are doing splendid work to place the burden of financing the war where it belongs. I urge you to consider their program and take a strong, positive stand on this vitally important matter of how the cost of the war shall be met.

Feeding the Nations.

The American farmer is called upon to feed the nations, and I do not need to say at such a meeting as this that the farmers of this state, practically without exception, have responded and will respond to the best of their ability. But there is a responsibility upon the part of the government fully as great as that upon the farmer in order that the work of feeding the nations shall be as thorough and ample as the potential producing capacity of this great country warrants the nations to expect, and in order that our farmers in responding to the demand shall not suffer from a glutted market if the war should come to an end. This would mean disaster if not ruin to the great majority of our farmers, and it is only common sense in preparedness in this great world-wide emergency, for congress to remove the fear of this disaster by insuring them against this possibility by guaranteeing a minimum price.

The miller can be protected by guaranteeing that his price shall not exceed the farmers' price plus a reasonable handling profit, and the consumer can be protected by regulating the price of flour in the same way. By the nations buying through a single agency they will be able to get their fair quota of the surplus for export at the farmers' price plus the cost of shipment, which, through the council of defense and its subsidiary councils, it will be able to control.

By simply guaranteeing to farmers a minimum price and leaving supply and demand to regulate the price above this minimum the two most vitally important things are insured, namely: First, that distribution shall be where the need is most urgent; and, second, that the increased price will go to the producer, where it belongs. This will stimulate as nothing else could extra effort upon the part of every producer to greater production of the next crop.

If this plan is supplemented by a well-organized plan upon the part of the government to insure an adequate supply of skilled farm labor—and to do this the government may need to establish farm labor training camps—the maximum yield, so far as present farmers are concerned, will be insured.

Industrial Alcohol Distilleries.

Any system of national preparedness that does not include provision for encouraging the most rapid possible development of agricultural industrial distilleries is defective, whether viewed from the point of increasing food production, the liquid fuel supply, or munitions of war. I consider this a matter of such importance that I want to see a national association of farmers, liquid fuel users, and alcohol using manufacturers to take charge of this important part of national preparedness, and I hope you will appoint at this session a committee specially charged with the duty of helping to form such an association.

Condition of the Order.

The condition of the order is not always shown by the report of the secretary, but that can safely be taken as an index.

During the period that has elapsed since we made our last annual report we have organized 37 new granges, and reorganized four. Our growth has not not been abnormal, but we are anxious that we shall show from year to year an ever-increasing strength such as is manifest in subordinate and Pomona granges throughout the state. This is where we get the true test of the condition of the order, and we here make the statement that our granges are in better condition than in any previous year of the existence of the grange in Washington.

The state lecturer has about the best barometer for gaging the condition of the order in his weekly reports from subordinate and Pomona lecturers. Based on these reports, his opinion is that never before was the condition of the order so good. All this gives us courage to press onward and upward until we have reached the goal which is the ideal of all patrons.

Field Days and Fairs.

Last year, more often than ever before, we were called to attend these midsummer picnics and were forcibly reminded of the necessity of having some kind of a program, or a committee on program, to arrange these affairs so that they will not conflict in dates, thus enabling the state officers to make their itinerary so that one will follow another as nearly as possible. With this in view I would recommend that a committee be appointed at this session whose duty it shall be to bring about this arrangement.

Year by year this work grows, and we are glad that it does. It means real education. Last year, in this state, we had more boys' and girls' clubs in contest work at fairs than in any year before. It was a source of the greatest satisfaction to see the boys and girls winning over grown-up men in the show ring at the Interstate fair.

Cooperation.

This subject is a live one in every subordinate grange, and the Pomona should make this work one of its chief functions. For years we have been urging this and lately we have been able to see decided results. This work is perhaps more developed in King county than in all the other counties together. One of these cooperative stores, located at Kent, under the management of Brother L. Y. Williams, did a business last year of over $113,000, on less than $6000 capital; another, located at Issaquah, with Brother R. I. Case as manager, will do as large a business as the one at Kent; and another, at Bothell, is doing almost as big a business. These patrons believe in cooperation and that the way to cooperate is to cooperate.

State College.

The patrons of Washington have just cause to rejoice with all the people of Washington over the victory won in the unusual fight waged against this, our state institution. This was an attempt to create an aristocracy in education—in other words, to reduce the farmers' school to a second class college and elevate the university to a school for the rich, thus drawing an ever-widening line of distinction in society. We have always demanded the same educational opportunities for our boys and girls as are offered to the city bred youths. This is nothing but plain democracy.

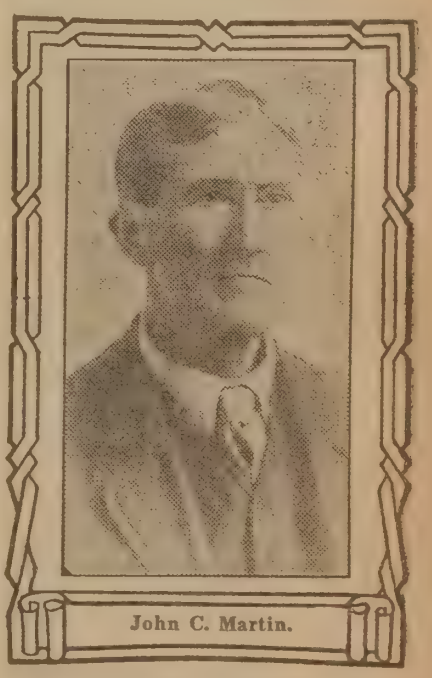
Adams County Fair.

The Adams county fair association at Ritzville, Wash., has elected five trustees, who are to serve a term of one year. They are B. B. Gillespie, J. A. Willis, W. R. Peters, F. H. Haupt and J. H. Perkins. A force of men is now busy cleaning the fair grounds. The track has been marked out and postholes for the fences are being dug.

Palouse Farm $75 an Acre.

Arthur A. Henry of Pullman, Wash., has bought for $12,000 the 160-acre farm of W. J. Cunningham, four miles west of Pullman.

Washington Portraits No. 18.



John C. Martin.

John C. Martin of Castle Rock, with the exception of five years has lived in Cowlitz county all his life. He has wrestled with those conditions that make men use their brains as well as their hands, first working in logging camps, helping clear the timber land, and finally owning a sawmill. He now has one of the coziest homes in the county. For two years he has been county treasurer, and deputy assessor for seven years of the county.

The next in the series of Washington portraits will be that of Charles E. Kline of Burke, and will be given in next week's issue of The Washington Farmer.

Liberty Bonds on Instalment Plan

Government Makes Liberal Terms and Banks Are Lending Their Aid

Your credit is good with Uncle Sam. He will sell you one of his liberty gold bonds on the instalment plan and give you the summer to meet the payments.

Suppose you decide that duty and good business judgment require you to invest in a $1000 bond. You can secure it on these government terms:

$20 when you make your application.
$180 on June 28.
$200 on July 30.
$300 on August 15.
$500 on August 30.
And the bond is yours.

There are, of course, bonds in smaller demominations for those who can not invest $1000 or more. Thrifty boys and girls can aspire to the ownership of a $50 bond. They would pay—

$1 down when they make their application.
$9 on June 28.
$10 on July 30.
$15 on August 15.
$15 on August 30.

These are the government's terms, but most of the banks are working out plans to offer still easier conditions. Some banks will give you a whole year to complete your payments.

The first thing to do is to take up the matter with your nearest bank, either by calling in person or by writing for instructions. The transaction is a simple one, and there is an organization in every county formed to help the government place these bonds.

The government is striving to popularize these bonds and the fault will be yours if you do not get one. An official statement from the treasury department at Washington says:

"Large numbers of national banks, state banks and trust companies, private bankers, express companies, newspapers, department stores, and other private corporations, firms and organizations, have patriotically offered to receive and transmit applications for the liberty loan without expense to the United States or to the applicants.

"The secretary of the treasury, appreciating the value of these offers, will have application blanks widely distributed throughout the country to these private institutions and also to the postoffices and sub-treasuries. Individual subscribers may use these conveniences or may send their applications directly to the treasury department at Washington."

With all these facilities, the purchase of a liberty bond will be as easy as the buying of a money order at the postoffice.

Mr. Roosevelt has well stated the reasons why every patriotic American should take a bond. "It is the duty," he says, "of every man and of every woman in this country, who can possibly afford to do so, to buy liberty bonds in order that guns, ammunition, food and clothes may be promptly and freely furnished to our soldiers who go to the front. There is every reason for buying them. The patriotic reason is enough, but here in addition there is offered the best security in the world, an investment backed by all the credit of the government and people of the United States."

Think it over. Talk it over with your family, asking them all to do their part.

Must Farmers Have Oriental Labor

The Washington Farmer of May 10 printed an article discussing a plan to supply needed farm labor which has been brought forward in the west. It is the French method of temporarily bringing in oriental labor with the requirement that the imported Chinese and Japanese farm workers be sent back at the end of the year. This article was sent out to quite a list of farmers scattered throughout the state of Washington and the replies received will be read with much interest:

J. C. BUSH, Chehalis, Wash.—Replying to your inquiry of May 2 regarding the temporary employment of oriental labor:

Personally I am opposed to the temporary or permanent employment of oriental labor in this country. The employment of such labor means in the end that the laborers become renters and land owners if the laws allow. The blood doesn't mix well, like that of the Scandiavians, the Germans, the English and other races, and in time we have colonies of orientals living on our best lands, mingling with the whites only in a limited business way, a source of trouble between the governments of the United States and those of the orient. I believe it better to avoid such trouble and possible future wars by discouraging in every possible way the coming to this country of the orientals even under the alluring plea of temporarily because we need them.

Our own hundred million people should furnish all of the labor we need to till the land and the taking away of one man out of every hundred of the population for the army should not work a great hardship. Let the home guard organizations, the commercial clubs and all patriotic bodies lend their individual and organized efforts toward helping the farmers at the rush times by supplying temporary labor and we will have no shortage. Let the army of hoboes be corralled and forced to work or starve. Let the national laws and machinery require every able-bodied man (and woman, too, for that matter), whether he is a pauper or a millionaire, to perform a certain amount of labor each year in helping produce food, unless he can show that he is regularly and steadily employed, and there will be no shortage of labor for the farms. We are too independent and want to take life too easy. We want the other fellow to volunteer for the army and we want "George" to go help our farmer friend while we ride about the country in automobiles and speculate on the prospects of crops for the coming season. If we are deeply and seriously in earnest about producing crops to help feed the allies let us conscript a few million men not needed for the army and navy and not following regular useful occupations and have them work on the farms.

A. A. KELLEY, East Spokane, Wash.—I am unalterably opposed to the indiscriminate importation of Oriental or Asiatic labor for agriculture or any industry when such labor is planned on a par with mules or other beasts of burden. If it is the purpose of importing and deporting the unfortunate, ignorant coolie, to be herded from place to place, not chained together, perhaps, but owned and controlled by contractors and drivers, I am of the opinion that we would be advocating a near-return to antebellum days. The Asiatic is a human being, endowed with mind and soul. There is no sound argument prohibiting the immigration of the Asiatics and the standing invitation and open door to every other part of the world. The standard of qualifications for entry to our land or country are fixed, may be changed, and in my humble opinion there should be no discrimination because of color, race, creed or country. Because my skin is white I am not so far removed from the birth of man that I can see no good in my fellow being. Therefore, it is incumbent upon me to regard my brother from the standpoint of citizenship rather than from the color of his skin, whether it be red, black or yellow.

BEN GROTE, Walla Walla, Wash.—I am not in favor of the temporary employment of Oriental labor, and I do not think it should be considered at all until it is determined how the raising of an army and the building up of our navy will affect the number of men usually available for farm labor. I employ from 20 to 75 men all during the year, and up to the present time I have had no difficulty in getting help: Conditions may be different in other sections, but personally I can see nothing to be alarmed at, for this season at least.

ALEX. MORRISON, Valley, Wash.: Relative to farm labor as regards oriental labor, I am not altogether in a position to say, only that wages are extra high, hence it means high cost of living or higher prices. Now Uncle Sam knows more about these things than I do, so I am willing to back him up, also abiding by his decisions. Of course we need more farm labor to cultivate the land from which our crops come. The idea of taking six or seven weeks to try one man like the I. W. W. case at Everett when all those jurors and witnesses should have been cultivating land! The case should have been fixed so it could have been tried with two judges, according to my view, but as the constitution says otherwise, so be it. Should Uncle Sam decide to allow the Chinese and Japanese to come to this country, then I am with Uncle Sam, first, last and always.

ROBERT PRIOR, North Yakima, Wash: There is absolutely no reason why oriental labor should not be supplied to the farms of the United States at this time, and in my opinion, any person or organization who opposes it is very unpatriotic if not anti-American.

W. FRENCH, Conconully, Wash.: The country is in great need of farm labor, therefore it is my belief that it would be to the advantage of the whole nation if farm labor of any kind could be secured, oriental or any other.

PETER CONBOY, Glenwood, Wash.: You ask me what I think of the proposition advanced regarding the temporary employment of oriental labor on the farms during the war; I am opposed to it.

More Egg Education

J. H. Guffey, manager of the Washington Cooperative Egg and Poultry association, confirms the report that many Washington poultrymen are going out of the chicken business.

"This is the report I get at our conferences, attended by the managers of the local associations," Mr. Guffey comments. "The selling movement is logical and almost inevitable at this time of the year, when the poultry farmers are faced with the necessity of carrying young stock through the summer on high priced feed. Either the egg market must improve, or many of our farmers will quit the business."

It is needless to say that such a condition would be a calamity for the entire northwest. Much of the stump land of eastern and western Washington is ideally suited to poultry culture. The hen is a specialist in turning the grasshopper and the wood ant into eggs and meat. Her ability as a rustler, and the wide range of diet to which she can adapt herself, make her one of the basic economic resources of the state. It is not reasonable to ask the farmer to shoulder this burden without help—he has been selling on a narrow margin of profit from the dawn of history, and a time has come when that margin is about to be wiped out. If the city man wants to continue to eat eggs, he must readjust his sense of food values; we need fewer egg boycotts, and more education.

P. E. T.

Something Good Added to Our Family Circle Page

Beginning with next week's issue THE FARMER will publish a series of

HEALTH AND HAPPINESS ARTICLES

By DR. LEONARD KEENE HIRSHBERG A. B., M. A., M. D.



Dr. Hirshberg is a graduate of Johns Hopkins university, and during his extensive medical studies in Europe was made assistant to a world authority on nervous diseases. He writes the kind of interesting and helpful health articles that you get both real benefit and keen enjoyment from reading. He blends the most timely and sensible medical advice with a buoyant optimism and good humor. We predict that our women folks will like Dr. Hirshberg, whose introductory article will appear in

NEXT WEEK'S FARMER.

Bull Association

Fifty Members Already Sign Up

N. C. Jamison, dairy specialist of the extension department of the State College of Washington tells The Farmer of the bull association now being organized on the Tieton project in the Yakima valley. In company with Joel G. Winkger of the United States department of agriculture, who has had much to do with the organization of these bull associations, R. P. Bean, the agriculturist on the Tieton project and J. N. Price, live stock specialist of the extension department of the state college, Mr. Jamison made a tour of the farmers. Over 50 members already have signed up and others are joining. The association will buy six or eight bulls and these will be located in blocks. At the end of two years the bull in block one will be transferred to block two, the bull in block two to block three and so on, and the bull in block six or eight will be transferred back to block one. This is the only bull association in the state of Washington. There are some 30 bull associations in the United States, the largest of these associations having 22 bulls and the smallest having three bulls. When several farmers unite in buying one bull, the organization is called a bull club. There are at least half a dozen of these bull clubs in Benton county, County Agriculturist Lee M. Lampson, having been largely instrumental in organizing them.

Milk Situation Critical.

Mr. Jamison, in common with others who are posted, regards the milk situation as extremely critical.. A number of dairies are being dispersed, the producers being convinced that they can not continue the business on present prices. There are somewhere about 250,000 milch cows in the state of Washington, and as the average life of a milch cow is eight years, it requires 30,000 cows each year to keep up the supply.

"People today are getting more food value for their money in milk than in almost any other essential article of food," says Mr. Jamison. "The producers should have an increase in price, and the consumers should be educated in the matter of the comparatively low cost of milk even at an increased price."

Mr. Jamison believes that the dairy cow yet remains one of the most profitable of animals, that she can use up roughage on a farm to better purpose than the hog, and that in the long run it will pay farmers not to sacrifice more of their dairy stock.

Mr. Jamison is continuing the work of aiding to organize the Spokane County Cow Testing association and will soon aid in similar work in the Yakima valley.

Skagit County Fair Prizes.

The board of directors of the Skagit County Fair association offer the following prices for the best grade dairy and beef cattle:

Grades.

Guerneseys.
Guerneseys, class M.
1. Cows, 3 years old or over; first, $4; second, $2.
2. Heifers, 2 years and under 3, first, $4; second, $2.
3. Heifer under 1 year old, first, $4; second, $2.
4. Herd, first, $10, $5.
Holstein, class N.
Same as above.
Shorthorn, class O.
Same as above.

Any Breed.

Class K.
1. Best grade cow, 3 years old or over, first, $4; second, $2.
2. Best grade cow, 2 years old and under 3, first, $4; second, $2.
3. Best grade heifer, 1 year old and under 2, first, $3 second, $2.
4. Best grade heifer, 6 months old or under, first, $2.50; second, $1.50.
Special premium for cow or steer in best condition for beef, $7.50.

New Elevator at Almira.

Almira, Wash., is to have a new elevator of 50,000 bushels' capacity.

Apples Important Food Necessity

As a Dried Product They Surpass Dried Potatoes in Nutritive Value

(Continued from page one.)

Energy Value.

	Calories per Lb.
Apples, fresh	260
Apricots, fresh	240
Grapes, fresh	390
Oranges, fresh	210
Prunes, fresh	325
Pears, fresh	255
Apples, dried	1190
Prunes, dried	1230
Apricots, dried	1139
Dates, dried	1415
Raisins, dried	1410
Baked beans, canned	555
Sweet corn, canned	430
Green peas, canned	235
Asparagus, canned	80
Tomatoes, canned	100
Apricots, canned	295
Cherries, canned	365
Peaches, canned	190
Corn meal	1625
Rice	1610
Wheat flour	1615
Corn bread	1170
White wheat bread	1195
Dried white beans	1530
Dried white peas	1508
Beef, fresh, rump	1380
Beef, corned, rump	1250
Veal cutlets	710
Pork shoulder	1660
Bologna sausage	1085

It will be noticed from the above that of the six kinds of fresh fruit, apples are credited with a greater number of calories per pound than apricots, pears or oranges. Canned baked beans contain only about half as much food value per pound as do dried apples. Canned sweet corn has only about a third as much value as dried apples.

White wheat bread has only about the same amount of food value as dried apples.

The above table will bear much study and will be a revelation to those who have deemed apples as a luxury rather than in the light of an important food product.

Outside of food values the necessity of fruit in the diet is well recognized by authorities as well as by the experience of people in general.

Analysis of 173 samples of 34 leading commercial varieties of American apples compiled from authorities are as follows:

	P. C.
Water	85.31
Solids, total	14.69
Sugar, total	11.30
Cane	3.40
Reducing	7.90
Protein	.639
Acid as malic	.589
Ash (salts)	.31
Crude fiber	1.29

Here is a table giving analysis of potatoes:

	P. C.
Average water content	76.67
Total solids	23.33
Starch	17.89
Sugars and dextrin	1.21
Protein	2.07
Crude fiber	.78
Ash	1.19
Undetermined	.19

Bulletin 28 of the bureau of chemistry gives the inedible portion of potatoes as 20 per cent; the available nutrients in the edible portion as follows:

	P. C.
Carbohydrates	17.7
Protein	1.7
Fat	.1
Minerals	.8
Unavailable nutrients	1.4

The same authority gives a fuel value per pound of potatoes as purchased of 292 calories.

The following table of food values of commodities as shipped are taken from "Elaboratory Handbook of Dietetics," by Mary Swarts Rose of Columbia university:

	Calories per Lb.
Tomatoes	103
Spinach	108
Cabbage	120
Cauliflower	138
Carrots	159
Potatoes	304
Cereals, etc.—	
Canned corn	445
White bread	1174
Beans, dried	1564
Rice	1591
Corn meal	1615
Fruits, fresh—	
Watermelons	57
Muskmelons	88.9
Oranges	169
Peaches	153
Apples	214
Pears	256
Dried fruits -	
Prunes	1161
Apricots	1260
Apples	1318

The apples are consumed in greater quantities than any other fruit in the United States. It constitutes one of the cheap forms of the desirable fruit portion of the diet, says B. F. Barnett, professor of pomology, state college of Washington.

Apple production:

1909 .....58,827,000 barrels
1916 .....67,695,000 barrels

The above is for the whole United States.

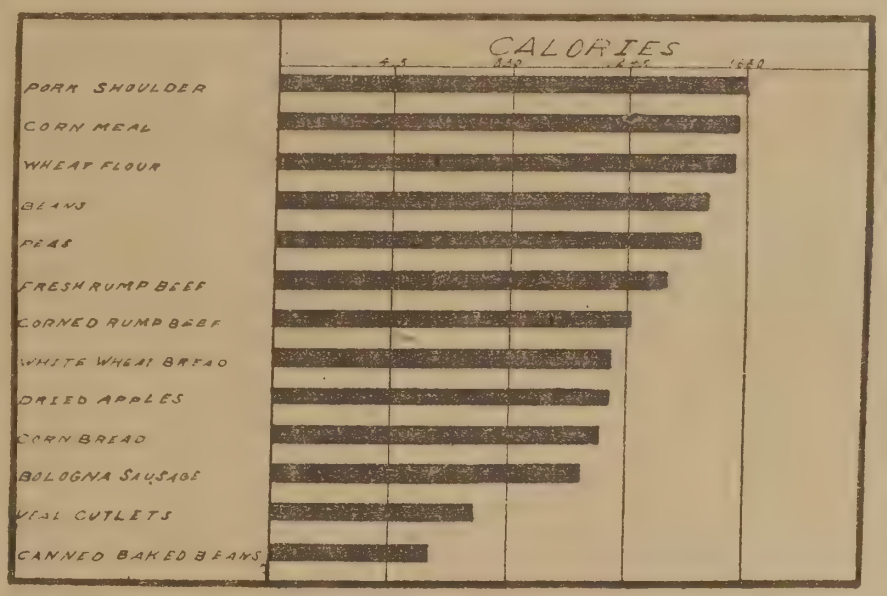
Here are some extracts from authorities on the subject of apple food value:

"The natural combination of acid, sugar, pectin, mineral salts and water that is found in fruits stimulates the appetite and helps in the movement of foods through the energy machine that we call the alimentary canal."—Bailey.

"The wholesomeness of apples is well recognized by all authors on physiology and hygiene, and the necessity of at least a partial fruit diet is acknowledged by all. Inasmuch as the apples are one of the most abundant of fruits * * * its value as a food product is probably not as fully acknowledged by our own people as it should be. Through a greater part of the year apples can be made a staple article of diet. They are, of course, to be most highly recommended uncooked."—Wiley.

The above compilation by the state college authorities is only one feature of the work that is being done by the institution in the line of aiding food preparedness. An exhaustive bulletin of over a hundred pages has been issued by the state college on the "Evaporation of Apples," by J. S. Caldwell, fruit by-products specialist, and other bulletins are in preparation, especially upon devices for use by families in drying fruits, some of which can be easily made at home.

Chart of Calories or Food Units



Dried apples (1190 calories) have in food units:

71.7 per cent as much as pork shoulder	1660	calories
73.2 per cent as much as corn meal	1625	calories
73.6 per cent as much as wheat flour	1615	calories
77.7 per cent as much as beans	1530	calories
78.8 per cent as much as peas	1508	calories
86.2 per cent as much as fresh rump beef	1380	calories
95.2 per cent as much as corned rump beef	1250	calories
99.5 per cent as much as white wheat bread	1195	calories
101.7 per cent as much as corn bread	1170	calories
109.6 per cent as much as bologna sausage	1085	calories
167.6 per cent as much as veal cutlets	710	calories
214.4 per cent as much as canned baked beans	555	calories

Land Bank Bonds Must Be Sound

Appraisals of Land Must Be Accurate and Reasonable

NORTH YAKIMA, Wash., May 31.—Several farm loan associations in the valley will go out of business, it is said, as a result of the announcement by Appraiser C. B. Kegley of the federal farm loan bank at Spokane, that fruit trees add nothing to the value of land and that loans must be based entirely on the land value.

Mr. Kegley has left this field with the suggestion that the associations disband, except one or two that with enlarged boundaries may accommodate any who want loans on the reduced valuations.

Desiring authoritative information on the matter of appraising orchard lands under the federal rural credits act the Farmer called upon D. G. O'Shea, president of the federal land bank at Spokane, handling the loan business for the four states of the Pacific northwest.

"Safety first; then service," is the motto adopted by the federal farm loan organization, said President O'Shea.

It was this idea, he says, that caused the central board at Washington, D. C., to make the ruling that fruit trees could not be appraised as a real asset of farm lands.

While this ruling has caused some uneasiness and some reported dissatisfaction in some orchard districts, it is believed that it will not work out to the injury of even the fruit growers themselves. Charters are being issued to loan associations in orchard districts, notwithstanding the ruling, says President O'Shea.

Announcement is made at the Spokane office that there are now nearly 30 associations in the four northwestern states, with many others in the process of application for charters. Of those granted, Washington leads with nine, Montana has eight, Oregon six and Idaho five.

The following is an extract from President O'Shea's instructions to land appraisers under date of June 1, touching upon the matter of orchard land appraisals:

"The appraisal of orchard lands has given rise to some comment and difficulty. In a measure we are between two fires and have to endeavor to steer fairly between both.

"In the first place I will say we are here primarily to serve the farming people of our district and bring to them the benefits that come from the farm loan law. Secondarily we are in duty bound to see that the security that is behind the bonds that will be issued will at all times be sufficient and beyond question. The continued operation of the law will altogether depend on the sale of the bonds that will be issued, and no question of reasonable doubt can ever be allowed to be raised as to the sufficiency of the security behind the bonds. It must also be borne in mind that the purchasers of such securities (many of whom will doubtless be representatives of estates for widows and orphans) must at all times feel that the investment is safe.

"The state of Oregon, under its rural credit law, has placed a limit on the amount of money that the state will loan per acre on any land within the state as a maximum of $50 per acre. It is doubtless true that the limitation was placed by the state of Oregon by reason of the difficulty that may arise from appraising lands in orchard districts. We would not like to have any misinterpretation of our purposes in the matter, and would also wish it understood that we are in duty bound to carry out the policies of the federal farm loan board. It would be useless for us to take mortgages that would not be acceptable for bond issues, as our activities would cease.

"We appreciate that land that is intensely cultivated is valuable, and we do not expect to ask to have land that is especially adapted for gardening and intensified cultivation appraised on the basis of grain lands in a remote section, as some have feared. In many sections of the western country, much land for orchard use was marketed in the past at high figures, and orchards have been planted thereon and loses incurred. In many cases the orchards have been pulled out and the land reverted to ordinary agricultural uses, and necesarily for all purposes will have to take the usual agricultural valuations.

"An orchard is a beautiful and a valuable asset, so is a beautiful home. If fruit trees were insurable they could be considered, doubtless, as insurable improvements. They can not possibly be fairly considered in the value of the land for the reason that they are destructable, that if care is not taken of them they may die or become diseased, and hence there is reason and justice in the policy of not considering the trees as having value for mortgage loans that will run up to 40 years. If orchard land should change ownership, what assurance would there be that future owners would have the knowledge or inclination to maintain orchards?

"In all these matters I trust that you will endeavor to make our position clear wherever you go and have it understood that it is our firm policy and purpose to treat all people and all sections of our district with equal consideration and care, and render to all equal service. Confident of the full and complete success of the land bank, and of its unquestioned and manifold benefits to farmers, we want only fair and conservative appraisements, and, believing that we are building for the future, we shall urge compliance with the motto we first adopted of "Safety first; then service."

Lambing Time

ARTICLE 6, by E. J. IDDINGS.

Management at lambing time generally determines the measure of success with the flock of the year. The percentage saved is all-important and runs from 40 per cent to 150 per cent, depending on feeding and management of the flock previous to lambing, equipment for taking care of the ewes and lambs and faithfulness of the work of the shepherd. In winter or early spring some shelter for night and conveniences form warming chilled and weakened lambs are required.

Some ewes, especially young ones, need to be placed by themselves for from two to four days until ewe and lamb learn to know and be able to find each other. Some lambs are born very weak and need to be rubbed to start the circulation and given warm milk and stimulants to give them a start in life. Saving of such lambs often does much to help the percentage. Orphans are common and must be placed on another ewe or raised by hand Often by placing the skin of a dead lamb on an orphan the mother of the former can be induced to take the latter. Other simple devices are made to serve the same end.

How to Feed Orphans.

Many fail in raising orphans by hand. The principal reason is overfeeding. The best method of feeding is with a bottle and rubber nipple. The first two or three days the cow's milk should be given every two hours, at first only two or three tablespoonfuls at a feed. Milk from a high-testing cow is best. The average for a 78-day butterfat test on 10 ewes representing five breeds in the University of Idaho flock was 8.62 per cent. One ewe, a Cotswold, averaged 9.46 per cent over a period of 76 days. The butterfat percentage for the average cow is approximately 3.75 per cent. The bottle and nipple must be kept clean and sanitary and the milk warmed for each feeding to about 92 degrees Fahrenheit.

After lambing the wes should have feed ample for making a strong milk flow. Some grain or grain and root crops for a few days and then grass is the common and entirely satisfactory method.

If the lambs are expected to make rapid growth they should be taught to eat grain early. After grazing is good the ewes need no grain. Feeding the lambs grain is solved by making them a creep. In a separate enclosure are placed low troughs for the lambs and

(Continued on page seven.)

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Crisis May Justify Asiatic Labor

Recently The Farmer suggested the advisability of the United States government temporarily permitting the immigration of Asiatic labor as a wartime measure to fill the urgent need of farm industries. The plan has been successfully tried out in France, with a provision of law that the Asiatic workers are to be returned to their native land when the war is over.

Other Pacific coast newspapers are supporting the movement, and the Chinese Six Companies of San Francisco have offered to import Chinese laborers up to the number of 500,000 for farm work in this country and to return them promptly to China on the termination of the war.

Offer Is Being Considered.

Their offer is now under consideration at Washington, and Walter S. Gifford, director of the council of national defense, has acknowledged it in the following telegram:

"Your telegram of May 19 was considered by the council of national defense at its meeting yesterday. I am directed by the council to convey to you its appreciation of your offer and to advise you that the whole subject is being studied and that the government will be glad to avail itself of your cooperation later should occasion arise. Permit me in behalf of the council of national defense to thank you for your tender of service."

Prejudice Should Not Rule.

Action on this matter should turn on existing conditions and not on prejudices of former years. If Chinese labor is needed—if its temporary importation will help to increase food production and make easier the winning of the war—there should not be a moment's hesitation about accepting this offer. The Chinese Six Companies are in close touch with the labor supplies of China, and have the organization and the financial resources to fulfill their pledges. The fact is also to be considered that all authorities agree that Chinese business men are scrupulous in keeping their obligations. The Six Companies have promised to return these offered workers whenever the United States government shall so direct.

The American wage-earner has as much to gain by their coming as any other citizen. Probably more. It will mean increased food production and reduced cost of living. It will check or stop the withdrawal to the farms of labor needed in other industries, a movement that threatens to paralyze many industries and throw their remaining workers out of employment.

The Conditions Are Abnormal.

In normal times the Farmer would be against the bringing in of additional Asiatic labor. But these are abnormal times. The nation is at war with a powerful and resourceful enemy. The war may be won or lost on the farms of the United States. Our allies are crying for food, and it would be a crime against civilization and free government for us to allow anything to go to waste next harvest time for want of labor in the fields.

In all probability the labor problem will be particularly stringent on the Pacific coast. We have grain to harvest, fruits and vegetables to pick, pack, preserve and dry; salmon and other food fish to can and dry. If the labor supply should fall short, millions of dollars' worth of precious food will be lost.

These huge problems are up to the council of national defense, and if its judgment approves the offer of the Six Companies it will be the patriotic duty of the public to accept the decision and make the most of this added labor resource.

A Mistaken Idea of Cowardice

There is a great deal being said these days about so-called slackers, men and boys who for various reasons and by various means wish to avoid service in the army or the navy.

The coward or the man without sufficient patriotism to shoulder arms for his country should be frowned upon, but in prosecuting the campaign against slackerism many persons are casting a slur on thousands of honestly patriotic boys and men who are joining the army of food producers on the farm. No doubt there are persons who wish to go to the farms to avoid army service, just as there were those who wished to rush into matrimony for like purpose. And just as many patriotic and sincere young men refused to carry out their plans of marriage for fear of being thought slackers, so will many patriotic and sincere men refuse to join the army of soldiers of the soil this season because there is about to be a stigma placed upon them.

The armies fighting Germany are in sore need of food. Their governments are pleading with America to produce it, and the government of the United States is urging the farmers to do their utmost and thousands of men and boys in the city to join them to help plant and harvest the greatly needed crops. There should be thousands of workers from cities working on the farms this summer, and they should be honored for it. It would be as patriotic service as that performed by the men who will go with Pershing to the French front. The charge of slacker that is being promiscuously made is unfair and withal foolish; unfair because where one slacker goes to the farm to escape duty, hundreds of loyal men and boys will go to perform duty; foolish because under the selective draft law recently passed, employment on the farm will exempt no man unless it be determined that his serviec there is of such nature as to render it more valuable to the country than it would be on the battlefield.

Bond Dealer Talks Foolishly

A Spokane bond dealer advances the nonsensical suggestion that the government fix a minimum wartime wheat price for the farmers of 80 cents a bushel. That was about the average price before the war, he says, and if farmers made money at that figure three or four years ago, they should make a profit on that basis now.

The man who made that suggestion needs to wake up. Vast changes have come to this old world since the fateful summer of 1914. The cost of growing wheat has skyrocketed everywhere and an 80-cent guaranteed minimum would be no guarantee at all. It would be a monumental blunder, for the inevitable effect would be to discourage production, cut down acreage and intensify the existing world shortage in breadstuffs.

The farmer must pay more for everything that goes to the production of a wheat crop. Machinery, labor, seed, grain sacks, binding twine, horse feed, gasoline, cost of boarding his helpers, harvest expenses—all are on a higher plane.

Eighty-cent wheat in 1917 would be about as unprofitable as 30-cent wheat in the '90s. It is simply out of the question.

The world is short of foodstuffs and liberal profits to the farmer will be found the only corrective for that international misfortune.

Save the Bottles

Look about most houses and a large number of unused bottles will be found. The large-necked ones may be used for putting up small fruits and preserves. The others may be utilized for the bottling of fruit juices. Corks and sealing wax or paraffin will make them airtight.

Washington Gleanings

The farmers of Thurston county have made applications to the farm loan bank of Spokane for $24,300.

The Colville Indian reservation is to be opened to settlement to aid the increased production of farm products.

J. C. Fluherty, federal government farm expert, has been appointed county agriculturist of Yakima county and will assume his new duties at once.

For the third consecutive month E. L. Brewer of Satsop and Murphy brothers of Montesano have captured the Aberdeen Chamber of Commerce prizes in the cow testing competition.

According to a report submitted to the state department of agriculture by F. E. DeSellem, horticultural inspector at North Yakima, 1600 acres will be planted in beans in Yakima county this spring.

Four hundred organized farm loan associations in the Spokane district have applied for loans aggregating over $19,000,000. Unorganized applications in sight will double this sum in loans soon to be made.

M. V. Picken has been appointed by the county commissioners to fill the vacancy caused by the resignation recently of M. K. Bowen as a member of the board of directors of the West Okanogan valley irrigation district.

T. O. Morrison, assistant commissioner of agriculture, announces that the department will send F. N. Rhodes of Seattle to Los Angeles for the purpose of inspecting all shipments of California potatoes which are sent to northern markets.

H. B. Miller, chairman of the beet sugar committee of the commercial club of Toppenish, announced that sufficient pledges are secured or in sight to guarantee the 50,000 tons' output of beets required to secure a sugar factory for Toppenish next year.

Glenn Chandler, aged 17, a member of the Broadway Pig club of North Yakima, has received a $20 cash prize from the secretary of the National Duroc-Jersey Record association, for the best record in any state in 1916 in raising Duroc pigs in school club work.

Up to date a total of nine war leases have been signed by State Land Commissioner Savidge in accordance with his plan to permit farmers to rent free of charge, vacant state lands. The land is being leased by small farmers who want to raise vegetables for their own families and not for commercial purposes.

What Others Say

Herald, Concrete: We talk too much anyway.

Megaphone, Quilcene: When conscription begins the fact that war actually exists will for the first time really be accepted by the general public.

Press, Uniontown: It begins to look as if we were going to have to work our own roads, and it is now up to some one to ask the county officials to please lend us the drags and other implements to do the work with.

News, Index: For every soldier at the front we will have to have several at home. That means that every man, woman and child who stays behind must be kept busy at some profitable labor until the world strife is done.

Tribune, Lynden: So successful was the Housekeepers' Institute at the high school under the direction of Miss Mary Rausch, a member of the faculty of the University of Washington, that an effort will be made to make it an annual affair.

May Insure Soldiers

Government Takes Up Big Problems

The council of national defense is now working on the details of a proposed plan whereby the government would insure all its soldiers who go into the service of the country. Under the proposal as it now stands a flat insurance of $4000 on the life of each soldier of whatever rank. Higher insurance could be had, but the soldier would have to pay a premium for all above $4000, which amount the government would carry without cost to him. The proposal is made as one step toward the solution of the pension problem, which looms large with the approach of what may be a long and bloody war.

Hoarding a Felony.

Congress has enacted a law providing for a nation-wide survey of food resources and making hoarding or otherwise interfering with the free distribution of foodstuffs with a view to influencing the price a felony. The measure also makes provision for stimulating agriculture to produce the greatest amount of foodstuffs possible. Great powers over grain exchanges are placed in the hands of the president, who may prohibit practices of dealing, especially with respect to futures, when deemed by him injurious to the people of the United States. The measure carries over $11,000,000 appropriation.

Wheat Production Inadequate.

Herbert C. Hoover, who will have charge of the food conservation program in this country during the war, has announced that it will require 971,000,000 bushels of wheat to supply the needs of this country's allies and neutral European nations. This is far more than the United States will be able to provide, he says, estimating that this country and Canada will be able to export 600,000,000 bushels of wheat during the coming year.

In order that the maximum staple foodstuffs may be available for supplying the needs of the warring nations including the soldiers of this country, Controller Hoover urges the saving of everything possible. Especially does he urge the people to use perishable goods as much as possible during this season, in order that the staples may be conserved not only for foreign use next winter, but for home use as well.

American U-Boat Base?

Persistent rumors have been heard during the last few days that the German government was making successful overtures to Venezuela to secure the island of Margarita, in the Caribbean sea, for use as a submarine base. Such base would be a great menace to this country, especially as it would enable the Germans to place the Panama canal in jeopardy. The rumors have been denied by Venezuela, buit it is still believed that negotiations are being made for a base somewhere in American waters.

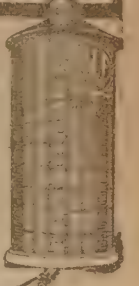
Apple at the Top.

The apple is the most important fruit grown in the United States, considering the quantity produced, value of product and wide distribution of cultivation.

Ewes Sell at $18 Each.

Fred Beeman, the Pine Creek cattle and sheep man of Okanogan county, Wash., has sold 1000 ewes for $18 a head to Vincent McKenna, representing a Portland company. The sheep are extra good, course wool Shropshire grades, and were sold with the understanding that there would be a lamb with every ewe.

RUSH SILO ORDERS!



Your silo will pay for itself this year. Feed prices will be so high next fall that every stalk of corn should go into the silo. Rush your order for a genuine H-L-F Double Walled Silo.

No Carpenter Needed

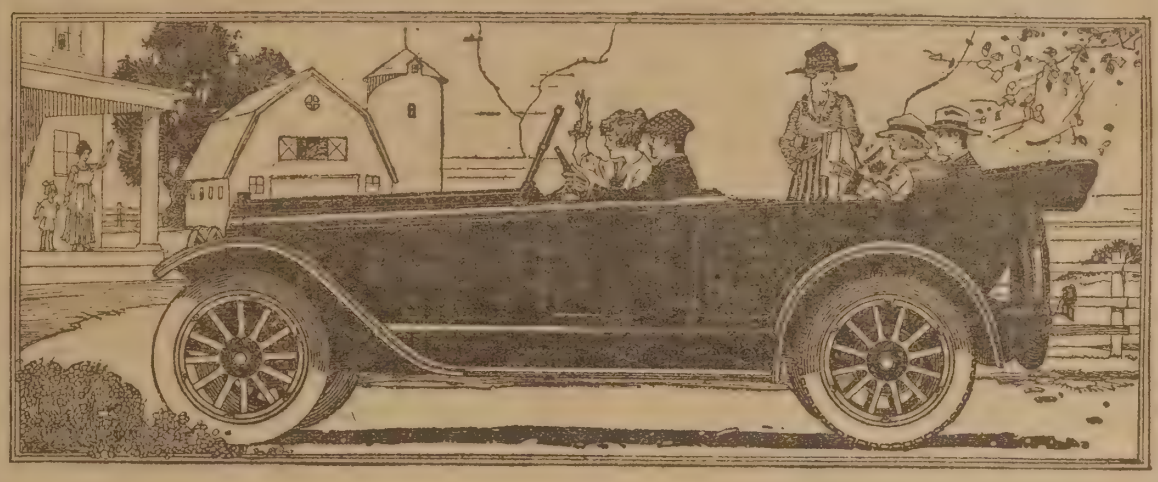
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John W. Bate, in the past three years, has doubled our margins of safety. Now every important part in Mitchells has 100 per cent over-strength.

This means better steel. It means larger parts. In these times it means much added cost. But it also means a lifetime car. It means a safe, economical car. A car which has proved that it can run 200,000 miles. That means 40 years of ordinary service.

Millions in Extras

There are also 31 features in Mitchells which nearly all cars omit. Things like a power tire pump, for instance.

There is 24 per cent greater luxury than in any other car in its class.

These extras will cost us on this year's output about $4,000,000. That is, for this over-strength, these extra features and this added beauty.

All Free to You

But all this added value costs you no extra price. Note that Mitchell prices, for either size, are below most fine-car prices.

We save in our factory cost. This mammoth plant has been built and equipped to produce this one type economically. John W. Bate, the efficiency expert, has cut our factory cost in two. Even the Mitchell bodies are built here, under these up-to-date methods.

That saving pays for these extras. We save all waste, and spend that saving on a superlative car.

Please see that car. See how it differs from other cars you know. Note its many unique attractions. You should know these things before you buy a car.

If you do not know the nearest Mitchell dealer, ask us for his name.

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Four-Passenger Roadster, $1495—Sedan, $2175—Cabriolet, $1895—Coupe, $1995—Also Town Car and Limousine.

Lambing Time

(Continued from page five.)

entrance to this place is gained by openings that admit the lambs but not the ewes. Crushed oats and bran or crushed oats and corn meal are grain combinations suited for offering lambs in a creep.

The average weaning time is four months of age. Good pasture for the lambs at this time enables them to grow fast and miss their mothers' milk but little. If the market offers inducements in order to secure spring lambs and the lambs are growthy, they may be sent directly from the ewes to the butcher.

Docking and Castrating.

Docked lambs keep cleaner and as fat lambs bring a higher price on the market. Docking should be done at 7 to 14 days of age. The tail should be severed with a knife or docking pincers at a point about one and one-half inches from the body. The pincers are used hot to prevent bleeding and are favored by many shepherds of the central states.

No ram lambs except pure-breds intended for breeding should be permitted to escape castration. Ram lambs gain slowly and in addition annoy other lambs in the feed lot. A good time for this work is on a bright day when the lambs are 10 to 14 days of age. The lower third of the scrotum is cut off and the testicles pulled out. At the age mentioned the cords break easily and but little blood is lost. The use of one of the many common disinfectants in connection with this operation makes it safer.

Forbids Sale of Wool.

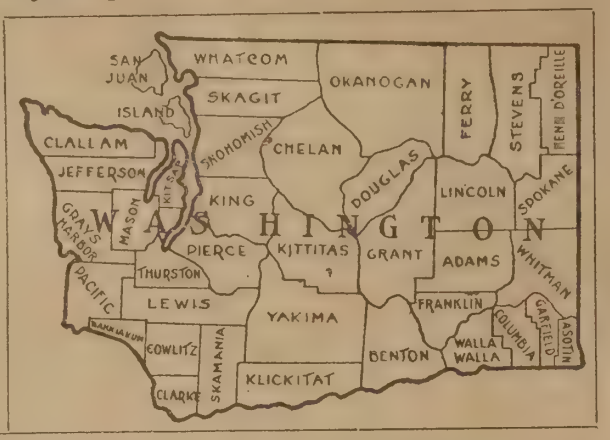
The army council forbids the sale of raw wool grown or to be grown in the united kingdom during the season of 1917, including fleece wool and skin wool, but not including daggings, locks, brokes, and fallen wool, otherwise than on behalf of the director of army contracts. All persons having in custody stocks of such wools are required to sell same to persons authorized by the director of army contracts.

Berry Picking On.

Strawberry picking is on at Richland, Benton county, Wash. Although the berries are late, they are reported to be of fine quality, with a large crop in prospect.

Should Employ Man and Wife

A House for Hired Family Would Solve Many of the Problems Due to Shortage of Labor and Inefficiency



FAIRFIELD, Spokane County, Wash., May 19.—It is not only possible, but very practicable, for farmers to build small tenant houses for a man and family and keep them the year around. This would lighten the work both for the farmer's wife and the farmer and go a long way to solve the hired man problem. The extra cost would be so slight in keeping the man the entire year that no farm where a hired man is kept could afford to be without the family. It is very difficult to get the right kind of kitchen help and by having an arrangement with the tenant's wife much of the work could be done in that way. In rush seasons the extra hired help could be boarded and thus relieve the farmer's wife of this extra work. The tenant man and wife would be on the place to take charge whenever the family desired a few days' outing or, in fact, at any time they should want to stay away after chore time. Without some such dependable help, farm life becomes a drudgery with no Sundays or holidays, but a continuous job every day in the year. If the right kind of a man and wife could be found and once tried, they would never be dispensed with. Farm work is progressing very favorably and by June 1 should see the finish of pea and oat seeding. Vegetation is backward and pastures are short.

ROY G. ADAMS.

Must Conserve Stock.

MONTESANO, Grays Harbor County, Wash., May 25.—There is a slight tendency to increase the live stock in this county. This is especially true of pigs and a great many are regretting having sold off so closely when grain began to soar. Dairy cattle are somewhat on the increase and a number in outlying districts are turning their attention toward the production of beef. sheep breeders is becoming larger. No tention of a few and the number of theep breeders is becoming larger. No one is in the sheep business extensively, but the tendency is to grow a few sheep on the smaller farms, where the cost of production is low. The only way to increase the meat supply is to stop the sale for meat of breeding stock that would be profitable and productive breeders. It is obvious that such a scheme could be carried out best by the federal government. Until such time an appeal to the patriotism of the meat producers would be futile unless the idea made a strong appeal to their pocketbooks as well.

C. F. MONROE.

Live Stock Decrease.

PORT ANGELES, Clallam County, Wash., May 25.—The number of live stock, as compared with last year has decreased in this county, probably about 20 per cent and the reasons for this decrease are, high feed prices, a hard winter and the opening up of several logging camps. As a consequence the stockmen are slow in disposing of additional stock and a natural increase is expected. The high prices will be instrumental in herding cattle on the government plateaus in the Olympic mountains and stock raisers are figuring on making the most of the ranging privileges when weather conditions permit.

J. P. CHRISTENSEN.

Dairy Stock Increase.

OLYMPIA, Thurston County, Wash., May 28.—Dairy stock is on the increase; beef stock only a few herds. A number of low producing dairy cows have been sold with the idea on the part of the seller to restock with better stock. This has decreased and will decrease the number of dairy cows, but will keep the total production about the same. Increase in this line, as also in hogs, can be secured through campaigns for better feeding and better breeding. C. H. BERGSTROM.

Crop Prospects Fine.

BRUCE, Adams County, Wash., May 27.—There has been .85 of an inch of rainfall at Bruce during the month of May and the spring grain drop looks par excellence. The rye is beginning to head and farmers are not nearly through plowing. Some have started weeders on the summer fallow, but very few have harrowed their wheat, preferring to leave it, while some are harrowing now. Fruit will be good. Potatoes are looking fine and the prospect is good for a fine crop of everything. Not many enlistments from this part of the country. O. A. LEE.

Should Test Cows.

CHIMACUM, Jefferson County, Wash., May 25.—The number of live stock in this community is about the same as one year ago. The stock disposed of are the milk cows who do not pay for their feed because of the high cost of feeds and a poor cow can not be kept at any price. This is not a meat raising community, the only beef being raised is culls, etc., from the dairy farms. If farmers would keep account and test each cow, they would readily see their mistake which would be one way to increase the beef supply. JOHN VAN TROJEN JR.

Milk Too Rich for Calves.

CHEHALIS, Lewis County, Wash., May 28.—It is my judgment that there is as much live stock in Lewis county as there was a year ago, although the country has been combed for young cattle and a great many have been taken away. The farmers are apparently well stocked with dairy cows, this being a dairy community, but owing to the high prices paid by the condenser for whole milk it is my impression that in the field covered by the condenser there will be only a limited number of calves raised this year. In the sections where cream instead of whole milk is sold it is probable the usual number of calves will be raised. Young calves have been sent from here this spring by express to eastern Oregon, where they are to be kept on nurse cows and used to replenish the beef herds. A steady market for beef at high prices will replenish the beef supply faster than anything else I know of. The condenser is paying $2.25 per hundred pounds for 3.7 to 4 per cent milk (an unheard of price at this season of the year) and is drawing milk from many sources where it was not previously furnished. Hundreds of farmers not in the habit of raising beef steers will find it convenient to raise a few at prevailing prices. J. C. BUSH.

Advocates Federal Control.

NEPPEL, Grant County, Wash., May 17.—The effect of high price of grain and produce has caused every available piece of ground to be planted. Most of the farmers are putting their shoulders to the wheels in earnest in expectation of an urgent need. As to bettering production and general farm conditions the machine corporations are advancing their prices and that has a tendency to lessen further purchases of improved machinery, notwithstanding the fact that cheaper money can soon be had from the federal farm loan banks. And the fact still remains that federal control is the only remedy for the unwarranted advances. Next year will see an average yield in crops in general. The production should be increased to 25 per cent over normal planting and yield of 1917. Several here are making preparations to keep a hired man and family the year 'round, although it is a hard problem at present. Hired men for short periods is expensive and one of the drawbacks the farmer has to contend with.

MARTIN PENHALLICK.

Crops Show Increase.

WILSON CREEK, Grant county, Wash., May 20.—The high prices are having a tendency to increase the acreage of wheat about 15 per cent above last year's acreage; potatoes and garden vegetables about 100 per cent. Farmers are also paying more attention to hogs and cattle. It is not practicable to build a house on a wheat ranch for a year round hired man and his family. J. P. SCHROEDER.

HAY WANTED.

This paper is constantly receiving inquiries wanting the names of farmers who have hay to sell. If you have any to dispose of you can sell it through a small classified ad at but very little cost and save the middleman's profit. Try it.—Adv.

88 Bu. Oats Per Acre

Mr. A. Taylor writes: "I had 315 acres in oats that averaged 88 bushels an acre, 30 acres in wheat that averaged 50 bushels an acre, 20 acres in barley that averaged 50 bushels an acre." This is only one of thousands of good reports from Western Canada. Yet nowhere can you buy good farm land at such low cost as along the Canadian Northern Ry.

BEST FARM LANDS at $15 to $20 per acre

Here you can buy specially selected, centrally located lands close to the railway, that will produce crops that can only be equaled on farms costing $150 to $200 the acre in a more densely settled community. This includes the best grainland, land also adapted to dairy and mixed farming. Here the man with limited cash can become the owner of one of these fertile farms through the liberal installment payment plan.

Low Fares Low round-trip home-seekers' fares to Western Canada are in effect every Tuesday, to November 27th inclusive.

Free Homesteads

If you have not the capital to buy land you can still get one of the recently surveyed 160 acre fertile Homesteads along the Canadian Northern Railway, the newest transcontinental railroad, 'The Road to Opportunity."

Free Book Be sure to write today for a free copy of the "Home-Seekers' and Settlers' Guide," full of complete and authentic information. A fortune is waiting for you.

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Why pay high, local prices for lumber when you can buy from us at wholesale? We save you enough to pay carpenter's bill. Send us your carpenter's list for bedrock estimate. Free Building Material Catalog on request. Write.

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The Fulton Truck

1 1-2 Ton Chassis, $1225 Spokane

The lowest priced high quality truck in the world.

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The Ideal Farmer's Truck

Price soon advances $200. Soon. Buy now.

Some Territory Open to Good Dealers.

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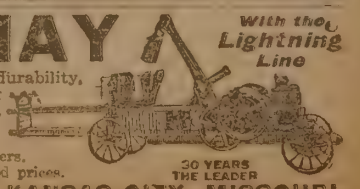
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MAKE BIG PROFITS Simplicity, strength, durability, make the Lightning Press the most economical to buy; big capacity, quick work, no trouble, lasts for years, best farm money-maker.

We make a complete line of both heavy and light presses, horse, engine and tractor power. We will make good terms to right customers.

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30 YEARS THE LEADER

KANSAS CITY HAY PRESS CO., - KANSAS CITY, MISSOURI.

Cheering Message to Farmer

This fact stands out beyond question: There never has been a year in the lifetime of this generation when the American farmer could go forward with such promise of ample reward for his intelligence, labor and enterprise.

Secretary Houston of the United States department of agriculture conveys a cheering message to the American farmer. In substance he says: "Go confidently forward with your plans for increasing the food production of the nation. We will see that you are supplied with the workers to help harvest your crops."

Speaking before the house committee on agriculture, Secretary Houston said:

"In the section west of the Mississippi and south of the Ohio the farm labor supply is not very far below the normal. There are, of course, in these sections of the country some areas where labor is scarce, and we have received reports of migrations. But reports of serious labor shortage come chiefly from the New England states, parts of Pennsylvania, New York, Delaware and New Jersey. It is of the utmost importance to be able to assure the farmers in these sections that there will be abundant labor for the harvest.

"By finding out just what the situation is in each state we can be of real assistance in extending aid through state commissioners of agriculture. We can, perhaps, induce laborers to move from one section to another as the time for the harvest comes around.

"It has been estimated," continued Mr. Houston, "that there are more than 2,000,000 boys in the cities and rural districts who could be utilized in the harvest. It might be well even to postpone the opening of high schools in the fall in order to impress the boys into the work of gathering in the crops."

Unless all signs fail, there will be a ready market at good prices for every pound of non-perishable food that can be produced this year on the soil of this country. Farmers will make no mistake in producing any of the staple grains, peas, beans, meats and poultry products. Potatoes are not so certain, but the indications point to a demand, either at home or abroad, for all that can be grown. Green vegetables will be a doubtful crop except in districts with canning and drying facilities, but where these exist there will probably be a ready market at fairly good prices.

Builds Up Farm

J. C. Graham Proves the Possibility

The announcement of the dairy sale of J. C. Graham near Palouse, Wash., late in June, brings forward an interesting story of the manner in which Mr. Graham took a run-down farm and developed it into one of the most fertile, productive farms in the Inland Empire.

When he purchased the place in 1910 the soil was badly depleted. Instead of continuing the process of robbing the soil by raising grain, Mr. Graham began the development of a forage farm and installed a few dairy cattle. At first he made use of every bit of manure or decaying vegetable matter obtainable. He even hauled straw and old stack bottoms from neighboring places. This material he scattered in the corrals and about the barnyard during the winter, allowing the stock to tramp it down. It absorbed much fertilizing elements, and when piled up in the spring soon rotted and was ready for distribution about the farm.

All the forage and hay product of the place he fed on the ground. As time and cash permitted, he increased his dairy herd. Presently the place began to assume the appearance of fertility, and began to prove it by producing large crops.

Recently the place was sold, the deciding point in the transaction being the superior fertility of the place over another under consideration by the purchaser. The sale of the place necessitates the sale of the cattle by Mr. Graham, the herd now numbering approximately 80 head.

New Tractor Attachment.



Above illustrates a new "track-laying" tractor attachment. This new attachment is fitted to the axle only and in no way connects with the frame or chassis of the car, thus leaving the rear end of the springs mounted. It is claimed by the manufacturers the attachment can be put on any car in one hour's time. The track is 12 inches wide by 28 inches long, making less than 3 pounds of weight to each square inch of ground surface. At ordinary plowing speed it is described as having a draw bar pull of 1470 pounds, equivalent to 10 horsepower, doing the work of 6 horses.



In answering advertisements please mention this paper.

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GOODRICH

BLACK SAFETY TREAD TIRES

THE Goodrich trade mark on Goodrich Black Safety Tread Tires is CERTIFICATION that they are the *best fabric* tires made, *tested* and found the *best* on the roads of our nation.

It *certifies millions* of *miles* of wear and tear tests vouch for those matchless fabric tires---millions of miles of hard roughing it to try the souls of tires.

It *certifies* that the UNIT MOLD, unbroken cure fabric construction, Goodrich always championed, has vindicated itself in the hardest test put to tires---the Goodrich Test Car Fleet.

Before Goodrich sells a tire to you, tires like them are belabored week after week through the Test Car System.

With heavy car and light car, two sets of drivers batter them sixteen hours a day over sand, rock and gravel.

Amidst the mountains of Yellowstone and Glacier Parks, in Dixieland, on the Pacific Coast, in the lake region of Minnesota, around Kansas City, over New England hills, SIX fleets of Goodrich Test Cars grind out the *best* and *worst* in Goodrich Tires.

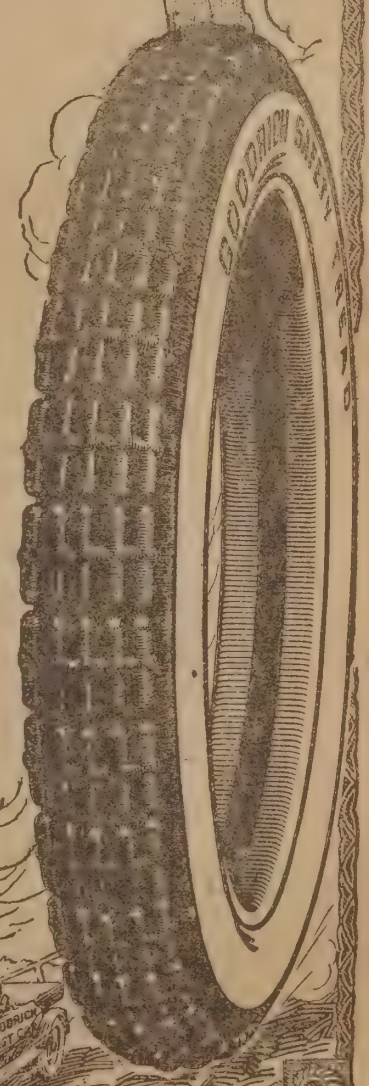
The BEST, backed up by Goodrich Fair Treatment guarantee, you get in Goodrich Black Safety Treads you buy.

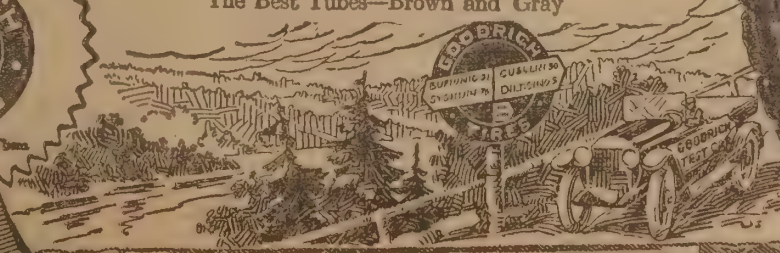
THE B. F. GOODRICH CO.
Akron, Ohio

Goodrich also makes the famous Silvertown Cord Tires, which won the 1916 Racing Championship

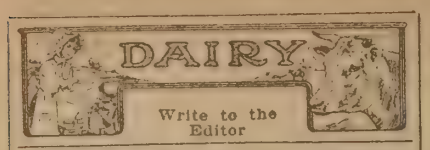
The Best Tubes—Brown and Gray







"Best in the Long Run"



A. B. NYSTROM, Editorial Contributor

Questions
Are Answered by A. B. Nystrom

Please tell me how to feed calf meal to a calf three months old. What is th feeding value of blood meal as calf feed, and likewise as a cow feed?

MRS. W. F. L., Mohler, Wash.

It is not an easy matter to raise calves without some milk. We do not find it necessary to feed whole milk for more than 10 days to two weeks, but a calf should get some skim milk even up to the age of three to five months. A good grain mixture for calves that are three months old is as follows: Eight pounds of blood meal, 100 pounds of corn meal, 100 pounds of wheat bran, 100 pounds of ground oats, and 50 pounds of linseed meal. This meal should be fed dry immediately following their allowance of milk. Blood meal is a good feed for calves, especially if there is danger of scours. Some feeders keep a box containing blood meal and a small amount of salt mixed within reach of the calves at all times. It is neither economical nor advisable to feed blood meal to cows.

Grain Before Calving.

How long before calving should a heifer be fed grain? How much should be fed? Is bran alone best? Or should it be mixed with some other grain?

M. I. H., Stanwood, Wash.

A heifer should be fed some grain to within four days of freshening. Up to within 10 days the grain may be the same that the rest of the herd is getting and should be composed of three or four grains. Within 10 days of the time of calving, feed bran alone or a mixture of bran, ground oats, and oil meal. It is important that the bowels be kept moving freely at time of calving. However, a purgative should not be given. Make use of laxative feeds.

Rennet From Calves' Stomach.

Can you advise me as to how to make rennet from calves' stomach properly?

E. R., Yacolt, Wash.

In preparing the home-made extract a number of the rennets are cut into pieces and just covered with salt brine in a suitable vessel, about three or four pounds of salt being added to 100 pounds of water. The mixture is vigorously stirred and pounded. Once a week the rennets are removed from the brine and passed through a press or clothes wringer to complete the extraction. The solution thus obtained is filtered through clean straw, sand and charcoal, and then treated with enough salt to prevent decomposition. A brine containing six or seven pounds of salt to 100 pounds of solution is about the proper strength. Rennet extract properly prepared is dark in color, but clear.

I do not recommend the use of home-made rennet extract. One can get the rennet extract at a dairy supply house at such a reasonable rate that it does not pay to go to the bother of preparing home-made extract, and again one is likely to get bacterial contamination. Also, the variation in strength of different lots usually requires the use of quite a variable amount of the preparation one time as compared with another.

To Prevent Bloating.

Is there any way that I can pasture cows on clover without their bloating? I have four cows and am depending on my clover for pasture until my rye is large enough to cut, but am having trouble with the cows bloating. Please let me know what to do.

W. M. B., Vashon, Wash.

Bloating is a form of acute indigestion, and can be largely prevented by making all changes in feed very gradual, especially if the ration is heavy, or if the new ration consists largely of green succulent feed. Cattle pasturing on clover should be kept under close observation and should not be let out if the clover is wet with dew or rain. It is sometimes well to feed some dry hay or similar feed before the change to pasture is made; or you may turn the cows to the pasture for a few minutes at a time, gradually increasing the time until they become accustomed to the new feed. Dry hay or similar material in a pasture is excellent to prevent bloating, as the cattle seem to like it. If the bloating is very acute and the animal is down, it will probably be necessary to insert a torcar through the body wall into the paunch on the left side about half way between the point of the hip and the last rib. A knife is sometimes used in place of a torcar, but there is danger of infection and also of making a wound that will not heal up readily when a knife is used.

If the case is not serious medicinal remedies will usually give relief. A large wooden bit about the size of a fork handle, on which some pine tar has been daubed, is placed in the mouth and held in place by a rope fastened to the horns. After the bit has been secured a small handful of salt thrown well back into the mouth causes the animal to work its tongue, and the flow of saliva promotes the belching of the gas. A large piece of rope that is hard will serve the same purpose. Tow ounces of turpentine diluted with milk is also a good remedy. This may be used as a drench if the bloating is not severe. Cold water may be dashed over the body or cold wet blankets may be put on and then covered with dry blankets.

Durham-Jersey Cross.

Does Durham and Jersey crossed make as good a cow as any, both the beef and milk qualities considered?

H. A. S. Appleton, Wash.

Sometimes if you get the milking strain of the Shorthorn and cross with a good Jersey cow you get an animal that is a fairly good milk producer and beef producer as well, but usually the cross does not result in such an individual. Very often we get cows that will produce only a small amount of milk with a low test. If you consider the beef type of Shorthorns you would by no means get as good a beef animal in the cross as you would by keeping the breed pure. I would not recommend such a cross. It is much better to stick to one line of breeding and try to breed up to the best possible production within that breed.

Preserving Butter.

There are several questions that I would like to ask about the brine method of preserving butter which you have given me. We have only a young cow and make but three to four pounds of butter a week, so that we have about one and one-half to two pounds more than we need. It is this surplus that I want to preserve. Can I make the brine as you suggest and just put the butter in from week to week? Would it be necessary to salt the butter? I should think the brine would salt it and make it very salty. I presume that when used it has first to be washed. We make our butter from sweet cream. Will that keep as well? MRS. F. C. B.

Wenatchee, Wash.

I believe you can get fairly good results by putting in a small amount of butter at each churning, but the best results can be obtained by making a special selection of cream to make sure that you are going to make the highest quality of butter, and then pack all of this butter into the jar that you expect to set away. If you do not do this you will find that some of the butter you will make will be of good quality and some perhaps a little inferior, and the color may be different in the different batches.

In preserving butter in this way you will not notice any great amount of salt in the butter except in the layer that is next to the top or next to the brine. In fact you will not need to wash the butter as you take it out, because there will be very little chance for any of the salt brine to get into the body of the butter, especially if it is properly packed. You should by all means salt the butter in the usual way, putting in just as much salt as your market demands, or rather as your taste demands. Get salt of good quality, free from odor, and see that it is worked in well, leaving no grittiness.

The larger the churning the better it will be and if you can fill your jar with one churning so much the better.

Many Dairies Quit.

Fifty-one dairies have gone out of business in Minneapolis in the last year, according to a report of the milk inspector. Most of these were small, having two to 10 cows. The high cost of cows and cow feed, in the face of the unchanging price of milk, and the increasing rent, are given as the causes.

Honor List of Walla Walla Association

The 4-year-old pure bred Holstein at the Walla Walla college heads the honor list in the Walla Walla Valley Cow Testing association during the month of April, she having produced 2201 lbs. of milk and 72.6 lbs. or butterfat. Cow No. 88, a Holstein at the penitentiary, has now been on the honor list for nine consecutive months, producing 594.7 lbs. of butter fat in that time.

The cow testing has been gradually increasing the number of cows on test until last month 400 were tested.

Below is a list of the cows producing over 50 lbs. of butter fat during the month of April, 1917, as reported by the tester, Will S. Horn:

Owner.	Breed.	Lbs. Milk.	Lbs. B. F.
Walla Walla College	H	2201	72.6
State Penitentiary	H	1098	69.2
State Penitentiary	J	1036	60.8
State Penitentiary	D	1239	59.4
State Penitentiary	H	1728	58.8
State Penitentiary	H	1332	57.3
Charles Baker	H	1356	54.2
Walla Walla College	H	1811	58.0
G. T. Weaver	Mix.	1110	53.2
Walla Walla Colleg	H	1714	54.9
Swegle Brothers	G	890	52.1
Swegle Brothers	G	963	52.0
State Penitentiary	J	1038	51.9
Walla Walla College	H	1604	51.3
State Penitentiary	J	1020	51.0
State Penitentiary	H	1584	50.7
State Penitentiary	H	1444	50.5

Spring Soiling Crops

By CHESTER C. FARR, Snohomish County, Wash.

With feed prices soaring and prospects for cheap hay promising very little; dairymen should consider the use of fall sown soiling crops for the coming spring.

Why not work that potato field for a crop of succulent feed next spring, or make the corn land help? It may be that you are expecting to have a root crop this year which can be stored in time to seed a fall green crop.

Two bushels of winter rye, oats or wheat and 100 pounds of vetch seeds on the potato, corn or root crop land with the first fall rains or any time from then on until the middle of November will produce a valuable soiling crop for spring feeding, just when the ensilage gives out. The aftermath will make a good pasture or green manure crop to plow under.

Moisture conditions should be good for best results. You will have to judge from your type of soil as to which crop—oats, rye or wheat, with vetch or peas, will be best adapted to your conditions.

This green feed will keep your cows up in milk and condition just at the time they most need it and will save you many dollars which would otherwise go to buy high-priced hay.

Give this some thought in planning your crops for the year. Talk with your county agent for further information.

Blue Cheese Factory.

William McBride, who is opening up a 2000-acre ranch near Oakesdale, Washington, is arranging with the ranchers of the district to build a cheese factory there. Land for such a factory has been donated. McBride formerly operated a cheese plant in Los Molinos, Cal.

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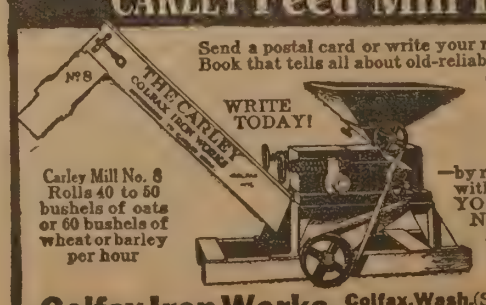
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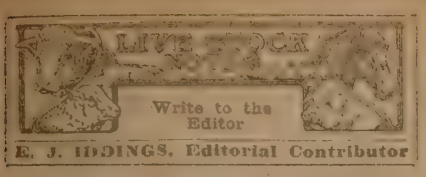
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E. J. IDDINGS, Editorial Contributor

Feeding Work Horses

By E. K. SPURR, Ferndale, Wash.

At a time when conservation is the national motto and feed prices are soaring sky-high, it may interest the readers of The Farmer to learn of my method of feeding workhorses.

I cut my hay as fine as I can cut it. I have a board tank 10x24x36 inches, thoroughly painted with white lead; this is done to keep the boards from absorbing the liquid, and to make the tank watertight.

I put in this tank three pails of cut hay and one pail of cut alfalfa, measuring with 12-quart pail. Mix the hay and alfalfa while dry, then pour over them one pail of water containing one pint of molasses. This molasses should be put in two quarts of hot water before mixing it with the cold. If you are feeding a poor quality of hay use one quart of molasses instead of one pint.

Pour the pail of molasses liquid over the four pails of mixed hay and alfalfa, then mix until the hay absorbs the liquid. If you can not procure alfalfa use the molasses on the cut hay, but I prefer the mixture containing alfalfa.

The tank now contains three feeds for two horses used to eating it. With horses unaccustomed to this method of feeding begin with a light feed of, say, one-half of the regular amount indicated. When I put a pail of this feed into the feed box I mix in one-third of the ground oats that I use when feeding dry grain.

To one who has never used this method of feeding, the amount of hay and grain saved will come as a surprise. In cool weather the above ration will keep sweet until fed. In hot weather I keep only one or two feeds in the tank. Never mix enough to have it at all sour when fed.

This ration can also be fed to cows when the aim is to build them up and get them into a thrifty condition, but it is not a ration for producing milk.

Where many farmers make a mistake in using molasses is in buying too cheap a grade. I am using a cooking molasses that casts about 32c a gallon in barrel lots. The same molasses sold last fall for 25c a gallon.

Better Cattle Urged.

Professor Gordon H. True of the California state university farm at Davis declares that western ranches generally have about reached their maximum number of cattle; that "we have got to take steers off the range and replace them with breeding cows." He adds: "We must keep 2 and 3 year olds on the range, but the people in the valleys must raise feed to fatten them." It was Professor True who took two steers from the university farm back to Chicago last fall and won the grand championship and the reserve grand championship at the Chicago international.

Veterinary

Dr. S. B. Nelson

Bloody Milk—I have a cow that gives bloody milk. This condition has appeared for a couple of summers, and lasts each time about two or three weeks. She is in good condition otherwise and has a good appetite.

J. W., Sultan, Wash.

Answer—The red condition of the milk and cream may be due to either of two conditions. First it may be a slight bloody condition, or it may be an infection by one of the color-forming bacteria.

I am going to recommend to you that for the present you give a teaspoonful of hypo-sulphate of soda in a pint of water once daily for a week or 10 days. Wash the teats carefully with a 2 per cent solution of lysol before and after milking.

Calf Gets Stiff—What can I do for a calf that at first began to have indigestion fits and then got stiff in its body and limbs? When we lift it up on its feet it would try to walk, and its joints would crack and snap. It has a fairly good appetite. Seems to have some fever the last few days. It is about 6 months old now and has been in this condition for about three months.

L. H. S., Deep Creek, Wash.

Answer—It would appear that your calf had some trouble with the brain or spinal cord, as well as indigestion. I would suggest that you give two or three ounces of castor oil, then give in its milk or feed five grains of potassium iodide, morning and evening, for two or three days, then once a day for two or three days. With a chronic trouble like this treatment may not be very satisfactory.

Needs Exercise—I have a cow that was in heat three weeks after freshening, but not since. She is in good condition. J. P., Ferndale, Wash.

Answer—Try giving your cow a day's good exercise two or three days before you expect her to show signs of heat. Two days before this time, or the next day after giving her the good day's exercise, give her a pound and a half of Epsom salts. This may have the desired effect.



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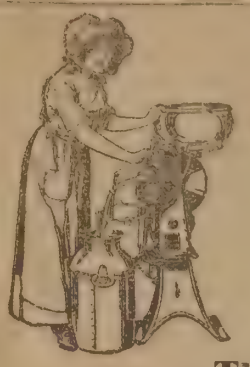
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Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

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PATRIOTIC DUTY as well as dollars-and-cents self-interest now demands of every cow owner the saving of every ounce of cream and butterfat.

Likewise the saving of time that is possible through a cream separator of ample capacity, that is easily turned and always in order.

There was never a summer in the history of the country when both these considerations were of as great importance to the nation as well as to the individual producer of cream and butter.

Under present circumstances, a modern De Laval Cream Separator will save its cost every few weeks. Every cow owner owes it to himself and his fellow countrymen to effect this saving.

This is true whether you have no separator or have an inferior or half-worn-out machine, even if it be an old De Laval model.

It is important to remember, too, that if you can not pay cash for a new De Laval machine, you can buy one on such liberal terms that it will actually pay for itself while you are using it.

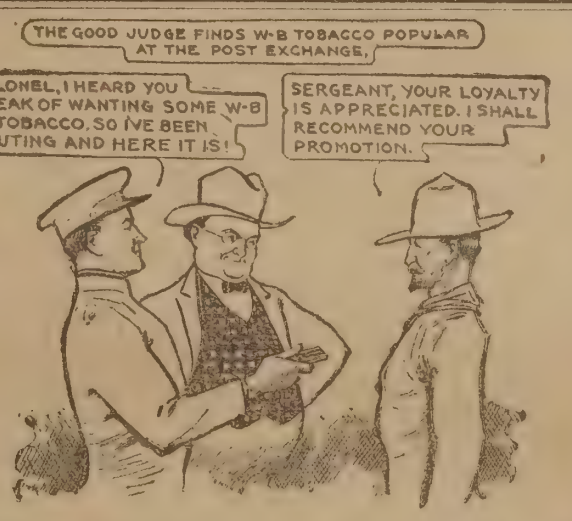
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YOUR soldier is all business, from reveille to taps—no room for excess baggage with him. He has no use for a big plug of coarse leaf, all loaded up with heavy syrup—what he wants is *tobacco satisfaction*. The little sappy chew of W-B CUT checks up with his idea of what's good. Out on a lonely outpost, it's mighty sociable and satisfying; and my, how it does last!

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POULTRY

Write to the Editor

JAMES ERYDEN
Editorial Contributor

What can the poultry raiser best do to aid the food campaign? Probably the best answer is that he should "stay on the job" and give his chickens better care than they ever had before.

The problem for the poultry keeper is not so much to hatch and raise more chickens as to take better care of what he has.

Keep the young pullets growing, so that they will come to laying maturity without a setback and furnish eggs when they are in greatest demand.

Never before has the poultryman had such an opportunity to make his work count for something. The country needs the eggs, and a little extra care given to the poultry will bring more profit than ever before.

Unless all signs fail the price of eggs for the next 12 months will be so high that the poultryman with a flock of good layers will make a very satisfactory profit. J. D.

"Volunteer" Plan Slow

To the Editor: Incubator chicks have many advantages over the others. Early chicks not only thrive better, but are worth more. I have my incubator set for the third time and only three hens set yet. The "volunteer" plan is too slow.

I never saw chicks grow like these. Not one has died, and they are really little bother after the first week.

Chicks, like all other babies, require warmth, food, cleanliness, exercise, fresh air and water, that's all. The first two days just warmth, the third grit and water. No food for three days. This is essential to health, life almost. No food till they have a mill to grind it. Grit and water first thing in the morning; grit all day, all they will eat, and they certainly do take a lot.

Give all dry feed; they know how much water they need. Give as free range as possible. Grass and insects are what they need. I made feeding pens by nailing four 12-inch boards together and tacking poultry wire on top. I can move these every day and keep food in them constantly.

I will set all hens that set before June 1 and put their eggs in the incubator just before they hatch. I can keep vermin from any incubator chicks and that, I think, is the secret of success.

MARILLA KIDWELL.
Garfield, Wash.

Note—This correspondent is right when she says that incubator chicks have advantages over others, but that does not mean that the "others" have not advantages over incubator chicks. Both have their advantages. It is true that early chicks are best, but hatching in June is late hatching. June and July I believe to be the worst months in the year for hatching and rearing chicks. Chicks are often fed too early, but there is also a danger of starving them too much. When they develop a good appetite, and that is usually in the second day after hatching, it is time to give them some feed. J. D.

Simplified Rations

Elaborate feeding formulas are not necessary. This point has been emphasized at the Storrs laying competitions. In the first four competitions the following rations were fed:

Scratch Grain.	Lbs.	Dry Mash.	Lbs.
Cracked corn	60	Coarse wheat bran	100
Wheat	60	Corn meal	100
Heavy white oats	40	Gluten feed	100
Barley	20	Ground oats	100
Kafir corn	10	Standard middlings	75
Buckwheat	10	Beef scrap	30
Coarse beef scrap	10	Fish scrap	30
		Low grade flour	25

In the fifth contest, which was held last year, the following simpler formulas were used:

Scratch Grain.	Lbs.	Dry Mash.	Lbs.
Wheat	100	Wheat bran	100
Cracked corn	100	Corn meal	100
		Ground oats	100
		Flour middlings	100
		Fish scrap	50
		Beef scrap	50

In the last contest the egg yield was some 10 eggs per hen higher than in the first four contests. It was not a feeding experiment and the result could not consistently be attributed to the change in ration, but it would indicate that elaborate feeding rations are not essential. The yield in the fifth contest was 162 eggs a hen. J. D.

Pea Growing Hints.

If the land is reasonably clean of weeds harrowing may not be necessary where few peas are planted.

If, however, it is infested with wild oats and other weeds, a great deal of harm may result to the crop if the weeds are not destroyed, as peas have very little ability to choke down weeds.

According to the experience of various growers, the harrow may be used both before and after the peas are up, if they have been seeded deep (three to four inches). If the weeds start before the crop is up, harrowing should be done immediately. If the crop is up the teeth of the harrow should be slanted so as not to tear out the young pea plant.



Some
Popular Uses

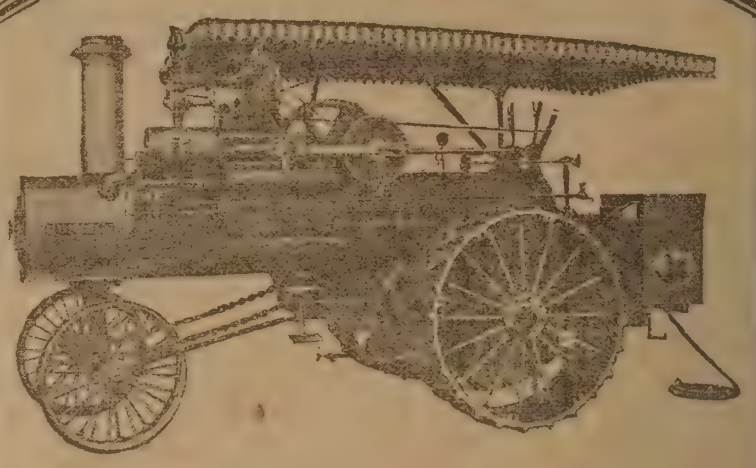
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will do the work of four good horses and cost you one-fourth the investment. In dollars and cents the Tracford makes you money. The price of horse feed and horse flesh is now too high to make horse power profitable. Buy a Tracford and save money. It can be easily attached in a few hours to any Ford and in no way impairs the car for pleasure use. Just the thing for the orchard. Can be handled between trees better than horses. Write for free booklet at once.

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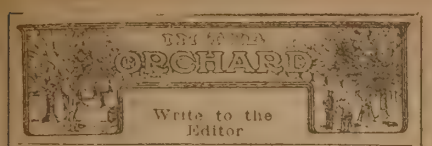
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Water glass, 15c pt., 25c qt., 75c gal.

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GRANVILLE LOWTHER
Editorial Contributor

Irrigation in Orchards

Every year since I have been a contributor to farm papers I have written one or more articles on irrigation. I had thought I would not write on that subject this year, but have changed my mind. The reason for change is that I have been out through the orchards, in several directions, and I see so many persons working at a disadvantage. Some are giving parts of the orchard too much water and other parts not enough. Some are distributing the water unevenly, in the same rows of trees and only a few comparatively doing the work in a way that it seems to me will yield the best results. So I have concluded to write again, giving those directions which I believe should be followed, and giving the reasons for following them.

Irrigate the Center.

I find a large numter of persons who irrigate splendidly up to within three to six feet of the trees, but who do not irrigate sufficiently near the trees. I saw one man wasting water because he said his orchard did not need all to which he was entitled, yet there was not a lateral carrying water nearer than six feet of the tree rows. We will suppose that the water percolates through the soil for a distance of two feet from the laterals there would still be left four feet on either side of the tree row without water or a strip of eight feet for every row of trees.

Now what is the result of that method? In the first place it is evident that the tree roots are not extending equally in all directions from the trunk of the tree and not getting all the food necessary to their best development. Tree roots tend to grow in the direction of the food supply. There is a scientific reason for this, but I am not teaching science, I am stating facts with which any observant farmer is familiar. It is a law similar to that which causes house plants to lean in the direction of the sunlight, if they are heliotropic, and away from it if they are anti-heliotropic. If, for instance, the tree rows run north and south there is a space eight feet wide along every row of trees in the orchard from which the trees get no moisture and therefore no food, because trees take their food in solution. Now we will suppose the trees are 24 feet apart, there is one-third of the orchard from which the trees get no food, or only such food as the slight moisture from the winter and an occasional summer rain will give them. The other two-thirds is generally given too much water and the damage done by overirrigating this part, is fully equal to the good results from rains. I, therefore, think it fair to say that by that method of irrigation one-third of the nutritive value of the soil is lost.

Again, in that arid strip, where the orchardist is trying the "dry farming method," the sage rats, gophers and field mice make their nests and grow their young, while they feed upon the tender roots of the trees. An orchard properly irigated, will drown hundreds of these young orchard pests, and the tendency will be for the old ones to remove to places not well irrigated. The man who irrigates all of his orchard thoroughly, will drive many of his gophers to the orchards of his neighbors who have dry strips of land where they can grow their young without being disturbed. These dry strips are also good places for ants, that are the worst carriers of blight and aphis, known to orchardists.

Now when I say I would irrigate the center, this does not mean necessarily that there should be made an irrigating lateral exactly in the center, although this is often better. But it does mean that the land all about the trees and between them should be wet.

The circumstances under which I would make a lateral immediately along the tree row, and so that the water will flow around the tree on either side, are when there is a little too much alkali in the soil. In the process of irrigation, the water percolates through soil, carrying with it a certain proportion of alkali and deposits it at a point where it percolates no further. It is common therefore to see strips of alkali about midway between the laterals, and a white crust on the surface, if the form of alkali is sodium sulphate, and a dark strip, if it is in the form of sodium carbonate. This is often strong enough to injure the bark of the tree and is a condition where certain diseases are propogated. Root rot would be much more frequent in an orchard of this character and treated in this way, than where the center is irrigated and the alkali carried away from the tree or more evenly distributed.

There are other questions of importance, but I will not mention them now, because I want the readers to remember the one thing in this article.

G. L.

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Booklets tell you how to produce larger yields by controlling Aphis, Thrips, and other soft-bodied, sap-sucking, crop-destroying insects on

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and other vegetables and fruit. Black Leaf 40 is effective. Inexpensive. Used by large growers. Recommended by Agricultural Colleges and Experiment Stations. Write for FREE vegetable booklets.

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Kills Aphis

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A full supply of bee supplies on hand. Ask for catalog.

The Inland Seed Co.
Spokane, Wash.

THE FARM GARDEN

ARTICLE 15.

Oyster Plant

There are a few vegetables which large numbers of gardeners feel a timidity about trying merely because they are not as familiar as cabbage and onions and beans. Salsify, or oyster plant, as it is more commonly called, is one of these.

Salsify gets its name from the oyster flavor which it has, and many persons find it an excellent substitute in the making of soup, and use it also as an edible root. One common manner of preparing it is to boil until practically cooked, then cut into the size pieces desired, roll in cracker dust or crumbs and fry brown in butter. When thus prepared the dish is referred to as "fried oysters" because of the oyster flavor.

This plant should be sown and cultivated and treated generally in much the same manner as parsnips. It should be sown in rows for cultivation, and should stand three to six inches apart in the rows. Cultivation should be such as to provide a good root bed, as the plant is nearly useless if allowed to develop into a sprangly mass of small roots.

If allowed to stand in the ground over winter, which is a good plan as in the cash of parsnips, care should be taken not to let the seed scatter. The plant goes to seed the second year, like radishes, and grows much like a weed if allowed to run wild.

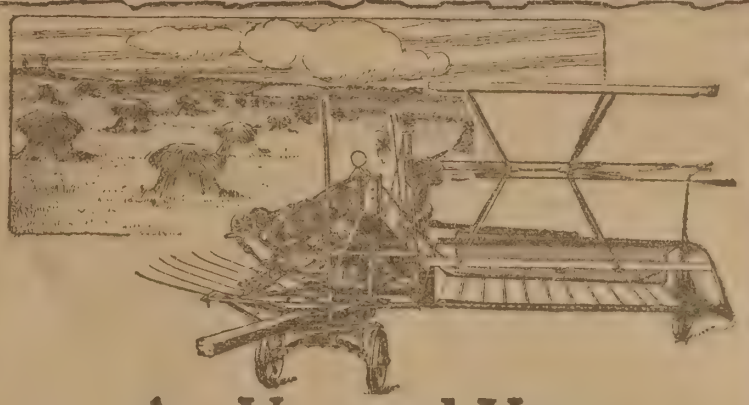
One ounce of seed is sufficient to plant about 100 feet of row.

First Douglas Strawberries.

The first crate of ripe Douglas county strawberries were marketed at Roseburg, Ore., May 19 by William Pemberton of Green. The berries were sold for $4. Although the season is more than three weeks late, the usual amount of strawberries will be marketed.

Not For Her.

A fresh young farmer tried to kiss a summer girl who was spending her vacation in his home town last summer. He declared he had never kissed a girl in his life. She indignantly told him that she was no agricultural experiment station.



An Unusual Year

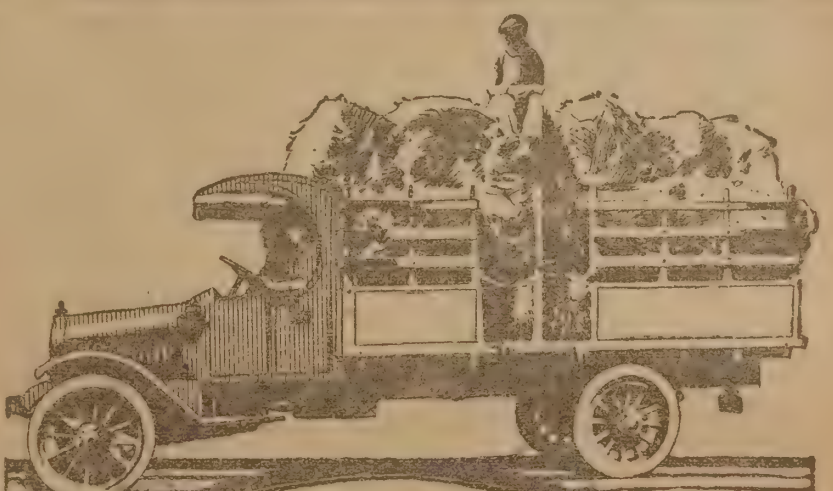
THIS may be the last year you will have a chance to market your small grain at such high prices. Naturally, you will do everything you can to secure a good crop and to harvest every last grain of it. The size and quality of the crop may not be entirely under your control, but the harvest is yours to make or break. It depends almost entirely upon the binder you use.

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The twine situation this year is complicated by a number of unusual features, but we are furnishing our customers with twine of as good quality as ever. Quality in twine is more important than price. At the same time, just as a matter of insurance, it will be wise to make your twine purchases as early as possible. The dealer will appreciate any aid you can give him by placing your orders for I H C repairs, twine, and harvesting machines at the earliest possible moment.

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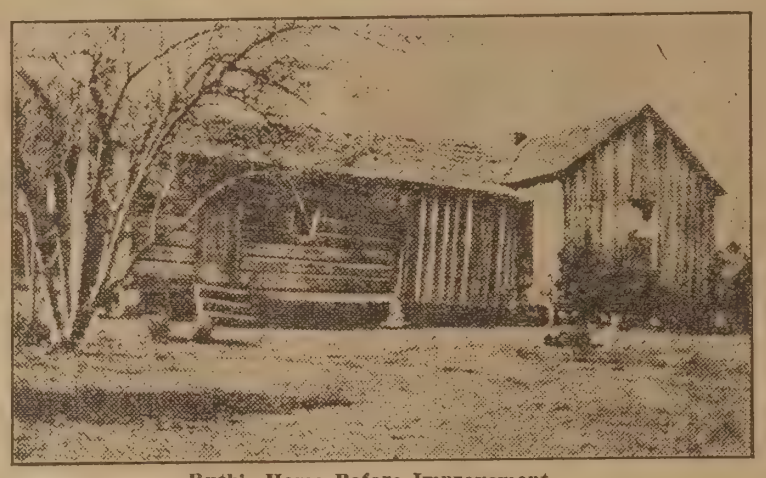
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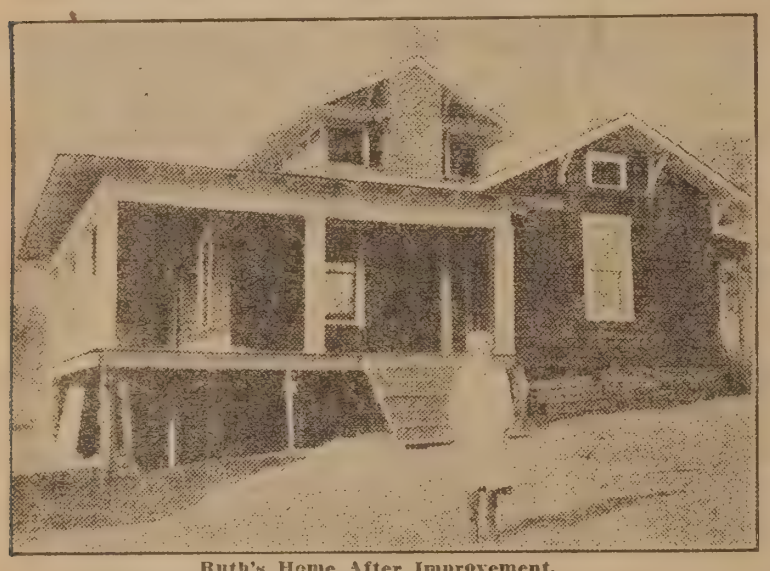
Fourteen-Year-Old Remodels House

Raises and Cans Vegetables for Carpenter in Exchange for His Work

Ruth Anderson of Etowah county, Alabama, in her second year of club work, had an excellent plat of one-tenth of an acre of beans and tomatoes. She is the second girl in a family of 11, and takes a great interest in her club work. The family home was small, dark and crowded, and somewhat unattractive. One day a carpenter friend of her father saw her one-tenth acre and said he wished he had time to plant a garden. She told him she would furnish vegetables in exchange for some of his time. Thinking she was joking, he began to figure how many beans it would take to build a house, but Ruth told him about her canner, and he saw then that she was in earnest. After a while a bargain was made by which the carpenter agreed to begin work on the remodeling of the house if Ruth would furnish him with fresh and canned vegetables for the season. The other members of the family were soon interested in this undertaking and worked willingly to contribute their share to its success. When the house was partly finished Ruth won a canning-club prize given by a hardware merchant in Gadsden, the county seat. Silverware was offered her, but, intent upon completing the new house she asked the merchant how much a front door of glass would cost, and learned that she could get the door, side lights and windows for the price of the silverware. In this way Ruth brought light and joy to her family with her windows and door. Today they live in a pretty bungalow that she helped to build with her gardening and canning work. At the age of 14, in the second year of her work, Ruth put up 700 cans of tomatoes and 750 cans of beans.



Ruth's Home Before Improvement.



Ruth's Home After Improvement.

The upper picture herewith shows the old house in which Ruth lived before she undertook the remodeling plan. Below at the left is the result of her work, the old house converted into an attractive and conveniently arranged bungalow.

The success of this girl's undertaking should stimulate hundreds of boys and girls and even older persons throughout the country to can and preserve vegetables and fruits. Especially is it desirable that such work should be done this season. There probably has never been a time when fruit and vegetables available for winter use were so much to be desired.

Ye Have Heard That It Was Said by Them of Old Time

THE SEVENTH COMMANDMENT
"Thou shalt not commit adultery."—Exodus 20:14.

It is significant that "adultery" and "adulterate" are so near alike. To pollute good things with a mixture of bad ones, to mingle fine things with those things which are coarse and to lower the standard of purity, is a breaking of the seventh commandment.

And this being the case, would it not be well to prevent the likelihood of legalized and socially recognized adultery? The marriage at which true love is not present may be signalized by pomp and circumstance and attested by dignitaries of church and state, but it is adultery.

We approach marriage with too frivolous and light a thought. We have planned much to cure the evils of divorce. Why not begin before the marriage? Most of the evils of our present social life have come from a disregard of the sacred and holy things which relate to the relationship of the sexes. A recognition of the sacredness of our bodies and our responsibility for their preservation for the functions of parenthood would do away with the crying evil of our generation.

H. H. B.

FAITH WITHOUT WORKS.

To will and not to do when there is opportunity, is in reality not to will, and to love what is good, and not to do it when possible, is not to love it.
—Swedenborg.

Something Besides Direction.

Teacher—Johnnie, now you have in front of you the north, on your right the east, on your left the west. What have you behind you?

Small Boy—A patch on my pants—I told mother you'd see it!

Ground Squirrels.

More than 50 species and races of ground squirrels inhabit the United States and Canada.

World Crop Outlook Is Gloomy

The International Institute of Agriculture, with headquarters at Rome, says "it is useless to ignore the fact that the world's wheat crop of 1916 and 1916-17 is unquestionably bad as compared with that of 1915 and 1915-16."

Copies of the April survey of the Institute have reached the United States. It discloses a gloomy outlook, not only for wheat but for foodstuffs in general.

It shows, in fact, a deficiency of more than one-fourth by comparison. It is also to be reckoned as a poor crop in contrast with the five years' average 1911 to 1915 and 1911-12 to 1915-16, since it shows a deficiency of one-eighth as compared with this average.

Statement for the commercial season—Fortunately, there is a considerable remainder from the previous crop. Will this suffice to meet the deficiency? The question would be answered affirmatively were it not that the trade of Rumania and Russia is interfered with. When the figures from these countries are set aside the situation becomes more aggravated, and reduced to its own resources the northern hemisphere shows a deficiency of 37,000,000 quintals, to which must be added the 26,000,000 quintals which usually form the net exports to tropical countries in the main.

To meet this deficiency of 63,000,000 quintals in the northern hemisphere we can find no more than 50,000,000 in the southern hemisphere.

Foodstuffs (Wheat and Rye).

Crop.—The crop of foodstuffs taken as a whole presents the same characteristics as that of wheat.

The rye crop of 1916 was also below that of 1915; rye is the only product showing a crop above the average in 1916; but this favorable situation can not do more than very slightly alleviate, in aggregating the foodstuffs, the deficiency in the wheat crop.

Disregarding the Rumanian and Russian crops not at present available for the world's requirements, the deficiency becomes even more pronounced than by including the yield of those countries in the totals. The deficiency is more than one-fourth in comparison with the past year, and about one-sixth of the average.

Fodder (Barley, Oats and Maize).

Crop.—Although relatively less unfavorable in the aggregate than the crops of foodstuffs the fodder crops must nevertheless be considered as bad when compared with the crop of 1915, and very moderate in contrast to the average yield.

Disregarding the Rumanian and Russian crops the situation is scarcely affected since the deficiency in these products is proportionately about as large in those countries as in the others taken as a whole.

Statement for the commercial season—Barley shows a deficiency of about 8,000,000 quintals (a quintal is about 220 pounds), which may, however, be counteracted to some extent by possible exports from subtropical countries.

Oats are the only cereal in the general statement that shows an appreciable surplus; this reaches about 30,000,000 quintals. The normal requirements of tropical countries are of no importance. It may be remarked that in order to constitute the credit balance it has been necessary to make considerable drafts on the reserves of the past year, amounting to 54,000,000 quintals.

Maize, on the contrary, presents the most unfavorable statement among the five cereals since the year finishes with a deficiency of 52,000,000 quintals, in spite of the fact that the reserves from the previous great crop amounted to 55,000,000 quintals.

In normal times tropical countries appear to require imports of maize, but the present high prices should have the effect of drawing this product to the large consuming centers in the temperate zone.

ONE HOUR'S WORK
Would It Feed One Soldier?

H. E. Murdock of the Montana Agricultural college experiment station, says he believes one hour's properly directed work on the farm this season will produce the equivalent of bread for one soldier for a year.

This may be questionable, but there is no doubt that there is need for effective work this season as seldom before, and if it requires five hours or 10 to feed a soldier it is all the more argument for no loss of time and no loss of effectiveness.



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Wants Fish Protected

To the Editor of The Washington Farmer: Just a word for which I beg to be excused and which I hope will escape the waste basket. I see in the last issue of The Washington Farmer, a very nice and truly interesting piece on the destruction of the coyote and all other predatory animals except the coon, which, with the help of the kingfisher and fish duck, evidently destroy more fish than all the nimrods in Washington or any other state.

Another party and I were fishing two or three years ago in Asotin county, Washington, and we stopped to eat our lunch beside Asotin creek well up in the mountains. We were there possibly 30 minutes and during this time there was a kingfisher perched on a snag by the creek. He caught to our certain knowledge six small trout, two to four inches long, leaving the tails and about half the fish lying where he sat when he caught them. And again you go along a small stream in the winter where there are plenty of small fry wintering and you will always see fish ducks (which are valueless) and coon tracks where they are catching those little fry. Now why fine fishermen who catch a few and eat every ounce of them and let predatory animals and birds catch and waste all the please? Why not put a bounty on kingfishers, fishducks, coons and fishhawks?

Again your item in The Washington Farmer says nothing about the coyote dostroying game birds. The coyote is an expert at finding grouse and other game birds' nests and you, Mr. Reader, know what it means for a coyote to find a nest of eggs.

Above all thing destroy predatory birds and protect the fish and destroy the coyote and protect the game birds.

S. B. CONNER.

Jerry, Wash.

To Poison Squirrels

To the Editor of The Washington Farmer: Will you kindly tell me in what solution can I soak seed corn to prevent the ground squirrels from taking it. It seems that we can not poison them when the corn is planted; nor can we prevent them from coming in from a great distance and devouring the corn. Would coal oil or corrosive sublimate be any good.—C. M. F., Colfax, Wash.

In answer to the above question, Leonard Hegnauer, extension specialist in soils and crops, State College of Washington, says:

The treating of seed grains for the purpose of keeping ground squirrels from destroying them would probably not be satisfactory. A good method by which to control the ground squirrels will be to use barley and treat that with the following preparation:

Barley (clean grain free from other seeds) 20 quarts.
Strychnine sulphate (ground or powdered) 1 ounce.
Saccharine, 1 teaspoonful.
Gloss starch (ordinary laundry starch) one-half teacup.
Water, one and one-half pints.

Dissolve the starch in a little cold water and add 11-2 pints of boiling water, making a rather thick solution. While hot, stir in strychnine and mix until free from lumps, then add the saccharine and beat thoroughly. Now pour the poisoned starch over the barley and stir rapidly until the starch is evenly distributed, then allow the grain to dry. When dry it will keep indefintely without deterioration.

Here is another method:

Take four gallons of cheap sugar and enough water to make five gallons of syrup. Heat to a boiling point and add one and one-third ounces of strychnine and boil for five minutes. The syrup can be bottled and kept indefintely. When ready to use, saturate the rolled barley with the hot syrup. As much should soak into the barley as is possible. Place a large tablespoonful of the mixture at one side of the holes. The squirrels are very fond of the sweet barley and it is sure death.

There is an objection to material of this kind, of course, which is that birds are killed by it.

Mountain Goats and Sheep.

The last flock of mountain goats and sheep of any considerable size in this state is to be found on what is known as Bauerman's ridge in Okanogan county. The last legislature set this aside as a game preserve, prohibiting the killing of sheep and goats therein. The United States has promised actve cooperation through its forest rangers to try to prevent the destruction of this flock.

Good Prospects for Fruit Crop.

Fruit Inspector Anderson of Garfield county reports good prospects for a big crop of fruit on Snake river farms, as there are no winter killed or frost bitten buds.



Canada's Liberal Offer of Wheat Land to Settlers

is open to you — to every farmer or farmer's son who is anxious to establish for himself a happy home and prosperity. Canada's hearty invitation this year is more attractive than ever. Wheat is much higher, but her fertile farm land just as cheap, and in the provinces of Manitoba, Saskatchewan and Alberta.

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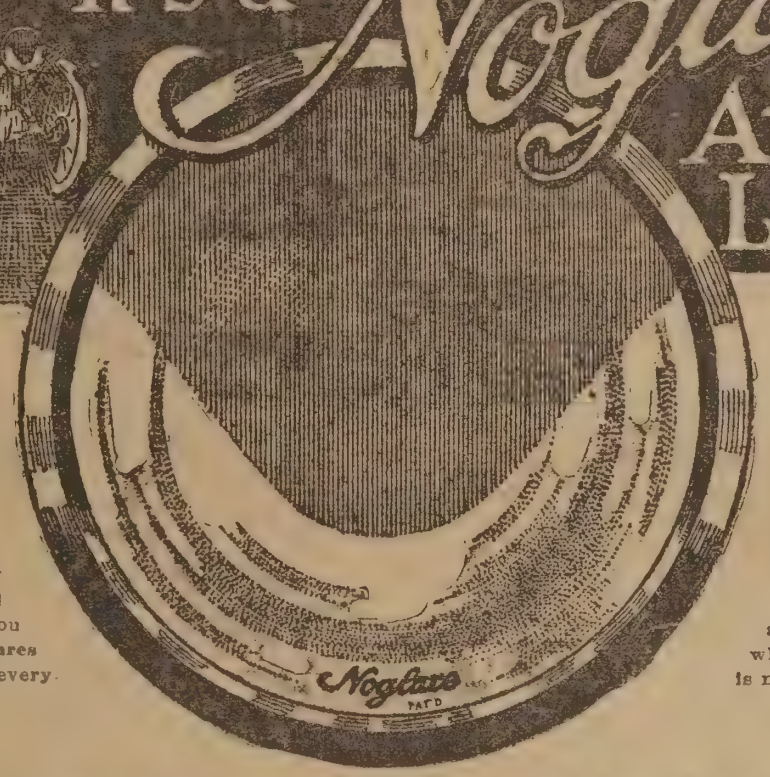
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Night driving in the city or country is a pleasure if you have enough light of the right kind. **Noglares** are brilliant where brilliancy is needed.

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In turning dark corners **Noglare** sidelight makes them "light as day" clear around the turn, **not only from afar off but after you get close up to them they are still in the wide radius of your light.**

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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

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CHAPTER XIII.

In which are described the "literary" society and the country dance of 25 or 30 years ago in the Big Bend country of eastern Washington.

In the Big Bend country of eastern Washington 25 to 30 years ago when farms were scattered with miles betwen bunch grass intervening between the homes of settlers there were two main sources of amusement in the winter. One was the "literary societies" the other was the country dances.

Coulee City got especially gay one winter and put on a home talent play —"Among the Breakers," it was called. Chris Hartshorne, one of our bachelor neighbors, did the part of the gallant ship captain. Frank Robinson was the comedian. In one part of the play the comedian got stuck in a cracker barrel, which was part of the stage setting, and the gallant ship captain had to quit making love to the heroine long enough to pull Robinson out of the barrel.

The town artist painted the scenery, not omitting a distant view of the ocean. Just before the play began a dog went up on the stage. Will Gifford, the wag and wit of the countryside, said that the pup went up to the ocean and tried to jump in to take a swim.

At the age of 12 or 13 I acquired considerable fame as an "elocutionist" in the Hartline Literary society. I learned one long, rambling recitation after another, produced them at about the rate of one a week, I think, during the winter. I would sit in the back end of the Hartline school house where the "literaries" were held, and wait with trembling and bated breath till my turn came. Mrs. Hill usually was secretary. She would say: "Recitation by Joey Ashlock," and Joey would come forth with tottery knees. But somehow I would always get through my "piece," and never "forgot" once

I remember part of the favorite recitation. On several occasions when I was not on the program some one would ask for this declamation as an extra. It began this way:

St. Peter stood guard at the golden gate.
With solemn mien and air sedate.
When up to the top of the golden stair
A man and a woman ascending there
Applied for admission.

They came and stood
Before St. Peter, so great and good,
In hopes the city of peace to win,
And asked St. Peter to let them in.

The man was short and thick and stout.
And his stomach was built so it rounded it out.
The woman was tall and lank and thin,
With a scraggy beardlet on her chin;
The choir in the distance the echoes woke,
And the man kept still while the woman spoke.

"O, thou that guardest the gate," said she,
We come up hither beseeching thee
To let us enter the heavenly land
And play our harps with the heavenly band.

"Of me, St. Peter, there is no doubt,
There's nothing in heaven to bar me out,
I've been to meeting three times a week,
And almost always I'd rise and speak.

"I've told my neighbors, told them all,
About Adam and Eve and their primal fall,
I've told them what they'd have to do
To pass in with the chosen few.

"I've talked and talked to them, loud and long,
For my voice is good and my lungs are strong;
I've made their path of duty clear,
Marked out the plan of their whole career.

"And so, St. Peter, you'll clearly see
That the gates of heaven are open to me,
But my old man here, I regret to say,
Hasn't walked exactly the narrow way;
He smokes and chews and grave faults he's got,
And I don't know whether he'll pass or not."

The poem went on at some length, relating how St. Peter, observing that the top of the man's head was bare, questioned him as to the reason, and the evidence thus gained was damaging to the woman. Calling an imp he said, "Escort this lady around to hell!" At that my audience would laugh, the men loudly and the women in a rather scornful way.

Concerning the man, St. Peter said:

"Thirty years with that woman there,
No wonder he hasn't any hair;
Chewing is nasty and smoke's no good;
He smokes and chews? I should think he would;
Thirty years with a tongue so sharp,
Ho! Angel Gabriel, give him a harp,
A jeweled harp with golden strings,
A glittering robe and a pair of wings;
See that on the finest ambrosia he feeds;
I think he's had all the hell he needs;
It isn't hardly the just thing to do,
To roast him on earth and in future too."

That was the close. By then the men would be in high merriment and the women would be smiling grudgingly. Sanford Harmon and Belle, his wife, had a heated argument over this recitation, I heard. Sanford said that "it was just like a woman." Belle fired up and said that it wasn't; that it was just like a man, always trying to say something mean about a woman

Another literary gem in high favor in the pioneer Hartline Literary Society was Charley Ames' song entitled "Gooseberry Pie." Charley appeared by request on many programs. If he were given an encore he would sing the last verse over again. The refrain of the song was:

"A gooseberry pie, says I, says I,
O, gimme some gooseberry pie."

The last verse which Charley sang on encore served notice on all the girls present that he wouldn't wed a one of them who couldn't make good gooseberry pie. To give the proper expression to the last verse, Charley would cast a meaningful glance at the prettiest girl there, if she were near him; and she would look the other way with color coming up in her cheeks.

A favorite that broke even with Charley's "Gooseberry Pie" was George Roberts' "O'Flannigan's Pup." It began thus:

"Ould Mickey O'Flannigan had a bull pup,
He'd foight and he'd niver give up,
His legs they was crooked, his nose it was hooked,
There niver on earth was such a pup"

The chorus was:
"Ooo—woo, woo, woo, such a pup,
He'd foight and he'd niver give up.
There niver on earth was seen sich a wan,
As Mickey O'Flannigan's pup."

The debate was always an important part of the literary program. A hotly debated question that I remember was this:

"Resolved That farming by irrigation is less desirable than farming with rain.

The case went against irrigated farming. The farmer who led the attack on irrigation said, in tones of thunder, that "Goddle mighty" never intended that water should be taken out of "cricks and rivers" and put on dry land. If land was too dry to grow crops, folks had no business trying to farm it. Let them get out of the darned country and go where there was rain.

Another debated question dealt with the exclusion of certain European immigrants—specifically, "dagoes," which class represented the debaters' idea of undesirable European immigrants.

Charley Roberts defended the right of Europe to send "dagoes" to America. He was the keenest and most entertaining debater I have ever heard. He had come into the Hartline country from somewhere in Pennsylvania, and now I realize that he must have had a university education with legal training. Keen wit, biting sarcasm, fluency I have never heard surpassed, and a masterful knowledge of parliamentary law were his deadly weapons. He did not have access to libraries or other reliable fountains of information in preparing his arguments; but he relied on his super-eloquent tongue and stinging thrusts of speech either to ridicule his opponents to the ground or make them so "mad" that speech failed them, leaving him winner of the debate by default.

On the occasion of the debate on European immigration the opposition to "dago" immigrants was led by a woman debater of the literary society.

"A whole family of them, were in the car (evidently a tourist) when we came west," she said. "They cooked onions on the stove and ate chunks of bread dipped in oil of some kind, and smelled up the whole car with their onions and dirt till the conductor made them get out and go into the day coach. They had about a dozen children, and the whole lot of them slept in an upper and lower, and the children yelled in their sleep and fell out of bed all night; and one of the women, the black-eyed thing, flirted with the brakeman something awful; and——"

"Mr. Chairman," interrupted Charley Roberts, "with your permission, please, and the consent of the house, may I ask the speaker a question?"

He stated his request so solemnly and so respectfully that everybody gaped forward, listening intently.

"Is the speaker willing to be interrupted by the gentleman on the floor?" asked the chairman.

The speaker was willing.

"I should like to ask the speaker," said Charley in low, solemn tones which every one sought to hear, —— "I should like to ask the speaker if the black-eyed flirt also ate onions."

The "house" exploded. When the uproar had subsided the "speaker" was in her seat, red with wrath; and the right of Europe to ship whole cargoes of "dagoes" to America, onions, noisy children, black-eyed flirts, all, was vindicated by the unanimous vote of the three judges of the debate.

In the next instalment the Bunchgrass boy tells of sitting on the shady side of the smokehouse and cutting fruit for drying, day after day. "Boards were laid out in form of wide, long tables, and over the bare boards were spread the cut halves of peaches, prunes, plums, apricots and the quarters or eighth of apples." Not the least interesting incident is that of the first fresh strawberries he ever saw, which were raised by a squaw man.

Holland Regulating Crops.

In 1915, 126,000 acres, or 2 per cent of Holland's superficial area, was devoted to gardening and 20,900 acres, or 0.3 per cent, to flowers and bulbs, out of a total of 2,325,000 acres (38 per cent) of arable land. On August 16, 1916, a law was passed empowering the government to restrict or prohibit the planting of crops that were not so useful for feeding human beings and animals as certain other crops; and therefore the government has made several regulations calculated to increase the food-producing capacity of the land and at the same time to discourage the cultivation of crops whose acreage has been increasing under the stimulation of high export prices. The cultivation of several kinds of crops will be restricted to the average acreage employed for those crops during 1913, 1914 and 1915. Other crops which are principally used for export, will be reduced to 70 or 80 per cent of the 1913-15 figures.

Sells 1000 Ewes.

A. P. Jones, Prineville, Ore., recently sold 1000 head of ewes, to be delivered in September, to William Wilson of Powell Butte at $12 per head.



Make the Most of Your Time

SAVING TIME is like saving money when you are threshing. You cannot afford to have all hands sitting idle waiting for your repairs. Insist upon having a thresher that will save your grain and keep steadily at work until the job is done. Hire or buy a

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All the World's a Stage, and All the Men and Women Merely Players

Nurses Killed on Mongolia.



ABOVE:—MISS HELEN B WOODS
BOTTOM:—MRS EDITH AYRES

The above photograph shows Mrs. Edith Ayres and Miss Helen Burnett Woods, Red Cross nurses of Chicago, who lost their lives aboard the American steamship Mongolia when a brass attachment of a shell used in target practice by the ship's gun crew struck the water and boomeranged back nearly 200 feet to the deck of the vessel. The navy department has announced that no such accident ever occurred before.

Study Taken Up in New York



Copyrighted by International.

One of the students of the Vanderbilt clinic, New York city, polishing a boy's teeth. Many New York girls are studying oral hygiene.

His Version of It



—Baltimore American.

National Legislators Enlist



A number of congressmen and senators will offer their services to the country. Representative Augustus P. Gardner of Massachusetts has answered the call for service as a colonel of the army reserve. Senators William F. Kenyon of Iowa and Henry F. Ashurst of Arizona have enlisted as common seamen in the naval reserve. Senator John W. Weeks of Massachusetts is also in favor of getting into personal service.

On Board French Cruiser at New York



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A deck scene on board the French cruiser Amiral Aube, which put into New York after escorting to American shores the ship that brought General Joffre and the French war mission. The Amiral Aube is the first warship of the allies to put in at New York since the outbreak of the war.

Hinted in Reichstag at Revolt



George Ledebour, leader of the socialistic movement in Germany in a speech in the reichstag recently declared that "revolution must come and the country may as well prepare for it."

When Knighthood Was in Flower

By EDWIN CASKODEN (Charles Major).

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CHAPTER XXI.—(Continued.)

As soon as Brandon arrived in Paris we took private lodgings, and well it was that we did. I at once went out to reconnoiter, and found the widowed queen a prisoner in the old palace des Tournelles. With the help of Queen Claude I secretly obtained an interview, learned the true state of affairs.

Had Brandon been recognized and his mission known in Paris, he would certainly have been assassinated by order of Francis.

When I saw the whole situation, with Mary nothing less than a prisoner in the palace, I was ready to give up without a struggle, but not so Mary. Her brain was worth having, so fertile was it in expedients, and while I was ready to despair, she was only getting herself in good fighting order.

After Mary's refusal of Francis, and after he had learned that the sacrifice of Claude would not help him, he grew desperate, and determined to keep the English girl in his court at any price and by any means. So he hit upon the scheme of marrying her to his weak-minded cousin, the count of Savoy. To that end he sent a hurried embassy to Henry VIII., offering, in case of the Savoy marriage, to pay back Mary's dower of 400,000 crowns. He offered to help Henry in the matter of the imperial crown in case of Maximilian's death—a help much greater than any King Louis could have given. He also offered to confirm Henry in all his French possessions, and to relinquish all claims of his own thereto—all as the price of one 18-year-old girl. Do you wonder she had an exalted estimate of her own value?

As to Henry, it, of course, need not be said, that half the price offered would have bought him to break an oath made upon the true cross itself. The promise he had made to Mary, broken in intent before it was given, stood not for one instant in the way of the French king's wishes; and Henry, with a promptitude begotten of greed, was as hasty in sending an embassy to accept the offer as Francis had been to make it. It mattered not to him what new torture he put upon his sister; the prince, I believe, was sufficient to have induced him to cut off her head with his own hands.

If Francis and Henry were quick in their movements, Mary was quicker. Her plan was made in the twinkling of an eye. Immediately upon seeing me at the palace she sent for Queen Claude, with whom she had become fast friends, and told her all she knew. She did not know of the scheme for the Savoy marriage, though Queen Claude did, and fully explained it to Mary. Natrally enough, Claude would be glad to get Mary as far away from France and her husband as possible, and was only too willing to lend a helping hand to our purpose, or Mary's, rather, for she was the leader.

We quickly agreed among ourselves that Mary and Queen Claude should within an hour go out in Claude's new coach for the ostensible purpose of hearing mass. Brandon and I were to go to the same little chapel in which Jane and I had been married, where Mary said the little priest could administer the sacrament of marriage and perform the ceremony as well as if he were thrice as large.

I hurriedly found Brandon and repaired to the little chapel where we waited a very long time, we thought. At last the two queens entered as if to make their devotions. As soon as Brandon and Mary caught sight of each other, Queen Claude and I began to examine the shrines and decipher the Latin inscriptions. If these two had not married soon they would have been the death of me. I was compelled at length to remind them that time was very precious just at that juncture, whereupon Mary, who was half laughing, half crying, lifted her hands to her hair and let it fall in all its lustrous wealth down over her shoulders. When Brandon saw this, he fell upon his knee and kissed the hem of her gown, and she, stooping over him, raised him to his feet and placed her hand in his.

Thus Mary was married to the man to save whose life she had four months before married the French king.

She and Queen Claude had forgotten nothing, and all arrangements were completed for the flight. A messenger had been dispatched two hours before with an order from Queen Claude that a ship should be waiting at Dieppe, ready to sail immediately upon our arrival.

After the ceremony Claude quickly bound up Mary's hair, and the queens departed from the chapel in their coach. We soon followed, meeting them again at St. Denis gate, where we found the best of horses and four sturdy men awaiting us. The messenger to Dieppe who had preceded us would arrange for relays, and as Mary, according to her wont when she had another to rely upon, had taken the opportunity to become thoroughly frightened, no time was lost. We made these 40 leagues in less than 24 hours from the time of starting; having paused only for a short rest at a little town near Rouen, which city we carefully passed around.

We had little fear of being overtaken at the rate we were riding, but Mary said she supposed the wind would die down for a month immediately upon our arrival at Dieppe. Fortunately no one pursued us, thanks to Queen Claude, who had spread the report that Mary was ill, and forrtunately, also, much to Mary's surprise and delight, when we arrived at Dieppe, as fair a wind as a sailor's heart could wish was blowing right up the channel. It was a part of the system of relays—horses, ship and wind.

"When the very wind blows for our especial use, we may surely dismiss fear," said Mary, laughing and clapping her hands, but nearly ready for tears, notwithstanding.

The ship was a fine new one, well fitted to breast any sea, and learning this we at once agreed that upon landing in England, Mary and I should go to London and win over the king if possible. We felt some confidence in being able to do this, as we counted upon Wolsey's help, but in case of failure we still had our plans. Brandon was to take the ship to certain island off the Suffolk coast and there await us the period of a year if need be, as Mary might, in case of Henry's obstinacy, be detained; then revictual and reman the ship and out through the North sea for their former haven, New Spain.

In case of Henry's consent, how they were to live in a style fit for a princess. Brandon did not know, unless Henry should open his heart and provide for them—a doubtful contingency upon which they did not base much hope. At a pinch, they might go down into Suffolk and live next to Jane and me on Brandon's estate. To this Mary readily agreed, and said it was what she wanted above all else.

There was one thing now in favor of the king's acquiescence: During the last three months Brandon had become very necessary to his amusement, and amusement was his greatest need and aim in life.

Mary and I went down to London to see the king, having landed at Southampton for the purpose of throwing off the scent any one who might seek the ship. The king was delighted to see his sister, and kissed her over and over again.

Mary had as hard a game to play as ever fell to the lot of woman, but she was equal to the emergency if any woman every was. She did not give Henry the slightest hint that she knew anything of the count of Savoy episode, but calmly assumed that of course her brother had meant literally what he said when he made the promise as to the second marriage.

The king soon asked: "But what are you doing here? They have hardly buried Louis as yet, have they?"

"I am sure I do not know," answered Mary, "and I certainly care less. I married him only during his life, and not for one moment afterwards, so I came away and left them to bury him or keep him, as they choose; I care not which."

"But—" began Henry, when Mary interrupted him, saying: "I will tell you—"

I had taken good care that Wolsey should not be present at this interview; so we four, the king, Wolsey, Mary and myself, quietly stepped into

The Thing to Do.

The youngster had just been told the story of Daniel in the lions' den, and the question had been put to him:

"What do you think Daniel did the very first thing when he found he was saved from the lions?"

The child reflected a moment, and then replied: "I suppose he telephoned home to his wife to tell her he was all right."

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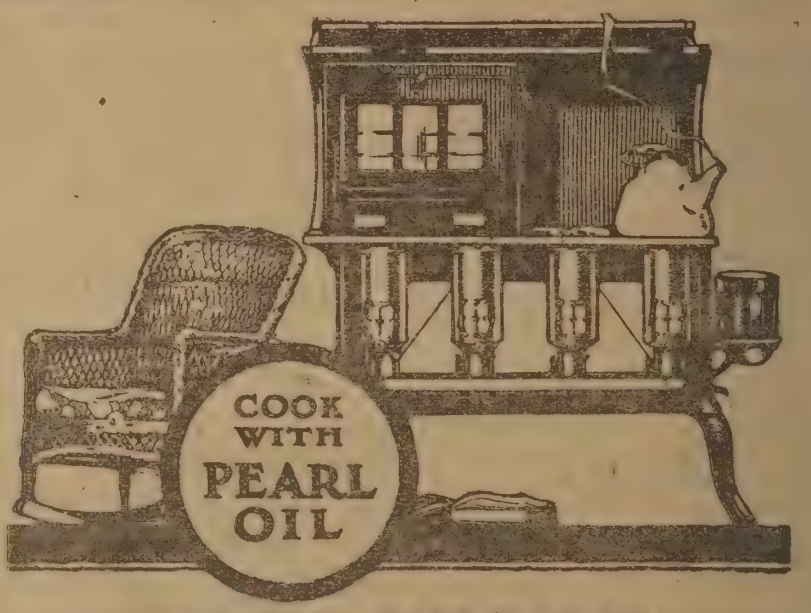
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a little alcove away from the others, and prepared to listen to Mary's tale, which was told with all her dramatic eloquence and feminine persuasiveness. She told of the ignoble insults of Francis, of his vile proposals—insisted upon, almost to the point of force—carefully concealing, however, the offer to divorce Claude and make her queen, which proposition might have had its attractions for Henry. She told of her imprisonment in the palace des Tournelles, and of her deadly peril and many indignities, and the tale lost nothing in the telling. Then she finished by throwing her arms around Henry's neck in a passionate flood of tears and begging him to protect her—to save her! save her! save her! his little sister.

It was all such perfect acting that for the time I forgot it was acting, and a great lump swelled up in my throat. It was, however, only for the instant, and when Mary, whose face was hidden from all the others, on Henry's breast, smiled shyly at me from the midst of her tears and sobs, I burst into a laugh that was like to have spoiled everything. Henry turned quickly upon me, and I tried to cover it by pretending that I was sobbing. Wolsey helped me out by putting a corner of his gown to his eyes, when Henry, seeing us all so affected began to catch the fever and swell with indignation. He put Mary away from him, and, striding up and down the room, exclaimed, in a voice that all could hear, "The dog! the dog! to treat my sister so.' My sister! My father's daughter. My sister! The first princess of England and queen of France for his mistress! By every god that ever breathed, I'll chastise this scurvy cur until he howls again. I swear it by my crown, if it cost me my kingdom," and so on until words failed him. But see how he kept his oath, and see how he and Francis hobnobbed not long afterward at the Field of the Cloth of Gold.

Henry came back to Mary and began to question her, when she repeated the story for him. Then it was she told of my timely arrival, and how, in order to escape and protect herself from Francis, she had been compelled to marry Brandon and flee with us.

She said, "I so wanted to come home to England and be married where my dear brother could give me away, but I was in such mortal dread of Francis, and there was no other means of escape, so——"

"God's death! If I had but one other sister like you, I swear before heaven I'd have myself hanged. Married to Brandon? Fool! idiot! what do you mean? Married to Brandon! Jesu! You'll drive me mad! Just one other like you in England, and the whole damned kingdom might sink; I'd have none of it. Married to Brandon without my consent"

"No! no! brother," answered Mary softly, leaning affectionately against his bulky form; "do you suppose I would do that? Now, don't be unkind to me when I have been away from you so long! You gave your consent four months ago. Do you not remember? You know I would never have done it otherwise."

"Yes, I know! You would not do anything—you did not want; and it seems equally certain that in the end you always manage to do everything you do want. Hell and furies!"

"Why! brother, I will leave it to my lord bishop of York if you did not promise me that day, in this very room, and almost on this very spot, that if I would marry Louis of France I might marry whomsoever I wished when he should die. Of course you knew, after what I had said, whom I should choose, so I went to a little church in company with Queen Claude, and took my hair down and married him, and I am his wife, and no power on earth can make it otherwise," and she looked up into his face with a defiant little pout, as much as to say, "Now, what are you going to do about it?"

Henry looked at her in surprise, and then burst out laughing. "Married to Brandon with your hair down?" And he roared again, holding his sides. "Well, you do beat the devil; there's no denying that. Poor old Louis! That was a good joke on him. I'll stake my crown he was glad to die! You kept it warm enough for him, I make no doubt.'

"Well," said Mary, with a little shrug of her shoulders, "he would marry me."

"Yes, and now poor Brandon doesn't know the trouble ahead of him, either. He has my pity, by Jove!"

"Oh! that is different," returned Mary, and her eyes burned softly, and her whole person fairly radiated, so expressive was she of the fact that "it was different."

Different? Yes; as light from darkness; as love from loathing; as heaven from the other place; as Brandon from Louis; and that tells it all.

Henry turned to Wolsey: "Have you ever heard anything to equal it, my Lord Bishop?"

My Lord Bishop, of course, never had; nothing that even approached it.

"What are we to do about it?" continued Henry, still addressing Wolsey.

The bishop assumed a thoughtful expression, as if to appear deliberate in so great a matter, and said: "I see but one thing that can be done," and then he threw in a few soft, oily words upon the troubled waters that made Mary wish she had never called him "thou butcher's cur," and Henry, after a pause, asked: "Where is Brandon? He is a good fellow, after all, and what we can't help we must endure. He'll find punishment enough in you. Tell him to come home—I suppose you have him hid around some place—and we'll try to do something for him."



Mary before the king.

"What will you do for him, brother?" said Mary, not wanting to give the king's friendly impulse time to weaken.

"Oh! don't bother about that now," but she held him fast by the hand and would not let go.

"Well, what do you want? Out with it. I suppose I might as well give it up easily, you will have it sooner or later. Out with it and be done."

"Could you make him duke of Suffolk?"

"Eh? I suppose so. What say you, my Lord of York?"

York was willing—thought it would be just the thing.

"So be it then," said Henry. "Now I am going out to hunt and will not listen to another word. You will coax me out of my kingdom for that fellow yet." He was about to leave the room when he turned to Mary, saying: "By the way, sister, can you have Brandon here by Sunday next? I am to have a joust."

Mary thought she could—and the great event was accomplished.

One false word, one false syllable, one false tone would have spoiled it all, had not Mary—but I fear you are weary with hearing so much of Mary.

So after all, Mary, though a queen, came portionless to Brandon. He got the title, but never received the estates of Suffolk; all he received with her was the money I carried to him from France. Nevertheless, Brandon thought himself the richest man in all the earth, and surely he was one of the happiest. Such a woman as Mary is dangerous, except in a state of complete subjection—but she was bound hand and foot in the silken meshes of her own weaving, and her power for bliss-making was almost infinite.

And now it was, as all who read may know, that this fair, sweet, wilful Mary dropped out of history; her soul his empire; her every wish his subject, and her will, so masterful with others, the meek and lowly servant of her strong but gentle lord and master, Charles Brandon, Duke of Suffolk.

(The End.)

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FAMILY CIRCLE

Write to the Editor

ALICE W. BARLAND
Editorial Contributor

Break Monotony

Have Something to Do Out of Doors

Dear Women of the Family Circle: I have been planting seeds during the last two or three weeks as I have no doubt you have, and aren't seeds the very most wonderful things?

I planted many varieties of flower seeds, some were so tiny like a pin point. As I held the little specks of things in my hand and looked at them the great miracle of life came to me with the same force as always when I am planting seeds.

Down in the heart of that tiny little brown speck is hidden a mystery which all the knowledge of all the ages has been unable to fathom—the mystery of life.

One could roll a few grains of earth into a little speck like the seed of a pansy for instance, which might look so much like the pansy seed that no one could distinguish them, but all the accumulated wisdom of all the centuries can not put the life germ into the speck which in outward form is identical with the pansy seed.

I had a package of carnation seeds which lay unopened for 15 years in my sewing machine drawer. From time to time as I put the drawer in order I left them there as they took up no room lying flat on the bottom of the drawer. Tossed about so long I forgot when or where or why I got them for I never raised carnations from seed. Last year I remembered them at the right time to plant them and though I had no idea the seeds would be good after all those years, I thought I would give them a chance.

They were placed in a little corner by themselves and in due time up came the sturdy little carnation plants.

Down in the heart of those little seeds was sleeping the life germ imbedded therein by God himself when he made the first carnation and decreed that every plant of the field should grow and produce seed each of its kind.

The little seeds, and they were very small, were lying forgotten for 15 years sealed into that paper package, but as soon as they were given moist earth and sunshine the life within burst the outside shell and leaving it behind pushed straight upward toward God and the sunlight. Oh the infinite wonder of it! The beautiful and wonderful mystery of life!

There are many reasons why I think farmers are the most fortunate of all who toil. I have not always appreciated the advantages of farm life and if by these little chatty talks I can direct the attention of the women who read this page to some of the beauties and wondrous things that surround them on all sides, it will help them to forget, in a measure, the monotony of the daily cooking and cleaning and mending, for the life of the farm is hard and no one knows better about it than I do.

A. W. B.

President Indorses Y. M. C. A.

By an effective order, President Wilson recently indorsed in most positive terms the good work done by the Young Men's Christian association as an adjunct to the army and navy. The president still believes that the Y. M. C. A. shall continue as a valuable civil organization, adding:

"However, the results obtained are so beneficial and bear such a direct relation to efficiency, inasmuch as the association provision contributes to the happiness, content and morale of the personnel, that in order to unify the civilian betterment activities in the army, and further the work of the organization that has demonstrated its ability to render a service desired by both officers and men, official recognition is hereby given the Young Men's Christian association as a valuable adjunct and asset to the service. Officers are enjoined to render the fullest practicable assistance and cooperation in the maintenance and extension of the association, both at permanent posts and stations and in camp and field."

For the Very Big Holes.

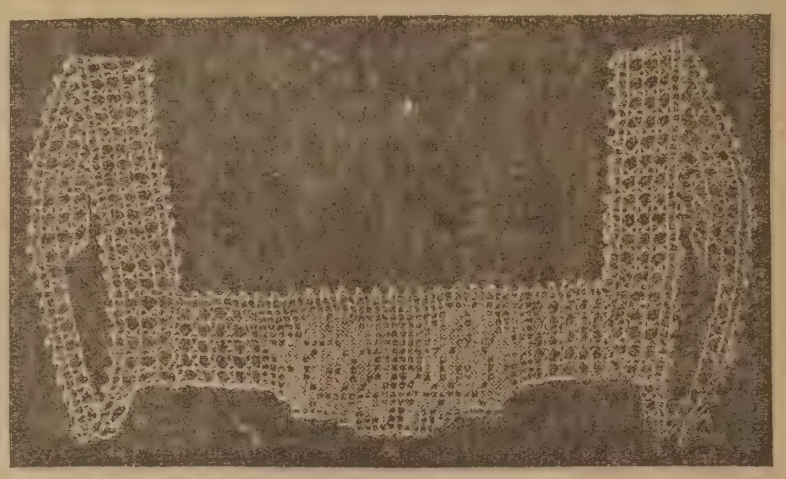
A shoemaker's wooden last is invaluable for mending stockings and socks. When slipped over the last the stocking is held in the shape of the foot and the mended places will neither bulge nor draw, as is usually the case where the darning egg is used.



Howe'er it be, it seems to me,
'Tis only noble to be good.
Kind hearts are more than coronets,
And simple faith than Norman blood.
—Tennyson.

Crochet and Tatting Designs

By WINIFRED WORTH



Lacet and Filet Yoke.

Use two balls No. 60 Cordonnet. Chain 41. Follow pattern.

This is a combination of lacet and filet stitches. For filet always remember to ch. 5 at end of row. In one block or filled mesh there are always 4 t., in 2 there are 7, in 3 there are 10.

This pattern will look beautiful crocheted in pink or light blue Cordonnet.





For the Home Table

To make cream omelette place in a saucepan a tablespoonful of butter or butter substitute; as it melts add a level tablespoonful of flour and stir till perfectly smooth. Then add a cupful of sweet milk; cook till thickened, stirring constantly. Beat separately the whites and yolks of three eggs; mix the yolks with the hot white sauce, then add the stiff egg whites, season with salt and pepper and fry in hot drippings, turning carefully one half over the other half, when sure the omelette is set. Brown delicately, turn onto a heated platter and serve at once. This is a most delicious omelette and never fails. The quantities here given will serve four people moderately. The secret of a tender omelette is to cook it very slowly till the eggs are "set."

Near-Maple Syrup.

Make a plain sugar syrup of granulated sugar and water and, when it has boiled till thick enough, take from the stove and add a teaspoonful or less of maple favoring, which can be purchased from any grocer.

Sell Imnaha Ranch.

H. D. Akins has sold his lower Imnaha ranch near Enterprise (Ore.) of 640 acres, and about 430 head of cattle, to D. W. Warnock.

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Patterns

2095-2096 — Lady's costume. Waist 2095 cut in 6 sizes, 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 2 7-8 yards of 36-inch material for a 36-inch size. Skirt pattern 2096 cut in 6 sizes: 22, 2, 36, 28, 30 and 32 inches waist measure, and requires 5 1-4 yards of 36-inch material for a 24-inch size. The skirt measures about 3 1-8 yards at the hem. Two separate patterns, 10 cents for each pattern.

2068—Lady's boudoir sack. Cut in 4 sizes: Small, medium, large and extra large. The small size requires 1 1-2 yards of 36-inch material. Price, 10 cents.

1965-1816—Lady's costume. Waist 1965 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 1816 cut in 6 sizes: 22, 24, 26, 28, 40 and 32 inches waist measure. It requires 6 3-4 yards of 4-inch material for the entire dress for a medium size. Two separate patterns, 10 cents for each pattern.

1876—Lady's dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 6 yards of 44-inch material for a 38-inch size. The skirt measures about 3 yards at its lower edge. Price 10 cents.

2072—Girl's dress. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. It requires 4 yards of 36-inch material for an 8-year size. Price, 10 cents.

1378—Boy's blouse suit. Cut in 4 sizes: 3, 4, 6 and 8 years. It requires 1 1-4 yards of 36-inch material for the blouse, and 1 1-8 yards for the trousers, for a 3-year size. Price, 10 cents.

1954—Lady's one-piece dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 7 1-2 yards of 36-inch material for a 36-inch size. The skirt measures about 3 3-8 yards at the foot. Price, 10 cents.

1964—Girl's one-piece dress. Cut in 4 sizes: 8, 10, 12 and 14 years. It requires 4 yards of 44-inch material for a 12-year size. Price, 10 cents.

1758—Lady's apron. Cut in 3 sizes: Small, medium and large. It requires 6 1-4 yards of 36-inch material for a medium sze. Price, 10 cents.

2094—Some attractive collars and one pair of cuffs. Pattern includes all styles illustrated and is cut in 3 sizes: Small, medium and large. No. 1 will require 1-2 yard, No. 2 collar 5-8 yard, cuff No. 2, 3-8 yard and collar No. 3, 5-8 yard of 27-inch material, for a small size. Price, 10 cents.

2081—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 3-4 yards of 36-inch material for a 36-inch size. The skirt measures about 3 yards at the foot. Price, 10 cents.

1972—Junior's dress. Cut in 3 sizes: 12, 14 and 16 years. It requires 4 3-4 yards of 44-inch material for a 14-year size. Price, 10 cents.



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We buy cascara bark, Oregon grape root and Oregon balsam of fir at the prevailing market. Submit samples and quantity you have for sale.

BLUMAUER-FRANK DRUG CO.

357 Everett, Portland, Oregon.



Wade in the Creek Behind the Farm.

Dear Aunt Nellie: I go to school every day and only missed six days on account of the measles. My teacher's name is Miss Steinback. I like her very much. I live on a farm of 80 acres and would not change with a city girl. A creek runs behind the barn. We go wading in the summer and catch fish and crabs. My papa is a hard worker and has 20 acres cleared. My mama keeps the house neat and sees that we children are clean. She works in the garden in the summer time and helps papa with the hay. We are milking 10 cows and I milk three of them myself. My brother Joseph milks three and papa milks the rest. We have three horses. Their names are Lizzie, Dick and Jimmy. I own a calf about five months old. She is black and white and I call her Spottie. I had nine rabbits and sold all of them and made $2.90 and also get $1.50 for milking. I have twin sisters whose names are Margaret and Frances. I have another sister, Mary. If any girls write to me I will surely answer. I told mama that nearly every girl is 11 and in the fifth grade. So am I.—Rosa Limmer, Winlock, Wash.

We'll All Be Looking for a Letter.

Dear Aunt Nellie: This is my third letter to the Corner. This time I am to tell you about our nice visitors. We had four nice visitors about two weeks ago. Can you guess who they were? It was my aunt and her family from St. Ignatius, Mont. She is my father's half sister. Their names are: Mary Finley and her daughter's Lucy Kicking-horse, the little girl, Helen Kicking-horse, and the man's name is Charlie Kickinghorse. We surely missed them when they left us. Papa gave his sister $16. They stayed at our house until my birthday was over and then went back home. I have six little calves now. Papa has one that makes seven. There are 15 children that go to my school. We have a nice teacher. We all like him very much. I am surely going to write to the Corner again. I want the cousins to look for another letter from me.—Sallie Selina Garry, Spokane No. 1, Indian Day School, Miles, Wash.

Is Going to Have a Flower Garden.

Dear Aunt Nellie: I saw my other letter printed, and was glad to see it in the paper. My colt's birthday was April 1. It was one year old. My father has the rheumatism and my mother has it, too. We are afraid that our brothers will have to go and fight. I like to read the Children's Corner very much. I have a new sister-in-law. She is 20. Her birthday is the 24th of March. I like to go to school very much. We have two dogs, their names are Penny and Fritz. We have very close neighbors. I am going to make a flower garden. My favorite flowers are sweet peas, poppies, buttercups, yellowbells and rockroses. Peanuts is my colt. I have to walk a little over a mile to school. My teacher's name is Edna Browning.—Eunice Martin, Riverside, Wash.

"The Man Without a Country."

Dear Aunt Nellie: I am 13 years old. I am going to write about my favorite book. My favorite book is "The Man Without a Country." It tells of the life of poor Philip Nolan. He cursed the United States and said he wished never to hear of her again. His wish was granted, as he was tried in court and sentenced to live on a ship out in the ocean all his life. He was never allowed to hear or read anything about the United States; but on his death bed a friend told him of the changes that had taken place in the United States, during the 56 years that he had been living on the ocean. When Philip Nolan died he asked to be buried in the ocean, for it had been his home, but he wished to have a stone set up at Fort Adams at Orleans in his memory. A man never loved his country as well as Philip Nolan did and it should be a lesson to every boy and girl to be loyal to their country.—Gladys May Plemon, Burbank, Wash.

Holly Will Raise Beans This Summer.

Dear Aunt Nellie: This is my third time to write to the Corner. We had a program at our schoolhouse the 31st of March. My papa got his foot hurt and he can't walk only on crutches. Our school was out the 27th of April. We thought the creek was going to wash our bridge out the other day. We play ball at school. My subject is my best friend. My best friends are my papa and mama. I would like to correspond with another boy. I am going to raise two or three acres of beans this year. I was very glad to see my letter in print. I read the Corner every time the paper comes. I haven't missed a day in school yet. I have two dogs. I have a cow and calf and a pony.—Holly Zinn, Lenore, Wash.

Edna Likes the Letters.

Dear Aunt Nellie: I like to read the letters. I am 11 years old and I am in the fifth grade. My teacher's name is Miss Clinton. It won't be very long till school will be out. We are taking examinations. I hope I will pass. Our teacher has taught two years and we are going to have a new teacher. I wish we could have Miss Clinton next year. We have five cows and three little calves. My birthday is May 10.—Edna Smith Rice Wash.

Edith's First Letter to the Corner.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and in the third grade. I have one pet kitten, and his name is Tom. We have two dogs, and the large one's name is Tip and the other one's name is Monty. We live on a 160-acre farm. We have two cows, their names are Cherry and Mott. I have two brothers and one sister. My sister's name is Olive and my brothers' names are Wallace and Verne. Olive is 10 years old and in the fourth grade. Verne is in the first grade and Wallace is not going to school yet. We have eight horses, and their names are Dave, Johnny, Bess, Jim, Major, Trilby, Nancy and Buck. —Edith Bannon, Antwyne, Wash.

The Bible Says:



Eats Sugar From Carolyn's Hand.

Dear Aunt Nellie: We have a 160-acre farm. I am 8 years old and in the third grade. This is my first year at school and I will finish the third grade this spring. I have a pet lamb. Her name is Bug. When she was little I fed her on a bottle. When I call her she will answer. She is a year old now. We have great times together. She likes to eat sugar from my hand. I have two brothers and no sister. My brother Ivan teaches school and Keith goes to high school. We have 30 sheep and 12 horses and six cows and calves. We have a Ford and I like to ride in it. I have a pony and I like to ride her too.—Carolyn R. Montanye, Colville, Wash.

Caught in the Stove Pipe Hole.

Dear Aunt Nellie: The worst day I can remember was when I was six years old. We live on a farm and had a smokehouse for meat. One day I shut my brother and sister in and then went on top and put my head through the stove pipe hole. There was a tin on it to fit the pipe. When my head was through the tin I noticed a big spider about six inches from my face which made it unpleasant. My older sister had to take the pinchers and take the tin off of the roof. They laughed at me which only made matters worse. I am now 13, but can remember that day.—Goldie Gaskill, Chesaw, Wash.

Name of the School Is St. Urban.

Dear Aunt Nellie: This is the second time I have written to the Corner. My father takes The Farmer. My teacher's name is Miss Beauchamp. I like her very much. I am eight years old and in the third grade and have light brown hair and brown eyes. I have three sisters and one brother. Their names are Rosa, Margareta and Frances. My brother's name is Joseph. Margareta and Frances like me. There are 22 children in my room at school. My brother is in the sixth grade. He is 13 years old. My sister is in the fifth grade and she is 11 years old. Our chickens are laying nicely now. I have five studies. My school is called St. Urban school. I had the measles and the grip.—Mary Limmer, Winlock, Wash.

Teacher's Alway Pleasant and Merry.

Dear Aunt Nellie: I enjoy the letters of the cousins to Aunt Nellie very much because my mother's name is Nellie. This is the first time I have written. I am 12 years old and I have two sisters and one brother. The subject I am going to choose is "My Best Friend." My best friends at school are my teachers and Miss Evans and Miss Myers. Miss Myers is my sewing teacher and Miss Evans is my teacher in other studies. They are both very nice and are always pleasant and merry. I think all the boys and girls like Miss Evans and Miss Myers.—Eileen M. Vogel, Kapowsin, Wash.

The Only Girl of Her School.

Dear Aunt Nellie: I am 8 years old. I go to the Ruark school. My teacher's name is Miss Mae Shapley. I ride to school. There are four pupils going to school and am the only girl. I live on a farm of 700 acres of land. My father has four little calves. One is black and the other three are spotted. I have four little kittens and they are black. Their eyes are not open yet. I have a little nephew. He was five months old Easter Sunday. They weighed him and he weighed 24 pounds.—Nettie Ruark, Pomeroy, Wash.

Brother Has Joined the Marines.

Dear Aunt Nellie: I am 11 years old. My birthday is September 18. I weigh 109 pounds. I have five brothers and four sisters. I have one brother that is dead. I have twin sisters, both are married and have families. I have three sisters and two brothers that are married. One of my brothers has joined the marines. He is 18 years old. I may never see him again. We have three big horses, two colts, one mule colt and two year old mule. My sister has some chickens. We have six little pigs and two big pigs and we live on a farm.—Abbie Gaskill, Chesaw, Wash.

Grace's Subject Is "My Chum."

Dear Aunt Nellie: This is the third time I have written. My subject will be My Chum. She is 11 years old and is about seven months older than I. She has blue eyes and reddish brown hair. She is chubby and I like her very much. The first time I saw her I liked her and sometimes we get in little scraps but make up again. I wish someone would write to me and I would answer them. I am 10 years old. My birthday is August 23d. I have light blue eyes and light brown hair. I weigh about 80 pounds.—Grace Humbly, Friday Harbor, Wash.

A Camping Trip to the Mountains.

Dear Aunt Nellie: I am a little girl of 12 years. I am staying in the country with my auntie and uncle. I walk a half mile to school and am in the seventh grade. My teacher's name is Leonard L. Heaphey and he tries to make it pleasant for us children. I am having a pleasant time riding with my cousin on the ponies. I like it better by a whole lot than I do in the city. On our vacations we have planned to take a camping trip to the mountains.—Retta Gray, Govan, Wash.

Have Lots of Fun at School.

Dear Aunt Nellie: I am going to write about my school. I go to Pleasant Valley school. My teacher's name is Miss Kerr. There are 21 kids in my school. They closed the school on account of smallpox this spring for a couple of weeks. They all had the whooping cough. I am eight years old and in the second grade. I just started to school last fall too. We have lots of fun at school.—Graham Potter, Hillyard, Wash.

Sit Together in Language Class.

Dear Aunt Nellie: My best friend is the subject I am going to tell about. My best friend is Leslie Fellows, a boy 8 years old. He is in the second grade and I am in the third. He lives about four miles from me. Leslie and I sit together when we have language class. I am 10 years old. My birthday is February 2. I have two pet chickens. They are very pretty—Frank Purcell, Pomeroy, Wash.

Feed the Lambs With a Bottle.

Dear Aunt Nellie: I am 10 years old. My birthday is the 19th of June. I am in the fifth grade. My teacher's name is Olin H. Thornton. We live about a mile and a half from school. We have two little lambs and we feed them with a bottle.—June Stiles, Fruitland, Wash.

Donald Likes to Ride the Pintos.

Dear Aunt Nellie: This is the first letter I have written to the Corner. I live in the South Basin. I am eight years old. It is one and a half miles to school. I have a dog and a cow and a calf. We have two pinto ponies and I like to ride them. I have a pair of sklis.—Donald M. Avin, Orin, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Marie Day, Mary Walker, Lydia Ervin, Jeannette Van Dyke, Luvelle Pompella, Florence Frohning, Margarette Gullixson, Rebecca Gullixson, Gertrude Ruchest, Cassius Orr, Ellen Purcell, Blanche Haquist, Laila Haquist, Lyda Augst, Louise Kramer, Rose Kramer.

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In answering advertisements don't fail to mention this paper.

Why Leave the Old Farm?

To the Editor of The Washington Farmer: I have been reading an article by E. A. Bryan on "The Push and Pull From the Country." My opinion is that the eight hour law has pushed the young men from the farms. Why leave the old farm? We old fellows work on the eight-hour system. We divide the 24 hours into three shifts, eight hours in the forenoon, eight hours in the afternoon, leaving eight hours which we have to sleep if he have our day's work completed. What can any young man ask for better than that? I know of a farmer that hired a man, agreeing to give him steady work. He worked until 1 o'clock in the morning and called him again at 4, at breakfast time. The hired man claimed that the contract was broken as the farmer had not given him steady work. Yes, better profits in farming would solve the problem, but will Brother Bryan tell us how to get better prices?

C. E. LUDDEN.

Arletta, Wash.

Grays Harbor Pomona Grange.

At the last meeting of the Grays Harbor Pomona Grange No. 28, which met at Summit, two new granges were reported since January 1, North River Valley Grange No. 641 and Wiskah Valley Grange No. 634. At the open meeting C. F. Monroe gave a talk on silos and C. M. McAlister of the Portland Stock Yards discussed the advantages of farmers cooperating in the selling of their beef and pork so as to ship in carload lots. It was decided to hold a picnic for the entire county at Satsop July 4, and committees were appointed. A class of 25 candidates were initiated in the fifth degree of P. and H. Summit Grange is reported to have served a very acceptable chicken supper at midnight. The next meeting of the Pomona grange will be held with the Wiskah Valley Grange No. 634 the third Saturday in July, afternoon and evening.

Newbill at Washington.

Professor T. J. Newbill, who has been in charge of the boys' and girls' clubs of Washington, has been called to Washington, D. C., by the agricultural department to aid in nationalizing the boys and girls' work.

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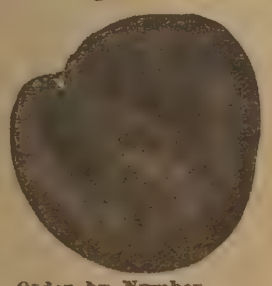
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POULTRY 174



This classification is a helpful guide to pure bred stock and eggs for hatching. If you want another breed of poultry or new blood in your flock, you will do well to write to advertisers below.

Your own ad in this column will be printed in The Washington Farmer, The Oregon Farmer, and The Idaho Farmer, taking the information about your poultry into over 50,000 farm homes, the best possible class of customers for the products of your poultry yards.

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750 acres, best part of basin; 200 acres winter wheat, looks fine, half to buyer; 350 spring wheat, one-third to buyer; 650 acres steam plow land; not over 40 acres waste; nice spring and stream; 2½ miles to town; good house. Price $75 an acre, and worth every cent of it on cash basis. Will take good Palouse farm, worth $15,000 to $20,000, part payment, balance easy terms.

SHIELDS RIVER VALLEY.
720 acres in best part of famous Shields River valley; no better winter wheat section in northwest; 226 acres winter wheat; 75 acres oats and barley; 35 acres alfalfa; 250 inches water; plenty to irrigate 250 acres; fine trout stream; not over 40 acres waste land; new 5-room bungalow, big shed and granaries; good spring near the house; equal to best Palouse soil. One of the best grain and stock farms in the country; over 600 acres steam plow land; all crop goes for short time at $70 per acre. Will take good land in Washington, clear, up to $20,000, balance good terms.

FINE STOCK FARM.
560 acres, 2½ miles to good town; 250 acres timothy and clover; 100 acres in barley; 350 acres irrigated; very little waste land; 2½ miles to good town; good 7-room house; located in coal district; geologists say most of this land is underlaid with coal; buyer gets half the hay, one-third the barley and full conveyance of coal rights at $60 per acre. Will take good farm land in eastern Washington for about half, balance to suit.

640 acres, in good grain district; 450 in crop, one-third to buyer; not over 40 acres waste; good spring and stream; 2 miles to town. Price $45 per acre. Will take good eastern Washington land, clear, up to $15,000, balance good terms.

The above places are all good land, personally inspected and worth the money in cash. Have other good Montana lands, on which owners will take good land as part payment. Write and tell us what you have to trade.

HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG., SPOKANE, WASH.

MONTANA LAND.
CROP GOES TO BUYER.
320 acres, in good grain district, 100 in crop, all goes to buyer; 90 per cent tillable; good spring. Price $22 per acre; good terms; no trade.

320 acres, 280 in crop, all goes, not over 15 acres waste land; some surface stone on part; good grain district; $35 an acre.

A GREAT BARGAIN FOR PROMPT ACTION.
800 acres in one of the very best grain districts of Montana; probably surest winter wheat crop district in Montana; 350 acres winter wheat, in fine condition; 150 acres spring grain; 150 acres fine hay; very little waste; lies nice and level, nearly all steam plow land; soil equal to the best in the west for grain; fine prospect for 30 to 40 bushels per acre on the wheat; in a district where 40 bushel crops are very common; fair set of buildings; 12 miles to good town, but good road; all the crop goes now at $60 per acre, but see us or call us on phone immediately if you want this place, as it is subject to withdrawal or raise in price.

HEGE & WATKINS CO.
715-16-17 Paulsen Bldg., Spokane, Wash.

330 ACRES, FENCED, CLOSE TO SCHOOL, town and Ry., in famous Shields River valley; nearly level; 250 acres cultivated; 256 inches decreed water; fine trout stream flows through farm; spring water piped into house; fairly good buildings; 120 acres in wheat, oats and barley; 60 acres alfalfa and timothy; two ordinary years' grain crops should pay for this farm, saying nothing of the dairying, hogs and live stock it will support in addition; $50 per acre, including all crops. It's a money maker right from the start. J. W. Hefferlin, farm opportunities, Livingston, Montana.

MONTANA LAND.
38,000 acres, $14 an acre, to be sold in section lots, 75 to 80 per cent tillable; 3 to 12 miles from railroad; Eastern Montana average rainfall 19 inches; raises good corn and all grains grown in Montana; deep rich soil, very little stone, average price in section lots, $14 an acre. New tract just put on the market this week. Go with us at once and get your choice.
Call or write for particulars.
HEGE & WATKINS CO.
715-16-17 Paulsen. Bldg., Spokane, Wash.

GOLDEN OPPORTUNITIES—THE BEST land that lies outdoors, the Gem district, close to railroad and electric line, where raw land will produce and has produced 65 bushels wheat, 93 bushels barley, 120 bushels oats and 9 tons alfalfa per acre; first crop out of sage brush; a few pieces can still be had for $50 per acre. Write for particulars to Nichol, the land man, Caldwell, Idaho.

40-ACRE DAIRY FARM, NEAR BOISE; mile from interurban line and cheese factory; 24 acres of pasture and alfalfa; 10 acres a little too high for gravity water, balance under plow; cross fenced. Ridenbaugh water right. Family orchard; plastered house; barn 40x33; silo. Price $4500. Good terms. Hub Realty Company, Boise, Idaho.

80-ACRE FARM, 3 MILES FROM RAILroad town; 15 head registered Holsteins, 3 with official records, bull out of 30-lb. cow, few grades, young stock; 20 acres bearing orchard; terms. W. Fred Harper, New Plymouth, Idaho.

BISSINGER & CO., DEALERS IN HIDES, pelts, wool, tallow and furs; consignments solicited; prompt remittance. P. O. Box 1553. Phone 503. Warehouse, 26th and R. R. st., Boise, Idaho.

IF YOU ARE LOOKING FOR GOOD farms, we have improved and unimproved farms for sale; also relinquishments and homesteads. Write Hall & Vollmer, Sumatra, Mont.

80 ACRES, GARDEN SPOT OF IDAHO; 50 in crops; alfalfa, fruit, grain; terms. E. Cope, Ontario, Ore.

IF YOU WANT LAND IN MONTANA, write to H. O. Clark Jr., 125 W. Broadway, Butte, Mont.

FOR SALE OR EXCHANGE 702

FOR SALE, OR EXCHANGE FOR SMALLer place—My 552-a. stock and grain ranch, 3 miles to town. Address owner, R. E. Warner, Crawfordsville, Oregon.

Grain and Produce Markets

Chicago Grain.

CHICAGO, June 2.—Extraordinary advances in the prices of future deliveries of wheat resulted today from attempts to purchase small amounts on a market bare of offerings. The extreme rise was 22c a bushel but quotations underwent a subsequent steep drop, and closed unsettled, with net gains of 8c to 9c, at $2.06 for July and $1.91 for September. Cash wheat, that is wheat for immediate delivery, did not follow the advance in futures. Corn finished 1 1-2c to 4 1-4c up, oats unchanged to 518c higher and provisions varying from 7c decline to a rise of 20c.

Pacific Northwest Grain.

SEATTLE, June 2.—Wheat—Bluestem, $2.46; Turkey red, $2.46; fortyfold, $2.44; club, $2.43; fife, $2.43; red Russian, $2.42.
Barley—$43 per ton.
TACOMA, Wash., June 2.—Wheat—Bluestem, $2.45; fortyfold, club and red fife, $2.43 red Russian, $2.41.
PORTLAND, Ore., June 2.—Wheat—Bluestem, $2.48; fortyfold, $2.43; club, $2.43; red Russian, $240
Oats—No 1 white feed, $47
Barley—No 1 feed, $42
WALLA WALLA, June 2—Wheat—Club, $2.27; bluestem, $2.35 .
Barley—$43@44.

Seattle Wheat.

SEATTLE, June 2.—Reports from the country this week indicate that there will be a few carloads of fortyfold, red fife and Russian on the market late in July, but that bluestem milling wheat will not be sufficiently ripened to offer for at least 60 days later. It is expected that a small amount of bluestem can be marketed from the Snake river district in August, but the new crop proper may not begin to move earlier than September.

The September option in the east, having stabilized to some extent, local buyers feel that if September options were reopened in Chicago that grain would be a good buy at this time. Now that the public demand that the rambler be thrown out has been appeased, millers and exporters here who all along felt that speculation was vital to the welfare of the grower and buyer alike are wondering what has become of the advantage in his expulsion. Flabby and inert markets have followed close on the heels of the action of the board of trade in all sections, and the zest and pip of the grain and milling trade has oozed away.

Portland Market.

PORTLAND, Ore., June 2.—Wool sales in eastern Oregon in the last week were small. Buyers freely bid current prices, but growers appear to be holding back for the public later in the month. Up to 51 cents has been paid for fine and 53 cents for coarse. The ideas of the majority of sellers are above these figures. Shearing has been completed at Echo and Pendleton, but elsewhere operations have been delayed by cold weather and the scarcity of labor.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers:

Oats—No. 1, $47 per ton.
Corn—Whole, $72; cracked, $73 per ton.
Millstuffs—Bran, $37 per ton; shorts, $40.
Barley—No. 1 feed, $42; brewing, nominal; rolled, $58.
Hay—Buying prices: Timothy, eastern Oregon, $30; alfalfa, $23; grain, $18@20.
Eggs—Oregon ranch, case counts, 32@32 1-2c per dozen; candled, 33 1-2c.
Poultry—Hens, 18@18 1-2c; ducks, 17@25c; turkeys, alive, 20@22c; dressed, 23@28c; geese, 12@14c.
Butter—City creamery, prints, 39@40c per pound; cubes, 37c.
Cheese—Oregon triplets, 24c; young Americas, 25c.
Dressed meats — Veal, 14 1-2@15c; pork, 19 1-2c.
Hops—Nominal.
Potatoes—Oregon jobbing price, $3.50@4.
Wool—Eastern Oregon, fine, 50@51c; coarse, 53@55c; valley, 52@55c.
Beans—California small white, 16 1-2c; large white, 16c per pound.
Hides—Salted hides (25 lbs. and up), 20c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 32c; green hides (25 lbs. and up), 18c; green stags (50 lbs. and up), 13c; dry hides, 34c; dry salt hides, 29c.

Live Stock Quotations.

At Chicago.

CHICAGO, June 2.—Hogs—Receipts, 8000. Unsettled about 5c above yesterday's average. Bulk, $15.60@16; light, $14.85@15.90; mixed, $15.40@16; heavy, $15.35@16.10; rough, $15.35@15.50; pigs, $10.50@14.75.
Cattle—Receipts, 2000. Steady. Native beef cattle, $9.25@13.70; stockers and feeders, $7.40@10.60; cows and heifers, $6.25@11.75; calves, $9.50@14.
Sheep—Receipts, 4000; weak; wethers, $10@12.90; lambs, $11.25@14.75; springs, $12.50@17.50

At Seattle.

SEATTLE, June 2.—Receipts, 146 sheep, no hogs, 3 cattle. Market steady.
Hogs—Prime light, $16@16.10; medium to choice, $15.70@15.80; smooth heavies, $15.15@15.50; rough heavies $14.70@15.10; pigs, $14.85@15.35.
Cattle—Best steers, $10.50@11; medium to choice steers, $9.75@10.25; common to good steers, $7@9.50; best cows and heifers, $8.75@9.25; medium to choice cows and heifers, $8.25@8.50; common to good cows and heifers, $6@8; best bulls, $7@8; common to good bulls, $4@6.75; calves, $6.50@11.50.
Sheep—Prime lambs, $13@13.50; good lambs, $12.50@12.75; wethers, $11@12.50; ewes, $10@11.

At Portland.

PORTLAND, Ore., June 2.—Hogs weak; receipts, 274. Prime heavy, $15.40@15.60; prime light, $15.25@15.50; bulk of packing grades, $15.30@15.40; rough heavies, $14.90@15.25; pigs and skips, $12.50@13.50; stock hogs, $12@13.
Cattle, no demand. Lower, receipts, 522. Steers, prime light, $9.25@9.50; prime heavy, $8.75@9.25; good, $8@8.50; cows, choice, $7.50@8.25; medium to good, $7.50@8; ordinary to fair, $7@7.50; heifers, $5@8.50; bulls, $5@7.50; calves, $7@8.50.
Sheep firm; receipts, 2794. Spring lambs, $13.50; shorn lambs, $11@12; shorn yearlings, $10.50@11; shorn yearlings, $10.50@11; shorn ewes, $9@9.50; prime shorn wethers, $10.25@11.

Spokane Stock Yards, Saturday.

Hogs—Receipts none, market steady. Prime heavy packing, $15.60@15.80; prime light packing, $15.40@15.60; rough heavy, $14.40@14.80; pigs, $12.60@13.75; stockers, $12.50@13.75.
Cattle—Receipts none; market steady. Prime heavy steers, $10.25@10.75; prime light steers, $10@10.25; good steers, $9.75@10; prime cows, $8.75@9.25; good cows, $8@8.75; common cows, $7@7.50; best heifers, $9@10; bulls, $6@8.25; calves, $8@10.25; stockers and feeders, $6@9.
Sheep—Receipts none; market steady. Prime lambs, $13@13.50; common lambs, $12@12.50; choice yearlings, shorn, $10.25@11; good yearlings, shorn, $9.50@10; choice ewes, $9@10.

Seattle Market.

SEATTLE, June 2.—The spud market is very firm for the week-end. Seattle jobbers are quoting up to $90 for locals and $95 for Yakima gems. Wholesalers claim that Yakima holders are quoting gems at $100 f. o. b. In isolated instances Western avenue merchants are holding for $125. Such a level is now regarded as possible for the summer cleanup. Continued cold weather has maintained the demand for old crop spuds.

Seattle creamerymen are widely at variance in their views of the butter market, and both the bull and bear faction are well represented, each faction contending that it is nearer right in its forecast of prices. That there is little for storage is also the fact, and the bulls are endeavoring to convince themselves that this market should be higher in order that they can bring in butter from outside the state.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 34c per dozen.
Poultry—Live hens, fat, over 4 lbs., 19c per lb.; 3 lbs. and under, 17c; old roosters, 12c per lb.; springs, 22c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 14c per lb.; broilers, live, 18@23c per lb.
Butter fat—42c per lb.; dairy butter, 28c per lb.
Beef—Buying price: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.
Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.
Veal—Fancy light, 13@15c per lb.; do heavy, 12@13c per lb.
Hides—Salted, 20c per lb.; salt kip, 32c per lb.; salted calf, 32c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 36c per lb.; dry calf (under 6 lbs.), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry butcher full wool sheep pelts, 30@33c per lb.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—$3.50@3.75 cwt; new potatoes, 7c lb.
Seed Potatoes—Early Rose, $4@4.50 cwt.
Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; N. Y. Pippins, $2.25 box; Ben Davis, $1.25 box.
Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Leaf, 40c lb; Better Butter, 40c lb; Attalia, 40c lb; Diadem, 40c lb; Hazelwood, 40c lb; Solid Pack, 38c lb.
Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 35c lb; brick cheese, 30c lb; domestic Swiss, 35c lb; Young Americas, 26c lb.
Eggs—Fresh local ranch eggs, $10.75 case.
Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.
Dress Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

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Weyerhaeuser fir grain tanks and granaries mean absolute conservation of waste—no waste labor, no waste hauling, no waste grain, no waste worry. Makes your grain harvest absolutely secure. Order NOW a

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and play safe. Get your order in EARLY. Five hundred thousand bushels capacity already on our books. Railroad equipment overtaxed. Late buyers CANNOT be served.

BE PREPARED. BE BEFOREHAND. THIS IS OUR LAST CALL FOR 1917.

"Bulk Your Grain" Folder FREE.

Weyerhaeuser Timber Co.
Everett, Wash.

Speed Governing Line Shaft



INCLUDES Cedar Rapids Governor Pulley with shaft 4 to 12 ft. long — pulleys and hangers according to length of shaft—heavy plank to which hangers are attached. Governor pulley prices

—as low as $12.00

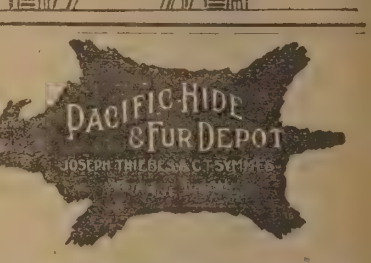
Costs little more than the average friction clutch pulley. The governor with **a thousand different speeds**—controls any speed instantly. Regulates the speed of several pulleys on the same shaft—speed **regulated by a simple turn of the hand-wheel** on the governor and speed always uniformly maintained.

Install it yourself—with a screw driver. No service troubles—no figuring pulley sizes—attach it to the wall—the ceiling or the floor.

Ask Your Dealer About It

He'll gladly demonstrate it for you, show you how it will control your machinery and how easily it can be installed. Or write us for illustrated folder and prices of all sizes.

Cedar Rapids Foundry and Machine Co.
452 Second Street, West
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Pay Highest Prices for Wool

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
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Truck Operator in Government Service 1,000,000 men will be sent to War, and 35,000 trucks must go with them Think of the vast number of trained mechanics that will be needed to operate and repair these trucks. The success of our soldiers will depend entirely on the efficiency of the truck service back of them, to bring up the ammunition and supplies.

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A Whitman County Farm Home.



One of the fine farm houses in Whitman county, Wash., owned by Mr. and Mrs. E. L. Moys near Albion. Mr. and Mrs. Moys are pioneers in Whitman county and they own 334 acres of some of the best land in the Palouse country. This new house has lately been completed and has all the late and up-to-date improvements, including an electric light plant and a heating plant.

Have Got the Spirit

Boys Plant Four Acres of Beans

The Washington Farmer has received the following news from O. T. McWhorter, chairman of the agricultural preparedness committee of Jefferson county.

The Port Townsend schools, Francis Drake, superintendent, have installed a community canning plant which will handle 1000 cans per day. It is the plan to use this plant to handle perishable vegetables grown by the Boys' and Girls' clubs of the schools and to help in conserving the farm products which usually go to waste about the town and immediate district. The boys of the schools have all told about four acres of beans planted on the town lots of the city.

It is interesting to add that the slogan of the committee is in keeping with the vigorous prosecution of greatern food production, "Dig and Produce —Your Country Demands It." The Jefferson county committee's executive board is composed of its chairman, O. T. McWhorter; H. D. Hopkins, Port Townsend; P. P. Bowman, Uncas; Samnel Curry, Chimacum; H. J. Lipsett, Port Ludlow; Edith Delanty, county superintendent of schools, and Tom W. Helman, secretary, Port Townsend.

Club Work in Whitman

To the Editor of The Washington Farmer: Not having a county agriculturist, nor any real club leader, our boys and girls did not follow club work through to the finish last year. This year some of our business men have decided to try to get our young people started in a small way, and to this end have offered prizes along certain lines. There are no conditions imposed for the keeping of records and no formality of any kind is involved which could afford an excuse to any boy or girl to quit after having once started. The conditions are open to any boy or girl not more than 20 years of age.

We hope that by next year our young people will have a desire to get into the regular state boys' and girls' club work. A prize of $15 is offered for the best quarter acre of field peas, $10 for the best quarter acre of potatoes, $10 for the best beef animal, any age or breed, and $10 for best pig or hog from pork standpoint. Similar prizes will be offered for other products including individual displays of vegetables and grains, fruit, canned goods and manual training exhibits. Special prizes will also be offered for other live stock, especially sheep and horses.

The state college has offered to furnish a man who will observe methods employed by the contestants and award the prizes.

Rosalia, Wash. E. W. WAGNER.

POTATO EYES FOR SEED

Must Have the Soil Well Fitted.

To the Editor of The Washington Farmer: I am a woman 68 years old, and am mother, mother-in-law and grandmother.

We raised our own seed potatoes last year, good, properly selected seed, sufficient to plant all the available ground at our command; the variety is mostly Burbank. And now I wish to say something about planting potato eyes.

My knowledge was gained first by observing the work done by my father during the closing of the civil war in this country and later by experience of my own. My father was a specialist on potato growing and in the early 60s he found it necessary to economize with potatoes as food for his family and at the same time plant crops of potatoes. It was the year 1863 that he planted several acres with seed eyes, using a corn planting bag to carry the seed eyes and drop from. He planted with a hoe on well-prepared and fertile soil and he claimed the yield was as good as when he used larger portions of the potatoes. On a part of the ground he planted six rows, using one eye in first row, two in the next and so on until the last row contained six eyes. The main crop contained an average of four eyes to the hill. He decided that from three to four was best. His seed was cut with a sharp-pointed jackknife in a conical shape. He followed the eye planting all his life.

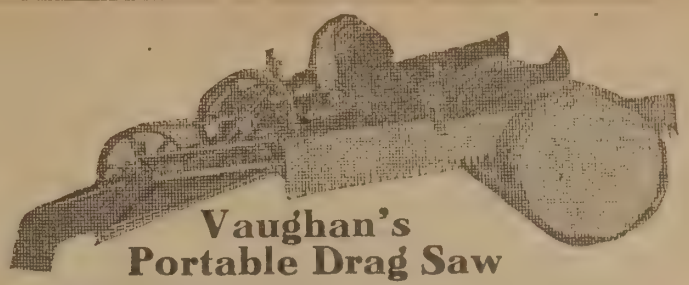
I have been an active gardener for more than 30 years and have been as successful with seed eyes as with larger pieces, but would advise those using eyes to have the soil well-fitted and not to plant more than four or five inches deep. I wish to add that father used only large potatoes to cut the seed from and planted them the same week, when using seed ends he made four pieces from a large end.

In closing I wish to say that I subscribed for The Washington Farmer last fall. It is a three-year subscription and I hope to renew before it expires. We like the paper very much and believe you are doing a much needed work. ESTHER N. TAFT.

Lebam, Wash.

Greenacres Fruit in Scotland.

Payment on a record shipment of Yellow Newtown apples from the Greenacres district, sold in Glasgow, Scotland, before the recent restrictions of apple shipments became effective, has been received by the Spokane Fruitgrowers' company. L. J. Blot, sales manager, reports that the Greenacres growers will realize $1.93 per box for the carload of 630 boxes. In Glasgow the shipment sold on the basis of $3.53 a box.



Vaughan's Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $140 f. o. b. Spokane and common points.

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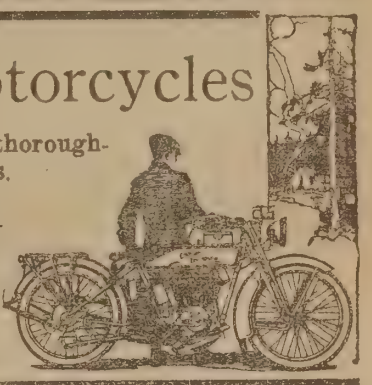
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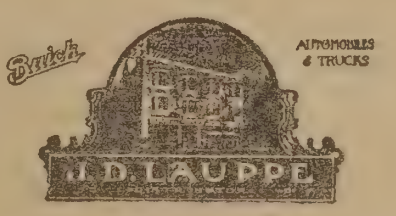


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SAN FRANCISCO H. O. HARRISON CO. OAKLAND

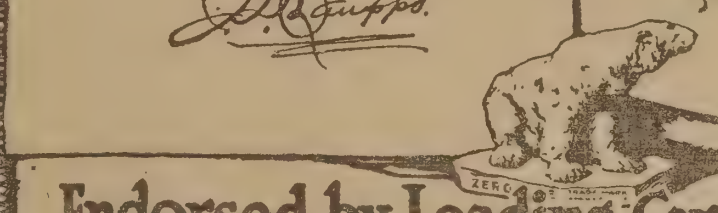
DISTRIBUTORS HIGH GRADE MOTOR CARS OAKLAND, CAL.

Gentlemen:

Regarding your inquiry am pleased to say that Zerolene Oil has proven a most satisfactory lubricant for Hudson and Dodge automobiles. We are speaking now of our own experience as well as from reports of Hudson and Dodge owners and our observations cover a wide range of conditions and time.

Very truly yours,

Chas. A. Gurman



Endorsed by Leading Car Distributors

—because the records of their service departments show that Zerolene, correctly refined from asphalt-base crude, gives perfect lubrication with least carbon deposit

Less wear and more power because Zerolene keeps its lubricating body at cylinder heat. Less carbon because, being made from asphalt-base crude, it burns clean and goes out on exhaust

Zerolene is the oil for *your* car—whatever the make—the oil for all types of automobile engines. For correct grade, get our lubrication chart covering your car

At dealers every where and Standard Service Stations

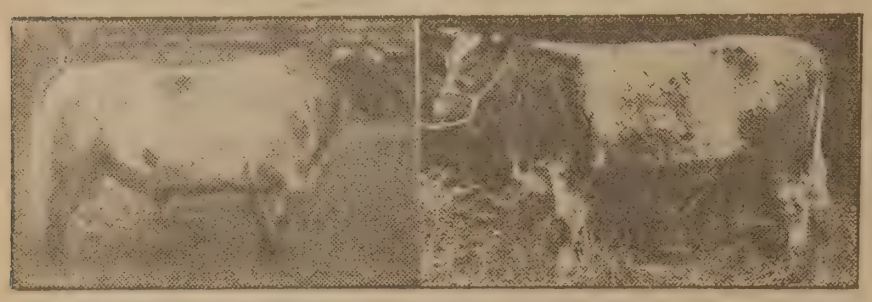
ZEROLENE

The Standard Oil for Motor Cars

STANDARD OIL COMPANY (CALIFORNIA)

NEWS FOR BREEDERS

Shorthorns to Be at Union Show



The Shorthorn bull here shown is General Hampton 390583 by Hampton Spray, that was grand champion at the American Royal a few years ago and weighed 2800 pounds. His dam is Mistletoe 2d out of Imp. Mistletoe 15th. He is owned by W. W. Green & Sons of Union, Ore., who brought him to Oregon from Oklahoma, together with 30 head more of registered Shorthorns, when they came to Oregon two years ago. General Hampton has universally sired high-class progeny and he and some of his offspring will be contenders at the Shorthorn show in connection with the Union, Ore., stock show June 12-15. It will be remembered the Messrs. Green bought the great cow Scottish Flower 3d at the Pacific International Stock show sale last winter. They expect to add to their herd as occasion demands.

At the right is shown Ringleader's Ruby, the beautiful and richly bred Shorthorn heifer purchased by W. J. Townley of Union, Ore., last December, at the Pacific International Shorthorn sale for $705. She is by Ringleader, son of the great Ringmaster, that was twice grand champion at the Chicago International. Her dam is Roselawn Queen 56th, by Gibson's Goods, son of Choice of All. Mr. Townley has been a breeder of Shorthorns in the Grande Ronde valley for many years. He now has 145 head, including this year's calves, and will make a strong exhibit at the Union Stock show.

From the W. A. Forrest Herd



These are, from left to right, Maid Oma, with a butter record of 541.31 pounds in a year; Maid Oonan, 544 pounds; Zila's Pride, 609.98 pounds; Lutn Bell's Queen, 333 pounds 15 ounces. They are all Class AA, R. of M. cows and belong to W. A. Forrest of McMinnville, and will be in his sale June 12.

Brings Hampshires From East.

Frank Brown Jr., of Carlton, Ore., has returned from a trip to Ohio with two carloads of Hampshire ewes selected from the leading breeders of New York state and Ohio.

A Fielder's Glove Like the League Players Use



Order by Number.
G 100.

Special brown tan on straight thumb pattern, with white welted seams; heavily padded with deep pocket and strong leather lining. Retails for $1.25. We will send it postpaid to any boy who sends us two yearly subscriptions to The Farmer. The Farmer is $1.00 a year. Address

The Washington Farmer

Premium Dept., Review building, Spokane, Wash.

McArthur & Stauff Sale.

At the McArthur and Stauff sale at Rickreall, Ore., June 27, all the pregnant cows and heifers will have been bred to Holger and all young bulls sired by him.

Thomas Williams of Forest Grove owns three daughters of these young cows, and they are all making fine records as senior 3-year-olds.

Olalla has made 391.78 lbs. of butterfat in five months and has averaged 6.35.

Jersey Style has produced 282.72 lbs. of butterfat in five months and has averaged 5.58 on her tests.

Dina Dorff has made 207.38 lbs. of fat in four months.

Fine Lot of Colts.

M. S. Levy of Union, Ore., who has the largest herd of Shetland ponies in the northwest, reports a fine lot of colts this spring. So far all the colts have come strong and have lived. He expects about 40. His herd sire is by the great Prince of Wales and the colts are showing much quality.

H. A.

ADD TO HERD OF HEREFORDS.

Platt Brothers of Genesee, Idaho, have recently added another carload of Herefords, purchased in Iowa, to their fine herd of registered Hereford cattle. Roy Jacobs of New London, Iowa, accompanied the shipment and will remain as herdsman of the Platt Brothers' herd, which now numbers over 100 head. As Mr. Jacob's father was a herder of purebred stock, his early training and practical experience is along that line. He is a graduate of the Iowa Agricultural college and has won honors in judging contests at the Iowa State fair. He comes highly recommended. The Platt Brothers started their herd three years ago with the idea of raising their own bulls for their range cattle. They with a partner, Mr. Jones, carry about 1500 head. Their purebred herd has now increased to about 100 head, and they will have a surplus to sell. D. G. S.

JERSEYS AT AUCTION

June 20, 1917

Ninety head of choice registered Jerseys, including cows in milk, herd bulls, and younger animals, both sexes.

An ideal opportunity to secure a foundation herd, milking cows or a herd bull of richest breeding and good individuality.

Complete catalog will be issued. Send name and one will be mailed when published.

W. B. DAVIS,
Shedd, Oregon

AUCTIONEERS

Col. J. W. Hughes, Forest Grove, Ore.
Col. B. T. Sudtell, Albany, Ore.

SALE OF THE FINEST DAIRY CATTLE EVER OFFERED IN WHITMAN COUNTY
Wednesday, June 27th, at 10:30 a. m.
The North Slope Dairy Farm
JAMES C. GRAHAM, Owner,
Will sell his complete herd at
PUBLIC AUCTION
30 HEAD OF REGISTERED AND GRADE HOLSTEIN CATTLE
PRODUCERS PROFIT MAKERS INDIVIDUALITY HEALTH SIZE AND CONDITION

Everything necessary to make the dairy 100 per cent perfect.

PRODUCERS—This herd has stood first and in a class by itself in the Whitman and Spokane County Cow Testing Association. This applies for the individual and the herd.

PROFIT MAKERS—This herd shows a wonderful profit for each year's work since the foundation was laid seven years ago. Several cows show over $200.00 profit and the lowest cow over $150. This wonderful performance is perhaps unequaled by any other herd in the west.

INDIVIDUALITY—More blue and red ribbons have been won by this herd than any other Holstein herd in Whitman county. They are surely a splendid lot.

HEALTH—This herd has always been under state supervision. A reactor to the tuberculine test has never been found. State certificates will be furnished with each animal over 6 months of age.

SIZE and CONDITION—The two-year-olds weigh about 1000 pounds. The cows up to 1700 pounds. The cattle are in the very best of condition.

Farm is located 2½ miles south of Palouse, Wash.
For terms, arrange with Clerk of sale.

Auctioneers
Geo. A. Gue, North Yakima, Wn.
Harry C. Cranke, Nez Perce, Ida.

George A. Gue, Sale Mgr.
John P. Duke, Clerk.

Dispersal Sale of Register of Merit Jerseys
Wednesday, June 27, 1917

This offering includes our entire herd of cows, all of which are in Register of Merit with yearly records averaging 545.19 pounds butter; also a choice assortment of young animals of both sexes—all out of tested dams. This is the greatest herd of dairy cattle ever offered for sale in the west. Send for catalog.

McArthur & Stauff, Rickreall, Oregon

TAMWORTH SWINE

Sold Out With the Exception

of pigs for May and June delivery. Keep in mind that Tamworths are the best of hogs and that Beinhart breeds the best of Tamworths. First come, first served. Send your order early to

OKIN BEINHART. Kennewick, Wash.

Read the "Want Ads"

You will find it well worth while to read the "Want Ads" in each issue of this paper.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 24. JUNE 14, 1917. ** WEEKLY.

Farm Bank Soon to Have Million Out

Money Being Distributed Among Borrowers as Rapidly as Sound Methods Permit

The vital influence that the Spokane district branch of the federal farm loan bank is to exercise in the financing of farming operations in Washington, Oregon, Idaho and Montana is indicated in part by the fact that already loans totaling more than $1,300,000 have been approved by the bank officials.

Of this amount approximately $35,000 is already in the hands of the farmers seeking loans, and more is going out at the rate of several thousands of dollars a day, depending solely upon the ability of the legal department of the bank to examine and approve the abstracts of title to the farms upon which loans are desired to be made and the condition of the title itself. The lands have been appraised by the appraising committee of the local associations and these appraisals approved by the appraiser of the land bank, but under the policy of "safety first" adopted by the bank officers it is necessary that the titles be known to be accurate and clear of all encumbrance, except when such encumbrance can be paid off from the proceeds of the loan.

The loans already made and those approved as indicated above comprise all those sought by the charter members of 30 local associations, the charters to which have already been granted, and of which 12 are in Washington, nine in Montana, six in Idaho and three in Oregon. The work of appraising farms in Oregon and Idaho was delayed in beginning, when the organization was in process of formation, and for this reason fewer association charters have been approved to date in those states than in Washington and Montana. The work is now progressing rapidly, however, in all sections of the northwest.

Up to the present time applications have been received for charters from 687 local associations, including the 30 already chartered. The total loans asked by this large number of associations is approximately $23,000,000, including the $1,300,000 already approved.

In view of this large amount of business already under way, including the placing of money already in the hands of a number of farmers, and the assurance that before many weeks more than $1,000,000 in loans will be made, the progress made by the bank appears little less than remarkable. It was predicted at the time of the beginning of the organization that the first loans could not be reached before July 1, but by that time much of the first million dollars will be in the hands of the borrowers.

"We are perfecting the organization as rapidly as can be done under reasonable consideration of economy and safety," said President D. G. O'Shea to a representative of The Farmer, emphasizing, as always, the imperative need of absolute soundness of all actions of the bank. "We have an immense territory to cover, and the loan system we succeed in perfecting must be for all time. We are organizing from the very bottom, and it can not be done in a day, but we are covering the ground as rapidly as possible.

"We have examined and approved the applications of 30 associations, for which charters have been issued, and have several other associations almost completed, but awaiting further inquiry. We are making loans to the members of the 30 associations as fast as abstracts can be examined and approved.

All Service Is Free.

"All the work of the appraisers and examination of titles is done without charge by the land bank, though some abstracts involve a large amount of detail and inquiry."

The large force of the Spokane bank are rushing the work of appraisals to enable them to send the loans to the applicants at the earliest possible date. The applications are taken up in systematic order to accommodate the largest number of borrowers possible in the shortest time. Numerous inquiries are being received, say the officers, asking when appraisals will be approved and loans made. Their reply is always in substance, "As soon as we can possibly do so."

The following are the locations of the associations already granted charters, and the amount of the loans approved for each such association, up to the present date:

Washington.

Deer Park, Spokane county	$23,000
Colbert, Spokane county	27,650
Clayton, Stevens county	21,300
Chewelah, Stevens county	43,300
Addy, Stevens county	29,250
Stevenson, Skamania county	102,400
Valleyford, Spokane county	37,275
Otis Orchards, Spokane county	42,250
Colville, Stevens county	41,460
Snohomish, Snohomish county	40,300
Dolphin, San Juan county	57,550
White Salmon, Klickitat county	30,850

Montana.

Eureka, Lincoln county	$46,850
Lothair, Hill county	47,900
Joplin, Hill county	49,800

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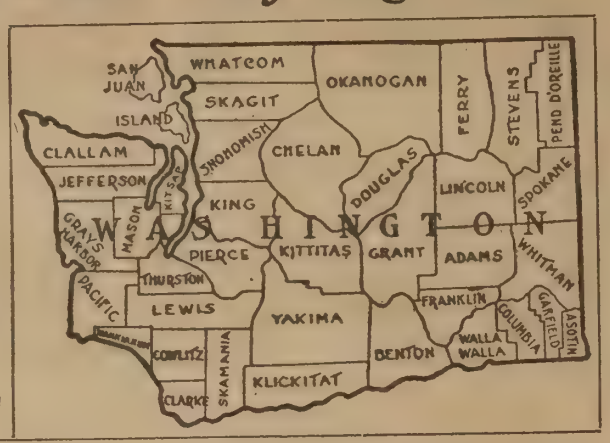
JUNE 14, FLAG DAY.

Today, June 14, is flag day throughout the nation, commemorating the anniversary of the formal adoption of the United States flag in its present form as the national emblem. This year as never before since the observance of the day became a custom should flag demonstrations be made. This year the honor and power of the nation have been questioned; this year American citizens are called upon to respond to the call of patriotism for loyal service to their country at home or abroad. Already many thousands have offered their service. Already hundreds of thousands have undertaken to do their bits by producing or saving something that is needed to win the war. Already the army of the United States is represented on European soil by General John J. Pershing and his staff of officers. The Stars and Stripes is with them, and soon will be leading an American army into mortal combat with the enemy of America and of humanity. Today, above all days, show honor to Old Glory.



Farm Women Play Big Part

Housekeepers Will Produce Foodstuff to Preserve for Winter Uses; Much Canning and Drying Will Be Done



MALAGA, Chelan County, Washington, May 25.—Peach trees are in full bloom and apple trees just coming in bloom. All give promise of a good crop so far. There was a frost here two nights, recently, and some are afraid their cherry trees were killed. A great deal of alfalfa was winter killed and will have to be reseeded this spring and is something that has not happened here in years. There is more garden stuff such as potatoes, beans and cabbage, and corn being put in here than ever before. The farmers here in the recent past have not raised nearly as much of the foodstuff as the used to. For instance, only a very few here raise spring garden stuff such as asparagus and evergreen onion and rhubarb. Most of the farmers have not a berry on the place. Strawberries and all kinds of later berries do fine here and could be raised for home consumption. Pigs have never been raised for home use either. Most of the farmers have plenty of milk and every one has small patches of alfalfa that could be hog fenced with little expense, making summer pig feed. Farmers who have raised corn here for winter pig feed have had good success with it. To better farm conditions more attention will have to be paid to general crops, large and small, instead of letting potatoes freeze in the ground; also carrots, beets, and other garden stuff that helps to make the farmer's table. A great deal of fruit is canned and dried here every year, and I am sure more will be canned and dried this year than ever before. The farm women here are planning on putting up garden stuff for winter use in every known way. The great armies of women on the farms are going to come to the front and surprise every one with their ways and means of home production of foodstuff, and I see in towns that the women there are doing their bit, also, by using every spare foot of ground for garden, helping to make lighter the store bills. MRS. O. ALLENBAUGH.

Need More Pigs Annually.

SOUTH BEND, Jacific County, Wash., May 28.—The number of live stock in this community is about the same this year as it was last year. Cattle are in their prime and the pastures are in excellent condition. We need more pigs and sheep to increase the meat supply. There are some pigs kept bu very few sheep. Not many farmers keep cattle for beef purposes. Dairy products are raising in value. The nearest condensery pays 20 cents a gallon for 3.5 per cent milk, pays the express and washes the cans. To the consumer, milk is retailing at 33 cents and 40 cents a gallon. The Menlo farmers are rebuilding their cheese factory which was destroyed by fire last winter. Some farmers are going to try an experimental patch of buckwheat. MRS. WINNIFRED BUCKINGHAM.

Peas Will Help.

SPOKANE, Spokane County, Wash., May 24.—I find that in a great many places throughout the wheat growing section the winter wheat has been badly hurt. In some places it has been sufficiently damaged to make it necessary to reseed the fields to spring wheat. However, this method of handling the ground where wheat has failed to stand the winter has been limited to some extent on account of the high price of seed wheat this spring. Throughout Spokane county, however, most of the large farmers are prepared to handle this difficulty because they kept their own seed. A great deal, of course, has been done toward greater food production in Spokane county through the planting of peas on the summer fallow land. This plan has gone forward and is still in operation to a great extent. Many acres of beans are going in this spring on the well elevated lands where frosts are not likely to occur, and also considerable area is being devoted to potatoes. Much clover is being planted in order to furnish cheaper feed for the live stock and a great deal of attention is being paid to keeping the brood sows from being slaughtered which come to the local stock yards in Spokane. In connection with the greater food production and the enormous use of the summer fallow for growing peas it has become very apparent that the farmers in Spokane county are devoting themselves diligently to farming this spring. Every effort is being made to get the land into crop as soon as possible. At the present time perhaps two-thirds of the land which would otherwise be summer fallowed has been plowed ready for the pea crop in this county. J. R. SHINN.

Wages High; Help Scarce.

MEAD, Spokane county, Wash., May 31.—There has been little change in the amount of crops sown or planted this year. A little more spring wheat and oats will be sown, taking the place of alfalfa frozen out on lowlands, and a few more peas than usual. High wages and scarcity of help have prevented any great increase in acreage cultivated. I do not believe it could be made generally practicable to build a house and hire a man and family the year round in this locality until things generally become more stabilized. Men prefer taking chances on rented places, no matter how unpromising, rather than a sure income under some one else. A change would also have to be made in the general type of farming before it would pay to keep men the year round. I do not believe the western country is ready for that yet. GEORGE HINGSTON.

Farmers Doing Their Best.

GRANDVIEW, Yakima county, Wash., May 21.—Every one is doing his best to put in a little extra gardan to cut the high cost of living. There are several pieces of land that could be farmed. I have thought that we might be more self-supporting than we are by being more economical and raising more grain. I think there is more wheat sown than ever before and the farmers expect to thresh it. The farms are generally too small for a hired man the year through, but I believe it would be a good plan to build a house on every 40-acre tract for the help to live in. E. H. FAULKNER.

Fruit Crop Enormous.

TOPPENISH, Yakima County, Wash., May 28.—Wheat, oats and barley, while a little late, are looking fine. Alfalfa is late and the first cutting will be light; timothy is a little better, but not up to the average; corn is very late, but is a pretty good stand and is now doing well; onions are fine, potatoes late, but improving in appearance every day; sugar beets are doing well and they are thinning the earliest ones. Some were planted on too dry a ground and are not a good stand. A few have plowed them up and replanted, and a few have planted some other crop in their place. The acreage of canteloupes and melons is the smallest on the reservation for many years, and those that are planted are not looking well; too cold.

Dairy cows are doing fine; pastures are pretty good now and high-priced butterfat is causing dairymen to take a little better care of their cows. The acreage of hay is smaller than usual, while potatoes are little larger than for a few years. The vicinity of Toppenish and Wapato have 3000 acres of sugar beet which is mostly alfalfa sod. The Yakima valley has the greatest fruit crop in its entire history. There was almost nothing killed by the frost and the bloom in most instances was heavy. Some trees that were heavily laden last year are a little shy this year and some varieties of sweet cherries bloomed heavily but did not set well. There are very few strawberries in the vicinity, but they are looking fine. Blackberries and raspberries and loganberries are badly winter killed and the yield will be very light. Gardens are late. The poultry hatch is light because of the high price of feed. Nearly everybody is cutting down their flocks and some are quitting the business entirely. The pig industry is receiving considerable impetus from clubs and the number of dairy cows has increased since last year. The Mutual Creamery company will open for business about the middle of June. They will manufacture cheese, butter, ice cream and casein, and will condense milk for wholesale trade. They will be equipped for handling about 20,000 pounds of milk daily. C. A. WYCOFF.

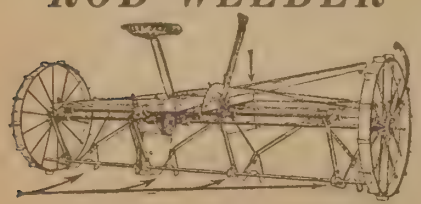
Great Crops Are In.

CENTERVILLE, Klickitat County, Wash., May 21.—We have sown all the grain possible in this county and even a good deal of summer fallow is sown over to spring grain, to increase the crop output this year. The high prices did not stop the seeding if the seed was to be had. A great crop of potatoes as well as other garden stuff is in the ground and I think an unusual amount of peas and corn will be put in. There is not much of the year 'round hired help here, so we don't need the homes for the extra help, but it is a common practice to have a house for the hired man in the fruit district. Fruit has a good prospect up to the present time, with very little indication of frost. We have had quite a few light rains, enough to help the spring sown grain. The fall grain has come out very fast with a prospect of a part of a crop. CLARENCE A. LESTER.

Politicians to Blame.

WALLA WALLA, Walla Walla County, Wash., May 27.—We are getting along fairly well with farm conditions as backward as they have been this spring. Help for the farm is getting more of a serious problem every day. The only suggestion I have to make would be the lifting of the Chinese exclusion act during the war. I do not want to find fault with the farm laborer, but the best of them are either renting or have farms of their own. Now the dear public wants the farmer to raise more and are taking away part of the too scarce help, which means that those raising crops that necessitate man labor will have to cut down those crops and plant machine handled crops instead. Nobody to blame but politicians. This may start something, but I hope it will if the war lasts for two or three years more as some of the best posted claim it will. Producing enough food will be the greatest problem this country has ever had before it. W. A. RITZ.

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You can take your time filling the silo, if you have time—or crowd the corn into the silo. Capacity depends upon how many teams and men you can get to help you when you fill your silo with

DICK'S **Blizzard Ensilage Cutter**



It's simple, compact and does maximum work with mimimum power. Knives and fans both mounted on heavy rib-reinforced fly-wheel. Every ounce of power counts. Your regular farm engine big enough. World's highest silos have been filled with Blizzards. Cuts silage evenly, no matter how fast it's run. Repair expense small. Practically no wear-out to it.

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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 24 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF June 14, 1917

Beware of Stock Selling Schemes

Northwest General Trading Company's Swindling Tactics Repeated

Stock selling schemes like that practiced by the Northwestern General Trading company at Spokane, continue to find favor with swindle promoters. For a time they make easy money for the promoters and find ready acceptance with a large number of people and especially appeal to farmers through their alleged cooperative plans.

Half a dozen concerns are under investigation by the government in Chicago and The Farmer is glad to note that there is no letup in the alertness with which the authorities are ferreting out concerns which swindle farmers and others throughout the country.

The following report is from the Chicago Tribune of May 20:

Further evidence of the methods employed by the Riley-Schubert-Grossman company and Curtis, Miller & Co. came into the hands of government officials yesterday, who are making an investigation of the stock-selling methods of these and six other "mail order" concerns in Chicago.

Financial statements of the company of Samuel M. Grossman which were obtained by the government show that generous commissions have been paid to sales agents for the disposal of the stock issues of this concern, and that in many instances the money paid out as sales commissions and collection expenses exceeded the sum for which the stock certificate was sold.

Where Is the $950,000?

Grossman, according to his own statement, has sold about $1,250,000 of the $5,000,000 stock issue of his company, which he arranged last winter to dispose of to investors over the country. He has merchandise in his plant which he says is worth "over $300,000." The government is seeking to learn what has become of the $950,000 that has been obtained from the sale of stock and is not represented in the merchandise of the company.

Exact figures as to the amount of commissions paid by the Curtis-Miller concern last year to its sales agents for disposing of its stock have been obtained by the government. The cost of selling $127,498 of preferred stock amounted to $104,000 alone, while collection expenses on this and the profit-sharing certificates were over $32,000. The agents' commissions for selling the profit-sharing certificates amounted to $72,970.

Salesmen Swindle Company.

The chief cause of the deficit of $259,873 in the financial affairs of this company at the end of the year was caused by the heavy outlays to stock salesmen. Much of this money does not represent legitimate sales of stock, being commissions paid out on fake stock orders that were not discovered until after the salesmen left the employ of the company and went to another concern engaged in similar business.

The evidence in the possession of the government shows that the company divided these commissions between assets and operating expenses in an effort to conceal the tremendous losses which the company was suffering.

Figures supplied to a commercial organization in Chicago yesterday by a stock salesman giving the name of Kaplan show that during the first four days of this week the cash mail order receipts of Curtis, Miller & Co. were $85.01 and the merchandise demands on profit-sharing certificates was $4,-129,92.

On May 14 the holders of profit-sharing certificates made demands for merchandise amounting to $526.99, while mail order cash receipts were $22.01. On May 15 the company had merchandising demands involving $1,020.62 and cash receipts of $17.02.

The following day the merchandise demands were $1,378.66 and the cash receipts on mail orders were $35.39. On May 17 the company had merchandising demands of $1140,.02 and received cash by mail $10.50.

Letters and advertising matter sent through the mails by these companies to stock and profit-sharing certificate holders continued to pour in yesterday to Postoffice Inspector A. E. Germer, who is conducting the inquiry for the postal department.

Government to Aid Bulk Method

Federal Agents to Promote Improved Grain Handling

Three agents are to be put into the Inland Empire field by the government to help in preparing for the change to the bulk handling system of grain. This is the news announced by L. M. Jeffers of Portland, federal grain supervisor in charge of the district. Following is the statement outlined by Mr. Jeffers: "The United States department of agriculture, realizing the importance of the economical handling of grain, has made arrangements to pay especial attention to the bulk handling of grain in the Pacific northwest. During the past two years the department has done a limited amount of work in studying grain-handling conditions in this section and is now planning on having three specialists devote their entire time to this question.

Producers Need Assistance.

"The department appreciates that at the present time it is of utmost importance that immediate assistance be given to the grain producers and handlers. The rapid and economical handling of grain is of especial importance at the present time as a conservation measure and the department desires to do all it can along this line.

"The department representatives will be placed in the field at an early date for the purpose of giving advice and assistance to the farmers and grain dealers who are installing or contemplat the installation of bulk handling equipment. These men will not be theorists, but are men who have actually built and operated elevators and are well qualified for the work for which they have been chosen.

Headquarters Are Established.

"The grain-producing sections of Oregon, Washington and Idaho will be covered in these activities, and it is hoped that this line of work will be of immediate benefit. The office headquarters of these men will be at 310 Worcester building, and the work will be carried on under the direction of L. M. Jeffers, grain supervision in charge of this district.

"G. Lansing Hurd, who has previously been engaged in this work in connection with the extension service of the Oregon Agricultural college, is one of the men assigned to these activities and will devote a large part of his time to meeting with farmers and others who are especially interested."

Washington Portraits No. 19.



Charles E. Kline.

Charles E. Kline of Burke has had an exceptional showing in growing Sudan grass this last year. Mr. Kline writes regarding the planting and tilling of the soil of the Sudan grass as follows:

"I summer fallowed the ground to begin with. About May 15 (1916) I planted the seed with a Lister, in rows about three feet apart. The seed was distributed about the same as a wheat drill would sow wheat, using about three pounds of seed per acre. Later I harrowed the ground and kept the ground free from weeds. I also cultivated the ground, using sweeps instead of shovels on the cultivator. I cut this crop only once, as I desired to get a good crop of seed. I cut it about the first of October, using a reaper, which put it off in piles, the tops being all one way. Later I fastened a knife, with a handle on it, to the low side of the header-bed and two persons topped it, one operating the knife and the other putting the grass under the knife and clipping the ends off. One can top an armful at one operation. The tops were then stored in a dry place and later were threshed with a threshing machine. The machine has to be run very slowly to prevent throwing the seed over. This was recleaned later. From four acres treated in this way I got 16 sacks of clear seed, each sack averaging 80 pounds. I also had six tons of hay, making one and a half tons per acre."

The next in the series of Washington portraits will be that of H. E. Goldsworthy of Rosalia and will be given in next week's issue of The Washington Farmer.

Has Had Good Luck With Colts



To the Editor of The Washington Farmer: I have been enjoying the pictures and sketches in your paper from the different stockmen and how they take care of their stock, so I will send you a picture of our two Percheron stallions, McKinley and Edmont.

I believe in working the stallion at light work during the breeding season and then let him do his part the rest of the year. I have made this a practice for seven years and have had put very few crippled or weak colts. We also do all the farm work with registered Percheron mares that are raising the colts. The mares usually have about two weeks' layoff at foaling time, but have worked them until the day of foaling and put them to work in eight or 10 days with good success.

C. F. SAWYER & SONS.
Palouse, Wash.

Load of Potatoes Brings Grower $331

Recently Charles H. Greely of Ridgefield, Wash., the potato king of Clarke county as he is commonly referred to, hauled a record load of potatoes to the depot here from where they were shipped. The load was drawn by four horses and brought the grower $331.20. It was composed of 69 sacks and the estimated weight was 8280 pounds. This is said to be the record wagon-load of potatoes, both in number of sacks of spuds and price received, ever sold in this country. The potatoes were grown on the farm of Mr. Greely in the Pioneer section, four miles east of Ridgefield, which is one of the richest spud growing districts in the state of Washington. It raises and ships more sacks of potatoes than any other section for its size in the state. Mr. Greely in all will have about 90 acres planted to this article of food while scores of other farmers will have somewhat reduced potato acreages ranging from 10 to 40 acres. This year will see one of the largest potato and bean acreages ever planted in this part of the state. It has carefully been estimated that there will be approximately 1500 acres in potatoes and nearly 100 acres in beans

E. L. S.

Although I am not a farmer I like the paper very much and generally read from cover to cover.
Friday Harbor, Wash. C. COUGHLAN.

No Mistake in Buying Liberty Bond

Do You Want to Prove Your Patriotism? If So, Buy a Government Bond

No one ever made a mistake in buying a United States government bond. Other forms of investment, other alluring schemes of a speculative nature, may seem more enticing when Uncle Sam is offering his promise to pay, but as the months pass by people often wish that they had left them alone and bought bonds instead.

An American periodical recently ran a series of articles descriptive of the contents of safety deposit boxes as they are revealed when estates are administered, or, in a time of financial strees or misfortune, the owner ransacks them in a forlorn hope of finding something on which he can realize a few dollars.

In a great majority of cases the boxes are largely filled with worthless stocks and deeds to valueless property, which had proved treacherously inviting when they were purchased. Title to wild cat mining stocks, deeds for ill-chosen boom town lots, stock in such schemes as the swindling Northwestern General Trading company, oil stocks, interest in Mexican or South American coffee and rubber plantations, and stocks in inventions that promised 1000 per cent profit and return the holder 100 per cent loss.

It is not difficult to imagine the joyful surprise that would come to a bereaved family that found among such evidences of bad investments a United States government bond or two.

The Farmer takes an especial interest in this important subject. As its readers know, it is resolutely opposed to all kinds of wildcat schemes to extract money from farmers and all others who have to work hard to make ends meet and lay by something for adversity and old age. It has an abiding faith in Uncle Sam and has no hesitancy in advising the public to back him with their dollars—faith in his promise to pay, and faith in the almost boundless resources that are back of that promise. It is therefore glad to give space to the following appeal from A. C. Kains, chairman of the Pacific Coast Liberty loan committee:

"The patriotism that counts for most at the moment is the flotation of the Liberty loan, which means the providing of the money to carry out the plans of the United States to win the war.

"Every patriotic man will buy one or more bonds, or, if he can not afford it, part of a bond. If it is only a quarter of a bond it will prove his patriotism.

"Make some sacrifice, if necessary, stop smoking for a few weeks in order to buy a bond, for the point every one must see is that the success of the United States in this war depends upon the flotation of this loan and if the United States is not successful in this war, the United States will have to pay a huge indemnity to its enemies, and then the financial obligation every one of us must pay will be far greater than the amount we are now asked to pay. Then too, the bonds are a very good investment, they are tax free and will probably sell at a premium, so buy a bond; you are not showing your patriotism, but putting your money into a safe investment, like a savings bank.

"You are simply lending your money to the United States government to help that government of which you are a part, to prevent harm coming to this nation.

"What sort of a man is he who enters a man's house, takes the man's food, is harbored by the host and then stabs him in the back?

"What sort of a man is he, who is harbored by another and refuses to help that other when they are in trouble, but sides with the other's enemies?

"Do you want a safe investment? Buy a Liberty bond. Buy a United States government bond.

"Do you want to prove your patriotism? Buy a government bond.

"Do you want to hand your children a proud heritage? Be able to tell them you helped your country when your contry needed help.

"Don't make your children's father a slacker.

"Don't put your children in a position where they have to hide their faces in shame because their father was not a patriot. Buy a government bond. Buy a Liberty bond."

Model Dairy Is Built Up on Palouse Wheat Farm

When the name Palouse is mentioned one's mind conjures up a picture of vast grain fields, for the Palouse country has rightly earned its name. Whitman county is one of the largest wheat-producing counties of the United States. Seven years ago James C. Graham purshased 160 acres, two and a half miles south of Palouse and started in to make a dairy ranch in a wheat country pay.

The mistake made by a large per cent of the dairymen of today in thinking 'a cow is a cow' was not made by Mr. Graham. After using such care in selecting his cows he reasoned that "any old bull" wouldn't do if he was to depend on his calves for his future cows.

The herd he built up was one of the first to enter the cow-testing association in that locality. Only half the herd is registered, yet as a herd they stand in a class by themselves.

A careful set of books has been kept, and Mr. Graham reports as a result of the seven years' dairying $20,000 has been made from this herd.

The acres of the North Slope Dairy ranch have been wonderfully built up since Mr. Graham purchased them. They have doubled in production. Splendid crops of hay, grain and green forage can be produced, and with plenty of pasture the cattle do well and thrive in this wheat section.

Owing to ill health Mr. Graham has sold his farm and is now going to dispose of his herd.







The pictures above are snapshots of the Blacks and Whites on the Graham farm. On the left below is the herd bull and on the right a bunch of his calves.

World Famine

Looms as More Than a Possibility

The time is coming, is in fact at hand, when an obstacle that threatens to become insurmountable will challenge, or challenges now, a force that must, in the name of humanity, be made irresistible. Hunger to the point of actual want and starvation faces the world.

The food needs of the world for the next twelve months are such as to require the greatest possible production and saving of foods by the people left free to produce and to save. Cold figures declare it. So many mouths to feed at so many pounds per week or month needed to sustain life and activity; so many pounds of food now on hand and so many capable of production this crop season.

With the needs in one pan of the balance and the possible supply in the other, the needs will outweigh the supply unless every man and woman and child left free to produce something or to save something produces or saves that something.

Says Herbert C. Hoover, recently appointed United States food controller:

"All these conditions throw upon North America the brunt of the burden of supplying our co-belligerents with the human and animal food necessary to maintain their great armies in fighting condition, as well as to keep alive and efficient the families of the fighters and the great industrial army at home.

"The exports from American necessary to meet these needs, which absolutely must be met if the war is to be won or even is to be carried on at all during the next year, must be immensely greater than they have been in normal times.

"The requirements in cereals alone for the next year of the allies, and the few neutrals whose needs must be given some consideration, are 1,000,000,000 bushels. The needs of meats, fats and sugar also are enormous. Native production and imports from other countries can meet but a part of these requirements. What is left must come from us, yet this amount is far beyond any surplus that we shall have if we try to maintain our normal consumption. Our wheat prospects for this year are not encouraging. A reasonable forecast would indicate a crop of between 650,000,000 and 700,000,000 bushels. We have never exported more than 500,000,000 bushels of cereals a year, yet the needs abroad are for twice that.

"The moral is clear: Our consumption must be reduced. This can be done, first, by elimination of waste; second, by the substitution for the kinds of food needed by the allies of food not so needed, but which we can just as well use, as corn for wheat, poultry and eggs for red meat and so on; third, by voluntarily restricting ourselves to a sufficient and sensible ration, which, rather than being hurtful, will be of advantage to us physically, and if done at a little sacrifice of preference of taste or inclination for a feeling of overrepletion will be of great advantage to us morally."

Before he sailed from Europe, after having been driven out of Belgium by the declaration of war between the United States and Germany, Mr. Hoover sent a message to this country in which were these remarkable words:

"I feel it my duty to emphasize that the food situation is one of the utmost gravity, which, unless it is solved, may possibly result in the collapse of everything we hold dear in civilization. The only hope of providing the deficiency is by the elimination of waste, and actual and rigorous self-sacrifice on the part of the American people. We must plant everything and everywhere it will grow, or this time next year the food problem will be absolutely unsolvable, and the world will face absolute starvation."

State Grange Meets at Wenatchee

From 600 to 800 Representatives of the Patrons of Husbandry in 24th Annual Session

By PAUL E. TRIEM

The twenty-fourth session of the Washington State Grange, which was held in Wenatchee from the 5th to the 8th of June, was, in some respects, one of the most important annual sessions in the history of the organization. When from 600 to 800 representatives of the patrons of husbandry get together, in these stirring times, things are pretty apt to happen.

Secretary Lewis' report shows that there are now 337 granges with a total membership of 14,252 in the state of Washington, as contrasted with 327 granges and 13,206 members last year. Thirty-nine new granges have been organized, and four granges have been reorganized. Spokane is the banner county for the number of granges, with King taking the lead for the number of members.

In the matter of formal resolutions, the grange went on record as favoring:

1. Federal ownership and operation of railways.
2. Federal control of distribution of food products.
3. Universal suffrage.

And as opposed to:

1. Partizan politics.
2. The importation of oriental labor.

Auto Ride and Banquet.

On the opening day, the guests were met at the various incoming trains by members of the local committee on arrangements, composed of J. T. Compton, H. I. Shotwell, C. F. Keiser, C. A. Ferrin and Mrs. U. G. Pyle, and were conducted to the place of registration. Following registration, tickets for the auto ride to take place in the afternoon and the banquet in the evening were distributed, and the visitors were directed to comfortable rooms reserved for the delegates at various local hotels. This part of the work was accomplished with unusual expedition.

State Master C. B. Kegley's annual address was delivered in the afternoon. Mr. Kegley referred briefly to the present development of Wenatchee valley, and reminded his auditors of a not very distant past when sage brush covered most of the land now occupied by orchards.

Turning to the subject of the great war, Mr. Kegley reaffirmed the statement of President Wilson that this is a war for democracy, but went on to tell his audience that our army is not organized on a democratic basis.

"The resolution asking for the reorganization of the army and navy on democratic lines, adopted at our last session," said Mr. Kegley, "should again be indorsed and plans made to see that support is aroused throughout the country to carry it into effect. An army organized on the lines of the old monarchial ideas of common soldiers and aristocratic officers, a class apart, is the most inefficient for fighting for world democracy and would be a constant menace to democracy at home."

Mr. Kegley referred to the part the farmers' national committee has taken in developing plans for financing the war, and urged the delegates to do their share in backing up this propaganda.

"To me it seems very clear," he declared, "that we should insist with all our might that the war be paid for as we go and that not a single dollar shall be left for our children, or our children's children, to pay, until the last dollar of accumulated wealth has been exhausted."

A topic dominant throughout the session of the grange, on the street and in the hotel lobbies, was brought out in the master's address. Mr. Kegley and apparently a vast majority of the delegates are in favor of a federal guarantee of minimum prices to be paid producers.

"By simply guaranteeing to farmers a minimum price, and leaving the supply and demand to regulate the price above the minimum, two most vitally important things are insured: First, that distribution shall be where the need is most urgent; and, second, that the increased price will go to the producer, where it belongs."

This, the state master adds, will be all the incentive needed to secure a maximum production of food crops.

A government owned merchant marine was discussed in the light of what the shipping board has recently done in this direction. Turning to the federal farm loan act, Mr. Kegley expressed his unwavering confidence in its value to the farmer.

"I would not have accepted a position in the federal farm loan bank had I not firmly believed that the rural credit act was a great thing for the farmer, and that it was my duty to do all that I could to see that the farmers whom I have served so long got all possible advantage from it."

Following the master's speech, the delegates were taken by auto to visit various beauty spots and particularly various typical farms in the valley. Many of those present could remember a time when the faithful cayuse and the buckboard furnished the standard means of conveyance in Chelan county, and when the sight of an automobile going down Wenatchee avenue would have caused a panic. Now the streets are lined with standing cars, and, even with 600 guests to look after, there was no difficulty in providing ample room for all. The opportunity to inspect the fruit lands where the big red apples, famous in history, are raised, was one greatly appreciated by all the visitors.

The guests brought tremendous appetites back with them, and the banquet which followed was undoubtedly one of the big events of the session. It is estimated that about 800 were served, and 24 hours later scattered groups along the street could be found telling each other how fine everything tasted.

Public Reception.

A public reception, held in the city park, followed the banquet. Music was furnished by the ladies' quartet of Beacon Hill Grange and by the Apollo club, a local organization of 30 members. A warm wind blew at times through the branches of the trees, and motor cars whizzed past, with a subdued rustling of tires. Many a delegate from a distant corner of the great state of Washington will look back to that summer evening reception in the little city nestling on the banks of the great, silent river with a smile of reminiscent pleasure.

Governor Lister, who was to have been one of the principal speakers of the evening, was detained in Olympia. Commissioner of Agriculture E. F. Benson appeared for the governor. Addresses by various members of the grange and by outside speakers whose interests were in some way connected with those of the order filled the evening. Probably the "hit" of the program was a straight-from-the-shoulder talk, interspersed with humorous stories and with epigrams carrying a barbed point, delivered by F. L. Lindley, of the Ford Service bureau. Mr. Lindley is able to present very convincingly the advantages of service and citizenship, as opposed to selfish individualism.

The election of officers, which took place on Wednesday, set at rest various rumors which had been much in the foreground. Many of the delegates were convinced that Mr. Kegley could not be induced to accept the office of another term. Various more or less promising candidates were discussed, but there was a very evident lack of unanimity in any one of them. The first ballot settled the whole matter, however, as Mr. Kegley was reelected by a vote of 283 out of 310 votes cast. Fred Chamberlain of Puyallup and H. A. McCormick of North Yakima shared the minority vote.

One of the features of the grange, which is never set down on the program, but which, nevertheless, exerts a powerful influence on every delegate, is the informal discussion which takes

(Continued on page twelve.)

OFFICERS OF THE STATE GRANGE.

The following officers of the Washington State Grange were elected for the ensuing two years: Master, C. B. Kegley, Spokane; overseer, William Bouck, Sedro-Woolley; lecturer, L. L. Snow, Olympia; steward, Lewis Exstine, Winlock; assistant steward, Bert Curry, Meyers Falls; chaplain, Laura S. Bouck, Sedro-Woolley; treasurer, Frank Field, Snohomish; secretary, Fred W. Lewis, Tumwater; gate keeper, Ivan Compton, Wenatchee; ceres, Mrs. Augusta Kegley, Spokane; pomona, Mrs. C. F. Keiser, Wenatchee; flora, Mrs. Margaret A. Wing, Washougal; lady assistant steward, Mrs. Anna Miller, Pullman; member executive committee, U. S. Case of Prosser.

Meeting of Grange at Wenatchee Was Scene of Much Activity and Conference



Here are a few snapshots of scenes at the meeting of the state grange last week. At the left is a snap of William Bouck, who was elected state overseer. As indicated by the photo, Mr. Bouck is a man of action. Next is a group of boy grangers, among the most keenly interested attendants at the session. They are Carl Hill of Swofford, Merle Bennett of Colville and Elmer Wilkes of Rice. The second photo from the right shows State Master C. B. Kegley of Spokane, who was overwhelmingly elected to succeed himself. The group at the right are Mr. and Mrs. W. G. Foster of Boistfort, and at the extreme right Mr. Johnson of Puyallup.

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Use Home-Grown Products

Official figures show that in the year 1916 there were shipped out of the state of Washington over 22,000 carloads of Washington grown fruit, of which over 16,000 cars were apples.

Figures for the previous year, 1915, which no doubt correspond reasonably closely with those that might be compiled for 1916, show that there were nearly 2000 carloads of oranges, lemons and bananas shipped into the state.

It is especially interesting in this connection to read the figures for one city (Seattle). In the year 1914 there were shipped into Seattle from various points about the state 720 carloads of apples. During the same year there were shipped in from other states 829 carloads of oranges, lemons and bananas. There was consumption of considerable locally grown fruit in Seattle, of course, but the figures indicate that of the fruit used that year in that city, approximately half was imported from other states, while large quantities of Washington grown fruit was being exported.

The suggestion to patronize home industry is always timely, but it is especially so in times when conditions make transportation difficult and costly. The people of Washington need a variety of fruit, but by far the greater part of the fruit eaten in Washington should be the famous Washington apple, than which there is no more healthful nor palatable fruit grown. It is well and good to invade distant markets with Washington produce, but little is gained by either producer or consumer when the produce of this state is shipped to New York and the produce of Florida or southern California is shipped into this state. If something has to be a drug on the market of this state let it be fruits from the tropics or sub-tropics, not Washington grown apples.

"Something Just as Good"

It used to be that we thought anybody who tried to substitute was the worst of people. Now, when there is an actual shortage, the man who can find a substitute for anything is a benefactor of the human race. So times change.

There is a shortage of tin plate and we must all use other containers when possible that there may be enough left to go around.

There is a shortage of glass, too, and the housewife who puts up quantities of fruit and vegetables is going to have trouble this year unless she uses great care and some ingenuity.

Elaborate containers for foods which do not spoil are unnecessary. Many containers may be used again, even though it is customary to throw them away.

Let us think of saving, and it is likely that we will discover new ways and better ones. As soon as we can convince people that there is a real shortage the native skill and ingenuity of Americans will "find a way."

Banks Asked to Aid Farmers

Secretary of the Treasury McAdoo has issued a special appeal to the bankers of the United States to lend all possible aid to the farmers in raising larger food crops.

Mr. McAdoo points out that unusual extensions of credit are needed. If the farmers are to speed up production they will need more machinery, more horsepower, more tractors, more seed, more labor.

> "Seeds are very high and money should be furnished to help the farmer secure them. Labor is scarce and wages are high, and the payment of labor requires cash."

The federal reserve system can help some, and the federal farm loan law is now taking care of long-time loans, but Secretary McAdoo urges that "the thing needed now is an extraordinary activity on the part of the financial interests of the country in seeking out places where short-time personal loans may be made for the express purpose of extending agricultural operations beyond their normal limits."

Turning then to the farmer, the secretary advises that he take advantage of the benefits of collective borrowing.

> "The credit union is in use in Massachusetts, Connecticut, New Jersey and North Carolina. Where the laws do not expressly provide for them they might be formed by voluntary associations. Where the demand is for short-time credit, it should be met by local banks, and it can be met with entire safety through this 'credit union' or collective borrowing system. A special authorization by statute law is not generally necessary."

We should think the national farm loan associations, of which we now have more than 600 organized in the Pacific northwest, could be quickly turned to double service here by constituting themselves as "credit unions" to obtain short-time loans at low interest rates for their members.

Meanwhile The Farmer advises its readers to write to the department of agriculture, Washington, D. C., for a copy of Farmers' Bulletin No. 654, entitled "How the Farmers May Improve Their Personal Credit."

Do Your Bit by Saving a Bite

Two great needs confront us, and we can not say which is the more important—producing food and saving food. Every bite we produce or save above our own needs will help support our own armies or those of our friends and allies. Every person should do his part, be it large or small.

The Farmers' Attitude

Everybody is talking war, with the exception of many of the farmers. Everybody is telling how the war should be carried on; what will defeat the kaiser; how the crops ought to be planted, cultivated and harvested; what plans should be adopted; how the president should treat congress, and so on and so on—except the farmer.

He does not say very much, but he plugs right along. The farmer is inclined to silences, but the world may be thankful he is also inclined to hard and effective labor. He understands what the need is right now, better than a good many glib talkers, and he is doing about all that can be done.

If everybody does his part as well the outcome of the war will not long remain in doubt.

The Hog and the Speculator

There is nothing the matter with a hog—as a hog. He should be kept in his place, that is all—and his place is in the hog yard. He is a dismal failure in the parlor, in spite of the old song. He is a failure as a companion, and he furnishes a poor example when it comes to table manners. Carefully stuffed and kept in his own proper environment, he lives his life and dies that we may feed on fresh pork, ham and bacon.

It is much the same with the speculator in food—the man with the behavior of the hog, who is compared to the hog so often. There is nothing the matter with him in his proper place. In a striped suit behind the bars he may be rendered useful. His tough hide should make admirable shoe soles, and as a horrible example he might point a moral and make more forcible if not adorn a tale.

Washington Gleanings

The King county grange fair is to be held in Renton, September 14, 15 and 16.

Farmers living in the vicinity of Clarkston are building two large grain elevators to handle this year's grain crop in bulk. One has a capacity of 150,000 bushels and the other of about 100,000 bushels.

An average of 12 pounds of wool to the fleece is the record made by Fred Smith, a prominent sheepman of Granddalles. Some of the fleeces ran to 18 pounds.

A campaign of education with the purpose of interesting every dairyman in the advantages of feeding ensilage over dry feed in winter has been launched by Manager M. Iverson of the Farmers' Mutual Creamery of Tonasket.

The school section on Nob Hill, Yakima, opened for cultivation this spring is rapidly being developed. On some of the tracts the sage brush is just being dug out, on others it is piled ready for burning, while some tracts are being plowed and are almost ready for tree planting.

Harry Armitage of North Yakima, dealing for himself and in connection with I. Koshland, has closed deals for 112,000 pounds of wool in five lots from Washington producers. The prices are stated to range from 45 to 50 cents and the total amount of the deal is about $50,000.

A. A. Prince, secretary and assistant sales manager of the Northwestern Fruit Exchange, has left for an extended trip over the markets, which will require about three months to complete. Special plans are under way looking to the development of new markets for the northwestern boxed apples. Attention will be paid to the small markets.

The stockmen of Yakima valley, especially the sheepmen, have been heavy investors in range lands this spring and dealers in that form of real estate say the market is active and many negotiations still are pending. A check made on the volume of the business since the first of the year shows that 63 sections have been sold, representing a total of 40,320 acres.

The Tieton project will increase its cultivated areas by 300 acres this year, according to figures given by G. C. Finley, superintendent of irrigation for the project. The increase is largely due to the call for agricultural preparedness. Mr. Finley reports that 1400 acres was the increase for the season of 1915 and 1600 for the season of 1916, while 3000 acres or more will be put under cultivation this year, bringing the total to 26,000 acres on the project. The total irrigable acreage under the project is 34,000 acres.

What Others Say

Review, Toppenish: The present consumption of wheat flour could be decreased by a third in the average American home without suffering or special inconvenience. In a bygone generation corn meal was the basis of a considerable portion of the household bill of fare. It should be restored to its old-time favor.

Courier-Press, Dayton: There will doubtless be a very large crop of fruits and vegetables raised in the Dayton section this year, and unless measures are soon taken to care for the surplus fruit and vegetables the producers will become discouraged because they will not receive returns for their labor.

Record, Ellensburg: More home labor in the kitchen, fewer parties and pink teas and time spent on making impossible cats on blue linen, would go far toward stocking the larder with wholesome food, and keeping it so stocked. Our grandmothers never saw a tin can in a store, and they got along just as well and lived out the full measure of their days.

How Railroads Figured

Ask $375,000,000 a Year for $60,000,000 Losses

When the Adamson bill was before congress last summer, The Farmer predicted that if the demands of the trainmen were granted, the railway managers would make that action of congress and the president the basis of a call for higher freight rates, and would try to turn the Adamson law to their own profit by calling for an advance in rates that would far more than compensate them.

That prediction is now verified. They want $375,000,000 more a year, and in their own figures only claim that the Adamson law is costing them $60,000,000 a year.

When the railroads put in their claim for a 15 per cent advance in freight rates, The Farmer pointed out that if it were granted, the increase would take $375,000,000 yearly out of the pockets of the farmers and other producers and consumers.

The railroads admit the accuracy of that estimate, but argue that a still greater sum of $477,000,000 is needed to cover their increased expenses.

But at least $225,000,000 of that great sum is asked for new rails, locomotives and cars, and is not properly chargeable as expenses. The railroads have had seven years of prosperity and should have kept stocked up with cars and locomotives instead of paying out so large a proportion of their earnings in dividends to their stockholders.

As matter of fact there is no probability that they would buy $195,000,000 worth of locomotives and cars if they were granted the rate increase. It is more likely they would use the money to pay still greater profits on their stocks.

The roads are now under the direction of a war board of five railway managers, and that board has directed them to save on cars and locomotives by cutting down passenger service and loading existing freight cars more heavily.

For instance, the New York, New Haven & Hartford has complied by canceling 199 trains, or 10 per cent of its passenger service.

The Erie has taken off 75 passenger trains, and other roads generally will follow suit.

The railways conduct a bureau of railway news to give wide publicity to their arguments for higher freight rates. This bureau admits that American railways showed a gain of $79,000,000 in earnings in the first quarter of 1917, but asserts that, notwithstanding this increase in traffic, they suffered a loss of $26,000,000 in profit in comparison with the same period last year.

But the New York Commercial, a daily newspaper that specializes on business and railroad news, points out that no mention is made by the bureau representing the railroads of the unusual weather conditions that held down their earnings during the first three months of 1917. Only a few days ago President Earling of the Chicago, Milwaukee & St. Paul said the weather after January 1 was the worst he had ever experienced during his 52 years of railroading. He made that statement to explain why the expenses of his company had been high. Regarding the future, he said the outlook was decidedly bright.

The Farmer does not hesitate to declare that it would be an act of gross injustice for the interstate commerce commission to let the western railroads advance their freight rates. All the transcontinental lines are doing remarkably well. The Wall Street Journal admits that the Union Pacific, the Southern Pacific, the Atchison, the Burlington, the Chicago & Northwestern, the Great Northern and the Northern Pacific "are paying dividends upon their common stock ranging from 6 to 9 per cent."

Some of these transcontinental systems have increased their profits amazingly in the last three or four years. We happen to have at hand the official figures of the Southern Pacific's profits in the first four months of 1917. They were $16,870,199. Two years ago the Southern Pacific's profits in the corresponding period, the first four months of 1915, were only $9,530,217. The profits of this system have nearly doubled in two years, and that in spite of higher wages and increased costs of operation.

We can not believe that the interstate commerce commission will allow these highly prosperous roads to lay yet heavier burdens on the producers of the Pacific northwest.

State College Grange.

A local grange has been organized at the State College of Washington. There were 50 members of the experiment station and extension staff present. The following officers were elected: Worthy master, George Severance; overseer, Dr. F. D. Heald; lecturer, Professor J. R. Barnett; chaplain, Mrs. Leonard Hagnauer; steward, E. F. Gaines; assistant steward, A. B. Nystrom, treasurer, Mrs. F. J. Newbill; secretary, C. E. Howell; lady assistant steward, Mrs. W. K. Whitaker; gatekeeper, E. B. Krantz; ceres, Mrs. R. J. Barnett; pamona, Mrs. A. B. Nystrom; flora, Miss Walker.

The grange was installed by Frederick W. Hodges of the Ewartsville grange. The new grange has 50 charter members and will be known as the State College grange. It was organized for the purpose of getting in closer touch with farming problems and for keeping farmers in closer touch with experimental and extension work done by the state college. The meetings will be held semi-weekly.

More Purebred Shorthorns.

Frank Rothrock, for the Day & Rothrock herd, at the Hercules farm near Sprague, recently returned from the middle west, having bought 32 head of purebred Shorthorns for approximately $16,000. He purchased one car from the Hopley stock farm of Atlantic, Iowa, at a sale where the animals averaged $627 each. The second car was purchased from S. G. Eliason of Montevideo, Minn., the prices paid being from $500 to $900 each. All the animals purchased in the middle west are cows, some with calves. The recent purchase will bring up the Hercules herd to 158 head.

Want a "Home Crew"

To the Editor of The Washington Farmer: On our farm we never employ strangers. We find a man with a family quite satisfactory. Their house was half a mile from ours, but in sight.

When our only son started to school we took an orphan boy of 11. A boy can do a lot of work, easy in itself, but hard when added to the day's work in the field.

He stayed with us six years, and after three years' absence he is working for us again, and today one of our prominent thresher men offered him two bits a day above running wages to help him thresh because he wanted a home crew.

That expresses the thought exactly, "a home crew." The man who hires in a community takes an interest in its affairs, has a home there, is the better man.

We should take our hired help into our homes. We don't want to hire questionable characters. Let a man take credentials when he goes into a new neighborhood; other business men require it; it is more important that the farmer should. Our help eat at the tables and are with our boys all day.

Sometimes boys from the city who are idle and a problem to the probation officer are a help on the farm. Often they do a lot of work if some one they like can be with them constantly. We kept two such boys over a year. This makes extra work for the woman, but it helps the boys, and their company is worth something if one has no boys.

MARILLA KIDWELL.

Garfield, Wash.

No Place for Them.

"Any beech trees on your place?"

"Oh, no, we are not near the ocean. We have no beach."

Stevens County Fair

Stevens county is commencing now to prepare for its fourth annual fair to be held at Colville, Wash. The fair is a combination of the Stevens County Live Stock association, organized for the promotion of the live stock industry, and the school children's agricultural and industrial exhibit under the supervision of county superintendent of schools. No admission fee is charged and about $1700 will be offered as prizes.

Last year the county held nine community fairs in different parts of the county, 72 districts were represented, representing 150 teachers. Over 1000 different articles were entered in the different exhibits. The winners at the community fairs entered their exhibits in the county fair for the final contest. One school after driving 20 miles in a lumber wagon arrived in time to take part in the parade held at 10 a. m.

Recently Miss Staunard, county superintendent, sent out letters addressed to the scholars in care of their teachers, asking replies to these questions:

1. What are you planning to bring to the fair?
2. What can the pupils, teachers and county superintendent do to make the fair a greater success?
3. What can the parents do to make the fair a greater success?

Up to date over 1000 replies have been received. She has evidently struck the keynote to rouse the enthusiasm.

D. G. S.

Pioneer Picnic June 26-28.

The Crab Creek Pioneer picnic will be held for three days instead of four this year. The date was postponed from June 19 to June 26, owing to conflicting dates with chautauquas which will be held in Ritzville, Sprague and Davenport. It was agreed not to sign up any chautauquas or anything else on the regular dates for the picnic in the future. The directors allowed a purse of $100 a day for baseball for the three days instead of $75 for four days as last year. A. D. Davis, who is in charge of this sport, will arrange games at once. George Wilson, who has the racing in charge, will have $1950 for purses against $1700 offered last year. The association has a balance of $950 on hand.

Britain Fixes Prices.

The food control of Great Britain has fixed the price for wheat and oats of the 1917 crop at 60 shillings ($14.40) for 504 pounds of wheat of first quality and 38 shillings 6 pence ($9.24) for 336 pounds of first quality oats.

Buys Montana Farm.

Word from Melrose, Mont., is to the effect that James D. Kennedy, one of the best sheepmen in the Dubois (Idaho) country, and who for several years was with the Denning & Clark Live Stock company of Dubois, has purchased the Fisher & Hample live stock outfit at Melrose and will be in active charge from now on.

To The Washington Farmer: I like The Washington Farmer because it is progressive and up-to-date. Every farmer in the great Northwest should take it and read it.

C. E. LUDDEN.

Arletta, Wash.



Stretch of Concrete on the Ohio River Road near Parkersburg, W. Va. Built in 1915 under the direction of Burdett Woodyard, Engineer.

The Farmer Can Pull Himself Out of the Mud

FARMERS know the value of permanent roads in their communities. They can get them if they act along the following definite lines:

1. All main highways should be built of concrete to withstand motor car traffic.

2. It is far better to lay out and build at once a system of concrete roads than to build a few scattered miles every year between stretches of mud.

3. It is better to raise a lot of money by a good roads bond issue and build right, than to spend each year the road funds on hand in temporary construction.

4. Concrete is as desirable for roads as for other important structures; and it is the least expensive permanent road material.

Some farmers may not like a bond issue. They do not realize that a very few cents a year per acre is enough to pay off the bonds and all interest.

In Illinois it has been figured out by the State Highway Commissioners that a system of four thousand miles of permanent roads would tax farm land less than three cents per acre per year for twenty years. That's nothing. The whole four thousand miles can be built at once and make a tremendous saving in annual upkeep.

The farmer should act. He can spread information among his neighbors, he can talk to his road officials, influence his lawmakers to pass a good roads bond issue; and he can vote for it.

This Association can give you reliable information about the cost of building concrete roads and how to go about it. Write for Bulletin No. 136.

PORTLAND CEMENT ASSOCIATION

Offices at

ATLANTA, CHICAGO, DALLAS, DENVER, INDIANAPOLIS, KANSAS CITY, MILWAUKEE, NEW YORK, PITTSBURGH, SALT LAKE CITY, SAN FRANCISCO, SEATTLE

WASHINGTON, D. C.

CONCRETE FOR PERMANENCE



A. B. NYSTROM, Editorial Contributor

Questions
Are Answered by A. B. Nystrom

I am desirous of information as to the raising the test of cows' milk by feeding such feeds as are required. I have been told that this can not be done in this way, but such a statement does not appeal favorably to me.
G. G. S., Everson, Wash.

We can not change permanently, nor for a very long time, the test of any cow by changing the methods of feeding. This has been tried at various experiment stations, and the results have been the same in every case. However, there are times when the test can be increased for a short period of time, as for example, just after a cow freshens. For instance, a cow that would normally test 4 per cent can be made to test as high as 5 per cent or 6 per cent for a week or 10 days, following freshening. This can be done by feeding and handling the cow in such a way that she will be fat at the time she drops her calf. After this time, if the feed is largely of a high protein nature, that is, if such feeds as alfalfa, bran, oil meal, cotton seed meal and other high protein feeds are fed to a greater extent than carbonaceous feeds, you will find that the cow will get thin quickly and will seem to take the fat from her back, so to speak, and put it into the milk pail. This is what is done sometimes in making short tests for a week or 14 days, but the test does not remain at this high point very long. In fact, only so long as the cow has the strength to hold up under the abnormal feeding.

Feeding ordinary feed will not change the fat content except as it increases or decreases the milk flow; usually as a cow gives more milk her tests become lower, and when the flow diminishes the test becomes higher. The general statement to make in this connection is that you can not feed fat into the milk.

Substitute for Alfalfa Hay.

Could you tell me of some feed or feeds for dairy cows which would take the place of alfalfa hay for a short time? Cows are on pasture but pasture is very short at present and hay almost impossible to get here.
H. B., Renton, Wash.

Cows should have some roughage of some kind and if they are getting some succulent feed they should have in addition some dry roughage. We prefer using the legume hay, such as alfalfa, clover, peas, vetch, etc., but in the absence of these I would get some properly cured grain hay, oats being preferred.

The Bang System.

What is the "Bang" system for handling tubercular cattle?
O. L. O., Seattle, Wash.

The Bang system for handling tubercular cattle is that of isolating those that have reacted to the test, feeding them separately and having separate attendants for them, so that there will be no chance of infecting healthy animals. These cows are left this way until they drop their calves and the calves are taken from them immediately, before they have a chance to take any of the milk from their mothers, and raised on milk that is free from the tubercular organisms. It is simply taking advantage of the fact that healthy calves can be raised from tubercular animals if they do not get infected milk.

Yamhill County Report

Fifty-one cows in the Yamhill County (Ore.) Cow Testing association during the month of May. W. H. Hubbard, who does the testing, has compiled the following list of cows which made over 50 pounds of butterfat during the month of May:

Name of Cow or Number	Breed	Owner	Butter Fat
Barbara	Shorthorn	Foothills Farm	68.8
No. 11	Jersey	Geo. Fuller	63.8
No. 7	Jersey	Geo. Fuller	63.7
Rosabell Registered	Shorthorn	Foothills Farm	62.8
20	Jersey	A. Q. Latimer	61.0
Miller	Jersey	D. L. Gubser	61.0
Weshauken Registered	Jersey	L. H. Baker	58.5
6	Jersey	Geo. Fuller	53.6
12	Jersey	Geo. Fuller	53.6
8	Jersey	Geo. Fuller	52.9
11	Jersey	A. Q. Latimer	51.6
14	Jersey	A. Q. Latimer	50.9
Lala Bess Registered	Jersey	D. H. Baker	50.7
Butter Cup	Jersey	D. L. Gubser	50.4
Hanson	Jersey	Wm. Donnelly	50.2



Purebred Registered HOLSTEIN CATTLE

A Holstein owner knows that he holds as an asset something more than size, weight, individuality, breeding and the highest standard of productiveness. He knows that he is a partner, directly and indirectly, in all of the progressive efforts of the Holstein-Friesian Association, and also in its financial soundness and mighty prestige. He benefits from its annual prize offerings of $22,500, and its yearly educational publicity campaign costing $25,000. The official records of its Advanced Registry Office establish for his cows positive and relatively high market values. Since 1908 the average auction price of Holsteins has increased to $255 per head. There's big money in the big "Black and White" Holsteins. Send for FREE Illustrated Descriptive Booklets. THE HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA. F. L. Houghton, Sec'y, 205 Brattleboro, Vt.

SAVE YOUR SILAGE



PERFECTLY cut silage prevents air pockets and the result is less spoilage. Purchase a Rowell Automatic Cutter and get perfect service. STRONG, EASY RUNNING, no danger, made in seven sizes. Investigate before you buy. *Free Illustrated Catalog.*

The I. B. Rowell Co.
Waukesha, Wis.

Cream Output Doubled.

Despite the wet weather and the delayed planting season, preparations for a big acreage of grain and other foodstuffs in Polk County, Oregon, have been planted, although a large acreage is waiting for the rains to stop.

Fall grain is in excellent condition and farmers in all parts of the country report a successful growth thus far. Clover is making an advance since the spring rains set in, and dairymen believe the flush cream season will be extended beyond the usual time this year on account of the big growth of grass in pastures. The cream production of the county has been nearly doubled during the last two weeks.

Year's Output $50,000.

The Satsop, Washington, cooperative cheese factory sold $49,351 worth of cheese during the year ending May 1, according to the annual report of Secretary Johnson. The cheese brought an average of 17 cents a pound, while in its making 2,529,511 pounds of milk were consumed. The plant today is operating on a larger scale than ever and is unable to handle all the milk and butterfat offered to it. During April alone over $4400 was distributed to the ranchers supplying the factory with butterfat.

To Drill for Artesian Water.

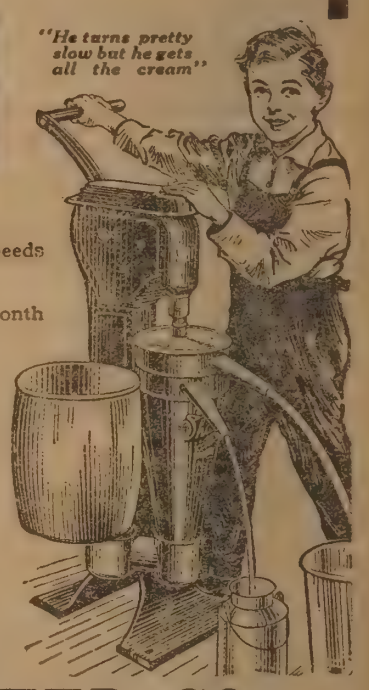
W. J. Roup, the well-known dry farmer in Fertile valley, near Emmett, Idaho, has plans made to sink for artesian water on his ranch. Mr. Roup expects to put a drill down from the bottom of his present dug well, which is 348 feet deep. It will be remembered that warm water, almost hot, was struck in this well a few months ago. A strong flow of artesian water in that section would mean the opening up of a large area of as fine a body of rich farm land as lies outdoors.

Use SHARPLES To Prevent Cream-Waste

Sharples is the *only* separator that skims absolutely clean at *all* speeds. All other separators lose considerable cream when turned below speed—admitted by leading experiment stations and all separator manufacturers. Average loss from this cause is 10 lbs. of butter per cow per year, or 80,000,000 lbs. in the United States alone! Sharples would save it all!—due to the wonderful Suction-feed, which automatically regulates the milk-feed so as to insure clean skimming whether you turn fast or slow.

Sharples is an absolute necessity *now*—when the world is clamoring for "more fat." It is the *only* separator that gets *all* the butter-fat out of the milk. Prevent waste by getting a Sharples—and get it *now,* while you can. Ask nearest Sharples dealer to explain it.

SHARPLES
Famous Suction-Feed
Skims clean at any Speed
SEPARATOR



the *only* separator that:
—skims clean at widely-varying speeds
—gives cream of unchanging thickness—all speeds
—has just *one* piece in bowl—no discs
—skims milk faster when you turn quicker
—has knee-low supply tank and once-a-month oiling

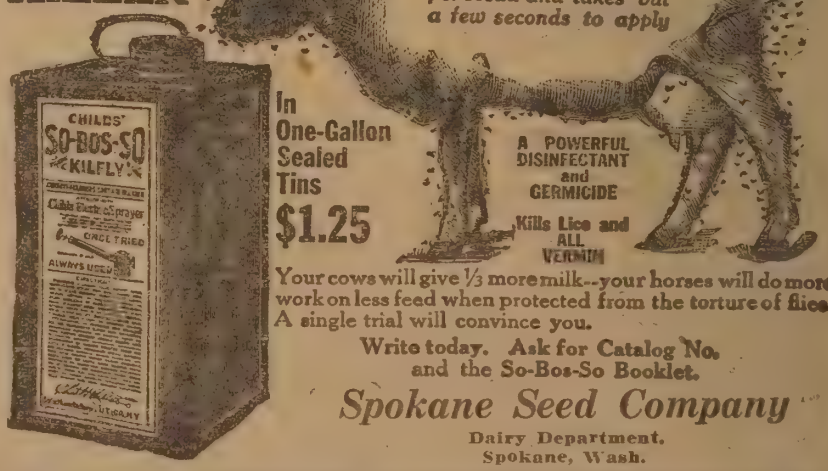
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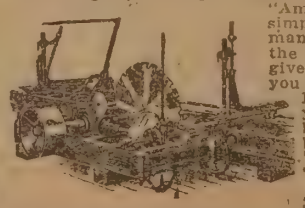
Your cows will give ⅓ more milk--your horses will do more work on less feed when protected from the torture of flies. A single trial will convince you.

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$ MAKE MONEY SAWING LUMBER $

There's thousands of feet of high-priced lumber over there in the wood-lot waiting for you to get an "American" Portable Saw Mill, belt it up to your farm engine, and get busy in a profitable lumbering business. There's an "American" of just the size you want — and it's so simple, durable and easy running that you can manage it yourself, turning out the best lumber at the least cost. No skill or experience is needed. We give you full instructions for making lumber which you can use yourself or sell in the local market. If you have no timber, there's lots around you. Lumber is high, and going higher. Trees bring the biggest money when sawed into lumber. Begin now to harvest your wood-lot. Write for our Farm Catalog and Booklet No. 7 on farm lumbering.



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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

To Produce More Pork

By LEE M. LAMPSON, Kennewick, Wash.

High prices are stimulating production very materially in Benton county, Washington. The agitation for a greater food production, the organization of food supply committees and so forth, and their work have also added considerably to the increase. The county has a central war food committee which has done considerable work in stimulation and providing means for greater production.

The local committees of the county agricultural council have made a list of all of the female hogs that were not being used for breeding stock, and a list of all who would buy one or more of these to put into the breeding-pens. These lists have been used locally and forwarded to the county agriculturist. By putting the owners of sows that were being fattened for the market and prospective purchasers in communication with each other we have been able to divert a great many sows from the fattening pens to the breeding pens; thus increasing pork production here considerable this year, and there will be a great deal more of this work done before this summer is over.

Warranted to Give Satisfaction.

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Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

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NO DOSE TO MEASURE.
NO LIQUID TO SPILL.
NO STRING TO ROT.

BLACKLEGOIDS are small pills. Each pill is an accurate dose of blackleg vaccine.

BLACKLEGOIDS are easily administered—simply inject them under the skin with a vaccine injector.

TAKE NO CHANCES.

Don't wait until your calves become infected. This means certain loss—there is no *cure* for blackleg. Vaccinate now—before the deadly disease shows itself.

THE COST IS SMALL.

BLACKLEGOIDS are economical. The expense is trifling compared with the loss you are liable to sustain if you do not use them.

ORDER THROUGH YOUR VETERINARIAN OR DRUGGIST.

Write for free booklets on Blackleg, with full information about Blacklegoids.

PARKE, DAVIS & CO.

Dept. Animal Industry. DETROIT, MICH.

The Purebred Sire

The following facts, given in a recent leaflet issued by the Wisconsin Livestock Breeders' association' may be duplicated most anywhere in the country.

In this leaflet it is stated that a certain farmer had for several years been breeding his mare to a grade stallion. He finally decided to patronize a purebred. Some time after he held an auction sale. Yearlings, two-year-olds, and three-year-olds, all by the grade sire, sold for $37, $55 and $76 a head respectively, while weanlings from the same mares, sired by a purebred stallion, averaged $101 each.

In another instance, it is reported that a company of farmers purchased a two-year-old purebred stallion. He was considered so good that the service fee was placed at $25—$10 more than any competitor. A three-year-old gelding sired by him was sold to a dealer for $625, and not one went for less than $225. A pair of grade mares sired by the same horse was sold to a man in Tennessee for $750, while a colt not over 20 months old was sold at public auction for $700.

These are not isolated cases but are given simply to show the greater profits that result from the use of purebred sires. Sound, high-class horses are the ideal farm power, and good mares bred to purebred sires of the same breed and conformation pay good profits, not only in the colts they produce, as has been shown, but also in the labor they perform. Poor horses render poor service and often cost more to keep than they are worth. The loss in feed consumed and lack of labor performed by the inferior and scrub horses of the country is enormous. This expense can be greatly reduced if farmers and mare owners will breed their mares to the right sort of stallions and produce the kind of horses the farm requires and the market demands.

Meat Freezing in New Zealand.

The fresh meat industry is becoming an important factor in the business and industrial life of New Zealand, having supplied exports during the past two years to the value of $75,045,532. During that time 1,145,531 quarters of beef were exported, 4,680,593 carcasses of mutton and 6,476,048 carcasses of lamb.

Sheep Dips for Argentina.

Imports of sheep dips of all kinds into Argentina during the five years from 1910 to 1914, inclusive, amounted to 70,439,064 pounds, valued at $9,249,704, of which England supplied 64,837,555 pounds, valued at $8,514,148; United States, 3,063,205 pounds, valued at $402,248.

Veterinary

Dr. S. B. Nelson

Removing Warts—How can warts on the generative organs of a horse be cured?—A. B.

Answer—It depends upon how large the warts are. If they have only a small neck they should be removed by surgical interference and then an astringent applied to the stump. The astringent to be used may be either tannic acid or alum, tannic acid is preferable. If the warts are small, then you might try the application of either castor oil or the American mineral oil to the warts once every two or three days.

Throat Trouble—I have a bull that has a growth in his throat, making it hard for him to breathe. He is 3 years old and feeds well.

C. L. H., Lewis, Wash.

Answer—I think the best thing that you can do, if you have a veterinary close to you, is to have him see the bull and prescribe for you after he has made a careful personal physical examination of the trouble in the throat.

If you do not have a veterinarian convenient to call, I would suggest to you that you rub on the swelling or growth in his throat iodine ointment, U. S. P., and also give him internally one dram of potassium iodide in one pint of water once daily for a week.



Twenty Million Miles of Telephone Wire

The telephone wire in use in the Bell System is long enough to run from the earth to the moon and back again forty times.

The Bell System has about twice as much telephone wire as all Europe.

More than 500,000 new telephones are being added to the Bell System yearly—almost as many as the total number of telephones in England.

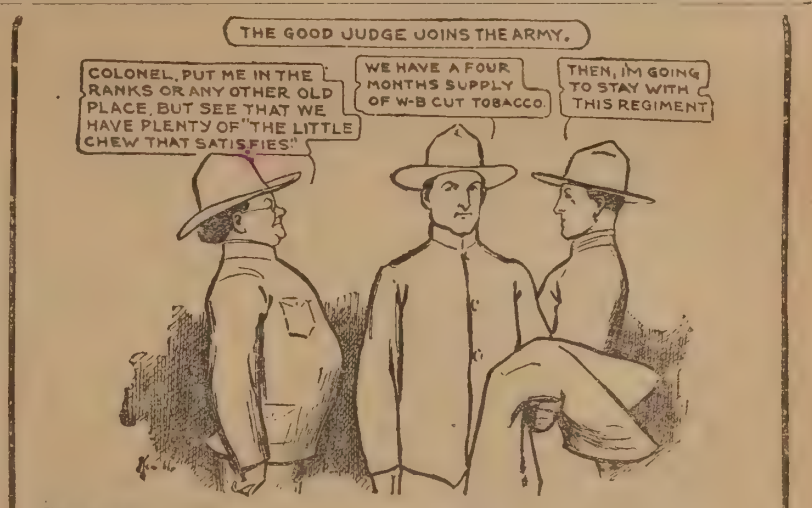
In twelve months the Bell System adds enough telephones to duplicate the entire telephone systems of France, Italy and Switzerland combined.

In proportion to population the extension of the Bell System in the United States is equal in two years to the total telephone progress of Europe since the telephone was invented—a period of about forty years.

The Bell System fills the telephone needs of the American people with a thoroughness and a spirit of public service which are without parallel the world over.

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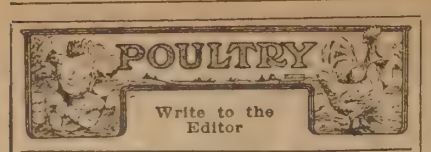
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The Frederick Boyd Co.

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JAMES DRYDEN
Editorial Contributor

Preserving Eggs

To the Editor: Would you kindly publish in your paper an authentic article on safe methods (or the safest method) of storing eggs.—J. J., Rexburg, Idaho.

In the May 31 issue a simple method of preserving eggs in lime water was given. The waterglass method is very commonly used and is as satisfactory as any. The liquid waterglass is purchased at the drug stores and it is diluted to one part to 9 or 10 of water. The water should be previously boiled to sterilize it and then allowed to cool. One measure of waterglass to ten measures of water should then be mixed together. The eggs may then be dropped into the liquid. Crocks or glass jars or wooden pails or kegs may be used. A quantity of the mixture may be made up at one time and the eggs put into it daily as gathered until the crock or pail is about full. Leave about an inch of liquid above the eggs. The liquid will evaporate some during the summer. A lid or cover on the jar will prevent some evaporation.

The eggs should be clean and there should be no cracked ones among them. It is better not to wash the dirty eggs, as washed eggs will not keep as well as unwashed eggs. J. D.

Pens or Free Range?

Should Hens Be Kept in House?

By PAUL E. TRIEM.

George Thompson of the White River valley of Washington is perfectly willing to admit that there are hens which will lay more eggs than his 900 White Leghorns. As a matter of fact, his flock averaged more eggs per hen the first year he was in the business than they will this year, but——

"They couldn't stand the strain," he explains. "I fed them high and crowded them in every possible way, and, while I got the eggs, I found there was such a thing as overdoing the intensive system. My hens will average about 125 eggs each per year; at 2 cents for each egg, as an average price, that is $2.50 per head, gross. It costs us about $1.30 a head to feed our chickens by the year, which leaves a net profit of $1.20 per head. As a matter of fact, they did a little better than that last year, averaging $1.25 net profit."

The disconcerting thing about Mr. Thompson's system of poultry raising is that he keeps books on himself and the hens. He doesn't have to guess, and this absence of guesswork is apt to chill the enthusiasm of the amateur suffering from a bad attack of chicken fever.

"I believe there is more real money in chickens than in any other crop around here," Mr. Thompson says. "But you've got to live with your flock a good deal of the time. For instance, I feed my laying hens five, or even six, times a day, milk, sprouted oats, grain, dry mash, lawn clippings; and the result is that they never suffer from their lack of free range—for my layers never leave the two-story house in which they live."

This two-story house is another illustration of the Thompson theory that you must cut all the notches if you are to get the money which is to be made with poultry. It is light and dry, with scratching shed below and living and laying quarters above; but it isn't a costly house. Mr. Thompson says it cost him "scarcely anything." That, of course, is in comparison with some of the tremendously expensive poultry plants which have been erected, many of them by city farmers who have figured out how to make a fortune in a few years in chickens.

Mr. Thompson has a small patch in which he grows wheat for the chickens to thresh themselves. He considers that another secret of keeping hens confined without impairing their vitality—first, cleanliness and variety of food and second, plenty of exercise. Wheat hay with the grain in it is even better than grain thrown into straw litter.

"Running an incubator is pretty much a profession in itself," the man of the place explains. "I tried it the first season, but my chicks cost me more than they do now. And you can buy as healthy stock as you can raise. One of my neighbors bought 4000 day-old chicks in California, and says that out of the whole bunch only 40 were killed in shipment. That shows you whether or not they are healthy."

Most of the Thompson eggs are sold direct to the consumer, usually a restaurant or hotel. And they are sold on honor.

"One of the biggest black eyes to the poultry business has been the lack of ordinary honesty and common sense of some of the men in it," Mr. Thompson says. "When hens are turned loose to wander all over the farm, it isn't going to be long before nests of clean, fresh-looking eggs will be found in the fence corners or in the grain fields. It's a big temptation to sell them—they look fresh. But the man who yields to this sort of temptation isn't a good business man. I can't afford to take any chances with my eggs. Every one I sell is strictly fresh, beyond the possibility of a doubt."

On a farm of 55 acres of course there is more than one string to the marketing bow. On the Thompson place there is accomodation for 35 cows. Also there is a loganberry patch of two and a half acres. But, above all the rest, the boss values his flock of Leghorns.

"People say chicken raising is too confining," he comments. "Well, let me tell you it isn't half as bad as some other things. In the winter, for instance, I don't have to get up till 7 o'clock. It isn't light before that, and I couldn't feed the chickens sooner, no matter how much I wanted to. In the summer I can throw down their first feed the night before, if I don't want to get up at daylight. Some of my neighbors who have gone pretty extensively into the dairy business, on the other hand, have to be out of bed by 2 or 3 o'clock the year around in order to catch the city markets. Chickens are good enough for me."

Owing to the question raised by Mr. Thompson of denying poultry free range, this article was submitted to James Dryden, editorial contributor of the poultry department of the Farmer. He replied as follows:

In describing the methods followed by George Thompson in keeping poultry, Paul E. Triem raises a question that commercial poultry keepers should carefully consider. I refer to the method of keeping the fowls shut in the house all the year. So far as they are given, Mr. Thompson's reasons for confining the hens are that he doesn't lose any eggs and that they are always gathered when they are fresh. It is no doubt true that hens having free range often steal their nests and the eggs are either lost or are found after they have lost a good deal of their freshness. But this need not necessarily be the case. With good nesting arrangements, the hens will lay in the houses in preference to finding a nest in the field or fence corner. When once they get started to lay in the houses they will always come back to the same nest to lay.

Supposing some eggs are lost under the free range system, it may even be that the poultry man will get more eggs than he would if his flock was confined in the house all the time. At any rate, the question of whether the eggs are lost or not lost does not settle the point of free range versus confinement.

I believe poultrymen make a mistake in keeping their fowls confined in the house all the time, if they wish to make a permanent success of their business.

There is no question but they will lay well under close confinement if they have the right care and have been bred right. I have had a pen of fowls average over 200 eggs in a year where they were never out of the house in the year, but that does not prove that that is the best system.

A good-laying hen will stand a lot of abuse and lay well, but if it is continued unto the second, third and fourth generations it is sure to show a bad effect.

The main points, however, in favor of close confinement, which Mr. Thompson does not mention but which he no doubt fully appreciates, is that it saves somewhat in labor and some in investment, because little land is needed. Labor-saving devices, however, do not always save profits, and the profits are not always measured by the amount invested.

I know of a number of poultrymen who are doing well with flocks kept shut up all the time, but they have not been very long at it. Hens that are shut up all the time are not good breeders. If the same hens are used to reproduce the flock, it will only be a few years until the health and vigor of the stock has reached such a point that the production is too low to make a satisfactory profit. The best plan in the end is to give the hens free range on clean ground.

Case of Wry Neck.

To the Editor: I lose a hen or two about once in three or four months. Usually I find them sick or dead in the morning on the floor in the roost room. Symptoms are similar to meningitis—legs sprawled and not controlled, head bent back, no visible marks or signs of ailment. The hens are Barred Rocks and are young, healthy, well fed and good layers. They have free range and an open house, open to weasels, but I find no marks. There are no previous signs of sickness, and death is sure and soon. Where they live a few days they may appear dull and sleepy. They usually seem in much pain. S. G.

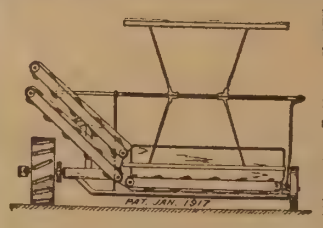
The above describes a case of wry neck. It is commonly associated with an over-fat condition. Heavy feeding, especially of stimulating foods, and little exercise, are usually the cause. Lighter feeding of grain for a while, fed in a deep litter of straw, more green food, milk or buttermilk, all they will drink, or meat foods in case milk is not available, is advisable. A dose of epsom salts, 25 grains per fowl, dissolved and mixed in a mash food, should be given.

Shipping Stock to Prineville.

Joe Brown, who resides on a rural route from Corvallis, Ore., and his brother, Lee Brown, of soap Creek, have shipped carloads of stock, comprising over 200 head of fine animals, to Prineville, eastern Oregon, where the animals will be turned on the ranges in that vicinity to fatten.

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GRANVILLE LOWTHER
Editorial Contributor

A garden in the back yard and a flag in front are the twin symbols of patriotism now. If you can not have both, better have the garden.

In the future we will have a "government of the people, for the people and by the people"; or will it be a government of the people for the kaiser. The outcome of the war will settle that question.

In Virginia in the counties of Prince Edwards, Halifax, Mecklinburg, Appomattox, Lunanburg, Nottowa, Cumberland and Buckingham thousands of acres on which they formerly grew tobacco, are being planted to beans, peas and alfalfa. Many farms are also being converted into stock rnches for the production of meats. A double motive seems to be the inspiration for this movement. The first is, that it is bad economy and unpatriotic to devote so much land and labor to the production of a commodity that is a luxury pure and simple, and one that tends to devitalize the nation when in this hour of peril we need food and must have it, or Germany will be our conqueror. The second motive is that they have grown tobacco on the land until they have devitalized the soil. If they would save their farms from depletion and themselves from poverty they must grow leguminous crops.

G. L.

Freezing of Fruit Buds

A bulletin issued by the Utah experiment station bearing the names of E. L. West and N. E. Edelston, contains such valuable information on the subject of the freezing of fruit buds that I think better to call attention to it now, although the danger of frost for this season is past. The conclusions are the results of most careful experiments in the laboratory as well as observations in the field. G. L.

To kill plant tissue by freezing, either the cell wall must be ruptured when the ice forms, or else after the ice forms it must thaw rapidly. An occasional case of ice formation and slow thawing without death resulting to the tissue has been observed.

Buds will stand a lower temperature by several degrees than the freezing point of the expressed sap, and the sap freezes three or four degrees below the freezing point of pure water.

The literature on the subject might lead one to infer that the buds have a definite freezing point, and that when the orchard reaches this temperature practically all of the buds are frozen and the crop for that year is to be a failure. This is not the case.

The further developed the buds are the more sensitive they are to frost.

There is a range of at least five degrees Fahrenheit between the temperature at which only about five percent of the buds are damaged and the temperature that will kill all of them.

In the case of Double Nattie cherries when the fruit is setting, 2 degrees Fahrenheit caused no damage, and 24 degrees killed practically all of them.

With Jonathan apple blossoms in full bloom, 28.5 degrees Fahrenheit caused no damage, and 24 degrees killed about half of them.

The temperatures which will kill about 50 per cent of the buds of the Elberta peach are as follows: When they are slightly swollen, 14 degrees; when well swollen, 18 degrees; when they are showing pink, 24 degrees; when in full bloom, 25 degrees, and when the fruit is setting, 28 degrees Fahrenheit.

Where a Tree Feeds

A tree sends its roots at least as far as the branches above the ground. It is the newly developed roots that take up the nourishment, and these are at the ends of the new roots just as the leaves are on the new branches. This means that water or manure to do the most good must be spread over a surface reaching out at least as far from the tree as the overhang of the branches. Where the rainfall is light grass and weeds should be kept from growing over the roots of the tree, as these will get the moisture first when it rains and there may not be enough to allow any to pass to the tree roots. There are few places so dry that a tree will not make a good growth if it gets all the moisture that falls on the ground occupied with its roots, says the extension department of the North Dakota Agricultural college.

Fruit Outlook Good.

The outlook for a bumber prune crop during the 1917 season in excellent, according to Fred Strang, Douglas county (Ore.) fruit inspector, who has returned from visiting at Looking Glass, Winston and other parts of the country. Mr. Strang says apples are also in the best of condition and the pear yield will be the heaviest in the history of the county. Strawberries are a month late, and it is doubtful whether they will ripen in time for the festival, which will be held in May.

THE FARM GARDEN

ARTICLE 14.

Growing Celery

Celery is another of the vegetables which few garderers try except those growing for the market. It is difficult to grow celery satisfactorily, but for persons who like it and who enjoy solving a garden problem it is a highly desirable addition to the garden.

Celery must be started in a hot bed or some other sheltered soil, and must later be transplanted to the open. Plants may be purchased from dealers or greenhouses, and in most cases the farm gardener probably would find this the most satisfactory method of securing the plants. Owing to the lateness of the spring in most sections of the northwest, it is still time enough to set out the first crop, though in some localities it is too late.

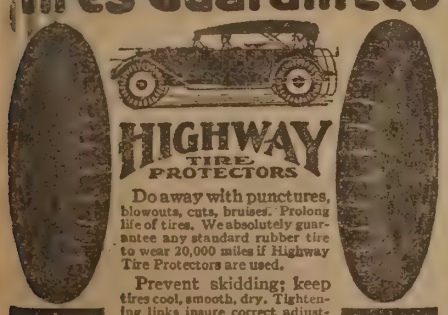
Celery must have good soil and generous moisture. Low lands are best, but they must be drained if strongly subirrigated.

The plants should be set out in rows about three feet apart if boards are to be used for blanching, or four to six feet apart if the blanching is to be done by piling soil about them. The plants should be set about six inches apart in the rows. Early celery in general should be blanched by the use of boards, though with the later crop it is frequently found more satisfactory to blanch with dirt. The blanching process consists of shutting off the light from the stems, but in so doing there should be care taken that the air is not too rigidly shut away. The soil about the plants at all times should be extremely well cultivated so as to permit aeration about the roots and the blanching stems. Some two weeks are necessary to secure a good blanch.

The crop must be cut below the surface of the ground when harvested. If the plants are to be stored in the cellar for winter use they should be taken root and all and set in moist earth or sand. They may also be packed in trenches, sided by boards and covered with straw.

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Pershing Is in Europe

Staff Will Get Ready for Warfare

The first United States soldiers have landed on European soil preparatory to placing a portion of the army of this country into the actual warfare with England, France and their allies against Germany and her allies. So well was the plan of the army kept secret that the American people knew nothing of the movement of the proposed Pershing expedition until the news was cabled that General Pershing and his staff of 56 men, with a small accompaniment of private soldiers, had landed in England. When it is intended to send an army to follow Pershing is being kept as strictly secret as a necessary precaution against information reaching the enemy. General Pershing will occupy the meantime familiarizing himself with the problem that confronts the United States army in Europe, and with learning the plans of the allies into which the army of this country will attempt to fit itself, as a cog in a wheel.

Naval Secrets Escape.

Secretary Josephus Daniels of the U. S. navy has isued a formal statement that naval secrets of utmost importance have leaked into the hands of German officials, and has called upon all persons in this country who know of naval or military plans to use the utmost effort to conceal them. Spy control and leakage of official information that would be valuable to the enemy constitutes one of the gravest menaces in this critical time.

Registration Is Effected.

As a result of registration day, June 5, approximately 10,000,000 men aged from 21 to 30 years, inclusive, have been formally listed for future war developments under the selective draft law passed by congress a few weeks ago. In a general way the number of men eligible under the law for registration was overestimated, in some states as much as 25 per cent. This registration does not mean that all these men are to be mustered into the army. Those specially fit for service will be drawn as needed, possibly as high as one million men within the coming 12 months if the war continues. Those physically unfit for service, specially valuable to the government in their present occupations, or having dependents to support, will be given consideration for exemption under the present plans of the government. Registration day was passed with practically no disturbance of any kind in the nature of opposition to registration as had been feared. It is also believed that comparatively few eligible persons evaded registration, though means are now being put into effect to bring slackers to justice. Evasion penalities are severe.

State Grange Meets at Wenatchee

(Continued from page five.)

place on every street corner and in every hotel lobby in the convention city. Probably no more direct and reliable index of public opinion throughout the state could be obtained than a complete tabulation of these topics and opinions at one of the annual grange meetings. At the present session, the spirit of the times was reflected in the talk of the delegates. War and its logical effect on the production and marketing of food crops was probably foremost in interest.

Production of Foodstuffs.

A summary of statewide opinion, as expressed by these active farmers, would seem to indicate two things: First, that the production of foodstuffs has been greatly stimulated by the patriotic appeals made to the farmers; and, second, that a still greater increase could have been secured had the producer been certain that there would be no glutting of the markets. Under the first of these heads, the actual increase, it was stated by farmers from practically every part of the state that while the spring is backward, with fair weather conditions from now on, the state of Washington will be able to do its share in feeding the world. Hay is said to be better than average, the fruit prospects are excellent, there has been an effort made to counteract the winter injury to wheat by spring seeding, while the production of such table crops as potatoes and beans has been greatly augmented by the utilization of many small tracts, unused in former years. But the marketing problem is still the weak spot in our national armor: the effort to increase production without insuring efficient selling was declared by one delegate to be like trying to shingle the house before the foundation was built. Another said: "I planted two acres of potatoes. I could as easily have put in 20, and as a matter of fact my part of the state, the Palouse country, could feed the nation with potatoes if we knew we could get an average price of a cent a pound for them!"

Farm Topics in Evidence.

Among topics of strictly agricultural interest which were much in evidence in the crowd were the relative advantages of horses and tractors; dual purpose cattle versus the beef or dairy types; peas for summerfallow land; alfalfa in orchards; silos and ensilage, and the late spring. A straw vote would probably show that the farmers of the state are watching the tractor with keen interest, and are willing to be "shown." One man commented: "I have to feed my horses at least six months of the year when I can't use them. A tractor wouldn't eat when it wasn't working—but will it do the business? Will it plow side hill land, for instance? I want to know some of these things before I buy."

There is evidently a considerable interest in dual purpose cattle, but the difficulty of securing breeding stock at possible prices has confined this interest largely to discussion, heretofore.

The grange adjourned on the evening of June 8, to meet next year at Walla Walla.

Small Orchard, Garden Truck and Chickens

F. W. Thurber of Buckeye, Spokane county, who attended the grange session, prefers to carry his eggs in several baskets.

"We have a small orchard," explains Mr. Thurber, "but that's only part of our farm. In addition, we raise a good deal of truck, to be sold in the city, and we have a nice bunch of chickens. No, I don't think there's much money in poultry just now, but on a diversified place like ours, the hens can pick up a considerable part of their living. We can certainly make a profit on them if any one can."

In Many Lines Smaller Producer Crowded Out

E. Bowles of Prosser, Washington, does not find it necessary to sell his chickens, even if feed prices are high.

"And when you get right down to the logic of the situation," Mr. Bowles adds, "I believe you will find that it is not so much the high price of feed which is forcing some poultrymen out, as it is the tendency for large business to replace smaller ones, in every line. A time has already come when it is hard to make a profit on a few hundred hens. With three or four thousand, a man can work to good advantage. He can buy and sell better, and can organize his work more efficiently. The small producer has been crowded out in many lines, and I do not see how he can continue to handle poultry at a profit. The margin of profit, at best, is too narrow."

Orhcard Good Investment If One Stays With It

A. E. Iliff of Omak admits that financing a growing orchard isn't the easiest thing in the world, but he believes in the long run it is a mighty safe investment.

"I've knocked around here in this western country, following my trade of carpentering, till I've had enough of it," Mr. Iliff comments. "Now I'm an orchardist, and you couldn't drag me back to city life with a team of horses. It isn't easy—my wife and I have both worked hard and long since we became farmers—but there's a freedom about it that you can't get in town. No, we haven't gotten rich—not yet; but I'm satisfied the orchard is a good investment, if we stay with it. As to whether I'm apt to stay or not, I'll just tell you that I was born mighty close to the Mason and Dixon line. We are all stayers where I came from."

High Water Makes Him Think of Home Lands

R. H. Mitchell of Kalama looked with considerable pessimism on the warm weather which he found waiting him at Wenatchee when he attended the meeting of the grange.

"I'm just wondering what this will do to us, down the river," he explained. "The water was within a foot or so of last year's high water mark when I left home, and if this warm spell is general in the foothills of the Columbia and Snake rivers, we're apt to have a serious flood. Much of our land is dyked, but I'm afraid a sudden rise in the river would sweep away all barriers. The resulting damage would amount to thousands of dollars."

Increase of Alfalfa Planted in Orchards

T. N. Buchanan of Okanogan reports an increase of alfalfa planted orchards in his part of the state. Many of the farmers are sowing every other row, while some are planting the entire orchard. There is a double benefit from this, as the hay secured is worth considerable money in these days of high priced feed, while the humus and nitrogen added to the soil by the alfalfa roots are a decided advantage. Mr. Buchanan says that during his recent visit to Wenatchee, at the time of the meeting of the state grange, he noticed that many of the Wenatchee orchardists were following this same system.

Farm Bank Is Lending Money

Many Points of Law Must Be Complied With.

Important questions, though in many cases considered insignificant by persons not familiar with the workings of the farm loan system, are constantly coming up in the negotiation and making of loans. Here are certain matters to which President O'Shea calls attention:

When application for a loan is made, it must show the exact legal description of the land on which the loan is sought. It is not sufficient to describe it as "in the vicinity of" such-and-such a town, as one applicant described his place.

Each association must have one committee of appraisers among its members, but must have only one such committee. Some associations covering considerable territory have appointed more than one such committee. the bank board having to hold appraisals made by them irregular. Each committee is composed of three regular members, with one additional, alternate member, who takes the place of any member of the committee when appraisal of such member's own land is under consideration. The members of these committees must themselves be borrowers.

An administrator of an estate can not, under the provisions of the law, be a member of an association to make loans for the estate. He can, of course, be a member to secure loans on land belonging to himself personally, but not as part of the estate. In like manner, a guardian of a minor can not be a member of an association to borrow money for such minor, though he may be a member to borrow for himself on his own land.

(Continued from page one.)

Kevin, Toole county	24,500
Kalispell, Flathead county	89,400
Beaverton, Valley county	37,250
White Pine, Sanders county	41,700
Waldheim, Musselshell county	30,800
Grass Range, Fergus county	38,050

Idaho.

Post Falls, Kootenai county	$ 32,535
Twin Falls, Twin Falls county	51,000
American Falls, Power county	31,050
Kimberley, Twin Falls county	47,730
Buhl, Buhl county	59,000
Sandpoint, Bonner county	25,045

Oregon.

Mollalla, Clackamas county	$ 40,900
Yewberg, Yamhill county	33,450
Stanfield, Umatilla county	50,850

The Staff of Appraisers.

The following is the list of appraisers now in the field appraising the lands on which loans are sought:

Washington—A. D. Davison, Stevenson; C. B. Kegley, Spokane; T. D. Davies, Everett; T. O. Morrison, Spokane.

Oregon—William Galloway, Salem; V. S. Brock, Hood River; Clifford K. Crosno, Ashland; S. A. Sanford, Roseberg.

Idaho—C. E. B. Roberts, Boise; D. R. Hubbard, Kuna.

Montana—W. D. Graves, Missoula; James Griffin, Billings.

Saving Powder in Land Clearing.

By J. R. MATTERN.

Under the pressure of high profits to be made and of national demand for more food crops the need for more powder than ever before in land clearing operations comes just at a time when powder prices are high. In spite of this costs of clearing should be kept down, and they can be reduced if proper economy in the use of explosives is practiced. It is the same with explosives as with many other things—they have been used wastefully. Powder this year must replace much costly labor. Electric firing of several charges together is one of the greatest means of saving powder that so far has been developed. By this system of firing big stumps can be taken out completely with three-fourths the total amount of powder usually required for single charges and fuse firing. In addition the holes left, when loading is done skilfully, are only half as big as when single charges are used to accomplish equal results.

The handbook of the powdermaker gives the complete details about this method of blasting, and describes many other short cuts of late development that every one who removes stumps or makes ditches this year should know. The man who is fully informed about new methods, late improved explosives and other factors will be able to do economical work.

Caring for Pigs

Sow a Catch Crop of Barley

By WILLIAM HISLOP.

Plan to sow a catch crop of barley for the little pigs as soon as the land is workable. Such forage will shoot the pigs along.

If possible, provide a ration of skimmed milk and shorts for the young pigs while they are nursing. Three pounds of skimmed milk to one pound of shorts is the proper proportion to use. Feed this in a creep to which young pigs have access all the time. Feed their mothers in a separate pen. A good ration for the latter would be:

Sixty pounds of barley, 30 pounds of shorts and 10 pounds of tankage.

Do not forget to provide crude oil to kill the lice that may infest the hogs. Give your breeding stock a worm medicine to drive out intestinal parasites. The following is the proper dose for a 100-pound pig:

Santonin	5 grains
Calomel	2 grains
Areca nut	2 drams
Sodium bicarbonate	1 dram

The following formula is to prevent worms:

Common salt	3 pounds
Glauber's salts	3 pounds
Salsoda	3 pounds
Copperas	3 pounds
Sulphur	1 pound

This mixture should be placed in boxes 12x12x4 inches and kept under cover before the pigs all the time.

Might it not be advisable to use a self-feeder for hogs weighing 100 pounds that are being fattened for the market? The self-choice or "cafeteria" plan of feeding hogs while they are fattening on clover, alfalfa or other pasture, has been demonstrated to be a most efficient way of producing commercial pork. No farmer can at the present time afford to feed hogs in dry lot on a straight grain ration of barley alone or wheat alone or corn alone. Supplemental feeds high in protein, such as tankage, skimmed milk or buttermilk, are essential to profitable production today. Likewise, green succulent forages cheapen production costs.

Tankage to the amount of 10 per cent of the weight of the ration should be used. Skimmed milk and buttermilk each having a high feeding value, should be fed in the proportion of two pounds of the milk to one pound of grain. In fattening hogs on alfalfa or clover pasturage tankage should be used to the extent of 5 per cent of the weight of the grain ration.

Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER XIV.

Fresh fruit on the table was more than a luxury—it was a sensation!

Twenty-five years ago the pioneer settlers in the Big Bend region of eastern Washington grew practically no fruit on their farms. Fresh fruit on the table was more than a luxury—it was a sensation! I remember well the first fresh strawberries I ever saw. There was a French "squaw man" living on Wilson creek about 16 miles east of our claim, who raised strawberries. He and his halfbreed children peddled the berries through the sparsely settled country. Customers were five to fifteen miles apart, yet Old Man Whitlow sold his berry crop in that way.

One day Mr. Whitlow stopped at our place with some strawberries. Mother had no money, but traded him three or four dozen eggs. I was out playing in the wild grass when the transaction was made, so she planned a surprise for me. When I came in she told me she had "bought something" from Old Man Whitlow. Secretly, pretending to be wholly uninterested, I began to nose about for the "something."

Down in the cellar an alien but delicious odor assailed my nostrils, and I followed the scent. It led me to a big trunk in which I knew mother occasionally stored such delicacies as cookies and doughnuts.

In great excitement, I lifted the lid slightly and peered inside. The alien but fascinating odor was fairly intoxicating to me. I saw concealed in the trunk mother's big stone crock partly filled with fruit of a kind I had never seen before, but which, by some animal instinct, perhaps, I recognized as strawberries.

I looked at the berries for a long time, noticing that they were red, heart shaped, and with tiny yellow "stickers" in their sides. I supposed that the stickers were straws, accounting for the name "strawberries." It did not occur to me that I might taste one of the berries. I merely looked at them and smelled them; and when I had looked and smelled my fill, reverently closed the trunk and stole away. I felt I had invaded sacred precincts and felt somewhat ashamed.

Mother surprised me with a strawberry shortcake. I dutifully pretended to be surprised, and consumed as much of the cake and berries as was put before me.

The larger part of the fruit we had was dried. There were dried apples, dried prunes, dried apricots and dried peaches. That was all, I think. My parents settled in the Big Bend on the claim five miles south of Hartline, when I was eight, and, for several years after that, drove each summer in a "covered wagon" to the Walla Walla valley for a load of dried and canned fruit. During the summer mother would dry fruit "on the shares" and father worked in the harvest fields with his team.

My part of the summer's work was to "cut fruit." The drying was done in the sun. Boards were laid out in the form of wide, long tables, and over the bare boards were spread the cut halves of peaches, prunes, plums, apricots, and the quarters or eighths of apples. The very large apples were cut in eighths. The apples were peeled for dying, and the peeling with a dull "caseknife" was a tiresome job. Really, it was a good trick to peel the apples and slice and core them so as to get out all the seeds and core and still waste none of the fruit. We got an "apple peeler" finally, and this, at my age of 10, seemed the most wonderful mechanical contrivance of the age.

I sat on the shady side of the smoke house and cut fruit day after day. The weather was hot and the air was full of bees, yellow jackets and hornets. Of bees I was unafraid. Yellow jackets were worse. They have a fiendish curiosity, and if one's shirt is unbuttoned or there is a hole in his pants, they are apt to crawl in just to see what is inside. Trouble begins as soon as they get in. Often I jumped from my box with a howl, feeling the sting of a yellow jacket that had gotten through a hole in my rather meager armor.

Also, as I cut peaches, prunes, apricots and plums, quite a pile of seeds would accumulate about me. The yellow jackets swarmed about the seed pile, and, incidentally, my bare legs. By and by I would be stung again; whereupon I would cease cutting fruit and slay all the "jackets" in sight. I learned the trick of setting open jugs partly filled with water near me. Out of curiosity the yellow jackets would crawl into the open jugs, fall in the water and drown.

Once a hornet attacked me without provocation. It stung me on top of the head, though not severely, my hair serving as a protection against the full thrust of the sting. I defended myself with a club as large as I could wield, with which I was lucky enough to bat the warlike bug to the earth. With furious blows delivered with all my 10-year-old might, I beat the hornet into the dust.

One summer father nearly died with typhoid fever. While he was sick one of our two horses died of pneumonia. Mother took care of father, dried and canned fruit, cooked for harvest hands and kept in good health and cheerful, in spite of toil and worry. When not cutting fruit I played up and down the creek with other children of my age. I remember how they looked at me in an awestricken way and remarked to each other in undertones that my father was liable not to "get well."

That summer we were staying at the Stanfield ranch on Dry creek in the Walla Walla valley. Uncle Bill Stanfield and his wife, Aunt Sally, were of the old-ime, pioneer stock. They crossed the plains in '49, Uncle Bill driving an ox team and Aunt Sally, then a girl, walking much of the way. They were full of the genuine, old-fashioned kindness and hospitality which is becoming rare, I think, with the passing of pioneers.

Such a family as we were with all our troubles must have been a real tax on the hospitality of Aunt Sally and Uncle Bill. But I know they never gave the matter a thought. They were principally concerned for the recovery of father and our sick horse, poor Old Rock.

During the days of his sickness the horse stood with drooping head on the manure pile behind the barn. Every morning I went out to look at him and on one of these occasions found him dead.

Father got well, though not in time to do any work during that harvest. From a friend he borrowed money to buy another horse, a tall, rangy fellow named Aleck. We loaded our wagon with dried and canned fruit, vegetables of the long-keeping kind such as potatoes, beets, turnips and carrots and started for the Big Bend early in the fall.

Uncle Bill Stanfield's good qualities were appreciated by others besides us, I know; and among his admirers was the Rev. Sam Driver, the traveling Methodist preacher of the Walla Walla valley in pioneer days. Uncle Bill could and did swear every hour of the day, artistically and musically. In the morning when he went out to milk the cows his swearing chimed in with the early crowing of roosters, the quacking of ducks and the demoniac shrieks of the guineas in a way that outclassed any "farm yard medley" ever produced.

But notwithstanding Uncle Bill's dreadful habit of swearing instantly, in anger or in mirth, Preacher Sam Driver, who in his ministerial perigrinations through the Walla Walla valley had plucked whole shoals of souls from the burning, always headed straight for Uncle Bill's place every time he came through the Dry Creek valley. He seemed utterly callous to Uncle Bill's swearing—knew it was a part of him, likely.

In the Stanfield home Preacher Sam always called morning prayer, and everybody kneeled, Uncle Sam with the rest, and as devout as any. I am sure that on many occasions he was swearing out in the barnyard 10 minutes after morning prayer; and one occasion when Uncle Bill and Preacher Sam left the house together Bill was swearing at the rheumatic twinges occasioned in his knees by the recent prayer before he and Preacher Sam had reached the gate.

Some one asked Sam Driver why he always stopped at Uncle Bill's place when Bill swore so dreadfully. Preacher Sam replied that he would sooner hear Bill Stanfield swear than some others pray—because Uncle Bill swore like he meant it.

At the age of 15 years the Bunchgrass boy is anxious to earn money. He says: "An opportunity came to me to get rich right away—so I thought." The next chapter tells of his experiences as a book agent and how he enabled the publishing company to start their fourth mile of copies of this wonderful history.

Mutual Fire Insurance

The organization and management of farmers' mutual fire insurance companies is discussed in detail in a new publication of the United States department of agriculture, bulletin No. 530. These companies, it is said, represent one of the most successful forms of rural cooperation in the United States. Nearly 2000 of them are in existence and the total amount of insurance they have outstanding exceeds five and one-fourth billion dollars. In some states of the middle west, fully three-quarters of all the insurable farm property is insured in companies managed by the farmers themselves, and organizations of this character exist in every state except in Florida, Mississippi, Louisiana, New Mexico, Arizona and Nevada. The increasing number and size of these companies make it important that they should be founded on sound principles. The bulletin already mentioned takes up the problems that are likely to arise and discusses them fully. In addition, suggestive articles of incorporation and bylaws are contained in the appendix, together with forms of application and policy blanks.

Imported Crop Pests.

More than one-half of our principal crop pests have been accidentally imported from other countries.

Ye Have Heard That It Was Said by Them of Old Time

THE EIGHTH COMMANDMENT. "Thou shalt not steal."—Exodus 20:15.

Amid the thunders of Sinai, Jehovah not only announced the duties of man to his Creator, but also toward his fellow men. He laid down rules for his observance of personal rights and also recognized in this commandment the rights of property.

In that ideal state to which certain visionary folks look forward to, when there will be no private ownership of anything, there can be no theft. How can one steal what belongs to nobody?

Implanted deep in the human breast is the desire to own things, to have them and use them and enjoy them. This is recognized in this mandate, and the observance of property rights is carefully and strictly enjoined.

The statement that the world owes anybody a living finds no justification here or elsewhere in the Bible. The title to property is defended and declared.

If every potential thief thought before he stole that theft is taking what does not belong to him, and that there is no justification for theft, we think the thieves would be fewer. Scrupulous honesty is not so common as it ought to be. Keeping within the law is not enough. H. H. B.

Does Farmer Earn What He Gets?

By GRANVILLE LOWTHER

If any one thinks the farmer does not earn what he gets, I want to outline the following program, and see how many merchants, railroad employes, traveling salesmen, manufacturers, bankers or members of the labor unions are willing to follow out his plan. I will give a concrete case: Mr. Hall is 65 years of age.

He rises at 4:30 o'clock in the morning.

He irrigates until 6.

Eats his breakfast.

Hitches up his team, drives to another place, is ready to begin work with the men employed, and works until noon.

Eats his dinner.

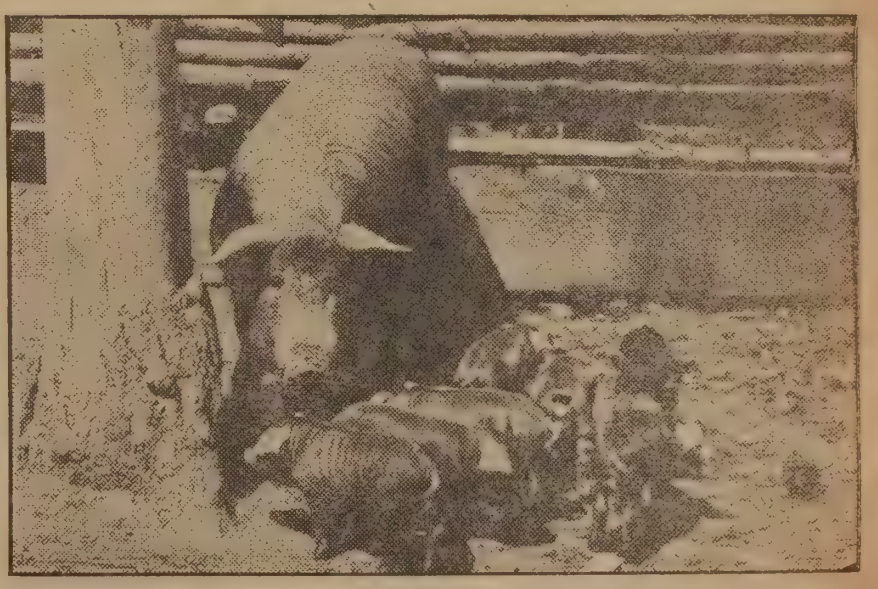
Works until 6 o'clock.

Drives home, eats his supper, and irrigates until dark, which is somewhere between 8 and 9 o'clock.

In other words, Mr. Hall works 14 hours every day, and the work of irrigation goes on holidays and Sundays. In fact, he has no holidays during the fruit and farming season.

Now, Mr. Hall is not an exception. There are thousands of farmers working in a similar manner. Who should have the bulk of the profits, the producers or the speculators?

Hogs Offer Quickest Meat Supply



In this time when there is great demand for meat animals, it is vital that effort be placed on production that will result in the greatest amount of meat in the shortest possible time. The hog undoubtedly is the animal with these possibilities. Aside from the chicken and the sheep, he is about the only animay that may be ready for market within less than a year. From a small beginning a considerable number of animals may be raised and placed on the market at 6 to 8 or 10 months, if properly cared for. Five reasonably good brood sows should produce with just reasonable care and success no fewer than 25 pigs and rear them to maturity. These pigs, if made to weigh 200 pounds at the age of 8 to 10 months, which can be done with reasonable care, means 5000 pounds of marketable product. The farmer can not afford to overlook the possibility of hog production as a "rush" war measure, and hence a "rush" profit measure.

All the World's a Stage, and All the Men and Women Merely Players

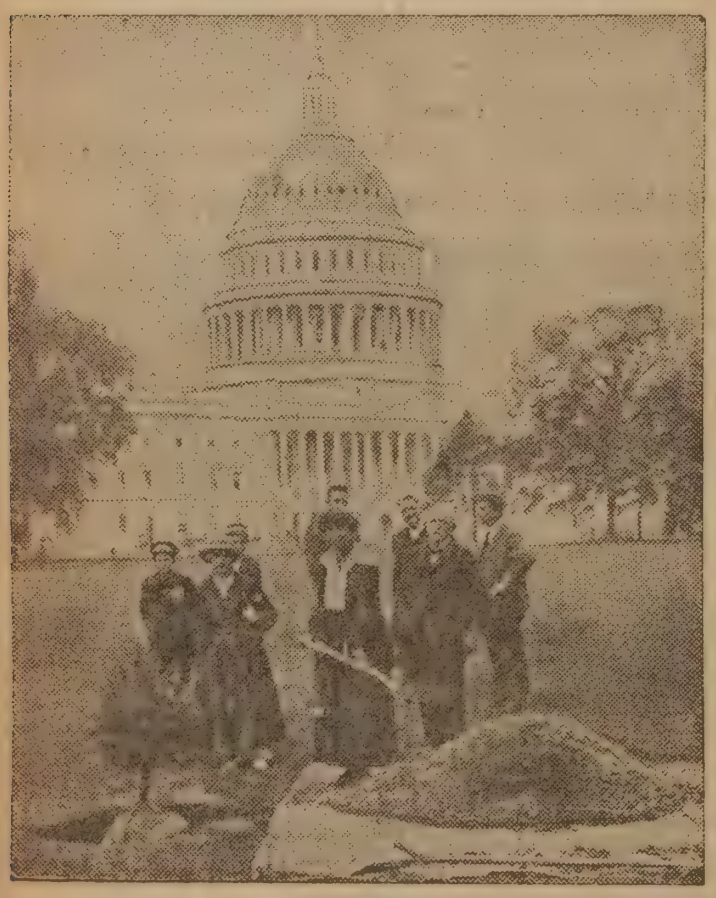
To Instruct American Aviators



Copyrighted by International Film Service.

Captain E. A. Kelly of the British Royal Flying corps, was in New York recently, making arrangements for a flight from that city to Wheeling, W. Va. Captain Kelly is on six months' furlough recovering from wounds of the feet, inflicted when he was brought down by a German aeroplane somewhere in France. On arrival at Wheeling Captain Kelly will act as aviation instructor at a school for American army aviators.

Miss Rankin in Outdoor Role



Copyrighted by International Film Service.

Miss Jeanette Rankin of Montana, the only congresswoman, has added agriculture or horticulture to her list of accomplishments. With the aid of several moving picture cameras, a handful of spectators and a pair of diminutive trees, Miss Rankin added to the landscape of the capitol grounds. She planted a fir tree and a California redwood. The picture shows her throwing back the earth after planting one of the trees.

Covering Attack With Barrage Fire



Copyrighted by International Film Service.

The stirring events connected with the allied advances on the western front have taken public attention from the east, where Serbs and Bulgars are fighting daily. This remarkable photograph shows Bulgarians seeking to counter attack and being prevented from doing so by the Serbian barrage fire. The shells are seen bursting immediately before them.

Searching Ruins for Cyclone Dead



Copyrighted by International Film Service.

More than 200 persons were killed and millions of dollars' worth of damage done by the cyclones that swept eight middle western states. This photograph shows relief workers searching amid the ruins for the dead in Twelfth street, Mattoon, Ill., where 90 blocks were razed.

The U-Bubble Busts.



—Wichita Eagle.

Premier of Hungary.



According to dispatches from Budapest, Count Jules Andrassy has been named premier of Hungary by Emperor Charles of Austria-Hungary. Count Andrassy is a former premier and a man of considerable force in Hungarian politics.

A TRUE GHOST STORY

By E. A. BRYAN

It is 40 years since she told me the story, and my pulses were then young enough to be responsive to the movements of the tale. My aunt was then 80, and the incident belonged to her young womanhood—so it is nearly a century since the event occurred.

Aunt was a good Christian woman, and Christians were not supposed to believe in ghosts, at least not to fear them. She had read the entire Bible—the books of Chronicles and all—one or more times every year since she was married the first time, and nothing in it had taught her to believe that departed spirits would return until that great day when all should stand before the white throne to answer for the deeds done in the body. Nevertheless, she admitted that things had occurred many times which she could not explain. She had trained herself, therefore, to shut her eyes to appearances and trust to "the eye of faith" when things hard to understand disturbed the tenets of her religion.

The night on which she told me the story of little Mary Miller was one long to be remembered. The old weather-boarded log house in which my aunt had lived for two generations stood in the middle of the farm, away back from the public road. Time had filled it with chinks and crannies, through every one of which the wind that night shrieked and sighed and mourned with such wierd notes that, with less provocation, one might well fancy that he was beset by millions of squeaking and gibbering ghosts, hurtling through the air, bent on such errands as ghosts alone are supposed to undertake. Half a mile away, in plain sight, stood the ancient brick church, and beside it the old graveyard, crowded with old-fashioned flat tombstones and overgrown with bushes and brambles.

In the old sitting room, where we sat, the fire of hickory embers burned low and blue in front of the huge, charred back log. There was not enough light, except for an intermittent flame, to lighten up the heavy blackened beams of the ceiling or reveal the pattern of the patchwork quilt on the old fourposter in the corner.

Age had not dimmed the fire of my aunt's eager black eyes, especially when she was deeply in earnest, and at such times the tremulo in her voice made an appeal which betokened not weakness, but deep emotion.

She sat on one side of the wide-spreading fireplace, with hands folded over the top of her hickory cane, her piercing eyes gazing into the bed of coals. I sat on the other side, wooden poker in hand, with which to stir the dying embers, as occasion required, or to spot a chance spark which might fly out upon the rag carpet.

"It was a strange experience," began my aunt, "and taught me how easily our mortal eyes are deceived. I did not get over the effects of it for weeks, and in fact," said she, with a sigh, "I am not sure that my baby that was born some months later did not owe her weakened constitution and her early death to that night's experience.

"We were living in this house then, and it was through that door behind you that the strange apparition first appeared." I cast a hasty glance over my shoulder into the darkness in the direction I knew the door to be, but only a sudden swelling of the deep undertone of the sobbing and sighing wind answered to my fearsome glance.

"It was in May," continued my aunt, "and my baby was born the following August. The doors and windows were all open to admit the coolness of the night after a hot day. Sarah, the daughter of a neighbor, who was to be with me until after the baby should come, was ironing in the kitchen while I was dampening the clothes.

"We had just been talking of little Mary Miller, who had been buried that afternoon in our graveyard by the church, whose sudden and somewhat mysterious death had shocked the whole neighborhood and was weighing down heavily on our minds and hearts.

"There were two Miller families in the community. One was a blacksmith, whose shop stood at the crossroads. He was a good man, a member of our church, always kind to his children and a good provider for his family. His brother, the shoemaker, lived in the outskirts of the village. He was inoffensive enough when he was sober, but a regular fiend when he was under the influence of liquor, and that was a good deal of the time. He had a large family, mostly girls, and was so cruel that the older ones were glad to leave home as soon as they were old enough to work. More than once he had broken up the furniture and smashed the dishes and driven the family out of the house. His wife, a quiet, patient creature, foolishly enough, tried to hide his brutality or excuse his failure to provide for the family.

"Mary, the daughter who had just been buried, was a slip of a girl, about 12 years old, tall for her age, black-eyed and never looked like she had enough to eat, which I suppose she hadn't, poor thing. She and her cousin Mary, the blacksmith's daughter, were about the same age, were together in school and looked very much alike—they took after the Millers.

"The shoemaker had been on one of his big sprees, and, from what the neighbors had said, had been worse than usual. Whether the poor wife was beaten or not nobody ever knew, or whether he had struck the child a blow with a shoemaker's hammer or a chair will never be known, but it was certain that he had abused the family terribly, and then had staggered off to the saloon for more drink and until he was dead drunk, from which he did not come home until the next night after it was all over.

"When the neighbors learned next day that Mary was sick her mother said that she couldn't make out what was the matter with her. She had complained of a terrible headache the night before and had a raging fever and was out of her head part of the time. There was no doctor in the community, and poor people in those days didn't usually send for the doctor anyway. The mother said she thought Mary would be better after another night's sleep. But about 9 o'clock in the evening there was a turn for the worse, and spasms were threatened, and one of the children ran for the neighbors. The convulsions continued and before 10 o'clock the child was dead.

"Our Sarah helped make the shroud the next morning. In those days they were always buried in shrouds, which were a sort of nightgown, only opened down the back. The carpenter made the coffin, and, as the weather was hot, they had the funeral at 4 o'clock that afternoon. Nobody thought of an inquest. People didn't like to say it out loud, but the question in the minds of many was "Was it murder or was the death due to natural causes?' Some of the men at the funeral glared at poor old Miller as though they would like to eat him. There were just a few of the neighbors at the funeral.

"No wonder our Sarah was nervous after working with the should and talking over the sudden death, and then going to the funeral. We didn't usually sit up so late, but the day had been so hot and the night was so cool, and we knew we couldn't sleep anyway for thinking and wondering about it, and we were behind with our work anyway.

"We didn't notice how time was passing until Sarah, looking up to the clock exclaimed 'La, me, it's midnight.' Just then a slight noise made me peer into the sitting room, and there in the doorway stood a tall, slim, blackeyed girl in a white shroud. She was in her bare feet. Her face was as white as the shroud she wore. Her piercing black eyes were wide open and stared straight before her. I gurgled and Sarah looked and screamed. The child moved slowly toward us, and we retreated behind the table, and as she came on we continued to retreat through the bedroom door and climbed onto the bed. She followed, her big black eyes seeming to look straight through us. We stood there speechless and trembling as the girl continued to move toward us. My first thought was, 'She has come to tell us the cause of her death.' Cold and trembling we waited for her to speak, but she said nothing. I struggled to speak, but my tongue stuck in my throat and my hair seemed to stand on end.

"Sarah was the first to speak. 'Why,' said she, 'as I live, it's little Mary Miller!'

"'Yes,' admitted I dazedly, 'it must be little Mary Miller. She has come to tell us. I never would have believed it.'

"'No,' exclaimed Sarah, 'I mean it's the blacksmith's Mary. You know they look so much alike. You know the blacksmith's Mary is a som—what do you call it? She walks in her sleep.'

"'Oh, a somnambulist,' you mean.'

"We both climbed off the bed, more dead than alive. We spoke to Mary and shook her but could not wake her. Each one took an arm and we led her down to the crossroads to her father's house. As soon as we entered the door she darted to her bed, still asleep, eyes wide open.

"I think the shock was too much for me, but it proved to me that there are no real ghosts," said my aunt, as she arose and gazed at the old clock above the mantel. "Why," exclaimed she, "it's just 12 o'clock again."

Quality of Production

By WILLIAM HISLOP.

Avoid keeping your breeding stock in diary barns because such places harbor the germs of tuberculosis and abortion. More stock has been killed by being housed in poorly ventilated, high-priced barns than ever was killed in well ventilated, but cheaply constructed buildings.

In war time, when every ounce of national strength is needed, the producers of the nation's meat should supersede at once all methods of waste by methods of conservation.

They should emphasize quality of production as well as quantity, and put quality first every time.

It would be the height of folly to save for breeding purposes all the females produced in the herds. Select only the very best females—the ones that promise well as efficient producers.

Mediocrity should be avoided in selecting breeding stock. Mate only the best. Raise your standards of production. If you do the future will reward you, for it is very bright from the stockman's standpoint.

Sufficient Cause.

"What started the fight?"

"Well, you see, Jones handed him an item stating that he was engaged in raising chicks, and it came out in print that he was engaged in raising checks."

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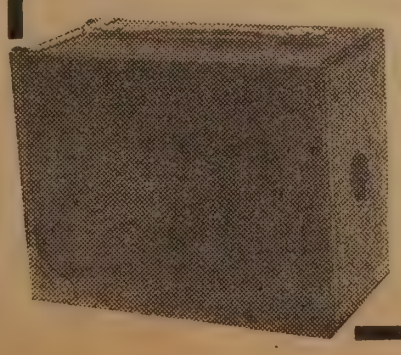
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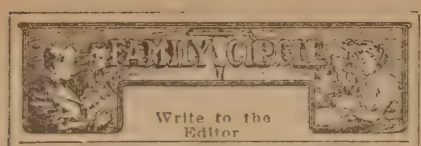
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ALICE W. BARLAND
Editorial Contributor

How the Women Help

It is hardly to the point to ask the question, What can the women do to end the war? because they are doing well now. A very large part of the $700,000,000 worth of poultry and eggs produced in the United States last year was a result of women's work. They are making no special business of poultry keeping, it is true, except in special cases, but they are embracing their opportunity, with the above result. The opportunities consist, in many cases, of an old shed for a poultry house, a few speckled hens and a granary and an apron. The feed bin and the apron are of considerable help when the "boss" isn't around.

Poultry on the farm, cared for very largely by the women, has been paying the grocery bills for years, buying the shoes, and when crops are poor, paying the tobacco bills.

The egg basket will help to win the war. The special opportunity for the women now is to insist upon a good poultry house for the flock, a liberal allowance of feed for the chickens, and one hundred good laying hens instead of fifty poor ones. This would mean an increase in the production of poultry and eggs of about half a billion dollars a year. The poultry crop for the present year should total one billion dollars. If it requires a thousand dollars to equip and feed a soldier for a year, the money value of the poultry crop will maintain an army of a million soldiers.

The women are doing their bit, but with a little help will do a bit more.

Secrets of Health and Happiness

If You Have "Tinea Tonsurans"

By DR. LEONARD KEENE HIRSHBERG.
A. B., M. A., M. D. (Johns Hopkins University).

Ringworms, scientifically known as "tinea tonsurans," are neither rings nor worms, but are really patches of mouldy skin or fungus growths on the epidermis. Yet ringworms may feel "crawly and itchy" as they sprout from the cuticle.


Dr. Hirshberg.

Examined under a high-powered microscope, the crusts, scales or fluffy discs at the edge of the ringworm, if moistened and soaked a bit in soda water, resemble the stems and twigs, branch and boughts of the spreading chestnut tree. If you plant in gelatin or beef boughs of the web-like shreds, they will flourish like a green bay tree. Indeed, you may be amazed to see them look like the bluish-green mold observable on stale bread or preserves.

Next to scabies or the itch, ringworms are a most common and prevalent dermal affliction. Like dirt itself, they are almost always with us.

Ringworms may occur on the face, chin, forehead, armpits or any area of the cuticle. Finger nail ringworms are the worst kind, and appear to bend, break and loosen the nails. These require vigilant and patient treatment by vigorous disinfectants in collodion. The lost, torn, broken and bent finger nails are slow to return. Indeed, the trouble itself is not always recognized because the typical appearance of the ringworm is not present.

Ringworms on the legs are raised, thick and red, with sharp edges. They must be diligently scrubbed off with a cheap hand brush, which is afterward destroyed or put in formalin. The ringworms are then washed with soda and finally massaged with ammoniated mercury ointment. This is to be repeated several times, after which the affected parts should be left severely alone.

Mild examples of ringworm on velvety, downless cheeks or arms may first be treated with an ointment composed of 15 grains of benzoic acid, 15 grains of salicylic acid, three teaspoonfuls of cocoanut oil and two tablespoonfuls or one ounce of vaseline. Tincture of iodine ought to be applied before this benzoic acid ointment. The last is to be kept on constantly.

I have often been asked what will stop a young man smoking cigarettes and cigars. First, the will to stop must be invoked. Then gum or caramel candies are to be chewed whenever the impulse to smoke appears. Slippery elm, licorice balls and a full stomach counteract the craving. Glycerite of tannin may be applied to the gums, tongue and smoke-thirsty parts.

The question of a treatment for stopping the craving of alcoholic liquors is also asked many times. There is a treatment, but it is preferably carried forth in a hospital or sanatorium. It is rarely successful at home. Moreover, the drugs used are dangerous except in the hands of those skilled in their use.

Do You Know That

Temptations resisted are stepping stones to success?

Crochet and Tatting Designs

By WINIFRED WORTH


Antique Yoke.

The patient crochet worker will find great reward for her time in making this attractive yoke.

Two balls No. 60 Cordonnet. Follow pattern. When complete finish off with 2 rows of 2 ch. 1 t. Then add scallop.

Begin in 5th hole. 9 tu. catch in 7th hole sl. st. to 8th hole. 1 t. 1 ch. in each 9 t. turn ch. 3. 1 t. 1 ch. 4 times 1 t. 1 ch. 1 t. 1 ch. in same space. 1 t. 1 ch. 4 times 1 t. 1 ch. 1 t. 1 ch. in same space. Catch in 9th hole sl. st. to 10th 1 t. 1 ch. to end. Turn 1 t. 1 ch. tu. Repeat until you reach 2 st. in 1 space of previous row. Ad 1 t. 1 ch. twice in same space. Finish row. Sl. st. to next hole, repeat to end of row, turn, and on last row add p. to every t. **This completes one fan.**



But pleasures are like poppies spread,
You seize the flower, its bloom is shed;
Or, like the snow-fall in the river,
A moment white, then melts forever. —Burns.

Dry Fruit and Vegetables.

Whenever practicable the housewife should dry her winter supply of fruits and vegetables, says Sarah L. Lewis, assistant professor of domestic science of the Oregon Agricultural college.

String beans should be prepared as for cooking and then dried in the sun or a warming oven. They will keep nicely all winter and are very delicious, but they must be soaked over night before using. By parboiling the beans before drying they require less cooking afterward.

Frock for Young Girl.



For little girls from 6 to 12 years old are made these frocks like smocks of rough white shantung silk. The collar is nothing but a soft bias piece of coarse woven saffron silk knotted low in front, and at the pointed ends are embroidered two purple roses, or even three, mabye, says the Kansas City Star.

Curried Lamb With Rice Border.

One pound lean lamb, one cup rice, one tablespoon cut onion, one teaspoon curry powder, one teaspoon salt, one tablespoon cut parsley, one tablespoon flour. Wipe the lamb with wet piece of cheesecloth, put in saucepan, cover with boiling water, add onion and salt and boil slowly two hours, or until tender. Mix the curry powder and flour with a little cold water, and add to the meat. Boil five minutes. The rice is washed, boiled, blanched and dusted with salt as usual, and put around the edge of platter. Put the meat and gravy in center; sprinkle parsley and dust with paprika.

Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Name .....

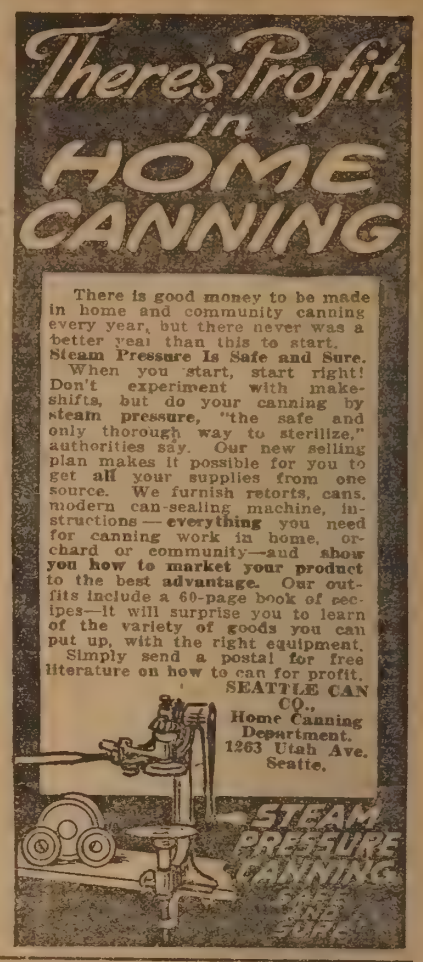
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Spokane, Wash. M. M. Higley, Pres.

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Shipments must not be less than 25-ton cars.

Combine with your neighbors and turn your worn out machinery into ready cash.

Write quick for quotations and shipping instructions.

Pacific Hide & Fur Depot
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1101 R. R. Ave., Spokane, Wash.

WANTED Cascara Bark

We buy cascara bark, Oregon grape root and Oregon balsam of fir at the prevailing market. Submit samples and quantity you have for sale.

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HAROLD SOMERS, 156 DeKalb Ave., Brooklyn, N. Y.

What Is the A. B. C.?

Audit Bureau of Circulations.

This is an association, nation-wide in its scope, not conducted for profit. Every publisher having membership in this organization pledges himself to sell circulation as a commodity, both as to quality and quantity. Advertisers using our columns are safeguarded. They know that we give all the circulation we offer.

Patterns

2093—Lady's dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 1-8 yards of 44-inch material for a 36-inch size. Skirt measures 3 yards at its lower edge. Price, 10 cents.

9821—Lady's one piece corset cover. Cut in 6 sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. It requires 1 3-8 yards of 36-inch material for a medium size. Price, 10 cents.

1647-1646—Costume for misses and small women. Blouse 1647 and skirt 1646 are both cut in 4 sizes: 14, 16, 18 and 20 years. It requires 3 1-2 yards for the skirt and 2 1-2 yards for the blouse of material 44 inches wide, for a 16-year size. The skirt measures about 3 1-2 yards at its lower edge. This calls for two separate patterns, 10 cents for each pattern.

1970—Lady's kimono. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 5-8 yards of 44-inch material for a medium size. Price, 10 cents.

2080—Girl's dress. Cut in 4 sizes: 1, 2, 3 and 4 years. It requires 2 7-8 yards of 27-inch material for a 4-year size. Price, 10 cents.

2077—Boy's rompers. Cut in 5 sizes: 2, 3, 4, 5 and 6 years. It requires 2 5-8 yards of 36-inch material for a 4-year size. Price, 10 cents.

2071—A smart bathing dress. Cut in 7 sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 5 1-4 yards of 27-inch material. Price, 10 cents.

1710—Girl's apron. Cut in 5 sizes: 2, 4, 6, 8 and 10 years. It requires 2 1-4 yards of 36-inch material for a 6-year size. Price, 10 cents.

1784—Girl's dress. Cut in 4 sizes: 6, 8, 10 and 12 years. It requires 3 1-4 yards of 44-inch material for a 10-year size. Price, 10 cents.

2078—Lady's apron. Cut in 4 sizes. Small, medium, large and extra large. It requires for a medium size, 4 3-4 yards of 36-inch material. Price, 10 cents.

1547—Lady's house dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 3-4 yards of 44-inch material for 36-inch size. The skirt measures about 3 1-8 yards at the lower edge. Price, 10 cents.

2085—Girl's dress. Cut in 4 sizes: 6, 8, 10 and 12 years. It requires 2 yards for the guimpe, and 3 yards for the dress, for a 6-year size, in 27-inch material. Price, 10 cents.

The coupon to be used in ordering these patterns may be found on the preceding page.

Why Stars Twinkle.

The so-called twinkling of the stars is chiefly an effect produced in our atmosphere upon the waves of light.





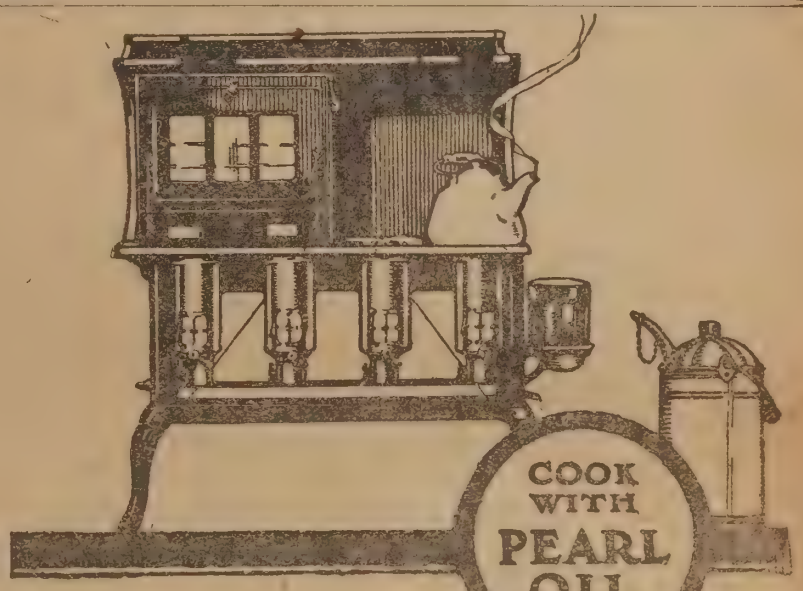
Choçolate is an appealing food—perhaps the most delicious of all foods. It is likewise *nutritious* food—perhaps the most nutritious.

When you buy Ghirardelli's Ground Chocolate you get the grand prize winner, a chocolate of finest quality packed in a hermetically sealed can that holds all the Ghirardelli goodness in and keeps all outside evils out.

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Bakes, broils, roasts, toasts. Better cooking because of the steady, evenly-distributed heat. More convenient than a wood or coal stove for all the year 'round cooking, and more economical.
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In 1, 2, 3 and 4 burner sizes, with or without ovens. Also cabinet models. Ask your dealer today.

NEW PERFECTION OIL COOK-STOVE

STANDARD OIL COMPANY
(California)



Boat Riding on the Columbia.

Dear Aunt Nellie: I am 12 years old and my birthday is June 30, and I am in the sixth grade. My teacher's name is Mr. Ryman. We live a quarter of a mile from school. We live at Cliffs, but we get our mail at Columbus, five miles from our place. We have four horses, one of them is mine. Her name is Gady. I ride her quite a bit. She is brown. We have three sheep, one cat, one dog and some chickens. We call the sheep Pearl, Betty and Pet. I have two sisters. My oldest sister's name is Hazel, and baby's name is Mildred. We live near the Columbia river, and go swimming and boat riding in the summer. We set a hen and put 15 eggs under her and only four hatched and two of them died. There are two left, and they are mine. I help mamma do the dishes, and sweep the floors. I help her plant the garden. We have a garden drill. We have planted a lot of flowers and a garden. I have a garden by myself. Our school closed May 18. I can embroider and crochet. I like to read the Children's Corner, and would like to win a prize.—Beulah Walker, Columbus, Wash.

The Easter Rabbit Came All Right.

Dear Aunt Nellie: I wish some girl of my own age, which is 10, would correspond with me. I think Anna S. Hutsell wrote a nice letter. This is my fourth letter to the Corner. Whenever the Farmer comes into the house I always look for the Children's Corner. I help mamma with the housework. In the summer I milk two cows. I will tell you about my sister's surprise and my brother's and mine. It was last Easter. We children went upstairs to bed. In the morning my brother got up to make oil meal for the calf. In the oil meal drawer he found a green egg. Mamma called Louida, my sister, and I. So I went downstairs to set the table, and under a bucket I found a pink egg. Then my sister went to get her shoes, and in one was a purple egg. That morning, before it was daylight, she asked "Has the Easter rabbit come yet?" I said I did not know. When she found the candy in her shoe she came downstairs as fast as her little legs could carry her and showed us. She said, "I put on my shoe and I felt something in it. I looked, and there was this purple egg."—Theresa S. Wilson, Grays River, Wash.

Ethel Is Not Lonesome on the Farm.

Dear Aunt Nellie: I am 14 years old. I go to Cliff's school, but we get our mail at Columbus, Wash. We have 10 pupils in our school. Our teacher's name is Mr. Ryman. I haven't been in Washington quite a year. I have one sister and two brothers. My sister's name is Lily and my oldest brother's name is Arthur and my youngest brother's name is Melvin. I wash the dishes and clean up the house before I go to school. We have 204 little chickens and eight old hens. We have a cow and a calf. I planted some garden seeds and more than 13 packages of flower seeds, some of them are up. I have so much to do on the farm that I do not get very lonesome. We will soon have a post-office at Cliffs. Columbus is five miles from our place. I can crochet and tat and can do other needlework. I have one quilt made. I like to crochet the best.—Ethel May Miller, Columbus, Wash.

Earned a Flag for the Schoolroom.

Dear Aunt Nellie: This is the first time that I have ever written to the Corner, but I hope it won't be the last time. I was 13 years old the 30th of January. I am in the seventh grade at school. I go to the town school. I am going to tell how we earned our flag. Our room at school didn't have any flag. Miss Averill, our teacher, thought it would be nice for us to earn it. One morning she brought to school a box of little silk flags. We were to sell them at 5 cents apiece. To make it more interesting, we chose up sides and the side that sold the least was to give a program. Altogether we made over $11 dollars. We took part of the money and got a large flag. The rest went for books for our library. The day that our big flag came we had a big program and every one was in it. We have it up in our schoolroom now. It is very pretty. I wish some one of my age would write to me.—Bernice Baker, Box 267, Colfax, Wash.

Best of All She Likes to Cook.

Dear Aunt Nellie: I live on the Twin Roy and 16 miles from Tacoma. Papa Royand 16 miles from Tacoma. Papa takes cream and eggs to Tacoma every week. We have six milch cows. Their Molly and Eva. We have six calves Molly and Sva. We have six calves and their names are Lady, Baby, Fawn, Girlie, Spot and Snips. We have two horses and 200 chickens. I have three brothers, who are all younger than myself. We go to the Oak Knoll school, one-fourth of a mile from our house. Our teacher's name is Eugenie Hicker. I am 12 years old and am in the eighth grade. My birthday is July 1. I like the farm very much and would not trade it for any city home. I help mother in many ways, such as sweeping the floors, making the beds, washing the dishes, but, best of all, I like to cook the meals. In the winter time I go sleigh riding with my friends. We hav a big bobsled and my brothers and I coast down the big hill on our farm in it. In the summer I make a garden of my own and help mama and papa with theirs. I have one pet cow and one pet cat that I like very much.—Esther M. Bower, Roy, Wash.

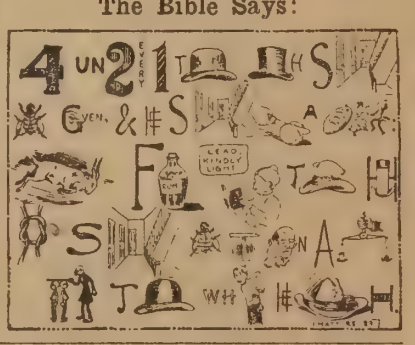
The Country Side Usually Wins.

Dear Aunt Nellie: My favorite study in school is grammar. We often have debates at school and our favorite topic is: Resolved, That we can get more pleasure from living in the country than in the city. I have always been on the country side and usually the country side wins, (not because I was on that side though). I will tell you why I would rather live in the country—because we have pure air, we can go picking berries, go swimming and fishing in the lakes and streams, climb trees, and roam through the woods. Well I would rather live in the country than in the city. I live on a 40-acre farm in Whitby Island. Before we came here we lived in Ballard or Seattle, Wash., and before we came to Seattle we lived in Alaska. I lived in Alaska 10 years. I would like to go up there again just for a visit. I am 13 years old and my birthday is the 12th of March. I would be very glad to write to any of the cousins if they would write to me.—Amy Lauth, Clinton, Wash.

About Edith and Her Twin Sister.

Dear Aunt Nellie: I am a little girl 9 years old. I live on a 160-acre farm. I have two sisters and one brother. One is my twin sister. Her name is Edna Ida and my name is Edith Irma. Our brother's name is Clarence. He is 11 years old and in the sixth grade. Our baby sister is 5 years old. Her name is Thelma, but she does not go to school yet. Our school will be out in three weeks, but if I do not miss in that time I will neither be absent or tardy for three years. I go sick or well. We love to go to school better than anything else. We have a mile to walk to school, and our teacher's name is Miss Emma McCabe. We are in the fourth grade. We have a pony to ride. We have a piano, but I can't play much yet, but mama says she will give us

The Bible Says:



lessons when we get a little older. I help mama do the work in vacation. I wash dishes, peal the potatoes, sweep and dust and help pick fruit to can. I love to live on the farm. I have two pet cats and two little pigs. I love to read the letters in the Corner.—Edith Peterson, Pomeroy, Wash.

School Is Not Far From Home.

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner and I hope it won't be the last. I am a girl 10 years of age. I am in the third grade. My birthday is the 11th of February. My teacher's name is Bess McGuire. I like her fine. I had the measles a few weeks ago. I have six sisters and one brother. We have eight cows, one pig, 20 ducks and around 30 chickens. We got a dog and cat which we found this winter. We have 20 acres of land. I go to school which is not very far from home. Every week I run and meet papa and get the Farmer first so I can read the Children's Corner. I wish I could win a prize. I saw a girl's letter in the Corner last time. She was born February 11 and 10 years old. Her name was Agnes Davis and she lived in Hulby, Wash. I wrote her a card a few days ago.—Pernille Hanson, Lakewood, Wash.

Play and March by Grafonola Music.

Dear Aunt Nellie: This is the third time I have written to the Children's Corner. I like the Corner very much. I hope we can keep it always. I like to go to school. I am 12 years old. The flowers are all in bloom here now. I have been flower-picking three times already. I am sending you a yellow-bell. I have for pets one cow, one cat, five bantams and lots of big chickens. I like to make flower gardens. I am putting lots of garden in. I am in the fifth grade. We had a test in geography today. I don't know what I got, for I haven't got my paper yet. We have a grafonola in the school. We play and march by it. One of my bantams hid her nest and I found it. It had 10 eggs in it. My sister found a bantam's nest with 11 eggs in it.—Rosalie Arledge, Dixie, Wash.

Children All Cleaned Up the Yard.

Dear Aunt Nellie: I am the oldest girl in our family and I have four sisters. Their names are Louise, Josephine, Jennie and Priscilla. Louise is 8 years old and in the fourth grade. My cousin stays with us. His name is George and he is in the sixth grade. He is 14 years old. I am 10 years old and in the sixth grade. George, Louise and I are going to have a garden. There is going to be pumpkins, carrots, mignonettes and poppies in our garden. We have three chickens and six ducks and we get a few eggs from them. We walk a mile and a quarter to school. The school is red and has a green roof on it. There is only one room in our schoolhouse and two halls. We had a basket social up at the schoolhouse April 7 and they got $21. Friday afternoon at 2 o'clock all the children helped clean up the yard and we made three or four fires. There are 26 pupils in school. Eight of them are boys and 18 are girls. My teacher's name is Miss Shelly.—Florence Hwang, Olalla, Wash.

Wilber Likes His New Home Fine.

Dear Aunt Nellie: I will be 10 years old the 22d of September. I go to school. The name of our school is the Hart school. It is two miles from our place. We came here last fall from Mansfield, Wash. We like our new home. We have a lot of trees on it. I have five brothers. Their names are Wallace, Arthur, Ralph, Howard and Nelson. Wallace is older than I am and the others are all younger. I am going to school. I have two brothers going to school. There are 15 pupils in our school. Our school is out the 18th of May. This is the first time I have written to the Corner.—Wilber Davis, Davenport, Wash.

Day Her Dog Died Was the Worst.

Dear Aunt Nellie: I enjoy reading the letters very much. The subject I am going to write on is, "My Worst Day." One day in summer I went to see my friend, Katie Schierman, and stayed all afternoon. When I got home my brothers came and told me my pet dog was dead. They said a naughty man ran over him. I felt very badly all the rest of the day. We had another pup and he is my pet dog now. I have not forgotten my first pet dog. I am 14 years old and I am in the sixth grade. My teacher's name is Miss Busby. I like her just fine. I will write again.—Leona Machlied, La Crosse, Wash.

Reads the Corner Every Week.

Dear Aunt Nellie: I am 11 years old and I am in the fifth grade. I have a sister and three brothers. My sister is 12 years old and my oldest brother is 22 years old. My other brother is 18 and my youngest brother is 16. I live on an 80-acre farm. We have 20 cows, three calves and two horses. We have about 30 chickens and two big sheep and three little lambs. I go to the normal school. There are 104 pupils in our school. My teacher's name is Mary McDougall. I read the Children's Corner every time we get the paper.—Esther Dale, Stanwood, Wash.

Effie Likes to Play the Piano.

Dear Aunt Nellie: I have been reading the Children's Corner and like it very much, so I thought I would write. I am 9 years old and I am in the fourth grade. My teacher's name is Harriet Snodgrass. I only missed two days of school. I have three brothers. Their names are Elmer, Ora and Albert. We live on a farm of 640 acres. We have 99 chickens. We have 26 horses. We have four dogs. Their names are Curly, Heck, Fido and Nero. Curly is my dog. We have eight head of cattle. We have a car and a piano. I like to play.—Effie Grace Ludlington, Bright, Wash.

Likes the Children's Corner Best.

Dear Aunt Nellie: We take the Washington Farmer. I like the Children's Corner best. I live on a farm. My papa has 1000 acres on his farm. He has 250 head of cattle and 95 head of horses. I have a sister and a brother. Their names are Earl and Thelma. My birthday is the 19th of November. I go to the White Swan school. It is the 13th of April now. Our school will be out the 11th of May. I am in the fifth grade and 10 years old.—Neta Gallaher, Mansfield, Wash.

All Have the Whooping Cough.

Dear Aunt Nellie: I enjoy reading the Children's Corner, so I thought I would write and see if my letter would be in the Corner. I am 8 years old and am in the fourth grade. I have two sisters and two brothers. My sisters' names are Emily and Bernadine. My brothers' names are Overton and Robert. All in our family but mama and papa have the whooping cough. I go to the Sandy Bend school. I would like to correspond with anybody my age.—Helen Blanchard, Castle Rock, Wash.

Plays Hide and Seek With Her Dog.

Dear Aunt Nellie: I saw my letter in print and I thought I would write again. I am in the fourth grade. There are 12 pupils in the school I go to. My teacher's name is Miss Larson. I have a pet dog. His name is Ford. I can play hide and seek with him.—Edna Webb, Wilson Creek, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Hilma Engluad, Leona Jacks, Lucile Brannan, Velma McAtee, Sammie Robertson, Ida Dock, Annie Fowler, Grace Miller, Alexander Weitz, Bessie Cochran, Ethel Harriman, Grace McKibben, Barnetta Bartholomew, Ruth Crabb, Nettie Jackson, Joyce Hatch, Kenneth Redman, Helen Smith, Esther Dale, Doris Streeter.

To Get a Flag Write Soon



With the declaration of a state of war our first supply of flags was quickly exhausted and we have had great difficulty in securing more.

We have at last secured a limited number of flags which we offer on the following terms:

OFFER NO. 1

3x5 flag together with The Washington Farmer for three years. Both for $2.50.

OFFER NO 2.

4x6 flag together with The Washington Farmer for three years. Both for $3.00.

We would suggest prompt action; orders will be filled as received.

The Washington Farmer, Review Bldg., Spokane.

Enclosed find $.... (your personal check, stamps or money order), for which send me American flag, as advertised, and The Washington Farmer for 3 years.

Size of flag .....

Name .....

Address .....

.....

A Fielder's Glove Like the League Players Use



Order by Number. G 100.

Special brown tan on straight thumb pattern, with white welted seams; heavily padded with deep pocket and strong leather lining. Retails for $1.25. We will send it postpaid to any boy who sends us two yearly subscriptions to The Farmer. The Farmer is $1.00 a year. Address

The Washington Farmer

Premium Dept., Review building, Spokane, Wash.

Read Your History As It Happens

Do you realize that the days we are living through now are among the most momentous in the history of the world? Our country is making preparations for war on such a gigantic scale that the effects are felt in every home throughout the land. Our sons and brothers will soon be marching in the military encampments. In a few months they may be fighting a ruthless foe in foreign trenches, while our sisters and daughters are nursing wounded soldiers of France, Belgium, England and America. It is your duty, it is your opportunity to keep yourself and your family thoroughly in touch with these world-quaking, home-shaking events. Do not stop your ears to the call of the bugle. Do not shut your eyes to the glare of the campfire. The whole panorama of our modern history as it unfolds is faithfully reported by

The Twice-a-Week Spokesman-Review

This is a splendid semi-weekly home newspaper which brings you every Tuesday and Friday a complete, accurate, condensed review of local, national and world events.. It gives you a reliable narrative of history in the making. Being a member of the Associated Press, the important happenings are flashed to it instantly from every capital and village, and from every far-flung battle line where the history of our day is being set down in ink and blood.

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The A B C of Road Construction

Road Surface Enters Into Cost of Hauling Produce

By FRANK W. GUILBERT.

Chairman Executive Committee Washington State Good Roads Association.

Some very interesting comparisons have been compiled showing the saving to be gained by improvement of road surfaces and keeping them in good condition at all times of the year.

We showed that excessive grades meant the limiting of loads for the haul in which these grades were permitted to remain. Or, that by reducing the pitches on a stretch of road the cost of transportation of the entire tonnage to be hauled over it would be affected and lessened.

Another element entering into the cost of hauling produce to market is the character of the road surface. Careful calculations have been made which go to show a very great saving in cost by reason of the variation from soft material, like loose sand and mud, to the other extreme in the nature of iron plates or rails.

From tests made covering a variety of materials the following facts were establishd:

It took 10 horses to pull 6270 pounds through sand and mud roads.

The same load on a loose gravel or common earth road required five horses to move it.

On a good gravel road two horses took care of the haul.

It was found that on a good macadam (presumably waterbound macadam) road only one horse took care of the 6270 pounds, and on steel rails only one-sixth of a horse power was required.

These tests all apply to haulage on a level road.

An interesting result was brought out in a test made with a narrow-tired wagon of the measure of force necessary to haul a wagon in a plowed field and the same wagon in a stubble field of tall wheat stubble.

On plowed ground the force required to pull the narrow tired wagon with a ton load straight ahead was found to be 808 pounds. In the stubble field it needed but 516 pounds of force. With a load of two tons in the plowed ground it took 1300 pounds and, with the same conditions governing, only 872 pounds in the stubble.

On a curve in the plowed ground 944 pounds of force were required to pull the wagon with the one-ton load. In the stubble field the result was obtained with the expenditure of a force of but 572 pounds.

This is interesting, especially to the farmer, and really has a bearing on the argument for compacted roads containing some binding factor.

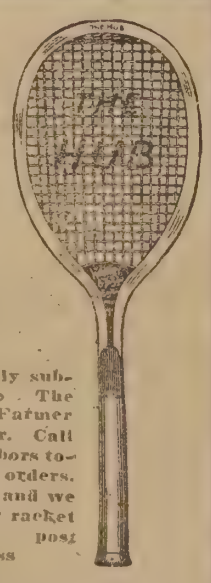
Big Elevator for Spokane.

Simultaneously with purchasing additional ground for its Seattle plant, the Centennial Mill company has acquired a seven-acre tract site north of the Interstate fairgrounds on the Northern Pacific for the construction of a million-bushel terminal elevator in combination with a large flour mill of greater capacity than the present Spokane plant of the company on Howard street.

Talley to Teach at Mt. Vernon.

Wilfred H. Talley of the Washington State college will teach science in agriculture in the high school at Mt. Vernon, Skagit county. He will have charge also of the boys' and girls' club work during the summer.

Boys Girls



We are offering you one of the strongest and most durable tennis rackets on the market in return for three yearly subscriptions to The Farmer. The Farmer is $1.00 a year. Call on your neighbors today, get the orders, send the cash and we will ship your racket immediately, post paid. Address

The Washington Farmer

Premium Dept., Review Bldg., Spokane, Wash.

The Motor Car
On the Farm

Pressure in Tires.

How many pounds air pressure should ordinarily be carried in tires in hot weather? L. D.

There is a more or less general impression that blowouts are liable to be caused by expansion of air in hot weather. Of course, some expansion occurs, but the accompanying pressure is not sufficient to be of serious consequence. The number of pounds increase in pressure is less than one-third the number of degrees increase in temperature. In other words, when the temperature of air in a tire rises 10 degrees the pressure is increased about three pounds.

A fixed rule for the inflation of tires can not be given owing to the fact that the same results are not experienced from the same degree of pressure under all conditions. The road conditions, speed, power, weight of machine and its load are some of the factors which have a direct bearing upon the inflation which will be most satisfactory.

The following simple formula is suggested by a tire manufacturer as a means of determining approximately the correct pressure. "For front tires multiply the width across tire by 15 to 18. A four-inch tire for example requires 60 to 72 pounds (4x15 equals 60), (4x18 equals 72.) For rear tires multiply by from 15 to 20 pounds instead of 15 to 18 pounds."

A good method is to pump up the tires in accordance with the formula and then, if necessary, reduce the pressure slightly until they do not cause excessive vibration to the car and there is not too great slippage of the rear wheels. Make a record of the pressure at this point and keep the tires at this pressure except when conditions are such as to make a change advantageous.

Want Ads

HELP WANTED—MALE 3

HAWTHORNE AUTO SCHOOL,
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free.
BEHNKE-WALKER BUSINESS COLLEGE, 167 FOURTH ST., PORTLAND, ORE.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Manufactured in our own mill and sold at factory prices. We ship to any one, anywhere. One price to everybody. Prompt shipments. Safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request.

5 cross panel doors, 2 ft. 6 in. by 6 ft. 6 in. $1.44
Craftsman bungalow doors 1.90
One panel, 3-ply veener doors 2.00
French doors, 15 lights 3.00
Screen doors, 2 ft. 8 in. by 6 ft. 9 in., galvanized wire 1.50
Standard two light windows, up from.. 1.13
8x10, 4-light sash ..... .52
16x16x26 spruce flour bins 1.50
Drain boards, 20x24 ..... .75
Williams' "Gold Seal" mixed paint, gal. 2.50
Frames, mouldings, builders' hardware, mill work.

O. B. WILLIAMS CO.
1943 1st Ave. So. Seattle, Wash.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, the Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MISCELLANEOUS—FOR SALE 60 Continued.

WRIGHT GOODS FOR THE BEEKEEPER, made at the western factory. Hives, supers, cans, cases. Wax received. Write for catalog. A. E. Wright & Sons, 713 Albany, Caldwell, Idaho.

MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES SAVE labor and are carried in stock by HIGGINS MACHINERY COMPANY 312 1st ave. South, Seattle, Wash. Write for catalog.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174

BABY CHIX.

White Leghorns, the kind that are real dividend payers, bred for 16 years for eggs, size, VIGOR, VIM and VITALITY. $10 per 100, from the oldest established hatcher in the state. Delivery in good condition guaranteed. Lakeside Poultry Farm, Roy, Wn.

BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.

LIVE STOCK 177

FOR SALE—PUREBRED, REGISTERED Hampshire pigs, either sex, March farrow. H. E. Richardson, R. F. D. No. 1, Chico, Cal.

MILCH GOAT CHEAP, FOR SICK BABIES. Mrs. C. W. Post, Troutdale, Ore.

BERRY PICKERS' TAGS 373

BERRY PICKERS' TAGS.

Free samples sent to berry growers. Write me. New idea. C. Anderson, Puget Route, Olympia, Wash.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 187 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

YELLOW DENT CORN, FIELD PEAS, SUDAN GRASS, RED CLOVER, WHITE BEANS. Complete line of "highest quality" garden seeds. Catalog free. ROUTLEDGE SEED & FLORAL CO., 145 Sec. st., Portland, Ore.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

FARM LANDS—FOR SALE 651

MONTANA LAND.

Great opportunities are open to you in improved and unimproved places in Judith basin, eastern Montana, Shields River valley, Musselshell valley and Great Falls districts at very attractive prices and on easy terms. We have several good places with fine growing crops that offer a fine investment if bought at present prices. Call or write for land list and full particulars. Tell us what you want and we will submit you something to suit.

HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG.

GOLDEN OPPORTUNITIES—THE BEST land that lies outdoors, the Gem district, close to railroad and electric line, where raw land will produce and has produced 65 bushels wheat, 93 bushels barley, 120 bushels oats and 9 tons alfalfa per acre; first crop out of sage brush; a few pieces can still be had for $50 per acre. Write for particulars to Nichol, the land man, Caldwell, Idaho.

400-A. STOCK FARM, 14 MILES FROM stock yards, 1½ miles to store and station; spring water; 6-room house; barn and outbuildings; fruit and timber; $5000 will handle. W1204 Indiana, Spokane, Wash.

IF YOU ARE LOOKING FOR GOOD farms, we have improved and unimproved farms for sale; also relinquishments and homesteads. Write Hall & Vollmer, Sumatra, Mont.

400-ACRE RANCH.

Three miles from Centerville, 4½ miles from Goldendale. Crop with place until harvest. $30 per acre. Terms. C. A. Lester, Centerville, Wash.

FOR SALE, OR EXCHANGE FOR SMALLer ranch—300-a. stock and grain ranch; big crop in; good pasture. Owner, M. Waters, Willamina, Ore.

80 ACRES, GARDEN SPOT OF IDAHO; 50 in crops; alfalfa, fruit, grain; terms. E. Cope, Ontario, Ore.

FARM LANDS—FOR SALE 651 Continued.

MONTANA LAND;
GOOD LAND; PARTLY IN CROP;
JUDITH BASIN.

750 acres, best part of basin; 200 acres winter wheat, looks fine, half to buyer; 350 spring wheat, one-third to buyer; 650 acres steam plow land, not over 40 acres waste; nice spring and stream; 2½ miles to town; good house. Price $75 an acre, and worth every cent of it on cash basis. Will take good Palouse farm, worth $15,000 to $20,000, part payment, balance easy terms.

SHIELDS RIVER VALLEY.

720 acres in best part of famous Shields River valley; no better winter wheat section in northwest; 226 acres winter wheat; 75 acres oats and barley; 35 acres alfalfa; 250 inches water; plenty to irrigate 250 acres; fine trout stream; not over 40 acres waste land; new 5-room bungalow, big shed and granaries; good spring near the house; equal to best Palouse soil. One of the best grain and stock farms in the country; over 600 acres steam plow land; all crop goes for short time at $70 per acre. Will take good land in Washington, clear, up to $20,000, balance good terms.

FINE STOCK FARM.

560 acres, 2½ miles to good town; 250 acres timothy and clover; 100 acres in barley; 350 acres irrigated; very little waste land; 2½ miles to good town; good 7-room house; located in coal district; geologists say most of this land is underlaid with coal; buyer gets half the hay, one-third the barley and full conveyance of coal rights at $60 per acre. Will take good farm land in eastern Washington for about half, balance to suit.

640 acres, in good grain district; 450 in crop, one-third to buyer; not over 40 acres waste; good spring and stream; 2 miles to town. Price $45 per acre. Will take good eastern Washington land, clear, up to $15,000, balance good terms.

The above places are all good land, personally inspected and worth the money in cash. Have other good Montana lands, on which owners will take good land as part payment. Write and tell us what you have to trade.

HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG., SPOKANE, WASH.

MONTANA LAND,
CROP GOES TO BUYER.

320 acres, in good grain district, 100 in crop, all goes to buyer; 90 per cent tillable; good spring. Price $22 per acre; good terms; no trade.

320 acres, 280 in crop, all goes, not over 15 acres waste land; some surface stone on part; good grain district; $35 an acre.

A GREAT BARGAIN FOR PROMPT ACTION.

800 acres in one of the very best grain districts of Montana; probably surest winter wheat crop district in Montana; 350 acres winter wheat, in fine condition; 150 acres spring grain; 150 acres fine hay; very little waste; lies nice and level, nearly all steam plow land; soil equal to the best in the west for grain; fine prospect for 30 to 40 bushels per acre on the wheat; in a district where 40 bushel crops are very common; fair set of buildings; 12 miles to good town, but good road; all the crop goes now at $60 per acre, but see us or call us on phone immediately if you want this place, as it is subject to withdrawal or raise in price.

HEGE & WATKINS CO.
715-16-17 Paulsen Bldg., Spokane, Wash.

IMPROVED FARM.

331 acres, over 200 in high state of cultivation, practically all in crop, balance easily cleared; rich deep dark loam; running water; good buildings; water piped to buildings; fully equipped with stock and machinery; only 22 miles from Portland, on Pacific Highway, which will now be paved; an hour's run with auto; close to S. P. electric, and one of the best towns in the Willamette valley. This is a money-maker and will stand close investigation; best of reasons for selling.

CALLAN & KASER.
414 OREGON BLDG., PORTLAND, ORE.

MONTANA LAND.

38,000 acres, $14 an acre, to be sold in section lots, 75 to 80 per cent tillable; 3 to 12 miles from railroad; Eastern Montana average rainfall 19 inches; raises good corn and all grains grown in Montana; deep rich soil, very little stone, average price in section lots, $14 an acre. New tract just put on the market this week. Go with us at once and get your choice. Call or write for particulars.

HEGE & WATKINS CO.
715-16-17 Paulsen, Bldg., Spokane, Wash.

NUMBER OF SMALL FARMS FROM 2 TO 20 acres, all in cultivation, with excellent water rights, from one to two miles from Boise and Payette, Idaho, that can be turned in at very low price and on long and easy terms. Will accept as part payment good motorcycle, Ford, sheep or poultry. Very high grade property, producing finest crops.

ADA COUNTY ABSTRACT CO.
BOISE, IDAHO.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C., M. & St. P. Ry., 2d and Cherry st., Seattle, Wash.

BIG MONEY RAISING VEGETABLES and chickens, greenhouse and 160 acres of land, near Spokane, cost $15,000, offered at $4500; easy terms.
PENNSYLVANIA MORTGAGE INV. CO.
SPOKANE, WASHINGTON.

TO EXCHANGE—REAL EST. 705

FARM WANTED
For
One of the Finest Residence
Properties in Spokane;
Cost Over $35,000. Price $22,000.
Reed Realty Co., 627 Peyton Bldg., Spokane.

Grain and Produce Markets

Chicago Grain.

CHICAGO, June 9.—Big jumps in wheat prices took place today as a result of the smallness of the 1917 crop indicated by the government report. After an extreme leap of 16 cents a bushel the market closed firm, 7c to 11c net higher, with July at $2.35 and September at $2.02. Corn gained ½c to 7¼c; oats, 1½c to 2c and provisions 15c to 30c.

It had been generally expected that wheat crop improvement during the last month would be shown to have been much greater than turned out to be the case.

Activity on a broad scale characterized the corn market. Heavy buying made prices advance rapidly. The chief stimulus to purchase came from cold weather. Considerable buying was said to be in progress on the theory that meats would continue to sell at high prices and corn, therefore, would be in urgent demand for feeding.

Bullish construction of the government crop report tended to lift oats. The official estimate of the yield was not so large as had been generally expected.

Cash Quotations.

CHICAGO, June 9.—Wheat—No. 2 and No. 3 red, nominal; No. 2 hard, $2.72; No. 3 hard, nominal.

Corn—No. 2 yellow, $1.73@1.74; No. 3, $1.72¾; No. 4 yellow, nominal.

Oats—No. 3 white, 66@67c; standard, 66½@67¼c.

Rye, nominal. Barley, $1.15@1.45.

Timothy, $7.50@8. Clover, $12@17.

Chicago Futures.

Wheat—	Open.	High.	Low.	Close.
July	2.29	2.40	2.29	2.35
Sept.	1.96	2.02	1.96	2.02
Corn—				
July	1.57¼	1.58	1.55½	1.57¼
Sept.	1.47⅛	1.50¼	1.47⅝	1.49⅞
Oats—				
July	.60½	.62½	.60½	.61½
Sept.	.52	.53½	.52	.53¼
Pork—				
July	38.05	38.30	38.05	38.25
Sept.	38.05	38.20	38.05	38.20
Lard—				
July	21.42	21.65	21.42	21.55
Sept.	21.50	21.80	21.50	21.67
Ribs—				
July	20.77	21.90	20.77	21.90
Sept.	20.97	21.07	20.97	21.02

Pacific Northwest Grain.

PORTLAND, Ore., June 9.—Grain—Wheat—Bluestem, $2.61; fortyfold, $2.56; club, $2.56; red Russian, $2.50.

Oats—No. 1 white feed, $46.50.

Barley—No. 1 feed, $42.

SEATTLE, Wash., June 9.—Wheat—Bluestem, $2.64; Turkey red, $2.64; fortyfold, $2.60; club, $2.60; fife, $2.60; red Russian, $2.60.

Barley, $44 per ton.

TACOMA, June 9.—Wheat—Bluestem, $2.63; fortyfold, club and red fife, $2.60; red Russian, $2.55.

WALLA WALLA, June 9.—Club wheat, $2.40; bluestem, $2.47.

Barley, $42@44.

San Francisco Grain.

SAN FRANCISCO, June 9.—Barley—December, $2; July new, $2.10 asked.

The Wool Market.

BOSTON, June 8.—The Commercial Bulletin will say tomorrow:

"The Boston wool market has been active during the last week, particularly on wool suitable for government uses. A little demand is in evidence for civilian purposes. Prices are higher by 2 to 3 cents a pound in the grease. Manufacturers are busily engaged on government work.

"In the west buyers are taking the new clip wools steadily, prices for which are also advancing. Scarcely any medium wools are available in the far west under 55 cents and some sales have been made of choice three-eighths clips at around 57 cents."

Scoured basis: Texas, fine 12 months, $1.55@1.60; fine 8 months, $1.35@1.40.

California, northern, $1.55@1.60; middle country, $1.25@1.30; southern, $1.10@1.15.

Oregon, eastern No. 1 staples, $1.55@1.60; eastern clothing, $1.30@1.35; valley No. 1, $1.95.

Territory, fine staple, $1.65@1.70; half blood combing, $1.45@1.50; three-eighths blood combing, $1.30@1.35; fine clothing, $1.35@1.40; fine medium clothing, $1.20@1.25.

Pulled: Extra, $1.75@1.80; AA, $1.65@1.75; A supers, $1.45@1.50.

Portland Wheat.

PORTLAND, Ore., June 9.—There is only a small demand for wheat coming from millers at the Coast and in the interior, but so light are remaining stocks that prices are being forced up at a rapid rate. Closing cash bids at the merchants' exchange were: Bluestem, $2.61; club and fortyfold, $2.56; red Russian, $2.50. Oats closed steady here at $46.50 bid, though there were sales at the same time on the Sound at $50. The oats situation is the same as wheat, stocks being practically exhausted.

The flour market is strong. There was a 40 cent advance in the latter part of the week to the $12 basis for patents, and another rise of the same extent is looked for in a day or two. Mill feed prices are gradually declining.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., June 9.—Hogs—Receipts, 8200; market 10c lower. Heavy, $15.10@15.30; mixed, $14.90@15.10; light, $14.75@15.10; pigs, $12.50@14.50; bulk of sales, $14.90@15.10.

Cattle receipts, 800; market steady. Native steers, $10@13.35; cows and heifers, $8.75@11.50; western steers, $9.50@12; Texas steers, $9@10.50; cows and heifers, $8.50@10.25; canners, $6.50@8.50; stockers and feeders, $7@11; calves, $10@14.50; bulls, stags, etc., $8@11.

Sheep—Receipts, 100; steady. Yearlings, $13@14.50; wethers, $12@13.25; ewes, $11@13; lambs, $17@18.

At Chicago.

CHICAGO, June 9.—Hogs—Receipts, 10,000; weak, generally 10c to 15c under yesterday's average. Bulk, $15@15.60; light, $14.50@15.40; mixed, $14.85@15.75; heavy, $14.90@15.80; rough, $14.90@15.10; pigs, $10.50@14.50.

Cattle—Receipts, 1000; steady. Native beef cattle, $9.20@13.75; stockers and feeders, $7.40@10.50; cows and heifers, $6.25@11.75; calves, $9.75@14.50.

Sheep—Receipts, 2000; steady. Wethers, $8.30@10.80; lambs, $9.50@14.50; springs, $12@16.50.

At Seattle.

SEATTLE, June 9.—No receipts today. Cattle and sheep steady; hogs 20c lower.

Hogs—Prime light, $15.55@15.70; medium to choice, $15.30@15.40; smooth heavies, $14.80@15.20; rough heavies, $14.30@14.70; pigs, $13.50@14.50.

Cattle—Best steers, $9.50@10.25; medium to choice steers, $8@9; common to good cows and heifers, $6@8; best bulls, $7@8; common to good bulls, $4@6.75; calves, $6.50@11.50.

Sheep—Prime lambs, $13@13.50; good lambs, $12.50@12.75; wethers, $11@12.50; ewes, $10@11.

At Portland.

PORTLAND, Ore., June 9.—Hogs—steady; receipts, 277. Prime heavy, $15.25@15.35; prime light, $15.10@15.25; bulk of packing grades, $15@15.25; rough heavy, $13.50@14.25; pigs and skips, $13@13.50; stock hogs, $12@13.

Cattle—Steady; receipts, 491. Steers, prime light, $9.75@10.25; prime heavy, $9.50@10; good, $9@9.25; cows, choice, $7.50@8.25; medium to good, $7.50@8; ordinary to fair, $7@7.50; heifers, $7@8.50; bulls, $5@7.50; calves, $7@8.50.

Sheep—Steady; receipts, 594. Spring lambs, good to choice, $13.50@14; spring lambs, fair to good, $13@13.50; spring lambs, culls, $11@12; shorn lambs, good to choice handy weights, $11@12; shorn wethers, good to choice, $10@10.50; shorn ewes, good to choice, $9@9.50; yearlings, long wool, $13.50@14; yearlings, short wool, $12.50@13; yearlings, prime shorn, $10.50@11.65.

Spokane Stockyards Saturday.

Hogs—Receipts, none; market steady. Prime heavy packing, $15.25@15.40; prime light packing, $15.10@15.25; rough heavy, $14.25@14.40; pigs, $12.50@13.50; stockers, $12.25@13.50.

Cattle—Receipts, 35; market steady. Prime heavy steers, $10@10.25; prime light steers, $9.80@10; good steers, $9.25@9.75; prime cows, $8.50@9; good cows, $8@8.50; common cows, $6.25@7.25; best heifers, $8.75@9.75; bulls, $6@8; calves, $8@10; stockers and feeders, $6@9.

Sheep—Receipts, none; market steady. Prime lambs, $13@13.50; common lambs, $12@12.50; prime shorn yearlings, $10.25@11; choice shorn ewes, $9@10.

Seattle Market.

SEATTLE, June 9.—Indications that the Kennewick berry season is drawing to a close, so far as this market is concerned, were furnished during the last three days in the diminishing size of the fruit. Jobbers have been endeavoring to get $3.75 per crate, but the quality was against them and only in a few instances would buyers pay within 25c of the price.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 32@24c per dozen.

Poultry—Live hens, fat, over 4 lbs., 19c per lb.; 3 lbs. and under, 17c; old roosters, 12c per lb.; springs, 22c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 14c per lb.; broilers, live, 17@21c per lb.

Butter fat—42c per lb.; dairy butter, 30@31c per lb.

Beef—Buying price: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 13@15c per lb.; do heavy, 12@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 32c per lb.; salted calf, 32c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 36c per lb.; dry calf (under 6 lbs.), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry butcher full wool sheep pelts, 30@33c per lb.

SELLING PRICES.

City Prices—Team Lots.

Apples—Winesaps, $2.25@2.75 a box; cooking, $1.25 a box; Newtowns, $2.25@2.50 a box.

Asparagus—Local, 12 1-2@13c per lb.

Feed—Scratch feed, $79 per ton; all grain crop, $61 per ton; oats, $56 per ton; rolled oats, $57 per ton; rolled or ground barley, $54 per ton; clipped barley, $57 per ton; wheat, $89 per ton; bran, $37 per ton; shorts, $40 per ton; oil meal, $55 per ton; whole corn, $71 per ton; cracked corn, $72 per ton.

Hay—Eastern Washington timothy, $32 per ton; alfalfa, $25 per ton; double compressed, $36 per ton; wheat hay, $26 per ton; Puget sound, $24 per ton; straw, $15.

Potatoes—local, $90 per ton; Yakima Gems, $100 per ton.

Rutabagas—$3 sack.

Strawberries — Kennewick, $3.50@3.75 crate.

Butter—Washington creamery extras, cubes, $38c per lb.; do bricks, 39c per lb.; creamery firsts, cubes, 37c lb.; do bricks, 38c per lb.

Eggs—Fresh ranch, 36@37c.

Spokane Markets.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—$3.50@3.75 cwt; new potatoes, 7@8c lb.

Seed Potatoes—Early Rose, $4@4.50 cwt.

Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; N. Y. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Leaf, 40c lb; Better Butter, 40c lb; Attalia, 40c lb; Diadem, 40c lb; Hazelwood, 40c lb; Solid Pack, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 27c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 29c lb; domestic Swiss, 35c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $11 case.

Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.

Dress Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Wheat Prospect Is Poor.

WASHINGTON, June 8.—America's 1917 wheat crop, as forecast today by the department of agriculture, will fall far below normal despite a prospect for a more than ordinary yield of spring wheat.

A total yield estimated at 656,000,000 bushels will give the country 16,000,000 bushels more than last year's crop, but with the heavy demands from abroad and virtually no reserve store, it will not meet war needs unless the country practices the most rigid economy.

Winter Wheat Under Normal.

The department forecast a spring crop of 283,000,000 bushels, a big yield, but estimates of winter wheat production give a crop of only 373,000,000 bushels, 7,000,000 more than was forecast from the May 1 condition, but still far from the normal yield.

The United States itself normally uses more than 600,000,000 bushels. At the beginning of 1916 there were 164,000,000 bushels on hand carried over from the previous year's record crop.

Forecasts for Year.

Forecasts of production of the country's principal crops as estimated today by the crop reporting board of the department of agriculture from reports of condition on June 1 follows:

(Figures in millions in bushels, i. e., 000,000 omitted.)

	Forecast.	1916 Crop.	1911-15 Average.
Winter wheat	313	482	542
Spring wheat	283	158	264
All wheat	656	640	806
Oats	1381	1252	1230
Barley	214	181	197
Rye	57.9	47.4	41.4
Hay (tons)	102	110	86.6
Apples	203	202	214
Peaches	45.4	36.9	49.0



Pay Highest Prices for Wool

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
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Trap the pest and get paid for your work. We pay the highest cash price for

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206 3d Ave. So., SEATTLE, WASH.

Money-Making Jerseys

Ninety Head at Auction June 20, 1917

If you want foundation cows, bred heifers, herd bull or young stock, either sex, of the richest jersey breeding this sale will furnish an unparalleled opportunity for you. This herd has never been pampered or over developed, always kept in good working herd condition and for a herd of this size the average production is among the best and many animals in the herd are capable of making high records if given individual attention. This will be the sale where you will surely get more than your money's worth, as it contains "diamonds in the rough." Excellent individuals and no contagious abortion ever on farm. Every animal (except small calves) has been tuberculin tested by Dr. W. H. Lydle, state veternarian, and certificate of health given.

Sale to be held on farm half mile from Shedd. Catalog giving full particulars will be published. Send name and one will be mailed when published.

W. B. DAVIS, Shedd, Oregon

Colonel J. W. Hughes,
Colonel B. T. Sudtell,
Auctioneers.

C. D. Minton, Assistant.
E. A. Rhoten, Sales Mgr.

NEWS FOR BREEDERS

N. B. Pettibone of Grangeville, Idaho, recently purchased a very fine yearling Hereford bull from August Schroeder of Cottonwood, Idaho. The purchase price was $250.

G. Hendricks of Dufur, Ore., recently purchased from the Royston estate of Payette, Idaho, a very fine Poland China spring boar pig of strictly big type breeding. He was farrowed February 1 and on May 7 weighed 103 pounds, showing the quick growing quality of the big type.

The Malheur county fair at Ontario, Ore., will be held this year September 18-20. Owing to the general condition of the country and the financial condition of the fair there will be no horse racing, but a strong effort will be made to have a good agricultural and live stock show.

Howard McKinley of Cottonwood, Idaho, raises the large type of registered Poland-Chinas. He kept over 17 brood sows this year. His hogs are all in good condition. He has raised large litters of pigs and they are running in alfalfa six or eight inches high. He feeds oats, shorts and milk, and plenty of it. He considers the grain he is putting in his hogs the best investment he could make.

Orin Beinhart, Tamworth swine breeder of Kennewick, Wash., has been adding some new blood of very fine quality to his herd. He has two new herd boars, Glenary Fred 17544, bred by Dr. E. D. Thomas of Kalona, Iowa, and Pleasant Hill Monarch 20288, purchased from T. G. Scheer of Bethany, Ill. His sire, Watterson 9363, the 1020-pound grand champion at the Illinois Staet fair in 1916, and his dam, Pleasant Hill Belle 16221. He also purchased from the same party two spring gilts sired by Watterson, dam, Maple Grove Ruby 14946, first prize aged sow at the Illinois State fair in 1916. Mr. Beinhart is a young man, but he understands his business and is satisfied with nothing but the best. His new purchases will be of great value to the breed in the northwest.

Adam Blackstock of Givens, Idaho, reports that the young Red Polled bull, Valdo, that he purchased in New York last fall, has grown and developed well and promises to make a great bull. Mr. Blackstock has most of the D. L. Young Red Polled herd and has bred 19 of them to the new bull. He will show at the state fair of Idaho at Boise this fall and may compete at the Oregon State fair later. Mr. Blackstock has a fine herd of unregistered Polled Angust cattle and has been receiving good prices for some of them for beef. Mr. Blackstock's farm consists of 1000 acres, 200 of which is in cultivation. Some of his alfalfa was frozen out to some extent, but he has 40 acres of new alfalfa that promises a big crop. He can sell all the hay he is willing to in the stack to sheepmen.

Three Holsteins for $1900.

H. R. Boomer, the Holstein breeder of New Plymouth, Idaho, recently sold three of his Holstein cows to the Carnation Stock Farm of Seattle, Wash., for $1900. The animals sold are Pioneer Daisy Clyde, 30.07 pounds of butter in seven days and 123 pounds in 30 days; Belle Segis Hope, daughter of Belle Segis 2nd, 31.5 pounds in seven days and she a daughter of the great matron, Belle Segis, 31.8 pounds, and Alma Walker, an untested daughter Artis DeKol Walker, out of Alice Coin Pietertje, 29 pounds as a three-year-old. The excellence of Mr. Boomer's herd is indicated by the prices paid by this great breeding firm for the three head. H. A.

BUILDS UP HERD OF JERSEY.

Bell Bros. of Cove, Ore., are building up a fine little herd of registered Jerseys with Fair Acres Lord 137430 at the head of the herd. This young bull is by Diamond's Lord Draconis, dam, Noble's Monine, 447 pounds of butter in a year, begun at 1 year and 11 months, and out of Moyane's Monine, 803 pounds. They showed a heifer at last year's union stock show that was awarded championship honors and looks now even sweeter than a year ago. They will show again. H. A.

Buys Fine Clydesdale.

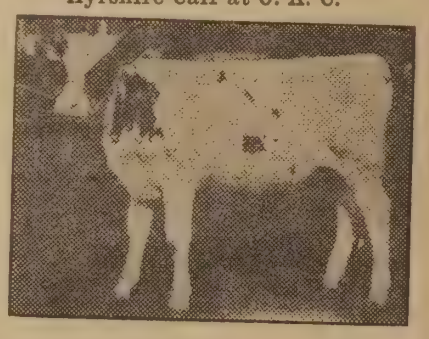
N. K. West of La Grande, Ore., recently purchased the 3-year-old Clydesdale stallion, Prince Hopkins, a grandson of Baron's Pride and a very fine individual. He will be bred on the daughters of Dunure Edward, also a grandson of Baron's Pride.

To Meet Champions

When J. M. Royston came from Nebraska to Payette, Idaho, some 11 years ago, he brought a foundation herd of Poland China hogs with him. He was an ardent advocate of the big type and his hogs were of that type and breeding. Mr. Royston soon stood in the front rank of hog breeders in Idaho and did as much as any one man, while he lived, to popularize Poland Chinas. At his death, three years ago, his sons continued in the Poland China breeding business, and they have made good. They have shown at the Idaho state fairs two years and have secured their share of prizes and have sold many hogs throughout the northwest that have given satisfaction. I visited the farm recently and saw there a young boar, a year and eight months old, that impressed me as much as any hog I ever saw. He has a great back, large bone, is right up on his feet and about the best head and shortest neck I ever saw on a big type. He weighed 684 pounds in thin flesh. The best of it is that he was bred by the boys themselves. He is by Ohida, a boar Mr. Royston bought in Nebraska and out of Wonderful, a sow of their own breeding. This young boar will go up against the strongest of competition this coming fall, in both Idaho-bred and imported hogs.

He will meet the grand champion of last year, owned by J. E. Ferrell of Weiser, that J. E. McFadden said was good enough to win at the National Swine show. He will also meet one of the greatest bred boars in the United States, brought in from Iowa by Wilson brothers of Greenleaf, as well as other great ones. But, while it is not my province to judge and while a hog has time to go all to pieces before fair time, I am willing to hazard the opinion that if any hog can beat him, that hog will be grand champion at the state fair this fall. H. A.

Ayrshire Calf at O. A. C.



The above is a photo of an extremely richly bred Ayrshire bull calf lately purchased by Professor Graves, head of the dairy departmetn of the Oregon Agricultural college, from J. W. Clise of Seattle. He is by Peter Pan 26th, that was junior champion at the Panama-Pacific exposition and was sold by Mr. Clise to the William Galloway farms at Waterloo, Iowa, where he is now in service His dam is the great young cow, Willowmoor Etta 3d, that holds the Ayrshire junior 2-year-old world's record. Coming a few days under two years old, she produced 16,621 pounds of milk and 666.06 pounds of fat, or 783.6 pounds of butter, in a year. The Peter Pans have proven good producers as well as show animals, and in this youngster Professor Graves has certainly selected an animal that ought to make an impressive sire.—H. A.

Butterfield Stock at Salt Lake.

The Butterfield Live Stock company, the big sheep breeding firm of Weiser, Idaho, will have 6000 head in the great ram sale at Salt Lake, Utah, August 28-30. Two hundred of these will be Rambouillets, 200 Lincolns and 200 Hampshires. There will be about 4000 head in the sale and Mr. Butterfield expressed the belief that it will be fully as successful as last year's sale, when 2500 were disposed of at high prices.

Lambing was light all over the northwest and as there is a shortage that can not be overcome in a short time Mr. Butterfield does not look for any material reduction in the price of wool or mutton for some years. The Butterfield company sold their coarse wool for 44 cents a pound about the middle of April. H. A.

Miller Buys Primrose.

Climax, Duroc boar from the Primrose herd of J. W. Fruit, at Brooks, Ore., has been bought by C. C. Miller of Natron, Ore.

Live Stock Pointers.

J. J. Hagaboom of Lapwai has sold his entire herd of Poland Chinas.

W. T. Simmons, west of Volmer, has closed out his entire herd of Duroc Jersey hogs.

B. W. Kitteral, breeder of Berkshire hogs, has sold his entire herd.

William Cox, whose place is four miles northeast of Juliaetta, had 600 Duroc hogs last year. This year he has only 60, including little pigs. He has quit registering, and raised a few for his own use and sells the balance on the market. He still keeps full-blooded hogs and uses nothing but registered boars. Mr. Cox also is a breeder of Ayrshire cattle. He now has eight registered cattle, but none for sale. Mr. Crosby, three miles southeast of Juliaetta, also is a breeder of Duroc Jersey hogs, generally carries about 100 head, but is sold down to one sow and seven pigs. D. G. S.

SALE OF CHAMPOEG JERSEYS.

The dispersal sale of the Champoeg Jersey herd near Donald, Ore., Friday, June 22, will be historic in two ways. The herd grazes on the site of the ancient town whose name it bears, the place where the vote was taken that saved the northwest for the United States. The blood lines of the herd are historic blood, too. A third of the animals are close up in St. Mawes breeding, and over 10 per cent are of Rosarie's Olga Lad blood. Carnation Fern and Merry Maiden family lines are prominent. Perhaps the first thing a prospective buyer asks about a dispersal sale is, "Why?" Henry Zorn's Champoeg farm consists of 67 acres, and he has two other farms as well. It was neglect his farms or his herd, or get rid of one or the other, and so he is selling out.

WILL SELL GUERNSEYS.

One of the first dispersion sales of high grade Guernseys to take place in the Pacific northwest for some time will be that of G. G. Fullerton of Dayton, Wash., Monday, June 25, at Dayton. The entire herd of 75, for which is claimed a butterfat test of over 5 per cent, will sell. George A. Gue and Harry C. Cranke will auction the cattle.

Sybil's Noble Majesty.



L. S. Dillie & Son of Caldwell, Idaho, in April of this year received the young bull, Sybil's Noble Majesty, shown above. He is an imported Jersey, and is by Sybil's Gamboge, that goes back through Oxford Majesty to Oxford Lad. Sybil's Gamboge's dam, Oxford Sybil, also traces to Oxford Lad through Gamboge Knight, that is sire of a number of big producers, including one 900-pound cow and several producing sons. Sybil's Gamboge Majesty's dam is Majesty's Nobel Maid, and she traces to Oxford Lad on her sire's side and in two generations to Noble of Oaklands on her dam's side. It will thus be seen that this very handsome and showy young bull traces to the most desired strains of Island breeding. Mr. Dille has one Island-bred cow, the balance of his foundation herd being of pure St. Lambert breeding. From them he has a lot of sweet heifers by a son of Distinction's Noble, and, with a bull of this quality to use as a herd sire he ought to build up a very typy, as well as big producing, herd . H. A.

Starts Like a Winner.

The two fine Duroc Jersey gilts purchased by E. M. Pratt of Baker, Ore., at the Oregon State fair last fall from W. L. Sheard of Dayton, Ore., have developed into very promising young sows. One of them was first junior pig and she looks like a first prize animal yet.

PACIFIC NATIONAL DAIRY SHOW.

The dates for the Pacific National Dairy show have been set for November 16 to 23, inclusive. The directors have planned a very large show, including dairy stock, dairy machinery and dairy products at Portland.

Should Dip Sheep for Ticks

Shearing and Handling of Wool Should Be Understood

ARTICLE 9, by E. J. IDDINGS.

Dipping for ticks is advisable once or twice a year and at any rate, soon after shearing. Ticks become troublesome when fleeces are long and as soon as the wool is removed, go into the lambs. Dipping of the whole flock at this time means little trouble from the ticks until the next spring. Any of the standard powder or coal tar dips if used according to directions, are effective for ticks.

A dipping vat suitable for a small flock is 10 to 12 feet long, 4 feet deep and 16 to 18 inches wide. It may be made of galvanized iron or concrete. One end of the vat should be perpendicular. The other end should have a cleated slope or incline so that the animals may walk, or at least climb out of the vat. A drainining platform will result in a considerable saving of liquid.

Shearing and Wool Handling.

Shearing may be done with hand shears or with one of the simple forms of shearing machines. In some sections experienced shearers go from farm to farm and clip the farm flocks for a reasonable compensation. If the farmer is to shear his own flock and is inexperienced, he will shear at a more rapid rate and do better work with a machine. A machine suitable for shearing a farm flock can be purchased for from $10 to $15. A combination shearer and horse clipper can be had at a moderate increase of cost over the shearer alone.

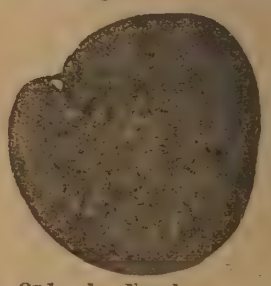
Sheep should be sheared as soon in the spring as danger of hard storms is past. They should be shorn on a clean floor and the fleece kept free from dirt and foreign matter of all kinds. The tags on wool taken from the rear part of the legs, and twist when holding balls of manure should be removed separately. The fleece should be rolled into a neat, firm roll with the shorn ends on the outside.

Many twines, among which the sisal, are not suitable for tying wool, since they will not take the dye. Even a small portion of such twine remaining with the wool in the cloth after weaving will fail to take the dye and result in a much lower grade of cloth. Sheep men are now using special twines and among the most satisfactory are twines made of paper. These twines are dissolved and eliminated in the process of scouring.

Wool is most handily stored in wool sacks. These sacks may be ordered through a local merchant and, under farm facilities for packing, can be made to hold 200 to 250 pounds of wool.

Next week's article will deal with fitting sheep for the show ring at the fairs. It will be the last of this series.

Play Ball



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Earn This Mit Fellows!

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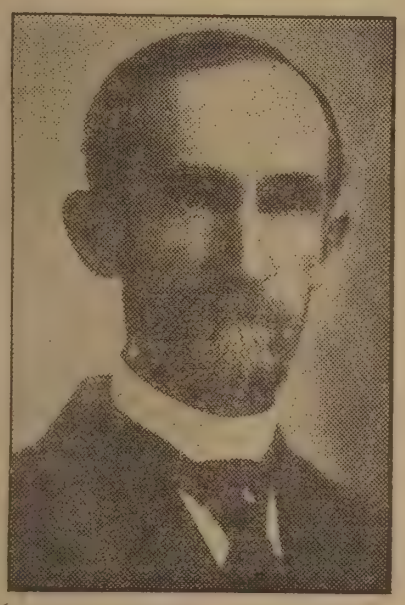
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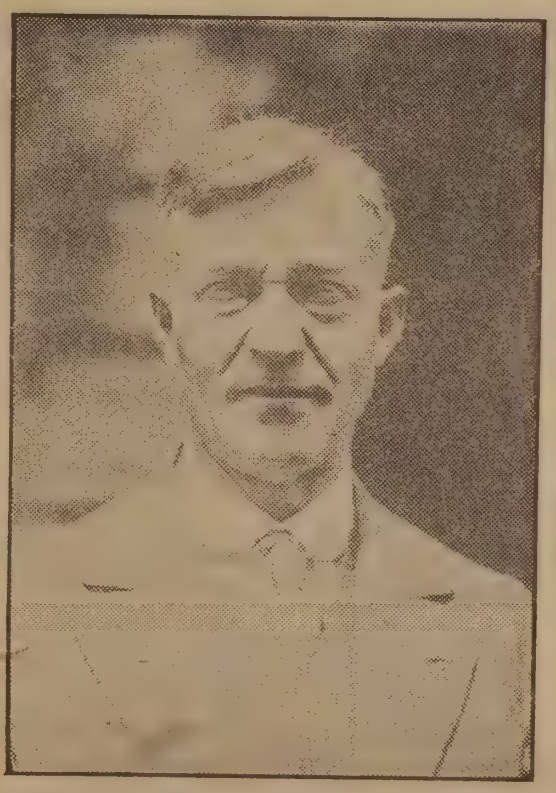
VOL. XL. NO. 25. JUNE 21, 1917. ** WEEKLY.

College of Agriculture
University

State College Drives Hard for Preparedness



R. C. McCroskey, of Garfield.



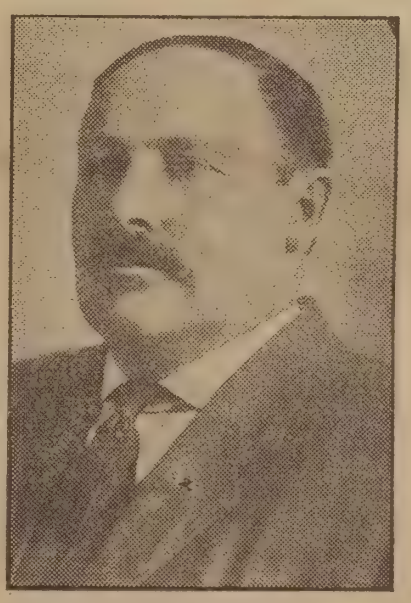
William M. Pease, of Seattle, president of the board of regents of the State College of Washington.



E. T. Coman, of Spokane.



A. Duncan Dunn, of Wapato.



W. A. Ritz, of Walla Walla.

Every Facility of College Mobilized for Farm Efficiency

The board of regents of the State college of Washington, together with President E. O. Holland and the other leaders in the big institution at Pullman, are this year throwing the facilities of the college unreservedly into the nationwide agricultural preparedness campaign. Appropriations originally designed for various miscellaneous needs of the college have been diverted from their original purposes and thrown into the farm educational branches. The college experiment and demonstration farm has been increased in acreage, farm extension work has been promoted with increased energy, club work has been extended, and the general movement for farm betterment has been given unprecedented impetus.

The photographs shown herewith are those of the five members of the board of regents of the college, who are devoting

(Continued on page four.)

In This Issue

Market Director Named.
Weeds Cause Big Loss.
Fruit Thinning Time.
Red Cross Makes Appeal.
Food Bill Is Explained.

Fourth of July

The national holiday is almost here. How shall it best be observed? It is different this year. See article on page 3.

Garford
MOTOR TRUCKS



"Profitable to Transport by Motor Truck"

—says Bennie E. Smathers
of Everett, Washington

"Hauling of dairy stock has become one of the most important branches of my business.

"Dairymen find it profitable to transport their cows by motor trucks rather than to drive them.

"My service is to move milch cows quickly without the usual loss sustained by moving them afoot—doing the work with a 1½ ton Garford Truck.

"I have increased my business to a radius of seventy-five miles.

"The dependability of my Garford—together with your good service has made this an extremely profitable investment—much more economical on gasoline than any other car or truck I ever handled.

"Have used the Garford for seven months—averaging 1000 miles a month with no cost for repairs."

SMATHERS TRANSFER
(Signed by Bennie E. Smathers)

Garfords are not *only* profitable for moving livestock—

Grain, hay, farm produce—especially the perishable kinds—can be far more economically carried by Garford trucks than by horse and wagon.

Hundreds of farmers in all parts of the country will testify to this.

And the farmer who operates a Garford is from one to five hours *nearer market* than the old fashioned horse-and-wagon farmer.

Garfords are working out in the fields and forests, all through the Northwest. They are proving themselves economical and reliable—and are earning far more than their keep.

Garford Motor Trucks are built in carrying capacities from one up to six tons. Any type of body you require is easily furnished.

Practical economy is the nation's watchword now. Do away with the old expensive wasteful horse method of hauling. Put a Garford at work. Save money.

Catalog on request.

Write for our booklet, "Roads—Their Influence on Social and Economic Conditions."

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Manufacturers of Motor Trucks of 1, 1½, 2, 3½, 5 and 6 ton capacity
4½, 7 and 10 ton Tractors
The Garford Road Builder
Distributors and Service Stations in all Large Cities

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 25 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF June 21, 1917

All Hail, 10,000,000 Young Men!

Make the Keynote of the Fourth of July Celebration a Tribute to This Mighty Enrollment

How shall the program of the Fourth of July celebration this year give a fitting recognition to more than 100,000 young men who have just been enrolled in this state by the selective draft?

For the first time in its history the United States is engaged in a great world war, the greatest of all world wars. For the first time in its history the United States has enrolled the flower of its young manhood as the first great distinctive step to participate in that great world war.

Is not this the logical keynote for this year's national celebration of July Fourth? Nearly 10,000,000 men have enrolled themselves, most of them willingly and with unhesitating loyalty.

These 10,000,000 young men, whether they are selected to enter the army or whether they are commandeered for duty in needful occupations at home, each and all have their names enrolled and are awaiting their respective assignments.

The Washington Farmer belives that the Fourth of July celebration this year can have no more fitting purpose as its keynote than to pay tribute to this mighty enrolment of America's young manhood.

Whether in the war that is now shaking the nations to their very foundations or in the mighty economic and social problems which will follow this upheaval, these young men are to play the leading part. It is to them that the country looks, that not only the nation but the world as well shall, under God, have a new birth of freedom and that government of the people, by the people, for the people shall not perish from the earth.

There have been years when the celebration of our national anniversary was little more than shallow merriment, but this year it must not be so. We are entering upon the greatest war in the history of humankind. Our every resource of men and means must be, and is being, thrown into the conflict against inhumanity. For the first time in the history of America its young men have been systematically enrolled that they may be assigned to duties on the fields of battle or in the industries at home to render their greatest service to the country and to the world at large. Their orders will come, and it will be theirs not to reason why, theirs but to do, and, if necessary, to die for their country.

In this state more than 100,000 are listed, ready to be called whither and into what particular line of service they know not. Can the whole people of Washington more fittingly observe the great national holiday than by dedicating it to a recognition of the cause to which these young men have pledged themselves; than by dedicating it to a recognition of the dangers they are soon to brave and the honor they are bringing thereby to themselves and their country?

The Washington Farmer believes not, and it urges that in every community or village where the day is observed, the program be planned with the double purpose of recognition and dedication; recognition of the world-wide call of humanity and of the loyal answer made by those enrolled and those enlisted in the military or naval branches of the service; and dedication of those who go and those who remain at home to the cause of human righteousness.

Fruit Thinning Time Is Here

Thinning Is Necessary if Crop Is Wanted Every Year

By GRANVILLE LOWTHER.

If the best results are to be obtained, if the best fruit is to be developed and if the trees are expected to bear annually instead of every second year, the fruit must be thinned.

In blossoming nature seems to have provided for a great waste, for she generally produces more than she needs. The time, too, is upon us, and we must get about it if we are to do the work properly. In fact, before this reaches our readers the time will have passed for thinning of certain varieties in the earlier sections.

Thinning Apples.

The work should ordinarily begin the latter part of June or first of July.

1. Take off all wormy, scaly or defective apples.

2. Unless the tree has a light crop and has good vigor never leave more than one apple on a single fruit spur.

3. The apples on the tips of the branches should generally be removed. They seldom make first-grade fruit, for the same reason that when a tree is starving the top may become rosetted while the middle and lower limbs are healthy.

4. The large varieties should generally be thinned to about six inches apart, and the smaller varieties may be left closer.

5. Thinning by pruning is a good plan if the limbs are close, if they intertwine or are so matted together as to exclude the sunlight. Sunlight colors the fruit and color brings money.

6. In thinning never pull the apples from the spurs; cut them off with thinning shears. In pulling them off you almost always pull off fruit spurs and that damages the crop of the coming year.

Thinning Peaches.

1. Peaches should, when developed, never touch; therefore, they should be from two to four inches apart.

2. If the trees are unhealthy or old the peaches should be farther apart than indicated in rule number one, because the tree will not be able to mature a heavy crop.

3. If the tree is not bearing a heavy crop two peaches may be permitted to grow more nearly together than indicated, provided they grow on opposite sides of the same limb.

4. Always leave the largest, healthiest looking specimens, taking off the weak, defective and malformed.

5. Peaches grow on buds, and should be pulled off. In this they are unlike apples, that grow on fruit spurs and must be clipped off.

6. If the peach trees are old thinning by pruning is an excellent idea, but is not sufficient if the peaches crowd one another.

Increased Acreage Campaign.

More than $500 has been used in furnishing seed in connection with the increased acreage campaign in Thurston county, Wash. Efforts were made in furnishing seed to keep to one type as much as possible in order that marketing this crop might be facilitated, says C. H. Bergstrom, the county agent.

Buy Through Community Clubs

Is This the First Step Toward Practical Cooperation?

George W. Bassett, of the department of public service at Chicago, advises people to combat the high cost of living by organizing community buying clubs, and has set the example by organizing one in his community.

Mr. Bassett says coffee can be bought at a saving of 7 to 9 cents a pound; tea at 18 to 35 cents cheaper; canned corn at a saving of 60 cents a dozen; peas are 36 cents a dozen cheaper; tomatoes, 48 cents a dozen, and canned salmon at 48 to 72 cents less a dozen than the market prices for the same grade.

There are now five hundred cooperative stores in the United States, and the Cooperative League of America, now a year old, issues a monthly organ and some other educationsl matter. The league has nothing to sell. Its sole mission is to foster the cooperative spirit.

The New York Journal of Commerce, noting the growing demand for cooperation, offers timely and sensible advice.

"This course of development is not theory or prophecy merely," adds this authority. "It is history. In England it began in the little buying club of Rochdale weavers in 1844, and this has grown (without one backward slip) until the retail sales by the cooperative stores of the kingdom are over $700,000,000 annually, and they are supplying the wants of 15,000,000 persons.

"The retailers objected at first, and tried to boycott them with the wholesalers. Then the cooperators went into wholesaling, and the wholesalers tried to boycott them with the manufacturers; so the societies took the final step and began producing for themselves. Their resident agent at the New York Produce Exchange buys for them over $9,000,000 worth of foodstuffs annually. Their employes in production are some 37,000. They print their own publications and produce nearly every consumable article. Their own ships bring tea from their own lands in Ceylon and palm oil from their own lands in Africa. They grow wheat on their own lands in Canada, and have lately bought 10,000 more acres of wheat land there. They own several estates in Great Britain, some of which they use as convalescent homes. They perform every process from the soil to the kitchen, from the mine to the sales counter. They are more than important; they have become colossal."

This gives us an inspiring picture of true cooperation. One reason why the cooperative movement has been retarded in this country, and it is a chief reason, has been the springing up of bogus cooperative undertakings like the swindling Northwestern General Trading company, which fleeced farmers of the Pacific northwest out of hundreds of thousands of dollars. The reckless and criminal operations of the men who were recently convicted in the United States court in Spokane wrought almost irreparable injury to true and honest cooperation. After experiences of that nature people become cautious and are inclined to turn coldly against meritorious cooperation.

Land Bank Gives Service

President O'Shea Cites Proof of Its Success

When president D. G. O'Shea and the other members of the official board of the federal farm loan bank of the northwest district began organization in Spokane two months ago President O'Shea told The Farmer that was designed to give "the man on the farm an opportunity to finance his own affairs without profit to anybody on earth," and that if there were any profit made in the conduct of the business of the bank "it will be returned in dividends to the stockholder in the local farm loan associations, who are the borrowers."

This week he tells a representative of The Farmer that the success of the bank up to this time indicates that dividends will be paid to the farmers in Washington, Oregon, Idaho and Montana who are borrowers. It has been undertaken by the board of directors to finance the operations of the bank on a margin of one-half of 1 per cent of the business done, and President O'Shea is now convinced that on this basis a profit will be made, which profit will be returned to the borrowers in the form of dividends.

Bank Stands Rigid Test.

"If the test of success is that the law has given service to the farming people in whose interest it was framed," he says, "then it can be said that in the northwest district it is a conspicuous success for the reason that in the short period we have been here we have perfected farm loan organizations and issued and recommended charters for such in all parts of our district, extending from Sheridan county, in Montana, to the islands in Puget sound, and from the Canadian line to the southern parts of Idaho. Throught all that large teritrory we have been making loans already, and to that end have brought the benefits of the law to people covering a very wide area.

Enormous Loans Sought.

"For the one month of May we received, listed, tabulated and classified applications for farm loans aggregating the sum of $5,505,463. In the same month we appraised, examined carefully and finally approved applications in the aggregate sum of $1,144,485.

"Since the date of the approval of the said applications the land bank has been ready to complete the loans as soon as titles are furnished and mortgage papers properly executed and signed.

"On such showing, for the initial work of an organization that is entirely new and had nothing whatever to start with 60 days ago, the measure of success of the bank may be estimated. But if, on the other hand, success may be considered only from the measure of profit and loss, it can be said that the federal land bank is already almost on a paying basis, even on the narrow margin under which it is doing business. With the progress it is making, its earning capacity in a very short time will be sufficient to meet is current expenses, even if the collections be not made until a future period.

Will Pay Dividends.

"Not only will the federal bank be enabled to do business continuously on the margin of one-half of 1 per cent, which has been undertaken by all the land banks in the United States, but it will be enabled to pay dividends, unquestionably.

"In addition to those things it has extended its facilities in organizing associations and in training farmers how they should organize and conduct the business of their associations; it has made appraisals of lands for the applicants without charge or commission of any kind or nature whatsoever; it has drawn up all papers and mortgages without charge, and asks of the borrower that he pay only for securing the abstract and for recording the mortgage. Under this system there will be no renewals or future costs, for a loan, once made here, need never be touched until it is retired in full.

"During the short period of two months the bank has had to develop not only its own organization, its forms and systems, and its methods, but also the organization of various farm loan associations in this terirtory, and that with a very small force.

Service to All Classes Alike.

"In the course of a conversation during the bankers' convention in Spokane last week one gentleman was heard to charge that the land bank would not allow the applicants sufficient money on their applications to be of benefit to them. Another gentleman almost at the same time was heard to urge as one of the defects of the land bank system that almost anybody could borrow through it, and that some who have heretofore had little or no credit could secure service from the federal land bank. Both conclusions can not be correct, and the fact that wise and able men of the same class urge reasons so far apart and contrary to each other as is mentioned here may be considered to be the best evidence that the land bank is steering the proper and wise middle course of giving its service to all classes alike, even though some who have heretofore been unable to secure service receive consideration and attention from the representatives of the federal land bank."

New Charters Are Granted.

The following nine new charters have been issued to local farm loan associations during the last few days, bringing the total number up to 39, with loans approved for a total of nearly one and three-quarters million dollars:

Idaho.	
Spirit Lake, Kootenai county	$27,300
Gooding, Gooding county	32,850
Oregon.	
Wamic, Wasco county	28,900
Eugene, Lane county	75,650
Medford, Jackson county	30,500
The Dalles, Wasco county	36,200
Montana.	
Roundup, Musselshell county	57,800
Washington.	
Mead, Spokane county	31,650
Vancouver, Clarke county	58,650

Farm Market Director

Governor Ernest Lister, acting upon the recommendation of Professor George Severance of the state college at Pullman, has appointed Asher Hobson of Pullman to the position of state director of farm marketing. This position was created by the last legislature with a view to improvement of marketing conditions in this state. Mr. Hobson will assume the duties of his office at once, the problems being extraordinarily great and the need of



Asher Hobson, newly-appointed director of the department of state marketing.

their solution extraordinarily urgent at this time because of the conditions brought about by the world war.

Asher Hobson, newly appointed director of marketing, was graduated from the University of Kansas in 1913. Later he received a master's degree from the University of Wisconsin. While doing undergraduate work he majored in economics, his graduate work at Wisconsin consisting of research work under the direction of the Wisconsin experiment station and the office of markets and rural organization of the United States department of agriculture.

Came to Washington in 1916.

In 1914 he was made an agent in the office of markets and rural organization of the United States department of agriculture, with headquarters at the University of Wisconsin, and the year following accepted a position in agricultural economics at the same institution. In the fall of 1916 he was elected by the regents of the State College of Washington as instructor in economics. His close acquaintance with the problems of the farmer and producer from a standpoint of marketing and other economic questions made him a highly valuable man in the northwest field and in February of this year he was offered the position of cooperative markets and rural organization agent in the extension department, which he accepted in conjunction with his economic work at the institution. As a member of the extension faculty he cooperated with the federal department of markets and rural organization.

His work in this capacity included a study of rural organizations, such as the farm loan banks, farmers' creameries, farmers' dairy associations and rural marketing associations. He specialized to a certain extent in an investigation of the grading of farm products, including grain and potatoes.

In the food conservation campaign being conducted by the extension department of the college Professor Hobson assisted primarily in the labor situation. As an agent of the federal department of markets and rural organization he was called upon to secure data in the state of Washington as to the quantity of food products on hand and in cold storage, and has also given valuable services to the federal government and through it to the people of the state in that connection.

College Will Cooperate.

In his new position as state director of farm marketing Professor Hobson will retain a certain relationship with the extension service of the college, which will cooperate to the fullest with both the state department of farm marketing and the federal office of markets and rural organization.

Mr. Hobson is author, or joint author, of a number of publications of an agricultural economic nature.

Council of Defense

Fifteen Are Appointed by Lister

As a sort of "cabinet" to work with him and the other departments of the state government and organizations in the work to secure the maximum efficiency of the state in various lines of preparedness, Governor Ernest Lister has appointed 15 prominent citizens of the state. They will serve without pay and at their own expense, there being no appropriation for the work that they are designed to do. They probably will meet within a few days for organization and to lay plans for the work. It is expected that a large number of committees, including many other people of the state, will be formed to assist in carrying on the various lines of the service to be rendered.

The following are the members of the defense council as named by the governor:

Charles Hebberd, Spokane, food supply and conservation; E. P. Marsh, Everett, labor; A. L. Rogers, Waterville, farm labor; C. J. Lord, Olympia, shipbuilding; George Donald, North Yakima, transportation; Everett G. Griggs, Tacoma, lumber; W. A. Peters, Seattle, home defense; J. T. Heffernan, Seattle, manufacturing.

W. A. Lowman, Anacortes, fisheries; Mrs. J. S. McKee, Hoquiam, woman's work; J. G. Kelly, Walla Walla, publicity; W. E. Boeing, Seattle, aviation; Dr. Ernest C. Wheeler, Tacoma, sanitation and medicine; E. S. McCord, Seattle, legal and finance; Dr. Henry Suzzallo, Seattle, coordination of societies and educational institutions.

State College

Drives Hard on Preparedness

(Continued from page one.)

much effort toward agricultural preparedness.

W. M. PEASE, recently elected president of the board, is a native son of Washington, his home being at Ellensburg prior to his going to Seattle to engage in business over a dozen years ago. In Seattle Mr. Pease was for a time the junior member of the firm of Miller, Wright & Pease, which company is now organized under the firm name of Turner & Pease Company, Inc., and engaged in the manufacture and sale of dairy and other farm products. He is an accomplished live stock man, and knows the business of dairy manufacture from the ground up, which practical knowledge he is expected to turn to good account during his regency at the state college.

R. C. McCROSKEY of Garfield is a native Tennesseean of the old, southern, pre-revolutionary stock. His American ancestry dates clear back to the arrival of the Scotch Covenanters, and a member of this family tree was Sam Houston, one-time governor of Tennessee and later famous in Texan history. Houston McCroskey, son of R. C. McCroskey, was named for this ancestor.

After the civil war Mr. McCroskey came west, his objective point being Salinas county, Cal. Over 30 years ago he moved from Salinas county to the Palouse country, settling first on a farm near Steptoe Butte. Later he acquired large land holdings near Garfield, where he now lives. Many times he has been elected to the state legislature, and was a member of the first legislative body that convened after statehood. On this occasion he helped draft and pass the bill which created the State College of Washington. He has been for many years a regent and one of the college's most active supporters.

W. A. RITZ, who was president of the board of regents until April 4th, is a pioneer resident of the Walla Walla valley, and has made his farm on the outskirts of Walla Walla one of the best examples of intensive cultivation there is in the state of Washington. He had charge of the Walla Walla agricultural exhibit at the Alaska-Yukon-Pacific exposition in Seattle in 1909, was a member of the board of horticultural judges at the Panama-Pacific exposition and is now a member of the board of trustees of the St. Paul Episcipal school for girls at Walla Walla. Five years ago he was a delegate to the democratic convention at Baltimore.

A. D. DUNN of Wapato is a native of the Yakima valley, and has lived on a farm and farmed all his life. His loyalty to farming led him to specialize in agriculture when in the later nineties he was a student at the State College of Washington, though at that time nine in 10 of the farm boys who went to college desired to prepare for "work in town."

Mr. Dunn's earlier experiences in farming were in hop growing. Gradually he has worked into diversified farming with one of the highest class herds of Shorthorn cattle in the west as the pride of his farm. Splendid types of sheep, hogs and horses also are found on the Dunn farms. He was treasurer of the Cascade International Stock show, has been a director in the Northwest Live Stock show for years, and in many ways has identified himself with the progress of better farming and better live stock in Washington.

EDWIN T. COMAN came to Colfax in the early nineties and practiced law. Later he branched out into banking and became an authority on rural credits in eastern Washington. Eventually he became identified with the Exchange National bank of Spokane, of which financial institution he now is president. He was active in the work of the Washington Country Life commission a few years, and the Exchange National was the first bank in the state to lend to boys on their own security money at low interest with which to buy pigs, a plan that now is widely adopted throughout the state, and has given many a country boy a start in the hog business. Along with hog raising the bank, largely through Mr. Coman's interest, has done much to promote corn growing in Washington.

Loss From Weeds on Washington Farms

Take Twenty-Five Million Dollars Each Year From the Pocket of Tillers of the Soil

By J. L. ASHLOCK, Pullman, Wash.

In the thousands of weed samples which in three or four years back have been tested by the state college there have been found, constantly, weed seeds of many kinds. Forage crop seed comprise the bulk of the samples that have been examined; and it is reasonable to assume that through mixture with forage seeds, such as clover, alsike, timothy and so on, weeds have been assisted in establishing their obnoxious selves on Washington farms. Eighty per cent of their precious host came into the Pacific northwest from elsewhere—they were no part of the native vegetation before the days of modern farms and farming.

Just how serious a thing is the presence in forage crop seed of noxious weed seed can easily be illustrated. Alfalfa seed has been tested at Pullman running from ten to twenty thousand seeds of the green fox tail per pound of "alfalfa seed"; which is to say that a farmer, buying this seed and planting it at the rate of ten pounds per acre, would be sowing per acre from 100,000 to 200,000 green foxtail seeds. An acre contains 43,560 square feet; so, foxtail sown with alfalfa at the rate above gives several seeds to the foot, which is a thick sowing for that particular weed.

Here is an actual laboratory report on green foxtail in alfalfa:

Twenty-one per cent of the samples of alfalfa containing foxtail had less than 100 foxtail seeds per pound of alfalfa seed; 21 per cent of the samples containing foxtail had 100 to 200 foxtail seeds per pound of alfalfa seed; 13 per cent of the alfalfa samples examined for fox tail contained 200 to 300 foxtails; 5 per cent had from 300 to 400; 16 per cent had from 400 to 500 foxtails per pound; 7 per cent had from 500 to 1000 foxtails per pound; 3 per cent had from 1500 to 2000 foxtail seeds per pound; 5 per cent had from 2000 to 3000 foxtails; 2 per cent had 5000 to 10,000 foxtails per pound of alfalfa seed; and 3 per cent had from 10,000 to 20,000 seeds of foxtail per pound of alfalfa seed.

Does any person wonder why foxtail is well established weed in the Pacific northwest? The showing for foxtail in alfalfa could be repeated for numerous other weeds that may be found in it and in other seeds, such as clover, alsike and timothy.

The showing of alfalfa seed in tests of the last year has been especially good. It averaged over 97 per cent pure; which is to say that in 100 alfalfa seeds 97 would be really alfalfa, and three seeds might be foxtail, or something else not alfalfa. The legal standard for alfalfa is 96 per cent pure. Alsike clover averaged over 95 per cent pure, the legal standard being 90 per cent. Red clover averaged 91 per cent pure, the legal standard being 92 per cent. It averaged poorer in quality than the others.

When it came to tests for "viability." The average viability for alfalfa was 85 per cent—which is to say that in 100

(Continued on page fourteen.)

Stork's Bill.



It grows everywhere—is a nuisance throughout the inter-mountain region. It is a wild relative of the beautiful geranium. It is also called filaree, alfilaria, pin clover, pin grass, and so on. One plant will cover three or four feet of ground. It has succulent stems, stands drouth well, and, like most weeds, is palatable to sheep. Its seeds have the curious power of being able to plant themselves. Each has at one end a curling appendage which twists about when subjected to different degrees of humidity or moisture. The other end of the seed is sharp; and the twisting appendage serves to force the seed into the ground. It has a high protein content—one reason why it has value for sheep and other stock. In spring, when it is in blossom, it is beautiful, and gives the familiar "pinkish" color to many mountainsides. To prevent it from spreading it should be cut before the seeds ripen.

Keep Calf Growing

By WILLIAM HISLOP.

It is imperative for success that these calves be kept growing from birth to maturity. Nowadays, it is believed that maturity should be reached at 24 months of age. If a steer can not make 1000 to 1200 pounds in 24 months it may as well be considered a loss.

The chief concern is to keep the calf growing. Never give it a setback. Never let the milk fat get off its back. When he reaches the shambles he will be worth more per pound and weigh more than the underfed, scrubby bred individual owned by the man who "just lets them run."

Give the stock buildings a spring cleaning. The walls should be whitewashed, and the following is a good preparation of this kind:

"Slake half a bushel of lime with boiling water, cover during the process to keep in steam, strain the liquid through a fine sieve or strainer and add to it a peck of sale, previously dissolved in warm water; also three pounds of ground rice boiled to a thin paste and stirred in while hot; half a pound of Spanish whiting and one pound of clear glue previously dissolved by soaking in cold water and then hanging over a slow fire in a small pot hung in a larger one filled with water. Add five gallons of hot water to the mixture, stir well and let it stand a few days covered from dirt. It should be applied hot, for which purpose it can be kept in a kettle or portable furnace."

Inasmuch as Ye Did It Unto One of the Least of These, Ye Did It Unto Me

This is National Red Cross week, so designated in a special proclamation by President Wilson at the request of the Red Cross association. During these seven days the people of this country are asked to contribute $100,000,000 for this great, Christ-like organization that it may be enabled to carry on successfully its world-wide work in the relief of suffering and the saving of lives that would otherwise be sacrificed through the horrors of this, the most gigantic and inhuman war in the world's history.

An Organization for Rescue.

The war is on and uncontrollable. Daily it takes its toll of life; daily it leaves on the field of battle hundreds and thousands of men of many nations, wounded and suffering, to perish if human kindness does not rescue them.

It is the self-imposed work of the Red Cross to effect this rescue, and thousands of brave and noble men and women are on the fields of blood working with surgeon's instruments, ambulances, improvised hospitals, medicines and antiseptics. They know neither race nor nationality, for a life is a life, be it that of an American, German, Belgian, Englishman, Frenchman, Austrian or Turk. They comprise the only wholly neutral organization of international scope in the world today. Their work is wholly unbiased and unselfish. They are living and working and braving dangers in the spirit of Him who said: "Inasmuch as ye did it unto one of the least of these, ye did it unto me."

One Dollar Each Needed.

The 100,000,000 people of America are asked to contribute $100,000,000 for this great work—an average of $1 each. Many will give large amounts; some subscriptions will be in thousands of dollars. But the dimes and the dollars, or the pennies from the boys and girls, are needed and will, if given, relieve suffering and save lives.

The people of the northwest, in every walk of life, in the city and on the farm, must give their share. Some two and a quarter millions of people live in the four northwestern states, and no better expression of their prosperity and their loyalty to humanity could be made than their liberal response to this call.

Will Equalize the Duty.

Local organizations throughout the entire country are seeking an equitable distribution of this duty—for it is a duty—so that the contribution need not be burdensome to any one. One method followed in one county is the apportionment of funds to be raised in proportion to the assessed valuation of property in each school district.

There are many demands for money from many soruces at this particularly critical time in the history of the world, but behind none is there greater urgency or greater human appeal than that of the Red Cross, whose sole mission is to do good.

Pointers on Food Situation

Here is the food situation as summarized by Congressman Lever of South Carolina, chairman of the house committee on agriculture:

That the world is existing on a basis of inflated currency.

That there is a tremendous gold supply reducing the purchasing power of gold.

That in this country there is a greatly disturbed transportation system; a poor shipping system.

That we have a great shortage of terminal facilities at ports.

That we are in more or less of a condition of hysteria, causing individuals to hoard food.

That there is some food speculation and various and sundry things entering into it.

Here is the remedy asked by the administration—the passage by congress of a law that would give the president—

Power to prevent hoarding and monopolization of food.

Power to prevent extortion and extortionate prices and corners.

In extreme cases, authority to take over storage plants, warehouses, mines, factories, to operate them and sell the products to the people under regulations.

To require concerns engaged in storage warehousing to be licensed and to do business under rules governing their conduct.

In order to stimulate production of the farmer, to fix a guaranteed farmer's profit.

To handle in the most effective way, either through regulation or by absolute prohibition, the matter of speculation in the necessities of life, including fuel, clothing, foodstuffs.

Power to regulate the amount of grain that may be used in alcoholic drinks, and even in nonalcoholic drinks, or to prohibit the use of grain in beverages if in his discretion he thinks it wise to do it.

Objection is heard at Washington and elsewhere that these powers are too sweeping to be intrusted even to the president of the United States. Chairman Lever answers these objections.

"The thought is in the minds of all of us who are in charge of this work that, while we are granting these very extraordinary powers to the president, the probability is it will not be necessary at any time to use any of them, except in exceptional and sporadic cases," said Mr. Lever. "In other words, we believe that the majority of the business people of this country are patriotic and willing to do their share in this emergency. But we recognize there may be a small minority over whom we must hold the power of the law. This bill really is more for the psychological effect—putting the fear of God into the hearts of those who will rob the people.

"And then we feel that putting into practical operation the provisions of this bill should be done in such a way as to give the least possible disturbance to the existing machinery of business. In other words, we are living in very abnormal times, and we can make them very much more abnormal by disturbing the machinery under which we are living. We hope to get the results outlined in this legislation without much disturbance.

"I believe the situation will get better; that it would have improved without this legislation; that it will immeasurably improve with it."

Washington Portraits No. 20.



H. E. Goldsworthy.

H. E. Goldsworthy, a prosperous farmer near Rosalia, in Whitman county, was born and raised on the farm that he now operates and has spent the greater part of his life on this farm. His training in agriculture has been a lifelong experience, supplemented by a four-year course at the state college. Mr. Goldsworthy believes in utilizing every acre every year as far as possible, and is now working toward that end. He hopes to find that peas are a great help, along with the other legumes. Mr. Goldsworthy also believes in coordinating live stock with grain growing, thereby consuming the forage crops that replace the summer fallow. He has not entirely eliminated the summer fallow, but hopes to in time. He is personally inclined to sheep, as he finds them the most profitable and also takes greater pleasure out of the handling of them.

The next in the series of Washington portraits will be that of R. P. Fuller of Castle Rock, and will be given in next week's issue of The Washington Farmer.

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Where Labor Is Not Lacking

Secretary of State I. M. Howell announces from Olympia that his office is swamped with applications by persons desiring to get employment checking the names to the referendum petition just recently filed against the bone dry prohibition law. Several times as many persons want that bit of employment, which would last at the most not to exceed 30 days, as can be employed. Does this indicate a labor shortage?

It is one of the most distressing evidences of such shortage. It indicates that there are people in this state who need employment, but who want to pick their work where conditions of comfort and ease predominate. These same people, at least a large percentage of them, could find employment and lots of it if they would appeal to the farmers of the state with half the zeal they are spending on Secretary Howell. It may come to a point where Uncle Sam will have to pass another army conscription law and invite these people to seek employment where it is needed and where they can earn the wages they receive.

Food Legislation Should Be Rushed

President Wilson will make another appeal to congress to speed up action on his food control measures. A delegation of labor leaders, led by Samuel Gompers, president of the American Federation of Labor, and accompanied by a number of congressmen who had grown impatient over dilatory proceedings in the house and senate, called on the president Monday and asked him to go before congress with another urgent message.

Mr. Gompers fears that if the food control bills are not passed before July 1 it will be too late. By that time, he pointed out, the crops will be on the move, or at least contracted for, and the United States may find itself in a plight similar to that of England when she first began to cope with the food problem.

The danger is not imaginary. The grain harvest is well under way in Texas and Oklahoma, and a few weeks more will carry harvesting operations into the wheat belts everywhere. Uncertainty hangs over the country, and in justice to the farmers, they should know quickly on what basis they are to market their products.

Producers, organized labor and the general consuming public have expressed their approval. They are for minimum guaranteed prices for the producers and maximum prices beyond which dealers shall not go in their dealings with the consuming public.

Why, then, this protracted delay? Is it to be attributed to congressional inertia, or to secret manipulations by powerful and influential speculators?

We Live in the Zone of Plenty

Louis W. Hill, chairman of the Great Northern railway, says it is less spectacular work to feed the world than to fight a nation's battles—but, after all, no less important.

Mr. Hill grows eloquent in letting the nation know the great part the northwest is playing in this tremendous work of winning the war on the fertile soil of the United States. He terms it the country's "zone of plenty," and gives these startling statistics:

With less than 6 per cent of the country's population, it produces 27 per cent of the total agricultural output of the entire nation. It produces about 200,000,000 bushels of wheat a year, 30 per cent of the nation's total; 32 per cent of the rye; 21 per cent of the oats; 52 per cent of the barley.

It mills 38 per cent of the flour; it raises 99 per cent of the nation's flax. Twenty-five per cent of the nation's bread is spread with butter from this "zone of plenty."

Minnesota alone produces 62 per cent of the iron ore of the United States, Montana 16 per cent of the copper, and the northwest about 40 per cent of the lumber.

And Mr. Hill might have added that the Coeur d'Alenes produce about 35 per cent of the lead mined in the United States, and Montana fully 10 per cent of the country's wool clip.

These are the records of normal times, and now that the nation is at war the great northwest will do better still.

Yet men still living remember the northwest when it was entirely in the wild. Sixty-four years ago, when Isaac I. Stevens, Washington's first governor, rode a horse from St. Paul to Olympia, he found this vast region all Indian land, with hardly a furrow turned between the Mississippi and Puget sound.

Puzzle of Gasoline Supply

With the amazing increased use of automobiles, tractors and other gas engines on the farms of the United States the problem of finding substitutes for the rapidly exhausting gasoline supply takes on increasing gravity. Already the country feels the pinch of rising prices.

Van H. Manning, director of the United States bureau of mines, discussed this problem with much frankness in an address at Washington the other day before the Business Publishers' association. Mr. Manning reminds us that there were 2,750,000 automobiles in this country in 1916, an increase since 1910 of 2,350,000. These automobiles used a billion more gallons of gasoline last year than were used in 1910.

The total gasoline production last year was 54,000,000 barrels—more than half a barrel for every person in the United States. A little more than half of that, 28,000,000 barrels, was consumed by automobiles.

> "The apparently unsolvable puzzle," said Director Manning, "is that while we have been increasing our production of gasoline the production of automobiles has increased 200 per cent above the increase in gasoline production. Substitutes for gasoline, such as the products of the distillation of coal, are being used at present in Europe for motor fuels, and may in time be used for that purpose in this country, as many byproduct coke ovens are being constructed."

We turn to science for the answer to this problem. In bygone ages, when mankind was still bound to superstition and ignorance, credulous people carried their puzzles to professional soothsayers and oracles, and precious little information they ever got that was of any real benefit to any one.

Now mankind turns with ever-increasing faith and trust to clear-eyed, radiant Science, and seldom with disappointment.

The Slacker

The slacker is a man who is not willing to do his plain duty. That duty may take him to the trenches in northern France. It may keep him on the farm; it may not make him a hero in the eyes of his friends. He knows, though, down in his heart, whether he is doing his duty or not.

The shame of a slacker does not come from others, but from himself.

Washington Gleanings

Rural free delivery has been established at Keechelus, Kittitas county, to serve 100 families.

More than $100,000 worth of public improvements will be completed at Aberdeen during the summer.

The North Yakima Commercial club is taking the lead in launching an evaporator campaign for the Yakima valley to help in food conservation.

Eighty farmers of the Wilson Creek district recently purchased the Wilson Creek state bank at Wilson Creek from the Union Securities company of Spokane.

Thomas Cooper, living south of Garfield, recently sold 42 hogs to M. D. Overby, and received a check for $1277.10. The hogs averaged a little over 200 pounds.

President E. E. Richards of the American Poultry association has called upon the poultry men of the United States to extend their hatching through the months of June and July.

The Spokane Farm Loan district is taking the lead probably of the entire nation in application for loans according to President D. G. O'Shea of the Northwestern Farm Land bank, located at Spokane.

J. S. Barbre of Creston, county president of the Farmers' Educational & Cooperative Union of America, has called the county convention to convene at Lamona on Friday and Saturday, June 22 and 23.

J. Sheuerman of Walla Walla has bought the Len Jackson clip of 31,000 pounds at 47 1-2 cents. Mr. Jackson received a check for $14,617.15, which, however, did not include the payment of 700 yearling wethers that he sold at $7, and 320 yearling ewes that he let go at $10.

L. P. Schumacher has sold his farm of 342 acres at Curtis to Carstens Earle of Seattle for approximately $44,000. Mr. Schumacher intends to buy another ranch in the Curtis district. He is a well-known breeder of Black Percheron horses and Red Polled cattle. Mr. Schumacher retains all his stock.

Fred Beeman of Pine Creek, Okanogan county, recently sold 1000 head of ewes for $18 a head to Vincent McKenna, representing the Portland Wool & Warehouse company. The sheep are extra good coarse-wooled Shropshire grades and were sold with the understanding there would be a lamb with every ewe.

Forest Supervisor P. T. Harris of Okanogan is in receipt of a message from the Portland office authorizing him to allow men who enlist in either army or navy to retain grazing preference without using the range during enlistment by filing a statement with the supervisor so that the range may be used temporarily during the absence of those who so enlist.

Apple dryers will be constructed at Walla Walla and at Dayton or Waitsburg this spring to take care of the surplus crop this year, a combination dryer for apples and prunes and soft fruits will be erected at Milton and an apple dryer will be erected in the Baker-Langdon orchard and the Gardena orchardists will arrange to ship their fruit to the Walla Walla dryer.

What Others Say

Hub, Centralia—That there can be an oversupply of substantial foods next winter seems beyond the range of possibility.

Banner, Buckley—Our plain duty of patriotism in war time is to keep the pot a-boiling. Waste is wicked, but legitimate spending a virtue.

Chronicle, Elma—A flea, for its size, is the champion broad-jumper of the world. And a grain of wheat, irrespective of size, is the new high-jumping king.

Argus, Mount Vernon—The sanest element in the consideration of the conservation of our resources and their economical consumption is the suggestion that the use of grains for the manufacture of liquors be prohibited.

Echo, Cle Elum—Our army of liberation will fight in Europe; but the real fight will be at home to back up that army with dollars. Every dollar that the people can save from current and from additional ecenomies will be needed.

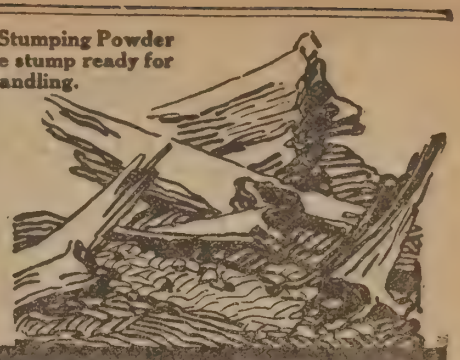




The first step in stump blasting; making hole under the stump.



Loading sticks of Giant Stumping Powder in hole under center.



Giant Stumping Powder left the stump ready for easy handling.

Save money on your stump blasting

The explosives that get stumps out cleanest and cheapest are those that have a heaving and lifting effect, shattering the stumps just enough to break them up. Then you can handle them easily.

"The farmer," says an Experiment Station, "should use an explosive prepared especially for his work; one that stands all ordinary shocks of handling and transportation and does not easily freeze. He does not need and should not use the expensive nitroglycerine explosives." Thousands of farmers have taken this advice and have found that

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

always save them money because they go further than any other stumping powders Also, because they are made especially to suit *western* farm conditions and because they are always uniform in composition and action.

Giant Farm Powders—the product of the oldest manufacturer of high explosives in the United States—are the only genuine "giant powders" for agricultural use. They are made in two brands—Giant Stumping Powder and Eureka Stumping Powder.

Giant Stumping Powder is the ideal explosive for blasting stumps in wet ground. It keeps perfectly for months, resists water and chilling, and gets the stumps out economically.

Eureka Stumping Powder is the money-saving, low-freezing explosive for blasting stumps in dry soil. It costs less than Giant Stumping Powder and careful blasters save many dollars by using it for wet work also.

EVIDENCE

. I bought five boxes of your Stumping Powder and now I want to sell a lot of other powder that I have.
RUDOLPH STADELI, Silverton, Ore.

Your Stumping Powder has a wide breaking power and less fumes to contend with after being exploded than any other on the market.
G. L. METZGER, Hillsdale, Ore.

In using a thousand pounds of your Stumping Powder neither I nor any of my men had the least bit of trouble in getting the very best results. I have used practically every powder on the market and find there is more strength in yours. J. L. EIDSON, Silverton, Ore.

Your Stumping Powder shoots the roots and spreads wide in the ground instead of going down. It is the best powder we have used.
G. S. McCARTNEY, Russellville, Ore.

I find your Stumping Powder all you claim for it. ELI CLINKER, Camas, Wash.

I am a large user of powder in stump blasting as well as in grading roads, breaking boulders and making ditches. I get good results from the Giant brands all the time.
MICHAEL HARVEY, Charleston, Wash.

Giant Stumping Powder gives good results when all other means of removing stumps have failed.
ROBERT CHABOT, Moclips, Wash.

Make This Test

You want to clear your land as cheaply as you can. If you are not using Giant Farm Powders, try them *now*. Mark and mail the coupon at the right. We will have our nearest distributor supply you—at the lowest market price—with a 25-pound or 50-pound case of Giant Stumping Powder or Eureka Stumping Powder. Compare this with any other and *prove* for yourself that Giant Farm Powders will save you money, time and work.

We Issue Five Valuable Books for the Farmer

They tell and show how to remove stumps and boulders, how to increase the fertility of the farm by blasting the subsoil, how to have earlier-bearing, thriftier orchards by blasting holes for trees, and how to drain your land by using Giant Farm Powders. These books are written especially to cover Pacific Coast conditions, and will be helpful to every farmer. Choose the books that you prefer and *mark and mail the coupon.*

THE GIANT POWDER CO., Home Office: SAN FRANCISCO
CONSOLIDATED *"Everything for Blasting"* ESTABLISHED 1866

Branch Offices: SEATTLE, SPOKANE, PORTLAND, SALT LAKE CITY, DENVER



FREE BOOK COUPON

The Giant Powder Co., Con.
San Francisco.

Send me your illustrated books on the subjects which I have marked X.

- ☐ Stump Blasting
- ☐ Tree Planting
- ☐ Boulder Blasting
- ☐ Ditch Blasting
- ☐ Subsoil Blasting

203

Trial Order Blank

(Kindly fill out if ready to purchase)

Have your nearest distributor supply me with

_____lbs. Giant Stumping Powder
_____lbs. Eureka Stumping Powder

NAME _____

ADDRESS _____

Write below your dealer's name.

Tear out and mail this coupon NOW
—before you forget it

Increase Taxes on Idle Lands?

Great Need Is for More Small Farms in the Move for Greater Production; Uncultivated Lands Need to Be Worked



BICKLETON, Klickitat County, Washington, June 2.—The weather the last week has been favorable for the growing of grain after a cold and stormy spring. I judge about 70 per cent of the fall grain was killed out. High prices have increased the acreage of spring grain somewhat, but more noticeably potatoes. I think the acreage of potatoes this year increased 200 per cent; probably 10 times more garden truck is being raised. There is 500,000 acres in the eastern end of this county that can be irrigated from the Klickitat river that would increase the amount of food if the government would take hold of it. The present company does not seem able to finance the project, though they may make it a success yet. Most of the farms here would not need to build a house for a hired man and family. They already have such houses on additional farms they have bought and absorbed in their own holdings, but few hired men will stay the year round on one place. That is one drawback in this country, the large farmer buying out the little one. There would be a greater production of farm produce if the farms were smaller and better cultivated. Most all large farmers have some land lying idle that they do not get time to put into cultivation. This land should be producing something. You can hardly blame a man for buying land, but if a man were taxed double on land that is lying idle, it might be a solution to the problem. It might cause him to sell it or rent it to somebody. BERT FAULKNER.

Are Slaughtering Calves.

GIG HARBOR, Pierce County, Wash., June 3.—Considered relative to the advance of settlement which goes forward slowly, but steadily, live stock has certainly decreased in the last year or two. The high prices for feeds and hay mainly accounts for this falling off. If our farmers could raise enough rough stuff to adequately supplant the alfalfa which now comes from the east of the mountains, they could make shift to get the mill feeds even though extraordinarily high, but it is impossible to do a paying beef or dairy business here and buy both, or the main part of them. Cows have been culled out and beefed quite extensively. Most of those remaining will, no doubt, be held now until fall feeding time again arrives when the butchery will commence again. The local markets report heavy receipts of veal calves from local farmers. Only a few of the best are being raised.

There is a desire and quite an effort to increase the pig growing, but the scarcity of brood sows at this juncture rather limits the actual increase. This pork line would seem to offer the quickest means of building up the very low meat supply. No amount of preaching and campaigning will induce a farmer to push out in a line that he has found unprofitable. Like Pickwick he would do it for his own sake if he did it for anybody's sake. I have no doubt there will be a steady and rather rapid increase in pig growing here, but never of beef production. The conditions here are not favorable to the large production of beef.

W. D. BOYNTON.

Are Conserving Calves.

CASTLEROCK, Cowlitz County, Wash., May 26.—This has been an unusually cold, wet, backward spring and the high water expected on the low lands, has kept back the plowing and planting that is generally done at this time of year. Already the water from the Columbia river is crawling over the flat, low land in the lower part of the county. Arrangements are made for the stock and tools on higher ground. A new order of conserving the young calves has been started among the dairymen. Instead of vealing them they are carefully housed and fed on skim milk and whey, with a liberal amount of oil meal and middlings. This is one way of increasing our stock; another would be for each farmer to get a few sheep to run in the brush and logged lands that can not be used for the milch cows or young calves. Experience has taught many of the stock men that sheep prove nearly as good to browse and feed among the brush as goats, coming out in the fall sleek and fat with one or two lambs at their side, which has a decided, substantial way of increasing the meat supply. Too many of us in the past have been selling off our breeding stock for a big price, as we thought, and are left to pick up and recuperate our broken ranks. Nearly all of the farmers have finished planting and sowing.

The farm loan association appraisers are busy appraising the farms on which loans are asked. In most cases the loans asked for are far below the limit. Our creamery is doing a nice business paying the farmers about $3000 a month and the cream station nearly as much. This is a great help as it means ready money for the groceries and seed. A cheese factory has been contemplated and a farm of 200 acres bought and stocked for a nucleus, starting in with 60 cows. If this is done, several of the stockmen will put on more milch cows for immediate use. C. C. BROWN.

Have County Agent.

FERNDALE, Whatcom County, Wash., June 3.—H. B. Carroll has recently been appointed as county agriculturist of Whatcom county and will fill a long-felt need in this county, where each district had its own peculiarities, and a distance sometimes of as little as three miles makes a world of difference in the soil and therefore in the way it is farmed and the crops that are grown. On the high land in the Mount View and Alder Grove districts small fruits and berries thrive remarkably well and nearly every farm has its berry patch, while along the Nooksack, in the districts known as Evergreen and Fertile Meadows, the soil is so rich that the berry bushes all go to vines and what berries they do grow, while of excellent flavor to eat fresh, when canned tend to soften and fade. This is said to be due to the large quantities of moisture in the soil. Strawberries and raspberries sell at $1 a crate delivered, so why cultivate them on ground that is so much better adapted to hay and oats? Crops are looking fine in this locality.

MRS. JACK PLASTER.

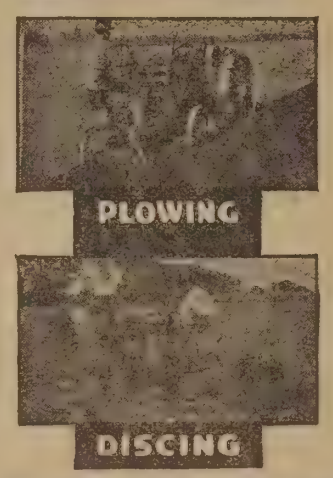
Live Stock Decrease.

RAINIER, Thurston County, Wash., May 24.—The live stock in this community shows a decrease from one year ago. Last fall many head were shipped out and many more were killed for beef which sold for a low price. Now, after a long winter of feeding and a very late spring, the farmers are not disposed to sell. While feed is high, milk is high and pasture is coming on now. I think the farmers will keep all the dairy cows and heifers that they can raise the forage for, but the costly experience of the last two years of high-priced hay will make many farmers want to be sure that they have feed enough before they increase their herds much. The farmers will have to raise their heifer calves this season to avoid a shortage. There are no swine to speak of here, and sheep would be a novelty. Dairying is the principal business. L. F. DAVIS.

Two Hogs Bring $167.

Wood Lower of Colbert, Wash., recently delivered two Chester White hogs to the O. K. Meat market at Hillyard, Wash., that weighed, dressed, 984 pounds, for which he received 17 cents per pound, which netted him $167.27. They were weighed before they were slaughtered and weighed after. They had dressed away 17 per cent.





You Ride the Tool —Not the Tractor

See how the operator of a Moline Universal Two-Wheel Tractor *sits on the seat of the implement* just as he would if he were driving a team. You know you couldn't ride your horses and do a good job of cultivating, plowing, drilling, mowing or any other kind of farm work. Neither can you do it with a tractor. With the Moline-Universal Tractor you sit where you can watch the work the implement is doing. You simply guide it with the steering wheel—easier than you can guide a team—everything is right at your finger tips with plenty of power. You can work as many hours as you wish in all kinds of weather—on all kinds of jobs.

MOLINE ORIGINAL 2 WHEEL TRACTOR **UNIVERSAL TRACTOR**

Does All Farm Work Without Horses



(12)

—It is heavy enough to do all farm work, yet light enough to work on soft plowed ground without packing the soil.
—It will *cultivate as well as plow.*
—It will do your discing, harrowing, planting, mowing, haying, harvesting—in short, anything you can do with horses and all belt work on the average farm.
—It will do all this easier, quicker, cheaper than with horses.
—It pulls the load of 5 horses and furnishes 10 to 12 horse power on the belt.
—It is made and backed by one of the oldest, strongest, most dependable farm implement companies in the world, and built in the largest tractor factory in the world.
—It is the *only* tractor which will do all farm work without horses.
—It is low in first cost and inexpensive to operate.

The Moline Line Includes:
Corn Planters, Cotton Planters, Cultivators, Corn Binders, Grain Drills, Harrows, Hay Loaders, Hay Rakes, Lime Spreaders, Mowers, Manure Spreaders; Plows (Chilled and Steel), Reapers, Scales, Seeders, Stalk Cutters, Farm Trucks, Vehicles, Wagons; also **Stephens Six Automobiles**

Costs Less Than 4 Horses Does the Work of 7 Horses

Write for our Catalog Folder and read how everywhere farmers are solving the power and hired help problems on their farms; how they are doing their farm work easier, better, quicker, and making more money. Learn how you can make your work easier and get it done on time and grow bigger, better crops. Write today.

MOLINE PLOW CO. Dept. 51 Moline, Ill.

Read the Want Ads in This Issue

New ads appear each week in the "Want Ad" department of this paper. Just take a few moments to look them over you may find something you have been looking for to repay you for your effort.

Liberty Bonds Taken

Treasury Flooded With Applications

That the people of the United States are loyal in the present emergency to the point of supplying their money to finance the war is indicated by the fact that the great Liberty loan of $2,000,000,000, the greatest bond issue ever authorized by the United States government, was oversubscribed by approximately three-quarters of a billion dollars. The bonds were sold in denominations from $50 to $100,000, but special urgency was expressed by the government officials that the largest number of individuals possible take bonds in denominations of $50, $100, $500 and so on. It is estimated that nearly 3,000,000 persons bought bonds. While the applications for bonds far exceed the number that will actually be issued, it is officially announced by the treasury department that all applications for the small bonds will be filled, and the amounts asked by the large investors reduced. The bonds bear 3 1-2 per cent interest, and may run for 30 years if the government desires, or may be retired at the end of 15 years if the treasury department is at that time ready to pay them off.

Selecting Big Army.

The great task of selecting the first units of the big army that will soon be in the process of organization from the 10,000,000 men registered for the selective draft is soon to be begun. A federal committee is now working out the methods of selection. Certain grounds for exemption are being worked out, based upon physical fitness of the enrolled men, their present occupational service to the country and the need of their remaining at home to care for dependents. How to secure the required number needed for the first units of 500,000 or more men from the list of men not exempted is the problem with which the committee is struggling. Every effort is declared to be used to prevent unfairness or political influence to manifest themselves in the selection. It is probable that each state will be required to furnish given numbers of men, and a secret system of selection used in each state to secure the required number from all those eligible.

To Develop Air Service.

It is anticipated that very soon congress will be asked to make an appropriation of $500,000,000 or more for the purpose of financing great development in the aviation service of the army. A separate aeroplane department is likely to be created, and the appropriation required within a year likely will reach a billion dollars. It is suggested that probably 5000 aviators and airships will be sent to the European battle front within the next two or three months to be of the greatest possible immediate service in lieu of this country's inability to place a large army in the field for several months.

Record Holstein Sale

Bull Calf Leads World at $53,200

The sale of Holstein cattle under the auspices of the national Holstein-Friesian Sale company, held at Worcester, Mass., this month, was one of the most remarkable in the history of the breed. The total receipts from 143 head were over $296,000, an average of $2073 per head. The top price, and also what is claimed as the world record bovine price, was established by the D. W. Field Farm company of Brockton, Mass., when they paid $53,200 for the five-and-a-half-months-old bull calf, King Ormsby Jane Rag Apple, consigned by Pine Grove Farms of Elma Center, N. Y. This calf was sired by Rag Apple Korndyke 8th, and his mother was the champion Ormsby Jane Segis Aaggie.

Another record was established when John F. Shannahan and Dodd Bros. of Buffalo bought Wandermere Belle Hengerveld for $18,300. This is claimed a world record for females of dairy breed. Another price equally interesting is that paid by the Hollywood farms of Washington for Glen Alex Queen DeKol, which brought $18,000.

Dairy Paper Appears

Inland Empire Association Aided

The first issue of the Inland Dairy News, a publication edited by B. E. Smead, secretary of the Inland Empire Dairy association, has been published and placed in the hands of the 300 members of the organization.

The association is one recently organized by the dairy producers in the district tributary to Spokane for the purpose of united effort toward the betterment of the dairy industry, especially in regard to improvements relative to the problem of distribution. The News is its official publication, designed to keep the producers informed on all matters of vital interest to their business. The first issue bristles with life, containing interesting articles by several authorities, together with facts and figures which tell their own story concerning many of the problems incident to the dairy business.

The association has enrolled approximately 100 dairymen within the last month, including now about 65 per cent of the producers in the district especially designed to be served.

Justly Proud of His Cow.

John Nordmark of Nine Mile, Spokane county, Washington, does not claim to have the champion milk producer of the county, but he is proud of his common every-day cow that he says produced 1386 pounds of milk during the month of May.

You Can Can Your Vegetables!

Because you tried to can some vegetables a few years ago and failed is no reason to think that you can not succeed this year, though there are thousands of housewives who are not planning to try it because they consider it a practical impossibility. Never was the need for canning and drying foodstuffs so urgent as now. And IT CAN BE DONE SUCCESSFULLY ON EVERY FARM in the northwest and WITHOUT ANY EXPENSIVE EQUIPMENT. Beginning with its next issue, that of June 28, The Farmer will substitute in place of the "Farm Garden" articles, which it has been running, a series of articles on "Farm Home Canning," giving information drawn from many sources of unquestioned reliability. If every farm home in the four northwestern states would this year can five gallons of vegetables it would mean many hundreds of tons, actual tons, of additional food for next winter. Read the articles. Study the subject. Talk it to your neighbors. Can!

Reduce the Cost of Handling Grain

Get the big profit from your crop. Save the cost of high priced sacks. Save the time and labor of sacking and tying. Handle your grain in bulk. Handle the biggest load in four to five minutes with no hard labor. Store your grain in tanks or cribs, or elevate direct into cars. All this is accomplished with a team of horses or engine and a

John Deere Tubular Steel Portable Elevator

Handles All Kinds of Small Grains

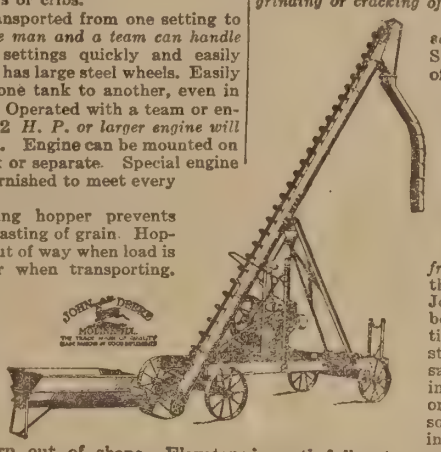
Elevates wheat, oats, rye, barley, flax, shelled corn and all small grains into tanks, granaries, cars or cribs.

Readily transported from one setting to another. *One man and a team can handle outfit.* New settings quickly and easily made. Truck has large steel wheels. Easily moved from one tank to another, even in rough fields. Operated with a team or engine power. *2 H. P. or larger engine will handle elevator.* Engine can be mounted on elevator truck or separate. Special engine drive jacks furnished to meet every requirement.

Big receiving hopper prevents spilling and wasting of grain. Hopper folds up out of way when load is driven up, or when transporting.

Wagon can be emptied from either side of hopper.

Built for years of service. Made of steel almost entirely. Cannot decay or warp out of shape. Elevator proper made of 3/16-inch steel well casing, 6-1/4 inches in diameter. Round steel flights run smoothly inside of casing. Chain is fastened in center of flight. Grain cannot get under chain or into sprockets. *No grinding or cracking of grain.*



Shafts operated in self-aligning boxes. Shafts cannot get out of line, cause heavy draft or breakage. Every part of the John Deere Tubular Elevator is designed and made to give satisfactory service.

Only steel tubular elevator on the market.

Big elevator book free. Tells all about the complete line of John Deere elevators, both portable and stationary; wood and steel. Tells how to save money in building a new corn crib or granary. Gives some valuable building plans. This book is worth dollars to any one who is planning to build a new granary.

When writing, please state the type of elevator in which you are interested.

The Bottom Is the Heart of the Plow

The right kind of plow bottom lays the foundation for the right kind of seed bed. Crop yield is increased The plow lasts longer and pulls lighter—a saving in actual cost, power, trouble.

John Deere Tractor Plows

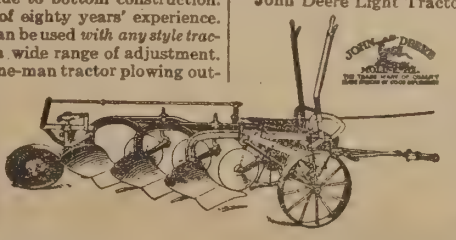
Have the Famous John Deere Plow Bottoms

The bottom on every John Deere plow is correctly designed—John Deere plow success is largely due to bottom construction. It is the result of eighty years' experience.

These plows can be used *with any style tractor.* Hitch has a wide range of adjustment.

They make one-man tractor plowing outfits. A pull of the rope by the man on the tractor lowers or raises the bottoms *high and level,* and the tractor does the work. The bottoms do not gather trash in turning or when plow is being transported.

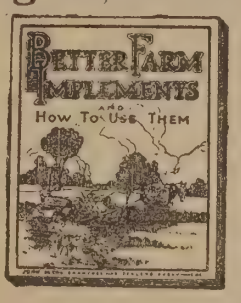
John Deere Light Tractor Plows *can be backed up*—they have a stiff hitch.



Equipped with John Deere Quick Detachable Shares—*save eight to thirty minutes changing each share.*

Write for free booklet.

Big Book Free



Better Farm Implements and How to Use Them

America must produce more food. Labor-saving implements will play an important part in increased crop production.

This book tells all about a full line of labor-saving farming implements. Tells how to adjust and operate many of them. A practica farm implement encyclopedia. Worth dollars. Illustrates and describes the following machines: Walking and Riding Plows, Tractor Plows, Disc Plows, Disc Harrows, Spring Tooth and Spike Tooth Harrows, Corn and Cotton Planters and Drills, Listers, Alfalfa and Beet Tools, Grain Drills and Seeders, Riding and Walking Cultivators, Lister Cultivators, Mowers, Side Rakes, Loaders, Sweep Rakes and Stackers, Hay Presses, Grain and Corn Binders, Corn Cutters, Stalk Cutters, Kaffir Headers, Manure Spreaders, Portable and Inside Cup Elevators, Corn Shellers, Wagons, Farm Trucks and Buggies. This big book will be sent *FREE* if you state the implements in which you are interested and ask for Package X1670.

You Are Interested

In farm implements that save you money. The dominant idea back of the manufacture of John Deere implements is to produce tools that are economical. This means durability, easy operation and GOOD WORK.

The name "John Deere" on an implement means that these qualities are embodied in that tool.

JOHN DEERE
MOLINE, ILL.
THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

John Deere Implements are sold by John Deere dealers everywhere

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A. B. NYSTROM, Editorial Contributor

Thoroughly Sanitary and Comfortable Dairy Barn.

The nearest approach I think I have ever seen to a thoroughly sanitary and comfortable dairy barn, at a cost in reach of a man of small means, is the one shown below, on the farm of the Avalon Dairy company, Holstein breeders, at Kuna, Idaho. It was not the desire for economy that prompted the plan of building so much as the hurry in its erection, for the company is able to build a barn of most any cost. But



it fills the requirements of a good, cheap dairy barn. The barn is 36x64 feet. The foundation and floor are of concrete. It is furnished with Star swinging stanchions, and the cows face in. The manger, made of slight slats, has no bottom, just clears the floor, and is set on hinges at each end so it can be swung back against the stalls, allowing the entire floor to be swept. The barn is merely a frame, 2x4 studding being used, with matched flooring on the sides, and is shingled. It is eight feet to the eaves, and the roof has a one-third pitch. The windows are made to drop in at the top or be taken out entirely. The only change I would suggest is windows a little longer and narrower, and slightly closer together.

As it stands the barn cost $1100. Nearly $500 of that could be saved by doing away with the concrete foundation and floor, but this would eliminate the best reature of the barn. It could also be made much warmer by ceiling inside, but that would require a King or some other ventilating system, and Mr. Austin found the barn plenty warm enough all the last cold winter, when full of cows. The only fault is that it sweats some during extreme cold weather. He plans to put a ventilator in the roof and see if that will stop the sweating. He will, however, have it so it can be closed in case it creates too much draught.

No doubt slight changes or modifications could be made according to the size of the herd and the location and climate. But as a satisfactory, cheap, but sanitary dairy barn it is certainly worthy of study. H. A.

White River Valley Cow Testing Results

Six hundred eighty cows were signed up for the third month's test in the White River Valley Cow Testing association. The average milk production per cow was 989 pounds and the average butterfat 36.88 pounds, according to the May report of Robert Cowan, official tester. There were four herds totaling 242 cows that had herd averages of over 1000 pounds per cow. Two of these herds had averages of over 40 pounds butterfat per cow. In the entire association 259 cows gave over 1000 pounds of milk; 180 gave over 40 pounds butterfat, 68 gave over 50 pounds butterfat and 13 over 60 pounds butterfat. There was a difference of 533 pounds of milk and 14.18 pounds of butterfat per cow, between the highest and lowest herd averages. The following is a list of cows giving over 1500 pounds of milk and 60 pounds of butterfat during the month of May:

Owner of cow.	Name of cow.	Bred of cow.	Lbs. Mk.	Per cent. of fat.	Lbs. butterfat
A. Zeeuw	No. 117	Grade Holstein	2102	4.3	90.39
A. Zeeuw	No. 32	Grade Holstein	2170	3.6	78.12
Cochrane Bros.	No. 94, stall 45	Grade Holstein	1984	3.6	71.42
Cochrane Bros.	No. 58, stall 58	Grade Holstein	1922	3.6	69.12
A. Zeeuw	No. 103	Grade Holstein	2030	3.3	66.99
A. Zeeuw	No. 111	Grade Holstein	2006	3.3	66.20
A. Zeeuw	No. 178	Grade Holstein	2002	3.2	64.06
A. Zeeuw	No. 88	Grade Holstein	1696	3.7	62.75
Cochrane Bros.	No. 99, stall 67	Grade Holstein	1686	3.8	61.54
A. Olson	No. 18	Grade Holstein	1922	3.2	61.50
A. Zeeuw	No. 11	Grade Holstein	1705	3.6	61.38
Cochrane Bros.	No. 91, stall 9	Grade Holstein	1962	3.1	60.51
A. Olson	No. 3	Grade Holstein	1632	3.7	60.38

May's Records Highest Yet

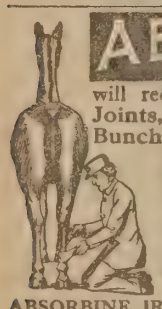
The Ahtanum-Wide Hollow Cow-Testing association makes the following report at the conclusion of its fifth month's work. Compilations made by Roy Larsen, tester.

The cows in the association made for the month of May higher records than any yet recorded. Not only was the highest individual record higher than those previously reported but the average of the association was also higher. Fifty-nine of the cows produced more than 40 pounds of butter fat for the month and 16 of that number produced more than 50 pounds of butterfat.

The following are the four highest producers in each age group:

Five years or over:

Name of Cow	Breed	Owner	Pounds Milk	Pounds Fat
Lady Mary Fayne	Holstein	Wm. Todd & Sons	1785	71.4
Edna Maria Jewel 2d	Holstein	E. B. Marks	1902	59.0
Rose	Grade H.	Mr. Sharp	1305	54.9
Jersey	Grade J.	Mr. Brady	1221	53.7
Four years and under 5:				
Nellie Fobes	Holstein	E. B. Marks	2253	70.3
Pieterta Beauty Tritonia	Holstein	E. B. Marks	1989	59.7
Cascade Johana Cornucopia	Holstein	Wm. Todd & Sons	1785	71.4
Bonnie Echo DeKol 2d	Holstein	E. B. Marks	1986	53.4
Three years and under 4:				
Violet's Wild Rose	Jersey	A. H. Huebner	909	43.2
Two years and under 3:				
Anna Belle	Grade H.	Henry Eno	969	48.6
Cascade Colantha	Holstein	Wm. Todd & Sons	933	40.2



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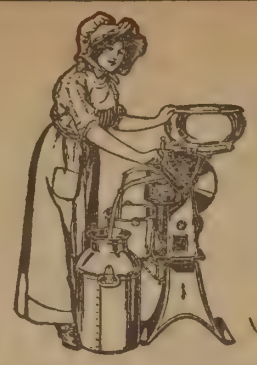
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SEPARATOR
NOW

1st If you are still using some gravity or setting process of creaming--

BECAUSE YOUR WASTE IS greatest and quality of product poorest in midsummer when the milk supply is heaviest.

BECAUSE TIME IS OF GREATest value on the farm at this season and the time and labor saving of the good separator counts for most.

BECAUSE THE SKIM-MILK IS poorest without a separator in hot weather and often more harmful than helpful to calves.

BECAUSE THE WORK OF A New De Laval Cream Separator is as perfect and its product as superior with one kind of weather as with another.

2nd If you have a very old De Laval or an inferior separator of any kind--

BECAUSE THE LOSSES OF THE poor separator from incomplete skimming and the tainted product of the hard-to-clean and insanitary separator are the greatest at this season.

BECAUSE OF THE GREAT economy of time at this season in having a separator of ample capacity to do the work so much more quickly.

BECAUSE THE NEW DE LAVAL is so much simpler and more easily handled and cared for than any other, and you can not afford to waste time these busy days "fussing" with a machine that ought to have been thrown on the junk-pile long ago.

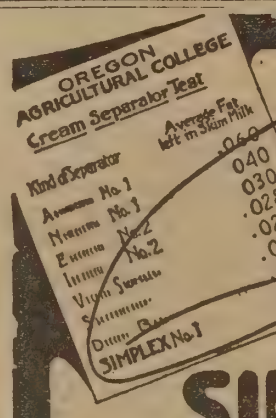
BECAUSE THE DE LAVAL SEPArator of today is just as superior to other separators as the best of other separators to gravity setting, and every feature of De Laval superiority counts for most during the hot summer months.

These are all facts every De Laval local agent is glad of the opportunity to prove to any prospective buyer. If you don't know the nearest De Laval agency simply write the nearest main office, as below.

DE LAVAL DAIRY SUPPLY CO.

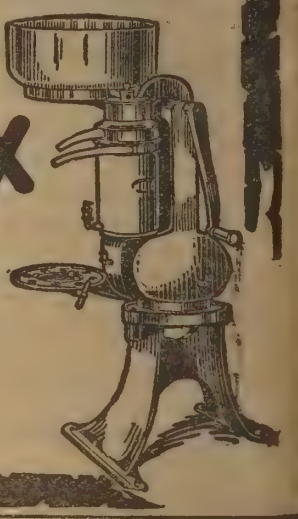
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Alpha Gasoline and Distillate Engines, Ideal Green Feed Silos, Acme Ensilage Cutters and Blowers, Irrigation Equipment, Centrifugal and Deep Well Pumps and Alpha Spraying Outfits. Send for special catalog.

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In a test for average butter-fat left in skim-milk, the Simplex stood lowest with .012, the next lowest being .018.



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LINK-BLADE SEPARATOR

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160 ACRE FARMS IN WESTERN CANADA FREE



Canadian Farmers Profit From Wheat

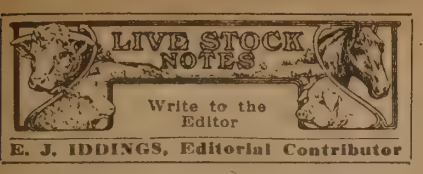
The war's devastation of European crops has caused an unusual demand for grain from the American Continent. The people of the world must be fed and wheat at over $2 per bu. offers great profits to the farmer. Canada's invitation is therefore especially attractive. She wants settlers to make money and happy, prosperous homes for themselves by helping her raise immense wheat crops

You Can get a Homestead of 160 acres FREE and other lands at remarkably low prices. During many years Canadian wheat fields have averaged 20 bushels to the acre—many yields as high as 45 bushels to acre. Wonderful crops also of Oats, Barley and Flax.

Mixed Farming as profitable an industry as grain raising. The excellent grasses full of nutrition are the only food required for beef or dairy purposes. Good schools, churches, markets convenient, climate excellent.

There is now an extra demand for farm laborers to replace the many young men who have volunteered for service in war. The government is urging farmers to put extra acreage into grain. Write for literature and particulars as to reduced railway rates to Supt. of Immigration, Ottawa, Canada, or

J. N. Grieve, Cor. First and Post sts., Spokane, Wash. Canadian Gov't Agt.



E. J. IDDINGS, Editorial Contributor

Classes and Grades of Swine.

A treatise on hog raising from the viewpoint of the packer has been compiled and is being sent out to the swine raisers of the country by Armour & Co. The booklet is the work of E. R. Gentry, general hog buyer for Armour & Co., assisted by Dr. R. J. H. DeLoach, director of Armour's bureau of agricultural research and education. It is not intended to supplant the excellent treatises on swine breeding put out by the government and by other learned authorities; on the contrary, it is designed to make those works more valuable to the man who desires to raise hogs for the market.

It describes the various classes and grades which are standard at the various big markets and explains the types which the packers are most anxious to get and for which they will pay the highest prices. The various cuts and the dressing percentages from the different grades are described and their bearing on the market values shown. The booklet is in no sense aimed to induce the farmers to turn toward certain breeds of swine, the intent being merely to acquaint the hog raisers with the needs of the pork packer.

The losses borne by farmers as the result of disease among the droves is dwelt upon and advice is given on how to minimize this loss. A chapter is devoted to the matter of government inspection and another to the interesting byproducts phase of the industry.

Northwest Live Stock Show.

Secretary Paul Clagstone of the Northwest Live Stock association reports that never have the prospects been so bright for a record breaking show at Lewiston, Idaho. The dates have been set nearly a month earlier than last season, November 8 to 15, inclusive, with three days between the close and the opening at the Portland show.

The Idaho legislature at its session last winter recognized the exhibition of northwestern breeders by making an appropriation of $10,000 cash. Several thousand dollars have been added to the liberal premium list, with special attention devoted to the carlot classes.

Exhibitors are already showing interest in the coming exhibition, and the secretary is getting letters announcing entries from many far away stockmen who have never shown at Lewiston, but who feel that at this time it is a patriotic duty to make sacrifices to aid the cause of live stock production in every possible way.

The premium list committee, under the ledership of Dean E. J. Iddings of the University of Idaho, has readjusted the classifications so as to correspond with the Chicago International and other leading shows of the country.

Dual Purpose Cattle

By PAUL E. TRIEM.

F. C. Sharkey of the Seattle Union stock yards is firmly convinced of the value of milking shorthorns under modern farm conditions.

"You can't get around the figures in the case," says Mr. Sharkey. "A shorthorn steer can be fattened on about half the feed it will take to finish a Holstein, for instance, and will probably command a dollar a hundred more when he is sold. Every dairyman has got to figure on a certain number of bull calves. With the straight dairy breeds these are more or less of a loss. With the dual purpose shorthorn, the steers can be finished for market almost as successfully as with a straight beef type breed, and you still have the milk pail to look to for the main profit.

"I had a practical illustration of the difference betwen the two types, beef and milk, when it comes to fitting for market, in the experience of one of our customers last winter. This man has been buying scrub steers and finishing them for some time. The premium of a cent a pound which he would have to pay for feeders of a better grade looked too big to him. Well, when he came here last winter for some feeders, there was nothing available except a bunch of poorly finished beef type steers. He had the feed, and he decided to take a chance. When the transaction was finished up and he had resold the steers, he came to me.

"'No more Holstein feeders for me!' he said. 'I've learned my lesson.'

"There isn't a valid objection to the dual purpose shorthorn," Mr. Sharkey concluded. "They'll make both beef and milk at a profit."

Balance Their Own Rations



W. F. Howard, breeder of Poland Chinas at Roswell, Idaho, on a Parma, Idaho, rural route, uses self feeders for his growing pigs. He mixes four parts oats, two parts bran and one part wheat and places tankage at one end of the feeder, in a separate compartment, as the hogs, Mr. Howard says, will balance their own ration when served cafeteria style. He has a very fine litter of pigs out of Hannah's Big Mollie, the 1916 first prize sow, that will enter the Futurity and give the others a run for their money. Mr. Howard's young herd boar, Belmont Hadley, is from the Iowa State college. He is by Varsity Hadley and out of Millie's Equal by Big Chief.

The four gilts shown in the picture were bred by E. D. Frazier of Missouri. They are Clover Blossom 1st, 2d, 3d and 4th, and are sired by Wonder King, son of Long King's Equal, dam Cloverfield Beauty 4th by Expansion Hadley.

H. A.

Percheron Stallions.

Wayne Dinsmore, secretary of the Percheron Society of America, is to be forgiven for exhibiting pride in the fact that in 20 states where stallions enrolment laws are in progress, there were 1275 Clydesdale, 2006 Shire, 2114 French Draft, 4212 Belgian and 19,199 Percheron stallions. Percherons, in every state, outnumber all the other draft breeds combined. In Iowa and Illinois, the two greatest draft horse producing states, Percherons constitute 60.68 per cent and 69.32 per cent of all pure bred draft sires. In Oklahoma 85.35 per cent are Percherons; in Kansas 77.65 per cent. In the entire 20 states, 66.49 per cent of the pure bred draft sires are Percherons, and in 10 of the leading states, on which the Percheron society published similar data two years ago, the percentage which Percherons bear to all pure bred draft sires has increased from 64 per cent to over 68 per cent, an increase of more than 4 per cent.

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Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

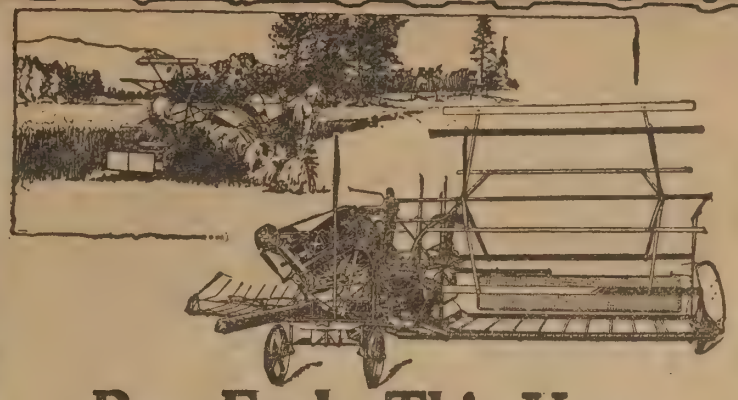
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Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

The Cutter Laboratory, Berkeley, Calif.

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Buy Early This Year

THIS year, American farmers have need of first-class equipment in harvesting machines, twine, and binder repairs. Buy none but well-known, long-tried machines and buy early. The early buyer alone can be sure of securing the necessary repairs and new machines to take care of his grain harvest.

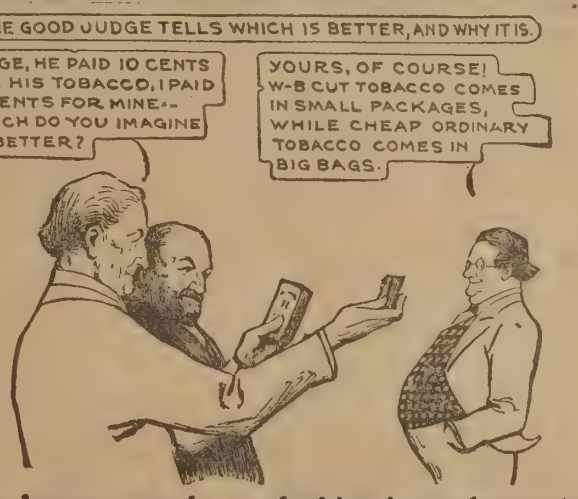
Buy good twine, and buy it now. This is no time to be thinking about saving a cent or two on twine, but to think of the dollars that good twine will save in the field. Our advice to every farmer is to buy at once the full amount he is going to need, and not alone to buy it, but to go to the dealer, get it, and take it home.

Champion, Deering, McCormick, Milwaukee, Osborne, and **Plano** binders now cost less in the amount of farm produce required to buy them than ever before. But prices of all manufactured goods are likely to go higher without much warning, while there is no chance at all for them to go lower this season. The safe thing to do, therefore, is to buy now, at present prices, for immediate delivery.

Your local dealer has done his share to insure the harvesting of your grain. See him as soon as you can and arrange for the repairs, twine, or new machines you are going to need this year.

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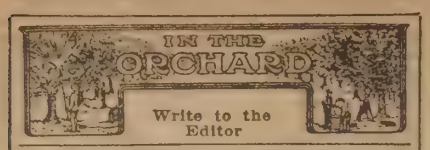
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WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

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GRANVILLE LOWTHER
Editorial Contributor

Can Government Help

Not long since, Professor Caldwell of the Washington State college lectured at North Yakima on the question of the best means of "Conserving the Orchard Wastes." The commercial club of the city had advertised it, and it was reasonably expected that a large number of fruit growers from all over the valley would be present. In this we were not disappointed; but the audience was not what some expected. I said to one man, "Are you going to hear Professor Caldwell this evening?" "No," he said, "I had intended to go, but I am too awfully tired." I went, and as I looked over the audience I knew there were others feeling the same way. One man dropped off to sleep and snored, much to the annoyance of the speaker and amusement of the audience. To my mind it was pathetic, for I knew he had worked from 4 o'clock in the morning with short intervals between for meals. He was about 60 years old and had not the vigor or rapid recuperating power of youth. He felt that he must work in order to grow the crop; that he must attend the lecture in order to learn how to best utilize the crop. But he had worked beyond his power of endurance. These are some of the farm problems. Can the government help us meet them? G. L.

Famous for Its Cherries

By HORACE ADDIS,

Most men and most towns or communities, if they become famous, do so as the result of some one effort or activity. The little town of Cove, which is in a cove on the edge of the Grand Ronde valley in eastern Oregon, is almost world famous for its cherry crop. Cherries from Cove took the grand champion prize for cherry display at the St. Louis world's fair and Karl J. Stockland, who kept up that display and is the largest grower of cherries at Cove, has the records to prove that Cove cherries have more gold medals than those of any other locality anywhere.

About two-thirds of the cherries grown around Cove are black or dark varieties and the other third are Royal Annes. The latter are contracted for Marischino cherries and are barreled in solution at Cove and so shipped, most of them to California. As high as eight or 10 car loads a day are shipped during the height of the season. As high as 80 carloads have been shipped in a season and Mr. Stockland and others estimate this year's crop at 100 carloads. For the black cherries the growers will receive at bulk prices about $65,000 and for the Royal Annes $20,000 or $25,000 more.

Cove is a little place of less than 500 inhabitants, but during the cherry packing season 400 or 500 pickers from outside the district are employed. Cove does not stop entirely on cherries, however. About 40 cars of prunes were shipped last year. They are a very sure crop, while the cherry crop is sometimes light. The apple crop runs from 20 to 60 cars, but some of the apple trees have been cut out. There are a number of young pear orchards, a very few peaches and apricots and from 5000 to 7000 crates of berries are annually shipped.

In 1901 Karl J. Stockland purchased a farm at Cove, Ore. He bought it on time, mortgaging a span of mules to make the first payment. In 1904 he planted the first orchard of sweet cherries of commercial size, east of the Cascade mountains, and then and there was started the industry that has made the little community famous and prosperous. He set 1000 cherry trees on six and a half acres, a double stand or half of thin fillers, which have later been taken out. In the meantime practically the entire community went into the cherry raising and its success is attested by the heavy annual shipments this year expected to reach 100 carloads. That orchard has now been bearing 11 years and taking good, bad and indifferent crop years and markets, it has averaged $300 per acre, net, annually.

Mr. Stockland made a display at the Panama-Pacifc exposition at San Francisco that attracted much attention, but would have attracted much more this year. It showed the American flag and eagle and liberty bell, all worked out in different colored cherries.

THE FARM GARDEN

Article 17.

Not Too Late Yet

Thousands of people in the northwest are allowing the spring season to pass without systematic planting of garden stuffs. Owing to the unusual lateness of the coming of warm weather, it is not too late even now for much to be done.

Where general conditions are favorable, garden peas, one of the vegetables that are not only luxurious food articles, but well nigh necessities, may still be produced successfully. Peas should be planted early, as they are very resistant to frosts, but since they can be planted successively for green peas during the later summer, they can still be planted for considerable production. Not only are the peas excellent and valuable food as fresh vegetables, but they are suitable for canning for winter use.

Squashes and pumpkins should be planted yet in localities at all suited for their production, if they are not already in. The late varieties, such as the Hubbard squash, should not be attempted unless the particular locality offers assurance of a long, warm season. But the more quickly maturing varieties may be produced successfully in many cases. Where the ground is well warmed up as it is in most districts now, the seed will germinate quickly, and with proper cultivation rapid growth can be reasonably expected. As fall frost time approaches it is advisable to cover the pumpkins or squashes with leaves or straw of evenings to protect them against damage should the vines be killed by the cold. Unless actually frosted a little themselves, the killing of the vines will not prevent fairly satisfactory maturing of the fruit. After frost, or whenever the squashes or pumpkins are ready to harvest, either store them in the field on and under straw or something of that character, or put them away in a cool, but dry shelter, such as the barn loft or the attic.

Sweet corn should be grown in greater abundance in the gardens this season than ever before. Many of the best corn growers have not yet put in their corn, owing to the lateness of the season. Every person with room should have a tract of corn large enough to provide plenty of fresh ears for the table during the summer, and plenty for canning for the winter. Canning corn is not as difficult as it was formerly considered to be. Simple methods have been devised. Every farm home should plan to can or dry large quantities of vegetables and fruits of various kinds this season. The United States is the only nation at war now where the people are not limited in their food rations, and no one should be surprised if before another crop season comes around in this country the government commandeers the food in general storage.



OWENS Double-Cylinder
Bean and Pea Threshers

From the largest to the smallest size, embody the essential features necessary to **thresh all varieties of peas and beans** direct from the rankest vines without splitting any of the seed.

They have more separating space and capacity than any machine on the market.

If you need a pea or bean thresher at all, **get an "Owens."**

They are the standard the world over. Built in sizes to suit any size grower from the smallest to the largest, and there are none better at any price.

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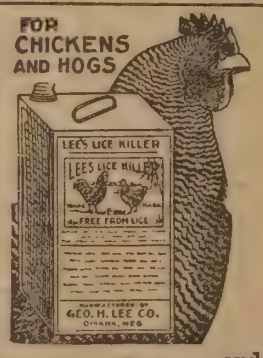
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This includes both meat for the table and eggs. Very few farmers practice a systematic plan of disposing of their fowls after they have ceased to be productive, although it is well known that fowls of the heavier breeds, such as the Plymouth Rocks, cease to produce a profitable number of eggs at the end of their second laying year, and that this holds true of the lighter breeds, such as the Leghorns, at the end of their third laying year. All poorly developed chickens should likewise be culled out and used as meat.

Caponizing the cockerels that are not intended for breeding purposes will not only increase their size, but will place a more desirable poultry meat on the market. Another practice that should be adopted more widely is that of fattening all chickens that are to be marketed before they leave the farm.

The greater production of turkeys, ducks, geese and guineas, all of which can be profitably raised and a ready market found in most sections, would increase the supply of poultry meat considerably. The production of ducks especially should be emphasized at this time, because of the rapidity with which they grow. It is estimated by poultrymen making a specialty of growing ducks that the feed cost per pound of producing duck meat ranges from 8 cents to 12 cents, depending upon the current prices of grain and other feeds.

The number of marketable eggs can be increased by following a few practical suggestions. Among the most important of these are the production of the infertile egg after the breeding season is over, and the proper handling of eggs by the farmer before sending them to market. An increased production of ducks' eggs is advisable where available markets are found.

The Motor Car
On the Farm

Northwestern distributors for the Cole Motor Car company of Indianapolis, Ind., have announced that the company they represent has not only offered to accept Liberty bonds in payment for machines purchased of them, but that it will pay a bonus of two per cent on all bonds so applied.

In other words, if the purchaser applies $500 in Liberty bonds on the payment, he will be credited with $510. If he pays $1,000 in Liberty bonds he will be credited with $1020.

This is but one evidence of the many forms of patriotism displayed by industrial plants throughout the country in their efforts toward arousing patriotic interest on the part of their patrons.

This story, told to the writer recently, is worth repeating:

"The other day a friend and I, while driving around a curve on a narrow road, found it necessary to turn into quite a little mudhole and let another car pass. I killed my engine and by the time it was started again we had settled quite a little in the soft and very slippery mud.

"We found we could go neither forward nor backward as the back wheels couldn't get a purchase. They simply went around while the car remained serenely in one place.

"There wasn't a house in sight and the chances for another car coming along were not encouraging. We tried going forward and backing up—but the car stayed right where it was.

"Then a clever idea that I had read about somewhere came to me. We cut two stakes and drove them into the road back of the car. Then took a couple of pieces of rope that I always carry along. One end of each rope we tied to a stake and the other end passed under the hubs of the rear wheels and tied to one of the spokes. This time when the gears were thrown into reverse the car backed right out of the mud in a jiffy."

Every once in a while we casually read of some predicament of a brother motorist and of some novel way of getting out of it and then some day we suddenly find ourselves in the same fix

Puyallup Summer Session.

The Puyallup summer session of the state college of Washington will be held June 25 to August 3, 1917. Write to the Registrar, State College, Pullman, Wash., for the bulletin which makes a most interesting announcement of the courses carried on at this summer school under the leadership of Principal Frank O. Kraeger, who is well known as the head of the department of elementary science at Pullman and yet better known throughout the state as lecturer on country life, community problems and industrial education. The Puyallup summer session always has been given chiefly to instruction and practice in the various branches of agriculture, horticulture, manual training and domestic science. The recreation side has been developed until a satisfactory balance of work, play and study has been attained. The location of the Puyallup summer session is ideal.

The Puyallup experiment station offers its wealth of scientific and experimental agriculture for observation and study. About the school in every direction lie the farms, gardens, dairies and berry fields of the Puyallup valley. The mills, factories and commerce of Tacoma are but a few miles away. A yeast plant, condensery, smelter, power plants, canneries, lumber mills and furniture factories are within a short distance. Land and water transportation is at hand. The region is a vast laboratory of geography, forestry, botany, agriculture, horticulture, manufacturing, commerce and transportation. The summer session has for its headquarters the Puyallup high school—a modern brick building, well equipped, with separate buildings for agriculture and manual training. The experiment station, which is made the basis of much of the scientific teaching, is less than a mile away.



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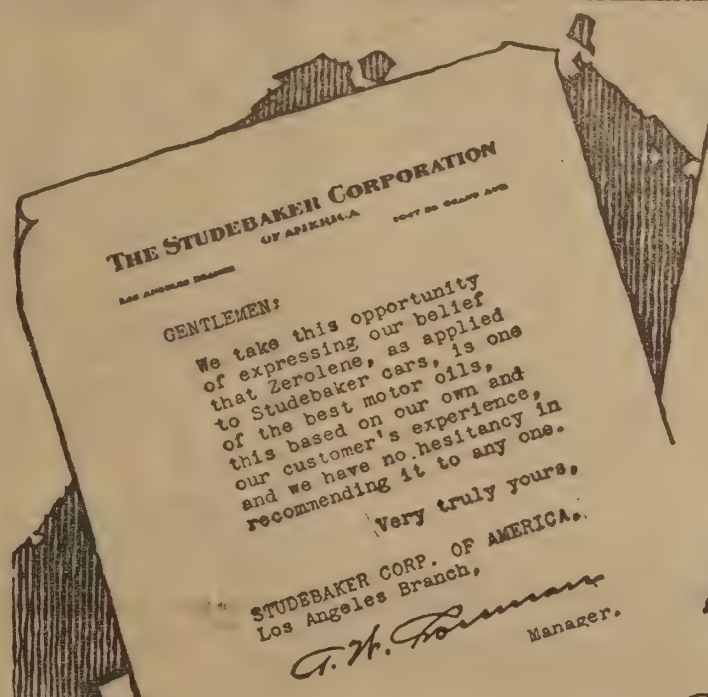
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Loss From Weeds Is Enormous

(Continued from page five.)

alfalfa seeds sown, 85 would germinate, and 15 would be "dead." The law says that 80 alfalfa seeds in a hundred must germinate; that is, it must run 80 per cent viable. So alfalfa was 5 per cent above the legal requirement for viability.

The seeds which fell below the legal standard for viability were English rye grass, German millet, Kentucky blue grass, orchard grass, red top and wheat. Probabilities are that the loss in percentage of germination or "viability" of wheat was due to injuries to the grain in threshing—too high speed of the cylinder, for example, which cracks the grain slightly.

During the last year, 32 per cent of all samples tested contained lamb's quarters. Probably the worst weed occurring in large quantity was green foxtail, which occured in 30 per cent of all samples tested. Barnyard grass occurred in 18 per cent of all seed samples examined. This is one of the worst weeds in the state. It can even "run out" dandelions—but there is no consolation in that fact, since the plantain is not as pretty in a lawn as is the blossoming dandelion. Sheepsorrel was found in 15 per cent of all farm seeds tested. Curled dock occurred in 11 per cent of the samples tested, Russian thistle in 8 per cent and so on down. Other weeds were tumble weeds, several of the brome grasses, a number of mustards, milfoil—or yarrow—rag weed, Canada thistle and a few others.

As one would expect, more than one variety of noxious weed are often found in these tests. In 1914, 13 per cent of all alfalfa samples tested contain no weed seed. Twenty-five per cent of the samples tested contained only one variety of weed. Seventeen per cent of the samples tested contained two varieties of weeds. Twenty-five per cent contained three weeds; 8 per cent contained four varieties of weeds; 9 per cent contained five varieties of weeds; 3 per cent contained six varieties of weeds.

The annual loss which Washington farming suffers from weeds is probably between fifteen and twenty-five million dollars.

About 80 per cent of the noxious weeds in Washington are of foreign origin, and have come in by means of farm seeds.

Weeds injure farm crops in several ways:

1. They rob the soil of food materials which would otherwise be available to useful crops.
2. They "crowd" the farm crops, cutting them off from sunlight, and occupying the root space needed by the former.
3. It takes as much moisture to produce a good crop of weeds as it does to produce a crop of wheat. Eastern Washington farmers are sometimes not alarmed by weeds growing on their summer fallow, and think if they keep them from seeding, that is sufficient. It is not. The moisture consumed by the weeds is needed for wheat, or other useful crops, and the latter are robbed by the weeds.
4. As well as consuming soil moisture, they rob the soil of plant food.

Morning Glory.



It is ubiquitous, omnipresent and noxious among farm weeds. Yet, it has a beautiful flower and by its beauty people often are beguiled into letting it stay on the place till it has worked havoc in field, orchard, garden, lawn. It is also called bind weed. It reproduces by an abundance of seeds and an equal abundance of underground stems or root stalks in which it accumulates large quantities of excess food material. In this respect it has somewhat the instinct of a squirrel storing nuts for winter. If the top is cut off the morning glory or bind weed immediately repairs the damage to its household by drawing upon the food supply stored in its roots for just such an emergency, and growing a new top. The top of the plant—or leaves—manufacture the food which is sent down underground for storage in the roots. So if one keep on cutting off the tops, after awhile the plant will have exhausted the food in root storage—and then starves to death. Also, if one throws straw over patches of bind weed and keeps the sun away from the leaves they are powerless to manufacture food, and the plant starves. Hogs like to eat the underground stems in which its reserve food is stored and will root industriously in the soil where these roots and stems are.

Shepherd's Purse.



Though it belongs to the mustard family it is not as bad as the Jim Hill or tumbling mustard. It produces enormous quantities of seeds—begins in March and April and keeps it up till snow. In fields, gardens and lawns, it can be controlled by rotation with cultivated crops. One of the worst things about this weed is its immense prolificacy.

43½ Bu. Wheat Per Acre

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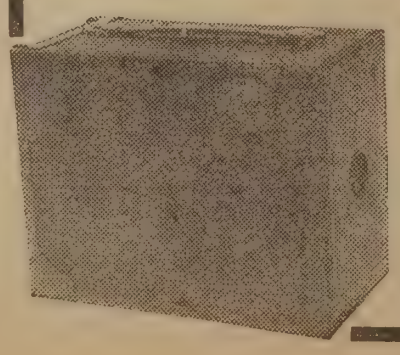
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ure needed by useful crops, weeds also consume soil nitrates and other plant food. If they are retilled into the soil, the soil nitrates are recovered to a certain extent; not so with the moisture.

5. A number of weeds are somewhat poisonous to the soil, giving off "toxic" substances injurious to other plants.

6. A great many weeds harbor fungous diseases and insect pests which are harmful to farm crops. "Rhizoctonia" in Washington, the causative agent of tomato blight in the Pacific northwest, is harbored by dandelions, some of the mustards, sour dock, lambs quarter, the sow thistle and a few others, perhaps. If these weeds are permitted to grow in tomato-producing sections year after year it is impossible to get rid of the tomato blight—which is also a serious disease of beans, cucumbers, sweet peas and potatoes.

The native home of the "potato bug" which now is making costly inroads upon the potato crop of the northwest is on the "horse nettle," a weed in Colorado.

Recommendations.

Sow only clean seed.

Never allow weed seed to ripen.

Disk stubble often and induce weed seed to germinate. If the plants start in the fall, most of them winter kill.

Cultivate frequently. Ordinary farm tools are usually sufficient to kill weeds.

Get some sheep—they are highly efficient destroyers of weeds.

Diversify—nothing is so conducive to weeds as continued cropping to one kind of crop.

Be suspicious of every new plant that appears on your farm. Hoe it up on general principle till you know whether or not it is danger. Send any "unknown" to the department of botany of the state college, Pullman, Washington, for identification and report. Take no chances.

There is no royal road to weed eradication. The only thing to do is to get them out of the ground by plowing, cultivation, hoeing, pulling or similar means. Get the first ones.

Common Cheat.



It takes this name, probably because it resembles grass. It grows in waste places, and is relished by sheep, the grazing of which is about the most efficient means of getting rid of it.

Sheep Sorrel.



It is also called correl grass and red sorrel. It produces seeds abundantly, and is frequently found in commercially sold forage plant seeds such as alfalfa, clover and alsike. It grows also by underground stems. About the best way of getting rid of it is to put the ground in a rotation of crops, one being a cultivated crop.

Curiously enough, this plant seems to thrive better on poor soil than on good soil. Soil that is somewhat acid is congenial to it. Enriching the soil by means of lime, or barnyard manure discourages its growth and correspondingly encourages the growth of useful crops.

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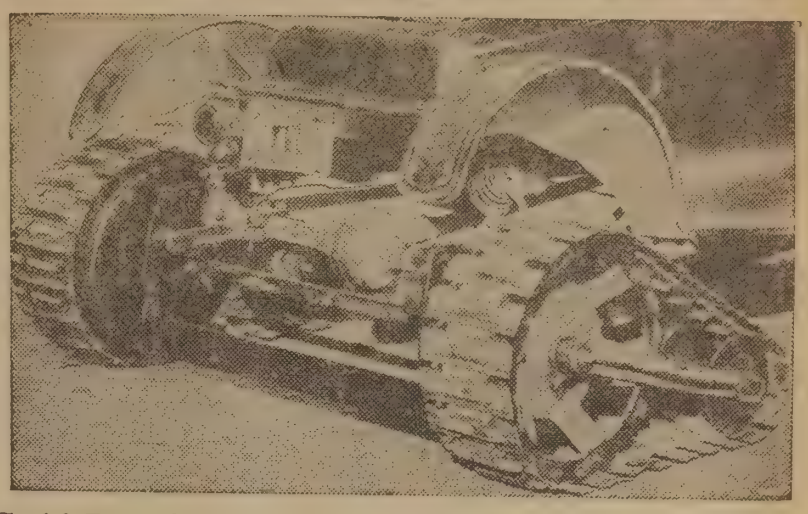
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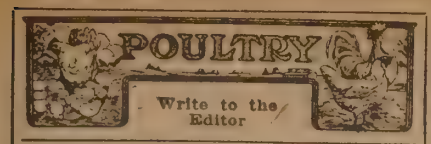
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JAMES DRYDEN
Editorial Contributor

Poultry Patriotism.

It was a patriotic duty to hatch chickens last month and the month before to help feed the world, but it is doubtful whether it is patriotic to hatch any after the first of June, with prices of feed as they are, and with prices of broilers as low or lower than they were a year ago. But it is a patriotic duty to make every ounce of high-priced grain that is fed to chickens count in raising them.

Don't throw high-priced grain at the chickens and expect them to make profitable use of it without green food, grit and animal food.

Don't feed $3 wheat to chickens to make blood and flesh out of it, and then let mites suck blood out of the chickens that was made out of the wheat. That is too much of a leak.

Cooperative Organization.

Helpful suggestions may be obtained by poultry raisers and others by writing to the Animal Industry Department of Parks, Davis & Co. of Detroit, for free booklets on farm sanitation and poultry raising, giving the A. B. C. of the industry, plus many practical and profitable suggestions.

Head Lice on Chicks.

On hen-brooded chicks, head lice are likely to be found in two or three days after hatched. A good remedy is a very little lard rubbed well in on top of head and under throat.

The Annual Food Cost of a Hen

The cost of feed for a flock of heavy-laying Barred Plymouth Rock hens at the Oregon station last year was $1.80 per hen. They averaged 181 eggs each, just a cent an egg. The eggs at wholesale prices in Portland were worth $4.27 per hen, showing a feed prefit of $2.47. This was very good profit. If the feed had cost as much as it did in April and May of this year, the cost would have been $3.06, leaving a profit of $1.21 at last year's egg prices. This shows an increased food cost of 71 per cent.

If the production had been 150 eggs per hen, which is a good overage for pullets, the profit on feed would be only 49 cents at last year's egg prices with April and May feed prices.

If the production had been 100 eggs per hen, which is more than the average of all the hens of the United States, there would have been a loss of 70 cents per hen on the feed, at April and May feed prices and last year's egg prices.

In this experiment the feed was purchased by the ton and the wheat averaged $1.75 per hundred pounds. If bought in a small way at retail stores the cost would have been somewhat greater. On the other hand, a flock of farm hens having free range on the farm, would have been fed at less cost; or rather, the food bill would have been reduced by the amount of waste feed found on the farm.

Again the egg prices secured were higher than most farmers receive for their eggs. If sold at the local stores the returns would not have been so great.

The monthly production cuts a big figure in cost and profit. Good layers lay well in fall and winter when prices are high. Poor layers lay few eggs when prices are high. In the above estimates I have assumed that the percentage monthly production was the same with both good and poor layers. But this is not correct. If 181 eggs made a profit of $1.21 this year's prices of feed, 150 eggs per hen would not make 49 cents profit, as mentioned above, because the poorer layer will not lay as well proportionately as the good layer when prices of eggs are high. The chances are that this difference in monthly production would wipe out the 49 cents profit.

So that the Plymouth Rock hen of 150-egg capacity will not make a profit at April and May prices of feed and last year's egg prices. With such a flock the poultryman must get better prices for his eggs than last year, if the feed prices are to continue high for the year. In point of fact egg prices have been ranging high enough this year for the 150-egg hen to pay for her feed. There is very good prifit with hens laying 175 to 200 eggs in the year.

Prices of feed and prices of eggs vary and no definite amount can be stated as the profit of a hen. But the appetite of the hen does not vary. The food consumption is the same year after year. The main point in the experiment quoted is the amount of different foods eaten. Knowing the food consumption, which is a definite definable amount, the poultryman can figure out in any year and at any feed prices what profit he is making.

The flock of Plymouth Rock pullets in question were kept in confinement where they could get no feed except what was actually weighed out to them. Even the amount of water they drank was weighed. With Leghorns or small breeds the profit on feed should be greater because they eat less food than Plymouth Rocks, at least 10 per cent.

The different foods eaten by the pen of Rocks and cost of same per hen is shown in following table. At feed prices prevailing last year the ration was an economical one. At present prices it will pay to modify the ration by reducing the amount of wheat and changing it in some other respects.

	Feed. Amount in Lbs.	Price per cwt. 1916-17	Value
Wheat	45.95	$1.75	$0.803
Oats	16.25	1.50	.243
Bran	8.21	1.40	.105
Middlings	2.05	1.65	.034
Grain oats	2.05	1.60	.033
Grain corn	2.05	1.60	.033
Linseed meal	2.05	2.00	.041
Buttermilk	16.42	.15	.024
Meat scrap	6.40	3.50	.224
Cut bone	3.00	2.00	.06
Kale	43.8	.15	.065
Grit	2.75	.50	.013
Oyster shell	2.42	.80	.02
Charcoal	.37	2.50	.01
Straw (for litter)	40.00	.25	.09
Total per hen	....	....	$1.80

Cooperative Organizations.

The steady growth of the agricultural industry in the western provinces of Canada is evident from various annual returns, of which those showing the results of the operations of farmers' organizations and of the distribution of cattle from the Winnipeg stock yards are especially significant. The farmers' organizations have 48,000 shareholders, a paid-up capital of more than $2,000,000, and assets of more than $8,000,000. Although the 1916 crop was unusually light these companies handled 90,000,000 bushels, or one-third of the marketable portion of the grain raised; the profits aggregated $1,814,000, and of this amount $620,000 will be paid to the government under the provisions of the business profits war tax act.

Through these cooperative associations efforts are being made to encourage mixed farming and the acquisition of more live stock.

Fire-Proof Celluloid.

In Germany there has been invented a fire-proof celluloid for use in wind shields and automobile windows.

S. J. Morin's Patent | Improved No. 2

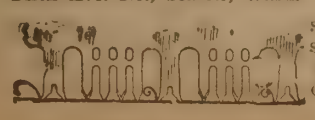


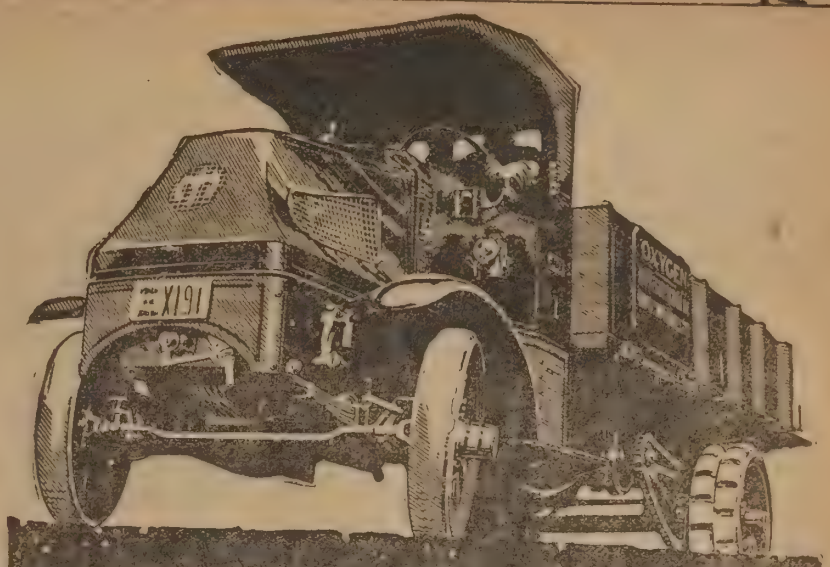
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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER XV.

In which the 15-year-old bunchgrass boy launches out into the financial world.

Ways and means of earning money were to a 15-year-old boy on a farm in pioneer eastern Washington of 25 years ago rather scarce. The first money I ever earned, I think, was by poisoning squirrels at 75 cents a day. The work was done for a neighboring bachelor who had 160 acres of wheat. It was my business to hunt over every square rod of the field, and to deposit at the mouth of each squirrel burrow I found a big spoonful of wheat that had been soaked in water sweetened and treated with strychnine.

To get over the field without loss of time it was necessary for me to carry a five-gallon pail of the poisoned grain The pail, when full, was pretty heavy. Also, in plodding through the soft, finely pulverized field my shoes filled with earth, which gathered in little bumps under the soles of my feet and made blisters. I tried going barefooted, but this was unsatisfactory, since the young wheat blades caught between my bare toes. Then, too, I was afraid of rattlesnakes.

One of our neighbor women remarked to a boy friend of mine that she did not believe I was poisoning all the squirrel holes in the hundred and sixty. She said it would be more like me to throw the poison into a badger hole.

My friend told me what she said. I was so angered over the matter that for days I brooded over it. For this woman I developed a most profound dislike. Had I ever consented to poison squirrels for her I believe it would not have been a bit above me to dump the poison in a badger hole, even if my act cost her a whole wheat crop. I disliked her, disliked her husband, disliked her children, disliked their cows, their horses, their pigs and their chickens. They and theirs I disliked; and as I grew older the dislike did not abate a jot, and it is about as strong as ever today.

Another source of income in my early boyhood was in finding horses that had strayed out of "The Ridge" country that was five to eight miles north of our place. The Ridge was quite thickly settled. It rained more up there than down on the Flat where we lived. The wheat crops were bigger, the farms better tilled, the farmers were more prosperous, and their horses often bigger and fatter than our horses. But very frequently the big, fat horses of the Ridge strayed down into the Flat, and on south into what we called "the Pot Holes." Once in the Pot Holes the stray horses from the Ridge were safe from discovery by their owners.

I knew the Pot Holes, almost inch by inch. Ranchers from the Ridge would come to our place and offer me 25 cents or a little more, maybe, to find their lost animal or animals. I generally located the truants in half a day of riding. I knew about when they went for water, knew which holes were dry, knew where there were shady clumps of "sarvice" and willow where the strays often rested when it was hot; knew the half hidden coyote trails, and knew certain curious conical piles of stone the early Indians had set up to guide them through the Pot Holes. I knew the high points on which I could ride to scan the surrounding country for the rising dust clouds that indicated a bunch of horses making for water; and knew how to thread my way swiftly through the Pot Holes to the point where I could most advantageously head off the horses and "cut out" the strays. These things and much other lore of the Pot Holes I knew; and I do not remember ever having failed to find a single stray animal that had escaped into the Pot Holes.

An opportunity came for me to get rich right away—so I thought—when I was 15. This was a little while after the close of the Spanish-American war. A "war history" had been published by a Chicago publishing house. I received a neatly typewritten letter from the company, asking me if I didn't want to sell its new and authentic and well illustrated history of the Spanish-American war. My commission would be 40 per cent of sales, the books selling at $2 each. The letter stated that already a stack of these books three miles high had been sold. The company sought to avail itself of my salesmanship in order to start on the fourth mile of the stack.

I felt highly honored by the offer that had been made. I had read in stories, of business men who, deep in meditation on some business problem, paced the floor till far into the night. I supposed that to decide what to do with this offer I should pace the floor. So I paced nightly, after my parents had gone to bed. The board floor creaked under my pacing, and my mother finally lost patience and told me to get to bed. I felt hurt, but complied. Eventually, I decided to help the company begin building the fourth mile of the stack of war histories it had already sold.

So I equipped myself with a sample book. Mother made me an oil cloth bag which I could swing over my shoulder under my coat. I repaired my saddle, curried my pony, trimmed his mane and tail, and fared forth as a seller of what was claimed to be the greatest history of the Spanish-American war that had been written.

I first made the round of the neighborhood and sold to the people who knew me. In Hartline I stationed myself at the entrance of the wheat warehouse and as the teamsters came in with loads of wheat sold them a war history. It was not long till my sales mounted to one hundred books, my commission on which was eighty dollars! This sudden wealth made me almost dizzy.

Among my friends I used several pretty effective talking points. Many of the boys had gone to the war and my book told about the battles in which they had participated. Harry Keyes, son of Old Man Keyes, a pioneer resident of the Hartline country, had been killed on the Maine in Havana harbor. Harry had spent a couple of years in our neighborhood—in fact, he

(Continued on page twenty.)

"Buck" and His Master Sleep Side by Side

By PAUL E. TRIEM.

Beside one of the gravel paths in Lakeview cemetery, Seattle, rises a slender monument of dark gray stone. Its base is shrouded in ivy. On one side the name "Buck" stands out in raised



In Memory of Buck.

letters, and is usually taken by the casual passerby for the surname of some pioneer, long ago forgotten.

The inference is substantially correct. Buck was a pioneer—one of those trail-breakers and burden-bearers whose unmarked graves are scattered over the vanishing frontier. To one who has the leisure, in these days of turbulence and hurry, to pause for a moment, the story of a life typical of many heroic lives of a vanishing era is quickly revealed. Pressing aside the matted vines around the foot of the monument the inquirer discloses four inscriptions, one on each side of the foundation stone.

On one side is chiseled:

"Buck, my favorite cattle horse, died Sept. 20, 1884. Aged 18 yrs. & 6 mos."

A second inscription is: "In adversity faithful." On a third side is carved the single word, "Corral'd." The fourth inscription tells the story quite fully. It reads:

"For 13 years my trusty friend and companion, in blackness of night, in storm, sunshine and danger."

Twenty years ago Buck's master followed the old cow pony along the last, mysterious trail, and all that was mortal of him was laid to rest close to the granite shaft which he had caused to be raised over his four-footed friend. Once a flicker of excitement was occasioned by the discovery, made by one of those bigoted people to whom the unusual is always the scandalous, that "a horse is buried right next to people, in the cemetery." There was a short lived attempt made to have the old pioneer's bones exhumed and buried in another place, but the matter was soon dropped.

And so, in these stirring days of the 20th century, when the seed sown by a generation of wilderness tamers already forgotten is beginning to bear fruit in great cities and prosperous country sides, Buck and his master sleep side by side; waiting the great day, perhaps, when all true hearts, whether they be those of men or beasts, shall know that—

"Nothing walks with aimless feet,
That not one life shall be destroyed
Or cast as rubbish to the void
When God hath made the pile complete."

Peas Beat Barley for Hogs

As a result of a series of experiments with four lots of hogs during a period lasting from January 27 to March 16, inclusive, Benton M. Bangs, a graduate of the State College of Washington at Pullman, found that peas proved to be a better hog feed than barley; that self-feeders are desirable from the standpoint of labor and time saving, and that shorts should not be used as more than 15 or 20 per cent of the feed ration.



Benton M. Bangs, whose article on hog rationing is referred to herewith, is one of the northwest practical students of agriculture whose fame has gone abroad because of his football record. Bangs was the most noted member of the team of the state college which in 1916 defeated every team that it met, including Brown university in the game played at Pasadena on New Year's day.

These facts are brought out in a comprehensive thesis by Mr. Bangs, who received a master's degree in agriculture from the state college this commencement. "The Best Ration for Hogs" was his subject.

The following proved to be the ideal ration from the standpoint of profit: Peas, 60 per cent; shorts, 30 per cent; tankage, 10 per cent. This yielded an estimated profit per hog during the time of the experiment of $5.71.

Results with other lots fed with different rations were as follows:

No. 1 ration—Barley, 60 per cent; shorts, 30 per cent; tankage, 10 per cent. Profit per hog, $3.72.

No. 3 ration—Peas, 60 per cent; shorts, 30 per cent; oil meal, 10 per cent. Profit per hog, $3.81.

No. 4 ration—Barley, 60 per cent; shorts, 30 per cent; tankage, 10 per cent. Profit per hog, $4.87.

Hogs in lot 1 were hand-fed, those in lots 3 and 4 being self-fed.

COYOTES ARE DYING.
Rabies Taking Large Numbers.

The Washington Farmer was pleased to receive a call from E. F. Averill, predatory animal inspector for Washington and Oregon, who brings the gratifying news that in the section of country on the east side of the Columbia from Pasco north to Ephrata and above there are only about 25 per cent of the coyotes seen that were prevalent a year ago. Mr. Averill says the chief cause in this lessening of the coyotes has been the rabies itself among the animals. A coyote affected with rabies lives only a few days, eats nothing and becomes merely a skeleton. This leads some to suppose that coyotes are dying of starvation, but, says Mr. Averill, a coyote will live on almost any kind of animals from a mouse up to a steer. On the west side of the Columbia there are also fewer coyotes seen, and here the government hunters have been effective largely in reducing the number. Mr. Averill was on his way to Sprague in which section a couple of government hunters are to be put on.

Ye Have Heard That It Was Said by Them of Old Time.

THE FALSE WITNESS.

"Thou shalt not bear false witness against thy neighbor."—Exodus 20:16.

There appears to be a distinction here. The ninth comandment does not say that thou shalt not lie, but that a lie must not be told to the injury of another. And this would seem to include not only the courts of law, where an oath is administered, but also private conversations where a falsehood whispered about another might, and sometimes does, blast a character forever.

The gossip and scandal monger are classed here alongside the murderer and thief. We are prone to look on the circulation of false tales as not polite and courteous or kind, but have we recognized this sort of thing as on the same plane as crimes?

So far as we can see no distinction is made. Moses did not say that killing was worse than bearing false witness.

It is an out-and-out sin, and though it is not classed as a punishable crime to tattle and retail gossip, it will be punished by the courts of eternal justice just the same.

All the World's a Stage, and All the Men and Women Merely Players

Taft Visits Son Now in Army



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This picture was taken when William H. Taft visited his son, Charles P. Taft II., now a private in the artillery stationed at Fort Meyer, Va.

Heads Relief Expedition.



Captain Robert A. Bartlett, who was with Peary in his arctic explorations, will command the steamer Neptune, which has been chartered by the American Museum of Natural History to be sent to the relief of the Crockerland expedition, which has been marooned in the Arctic since 1913. This will be the third attempt to reach the expedition, the prior efforts proving failures. It is expected the relief expedition will start about July 1, and if successful it should return in September. Members of the Crockerland expedition, who are believed still alive in Etah, were sent out in 1913 by the Museum of Natural History, the American Geological society and the University of Illinois. The expedition consists of six scientists and the crew.

Getting Wilson's Address to Germans



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That the German soldiers might be correctly informed regarding the entry of the United States into the world war and its reasons for so doing, the French had President Wilson's great message translated into German and distributed over the German lines. This photograph shows the printed speeches being tied to a balloon.

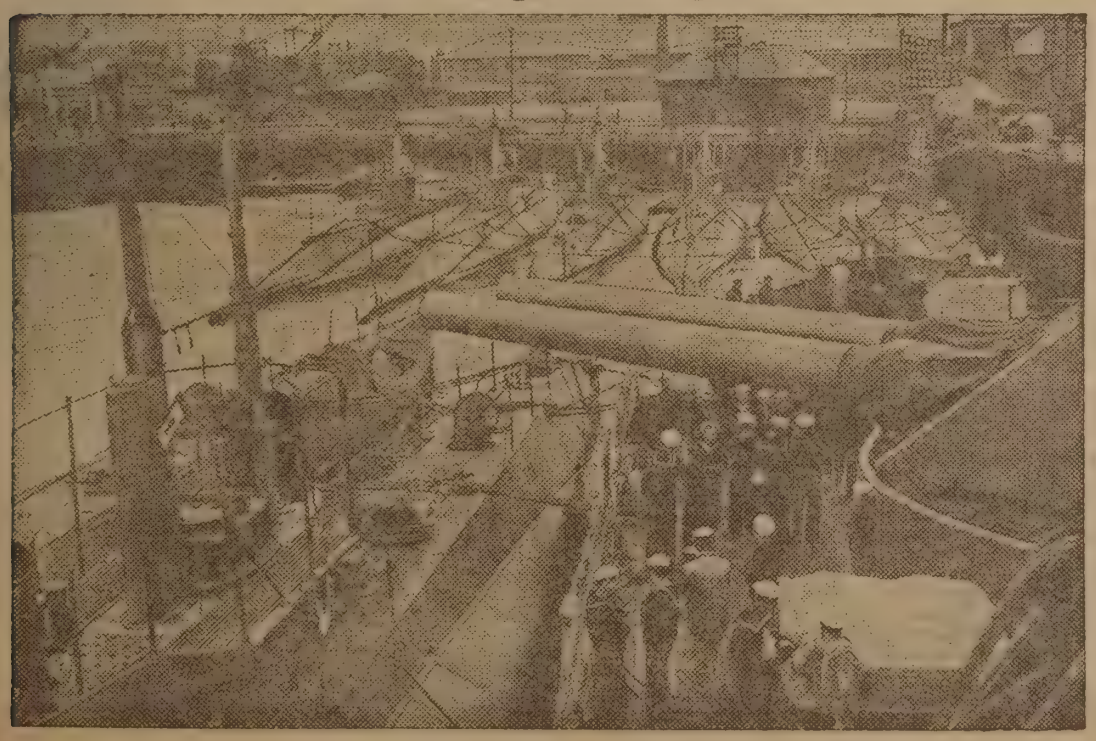
Picking Up Survivors From Torpedoed Ship



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Official British war office photograph showing survivors from an unnamed merchant ship being picked up by lifeboats and rafts in mid-ocean, following the sinking of the vessel by a German submarine.

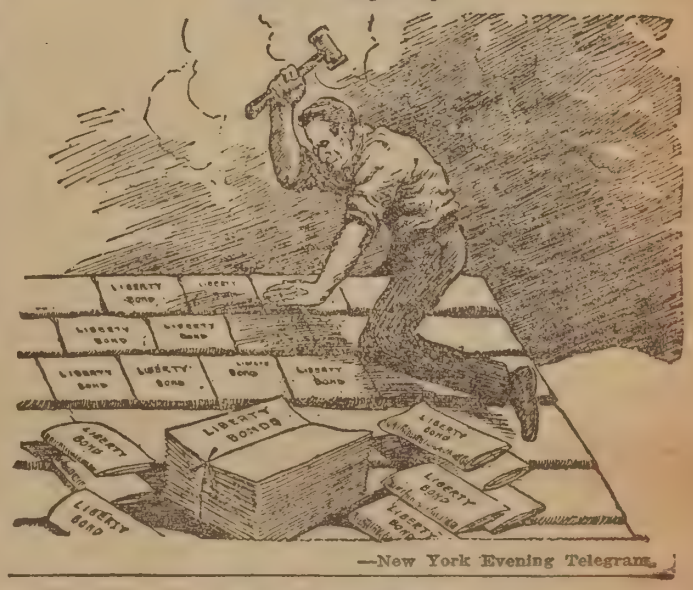
Guarding Her "Pups."



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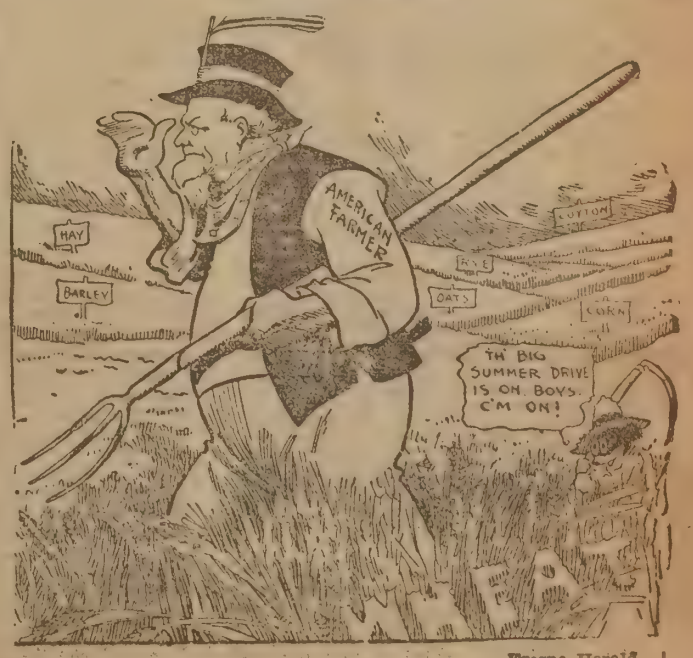
The "mother ship" of a submarine unit guarding her "pups" in the Charleston navy yard slip.

For a Rainy Day.



—New York Evening Telegram.

The Field Marshal.



—Fresno Herald.

Ups and Downs of a Bunch Grass Boy

(Continued from page eighteen.)

and I had ridden the hills together looking for horses and cattle. I do not know in what capacity Harry shipped on the Maine after he left home, but somehow he got on and afterwards was killed. So there was a good deal of local interest in my war history, which, coupled with the fact that most of the people knew me, made the book go like hot cakes.

Next I raided Coulee City and sold to most of the business men in the town. The railway "section house" where the laborers boarded was occupied and managed by two old maids. One of them bought a war history. I did not know just what argument to advance in order to persuade the women to buy my book. In desperation I said that the men were buying it and that I thought the women ought to buy it also.

Coming out of the section house I heard a man shoveling coal in one of the bins a short distance up the track. I followed the sound and eventually found a grimy, good-natured Irishman busy with a shovel. He said his name was John Corley. Sure he would buy the book—glad to; did I want my money now? I did, but was too timid to say so. I said he could pay me when the book was delivered. A month later I visited the coal bin to deliver the book, but John Corley was shoveling coal somewhere else likely, and had departed without leaving his address.

My book selling campaign that fall included our neighborhood, the region east as far as Almira, where I struck the territory of another agent for the same book, and west 50 miles to Waterville. In the western country towards Waterville all was virgin land so far as book agents were concerned. The pioneer people, many of them, hauled their wheat 20 and 30 miles to market. They welcomed me, and almost any kind of a canvass sold a book. When it was night I stopped at the first house and asked for lodging for myself and horse. In the morning my bill was either 25 cents or 50 cents, and often nothing, with an invitation to return. I invaded homes, threshing machine outfits, hotels and cow camps, and often was offered a harvest field job. Once I climbed up on the derrick table of a thresher, took the fork from the hand of a workman, gave him my prospectus and asked him to go and sit in the shade of the stack and look at it. He did so. I worked on the "hoe down" in his place for 20 minutes, until he came back with his name written down in the place I had showed him.

In Waterville I did not sell many books. The people were wary of agents, and I had no skill in getting into a house where agents were not wanted. I tried the outskirts of the town, but with no better success. Then I struck across Badger mountain and into the southside country, 75 miles from home and among strangers who were increasingly difficult to interest in war histories, no matter how authentic.

Returning from the southside country I got lost in a snowstorm on top of Badger mountain. I had a hard ride that day, aiming to get over the mountain and down to Waterville. In the higher altitude of the mountain it had been snowing all day, and in the tops of the big pines that grew thickly on each side of the road were lodged great masses of feathery snow, which was shaken down as the night wind began to rise.

I had been raised on the prairie. The timber did not look good to me that night. It occurred to me that it would be mighty easy to get lost if one got off the road in the timber. It was dark when I reached the clearing about Bishop's sawmill, and the comfortable lights of the bunkhouse made a pretty strong appeal. I knew in my heart I should stop; but with twinges of homesickness I held to my determination to get to Waterville that night.

The wind blew harder as evening advanced and shook the fluffy snow out of the trees in masses that nearly buried me and my pony at times. It got darker till I could see only the white, narrow roadway through the timber. On all sides it was black as ink.

Then the thing happened. I came suddenly to a place where the road branched to the right and the left, with one road going straight ahead. Which road to take was a mystery to me. On my native prairie I would not have been dismayed, even in the dark and snow; but of timber I was afraid. I halted my tired pony and pondered. A heavy drift of snow fell from the overhanging treetop and nearly smothered me and my horse. He reared and floundered and snorted, and when I had quieted him and gotten the snow out of my eyes and ears I was lost. I did not know which road was the back trail, or which would lead me to Waterville.

It was clear to me that my case was fairly critical. One might not freeze if obliged to stay out in the snow all night, but it would surely be uncomfortable. Besides, there was the humiliation of being lost, even if I did scrape through without freezing. Luckily I had sense enough not to "stampede"; but sat my horse and tried to ponder a way out of the difficulty. It would be useless to wander about, I decided, since by so doing my confusion would be increased.

I reasoned, finally, that as I had ridden from Bihop's mill the wind had been at my back. Therefore, desiring to return, I should face the storm. Unfortunately the trail leading into the storm was the wrong one, I was sure. It was plain that the wind could not have changed its direction, however; also, the very fact that I was lost was proof adequate that my sense of direction was muddled. Hence, the wind, rather than my own belief, seemed the safe guide, so I headed into the storm for Bishop's mill.

I held to the trail, hours it seemed, sure every minute that the road was wrong, yet knowing that the wind had not changed. Eventually, to my vast relief, the friendly lights of the bunkhouse appeared. I rode up to the door and shouted. The door opened, light streaming out, and several men crowded to the doorway. My shrill voice puzzled them, perhaps. One said: "It's a woman." Another said: "It must be a kid that's lost." They came out and surrounded me, storming as it was, and I explained that I had been trying to get to Waterville, but was uncertain which of the three roads to take.

"The middle road," said one of the men—"in the morning." He laid his hand on my bridle and asked me to dismount. It was Mr. Bishop himself who spoke. I was white with snow, and they swept me off with a broom; they warmed and fed me by a fire of pine knots that blazed high, filling the room with warmth and their own resinous fragrance.

They put me to bed, presently, in a top bunk supplied with a mattress, warm, dry horse blankets for covering, and one of the men's coats rolled up for a pillow. On the roof a couple of feet from my head was the pounding of the storm which had increased in violence; and I went to sleep with its roar and thoughts of home 70 miles away in my last, fading consciousness.

In the next instalment, the Bunchgrass Boy recalls his "baching" days while attending business college in Walla Walla. Here is one paragraph from his narrative:

"I had a red flannel shirt which was part of my equipment brought from the Big Bend. I knew enough not to wear it on the streets of Walla Walla; but I wore it in doing my housework and cutting wood. Eventually it needed washing. I thought I ought to 'boil' it, and did; in fact, I boiled it good and plenty with such garments as light underwear, white shirts, white handkerchiefs, and so on. The color of the shirt 'ran'—indeed, it ran like a scared wolf. All the clothes came out a sort of reddish pink. So the rest of the winter I wore pinkish socks, pinkish shirts and pinkish underwear."

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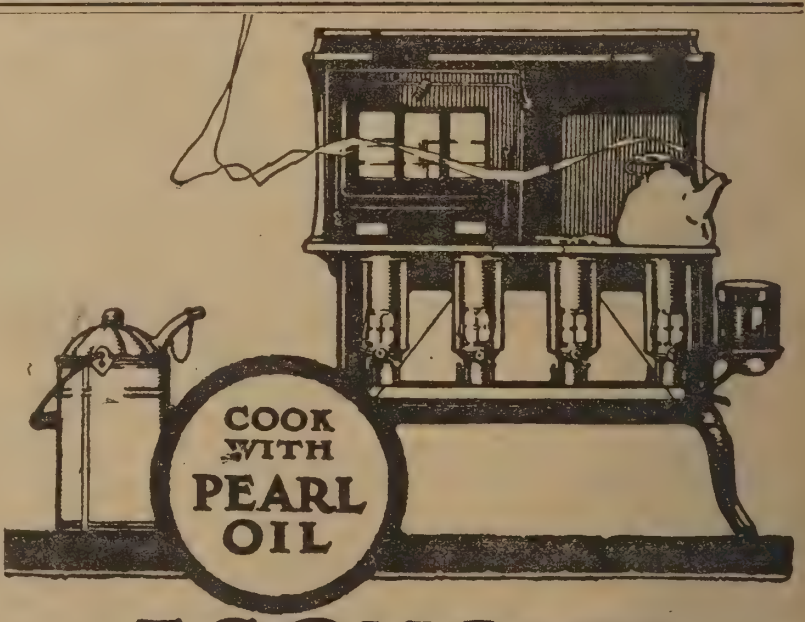
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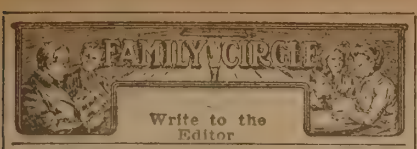
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Bran and White Flour.

Please tell us what portion of the wheat the middlings are, also the shorts. Is there any real flour in either of them? It would interest many to know how and what portion of same could be added to flour to make good bread, biscuits and hot cakes. Please give recipe in your paper.—H. E. B.

Wheat is a starchy mass surrounding the embryo and surrounded by six layers of tissue. Bran is the outer coat of the wheat separated from the flour by bolting. Middlings and shorts are often used for the same article, which is composed of the coarser flour and finer bran. Shorts sometimes consist of ground over bran and have no flour to speak of. Bran contains bulk, protein and ash and is a valuable feed. Middlings furnish a richer and more concentrated feed. There is rye bran, corn bran, rice bran and buckwheat bran, as well as wheat bran, though commonly it refers to wheat. Whole wheat flour contains most of the bran and, of course, the middlings. Authorities say that white flour contains more digestible matter than bran or whole wheat, but the bulk material is valuable for mechanical reasons.

An excellent housewife states that if you use bran with white flour for bread or biscuit use from one-half to one-third bran with white flour, make the bread in the same manner as with white flour. Use more sweetening than in ordinary white bread.

Secrets of Health and Happiness

By DR. LEONARD KEENE HIRSHBERG.
A. B., M. A., M. D. (Johns Hopkins University).

Sleep Needs Depend Upon Work and Habits

It is universally agreed that an abundance of sleep is needed by all, in order to do the best work, enjoy the best health and obtain the longest life.


Dr. Hirshberg.

Thinking and doing both use up the forces of the tissues more rapidly than they recuperate, hence it is necessary to lay by a part of every 24 hours for repairs and thus accumulate new strength for recurring duties. Many die yearly from lack of sleep, the wear having been greater than the repair. Whoever, by work, pleasure, sorrow or any other cause, is regularly diminishing sleep is shortening life.

The number of hours required for sleep for an adult varies from six to 10, according to the temperament, vigor, duties and mental condition of the person. Many say that women need more sleep than men. It is claimed by some that persons who think and work fast will sleep more in an hour than slow people and thus require a less number of hours of rest. This is certainly false and absurd reasoning.

Persons of active, energetic, highly nervous temperament do not build up more readily than others, and, by great activity of mental force added to all they do, wear out more rapidly, hence require more sleep—not less than eight hours, and some as many as 10. They may seem to require less because they are so much interested in whatever claims their attention, that after a moderate amount of sleep they find it easy to be wide awake.

Energetic people need not be afraid of sleeping too much. Persons who feel uncomfortable after sleeping may generally trace their unpleasant feelings to other causes than too much sleep, which may have been heavy because of an unhealthy condition of the blood, want of ventilation or obstructed circulation from improper clothing or position.

No one should become so fatigued by work of muscle or brain that a good night's rest will not follow and afford complete recuperation.

It is important to have several hours' sleep before midnight and better to sleep during the shades of night than when the sun bids all things to be astir, yet it is better to take a nap during the day than not to sleep enough. Indeed, a little nap before the noon meal will rest the nerves and promote digestion.

Do not sleep just after eating, as it retards digestion. Stimulants of any kind should not be resorted to in the hope of gaining strength. An increase of vigor can only be had from the nutritive particles in the blood, which were obtained from the food previously eaten and has been oxygenized by contact with good air in the lungs and by the rest which sleep affords.



Yet I doubt not through the ages
one increasing purpose runs,
And the thoughts of men are widened with the process of the suns. —Tennyson.

Balancing of Food

By Grace Powers Fischer.

"We build our bodies brick by brick," said Mrs. J. D. Spencer, food expert, in a talk before the Oregon grange women's club at a recent meeting. "Slowly, step by step, little by little, we make our bodies, right or wrong. Carelessness or ignorance in the choice of food, the balancing of food and the preparation of food are responsible for most of our bodily ills."

There are, according to Mrs. Spencer, three main forms of food elements—protein, carbohydrates and fats. Nearly all foods contain all three in differing quantities. Because there is a high percentage of proteins in them, lean meat, fish, poultry, eggs, milk, cheese, dried peas and beans and peanuts are called protein foods; breads, rice, pastry and the like are carbohydrate foods, and fat meat, chocolate, butter, nuts, etc., are fat foods. There are other materials in foods, mainly mineral salts which the body needs, such as iron for the red corpuscles of the blood, lime and magnesium for making bones and teeth.

The good housewife must not only balance her ration, but do it economically. It is easy to buy so much protein and so much fat and so much carbohydrate food, mix them and serve. But to pick out the right amount of each and still keep the purse fat is not so easy, especially when prices vary all the time. A very valuable food one week may lose its value because of its price the next. The following table was placed on the blackboard, giving values in the three food elements and also "calories" or units of heat or energy:

	Protein.	Fat.	Carbohydrates.	Calories.
Beef ribs	19.7	12.7	....	8.45
Cheese	28.8	38.9	3.0	19.90
Chicken	21.5	2.5	....	4.93
Almonds	21.0	54.9	17.3	29.40
Walnuts	18.4	64.4	13.0	31.82
Peanuts	25.3	38.6	24.4	24.90
Peanut butter	29.3	46.5	17.1	26.90
Beans	22.5	1.8	59.6	15.65
Peas	26.4	1.0	62.0	16.11
Graham bread	8.9	1.3	52.1	11.39
White bread	9.1	1.6	53.3	11.99
Chocolate	12.9	48.7	30.3	27.65
Rice	8.0	.3	79.0	16.20
Potatoes	2.2	.1	18.4	3.78
Prunes	2.1	....	73.3	13.65
Raisins	2.6	3.3	76.0	15.62

Sugar and lard, containing nothing but pure food elements, Mrs. Spencer called them "straight foods." Fats and starches can be changed into each other. Pure fat contains about 2 1-4 times as much heat or energy as starch.

Crochet and Tatting Designs

By Winifred Worth



MEDALLION YOKE.

Here's another yoke that will appeal to every crochet worker. The medallions furnish a most pleasing circular motif.

Detail for medallion:

1st Row—12 ch. Join.
2d Row—36 dc. in loop.
3d Row—Sc. on top of 36 dc.
4th Row—Sc. widening every 9th st.
5th Row—Sc. widening every 9th st.
6th Row—Sc. widening every 10th st.
7th Row—Ch. 3. Make dc. in 3 st., leaving 1 st. between each 3, making 12 groups of 3, 3 ch. st. and then 7 sc.
8th Row—3 ch. 6 dc. into each l, making 2 ch. between the 6 dc. and 3 ch. between group of 6 st. 3 ch. at end and 2 sc. Increase at each end.
9th Row—3 ch. same as 8th row.
10th Row—3 ch. into l. of 6 dc. st. put 3 dc. 3 ch. catching up two lower l. 3 ch. at end, and increase 2 sc. st. each end.
11th Row—3 ch. fastened in middle of 3 sts., 12 ch. fastened in middle of 3 sts., 2 sc. Increase at each end.
12th Row—12 dc. in L. of 12 st. ending as before with 3 ch. and increase to 2 sc. sts. each end.
13th Row—3 ch. 3 dc. 2 ch. 6 dc. putting in every st. of 12 dc. 2 ch. between every 6 st. 3 ch. st. end and increase of 2 sc. each end.
14th Row—3 ch. in L. 6 dc. 2 st. between each 3. 3 ch. and so on.
15th Row—3 ch. in L. 6 dc. 3 st. between each 3. 3 ch. and so on to end.
16th Row—3 ch. in L. 3 dc. with 3 p. edge. 3 ch. and take up 2 lower L. 3 more ch. and 3 st., dc. So on to end.



Patterns

2001—Ladies' house dress, with or without back yoke. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires six and three-eighths yards of 36-inch material for a 36-inch size. The skirt measures about three yards at the foot. Price 10 cents.

2121—Girls' dress. Cut in three sizes: 12, 14 and 16 years. Size 14 will require five and one-eighth yards of 32-inch material. Price 10 cents.

2109—Ladies' waist. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires two and five-eighths yards of 36-inch material for a 36-inch size. Price 10 cent.

2110—Ladies' tunic skirt, in raised waistline. Cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires three and one-eighth yards of 44-inch material for the skirt and two and a half yards for the tunic for a 24-inch size. The skirt measures about two and a half yards at the foot. Price 10 cents.

2120—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires six and a half yards of 36-inch material for a 36-inch size. The skirt measures about two and three-quarters yards at the foot. Price 10 cents.

1971—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires six yards of 44-inch material for a 36-inch size. The skirt measures about three and a quarter yards at the foot. Price 10 cents.

9662 — Ladies' combination chemise and drawers. Cut in three sizes, small, medium and large. It requires two and three-quarters yards of 36-inch material for a medium size. Price 10 cents.

2112—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. It requires three and a half yards of 44-inch material for an eight-year size. Price 10 cents.

1339—Ladies' kimono. Cut in three sizes, small, medium and large. It requires four and a half yards of 44-inch material for the full-length style and two and three-quarters for sack length, for a medium size. Price 10 cents.

2105—Ladies' skirt. Cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It will require two and three-quarters yards of 44-inch material for a 24-inch size. Price 10 cents.

1993—Girls' one-piece dress. Cut in five sizes: 4, 6, 8, 10 and 12 years. It requires three and a quarter yards of 44-inch material for an eight-year size. Price 10 cents.

2130—Girls' dress, with or without bolero. Cut in four sizes: 6, 8, 10 and 12 years. It requires one and an eighth yards for the bolera and three and three-quarters yards for the dress, of 27-inch mateial, for a six-year size. Price 10 cents.

2125—Ladies' waist. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 36 requires two and seven-eighths yards of 36-inch material. Price 10 cents.

Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

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Enclosed find ..... cents, for which send me the following patterns:

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Pattern No. ..... Size .....

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Name ....

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Postoffice .....

State ....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.



Work Together for Good

What is the quotation or what are the words which have helped you in the journey of life?

Send it to the editor of The Farmer and let it help another.

To the Editor: The best quotation I know is from the Bible: "And we know that all things work together for good to them that love God." Romans 8:28.

WILLIAM BRICKEY.

Kamiah, Idaho.

Bits of Home Cookery.

To make mashed salmon—Carefully turn the contents of a can of salmon onto a hot platter. This is done without breaking the shape by opening the can all way round and giving a sharp rap to the bottom. When ready to serve pour over two cupfuls of cream of white sauce, in which a beaten egg has been stirred just as the sauce is removed from the stove. Sprinkle with salt and red pepper.

What True Economy Is.

Economy does not always consist in using what is called necessites, but rather in using good, pure, wholesome food, eliminating waste and utilizing every scrap; last but not the least important is cooking and serving the plainest food in a manner which is attractive and appetizing and which appeals to the palate, says the The Kansas City Star.

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Turn your surplus products and time into money this year and have a business of your own—home canning. There is good money to be made in home and community canning every year, but there never was a better year than this to start.

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Don't experiment with makeshifts, do your canning by steam pressure; "the safe and only thorough way to sterilize." By our new selling plan you get all your supplies from one source. We furnish retorts, cans, modern can-sealing machine, instruction—everything for canning work in home, orchard or community, showing how to market your product to best advantage. Outfits include 60-page book of recipes on goods you can put up.

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The most practical, healthful, playtime garments ever invented for children 1 to 8 years of age. Made in one piece with drop back. Easily slipped on or off. Easily washed. No tight elastic bands to stop circulation. Made in blue denim, and genuine blue and white hickory stripes. Also lighter weight, fast-color material in dark blue, cadet blue, tan or dark red, all appropriately trimmed with fast-color galatea. All garments made in Dutch neck with elbow sleeves for high neck and long sleeves.

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If your dealer cannot supply you we will send them, charges prepaid on receipt of price, 85c each. Satisfaction guaranteed or money refunded.

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HAROLD SOMERS, 150 DeKalb Ave., Brooklyn, N. Y.



A Flock of Black-Eyed Crows.

Dear Aunt Nellie: I am going to write about a large flock of crows I saw coming over the hills one night. They came from the north and were going to the south to the sea to bed. Over on the other side of the hill was a large tree which did not have any bark on it and only a few limbs in the top. They all went over there to rest. Before they lighted they circled and circled around in the sky to find a good lighting place, but they soon lighted and then their fuss was over of cawing and cawing. They stayed there over a quarter of an hour and then they went their way. They came back before daylight and go before dusk. They are a great pest to the farmer because they steal his corn and wheat. They steal his eggs and little chicks that have just been hatched. They are very sly and sneaking. They come back of our schoolhouse and eat the crumbs the children throw out of their pails. If the teacher opens the window or any one goes outside they are gone as quick as you can snap your finger. They go way back out in the trees or behind the stumps and ferns so no one can see them. This bird is coal black and he is not a handsome bird. He has eyes which are very black and keen. This old bird follows us home from school wanting us to throw something out of our buckets.—Mabel Kessey, Grays River, Wash.

Saw Four Deer Near the Orchard.

Dear Aunt Nellie: My subject is many things. I am three feet and eight inches tall. I weigh 44 pounds so you can guess how big I am. My little brother is 6 years old and weighs 45 pounds and is one inch shorter than I am. Tonight mama saw four deer just above our orchard. My big brother also saw them, but Florence, David and I did not see them because we were in the house. My mother raises lots of flowers. She loves most any flowers. We have a heliotrope, which I love the smell of. We have only one cat because our tomcat got poisoned. I guess the neighbors were poisoning squirrels and he caught a poisoned one and ate it. He weighed about 15 pounds. Our school let out the 20th of April, which is the day before my birthday, and Helen Proctor's birthday was the last day of school. Our school began the second week in September and we did not have any Christmas vacation. I have dark brown hair and hazel eyes. I got a ring, a little silk handkerchief with a flower in one corner of it, a bracelet, a string of beads and a buffalo nickel for my birthday. I would like to correspond with any girl of my age.—Glenn Faber, R. F. D. 2, Colbert, Wash.

How Their Doggy Came to Them.

Dear Aunt Nellie: My father takes The Washington Farmer. I love to read the letters. I live on a 175-acre farm. I am in the fifth grade and am 11 years old. My birthday is December 5. I have one sister and one brother. My sister's name is Elve, and my brother's name is Rudolph. I have got two cats and a dog. One cat's name is Tommy and the other is Calico, because it has color like calico goods. My dog's name is Rosie. The dog belongs to my sister, brother and I. I will tell you how we happened to get our dog. It was near Christmas night. My papa went to the harbor and when he came back he had a dog. In the morning papa said that we got a dog for a Christmas present. He put the dog outside for he was to go to bed. In the morning she was gone. Pretty soon she came back and she jumped on us for she was so glad. Our horses' names are Nubby, Babe, Kiras. We have pigs and cows. We have a big house and a big barn. There is a sawmill near our house. We also have a homestead. I like to live on a farm.—Hilda Hilstrom, Oakville, Wash., R. F. D. No. 1, Box 10.

Turns First Thing to the Corner.

Dear Aunt Nellie: We take The Washington Farmer and the first thing I turn to is the Corner. I enjoy reading the letters of the other children so much that I thought I would write. I am 5 feet 2 inches tall, have light brown hair and brown eyes. The subject I am going to write on is "My Best Friend." My best friend is my mother. She is my best friend because she took care of me when I was a baby and she gets my meals and washes my clothes and so many other things. I live on a 40-acre farm. We have six cows, three horses, three pigs, six geese, about 10 chickens, one dog, one cat and a lamb. I am 12 years old and my birthday is the 17th of March.—Beulah Coatney, R. 1, LaCenter,—Wash.

A Hike Through the Woods.

Dear Aunt Nellie: This is the second time I have written to the Corner. I have gotten several letters from Harry Burke since the last time I wrote to the Corner. Spring has come and the wild flowers are all in bloom and the trees and shrubs are beginning to leaf out and everything is getting green out here. We have an automobile now and we also have a new dog. My old white cat has four kittens, two of them are white but the other two are gray and black. My cousin, Rufus Nivell, and I made a wooden shoe and a canoe each and we will take them to the fair next fall. Last Friday the whole school went for a hike through the woods. My mother has two hens with little chicks. I have made a garden.—Frank Saeger, Shelton, Wash.

First Letter We've Had From Hilma.

Dear Aunt Nellie: I have read all the letters that have come in The Washington Farmer. I like them all very much. I am going to tell you about our farm. It is not very big. It is only 13 acres. We have it about all cleared. We have a horse named Dick. We have four cows, two calves, two dogs, two pigs, 10 chickens. We have some little chickens. They are very pretty. We have a cat as old as I am. Her color is black and white. I go to a city school. My birthday is August 8. I am 10 years old. My mother died when I was 5 years old, my sister was 3 years old and my brother was 1 year old. My mother was 29 years old when she died. She died June 12, 1912. My grandma is taking care of us now. She is 58 years old. I have five uncles. I have no aunts. I have one grandma and one grandpa. We have just got our garden planted. Our house is painted gray. It is quite a big house.—Hilma Anderson, R. F. D. No. 3, box 19, Olympia, Wash.

Baby and Bunny Play Together.

Dear Aunt Nellie: I like to read the letters very much so I thought I would write one too. My school is out now. I passed into the fifth grade. I have had my teacher for two years. I believe she is the best teacher I have ever had. Her name is Miss Clinton. I had to walk about three miles to school. My little sister and brother are very sick. Gordon is my brother who is sick and Martha is my sister who is sick. We have seven Indian Runner ducks that are always getting into the creek and I have to chase them out. I have a little baby brother who seems very cute to me. We have a little black bunny. The baby will try to take hold of its ears. Then it will jump. This will make baby laugh at him. They will keep this up until they both get tired of it. Every time any of us children go in the barn one of our little calves will run and kick up her heels. I am glad the Children's Corner is growing fast. I am 10 years old and will be 11 June the 19th.—Laura Smith, Rice, Wash.

The Bible Says:



Kathryn Will Raise Cucumbers.

Dear Aunt Nellie: I enjoy reading the letters in The Farmer. I am 11 years old. My birthday is the 7th of September. I am in the fifth grade. My teacher's name is Miss Johnson. I like her very much. We have two rooms in our schoolhouse. My brother, Parker, rode his pony to high school, six miles, all last winter. My brother James and I walk one mile to school. I joined a school club. I am going to raise cucumbers. I live on a 40-acre ranch. We have four head of horses, their names are Dandy, Dick, Joe and Maud. We have 17 head of cattle, two mother pigs and eight little ones. My brother has a hound, his name is Prince. I have two cats. Their names are Mutt and Jeff. I also have 11 little ducks and two old ones. The mother duck is setting on 14 eggs. They will soon hatch. I live in the Benston school district No. 16.—Kathryn Tattler, Graham, Wash.

Raymond's School Is Out Now.

Dear Aunt Nellie: This is the first time I have written to the Corner. I have three geese and one dog and three cats. My school lets out tomorrow. We have 17 horses and two cows and 200 chickens. It is raining today. There are 12 pupils in our school. I walk three quarters of a mile to school. We are having warm and rainy weather. I can hardly wait till the Washington Farmer comes. I am in the third grade. I read the letters in the Corner.—Raymond Geissler, Odessa, Wash.

Likes Boys' and Girls' Letters.

Dear Aunt Nellie: I haven't written to the Corner before. I read all the letters the boys and girls write and enjoy them very much. I live on a 40-acre farm. We have 16 cows and three horses. The names of our horses are Fey, King and Prince. I go to school. I am in the sixth grade and I am 12 years old. I have a mile and a quarter to go to school. I have three brothers but no sisters. Their names are Harold, Philip and Olaf. Harold is married and he has a little boy whose name is Irving. We have a new piano and I take lessons from Harold's wife. I have three cats. I also have 17 little chickens.—Mabel Iverson, R. F. D. No. 3, box 105, Mount Vernon, Wash.

In Sight of Pretty Lake Chelan.

Dear Aunt Nellie: I like to read the letters of the other cousins so I thought I would write, too. I live on a six-acre apple ranch in sight of Lake Chelan. It is a very pretty lake. We have one cow and three horses. The cow's name is Polly and the horses' names are Nancy, Babe and Barny. We also have a goat whom we call Billy. I am going to tell you about my flower garden. I am going to raise lilies, roses, tulips, pansies, asters, cosmos, California poppies, sweet peas, morning glories, nasturtiums, candytuft, sweet alyssums, snapdragons, and mignonettes. I go to the Manson school. My teacher's name is Miss Pierce. I am in the fifth grade and my brother, Milford, is in the third grade. He is 8 years old and I was 10 years old the 18th of February.—Margareta Schultz, Manson, Wash.

Loves to Hear the Birds Singing.

Dear Aunt Nellie: I am glad that spring is here. I like to listen to the birds and frogs singing. I like to make flower garden and plant flowers. I am 9 years old and in the third grade. It is three miles to school. My teacher's name is Miss Thulan. I have one brother and two sisters. My oldest sister is married. Her name is Mildred. My other sister is home. Her name is Lillian. My brother's name is Frank. I live on a 160-acre farm. We have five horses. Their names are Dolly, Bird, Jenny, Purtsy and Pansy. Two of them are colts and two are the team. The other one is the saddle horse. We have one cow, one heifer and two steers. My pets are two cats and one dog. The dog's name is Tige. We have about two dozen chickens.—Esther Anderson, Camden, Wash.

Hopes for Good Luck With Her Garden

Dear Aunt Nellie: I am a girl of 10. I have been reading with pleasure the Children's Corner for some time and I want to be a cousin. I am making a garden and hope I have good luck with it. I have a pet pigeon. She is white with a black spot on her head and tail. Her name is Beauty. I have five dolls. Their names are Flo, Quimbo, Laura, Zota and Alice. I like to live in the country. I do not like to live in the city. I have lots of fun on the farm. We have some little chickens. I have one of my own. There are two little black chickens, one red and three white ones.—Avah Sharpe, Alameda, Wash.

Best Friend Just Moved to Canada.

Dear Aunt Nellie: I saw my name in the paper yesterday and thought I would write again. I like the Children's Corner very much and would like to correspond with any boys or girls. I have lost my best friend today. She has moved to Canada. I hated to have her go because we were such good friends. She is in the same grade as I am. We are both in the sixth. She lived closer to me than any other girl my age. The people that are going to move on their place are Finlanders. They have four children, two boys and two girls.—Laverne Nunn, Meyers Falls, Wash.

Cousin Clifford Is a Scout.

Dear Aunt Nellie: This is the first letter I have written to the Corner. I am 9 years old. I am in the third grade. I like to read the children's letters. They are so interesting. I am a Lone Scout of America. My birthday is October 11. I like to go to school. I have no pets but I like animals. I had a dog, his name was Bobbie. We have no stock. If I have a twin I wish he or she would write to me.—Clifford Zimmerman, Lelean, Wash.

In a Pretty Valley in Fragaria.

Dear Aunt Nellie: I am very interested in reading the Children's Corner of what the other children wrote. We take The Washington Farmer. I live in Kitsap county in a pretty valley in Fragaria. My cousin, sister and I walk a mile to school every morning and evening. I will be 9 years old the 9th of November. I am in the fourth grade.—Louise Hwang, Olalla, Wash.

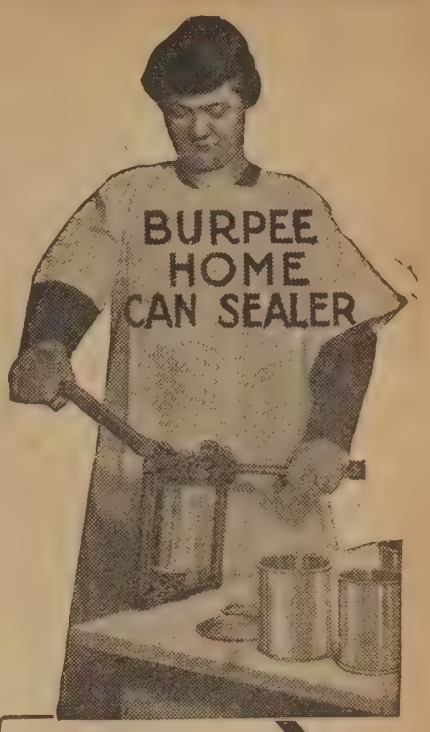
A Few Sweet Peas Are in Blossom.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I was 9 on the 28th of December. I have light hair and blue eyes. I wish a girl that is about my age would write to me. I read The Farmer nearly every time it comes. My pet is a kitten. She is about a year old. We have a few sweet peas in bloom in the greenhouse.—Rosa Sahli, Kent, Wash.

Ruby Belongs to a Bird Club.

Dear Aunt Nellie: This is the first time I have written, so I thought I would write to you. I live in town. My teacher's name is Miss Driskell. There are 31 in our room. We are having a bird club. I am in the fourth grade at school. I am 11 years old. I wish some of the children would write to me.—Ruby E. Werz, Elma, Wash.

Aunt Nellie is glad to announce the receipt of leters for the Children's Corner from the following during the last week: Olive Miller, Ida Dock, Annie Fowler, Thelma Gowing, Christina Schmelzer, Mabel Evanson, Helen Roberts, Florence Spoolman, Herdis Hansen, Edith Crabb, Stella Ruark, Warren Keith.



ARE YOU READY FOR HARVEST

Fruits and vegetables will soon be ready for market. Are you sure that you can sell all you produce? Insure yourself against glutted markets, waste and loss by buying a

BURPEE HOME CAN SEALER

The strongly built, simple, easily operated machine for sealing sanitary tin cans without acid or solder. Clamps on any kitchen table.

It will save all those fruits and vegetables you might have to feed the hogs. It will start you in a new and highly profitable business. Made and guaranteed by one of the biggest canning machine manufacturers in the country. Cans easily secured. Free book of canning recipes, compiled with the assistance of the U. S. Dept. of Agriculture, with each machine. Write today for information.

BURPEE & LETSON, LTD.
So. Bellingham, Wash.

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So. Bellingham, Wash.

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The regiment of young people who enter our school every year for a summer course in bookkeeping, shorthand and typewriting.

We train you for a real money earning position—and help you secure it after graduation.

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Spokane, Wash. M. M. Higley, Pres.

1000 Tons Scrap Iron Wanted

Shipments must not be less than 25-ton cars.

Combine with your neighbors and turn your worn out machinery into ready cash.

Write quick for quotations and shipping instructions.

Pacific Hide & Fur Depot
Joseph Thiebes and C. T. Symmes.
1101 R. R. Ave., Spokane, Wash.

How to Prepare Sheep for Show

Live Stock Shows Aid in Developing Uniform Type

ARTICLE VIII—By E. J. Iddings.

The modern live stock show is primarily an educational institution. Farm animals of all kinds are assembled and competent judges arrange them in order of merit accordingly as they approach closely or fail to meet certain well defined ideals of type. Live stock shows help toward uniformity of type and harmony of effort in animal breeding and are the meeting place of those who are producing live stock to sell and those who desire to purchase live stock.

The exhibitor learns much in the show ring that is of value to him in his breeding operation, but the principal benefit comes in the way of advertising. Hence the advantage of specially preparing and fitting animals for show. There is certainly nothing to be gained educationally in driving sheep from a pasture and showing them to visitors without any attempt to clean or prepare them for critical inspection. Some fitting is necessary even for our smaller fairs and live stock shows.

Should Represent Type.

The first effort should be made in selecting animals of such confirmation as are suitable to properly represent their type and breed. In most breeds of sheep the choice for the show ring should fall on a reasonably low set, thick, strong-backed and vigorous individual that shows to a considerable degree the particular characteristics of the breed to which it belongs. Additional flesh, as compared with pasture condition, will result from a little especially good pasture for the cooler hours of the day, shade during the midday hours and a grain ration of bran and oats. If the animals are quite thin and need to be crowded they may be left on pasture but one hour daily and given a heavier grain ration and clover and alfalfa hay in addition to the grain.

The feet should be trimmed and the sheep taught to stand squarely on the legs. The fleece should be freed from straw or other coarse material and blocked out with a pair of hand shears. In the blocking-out process the wool over the back is cut down and leveled, the side lines straightened, and the entire form as represented by the wool is made more shapely. The wool surface is then evened by careful trimming until the entire outline is regular and attractive to the eye. A dampened brush is used in brushing the fleece. Brushing straightens the fibers to that when once trimmed the fleece keeps the form given it with the shears.

Some experience must be had in order to get good results in trimming. A little preliminary instruction and some practice on sheep not intended for show often enables a beginner to materially improve the appearance of animals destined for the show ring.

Washington Crop Report.

A summary of the June crop report for the state of Washington and for the United States, as compiled by the bureau of crop estimates, United States department of agriculture, is as follows:

Winter Wheat—State: June 1 forecast, 10,700,000 bushels; production last year (final estimate), 18,285,000 bushels. United States: June 1 forecast, 373,000,000 bushels; production last year (final estimate), 481,744,000 bushels.

Spring Wheat—State: June 1 forecast, 28,500,000 bushels; production last year (final estimate), 19,350,000 bushels. United States: June 1 forecast, 283,000,000; production last year (final estimate), 158,142,000 bushels.

Oats—State: June 1 forecast, 14,100,000 bushels; production last year (final estimate), 14,300,000 bushels. United States: June 1 forecast, 1,380,000,000 bushels; production last year (final estimate), 1,251,982,000 bushels.

Barley—State: June 1 forecast, 6,720,000 bushels; production last year (final estimate), 6,814,000 bushels. United States: June 1 forecast, 214,000,000 bushels; production last year (final estimate), 180,927,000 bushels.

All Hay—State: June 1 forecast, 1,970,000 tons; production last year (final estimate), 2,048,000 tons. United States: June 1 forecast, 102,000,000 tons; production last year (final estimate), 109,786,000 tons.

Pasture—State: June 1 condition 96, compared with 10-year average of 95. United States, June 1 condition 83.8, compared with the 10-year average of 89.5.

Apples (Agricultural Crop)—State: June 1 forecast, 2,150,000 barrels of three bushels; production last year (final estimate), 3,225,000 barrels. United States: June 1 forecast, 25,400,000 barrels of three bushels; production last year (final estimate), 67,415,000 barrels.

Prices—The first price given below is the average on June 1 this year, and the second the average on June 1 last year. State: Wheat, 237 and 84 cents per bushel; corn, 179 and 112; oats, 74 and 44; potatoes, 211 and 89; hay, $19.70 and $18.70 per ton; eggs, 32 and 22 cents per dozen. United States: Wheat, 283.5 and 100 cents per bushel; corn, 160.1 and 74.1 cents; oats, 69.9 and 42.1 cents; potatoes, 274 and 98.8 cents; hay, $15.25 and $12.46 per ton; cotton, 20.2 and 12.2 cents per pound; eggs, 31.1 and 19 cents per dozen.

Do You Know That

Faultless people have few friends?



Pay Highest Prices for Wool

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

To Get a Flag Write Soon



With the declaration of a state of war our first supply of flags was quickly exhausted and we have had great difficulty in securing more.

We have at last secured a limited number of flags which we offer on the following terms:

OFFER NO. 1

3x5 flag together with The Washington Farmer for three years. Both for $2.50.

OFFER NO 2.

4x6 flag together with The Washington Farmer for three years. Both for $3.00.

We would suggest prompt action; orders will be filled as received.

The Washington Farmer, Review Bldg., Spokane.

Enclosed find $.... (your personal check, stamps or money order), for which send me American flag, as advertised, and The Washington Farmer for 3 years.

Size of flag .....

Name ....

Address ....

....

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

HELP WANTED—MALE 3

HAWTHORNE AUTO SCHOOL,
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free.
BEHNKE-WALKER BUSINESS COLLEGE,
167 FOURTH ST., PORTLAND, ORE.

SITUATION WANTED—MALE 21

EXPERIENCED GAS TRACTOR MAN wants job running tractor, plowing, etc., or will take other farm work. A. M. Snow, Box 578, Tacoma, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Manufactured in our own mill and sold at factory prices. We ship to any one, anywhere. One price to everybody. Prompt shipments. Safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request.

5 cross panel doors, 2 ft. 6 in. by 6 ft. 6 in.	$1.44
Craftsman bungalow doors	1.90
One panel, 3-ply veener doors	2.00
French doors, 15 lights	3.00
Screen doors, 2 ft. 8 in. by 6 ft. 9 in., galvanized wire	1.50
Standard two light windows, up from	1.13
8x10, 4-light sash	.52
16x16x26 spruce flour bins	1.50
Drain boards, 20x24	.75
Williams' "Gold Seal" mixed paint, gal.	2.50

Frames, mouldings, builders' hardware, mill work.

O. B. WILLIAMS CO.
1943 1st Ave. So. Seattle, Wash.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

WRIGHT GOODS FOR THE BEEKEEPER, made at the western factory. Hives, supers, cans, cases. Wax received. Write for catalog. A. E. Wright & Sons, 713 Albany, Caldwell, Idaho.

MACHINERY—FOR SALE 93

FOR FARM LUMBERING USE "AMERICAN" PORTABLE SAWMILLS. Carried in stock by HIGGINS MACHINERY CO., 312 1st ave. So., Seattle. Write for catalog.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBTAIN a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174

I. D. CASEY & SONS, WAITSBURG, Wash., have on a bargain counter several hundred 1-year-old S. C. White Leghorn hens; they are real goods at a reasonable price.

LIVE STOCK 177

FOR SALE—PUREBRED, REGISTERED Hampshire pigs, either sex, March farrow. H. E. Richardson, R. F. D. No. 1, Chico, Cal.

FOR SALE—REGISTERED JERSEY MALE calf; extra heavy milking ancestry; reasonable. S. W. Hensel, Wenatchee, Wash.

FOR SALE—IMPORTED PERCHERON mare, 9 years old, with two colts, 3 and 15 months old. S. M. Roff, Burley, Wash.

MILCH GOAT CHEAP, FOR SICK BABIES. Mrs. C. W. Post, Troutdale, Ore.

RUG and CARPET WEAVING 270

YOUR OLD CARPETS AND RUGS remade into beautiful FLUFF RUGS at small cost. Send for booklet and prices. Nustyle Rug Co., Sellwood, Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bagnard, Spokane.

PLUMBING and HEATING 594

SPECIAL BARGAINS IN PLUMBING SUPplies, pipe and fittings. Write and save money. NORTHWESTERN PIPE CO., 137 Front st., Portland, Ore.

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

SEEDS 620 Continued.

YELLOW DENT CORN, FIELD PEAS, SUDAN GRASS, RED CLOVER, WHITE BEANS. Complete line of "highest quality" garden seeds. Catalog free. ROUTLEDGE SEED & FLORAL CO., 145 Sec. st., Portland, Ore.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa clover and field seeds. Mark Means & Co., Lewiston, Ida.

FARM LANDS—FOR SALE 651

FOR SALE—900 ACRES RIVER BOTTOM land, deep sandy loam, gravel subsoil; natural drainage, river frontage; located in southern Oregon, 10 miles from S. P. Ry.; excellent all year automobile road, daily mail and automobile stage; climate mild and equable, good hunting and fishing.

Irrigation project guaranteed to be finished next November. Water charge $36 per acre with $1.50 maintenance fee. Alfalfa yields seven tons per acre with irrigation, often more, and corn in proportion.

Dairy or stock men will find here an ideal location with natural, well-drained alfalfa land, outrange nearby and plenty of excellent water.

Want to sell to some one who knows and appreciates good land, who wishes to keep it or subdivide and sell at a profit after irrigation is established. Land of this kind is limited in quantity. Bank reference. A few choice small ranches for sale.

For price of this land write
JOHN C. WHITE, RIDDLE, OREGON.

FOR SALE OR RENT

STOCK RANCH OF 1625 ACRES, IN THE FAMOUS SALMON RIVER VALLEY, IDAHO COUNTY, IDAHO.

Good range, long summers, mild winters, outfit is fully equipped and in operation, consisting of land, cattle, horses, sheep, hogs, grain and hay; stock well bred; some registered; gross income $10,000 to $12,000 annually; expenses light.

This will bear closest investigation. Yearly payments can be arranged.

Complete list of stock and equipment furnished on application. Address S. Delmage, Box 2, Whitebird, Idaho.

450 ACRES, SIX MILES FROM LIVINGston; fine road, daily rural mail, school 1 mile, Ry. station 1½ miles; 250 to 300 acres plow wheat land, rolling and some hilly; excellent pasture, 90 acres cultivated, 40 acres timothy and alfalfa, some grain; good creek flows through farm, spring water piped into house and barns; 5-room frame house, barns for 23 cows and 9 horses, granary, chicken houses, etc.; good diversified farm, dairying, hogs, stockraising, grain, hay; $25 per acre; terms. J. W. Hefferlin, Livingston, Mont.

960 ACRES, WITH PLENTY RANGE, AND forest reserve adjoining; rolling and hilly; lots spring water; 40 acres timothy; 10 acres oats; six-room frame house; sheds 40x60; barns for 24 cows and horses; storehouse, etc.; excellent live stock ranch; 11 miles from Livingston; only $12 per acre. J. W. Hefferlin, farm opportunities, Livingston, Montana.

MONTANA LAND.

5400 acres, in Forsyth district, can be sold in farms of 160 acres and up at $12 to $17.50 per acre; easy terms. Call or write for particulars.
HEGE & WATKINS CO.
717 PAULSEN BLDG. SPOKANE, WASH.

A GOOD FARM IN SOUTHERN OREGON, 80 acres; half under cultivation, balance cleared easily; all lies ideally; small mountain stream; water to irrigate entire place; new barn and silo; excellent roads; school ½ mile; a snap. Address owner, L. J. Hicks, Williams, Ore.

THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C., M. & St. P. Ry., 2d and Cherry st., Seattle, Wash.

BIG MONEY RAISING VEGETABLES and chickens, greenhouse and 160 acres of land, near Spokane, cost $15,000, offered at $4500; easy terms.
PENNSYLVANIA MORTGAGE & INV. CO.
SPOKANE, WASHINGTON.

480 ACRES, 200 IN WHEAT, 100 BARLEY, 75 alfalfa; all but five acres can be plowed; near shipping point; yields 25 to 40 bu. average; $27.50 acre, including third all crops. W. E. Freehafer, Council, Idaho.

400-ACRE RANCH.

Three miles from Centerville, 4½ miles from Goldendale. Crop with place until harvest. $30 per acre. Terms. C. A. Lester, Centerville, Wash.

IF YOU ARE LOOKING FOR GOOD farms, we have improved and unimproved farms for sale; also relinquishments and homesteads. Write Hall & Vollmer, Sumatra, Mont.

FOR SALE, OR EXCHANGE FOR SMALLer ranch—300-a. stock and grain ranch; big crop in; good pasture. Owner, M. Waters, Willamina, Ore.

TO EXCHANGE—REAL EST. 705

MONTANA LAND TRADES.

563 acres, nearly all irrigated, mostly in crop; take land in Spokane country as part payment. Call or write for particulars. Hege & Watkins Co., 717 Paulsen bldg., Spokane, Wash.

LOOK THIS UP

The Breeders' Department in this issue contains the names of many prominent live stock breeders. Their offers are worthy your consideration.

In answering advertisements don't fail to mention this paper.

Grain and Produce Markets

Chicago Grain.

CHICAGO, June 16.—Increased offerings of new wheat from Texas had a bearish influence on prices today. During almost the entire session the market ruled lower and the finish was unsettled at 1-2c to 1 1-2c net decline with July at $2.21 1-2 and September, $1.95 1-2. Corn closed unchanged to 1c higher. Oats a shade off to 5-8c up and provisions at an advance of 10 to 22c.

Downturns in the wheat market began at the outset. One of the reasons was a current estimate that as much as 60,000,000 bushels still remained in the United States for export before July 1, not counting bread and seed requirements. Bearish sentiment was increased later by word that new wheat was being moved in Texas at a cost less than for old wheat, and by evidence that the new crop offerings from the southwest were expanding noticeably in volume.

Corn rose sharply as a result of active commission house demand. It was current gossip that about half of the domestic visible supply was under contract for export. Expected warmer weather during next week led to much realizing, however, by holders in the last half-hour.

Frost reports and seaboard demand gave firmness to oats. Crop advices remained favorable, but sellers were scarce.

Liberal warehouse stocks depressed the provision market for a time, but later a decided rally took place, the result of profit-taking by shorts.

Seattle Wheat.

SEATTLE, June 16.—There has been little life to the wheat trade this week, due, buyers believe, to the limited amount of grain that is not close held for milling or export purposes. Bluestem and turkey red moved groggily forward, with only a few scattered sales reported in. Bids dropped 2 to 4 cents by midweek and a total of 10 @12c as compared with last Saturday.

Country bids varied from $2.50 downward. There has been no demand for wheat excepting a little club for feed purposes. Aside from milling bluestem and turkey red, all the so-called export wheats, such as club, fife and fortyfold, have been selling as feed. Minneapolis buyers are no longer in the market in person, but have been sending wires of inquiry with occasional requests to agents to buy. There is no export of wheat now unsold, the 10,000 tons for delivery by water having been gotten out of the way so far as new business is concerned.

In the Big Bend district it is stated that the wheat is thin, backward and of poor quality and the outlook in the Palouse country is not as bright as was hoped. Millers say that from appearance today the club varieties of wheat will be very scarce. Very little turkey red, so highly favored by Minneapolis millers during the last year, has been planted. Stands of bluestem are good everywhere. There will be an increased acreage of marquis wheat, but this is not looked upon with high favor by Puget sound millers, who are specializing more extensively in the trade of the southeast.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—$3.50 cwt; new potatoes, $4.50 cwt.

Apples—Washington apples, cooking, 75c box, Rome Beauties, $1 box; N. Y. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Leaf, 40c lb; Better Butter, 40c lb; Attalia, 40c lb; Diadem, 40c lb; Hazelwool, 40c lb; Solid Pack, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25½c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 29c lb; domestic Swiss, 35c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $11.25 case.

Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.

Dress Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Portland Market.

PORTLAND, Ore., June 18.—Wheat trading with the east slowed down again at the close of the week when cash premiums in the eastern markets fell off. There is no present demand here or in California for wheat.

Closing cash bids at the merchants' exchange were: Bluestem, $2.52; forty-fold and club, $2.48; red Russian, $2.46.

Oats and barley continue very dull.

Flour is steady at the recent advance, but millfeed is tending lower.

The demand for hay is limited, but dealers expect present prices to be maintained until the new crop is on the market.

Wool sales are increasing in volume in this state, but the trading is at scattered points. Most of the large public sales scheduled for June have been postponed until July, owing to the delay in shearing. Dealers are bidding 53 to 55 cents for fine wool and up to 58 cents for coarse. Valley wools are bringing 60 to 62 1-2 cents.

Poultry is also weaker, with increased receipts and a slow demand. Dressed meats are holding steady.

The old potato season has closed and there is still more or less stock on hand, in spite of predictions by speculators that there would be a famine in potatoes before the spring was half gone.

Strawberries, at the close of the week, were in sufficient supply for the first time this season and prices dropped to $1.75@2.50 for southern Oregons and $3.50 for Hood Rivers.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to prodcers. The other quotations are prices from jbobers to retailers:

Oats—No. 1, $46 per ton.

Corn—Whole, $72; cracked, $73 per ton.

Millstuffs—Bran, $35 per ton; shorts, $38.

Barley—No. 1 feed, $42; brewing, nominal, rolled, $49.

Hay—Buying prices: Timothy, eastern Oregon, $28@30; alfalfa, $23; grain, $18@20.

Eggs—Oregon ranch, case counts, 30@31c per dozen; candled, 33c.

Poultry—Hens, 15@17c; ducks, 16@20c; turkeys, alive, 20@22c; dressed, 23@28c; geese, 10@11c.

Butter—City creamery, prints, 38@39c per pound; cubes, 36@36 1-2c.

Cheese—Oregon triplets, 24c; young Americas, 25c.

Dressed meats — Veal, 14 1-2@15c; pork, 19@19 1-2c.

Hops—Nominal.

Potatoes — Oregon jobbing price, $3.50@4.

Wool—Eastern Oregon, fine, 50@55c; coarse, 55@58c; valley, 60@62 1-2c.

Beans — California small white, 16 1-2c; large white, 16c per pound.

Hides—Salted hides (25 lbs. and up), 20c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 32c; green hides (25 lbs. and up), 13c; green stags (50 lbs. and up), 13c; dry hides, 34c; dry salt hides, 29c.

Seattle Market.

SEATTLE, Wash., June 16.—Butter is easy and city creamerymen are concentrating their attention on getting their cost prices down. If this can be accomplished there will be some storage during the remainder of the month.

Creamerymen throughout this territory are paying the same price for butterfat and until it can be reduced the trade will not expect to buy butter for any less than the going quotations of today. The make all along the Pacific coast is showing a heavy increase, but a short, dry and hot summer is feared, during which the grass will be burned out and cream production reduced. This is the bullish undertone of the trade today.

Cheese has apparently not struck bottom. Quotations are half a cent less for the week.

Old local potatoes are firm at $90 and Yakimas at $100. Jobbers are finding difficulty in getting hold of enough gems to supply the demand.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 33c per dozen.

Poultry—Live hens, fat, over 4 lbs., 19c per lb.; 3 lbs. and under, 17c; old roosters, 12c per lb.; springs, 22c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 14c per lb.; broilers, live, 15@19c per lb.

Butter fat—32c per lb.; dairy butter, 30@31c per lb.

Beef—Buying price: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 13@15c per lb.; do heavy, 12@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 32c per lb.; salted calf, 30c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 30c per lb.; dry calf (under 6 lbs.), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry butcher full wool sheep pelts, 30@33c per lb.

Live Stock Quotations.

At Chicago.

CHICAGO, June 16.—Hogs—Receipts, 9000; unsettled at yesterday's average. Bulk, $15.20@15.90; light, $14.60@15.75; mixed, $15@16; heavy, $15@16.05; tive beef cattle, $9@13.70; stockers and rough, $15@15.20; pigs, $10@14.50.

Cattle—Receipts, 10,000: weak. Na-feeders, $7.30@10.60; cows and heifers, $6@11.80; calves, $10.50@15.50.

Sheep—Receipts, 2000; firm. Wethers, $8.20@11.35; lambs, $10.50@16; springs, $13.50@18.

At Omaha.

OMAHA, June 16.—Hogs—Receipts, 6500; market, 5c and 10c lower. Heavy, $15.15@15.45; mixed, $15.10@15.25; light, $14.85@15.25; pigs, $12.50@14.50; bulk, $15@15.25.

Cattle—Receipts, 200; steady. Native steers, $10@13.40; cows and heifers, $8.75@11.50; western steers, $9.50@12; Texas steers, $9@10.50; cows and heifers, $8.50@10; canners, $7@8.50; stockers and feeders, $7@10.75; calves, $10@14.50; bulls, $7@11.

Sheep—Receipts, 100; steady. Yearlings, $11.50@12; wethers, $10@10.75; ewes, $8@10; lambs, $14.50@17.50.

At Seattle.

SEATTLE, June 16.—Receipts: 18 cattle; 197 hogs. Steady market; strong on good quality hogs.

Hogs—Prime light, $15.55@15.70; medium to choice, $15.30@15.40; smooth heavies, $14.80@15.20; rough heavies, $14.30@14.70; pigs, $13.50@14.50.

Cattle—Best steers, $8.50@10.25; medium to choice steers, $8@9; common to good cows and heifers, $6@8; best bulls, $7@8; common to good bulls, $4@6.75; calves, $6.50@11.50.

Sheep—Prime lambs, $13@13.50; good lambs, $12.50@12.75; wethers, $11@12.50; cows, $10@11.

Spokane Stock Yards Saturday.

Hogs—Receipts, 31; market, steady. Bulk of sales, $15.25; prime heavy packing, $15.25@15.50; prime light packing, $15@15.25; smooth heavies, $14@14.50; pigs, $12.75@13.50; stockers, $12.25@13.75.

Cattle—Receipts, 98; market, strong on good beef steers and cows, steady on other grades. Prime light steers, $10@10.25; prime heavy steers, $10@10.50; good steers, $9.25@9.75; prime cows, $8.75@9.25; good cows, $8@8.50; common cows, $6.25@7.25; best heifers, $8.75@9.75; bulls, $6@8; calves, $8@10; stockers and feeders, $5.75@8.

Sheep — Receipts, 2042; market, steady. Prime lambs, $13@13.50; common lambs, $12@12.50; prime shorn yearlings, $10.25@11.25; choice shorn ewes, $9@10.

At Portland.

PORTLAND, Ore., June 16.—Hogs—Weak; receipts, 452. Prime heavies, $15@15.10; light butchers and packing, $14.90@15.10; bulk of sales, $14.90@15; rough heavies, $13.90@14.25; pigs and skips, $12@12.50; stock hogs, $11@12.50.

Cattle—Strong; receipts, 17. Steers, prime light, $9.75@10.25; prime heavy, $9.50@10; good, $9@9.25; cows, choice, $7.75@8.25; medium to good, $7.50@8; ordinary to fair, $7@7.50; heifers, $5@8.50; bulls, $5@7.50; calves, $7@8.50.

Sheep—Weak; receipts, 44. Spring lambs, $13@13.50; spring lambs, culls, $11@12; shorn wethers, $10@10.50; shorn ewes, $7@9; shorn yearlings, $8 10.50.

At Salt Lake.

SALT LAKE, Utah, June 13.—With liberal receipts of cattle here today our market was strong and demand good. Several loads changed hands at fully steady prices. Some two cars of veal calves sold for $11 per hundred, and, considering weights, they are higher than the river prices. A feature of todays trading was the excellent demand for butcher stuff. Some fair to good cows and heifers brought $8.75. Quotations on todays trading as follows:

Receipts: Cattle, 1915; hogs, 93; sheep, none. The following are the quotations:

Choice steers	$10.50	to	$11.25
Fair to good steers	9.00	to	10.50
Common to fair steers	6.50	to	9.00
Choice cows and heavy heifers	8.75	to	9.75
Fair to good cows and heifers	7.75	to	8.75
Cutters	7.00	to	7.75
Canners	4.50	to	5.50
Fat bulls	8.00	to	8.50
Bologna bulls	7.00	to	8.00
Good to choice yearlings	9.00	to	10.00
Veal calves	9.00	to	12.00
Choice hogs, 200 to 240 lbs.	14.45	to	14.55
Mixed, 160 lbs. up	14.25	to	14.45
Heavy roughs	13.00	to	13.50
Fat lights, 130 to 160 lbs.	12.00	to	13.00
Spring lambs	14.00	to	15.00
Wethers	10.50	to	11.50
Ewes	8.50	to	9.50

Wool.

BOSTON, June 15.—The Commercial Bulletin will say tomorrow:

Business in the Boston wool market has been less active during the last week. The market, however, is very strong and the strength of the situation appears to be dictated more by the west than the east. Operations in the west are going forward steadily at slightly higher prices.

Manufacturers are generally well employed and are devoting more and more time to government contracts.

Scoured basis: Texas, fine 12 months, 155@160; fine 8 months, 135@145.

California northern, 155@160; middle county, 135@140; southern, 115@120.

Oregon, eastern No. 1 staple, 160@165; eastern clothing, 135@140; valley No. 1, 145.

Territory fine staple, 165@170; half-blood combing, 145@150; 3-8 blood combing, 130@135; fine clothing, 135@140; fine medium clothing, 120@125. Pulled: extra, 175@180; AA, 165@175; A supers, 145@150.

Good Power

GOOD strong power is just as essential as any other feature of a threshing outfit. It is impossible to do a good job of threshing without steady and even motion, and a strong, well-built engine is necessary. The *Nichols-Shepard Steam Traction Engine* has the strongest and best built boiler ever used in traction engine building.

The double-cylinder engine boilers do not have a bolt, stud-bolt or cap screw that goes through the shell into steam or water space. It steams easily—is powerful in the belt, runs steadily during the entire season. All Nichols & Shepard Engines are members of the

Red River Special Line

With the Red River Special threshers, they make a combination that is sure to save the farmer's thresh bill.

Write for big, free catalogue and read why the Nichols-Shepard Engine excels all others. The most profitable for both threshermen and farmers. Write for description of anything in Threshing Machine Line desired.

Nichols & Shepard Co.
In Continuous Business Since 1848
Builders Exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam Traction Engines and Oil-Gas Tractors
Battle Creek Michigan

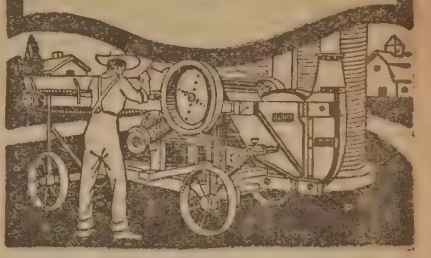
THE ROWELL AUTOMATIC SILO FILLER

BEST OF ALL. Wm. Fenning, Bryant, Ind., says, "We filled four silos all 30 ft. high with ROWELL AUTOMATIC, and think it the best silo filler we ever saw work." Save your ensilage---buy

The Rowell Automatic Silo Filler

Is STRONG, EFFICIENT, DURABLE, cuts ensilage evenly and perfectly. No danger of accidents, light running, big capacity. Seven sizes. Made by a reliable firm of fifty years experience. Investigate the Rowell line before yu buy. *Free Illustrated Catalog*

THE I. B. ROWELL CO.
Waukesha, Wis.



Stevens County

"where stock raising and dairying pay"

Write for free booklet on Logged-off Lands. It tells about the possibilities of farming on cut-over lands; Also about the low prices and long terms on which the tracts are sold. Ask for the folder now—it will pay you.

Phoenix Lumber Company

Dept. D. Spokane, Wash.

News for Breeders

At the Warren T. McCray Hereford sale at Kentland, Ind., May 16, the bull Martin Fairfax sold for $17,000, the highest price ever received for a Hereford bull at auction in America. George E. Fuller of Craig, Saskatchewan, Canada, was the buyer. No animal sold for less than $1000, and the average was $1750 for the 75 head, which was also a new record for an American auction.

W. C Postlethwaite of Caldwell, Idaho, is a business man who breeds Chester White hogs on the side and will exhibit at the state fair of Idaho this fall. His herd boar is by Wildwood Prince, a hog that was grand champion at the Iowa state fair, weighed 1100 pounds and sold for $750. Mr. Postlethwaite's boar weighed close to 500 pounds at 20 months. He has two sows that were bred to Big Bone when he purchased them and they brought a fine lot of pigs. The gilts as well as the sows are now bred to his boar and he will be able to give other exhibitors strong competition if no accident happens before fair time.

H. A.

To Be Fitted for Fall Shows.



Golden Lad, calved October 15, 1916, owned by I. H. Jorgensen, Nez Perce, Idaho. The foundation stock of Mr. Jorgensen's herd was purchased from J. H. McCroskey, Fishtrap, Wash.

Percherons at $857

Mullhall's first annual public sale of registered Percheron horses and Shorthorn cattle was held May 23 on the farm near Fenn, Idaho.

When the sale started there were about 100 present. The registered Percherons averaged $857. The Shorthorn cows were in thin condition, but averaged $200. The bulls averaged $187. They were young, ranging from sucking calves to one year old. They were sired by the herd bull, Prince Booth, and were as even and uniform a lot of bulls as you ever see.

Mr. Mulhall started his herd 15 years ago with $175 invested in one registered cow; three years later he added another cow. The two cows have raised him 27 calves. He sold the first cow at the age of 17 years for $87.50. The other one is still in the herd and is now raising a fine calf. The entire offering, together with 75 others in his herd, are the offspring of these two cows and their increase.

Harry C. Cranke of Nez Perce, Idaho, acted as auctioneer, and Felix Martzen of Cottonwood, Idaho, as clerk.

Below is a list of sales:

Horses.

Calypso, 122650, dark gray stallion, 2 years old, Rothelsburg brothers, Grangeville, Idaho, $875; Eclipse 122652, bay stallion, 2 years old, J. L. McHugh, Grangeville, $925; Vidocq 40937, black stallion, 14 years old, Jake Jensen, Cottonwood, $775.

Cows.

Candidate 213665, calved October 9, 1913, H. E. Sweet, Grangeville, $150; Goodenough 213670, calved April 4, 1913, H. E. Sweet, $200; Maid of Orleans 542201, calved April 7, 1916, E. S. Sweet, $375; Molly 121728, calved April 7 ,1911, H. E. Sweet, $150; Rubyville 246046, calved May 20, 1914, H. E. Sweet, $125.

Bulls.

Beauty and the Beast 542175, calved March 18, 1916, E. S. Sweet, $180; Beautiful Lad 542176, calved April 17, 1916, E. S. Sweet, $215; Great Expectation 542181, calved October 4, 1916, Henry Munsterman, Gifford, $130; Hero of Leonato 542182, calved September 23, 1916, E. S. Sweet, $150; Last Judgment 542184, calved February 16, 1916, George Cowgill, Grangeville, $200; Pound Sterling 542190, calved October 4, 1916, E. S. Sweet, $115; Our Mutual Friend 542188, calved April 13, 1916, J. L. McHugh, $250; Flash of Bourbon, calved April 23, 1916, Kube and Schlicker, Grangeville, $185; Prince Figet, calved March 21, 1916, E. S. Sweet, $190; Duke of Shawnee, calved April 7, 1916, Harry C. Cranke, Nez Perce, Idaho, $180.

D. G. S.

BUT LITTLE DISEASE.

D. G. Ruby, president of the Idaho Live Stock Sanitary board, says the states has not been so free from animal diseases in years as at present. At the meeting of the board, May 10, only three places in the state were reported as having any hog cholera, and they were light outbreaks. There is practically no scab or other sheep diseases and the general health of cattle is excellent. There is harmony and efficient cooperation between Dr. Bodle, state veterinarian, and his able corps of deputies and the government veterinarians operating in the state, and in a short time a systematic plan to test all the cattle in the state for tuberculosis will be started. Mr. Ruby expressed the opinion that the next legislature would pass a comprehensive compensation bill for all cattle destroyed on account of tuberculosis.

H. A.

COOPER'S JERSEY SALE.

The annual Memorial day Jersey sale of T. S. Cooper & Son at Cooperstown, Pa., was a great success, as usual, and high prices were received. The 88 head that passed through the sale ring brought a total of $60,280, or an average of $685. The 83 females averaged $710. Top price was paid for Simone of St. Saviours, a 6-year-old daughter of Plymouth Lad, with several certificates of merit tests to her credit. She went to Mrs. C. D. Illingsworth of Fox Chase, Ohio. Conservate Lady went to R. J. Fleming of Canada for $2000. Golden Champion Brown Maid was secured by William Ross Proctor of Barryville, N. Y., for $1850. Some of these Jerseys went to California, Texas and Canada, but none to the northwestern states. They were all of Island or Close Up or Island breeding.

H. A.

REPORT GOOD CROP OF LAMBS.

The Deseret Sheep company report a splendid crop of lambs at their big ranch near Nyssa, Ore. The 2500 ewes produced 122 per cent of lambs. They have been put on summer range near Council, Idaho, in good condition. The sheep were loaded at Ontario, Ore., and were unloaded at Council, right on the range. The ranch at Nyssa is finely equipped, with running water in the barn and all modern sheep conveniences. Most of this company's sheep are registered Cotswolds, the balance registered Hampshires. They exhibited at the Salt Lake fair last fall, winning pretty near everything in their classes. They will show again this fall and will probably also show at the Idaho state fair at Boise. They will have 500 sheep in the Salt Lake sale in August.

H. A.

Alfalfa Demonstrations.

"I have recently examined most of the 14 alfalfa tracts which were started in different sections of the county last year," says County Agent F. W. Rader of King county, "and find that alfalfa is doing especially fine."

HAMPSHIRE SWINE

HAMPSHIRE SWINE

Choice stock of all ages at bargain prices.
HIGHLAND FARM, Box 22, Underwood, Wn.

TAMWORTH SWINE

I HAVE TWO CHOICE GILTS for sale; will farrow the last week in August, bred to Pleasant Hill Monarch 20283, son of Watterson 9363, the 1020-pound grand champion boar Illinois State fair 1916. I also have boar pigs not related to the gilts or pigs they will farrow. I breed registered Tamworths with quality.
ORIN BEINHART, Kennewick, Wash.

DOGS

Fox and Wolf Hounds



of the best English strains in America; forty years' experience in breeding these fine hounds for my own sport and protection of sheep, hogs and poultry. Send stamp for catalog.

T. B. HUDSPETH.
Sibley, Jackson County, Missouri.

The big feature in motoring. An all-refinery gasolene—not a mixture.
STANDARD OIL COMPANY (California)



Don't Miss the Big
Guernsey Auction Sale
Monday, June 25, 10 A. M.
DAYTON. WASH.
75 Head of High Grade Guernsey Cattle 75
Considered the finest grade herd in the west.
Average butter fat test of the herd is 5.01 per cent.
Guernsey Cattle Hard to Find
This sale offers the opportunity. All by registered bulls. All tuberculin-tested.
ENTIRE HERD GOES
Geo. A. Gue, North Yakima. G. G. Fullerton,
Harry C. Cranke, Nez Perce, Owner.
Auctioneers.

Last Call
For The Big Auction Sale
of
The North Slope Dairy Herd
Palouse, Wash., Wednesday, June 27, at 10:30 a. m.
The Spokane & Inland Electric stops at RINGO station, located on the farm.
80 Head of Registered and Grade Holsteins
THE BIG KIND. THE PRODUCING KIND.
THE HEALTHY KIND.
They are the kind you should buy, if you want the best. This is the herd that heads the Cow Testing association of Whitman and Spokane counties.
This is the herd that is recognized as one of the best in the west. State tuberculin-tested.
Quality Health Production
JOHN P. DUKE, Clerk, Palouse, Wash.
George A. Gue and Harry C. Cranke
AUCTIONEERS.
George A. Gue, Sale Mgr. James C. Graham, Owner.
North Yakima, Wash. Palouse, Wash.

FOR SALE— Percherons, Shire Stallions and Mares

Jerico 110196, a dark iron gray Percheron stallion, 3 yrs., wt. 1850; sire Jube 81251 by Coco, dam, Bird 81977 by Brilliant Jr. His 1st, 2d and 3d dams are close descendants of Brilliant. Winnings at Northwest Live Stock show, Lewiston, as suckling colt, first in class and Percheron society gold medal as best stallion under three years, owned and bred by exhibitor. As 2 yr. old, 1st in class and champion under 3 years, three Society medals, best under three years owned and bred by exhibitor, grand champion and best stallion owned and bred by exhibitor and in open class reserve grand champion.

Aaron 117566, a 2-yr.-old half-brother, dark bay, wt. 1550. Sire Salvador 51340 by Calypso. Equally good, (some say better). He has never been shown.

Callie 88642, a dark gray mare, 6 yrs. old, wt. 1750. Sire Apollon 26130. She is very strong in Brilliant blood; has mare colt by Halicite.

Lady Grace II., 15452, a 3-yr.-old Shire, bay, white face and white hind legs, wt. 1650. Sire Imp. Toga VII. 9283; dam Bay Lily 13577, by Imp. Greenham Champion.

All first class in every respect, mostly our own breeding, reserved for our own special use.

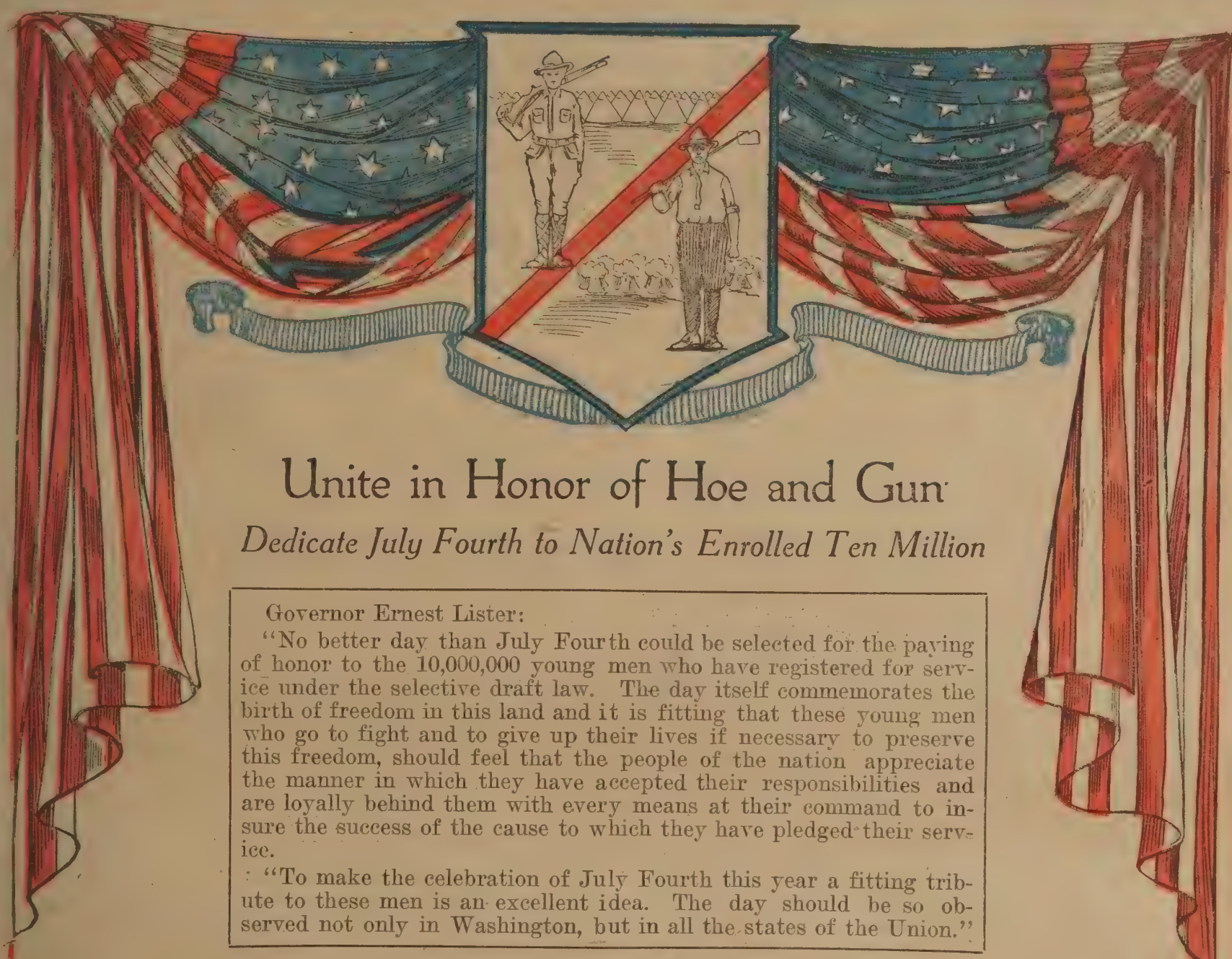
On account of the death of one of the partners, must sell to close estate.

FOLLETT & SCHOOLER, Genesee, Idaho.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 26. JUNE 28, 1917. ** WEEKLY.



Unite in Honor of Hoe and Gun

Dedicate July Fourth to Nation's Enrolled Ten Million

Governor Ernest Lister:

"No better day than July Fourth could be selected for the paying of honor to the 10,000,000 young men who have registered for service under the selective draft law. The day itself commemorates the birth of freedom in this land and it is fitting that these young men who go to fight and to give up their lives if necessary to preserve this freedom, should feel that the people of the nation appreciate the manner in which they have accepted their responsibilities and are loyally behind them with every means at their command to insure the success of the cause to which they have pledged their service.

"To make the celebration of July Fourth this year a fitting tribute to these men is an excellent idea. The day should be so observed not only in Washington, but in all the states of the Union."

THE above is the manner of Governor Ernest Lister's indorsement of the campaign of The Washington Farmer to have the Fourth of July this year dedicated to a fitting recognition of the loyalty of the men who, through their registration June 5, have placed themselves in readiness to answer their country's call to whatsoever service may be necessary. From all parts of the state, and many points throughout the entire northwest, has come vigorous expression of the united loyalty that will find voice in the national observation of America's great patriotic day next week. It seems peculiarly appropriate that the recognition of the enrolment of the nation's first great army for world-wide service should be made the keynote of the celebration.

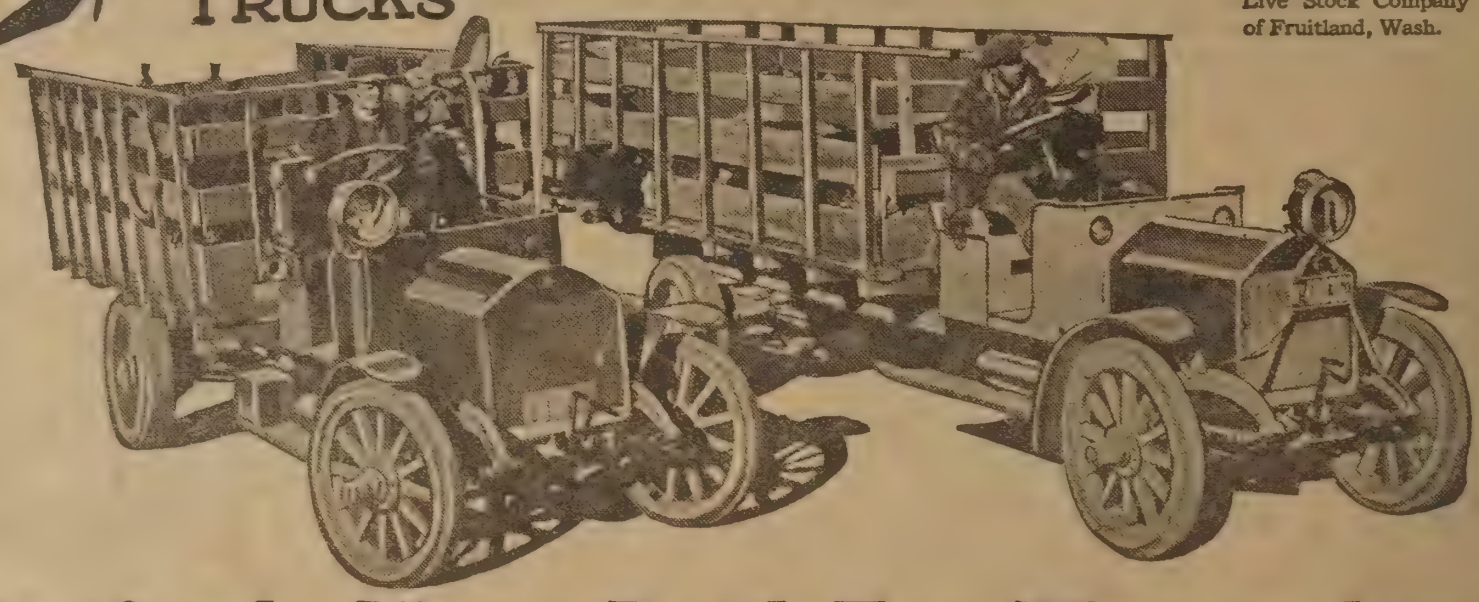
Never again will the entire nation have the opportunity to give united recognition to its ten million enrolled patriots; never again will the state of Washington have the opportunity to give united recognition to the more than 100,000 young men on her great honor roll. Before another year shall have passed, some of these men, unless the miracle of an early peace is enacted, will have "paid the last full measure of devotion" to their country on the field of battle, a foreign field, but the field of world-wide humanity.

This Fourth of July, or never, may these soldiers of liberty be made to know that their community, their state and their nation honor them and are with them in loyalty to the cause to which their country has pledged them. This Fourth of July, or never, may the mothers and wives and sisters of these young men be made to know that the sacrifices they are called upon to make are appreciated by those of their countrymen who remain at home to fight the battle of their country in the ranks of productive industry.

Next Wednesday is America's great opportunity; it is the northwest's great

Continued on page five.

Garford MOTOR TRUCKS



These are the two Garford Trucks that have more than paid for themselves in the service of the Tonasket Live Stock Company of Fruitland, Wash.

"Garfords Have Paid For Themselves"

—says The Tonasket Live Stock Co.
of Fruitland, Washington

"—Regarding Garford Trucks purchased from you—one in July, and in continuous operation since date of purchase, and second one purchased in December.

"—trucks are used exclusively for hauling hogs—a great deal of the time from Fruitland, Washington, to Spokane, a distance of 80 miles.

"In addition to never having been laid up for repairs a single minute these Garfords have absolutely paid for themselves in the saving in the shrinkage of the hogs.

"By the old method of hauling we used to figure from 12 to 15 pounds shrinkage between points of purchase and delivery.

"By Garford Trucks the maximun is 3 pounds, and very often not over two—and we have hauled loads of them that did not lose enough to mention.

"I have hauled over 2500 hogs. Figure out the saving.

"Operating cost has been nominal. We are certainly satisfied with Garford Trucks."

(—letter from Tonasket Live Stock Co.)

Garfords Will Be Just As Profitable For *You*

Garford Trucks will pay for themselves in *your* service too. They are doing the hauling for hundreds of farmers all over the country. And they are doing it as *dependably*, as *economically*, as *profitably* as they are for the Tonasket Live Stock Company.

Garfords are hauling bales of hay, bags of grain, crates of fruit, timber, machinery and all the hundred and one things a farm truck *must* haul.

And they are making the farmer's day *shorter*—and his profits *longer*.

Write to us or one of our dealers for information.

We can tell you how some one with problems *just like yours* is solving them the Garford way.

Garford Motor Truck Co., Inc.
1701 Broadway Seattle, Washington

The Fancher-Larson Company
1201 First Avenue Spokane, Washington

Oregon-Oakland Motor Company
522 Alder Street Portland, Oregon

The Garford Motor Truck Company, Lima, Ohio
Manufacturers of Motor Trucks of 1, 1½, 2, 3½, 5 and 6 ton capacity
4½, 7 and 10 ton Tractors
The Garford Road Builder
Distributors and Service Stations in all Large Cities

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 26 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF June 28, 1917

Does Smut Damage Quality of Grain?

Wheat of Northwest Docked Thousands of Dollars Yearly for Damage

Uniformity of grading standards for grain and hay between the states of Oregon, Washington, Idaho and Montana and the federal government, were overwhelmingly favored by those attending the series of open hearings on grading held during the last few days at Portland and Pendleton, Ore., and Tacoma, Spokane and North Yakima, Wash.

The public service commissioners of Washington and Oregon joined in the hearings with a view to taking uniform action for both states, which would virtually determine the grading for Montana and Idaho as well, owing to the fact that the greater portion of the products of these latter states find their shipping outlet through Washington and Oregon terminals.

Smutty Grain Troublesome.

Smut in grain and the problems that its presence creates were the center of much discussion at the hearings. The central problem in this discussion was whether or not a differential should be adopted in grading to account for the cost of cleaning the grain of smut and to cover also the irreparable damage to the quality of the grain caused by the smut, if such damage actually exists. That the grower of wheat is the loser through smut in four directions was clearly evident from the discussions, though the dealers and millers present declined to admit it. The farmer loses in actual yield; he loses actual weight of threshed grain when the smut is removed; he loses when the cost of removing the smut from the grain is charged up against him directly or indirectly; and he loses when his grain is docked on the ground that it is damaged for milling purposes by the smell of smut which it retains.

Whether or not the quality of the grain is actually injured beyond the power of the cleaner and the scouring machine to remedy is a disputed question. Millers claim it is. Many prominent buyers and dealers declare it is not. Under the present conditions of buying and selling grain the grower actually pays for this supposed injury by receiving less for his grain on that alleged account.

If the growers could once establish beyond question, and have incorporated in the grain standards regulations the fact that their wheat is not permanently injured by the presence of smut, it would mean a gain to them of thousands of dollars.

Proposed Differentials.

The new federal grain standards act provides that smutty wheat shall be graded with reference to the actual weight loss when the smut is removed, but makes no provision for the cost of cleaning. Buyers contend that the public service commission should establish a differential expressed in cents per bushel to cover this cost of cleaning and the alleged damage to the grain quality.

One proposal, expressed at the hearings by H. H. Harder of the Seattle Merchants' Exchange, was that a flat rate of two cents per bushel should be deducted for grain with one per cent of smut, and that this should be increased as the rate of one cent per bushel for each additional one per cent of smut.

This would mean that wheat with three per cent of smut would have to bear a loss of four cents a bushel; that wheat with five per cent would have to bear a loss of six cents a bushel.

This proposal was based on the claim that the actual cost of cleaning was two cents a bushel for wheat with one per cent smut; that it increased at the rate of half a cent per bushel for each additional one per cent of smut, and that the damage to the quality of the grain amounted to half a cent a bushel per additional one per cent of smut.

Counter claims were made that the cost of smutting was not in excess of one and a half cents, and that there was no actual damage to the quality of the grain because of the smut.

Commissions Will Decide.

It is apparent that the members of the two state commissione are working in perfect harmony in their movement to coordinate the grading systems of this northwestern territory. The last legislature of Oregon picked up the Washington grain standards act and enacted it into law for Oregon with the one main exception that where the Washington law leaves it optional with the Washington public service commission to follow the federal act, the Oregon law requires that the Oregon commission adopt the federal standards for Oregon grading.

The federal standards govern all shipments from one state into another, and all export shipments without regard to the state laws, the latter governing only shipments between points within the state itself.

The Oregon and Washington commissions have called a joint hearing for Friday, June 29, at which their grain department experts will hear the testimony of picked representatives asked to present the views of the growers, shippers, millers and dealers. These experts will then draft rules for the final consideration of the commissions, who will act on them at the earliest possible date.

The federal grain standards become effective for winter wheat on July 1 this year, and those for spring wheat on August 1.

If Oceans Would Rise.

If the ocean should rise one twenty-sixth of their depth they would flood one-half of the land.



The photograph above shows the members of the Washington and Oregon state public service commissions, who conducted the hearing on the grain standards problems in Spokane June 20. Others who took special part in the hearing are also shown, the personnel of the group being, from left to right:

Front row: Frank R. Spinning and Arthur A. Lewis, members of Washington public service commission; Chairman Frank J. Miller and Fred G. Buchtel, members of the Oregon public service commission; Professor George R. Hyslop of the field crops department of the Oregon Agricultural college, and C. E. Porter, chief grain inspector of the Oregon public service commission.

Back row: William P. Ellis, stenographic reporter for the Oregon public service commission; J. F. Marias of the Astoria dock commission; L. M. Jeffers of the United States department of agriculture; F. R. Randall of the Portland dock commission; Leslie Kayler, stenographic reporter for the Washington public service commission, and P. J. Sweeney, chief grain inspector for the Washington public service commission.

Washington Portraits No. 21.



R. P. Fuller.

R. P. Fuller is one of the prosperous farmers of Cowlitz county. His farm is near Castlerock and his leading product is potatoes, although he has been very successful with alfalfa and clover. His dairy and fruit also afford a source of revenue. Mr. Fuller is an influential man in the community, acting as the secretary of the Farmers' Loan association and a prominent grange member.

The next in the series of Washington portraits will be that of W. G. Rex of Shelton, and will be given in next week's issue of The Washington Farmer.

Year 'Round Labor

Solution Given by Montana Man

By J. M. LEWIS, Manhattan, Mont.

Every farmer should so handle and stock his ranch where conditions permit of live stock at all so as to have a year 'round man; this is the right kind of help. The year 'round man should have also a good thrifty wife, who should likewise help the farmer's wife with the heavier tasks of washing, ironing and weekly house cleaning as regular help. She should, of course, be right on the job for the day of and day after the hog killing, for the sausage and lard making, meat pickling, and cleaning up after. Then is the time to make the soap, too. This year 'round family should have a neat home, their own garden or free use of the farm garden, their own chickens or interest in the farm chickens and other fowls, free milk, cream and butter and a fair allowance of the automobile for themselves occasionally. A Sunday team they should have in reason. The family so treated can be left in charge once every year when father and mother take their vacation which, for best service and economy, they must have.

Far East Markets for Fruit

To help American fruit shippers obtain Pacific outlets for their products during the coming season the office of markets and rural organization is sending a representative to China, Japan, Australia, the Philippines and eastern Siberia to investigate the marketing of American fruit in these countries, according to an announcement of the U. S. department of agriculture today.

The need of expanding the Pacific outlet is made evident by the closing, practically, of the English and Scandinavian markets to which the United States has previously forwarded large quantities of fruit, particularly apples and pears.

Vegetables Are as Easily Canned as Fruit

There Is One Fundamental Principle to Be Observed; Observe It and You Will Not Fail

Garden vegetables can be canned. They can be canned and made to keep. They can be canned by any one who knows the one fundamental principle of canning and does those things necessary to put that principle into effect. Those things are not hard to do. They do not require elaborate canning outfits. They do not require anything that the average kitchen does not possess. In other words, any housewife can "put up" corn, spinach, string beans, peas, turnips, carrots, or almost any other garden vegetable and make them keep for winter use.

What Is the Principle?

There is nothing mysterious about the principle or the methods of putting it into practical operation, says J. F. Breazeale, of the government bureau of chemistry, in a comprehensive article on "Canning Vegetables in the home":

"The great secret of canning or preserving lies in complete sterilization."

He goes on to explain this principle as follows: "The air we breathe, the water we drink, all fruits and vegetables are teeming with minute forms of life which we call bacteria, or molds, or germs. These germs are practically the sole cause of decomposition or rotting. The exclusion of air from canned articles, which was formerly supposed to be so important, is unnecessary provided the air is sterile or free from germs. The exclusion of air is necessary only because in excluding it we exclude the germ. In other words, air which has been sterilized or freed from germs by heat or mechanical means can be passed continuously over canned articles without affecting them in the least."

Killing the Germs.

With this principle in mind, the question then becomes: How can these germs be destroyed and the fruit or vegetables kept absolutely free from them? Others qualified to speak on the subject agree with Mr. Breazeale that any fruit or vegetable will keep if these bacteria, or germs, are kept away—absolutely away.

The answer to the question is that, since high and continued temperature will kill these germs, the material to be canned must be subjected to this high degree of heat sufficiently long to destroy them and must then be sealed so that no more can enter.

Both these things can be done successfully by any careful housewife in any ordinary kitchen. The purpose of this article is to indicate how.

This article is the first in a series to be published in the Farmer on canning. It is designed to indicate the principle that must be observed in successful canning, and also to indicate in a general way the methods of putting the principle into effect. There are three recognized methods of canning: First—The open kettle process. Second—The intermittent sterilization process. Third—The single period process. The first method is largely passing out of use because of the superiority of the second and third methods. The second method is described in this article. The third method will be taken up in next week's article, and subsequent articles will give details on many phases of canning both vegetables and fruit. It must not be forgotten, however, that the fundamental principle is the same in all successful methods.

Extracts from the United States department bulletin above quoted follow:

The First Essential.

"The first requisite for successful canning is a good jar. Glass is the most satisfactory. Tin is more or less soluble in the juices of fruits and vegetables. Even the most improved styles of tin cans which are lacquered on the inside to prevent the juice from coming in contact with the tin are open to this objection. While the amount of tin dissolved under these conditions is very small, enough does come through the lacquer and into the contents of the can to be detected in an ordinary analysis. While the small amount of tin may not be injurious, it gives an undesirable color to many canned articles. Tin cans can not readily be used a second time, while glass with proper care will last indefinitely.

"There are a great many kinds of glass jars on the market, many of them possessing certain distinct points of advantage. The ordinary screw-top jar is the one in most common use. Although cheap in price, these jars are the most expensive in the long run. The tops last only a few years. The tops also furnish an excellent hiding place for germs, which makes sterilization very difficult. An improved type of screw-top jar is fitted with a glass top held in place by a metal cover which screws down over the neck of the jar. If the canning or sterilization is conducted properly, practically all of the air will be driven out of the jar by the steam. Upon cooling, this is condensed, a vacuum is formed on the inside which clamps down the glass top against the rubber ring and seals the jar automatically.

"Another type of jar in common use require no rubber rings, but are fitted with a metal top, lacquered on both sides and having a groove around the lower edge. This groove contains a composition of the consistency of rubber which is melted during canning by the heat of the jar and forms a seal that takes the place of the rubber ring. These metal tops must be renewed each year, as it is necessary to puncture them in order to open the jar.

"The most satisfactory jar that the writer has had any experience with has a rubber ring and glass top which is held in place by a simple wire spring. There are several brands of these jars on the market, so no difficulty should be experienced in obtaining them.

"Vegetables often spoil after being sterilized because of defective rubbers. It is poor economy to buy cheap rubbers or to use them a second time. As a general rule black rubbers are more durable than white ones.

"In selecting a jar, always give preference to those having wide mouths.

Equipment for Sterilizing.

"The writer uses a tin clothes boiler with a false bottom made of wire netting cut to fit. The netting is made of medium-sized galvanized wire with one-half inch mesh. A false bottom is absolutely necessary as the jars will break if set flat on the bottom of the boiler. Narrow strips of wood, straw or almost anything of this nature may be used for the purpose, but the wire gauze is clean and convenient.

"There are several varieties of patent steamers or steam cookers in common use.

First Step in Canning.

"The first step in successful canning in the selection and preparation of the vegetables: Never attempt to can any vegetable that has matured and commenced to harden, or one that has begun to decay. As a general rule, young vegetables are superior in flavor and texture to the more mature ones. This is especially true of string beans, okra, and asparagus. Vegetables are better if gathered in the early morning while the dew is still on. If it is impossible to can them immediately, do not allow them to wither, but put them in cold water or in a cold, damp place and keep them crisp until you are ready for them."

How to Can Corn.

To illustrate the exact methods to be followed in canning vegetables, the following specific directions for the canning of sweet corn are quoted from the article by Mr. Breazeale:

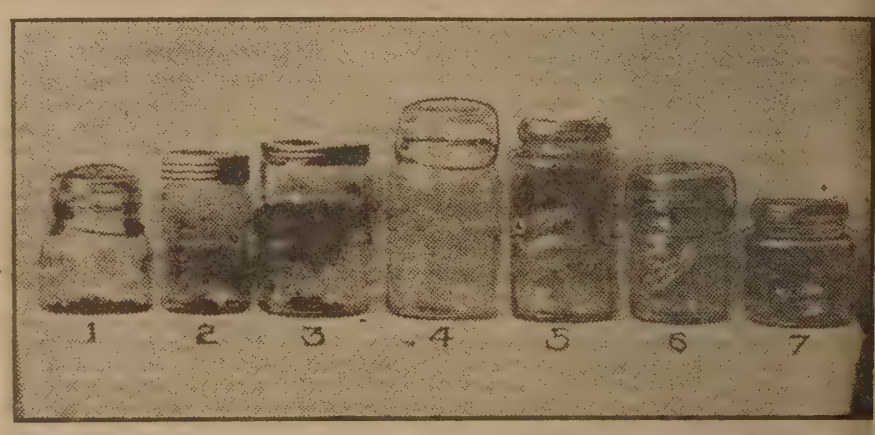
"Contrary to the general opinion, corn is one of the easiest vegetables to can. The United States department of agriculture has shown that the amount of sugar in the sweet varieties diminishes very rapidly after the ear is pulled from the stalk; therefore in order to retain the original sweetness and flavor it is necessary to can corn very soon after it is pulled—within an hour if possible. Select the ears with full grains before they have begun to harden, as this is the period of greatest sugar content. Husk them and brush the silks off with a stiff brush. Shear off the grains with a sharp knife and pack the jar full. Add salt to taste, usually about a teaspoonful to the quart is sufficient, and fill up the jar to the top with cold water. Put the rubber ring around the neck of the jar and place the glass top on loosely.

"Place the false bottom in the boiler and put in as many jars as the boiler will conveniently hold. Don't try to crowd them in. Leave space between them. Pour in about three inches of cold water, or just enough to form steam and to prevent the boiler from going dry during the boiling. It is not necessary to have the water up to the neck of the jars, as the steam will do the cooking. Put the cover on the boiler and set it on the stove. Bring the water to a boil and keep it boiling one hour. At the end of that time, remove the cover and allow the steam to escape. Press down the spring at the side of the jar. (Assuming that the spring type of jar is used. Otherwise close the jar air tight as if ready to set it away.—Editor's note.) This clamps on the top and will prevent any outside air from entering. The jars can now be removed and cooled or allowed to stand in the boiler until the next day.

"On the second day raise the spring at the side of the jar. (Loosen top if another type of jar is being used.—Editor's note.) This will relieve any pressure from steam that might accumulate inside the jar during the second cooking. Place the jars again in the boiler and boil for one hour. Clamp on the top as on the preceding day and allow them to cool. Repeat the operation on the third day. In removing the jars from the boiler, be careful not to expose them to a draft of cold air while they are hot, as a sudden change in temperature is likely to crack them.

"After the sterilization is complete the jars may be set aside a day or two and then tested. This is done by releasing the spring at the side and picking the jar up by the top. (The writer is still assuming that the spring-top jar is being used. This test could not be

(Continued on page seven.)



The above picture shows various types of jars suitable for canning fruit or vegetables. Nos. 1, 4 and 6 are the spring top kind, a wire spring being made to hold the top down snugly against the rubber ring. No. 2, 3 and 5 are forms of the screw top jar, while No. 7 is a form frequently used which depends upon two factors to insure the sealing. The first factor is the pressure of the atmosphere on the top when the contents of the jar cool and contract, forming a vacuum and thereby reducing the inside pressure. The second factor is a rubbery compound around the inside edges of the lid which softens when the lid is placed on the hot jar, hardening as the jar cools.



The picture above, taken from an Oregon Agricultural college bulletin, shows a home-made canning outfit, very practicable and available for every farm kitchen. It is a common wash boiler with a false bottom made of wooden slats to set the jars on in order that they will not be broken, as is frequently the case where they are set flat on the bottom of the boiler. Note that the water in the boiler comes probably two-thirds of the way to the top of the jars of vegetables. The steam cooks that part above the water. The tops of the jars must be left sufficiently loose to allow the steam and expanding air to escape from the jar when they become hot.

Unite in Honor of Hoe and Gun

Dedicate July Fourth to the Nation's Ten Million Enrolled Patriots

(Continued from page one.)

opportunity; it is Washington's great opportunity. If the response received by The Farmer to its suggestion for the observation of that day is typical of public sentiment—and it can not be otherwise—July 4, 1917, will witness the greatest outpouring of loyal patriotism since that memorable day one hundred and forty-one years ago, the first Fourth of July.

The following sentences give the purport of an article in last week's Farmer, urging that everywhere throughout the state the Fourth of July celebration this year shall honor the patriotism of the ten million young men who have just been enrolled in the United States, as well as point out the profound responsibility resting upon them in these momentous days of the world war:

> How shall the program of the Fourth of July celebration this year give special recognition to more than 41,000 young men who have just been enrolled in this state by the selective draft?
>
> Is not this the logical keynote for this year's national celebration of July Fourth?
>
> Whether in the war that is now shaking the nations to their very foundations or in the mighty economic and social problems which will follow this upheaval, these young men are to play the leading part. It is to them that the country looks, that not only the nation but the world as well shall, under God, have a new birth of freedom and that government of the people, by the people, for the people shall not perish from the earth.

This article was enclosed in a letter to a representative citizen here and there all over the state, asking that the letter be returned with an O. K. if the idea was endorsed. In all the replies received there is not a single dissenting voice. On the other hand, many have added words of most hearty cooperation in carrying out this feature of the Fourth of July celebration.

All walks of life are represented in the replies received, farmers, stockmen, bankers, manufacturers, educators, lawyers, and so on. For instance, one will see mentioned below representatives of these different vocations men like J. V. McCall of Hay, president of the Washington State Farmers' union; Charles Hebberd of Spokane, member of the state council of defense; W. J. Sutton of Cheney, President S. B. L. Penrose of Whitman college, Walla Walla; Judge Thomas Burke of Seattle, and N. B. Coffman of Chehalis.

Nothing More Fitting.

J. V. McCall, Hay: I most heartily approve the suggestion that our national celebration this year be given the turn indicated—that of honoring the splendid young manhood of our country who have offered their services to defend our homes and our families from the aggressions of a would-be-world autocracy, which today without question, threatens us. I shall be very glad to do what I may to make July Fourth a special service in their honor.

Charles Hebberd, Spokane: Most decidedly.

Charles E. Meyers, Davenport: Your splendid encomium in behalf of the 10,000,000 young men who registered for service under the colors of our country is most opportune and ought to be recognized and made use of by all committees having in charge the program for the Fourth. I heartily approve of your plan and will follow it in an address I have promised to make on that day.

D. A. Scott, Ritzville: I heartily indorse the sentiments expressed in your article and will do my part in carrying out such a program.

W. F. Millard, Newport: Let us all do our part and push the good work along.

John Gellatly, Wenatchee: Your editorial is fine and I surely approve of it.

Richard Foster, Springdale: I heartily o. k. the article enclosed in this note. At Springdale we will make the enrolment the principal theme of the "free celebration" that we are giving. Del Cary Smith will address us on that occasion.

R. V. Peringer, Belmont: I most heartily indorse the sentiment of the enclosed article.

L. S. Munger, Marcus: Article referred to o. k. in every particular.

Stanley Hallet, Medical Lake: Most assuredly I do.

N. B. Coffman, Chehalis: Most heartily indorse. Celebration here is being planned along these lines.

D. A. Angus, Rosalia: I heartily approve of the suggestion.

Mark E. Reed, Shelton: This certainly is a capital idea and the people of the state of Washington could not show their patriotism in any better manner than to dedicate our national holiday to a celebration in tribute to the young men of our country who are going to the front to battle for the freedom of our country and its people.

M. B. Howe, Waterville: I not only can o. k. it with all the earnestness I possess, but I want to do more than that. I want to indorse it by suggesting that we make the day one of consecration instead of exaltation. We have started on a journey, the end of which God only can foresee, and I believe we not only should, but must, consecrate every effort and every thought to the work ahead. No phase of our situation can call for light-heartedness or self-assurance. Self-confidence we must have in proper degree, but more than all must we have a proper realization of the work before us. We must not only win, but must win at a minimum cost, and to the accomplishment of this we can not dedicate ourselves too soon.

Ralph Metcalf, Tacoma: I heartily approve.

Robert Prior, North Yakima: Your article is o. k. and very fitting way of recognizing the enlisted men.

A. A. Smith, Port Angeles: O. k. Sure!

O. L. Olsen, Deer Park: I heartily indorse.

Guy E. Kelly, Tacoma: I most earnestly approve the attached article.

John S. Baker, Tacoma: Good work

Thomas Burke, Seattle: Yes. O. k. in full measure.

J. H. Perkins, Ritzville: I believe in the enclosed article. Nothing would please me more than to see this Fourth of July made an inspiration to the boys who have registered to serve their country. It would impress upon our new made citizens, especially, that we believe in what our fathers fought for in 1776.

Frank Carpenter, Cle Elum: Your article has my hearty approval, but on account of Red Cross and other work we will not hold a celebration this year.

H. Stanley Coffin, North Yakima: Yes.

C. F. Monroe, Montesano: Think your idea excellent.

A. Alexander, Wilbur: I most heartily indorse your letter.

W. D. Vincent, Spokane: Patriotism is the capital of the business of war. War is now the business of the nation. Yours is a fine editorial.

W. W. Gray, Wenatchee: You bet this is o. k.

Samuel Kreidel, Ellensburg: I certainly believe in such patriotic move. Here is my o. k.

H. W. Reaugh, Ephrata: O. k.—a mighty good plan.

J. J. Donovan, Bellingham: Your article is just what is needed and I am sending it to the chairman of our committee. These men are the power and stand for the soul of the America.

E. O. Holland, Pullman: Most heartily do I concur in the above.

E. E. Flood, Spokane: I have carefully read the proof of the article, which you intend for your June 21 issue and desire to compliment you on it. I think this is an excellent move and is worthy of commendation.

W. P. Sawyer, Wapato: O. k. My only son is with those already enlisted and gone.

L. C. Van Patten, Cheney: I heartily approve of this article and hope it will reach the hearts of those who have neglected patriotism for lesser things.

J. H. Davis, Tacoma: I fully indorse this sentiment and hope all good citizens will stop and think and remember we all have a duty to perform in this great struggle for humanity and a greater and better civilization.

Peter Iverson, Poulsbo: A few weeks ago, in an editorial in the Kitsap County Herald, I advocated the same idea as you suggest. I certainly O. K. the sentiments expressed.

A. L. Ray, Prescott: The article referred to certainly voices my sentiments.

A. A. Kelly, East Spokane: A patriotic inspiration! We can offer only one of the 100,000 now; later another, the necessity of which may God forbid.

A. L. Rogers, Waterville: Fine.

B. E. Smead, Opportunity: Fine idea.

J. P. Duke, Palouse: I think that you have struck the keynote in your article. Our Fourth of July celebration has been too much just waving flags without going into the deeper significance of the day. I think this year would be the right time to celebrate in a more serious manner, using the money which we have been accustomed to spending in frivolities and unnecessary celebration for a donation to some serious and good cause—something which will be the means of making life easier for those selected to serve in the war for our future freedom and welfare.

John A. Rea, Tacoma: In addition to his o. k. Mr. Rea adds the following:

To the Slackers.

Brethren, how shall it fare with me
When the war is laid aside
If it be proven I am he
For whom the world has died?

If it be found when the battle clears
Their death has set me free
How shall I live with myself thru the years
Which they have fought for me?

Brethren, how must it fare with me
Or how am I justified
If it be found that I am he
Who being questioned, denied?

More O. K.'s.

A simple O. K. when given by the men of the type represented below may mean more than pages of words:

J. A. Balmer, Cle Elum.
H. E. Barr, Dayton.
E. A. Bryan, Pullman.
J. W. Clise, Seattle.
Charles A. Cole, Tacoma.
A. G. Craig, Deer Park.
Amel Carlson, Spangle.
P. H. Carlyon, Olympia.
D. H. Cox, Walla Walla.
Chester C. Farr, Everett.
H. D. Hopkins, Port Townsend.
J. E. Hoobler, Clarkston.
A. W. Hawn, Grandview.
John F. Lyon, Tacoma.
H. J. Lipsett, Port Ludlow.
O. L. McWhorter, Port Angeles.
W. H. Martin, Ritzville.
John W. Mathews, Pullman.
Ralph D. Nichols, Seattle.
George A. Nelson, South Bend.
S. B. L. Penrose, Walla Walla.
H. L. Pierson, Pomeroy.
C. W. Ramsey, Goldendale.
John A. Rea, Tacoma.
N. D. Showalter, Cheney.
W. L. Sax, Colville.
Charles M. Sanford, Hanford
George W. Sherk, Kennewick
W. J. Sutton, Cheney.
Charles M. Talmadge, Newport
G. E. Willison, Pasco.
A. L. Wiffin, Ritzville.
Hugh Waddell, Colville.
J. W. Wright, Mansfield.
E. F. Benson, Olympia.
Samuel Curry, Chimacum.
T. J. East, Bridgeport.
Harry J. Kerr, Okanogan.
George M. McDonald, Coulee City.
Mrs. George Urquhart, Krupp.
E. F. Banker, Winthrop.
John P. Hopkins, Ione.

Over $2,000,000 in Loans Approved

Land Bank Continues to Extend Its Service to Farmers

The northwest district farm loan bank at Spokane, covering the four states of Oregon, Washington, Idaho and Montana, continues to expand its business of furnishing money to the farmers at 5 per cent interest.

The number of charters actually granted to local farm loan associations has been brought up to 46, with many others practically ready for final action.

The loans sought by the farmers included in the charter membership of these 46 chartered associations total more than $2,000,000, with additional members coming in with requests for loans which will ultimately increase the loans to be made to these associations by many thousands of dollars.

To illustrate this point, the applications show that the charter membership of the association at Freewater, Ore., asked for about $30,000 in loans. Additional membership in the Freewater association has come in since that time asking for about $80,000 more.

President D. G. O'Shea of the district bank says that already loans have been approved for some of the applicants who have joined some of the chartered associations since the charters were granted, but that such loans must of necessity be somewhat delayed, and take their turn as the business of the bank will permit. Other applications for loans and for membership in associations not yet chartered are daily being received. No action can be taken by the bank on them until the association has been approved and the charter granted.

"We are receiving many applications from those who did not come in on the original membership roll," says President O'Shea. "Such will have to be held till after the charter is granted, as such association is not a legal body until chartered. After a charter is granted, then the association is a corporation, authorized to admit new members. Then such application will be taken up."

The following are the chartered associations from No. 40 to 46, inclusive, showing the loans sought by the charter members, those up to No. 40 having been published previously in these columns:

Washington.	
Mt. Vernon, Skagit county	$133,750
Carrolls, Cowlitz county	27,125
Idaho.	
Midvale, Washington county	58,750
Montana.	
Retah, Dawson county	52,300
Froid, Sheridan county	23,700
Oregon.	
Harrisburg, Linn county	35,500
Freewater, Umatilla county	30,450

An Appropriate Celebration.

To the Editor of The Washington Farmer: I believe the article in the last issue of The Washington Farmer, regarding the Fourth of July celebration, is an appropriate article for the occasion.

MRS. JOSEPHINE CORLISS PRESTON.
Olympia, Wash.

Fair Dates.

Pendleton, Roundup—Sept. 20
Boise, State—Sept. 22-29.
Salem, State—Sept. 24-29.
Helena, State—Sept. 24-29.
Lewiston, N. W. Lvst.—Nov. 16-23.
Portland, Pac. Nat. Dairy—Nov. 16-23.
Portland, Pac. Int. Lvst.—Nov. 19-24

Washington Fairs and Shows.

Chehalis, S. W.—Aug. 27-Sept. 1
Spokane, Interstate—Sept. 3-8.
Elma, County—Sept. 5-9.
Mabton, Hay Palace—Sept. 11-
North Yakima, State—Sept. 17
Rosalia, Lvst.—Sept. 20-22.
Lynden, County—Sept. 25-29.
Garfield, Roundup—Sept. 26-29
Shelton, County—Sept. 27-29.
Burlington, County—Oct. 1-6.
Puyallup, Western—Oct. 2-7.
Palouse—Oct. 4-6.
Port Angeles, County—Oct. 11-13
Colville, Live stock—Oct. 17-19

Policewomen.

Policewomen are an official part of British munition plants.

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Any subscriber who does not feel that The Washington Farmer is worth to him all and more than the subscription price may order the paper discontinued and the unusued portion of the amount paid for the subscription will be refunded. You must be satisfied.

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GUARANTEE OF ADVERTISEMENTS.

We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Severe Indictment Is Made of Dairy Products Distributors

Secretary E. B. Smead of the Inland Empire Dairy Producers' association charges the large distributors with direct responsibility for the decline in the dairy industry. In the first number of the Inland Empire Dairy Journal he says:

"They have had little consideration in the past for the individual dairyman. So now, when their troubles are multiplying on all sides, we feel sorry for them in their extremity, but can honestly say that they brought it on themselves. For if they had kept the good of the dairy industry at heart, kept track of the cost of production, and paid enough to the farmer always to enable him to have a fair profit, there never would have been the need for the producers to organize. But we have been driven to it at last and the feeling is unanimous among dairy farmers that they will either have a fair price for dairy products or quit the business."

This is a severe indictment, but many believe it is not unfounded. We were discussing this problem the other day with a dairy producer who recently sold off his herd and quit production.

"The distributors have only themselves to blame," he declared. "For years they had pursued a policy of grinding down the producers with low prices for milk, while charging the consumers high prices. They got away with that policy until war conditions altered the whole situation. Dairy farmers hung on because they had no other landing place. By working themselves and families long hours they managed to keep their herds going, preferring that course to the sacrifices they would have to make if they sold their cows at the low prices then prevailing.

"Then war conditions ran up the price of beef and provided the producers just the opportunity they had long wanted to get from under. That is why so many farmers are going out of business. They are afraid that if they let this opportunity pass it may not continue. They distrust the distributors. They fear that if the old conditions should come back again the dealers will resume their former practices."

Already some of the distributors and their defenders are trying to put the blame for existing conditions on others. They have even tried to make a scapegoat of The Farmer and other journals that have been investigating dairy conditions.

As our readers well know, we have opened our columns to the fullest discussion. We have printed the opinions of both producers and distributors. We have turned on the searchlight and have no apologies to offer.

It is ridiculous for these critics to say that the honest publication of facts can hurt any industry, and they are wasting breath when they try to shift the blame from their own shoulders, for the producers know that unprofitable prices are the source of the trouble, and the consumers want the facts and are determined to have them.

Should Renew the Pledge of 1776

On July 4, 1776, the signers of that epoch-making document, the Declaration of Independence, spoke this pledge for the united people of the American colonies:

"For the support of this declaration, with a firm reliance on the protection of divine providence, we mutually pledge to each other our lives, our fortunes and our sacred honor."

One hundred and forty-one years have passed, and the American people are again called upon, in the name of humanity, to renew their allegiance to the principle of that pledge of the first Fourth of July.

For support in the conflict into which America has been drawn she may still place a firm reliance on the protection of divine providence, for her cause is just. Her people again may pledge to each other their lives, for life is no dearer today than in that memorable time. Her fortunes are greater, but inasmuch as they are so much greater is the duty to throw them into the service of humankind. Her honor, grown yet more sacred through the decades of fulfilment of her high purposes, must again be vindicated by whatever sacrifice may be required. Menacing though the bloody hand of Prussianism may appear to the very life and liberty of the people of these United States, may it never truthfully be said that "America's ten million" enrolled for selfish service alone; may it never truthfully be said that American industry and American homes have rallied to the needs of war to save themselves alone from the hand of despotism. With eyes on the devastated fields of Europe, on the hordes of once free and happy men and women now toiling in slavery under the goad of tyranny; on the miles and miles of nameless graves; on the wreckage where but a few short months ago there stood thriving towns and homes of happy people—with eyes on the work of inhuman ambition, the free people of every American community should consecrate themselves anew this Fourth of July, and, with a firm reliance on the protection of divine providence, pledge to each other their lives, their fortunes and their sacred honor to the redemption of humanity.

Do What You Can Do Best

It would be poor policy to try to make a foot-racer out of a one-legged cook. The effective way of doing things is to keep experts busy at useful things which they can do best.

During a war one of the most useful things is to provide food. Without food there can be no army. We have at no time had too many good farmers, and now it seems that many of them have enlisted to fight the enemy with arms instead of food.

There are other classes of men which could be spared more conveniently.

Nobody would deny the right of young American farmers to fight for their country, but the most effective fighting they can do this first year at least is on the farm.

Cultivation Will Help

In the great agricultural states of the east and the middle west much stress is laid by the farmers on cultivation of their crops. This is no doubt partially true because of the more intensive development of the farms and the farming methods, but this is a year when all farming should feel the impetus of intensive methods as much as possible.

Cultivation properly done will greatly increase yields. A day with a man and team in the potato patch will actually increase the yield of potatoes by bushels. Work with the plow, the harrow, the hoe or other implement in the corn and beans will very materially add to the output when harvest time comes.

Wherever it is possible crops should receive better cultivation this year than has been the custom. There will be need for the greatest output of foodstuffs this year in the history of the United States. If cultivation will increase the yield of an acre one bushel, that acre should be cultivated if possible.

Washington Gleanings

The Satsop cooperative cheese factory sold $49,351 worth of cheese during the year ending May 1.

Fifty thousand trout have been planted in Whitestone lake near Brewster by Game Warden Clay Fruit.

The Washington state fair is offering prizes this year for essays on birds by school children or children of school age.

Bounties for 136 coyotes, two lynx and one bobcat have been paid to Lincoln county people by the county auditor's office since March 15.

The state and county fish hatchery at Leavenworth has been active. There is now ready for delivery to the waters of the Wenatchee river some 1,300,000 Chinook salmon fry.

Four thousand gallons of rhubarb have been put up this season at the Sumner cannery, according to Mr. Paulhamus. The association has orders for something over 6000 dozen gallons.

Jess Miller of Colfax purchased the Kenoyer ranch, consisting of 440 acres of land, recently. It lies midway between Central Ferry and the Penawawa. The sale price was announced as $17,600.

As further conservation of natural food resources, the state fish commission declared all tributaries of the Columbia, on the Washington side, closed for two years from June 1 to commercial fishing.

Closely following the purchase of the E. H. Stanton packing plant by Armour & Co., is the announcement of Roberts Brothers to make additions and improvements costing $50,000 to the Union stock yards at Spokane.

Clallam county's third annual fair will be held October 4, 5 and 6 and assurances already have been received of community exhibits from Fairview, Eden Valley, Mount Pleasant, Ramapo, Forks and Quillayute.

Two carloads of Russian-German workmen who are to labor in the beet fields of the Utah-Idaho Sugar company arrived at Ellensburg lately with their wives and children, and their household appurtenances.

Commissioner E. F. Benson of the department of agriculture has appointed M. L. Dean of Montana as assistant commissioner in charge of the division of horticulture, succeeding T. O. Morrison, who has resigned.

Between 350 and 400 boys and girls of Whitman county are now engaged in boys' and girls' club work under the direction of J. Carl Laney, county leader of boys' and girls' club work. There are altogether 27 clubs in Whitman county.

Ross and Orville Smith of Riverside and Pine Creek have purchased the entire band of sheep owned by Bert Webber, which, together with their own holdings, will give these boys a flock of approximately 3000. The purchase price of the flock was $12,000.

American Patriots

"Our country is the world; our countrymen are all mankind."—William Lloyd Garrison.

"They that can give up essential liberty to obtain a little temporary safety, deserve neither liberty nor safety."—Ben Franklin.

"Is life so dear, or peace so sweet, as to be purchased at the price of chains and slavery? Forbid it, Almighty God! I know not what course others may take, but as for me, give me liberty or give me death."—Patrick Henry.

"It (Independence day) ought to be commemorated as the day of deliverance, by solemn acts of devotion to God Almighty. It ought to be solemnized with pomp and parade, with shows, games, sports, guns, bells, bonfires and illuminations, from one end of this continent to the other, from this time forth and forever more."—John Adams.

"Conquer or Submit"

So Says Wilson in World Message

"The day has come to conquer or submit."

This startling declaration was recently made to the world by President Wilson in a message to the newly organizing government of Russia.

"Unless we pour out our blood and treasure now, and succeed, we may never be able to unite or show conquering force again in the great cause of human liberty," said the president in a plea to the Russian government to listen to no intrigues by Germany, but to stand firmly with the allied nations and fight to the end the battle for liberty and righteousness.

So clear is the statement by the president of the purposes which led this country to join the allies in the world-wide war, and so great have been the difficulties encountered in making those purposes clear, it is not amiss to revert to his remarkable message to new Russia.

He says in part:

"It seems opportune and appropriate that I should state again in the light of this new partnership the objects the United States has had in mind in entering the war. Those objects have been very much beclouded during the last few weeks by mistaken and misleading statements and the issues at stake are too momentous, too tremendous, too significant for the whole human race to permit any misinterpretations or misunderstandings, however slight, to remain uncorrected for a moment.

"The position of America in this war is so clearly avowed that no man can be excused for mistaking it. She seeks no material profit or aggrandizement of any kind. She is fighting for no advantage or selfish object of her own, but for the liberation of peoples everywhere from the aggressions of autocratic force.

"We are fighting for the liberty, the self-government and the undictated development of all peoples and every feature of the settlement that concluds this war must be conceived and executed for that purpose. Wrongs must first be righted and then adequate safeguard must be created to prevent their being committed again.

"We ought not to consider remedies merely because they have a pleasing and sonorous sound.

"Practical questions can be settled only by practical means. Phrases will not achieve the result. Effective readjustments will, and whatever readjustments are necessary must be made.

"But they must follow a principle, and that principle is plain.

"No people must be forced under sovereignty under which it does not wish to live.

"No territory must change hands except for the purpose of securing those who inhabit it a fair chance for life and liberty.

"No indemnities must be insisted except those that constitute payment for manifest wrongs done.

"No readjustment of power must be made except such as will tend to secure the future peace of the world and the future welfare and happiness of its peoples.

"And then the free people of the world must draw together in some common covenant, some genuine and practical cooperation that will in effect combine their force to secure peace and justice in the dealings of nations with one another. The brotherhood of mankind must no longer be a fair but empty phrase; it must be given a structure of force and reality. The nations must realize their common life and effect a workable partnership to secure that life against the aggressions of autocratic and selfpleasing power."

Milions for Red Cross.

The nation-wide campaign during the last week for $100,000,000 for the work of the Red Cross in stricken Europe demonstrated the heart of the people of America. While at this writing the totals contributed have not been compiled, reports from scores of centers indicate that the allotments have been more than raised. In the northwest was this more than true. Washington's allotment of $1,000,000 is thought to be assured. Oregon is exceeding its quota of $400,000 by approximately $100,000. Idaho's $250,000 is being swelled to nearly $350,000. Montana is raising over $500,000 instead of the $400,000 originally allotted to it.

Food Bill Is Coming.

The lower house of congress has passed the government food control measure and the senate is expected to pass it with certain amendments before the end of the week. The measure as passed by the house gives wide powers to control prices and distribution, and prohibits the use of grains in the manufacture of intoxicatingliquors. This proposal has both friends and enemies in the senate, and will precipitate a vigorous fight.

The Motor Car

On the Farm

Stale air which has remained in a tire for four or six months has a slight deteriorating effect upon the rubber and should be let out and replaced by fresh air. The use of exhaust from the engine to inflate tires is injurious on account of oil and gases contained therein. Of course, there is no objection to the use of pumps operated by engine power, provided they fill the tire with fresh air.

The general practice of carrying one or more extra inner tubes results in quite a percentage of them being injured before they are even placed inside of a casing. There is danger of the tube being chafed when carried in the ordinary pasteboard box in which they are purchased and it is advisable to provide tube bags for spare tubes.

A mistake which usually results in short life for a tube is placing it in either too large or too small a casing. A 4 1-2-inch tube in a four-inch case wrinkles and creases and is soon weakened or worn through. A four-inch tube in a 4 1-2-inch case requires excessive stretching of the rubber and weakens it.

The matter of lubrication is generally given but little consideration, but is one of the most important factors in conserving tubes. New tubes are coated with a white solution to prevent tubes from sticking to the case, but a good lubricant should also be dusted on the fabric all around the case and on the inner tube. Soapstone, powdered mica and graphite are the common lubricants and all are satisfactory if properly used. Powdered mica is more durable than soapstone and as effective as graphite, as well as more pleasant to handle. Soapstone is quite satisfactory, but not lasting and should be applied two or three times during the season, care being exercised as to the amount used. Too much is as bad, if not worse than too little. If a quantity is dumped into a case it will collect at one point and during the hot weather will heat to such an extent as to burn the rubber of the tube, making it very thin, brittle and lifeless; this can be recognized by the honey-combed appearance.

Hires Out as Ranch Hand; Tells of His Short Experience.

For obvious reasons the writer of this article doesn't wish to sign his name to it. The labor problem on farms has become a serious question and wages have risen considerably. It would be in line with general business principles that where the demand is increasing those supplying the demand obtain more and more favorable terms both as to wages and accommodations. However, The Washington Farmer is willing to let this man have a hearing in its columns:

I was over to the city employment office this morning and saw a list three feet long of "Ranch Hands Wanted," posted on the board. There were more than enough idle men in the large waiting room to fill all those jobs. Why don't those men jump at those jobs?

Not being able to pass the physical examination required of a soldier I did the next best thing I could think of and several weeks ago I secured a job on a ranch at $45 per month.

Some days it rained and we did not work and other days it rained, but not so hard, and we worked in the rain. I am not what would be called a robust man, but can do as much work on a ranch as any one with five to eight horses if I can get proper food and proper sleep and do not have to work in the rain. I told my boss that I could not stand to work in the rain, but he told me that it would not hurt me. He seemed to know more about me than I did myself though I have lived with myself for nearly 50 years and he had only known me for a short time.

My doctor ordered that I eat nothing sweet, but the wife of my boss became offended because I would not eat her pies and insisted that they would not hurt me. So I decided that a rancher and his wife do not want a ranch hand to have any ideas of his own even about his own personal affairs.

Working in the rain, eating sweet food, having a miserable bed and no place at all for a bath put me out of business in a short time and I was compelled to leave. However, my boss refused to pay me for the rainy days I did not work thus compelling me to spend more than it amounted to in order to collect or accept day wages at monthly wage rates.

I began work at 5 a. m. by feeding 11 head of horses, cleaned the stable and wheeled the manure in a cart over 100 feet. By the time I had my horses curried and harnessed it was 6 o'clock and breakfast time. A half hour was given to breakfast when I immediately got the horses out of the stable. I quit in the field at 11:30 a. m., but it was another half hour before my horses were watered and in the stable and fed. At 1 p. m. I again took my horses out of the stable and quit in the field at 6 p. m., taking another half hour to get the horses into the stable and unharnessed. After supper I spent a half hour caring for the horse making a total of 12½ hours on duty. On Sundays I had at least from two to three hours work in caring for the horses making at least 334 hours per month.

Figuring meals at $20 per month and the use of a board bunk on which to unroll my blankets, at 4c per night or $1.20 per month my wages amounted to $66.20 per month or a trifle less than 20 cents per hour. I asked one of the men who sweeps the streets of Spokane how much he received and he said 37½ cents per hour and they were talking of raising this to 40 cents per hour. It is certainly as hard work and requires as much skill to drive from five to eight head of horses to a plow, harrow or seeder as it does to sweep up the trash on the smooth streets of Spokane.

My boss told me that he came to Washington 30 years ago with $10 and that he was now worth $100,000. If, he paid, say 30 cents per hour for his ranch hands and furnished a bunkhouse with a bath for the men and a separate room for each one he might not make quite so much money, but I would make a bet that he would have less trouble getting ranch hands to work for him. S.

Spokane, Wash.

Vegetables Are Easily Canned

(Continued from page four.)

made with a screw-top jar, but could with any jar having a false glass tin top from which the screw top, spring or clamp could be removed without actually opening the jar.—Editor's note.) If there has been the least bit of decomposition, or if sterilization has not been complete, the top will come off. This is because the pressure on the top has been releived by the gas formed by the bacteria. In this case, it is best to empty the corn and fill the jar with a fresh supply. If canning fruits or some expensive vegetable, however, examine the contents of the jar, and, if decomposition has not gone far enough to injure the flavor, place it once more in the boiler and sterlize over again. If the top does not come off when the jar is lifted by it, one may be reasonably sure that the corn is keeping. In case any jars spoil, increase the time of boiling to one and a half hours."

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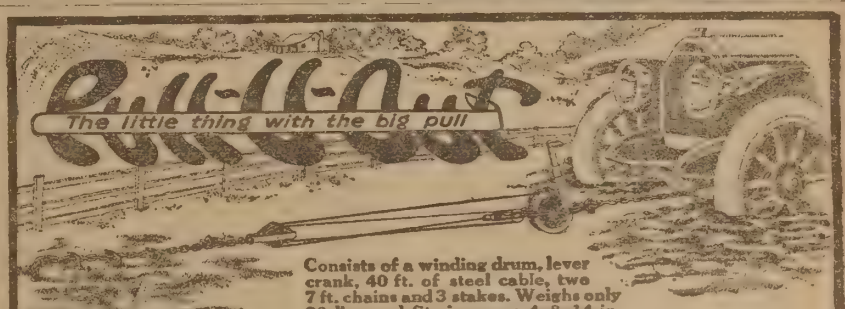
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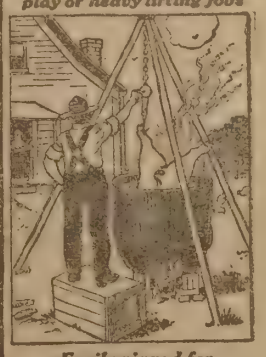
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Consists of a winding drum, lever crank, 40 ft. of steel cable, two 7 ft. chains and 3 stakes. Weighs only 28 lbs. and fits in space 4x8x14 in.



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Here's the most wonderful little machine ever invented for farmers. It combines two things—a rescuing device for your automobile and a machine that will do hundreds of lifting and pulling jobs on the farm, easily and quickly. It saves a world of back ache and is worth its weight in gold.

Pull-U-Out fits into the tool box of your auto, yet is so powerful that it will pull a 5,000 lb. auto out of hub-deep mud without delay, expense, trouble or damage to car or clothes. Lifts 2,000 lbs. dead weight; pulls 100,000 lbs. on wheels.

No motorist, however experienced and careful, should venture out, even on the best of roads, without Pull-U-Out, because accidents come *suddenly* —without any warning. Trouble is lurking every where. You may get stuck in the mud, skid into a ditch or overturn. It is then that you will bless the day you bought a Pull-U-Out. With powerful, inexpensive little Pull-U-Out in your tool box you need never fear road conditions; you can go wherever your business or fancy leads you. If you meet with an accident you *know* that you have *immediate* and efficient help right at hand. Don't wait for an accident to make you wish you'd bought a Pull-U-Out—buy one today.

Does wonders on the farm!

Wherever there's *any* heavy lifting or pulling to do, use Pull-U-Out. For loading and unloading wagons, scalding hogs, quartering beef, lifting wagon beds and hay racks on and off the running gear, stretching wire fences, loading baled hay, bales of cotton, sacked grain and other heavy things, Pull-U-Out is marvelous. It is light, portable and strong. Easily moved by one man from one place to another. Does lifting and pulling jobs that usually take from 3 to a dozen men.

Pull-U-Out Sales Co., 2044 Market Street, St. Louis, Mo.

Steady Price Is Greatly Needed

Up and Down Prices Tend To Discourage Producers of Meat Animals and Result in Reduction of the Herds



RITZVILLE, Adams County, Wash., June 18.—The number of live stock, except hogs, are about the same as a year ago. We are disposing only of surplus stock and increasing our herds where condition permits. The best means of increasing the number and size of herds is the big price and steady market, as an up-and-down price is most discouraging to the herdmen. The quickest way of increasing our meat supply is to prepare the female stock. The range is so far in good condition, and the unusually long winter has played havoc with the grasshoppers and sage ticks, which are reduced in numbers tenfold.

JACOB HARDER.

Hogs Quickest Way to Meat.

GARFIELD, Whitman County, Wash., June 18.—There is not much chance to increase live stock now, but we should protect what we have, forbid veal to be butchered, and try to make it unnecessary for cattle to starve in winter. Hogs are the quickest way to meat. So many say they can not afford to raise hogs on such high-priced wheat. Some even have cut down the number of chickens to save feed. Can't they realize that, whatever the feed costs, the meat will pay for it? We are really not talking so much about these things here. No farm work could be done until May, and everybody is too busy. Wheat around Garfield is better than the general run, and east of here, where the snow lay on until the middle of April, fall wheat is very good. Crops and gardens just finished, and summer fallowing is well on.

MRS. MARILLA KIDWELL.

Skagit Is Prosperous.

MT. VERNON, Skagit County, Wash., June 1.—Aside from the fact that the season is just about a month late, crop conditions here look favorable. Most of the oats are up and look good; grass is up, and in fact everything is growing well now. There is more than twice the acreage of potatoes, onions and beans than is commonly grown. Nearly every family has a garden and much more land is being tilled this year than ever before. I think it is a fairly close estimate to say that about 350,000 pounds of milk is being hauled into Mount Vernon every day, the present price being $2.15 per hundred pounds. The third condenser which is nearing completion expects to begin receiving milk June 15.

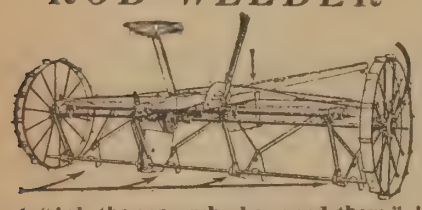
C. S. PHILLIPS.

All Are Comrades.

OTHELLO, Adams County, Wash., June 16.—Regarding comparison of the number of live stock now and one year ago, personally, I believe there is about an even number of horses and cattle. Many young horses are coming into harness and farmers are breeding more than formerly. The farmers are really inceasing their herds in both lines of stock. As to hogs, there is a very decided shortage; high-priced feed last fall cleaned out the pens. The quickest way to increase meat supply is for all the farmers to keep all breeding stock and see that they are kept busy. With proper care, sows may produce two litters annually and be made money makers. The writer takes no little pride in his brood sows, but there are very few in this vicinity. We feel it the patriotic duty of all breeders to make an extra effort to increase their herds. If we older men can not go to the trenches, we can devote more time and care to increasing the food supply for those who are there. We are all comrades in a common cause.

A. O. LEE.

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Recommends Silos.

SPOKANE, Spokane County, Wash., June 15.—The number of live stock in this community is very much less than it was in 1915 and 1916. This is especially true of hogs. In communities where pea growing is under way, there is a promise of feed in the shape of the shattered peas which remain in the field and also from the split peas which are taken from the threshed peas. Several men made good use of this material last season. The customary price for these split peas last season was 1 1-2 cents a pound. With this opportunity to secure such cheap feed, stronger inducements await the farmers who would like to have more hogs on their farms. In regard to the business of keeping up the meat and dairy products, I find there is a tendency to reduce the amount of dairy cattle kept upon our ranches and to some extent the beef cattle are also being reduced. As a matter of great importance, as county agent, I am directing the attention of the farmers in the following manner to the great need along this line:

"Since our nation is at war and is one of the greatest agricultural countries it is called upon as never before to feed and clothe the world. Dairy products, beef and leather, are mighty essential to accomplish this service properly. In the face of this obligation we have passed through one of the most trying experiences in the history of our farming. Feed has been scarce and high priced and the tendency has been to reduce the cattle of our farms. In order to assist in handling the situation and to help provide another winter's supply of feed for cattle, the following suggestions are made and the cattle owners of Spokane country are urged to carry them into operation:

"1. A silo is essential on every farm where four or more beef or dairy cows are kept. It will save one-third the hay, or in other words, wheat, oats or barley when made into silage will go one-third farther as feed than the same material made into hay.

"2. A home-made silo will cost from $40 for the smaller sizes to $100 for the larger ones. At these prices there need be no farmer without a silo where sufficient cattle are owned to warrant its use.

"3. The hay problem is also perplexing. Relief from this condition may be secured through the enormous acreage of peas in Spokane county this year. Pea threshings make excellent cattle feed. In many instances these threshings are found superior to oat hay and equal to clover hay. Many of the large seed companies have found that they can winter their horses on pea straw. If your community is not growing peas in a large way, remember there are plenty other sections in Spokane county from which you can obtain this pea straw.

"4. During the threshing of peas more or less waste is found in the shape of split peas. These, ground into meal, make excellent cattle feed and will assist materially in cheapening rations. Split peas sold for 1 1-2 cents per pound in the pea-growing sections in the fall of 1916."

J. R. SHINN.

Preparing to Feed.

EPHRATA, Grant County, Wash., June 18.—The increase in cattle this year will amount to approximately 25 per cent in this county. The crop of calves is exceptionally good, practically no loss occurring. Last year considerable loss occurred at this season of the year from blackleg, but the largest percentage of the stockraisers have vaccinated and the loss today has been practically nothing from that disease. More purebred bulls have been purchased in this county this year than have ever been in the county at one time before. The people are preparing for better feeding next year. Many contemplate putting in silos for winter feeding. There are not so many hogs in the county as last year, but many people are getting in at least one sow for next year. It looks as if by another year the hog industry would be increased materially. No live stock has been marketed at present.

H. W. REAUGH.

Grow Small Farm Mutton.

STRAW, Fergus County, Mont., June 20.—On account of the severe winter and late spring, the live stock has been reduced by a large percentage. The calf and lamb crop is also comparatively light. The farmers are trying to increase their herds, but the hogs will be hampered as long as grain is so high in price. More mutton is being produced by small farmers than usual. In order to increase the meat supply there will have to be more pastures and more alfalfa raised, so that more mutton and beef can be raised. The price of grains almost prohibit hog raising at the present time here. Many farmers are selling cattle, but mostly to local buyers. Good prices always stimulate production. The present prices are good, so conditions are favorable for increasing herds.

B. F. GORDON.

Need More Meadows.

MARIETTA, Whatcom County, Wash., June 4.—There is not as much live stock in this community as a year ago due to purchasers from Montana buying heavily here. Most farmers are disposing of their grade cows and are intending building up their dairy herds with high class cows. I would suggest that farmers clear more land and increase their meadows as the quickest way of raising the meat supply. Weather for the month of May has been very dry, only .66 inches of rain falling, but at this writing there has come a generous downpour which will be very much appreciated by all.

S. B. MAYHEW.

Afraid of Hog Raising.

LA CROSSE, Whitman County, Wash., June 1.—The number of live stock is considerable less than a year ago, especially hogs which have decreased about 50 per cent. Cattle and horses are more nearly normal, only the undesirables being weeded out. There should not be any scarcity of hogs, but the low prices of hogs a year ago got the grower skeptical and it will be some time before many farmers will raise pork for the open market.

M. E. SCHRECK.

All Crops Increased.

OMAK, Okanogan County, Wash., June 5.—There is a general increase in the acreage in all crops. Potatoes and beans are being planted in unusual quantities and all available land is being put to use. The weather has been very favorable so far this spring. Alfalfa is looking very thrifty. Some ranchers have cottages for their hired help, but in most cases help is not needed the year 'round.

J. O. WOODS.

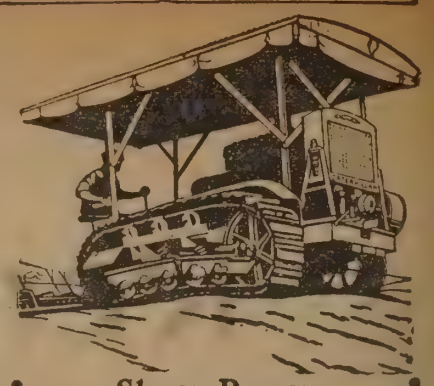
Rabbits Increase Rapidly.

GRESHAM, Mulnomah County, Oregon, June 16.—In this county there seems to be a general decrease in the amount of stock on hand, especially in dairy cows, which usually form a big percentage of the farm income in this district. A good many of the farmers are disposing of their stock on account of the high cost of feed as well as the handsome prices which they are receiving for the animals, no matter what state of primeness they are in. Some of the more reliable farmers ary trying to build up good herds, but if the price of feed goes up and the consuming public refuses to give more for their products, they too will sell their cows to the butcher from whom they will get reasonable prices. There is, undoubtedly, a need for an increase in the meat supply, but just how to supply this need is a proposition that is harder to solve than a person would expect. I am advising farmers in this community to save their brood sows and raise all the pigs they possibly can. About one of the quickest ways of increasing the meat supply in small towns is to encourage the breeding of rabbits and chickens.

S. B. HALL.

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Every reader of this paper should write at once for a free copy of "The Home Seekers' and Settlers' Guide." It tells all about the rich 160-acre free farms, excellent for growing grain and mixed farming, also what others are doing. Address Canadian Northern Railway. A. A. Brostedt, D. F. & P. A., 605 Hastings St., Vancouver, B. C., Canada. —Adv.



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Battle Creek Michigan

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Read Your History As It Happens

Do you realize that the days we are living through now are among the most momentous in the history of the world? Our country is making preparations for war on such a gigantic scale that the effects are felt in every home throughout the land. Our sons and brothers will soon be marching in the military encampments. In a few months they may be fighting a ruthless foe in foreign trenches, while our sisters and daughters are nursing wounded soldiers of France, Belgium, England and America. It is your duty, it is your opportunity to keep yourself and your family thoroughly in touch with these world-quaking, home-shaking events. Do not stop your ears to the call of the bugle. Do not shut your eyes to the glare of the campfire. The whole panorama of our modern history as it unfolds is faithfully reported by

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A. B. NYSTROM, Editorial Contributor

Leander Martin of Castle Rock, Wash., reports great activity in silo building in his county. A carload of knocked-down silos has been shipped in by one firm this spring, and this is probably less than half of those built or in the process of building. Mr. Martin calls attention to the prevalence of stagggers western Washington horses and is of the opinion that the ergot so abundantly found on various types of vegetation west of the Cascades is at least partially responsible for the trouble.

"Some of these things have not been definitely and finally determined," he comments, "but it is well for our farmers to keep in mind that fern pasture may have a bearing on the problem. Another unsolved problem of considerable economic interest to the farmer is the effect of feeding highly acid silage to dairy cattle year after year. That silage is a valuable food for increasing or maintaining production, we all know, but we must not forget that in the course of the years an acid product of this kind may influence the animal's health."

Jefferson County Cows

The May report of the Jefferson County Cow Testing association shows the average production of all cows tested during the month to be 848 lbs. milk, yielding 33.0 lbs. fat, according to the report of Elmer Leonard, tester.

Very little grain is being fed. Most of the herds on good pasture and are doing creditable work. It is noticeable that cows which were brought through the winter in good condition are paying the farmer for the extra care and expense by a greater production on pasture.

The high herd average production and also the high individual records for the month are held by Yarr Bros., of Chimacum. Their herd of 23 cows averaged for the month 1404 pounds milk and 48.97 pounds fat. Their high cow produced 1947 pounds milk, containing 85.66 pounds fat. These results were obtained on pasture alone.

Following is a list of cows producing over 50 pounds fat for the month: Yarr Bros.' Gr. Hol. produced 1947 pounds milk, containing 85.66 pounds fat; Yarr Bros.' Gr. Hol. produced 1575 pounds milk, containing 67.72 pounds fat; Yarr Bros.' Gr. Hol. produced 1649 pounds milk, containing 67.60 pounds fat; Yarr Bros.' Gr. Hol. produced 1686 pounds milk, containing 67.44 pounds fat; George Hendricks' Gr. Hol. produced 1693 pounds milk, containing 66.03 pounds fat; Glendale Creamery company's P. B. Jersey produced 1302 pounds milk, containing 65.10 pounds fat; Glendale Creamery company's Gr. Jersey produced 1857 pounds milk, containing 64.99 pounds fat; Yarr Bros.' Gr. Hol. produced 1689 pounds milk, containing 60.80 pounds fat; Yarr Bros.' Gr. Hol. produced 2207 pounds milk, containing 59.59 pounds fat; Bert McConogy's Gr. Hol. produced 1739 pounds milk, containing 57.39 pounds fat; George Hendricks' P. B. Hol. produced 1280 pounds milk, containing 56.32 pounds fat; Glendale Creamery company's Gr. Jersey produced 1023 pounds milk, with 56.26 pounds fat; Bert McConogy's Gr. Hol. produced 1411 pounds milk, containing 55.00 fat; Yarr Bros.' Gr. Hol. produced 1528 pounds milk, containing 55.00 pounds fat; H. L. Hansen's Gr. Hol. produced 1442 pounds milk, containing 54.8 pounds fat; B. McConogy's Gr. Hol. produced 1516 pounds milk, containing 54.57 pounds fat; Yarr Bros.' Gr. Hol. produced 1612 pounds milk, containing 53.18 pounds fat; Glendale Creamery company's Gr. Jersey produced 1175 pounds milk, containing 52.87 pounds fat; Glendale Creamery company's Gr. Jersey produced 1008 pounds milk, containing 52.40 pounds fat; Yarr Bros.' Gr. Hol. produced 1652 pounds milk, containing 52.86 pounds fat; Griffith Bros.' Gr. Hol. produced 1311 pounds milk, containing 52.45 pounds fat; Glendale Creamery company's Gr. Jersey produced 1091 pounds milk, containing 52.37 pounds fat; Glendale Creamery company's Gr. Jersey produced 1339 pounds milk, containing 52.22 pounds fat; H. L. Hansen's Gr. Hol. produced 1522 pounds milk, containing 51.85 pounds fat; Yarr Bros.' Gr. Hol. produced 1504 pounds milk, containing 51.13 pounds fat; Fred Stutler's Gr. Jersey produced 1141 pounds milk, containing 51.34 pounds fat; James Maddock's Gr. Jersey produced 825 pounds milk, containing 51.12 pounds fat. Yarr Bros.' Gr. Hol. produced 1500 pounds milk, containing 51.00 pounds fat; Yarr Bros.' Gr. Hol. produced 1451 pounds milk, containing 50.78 pounds fat

The six highest producing herds are as follows:

Yarr Bros.' 23 cows produced 1404 pounds milk, containing 48.97 pounds fat; George Hendricks's 12 cows produced 1236 pounds milk, containing 44.00 pounds fat; Robert Cook's 15 cows produced 1058 pounds milk, with 41.12 pounds fat; Bert McConogy's 23 cows produced 1105 pounds milk, containing 39.49 pounds fat. H. L. Hansen's 9 cows produced 1136 pounds milk, containing 38.62 pounds fat; Miss M. Chase's 13 cows produced 804 pounds milk, containing 38.24 pounds fat.

Testing of Dairy Herd.

Professor E. L. Westover, formerly with the dairy husbandry departmental work in California, has come to Oregon and taken charge of the work surrendered by Professor Barr.

Veterinary

Dr. S. B. Nelson

Warts—How can I get rid of warts on cows' teats?—E. D. J., Rochester, Wash.

Answer—The treatment as advanced in this column (answer to A. K.), I think, will be of value to your animals also.

Bloody Milk.—What can I do for a cow that gives bloody milk?—C. O. O., Corral, Idaho.

Answer.—Try giving your cow one teaspoonful of hypo-sulphite of soda in one quart of water morning and evening for a week to 10 days time.

Sometimes it is advisable to prepare the cow for this treatment by first giving her one and one-half pounds of Epsom salts in three quarts of water, and then begin the prescribed treatment two days later.

Warts on Teats—I have two cows that are becoming badly affected with warts on their teats.—A. K. Rockford, Wash.

Answer—Apply the following preparation to the warts on the teats twice daily:

Chloral-hydrate, drachms 1 1-2
Acetic acid, drachms 1 1-2
Salicylic acid, drachms.....1
Spirits of ether, drachms 1
Collodiom, drachms 4

This has given good results in many instances.

Udder Cakes—I have a cow that I could not dry up before she freshened and now about twice a week one-quarter of her udder will cake and the milk will get gargety for a couple of milkings.—G. C., Bow, Wash.

Answer—Give your cow one and one-half pounds of Epsom salts in three quarts of water. Two days later begin giving her a tablespoonful of fluid extract of pigroot in a pint of water morning and evening for about a week. Also give her every other day about a handful of Epsom salts in a pint of water. Try that for some time. If she does well under that, she will not of course need further treatment. If not, you may have to give injections into the udder, about which you will be advised later if you write again.

Depends on Cow—If a cow should lose her calf how long would it be before she came in heat. Is it possible to bring a cow to her milk after drying her up. On account of being in poor condition I have one which I am trying it on by feeding dairy food. I have been getting about two teacups of milk a day which cost me one dollar a week.—H. G. F., Port Orchard, Wash.

Answer—The time of heat depends a great deal upon circumstances, and upon the individual cow. As a general rule, they may come into heat 21 days after calving and the natural period occurs regularly. However, after a cow loses her calf and there is some inflammation or severe relaxation of the generative organs, this physiological function may vary considerably and occur at irregular periods varying from the normal three weeks up to a month or even more. There is very little opportunity of getting a cow to her milk during this lactation period. After she goes dry, and again freshens, she may come again to her lactation period. It would hardly pay to put high-priced feed into a cow for two teacupfuls of milk a day. The sooner she is dried up completely the better for the owner.

$53,200
Paid for Holstein Bull Calf

The greatest tribute to the superiority of Holstein-Friesian cattle was paid in the auction sale at Worcester, Mass., June 7 and 8, where a Holstein bull calf brought $53,200, a Holstein cow $18,300, and a Holstein heifer $18,000. 143 animals were sold for $296,470, or an average of about $2073 per head. In 1916 at Detroit, Mich., 140 animals were sold for an average of $1173 per head. This great increase in selling values is proof conclusive of Holstein popularity, partly due to Holsteins raising in the past year all world's 7-day records for milk and butter. The world's record for butter in 7 days is now over 50 lbs.

Cows Kept Out of Doors

A few years ago, when orchard lands were booming, the Avalon Orchard Tract company cleared up a big tract of land at Kuna, Idaho, and set most of it to fruit trees. Part of the tract was sold, but the company retains 360 acres, a good part of which is in orchard. The apples are just coming into bearing and are expected to yield 150 boxes per acre this year. Sixty acres of prunes are four years old. While waiting for the trees to come in bearing a part of the land was put in alfalfa, a herd of registered Holsteins was purchased, and the dairy began to bring in immediate returns.

A visit to the Avalon Dairy, which is in charge of C. B. Austin, secretary and treasurer of the company, reveals a herd of really high-class individuals of rich breeding. Hartwood Helio Hengerveld heads the herd. He is by Pontiac Korndyke Hengerveld, a son



of Pontiac Korndyke, that is sire of King of the Pontiacs, with over 100 A. R. O. daughters, including K. P. Pontiac Lass, and his dam by Hengerveld DeKol, sire of 116 A. R. O. daughters and 62 proven sons. Hartwood Helio Hengerveld's dam is Lady Helio Butter Girl, with an A. R. O. record of 24.51 pounds of butter as a four-year-old, and she is a granddaughter of the two great bulls, Mooie Mutual DeKol and Sir Korndyke Manor DeKol. The bull is now three years old and weighs 2200 pounds. He has sired a very nice lot of both bulls and heifers.

The photo shown herewith is that of Pauline Hengerveld Fayne, with a two-year-old record of 14.65 pounds of butter and 304 pounds of milk in seven days. She will later have another official test, and Mr. Austin expects her and at least two others to go above 30 pounds. Milk and Butter Girl Clothilde has 495.4 pounds of milk and 23.41 pounds of butter to her credit, as a junior four-year-old, made here. Her half sister, Belle Columbo Johanna, has 431 pounds of milk and 23.2 pounds of butter as a junior four-year-old made here. There are seven official records and more will be made.

A concrete silo is used and is annually filled with corn silage, with very satisfactory results. The cows run on pasture and are only put in the barn to be milked and fed. They are kept out of doors even in winter, during the many sunny days for which southern Idaho is famous.

R. T. Walbank, president of the company, personally owns an extremely well equipped little creamery in a brick building, which uses all the milk besides that of some neighbors.

H. A.

Whitman County Tests

The cows in the Whitman county association made an excellent showing for the month of May, despite adverse weather conditions and the scarcity of feed, according to the report of Noel Buchanan, tester. Seventy-nine of the 326 cows milking during the month produced over 40 pounds butterfat, while the average of the whole number was 32.9 pounds fat and 86.5 gallons of milk.

The 10 highest producers made remarkable records, which are as follows:

Name of Cow.	Lbs. Milk.	Lbs. Fat.
Minnie 1581		77.5
Blackie 1923		76.5
Megsilo Fern Lassie 1541		76.4
Princess Coleman 1089		75.3
Emnent's Foxy Belle 1313		73.9
Genasta Daches 1310		65.50
Fancy Iron Duchess 1065		60.9
No. 111 Grade 1049		60.8
Foxes Friars Lucy 1213		60.6
Emnent's Coquette Girl .1293		69.8



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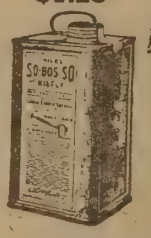
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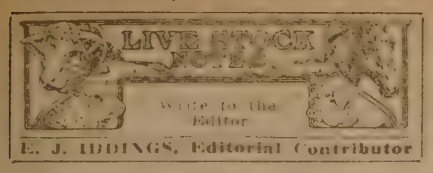
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E. J. IDDINGS, Editorial Contributor

Must Have Horses

War Greatly Increases the Demand

Colonel Henry J. Reilly is a West Point graduate who has seen many years of active service with the regular army. He is also an experienced correspondent and has for a considerable time been attached to the staff of the Chicago Tribune. In February, 1917, he went abroad. Through the courtesy of the Tribune, Wayne Dinsmore, secretary of the Percheron Society of America, was enabled to make arrangements with Colonel Reilly to have him give special heed to the part which horses were playing in this greatest of all wars. Qualified by training, experience and by reason of unequaled opportunity for observation on the battle front in France he has prepared this message to horse breeders in general, as well as to the Percheron breeders in America, to whom it is particularly addressed:

To the Percheron breeders of America:

I know of no more vital message to send America's horsebreeders than this:

HORSES ARE INDISPENSABLE IN WAR.

There seems to be a rapidly increasing opinion that the day of the horse in war has passed. The nearly three years of warfare in Europe has shown this to be an entirely erroneous idea.

On the eastern or Russian-Rumanian front, where there are a few good roads, in other words, where the road conditions are somewhat similar to those which ordinarily obtain in the United States, the horse has not only held his own for the mounted services, such as the cavalry and artillery, but also for supply purposes. Again and again the armies operating on this front have found the arrival of supplies and ammunition dependent upon the use of horse transport. Even on the western front, where the road system is probably the best in the world, mechanical traction has not been able to displace the horse. In general, it might be said that the line between mechanical and horse traction on a battlefield is the extreme limit of the enemy's artillery fire when any heavy action is going on. The horse is used on the battle field and the mechanical traction in rear of it. Of course, during calm periods, mechanical traction is used along the rear part of the battle field. There are various reasons for this division. Probably the main one is that batteries frequently must be placed and supplied in positions some distance from a road. Often the country to be traversed is so rough that a tractor can not get over it. If the army is operating on conquered ground, this ground generally is so cut up with old trenches and shell holes that horse traction and only horse traction is practicable. Frequently the mud is so deep that mechanical traction is helpless. In many cases the situation is such that no wheeled carriages of any kind can move. In such cases pack animals have to be used.

So well are these conditions recognized that in spite of the tremendous weights of heavy artillery material and the slowness and difficulty of moving them by horse traction, it is considered that only half the heavy batteries should have mechanical traction. The remainder are horsed, and thus the means is always available to move the batteries, no matter what the difficulties. Therefore, in general, it may be said that an army must still have animals for all its cavalry, the usefulness of which is far from disappearing; it must have horses for all its light field artillery, half its heavy field artillery, and all its regimental and divisional supply trains. Incidentally every regiment of infantry must have several hundred horses and mules. The more the question is examined, the more two facts stand out. The first is that certain work in modern warfare can be done only by horses. The second is that the number of horses needed for armies which are counted by millions must be counted by the hundred thousands.

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Live Stock Prices

Other Commodities Must Govern

By E. L. POTTER.

Governmental control of the prices of live stock and other agricultural products is now being advocated by the United States department of agriculture and by some of the large packers. That fixed prices for agricultural products would be desirable is generally admitted, but the fixed prices must bear a proper relation to the cost of production and the price of each product must bear a proper relation to the prices of other commodities. Then with nonstandardized products, like live stock, there must be some means provided to so grade the product that it will be possible to tell just when the product is actually bringing the standard price.

Wheat is usually considered as the barometer of the agricultural trade. Other cereals follow more or less closely the price of wheat. Any continued rise or fall in the price of wheat will be followed by a similar change in the price of barley, corn and oats. Likewise the price of cereals has a direct bearing on the price of live stock. If, for example, the price of wheat was fixed at $2 a bushel and the price of good 200-pound hogs at $12, the tendency will be to drive the hog men out of business, since wheat fed to $12 hogs will return less than $1.50 per bushel. On the other hand, if wheat were priced at $1 and hogs left at $15, the wheat man would feed his wheat all to hogs and thereby get a return of $1.80 a bushel. As a result the hog markets would be glutted, but there would be no wheat for milling.

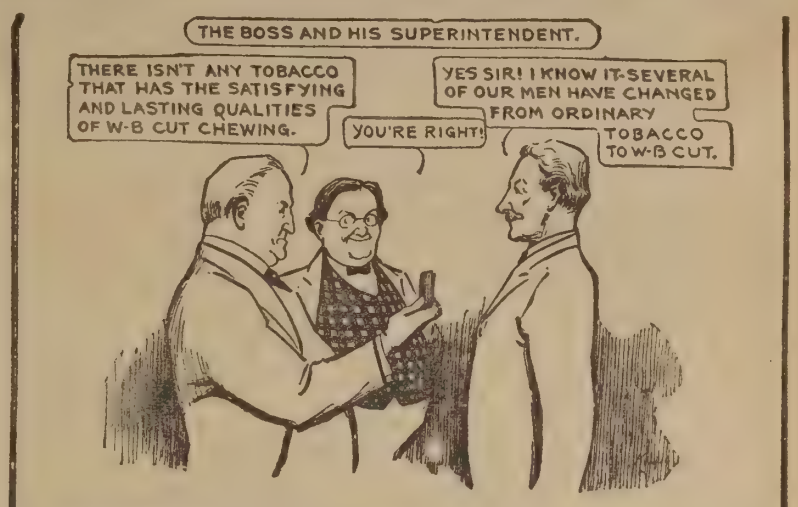
The prices of all kinds of live stock must be kept at about the same level. During the last seven years the average price of lambs on the Chicago market has been $8. The average price of native steers during the same period has been the same—$8. The price of light hogs has been $7.85. In other words, during this period the prices of cattle, sheep and hogs have been practically the same. The condition could not well be otherwise, since the average consumer will buy whichever is the cheapest, thus tending to force prices to an equality. A study of the live stock history of this country shows that the price which the farmer receives for well-finished pigs, good steers or fat lambs should be about five times the price which he receives for a pound of wheat. The city prices for live stock must, therefore, be from 50 cents to $1 higher than farm prices to cover cost of shipping and shrinkage. We consider live stock prices high, but they are not in line with the price of grain. To correspond with the price of wheat live stock should be worth in Portland better than $20 per hundred. The present situation is discouraging live stock production, and the effect would really be serious were it not for the fact that most farmers do not expect wheat to be as high at threshing time as it is now.

All of these price inter-relationships must be given careful consideration whenever any price fixing is undertaken. Otherwise we will find ourselves with a feast of one product and a famine of another.

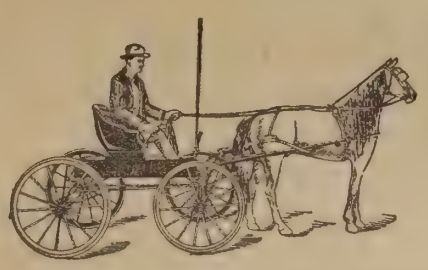
Argentine Meat Exports.

Exports of chilled and frozen meats from Argentina during the first three months of 1917 show a distinct falling off as compared with exportations of these products for the corresponding period of last year.


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IN THE ORCHARD
Write to the Editor

GRANVILLE LOWTHER
Editorial Contributor

Fruiting Science

Conditions That Make Barrenness

By GRANVILLE LOWTHER.

C. F. Becker of Kalama, Wash., writes:

"I have two walnut trees that bloom and have little nuts on, but they fall off and we never have a harvest. They are cultivated and properly cared for. Please let me know why the nuts fall off before they are grown."

I am not as familiar with walnuts as with apples and some other friuts. The walnut industry in this country is in its infancy, and I do not know whether I can give the right instructions or not. However, there are some general principles that apply to almost all orchard trees, and, in fact, there are principles that run through all nature and which probably would apply to walnuts as well as to apples, peaches, pears and other fruits.I can give those general principles because I have studied them and observed them in relation to fruits in general but not in relation to walnuts.

Causes of Sterility.

The most frequent causes of sterility are:

1. Lack of pollenation.
2. The blossoms injured from drouth.
3. Fruit buds injured from winter freezing.
4. Fruit buds injured from late spring frosts.
5. Blossoms injured from lack of proper nourishment.
6. The tree may fail to bloom from an excess of certain kinds of nourishment. This means a lack of proper proportions of chemicals in the soil.

In order to understand the natural causes for sterility it is necessary to know that plant life, as well as animal life, is classified into sexes.

In botany the term sex is by analogy applied to the differences in the reproductive organs of the higher plants. The staminate organs, which produce the pollen, correspond to the male sexual organs in animals; the pistillate organs, which produce the ovule, correspond to the female sexual organs. Hermaphroditism is common, the stamens and pistils occurring on a single flower in most plants, while the occurrence of pistillate flowers on one plant and of staminate flowers on another is rare.

Self-Fertile and Self-Sterile.

Some fruits are self-fertile; that is, they will pollenate from their own bloom. Others are self-sterile, that is, they will not pollenate from their own bloom; but the pollen has to be carried from other varieties, either by the winds or by insects.

Some varieties of fruits are more or less completely unable to pollenate themselves, and they should be planted near other varieties to insure fruitfulness. Any variety will fertilize any other variety of the same species, so far as known, if the bloom occurs at the same time. In general, in planting a self-sterile variety, every second or third row should be planted to some other variety.

1. The trees or the blossoms may be injured from drouth. It sometimes happens that a very wet spring with such weather as will stimulate the trees into a very strong growth during the earlier part of the growing period is followed by a summer and fall of extreme drouth. Under such conditions the fruit trees are unable to set fruit buds with sufficient vitality to carry them far enough to form fruit. Fruit buds make heavier demands on the tree than leaf buds. After such extremes as the above the tree uses its whole energy to recover its vegetative power and it may often happen that a tree will fail to set fruit from this cause.

Winter Freezing.

2. The fruit buds may be injured by winter freezes. It is impossible to say just how much freezing the fruit buds of the apple will stand. In sections of this country where the air is less dry than in the west the buds will stand a much lower degree of temperature than they will in our dry atmosphere, and a very low temperature of one winter will have less of an evil effect on the fruits of our region than another winter when the thermometer does not record so low a degree of temperature. There are so many influences that affect the formation of fruit buds and their proper nourishment that it is impossible to say how far and to what extent freezing affects the next summer's crop of apples. The vitality of the buds, their maturity, the condition of the atmosphere as to moisture, the amount of moisture in the soil, and the amount of snow on the ground, are a few of the things we must consider.

Late Spring Freezes.

3. The buds may be injured by late spring frosts. The amount of injury to buds from frosts can not be computed; a few days before or after the blossoming period may make an untold amount of difference. Buds that have been injured by frosts may yet have enough vitality to bloom and yet not enough to set fruit. Some buds, from their position, their state of maturity, or because the yare more hardy, may be less injured than others on the same tree. Varieties considered tender may be able to set fruit after experiencing an unusually heavy frost, yet fail the next year when lighter frosts have touched them. The advancement or retardation of the buds may account for this. Though neither the pistil nor the stamens are badly injured by the frost, the ovary may be so badly injured that fecundation is impossible. Heavy frosts during the blossoming period may so impair the fruiting organs as to cause the dropping of the fruits after they have set.

Insufficient Nourishment.

4. The trees may lack proper nourishment. This may be from a lack of other plant foods. Orchards which have been improperly cultivated, or which have grown heavy crops of apples and have not had the elements removed by these crops returned, may fail to set fruit buds in the proper manner. In an experiment with pollen from an improperly nourished Missouri Pippin, it was found that this pollen was very much less potent than pollen from a more thrifty tree. Poorly nourished trees were found to be more liable to self sterility. Many orchards set in the early history of the different sections have ceased bearing, in al probability from the effects of continued starvation, and many other younger orchards fail to set fruit from the same cause.

Too Much Nourishment.

5. The trees may fail to set fruit from an excess of certain kinds of nourishment. The above may be the case, or they may have plant food at the wrong season of the year. It is a well-known fact that the reproductive and the vegetative powers of a tree are exercised in direct opposition to each other, and a tree making too great a vegetative growth is liable to be barren. This is especilly true of orchards planted close to barns, feed lots or corrals, where the owner is in the habit of dumping manures. Under such favorable conditions to the development of vegetative portion of a tree, it would be much longer in reaching maturity and would never bear as well as another tree planted in soil with nearer the optimum amount of plant food or with plant food better adapted to its needs. On such a tree the fruit buds would be few and would go into winter in an immature condition, with few chances of escaping winter injury. Orchards may fail to set fruit because of too great a growth during the season when fruit buds are forming. A later fall growth may open the road to winter injury because of improper ripening of the wood. Winter killing of the immature wood, together with the fruit buds, is very often the result.

Cereal Seeded in Spain.

Recent figures show that the area seeded in wheat in Spain for 1917 was over 126,000 acres larger than in 1916; in barley, nearly 139,000 acres more; in oats, nearly 19,000 acres more and in rye, only about 700 acres more.

Preserving Strawberries for Show

I have received a communication from J. W. Lott, Olympia, Wash., asking how to preserve show fruit, or strawberries for show purposes. The letter is as follows:

To the Editor: I am a reader of The Washington Farmer and an expert raiser of pedigreed strawberry plants and I do wish some one would tell me, through The Washington Farmer, how to preserve some show fruit in alcohol to retain their full size when picked from the vines. I wish to put up about two gallons in different jars.—J. W. L. Olympia, Wash.

The alcohol process of preserving fruit is probably not the best. At least it is not so considered by experts, and not in general use. There are six ways of preserving foods of different kinds:

1. Preservation by cold, or freezing.
2. Preservation by drying, as in evaporated fruits, meats, etc.
3. Preservation by salting.
4. Preservation by sterilization by heat and exclusion of air.
6. Preservation by chemical or antiseptic substances.

Why Food Decays.

1. The starch during the ripening process turns to sugar.
2. The sugar turns to alcohol.
3. The alcohol ferments, and certain fungi and bacteria get in, grow and multiply that decompose and break down the organic compounds. This is called decay.

When Decay Ceases.

1. When the nutritive elements of the fermenting substance is exhausted. This is true when sweet cider is allowed to alcoholize, then to change from alcohol to vinegar. Provided fresh cider is not added, the vinegar will be changed to water and carbon-dioxide, because the nutriment for the vinegar-forming organisms is consumed.

2. When a substance deletereous to the fermenting organism is produced. This may be true of alcohol above 14 per cent. In a less amount of alcohol the fermenting organism can live, and the fermentation go on. But in a larger amount the fermentation will cease. The same might be true of sugar and salt in certain proportions.

3. Fermentation ceases, but the fermenting organism is not killed, where the mercury reaches the freezing point. It is killed if the heat temperature is 122 or above.

4. Any antiseptic which acts as a poison to the fermenting organism will preserve the fruit.

Recipes for Preserving.

The following recipes for preserving fruits for exhibition are generally used:

The fruit should be put up when very firm, and at least 48 hours after being put into the preserving fluid, should be kept under a low temperature and in a darkened room. The following recipes are in common use:

1. Formalin, one pint; salt solution, two pints; water, 17 pints.
2. Formalin, three parts; salt solution, 10 parts; water, 87 parts.
3. For raspberries: Formalin, one part; glycerine, 10 parts; water, 89 parts.
4. For strawberries: Formalin, one ounce; alum, one drachm; glycerine, five ounces; water, three pints.

Strawberries may be preserved for considerable time in a solution of common salt. So they say; but I never tried it.

I never tried the alcohol solution, although I know that alcohol at a certain degree of strength will kill the organized ferments that cause decay. I never tried it because I followed the direction of our chemists working in the agricultural colleges to discover the many things of practical use. Alcohol may be better than any of the recipes I have given. I wish our friend, Mr. Lott, would try it, and if he finds it works well, I wish he would publish his discoveries, so that all may benefit by them. G. L.

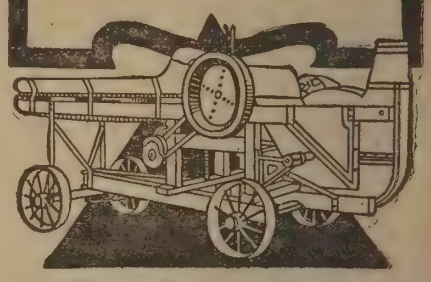
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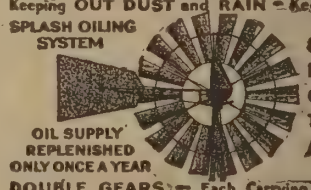
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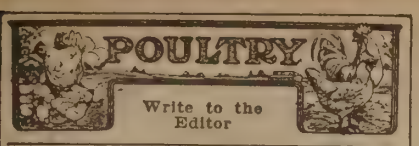
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JAMES DRYDEN
Editorial Contributor

To Check Tuberculosis.

A subscriber of the Farmer concludes from a description of foul tuberculosis, given in these columns, that her flock is infected with the disease and asks what can be done to check the trouble. The safest and surest way to get rid of the disease is to kill off the fowls and start new wth chicks on new ground.

If possible cultivate the feeding grounds and keep chickens off till next year. If the young chicks have been running with the old fowls and eating on the same ground, they are likely to be infected and it wouldn't be wise to keep them. The disease is spread mainly through the droppings, the germs coming in contact with the feed. This indicates the methods of prevention to follow. There is no known cure for the disease. J. D.

White Leghorns' Record.

To the Editor: I have just 14 White Leghorn chickens, and in the five months, from January 1 to May 31, they have made the following record: In January they layed 107 eggs, February 173, March 267, April 267, and in May 281, making a total of 1095 eggs in five months. MRS. JAMES H. MULES.
Seattle, Wash.

Reducing the Feed Bill

In reducing the feed bill care should be taken that the egg production is not reduced more than the feed bill. It is easy to reduce the feed bill, but harder to keep up production. The object should be not to reduce the feed bill, but rather to reduce the feed cost per dozen of eggs. A cheap ration may mean dear eggs.

There has been a considerable decrease in prices of grain since April and May, and poultrymen are encouraged. Prices of eggs are high, however, some 30 or 40 per cent higher than a year ago. Feed prices are still a little higher proportionately than eggs. With a good grain crop promised it is probable by the time farmers are selling grain that the poultry situation will have been much improved.

If there should be a big corn crop this year there will be far more corn fed to poultry than ever before. Corn will undoubtedly be much lower than wheat, and where this is the case the poultryman can get along without wheat.

A few years ago corn was roundly condemned as a food for laying hens. Hens wouldn't lay if fed corn, so it was said. Later it was found in actual test that hens laid well when corn was fed in proper combination with other foods. There must, of course, be a combination of foods. No one grain will make the hen lay profitably.

"Corn is the best liked grain that is fed to poultry in the middle west," says Lippincott. Lewis in his book says: "Corn is probably the grain most widely fed; moreover, it is greatly relished by all classes of poultry. Corn is very fattening and birds eat it greedily."

This change in viewpoint resulted very largely from careful experiments made with corn in comparison with wheat. These were made by Brooks at the Massachusetts experiment station, where the egg yield from a corn ration was as good as from a wheat ration. The prejudice against corn had been so great that it was freely suggested that there must have been "something the matter" with the experiments. The experiments were corroborated, and the prejudice against King Corn as an egg food had to beat a retreat. All experiments have to run the gauntlet of prejudice, and this is only one case where the results of a careful, laborious experiment have been attacked because the results did not accord with preconceived opinions.

Because of this prejudice much high priced wheat in other years has been fed in place of cheap corn. Now when the demand is so great for wheat and wheat flour and corn is likely to be very much cheaper than wheat the probability is that corn will be substituted largely for wheat.

If wheat and corn should be the same price, which no one expects for years to come, then the poultryman would do well to feed equal parts of each. At present range of prices, wheat could be left out of the ration altogether. But first, let it be understood that the change should not be made all at once. Give the hens two or three weeks time to learn to like corn, and discontinue the wheat and increase the corn gradually.

Here is a sample ration. It is not the only combination that may be used. Others as good might be made without using wheat.

Whole Grain.

Corn, 100 pounds.
Oats, 50 pounds.

Mash.

Bran, 100 pounds.
Middlings, 50 pounds.
Ground corn, 25 pounds.

Animal Food.

Skim milk or buttermilk as drink and no water, and mash mixed with the milk. If no milk is available, use commercial meat scrap, kept in a hopper all the time. If the mash is fed dry in a hopper, add 25 pounds of meat scrap to it if there is no milk to drink. If milk to drink add 10 pounds to dry mash. Grit, shell, charcoal and in a hopper all the time, and green food all the fowls will eat regularly.

Where it is cheaper than oats, or where oats of good quality can not be bought, barley may be substituted.

This wheatless ration, if fed properly, will result in producing eggs at lower cost. It will also serve the patriotic purpose of conserving the supply of wheat to feed the nations at war. J. D.

Enlargement of Liver.

To the Editor: The hens have been laying right along, but every little bit I find one of them dead. I found one of them dead today. I know she had not been dead over an hour. I cut her open. She was awfully fat and her liver was as big as both of my hands. —E. H. Ferris, Winsap, Wash.

This is a case of enlargement of the liver, or hypertrophy of the liver, if the symptoms are fully described. A change should be made in method of feeding. The fowls are evidently getting too much of a fattening ration and the best thing to do is to put them on half grain rations for a week or two. Give them free range or make them exercise in a deep litter of straw for all the grain they eat. Feed liberally on a mash of bran and shorts mixed with milk and give them all the green feed they will eat all the time. If these overfat hens are two or three years old they are not likely laying and at present prices of feed had better be marketed.—J. D.

Larger Crops in Nebraska.

Reports at the Nebraska conservation congress indicate that the beet sugar crop of the state will be 140,000,000 pounds, an increase of 30,000,000 pounds over last year. Of potatoes, 17,000,000 are promised instead of 8,000,000 bushels raised last year, and 400,000,000 bushels of corn in place of 290,000 bushels in 1916.

Brand Farm Products

During these years of readjustment, when every business is coming in for an efficiency examination and is being made to conform to higher standards than ever before, selling farm products under a brand or trademark has frequently been advocated. The foremost educational influence in this direction is probably that exerted by the United States agricultural department. Recently Printers' Ink, a journal for advertising men, printed an article on this subject of branding farm products, from which we summarize the following important points:

Establishing a market for trademarked goods is not an in-and-out business. If you are going into it, go in to stay. The man who sells his potatoes or his apples under his own brand this year only to jump the fence and sell through a jobber or an association next, has thrown away most of his work. It takes time to educate a buying public to know and ask for your goods. If you don't intend to stick don't begin.

A second important point is in regard to handling the products of off years. After you have established a reputation for prime quality you can't afford to jeopardize it by selling an inferior product under your trade name.

Do You Know That

America was discovered in 1492?

Useful on the Farm

By J. C. KNOLLIN.

This large iron kettle, with a capacity of 25 gallons, represents a very small investment in proportion to its usefulness. It is almost indispensable in the old-fashioned process of making "hard soap" and also has a place wherever farm butchering is done, being useful for heating water, rendering lard and cooking the various "trimmin's."

It was purchased with only the bail, the hanging device having been manufactured in the farm blacksmith shop. This consists of a rod of sufficient length to hold the kettle away from the post, with a hook on one end on which the kettle is hung. An iron



Hanging Iron Kettle.

socket was set into the post for the other end of the rod, the weight of the kettle holding it in the socket. This allows the kettle to swing back and forth, the socket being considerably larger than the rod. The rod is suspended by means of a piece of log chain, which is hooked under the bail of the kettle and fastened at a height of about six feet on the post by means of a bolt hook, which goes through the post and is held by nut and washer. By hooking the chain in different links the kettle may be raised or lowered.



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LITTLE COST—ACCOMMODATIONS range from best hotels to cottages and tent-houses. Sea foods abundant. PUREST MOUNTAIN WATER.

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Ask your local agent for excursion fares to Clatsop beach.

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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

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CHAPTER XVI.

In which the 16-year-old bunchgrass boy attends business college at Walla Walla and "batches" and fears his beautiful teacher thinks him a "boob."

The fall I was 16, I rode horseback 170 miles to go to school. The school I wished to attend was the old Empire Business college, run by the Brewer brothers in Walla Walla city. During the preceding planting, plowing and harvest season I had worked and saved about $75. Orlando Fulton, a neighbor, paid me $50 for three months' work. In harvest I was paid $1.50 a day, the same as the men. A couple of pairs of shoes, three or four pairs of "overalls," some shirts, some socks and two pairs of gloves represented most of my expenditure during the summer, and the rest of my earnings I managed to save.

Mother had preceded me to Walla Walla to can and dry fruit, and when I rode into Uncle Bill Stanfield's farm on Dry creek, she was there to meet me, greatly rejoiced that I had made the ride in safety. She went with me to see the principal of the business college. He asked me what I desired to study. I had not the slightest notion. One of our family traditions was that my great grandfather had practiced law in partnership with Stephen A. Douglas some time prior to the Lincoln-Douglas debates. Remembering this, I was prompted to say that "I had thought some of studying law."

The principal smiled in a winning way and assured me that "the field was broad." I thought this was his way of saying that I had chosen exactly the right thing.

But I did not study law at the Empire Business college. I had bookkeeping, penmanship, spelling, commercial law and football. I did not "make good" on the football team. I was afraid of hurting the other fellow, and he wasn't afraid to hurt me.

The principal who assured me that law was a broad field was a fine teacher. But he made love to one of the girls who was pretty, and, inasmuch as he was a minority stockholder in the school, notwithstanding that he was principal, the other and majority part of the firm fired him.

I can not remember the principal's name. The teacher who taught me commercial law and spelling after he left was an astonishingly beautiful girl. I studied very hard, and had my lessons every day; but I was so appalled by her beauty that I stuttered and "forgot" every time she called on me for a recitation. I had an idea that she thought I was a "regular boob"; but if she thought so she was kind enough not to say so in my presence, for which consideration I was grateful. I used to wonder why she let me and a few other homely jays come into her classroom. It never occurred to me that she was being paid to do it.

That fall and winter I "batched." Sweet potatoes and celery were cheap in Walla Walla, and I fed on them till to this day I do not like either. Meat was too high in town for my slender resources, so I walked eight miles out in the country to Uncle Bill Stanfield's, and, for $1.75, bought a huge smoked ham and lugged it back to town.

The ham lasted all winter. Levi Malone's house, in which I had an upper story back room for $2 a month, had on top of it a small windowed cupola reached by a stairway and ladder up through the garret. I hung my ham up in this cupola and journeyed to it once or twice a day to cut off what I wanted to eat.

My worst mishap, I think, was in doing my own washing. I had a red flannel shirt which was part of my equipment brought from the Big Bend. I knew enough not to wear it on the streets of Walla Walla; but I wore it in doing my house work and cutting wood. Eventually, it needed washing. I thought I ought to "boil" it, and did; in fact, I boiled it good and plenty with such garments as light underwear, white shirts, white handkerchiefs, and so on. The color of the shirt "ran," — indeed, it ran like a scared wolf. All the clothes came out a sort of reddish pink. So the rest of the winter I wore pinkish socks, pinkish shirts, and pinkish underwear. No wonder the beautiful teacher of commercial law, spelling and arithmetic, thought I was a "boob"—though I am only guessing at what she thought. Really, as I now look back, it is quite clear that she sympathized with me because I was so bashful.

Life in Walla Walla that winter was not very pleasant. In school I was afraid to move lest I should be looked at. "Sky" Williams, later famous in the intercollegiate baseball conference of the Pacific northwest, sat opposite me at the desk. He chewed "sen sen" gum, parted his hair in the middle, and slopped ink on the desk. Sky was anything but green in the ways of city life; nevertheless, I got a clear impression that the beautiful teacher of us both didn't like him any better, if as well, as me. I thought it must be because he chewed sen sen and parted his hair in the middle.

Plus Sky's chewing gum and parted hair, I had from my window an uninspiring view of the saloon rears, and sooty, flat-topped roofs. I longed for my Big Bend hills and bunchgrass, and was so homesick at times that I nearly went wild.

But there were a few pleasures. I saw that winter, my first "show." It was Mansfield in "A Gentleman of France." Before the curtain raised, the orchestra played music of a new brand so far as I was concerned. In the Big Bend I had heard "fiddling" at the dances; in fact, had learned to fiddle by "ear," and could scrape off about a hundred tunes, several being my own composition, or, rather, I imagined I had composed them.

But they had a fiddler in the orchestra pit who outfiddled any and all other fiddlers I had previously seen or heard. That night I returned home to Malones, and fiddled till midnight, playing by ear as nearly as I could, the tunes played by the violinist of the orchestra.

When the curtain went up I gasped. Down on the stage were many trees. Some of them seemed to be a mile away, others seemed close up, yet I knew that all were on the brightly lighted stage. The actors were talking. They were costumed in the Louis XV. period, I think—though then I did not know, of course. Each wore a bright sword.

Presently the "Gentleman of France" strolled out from among the trees—apparently—reading an important communication from the king, or somebody. This finished, he called down a rakish fellow for talking fresh to a pretty girl. I was glad he did. The rake talked back; presently they whipped out their swords and made for each other. I nearly fell out of my seat, in my excitement. It was a great sight and a great night, and to this day I remember lines of the play.

Towards spring my money began to get low. I saw I would have to quit. I stayed till I had 10 50 cent pieces; then, realizing the emergency was at hand, I walked out to Stanfields, caught my pony, who had spent the winter running loose in a wheat field, saddled up, and started for home, 170 miles away. It was rather stormy, and the road was wet and slippery, but storm or shine I had to get home before my last 50-cent piece was gone.

The first night I made Lyons Ferry on the Snake. Twenty-five cents went to feed my horse, a dollar went for my bed, breakfast and supper, and 50 cents more got me across Snake river which was high. I made a killing ride that day, getting into Ritzville late at night. My tough buckskin cayuse was about done up. The next night I made it to Urquhart's, on Crab creek—hard riding, surely. The following night I reached home, coming in late in a heavy rain. I had made the 170 miles in four days in the saddle.

One of our two horses, "Old Prince," had died during the winter. I began working and trading, and somehow, I do not recall just in what way, acquired possession of a chunky, slender-legged, bull-necked broncho named Rover—a horse with a history, and who made some more history in my possession.

The pioneers of eastern Washington were often visited by Indians, who came singly or in bands of 20 to 40. In the next chapter the Bunchgrass Boy tells some interesting incidents connected with their visits at his home in the early days.

Ye Have Heard That It Was Said by Them of Old Time

THE 10TH COMMANDMENT.

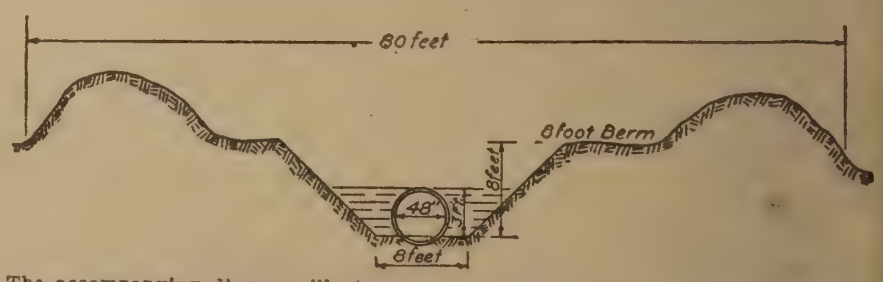
"Thou shalt not covet Thy neighbor's house; thou shalt not covet thy neighbor's wife, nor his manservant, nor his maidservant, nor his ox, nor his ass, nor anything that is thy neighbor's."—Exodus 20:17.

To us it seems that the commandments impose on human beings first their duty toward God, then their duty toward other men and, last of all, their duty toward themselves. For coveting your neighbor's house does not hurt your neighbor, but it does hurt you.

This spirit of envy provokes discontent and laziness at the same time. Furthermore, it leads to desire of ownership without the title that comes from earning. And this, in turn, leads to the petty, sneaking crimes as well as the crimes of violence.

Covetousness well deserves a place among the 10 great commandments. H. H. B.

Replacing Open Ditch With Pipe



The accompanying diagram illustrates how a concrete pipe 48 inches in diameter can be made to replace an open ditch that keeps out of cultivation a strip of land approximately 80 feet wide. Nor is it certain that such an open ditch will always confine its patch to a strip of the width mentioned. Large quantities falling during heavy rain storms may wash soil away. Every year the washing and soil erosion make the open ditch less effective and more of a nuisance and expense. An 80-foot strip means an acre of land every 544 feet. If this strip is occupied by a ditch running 80 rods through one farm, 2.43 acres are lost. Concrete pipe and tile have been used in land drainage for many years. Concrete tile drains may be laid to steeper grades than open ditch water ways because a pipe line furnishes a permanent channel that prevents water from washing away the soil.

Woman Runs Tractor and Plows



A demonstration of what can be done with a light tractor was witnessed recently at the O. A. C. experiment station near Union, Ore., when Mrs. R. King demonstrated the running of a tractor in plowing. Mrs. King handled the machine with perfect ease, and turned over nearly an acre of ground in an hour. The tractor pulls three plows, and has four speed, three ahead and one back. Regular pulling is on direct drive, thus eliminating wear and tear on gears.

Sidelights

Cause for Happiness.

"Why is your wife looking so happy?"

"She's got something to worry about again."—Puck.

This Is a Joke.

Mistress—Bridget, does this lamp smoke?

Bridget—No, mam. It don't smoke or drink, but it goes out nights.

Scientific Language.

Pat—The doctors say O'Brien is afflicted with "rheumatical arthritis," whatever that may be.

Mike—Oh that's Latin for "Mrs. O'Brien," I imagine.

Too Slow.

Teacher—I am teaching your son "first aid."

Father of dullest boy in class—Better teach him "second aid" instead, ma'am; he's so durn slow he'd never get there in time to use the first.—Life.

Some Consolation.

"It's tough when you have to pay 40 cents a pound for beefsteak," grumbled the head of the house. "Yes, but it's tougher, dad, when you pay 18," returned the pride of the family.

The Cat Came Back.

Mr. Penn.—They say the streets in Boston are frightfully crooked.

Mr. Hubb—They are. Why, do you know, when I first went there I could hardly find my way around. The first week I was there I wanted to get rid of an old cat we had, and my wife got me to take it to the river a mile away. I never would have found my way home if I hadn't followed the cat.

How She Felt.

Mrs. Higgins—And so you have secured your divorce, I hear?

Mrs. Wiggins—Yes, I'm glad to say that I have.

Mrs. Higgins—How did you feel when you heard the judge's decision?

Mrs. Higgins—Well, I felt sort of unmanned, as it were.

Sam's Attraction.

Miss Jackson—Dey say dat Sue Beasley is aftah Sam Coopah's heart.

Miss Brown—Yaas; she dun heard dat Sam is chicken-hearted.

A Careful Young Man.

"You want to marry my daughter?"

"I'm not certain, but I'd like to take an option on her hand, sir."

All the World's a Stage, and All the Men and Women Merely Players

Prince Alexander Is Earl.



In the photograph above is shown Prince Alexander of Teck, who recently had the title of earl conferred upon him by the king of England.

Young Americans Preparing for Navy



Copyrighted by International.

A remarkable view of the Great Lakes training station at Lake Bluff, Ill., where several thousand young Americans are being prepared for active service in the United States navy. Other training stations for United States sailors are located at Newport, R. I.; Yerba Buena, Cal., and at North Chicago, Ill. Since the beginning of the war, 56,248 men have enlisted in the navy. The total now is 120,923.

Sims in High Command.



Vice Admiral William S. Sims of the United States navy has been appointed to command the allied naval forces in Irish waters during the absence of the commander of that district.

Making Ready for Heavy Marching



Copyrighted by International.

Fifteen graduates of the New York School of Chiropody are attending to the feet of the men of the Fourteenth regiment, N. G. N. Y., at their Brooklyn armory. There is a crying need for the scientific care of the feet of our soldiers. A bill will be presented to congress to include pediatrists in the personnel of the medical branch of the service.

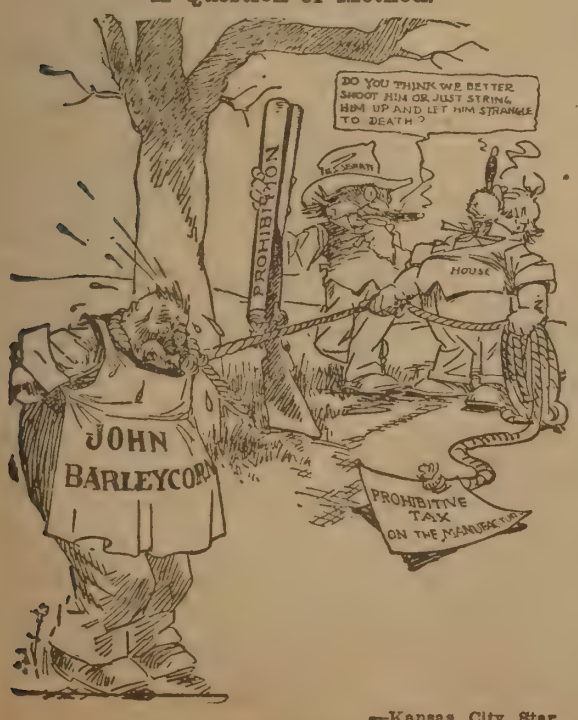
Parading in Tokio Under Old Glory



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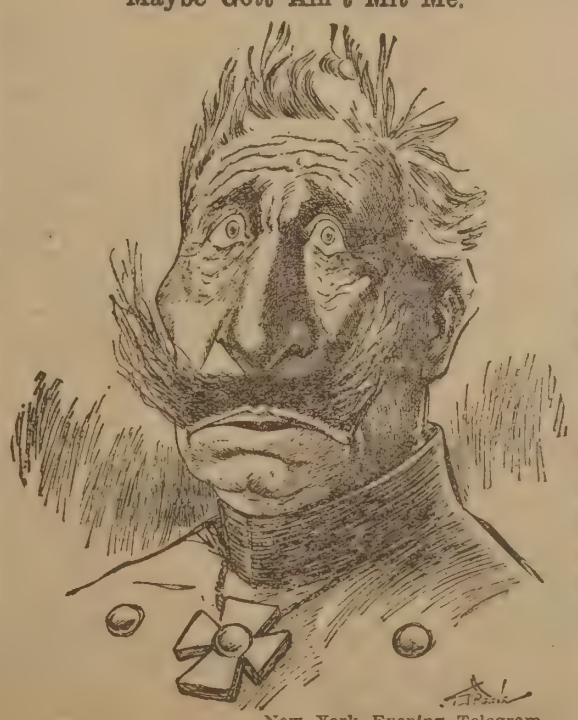
In the above photograph is shown the Filipino contingent at the Japanese Olympic games in the city of Tokio, parading under the Stars and Stripes of the United States at the opening of the con-

A Question of Method.



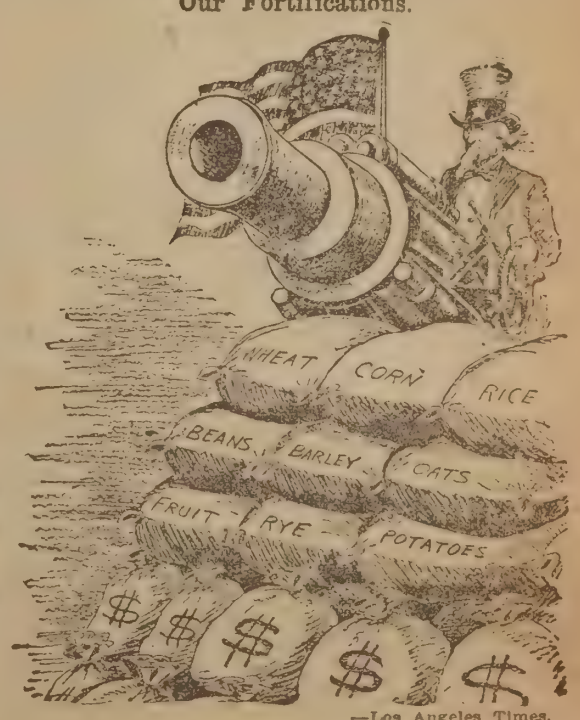
—Kansas City Star.

Maybe Gott Ain't Mit Me.



—New York Evening Telegram.

Our Fortifications.



—Los Angeles Times.

The Face That Came Back

By Enos Emory

Cautiously the sick man raised himself on one elbow and listened. The gentle, regular breathing at the foot of the bed told him Elise was in the deep sleep which comes from many broken nights.

Slowly and painfully he dragged himself from his bed to the easel, which stood in a corner of the room, and with the cunning born of a distraught mind turned up the gas by degrees.

The weak fingers tremulously grasped the well-known brush, and with a sigh of satisfaction he started feverishly to work. A new-born force seemed to thrill his being, and his hand responded in obedience to its influence.

The hours of darkness passed until the gray dawn filtering through the faded blinds found the artist still painting and the sleeper still sleeping.

The tired brain was beginning to play queer tricks. The colors danced before the aching eyes; the figures on the painted canvas assumed grotesque and fantastic proportions, and at times a wave of blood-red hue swept over the picture, obliterating all else.

His temples throbbed with the noise of some giant engine, and an unknown force compelled him to paint to the time of the quick throb-throb.

Fresh figures—creatures of delirium—leaped to the canvas, laughing and mocking at him with hideous and derisive faces.

"Curse you, curse you" he muttered, savagely, and a big splodge of color marred the left-hand corner. The strength of the thrust overbalanced the easel, which fell to the ground with a crash, carrying the picture with it.

"Maurice! Maurice! What are you doing?"

In the garish mixture of gaslight and dawn she saw the overturned picture and easel, and her husband sitting with uplifted brush and eyes strangely glittering.

"They did it—they did it," he kept on muttering, incoherently.

In soft, persuasive tones she prevailed upon him to get back to bed.

He was still babbling, childlike, when the doctor arrived.

"Anxiety, weakness and want of sleep are responsible for this. I will send around a draft for him, and on no account must he be disturbed. And no more of that picture," he added with emphasis. "His reason and life are worth more than all the pictures in the world. Tomorrow may find him normal again."

In the afternoon Elise left the sick-room and went out for fresh air. As she walked along, her mind, naturally buoyant and optimistic, descended into the lowest depths of despair.

The picture—the candidate for the Grand Prix of 25,000 francs at the International Art Exhibition—had to be finished and sent off the next day. And what a great deal depended on its final success. There were full two months arrears for board and lodging due to the indulgent Mother Guerin.

In addition there was the doctor, M. Vidal, who had been in almost daily attendance for the last three months. He was kind, too, and forbore pressing his claim. The interest which his patient's case aroused within him somewhat qualified the absence of monetary receipts.

He watched the slow growth of the picture with the keenest attention, and in his medical mind wondered which would finish the race first—the brush or those microscopical organisms which were attacking so voraciously the poor artist's lungs.

Sitting down on a seat nearby, Elsie allowed her thoughts to run on despondently. Where were the things she so fondly hoped to realize when she married Maurice?

To her youthful imagination he had painted life in the rosiest of colors. He would do this, he would do that: his pictures would take the world by storm; he would enroll his name on that immortal list of great masters; a beautiful house, wealth, success—all should be theirs, and so glorious had been the vista of possibilities which he had opened out to her that her ingenious mind had been dazzled and hypnotized by it.

They had settled down and Maurice had started in grim earnest to establish his fame as an artist. But in reality fortune seemed to have dealt her worst cards to this ambitious clamorer for her best favors.

True, he had sold some of his pictures; but very few, and for a poor price; necessity must strike hard bargains.

The pictures were very good, original and clever, portraying the artist in every line; but they lacked that indefinable something which captivates men's minds.

Never before had the future loomed so dark and hopeless. Her child, a gay little fellow of five, had been sent away to friends; even one mouth less is something—what was to become of him?

Two bright tears slowly rolled down the pale, pinched cheeks and splashed on to the time-worn dress.

She was too upset to notice the approach of a quietly dressed stranger who, seeing her distress, stopped and looked at her in pity for some moments.

"Madame is in trouble," he remarked gently, sitting down beside her.

Elise started and looked up. The kind, fatherly gaze, the sympathetic voice, invited confidence and before she had quite realized the situation her tale was told in a few broken sentences.

"And this picture must be finished and sent off by tomorrow," he repeated. "Take me to it my child, and we will see what can be done."

Elise felt too weak and miserable to raise any objection, and a few minutes' walk brought them to the humble lodging.

From behind the screen, which shut off the bed from the rest of the room, the quiet breathing of the invalid showed that the doctor's prescription had taken effect.

The stranger approached the window and gazed long and earnestly at the painting. Silently he took up a brush and painted swiftly.

Awestruck and wondering, Elise watched the growth and transformation of the picture under the magic power of his hand.

The hours crept on and still the unknown one painted. At last just before midnight he heaved a deep sigh and put down the brush.

"My child," said he, "I can do no more.'

"O, monsieur!" exclaimed Elise, clasping his hand impulsively, "how can I ever repay you for what you have done? Let me know your name that I may live to always thank and pray for you."

"My little one," he replied with tenderness. "It is quite impossible for me to give you my name. Your thanks and prayers will be reward enough to one who has been only too pleased to benefit those in distress with the gift kind heaven has bestowed on him. I leave the town early tomorrow, so farewell, as I doubt we shall ever meet again."

Stooping, he kissed her lightly on the forehead and was gone. With tears in her eyes Elise remained in front of the easel.

What man was this who in a few hours could so transform a picture? With wonder—nay, almost fear—she stared fixedly at the canvas.

In truth the picture was the same, yet different. A vague something had crept into it—a something which defied analysis and yet proved its presence; the picture seemed to breathe forth the influence of a mighty soul.

The next day Elise packed and sent off the picture. Maurice's attack of delirium would afford him little chance of recollecting the state of his picture when he last worked at it, and Elise felt confident that if success were gained he would in his innocence accept the work as of his entire creation, never suspecting the true state of affairs.

"I don't remember finishing it," he remarked a few days later, on hearing that his work had been sent off. "I only hope its all right."

Three weeks passed—three weeks of nerve-torturing suspense and uncertainty, and still no news came from the committee.

Then early one morning the doctor rushed in, excitedly waving a newspaper.

"There! Your picture!" he shouted. "Didn't I always say so? Listen. "Some time back the committee of the International Art Exhibition offered the munificent sum of 25,000 francs for what was considered the best original painting. A very large number of entries was received, and finally after much consideration from the best critics, Mr. Maurice Natier's picture, 'Vale,' has been awarded the prize.

"This work of a hitherto unknown artist is undoubtedly a chef d'oeuvre, and the whole world of art will unite in congratulating and thanking Mr. Natier for having produced such a highly qualified work of genius. The picture is one which will work an era in the age of art, and we predict a brilliant future for the artist.'"

The greatest interest had been aroused in the competition, and the massive hall in which the exhibits were shown was thronged with people all anxious to see the picture which had carried off the coveted prize.

As Maurice gazed on his work, placed so conspicuously and to the full advantage of the light bearing down from the glass dome overhead, his heart was filled with a sudden rush of awe and feeling.

"Good heavens! Elise," he said in a hoarse whisper, "what an inspiration I had when I painted that!"

At the public presentation of the Grand Prix Maurice received a tremendous ovation, and amid wild cheering he stepped forward to receive the much contested check.

All the dark past with its gloom and despair had given way to a future rosy and bright with new-found aims and hope. Elise alone felt sad with a strange weight gripping at her heart. She wondered whether among that vast throng there was one who was looking on with mingled feelings of pride and pity.

Many years afterward Elise was casually glancing through a book of portraits when her attention was arrested by a face which seemed strangely familiar to her.

Where had she seen that sympathetic, fatherly gaze? Suddenly the dim memories of bygone days quickened to life, and she recognized the face as that of the unknown painter, who had saved them in their hour of need.

At that moment there entered an old friend who was a frequent visitor to the beautiful art studio in Paris, which Maurice had opened to receive pupils; better living and renewed interest in his life and work had done much to conquer his malady and bring him back health and strength.

"Monsieur, do you know who that is?" asked Elise, showing the portrait.

"What! don't you know?" "That's Malheau, the greatest painter of his age. Surely you saw the obituary notice and account of his life about three months ago. Good old Malheau! A kinder, better heart never beat."

Pumpkins in Corn

Pumpkins planted in corn furnish a cheap, appetizing stock feed. They should be planted by the latter part of June, putting a pumpkin seed in every sixth hill and in every missing corn hill. Pumpkins will affect but slightly the stand of corn and a large amount of fine stock feed can be raised.

Pumpkins are relished by cattle and hogs. Fed, uncooked and with the seeds, they act as an appetizer and corrective of digestive troubles. Two and one-half tons of uncooked pumpkins are equal to one ton of corn silage to cattle. It has been found that 273 pounds of grain and 376 pounds of pumpkins produced 100 pounds of pork, the pumpkins saving 100 to 150 pounds of grain. The low cost of growing, ease of keeping, large yields, and the tonic qualities of a succulent feed available when succulent hog feeds are scarce make pumpkins well worth while.

Butter Production of South Africa.

In answering certain inquiries in the British parliament it was stated that if the season is favorable 15,000,000 to 16,000,000 pounds of butter will be produced in the Union of South Africa in 1917. The production in 1915 was 13,407,000 pounds, while there were over 2,000,000 pounds imported in 1915.

Figures for 1916 are not yet available.

A Dandy Premo Junior

CAMERA FREE *to Boys and Girls*

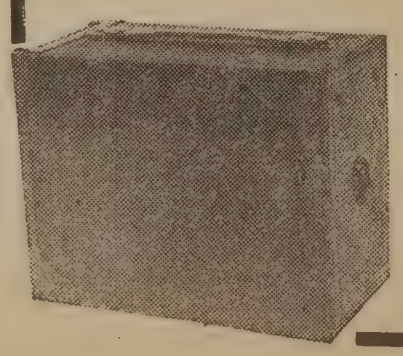
TAKES PICTURES JUST LIKE THIS.



Don't you want this excellent camera? Just think of the fun it will be to take the pictures of boy and girl friends, of your pets, and of the many, many interesting things you will see this summer!

YOU Can Have It FREE

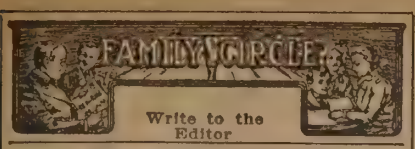
The way to get it is this: Go to two neighbors and tell them if they will subscribe to THE WASHINGTON FARMER one year they will be helping you get a camera. Ask each of them to give you one dollar for the subscription, and when you have the two dollars send it to us and we will immediately send you the camera. If the first two neighbors you call on are already taking THE WASHINGTON FARMER, try other neighbors until you get the two subscriptions. It won't take but a little bit, and then the camera will be yours, to take pictures with for years to come.



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The WASHINGTON FARMER

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ALICE W. BARLAND
Editorial Contributor

Canning Peas and Beans

What is the most helpful thing you have learned during the last year in your experience in housekeeping? Let us pass it along to other housekeepers.

To the Editor: The most satisfactory thing I have learned the last year is canning peas and beans in jars: Sterilize jars, fill with peas or beans, add one teaspoon salt, fill with boiling water, place sterilized cover on jar, do not tighten. Set jar in oven on asbestos mat; one mat will hold three jars; and 12 quart jars can be put into a moderate sized oven. Cook three or four hours. If water boils off too much add more. It takes very little fire after it once begins to cook. When thoroughly done, fill in boiling water until jar is full, add rubber, screw down cover. This is very successful and little trouble.

I would also like to tell of the easy way of making cornmeal mush. Moisten cornmeal with cold water before adding the boiling water. You can soon learn amounts of each for the amount of mush you wish. It saves time and does away with lumpy mush.

For a toothsome dip for cottage pudding add half cup mashed, sweetened loganberries to whipped cream.

MRS. CLARA GATES.

Albany, Ore.

Plain Food Recipes

Sweet potato biscuits are made by taking one cupful flour, one-half teaspoon salt, two teaspoonfuls baking powder. Mix and rub in four tablespoonfuls of shortening, then add one cupful of mashed sweet potatoes and enough milk to form a stiff dough. Roll or pat, then cut and bake in hot oven for fifteen minutes.

Eggs and Macaroni.

One cupful cooked macaroni, one-half cup tomato sauce, one-half teaspoon salt, one-half teaspoon onion sauce, one teaspoonful chopped parsley, four eggs. Put the macaroni in a baking dish, then poach the eggs and put them on top of the macaroni. Cover with sauce and seasoning, then put in hot oven and cook for five minutes.

Stuffed Prune Salad.

One-half cup stoned prunes, two tablespoonfuls cheese, one orange. Fill cavities of prunes with the cheese. Slice the orange and cut each slice in half, then line a bowl with lettuce leaves, lay in the slices of orange, then the prunes cut in half and garnished with strips of pimentoes. Serve with fruit dressing.

Broiled Mutton Chops.

English mutton chops with the bones removed, then rolled tightly and held with a skiver, are delicious broiled or grilled over a hot fire.

Crochet and Tatting Designs

By WINIFRED WORTH



MALTESE PUFF AND HAIR RECEIVER.

These ideal accessories for the boudoir dressing table are always acceptable and appropriate gifts.

Back-Powder Puff.

One lamb's wool insole. Cover leather part. One ball No. 15. Maltese crochet, 3 yds. Ch. 3, catch in 3 L. of Maltese, ch. 3, catch in 3 L. on opposite side. Continue until Maltese covers sole.

For pocket, one piece Maltese joined in center with 3 ch. finish with shell border. 5 dt. 1 dc. 5 dt. 1 dc., across top of pocket. 1½ yds. ribbon.

Hair Receiver.

One ball No. 5. 1 hoop. 2½ yds. Maltese lace. Join lace together by ch. of 3.

To join lace in center take 2 L. of Maltese on needle ch. 1 to tighten. Ch. 20, catch to 2 L. of opposite side. Ch. 5 catch in 5th st. of ch. of 20. Repeat 3 times. Take up 2 L., continue joining. Handle is double chain.

Secrets of Health and Happiness

By DR. LEONARD KEENE HIRSHBERG.

A. B., M. A., M. D. (Johns Hopkins University).

Cereals and Milk Better Than Meat

The reason that "a man hath often more trouble to get food than to digest it" depends upon the weakness of his flesh for tasty dishes flavored with sometimes ulcer-forming condiments and hyper-acid-making seasoning. All meat is not the same in every man's mouth, although "God sendeth and giveth both the mouth and the meat." Men, above all others, believe that "you canna' fare well, but you cry roast meat."



Dr. Hirshberg.

As a matter of scientific as well as living fact, cereals are often sent to limbo for the tang which meat gives, rather than the life and health it is expected to sustain.

Cornmeal, oatmeal, whole wheat or rice are composed of albuminous—protein—flesh-building elements equivalent practically to those in good, lean meat. Moreover, there are six times more food units or calories in cereals than in meat.

Consider our ways, extravagant mites that we are! We go to market to buy a fat pig, a lean roast or tenderloin at least 30 cents a pound, whereas a ceral such as oatmeal gives almost as much protein flesh substance for a "jit" or 5 cents. These figures more than speak for themselves; they cry aloud in vain like the prophet in the wilderness.

Not only are the despised old-time breakfast foods six times as cheap for the same amount of pabulum, but oatmeal has 10 times as much lime and human fertilizer in it as prime ribs of beef, steak, lamb chops and other meats.

So important a bone, brain and brawn stuff as phosphorus is digested from oatmeal more easily and in three times the amount which a corresponding weight of beef would give. As for iron, that mineral food of the red blood corpuscle, all the "beef, wine and iron" your could drink as a dose of medicine would not give you as much available iron as a bowl of oatmeal. Meat contains only five-sixths as much.

There is enough lime in a pound of oatmeal in the form of calcium to last a human creature a full 24 hours. This cereal contains decidedly more phosphoric acid than you can use and also a very liberal day's supply of iron.

But oatmeal is almost always eaten with sugar and cream or milk. The sugar yields nothing but fuel. Milk is the cheapest form of calcium, and it is also rich in protein and phosphorus. Oatmeal porridge is a better all-round food than beefsteak. If we would recognize that fact we would not be complaining about the high price of potatoes, the scarcity of eggs or the wickedness of the "beef barons."

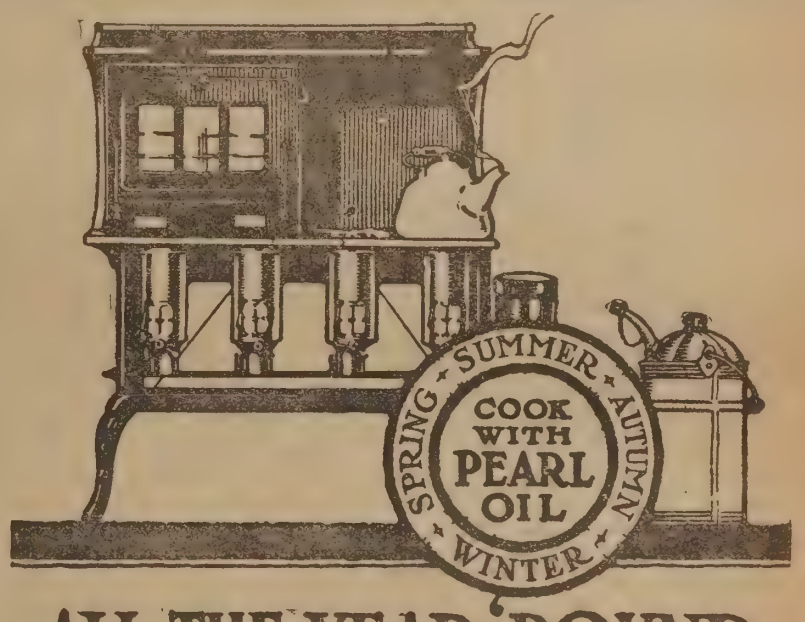
Saving Vanilla.

Vanilla is one of the most expensive flavorings and should never be cooked in the mixture or added while the mixture is hot, for it is thus evaporated.



Live while you live, the epicure would say,
And seize the pleasures of the present day;
Live while you live, the sacred preacher cries,
And give to God each moment as it flies.
Lord, in my views, let both united be:
I live in pleasure when I live to thee.

—Philip Doddridge.



ALL THE YEAR ROUND

Cooler cooking in summer—better and more economical cooking all the year 'round.

A good oil stove will cook anything that any wood or coal range will cook, and do it better because of the steady, evenly-distributed heat.

All the convenience of gas. Meals in a jiffy, and a cool kitchen in summer.

The long blue chimneys prevent all smoke and smell.

In 1, 2, 3 and 4 burner sizes, with or without ovens. Also cabinet models. Ask your dealer today.

NEW PERFECTION OIL COOK-STOVE

STANDARD OIL COMPANY
(California)

Patterns

2102—Girl's dress. Cut in four sizes: 4, 6, 8 and 10 years. It requires three yards of 44-inch material for a 6-year size. Price, 10 cents.

2114-2113—Ladies' coat suit. Coat 2114 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2113 cut in seven sizes: 22, 24, 26, 28, 30, 31 and 34 inches waist measure. It will require eight and five-eighths yards of 44-inch material for the entire suit, for a medium size. The skirt measures three yards at the foot, with plaits drawn out. Two separate patterns, 10 cents for each pattern.

2107—A pretty summer dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires seven and seven-eighths yards of 44-inch material for a 36-inch size. Price, 10 cents.

2108—Play or beach suit for small boys. Cut in four sizes: 2, 3, 4 and 5 years. It requires two and one-fourth yards of 36-inch material for a 3-year size. Price, 10 cents.

2124—A practical work suit for women. Cut in four sizes: Small, medium, large and extra large. Size medium will require six and one-fourth yards of 36-inch material. Price, 10 cents.

1780—Ladies' breakfast sacque and cap. Cut in three sizes: Small, medium and large. It requires three and three-eighths yards of 36-inch material for the sacque, and seven-eighths yards for the cap for a medium size. Price, 10 cents.

1984—Ladies' house dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires six and three-quarter yards of 36-inch material for a 36-inch size. The dress measures about two and three-quarter yards at its lower edge. Price, 10 cents.

2123—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. It requires three yards of 36-inch material for a 6-year size. Price, 10 cents.

1906—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. It requires one yard of lining 36 inches wide for the underwaist, and three and one-quarter yards of material for the dress, for an 8-year size. Prize, 10 cents.

2127—Ladies' apron. Cut in four sizes: Small, medium, large and extra large. Medium size will require three and one-half yards of 36-inch material. Price, 10 cents. House dress pattern may be had in 1435, which is cut in sizes 34 to 44 inches bust measure. Price, 10 cents.

2004—Junior dress. Cut in three sizes: 12, 14 and 16 years. It requires five and one-quarter yards of 36-inch material for a 14-year size. Price, 10 cents.

1973—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. It requires five and five-eighths yards of 44-inch material for an 18-year size. The skirt portion measures two and three-quarter yards at the lower edge. Price, 10 cents.

Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.



Should Begin With Monopolists.

To the Editor of The Washington Farmer: I am strictly opposed to government regulation of the farmers' products unless the price of everything that the farmers have to buy is fixed by the government. It would be a very unjust thing for the government to fix the price of the farmers' wheat and do nothing to lower the price of the things the farmer has to buy. If Uncle Sam is going into the price fixing business he should commence on the monopolists and food manipulators instead of commencing on the under dog, the farmer. The farmers are the backbone of the country, but some people seem to think he is to blame for the high cost of living and everything else. There is one thing certain, if the government fixes the price on the farmers' wheat in order to cheapen bread and leaves everything else go unchanged there will be a lot of farmers who will have to quit. Then production will be less and things will be in a worse fix than ever.

T. J. RHOADS.

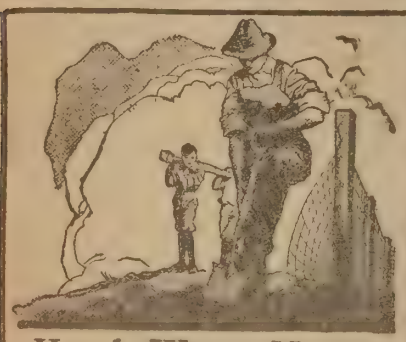
St. John, Wash.

His Real Name Was Man.

"He's a beast."

"He certainly is a bird."

"Well, at least he is a queer fish."



Hard Wear Never Bothers This Hosiery

and it lasts longer without holes than any you ever wore because it's

DURABLE

DURHAM HOSIERY

FOR MEN, WOMEN AND CHILDREN

Made Strongest Where the Wear is Hardest

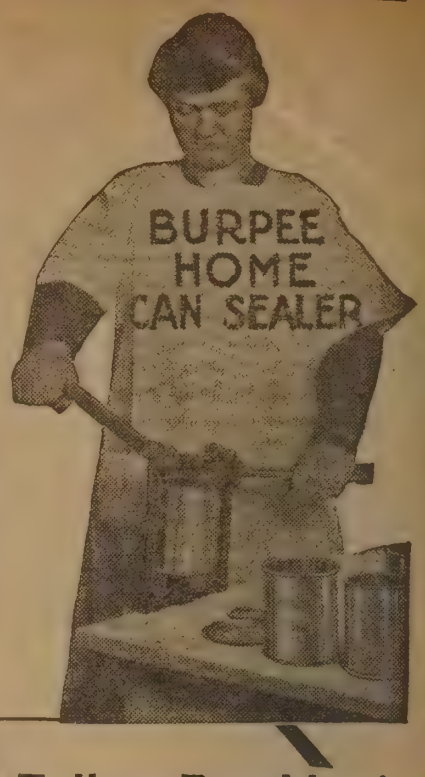
The heels, soles and toes are strongly reinforced. The wide elastic, garter-tear-proof tops with the anti-run stitch are knit on *to stay*. The quality is uniform throughout, sizes correctly marked, and the legs are full length. The feet and toes are smooth, seamless and even. The famous Durham dyes prevent color from fading or turning green after wearing or washing. Sells for 15, 19, 25 and 35 cents the pair.

Buy Durable-DURHAM Hosiery for the entire family.

Ask your dealer to show you our ladies' 35-cent and men's 25-cent silk mercerized hosiery with the patented anti-run stitch.

DURABLE DURHAM HOSIERY Trade-Mark

DURHAM HOSIERY MILLS, Durham, N. C.



Follow President Wilson's Advice

SAVE ALL
YOUR PRODUCTS—
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Help to correct America's great fault of wastefulness. Raise big crops, and put into cans all that you cannot sell now. There'll be a big demand for them next winter.

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Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.



"A Loaf of Bread Talks," by Selena.

Dear Aunt Nellie: I promised you a story and here it is, "A Loaf of Bread Talks." When I was a tiny grain I was put in the ground and stayed there for what I thought was a long time. Soon green sprouts shot up and I could see the world again. I was very happy. I grew tall and waxed in the hot summer days. Before long I was cut down and put into a bundle with many other grains and hauled to the barn, where I went through the threshing machine and was put in a sack. I shall never forget my travel to the mill. I was hauled about 10 miles to the mill, where I became very miserable. Once in the mill I thought my trouble over, but I had to be crushed, sifted, made into flour and sacked. I was then taken to the warehouse to be sold. I soon found myself being loaded into a truck. Then we reached the bakery, where I was unloaded at the back door. I became acquainted with the baker. He put me in a sifter, then he sifted me into a pan and made me into bread, which was bought by a little girl who took me home to her mother, who cut me into slices and put me on the table. Then I was eaten. Now that I have finished my story I will finish my letter. I am 12 years old. I live on a farm seven and a half miles west of Spokane. I go to Normandy school and walk one and a half miles.—Selena Elizabeth Dero, Spokane, Wash., R. F. D. No. 1.

A Little Garden of His Own.

Dear Aunt Nellie: I am 7 years old. My birthday is February 7. We have an incubator and two hens sitting. We have set the incubator twice. I have a little garden of my own. I have two brothers and one sister. My brothers' names are Melvin and Kenneth. My sister's name is Marie. We have a cow that gives five gallons of milk a day. Her name is Bessie. We live on a 640-acre ranch. It is eight miles to the nearest town. I go to school. I am in the first grade. My brothers and my sister and I drive five and a half miles to school. We drive a horse named Babe. We have lots of chickens. We have Plymouth Rocks and White Leghorns. We have two cherry trees and a peach tree. We have lots of locust and willow trees. My mama reads the letters in the Children's Corner. My sister has written to the Children's Corner before. We had a picnic May the 18th, the last day of school.—Stanley Stewart, Waitsburg, R. F. D. 3.

Two Flower Showers for Teacher.

Dear Aunt Nellie: This will be my second letter to the Farmer. I am a girl of 12. My birthday was the fourth of September, the day our school began. There are many flowers in bloom here now, such as bird bills, lady slippers, violets and many other kinds. We have had two flower showers on our teacher already. We had the last one on the first of May. School was closed three weeks and two days here on account of measles. I had them too. Our school didn't get out as early as it would have because we had to make up some days for having so much vacation. My subject this time is "My Favorite Book." The name of it is "The Children's Book." It has many fairy tales and funny stories in it. There are also many poems and pictures in this book. I got it for Christmas from mama. Mama has gone to Centralia today and papa is out so I am in all alone. I made a cake this forenoon but it didn't turn out very good.—Agnes Lund, age 12, Route 1, Rochester, Wash.

Cherry and Plum Trees in Bloom.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and am in the fourth grade. I live on a 140-acre farm. I have a pet dog, his name is Sport. We have 30 cows, but I do not know all their names. I have six pet calves, their names are: Beauty, Jeannette, Dolly, Browny, Chubby and Sweetheart. I have lots of fun on the farm. In summer I make a raft and go up and down the creek that flows by our place. I am going fishing tomorrow if it is a good day. Our cherry trees are in bloom and our plum trees are in bloom, too.—Henry E. Crabtree, R. F. D. 1, Lynden, Wash.

A Goose and Gander on Their Farm.

Dear Aunt Nellie: I have been reading the Corner and I like it very much. I thought I would write too. We have two dogs and two cats. Papa has eight horses and mama has nine cows and eight calves. We live on a 160-acre farm. We have a goose and a gander and the goose lays eggs every other day. We have 90 chickens. I am seven years old. My birthday is September 14.—Harry Wegele, Wilson Creek, Wash.

A Picnic the Last Day of School.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am a little girl. I was 7 years old the 16th of May. I have two brothers. Their names are Cecil and Heston. Cecil is 9 years old. Heston was 5 on Christmas day. This is my first year at school and I haven't been absent or tardy this year. My teacher's name is Miss Picket. I like her fine. There were six of us in the first grade. Their names are Norman, Mildred, Runar, Roy, Emmett and myself. Our school let out on the 29th of May. We had a picnic the last day of school. I live on a 40-acre farm. We have 11 cows, two horses named Polly and Dolly and two colts. Their names are Pride and Chief. We have two pigs and some chickens. My brother and I like to read the letters in the Children's Corner.—Beulah Weyrich, age 7, Mt. Vernon, Wash.

Naomi's Pets on the Farm.

Dear Aunt Nellie: I am 11 years old. My birthday was April 23. I was born in the year of 1907. We have two cats, one is named Billy and the other is Smut. Billy is an angora cat and I do not know what Smut is. We have two dogs. One we call Tige and the other is Smoke. I have one white calf. I call it Snowball. We have 260 acres on our farm. We have a six-room house. I have two brothers and one sister. She is married. I have one little nephew. His name is Harold. My sister's name is Mabel. She is 19 years old. My oldest brother's name is Philip. He is 17 years old. My youngest brother's name is Harry. He is 15 years old. I am in the fifth grade at school. We have a piano. I am going to take music lessons.—Naomi Belle Miller, Wauconda, Wash.

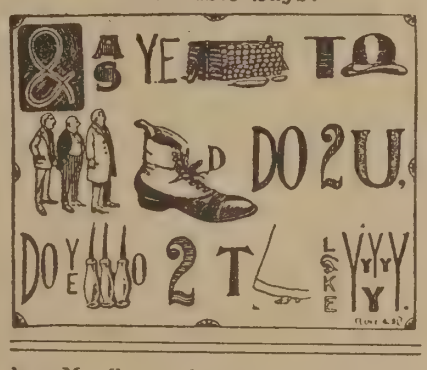
Elsie's First Letter to Our Corner.

Dear Aunt Nellie: I have not written to the Children's Corner before. I read one of Alice Clinesmith's letters about when she was 6 years old. I thought it was a quite good way of earning money. I am in the fourth grade and am 12 years old. My birthday is the 7th of November. I have three brothers and four sisters. One of my sisters is married. We live on a 106-acre farm. We have nine head of horses and 12 cows.—Elsie Sanford, Warden, Wash.

Little Baby Is Mama's Mayflower.

Dear Aunt Nellie: Lots of things have happened since I wrote to you. I am 9 years old. Best of all, I have a little baby brother. His name is Louis Amos Stannard. He is six days old. We all tell mama he is her Mayflower because he came on May day. My brother, Lloyd, is 5 years old now. Gerald and Lloyd are writing to you. The violets, buttercups, crocuses and arkindales are in bloom. They look very pretty mixed in with the green grass. The snow is all gone here, but it is not on the mountains. I wish some of the cousins would write to me. Also would you and the cousins please help me find Alice Josephine Stauch's address. I wrote about two months ago, but she has never answered yet.—Lola Stannard, Three Forks, Wash.

The Bible Says:



Fun in the School Wagon.

Dear Aunt Nellie: I live on a 170-acre farm three miles from Menlo. We have 14 cows, four yearling calves and 90 chickens and get about 60 eggs a day. I go to school at Menlo. I walk one-half mile then get in a school wagon. There are about 26 children in the bus. We have lots of fun in the wagon. There are six rooms in the schoolhouse and an auditorium and a gymnasium. We have steam heat. There are 112 pupils going to school. In the fall and winter my sister and I go salmon fishing. My sister and I get impatient for the Farmer because we are reading "The Ups and Down of the Bunch Grass Boy." There are five people in our family, father, mother, Bruce, May and myself. Our little baby died March 6, 1917.—Basil Milam, Menlo, Wash.

Plays Tag With Theresa.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and in the fourth grade. I like to go to school. My teacher's name is Mrs. Rice. I have two brothers and one sister. I have a pet pig. It is white and about five months old. My birthday is December 12. Have I a twin? I am going to plant a garden this summer: I like to read the letters in the Corner. Theresa is my playmate. We play tag and other games.—Margaret Kessell, Grays Harbor, Wash.

Miss the Fun if You Live in Town.

Dear Aunt Nellie: I never wrote for a long time and thought I would write again. I like it when it is spring. I can work out in the flower garden. We have some flowers blooming now. I like summer the best. I would hate to live in the city in summer. I would miss all the fun. The cherry trees are blooming now. I wish it wouldn't hail any more because it would take all the blossoms off the trees and we wouldn't have any cherries. I like the country better than the city because you see in the country you can see nice green fields, but in the city you just see lots of houses and pavement.—Marie Anderson, Kalama, Wash., R. F. D. 1, box 31.

Hear From Albert for First Time.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My father has taken the Farmer for four or five years, and I always enjoy the letters. I am 10 years old and in the fifth grade at school. We have a schoolhouse with four big rooms. We have high school, grammar school and primary grades. We have a library and a basement in our school. The basement is our playroom in bad weather, all but one end, and that is a manual training room. We had four teachers last year, but our school is out. It let out the 11th of May. We had a program. I have eight brothers and two sisters.—Albert Needham, Wilcox, Wash.

The Five Little Peppers Series.

Dear Aunt Nellie: This is the second time I have written to the Corner. We have a little pet lamb. His name is Billy. He is my sister's and brother's and mine. We have a colt named Bess, which is my brother's and sister's and mine. The subject I have chosen is "My Favorite Book." My favorite book is Five Little Peppers series. They are good books. I have read two of them and am reading the third. Some of their names are: Bird-hills, baby faces, yellow-bells, bluebells, buttercups, Johnnie-jump-ups, salt and pepper and negro heads. I was 10 years old the 26th of February.—Daisy Alberta Laird, Macall, Wash.

Mae Passed Into the Seventh Grade.

Dear Aunt Nellie: I hope I will win one of the prizes. I live on a 160-acre farm and have one dog and two cats, named Bertha and Bettie. We have three horses named Nellie, Fannie and Kittie. The dog's name is Flash. We have eight cows, two of them are milch cows. The cows' names are Florence, Bossy, Nigger, Scabs, Bessie, Eva, Maggie, Mae, John and Hazzy. Our school was out the 27th of April. We had a good teacher. Her name is Miss Hewitt. I am 15 years old. My birthday is the 10th of September. I am in the seventh grade at school. I passed this year—Mae Lenderman, Colville, Wash.

Another Letter From Cousin May.

Dear Aunt Nellie: My papa takes The Washington Farmer. He thinks it is the best paper that is going. I have written to the Children's Corner once before. My subject is about the farm. There are 170 acres on this farm. We have about 90 chickens and get from 50 to 60 eggs a dag. We have 14 cows and three horses, one named Carl and the others Prince and Queen. My brother has one pig. He is in the pig club. My brother and I go to school at Menlo. There are seven rooms and five teachers besides Mr. Murdock. I like my teacher fine.—May Milam, Menlo, Wash.

Linda's First Corner Letter.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I was 8 years old March 24. I am in the second grade at school for two weeks. I like to read the Corner. My subject is "My Best Friend." I have two sisters and one brother. My sister's names are Blanch and Laila. My brother's name is Lee. My teacher's name is Miss Bachman. I like her fine. There are 33 in our room. There are 71 in the whole school.—Linda W. Haquist, Independence, Wash.

A White and a Gray Rabbit.

Dear Aunt Nellie: I will be 10 years old the 23d of June. I have one brother and his name is Arnold. I live on a 120-acre farm. We have several pets, a cat, a dog and two rabbits, one white and one gray. We have about 100 chickens and some little ones. We have about 20 head of cattle, four calves and five horses and a black colt.—Harriet Johnston, Hunter, Wash.

A Little Calf Named Snooksey.

Dear Aunt Nellie: We have five hens sitting now. We have a little calf named Snooksey. We have three dozen hens. We have 29 rabbits. The green grass is up here. Each old hen has 13 eggs under her. One of the old hens is Lola's and two of them are mine, the other two belong to papa and mama. —Gerald Moody Stannard, Three Forks, Wash.

Welcome to Another New Cousin.

Dear Aunt Nellie: I like to go to school very much. I am in the third grade. My teacher's name is Mrs. Garrison. I like her very much. I have gone to school to her three yeas. There are nine scholars in our grade and about 35 in school. I am nine years old. I have four sisters and four brothers.—Stella Shaw, R. F. D. No. 1, Box 53. Pateros, Wash.

Lloyd Has a Little Garden.

Dear Aunt Nellie: We have some garden planted. I have a little garden. Papa set out some strawberry plants yesterday. Papa planted some beets, radishes, turnips and Swiss chard. I weigh 64 pounds. Our horses, Old Ted and Babe, were sick. Old Ted was sicker than Babe though.—Lloyd Elwin Stannard, Three Forks, Wash.

Aunt Nellis is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Delma Fouts, Lillian Wotton, Helen Mehl, Lois Barnhart, Julian Yoss, Josephine Prouty, Melvin Franks, Thelma Hinkle, Mary Heot, Alice Miller, Buster Miller, Ruth Matthies, Annie Hutsell, Harvey Norris, Eva Bond, Ina Stewart, Ruth Hagen.



To Get a Flag Write Soon



With the declaration of a state of war our first supply of flags was quickly exhausted and we have had great difficulty in securing more.

We have at last secured a limited number of flags which we offer on the following terms:

OFFER NO. 1

3x5 flag together with The Washington Farmer for three years. Both for $2.50.

OFFER NO 2.

4x6 flag together with The Washington Farmer for three years. Both for $3.00.

We would suggest prompt action; orders will be filled as received.

The Washington Farmer, Review Bldg., Spokane.

Enclosed find $.... (your personal check, stamps or money order), for which send me American flag, as advertised, and The Washington Farmer for 3 years.

Size of flag .....

Name .....

Address .....

.....

In answering advertisements don't fail to mention this paper.

You Can Make Sun Drier at Home

By JESSIE M. HOOVER, Professor of Home Economics, University of Idaho.

A year ago the writer visited 400 farm homes in southern Idaho. Before the home visits were made the women of each community or neighborhood were assembled at a central meeting place and were asked to consider the best labor-saving device they possessed, and, if possible, show it to the visitor when she called at their home. Pictures were taken of many of the best devices, and this drier was one of the devices which seemed especially interesting. Judging by the results sampled the efficiency of the drier can not be questioned.

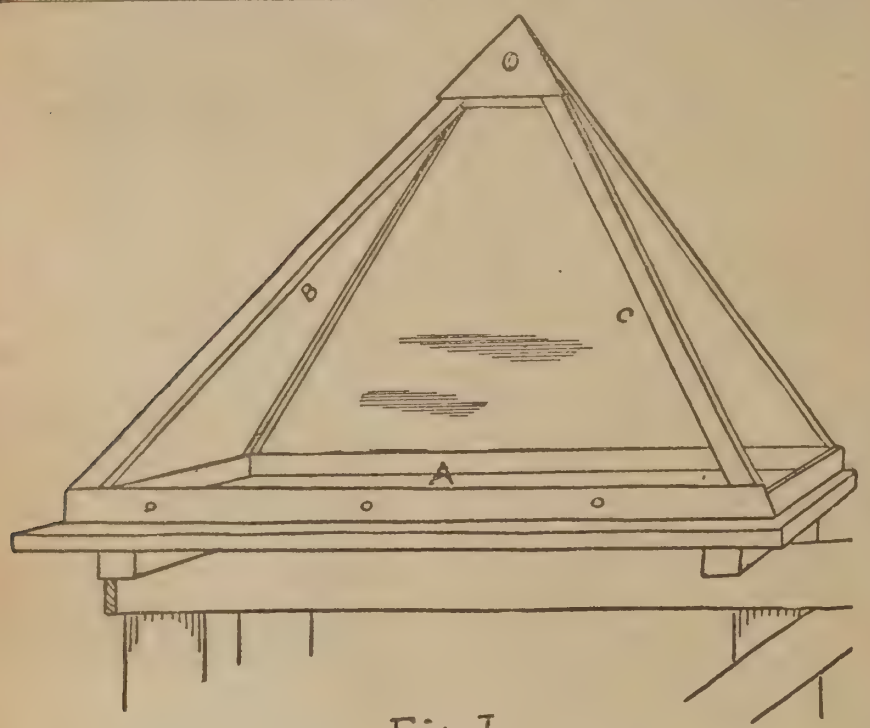


Fig I

Fig. I. shows the completed drier, with ventilating holes at the base and apex.

Two panes of glass, 36 by 36 inches each, are required. Fig. II. shows one of these glasses cut diagonally so as to form two right-angled triangles. Fig. III. shows the second glass cut so as to form a triangle with two equal sides. In Fig. III. there is a waste of the two upper corners of the glass.

These three triangles are cased with wood in much the same way as a window sash.

For the base of the drier build a square wooden platform of the same dimensions as the base of the cased glass. This should be placed on a table or substantial frame in the dooryard, where it will have a good exposure to the sun, i. e., place the triangle ABC on the south side of the base, as shown in Fig. I. On the east and west sides of the wooden base place the two triangles shown in Fig. II., A' and A" in each case being placed on the wooden base. The edge C' is joined to the edge C. The edge B' is joined to the edge B. The edges B' and C' will be slightly longer than the edges of B and C, but these can be extended up into the wooden apex. The back of this drier may be made of tightly matched boards, hinged along the north side of the base; or it may be made of the wire gauze screening. Where dust storms or sudden showers are likely to occur the wooden back is preferable. The door is fastened to the apex of the drier with a suitable catch. A removable frame of wooden slats or heavy wire, elevated an inch or two above the base, will furnish a free circulation of air from beneath, and the food spread on it will dry more quickly. The air enters the small holes at the base, and, accompanied by the moisture from the evaporating fruit, passes out at the inch hole in the apex.

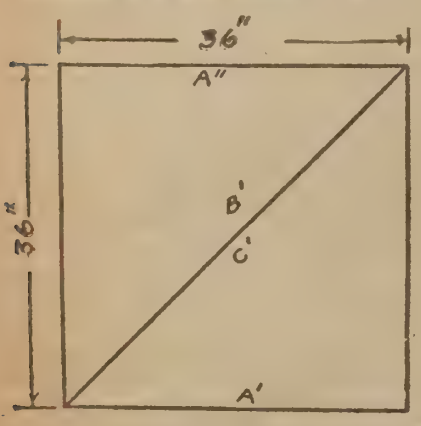


Fig. II

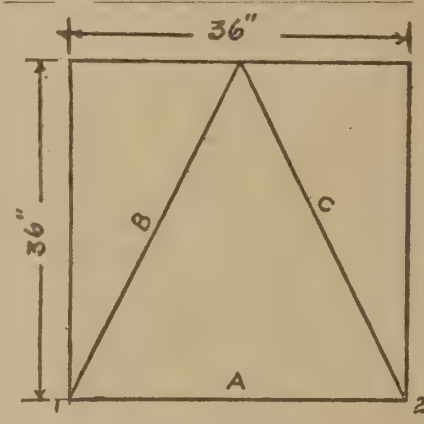


Fig. III

To save steps the drier might be placed against a south window, and could thus be filled and emptied without going outside. For protection in winter the drier can be set under a shed. The owner of this drier reports that it cost her $6 complete. The position of the glass aids in concentrating the sun's rays and increasing the heat. The enclosure prevents the entrance of dust and insects.

Buys 68-Acre Tract.

J. W. Haines of the Yeo district, near Pullman, Wash., has purchased a 68-acre tract from the Woods sisters. The consideration was $6800, or $100 an acre. The place is well improved and is close to the state college, and will be occupied by Mr. Haines as a home while educating his children.

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Let the Builders' Bargain House save you money on all building materials. Send your building list for Boyd's low estimate or write for our free catalog of a thousand building bargains.
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Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

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Manufactured in our own mill and sold at factory prices. We ship to any one, anywhere. One price to everybody. Prompt shipments. Safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request.

5 cross panel doors, 2 ft. 6 in. by 6 ft. 6 in.	$1.44
Craftsman bungalow doors	1.90
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Standard two light windows, up from	1.13
8x10, 4-light sash	.52
16x16x26 spruce flour bins	1.50
Drain boards, 20x24	.75
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Frames, mouldings, builders' hardware, mill work.

O. B. WILLIAMS CO.
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BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

WRIGHT GOODS FOR THE BEEKEEPER, made at the western factory. Hives, supers, cans, cases. Wax received. Write for catalog. A. E. Wright & Sons, 713 Albany, Caldwell, Idaho.

MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES save labor, and are carried in stock by HIGGINS MACHINERY COMPANY, 312 FIRST AVE. SO., SEATTLE. Write for Catalog.

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BIG BULL TRACTOR—7-20 h. p.; has plowed about 5 acres; used as a demonstrator; fully guaranteed. Will plow up to 7 acres per day. $495.

BIG BULL TRACTOR—10-20 h. p.; new; plowed only 2 acres demonstrating. Equipped with Hyatt roller bearings; high-tension magneto, dust trap, etc. Will plow up to 9 acres per day. $675.

DON'T DELAY—FIRST ORDER TAKES THEM.

NOTICE: After July 1, factory advise an advance of $100 in the price on all machines. Hughson & Merton, Inc., 329 Ankeny St., Portland, Ore.

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POULTRY 174

I. D. CASEY & SONS, WAITSBURG, Wash., have on a bargain counter several hundred 1-year-old S. C. White Leghorn hens; they are real goods at a reasonable price.

LIVE STOCK 177

FOR SALE—IMPORTED PERCHERON mare, 9 years old, with two colts, 3 and 15 months old. S. M. Roff, Burley, Wash.

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YOUR OLD CARPETS AND RUGS remade into beautiful FLUFF RUGS at small cost. Send for booklet and prices. Nustyle Rug Co., Sellwood, Portland, Ore.

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SEEDS 620 Continued.

YELLOW DENT CORN, FIELD PEAS, SUDAN GRASS, RED CLOVER, WHITE BEANS. Complete line of "highest quality" garden seeds. Catalog free. ROUTLEDGE SEED & FLORAL CO., 145 Sec. st., Portland, Ore.

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STOCK RANCH OF 1625 ACRES, IN THE FAMOUS SALMON RIVER VALLEY, IDAHO COUNTY, IDAHO.

Good range, long summers, mild winters; outfit is fully equipped and in operation, consisting of land, cattle, horses, sheep, hogs, grain and hay; stock well bred; some registered; gross income $10,000 to $12,000 annually; expenses light.

This will bear closest investigation. Yearly payments can be arranged.

Complete list of stock and equipment furnished on application. Address S. Delmage, Box 2, Whitebird, Idaho.

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5400 acres, in Forsyth district, can be sold in farms of 160 acres and up at $12 to $17.50 per acre; easy terms. Call or write for particulars.
HEGE & WATKINS CO.
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THOUSANDS OF ACRES OF FINE LAND. Irrigated, logged-off and general farming land; along the new lines of the Chicago, Milwaukee & St. Paul Ry. Write or call for free booklets. Immigration bureau, C., M. & St. P. Ry., 2d and Cherry st., Seattle, Wash.

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Three miles from Centerville, 4½ miles from Goldendale. Crop with place until harvest. $30 per acre. Terms. C. A. Lester, Centerville, Wash.

IF YOU ARE LOOKING FOR GOOD farms, we have improved and unimproved farms for sale; also relinquishments and homesteads. Write Hall & Vollmer, Sumatra, Mont.

FOR SALE, OR EXCHANGE FOR SMALLer ranch—300-a. stock and grain ranch; big crop in; good pasture. Owner, M. Waters, Willamina, Ore.

FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. C. K. Hawley, Baldwin, Wisconsin.

TO EXCHANGE—REAL EST. 705

MONTANA LAND TRADES.

563 acres, nearly all irrigated, mostly in crop; take land in Spokane country as part payment. Call or write for particulars. Hege & Watkins Co., 717 Paulsen bldg., Spokane, Wash.

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In the want ads of this paper you will find frequent attractive offers.

What Is the A. B. C.?

Audit Bureau of Circulations.

This is an association, nationwide in its scope, not conducted for profit. Every publisher having membership in this organization pledges himself to sell circulation as a commodity, both as to quality and quantity. Advertisers using our columns are safeguarded. They know that we give all the circulation we offer.

Grain and Produce Markets

Chicago Grain.

CHICAGO, June 23.—Improved conditions as to the amount of vessel room available for shipments to Europe helped lift wheat prices today. The market closed firm, 3c to 4c net higher, with July at $2.14 and September at $1.87. Corn finished 1-4c off to 5-8c up; oats down 1-4c to 1-2c and provisions ranging from 10c decline to a rise of 20c.

Cash Quotations.

CHICAGO, June 23.—Wheat—No. 2 and 3 red and No. 2 and 3 hard nominal.

Corn—No. 2 yellow, $1.72 1-2@1.73; No. 3 yellow, $1.72 3-4@1.73; No. 4 yellow nominal.

Oats—No. 3 white, 67 12-@68c; standard, 68@68 1-4c.

Rye—No. 2 nominal; No. 3, $2.35.

Barley, $1.10@1.48.

Timothy, $4@7.75; clover, $12@17.

Chicago Futures.

Wheat—	Open	High	Low	Close
July	2.16	2.16	2.10	2.14
Sept.	1.85	1.90	1.85	1.87
Corn—				
July	1.56	1.56½	1.55½	1.55¾
Sept.	1.47½	1.48½	1.46½	1.47⅛
Oats—				
July	.63½	.64	.62¾	.63
Sept.	.53¾	.54	.53	.53⅛
Pork—				
July 39.95		40.10	39.95	40.00
Sept. 40.15		40.35	40.00	40.07
Lard—				
July 21.70		21.75	21.57	21.57
Sept. 21.90		21.92	21.80	21.80
Ribs—				
July 21.90		21.95	21.77	21.80
Sept. 21.97		22.05	21.82	21.87

Minneapolis Grain.

MINNEAPOLIS, Minn., June 23.—Wheat prices shot upward today, but later declined. July finished 3 cents higher than yesterday's close. September closed fractionally higher.

Wheat—Receipts, 166 cars, compared with 288 a year ago.

Wheat—July opened, $2.25; high, $2.41; low, $2.33 1-2; close, $2.36.

September opened, $1.88 1-2; high, $1.89; low, $1.82 1-2; close, $1.82 1-2.

Cash—No. 1 hard, $2.76@2.81; No. 1 northern, $2.71@2.76; No 2 northern, $2.56@2.66; No. 3 wheat, $2.36@2.51; No. 2 durum, $2.10@2.17; No. 2 hard, Montana, $2.61@2.66.

Corn—No. 3 yellow, $1.65 3-4@1.66 3-4.

Oats—No. 3 white, 65 1-2@66 1-2c.

Flax—$3.13@3.18.

Flour, 75c higher, fancy patents quoted at $14; first clears, $12. Other grades unchanged; shipments, 41,862 barrels.

Barley—88c@$1.43.

Rye—$2.26@2.28.

Bran—$27@28.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1, up to Saturday night, for 1916-17 and 1915-16, were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1916-17	5603	1448	371	4093
1915-16	8000	1129	1466	4412
Portland—				
1916-17	6486	2324	285	2612
1915-16 10437		1122	1523	2860
Total—				
1916-17 12089		3772	656	6705
1915-16 18437		2251	2989	7272

Live Stock Quotations.

At Omaha.

OMAHA, June 23.—Hogs—Receipts, 1600. Market 5c lower. Heavy, $15.20@15.60; mixed, $15.10@15.40; light, $15@15.40; pigs, $12.50@14.50; bulk of sales, $15.10@15.45.

Cattle—Receipts, 100. Market steady. Native steers, $10@13.75; cows and heifers, $8.75@11.50; western steers, $9.50@12.25; Texas steers, $9@10.50; cows and heifers, $8.50@10; canners, $6.50@8.50; stockers and feeders, $7@11; calves, $10@14.50; bulls, stags, etc., $7@11.

Sheep—Receipts, 100. Market steady. Yearlings, $12@13.50; wethers, $10@11.50; ewes, $8.25@10.25; lambs, $16.50@18.60.

Salt Lake Quotations.

SALT LAKE CITY, Utah, Junt 21.—The following quotations are made by the Salt Lake Union stockyards:

Choice steers, $10.25 to $11; fair to good steers, $9 to $10.25; plain to fair, $7.50 to $9; choice cows and heavy heifers, $8.50 to $9.25; fair to good cows and heifers, $7.75 to $8.50; cutters, $6.25 to $7.25; canners, $4.50 to $5.50; bologna bulls, $7 to $7.50; fat bulls, $8 to $8.50; medium to choice yearlings, $9 to $10.25; veal calves, $9 to $12. Hogs—Choice hogs 200 to 250 pounds, $14.80 to $14.90; mixed 160 pounds, $14.50 to $14.80; heavy packers and lights, $13.50 to $14; stockers, $1.50 to $12. Sheep—Spring lambs, $15 to $15.50; yearlings, $1.50 to $12; aged wethers, $1 to $11.50; ewes, $8.75 to $9.50.

At Portland.

PORTLAND, Ore., June 23.—Hogs stronger; receipts, 92. Prime heavies, $15.15@15.25; light butchers and packing, $14.85@15.10; bulk of sales, $14.75@15; rough heavies, $13.90@14.25; pigs and skips, $12@12.50; stock hogs, $11@12.50.

Cattle—Steady; receipts, 33. Steers, 25 to 50 cents higher; receipts, 754. Steers, prime light, $9.50@10.25; prime heavy, $9.50@10; good, $8.75@9.25; cows, choice, $8@8.50; medium to good, $7.50@8; ordinary to fair, $7@7.50; heifers, $5@9; bulls, $5@7.75; calves, $7@8.50.

Sheep weaker; receipts, 318. Spring lambs, $12.75@13; spring lambs culls, $11@12; best shorn wethers, $9@9.50; heavy shorn ewes, $7.50@8.50; best shorn yearlings, $8@9.50.

At Chicago.

CHICAGO, June 23.—Hogs—Receipts, 10,000; weak, 10 to 15c below yesterday's average. Bulk, $15@15.70; light, $14.50@15.35; mixed, $14.65@15.90; heavy, $14.70@16; rough, $14.70@14.95; pigs, $11@14.40.

Cattle—Receipts, 1000; steady. Native beef cattle, $8.50@13.80; stockers and feeders, $6.90@10; cows and heifers, $5.75@11.75; calves, $11@15.75.

Sheep—Receipts, 10,000; weak. Wethers, $9.15@12; lambs, $11@16.75; springs, $14.50@19.

At Seattle.

SEATTLE, June 23.—Market steady.

Hogs—Prime light, $15.45@15.60; medium to choice, $15.20@15.30; smooth heavies, $14.70@15.10; rough heavies, $14.20@14.60; pigs, $13.40@14.40.

Cattle—Best steers, $8.50@10.25; medium to choice steers, $8@9; common to good cows and heifers, $6@8; best bulls, $4@8.75; calves, $6.50@11.50.

Sheep—Prime lambs, $13@13.50; good lambs, $12.50@12.75; wethers, $11@12.50; cows, $10@11.

Spokane Stock Yards Saturday.

Hogs—Receipts 137; market steady. Prime heavy packing, $15.25@15.50; prime light packing, $15@15.25; smooth heavies, $14@14.50; pigs, $12.75@14.25; stockers, $12.25@13.50.

Cattle—Receipts, 197. Prime steers and cows steady; poorer grades weaker. Prime light steers, $9.75@10; prime heavy steers, $10@10.25; good steers, $8.50@9; prime cows, $8.50@9; good cows, $7.50@8; common cows, $6.25@7.25; bulls, $6@8; calves, $7.25@8.75; stockers and feeders, $5.75@8.

Sheep—Receipts 3; market steady. Prime light lambs, $13@13.50; prime shorn wethers, $10@11; prime shorn yearlings, $10.25@11.25; prime shorn ewes, $9@10.

Seattle Market.

SEATTLE, Wash., June 23.—Feelers on the new local potato crop have been put out by wholesalers. Kennewick shippers believe they will get out first small lots early in July. According to best information obtainable the yield this year will be a big one. In both buying and selling divisions low prices are expected this year and prominent dealers today forecasted that first quotations for field stock at Yakima will not be over $15, and that considerable stock will move before $20 is passed.

The run of poultry has been so heavy this week that jobbers will make no change in the buying levels beginning Monday. All week the arrivals of broilers and small hens has been heavy.

It is believed that cheese will decline a shade or two before it hits bottom. Prices are out of alignment with the cost of butterfat and the quotations to the trade are too high for a healthy demand.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transaction by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 31@32c per dozen.

Poultry—Live hens, fat, over 4 lbs., 19c per lb.; 3 lbs. and under, 17c; old roosters, 12c per lb.; springs, 22c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 14c per lb.; broilers, live, 15@19c per lb.

Butter fat—32c per lb.; dairy butter, 30@31c per lb.

Beef—Buying price: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.

Hogs—Light, 13@17c per lb.; do heavy, 12@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 32c per lb.; salted calf, 30c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 30c per lb.; dry calf (under 6 lbs.), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry butcher full wool sheep pelts, 30@33c per lb.

SELLING PRICES.

Citiy Prices—Team Lots.

Aples—Winesaps, $2.25@2.75 a box; cooking, $1.50 a box; Newtowns, $2.25@2.50 a box.

Asparagus—Local, ...

Cherries—Local Early Black, 8c lb.

Feed—Scratch feed, $74 per ton; all grain chop, $57.10 per ton; oats, $53 per ton; rolled oats, $53 per ton; rolled or ground barley, $50 per ton; clipped barley, $53 per ton; wneat, $86 per ton; bran, $33 per ton; shorts, $36 per ton; soya bean meal, $51 per ton; whole corn, $71 per ton; cracked corn, $72 per ton.

Hay—Eastern Washington timothy, $32 per ton; alfalfa, $23 per ton; double compressed, $35 per ton; wheat hay, $[illegible] per ton; Puget sound, $22 per ton; straw, $15.

Potatoes—Local, $90 per ton; Yakima Gems, $100 per ton.

Rutabagas—$3 sack.

Strawberries — Olallas, $2.25@2.50 crate; Marshalls, $3 crate.

Butter—Washington creamery extras, cubes, 38c per lb.; do bricks, 39c per lb.; creamery firsts, cubes, 37c lb.; do bricks, 38c per lb.

Eggs—Fresh ranch, 36c.

Portland Market.

PORTLAND, Ore., June 25.—There is so little wheat left to sell in this territory that the Merchants' exchange has suspended its regular daily sessions until new crop wheat is available. An occasional carload is being disposed of in the open market at generally firm prices. Bluestem is quoted at $2.35@2.40, club and fortyfold at $2.30@2.35 and red Russian at $2.25@2.30.

Oats are steady at $45@46, with only a light demand. Nothing is doing in barley.

The flour market is firm at ruling quotations.

There is a strong 60-cent wool market in the eastern counties. Since the big Pilot Rock sale last week there has not been much doing in the open market, although an occasional clip has been picked up at around the 60-cent mark. An interesting feature of wool now is the fact that all grease wools are on about the same basis. Early in the season coarse wool brought a premium of 5 cents or more over fine, as it did last year, but now wool is wool.

Two important sales are scheduled for this week, at Heppner on June 28 and at Condon on June 29. Shaniko will hold its annual wool sale on July 6.

The butter market was firmer at the close of the week, with extras freely taken at 36 1-2 cents.

The Coos Bay Cheese association cut its cheese price three-fourths of a cent to 23 cents f. o. b. Myrtle Point, but the Tillamook factories are maintaining their old price.

Eggs are holding steady at the 30-cent basis for case count. The demand has fallen off and receipts are also lighter.

With the heavy egg-laying season drawing to a close hens are being marketed in larger numbers and poultry prices are weakening. Country dressed meats are about steady.

Strawberries are getting down to summer prices, the market closing at $1.25@1.75 for close-in grown fruit. Local cherries are also more plentiful and selling at 8 to 10 cents a pound. Local green vegetables are replacing many California lines.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—$3.50 cwt; new potatoes, $4.50 cwt.

Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; N. Y. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Leaf, 40c lb; Better Butter, 40c lb; Attalia, 40c lb; Diadem, 40c lb; Hazelwood, 40c lb; Solid Pack, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25½c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 29c lb; domestic Swiss, 35c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $10 case.

Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.

Dress Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Wool.

BOSTON, June 22.—The Commercial Bulletin will say tomorrow:

Wool markets in the east have been comparatively quiet this week with a fair demand in spots. Values tended steadily higher, although the actual advance has not been very marked. The situation in the west is really keener than at the seaboard markets, prices for fine and medium wools having shown an advance both in the bright wool and territory sections.

Manufacturers are fairly well engaged on old contracts. Reports to the National Association of Woolen Manufacturers indicate that about 90 per cent of the machinery occupied on clothing is in operation.

scoured basis:

Texas—Fine, 12 months, $1.65@1.70; fine, eight months, $1.45@1.50.

California—Northern, $1.65@1.70; middle counties, $1.35@1.40; southern, $1.15@1.20.

Oregon—Eastern, No. 1 staple, $1.70@1.72; eastern clothing, $1.45@1.50; valley No. 1, $1.45@1.50.

Territory—Fine staple, $1.72@1.75; half blood, combing, $1.45@1.50; three-eighths blood, combing, $1.30@1.35; fine clothing, $1.45@1.55; fine medium clothing, $1.24@1.35.

Pulled—Extra, $1.75@1.80; AA, $1.65@1.75; A supers, $1.45@1.50.

Higher Than Niagara.

The falls of Iguaza in South America are 50 feet higher than Niagara and twice as wide.



Pay Highest Prices for Wool

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
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These lands offer you the opportunity of independent farming on your own property.

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We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

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NEWS FOR BREEDERS

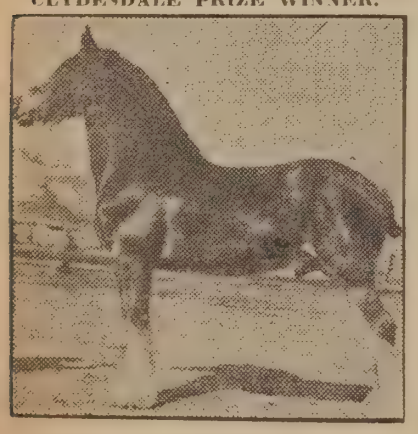
John Slone of Lucile, Idaho, has recently purchased two very fine Hereford bulls from N. B. Pettibone of Grangeville. He expects to use them on high-grade Shorthorn cows. He believes a cross of the two breeds is better than either one for range purposes. He runs his cattle on the Salmon river. Until the last two years he has never fed before January 1 and was able to turn out on the range in March. The last two years he has had to feed about twice as long.

The Idaho Poland-China futurity, which has been so successfully held at the Idaho state fair at Caldwell the last two years, will this season be held at the state fair of Idaho at Boise. The Boise fair was recognized by the last legislature and a state appropriation given and owing to the destruction of the grandstand and considerable more of the equipment of the Caldwell fair by fire it was decided to make the change. Another long entry list and a great Poland-China show is assured.

C. H. Kirkpatrick of Parma, Idaho, considers the outlook for the hog business encouraging for the next few years at least. He finds the demands for Durocs good. Last fall Mr. Kirkpatrick exhibited at Ontario, Ore., and Caldwell and Boise, Idaho, winning a large share of premiums at each place. In the Duroc Futurity he won first on boar, first, second and fourth on sows, first on litter and the silver cup for premier futurity winner. He will, of course, show at the state fair of Idaho at Boise this fall.

August Schroeder of Cottonwood, Idaho, has for a long time been in the cattle business. He started with a very inferior quality of range stock, but for the last nine years he has used nothing but registered Hereford bulls in his herd, with the result that he now owns one of the best grade Hereford herds in the state. Three years ago he decided to move into town to educate his family. For a man who had been so active all his life he soon found he had made a mistake—town was a prison for him. As a compromise he purchased 160 acres near Cottonwood where the children could go to school and he could still be on the farm. He purchased a few registered Hereford cattle, more for his own pleasure than for profit. His herd has grown to 40 head and will soon outgrow his present quarters. This fall he must either close out his registered stock or his grade herd. He knows there is more money in the registered herd but to part with his grade herd that he has built up to such a high state of perfection is like parting with old friends who have helped you out in adversity.

CLYDESDALE PRIZE WINNER.



The above is a photo of the Clydesdale stallion, Decoration 14,355, recently purchased by J. E. Reynolds of La Grande, Ore., through Ledbetter & McKennon of Alicel, Ore. In his 2-year-old form Decoration won first in American bred class, bred and owned by exhibitor, second in American bred class and fourth in open class at the great horse show at the Chicago International. He still has exceptional quality and looks younger than he is. He will be exhibited at the Union Stock show in June and probably at the Oregon state fair this fall. Mr. Reynolds now has an even dozen registered Clydesdales. They include Bonnie, that as a yearling won grand championship at the Oregon state fair in a class of 32 of all ages; also her dam, Lady Glen and Lady Glen's dam, Lady Jane, all three generations being prize winners, and the older ones proven great brood mares.—H. A.

Shorthorn Congress

Secretary F. W. Harding of the American Shorthorn Breeders' association made the announcement at the recent Chicago sales of a Shorthorn congress to be held at Chicago the third week of February next. This event is to be nation-wide in its scope. It is the purpose to hold shows each forenoon, sales in the afternoon and Shorthorn meetings, conferences, banquets, etc., each evening. The fourth day will be devoted entirely to the milking Shorthorn interests.

Three hundred and fifty to 400 cattle to be selected on the basis of individual excellence, will be offered in the sales and the show entries limited to these animals.

The purpose is to make the standard of merit and the number of Shorthorns assembled second only to the international Shorthorn offering. Cash prizes approximating $8000 will be provided by the American Shorthorn Breeders' association and the event is intended to be the most far-reaching in its effect of any that has ever occurred within Shorthorn circles.

It is designed to make an outlet for all breeders of high-class cattle, and in order that the small breeders may be given full recognition the entries from individual herds will be limited to 15 head.

The series of Shorthorn sales held at and near Chicago recently made an average on the entire number, nearly 300 head, of $1125—a record that has never been approached in a series of sales of any breed heretofore.

Hogs in Fine Shape.

To the Editor: The hogs are coming in fine shape now; the late, cold spring has kept them back some, but think from now on they will make up for lost time.

My sows are all farrowed; from seven sows we got 58 pigs and our losses were small and we are raising most of them—a very promising bunch. These were sired by Ike Knox and Coal Black,, the latter boar one of my own breeding that was first prize junior boar and senior champion at the Oregon State fair last year, but was beaten for champion by Ike Knox. The remarkable thing about this crop of pigs is that every one of these sows and boars was fitted and shown last fall; so it does not hurt the prolificy of pigs to fit them for show, and many of the old breeders remarked that they were all very highly fitted. Besides four sows of my own breeding in the neighborhood were farrowed 34 pigs, and of these the men are raising 33 pigs, one being lost out of a litter of 10. Three of these were gilts their first litters and one sow of second litter.

I just shipped two sons of Ike Knox —one to W. F. Craig, Enterprise, Ore., and to P. T. Peterson, Parker, Ore., to head their herds. I also sold a good son of Ike Knox to Fred Lau, Lyons, Ore., to head his herd of sows recently purchased from N. O. Neibert, Stayton, Ore. I am shipping to George W. Buck, Oregon City, Ore., one of the best pigs from Miss Defender by Big Expanso, the gilt with which I topped the sale of Gerlick & Barker, Mankato, Minn., last winter. He is from a litter of nine, and they look like herd headers to me. I also shipped a fine sow pig to Edward Shearer, Estacada, Ore., for his boy in the pig club.

I am fitting a show herd for the fall fairs and will make the circuit if all goes well, visiting the largest shows in the northwest.

Every one here is doing his best to raise more hogs. The high price of feed is a little discouraging just at present, but I think those things will adjust themselves in a short time. I can not see anything but prosperity ahead for those who have stood with the good, big, old sows and kept them breeding, and especially those with purebreds, as surely this is no time to be feeding a scrub hog of any kind. The demand is getting better every day for good hogs.

Lyons, Ore. RAY J. FOX.

WEIGHS 1220 AT YEAR OLD.

Carl Whitmore, of Joseph Ore., one of the progressive farmers of the Wallowa valley and president of the county fair, has a grade Percheron colt that at 12 months and four days old weighed 1220 pounds. The colt has good bone and is symmetrical. His sire, Olbert, was bred in the Wallowa valley, by Sam Wade and is now owned jointly by Messrs. Wade, Whitmore, J. M. Fruitts and Burrell Kooch. He is a grand individual and is proving a great sire. Mr. Whitmore has a fine little flock of registered Hampshire sheep, from Butterfield flock foundation. He also has a few Berkshires with a boar that was shown by Barrows and Davenport on the North Pacific circuit when under a year and never defeated. H. A.

A PROOF OF LONGEVITY.

G. G. Taal of La Grande, Ore., is the owner of a Shorthorn bull, Orange Jr., that is now 10 years old and is yet a vigorous and sure breeder. Mr. Taal has used him regularly, but rather lightly, for the five years he has owned him and has recently sold him for delivery a little later for $25 more than he paid for the animal five years ago. The bull originally came from the noted herd of W. O. Minor of Heppner, Ore., and Mr. Taal is thoroughly convinced of the longevity and usefulness of the Shorthorn.

Malinda Glenwood's Second Record.

Word comes from the American Guernsey Cattle club that Malinda Glenwood 33892 A. R. 2318 has just completed her second record with 17025.6 pounds of milk and 811.67 pounds of butter fat at 8 years of age. She was bred by E. C. Anderson of Kane, Penn., and purchased by Frank Thomson, Brookmead farm, Devon, Penn. This cow comes honestly by her great producing powers. She is a Glenwood cow from the well-known Glenwood families.

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Breeders' Department

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Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.

Write for pedigrees and terms.

H. R. BOOMER, New Plymouth, Ida.

Avalon Dairy

Registered bull calves by Hartwood Hello Hengerveld (129524) from cows with good A. R. O. records, DeKol, Korndyke and Pontiac blood. Prices right. Six per cent interest on time payments. Write today.

AVALON DAIRY, Kuna, Idaho.

HOLSTEIN CATTLE

Young stock by richly bred grandson of King of the Pontiacs, out of high-producing advanced registry cows.

A. E. SMITH, Sumas, Wash.

BUFFALO DUKE DOEDE (102228) heads my herd. He is a half-brother of world's record cow, Dutchess Skylark Ormsby, producing 1506 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.

H. H. STIYER, Buhl, Idaho.

HOLSTEIN BULL CALVES.

One from 20-lb. cow, another from a 16-lb. Jr. 2-yr.-old. Herd headed by Model Fobes of Idaho, whose four nearest dams average 27.25 lbs. butter 7 days.

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Hercules Shorthorns

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Sired by the great boar Big Bone, and out of high class sows; $40 each.

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For the month of April we had 11 head on test. Our herd average was 62 lbs. butter per cow, including strippers, heifers and all. Most of these cows are bred to Gertie's Poppy's St. Mawes. Of the four cows for sale, none have an average test under 6 per cent.

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Can also supply outstanding young bulls unrelated to these females.

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N. P. Station, Sprague. O.-W. Station, Croskey.

THE WASHINGTON FARMER

SUCCESSOR TO THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 27. JULY 5, 1917. ** WEEKLY.

State Council of Defense Attacks Gigantic Tasks

Industrial Life of State Must Be Coordinated for Wartime Efficiency

Washington state's council of defense, consisting of 15 members, recently appointed by Governor Lister to cooperate with the national council of defense, has organized and undertaken the vital and tremendous task of coordinating every industry and interest in this state into a unit of maximum efficiency for wartime service.

The organization was effected at Olympia, when President



President Henry Suzzallo, who will direct work of state council of defense.

Henry Suzzallo of the University of Washington was chosen chairman and director of the council and authorized to establish headquarters at the state capital.

Women Will Play Big Part.

Governor Lister recognized the enormous part women must play in the greatest of all preparedness problems (food conservation), and named Mrs. J. S. McKee of Hoquiam a member of the council. At the meeting in Olympia Mrs. McKee was designated to work with Charles Hebberd of Spokane on the food problem, and together, with the advice of the other members and of prominent men and women throughout the state, they are now undertaking the first steps in a great state-wide movement for practical education along the lines of food saving and conservation.

Wide Field of Activity.

The scope of the work to be done by the council is indicated by the divisions of duty assigned to them by the governor, which are as follows:

Director Suzzallo — Coordination of societies and educational institutions.

Charles Hebberd of Spokane—Food supply and food conservation work.

E. P. Marsh of Everett—Labor organizations.

A. L. Rogers of Waterville—The farm labor movement.

C. J. Lord of Olympia—The ship building industry.

George Donald of North Yakima—Transportation activities.

Everett P. Griggs of Tacoma—The lumber industry.



Mrs. J. S. McKee, the woman member of the council of defense, who will direct the movement for woman's activity in the state's war problems.

W. A. Peters of Seattle—Home defense organizations.

J. T. Heffernan of Seattle—Manufacturing industries.

W. A. Lowman of Anacortes—The fishing industry.

Mrs. J. S. McKee of Hoquiam—Women's work.

W. E. Boeing of Seattle—Aviation.

Ernest C. Wheeler of Tacoma—Sanitation and medicine.

E. S. McCord of Seattle—Legal



Charles Hebberd, who will supervise defense council's work for food preparedness.

and financial problems of the council.

J. G. Kelly of Walla Walla—General publicity.

Many Leaders Take Part.

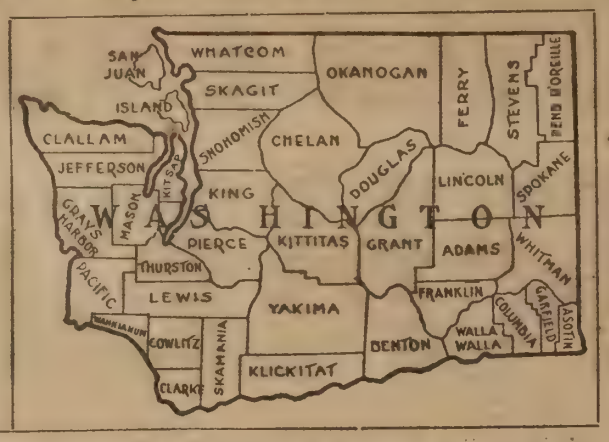
While the members of this council will act as a sort of cabinet for the governor, much as the national cabinet does for the president, one of the first essentials to their success in bringing about the desired coordination of forces throughout the state is the alignment with them of scores of local and state-wide leaders. This

Continued on page three.

Western Washington Dairymen Are Organizing for Aggressive War on Low Returns. Read Report in This Issue. Watch for Others

Can Raise Sheep on Waste Lands

Small Flock of Sheep Is Much To Be Desired for Every Farm; Rye Pasture Is Advocated As Easy Way To Feed Hogs



BOSSBURG, Stevens County, Wash., June 25.—The number of cattle in this part of the county is increasing faster than ever and there are none for sale. There is a shortage of hogs in our community, caused by the high price of grain the last year, and now there is a good demand for pigs, but there are none for sale at any price. We believe the best and quickest way to increase the meat supply would be for every farmer or one that has a small tract of land to keep a brood sow, taking good care of pigs and rush them through for the market as there is no danger of an over supply for the next two years. As to raising pigs, a small patch of rye sown now will keep a sow and a litter of spring pigs from August first until snow comes, with very little other feed. Alfalfa is better if one has it. Here is what one of our men is doing with his pigs now. He cuts the alfalfa and feeds the pigs all they will eat up clean, twice a day, and gives them very little oats, and he has the best bunch of pigs in the community. It has taken less than one-half acre to keep a sow and six pigs. The next quickest way I know of to help out with the meat supply is for all those who can to keep a small bunch of sheep. We can raise a few sheep where we can raise nothing else. Give them a small pasture on a rough rocky side hill, brush patch or any waste land where there is grass and weeds and they do well all summer, and a good warm shed and a little good feed will keep them through the winter. There is certainly great need of increasing the meat supply and we should not forget the lesson we have had the last year. That is the reason for grain going higher and meat higher. Then the farmer should not be afraid to raise poultry, even if grain is high. The poultry men over on the Coast have not quit because of the high price of feed and they have to buy all their feed, which is mostly all raised by farmers of eastern Washington. All should take an interest along these lines. W. W. PALMER.

Increasing Number of Sheep.

YAKIMA, Yakima County, Wash., June 22.—There is less live stock in the Yakima valley than last year. I have talked to a number of men who are very good authorities on the subject and they estimate the number to be at least 15 per cent less than one year ago. This applies more particularly to cattle and hogs. Within the last couple of months there seems to be a tendency to increase the number of sheep, owing to the high prices of wool and mutton. I also think that dairy cattle are beginning to increase, as I know of a number of herds which are coming into the valley from outside points. The increase in dairy cattle is due to the anticipated high price for butter and cheese and also the better price which is being paid for market milk. I think it is very necessary that we increase the meat supply in the country. This can be done, of course, more quickly through pork production and a campaign could be carried on through our agricultural papers for the saving of all brood sows which are fit for breeding purposes. Another method of increasing the meat supply quickly is the encouragement of small flocks of sheep on the general farm. The keeping of Belgian hares and the increasing of the size of poultry flocks are methods to be advocated by persons who wish to increase the meat supply.

LEE W. FLUHARTY.

Labor Problem Is Serious.

NEPPEL, Grant County, Wash., June 20.—The building of a cheese factory has had a tendency to improve the class of dairy stock and the improvement is noticeable this year. There is probably 40 per cent more stock this year. The meat supply is a serious question here as not any attention is being paid that line in a special way. I would suggest that the silo is the quickest way to produce beef, with the help of a root crop, making a cheaper home product, than grain for finishing stall feed. Beef is not profitable at present prices of grain feed. The labor situation here is assuming a serious aspect as it is impossible to secure help to harvest the alfalfa crops, while fancy prices are being paid to mere children to help with the crops.

MARTIN PENHALLICK.

Rains Do Damage.

FERNDALE, Whatcom County, Washington, June 18.—The recent heavy rains have done much damage to the crops planted on poorly drained soils. In some spots the grain has been entirely drowned out and in other spots it looks poor and sickly. Potatoes have also drowned out and rotted in the ground in some places, and farmers that have seed are planting some of their fields over. The first local strawberries are on the market and a good crop is assured providing the weather is good during ripening and picking. On the upland haying has started but on the river bottom it will not start for some time yet as the farmers there pasture their meadows longer in the spring.

The principal crops grown for hay on the upland are clover and timothy, mixed. The seed is sown in the spring with oats, usually. If the meadow is not plowed up within three or four years, the field usually becomes full of foreign grasess and consequently the yield and quality of the hay decreases. The soil responds best when the meadow is plowed up and kept open, planted to cultivated crops, for two years before it is seeded down to grass again. There are only a few farmers that have silos. Those that do not have them plant a considerable amount of cow kale and mangels which supplies the cows and poultry with green feed during the winter. The majority of the farms are 10, 20 and 40 acre tracts, and are run without the aid of outside help except for a few days, when the crops are harvested. CARL J. MENZE.

Not Increasing Live Stock.

PROSSER, Benton County, Wash., June 24.—The weather is fine and wheat looks good, but it wants rain. The first crop of alfalfa hay is half in the stack. We have about the same number of live stock in this community as a year ago, that is, hogs and cattle. We have more sheep. The farmers are not keeping any more hogs or cattle than they can raise feed for. The farmers are not trying to increase their herds for a larger meat supply in this county. I would suggest that the best and quickest way would be for the meat packers to pay the farmer a price he can afford to raise them for. The farmer will not increase his stock at a loss, for if the grain they feed to hogs is worth more than the hay is, then the grain will be sold.

G. W. WILGUS.

Pigs Can Increase Meat Supply.

TACOMA, Pierce County, Wash., June 22.—Dairymen are selling off some of their cows. The decrease will not be large. In this county we need more brood sows. Pigs will be the quickest method of increasing the meat supply. Rabbits and chickens are good for the family supply of meat.

CHARLES A. COLE.

Crops Very Late.

CHEHALIS, Lewis County, Wash., June 22.—Most all the crops are several weeks late, scarcely covering the ground yet. The largest acreage of potatoes, beans and gardens ever planted are in but scarcely large enough to cultivate yet. The ground dried too fast. A general shower today is extra welcome to all except those having early hay cut. It has been the longest winter to feed stock ever known here. Hay was shipped in and hauled out into the country well into June. Butter fat is 40 cents at the Lewis County Cooperative creamery which is doing a large business. Milk is $2.50 per 100 pounds at the Condensery, over 165,000 pounds a day coming in. Big yields and big prices are needed to make the grass pay for last winter losses in feeding. Eggs are 35 cents but feed is so high most of the hens and many chickens are sold at low prices to stop costs. Buyers are again looking for good horses which are very scarce. There is not nearly enough pork and mutton raised for local use. Many thousands of cattle have been sold and shipped the last two years which will make a living market in the near future for what are left.

L. K. COGSWELL.

Need Pasture for Pigs.

HIBBARD, Rosebud County, Montana, June 17.—The number of live stock for this season is about the same as last year. Everybody, however, is endeavoring to increse his herds. I would suggest that raising hogs would be the quickest means of increasing the meat supply. Since pastures, such as alfalfa, rye, oats or barley make an abundance of feed for the summer's growth of pigs, this will greatly eliminate the high cost of feed until the time when they are ready to be prepared for market when ground grain should be fed to get quickest returns.

J. R. KLUNDTS.

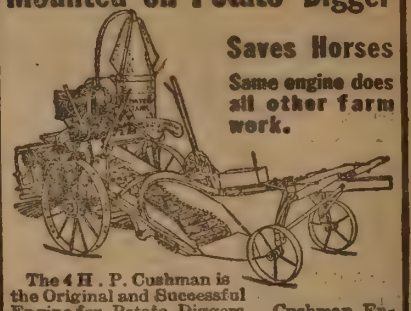
Meat Demand to Be Met.

LEAHY, Douglas County, Wash., June 19.—There is not much stock changing hands at present. There is more cattle and hogs than a year ago, however. I think every one is trying to increase his herd. Some disposed of their stock last fall and some increased it. I would suggest raising hogs as the quickest way to increase the meat supply, if handled right. They will make meat in six or eight months. I think the demand for meat will be met this fall as usual, as there is no great slump in stock in this neighborhood. W. A. GRAY.

Need More Irrigation.

MEDFORD, Jackson County, Ore., June 25.—The live stock of the county is being increased at a moderate rate, with the possible exception of cattle. Sheep and hogs especially will be increased this year. Dairy cows are also on the increase. In order to materially increase our live stock in this county, it will be necessary to secure more irrigation. However, some new districts are going in this year, and we hope to gradually increase our live stock industry. CLAUDE C. CATE.

4 H. P. Cushman Engine Mounted on Potato Digger



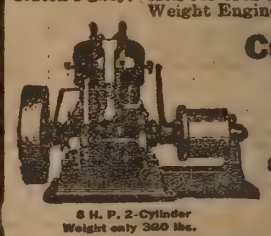
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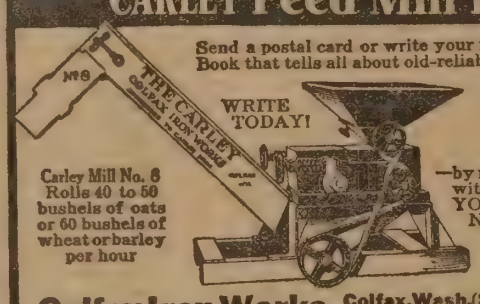
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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 27 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF July 5, 1917

How Farm Loans May Be Used

Are for Farm Business Only, but May Mean Automobile

A borrower of money from the government through the federal farm land bank may buy an automobile with part of the money if——.

But the bank officials bear down so hard on that word "if" that they take most of the joy out of life for the borrower who might want to equip his farm with a brick garage and a seven-passenger or more touring car.

The farm loan law says that loans may be made for one or all of four purposes: (1) To provide for the purchase of land for agricultural uses; (2) to provide for the purchase of equipment, fertilizers and live stock necessary for the proper and reasonable operation of the land; (3) to provide buildings and for the improvement of the land; and (4) to pay existing debts.

It Was No Oversight.

Had the law provided that loans might be made for paying future debts instead of existing debts only, anything in the auto line from a "road louse" to a limousine might be purchased. But this was no oversight on the part of the framers of the law. If an auto gets in among the legitimate purchases with farm loan money it must get in as equipment for the farm operation. President D. G. O'Shea believes that sometimes it may be so classed.

One applicant for a loan through the Spokane bank included among the things he wished to buy with the money an automobile. He specified that he wanted it to deliver his produce to market and his children to school. President O'Shea holds that both produce and children are proper outputs of the farm, and that the former must go to market and the latter to school. Hence he approved the loan.

The Spirit of the Law.

"If an automobile or truck is so constructed and equipped as to be a piece of farm machinery, and if it is used in such a way as to take the place of some other necessary piece of farm equipment, I believe it comes within the field of legitimate purchases with farm loan money," said President O'Shea in explaining his position to a representative of the Farmer. "An automobile for pleasure or mere convenience in traveling certainly would not be in accord with the spirit of the law, for the law is designed purely as a farm development measure. But when the automobile is in the form of a tractor, or may be readily converted into a tractor, to plow, or seed, or cultivate, or harvest, or when it is hitched to the pump to pump water or to the light plant to generate electricity, or is used as a delivery wagon to get produce to market, it becomes a useful piece of farm equipment and therefore a legitimate purchase.

"However," President O'Shea continued, "no loan will be made for the purchase of an automobile or motor vehicle of any kind unless it is shown to the bank board conclusively that such vehicle is suited to such practical farm uses, and that it is the bona fide intention of the borrower to use it in that way."

Borrowers Should Be Definite.

The law requires that borrowers of money should state definitely what they wish to expend the money borrowed for, and the board of the northwest district bank urges that every applicant make this statement as detailed as possible. "It will greatly expedite the making of loans if the uses for which they are intended are stated fully and clearly," says President O'Shea. "Just a little additional care on the part of the applicant in many cases would save a lot of time and prevent a lot of trouble."

Questions Must Be Answered.

The application blanks required to be filled out by those who wish to borrow money contain a large number of questions. It is absolutely essential that every one of these questions be answered, even though the applicant may be unable to see wherein it affects his proposed loan. Every blank space after a question should contain a definite reply. "Even if the question does seem irrelevant in a particular case, the safe way is to answer it," President O'Shea argues.

New Charters Granted.

The following are new loans approved by the granting of charters to new loan associations, or of additional loans to associations already chartered:

Washington.	
Kennewick, Benton county	$22,500
Oregon.	
Rogue River, Jackson county	22,000
Mayger, Columbia county	23,950
Myrtle Point, Coos county	44,500
Freewater, Umatilla county (additional loans)	68,450
Montana.	
Melstone, Mussellshell county	23,750
Bascombe, Roseberg county	50,600
Additional loans under previous charters	40,900
Idaho.	
No new associations chartered, but additional loans approved totaling	33,550

State Council Begins Task

Industrial Life of State Must Be Unified

(Continued from page one.)

they are already doing, and very soon every locality in the state will have a representative in touch with the work and methods of the council. Leaders in all lines of activity are being consulted, and are offering their services loyally.

Labor Problem Is Vital.

That conservation of the food crops of the state must not be blocked by I. W. W. agitators was the first conclusion reached by the commission at its organization meeting. The problem was discussed at length, and a special committee composed of Charles Hebberd of Spokane, President E. P. Marsh of the State Federation of Labor, and A. L. Rogers of Waterville, was designated to make a special study of the questions at issue and report back to the council.

A committee headed by Attorney Harold Preston, representing the Central Council of Patriotic Defense, appeared before the council and presented a written outline of the need of taking steps to suppress I. W. W. activities, particularly in the farming sections of Washington.

Now Is Time to Act.

Speaking in support of quick and effective action, Judge George Donworth of Seattle said the time had come to stop the activities of this class rather than to wait until disorders occurred. These statements were backed by R. M. McCullough, business agent of the printers' union, and others.

Club Boys Boost Big Industry

Twenty-Six Boys Have 156 Purebred Pigs to Distribute

"If farmers throughout the northwest were doing as much for the hog industry as are the Spokane county pig club members, there would be no scarcity of pork this fall," says O. S. Fletcher, club leader for the county. Mr. Fletcher succeeded W. W. Skuse as club leader when the latter was transferred to Montana.

Last year there were 39 boys and girls in these clubs and they had a total of 48 pigs, Mr. Fletcher says. All the pigs were purebreds, and most of them females. The plan was for the club member to get a sow pig, keep her until she became a brood sow and then raise pigs.

Records were kept of all feed and pasture used. Figuring profits at pork prices only, these club members made a total profit of $378 last year, an average of nearly $10 per member.

However, their actual profits will be much greater for at the present time 26 sows have fine litters of pigs, a total of 156 pigs, all purebred an dsubject to registry. They will sell at from $10 to $15 each. At an average of $12.50 each the 156 pigs would bring a total of $1950. The boys are now offering them for sale.

"One of the chief reasons for these boys making good profits is their recognition of the necessity of cheap forage," says Leader Fletcher. "Each club is growing from one-half acre to an acre of some leguminous crop. Sweet clover is the most popular pasture in this county, at is produces well, stands pasturing and is not easily winter killed.

"The Nelson boys of the Lance Hill (Tyler) pig club planted one acre of sweet clover for their two pigs last season. Before the end of the season the clover was making such a growth that they had to turn the mares and other stock in to help the pigs keep it down. It is coming on fine this season.

"Most of the boys grow peas and feed shelled peas during the winter."

The Boys in the Business.

The following are the boys in the Spokane county clubs who have Duroc Jersey pigs. Each boy plans to keep one or more but each has some to sell.

Leroy Frederick, Hayden Carney, Charles Carney and Harry Hudlow, R. F. D. No. 2, Mead.

Zelenor Young, Forrest Green and Robert Green, Chattaroy.

Edward Fisher, Thomas Darcey, Wallace McDonald, Clarence McDonald and Chester McDonald, R. F. D. 1, Colbert.

Ernest Rogers and John Louthan, Amber.

Don Wilson, Rodna.

Harry Jones and Irvin Owes, R. F. D. 1, Mica.

Burton Rubeck, Ellis Womack and Gale Boy, Freeman.

Claude Haller and Mededith Haller, R. F. D. 1, Rockford.

The following boys have Berkshire pigs, several of which are for sale.

Melford Nelson, Lloyd Nelson, Lester Moore and Leslie Mason, Tyler.

Crickets In Grant County.

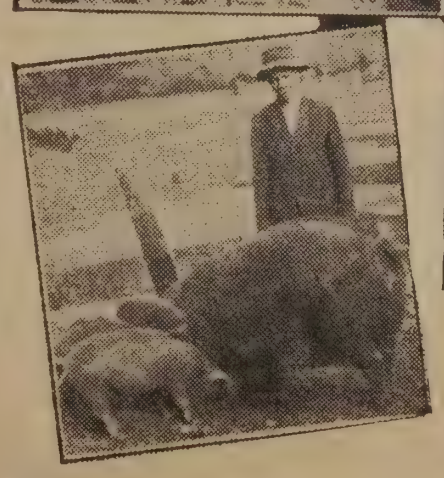
County Agriculturist H. W. Reaugh reports that he has found it necessary in one or two cases to put up some fences in order to stop the crickets.

They have begun to migrate and it will be necessary in some cases to fence them. The poison has done a great deal of good in reducing the numbers, and will not have nearly the numbers to contead with this year as last year.









The photograph shown at the left above is that of Willis M. Fisher of Colbert, Wash., leader of the Valley Prairie Pig club. Each club is required to have an adult leader to advise with the boys. Below Mr. Fisher is shown Edward Fisher, a member of the Valley Prairie club. At the right above are Melford and Lloyd Nelson of the Lance Hill club, in the clover pasture with their 1916 pigs. The lower left picture is that of Leroy Frederick of Mead, caring for his stock.

Vegetables Can Be Canned at Home

Perfect Sterilization and Sealing Must Be Accomplished for Success

In last week's issue of The Farmer the fundamental principle of successful canning of vegetables and fruit was discussed and what is known as the intermittent sterilization method illustrated. This week the one-period process of canning will be outlined.

The same principles govern all methods of successful canning. The sterilization must be perfect. By sterilization is meant the destroying by heat of all bacteria, or germs, that may be living in the vegetables or fruit, in the water in which they are canned, in the nooks or crevasses in the jar or can, or in the air that may be left in the jar or can when it is sealed.

The sealing of the jar or can must be perfect, also. Sterilization is useless if the slightest opening is left for bacteria or germs to enter through.

The So-Called Cold Pack.

The term "cold pack" refers to the practice of placing the vegetable or fruit in the jar before sterilization, in a wholly raw or partially cooked condition. It is used in both the intermittent and the one-process methods of canning.

How Best to Sterilize.

How to secure perfect sterilization is the first big problem in canning. The second, of course, is how to keep the sterilization perfect.

The so-called intermittent method of sterilization described last week requires that the vegetables or fruit be placed in the cooker (of whatever type used) and kept at boiling temperature for certain lengths of time each day for three days, being allowed to cool between boilings. This method is considered necessary by some expert canners to insure the absolute destruction of all bacteria. Its one great drawback is that it takes three days to complete the canning, and requires much more work and much more fuel than would be necessary if one boiling were sufficient.

The One-Process Method.

The one-process method is held by the majority of canners to be practically safe. It requires that the vegetables be cooked a certain length of time one day only, the length of time depending, of course, on the vegetable. Fruits are seldom canned by the intermittent method, even by those who advocate it for vegetables over the one-process plan. The economy of time, labor and fuel in this method is apparent, and it is recommended by many recognized authorities on canning.

How to Do Canning.

In an Oregon Agricultural college extension bulletin, written by Anna M. Turley, extension specialist, detailed steps in canning are outlined, with explanation of the terms used. The following are the steps which she says lead to success in home canning:

Vegetables—Gather, grade, clean, prepare, blanch, cold-dip, pack, sterilize, seal, store.

Fruits—The same as for vegetables except scald instead of blanch in case of certain special fruits, though most fruits do not require scalding, blanching or cold-dipping.

Meats—The same steps as vegetables except that scalding, blanching and cold-dipping are omitted.

Explanation of Steps.

The following explanation of these steps is taken directly from the bulletin referred to, which has been published only a few weeks:

"Gather. To dig, to pick, or bring together the products to be canned. The work of securing the products involves rush operations, since most vegetables are green and in a tender condition when they spoil very readily. Asparagus, peas, corn and string beans are all seriously injured by standing, and to insure complete success must be canned immediately after gathering.

"Grade. Grade the product into lots according to ripeness, size and quality. This insures:

"1. Uniform cooking.
"2. Better appearance.
"3. Greatest usefulness.

"Clean. By removing all trash, such as leaves, stems, refuse, etc., and by washing all products when necessary.

"Prepare. By stringing beans, removing silk from corn, hulling berries, etc.

"Scald. By placing the product in wire basket or cheesecloth and plunging in boiling water.

"Purpose:
"1. To loosen skins.
"2. To eliminate unnecessary acids.
"3. To start flow of coloring matter.
"4. To reduce the necessary sterilization period.

"Special fruits, such as gooseberries, should be given this step.

"Blanch. By placing the product in a wire basket or cheese cloth bag and boiling quickly for a short time, from two to five minutes, depending upon the product.

"Purpose:
"1. Partly to cook the product.
"2. To loosen skins.
"3. To eliminate objectionable organic acids and flavors.
"4. To reduce bulk.
"5. To start the flow of coloring matter prior to the cold dip.
"6. To kill bacteria, yeasts and molds.

"Cold Dip. By plunging product from the scalding or blanching vat into cold water.

"Purpose:
"1. Make product easy to handle.
"2. To separate pulp and skin.
"3. To set the coloring matter, thus maintaining a good color in the product.
"4. To make the pulp firm, thus maintaining the natural form of the product.

"Pack. The final preparation of the product, such as removing skins, cores, slicing, etc., should be done as soon as possible and the product packed into clean glass jars. Pack closely, to economize in jar space, and as full as possible without crushing the product. Products may be packed whole, in halves, or sliced.

"When the jar is filled, add hot liquid (water for vegetables, syrup for fruits) to fill up small spaces in the jars.

"Place the clean new rubber ring on the jar. Care should be taken to see that the rubbers lie flat and fit close to the neck of the jar.

"Put the covers in place and partly seal.

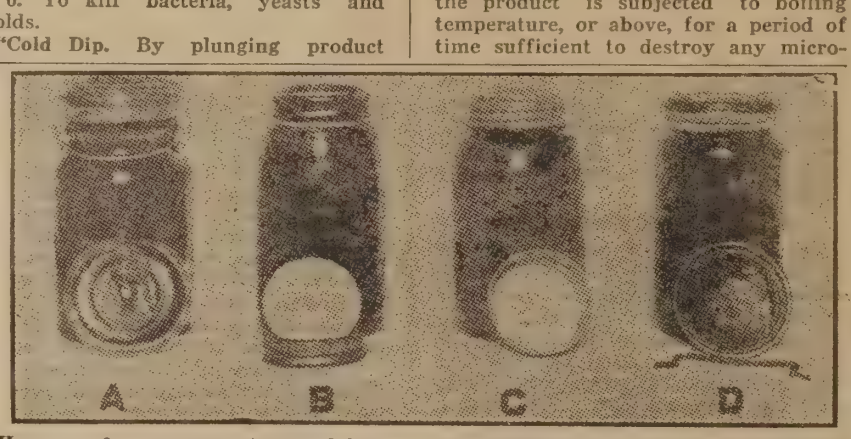
"In case of screw-top jars screw down the top entirely, then reverse a quarter of a turn. If glass-top jars are used, adjust the top spring only. This allows the air to escape as the sterilization takes place.

"Sterilize. Sterilization means that the product is subjected to boiling temperature, or above, for a period of time sufficient to destroy any micro-organism. The length of time necessary for this differs with the various food products and the temperature. This is one of the most important steps in the canning process. Thorough sterilization is absolutely necessary.

"Seal. After the necessary sterilization period the jars should be removed from the canner and, if they have the glass covers, the second clamp should be fastened down; if they have the screw tops, these should be screwed down as tight as possible. A dry towel or cloth placed over the filled jars after they are removed from the boiler will protect them from draughts of cold air and thus prevent possible breakage from this cause.

"Store. After the jars are cool and perfectly sealed, store them in a cool, dry, dark room. To keep out the light, wrap them in paper and thus keep the good color which has been maintained throughout the process. Light tends to bleach the product."

Next week's Farmer will contain further discussion of canning. It is intended to cover as many phases of canning as possible, including detailed recipes for canning many classes and varieties of vegetables and fruits.



Here are four common types of jars: A, the spring top; B, the improved screw top; C, the old-fashioned screw top; D, the self-sealing clamp top.

Bonds for Warehouses.

Grain warehouses in the state will hereafter furnish bonds for faithful performance based on their capacity and the actual amount of grain handled, according to a rule promulgated by the public service commission. In the past bonds for all warehouses, large and small, have been $2000, says P. J. Sweeney, the new state hay and grain inspector. The basis of circulation under the new rule will be one-half of the sum of the actual capacity of the warehouse in question and the amount of grain handled during the preceding year. or every 50,000 bushels arrived at on this basis a $1000 bond will have to be posted. For instance, if a warehouse has a capacity of 100,000 bushels and handled 50,000 bushels last year, the basis and the bond will be 75,000 bushels and the bond will be about $2000, the sum of $1000 for the first 50,000 bushels and $1000 for each succeeding 50,000 or fraction thereof.

To Raise Pheasants.

Ed Harpole has received two pairs of Chinese pheasants and has taken them out to his Whitman county farm on the Palouse river, where he hopes to raise pheasants in goodly numbers.

Graham Holstein Dispersal Sale

Forty Purebreds Average $213, While the Forty Grades Average $132

By A. C. BALTZER

Instructor Dairy Department, University of Idaho.

Whitman county, Washington, on June 27 witnessed the dispersal of one of the best and largest Holstein herds, composed of registered and grade stock, that the northwest has seen. Buyers from Oregon, Washington and Idaho were present, and with warm sunshine and ideal weather favoring, the J. C. Graham North Slope dairy herd at Palouse, Washington, was quickly sold.

J. C. Graham, breeder of the herd, gave a brief sketch of its beginning, when eight years ago one cow and the faith of a local bank in the future of the dairy industry started him out on the road to success. From this small beginning, the 80 head sold at the sale was but a part of the total that grew up on North Slope farm. With intelligent breeding, good feeding and farm management, careful selection of breeding stock, a herd of uniformly large barrel and udder capacity resulted. The opinion of several breeders was that the herd stood second to none for actual milk production to any in the northwest under ordinary farming conditions. Indeed, the eye of the breeder judged well his cattle.

Dean E. J. Iddings of the College of Agriculture, University of Idaho, emphasized strongly the diversified farming that the Palouse country was gradually taking up. J. P. Duke explained how dairy farming and the banker were always in accord in their views. The auctioneers were George A. Gue, North Yakima, Wash., and Harry C. Cranke, Nez Perce, Idaho.

The average price for the total of 80 head sold was $174. The average price for the pure-bred stock totaling 40 head was $213.25, while the 40 grade cattle averaged $132.50, a difference of $80 in favor of the registered stock.

The top price paid for a cow was $530, by J. L. Smith, Spokane, Wash., for Natsy Sunshine 2d. C. L. Williams of Wilson Creek, Wash., bought a total of 30 head, 16 of which were registered. He paid a total of $6600 for his cattle, and is to be congratulated for the splendid selection that he made. Other buyers were Michael Marugg of Spokane, Wash., who paid $1465 for seven head, and R. H. Gray of Post Falls, Idaho, bought eight cows for $1185.

The buyers of the registered stock were the following: Mr. C. L. Williams, Wilson Creek, Washington.

Cow No. 21, Pinney Pietertje DeKol	$ 160
Cow No. 16, Ivy Pietertje DeKol	160
Cow No. 3, Belle Nudine DeKol	235
Cow No. 2, Liscomb Aaggie of Riverside 2d	365
Cow No. 30, Bessie Aaggie Ormsby DeKol, calf	155
Cow No. 7, Aaggie Korndyke Liscomb	375
Cow No. 28, Aaggie DeKol of North Slope, calf	180
Cow No. 18, Lady Aaggie Posch Pietertje	300
Cow No. 8, Alice Butter Boy Artis	325
Cow No. 17, Johanna Artis of North Slope	500
Cow No. 22, Princess Pietertje Artis	380
Cow No. 27, Uneeda Korndyke Adeline	450
Cow No. 24, Uneeda Aabbie Butterboy 2d	190
Cow No. 31, Uneeda Adeline Butterboy	175
Cow No. 32, Queen Griepe Butterboy 2d	175
Bull No. 1, Idaho Boy DeKol	150
Also fourteen grade cows for a total of	2325
	$6600

Mr. Michael Marugg, Spokane, Wash.

Cow No. 1, Aaggie Alta Liscomb Posch	$ 225
Cow No. 4, Shadeland DeKol Etta 2d	295
Cow No. 29, Belle DeKol of North Slope, calf	300
Cow No. 23, Queen Canary Griepe 4th, calf	180
Cow No. 12, Eva Aaggie DeKol, calf	135
Cow No. 20, Plebe Laura Korndyke	325
Bull No. 2, Idaho Ruth Hazelwood Ormsby	105
	$1465

Mr. R. M. Gray, Post Falls, Idaho.

Cow No. 26, Uneeda Aabbie Douglas Korndyke 4th	$ 125
Cow No. 6, Aaggie Alta Liscomb Posch 2d	175
Also six grade cows for a total of	885
	$1185

Mr. H. M. Paul, Mabton, Wash.

Cow No. 25, Uneeda Aabbie Douglas Korndyke	$ 160
Cow No. 13, Natsy Sunshine 3d, calf	175
Cow No. 73, unnamed calf,	115
Unnamed calf, out of No. 25	75
Unnamed calf, out of No. 26	75
Also two grade cows for a total of	310
	$ 910

Mr. J. L. Smith, Spokane, Wash.

Cow No. 5, Natsey Sunshine 2d	$ 530

Mr. H. S. Curtis, Palmer, Wash.

Cow No. 10, Princess Pietertje Artis DeKol	150

Mr. August Scholtz, Harrington, Wash.

Cow No. 19, Pauline Butterboy Aaggie DeKol	395

Mr. G. Z. Ickes, Palouse, Wash.

Registered heifer calf	130

Mr. W. F. Gano, Moscow, Idaho.

Registered heifer calf	85

Mr. A. E. Pickett, Thornton, Wash.

Registered bull calf	85

Mr. Walter Savage, Pullman, Wash.

Registered heifer calf	100

Mr. H. Verhune, Palouse, Wash.

Registered bull calf	100

Mr. C. N. Sneve, Plummer, Idaho.

Clothilde DeKol Togo 4th, calf	145
Also one grade yearling	60
	$ 205

Potlatch Mercantile Co., Potlatch, Idaho.

Five grade cows	$ 500

Mr. E. Gooley, Harrington, Wash.

One grade cow	150

Mr. E. McDougal, Moscow, Idaho.

Four grade cows	595

Mr. J. W. Chaddick, Moscow, Idaho.

Five grades	370

It may be noticed that only three of the total number disposed remained in Whitman county, Washington.

West Side Dairymen Band Together

Strong Organizations Unite in Movement to Command Better Prices

By PAUL E. TRIEM

Dairymen owning about 10,000 cows in Skagit and Whatcom counties, the big dairy district of western Washington, are in progress of reorganization on aggressive lines to demand better prices from the big condenseries.

The Skagit County Dairymen's association, which has taken the lead in organizing the West Side counties, was formed by dairymen owning almost half of Skagit county's 16,000 cows. Business is transacted on a capital of $1000, representing 1000 shares of stock with a par value of $1 each. The company is not run to show a profit, and none of the officers receive pay. In the charter and bylaws the widest scope of activity is provided for, so that in case of future need the association may go into any branch of manufacturing or industry necessary to the direct handling and marketing of milk and milk products.

John Kill is president and J. B. Hall secretary of the Skagit county association. They attended a meeting of the Whatcom County Dairymen's association at Lynden June 23 and urged there the importance of reorganization of the Whatcom county association and close cooperation between the two. They described to the assembled dairymen the plan of organization and the experiences met with in Skagit county.

Milk producers owning approximately 1500 cows signed up as favoring the change in organization, which will convert the association from a body practically social in its functions to one constructive and, if necessary, militant in aims and methods. Before adjournment, a committee composed of the officers of the present association—N. P. Sorensen, president; O. P. Brown, vice president; J. L. Parker, secretary; L. J. Siennes and B. C. Crabtree, trustees—was chosen to draft a constitution and bylaws similar to those adopted by the Skagit association. A meeting to consider further action will be held in Lynden Saturday, June 30.

The chief significance of the Lynden meeting lies in the fact that it is but one step in a progressive movement, general throughout western Washington, looking toward the effective coordination of all the dairy farmers.

Mr. Kill told of the indifference of the big dairymen to the organization in its younger days.

"At first, the men who owned 80 or a hundred cows didn't think much about us," he admitted, "but pretty soon they began to take notice. The fact is that we had tied the little herds together, and had made one big herd out of them. If America is to feed the world, that is one of the things we must do—we must learn, as farmers, more about selling what we produce."

No Salary for Officers.

Among the direct recommendations made by President Kill was that no salary should be paid the officers of the association, as a fat salary is apt to attract a type of men who are interested principally in their own financial gain.

"You must put in men who are willing to sacrifice something for the community good," he warned his hearers. "They mustn't be small enough to worry about the gasoline they are burning up, doing their work. And when you get that kind of officers, back them up to the limit! Don't go around behind their backs and try to knife them. Work together. The men who represent you will get kicks enough from the other side. And here is another point: When your members are assembled for a business meeting, lock the doors and see to it that no one who is not interested as a producer is allowed to take part in the proceedings."

Results in Skagit County.

Secretary J. B. Hall went into the details of organization worked out by

(Continued on page thirteen.)



On the left above is a snapshot of John Kill, president of the Skagit County Dairymen's association; below is that of N. P. Sorensen, president of the Whatcom County Dairymen's association.

The silos are on the farm of C. C. Schroeder, Skagit county. Mr. Schroeder is milking about 22 cows and also raises some hogs.

Hislop to Be Judge Again.

Professor Hislop, head of the animal husbandry department of the state college of Washington, has been asked to judge live stock at a number of the important fairs again this fall. He will judge for the third season in the sheep department of the Montana state fair, and for the second year in both the sheep and swine departments of the Utah state fair. In Washington he will judge the sheep at the Spokane interstate fair and the swine at the Washington state fair at North Yakima.

King County Fair.

Two years ago County Agent F. W. Rader was able to get several of the local granges of King county to hold a corn and potato fair with the idea of holding a county grange fair the following season. This plan was successfully carried out in 1916, and the first King county grange fair was held. This fair is now to be an annual event, but instead of being a grange fair it is the plan to make it a county fair, inviting all to take part, whether they are grangers or not.

Wahkiakum Cow Testing.

A cow-testing association for Wahkiakum county has been organized in Skamokawa by County Agricultural Agent A. T. Flagg. Between 650 and 700 cows have already been pledged and the costs are not to exceed $1.50 for each cow tested during the year. It was voted to pay the cow tester a salary of $60 a month, allow him $5 a month for incidental expenses, and if he remains a year with the association and gives satisfaction he is to have a bonus of $5 a month extra. He also boards with the members of the association while testing. The directors are: Messrs. Meserve, Laughlin and Durrah of Grays River, William Lund of Cathlamet and Weister, Dawson and Charles Strom of Skamokawa. The officers of the association are H. L. Wiester, president; C. W. Laughlin, vice president; William Dawson, secretary, and W. N. Meserve, treasurer.

Algona Drainage Project.

The Algona drainage project, which takes up 100 acres in Pierce county and 1400 acres in King county, Washington, is getting well under way, according to County Agriculturist F. W. Rader. From present indications there will be no difficulty in securing the required number of signatures to bring the matter before the court for a hearing.

South Fork Grange.

At the last meeting of the South Fork grange No. 22, reported by the Northport News, Mrs. John Selmer was elected master for ensuing year, and D. O. Westman, delegate for the state convention which is to be held at Wenatchee. A large number were present and John Selmer spoke on the new cooperative store to be started at Northport, its principles and the amount of stock subscribed. Mr. Selmer stated that about $1000 worth of stock had been subscribed by the Deep creek ranchers.

Forest Patrol Law.

The provisions of the new forest patrol act of the state of Washington became effective June 7. This requires owners of timber or forest land who do not permanently reside within one mile thereof to patrol and protect during the season when there is danger of forest fires. The patrol and protection must be adequate and meet with the approval of the state board of forest commissioners. Further information may be obtained from Fred Pape, State Forester, Olympia, Wash.

To Preserve the Quail.

In an attempt to preserve the quail supply of western Washington hunting for any species of this bird is prohibited until October 1, 1919, in San Juan, Clallam, Clarke, Jefferson, Skagit, Snohomish, Skamania and Whatcom counties. It is also made unlawful to hunt Chinese pheasants in Yakima county, the new law making it unlawful to hunt them in Yakima and Kittitas counties.

Wideness of Douglas County.

Empire, Waterville: How many spuds could be raised in Douglas county if all the summer fallow ground was planted? We could certainly feed a big army.

Pasco Opens Its Union Stock Yards

Stock Sales Opening Day Total $15,000; Program Given

By D. G. SUTHERLAND.

With buyers from many points throughout the northwest present, and sales totaling between $15,000 and $16,000, the Pasco Union stockyards at Pasco, Wash., were formally dedicated June 25.

The stock consigned for opening day comprised 246 cattle, 169 hogs and 548 sheep. The bidding of the buyers resulted in the hogs bringing an average of about 15 cents and the sheep, which were mostly 2-year-old wethers and averaged 110 pounds, bringing 11 cents, which was claimed as the top price for like stock on western markets that day.

The cattle were not fit for beef. The consignment consisted of cows and calves and stockers, really stock for the range. There was a dearth of range buyers and only about 50 head were sold, the balance being shipped to Montana for further feeding. The principal buyers were Carstens Packing company, Tacoma, and F. M. Lowden Jr., Walla Walla.

The new stockyards company now owns 22 acres, has a five-year option on 170 acres adjoining, giving one and three-fourths miles of Snake river and Columbia river waterfront. There is ample railroad trackage and unloading pens are so constructed that stock step right off the cars on the level to the pens, sheep can be unloaded two decks at a time. Ten acres are now in actual use.

The office building, with general offices, has private offices for patrons, commission firms and buyers and shower baths for the convenience of customers. It is also equipped with self-registering scales. There are undercover unloading sheds, 100x180, hog sheds 80x240, sheep sheds 66x400. There are 50 pens for stock, a good many are very large and can be subdivided in four each, when necessity demands.

The total cost of the yards to date is $20,000, and the indebtedness of the company is but a small part of this amount.

Banquet Is Held.

An elaborate banquet was spread in the evening at the Pasco hotel, at which 72 were present, nearly every locality

(Continued on page twelve.)



One view of part of the Pasco stock yards.

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A Cat With Nine Lives or More

John Barleycorn clings as tenaciously to his life as the blackest cat that ever crossed the trail of the human race.

About half the states of the Union have voted him into legal exile. All the warring nations of Europe have banished him, at least till after the war. He has proved himself an undesirable citizen at all times, but especially when strenuous business is to be performed. Europe banished him because he interfered with war. Some provinces banish him because he interferes with peace. But he hangs on.

In this country he is making what may be his last fight for life before congress. And he is weakening. If civilization can not win against him, war will. John Barleycorn's epitaph may as well be written now and carved into a slab for his grave: "He lived; he died. For such as him there is no resurrection."

What Would It Mean?

If every family in the United States were to eat one pound (only 16 ounces) less wheat bread a week for one year than they are now doing? A saving of half a million tons of bread for exportation to the army camps in this country and her allies in Europe, where it is needed many times more than here.

If every farmer in the United States could have one pound of foodstuff per acre that would otherwise go to waste? A saving of a quarter of a million tons of foodstuff to be exported or used at home in place of foods more suitable for exportation, and more greatly needed by the stricken people of Europe.

If every home in the United States were to save one pound of food each week for a year that would otherwise be wasted? A saving of half a million tons of food.

If every family in the United States were to use enough perishable or non-staple products, like cabbage, turnips or potatoes, to enable the saving of two ounces of red meat a day for one year? A saving of nearly 450,000 tons of meat for exportation to the soldiers who are fighting the battles of this country and her allies.

If every family in the United States were to save one ounce of butter, lard or other fat each day for a year? A saving of nearly a quarter of a million tons of fats that are so urgently needed in Europe.

If every person in the United States were to contribute one penny a month (12 cents a year) to relief funds? A total of $12,000,000 to care for wounded soldiers, hungry women and children, and all manner of persons stricken with disease or plagues as a result of the devastating war into which this country is drawn.

If every person in the United States were to do his "bit," even to sacrificing something that seems almost like a necessity, in addition to luxuries (including idleness)? An earlier end to the war than will otherwise be possible; fewer soldiers slain; fewer homes wrecked; fewer months of hunger and loneliness and suffering for those at home or homeless in the devastated areas; an earlier triumph of liberty over despotism, humanity over inhumanity, right over wrong.

Are you doing your bit? Are you making some little sacrifice? Are you eating one slice less of wheat bread daily? Are you preventing some little item of waste somewhere? These are the practical tests of your own personal patriotism.

Farmers Will Question Wisdom of Alliance With the I. W. W.

A news item from Fargo, North Dakota, says the announcement is made there by the Nonpartizan league of farmers that its committee appointed recently to confer with the Agricultural Workers' union with a view to having the latter divert a portion of its membership to North Dakota to help care for the harvest, had reached an agreement as to wages, hours of service and working conditions.

The Nonpartizan league will be called upon to ratify this agreement at a convention to be held at Minot, N. D., July 11.

The Agricultural Workers' union is a branch of the I. W. W. and is said to have a membership of more than 20,000.

Many farmers will question the wisdom of this action. They fear there is danger that the I. W. W. is driving an entering wedge that may lead to the splitting of the farmer forces of the northwest; that North Dakota farmers, under this plan, would be bidding against the farmers of Montana, Idaho, Washington and Oregon.

It is probable that the Nonpartizan league may find the present demands of this organization tolerable, but there is danger that, once the I. W. W. got a strong hold on the harvesting of western crops it would push up its demands and paralyze harvesting operations pretty much as lumbering operations are now being paralyzed in Idaho and Washington.

The I. W. W. leaders who are negotiating this alliance with the Nonpartizan league are probably professing a friendly regard for the farmer which their published declaration of principles flatly contradicts. In order that its readers may have no misunderstanding about the aims of the I. W. W. the Farmer quotes the following extracts from the organization's declaration of principles:

"The working class and the employing class have nothing in common.

"Between these two classes a struggle must go on until the workers of the world organize as a class, take possession of the earth and the machinery of production, and abolish the wage system.

"It is the historic mission of the working class to do away with capitalism. The army of production must be organized, not only for the every day struggle with capitalists, but also to carry on production when capitalism shall have been overthrown."

The association is avowedly anarchistic and syndicalistic.

The Great Heart of Humanity

In these times when the whole world seems to have lost its equilibrium and hurled itself headlong into a brutal conflict of slaughter and destruction it is encouraging to catch one bright beam from the sun of human kindness. The inventive genius and the full powers of mankind seem dedicated to the destruction of those things that men have struggled centuries to gain.

But in the midst of it there shines a bright light. The American Red Cross!

All over this land women and girls by thousands are studying the problems of first aid to the injured, and are sewing and knitting and giving that sufferers of any nation on any battlefield may be relieved. All over this land men and women are volunteering their services without pay, and are crossing the ocean to submit themselves to gravest dangers while carrying out their rescue work.

A few days ago the Red Cross association issued a call for $100,000,000 to finance its great work, and the people of this country responded with more than that asked for. And contributions are still being received.

Washington Gleanings

Articles of incorporation for the Oakville cheese factory have been filed.

Walla Walla has been selected as the 1918 meeting place for the state grange.

E. C. Cluster of Pomeroy has planted 50 acres to beans this season. She seed cost $117.

More than $2000 in prizes was awarded at the 13th annual horse show held in Waitsburg recently.

Beans are going to be used extensively in eastern Washington in the present effort to increase food production.

George Gunning has just sold a section of wheat land east of Reardan to August Rux of Rockland for $100 per acre.

The latest report of the Jersey Creamery company of Vancouver is that 19,200 pounds of butter are made a month by that firm.

Workmen are busy on the construction of an elevator for the Ritzville Warehouse company. The elevator will be 80 feet in height.

Farmers from all parts of western Washington will come to Puyallup to study the work of the experiment station, according to plans made by the western Washington farm agents.

Work has now commenced on the new permanent highway known as the Pasco-Rattlesnake flat road, which is being built out of Pasco by Franklin county at a cost of about $35,000.

Big food-drying plants have been installed at Wenatchee, Yakima and Spokane, and smaller plants are being erected in various sections of the state, according to E. F. Benson, state agricultural commissioner.

The May report of B. C. Wright, official tester for the Chehalis District Cow-Testing association, shows 113 cows produced on an average over 40 pounds of butterfat. Of these 690 did better than 45 pounds each.

The King county board of agricultural preparedness, after consultation with the Seattle city council, has announced the establishment of a county market for farmers only at Sixth and Westlake avenues at Seattle.

The directors of the Adams County Fair association have fixed dates for the fair to be held this fall as September 12, 13 and 14. This will be just following the Spokane Interstate fair and just prior to the Yakima State fair.

If sufficient tonnage of low-grade and cull potatoes can be secured at prices ranging not above $10 a ton it seems likely that a potato starch factory will be added to the manufacturing industries of Yakima valley within the year.

What Others Say

A quart of canned peaches or tomatoes on the shelf is worth a bushel rotting on the ground.—U. S. Department of Agriculture.

Is this a popular war? Everything points to a unanimous answer to the question—and the answer is not in the negative.—The Dakota Farmer.

This year the farm that is not producing practically all the vegetables, fruits, meats and grains for the need of the owner is not being worked up to the demands of the crisis.—Country Gentleman.

If the farmer could be protected against the tremendous advances in the prices of the things he has to buy, he would do very well; but no one seems to be worrying about this side of his business.—Wallace's Farmer.

Thousands of city folks who have made gardens this year are meeting with some surprises. They had thought that crops "just growed," and they are amazed at the enemies they find on every hand.—National Stockman and Farmer.

Army Lands in France

First Transports Escape Torpedoes

The announcement of the arrival in France of several vessels carrying the first expedition of United States soldiers for participation on the actual field of battle startled the whole world last week. So close had been the secrecy thrown about the plans and movements of the army, that no hint of the expedition had been heard in this country. Just how many soldiers were are in the expedition has not been given out, but it is believed that there are several thousands.

Their arrival was celebrated with joyous demonstrations by the French people.

While no official information is being given out as to the plans of operation for the United States soldiers on the European battle field, it is currently understood that they will go into training under the command of Major General Pershing, who is already in Europe, and be ready for actual service within a short time. Additional expeditions will be made from time to time as rapidly as practical, it is semi-officially admitted, until the representatives of the United States in Europe are numerous enough to make the actual fighting force of this country keenly felt by the German forces.

So far as is known, the transports carrying the soldiers were subjected to no immediate dangers, but their complete escape from submarines in the war zone is accepted as one of the encouraging developments of the nation's participation in the war. Strictest secrecy is maintained as to the times and places of departure of troops in order to prevent informed effort on the part of the submarine commanders to destroy the transports.

Russia Again Aggressive.

The soldiers of new Russia have assumed the aggressive. For the first time since the revolution last March Russian troops have begun an attack on an extensive scale. Along a front of 16 1-2 miles in the region of Brzezany, Galicia, Russian troops have stormed the German positions. Berlin says the Russians suffered heavy losses and were compelled to retire before the German fire. The attack was made in the section southeast of Lemberg, where the artillery firing has been heavy recently. Field Marshal Haig continues to tighten his grip on Lens. On the north bank of the river Souchez British troops have captured German positions on a front of half a mile southwest and west of Lens.

Brazil and Greece Next.

Announcement is expected immediately of definite severance of diplomatic relations and a possible declaration of war on Germany by the republic of Brazil, in South America. For months Brazil has been endeavoring to maintain the position of neutrality, but has withdrawn her formal declaration to that effect.

Greece, from the throne of which King Constantine was recently compelled to abdicate because of his German tendencies, is virtually at war with Germany and her allies (Austria, Bulgaria and Turkey). Former King Constantine's son, a strong anti-Germanist, has succeeded to the throne.

U. S. to Build Airships.

Recognizing the important part airships are playing and will continue to play in the war, this country is planning on spending huge sums of money building airships and training men to operate them. It is definitely stated that 3500 such fliers will be built as soon as possible, and that 6000 men will be trained to operate them by the time they are ready for use.

Wilson Controls Exports.

One clause of the espionage bill recently passed by congress gives President Wilson power to control the exportation of foodstuffs and munitions of war. The president has appointed an export council to assume charge of the work in this regard, with his supervision and consent. Explaining the intentions of the council and himself, President Wilson said:

"There will, of course, be no prohibition of exports. The normal course of trade will be interfered with as little as possible, and, so far as possible, only its abnormal course directed. The whole object will be to direct exports in such a way that they will go first, and by preference, where they are most needed and most immediately needed, and temporarily to withhold them, if necessary, where they can best be spared.

"Our primary duty in the matter of foodstuffs and like necessaries is to see to it that the peoples associated with us in the war get as generous a proportion as possible of our surplus, but it will also be our wish and purpose to supply the neutral nations whose peoples depend upon us for such supplies as nearly in proportion to their need as the amount to be divided permits.

"There will thus be little check put upon the volume of exports, and the prices obtained for them will not be affected by this regulation."

Increased Rates Denied.

The interstate commerce commission denies the plea of the railroads of the United States for a horizontal increase of 13 per cent in freight rates. The commission found, as a result of extended hearing that the carriers generally show a substantial and increasing financial prosperity and that they have ample resources with which to conduct transportation In its decision the commission indicated its willingness to increase class rates in the eastern district. This decision lifts a weight of anxiety from two basic industries of the Pacific northwest, that of orchard owners and lumbermen.

Bone Dry States.

Twenty-three states became bone dry at midnight on June 30, the effective hour of the Reed amendment prohibiting shipment of liquor into any territory where its sale or manufacture was prohibited. The law bars from prohibition areas all mail matter containing liquor advertisements. Eleven other states are partially affected by the legislation. The bone dry states include Idaho, Washington and Oregon.

Food Control.

The food control measure as redrafted by the senate committee on agriculture is a distinct improvement on the bill passed by the house. It is much fairer to the agricultural interests of the nation.

The house bill gave the president authority to declare maximum and minimum prices on foods, feeds and fuel.

The senate committee has adopted amendments to give the president authority to control iron, steel, copper and their products, farm implements and machinery, fertilizers and binding twine materials.

Other important amendments would authorize the government to take over and operate factories, packing houses, oil wells and mines, regulating the wages of their employes, and to commandeer supplies of any kinds when needed for the army and navy, "or any other public use connected with the public defense."

These amendments are declared by senators who have been opposing, as well as by those supporting control legislation, to improve the bill and remove almost all opposition except upon prohibition.

But lamentably the prohibition issue threatens an indefinite deadlock in congress. The fight now is over beer. The house bill absolutely prohibits the use of any and all food materials in the manufacture of intoxicating beverages.

The bill as redrafted by the senate committee carries absolute prohibition of the manufacture of distilled spirits and malt liquors, but gives the president authority either to prohibit or license the manufacture of wines.

The brewery interests will not give up without a long and determined struggle, and senate leaders agree that the fight will be one of the most strenuous in the senate's history, with the alignment extremely close on the question of stopping the manufacture of beer.

To the Farmer it looks as though the breweries are putting business above patriotism, and their supporters in and out of congress will be largely an element that believes in putting its glass of beer above country.

Buys Good Sheep Range.

David Rosenburg has completed the negotiations for the purchase by himself and his brother Harry of the big Hargadine ranch of 5000 acres, east of Ashland, Ore. The Rosenburg brothers will use the ranch in connection with their extensive sheep raising industry, and expect to soon have a large herd of sheep roaming over the land. The property was purchased from Ben Selling and Joseph Simon of Portland. The purchase price is not given out.

Thoroughly Disc Before and After Plowing

After the grain has been cut from your fields and before the hot August and Septembersun has cracked the ground, allowing the subsoil moisture to escape, use the

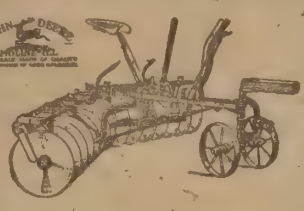
John Deere Model B Disc Harrow

Noted for Thorough Disking

It produces a fine dirt surface mulch *pulverized through* and *through*—no trash that *stops evaporation* of moisture and bunches—no clods—no air spaces—*seed bed catches and holds rainfall.*

Mixes stubble, trash and weeds thoroughly into the soil. *Checks weed growth. Pulverizes surface thoroughly—ground is kept mellow—plowing is made easier.*

Using the Model B after plowing completes a seed bed that is *thoroughly fits the subsoil perfectly.*



The Model B is *exceptionally flexible*—that is why it disks so thoroughly. The spring pressure third lever assures uniform penetration regardless of dead furrows or ridges.

Write now for free booklet on this profitable disc harrow.

The Bottom Is the Heart of the Plow

The right kind of plow bottom lays the foundation for the right kind of seed bed. Crop yield is increased The plow lasts longer and pulls lighter—a saving in actual cost, power, trouble.

John Deere Tractor Plows

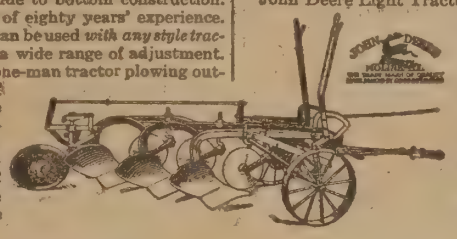
Have the Famous John Deere Plow Bottoms

The bottom on every John Deere plow is correctly designed—John Deere plow success is largely due to bottom construction. It is the result of eighty years' experience.

These plows can be used *with any style tractor.* Hitch has a wide range of adjustment.

They make one-man tractor plowing outfits. A pull of the rope by the man on the tractor lowers or raises the bottoms *high and level,* and the tractor does the work. The bottoms do not gather trash in turning or when plow is being transported.

John Deere Light Tractor Plows *can be backed up*—they have a stiff hitch.



Equipped with John Deere Quick Detachable Shares—*save eight to thirty minutes changing each share.*

Write for free booklet.

A Bigger Yield From the Same Field

Manure well shredded and spread evenly gets the best results. It goes farther. Plant roots get all of its plant food. On any field that you have been manuring by hand you get approximately a 25 per cent increase in crops by using

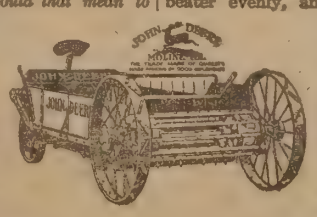
The John Deere Spreader

The Spreader With the Beater On the Axle

Ask any farmer who uses a John Deere Spreader. *How much would that mean to you in these years of high crop prices?* And you'll find there is a saving of 50 per cent in time and labor.

Beater on the Axle is found only on John Deere Spreaders. Does away with chains, clutches and half the castings otherwise necessary. *Means better spreading, fewer repairs.*

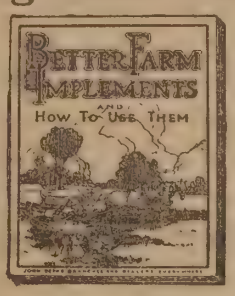
Revolving Rake which feeds manure to beater evenly, and Ball Bearing Apron Drive, securing frictionless apron travel with no racing, are other exclusive features.



Spreader only hip-high—easy to load. Big drive wheels—light draft. Easy to operate—only two levers—a boy can run it.

Write for free booklet on the John Deere Spreader.

Big Book Free



Better Farm Implements and How to Use Them

America must produce more food. Labor-saving implements will play an important part in increased crop production.

This book tells all about a full line of labor-saving farming implements. Tells how to adjust and operate many of them. A practical farm implement encyclopedia. Worth dollars. Illustrates and describes the following machines: Walking and Riding Plows, Tractor Plows, Disc Plows, Disc Harrows, Spring Tooth and Spike Tooth Harrows, Corn and Cotton Planters and Drills, Listers, Alfalfa and Beet Tools, Grain Drills and Seeders, Riding and Walking Cultivators, Lister Cultivators, Mowers, Side Rakes, Loaders, Sweep Rakes and Stackers, Hay Presses, Grain and Corn Binders, Corn Cutters, Stalk Cutters, Kaffir Headers, Manure Spreaders, Portable and Inside Cup Elevators, Corn Shellers, Wagons, Farm Trucks and Buggies. This big book will be sent *FREE* if you state the implements in which you are interested and ask for Package X—1670.

John Deere Said

in reviewing his career, that he felt most pride in the consciousness that he never produced an implement of poor quality.

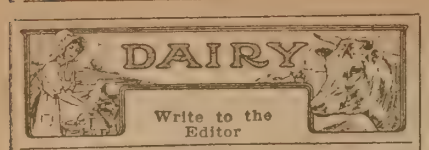
The same pride that John Deere felt is the pride of the makers of John Deere implements today. It is a powerful incentive to the maintenance of the high standard to which John Deere tools have been kept for eighty years.

JOHN DEERE
MOLINE, ILL.
THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

John Deere Implements are sold by John Deere dealers everywhere

JOHN DEERE, MOLINE, ILLINOIS

When you write to advertisers, be sure to say that you saw their advertisement in this paper.



A. B. NYSTROM, Editorial Contributor

Milk Production Cost

Should Interest Be Figured?

How shall a dairy farmer calculate the cost of producing milk? Should he figure in interest on the value of his cows and the money invested in barns and other equipment?

These questions came up at a public meeting in Spokane, where dairymen and dealers were testifying before a commission of 15 citizens that is investigating the high cost of living.

A. A. Newbery, former owner of a dairy near Spokane, while questioning the manager of the Broadview dairy, objected to a charge for barn rent which he discovered in the printed statement of dairymen and distributors. Barns and cows, he argued, were capital, and production costs should not include interest or rent on captial.

N. W. Durham, another member of the investigating commission, differed from Mr. Newbery. Mr. Newbery's point of view is given in the following communication:

To the Editor; During the milk hearing at the city hall Thursday night I contended that the items of interest on money invested in cows and barn rent were not proper charges in estimating cost of production. Both Mr. Flood and Mr. Durham insisted I was wrong in my contention.

I stated at the time that the government authorities would not permit these charges to be figured in income tax returns and the United states internal revenue office in this city informs me that I was right in my position.

I know that this question of interest on capital investment and rent being included in estimating cost of any given article of manufacture has long been a subject of discussion among expert accountants and that volumes have been written on this subject, but the government has decided against the fallacy of including interest and it is a significant fact that no manufacturer has attempted to test this decision in court.

A. A. NEWBEARY.

Mr. Newbery's argument that the government authorities do not permit such charges to be figured in income tax returns is not to the point. That is an entirely different matter.

The government rightly excludes interest on capital because the object of the income tax is to require the citizen to pay a tax on the income from his capital.

Such items as interest on plant, herd, etc., must be considered, if the producer is to stay with the industry and not to go broke. If they are not added to the items of basic cost, they must be weighed later. if we are to arrive at the dependable figure at which the producer can sell his milk without loss.

An illustration may make this plainer. Take the case of a farmer just starting a dairy. He owns his land, but must borrow money to buy cows, build barns, etc. He must pay interest on that borrowed money, and practically that interest is as clearly a cost charge as his labor or the money he pays out for feed for his herd.

Suppose that when he was building his barns he also provides sufficient capital to lay in a supply of feed to run his herd for two, three or five years, and then eliminated feed items from his tabulation of cost and sold his products on that basis. Where would that farmer wind up?

The capital that is required by the dairy farmer must have its fair return.

Produce Over 50 Pounds Butterfat in One Month

The following table gives the names and records of the cows in the Linn County (Oregon) Cow Testing association, which have produced more than 50 pounds of butterfat during the period of 30 days ended May 29, according to the report of E. W. Bartroff, tester:

Owner of cow.	Name. of cow.	Breed (years.)	Age	When fresh.	Lbs. milk.	Per cent of fat.	Lbs. B. fat.
R. L. Patterson	Monte	G. J.	8	Oct.	942	6.0	56.52
Thomas Spillman	30 ..	G. J.	6	Feb. 7	822	6.2	50.86
Thomas Spillman	18 ..	G. J.	8	Mar. 18	954	5.4	51.52
Henry Stuart	Lass ..	G. J.	2	Apr. 10	954	5.3	50.56
Robert L. Burkhart	Princess	G. J.	6	Apr. 2	1188	4.7	55.84
Martin Cummings	Moss ..	G. J.	5	Apr. 22	960	5.3	50.88
L. M. Dickson & Son	May ..	R. J.	3	Feb. 23	1230	5.9	72.57
L. M. Dickson & Son	Spazza 2d.	R. J.	2	Mar. 23	1137	4.4	50.03
L. M. Dickson & Son	Starr ..	R. J.	4	Dec. 24	897	5.5	71.12



NO DOSE TO MEASURE.
NO LIQUID TO SPILL.
NO STRING TO ROT.

BLACKLEGOIDS are small pills. Each pill is an accurate dose of blackleg vaccine.

BLACKLEGOIDS are easily administered—simply inject them under the skin with a vaccine injector.

TAKE NO CHANCES.

Don't wait until your calves become infected. This means certain loss—there is no *cure* for blackleg. Vaccinate now—before the deadly disease shows itself.

THE COST IS SMALL.

BLACKLEGOIDS are economical. The expense is trifling compared with the loss you are liable to sustain if you do not use them.

ORDER THROUGH YOUR VETERINARIAN OR DRUGGIST.

Write for free booklets on Blackleg, with full information about Blacklegoids.

PARKE, DAVIS & CO.

Dept. Animal Industry. DETROIT, MICH.

Cow Testing Results.

Records of the Pierce County Testing association in Washington for May show a larger number of high producing cows than ever before. Twenty-one cows produced over 60 pounds of butterfat in the month, while out of 607 cows in the association 132 produced over 40 pounds, most of them getting no other feed than pasture. The three highest herds, those of J. J. Miller, John Snell and C. W. Orton, averaged 41.5 pounds of butterfat per cow, while the three lowest herds averaged 22.2 pounds per cow. J. J. Miller's herd of 67 cows produced an average of 48.1 pounds of butterfat each. The average per cow for the whole association was 817.5 pounds of milk and 32.8 pounds of butterfat.

In the Roy district the best showing was made by the herd of Mrs. A. A. Pike, a new member, whose herd of grade Jerseys contained nine cows producing over 40 pounds of butterfat. Mrs. Pike has raised nearly all of her cows and now has an exceptionally fine Jersey bull at the head of the herd.

In addition to the cows over the 60-pound mark the following herds showed up well:

J. J. Miller, 15 cows over 50 pounds.

John Snell, seven cows over 50 pounds.

C. W. Orton, two cows over 50 pounds.

J. Schuler, one cow over 50 pounds.

Pierce County farm, one cow over 50 pounds.

Dr. Robert Wilson, three cows over 50 pounds.

Walter Spinning, two cows over 50 pounds.

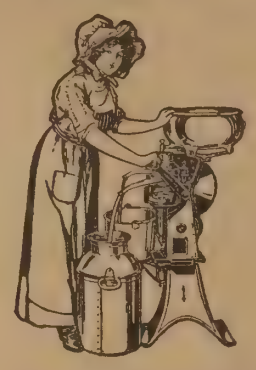
C. C. Schrengohot, one cow over 50 pounds.

W. Strafford, one cow over 50 pounds.

Snohomish Valley Cow Testing.

A Snohomish valley cow-testing association in western Washington has begun its second year's work, with V. R. Riley, from Wisconsin, as tester, with over 500 cows, is the report made by County Agriculturist C. C. Farr.

HOT WEATHER



the season when a DE LAVAL SEPARATOR saves most over any other separator or skimming system

IT'S A GREAT MISTAKE for any dairy farmer without a separator or using an inferior machine to put off the purchase of a New De Laval Cream Separator in the summer months, especially with butter-fat at the present unusually high price.

Great as are the advantages of the New De Laval over all other separators, as well as over any gravity setting system, at every season of the year, they are even greater during the mid-summer season than at any other time.

This is because hot weather conditions occasion greater butter-fat losses with gravity setting and render it most difficult to maintain quality of product with any gravity system or unsanitary separator, while, moreover, the quantity of milk is usually greatest, and any loss in either quantity or quality of product means more.

Then there is the great saving in time and labor with the simple, easy running, easily cleaned, large capacity New De Laval machines over all other methods or separators, which naturally counts for more at this time of the year.

Hence the great mistake of putting off the purchase of a New De Laval Cream Separator in summer, whether you already have a poor machine or none at all, and every dairy farmer should keep in mind not only that a De Laval will pay for itself in a few months, but may, if desired, be bought on such liberal terms as to actually save its own cost while being paid for.

Every claim thus made is subject to easy demonstration, and every De Laval local agent is glad of the opportunity to prove these claims to you, in your own dairy, without cost or obligation on your part.

Why not see the nearest De Laval agent at once? If you do not know him, write to the nearest office for new catalog or any desired information.

Every New De Laval is equipped with a Bell Speed - Indicator.

DE LAVAL DAIRY SUPPLY CO.

LARGEST DAIRY SUPPLY HOUSE ON THE PACIFIC COAST.
Alpha Gasoline and Distillate Engines, Ideal Green Feed Silos, Acme Ensilage Cutters and Blowers, Irrigation Equipment, Centrifugal and Deep Well Pumps and Alpha Spraying Outfits. Send for special catalog.
61 BEALE STREET, SAN FRANCISCO
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



FEDERAL DOUBLE CABLE BASE TIRES

If you've never used Federal Tires try them now. Without an equal for country roads. The non-skid treads are tough and durable, give perfect traction and hold the car safely to the road in wet or slippery weather.

No matter how hard or rough the going, Federal Tires always hold fast. For down in the base of the tire four strong steel cables anchor the tire safely to the rim against the hardest kind of strains. Yet they slip off easily when necessary.

Made in white Rugged and black Traffik non-skid treads. Sold by leading dealers everywhere.

The Federal Rubber Company of Illinois

Factories: Cudahy, Wis.

(3)

Manufacturers of Federal Automobile Tires, Tubes and Sundries; Motorcycle, Bicycle and Carriage Tires; Rubber Heels, Fibre Soles, Horse Shoe Pads, Rubber Matting and Mechanical Rubber Goods.

LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

War Horse Situation

By E. L. POTTER.

The war horse situation still retains its air of uncertainty. The U. S. government has announced its intention of buying large numbers of horses for army purposes, but dealers are still up in the air as to the proper move to make. The heaviest demand will probably be for draft horses, or gunners, as they are called. The U. S. specifications allow for three grades which together takes weights from 1100 to 1700 pounds and heights from 15 1-2 to 17 hands. These specifications are rigid. The European buyers would accept horses a little over or a little under the specifications if otherwise a good animal, but U. S. inspectors put the standard on all of them and they must come within the specifications. The horses must also be geldings of hard colors. Dark grays, however, will be accepted.

What the prices will be and how many can be bought no one knows. The available supply has of course been gone over again and again, yet every buyer seems to get a few more and prices do not improve materially. Two months ago there seemed to be considerable demand outside of the war trade, but it has since disappeared except in isolated spots, and it is hard to sell any kind of horse that is not suitable for war. Many people are knocking the horse and advocating tractors in spite of the well known fact that tractors are only in the experimental stage. No one familiar with the capacity of American inventors can doubt the bright future of the tractor, but on the other hand, every one who has given attention to the mechanical phase of tractor construction realizes that there are serious problems to be solved before the tractor is a universal success. In the meantime it seems to be the fad to make the horse the goat and the breeder and dealer pay the penalty.

Veterinary

Dr. S. B. Nelson

Ailing Pigs—I have a pig that is sick. He refuses to eat for several days, then he eats greedily and stands and grits his teeth. I just killed its mate, and it had worms in large quantities, some 10 inches long.—J. W., Vancouver, Wash.

Answer—Starve your pigs over night by not giving them any supper. The next morning give five grains of santonin in the feed. At noon give from one to two ounces of castor oil on the feed. Repeat the treatment in a week if necessary.

May Be Rupture.—I have a cow that was fresh a week ago and she is discharging blood. It does not look like the ordinary discharge after calving.—S. L., Port Stanley, Wash.

Answer.—It is difficult to say just where the discharge of blood comes from. If it comes from the womb there must be a rupture in the womb, or one of the cocyledons to which the afterbirth attaches is torn. You might try giving one ounce of fluid extract of ergot in one pint of water; repeat in 12 hours. Do not give over two doses to the cow.

For Common Diarrhea.—To the Editor: I have seen many inquiries about a cure for white scours in calves. I will give a remedy that has proved successful every time, or nearly so, for myself and also for my father. As soon as you see the scours begin give one fresh hen-egg every two hours until cured, and in addition give as soon as noticed one tablespoonful of gloss starch, dissolved in one quart of luke warm water. I use for drenching calves an old cow's horn, dry, with the pith taken out. Clean up and disinfect the stable. Reduce calf's ration of milk one-half. JOHN F. HUTESON.
Eastsound, Wash.

Referring to the above Dr. S. B. Nelson says:

The contents of Mr. Huteson's letter is a remedy that has been used for the common diarrhea of calves for a long, long time, and is sometimes proved a very good remedy. However, it has not been satisfactory in the disease known at white scours, which is of bacterial origin, and yields only with difficulty even to the very best disinfectant given internally. For the common form of diarrhea, the treatment recommended, as I said before, has often given good results.

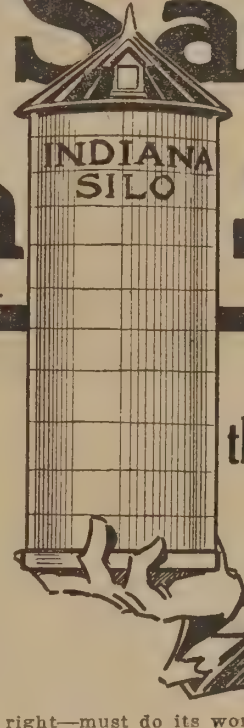
Sores on Udder.—I have a cow that was fresh last September and has always been in perfect health, but about three weeks ago her udder and teats became covered with little watery sores, forming a scab, which falls off leaving the spot well, seemingly, but new spots are coming all the time.—V. B. D., Clayton, Wash.

Answer.—The disease that you referred to follows very closely with the disease cowpox in cattle. The symptoms which you described are quite similar to those of cowpox. I would advise you to wash the udder with a 2 per cent solution of Lysol, prior to milking. Wash the udder again carefully after milking. Then apply to the little pimples or sores, a little zinc-oxide ointment after each milking. Milk this cow last, after you have finished the rest of the cows. It would not be a bad thing for you to disinfect the udders of all of your cows, and it possibly may keep the disease from spreading. It does not cause any great loss, but it is quite troublesome in character.

Blood Clots in Milk—I have a 2-year-old heifer which was fresh March 15. Two months later she began giving bloody milk from the right front teat. There is no fever in her udder, and she eaats hearty and appears to be in good condition.—R. W. H., North Yakima, Wash.

Answer—The matter of blood clots in the milk is due to a number of causes. Where the milk is only tinged with blood, or slightly blooded, the treatment given in the column above, that of administering a teaspoonful of hyposulphite of soda in a quart of water morning and evening for a week or ten days sometimes helps, but where there are real blood clots it is questionable if this treatment is of any value, and in such a case I think that the cause ought to demand the personal services of one of the veterinarians in your locality, because there may be any one of several pathological conditions which cause the bleeding, and I am sure that it would take a close personal observation and study of the case to determine which is the cause of it so that a proper remedial treatment may be prescribed.

Uncle Sam Says: Own a Silo!





YOUR "bit," Mr. Farmer, is to give the Nation the greatest supply of foodstuffs ever produced. You will do this through increased acreage and more efficient farming methods generally. But you must also remember that **food conservation** is equally as **important** as increased production.

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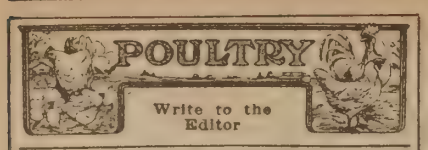
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JAMES LRYDEN
Editorial Contributor

The Feed Problem

An egg, according to the chemist, is so much water, so much ash, so much protein and so much fat. According to the poultryman an egg is so much wheat, so much corn and oats, so much meat or milk, so much grit and shell and green food. After the chemist has studied a little of practical poultry keeping and the poultryman has studied a little science—just a little—the two discover that there is not much difference if any between them, only a difference of words or terms. Wheat and corn are made up of protein, ash, fat, etc., and so is the egg, only in differing proportions. It is the business of the scientific feeder to find out what those proportions are. Knowing the composition of feeds he is able to feed not only the most effective ration or feeds, but also, and what is important at this time, to change or adjust his feeding rations to feed with the greatest economy or profit. Good feeding is not so much a question of wheat as it is of protein and protein is found in other grains as well as wheat. Can this protein be secured without feeding wheat?

The following gives the per cent of protein in the principal grains:

Wheat, 11.9; corn, 10.5; kaffir corn, 9.9; oats, 11.2; peas, 20.2; barley, 12.4.

This shows that wheat, corn, oats and barley, the principal grains fed, have about the same amount of protein.

Protein is the most valuable constituent of feed, and usually feeds are high or low in price in proportion as the protein content is high or low. So that, judging from this standard, we can reduce the feed bill considerably at present prices of grains by feeding oats or barley, or both, as well as corn, instead of wheat. There would be a considerable reduction in the ration by cutting out wheat altogether, and so far as the amount of protein is concerned we should get equally as good results.

But there are other points to consider. There are some other constituents of the foods, some of which add to their value. A certain percentage of the foods is fiber, and the more of it they contain the less value the food has, because fiber lacks in digestibility; it is almost totally indigestible. The fowls get no good from it, or very little. Wheat, corn and barley do not vary very much, barley having slightly the most, but oats have more than four times as much, and peas six or seven times as much fiber. Again, the nitrogen-free extract, another constituent that adds to the food value, is the highest in wheat, corn and barley and lowest in peas and oats. Another constituent which has food value is fat. Corn and oats have the highest percentage of fat and peas and barley the lowest.

As a whole, the differences in composition of the principal grains is not so great as to make it impossible to substitute one for the other and get good results.

There is another question, however, that the scientific feeder will look into and that is digestibility. All feeds are not equally well digested. It has been found, for example, that an animal digests a certain percentage of the protein in certain grains. With fowls the digestion experiments that have been made show that the protein in the corn is more fully digested than the protein of wheat. So that to get an accurate basis for judging of the relative values of the different grains we should know how well they are digested. But we don't know enough yet about the digestibility of feeds when fed to fowls, and that we have to do some guessing or leave the question of digestibility out of consideration.

There is yet another point to consider which is outside of the jurisdiction of the chemist, that is palatability. The poultryman himself is both judge and jury here. The chemist's analysis doesn't explain why a hen will eat more of one grain than another even though they may have the same chemical composition. The feeder alone can tell which foods the hen likes best, which are the most palatable. We must feed palatable foods to get good results in egg yield. The laying hen must be a good eater in order to manufacture the eggs. He knows that oats and barley are not as palatable as wheat and corn and that the hen does not like rye. Good feeding is largely a question of palatability.

If the hen has access to a sufficient variety of foods she will usually balance her own ration, if with it she can have exercise. We need not trouble then much about protein and other things. The success that has followed hopper feeding is evidence of this fact. Some practice feeding all the food in hoppers, others only part of it. At the Oregon station partial hopper feeding is used. The grain foods, both whole grain and mash, are fed at stated times, but a hopper of meat scrap is kept before the fowls all the time and as meat scrap is very rich in protein the hen balances her ration by eating much or little meat scrap as she needs it. It has been found that there is no danger in feeding an unlimited amount if the supply never runs out. If the hoppers are empty for a few days and then filled the hen will eat so much as to put her out of condition and laying will cease.

Where the fowls are running at liberty on the farm hopper feeding all the feed may be safely followed. Where they are confined in houses or yards I think it better to feed the grain, at least the whole grain, in a deep litter of straw at stated times in order to induce exercise.

Chemistry has done wonders for the feeder. It will yet do more and greater wonders. Chemists are working quietly but diligently on problems of nutrition with the idea of discovering the true functions of various elements of feeds. There is much, however, that they can not tell us. For instance, they can not yet tell us why the protein in the grains can not take the place of the protein of meats and milk for poultry, but the poultryman has found by experience a wide difference in the results, and he is compelled to feed high-priced meat scraps to fet the protein which is found in grains at less than half price usually. When we can eliminate the buying of meat for poultry and substitute vegetable protein in some form it will be a great saving to the poultryman. Whether it can be done or not remains to be seen. The evidence at present is altogether in favor of animal protein for poultry.

J. D.

The Early Laying Pullets.

This year's pullets will be starting to lay from now on. The earliest hatches will be starting soon, if not already started. Pullets should not be forced to lay early. The early laying pullet under forced feeding will lay small eggs. The pullet that lays at four months of age will not lay as many eggs in 12 months as she would if not forced and brought to laying maturity at five or six months. This does not mean, however, that the early-laying pullet is not a good layer; she is the best layer, but the best layer can be made to lay at four months or six months just as the feeder chooses. To retard laying, reduce or cut out meat fods, or other foods rich in protein.

J. D.

All-Northwest Laying Contest.

The 20 pens making highest records from October 15, 1916, to May 31, 1917, in the all-northwest egg laying contest follow, the number indicating eggs laid:

J. R. McRae, Milwaukee, Ore., White Leghorns, 530 eggs.
J. A. Hanson, Corvallis, Ore., White Leghorns, 526 eggs.
A. Unsworth, Sardis, B. C., White Leghorns, 491 eggs.
P. W. Harries, Seattle, Wash., White Leghorns, 490 eggs.
Auburn Poultry farm, Auburn, Wash., R. I. Reds, 479 eggs.
Bliss & Bliss, Southworth, Wash., Barred Rocks, 459 eggs.
C. Daniels, Hoquiam, Wash., White Rocks, 453 eggs.
J. D. Balmat, Spokane, Wash., White Leghorns, 451 eggs.
B. O. Longsdorf, Labanon, Ore., White Minorcas, 441.
Oregon Agricultural college, Corvallis, Ore., 436 eggs.
W. J. Loveland, Roy, Wash., White Leghorns, 431 eggs.
Valley farm, Boerne, Texas, White Leghorns, 430 eggs.
L. F. Solly, Westholme, B. C., White Leghorns, 429 eggs.
Martin Brothers, Dolphin, Wash., Golden Wyandottes, 426 eggs.
C. C. Coolidge, La Grande, Ore., White Leghorns, 425 eggs.
G. M. Brown, Los Angeles, Cal., R. I. Reds, 425 eggs.
D. Tancred, Kent, Wash., White Leghorns, 419 eggs.
K. Hammerbacher, Grants Pass, White Leghorns, 419 eggs.
Oregon Agricultural college, Corvallis, Ore., Barred Rocks, 418 eggs.
Carl O. Engel, Seattle, Wash., White Leghorns, 414 eggs.
Charles Hudson, Escandido, Cal., White Leghorns, 414 eggs.
W. C. Thurlow, Fairview, Ore., White Leghorns, 414 eggs.
Mrs. T. M. Dennis, Wenatchee, Wash., Sal. Faverolles, 414 eggs.

The highest individual record to date was made by a Rhode Island hen owned by Abercrombie & Witbeck, Victoria, B. C., 142 eggs; second, Paul B. Towne, Tekoa, 141; third, P. W. Harries, Seattle, Wash., 130; fourth, J. R. McRae, 129 eggs.

Caponize the Surplus Cockerels

A farmer's wife in Nebraska, according to T. E. Quinsenberry, has been clearing about $1000 a year on capons. There may be, or at any rate there should be, many others doing as well. It is really a business that can best be done on the general farm where there is plenty of range for the fowls and food is compartively cheap. The special poultryman on limited ground, who has to buy all his feed, usually hatches his chickens early and sells the cockerels as broilers early in the spring when broiler prices are high. That is the best plan for him. But on the farm there are usually many late hatched chickens, too late for the early broiler market, and with the cost of keeping them comparatively cheap, a good way of handling the surplus cockerels is to caponize them and keep them till winter and sell them as capons at a good price.

The great bulk of cockerels are marketed in the fall. They have then attained marketable size and they are rushed to market before cold weather comes to save housing room and to save feed. As a result there is a yearly slump in the price of chickens, and the farmers make little or nothing on them. Packers and storage men take advantage of the situation and fatten and store great numbers and hold them for higher prices, or until the farmer has no more to sell. It will not pay to keep them longer on the farm, because the price on cockerels does not rise. After he is a mature bird his meat is not good, not as good as the cold storage bird, because the cold stored article was put up when it was called spring chicken and the meat was as good as a broiler. The packer maintains this quality by storage and when the chicken is put on the market it has the spring chicken quality, possibly not as good, but better than the mature male that is then sold as a stag at a price per pound no higher than he could have been sold for in the fall as a "spring." The cockerel does not increase in price as he matures in the winter, but the capon does.

There is as much difference in quality of meat in a capon and an old rooster as between a prime beef animal and the uncastrated animal.

The farmer can beat the packer at furnishing good poultry meat in the winter by caponizing the cockerels. He doesn't need any cold storage house. He needs a cheap shed and some feed, and as they put on weight the capons will also increase in price. The capon will be much larger and will sell at a fancy price in the winter. This is one good way of preserving the food supply.

The operation of caponizing is simple. A few neighboring farmers who have surplus cockerels can join together and get a set of caponizing tools for two or three dollars and have a caponizing day. They can work together in marketing the capons in the winter and get the most out of them.

The caponizing is done when the cockerels are two or three pounds in weight, or before they begin to grow or develop combs. Any breed may be used, but it will hardly pay to caponize the Leghorns or other small breeds.

Under certain conditions the poultry department of the Oregon Agricultural college will give free demonstrations, showing how the operation is performed. Other states will also furnish necessary information about the work.

Let us have more real chicken meat—capons.

J. D.

88 Bu. Oats Per Acre

Mr. A. Taylor writes: "I had 315 acres in oats that averaged 88 bushels an acre, 30 acres in wheat that averaged 50 bushels an acre, 20 acres in barley that averaged 50 bushels an acre." This is only one of thousands of good reports from Western Canada. Yet nowhere can you buy good farm land at such low cost as along the Canadian Northern Ry.

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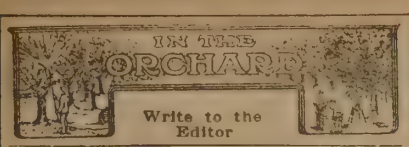
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GRANVILLE LOWTHER
Editorial Contributor

A Home Fruit Drier

Inquiry is made by H. R. Roberson, Centralia, Wash., about a fruit drier. Mr. Roberson says, "There is promise of a big fruit crop, and as sugar is so high and fruit jars going up the thought came to me, why not dry it? Then, the question of a drier presented itself and I will ask you for plans for a small family drier. I have an old sheetiron box heater that I could use for the heating. Will you kindly furnish plans and an estimate of the material needed for its construction?"

It is difficult to suit a particular kind of drier to a certain style of heater, without first seeing the heater. But from the description given I would say build a galvanized iron drier all around the heater, except immediately in front where the fuel is put in and the ashes taken out. My reason for this is to get as much heat radiated from the heater as possible, and in order to do this, all the radiating surface possible should be utilized. Perhaps I should except also the pipe for the escape of the smoke; but it is possible even to utilize the heat from the pipe.

The drier then, as I think I would build it, is a square galvanized iron box, into which is set a sheet iron heater. The legfis of the stove stand on the bottom of the drier. The bottom of the stove radiates heat, which is reflected back into the drying space. By this means all the fuel used is utilized, and all the heat conserved, except the little lost through the smoke escape, and that at the front end where the wood is put in. On either side of the stove and between that and the walls of the drier, is a space of several inches, say one foot. If your stove is two feet wide, your drier would in that case be four feet wide.

Equipment Needed.

The next thing is a system of several trays, the first one far enough above the stove, so that the fruit will not burn. Then the trays are set one above another until you have as many trays as you desire, or until the top one is as high as it is convenient for one who is standing on the ground to reach. These trays are made of wire, placed in square frames, the size of the inside of the drier. The wire should be strong enough, and closely enough woven to hold the apples, at the same time to admit a circulation of air. There should be an opening at the top, for an escape of air. It could be regulated by a thermostat, similar to that used on egg incubators, but larger, which, when the mercury reaches a certain temperature, would raise a valve, but when a cooler temperature is reached, will allow it to despend until it rests on the top of the drier. This is a useful, simple device, and not expensive.

The main equipments, after the heating and drying apparatus are provided, are a paring table, hand parer and slicer. G. L.

In a Class by Itself.

By T. O. GREENE, Juliaetta, Idaho.

How long will a Delicious apple keep —and still be delicious to the taste?

On June 4—just one month before the Fourth of July—the writer had in his cellar at Juliaetta, Idaho, several perfect specimens of Delicious apples that are in excellent condition still — in shape, firmness and favor. The week before this sketch was written a dozen of these apples were distributed among my friends, each of whom declared they were "perfectly delicious."

When a boy, living in the Ozark country—made famous a few years ago by Harold Bell Wright in his matchless story, "The Shepherd of the Hills" —I saw a peck of large, luscious, juicy peaches that had been awarded first prize at a local fair put up and sold at public auction to the highest bidder—the proceeds going to charitable purposes—specimens of which sold as high as $1.60 each!

I should like to see a box of Delicious apples—like those I now have in my cellar—put up and sold by auction to the highest bidder at some big Fourth of July celebration, the proceeds to be given to the Red Cross work.

After one has eaten a thoroughly matured, sun-kissed Delicious apple, with its spicy, aromatic flavor that leaves in the mouth a lingering longing for more—one can scarcely blame Eve for having been tempted by the apples of the "forbidden tree" that grew in the garden of Eden.

Grimes Golden Pippin is indeed a "pippin"; the Seek-No-Further is good enough; the Yellow Bell Flower, with its clinging juiciness, is enough to make the most pronounced epicure turn green with envy—but the Delicious apple is in a class by itself—it is unique.

Idaho Apple Orchards

By E. F. STEPHENS, Nampa, Idaho.

Apple orchards now coming into full bloom illustrate very forcibly the merits and demerits of different methods of pruning. Some orchardists prune in vase form, opening out the center of tree and removing the lower outside branches. Advocates of this system are likely to remove cross branches and interior twigs, fearing the fruit borne thereby may lack color. Heavy laden branches bend outward. Interior of trees in our sunny climate get plenty of sunlight. Many pruners remove lower limbs because they interfere somewhat with cultivation.

The Stephens Orchard company desires the largest possible returns the first 12 years. It planned for fruit from the sixth season on and expects to double the crop, having planted 16x28 feet—96 trees per acre, instead of 48.

Fruit as a result is expected on the lower limbs and the interior small branches and the fruit spurs will carry on main branches.

On seven-year trees standing 12 to 15 feet in height three-quarters of the apples at picking time will be in reach of the pickers standing on the ground. As an illustration I may mention that in 1915 from one Stayman Winesap tree, planted seven years and six months, 1800 orchard run boxes of apples were picked. The same season from one Winesap tree, five years and six months planted, 10 boxes of orchard run apples were picked.

Apple orchards are in Idaho now coming into full bloom. It is easy now to judge of the merits of different methods of pruning. The Stephens Orchard company plan to secure two and one-half times the fruit grown in many orchards of similar age.

The public is invited to visit and view the Stephens orchards of Nampa, Idaho.

Control of Aphis.

Frank H. Lathrop of South Carolina has been appointed research assistant in entomology at the Oregon Agricultural college experiment station.

Mr. Lathrop will work toward a more effective control of aphis in Oregon orchards. He graduated from the Clemson Agricultural college, South Carolina, and took the master's degree at the Ohio state university, where he served as graduate assistant and research fellow in entomology and zoology, and also at the South Carolina and New York experiment stations.

Lacks Development

A letter from J. Kocar, Hingham, Montana, says: "Will you kindly tell me why my rhubarb plants bloom almost immediately after the leaves come up and the leaves are very short. What should I do for them?"

I could not tell with certainty without seeing the plants. Even then I might fail to find the real cause. However, I have a suspicion that the plant for some reason is starving. The cause of lack of food may be any one of several things.

First—Some insect may be destroying the root feeders. This is not probable, inasmuch as rhubarb is not much subject to attack from insects.

Second—There may be unfavorable soil conditions, such as too much alkali; but this is not probable, because in that case the leaves would be yellow.

Third—The probability is that the plants need manure. Rhubarb is a very heavy feeder; it requires more manure for its best development than almost any other plant, except asparagus.

At this distance, I could only say loosen up the soil about it, put on a heavy coating of manure, and repeat the process every year. If that does not work, I would transplant to another place, for there may be a soil condition unfavorable. It may be what is called "scab," or it may be "adobe" or alkali. G. L.



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Pasco Opens Its Union Stock Yards

(Continued from page five.)

within 100 miles being represented. There were also some present from Montana.

E. F. Benson of Olympia acted as toastmaster. He gave a short history of the enterprise and their hopes for the future, emphasizing the necessity of raising more live stock. Though some were advocating passing a law prohibiting the killing of female stock under certain age, he considered such a law too radical, as there were many cows, not fit for breeders, which, if kept, would be kept at a loss and be a detriment to the breed. All such should be slaughtered, but all good females should be kept.

F. M. Lowden Jr. of Walla Walla extended congratulations of Walla Walla to Pasco.

Samuel Glasgow of Spokane commended the activity of Manager Hale and Secretary Cox in pushing the stockyards enterprise to a finish.

Spokane Yards Lend a Hand.

John H. Roberts of the Union stockyards of Spokane said he had come down to learn, and to extend a glad hand. He recommended working up community shipments, having two or three growers make up a carload and all thereby secure the advantages of carload rates and service.

$2.50 per acre, on 10 years' time. It was cheaper than homesteading. You could now transport freight on an average one ton a mile for 1 cent, for less than you could write a letter of inquiry about it.

The railroads were a bureau of information. He said he had received a letter of inquiry as to where a man could purchase a load of timothy hay, and 50 other transportation agents had received the same letter. It was their business to serve and they would do it to the best of their ability. He concluded with the admonition: "Keep your eye on Pasco."

Mrs. J. B. Crain of Pasco congratulated the men of Pasco on their new enterprise. Her earlier life she had spent in Omaha, Neb., and she described the first stockyards there, their struggles at first, how the packers one after another came in and the wonderful change it brought about. She considered the stockyards one of the big milestones in Pasco's success.

Commission Man's Side.

G. G. Barton of Barton Brothers, Seattle, spoke on the commission broker, he considered him a necessity. He spoke of their trouble having to consider the seller, the buyer and themselves.

He believed to get the most out of live stock with the shortest delay and least expense, the commission man



Some of the sheep offered at Pasco opening day.

Thomas Carstens of Tacoma said he took a great deal of interest in the stockyards because he thought it would increase the live stock business in the northwest. He said if he could he would like to buy all his live stock from the four northwest states, but lately he was compelled to go to California for some. He had shipped in 15 cars and had 19 cars on the way. Out of a shipment of 250 head, 50 had been condemned on account of tuberculosis, while on cattle bought in the northwest, the percentage of affected cattle had not exceeded one-half of 1 per cent.

He considered this the most profitable time to get into the stock business. He said that when the war is over the price of grain will drop and demand for stock will be greater than ever.

The Railroad Viewpoint.

S. B. Calderhead, Northern Pacific district agent, of Walla Walla, said even the railroad man had his troubles. He believed the railroad people had done more to build up the country than any other class, and that they were more abused and less understood. He spoke of a time when all live stock was slaughtered in the east, 60,000 head being loaded at one small town in Kansas, all bound for Chicago, the market was glutted and everybody lost money. He spoke of the first transcontinental line, built to the Coast. At the time it was believed to be the only line that would ever be built, that the country would never support more than one such line; now there were nine transcontinental lines. The railroads built the lines, then built up the country to support the lines. The railroads sold land at

should be a good judge of stock, keep well posted on all outside markets, know the kind of stock that went to the particular buyer, know his capacity for handling, and his supply on hand. If he were an honest, wide-awake man, he could place stock to make the seller more money than it would be possible for a stranger to get, or a man who was on the market only once in two or three months.

W. H. Kirkman of Walla Walla said that bees always go where the honey is; that Pasco has the alfalfa, the stock and the place of exchange, and need not worry about the buyers, for they would come.

E. M. Dy of Kennewick considered the stockyards a great benefit to Kennewick. He believed stimulating the live stock industry in that section would make alfalfa on an average worth $3 per ton more than without it. He said his firm alone had sold 10 tons of alfalfa seed this spring, which, when it is considered that it only takes from 10 to 15 pounds to plant an acre, indicates an immense acreage.

F. J. Pingry of Burbank, Wash., said the Burbank people would have at least 3000 tons of alfalfa hay this year. He said he considered the stockyards a great thing for their community.

Mrs. V. B. Cox of Pasco said Mr. Benson was too modest to take any of the credit for their success. She described Pasco as a great big octopus, reaching out in every direction and grabbing every good man they could get and putting him to work. She spoke of Mr. Benson and a number of others who had been drafted and they had all made good.



Every Sack of Wheat a Soldier of Defense.

DON'T LET FIRE Rob You of Your Grain

A HUNGRY world is looking this way for food. Here in the northwest we produce one-twelfth of the wheat of the United States.

In our great national crisis it is a hundred times more essential than ever before that every pound of grain be delivered for food.

Fire is one of the greatest enemies of the wheat grower. Hundreds of thousands of bushels of wheat have gone up in smoke in the Inland Empire. For the sake of starving people it must not be so this year.

Protect Your Wheat

It is a patriotic duty to America—it is in the interest of world-wide humanity.

You need insurance against fire—of course. That is your personal protection. But insurance will not feed the hundreds of thousands that are awaiting bread from your wheat fields. Your insurance will not save the lives of those dependent upon America for food.

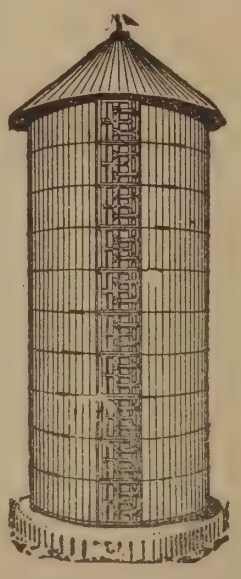
Take every precaution to battle fire in your own fields and warehouses. Let us help you. Write us today for our latest literature on the prevention of Grain Fires. This may save your wheat, your property. It points the way to **safety.**

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McGoldrick Lumber Co., Spokane, Wash.

Please mail me your 1917 silo catalogue.

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West Side Dairymen Band Together

Strong Organizations Forming to Command Better Prices

(Continued from page five.)

the Skagit association, and read and explained the contract in force with its members. One of the first tangible results of the organizing of the milk producers, according to Mr. Hall, was a reduction in hauling prices. These had been 8, 10 and 12 cents, according to the distance from the condensery. They were speedily reduced to 5, 8 and 10 cents. The condensery people offered, moreover, to let the association choose its own testers and weighers, while continuing to pay them their salaries as before. The biggest victory of all, however, according to Secretary Hall, was the securing of a price of $2.50 a hundred to be paid at Mount Vernon by at least one of the condenseries, beginning Monday, June 25. This Mr. Hall believed to be the direct result of associated effort.

The main features of the Skagit contract, as described by the secretary, are the clauses binding all members to market through the association during the period of their membership, or pay a forfeit of $10 for each cow signed up with the organization. If a dairyman owns two farms, he can run one under the wing of the association and maintain the other as an independent plant, if he so desires. Contracts can be canceled on the 1st of February, any year, by giving 30 days' notice. Unless so canceled, the contract is continuous and runs on from year to year.

According to the best legal opinion obtainable, this Skagit contract is without a flaw. During the recent session of the state grange at Wenatchee it was given the official endorsement of that body.

Mr. Hall concluded by stating that the establishment of the new federal condensery at Mount Vernon, securing to dairymen in that territory the benefits of competitive buying of milk, was largely due to the organization of the big association.

By a rising vote, taken just before adjournment and after the departure of the Skagit county men, the Whatcom county organization went on record as favoring reorganization along lines similar to those adopted in the county to the south, so that the linking up of the two associations, which is foreseen as a necessary step in securing a state-wide producing and selling body, will be as simple as possible.

Look at Prices Now and Before.

John Leander of Skagit county is a member of the association and one of its enthusiastic supporters.

"Look at the price we're getting for milk now and compare it with what we got before our association was organized," says Mr. Leander. "That tells me all I want to know. No, there hasn't been any money in dairy farming until recently. We have an 83-ton silo, which we filled last year from six acres of vetch and oats. The cold spring this year has held the pasture back, and lately we've had to cut green feed to help out with."

Mr. Leander was in the live stock business in Kansas until he came to Washington. He believes there is more money in his former line than in the kind of farming he is now doing, or at any rate that farming here on the Coast must be conducted on entirely different principles than in the central west.

Always Sold Milk Through Same Plant

Thomas A. Lockhart of Mount Vernon is proud of his record as one of the old patrons of the "big condensery." The number which he was first given has never been changed, for he has always sold milk through the same plant. Mr. Lockhart is frankly waiting for more light on the matter of the dairymen's association.

"I don't know just how it will work out," he confesses. "It ought to be a good thing—a lot of men ought to be able to work together better than one man can work by himself. Yes, I think the new condensery is a good thing for all of us. The people back of these concerns are only human, and they need plenty of competition in order to make them consider the other fellow."

Mr. Lockhart's principal point of doubt as to the working of the association is suggested by the fact that there is a limit beyond which prices for raw milk can not be forced.

"It's a different matter from supplying the needs of a big city, for instance," he points out. "The city must be supplied from a territory within a certain distance of its borders, while the market for canned milk can be supplied by milk produced anywhere—once it is put up in cans, it can be shipped around the earth. There hasn't been much profit in dairy farming for a long time past, but the increase will have to come from more than one direction. Silage will help—I have a 45-foot silo on my farm, and have tried out vetch, oats and clover, in addition to corn."

Does Not See Wholesale Remedy.

John Kamb of Skagit county belongs to both the Skagit County Dairymen's association and the local testing association. In spite of this fact, however, he is not convinced that to the associations belongs all the credit of somewhat improved marketing conditions.

"Prices are higher, all the way around," Mr. Kamb points out. "The test of the value of the association is still to come. One thing is certain—there has been no money in dairy farming for a long time past. If a man hires his milking done, as I do, he can't much more than come out even at the end of the year. Home-raised feed? Sure, we raise everything we feed right here on the place. But how does that help? If I sold the feed I'd get the market price for it, wouldn't I? And if I can make as much and perhaps more by selling my hay and grain, what is the use of my keeping cows? No, I've got no quarrel with the condensers; they've done something for this country—but at the same time, the farmers of this country have done a lot for the condensers. It's a big problem, and I don't believe any remedy will be found that will correct all of our troubles all at once."

Association Is Vital Factor.

E. Maupin of Whatcom county believes the dairymen's association is a vital factor in profitable dairy farming. Marketing rather than production, in Mr. Maupin's opinion, is the keynote to better farming conditions. He illustrates this by citing his experience in selling potatoes this season.

"I sold lots of them at $50 a ton," he comments, "but I can't tell you why they should have brought any such price. Yes, a minimum price guaranteed by the government would certainly help the farmer, and probably the consumer; there would be a good profit in potatoes at $25 a ton or even less, and if the producer could be sure he would receive at least this much, there would probably be plenty of potatoes raised every year."

Mr. Maupin is one of the well-informed men in his community. He spends upward of $25 a year for periodical reading matter and keeps track not only of straight farming articles, but of such things as the speeches and activities of our new food "dictator," Hoover.

Washington State Fair

According to the premium list of the Washington state fair which will be held at North Yakima September 17-22 inclusive, arrangements have been perfected with the railroad companies of the country whereby all live stock (except race horses) and articles for exhibition which have paid full tariff rates to the fair will be returned to the point of origin free. This arrangement is national in its scope and holds good on any railroad line

Where full tariff rates have been paid one way on articles of a perishable nature, such as green fruit, vegetables, etc., the amount so paid will be refunded upon presentation of and surrender to the railroad agent of the original expense bill and a certificate from the secretary that such goods have become useless and unsalable.

Passenger rates to the Washington state fair will be one and one-third fare for the round trip and by special agreement this year, both the Oregon-Washington Railroad & Navigation company and the Northern Pacific Railway company, the two lines entering North Yakima, will open the sale of these special tickets Saturday preceding the fair, instead of Sunday, as formerly.

Entries may be made with the secretary either by mail or in person any time after July 1. They should be made on regular entry blanks furnished free on application to the Washington state fair, and sent in as early as possible so that space may be allotted and tags made ready for exhibitor.

3. Entries close as follows:

Monday, September 3, for live stock department.

Thursday, September 13, for poultry department.

Saturday, September 15, for all other departments.

Information regarding the state fair will be gladly furnished by Frank Meredith, secretary and manager, North Yakima, Wash.

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SPERRY FLOUR CO.

Buy Sperry Quality Cereals. They Come in Red Packages.

Read Your History As It Happens

Do you realize that the days we are living through now are among the most momentous in the history of the world? Our country is making preparations for war on such a gigantic scale that the effects are felt in every home throughout the land. Our sons and brothers will soon be marching in the military encampments. In a few months they may be fighting a ruthless foe in foreign trenches, while our sisters and daughters are nursing wounded soldiers of France, Belgium, England and America. It is your duty, it is your opportunity to keep yourself and your family thoroughly in touch with these world-quaking, home-shaking events. Do not stop your ears to the call of the bugle. Do not shut your eyes to the glare of the campfire. The whole panorama of our modern history as it unfolds is faithfully reported by

The Twice-a-Week Spokesman-Review

This is a splendid semi-weekly home newspaper which brings you every Tuesday and Friday a complete, accurate, condensed review of local, national and world events.. It gives you a reliable narrative of history in the making. Being a member of the Associated Press, the important happenings are flashed to it instantly from every capital and village, and from every far-flung battle line where the history of our day is being set down in ink and blood.

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Enclosed find $2 in payment for three-year subscription to The Washington Farmer, and one-year subscription to the Twice-a-Week Spokesman-Review.
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Northwest Stock Show

Promises to Be Biggest Ever at Lewiston

The following is an official notice in part, sent out by Secretary Paul Clagstone of the Northwest Live Stock Show:

Stockmen of the Northwset: Our annual show has now obtained the backing of the state of Idaho, not only financially, but from an official standpoint.

On April 15 Governor Alexander said, in part: "The live stock interests of the northwest will probably be represented at Lewiston as never before in the intermountain country * * * I also suggest that you take up the matter of special train service between Lewiston and Boise, so that the people of this section will be enabled to go north and see the finest exhibit of live stock that could be assembled at any one point."

This support, and other factors, will undoubtedly make the coming show the greatest ever held in the northwest.

There are many promising things for the exhibitor in the revised premium list of the association. More money is offered than ever before, the carload lots have been restored and strengthened as compared with former years. In horses, cattle, sheep and swine there have been revisions, additions and new and attractive classifications that will make the show a much better one for every exhibitor, will distribute the money more widely and more evenly and will make it easier to handle the judging of the various classes. To illustrate the various changes a number of the more important will be cited in connection with each kind of live stock.

Horses.

For several years the horsemen have desired a stronger classification for draft horses. There has been no lot for 4-year-old stallions, and the 3-year-old horses, both stallions and mares, have had to show against the older and more mature horses at a decided disadvantage. The new classification provides for both 3 and 4 year old and older classes for both stallions and mares.

In the 1916 premium list there were awards for junior champion and senior champion stallions and mares. This year the additional awards of grand champion will be made. Instead of the award for what was called the best showing, the new premium list will carry awards for get of sire and for produce of dam. The northwestern states are breeding good horses and will breed more in future years. The prizes for get of sire and for produce of dam, therefore, look to efficiency in breeding and encourage a feature that is most important of all.

All of the above changes will apply to the Percherons, Shires, Clydesdales and Belgians. In the grade horses a new prize award is for mare with colt under 1 year, the colt to count 75 per cent and the mare 25 per cent. This prize is aimed to encourage the breeding of grade horses of the finest possible type.

Beef Cattle.

The beef cattle classification was standardized two years ago, or in other words made the same as is carried in the premium list of the Western National at Denver, the International at Chicago and other old and well established live stock exhibitions. There will be two announcements in the new premium list that will please beef cattle men. The first one is that for the first time a full classification is offered for the Aberdeen Angus breed, one of the really great beef breeds of cattle. This announcement will, it is thought, insure a splendid showing of black cattle at Lewiston next November. The Hereford Breeders' association is not only adding heavily to the premium money, as usual, but is preparing to officially conduct a sale during the show. The same is true of the Shorthorn association. As always, the Northwest Live Stock association will hold a series of great auction sales during the latter days of the show.

Dairy Cattle.

The dairy classification has been quite strong and remains the same for the coming year.

Swine.

Exhibitors of swine have always had to contend with a limited classification which compelled them to show aged and yearling boars and aged and yearling sows in the same lots. It was unsatisfactory for the exhibitor and hard for the judge to render a decision satisfactory to himself and the exhibitor. This situation has been met by adding four additional lots to each breed classification. The new lots will be for aged boar or boar two years and older, senior yearling boar, aged sow and senior yearling sow. In each case four awards, or first, second, third and fourth, will be made.

Sheep.

The provision for the sheepmen includes a classification the same as offered at the International at Chicago. The prizes are, of course, not so many nor quite so large, but even in amount the comparison is more favorable than one might think.

The classification has been standardized and the entire list of prizes strengthened by the following changes: A prize for year-old ewe is no longer offered, since the most progressive shows have eliminated this division, holding that the place for the 2-year-old ewe is at home as an active member of the breeding flock. The old prize list made no provision for flocks. The new list will take care of flock, offering the same classification in this respect as is offered at the International. There will be two groups prizes, one for flock to consist of one ram 1 year old or over, two yearling ewes and two ewe lambs. The other group is for four lambs of either sex bred by the exhibitor.

These changes will be made for each breed and the following six breeds will be recognized: Shropshire, Hamspsire, Oxford, Lincoln, Cotswold and Rambouillet.

Utility Classes.

Farmers and feeders can make big money this year by exhibiting carlots of cattle, sheep or hogs, as the premiums run into many hundreds in these classes, and winners sell at auction for fancy prices.

Yours for the best show ever held in the west,

PAUL CLAGSTONE, Secretary.

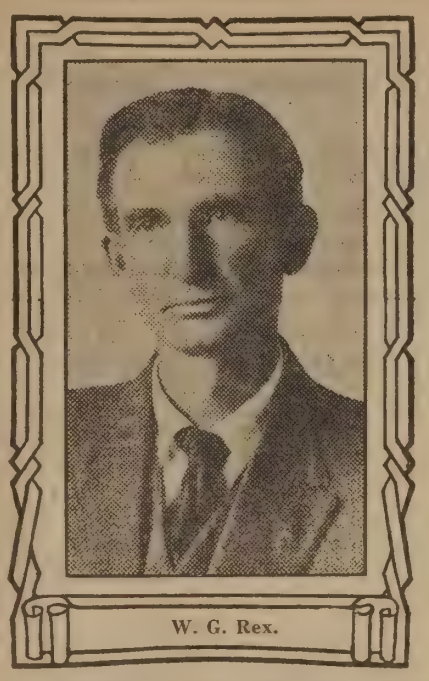
To Irrigate 2600 Acres.

The Cline irrigation district election, which was held June 23, carried by a large majority. This district, which is being formed and organized under the provisions of the state laws regarding agricultural improvement districts, and proposes to irrigate about 2600 acres on what is known as the Old Town prairie at Dungeness, Wash. Most of this land is already under cultivation, but its producing power will be almost doubled by irrigation.

John Knoph, W. H. Cline and E. Peterson were elected directors.

County Agricultural Agent McWhorter has been actively assisting the farmers with the organization of the district.

Washington Portraits No. 22.



W. G. Rex.

On the 7th of July, 1886, there arrived in Sheltonville (now Shelton, Wash.) a dusty and road-worn young man with 10 cents in the pocket of his frayed trousers, a straw hat on his head, and a few carpenter's tools in his suitcase. His name was Rex, and after his triumphant entry into Shelton the newcomer worked at various occupations, from carpentry to logging, until he had accumulated a modest bank account. Now, after 10 years of pioneer farming and the building up of a modern home in the country, Mr. Rex admits the bank account is somewhat reduced; but he declares that the pioneer spirit which led him to leave the sandhills of his native New York and cross the continent has not lost its edge.

Speaking of his successes, Mr. Rex continues:

"I have been fairly successful in the chicken business and in raising potatoes, wheat, rye, oats, barley and vetch, and I think I have had a little more than ordinary success in raising corn. I am enthusiastic about the possibilities of corn in the Puget Sound country. My advice to both young and old is, if you have suitable land, raise corn. One little point which I have not seen published is about the seed corn patch. I raise Minnesota No. 13 and plant my seed patch separate from the main field, the hills two feet apart, thinning to two stalks to the hill, the rows three feet six inches apart. Before planting I broadcast and harrow in about 200 pounds per acre of superphosphate, testing not less than 15 per cent available phosphoric acid; also about 150 pounds dropped beside the hills at the first hoeing. As soon as the pollen begins to form on the tassels and the silks begin to appear, I go through the patch and remove all barren stalks and all weak ones. You can not afford to breed from scrub stock in cattle, so why do it with corn? I have raised good mature seed corn for the last three years, and have improved on the iriginal seed obtained from the Pullman Agricultural college."

The next in the series of Washington portraits will be that of F. Z. Flowers of Fairfield, and will be given in next week's issue of The Washington Farmer.

As to Harvest Labor.

To the Editor of thee Washington Farmer: I have read three of your papers and they all say a scarcity of labor, when it is not so. There are all kinds of men in all the towns, and the wheat section of the state can get them if they will treat them right and pay them the same wages that they get at other work for the same amount of work. But we want a decent place to sleep, not on the bare ground or out in the back yord with the dog or in the lot with the hogs. Now everything we use is 60 per cent higher and wages are only 10 to 25 per cent higher. The wheat farmer pays $35 to $45 per month for driving six or eight horses and the lumberman pays $75 to $125 per month for driving six or eight horses. If the wheat farmer would buy some modern machinery and use it he could make money. But let anybody with eyes go there and inspect the work on the average farm and you will find the ground half plowed, and the grain about half threshed, for I have seen whole heads hardly touched and about one third of the threshed grain in the chaff where a combine was used. You won't find floors in half of the barns, and only wheat chaff to feed the work stock on. I am a threshing machine expert myself and know what I am talking about. I am willing to go anywhere I can get fair wages and treatment, but under the same conditions that I have worked before it is the woods for me. It is a Godsend to all the laboring class that the state went dry. That is all the secret there is to the help problem. We save our money and are independent instead of slaves.

Anacortes, Wash.

R. D. FITZGERALD.

Steers Bring $100.15.

Two 3-year-old steers were sold by G. L. Moore, living two miles east of Bend, Ore., to O'Donnell Bros., for $100.15 each. The animals tipped the beam at practically the same weight, each shading 1450 pounds. They are of a mixed Shorthorn strain.

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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER XVII.

When the Indians Visited the Pioneers' Homes.

The farm my father selected in pioneer eastern Washington was close by the old Indian trails, which in early history were traveled by bands of redskins en route from the Columbia country north to the land of the Yakima tribes, 100 miles southwest.

The trails paralleled each other at intervals of a yard or so, and were more than a dozen in number. Where one curved they all curved. Uphill and down they went, direction being the only apparent consideration. The white man who lays out a road may go around a hill, instead of over it, finding it easier. But the Indian, as a rule, cares nothing about this, and many a white settler, pulling into the country for the first time has halted his tired team and called the Indians fools for running their blamed trails up the side of a near precipice, instead of going a mile or so around and keeping to the level.

You who have seen wild west shows, or have "followed the hounds" over high fences and other places requiring surefooted horses and a daring rider, may think you have mastered the scientific points of riding. Maybe you have. But the Indians of the bunchgrass plains can go you one better, and until you have seen such an Indian on a horse you are short in your conception of what it is to ride easily, gracefully, as if you were "grown to the saddle." "Grown to the saddle," or "riding like a centaur," are figures of speech so far as the white men are concerned—any white man, Buffalo Bill, Wild Goose Bill, all the other Bills, and any cowboy that ever lived. The white man simply can't do it. He hasn't it in his human frame to ride like an Indian, turn his hair to Indian hair, make his cheek bones high or his complexion coppery brown. These are Indian traits.

The Indians who rode by our home in the earlty days were old, middle-aged, youthful and on down to nursing babies, strapped to boards which swung by a buckskin loop to the cross pieces of a packsaddle. Occasionally they would come by arguing about something. The whole band would be talking, each at the top of his or her voice, and gesticulating. Most people have the idea that the Indian stalks around silently and full of meditation all the time. That is not exactly a correct notion. I have been in their camps when they were making more noise than a lot of crazy rooters at a ball game. They laugh, talk, sing songs of an unmusical, cackling kind, and play tricks on one another. At other times they are silent and uncommunicative, and never so much so as when a white man is trying to "pump" them for information about their family affairs, religion, traditions and so on.

Often they stopped singly or in bands of 20 to 40 at our place. When they did they almost invariably asked for one or more of three things—food, water or information concerning the road they were traveling. It was interesting to have them ask about the road, when the only road that led any place where they wanted to go was their own trails, which they and their ancestors had traveled long before Columbus crossed the Atlantic. When a white man runs out of something to talk about he resorts to the weather. An Indian resorts to the road.

Very often the squaws had moccasins, hair ropes and watermelons to sell. Young rattlesnakes with one rattle and a "button" were fairly numerous in the bunchgrass, and my mother feared to have me go barefooted, so she bought moccasins of the Indian women. These baby rattlers, by the way, were feared by the pioneers even more than the big ones. One rattle on the end of a snake's tail means it is a year old and a well developed "button" means it is beginning its second year. A rattle and a button do not make much noise, hence one might tread barefooted on the young rattler in spite of its warning. Again, their length was so short that they could easily conceal themselves in a bunch of grass, so I expect mother's fear that my bare feet might some day tread too close to a baby rattler was well founded. I doubt, however, if the moccasins would have been much protection, for they were quite thin.



A thing of beauty is a joy forever;
Its loveliness increases; it will never
Pass into nothingness.

—Keats.

We came to know one of the squaws quite well, and every spring when the weather began to warm up and Indians came riding by we would watch for her and her moccasins. She was huge and strong, weighing not less than 200, I think. She would come by, sell us some moccasins, ask for a drink, inquire about the road and then linger around wistfully. Mother knew she was hungry and would ask her to eat. The squaw ate whatever we had left over from the last meal—cold, fried bacon or ham or eggs or beef; cold boiled potatoes with their "jackets" on, in which case they were eaten jackets and all; left over pies, biscuits and canned or dried fruit. Once mother set before the squaw a big cocoanut cake that had been a failure; that is, it had "fell." It fell again, rapidly and to the last crumb when the big squaw got to it. I remember yet how her eyes shone when she waded into the cake.

Another time, we warmed up a pot half full of coffee, and the squaw drank it all, cup after cup, leaving only a little which she poured into a flask of the flat, circular bodied kind which were then used as containers of "Injun" whiskey. Could she have a little milk and sugar? Mother gave her some. What in the world was she going to do with a mixture of that kind? Replying by actions, instead of words, the squaw mixed the milk with the coffee and sugar, shook the flask, corked it, and slipped it inside her waist next to her ample bosom. This done, she informed us by signs, words, gutteral grunts and contortions of her big face that fast to the packsaddle and on a cream colored old pony which was sleepily eating bunchgrass down by the trails, was a papoose. Papoose heap hungry by and by! She would keep the milk, coffee and sugar in the ex-whisky bottle till it was warmed by contact with her breast, then feed the heap hungry papoose.

"How many papooses have you?" mother wanted to know.

The big squaw began counting on her fingers. At the seventh she stopped with look of puzzlement. Her numbers went no further.

An idea dawned. She held her huge, coppery palm within 12 or 18 inches of the floor and pointed to the old cream cayuse down by the trails. That was Papoose Number 1—counting them backward, of course. She held her hand six inches higher—Papoose Number 2! And so on, till with a proud smile she held her hand level with her own head, then six inches above, and a foot above it. Now you understand. Her papooses began with the one out by the trails and were about six inches apart to a height of one foot above her own head—a dozen or so, perhaps. She was a very proud mother!

Mother wanted to know about her husband; we had seen her year after year, always with no male escort. The squaw was puzzled. "Halo cumtux (no understand)," said she. Mother didn't know the Indian word for "husband." She tried "Boston man." The squaw shook her head very decidedly. Boston man meant nothing but "white man" to her. Mother had made a mistake. But finally the meaning of mother's questioning dawned upon her. She laughed till her huge sides shook.

"Cultus Injun," she explained cheerfully. "Heap no good—much firewater—see?" She showed the flat bodied flask which she was warming against her breast.

Now you have it. Her husband, or whatever such a man is called in the Siwash language, was a drunkard; and the nursing bottle for her latest offspring was one of his old "empties."

One day a handsome young Indian "buck" came by accompanied by a young squaw. The squaw, not out of her teens, I think, wore a brightly colored calica dress, which I suspect had been bartered for, ready-made, at a trading store. Her hair, of which she had a great quality, hung in two big braids down her back. On her head was a red silk handkerchief, and her ears were adorned with big copper rings. Her moccasins, richly beaded, followed the contour of an unusually small and shapely Indian foot inside.

The "Buck"—the pioneer's name for young Indian men—was mandsomely dressed according to the Indian standard. Beads done in artful designs were on his moccasins and buckskin trousers. His hat of the sombrero type was stiff, new and banded with a rattlesnake skin. He had a large, red silk handkerchief about his neck which was the counterpart of the handkerchief worn by the young woman.

They were in high spirits. Mother thought they were on a honeymoon; and since all the world loves lovers, she felt more cordially inclined than usual, and asked them into eat at our table.

They ate heartily and indiscriminately, chattering, giggling, and snickering at one another which corroborated our "newlywed" theory, but as it came to pass, we were somewhat mistaken.

Several days later one lone Indian came by, stopped, asked for food, water, inquired about the road—and wanted to know if other Indians had passed by! Mother told him of the young couple, and he was noticaeably interested.

This Indian was beaded, painted, and otherwise decorated; but he was old; and the general effect of his attempts at personal adornment was that of sticking an old rose with the petals falling into fresh water. One of our bachelor neighbors used to say, "Old age raises hell with good looks." Old age certainly had raised that very thing so far as the looks of this particular Indian were concerned. He was about the homeliest, most wrinkled up old Siwash I have ever seen, and to make matters worse he had a thin, stingy beard. He was the only Indian I had ever seen with whiskers. He wore a peaked black felt hat adorned in the peak with a long, curling feather which I am sure had at one time decorated the tail of a Plymouth Rock rooster. He wore the hat while he ate; and while he ate, the big, curling feather moved languidly back and forth, keeping motion with his slowly moving jaws.

He was hungry. The threshermen had just left us to move several miles across the prairie to the next "setting," so mother had an unusually large variety and quantity of leftovers, all of which she set before the aged Indian with the remark: "I'm just going to see if I can fill that old thing up."

The aged Indian ate slowly, appreciatively, stopping once to assure mother that she was a "heap skookum squaw" for feeding him so well. He ate a lot of cold cornmeal mush, a lot of leftover potatoes, half of a dried prune pie rather the worse for age and some baking powder biscuit. With the biscuits and potatoes he consumed a large quantity of butter so rancid that mother did not care to cook with it, but which the aged buck insisted was "skookum."

The worst was a pitcher half full of syrup which I set out for him, not noticing many flies had gotten into the pitcher, whose lid had been left ajar. Mother would have taken it away, but the Indian objected with many reproachful grunts, assuring mother that the syrup, as well as the butter, was "heap skookum."

He did not eat the flies. I watched him. He carefully pushed each one out of the syrup, being careful to waste no syrup as he did this; and when he was through with the syrup, flies lined one side of his plate at intervals of half an inch to an inch.

The Indian finally consumed the small end of a cold boiled ham, cleaning it to the very bone by gnawing it while he held the hambone in his hands. Finally, when the hambone was fairly polished with his gnawing, and two hours and a half of mastication and occasional rests had elapsed.

(Continued on page twenty-one)

Low Heels Cause Flat Feet

By DR. LEONARD KEENE HIRSHBERG,
A. B., M. A., M. D. (Johns Hopkins University).

The ban against high heels must be lifted. Recent discoveries and observations bear witness to the goodness, usefulness and good character of the much-maligned high heel, for it has been proved that flat feet or fallen arches are the result of a change in the center of gravity of the sufferer. That is to say, instead of the plumb-line of balance falling somewhere between the toes and the ball of the foot, as it should do, the center of equilibrium is shifted to the heels.



Dr. Hirshberg.

Why, then, do some persons, such as nurses, policemen, lettercarriers, soldiers and housekeepers become flat-footed in such numbers? The answer is to be found in the carriage, posture, indifference and relaxed attention to proper pose. This allows the weight of the body to fall upon the heels instead of the forward part of the foot near the toes.

Wherever the force of gravity pulls downward through the heels it tends to eliminate at least two of the natural arches of the foot. The sole of the foot becomes increasingly flat instead of like the architectural keystone or engineer's span.

Carelessness of Posture.

You can picture to yourself what the consequences might be if the spans of a cantilever bridge lost its arches. When the bow is relaxed after the arrow has sped on its way you have much the same spent power.

Flat feet or fallen arches evidently are caused by carelessness in carrying your own body weight as well as wearing low-heeled shoes. Obviously, they exert an influence to force the weight and center of gravity backward instead of forward toward the toes, where it belongs.

The lesson learned from these researches have already born fruit in many instances. By so simple a procedure as "walking on tip-toes" in going about your work and your walks, laughable as it may appear, you have a very ready means whereby this sometimes painful affection may be eliminated.

High Heels Aid.

High-heeled shoes play a most valuable role in this drama—tragedy to some—of flat-footedness. Since you can not literally, either in tip-toeing or toe-dancing, actually stand on your toes, it is really the groove or jointline just behind your toes which should receive the weight of your anatomy. Force exerted downward at this point will gradually, if maintained for several months, form new arches and spans across the "last breadth" and "size length" of the feet.

High-heeled shoes do this very thing; whereas flat, low-heeled shoes tend to the contrary, namely, to produce fallen arches.

When the muscles of the front of the legs are inclined to be relaxed, as they are when the heel is low and weight is pressed netherward through the heel, the tendons which aid in support of the arches gradually lose their grip. On the other hand, when the force and weight go through or near the toes, these tendons are made taut and strengthened. This improves the arches.

The old-time school teachers, who, to preserve silence, commanded their charges "to walk on tip-toes" or "to toe the mark," unwittingly prevented many fallen arches.

Any sensation of suffocation has to do with the lungs and breathing, not with the stomach. The burning sensation may come from excess of the natural acids that are present in healthy individuals, or to immobility of the stomach, high blood pressure and other things. It is not a characteristic symptom of any one particular disease.

All the World's a Stage, and All the Men and Women Merely Players

Like Headpiece of Old-Time Fighters



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Showing the new French trench helmet. With the added advantage of the visor down the soldier is protected from shrapnel and grenade fragments which it is hoped will cut down the casualties to a small percentage. Since the adoption of the steel helmet, few soldiers are disabled from head wounds.

Composer Dictating to His Arranger



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Showing the unconventional manner in which Earl Carroll (at piano), America's leading composer, works on the whistleable melodies for which the young Pittsburger is noted. He is shown with his arranger, Al Matthews, at work on his very latest musical comedy which will be shown on Broadway next season. Carroll is one of the few who can write the book, the lyrics and the music of a comedy.

Spanish Lose Constitutional Guarantees



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The Spanish government has decided to suspend the constitutional guarantees. Premier Dato took to the palace the decree authorizing the suspension to obtain the king's signature. Dispatches from Madrid give no special reason for this action. The picture shows Dato and King Alfonso.

Somewhere in France.



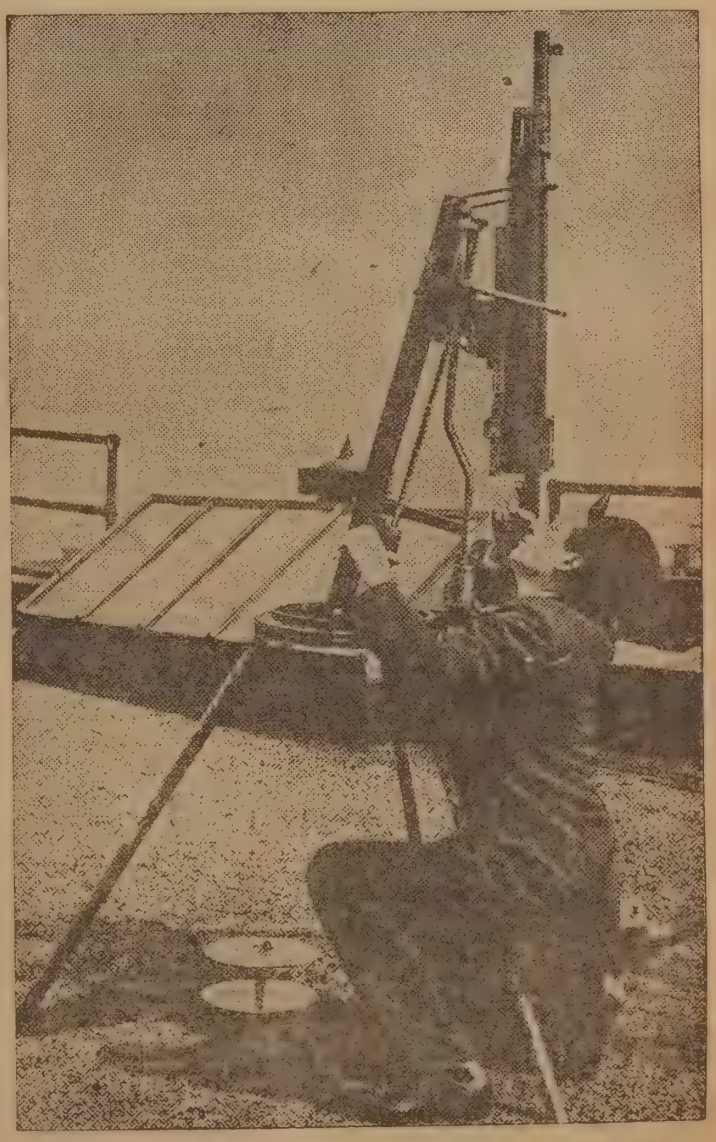
—St. Louis Republic.

"Don't Forget Me, Mister."



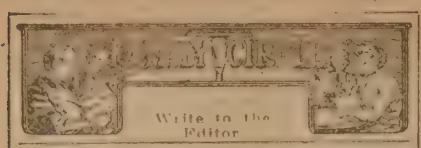
—New York Evening Mail.

New Type of Machine Gun Mount



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Willse M. Lawrence of Portland, Ore., inventor of the Lawrence machine gun mount, operating the mount carrying a Colt machine gun at 90 degrees. The mount will carry any machine gun used in the United States army and with its use an operator can work from a trench two or three feet below the gun.



ALICE W. BARLAND
Editorial Contributor

Women to Mobilize

Twenty Million to Do Service

This week and next, throughout the entire country, the national council of defense is conducting a campaign for the enlistment of an army of 20,000,000 women. The army is known as the United States food administration, and the enemy which it is being mobilized to attack is food waste. Every housewife in America is urged to enlist by signing the pledge that is being sent out, the wording of which is given on this page.

"Since food will decide the war, each American woman can do a real national service by protecting the food supply of the nation," says Herbert C. Hoover, national food controller, in issuing the council of defense's call for the great enrolment. "Ninety per cent of the food consumed in America passes through the hands of the women. In no other field do small things, when multiplied by our 100,000,000 people, count for so much.

Though not minimizing the necessity of curbing the activities of the food speculator and preventing hoarding of foodstuffs, both of which the government is determined to do, Controller Hoover lays stress on the actual shortage of food materials. He says:

"This is not alone a war question. The high prices which are being so hard on the poor and the more moderate wage-earners in this country are partially due to the shortage of supplies in the world's market and the saving in consumption and waste which can be made will lessen the prices to those of our own people which must be our first solicitude. In all of the arrangements which we plan to make during the forthcoming year for the supploy of our allies we will bear the first regard to our own people, that they shall have plenty, provided that they eat wisely and without waste."

Wants Complete Statistics.

Relative to the registration of the housewives of the country, Controller Hoover says in a formal statement:

"We not only want the name and address, but we want the number of persons in the household, we want to know whether the household employs a cook, whether it has a garden, and we want to know the occupation of the breadwinner. There are no fees or dues to be paid. The food administration wishes now to have as members all of those actually handling food in the home.

"On receipt of the pledge, we will send out preliminary instructions and a household tag to be hung in the window. The insignia of the food administration will consist of the national shield, surrounded by heads of wheat, and we hope to have the shield displayed on every home in the United States.

"With the assistance of various trained women in the country we are formulating committees on domestic economy, and from leaders on the subject of nutrition we are arranging committees on food conservation and utilization and we propose, with their advice, to furnish information from time to time to the members of the administration as to the manner in which they can best serve the national interests in food conservation. We have six general principles of instruction.

"First—To save the wheat. If we eat as usual from our harvest this year we will have little more than enough for our own supply, but we can divide with our allies if each individual makes some sacrifice; by eating at least one wheatless meal a day, substituting corn bread or other cereals.

Buy Less Meat—No Waste.

"Second—We want to save the meat, for our cattle and hogs are decreasing and we must send to our allies, so we wish every householder to buy less, to serve smaller portions and to allow no waste.

"Third—We wish to save the fats. We consume three times the fats that are necessary for nutrition and we need them now for war. We wish no butter used in cooking. We want less butter served on the table; we want less lard, bacon and other pork products used.

"Fourth—Any deficiencies in food supply, by economy along the above lines, can be amply covered by increasing the use of fish, potatoes, beans, peas, turnips, cabbages and vegetables generally, corn, buckwheat, rye and rice, which we will have in abundance this harvest.

Buy Home-Raised Products.

"Fifth—We want to save transportation. Our railways are unable to meet the war pressure for munitions, men and coal, so that we wish every one to consume products of local origin as far as possible, to buy from the local miller, the local packer, buy and eat vegetables grown near home.

"Sixth—We preach and want every one to preach the gospel of the 'clean plate,' to buy less foodstuffs; to serve smaller portions and to see that nothing of value goes into the garbage can.

"Aside from eating an increased proportion of these commodities in order to save on the staples it is extremely important that any surplus of these commodities shall be preserved or well stored for winter use."

The Pledge of Household Economy.

I am glad to join in the service of food conservation for our nation, and I hereby accept membership in the United States food administration, pledging myself to carry out the directions and the advice of the food administrator in the conduct of my household insofar as my circumstances permit.

To Clarify Fat.

Any uncooked fat, such as suet, the fat from chickens, and all superfluous beef fat, should be saved and clarified, according to the Kansas City Star. Cut the fat into small pieces, cover with cold water, and cook over a slow fire until the fat has melted and the water nearly evaporated. Then strain and press all the fat from the scraps. When cool remove the cake of hard fat, or, if soft, draw it to one side and let the water underneath run off. You may put with this fat any additional fat from soupstock, corned beef, dripping from roast beef, veal, fresh pork, or chicken; in fact, anything except the fat from mutton, turkey and smoked meat. If there is any sediment adhering add a little cold water, and after stirring well pour the water off, or skim the fat from the water. Place the fat in a pan over the fire, and when melted add one small raw potato cut into thin slices. Let it stand on the top of the stove or in the oven till it has stopped bubbling, and the brown and crisp scraps rise to the top. Strain through a fine strainer and keep in a cool place.

Boiling the fat causes the water in it to evaporate and the organic matters or impurities to be decomposed and deposited as sediment; the potato, owing to the power of absorption (being mostly starch and carbon), absorbs any odors or gases, collects the sediment, and thus cleanses the fat, very much as charcoal purifies water.

Crochet Boudoir Cap

By WINIFRED WORTH.

Every woman will appreciate this beautiful pattern. Makes an ideal gift for the young bride.

One ball pale blue No. 5

Eight medallions

1st row—Large medallions 2 ch. join. 27 t. in ring, join

2nd row—9 clusters with 5 ch. between.

3d row—7 ch. 1 dt. over ch. p. (4 ch. sl. st. to top of ch. 5 ch. sl. st. in same space 4 ch. sl. st.). 9 ch. 1 dc. over cluster of 2 in row. Repeat. Second medallion same as first. 7 ch. 1 t. in place of 9 ch. 1 dt. Small medallion same. Use 5 ch. 1 t. in last row.



Boudoir Cap.

Edge—1 dt. 3 ch. half t. catch on back of dt., repeat 3 times. 1 dc. in net. Repeat.

Use 1-4 yard fancy net for crown of cap.

What boudoir is without its slippers? This pattern would make a most acceptable gift for a bridal shower.

Use size 5 perle cotton.

Ch. 6 9 dt. in 1 ch. turn. 9 dt. in 1 of 9 dt. in st. Now catch with 1 dc. in 5 st. 9 dt (shells), in last st. turn. Add 1 shell to each row. Now continue until 9 shells are made in one row. Finish with p. edge. For draw strings make a ch. desired length. To make ball., ch. 5 join 7 t. in ring, join 14 dt. join and sl. st. all together.



Boudoir Slipper.



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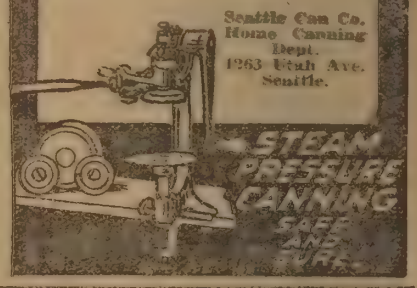
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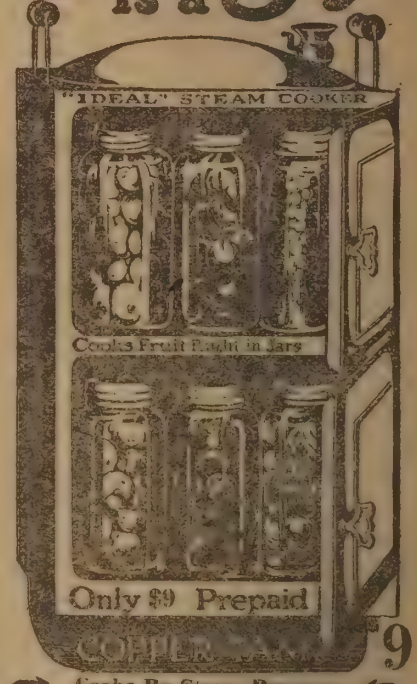
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Patterns

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2129—Girl's dress, with bolero. Cut in 4 sizes: 4, 6. 8 and 10 years. Size 8 requires 1 3-4 yards for the bolero and 1 1-4 yards for the dress, of 27-inch material. Price, 10 cents.

2117-2126—Lady's costume. Waist 2117 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 1 1-2 yards of 36-inch material for a 36-inch size. The skirt 2126 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires 3 yards of 44-inch material for a 24-inch size. The skirt measures about 2 5-8 yards at the foot. Two separate patterns, 10-cents for each pattern.

1270—Child's overalls. Cut in 4 sizes: 6, 8 and 10 years. It requires 2 1-8 yards of 36-inch material for a 6-year size. Price, 10 cents.

2099—Girl's play dress. Cut in 4 sizes, 2, 4, 6 and 8 years. It requires 1 7-8 yards of 27-inch material for a 4-year size. Price, 10 cents.

1963—Lady's apron. Cut in 4 sizes: 34, 38, 42 and 46 inches bust measure. Size 38 requires 5 1-4 yards of 36-inch material. Price, 10 cents.

9355—Sun bonnets for ladies and girls. Cut in one size, medium. It requires for No. 1 1 1-2 yards, and for No. 2 1 3-4 yards of 32-inch material. Price 10 cents.

2115—Ladies' "cover all" apron. Cut in four sizes: Small, medium, large and extra large. Size medium will require 5 3-4 yards of 36-inch material. Price 10 cents.

1853—Ladies' skirt. Cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 3 1-4 yards of 44-inch material for a 24-inch size. Price 10 cents.

2128—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. It requires 5 1-2 yards of 44-inch material for an 18-year size. The skirt measures about 2 3-4 yards at the foot, with plaits drawn out. Price 10 cents.

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Enclosed find ..... cents, for which send me the following patterns:

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BE SURE TO GIVE NUMBER AND SIZE.



Some Simple Dishes

To make Canadian war cake, take two cups of brown sugar, two cups hot water, two tablespoons lard, one package seedless raisins cut once, one tablespoon salt, one teaspoon cinnamon, one teaspoon cloves. Boil all these ingredients five minutes after they begin to bubble. When cold add one teaspoon soda, dissolved in one teaspoon hot water. Three cups flour. Bake forty-five minutes in a slow oven. This cake is better at the end of a week or even longer. It ripens as does all fruit cake.

Health Plum Pudding.

Two cupfuls graham flour mixed with a half teaspoon salt, half a teaspoon baking powder. Add a cupful broken nut meats of any kind, a cup full raisins, a cupful milk and a half a cup of molasses. Mix all thoroughly, butter a pudding mold, turn in the butter and boil, surrounding with hot water for three hours. Serve with hard sauce or any hot pudding sauce.

Cheese Muffers for Lunch.

Stale bread, grated cheese, butter, milk, eggs, salt. Butter slices of stale bread and cover with grated cheese. Cut the slices in halves and place in layers in a buttered baking dish. Season each layer with salt and dot with butter. To each pint of milk add too slightly beaten eggs. Pour milk over the bread and bake about one-half hour in a slow oven. This is a delicious luncheon dish.



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LITTLE COST—ACCOMMODATIONS range from best hotels to cottages and tent-houses. Sea foods abundant. PUREST MOUNTAIN WATER.

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Down through the Grand Canyon of the Columbia to the sea—paralleling the Columbia River Highway.

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Ask your local agent for excursion fares to Clatsop beach.

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DAISY FLY KILLER placed anywhere, attracts and kills all flies. Neat, clean, ornamental, convenient, cheap. Lasts all season. Made of metal, can't spill or tip over; will not soil or injure anything. Guaranteed effective. Sold by dealers, or 6 sent by express prepaid for $1.



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COOLNESS

There's nothing so cool as an oil stove for summer cooking. All the heat is concentrated on the cooking and not radiated about the kitchen.

Cooks everything any wood or coal range will cook, and cooks it better, because of the steady, evenly-distributed heat.

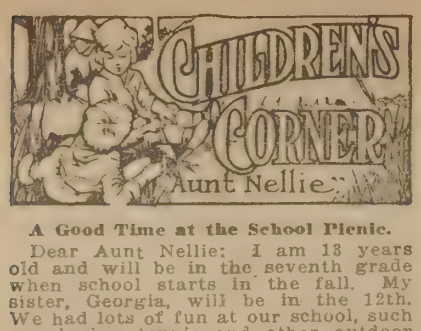
Use it all the year 'round—more convenient than a wood or coal stove, and more economical.

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In 1, 2, 3 and 4 burner sizes, with or without ovens. Also cabinet models. Ask your dealer today.

NEW PERFECTION OIL COOK-STOVE

STANDARD OIL COMPANY
(California)



A Good Time at the School Picnic.

Dear Aunt Nellie: I am 13 years old and will be in the seventh grade when school starts in the fall. My sister, Georgia, will be in the 12th. We had lots of fun at our school, such as playing tennis and other outdoor games. The boys have a gymnasium to play basket ball in winter time. The high school gives a play almost every year and the seventh, eighth, ninth, 10th and 11th and 12th grades are included in the chorus. My best friend's name is Vera Stambaugh. We have lots of fun together. A week before school was out the fifth, sixth, seventh and eighth grades had a picnic at Orange Blossom. Vera's father has the dray and took a load down in his truck. The first thing most of them did after they got there was to fish. The rest climbed hills. Edna, Vera, Nettie and I climbed the hills. We had bushels of fun and before we got back some more girls came up and we were going to run a race going down to see what bunch got to the road first. Some of us had bad luck. Edna, Nettie and I fell down, the other girls got down all right and beat us to the road. We had all kinds of good things for dinner. Coming back we sang songs on our way to town. As we went down through Main street we sang, too. The police looked at us cross, but it didn't affect us in the least. We were all very tired and were glad to get home.—Violet Cronn, Creston, Wash.

Sisters Come Home for the Summer.

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I am 11 years old and my eyes are blue. My hair is real dark. I am in the sixth grade. Miss Parker is my teacher. There are two girls in my class, another girl and myself. My subject is "On the Farm." I like the farm very well and would not trade with any city girl. I live on a farm of 320 acres. My father owns two farms. We live on the biggest one. The other one has 200 acres. The one we live on is called the Cumberland farm and the other is Paskaroo farm. We have lots of cows, horses, sheep and pigs. We have two dogs and two cats. My youngest brother has lots of pet rabbits. We put in a big vegetable garden every year. I have six sisters and three brothers. My two oldest sisters are married. I have two nephews. One is 5 and the other is 17 months old. Their names are Philip and Joe. My sisters come home and stay during the summer.—Nettie L. Johnson, Friday Harbor, Wash.

Florence Belongs to the Garden Club.

Dear Aunt Nellie: I thought I would write to you for the first time, after reading your letters in The Washington Farmer many times and enjoying them very much. Our school was out the 18th of May this year. My teacher's name was Miss Ada English. I like her very much. I was in the fourth grade, but I passed into the fifth grade. Our teacher's name next year is Miss Hilda Ham. I think she is very nice. Our school is Tualco district No. 7. We are out for a three and a half month vacation. I have joined the garden club and have planted my garden. I live on a farm of about 60 acres. We live three miles from Monroe. We raised sheep, cows, horses and chickens. We have two dogs, one brown and one black. My father is going to get an automobile. I take music lessons. My music teacher is Mrs. Donald Smith. I am 10 years old. My birthday is January 5. My brother, Theodore, had a birthday June 4.—Florence Frohning, box 16, R. F. D. 1, Monroe, Wash.

Blue Eyes and Light Brown Hair.

Dear Aunt Nellie: I have read almost all the letters and enjoy them very much. My sister, Mabel, wrote to the Corner, so I thought I would write, as her letter was in print. Our school was out May 17 and we had a program in the morning and then went to Jump-Off Lake. I am 12 years old and in the sixth grade at school. My birthday was September 23. I am five feet three inches tall and have blue eyes and light brown hair. Eva Wies of Cheney is as old as I and in the same grade at school. I am just one inch taller than she. I have 11 little chickens and a large flower garden and one calf. Papa gave me the calf for milking last summer. I would like to correspond with any of the cousins.—Lydia Ervin, Valley, Wash.

Cooks Dinner in Her Playhouse.

Dear Aunt Nellie: I am 11 years old and am small for my age. I am in the sixth grade. I have a quarter of a mile to go to school. I liked my teacher. His name is Mr. Watt. Our school was out the 9th of May. When school was out our teacher gave us some little souvenirs with his picture on it. I passed in the sixth grade. We are a great help to father and mother. My oldest sister is 15 and my youngest sister is 7. Minnie, my oldest sister, plays the fiddle and the guitar. I can make dinner, make the beds, clean house and bake. I can comb my own hair. My brother helps father with the horses. My youngest sister does many little things, such as carry in the wood, and she helps me a little, too. I have a little playhouse about 30 yards away from the house. I have a little stove in it to cook on. My brother and sister help me in the playhouse so I can get dinner. I can make a cake in the stove, too. The house has two rooms in it. Minnie helps mother cook when I am playing. We milk two cows and have three calves. We live on a 400-acre farm. We have an Overland car.—Gertrude Ruchest, Peola, Wash.

A Letter From Deweyville.

Dear Aunt Nellie: I haven't seen any letters from Deweyville, so I thought I would write. I live on a farm of 80 acres. We have six horses and one colt, two cows, eight pigs, 60 chickens and one dog. I have eight brothers and four sisters. My oldest brother is on a mission in Kansas. I am 11 years old. I will be 12 on the 17th of July. The other day my papa went out to the automobile shed; when he opened the door he saw a pine hen. He shut the door and caught it. We put it in a pen and in two days it laid an egg. We set the egg under a hen. We are going to see if it will hatch. I like to go to school. I am in the sixth grade. I hope to see my letter in the Corner.—Arlen Dewey, Deweyville, Utah.

Always Glad to Hear From Myrtle.

Dear Aunt Nellie: I like to read in the Children's Corner and have written to it many times before, but thought I would write again. I am 13 years old. My birthday is on the 11th of September. I live on a 480-acre farm, but we have some rented and altogether it makes 640 acres. There is a girl by the name of Josie Read that writes to the Children's Corner and she is just one year older than I. She didn't say what grade she was in, but I am in the eighth. Our school was just out last Friday. I don't know whether I got my diploma or not and will not know till about three weeks. I wish that Josie Read would write to me because I think she would be a very nice girl. I am also a country girl, living one and a half miles from Johnson. I have to milk a cow and sometimes two of them. I am going to put out my traps in about two or three days. I get 2 cents for every squirrel I catch.—Myrtle Sodorff, Box 62, Johnson, Wash.

Passed Into the Eighth Grade.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the children's letters. I live on a 40-acre farm and I am 11 years old and will be 12 August third. School ended May 18 over here, and I passed into the eighth grade. The school I attend is called Riverside. We have eight cows, two calves and two horses and about 40 chickens. We have three cats and their names are Mary, Lizzie and Johnny. The horses' names are Eva and Molly.—Blanche Haquist, Independence, Wash.

Cecelia Can Play on Her Violin.

Dear Aunt Nellie: My father takes The Washington Farmer. Every Thursday I go to the mail box to see if it is there. I enjoy reading the letters, and I think they are very nice. I have a flower garden. I planted bachelor buttons, poppies, pinks, sweet williams and calliopsis. I have a little violin and I can play on it a little bit. I am 13 years old. I wish some of the girls would write to me.—Cecelia Foy, 611 North Eighth street, North Yakima, Wash.

One of the Colts Is Alexander's.

Dear Aunt Nellie: I have never written to the Corner before. I am 13 years old and am in the seventh grade. My teacher's name is Mrs. Longfellow. We have 24 pupils in our room. We live on a 520-acre farm. We have 15 horses and five colts. One of the colts is mine. I also have six pet ducks. We have four cows and two calves. We have 150 spring chickens and 11 pigs.—Alexander Weitz, Box 51, Endicott, Wash.

Likes to Crochet and Tat.

Dear Aunt Nellie: I am a little girl 9 years old. I enjoy reading the Children's Corner and like the letters very much. I passed into the fifth grade. I can crochet, tat and I like to do them. —Laila Haquist, Independence, Wash.

Little Pet Pig's Name Is Dick.

Dear Aunt Nellie: I read the Children's Corner. I am 11 years old. My birthday is the 8th of April. I have a little pet pig. His name is Dick. Our school is closed for this season. We have 12 horses and six cows. I have no sisters or brothers. I have a pony named Bolly. I like to ride horseback. My best girl chums are Eunice Sweet, Arnetta Pittman and Ella Jarvis. We have a car, and it does not take us so long to go to town as it did before. —Rebecca Gullixson, R. F. D. 1, Tekoa, Wash.

Promoted to the Fifth Grade.

Dear Aunt Nellie: This is the first time I have written the Children's Corner. I am 9 years old and will be 10 years old in June. We have to go four miles to school. I was promoted to the fifth grade. I have five sisters. Their names are Marian, Lola, Carrie, Vivian and Della. My brother's name is Harry. We live on a 640-acre farm. There is 300 acres in crop. Our crop looks fine and the rest of our land is in pasture. We have one sweet little colt.—Hazel Covert, Delrio, Wash.

Lucelle Has Never Written Before.

Dear Aunt Nellie: I have never written to the Children's Corner before. I like to read the Children's Corner. I have two sisters and one brother and their names are Carmel, Lenora and Vern. I was 9 years old the 16th of last November. We have two cows and 25 hens. My name is Lucelle and I am in the fifth grade at school. My teacher's name is Mrs. Kelley. She is very nice. We live a half a mile from the schoolhouse.—Lucelle Pompella, Husum, Wash.

Hopes She Has Another Twin.

Dear Aunt Nellie: I read my first letter in the Corner and was glad to see it. I can crochet, tat and embroider. My birthday is August 25. I am 13 years old. Have I a twin? I have one twin who writes to me, and hope I have another one. We take The Washington Farmer, and I like to read the letters. We have a car now. Our school let out about one month. I would like for some of the other girls to write to me.—Ellen Purcell, Box 238, Pomeroy, Wash.

Jeannette Has Found Her Twin.

Dear Aunt Nellie: I enjoy reading the letters. I have found a twin. Her name is Pearl Smith. I am 11 years old and my birthday is the 19th of February. My health is poor so I have not been to school for a long time. I take music lessons and I am also learning to tat. I think spring is the nicest time of the year. I like to pick flowers and make gardens. I wish Pearl Smith would write to me.—Jeannette Van Dyk, Box 201, Oak Harbor, Wash.

Planted Lots of Things in His Garden.

Dear Aunt Nellie: I am 11 years old. I am in the sixth grade. I like to go to school. My teacher's name is Miss St. Clair. I like her very much. I have a garden of my own; I planted beans, cabbage, carrots, radishes and lettuce. I have three sisters and one brother. My sisters' names are Maxine, Martha and Dorothy. My brother's name is Albert. I live near Northport, Wash.—Cassius Franklin Orr, Northport, Wash.

Little Cousin Margarette Is Seven.

Dear Aunt Nellie: I am 7 years old. I am in the first grade. I have a pet pig. Her name is May. We have four calves. I have a sister and her name is Myra. She is 5 years old. We have 26 little chickens. We have apple blossoms on our trees. We have 12 horses. My best friends are Mary Fencetmacker and Eunice Sweet. My teacher's name is Miss Keinholz.—Margarette Gullixson, Tekoa, Wash.

Likes Arithmetic the Best of All.

Dear Aunt Nellie: We have taken The Washington Farmer for a long time. I like to read the Children's Corner. I am 14 years old and my birthday is on the 15th of February. Have I a twin? I am in the seventh grade at school. I like to work arithmetic better than any of my studies. Sometimes I help papa keep his bills. I would like to have Esther Carslin of Olalla write to me. I lived in Olalla when I was a baby, but I don't remember anybody there. We have a Ford automobile, in which we took a trip to Oregon last summer, which I will tell you about some time.—Rub Prather, Freeland, Wash.

Nina's First Letter to the Corner.

Dear Aunt Nellie: This is the firs time I have ever written to the Ch dren's Corner. I have thought of wri ing lots of times, but always forgot. am 12 years old and in the sixth grad at school. I like my teacher ver much. Her name is Miss Sumarlidaso I go to the Bush school on Bush pra rie. I live on a 149-acre farm. I hav two cats whose names are Tommy an Jimmy. I have one sister whose nam is Ruby. She is 11 years old and in the eighth grade at school. W have five cows and four calves an two horses and one colt. We have a auto and a piano. My sister is takin music lessons. I will write some oth time.—Nina Drunry, Tumwater, Was

Arthur Walks a Mile to School.

Dear Aunt Nellie: This is the firs time I have written to the Corner. have one sister and no brothers. M sister's name is Beatrice. She is i the fifth grade and I am in the fourt grade. We have five head of cattl I live on a 40-acre farm. We have dog that barks at every one that goe by. I walk a mile to school. Ther are 22 pupils in our room. My teach er is Miss Jones.—Arthur James Blaine, Wash.

Vena Is in the Third Grade.

Dear Aunt Nellie: I enjoy readin the Children's Corner very much. Thi is the first time I have written I am years old. We live on a 320-acre farm We have four pigs, 12 horses, six litt goslings, 10 big geese and two cows I like to go to school. I am in the thir grade. My teacher's name is Mis Shehan. I like her very much. I hav about a half a mile to walk to schoo I have two sisters and one brother.— Vena Henning, Thornton, Wash.

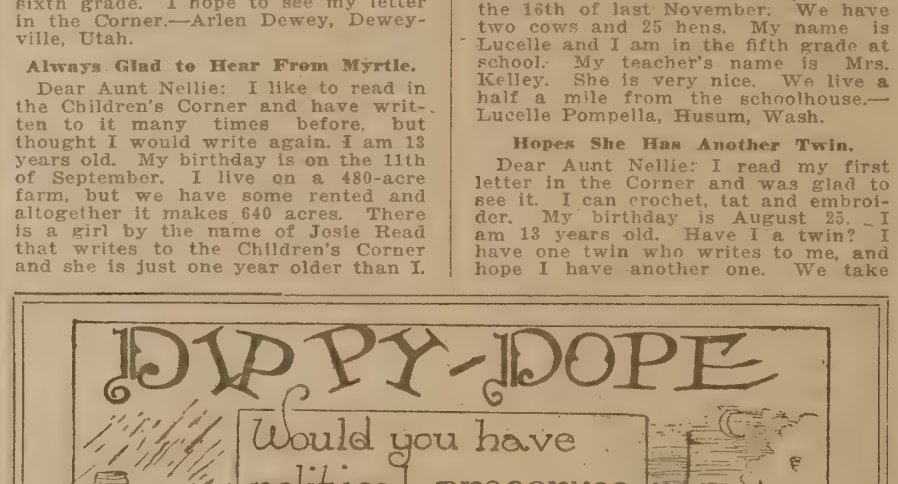
Glad When School Is Out.

Dear Aunt Nellie: My papa take The Farmer and I enjoy reading th other cousins' letters. This is my firs letter. I am 12 years old. My birthda was November 26. I live on a 40-acr farm. I have one sister. Her name i Olga. We have nine milch cows an five calves. We have two horses an three cats. I was glad when school le out. I will write again.—Gertrud Sande, Mount Vernon, Wash.

Ovey Helps to Irrigate.

Dear Aunt Nellie: This is the firs time I have written to the Children' Corner. I am 10 years old and am i the fourth grade. I live on a 60-acr farm. We have four horses two cow and three calves, one dog. His name i Rover, and a cat named Tom. I hav to help irrigate. We have about si dozen hens and over 200 little chicken and some pigs.—Ovey Van Horn, Sun nyside, Wash.

Aunt Nellie is glad to announce th receipt of letters for the Children' Corner from the following during th last week: Anna Entel, Eva Simmons Thelma Hendrickson, Beulah Todd Fern Mathena, Marie Gunderson, Addi Beckley, Esther Eastman, Viola Arigst Pearl Droullard, Lucy Jackson, Flor ence Spoolman, Clara Jackson, Hazel Casebery, Anna Budig, William Davis Smith, Jennie Van Wyke.



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European Plan
In the Center of Everything
Commercial and Stockmen's Headquarters
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Table d'Hote Dinner Daily, Merchants' Lunch 12 to 2. Rates, without Bath, $1.00 up, With Bath, $1.50 up.
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will teach piano, organ or vocal music surely and quickly. Sent postpaid with book of good music on receipt of $3.00. Descriptive circular on request.
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Sash, Doors, Millwork, Roofing, Hardware, Paints.
Let the Builder's House-service ...
... materials. Send your ... Boyd's low estimate or write ... building
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2210 Westlake Avenue, Seattle

Ups and Downs of a Bunch Grass Boy

(Continued from page sixteen.)

He arose to go, at peace with the world.

Sociably inclined after the huge meal, he lingered and talked. We learned why he was casually interested in the young squaw and the handsome young buck. The young woman was his wife! She was running away with a young Indian! The old Indian was on the trail.

"Heap ketch 'em,' he grunted contentedly.

"What will you do when you ketch em?" asked mother.

"Kick 'em!" was his placed response. "Heap-kick 'em."

Then he departed, assuring and reassuring mother that she was a heap skookum squaw.

It was three or four weeks later when the old Indian came by on the home trail, the rooster feather still in his hat. He was hungry again. His runaway wife was with him and she too was hungry. Mother asked them in and began to get out her leftovers.

"Is that your runaway squaw?" she asked the old Indian, desiring to start conversation.

The old fellow didn't know what "runaway squaw" meant, apparently. He shook his head sadly and bit deeply into a huge slice of bread dripping with sirup—in which no flies were present, this time.

But the young squaw knew the meaning of "runaway" all right. She giggled and showed her white teeth.

"Heap runaway—head ketched now—goin' back," she explained.

Mother eyed the wrinkled old Siwash in disgust. She couldn't get over the spoiled butter and sirup with flies in it.

"I don't blame you," she said. "Why don't you run away again?"

The handsome young squaw giggled again; then slyly confidentially, in a half whisper with a bright eye on her aged spouse whose face was buried in his plate, she said:

"Goin' to—heap runaway—no ketched next time."

Wild friends and wild foes visited the Bunchgrass boy and his mother that summer they were alone in their pioneer home. Next chapter tells of a thrilling experience with a mountain lion, which cost the life of their beloved big dog.

Giving the Bees Room

Many beekeepers make a serious mistake in failing to give their bees enough storage room on time. The addition of this room at just the right time for the storage of the season's crop of honey requires good judgment and an intimate knowledge of the nectar resources of the particular locality and season. Very few people realize that in many localities the entire season's crop of surplus honey is gathered and stored within a period of a few weeks. It is exceedingly important during these few weeks that the progress of the work in the supers be watched closely and additional room be given as rapidly as the bees can use it.

The usual procedure by the inexperienced beekeeper is to put on a super of 25 to 50 lbs. capacity during early spring and give the subject no further thought until late summer or autumn. If the super is found to be full of honey at that time it is removed and probably an empty one put in its place. In many cases this empty super is given long after there is any possibility of any further storage of honey during the season, and if comb-honey is being produced the sections and foundations are ruined for further use by being on the hives during a time when no honey is being stored.

During a poor season a single super for each colony may furnish an abundance of room for the storage of the entire crop of honey, but during a good season, if additional supers are not given as needed, the major portion of the crop is lost to the beekeeper simply from lack of storage space.

In comb-honey production the standard supers contain when filled only about 25 pounds of honey. During a rapid honey flow such as occurs some seasons, especially in the northern states, sufficient progress is frequently made in each newly added super to justify the addition of another every three or four days.

With such a honey flow several supers may be completely filled with honey before any of it is ripened and sealed, and the hive may have, therefore, as many as five or six supers at one time. Under such conditions, if the bees are compelled to ripen and seal the honey in the first super before a second one is given most of the possible honey crop is lost to the beekeeper, the bees being compelled either to swarm or to loaf during the height of the storing season. Such an abundant honey flow does not by any means occur every year, but when it does occur the beekeeper should be prepared to take full advantage of the opportunity.

Bees need so little attention during the greater portion of the year that it is difficult for the inexperienced beekeeper to realize that for the best results almost daily attention is needed during the few days or weeks known among beekeepers as the honey flow. A more complete discussion of this subject is given in Farmers' Bulletin No. 503, Comb Honey, which may be obtained on request from the United States departmnt of agriculture.

Mold Poisons Horses.

A. R. Hunter, the Percheron breeder of Island City, Ore., had the misfortune recently to lose seven head of his registered fillies and seven head of high grade horses. The pure brds are valued at an average of $500 each and the grades at about $125 each, so that Mr. Hunter suffered a loss of over $4000. Besides these he had 12 others sick, that were saved and now show no bad effects of the sickness. The trouble is pronounced by veterinarians to be a poison from eating a mold that was in the grass and stubble on which the horses were pastured.

H. A.

Grain Crop of Germany.

News comes from Germany that from the moment of the first ripening the entire grain crop will be requisitioned by the government and that only from one-quarter to one-third of the crop will be left to the farmer.

To Get a Flag Write Soon



With the declaration of a state of war our first supply of flags was quickly exhausted and we have had great difficulty in securing more.

We have at last secured a limited number of flags which we offer on the following terms:

OFFER NO. 1

3x5 flag together with The Washington Farmer for three years. Both for $2.50.

OFFER NO 2.

4x6 flag together with The Washington Farmer for three years. Both for $3.00.

We would suggest prompt action; orders will be filled as received.

The Washington Farmer, Review Bldg., Spokane.

Enclosed find $.... (your personal check, stamps or money order), for which send me American flag, as advertised, and The Washington Farmer for 3 years.

Size of flag .....

Name ....

Address ....

....

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

HELP WANTED—MALE 3

HAWTHORNE AUTO SCHOOL,
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

WANTED—SINGLE, STEADY MAN OF NO bad habits, who understands cows, to assist in small city dairy. A. B. Funnell, 4313 6th ave. So., Seattle.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free.
BEHNKE-WALKER BUSINESS COLLEGE, 167 FOURTH ST., PORTLAND, ORE.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
Manufactured in our own mill and sold at factory prices. We ship to any one, anywhere. One price to everybody. Prompt shipments. Safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request.

5 cross panel doors, 2 ft. 6 in. by 6 ft. 6 in.	$1.44
Craftsman bungalow doors	1.90
One panel, 3-ply veener doors	2.00
French doors, 15 lights	3.00
Screen doors, 2 ft. 8 in. by 6 ft. 9 in., galvanized wire	1.50
Standard two light windows, up from..	1.13
8x10, 4-light sash	.52
16x16x26 spruce flour bins	1.50
Drain boards, 20x24	.75
Williams' "Gold Seal" mixed paint, gal.	2.50

Frames, mouldings, builders' hardware, mill work.

O. B. WILLIAMS CO.
1943 1st Ave. So. Seattle, Wash.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

WRIGHT GOODS FOR THE BEEKEEPER, made at the western factory. Hives, supers, cans, cases. Wax received. Write for catalog. A. E. Wright & Sons, 713 Albany, Caldwell, Idaho.

MACHINERY—FOR SALE 93

FOR FARM LUMBERING USE "AMERICAN" PORTABLE SAWMILLS. Carried in stock by HIGGINS MACHINERY CO., 312 First ave. So., Seattle. Write for catalog.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBTAIN a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174

I. D. CASEY & SONS, WAITSBURG, Wash., have on a bargain counter several hundred 1-year-old S. C. White Leghorn hens; they are real goods at a reasonable price.

LIVE STOCK 177

FOR SALE—IMPORTED PERCHERON mare, 9 years old, with two colts, 3 and 15 months old. S. M. Roff, Burley, Wash.

HAY FOR SALE. 200

ALFALFA HAY, BALED OR CHOPPED. Direct from producer.
C. C. MASON, HERMISTON, ORE.

RUG and CARPET WEAVING 270

YOUR OLD CARPETS AND RUGS remade into beautiful FLUFF RUGS at small cost. Send for booklet and prices. Nustyle Rug Co., Sellwood, Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

FURRIERS 429

BISSINGER & CO., DEALERS IN HIDES, pelts, wool, tallow and furs; consignments solicited; prompt remittance. P. O. Box 1553. Phone 503. Warehouse, 26th and R. R. st., Boise, Idaho.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

SEEDS 620 Continued.

YELLOW DENT CORN, FIELD PEAS, SUDAN GRASS, RED CLOVER, WHITE BEANS. Complete line of "highest quality" garden seeds. Catalog free. ROUTLEDGE SEED & FLORAL CO., 145 Sec. st., Portland, Ore.

HOMEST'DS, RELINQ'M'TS 642

MONTANA HOMESTEADS — 16,000,000 acres; 640 or 320 acres for you. Circulars free. Homestead Bureau of Montana, Dept. 66, Box 845, Butte, Mont.

FARM LANDS—FOR SALE 651

1440 A.—SOUTH OF CONNELL, ALL good land; can be farmed with tractor; $21 per acre.

1740 A.—Wheat and stock ranch; 500 A. farmed; $16 per acre.

6600 A.—A fine stock proposition; 300 A. bottom land; $13 per acre.

640 A.—Level land; 320 A. wheat; all crop, stock and machinery goes at $46,000.

1480 A.—This place is one to three miles from town; 800 A. in wheat, balance plowed; price with all crop, and plowing, $60,000.

600 A.—3 mi. from town; 265 A. crop; price with crop, $22,000.

1280 A.—2 mi. from town; 400 A. in crop; price with all crops and plowing, $50,000.

Chas. S. Bassett, Washtucna, Wash.

FOR SALE OR RENT
STOCK RANCH OF 1625 ACRES, IN THE FAMOUS SALMON RIVER VALLEY, IDAHO COUNTY, IDAHO.

Good range, long summers, mild winters; outfit is fully equipped and in operation, consisting of land, cattle, horses, sheep, hogs, grain and hay; stock well bred; some registered; gross income $10,000 to $12,000 annually; expenses light.

This will bear closest investigation. Yearly payments can be arranged.

Complete list of stock and equipment furnished on application. Address S. Delmage, Box 2, Whitebird, Idaho.

40-ACRE DAIRY FARM NEAR BOISE; mile from interurban line and cheese factory; 24 acres of pasture and alfalfa; 10 acres a little too high for gravity water, balance under plow; cross-fenced. Ridenbaugh water right. Family orchard; plastered house; barn 40x33; silo. Price $4500. Good terms. Hub Realty Company, Boise, Idaho.

MONTANA LAND.
5400 acres, in Forsyth district, can be sold in farms of 160 acres and up at $12 to $17.50 per acre; easy terms. Call or write for particulars.
HEGE & WATKINS CO.
717 PAULSEN BLDG. SPOKANE, WASH.

BIG MONEY RAISING VEGETABLES and chickens, greenhouse and 160 acres of land, near Spokane, cost $15,000, offered at $4500; easy terms.
PENNSYLVANIA MORTGAGE INV. CO.
SPOKANE, WASHINGTON.

80 A. OF GOOD CHEAP, ROUGH, IRrigated land for sale; unimproved; worth $2400; make an offer.

80 A., partly imp.; crop; $3600; 5 mi. city, Bend, Ore.; (owner.) E., Box. 5, Tumalo, Ore. Please act quickly; a good prop.; cash.

FOR SALE—GOOD 10-ACRE RANCH; 7 head of stock; 3-room house, 32x32 barn, woodshed, milkhouse; bearing orchard; farm implements and all the tools. J. Perz, Route 2, Ferndale, Wash.

400-ACRE RANCH.
Three miles from Centerville, 4¼ miles from Goldendale. Crop with place until harvest. $30 per acre. Terms. C. A. Lester, Centerville, Wash.

IF YOU ARE LOOKING FOR GOOD farms, we have improved and unimproved farms for sale; also relinquishments and homesteads. Write Hall & Vollmer, Sumatra, Mont.

FOR SALE, OR EXCHANGE FOR SMALLer ranch—300-a. stock and grain ranch; big crop in; good pasture. Owner, M. Waters, Willamina, Ore.

FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. G. K. Hawley, Baldwin, Wisconsin.

TO EXCHANGE—REAL EST. 705

MONTANA LAND TRADES.
563 acres, nearly all irrigated, mostly in crop; take land in Spokane country as part payment. Call or write for particulars. Hege & Watkins Co., 717 Paulsen bldg., Spokane, Wash.

Worth While Offers

In the want ads of this paper you will find frequent attractive offers.

Grain and Produce Markets

Chicago Market.

CHICAGO, June 30.—Urgent demand today for corn for immediate delivery brought about the highest prices ever reached in the corn market here, No. 2 yellow, a regular contract grade, commanding $1.76 a bushel. The market closed unsettled at gains of 1-2c to 1 1-2c. Wheat showed an advance of 1-2c to 1c net, with July at $2.02 and September at $1.82. Oats finished up 1-8c to 5-8c higher. In provisions the outcome ranged from 25c decline to a rise of 5c.

Wheat and oats hardened in sympathy with corn. Wheat bears had an advantage in the early trading, though, on account of announcements that the first new wheat this season had arrived at the Atlantic seaboard ready for shipment to Europe.

Cash Quotations.

Wheat—Nos. 2 and 3 red and 2 and 3 hard, nominal.

Corn—No. 2 yellow, $1.75@1.76; No. 3 yellow, $1.75@1.75 1-2; No. 4 yellow, nominal.

Oats—No. 3 white, 70@70 3-4c; standard, 70 1-4@71c.

Rye—Nominal.

Barley—$1.10@1.40.

Timothy—$4@7.75.

Clover—$12@17.

Pacific Northwest Grain.

TACOMA, June 30.—Wheat—No quotations.

Car receipts—Wheat 12, oats 3, hay 1.

SEATTLE, June 30.—No grain quotations.

Yesterday's car receipts—Wheat 1, oats 1, barley 1, flour 4.

PORTLAND, Ore., June 30.—Wheat—No quotations.

Today's car receipts—Wheat 7, barley 1, flour 3, oats 1, hay 3.

San Francisco Grain.

SAN FRANCISCO, June 30.—Barley, $1.94⅞; May, $2.04; July, new, $1.97⅜@2.02½.

Minneapolis Grain.

MINNEAPOLIS, Minn., June 30.—Wheat prices weakened today, and July finished 4½c down. September closed strong.

Wheat—Receipts 157 cars, compared with 268 a year ago.

July opened $2.17; high, $2.17; low, $2.09; close, $2.12½.

September opened $1.71; high, $1.72; low, $1.69; closed, $1.72.

Cash—No. 1 hard, $2.32½@2.37½; No. 1 northern, $2.32½@2.33½; No. 2 northern, $2.17½@2.22½; No. 3 wheat, $1.87½@2.12½. No. 2 hard Montana, $2.17½@2.20½.

Corn—No. 3 yellow, $1.69¾@1.70¾.

Oats—No. 3 white, 68@68½c.

Flax, $2.81½@2.87½.

Flour—Fancy patents, 25c lower; quoted at $12.50; first clears, 25c lower; quoted at $10.50; second clears, 50c lower; quoted at $7. Shipments, 35,676 barrels.

Barley, 88c@$1.25.

Rye, $2.20@2.22.

Bran, $27.50@29.

Portland Market.

PORTLAND, Ore., July 2.—The grain year came to a close with the wheat market at an absolute standstill. There is still a little wheat lying around at scattered points, but there is no demand from any quarter and the dealers are making no effort to connect up with business. It is probable that nothing will be done in this line until new wheat begins to move. Nominal quotations are: Bluestem, $2.20; club and fortyfold, $2.15; red Russian, $2.10.

Oats are a little easier, as shown by a sale here at $44. There is no interest in barley.

Millers have made another 40-cent cut in flour prices, which puts patents at $11.40. Mill feed prices are holding steady with a light demand.

Bids were submitted to the government by local dealers on 2800 barrels of flour and 3800 tons of oats for use at American Lake, but the awards have not yet been made.

At the Condon wool sale over 500,000 pounds were offered, but only three clips were disposed of, as most of the growers thought the bids were too low. The prices paid ranged from 52 3-4 to 61 1-2 cents. Subsequently at private sale as high as 65 cents was paid for a small clip grown at Fossil. Other lots went at 52 3-4 to 61 cents. In the valley as high as 72 1-2 cents has been paid.

With the Coast storages now well filled, cheese prices are easing off. A week ago the Coos Bay association cut its price and on Saturday the Tillamook people announced a decline of a cent.

Butter is holding steady with the supply and demand nearly equal. Eggs are also unchanged and dealers look for a steady market during the summer.

Poultry receipts are liberal and but for shipping orders the market would be blocked. Country dressed meats are ruling about steady.

The strawberry season is now practically ended with only a week of good receipts from nearby points. Prices closed firmer at $1.65@2.25.

A few new Oregon potatoes are coming in, but the trade will depend on carlot shipments from California for a week or two yet. There is little call for old potatoes.

Hop growers are more encouraged over the prohibition situation at Washington, but no business is expected until the matter is definitely settled. There will be half a crop in this state and it is being well cultivated.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to prodcers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $44 per ton.

Corn—Whole, $72; cracked, $73 per ton.

Millstuffs—Bran, $35 per ton; shorts, $38.

Barley—No. 1 feed, $42; brewing, nominal; rolled, $49.

Hay—Buying prices: Timothy, eastern Oregon, $28@30; alfalfa, $18; grain, $18.

Eggs—Oregon ranch, case counts, 30@31c per dozen; candled, 32c.

Poultry—Hens, 14@16c; ducks, 15@20c; turkeys, alive, 20c; geese, 10@22c; turkeys, alive, 20c; geese, 10@12c.

Butter—City creamery, prints, 38@39c per pound; cubes, 36c.

Cheese—Tillamook triplets, 23c; young Americas, 24c.

Dressed meats—Veal, 14 1-2@15c; pork, 19@19 1-2c.

Hops—Nominal.

Potatoes — Oregon jobbing price, $3.25@3.50.

Seattle Wheat.

SEATTLE, Wash., June 30.—Country bids on the 1916 wheat reached $2.30 for bluestem and $2.25 for the red wheats. Farmer holders were not obdurate at this level, expressing a willingness to shade it a nickel on occasion. Puget Sound wheat operators are willing to concede $1.50 per bushel farm price for new bluestem and would probably be willing to take a chance on a few contracts at that figure, but they are unable to see their way clearly and pay any more.

Seattle grain dealers believe they have had at least a glimpse of what new Washington wheat will bring in the opening quotations on Oklahoma and Kansas No. 2 red wheats this week. Wheat grown there bears a close resemblance to the Washington club and red Russian.

The car situation is practically normal. All transcontinental lines report ability to deliver cars immediately. Relief has come rather late to be of service to the wheat export trade.

The conditions of the flour trade were amplified this week in relation to wheat in the fact that Montana hard wheat flour sold under Washington soft wheat flour by 15c. Unless there is a spread between the two of at least $1.50 per barrel Puget Sound millers have always held that they were out of the market. There are still many buyers who will take hard wheat in preference to soft wheat flour at the same or a less price. Millers admit demoralization in the flour market due to oversupply, dull trade and reselling by bakers who bought on the early low market.

Seattle Market.

SEATTLE, Wash., June 30.—The proportion of good quality eggs coming to the Seattle market is diminishing, and jobbers are more inclined to strengthen quotations. There was some prospect of a 37-cent market next week, with seconds maintaining their level at 33c. Bid prices in the country have not exceeded 32c, but if there is an advance in the selling price more money to the producer is believed to be the natural outcome of competition for stock. The percentage of soft eggs is increasing, indicating to jobbers that the lay is on the verge of a sharp reduction.

Butter is steady, but whether the undertone is to be maintained is a question. It was reported along the street today that condensaries are preparing to bid $2.60 per cwt. for milk for the first two weeks in July. This will touch a number of the cream supply stations at a vital point, and a minority of city creamery men are asserting that it will be necessary to advance the buying price of butterfat to meet the competition and keep the raw material coming.

Grave foreboding of a sharp falling off in cream do not square with the results to date. Unseasonable rains, during a time when grass feed is drying up, have prolonged the life of the meadow feed, and receipts of cream have been more than enough to keep city creameries operating at full capacity and a consequently easy market.

Receipts of heavy hens have been heavy and jobbers are quoting a cent lower next week, at 18c on the buying side. Broilers are also lower, at 15@18c.

Cheese is weak. Jobbers will not buy any heavy stocks at the present level, contending that it will not sell.

All jobbing houses along Western avenue were amply supplied with receipts of cherries today from eastern Washington, Wenatchee, Yakima and Hanford districts contributing principally to the offerings. Due to something of an overstock and in part to a desire to clean up over Sunday, jobbers cut prices on Bings to 14@15c and Anns to 8c.

Strawberries were strong, Marshall moving at $1.50 on best grades, some of the differential that has all along favored Clark Seedlings being wiped out. Clarks brought $2 on the average, although an occasional sale at 25c higher was reported.

The future of potatoes hinges largely on opening prices for Kennewicks, the first of which will be due about July 10. The market for Californias is weak and the expected break may be near at hand.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transaction by jobbers.

The following prices are offered to tre producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 32c per dozen.

Poultry—Live hens, fat, over 4 lbs., 18c per lb.; 3 lbs. and under, 15c; old roosters, 12c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 14c per lb.; broilers, live, 15@18c per lb.

Butterfat, 32c per lb.; dairy butter, 27@30c.

Beef—Buying price: Prime beef steers, 7@8c per lb; cows, fat, 7@8c per lb.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 13@14½c per lb.; do heavy, 12@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salter calf, 30c pe rlb.; green hides, 16c per lb; salted bulls, 15c per lb; dry hides (short trim), 38c per lb.; dry calf (under 6 lbs.), 40c per lb; bull and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry butcher full wool sheep pelts, 30@33c per lb.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., June 30.—Hogs—Receipts, 6800; steady to stronger. Heavy, $14.85@15.25; mixed, $14.75@15; light, $14.50@15; pigs, $12.50@14.50; bulk, $14.70@15.

Cattle—Receipts, 100; steady. Native steers, $9.50@13.50; cows and heifers, $8.50@11.50; western steers, $9.50@11.75; Texas steers, $9@10.50; cows and heifers, $8@10; canners, $6@8; stockers and feeders, $6.50@10.50; calves, $10@14.50; bulls, $6.75@10.75.

At Chicago.

CHICAGO, June 30.—Hogs—Receipts, 7000; slow, 5c to 10c under yesterday's average. Bulk, $14.40@15.30; light, $13.85@15.05; mixed, $14.20@15.50; heavy, $14.10@15.60; rough, $14.10@14.40; pigs, $10.75@13.85.

Cattle—Receipts, 2000; weak. Native beef cattle, $8.60@13.60; stockers and feeders, $8.50@9.75; cows and heifers, $5.60@11.80; calves, $10.50@15.25.

Sheep—Receipts, 9000; weak. Wethers, $8@10.85; lambs, $9.75@14.50; springs, $12@17.50.

At Portland.

PORTLAND, Ore., June 30.—Hogs—Steady; receipts, 121.

Cattle—Steady; receipts, 909.

Sheep—Steady; receipts, 1033.

At Seattle.

SEATTLE, June 30.—No receipts; market steady on cattle, sheep and hogs at yesterday's quotations.

Spokane Stockyards Saturday.

Hogs—Receipts, none; market steady. Prime heavy packing, $15.25@15.50; prime light packing, $15@15.25; smooth heavies, $14@14.50; pigs, $12.75@14.25; stockers, $12.25@13.50

Cattle—Receipts, 124; market slow. Prime light steers, $9.75@10; prime heavy steers, $10@10.25; good steers, $8@8.75; ordinary to fair, $7@8; prime cows, $8.50@9; good cows, $7.25@7.75; common cows, $6.25@7; bulls, $6@8; calves, $7.25@8.75; stockers and feeders, $5.75@7.75.

Sheep—Receipts, none; market steady. Prime spring lambs, $12.50@13; prime shorn wethers, $9@10; prime shorn yearlings, $10.25@11; prime shorn ewes, $8.50@9.50.

At Salt Lake.

SALT LAKE, June 29.—Cattle—Receipts, 87. Choice fed steers, $9.50@10.50; fair to good steers, $8.50@9.50; grassers, $8@9; choice cows and heavy heifers, $7.75@8.50; fair to good cows and heifers, $7@7.75; cutters, $6@7.

Hogs—Receipts, 192. Top, $14.90; bulk, $14.60@14.75; stockers, $11@11.75.

Sheep—Receipts, none. Demand good. Spring lambs, $14@15; yearlings, $10.50@11.50; wethers, $9.50@10; ewes, $8.50@9.50.

Spokane Market.

The wholesale prices quoted in the list b low are not the prices paid to producers shippers; they are those charged by t Spokane commission houses to the re trade for standard produce. The prices q ted for live stock, however, are the pri given to the producer.

Potatoes—$3.50 cwt; new potatoes, 5c

Apples—Washington apples, cooking, box; Rome Beauties, $1 box; N. Y. Pippi $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 40c lb; Me Maid, 40c lb; Cascade, 40c lb; Gold Le 40c lb; Better Butter, 40c lb; Attalia, lb; Diadem, 40c lb; Hazelwood, 40c Solid Pack, 38c lb.

Cheese—Wisconsin full cream, twins, 2 triplets, 25c; Hazelwood full cream, tr lets, 25½c lb; Hazelwood Young America, lb; Wisconsin limburger, 29@30c lb; br cheese, 29c lb; domestic Swiss, 35c Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $10 case.

Live Poultry—Hens, 19c lb; old roost 10c; ducks, 13@14c; geese, 11c; turkeys, @25c.

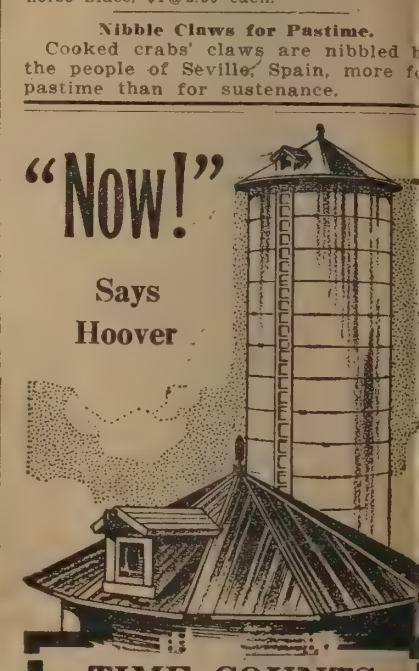
Dress Poultry—Hens, 22c lb; old roost 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and 17½c; salted cured, 20c; green bulls a stags, 13c; salted cured, 16c; kip, 15 to 25 lbs, 23c; calf skins up to 15 lbs, 3 dry flint hides, 34c; dry salted, 27c; calf skins, under 7 lbs, 42c; dry sheep pel full wooled, 22@26c; dry shearlings, 10@ each; green horse hides, $3@5 each; horse hides, $1@2.50 each.

Nibble Claws for Pastime.

Cooked crabs' claws are nibbled the people of Seville, Spain, more f pastime than for sustenance.



TIME COUNTS

NOW IS THE TIME to act. You have all read Hoover's food warning. It is already late this year. Order your

Weyerhaeuser Silo

Now! Make it sure that you and your farm will do your bit as it should be done in this critical year 1917. The silo means immeasureably greater efficiency—more food, and better food, more for us, more for our allies. Write us TODAY.

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NEWS FOR BREEDERS

Paddock Bros. of Union, Ore., have recently purchased from the Brickett farm of Utah two fine spring gilts by Brickett Farm Illustrator, son of the great boar Illustrator and out of a daughter of Defender. Their herd boar, Johnson XVII., is a big hog of fine quality and they have other well-bred individuals.

Three years ago I. H. Jorgens of Nezperce, Idaho, invested $3250 in a registered Shorthorn bull and 15 females. Since then he has sold from his herd $4250 worth of stock and has 37 head left, which, at a very conservative valuation, is worth $6000. He says even considering the present high cost of hay and grain his Shorthorn investment is one of the best he ever made.

W. E. Boulton of Caldwell, Idaho, believes in official work for dairy cows and has eight official records in his Jersey herd. Mr. Boulton has been dairying at Caldwell for 15 years and for many years made and sold dairy butter in Caldwell. He had some pure bred Jerseys from the start and now has 39 head, including calves. They are mostly of the Melia Ann and Brown Bessie strains. His present herd bull, Pioneer's Eminent Lad, is a grandson on the sire's side of Noble of Oaklands and on the dam's side of the equally great bull Eminent. He is a fine, showy individual. Lina's Pedro Princess, Mr. Boulton's heaviest producer, has 664 pounds of butter and 1211 pounds of milk in a year to her credit, but only half the year is official, owing to the tester's moving away. Boulton Farm Bessie has an official record of 511 pounds of butter in a year.

Mr. Boulton has 15 acres of blue grass pasture. He considers a soiling crop the most preferable way of feeding dairy cows, but on account of labor conditions that is out of the question.

H. A.

That Biggest Holstein Sale

Telling Details Given in the Official Report

The following details and comments on the great record-breaking Holstein sale at Worcester, Mass., are taken from the official report sent out by F. L. Houghton, secretary of the Holstein-Friesian Association of America:

It is doubtful if there has ever been seen such a display of enthusiasm at a cattle sale as that which occurred at the wonderful, record-breaking sale of Holsteins at the fairgrounds, Worcester, Mass., on June 7 and 8, under the management of Harvey A. Moyer. Before the sale commenced it was thought by many breeders that the high-water mark of prices for dairy cattle at auction had been reached at Detroit last year, when 143 head of Holsteins sold for $156,710, or an average of $1096 each.

On the other hand, one could find men who were confident that Detroit would be beaten hollow! It was useless trying to form an opinion. Last year Mr. Moyer got together some of the finest samples of Holsteins that could be found in the country. This year—well, he got something more than that, as the list of prices paid for a number of the choicely bred individuals at Worcester will show.

The arena was filled with breeders from 20 states and Canada when the first animal was led into the ring, and in the first hour Colonel Perry had to produce many of his long stock of jokes, etc., to "get 'em a-going." The first 10 cattle that were sold averaged $386 each, the highest price paid being $675 for a 19-lb. daughter of King Pontiac Artis Canada, a son of King of the Pontiacs out of a 31-lb. daughter of Henverveld De Kol. The next 10 brought the average up and, when the 20th cow had been sold, an average price of $580 was shown. Gardiner Hall Jr. & Co. of South Willington, Conn., paid $2500 for a 5-months-old daughter of King Model (who sold for $10,400 at the Stevens' sale a few weeks ago), and out of a 33-lb. dam. J. T. Shanahan of Buffalo, N. Y., made his initial purchase at the sale by securing K K S V Aagie Maid, a 6-months-old daughter of King Korndyke Sadie Vale and out of a 25-lb. dam, for $1000.



King Ormsby Jane Rag Apple 208883.

The average was maintained and improved upon when No. 30 on the catalogue, a double granddaughter of Colantha Johanna Lad, sired by a son of the former world's champion, Aaggie Cornucopia Pauline, the first 34-lb. cow, and out of a 28-lb. daughter of a 41-lb. cow, fetched $1825. This yearling heifer was secured by H. E. and K. E. Aitken of Waukesha, Wis.

Exciting scenes were to follow the sale of this well-bred young heifer. Everybody was on tip-toe and all eyes were at once focused on the beautiful King Ormsby Jane Rag Apple, the 5-months-old son of Rag Apple Korndyke 8th and Ormsby Jane Segis Aaggie, the wonderful twice 40-lb cow and world's champion for 30-day butter production. "A peerless combination" of breeding is shown in this handsome creature's pedigree. Mr. Cabana made a short talk calling attention to the wonderful future which he believed was in store for Rag Apple Korndyke 8th and for the splendid animals sired by this fine bull, out of some of the greatest cows of the breed, and also mentioned that Ormsby Jane Segis Aaggie was now milking 100 lbs. a day and was in absolutely perfect condition.

The first bid for this regal youngster was $10,000 and like a flash came another bid for $15,000. Three men competed for possession, John Arfmann quitting at $30,000, leaving J. T. Shanahan and D. W. Field to "carry on." Amid intense excitement these two men answered the calls from the auctioneers and eventually $50,000 was bid by Mr. Field. Still Mr. Shanahan kept things moving, but at $53,000 he gracefully retired and Mr. Field was acclaimed the purchaser of King Ormsby Jane Rag Apple at the world's record price of $53,200.

The insistent demands of the big crowd of breeders present for a speech, compelled Mr. Field to say that he wanted the best bull in the world and believed he had secured it in King Ormsby Jane Rag Apple. Mr. Cabana called for cheers for Mr. Field and also for Mr. Shanahan, which were given in a demonstrative way. Mr. Arfmann told the breeders that he wanted to buy the youngster and the only reason he did not was because Mr. Field's pocket was a great deal deeper than his.

The price of $18,000 paid for Glen Alex Queen De Kol was the highest ever paid for a dairy cow in the auction ring, and speculation was keen among the breeders in attendance the second day, as to whether Wandermeere Belle Hengerveld, the world's champion junior 4-year-old, would beat this record. Mr. Pelletier's cow achieved that honor by topping the sale at $18,300! Mr. Shanahan bought her, and it was stated that he received an offer of several thousand dollars for his bargain after the close of the sale. Mr. Pelletier made an offer of $10,000 for the calf that "Wandermeere" is carrying, delivered to him at six weeks old, (bull or heifer). Mr. Cabana offered a free service to Rag Apple Korndyke, 8th, and if "Wandermeere" fetched $20,000, a free service to son of Segis Fayne Johanna, the 50-lb. cow. Other offers were made by Bernhard Meyer, Finderne, N. J., of a free service to King Valdessa; Quentin McAdam, free service to King Korndyke Sadie Vale; Fred F. Field, to King Segis Pontias Konigen, the $35,000 bull, and F. M. Jones, Clinton, N. Y., to Spring Farm King, with and offer of $12,000 for the calf, either sex.

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BLACKLEG PILLS

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Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.

Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

Prices:

10 dose pkge. Single pills	$1.00
50 dose pkge. Single pills	4.00
10 dose pkge. Double Pills	1.50
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Cutter's Pill Injector....	1.50

Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

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a big knee like this, but your horse may have a bunch or bruise on his ankle, hock, stifle, knee or throat.

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will clean it off without laying up the horse. No blister, no hair gone. Concentrated—only a few drops required at an application. $2 per bottle delivered. Describe your case for special instructions and Book 8 M free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful Swellings, Enlarged Glands, Wens, Bruises, Varicose Veins; allays Pain and Inflammation. Price $1 and $2 a bottle at druggists or delivered. Made in the U. S. A. by

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Levy's Shetland Pony Farm

Largest herd in the west. Headed by the grand champion Kenilworth 6188; he by the great undefeated Prince of Wales. The best of the good ones always for sale.

M. S. LEVY, Union, Ore.

BROWN SWISS CATTLE

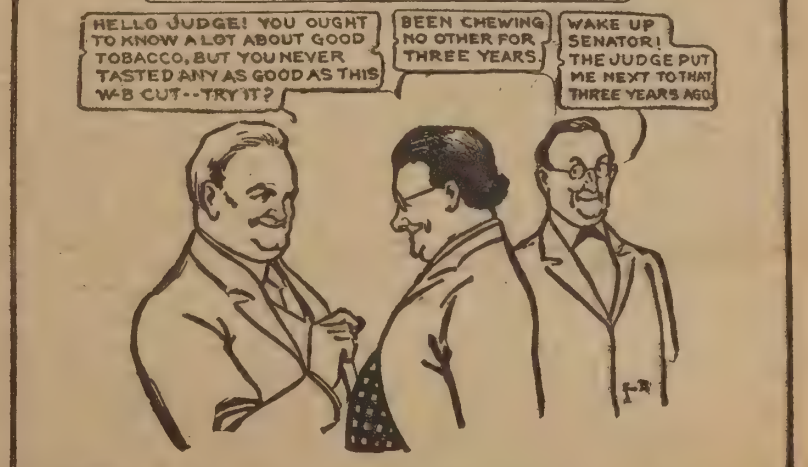
Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale. THEO. BRUGGER, Route 3, Gresham, Ore.

AUCTIONEERS

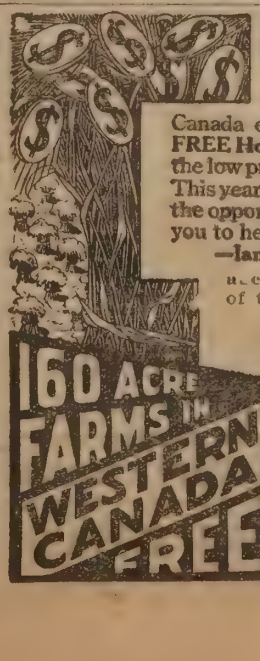
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Raise High Priced Wheat on Fertile Canadian Soil

Canada extends to you a hearty invitation to settle on her FREE Homestead lands of 160 acres each or secure some of the low priced lands in Manitoba, Saskatchewan and Alberta. This year wheat is higher but Canadian land just as cheap, so the opportunity is more attractive than ever. Canada wants you to help feed the world by tilling some of her fertile soil—land similar to that which during many years has averaged 20 to 45 bushels of wheat to the acre. Think of the money you can make with wheat at over $2 per bushel and land so easy to get. Wonderful yields also of Oats, Barley and Flax. Mixed farming in Western Canada is as profitable an industry as grain growing.

The government this year is asking farmers to put increased acreage into grain. There is now a great demand for farm laborers to replace the many young men who have volunteered for service in the war. The climate is healthful and agreeable, railway facilities excellent, good schools and churches convenient. Write for literature as to reduced railway rates to Supt. of Immigration, Ottawa, Canada or to J. N. Grieve, 1st and Post St., Spokane Wash., Canadian government agent ....

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DUROC PIGS, PAIRS AND TRIOS.

I have a choice lot of the best bred weanling pigs, will sell singly or in pairs or trios; not related. Matings will be made with special reference to best results, both in blood lines and conformation.

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Prolific, Profitable Durocs

Pigs from Champion Sow, bred by Exhibitor of the State of Washington, and other blue-ribbon sows, headed by the great 900-lb. boar, Red Dandy, 159453. Choice boars and gilts for sale from these prize-winning sows.

JNO. B. PETERSON, Montbourne, Wash.

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Spring pigs from champion and first prize sows at Ontario, Ore., and Gem State and Idaho State fairs.

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Hillcrest Duroc Jerseys

Pigs from fine strain, matured stock; handled for results. Good looks and good breeding. You can't go wrong on these.

R. P. CAMP. Ione, Wash.

Duroc Jesery Spring Pigs

raised by Boys' Pig club. Excellent breeding, prices reasonable. Write Harry Jones, secy.

BOYS' PIG CLUB, R. 1. Mica, Wash.

HOLSTEIN BULL CALVES.

One from 20-lb. cow, another from a 16-lb. Jr. 2-yr.-old. Herd headed by Model Fobes of Idaho, whose four nearest dams average 27.25 lbs. butter 7 days.

EARL BEERE, R. F. D. 2, Rupert, Idaho.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Pullman, Wash.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have for sale extra good spring pigs. Correspondence solicited.

J. M. ROYSTON EST., C. ROYSTON, MGR., Payette or Fruitland, Idaho.

Locust Lawn Herd

Booking orders for strictly big type Poland China spring boars, sired by Overlook, 1st and senior champion, Idaho State fair and Gem State fair, 1916; weight 320 lbs.; out of the 1st, 2d and 4th prize sows at Idaho State fair 1916, in strongest competition; satisfaction guaranteed.

W. F. HOWARD & SONS, Parma, Idaho.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX. Lyons, Ore.

Pure-Bred Poland China Fall Gilts

will be shipped c. o. d. subject to your approval. Write to

HERBERT WILLARD. Dayton, Ore.

BIG TYPE POLANDS

Weaned pigs, $25.

GEO. W. BUCK. Oregon City, Ore.

BERKSHIRE SWINE

Kintyre Farm Berkshires

Exceptionally fine breeding stock for sale at reasonable prices.

CLARK BROS., R. F. D. 2, Prosser, Wn.

RIVERBY ORCHARD BERKSHIRES won 12 out of 15 first prizes at the Washington State Fair, 1916. A few outstanding boars for sale at reasonable prices.

D. C. BUNN. Prosser, Wash.

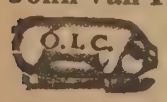
GALBRAITH RANCH BERKSHIRES

Best breeding stock obtainable. Prices reasonable. Phone 20F.3.

T. A. GALBRAITH, Kent, Wash.

O. I. C. SWINE

John Van Trojen Sr., Breeder



of the famous Ohio Improved Chester White Hog. All stock registered. Write for prices. Orders filled after July 1.

Chimacum, Jefferson County, Washington.

HAMPSHIRE SWINE

HAMPSHIRE SWINE

Choice stock of all ages at bargain prices.

HIGHLAND FARM, Box 22, Underwood, Wn.

Breeders' Department

HOLSTEIN CATTLE

Holstein Friesian Cattle

All our own breeding. A herd equally strong at both ends. Herd head, Sir Korndyke Ormsby Piebe, sired by Sir Korndyke Hengerveld De Kol 36th; dam Queen Piebe Ormsby Mercedes, record junior 2-yr.-old, 24.65 lbs. butter in 7 days, 3-yr.-old in 365 days, 952.28 lbs. butter, 20,286.20 lbs. milk; 4-yr.-old, 35.16 lbs. butter in 7 days. She is ¾ same blood as Queen Piebe Mercedes, world's record 4-yr.-old, record 1389.45 lbs. of butter in 365 days.

Most of the cows are sired by Sir Johanna Ruth Fayne, now 9 yrs. old, still in service. For average A. R. O. test of daughters, age and production considered, he stands near the top of the list.

WM. TODD & SONS, R. 4, North Yakima, Wn.

GLENWOOD HERD

Registered Holstein Friesian cattle.

"A breeder is known by his Herd Sire."

Prince Aralia De Kol Burke—No. 142092. His 3 nearest dams, Sadie De Kol Acme, Riverside Sadie De Kol Burke and Arillia De Kol, have an average yearly record of 25,300 pounds milk and 1037 pounds butter. Bull calves of his get, from good cows, for sale at farmers' prices.

A. H. BUCK AND ED HOEM, Monroe, Wn.

Holstein Bull Calves

One from grand champion cow with 24-pound record. One from 20,000-pound-year cow, as well as several other calves from a bull whose dam has a record of 133 pounds in 30 days, granddam 26 pounds 2-year-old, great granddam 31. All winners at National Dairy Show. These calves are priced right. Send for particulars.

J. L. SMITH, Hazelwood Farm, Spokane, Wn.

Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.

Write for pedigrees and terms.

H. R. BOOMER, New Plymouth, Ida.

Avalon Dairy

Registered bull calves by Hartwood Hello Hengerveld (129524) from cows with good A. R. O. records, DeKol, Korndyke and Pontiac blood. Prices right. Six per cent interest on time payments. Write today.

AVALON DAIRY, Kuna, Idaho.

Richly-Bred Bull Calf

Six months old, sired by Julian King Repeater, whose two nearest dams averaged 1156 lbs. butter. The calf's dam is sired by Julian King of Rock, whose dam has official record of 1021 lbs. and the calf's dam's dam over 700 lbs.

F. R. BEALS, Tillamook, Ore.

SHORTHORN CATTLE

SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

R. E. BOYCE, Baker, Ore.

Hercules Shorthorns

For particulars write

DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

For Sale—Shorthorn Bulls

Fine individuals, sired by Lavender Gord's No. 370358, a bull produced by the blending of the blood of two great families, one headed by Count Lavender, the other by Choice Gords.

ANDREW OLSEN, R. 4, Ellensburg, Wash.

H. H. Schildman

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.

Filer, Idaho.

For Sale; Short Horn Bulls,

and Shropshire ram lambs.

I. H. JORGENS, NesPerce, Idaho.

HEREFORD CATTLE

BULL RANCH

Registered Hereford cattle.

CHAS. BULL, Prop. Mabton, Wn.

Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.

HOLSTEIN CATTLE

Young stock by richly bred grandson of King of the Pontiacs, out of high-producing advanced registry cows.

A. E. SMITH. Sumas, Wash.

HOLSTEIN BULLS

and a few females for sale out of A. R. O. dams of the noted Segis family. Herd bull, Model Annie De Kol Segis, No. 81071, dam's record, 30.91 lbs. butter in 7 days, his 4 nearest dams' average, for 7 days, 29.63 lbs.

MOREHEAD & HOBSON, Outlook, Wn.

Holsteins—Berkshires

A splendid lot of young bulls for the fall trade, also a few heifers. A son of the world's champion milk cow, Lutske Vale Cornucopia, now heads our herd. A few cows accepted for service. CLOVERIDGE FARM.

W. K. NEWELL, Seghers, Wash. Co., Ore.

BUFFALO DUKE DOEDE

(102228) heads my herd. He is a half-brother of world's record cow, Dutchess Skylark Ormsby, producing 1506 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.

H. H. STIYER. Buhl, Idaho.

HOLSTEINS

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

TAMWORTH SWINE

I HAVE TWO CHOICE GILTS

for sale; will farrow the last week in August, bred to Pleasant Hill Monarch 20288, son of Watterson 9363, the 1020-pound grand champion boar Illinois State fair 1916. I also have boar pigs not related to the gilts or pigs they will farrow. I breed registered Tamworths with quality.

ORIN BEINHART, Kennewick, Wash.

DOGS

Fox and Wolf Hounds



of the best English strains in America; forty years' experience in breeding these fine hounds for my own sport and protection of sheep, hogs and poultry. Send stamp for catalog.

T. B. HUDSPETH.
Sibley, Jackson County, Missouri.

JERSEY CATTLE

THE FAMILY HERD.

JERSEYS AND O. I. C.s

Herd headed by Hermits Majesty, sire Majesties Toga 1st and Grand Champion prize winner.

Dam, Imported Hermits Graceful Lady, winner Reserve, 26 entries, Royal Show, Jersey, 1910.

For sale, males and females; bulls ready for service.

O. I. C hogs, boars and gilts from prize-winning ancestry.

C. C. WINGER. Grandview, Wash.

Jersey Isle Stock Ranch

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castillian Lady 266628 made 603.3 lbs. fat (713.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow-Testing association. Young stock for sale.

C. E. LONG, Buhl, Idaho.

Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding

WAIKIKI FARM, R. 7, Spokane, Wash.

MERIDIAN DAIRY AND FRUIT FARM.

Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams.

B. C. CRABTREE. Lynden, Wash.

ROLLING MEADOWS JERSEYS.

Four registered cows, 3 to 6 years of age; solid color; cow testing assn. show them to be profitable; quick sale $650.

S. A. RICHES, Silverton, Ore.

ABERDEEN ANGUS

Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the breed.

At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

Congdon & Battles
Otto V. Battles, Mgr.
North Yakima, Wash.

GUERNSEY CATTLE

Young Guernsey Bulls

Well bred, good individuals. Will be sold reasonable.

WAUKESHA GUERNSEY FARM.
Carlton B. Holt, Mgr., Box 85, Boise, Ida.

WHATCOM CO. GUERNSEY B. ASSO.

We can supply some choice young herd sires, also a few young registered cows and a promising lot of young grade heifers.

Address Lynden, Wash.

Dispersal Sale of Cattle, Hogs, Sheep

July 25, 1917

50 Register of Merit Jerseys
50 Register O. I. C. Hogs
200 Hampshire and Shropshire Sheep

C. C. WINGER, Grandview, Wash.

Shorthorn Cows and Heifers for Sale by McCROSKEY & SONS

Sprague, Wash.

Young cows with calves at foot and rebred.
One and two year old heifers, bred and open.
Can supply one or a carload. Large numbers to select from.
Can also supply outstanding young bulls unrelated to these females.
Write or wire when coming.

N. P. Station, Sprague. O.-W. Station, Croskey.

FOUR HIGH PRODUCING COWS FOR SALE.

For the month of April we had 11 head on test. Our herd average was 62 lbs. butter per cow, including strippers, heifers and all. Most of these cows are bred to Gertie's Poppy's St. Mawes. Of the four cows for sale, none have an average test under 6 per cent.

MELLOW LAWN FARM.
F. A. Doerfler, Silverton, Ore.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 28. JULY 12, 1917. ** WEEKLY.

U. S. Makes Marvelous Speed Going to War

In Three Months' Time Great Deeds Have Been Written Into the World's History

If there is a tendency on the part of any one to feel that the United States is slow in throwing the strength of its resources effectively into the war, such person should look at the record of his country's accomplishments since congress, at the request of President Wilson, declared that a state of war existed between this country and Germany. It was April 3 that President Wilson asked congress for that declaration. Stupendous deeds have been written into American and world history since that time.

Staggering Finance.

The United States has floated the largest single war bond issue in the history of the world, the famous Liberty loan of $2,000,000,000. This is all the greater accomplishment in view of the fact that the people applied to buy a total of nearly $3,000,000,000 of such bonds, nearly 50 per cent more than the total issue.

This country has loaned to England, France and her other allies a total of more than $1,000,000,000.

She has registered nearly 10,000,000 young men for selection in the formation of the first great American army unit of 500,000, and that without a serious disturbance of any kind.

Great Army Is Ready.

She has built up her trained fighting force of men, including the navy and marines, the machine gun corps, the national guard and the regular army from less than 300,000 to more than 660,000.

She has placed an expedition of her soldiers on French soil under the command of Major General John J. Pershing, a force, though comparatively small, soon ready to join the enemies of Germany in actual warfare on the battle front.

She has selected 50,000 men for special training for officers' service in training and commanding the armies to be formed or now in process of formation.

Navy Rushes Aid.

She placed in European waters a flotilla of anti-submarine craft to assist the allied navies in their war against the undersea depredations. This was done within a bare few weeks after the declaration of the existence of a state of war. So well equipped and manned was this flotilla that its commander, Vice Admiral Sims, was placed in charge of all the allied anti-submarine operations in one great portion of the war zone.

She has taken effective steps to mobilize medical and engineering corps for special service.

She has outlined a plan of ship construction on a gigantic scale, not only of merchant vessels to replace the tonnage destroyed by submarines, but of transports, submarine chasers and destroyers and other forms of craft for particular service in prosecuting the many phases of the war.

An Aerial Army.

She has put into motion a plan for the construction and manning of an enormous fleet of airships, necessitating an appropriation of more than $600,000,000.

She has armed scores of merchant vessels to enable them to drive off attacking submarines. Continued on page three



The photograph shown above at the left is that of Secretary William G. McAdoo of the United States treasury department, prominent figure in this country's war finance. At the right is Colonel George Goethals, Panama canal builder and now in charge of the country's ship building program. In the center is American Vice Admiral Sims, commanding the flotilla of anti-submarine craft in the war zone.

Watch Each Week for The Farmer's Message From the State Council of Defense

Garford MOTOR TRUCKS



This big three and a half ton Garford is economically hauling grain and bales of hay for the Spokane Grain Company.

Garford Trucks Are "Doing Their Bit"

Out on the farms of the great Northwest, Garford Motor Trucks are "doing their bit" for the nation.

Hauling grain, hay, garden truck, fruit, and livestock—working almost ceaselessly—Garfords are helping to a tremendous degree in the fast distribution of the nation's food.

And they are increasing profits for the *farmer* at the same time that they are fighting high food costs for the *consumer*.

They are relieving congestion on railways, by handling hundreds of short freight hauls.

They have increased the efficiency of both the *farm* and the *farmer*.

Intensive farming must be backed by the *intensive transportation* of the farm products.

That's where Garford motor trucks step in.

Working out in the fields—all day—often all night—they are economically, dependably and profitably solving the problems of war time food distribution.

Their economic value has been firmly established for all time.

And they will play an increasingly important part in the future.

You cannot afford to farm without a truck—preferably a Garford motor truck.

Your neighbors by the hundreds are using them. Their problems are similar to *yours*.

Help the country—*and help yourself at the same time*—by putting a Garford motor truck at work on *your farm now*.

Any style body—any capacity from one to six tons.
Ask our dealers or write us direct for information

Write for our booklet, "Roads—Their Influence on Social and Economic Conditions"

Garford Motor Truck Co., Inc.
1701 Broadway Seattle, Washington

The Fancher-Larson Company
1201 First Avenue Spokane, Washington

Oregon-Oakland Motor Company
522 Alder Street Portland, Oregon

The Garford Motor Truck Company, Lima, Ohio
Manufacturers of Motor Trucks of 1, 1½, 2, 3½, 5 and 6 ton capacity
4½, 7 and 10 ton Tractors
The Garford Road Builder
Distributors and Service Stations in all Large Cities

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 28 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF July 12, 1917

Raise for Milk

Producers Now Demand 24 Cents

After an all-day session at the Spokane Chamber of Commerce Saturday 200 members of the Inland Empire Dairy Producers' association adopted a resolution demanding a 25 per cent increase in the price paid the farmer for milk, the new scale to take effect July 15.

Regarding milk prices the resolution says:

"Whereas, We can no longer continue to meet the requirements as to proper temperature to insure a low bacterial count at the price of 20 cents a gallon; and

"Whereas, We will prefer to go out of business rather than furnish milk at a lesser standard than we are now supplying;

"Resolved, That we ask 24 cents per gallon from the distributors for 3.6 per cent milk, with one-third of a cent for each one-tenth per cent above 3.6 per cent and the same deduction for milk testing below 3.6 per cent, this increase giving the producer 25 1-3 cents per gallon for 4 per cent milk. This price is asked instead of 26 cents a gallon, which is the actual cost to produce milk this fall if all items of labor and interest on investment are consideration."

"Resolved, That if the distributors in Spokane do not grant us this price, which it is absolutely necessary for us to obtain in order to stop the sale of our cows to the butcher, we will take such steps as are necessary to distribute a pure and wholesome supply of milk produced by our members until such time as the distributors can agree to give us a justified price."

A Red Cross Calf



Louise Winger, daughter of Mr. and Mrs. C. C. Winger of Grandview, Wash., and her registered Jersey heifer calf, "Red Cross Minnie." This calf is to be included in C. C. Winger's dispersal sale July 25, 1917. The proceeds goes to the Red Cross society.

Vrooman Coming

Agricultural Efficiency Is Desire

Announcement has been made that Carl Vrooman, assistant secretary of agriculture, will be in the northwest for a brief time during the week beginning July 23. His mission is the furtherance of the nationwide campaign for agriculturaal efficiency and food production and conservation.

The only official announcement of his northwestern program so far is that he will arrive in Spokane July 23, where three meetings will be held, one a private luncheon at noon, one an afternoon massmeeting for women on household food saving subjects, and the other an evening massmeeting for all.

That morning he will be taken to Coeur d'Alene, Idaho, where he will address a massmeeting.

Strenuous efforts are being made to advertise his coming widely in order that as large a number of persons from all the territory tributary to Spokane and Coeur d'Alene as possible may hear him.

A Word to Fruitgrowers.

Addressing the people of Chelan county, P. S. Darlington, district horticulturist, declares that "beyond caring for the fruit crop our problem becomes one largely of making ourselves self-sustaining."

Every Little Bit Added to Every Body's Little Bit Makes a Mighty Big Bit

By RUTH KARR M'KEE, Member Washington State Council of Defense.

ECONOMY of food will entail expenditure of time and labor, for gain in one direction is compensated by loss in another. But America needs food now; time and labor can both be properly expended in saving it. This may be the one great service that Washington women can give toward winning the war, and this is within the reach of all.

All scraps of bread should be dried, ground and placed in a covered jar to be used as flour substitute in desserts and as potato substitute in hash or croquets.

Every particle of fat should be saved, tried out and used to save butter wherever possible.

If rice or cereals stick to the dish, fill with clear, cold water; when the food is loosened drain, mold and brown or use with meat fragments as above. Even a tablespoonful of cereal is worth the trouble it takes to save it now. There are 20,000,000 homes in America. Twenty million tablespoonfuls of good food daily means a big saving.

Remember that other women are saving, too.

Every little bit added to everybody's little bit makes a mighty big bit.

Use corn flour wherever possible. Cultivate a taste for corn bread instead of wheat bread. Wheat bread can be carried in a soldier's knapsack, corn bread can't. Let's save the wheat for the soldier boys.

A Good Corn Pone.

This recipe for corn pone comes from Mrs. Overton G. Ellis, wife of Chief Justice Ellis. It is simple, economical and delicious:

Take equal parts of corn meal and boiling water, salted. Stir together, being sure that the water is actually boiling. Let the mixture cool until it can be handled. Shape into cakes and bake 40 minutes.

Bake this on wash day or ironing day or some time when you have a fire for other purposes.

Green Apple Sauce.

If you have access to apple trees, take the green apples, peel and core and can the green apple sauce. It is delicious, far superior to apple sauce made from mature apples in the winter time.

To the peelings and cores add water enough to cook well. Drain and make a jelly of the juice. Or add this juice to the fruit for a combination jelly.

Apples that are used for thinning purposes or that are inferior in grade can be used this way. If you have time, Mrs. Farmer's Wife, just remember that there is nothing that will be more appreciated by the soldier boys than apple sauce in cans, jelly or apple butter, which Uncle Sam will not supply. These soldiers are all boys beneath the khaki. Goodies from home, anybody's home, will taste good. Care must be used in the kinds, so that they be suited for shipping. It will be the business of the state council of defense to get authentic information on these subjects and devise ways and means for sending the things that will supplement the government ration. So when you can fruit or vegetables, remember the soldiers. This is to be our way of serving.

We should stap eating lamb and veal, but especially lamb. When an animal has weathered the first year of life it ought to be allowed to go on to maturity, to provide as much food value as possible. With lamb is added the extra wool crop. Wool is high and very necessary to give warm clothing for the men on ships and in the trenches.

These are just a few ideas from a housekeeper who isn't so very much of a housekeeper after all.

Follow Straight Lines, Says Loan Bank

When farm loan associations under the federal act select the districts in which they wish to do business they should follow definite boundary lines and make the description of the district as simple as possible, says President D. G. O'Shea of the northwestern district.

There is no danger of making a district too large under the provisions of the law, unless by so doing it would cross a state line. Districts may lap over each other without violating the requirements of the loan bank. Therefore, it is not advisable that boundaries be made to follow irregular lines like creek bottoms or valleys or hill contours, but they should follow definite, straight lines in all ordinary cases.

To be entitled to a charter an association must have not fewer than 10 members and desire to borrow a total of at least $20,000.

Two new appraisers have been added to the list in order to rush the work of approving loans asked for. The new men are Richard Burke of Moscow, Idaho, and C. N. Mansur of Polson, Mont.

The following new associations have been chartered:

Idaho.

Palouse (Wash.), Latah county (Idaho)	$ 35,600
Carey, Blaine county	31,250

Washington.

Yacolt, Clarke county	27,000
Kennewick (Horse Heaven Assn.), Benton county	26,850
Prosser, Benton county	27,600

Oregon.

Madras, Jefferson county	25,150
Astoria, Clatsop county	50,400

Montana.

Billings, Yellowstone county	118,100
Rithiemay, Musselshell county	49,300
Plevna, Fallon county	48,600
Foster, Big Horn county	42,300

Agriculturist Pro Tem.

Under an agreement reached between the committee on agricultural preparedness, County Superintendent Ackley and the county commissioners at North Yakima, Mr. Ackley has been appointed county agriculturist pro tem. to have active charge of organizing and systematizing the effort to get a maximum production of food crops in Yakima county.

Pickers' Pay to Advance.

Berry pickers in the Puyallup valley are practically assured a wage increase of 33 1-3 per cent for this season, according to W. H. Paulhamus, manager of the Puyallup and Sumner Fruit Growers' association. The price in former years has been 30 cents a crate for berries. Mr. Paulhamus will recommend to association directors that pickers be paid 40 cents a crate.

U. S. Makes Speed

Great Deeds Done in Short Time

(Continued from page one.)

She has formed a national food commission looking toward the maximum efficiency possible in food production and food conservation.

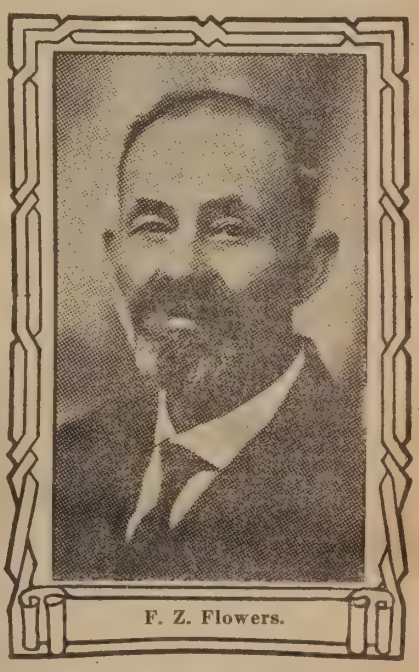
She has enacted an espionage measure putting into operation a great secret service machine for the detection and punishment of spying by enemies and of unpatriotic acts by American citizens.

She has practically completed a program for regulation of food and industrial materials with a view to the utmost conservation of all things needful in the prosecution of the war to a successful conclusion.

All these things and more have been accomplished within a few days more than three months. Never before, it is safe to say, were the resources of a great nation so quickly mobilized for service in war. And it has been done with a minimum of industrial disturbance. The basic industries are operated comparatively normally, except that each is crowded to its limit for increasing production.

America may have been slow to grasp the necessity for preparedness, but once decision was made it has been carried out with remarkable speed.

Washington Portraits No. 23.



F. Z. Flowers.

F. Z. Flowers of Fairfield made his mark by raising potatoes on the summer fallow. At present he is growing peas instead of potatoes and is very successful with them.

The next in the series of Washington portraits will be that of C. C. Brown of Castlerock and will be given in next week's issue of The Washington Farmer.

Cattle Census of State.

The state of Washington is going to take a census of all its cattle. It will also include the owners of the cattle and the amount of milk, butter, butter fat and other dairy products these cattle are capable of produoing. Dr. R. J. Donohue, assistant commissioner of agriculture, who announced the department's plans to take the census, said it would help in keeping a closer check on shipments of cattle and in preventing the spread of disaese.

Others Have Learned.

Bee-Nugget, Chehalis: The great problem for the American people to learn now is thrift and economy, the kind that has long ago been learned in older countries.

Farmers Are Urged to Stop Big Waste

Fertilizers From Barns and Feed Lots Would Pay Half Liberty Loan

Every year the farmers and stockmen of this country waste natural fertilizer valued at more than one billion dollars, says Carl Vrooman, assistant secretary of the United States department of agriculture, who is conducting a nation wide campaign in the interst of agricultural efficiency.

This means a loss of more than the value of the entire wheat ccrop that is being produced this year. It means half of the Liberty loan recently subscribed, the most gigantic war loan in the history of the United States. It means 10 times the amount of money raised two weeks ago in the nation wide Red Cross campaign when the people of this country responded to the call of humanity with more than $100,000,000.

Greatest Single Waste.

Says Assistant Secretary Vrooman: "Without making any comparisons, and subject to corrections if it can be shown that the facts are otherwise, I dare aver that our billion dollar manure waste is the world's greatest single economic leak—the prize waste of the champion wasters. This great war has brought home to us Americans, as it has never been emphasized before, the fact that we are the world's champion wasters."

The figures quoted by Mr. Vrooman are those arrived at through seemingly accurate calculation, the values being based on the cost of commercial fertilizers, and on the preventable losses from the stables and feeding lots of the farms of the country.

Not only are these losses unpardonable under normal conditions, he argues, but they are especially so at this period when increased production of agricultural crops is so essential, and when commercial fertilizers are scarce and in some cases almost unobtainable.

The department of agriculture is laying nation wide stress on the urgent need of utilizing every possible element for building up the soil and replenishing its lost fertility for next year's crops, but Mr. Vrooman is looking still further ahead in his campaign.

"It is work that will pay tremendous dividends, not only as a war measure, but conceivably for all time," he says, urging the necessity of developing the habit of soil conservation in this country as the peoples of other nations have been compelled to do through sheer necessity.

World Faces Famine.

"The solemn duty of saving the world from famine devolves directly upon us," says Mr. Vrooman, emphasizing the vital need for conservation of every element that will tend to increase production. "It is a job for the American farmer worthy of his utmost effort in keeping with the spirit of America in this critical hour."

The department of agriculture calculates that each horse or mule produces annually $27 worth of manure (as compared with commercial fertilizers); each head of cattle $20 worth; each hog $8 worth. Calculating from the 1910 census figures for number of animals on farms—62,000,000 cattle, 24,000,000 horses and mules, 58,000,000 swine and 54,500,000 sheep and goats—the total value of manure produced is found to be about $2,461,000,000.

"Recent investigations by the department of agriculture indicate that at least half of this great wealth of fertilizing material is sheer waste," says Mr. Vrooman. "In some good general farming sections not more than 15 per cent of the manure produced is used. Even in the most intensive dairy regions, where cows are largely stall fed and comparatively great care taken with the manure, the loss seems to be approximately 25 per cent.

"The cheapest and best way to handle manure, where convenient, is to haul it to the field and spread it daily, or at least every two or three days. In this way, if plenty of bedding be used, practically all the valuable constituents are saved. In this way, too, loss through heating, or "firefanging," is avoided.

"Many farmers, however, are not so situated as to make it profitable for them to handle manure in this way. For such farmers the concrete pit offers a solution. Such a pit need not entail great expense. A pit three feet deep, 12 feet long and 6 feet wide, with walls and floors five inches thick, will serve the needs of the average farm.

"Another good way to save manure, especially in the case of hogs or of beef cattle, is to have a floored feed lot, preferably under a shed roof. Where the farmer can not afford a paved floor, a cheap open feeding shed may be made to serve the purpose very well, if abundant bedding is used to absorb the valuable liquid manure."

Finds No Easy Way

By PAUL E. TRIEM.

C. Sorensen of Wahkiakum county, considers himself a real "old timer" on the Coast. Mr. Sorensen has been in his present location 42 years and has been farming or preparing to farm most of that time.

"Down in our part of the state you don't just stick a plow into the ground and start to break the sod," says Mr. Sorensen. "First, you've got to clear away the big trees, and that is no child's play. No, char-pitting does not amount to much with us. The stumps are too big—I've taken them out where the cavity left by stumps and roots measured 50 feet across. There isn't any easy way to do it."

Mr. Sorensen is a dairy farmers and reports a remarkable development of dairying in his locality. He does not consider Wahkiaum county a silo country, and says that the majority of his neighbors depend on roots, clover hay and oats.

"Oats and peas are said to make good silage," he comments, "but when it comes to corn we can't count on maturing it sufficiently for good silage. It's only the exceptional year when we can secure the right kind of a corn crop."

Favors Food Control.

At a recent meeting of Finley Grange No. 414, at Finley, Wash., a resolution was passed in favor of congress taking definite and immediate action in the control of prices and distribution of food stuffs.

Canning the Earlier Vegetables

No Garden Crop Should Be Allowed to Pass Uncanned

This is the third article in The Farmer's series on food preservation. For the benefit of those who have overlooked the first articles, a brief repetition of the principles of canning and the main features of the methods used is given. Recipes from recognized authorities are given for canning some of the earlier vegetables, and other recipes will be given from time to time as the season progresses. Also, the subject of drying vegetables and fruits will be treated in the course of the series.

The principles underlying successful canning can not be repeated too often. The vegetable or fruit must be perfectly sterilized and perfectly sealed. This is the two-fold principle of canning. Sterilization means the destruction of all bacteria or germs in the jar, in the fruit or vegetable, or in the water or juice used in canning.

The application of heat is the recognized method of destroying these bacteria or germs, and the most practical way of applying it, as previously outlined, is by prolonged boiling or steaming in the jars. In the average farm home the practical outfit consists of a wash boiler or other container having a well-fitting cover, and a false bottom made of wire netting or strips of wood to keep the jars from standing flat on the bottom. Commercial outfits are also in use successfully, especially the steam pressure outfit, by which the temperature may be greatly increased over boiling temperature.

The method most common, and satisfactory, is what is known as the one-process method. The vegetable or fruit is prepared and packed into the jars cold and only partially cooked if not entirely uncooked. The jars are placed in the cooking outfit, in which water (warm but not hot) is deep enough to cover the lower two-thirds of the jars. The tops should be on loosely. The heat should be applied to bring the water to the boiling point, at which it should be held for one period, the time depending on the vegetable or fruit being canned. These periods will be indicated in the different recipes given hereafter. The co-called intermittent method requires at least one repetition of the one-process method.

The Steam Pressure Outfit.

The principle involved in canning with a steam pressure outfit is not different from that of the common wash boiler devices. The pressure outfit, illustrated by the accompanying sketch, has a top securely bolted on, a steam gauge and a safety valve to prevent possible explosion. The jars are placed inside the same as in the home-made outfit, but when subjected to the pressure a temperature much higher than the boiling point may be maintained, and thereby the time required for sterilization may be reduced.

Definition of Terms.

The following definitions of terms used in canning recipes was given last week, but are repeated to make the recipes given herewith perfectly clear:

Scald—Plunging of fruit or vegetable in boiling water for a few seconds.

Blanch—Placing of fruit or vegetable in boiling water for a few minutes.

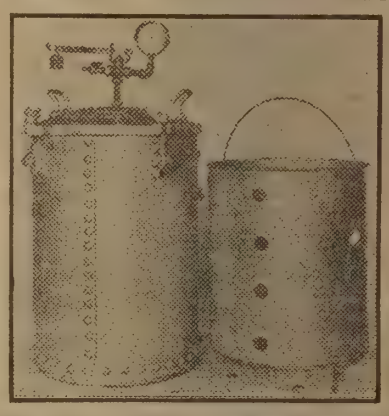
Cold Dip—Plunging the fruit or vegetable directly from the scalding or blanching water into cold water.

Sterilize—Subjecting the fruit or vegetable to high temperature by boiling or steam pressure method after having been packed cold into the jars.

Recipes for a Few Vegetables.

The following recipes are prepared from the advices of recognized authorities on canning. They are for the common canner, not under pressure.

Greens—Blanch 15 to 20 minutes. Cold dip after draining in the blanching vessel. Pack well into jars. Add one teaspoonful of salt to a quart of greens. Fill jars with liquid in which greens were blanched. Adjust the tops loosely, being sure rubbers are new and well fitted. Place jars in canner. Bring to a boil. Boil for 90 to 120 minutes, the latter to be positive the sterilization is complete. Remove from canner. Seal perfectly. Wrap with cloth or paper to prevent breakage by too rapid cooling. Store away where contents will be shielded from bright light.



The above shows a steam pressure canning outfit as used by many persons successfully in place of common kitchen boiler outfit.

Beans—Blanch five to eight minutes. Cold dip. Pack tightly in jars. Fill jars with liquid from blanching vessel. Add one teaspoon salt to each quart of beans. Adjust tops loosely. Place in canner and boil for two hours. Remove. Seal perfectly. Wrap in cloth or paper to prevent breakage from cooling. Store where contents will be shielded from bright light.

Beets—Beets may be kept without preserving, but if canning is desired, the following recipe is practicable: Use only small, young beets. Blanch five or six minutes without removing the roots and with an inch of the top still unremoved. Cold dip. Remove roots, tops and skins. Pack in jars. Fill jars with hot water. Add a teaspoon salt to each quart of beets. Adjust tops loosely. Place in canner. Sterilize for two hours. Remove. Seal perfectly. Wrap with paper or cloth to prevent breakage in cooling. Store where shielded from bright light.

Peas—Follow the same directions as for beans, given above.

Pioneer Ginseng Man Dies.

The death is reported from Anacortes of Andrew J. Anderson, who planted the first crop of ginseng ever raised in Skagit county some 10 years ago. The Anacortes ginseng gardens consist of two and one-fourth acres under cover.

Is It a Patron Saint or an Octopus?



The "big condensery" is one of the features in Skagit county. By its friends it is described as the patron saint of the community, while its enemies call it an octopus, a malignant trust.

Urges Less Wheat Be Cut for Hay

By E. E. ELLIOTT

The great staple article of human food among our people is wheat. We may utilize certain substitutes, but the real method of substitution, especially here in the west, is to absolutely conserve the wheat supply by using the other cereals for animal maintenance. Perhaps the old practice will still be retained and thousands of tons of wheat hay will be cut for feed which should be allowed to mature its grain for the sack. I confess that after nearly 20 years of familiarity I can not become accustomed to the use of wheat in any form as a stock food, not even for chickens, and under present conditions it appeals to me as an economic waste. In the rendition of the great national chorus it is time for the live stock producers to begin to sing fortissimo.

Councils of Defense

To Be Organized in Each County

National and state councils of defense are now well organized, and the next important step is county organization. State councils of defense cooperate with the national council, and county councils cooperate with the state council.

The state council has named the following citizens to organize the county councils in Washington:

Spokane county—N. W. Durham, Spokane.
Whatcom county—F. F. Handchey, Bellingham.
Skagit—M. J. Molstad, Mt. Vernon.
Snohomish—W. Howarth, Everett.
King—Harold Preston, Seattle.
Pierce—J. L. Carman, Tacoma.
Thurston—C. J. Lord, Olympia.
Lewis—N. B. Coffman, Chehalis.
Cowlitz—Stewart, Kelso.
Clarke—Adams, a banker, of Vancouver.
Skamania—Christiansen, a banker, of Stevenson.
Wahkiakum—Girard, no postoffice.
Pacific—L. L. Darling, South Bend.
Grays Harbor—W. H. Abel, Aberdeen.
Mason—Mark Reed, Shelton.
Island—J. M. Wanamaker, Coupville.
San Juan—Robert Morna, East Sound.
Jefferson—Clarence Wanamaker, Port Townsend.
Clallam—Tom Trumbull, Port Angeles.
Whitman—Charles L. MacKenzie, Colfax.
Grant—Davis, Ephrata.
Franklin—V. H. Cox, Pasco.
Walla Walla—A. J. Gillis, Walla Walla.
Columbia—H. H. Hadley, Dayton.
Asotin—Elmer E. Halsey, Clarkston.
Yakima—W. W. Robertson, North Yakima.
Benton—No selection.
Kittitas—J. C. Hubbell, Ellensburg.
Klickitat—C. F. Brooks.
Garfield—E. V. Kuykendall, Pomeroy.
Adams—D. C. Scott.
Lincoln—E. L. Farnsworth, Wilbur.
Pend Oreille—Fred Wolff, Newport.
Stevens—G. W. Peddycord.
Ferry—A. L. Bradley.
Okanogan—Clay Foote.
Chelan—John A. Gellatly, Wenatchee.
Douglas—E. W. Fawley, Waterville.

The first official act of Director Suzzallo was to send notice to all of the men to organize the county council. These councils are to have heads of food supply, labor, industrial and farming, manufacturing, ship building, lumber, transportation, home defense, women's work, medicine, morals, finance, legal, sanitation, and publicity if practical. The councils are to be flexible and number from 10 to 15 members and handle the special activities of the county.

These councils are to coordinate the county activities and to have them work in harmony with the state council, or, as the instructions read: "These auxiliaries should be made the centers of patriotic feeling, national loyalty and war service. It is a method by which every loyal citizen who does not go to the battle front may enlist for service in this great war for the safety of democracy."

The county councils are advised to look to the prosecuting attorneys for advice and the sheriffs for the local preservation of law and order.

It is proposed to take a census of the home guard organizations of the state as soon as possible. On this subject the bulletin of the council reads:

"The organization and control of home guards should be directed by the county councils of patriotic service under the special supervision of the member in charge of home defense. The home guards have no legal status and can only be used as a voluntary organization from which a large body of deputy sheriffs may be recruited. Be sure that all men suggested to the sheriff are persons worthy to be sworn as deputy sheriffs and are responsible representatives of every patriotic class of citizens in the community. Other local peace officers should cooperate with the sheriff, who should be the responsible officer to whom the county council should look for the enforcement of law."

Letters to Soldiers

How to Address Mail for Army

According to the instructions of the post office department, the correct manner of addressing such letters would be as follows:

Return to
Mrs. John Smith,
Blank Street,
New York City.

JOHN SMITH, JR.,
Co. X ——— Infantry,
American Expeditionary Forces.

Under no circumstances should the sender of mail matter to a member of the expeditionary forces attempt to designate on the addressed envelope the location of the unit.

Postmasters have been informed that letters, post cards, and printed matter originating in the United States or any of its possessions for transmission to the United States expeditionary forces in Europe are subject to the United States domestic classification, conditions, and rates of postage.

Postmasters are directed to forward all matter addressed "American Expeditionary Forces" to New York.

Money in Poultry

Mt. Vernon Man Shows His Faith

H. L. Willis, a poultryman, of Mount Vernon, is building a new laying house, 450x24 feet in size. At a time when many poultrymen are complaining that there is no money in the business, this is suggestive. The fact is that Mr. Willis does not view the situation in quite the same light as the kickers.

"Of course, I believe there is money to be made in the poultry business," he comments, "or I wouldn't be adding to my plant. I don't believe there is a living profit in poultry at the present time for the man who conducts his operations on a small scale—the margin between production costs and selling prices is too narrow. But if you understand the business, and if you keep track in a practical way of all the details, I know that there is money in chickens."

To illustrate just what he means by keeping track of details in a practical way the Mount Vernon man tells something about his present feeding methods.

"Corn is my cheapest grain food," he says. "Of course, I bought well—paid $37 a ton, in carload lots last fall. I couldn't have bought to anywhere near as good advantage, by the way, if I had had only a hundred or so hens. But corn, even when it can be obtained at bargain prices, is a food rich in heating and energy value—in carbohydrates. That means that if you use corn as your principle grain food you must find some way of balancing the ration. I do this by feeding a high protein mash and lots of curded buttermilk—I am using 16 cans a day of the latter.

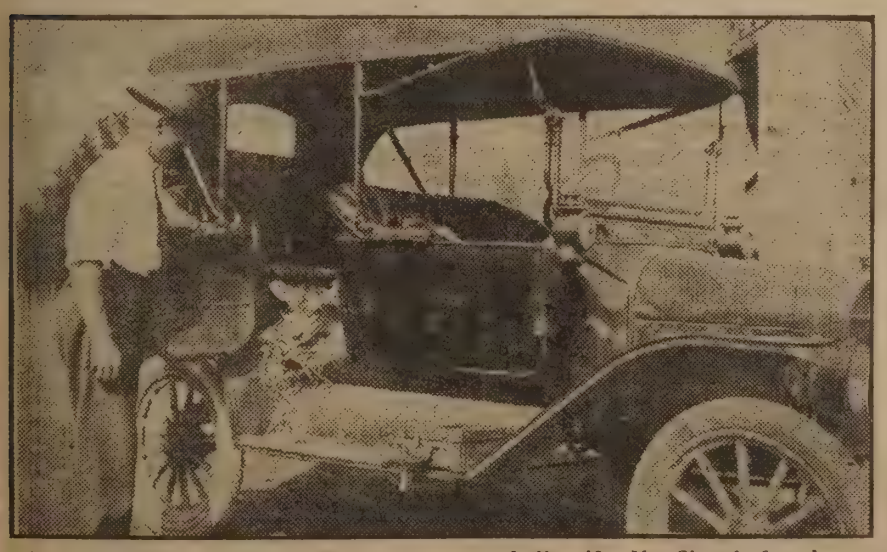
"Do I do my own incubating? No—I can't afford to. There are many distinct branches to the poultry business—building up a high laying strain of breeders is one; hatching is another—is a business in itself; raising the newly hatched chick to maturity is a third; and handling the layers, the branch of the business to which I confine myself, is separate and distinct from all the rest. I don't know how to handle a breeding flock, or how to run an incubator, or how to care for a young chick. I can't afford to do these things, when I can buy from men who have mastered these branches of the business all the three-months-old pullets I need. I don't pretend to understand any part of the poultry business except producing eggs from matured layers."

Mr. Willis has been in the poultry business six or seven years. His original plant consists of three wings, each 160x16 feet, joined at their "hub" by a granary 20x60 feet. The three wings of this plant have been built a year or two apart, as the business expanded. There is also a silo and cow barn on the place, but Mr. Willis has practically gone out of the dairy business—not necessarily because there is no money in it, but because the need of specialization has forced him to choose between cows and chickens.



Part of H. L. Willis' poultry plant just outside of Mount Vernon. There is a third wing at the right like the two extending toward the front. Each wing is 160x16 feet.

Purebred Calf Delivered in an Automobile



One way that a county agriculturist may make himself useful to the farmers of his district was demonstrated recently by County Agent M. S. Shrock of Yamhill county, Oregon. A Yamhill county farmer wanted a purebred Jersey bull calf. Mr. Shrock found one across the mountains in Tillamook county, 70 miles away. He loaded the little aristocrat into the back part of his five-passenger auto and gave him a ride across the mountains to his new home.

Car of Cherries Brings $4300.

The Spokane Fruit Growers' company has received returns from a carload of Bing and Royal Ann cherries shipped to Chicago from the Kennewick district and sold at auction. The Bings brought about 20 cents a pound and the Royal Anns better than 15 cents, the carload bringing $4300.

I. W. W. Principles

Some of Their Admitted Methods

A committee of the state council of defense, holding hearings in the Yakima valley, where I. W. W. strikers are menacing various agricultural industries, questioned six members of that organization regarding their principles and methods.

The committee had I. W. W. publications before it, and asked the witnesses if these were the doctrines of the I. W. W., to which they invariably responded in the affirmative. Some of these declarations are:

> We are not satisfied with a fair day's wage for a fair day's work. Such a thing is impossible. Labor produces all wealth. Labor is, therefore, entitled to all wealth. We are going to do away with capitalism by taking possession of the land and the machinery of production. We do not intend to buy them, either. The capitalist class took them because it has the power to control the muscle and brain of the working industry. Organized, we, the working class, will have the power. With that power we will take back that which has been stolen from us. We will demand more and more wages from our employers. We will demand shorter and shorter hours. If we gain these demands we are diminishing the profits of the boss. We are taking away his power. We are gaining that power ourselves. All the time we become more disciplined. We become self-reliant. We realize that without our labor power no wealth can be produced. We fold our arms, the mills close, industry is at a standstill. We then make our proposition to our former masters.
>
> It is this: We, the workers, have labored long enough to support idlers. From now on he who does not toil, neither shall he eat. (From page 14, the Revolutionary I. W. W.)
>
> On page 24 of "The I. W. W.: Its History, Structure and Methods" is the statement: "The future belongs to the I. W. W. The day of the skilled worker is past."
>
> From page 10 of the same publication was taken the following statement:
>
> "There is but one bargain that the I. W. W. will make with the employing classes—complete surrender of all control of industries to organized workers."
>
> Other extracts from the same publication submitted to the defense council were:
>
> "The tactics used are determined by the power of organization to make good in their use. The question of right and wrong does not concern us. No terms made with an employer are final. All peace, so long as the wage system lasts, is but an armed truce."
>
> "No part of the organization is allowed to enter into time contracts with the employers."
>
> "The I. W. W. maintains that nothing will be conceded by the employers except what we have power to take and hold by the strength of our organization. Therefore, we seek no agreements with the employer. Failing to force concessions from the employers by strike, work will be resumed and sabotage used to force the employers to cede the demands of the workers."
>
> "We are looking forward to the time when the organized proletariat will meet in union the world over and decide how long they will work and how much of the wealth they produce they will give to the boss."

So capital is to be annihilated, intelligent directing service is to be destroyed, skilled labor is to be cast out and the earth and all industry turned over to drifting, unskilled elements who would work six hours daily or less, if they worked at all, and go on vacation a large part of the year.

Every I. W. W. agitator who is intimidating a willing worker should be dealt with by the law.

Every I. W. W. agitator who is counseling violence is engaged in a conspiracy against the public peace.

Others are defying the sedition and espionage laws of the U. S. government.

The right course lies plain before the people of the Pacific northwest. Every sheriff should do his duty. He has ample and unquestioned authority and power to swear in large bodies of citizens as special deputies.

The governor has authority, and it will be his duty if the sheriffs can not deal with the situation, to call on the U. S. government for troops.

United States marshals, U. S. district attorneys and U. S. courts can enforce the laws of the United States.

The law is on the side of order, industry and protection of individual rights. Assist the law. We hope no community will make the grave mistake of combatting lawlessness with lawlessness.

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Idle Men Should Go Hungry

No more pressing and important problem confronts the state of Washington and the state council of defense than the labor problem. It is of extreme importance that the crops be harvested without loss; that production go forward in the lumber camps, and that the fisheries and coal mining be kept free from the intimidating influences of lawless and defiant men who are lacking in patriotism and have no proper conception of the rights of American citizens.

If the I. W. W. agitators want to idle away their time in a crisis that is quickening the heart beats of every true citizen of the United States, no appeal to duty, decency and patriotism can reach them. But they should be made to understand that they can not safely defy the law. The flag stands for protection for industrious and patriotic men who want to work, and the power and authority of the state and national governments must protect them in their rights.

One effective means of dealing with idlers is at the command of the general public. Work awaits every able-bodied man who wants it. Able-bodied men who will not work should be made to go hungry. Housewives should deny them handouts at the kitchen door. Vagrancy should be viewed with cold suspicion, though discriminating care should be taken not to deny relief to any worthy applicant.

A patient and indulgent public has long been tolerant with the I. W. W. element. There have been periods when employment was scarce and sympathy was properly extended to the wandering element. But those conditions have vanished. The nation is at war and work goes begging. The agitators should find that they can not safely trifle with the present-hour serious purposes of the people of the Pacific northwest.

Raise More Poultry, Official Says

State Commissioner of Agriculture Benson imparts good counsel when he urges the people of Washington to raise poultry as quickly as possible. He well says that the general raising of chickens will do much to relieve the danger of food shortage, and points out that chickens can be turned into meat inside of three months and can be fed on much material that is now waste.

The end to be sought is a widespread extension of the poultry industry on a small individual basis of production rather than on an extensive commercial scale. A few chickens can be fed with wholesome refuse from any kitchen and table and the feed costs be reduced to the minimum, as against high feed costs, where one engages in the industry on an extensive scale.

The same is true of keeping a family cow or growing a pig for the family larder.

There is no question about these facts. Throughout the United States are millions of men and women of middle age who owe their rugged strength to the fact that their parents were enabled by these aids to give them an abundance of nourishing food, though possessed of very limited incomes.

Money to Make the Farm "Mare" Go

The Farmer has received this pointed comment from one of its readers concerning the matter of financing farm operation:

> "We can not produce lamb, pig, calf or colt without the 'mare.' Thousands to push the Liberty loan, but too few to push the plow. There are plenty to push private loan interests, but nobody to hitch the best security to forty years future."

In other words, in the view of this correspondent, it requires money to conduct the farming industry successfully, and money lenders are backward about placing their capital out on farm land security at low rates of interest.

He is right. It does take money to make the mare go, and capital has not made all the concessions that it should have to this basic of all industries, farming.

For this reason the United States government some time ago began the gigantic task of establishing a federal farm loan system. That system is gradually becoming operative. The organization and machinery necessary to be perfected before loans could be made are virtually complete. Small totals of actual money have been put into the hands of the farmers, not at 8 per cent interest, as has all too generally been the case in loans by private individuals or concerns on farm security, but at five per cent interest. The mortgages taken by the federal farm loan bank as security for the loans do not expire in 90 days or a year or three years, but in 10, 20 or even 40 years, according to the desire of the borrower. The lender (in this case the government) is not calculating to make a profit on the loan, but to meet only the actual cost of making the loans. If the borrower pays his interest and a small fraction of the principal with each interest payment, he needs never fear foreclosure. And best of all, when the mortgage actually becomes due, it isn't due at all, but has all been paid. To illustrate:

A farmer may secure a loan of $1000 on the 20-year basis. Each year for twenty years he will be required to pay $80.24. This, for the first year, includes $50 interest (on $1000 at 5%) and $30.24 reduction on the principal. Each year a smaller portion of the $80.24 covers the interest and a correspondingly larger portion the principal reduction. At the end of the 20 years he will have paid out a total of $1604.89, and his debt will be wiped out completely. If, however, he had borrowed the money from private lenders at 8 per cent interest, had the mortgage renewed from time to time, to run the entire 20 years, he would have paid out $1600 in interest and would have to pay the principal of $1000 on top of it.

The federal farm loan bank has not jumped into existence in a day, and it has not been able to organize and go to making loans without some time. But it is daily increasing its effectiveness and the field of its operation. In the four northwestern states it now has on hand applications for more than $20,000,000 in loans. It has a few hundred thousand dollars actually distributed among the farmers who are taking out loans. It has approved the loans sought to a total exceeding $2,000,000. And it is working hard to meet the demands being made upon it.

Uncle Sam, the United States of America, is "hitching the best security to forty years future." Uncle Sam is "pushing the plow." He is undertaking the stupendous task of providing the money to make the farm "mare" go, and he is succeeding.

Boys and Girls and the Red Cross

The boys and girls are doing their bit for the work of the Red Cross in relieving suffering and preventing loss of life from injuries on the battlefields of Europe. Pennies and nickels are being contributed, and, though they seem small, they increase the total enough to carry aid to many wounded men. A thousand pennies makes $10.

One way the country boys and girls are helping in some localities is by giving the proceeds from a garden patch, the sale of a pig or a calf or the sale of eggs from poultry grown and cared for.

Such contributions are a real aid to the great humanitarian work of the Red Cross, but they are of still greater value to the boy or the girl who makes them, for they stimulate a healthful sympathy and a willingness to make sacrifice for others. They tend to eliminate selfishness, the great destructive thing in the character of so many.

Washington Gleanings

A total of 85.2 per cent of Lewis county's total, 1917 tax levy, was paid before June 1.

With seasonable weather from now on prospects for a big wheat crop in the Spokane territory will be excellent.

County Agricultural Agent C. H. Bergstrom of Thurston county has issued a statement regarding the keeping of farm accounts.

The attendance at the 29th annual session of the state grange held in Wenatchee recently was the largest in the history of the organization.

Professor Lynn S. Keyes, science teacher in the Kelso high school the past year, has been appointed county agricultural agent of Cowlitz county.

The final transfer of the Hanson telephone line to the possession of the West Crescent Farmers' Cooperative Telephone company, has been made.

At the annual meeting of stockholders of the Cooperative Creamery, Chehalis, a 6 per cent dividend was declared. The concern bought during the year 154,092 pounds of butter fat, paying the farmers $53,030.86. The sale of butter for the year amounted to $65,036.36. Total sales were $68,588.81.

Harry F. Giles, deputy to Secretary of State I. M. Howell and commissioner of the state bureau of statistics and immigration, has been in Cashmere securing data on resources and possibilities for manufacturing. This is to be compiled into literature, for state exploitation, which will be sent out to attract eastern capital.

An auxiliary of the Washington State Harvesters' league has been organized for active cooperative service in Burlington. The primary object of the local league is to secure as many volunteer harvest workers as possible to provide against a shortage of labor in the fruit orchards, hop fields, and grain fields this season.

Farm loan associations to the number of 14 have been formed in Snohomish county, the latest to organize being at Trafton. This association starts with 15 members who call for $35,000. The entire 14 are asking for $800,000. In this section of the country where logged-off lands are the great problem, there was some disapproval of the law in that it required a farmer to have his farm paid for and then would loan only 50 per cent of the estimated value.

What Others Say

Keep your eye on a sheep, and if possible, get your hands on a few.—The Farmers' Review.

The last sacrifice a warring nation should make would be its breeding stock.—Breeders' Gazette.

There wouldn't be any labor shortage if the supply of labor were as great as the supply of theories on the subject.—National Stockman and Farmer.

Five per cent of the eggs in cold storage spoil because of careless handling, and 5 per cent is even better than the Liberty bonds draw.—California Cultivator.

Be selfish enough to save, and later on you can afford to be unselfish enough to serve. A man is not worth much to himself if he can not save a part of what he earns, and he will never be worth much to any one else unless he has some money saved.—Utah Farmer.

Will Regulate Exports

Government Takes Complete Control

On and after July 15 no staple product shall be exported from the United States without direct and specific consent from the government. This was officially announced by President Wilson in a proclamation just issued, following out the provisions of the recently enacted law empowering the president to regulate exportation. Under the president's proclamation the following articles can not longer be shipped out of this country without authority having first been secured from the secretary of commerce:

Coal, coke, fuel oils, kerosene and gasoline, including bunkers; food grains, flour and meal therefrom, fodder and feeds, meats and fats; pig iron, steel billets, ship plates and structural shapes, scrap iron and scrap steel; ferro manganese; fertilizers: arms, ammunition and explosives.

In his proclamation the president explains the purposes of the regulations in the following language:

"In controlling by license the export of certain indispensable commodities from the United States the government has first and chiefly in view the amelioration of the food conditions which have arisen, or are likely to arise, in our own country before new crops are harvested. Not only is the conservation of our prime food and fodder supplies a matter which vitally concerns our own people, but the retention of an adequate supply of raw materials is essential to our program of military and naval construction and the continuance of our necessary domestic activities. We shall, therefore, similarly safeguard all our fundamental supplies.

"It is obviously the duty of the United States in liberating any surplus products over and above our own domestic needs, to consider first the necessities of all the nations engaged in war against the central empires. As to neutral nations, however, we also recognize our duty. The government does not wish to hamper them. On the contrary, it wishes, and intends, by all fair and equitable means to cooperate with them in their difficult task of adding from our available surpluses to their own domestic supply and of meeting their pressing necessities or deficits. In considering the deficits of food supplies, the government means only to fulfil its obvious obligation to assure itself that neutrals are husbanding their own resources, and that our supplies will not become available, either directly or indirectly, to feed the enemy."

China Is In Toils.

With the advantage swinging back and forth between the advocates of a republican form of government and the old monarchical form, China has been for several months in the toils of revolution. For several years a so-called republican form of government has been in force, but a vigorous and nearly successful movement has been under way to restore the old Manchu dynasty to the throne. At the present time the friends of the republican government appear to have the advantage, with the probabilities growing that popular government will yet prove winner in the Chinese empire.

More for Ship Building.

A movement is on foot in congress for the appropriation of a second half billion dollars for the ship building program of this country. It is stated that the first $500,000,000 appropriation is well nigh exhausted, and that the additional appropriation is needed to complete the construction under way and to add additional tonnage needed.

Russians Are Reviving.

Significant in the conduct of the war is the return to activity of the Russian forces along the southeastern front of the conflict. Vigorous fighting has been reported, with the Russians gaining ground against the German forces. The attack is being centered along a 30-mile front before the city of Lemberg, the capital of Galicia, which the Germans are strenuously defending.

To Make Draft Selections.

Announcement has been made by the government war department that all men registered under the selective conscription law June 5 must hold themselves in readiness to appear on short notice before examination boards if their names are called in the first 500,000 to be drawn very soon. There are local boards for the purpose of examining the men for physical fitness. If they pass this examination and wish to ask exemption, they will be given 10 days to file proof of their right to exemption. The machinery for making the selections is said to be well constructed and organized, and no difficulty is anticipated in securing the first army unit and have it ready for training by early fall.

Is Submarine Failing?

The official report issued July 4 of the sinkings of merchant ships for the week that had just ended seemed to indicate a falling off in the damage being wrought by the undersea craft. The report showed that 2740 merchant ships had entered British ports during the week, and that 2846 had sailed from them. The submarine report reads:

British merchant ships sunk by mine or submarine over 1600 tons, 15; under 1600 tons, five.

British merchant ships unsuccessfully attacked, 16. British fishing vessels sunk, 11.

Federal Farm Loans.

An offocial statement from the federal farm loan bank board at Washington, D. C., says that the 12 district farm loan banks have applications before them asking for a total of nearly $100,000,000 in loans. So far, in the entire country, some 250 local loan associations have been chartered, the members of which are asking for nearly $12,000,000 in loans. These loans are being made on first mortgages against the farms. According to the report from Washington, D. C., the amounts of the loans approved by the northwestern district board at Spokane totaled on July 1, $1,912,535, distributed as follows: Washington, $720,135; Oregon, $330,750; Montana, $496,540; and Idaho, $365,200. The loans are being actually made under these approvals as rapidly as the detail of the business can be carried out. The determination of the bank board to see that titles to the land mortgaged is absolutely sound causes delay in many cases where the titles are involved.

League to Enforce Peace

Evidence That Farmers Are in Hearty Sympathy

Evidence that the farmers as a class are in hearty sympathy with the League to Enforce Peace has accumulated impressively since the United States entered the war, says the League Bulletin. Since April 6 the league has laid its plan, and its proposition that the fulfilment of such a plan is the fundamental purpose of the war, before leading agriculturists in every state of the Union. Forty of these men already have expressed their approval and offered their services. Not one has disagreed or protested.

Cooperation has come to the league from no less than 20 heads of agricultural colleges, from 11 state commissioners of agriculture or secretaries of state agricultural boards, from masters of state granges, directors of state experiment stations and others in close touch with the agricultural activities of the country.

The league regards these expressions as unusually significant because they go further than mere approval. They tell of definite work done or planned to help spread the principles of this organization in the rural community. For example, Charles E. Patton, secretary of agriculture of the state of Pennsylvania, has distributed the league's literature among the 1100 employes of his department. C. N. McIlvaine, secretary of the State Fair and Exposition of South Dakota, is putting folders printed by the league in every one of the 15,000 premium lists mailed this month to the farmers of his state.

The league attributes this enthusiasm for its work to the fact that the agricultural leaders have been quick to see its definite and immediate value in stimulating the patriotism of the country. This the league is doing by keeping before the American people the fundamental fact that the war is a war of liberty, to free the world from the menace of autocracy and militarism, and to establish a lasting world peace.

President Wilson has placed this ideal before the world as America's purpose in the war; and the league considers that it can not be too often repeated:

Proclamation to People
April 15, 1917.

We are fighting for what we believe and wish to be the rights of mankind and for the future peace and security of the world.

Statement to Press,
April 6, 1917.

The hope of the world is that when the European war is over arrangements will have been made composing many of the questions which have hitherto seemed to require the arming of the nations, and that in some ordered and just way the peace of the world may be maintained by such cooperation of force among the great nations as may be necessary to maintain peace and freedom throughout the world.

Message to Congress,
April 2, 1917.

We shall fight for the things which we have always carried nearest our hearts—for democracy, for the right of those who submit to authority to have a voice in their own government, for the rights and liberties of small nations, for a universal dominion of right by such a concert of free peoples as shall bring peace and safety to all nations and make the world itself at last free.

Address to Senate,
January 22, 1917.

In every discussion of the peace that must end this war it is taken for granted that that peace must be followed by some definite concert of power which will make it virtually impsible that any such catastrophe should ever overwhelm us again. Every lover of mankind, every sane and thoughtful man, must take that for granted.

Address to Senate,
January 22, 1917.

It is right that . . . this government should frankly formulate the conditions upon which it would feel justified in asking our people to approve its formal and solemn adherence to a league for peace. . . . If the peace presently to be made is to endure, it must be a peace made secure by the organized major force of mankind.

Address to Senate
January 22, 1917.

There is no entangling alliance in a concert of power. When all unite to act in the same sense and wth the same purpose, all act in the common interest and are free to live their own lives under a common protection.

Message to Congress
April 2, 1917.

A steadfast concert for peace can never be maintaned except by a partnership of democratic nations . . . . a league of honor.

The above in substance, is the program formulated and adopted by the League to Enforce Peace, at Independence hall, Philadelphia, June 17, 1915.

New Engineering Project.

A new project of American engineers is a giant canal 250 miles long to connect the Arctic ocean with the Baltic sea, extending from Kandalaska on the White sea to Tornea, near the Swedish frontier on the Gulf of Finland. The cost is estimated at $150,000,000.

Kill All Flies! They Spread Disease

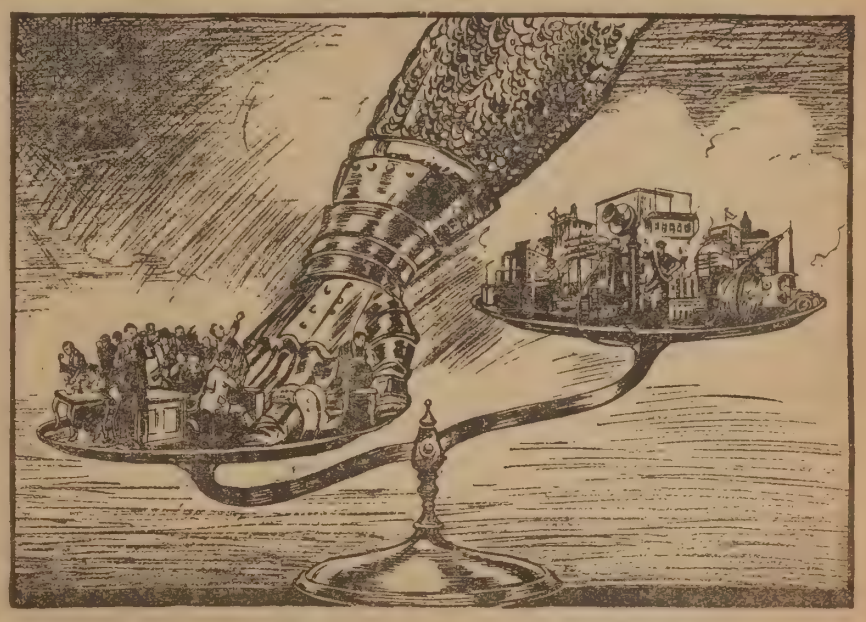
Placed anywhere, Daisy Fly Killer attracts and kills all flies. Neat, clean, ornamental, convenient, and cheap. Lasts all season. Made of metal, can't spill or tip over; will not soil or injure anything. Guaranteed effective. Ask for



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Sold by dealers, or 6 sent by express, prepaid, $1.00.

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The Weight of War

The heavy hand of war has disturbed the balance between supply and demand the world over. Our problem of serving the public has all at once assumed a new and weightier aspect.

Extraordinary demands on telephone service by the Government have been made and are being met. Equipment must be provided for the great training camps, the coast-defense stations must be linked together by means of communication, and the facilities perfected to put the Government in touch with the entire country at a moment's notice.

In planning for additions to the plant of the Bell System for 1917, one hundred and thirty millions of dollars were apportioned. This is by far the largest program ever undertaken.

But the cost of raw materials has doubled in a year. Adequate supplies of copper, lead, wire, steel and other essentials of new equipment are becoming harder to get at any price, for the demands of war must be met.

Under the pressure of business incident to the war, the telephone-using public must co-operate in order that our new plans to meet the extraordinary growth in telephone stations and traffic may be made adequate.

The elimination of unnecessary telephone calls is a patriotic duty just as is the elimination of all waste at such a time. Your Government must have a "clear talk track."

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
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One Policy *One System* *Universal Service*



A. B. NYSTROM, Editorial Contributor

Hit With Boomerang

Spokane Milk Distributors.

Spokane milk distributors know how it feels to be hit with a boomerang.

Some time ago Mayor Fleming appointed a commission of 15 citizens to investigate and report on the high cost of living. A sub-committee of three members is inquiring particularly into dairy products, and the Spokane distributors went before this subcommittee with an elaborate printed statement of the costs of producing and distributing milk.

One tabulation in their statement calculated the cost of production, for 50 gallon dairies in the outskirts of Spokane, at 26 1-3 cents per gallon.

The Inland Empire Dairy Producers' association has seized on that calculation and is on the point of demanding 26 1-3 cents a gallon for milk testing 4 per cent butterfat.

The distributors are now paying only 20 cents a gallon, or 6 1-3 cents less than their own figures of cost.

A resolution fixing the price at 26 1-3 cents came up at a meeting of the association in Spokane June 23, but action went over to a meeting to be held two weeks later.

The motion provided that after July 15 the members of the producers' association demand the higher price and it was provided that in case the distributors refused to pay it the producers would separate their milk themselves and sell to creameries, which are butter makers exclusively and do no retail trade in milk.

The membership of the Inland Empire Dairy Producers' association, according to its officers, includes 250 farmers owning more than 2500 cows and supplying at least half of the milk consumed in Spokane.

The big distributors, buying 4 per cent milk at 20 cents a gallon, are retailing at 11 cents a quart. An advance of 6 1-3 cents a gallon in the cost to the distributors would amount to 1 7-12 cents a quart.

The producers' association will meet again in the assembly room of the chamber of commerce Saturday, July 7, to take action.

Although the resolution to demand the higher price was not passed, the consensus of opinion of the producers was expressed in a resolution, which was passed, declaring that it costs 26 cents a gallon to produce 3.6 per cent milk.

The secretary was authorized to levy an assessment of 10 cents a month per cow for three months as subscription to the Inland Empire Dairy Journal and to defray expenses of the organization.

Jersey Registration Fees.

The amendments to the bylaws submitted on May 15 to the members of the American Jersey Cattle club for a vote have resulted in the adoption of a new schedule of fees covering the registration of domestic-bred Jerseys. The new fees will go into effect on September 17, 1917, and will be as follows:

Females, 1 year old or under—To members, $1 each; to nonmembers, $2 each.

Females, over 1 year old and not more than 2—To members, $2 each; to nonmembers, $3 each.

Females, over 2 years old—To members or nonmembers, $10 each.

Males, 1 year old or under—To members, $2 each; to nonmembers, $3 each.

Males, over 1 year old and not more than 2—To members, $3 each; to nonmembers, $5 each.

Males, over 2 years old—To members or nonmembers, $10 each.

Dairy Shorthorns.

A new record for prices on dairy Shorthorns was made at the Glenside herd sale of L. D. May at Granville Center, Pa., May 29, when 39 head went through the ring for a total of $39,312, or an average of $1008 per head. White Queen, an imported cow, brought top price of $3000, going to C. A. Otis of Willoughby, Ohio, a well known dairy Shorthorn breeder. A North Dakota firm bought several head, but none came to the Coast.

H. A.

Invents Aluminum Alloy.

An aluminum alloy has been invented by an Australian that is said to be as hard as steel, to be non-corrosive and which can be brazed and soldered.

Figures From Clallam County.

The Clallam County Cow Testing association finished the month of May with an average of 28.89 lbs. butterfat and 615.63 lbs. milk for 487 cows that were milking during the month, according to the report of E. W. Soper, tester. Of this number 21 produced over 50 lbs. butterfat each and 68 stood above the 40 lb. mark.

The high cow for the month, a grade Jersey, owned by George Dickinson, produced 1158.0 lbs. milk (test 5.4 per cent), 62.53 lbs. butterfat.

The scarcity of mill feeds puts a grain supplement to pasture out of reach of most of the dairymen. Although when grain is fed the results show plainly in nearly every case, but good pasture and no grain seems to give better results than a short pasture and bran or shorts.

The following cows have produced 50 lbs. or over of butterfat: Geo. Dickinson, 5; Homer J. Hart, 1; Edwin Pettit, 5; E. F. Gierin, 3; Thos. Laurenson, 1; Bert Simdars, 2; Orin H. Babcock, 1; Roy Stone, 1; R. F. Fasola, 1; Frank P. Holland, 1; Willis Chambers, 1.

The following have cows above 40 lbs. of butterfat: Orin H. Babcock, 3; P. S. Govan, 2; Ben Ridgway, 5; Bob Ridgway, 1; Fred Edgington, 1; Mark Gibson, 1; A. F. Fasola, 5; C. E. Blake, 1; Bert Simdars, 6; Thos. Laurenson, 1; P. A. McNamara, 1; E. F. Gierin, 14; Roy Stone, 8; W. S. Brown, 1; Frank Holland, 3; Edwin Pettit, 8; Geo. Dickinson, 9; Homer J. Hart, 9; Sam Kilby, 2; Willis Chambers, 1.

The following herds averaged over 30 per cent butterfat: George Dickinson, 16 cows, produced 851.14 pounds of milk, containing 42.395 pounds of butterfat. Edwin Pettit, 14 cows, produced 782.37 pounds milk, containing 41.806 pounds butterfat. Homer J. Hart, 25 cows, produced 792.76 pounds milk, containing 37.117 pounds butterfat. E. F. Gierin, 52 cows, produced 809.22 pounds of milk, containing 30.93 pounds butterfat. A. F. Fasola, 39 cows, produced 653.01 pounds milk, containing 30.71 pounds butterfat. Frank P. Holland, 30 cows, produced 684.98 pounds milk, containing 31.37 pounds butterfat. Bert Simdars, 20 cows, produced 603.07 pounds milk, containing 32.05 pounds butterfat. Roy Stone, 25 cows, produced 725.13 pounds milk, containing 35.78 pounds butterfat. A. A. Evans, 20 cows, produced 608 pounds milk, containing 30.53 pounds butterfat. P. S. Govan, 10 cows, produced 854.96 pounds milk, containing 31.49 pounds butterfat. Ben Ridgway, 15 cows, produced 752.8 pounds milk, containing 34.23 pounds butterfat. Orin H. Babcock, 15 cows, produced 653.8 pounds milk, containing 32.39 pounds butterfat. Fred Edgington, eight cows, produced 827.62 pounds milk, containing 33.57 pounds butterfat. George S. Willis, four cows, produced 864 pounds of milk, containing 33.49 pounds butterfat.

Less Swiss Milk.

The scarcity of stock food caused a great decrease in production of milk in Switzerland during the month of April, such as has not been experienced since the production statistics have been kept. According to the provisional results the average receipts of 461 milk-collecting concerns were about 37 per cent less than during the same period of last year. Compared with April, 1914, the receipts were 48.7 per cent less.

Grain for Skim Milk Calf.

Whole milk is nature's balanced ration for the calf and it should be fed during the first two weeks of the calf's life. Whole milk, however, is too expensive for prolonged calf feeding because the fat it contains is worth approximately 40 cents a pound.

In view of this price it is advisable to sell the fat and feed skim milk with a substitute for butter fat. The chief office of fat in the calf ration is to supply heat to the body. When the fat is removed and skim milk is fed the energy can be supplied more economically in the form of grain.

Protein is also expensive, but absolutely essential to development of the calf's body. None of the growth producing proteins is removed by skimming the milk.

When a calf is about two weeks old it may be taught to eat grain. If it is with older calves it will take grain without any special attention. Otherwise it may be started to eating by rubbing a small amount of corn meal or bran on its nose. In licking its muzzle the calf will develop an appetite for the grain. The grain may be kept constantly before the calf for a few days. W. W. Swett of the Missouri college of agriculture offers the following grain mixture for calves: Three parts cracked corn or corn meal and one part wheat bran. To this one part oats may be added if desired. Linseed meal or blood meal may also be added in small quantities, but neither is necessary.

The grain should be given in the dry form after the skim milk has been fed. After the calf is old enough to eat grain freely it should be fed at regular intervals. During the first two months the grain taken will be less than one pound a day. This should be gradually increased so that at the age of six months, when the calf is weaned, about two pounds will be taken daily.

When only a few days of age the calves will begin to nibble hay if it is within reach. It is preferable to feed timothy for the first two or three months after which alfalfa or clover hay will give better satisfaction.

Warranted to Give Satisfaction.
Gombault's
Caustic Balsam

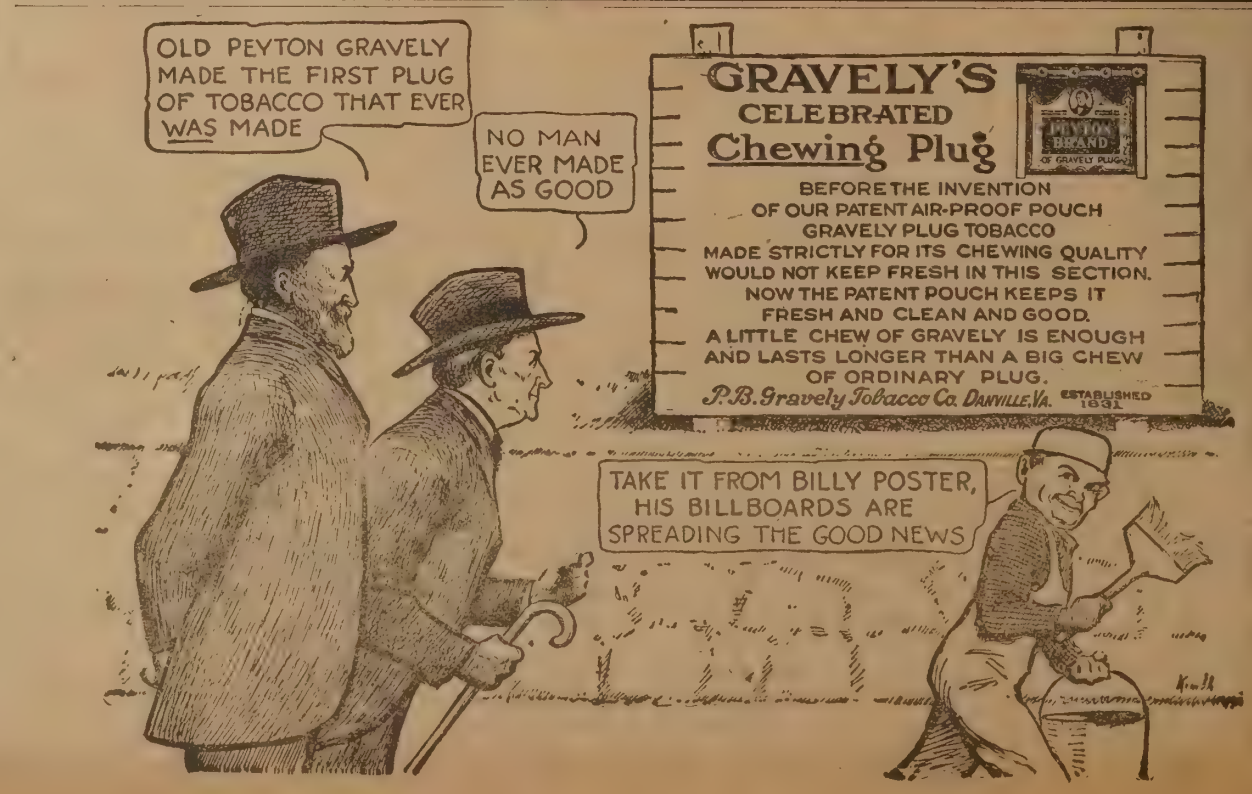


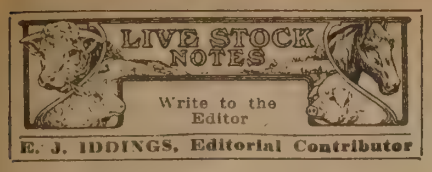
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Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.
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Purebred Registered HOLSTEIN CATTLE
To the open minded farmer or dairyman, the results of actual comparative tests of Holsteins with other breeds are striking object lessons of economic investment. The ten largest records of Holstein cows average 1007 pounds of butterfat and 25,887 pounds of milk in a year. A like number of cows of the nearest competitive breed produced 974 pounds of butterfat, and 18,120 pounds of milk. One good Holstein cow will produce as much as two ordinary cows at a saving in feed and care. There's big money in the big "Black and White" Holsteins.
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E. J. IDDINGS, Editorial Contributor

Stock Loss Heavy

Prices Are Likely to Remain High

In a circular letter issued by the American National Live Stock association and signed by I. T. Pryor president as well as by T. W. Tomlinson, secretary, there is the following summary of the losses of live stock during the past winter, as well as a statement of the exports of meat food products for the nine months ending March 31 of the last three years:

The last winter has been unusually severe on live stock. In many sections it has been the hardest season for more than 25 years. Drouth in some districts, and long-continued snow and cold in other localities, have resulted in very heavy losses, and the present condition of range stock is much below normal. Ranchmen have been compelled to feed all their own hay, and to buy large supplies of cottonseed products, corn, hay and other forage at abnormally high prices. The extra expense for feed, together with the large losses of live stock, when distributed on the remaining stock will show a very large increase in cost of production, and it will require high prices to offset this increase in cost.

Indications point to the continuance for some time of substantially the present level of prices for live stock. There is an undoubted world shortage, and the total supply of meat-food animals in this country is below the average of recent years. Even the speedy ending of the present world war ought not markedly to change the present basis of prices until a normal world supply is raised. The new revenue bill provides for an import duty of 10 per cent at ad valorem on all articles now on the free list. This will measurably serve to protect us from the products of live stock of other surplus countries where land and labor are cheaper. Had congress seen fit to retain an import duty on live stock, meat products, hides and wool, instead of putting them on the free list, our domestic production would have been greater than it is.

Exports of Meat Food Products.

Below is a statement of meat food products exported for the nine months ending March 31 of this year indicated. Please note that, while the total number of pounds exported is substantially the same for the two periods, 1917 as compared with 1916, the value is $54,038,607 greater in 1917 than in 1916:

Years	1917	1916	1915
BEEF PRODUCTS—			
Pounds	272,472,669	320,325,259	219,997,495
Value	$39,540,668	$39,292,993	$27,217,896
HOG PRODUCTS—			
Pounds	1,168,124,506	1,098,859,716	832,045,944
Value	$189,109,771	$135,378,841	$101,544,179
GRAND TOTAL—			
Pounds	1,440,607,175	1,419,184,975	1,052,043,439
Value	$228,650,439	$174,611,834	$128,762,075

Shorthorn Sales.

Five sales of Shorthorns held recently in Missouri and Pennsylvania included on an average of over 500 head at slightly more than $900.

Only once in the entire two weeks' sales did a single animal approach a spectacular price. In that case an imported yearling bull brought $7000. American-bred cattle throughout the series commanded prices on a level with the imported offerings.

Fixes Live Stock Prices.

The Italian government has fixed the maximum price to be paid for cattle requisitioned for army use. Live weight for oxen is about $1.10 a hundred.

SAVE BREEDING EWES.

Utah Sheepmen Look to Future.

The Utah Wool Growers' association has taken official action asking their members and other sheepmen of the state to make special effort to conserve female sheep for another year, and not allow them to be sacrificed on the block because of high mutton prices and high cost of feeds.

This is indicative of the nationwide movement looking toward the conservation of breeding stock of all kinds with a view of building up the well nigh depleted herds and flocks of the country.

Buy 240 Acres Near Palouse.

F. H. English and A. L. Hill have purchased the George Harper farm of 240 acres, three miles northwest of Palouse, Wash., on the Colfax road, paying $18,500. The land was bought as an investment. Mr. Harper owned the place for a number of years. He recently bought a section of land in Alberta, for which he paid $27,000, and will move to that place.

Vaccinating for Blackleg.

County Agriculturist B. W. Cooney of Klickitat county reports vaccinating 88 head of cattle for blackleg. He reports that this disease seems to be more prevalent this year than ordinarily, and that it caused quite a loss in certain districts. County Agriculturist M. J. Newhouse of Pend Oreille county also reports helping to vaccinate about 100 head of young stock for blackleg.



A NOTED Pacific Coast sportsman who has hunted everything from snipe to black bear, said recently: "The waterproofing feature now offered sportsmen in Remington UMC 'Arrow' and 'Nitro Club' Wetproof Shotshells, is the most important improvement made in the shotshell field in over a decade. The men who perfected the Wetproof system certainly know shotgun shooting and its requirements from field, duck blind and traps, as well as from the scientific angle."

Here is something that every man who lives in a wet climate or does his shooting in the stormy seasons ought to know about.

These are the first *completely* wetproof shotshells —a new and exclusive feature of the Remington UMC "Arrow" and "Nitro Club" Shotshells.

This is a process that took three years to perfect.

It involved a deeper study of wet-proofing materials than has ever been conducted outside of the Remington UMC laboratories.

It means special paper for the shells; a special formula for the wet-proofing; new equipment invented to apply the wet-proofing compound. Virtually a new type of shell—adding to the shooting qualities of "Arrow" and "Nitro Club" the hitherto unknown quality of perfect resistance to wet.

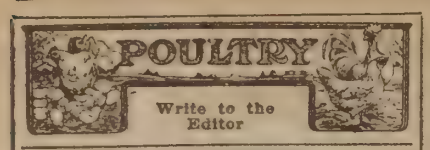
It produces a shell that can be soaked in water for hours without swelling, and without softening the crimp—a shell that is as bone dry inside after soaking as before—a shell that works perfectly through the gun in all climates, and can be depended upon for sure fire, speed, pattern and penetration, *wet days* as well as *dry*.

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JAMES DRYDEN
Editorial Contributor

Early Laying.

To the Editor: We have 40 Barred Plymouth Rock pullets hatched February 3, 1917, and we found a few were laying on the 24th of May. I would like to know if this is not unusual for Barred Rocks to lay so early. They have not had any kind of meat.—M. W. Greenlee, Seattle, Wash.

This is very early laying, and I do not know of any report of earlier laying for Barred Rocks. I have known them to lay between four and five months, and I have known Leghorns to lay in less than four months. It would be interesting to have a statement from Mr. Greenlee as to how he fed these pullets, and how they were brooded and cared for. J. D.

Overcrowding the Pullets.

It is about this time of the year that the young pullets for next year's laying often receive a setback due to overcrowding. Very often 50 pullets are kept all summer in a house that is large enough for only 25. The house may be large enough for the newly hatched chicks, but not large enough for half matured pullets. If more roomy quarters can not be provided half the pullets had better be killed off or marketed. Twenty-five good pullets will pay more profit than 50 stunted ones when it comes to laying.

The number of chicks hatched should be in proportion to the facilities for taking care of them when hatched. The effort seems to be often to hatch as many chicks as possible, with little thought given as to how they shall be raised. The result is many of them die, and many of them that live do not develop properly and are not profitable layers. Allowing too many to crowd together in small roosting quarters is one reason for the shortage of eggs in fall and winter. A very simple rule is to allow four to six inches of space per bird on the perches and keep the perches 12 inches apart, or 16 or 18 inches when the pullets approach maturity. This will give them sufficient room to develop.

But this is not all. The house must be well ventilated. It must be high enough to allow sufficient air space. A height of four or five feet at the rear and about six feet at the front is high enough to give the necessary air space and high enough for the convenience of the attendant.

The third point has to do not with the floor space nor the air space, but with the rapidity with which the air changes. The air must change often. Foul air must go out and fresh air enter often enough, otherwise the chickens will not grow and develop as they should because of a lack of fresh air. The best rule as to fresh air is to leave one side of the house entirely open all the time.

These are the three essential conditions in the housing of growing pullets —sufficient roost space, sufficient air space and sufficient ventilation, the primary essential of all three being fresh air. J. D.

Chicks Confined Too Closely.

A great many reports have been received of losses in chicks from five to eight weeks of age in brooder houses. In a large majority of cases it has been found that the chicks were kept shut in and never out of the brooder house up to a month and even two months of age. They have died without any apparent cause. They become droopy, hang their wings, lose appetite, are listless and move about little. Growth ceases and at eight weeks of age they may be no larger than they were at four weeks. It is a case of arrested development and finally death. They may have been well fed and the brooder temperature may have been all right and the poultryman may have worked hard to rear them, but nothing would save them.

One thing would have saved them, and that it for the poultryman to have worked less and let the chicks work more. Chickens can't be treated like hothouse plants. Let the chickens do the work. Of course the poultryman must not neglect them, but it is not necessary for him to sit up half the night and watch them 12 hours a day beside to see whether they are going to live or die. The remedy is to get the chicks out on the ground just as soon as possible or within a few days after they are hatched. The ground, of course, must be clean or sanitary. Let them scratch in the soil, eat the soil if they want to, chase after bugs, scratch out the neighbor's garden (pay the neighbor for the damage)—let them run and let the poultryman sit down and enjoy himself occasionally while the chickens are enjoying the pure, fresh air. The mother earth and the labor is life. The outdoors will not hurt the chicks. If the outdoors appears to injure them it is because the indoors were not kept under good conditions of temperature and ventilation. J. D.

Feeding Hens Pepper.

To the Editor: Owing to the extremely cold weather in this locality, I have used a warm wet mash in the morning, in which I mixed a teaspoonful of poultry pepper; my idea being to warm up the hens for the day's feeding and laying. Will you kindly advise if this method is proper for maximum egg production?
H. F. W., North Powder, Ore.

In practice I do not use nor advise the use of pepper. The high egg records at the Oregon station were secured without the use of pepper or other condiments. Though we have made no actual experimental test of it, I think our results have shown that it is unnecessary. There may, however, be grounds for the belief that pepper will stimulate production for a time at least. I know that prominent and successful poultrymen at Petaluma use pepper rather heavily at certain seasons, usually, I believe, about August, in order to get the maximum production when egg prices are good, and after the breeding season is over. But it is very probably true, as in the case of humans taking stimulants, that this artificial stimulation may make them feel good for a while; afterward there is a reaction.

There is no very strong experimental evidence, one way or the other, but my advice would be to put pepper in the medicine chest rather than in the food hopper. It is more for the sick hen than the laying hen. The proper stimulation for egg production is good food, fresh air and exercise. By the way, fresh air is a better egg producer than red pepper or other condimental foods. J. D.

Hereford Sells for $27,500.

At the Harris Brothers' sale June 28 of purebred Hereford cattle at Harris, Mo., in the last two days, 34 head of cattle were sold for $412,384. Repeater VII. sold for $27,500 and Gay Lad XVI. brought $20,000.

Market Gardening by Women

The present emergency for greater food production in the British isles leads Charles W. Macara to write a letter to the Irish Homestead on the pressing need for women's help in cultivating the land. He says:

Market gardening, of all work on the land, is not only a most healthful occupation, but the implements used in the work are not nearly so heavy as those employed in general agricultural work, and if women are put under a trained instructress it is remarkable how quickly they become proficient in their use.

The great need at the present time is to establish training centers with fully qualified women at their head. Amateurs, however willing they may be, can not be expected to be able to give the instruction that must be given to those who have had no previous experience of agricultural work.

In visiting the United States of America, Egypt and other countries, I have found that their governments are fully alive to the importance of providing agricultural training on scientific lines, and I do not see that what is being done so well in other countries should not be adopted in this, and educational centers established all over the country. At the head of these centers, as I have intimated, should be placed those who have received a thorough training at agricultural and horticultural colleges.

In a letter I addressed to the press in February last, on the organization of women's work, I strongly advocated the use of the National Register, which had been fairly well kept up, and if this thoroughly practical suggestion had been adopted, municipalities, district and rural councils would have little difficulty in ascertaining the number of women of leisure available for work on the land. I am convinced that there are many thousands. I thoroughly disapprove of house-to-house canvassing, with the object of inducing women to give up their present occupations, whether engaged in private service or in national work. What is wanted is to enlist the services of women of leisure, many of whom are anxious to serve their country in this time of grave emergency.

The proposed linking up of electrical power stations and the adaptation of electricity to the cultivation of the land, both as regards driving agricultural machinery and increasing the productivity of the soil, are matters to which considerable attention is at present being directed, and if successful may have enormous beneficial results. What we want, however, without delay, is a large accession to the ranks of women willing to be trained in the cultivation of the soil, and the prompt establishment of centers at which they may receive proper instruction.

The Motor Car
On the Farm

What's a Sleeve Valve?

Sleeve valves are smooth cast iron shells which slide up and down inside the cylinder between the cylinder wall and the piston. Each cylinder has two sleeves, one working within the other. As the sleeves slide up and down openings in each come together, giving passage to fresh gas and expelling dead gas. Connecting rods working on an eccentric shaft raise and lower the sleeves which move only a short distance—less than an inch in most cases. It is said sleeve valves seldom if ever require adjustment. The statement also made for the sleeve valve motor that it is free from carbon deposit, the carbon formed being made to act as a lubricant to the sliding surfaces of the sleeve. The sleeve valve motor may have either battery or magneto ignition and either a thermo-syphon or pump cooling system.

How to Have Clean Valves.

Any car owner can keep the exhaust valves in his engine comparatively free from serious carbon deposit by using kerosene in the following manner about once a week:

Remove spark plug or open priming cocks and pour into each cylinder about half a teacupful of kerosene—enough to wet thoroughly the walls of the combustion chamber. Cut off the ignition and crank the engine, giving the oil a chance to get into every part of the combustion chamber and over the exhaust valves and stems. Do this in the evening, preferably, and let the kerosene remain in over night. When you start your engine next morning you can see particles of carbon in the white smoke that comes from the exhaust. During the night the kerosene has cut loose most of the carbon from the cylinder and cleaned the exhaust valve stems as well. With so simple a method to prevent the annoyance of sticky carbon-clogged valves no one need have this form of trouble.

GOOD NEWS FOR RENTERS AND FARM OWNERS' SONS.

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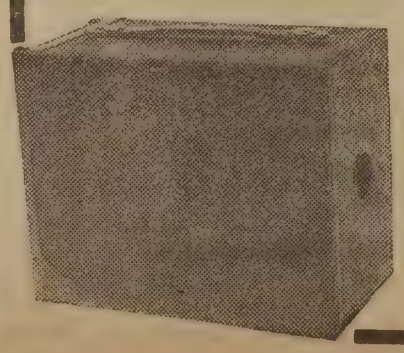
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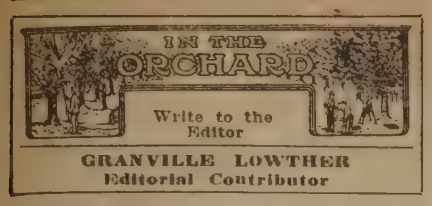
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GRANVILLE LOWTHER
Editorial Contributor

Tomato Diseases.

Some time since we received a letter making inquiry about a form of disease affecting the tomato and supposed to have originated from the use of poison for insects. On receiving the letter I wrote a short reply, which was not satisfactory, because it failed to answer the question, "What is the nature of the trouble?"

I am not yet prepared to answer, because I do not know all the conditions; but, considering that the tomato is destined, on account of the increase of the number of canneries, to become one of the more important crops, and much more important than at present, I have concluded that it is better to write more fully, naming and very briefly describing the diseases to which tomatoes are ordinarily subject, so that tomato growers may form some idea about the nature of diseases and a cure where remedies are known.

Anthracnose.

This is common in widely different localities, is a kind of tomato rot and caused by fungi. Professor G. E. Stone of Massachusetts says it can be cured by spraying with Bordeaux mixture.

Blight.

There are several forms of blight, among which are the following: Bacillus solanacearum. Downy mildew blight, Phytophtora infestans. Leaf blight rust; Cylindrosporum sp. Leaf blight, Septoria sp. Sclerotium blight. Western tomato blight. Winter blight.

The first named has done considerable injury in the south, and the authorities recommend spraying with Bordeaux.

The second named is the same as that of the potato, and has sometimes caused the loss of whole crops. It was this that caused the famine in Ireland in 1845. Spray with Bordeaux.

The third named, leaf blight rust, has given considerable trouble in New York and New Jersey, in greenhouses and where there is not sufficient light and air. It affects the lower leaves, particularly where the plants are crowded. This is not common in this country, especially in irrigated sections. Spray with Bordeaux.

The fourth named occurs mostly in New Jersey, Ohio and the south. Circular spots form first on the lower leaves and then on the upper, finally destroying the leaves and leaving little but the bare steam and small, stunted fruit. Spray with Bordeaux.

Sclerotium blight, the fifth named, occurs mostly in Florida and in greenhouses. However, according to some authorities, it is the same as western tomato blight and requires the same treatment.

The sixth, or western tomato blight, has been the subject of much controversy. It has been claimed to be the same as the Sclerotium blight and to have affected the crops of California and Oregon. Again this has been disputed, and it has been claimed to be peculiar to the northwest, especially the Inland Empire. It has been claimed to have been caused by a bacterium, and then this is disputed by apparently good authority. In fact, I am judging by the bulletins sent out from our experiment stations, that opinion is changing as to whether it is caused by a soil condition or a bacterium. The symptoms are a gradual yellowing and a curling of the foliage. As the leaf tissues turn yellow the veins take on a puurplish color. The plants are dwarfed and fail to mature fruit. The stem of the affected plant is thickly covered with glandular hairs. The small lateral roots are at first discolored, then die back, and where a root is killed several more start at its base to replace it, so that a mat of small laterals are formed rather than long feeding roots.

Professor Humphrey, formerly of Washington State college, recommended "doing away with the seed bed." This I have tried and found it efficient, but not sufficient. That is, the plants would blight, but not so badly as where they were transplanted from the bed to the field. I tried sowing the seed in hills where I wanted the plants to grow, and thinning to the desired number. This did not prevent blight, but they did not blight so badly.

Noting that greenhouse men generally grow their tomatoes under lath to prevent blight, I conceived the idea of excluding in part, the sunlight by planting in the shade of fruit trees, where they would be protected from the sun at least a part of every day. This I found to be helpful.

I have never known a case of blight where the soil was good, properly irrigated and properly shaded.

By a good soil I mean a rich soil, not overcharged with alkili. By proper irrigation I mean, irrigate as nearly as possible to the plants, rather than by making the irrigating laterals midway between the rows. This drives the alkali from the plant, whereas if you make the ditches midway between the rows, the water percolating through the soil will drive the alkali toward the plant, and blight results. Then, too, the plants should be irrigated in the evening, allowing the water to run during the night, rather than in the morning and during the day: The reason for this is that if the water is turned on in the evening by morning the plants are sappy and turgid, and stand the rapid evaporation from their porous stalks, therefore become blight resistant, whereas if the other method is followed, they dry up and wilt. I have no controversy with those who claim that blight is due to a bacterium, for there are conditions of soil and climate where this species of bacterium is always present. What I claim is that partial shading and proper irrigation in a soil adapted to the growing of tomatoes are conditions unfavorable for the multiplication of that species of bacterium. Therefore the bacterium need not be taken into account if you have the right kind of soil and give it the proper treatment.

The winter blight occurs on late shipping stock and early spring plants. Spray with Bordeaux.

There are other diseases, but they mostly affect work in greenhouses. This article would be too long if I treated every disease minutely, but having given the principal diseases affecting the field industry, especially in the northwest, I presume I have done the best I can under the circumstances. A northern slope is better than a southern, because it is slightly protected from the sun; the less alkali the better in our volcanic ash soil; a heavy coating of well rotted barnyard maneur is good; plant the seed where you want the plants; irrigate the center; irrigate in the evening. G. L.

Big Cherry Problem

But for the benevolent rascality of the nurserymen, E. Bowles, of Prosser, Wash., would have failed in the cherry business. Mr. Bowles himself admits it.

"My first tree order was a solid one for Bings," he explains, "but the usual thing happened, and in the shipment were a scattering of Gov. Woods. Ordinarily this kind of thing doesn't please the buyer any too well, but the mixture of Gov. Woods, an inferior market cherry, is all that saved me. Why? Well, simply because the Bing is a failure when it comes to self fertilizing. I used to lay all my failures to late frosts, but I have come to see that pollenization is the biggest problem confronting cherry growers in the northwest. When you get a fine showing of blossoms and a poor stand of fruit don't charge the failure up to frost till you have investigated. Remember that an unfertilized blossom drops off just as a frosted one does. And remember, also, that the Bing, although a fine market cherry, is practically incapable of self fertilization on a big scale."

Mr. Bowles has planted four or five Gov. Woods to the acre, but is inclined to think this is hardly enough. He states that the county agent is experimenting with Black Tartarian, and that up to this time results have been promising. This variety is a better market cherry than the Governor Wood, and if it proves to be capable of taking the place of the latter as a pollenizer the financial saving will be considerable. P. E. T.

Important Grain Country.

Rumania is an important grain producing country. Its average exports of corn from 1911 to 1913 ranked second only to those of the Argentine, while its wheat exports stood sixth among all countries and its oats exports fifth. The country has a somewhat smaller area than the state of Arkansas. Rumania also has rich oil wells operated to a considerable extent by the Standard Oil company.

Nature Adopts Poison Gas.

Most people think that the use of poison gas in warfare is a purely human or perhaps one should say inhuman idea. Yet the plan has been adopted by nature. Certain kinds of beetles, known as bombardiers, and called by scientists brachinus, make free use of poisonous fumes to keep their enemies at bay.

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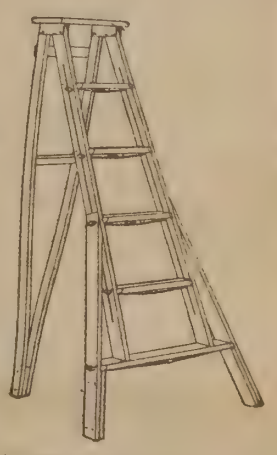
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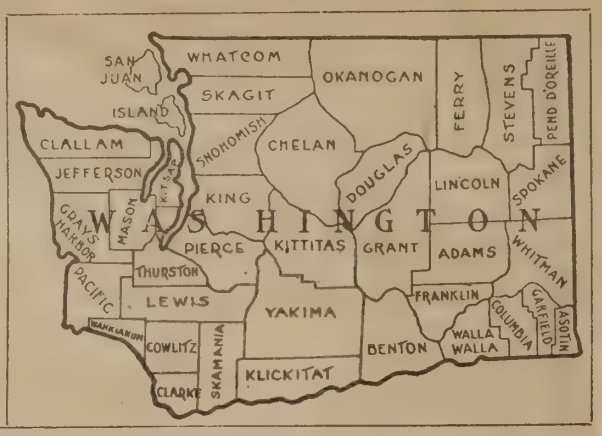
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Is It Wasteful to Eat Meat Now?

Writer Says Grains Make Better Food Than the Meat That Can Be Produced by Feeding Them To the Stock



KELSO, Cowlitz County, Wash., June 26.—Live stock has not materially increased nor is disposal widespread, though here and there a few are being cut out. Meat is in reality a wasteful food and I think you will find that the same amount of corn, wheat, etc., will go much farther as human food than the meat which it produces. As population increases and the food supply endangered, the resort must be made to meat produced only after the roughage unfit for human food. Eat grain rather than meat.

L. S. KELSO.

Rains Insure Heavy Crops.

CHIMACUM, Jefferson County, Wash., June 29.—At this date, the last of June, we find the season about three weeks late and have had very heavy rains the last three weeks which will insure heavy hay crops and the early potatoes never looked better. Production has increased very much, especially with potatoes and garden truck. There are also abundant pastures on account of the late rains, also the grains on the high lands are going to yield very heavy, but the bottom land crops, such as carrots, mangels, etc., are damaged to some extent on account of the rains. If we have dry weather during the month of July they will come all right.

Labor is a little scarce, but we think that there will be enough to harvest the crops, by working Sundays and evenings during haying.

JOHN VAN TROJEN JR.

Labor Secretary.

PORT ANGELES, Clallam County, Wash., June 29.—While the spring is the latest for many years on the Olympic peninsula it augurs well for abundant root crops and hay. Hay, potatoes and peas will show the largest increase as to yield and the farmers look forward to a ready market and good prices. There will be no change in the method of harvesting. Owing to a large increase of men employed in logging, milling and the erection of new industrial plants, farm labor is scarce in Clallam county and if the situation does not improve in the immediate future it will look bad for our farmers when harvest sets in.

J. P. CHRISTENSEN.

Produce More Silage.

OLYMPIA, Thurston County, Wash., July 3.—I have not as yet been able to make a complete check of the results from the increased crop movement. So far as I have data to the present time the increase is most noticeable in oats, beans and gardens.

A large increase in beans through direct work for that increase is certain. This crop is looking fine and present indications are that yields will be good. Oats, however, as with nearly all spring sown grains, are somewhat backward, due to the spring weather conditions.

We are short on labor and that shortage is particularly noticed now with haying coming on.

With regards to changes in methods of harvesting, the only change will be in the production of more silage. We are expecting a big increase in the number of silos. C. H. BERGSTROM.

Many Silos Being Built.

MONTESANO, Grays Harbor County, Wash., June 30.—As a result of the agitation to increase crop production would estimate that the total crops have been increased approximately 10 per cent. This increase is made up largely in the towns of general garden crops with potatoes predominating. In the country the increase is due to increase of potatoes, peas and small grains. The present prospects are good for large yields providing we have a fairly late fall. Labor, machinery and work stock in this community seem to be adequate for harvest needs, although labor is considerable higher this year than in the past. There has been a noticeable increase in milk and all dairy products this year. A great many silos are being built and it would appear that cattle will be wintered better this year than last.

C. F. MONROE.

Mustard in Fall Wheat.

LA CROSSE, Whitman County, Wash., July 1.—There is not much change in crops in this vacinity, wheat being the main crop. Crop prospects are good considering late season and nearly all spring sowing. Fall wheat is reported very weedy with mustard and will no doubt be hard to harvest in places. Spring wheat is heading nicely and in all, prospects are for a fair crop. There won't be much change in harvesting, heading and threshing being more popular. There are a few binders and combines added this year and a few farmers head and stack and later thresh it out of the stack.

M. E. SCHRECK.

Farmers Disposing of Stock.

PORT ORCHARD, Kitsap County, Wash., June 30.—The farmers of this county are disposing of their stock and reducing their herds, to just what percentage to estimate the reduction I am at a loss to say. The need for increasing or holding the meat supply up to the standard is one of importance and I think a strenuous campaign for the raising of all heifer calves, keeping of brood sows, laying hens, and lambs, will probably have to be instigated. C. B. SPRAGUE.

Work Farms to Full Capacity.

CHEHALIS, Lewis County, Wash., June 29.—There has been a tendency in this community on account of the agitation for increased crop production to add many small patches of land not ordinarily in cultivation and in the country the farms are being worked to their full capacity. In the towns and even about the mill towns many are working gardens and raising patches of potatoes who have not previously done so. I would say, however, that the result of all of this effort would be an increase of not more than 10 per cent in the food supply over normal years. Prospects for yield are excellent. The spring was late, but we are having seasonable rains. There is plenty of machinery and work stock in this community for harvesting and there is plenty of labor, providing enough of the old "has been" farmers and the young dolittles can be pulled out of the towns for a few days during haying. We will harvest the crops but it will be in many cases to the neglect of other work that should be done. The methods of harvesting remain the same here. The ordinary binders and haying machinery are sufficient as the fields are not large enough to justify the elaborate outfits used in some sections. The condensed milk company has stimulated the milk business by paying unusual prices for summer milk and by reaching out into new fields with their milk trucks. The increase in the supply of milk will be far greater in this community than the increase in potatoes, beef or any of the grain crops.

J. C. BUSH.

Use Shattered Peas for Hogs.

FAIRFIELD, Spokane County, Wash., June 28.—The number of live stock is about the same as last year except hogs and there seems to be a shortage, and good prices have been obtained for both pigs and sows. There is no question but that the farmers should increase their stock, especially hogs, but under the present high prices of grain they are loath to do so. The farmers generally sold their grain at $1.50 or under so to feed hogs grain at the price it was this spring was prohibitive. The quickest way to increase the meat supply is by raising more hogs. The pea farmer or grower is the one who will reap quick returns by utilizing the shattered peas after harvest in this way. ROY G. ADAMS.

More Hogs and Chickens.

TWISP, Okanogan County, Wash., June 24.—The number of live stock is as large and very likely larger than last year and the grade is being improved. The farmers are not anxious to sell their stock and the majority are trying to increase their herds. I will suggest more poultry and pigs for increasing the meat supply. If all the farmers and their wives were to raise all the pigs and chickens they could handle within 18 months, there would be an over-supply of meat and eggs. Most of the farmers of this community are making an extra effort to produce more foodstuff than usual.

GEORGE LA RUE.

Logging Camps Take Men.

DARRINGTON, Snohomish County, Wash., June 22.—The weather has been ideal for the last two weeks for the growing crops, but it is yet hard to tell what the hay crop will be, for everything is over a months late in this section. Hay is very backward and it looks as if the crop would be rather light. Cherries are nearly all falling off the trees and it looks as if the fruit will be rather scarce. Hogs are very scarce and selling at 18 cents per pound, dressed; little 6-weeks-old pigs are selling at $4 per head; beef at 13 cents, dressed. There is no decrease in dairy cows; if anything they are increasing in this section, with the Guernseys in the lead. Nearly everybody had to replant their corn and it is now just coming up, as it was very cold and wet in May. Mangels, potatoes and other garden truck is looking fairly good. Farm help is very scarce and the farmers will have a hard time getting any help at all during haying, and that is about the only time most of the farmers need any help. The logging camps are picking up every man that comes along at better wages than the farmers can afford to pay.

C. B. NEIDERPREUN.

Had Million Dollar Rain.

METHOW, Okanogan County, Wash., June 25.—About the same number of live stock is raised this year as formerly unless it is more pigs. Farmers are trying to increase dairy stock herds also. The quickest way to increase the meat supply is to pass a law allowing no cattle to be butchered that won't dress out 400 pounds of meat. The cure that some suggest for meat supply will not work, namely that no sows or cows be butchered. I think that when either of them fail to produce their young once a year there is only one place for them and that is the block, especially for the range cattle. A million dollar rain fell here recently, which will insure good crops.

CHARLES GRANT.

Increasing Purebreds.

COLVILLE, Stevens County, Wash., June 25.—There is no data available by which one could compare the number of animals in the county this year with last year. From all indications there is a shortage of hogs, a small increase in the number of cattle, and a large increase in sheep. As a whole most farmers are increasing their herds. This has been especially noticeable along the pure-bred line.

A. R. HAHNER.

Cherry Crop Is Short.

GRANDVIEW, Yakima County, Wash., June 22.—I don't think there is much difference in the number of cattle, but there are not as many hogs as last year. Farmers here can not raise enough grain to feed hogs profitably. I think if we had more pasture it would help. Haying is more than half done, the hay is of fine quality. The cherries are nearly ripe, but not half a crop is expected.

E. H. FAULKNER.

Should Increase Poultry.

SPOKANE, Spokane County, Wash., June 13.—The farm survey records from this section indicate that on the whole there is a slight increase in live stock, probably the average increase that could be expected in a normal year. There is a decrease in farm horses, although the general quality of these horses is probably better. Farmers are inclined to increase their stock, especially sheep and hogs. More immediate results in increasing the meat supply at this time could be secured with poultry than in any other way. An increase in hogs would also be feasible in helping with the supply of meat, and farmers are, at present, doing everything in their power to do this. This is shown by the fact that there

REAL HOMES at Milan Farms

on Great Northern Railroad, only 25 miles from Spokane, the metropolis of the Inland Empire and live stock, fruitgrowing and grain center of the Pacific Northwest.

Especially adapted to dairying, diversified farming, stock and poultry raising. Free rural delivery daily, excellent schools, splendid roads, long distance telephones and near fine lakes and streams. Soil rich, with ample moisture.

Every acre put on the market last year was sold, indicating attractiveness of our proposition. Additional acreage now ready at prices from $7.50 an acre up, on terms to suit purchaser.

SPECIAL OFFER TO JUNE 1

All purchases to June 1 secure service of man with team, stump puller and carpenter for one week free.

Write for attractive folder giving exact facts about these lands and the best opportunity for securing the most attractive farm home in the northwest.

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HIGHWAY TIRE PROTECTORS

Do away with punctures, blowouts, cuts, bruises. Prolong life of tires. We absolutely guarantee any standard rubber tire to wear 20,000 miles if Highway Tire Protectors are used.

Prevent skidding; keep tires cool, smooth, dry. Tightening links insure correct adjustment. May be put on and taken off without deflating tires. Steel studs grip the road, give tremendous traction power. Reduce gas consumption Damaged sections can be replaced in five (5) minutes.

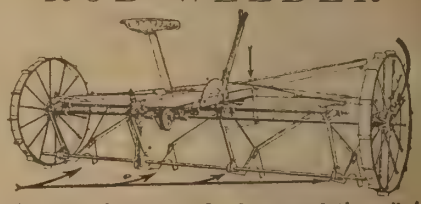
Save your tires, and tire expense. Highway Tire Protectors cost little compared to saving in tire bills.

Write for descriptive circular and Free Trial Offer. See for yourself. Prove our statements.

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DOUBLE GEARS — Each Carrying Half the Load
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WANTED Cascara Bark

We buy cascara bark, Oregon grape root and Oregon balsam of fir at the prevailing market. Submit samples and quantity you have for sale.

BLUMAUER-FRANK DRUG CO.
357 Everett. Portland, Oregon.

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

is a greater number of brood sows this year, although the total number of swine is considerably less. Ten pure-bred sow pigs were recently distributed to boys and girls of the county in connection with pig club work. The production of beef is at its maximum in this region at present and can not well increase until there are more silos and facilities for the raising and fattening of cattle. A. R. CHASE.

Government Must Be Heroic.

COLFAX, Whitman County, Wash., June 18.—There is not over 50 per cent of the live stock there was a year ago in Whitman county. Farmers are not much disposed to increasing their herds owing to the high prices of feed. There is only one way to stimulate immediate meat production and that is for the government to guarantee that the prices of meat will not be allowed to become disproportionate to the prices of feed. A year ago the farmers were caught with five cent hogs and $1.25 wheat, and were absolutely at the mercy of the packing houses. Of course they had to unload hence the present shortage. On a basis of 75 cent wheat, hogs should sell for eight cents per pound; on dollar wheat at 10 cents per pound; on $1.50 wheat at 15 cents per pound.

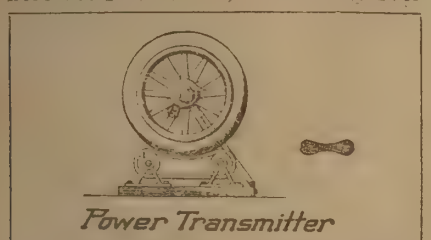
With this guarantee the quickest way to produce meat would be through the medium of hogs. A good brood sow can, in 10 months' time, put on the market 1200 pounds of pork. A suckling pig, if properly handled, can produce the same amount in 18 months. If the meat supply is to be increased in the face of present conditions something heroic must be done, and it is up to the government to be the hero. Farmers will not feed the present high-priced feeds and take chances on low-priced hogs. "A bird in the hand is worth two in the bush." The bacon that the packing houses are now selling at 45 cents per pound was bought last year from the farmers for 5 cents a pound. This is outrageous, not only to the farmers but to the consumers as well. This experience has opened the farmer's eyes. They are in favor of letting the packing houses raise their own meat. E. C. HUNTON.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Power Transmitting Apparatus for Automobile.

Each rear wheel of the automobile here rests on a belt, which runs over

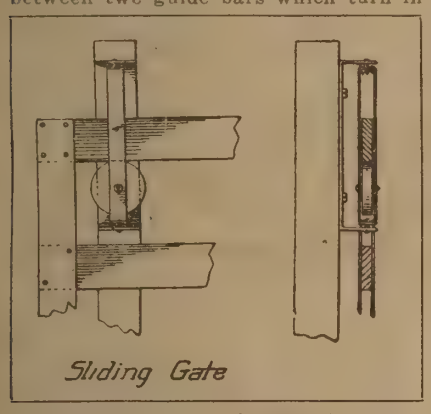


Power Transmitter

two grooved wheels. The power is taken from a pulley on the axle of one pair of grooved wheels.

Sliding Gate Hanger.

The roller of this hanger revolves between two guide bars which turn in

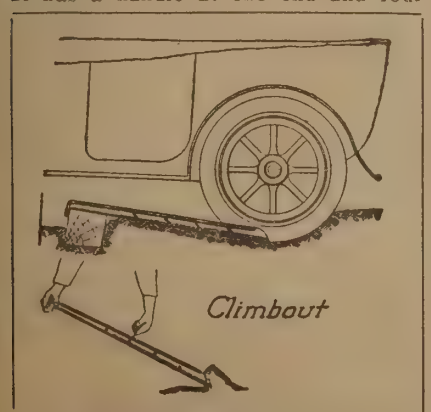


Sliding Gate

a bracket. To open the gate the operator slides it half way and then swings it horizontally.

Climbout and Shovel.

This climbout is made of stout sheet metal bent into the form of a trough. It has a handle at one end and four



Climbout

cross chains which help the car to climb out of the mud and also serve as handles when the device is used as a shovel.

Talks With Farmers

Readers of The Washington Farmer will enjoy a few notes made by Bernard Tormey of Spokane on a horseback trip to British Columbia.

MILAN, Spokane County.—I have had a good day's ride and talked to two very interesting persons. The first was T. H. Judd of Colbert. He has a 40-acre garden tract there and liked to talk.

Mr. Judd, while working on his garden tract in fall and winter, proved up on a homestead in Saskatchewan, Canada, in the summer. He leased his homestead for a good fee as soon as he received his title and preempted another which he also leased. The income from these and his garden tract are now keeping him comfortably. Mr. Judd put his son through the electrical and civil engineering courses at W. S. C. He said his son could get good jobs on his diploma anywhere and has been making good money since he graduated several years ago. He is now with the army engineers' officers reserve corps.

I spent the night at Leo Johnston's home near Milan. Mr. Johnston has 18 head of cattle and is milking six. He has also a quarter section of land. He says that dairying is the big idea at Milan. The country is ideal for it and there are still large patches of good range left.

There is a storm brewing in Milan over the price that producers get for their milk. Right now the dairy men have to sign a year's contract at 17 cents per gallon. A while ago the wholesalers said in the paper that they were paying 20 cents to the producers, which is condemned here as a lie. Milk is selling in town at 11 cents a quart and the producers are getting 4 cents on it.

LACLEDE, Idaho.—I rode from Milan to Priest River yesterday. The country was nothing but logged-off land all the way with only one farm of any interest whatever. This one belonged to a Mr. Mitchell, who has one of the nicest farms I have seen on this trip. It is 160 acres almost entirely cleared and lies in the heart of the wilderness about five miles from Newport. Mr. Mitchell has some mighty fine fields of fall wheat and expects a good crop if the fall is reasonably late to make up for the late start this spring. This farm was the only one on the whole 20 miles from Milan to Newport.

I rode yesterday from Priest River to Sandpoint, Idaho. The trip was delightful from both my viewpoints, the esthetic and practical. I met and talked with two very interesting farmers. The first talked with me about conditions around Laclede. There are quite a few fruit trees around there which are promising a good crop this year in spite of the poor start. Things in general are doing well.

The road from Priest River to Laclede is settled almost entirely by Italians. They have a church of their own and there is a regular little Italy right here in Idaho. Their farms make most of the American farmers' around here look rather poor. A national characteristic of the Italians is supposed to be untidiness, but the farms in the Italian settlement are almost model plants. I saw modern machinery, high class cattle and good buildings on all sides.

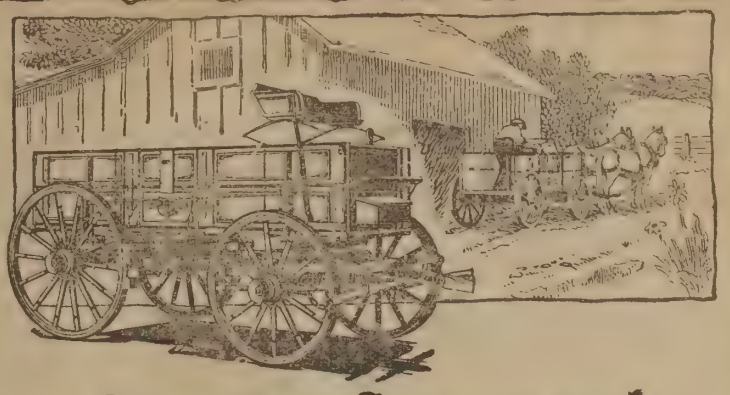
A good illustration of the value of both scientific education and of good agricultural papers was given to me by Mr. Shaffer of Kootenai. He told me that the farmers around there had for some time produced almost negligible results from their clover plots. There the two Liszt brothers moved into the vicinity and took up scientific farming on a thorough system. They taught the farmers there the secret of inoculating the clover seed; now the farmers are showing as fine stands of clover as could be seen in many a long day's ride.

Kootenai with backwaters from the floods which have rotted the wheat on

There has been some trouble around some farms.

Clocks Made in 1660.

Tall clocks were made in England in 1660.



Capacity Guaranteed

TELL the dealer you want a wagon that the manufacturer will guarantee to carry your biggest load. If he is up to date, he will show you a **Weber** or **Columbus** wagon with its capacity stenciled in plain figures on the rear bolster. That is the new idea for protecting you in your purchase of a wagon.

When you bought by skein size, you could not be sure that you were buying the most economical wagon. Now you can be sure. Every **Weber** and **Columbus** wagon that leaves the factory is guaranteed by the manufacturer to carry a known load over the roads that you have to travel.

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Opportunity for Owner of Rig or Automobile

THE publisher of **The Washington Farmer** wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are offering these positions only to farm owners or renters and are paying good salaries to workers who had no experience in this line before accepting our offer. In almost every neighborhood there is an opportunity for building up a successful business. Perhaps this is the very chance you want to earn some extra money.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month, or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter.

THE WASHINGTON FARMER
Review Building, Spokane, Wash.

Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

Chapter XVIII.

Looking back to the age of ten or eleven I can see myself in our prairie home in the Big Bend seeking amusement and adventure with the ingenuity of the young—always alone, miles from neighbors and children of my own age.

I began to get acquainted with the prairie animals. There were the squirrels, the perpetual squirrels, too numerous to be amusing. Chipmunks were more entertaining, though harder to find. They were small fellows with striped backs, bright eyes and bushy tails, which they carried erect when running in fright and uttering their peculiar "whir-r-r" as they darted for cover.

The coyotes were numerous, though one never got near one of them. The summer mother and I stayed alone on the claim coyotes often dashed into our small flock of hens and carried away a fowl in broad daylight, with mother waving her broom and calling loudly to frighten the animal. In the evening and morning they howled and wailed in the big gulch south of our house. Often I was awakened at sunup by their short, staccato barking and yelping. They were cowardly, but swift of foot and cunning. When especially hungry they were inclined to boldness, especially if you had no gun; and that summer mother and I had no gun.

But during the summer we acquired a dog. He came into the yard one day, an immense, bony hound, with powerful limbs and massive jaws. He was black from tip to tip and had pleading brown eyes. He was hungry and thirsty and mutely asked for food and water.

Mother and I were lonesome that summer; and both of us welcomed the huge, black hound. We fed and watered him, after which he padded contentedly toward our doorstep, circled thrice, and plumped down with every evidence of being at home.

What kind of a dog he was, to whom he belonged, or how he found his way to our place we never learned. Years afterward I was told that the summer the Central Washington railway built from Spokane to Coulee City nine miles west of our claim—which was the summer the black hound came to us—a Russian of title came through the country from Spokane to Coulee, thence to Waterville and down to the Columbia at Wenatchee, partly for the experience of "roughing it" on the prairie frontier, and partly to see how the American pioneer proceeded in the development of new country—Russia then having immense areas of equally unsettled domain. I was told that the Russian had with him an immense hunting hound, which was one of a pack he had used in hunting big game in Asia; also that he had given the dog to some one while in the Big Bend, and that the dog had subsequently disappeared. The animal was a trained hunting dog that had seen service on the steppes of southern Russia and even in the Asiatic jungles.

How much or how little of this half-legend tale of the titled Russian and his trained hunting dog is true I can not say. I am inclined to credit this story, however, and I often have wondered if the big, black hound that came to our door step was not the Russian's dog.

Certainly the dog had been trained to hunt. Often at night when the coyotes barked and wailed in the big gulch he would rise silently from our doorstep and speed away without a sound, save the beating of his big feet which were almost as audible as the hoofs of a horse. In silence he would return. Once I was sure there was blood on his jaws. I saw him slay a coyote once, and he did it with promptness and finesse which passed unnoticed then, but which now I realize indicated a dog trained to the hunt.

The coyotes of the prairie country did not fear the average dog of the pioneer, which usually was content to stay under the house or very close to it while the animals were prowling about. If an unusually courageous dog did venture out two coyotes often "paired" against the dog in a way that soon sent it back to the house with its tail between its legs. While the dog chased one coyote the other slipped in behind and chased the dog, nipping his heels. The excited dog would whirl and chase the one that had come so close to him and have his heels nipped by the other, now turned pursuer. Two coyotes would play tag with a dog in this way till the dog howled with fright and made for home.

Two coyotes tried a game of this kind on our big, black hound once. A pair of them appeared on the bunchgrass slope a couple of hundred yards east of our cabin. Attracted by our chickens they came nearer, not seeing mother and I watching from inside the house, or the big, black hound curled up on the doorstep. The hound saw them, however, but beyond raising his head slightly he made no sign of interest. We thought he was sleepy and tired from a chase of the night before and did not care to go after the approaching marauders; indeed, we did not realize that there was sufficient speed in his apparently sluggish limbs, or cunning back of his kind, brown eyes to enable him to outrun and outgeneral a coyote. We were to learn better.

When the coyotes had come so near that they were about to dash in for a chicken the huge hound rose leisurely, yawned, shook himself and trotted toward them in a somewhat disinterested way. I realize now that his apparent disinterest at the outset was not due to laziness as we then thought—it was simply coolheaded, deadly, menacing calculation. He moved from the doorstep not as a panic-stricken dog, but as a trained warrior going to battle.

The coyotes loped away from right to left, "spreading" exactly as they do when getting ready to "pair" on a dog. They even yelped defiantly. The black hound went on in a businesslike way, gradually edging out after the coyote to the left which presently he pursued with some show of speed. His utter calmness, however, was aggravating to mother and I who were getting excited. We feared that even yet the lazy hound would let one of the animals into our flock of hens.

The rear coyote closed in behind and nipped the black dog's heels. He stopped short in his tracks, regarding first one, then the other; arrived at a decision, moved gingerly toward the same coyote he had pursued at the out set. Again he had his heels nipped; again he stopped, glanced around at his pursuer in a way indicative of increasing interest; and again he went after the same coyote he had pursued before.

The pursuing coyote closed in for another nip—but this time he missed his nip! When he was within a yard of the hound's heels, the heretofore lethargic animal went into action with the lightening swiftness of a spring uncoiling. He whipped about in his tracks in the instant that the tricky coyote reached for his heels; and I believe he missed the coyote's throat by just about the breadth of one hair.

The coyote bounded sidewise in an astonished way, and darted away. Then the wonders began. The big, clumsy hound had ceased being clumsy. He stayed right at the flying coyote's heels, and in spite of the last link of speed the coyote possessed, he stayed right there. Outclassed in speed, the coyote took to dodging. Time and again the clever animal dodged, evading by a hairsbreadth, an open-mouthed lunge of the big hound. But it was a game at which the coyote quite clearly was new—and the dog experienced! His long, black body at times doubled back on itself like a serpent as he twisted, whirled and darted at the heels of the active coyote.

It was a pretty little game. I am sure the Russian nobleman would have enjoyed it; so would the emperor himself; for each animal displayed a bit of animal science of which we clumsy humans are very poor imitators.

The coyote, in spite of its undoubted shrewdness and endurance, presently

(Continued on page twenty-one)

Secrets of Health and Happiness

What Science Does to Ward Off Hardening of Ear Joints.

By DR. LEONARD KEENE HIRSHBERG, A. B., M. A., M. D. (Johns Hopkins University).

The hearing ear is always found close to the speaking tongue," but the poet only stated part of the truth. The poorly hearing ear is situated in the same way. While such old saws as "none so deaf as those who will not hear" are, in a fashion, true, there is more truth in the phrase that "Walls have ears" and "The deaf would hear, but can not."



Dr. Hirshbegg.

One of the material causes of deafness is hardening or sclerosis of the joints between the ossicles. These are miniature bonelets about the size of anise seeds or manna, shaped like a tiny anvil, stirrup and hammer behind the ear drum, facing the inner ear.

Matter, decomposed tissues, putrefaction due to germs and the inflammatory products of sore throats, "colds in the head," pharyngitis, adnoids, tonsilitis, scarlet fever, measles or any bacterial disorder which invades the nose, throat, mouth or ear may express itself finally as an "itis" or inflammation of the ear ossicles.

If this is kept up too long or recurs too often, in the end there will be rigidity or hardening of those bony joints.

"To take the bull by the horns" is, so to speak, the proper method whereby deafness caused by "ossicle-sclerosis" may be warded off. That is to say, if you wish never to be deaf your utmost endeavor must be made to prevent all or any infection or growth of germs in the eustachian tube or its environs.

"Chronic catarrhal deafness" is the old-style name, which is still employed to indicate almost any sort of increasing deafness. Whether it is in origin an infectious malady or whether it is due to or made worse by tobacco, drinking, high blood pressure or what not, the term "catarrhal" should be sent to limbo and a name, indicative of cause, effect and the accurate description of affairs adopted.

When there is too narrow a vent pipe, that is, too constricted an orifice of the eustachian tube, the ear specialist painlessly introduces an instrument into this canal and widens it. This spreads it gradually apart and sometimes helps to restore somewhat the ear's loss of sensibility. An outdoor life and a wide-open nose—obtainable by operation, if not otherwise—all assist the ear to hear better.

Baths, massage, osteopathy, vibration, electricity, inhalation of vapors and a complete change of habits, locality, scenery, air and light, as a long visit at the seashore or sulphur springs, help to better the hearing.

Dr. Beverly Robinson of New York city, who devotes much of his time to auditory disorders, holds that inflation of the eustachian tube with daily vaporization of iodine into the nose and middle ear has often worked near-magic, as it is cleansing, comforting and disinfecting.

The insertion of small-calibered, rubber tube into the vent pipe of the ear to make a free passage for vapors is now a practice among some doctors.

Good results are occasionally to be had by the mechanical vibrator inserted into the outer ear and another into the vent pipe or eustachian canal. Considerable skill is needed to produce the expected improvement. The victim himself can not do much, for special facilities and long continued patience are demanded in this delicate treatment.

American Farmer as a Producer

Much is said about the superior yield per acre of the European farms; how the French, German, English and the Belgian farmers obtain a greater production out of an acre of land than does the American farmer.

While statistics proves this to be true, it remains a fact that—

For every hundred pounds of products the English farmer on the average gets out of his farm the American farmer gets 230 pounds.

For every hundred pounds of products the German and Belgian farmer gets out of his farm the American farmer gets 250 pounds.

For every hundred pounds of products the French farmer gets from his farm the American farmer gets 320 pounds.

For every hundred pounds of products the Hungarian farmer gets out of his farm the American farmer gets 360 pounds.

For every hundred pounds of products the Italian farmer gets from his farm the American farmer gets 650 pounds.

These facts are brought out in the following table prepared by the United States department of agriculture and published in its monthly crop report for May.

EUROPEAN AND UNITED STATES AGRICULTURE.

COUNTRIES.	Year	Persons engaged in agriculture	Approximate area in cultivation	Acres per person engaged in agriculture	Index figure of productivity per acre	Index figure of production per person engaged in agriculture. U. S.—100.	Ratio * of production per man, United States to countries indicated
United Kingdom	1901	2,263,000	16,000,000	7.1	164	43	2.3
France	1901	8,165,000	60,000,000	7.3	114	31	3.2
Germany	1907	9,863,000	70,000,000	7.1	155	41	2.5
Hungary	1900	6,053,000	43,000,000	7.1	105	27	3.6
Belgium	1900	699,000	3,700,000	5.3	205	40	2.5
Italy	1901	9,609,000	45,000,000	4.7	88	15	6.5
United States	1900	10,382,000	280,000,000	27.0	100	100	....

* That is, per person engaged in agricultural pursuits.

Measured by the volume of production credited to each farmer on the average, the American farmer is producing two and three times as much as the European farmer and this fact of itself puts the American farmer on a higher plane of success than the European farmer.

This is not saying that the American farmer is doing his best or doing as well as he might and should do, not only for himself, but at this juncture for his country's needs.

When you can show the American farmer that he can increase his income by increasing his acre yield, he will increase his acre yield.

The mere fact that the Belgian on his five-acre farm or the Frenchman on his seven-acre farm get a larger acre yield than the American farmer on his 27-acre farm, is not sufficiently alluring to induce the American farmer to follow Belgian and French methods of farming.

All the World's a Stage, and All the Men and Women Merely Players

Liverpool Mayor Greets Pershing



Copyrighted by International.

In the above picture the mayor of Liverpool is seen greeting Major General John J. Pershing, commander of the American expeditionary force which recently arrived in England after a quiet and unassuming departure from the United States.

Flies Over the Stars and Stripes



Copyrighted by International.

There is but one flag that is ever permitted to fly over the Stars and Stripes on an American battleship and that is the one shown above. Whenever this flag is seen hoisted above Old Glory all navy men know that it is time to attend divine worship.

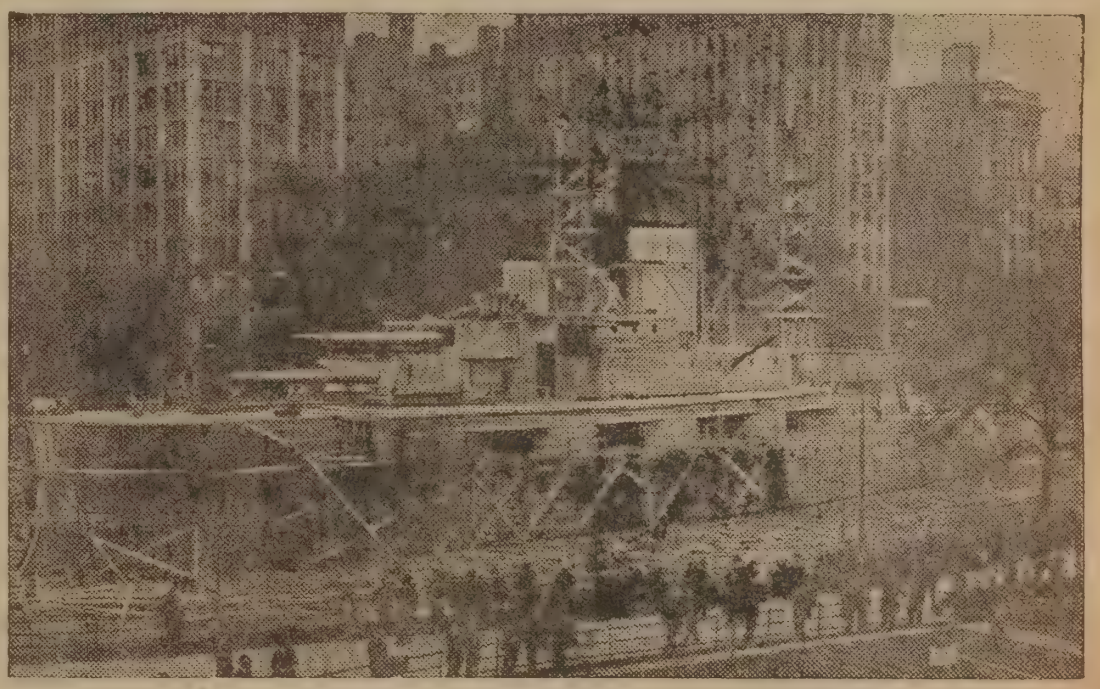
Volunteers Learn How to Use Bayonet



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Although the men in the accompanying photograph may look like the Roman gladiators preparing to battle for their lives under the stern eye of Nero or Caligula, they are actually just young American volunteers, on the state fairgrounds at Syracuse, N. Y., learning the gentle art of handling a 12-inch bayonet, preparatory to their entrance into the European conflict. For purposes of practice the bayonets are equipped with heavy rubber tips.

Built to Stimulate Recruiting



Copyrighted by International.

A wooden dreadnaught of timber, patterned after one of our modern battleships, is at present being erected in Union Square, New York. This dreadnaught is to be used as an aid for recruiting men for the navy. The novel ship is almost completed and in a short time will be opened as a recruiting headquarters.

Let the Old Eagle Get a Poke at Him.



—Philadelphia Press.

"Unt Der Kaiser Toldt Me I Vas Looking Fine."



—Wichita Eagle.

The Girl Who Dared

On the virgin slopes of Holbrook Hollow wild oats and mariposas continue to spread their June-time glory in all the undiminished exuberance of the slumberous ages before the padres. There, today, gay bevies of three-winged mariposas tilt their yellow petals and tip-toe their butterfly measures upon a diaphanous summer-day carpet of wild oats that has never been torn open by the plow.

Old Holbrook, in 40 years' occupancy, had cultivated but a scant acre or so along the meager creek which straggles across the northeast corner of his quarter section.

On the hillslope above his shack once stood the cabin of the Widow Enmark, its front south windows shaded by a rude, unpainted veranda.

Emily Enmark and her beau sat there, one afternoon, gazing absently at the familiar shimmer of the wild oats. Emily's hair looked very like them; a dim silver or an evanescent gold, according as the sun fell on it, or the shadow. With a wistful sigh she tucked her cheek down against a certain muscular hollow on the front of Donald's broad shoulder.

"The thing is perfectly all right," Donald argued gently. "Now that the Santa Mercedes Irrigation company has been organized, Holbrook creek is important. Some professional landshark would soon have found out that old Holbrook never proved up on his claim, and would have filed. Lucky I found out first. With me, he can go living here, just as he always has."

"He won't stay!"

Donald raised Emily's woeful face by the chin, and pressed a comforting kiss on each tremulous eyelid. But they insisted on flying open. Her eyes, each with its fine black circle edging the clear hazel iris, gazed pleadingly into his. The pupils had a habit of dilating under excitement. They now were so large that the eyes looked black, and painfully vivid, Donald's eyes, looking down into them, were a strong granitic blue, with pupils that never changed.

"But it was I who told you about it," she mourned. "He told me, and I told you. Then you went to the county seat and filed."

"You couldn't have done him a greater service!"

"But he was going to prove up!"

Her sensitive face quivered. Donald kissed her cheeks, to bring back the dimples. But the dimples would not come. He was astounded. Emily to argue with him, oppose her will to his! Donald had never imagined she possessed a will. There had been moments, perhaps, when he rather wished she possessed one. But today was not one of such moments.

A rhythmic swish-swish grew on the agitated silence. An old man, clad in dun overalls and jumper, rounded the corner of the cabin. His wispy gray locks fringed uncouthly a Stetson so ancient and dejected that it recalled the head-gear of Crusoe on his island. A gray beard of knee length was braided and looped up into his waistband. He hadn't many teeth. What he had were stained like old meerschaum. He stopped abruptly in front of Don and Emily, who straightened up, much embarrassed.

"Thought that mought be the way of hit!" he rasped out in the shrill, high note of senile anger. Then he strode off down the slope.

Although he limped, he covered the ground with astonishing vigor and speed. The wild oats parted with a sharp hiss before the fury of his progress, and swept together in a shuddering silvery wake behind him. Across it the mariposas nodded timorously at one another and fluttered their petal-wings.

"Well, Don," a second voice from the house threshold broke in, "so you're to be our new landlord, be yeh?"

Emily and Don turned to the Widow Enmark; a strong, short woman, as unlike Emily as a scrub oak is unlike a slim young willow sapling.

"So it seems, Mother Enmark," Don replied. "But Holbrook has pulled up my stakes, and sued for an injunction against me."

"Well," crisply, "Holbrook's been an actual settler 40 years. I s'pose he ought to be thankful for that much livin' off of it."

"My owning it will make no difference to him—"

"Except to his feelin's," interpolated the widow, but not too sarcastically. Emily must be taken care of. Emily was like her dead father; infinitely lovable, but lacking in backbone.

"I was wondering, Mother Enmark," Don suggested, "how you and Emily would like a double bungalow about where we are now? Needn't disturb Emily's Marechal Niel." He nodded toward the giant vine whose broad, satin-green leaves and pendant saffron bells garlanded the broken edge of the veranda roof. "Two parallel wings, both facing front," he sketched gusily, "connected by a square, screened-in porch; 'lanai,' they call it, out in the islands. Kind of open-air sitting room. Hammocks and couches and sewing machines and such."

"Guess I'll make out to live by myself," opined the widow, "and go on raising chickens."

"Sure! All by yourself—chicken-run in your back yard. But, connected like this, Emily won't be quite so much alone when I'm away."

"Something in that," admitted the widow.

Emily sat gazing out on the mariposa-dotted wild oats. Their slender heads massed a tarnished silver when the breeze from the wheat lands, lower down, swayed them against the late afternoon sunshine. But when a vagrant breeze from the hollow lifted and flung them eastward they gleamed a pallid gold beneath the aureate swarm of flower butterflies a-wing just above their fragile husks. A rose-wreathed double bungalow visualized itself in the foreground. Her cheeks flushed a subtle pink, with the dimples back in place. Of all Emily's mutable prettiness, those flitting dimples held, for Donald, the one inevitable allure.

"Yeah," the Widow Enmark had once commented on some such remark from Donald, "her father had 'em. They're pretty, but they ain't dependable. But sometimes they surprise you."

"Set still," the widow enjoined, as Emily arose, after Don had gone. Emily obediently sat down again.

"Now, Emily," the widow admonished her daughter, "don't you try to stand up to Don. You can't do it. You're your father's daughter. He couldn't stand up to nobody. Didn't have the backbone. 'T was like yourn—just only gristle. And Don's a mighty hard man—in business—"

"Mother——"

"In business! But he's honest, and all the Andrews are loving to their women folks. Don'll be good to you so long's you do exactly what he wants you should."

"I've always wanted things his way ——"

"Well, keep right on wantin' 'em his way. You're like me in just one thing. You're a one-man woman. Your father was a mighty poor provider, and his backbone was mostly gristle. But he was my one man. Don's your one man. Don't risk losing him. You know what he is—once his mad's up. Once he breaks with anybody there's never any come-back." Emily nodded, wretchedly. "Well, don't lose him. Don't you ever try to stand up to Don."

A week later old Holbrook again materialized among the wild oats in front of the cabin porch, where Emily sat in solitary revery. He ran his eyes over her with morose forbearance.

"Say little gal," he remarked, not unkindly, "quit yer worryin'. This's man's business. Man ain't got no call to talk business with a gal, nohow. I just got my come-uppance. You quit worryin'. I'm tellin' 'em I did prove up, thutty-five year ago, jest befoh that there co't house fire burned up a lot of the records. The paper——" leering down at her, "must o-got burned up, and wa'n't never sent back to Wash'n'ton. 'N'course," slyly complacent, "I was too iggernerant to know I'd oughter git a gov'ment patent sent out to me. All comes of me bein' so iggernerant." He quite licked his lips over his mental deficiency. "My lawyer feller put me onto that. He's smart's they make 'em! It'll jest be your word ag'in mine—so cut loose. Say whut you got to say. Don't take no resk lettin' Don slip the noose. You know hom. Once gone—goodby! I reck'n I kin take keer o' myself 'thout breakin' up a pore little gal's housekeepin' arrangements. Now—you hear me!—don't you go for to stand up to Don. Cain't be done. Leastways you hain't the one kin do hit!"

The hearing in the suit to enjoin Donald Andrews from filing claim on the Holbrook Hollow quarter section was set for an early date. Donald's lawyer had no difficulty in convincing Emily that to withhold her testimony would make her accessory after the fact to a felony. With a comparatively easy conscience she memorized the few short questions and answers that would fall to her. Holbrook had no legal standing, but this particular judge was inclined to look leniently on purely legal discrepancies, when bona fide tenancy and improvements were in evidence.



"THOUGHT THAT MOUGHT BE THE WAY OF HIT."

On the day of the trial Emily—by Don's thoughtfulness—waited alone in the judge's chamber, back of the courtroom. Through a wide crack in the warped door she could hear bits of the preliminary phases of the investigation. They sounded quiet and businesslike; nothing to make anybody nervous; least of all, a girl who had come all this distance simply to tell the truth.

The cracked door opened. The freckle-faced clerk stood smiling encouragement on the threshold. She followed, pale but composed. While she remained standing for him to gabble the oath, she noted Don at the extreme right, with his attorney. Between them and her chair sat old Holbrook and his rat-visaged man of law. Austerely in the background loomed the Widow Enmark.

"S'elp you Gawd?" inquired the freckled one apologetically.

"I do."

That was what she had come to do; to speak the truth, the whole truth, and nothing but the truth. Don's lawyer had drilled her to speak it in the simplest and most effective manner; just the truth; the truth that would assure to her Don and happiness for life—that would secure the old age of her mother. Certainly Emily must speak the truth—although it would beggar that sardonic old man, who, because of his pig-headed obstinacy, would be turned out in the world penniless at 75.

Old Holbrook was swearing to a lie. He had not told the truth. But—what debt of truth did he owe to a government that would take from a man of his age the land he had lived on and improved for 40 years, just because he had neglected some puny regulation they had framed up without his advice or consent? Emily wondered, vaguely, whether the government had proved up on schedule time—and paid taxes—to the original owners, the Indians?

She raised her eyes, calm and serious, to the judge. He looked the sort of man to whom one simply had to speak the truth.

Behind him, oddly, shimmered a hillside of swaying silver; a silver that changed elusively into the lambent gold of over-ripened wild oats, dotted with gold-pionioned mariposas. A double bungalow bloomed out in the foreground, its screened lanai gold-garlanded with pendant Marechal Niels.

She replied mechanically to questions about her name and residence. The hill-slope, awing with mariposas, dissolved into a bleak, gray-plastered wall, backing a stern judicial countenance.

"You discussed with Mr. Holbrook his not having proved up on his claim?" Don's lawyer put the familiar question.

"Yes," obediently.

"He stated to you that he had not proved up on his claim?"

"Yes." It was the truth.

"What reason did he assign?—"

"I object!" vociferated Holbrook's counsel.

"On what ground?" inquired the judge.

"On the ground of hearsay evidence."

The judge pondered. "Objection not sustained."

Holbrook's attorney busily made a note of the ruling. Emily cast one imploring glance at Don.

The steely brightness of his prohibitive gaze contracted her heart. Had he always been this hard, and she not known it? Or—had she always known—and submitted? She looked back at the judge. He was observing her with puzzled interest. Of course, she must tell him the truth. But he could not know, as Don knew, how traitorious a thing the truth, the whole truth, and nothing but the truth could be.

"What reason did Mr. Holbrook assign for not having proved up?" the judge reiterated the question with formality; but Emily sensed a human note beneath his official tones. Her eyes implored him mutely.

"He said," she recited carefully, "it was because it let him out of paying taxes."

"He stated to you that he had not proved up, for the express purpose of avoiding the payment of taxes?"

"Yes."

"We are through with the witness," announced Don's lawyer, satisfied. Holbrook's attorney arose.

"Miss Enmark," he inquired suavely, "are you engaged to marry Mr. Donald Andrews?"

"I object!" yelled Don's attorney. "The question is irrelevant, incompetent, and immaterial!"

"Objection sustained," ruled the judge.

Holbrook's attorney, snugly triumphant, ostentatiously made another note. There ensued a long moment of absolute silence. Emily's fascinated, wide-pupiled gaze clung to the judge's expressionless features. The judge studied her quite as intently.

"Miss Enmark," he abruptly inquired, "what is your opinion? To whom do you think this land, by right, should belong?"

The subtle pink crept into Emily's cheeks. She cast one final, supplicating glance at Don's unyielding countenance. Then her drooping figure straightened. Her voice, when it came, was clear and firm.

"Well, judge," she replied, earnestly, "if it's my opinion you want? * * * the judge nodded encouragement. "I think the land, by rights, belongs to Mr. Holbrook."

"So do I!" the judge concurred, with emphasis.

As Emily made her slow way to the cracked door of the inner room—her eyes very blurred—she unconsciously listened to the judge's decision.

"Miss Enmark's testimony might be

(Continued on page eighteen.)



ALICE W. BARLAND
Editorial Contributor

To Make Apple Dumplings.

What is the most helpful thing you have learned during the last year in your experience with housekeeping? Let us pass it along to other housekeepers.

To the Editor: We think this recipe for apple dumplings very good, and, as I have never seen them elsewhere, am sending the directions.

Make a rich biscuit dough and divide into portions about the size of a biscuit. Roll out to about a quarter of an inch in thickness and place in the center of each a pared and sliced apple, with a tablespoonful of sugar and a dash of cinnamon. Moisten edges of crust with cold water and pinch together over apple. When finished place all in a baking dish, being careful not to have them touch. Half cover with boiling water, to which has been added three-fourths of a cup of sugar and a tablespoonful of butter. Bake for three-quarters of an hour in a moderate oven. Baste frequently. Serve with the sauce in which they were baked and cream. See if the family doesn't ask for more.

Fund for Chinese School.

A fund of $100,000 has been raised by a three years' campaign, for erection of new buildings for St. Mary's hall, an Episcopal school for Chinese girls at Shanghai.

Horses Refused to Go

The summer I was 9 years old my brother and I had a novel experience. Papa being away from home, it fell to the lot of my brother, a boy of 14, as man of the family, and me as his constant companion, to take the team, consisting of our saddle pony, a thoroughly spoiled beast, and a large, overgrown colt, the big wagon and two large barrels, and go after water to the lake, two miles away.

It was a very hot day in August, and, of course, the roads were very sandy, as all roads in eastern Washington are at that time of the year. We started early in the morning, expecting to be back by noon.

All went well until we had the water and were starting back, then at the first sandy grade the pony took it into his head not to pull, and of course the colt was quite willing to abide by that decision. Coax and pull and push though we did, they would not budge, so my brother relieved his feelings by pouring the contents of one of the barrels on them, to no avail. I even spied a bunch of hay and tried its powers, but it did no more than the other.

We were completely at our wits end, for there were no near neighbors and few travelers on that road except the men who like ourselves came to the wells for water. We decided to sit and wait for the horses to get ready to go. We crawled beneath the wagon out of the sun and waited with what patience we could, drawing figures in the sand and talking, getting up occasionally to see if the horses were ready to go. When the threshing machine whistles began to blow for noon, for it was harvest time, we began to get hungry and decidedly anxious to be home, but evidently the horses did not, for there they stood. It was not until 1 o'clock that a neighbor came along and pulled us over the first grade that we moved. After the man went on the horses started of their own accord, and we had hopes of getting home, when, about a half mile further on, they stopped again. This time we had to wait only about a half hour before they started.

By this time the folks at home had become anxious about us, and my oldest sister started out on foot to meet us. We met her about a half mile from home and, my! the time we did have relating our experiences to the whole family and the neighbors as well.

J. S. M.

Enterprise, Ore.



A mind not to be chang'd by place or time.
The mind is its own place, and in itself
Can make a heaven of hell, a hell of heaven. —Milton.

The Celtic Race of Japan.

The Ainus, the Celtic race of Japan, live in the island of Yeddo, although the race has become so reduced that there are now not more than 16,000 or 17,000 of them left in the country. The most noticeable peculiarity about Ainu women is that they have tattooed upon their upper and lower lips what resembles a mustache. The women are not considered attractive, and their matrimonial prospects are quite injured without this decoration. The mustache is begun when the girl is quite a child. It is done gradually, a little each year, until it extends partly across the cheek, the material used being the soot from burning birch bark.

Not So Much Guesswork.

We do not guess so much as we used to do. Wise housewives have learned that the few pinches of baking powder saved by scraping off the heap from a spoon, the milk remaining in measuring cups needlessly refilled when a bit of calculation would have indicated a single measurement, all count up and mean saving. When four cups are called for it means a quart; one cup is half a pint, and so on.



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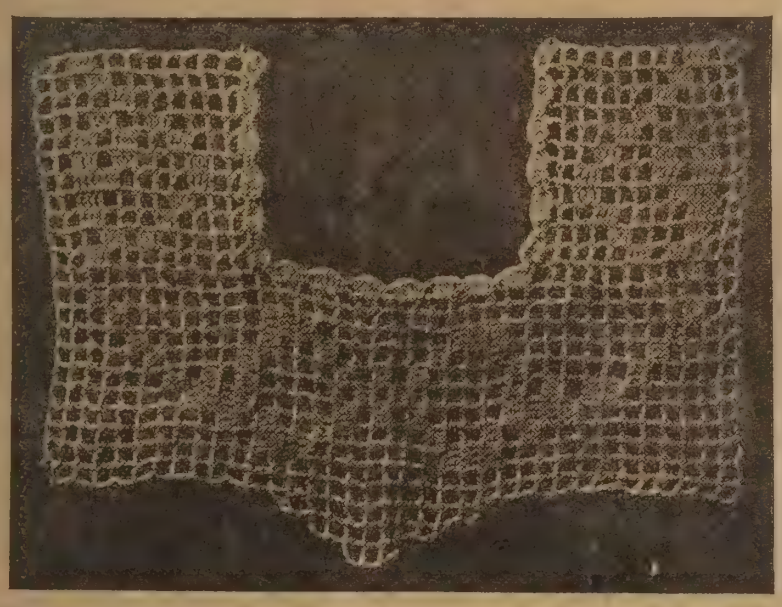
Crochet and Tatting Designs

By WINIFRED WORTH

FILET FESTOON YOKE.

Here's something for a child's dress which all mothers will appreciate. Use one ball No. 10 Cordonnet.

1st Row—77 mesh.
2d Row—11 mesh.
3d Row—9 mesh 1 block 1 mesh.
4th Row—2 mesh 1 block 8 mesh.
5th Row—7 mesh 1 block 4 mesh.
6th Row—4 mesh 1 block 6 mesh.
7th Row—5 mesh 1 block 5 mesh.



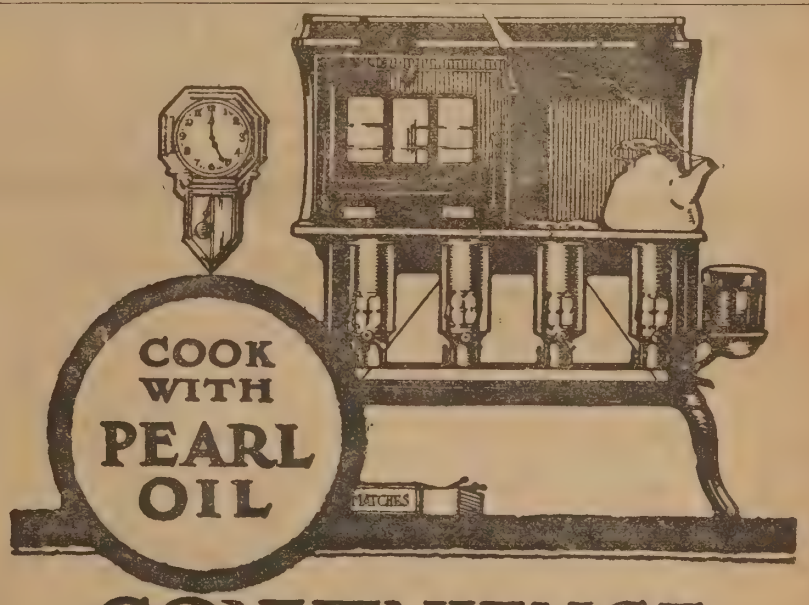
8th Row—Same as 7th.
9th Row—4 mesh 1 block 6 mesh.
10th Row—5 mesh 2 block 4 mesh.
11th Row—3 mesh 2 block 6 mesh.
12th Row—4 mesh 3 block 4 mesh.
13th Row—2 mesh 2 black 3 mesh 2 black, 2 mesh.
13th Row—2 mesh 2 block 3 mesh 2 block 2 mesh.
14th Row—2 mesh 1 block 5 mesh 1 block 3 mesh.
16th Row—3 mesh 1 block 3 mesh 1 block 5 mesh.
17th Row—6 mesh 1 block 1 mesh I block 4 mesh.
18th Row—5 mesh 1 block 8 mesh.
19th Row—Same as 17th.

Continue pattern by working backward from the 17th row to complete yoke.



FILET FESTOON BAND.

Band for waist of child's dress.
One ball No. 10 Cordonnet.
Make same as the front of above yoke.
Edge for sleeves may be made by reducing width of pattern, as desired, and finishing with picot edge.



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Patterns

2101-2118—Ladies' costume. Waist pattern 2101 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2118 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It will require 6 1-2 yards of 44-inch material for the dress for a medium size. The skirt measures about 3 1-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

1950—Ladies' shirtwaist. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 2 1-4 yards of 44-inch material for a 36-inch size. Price 10 cents.

2122—Ladies' one-piece dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 8 yards of 36-inch material for a 36-inch size. Price 10 cents.

9078—Infants' skirt, barra coat, shirt and shoes. Cut in one size. It requires 1-8 yard of material for the shoes. The skirt 1 7-8 yards and the barra coat 1 3-8 yards of material 36 inches wide. The shirt requires 5-8 yard of material 27 inches wide. Price 10 cents.

2103—A practical work dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 1-4 yards of 36-inch material for a 36-inch size. Price 10 cents.

2119—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 10 requires 2 1-8 yards for the guimpe, and 3 1-2 yards for the dress of 27-inch material. Price 10 cents.

1823—Girls' dress. Cut in four sizes: 1, 2, 4 and 5 years. It requires 2 3-8 yards of 44-inch material for a 4-year size. Price 10 cents.

1788—Ladies' house dress. Cut in seven sizes: 32, 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 1-2 yards of 44-inch material for a 36-inch size. The dress measures 2 7-8 yards at its lower edge. Price 10 cents.

2116—A set of serviceable caps. The pattern includes the three styles portrayed. Cut in two sizes: Medium and large. No. 1 will require 1 yard; No. 2 will require 7-8 yard; No. 3 will require 7-8 yard of 27-inch material for the medium size. Price 10 cents.

1326—Bathing suit for ladies and Misses. With bloomers and cap. Cut in three sizes: 14, 16 and 18 years, for misses and in five sizes, 36, 38, 40, 42 and 44 inches bust measure for ladies. It will reuire 4 5-8 yards of 36-inch material for a 16-year size for the suit with bloomers, and 5 1-8 yards for a 38-inch size. The cap will require 3-4 yards of 27-inch material for either size. Price 10 cents.

2106—A smart "pocket" dress for the growing girl. Cut in four sizes: 8, 10, 12 and 14 years. It requires 3 5-8 yards of 44-inch material for a 10-year size. Price 10 cents.

2100—Ladies' combination corset cover and drawers. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 7-8 yards of 36-inch material for a 36-inch size. Price 10 cents.



The Girl Who Dared

(Continued from page sixteen.)

classed as hearsay evidence. But such evidence may be valuable in showing the impression made upon the witness at the moment. The fact that taxes were not proffered is not altogether conclusive." A grim humor tinctured his elucidation just here. "I note that the impression made on Miss Enmark at the time was in favor of Mr. Holbrook's essential ownership of the land, although that view—" with a glance at Holbrook's attorney, "may possibly be antagonistic to her personal interest. In consideration of this, corroborated by Mr. Holbrook's actual tenancy and improvements, I grant the injunction for one month." He addressed Donald's attorney. "Application for appeal must be filed within 10 days."

As Emily slipped through the doorway, Donald's frigid tones cut the expectant silence.

"There will be no appeal, your honor."

Emily closed the door behind her. She knew that tone well. All her adoring life she had instinctively feared and avoided it. Now it had come. She stood benumbed. Trivially she recalled an expression of dismayed triumph on the weather-beaten countenance of her mother. Her head felt light and queer. She took off her hat, dropping it just anywhere. Dire physical weakness unnerved her. She could not live without Don—and he would never forgive her! Never forgive this terrible public humiliation. And the expense of it!

Maybe—if she could manage to get her arms about his neck, her cheek against its old familiar resting place—for Don did love her! He had always been so tender about the foolish weakness in her character. Even now he declined to discredit her by entering the appeal that had been planned. Maybe—

Her tears mechanically stopped. Her white, shuddering body drew up, slim and rigid. Her hands clenched in little nobbly white balls straight down at her sides. Don had come into the room. He had closed the door. By the sharp tap of his heels she knew that he was horribly angry. He paused. She did not turn. He walked methodically around and faced her. His features were livid. His blue eyes were coldly scintillant.

Donald and Emily stared at each other in unbelievable hostility.

To her unbounded astonishment, Emily found herself standing firm. Her eyes—the pupils well contracted—met his without a tremor. A strange pride thrilled through the unendurable ache. Her heart was at the breaking point—but she discovered, with a sort of horrified joy, that she could not possibly give in. She could not beg forgiveness. She found herself—standing up to Don!

She pressed her lips together, to still their trembling. The tension brought wan shadows of dimples to her thin cheeks.

Then—she found herself gripped in a rough embrace; her cheek pressed savagely against the firm hollow in front of Don's shoulder. The other cheek flushed hot under his onslaught of angered kisses.

"You darling!" Don stormed, between the kisses, "You darling! You darling!"

Through the crack in the warped door came old Holbrook's nasal intonations.

"Wall, jedge," he shrilled, "seems like Don ain't a-gittin' the land, but <—you hear me!—he's a-gittin' some wife!"

Donald kissed Emily once more, but very tenderly. And this time she could feel that he was laughing—Prize story by Hughes Cornell in Los Angeles Times Illustrated Magazine.

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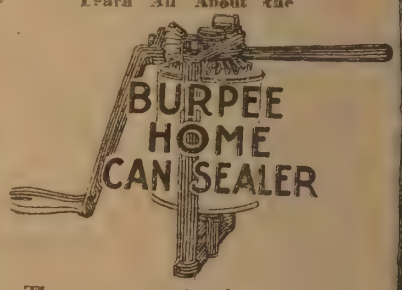


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Hilma's Sister Lives in Alaska.

Dear Aunt Nellie: I enjoy reading the Corner very much. Many of my friends have written to the Corner. I live on a 110-acre farm and my father has five horses and a little colt. We have a bay mare and she is the childrens' pet. Her name is Babe. We have 18 cows and one of them is mine. I call her Lyony and she is a Jersey cow and much the shape of a deer. My mother has 53 chickens and my brother has six banties and one of them hurt its leg. I think I would rather live in the city than in the country because I would have more fun going riding in the automobile on the pavement and many other things. I have three sisters and three brothers. Their names are Mary, Ida and Eva, Alexander, Alfred, and Reuben. My sister Mary went to Fairbanks, Alaska, two years ago, March the fourth. I think she will come home in the fall some time and I will be very glad to see her again. I live one mile from my schoolhouse. Our school was out May 18. We had a program and served lunch for the audience. It makes me feel lonesome to think how much fun we used to have playing volley ball at school and lots of other games. I am 13 years old. I would like to correspond with Jessie Moss.—Hilma Engluad, age 13, Box 6, Independence, Wash.

Esther Crochets and Tats.

Dear Aunt Nellie: I am 11 years old and passed to the sixth grade in school. My birthday is the 14th of February. It is on Valentine day. I have one sister and three brothers. Their names are Inga, Olaf, John and Oswald. I saw Carrie Fjerlie's letter in the Corner yesterday. She goes to the same school as I do. I go to the normal school. It is the best school around here. I like to go to school. Our school was out the 24th of May and we had our picnic the 25th. We had a good time. We had an exhibit the same day that we had our picnic. I crocheted a yoke, a doily and some lace for pillow slips. I sold the yoke for 50 cents and the lace for pillow slips for $2. I did not sell the doily. I like to crochet better than I like to tat. My sister does not like to chochet, but she likes to tat. I will write to the Corner again.—Esther Victoria Dale, R. F. D. 1, Box 70, East Stanwood, Wash.

The Country Is Healthy and Free.

Dear Aunt Nellie: I have been very interested in the other childrens' letters and I thought I ought to write also. I stay on a farm with my grandpa and grandma nearly every summer. I like the farm better than any city or town. It is healthy and free. Grandpa has seven horses and two cows and a Holstein heifer. The cows' names are Birdie and Rosy. The heifer's name is Bessy. We have a shepherd dog named Speck. If you tell him to get the cows or horses he will get them in a minute. They have one cat named Snowball. I have two brothers. Their names are William and Homer. Homer is the youngest. He is 10 and in the fourth grade. I am 11 and in the sixth grade. William is 12 and soon will be in the ninth grade. I am helping grandma all I can. In summer when the raspberries are ready to pick I have to pick them and it is great fun. It will keep me busy. Grandma has 50 little chickens and about 60 large ones. I have 25 squirrel traps to look after. I have caught 30. The weather is bad and I don't think I will catch many until it is warmer. Last year I caught 60 squirrels.—Barnetta Bartholomew, Box 85, Tekoa, Wash.

Spends Lots of Time Outdoors.

Dear Aunt Nellie: I am now going to write you a letter. I wrote to you abotu a year ago. The only girl in the Washington Farmer whose birthday was on the same day of the month as mine was a girl by the name of Martha, but she is only 12, and I am 13. I will be 14 the 27th of October. I went to school last winter. I was promoted to the eighth grade. I liked my teacher very much. Her name was Hazel Burnett. She was a very nice teacher. I have four brothers and two sisters. One of my brothers joined the army, and my other three are here at home. I had a pet cat, but he ran away and died, I guess, for I haven't seen a trace of him since he left. We have two dogs and no cat, a canary bird and horses, pigs and chickens. I love to gather flowers and play in the brooks. I spend a great deal of my time out of doors. I do not see as many letters from boys in The Farmer as there are from girls. I hope to see one of your letters to the nieces and nephews soon.—Olive Miller, Peola, Wash.

Ruth Passed Into the Fifth Grade.

Dear Aunt Nellie: I enjoy reading the Children's Corner. We take The Washington Farmer and the Youth's Companion. I like to read the children's page in it. We have about 19 horses. We have three cows and two calves. Our school is out now. We had a picnic Saturday, the 25th of May. Everybody took a lunch. We had ice cream after we ate our lunch. We have one dog and four cats and three kittens. We have four geese; one of them is setting. We have 11 little chickens. I am 11 years old. My birthday is the 27th of October. I passed this year in the fifth grade. My teacher's name is Miss Hendricks. I would like to correspond with Edna McClelland.—Ruth Crabb, Marengo, Wash.

Sammie Is a Farmer Boy.

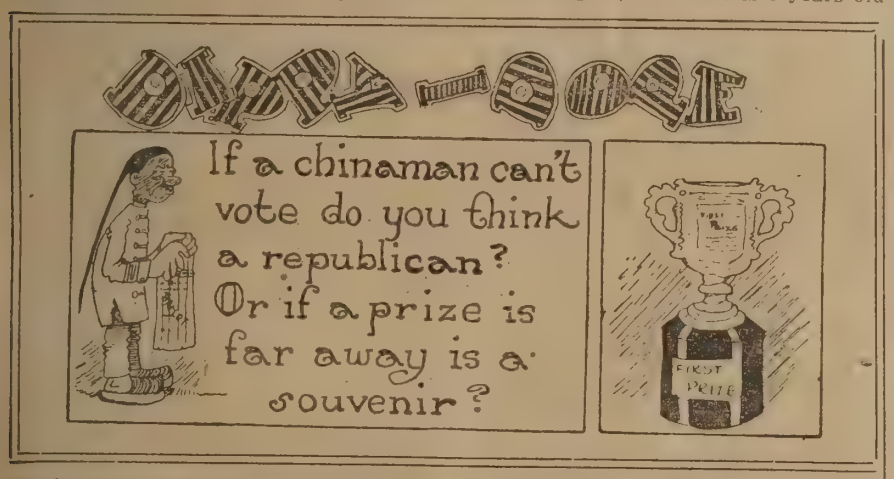
Dear Aunt Nellie: I am a farmer boy and my father takes The Washington Farmer. I am 14 years old and I am in the eighth grade. My teacher this term will be my sister. Her name is Leone. She is 20 years old. I have one sister and no brothers. My subject is about my father's farm. Our farm consist of about 320 acres. I have 17 pet lambs and seven rabbits and one pony named Lightfoot. We have five cows, which I milk night and morning. We have a Dodge car. I have over a hundred little chickens. I would like to have a twin. My birthday is October 19. I wish some of the nieces and nephews would write to me. I will write again to the Children's Corner.—Sammie Robertson, R. F. D. 1, Box 54, Pomeroy, Wash.

Velma Has Named Her Colt Daisy.

Dear Aunt Nellie: This is the first time I have written to the Corner. The letters are very interesting. I am 10 years old. I am in the fifth grade. I go to the Summitview school. My sister is 9 years old and is in the fourth grade. She goes to the same school as I do. I have a colt almost two months old. Her name is Daisy. She is a bay colt. My sister Freda has a colt, too. His name is Dobbin. They are orphans. We feed them milk, mornings, noons and evenings. Freda and I have to go after them each time. We have a dog named Johnnie and also a white cat we call Snowball. We have 12 horses and 17 head of cattle. I live on a farm of 335 acres, 15 miles from town.—Velma McAttee, Ellensburg, Wash.

The Prettiest Cat Belongs to Nettie.

Dear Aunt Nellie: Our school is just out. We had a picnic. I have had the measles so could not go to it. I have never written to the Children's Corner before. I have two sisters and two brothers. One sister is 10 years old in August, the other is 8 years old in November, one brother is 9 in September, the other is six in September. I will be 12 the 6th of July. I am in the seventh grade. We have four cats. They are all good mousers. The prettiest cat is mine and its name is Snooker. We have a big wolf hound. It is a pup, but it scares some of my playmates. Our farm has 67 acres. We live in quite a pretty country. I just walk five minutes in the right direction to school. I live 300 yards from school. I wonder if I have a twin. If I have I hope they will write to the Children's Corner or to me I usually read the Children's Corner first. If any one's name is Nettie besides mine I hope they will write to me.—Nettie R. Jackson, Sunnyside, Wash.



The Parrot Can Say Everything.

Dear Aunt Nellie: I am in the fifth grade at school. I will be 12 the 25th of December. My mother died, and I made my home with my aunt. She has no children. I am the oldest in our family. I have two sisters and three brothers. Their names are Lambert, Marion and Stanley, and my sisters' names are June and Harriett. Harriett is 17 months old. She is the baby. I live on a 165-acre farm. We have 10 milch cows and three heifers. I have a cow named Topsy. We have three horses and about 80 little chickens. We have a car, and my aunt drives it. We have a parrot, a dog and three cats. The parrot says everything. I am going to take music lessons as soon as we find a teacher. We have a nice bathroom and a windmill. My uncle takes The Farmer. I was reading The Farmer the other night and saw a letter in it from my little friend Beatrice Hett.—Annie Elizabeth Fowler, R. F. D. 1, Box 58, Rochester, Wash.

Call the Cats Topsy and Tipsy.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 12 years old and in the sixth grade at school. I have been reading all of the letters that the other children write and I am very interested in them all. I live three and a half miles from school. We ride in a bus to school. We have one dog and his name is Arrow. We have two cats and their names are Topsy Tipsy. Our schoolhouse has four rooms in it. A friend taught me how to tat and crochet. I made enough tatting to go around a handkerchief. My birthday is the 24th of April. Have I a twin? I joined the sewing club at school.—Louise Tracie Kramer, Kennewick, Wash.

Two Cousins Are Almost Her Twins.

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 11 years old and will be in the seventh grade next year. My birthday is December 15. Have I a twin? Mabel Margret and Ruby Warren are almost my twins. Mabel Margret is just three days younger than I am and Ruby Warren is four days younger. I read the Children's Corner every time the paper comes. I have two sisters, one finished the eighth grade this year and one finished high school. I would like to correspond with any girl of my own age.—Ida Dock, R. F. D., Box 50, Stanwood, Wash.

A Nest With Four Baby Robins.

Dear Aunt Nellie: I have just been reading the Children's Corner and I like it very much. I am 8 years old and will be in the third grade next year. My teacher's name this year was Helen Newstrum. I live just out of town. We have about 60 little chickens and two cows and a calf and two horses and a colt. I did have two kittens, but they both died. There was a little bird's nest in our cherry tree, but the wind blew it down. There is a robin's nest in a tree in our back yard with four baby robins in it.—Bessie Cochran, Sunnyside, Wash.

A Vacation at Sister's House.

Dear Aunt Nellie: This is the first letter I have written to the Corner. My father takes the Washington Farmer. I like to read the Children's Corner. I am 10 years old and in the fifth grade at school. My teacher's name was Miss Martin. Our school closed May the eighteenth, I am having a week's vacation at my sister's. I am having lots of fun. I have three sisters and three brothers. We have a horse, cow and a car. I live in Sunnyside and my father raises asparagus and I help him sometimes. I hope to see my letter in print.—Grace McKibben, Sunnyside, Wash.

Lucile Is a New Corner Cousin.

Dear Aunt Nellie: I am 11 years old and in the seventh grade at school. This is the first time I have written to the Corner. My teacher's name is Miss Harris. I like her very much. I have four sisters and three brothers. I live on a farm 10 miles from Pullman. We have many horses and cattle. We have a pet pig and we call it Jack. I like to read the letters so well in the Children's Corner so I thought I would write. I think I will write again some time.—Lucile Brannan, Pullman, Wash.

The Only Girl in the Family.

Dear Aunt Nellie: I thought I would write a letter to the Children's Corner. I have read the Corner ever since we got the Farmer and I like to read the letters very much. I go to Sunday school every Sunday. I go to school and am in the third grade. My teacher's name is Miss Dolan. There are 15 pupils in our school. I am the only one in my class. I have six brothers and I am the only girl in the family.—Grace Miller, Joyce, Wash.

Ride to Town in the Launch.

Dear Aunt Nellie: I enjoy reading the Childrens' Corner very much. I am eight years old. My birthday is July the ninth. I am in the third grade. When our school closed we had a picnic the last day of school. Two or three days after school was out I went to visit my cousin, Fred. He lives near the Puget Sound. When the tide comes in we go boat riding. My uncle has a gasoline launch and we go to town with his boat. I like to ride in it very much.—Ethel Harriman, R. F. D. 1, Monroe, Wash.

Wrote His Letter on the Typewriter.

Dear Aunt Nellie: I am going to write about my favorite book. My favorite book is Our Country West. I like it because it has so many interesting things to talk about. I am 10 years old and in the fifth grade at school. My birthday is July 20. I have one sister but no brother. I am writing on a typewriter in this letter. I am five feet tall. I live on a 14-acre farm near Montesano.—Kenneth Redman, Melbourne, Wash.

Helen Likes the Farm Very Much.

Dear Aunt Nellie: My grandfather takes The Washington Farmer and I like to read the Corner very much. I am a little girl 8 years old and I weigh about 55 pounds. Our school closed last week and I passed to the fourth grade. I have only one sister and I have not any brothers. My sister's name is Evelyn. She is 11 years old and will be in the sixth grade next term. My grandfather has 165 acres in his farm. I like the farm very much. We have only 18 chickens and eight little ones, which were hatched this morning. I have red hair and the children at school call me Red Top, but my real name is—Helen Smith, Box 40, R. F. D. 1, Yelm, Wash.

Happy When She Roams in the Woods.

Dear Aunt Nellie: I read my first letter in the Farmer and was glad to see it. I go to school every day. I have not very far to go to school. We are going to have a program on the last day of school. I am going to speak a piece. I am 9 years old. I am in the third grade. My teacher's name is Mrs. Smith. I love to see the flowers come again so I can go out into the woods to gather them and to hear the sweet songs of the birds. It makes me so happy to roam through the woods. I dearly love to read the Children's Corner.—Jennie Peterson, Thomas, Wash.

A Lighthouse on the Island.

Dear Aunt Nellie: We got two cows and one horse and 14 sheep. There is a lighthouse on this island. I have three brothers and one sister. My oldest brother is 15 years old. His birthday is the 1st of January. I am 9 years old. My youngest brother is 8 months old. It is three miles to school. My teacher's name is Mrs. Pinneo. There are 11 of us going to school now. We have two cats. We have 29 chickens. I like to read the farm papers very much.—Pearl Droullard, Prevost, Wash.

Helen Likes the Corner Letters.

Dear Aunt Nellie: I have been reading the Children's Corner for a long time. I like to read the many interesting letters. I am 10 years old and in the fourth grade. My birthday is the 18th of September. I have one brother. His name is Adrian. I live on a 25-acre farm. I walk to school three-quarters of a mile.—Helen Davis, Randle, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the last week: George Nichols, Esther Eastman, Iva Brannan, Edith Anetta Parmeter, Wilma Anderson, Frances McCauley.

To Get a Flag Write Soon



With the declaration of a state of war our first supply of flags was quickly exhausted and we have had great difficulty in securing more.

We have at last secured a limited number of flags which we offer on the following terms:

OFFER NO. 1

3x5 flag together with The Washington Farmer for three years. Both for $2.50.

OFFER NO 2.

4x6 flag together with The Washington Farmer for three years. Both for $3.00.

We would suggest prompt action; orders will be filled as received.

The Washington Farmer, Review Bldg., Spokane.

Enclosed find $.... (your personal check, stamps or money order), for which send me American flag, as advertised, and The Washington Farmer for 3 years.

Size of flag .....

Name ....

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Vividly Told

Subscribers to The Twice-a-Week Spokesman-Review are kept closely informed regarding the great world struggle into which our country has been drawn. It prints the facts regarding the gigantic war preparations, the tremendous battles, and the political maneuverings and intrigue which are taking place far back of the battle lines. No one will be considered well educated by his neighbors if he or she is unable to talk intelligently about these and other events which are taking place in these stirring times.

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The Twice-a-Week Spokesman-Review will keep you accurately posted regarding local, state, national and world affairs. It is complete, reliable, and condensed for busy readers. Being a member of the Associated Press, the important happenings are flashed to it instantly from every capital and village, and from ever far-flung battle line.

Special Offer Is Repeated

Hundreds of our friends have already taken advantage of the offer below; but we are repeating it as we believe many hundreds more will wish to secure their state farm paper in combination with The Twice-a-Week Spokesman-Review.

Twice-a-Week Spokesman-Review for 1 year regular $1.00
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Big things are happening this week. Big things will happen next. To get the facts about these events, send in your order at once. Paid ahead subscriptions will be advanced from the dates to which they are paid.

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Ups and Downs of a Bunch Grass Boy

(Continued from page fourteen.)

became a bit less certain in its movements, just a bit panicstricken; and the black hound became surer. He made one move, presently, which seemed surer and quicker than the rest—and the game of tag was over. He had caught the coyote by a hind foot—just where the coyote had nipped him twice! Game to the last the gray animal whirled on its back and snapped its needle fangs into the hound's stiffly bowed neck, but futilly. With a crunch the dog broke the leg; and with another quick, sure movement, he had the coyote by the throat. A minute later he shook it in his great, powerful jaws, as easily as a terrier shakes a rat.

Sure that the coyote was dead, he looked around to see the other coyote; but it was gone. So he padded unconcernedly back to our doorstep, circled thrice, plumped down, and with powerful muzzle resting on his equally powerful paws, sighed contentedly and closed his eyes. Mother and I watched the great dog with a feeling akin to awe.

That summer the nights were very warm, and, for the sake of fresh air, mother and I often slept in our one-room cabin, with the door wide open. Jack, as we came to call the mammoth hound usually slept curled on the doorstep. Sometimes in the quiet night I would awaken and see him there, silent, but watchful, with an ear to the ground. I always was glad to see him there, and so was mother. Alike we were thankful for the big dog and the protection he afforded, but he had such an appetite. Verily, it seemed that he would eat us out of house and home. But as the days went by and we came to rely on him more and more for protection we thought less of his cave-like maw, and I know that either of us would gladly have gone hungry to feed him.

Late in summer fires broke out in the mountains and wild animals came down, crossed the river and appeared in unexpected places on the bunchgarss prairie. Neither mother nor I was alarmed, for this had happened every summer since we had lived on the claim, and we had never been disturbed by the mountain animals.

One moonlight night when the smoke from mountain fires hung like a smoky-blue cloud over the prairie we were awakened by the big hound growling on the doorstep. He had never growled before, to our notice, and we were alarmed.

We hastened out of bed and stood at the door by the black hound. He stood there growling in low, muttering tones, and his eyes, which, in a brief glance, flashed on us, were strangely ablaze. Mother spoke to him, but he was utterly unresponsive. I trembled with fear and so did mother. I stroked his huge head with a shaking hand, and remember that beneath my tremulous touch he was rigid as steel—always growling in low, menacing tones, with eyes afire with a murderous light; we scarcely recognized him, so singular was the transformation.

With a short, impatient growl he left the doorstep abruptly. We heard him growling behind the house; then at the corner, and again as he came back to the doorstep.

A long time we stood huddled together in the doorway, while the dog growled and seemed to listen. Presently we heard a cry, a curiously weird, half-human cry, not loud, but having in it a peculiarly penetrating quality or accent—grewsome it was, and one felt after hearing it that he must have imagined. It was so unreal.

But it was not unreal. Again the crying tone came through the night, distinct and unmistakeable.

The big hound's low, menacing growl ceased. He seemed to have made up his mind. Silently, padding stiffily with crest slightly raised and tail stiff he left our doorstep in the direction of the cry. We saw him pause on top of the hill south of the house, his black figure clearly silhouetted against the moonlit sky. Then he vanished—and never came back.

All that night we stayed awake, waiting to see his huge, protecting form loom on our doorstep. Vainly we watched. Toward morning, when the moon was low in the west and it was still dark, mother got up and shut the door. In my trundle bed I trembled with fear, and when I spoke to mother it was in such quaking tones that she perceived my terror and had me get in bed with her.

A few days later Charley Gifford looked up from the bottom of the well he was digging and saw the large, cat-like head of a mountain lion looking down at him, 20 feet below. He climbed out of the well, followed the animal and shot it.

Father returned from the harvest fields shortly after our big dog disappeared and the matter soon passed. As the years have slipped by, on me the conviction has grown that that night the Russian hunting hound—if such he was—recognized the presence of a deadly enemy, went out to battle and was slain. Brave and powerful and well trained as he was, he could hardly have killed a nine-foot mountain lion; but it must have been a great fight.

In next week's Farmer the Bunch Grass Boy tells of the feathered and furry animals, large and small, speaking a language which has become familiar to him:

When I was growing up on the western bunchgrass it was the curlews that told me when spring had come.

When the bluebirds came I knew that wild violets were blooming over in the rocky lands west of our farm a couple of miles.

After the bluebirds and the violets you noticed the ground owls—I do not know what else to call them.

The sandhill cranes told me when summer had come, just as the curlews told me when it was spring.

Late in the summer when the blue haze of approaching autumn hung heavy in the air and the evenings and nights were getting cool, the geese told me that winter was approaching.

Sidelights

Partial Responsibility.

Guest—See here, waiter, you've kept me waiting for half an hour, looking like a fool!

Waitress—Sorry I had to keep you waiting, sir, but you're responsible for the rest.

Worse Than Hubby.

Wilkom—What's that string on your finger for?

Bilkom—My wife put it on to remind me to post her letter.

Wilkom—Did you do it?

Bilkom—No. She forgot to give it to me.

The Police Captain Knew.

Captain—What's he charged with, Casey?

Officer—I don't know the regular name for it, captain, but I caught him a-flirtin' in the park.

Captain—Oh, that's impersonatin' an officer.

Took and Gave Father's Advice.

Father—Tommy, go out to the barn and hitch the horse to the old sleigh.

Son—Why not to the new sleigh, father?

Father—Wear out the old first, is my motto, son.

Son—Well, then, father, you go out and hitch up the horse.—Everybody's.

No Quarter for Him.

Mrs. Jones was standing in the doorway talking with old Mr. Hahn, a neighbor. They were speaking in uncomplimentary terms about an impostor who had lately passed through the village, swindling right and left.

"He'd better not come round here again!" exclaimed Mrs. Jones indignantly. "If he does, I'll give him no quarter."

"Quarter!" shouted the enraged old man; 'quarter! Well, I guess not! I wouldn't give him 10 cents!"—Youth's Companion.

One Look Enough.

A Quaker had got himself into trouble with the authorities and the sheriff called to escort him to the lockup. "Is your husband in?" he inquired of the good wife who came to the door.

"My husband will see thee," she replied. "Come in."

The sheriff entered, was bidden to make himself at home, and was hospitably entertained for half an hour, but no husband appeared. At last the sheriff grew impatient.

"Look here," said he, "I thought you said your husband would see me."

"He has seen thee," was the calm reply, "but he did not like thy looks and has gone another way."

Want American Ship Orders.

A number of Chinese shipbuilders are at present touring the United States with the object of getting orders for ships. They can build at half the cost and with designs drawn by Americans, they can, they say, multiply the number of ships faster than the United States can procure men to man them.

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Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

HELP WANTED—MALE 3

HAWTHORNE AUTO SCHOOL,
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

WANTED—SINGLE, STEADY MAN OF NO bad habits, who understands cows, to assist in small city dairy. A. B. Funnell, 4313 6th ave. So., Seattle.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free.
BEHNKE-WALKER BUSINESS COLLEGE,
167 FOURTH ST., PORTLAND, ORE.

FRESH FOOD PRODUCTS 56

MILD CURED BLACK COD BELLIES, the best part of the fish; a real delicatessen; packed in pails, 10 pounds net weight; shipped by parcel post; within 100 miles of Seattle, $1.15; 200 miles, $1.25, 300 or over, $1.40. Superior Fish Company, 2615 Railroad ave., Seattle, Wash.

MISCELLANEOUS 57

PUBLIC LANDS AND MINING MATTERS a specialty. Twenty years' experience in connection with the administration of the public land laws and the adjudication of questions arising thereunder. Best of references. James I. Parker, Southern building, Washington, D. C.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
Manufactured in our own mill and sold at factory prices. We ship to any one, anywhere. One price to everybody. Prompt shipments. Safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request.

5 cross panel doors, 2 ft. 6 in. by 6 ft. 6 in.	$1.44
Craftsman bungalow doors	1.90
One panel, 3-ply veener doors	2.00
French doors, 15 lights	3.00
Screen doors, 2 ft. 8 in. by 6 ft. 9 in., galvanized wire	1.50
Standard two light windows, up from	1.13
8x10, 4-light sash	.52
16x16x26 spruce flour bins	1.50
Drain boards, 20x24	.75
Williams' "Gold Seal" mixed paint, gal.	2.50

Frames, mouldings, builders' hardware, mill work.
O. B. WILLIAMS CO.
1943 1st Ave. So. Seattle, Wash.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
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Write for Catalogue.

AUTOMOBILE ENGINES
are great for tractors. If you are building a tractor, see us for a good engine at a reasonable price.
AUTO WRECKING CO.
89-91 North Broadway, Portland, Ore.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

PATENTS ON INVENTIONS
secured that protect.
James I. Parker, Solicitor
of Patents, Southern Building,
Washington, D. C.

POULTRY 174

I. D. CASEY & SONS, WAITSBURG, Wash., have on a bargain counter several hundred 1-year-old S. C. White Leghorn hens; they are real goods at a reasonable price.

LIVE STOCK 177

FOR SALE—IMPORTED PERCHERON mare, 9 years old, with two colts, 3 and 15 months old. S. M. Roff, Burley, Wash.

HAY FOR SALE. 200

ALFALFA HAY, BALED OR CHOPPED.
Direct from producer.
C. C. MASON, HERMISTON, ORE.

RUG and CARPET WEAVING 270

YOUR OLD CARPETS AND RUGS remade into beautiful FLUFF RUGS at small cost. Send for booklet and prices. Nustyle Rug Co., Sellwood, Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

BUSINESS OPPORTUNITIES 516

FOR SALE—ONLY EXCLUSIVE MILLInery and ladies' waist shop in progressive mining town; very best location; splendid opportunity; $400 cash will buy it. Owner must go east immediately. Mrs. R. Ribner, Cle Elum, Wash.

NOTICES 531

INDIAN WARS PENSIONS—SOLDIERS of the old Indian wars, and their widows may now obtain pensions. Recent legislation. Write James I. Parker, Southern building, Washington, D. C.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE.
Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

YELLOW DENT CORN, FIELD PEAS, SUDAN GRASS, RED CLOVER, WHITE BEANS. Complete line of "highest quality" garden seeds. Catalog free. ROUTLEDGE SEED & FLORAL CO., 145 Sec. st., Portland, Ore.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

HOMEST'DS, RELINQ'M'TS 642

HOMESTEADS FOR SALE.
Young man, file yours before enlisting, as army service counts. Wyoming Land Co., Douglas, Wyo.

FARM LANDS—FOR SALE 651

1440 A.—SOUTH OF CONNELL, ALL good land; can be farmed with tractor; $21 per acre.

1740 A.—Wheat and stock ranch; 500 A. farmed; $16 per acre.

6600 A.—A fine stock proposition; 300 A. bottom land; $13 per acre.

640 A.—Level land; 320 A. wheat; all crop, stock and machinery goes at $46,000.

1480 A.—This place is one to three miles from town; 800 A. in wheat, balance plowed; price with all crop, and plowing, $60,000.

600 A.—3 mi. from town; 265 A. crop; price with crop, $22,000.

1280 A.—2 mi. from town; 400 A. in crop; price with all crops and plowing, $50,000.

Chas. S. Bassett, Washtucna, Wash.

FOR SALE OR RENT
STOCK RANCH OF 1625 ACRES, IN THE FAMOUS SALMON RIVER VALLEY, IDAHO COUNTY, IDAHO.

Good range, long summers, mild winters; outfit is fully equipped and in operation, consisting of land, cattle, horses, sheep, hogs, grain and hay; stock well bred; some registered; gross income $10,000 to $12,000 annually; expenses light.

This will bear closest investigation. Yearly payments can be arranged.

Complete list of stock and equipment furnished on application. Address S. Delmage, Box 2, Whitebird, Idaho.

A FEW GOOD FARMS IN A SECTION OF almost ideal climate, southern Oregon. These farms are on an excellent all-year auto road and will yield 7 tons alfalfa per acre and corn in proportion. River bottom land; natural drainage; plenty of outrange and good water. All within a few miles of railroad and in a paradise of good hunting and fishing. Write me at once for prices. JOHN C. WHITE, RIDDLE, ORE.

MONTANA LAND.
5400 acres, in Forsyth district, can be sold in farms of 160 acres and up at $12 to $17.50 per acre; easy terms. Call or write for particulars.
HEGE & WATKINS CO.
717 PAULSEN BLDG. SPOKANE, WASH.

FOR SALE—35-ACRE RANCH; RICH SOIL; 12 acres in grain, balance in clover, potatoes, roots and pasture; good house and barn and orchard; very reasonable. A. Halma, Oak Harbor, Wn. R. 2, Box 43.

BIG MONEY RAISING VEGETABLES and chickens, greenhouse and 160 acres of land, near Spokane, cost $15,000, offered at $4500; easy terms.
PENNSYLVANIA MORTGAGE INV. CO.
SPOKANE, WASHINGTON.

80 A. OF GOOD CHEAP, ROUGH, IRrigated land for sale; unimproved; worth $2400; make an offer.

80 A., partly imp.; crop; $3600; 5 mi. city, Bend, Ore.; (owner.) E., Box. 5, Tumalo, Ore. Please act quickly; a good prop.; cash.

976-A. CENTRAL OREGON RANCH, ALL tillable but 15 a. Will make an IDEAL stock farm. Near school, store, P. O. Terms. Mrs. E. Nurnberger, Connley, Ore.

TO EXCHANGE—REAL EST. 705

MONTANA LAND TRADES.
563 acres, nearly all irrigated, mostly in crop; take land in Spokane country as part payment. Call or write for particulars. Hege & Watkins Co., 717 Paulsen bldg., Spokane, Wash.

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

Grain and Produce Markets

Chicago Grain.

CHICAGO, July 7.—Corn prices burst all restraint today and reached the highest level yet after more than a week of continued overtopping of previous records. Unseasonable cool weather and virtual exhaustion of the stock of corn here had much to do with bringing about the fresh advance. Quotations closed nervous, 1 3-8c to 3 3-4c up, with September at $1.56 1-4 to $1.56 1-2, and December at $1.18 1-8 to $1.18 1-4. Wheat finished unsettled at 5c decline to a gain of 2c, July 2.07, and September $1.94. Oats were unchanged to 7-8c higher, and provisions varied from 10c down to a rise of 2 1-2c.

Interest in the wheat trade seemed to be confined to guesses regarding what would be shown by the government crop report on Monday. It was not expected, however, that the report would be of a nature to disturb much, if at all, the anchorage which quotations have bee nsubjected to by prospective tightening of federal control.

Oats made only a moderate response to the strength shown by corn. The general bright outlook for the oats crop seemed to be too much of a handicap for the bulls, and it was said export buying had been curtailed.

Provisions gave way with hogs. The corn bulge resulted in merely a slight transient upturn for lard and ribs.

Cash Quotations.

Wheat—Nos. 2 and 3 red, and No. 2 hard, nominal.

Corn—No. 2 yellow, $1.84@1.85 1-2; No. 3 yellow, $1.84@1.85; No. 4 yellow, nominal.

Oats—No. 3 white, 71 3-4@72 1-4c; standard, 72@72 3-4c.

Rye—Nominal.

Barley—$1.15@1.40.

Timothy—$4@8.

Clover—$12@17.

Chicago Futures.

	Open.	High.	Low.	Close.
Wheat—				
July	2.10	2.10	2.07	2.07
Sept.	1.92	1.94	1.91	1.94
Corn—				
Sept.	1.55	1.57¼	1.55	1.56¼
December	1.14½	1.18⅞	1.14½	1.18½
Oats—				
July	.65¾	.66½	.65¾	.66
Sept.	.54⅛	.55¼	.54⅛	.55⅛
Pork—				
July				40.00
Sept.	39.82	39.82	39.80	39.80
Lard—				
July				21.00
Sept.	21.35	21.42	21.25	21.27
Ribs—				
July	21.70	21.70	21.57	21.57
Sept.	21.75	21.77	21.67	21.67

Pacific Northwest Grain.

PORTLAND, Ore., July 7.—Wheat—No quotations. Today's car receipts: Wheat, 2; barley, 1; flour, 2; oats, 4; hay, 4.

TACOMA, July 7.—Wheat — Not quoted. Car receipts: Wheat, 3; hay, 5.

SEATTLE, July 7.—No grain quotations. Yesterday's car receipts: Wheat, 2; oats, 1; hay, 4; flour, 2.

Minneapolis Grain.

MINNEAPOLIS, July 7.—The wheat market had a strong tone and prices closed 2 1-2 to 3 1-2 cents up. Wheat receipts 56 cars, compared with 154 a year ago.

Wheat—July opened, $2.32; high, $2.33; low, $2.29; closed, $2.31 1-2.

September opened, $1.90; high, $1.95; low, $1.90; closed, $1.93 1-2.

Cash—No. 1 hard, $2.51 1-2@2.56 1-2; No. 1 northern, $2.41 1-2@1.51 1-2; No. 2 northern, $2.31 1-2@2.41 1-2; No. 3 wheat, $2.26 1-2@2.31 1-2. No. 2 durum, $1.83@1.93; No. 2 hard, Montana, $2.36 1-2.

Corn—No. 3 yellow, $1.76 1-2@1.79 1-2.

Oats—No. 3 white, 69@69 1-2c.

Flax—$2.69@2.83.

Flour—Unchanged. Shipments, 29,994 barrels.

Barley—$1.05@1.39.

Rye—$2.24@2.26.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots for the fiscal year beginning July 1, up to Saturday night, for 1917-18 and 1916-17, were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1917-18	20	17	3	21
1916-17	87	15	0	23
Portland—				
1917-18	31	12	7	22
1916-17	39	51	7	17
Tacoma—				
1917-18	19	5	0	..
1916-17	45	4	7	..
Total—				
1917-18	70	34	10	43
1916-17	171	70	14	40

Portland Wheat.

PORTLAND, Ore., July 7.—No trading is being done or attempted in the wheat market and there will be none until the food bill is settled by congress. Nominal quotations here are $2.15 for bluestem, $2.10 for club, and fortyfold and $2.05 for red Russian.

Butter and Eggs.

ELGIN, Ill., July 7.—Butter—37 1-2c bid; no offerings.

CHICAGO, July 7.—Butter—No market.

Eggs—Receipts, 109 cases; no market.

SAN FRANCISCO, July 7.—Eggs—Fresh firsts, 32 1-2c; extra firsts, pullets, 29 1-2c.

Live Stock Quotations.

At Omaha.

OMAHA, July 7.—Hogs—Receipts, 12,000; market 10@15c lower. Heavy, $15.10@15.50; mixed, $14.90@15.10; light, $14.55@15.10; pigs, $12.50@14.50; bulk, $14.90@15.10.

Cattle—Receipts, 1400; steady. Native steers, $9.50@13.35; cows and heifers, $7.50@10.50; western steers, $9@11.75; Texas steers, $9@10.50; cows and heifers, $7@9; canners, $5.50@7.50; stockers and feeders, $6.50@9.50; calves, $9@15.50; bulls, $5.50@10.50.

Sheep—Receipts, 900; steady. Yearlings, $10.50@13; wethers, $9@10.25; ewes, $8.50@9.25; lambs, $15@16.

At Chicago.

CHICAGO, July 7.—Hogs—Receipts, 11,000; slow, 5@10c under yesterday's average. Bulk, $14.80@15.75; light, $14.50@15.75; mixed, $14.55@15.95; heavy, $14.45@15.95; rough, $14.45@14.65; pigs, $11@14.25.

Cattle—Receipts, 300; steady. Native beef cattle, $8.30@13.90; stockers and feeders, $6.30@9.50; cows and heifers, $5.40@11.75; calves, $10@14.75.

Sheep — Receipts, 13,000; steady. Wethers, $7.75@11; lambs, $10@16.50.

At Portland.

PORTLAND, Ore., July 7.—Hogs—Steady; receipts, 448.

Cattle—Steady; receipts, 309.

Sheep—Steady; receipts, 511.

At Seattle.

SEATTLE, July 7.—Receipts, 73 cattle, 33 hogs. Market steady on hogs. Cattle and sheep at yesterday's quotations.

Woodworth & Barton reports:

"A liberal run of cattle and much unfinished stock has caused a sharp break in the market, ranging from 50c to 75c per 100 pounds lower than the prices obtained on the same quality a week ago.

"The best steers sold Friday at $9.50, with the commoner grades of good weights ranging from 8c to 9c, while those coming in the stocker and feeder class sold from 6c to 7c.

"Prime cows sold at $7.85, with the bulk of sales ranging from 6c to 7c.

"While the run of hogs is light, the market shows little life, the extreme top being about $15.75, while good to choice range from $15.40 to $15.60.

"The sheep and lamb market is steady, with few offerings. Good lambs would bring 13c and yearling wethers from 10c to 10 1-2c."

Spokane Stock Yards Saturday.

Hogs — Receipts, none; market strong. Prime heavy packing, $15.40@15.65; prime light packing, $15.25@15.40; smooth heavies, $14.40@14.65; pigs, $13@14.25; stockers, $12.50@13.75.

Cattle—Receipts, 101, mostly stockers; market weak. Prime light steers, $9.50@9.75; prime heavy steers, $9.75@10; good steers, $8@8.50; ordinary to fair, $7@7.75; prime cows, $8.25@8.75; good cows, $7@7.50; common cows, $6@7; best heifers, $8.50@9; bulls, $6@8; calves, $7.25@8.75; stockers and feeders, $5.75@7.75.

Sheep — Receipts, none; market steady. Prime spring lambs, $12.50@13; prime shorn wethers, $9@10; prime shorn yearlings, $10@10.75; prime shorn ewes, $8.50@9.50.

Seattle Market.

SEATTLE, July 7.—Potato prices have been plunging heavily during the last two days and new stock from both eastern and western Washington can be bought at 3 1-2c per pound, with indications of a still farther decline next week.

Today the first lot of Puget Sound Early Rose potatoes were shipped into the market in lug boxes and are selling briskly at 3 1-2c per pound.

Eastern Washington pie cherries are scarce at 4@5c. Bings are plentiful and weak, with the various grades considered, at 10@14c and Royal Anns at 5@7c. Good cherries are likely to continue stiff in price, as the Puget Sound crop has been damaged 50 per cent by blight.

Strawberries firmed up considerably through lighter receipts. The weekend cleanup should have shown a decline, but the big week is now passing and from now on jobbers predict rising prices. Good Marshalls brought $1.50 and Clark Seedlings $2.

Local raspberries are easier at $3.50 per crate.

Receipts have fallen to such an extent and the losses from warm weather and long holding running so heavy that the fresh ranch egg market is firm to an advance. Jobbers predict that the 36-cent level will be entirely absorbed by Monday, and a 40-cent level is believed to be near at hand. Several of the larger houses are preparing to draw on their storage stocks within the next few days as a check against the rising price tendency.

Butter remains stationary. While the receipts of cream are not showing the volume per milch cow that was expected it is being pressed home to city creamerymen that there has been an increase in the production from some source in this territory.

Poultry quotations will remain unchanged next week. Jobbers report that they are well satisfied with the adjustment between sales and receipts.

Cheese is weak, but jobbers have been unable to get manufacturers to quote lower. Pressure exerted by consumers in bid prices for milk is alone preventing a decline.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transaction by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 30@33c per dozen.

Poultry—Live hens, fat, over 4 lbs., 18c per lb; 2 lbs. and under, 13@16c; old roosters, 12c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 14c per lb.; broilers, live, 15@17c per lb.

Butterfat, 32c per lb.; dairy butter, 27@30c.

Beef—Buying price: Prime beef, steers, 7@8c per lb; cows, fat, 7@8c per lb.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 13@14 1-2c per lb.; do heavy, 12@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 30c per lb.; green hides, 16c per lb.; salted bulls, 15c per lb.; dry hides (short trim), 38c per lb.; dry calf (under 6 lbs.) 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 1c per lb.; dry butcher full wool sheep pelts, 30@33c per lb.

SELLING PRICES.

Asparagus—Local, $1.50@2 crate.

Cherries—Local, Bing, 10@14c lb.; Royal Anns, 5@7c lb.; local pie, 4@5c per lb.

Cappabe—3 1-2c lb.

Feed—Scratch feed, $75 per ton; all grain chop, 57 per ton; oats, $53 per ton; rolled oats, $54 per ton; oats, $63 per ton; rolled oats, $54 per ton; rolled or ground barley, $50 per ton; clipped barley, $53 per ton; wheat, $82 per ton; bran, $33 per ton; shorts, $36 per ton; soya bean meal, $54 per ton; whole corn, $74 per ton; cracked corn, $75 per ton.

Hay—Eastern Washington timothy, $29 per ton; alfalfa, $22 per ton; double compressed, $34 per ton; wheat hay, $22 per ton; Puget Sound, $20 per ton; straw, $15.

Rutabagas, $3 sack.

Strawberries—Clark seedings, $1.75@2 crate; Marshalls, $1.25@1.50 crate.

Butter—Washington creamery extras, cubes, 38c per lb; do bricks, 39c per lb.; creamery firsts, cubes, 37c lb.; do bricks, 38c per lb.

Eggs—Fresh ranch, 37c; seconds, 33c dozen.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—$3 cwt; new potatoes, 4½c lb; new local potatoes, $3.25 cwt.

Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; N. Y. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Leaf, 40c lb; Better Butter, 40c lb; Attalia, 40c lb; Diadem, 40c lb; Hazelwood, 40c lb; Solid Pack, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25½c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 29c lb; domestic Swiss, 35c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $10 case.

Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.

Dress Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Concrete in New Zealand.

The use of concrete by the farmers of New Zealand is increasing rapidly. It is used in making drinking troughs, dairy houses, cow sheds, fence posts, pigsties and practically everything that was formerly constructed of wood.

Portland Market.

PORTLAND, Ore., July 7.—The country produce markets are running about steady. Eggs require closer candling these days and the spread between case count and candled prices is wider. A fair demand is reported for country creamery butter. Poultry and dressed meats show but little change.

Northwestern prune packers have withdrawn from the market as buyers, pending the outcome in California, where the association named an unusually low opening price.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to prodcers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $45@45.50 per ton.

Corn—Whole, $72; cracked, $73 per ton.

Millstuffs—Bran, $32 per ton; shorts, $35.

Barley—No. 1 feed, $42; brewing, nominal; rolled, $49.

Hay—Buying prices: Timothy, eastern Oregon, $25; alfalfa, $18; grain, $16.

Eggs—Oregon ranch, case counts, 31c per dozen; candled, 33@33 1-2c.

Poultry—Hens, 15@16c; ducks, 15@22c; turkeys, alive, 20c; geese, 10@12c.

Butter—City creamery, prints, 38@39c per pound; cubes, 36 1-2c.

Cheese—Tillamook triplets, 23c; young Americas, 24c.

Dressed meats—Veal, 14 1-2@15c; pork, 19@19 1-2c.

Hops—Nominal.

Potatoes—New, 3 1-2@4c per pound.

Wool—Eastern Oregon, fine, 58@61c; coarse, 58@65c; valley, 72 1-2@75c.

Beans — California small white, 16 1-2c; large white, 16c per pound.

Hides—Salted hides (25 lbs. and up), 20c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green hides (25 lbs. and up), 18c; green stags (50 lbs. and up), 13c; dry hides, 34c; dry salt hides, 29c.

Wool Market.

BOSTON, July 6.—The Commercial Bulletin will say tomorrow:

Except for the sale of a sizable line of scoured fine cape wools the last week in the Boston market has been very dull, prices hold fairly steady, however, for everything.

Possibly the trade is a bit more optimistic as to the future, but the attitude of the federal government as to noils and waste prices is restraining trade in wool.

Manufacturers are busy, but new contracts have been few, while demand in the west is steady and prices strong.

Scoured basis.

Texas—Fine, 12 months, $1.70@1.75; fine, eight months, $1.45@1.50.

California — Northern, $1.70@1.75; middle county, $1.40@1.45; southern, $1.15@1.20.

Oregon—Eastern, No. 1 staple, $1.72@1.75; eastern clothing, $1.45@1.50; valley, No. 1, $1.45@1.50.

Territory—Fine, staple, $1.72@1.75; half-blood combing, $1.45@1.50; three-eighths blood combing, $1.30@1.35.

Pulled extra, $1.80@1.85; A.A, $1.70@1.80; A supers, $1.45@1.50; C supers, $1@1.05; fine combing, $1.40@1.45; medium combing, $1.25@1.35.



Pay Highest Prices for Wool

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News for Breeders

In 30 Days 94 Pounds Fat.

Under date of June 28, Superintendent Malcolm H. Gardner of the Holstein-Friesian association writes:

I am advised through preliminary reports and by wire that the Holstein-Friesian heifer Von Heim Winnifred Colantha 329334 has broken the record for fat production in the junior two-year class of the 30-day division, by producing in 30 consecutive days 1925.3 pounds milk containing 94.245 pounds fat. She freshened at the age of 2 years, 1 month, 4 days. Her sire is Dutchland Governor Sir Colantha 90477; her dam is Winnifred Piebe De Kol 2d 183405. She was bred by Carnation Stock Farm, Seattle, Wash.; and she is now owned by J. von Herberg of Kent, Wash. In the junior two-year class of the 30-day division she displaces Fairview Korndyke Pietertje 252940, whose record for 30 days is 2064.8 pounds milk containing 93.829 pounds fat. Computed on the 80 per cent basis, the equivalent butter claimed for Von Heim Winnifred Colantha would amount to 117.806 pounds.

BROOKSIDE HERD DISPERSED.

The greatest dispersion sale of pure-bred dairy cattle in the history of the world took place at Liverpool, N. Y., on May 15, 16 and 17, when the great Brookside herd, founded in 1875 by the late Henry Stevens of Lacona, N. Y., and later owned and brought to a high state of perfection by his two sons, Ward W. and Ralph J. Stevens, was placed under the hammer and sold for the magnificent sum of $242,665. There were 309 head, and the average price worked out at $785, the two highest priced animals being the famous sire King of the Pontiacs, who sold for $10,500, and the finely bred King Model, who was knocked down at $10,400. N. W. Salmon of Glenfield, N. Y., purchased the former and H. Perkins & Son and M. Philip of Red Creek, N. Y., the latter.

Founded in 1875 by the purchase of the bull, Baron Steuben, and the two females, June and May, which were secured the following year, the first real success came after Mr. Stevens purchased the imported cow, Inka, then a yearling heifer. Baron Steuben was replaced by Mooie Hartog 4th and then followed Milla's Pietertje Netherland. One has only to think of a great Holstein sire or cow, and on tracing back he will invariably find the ancestry of the animal in the Brookside herd. Such splendid specimens of the breed as De Kol 2d, Belle Korndyke, Netherland Hengerveld, Helena Burke, Korndyke Queen and Korndyke Queen De Kol, are but a few of the animals whose work as foundation stock is familiar to every student of Holstein history.

It was announced in the ring that the grand old King of the Pontiacs had changed hands again, at a much higher figure, after the first sale, his new owners being the Winterthur Farms, Winterthur, Del., Tranquility and Allamuchy Farms, Allamuchy, N. J., and G. G. Burlingame and D. N. Hart, Cazenovia, N. Y.

That splendid matron, Pontiac Clothilde De Kol 2d (13½ years old), the first cow to make 37 pounds of buttter in 7 days, 145 pounds in 30 days, and over 1000 pounds of butter fat in a year, and also the first cow to make over 30 pounds butter in three successive lactation periods, was purchased for $2600 by the Fred F. Field Holstein company, Brockton, Mass. She is a three-quarters sister to King of the Pontiacs and is the dam of the splendidly bred bull, It, recently sold by Stevens Brothers to McAllister & Sons, the well-known Pacific coast Holstein breeders. Messrs. Field also paid $4200 for a 37-pound daughter of King Korndyke Hengerveld Ormsby and K P Polkadot.

The Wourms Sale

While a fairly large crowd gathered recently for the sale of the Jersey herd at Fred Wourms', four miles from Oregon City, they apparently were not anxious to buy.

The animals themselves appeared to be good individuals and were of excellent breeding.

Golden Cicely, a register of merit cow, sold for $160 to Thomas Withycombe. Ione of Rock Ridge, with a record of 337.9 pounds of fat in 265 days, was bought by Mr. Bohlander of Naef for $132.50.

After six animals were disposed of and several were led back without a bid, the sale was declared off.

F. M. Roseman, O. A. C. graduate, former cow tester in Clackamas county, now farming with his father at Dayton station, recently gave a demonstration of food conservation, and elimination of waste. This demonstration was given at the Wourms sale near Oregon City.

RECENT ANGUS SALES.

Recent sales by the Yakima herd of Aberdeen Angus cattle include:

J. I. West, Mapin, Ore., bull calf.

T. S. Brown, Wapinitia, Ore., yearling bull.

W. A. McLeod, Grass Valley, Ore., two yearling bulls.

Lars Kadegaard, Mabton, Wash., bull calf.

Jack Fendall, Devils Lake, Ore., yearling bull.

Cris Lannes, Bearmouth, Mont., two yearling bulls.

Besides the above, Dickson & McDowell, Prineville, Ore., bought an entire show herd which they expect to exhibit at the leading fairs this fall as follows:

One yearling bull, one six-year-old bull, five bull calves, two two-year-old heifers, five yearling heifers, three heifer calves.

CREDIT WHERE CREDIT IS DUE.

The handsome Clydesdale stallion, Decoration, shown with the report of the Union (Ore.) stock show in a recent issue was not grand champion of the show, as indicated, but was champion Clydesdale stallion. The grand championship, all breeds, was won by Albert Hunter's magnificent Percheron, Kroumer, as the report elsewhere showed.

Union county was cheated out of an honor in the report when Golden Duchess, owned by R. E. Boyce of Baker, was credited with being senior champion cow, an honor which was awarded to Roan Duchess 2d, a 2-year-old, owned by G. W. De Lay of Hot Lake. Golden Duchess, however, won first in her class.

A FOUR-YEAR-OLD CHAMPION.

News comes that Merry Miss Oonette —288311—takes first place among Oregon's senior four-year-old Jerseys, having produced, in a year's test, 15,055.5 pounds of milk and 685.62 pounds of butterfat. The new champion is owned by W. M. Ladd, Portland, Ore.

SPECIALIZE ON LINCOLNS.

Dr. S. S. McClure, secretary of the National Wool Growers' association, will make a specialty of thoroughbred Lincoln sheep on his Hagerman valley ranch, the old Bliss ranch near Gooding, Idaho. He has just received four bucks from New Zealand. He also has 30 registered ewes on the ranch.

Breeders' Department

Dispersal Sale of Cattle, Hogs and Sheep

At Grandview, Wash.

July 25th, 1917

50 head of Register of Merit Jerseys.
50 head registered O. I. C. hogs.
200 head of January lambs.

One herd bull, Hermit's Majesty, No. 146,981, whose close ancestors are 700 to 900 pound cows.

There are a few of the blood lines we offer: Raleigh's Honeymoon Boy, whose sisters are 600 to 700 pound cows.

Toppers Sunbeam, No. 238741, whose sisters are 600 to 700 pound cows.

Baby Buffs Ellen, No. 220,530, who herself has a record of 630 pounds in one year.

We offer the best blood lines in the Jersey breed, none excepted.

Stock tuberculine tested. Cow testing records will be open for inspection.

One Empire Double-Unit Mechanical milker.

Terms Nov. 1, 1917, 3 per cent discount for cash.

AUCTIONEERS:

Geo. Gochnour, Sunnyside, Wash. **J. W. Hughes, Forest Grove, Ore.**

C. C. WINGER, Owner, Grandview, Wn.

A. W. HAWN, Clerk, Grandview, Wash.

Send for Catalogues.

LUNCH WILL BE SERVED BY THE LADIES OF THE RED CROSS.

All trains will be met at Grandview and Mabton, Wash., on the day of the sale.

SHEEP

KNOLLIN RAMS--BETTER LAMBS

Largest purebred Shropshire flock in U. S.
World famous—thirty years standing.
Hundreds of prizes won.

Address A. J. KNOLLIN, Pocatello, Idaho

DUROC-JERSEY SWINE

Duroc Spring Boars

from state champion ancestors, 14 to select from. Order early and get your choice.
H. W. TURNER, Sunnyside, Wash.

Hillcrest Duroc Jerseys

Pigs from fine strain, matured stock; handled for results. Good looks and good breeding. You can't go wrong on these.
R. P. CAMP. Ione, Wash.

Duroc Jesery Spring Pigs

raised by Boys' Pig club. Excellent breeding, prices reasonable. Write Harry Jones, secy.
BOYS' PIG CLUB, R. 1. Mica, Wash.

DUROCS.

Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR.
JAMES N. PRICE. Pullman, Wash.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have for sale extra good spring pigs. Correspondence solicited.

J. M. ROYSTON EST., C. ROYSTON, MGR., Payette or Fruitland, Idaho.

BIG TYPE, BIG LITTER

Easy feeding, eligible to register. Poland Chinas, foundation stock. If interested write for prices, description and booklet.
J. N. SCOTT. Naches, Wash.

DOGS

Fox and Wolf Hounds



of the best English strains in America; forty years' experience in breeding these fine hounds for my own sport and protection of sheep, hogs and poultry. Send stamp for catalog.

T. B. HUDSPETH.
Athley, Jackson County, Missouri.

HOLSTEIN CATTLE

Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.

Write for pedigrees and terms.
H. R. BOOMER. New Plymouth, Ida.

Avalon Dairy

Registered bull calves by Hartwood Hello Hengerveld (129524) from cows with good A. R. O. records, De Kol Korndyke and Pontiac blood. Prices right. Six per cent interest on time payments. Write today.
AVALON DAIRY. Kuna, Idaho.

HOLSTEIN CATTLE

Young stock by richly bred grandson of King of the Pontiacs, out of high-producing advanced registry cows.
A. E. SMITH. Sumas, Wash.

BUFFALO DUKE DOEDE

(102228) heads my herd. He is a half-brother of world's record cow, Dutchess Skylark Ormsby, producing 1506 pounds of butter in one year. Wayside Ranch Holsteins and Poland China hogs.
H. H. STIYER. Buhl, Idaho.

HOLSTEIN BULL CALVES.

One from 20-lb. cow, another from a 16-lb. jr. 2-yr.-old. Herd headed by Model Fobes of Idaho, whose four nearest dams average 27.25 lbs. butter 7 days.
EARL BEEBE, R. F. D. 2, Rupert, Idaho.

GUERNSEY CATTLE

West Lea Guernseys

Two choice yearling bulls out of Island dams by Gold Finder's Western Boy, a bull of choice breeding and a very fine individual. Also a few choice Lincoln rams.
HAWLEY & SON McCOY, ORE.

SHORTHORN CATTLE

Hercules Shorthorns

For particulars write
DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

BERKSHIRE SWINE

GALBRAITH RANCH BERKSHIRES.

Best breeding stock obtainable. Prices reasonable. Phone 20F.3.
T. A. GALBRAITH, Kent, Wash.

JERSEY CATTLE

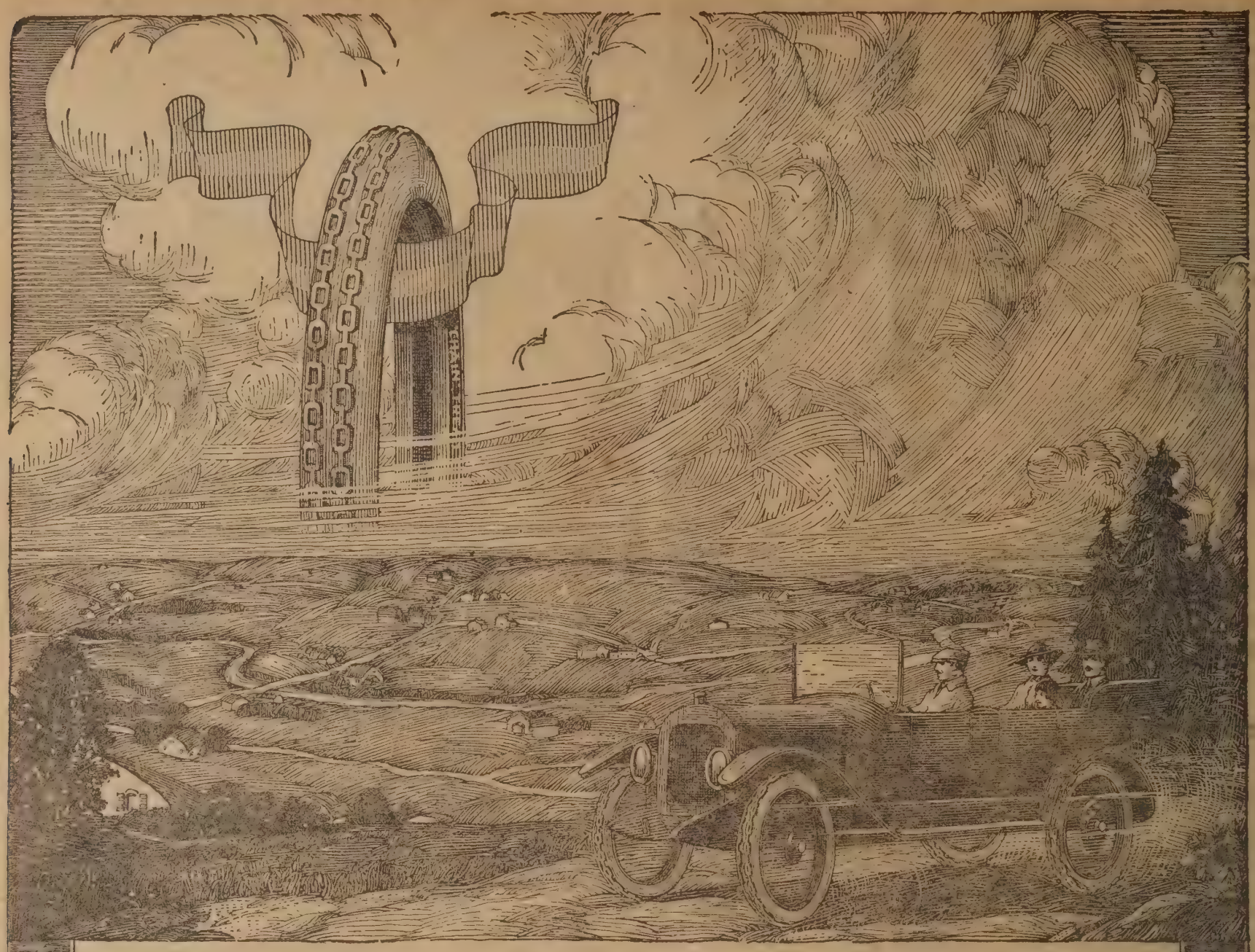
Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.
WAIKIKI FARM, R. 7, Spokane, Wash.

FOUR HIGH PRODUCING COWS FOR SALE.

For the month of April we had 11 head on test. Our herd average was 62 lbs. butter per cow, including strippers, heifers and all. Most of these cows are bred to Gertie's Poppy's St. Mawes. Of the four cows for sale, none have an average test under 6 per cent.

MELLOW LAWN FARM,
F. A. Doerfler, Silverton, Ore.



Rough Roads

demand tires that are tough, resilient and efficient anti-skids. Inferior quality of rubber, workmanship and inspection won't do. Only the best material and craftmanship in tire-making can withstand the wear and tear of roads full of ruts and holes and rocks.

That's why the *United States 'Chain' Tread Anti-Skid Tire*—one of the five famous *United States Tires*—made by the largest rubber manufacturer in the world—is forging ahead in popularity with farmers and others who *know* the tire needs of rough country roads.

More mileage per dollar, better all round service and greater assurance against ordinary tire troubles—no matter how bad your roads may be—are guaranteed when you equip your car with *United States 'Chain' Treads.* Try them TO-DAY.

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A tire for every need of price and use

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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HOME AND HOOF

VOL. XL. NO. 29. JULY 19, 1917. WEEKLY.

What Service Can I Render My Country?

Council of Defense Is Perfecting an Organization to Answer This Vital Question

By N. W. Durham

As we see our boys putting on the uniform of their country, and read of their training work in great encampments, the question rises in the mind of every patriotic man and woman and every loyal boy and girl, "What can I do in the way of service to my country?"



N. W. DURHAM.

There is service for all and the road to that service will soon be pointed out by a wonderful patriotic volunteer organization that will have its ramifications in every county in the United States.

This organization is under the leadership of the council of national defense, composed of the following members of President Wilson's cabinet: Secretary of War Newton D. Baker, chairman; Secretary of the Navy Josephus Daniels; Secretary of the Interior Franklin K. Lane; Secretary of Agriculture David F. Houston; Secretary of Commerce William C. Redfield; Secretary of Labor William B. Wilson.

The national council of defense has called to its aid a large body of able and eminent citizens, distinguished in various lines of industry, science, business and the professions, who are called the advisory commission of the council of national defense and who serve without pay.

This brings us to the state council of defense, a body of representative and patriotic citizens, chosen by the governor and serving without pay.

State Council Membership.

Dr. Henry Suzzallo, president of the state university, is chairman of the Washington council, and its other members are: Charles Hebberd of Spokane, E. P. Marsh of Everett, A. L. Rogers of Waterville, C. J. Lord of Olympia, George Donald of North Yakima, Everett G. Griggs of Tacoma, W. A. Peters of Seattle, J. T. Hefferman of Seattle, W. A. Lowman of Anacortes, Mrs. J. S. McKee of Hoquiam, J. G. Kelly of Walla Walla, W. E. Boeing of Seattle, Dr. Ernest C. Wheeler of Tacoma, and E. S. McCord of Seattle.

This state council, at its meeting in Yakima, July 2, voted to organize in each county of Washington a county council for patriotic service, which shall have charge of the coordination of all voluntary movements for patriotic service within that county for the period of the war.

The county council holds the same relation to the county as the state council of defense holds to the state.

In each county a citizen has been appointed to organize a County Council of Patriotic Service. He has been instructed to "ask from 10 to 15 of the most able, patriotic and representative citizens of his county to act as the county council."

Each of these 10 to 15 councillors is to have responsible charge of some special activity, and the following special lines of activity are suggested by the state council:

Food supply and conservation.
Industrial labor.
Farm labor.
Manufactures.
Shipping and ship-building (in the coast counties).
Lumber.
Transportation.
Home defense.
Fisheries.
Woman's work.
Publicity.
Sanitation.
Medicine and morals.
Legal and finance.
Coordination of patriotic and other societies.

It will be the duty of the county

(Continued on page five.)

The Washington Farmer Starts Big Information Department

Realizing that it is impossible for The Farmer in its regular departments to give its readers all the specific information that they may desire, we have determined to undertake the conduct of a special Information Bureau through which questions of any practical nature will be answered.

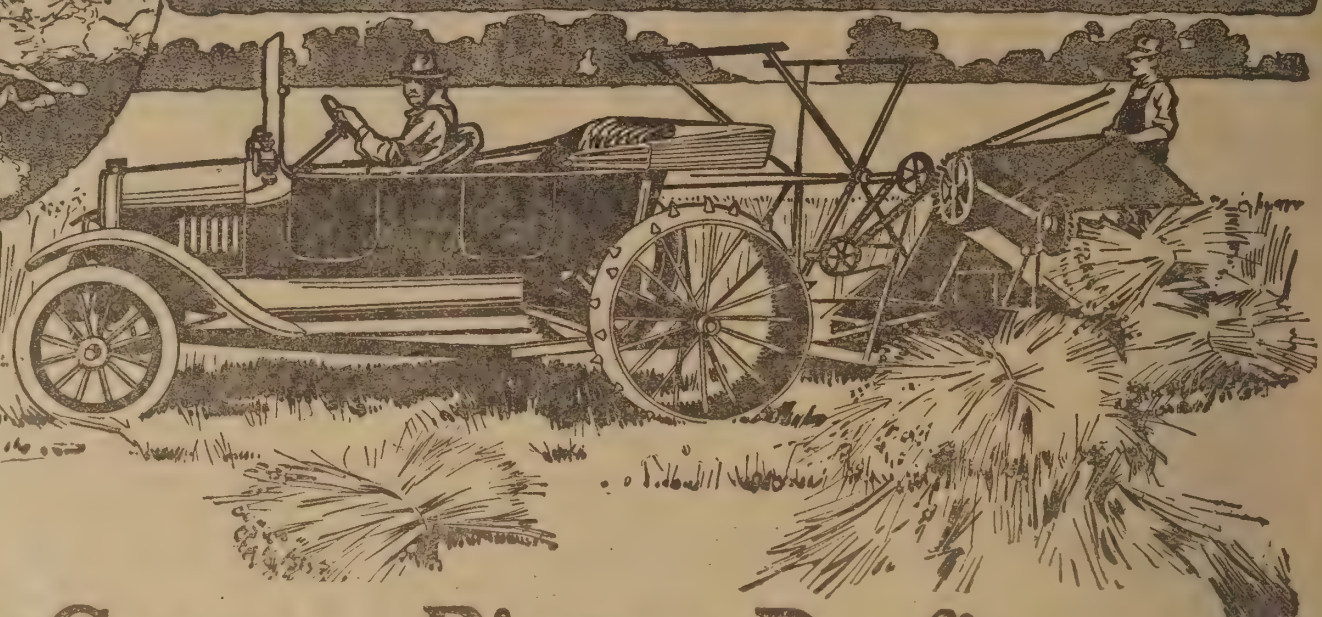
It is for you, the reader of this paper, to ask us a question of any kind—about anything that interests you or the answer to which will be of special value to you. It is for us to give you the best possible answer, making use of our own library of books, reports, bulletins, statistics and outside sources of information to which we have access. There will be no charge for this service.

It is our business as a farm paper to be of the greatest possible assistance to our readers. Nothing would please us better than to get a lot of questions by the next mail.

All questions must be signed with your name and postoffice address. All questions will be answered by personal letter, and replies of general interest may be published in the Farmer, your name being omitted if you so desire.



Smith Form-a-Tractor
$255 and a Ford



Bigger Crops—Bigger Profits—

Do Four Horse Work at One Horse Cost

MAXIMUM crops from every foot of farm land is the ambition and duty of every farmer now. The only positive method of achieving maximum crops and profits is through intensive farming—with the aid of wonderful Smith Form-a-Tractor.

Does Four Horse Work

Everywhere Smith Form-a-Tractor is daily demonstrating its wonderful ability. Farmers are amazed at the way it is doing the work of 4 horses and overcoming labor difficulties. They are saving the wages—now higher than ever before—of 2 or 3 farm hands, and plowing 7 acres in the same time horses took to plow only four acres. At this rate Smith Form-a-Tractor costs them no more to operate than one horse, and they save up to $500 a year in horse maintenance.

For All Farm Work

The wonderful ability of Smith Form-a-Tractor demonstrated in plowing is proportionate with its remarkable performance in every other kind of farm work—harvesting, discing, drilling, hauling heavy wagons out of the field and doing heavy road work.

Smith Form-a-Tractor gives you even greater working ability than big, expensive tractors. Your initial investment and operating cost are trivial compared with the cost of big machines.

24 Hours Work

Modern farmers who foresaw the wonderful possibilities of Smith Form-a-Tractor on the farm finished their plowing and planting long before farmers who stuck to old-fashioned methods.

Important farm work will not be delayed a minute on account of falling, dying horses overcome by heat, and you will have more time for yourself than ever before. Works day and night if necessary.

Change in 15 Minutes

Any farmer can attach it to his Ford touring car or roadster without special tools, in 15 minutes. Then he can change it back at any time into a pleasure car in the same short time.

Remarkable Superiorities

The permanent features you get with Smith Form-a-Tractor make your Ford a better machine for pleasure purposes.

You get a new cellular type radiator many times more efficient than the ordinary Ford radiator. This guarantees you absolutely perfect cooling in hottest weather and adds to the service and money value of your Ford.

You get a Strong Patented Force Feed Oiling System, which pumps oil to all the bearings of the Ford motor and guarantees perfect lubrication under heaviest work. The big, staunch Smith Form-a-Tractor frame extends the full length of the car and fastens to the front axle.

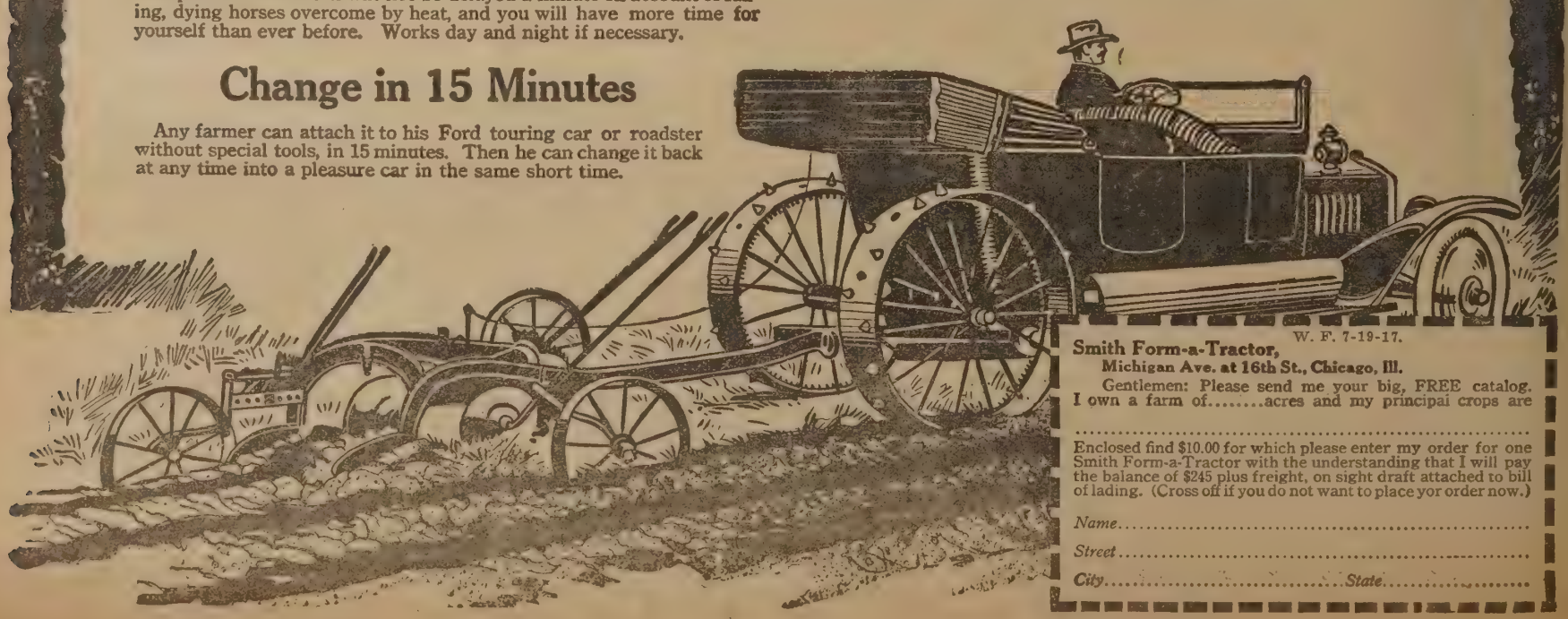
The wide tractor wheels and 36 conical lugs, 18 in each wheel, give perfect traction in any soil.

Mail the Coupon Quick

It is up to every farmer to increase production—to adapt proved methods of efficiency on the farm. Mail the coupon below for amazing free book on Smith Form-a-Tractor and what it's doing for other farmers.

We will fill your order direct if there is no Smith Form-a-Tractor dealer near you. Send the coupon with $10 attached and we will ship Smith Form-a-Tractor to you at once. You pay the full cost less $10 when it reaches you.

SMITH FORM-A-TRACTOR
Michigan Ave. at 16th Street, Chicago, Ill.



W. F. 7-19-17.

Smith Form-a-Tractor,
Michigan Ave. at 16th St., Chicago, Ill.

Gentlemen: Please send me your big, FREE catalog. I own a farm of.....acres and my principal crops are

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Enclosed find $10.00 for which please enter my order for one Smith Form-a-Tractor with the understanding that I will pay the balance of $245 plus freight, on sight draft attached to bill of lading. (Cross off if you do not want to place yor order now.)

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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 29 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF July 19, 1917

Speculators Rob Producer and Consumer

Congress Urged to Hasten Legislation for Protection of the Public

Obstructionists in the senate can not stand out much longer against the telling arguments of Herbert C. Hoover, national food commissioner, who is leading in the fight for legislation to protect the producer and the consumer from the plundering tactics of the unscrupulous speculator.

Mr. Hoover tells the president and the public that while the producer received an average of $1.51 per bushel for the 1916 wheat harvest, yet wheat has been as high as $2.25 at Chicago, and the price of flour has been from time to time based on this speculative price of wheat, so that through one evil cause or another the consumer has suffered from 50 to 100 per cent and the producer gained nothing.

Mr. Hoover warns the country that this monstrous evil will not cure itself, and that unless government regulation is provided the speculators may extract even greater profits from the 1917 wheat crop.

Must Protect Farmer.

"In order to do justice to the producers who have shown great patriotism in a special effort to increase production in 1917, and further to stimulate the efforts of 1918, it is absolutely vital that we shall protect the farmer from a slump in price," he says.

Conditions as surveyed by Mr. Hoover are ripe for fine speculative pickings. Two powerful factors fix the prices at which the great majority of the producers must sell their wheat. One of these is the concentration into a single hand of the buying orders of the entente allies, "as that in a great measure the American producer is left to that buyer's judgment and is without voice."

Shortage of Ships.

The other factor is the shortage of shipping to transport grain to Europe. This will lead to a glut in our interior terminals. Here the speculator steps in, manipulates prices downward and leads up with cheap wheat at the expense of the producers.

Then, when the requirements of the allies are filled, the speculators shove up the price to the American consumers.

Mr. Hoover finds three facts standing out plainly from his investigations:

"First, that in this situation the farmer will need protection as to the price of wheat; second, that large masses of people in the consuming centers are being actually under-nourished today, due to the exorbitant cost of living; and that these conditions, unless some remedy be found, are likely to repeat themselves in even more vicious form at this time next year; third, the speculator, legitimate or vicious, has taken a large part of the money now being paid by the consumer."

Helpless Without Law.

These senators who are playing into the hands of the speculators to the detriment of the producers and consumers will find it difficult to combat Mr. Hoover's concluding sentence: "We are practically helpless to safeguard either the farmer or the consumer until the pending legislation is passed."

The following is Commisisoner Hoover's statement:

"Dear Mr. President: In response to your request I send you herewith the following notes, compiled by myself and my associates, upon the present situation with regard to wheat:

"1. The 1917 harvest promises to yield 678,000,000 bushels. The normal internal consumption and seed requirements (assuming a carry-over of same volume in 1918 as in 1917) amounts to about 600,000,000 bushels, thus leaving a theoretical export balance of 78,000,000 bushels. The conservation measures are already having a marked effect and it is not too much to hope that the national saving may be 80,000,000 to 100,000,000 bushels, and, therefore, the export balance increased to, say, 158,000,000 to 180,000,000 bushels.

"2. The experience this year in the rampant speculation, extortionate profits and the prospect of even narrower supplies than the 1916 harvest and carry-over must cause the deepest anxiety. No better proof of the hardship worked upon our people during the last year need be adduced than the recitation of the fact that the producer received an average of $1.51 per bushel for the 1916 wheat harvest, yet wheat has been as high as $3.25 at Chicago and the price of flour has been from time to time based on this speculative price of wheat, so that through one evil cause or another the consumer has suffered from 50 to 100 per cent and the producer gained nothing.

Due to Rank Speculation.

"After much study and investigation it is evident that this unbearable increase in the margin between producer and consumer is due not only to rank speculation, but more largely to the wide margin of profit demanded by every link in the chain to insure them

(Continued on page seventeen.)

WASHINGTON PORTRAIT NO. 24



C. C. BROWN.

C. C. Brown, who now resides at Castlerock, has been for years closely identified with agricultural interests. He was born in New York on a grain and dairy farm, and his early experiences were gained from the practical. Gathering wood ashes from the adjoining town, mixing them with land plaster he built up the farm on which he was born from a worn out condition to a high state of production. In 1898 he arrived in Seattle on the crest of the Klondike excitement, and hearing that the agricultural advantages were good on the lower Yukon river, he went north. He settled on land near Dawson and started a small garden. The smaller and tender vegetables were too expensive because of the cold nights, and so the garden was turned into potatoes, cabbage and turnips. After four years in the north, a representative of the pickle plants in Holland induced him to go to Holland and England to help them with the cultivation of their large farms. Later he returned to the United States and settled near Castlerock, Wash., where he has built up a large dairy farm, using the improved silos.

Mr. Brown is a firm believer in the raising of hogs, potatoes and artichokes, and makes a practice of keeping a few sheep on the ranch for cleaning up the brush. He also has a ranch in eastern Washington which is farmed by his brother. At present Mr. Brown is installing an evaporator on the place for taking care of the surplus fruit that usually goes to waste. He believes that the salvation of the country is to save what has been permitted to go to waste and produce a better grade of live stock, fruit and vegetables.

The next in the series of Washington portraits will be that of U. E. Fries, of Brewster, and will be given in next week's issue of The Washington Farmer.

Filbert Culture, Chickens, Garden

By PAUL E. TRIEM



Of the accompanying photographs the small one is the model cottage at Alderwood manor. The eaves are narrow so as to admit a maximum of light. The rooms are well arranged for a small family, and are intended to give the small farmer the same home comforts which he would have as a moderately well-to-do city man. The water system is supplied from a 90-foot well, having a depth of about 50 feet of water and an inflow sufficient to supply the needs of a large establishment.

The larger illustration is a section of the breeding house, 128x16. This house is similar to that at the experiment farm at Puyallup. The open space in front can be closed by rolling down the long canvas curtain. There is a dust bath just inside in the front of the house, and a feeding trough for wet mash just outside. Windows under the roosting platform, visible as small areas of light in the photograph, encourage equal scratching of the litter, as the hens are not obliged to work away from the front of the house to keep out of their own light.

Alderwood manor is the model farm operated by the Puget Mill company, in Snohomish county. On it, in addition to the buildings mentioned, are a laying house, 128x20, a feed storage an incubator building, colony brooder houses, a community center building for the use of the community as a whole, and various landscape and garden features. The main industry is expected to be filbert culture, with chickens and gardening as secondary sources of income. The company has hired a number of experts to serve as advisers, and has planned to sell land to the right sort of settlers partially developed, when desired. It is stated that Puget Sound is the only considerable area in this country where filberts do well.



Canning Vegetables in Home Kitchen

To Follow Out Fundamental Principles Insures Success

So absolutely essential is it that the fundamental principles of vegetable and fruit preservation by canning be kept constantly in mind and that they be followed out explicitly, The Farmer ventures again to repeat them:

Spoiling is due to the development and activity of minute organisms in the fruit or vegetables called germs or bacteria. Therefore, the fruit or vegetable must be entirely freed of them and kept entirely free of them. This is done by perfect sterilization through boiling or steaming and by perfect sealing after the sterilization is completed.

These principles and ways of putting them into effect have been described fully in The Farmer in the last three issues, but for those who overlooked them the following brief repetition of the methods is given:

Buy a commercial canner if you want to, but if you don't want to, use the wash boiler. Make a false bottom of woven wire or wooden slats. After preparing the fruit or vegetables according to the requirement of the various varieties or classes pack in jars, place tops on loosely, set in the boiler on the false bottom, with water coming almost or quite to the top; boil the required length of time, varying with the different kinds of fruit or vegetables; take out, seal, wrap to shut out the light, and store away. There are many incidental facts and considerations not to be overlooked, but the foregoing illustrates the principles and requirements.

On this page is found a table showing lengths of time for various operations of canning. Also below the table are repeated a few definitions of terms used.

The following recipes are from recognized authorities on canning vegetables:

Asparagus—Cut the stalks into convenient and uniform length. If the plants are young and tender blanch three minutes; if older increase time to perhaps five minutes. Cold dip. Pack closely into the jars. Add a teaspoonful of salt to each quart. Fill jar with boiling water. Adjust top of jars loosely. Place in cooker and sterilize 90 minutes. Remove. Seal. Wrap with cloth or paper to prevent breakage from cold air. Store away where shielded from bright light.

Okra—Blanch five to eight minutes. Cold dip. Pack closely into the jars. Add one teaspoonful of salt to each quart. Fill jar with boiling water. Adjust tops loosely. Place in cooker. Sterilize for two hours. Remove. Seal. Wrap in cloth or paper to prevent breakage. Store away where shielded from bright light.

Summer Squash, Squash and Pumpkin—These three vegetables may be canned by the same rule. They may be cut into small cubes and cooked in the process of sterilization or they may be cooked first and packed firmly into the jars before sterilization. Both methods are practical and the latter has at least the one virtue of enabling one to get a great deal more of the material into a jar than when cut into cubes. When the vegetable is cooked before sterilization a greater length of time will be required in sterilization because of the difficulty of heating the compact mass through and through. Fifty or more per cent additional time should be taken. The following recipe is for canning when the cube system is used:

Blanch 10 minutes. Cold dip. Pack into jars. Fill jars with hot water. Add a teaspoonful or slightly less of salt for each quart. Adjust on loosely. Place in cooker and sterilize one hour. Remove. Seal. Wrap in paper or cloth to prevent breakage. Store away where shielded from light.

Corn—Blanch 10 minutes on the cob. Cold dip on the cob. Cut from the cob with thin knife. Pack into jars. Add teaspoonful of salt to each quart. Fill jar with boiling water. Adjust top loosely. Place in cooker and sterilize three hours. Remove from cooker. Wrap in cloth or paper to prevent breakage. Store away. (Note: Corn can be canned on the cob by the same process, the periods for blanching and sterilization being the same).

In last week's Farmer recipes were given for canning greens, green beans, beets and peas.

CANNING TIME TABLE.

The following table is taken from a University of Missouri bulletin, written by Bab Dell and Addie D. Root, and shows the length of time for scalding, blanching and sterilizing various fruits and vegetables:

Products	Blanch or Scald	Sterilize
Vegetables	**Minutes**	**Hours**
Asparagus	3-5	1½-2
Beans	5-8	2
Beets	6	2
Carrots	6-8	1½
Corn	8-15	3½
Corn on cob	8-15	4
Eggplant	8-10	2
Greens	Until Shrunk	1½
Okra	5-8	2
Parsnips	6-8	1½
Peas	5-8	2
Peppers	3	¼
Pumpkin	10	1
Rhubarb	1	¼
Squash	10	1
Sweet potatoes	6-8	1½
Tomatoes	1	1-3
Fruits		**Minutes**
Apples (whole)*		20
Apples (sliced)		12
Apricots*		16
Berries		16
Cherries		16
Grapes		16
Peaches*		16
Pears*		30
Plums*		16
Quinces*		30

The time given as in the directions through the circular is for quart jars. Add 10 per cent for half-gallon jars and deduct 10 per cent for pint jars. In all cases, the water must be boiling during the entire time given for sterilization.

*Apples, apricots, peaches, pears, plums and quinces may be blanched if desired. The average time required is from one to two minutes.

Meaning of Terms.

The following definition of terms used in canning recipes was given last week, but are repeated to make the recipes given herewith perfectly clear:

Scald—Plunging of fruit or vegetable in boiling water for a few seconds.

Blanch—Placing of fruit or vegetable in boiling water for a few minutes.

Cold Dip—Plunging the fruit or vegetable directly from the scalding or blanching water into cold water.

Sterelize—Subjecting the fruit or vegetable to high temperature by boiling or steam pressure method after having been packed cold into the jars.

Shade Trees.

County Agriculturist A. M. Richardson of Douglas county, Washington, reports distributing 7500 black locust trees to farmers and schools in the county during the spring. Some of these trees were furnished by the dry land department of the state college, and some were bought by the county agent's office.

Olden Ways of Saving the Fruit

In this issue Dr. E. A. Bryan tells how peaches and apples were saved when he was a boy back in southern Indiana. The same plans can be followed very profitably, we believe, this season. Every reader of The Farmer should read this bit of most interesting and really valuable reminiscence because it carries an idea that may be made to yield many extra dollars of profit from fruit which might otherwise be wasted, especially this year. It is on page 20. Turn to it and read it.

Noted Food Conservationist Coming

Carl S. Vrooman Will Tell People of Nation's Problem

Great plans are under way for the appearance in Washington next Monday, July 23, of Carl S. Vrooman, assistant secretary of the federal department of agriculture, who is on a nation-wide tour in the interests of agricultural efficiency and food production and conservation. He will hold one private conference with executives and leaders of the state and will deliver two public addresses on that day in Spokane. His visit in that city will be his only stop in Washington, and a state-wide movement is being made to assemble representatives from every section of the state for the meetings.

Mr. Vrooman is recognized as one of the greatest authorities on matters of agricultural and food conservation nature in the country. His addresses, in which he will present in detail the government's food production and conservation plan, will be the signal for the opening of the state's definite and energetic conservation program.

Among those expected to attend the meetings are Governor Lister, State Commissioner of Agriculture Benson and the members of the state council of defense. The heads of the county councils of defense recently appointed to organize the work in the counties are also expected, as are many representative citizens from all districts of the state.

In the forenoon Mr. Vrooman will hold a conference with public officials and members of the defense councils and other conservation organizations. In the afternoon he will go to Coeur d'Alene, Idaho, where he will deliver a public address at 3 o'clock. He will return to Spokane afterward for a great massmeeting, when it is expected that several thousands of persons will hear him explain the purposes and methods of the nation's food production and conservation movement.

Farm Bank Lends a Million Dollars

Three Times a Million Soon Will Be in Farmers' Hands

The northwest district farm loan bank, covering Oregon, Washington, Idaho and Montana, and having its head offices at Spokane, has approved loans as asked by farmers of the three states for a total of $3,534,210.

Of this amount nearly $1,000,000 have been actually sent out to the farmers asking for the loans.

The remaining $2,500,000 is waiting only for the receipt by the bank of abstracts of title to the land on which the borrowings are to be made.

When a loan is approved by the bank the board requires that the borrower furnish an abstract showing the clear title to the land that is to be mortgaged to guarantee the loan. In many cases loans are held up a long time because of the delay of the applicant in furnishing this abstract. No loan will be made, however, until the title is shown to be absolutely sound.

President D. G. O'Shea says that there are comparatively few of the borrowers who ask for all the money that they would be entitled to receive on their land, notwithstanding the suggestions that have been made that the bank was lending too heavily. "Ninety per cent of those seeking loans ask for less than the 50 per cent of the value of their farms, which the law provides they may borrow," he says.

One hundred dollars is the smallest amount that can be borrowed, and there are applications in considerable number for this amount on farms that would entitle the borrower to much greater sums.

The following is the list of associations chartered during the past week, which bring the total number chartered at this time up to 75. The figures show the amount of the loans approved by the board, for the charter membership of the associations:

Washington.	
Puyallup, Pierce county	$73,900
Woodland, Cowlitz county	78,000
Vera, Spokane county	58,800
La Center, Clarke county	40,000
Sedro-Woolley, Skagit county	63,800
Connell, Franklin county	43,800
Additional loans to new members in associations previously chartered	23,100
Oregon.	
Lebanon, Linn county	65,800
Montana.	
Boyes, Fallon county	25,800
Willard, Fallon county	36,900
Superior, Mineral county	37,500
Additional loans to the Billings association	5,700
Idaho.	
Emmett, Gem county	52,400
Richfield, Lincoln county	52,450
Additional loans to new members in associations previously chartered	2,100

Wheat Crop Hurt

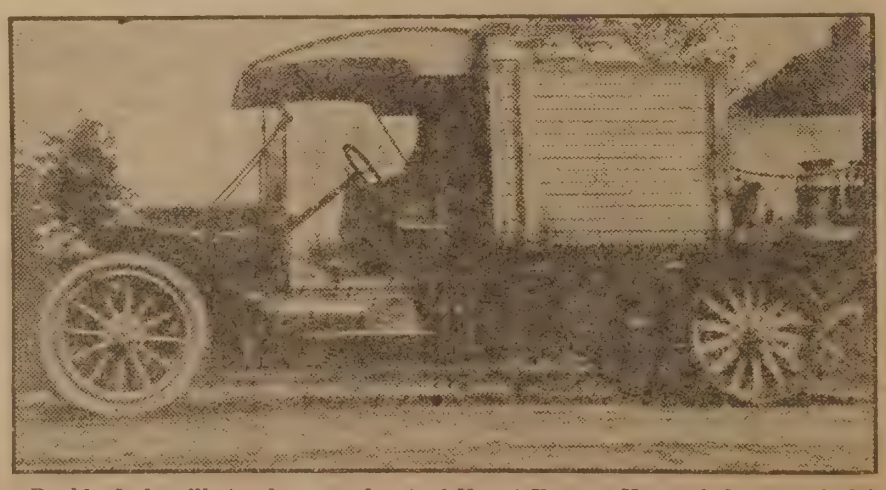
Hot Weather Will Lower Yield

Reports from all over the northwest indicate that damage is being done to wheat by the long, hot and dry spell of weather. How serious the damage is can only be conjectured. Should cooler weather, with a rain, come immediately, the damage might be recouped to a great extent. In certain localities, where the grain was well advanced, it is reported only slightly damaged, though in some localities where the seeding was extremely late, and where the bulk of the crop is spring sown, injury is believed to be great.

Proper Covers for Machinery.

The growing demand of the government for cotton duck for strictly army and navy purposes brings a word of warning to farmers in the way of providing proper covers for machinery and brings into the foreground the treatment of this cloth covering for machinery with some good waterproofing preservative.

A Truck Double-Decked for Milk Hauling



Double deck milk truck on road out of Mount Vernon. Many of these truck drivers are going over to the new condensery, taking their entire route with them.

Fairs to Demonstrate

Government Urged to Send Exhibits

The councils of defense of the northwest are joining in a request to the United States department of agriculture that the latter send its farm demonstration car west for the fair season this year, with a view to making a great educational campaign for increased efficiency in the work for food production and conservation. If the request is granted the demonstration cars will be taken to as great a number of fairs as possible during the season, such as the regular state fairs, the Spokane Interstate and some of the larger district fairs.

The demonstration car carries models to illustrate silo construction, farm buildings construction, farm implements, road building, cultivation, various crops and their methods of production, harvesting and marketing and many other features designed to improve agricultural work and country life, and thereby stimulate the production of food materials so greatly needed.

Nation Calls 687,000 to the Colors

Northwestern States Will Furnish 18,000 Men for First Unit of Army

Within a week, if the plans of the government as announced materialize, the 100,000 men between the ages of 21 and 31 years in the state of Washington who registered on June 5, in accordance with the provisions of the selective draft act, will know definitely in what order they will be called before the federal boards for examination for enlistment or exemption. At the same time 7296 of them will know that they must be ready for instant and early response to a call to the colors, that number being Washington's net quota for the first half million unit of the great new army. President Wilson has issued a formal order as commander-in-chief of the military forces of the nation specifying that there shall be 687,000 men taken into the service immediately from the 10,000,000 who registered June 5.



Woodrow Wilson Commander - in - Chief of the U. S. Army.

This number is intended to fill the national guard and the regular army to full war strength and to provide a new army of 500,000. Additional men will be called later as exemptions reduce the number acceptable in the first selection. The filling of the guard and the regular army to maximum strength and the formation of the first new army unit of 500,000 will bring the men actually ready for battlefield service or in training camps up to about 1,262,000.

Distribution Equitable.

In order that the distribution of the selections be absolutely fair to every state, each state is credited with the number of men that it has in the national guard and the number of its regular army recruits since April 1, this number being deducted in each case from the number that the state would otherwise be required to give.

After these deductions are made the state of Washington is required to furnish 7296 men, Idaho 2287, Montana 7872 and Oregon 717. Oregon's comparatively small number is not due to favoritiism to the state, but to the fact that she has a national guard of 4683 men and has furnished nearly 2000 recruits for the regular army since April 1, leaving only the small net quota of 717 yet to be furnished out of her gross quota of 7378.

Method of Selection.

Under the method of selection adopted by the government, every man who registered will know within a few days at just what time in the development of the army plan he will be called to service. Every man registered is given a number. The entire United States is divided into about 4000 registration districts, the smallest one containing 187 registered men and the largest containing about 7000 men. Therefore, the numbers will run in each registration district from one to 7000, though, of course, in the smaller districts the drawing of a number higher than the total number of registered men in each will simply act as a blank.

Officers in each district have given each man a number. Each number will be placed in a capsule and the entire 7000 capsules placed in one big jar at Washington, D. C. There will be no drawing of numbers by states or by local registration districts. At Washington on the day selected as drawing day officers will remove the capsules from the jar one at a time. The number so drawn will call one man in each registration district in the country. Thus, if the first number drawn be No. 10, each man in each of the 4000 registration districts whose number is 10 will be drawn, and will be recorded as the first in that district to be called to service.

Every one of the 7000 numbers will be drawn at the one time, so that every registered man will know approximately when his turn to be called to the colors will come. As the numbers are drawn from the jar at Washington they will be recorded both by the number of the man and the number of the drawing. That is, if No. 10 be drawn first, No. 10 in each registration district will be recorded as No. 1 in the selection. If No. 20 should be the second number drawn, No. 20 in each registration district would be recorded as No. 2 in the selection, and so on down.

Since there are 4000 registration districts, resulting in the drawing of 4000 men by each number taken from the jar, it will require the taking of only 172 numbers to secure the entire 687,000 men first to be called to the colors. The others will be subject to call in the order in which their numbers are drawn from the jar.

What Service Can I Do My Country?

(Continued from page one.)

councils to organize in every village and town an auxiliary to the County Council for Patriotic Service, membership in which shall constitute membership in a statewide League for Patriotic Service.

Every man, woman and child should belong to some auxiliary of the League for Patriotic Service. It is the method by which every loyal citizen, who does not go to the battlefront, may enlist for service in this great war for "the safety of democracy."

It is planned to have a chairman and executive committee for each of these town and village auxiliaries, and have them report officers, conditions and activities to the chairman of the county council each week.

"These auxiliaries," says the state council, "should be made the centers of patriotic feeling, national loyalty and war service."

The county councils are directed to look to the prosecuting attorney of the county for legal advice, and to the sheriff for the local preservation of law and order.

The last paragraph of the instructions from the state council to the county councils is especially important:

"The organization and control of home guards should be directed by the County Councils of Patriotic Service under the special supervision of the member in charge of home defense. The home guards have no legal status and can only be used as a voluntary organization from which a large body of deputy sheriffs may be recruited. Be sure that all men suggested to the sheriff are persons worthy to be sworn in as deputy sheriffs, and are responsible representatives of every patriotic class of citizens in the community. Other local peace officers should cooperate with the sheriff, who should be the responsible officer to whom the county council should look for the enforcement of law."

Every Able-Bodied Man Is a "Reservist" For Home Defense When Called by Sheriff

By W. A. PETERS, "home defense" member state council of defense.

In recruiting a national army, the nation has necessarily drawn heavily upon the state militia; in fact so thoroughly nationalized has become our system of government that in case of war the state militia almost automatically becomes a part of the national army.

Our system of state government, however, following the line of state legislation generally, has wisely provided for the organization of what is termed the "reserve militia" to take the place for state service of the bodies of national guard which have been called into the federal service, so that the executive power of the state shall not be deprived of the means of enforcing the laws of the state and of upholding law and order, while the national forces are engaged with foreign foes.



W. A. Peters.

Expect True Patriotism.

One would expect that at such times an enlightened people would not hamper their efforts as a national unit in the prosecution of a great war in the defense of the nation by internal disturbances and local violations of law, and, thanks to a generous patriotism, this expectation is largely realized; yet there will always be the few to whom no argument appeals, short of the argument of force, and for the use of this argument when necessary, every sane government must be prepared.

I understand that the governor of the state, in pursuance of the requirements of the statute, has instructed the adjutant general to organize throughout the state the reserve militia to take the place of the national guard, to remain for service within the state. For this reserve militia, all male able-bodied citizens between the ages of 18 and 45 are subject. This, however, in no way interferes with the recruiting of the federal troops or the national guard for federal service, as there are plenty of men over the age not acceptable to the federal army, that is, between the ages of 30 and 45, who are amply able physically to give the less strenuous service required in the militia reserve.

In our state organism, the sheriffs are guardians of the peace of each county, and are required by law to see to it that the citizens and property of their counties have proper protection. It would be unwise under our democratic institutions to maintain as a standing force a sufficient body of men to aid the sheriff in enforcing law and order, for this would mean so many citizens drawn from useful industry. The sheriff, however, under the law, has the power, and it is his duty to call upon the citizens of his county to furnish in emergency that aid and assistance, in bearing arms, in resisting aud employing force, which may be necessary, and a citizen when called upon can no more refuse this service than can an enlitsed soldier disregard the order of his superior officer. The duty, therefore, of maintaining law and order in the county is primarily upon the sheriff, who should be advised in those matters by the prosecuting attorney, and not until the power of the sheriff is shown to be insufficient to cope with the situation is it ordinarily the function of the state militia to undertake the obligation.

Forcasts Fruit Crop

Yield Will Equal That of 1916

The state of Washington will produce 21,750 carloads of fruit this season as compared to 21,506 carloads last season, according to the estimate just completed by the horticultural branch of the state department of agriculture, M. L. Dean, chief.

The following is the tabulation of last year's production and the estimate of the present season; the figures representing carloads:

	1916.	1917.
Apples	16,955	16,925
Pears	1,639	1,247
Peaches	1,265	1,946
Grapes	25	30
Prunes	511	650
Apricots	87	165
Cherries	213	377
Strawberries	394	300
Other berries	417	110

A significant feature of this estimate is that the soft fruits are those responsible for the gains. It is seen that the prospect for such as peaches, apricots, prunes and cherries is better than last year, while the apples remain about the same and the pears and berries fall off.

See No Cheaper Milk

Further Increase Is a Possibility

A special committee making an investigation of the milk situation for the city of Spokane has reported that if "the careless methods of production and expensive methods of distribution are to continue there appears no likelihood of any lower prices to the consumer. On the contrary, there seems a strong probability of higher retail prices within the next few months."

The investigation and report are a part of the outgrowth of the great unrest in the dairy business and among the consumers of high-priced milk and cream.

Producers Must Get More.

The report of the committee states unequivocally that the producers must get more for their milk than they have been doing in the past and suggests that the only way the consumer can be relieved of paying the amount of increase necessary is for the cost of distribution to be reduced. How this cost may be reduced is suggested by the following portion of the report:

According to their own figures, it is costing the large dealers over 5 cents per quart to handle and distribute milk. It may be true that under the present system this cost can not be reduced, but your committee is of the opinion that with a centralized plant embracing all the large distributors and with a system of small distributing stations located in populous districts of the city under one central management, a material saving in cost of distribution would be obtained. In cities where the milk supply, or the bulk of it, is handled by one concern or by a properly organized and managed association of producers, a more economical result is obtained than in Spokane.

It was disclosed during the hearing that there had been a consolidation of distributors in Portland, Ore., by which a saving of 15 per cent was made.

Here are further interesting extracts from the report:

It became evident to your committee that the producers have been selling milk to the dealers for several years at less than cost, and, as stated by Mr. McBride after his Michigan investigation, the reason the dairy industry has been able to continue under such conditions is the fact of unpaid overtime and unpaid woman and child labor.

It costs just as much to feed and care for a cow producing 1 3-4 gallons as one producing three gallons per day, and the latter is not an excessive figure to expect.

If some practical method of cooperation among the producers could be brought about much good would be accomplished in every branch of the industry, but with the present conditions existing among so many scattered units it is difficult to bring about united action upon common sense, businesslike methods of operation. For the producers simply to unite and advance prices regardless of methods of production is not fair to any one, themselves included.

Double Vegetable Output.

According to an estimate made by P. E. Magruder, executive secretary of the Bellingham Chamber of Commerce, the vegetable production of Whatcom county will be doubled this year through the activities of the home defense food committee and the war-time food committee, the first working in the country and the second in the city.

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Employers and Workmen Must Give and Take This Season

It is unpatriotic for the laborer this season to quibble with the farmer or the employer in any other staple industry over matters of hours or wages or conveniences. It is equally unpatriotic for the farmer or other employer to withhold reasonable compensation and comforts from his employe. Workman and employer should work together for mutual interests. The success of the one depends on the success of the other. The workman should receive good wages, and in turn he should give a good day's work. He should be provided a good place to sleep and wholesome and palatable food to eat, and in turn he should cooperate with his employer in the work, not merely perform so many stipulated hours of disinterested labor. Cooperation embodies the idea of personal interest in the employers' plans and purposes and their accomplishment.

It is a blot of shame on the fair name of American citizenship that there should this trying year be a large number of so-called workers who are unwilling to give fair service for fair pay and who are openly doing all in their power to destroy the efficiency and peace of industry. It is equally to be regretted that occasionally there remains an employer who is unable to understand the rights that belong to the honest worker.

Worker, be fair with your employer! Employer, be fair with your employe!

Whot the Pig Clubs Are Doing

The pig club boys of one county in eastern Washington have announced that they have 150 or more pure-bred pigs for sale.

This is something that should arouse hope in the future of the hog industry of the state. These pigs are from sows grown or bought by the boys, probably with the assistance of local banks or public-spirited men of the communities. They are excellent stock—pure-breds, subject to registration. This one county is furnishing probably 75 pure-bred sires for the hog raisers of that part of the state, and probably an equal number of mothers for pigs next year. The offspring of these animals within one year may well be expected to run well up into the hundreds, and if several counties have equal success with their club work the number in the state should run into several thousands.

The boys' club work means something substantial to the live stock industry. What is true of pig clubs is correspondingly true of other clubs. Club work is a movement that deserves support and encouragement from all sources. Persons wishing to buy good breeding stock should investigate the clubs of their communities before sending to eastern breeders. Patronize home industry.

The Fire Season Is Here

A farmer may have his grain field or his haystack or his house and barn insured, but if they burn up somebody has suffered a real loss. The insurance company sees to it from the very first that it is self-insured. Its premiums are calculated to guarantee it against loss. In the final analysis, it is the farmer himself, or the farmers as a class, who pay the bill when farm property is destroyed by fire.

This season, above all, the farmer can not afford to be careless with fire. His products are too valuable from the money standpoint to be subjected to unnecessary risks, and the hungry world needs them as it probably never before needed them.

Every possible precaution should be taken to guard against fire. Each individual should feel upon himself or herself a personal responsibility in the matter. Each should take special care to avoid dangers, to eliminate carelessness. It is a personal matter. The carelessly dropped match, the over-heated stove, the open gasoline or kerosene can, the pipe or cigarette, the waste matter piled away carelessly to take fire spontaneously or to afford kindling for the spark or the match—these are responsible for many destructive fires. Personal care would prevent every fire so started.

Live Stock Pays the Mortgage

Animal husbandry makes for stability. At a time when $1 and $2 wheat is being discussed there may seem to be too narrow a margin of profit in pork, even at 15 cents a pound live weight. But year in and year out it is the hog and the cow that pay off the old mortgage or enable the farmer to replace it with one bearing a lower rate of interest.

Many of our readers who formerly lived in the "corn belt" will remember when farm loans were made in the now prosperous state of Iowa at from 12 to 20 per cent. The average in that state at the present time is 5.9 per cent, and at that rate there are outstanding some $469,000,000 worth of mortgages—much more than the three states of the northwest are borrowing on their farms, although the average rate here is above 8 per cent. Now, let us try to discover what brought the interest rate down in Iowa: It wasn't federal, state or county help in farm financing. Roughly speaking, Iowa's high interest rate prevailed till the cow and the hog became prominent citizens of the state. With their advent the interest rate began to go down.

Washington Cranberries

Before many years have passed the state of Washington is going to keep at home some $600,000 which it has been spending annually for eastern cranberries. The reason is simple enough—we are beginning to raise our own, and we find them at least equal to anything we have ever tried. Eastern producers are handicapped by two circumstances; one is that they must pay $2.50 to set every barrel of cranberries down in Washington; the second is that their cranberry bogs must be winter flowed to protect the vines from freezing, while in the mild climate of Pacific county, where most of the Washington cranberries are produced, no such process is necessary.

The peat bogs on which the cranberry plantations are maintained are covered, in their original condition, with a thick matting of spagnum moss. This is "sealped," and then the bog is covered with sand to a depth of three inches. Check rows 12 inches apart each way are marked, and the 18-inch cuttings are inserted where the rows cross. Drainage is secured by means of a complete system of ditches.

The young plantation must be hand weeded for the first three or four years, until it comes into bearing, in fact. The first picking is a hand process, likewise, but after that the berries are scooped up by means of an implement working on the comb principle. Thereafter the vines are good for a lifetime, with one re-sanding every seven years.

Washington Gleanings

The Farmers' Union Grain company will build a concrete elevator with a capacity of 75,000 bushels at Hartline.

The four states—California, Oregon, Washington and Idaho—this year will produce the greatest crop of potatoes in their history.

The salmon canners of Washington have decided that they will sell to the government at the regular wholesale rate. Each canner will furnish goods proportionately.

An Indian department will be an interesting feature of the Skagit county fair this fall. There are many fine Indian curio collections in the county which it is anticipated will be exhibited in the department this year.

The Horse Heaven irrigation district has voted to bond itself in the sum of $18,000,000 for the completion of the project. According to present plans about 215,000 will be put under water at a cost of about $47 per acre.

Cultivated acreage on the Yakima Indian reservation now is 57,507 acres, which is 9584 acres greater than last year and 1000 acres above the highest estimate earlier in the year. Added land is largely in grain, beans, corn, beets and potatoes.

The first steps toward the creation of the Kennewick irrigation district have been taken by the Highland Improvement club. As at present outlined, 38,000 acres will be included in the new project, all of which lies above the N. P. I. company's gravity canal.

A contract has been let for the construction of a five and a half mile link in the Olympic highway, from Discovery bay to a connection with the short new stretch of road connecting Gardiner with the Clallam county roads. The construction cost will be $46,130.

The sale of registered Holsteins owned by J. C. Graham of North Slope dairy farm, three miles south of Palouse, totaled $13,813. It was the largest sale ever held in that region. The average price of registered stock was $282 and the average price for all animals was $187. The herd consisted of 75 head.

The granges of Clallam county are asked to report how many farm hands are now employed in the county, as well as how many will be needed during the harvest season, to Secretary Teck, of the Commercial club of Port Angeles, in order that a check may be had and provision made for the extra number in time to get them through cooperation with the Washington State Harvesters' league.

Five hundred Seattle Y. M. C. A. boys will hire out as berry pickers in the Puyallup valley this season. They will work at regular wages and will be in groups of 15 or 20. An adult will be in charge of each group. Every year the boys go on an outing, but this year it was thought best to give them a chance to earn some money besides. They will do a good deal toward relieving the threatened labor shortage.

Mrs. Zorah Jackson, widow of the late R. A. Jackson, and children have incorporated their mammoth stock and farming interests under the name of R. A. Jackson Tucannon Rambouillet and Stock Farm. The capital stock of the company is placed at $200,000, fully paid up. The Jackson ranch is located 14 miles east of Starbuck on the Tucannon river. It is said that this is the largest corporation formed within the state of Washington to be headed by a woman.

What Others Say

The silo must be ready ahead of time. The corn will not wait on it.—The Farmers' Review.

It may seem a little hard to feed a large pullet for the next three months, but the reward will come when she begins to lay.—The Pacific Poultryman.

See that the harvesting machinery is kept in good repair. A delay of a few hours or a day may mean many dollars in damage.—Reclamation Record.

Wheat is too valuable now to guess at weight, dockage or moisture content. And you must know all these absolutely.—Price Current-Grain Reporter.

A kindly feeling prevails among farmers toward boys and men from the cities who patriotically are offering their labor on the farms for the summer and harvest period—Farm and Home.

Germany Is in Turmoil

Political Revolution Threatened

The whole world is watching with bated breath the political turmoil that is admittedly existing in Germany. Something bordering on a crisis is transpiring, though conjectures as to the real meaning of the happenings are all that can be made in the way of explanation. The outstanding single event is the resignation of Imperial Chancellor von Bethmann-Hollweg and the appointment of Dr. George Michaelis by Kaiser William to succeed him. The resignation of Foreign Minister Zimmerman preceded that of von Bethmann-Hollweg.

The disturbance undoubtedly has grown out of a two-fold condition, the desire on the part of a great mass of the people of Germany for a more democratic government and the desire of the same great element for peace.

Members of the reichstag, the German legislative body, have gone far in their fight for liberal government, winning some ostensible consideration from the crown. Kaiser William only a few days ago issued a decree which, on the face of it, seemed to be designed to grant popular equality in the ballot in Germany, which is one of the rights that the people have been demanding. Whether this is genuine on the part of the kaiser and his advisers, or merely a "grandstand play" to temporarily pacify the liberals is doubtful.

For some time Austria, the principal ally of Germany, has been openly favoring peace negotiations. She has gone so far as to bind herself to a policy of peace without annexations or indemnities, and has made certain peace overtures which indicate a possible, though not a probable separate peace with Russia should the militaristic regime continue to control Germany as it has in the past.

The resignation of von Bethmann-Hollweg followed a hurried conference in which German royal and military leaders participated. At this conference it is believed that the crown prince, a vigorous opponent of the democratization of Germany as desired by the rank and file of the people, controlled the situation.

This is further indicated by the appointment of Michaelis to the position, he being known to be strictly in accord with the bureaucratic government of the kaiser and the military party.

What It May Mean.

There seems some reason to believe that the outcome so far is a victory for the war party in Germany and a defeat for the liberal, democratization element. But there is also some reason to believe that it is such a victory as will engender greater popular opposition to the autocracy of the German government and ultimately lead to something more nearly equivalent to the recent Russian revolution.

The officials of the United States, however, are not inclined to look upon the situation as one which should give hope of early cessation of the war. A committee at Washington, D. C., authorized to review the situation and give out a public statement from the department of state, says in part:

"Information reaching the department of state indicates that the German political crisis now centers primarily on the question of internal reform and peace, and that the question of changes in the personnel of the government is subordinate in importance. The dispute is over measures rather than men. And whether or not the chancellor and several secretaries of state lose their positions, it is unlikely that the political storm can be stilled until definite action has been taken in regard to internal reform and peace.

"In spite of the bitterness of the present contest in Berlin, there is not the slightest reason to believe that it will result in anything remotely approaching revolution, or in any diminuation of Germany's military power. The crisis probably will lead to internal reforms, which, from the point of view of Germany, will seem colossal, but will be, in truth, only the first steps toward making the German people masters of their own destiny."

England Will Get Food.

Germany's submarine campaign, stupendous as have been the losses caused by it, is an absolute failure so far as conquering England this year is concerned. This is the opinion of persons in position to form sound opinions. The following from the Wall Street Journal, recognized as an authorative commercial publication, gives the gist of the condition:

"Up to the first of June, Germany had succeeded in destroying only six per cent of the tonnage carrying food to England. Had she been able to destroy the other 94 per cent in June, Germany would still have failed in her object, as England has within her own territory sufficient food without any importations to carry her over to this year's crop returns. English crops are good for at least a four-months' food supply. Therefore, so far as this year is concerned, Germany's submarine campaign is doomed to failure."

Allies Continue Gains.

The work of the Russian army on the eastern battle front continues to be victorious if reports may be believed. Continued advances are being made in Galicia, where the Germans rushed in troops in a futile attmpt to prevent the routing of the Austrians, who are defending the territory. The operations of the Russians for the last two or three weeks seems to indicate a successful termination of the revolutionary activities that brought about the abdication of the czar and the setting up of the more popular government.

While the recent operations of the English and French on the western battle line have been less spctacular than those of the Russians for the last two weeks, gains have been reported almost daily.

U. S. Operations Unknown.

Little or no official information is coming through concerning the United States troops in France. Absolute secrecy is being maintained as to the government's plans for putting them into the fighting or sending men to foreign soil. It is not withheld, however, that the war and navy departments are putting forth every effort to enable the navy and the army to strike with the greatest possible strength and effectiveness at the earliest practicable moment.

An interesting sidelight on the entrance of this country into the war is found in the apparently reliable report that the German authorities are trying to convince the German people that the United States can not greatly affect the outcome of the war. It is reported that the German government is figuring that this country can not put an appreciable army in Europe in less than 18 months, which seems on the face of it to be a move to prepare the German people for at least another year of the war.

Woodsmen Are Called.

The fact that war is not merely a matter of guns and gunpowder and men to use them is indicated by the announcement that Henry S. Graves, chief of the United States forest service, has gone to France to familiarize himself with the lumbering needs of the allied countries and to prepare the way for a large corps of timber engineers and working woodsmen from this country. The department of agriculture, of which the forest service is a branch, announces that it will not be the purpose to place these men in combatant service at any time, but to put them into the timber regions behind the fighting lines to get out the timber required in carrying on modern warfare. Applicants for the expedition must be between the ages of 18 and 40 years, and must pass the regular military physical examination.

Food Bill Is Coming.

After delays lasting a month, the senate is reported to have agreed to take a final vote on the food regulation measure Saturday of this week. Whether other delays will be made and cause it to be further postponed, is doubtful. President Wilson and Food Commissioner H. C. Hoover have been bringing heavy pressure to bear on congress to pass the bill with its provisions designed to eliminate the food speculator and stabilize the markets for staple food products.

Patriotism Above Profit.

In a formal statement issued to the businessmen of this country President Wilson has made an urgent plea that money-making be forgotten during this crisis in the country's history and that patriotism be substituted for it. The president urges that all commerce and trade be conducted with the welfare of the country and her allies in mind rather than the making of money.

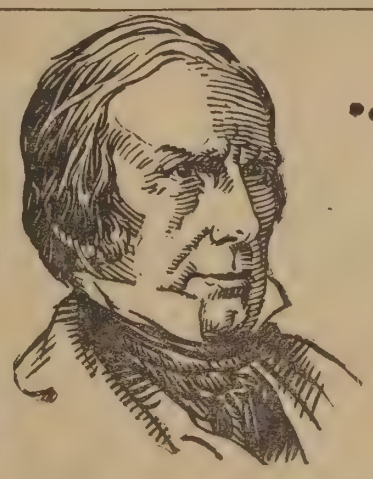
Favors Government Control.

To the Editor of The Washington Farmer: I am not a farmer but as a grain dealer I come in touch with the farmers of the community and am sure the majority are in favor of regulation of prices of farm products. I feel that the labor situation is such that no great increase in the amount raised can be made. Have heard of no movement for increased crops in the farming section, but the people of the town are utilizing all spare ground.

Asotin, Wash. C. C. DAY.

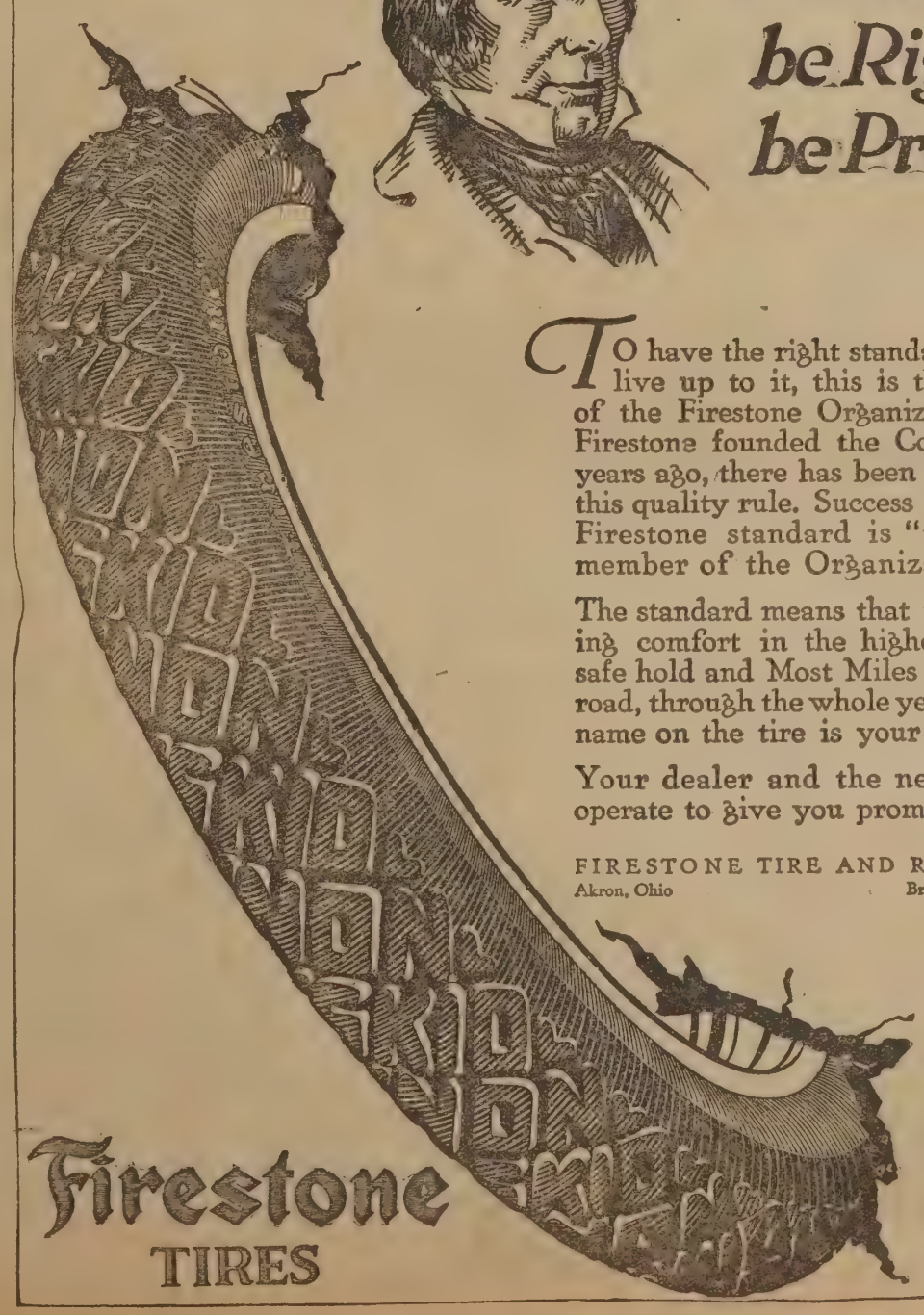
Tractors on Farms.

The fact that the army needs for horses are going to give farmers an unusual interest in the tractor way of handling farm work is brought out by E. E. Gerlinger president of the Gerlinger Motor Car company at Seattle. Not only cavalry horses but heavy draft horses are to be called for in army schemes. It is up to the farmers to be looking into this matter and see what kind of a tractor will be adapted to his farm.



"I Would rather be Right than be President"

H. Clay



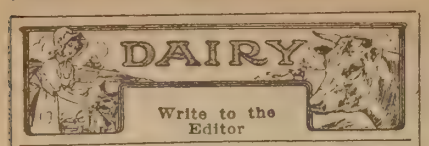
TO have the right standard and faithfully live up to it, this is the working motto of the Firestone Organization. Since Mr. Firestone founded the Company seventeen years ago, there has been no swerving from this quality rule. Success has come because Firestone standard is "right" and every member of the Organization upholds it.

The standard means that you must get riding comfort in the highest degree with a safe hold and Most Miles per Dollar on any road, through the whole year. Mr. Firestone's name on the tire is your assurance of this.

Your dealer and the nearest branch cooperate to give you prompt, saving service.

FIRESTONE TIRE AND RUBBER COMPANY
Akron, Ohio Branches and Dealers Everywhere

Firestone
TIRES



A. B. NYSTROM, Editorial Contributor

Carlton B. Holt, manager of Waukesha Guernsey farm, on the edge of Boise, Idaho, says Guernsey milk outsells all others, on account of its rich color, even at the same percentage of butterfat. Mr. Holt has both registered and grade Guernseys. He had 60 tons of corn silage last fall, but will have more this year. His cows are run on bluegrass and white clover pasture, supplemented with alfalfa hay. He likes a little of the white clover in the pasture mixture.

Over 800 Pounds of Butter.



Here is a picture of the beautiful Jersey cow, Miss Oonette No. 288311, owned by the William Ladd Iron Mine Farm, Portland, Ore. She finished an official test Jan. 23, 1917, with the extremely creditable record of 15,055.5 pounds of milk and 688.62 pounds of fat or 806.61 pounds of commercial butter, and qualified for class A. A., by dropping a calf inside of four months. Her dam, Oonette No. 149351, is No. 2 in the Register of Merit. She qualified under the supervision of the Kentucky agricultural experiment station, producing 16 pounds 11 ounces in seven days at the age of three years and three months. Miss Oonette's sire is Merry Miss' son, sire of seven in the Register of Merit.

Iron Mine Farm now has 19 Jerseys on test and, while there is probably nothing prenomenal being done, all are making good records. H. A.

Stillaquamish Cows

There were 581 cows in the Stillaquamish Cow Testing association tested during the month of June. Of this number 566 were producing throughout the period. The average production for the association was 806.6 pounds of milk and 34.66 pounds butterfat at a cost of $3.27 per cow.

There were five herds aggregating 136 cows which averaged over 40 pounds butterfat, the highest average being 44.1 pounds. The lowest average was a herd of 23 cows at 18.75 pounds fat.

There were some good producers this month. Forty-seven cows produced over 50 pounds butterfat, 10 over 60 pounds, and two produced 70 pounds or better. This is the first time any of the cows of this association have reached the 70-pound mark. These two cows belong to Max Eitzenberger and John Furness.

The following are the names of members owning cows in the 60-pound class, also the number of cows owned in that class:

Carsten Thomson, three cows; W. G. Grimm, four cows; Max Eitzenberger, one cow; John Lee, one cow; C. Olsen, one cow.

The following are owners of 50-pound cows: Valley Gem dairy, two; Anthon Kraetz, one; Carsten Thomson, five; M. Lindquist, two; G. A. King, two; Hans Thomson, four; Max Eitzenberger, six; W. G. Grimm, seven; Ole Larson, two; J. B. Knutson, two; John Lee, one; O. Olsen, six; Gerhard Weerda, four; Herbert Thurmond, three.

E. O. Sneve purchased a purebred Holstein bull calf last month.

During the month 13 unprofitable cows were sold for beef.

Snohomish Cow Testing.

In spite of the continued adverse weather conditions, the cows in the Snohomish Valley Cow Testing association of western Washington did nearly as well for the month of June as for the preceding month. The high cow for the association for the month is owned by Thomas Bowen. She is a grade Holstein, Dora, age 5, producing 1470 pounds of milk testing 5.45 per cent and containing 80.1 pounds of butterfat. There were 52 cows in the association testing over 40 pounds of butterfat for the month, according to the report of V. B. Riley, official cow tester.

New York Milliners.

More than 12,000 women are engaged in the millinery business in New York city.

White River Valley Cows' Records

There was a general falling off in the milk flow of the cows in the White River Valley Cow Testing association, according to the June report of Robert Cowan, tester. This is reported due to the poorer pasture conditions caused by the warm, dry weather during the early part of the month. The averages per cow were milk 883 pounds, butterfat 29.73 pounds, feed cost $4.22. The number of cows tested was 610. Of this number 238 gave over 1000 pounds of milk, 107 over 40 pounds butterfat, 26 over 50 pounds butterfat. Sixteen were sold for beef. Of the 13 farmers in the association four were feeding grain and one was supplementing pasture with corn silage. One farmer has already contracted for his alfalfa.

The following table gives the names and records of the cows in the association which have produced more than 55 pounds of butterfat and 1200 pounds of milk during the period of 30 days, ending June 30:

Owner of cow.	Name of cow.	Breed of cow.	Age. (yrs.)	Lbs. milk.	Per cent of fat.	Lbs. butterfat.
A. Zeeuw	No. 117	Grade Holstein	8	1917	3.7	70.93
O. E. Inglebright	No. 2	Grade Holstein	6	2031	3.2	64.94
Nels Nelson	No. 19	Grade Holstein	6	1419	4.5	63.85
John Steele	No. 36	Grade Jersey	5	1341	4.5	60.34
A. Zeeuw	No. 170	Grade Holstein	7	1518	3.8	57.68
A. Olson	No. 10	Grade Holstein	9	1680	3.4	57.12
John Steele	No. 4	Grade Holstein	7	1674	3.4	56.92
A. Olson	No. 3	Grade Holstein	7	1380	4.1	56.58
John Steele	No. 44	Grade Ayrshire	7	1278	4.4	56.23
Herman Nelsen	No. 9	Grade Holstein	6	1587	3.5	55.54
John Steele	No. 38	Grade Jersey	4	1257	4.4	55.38
Cochrane Bros.	Stall 41	Grade Holstein	6	1671	3.3	55.14

Milk Regulations in England

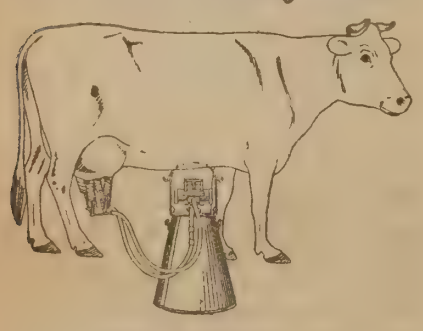
More food value in milk itself than in cheese, butter, condensed milk, dried milk and other milk products. This is brought out in comments made by the Irish Homestead:

We warned our readers a few weeks ago that there were likely to be restrictions on the sale of cream or the manufacture of butter, and that as milk was the most important food produced in these islands independent of foreign supply, steps would in all probability be taken to insure that the full food value would be made available to the public, and as by making butter or extracting cream the full food value was not made available, regulations would in all probability be issued shortly dealing with the uses to which milk would be put. These regulations have not yet been issued, but the report of the English committee to consider the effect of the existing milk order on the production and distribution of milk has just been printed, and we see among the more important recommendations that the production and distribution of all milk products made up in factories and creameries should be under the direct license of the food controller, who should have it within the exercise of his powers to compel such creameries and factories to release milk in liquid form to meet the urgent demands of the public. Also it is urged that the sale of preserved cream should be prohibited. These recommendations are by an English committee, and refer to England, but we consider it likely that as there will be a shortage of milk this autumn and winter in the Irish towns that somewhat similar regulations will be made with regard to Ireland, and that the shortage in the milk supply of cities like Dublin and Belfast, caused by the deficiency in the supply of brewers' grains, feeding stuffs, etc., for feeding cattle in town dairies, will be made up by a levy of a certain percentage of the milk supplied to Irish creameries. The committee report that having regard to the value of milk in comparison with milk products it is of importance that pure liquid milk should take precedence of cheese, butter, condensed milk, dried milk and other milk products. In Ireland there is not so great an urban population as in England, and the suggestions made could not be applied in this country; but we have no doubt that some regulations will be made.

United States' Peanut Crop.

The United States grows more than 6,000,000 bushels of peanuts a year.

The Perfection Milking Machine



D. E. Woodin of Sunnyside, Wash., says about the Perfection: "I feel sure that the Perfection Milker, used as I am using it, cannot possibly injure the cows, and can see no reason why it should not last a lifetime."

Newman Bros., of Elk Grove, Cal., say this:

"Anything called Perfection must go some to live up to its name. To be conservative, your machine comes mighty close to it."

The Perfection has the most simple pulsator.

The Perfection has a universal common sense teat cup with a downward squeeze.

The Perfection has a slow running pump.

The Perfection can be adjusted for milking different cows.

The Perfection will do the work, do it right and please the user.

The J. C. Robinson Co.

46 First St., Portland, Ore.

CUTTER'S BLACKLEG PILLS

"California's Favorite" for nearly 20 years

For the Prevention of Blackleg in calves and young cattle

Their superiority is due to nearly 20 years of specializing in "Vaccines and Serums only."

Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.

Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

Prices:

10 dose pkge. Single pills	$1.00
50 dose pkge. Single pills	4.00
10 dose pkge. Double Pills	1.50
50 dose pkge. Double Pills	6.00
Cutter's Pill Injector....	1.50

Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

The Cutter Laboratory, Berkeley, Calif.

The Cutter Laboratory of Illinois, Chicago
Eastern Agent



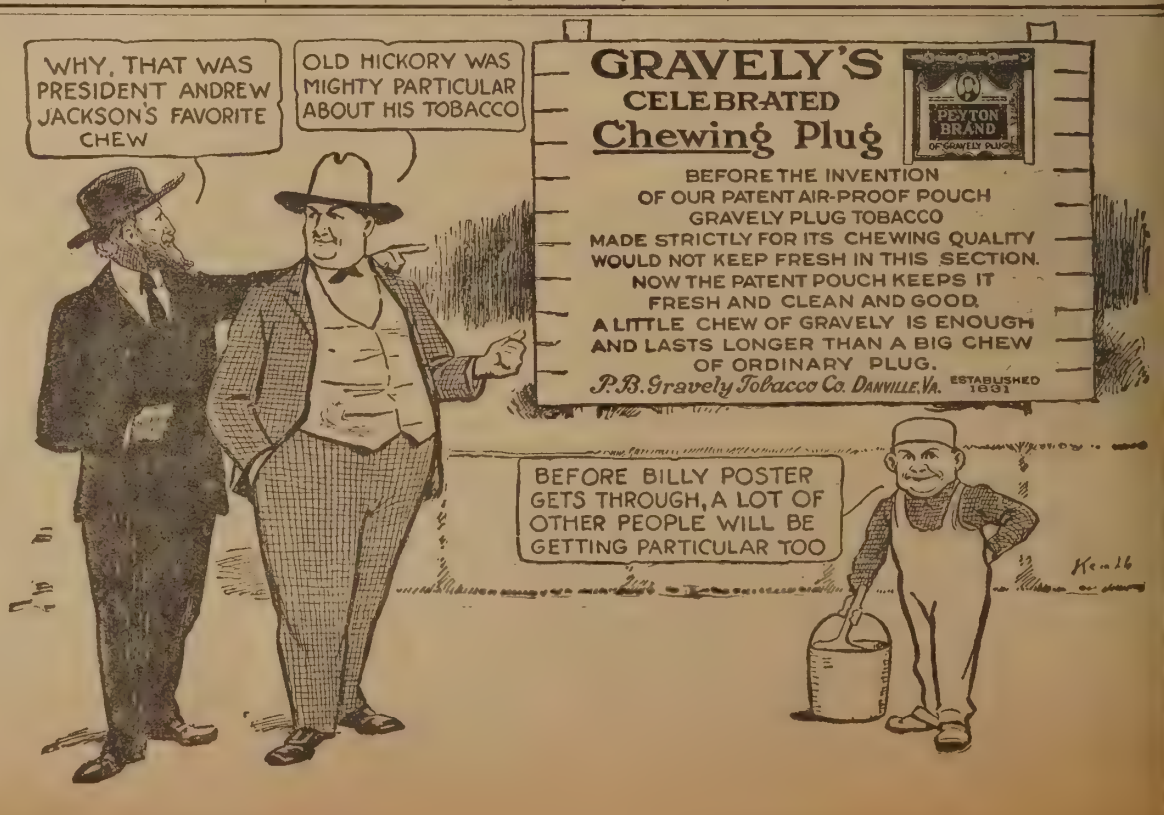
ABSORBINE STOPS LAMENESS

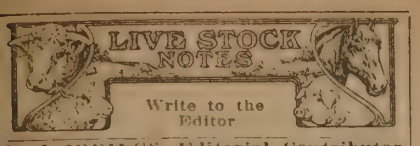
from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone, or similar trouble and gets horse going sound. It acts mildly but quickly and good results are lasting. Does not blister or remove the hair and horse can be worked. Page 17 in pamphlet with each bottle tells how. $2.00 a bottle delivered. Horse Book 9 M free.

ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful Swellings, Enlarged Glands, Wens, Bruises, Varicose Veins; heals Sores. Allays Pain. Will tell you more if you write. $1 and $2 a bottle at dealers or delivered. Liberal trial bottle for 10c stamps.
W. F. YOUNG, P.D.F., 371 Temple St., Springfield, Mass.

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.





E. J. IDDINGS, Editorial Contributor

HOGE ARE SAFE.

Reasonable Profit Assured.

H. L. Randall of Boise, Idaho, who has been breeding Big Type Poland Chinas for the last 10 years, and who has most of that time been superintendent of the hog show at the Boise fair, looks at the hog situation with optimism. With the present shortage of hogs he feels sure prices will stay high. "While there is no big profit in hogs under present conditions," says Mr. Randall, "there is a fair profit." He does not expect farmers to go into the hog business on any gigantic scale, nor does he think it wise. A small herd can often be made profitable where a large one would inevitably cause loss. In fact there can be no great rush into hog raising for a while, as the breeding hogs are not to be had. But Mr. Randall does expect many small herds to be started. He has only a few sows and a fine herd boar, purchased from Wilson Brothers of Greenleaf, Idaho.

SHEEP PROFITABLE.

Make Good on General Farm.

Colonel E. Marsters, the well-known auctioneer of Boise, Idaho, sheared an average of seven and a half pounds of wool from his Hampshire ewes this spring which was cold at 50 cents a pound. Besides this the ewes produced over 100 per cent of lambs. They are imported ewes, 9 years old, and Mr. Marsters has decided that, under present conditions, sheep raising is about as profitable a line of live stock farming as can be engaged in. The sheep are run on good bluegrass pasture. Colonel Marsters still has a small herd of Holsteins and still raises some hogs. He says hogs can be turned off at a fair profit at present prices.

Draft Horse States.

In Iowa and Illinois, the two greatest draft horse producing states, Percherons constitute 60.68 per cent and 69.32 per cent of all pure bred draft sires. In Oklahoma 85.35 per cent are Percherons; in Kansas 77.65 per cent. Iowa, first in total number and in value of horses, has a higher percentage of pure bred draft sires than any other state—a high tribute to the good sense of her farmers, and the sound principles of her stallion law. The percentage of grade stallions is also less in Iowa than in any other state, save Michigan and Utah, where the percentage is slightly less. In Iowa, too, we find one pure bred draft sire to every 295 horses, while no other state even approaches this proportion. Illinois, which ranks second to Iowa in horse production, has one to every 361, and Indiana one to every 382 horses.

Meat Inspection Service.

About 2650 persons are engaged in the government meat inspection service. Of these 800 are veterinary inspectors, 1000 lay inspectors, grade 2; 700 lay inspectors, grade 1.

PROTECT YOUR STOCK!!

From the Torture of Flies



Cows Give ⅓ More Milk — Horses Do More Work on Less Feed when Protected by SO-BOS-SO.

Applied in a few seconds at a cost of less than ½ cent per day per head.

Ask for catalog No. 186.

Agents National Cream Separators.

PORTLAND SEED CO.
PORTLAND, OREGON

The Dairy Steer

By E. L. POTTER.

There seems to be no way to get rid of the dairy steer. Not only does the steer burden us with unwelcome presence, but the owners insist that there must be some way to make him profitable. They insist that the dairy steer is good meat, and that it is robbery to pay so much less for them than for beef-bred steers.

Why should a dairy steer bring less than a beef steer? It seems a foolish question, but since many ask it in all apparent seriousness we will try to answer in the same tone. The big and all important reason for the low price of the dairy steer is the inferior quality of the meat. The texture is poor, the lean is thin, the proportion of gristle large, and the fat is of an uninviting color and flavor. As a result customers in a good butcher shop will not accept this class of meat. The average customer of course, does not know anything about the breeding of beef, but he does know that he likes some beef and does not like others. The butcher knows that he does not like the dairy-bred beef, and that the customer's trade can not be held with that class of meat. The dairy beef must therefore go to cheaper shops where price is of more importance than quality.

In addition to the dairy steer, but not always dresses out a lower percent and the proportion of valuable cuts is less. It is also true that most men who raise dairy steers are poor feeders and their cattle are not fat, but even when equally fat the differences mentioned above hold good.

Veterinary

Dr. S. B. Nelson

Doesn't Come in Heat—I have a cow that was fresh three months ago and she has not been in heat yet. A. A.
Mount Vernon, Wash.

Answer—There are several abnormalities that may cause the condition you mention, and I can not tell which it is in your case. I would advise you to consult your local veterinarian. Have him make a physical examination of the animal and then he can without doubt tell you the best thing to do.

Knee Swellings—I have a cow that has swellings on her front legs just over the knee joint and she has had that for three years. Now they are getting quite large. She is a young cow. E. B.
Tumwater, Wash.

Answer—The only thing that possibly could be done for your cow would be to operate on her by opening the swelling and destroying the secreting membrane by means of caustic drugs and healing the wound by granulations. This is sometimes successful, but at times it is fraught with danger. I believe you had better leave her alone.

Front Legs Stiff—I have a horse that got stiff in his front legs shortly after I bought him. I let him rest up and he got pretty well. As soon as I worked him again he went lame. The cords in his legs seem to be shortening and his ankles to be knuckling over. G. K.
Port Orchard, Wash.

Answer—Trim the horse's toes short, shoe him with thick-heeled thin-toed shoes. Then blister the tendons behind the bone with the following blister: Red iodine of mercury, one part; powdered cantharides, one part; lard, seven parts, bees wax, one part; mix well. Apply to each leg with rubbing one week apart. Do not blister both legs at the same time. Three or four days after applying the blister, rub a little oil or lard into the blistered part.

Hock Joint Injured—I have a cow that got lame three weeks ago. There is a scratch on the hock joint and the joint is swollen. For the last 12 days she does not put any weight on it at all. L. E. K.
Okanogan, Wash.

Answer—It is quite possible that the cow's hock has been badly bruised and that pus is forming under the skin somewhere. Examine the hock carefully and if in the swelling there is a soft pointed spot open it and if matter is present drain it and wash it morning and evening with a 2 per cent solution of lysol. If there are no soft spots and no matter present paint the hock daily with tincture of iodine. It will probably take several weeks for recovery if it is a bone trouble.

A Woman Blacksmith.

A New Hampshire girl has become a blacksmith. Her only previous experience had been in shooing hens.

Reduce the Cost of Handling Grain

Get the big profit from your crop. Save the cost of high priced sacks. Save the time and labor of sacking and tying. Handle your grain in bulk. Handle the biggest load in four to five minutes with no hard labor. Store your grain in tanks or cribs, or elevate direct into cars. All this is accomplished with a team of horses or engine and a

John Deere Tubular Steel Portable Elevator

Handles All Kinds of Small Grains

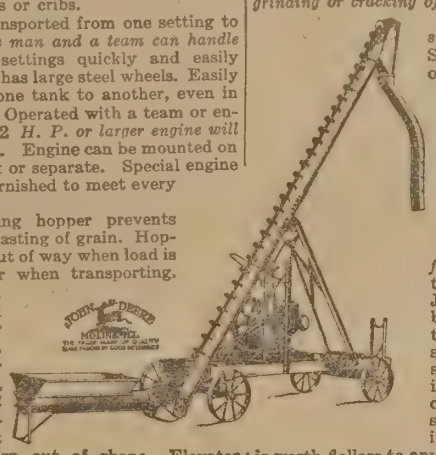
Elevates wheat, oats, rye, barley, flax, shelled corn and all small grains into tanks, granaries, cars or cribs.

Readily transported from one setting to another. *One man and a team can handle outfit.* New settings quickly and easily made. Truck has large steel wheels. Easily moved from one tank to another, even in rough fields. Operated with a team or engine power. *2 H. P. or larger engine will handle elevator.* Engine can be mounted on elevator truck or separate. Special engine drive jacks furnished to meet every requirement.

Big receiving hopper prevents spilling and wasting of grain. Hopper folds up out of way when load is driven up, or when transporting.

Wagon can be emptied from either side of hopper.

Built for years of service. Made of steel almost entirely. Cannot decay or warp out of shape. Elevator proper made of 3/16-inch steel well casing, 6-1/4 inches in diameter. Round steel flights run smoothly inside of casing. Chain is fastened in center of flight. Grain cannot get under chain or into sprockets. *No grinding or cracking of grain.*



Shafts operated in self-aligning boxes. Shafts cannot get out of line, cause heavy draft or breakage. Every part of the John Deere Tubular Elevator is designed and made to give satisfactory service.

Only steel tubular elevator on the market.

Big elevator book free. Tells all about the complete line of John Deere elevators, both portable and stationary; wood and steel. Tells how to save money in building a new corn crib or granary. Gives some valuable building plans. This book is worth dollars to any one who is planning to build a new granary.

When writing, please state the type of elevator in which you are interested.

The Bottom Is the Heart of the Plow

The right kind of plow bottom lays the foundation for the right kind of seed bed. Crop yield is increased The plow lasts longer and pulls lighter—a saving in actual cost, power, trouble.

John Deere Tractor Plows

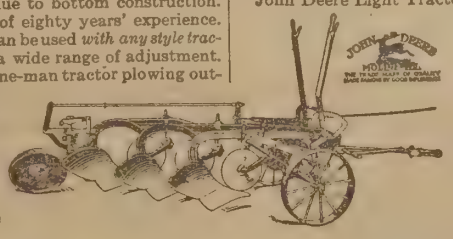
Have the Famous John Deere Plow Bottoms

The bottom on every John Deere plow is correctly designed—John Deere plow success is largely due to bottom construction. It is the result of eighty years' experience.

These plows can be used *with any style tractor.* Hitch has a wide range of adjustment.

They make one-man tractor plowing outfits. A pull of the rope by the man on the tractor lowers or raises the bottoms *high and level,* and the tractor does the work. The bottoms do not gather trash in turning or when plow is being transported.

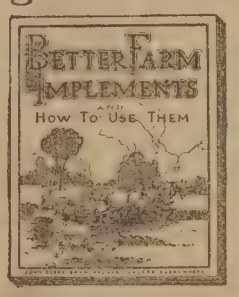
John Deere Light Tractor Plows *can be backed up*—they have a stiff hitch.



Equipped with John Deere Quick Detachable Shares—*save eight to thirty minutes changing each share.*

Write for free booklet.

Big Book Free



Better Farm Implements and How to Use Them

America must produce more food. Labor-saving implements will play an important part in increased crop production.

This book tells all about a full line of labor-saving farming implements. Tells how to adjust and operate many of them. A practical farm implement encyclopedia. Worth dollars. Illustrates and describes the following machines: Walking and Riding Plows, Tractor Plows, Disc Plows, Disc Harrows, Spring Tooth and Spike Tooth Harrows, Corn and Cotton Planters and Drills, Listers, Alfalfa and Beet Tools, Grain Drills and Seeders, Riding and Walking Cultivators, Lister Cultivators, Mowers, Side Rakes, Loaders, Sweep Rakes and Stackers, Hay Presses, Grain and Corn Binders, Corn Cutters, Stalk Cutters, Kaffir Headers, Manure Spreaders, Portable and Inside Cup Elevators, Corn Shellers, Wagons, Farm Trucks and Buggies. This big book will be sent *FREE* if you state the implements in which you are interested and ask for Package X—1670.

The Name "John Deere"

is implement insurance. It fixes the quality, and has done so for eighty years.

Don't forget that goods that have the reputation and are the biggest sellers on the market are the best in their line — always.

The increasing number of John Deere implements in use every year indicates the farmers' final verdict.

JOHN DEERE
MOLINE, ILL.
THE TRADE MARK OF QUALITY
MADE FAMOUS BY GOOD IMPLEMENTS

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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

The stubble fields will reduce the feed bill if the chickens are moved out on to them. The fowls will pick up every kernel of grain and make good use of it in either meat or eggs. Portable houses should be used, so that the chickens may be moved on to different parts of the field as they clean up the grain. A house 7x10 feet, with shed roof and open front, built on runners, is a convenient size. This is large enough for 50 or 60 pullets or cockerels. Cheap lumber will do, but there should be no cracks for the wind to whistle through in the back or ends. Leave the front or high side all open, but cover it with wire netting if there is any danger from coyotes or other vermin. It may be necessary to shut them in at night. An opening or door 4 or 5 feet from the ground, left open all the time, allowing them to come and go at will would protect them from most wild animals, and save trouble of shutting them in at night and letting them out in the morning.

With good range the chickens will need no feeding. There will be grain enough in the stubble. There should also be some green stuff. Usually there is sufficient grass or some weeds that they will eat. Another condition of a good range is the presence of bugs or insects. If grasshoppers are abundant the chickens will thrive on them. They need the animal food to grow well. The hen is a meat eater, and she relishes the grasshopper about as well as we relish a sirloin. Besides, the grasshopper leads her an active life and that is worth a good deal to the hen. If there is good running water available, and some grit or gravel, then the farmer has a chicken paradise, if there is such a thing.

At the Oregon station 500 cockerels were kept on 30 acres of wheat stubble for two months without other feed, except a little meat scrap, as the grasshoppers and bugs were scarce in that section.

This is a splendid opportunity to turn waste to account. J. D.

More Eggs in Storage.

During the first two weeks in June, 571,524 cases more were pleced in storage as reported by 311 storages this year than were reported by 219 firms last year. The total holdings on June 15 were reported by 338 storages at 5,752,225 cases, 477,609 cases more than the holdings reported by 252 storages August 1, 1916, the date of the maximum holdings of last season. On June 15, 5,151,421 cases of eggs were reported by 264 storages last year and 52,239,985 cases by the same firms this year, an increase of 1.7 per cent.

Cut Out "Best of Care."

"Will you please answer me in regard to raising turkeys. We have fine hatches. They thrive and do well until about two months old when they just droop and die without any apparent cause. They have the best of care, as far as I know how to give them." O. H. Reithner, Coeur d'Alene, Idaho.

The subscriber does not give enough information. I can only guess what the trouble is, and my guess is "best of care" killed them. Turkeys come near being wild birds, and they are apt to pine under civilization. Cut out "best of care"; turn the turkeys loose to roam at will in the fields and woods and there will seldom be a case of "droop and die." In sections where there are plenty of weed seeds, bugs and grasshoppers, no other feeding will be necessary, unless it is a little at night to keep them from going back to the wild life altogether. But be very sparing of the feed during the growing period. That is what kills them nine times out of 10. The turkey lives by the sweat of its brow, if it has any such mental adornment.

Some of the best turkey raisers in western Oregon make the turkeys rustle for their living practically all summer. They feed them a little the first few days after hatching, then give them their liberty on several hundred acres of range, fields, hills and woods. Some of them practice feeding a little grain in th eevening just to coax them home to roost. Then in the fall a month before killing time they are fed for fattening. Where there are stubble fields, they will fatten themselves. J. D.

British Poultrymen Up Against It

By JAMES DRYDEN.

A perusal of the poultry papers from London, England, indicates that the poultry keepers, those more or less extensively engaged in the industry, are facing a rather serious situation. Poultrymen are drafted into the war; they are called upon to donate a certain number of eggs for the hospitals; they are prohibited by law from feeding wheat to poultry; it is against the law to feed stale bread, because stale bread may be used for human food in some forms, such as puddings; "stale bread soaked in milk" is no longer a chick formula; corn also is prohibited, or that portion of it that can be used for human food. In fact, I gather that all the cereals are prohibited except those of low grade, such as screenings, damaged grain, etc. Surely the British poultrymen are up against it. But patriotism and the law demand it.

The command has gone out to the poultryman from the authorities that there must be a culling out of the stock of poultry. The food fattening of poultry is to stop. But good layers are to be kept and the nonproducers culled out. No food must be fed to hens that do not make profitable use of it. The poultryman now realizes that fact well enough without command from the government because of the high price of feeds. Not long ago the government was encouraging poultrymen to increase their flocks; but now it says that the flocks must be decreased and only such fowl kept as are economical producers of food.

Let us hope it may never be necessary for the United States government to take similar action. It would not be surprising if the order goes forth before long that no wheat be fed to poultry, except that of poor quality. The poultryman, as a patriotic duty, must study the feed question. He must study it also for his own profit. I have already given rations from which wheat is eliminated. If the food shortage continues we may have to eliminate more.

The good poultryman will not wait for government command to cull out his flock; he should begin now. If he can use trapnests for a month now he should kill off or market those that do not lay for a month in July or August. Also kill off all that are more thad two years old except those that are of special value for breeding. All cockerels weighing more than a pound and a half should be marketed now.

The war will force many new adjustments in the world, and the poultry business will not be exempt.

Fur-Bearing Animals.

The fur trade in this country has grown to such proportions as regards its business value that naturally the concern of those engaged in it is directed to its permanency. Curiously enough, the prevalent opinion that fur-bearing animals are fast decreasing in numbers is not correct as regards those animals which furnish the bulk of the fur business.

There are a number of fur-bearing animals which can not exist in civilized and thickly settled countries, and which consequently are fast dying out. But muskrats, coons, skunks and some others seem to thrive and multiply in spite of civilization, for such old and thickly settled states as New York, Pennsylvania and Ohio still contribute largely to the fur trade, especially in muskrat skins. Should the time come when these animals can not be had plentifully in their wild state, it is not unlikely that they will be bred especially for their furs.

Grain and Hogs in Denmark.

The grain crops of Denmark average 600,000 tons of wheat and rye and 540,000 tons of barley. In 1916 there was a shortage of wheat and rye, and only 440,000 tons of these grains were raised. As much of the rye is suitable only for feed, it is estimated that 150,000 tons of wheat and rye will have to be imported before the next harvest. Hogs slaughtered during 1916 show a decrease of 11 per cent, from 2,426,000 in 1915 to 2,150,000 for the last year.

Canneries Short of Workers.

Anacortes salmon canneries are likely to have a hard time to get enough workers this summer if the run of fish comes up to expectation, says The American. Canned salmon is one of the world's most valuable foodstuffs and thus one can do his or her patriotic duty by working in the salmon canneries this summer.

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We will send you free a booklet on how to protect your hogs from lice and parasites and disease.

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Dept. Animal Industry. DETROIT, MICH.

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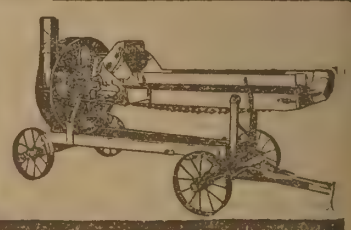
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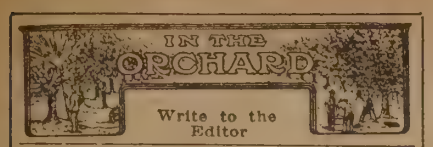
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GRANVILLE LOWTHER
Editorial Contributor

"Who Showed the Little Ant?"

There was once a popular poem beginning with the words:

"Who showed the little ant the way
Her little hole to bore,
And spend her pleasant summer day
In laying up her store?"

Now we are looking for some one to show us how to get rid of them. They are an awful orchard pest; at least we think they are. However, the article on ants, in the last edition of the Encyclopedia Britanica says "ants devour scale insects." If that be true, the orchardist in fighting the ants may be fighting his best friend. It may be that they are both friend and foe. Like cats that kill the ghophers and mice that injure the trees, but also kill birds that eat insects damaging to fruits. Be that as it may, I have been trying to get rid of the ants.

I did not believe that arsenate of lead, regular strength for a codling moth spray, would kill ants. If it would, then why are they so numerous in orchards where codling moth are under control by arsenate spray? What I did believe was that the ant was immune from poison in greater degree than most insects, but not wholly immune. Scientists are of the opinion that certain animals and insects are able to protect themselves from poison because they contain in their organisms "anti-bodies" that react on poison and other bodies, neutralizing its effects, therefore are said to be immune. But I believe enough arsenate to overcome the anti-bodies would kill the ants.

On June 22, 1917, I prepared equal parts of bread, sugar, water and powdered arsenate of lead, mixed them in two separte buckets, tipped them over on their sides near two separte ant hills, to await results. In about two hours a considerable number were in the buckets. I tipped them back quickly, tied cloths over the tops to prevent the escape of the ants, yet so they could get air. I held them as prisoners for 18 hours, and at the end of that time, there was not a dead ant in either bucket, and they were still feasting on the arsenate of lead, sugar and bread.

Test With Black Leaf.

The next day I made a test with black leaf. We had been spraying with black leaf at a ratio of one to 800, to kill codling moth, aphis, red spider, scale, etc. I concluded to try it on ants, not by spraying, but by dipping branches heavily infested with ants into it, to be sure that they got it.

The first test was one to four hundred, or twice as strong as we had been using for other insects. It seemed to affect them unfavorably, but did not kill. I tried one to 200, and a few of the weaker ones died from the effects. I then tried one to 100, and as nearly as I could guess about one-half of the smaller, (perhaps younger) died. I did not try a stronger solution, because it seemed to me too expensive for a practical application in general use.

Cyanide of potassium mixed with water and sugar will kill them, but that is so deadly a poison for human beings, that I do not like to have it about the premises. It is a little like dynamite in this, that it is safe in the hands of one who knows just how to handle it and who always does the best he knows; but it is not safe to be left lying around where children or careless persons may get it. G. L.

Salvation of Orchard Industry

Demands Cooperative Marketing Among Fruit Growers

The United States Chamber of Commerec has just completed a survey of the fruit crop of the United States. It reaches a clear conclusion that cooperation among growers is the hope and salvation of the orchard industry, especially in the west.

"It is very difficult, in fact, almost impossible," the report declares, "to obtain complete and reliable statistics as to the total production and value of the fruit crop as a whole. If all manner of fruits, such as watermelons, cantaloupes and the like, are included in the reckoning, it is possible that the annual output will show a total value of about $500,000,000."

The real problem today, the committee says, is that of marketing. Most kinds of fruit are very perishable and will not keep any length of time without serious deterioration both in quality and value. Added to this fruit growing sections, especially in the far west and the extreme south, are often a long way from the markets. Also there is constant competition, which is further complicated by the fact that the large markets are very few compared with the producing districts which supply them.

Cooperation has largely proved the saving grace of the fruit situation, as the innumerable cooperative growers' associations, particularly in the far west, only too plainly demonstrate. The nature and purpose of these associations, the report goes on, are far reaching and comprehensive. They cover all the details of cultivating, gathering, grading and packing of fruit; of prices, transportation, marketing, collecting the proceeds of sales, developing new markets; in fact, every phase of the growing, shipping and selling of fruit.

"Without the growers' and kindred associations," the report concludes, "the growing of fruit on a large scale, especially in the more thinly settled parts of the country, would be impossible, since as a rule the individual could not possibly handle so complex a situation. Thus the older and more populous sections would be deprived of that diet of fruit now so abundant, usually so reasonable in price and always so healthful."

"The condition of apples, the most important of all fruits, is generally good everywhere throughout the country," says Archer Wall Douglas of St. Louis, chairman of the committee. "The usual and inevitable local exceptions to this statement are not of sufficient importance to affect its substantial accuracy."

The story of small fruit, strawberries and other berries, cherries and the like, according to the committee, is much mixed but on the whole is for a large yield, especially of cherries, if the weather is not too wet from now on. Strawberries seem to have suffered much in some districts, especially in southwest Missouri and nothwest Arkansas, from both drouth and cold, but on the whole, it is said, a generous yield of high quality fruit may be expected.

Pears, the report states, were damaged much by cold and blight, but the total production promises to be fully up to the average. The forecast for a heavy yield of plums and prunes, items of growing commercial importance, is very bright. The condition of citrus fruits—oranges, lemons and grape fruit—is not good in southern California but somewhat better in southern Arizona, southern Texas and Louisiana. The trees were severely damaged by extreme cold weather throughout the Florida peninsula, and the yield there will consequently be greatly reduced.

Peaches, the survey details, suffered severely from winter killing in almost every section. Their condition is extremely spotted in one part of a state and fairly good in another. Their promise is best in sections so far apart as the Pacific Coast and the Middle and South Atlantic states and the poorest in the central west and central south. In some states, notably Oklahoma and Arkansas, the crop suffered not only from very cold weather in the winter and untimely frosts in the late spring, but likewise from severe hail storms. The total yield, while not up to normal, will on the whole, it is thought, be larger than seemed possible 30 days ago.

English Food Economy.

In all parts of England, food economy is being vigorously promulgated. In many country districts the people have not yet awakened to the necessity of eating less and to abstain from every form of waste, and the authorities are striving through local committees to teach economy in food by means of meetings and demonstrations of cooking, says the London correspondent of the Northwestern Miller. Efforts are being made even to instill into some of the youthful members of the community the spirit of economy by teaching them the following doggerel:

"Save the crumb
And you save the loaf.
Save the loaf
And you save the corn.
Save the corn
And you save the ships.
Save the ships
And you save the men.
Save the men
On land and sea, and thus you
Save your country."

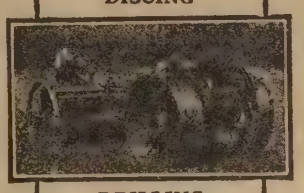
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Social Relations of Honey Makers

You Can Find Much of Humans in Bees, or Much of Bees in Humans

By GRANVILLE LOWTHER

> Bee characteristics are very like the race characteristics of men. There are light and dark colored bees. There are big bees like Russians, and little bees like Japs. There are hot-tempered bees like Spaniards, and mild-tempered like the philospohers of India.

Bees are interesting to the farmer, because they fertilize his crops and increase the yield; to the orchardist, because there are many kinds of fruits that can only be grown by the aid of bees and other insects that carry the pollen from flower to flower. They are interesting to the professional apiarist because they manufacture the honey out of which he makes his living. But they are interesting to the sociologist as well, because they observe certain laws of life and of social relations that in some form are to be worked out and applied in a well ordered state of human society.

There are catalogued about 5000 species, of which 1500 are honey bees. They have race characteristics, growing out of the conditions of climate and circumstances under which they live. They inhabit the whole world, except in the very coldest climate, and become adapted to their environments or die.

Their Enemies.

Among the enemies of the bee are the bee louse, bee moth, bee flies, bee birds and certain animals that feed upon the honey.

Bees often become enemies of one another, and war is the result. There are guest bees, that lay their eggs in the nests of burrowing bees where they are permitted to grow their young, and the two species often live together in harmony and become amalgamated.

Robber bees are those that invade the hives of other bees, and a fight occurs. If the robbers are whipped they go back home, recuperate and attack another hive. If they are not whipped, then either the conquered bees move out, leaving the hive to the invaders, or they live together and unite their forces to whip another colony.

Division of Labor.

There are three general classes, with subdivisions, all of which perform some useful work, according to their ability. The first is the males, whose only work is to fertilize the hive. They can not gather honey, they can not defend the hive, for they have no stings, and they are fed by the workers until their work is done. Then they go out voluntarily from the hive into the world to die in order that their food may be conserved for the good of the colony, or they are cast out by the workers or killed outright and carried out. This is what we are calling now in American society "the conservation of the food resources." In a similar way the ancient Greeks at one period of their history conserved the food supply by disposing of the aged, the infirm who were considered incurables and the malformed. This method has been practiced by several primitive nations in cases of special exigencies when the people were facing famine, and the survival of the colony depended upon furnishing food to the workers and defenders. However, with bees it is a habit of such long standing that it has come to be an instinct of their nature.

The queen bee might more properly be called the mother bee, for she performs none of the offices generally performed by the queens of human society. She is not a ruler in the regal sense, but she has been developed by feeding from the larval state from among the females until she is much larger than other females that are less developed. This mother bee is capable of producing 3000 eggs in one day, and as there are from 10,000 to 100,000 bees in a hive it is clear that she can soon deposit eggs enough to become the mother of a new colony. In one particular she is wiser than the best human scientists, for she knows when she deposits her eggs whether they are male or female, deposits them in separate apartments, and does not have to wait until a later period of development or until hatching time to determine.

The worker bees clean out the hives, build cells for the larva out of which is to be developed the young bees, go on excursions for food, attend the young, guard the colony against enemies and fight.

Bees in their social organizations are collectivists of the communistic type. They are collectivists in this, that they know they can not live alone, that they must live in colonies or die, and they know, further, that if they live in a collective state of society they must own the food supply collectively. Therefore, there are no rich and poor bees in a colony; there is no pauper problem, no overfeeding of one class or underfeeding of another. In their labor "Every one renders according to his ability, to every one according to his needs." Or, as it is said of the communistic societies of early Christians, "He that had much had nothing over, and he that had little had no lack."

They seem to be instinctively altruistic, for even in their swarming habits the strong ones leave the hive, go out into the world to found a new colony and leave the old home with its cells and food supply to the younger and the weaker.

The fighters are also the workers. They have stings and defend the colony; but on their stings are little barbs which, when the sting is inserted into an object, prevents it from being extracted in much the same way as the barbs on a fish hook holds the fish. However, the sting is pulled loose from the bee and inflicts a wound upon it that is certain death. Therefore, whenever a bee goes out to fight it knows is it going to die. Yet it does this for the good of the colony.

Some Lessons for Americans.

Now, I do not claim that we are to follow all the habits of these lower forms of life in our social relations, for it is supposed, at least, that we have evolved far beyond the state of intelligence and morality of any other form of life on this planet. Yet we might ask ourselves some questions and study them with profit.

First—Suppose we call the nations of the world colonies and the different races of men varieties or species. In the United States our ancestors founded a colony, or government, the chief cornerstone of which was that "All men are created free and equal by nature and are endowed by their Creator with certain inalienable rights, among which are life, liberty and the pursuit of happiness."

The peoples of other countries have heard of these principles and have liked them. Therefore, they have come from all lands to be our guests. Using the analogy of the bee, they are "guest bees." What should be our attitude toward those guests? My answer is, if they come to make their homes among us, if they are willing to bear their share of the burdens of producing the food for the young, maintaining the colony and defending the society against its enemies the same as we who were born here and have no other national or political relations, then they are of us, are part of our colony—our brothers by adoption if not by birth. If, however, they become our enemies, and because the colony from which they originally came is at war with us, they dynamite our factories, murder our citizens, refuse to contribute to the defense of the colony and hinder the production of food and supplies for the success of the fighters and workers, they are "alien enemies," and such guests must be cast out, interned or otherwise cared for as a matter of self-protection.

Second—Suppose a colony or a group of colonies should conceive the idea that it is easier to whip weaker colonies and take away their substance than it is to go from flower to flower to gather it, what should be our attitude toward the "robber bees"?

In 1864 Germany whipped Denmark and took away three states. This was more in harmony with her tastes than acquiring territory in some other way. In 1866 she whipped Austria and Hungary, took five states and levied an indemnity. In 1870 she whipped France, took two states and levied $1,000,000,000 indemnity. By this time the conquered states of Denmark, Austria-Hungary joined with the "robber bees," the conquerors, in order to whip Belgium, France, Serbia and other states to further enrich themselves. There grew up an alliance of colonies to determine whether the industrial system or the robber system should be the law of nations. We are in this struggle, the greatest in the history of nations.

Third—Suppose certain members of our colony refuse to work and persist in hindering others who desire to work, what should we do?

Fourth—Suppose some who will not work and who hinder others from work destroy the property created by the labor of others, what should we do?

Fifth—Suppose certain others who never work persist in getting control of the food supply gathered from various sources by the workers. Suppose they buy this food at a comparatively low price, because they take advantage of the necessities of the workers to obtain it, and then charge two or three prices for it, thereby making it practically impossible for the wage workers to feed their families, what should be done with them?

The laws of self-preservation, from which have evolved the instincts of self-preservation, say, "Sting them." Sting them to work or to death, it matters little which. Society must protect itself against its enemies at home and abroad.

I would require every able-bodied person, male or female, to have some kind of useful occupation and perform something useful to the general good or die. In order to carry that into effect I would furnish employment to all who have no employment, and if they will not work, put them first on short rations, then shorter until every one will work or starve. "If any man will not labor, neither let him eat."

When Grains Are Well Dented.

Recent investigations have shown that silage varies widely in feeding value. The Iowa experiment station after careful study advises: "The corn should be ensiled when the grains are well dented, which is generally when the lower leaves and husks are beginning to dry up, and the corn is nearly ready to cut for shocking." The trouble is, however, that very often a farmer must fill his silo when the cutter crew is in his neighborhood or wait until his fodder has become dry and harsh.

Donkey Clearing Outfit.

J. A. Edmiston, from the Upper Skokomish, was in Shelton the other day looking up information on the gasoline donkey clearing outfit, which he plans to buy and open up more of his farm. He already has about 50 acres under cultivation, and after getting the rest of his 80 cleared he expects to find plenty of similar work to do for his neighbors to help pay for the machine.

"Concealed Weapons."

"I want a license."
"Hunting?"
"No! I've just finished hunting."



Grain Smuts

The U. S. Dept. of Agriculture recommends the use of Formaldehyde for cleansing seed grain before planting. It guards against the development of stinking smut and loose smut in wheat—

FORMALDEHYDE
The Farmer's Friend

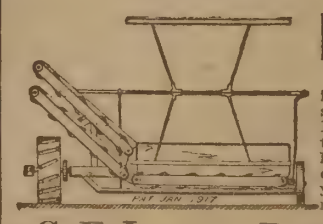
The loss through smut in this country amounts to millions annually. This can be prevented by treating all seeds before planting with Formaldehyde solution. Pint bottles at your dealers, 35 cents, treats 40 bushels. Complete directions for using Formaldehyde, U. S. Dept. of Agriculture reports and hundreds of valuable suggestions in our big illustrated booklet sent free.

PERTH AMBOY CHEMICAL WORKS
100 William Street New York

Boyd's TRADE MARK
Sash, Doors, Millwork, Roofing, Hardware, Paints.
Let the Builders' Bargain House save you money on all building materials. Send your building list for Boyd's low estimate or write for our free catalog of a thousand building bargains.
The Frederick Boyd Co. Inc.
2218 Westlake Avenue, Seattle

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WOOL · PELTS
FURS · TALLOW
SHIP TO US
NO CARTAGE - NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS - HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC.
SEATTLE
BE SURE AND MENTION THIS PAPER

BALE YOUR HAY
With the Lightning Line
MAKE BIG PROFITS
Simplicity, strength, durability, make the Lightning Press the most economical to buy; big capacity, quick work, no trouble, lasts for years, best farm money-maker.
We make a complete line of both heavy and light presses, horse, engine and tractor power. We will make good terms to right customers.
Send name today for complete catalog, showing all styles and prices.
30 YEARS THE LEADER
KANSAS CITY HAY PRESS CO., - KANSAS CITY, MISSOURI



Lucore's Binder Canvas Protector

Stops heavy or tangled grain or forage crops catching on front corner of your canvas slats, which causes stopping, wearing and tearing of your binder canvas. Easily applied, costs little, and will more than double the life of your canvas. Ask your dealer if he does not keep them; count the slats on your canvas, add 5c each, and send to me direct, and I will mail them to you, postage prepaid. Each bona fide protector bears my stamp.

G. F. Lucore, Patentee and Mfgr., Arriba, Colo.
These pads are protected in U. S., Canada, England and Australia.

The Story of the War
Vividly Told

Subscribers to The Twice-a-Week Spokesman-Review are kept closely informed regarding the great world struggle into which our country has been drawn. It prints the facts regarding the gigantic war preparations, the tremendous battles, and the political maneuverings and intrigue which are taking place far back of the battle lines. No one will be considered well educated by his neighbors if he or she is unable to talk intelligently about these and other events which are taking place in these stirring times.

Accurate Information

The Twice-a-Week Spokesman-Review will keep you accurately posted regarding local, state, national and world affairs. It is complete, reliable, and condensed for busy readers. Being a member of the Associated Press, the important happenings are flashed to it instantly from every capital and village, and from ever far-flung battle line.

Special Offer Is Repeated

Hundreds of our friends have already taken advantage of the offer below; but we are repeating it as we believe many hundreds more will wish to secure their state farm paper in combination with The Twice-a-Week Spokesman-Review.

Twice-a-Week Spokesman-Review for 1 year regular $1.00
The Washington Farmer for 3 years if subscribed for a year at a time $3.00

Total value $4.00

Our Special Price for Both, $2.00

Big things are happening this week. Big things will happen next. To get the facts about these events, send in your order at once. Paid ahead subscriptions will be advanced from the dates to which they are paid.

Address orders to

The Washington Farmer
Review Bldg., Spokane, Wash.

The Washington Farmer, Spokane, Wash.

Enclosed find $2 in payment for three-year subscription to The Washington Farmer, and one-year subscription to the Twice-a-Week Spokesman-Review.

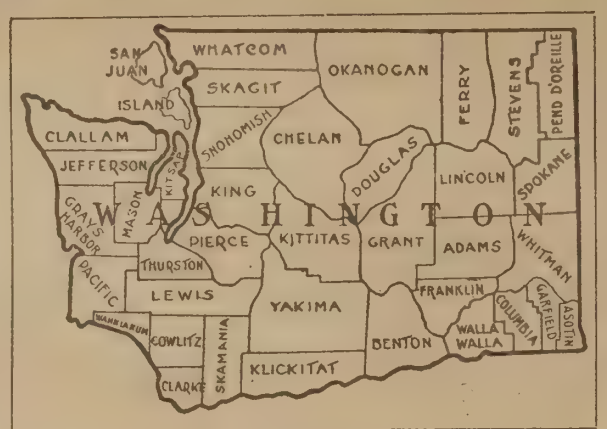
Name .....

Town .....

State .....

Exchanging Work Is Great Help

Labor Shortage Equalized by Community Cooperation and Crops are Sown Without Any Unusual Loss of Time



CASTLE ROCK, Cowlitz County, Wash., July 2.—The season has been exceptionally good for the last three weeks for the farmers to put in their crops. There has been little rain and plenty of sunshine, drying off the lower ground and making it ready for cultivation. Early sown grain has a splendid stand and looks exceptionally well. Early potatoes are not, as a rule, as good as in former years. Still a large crop is predicted, owing to the extra acreage. Prospects are so flattering for an increase in the production of milk that new stations are bidding for the patronage of the milk men. Cheese factories in the southern end of the county are flourishing and prospects are good for one or more in the northern part.

Labor at the present time seems to be equal to the demand and the most of our farmers are well equipped with farm machinery for handling the crop and to equalize the help situation they are changing work with each other and putting in the crop without much delay. Haying has started in good earnest and the crop promises to be above the average, especially so where the ground has been plowed and reseeded during the last two years. One of the difficult things that we have to contend with in the county is properly preparing the ground for seeding. Unless the land is well drained it plows up chunky and lumpy. The disk will not cut the lumps, as they roll around between the blades and are left. Then the crusher is put on and this drives them into the ground but does not pulverize them enough for perfect cultivation.

The crop of calves in the county is good and shows a decided increase over last year. There is no disease among them. Sleek and healthy hogs are the kind we have here, and the stock men are combing the country for good breeders. Ten dollars is the price for pigs soon after birth. There should not be any scarcity of hogs, but some will be getting skeptical if the prevailing prices still keep up. However, it will have a tendency to increase very materially the hog production, and this is the quickest way to the increasing of the meat supply. Government reports are that the whey from the cheese factories makes good hog feed, but the farmers in this locality seem to have the impression that it is no better than water.

C. C. BROWN.

Binder Twine Is Up.

FERDINAND, Idaho County, Idaho, July 7.—The agitation for the increased crop production had but little or no effect on small grain. On account of the late spring it was impossible to get it all in. Some have only half of the land planted to small grain that they intended to plant.

The acreage of potatoes and peas have been increased very much. The fall sown grain looks very promising, but needs rain to fill out well. The spring crops are far behind the average, and if it doesn't rain soon, will be a failure, for some of the last sown isn't up. Laborers are scarce. Machinery and work stock are nearly normal. It is uncertain what methods will be pursued in harvesting.

Since the binder twine went up to 18 cents per pound many are talking header again. H. W. UHLENKOTT.

To Sell Dairy Herd.

SOUTH BEND, Pacific County, Wash., June 28.—By far the greatest increase in crops is seen in garden produce. The weather has been very favorable this month, plenty of rain that made the setting out of plants easy. Some gardeners have been trying a few drops of creo dip in a gallon of water to keep the bugs from the cabbage plants. They simply moisten the ground with a little of the solution when setting out the plants. The gardens are late, but doing nicely. C. O. Rhodes is shipping strawberries in large quantities all over the country. The berries are extra large and fine flavored. The cranberry crop is a promising one. In June there was no hay weather, so the hay will be made later. Mr. DeHinmen of Menlo, who has a dairy ranch at that place, will sell off his fine herd of Holsteins soon and go to California, where he has purchased a farm. He has one of the best herds in the county. There is a good opening in South Bend for a milk route, for this summer all the milk routes stopped. The dairymen are selling their milk to the condensery at Chehalis, which pays them better than the retail trade.

MRS. WINNIFRED BUCKINGHAM.

Stock Cattle Decreased.

OMAK, Okanogan County, Wash., June 22.—Dairy cattle have increased to some extent during the last year, while stock cattle have decreased. Horses have greatly decreased on account of the war. I believe the meat supply could be increased quickest by raising hogs, as they multiply and can be raised to maturity much quicker than the stock.

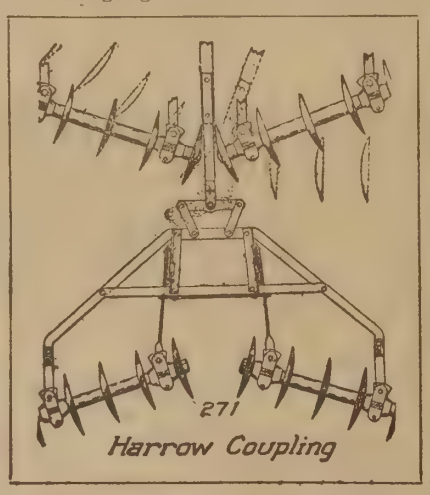
E. O. WOODS.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Tandem Disk-Harrow Coupling.

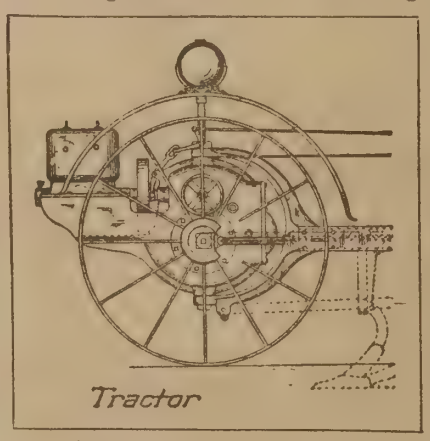
It is claimed that this coupling makes the rear gangs of disks assume such an angle on turning that the ground is not thrown up in ridges and the side draft is decreased.



Harrow Coupling

Tractor.

We show here the front traction wheels of a small three-wheeled tractor. The gears run in oil in a housing which serves as a strong framework and as a rigid support for the engine. The tractor pulls two plows.


Tractor

Do You Know That

You wouldn't do lots of the foolish things you do if you looked ahead just a day or an hour to see what the results would be?

43½ Bu. Wheat Per Acre

Mr. W. Loat writes: "I had 203 acres of **wheat** that averaged 43.5 bushels an acre, 17 acres of **oats** that averaged 65 bushels, 25 acres of **barley** that averaged 50.5 bushels an acre."

This is **only one of thousands** of good reports coming from Western Canada. Yet nowhere can you buy good farm land at such low cost as along the Canadian Northern Ry.

BEST FARM LANDS at $15 to $20 per acre

Here you can buy specially selected, centrally located lands **close to the railway,** that will produce crops that can only be equaled on farms costing $150 to $200 the acre in a more densely settled community. This includes the **best grain land,** land also adapted to **dairy** and **mixed farming.** Here the man with limited cash can become the owner of one of these fertile farms through the liberal installment payment plan.

Low Fares Low round-trip home-seekers' fares to Western Canada are in effect every Tuesday, to November 27th inclusive.

Free Homesteads

If you have not the capital to buy land you can still get one of the **recently surveyed 160 acre fertile Homesteads** along the Canadian Northern Railway, the newest transcontinental railroad, "The Road to Opportunity."

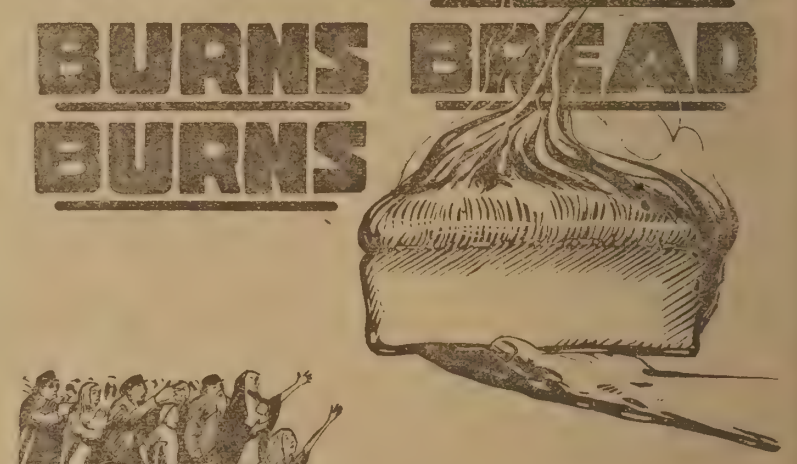
FreeBook Besure to write today for a free copy of the "Home-Seekers' and Settlers' Guide," full of complete and authentic information. **A fortune is waiting for you.**

CANADIAN NORTHERN RY.

CANADIAN NORTHERN

A. L. BROSTEDT, D. F. & P. A. 605 Hastings St. Vancouver, B. C.
A. L. DAVIS, G. A. Cor. 4th and Jackson St. St. Paul, Minn.

WHEN GRAIN BURNS BREAD BURNS





SAVE THE WHEAT

Act NOW to protect your grain from FIRE.

The world is looking to America for BREAD, one-twelfth of the nation's wheat supply coming from the Inland Empire.

It is a duty every patriotic citizen owes the country, to do everything possible to protect the food supply—to avert a loss insurance can not replace.

Insurance Will Not Make Bread!

The fate of your wheat is in your hands. The state council of defense is mustering its forces; the insurance department of the state is asserting its police power to eliminate excessive fire hazards; the Northwestern Mutual is throwing itself into the fight heart and soul.

But these agencies are powerless unless you, the custodian of your own crop, use every safeguard in your power. Organize! Prepare to defeat this common enemy—fire.

For years the Northwestern Mutual has devoted its fullest energies toward fire prevention, and now all its field forces are doing their utmost working with the grain growers to reduce this season's losses to a minimum.

Let us all cooperate in this vital cause. Please write us for valuable information that may save you big loss.

Remember—Insurance does not restore grain that is burned. And the world is crying for BREAD.

Northwestern Mutual Fire Association

General Offices—208 Columbia Street, Seattle.

F. J. MARTIN, President.

Inland Empire Office, Old National Bank Bldg., Spokane.

Five Books Free

DO YOU want to save money on your stump blasting? Do you want to get the stumps out cleaner—split them up better—and cut down the quantity of powder required? Our Stump book, "Better Stump Removing," tells and shows how to do it.

OR do you want your fruit trees to grow faster, yield sooner and bear bigger crops. Our Tree book, "Better Orchard Tillage," shows how you can secure these results by blasting when planting.

IF you want to save fertilizer and grow bigger crops, send for our Crop book, "Better Farm Tillage." It tells how blasting will make the subsoil mellow several feet deep and release new plant food for your crops.

ARE there rocks on your farm? Our folder, "Better Boulder Breaking," shows how a few minutes' work will get them out of your way forever.

DOES your farm need draining? Our Ditch book shows how to blast clean, smooth ditches of any size—the easiest, quickest way of making them.

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

Here are some of the reasons why you should insist upon Giant Farm Powders for all farm blasting.

1. They are made especially to suit Western farm conditions, by a Western company with 50 years' experience.
2. They are the *genuine* Giant Powders—the product of the manufacturers who originated the name. The fact that other explosives are often called "giant powders" indicates the high quality of the genuine.
3. They go further than ordinary dynamites. They exert their strength over a wide area, cracking, splitting and heaving out stumps, roots and all, rather than shattering and throwing them high in the air.
4. They will not freeze at ordinary temperatures, standing 32° for days without requiring thawing.
5. They are being used by thousands of farmers, scores of whom state that the Giant brands "give better results"—"save money"—"have wider breaking power"—"shoot the roots"—and "are always uniform in strength and action."

There are two of the Giant Farm Powders: Giant Stumping Powder, for wet work, and Eureka Stumping Powder, for dry work. Eureka costs less and many careful blasters use it for wet work, too.

Ask Your Dealer

Your local dealer probably has Eureka and Giant Stumping Powders and other Giant blasting supplies. If he does not have them, write us. We will see that you are supplied promptly through the local dealer with whom you prefer to trade, through a dealer in a nearby town who has a magazine, or direct from our nearest distributing point.

The Giant Powder Co. Hom Office **San Francisco**
CONSOLIDATED *"Everything for Blasting"* ESTABLISHED 1866
Branch Offices: Seattle, Spokane, Portland, Salt Lake City, Denver



Mail the coupon below or a post card and get one or all of the Giant books. You will find them valuable. They contain illustrations of the most economical ways of doing farm work with Giant Farm Powders.

Make This Test

Get a 25 or 50 pound case of either of the Giant Farm Powders. Get at the same time a case of any other dynamite or stumping powder.

Blast with each. Keep track of the quantities used. Figure the cost. You will find—as farmers everywhere have found—that the Giant Farm Powders save farmers time, work and money.

To make it easy for you to secure Giant Farm Powders we print a trial order form in the coupon at the right. Fill it out and we will have our nearest distributor supply you with a trial case at the lowest market price.

FREE BOOK COUPON

The Giant Powder Co., Con.,
San Francisco.

Send me your illustrated books on the subjects which I have marked X.

☐ Stump Blasting ☐ Tree Planting
☐ Boulder Blasting ☐ Ditch Blasting
☐ Subsoil Blasting 203

Trial Order Blank
(Kindly fill out if ready to purchase)
Have your nearest distributor supply me with

_____lbs. Giant Stumping Powder
_____lbs. Eureka Stumping Powder

NAME _____

ADDRESS _____

Write below your dealer's name.

Our "Want" Ads Are Doubly Profitable

It Pays to Read Them as Well as to Use Them

READ WHAT SOME SAY WHO HAVE USED OUR "WANT" ADS

RESULTS FROM POULTRY AD.

"As to my ad in The Farm Trio, I had splendid results; in fact, more than I could supply."—A. O. Laabs, Coeur d'Alene, Idaho.

17 POLAND CHINAS SOLD IN WEEK.

"It pays to advertise. Sold 17 last week, all registered stock, for breeding purposes. Nothing cheap about my stuff except the price."—F. P. Farrington.

AD SELLS $1000 WORTH OF LIVE STOCK.

"We feel more than pleased with the results secured so far through our advertising in your papers. We have sold to buyers in these states to the amount of $1000 in the last four months, every one having mentioned one or another of your papers."—Pomeroy & Son, Scappoose, Ore.

SELLS HIS SEED CORN.

"I have a great deal of confidence in the Trio as an advertising medium, as I have just had some success in selling some seed corn through the three papers. Enclosed you will find my check for $7.42, covering the ad for January. Please run this ad as per my letter of January 25, through February."—L. F. Pourtales, Oroville, Wash.

BEST FOR SELLING TURKEYS.

"Results from my turkey ad in The Farm Trio: Aside from one local order all shipments have been one, two or three birds in a shipment, going to all parts of Washington, Oregon and Idaho, and some to Montana. We have been carrying ads in six or seven weeklies, and can safely say that 85 per cent of our inquiries come from The Farm Trio."—Mrs. H. J. Cortner, Payette, Idaho.

SELLS FARM AND RAW LANDS

"No doubt it will please you to know that the classified 'want' ad service of your three state papers has been productive of very good results for us. Your papers are bringing us a constant stream of good, live inquiries from all three states, which shows plainly that a good proportion of your subscribers in all sections of Washington, Oregon and Idaho are always on the lookout for promising real estate investments and that they must watch your 'want' ad pages pretty closely for legitimate snaps in farms, raw lands and city property."—J. Melvin Thomas & Co., Spokane, Wash.

Examples showing cost of different sized "WANT" ads inserted in The Washington Farmer, The Oregon Farmer and The Idaho Farmer.

(2 LINES.)
FOR SALE—43 LINCOLN AND SHROP ewes with lambs. P. C. Jensen, Ilo, Ida.
Cost of 4 insertions, $2.28.

(3 LINES.)
W. S. C. STUDENT WANTS A YEAR'S DIversified farm work, beginning June 20. O. A. F., 361 College Station, Pullman, Wash.
Cost of 4 insertions, $3.42.

(4 LINES.)
FOR SALE, OR EXCHANGE FOR SMALLer place—My 552-a. stock and grain ranch, 3 miles to town. Address owner, R. E. Warner, Crawfordsville, Oregon.
Cost of 4 insertions, $4.56.

(5 LINES.)
BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.
Cost of 4 insertions, $5.70.

(6 LINES)
BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, Ore.
Cost of 4 insertions, $6.84.

Every time your ad is printed in this paper it will also appear on the "want" ad page of the two other big state papers of the Pacific northwest, thus bringing you into communication with thousands of prospective buyers or sellers in every section of Washington, Oregon and Idaho.

Send Your Want Ad Orders to

The Washington Farmer

Review Bldg., Spokane, Wash.

Speculators Rob Producer and Consumer

(Continued from page three.)

from the great hazards of trade in the widely fluctuating and dangerous price situation during a year when all normal stabilization has been lost through the interruption of world trade and war. All these factors render it vitally necessary to initiate systematic measures which will absolutely eliminate all possibility of speculation, curb extortionate profits and effect proper distribution and restriction on exports to a point within our own protection. These measures can not be accomplished by punitive prosecutions of evildoers, but only by proper and anticipatory organization and regulation all along the distribution chain.

"3. During recent months the allied governments have consolidated their buying into one hand in order that they might relieve the burden of speculation from their own consumers and as the restricted exports to neutrals are but a minor item the export price, if not controlled, is subject to the will of the allied buyer, so that in a great measure the American producer is left to that buyer's judgment and is with out voice.

Glut in Interior Terminals.

"Furthermore, in normal circumstances, United States and Canadian wheat is moved to Europe largely in the fall months, such shipments averaging about 40,000,000 bushels per month and relieving a corresponding flow from the farms into the interior terminals. This year, owing to the shortage of shipping, the allied supplies must proceed over a large period of the year and will not during the fall months apparently average over 20,000,000 to 25,000,000 bushels per month.

"We must therefore expect a glut in our interior terminals during a considerable period. The financial resources of the grain trade are probably insufficient to carry this extra load without the help of speculators, and, moreover, the consolidation of practically all foreign buying in the hands of the allied buyer has further tended to diminish the resources of capital available by putting a number of firms out of business and limits the financial capital available in export trade.

"The net result of this situation is that unless some strong and efficient government action is immediately settled and brought into play the American producer will face a slump in wheat, and in any event the price of export wheat will be dictated by a single agency and the American consumer will be faced with the situation that a large part of the essential breadstuff has passed into the hands of speculators; for some one must buy and hold not only the normal flow from the farmer, but this probable glut.

Send Flour Abroad.

"4. With great reduction in the consumption of wheat bread now fortunately in progress the employment of our mills must be greatly diminished and with the reduction of domestic flour production and our daily feed from wheat residues will be greatly curtailed. Therefore we must induce foreign buyers to accept flour instead of wheat.

Must Protect Farmer.

"5. In order to do justice to the producers who have shown great patriotism in a special effort to increase production in 1917 and further to stimulate the efforts of 1918, it is absolutely vital that we shall protect the farmer from a slump in price this year due to a glut as above or from the uncontrolled decisions of any one buyer. I am informed that most of the allied countries have fixed the price of wheat to the farmer at $1.80 per bushel, and many of their producers believe that as allies it is our duty to furnish wheat at a price which delivered to them will not exceed their domestic price, in other words, about $1.50 per bushel, Chicago.

"Neither their responsible officials nor I hold this view, because I consider that the stimulation to production, if for no other reason, is in the long run in the interest of the allies. There is, however, a limit to prices which so trespass upon the rights of the consumer as to defeat its own object through strikes, raises in wages and social disturbances in the country. It is with the view to finding a solution to these problems, filled with the greatest dangers to both our producers and consumers, that legislation has been proposed and pressed for speedy enactment.

Study Consumers' Plight.

"6. The proposed food administration has conferred with many hundred patriotic men engaged in production and distribution, and has investigated the condition of the consumers in many centers as well. Many plans have been tentatively put forward and abandoned, and others have developed; but in any case none has or can be settled until legislation has been completed. Three facts stand out plainly enough from our investigations.

"First, that in this situation the farmer will need protection as to the price of wheat; and second, that large masses of people in the consuming centers are being actually under-nourished today due to the exorbitant cost of living; and that these conditions, unless some remedy be found, are likely to repeat themselves in even more vicious form at this time next year; third, the speculator, legitimate or vicious, has taken a large part of the money now being paid by the consumer.

"7. It seems to be overlooked in some quarters that the marketing of this year's wheat is surrounded with circumstances new to history and that the old distributing safeguards are torn away by isolation from the reciprocal markets abroad and the extinction of a free export market and free export transportation.

"The harvest has begun to move, and from these very causes the price of wheat has begun to drop, and if the farmer is to sell his wheat either the speculator must return to the market to buy and carry on not only the normal flow from the farmer in excess of domestic and foreign requirements, but also the glut due to the restriction upon the outlet to the latter.

"He must necessarily charge his toll to the producer and the consumer, and this latter probably upon a more extensive scale than last year, as his risks will be greater.

"Or, on the other hand, the government must buy the surplus of wheat at some reasonable minimum price, allowing the normal domestic trade of the country to proceed with proper safeguard against speculation. Nor would the services of the speculator be necessary, for the government should be able to stabilize the price of wheat without his assistance and can control the price and quantity of export wheat. We are practically helpless to safeguard either the farmer or the consumer until the pending legislation is passed.

"HERBERT HOOVER."

Another Dryer for Yakima.

The California Packing Corporation of San Francisco will erect an evaporator of the "'Stack Type," at North Yakima, to handle the season's cull and C grade apples in the valley. The plant will have a capacity of 10 tons of green fruit daily for each unit, and the plant will start with two units. Dr. Ira D. Cardiff and associates are building a plant of the Kiln type to handle 80 tons of green fruit daily.



As good as mother's! The reason is they are made with the same flour that made mother's reputation—

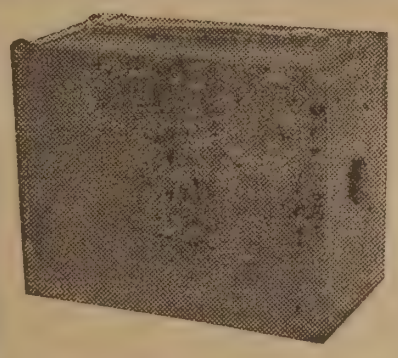
DRIFTED SNOW FLOUR
A SPERRY PRODUCT

For "golden brown" biscuits, the "perfect loaf," crisp cookies, light and fluffy cakes, the important part of the recipe should be Sperry Drifted Snow Flour, a household favorite for more than 60 years because it is always uniform in high quality. Order a sack today.

SPERRY FLOUR CO.

Buy Sperry Quality Cereals. They come in red packages.





BOYS AND GIRLS
You can still get this dandy Premo Junior Camera FREE!

Takes picture like this.



Now is the time of year to take pictures. Dozens of our boys and girls have had us send them cameras during the past week or so. Why don't you get one, too?

SEE HOW EASY IT IS TO GET ONE

Go to two neighbors and tell them if they will subscribe to THE WASHINGTON FARMER one year they will be helping you get a camera. Ask each of them to give you one dollar for the subscription, and when you have the two dollars send it to us and we will immediately send you the camera. If the first two neighbors you call on are already taking THE WASHINGTON FARMER, try other neighbors until you get the two subscriptions. It won't take but a little bit, and then the camera will be yours, to take pictures with for years to come.

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The WASHINGTON FARMER

Premium Dept. Review Bldg. SPOKANE, WASH.

Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER XIX.

On a bunchgrass prairie reaching 50 miles in any direction, with the small, unpainted cabins and insignificant plowings of early settlers at but rare intervals, the feathered and furry animals, large and small, speak a language which a boy of 10 to 15 years old, growing up with the prairie creatures as his most frequent playmates, learns to understand.

When I was growing up on the western bunchgrass it was the curlews that told me when sping had really come. We might have warm breaks in the weather in the latter part of February; even in March we might have warm stretches of sunshine, when the redbreasted robins would be hopping about. But I was not deceived. I knew that spring weather had not come for good till I heard the curlews calling in the big gulch east of the house, and when the curlews did call there I knew that they were building a nest and getting ready to raise some baby curlews—and real spring had come at last! Melting snow, warm south winds, the robin's song, the whistling of squirrels out ahead of time all were significant; but it was the curlew's cheerful melody over in the big gulch that I accepted as the only authentic springtime sounded by Nature in my listening ears.

When the bluebirds came I knew that wild violets were blooming over in the rockly lands west of our farm a couple of miles. Some morning, bright and early, I would take a half gallon tin lard pail and trudge afoot across the two miles of moist fragrant prairie and fill my bucket with the sweet, wild violets.

Let me say here that if you have never delighted your senses with the sweet fragrance of wild violets you have never learned what real violet fragrance is like. The wild violets are smaller than the home grown and hothouse variety. They peeped forth from the green prairie moss that grew in early spring between the masses of bunchgrass. Their stems were short; but their fragrance filled the whole prairie and came to you on the gently fanning spring breeze with a tang of the wild, which you can find only in the untamed heart of Nature.

After the bluebirds and the violets you noticed the ground owls—I do not know what else to call them. They were little owls that lived underground, and stood like sentinels by twos and threes on the round mounds of their burrows and sang "ho-ho-hooo-o" at you as you went by. If you stopped to look at them they bobbed at you in a funny way, and their eyes grew big and yellow; and if you still looked at them, or moved ever so slightly in their direction, they bobbed again, and scooted underground.

They did not dig their own burrows. This was done for them by the badgers; for the badgers in quest of fat squirrels were under the necessity of digding for them which they did most industriously, making many holes in the prairie at which many a cowboy has hurled maledictions. The ground owls when desiring a home, simply moved into one of the badger holes and made a nest. Why the badger did not come back and eat them, I do not know. Evidently the badgers did not do this for the bunchgrass certainly was prolific with ground owls.

I learned to imitate their call perfectly by cupping my hands and blowing into them. Often in the evening when the house was lonely and silent, I would cup my hands and whistle "ho-ho-ho-o-o" with a rising inflection at the end, just as did the little owls. By and by an owl would answer; then another and another, and soon the whole prairie would resound with their soft, melodious cries, some gruff, some shrill, some far and some near.

By cupping my hands differently I could sound a wild, shrieking whistle that rose and fell in ear-splitting notes; that would frighten the owls to momentary silence. They perceived a stranger was in their midst. Sometimes I would get another reply to my louder, piercing call—the distant yell of a coyote. Answering my call, the coyote assured me that he expected to sniff around our henhouse that night; and in anticipation of his nocturnal call I promptly ceased talking to the owls and went out to see that the henhouse door was shut and that no foolish hens were roosting out.

The sandhill cranes told me when summer had come, just as the curlews told me when it was spring. Playing in the yard I would hear their far away dismal croaking. It took keen ears to hear them and sharp eyes to see them far up in the summery sky. Where they came from I knew not, whither they were bound I knew not; but I learned that sometimes they would drift down to a chain of small lakes that in early spring and summer were a couple of miles west of our place in the rough, rocky land. The lakes dried up as summer advanced, but until they did, the cranes often settled down there to drink and rest a bit.

They were shy I was told, and because they were shy and floated through the sky at such wonderful heights and had such a lonely, sad croaking cry, I longed to see one at close range.

I did this finally by hiding in the tall wild rye grass which grew in clumps and small hillocks out among the small lakes. There were days when the blue sky seemed full of cranes and their mournful, gutteral croaking came from everywhere, and on such days I hastened to the lakes and hid in the rye grass. Many times I did this vainly. Once I was successful. With plaintive cries, a triangle of the birds drifted earthward, crying more loudly and discordantly as they came nearer. Had each crane been an animal of the maneating kind, my excitement could not have been more. When the cranes were a hundred feet or so above ground, their perfectly formed triangle broke up in a disorderly, excitedly honking and croaking mob, and they descended swiftly, working their long legs up and down as they did so.

Often I have wondered why the sandhill cranes stretched and doubled up their legs as they swooped nearer to the ground. As a boy I concluded that it was because the birds had flown so long in the air that they were rather timorous about putting their feet on the solid ground. Perhaps also, their vision was deceptive in enabling them to gage the distance of the earth to which they were rapidly descending, and they kept "feeling down" for it. I noticed that each bird as it struck the ground ran forward with stiff, stumbling steps, then stopped, stretched, preened, and stalked sedately to the water's edge, unless, perchance, they lighted in the water, which frequently they did.

The cranes at near view were less wonderful to me than when floating thousands of feet high across the whiteness of a cloud, or seen less certainly against the pure blue of the sky. They were rather small bodied, brownish, with darker colored tufts or plumes falling from the top of their heads down the back of their long necks. After resting and drinking they would begin to flap their wings as

(Continued on page twenty-three.)

War Program for Country Churches

In order that it may perhaps help the country churches of America to fulfill the great duty and meet the great opportunity of the hour, the committee on church and country life of the Federated Council of the Churches of Christ of America, of which Gifford Pinchot is chairman, proposes the following:

The Farmer.

1. Urge upon the farmers the absolute need of an immediately increased food supply as their first duty and as their most vital contribution to the winning of the war. Make it clear that we must prepare to supply food not only for a long war, but for the years immediately following the war.

2. Show how waste in food may be eliminated in field and in home. Urge immediate and hearty support of federal war prohibition of the manufacture and sale of intoxicating beverages as one means of saving both food and human resources.

3. Promote the fullest cooperation on the part of farmers with farm bureaus, agricultural colleges and boards of agriculture, the United States government, national, state and local committees or councils of defense, as well as with organizations of earnest and patriotic women and business men in the cities.

4. Make sure that emergency laborers, especially lads from the schools and colleges, understand their duty to their employers and to the community for faithful work and clean living as their contribution to the nation's task. On the other hand, these boys and young men should have fair treatment, kindly sympathy, wholesome recreation, Christian consideration.

5. Develop the spirit of cooperative enterprise in each community wherever possible, in order that new methods of working together in the production, saving and selling of food, and for public safety and relief to wounded and suffering may be developed and made effective.

6. Should the need arise, the farmer must not and will not shrink the great sacrifice—the giving of his sons to the army and navy of his country.

The Church.

7. Arrange for a food Sunday and for occasionally special sermons, in order that this war program may be proclaimed and continued.

8. Aid to the utmost, even with small gifts, those great efforts, such as the Red Cross and the Y. M. C. A., that attempt to lessen the horrors and distresses of the war.

9. As never before, make each local church a true community church, which shall support all good words and works and aid in every possible way to bring cheer, hope and blessing to all the souls within the neighborhood. Let each church search its heart to see if it be really and truly democratic and brotherly.

10. Let relations between local churches as well as between great church boards of different denominations attain a new fraternity of feeling and cooperation in activities, on behalf of all the purposes of Christian democracy at home and abroad.

The Preacher.

11. Let the country preacher preach, in season and out of season, the deeper issue of the war; That the world must be made safe for democracy; that a world kingdom of God means a brotherhood of nations living in peace and good will; that America must learn that sacrifice is the law of salvation, in personal character as well as in national life, and that it is our great task to see that American rural work and life, as well as urban work and life, shall become and shall remain truly free and democratic.

12. Many country preachers can do emergency service, either at home or by some form of enlistment, in Red Cross, as army chaplains, as special Y. M. C. A. workers in camps or among boys and young men at work on the farms, and in other ways that will suggest themselves. Churches should be willing to release their pastors for special service of this sort whenever the call is clear. Oftentimes, in communities having several churches, a plan of "doubling up" would release half the pastors for emergency service elsewhere.

Conclusion.

By some such program as this, suggested to and urged upon the country churches of America, it is hoped and believed that God's great purpose in this awful day of war may be promoted by his servants on earth.

Soldier and Family

Canada Provides Compensation

The Canadian compensation for the soldier and his family includes not only $33 of monthly pay for the private in active service, but a separation allowance to his dependents of $20 a month from the dominion government and further assistance in special cases from the Canadian patriotic fund.

For example, the wife of a private soldier with three children between the ages of 10 and 15 may receive either $15 or $20 from the assigned pay of her husband, $20 separation allowance and $25 from the Canadian patriotic fund, or in all $60 or $65 a month.

If her husband is killed she will receive $40 a month for herself and an additional $6 a month for each of her children until her boys are 16 years of age and her girls are 17 years of age. In addition, if she lives in Toronto or one of a number of other cities, she will receive life insurance.

If her husband is disabled she will receive a special maintenance allowance while he is having medical treatment and learning a new occupation, and when he is discharged, if his physical disability continues, a pension will be paid according to the extent of his disability and the number of his children under 16 or 17 years of age.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University)

How to Break Baby of the Habit of Sucking His Thumb

You will scarcely defend these two obnoxious habits, that of sucking thumbs and biting nails. You can not deny that they are habits. A habit, be it said for the nonce, is sensation - motion combination, scarcely recognized by the one who exhibits it—that is to say, a habit is something done as a consequence of a sensation received, neither of which appears in consciousness at present, but both the sensation and the movement of which were originally carried out consciously with a definite purpose.



Dr. Hirshberg.

Thumb-sucking and nail-biting are typical habits. The infant, perchance, cold or hungry once or twice, aimlessly waves its hands around. The energy thus expended made the child warm and its thumb, very likely, encountered its lips. The comfort and pleasant satisfaction thus consciously attained is repeated until the original consciousness is lost, but the soothing sensation and the movement, which gets results, remain.

Habits then "get results" in the shortest possible time without the delay entailed in being aware of what is going on. The point is that a habit thus formed may work havoc as well as good.

How then are you to bring into consciousness again that a destructive or dangerous habit must be broken? By punishment or something equivalent that will stir up the muscles and feelings and do away with the unconscious memory habit of pleasure.

The original incentive to thumb-sucking or to nail-biting gives way in the habit to a compulsive power, which, as Dr. Caroline Richards says, "defies all means of correction."

In the very young child it is idle to invoke "strength of will" against the great power of unconscious habit and the "animal spirits," which give play to its abundant energy. Something else must be done.

It has been found practical to do away with such habits by restoring knowledge of the unsocial and disgraceful behavior in grown-ups and by deflecting the energy thus expended in the infant into a pleasanter channel.

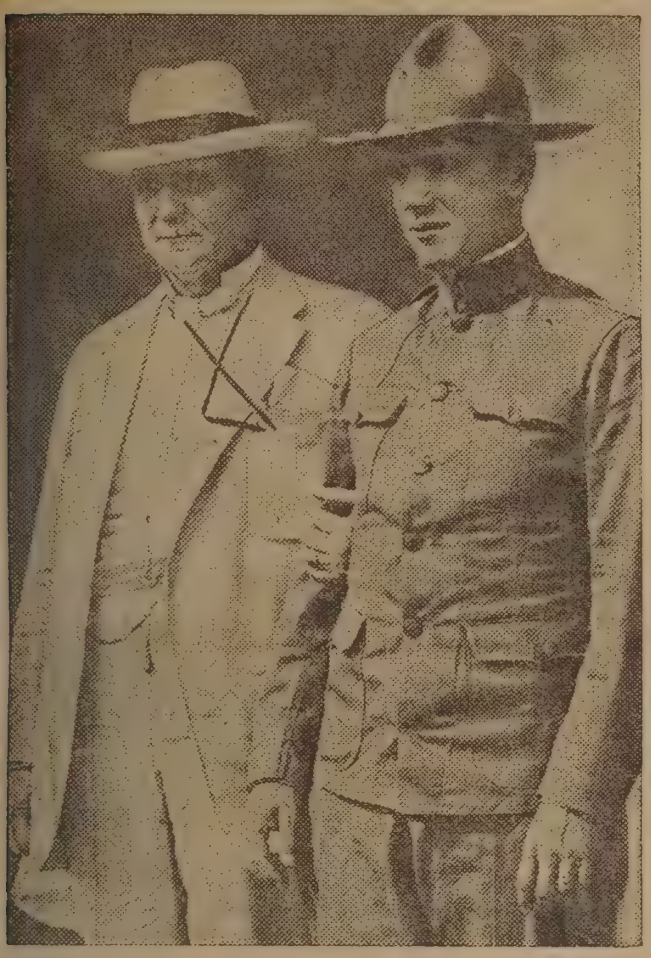
While the use of bitter substances, such as aloes and quinine, are not always helpful, they are worth the trial by virtue of the punishment thus automatically bestowed.

However, in the matter of the infant, if a bottle of sweetened milk and water is repeatedly and quickly substituted the instant the thumb is observed in its mouth the habit can be broken. This has been found of great assistance by at least one mother.

A slight slap of the fingers and thumb, with care not to injure the delicate bones as the thumb is snatched from the child's mouth, followed by the nippled-bottle of very sweet milk or water—both of which ought to be boiled—may do away with a habit that can lead to no benefit.

All the World's a Stage, and All the Men and Women Merely Players

Clark's Boy a Soldier



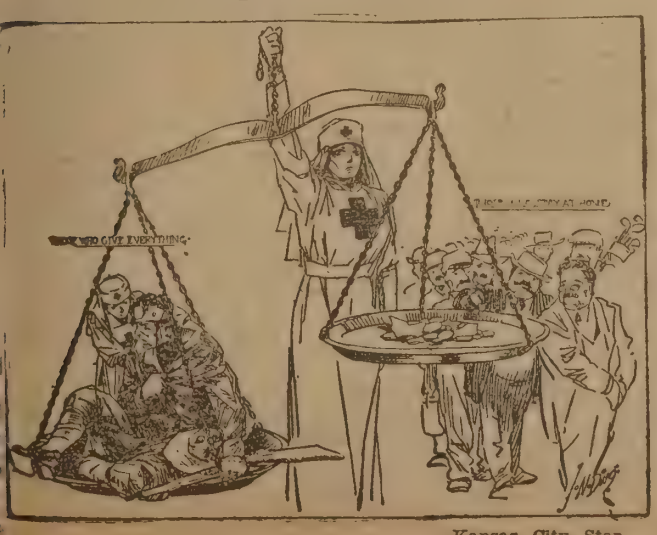
The speaker of the house of representatives, Champ Clark, raised his boy to be a soldier. The photograph above shows the speaker and his son, Bennett Clark, as snapped at the baseball game in Washington between the republican and democratic members of the house of representatives. Bennett Clark is a candidate for an army commission and is now drilling in the officers' training camp at Fort Myer, across the Potomac from Washington.

"God Bless Mr. Hoover"



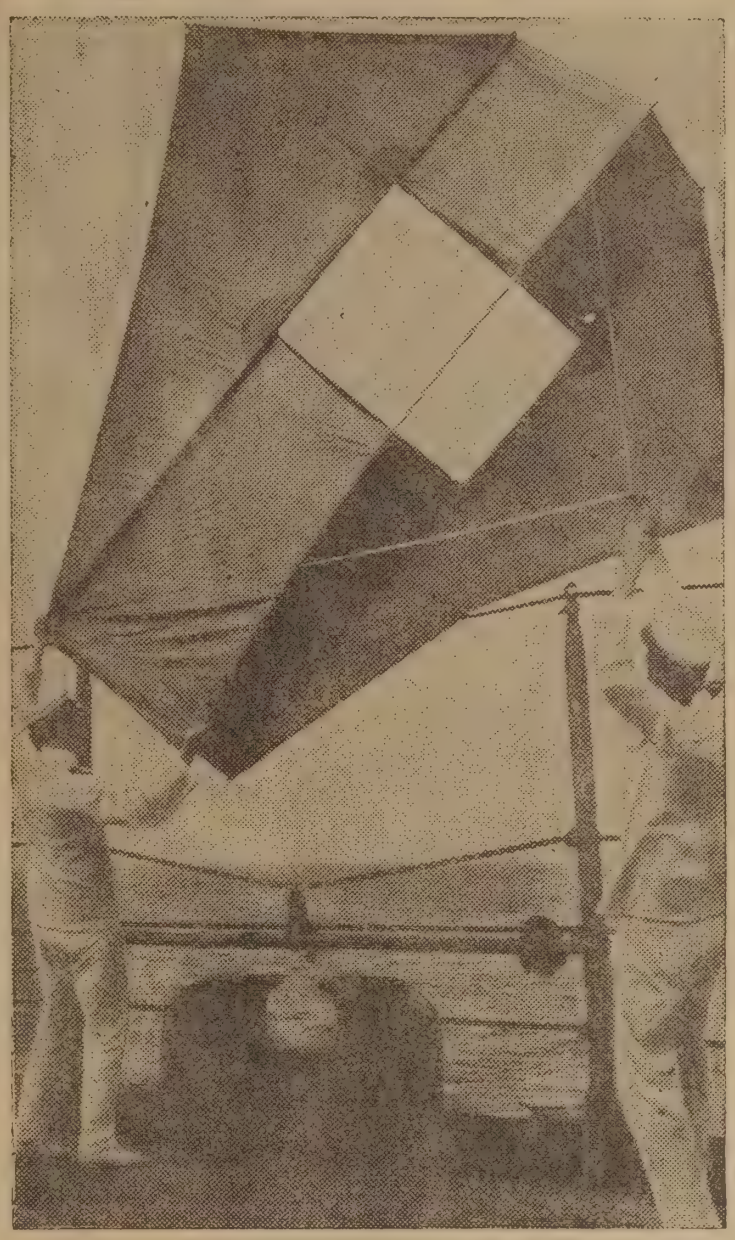
—Philadelphia Public Ledger.

Keep It Balanced



—Kansas City Star.

Huge Kite for Mark to Shoot At



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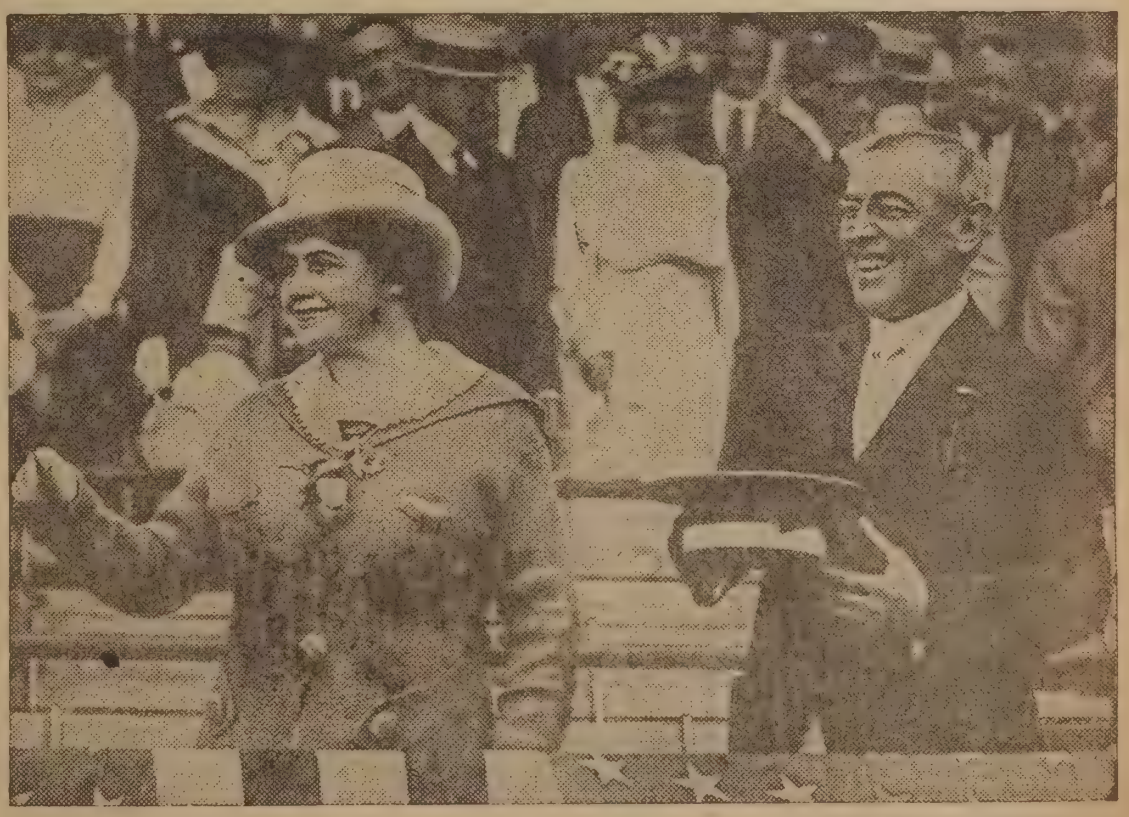
Officers and men of an American battleship are shown in the above picture sending up one of the huge kites that are used as targets for anti-aircraft guns. These kites are used in practicing "potting" enemy aeroplanes and the gunners have acquired wonderful accuracy.

Helmets and Body Armor.



This is what the United States soldier may look like when prepared for attack, if plans the war department is said to have go into effect. Bids have been asked to furnish helmets made of a special alloy steel, 15-100ths of an inch in thickness and capable of turning a rifle bullet. The body armor is made of a series of thin spring-steel plates, made semi-flexible by being sewed together in a canvas sack.

Wilsons Watch Congressmen Play Ball



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A short time ago the republican and democratic members of the house of representatives played an interesting game of baseball in American League park, Washington, for the benefit of the Red Cross. Among the spectators at the game that day were the president and Mrs. Wilson, and they proved to be two of the most enthusiastic fans present. The president is a busy man these days, but ocasionally he takes a little relaxation from the serious duties of his office. In the photograph may be seen the president and his wife watching the game. The game was almost as hotly contested by the two political parties as some of the measures that have come up recently in congress, and some of the plays caused comment favorable and otherwise from the crowd in the stands and bleachers. President Wilson threw the ball to start the game.

Olden Ways of Saving Fruit

By E. A. BRYAN

The well-known practices of one generation easily become the lost arts of the next generation. The age of hand-spinning and hand-weaving are supplanted by the age of "hand-me-downs," and daughter asks mother at the "home economics" show, "What is that?" The mother replies: "That is a spinning wheel and that is a hand loom like grandmother used to make the cloth for our dresses on."

Back in southern Indiana, after the close of the civil war, peaches continued to flourish and apples were abundant, but money was scarce and crops were poor and hard to sell. We did not know how to market peaches then and there was no market, anyway. If there appeared to be any chance at all to sell any peaches in the short but abundant peach season we placed hay in the bed of the jolt wagon, piled a heap of the small but well-flavored peaches into the wagon bed, put the half-bushel measure on the heap of peaches, placed a board across the front end of the wagon bed and drove to town. There we peddled from house to house, glad if we could sell a few at from 25 cents to 50 cents a bushel, that would be from eight to 16 cents a box by our modern system. But at best we could sell but a few, and so we saved by "drying" and "canning." When we ran out of tin cans we often canned in earthen jars. I remember a six-gallon stone jar which regularly was opened in midwinter when the contents would not spoil during use. It was a very economical method. We also saved both peaches and apples by making the delicious peach butter and apple butter, which we prepared in large kettles and which kept well even with a paper over the jars. And how good they were!

But what I was going especially to mention as appropriate just now, when everybody feels it a duty to save from wastage, was the "dry kiln" and the "dry house." As a boy from 12 to 15 years old I made several of them. For the dry kiln I dug a trench about 18 inches wide and eight feet long and set some flat stones on edge along each side. A few odd scraps of iron placed across made a support for other stones laid flat. Over this I spread a stiff mud, four or five inches thick, which was made quite smooth on top with a shingle paddle. This top, when slowly dried out, made a hard, dry surface on which halves of "free-stone" peaches, laid back down, might be dried quite rapidly, a fire having been made in the furnace with long sticks. The peaches were finished off in the sun.

Better still were the simple dry houses. Trays of lath four feet square were made, on which the peaches were laid, as before. A simple box house four feet wide, eight or 12 feet long, into the side of which the trays would be shoved one above another—two or three trays to the tier and six or eight tiers high—the ends of the trays resting as guide boards, gave you a means of rapidly drying considerable quantities, to be finished off in the sun. The fresh trays are shoved in at the bottom as the dried ones are taken out at the top. A "kiln" as described above might furnish the heat or a small stove might do as well or better. In this way many bushels of wholesome, easily preserved fruit were saved. Apples and other fruits were saved in the same way.

The method of preservation by "drying" should not become a lost art. In the "canning" business, excellent as it is—we can tremendous quantities of water. We are not unlike certain railways are with their stock. In drying we save the same nourishment without the water. The simplest precaution prevents any loss of dried fruit, while with best efforts much canned fruit is lost. Revive the lost arts of an age when economy was enforced, for we may need it all and more if the world is to be preserved from actual want.

Silage for Wintering Sheep

By E. L. POTTER

At the request of many farmers who are contemplating the erection of silos for wintering ewes we submit a few fundamental facts relating to the subject.

One hundred pounds of silage contains about 25 pounds of dry matter and the remainder is water. On the other hand dried corn fodder or hay is only about 10 per cent water. One hundreds pounds of silage dried out so that it would keep like hay would only weigh 27 to 30 pounds instead of 100. The dry matter in silage, however, is rather more palatable and somewhat more digestible than in dried fodder, so that on the basis of nutrients about three pounds of silage is equal to one pound of good hay.

Many animals, however, crave succulent feed, especially in the winter, and if the succulence is given in proper amounts it seems not only to have a high value in itself, but to increase the value of the remainder of the ration.

Comparative Values.

For these reasons a limited amount of silage may be considered worth half as much as good hay, pound for pound, but if fed alone, or nearly so, only one-third as much as good hay.

Sheep are fond of silage, but not as much so as cows, and furthermore they go off feed more easily if the silage is at all spoiled. It has been found that breeding ewes should not be fed more than two pounds a day. Since the average allowance of hay for wintering ewes is three pounds a head daily, this would mean that the ideal silage ration would be two pounds of silage along with two pounds of hay. Since the silage is highly carbonaceous, it is important that the hay be one of the legumes, as alfalfa, clover, or vetch.

If silage was scarce a good ration would be two and one-half pounds of hay and one pound of silage. These rations would be applicable to the smaller range ewes, but would need to be increased slightly for the larger ewes.

How Fast To Lower Silage.

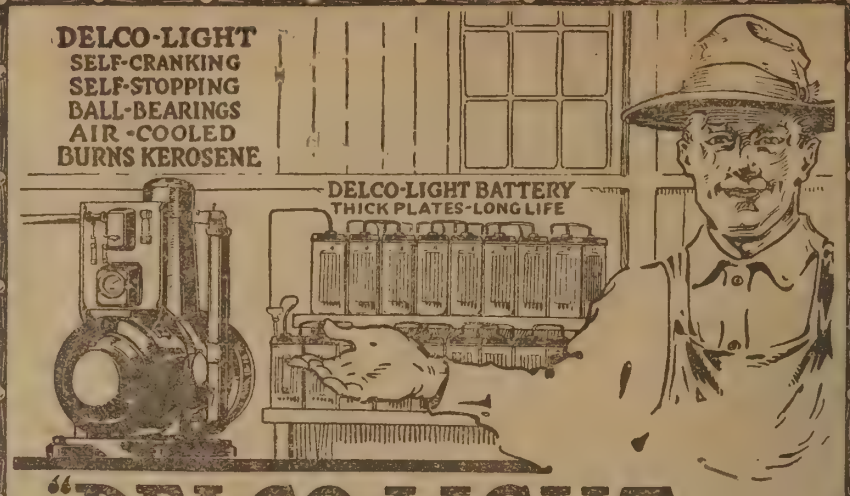
In planning a silo it must be kept in mind that the exposed silage on top spoils rapidly and that to prevent the top from becoming moldy it must be fed off faster than it can spoil. This means at least two inches a day, or five feet a month. This would mean that for four months' feeding the silo must be at least 24 feet deep, allowing four feet for settling and 20 feet for the actual silage. For a long feed the silo must be proportionately higher. In diameter 10 feet is as small as is practical, since with smaller silos the expense of construction per ton is high and the spoilage around the edges heavy. On the other hand 16 feet in diameter is as large as convenient to feed out of.

One would, therefore, have to have at least 280 ewes to justify a 10-foot silo and 400 ewes for a 12-foot silo. With this in mind it will be seen that a silo exclusively for sheep is not practical with little farm flocks of 50 to 100 head, but since many of the farms with small flocks also keep cattle one silo may be made to serve both purposes.

In a word then we would recommend a silo for sheep wherever there are enough sheep to justify it and where good well matured corn silage can be grown at less than one-half the cost of good hay. As a general proposition wherever a heavy crop of mature corn can be grown the cost will be low enough to justify its use. We would not, however, recommend a silo where the corn crop is light or immature. We would also hesitate to recommend any other silage crop than corn, although if any one cares to experiment with other crops we are very glad to see them try it and would like to know what results they obtain.

Starts Skunk Farm.

Walter Boak of Reedsport, Ore., has shipped from the east, five skunks, one male and four females. With this beginning he will start a skunk farm at some point on Smith river or on the Umpqua for the purpose of raising skunks for their fur. The ones which he has received are of the best breed of the animals of that kind, and are odorless and easily handled, being as gentle as kittens. Each skunk is expected to raise one litter of kittens each year of from four to 14 to a litter. Mr. Boak expects to receive from $4 up for the fur. This, he says, is an experiment, and if it proves a success he expects to go into the business on an extensive scale.



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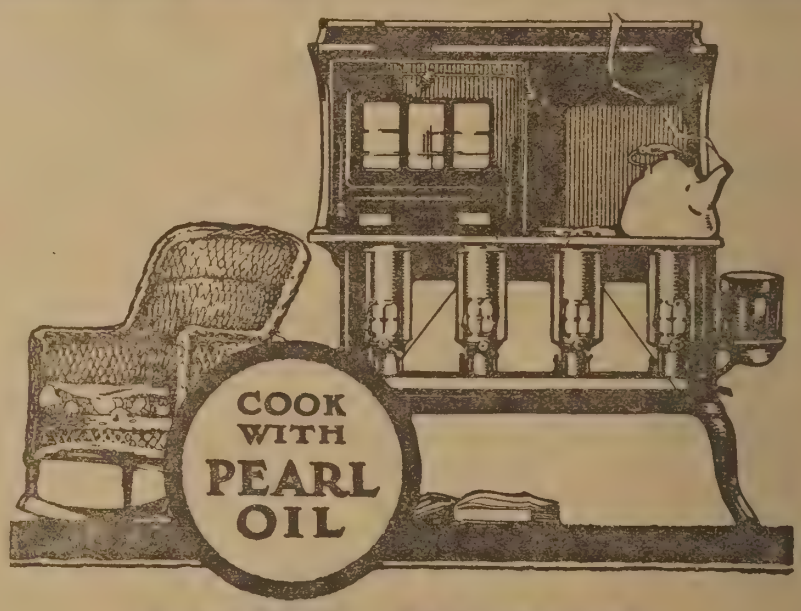
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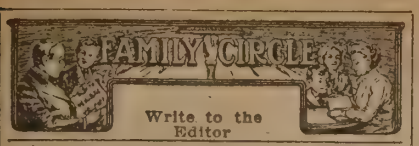
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ALICE W. BARLAND
Editorial Contributor

The Woman's Part

Learn What Thrift Really Means

By Ruth Gipson Plowhead.

A recent cartoon tellingly shows a fat, slovenly housewife standing by the back door gazing at an overflowing garbage barrel. We can easily see that neither economy nor thrift dwells there, and it is by the use of these that the homekeeper may do her part toward feeding the fighting armies. There are a number of things which we may all do to help reduce the cost of living. Mrs. Richards, in a book on "Cost of Food," claims it is possible to live in perfect health on 10 cents a day—this sum spent for food alone. While she was undoubtedly not figuring on our present war time prices, who of us who read this has ever tried to come anywhere near that small sum for living?

Skim or separated milk and buttermilk are often wasted, yet both of these furnish inexpensive protein, only the fats are taken out. Practically all famous dietetians advocate less meat and eggs, less concentrated rich foods and more bulk and raw foods. Bran, used in connection with flour, makes excellent muffins and bread is considered a splendid bulk food. Cabbage, lettuce, turnips, beets and carrots are all inexpensive, and all good bulk foods.

A nourishing and very inexpensive rice pudding is made by baking one cup of rice in the oven in several quarts of milk (separated will do). It may cook for several hours on a morning when one has a hot stove, and a few minutes before serving a well-beaten egg, sugar and flavoring to taste be added. It should be cooked down until creamy and rich.

Another nourishing pudding is made by adding one cup of corn meal to the boiling milk as for mush, add three-fourths of a cup of sugar, one-fourth cup of molasses, one-half teaspoonful of cinnamon and ginger, and allow this to bake slowly for several hours, adding milk from time to time if it bakes down too much.

Cottage cheese, thick vegetable soups served with toasted dry bread, mush and milk, corn and graham breads are all inexpensive. While we all want our families to be well fed and satisfied we must seriously pause at extravagance when we think that luxurious meals on our part may be taking the food out of some one's mouth—some one who may be starving.

Herbert Hoover, who is to be food controller, tells us that we positively must reduce our living to the least upon which we can maintain good health if we are to do our part in feeding the nations.

The waste and scraps that can not otherwise be saved should be given to your own or your neighbors' chickens or hogs. Suppose we begin to study what the word thrift really means.

Instead of a cake made with four or six eggs and plenty of butter, suppose you try this some evening and see if it is not good:

Quick Cup Cakes.

Break one very large or two small eggs into a cup, beat well and fill with milk or cream.

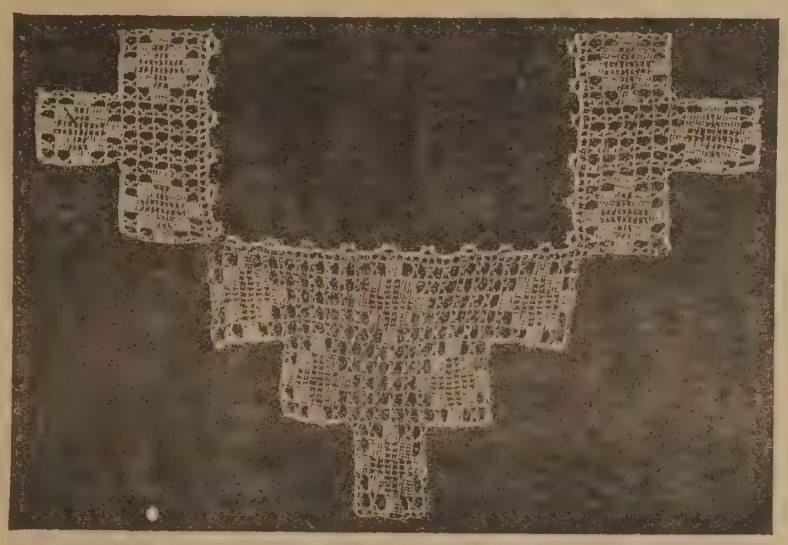
Sift one and a half cups of flour (being sure to use the same size cup as in No. 1, and measure carefully), one cup of sugar and two teaspoonfuls of baking powder. Add to milk and eggs, beat hard, flavor with lemon peel grated, and beat either in flat sheet or in muffin tins. These are very good served with whipped cream, while still warm.



Some must be great. Great offices will have
Great talents. And God gives to every man
The virtue, temper, understanding, taste
That lifts him into life and lets him fall
Just In the niche he was ordained to fill. —Cowper.

Crochet and Tatting Designs

By Winifred Worth



LACET AND BLOCK YOKE.

This beautiful yoke is easy to make and will make an ideal gift for a bride.

Use 2 balls No. 60 Cordonnet.

Ch. 36.

First row—1 t. in 8 ch. 2 L. 7 t. 2 L. 2 t.

Second row—Ch. 3 1 t., ch. 5, 1 t., ch. 5, 7 t., ch. 5, 1 t., ch. 5, 1 t., ch. 2, 1 t.

Third row—Ch. 5, 1 t., 1 L. 7 t, 1 ch. 1 t., 1 ch., 1 t., 1 ch., 7 t., 1 L. 2 t.

Fourth row—Ch. 3, 1 t., 5 ch. 7 t., 1 ch. 1 t., 1 ch. 1 t., 1 ch. 7 t., 5 ch. 1 t., 2 ch. 1 t.

Fifth row—5 ch. 7 t., 1 ch. 1 t. (repeat 8 times) 7 t. 1 t.

Sixth row—Same as 5. This completes half of block pattern. For first drop, ch. 34, repeat pattern filling upper space with lacets. Second drop. There are two block patterns. This in front of yoke. Shoulder and back are made with only one dropped block.

Give Canning a Fair Trial.

"Don't judge the success of canning by your first effort with whatever product you happen to find in market, when you begin operations," says a statement just issued by the United States department of gariculture. "It is more than likely that if you are a beginner at canning you will start with strawberries, the first fruit available. If you do you should realize that strawberries are one of the most difficult of all products to can satisfactorily. It is next to impossible, in fact, to can this fruit, as distinguished from preserving it (in which case a much larger proportion of sugar is used) so that its color, size, and texture will be preserved.

"Don't feel, therefore, that your strawberry canning is a failure. Above all, don't become discouraged and fear that all your canning will be unsatisfactory. Practically every vegetable and fruit worth canning may be canned and kept in condition fairly comparable in flavor and texture to the fresh product."

A GOOD FURNITURE POLISH.

What is the most helpful thing you have learned during the last year in your experience with housekeeping? Let us pass it along to other housekeepers.

To the Editor: A good furniture polish is made of equal parts of olive oil and vinegar. Rub on with a soft cloth and then polish with another soft cloth.

MRS. J. C. LEHMAN.

Paha, Wash.

Misunderstood.

She—Does Dr. Cutter treat many people

He—No; he's notoriously stingy.



Awarded GRAND PRIZE at the P. P. I. E.



If your dealer cannot supply you, we will send them, charges prepaid, on receipt of price, $1.00 each.
Levi Strauss & Co., San Francisco

DAISY FLY KILLER placed anywhere, attracts and kills allflies. Neat, clean, ornamental, convenient, cheap. Lasts all season. Made of metal, can't spill or tip over; will not soil or injure anything. Guaranteed effective. Sold by dealers, or 6 sent by express prepaid for $1.

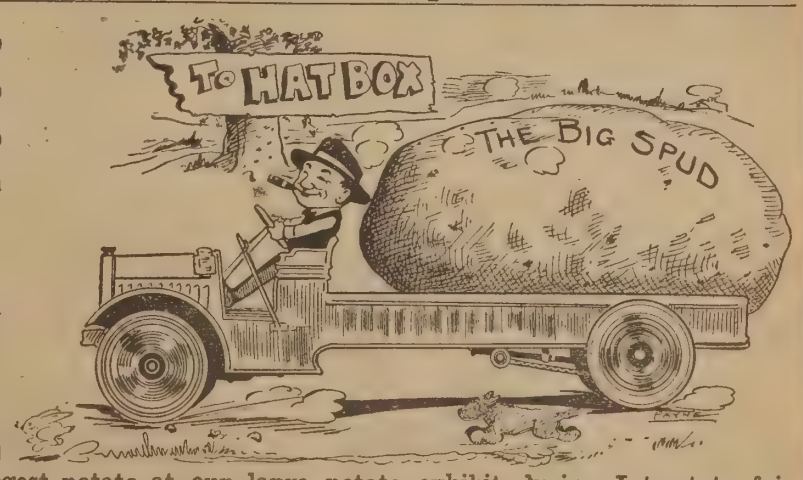


HAROLD SOMERS, 150 DeKalb Ave., Brooklyn, N. Y.

EXHIBIT OF BIG POTATOES

at Our Store, INTERSTATE FAIR WEEK, September 3-8, 1917

The Great Big Potato
The HAT BOX Potato
The Red Cross Potato
The Potato That Grows in the Sunny Northwest



CHOICE of ANY $5 HAT IN THE STORE

awarded to the exhibitor of the largest potato at our large potato exhibit during Interstate fair week, Spokane, Wash., Sept. 3-8.

RULES GOVERNING EXHIBITION AND AWARD

1—All potatoes for exhibit must be delivered to our store on or before September 1.

2—Each exhibit must be marked with name of grower, town, state and variety, and probable date of planting.

3—Exhibits will be received from Washington, Idaho, Oregon and Montana.

4—When shipping exhibits, address "Big Potato" Exhibit, the "Hat Box," Spokane, Wash.

5—The awarding of our best $5 hat to the successful entrant will be determined by state and county agricultural judges.

6—All potatoes sent us for exhibition in this contest will be on display in our Howard street windows during fair week, after which they will be given to the Red Cross organization.

A chance for you to do your bit and proudly wear one of our best $5.00 hats. Select that potato hill today, and see that it gets every attention possible to be a leader of all the leaders.

No. 6 Howard Street **THE HAT BOX** Spokane, Washington

Patterns

2152-2153—A Stylish Gown—Waist 2152 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 2153 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It will require 6 1-2 yards of 44-inch material to make the entire dress of one material for a medium size. The skirt measures about 2 1-2 yards at the foot, with plaits drawn out. Two separate patterns, 10 cents for each pattern.

2139—Child's Set of Short Clothes—Cut in five sizes: 1, 2, 3, 4, and 5 years. The dress will require 2 1-4 yards of 36-inch material. The slip 1 1-2 yards, the drawers 1 1-4 yards, for a 4-year size. Price, 10 cents.

2159—Dress for misses and small women. Cut in four sizes: 14, 16, 18 and 20 years. It requires 5 1-8 yards of 44-inch material for a 16-year size. The skirt measures about 2 1-2 yards at the foot. Price, 10 cents.

2143—Girls' Middy Dress—Cut in five sizes: 4, 6, 8, 10 and 12 years. It requires 4 1-4 yards of 27-inch material for an 8-year size. Price, 10 cents.

2151—Girls' Dress—Cut in four sizes: 2, 4, 6 and 8 years. It requires 3 1-4 yards of 24-inch material for a 4-year size. Price, 10 cents.

1843—Girls' Dress—Cut in five sizes: 6, 8, 10, 12 and 14 years. It requires 3 1-4 yards of 44-inch material for a 10-year size. Price, 10 cents.

1277—Ladies Bib Apron—Cut in three sizes: Small, medium and large. It requires 5 1-2 yards of 36-inch material for a medium size. Price, 10 cents.

1343—Boys' Blouse Suit—Cut in four sizes: 3, 4, 5 and 6 years. It requires 3 1-4 yards of 36-inch material for a 5-year size. Price, 10 cents.

1892—Ladies' Yoke Skirt (in raised waistline)—Cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires 3 3-8 yards of 44-inch material for a 24-inch size. The skirt measures about 3 yards at the foot. Price, 10 cents.

2138—A Simple Night Gown—Cut in five sizes: 12, 14, 16, 18 and 20 years. Size 16 requires 4 1-8 yards of 36-inch material. Price, 10 cents.

2144—Ladies' House Dress—Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 6 1-4 yards of 36-inch material. The skirt measures about 2 1-2 yards at the foot. Price, 10 cents.

1919—Ladies' Waist—Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 2 3-4 yards of 36-inch material for a 36-inch size. Price, 10 cents.

Honey Sweetened Whipped Cream.

When whipping cream try adding a teaspoonful of strained honey instead of sugar. It not only gives the cream a delightful flavor, but causes it to stay whipped and firm all day.



Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Pattern No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

Milk Toast.

Don't throw away stale bread and left-over skim milk, Madam Housewife. From them you can make that simple and well-known but nourishing dish, milk toast, the United States department of agriculture points out. This makes a good dish for breakfast, luncheon, or supper, especially for children.

Heat the milk. Add a small quantity of butter and season to taste with salt. Pour while hot over well-toasted stale bread and serve.

NO EXEMPTIONS

Active Service for All

Are you content to live in obscurity? The active business world needs you. A good salary awaits you. But you must be

TRAINED

We qualify you in Stenography, Bookkeeping, Commercial Training. Begin any day. Don't fail to ask for catalogue B.

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Spokane, Wash. M. M. Higley, Pres.

The World Needs Veterinarians

The State College of Washington offers one of the strongest veterinary courses in America.

STRONG FACULTY
MODERN EQUIPMENT
LARGE CLINICS
COLLEGE ASSOCIATIONS
FREE TUITION

Term opens September 17, 1917. For information write to

S. B. NELSON,
College of Veterinary Science, Pullman, Washington.

LOOK THIS UP

The Breeders' Department in this issue contains the names of many prominent live stock breeders. Their offers are worthy your consideration.

Free Tuition Y. M. C. A.

Day and Night Schools

(JENKINS INSTITUTE OF THE Y. M. C. A.)

Boys! Young men! What have you done in the past three months to conserve the nation's food supply as requested by the governor of your state?

The Y. M. C. A. day and night schools at Spokane, Wash., will give **three free scholarships aggregating nine months' tuition,** apportioned as follows:

4 months' tuition for best paper telling "What I Have Done."

3 months' tuition for second best paper, and

2 months' tuition for third best paper.

Papers will be judged and awards made September 15, 1917. Address educational secretary.

Y. M. C. A. Day and Night Schools

SPOKANE, WASH.

Business College, Preparatory and Trade Schools





Wouldn't Exchange With a City Girl.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and in the fourth grade. My birthday is January the 31st. Our school let out May 25. We had a picnic in the woods. There were 25 children going to school, but six left, and my sister graduated We had a man teacher this year, but next year we will have a lady teacher. I have four brothers and one sister. Her name is Agnes. She is 15 years old and is the oldest in the family. My brothers' names are Albert, Viggo, Irving and Leslie. I live on a 30-acre farm. We have eight cows, one horse, three calves, three pigs and some chickens. I haven't many pets, but I have two cats and six kittens. There are two big maple trees in front of our house which I think are very nice. There is also a big cherry tree, which was very pretty when it was in blossom. We have many apple trees and other fruit trees in our orchard. I would never exchange places with a city girl. If any of my cousins write to me I will gladly answer.—Herdis Hansen, R. F. D. 1, Bothell, Wash.

Lightfoot and Grayfur Are Her Cats.

Dear Aunt Nellie: I have read the children's letters many times and have enjoyed them very much. We live on a big farm about 100 acres, counting rough land. We raise hay and potatoes, but we have some stock. There are three cows and a calf that will soon be a cow; then we have another calf. We have six head of horses on the place, but only three of them are ours. I have a dog and two cats. The dog's name is Rex, and the cats' names are Lightfoot and Grayfur. Lightfoot has two little kittens. One is spotted, with a white ear, and the other ear is gray. The other kitten is all gray. They used to spit at me when I went in where they were. My school was out the 29th of May. I had two miles to walk and I walked with two little girls. Their names are Velma and Louise. I was in the fourth grade at school, but I passed into the fifth. I am 9 years old and will be 10 the 9th of October. I was born in 1907. We have a car and we live 13 miles from Yakima. We live on the Naches Heights. I hope I have a twin.—Helen Mehl, Naches, Wash.

Do Come Again, Julian, We Like You.

Dear Aunt Nellie: My brother Henry takes The Washington Farmer and I like to read in the Farmer first of all the Children's Corner. This time I am going to tell you the names of all my brothers and sisters and also their ages and myself included. First in the rank is my big brother, Hank, he was 12, 12 on April 20th. Next, I compete with a year and some weeks, I am 11, 11 this day on this beautiful morning of June the 12th. Third is Miss Sylvia, who will be 10, 10 on October the 18th. Fourth is Miss Ida May, the fair little maiden, who will be eight on September 26th. Fifth is Miss Anna, the cute little tot, she will be six, six on September ninth. Sixth is brother Benoit, he will be four, four on January 11th, 1918. Last of all is our darling little baby Carl, with his sweet little face and pretty blue eyes, he was born February seven of winter last. If this is printed and I allowed to, I will come again some other time.—Julian H. Yoss, Whitcomb, Wash.

A Climb Up the Mountains.

Dear Aunt Nellie: I am going to write about the last day of school. The last day of school we went up on the mountain. My teacher was ill, so she did not accompany us. We followed an old wagon road which led off to a cattle trail. I was very tired when I reached the top. We walked part of the way down the other side and went to a cliff. It was very high and steep and was covered with moss and vines. Underneath it was a field of rocks which had fallen from its sides. My head grew dizzy when I looked over and saw how steep it was, but it was very pretty. This cliff was a large projecting rock and underneath there were about six inches of snow, which looked very strange this time of the year. I shall be 12 years old the 25th day of August. If I have a twin I would like very much to hear from her. —Lois Barnhart, R. F. D. 1,, Tekoa, Wash.

Likes "That Printer of Udell's" Best

Dear Aunt Nellie: I was 12 years old the 19th of May. I have read many books, including, Making Over Martha, Blazed Trail, Return of Tarzan, Girls of True Blue, Million Dollar Mystery, Little Shepherd of Kingdom Come, A Texas Ranger, and That Printer of Udell's, which I think is the best of all. It is about a little boy whose mother dies. He calls to his dog and says, "Come on, we better be going now or he'll kill us." He meant his drunken father lying by the fireplace. He was glad his mother was dead so that his father couldn't beat her. Later on the dog dies and the boy becomes a carriage driver. One day he met an old friend of his father's who tells him that his father is dead. Later on the boy marries a beautiful girl. He has many adventures trying to find her after she ran away. It is a very interesting book. I hope many of the cousins can read it some time. It was written by Harold Bell Wright.—Josephine Prouty, Outlook, Wash.

Lots of Fun Since School Is Out.

Dear Aunt Nellie: It has been so long since I have had a letter in the Children's Corner, so I thought I would write to you again. Summer is almost here, but the weather has been so bad that it doesn't seem much like spring to me. School was out the first day of June. I have lots of fun now. My girl friend came over to Sunday school and we had a big program at 12 o'clock. After Sunday school she came home with me and had dinner. After dinner I went over to her place and we went down to the lake and after we were down to the lake, we went up on the hill and played around until it was time to go home. Then I got my hat and coat and went home. My favorite books are "Herbert Carter's Legacy" and "Black Beauty."—Lillian A. Wotton, Friday Harbor, Wash.

Five Little Kittens, Gray and Blue.

Dear Aunt Nellie: This is the first time I have writen to the Children's Corner. I am 10 years old. My birthday is October 29. I will be in the fifth grade next year. It is a mile and a half to school. I read most of the letters and I enjoy them very much. I can crochet and tat. I have two sisters and two brothers. My sisters' names are Elsie and Lillian. My brothers' names are Roy and Delbert. We live on a farm. It is about eight miles to town. We have two ponies. Their names are Ginger and Buster. We have five little kittens, three of them are gray and two are blue. We have 24 big sheep and 28 little ones—Mabel Evanson, Benge, Wash.

Thelma Has a Magpie for a Pet.

Dear Aunt Nellie: My friend, Harry Woods, takes the Washington Farmer and he gives it to us. I like to read the Children's Corner fine, so I thought I would write to you. I am 11 years old and in the sixth grade at school. I have dark hair and blue eyes. My birthday is November 20. Have I a twin? If I have I would like very much to hear from her. I have two little pets. One is a litle coltie and the other is a little magpie. The little coltie's name is Ben and the magpie's name is Mary. I have one brother and one sister. My brother's name is Rolland and my sister's name is Helen.—Thelma Gowing, Pomeroy, Wash.

Hasn't Written For a Long Time.

Dear Aunt Nellie: I have not written to the Children's Corner for a long time, but I am going to write again. I will be in the fourth grade. We have three cows, two calves, 19 horses and about 35 chickens. We have one dog and 10 cats. The calves names are Spot and Major. I live one mile from school. My smallest brother has a tricycle. There are 14 pupils in our school. We live one mile from town. I will be 10 years old December 19. My oldest brother is 21 years old. The next is 18 years old and the youngest is five years old.—Edith Crabb, Marengo, Wash.

Marie Was Promoted This Time.

Dear Aunt Nellie: This is my first time to write to the Children's Corner. I am 9 years old. My birthday is December 2. I have a little brother. His name is Howard, and his birthday is November 28. We have 80 little chickens. We have a 30-acre farm. We have six cows and six calves, one hog and two horses. We have 17 little rabbits and four old rabbits. We have a white cat. I was promoted to the fourth grade. My school was out the 11th of May. I live seven miles from school. We ride in an auto bus to school.—Marie Day, Kennewick, Wash.

Visiting Two of Her Girl Friends.

Dear Aunt Nellie: I have been reading the letters in The Washington Farmer and like them fine. I like to read the stories, too. I am 12 years old and am in the sixth grade. My birthday is the 15th of November. I have light hair and blue eyes. Have I a twin? I am visiting two of my girl friends now and am going to stay with them all week. I have eight brothers and two sisters. Both of my sisters are married. My oldest sister has eight children. My friend, Thelma, is writing you, too.—Christina Schmelzer, Pomeroy, Wash.

Raising Opions to Sell This Fall.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I like to read the letters so much. I was 12 years old the 23d of May. I hope I have a twin in the Children's Corner. I have a sister and brother. Their names are Cecile and Edwin. I live on a 20-acre farm. I am in a garden club. I am raising onions and hope to have a good crop to sell this fall. I have a little wild rabbit I am trying to raise. It is very cute.—Helen Roberts, R. F. D. 1, box 62, Grandview, Wash.

Enjoys Playing With Her Pet Rabbit.

Dear Aunt Nellie: This is the first time I have writen to the Children's Corner and I like to read the letters very much. I am in the seventh A grade at school and will be 13 years old December 4. Have I twin? I live on a fruit ranch about two miles from town. Our cherries will soon be ripe and I will help pick them. We have one cat, a dog named Teddy and 17 turkeys, two of which are mine. I enjoy playing with my pet rabbit. —Florence Spoolman, route 7, box 160, North Yakima, Wash.

Ups and Downs of a Bunch Grass Boy

(Continued from page eighteen.)

though stretching them; and presently would rise in flight, and in a few moments would be specks in the blue distance above.

With the passing of the sandhill cranes, passed the last fresh breath of spring. Long since, the curlews had gone; so had the robins, the bluebirds and the violets. The prairie grass curled and dried up, actually "cured in the bunch" as the settlers said. Before summer was over, the squirrels had thinned out, going into the ground for their long hibernation. Only the coyotes and sage hens and ground owls remained; and presently the owls disappeared, in the ground, too, I imagine, for I never saw one of them fly more than a few hundred feet from their mounds.

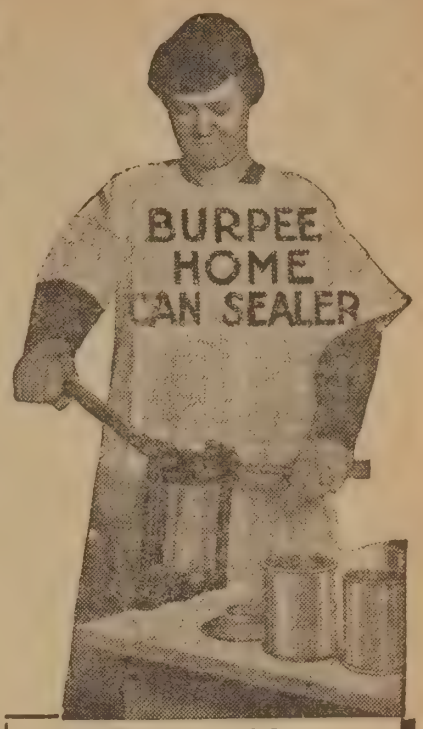
Summer and autumn was a period of slender living for the coyotes. Often I wondered what they lived upon, with the squirrels holed up, the sage hens beyond their reach on the wing, and a sparse prairie population of long-eared, long-legged jackrabbits that could almost outrun a coyote and nearly always find a badger hole to dive into if pressed too closely by a hungry coyote. I am sure that the coyotes were hungry most of the time; by their discordant, discontented yapping and snarling and howling morning and night they said very plainly that they were disgusted and cross as two sticks. Sometimes they would start yelling in the evening, and from the sounds one would judge that they were fighting among themselves, the stronger trying to devour the weaker.

Late in summer when the blue haze of approaching autumn hung heavy in the air, and the evenings and nights were getting cool the geese told me that winter was approaching. The swish of their wings as they flew by in great triangles, one triangle following another, reminded me of the whistle and rush of winter wind and the pelting of snowflakes. They were cheerful, noisy, gossipy and fat, were the geese. They came in by the thousand and settled on the stubblefields scattered through the prairie, to feed on fallen grain heads that had been left by the harvesting machines. Many will not believe me, I presume; but I swear that I have seen half of an 80-acre stubblefield black with geese. How many thousands were in these mammoth flocks you can imagine. To shoot them you had simply to dig a hole in the stubblefield, equip yourself with a goose call (a kind of whistle), and get some wooden geese, or "decoys," which you scattered about your rifle-pit. Then you waited for a flock to come your way, and when it did you blew your goose call with might and main. Generally the geese would be attracted by your call and the decoys which they mistook for their own kind; and when they were sufficiently near you cut loose with both barrels into the thickest part of the flock.

Following the geese came the snowbirds—what kind of bird I know not; but to us they were snow birds and told me that winter was right at hand. It was time to hurry in the winters' wood, tighten up the holes in the barn, and bank up the house. George Collins, one of our bachelor neighbors, surprised a flock of snowbirds that had settled on his haystack; and with shots from his double-barreled shot gun, slew nearly a score, I think. He gathered them up, put them in a sack and told me to take them home to mother and have her make a bird pie—which I did. From that day to this I have longed for another snowbird pie, and when I see a flock of snowbirds fluttering about a haystack, I have much the feeling about my mouth that a cat has as it stalks up to seize one—if it can! I can imagine the joy of the king, who, according to my nursery rhyme, was fed "four and twenty blackbirds baked in a pie." But I think the rhymster made a mistake. He should have said "four and twenty snowbirds." I never did think that blackbirds would be good in a pie.

Here is a paragraph from the next instalment of "The Ups and Downs of a Bunchgrass Boy," which will appear in the Farmer of July 26.

"Philip McIntee, cattleman and pioneer, the first mayor of Coulee City, who built his log cabin among the sagebrush and greasewood of the Grand Coulee long before Coulee City had been heard of, was typical of the old-time pioneers whom to meet was to be inspired."



Canning Clubs

All Over the Country

have adopted the Burpee Home Can Sealer, because of its simplicity and the fact that no solder, no acid and no extra equipment are required. Seals cans airtight. Absolutely sanitary.

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Put up your own fruits, vegetables, fish and meats. Save your surplus. Don't waste anything. Can everything you don't sell. Then sell the delicious canned foods at a good profit or use them yourself. Satisfaction guaranteed. Write for free book.

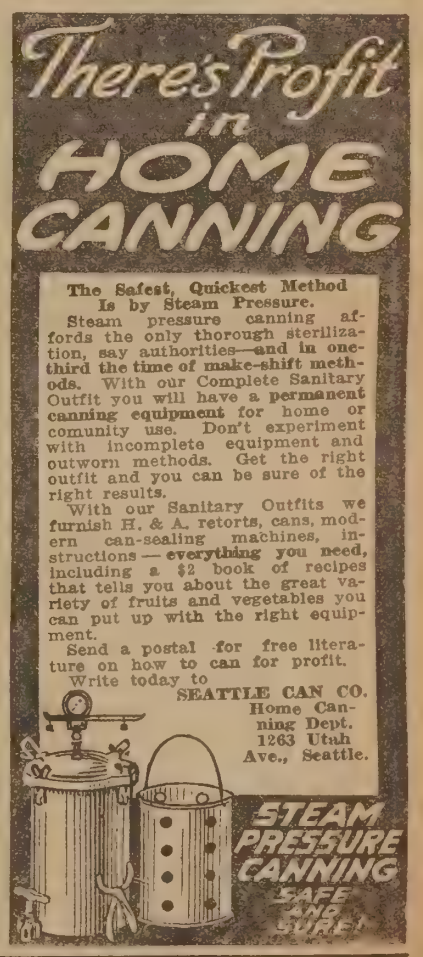
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Dear Sirs:—Please send free illustrated folder on Burpee Home Can Sealer.

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WANTED
Cascara Bark

We buy cascara bark, Oregon grape root and Oregon balsam of fir at the prevailing market. Submit samples and quantity you have for sale.

BLUMAUER-FRANK DRUG CO.
337 Everett, Portland, Oregon.

The Motor Car
On the Farm

Roy Hickman, a farmer of Colfax, Wash., makes his motor truck supply practically every hauling need on his ranch. He wouldn't think of changing his truck for horses, he says. He purchased his truck, a three and a half ton, in Spokane last fall, for hauling wheat. Mr. Hickman has a ranch eight and a half miles from Mockonema, and raised last year about 4000 sacks of wheat, which he hauled off in only 21 days, averaging four round trips per day, hauling from 80 to 85 sacks of wheat a load. His wheat was heavy, making an average load of about 11,900 pounds. With the truck he was able to haul over 320 sacks a day. Under the old regime with a four-horse team he could only haul 45 sacks on one day, Mr. Hickman says.

Mr. Hickman has another ranch five and a half miles from Almota. Almota is on the Snake river and there is a rise of 1200 feet in the road in the first three miles. This haul used to require all day with a good heavy four-horse team. With his truck he made on an average of four trips per day with an average gas consumption of 14 gallons per day, or slightly over three miles per gallon.

On several occasions Hickman has hauled a load of 30 hogs from his home into Colfax, a distance of 15 miles, in one and a half hours.

With the long frame put on this model truck he can profitably use it for hauling hay, having a capacity for from three to four tons. He has also used the truck for hauling barley, sand and lumber.

Good Roads Pay Dividends.

There is a farming community in Virginia, around the town of Fredericksburg, that had a hunch that good roads pay dividends. The farm products exported from this town by rail at the time the road improvement work started amounted to 49,000 tons annually. Two years after the roads had been put into good shape the tonnage of farm products shipped from Fredericksburg had increased to 71,000 tons, a growth of more than 45 per cent.

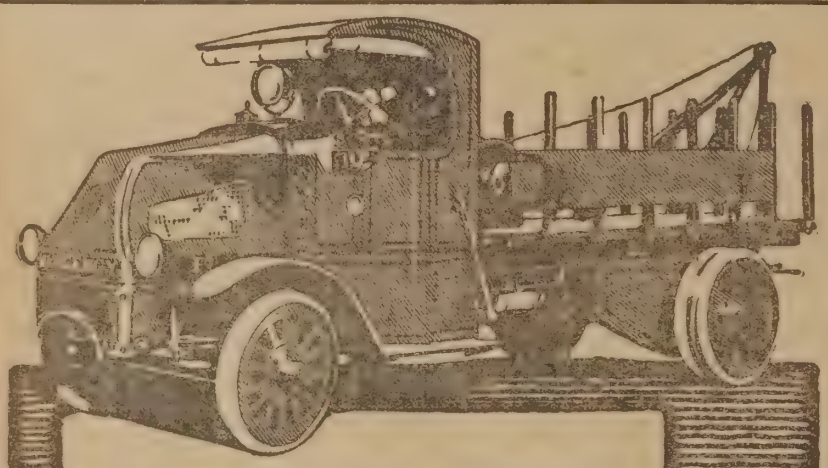
During the same time the cost of hauling a ton load a distance of one mile decreased from 20 cents to 12 cents. The total annual saving to the farmers of the county of which Fredericksburg is the county seat has been estimated at $41,000 annually.

Such a saving of money by means of good roads perhaps seems a trifle fictitious to those familiar only with driving teams. Except when roads are at their worst, a team seems to travel about as well on a dirt road as on an improved one. But the farmer who owns a motor car quickly observes from the position of the throttle and the amount of gasoline used that improved roads require much less power in proportion to the load. In bad weather the difference is even more obvious.

Thus, entirely aside from the pleasure value of good roads and the ability to use them every day in the year, they reduce the cost of all kinds of travel and "are just as real a source of profit as the increase in the price of wheat."

Farm Tractors Loaned.

Believing that, through the use of farm tractors and tillage implements, the agricultural products of New York can be largely increased, the state food supply commission has purchased 40 tractors with plow and harrow attachments. The tractors are to be used to increase the number of acres of land plowed and tilled during the season of 1917 in addition to the number of acres that would otherwise be plowed and tilled, and to demonstrate the feasibility of such aid by the state. The tractors are loaned to a county farm bureau association, a county home defense committee, or some responsible farmers' organization. The commission depends on its county representative to satisfy himself that all the conditions of the contract are fulfilled, that the increased acreage is available, and that the land is adapted to the use of a tractor.



FARM LOAN MONEY FOR AUTO TRUCKS

"If an automobile or truck is so constructed and equipped as to be a piece of farm machinery, and if it is used in such a way as to take the place of some other necessary piece of farm equipment, I believe it comes within the field of legitimate purchases with farm loan money."—President D. G. O'Shea, Spokane Farm Loan bank.

Here is definite encouragement from the government for the grain grower and the general farmer, to provide himself with the greatest aid to economical farming that modern invention and mechanics have produced—the Truck.

MACK TRUCKS

stand for all that is strongest, most enduring, most satisfactory. In buying a truck, either with your own money or with Farm Loan money, you are making an investment in efficiency. Use the coupon to get the latest literature on MACK TRUCKS; they are truck efficiency 100 per cent.

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Mack Trucks.
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T. G. YOUNG, Distributor Mack Trucks,
1201 Sprague Ave., Spokane.
1000 Pike Street, Seattle.
Please send me your latest literature on Mack Trucks. I may be interested in a.....ton truck about.....(date)
Name .....
Address .....

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Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

HELP WANTED—MALE 3

HAWTHORNE AUTO SCHOOL,
445 Hawthorne ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

SITUATION WANTED—MALE 21

FIRST-CLASS GRAIN MAN, WITH LARGE buying, selling and office experience, wishes position as manager, assistant, or traveling representative; high-class references and bond furnished. Address K 8, Spokesman-Review.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free.
BEHNKE-WALKER BUSINESS COLLEGE,
167 FOURTH ST., PORTLAND, ORE.

FRESH FOOD PRODUCTS 56

MILD CURED BLACK COD BELLIES, the best part of the fish; a real delicatessen; packed in pails, 10 pounds net weight; shipped by parcel post; within 100 miles of Seattle, $1.15; 200 miles, $1.25, 300 or over, $1.40. Superior Fish Company, 2615 Railroad ave., Seattle, Wash.

MISCELLANEOUS 57

PUBLIC LANDS AND MINING MATTERS a specialty. Twenty years' experience in connection with the administration of the public land laws and the adjudication of questions arising thereunder. Best of references. James I. Parker, Southern Building, Washington, D. C.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
Manufactured in our own mill and sold at factory prices. We ship to any one, anywhere. One price to everybody. Prompt shipments. Safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request.

5 cross panel doors, 2 ft. 6 in. by 6 ft. 6 in.	$1.44
Craftsman bungalow doors	1.90
One panel, 3-ply veneer doors	2.00
French doors, 15 lights	3.00
Screen doors, 2 ft. 8 in. by 6 ft. 9 in., galvanized wire	1.50
Standard two light windows, up from.. 8x10, 4-light sash	1.13 .52
16x16x26 spruce flour bins	1.50
Drain boards, 20x24	.75
Williams' "Gold Seal" mixed paint, gal.	2.50

Frames, mouldings, builders' hardware, mill work.
O. B. WILLIAMS CO.
1943 1st Ave. So. Seattle, Wash.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MACHINERY—FOR SALE 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS,
Carried in stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave. So., Seattle. Write for catalog.

AUTOMOBILE ENGINES
are great for tractors. If you are building a tractor, see us for a good engine at a reasonable price.
AUTO WRECKING CO.
89-91 North Broadway, Portland, Ore.

FOR SALE — STEAM STATIONARY threshing outfit, very cheap. G. H. Summers, 121 So. Lincoln, Spokane, Wash.

AUTOMOBILES 114

AUTO TOPS, BUILT TO ORDER, AND repaired. N. Reeder, Dept. F, Spokane, Wn.

STOVE REPAIRING 126

MYER S. RUBENS STOVE & FURNACE Repair Works; welding. W1009 1st., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

PATENTS ON INVENTIONS
secured that protect.
James I. Parker, Solicitor
of Patents, Southern Building,
Washington, D. C.

POULTRY 174

FOR SALE—WHITE LEGHORN HENS, $9 a doz., Aug. 1st delivery; egg record, Oct. 1st to July 1st, 145 eggs. C. J. Hageman, Chewelah, Wash.

HAY FOR SALE. 200

ALFALFA HAY, BALED OR CHOPPED. Direct from producer.
C. C. MASON, HERMISTON, ORE.

RUG and CARPET WEAVING 270

YOUR OLD CARPETS AND RUGS remade into beautiful FLUFF RUGS at small cost. Send for booklet and prices. Nustyle Rug Co., Sellwood, Portland, Ore.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 420

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 52 Bernard, Spokane.

BUSINESS OPPORTUNITIES 516

FOR SALE—ONLY EXCLUSIVE MILLInery and ladies' waist shop in progressive mining town; very best location; splendid opportunity; $400 cash will buy it. Owner must go east immediately. Mrs. E. Ribner, Cle Elum, Wash.

BE A DEMONSTRATOR, AND AT THE same time make big money. Write Kamiah Asbestos Mfg. Co., Kamiah, Idaho.

NOTICES 534

INDIAN WARS PENSIONS—SOLDIERS of the old Indian wars, and their widows may now obtain pensions. Recent legislation. Write James I. Parker, Southern Building, Washington, D. C.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

HOMEST'DS, RELINQ'M'TS 642

HOMESTEADS FOR SALE.
Young man, file yours before enlisting, as army service counts. Wyoming Land Co., Douglas, Wyo.

FARM LANDS—FOR SALE 651

1440 A.—SOUTH OF CONNELL, ALL good land; can be farmed with tractor; $21 per acre.
1749 A.—Wheat and stock ranch; 600 A. farmed; $16 per acre.
6600 A.—A fine stock proposition; 300 A. bottom land; $13 per acre.
640 A.—Level land; 320 A. wheat; all crop, stock and machinery goes at $46,000.
1480 A.—This place is one to three miles from town; 800 A. in wheat, balance plowed; price with all crop and plowing, $60,000.
600 A.—3 mi. from town; 265 A. crops price with crop, $22,000.
1280 A.—2 mi. from town; 400 A. in crop; price with all crops and plowing, $50,000.
Chas. S. Bassett, Washtucna, Wash.

A FEW GOOD FARMS IN A SECTION OF almost ideal climate, southern Oregon. These farms are on an excellent all-year auto road and will yield 7 tons alfalfa per acre and corn in proportion. River bottom land; natural drainage; plenty of outrange and good water. All within a few miles of railroad and in a paradise of good hunting and fishing. Write me at once for prices. JOHN C. WHITE, RIDDLE, ORE.

FOR SALE—35-ACRE RANCH; RICH SOIL; 12 acres in grain, balance in clover, potatoes, roots and pasture; good house and barn and orchard; very reasonable. A. Halma, Oak Harbor, Wn. R. 2, Box 43.

BIG MONEY RAISING VEGETABLES and chickens, greenhouse and 160 acres of land, near Spokane, cost $15,000, offered at $4500; easy terms.
PENNSYLVANIA MORTGAGE INV. CO.
SPOKANE, WASHINGTON.

80 A. OF GOOD CHEAP, ROUGH, IRrigated land for sale; unimproved; worth $2400; make an offer.
80 A., partly imp.; crop; $3600; 5 mi. city, Bend, Ore.; (owner.) E., Box 5, Tumalo, Ore. Please act quickly; a good prop.; cash.

CENTRAL OREGON STOCK RANCHES, farms and city property; can furnish anything from a city lot to a $40,000 ranch. Write your wants.
T. J. M. Riggs, Prineville, Ore.

TO EXCHANGE—REAL EST. 705

MONTANA LAND TRADES.
563 acres, nearly all irrigated, mostly in crop; take land in Spokane country as part payment. Call or write for particulars. Hege & Watkins Co., 717 Paulsen bldg., Spokane, Wash.

Worth While Offers

In the want ads of this paper you will find frequent attractive offers.

Grain and Produce Markets

Chicago Grain.

CHICAGO, July 14.—Corn averaged higher in value today, despite some setbacks due largely to bearish inferences regarding the outlook for peace. Scarcity of supplies available for immediate use formed the chief element of strength. The market closed unsettled at the same as yesterday's finish to 7-8c up, with $1.59 1-4 for September and $1.12 1-2 for December. Wheat gained 1c net, closing at $.04 for July and $1.95 1-2 for September. Oats were unchanged to 3-8@1-2c higher and provisions varying from 5c decline to a rise of 25c.

Business in wheat remained at nearly the zero stage, awaiting congressional action at Washington as to the food control bill. Meanwhile prices hardened a little, influenced perhaps by current bullish crop reports from Canada and North Dakota and by a government decree lifting quotations in France to $3.05 a bushel.

Oats duplicated the action of corn. Some reduction in the visible supply of oats was expected to be shown in the weekly statement on Monday. Demand for lard was stimulated by peace talk.

Chicago Futures.

Wheat—	Open.	High.	Low.	Close.
July	2.04	.....	.....	2.04
Sept.	1.95	1.95½	1.95	1.95½
Corn—				
Sept.	1.58½	1.59⅝	1.58½	1.59¼
December.	1.12	1.13¾	1.11⅛	1.12¼
Oats—				
July	.68¼	.68⅜	.68	.68⅛
Sept.	.55	.55⅝	.55	.55⅝
Pork—				
July	.....	.....	.....	40.65
Sept.	40.00	40.22	40.00	40.12
Lard—				
July	20.82	20.92	20.82	20.92
Sept.	21.05	21.17	20.02	20.17
Ribs—				
July	.....	.....	.....	21.62
Sept.	21.70	21.77	21.67	21.77

Cash Quotations.

CHICAGO, July 14.—Wheat—No. 2 and No. 3 red and No. 2 and No. 3 hard, nominal.

Corn—No. 2 yellow, $1.94@1.95; No. 3 yellow, $1.94@1.95; No. 4 yellow, nominal.

Oats—No. 3 white, 74 3-4@75 1-4c; standard, 75 1-4@75 3-4c.

Rye—Nominal.

Barley—$1.20@1.60.

Hay—Timothy, $4@7.50; clover, $12@17.

Pacific Northwest Grain.

SEATTLE, July 14.—Wheat—Bluestem, $2.10; turkey red, $2.10; fortyfold, $2.08; club, $2.07; fife, $2.07; red Russian, $2.06.

Barley—$41 per ton.

Yesterday's car receipts—Wheat, 2; hay, 1; flour, 4.

TACOMA, July 14.—Wheat—Bluestem, $2.10; fortyfold, $2.08; club, $2.07; red Russian, $2.06.

Car receipts—Wheat, 1; hay, 1.

PORTLAND, Ore., July 14.—Wheat—No quotations.

Today's car receipts—Wheat, 1; oats, 1.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots for the fiscal year beginning July 1, up to Saturday night, for 1917-18 and 1916-17, were as follws:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1917-18	32	40	3	29
1916-17	138	27	1	47
Portland—				
1917-18	51	33	7	35
1916-17	78	73	7	23
Total—				
1917-18	83	73	10	64
1916-17	216	100	8	70

Seattle Market.

SEATTLE, July 14.—The new potato market is drawing the attention of both brokers and jobbers this week. The quality of Washington grown stock has not been desirable, although there is a brisk demand at going prices and an excellent market here for Kennewicks and the spuds fom other sections provided they are graded and culled for the shipping trade.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transaction by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o.b. Seattle:

Eggs—Local, 34@35c per dozen.

Poultry—Live hens, fat, over 4 lbs., 18c per lb.; 2 lbs. and under, 13@16c; old roosters, 12c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 14c per lb.; broilers, live, 15@17c per lb.

Butterfat—44c, per lb.; dairy butter, 38@31c.

Beef—Buying price; Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 13@14 1-2c per lb.; do heavy, 12&13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 30c per lb.; green hides, 17c per lb.; salted bulls, 16c per lb.; dry hides (short trim), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 13c per lb.; dry butcher full wool sheep pelts, 38@42c per lb.

Live Stock Quotations.

At Omaha.

OMAHA, July 14.—Hogs—Receipts, 9500; slow, 5@10c lower. Heavy, $14.90@15.50; mixed, $14.75@15; light, $14.60@15.10; pigs, $12.50@14.50; bulk of sales, $14.75@15.10.

Cattle—Receipts, 800; steady. Native steers, $9.65@13.65; cows and heifers, $7.50@10.50; western steers, $8.50@11.50; Texas steers, $8@10; cows and heifers, $7@9; canners, $5.25@7.25; stockers and feeders, $6.50@9.50; calves, $8@14, bulls, stags, etc., $6@9.50.

Sheep—Receipts, 100. Steady. Yearlings, $10.50@11.50; wethers, $9@10.50; ewes, $8@8.75; lambs, $14.60@15.60.

At Chicago.

CHICAGO, July 14.—Unevenness of prices was a feature of the hog market today, owing to activity of shippers and backwardness of killers. Nearly all of the cattle and sheep that arrived went direct to packers.

Hogs—Receipts, 8000. Unsettled, 5c off to 5c above yesterday's average. Bulk, $14.75@15.75; light, $14.40@15.60; mixed, $14.05@15.80; heavy, $14.25@15.85; rough, $14.25@14.45; pigs, $11.25@14.30.

Cattle—Receipts, 700. Steady. Native beef cattle, $8.30@14; stockers and feeders, $6.25@9.25; cows and heifers, $5.40@11.90; calves, $9.50@14.50.

Sheep—Receipts, 700. Steady. Wethers, $7.75@11; lambs, $10@15.75.

At Seattle.

SEATTLE, July 14.—Receipts, none. Market steady on cattle, sheep and hogs at yesterday's quotations.

At Portland.

PORTLAND, July 14.—Hogs, steady; receipts, 154.

Cattle, steady; receipts, 97.

Sheep, steady; receipts, 4.

Spokane Stock Yards Saturday.

Hogs—Receipts 286, market steady. Bulk of sales, $15.50@15.80. Prime heavy packing, $15.70@15.80; prime light packing, $15.55@15.70; smooth heavies, $14.55@14.80; pigs, $13.50@14.50; stockers, $12.75@13.75.

Cattle—Receipts, 66; market slow. Prime light steers, $8.75@9; prime heavy steers, $8.50@9; good steers, $7.25@8; ordinary to fair, $6@6.75; prime cows, $7@7.50; good cows, $6.25@6.75; common cows, $5@6; best heifers, $7.50@8; bulls, $5@7; calves, $7@8.50; stockers and feeders, $5.50@7.

Sheep—Receipts, none; market steady. Prime spring lambs, $12.50@13; prime wethers, $9@10; prime yearlings, $9.50@10.25; prime mutton ewes, $8@9.25.

Portland Market.

PORTLAND, Ore., July 16.—The butter market has become firmer since the flush of the season passed and prints are now quoted by city creameries one cent higher.

Eggs are also advancing as receipts have fallen below local requirements. A few dealers have begun to draw stocks out of storage.

Poultry and dressed meats are very firm with limited receipts and a good average demand.

An advance in hides was expected this week, but failed to materialize as the eastern markets did not keep up their forward pace.

Wool buying has slowed down, owing to the check to the advance in the east.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to prodcers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $45 per ton.

Corn—Whole, $78; cracked, $79 per ton.

Millstuffs—Bran, $32 per ton; shorts, $35.

Barley—No. 1 feed, $42; brewing, nominal; rolled, $49.

Hay—Buying prices: Timothy, eastern Oregon, $26; alfalfa, $18; grain, $16.

July Crop Report.

A summary of the July crop report for the state of Washington and for the United States, as compiled by the bureau of crop estimates (and transmitted through the weather bureau), U. S. department of agriculture, is as follows:

Winter Wheat—State: July 1 forecast, 11,300,000 bushels; production last year (final estimate), 18,285,000 bushels. United States: July 1 forecast, 402,000,000 bushels; production last year (final estimate), 481,744,000 bushels.

Spring Wheat—State: July 1 forecast, 27,700,000 bushels; production last year (final estimate), 19,350,000 bushels. United States: July 1 forecast, 276,000,000; production last year (final estimate), 158,142,000 bushels.

Oats—State: July 1 forecast, 14,100,000 bushels; production last year (final estimate), 14,300,000 bushels. United States; July 1 forecase, $1,450,000,000 bushels; production last year (final estimate), 1,251,992,000 bushels.

Apples (Agracultural Crop)—State: July 1 forecast, 2,700,000 barrels of three bushels; production last year (final estimate), 3,225,000 barrels. United States: July 1 forecast, 66,800,000 barrels of three bushels; production last year (final estimate), 67,415,000 barrels.

Barley—State: July 1 forecast, 6,800,000 bushels; production last year (final estimate), 6,814,000 bushels. United States: July 1 forecast, 214,000,000 bushels; production last year (final estimate), 180,927,000 bushels.

Potatoes—State: July 1 forecast, 11,510,000 bushels; production last year (final estimate), 9,900,000 bushels. United States: July 1 forecast, 452,000,000 bushels; production last year (final estimate), 285,437,000 bushels.

All Hay—State: July 1 forecast, 1,950,000 tons; production last year (final estimate), 2,048,000 tons. United States: July 1 forecast, 103,000,000 tons; production last year (final estimate), 109,786,000 tons.

Prices—The first price given below is the average on July 1 this year, and the second the average on July 1 last year. State: Wheat, 219 and 79 cents per bushel. Corn, 150 and 97. Oats, 80 and 40. Potatoes, 218 and 81. Hay, $18.80 and $15.20 per ton. Eggs, 33 and 23 cents per dozen. United States: Wheat, 220.1 and 93.0 cents per bushel. Corn, 164.6 and 75.4 cents. Oats, 68.9 and 40.4 cents. Potatoes, 247.9 and 102.3 cents. Hay, $14.60 and $12.09 per ton. Cotton, 24.7 and 12.5 cents per pound. Eggs, 24.8 and 19.7 cents per dozen.

Wool Market.

BOSTON, July 13.—The Commercial Bulletin will say tomorrow:

Another quiet week is reported through the wool trade, although on the whole the market appears fairly buoyant, believing that it is the intention of the government to interfere in the private conduct of the business just as little as possible consistent with the maintenanme of the national defense. A few houses report a fair trade at about former rates. The mills are well engaged on old business, but find new orders rather slow. The west is less active and in certain sections hardly as strong as a week ago.

Quote—Scoured basis:

Texas—Fine, 12 months, $1.70@1.75; fine, 8 months, $1.45@1.50.

California—Northern, $1.70@1.75; middle county, $1.40@1.45; southern, $1.15@1.20.

Oregon—Eastern No. 1, staple, $1.75; eastern clothing, $1.50@1.55; valley, No. 1, $1.45@1.50.

Territory—Fine staple, $1.75@1.77½; half blood combing, $1.45@1.50; three-eighths blood combing, $1.30@1.35; fine clothing, $1.55@1.65; fine medium clothing, $1.40@1.50.

Pulled—Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.45@1.50.

Butter and Eggs.

SAN FRANCISCO, July 14.—Butter fresh extra, 37c; prime firsts, 36 1-2.

Eggs—Fresh extras, 34c; fresh firsts, 33 1-2c; fresh extra pullets, 31c; extra firsts pullets, 30 1-2c.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—$3 cwt; new potatoes, 3½c lb.; new local potatoes, $2.50@2.75 cwt.

Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; N. Y. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Leaf, 40c lb; Better Butter, 40c lb; Attalia, 40c lb; Diadem, 40c lb; Hazelwood, 40c lb; Solid Pack, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25½c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 29c lb; domestic Swiss, 35c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $10 case.

Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.

Dress Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

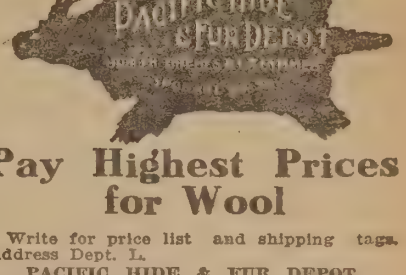
Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

FIRST BARLEY AT $35 A TON

WALLA WALLA, July 13.—The first Walla Walla barley appeared on the market today, bringing slightly above $35 a ton. It was raised on the J. E. Short farm near Lowden on irrigated land and yielded an average of better than 70 bushels to the acre.

Dement Brothers Milling company purchased this barley, which was the first grain threshed in the valley this year.



Pay Highest Prices for Wool

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.



BAGS

New and Second-Hand

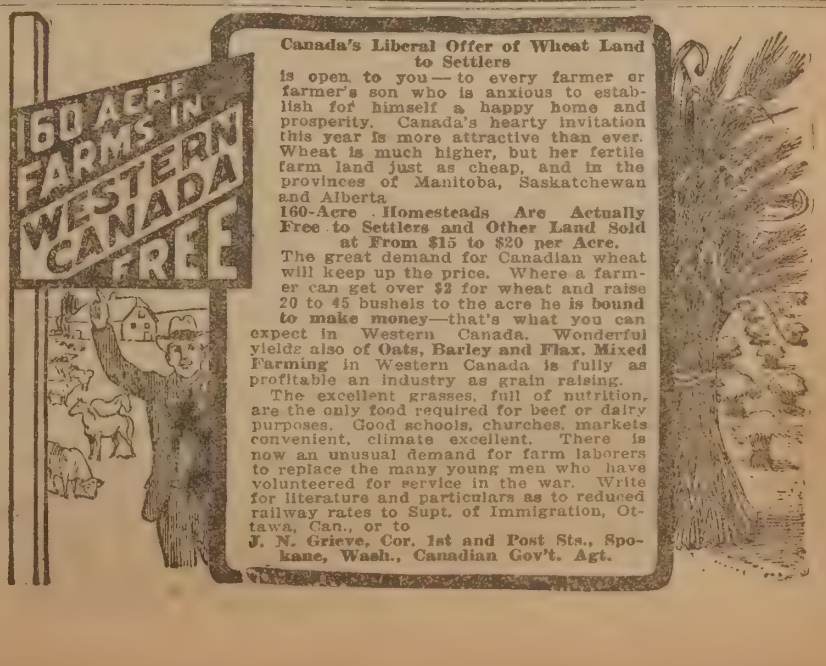
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The Bags for Service.
Money Savers.

Winkleman Bag & Burlap Co.

Tacoma, Wash. 171 Front St., Portland, Ore.



Canada's Liberal Offer of Wheat Land to Settlers

is open to you—to every farmer or farmer's son who is anxious to establish for himself a happy home and prosperity. Canada's hearty invitation this year is more attractive than ever. Wheat is much higher, but her fertile farm land just as cheap, and in the provinces of Manitoba, Saskatchewan and Alberta

160-Acre Homesteads Are Actually Free to Settlers and Other Land Sold at From $15 to $20 per Acre.

The great demand for Canadian wheat will keep up the price. Where a farmer can get over $2 for wheat and raise 20 to 45 bushels to the acre he is bound *to make money*—that's what you can expect in Western Canada. Wonderful yields also of **Oats, Barley and Flax. Mixed Farming** in Western Canada is fully as profitable an industry as grain raising.

The excellent grasses, full of nutrition, are the only food required for beef or dairy purposes. Good schools, churches, markets convenient, climate excellent. There is now an unusual demand for farm laborers to replace the many young men who have volunteered for service in the war. Write for literature and particulars as to reduced railway rates to Supt. of Immigration, Ottawa, Can., or to

J. N. Grieve, Cor. 1st and Post Sts., Spokane, Wash., Canadian Gov't. Agt.

News for Breeders

Corn Growing Tests.

County Agriculturist O. T. McWhorter of Clallam and Jefferson counties, Wash., reports that following the corn growing tests of last year arrangements have been made with E. B. Stookey for the western Washington experiment station to make further tests with Minnesota 13 field corn, grown in five different localities in the northwest.

One farmer at Dungeness has 35 acres planted and will plant 10 acres more. Seed used was navy pea type and most of it home grown. The Port Townsend high school boys have all told about four acres planted. Many farmers are putting in small patches for home use.

Much more barley, oats and some wheat are and have been planted this season than last year. Thin meadows have been plowed for this purpose. Farmers, a large percentage of them, are treating the seed grain with formaldehyde for "smut" and are trying to secure high grade seed. Last year they did not take so much interest in it. No census has been taken on increased acreage yet.

Shorthorn Notes.

A. R. McDonald of Cambridge, Idaho., who owns a good Shorthorn herd from foundation stock purchased from McCroskey & Sons, Fishtrap, Wash., had the misfortune recently to lose his herd bull, Snowball. Snowball, pure white, was a grandson of the great Golden Goods. He had both scale and quality and his calves were good. Mr. McDonald runs his cattle entirely on his own enclosures, but on native grass.

To Get a Flag Write Soon



With the declaration of a state of war our first supply of flags was quickly exhausted and we have had great difficulty in securing more.

We have at last secured a limited number of flags which we offer on the following terms:

OFFER NO. 1

3x5 flag together with The Washington Farmer for three years. Both for $2.50.

OFFER NO 2.

4x6 flag together with The Washington Farmer for three years. Both for $3.00.

We would suggest prompt action; orders will be filled as received.

The Washington Farmer, Review Bldg., Spokane.

Enclosed find $.... (your personal check, stamps or money order), for which send me American flag, as advertised, and The Washington Farmer for 3 years.

Size of flag .....

Name ....

Address ....

....

St. Mawes Beauty.



This is a picture of St. Mawes Beauty, bred and raised by Ed Cary of Oregon. She was sold recently for $2500 to Airedale farm of Bangor, Maine. St. Mawes Beauty at 1 year and 11 months gave 10,239 pounds of milk and 690 pounds of butter. At the age of three years she gave 12,515 pounds of milk and 379 pounds of butter.

Succeess With Herefords

L. L. Young of Nampa, Idaho, is an example of a man who came west with large ideas and made them win in the face of adverse circumstances. He bred Herefords in Nebraska for 25 years and came to Nampa, Idaho, eight years ago and has continued breeding Herefords. He now has 200 head in the herd and has sold about $15,000 of registered Herefords since last fall. Oregon takes about 40 head per annum and he has good sales in both southern and northern Idaho. One car went to Montana, one to Wyoming and one to eastern Washington. Bulls that have been used and are still in service include Beau Mischievous, by Beau Mystic; Bonnie Lad, by Bonnie Brae, 24th; Imp. Harold, by Monarch, and Beau Gallatin, 45th, by Beau Gallatin 2d, head of the state farm in Montana. Mr. Young expects cattle prices to go still higher and the great demand for breeding stock to continue.

While Mr. Young's Herefords are well grown, he grows them on pastures and feeds hay in winter. He feeds no grain except a little to weaned calves in bad weather. Mr. Young does not claim any more for his Herefords than any others, but does claim they are the best breed of cattle in the world for the northwest; that they mature better on hay and pasture with less feed and at a younger age than any other breed; that they bring a larger percentage of calves, with fewer culls, and finish at a younger age; that the cows have the best motherly instinct of any of the beef breeds; that they are the best rustlers, are the most contented, and that they cross better with the dairy breeds for veal than any other beef breed.

WAR DEMANDS HORSES.
Supply Must Be Equal to Need.

By RICHARD HAMILTON BYRD.

The European war has drawn heavily on saddle and draft animals of the United States. According to a compilation the number of horses exported since the beginning of August, 1914. is 920,000 and of mules 330,000. The horses were valued at $194,000,000 and the mules at $66,000,000.

Statistics show about 22,000,000 horses still in this country, which is about one-fifth of all in the world. The average valuation of the horses exported in the first year was $221 per head, in the second, $205, and in the third, $214. The average price of the mules in the first year was $193, in the second, $205, and in the third, $206 per head.

The department of agriculture in its report on the number and value of farm animals shows the average value of all horses on farms January 1, 1917, at $103 per head, against $109 per head on January 1, 1914. The loss of nearly a million of the best horses of the country, however, had a perceptible effect upon the total value of farm horses in the country, since the department of agriculture estimates of the value of all farm horses in the country fell from $2,292,000,000 in 1914 to $2,175,000,000 in 1917.

The fact that this is "not a cavalry war," and that automobiles, motorcycles, flying machines, and observation balloons are performing much of the service formerly done by the horse in war time, does not seem to have checked the demand for American saddle and draft animals.

More Silos in Grant County.

County Agriculturist H. W. Reaugh has been interesting the farmers of Grant county, Washington, in silos for next year's crop. The prospects are that several silos will be put up in the vicinity of Neppel.

Dispersal Sale of Cattle, Hogs and Sheep

At Grandview, Wash.

July 25th, 1917

50 head of Register of Merit Jerseys.
50 head registered O. I. C. hogs.
200 head of January lambs.

One herd bull, Hermit's Majesty, No. 146,981, whose close ancestors are 700 to 900 pound cows.

There are a few of the blood lines we offer: Raleigh's Honeymoon Boy, whose sisters are 600 to 700 pound cows.

Toppers Sunbeam, No. 238741, whose sisters are 600 to 700 pound cows.

Baby Buffs Ellen, No. 220,530, who herself has a record of 630 pounds in one year.

We offer the best blood lines in the Jersey breed, none excepted.

Stock tuberculine tested. Cow testing records will be open for inspection.

One Empire Double-Unit Mechanical milker.

Terms Nov. 1, 1917. 3 per cent discount for cash.

AUCTIONEERS:

Geo. Gochnour, Sunnyside, Wash. — **J. W. Hughes, Forest Grove, Ore.**

C. C. WINGER, Owner, Grandview, Wn.

A. W. HAWN, Clerk, Grandview, Wash.
Send for Catalogues.

LUNCH WILL BE SERVED BY THE LADIES OF THE RED CROSS.

All trains will be met at Grandview and Mabton, Wash., on the day of the sale.

Shorthorn Cows and Heifers for Sale by McCROSKEY & SONS

Sprague, Wash.

Young cows with calves at foot and rebred.
One and two year old heifers, bred and open.
Can supply one or a carload. Large numbers to select from.
Can also supply outstanding young bulls unrelated to these females.
Write or wire when coming.

N. P. Station, Sprague. — **O.-W. Station, Croskey.**

FOR SALE— Percherons, Shire Stallions and Mares

Jerico 110196, a dark iron gray Percheron stallion, 3 yrs., wt. 1850; sire Jubo 81251 by Coco, dam, Bird 81977 by Brilliant Jr. His 1st, 2d and 3d dams are close descendants of Brilliant. Winnings at Northwest Live Stock show, Lewiston, as suckling colt, first in class and Percheron society gold medal as best stallion under three years, owned and bred by exhibitor. As 2 yr. old, 1st in class and champion under 3 years, three Society medals, best under three years owned and bred by exhibitor, grand champion and best stallion owned and bred by exhibitor and in open class reserve grand champion.

Aaron 117566, a 2-yr.-old half-brother, dark bay, wt. 1550. Sire Salvador 51340 by Calypso. Equally good, (some say better). He has never been shown.

Callie 88642, a dark gray mare, 6 yrs. old, wt. 1750. Sire Apollon 26130. She is very strong in Brilliant blood; has mare colt by Halicite.

Lady Grace II., 15452, a 3-yr.-old Shire, bay, white face and white hind legs. wt. 1650. Sire Imp. Toga VII. 9288; dam Bay Lily 13577, by Imp. Greenham Champion.

All first class in every respect, mostly our own breeding, reserved for our own special use.

On account of the death of one of the partners, must sell to close estate.

FOLLETT & SCHOOLER, — **Genesee, Idaho.**

KNOLLIN RAMS==BETTER LAMBS

Largest purebred Shropshire flock in U. S.
World famous—thirty years standing.
Hundreds of prizes won.

Address A. J. KNOLLIN, Pocatello, Idaho

A FEW HIGH PRODUCING COWS FOR SALE

We held the highest herd average in the Marion County Cow Testing Assn., for the past 7 months; our herd average was over 60 lbs. butter per cow, per month, for 7 months. We are also offering a young bull ready for light service from our heaviest producing dam. Write for pedigree and price.

MELLOW LAWN FARM. — **F. A. Doerfler, Silverton, Ore.**

HIDES

WOOL, PELTS, MOHAIR, CASCARA BARK

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

THE H. F. NORTON CO.

53-55 No. Front St., PORTLAND, ORE. — **206 3d Ave. So., SEATTLE, WASH.**

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 30. JULY 26, 1917. * * WEEKLY.

Organization of New National Army Begins

Stupendous Lottery Selects Those Who Will First Be Called Into Country's Service

The event affecting more people in a vitally personal way than any other one event in the history of the United States occurred at the national capital, Washington, D. C., last Friday, July 20, when a blindfolded man drew from a glass jar, one at a time, the capsules containing the numbers of the 10,000,000 young men who registered for their country's service last month.

The drawing determined the order in which these ten millions will be called before the examining boards preparatory to drafting into the ranks of the regular army, the national guard or the first half-million unit of the great new national army.

Six hundred and eighty-seven thousand men are to be called to fill the regular army and national guard vacancies and make up the first new army unit. Government officials calculate that probably half of those called for examination will be exempted because of physical deficiencies, industrial occupations or family dependents. Therefore it is virtually certain that the first 1,350,000 men on the great numbered roll will be called before the examination boards before the 687,000 are accepted.

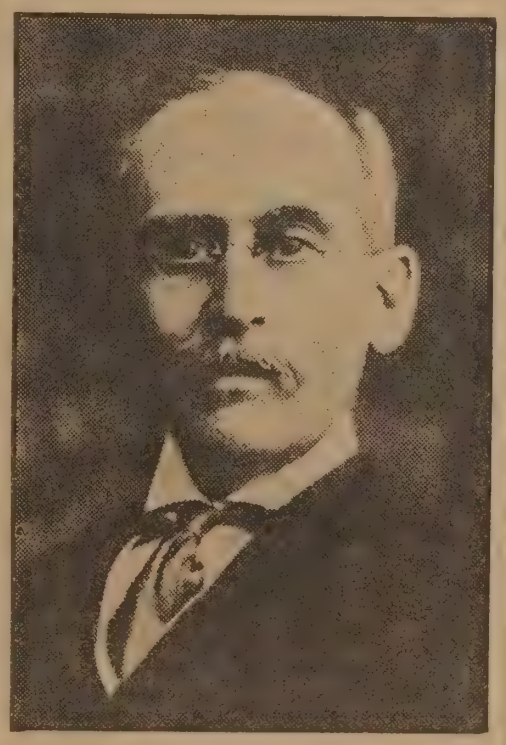
The Stupendous Lottery.

For weeks the officials at Washington city have been working under the leadership of Provost Marshal General Enoch H. Crowder to provide a democratic, fair and accurate way to make the selections of the men that are to be called. The method in brief follows:

The nation was divided into some 4000 registration districts for registration on June 5. Every man between the ages of 21 and 31 years was required to register. Later the officials in each registration district throughout the country numbered every man who registered in that district. The result was that, since there were about 4000 registration districts, there were about 4000 men in the United States bearing No. 1, about 4000 bearing No. 2, about 4000 bearing No. 3, and so on.

Some of the districts were larger, one containing more than 10,000 registered men, and therefore making it necessary that more than 10,000 numbers be drawn to include all of them.

Preparatory to the actual drawing at Washington city, officials printed each



General Enoch H. Crowder, under whose leadership the plans for the great army drawing were prepared and carried out.

number from 1 to 10,500 on small slips of paper. Each number was rolled and placed inside a black capsule about three-quarters of an inch long. The entire 10,500 capsules were then put into a large glass jar about a foot in diameter and a foot and a half high.

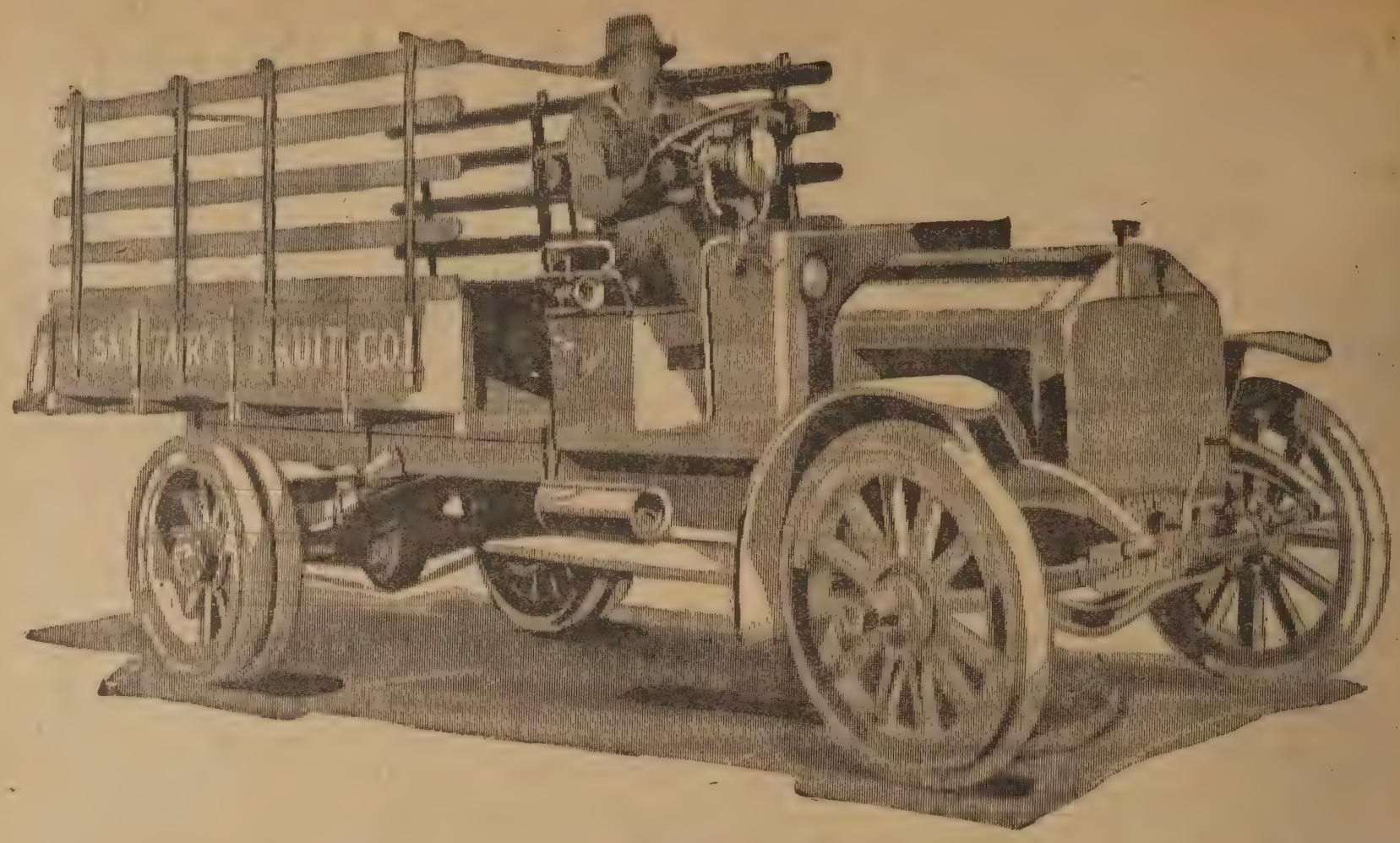
Friday morning, July 20, the official force having the drawing in charge gathered in a large room in the senate building at Washington. The glass jar was brought in and placed on a table. The seal was broken, and a blindfolded man began his day's task of stirring the jar of capsules with a spoon to add to the element of chance in the lottery. In honor of his position, Secretary Newton D. Baker of the war department, blindfolded, reached his hand into the jar and drew out the first capsule. It was No. 258, and its drawing drafted into the service of the United States nearly 4000 men, one in every registration district in the United States which registered that many men.

Other noted officials, including Provost Marshal Crowder, were blindfolded and each allowed to draw one capsule. Then began the routine work of the day.

Drawing Is Guarded.

The blindfolded man continued to stir the capsules in the jar, and another blindfolded man began taking out capsules one at a time. As he took out each he handed it to an announcer, who opened it, announced the number it contained, and passed it to another official, who verified the announcement. Another man stood at a large blackboard and wrote each number down in order as it was announced and verified. This blackboard held 1000 numbers, and when filled was removed, photographed, the numbers erased and another 1000 written in as they were taken from the lottery jar. The photographs of this blackboard constitute the official record of the drawing. Reproductions of them will be bound in small booklets and sent to every exemption board in the United States as the board's official returns from the drawing. Upon receipt of these, but not before, the exemption boards will begin the task of calling in the men first liable to drafting and subjecting them to examination. It has been announced from Washington that the local exemption boards shall pass upon only the questions of physical fitness and family dependents of the drafted men, but not on industrial occupations that might entitle one to exemption from service. For the industrial exemption, a special board is provided in each federal judicial district.

The County Councils of Defense Are Organizing Every Community in the State. Join Your Local. Do Your Bit. Help Your Country and Her Allies Win the War



"The Best Truck Possible"

—Says the Sanitary Fruit Company of Red Bluff, California

"We purchased our Garford two ton truck with the firm conviction that we had selected the best truck possible for our service.

"The truck has fulfilled every promise you made for it.

"It has worked steadily—doing about fifty miles per day—and is very economical on fuel and maintenance.

"We take pleasure in recommending it to anyone."

(Signed—Sanitary Fruit Company)

Garford MOTOR TRUCKS

Fruit growers demand prompt, dependable hauling.

For loss of *time* in transportation means a direct *money* loss to the shipper.

Garford motor trucks are time savers—and consequently money savers.

They put you vastly *nearer your market*. They *shorten* your hauling hours. They *increase* your profits.

The Sanitary Fruit Company says the Garford is *"the best truck possible for our service."*

And if it is profitable for hauling fruit, it will be even *more* profitable for hauling hogs, cattle, hay, grain, garden truck and all the other burdens that a farmer's truck must bear.

Any kind of body can be furnished—to efficiently meet your hauling requirements. And the wide range in Garford carrying capacity, from one to six tons, gives you an opportunity to select a truck exactly suited to *your* needs.

Any one of our dealers will gladly give you detailed information—or you can get it by writing direct to the factory.

The government has asked for *practical* economy from every citizen of the United States. Garford Motor Trucks will help *you* do *your* bit by cutting out waste of time, labor, produce and money.

Write for our booklet, "Roads—Their Influence on Social and Economic Conditions."

Garford Motor Truck Co., Inc.
1701 Broadway Seattle, Washington

The Fancher-Larson Company
1201 First Avenue Spokane, Washington

Oregon-Oakland Motor Company
522 Alder Street Portland, Oregon

The Garford Motor Truck Company, Lima, Ohio
Manufacturers of Motor Trucks of 1, 1½, 2, 3½, 5 and 6 ton capacity
4½, 7 and 10 ton Tractors
The Garford Road Builder
Distributors and Service Stations in all Large Cities

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 30 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF July 26, 1917

Food Shortage Is Not Imaginary

Carl Vrooman Brings Stirring Appeal to People of the Northwest

"Famine is just over the sky line of every European country."

So declared Carl Schurz Vrooman, assistant secretary of agriculture, in his address Monday at Spokane, to the county agricultural agents and the agricultural extension representatives of the state college, and through them to the farming industry of Washington, in the most stirring appeal for agricultural preparedness yet heard in the northwest.

"We must not say that if we do not increase production there will be a world food shortage. There is now a food shortage, the worst that has been seen in your lifetime or mine," the federal representative declared with emphasis born of conviction and earnestness.

Making Preparedness Tour.

Assistant Secretary Vrooman is making a nation-wide tour in the interests of agricultural preparedness. His stop in Spokane was his only stop in Washington owing to the pressure laid upon him for speeding up the work. He was in conference with northwestern leaders in agricultural work and with the state council of defense nearly all forenoon Monday. Monday afternoon he went to Coeur d'Alene, Idaho, where he addressed a massmeeting. He returned to Spokane and addressed a gathering at the armory in the evening that numbered thousands.

Build for Permanency.

The keynote of the conference talks by Mr. Vrooman, and by those leaders in conference with him, was that the agricultural development so strongly urged and so vitally needed should not be of temporary nature, but permanent in character. Mr. Vrooman declared that the war, deplorable as it is, was forcing the people of the United States to develop a better agricultural industry. He said that it was doing what the department of agriculture and the agricultural colleges had been trying to do for decades. He urged that a greater and constantly greater practicalness be injected into the agricultural work of the educational institutions.

"Let us thank God," he said, "that in spite of the pestilence of war, we are given this opportunity to build up a sound, practical agriculture."

Starvation in Europe.

Reports that starvation has already taken its toll in many European countries because of food shortage and inability to transport what supply is on hand are not exaggerated, said the speaker. He declared that millions have actually perished already because of famine. In some of the war stricken countries he said that one could go for miles and miles through once populous and prosperous districts without finding a child under the age of 5 years, every one of tenderer years having died for lack of food.

No Painless Patriotism.

The patriotism in business and industry at home must be the same as that among the soldiers in the trenches, urged Mr. Vrooman. On this point he said:

"There are a few, a very small minority of our business men who have not achieved this high level of patriotism yet. The majority have. There never has been a time in the history of the world when the business classes of a nation were as patriotic and showed themselves to be as patriotic, showed themselves to be as little mercenary, showed themselves to have as little greed for gain as our American business men today. But there is a small minority, the scum of the business world, that has not risen to the real conception of the nature of this contest, and what part they play in it. Some of them seem to think, like the miser, that the only thing in life worth doing is to make money.

"I believe we are going to organize, in addition to our other armies, an army of business men who are going to fight the battles of democracy and liberalism at home while their sons are fighting those same battles in the trenches. We are very free to tell Germany that she should liberalize herself; that she should cast down the junkers, the reactionaries, the despots of Germany and make of Germany a free, self-governing people.

'How about ourselves? We have a nation that is a free and self-governing nation, but we have certain minorities in every state and in every community who are reactionaries, who are not liberal. We have the food pirate, the food gambler, the man who is trying to run up the price of coal or steel, or other things necessary for the successful conduct of the war. We must organize the sentiment of this country among the business men, so that every business man in this nation will do his part just as bravely and just as self-sacrificingly as every soldier is expected to do his part in the trenches.

'The farmers are trying to increase their acreage of food. In order to do that successfully they must be able to market that food without any class of people being able to levy a tribute, an illegitimate war profit, upon the produce of their toil. We must create for the farmer a marketing system, and see to it that when he produces food it will be sent over to the consumer, whether that consumer be the people here at home or the soldiers in the trenches, without any man or set of men being able to extort from him or from the consumer an illegitimate war profit.

"I did not come all the way across the continent to urge you to do a lot of easy things, to urge you to go in for painless patriotism. I came out here because I believe you represent some of the best blood of the world, to ask you to look around for something difficult for a job that is a man's size, something that means a real sacrifice; to ask you to go into it, if you are a business man, with all of your business shrewdness and training. The government can not handle this war unless the business world gets behind it.

"While the boys in khaki are covering our flag with glory they are leaving a lot of despicable food pirates and others who will be staining it with graft, extortion and greed. That infamy must not come upon our flag. We must mobilize the patriotism of the business world; we must forget partizanship; we must overcome the lust for money; we must overcome our ambitions as individuals. Those of us who can not go out in the trenches and fight for democracy can fight here, if we are brave enough, if we are free from the yellow streak, if we love our country more than we love the shekels that jingle in our pockets.

"Yes, there is just as good fighting at home as there is abroad. And right now this country is more menaced by the enemy within its gates than it is from any enemy without. And if the business world will rise to this emergency and will do something new in the history of mankind, will keep business clean and pure and patiotic, will keep that flag from getting any stain of graft or extortion during the continuance of the war, then the business world, as I said, will have achieved something novel in human warfare. They will have added a new luster to the glory with which the boys in the trenches are covering that flag at the cost of life."

County Council of Defense

Every Loyal Man and Woman Should Enroll

By N. W. DURHAM.

The council of national defense, authorized by act of congress, and urged by the president of our country, has requested the organization of councils of defense in the states, the counties of the state, and in the municipal subdivisions of the counties; the state council of Washington has been organized, and auxiliary to it the county councils are being formed, and it is now urged that auxiliary local councils be organized throughout every county in the state.

The broad and comprehensive purpose is for the national defense and for patriotic service for the general welfare of our country. Every patriotic citizen, man and woman, should enroll in this great work.

Many of our citizens are voluntarily risking their lives in this great crisis for the protection and security of those of us who remain at home, and those of us who do not risk our lives on the battle front can enlist here for voluntary service in this great war for the safety of democracy.

You are urged immediately to enlist the cooperation of your neighbors and citizens and enroll the membership of every patriotic citizen of your community in this great service.

The county councils are asking communities to organize local auxiliary councils, elect a chairman and secretary and an executive committee, in the membership of which committee may be included the chairman and secretary of the local, if expedient.

Membership in a local auxiliary shall constitute membership in a state-wide league for patriotic service.

Suggested activities in the service of our country will, from time to time, be called to their attention. In the meantime, and all of the time, make your local meetings the center in your community of patriotic feeling, national loyalty and war service.

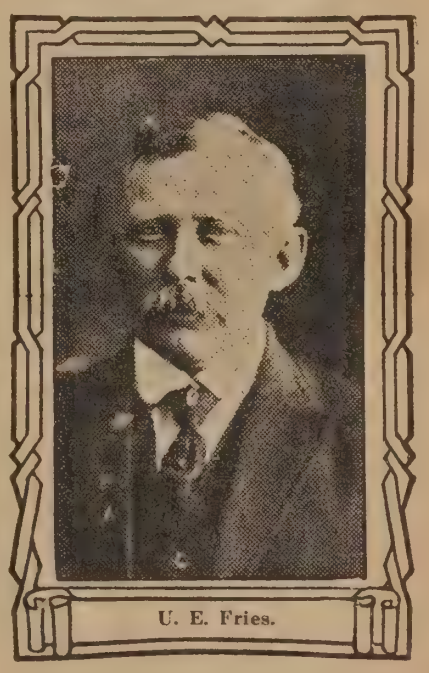
Consider and discuss how best to stimulate loyalty and industry, conserve our general resources, eliminate waste, discourage and suppress disloyalty and treason, and finally insure the success and permanence of democracy throughout the world.

The Spokane county council has adopted the following form of membership roll for community auxiliaries:

"For the welfare of America, and to volunteer and enlist our individual services, in the defense of our common country, we, the undersigned, subscribe ourselves as members of the..... Washington, local auxiliary, of the Spokane county council of national defense, and pledge ourselves to the loyal and patriotic service of our government."

It is planned to organize about 50 of these local auxiliaries in Spokane county, and similar organization is being worked out in other counties.

Washington Portarits No. 25.



U. E. Fries.

U. E. Fries came from Denmark to the United States when only 17 years of age and settled, after three years of working in different parts of the country, in Okanogan county. After a great many hardships and privations Mr. Fries has succeeded in building up a good farm. Mr. Fries tells of his early experiences in the Okanogan county, in another part of this issue.

The next in the series of Washington portraits will be that of B. E. Smead of Opportunity, and will be given in next week's issue of The Washington Farmer.

Land Bank Rushes Loans to Farmers

Central Office and Field Appraisers Hurry Farm Finance

With the movement of farm development and efficient cultivation at a stage never before known in this country, the federal farm loan bank, with northwestern office at Spokane, is rushing its work of chartering loan associations, appraising the lands on which loans are sought and completing the work of making the loans where proper title to the land can be secured.

During the last week charters have been granted to 15 new associations, and approval given to more than three-quarters of a million dollars of loans asked by their members. Actual loans to members of associations formerly chartered have also been made and are being made with the greatest possible speed.

The following are the new associations chartered since the last issue of The Farmer, together with the loans sought by the charter members and approved by the land bank board:

Washington.	
Sunset, Spokane county	$ 66,850
Kirkland, King county	26,650
Adna, Lewis county	38,400
Toppenish, Yakima county	34,850
Curlew, Ferry county	25,550
Duvall, King county	45,500
(Additional loans, Spokane county)	16,350
Oregon.	
Prineville, Crook county	102,700
Elgin, Union county	48,000
Idaho.	
Arbon, Oneida county	22,800
Holbrook, Oneida county	43,550
Cottonwood, Idaho county	80,500
Montana.	
Baker, Fallon county	102,400
Westmore, Carter county	73,400
Libby, Lincoln county	25,250
Elkalala, Fallon county	32,450

Drying Foodstuffs Is Way to Win War

Simple Methods Enable Households to Conserve Tons and Tons of Food Otherwise Wasted

There are three recognized methods of drying fruit or vegetables: (1) The sun drying method; (2) the artificial heat method, and (3) the air blast method, or that where a constant current of air is passed over the drying product to carry away the moisture.

While the sun drying method is the simplest and the least expensive under ordinary circumstances, it is easy for any one to construct drying apparatus for use over a cook stove, heater or specially made heating appliance.

Drying can be done over the cook stove during the regular cooking hours by using a simple bit of frame work so constructed as to hold two or three or more trays to contain the fruit or vegetable. The oven is coming to be a popular place to dry products. It is often desirable to dry small portions of corn, peas, beans, apples, peaches or what not at times when there is just a little on hand. These bits may well be dried on the back of the stove or in the sun or in the oven or anywhere that it is convenient to have a little heat and cleanliness.

Care Should Be Exercised.

"Care should be taken that the material is sliced thin enough but not too thin. From an eighth to a quarter of an inch is a fair thickness for most of the common vegetables to be sliced and dried," says the United States department of agriculture in a new bulletin just issued. This bulletin is issued for the benefit of the people of the country in the food conservation movement, and should be secured by as many as possible by addressing the Division of Publications, U. S. department of agriculture, Washington, D. C.

"Cleanliness is as necessary in the preparation of vegetables and fruits for drying as in their preparation for canning, perhaps even more so," continues the bulletin.

To secure a fine quality of dried products much depends upon having the vegetables absolutely fresh, young, tender, and perfectly clean. If steel knives are used in paring and cutting have them clean and bright so as not to discolor the vegetable. The earthy smell and flavor will cling to root crops if they are not washed thoroughly before slicing, and one decayed root may flavor several kettles of soup if the slices from it are scattered through a whole batch of dried material. High-grade dried "root" vegetables can only be made from peeled roots.

Blanching of vegetables is considered desirable by some housekeepers, although it is not strictly essential to successful drying. It is claimed that the blanch gives a more thorough cleaning, removes the strong odor and flavor from certain kinds of vegetables, and softens and loosens the fiber. This allows the moisture in the vegetable to evaporate more quickly and uniformly. It also quickly coagulates the albuminous matter in the vegetables, which helps to hold in the natural flavors. Blanching consists of plunging the vegetable into boiling water for a short time. Use a wire basket or cheese-cloth bag for this. After blanching the required number of minutes, drain well and remove surface moisture from vegetables by placing between two towels or by exposing to the sun and air for a short time.

Apparatus for Sun Drying.

The drying of fruits and vegetables in the sun is a simple process if they have been prepared properly. In its simplest form such drying consists in spreading the freshly prepared slices or pieces on sheets of paper, or, if there is danger of the product's sticking, spreading on old pieces of muslin held down with stones. Bright, hot, sunny days are chosen for this work, and a close watch is kept to see hat no rain or dew wets the product. If flies and other insects are abundant, a mosquito bar is thrown over the product. Once or twice a day the slices are stirred or turned over with the hand and the thin ones which dry first are taken out. Sun drying has much to recommend it, since it requires no expenditure of fuel and there is little danger of the product becoming overheated. Dust, however, gathers on the product, and unless it is protected carefully, flies and especially certain insects which habitually attack dried fruits will lay their eggs upon it. These eggs later will hatch out, and the worms, or larvae, will riddle the dried fruits or vegetables, rendering them unfit for the table.

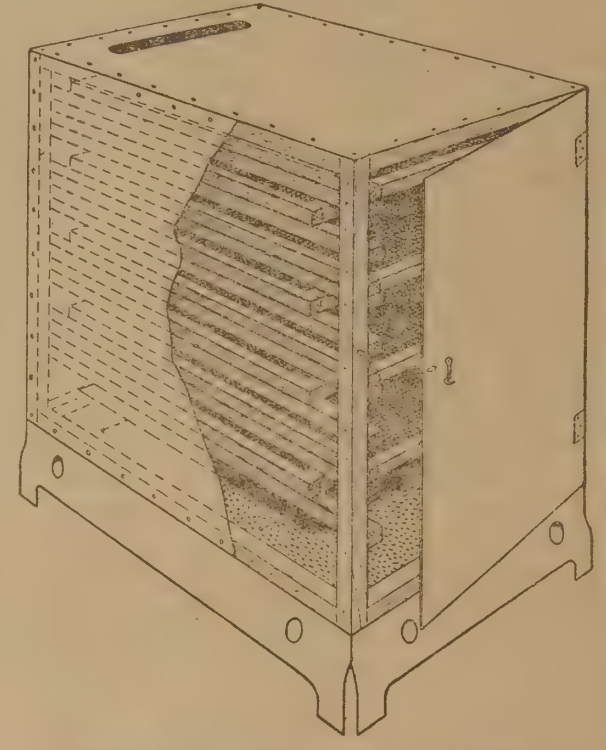
Specially Made Driers.

The two fundamental requirements of a drying cabinet or other apparatus for the use of artificial heat is the availability of heat and the circulation of air. If a drier is too close, the moisture from the vaporating fruit will collect and not only prevent further drying, but threaten the fruit or vegetable with souring or molding. The moisture that evaporates must be carried away.

Therefore, in constructing the cabinet drier, such as illustrated on this page, it is essential that there be air openings at the bottom and also at the top. In placing the trays, it is highly advisable that they be arranged so that the air will pass over the lower one, up at one end of the cabinet and over the next one, up at the other end of the cabinet and over the next tray, and so on to the final openings at the top.

The Air Blast.

The air blast method of drying requires a strong current of air to be passed over the product to be dried. This may be accomplished by means of an electric fan or other blower. This method is not so practicable in the ordinary home as the sun drying or the specially made drier methods, but it does have the advantage of completing the process with a lower degree of heat, which advantage some claim results in a better flavor to the dried product.



Artificial drier, showing method of placing the trays so as to allow circulation of air from bottom to top, the heat being provided at the bottom.

Conditioning.

The government experts urge upon persons drying either vegetables or fruit the advisability of "conditioning" the product before it is put away for future use. "This is best done," says the bulletin, "by placing the material in boxes and pouring it from one box into another once a day for three or four days, so as to mix it thoroughly and give to the whole mass an even degree of moisture."

Recipes for Drying.

The following recipes for drying are taken from the government bulletin before referred to. The letters a, b and c indicate different methods of drying the vegetables or fruit in question.

Sweet Corn.

Only very young and tender corn should be used for drying, and it should be prepared at once after gathering.

(a) Cook in boiling water two to five minutes, long enough to set the milk. Cut the kernels from the cob with a sharp knife, taking care not to cut off pieces of the cob. Spread thinly on trays and place in position to dry. Stir occasionally until dry.

(b) Boil or steam on the cob eight to 10 minutes to set the milk. To improve the flavor a teaspoon of salt to a gallon of water may be used. Drain well and cut corn from cob, using a very sharp and flexible knife. Cut grains fine, only half way down to the cob, and scrape out the remainder of grain, being careful not to scrape off any of the chaff next to the cob. Dry from three to four hours at 110 degrees to 145 degrees F. When field corn is used, good, plump roasting-ear stage is the proper degree of ripeness. A pound of dried corn per dozen ears is an average yield.

(c) The corn may be dried in the sun. Dry in oven 10 to 15 minutes and finish drying in the sun. Sun drying, of course, is not satisfactory in moist weather.

Pack in cartons or boxes for a few days to "condition," as described on page 8.

String or Snap Beans.

All varieties of string beans can be dried, but only beans in ideal condition for table use should be selected for this purpose.

(a) Wash, remove stem, tip and "strings." Cut or break the beans into pieces half to one inch long, and place on trays and dry. They also can be run through the slicer and then dried quickly.

(b) Prepare as directed above, but instead of cutting the beans, thread them on coarse, strong thread, making long "necklaces" of them, and hang them above the stove or out of doors until dry. An old-fashioned recipe calls for boiling the pods until nearly cooked through before drying.

(c) Wash and string beans carefully. The very young and tender beans can be dried whole. Those that are full grown should be cut in one-fourth to one-inch lengths with vegetable slicer or a sharp knife. It is better to cut beans than to snap them. They are then put in a bag of cheesecloth or in a wire basket and blanched in boiling water for six to 10 minutes, depending on the maturity of the bean. One-half teaspoon of soda may be added to each gallon of boiling water to help set the green color in the beans. Remove surface moisture by placing between two towels or by exposing to the sun and air for a short time. Dry young string beans two hours, more matured beans three hours. Begin drying at temperature of 110 degrees F. and raise temperature gradually to 145 degrees F.

Wax beans are dried in the same manner as the green string beans.

Lima Beans.

Lima beans can be shelled from the pod and dried. If gathered before maturity when young and tender, wash and blanch from five to 10 minutes. Length of time for blanching depends upon size and maturity of beans. Remove surface moisture and dry from three to three and one-half hours at same temperature as string beans.

Okra.

(a) Small, tender pods sometimes are strung on a stout thread and hung over the stove to dry. If dried in that manner, heat in oven before storing on trays.

(b) Wash, blanch three minutes in

(Continued on page eleven.)

Save Perishable Foods by Canning

Recipes Make It Simple Matter to Preserve Successfully

In previous issues of The Farmer recipes for canning the following vegetables have been given: Greens, string beans, beets, peas, asparagus, squash, pumpkins, okra and sweet corn.

In last week's issue appeared a summary of the principles and the general methods to be used in canning.

The following recipes are given in addition to those previously published and those to be given in subsequent issues:

Lima Beans—Blanch three to five minutes. Cold dip. Pack into jars tightly. Add a teaspoon of salt to each quart. Fill jars with boiling water. Adjust tops loosely. Place into the cooker. Sterilize by boiling for two hours. Remove. Seal. Wrap in paper or cloth and store.

Egg Plant—Slice the egg plant. Blanch eight to ten minutes. Cold dip. Pack into the jars closely. Do not salt until taken out for use. Fill jars with boiling water. Adjust tops loosely. Place in cooker. Sterilize by boiling for two hours. Remove. Seal. Wrap in cloth or paper and store.

Carrots—Select medium size carrots. Blanch six to eight minutes. Cold dip. Pack in jars. Add a teaspoonful of salt to each quart. Adjust tops loosely. Place in cooker. Sterilize by boiling for 90 minutes. Remove. Seal. Wrap in cloth or paper and store away.

Rhubarb—Cut into pieces to suit. Blanch one minute. Cold dip. Pack into jars. Place one part of sugar to three parts of water in a separate vessel and bring to a boil. Fill the jars with this sweetened liquid. Adjust tops loosely. Place in cooker. Sterilize by boiling for 15 minutes. Remove. Seal. Wrap in cloth or paper and store away.

Tomatoes—Blanch one minute. Cold dip. Remove skins. Place in jars either cut or whole as desired, but preferably cut if large. Add a teaspoonful of salt to each quart. Fill jars with boiling water, or, preferably, a boiling juice from a few cooked tomatoes. Adjust tops loosely. Place in cooker. Sterilize 20 to 25 minutes. Remove. Seal. Wrap in cloth or paper and store.

Parsnips—Follow same directions as for carrots, except cut the parsnips in suitable sizes if too large.

Sweet Potatoes—Follow same directions as for carrots and parsnips.

Canning Fruits.

Anna M. Turley, in a home economics department bulletin of the Oregon Agricultural college, divides fruits into three classes: The soft fruits, including such as strawberries, blackberries, dewberries, sweet cherries, blueberries, peaches, apricots and so on; the sour berry fruits, including gooseberries, currants, cranberries, sour cherries and so on, and the hard fruits, including such as apples, pears and quinces.

For each class she gives one general recipe, which is given below in so far as it applies to the common water bath outfit, for which all the recipes given in this series of articles are intended.

Soft Fruits—Can the same day fruit is picked. Grade and rinse the fruit by pouring water over it through a strainer. Cull, seed and stem. Pack immediately in glass jars or tin cans. Add boiling hit thin sugar syrup. Place rubber and top in place. Partly tighten. Sterilize in hot water bath outfit 10 minutes. Remove. Tighten covers. Invert to cool and test joints. Wrap glass jars in paper to prevent bleaching; then store.

Sour Berry Fruits—Can same day picked. Stem, hull and clean. Blanch in hot water one minute. Remove and dip quickly in cold water. Pack berries closely in container. Add hot sugar syrup considerably heavier than for the soft fruits. Place rubber and cap in place. Seal partly, not tight. Sterilize in hot water bath outfit 10 minutes. Remove jars. Tighten cover and invert to cool and test joints. Wrap in paper and store.

Hard Fruits—Grade, blanch one and a half minutes, and plunge quickly in cold water. Core, pit or remove skins, if necessary. Pack whole, quartered, or sliced, as desired. Add boiling hot medium thin sugar syrup. Place rubbers and tops in position. Partly tighten. Sterilize 20 minutes in hot water bath outfit. Remove jars. Tighten covers and invert to cool and test joints. Wrap glass jars in paper to prevent bleaching and store.

Adapted to War-Time Needs.

The 1917 Puyallup summer session of the state college has been adapted to present and future war time needs of the country. Academic branches have been dropped and the energy and effort of the school have been concentrated on problems of more efficient production, greater conservation of wealth and energy, and wiser and more economic consumption.

Colorado Potato Bug Invades Northwest

Reports Indicate Menace That Requires Strenuous Methods to Combat

Every potato grower in the northwest, though he have only a garden patch, owes himself, his neighbors and his country a simple, but vital, duty brought upon him by the reported appearance of the notorious Colorado potato bug in this heretofore famously pestless region. That duty is the inspection of the potato patch and a declaration of a relentless war if even one of the yellow, black-striped beetles that have wrought such havoc to the potato states of the east is found.



The Colorado potato bug, two and a half or three times natural size.

The Pest Is Here.

That the genuine, Colorado potato beetle is in the northwest is the positive statement of L. C. Barrett of the Spokane Seed company, who has received reports from many counties of eastern Washington, northern Idaho and Montana, together with one boxed sample of the pest.

Kootenai, Latah, Clearwater, Nez Perce and Lewis counties of Idaho have reported the presence of the beetle. Whitman, Spokane and Stevens counties in Washington admit its presence, and authentic reports show it to be in Lewis and Clark, Flathead, Missoula and Granite counties in Montana.

How extensive the spread of the bug is in the northwest will be learned through an investigation that The Farmer is now inaugurating. That the most strenuous methods of combat available should be employed at once is certain. The first appearance of the Colorado potato bug was reported three or four yars ago, but sufficient stress was not laid on the need of a vigorous fight against it at that time or the greater offensive would not be required now. Every potato grower should see to it without fail that his patch or field is not allowed to provide the home for even one of the bugs.

Effective Remedies.

There are three recognized remedies: Paris green, arsenate of lead and arsenate of zinc. Each depends upon the arsenic poison contained in the preparation. Owing to the expensiveness of the arsenate of zinc, together with the danger of burning or otherwise injuring the potato plants or other vegetation with it, Mr. Barrett considers it comparatively impractical, though it is recognized as a powerful bug poison.

Paris green has been used in the past perhaps more than has the arsenate of lead, but its price is now well nigh prohibitive. Paris green, which ordinarily sells at from 18 cents to 25 cents a pound, is now costing much more, or 60 cents to 75 cents a pound.

Arsenate of lead, though considerably higher than in former times, may be secured at from 30 cents to 45 cents a pound, and is considered as effective a poison against pests as is the paris green.

The arsenate of lead apparently has the additional advantage of an adhesive quality, either in the dust or the liquid spray form, which makes it cling to the leaves of the plants where the paris green is easily blown or washed off.

Should Spray Potatoes.

Either the liquid spray or the dust is effective against the potato bug. It is the eating of the poison that destroys the biting pest, not the mere application to its body as in the case of some of the sprays for sucking pests. Mr. Barrett says that about five pounds of the arsenate of lead powder, applied as a dry dust, is required for an acre, while from three to four pounds is sufficient for liquid spray made from the paste compound. The dry method has the advantages of being more easily applied and of penetrating into all the recesses of the plant, under side as well as upper surfaces. But it has the disadvantage of losses through inability to confine the spraying to the potato plant only.

The Colorado potato bug is not familiar to the farmers of the northwest. The so-called potato bug of this country should not be mistaken for it. The bug most common in this region, and much less destructive, is a longer, more slender insect. Of these there are at least two varieties, a steel blue one and a striped one. Both are much longer than they are wide or thick.

The potato grower's real enemy, the Colorado bug, is heavy in build. It is about three-eighths of an inch in length and two-thirds as wide as long. Its color is yellow, except for black lines that run parallel to each other, lengthwise of the bug's wings. The thorax, or collar, has several black spots, and the head has a black triangular spot. The lower part of the body is marked with black.

The bug hibernates in the ground over winter, sometimes burying itself several inches or two or three feet. It comes forth early in the spring, and flies about readily and quite actively. It lays its eggs on the under side of the leaves, where they hatch in from four to eight days. One female produces as many as 500 eggs. The egg hatches a dark red creature, which, as it grows, becomes paler and is a disgusting, slug-



The Colorado potato beetle, showing (a) the eggs, (b) the larva, (c) the pupa, (d) the mature beetle, and (e) the enlarged wing.

gish animal frequently called a slug. It has spots along the sides.

In from 16 to 20 days these creatures reach the pupa stage, when they descend into the ground, where they remain for seven to 15 days, being transformed into the mature beetle, which comes forth and is active till late in the fall.

Can Joke About Past Hardships

Had Long, Hard Pull, but Now Sees Success on Farm

To the Editor of The Washington Farmer: I was born in Denmark, December 19, 1866. Father was a Lutheran minister, who had 18 children, and I was number 13 of the flock. He died when I was 12 years of age. At 14 I left school to work for a living because mother was poor, as my father's estate had been declared bankrupt after his death. I received no wages on the two different farms where I worked, just board and lodging, and mother clothed me. The wages at that time in Denmark were very low, so mother proposed for me to go to the United States.

I consented, and at the age of 17 I left and landed in Castle Garden, May 18, 1883, with $13 in cash and a ticket to Chicago. I worked on farms in Illinois until March, 1886, when I left for the west. I worked in different parts of Oregon and Washington, managed to save up $350, and the following spring, March, 1887, at the age of 20 years, I started from Ellensburg afoot, leading a pack horse, and in company with four young Germans, for Okanogan county, which at that time was Stevens county. We crossed the Columbia river at Moses Coulee, went straight through the country over Badger mountain. There were no fences to stop us and Waterville was not thought of at that time, but there was a small settlement around Douglas City. We saw no settlers before we came close to Foster creek ferry, where now Bridgeport is located. We crossed the river here into the Colville Indian reservation and forded the Okanogan river some 10 miles up from its outlet into the Columbia. After traveling for some time over the country I selected a place and made final settlement in April, on the homestead I have lived on ever since. It is nine miles north of the town of Brewster and three miles from the orchards that won world renown for its famous and unexcelled apples.

When I started my home my desire was to run cattle, as this locality is well adapted for that. In order to use little of my capital and save most of it to buy stock, a neighbor and I bought a team, wagon and other implements together. We exchanged work, built our houses and fences and our little farming the first year in partnership. But the following year we divided.

In the fall of '88 I bought eight cows and calves in Kittitas valley, where I had gone to earn a "grubstake." The provision was freighted to Rock Island on the Columbia and shipped on steamer from there to my home town. My little herd of cattle was turned on the range in the summer to care for themselves and I went out working for wages. During the winter I cared for them, made fencing and put up buildings. The winter of 1889 was a very severe one. It was estimated that 90 per cent of the stock in the county starved to death because feed was not to be had at any price. I had provided for my little herd, however, and saved them. I was offered four work horses for two tons of hay and traded. In the spring I started to break up land and to clear up the dense growth of brush which part of my land was covered with. Since then I have lived off my farm by selling different products and surplus stock.

In 1892 I married. My wife raised chickens, and sold butter and eggs, which were our salvation when cattle and horses in the '90s were so cheap, that a 120-pound cow brought but $15, as also did 2-year-old steers. Three and 4-year-old steers sold for $20 and $22.50 a head, and we were glad to sell at that price. I was six months selling a span of mares weighing 1200 pounds each for $25, which money just bought a cheap sewing machine or my wife. By exercising great saving we lived throughout the hard times although butter sold for 12 1-2 cents per pound, eggs at 5 cents a dozen, and a deer hide was legal tender for two pounds of sugar at the little country stroe.

The development of our county was held back by the absence of a railroad. The shipping of farm products on the boats gave but small returns to the farmers. Cattle in the early days were driven to Ellensburg, from there shipped to Seattle. Later on the Great Northern built to Wenatchee and then stock were shipped from there.

In 1907-08, when hay went to $20 a ton on account of poor crops and cattle were cheap, we sold neary all of our cattle. However, this was our mistake, as we soon learned that even if cattle were cheap, they were the most profitable domestic animal we could keep on the place. Hay soon dropped to its normal value and below it. For several years we had sickness in the family. We made debts, our land lost in fertility by not having manure to apply to it, everything we raised was hauled away even to the meadow hay. Then came the task to rebuid a herd which by no means is an easy matter, but through determination we are succeeding.

My principal crops are corn, wheat, oats and alfalfa. I fertilize my land for corn and potatoes, following it with wheat or oats, which do well on corn land. With the prices I have received lately in Seattle for live stock we are doing well and I and my family can now joke about the hardships we have endured.

U. E. FRIES.
Brewster, Wash.

"UNDER THE BLACK CANOPY."

This is the title of a story of the northwest that The Farmer is going to run, beginning in an early issue. It is written by a northwestern writer known to the readers of The Farmer. It deals with people and things right here where we live. Watch for it.

Pacific Nurserymen

In Annual Convention at Tacoma

The Pacific Coast Nurserymen's association, in annual session at Tacoma, has decided to start an educational campaign, especially directed toward business and working men for increased food production from town lot gardens. F. A. Wiggins of Toppenish, Wash., the president of the association, in his address, said:

"Our press committee, aided by the landscape architects, will publish charts of homes surrounded in front by artistic shrubbery and flowers and in back by a few fruit trees, some small fruit and some vegetables," said Mr. Wiggins.

"It will endeavor to encourage each family to grow its own fruit and produce with perhaps the exception of that used for canning. For instance, I believe a single backyard, 40x50, can easily contain five fruit trees, six berry plants and a small vegetable garden.

"This information with practical instructions will be gotten out as soon as possible so that gardens may be started early for the new year. All the expenses necessary to carry on the campaign will be assumed by the association, which will give a special sum for the purpose."

Information of an unknown and infectious disease, which if it spreads may put rose growers of the west out of business, was given by J. A. Balmer of Cle Elum. The disease came to him from California.

Said Mr. Balmer:

"It was just as if I were raising walnuts and potatoes instead of roses when those plants matured. Funny, hard knobs appeared not only on the roots, but on the stems. I soon found that the flinty bunches formed wherever a rose had been cut, and that my scissors had infected many of my own choice plants.

"After a bud or flower had been cut a nice callous formed, but instead of finally starting another sprout, it merely continued to be a callous, except that the callous grew and grew until it had become a walnut or potato in size. And I hadn't planted nor paid my good money for walnuts or potatoes, I wanted roses.

"The disease is certainly new and very serious," said R. A. Stadthalter of Seattle, representing the United States department of agriculture, of which he is the field pathologist expert. "It seems a matter of importance that is not sectional, but national. I will immediately place specimens and all possible information in the hands of government experts."

Walnut growing was the subject of a paper read by Fred Groner of Hillsboro at the afternoon session. Uniform packing standards, measures, wholesale and retail prices were discussed. It is generally believed by the nurserymen that the only way to accomplish uniform laws is through the federal reforms rather than state regulations.

Before the convention adjourned officers were elected. Those chosen were: M. McDonald of Orenco, Ore., president; C. Malino of Seattle, vice president for Washington; A. Brownell of Portland, vice president for Oregon; C. T. Hawkes of Caldwell, vice president for Idaho; C. L. Trotter of Vancouver, vice president for British Columbia, and R. W. Mills of Helena, vice president for Montana; secretary, C. A. Tonneson of Tacoma; executivve committee, A. Brownell of Portland, S. A. Burglehaus of Sumner and H. A. Lewis of Portland.

To the FOOD ADMINISTRATOR, Washington, D. C.:

I am glad to join you in the service of food conservation for our nation and I hereby accept membership in the United States food administration, pledging myself to carry out the directions and advice of the food administrator in the conduct of my household, in so far as my circumstances permit.

Name .....

Address .....

Number in household ..... Do you employ a cook? .....

Occupation of breadwinner ..... Will you take part in authorized neighborhood movements for food conservation? .....

There Are No Fees or Dues to Be Paid.

The food administration wishes to have as members all of those actually handling food in the home.

DIRECTIONS: Mail this slip to the National League of Woman's Service, Room 201 Sherwood Bldg., Spokane, Wash., and later you will receive FREE your first instructions and a household tag to be hung in your window.

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Opposition to Freight Rate Increase Proved to Be Sound

When The Farmer opposed the granting of the 15 per cent advance in freight rates which the American railroads asked from the interstate commerce commission its position was criticized in some quarters. "You are interfering with the development of the country," said one banker to the writer of this article, who went on to argue that the railroads needed the money badly to provide increased equipment to take care of the transportation needs of the industries of the Pacific northwest.

But The Farmer knew its ground, and the commission's decision and still more recent earnings returns of the transcontinental roads prove that it was right.

All the western lines are highly prosperous. Take, for example, the Northern Pacific and the Great Northern. The former is earniug directly a clear profit of nearly 10 per cent per annum on its stocks, and the latter upward of 10 per cent.

But that does not tell the whole story of their prosperity. The Chicago, Burlington & Quincy, better known as the Burlington, is the premier profit-earning railway system of the United States. In the fiscal year ended June 30, 1917, it made 28 per cent clear profit on its $110,000,000 of stock.

This great system, which connects with the Northern Pacific at Billings, Mont., is operated jointly by the Northern Pacific and the Great Northern under a lease which obligates them to pay 8 per cent dividends on Burlington stock. After meeting that obligation the two Hill lines take the remaining 20 per cent of Burlington profits to themselves.

Roughly speaking, this Burlington "melon" is equivalent to 4 1-2 per cent on the stocks of the Hill roads. They therefore have a profit income of about 15 per cent on their stocks after payment of interest on their bonds, costs of operation, taxes, etc.

Do you wonder that the interstate commerce commission rejected their plea for permission to put up freight rates on all commodities by a round 15 per cent?

With an annual profit of 15 per cent the Northern Pacific and the Great Northern should find it an easy problem to pay liberal dividends, while at the same time purchasing new equipment, improving their lines and laying aside a very respectable reserve.

I. W. W. Must Not Destroy Harvest of Foodstuffs

Quoting a European statesman's remark that the war would probably be won by the last 500,000 bushels of wheat, Food Commissioner Herbert C. Hoover said:

> It is within our power to give this last 500,000 bushels, but only if we organize to save and organize to supply all our allies. Our problem is not alone to mobilize our civilian population for the support of the fighting men of our allies. We must feed our allies, that their people remain in the war. Liberty can not be maintained on the empty stomachs of the women and children.

But it will avail us nothing to organize to produce and to conserve if unpatriotic men, led on by I. W. W. agitators, are allowed to paralyze harvest operations.

At best we shall have a light grain crop in the Pacific northwest. Hot weather has enormously reduced the yield, and more than ever is it obligatory to save the last possible bushel of the crop. The people are in no mood to tolerate I. W. W. threats and interference with the vital work of saving the crops.

Are You Doing Your Part?

The United States department of agriculture, in one of its food posters, makes the following statement: "Somebody has to raise or pack everything you eat." It drives the fact home with this question: "Are you doing your share?"

There is the entire gist of the food production and food conservation problem. What we eat must be raised and preserved. Somebody must do it. Everybody should do his or her fair share.

The person who wastes food this year is not a true patriot. He is not a true humanitarian, for there are thousands of human beings actually starving today and others in large numbers threatened with starvation for lack of food within their reach.

And it is wasteful to allow a good piece of land to go uncultivated, a real waste of food. It is wasteful to feed to live stock food that is more valuable for the use of human beings. It is wasteful to eat food of the staple, easily preserved kinds and allow the perishables to spoil. It is wasteful to eat more than one needs for good physical nourishment.

Having the money to buy plenty, even at the present high prices, does not justify lavish living, for when one man lives lavishly, another is denied even a spare living.

Pays to Study the Market

Mrs. O. J. Wold of Bellevue, Wash., knows how to extract the dollars and cents value from her reading. Last fall she kept track of the potato market, reading for that purpose the market columns of The Washington Farmer. As a result she graded her potatoes more rigidly than usual, saving the small size, even potatoes which in years of big yields and low prices she would hardly have bothered with. These small-sized potatoes brought readily $1.50 a sack, and both buyer and seller were benefited.

In addition to this Mrs. Wold sold a quantity of potatoes for seed. This seed stock was hill seeded, from a variety imported from Scotland several years ago, and sold readily at 10 cents a pound. It is these little details in careful marketing that bring in the net profit.

Mole Pest in Western Washington

The mole pest is a serious question in Wahkiakum county, Washington. To combat this pest County Agent A. T. Flagg made arrangements with Theo. H. Scheffer of the United States biological survey to give four days of demonstrations of skinning and drying the pelts. All the meetings were well attended and interest was shown by the farmers and boys of the communities visited. Merchants agreed to stock up with the proper traps for combating the mole pest.

Washington Gleanings

A national farm loan association was organized at Lind recently with 12 members.

More Colville land has been opened to settlers. A large tract heretofore held to be mineral is now subject to entry for agriculture.

Dairymen of Snohomish and Island counties to the number of over 300 have organized the Snohomish and Adjoining Counties Dairymen's association.

Unit No. 8 of the King County Dairymen's association has been organized at Meridian. The officers are: President, P. T. Nelson; secretary, J. C. Berg; treasurer, J. J. Whall.

County Engineer Weir of Thurston county has approved the widening and deepening of Black river for a distance of 2000 feet near Little Rock for the purpose of reclaiming approximately 1500 acres of land.

Dan Wuille & Co., the London fruit merchants, who have exported large quantities of White Salmon apples to England, announce that they will this year export to Australia, where they have branches and an efficient distribution system.

The Kennewick valley's early potato crop began to move to market recently when the Kennewick-Richland Marketing union shipped the first full carload of the season. The union's potato business this year is being handled by Dr. M. P. Davidson.

The 1917 strawberry crop in the vicinity of Arlington is in excellent quality this season. A. F. West of Edgecomb recently took a quart box to Arlington which was completely filled with 21 berries, weighing 20 ounces, or practically one ounce to the berry.

"Every fruit district in the state of Washington will have one or more evaporators in operation this year," says Dr. J. S. Caldwell, byproducts expert of Washington State college, who has been called into consultation in nearly every instance where there is a new plant to be built.

J. W. Vickers, manager of the Kennewick branch of the Spokane Fruit Growers' company, has received returns from a full carload of cherries shipped to Chicago and sold at auction. The car was sold for a little less than $4300, which is about $120 more than the famous first car sold for in Philadelphia two years ago.

County Agriculturist Richardson of Douglas county has been holding a series of meetings throughout the county at which Miss Walker of the state college extension department lectured and gave demonstrations on home canning and Dr. S. B. Nelson, head of veterinary science at the state college, talked on the feeding of horses.

L. W. Van Aiken of Blackfoot, a representative of the state horticultural department, has been making an inspection of the orchards in the vicinity of Arco. Mr. Van Aiken states that the fruit crop on Lost River this year will be very poor, due to the exceeding hard winter, which caused many of the trees to winter kill, but that fruit prospects of the Snake river country were never better.

Dayton has organized a home guard of over 200 business and professional men, who propose to take every means possible to see that the crops of Columbia county are not destroyed at the hands of incendiaries who have sent anonymous letters to farmers threatening to destroy the crops before they are harvested. If necessary, every highway of the county will be patrolled from the time the grain is ripe enough to burn until it has been harvested.

The Imperial Farms company of Palouse, A. W. Bradrick, manager, has just shipped in a carload of purebred cattle from the east to add to the herd which is already one of the best in the Palouse country. The shipment consisted of a purebred Holstein bull, bought at Liverpool, N. Y., a son of King of the Pontiacs, and six head of purebred milking Shorthorns. The Imperial Farms company is supplanting its Jerseys with Holsteins and Shorthorns.

What Others Say

Mirror, Morton: Dictator Hoover is better than Dictator Hunger.

Independent, Chewelah: This is the time to look out for dry grass and brush fires. A word of caution to your boys and girls may have a very excellent effect in reducing the fire loss among these inflammable materials.

Journal, Kent: With all the associations and clubs that are being formed today in various lines, why is not some move made by the poultry and egg producers to get together into an organization for mutual help and support?

Herald, Concrete: Reports of the last few days are to the effect that heat is seriously affecting the wheat and other grain crops of eastern Washington and Montana; but even though in the end there should be a shortage in cereals there is certainly going to be an abundance of vegetables of every description. Those "war gardens" will help tremendously in solving the high cost of living the coming fall and winter.



There Are Five

brands of United States Tires to select from—a tire for every need of price and use. All of them are GOOD tires. All of them give better service, more mileage per dollar, greater resilience and stouter resistance to road-wearing conditions. Four of them—the 'Royal Cord,' the 'Nobby,' the 'Chain,' the 'Usco'—are famous anti-skids. The other is an equally famous 'Plain' Tread. Choose which one meets your special requirements and order TO-DAY.

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A. B. NYSTROM, Editorial Contributor

N. B. Smith of Oregon City, whose Jersey cow, Picabo, came near making a world's record for milk production, has 14 registered Jersey cows, every one either with a register-of-merit record or on test. Picabo ended a year's official test March 9, begn at 9 years and 3 months of age, with 698.33 pounds of fat, or 821.36 pounds of commercial butter. Brown Bessie's Alphena Gem ended her year March 7 with 702.96 pounds of fat, an even higher record than Picabo. Both of them became gold medal cows by producing over 800 pounds of butter in a year. Both will qualify for Class AA by dropping a calf inside of four months from end of test.

Pride of Cedar Hill, a daughter of Brown Bessie Alphena Gem, began at 1 year and 11 months, and in 216 days has produced 321.52 pounds of fat. She is practically sure of 500 pounds of fat for her year, or almost 600 pounds of butter. Ella of Cedar Hill, a daughter of Picabo, began at 1 year and 11 months and had 51 pounds of fat in January, but was poisoned and has taken some time to recover, but will make a good record. Minette of Ashwood at 2 years and 1 month had 238.54 pounds of fat in 145 days. Mr. Smith gives his cows good care, but no very special attention. He pastures as much as possible. He is a strong believer in line breeding when one knows he is breeding a producing line.

H. A.

Ferndale Lady.



This is a picture of Ferndale Lady, a registered Holstein, owned by George Steiner, a prominent Whatcom county dairy farmer. She is 4 years old and has a record of 546 pounds of milk in seven days. Her best record for one day is 81 pounds. Mr. Steiner bought Ferndale Lady from William Bishop of Chimacum when she was only a few months old.

Walla Walla Tests

The report of the Walla Walla Valley Cow Testing association for the month of June, 1917, shows a number of points in which the association has been helpful to the members. June is the eighth month in the second testing year and to date 64 cows have been sold for slaughter as unprofitable by 19 members, and 55 cows have been sold for dairy purposes by seven members on the strength of their association records.

Much interest has been shown in the quality of sires used to perpetuate the herd, 14 purebred sires having been purchased since the beginning of the testing year. Twenty-two of the 26 members of the association are now using a purebred as the head of their herd.

Silos are becoming more popular, 20 of them being on the places of 13 members at the present time and 10 more will be erected by eight members before fall.

The following, as reported by the tester, Will Horn, is a list of the cows producing over 50 pounds of butterfat during the month:

Owner.	Breed.	Lbs. Milk.	Lbs. B. F.
State Penitentiary	H	2040	73.4
State Penitentiary	H	1206	67.2
State Penitentiary	H	2010	64.3
State Penitentiary	H	1824	63.8
E. S. McKinney	H	1791	62.7
State Penitentiary	H	1788	59.0
Burbank Co.	H	1598	59.0
State Penitentiary	H	1698	57.7
State Penitentiary	H	1866	56.0
State Penitentiary	H	1536	55.3
State Penitentiary	H	1680	53.8
State Penitentiary	H	1554	51.3
State Penitentiary	H	1524	50.3

Breeders Have Outing.

Inspiration for the members of the Linn County Cow Testing association, encouragement for the Jersey breeders and a general good time for all were realized by those who attended the picnic of the Linn County Jersey breeders and Linn County Cow Testing association last month. R. L. Burkhart and wife were hosts and the picnic was held in the beautiful grove on their dairy ranch on the edge of Albany, Ore. In spite of the busy season nearly 200 members, neighbors and friends gathered. Mr. Burkhart has imported Island cows, as well as American bred, of the most fashionable strain and individuality that compels admiration. His herd is headed by two richly bred bulls, Moose of Fern Hill and Carnac Noble.

Mr. Burkhart keeps his cows in stanchions in the barn only while being milked and fed. He was the first man in the Willamette valley to adopt the shedding system. He does not feed in the shed. It has drop windows, which give plenty of light and ventilation, but the draft is above the head of stock. The driveway from barn to shed is of concrete. The Burkhart silo is built of tiling.

Mr. Burkhart, who is president of the club, introduced Mr. McGinnis, president of the cow testing association, who presided during the program. Patriotic selections on a victrola and songs of the same nature were a much enjoyed feature of the afternoon's program.

Professor Westover, who is in charge of the cow testing work at the O. A. C., spoke of Oregon having more breeders winning Jersey medals in 1917, than any other state. The Idaho buyers at the Forest sale came because the cows had records and it pays from every standpoint to test and know just what a cow can do. He pleaded for a cooperative spirit among breeders.

Carl Hanneman, tester for the Marion county association, said his association showed a big improvement over last year's work. He said lack of physical energy is one cause of dairymen's failure. Leaving a few drops of milk in the udder has a tendency to cause a cow to go dry and he urged that every drop should be drawn when milking.

Dr. Young, pastor of the Albany Baptist church and Dr. Gibson, pastor of the Methodist church, made brief patriotic addresses and Professor Kendall gave a humorous reading.

Professor Fitz of the O. A. C., said it is our patriotic duty to conserve food and spoke of the dairy cow's part after the war, while the beef cow and other animals can act only once.

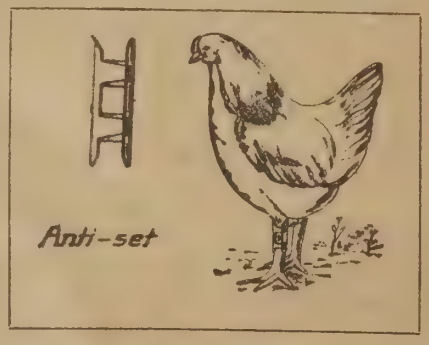
Horace Addis of the Oregon Farmer and C. D. Minton of the Pacific Homestead, each spoke briefly.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Device to Prevent Hens From Setting.

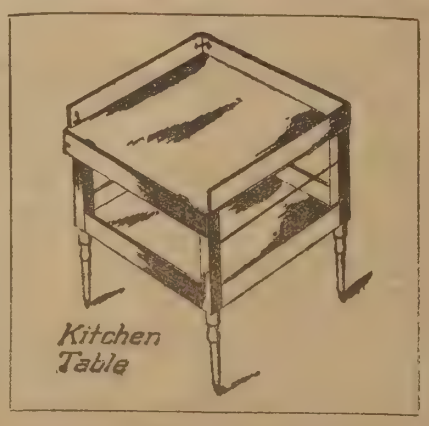
This device is a metal sleeve, which is clamped about the hen's leg in such



position that she can not bend the leg and therefore can not set.

Kitchen Table.

This table runs on casters and is used to carry dishes between the kitchen and the dining room. The sides of the top can be folded up into box shape when desired.



The Motor Car

On the Farm

Aside from its use as a means of conveyance on errands of business and pleasure, what other uses do you get from your motor car?

Of course, there are a good many cars of the lighter type that are converted into tractors. Also a number that are transformed into trucks. Some cars again are made to pump water, saw wood, grind feed, lift hay and fill silos.

We do not believe, however, that these are by any means all the chores that a good, well-broken, properly harnessed motor car can do. We believe the ingenuity of many of our subscribers has been exercised in making their cars do various kinds of stunts, an account of which would be very interesting if told about. We should like to hear from any and all of you who have "trained" your car to do useful bits of work about the farm when it isn't in use as a vehicle. Or if there is any bit of advice or information you wish at any time, we will gladly furnish same promptly by letter. In writing, address Automobile Editor, care of The Farmer, and your letter will be answered with as little delay as possible.

Plowing 50 Cents Per Acre.

J. A. Donnelly of Olympia, Wash., has been keeping books on his tractor, with the following results: Tractor plowing has cost him on the average 50 cents per acre, and the machine will turn over from three-fourths of an acre to one acre each hour. A good team will plow from two to two and one-half acres a day, and team plowing cost Mr. Donnelly from $2.50 to $3 per acre. A further consideration which enters into his calculations is that the tractor can work long hours—day and night if necessary—while the best team going will wear down under too much work.

Oversize Tires.

A subscriber wants to know just what the advantage is of equipping a car with oversize tires. There probably is little or no advantage except where the car is a heavy one, or where it is made to carry capacity loads. Recently we read the experience of a man whose car weighs about 2500. He used up six ordinary casings in two years of moderate driving. Then he equipped with oversize tires which he says he has run for over two years without a puncture or blowout. If you are accustomed to carrying good sized loads in a light car, or in a heavy car either, for that matter, the oversize tire will probably mean a good big saving in the long run.

A Damaged Flock.

Bobbie had never seen a live sheep, but one of his most treasured toys was a little woolly lamb on wheels, which he drew all about the house and yard. Last summer he went to visit his uncle, who owns a sheep ranch in the west. When Bobbie spied a flock, he exclaimed:

"You must have got them cheap, uncle, 'cause they've all lost their wheels."

RECENTLY SURVEYED HOMESTEADS NOW OPEN.

Every reader of this paper should write at once for a free copy of "The Home Seekers' and Settlers' Guide." It tells all about the rich 160-acre free farms, excellent for growing grain and mixed farming, also what others are doing. Address Canadian Northern Railway, A. A. Brostedt, D. F. & P. A., 605 Hastings st., Vancouver, B. C., Canada. —Adv.



Purebred Registered HOLSTEIN CATTLE.

Prof. Carlyle of the Wisconsin Experiment Station asserts that "It will be readily seen that the Holstein cow has the ability to digest coarser feeds and work them over to a better advantage than Jerseys and Guernseys and this is a strong point, in which I contend that the Holstein has a great advantage over any of our smaller breeds, and it is a point which is going to appeal to the farmer in the future far more than it has in the past." There's big money in the big "Black and White" Holsteins.

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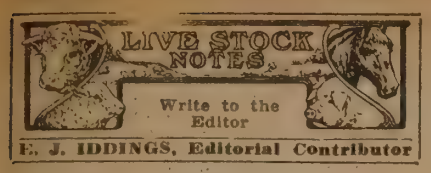
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E. J. IDDINGS, Editorial Contributor

Baby Beef Facts

College Makes Vital Feeding Tests

By ROBERT WITHYCOMBE.

Among the various cattle feeding experiments conducted at the eastern Oregon Agricultural experiment station at Union, possibly none are of greater interest to the stockmen than the experimene pertaining to the relative cost of producing baby beef in comparison with that of 2 or 3 year old steers.

For this test the station secured last fall 72 head of good thrifty range calves with an average weight of 503 pounds. They were divided into six lots of 12 each and fed various rations. For instance, one lot received the waste hay from the beef pens, another lot had good alfalfa hay, another received alfalfa and all the grain they would eat, and the last lot received a daily ration of straw and two pounds of oil meal per head.

At the close of the winter feeding period all these were turned out on the range excepting those in one of the lots that had been on alfalfa and a full grain ration. These were placed on meadow pasture and received their full feed of grain until marketed as baby beef.

The yearlings that went to the range will be returned to their respective feed lots in the fall and it will be interesting to note whether or not those that had been roughed through the winter, so to speak, had caught up with those in adjoining lots that had received a more expensive winter ration. Or, in other words, see how much the stockmen are really losing or gaining by their usual method of caring for stock cattle.

The test is made as practical as possible, and while some of these cattle will be marketed as baby-beef others will be marketed from time to time either off grass or from the feed lot.

The experiment will not be concluded until the entire 72 head have been marketed and it is hoped that the test might be continued for several years, in order that abnormal market conditions and high cost of feed materials may not interfere materially with final results.

The baby-beef lot in this experiment consumed an average of 15 pounds of alfalfa hay and 6.6 pounds of chopped barley and made an average daily gain of 1.82 pounds per head. During the 43 days on pasture they consumed 5.9 pounds of grain and made a daily gain of .98 pounds per head. These were recently marketed at Portland, and while they were not as highly finished as they should have been, yet they made a very creditable showing on the market.

While it will be noticed that these yearlings sold for $72.55 per head, which is a big price, yet they were really fed at a loss, owing to the high cost of feed materials.

The experiment station produces its own feed; however, in calculating final results, the feed cost is based upon its market value at the beginning of the test.

The results are given in the following tabulation:

Average weight of 12 head at experiment station		798 pounds
Average weight at Portland stock yards		758 pounds
Shrink during trip 40 pounds—5%.		
Financial Statement.		
Cash sales receipt for 12 head		$870.58
Initial cost of 12 head October 25, 1916	$322.68	
13.36 tons alfalfa at $15	200.40	
7.97 tons of chopped barley at $36.50	258.05	
Labor	100.00	
1.4 months pasture at $1.00	16.80	27.35 loss
	$897.93	$897.93

Average loss per head, $2.28.

Feeding Work Horses

By A. M. RICHARDSON.

Albert McKay, north of Waterville, Wash., has been feeding his twelve work horses this spring according to the system advocated by Dr. S. B. Nelson, veterinarian, Washington State College. As a result, he has done more work, brought his horses through the season's work in better condition than ever before, and has saved between three and four tons of hay. He had but one light case of colic. He has worked two three-year-old colts all the time and they are in splendid condition.

Last year Mr McKay plowed, packed and harrowed 160 acres in 25 days, with two six-horse teams. This year he did the same work in 19 days. He credits the difference to the change in his system of feeding. Heretofore he has fed his horses as practically all other farmers do, that is: grain first thing in the morning; hay and water after breakfast, just before going to the field; at noon, water, grain, hay, and water; at night, water, grain and hay.

According to the system advocated by Dr. Nelson, which Albert McKay followed this spring, the horses are watered first thing in the morning, fed grain but no hay, and are not watered after breakfast; at noon they are watered and fed grain but no hay, and no water after dinner; at night they are watered, fed hay for an hour or two, then grain, and then all the hay they will eat during the night.

This system of feeding horses will take less feed, keep the horses in better flesh, give them more life, prevent digestive disorders better than any other system of feeding we have seen tried. It is physiologically correct. Each organ in the horse's digestive apparatus does the work adapted to it and no organ is overworked. A good many men told Dr. Nelson that they fed headings during harvest and had more or less colic and founder, and wanted to know what they should do. Dr. Nelson said it was a question for each farmer to settle for himself. He could feed headings and take chances on colic, founder and the loss of a horse occasionally, or he could feed hay and grain as advocated and not have the trouble from sickness. The actual cost of feed would be practically the same. It is largely a matter of convenience.

Pushing Swine Industry

The hog is one of the most profitable animals to handle for meat and money. The various swine record associations are making every effort to promote not only their own particular breed, but the hog business generally. Among these, the National Duroc-Jersey Record association is playing a prominent part. Within the last year the association has added another office, that of field secretary. This officer's duty is to look after the promotion work and the interests of the breeders in this and other countries. For this work the stockholders selected R. L. (Bob) Hill, Columbia, Mo., who at the time of the selection was a director in the association.

Bob Hill, as he is familiarly known, will make a trip west during the month of September in the interests of the Duroc-Jersey breed and breeders, and during this time will attend the state fairs of California, Washington, Oregon and other fairs adjacent. He will be glad to meet with as many of the breeders as possible, to help them form state, county or district associations or to give any further assistance that the breeders might desire.

Those who want to get in touch with Mr. Hill on this trip should write to him at once at Columbia, Mo.

Those who are interested in Duroc-Jersey hogs should get in touch with the National Duroc-Jersey Record association at Peoria, Ill., for any information they might want.

Pure-Bred Shrothorns.

Horace W. Bush of Bonners Ferry, Idaho, has bought a yearling roan bull from the Hercules stock farm at Sprague, Wash., also five cows from the Meadow Lake herd of J. H. McCroskey & Sons of Sprague. "I think we have a good stock country," said Mr. Bush. "We intend to build up a good herd of the best blood. Our country is not much for grain, but the forage is fine."

Boys!

Win These Prize Ewes

THE Bradley Sheep Club offers sixty flocks of bred ewes as prizes to stimulate interest in sheep raising and to increase wool production.

Any boy between the ages of 13 and 17 inclusive, is eligible for one of these prize flocks. In five years the flock you win will earn enough to send you through college. This is your chance to learn a profitable industry and help clothe and feed our soldiers. Prizes awarded on merit only.

Write us for Free Booklet on Sheep Raising by Mr. Anthony Gould of the American Sheep Breeder. Full details of contest will be sent with booklet.

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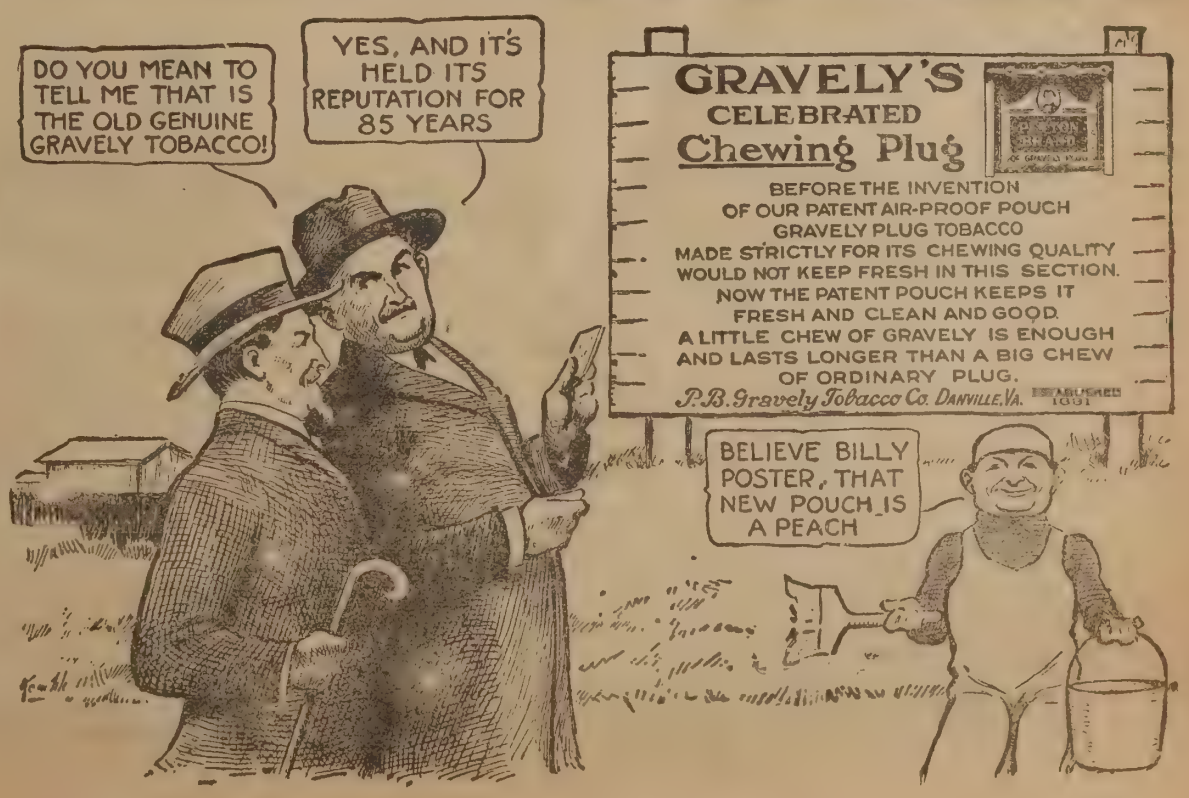
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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

Do not feed high-priced feed to non-producers.

The present situation demands better feeding, not less feeding.

Ship the cockerels to market when they reach a pound and a half or two pounds weight. J. D.

When feed is high do not cut down on the feed. Cutting down on the feed cuts down on the egg yield.

If a good grade of commercial scratch feed can be purchased for less than a good grade of wheat and corn, use that, but be careful of the grade.

If you know a hen that hasn't laid an egg for two weeks in July, kill her and eat her or sell her for eating purposes. The early quitters are not good layers.

Keep the pullets growing. Do not stint them because feed is high. If you do you will be wondering next winter why they don't lay when eggs are high.

Eliminate wheat, doing it gradually, and substitute cheaper grains Corn is likely to be much cheaper than wheat. If this proves to be correct, use corn instead of wheat, or part oats or barley and part corn, and feed liberally on bran and shorts or middlings.

Egg-Eating Hens

My chickens eat the eggs as fast as they lay them. Could you tell me how to stop them? It is not one alone that eats them, but all of them have a hand in it. Some say to cut the end of the bill off."
—Dewey Churchill, Tenino, Wash.

To stop egg-eating by the hens the important things are, first, to furnish them with animal food enough and with plenty of lime or shell-making material. The hen eats the egg usually to balance her ration. She must have certain amounts of animal food and shell material. With a hopper of meat scrap or milk before them all the time they do not often learn to eat the eggs. That is a question of feeding.

Sometimes a broken egg on the floor or in the nests will start the habit. That suggests the idea that anything that will prevent the eggs from getting broken, or if broken, from the hens seeing them, will often prevent the trouble. The nests therefore should be in a rather secluded or dark place, two feet from the floor or better. It is a good plan to have the entrance to the nests at the back, with the front and top of the nests covered. In this way the eggs are not exposed to the view of the hens on the floor. Another point: There should be plenty of soft straw or hay in the nests all the time to prevent eggs being broken. A hen in laying rises a little in the nest and if the egg drops on a bare board it is liable to break or crack. A broken egg is the beginning of the vice. This is a question of mechanical arrangement of the nests.

There is another point that is important, and this has to do with the management of the flock, which should not be overlooked. It is mostly the closely confined hens that eat eggs. A hen that is more or less idle is looking for trouble, and she usually finds it in one way or another. Satan finds some mischief for idle hens to do. A hen that is busy hunting for legitimate food in a legitimate way very seldom will be caught eating eggs. Hens that have free range and spend a good deal of their time hunting over the farm for food are not often egg-eaters. If they spend most of their time in the house, there should be plenty of straw litter on the floor and their grain should be thrown in the litter, enough at a time only to keep them scratching as much and as long as possible.

So we see in preventing egg-eating by hens we have an argument for good feeding, good housing, and good management. I hardly think breeding or heredity has anything to do with it. It is an "acquired characteristic" that is not inherited.

As to a cure for the habit, I do not think there is any very certain cure. Blowing the contents of the egg out and filling it with a paste of mustard, then laying it on the floor for the hen to eat may sometimes give her such a bad taste in the mouth that she will not try it again. Throwing china eggs around on the floor sometimes helps. Trimming the beak, I do not think, is very effective. Sometimes the best and only cure is to kill the hen.

But try the darkened nests, and more nests; feed more meat scraps or milk, then keep the hens busy. J. D.

Heredity Governs Value

To the Editor: I have some choice purebred single comb White Leghorns that are 2 1-2 months old. A neighbor wants them and wants to pick out my pullets only. Can you tell me about what price they should bring?—N. B. D., Bend, Ore.

The value of the chicks will depend, first on the value or cost of the eggs from which they were hatched; second, on the cost of the feed consumed in raising them; and, third, on the value of the labor expended in rearing them. As to the cost of the eggs used, if they were ordinary eggs, worth so much a dozen for market purposes, the initial cost of the stock need not be much, unless, as sometimes happens, it takes a dozen eggs or so to produce one chicken. If the eggs, however, are from high-priced breeding stock the egg cost will be a considerable item. The fact that they were "choice purebred White Leghorns" does not indicate their real value. White Leghorn eggs can be purchased often at market price by the dozen. But if it is high-priced stock; if for instance, it is 200-egg stock, the hens having actual records of over 200 eggs in a year, and the owner has paid $10 apiece for them or more, then the value or cost of the eggs would be proportionately more. Ordinary purebred chicks can be purchased when a day old at 10 cents each. Chicks that are from selected heavy layers are worth more than twice as much, say 25 to 50 cents, depending upon on how highly bred they were for eggs. Sometimes a dollar apiece is paid for eggs for hatching; I have had such offers for eggs from our heavy-laying college station stock at Corvallis, Ore. Such chicks start out in life with a considerable load to carry. If it takes two eggs to produce one chick, as it often does, the chicks start out with an initial cost of $2. But no one should pay such prices unless he "knows chickens" and knows exactly what he is getting.

The cost of the chicken at two and one-half months or any other age depends first on the cost of the egg or eggs used in hatching it. The large commercial hatcheries charge in the neighborhood of 10 cents apiece for day-old chicks. Such chicks have no particular breeding. They may be pure bred, but they haven't been bred up for several years for heavy production by an accurate trapnest system of pedigreeing. Such pedigreed chicks are worth more because they have cost more to produce. The chick may be produced by ordinary farm methods at 5 cents each on an average. With eggs at this year's prices they will cost more. Supposing we charge up 5 cents as the cost of the chick. Add to this 35 cents for feed and labor and the chick has cost at two and one-half months 40 cents. Selling it at 50 cents the poultryman is making a profit of 10 cents a chick. It will pay the purchaser to pay a dollar each if they are from stock of a proved heavy laying strain rather than 50 cents for average stock.

The term "single comb white leghorn" or "rose comb Rhode Island Red" does not indicate anything as to whether the chick is worth 50 cents or 100 cents. There are very good layers among them and there are very poor layers and you don't know what they are worth or how many eggs they are likely to lay unless you know something of what their mothers, grandmothers and great-grandmothers on both sire's and dam's side, laid before them. It is heredity that fixes their value. J. D.

Fair Dates.

Pendleton, Roundup—Sept. 20-22.
Boise, State—Sept. 22-29.
Salem, State—Sept. 24-29.
Helena, State—Sept. 24-29.
Lewiston, N. W. Lvst.—Nov. 16-23.
Portland, Pac. Nat. Dairy—Nov. 16-23.
Portland, Pac. Int. Lvst.—Nov. 19-24.

Washington Fairs and Shows.

Chehalis, S. W.—Aug. 27-Sept. 1.
Spokane, Interstate—Sept. 3-8.
Elma, County—Sept. 5-9.
Mabton, Hay Palace—Sept. 11-15.
North Yakima, State—Sept. 17-22.
Woodland, County—Sept. 19-22.
Rosalia, Lvst.—Sept. 20-22.
Lynden, County—Sept. 25-29.
Garfield, Roundup—Sept. 26-29.
Shelton, County—Sept. 27-29.
Burlington, County—Oct. 1-6.
Puyallup, Western—Oct. 2-7.
Palouse—Oct. 4-6.
Port Angeles, County—Oct. 11-13.
Colville, Live Stock—Oct. 17-19.

Difficult, Indeed!

Stranger—Why don't you try to cheer the baby up?

Little girl—Say, did you ever try to cheer anybody up who'd ate five benanas an' a half pound o'citron candy?

SILO A NECESSITY?

Cost Not Considered Prohibitive.

By C. C. BROWN, Castle Rock, Wash.

A number of silos have been put in Cowlitz county this year and will make a decided change in the order of farming. The silo is essential on every farm where stock is kept, some claiming that the ensilage furnishes just what the chickens and hogs need for perfect health during the winter months. The price of a silo either home-made or knocked down by the companies building them is not prohibitive. For the small difference in cost between the factory built and home-made, the general impression is that the factory has the preference over the home-made. The picked lumber and other material give satisfaction and results. More corn has been sown around here this year for the silos than in former years, and where clover is a short crop vetch and peas are taking its place for a filler for the silos.

FAIR JUDGES NAMED.

Experts Will Place the Ribbons.

The state fair board has announced the list of judges who will score the live stock exhibit this fall at the fair at North Yakima. The list is as follows: Dairy cattle, Professor H. H. Kildee, Minnesota university; beef cattle, John L. Smith, Spokane; swine, Professor William Hislop, Pullman; sheep, Professor C. E. Howell, Pullman; dairy and cheese products, G. E. Fervert, Salt Lake City; draft horses, C. F. Monroe, Grays Harbor; poultry, James A. Tucker, Royal Oaks, Mich.

Children's Day at Fair.

The annual fair held by the Okanogan county Pomona grange in October will set apart one day exclusively to the school children of the county. Frank G. Graham, president of the Pomona grange, has named the following fair committee: W. T. Beals will be secretary, and the committeemen, as far as named, are W. C. Ostenberg of Malott, John Chalmers, Okanogan; J. L. Freeman, Tonasket; U. E. Fries, Brewster; County Agriculturist Walter A. Holt and Superintendent of Schools Geargian Donald.

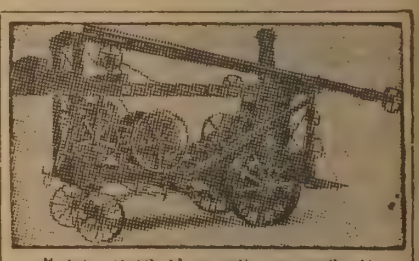
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Backache
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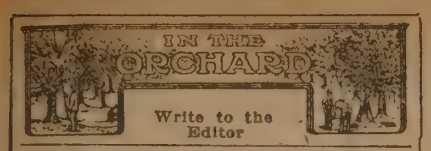
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GRANVILLE LOWTHER
Editorial Contributor

Fights Insect Pests

By H. H. BUSHNELL.

A long time ago the Chemawa Indian school was located at Forest Grove. When it was removed to its present location near Salem, after various property transfers were made, a small patch of ground was overlooked, and lay there without any visible owner. Some man occupied it for quite a while and used it for a garden. When he moved away nobody knew who it belonged to, but a search of titles recovered it to the interior department, and now it has been turned over to the entomological office for the northwest and is being used as an experiment plot.

This office was established by the department of agriculture and its work is for the purpose of studying and combatting insect pests of cereal crops. Its jurisdiction extends into California on the south and covers Oregon, Washington, Idaho and Montana.

At the present time C. W. Creel, who is in charge of the station, is in Montana engaged in fighting those German assistants, the grasshoppers. L. P. Rockwood, one of his assistants, is also fighting hoppers in Montana or Idaho. M. C. Lane, another assistant, is in California studying the Hessian fly. Hessians were our enemeis from Germany during our revolutionary war.

J. M. Landston, a third assistant, remains at the home post and fills in his time with the study and slaughter of the clover midge.

The clover midge and the Hessian fly are the two most potent foes of the cereal growers of the Willamette valley. A great deal of work has been done on the clover midge. Perhaps a fourth of an acre is devoted to experiment plots of clover. Plots have been cut every week or 10 days in order to discover which cutting catches the midge at the time of dropping the larvae. The dates vary considerably. Last year the right cutting was about June 1. This year it appeared to be June 25; such is the difference in the two seasons.

The remainder of the ground is devoted to wheat, and in screened boxes the Hessian fly is not only permitted, but urged to do his dastard work, while keen scientists take notes of his reckless progress and make plans to ruin him.

Farmers in the state should know of this station at Forest Grove. It is established for their benefit and may prove of great value to them. The work done on the clover midge has already been of great value to those who have followed the advice furnished on the basis of past experiments.

Drying Foodstuffs

Is Excellent Way to Win the War

(Continued from page four.)

boiling soda water, and dry two to three hours at 110 degrees to 140 degrees F. Use one-half teaspoon soda to a gallon of water. Dry young and small tender pods whole. Older pods should be cut in one-fourth inch slices.

Peppers.

(a) Peppers may be dried by splitting on one side, removing seed, drying in the air and finishing the drying in the drier at 140 degrees F. A more satisfactory method is to place peppers in biscuit pan in oven and heat until skin blisters, or to steam peppers until skin softens, peel, split in half, take out seed, and dry at 110 degrees to 140 degrees F. In drying thick-fleshed peppers like the pimento, do not increase heat too quickly, but dry slowly and evenly.

(b) Small varieties of red peppers may be spread in the sun until wilted and the drying finished in the drier, or they may be dried entirely in the sun.

(c) Peppers often are dried whole. If they are large they can be strung on stout thread; if small, the whole plant can be hung up to dry.

Peas.

(a) Shell and spread on trays and dry.

(b) Shell full-grown peas with non-edible pod, blanch the peas from three to five minutes, remove surplus moisture, spread in single layer on trays and dry from three to three and one-half hours. Begin drying at 110 degrees F., raising temperature very slowly in about one and one-half hours to 145 degrees F. Continue drying one and one-half or two hours at 145 degrees F.

(c) Shell full-grown peas, passing through a meat grinder, spread on trays and dry. Whole peas take longer to dry, but when cooked they resemble fresh peas. The ground peas dry more quickly, but make a product which can be used successfully only in the preparation of soup or puree.

(d) When drying the very young and tender sugar peas, use the pod also. Wash and cut in quarter-inch pieces. Blanch in boiling water six minutes. Remove surplus moisture and dry the same length of time and at the same temperature as string beans. It is not necessary to use soda when blanching peas.

Garden Beets, Onions, Leeks, Carrots, Turnips, Parsnips, Cabbage.

Beets: (a) Select young, quickly grown, tender beets. Wash, peel, slice about one-eighth inch thick, and dry.

(b) Boil the whole beets with skin until a little more than three-fourths done. Dip in cold water, peel and slice into one-eighth or one-quarter inch slices. Dry two and one-half to three hours at 110 degrees to 150 degrees F.

Turnips: Turnips should be treated in the same way as beets.

Carrots: Varieties having a large, woody core should be avoided.

(a) Wash, peel, slice lengthwise into pieces about one-eighth inch thick, and dry.

(b) Clean, scrape or pare, and slice into one-eighth inch slices. Blanch six minutes, remove surface moisture and dry two and one-half to three hours. Begin drying at 110 degrees F. and raise temperature gradually to 150 degrees F.

Parsnips, kohlrabi, celeriac and salsify are dried by the same methods.

Onions: (a) Select well-matured onions and remove the outside papery covering. Cut off tops and roots. Slice into one-eighth inch pieces and dry quickly. Store in a light-proof container to avoid discoloration.

(b) Wash, peel and slice onions into one-eighth to one-quarter inch slices. To avoid any unpleasantness, peel and slice while holding under water. Blanch in boiling water five minutes. Remove surface moisture and dry two and one-half to three hours, beginning at 110 degrees F. and raising temperature gradually to 140 degrees F.

Leeks are handled in a similar manner, cut into one-quarter inch strips and dried.

Cabbage: (a) Select well-developed heads of cabbage and remove all loose outside leaves. Split the cabbage, remove the hard, woody core, slice the remainder of the head with a kraut cutter or slicer, and dry.

(b) Shred or cut into strips a few inches long. Blanch 10 minutes, drain, remove surface moisture, and dry three hours at 110 degrees to 145 degrees F.

Spinach and Parsley.

Spinach that is in prime condition for greens should be prepared by careful washing and removing the leaves from the roots. Spread the leaves on trays to dry thoroughly. Slicing will greatly facilitate drying.

Parsley should be treated in the same way as spinach.

Beet Tops, Swiss Chard, Celery and Rhubarb.

Beet tops: Tops of young beets in suitable condition for greens should be selected and washed carefully. Both the leafstalk and the blade should be cut into sections about one-quarter inch long, spread on screens, and dried.

Swiss chard and celery should be prepared in the same way as beet tops. Celery also may be prepared in the same way as pumpkins and summer squash.

Rhubarb: Choose young and succulent growth. Prepare as for stewing, by skimming the leafstalks and cutting into pieces about one-quarter to one-half inch in length. Do not use the blade of the leaf.

Cauliflower.

Clean, divide in small bunches, blanch six minutes, and dry two to three hours at 110 to 145 degrees F. Cauliflower will turn very dark when drying, but will regain part of the color in soaking and cooking. Dried cauliflower is especially good in soups and omelets.

Brussels-sprouts may be handled in a similar way, but add a pinch of soda to the blanching water.

Pumpkins and Squash.

(a)—Select sound, well-grown specimens. Cut into strips; peel these; remove all seeds and the soft part surrounding them. Cut strips into smaller bits not over one-fourth inch thick and two inches long, and dry.

(b) Pare and cut into about one-half inch strips and blanch three minutes. Remove surface moisture and dry slowly from three to four hours, raising temperature from 110 to 140 degrees F.

Soup Mixtures.

Each vegetable used in the soup mixture is prepared and dried separately. They are put together in proportions desired, the prepared flavoring vegetables predominating. A combination of several vegetables makes the most desirable soup mixture. Those most often used are carrots, cabbage, onions, celery, potatoes and okra.

Herbs.

Celery tops, parsley, mint, sage and herbs of all kinds need not be blanched, but should be washed well and dried in the sun or in the drier. These are good for flavoring soups, purees, gravies, omelets, etc.

Apples, Pears and Quinces.

Early varieties and sweet apples are not well adapted to drying. Winter apples should be used for this purpose.

(a) Peel, core, trim and slice one-fourth inch thick. Dip in weak salt solution containing eight teaspoons of salt to one gallon of water. Spread on trays and dry. It is only necessary to dry apples long enough for them to become tough and somewhat leathery.

(b) Pare, core and cut into eighths, or core and slice in rings, using fruit or vegetable slicer. As apples discolor quickly, do not let them stand long before drying. To prevent discoloration, as the fruit is prepared it may be dipped for one minute in a cold salt bath, using 1 ounce of salt to 1 gallon of water. Remove surplus moisture and dry at 110 degrees to 150 degrees F., raising temperature gradually. Dry from 4 to 6 hours, and longer if necessary.

Pears are dried in the same way as apples. They may be steamed 10 minutes before drying.

Quinces are treated in the same way as pears.

Raspberries.

(a) Sort out imperfect berries, spread the selected berries on trays, and dry. Do not dry so long that they become hard enough to rattle. The drying should be stopped as soon as the berries fail to stain the hand when pressed.

(b) Pick leaves and stems from fruits and spread on trays. Handle carefully and do not bruise. Spread in thin layer on tray and dry slowly. Raise temperature gradually from 110 degrees to 125 degrees F. in about 2 hours. Do not raise temperature higher than 130 degrees F. until a considerable portion of the moisture has evaporated, as otherwise expansion will occur and juice will be lost by dripping. This is accompanied by loss of flavor and color. Finish drying berries at 140 degrees F. for 2 to 3 hours. It is necessary to dry berries from 4 to 5 hours.

Blackberries, dewberries and huckleberries can be dried in the same way as raspberries.

Peaches.

Peaches usually are dried unpeeled, but they will be better if peeled before drying.

(a) Remove the stones, cut the fruit into halves, or preferably into smaller pieces, and spread on trays to dry.

(b) Cut in halves, pit, lay in trays pit side up, and dry at same temperature and for same length of time as apples.

Plums and Apricots.

Plums: (a) Plums are not peeled, but the pits are removed, the fruit being cut into halves and dried in the same way as peaches.

(b) Select medium-ripe plums, cover with boiling water, cover the vessel and let stand 20 minutes. Small, thin-fleshed varieties are not suitable for drying. Drain, remove surface moisture, and dry from 4 to 6 hours, gradually raising temperature from 110 degrees to 150 degrees F.

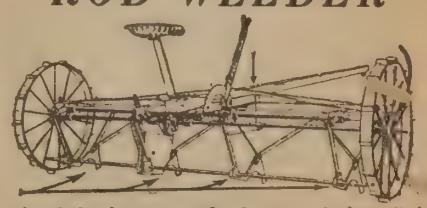
Apricots are handled in the same way as plums.

Cherries.

(a) Remove stems of cherries and, if the fruit is large, the pits also. Spread out on trays to dry. Small, black cherries can be dried when containing the stones.

(b) Wash, remove surface moisture, and spread cherries, unseeded, in thin layer on trays. If cherries are seeded there will be a loss of juice. Dry from 2 to 4 hours at 110 degrees to 150 degrees F. Raise temperature gradually.

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We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter.

THE WASHINGTON FARMER
Review Building, Spokane, Wash.

Two Dollar Wheat?

Senate Favors This as a Minimum

With a view to stimulating the greatest possible production of wheat in the year 1918, the United States senate has passed the house food control bill with an amendment placing a minimum price of $2 a bushel on No. 1 hard northern wheat at interior grain centers. Other wheat would be regulated in like manner, different varieties and grades having prices corresponding. This regulation would govern both the 1917 and 1918 crops. This would amount to a guarantee to the farmer of a good price for his grain, fixing only the lower limit and not the upper limit of the possible price to be obtained.

This action by the senate, however, does not mean that the measure is finally passed with this provision. The bill originated in the lower house of congress, and now must go back for approval there as amended by the senate. Conference committees are this week working on the amendments with a view to getting the food control bill ready for final passage after the long delay that it has experienced in the senate. There are many amendments attached by the senate, each of which will likely cause more trouble and delay.

The measure as it came from the house approved the president's plan to place the food control under one man, to which position he already has appointed Herbert C. Hoover. The senate amended the measure so as to require a board of three instead of one for food control. It is known that President Wilson and his close advisers favors the one-man plan, and will make an effort to have the conference committees agree to eliminate the senate amendment on this matter.

Another matter of difficulty in the measure is the substitution by the senate of a section prohibiting distilled beverages, but not malts, during the war, for the house bone-dry section. This is in conformity with President Wilson's recommendation, but is sure to meet with strong opposition in the house, and also from certain senate members who favor bone-dry legislation.

The bill as it now stands places in the hands of the administration, through the proposed commission of three men, the control of foodstuffs, feeds and fuel, including gasoline and kerosene. It also contains an appropriation of $10,000,000, made by senate amendment, for purchase by the government of soda nitrates for use as fertilizers in the nation-wide attempt to increase food production.

It also provides stringent regulations whereby the president could exercise broad control over cold storage plants and grain exchanges that were found hoarding foodstuffs or manipulating prices to the detriment of the public and of the allied governments engaged in the struggle with Germany.

Russians Are Checked.

The activities of the Russian army in the Galicia region apparently has received a vigorous setback by the German reenforcements that were rushed to the aid of the Austrians. For two weeks the Russian armies drove fiercely and desperately into the Austrian lines, gaining much coveted ground. Seeing the distress of their allies, the Germans hurried to their assistance and it seems have delivered a telling blow. A breach eight miles wide and 10 miles deep in the Russian lines is said to have been made.

With a view to reinspiring the Russian soldiers for more vigorous defense and a new movement of aggression, Premier Kerensky, who started the first successful offensive, has again gone to the front, according to latest reports.

Activity has been less marked of recent on the French front, though battling continues there. No reports of important successes or defeats on the part of either side have been received for several days.

The Submarine Situation.

It is apparent that Germany is still placing supreme confidence in her submarines to win the war or so cripple the effectiveness of England and her allies as to permit the armies to rush to victory. That the submarine is not as successful as Germany had hopes is indicated by the latest report, which shows that only two weeks since the inauguration of the submarine campaign has the loss to allied shipping been as low as during the last week officially reported, July 11-18.

The following figures show the weekly losses to allied shipping since the beginning of the campaign, the ships being classified as those of over 1600 tons capacity and those under that capacity:

Week—	Over 1600 Tons.	Under 1600 Tons.	Small Craft.
First	14	9	3
Second	13	4	3
Third	16	8	21
Fourth	19	7	10
Fifth	18	13	6
Sixth	17	2	6
Seventh	19	9	12
Eighth	40	15	9
Ninth	38	13	8
Tenth	24	22	16
Eleventh	18	5	3
Twelfth	18	9	3
Thirteenth	18	1	2
Fourteenth	15	3	5
Fifteenth	22	10	6
Sixteenth	27	5	..
Seventeenth	21	7	..
Eighteenth	14	3	7
Totals	385	149	128

Grand total, 622.

Air Army Bill Passed.

The United States senate has passed the house bill appropriating $640,000,000 for the financing of this country's great aeroplane development. Under the provision of the measure and the plans of the war department there will be constructed as rapidly as possible 22,000 airships, and a force of 100,000 trained men will be developed to man them.

The aeroplane bill was fought bitterly by a number of senators, led by Senator LaFollette of Wisconsin, who opposed the provision in it by which men could be drafted into the service to operate the planes.

ALLOT LIBERTY BONDS.
All Small Bonds to be Issued.

Every applicant for a small Liberty bond during the nation-wide campaign for their subscription early in June will receive his bond, according to Secretary W. G. McAdoo of the United States treasury department. Only the subscriber for a bond in excess of $10,000 will have the size reduced. This is due to the fact that there are applications on file for bonds totaling over $3,000,000,000 when the total issue was only $2,000,000,000. Every subscriber, however, will secure a bond. The following table indicates what percentage of the bond subscribed for by any individual will be issued to him by the government.

Size asked.	Percent to be issued.
Up to $10,000	100 per cent.
$10,000 to $100,000	60 per cent.
$100,000 to $250,000	45 per cent.
$250,000 to $2,000,000	30 per cent.
$2,000,000 to $6,000,000	25 per cent.
$6,000,000 to $10,000,000	21 per cent.
$25,000,000 (two such applications)	20¼ per cent.

Economy in Powder.

By J. R. MATTERN.

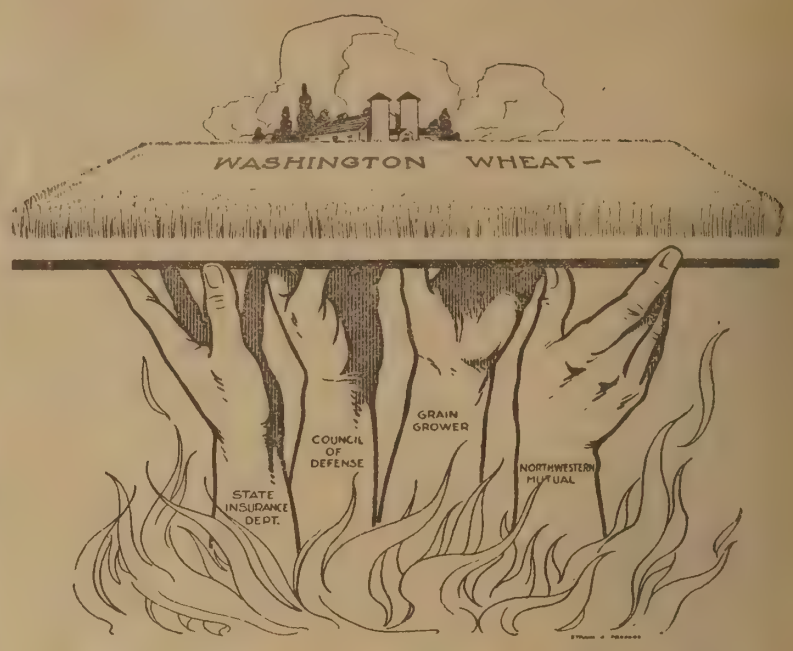
The war naturally has had the effect of raising powder prices several cents on the pound over what they were a few years ago, and many land clearers have been reducing their use of powder accordingly. This is a wrong viewpoint, for recent improvements in both powder and methods of using it make possible cheeaper stump removing today than ever was possible before. In respect to powder, the development largely has taken the form of a turn from nitroglycerin to ammonia. The old way was to dig a hole under a big stump and load in a single large charge. If enough powder was put in the stump was blown out—together with enough dirt to leave a hole as big as several horses in some cases. Quite often, however, the single charge failed to take out a large part of the stump, even while throwing the other parts long distances.

The new method of firing several charges together by means of electric current does away with the waste of powder required in the excessive single charges, insures the complete removal of the stump with all its roots, and makes holes little bigger than the underground parts of the stumps themselves. The greater efficiency of the elecetric firing method comes from hitching the force or power shorter to the load it must lift.

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The first carload of this year's wheat was shipped from Trinidad, Wash., July 23, when W. P. Gilbert of the Columbia View farms shipped a load of Early Baart to Seattle, receiving $2 a bushel for the same. Mr. Gilbert has 1500 acres in crop and it will average 18 bushels to the acre.

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Lift your wheat crop to the safety level above fire-danger!

By close cooperation Washington's wheat may be saved 100% strong for hungry mouths that look to the Inland Empire for bread.

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The Insurance Commissioner is laying down wise regulations for protecting the growing grain and is urging the formation of fire-fighting forces; the Council of Defense is strengthening local authorities and arousing people to action through grain-producing sections, while the Northwestern Mutual has released its entire field force to cooperate with the grower in every possible way.

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JORDAN
Being a Tale of Boys, Bees and Brawn

By PAUL E. TRIEM

"As Walter Kenedy finished roping his trunk, he heard his father enter the kitchen. Something in the firm and heavy step and in the other home sounds that formed a background for it—the strident voices of chickens in the yard and the lowing of cattle in the south pasture—something in all these familiar noises brought a lump into the boy's throat. Mechanically he puckered his lips and began to whistle.

"On Jordan's stormy banks I stand, and cast a wistful eye——"

Then he blinked something very like tears out of his eyes and went downstairs into the living room.

Mr. Kenedy was wraping a bundle of mail. He turned, at the sound of his son's entrance, and stood for a moment silently regarding him.

'Well, Wally," he said, "I guess we're all ready for town. Is your trunk roped?"

Walter nodded. He didn't feel like talking, for even his favorite song had failed to banish that queer feeling in his throat.

Mr. Kenedy seemed not to notice the boy's silence. His own keen, gray eyes rested meditatiely on the stalwart figure of the youngster, and he nodded.

"Wally," he continued, "when a boy leaves home for the first time, his father usually gives him a sort of lecture on how he is to behave while he is away. I don't believe that's necessary with us—you and I have been chums for pretty close to seventeen years now, and you know what I think about most of the things that come into living. The details of existence may be different in one place from what they are in another, but the principles are the same the world over. There's just one thing I've thought of that it may be worth while to mention: in school, you'll find a good many youugsters who have never done any work and who will look down on you because your clothes aren't quite as fancy as theirs and because your hands are big and strong. Now I want you to remember that a boy who can finance his own schooling by working 80 acres of land in addition to helping his father, hasn't anything to be ashamed of. And on the other hand, I don't want you to admire yourself too much, nor to look down on the boys who don't understand you. There's no virtue in being misunderstood, and it's neither good business nor at all comfortable. Try always to get the other fellow's point of view, and learn to make him see yours. That's half the art of getting on in this world."

Walter nodded. Truth to tell, his father's advice made little impression on his attention just then, but he remembered it afterward.

His first duty after he had landed in the little middle western college town was to engage a room, have his trunk brought up from the station, and visit the registrar. After paying his tuition he went to the president's office and arranged his studies for the spring term.

"Too bad you couldn't have started with us in the fall, Mr. Kenedy," the kindly man who helped him with this commented. "It's always a little hard taking up work in the middle, as you are doing."

"I couldn't get away from my work earlier,' Walley explained. "And I've been studying at home, nights. I think Ill be able to get along."

President Allen looked from the strong, clean face to the sturdy figure of the new student. Perhaps it took him back to a time when he, too, was a country boy, starting at the foot of the education ladder.

"I think you will," he agreed.

And if there had been nothing to do but to prepare lessons and recite them, Walter would certainly have held his own without much effort. His exuberant vitality gave him a fund of reserve energy upon which to draw, and the fact that he had had to earn the privilege of attending school made him eager to get ahead. But there were other things—

He wasn't really shy, but he was not accustomed to the quick shifting and clashing of thought and conversation which life in the city cultivates. He took time to think before he asked a question or answered one, and although this saved explanations in the end, it gave his speech the appearance of slowness. Some of the teachers misunderstood this deliberation; more of them appreciated it; but among his fellow students, Walter quickly came to be considered a "bone head." For some time he failed to notice the signs of gathering amusement at his expense. Then, very unexpectedly and brutally, as is apt to be the way with youngsters who have not yet learned in the university of hard knocks the supreme lesson of tolerance, the awakening came.

It was at the first meeting of the Choral club. Walter attended, together with many others of the new students. He liked to sing, and only regretted that in the preliminary exercises, which consisted of singing various songs evidently well known to the other students, he was unable to join. Selections were called for.

"Don't be bashful, fellows," Don Carlson shouted from his position on the platform. "This is just a little get-together meeting—we'll sing the bashfulness out of ourselves, and then get down to organizing. Who has something else for us to try our lungs on?"

Apparently most of the favorites had been selected, for there was a pause of some moments' duration. Wally cleared his throat.

"We .haven't sung 'On Jordan's Banks,'" he said. "'On Jordan's stormy banks I stand—' you all know it."

For a moment there was silence in the big room. Everybody had turned and was regarding Wally with undecided curiosity. Very evidently he was in earnest, however, and next moment the whole concourse had burst into a roar of laughter.

"'Jordan's banks—' I say, that's a gaod one! When did you wake up Mr. Van Winkle?" someone next him exploded.

Up on the platform, Don Carlson was pounding the table for order. "Come, come, fellows—somebody else suggest something—something up-to-date, if you don't like 'Jordan!'"

Wally's face flushed slowly as he sat back in his chair listening to the amused titter which still sounded around him. "Up-to-date"—that was why he had not known any of the songs they were singing! And Jordan was old! For the first time he realized that a gulf separated him from these gay and dashing young fellows around him. He sat silent through the rest of the meeting.

He was making his way thoughtfully and somewhat bitterly home across the college grounds, with their winding paths and shrubbery and their broad, open lawns, when a voice hailed him.

"Hey, Jordan! Wait a moment!"

He turned and saw two well dressed young fellows of about his own age coming along the path behind him. One of them was Don Carlson. The other he recognized as Jimmy Spicer, one of the school's star athletes. They came up with him next moment, and Spicer looked at him as if Wally were a new variety of bug or fossil.

"I say, Jordan, do they still sing that kind of thing where you come from?" he demanded incredulously. "I'm asking for information—'data on the folk customs of the rural population,' old Tucker would call it."

Professor Tucker taught various English and rhetorical subjects, Wally remembered, and his eyes grew hard and bright as he understod the slur.

"We do more than sing where I came from," he replied quietly. "We work, hard and long, and when we do have time for singing , the old fashioned songs are good enough for us. I'm sorry I didn't understand the kind of people I was among," he added.

"Come, come, now fellows," Don Carlson protested amiably. He was a blue-eyed, genial boy with a flaxen pompadour and a gift for diplomacy. "The dean says the real purpose of education is to broaden our understanding and sympathy. Let's show that we're beginning to learn our lessons by forgetting these little differences—as Shakespeare says, 'Every man sings the same tune when he's hit with a brick!'"

Jimmy Spicer fell silent, but the smile of superiority did not leave his face. The three journeyed together across the square that formed the college grounds.

"So long, Jordan!" Spicer said, as they parted.

And that name stuck, long after the Choral club incident was forgotten. It stuck, and it carried with it something of condescension and superiority which would have humiliated many a boy. Wally had remembered his father's parting advice, however, and he was determined to retain his own perspective, his own fairness of vision, even if he could not force his fellow students to look upon him with the same tolerance.

"There's no virtue in being misunderstood, and it's neither good business nor at all comfortable!"

He knew that now, and he was resolved that some way, some time, he would force these debonair students around him to see him as he saw himself—not a "little tin god on wheels," but one like themselves in honesty and ambition and in a liking for a good time.'

That time was long in coming. With the full swing of the spring work Walter found himself more and more forced back upon his own companionship and resources. Don Carlson some times stopped to talk with him, when they met on the snow-blanketed campus or in the corridors of one of the school buildings; Jimmy Spicer occasionally condescended to bestow upon him a supercilious, "How are you, Jordan?" But he had made no real advance into companionship with any of the many students, and in his none too cheerful room in the boarding house he spent many a long hour grinding at his lessons.

Once, for a few minutes, he sprang into prominence. It was after the snow and ice had vanished, and the lawns had reemerged, apparently greener and more luxurient than ever, from under their winter covering. Wally had crossed the college grounds from the rear and had just rounded the corner of the recitation hall when a huge twisting ball rolled in front of him. He stepped precipitately back,

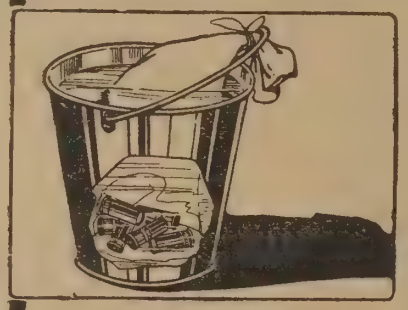
(Continued on page twenty.)

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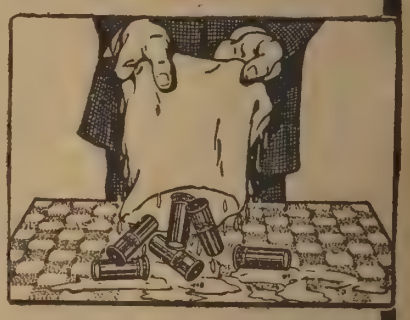
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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK.

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CHAPTER XX.

Telling of a certain fiendish, yellow cat, possessed of an evil spirit that made life miserable for Madden, a Chinaman who kept a "washee house" in Coulee City when that place was "wild, woolly and full of fleas."

In pioneer eastern Washington 25 to 30 years ago you met two classes of people—one whom you were glad to meet; and another class whom you had little to gain, and a little to lose, maybe, in meeting.

The ones you enjoyed meeting were the pioneers there ahead of you, who, like you, were poor. Everybody was poor. Everybody was hopeful of the future. No man thought he was better than his neighbor—and if he did, he was at once pronounced a misfit in the country, and the weight of public opinion generally helped him to other climes.

Philip McIntee, cattleman and pioneer, the first mayor of Coulee City, who built his log cabin among the sagebrush and greasewood of the Grand Coulee long before Coulee City had been heard of, was typical of the old-time pioneer whom to meet was to be inspired.

He came into the Coulee country so many years ago that I am at a loss to say when; but I know he was there when the Indians were not exactly friendly. Because they were unfriendly one memorable winter, he had to get out of the country as swiftly as a tough cayuse would take him, and he saved a white woman's life by getting her out and safe to Walla Walla the same winter. This and similarly thrilling exploits were told of Philip McIntee; but of himself he said never a word. So a good deal that Philip McIntee dared and did in the early days of the Coulee country is still a matter of conjecture. But he took his chances, without a doubt, for he was in the country at a time when a white man's scalp was not safe unless he was married to an Indian woman—"squaw men" they were called; but Philip McIntee never married a squaw, and kept his scalp just the same.

We were his guests for dinner one day shortly after father had camped on the Coulee bottom ready to hunt for a farm on the surrounding bunchgrass prairie. For dinner there were potatoes boiled, unpeeled, stewed dried apples, fresh beef, baking powder biscuits made by McIntee himself, syrup made of brown sugar and water, and coffee. The syrup can set of the back of the stove, and at each meal was replenished with more sugar and more water, and served hot. McIntee and one of his cowboys got dinner. To get some sugar for the syrup can McIntee passed into the small, dark room of the cabin adjoining the kitchen which was used also for a living room. He explained:

"The plagey ants are after me shuggar, Mum; so I kapes it in the bidroom where it is dark."

His cawboys called him "Mishter MaCountey" and this nickname seemed to have appended to it, a joke of some kind at which he became greatly flustered when one of the cowboys threatened to tell it on him.

"Tell it, and I'll be landin' on ye with me skillet," he said with a red face. To my mother he apologized, adding that "the b'ys were a worthless lot, always in divilment up to their ears."

Dan Paul was another old-timer who came into the country years before others thought of coming there. Several more settlers were scattered up and down the Coulee bottom at intervals of 10 to 20 miles. One and all they welcomed later comers, such as us. In their welcome there was an actual eagerness that was almost pathetic. They wanted neighbors—some one to talk to. They insisted that you camp with your wagon and animals and children in their front yard and stay there all summer and eat with them three times a day. When they went away they left the door wide open so that you would feel free to enter and make yourself at home—and if you failed to enter and make yourself at home, they felt injured.



To see her is to love her,
And love but her forever;
For Nature made her what she is
And never made anither.

—Burns.

Those were the old-time pioneers you would have enjoyed meeting; and their inspiration continued on down into the first and second and almost to the third generation of later pioneers and settlers. Now, this grand western hospitality is getting a bit out of fashion, I think. It's too bad; but it has passed with the pioneer west.

A good many of the pioneers, or semi-pioneers, whom you would not have cared about meeting did not stay long. They had their rise when the Central Washington railway built through from Spokane to Coulee City and stopped there in the greasewood and scab-rock. A double row of pine board houses sprang up, making the main street of the town, with a livery stable at one end and the railway depot at the other; and as you passed along the street, on either side, a good many of the doors you passed opened into a saloon, all of which did a flourishing business. The town filled up with all sorts of gentry—railroad workmen; Indians, full blooded, half blooded, quarters and eighths; gamblers, drunkards, hoboes, amateur bad men and would-be toughs. On the outskirts of the town and environed by sagebrush, scab-rock and alkali flats, flourished the so-called tenderloin district. For a little while Coulee City was the real thing—"wild, wholly and full of fleas and never curried below the knees."

Cowboys who, on the wide, clean, grass range, with fire-water and its itinerant temptations a hundred miles away, were clean-minded, active fellows, turned hellward and drank like fish. One of the boys got super-hilarious one night and began to shoot through the ceiling, the windows, the walls and the floor. A man was walking by in the unlighted street; a stray bullet hit him in a tender spot. At sunup they found him there "dead as a door nail," as somebody said. The shooter was found and arrested. A jury was sworn in, and the killer got 20 years at Walla Walla.

The unique character of the town was Madden, the Chinaman who ran a "washee house" back of Hutton's saloon. One of the vaudeville artists of Hutton's saloon was a huge yellow and yellow-eyed cat that would, for the entertainment of the crowd, lap up three saucers of beer and then circled after its tail in a teetering, tipsy way which made everybody howl with delight. Madden didn't like Hutton's yellow cat.

It seems that the cat was persona non grata to the Chink, on grounds of religion, superstition, sentiment and a hatred of the whole feline tribe. Whenever he saw the big yellow creature, he cursed it as only a Chinaman can curse. He explained, one day, in the midst of a typhoon of Anglo-Chino swearing, that it was bad luck to have a yellow-eyed cat around. It developed that if anything went wrong with Madden's washing he cursed Hutton's cat. He had an immense line of washing of the snowy white kind out one day, and a southwest gale stirred up such slouds of alkali dust that he had to do all the washing over again—which he did, cursing Hutton's cat the while.

When the boys found how Madden hated the big cat they began to have some fun. While the Chinaman was out gathering his washing they would slip the yellow cat into his shanty and shut the door. Behold Madden plodding back with soiled clothing piled high on his back, and opening the door of his house to find the big, yellow cat glaring and spitting at him, or adeptly climbing the walls!

Instantly there would be a double explosion—Madden and the cat. He would hurl wood, stones, tin cans, whatever he could lay his hands on. The cat would yowl in a fiendish way and dart through the door between Madden's legs and streak into the saloon through the back door, eyes like coals and tail the size of a stovepipe.

The boys would troop out and sympathize with the cursing Mongolian. What was the matter? The damned cat! How in the world did it get in the house with the door closed? Everybody wondered, and the Chinaman swore. They would go all around the house and inside, helping Madden hunt for a hole where the cat might have gotten in, and ask him time and again if he was sure he had shut the door when he left. The Chinaman was deceived. The cat was an evil spirit beyond a shadow of doubt. He would glare and swear whenever he saw the cat; likewise would the cat glare and swear in its cat way whenever it saw Madden.

One night in a storm, when there was rain, wind and thunder, the boys slipped the cat into his shack while he was asleep. Two other cats were secured and their tails tied together in readiness, at a signal, to be hung over Madden's doorknob. A couple of the fellows carefully mounted the roof of the Chinaman's dwelling, made holes in it and let down strings to which fishhooks were attached. Receiving the signal, the custodian of the cats hung them by their tails on the doorknob and instantly there ensued a wild shrieking and snarling. Madden awoke; as he did so his bedclothes were lifted from him with a ghostly, invisible hand. He hopped out of bed with a howl; and the big, yellow cat imprisoned in the room with him turned loose with howls, yowls, growls and much spitting and hissing. Madden yelled like a maniac and the cats squalled in a way that would have disturbed the dead. He burst through the door, and after him the yellow cat, big-eyed and fur on end.

Madden, in spite of his humble occupation in America, seems to have been a Chink of rank in the Flowery kingdom, though something of a family black sheep. The cowboys asked him many questions, and often were absolutely indelicate in their questioning and surmises as to why he left China. Madden wouldn't tell. He presently would get angry, shake his fists, and shout to the effect that all China and all Chinese could go "stlaight to heiley," grab a big, hot iron and slap it on the bosom of a shirt with a mighty whack and a cloud of steam.

But, someway, he received a family forgiveness in China, or was absolved to the extent of coming into an inheritance of much money. All of a sudden the Chinaman was rolling in wealth. He made trips to Spokane and came back with half a dozen tailor-made suits of clothes, the most expensive that money could buy. He had pink, purple, red, lavender and still more gorgeous colors in neckties, and an immense tie pin made of gold wire twisted into a queer looking letter—part of his Chinese name, maybe. He wore a good watch, wore shining patent leather shoes, silk socks, gloves, sent all his laundry to Spokane—was a "sport" all the way through. He sailed into the barber shop one day and announced with a shout that he wanted his queue "cutte off." He proposed to become a white man—no more of the Chinese for him. The pigtail was amputated and the Chinaman ridiculed it as it lay helpless at the barber's feet.

The Salvation Army invaded Coulee City that winter. They held meetings in Rice's hall, opposite the Coulee post-office; and immediately there was a landslide of sinners.

There were several really pretty girls in the Salvation Army band. In voices sweet, sad, and divinely compelling they sang every night:

"In a graveyard lonely, many miles away,
Lies your dear old mother in the cold, cold clay——"

I can not remember more of the song, though it went on at some length, "skies" rhyming with "dies," I think. It had its effect; I have seen the roughs and toughs of the town weep as they heard it, and crowd to the penitent's bench up in front. One night Madden in a brand new suit of clothes, big pink tie redolent with jockey club perfumery and his Mongolian hair parted in the middle, went to the bench with them. He proposed to take on the white man's religion along with the white man's clothes, language and manners in general.

That night, the bench was pretty well loaded, and several of its occupants were somewhat "loaded." Stated otherwise, they were "lit up"—they had been drinking. Presently the bench broke. Madden's legs were caught and pinched under the broken boards with several hundred pounds of sodden humanity on top of him.

"Offee my leg!" he howled. They did not move quickly enough, so he began to swear. Those in the back of the hall began to laugh, and the merriment spread to the tangle at the demolished bench. Those who but a moment before were tearful under the very real weight of their sins and at the memories stirred by the song in which "dies" rhymed with "skies" now wept tears of merriment as the indignant and volubly discoursing Chinaman was pulled from the tangle at the bench.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University)

What a Calory Is and How It's Used to Determine Diets

Can you eat a "calory?" This is a fundamental question nowadays. A calory is neither a ghastly visitation, a wild animal nor a fearsome bugaboo of the technical "professor." It is a simple little thing equal by analogy to inches, degrees, gallons and other standards of childhood's unhappy hours.



Dr. Hirshberg.

If school books taught you "how many calories there are in a pound of cheese," just as it made you memorize "how many mills make one cent" or "how many bushels make a barrel," calories would not be such odd fish and strange birds which you take them to be.

The amount of heat in a piece of bread—or any other food—necessary to raise one pound of water 1 degree is one calory. To keep the average person warm and on the go about 100 calories, the quantity contained in one serving of either half a potato, rice, barley, oatmeal, whole wheat, a banana or an orange, are necessary. Not all of these, mark you. Any one item here mentioned is a portion or a "serving," and it will raise the temperature of one pound of water 100 degrees, and that of a 200-pound man half a degree.

One tablespoonful of butter yields the human living creature 100 calories. So does an ounce and a half of steak, an ounce of beans, flour or peas. A French roll yields as many calories as a lamb chop, but in a starchy-sweet from, and not as albuminus matter. The latter, called protein, is more constructive. Proteins are the structure-making bricks and mortar of the human form divine.

Milk, fish, nuts, eggs, meats, fowl, flesh and cheese are all rich in proteins, the tissue builders. The protreins in vegetables and fruits are similar to those in flesh, fish and fowl.

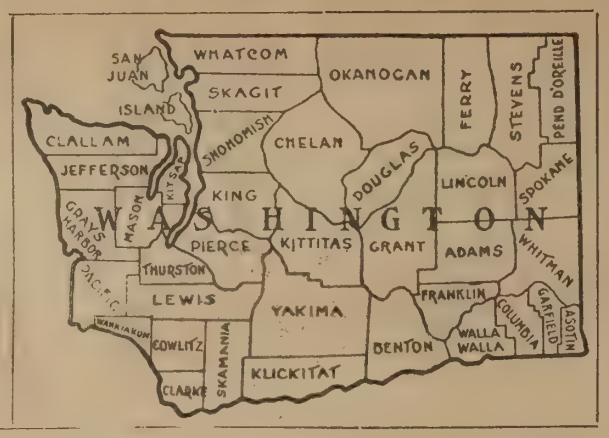
To be sure, meat as human fodder is a much abused and overdone ration. Indeed, the less meat the quiet, non-muscular person eats the better it often is for him.

About three ounces of proteins are a very liberal allowance in the ordinary diet. Of man's 3000 of calories a day about 300 of them are "more than a plenty" in the form of proteins. A roll of cream cheese—a quarter of a pound—four eggs or third of a pound of roast beef yield you all the tissue fodder needed. Moreover, this relatively small yet proper amount of nitrogen will do away with much of the constipation so common among many Americans.

"Liver trouble," "indigestion," "sluggish blood" and other flapdoodle words, words which exhibit human ignorance at its worst, are terms to denote only too often constipation.

Pea Crop Badly Injured by Heat

Many Farmers Regret Planting the Land to Peas That Ordinarily Is Given a Year of Rest by a Summer-fallow.



FAIRFIELD, Spokane County, W[illegible] July 12.—Where the summer fallow in past years averaged one-third of the acreage, this year it is practically nothing. But just now many farmers are lamenting the fact that they haven't the one-third in summer fallow and less peas. The hot winds are cutting all spring sown crops very hard and especially the peas on new pea land. Many acres have already been ruined and will not make the seed back. There seems to be plenty of labor and with the light yields the stock and machinery is more than adequate to handle the harvest. This community will harvest in the same way as formerly except a new pea harvester will be tried by some farmers.

ROY G. ADAMS.

Use Combine Harvesters.

MOHLER, Lincoln County, Wash., July 13.—On account of hot weather crops are going to be much below the average in yields. Harvesting this year will be done altogether by combined harvesters. Farmers who heretofore have harvested by headers are buying harvesters.

A. S. MARLER.

No Increased Acreage.

MEAD, Spokane County, Wash, July 13.—As farmers here were utilizing about every foot of available ground, the agitation for increased production has not resulted in much increased planting over ordinary years. Prospects are poor for yields of spring grain, and rapidly growing worse by reason of continued dry and hot weather. There will be no scarcity of labor, machinery or stock to harvest crops promptly. There will be no change in methods of harvesting from that of former years by binder and threshing principally from the stack. Winter wheat, while not suffering like spring sown grain, will not yield nearly as well as the last two or three years.

GEORGE HINGSTON.

Cheerful Outlook.

LA CONNER, Skagit County, Wash., July 16.—At the present time the crop conditions seem to be very good. It is more noticeable, perhaps, in the hay crops than in others. In a number of places the oats show signs of the wet spring, but in general the outlook is very good. A great deal of the spinach has been plowed up and replaced with other crops. It appears that spinach will not do in ground that is inclined to be the least bit sour.

The beans and potatoes that were crammed into every available space seem to be making a very good showing. The late potatoes are making the best showing, as the early spring was cold and wet.

The harvesting of the hay crops is now in full blast, and there seems to be no lack of labor in the fields. In most cases the crops are good, and the farmers seem to be satisfied with the outlook.

J. W. ALEXANDER.

More Vetch and Oat Hay.

GIG HARBOR, Pierce County, Wash., July 16.—As the season advances it is quite evident that all the propaganda and publicity for increased crop production has not been thrown away. About here the increase is more noticeable among the root crops, particularly potatoes, and among the legumes, particularly peas and beans. We can not run to the grain crops very extensively here because of the lack of cleared acreage, and all the appliances needed for harvesting and threshing a grain crop. I think that I might safely say that there has been an effort among our poultry growers to produce a little more wheat, oats and peas to be fed to the chickens in the form of straw scratching material from which they can extract the equivalent of one good grain feed per day during the coming winter. I seem to see more vetch and oat hay being made this season hereabouts than I have observed during former years.

The crop prospects are fairly good in this region. The first cut of clover got caught in the heavy rain of early July with some, but for the last 10 days weather has been perfect for haying and harvesting. On the whole, the crop of roughage has been good, and secured in good condition. Root crops are looking well where planted on soils fairly supplied with natural subirrigation. Yes, it can not be denied that the increased crop production propaganda, added to the farmer's own native canniness, has increased the aggregate production of this section of the country.

W. D. BOYNTON.

No Labor Anxiety.

SPOKANE, Spokane County, Wash., July 16.—Regardless of the great effort that has been made this season for increased crop production and the cooperation of all parties concerned, it looks as though we are doomed to a great disappointment when it comes to the harvest. This would not have been the case, however, if the weather man had favored us with the abundance of rain as he usually does about the first of July. The spring crops are generally conceded to promise only half of a normal crop. This includes wheat, oats, peas and barley. Unless a rain is forthcoming within the next week it may be that the crop will be far less than half. What winter wheat there is left is in very good shape, but such a small percentage of it came through the winter last year that it is hard to estimate what percentage of a normal crop we will have.

In regard to the labor situation, there is not the anxiety that was felt before the drouth struck us. The chances are we will have plenty of labor to handle the short crops in a satisfactory way. Each community is supplied with plenty of work stock and machinery to handle their crops. Different towns have prepared to establish a local man who will get in touch with the federal labor agent in Spokane and notify this office of the needs for harvest hands. In this way it is expected to take care of the labor situation throughout the harvest season. It is generally conceded that the wage scale will be somewhat higher than heretofore, but much will depend upon the crop prospects from now on.

J. R. SHINN.

Hay Crop Almost Doubled.

CHEHALIS, Lewis County, Wash., July 16.—Seasonable June rains have about doubled the hay crop of Lewis county. Ideal haying weather the middle of July allows it to be rushed into barns in rapid-fire shape, largely assisted by side delivery rakes, power hay loaders and improved hay handling machinery in the many big new barns. Many new silos will also be filled this season. So less than a third of the usual amount of money will be sent out of the county for feed. If the fall is favorable much the largest crops of potatoes and beans ever grown here will be gathered. Sheep and pigs are extra scarce and bring record prices. Stock cattle and good cows are in fair demand at slightly advancing prices. Little roosters and hens are being rushed to market at 10 to 14 cents a pound—less than half their cost—and eggs are getting scarce at 40 cents a dozen.

L. K. COGSWELL.

Potatoes in Good Condition.

EPHRATA, Grant County, Wash., July 14.—The rye harvest is on in the south part of this county. Rye is not as good as usual, owing possibly to the exceptionally dry fall and poor stand. Wheat in the sandier sections of the county is very good and has not been affected very much by the hot weather. Some sections of the county have been hurt worse than others by the hot wind, but there will be almost an average crop in the largest part of the county. Some sections will give about half the usual yield.

The potato crop will be large this year as a large acreage has been put in and they seem to be in very good condition.

Quite a number of the small combined harvesters have been sold in this county, partly because the farmers have felt that there is apt to be a shortage on the labor situation this year and with a small combine there is nearly always enough help in the family to harvest crop without any additional outside help. Many of the harvesting crews have been made up already and it is hoped that there will be very little delay in harvest this year owing to any shortage in labor.

Several farmers have also gone together and bought a small threshing machine. In this way they will have nearly all the crew among themselves and will not need to call on outside labor very much.

H. W. REAUGH.

High Price Causes Big Acreage.

OTHELLO, Adams County, Wash., July 16.—I notice an increased acreage of spuds but no material increase in grain because of the agitation for greater crops. The facts are that farmers are doing their utmost because of prevailing prices. There will not be much shortage of help to handle the crops here. The same policy as of old will prevail. Wages will be about $3 to $3.50 and board per day. The crop here will be about the same as last year. The past week the thermometer has been 100 to 108 degrees.

A. O. LEE.

Fine Hay Weather.

FERNDALE, Whatcom County, Wash., July 14.—No cloud has as yet appeared in the sky to dishearten the hay makers. The weather has been ideal and if it holds out a week longer practically all the hay will be under cover. Hay hands are scarcer than in other years and wages are higher. The strawberries have come and gone. The yield was not as heavy this year as previously and the price was a trifle higher. Cherries are ripe now. Local potatoes are on the market. While the fruits and berries are not as plentiful as in other years the gardens are surpassing our wildest hopes, though a trifle later than usual. The I. W. W. agitation that is exciting other parts of the state does not seem to be very alarming here, though the county fire warden has warned timber owners to take extra precautions in guarding their buildings, as he has inside information that an attempt will be made to destroy the timber by fire.

MRS. JACK PLASTER.

Kill Jack Rabbits for Meat.

BICKLETON, Klickitat County, Wash., July 18.—Hot, dry weather and east winds are doing damage to the grain in this section. Unless a change occurs soon serious damage will be done to the spring grain crop. In a few cases in the Glade and Six Prong country the crops are past hope. I think the number of live stock is about the same as last year, probably a little on the increase. There are many ways of increasing the meat supply. Probably the quickest returns would be from hogs, but the cheapest would be from a few sheep. There is one meat supply, but a poor one, and that is the raising of hares and rabbits. We have millions of rabbits in the northwest eating up thousands of dollars' worth of crops without raising any more. A person can kill 500 or more wild rabbits in the same length of time it takes to raise one tame one.

BERT H. FAULKNER.

Says Farmers Should Organize.

KING HILL, Elmore County, Idaho, July 17.—The agitation for greater crop production has not had much effect in this community, but I notice that papers and would be know-it-alls are talking of great big harvests all over the country, and that there will not be a market for potatoes and such crops, and unless the farmers get some protection the speculator will get the profits as usual. Our own state is making a great big talk of crops and going over the state to get an estimate on the harvest. The farmers ought to organize and demand certain prices and take not less. Farmers are only getting 2 to 3 cents for new potatoes now, and stores are charging 7 and 8 cents. Who gets the profit after paying 6 cents for seed? Hay hands have been very scarce and farmers have been paying $4 and $5 dollars a day with board. Some have just finished putting up their first cutting and some are starting to cut a second time. There are no changes in the methods of harvesting.

WM. A. DUNCAN.

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NEW PERFECTION OIL COOK-STOVE

STANDARD OIL COMPANY (California)

All the World's a Stage, and All the Men and Women Merely Players

Fully Equipped.



This soldier is a type of the infantry in General Pershing's expeditionary force in marching kit. The helmet will turn a rifle bullet or shrapnel. It is reported that the permanent camp already has been established and one battalion of the expedition is undergoing intensive training behind the firing lines in France.

Big German Projectiles Create Havoc



The interesting photograph above shows big German shells bursting in the Belgian city of Nieuport, and firing the town. Nieuport has been under bombardment several times and is almost as frequent a target for the German big guns as Rheims. (Belgian official photo.)

Anarchist Leaders Are Sent to Prison



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Emma Goldman and Alexander Berkman, anarchists, convicted in New York of conspiracy to obstruct operation of the selective draft law, were each sentenced to two years' imprisonment and to pay $10,000 fine. Beckman was taken to the federal penitentiary at Atlanta, Ga., and Miss Goldman to the state penitentiary at Jefferson City, Mo.

Teaching at Harvard.



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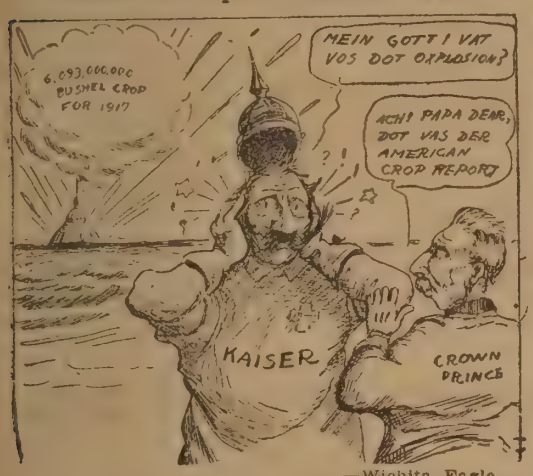
Captain Osborn Wood of Company D of the Harvard university regiment who is teaching the Harvard students the use of the rifle. Captain Wood is a son of Major General Wood.

Woman to Guard Woman.



Miss Christie Harrington of New York will act as uniformed personal bodyguard to Mrs. Grace Humiston, the attorney who plans to cleanse New York city of white slavery.

When the Report Reaches Berlin.



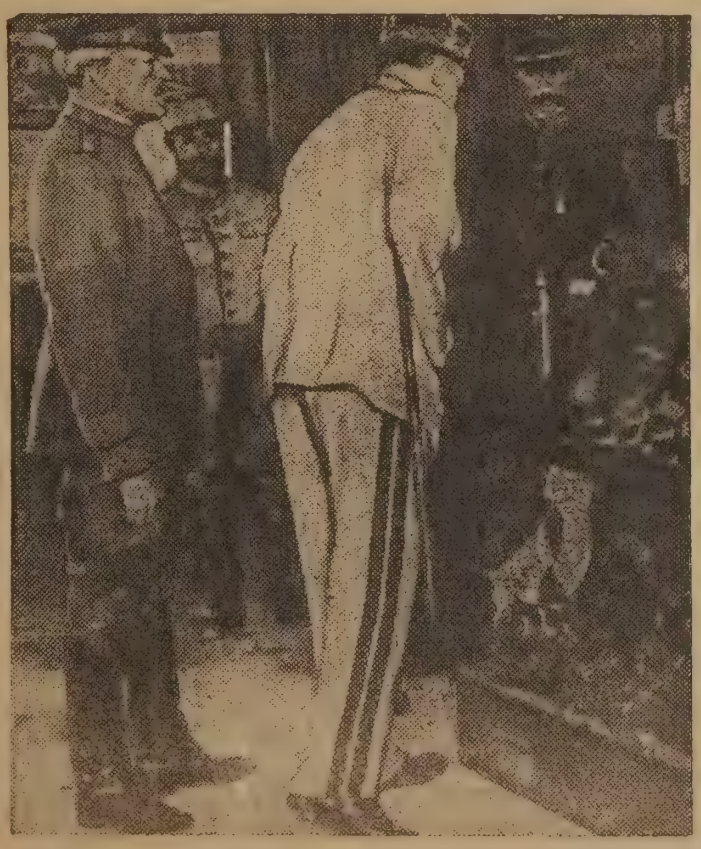
—Wichita Eagle.

Green Apple Time.



—Knoxville Sentinel.

American General Views Trophies



In the above picture Major General John L. Pershing, commander in chief of the American expeditionary forces in France, is shown visiting the Invalides, Paris, where many of the trophies of the present war are exhibited. He is accompanied by General Pelletier of the French army.

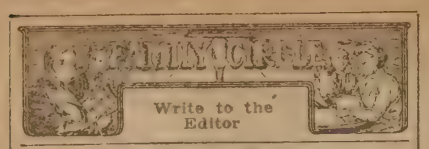
Russia on the Offensive.



—Kansas City Star.

Will He Ever Wake Up?





ALICE W. BARLAND
Editorial Contributor

Save One Pound

Can It or Dry It for Winter Use

There are about 20,000,000 homes in the United States. If one-half of them would each can or dry five pounds of vegetables or fruit that otherwise would be wasted because of its perishable character; if one-half of the remainder would can or dry 10 pounds; if one-half of the remainder would can or dry 25 pounds, and the remainder can or dry 50 pounds, what would it mean?

Nearly 300,000,000 pounds of foodstuffs. Nearly 150,000 tons of foodstuffs. Nearly 6000 carloads, enough to make a train 40 or 50 miles long.

Every housewife in America has opportunity to save some little article of food by the canning or drying method. There are times when half a pound of something must be wasted if it is not in some way preserved from spoiling. Dry it or sterilize it and seal it up.

The Farmer is devoting much of its space this week, as it has been for several weeks, to this food conservation proposition. Articles illustrating methods of drying or canning fruits or vegetables are to be found on preceding pages in this issue. Making preserves, jellies, pickles, relishes and the like will also be treated as time and space will permit. Read these articles carefully and put into practice at least a part of their suggestions. There are thousands of persons in the world at this very time starving. Cold calculations show that it will require every possible ounce of food that the world can produce to supply the actual needs of the world's people this year and until next year's harvests. To waste food is murder.

Subs Cut Wire Nets.

A cutting device which eats through a steel netting like a "hot knife through butter," is a part of the equipment of German submarines now. It is described as being similar to a buzz saw; by officers arriving from a Mediterranean port. They say the subs are very bold in the Mediterranean. They approach the harbors without fear to sink ships, cut nets and plant mines.

Neighborliness

There Are Different Kinds of It

Dear Women of the Family Circle: Let us have a cozy little talk all by ourselves this time—just a visit over the teacups. Suppose we talk about neighborliness.

I once heard an old man, who was not blessed with a great amount of common sense, give utterance to a bit of wise advice. It was this: "A man should always be good to his neighbors so they will be good to him. A man can't get away from his neighbors. All his relations may move away to some other part of the world, but his neighbors always stay, and so he should be kind to his neighbors."

I once knew two friendly women who were neighbors to each other for many years. Their farms were about a mile or so apart. They were the old-fashioned kind of neighbors, the kind that one finds in communities where the settlers are few and far between—and that sort of scattered settlements are growing fewer every year. These two women neighbors took time to visit occasionally, all-day visits usually. These women had a system of signals whereby they might communicate with each other. If a distant neighbor came for an all-day visit to one of their homes there would be a white cloth fluttering from an upstairs window immediately. If the hostess found she was low on bread and would like a loaf, a black cloth was put out along with the white one; but if a pie or a cake was needed there would be a red cloth floating to the breeze beside the white one. The white one always meant the neighbor was wanted to come at once. Many times when a little girl I have gone with my mother on these all-day visits, and I have a vivid recollection even yet of the delicious meals we used to be served. I can see Mrs. Locke, the neighbor who always responded to the signals an the days when we—my father, mother and I—were the visitors, coming briskly in very soon after the signals were placed. She was always dressed in a crisp, clean, calico dress and brought some work—usually knitting, for the women whom I knew those years always knit the family stockings.

These two families shared their reading matter. They were people with limited education, and in those days there were very few magazines. I remember they used to take the New York Ledger, a story paper of the very sensational sort. The stories would run on and on, the paper coming weekly, till all the good folks got everything they wanted and all the bad people got killed or imprisoned. These good neighbors used to take turns subscribing for the paper, and, if possible, would meet on Saturday evening and read the stories together.

If one was sick, either man or woman, the other family carried on the work till the sickness was over. If one or the other family should have a lame or sick horse the fortunate one immediately took over one of his to work in its place.

In contrast with these friendly people I am reminded of an amusing incident that occurred in my childhood days.

Our neighbor on the east, whose farm adjoined ours, was a very unpleasant person to live beside. He never wanted to exchange favors, but if he did he was always more or less disagreeable about it. Both he and my father raised white hogs. Early one summer morning this neighbor came down to our house, and, meeting my father as he was going out to the chores, he said: "Your old sow got into my cornfield last night and rooted up a lot of corn and I set the dog on her and he ran her around till she is about dead, and you better go and get her." My father was very careful about his stock being securely fenced in, and he said: "I think you are mistaken about it being my hog; I am sure mine are all in the yard." The man replied, "I know it is your hog, and I want you to take care of her"; and he went away home. My father looked into his pen and counted his hogs and found them all there, and no opening where any could get out.

The next day our neighbor's young son, about 12 years old, was down to our place, and he said in his high-keyed voice: "That big old hog pa dogged so hard the other night when he thought it was yours is pretty near dead, and it's pa's own hog."

I don't believe this story needs any moral, does it? A. W. B.

Sidelights

Right Side of the Cow.

Farmer—On which side do you milk a cow?

New War Hand—The outside.—New York Sun.

A Matter of Politeness.

Wife—Why do they say "Dame Gossip"?

Husband—Dun'no. Perhaps they are too polite to drop the "e."

Nicknames.

"Do they give little Johnnie any nicknames at school?"

"Yes they call him 'Corns.'"

"Why?"

"He's always at the foot."—Exchange.

Try It on Your Nickel.

Professor—What do the buffaloes on the new nickels stand for?

Voice from the Dead—Because they have not room to sit down.—Harvard Lampoon.

Brute of an Incubator.

"Any luck with your incubator?"

"No, I think I must have been swindled over the beastly thing. I've had it for three weeks, and the brute hasn't laid a single egg yet."

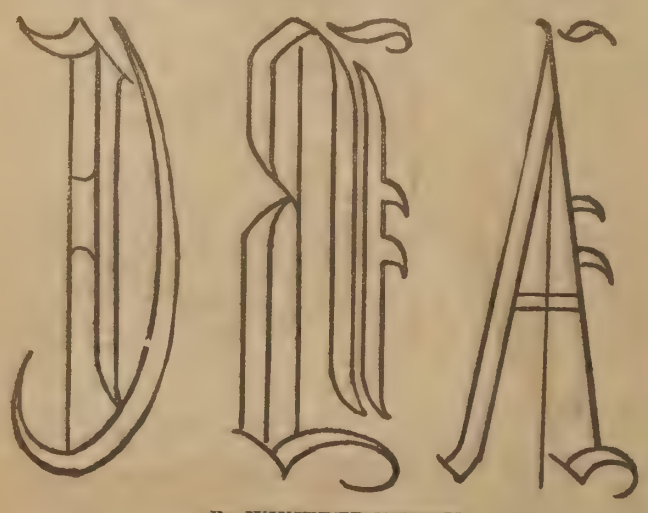
More Exactly Stated.

Jamie, having come into the possession of considerable wealth through the death of relatives, was thus addressed by one of the neighbors:

"Aye, Jamie, it was a guid thing for you that your rich freens waur bore afore ye."

"Weel," said Jamie, "I'm nae seae sure about that, but it was a guid thing that they dee'd afore me."—London Tit-Bits.

Old English Initials to Embroider



By WINIFRED WORTH.

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of a linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design.

In padding these old English initials, different methods may be used. Some use the twilled cotton for the purpose; others make the chain stitch, while others let a skein of floss out at full length and embroider a strip of it under the thick parts while forming the letter, clipping the skein when the initial is finished. This is a splendid method, quickly done, and is suggested, too, as a help in padding all large pieces in border or crescent outline.

Initials can be made by filling in the broad space with French knots. This is used largely on elaborate pieces, such as the laundry bag, table scarfs, and ornate gifts.

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4 months' tuition for the best paper telling "What I Have Done."

3 months' tuition for second best paper, and

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Papers will be judged and awards made September 15, 1917. Address educational secretary

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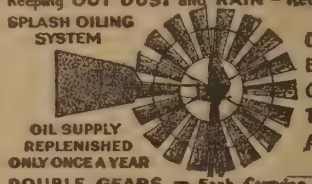
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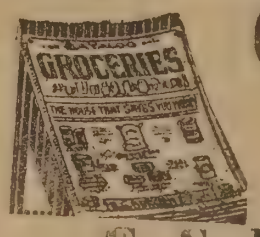
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Patterns

2134—Boys' Blouse and Trousers—Cut in 4 sizes: 4, 6, 8 and 10 years. Size 8 will require 3 yards of 36-inch material. Price, 10 cents.

2154—A Pretty Summer Dress—Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 yards of 44-inch material for a 38-inch size. The skirt measures about 3 1-8 yards with plaits drawn out. Price, 10 cents.

2155-2147—For Business, Home or Shopping—Waist 2155 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 3 yards of 6-inch material for a medium size. Skirt 2147 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. Size 24 requires 4 3-4 yards of 36-inch material. It measures 3 1-2 yards at the foot with plaits drawn out. Two separate patterns, 10 cents for each pattern.

2160—Girls' Dress—Cut in 4 sizes: 8, 10, 12 and 14 years. It requires 2 yards of 36-inch material for the guimpe and 4 1-4 yards for the dress for a 10-year size. Price, 10 cents.

2158—A Practical Undergarment—Cut in 4 sizes: Small, 32-34; Medium, 36-38; large, 40-42, and extra large, 44 and 46 inches bust measure. Size medium, requires 3 1-4 yards of 36-inch material. Price, 10 cents.

2141—Ladies' Apron—Cut in 4 sizes: Small, 32-34; medium, 36-38; large,, 40-42, and extra large, 44-46 inches bust measure. Size medium will require 5 1-8 yards of 36-inch material. Price, 10 cents.

1364—Ladies' House Dress—Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 7 yards of 36-inch material for a 36-inch size. The skirt measures about 3 yards at the foot. Price, 10 cents.

2137—Girls' Dress—Cut in 4 sizes: 6, 8, 10 and 12 years. It requires 3 1-2 yards of 36-inch material for a 10-year size, for the dress, and 3-4 yard for the bolero. Price, 10 cents.

1407—Girls' Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. It requires 3 1-2 yards of 36-inch material for a 10-year size, for the dress, and three-quarters of a yard for the bolero. Price, 10 cents.

1832—Ladies' Shirtwaist—Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 3 yards of 44-inch material for a 36-inch size. Price, 10 cents.

1778—Girls' Dress—Cut in 4 sizes: 8, 10, 12 and 14 years. It requires 4 3-4 yards of 44-inch material for a 12-year size. Price, 10 cents.

1247—Ladies' Dressing Sack, Boudoir Cap and Slipper—Cut in 3 sizes: Small, medium and large. It requires 5-8 yard for the cap, 1 yard for the slippers and 2 5-8 yards for the sack of 27 inch material for a medium size. Price, 10 cents.

Bread Keeps Fresh Two Weeks.

Bread that will keep fresh two weeks after it has been wrapped in paper and sterilized has been invented by a Paris baker.



Some New Recipes

To make oatmeal cookies take one cupful shortening, one cupful sugar, two eggs, four tablespoonfuls milk, one level teaspoonful soda, one teaspoonful ground cinnamon, half a teaspoonful salt, two cupfuls flour, two cupfuls dry rolled oats, one cupful chopped raisings. Sift the salt, soda and spice with the flour; mixing in the order given. Drop by teaspoonfuls in a buttered pan, allowing space between each cake for spreading. Bake in a moderate oven.

Make Celery Croquettes.

Cook together two tablespoonfuls of flour and two of butter. When it bubbles add a cupful of milk. When this is thick and free from lumps pour it slowly on the beaten yolks of two eggs and add a cupful of celery cut into tiny pieces (not chopped). Season with celery salt and white pepper and set aside to cool. When cold form with floured hands into small croquets. Roll them in cracker dust an hour before you finish preparing them by frying in deep hot fat.

Unnecessary.

"Are you ill? Let me see your tongue."

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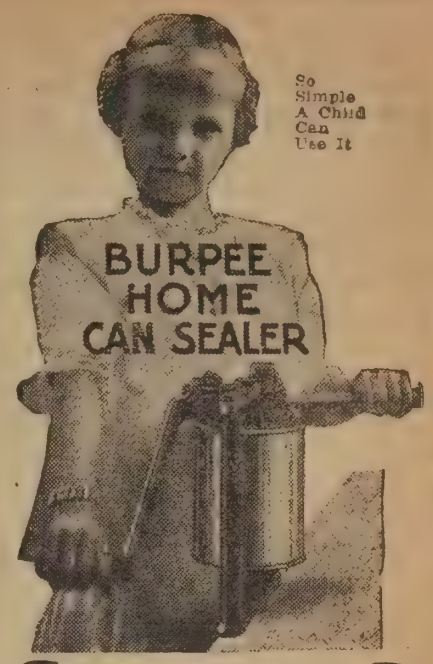
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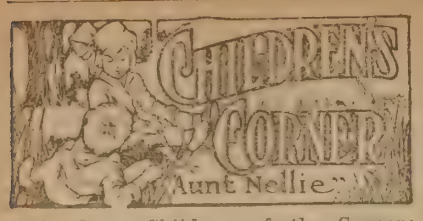
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My Dear Children of the Corner: Have you thought Aunt Nellie had deserted you entirely? No, indeed; but she has been very busy. We extended the contest for three months and your letters grew few and far between toward the last, but I suppose some of you are away on your vacations or hard at work in gardens making things grow.

Next week I will announce the prize winners of the contest now closing, will give you new subjects for the coming one and have some other announcements.

Write and tell us all about what you have been doing this summer. This is a secret, so let me whisper it to you, that this is to be one of the new subjects.

I wish my dear boys and girls who are growing up so fast would talk about our Corner, which has been such a pleasure to us—talk about it with the younger children.

With love to you all and hoping you have had a splendid vacation so far and are going to enjoy every bit and speck of August, I am, your loving

AUNT NELLIE

Lois Must Write Some Time Again.

Dear Aunt Nellie: I am sending my many thinks for the very pretty cup and saucer given as a prize during the month of December. I was visiting my grandmother in Portland, Ore., when I received it. I did not know from where it came until my return home. Then a neighbor told me that it was announced in the paper.—Lois Barnhart, Tekoa, Wash.

Two Brothers, Gerald and Ronald.

Dear Aunt Nellie: My papa takes the Farmer and I enjoy reading the Children's Corner. We have two cows, one horse, 13 chickens and a gray cat. We did have a dog and his name was Teddy. I have two brothers. Their names are Gerald and Ronald. I have no sisters. I am 9 years old and my birthday is the 18th of August. Have I a twin? I have to walk two miles to school. I am in the third grade and my teacher's name is Miss Forbes. I go to Sunday school and my mama is my teacher. I can crochet, sew and tat.—Rena Craig, Camas, Wash.

Some Funny Places in That Book.

Dear Aunt Nellie: I want to write about my favorite book. The book I like best is Dorothy on a Ranch. There is some funny places in it. I will tell you one of them. There was once a little boy who had a lamb. It was dirty. He did not like it. There was a barrel of water in the house. The little boy took the lamb, soused it up and down in the barrel. In the other room was a sick man. The sick man wanted a drink of water. The little boy gave him a drink out of the barrel. The man did not know the lamb was washed in the barrel.—Katherine Bowen, Oroville, Wash.

Will Help You More Than Anyone.

Dear Aunt Nellie: My favorite book is Elsie Dinsmore. There is a lesson in it I like. The lesson is to take your troubles to Jesus. He can help you more than any one. Even though you are not in the wrong if you bear the blame of it you will be rewarded in the end. Elsie had a sweet disposition. She had been taught to love Jesus and do right.—Elizabeth Bowen, Oroville, Wash.

Lots of Fun Picking Blackberries.

Dear Aunt Nellie: I have been reading the Children's Corner and I like it very well. The other children write so well I thought I would write, too. I am 8 years old and in the fifth grade at school and in the second grade of music. I have one brother and one sister older than myself. Last summer I had lots of fun picking blackberries and selling them to the neighbors. I hope they will be quite plentiful this year.—Lucile Bowers, box 207, Selleck, Wash.

Flopsy, Mopsy and Cotton-Tail.

Dear Aunt Nellie: I live on a poultry and fruit farm. There is a ravine real close to the house and we are making a dam and my aunt wants a pond for ducks. We have one cat, one cow, 18 horses and four rabbits named Flopsy, Mopsy, Cotton-Tail and Peter for the Peter rabbit family. Cotton-tail has five baby rabbits. I do not like it here very well for it is so lonely. I am 9 years old and in the fifth grade. I will be 10 the 20th of April. We have school across the ravine because the schoolhouse is so far away and the coyotes have rabies. —Mary Willis, Wahluke, Wash.

Peach Orchards Across the River.

Dear Aunt Nellie: My uncle takes the Farmer and I enjoy reading the cousins' letters. I live on the Columbia river. I can look across the river and see the peach orchards. My brother, sister and I came here about a year ago and we like it here very much because it is not so rainy as on the Coast where we used to live. We have five pupils in our school and it is in a little house across a ravine from us. We have school there because our schoolhouse is not finished. —Rogenia J. Willis, Wahluke, Wash.

Has Read the Corner for a Long Time.

Dear Aunt Nellie: I have been reading the children's corner for a long time. I live on a 1040-acre farm. Two of the horses and two of the cows are mine. The horses' names are Daisy and Martha. The cow's names are Lula and Rags. We have about 160 chickens. There are 24 children in our school. I am in the fourth grade. I have one sister and three brothers. My sister's name is Ida and my Brothers' names are Jake, Thomas and Robert. Our teacher's name is Miss Verna Merkey.—John Shaw, Govan, Wash.

Out of School With Whooping Cough.

Dear Aunt Nellie: I am 9 years old and in the sixth grade. Our schoolroom was built in 1915 and it is 29x39. We have a cottage for the teacher. Her name is Mrs Belles. I have three brothers and one sister. My sister's name is Lucile. My brothers' names are Melvin, Cecile and Maynard. I go to school. We have to walk one and one-half miles. When it is bad weather papa takes us, but when it is nice we walk. I was out of school one week with whooping cough.—Gladys Cary, Ritzville, Wash.

Used to Live on a Farm in Finland.

Dear Aunt Nellie: I am 12 years old and I am in the fifth grade. This is the first time I have written to the Children's Corner. I do not live on a farm but I thought I would write just the same. I lived on a farm four years ago in Finland. I like to live on a farm best. I have two sisters and my youngest sister's name is Annie. My brother's name is Frank. My teacher's name is Miss Jeans. I like her.—Nick Seivonen, Aberdeen, Wash.

Seems Good to Hear From Edna Again.

Dear Aunt Nellie:—This is the second time I have written to the Corner. I have three dogs and no cats. I have a little sister. Her name is Edith. We have three cows and one calf and 80 head of horses. I have three big sisters. Their names are Maud, Florence and Hazel. I have a big brother. His name is Lloyd. My sisters are married. One of my sisters has a little girl. Her name is Eva. She is two years old. We have a pet hen. We have 20 chickens. Florence is staying with us.—Edna Smith, Riverside, Wash.

Take Father's Lunch to Him.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am eight years old. My brother and I bring the lunch to papa. We have 12 chickens. Our baby is 15 months old. I am in the first grade. —Lucille Cox, Leahy, Wash.

Lonesome Since School Closed.

Dear Aunt Nellie: I am a lonesome little girl since our school is closed down because the measles were in school. I am eight years old. I go to school at the Springdale Buena school and my teacher's name is Miss Macoy. I like her very much. If you will permit me to join your Corner I will write more next time.—Mary Edna Wilkins, R. F. D. No. 1, Zillah, Wash.

Fed the Pigs While Papa Was Gone.

Dear Aunt Nellie: I earned my first money by feeding pigs. Papa was away and I had to feed the pigs. I fed them shorts morning and noon and at night.—Graham Potter, Hillyard, Wash.

Cousin Joyce Has Three Brothers.

Dear Aunt Nellie: My papa takes the Washington Farmer and I have been reading the Children's Corner and thought I would write. We have three horses and two little mule colts. The horses' names are Nat, Lou and Billy. I am 10 years old. My birthday is the 16th of May. I have three brothers. Their names are Warren, Lloyd and Allen—Joyce Hatch, Goldendale, Wash.

Learn More About the Violin.

Dear Aunt Nellie: This is my first letter to the Children's Corner and I hope it will be a success. I am a boy 13 years old and weigh 110 pounds. I am five feet three inches tall. I am in the eighth grade at school. I have four horses and one baby colt. The horses' names are Dutchie, Spotty, Jose and Freckles and the colt's name is Dolly. I live on a farm of 640 acres. We have about 50 acres of rye. I have one sister five years old. She has almost golden hair and light blue eyes. Her name is Evelyn. My cousin, Thelma Hinkle, is staying with me now and stayed to see the circus that was here the 18th of June. I am going to learn more about playing a violin. I can play pretty good now, but I will take more lessons this summer after haying is over. I go 10 miles to take my music lessons and six miles to school.Melvin Franks, Sunnyside, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Gertrude Ruchest, Alexander Weitz, Esther Bower, Elsie Johnson, Hazel Rose, Grace Milbrath, Mildred Rees, Hazel Saltmarsh, Florence Hang, Fannie Blackburn, Louise Blackburn, Kathleen Jump, Ruth Draper and Martina B. Pruiet.

JORDAN

(Continued from page fourteen.)

and next moment saw that the ball was composed of two twisting and straining wrestlers, each of whom was striving to pin the other to the ground.

"That's the boy, Spicer!"

The crowd around the corner, was rooting for the champion, who a moment later pried his adversary's shoulder over and pressed it and its mate against the soggy ground.

"Who's next?" the victor cried, as he sprang up and shook the gravel and bits of stick from his clothing. "Ah, here's Jordan in our midst—come, my boy, let's ses what you can do for the honor of the rural districts!"

For a moment Wally hesitated. There was something he ought to tell this arrogant young fellow who stood looking mockingly at him. Then he smiled. It was not his affair—this match was being forced upon him, and he could make his confession afterward!

Stripping off his coat and vest and laying his books and cap upon them, he turned and faced the champion. For a moment they measured one another. Then Spicer sprang forward, feinting as if to grasp Wally around the shoulders, then ducking for the under hold. Wally stood as if frozen in his tracks till he felt his adversary's arms closing around him. Then he stooped, slipped one arm around the other's neck from above, and with the other hand grasped one of Spicer's wrists and forced it around and up. As soon as he had secured this combination of chancery hold and hammer lock, he forced his opponent to his knees, shifted swiftly behind him, and next instant had changed his tactics by slipping his right arm under Spicer's shoulder and back of his neck and had twisted him over on his back. The whole thing had been done so quickly that none of the spectators had had time to utter a comment.

As Wally released his antagonist and sprang to his feet, the crowd burst into a roar of approval, and a trimly built man in a sweater and light coat stepped forward and clapped the victor on the shoulder.

"You never learned that trick without a lot of expert teaching, my boy!" he cried. "I've taught wrestling for 10 years, and I never saw it better done—'fess up, now—who showed you how to do it?"

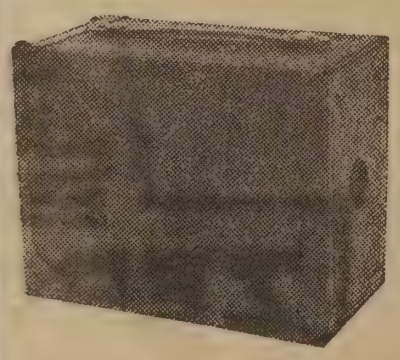
Wally grinned. "Farmer Burns used to train on the farm next to ours," he explained. "He taught me a lot of

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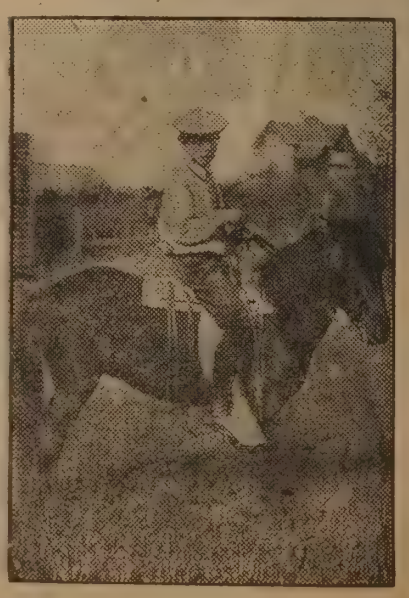
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The WASHINGTON FARMER
Premium Dept. Review Bldg. SPOKANE, WASH.

holds—I used to wrestle with him every evening!"

Spicer got up, rubbing his arms and legs as if to make sure none of them was broken. Then, without a word, he turned and entered the recitation hall.

If this incident had taken place earlier in the school year, it might have resulted in Wally's being pressed into the service of the gym, instructor in forming some of the track teams. Now, however, with spring already blending into early summer and with examinations looming close ahead, no one had time for much thought upon such matters. Only Spicer plainly remembered—and changed his tactics from somewhat sneering good humor to growling ill will. Wally realized that he had not fathered his purposes of forcing his companions to understand and like him. He had gained no friends—and one enemy.

"You can't gain a man's good will by publicly humiliating him," he confessed to himself. "I shouldn't have done it—but I'll force him to like me yet! He's not a bad sort, only he isn't used to me and I'm not used to him. But I'll—"

Whatever he intended to do, the time remaining for its accomplishment was short. The week of review, preliminary to examinations, was already upon the school, and the radiant warmth of an early summer came in at the opened windows. Wally felt that failure was trailing him, laughing at him. He was stubbornly determined he would not go home and tell his father he had not been able to make these men of his own age understand him, that he had been regarded by most of them, throughout the winter and spring, as an unsociable sort of fellow. But the days crept by, with much study for those who had skimped their work during the term, and were trying futilly now to "cram" for examinations, and with long, hard hours of review for even the steady workers. Friday of review week came, and still Wally was no nearer his purpose.

He was thinking of this as he strapped his books together in the afternoon, and started for his boarding house. Others were leaving, most of them in groups of two or more. Wally alone seemed to have formed no ties of friendship.

He went out into the almost sultry heat of the afternoon. Turning the corner, he started across the campus. A straggling line of students ranged before him, while others were constantly emerging from the recitation hall.

He crossed the lawn and was approaching a know of low maple trees, among which several rustic benches had been built, when from high overhead there came a sudden whirring and singing, like the metallic whir of a million rifle bullets cutting the air. The straggling groups in front of Wally had caught the sound and were looking up. Wally did the same—and next instant he understood: the air was full of little black dots; dots which dropped with the speed of the wind, singing and screeching as they came. They drew together into a sort of black haze as they dropped swiftly toward the clump of maples.

Then Wally felt his heart stop beating for a moment, and his arms and legs went weak. For the bees—a big swarm of yellow and brown, powdery fellows—had begun to settle; and the object which formed the nucleus of the swarm was a willow switch, held in the hands of Jimmy Spicer.

Spicer had been studying out here in the open, apparently, and had fallen asleep with the switch held negligently in his hands. And as Wally saw the athlete's eyes open and caught the look of wonder, merging into alarm and terror which instantly came into them, he dropped his books and stepped forward.

"Sit still!" he cried peremptorily. "Don't move or they'll sting you to death—I'll try to get them off you!"

He was thinking fast. He had never handled bees but he knew something about them, for his father was the champion bee catcher of the township. So Wally stripped off his coat as he advanced; and as the last of the bees settled upon the seething swarm that clung to the willow switch and to Jimmy Spicer's hands and arms, the country boy stepped and laid his coat on the ground.

"Don't move!" he commanded. "They won't sting if they can help it—they're loaded with honey for the new hive. But if you try to fight them they'll kill you!"

With the coat on the ground to receive the bees, he began to work. He had never before handled bees with his bare hands, and the feeling of their clinging legs and their hard, smooth bodies against his flesh sent a shiver up his spine. But there was nothing for him to do but work, and as he worked he whistled, gently, through his teeth. The air seemed to come to him as if some one else were whistling it.

"On Jordan's story banks I stand,
and cast a wistful eye.
To Canaan's fair and happy land,
where my possessions lie."

The man in front of him shivered, and Wally spoke. "Sit still. If one or two of them sting you, don't mind it. They're stinging me, too, but we'll get out all right if we don't lose our heads!"

Jimmy Spicer's eyes were fastened upon Wally's, as if the country boy were his last hope. He sat without moving while his rescuer scraped the living mass from his hands and arms.

"Now, stand up slowly—be careful where you put your feet, for if you crush any of them they'll all be on us!"

Spicer stood up and moved a step or two away. Then he spoke. "You come, too," he said, his teeth chattering, but his eyes determined. "I won't go another step without you!"

Wally nodded. "I'm coming," said he. "Now hurry—they don't like the coat, and they may take the air again any moment."

Step for step, Spicer preceded Wally, until the latter turned and said, "Now run for it——" And they ran.

At the last meeting of the Choral club, which was held Thursday evening of examination week, Don Carlson stood up, his flaxen pompadour waving gently in the summer breeze that blew through the hall.

"Fellows," said he, "I move that we bring this meeting to a close by singing one more song—a song we all know, and which has associations none of us is likely to forget. For my own part," he added, "I intend to sing it whenver I feel my head getting too large for my hat, or my sympathy and good fellowship sinking toward zero. Now, altogether!"

And in the swelling chorus of "Jordan" which followed, Wally caught the vibrant tenor of Jimmy Spicer's voice, mingled with the rather erratic boom of Don Carlson's bass.

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1740 A.—Wheat and stock ranch; 500 A. farmed; $16 per acre.

6600 A.—A fine stock proposition; 300 A. bottom land; $13 per acre.

640 A.—Level land; 320 A. wheat; all crop, stock and machinery goes at $46,000.

1480 A.—This place is one to three miles from town; 800 A. in wheat, balance plowed; price with all crop, and plowing, $60,000.

600 A.—3 mi. from town; 265 A. crop; price with crop, $22,000.

1280 A.—2 mi. from town; 400 A. in crop; price with all crops and plowing, $50,000.

Chas. S. Bassett, Washtucna, Wash.

EQUIPPED STOCK RANCH IN IDAHO; 160 acres; ½ mile from station; 2 railroads; 80 acres in meadow and cultivation; 35 acres timber, balance bottom land with some brush; no waste land; running water; good house, 3 barns; team, wagon and all necessary farm machinery; 30 head cattle, 14 cows milking, all crop goes with place. Price $12,500, 1-3 cash, balance easy at only 6 per cent. Hege & Watkins Co., Paulsen bldg., Spokane, Wn.

A FEW GOOD FARMS IN A SECTION OF almost ideal climate, southern Oregon. These farms are on an excellent all-year auto road and will yield 2 tons alfalfa per acre and corn in proportion. River bottom land; natural drainage; plenty of outrange and good water. All within a few miles of railroad and in a paradise of good hunting and fishing. Write me at once for prices. JOHN C. WHITE, RIDDLE, ORE.

BIG MONEY RAISING VEGETABLES and chickens, greenhouse and 160 acres of land, near Spokane, cost $15,000, offered at $4500; easy terms.
PENNSYLVANIA MORTGAGE INV. CO.
SPOKANE, WASHINGTON.

FOR SALE—11,000-ACRE GRAIN AND stock farm; will include 500 head of grade Hereford cattle at market price. For full particulars address the owner, H. K. Schuster, Wibaux, Mont.

STOCK RANCH, 480 ACRES.
150 good soil, bal. pasture; the finest of range; 4 miles to R. R. station. $1000 cash. Otto A. Bittrick, 514 Rookery blk., Spokane, Wash.

SOUTHWEST ALBERTA FARMS, ANY size; square deal. No trade. Cards on investment Co., Ltd., agents R. R., Hudson's Bay and company lands. Cardston, Alberta.

HAY, GRAIN, STOCK OR DIVERSIFIED farm lands in the Colville valley, reasonable. We answer. H. L. Fisk, Valley, Wn.

2120 ACRES, 800 IN CROP, 23 MILES S. W. Spokane, cheap. Address M., Northwest Farm Trio, Spokane, Wash.

SUBURBAN TRACTS—For Sale 672

EXCELLENT SUBURBAN HOME, NEAR Tacoma, on electric car line, school and church; 4 acres; improvements alone at low figure, including poultry and cow, $5300; will take $5500; place must be seen to be appreciated; good reason for selling. If interested, write Louis Lundgren, R. 4, Box 201, Tacoma, Wash.

In answering advertisements don't fail to mention this paper.

Grain and Produce Markets

Chicago Grain.

CHICAGO July 21.—Assumed certainty of the enactment of a minimum wheat price guaranteed by the federal government had a bullish effect today on the wheat market here. An advance of 5c to 9 3-4c net took place and the close was strong with July at $2.55 and September at $2.27 3-4. Corn finished heavy, unchanged to 1 1-8c lower at $1.63 to $1.63 1-8, September, and $1.15 to $1.16 1-8 December.

The outcome in oats was 1-8c off to 1 3-8c up and for provisions an advance of 5c to 32c.

Provisions rose with hogs and as a result of an advance in quotations of meats at Liverpool. There was a complete absence of the liquidating sales which have been noticeable of late.

Cash Quotations.

CHICAGO, July 21.—Wheat nominal. Corn—No. 2 yellow, $2.12@2.16 1-2; No. 3 yellow nominal; No. 4 yellow nominal.

Oats—No. 3 white, 85 3-4@87 1-2; standard, 86 1-2@87 1-2c.

Rye nominal. Barley, $1.25@1.60. Timothy, $4@7.50. Clover, $12@17.

Chicago Futures.

	Open.	High.	Low.	Close.
Wheat—				
July	2.50	2.56	2.50	2.55
Sept.	2.18	2.27¾	2.18	2.27¾
Corn—				
Sept.	1.63	1.63⅜	1.63	1.63
Dec.	1.16⅞	1.17⅞	1.15⅞	1.17⅞
Oats—				
July	.76½	.78¾	.76½	.77¾
Sept.	.59	.59⅝	.58½	.58¾
Pork—				
July				40.55
Sept.	40.00	40.20	40.00	40.10
Lard—				
July	20.40	20.40	20.35	20.40
Sept	20.62	20.67	20.57	20.62
Ribs—				
July	21.62	21.62	21.60	21.60
Sept.	21.60	21.80	21.60	21.72

Pacific Northwest Grain.

SEATTLE, July 21.—Wheat—Bluestem, $2.15; turkey red, $2.12; forty-fold, $2.10; club, $2.08; fife, $2.08; red Russian, $2.08.

Barley, $42.50 per ton.

TACOMA, Wash., July 21.—Wheat—Bluestem, $2.15; fortyfold, $2.12; club, $2.08; red fife, $2.08; red Russian, $2.06.

PORTLAND, July 21.—Wheat—No quotations.

Minneapolis Grain.

MINNEAPOLIS. July 21.—Wheat prices were higher today, July advancing 4 cents and September finishing 5 cents up. Wheat receipts today, 114, compared with 275 a year ago.

Wheat—July opened $2.74; high, $2.82; low, $2.74; closed, $2.79.

September opened $2.25; high, $2.26; low, $2.25; closed, $2.25.

Cash—No. 1 hard, $2.90; No. 1 northern, $2.802.90; No. 2 northern, $2.75@2.85; No. 3 wheat, $2.60@2.75.

Corn—No. 3 yellow, $2.05@2.06.

Oats—No. 3 white, 79 3-4@2.06.

Flax, $3.08@3.13.

Flour—Fancy patents advanced 50 cents; others unchanged.

Barley, $1.15@1.55.

Rye, $1.98@2.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots for the fiscal year beginning July 1, up to Saturday night, for 1917-18 and 1916-17, were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay
1917-18	54	51	6	72
1916-17	213	47	11	115
Portland—				
1917-18	58	52	10	46
1916-17	129	115	15	46
Tacoma—				
1917-18	65	9	1	36
1916-17	175	13	4	46
Totals—				
1917-18	197	112	17	154
1916-17	517	175	30	207

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—$3 cwt; new potatoes, 3½c lb.; new local potatoes, $2.50@2.75 cwt.

Apples—Washington apples, cooking, 75c box; Rome Beauties, $1 box; N. Y. Pippins, $2.25 box; Ben Davis, $1.25 box.

Butter—Blanchard cartons, 40c lb; Medo-Maid, 40c lb; Cascade, 40c lb; Gold Leaf, 40c lb; Better Butter, 40c lb; Attalia, 40c lb; Diadem, 40c lb; Hazelwood, 40c lb; Solid Pack, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25½c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 29c lb; domestic Swiss, 35c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $10 case.

Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.

Dressed Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., July 21.—Hogs—Receipts, 8100; steady. Heavy, $14.80@15.30; mixed, $14.40@14.60; light, $14.10@15.10; pigs, $12.25@12; bulk of sales, $14.25@14.70.

Cattle—Receipts, 1400; steady. Native steers, $9.85@13.85; cows and heifers, $7.75@10.75; western steers, $8.75@11.75; Texas steers, $8@10; cows and heifers, $7.50@9.50; canners, $5 50@7.50; stockers and feeders, $6.50@9.50; calves, $10@13.50; bulls, stags, etc., $7@10.

Sheep—Receipts, 3400; market steady. Yearlings, $9.50@10.25⅛ wethers, $9@9.75; ewes, $8@9; lambs, $14.60@15.60.

At Chicago.

CHICAGO, July 21.—Hogs—Receipts, 5000; strong, 5c to 10c above yesterday's average. Bulk, $14.40@15.35; light, $14.10@15.35; mixed, $14.05@15.35; heavy, $14@15.60; rough, $14@14.25; pigs, $11.25@14.30.

Cattle—Receipts, 2000; steady. Native beef cattle, $8.0@14.05; westerns, $8.65@11.60; stockers and feeders, $6.35@9.40; cows and heifers, $5.50@12; calves, $10@14.75.

Sheep—Receipts, 7000; weak. Wethers, $7.75@11; lambs, $10@16.

At Seattle.

SEATTLE, July 21.—Receipts, none. Hogs 10 cents lower. Market steady on cattle and sheep.

Hogs—Prime light, $15.75@15.85; medium to choice, $15.40@15.60; smooth heavies, $14.90@15.35; rough heavies, $14.0@1.85; pigs, $1.0@1.85.

Cattle—Prime steers, $9.25@9.50; medium to choice steers, $8.50@8.75; common to good steers, $6@7.50; best cows and heifers, $5@7; common cows and heifers, $@4.50; best bulls, $6.50@7; common to good bulls, $3.50@6.50; calves, $6.50@9.50.

At Portland.

PORTLAND, July 21.—Hogs, steady. Receipts, 50. Prime heavies, $15.25@15.35; light butchers and packing, $15@15.30; bulk of sales, $15@15.25 rough heavies, $14@14.50; pigs and skips, $12.50@13.50; stock hogs, $12@13.

Cattle—Steady. Receipts, none. Steers, prime to light, $8@9; prime heavy, $8.50@9; good, $7.50@8; cows, choice, $6.50@7; medium to good, $5 75@6.25; ordinary to fair, $5@5.50; heifers, $5@7.25; bulls, $5@6.50; calves, $7@9.

Sheep—Lower. Receipts, 53. Spring lambs, $11@11.50; spring lambs, culls, $6@7.75; best wethers, $8.50@9; heavy ewes, $6@8; best yearlings, $9@10.

Spokane Stock Yards, Saturday.

Hogs—Receipts, 138; market strong. Prime heavy, $15.25@15.40; prime light, $15.10@15.25; mixed, $14.10@14.40; pigs, $13.25@14.

Cattle—Receipts, 52; market slow. Prime light steers, $8@8.25; prime heavy steers, $8.25@8.75; good steers, $7@7.25; ordinary, $5.50@6; prime cows, $6@6.75; good cows, $5.50@6; common cows, $4.75@5.25; best heifers, $6.25@7; bulls, $5@7; calves, $7.50@9; stockers and feeders, $5@7.

Sheep — Receipts, none; market steady. Prime spring lambs, $12.25@12.75; prime yearling wethers, $9@9.75; prime mutton ewes, $6.50@8.

Seattle Wheat.

SEATTLE, July 21.—Due to the fact that the bins of Washington have been scraped and farmer holders of the grain are expecting higher bids, the market throughout the week remained practically stationary at 2.10@2,15 bid, and 2.22@2.30 asked for milling bluestem and turkey red. The opening was steady with the close of last week at $2.10. On Wednesday when the reports from eastern Washington wheat districts carried proof of serious damage from drought and hot winds, the market declined 2c per bushel, strengthening again the following day but getting no higher than the maximum of the week. Buyers and sellers were continually 12c@15c apart, this ratio being maintained through a market which was at the best operating with holdings of only a few thousand bushels.

Seattle buyers claim that farmers are inclined to clutch tightly all the wheat that they hold and are endeavoring to swell the carryover, confident that the state will not have more than half a normal yield. Government crop reports have been revised upward and sharply downward since July 1, due to the hot weather conditions.

Reports of drought in Montana wheat fields continue to come in to Puget sound buyers, who before the hot spell feared that state would have a big surplus to ship into terminals here in competition with Washington soft wheat. These fears are now dispelled.

Wheat stocks in the hands of Washington millers are now lower than at any time in the past ten years. Buyers did not bid to exceed $1.90@$2.00 for wheat in the country during the week. Farmers are entertaining the most bullish sentiment in the state today and will not even discuss contracts on new wheat. This disposition became more pronounced after bullish crop reports began coming in.

Millers were in the market for wheat for feed, but were unable to get hold of any quantity. Bran and shorts are now the most active end of the milling trade, as Puget sound mills and their eastern Washington branch plants are grinding out as fast as possible in order to get the storage space for the new crop.

Notice to grain and feed dealers at terminal points regarding the enforcement of the federal inspection law was posted by P. J. Sweeney, chief grain inspector, at the Merchants Exchange this week. Mr. Sweeney warns all dealers that it will be necessary to have a sampler examine every car of wheat or corn unloaded at terminal points coming from any other state, and unloading of interstate cars before notice to his office, is prohibited.

Portland Market.

PORTLAND, Ore., July 23.—The wool market remains quiet with buyers making no effort to operate and growers holding tight. It is said that not a single car has been sold since the Spaniko sale on July 6.

Prune packers are contracting with growers in a limited way on the former basis of 8 cents, but the sellers are reserved. The news that export business has been worked on the Atlantic seaboard encourages holders to believe that an outlet will be found for the big American surplus and that prices will go no lower than the opening basis.

Wenatchee apricots are a feature of the local market and are quoted by jobbers at $1.50 a crate. The raspberry season is nearly over and the indications are that the loganberry season will also be a short one.

Oregon new potatoes are coming on the market freely and selling at 3@3 1-2 cents. California new potatoes will not be quoted by dealers after this week.

All lines of country produce are firm, especially creamery butter and eggs. Receipts of the latter have become small and the quality is of the usual hot weather sort, which increases the premium on candled stock.

The heavy marketing of poultry, anticipated by dealers, has not yet materialized, and prices are easily maintained. The hot spell has materially cut down the consumption of veal and pork.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $45@45.50 per ton.

Corn—Whole, $30; cracked, $81 per ton.

Millstuffs—Bran, $33 per ton; shorts, $36.

Barley—No. 1 feed, $43; brewing, nominal; rolled, $49.

Hay—Buying prices: Timothy, eastern Oregon, $26; alfalfa, $16@18; grain, $12@15.

Eggs—Oregon ranch, case counts, 34@34 1-2c per dozen; candled, 37@39c.

Poultry—Hens, 15@17c; ducks, 15@22c; turkeys, alive, 20c; geese, 10@12c.

Butter—City creamery, prints, 42@43c per pound; cubes, 38 1-2@39c.

Cheese—Tillamook triplets, 23c; young Americas, 24c.

Dressed meats—Veal, 15c; pork, 19 1-2@20c.

Hops—Nominal.

Potatoes — New, 3 1-4@3 3-4c per pound.

Wool—Eastern Oregon, fine, 58@61c; coarse, 58@65c; valley, 72 1-2@75c.

Beans — California small white, 16 1-2c; large white, 16c per pound.

Hides—Salted hides (25 lbs. and up), 20c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 32c; green hides (25 lbs. and up), 18c; green stags (50 lbs. and up), 13c; dry hides, 34c; dry salt hides, 29c.

Day-a-Week Market.

One-day-a-week public market has been inaugurated at Port Angeles, Wash., according to a report of the county agriculturist, O. T. McWhorter, who adds: "Considering that not much produce is ready for market, it made a fair start. At any rate, the plan will be thoroughly tried out. The manager of the public market issues a four-page newspaper bulletin on Monday of each week. This bulletin will be issued for several consecutive weeks, or until the market succeeds or fails. It carries the market quotations on farm products, "ads" of local merchants, and timely "write-ups" and editorials of interest to farmers. It is mailed to the farmers of the county free.

Eight shelter sheds open on one side were erected along one of the streets of the town for the use of farmrs with produce to sell. Each shed rents for 25 cents per day, or 10 cents per day if rented by the season. Rentals are not charged except to pay the person who cleans up the street after market day."

Japan's Last Rice Crop.

Japan's last rice crop broke all records for that empire, having amounted to 298,466,706 bushels, which beat the former official high record (1914) by 6,630,270 bushels.

Seattle Market.

SEATTLE, July 21.—The apricot market next week, the flush of the season, is expected to be higher due to authentic reports that growers of eastern Washington have contracted the bulk of their later crop for eastern shipment. Reaction on these reports set in today with the market stronger for the weekend at $1.25@1.50. Growers are getting 75@80c f. o. b., which is the equal or better than returns on consignments to Seattle.

The local potato market is weak, but the weakness is due more to poor quality than a lack of demand or support for the market. All Puget Sound offerings are selling at 2@2 1-2c. Kennewicks are scarce, but the quality has been poor, and California is still getting the big end of profits because of superiority and adaptability to shipping trade demands. The dry weather has been too pronounced for the welfare of even the potato. Locals are too green and hard to attract buyers, and jobbers are selling them for what they will bring.

Activity in the apple market has been one of the features of the week. Buyers are able to find fair stocks and good quality of Washington transcendants, yellow transparencies, red astrachans and duchess brands in peach box packs at $1, with transparencies leading in popularity. In competition with these are California gravensteins in standard boxes at $2.50@3.

Eastern Washington Bing cherries are cleaned up. The valleys have completed shipping, and the hill and canyon stock, not of great volume, will begin moving next week simultaneously with locals.

The first shipments of Yakima new honey arrived today and cleaned up quickly at $4 per case.

The big week in local currants has passed, with closing prices at $1.10@1.15. The volume will fall off from now on.

Cabbage is very dull at 3c. Local cauliflower is popular at $1.25@1.50.

Jobbers will quote this week's buying prices Monday to poultry shippers, the strike of the express companies, which compelled dealers to look to shippers on the steamboat lines for their supply, cutting down the receipts to more nearly equal the demand. The market is generally steady.

The butter market weathered the week without change, although sentiment is almost wholly on the bull side.

Fresh ranch eggs are very firm. Jobbers are expecting to life the buying price next week. One more advance of this nature will start the movement of storage eggs, about 30 days earlier than normal.

Cheese is dull and the movement very light. Quotations are firm at 23 1-2@24c for Oregon and Washington triplets.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transaction by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 35@36c per dozen.

Poultry—Live hens, fat, over 4 lbs., 18c per lb; 2 lbs. and under, 13@16c; old roosters, 10c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 10c per lb.; broilers, live, 15@17c per lb.

Butterfat—46c per lb.; dairy butter, 28@31c.

Beef—Buying price: Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 14@15 1-2c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 30c per lb.; green hides, 17c per lb.; salted bulls, 16c per lb.; dry hides (short trim), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 13c per lb.; dry butcher full wool sheep pelts, 38@42c per lb.

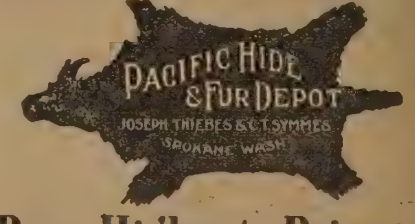
Butter and Eggs.

SAN FRANCISCO, July 21.—Butter—Fresh extras, 40c; prime firsts, 39 1-2c.

Eggs—Fresh extras, 35c; fresh firsts, 34 1-2c; fresh extra pullets, 34c.

ELGIN, Ill., July 21.—Butter, 38c bid; 100 tusb offered; no sales.

CHICAGO, July 21.—Butter higher; creamery, 34 1-2@38c.



Pay Highest Prices for Wool

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

News for Breeders

The Brown Swiss cattle breeders of the United States held their first consignment sale at Pottstown, Pa., June 26. It resulted in 37 head selling for a total of $10,556, or an average of $288. Top price was paid for the great bull Milton K. of Laurel Locks, that went to Walhalla Farms, Middleburg, New York, at $1,550.

A Clackamas county, Oregon, Guernsey Breeders club is an early likelihood. Quite a number of breeders already have registered herds, some with only a few head and it is believed much advantage will accrue from organization. Professor Westover of the O. A. C., who has charge of cow testing for the college, is lending his assistance to the plan.

At the Mitchell Brothers' dispersal sale of Shorthorns at Burlington, Ontario, June 29, 39 head sold for $34,125, an average of $827. Another Canadian sale, that of J. A. Watt and J. M. Gardhouse, jointly, at Elora, Ontario, on June 28, resulted in 61 head selling for $47,125, an average of $772. A large proportion of the cattle in both sales were purchased by breeders from the United States.

J. A. and J. B. Riches, Guernsey breeders of Boring, Ore., plan to begin official testing this fall and winter, when about half a dozen of their registered heifers and cows with second calves freshen. Their herd bull, Emigrant Lad, is of May Rose breeding and is a good individual. They will probably exhibit at the Pacific dairy show at Portland, but owing to scarcity of labor, hardly expect to have any stock at the state fair.

The Walla Walla college at Park Place, near Walla Walla., Wash, recently purchased 10 head of registered Holsteins from A. Bendler, Cornelius, Ore. The consignment consists of cows, heifers and calves, all of the Dora Veeman strain. The college is a member of the Walla Walla Cow-Testing association. They have stood high in the fat-production records, one of their cows consistently leading the association. She is a New York bred cow and was purchased from Mr. Bendler six years ago. Her work and the good records being made by other kin back in New York caused the purchase of her progeny from Mr. Bendler. They will all be given official records, which pleases Mr. Bendler very much.

The Harris dispersion sale of 260 Herefords at Harris, Mo., June 26 and 27, brought prices that smashed all records. The bulls averaged $3198 and the females $1220, the general average being $1525. The great show bull, Repeater 7th, brought $27,500 and Gay Lad 16th sold for $20,000. He went to George G. Moon of New York city, while Repeater 7th was bought by W. A. Pickering of Kansas City, Mo., who has more of the Repeater family than any other breeder. He also got Repeater 8th at $10,000 and paid $10,000 for Princess 31st, the dam of Repeater 7th. Top price for females was $13,000, Repeater's Model going to M. M. Marshall of Los Angeles, Cal., at that figure. John Booze of Parkman, Wyo., was a heavy buyers at long prices and several animals went to Colorado and South Dakota, but none to the three northwestern states.

Bull Calf From Illinois.

A letter to The Farmer from C. B. Austin, secretary of the Avalon Orchard Tract company of Kuna, Idaho, says that that company has just brought out a fine bull calf from Illinois, a son of King Segis Pontiac Chicago (the $20,000 son of King Segis Pontiac and Johanna De Kol van Beers), and a 22-pound three-year-old heifer. The calf's four nearest dams have seven day records averaging 32.5 pounds butter.

PIONEER BREEDER QUITS.

L. K. Cogswell of Chehalis, Wash., a pioneer breeder of the Pacific northwest, as well as a charter member of the American Red Polled Cattle club, is retiring from the stock business. His reason for doing so is advancing age. He is now disposing of his holdings.

RED POLLED CATTLE

Red Polled Cattle

A car load of well bred cows, heifers, bulls and calves at a bargain, for quick sale.

L. K. COGSWELL, Chehalis, Wash.

Registered Stock Pays.

Six years ago W. A. Hall of Caldwell, Idaho, purchased six registered Shorthorn cows for $750, while Shorthorns and all beef cattle were cheap. Last fall he held a sale at which three of the cows and offspring from them and some of the others were sold. The sale totaled $3600. Mr. Hall has three cows left and eight heifers or young cows and one bull calf. These could not now be bought for $2500. "Is this not reason enough," Mr. Hall asks, "for the keeping and raising of purebred cattle, rather than scrubs, or even of good grades, especially when Shorthorns are the breed kept: the breed that adapt themselves best to farm conditions and are most profitable under almost any conditions?"

Mr. Hall uses as a herd sire Donald No. 359930, the bull shown on this page,



Donald 359930.

bred by Thompson Brothers of Kansas. Donald is by St. Clair, dam Daisy of Valley Grove by Lavender Prince, going back in four generations to Imp. Daisy of North Oaks—straight Scotch breeding. For two years Mr. Hall used Aberdeen of Walnut as his herd sire, a bull that W. O. Minor brought from Iowa and used for a time. He has one daughter of Golden Goods, that won first for her breeder, Mr. Minor, at the Pacific International as a senior calf. She also won first as a yearling at Caldwell and Boise for Mr. Hall. Mr. Hall's cow, Jessie Linwood, was three years grand champion at Caldwell and Boise. She is by Imp. Ruddington Star, dam Maggie Linwood by Baron Linwood.

Mr. Hall now has 33 head of registered females. He has six acres of corn, which will be used for silage.

H. A.

A Profitable Producer.

A. L. Wileon of Wilson Bros., Poland China breeders, at Greenleaf, Idaho, own Pet, a Poland China sow, now 11 years old, that has a record of profitable production not often equaled. She has farrowed two litters every year and never had less than seven nor more than nine pigs. She showed in the under six-months-old class, as a yearling, and as a two-year-old and was never defeated in class. One year at three fairs Mr. Wilson won 56 ribbons with her and her produce, including six championships. She is dam of the boar with which Mr. Wilson won second in his class of 28, and the boar that beat him was grand champion. Pet had eight pigs this spring, but only saved one. She is not profitable any more, but on account of her past performances Mr. Wilson can not find it in his heart to kill her.

H. A.

Champion Shire.



The above is a photo of Wilson Idol, the Shire stallion that won championship of the breed and then won the O.-W. R. & N. trophy for the best groomed, best mannered and best finished horse of the show all breeds competing at the Union (Ore.) Stock Show, June 12 and 16. He is of good size, but not an extremely large horse for a shire, but has that symmetry and finish known as quality, that makes him a great horse. He is owned by W. R. Ledbetter, Alicel, Ore.

Breeders' Department

Berkshire Boars for Fall Service

I have a number of thoroughbred Berkshire boars sired by W. S. C. champion boar, brother to Reserve Champion at Panama exposition. Sows from Masterpiece strain. Large, smooth, prolific type.

Delivered f. o. b. your station. Registry papers complete.

R. W. SNYDER, Washtucna, Wash.

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World famous—thirty years standing.
Hundreds of prizes won.

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Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.

Write for pedigrees and terms.

H. R. BOOMER. New Plymouth, Ida.

We Have for Sale

The best of registered in grade Holsteins, all ages. Will sell singly or a car load. Heifer calves, crated, $15, f. o. b. Everett. Satisfaction guaranteed.

KOOISTRA & DYKSTRA. Everett, Wash.

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Young stock by richly bred grandson of King of the Pontiacs, out of high-producing advanced registry cows.

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Am offering 13 heifers for sale, sired by my herd bull Buffalo Duke Doede, a half brother to the world's champion cow. An opportunity of a life time to the man wanting No. 1 stuff.

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One from 20-lb. cow, another from a 16-lb. jr. 2-yr.-old. Herd headed by Model Fobes of Idaho, whose four nearest dams average 27.25 lbs. butter 7 days.

EARL BEEBE, R. F. D. 2, Rupert, Idaho.

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PLATT BROS., Props., Roy Jacobs, Herdsman, Genesee, Idaho.

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from state champion ancestors, 14 to select from. Order early and get your choice.

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Pigs from fine strain, matured stock; handled for results. Good looks and good breeding. You can't go wrong on these.

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DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
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Jacks and Jennettes

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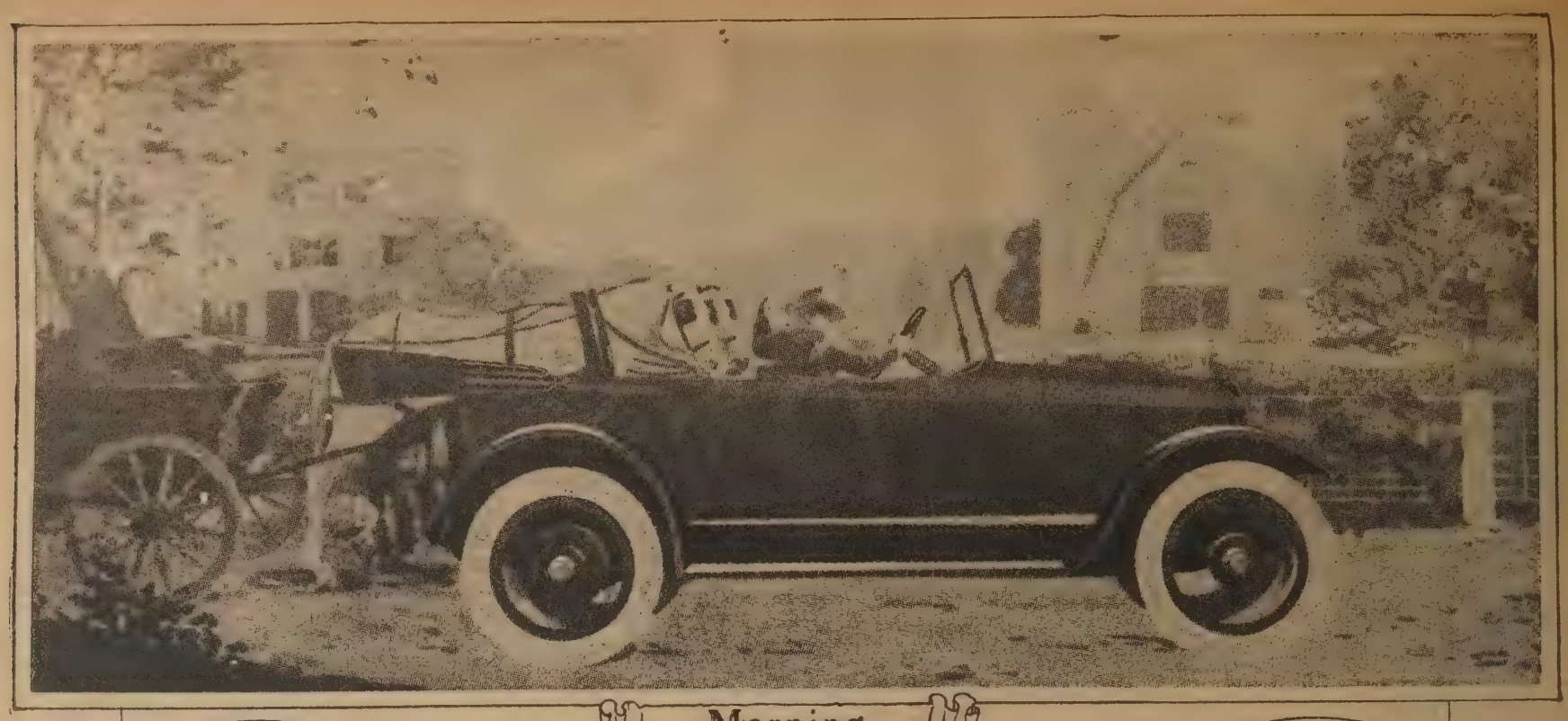
15 head, including one service jack, younger jacks ond colts, all at reasonable prices. A few well-bred registered Duroc Jersey spring pigs, only $15.

F. J. CHALMERS. R. 1, Cornelius, Ore.

A FEW HIGH PRODUCING COWS FOR SALE

We held the highest herd average in the Marion County Cow Testing Assn., for the past 7 months; our herd average was over 60 lbs. butter per cow, per month, for 7 months. We are also offering a young bull ready for light service from our heaviest producing dam. Write for pedigree and price.

MELLOW LAWN FARM. F. A. Doerfler, Silverton, Ore.



Morning



Noon



Noon



Night



Night

Overland

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Time Saver

It's time now for speed and efficiency.
No one now has *time* to waste.
Speed up your work—and speed up your play to keep fit for your work—get an automobile.
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Get a car that's big enough not to cramp you, that rides easy and won't tire you.
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Get Overland Model Eighty-Five Four.
True efficiency and true economy point to this one car as the compass points to the North Pole.
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No other car of such comfortable size is so sturdy—so economical of upkeep.
No other car of such comfortable size has been built in such quantities and for so long a time.
No other car of such comfortable size sells for so little.
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Have efficient equipment for efficient living.
Get your Overland Model Eighty-Five Four today.

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112 inch wheelbase
Famous 35 horsepower four cylinder Overland motor
Cantilever rear springs
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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 31. AUGUST 2, 1917. * * WEEKLY.

Take Up Arms Against Grain Fire Hazard!

Harvest and Warehouse Crews Urged to Form Into Volunteer Fire Departments

By N. W. DURHAM

Farmers and other producers should remember that in organizing local auxiliaries to their county defense councils they are organizing for their own defense and welfare. They are throwing protection around their homes and families, their crops and live stock.

Take, for illustration, the single activity of protection against fire. As Chairman Suzzallo of the Washington state council of defense points out in a special letter to the various county councils, "the very rapid ripening of grain increases the fire hazard and makes prompt action necessary." Chairman Suzzallo urges that active committees be organized as follows:

First, a committee in each town or community center to organize a volunteer fire department.

Second, a committee in each district to see that each threshing crew is organized into a volunteer fire department.

Third, a committee in each district to see that night patrols and night watchmen are provided.

Much will depend on the selection of the chief of the volunteer fire departments. All volunteer fire fighters will immediately drop work and proceed to the fire the instant the alarm is given. Plenty of automobiles or other conveyances should be arranged for to carry the fighters and their appliances to the fire.

There should be an assistant chief appointed, whose duty it shall be to see that all necessary apparatus and appliances are provided and kept in order ready to be carried by the vehicles available to the scene of the fire.

The state council of defense recommends the following equipment for the protection of grain crops:

1. Automobile or trailer.
2. Box to hold 20 sacks kept wet down at all times.
3. Four 10-gallon milk cans filled with water for keeping sacks wet; two buckets to carry water from cans to fire fighters.
4. Twelve sharp-nosed shovels.
5. Six large garden rakes to use in case of fire in headed and stacked grain.
6. Two large hoes.
7. At least one-half dozen water bags with drinking water for fire fighters.
8. Two 2½-gallon chemicals.
9. One 50-foot auto tow line steel cable.

Continued on page fifteen.

What Fishback Says

H. O. Fishback is state insurance commissioner, and as such is ex officio state fire marshal which gives him authority to take in hand vital problems arising out of fire menace.

Commissioner Fishback is warning farmers throughout every district of the state against fires. "Fire is an absolute destroyer of wealth," he says. "An unnecessary fire means the robbing of some hungry mouths of the food they need."



H. O. Fishback.

A special representative of the insurance department has been placed in eastern Washington to cooperate with the farmers and others in a great campaign of carefulness to prevent farm fires during this harvest season. W. A. Groce is the man, and may be reached by letter or other message addressed to the Grand hotel, Walla Walla, or to the Colfax hotel, Colfax; these two cities being his headquarters.

What Is Sabotage?

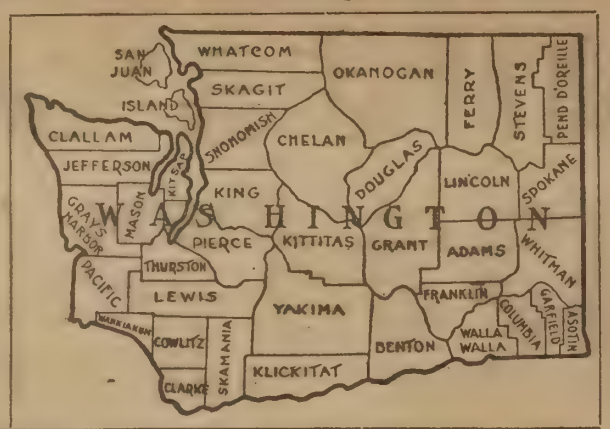
Sabotage, a word associated with the operations of the I. W. W., appears to mean anything "necessary to gain the end," using the words of one leader of that anarchistic order. Read in this issue what the I. W. W. believe and promise to do.

"Under the Black Canopy."

It is not often that people of the northwest are privileged to read a story by a northwest author. The Farmer is giving its readers that unusual privilege. Begin reading "Under the Black Canopy" in next week's issue.

City Gardens Cut Country Business

Every Vacant Lot is Growing Something To Eat; Truck Gardener Has No Show With His Products This Season



PROSSER, Benton County, Wash., July 22.—The weather is dry and hot around here. The thermometer has registered 110 for the last week. The hot weather has damaged the wheat quite a bit. Some farmers have started to harvest their grain. The only increase in crops in the county is in potatoes and lots more have been planted this year. In the town of Prosser there is quite an increase in the garden truck. Every vacant lot is planted to some kind of vegetables. A country truck man can't sell anything in Prosser. All crops are good, except wheat, which will be a poor crop. Labor, machinery and work stock in this community is adequate for harvest. Six or eight of the farmers are using the 12-horse combine. As the harvest will be late this year the farmers are trying to get along with community help. G. W. WILGUS.

Many Town Gardens.

COLVILLE, Stevens County, Wash., July 20.—The agitation for increased crop production has had beneficial results in increasing the amount of cereal crops on thin meadow land, in increasing the acreage of beans and of gardens in both country and towns. The most noticeable feature is the large number of gardens in the towns.

Prospects for yields are not the best. The dry weather during June and July will materially decrease the cereals, and while the first cutting of hay crops was nearly normal, the second cuttings in some cases will be impossible and in others greatly decreased. The yield of timothy hay in most districts will be materially decreased.

There is no report of labor shortage, or shortage of work stock or machinery. Quite a few farmers have purchased side delivery rakes to decrease the labor of hay harvest.

A. R. HAHNER.

Irrigated Wheat Fine.

GRANDVIEW, Yakima County, Wash., Juy 21.—More gardens in the town have been planted this year than before. More beans and more wheat have also been planted. Wheat on irrigated land is fine. So far there is plenty of help by the farmers changing work. We exchange and don't have to hire many more men. The weather has been very hot, up to 104 degrees, but is cooler for putting up the second cutting of alfalfa. There are not many men here to be had, but there are enough and we get along.

E. H. FAULKNER.

Scare Away Workers?

COLFAX, Whitman County, Wash., July 19.—Great effort was made last spring to increase the crop production, but the season has been unfavorable, and production will fall short of last year. Potato acreage is easily double that of last year, and prospects for spuds are good. Wheat, oats and barley are a disappointment. They are heading too short, and if present hot weather continues will be a poor crop. Labor is inadequate now, but unless commercial clubs and "citizen committees" succeed in terrorizing the workmen into staying out of the country I believe it will be adequate at harvest time.

E. C. HUNTON.

Fear Harm to Crops.

GARFIELD, Whitman County, Wash., July 25.—There was more spring wheat planted, but it is burning up very badly. A few more potatoes have been planted than usual. There has been no shortage of labor so far, but high wages are paid. Farmers are agitated over the necessity of protecting their crops from wilful destruction by anarchists and idlers. Two years ago many threshers were destroyed and some grain fields burned, and there is apprehension of greater danger this year. Peaches and late cherries were damaged by frost. Small fruits are plentiful, but everything is drying up. There has been no rain since June 23. Hay is good. Winter wheat is ripening prematurely. Ten acres on Cora farm planted to beans and corn last year, tended well, will have about half the crop of the rest of the same field.

MRS. MARILLA KIDWELL.

Yields Cut in Half.

METHOW, Okanogan County, Wash., July 24.—As the season progresses the results from the agitation for increased crops gives 25 per cent more grain to cut, but the hot weather has cut down the yield from one-half to two-thirds. The bean crops seem to have suffered less than grain or potatoes. Wheat and beans and potatoes are most noticeable in increase. The prospect for a yield are the poorest I have seen here in eight years. I have only seen one poorer year in the 29 years farming here. The labor and stock are sufficient for the grain crops. No new methods of harvesting the grain will be found.

CHARLES GRANT.

Beans Stand Hot Weather.

LEWISTON, Nez Perce County, Idaho, July 19.—The crop conditions in this territory at present are far from satisfactory. June and July as shown by the government weather bureau are the driest in 17 years. Winter seeded grain, of which there was a very small acreage, is in fairly good condition, I would say 95 per cent government basis. Spring wheat, of which there was a very large acreage as compared with former years, is in very poor condition. The straw is very short and the heads are not filling out. A rain at the present time would not increase the yield over 20 per cent. The last week has been extremely hot, with unusual hot winds, which have burned the grain badly.

The bean crop, of which the acreage will be 75 to 100 per cent greater, is standing the hot weather remarkably well. The growers who have been handling beans for the last several years have purchased new bean cultivating machinery, by which they are enabled to take much better care of their crops than at any time in the past, and it is shown that the intensive cultivation of beans holds the moisture in the ground and is going to be very profitable to such as have followed this method. I am informed by reliable bean experts that an increase in acreage of 100 per cent will not result in more than 40 per cent greater yield. A portion of this increase is on new ground which has not yet become innoculated to bean growing, it having been demonstrated by practical growers as well as by the agricultural schools that the yield increases from year to year on the same ground up to a certain point.

There has been a considerably greater acreage of corn, which to date is in first-class condition, but a much longer duration of the dry hot winds will cause great damage.

J. J. WILSON.

Irrigated Crops Are Good.

IDAHO FALLS, Bonneville County, Idaho, July 20.—The agitation for increased crop production in this vicinity has resulted in a greatly increased acreage of potatoes and wheat. It has also resulted in a great increase in truck gardening in and around the towns in this vicinity.

The season has been very favorable, and crop conditions in the irrigated portion of the valley were never better than at the present time. The grain on the dry farms has suffered greatly from the drouth during the last 30 days and possibly will make about 65 per cent of a normal crop, but all irrigated land will run a strong average.

The farmers have experienced little or no difficulty in securing labor and are well supplied with work stock. A great many tractors have been purchased, which have been of great assistance in reducing labor and the amount of work stock necessary to the farms. We anticipate no shortage of labor or machinery during harvest.

On the irrigated farms the harvesting is done principally with binder and thresher, while on the dry farms the harvesting is done with headers and combined harvesters.

The upper Snake river valley will do more than its share of relieving the shortage of the nation.

W. L. SHATTUCK.

New Section Opening Up.

BOARDMAN, Morrow County, Ore., July 18.—The people in this locality are striving to get their places under cultivation as fast as possible. Alfalfa is the principal crop being planted. As I have stated before this is a new section that has been opened by United States reclamation service and there is nothing fully established. I was in Gilliam county, west of here, last month and I found that quite a portion of the grain was badly hurt by drouth and hot winds. One well-posted party told me that in his opinion there would not be a 10-bushel harvest throughout the county. They were preparing to use a number of small combines or harvesters, to be operated by two men and 10 or 12 horses. We are having rather warm weather, more than 100 degrees in the shade every day.

S. A. BARNS.

Irrigated Crops Satisfactory.

GRANTS PASS, Josephine county, Ore., July 21.—The results obtained from the agitation for increased war production have been very satisfactory in Josephine county. Perhaps the increase in beans is more noticeable than that of any other one crop. There has been a considerable increase in vegetables, particularly in the towns of the county. The prospect for a large yield of beans is excellent and in irrigated portions of the county all crops are looking very well. The non-irrigated areas, however, have very poor crops; in many cases the crop will not be worth harvesting. Indications at the present time are that we will have sufficient labor, machinery and work stock for all harvest work unless possibly at fruit picking time. There are practically no changes in the proposed method of harvesting for this year. Possibly some better means will be provided for harvesting and threshing beans.

C. D. THOMSON.

GOING TO SPOKANE?

Farmers, stockmen and fruitgrowers and their families, who intend visiting Spokane, will find desirable stopping places listed on the classified page of this paper.—Adv.



Sheer Power

Coupled with enormous traction carries the Caterpillar with its load over hills that bother most tractors to make "empty."

Sock your plows down to the beams, hook on your Combine. You can not stall the

CATERPILLAR

Reg. U.S. Pat. Off.

The tracks last for years. Slow speed motor—none so accessible or economical. High tension magneto; impulse starter; patent air cleaner; cut gears in oil; two speeds ahead. Grand prize (highest award) both California expositions.

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We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month, or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter.

THE WASHINGTON FARMER
Review Building, Spokane, Wash.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 31 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF August 2, 1917

Time to Fight Famine Right Now

Food Producing Facts Discussed at Vrooman Conference in Spokane

At a meeting of the county agricultural agents, members of the faculty and extension workers of the state college of Washington and prominent business men and citizens, held at the Davenport hotel in Spokane, July 23d, Assistant Secretary of Agriculture Carl Vrooman spoke in part as follows:

"In all our war food work throughout the country one of our most difficult problems is to get the food that is produced to the people. In Denver they have under consideration a plan involving the establishing of a municipal market to supply food at cost to poor people. In passing through Denver recently, I was asked concerning the feasibility of this plan. I told the Denver people that I did not think a plan of this kind should be so used as to replace the grocers and dealers already established. Of course, if the time should come—which I have no idea will come—when it becomes apparent grocers, and vendors have seased to be patriotic and are taking advantage of the war situation, and are running up the cost of food, there would be but one thing to do: start and conduct a wholesale and a retail establishment.

"I must say, however, that in traveling through many states and meeting many people, I have failed to find grocers, bakers, millers, canners or anyone who is unwilling, after this matter is put up to them on a patriotic basis, to conduct their business on a basis of reasonable profit. They do not want to get rich out of the slaughter of our young men on the European battlefields."

President Holland of the state college asked R. N. Miller, farm demonstration agent of Washington, to tell facts concerning the farm labor situation in Washington. Mr. Miller spoke in part as follows: "For two months I have been in the field endeavoring to see what the labor conditions are. There had been, during the early part of the season, a good deal of fear on the part of farmers on this ground. Also the season has been late, which added to their anxiety. They had found it difficult to find enough labor to put in the crops.

"As the season advanced, the farmers began to cast abount among themselves, and, I am glad to say now, they have taken the matter in hand and have recruited their harvest labor from their own ranch. Much has been done by the purchasing of labor-saving machines. At Ritzville 28 of the two-man type of combined harvesters have been taken out into the harvest field. I think as many as one hundred more will be installed. This will help to eliminate outside labor. The same is true in all parts of the Palouse country—more labor-saving machines will be used for harvest than ever before. I do not believe that the farm labor situation is serious in all parts of the state at this time. There is plenty of farm machinery on hand now.

"Meetings have been held throughout the state and farmers have been advised that it is a good practice to pay a little higher wage than before, owing to the advanced cost in living. They have responded in the proper spirit and there has been a horizontal advance in farm labor amounting to about fifty cents a day.

"We do not expect a shortage of labor in the Inland Empire."

Mr. Vrooman asked concerning the prevailing prices of farm labor. Mr. Miller informed him that $3.50 per day for common labor was being paid generally, but that in the Palouse country they had need to pay $4.00 per day.

> "We can not throw many troops into the trenches for months to come. We can do this thing: we can furnish food, more food, and still more food to those peoples and those armies today on a thousand battle fields dying by the thousands, fighting your battle and mine and fighting the battle of democracy throughout the world."

That the threshing of wheat will be higher than last year—probably 22c to 25c a sack as against 18c to 20c last year. A man and team is paid averaging $5.50 per day.

E. F. Benson, state commissioner of agriculture, said in part: "In order to get the farms into the highest possible condition of production, many of the farmers are finding it necessary to borrow money to purchase seed, additional farm implements, horses, harness, and farm equipment in general. There has not been any shortage of funds due largely to the willingness of bankers to advance money in this emergency. Many of the farmers needing money are not able to give the best of security and it is possible that banks, through their public spiritedness may fail to realize on their notes.

"It seems to me that the great problem confronting us in agricultural production is for next year, not this. The weather difficulty in many parts of the state has helped take care of the labor situation. The harvest will be somewhat short. The burning question before us is to put land into cultivation so that there will be no idle acres in this state next year. It seems to me that while we are all engaged in this war preparedness campaign, we ought not to overlook the importance of the preparedness of business.

"In building our foundation, we should have in mind that it is not a temporary structure whose usefulness will cease at the end of the war, but we should buid permanently so that at the end of the war agriculture in the state will be stronger than ever before and we can keep on building and making it stronger. Whether we are in war or peace what we are doing should be done with the view of permanence."

Professor E. J. Iddings of the University of Idaho, discussed the labor situation in that state. He said that the lumber camps throughout the state had volunteered to close down sufficiently long to enable their employes to go into the harvest fields and help take care of the crops. Similar proffers of help have come from residents of the cities who had offered to do all they could to help take care of the crops.

Following the talk by Professor Iddings and others who gave information desired by Mr. Vrooman, he replied by saying that the government found these first-hand facts of extreme importance in planning its work to meet the national crisis. He said in part: "One of the most interesting facts in connection with our present so-called war stimulus to agriculture is that this war situation gives the opportunity to interest the people in a more vital way than before in the things we have been trying to teach for a quarter of a century. nI other words, the war stimulus to agriculture is putting steam in your boilers. It is making the people receptive to our message. We have been campaigning for greater agricultural production for years and now the people are increasingly alive to the importance of this thing.

"The fact of the matter is the nation must now go on a war basis. Formerly we were on a peace basis as concerned our industry, our commerce, our military and our psychology; and when you talked about war and its camp followers, which are starvation and famine, it sounds strange to American ears in this land of plenty. The gaunt spectre of famine is already abroad in Europe. A dozen hungry hands, a dozen hungry eyes, are reaching for and looking at every ounce of food we waste in America. It is hard to realize that this is anything more than a rhetorical statement, but the fact is that already there are places on the earth where millions of people have starved to death. The roads are lined with bones where they will remain until made into fertilizer. There are stretches of country in which there are few children now living. They have starved. Today there is a world shortage of food. Any one who will take the trouble to study figures can see this shortage.

"Our primary military necessity is to put back this food famine. If we do not succeed in producing and saving more food more people will die in Europe of starvation in years to come than have been slaughtered in battle in the years that have gone. This is a crisis which should appeal to your patriotism if you have any manhood or womanhood or any humanitarian sentiments. Here is a task into which even the pacificist can throw himself heart and soul.

"We can not throw many troops into the trenches for months to come. We can do this thing; we can furnish food, more food, and still more food to those peoples and those armies today on a thousand battlefields dying by the thousands, fighting your battle and mine, and fighting the battle of democracy throughout the world."

Farm Bank Active

Continues to Rush Making of Loans

The northwest district federal farm loan bank at Spokane continues rushing the work of chartering local loan associations, approving loans and sending out to applicants the money to which their holdings entitle them. Fourteen new local associations were chartered last week, three in Washington, six in Oregon, four in Montana and one in Idaho. The following are the new associations and the amount of loans asked by the charter members of each and approved by the land bank officials, subject to the filing of abstracts of title to the land on which the borrowings are to be made:

Washington.

Maple Valley, King county	$55,230
Kiona, Benton county	27,250
Winlock, Lewis county	44,230

Oregon.

Beaver, Tillamook county	43,100
Cloverdale, Tillamook county	55,400
Thurston, Lane county	46,900
Sisters, Deschutes	38,100
Baker City, Baker county	84,700
Salem, Marion county	49,200
Eugene (additional loans)	30,150

Montana.

Park City, Stillwater county	39,800
Dunkirk, Toole county	59,400
Terry, Prairie county	48,600
Union, Dawson county	35,700
Additional loans in state	23,800

Idaho.

Melrose, Nez Perce county	51,100
Additional loans in state	11,000

Washington Portrait No. 26.



B. E. Smead.

B. E. Smead of Opportunity spent the first 10 years of his life in St. Paul, and then his parents moved west to Portland, Ore. The next three years were spent at Blalock on a fruit ranch. It was there he decided to become a cowboy, to which his mother objected and sent him off to Pullman to school. From that time until 1907 his time was devoted in the winters to acquiring an education in electrical engineering. The summer months, which were the happiest of the year, were spent on the ranch.

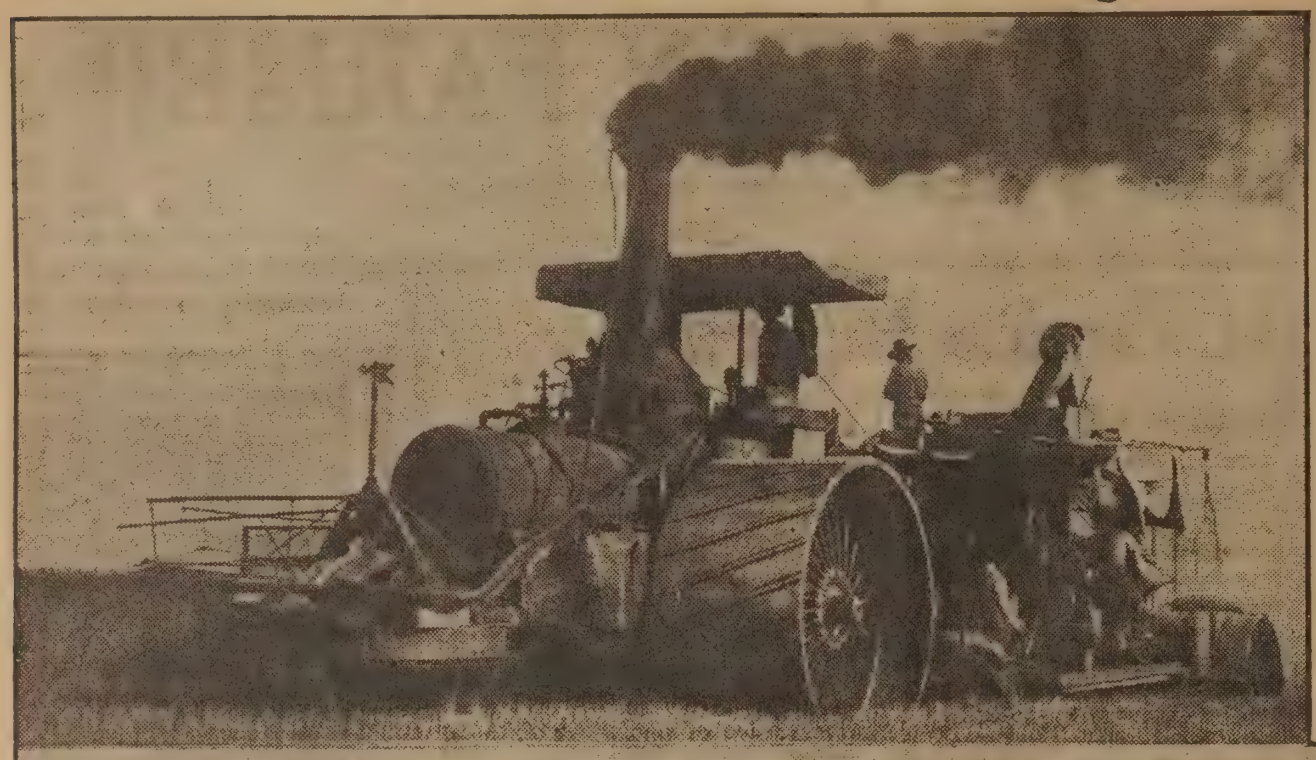
In 1907 he began to serve an apprenticeship with the Westinghouse company at Pittsburg. He arrived at that concern just at a time when it passed into the receiver's hands, and the dirt, grime, grease and multiude of bosses combined to sicken him of the work; so at the end of a year he turned west again.

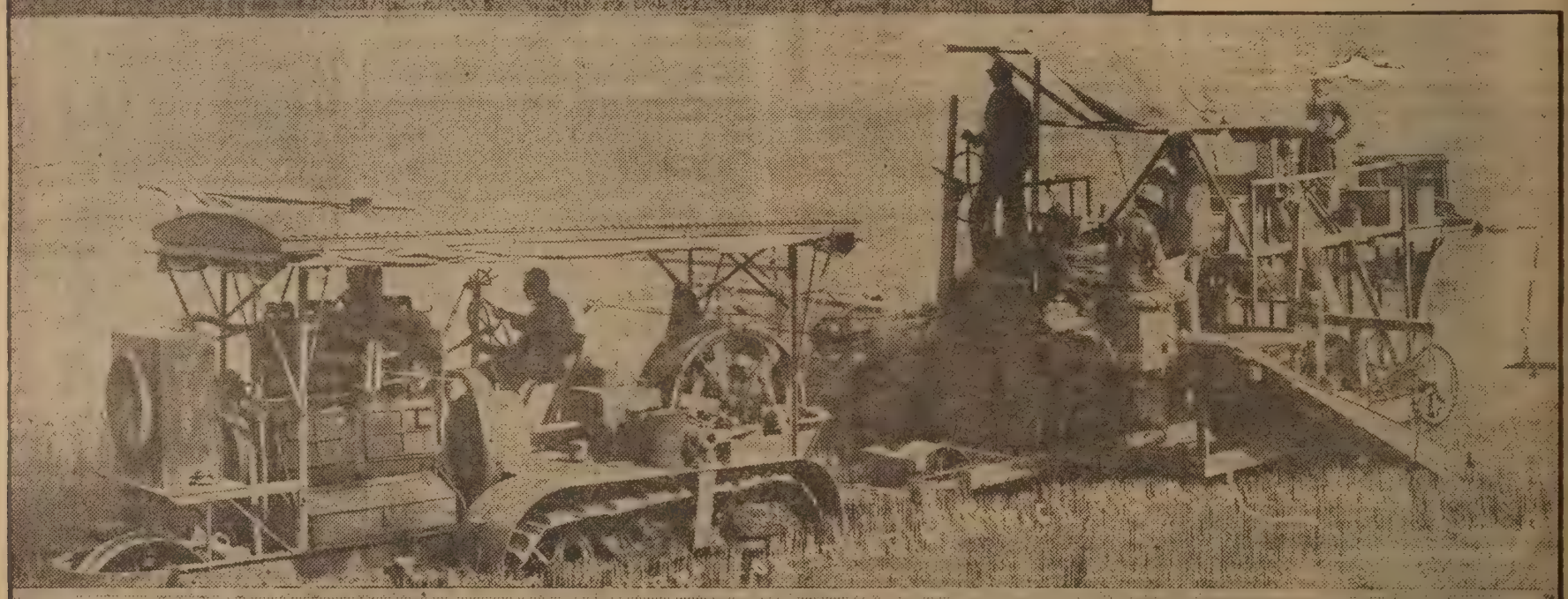
Pure-bred live stock had always held a great attraction to him. To start in with cattle or horses required large capital, so he turned to Duroc hogs. The first purchases made at the Spokane fair turned out very fortunate, proving all to be prize winners at the fair one year later. The third year brought many prizes, the fourth year the old exhibitors all had to take a back seat. It looked as if his future as a breeder was secured. But starting with this year came the slump in pork values and the falling off in the demand for pure-bred stock. In the meantime dairying was carried on in a small way with pure-bred Jerseys. Owing to the fact that all the calves born were males, the herd increased disastrously slow.

Mr. Smead would advise youg men in the country to take a course, if possible, at the nearest agricultural college. He believes that one of the most valuable things a young man can learn is the ability to mix well and take well with his fellow beings. The crying need in almost every rural community at the present time is for some young fellow to organize it as a social center. That some young man with winning and boundless enthusiasm, high vision and the will to do, bring his neighbors into the spirit of cooperation, social recreation and education, It is by no means necessary that a bright young fellow go to the city in order to be of benefit to his fellow man. There is a wonderful field at nearly every young man's door if he will but see it.

The next in the series of Washington portraits will be that of John H. Quick of Castlerock, and will be given in next week's issue of The Washington Farmer.

Northwest Wheat Growers Conduct Big Harvesting Operations







Typical Big Methods.

The three photographs here illustrate three types of harvest power in use in the northwest. All three are scenes in the harvest fields of Umatilla county, Oregon, one of the world's great wheat-raising counties.

The top picture shows the steam traction engine pulling a combined harvester outfit on the George Peringer ranch, near Havana.

The middle picture shows a gas traction engine pulling the big harvester on the Sturgis and Wyrick place, between Havana and Cayuse.

In the bottom picture 30 horses are pulling the big combine on Charles M. Wright's ranch at the southern end of the Umatilla reservation.

Notwithstanding the great reduction in grain crops throughout the northwest by the long dry and hot spell, the sound of the big harvesters is beginning to be heard. Already the shuffle of the header and binder sickle, the hum of the thresher cylinder and the triple voice of the tractor-pulled combine are in the air, and in some of the earlier districts the wheat wagon is beginning to deepen the dust of the roads.

The photographs herewith indicate in some degree the picturesque immensity of the harvesting operations in the northwest and also the customs in practice. Steam, gas, horse flesh! Not many years ago it was horse flesh only, but today the steam and gas are playing a big part. But even at that, the horse is still the leading element of farm power. He is more numerous today than ever, notwithstanding the thousands of tractors that are doing duty in the fields of the United States, indicating the great increase in farming operations. Two conditions have contributed to the development of the tractor in farm work, the inability of the horse breeder to keep pace with the need of farm power, and the wonderful adaptability of steam and gas.

Use Diligent Care in Canning Fruit and Vegetables; Follow Directions and Be Successful

The United States department of agriculture has issued a warning to the housewives of the country against carelessness in canning their vegetables and fruits. The subject is so timely and of such vital importance that The Farmer gives it herewith. Canning directions have been given in previous issues of The Farmer.

The faithful following of approved methods and directions is the only safe road to success in canning. Housewives who carelessly practice methods that are new to them, or who attempt to "improve" on the methods, or to make short cuts, are taking a risk of spoiling good food. Canning is essentially a scientific process, however much it may have been simplified for home use.

In the canning methods which the department advocates careful study has been made of the essentials for the preservation of food products, and all steps not absolutely necessary have been eliminated. There is good reason, therefore, for each step which is advocated. If home canners profess to follow a department method, they should follow it in detail; and if they fail so to follow it, they should frankly recognize that not the method, but the application of it is at fault. Especially there should be no mixing of methods, whether those of the department or others. One method should be adopted and followed carefully in canning any given batch of products.

In the one-period cold-pack method of canning in particular, canning has been simplified greatly as compared with some other methods. For this very reason, every step called for in the directions is essential, and not one should be omitted or performed otherwise than as indicated. Specialists who have worked out and demonstrated this method of canning for the last five years, have investigated all reports of the spoilage of products, and have found in every case that the trouble was due to faulty equipment, including poor rubbers and containers, to failure to follow the directions carefully, to the use of old or spoiled vegetables or fruits, or to the local occurrence in certain vegetables of unusual spores, which prove troublesome even under commercial canning practices. By following the simple directions exactly the specialists themselves have put up with home-made water-bath outfits, without loss, thousands of jars and cans of various products.

The following points especially should be kept in mind when canning by the one-period cold-pack method:

Test jars, and use only those free from flaw.

(Continued on page twenty-one)

Skagit Milk Prices Higher Than Ever

Over Half the Cows in County Included in Dairymen's Association

By PAUL E. TRIEM

The Skagit County Dairymen's association, which is the pioneer organization west of the Cascades, has already achieved the major portion of its task by bringing into the fold more than half of all the cows in the county. In other words, the association herd is now the "big herd," and as such its owners, collectively, are able to demand for themselves as favorable treatment as is accorded any one in the territory. Milk prices are higher in Skagit county than they have ever been before, and apparently the end is not yet reached.

Whatcom county is rapidly perfecting an organization, along lines very similar to those worked out in Skagit. President John Kill and Secretary Joe Hall, of the Skagit association, have done much to aid the Whatcom dairymen to build up an efficient producing and selling machine.

Snohomish county will soon be completely organized. Meetings have been held in various parts of the county, a constitution and bylaws similar to those adopted in Skagit county have been passed, and contracts are rapidly being signed by the dairymen.

King county has departed somewhat from the lines followed by the counties to the north, in providing for a sinking fund to be raised by levying on each cow. This feature of the organization calls for the investment of considerable money by members, and for this reason the work of organization has possibly been a little slower than in the other dairy counties. A meeting will soon be called at which to consider these and other practical matters, and at this meeting prominent members and officials from Skagit county will be present, to advise with the King county men.

Must Help Themselves.

John Kill, of Skagit county, Washington, is the fighting president of as aggressive and determined a body of dairymen as ever organized. Mr. Kill is a producing farmer, rather than a book farmer, and upon the latter type he looks with feeling of unmixed contempt.

"It is no good for the dairymen to look for help from any one but themselves," he declares. "What are the various agricultural colleges and departments trying to do? Principally to teach the farmer to raise bigger crops. What good does that do? We understand the production end of our business better than any man from the outside can possibly do. Every farm is an individual problem, and it is absolutely ridiculous for these so-called 'experts' to come in here and try to show us how to run our business. Let me tell you one thing—the only failures in the farming business we have had up here have been book farmers—men who sat on the fence, looking from a text book on agriculture to their crops, which according to theory should be growing, but which didn't grow right because they didn't have enough know-how and elbow grease applied to them.

"At a recent meeting up in Whatcom county," Mr. Kill continued, "I was called upon to express my opinion on these and similar matters. For instance, the subject of testing came up. I said: 'Gentlemen, I will be strong for the testing idea when the tesfer is able to make his figures official, so that the condensers will have to accept them. As it is now, the tester tells you that your test runs 3.8 or 3.9, perhaps, but when your milk reaches the condensery it is tested by their man who tells you that your test is 3. And that is what you get paid for. Until the testers whom the associations hire are able to make their tests stick, I am not in favor of making more fancy jobs to be paid for out of the farmer's pocket.'"

Mr. Kill takes issue with the statement made at various public dairy meetings that certain cows in the county are paying their owners a handsome profit. "Half of these things that are worked out all right on paper won't work at all in actual practice," he comments. "High yields are often secured at such a tremendous price for feed, care, etc., that if the dairyman figured his own wages in, he would come out in the hole. And because we won't agree to all these things which are said to us, certain elements in the community are opposed to us. We had a meeting scheduled in a town not far from here the other evening, and when the mayor heard of it, he found suddenly that he must call a special session of the council. The result was that when the dairymen had come into town for their meeting, there was no place for them to assemble—the city hall was occupied. One of the local lodges heard of our trouble, however, and turned their hall over to us. So we had the meeting, in spite of our friend, the mayor.

"Mr. Stuart, of the Carnation company, says that if he pays us what we ask for our milk this summer, he himself will come out on the wrong side of the ledger next winter," concluded Mr. Kill. "How about the farmer, who has been coming out on the wrong side of the ledger, winter and summer, for years? Does Mr. Stuart worry about him? Not a bit—he told me that if he really felt about this matter as we expressed ourselves to him, he thought perhaps it would be best for him to take his machinery out of the local plants and move it elsewhere. And I said to him: 'Mr. Stuart, when you were thinking of coming in here, the local dairymen called a meeting and subscribed enough to buy your location. If you want to pull out of here now, it will be just as easy for us to call another meeting and subscribe funds to build our own condensery. It's up to you—we're not begging you for anything!"

As a final indication that the Skagit county milk producers are determined to secure all that they are entitled to, President Kill said that the association is now so widely and so favorably known that applications for membership are coming in from all over the county by mail. This has rendered active field work unnecessary.

J. B. Hall, secretary of the Skagit County Dairymen's association, is one of the most active missionaries in carrying the new gospel of organization into other west side counties. Mr. Hall is one of those likeable fellows who can stand up for his rights without holding malice against any one, and it is safe to say that his good humor and his willingness to put himself out for the common good have been big factors in the success of the Skagit association.

Secretary Hall reports the business of the dairymen's organization in flourishing shape.

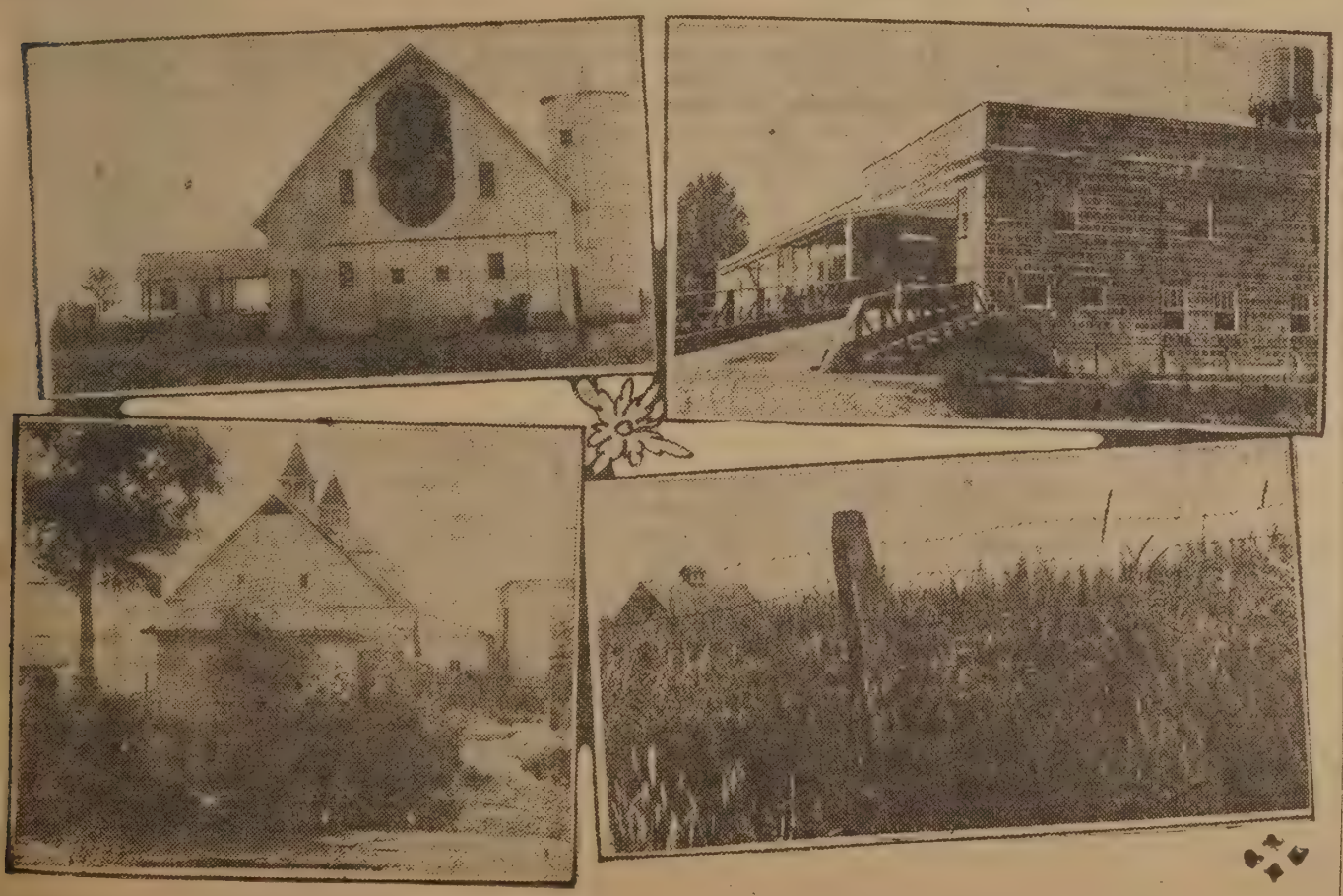
"This movement is one of the biggest things western Washington has ever seen," he declares. "All that is needed is the loyalty of our members, and that we are sure of—they are sticking and doing their share in great shape."

"We're for It."

Lutro brothers, of Skagit county, are among the successful experimenters with alfalfa. One field has been in three years, and is doing well. The Grim alfalfa seed was obtained in Minnesota, and was innoculated with a pure culture obtained from the state college at Pullman. Three cuttings per year are obtained. The biggest problem has proved to be weed control—a problem which probably is best solved by raising several cultivated crops before seeding to alfalfa, combined with thorough preparation of the ground.

The herd of pure-bred Holsteins belonging to this farm are all signed up with the Skagit County Dairymen's association.

"Do we believe the association is a good thing?" repeated one of the proprietors. "There's not much room for doubt about that—compare this year's milk prices with last. Of course, the association is young, but it has already shown what it will be able to do. We're for it."



The picture in the upper left corner shows the dairy barn on the farm belonging to the King brothers. The picture at the right is a part of the new federal condensery at Mount Vernon. The lower left picture shows part of the farm buildings on Otto Rundgren's stock farm, and the picture at the lower right corner shows a sample of Skagit county oats, photographed July 18.

Kill Potato Bug With Arsenicals

Use Arsenate of Lead or Paris Green as Dust or Spray

Last week The Farmer published an article relative to the apeparance of the Colorado potato beetle in the northwest, and sent out inquiries to county agriculturists and others asking for information as to the extent of the invasion, and means of combatting the pest.

Interesting replies have been received indicating that the potato bug is to be found in several parts of the northwest, in some of which it is threatened to become a serious pest, but in others of which it is under control.

The replies, together with information from scientific authorities and experimentors, indicate that the three successful remedies are arsenate of lead spray, paris green spray or dust and arsenate of zinc spray. The lead and paris green appear the most common.

The spraying should be done about the time the eggs hatch, and if investigation is careful, only those plants where the red, spotted-sided larva (look like slugs) appear need to be sprayed.

W. C. Edmundson of the agricultural department of the University of Idaho writes as follows:

"In north Idaho the potato beetle is a very serious pest and one that is causing a great loss to the growers every year. This pest has not yet made its appearance in south Idaho, and the potato growers should do all in their power to prevent it from getting a foothold in that part of the state.

Use Arsenical Poison.

"The best and most practical remedy is spraying with some arsenical poison. In the larger fields the best machine is a special made power outfit drawn by horses. In garden patches a small hand pump does good work. Arsenate of lead and paris green are the two stomach poisons commonly used. The arsenate of lead does not kill as quickly as the Paris green, but it sticks to the leaves better and will do effective work even after a rain.

"If applying arsenate of lead, use one pound of the powder to fifty gallons of water. If applying Paris green add two pounds of lime, 3-4 pound of Paris green to fifty gallons of water.

"Potato plants should be sprayed with an arsenical poison as soon as all the plants are well out of the ground. By so doing, many adult beetles will be killed before they deposit their eggs.

"It might also be a good idea to mention the hand picking which is used in small gardens. The insects are killed quickly by dropping them in a can of kerosene, but this is a slow process at best. Spraying or even dusting is much easier and far more effective."

The following reports have been received from county agriculturists in response to The Farmer's inquiry regarding the potato pest:

CHARLES GRANT, Methow, Okanogan County, Wash.: I have not seen one of the potato bugs here, although

(Continued on page seven.)

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Style Costs More Than Food

A good deal of the railing against the high cost of food is misdirected. It is the high cost of style that is pinching many people who unjustly blame the farmer.

Congressman Madden of Chicago, in a speech in congress the other day, gave an interesting analysis of prices on the bills of fare of some of the high-class hotels in the national capital. For 46 cents worth of food the man who wants to dine in style is charged $6.55, according to the Illinois congressman. Here are his figures:

	Menu price.	Cost price.
Lobster cocktail	$ .90	$ .03
Clams	.50	.01
Olives	.30	.03¾
Half broiled duckling	1.75	.12½
Beans	.60	.05
Cauliflower	.50	.02
Grapefruit salad	.50	.06
Green peas	.50	.03-.04
Peaches	.50	.05
Cantaloup	.50	.06-.08

It is also to be remembered that the producers got only a part of that 46 cents. A portion of it went for transportation, and assuming that the hotel bought directly from the wholesaler, at least one middleman took his "bit."

But much the greater part of that $6.55 was paid for style, and a congressman does not have to dine at the top-notch hotels. Washington has hundreds of cheaper hotels and restaurants that serve pretty good meals at reasonable prices. Thousands of clerks and other employes in the various departments and bureaus get pretty good "eats" for 25 or 35 cents. The waiter in a high-toned hotel expects that much in way of his tip.

Style comes high, and many buy who can not afford it.

Attack the Big Things Everywhere

Most of the mistakes of men and women grew out of thoughtlessness. A glaring case in point was narrated by Miss Elizabeth Jones, assistant state leader of boys' and girls' clubs, at the conference in Spokane by members of the state and county defense organizations, county agricultural agents, State college professors and representative farmers.

Miss Jones, who takes a keen and practical interest in the big work of home conservation of foods, told of organizing boys' and girls' canning clubs and asking the high schools to specialize on this work in season in their domestic science teaching.

"Imagine my consternation," said the speaker, "to learn that in some towns this request had been overlooked or ignored; that girls were being taught sewing instead of cooking and canning, and that some classes were at work on tatting and crocheting. I told them that if they must teach sewing now when they should be teaching canning, for goodness sake to drop fancy work and apply their labors to Red Cross sewing of a practical and patriotic nature."

However, these incidents are only the amusing exceptions to the rule, for The Farmer is satisfied that school authorities generally will have the good judgment and the thoughtfulness to coordinate their work with this vitally important labor of conserving the food supplies of the land.

Our readers will be pleased to know that Miss Jones reports that 820 boys' and girls' canning clubs have been organized in Washington state, with an average membership of about 12. Here is a fine little army of 10,000 boys and girls, responding right loyally to the president's call for service to help America win the war.

Revoke License of Dr. L. F. Wagner

Petitions to the state board of medical examiners, asking to have revoked the medical license of Dr. L. F. Wagner of Harrington, have made their appearance in Harrington, Lincoln county. The petitions assert that Dr. Wagner, convicted of grossly immoral conduct toward a 16-year-old girl, is unfit to retain a physician's certificate.

The restoring by the state board of medical examiners of a license to Dr. Wagner remains without satisfactory explanation. The manner in which Spokane county and state officials handled the Wagner case is also hard to understand. Although Wagner pleated guilty to the charge of contributing to a young girl's delinquency, the county prosecutor urged that he be let off with a fine. The superior court overruled the request for leniency and sent Wagner to the county jail, whence he was released a week before the completion of his sentence. Then the county prosecutor appeared before the state medical board and told the board that "Wagner was a man who had been persecuted rather than prosecuted."

Every father and mother of daughters in the farming districts, in the rural towns as well as in the larger cities, has a public duty to perform in this lamentable matter. Write a letter of protest to Dr. Royal A. Grove of Tacoma, Wash., president of the state board of medical examiners, which board gave Dr. Wagner the license. Write a similar letter to Governor Lister, Olympia, Wash., telling him what you think of all these dastardly proceedings which have resulted in permitting Dr. L. F. Wagner of Harrington to resume the practice of his profession under state authority, which he should be forever disqualified from doing. Demand that the state board revoke the license to Dr. Wagner; otherwise demand that the governor remove the state board and create a new board, which shall meet the demand of an outraged public.

The Council of Defense

The people of the United States are being organized into one great council of defense. Very soon every village and country district will have its local organization designed to play its little part in the great movement for national efficiency in every line of industrial production and distribution. The council of defense is as simple as it is practical.

Several weeks ago President Wilson appointed several members of his cabinet to act as his advisers and assistants in carrying out the great problems before the nation. Since that time the governors in the various states have appointed committees of responsible citizens as state councils of defense to serve within the states as the national council serves with the president for the whole country. The state councils are organizing county councils to serve within the county as the former does within the state, and the county council is assuming the still greater task of organizing every community in the county for specific, personal effort in the great, nation-wide movement.

The national, state and county councils have a great work to perform, but the success of the entire movement depends upon what the individual citizens do in their own homes and localities. America's greatest problem is that of arousing an individual, personal interest on the part of each of its citizens in the issues that confront it. We are 100,000,000 people, and 100,000,000 acts of loyalty will win the war for humanity, while 100,000,000 acts of disloyalty or mere disinterestedness may well lose it.

Washington Gleanings

A large evaporator plant is being rushed to completion at Yakima.

Prescott is organizing a home guard to protect its wheat crops. It is in the midst of a large bluestem district.

Irving West of Colfax has purchased the J. O. McClung farm of 595 acres, four miles west of Palouse, for $60,700, or a little more than $100 an acre.

An exhibit of agricultural products as grown or prepared by the school children of Garfield county will be held next fall, according to plans soon to be made public by Miss Belva Ball, county superintendent of schools.

Work on a $13,000 elevator to be erected by the Superior Milling company at Winona has been started. Besides the elevator the mill company will erect a flour warehouse to cost $2500 and install new machinery to cost $2500.

J. N. Livingston, well-known rancher of Belmont, has sold his ranch of 500 acres to A. L. McCauley of Dayton, Wash. The Livingston ranch is known as one of the finest in the Palouse and brought the price of $50,000 cash.

An effort is to be made to promote a school for the instruction of Leavenworth people in the packing of apples. This is being done to overcome the trouble experienced in the past by the growers being unable to secure packers for their crops.

The report of the department of agriculture states that the total amount of fruit expected for this year is slightly in advance of last year's crop. It is expected that the total fruit crop this year will be 21,750 carloads, in comparison to 21,506 of last year.

George Goranson of Centralia has purchased the Richard Jones property on Fords prairie, which he immediately traded in on a big dairy ranch near Olympia owned by F. P. Crawford. The deal included the stock on the place. The consideration is said to be in the neighborhood of $13,000.

J. P. Stevenson of Burlington closed negotiations recently for the purchased of the 60-acre Pettet farm, situated a mile and a half west of Burlington. It is improved and considered to be one of the most fertile tracts of land in the valley of the Skagit. The consideration is said to have been $20,000.

Never in the history of the Pacific coast has there been such a demand for hogs and other live stock as at the present time, and packers are a unit in declaring that conditions are such that live stock growers will be able to reap fortunes during the next five or six years, according to the Burlington Journal.

What Others Say

Republic, Palouse: The fellow who is constantly looking for failure invariably finds what he is looking for.

Record, Neppel: Unless we protect the production of labor-saving farm machinery and the supply of skilled farm labor we, too, must soon face a shrinkage of food supplies.

Express-Progress, Pasco: It is to a careful marketing of the surplus perishable products of the farms that community organizations, boards of trade and business men all over the country should direct their attention.

Tribune, Oakesdale: The sensible economy and the true patriotism is for each to exert himself to keep the business of the country normal. Buy and sell, earn and spend, as only by such a course can business be kept healthy and on the up grade.

American, Anacortes: Opportunity has never knocked louder at the gate of our young men than at the present time, and it is to those who have the capacity to discern opportunity and power to take advantage of it who will be among those who will control the destinies of the country 10 and 20 years hence.

No News Is Good News

Movement of U. S. Troops to Be Secret

The navy and war departments have announced that hereafter strict secrecy will be followed, so far as publication of news concerning the movement of vessels and troops is concerned. This includes the arrival of American troops on foreign soil. No longer will the war department allow publication of the fact when a detachment of soldiers lands in France. This ruling is made because it is deemed advisable to keep Germany and her allies in as total ignorance of the plans, preparations and operations of this country as possible.

The department has promised, however, that if any disaster to U. S. troops en route to France occurs, the American people will be allowed to know of it. This means that "no news is good news." It is believed that newspaper publication of reports of battles in which the American soldiers take part will be allowed, so that the people of this country may know of the actual participation of its army in the war.

Gigantic Cost of War.

The war and navy departments, and minor branches of the government taking part in the war and preparations for it, have asked congress for a total of more than $11,000,000,000 for the expenses of the first year—July 1, 1917, to June 30, 1918. This huge sum will be raised by various forms of taxation, including the income tax, and by the issuance of government securities, such as bonds and treasury certificates. The actual expenses of the year are calculated to reach $10,735,000,000, but the additional amount is asked in order that there be no danger of stint in carrying out the big plans of the government for participation in the war. This means an average expense of approximately $30,000,000 a day, which is about 30 cents a day for every man, woman or child in the United States, or more than $500 a year for every family of five persons. Owing to the use of the income tax, the sale of bonds and the use of various forms of revenues, including customs duties and internal stamp taxes, the rank and file of the people will pay their share only indirectly, the system being so planned as to distribute the burden where it will be least felt.

Food Bill Difficulties.

The impossibility of the committees of the house of representatives and the senate in congress to agree on certain of the problems involved in the food administration measure that has been pending so long, and for which the administration and the producer and consumer have so long been asking, has resulted in the calling of a conference between the joint committees and President Wilson. The two greatest difficulties appear to be the question of a single food controller or a board of three food controllers, and the question of a single supervisor of national expenditure or a congressional committee of supervision. The president is an advocate of the one-man idea, having urged from the beginning the placing of the food control movement in the hands of Herbert C. Hoover. It is probable that the food control measure will be agreed upon before the end of the week, and be passed in some form within a few days.

Call Men to Colors.

With the drawing of the numbers completed, determining the order in which the 10,000,000 registered men in this country will be called into the army service, the second step is now being taken—that of calling the first unit for examination. At the time of the drawing of the numbers at Washington, photographs were taken of a blackboard on which the numbers were written as they were drawn from the great lottery jar. Reproductions of these photographs have been sent to the examination board in each registration district and that board in each district is now calling the men whose numbers were first drawn for examination. The examination board passes upon the physical fitness of the registered men and upon the question of their exemption from the standpoint of dependents. A special board, one in each federal judicial district, is created to handle the question of occupational exemption. This latter board will determine whether a man who is called to the colors shall be exempt because his occupation is of more value to the government than would be his service as a soldier.

The first unit of the great new national army is to total 500,000 men. In order to fill up the national guard and the regular army, an additional 187,000 men are called in the first drafting, making a total of 687,000. Because nearly half of the men examined will be exempted for one reason or another, principally physical reasons, however, this means that more than 1,350,000 men will be called for examination as rapidly as the boards can pass upon them.

Need Naval Warfare.

The possibility of a united and formidable naval campaign against German control of the Baltic sea is affording thought for English newspapers and others more personally interested in the conduct of the war. The complete control of the Baltic sea and its entrances by the German navy is the "insurmountable obstacle" that the allies would like to overcome with "an irresistible force." Were it possible to break this control, it would probably be the greatest disaster that could befall Germany, for it would afford an opportunity to the allies to destroy the German navy and get at the submarine bases. The task is so stupendous, that but the highest flights of imagination can conceive its possibility, yet there is strong agitation for a more aggressive naval policy on the part of the allies. This policy would of necessity involve the creation and the operation of a giant navy of airships to collaborate with the warships, submarines and submarine destroyers.

Strikes Are Numerous.

Strikes are menacing industry in many localities. In the northwest the I. W. W. has been fomenting industrial disturbances for many months. Through its activities many lumber camps and mills have been closed down and others greatly handicapped. Farm harvest operations are threatened. In Seattle a strike of streetcar operatives has tied up the entire car system, necessitating that those doing business in the large city walk long distances or use autos and jitneys. Failure of the car company to recognize the operatives' union is the cause. Two thousand fruit and vegetable canners in the San Jose, Cal., section, have been on strike for higher wages and better conditions. This strike is reported about settled. Probably the most disastrous strike is that of the railroad switchmen of Chicago, by means of which they have tied up practically all rail operations through Chicago. An embargo has been placed by the railroads on all perishable freight, including live stock, billed to or through Chicago. Serious problems confront the committees trying to end the strike. Mine strikes are reported from several districts, including that of about 5000 miners in Michigan iron mines.

Send In Your Questions.

It is our business as a farm paper to be of the greatest possible assistance to our readers. Any question of a practical nature that interests you or the answer to which will be of special value to you—send it in. It is for us to give you the best possible answer. There will be no charge for this service. All questions must be signed with your name and postoffice address and will be answered by personal letter. Replies of general interest may be published in The Farmer, your name being omitted if you so desire.

Kill Potato Bugs With Arsenicals

(Continued from page five.)

they were plentiful in Ontario, Canada, while I was farming there. We used paris green regular or there was no potato crop.

M. E. SCHRECK, Lacrosse, Whitman County, Wash.: The Colorado potato bug has made its appearance in this locality, but there has been no action taken to fight it.

JOHN B. Peterson, Montborne, Skagit County, Wash.: There are no Colorado potato bugs in Skagit county.

Let Them Win the War.

MARILLA KIDWELL, Garfield, Whitman County, Wash.: The Colorado potato bugs have appeared in Whitman county. They began about three or four years ago, and although there are many nice potato fields in the country, all farmers spray the plants. One man who planted a sack of potatoes said he got a gallon of bugs in two pickings. Picking and spraying are both good methods of fighting the pest. But we may make the potato bug a valuable ally to help win the war. Ducks eat the bugs and thrive on them. A few acres of potatoes, bugs and ducks ought to keep a family. We find that even when the leaves are all eaten the vines can be saved by spraying if it is not too dry.

J. F. McCURDY, ZiMah, Yakima County, Wash.—No potato bug has appeared in this section that I know of.

LEE M. LAMPSON, Kennewick, Benton County, Wash.—The potato bugs have not appeared yet in Benton county.

G. W. WILGUS, Prosser, Benton County, Wash.—I have not seen any appearance of the potato bug in this county.

A. R. HAHNER, Colville, Stevens County, Wash.—Have heard no report from this county indicating the presence of the Colorado potato beetle. It is possible that it may be present in the southern portion of the county, but in extensive travels in the northern in extensive travels in the northern portion have not seen it.

MARTIN PENHALLICK, Neppel, Grant County, Wash.—We have none of the potato bugs yet, but four years ago I found some in a potato field that had been seeded from potato seed from Rosalia. I was able to put out a clear crop by cleaning them as fast as they appeared.

A Serious Pest.

H. W. REAUGH, Ephrata, Grant Copnty, Wash.—The Colorado potato bug has not invaded Grant county as yet. As a boy I remember picking potato bugs in Illinois and I trust that they will not gain a great foothold in the west. However, owing to the appearance in the different sections of the northwest, they are apt to become a very serious pest and cause the growers of potatoes thousands of dollars each year in combating them. The old adage, "an ounce of prevention is worth a pound of cure," could be applied to the potato bug situation very easily. If each individual that has potato bugs in his fields would work to eradicate them he would not only be saving himself much money but would be doing a duty worth while to the whole northwest.

C. C. BROWN, Castlerock, Cowlitz County, Wash.: In the southern part of the county the Colorado potato bugs have appeared. Those that have found them are taking the proper precautions to exterminate them, as they have combated with this pest in the eastern states and know what they are up against. The same methods are used that are used in New York state, where there is not much ground to go over a small amount of paris green or arsenate of lead is used regardless of the cost. The paris green is used by diluting with water, a small teaspoonful to a bucket of water, or the same proportion in a small sack of plaster, sprinkled on the vines when the dew is on and the vines are moist. Arsenate of lead can be used in the same manner. The impression has been heretofore that the nights were too cold for the bugs' eggs to hatch, but this ought to be forgotten, for where tomatoes and corn will mature the potato bugs' eggs will hatch. In many instances the vines have been stripped of their leaves in a short time by the pests. Several have saved the vines with the paris green, either the water method or plaster, sprinkling three or four times a week, and if showery have taken a pan and knocked the slugs or red young ones from the vines, getting a pan full from a few hills. We are going after the pest here in Cowlitz county and with each farmer watching his fields carefully for the first appearance and doing away with them. It will be several years before they will be a menace to the potato grower.

J. G. WOODS, Omak, Okanogan County, Wash.: The potato bug has not appeared in this section and every effort should be made to exterminate them as soon as they make their appearance. Paris green was extensively used in Minnesota and was very effective. I have never experimented with other sprays.

Inland Empire Wheat Going to Market in a MACK Truck.

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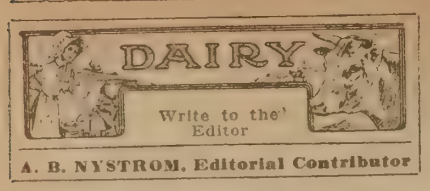
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A. B. NYSTROM, Editorial Contributor

FAMOUS COW IS DEAD
Clover Bloat Takes Costly Animal.

Gertie's Fern Princess, the fine Jersey cow for which Frank Doerfler paid $820 at the McArthur & Stauff sale June 27, is dead. She bloated on clover pasture July 10. She had two register of merit records, the first made when she was 2 years old. The second was over 700 pounds of butter in a year, and she would have been put on test again, with every prospect of entering the gold medal class, by producing over 800 pounds.

The loss is most discouraging to Mr. Doerfler, who lost her daughter some time ago, after paying a long price for her. Moreover, he had contracted her next calf, by the McArthur & Stauff herd sire, Holzer, to W. A. Forrest of McMinnville, Ore., for $440 if it should be a bull. Mr. Forrest made this announcement at the sale.

Mr. Doerfler has paid high prices for all his foundation stock; he has selected well, and, in spite of misfortune, has shown not only the ambition, but the ability, to build up a high-class Jersey herd. His herd led the Marion County Cow-Testing association the last seven months. It is yielding a good profit, a nice lot of young stock is coming on and Mr. Doerfler will continue to successfully breed Jerseys. H. A.

Ferndale Cow Testing.

Whatcom County Agriculturist H. B. Carroll Jr. reports: July 5, 1917, meeting called by county agent for purpose of completing organization of a cow-testing association. O. E. Gibson and I secured the names of 26 men who were interested in a cow-testing association. Of this number 14 were present at this meeting, held in Ferndale. The by-laws and constitution furnished by the dairy department were read and adopted; a board of seven were elected. This body then elected the following officers: President, H. B. Doughas; vice president, Jay Vail; secretary, F. C. Johnson; treasurer, B. S. Hillier; board of directors, Miss Anne E. Radford, H. J. Evans, J. A. Porter. The association has about 560 cows and expects to sign up a few more. We are now waiting for a competent man to do the testing. The organization will be known as the Ferndale Cow-Testing association, Ferndale, Wash., and is the first one of its kind to be organized in Whatcom county.

Boise Valley Cow Testing.

The Boise Valley Cow Testing association was reorganized at Meridian, Idaho, July 13.

F. O. Johnson of Meridian was chosen president, David Betts of Nampa vice president and Chesley F. Jenness of Meridian secretary of the old association was reelected to the same position.

Dr. John Pipher of Nampa and Bernard Lee of Meridian were chosen directors.

As soon as a competent tester can be secured the work of keeping tab on the production of the cows of the members will be taken up.

The meeting listened to helpful talks from Project Adviser H. A. Ireland of Caldwell, Project Adviser E. F. Rinehart of the Minidoka project, County Agent R. H. Musser of Canyon county and County Agent F. L. Williams of Ada county.

Figures From Ahtanum.

During the month of June the Ahtanum Wide Hollow Cow Testing association of central Washington produced a list of 76 cows with a record of 40 pounds. There were 564 cows in the association, 21 of which produced 50 pounds or better of butterfat. The high herd average went to C. B. Marks, with a herd of 17 pure-bred Holsteins, which gave an average production of 1462 pounds of milk and 48.27 pounds of butterfat, according to the report of Roy Larsen, the official tester.

GOOD NEWS FOR RENTERS AND FARM OWNERS' SONS.

You can get a rich 160-acre farm free this spring, excellent for growing grain and mixed farming. Write for copy of "The Home Seekers' and Settlers' Guide." It gives full facts and tells what others are doing. Address Canadian Northern Railway, A. A. Brostedt, D. F. & P. A., 605 Hastings st., Vancouver, B. C., Canada.—Adv.

Butter and Cheese Scoring.

At the O. A. C. in Corvallis June 27 was held the third monthly butter and cheese scoring contest of the year. Due to the hot weather and the rush season, there were not as many entries as had been the case during the two previous contests. L. B. Ziemer of the state dairy and food commissioner's office, E. B. Fitts and P. S. Lucas of the college acted as judges of the butter and C. E. White, O. G. Simpson and P. S. Lucas were judges of the cheese. There were nine entries of butter and one entry of cheese.

There was not the variation in quality between entries of butter at this as there was at the last scoring contest. The entry of cheese was of good quality, but rather soft in body and somewhat open in texture.

The following creameries received a score of 90 or over: The Oregon City creamery, Oregon City, Ore., 93.16; Albany Creamery association, Albany, Ore., 92.25; L. S. Leach, Carlton Creamery company, Carlton, Ore., 92.08; McMinnville creamery, McMinnville, Ore., 91.5; Hudson Bay Cooperative creamery, Umapine, Ore., 91.

The entry of cheese by W. J. De Boer of the Red Clover Cheese factory, Tillamook, Ore., scored 90.83.

Build Up Holstein Herd.

Morehead & Hobson of Outlook, Wash., a little over three yeafs ago decided to go into the dairy business and selected registered Holsteins as their oreed. After carefully looking over the different herds, studying the different types and milk records, they decided the King Segis family was the one that came the nearest to meeting their ideal. They purchased five granddaughters of King Segis, all were large, roomy cows, with plenty of capacity and constitution. To cross on these cows they purchased Model Annie De Kol Segis, a grandson of King Segis, with a double cross of King Segis blood i nhis pedigree. This is over a ton bull, with all that could be asked in form, strength and masculine ability. His four nearest dams had an average seven-day butter record of 29.64 pounds. From this foundation stock they have built up a herd of about 40 head, and it is doubtful if in any other herd there can be found a greater per cent of King Segis blood. Their herd is mostly young heifers, but they stand at the head of the list in Yakima valley for production.

Washington Guernsey Record.

For the best 2-year-old Guernsey record made west of the Missouri river we must now look to the state of Washington, is the report from the American Guernsey Cattle club. Sammamish Topsy 46992 A. R. 5094, recently gained this distinction by producing 11424.6 pounds of milk and 629.66 pounds of butter fat in one year. As her name indicates, Sammamish Topsy 46992 is a Washington product, born and bred. This fact makes her record all the more to be admired, and her owner and breeder, Dr. Park Weed Willis, an eminent physician of Seattle, justly feels proud of his cow and her accomplishments.

She was sired by Imp. Sequel of Sarnia 19171, a son of the Advanced Register sire Imp. Galaxy's Sequel 16904, and out of Pixie 3176 F. S., a foundation stock cow on the Island.

Water Power in U. S.

Secretary of the Interior Lane said recently that there is 35,000,000 undeveloped horsepower in the streams of the United States.

Hugh L. Cooper, a former resident of Washington state and a water power authority of national reputation, in an article in the Electrical World, estimates that with 5,000,000 additional water power in the United States, only one-seventh of the power now running to waste, the country could save more than $50,000,000 in power bills, and the railroads would be able to divert $274,000,000 worth of railroad equipment to other uses than supplying coal for steam power plants.

Government development of some of the larger power sites is under discussion at Washington, and even the conservative Wall Street Journal views the proposition favorably.

GUARD AGAINST FIRE
Special Effort Should Be Made.

No more important problem confronts the grain growers of the northwest than that of preventing fires.

This is the belief of the state council of defense, which is cooperating with the growers, the county authorities, the state insurance department and the large insurance organizations to reduce the menace of fire.

From the farmer's point of view the necessity for conserving the crop has not only the incentive of patriotism, but fear is expressed that if grain losses become out of proportion the insurance companies may be compelled to cancel all grain insurance as a matter of self-protection.

With the complete organization of local, county and state forces escape will be extremely difficult for any wilful trouble makers.

Preparation to combat fires necessitates the cutting of hay strips along the roads and around farms, and a fire-fighting equipment that can be brought instantly into action. One method is to equip an auto or light wagon with wet sacks, a number of 10-gallon milk cans, filled with water; plenty of shovels, a plow for quickly running furrows, and other fire extinguishing equipment to make a whole fire department, when properly manned.

No threshing machine should be allowed to operate without full fire fighting equipment, including at least two two and one-half gallon fire extinguishers and every "setting" should be protected by half a dozen plowed furrows.

Canadian Field Crops.

Out of the total estimated wheat production of 1916, in Canada, 21 per cent, or 45,638,000 bushels, remained in farmers' hands at the end of March. In 1916, at the corresponding date, the proportion was 23 per cent, in 1915 it was 12 1-2 per cent and in 1914 it was 16 1-2 per cent. Of the remaining field crops, the proportions and quantities estimated to be in farmers' hands at March 31 are as follows: Oats, 39 per cent, or 136,179,000 bushels; barley, 26 per cent, or 10,559,000 bushels; rye, 28 per cent, or 813,500 bushels; buckwheat, 18 per cent, or 1,103,000 bushels; corn for husking 13 per cent, or 814,000 bushels; flax, 20 per cent, or 1,413,000 bushels; potatoes, 26 per cent, or 15,969,000 bushels; turnips, etc., 14 per cent, or 5,843,000 bushels; hay and clover, 32 per cent, or 4,802,000 tons.

CUTTER'S
BLACKLEG PILLS

"California's Favorite" for nearly 20 years

For the Prevention of Blackleg in calves and young cattle

Their superiority is due to nearly 20 years of specializing in "Vaccines and Serums only."

Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.

Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

Prices:
10 dose pkge. Single pills $1.00
50 dose pkge. Single pills 4.00
10 dose pkge. Double Pills 1.50
50 dose pkge. Double Pills 6.00
Cutter's Pill Injector.... 1.50

Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

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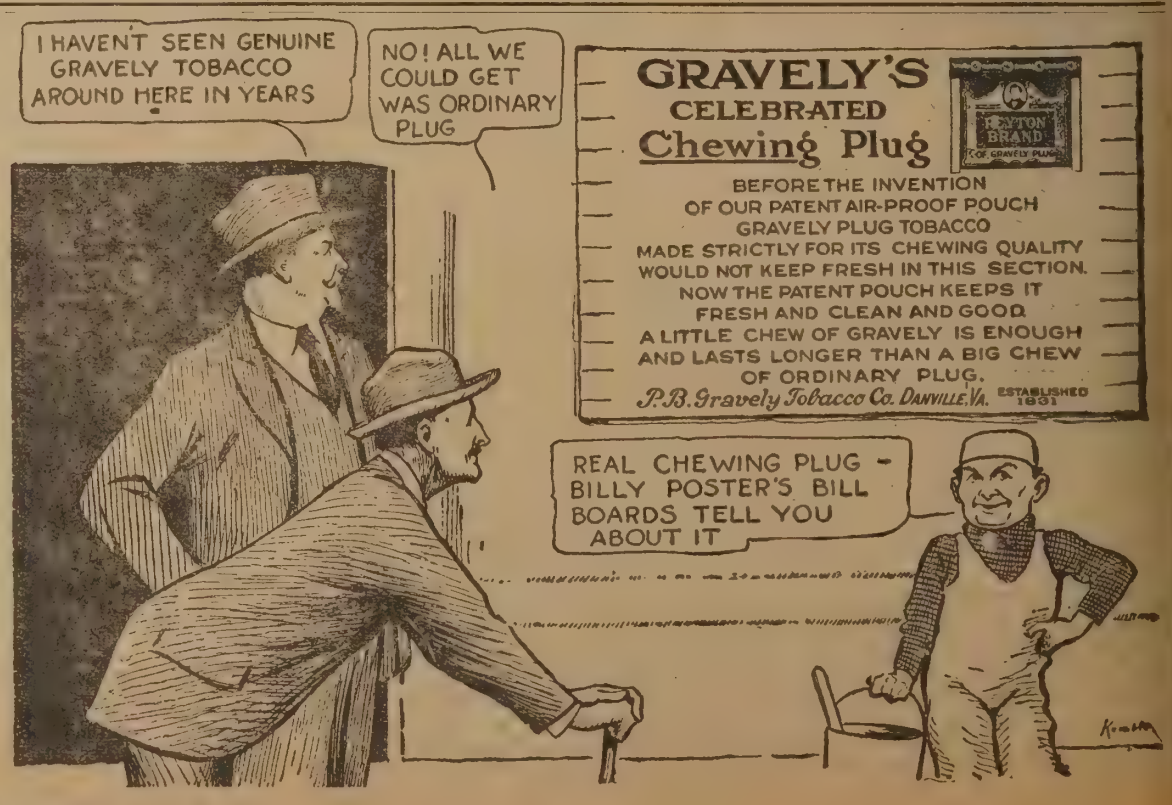
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ABSORBINE, JR., for mankind—an antiseptic liniment for bruises, cuts, wounds, strains, painful, swollen veins or glands. It heals and soothes. $1.00 a bottle at druggists or postpaid. Will tell you more if you write. Made in the U. S. A. by

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Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.



LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

Pure Bred Beef Cattle

By E. L. POTTER.

Many people are now becoming interested in the production of good pure bred beef. Many small herds have been established in the last year or two. The Shorthorn and the Hereford were never so popular as at present. Prices are high as compared with what they have been in the past, but there is a perfectly good reason, several of them in fact. In the first place everything is high and a dollar does not go as far as it used to. Commercial beef is scarce and high and this makes it unusually profitable for the beef producer to use good pure bred bulls. Then the country is awakening to the benefits of pure bred cattle. The man who a few years ago made fun of pure bred cattle now uses only pure bred sires. The beef breeds and especially the Hereford and the Shorthorn have so thoroughly demonstrated their value that there is no longer any question of the very great improvement that is brought about by the use of bulls of these breeds.

Twenty years ago the most progressive had all been convinced, but the rank and file of the cattlemen still felt that the native stock was hardier and the newer kinds might be subject to all kinds of disease besides being unable to make their living unless it was brought to them in a pan. Now the beef producer who denies the profit and advantage of pure bred sires is the exception. These are absolutely sound economic reasons why the demand for pure bred cattle has increased and why many new herds are and should be established. The breeding of pure bred cattle is bound to have its booms and its depressions, but the fact remains that the demand has increased and that it will increase still further. Twenty years ago only the few had telephones. Now every one has them. They are considered indispensable. Pure bred sires are just as indispensable as telephones and the cattlemen are coming to realize it. The time is not far distant when all of our commercial cattle will be sired by pure bred bulls and unless we increase our herds there will not be enough bulls to fill the bill. Only a little farther on we will be producing all of our commercial beef from cows that are pure bred or practically so. This, however, can not take place within the lifetime of any one now living, since it is impossible for our herds to increase that rapidly.

Prices in the future will fluctuate as they have in the past. There will be times when great progress is being made and there will be other times when apparently things are standing still. There will be times when it is impossible to supply the demand and there will be times when sales will be slow. But to say that there are, or that there will be any time soon, more pure bred beef cattle produced than the country needs at remunerative prices would be utter nonsense. The breeding of pure bred cattle in the United States is only well started.

BOYS ARE ORGANIZED

Form Junior Stock Association.

The formation of a junior live stock association in Pend Oreille county, Washington, has been effected under the leadership of County Agriculturist M. J. Newhouse.

Mr. Newhouse is instructing the boys in the rudiments of stock judging and otherwise inspiring them to take an active and practical interest in the live stock business. The parents of the boys are also taking a live interest in the movement.

It is planned to have the association take a leading part in the junior agricultural work planned by Agriculturist Newhouse for next winter.

Veterinary

Dr. S. B. Nelson

Must Conquer Animal—I have a mare, gentle to handle, ride or use anywhere except in harness. Just as soon as one starts to drive her she begins to kick and keeps it up until she gets the harness off. What will cure her? J. W. B.

Auburn, Wash.

Answer—The breaking of a kicking horse is entirely a matter of horsemanship. There are several systems used, but the principle of all of them is that the animal must be conquered. First she is to be taught that she is not to be hurt; and second, must be handled where she can not hurt anybody or anything. Most professional horsemen begin the treatment of an animal of this kind by personal acquaintanceship, and then gradually lead up to what they wish to break the animal of. Many use the system of some soft material which may be swung to the tail, and allow the mare or animal to kick at it. Or, as in your case where the harness is the offending material to the mare or animal, that it is so thoroughly fast that she can not get it off and that she is broke to find out that it does not hurt her. Generally, these animals have been ruined by either being hurt or frightened at some time. The third system of breaking consists in hooking the animal up to the type of wagon where the driver is far away and where the animal can kick until she gets tired, and at last she finds out that the harness and the cart will not hurt her. These are the principles that are used. There are many variations and the chief and important thing which the breaker must have is patience and time with the animal.

Leaky Teats and Warts—Will you please tell me what to do to stop the teats from leaking, as I have a cow that loses milk by leaking teats? I would also like to know what is good for small warts on teats.—S. O., Ione, Wash.

Answer—For leaky teats try wrapping the end of the teat with a piece of cotton—not too tight, but sufficient to cause it to stap leaking, and the tissue may contract so as o stop leaking.

For the warts, use the following, applying twice daily: Chloral hydrate, one and a half gram; acetic acid, one and a half gram; salirylia acid, one gram; spirit of ether, one gram; callodeon, four grams.

Proud of Her Young Family---Has Right to Be



The above is a picture of a fine Duroc mother, belonging to C. G. Sprong of Grandview, Wash.

A Bigger Yield From the Same Field.

From any field that you have been manuring by the hand method you can get a bigger yield if you use the spreader method—and save much time and labor.

A good spreader tears up the manure into small particles and spreads it evenly. The manure goes farther. It can be worked well into the seed bed so that the plant roots get all of its valuable plant food. *Wasting manure is like wasting money—a good spreader makes every particle of manure count.* A Newton County, Ind., farmer testing the spreader and hand methods of applying manure on two ten-acre tracts found that the *spreader method gave 120 more bushels of corn, 140 more bushels of oats and 9 more tons of clover.*

The John Deere Spreader

The Spreader with the Beater On the Axle

has special capabilities for increasing your crop yields. Its exclusive features make it the ideal implement for the best method. Ask any owner of the John Deere Spreader about the way it increases crop yields and saves time and labor. After you have operated a John Deere Spreader of your own for a year, you will fully appreciate how much these gains really mean. *You'll find that the Spreader with the Beater on the Axle more than pays for itself in one year from the gains it gets on even a fair-sized farm.*



The beater on the axle construction *eliminates all chains, clutches and scores of other trouble-making parts. Does away with half the types of castings otherwise necessary. Does away with adjustments. Puts upkeep at minimum. Makes the John Deere Spreader exceptionally long-lived.*

Beater is all steel—practically indestructible—runs on roller bearings, aiding light draft. Beater teeth spirally arranged—tear up manure perfectly and distribute it evenly. Deliver manure close to the ground—wind does not affect spreading.

Revolving rake feeds manure to beater evenly, aiding in uniform distribution. Shock - absorbing spring relieves spreader and horses of sudden strains.

Spreader only hip-high to top—easy to load. Big drive wheels—light draft. Ball-bearing apron drive—apron travel frictionless. Simple gear attachment keeps weight of load from making apron race when spreading up hill.

Easy to operate—only two levers—one lever determines number of loads spread to the acre; the other starts and stops the spreading. It's so simple, a boy can operate it.

Wide-spread attachment for extra wide spreading.

Write for booklet on the John Deere Spreader.

Reduce the Cost of Handling Grain

Get the big profit from your crop. Save the cost of high priced sacks. Save the time and labor of sacking and tying. Handle your grain in bulk. Do all this with the

John Deere Tubular Steel Portable Elevator

Elevates All Kinds of Small Grains

Elevates wheat, barley, oats, rye, flax, shelled corn, etc., into granaries, tanks, cars or cribs.

Readily transported. One man and a team can handle outfit. New settings quickly and easily made.

Operated with horses or engine.

Feed is adjustable. The volume of grain elevated can be accurately controlled to conform to power used.

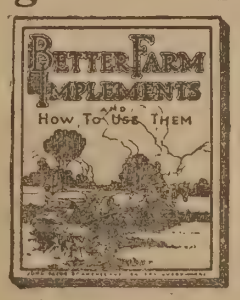
Big receiving hopper prevents spilling. Wagon can be emptied from either side of hopper.

Built for years of service. Made of steel almost entirely. Will not decay or warp. Elevator proper made of 3/16-inch steel well casing, 6-1/4 inches in diameter.

Big elevator book free. Tells all about the complete line of John Deere elevators. Tells how to build a granary to the best advantage. Write for this book.



Big Book Free



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JAMES DRYDEN
Editorial Contributor

Strange Chick Ailment

To the Editor of The Farmer: I have been raising chickens more or less for over 20 years. At present I have 500 old ones and about 350 young ones. I am writing you for help, as some kind of sickness I have never seen before has attacked my young White Leghorn chicks. They are nine and ten weeks old, and the trouble started a little over two weeks ago. They are fed four times a day. At three feeds they get equal parts of scratch and whole wheat; at the other feed they get a moist mash of three parts shorts, two parts bran, one part middlings, one part fine corn meal and one and one-half part beef scrap, and plenty of fresh water, grit and shell all the time, and free range from 9:30 in the morning till night. At the first sign of sickness the chick will stand and stretch its neck, then draw it down as if trying to crowd something large down. The wings begin to droop, but the chick eats at every meal. After a day or two the chick stands with head under wing and sleeps most of the time, gets very pale about the head and sets its feathers on end. They usually live about a week, but get very weak the last few days. The most of them eat a little to the very last, but a few will not eat the last day or two. I opened three that died this morning, and in each case the flesh was dark and the chick very thin. The heart, lungs and bowels were all right, the liver was good, but the gall was a little larger than it should be and was filled with a bloody-like liquid. The liver where the gall touched it, also the part of the bowels where the gall touched, were stained a greenish yellow and were a little foamy, as if the gall had leaked on them and then filled up with the other liquid. There was also a small spot of the same color on the flesh where the gall lay nearer to it. Where the large place is where the throat enters the gizzard it was larger than it should be, being more than half as large as a walnut and white in color, and on being opened had what seemed to be thick, white pus in it. There was no looseness of the bowels throughout the sickness, they seeming normal all the time.—J. E. S., Toledo, Wash.

This correspondent has given an unusually clear description or history of her chief troubles. The feeding methods are very well given, but a little information as to how the chicks are brooded and housed would enable us better to locate the cause of the trouble.

Many chicks at that age are lost because of improper methods of feeding and brooding and housing. I suspect that the whole trouble is due primarily to some mistake in either feeding or brooding, or to both.

As to feeding, chicks at that age should not be fed four times a day. They may, under certain conditions, stand it if a very little is fed at a time. I would suggest that at least one of the feeds be cut out and that the chicks be let out in the morning at least two hours earlier, unless there is some special reason for keeping them confined. The morning is the best time for them to be out. Two hours' exercise on the range in the morning will be worth as much as one feed of grain, perhaps more if the range is good. Lack of activity and heavy feeding is the bane of the growing chicks. I would change the mash by giving double the quantity of bran, more during the warm months would be better, leaving the other ingredients the same. Give one feed a day of the scratch grain and wheat, or cut out the wheat altogether if the scratch grain is cheaper and of good quality. Feed the mash in the morning and one feed of grain in the afternoon or evening. Give them just as much grain as they will clean up and no more. Give a liberal feed of mash in the morning mixed with milk or buttermilk, if possible, all they will clean up in half an hour.

There should be, of course, an abundant supply of green food, all they can eat all the time. Let them range or rustle for the rest of their feed and for their exercise, which is as important as feed. By "the large place where the throat enters the gizzard" is no doubt meant the chicken stomach. The description and location about fits the stomach. The condition of the contents would indicate some digestive disorder or a catarrhal condition of the stomach.

In the way of treatment, a dose of Epsom salts would be good for the whole flock. Starve the chicks for half a day or more or until they are very hungry, then give them the salts. The dose is about a teaspoonful to half a dozen chicks of that size. Dissolve the salts in water, then mix in a mash of bran and shorts. Have plenty of troughs or boards to spread it on so all the chicks will get their share, and spread it out quickly. Feed lightly on whole grain for a while and make no mistake about green food. Feed also charcoal and grit. J. D.

Cut Worms in Grain

To the Editor: Please tell me as soon as possible if there is anything to stop cut worms in grain. I have about 300 acres of grain and they are working in it fierce. They have as high as two acres in a patch that they clean. My place is a sub-irrigated place. The sub isn't quite up yet. It lacks about 10 feet. If there is any cure let me know. H. C.
St. Anthony, Idaho.

The above question is answered as follows by M. A. Yothers, assistant entomologist of Washington experiment station:

Much damage is done annually by cut worms to all kinds of garden crops. These worms work at night and hide in the soil in the daytime, a few inches below the surface, where it is often difficult to find them owing to their close resemblance to the soil.

There are many different kinds of cut worms, but their work is much the same and to the untrained eye they look very much alike. When full grown the larvae average about an inch to an inch and a half in length and about one-fourth of an inch across. The adults of the cut worm are the ordinary gray mottled winged moths so commonly seen in all parts of the country flying about the light at night in summer. The eggs are laid in the spring by the adult female moth. They are deposited on a great variety of plants, depending much on the species of moth. The eggs hatch out into tiny cut worms which grow to maturity feeding the while on most kinds of garden crop, field crops and many kinds of weeds. They pass the pupa stage under ground, the dark brown chrysalis being enclosed in an earthen cell.

There are several broods during the year, depending upon the climate, and more or less upon the local weather conditions. The winter is passed usually in the pupa stage underground, but some of the adult moths are often seen in winter especially in our houses. Sometimes the winter is passed in the partly grown larva stage, and when spring comes they are ready to feed upon the first vegetation that appears.

Although many control measures have been from time to time devised for the control of this pest there seems to be none that gives perfect results. Clean culture is one of the most effective measures, however, and if consistently followed will give a good measure of success. Plow infested land in the fall to break up the pupa cells and destroy the over-wintering caterpillars. One of the commonest treatments, however, and a very effective one, is to poison the worms with a poison bran mash. The poison mash should be planted along the row and not around the field, for the worms are in the soil in the field. The following formula has given the best results:

A. 1 pound of Paris green; 20 pounds of bran. Mix thoroughly in a washtub while dry. Then stir in the following (B) well mixed:

B. Two or three lemons or oranges, chopped fine; three pints of cheap syrup; three and one-half gallons of water.

The fruit juice may be squeezed in the water and the rind and pulp run through an ordinary meat chopper.

The poison bran serves best when sown broadcast late in the evening, for then the mash retains its moisture longer and the worms care less for it when it is dried out. From five to 15 pounds of the wet mash is sufficient to the acre, but it is best to apply it here and there to the worst infested areas. After a few days the poison may be again distributed if deemed necessary.

Poisoning Squirrels.

Several farmers from different districts report excellent success in the use of poisoned oats for poisoning squirrels following the demonstrations conducted by W. E. Crouch, in cooperation with the Kootenai county farm bureau. Three men report, by the expenditure of $7.50, that $100 has been saved them. Several farmers, too, report that the squirrels will eat the poisoned grain at this late season even though green food is plentiful.

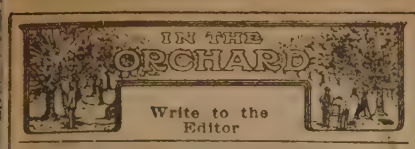
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GRANVILLE LOWTHER
Editorial Contributor

Codling-Moth

"I Wonder What I Am Here For"

"I wonder what I am here for?" said a codling moth egg as it stuck fast to the leaf on which it had been deposited, swirled in the breezes as the tree tops swayed in the winds and the bright sunshine glistened upon it. It was a little speck, scarcely one-twentieth of an inch in diameter, translucent, semi-transparent, scattering like a prism the rays of light that passed into it and through it, making itself almost invisible because it seemed a part of the air and sunshine that permeated it.

"What am I here for?" I am not sure that I can give a much better answer to the question than a codling moth egg could give. Yet my mind is never satisfied without a logical answer, and I keep trying to solve the mystery. But here am I and here is the codling moth egg; a tiny speck, an atom in the universe; yet because it possesses all the fundamental substances out of which life, mind and matter are formed it may be the universe itself in miniature, a microcosm in a macrocosm, a little world in a big one.

"What is this strange feeling?" and it seemed trying to examine itself; but a scientist put it under th emicroscope and found that filaments were forming, tender as the downy threads woven by the minutest insects. He could discover impulses to move, to expand, to respond and react to changes of heat and cold, light and darkness, aridity and humidity in much the same way as the nerves of the human organism react to the forces that play upon them, or the strings of the violin respond to the touches of the master musician.

"I want to live," said the egg, but it spake not in the terms of human speech that expresses by means of relations and variations in tones. Rather, it spake by means of its impulses and the forms it was building; through its manifest likes and dislikes its energy and inertia; its tendency to grow and to remain static; its shrinking to protect itself from cold and its expansion to receive the warm rays of sunshine. It spake a language more difficult than Egyptian hieroglyphics or Assyrian symbols; it was building its thoughts into the forms of matter; organizing the atoms; manifesting mind and life and speaking a language that could be read only by the aid of the microscope, and that was eloquent only to the lover of nature.

"I want to live," repeated the egg, as a hummingbird came flitting by and picked off one of its mates on the same leaf, and another on an apple nearby. A large bird appeared, the small bird flew away, while the large bird fed upon the eggs of the hummingbird, as she called frantically to her mates for help, and made strenuous efforts to save her young. A strange world this, in which everything that lives survives because others die.

Egg Dies.

Seven to 10 days had passed since the egg had taken its place on the leaf. Minute creatures were busily at work organizing what seemed to be lifeless substances into forms. There were living organisms that could be discerned with a microscope that would multiply 200 diameters, and ranging down in size until they became so small that they could not be seen with the largest instruments that multiply 4000 diameters, but only seen in masses of hundreds of thousands collectively. Yet all seemed busily engaged doing something, and when a day was passed it was plainly seen that they had worked according to an apparent plan. There were positives and negatives, radicals and conservatives, builders and destroyers, and a continuous struggle was going on, much like the conflicts of human society, especially the war that is now being waged on the battle fields of Europe, into which the world of mankind is being drawn to break the crust of the old autocracies, as the living thing in the codling moth egg breaks its shell and comes forth into a larger life.

Worm Is Born.

"Who am I," said the worm as it looked about upon the new world into which it had been born as if to inquire "what am I here for?" A scientist examined it and found it was made of the materials contained in the egg. "But is it the egg?" No, it has sense organs; it feels, moves, has head and eyes, mouth and grinders, feet and legs, digestive and excretory organs. The scientist released it to watch its movements. The sun was rising and its hot rays seemed to scorch its tender skin; it sought protection by chewing a hole in the leaf upon which the scientist had placed it, but as the sun seemed changing its position and growing hotter it crawled out upon an apple, bit a hole in the skin, but this seemed too hard for its tender jaws of only 24 hours' growth. Moving about, it found the blossom end of the apple, crawled into it, found protection, and, as it grew, gradually worked its way farther and farther until it found the heaven of its desires in the core. Thousands of other worms were looking for similar places in the millions of apples in the orchards.

Two men came into the orchard to spray.

"I wonder why God ever made a codling moth " said one of the men. "I suppose for the same reason he made you," said the other. "Well, but I guess I am different from a codling moth?" "Yes, but you both eat and sleep and struggle and die." "Sure, but this is too big a question to argue about here, we've got to do this spraying, the eggs are already hatching and for every hour we lose enough eggs enter the apples to spoil fruit enough to more than pay our wages, see?"

"All right," was the response, "crank up the engine, turn on the juice and I'll play the rod," and he began to move the nozzle about over the tree in a kind of rhythmic fashion as he sang a jingle of improvised words to a tune he had learned in the primitive revival meetings of a generation ago. Very slight changes were necessary to suit these words to his humor and he sang.

"Oh, the good old way is to watch
and spray,
And to live and die in the good old
way.
Oh, the good old way is to watch and
spray
And to live and die in the good old
way.

"If you get there before I do,
Look out for me; I'm coming, too.
Oh, the good old way is to watch and
spray,
And to live and die in the good old
way."

"Aw, give us a rest," said his helper; "in the good old days they didn't spray at all. The good old way was to watch and pray; and they ate their apples, worms and all."

The Pupa.

When the larva entered the apple it was only about one-sixteenth of an inch long, but it had grown to 12 times its former size and longed for a larger sphere. It knew not whither nor what of the future; but there were the impulses, the instinct, the intuition. It therefore left the apple, came out into the "unknown and unknowable" and began to explore.

The winds were blowing, the sun was shining, birds were singing and flitting from branch to branch of the trees in search of food, and insects were to them sweet morsels. Instinctively it felt that it had come into new conditions of danger; and by the same indescribable instinct it sought a protected spot, hollowed out a cavity and proceeded to weave for itself a garment made of silken threads sput of materials taken from its own body and mixed with the dust-like particles formed in the process of excavating a place in which to live. Is it really building a new and better home, or weaving for itself a funeral shroud and digging its own grave?

The Moth.

Approximately three weeks had passed since the larva entered the pupa state, enshrouded in its silken cocoon, a chrysalis; unconscious, inactive, taking no food absorbing only the substances of its own body, or possibly a few atoms from the materials that environed it. Is it death?

There are signs of life; the silken threads are broken, the materials with which they were interwoven, interlaced, glued and cemented are torn asunder and there emerges a moth, colored with a modest greyish brown, the fore wings when fully expanded measuring about three-fourths of an inch, with transverse wavy lines; the hind wings clothed with long hairs; it had feet, head, eyes, sex organs, a larger and more beautiful form of life than ever before.

The coloring was so nearly that of the outer bark upon the trees that they were seldom seen; when disturbed, they flew a zigzag motion making it difficult for the eye to follow them; they generally deposit their eggs at night, when birds and other natural enemies are asleep; but a robin feeding her young carried it away

"Why did God ever make a codling moth?" or what is its place in the order of nature? G. L.

Cherries at Hood River

"I want to show you a Lambert cherry tree," said J. R. Nunamaker, known as the cherry king of Hood River. As a matter of fact, Hood River is not famous for its cherries, more attention having been paid to other fruits, but those who have trees have found that they do wonderfully well, bear heavily, need comparatively little attention and bring in a good profit.

The tree in question is about 20 years old and has a fine even spread. The cherry tree is a tree of upright habit, but this one bent heavily down and seemed about to break under the load of its dark red fruit, almost ready to pick.

"That tree," continued Mr. Nunamaker, "is my best tree. It bears heavily every year. It is always healthy and the fruit is the best there is, in my opinion. I like them better than the Royal Annes. That is my choice."

Mr. Nunamaker said he estimated the yield of this one tree at 800 pounds, which was approximately what it bore last year. He has about an acre of Lamberts and four acres altogether in cherries. An average cherry yield for the place is about 48 tons. The cherries net the ranch somewhere around $1250 per annum.

"These Anjou pears," continued Mr. Nunamaker, "bore well last year for their age. They are only 6 years old. I was offered $2.25 a box and refused, and that is more than I got."

He has seven acres in pears and the trees look promising. He says there has never been any pear blight in his orchard, nor, so far as he knows, in the Hood River country. For that reason he believes more pears should be planted there. The trees appeared healthy, but have a light crop on this year.

Mr. Nunamaker's pickers camp out in the oak grove on the place. There were at cherry picking time about 60 on the place at work. H. H. B.

Cold Storage of Fruit

E. H. Shepard, editor of Better Fruit, at Hood River, declares that cold storage of fruit is not a matter of merely putting the fruit in a cold place. The man who expects his fruit to hold up properly must know when to pick it.

"It must not be underripe or overripe," said he. "You might call it firm ripe. When carefully graded for this stage, it will keep much longer when undisturbed. To show this to be true I put several boxes of Spitzenbergs in cold storage October 1, 1915. I took the last of them out July 18 this month, and they were in perfect condition. So far as I know, that is the longest period on record for keeping Spitz apples perfect.

"I am now using Newtowns which have been in for a year, and they are exactly as they were when put in—just as green and just as firm. When apples are cold-storaged when not at the right stage of ripeness the skins scald and come out off in color and texture. If put in right and maintained at the right temperature the development is merely arrested and held just as it is to start with."

Mr. Shepard reported that the strawberry crop, while extremely short, was most profitable this year on account of the high prices. The yield was a fairly good one, too. Last year there were about 100 cars of strawberries shipped out of the district. This year the shipments were about 80 cars.

The cherry croo is about over now, the Lamberts being the last to be picked. The unfavorable weather conditions interfered to some extent with cherries, though some report about the same yield as last year.

The pear yield will vary widely. In general the Bartlett pear crop will be good and the Anjou quite light.

The apple crop he estimates at from 60 per cent to 75 per cent of last year. Last year the yield was quite large, 1,343,000 boxes being shipped out. Last year the division between Newtowns and Spitzenbergs was fairly even, there being 385,408 boxes of Spitzenbergs and 335.324 boxes of Newtowns.

Imported Fruits.

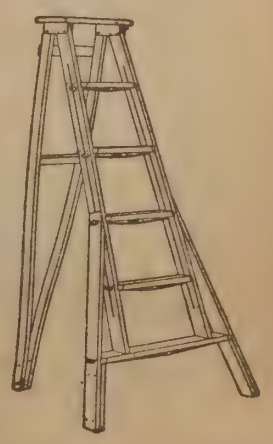
Fruits valued at $27,081,396 were imported from foreign countries during 1915. Bananas constituted 50 per cent of the imports, having a valuation of $13,512,960. Imports of lemons were valued at $3.730,085, and the imports of currants, figs, grapes, olives and pineapples amounted to more than a million dollars each.

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Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

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CHAPTER XXI.

While my father was building his twelve by fourteen shanty on our bunchgrass claim in the Coulee country of eastern Washington the Johnson boys were building habitations on their claims two miles north. Disinclined to haul lumber 75 miles, they burrowed into the earth; that is, they made dug outs.

The dugout habitation was the most unpretentious human habitation that you found on the Washington bunchgrass of 30 years ago. It was made of poles, tules, earth and big flat stones. The builder of the dugout began by digging a hole in the ground four to five feet deep and as wide and long as desired. Then he hauled poles, the larger of which he used for uprights to support the still heavier and stronger ridgepole and the crosspoles from the side. The roof poles he laid closely together and over them piled tules which were covered with eight inches or a foot of earth. An opening was left at one end for a door. In the side of the roof there might be a window. If the man had a stove the pipe stuck up through the roof of earth, poles and tules, and it was in order to pack stones and mud next to the stove pipe so that it could not set the roof afire. Lacking a stove, the pioneer made a fireplace at the back end or side of the dugout, using big flat stones for this purpose, which often exploded and blew up his frying pan or kettle of beans when the fire was unusually hot.

In this dugout the bunchgrass plainsman lived on an earthen floor summer and winter. When the floor got soft or dusty under the action of tramping feet, he threw water on it and patted it down smooth and hard. Usually the earthen floors of the dugouts were smooth and hard and dry. The dugouts were dry and cool in summer and warm in winter, though in seasons of prolonged rain they might become damp.

The Johnson dugouts were two, and they were beside the bunchgrass road which we had made from our place to Bundschue's, give miles distant. Over this rough road father hauled water in 50-gallon whisky barrels three times a week. The Johnsons had plowed around their place and put up a light fence of cottonwood poles, which they had hauled from the brush patches down on the Deadman. We drove by their place the first time when they were putting a washing out on their family clothes line; and I remember how they came racing out of their dugouts to the pole fence near which father drove as we passed their place. They leaned against the pole fence and talked eagerly as long as father and mother would stay. They hadn't seen anybody for weeks, were hungry for gossip, eager for us to stay, hoped we would like the country, and so on.

The Johnson boys left the country that summer and never came back. In the years that followed "The Dugouts" came to be a definite landmark in our scantly populated neighborhood. For a long time I feared to go past them alone, imagining that ferocious animals were hiding in them. During the summer when the mountain fires drove animals down on the plains I was absolutely certain that the dugouts were headquarters for all the bears and mountain lions that passed through. As I grew older I became bolder. By this time the fence of cottonwood poles which the Johnsons had put up was a dismal thing, the long poles sagging between the posts which were leaning this way and that. The white bark had long since peeled off under the action of sun in summer and wind in winter, and hung in tatters that fluttered and rattled in the prairie breeze, or hung inert in hot, still weather.

One day I mustered courage to tie Rowdy to a sagging fence post and make my way through the rank sagebrush which had grown up on the Johnson plowing, to the dugout nearest the prairie road. The door was open; in fact, I doubt if it had ever been closed.



Because right is right, to follow right
Were wisdom in the scorn of consequence. —Tennyson.

Large flat stones served as steps down to the dugout doorway, and the stones were partly covered with earth that had carried down into the dugout by wind and rain. Gingerly, alert as a squirrel, I trod the big, flat stones down to the doorway of the dugout and peered into its shadowy interior. The first object that caught my eye was a small shelf on the large post which centerwise in the dugout supported the main roof-pole. It had been used as a clock shelf, undoubtedly; but no clock was upon it. Instead there was a robin's nest, and Mother Robin was at home. She flattered past me as I stepped inside. I found a rickety bench, pulled it beside the post, stepped upon it and peered into the nest. There were two eggs! Columbus discovering America, or Balboa sighting the Pacific were no more elated than I. I tiptoed out of the dugout, and in following days visited it often with offerings of breadcrumbs and water carried in a mason jar. When the baby robins got out of their shells I shared responsibility with their feathered parents.

That spring I had quite a family of birds. Father commenced plowing early, and the small, prairie birds built nests under the pieces of sod which lay partly overturned or rested on another sod with small, cave-like, grass-lined shelters beneath. These tiny sod houses certainly were ideal nesting places for the birds, and they were quick to perceive this fact.

As soon as I discovered what the birds were doing I spent much of my time in hunting for nests. When I was walking barefooted across the sod and a bird fluttered up from my feet in a startled way. I was sure a nest was near; but they invariably were concealed remarkably well, and it was a feat to find one. I had a half dozen bird families on my hands that spring, including the robins two miles away. Every other day I made the rounds with bread crumbs and water or grain, which I believe the birds gratefully received.

The Johnson fence finally fell down in places, and passersby, having learned that the Johnson boys had "thrown up their claim," took the fence for firewood. Then the range cattle took possession of the dugouts. A cow ventured upon the roof of one of them and went through. Presently other cows did the same thing; and eventually the dugouts ceased to be dugouts and were only holes in the ground.

Before their complete demolition I had a near-adventure in one of them. By this time I was 14 and had conceived an intense animosity toward coyotes which had stolen many of our chickens. Often I had chased them on horseback till either they or Rowdy reeled with exhaustion. One day Elam Rice and I chased one in a circle for three hours, taking the beast around the circle by turn. Finally the coyote got so tired that it staggered and fell and then sat uncertainly on its haunches with its red tongue out and saliva dripping from its jaws. Elam dismounted and dropped a noose over the exhausted animal's head. As he was tightening the noose it snapped him on the hand and brought blood. We had no way of killing it there so hauled it over the prairie till we found a club with which Elam rapped it on the head so soundly that it kicked a few times and died.

Often we found their dens which most usually were enlarged badger holes in the banks of water-worn gullies. In such cases we dug in from the top and struck the hole and kept on digging till we reached the end of the burrow where the "nest" was. Once we dug down into the nest from above, guessing the length of the burrow back from the bank where it began, to a foot. Cal Steele was helping me this time; when we broke into the nest he stood on his head in the hole we had dug while I hung to his feet, and reached back into the nest and snatched out the baby coyotes which were of the suckling age, but showed fight. As he passed them up to me they snarled in babyish fury, their eyes green and glistening.

The summer before the dugouts were completely demolished a family of coyotes took up their abode in one of them. I decided to raid their den. A badger had dug a burrow in a corner of the dugout, which the coyotes enlarged and inhabited. It was a fairly simple thing to dig down from the top, outside the dugout, and strike this burrow at the point near the nest, but I conceived what I thought to be a less laborious plan. Examining the burrow, I noticed that it was unusually large. I peered up into it and as far up as I could see it was no smaller. It seemed sufficiently large to admit my body so I decided to crawl up into it and get at the young coyotes in that way.

The crawling was easy, I wormed forward in the dark till I was in a couple of yards I suppose, and then I got the scare of my life. From the inky darkness ahead of me came a low, menacing snarl. In the pitchy blackness I could see nothing; but I could hear the low snarling, and in it there was a quality of menace that made my hair leap on end and my blood run cold. I saw, in another instant, the greenish flash of a pair of eyes—and those eyes were set too far apart to be in the head of baby coyote! I had blundered.

I suppose that all of us in finding ourselves in danger that appears suddenly and entirely unexpectedly are less terrified than when we can see it approaching gradually. I had no fear of a coyote; but reason told me at this point that if the mother coyote were up there with her babies that she would be an ugly customer.

Cautiously I began to back out of the hole, and doubt if I breathed more than twice while I did so. I recall taking my time, thinking that if I displayed panic the coyote might be encouraged to attack me with all the advantages in her favor.

Outside in the dugout I began to get thoroughly scared. I noticed for the first time that the hole which I had so unceremoniously and so recklessly entered was rather large for a coyote burrow. I noticed also that about its mouth were some pretty big tracks—autogether too big for a coyote, I thought. I suppose it was what you would call an optical illusion that made those tracks get bigger every time I looked at them. By the time I had looked at them three times they had expanded to the dimensions of cougar tracks.

With quaking knees I made my way out of the dugout, and by the time I was out of it, I was positive that I had blundered into the den of a mountain lion. The further away from the dugout I got the surer of this I became, and by the time I reached Rowdy I expected to see a cougar head rising above every sagebrush in the Johnson plowing. I actually do not remember untying Rowdy or mounting him; but when I began to see and think coherently I was on his back with a hand wound into his mane and my knees gripping his sides for dear life. I fully expected to see two infuriated mountain lions, a whole pack of them, maybe, charging out of the dugout and coming for me.

What I did see presently, was two pointed ears rise in view over the bank at the open end of the dugout. The ears rose higher till I saw unmistakably the head of a coyote—and a very much alarmed coyote, as I could see, at the first movement of my pony the head dropped from view. A few days later I attacked the den again, this time coming at it from above with a spade; but when I struck the nest I found that the creatures had broken up housekeeping.

Horned lizards and stink bugs were thick in the bunchgrass about Blind Springs. While the bunchgrass boy was watching the prairie sunrise he detected a movement of some sort down under the covers near his bare leg. Could it be a rattlesnake? Next chapter tells of that night's adventure, when the bunchgrass boy, with his father and mother and Dave Reavis, camped at Blind Springs.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University)

Rest, Sunshine and Fresh Air Best Cure for "Summer Colds"

Your friends who often have "a sure cure for a summer cold" are more or less likely to promise more than they can perform. Whenever you hear of a multitude of remedies for one and the same ailment, you may also be sure that but one of them may be the real cure. This is on the same principle as a lock without a key. If one key fits, you are not apt to try a legion of others to turn it.



Dr. Hirshberg.

Perhaps the very fact that there is no certain specific treatment for a "cold" makes its victims too anxious and restless to await quietly the few days necessary for its disappearance. Patience, even in health, is, according to a poet, the virtue of an ass that trots beneath his burden and is quiet. Therefore, in the name of justice and action, the man with a "summer cold" must attack his arch enemy with some weapon.

Professor Dochez and Dr. Gillespie, twe research workers, have discovered that the germ of pneumonia, the pneumococcus, occurs in four distinct types. This led to the invention by Dr. Rufus I. Cole of the Rockefeller institute of Medical Research of four different kinds of antisera with which to combat pneumonia.

The Germs Isolated.

It seems now that at least one bacteriologist, Dr. George Lyons of Marseilles, has taken the hint, and isolated three separate and distinct racial forms of a micrococcus associated with colds. He claims that the "colds" which arise in warm climes and the summer season are due more or less to his type C bacterium. This microscopic coccus burrows down into the membranes of the nose, eyelids and throat, beyond the reach of air and light. There it establishes itself to flourish like a green bay tree precariously for a few days' time, and simultaneously to irritate the tissues.

The upshot of this unwelcome irritation is to incite the rebellion of the membranes in the recognizable output of mucous, serum, lymph or matter. Dr. Lyons maintains that all three of his "foculative anaeroties," as these atmosphere-hating germs are called, die a natural death in the tissues which harbor them, unless the individual attacked is very weak or in ill health from other causes, such as physical excesses.

All three of these "cold" bacteria may be harbored by some persons in their mouths and on their skins without any outbreak of a "cold." These prove to be "carriers" and sources of contagion to other more susceptible gentry.

Type C, the one held to be the origin of "summer colds," dies within a brief period if exposed to air, sunlight or oxygen. It seems to survive longer during damp, hot, soggy, sultry days than in dry weather.

Avoid All Excesses.

Cultivated artificially in the gelatin or beef tea of a bacteriological laboratory these "cold" microbes will only grow and fructify if all oxygen is excluded. In order to plant and obtain them as a pure race all air is forced out of the flasks and tubes in which they are incubated by the maintenance of a stream of hydrogen or other neutral gas.

Since a precise, scientific mode of treatment is as yet not to be had, the victim is to possess his soul in patience and his body in bed for the few days required to overcome a cold.

All the World's a Stage, and All the Men and Women Merely Players

Training Junior Naval Scouts to Shoot.



Copyrighted by International.

Boys of the American junior naval and marine scouts are shown receiving instruction from Major Korn, a scout officer, and former chief quartermaster in the navy, in the use of a Hotchkiss revolving gun. The photograph was made on board the United States ship Recruit, the wooden battleship in Union Square, New York, erected as recruiting headquarters for the navy.

Welcome Sound to Soldiers.



The mess call on the bugle is the most welcome note that cuts the air at Fort Myer, Va., where a number of our best young Americans are learning to be officers.

Fights to Save Mother.



The daughter of Mrs. Amy E. Archer-Gilligan is fighting to save her mother from the indictment of murdering an inmate of a home for the aged at Windsor, Conn.

Uncle Sam's New Army.



—Fresno Herald.

A Quiet Game in a First Line Dugout.



Copyrighted by International.

This picture is merely a little group of French officers engaging in a quiet little game in a dugout back of the first line trenches at a point which is frequently subjected to gas attacks by Germans. The soldiers take no chances.

Girls in France Help the Airmen



Copyrighted by International.

Women have been pressed into service as mechanicians at the French aviation stations. Here are seen two French women mechanics at work on a battleplane which has just returned from a successful raiding expedition over the German lines.

The Motor Car
On the Farm

Three Million Autos.

In 1916 there were 1,067,332 more motor cars registered in the United States than in 1915. This was an increase of 43 per cent. The gross total of registered cars, including commercial cars, was 3,512,996; the number of motor cycles registered was 250,820. The several states collected in registration and license fees, including those of chauffeurs and operators, a total gross revenue of $25,865,369.75. Of this amount 92 per cent, or $23,910,811, was applied directly to construction, improvement, or maintenance of the public roads in 43 states, according to figures compiled by the office of public roads of the United States department of agriculture, in circular 73, "Automobile Registrations, Licenses and Revenues in the United States, 1916."

The figures for 1916 correspond very closely with the annual percentage increase of motor car registration of the last three years. This yearly increase has averaged 40 per cent in the number of cars and 50 per cent in revenues.

When viewed over a period of years, the increase in motor car registration and gross revenue has been remarkable. In 1906 the total state registrations were approximately 48,000 cars, on account of which the several states collected in fees and licenses a total gross revenue of about $190,000. Only a small part of this was applied to road work. In 1916 the $25,865,369.75 collected formed nearly 9 per cent of the total rural road and bridge revenues of the states.

Recent years have shown an increasing tendency to put the spending of the motor car revenues directly in the hands of the state highway departments. Of the total amount applied to road work in 1916, 70 per cent, or $16,411,520, was expended more or less directly under the control or supervision of state highway departments. Only 13 states did not exercise any direct control over the exepending of the net automobile revenues.

Horse or Tractor?

The other day we ran across a man who is a real downright tractor enthusiast. He has been farming with a tractor for two seasons. In many respects his story is typical of scores of others we have heard this summer in various parts of the Pacific northwest from men who are applying the tractor intelligently to farm work. Here is the substance of what he said:

"I used to laugh when I read or heard about using tractors to plow and seed and harvest crops. I figured that it was a new fangled idea and that horses were plenty good enough for me. My argument was that you could depend on horses while it would always be a tossup whether the tractor would work or not.

"But I was open for proof and I made it a point to watch the iron horse work whenever I got a chance. Finally a man from Iowa bought the place next to mine and part of the machinery he brought was a light tractor. He had one piece of about 20 acres right across the road from a piece of mine about the same size. I had about five acres of mine plowed when he commenced. When he started in with his tractor I felt sort of sorry for him because the season was well along and I didn't figure it wise to waste any time experimenting.

"I was using four horses on a riding plow, and just to show my new neighbor how it ought to be done, I put on an extra team. But law! I was beat, as the saying is, before I started. He had his piece plowed, disked and seeded before I had finished plowing.

"Now, I don't need a brick house to fall on me before I take a hint. I saw right then and there that that little old machine was better than two six-horse teams, and I began to get down to comparing costs.

"Well, sir, I just sold myself a tractor as slick as a whistle. And now that I've used one for two seasons I feel toward a man who is trying to farm without a tractor just about like most of us feel for the neighbor who has to depend on a horse and buggy to travel.

"The question with me is what will become of the horse as tractors improve and get cheaper in price? Of course, I don't think horses will be done away with—but I look forward to the day when reliance on horses for the heavy work about the farm will be a thing of the past—on a majority of the farms at least."

EDITOR'S NOTE—We are not at all pessimistic about the future of the horse, even when the tractor becomes universally, an important part of modern farm equipment. Rather we look forward to a lightening of the hard work this noble animal has necessarily been made to perform, with plenty of lighter jobs for him that he is so well adapted to do.

Minor Farm Equipment

Few farmers realize the extent of their investment in small items of equipment or the time and inconvenience involved in buying them singly or in small lots, says a bulletin on "Minor Articles of Farm Equipment," issued by the department of agriculture. If possible, these tools should be purchased all on one order. This will save time and, usually, money. Also it will entail a total expenditure sufficiently large to impress the farmer with the importance of giving systematic care to his small tools.

The experts investigated the minor equipment of 33 general farms in Ohio and found on one or more of the farms the following list of general-purpose minor equipment:

Anvil	Paint brush
Auger handle	Pick
Auger bits	Pinch bar
Ax	Pliers
Ax (hand)	Pincers (carpenter's)
Awl	Plane
Barrel	Punch
Basket	Post-hole digger
Bell (farm)	Rasp
Bench screws	Sand sieve
Brace and bits	Saw (buck)
Brush hook	Saw (compass)
Cant hook	Saw (crosscut)
Chain (log)	Saw (hack)
Chalk	Saw (hand)
Chisel (cold)	Saw (set)
Chisel (wood)	Scale (counter)
Compasses	Scale (farm)
Ditch cleaner	Scale (spring)
Drawing knife	Scale (steelyard)
Drill press	Scratch gage
Drills	Screwdriver
File (flat)	Screw plate
File (round)	Shovel (D)
File (taper)	Shovel (round point)
Forge	Tinner's snips
Grindstone	Spade (tile)
Grubbing hoe	Square (bevel)
Hammer (claw)	Square (steel)
Hammer (rivet)	Square (try)
Hammer (sledge)	Tape line
Hatchet	Trap (rat)
Hoisting block	Trap (steel)
Jackscrew	Trowel (brick)
Ladder	Trowel (plastering)
Ladder (step)	Tongs
Lantern	Tool grinder
Level	Vise
Machine oil	Wedge (iron)
Mallet (wood)	Whetstone
Mattock	Whitewash brush
Maul	Wire splicer
Nippers (farrier's)	Wire stretcher
Oil can	Wrench (pipe)
Padlock	Wrench (monkey)

In selecting the minor tools to equip a farm provision must be made for the articles needed for the care and repair of buildings, fenses, machinery, etc., the care of live stock, the production of crops and the various other interests of the farm. With every change in the type of farm involving a new combination of enterprises, a change in minor equipment will be necessary. For each of the many specialized types of farms certain articles will be needed which will not be found necessary on general farms.

The authorities found that for a general farm of 160 acres in the middle western states the necessary minor tools range from a husking peg to a grindstone, and will cost from $100 up to the neighborhood of $200.

Discard Sack System.

The various grain growing states of Australia will adopt the bulk system of handling grain. Plan has been developed by which the elevator system is to be established generally throughout the whole country. The bag or sack system has been found expensive, inefficient and wasteful.

New South Wales has decided to install a system of elevators and the government has committed itself to spend for this purpose $9,733,000. This system is to be developed until it is capable of handling 15,000,000 bushels, including elevators along the railways, as well as terminal elevators on the sea. It has also been decided by the government of South Australia to expend $4,866,500 for the construction of elevators.

The government of Victoria, likewise, is looking very favorably upon the proposition of establishing the elevator system. The minister of railways in the state of Victoria has urged that the proposal for bulk handling in this state be immediately pushed through.

The Farmers' Union in New South Wales has passed a resolution unanimously requesting the state government to push through with its utmost vigor the scheme for handling wheat in bulk.

A Good Sign.

Sponge—I think that a street car has just passed.

Blotter—How yuh know?

Sponge—I can see its tracks.—Chaparral.

Sidelights

No Crop.

"Planted anything in your garden yet?"

"Both rubbers, two pencils and a fountain pen."—Buffalo Express.

What He Took.

Lawyer (to witness at a blind pig trial)—Did you take cognizance of the man who sold him the liquor.

Witness—I took the same as the rest.

Convenient Delivery.

Customer—Send up 25 cents' worth of boiled ham.

Butcher—All right, sir. Anything else?

Customer—Yes. If my wife isn't at home, tell the boy to put it through the keyhole!—Life.

Saving the Youngster.

"Oh, hubby, such an instructive lecture. The gentleman told us that what you eat, you become."

"Huh?"

"What you eat, you become."

"Take that all-day sucker away from Tommy."—Courier-Journal.

A Valuable Dog.

The minister delivered a sermon of but 10 minutes' duration—a most unusual effort for him.

At the conclusion of his remarks he explained: "I regret to inform you, brethern, that my dog this morning playfully ate the portion of my sermon that I have not delivered. Let us pray."

After the service a man who was a member of another church shook the preacher's hand heartily and said: "Doctor, I should like to know whether that dog of your has any pups. If so I want to get one to give to our minister."

From Headquarters.

William had just returned from college, resplendent in checked trousers, silk hosiery, a fancy waistcoat and a necktie that spoke for itself. He entered the library, where his father was reading. The old gentleman looked up and surveyed his son. The longer he looked the more disgusted he became.

"Son," he finally blurted out, "you look like a silly fool!"

Later the old major who lived next door came in and greeted the boy heartily.

"William," he said, with undisguised admiration, "you look exactly as your father did twenty-five years ago, when he came back from school.

"Yes," said William, with a smile. "So father was just telling me."

World's Production of Tea.

The world's production of tea in 1915-1916 exceeded the figures of all other years recorded. India, Ceylon and Java produced 100,000,000 pounds more than in the previous year, the Indian harvest alone surpassing that of 1914-1915 by 55,500,000 pounds. Shipments from Java reached 96,000,000 pounds, an increase of 12,000,000 pounds over the previous year. Shipments to China showed a steady diminution.

Parrots.

There are 350 species of parrots, chiefly confined to the warm parts of America, Asia, Africa and Australia. There is none in Europe and none in Asia west of the Indies; and, while numerous in the Malay archipelago, they are wanting in China Cochin China and the Philippine islands. The only species native to the United States is the Carolina parrot.



The faster this Bread goes the more I save

That is the judgment of the careful, discriminating **home manager**—the woman who makes her bread by using Sperry Drifted Snow Flour.

She knows it gives economical food service.

DRIFTED SNOW FLOUR
A SPERRY PRODUCT



supplies nutriment at lowest cost. To get the same food value out of meat as you do out of Sperry Drifted Snow Flour bread the cost would be three times as great. Order a sack.

SPERRY FLOUR CO.

Buy Sperry Quality Cereals.
They Come in Red Packages.

Take Up Arms Against Grain Fire Hazard!

(Continued from page one.)

Thresher Equipment—Every threshing machine outfit should carry the same equipment as specified for automobile or trailer.

Combines—Every combine harvester should be fitted with a two and a half gallon chemical fire extinguisher, a box of wet sacks and two sharp-pointed shovels.

Other Equipment—As the principal appliances consist of wet sacks and sharp-pointed shovels, we suggest that a great many equipments be provided for individual automobiles, these equipments to consist of a box of 20 wet sacks, a 10-gallon milk can filled with water and a dozen sharp-pointed shovels, these to be distributed in the most accessible places where they can be obtained by any automobile going to the fire.

Fire Detection—A fire starting in the day time will always be quickly discovered, but not always so with a fire starting at night. It has been suggested that guards be stationed at elevated points so as to readily see over a large area and thus be able to detect a fire the minute it starts. These guards should be provided with phones so that the alarm can be given promptly. It is believed that one guard placed at an elevated point can in most cases detect a fire within a radius of about three miles, thus covering a district almost equal to a township. By this method, and also by having guards placed at the principal cross-roads at night, it would be almost impossible for a man to start a large number of fires and escape.

Finances—The council of defense has no funds except what may be received through voluntary contributions. If the home guards would volunteer their services for one night in the week during the short period when the grain is combustible it would doubtless make a suficient number to give all needed protection. Without such protection our grain crop is certainly in danger. It is hoped that sufficient funds will be raised locally to cover the necessary cost of equipping the guards with telephones.

The telephone wires can be run along the fence to the nearest telephone line at very small expense.

State Fire Marshal—Under the present law the insurance commissioner is state fire marshal with power to require property owners to adopt all necessary safeguards. He is now placing deputies in the field to see that all reasonable precautions be taken by the individual farmers. We ask that you give your best assistance to the state fire marshal and his deputies. Among the requirements he is making are the following:

Plowed Strips—Every threshing machine setting is to have a strip at least 12 feet wide plowed around it as soon as the threshing machine moves from the place.

Hay Strips—A hay strip not less than 12 feet and preferably 15 feet wide, is to be cut along all roadways. Such a strip is also to be cut whenever there is any possible danger of a grass fire communicating with the wheat.

In organizing each threshing crew into a volunteer fire department it should be made some one man's duty to see that all fire is thoroughly extinguished after each moving. Another man should follow behind the engine and see that no fire is dropped.

Matches and Smoking—Harvesting crews should be supplied with safety matches and should be strictly prohibited from having any other kind. Smoking by threshing crews should be strictly prohibited while in the field, unless within 12 feet of the engine while at setting or some other safe place specially designated.

Through the cooperation of the state insurance department, the state council of defense is enabled to send organizers for fire prevention throughout the state.

Heavy Draft Horses.

A. B. Riddell, late of Spokane, the well-known importer and dealer in registered Belgian, Clyde, Percheron and Shire horses, has recently moved to a 640-acre ranch 70 miles north of Spokane, near Addy, Wash. It has been his desire for some time to become a breeder as well as a dealer in heavy draft horses. His new location is an ideal place in which to extend this line of business, 450 acres is bottom land, seeded to alfalfa, timothy and oats. The remainder in pasture is sufficiently broken to develop heavy bone and strong muscle. It is supplied with water by springs and mountain streams,



Princess d'Uyt, imp. 2924, one of the brood mares on the breeding farm of A. B. Riddell.

Dwelling of A. B. Riddell, near Addy, Wash., on his breeding farm of registered draft horses.

one running between the house and barn. About 300 yards above there is a dam, creating an artificial lake, on which are boats. It has been stocked with trout and is a fine place for boating and fishing. This lake furnishes both water and power supply for all the buildings. When asked what was the idea in choosing this place he said: "This is a good distributing point. I have sold two carloads of stallions in the last six months, but aside from the profit in dollars and cents my desire is 'better horses.'"

When shown four Belgian brood mares, each weighing over a ton; two Clydesdales equally as good, two fine fillies, one 2 and one 3 years old, each good for a ton at maturity, it was plain to be seen Mr. Riddell's ideals were going to materialize. We have since learned he was induced to part with the fillies to Messrs. Huguenin & Holt for the sum of $2500, with the understanding they are to remain in the valley and help develop the breed.

D. G. S.

What Is Sabotage?

Official I. W. W. Definition

The Farmer in a recent issue quoted from the official publication of the I. W. W. such declarations as:

"We are not satisfied with a fair day's wage for a fair day's work."

"We are going to do away with capitalism by taking possession of the land and the machinery of production. We do not intend to buy them either."

This is open warfare on the farmers of the land. It means that I. W. W. members who work for them are taught by their leaders to look upon their employers as enemies to be fought. It means that the avowed purpose of the I. W. W. is to take away the farmer's land, his buildings, his machinery, his live stock, his crops and every other vestige of his industry and thrift.

This purpose, already clear, is made yet clearer by this extract from the "Advancing Proletariat," page 17, an official publication of the I. W. W.:

"He (the I. W. W. member) finds that he must attack the structure of a society based on private property, and his point of attack is at the point of production, the point where he daily meets his enemy. His whole attitude is one of opposition; opposition to the property of the master class—an attitude subversive of all modern ethics, morals, religions and laws—an utterly revolutionary attitude."

One page 16 of "The I. W. W., Its History, Structure and Methods," another publication of that organization, appears the following:

"Failing to force concessions from the employers by the strike work is resumed and 'sabotage' is used to force the employers to concede the demands of the workers."

What is sabotage? Official publications of the I. W. W. define it as follows:

"Any conscious and wilful act on the part of one or more workers intended to slacken and reduce the output of production in the industrial field, or to restrict trade and reduce the profits in the commercial field, in order to secure from their employers better conditions or to enforce those promised or to maintain those already prevailing when no other way of redress is open."

"Any skilful operation on the machinery of production intended not to destroy it or permanently render it defective, but only to temporarily disable it and put it out of running condition in order to make impossible the work of 'scabs' and thus to secure the complete and real stoppage of work during a strike."

Elizabeth Gurley Flynn, the noted I. W. W. agitator, describes sabotage under several heads, among which are:

"Adulteration.

"The slowing down of work.

"A general reduction of efficiency.

"Placing kerosine in ovens to make food unfit to eat.

"Intimidation, coercion and any means necessary to gain the end."

In North Dakota the slogan of the I. W. W. in the harvest fields is $3.50 per day, heads down, $4 per day heads up." This means that unless they are paid $4 per day of eight hours bundles of grain will be shocked with two in the center heads down.

These methods, wrong, mischievous and destructive at any time, become vicious and disloyal now that the nation is at war.

Fair Dates.

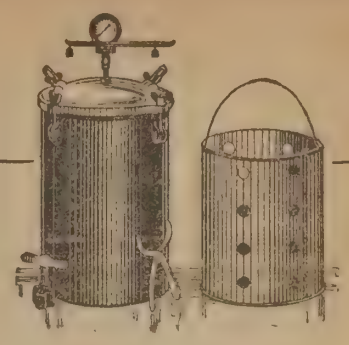
Pendleton, Roundup—Sept. 20-22.
Boise, State—Sept. 22-29.
Salem, State—Sept. 24-29.
Helena, State—Sept. 24-29.
Lewiston, N. W. Lvst.—Nov. 16-23.
Portland, Pac. Nat. Dairy—Nov. 16-23.
Portland, Pac. Int. Lvst.—Nov. 19-24.

Washington Fairs and Shows.

Chehalis, S. W.—Aug. 27-Sept. 1.
Spokane, Interstate—Sept. 3-8.
Elma, County—Sept. 5-9.
Mabton, Hay Palace—Sept. 11-15.
North Yakima, State—Sept. 17-22.
Woodland, County—Sept. 19-22.
Rosalia, Lvst.—Sept. 20-22.
Lynden, County—Sept. 25-29.
Garfield, Roundup—Sept. 26-29.
Shelton, County—Sept. 27-29.
Burlington, County—Oct. 1-6.
Puyallup, Western—Oct. 2-7.
Palouse—Oct. 4-6.
Port Angeles, County—Oct. 11-13.
Colville, Live Stock—Oct. 17-19.

Miners Protest Increase.

One of the thousands of telegrams received by congress protesting against the bill increasing the second-class postal rates came from the officers of the United Mine Workers of America, representing the union's 500,000 members.



Saves Time in Home Canning

The Steam Pressure Method saves time, labor and fuel in home canning. It is not only the quickest, but the safest way, for it is the only safe sterilizing process.

You can put up fruit and vegetables expertly, for home use or for sale, with our

Complete Sanitary Canning Outfits

Made in sizes for home, community or commercial use. We furnish everything you need—H. & A. retorts, cans, sealing machines, instructions—including a book of recipes that tells you what to can and how to do it.

Write for free literature that describes our equipment and tells you how to can for profit.

Seattle Can Co.

Home Canning Dept.
1263 Utah Ave., Seattle.

WANTED Cascara Bark

We buy cascara bark, Oregon grape root and Oregon balsam of fir at the prevailing market. Submit samples and quantity you have for sale.

BLUMAUER-FRANK DRUG CO.
357 Everett. Portland, Oregon.

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

SLEEP IN A FORD HOTEL $8.50

OTHER FIVE-PASSENGER CARS $10.00



SATISFACTION GUARANTEED. NOT A HAMMOCK. A SPRING BED.

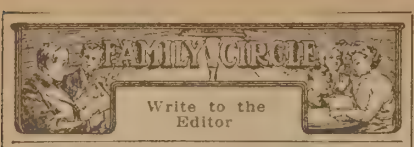
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ALICE W. BARLAND
Editorial Contributor

Women Do Fine Work

A group of patriotic New York women are rendering valuable service by probing and exposing the woeful waste of food by commission dealers of that great metropolis.

They have brought out the startling fact that there is a weekly loss in New York of 220,500 pounds of food which, through one cause or another, is condemned by the department of health.

The New York Journal of Commerce, a daily newspaper that specializes on business news, says that besides this loss at least as much more, and possibly as much as 400,000 pounds, "goes to waste through the lack of organization at food terminals. The complete disregard for economy at some places, and the apparent effort to keep the price up by destroying overproduction, have combined to embitter many housewives familiar with the situation."

Long ago this method of "keeping up prices by destroying overproduction" embittered millions of farmers who saw their produce rejected or destroyed after they had consigned it to commission dealers. The Farmer is glad that at last consumers are awakening to this monstrous evil.

These investigations were made by a subcommittee of the mayor's committee of New York women interested in the food problem. The subcommittee has started a city canning and drying kitchen.

Mrs. W. H. Lough of Bronxville, general manager, said that the department of agriculture at Washington had promised an expert to help with the canning and rehydrating.

"Our idea," she added, "is to put our food on the market at cost." The pier manager, Miss A. Sheehan, cooperates with the board of health. If a third of a box of oranges is spoiled the remainder is not allowed to go on the New York market until it is conditioned. Sometimes it is cheaper for the buyer to throw it away than to recondition it. In this case Miss Sheehan gets it for nothing.

"We wish to prevent waste. We do not wish to handle food which otherwise would go on the market at a reduced price." Under Miss Sheehan are the captains who inspect the food on the various piers. Each captain has 10 helpers.

"Look at this," one woman said as she picked up a specimen of salvage cabbage. "On Park avenue this morning I was charged 15 cents for a cabbage not so large as this—and the city permits these to be thrown away!"

The committee employes Boy Scouts to go around to the different city docks and sort the good from the bad in each container of condemned vegetables.

Table Sirup From Sugar Beets.

Sugar beets are grown in large quantities for sugar making, but their value as a source of the family sirup supply has been overlooked. Sugar beets suitable for sirup making may be grown wherever soil of reasonable fertility is available. The sweetness of the beets may be greater in one locality than in another, but all sugar beets contain sugar enough to make sirup, say specialists of the United States department of agriculture. The sirup may be made by a very simple process, and a few rows in the garden will produce beets enough to give a family all the sirup needed.

A bushel of beets will produce from three to five quarts of sirup. As the beets when mature should weigh from 1 to 2 pounds each, 30 or 40 of them will make a bushel, and as the beets after thinning stand about 10 inches apart in rows about 20 inches apart, it is easy to determine how much ground to use for sugar beets if a particular quantity of sirup is desired. A few rows in the garden generally will be sufficient.

In making sirup the toppled beets are cleaned by soaking a few minutes, then scrubbing with a coarse, stiff brush. The next step is to cut them into slices as thin as one-sixteenth of an inch if possible. A butcher knife may be used, but a kraut cutter or some other slicing device is easier.

The sliced beets are placed in a tight barrel and just enough hot water to cover them—boiling water if possible—is poured in at once. The barrel is then covered with several thicknesses of canvas to hold the heat. The sliced beets are allowed to soak for about 60 minutes. The barrel is agitated from time to time without being uncovered. This process brings out the sugar from the beets. The liquid is then drawn off, strained through several thicknesses of cheesecloth and placed in a kettle or other vessel, in which it is boiled slowly until it has evaporated down to the thickness desired. It is important that the boiling be slow and the process will take several hours. The work may be done out doors if desired. Care should be taken not to scorch the sirup. The scum which rises to the surface of the liquid is skimmed off, to remove the strong, beetlike flavor.

The sirup is bottled or canned while hot and sealed to prevent molding. It is dark in color, but has a pleasant flavor.

Party Entertainment

By GLENTWORTH RUBINS.

We are sometimes in a real quandry to know what to prepare as entertainment for an expected company of guests—something that will be new, entertaining, amusing, or will set wits to working. It is not necessary to award prizes to add zest to say of the games which entertained us at some parties I have recently attended.

The hostess handed each guest a sheet of paper on which were written 19 different puzzles, the answer to each being the name of a tree. We shortly discovered we could not so easily recall the names of our forest friends as some of us might imagine. This game was concluded by the hostess reading the right answer to each puzzle.

She next gave each of us 10 soup beans, and took turns trying to drop the beans into a quart-size milk bottle, holding the arm straight out from the shoulder. Two succeeded in getting 10 beans apiece into the bottle, so they were given another trial to decide the real winner of the game. This game is not as easy as it sounds.

On another occasion, after we had played a lively game or two to get us on our feet and break up any little groups, the hostess brought in a dish of English walnuts, the shell of each having been opened enough to hold firmly a scrap of paper on which was written some stunt for each of us to do—sing a song, whistle a solo, talk to your neighbor without saying anything, imitate a public speaker, make a rag doll (this fell to the only minister present), tell the most ridiculous thing that ever happened to you, etc.

After we had all "performed" the hostess brought in another dish, this one filled with different kinds of blossoms, one of which we were invited to take. When we were all supplied with a flower she told us that we would find our places at the table in the dining room by matching our flowers with a leaf of their own foliage which would be found beside the plates. As many of the blossoms and most of the foliage were unfamiliar to us it was a merry hunt and effectually abolished all selfish seating, with no blame or responsibility on the part of the hostess.

One summer evening a company was entertained by completing a "vacation" story. The hostess had composed the story, leaving out words that could be supplied by names of furnishings or objects in the room, such as rug, pictures, lights, etc. Some of the completed compositions were quite ingenious.

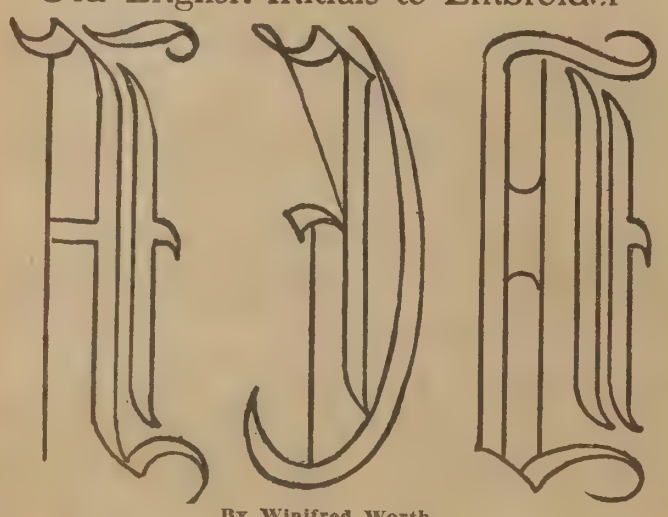
Chinese writing is a puzzle to the unitiated, which is apparently done on the floor with the aid of a cane or stick. One of the company is sent out of the room while the rest decide on some word. Suppose they choose chair. The one sent out comes back and the "writer" gets busy making passes as if writing on the floor. "Can you see?" should give a clue to the first letter, then more passes with the cane. "How do you think you like this game?" may then be asked, followed by more motions with the cane. The vowels are indicated by thumping the cane, thus one thump for a, two for e and so on—so one thump would indicate the a, more passes, three thumps for i, more passes, then "rainy weather just now?" and the spelling is complete and the "reader" is supposed to be able to tell the word. Any word may be chosen, and the questions asked depend upon the ingenuity of the "writer."

Save Your Bit.

Stale bread and left-over skim milk can be made into an appetizing dish of milk toast. This makes a good dish for breakfast, luncheon or supper, especially for children.

Bits of lean or fat meat can be run through the food chopper, well seasoned, and wrapped in pie crust to make delicious meat finger rolls; served either hot or cold.

Old English Initials to Embroider



By Winifred Worth.

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of a linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design.

In padding these old English initials, different methods may be used. Some use the twilled cotton for the purpose; others make the chain stitch, while others let a skein of floss out at full length and embroider a strip of it under the thick parts while forming the letter, clipping the skein when the initial is finished. This is a splendid method, quickly done, and is suggested, too, as a help in padding all large pieces in border or crescent outline.

Initials can be made by filling in the broad space with French knots. This is used largely on elaborate pieces, such as the laundry bag, table scarfs, and ornate gifts.

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2135-2131—Ladies' Costume—Waist 2135 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure, and requires 2 7-8 yards of 44-inch material for a 38-inch size. Skirt 2131 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 5 yards of 44-inch material for a 24-inch size, and measures 3 yards at the foot with plaits drawn out. Two separate patterns, 10 cents for each pattern.

2140—Ladies' Dress—Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 36 requires 7 yards of 36-inch material. The skirt measures about 2 1-2 yards at the foot. Price, 10 cents.

2161—Child's Play Dress, Shade Hat and a Flower Basket—Cut in 5 sizes: 2, 4, 6, 8 and 10 years. Size 4 years will require 2 3-8 yards for the dress, 3-8 yard for the hat, and 3-8 yard for the basket, of 36-inch material, for a 4-year size. Price, 10 cents.

2146—Ladies' Kimono or Lounging Robe—Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium will require 7 yards of 36-inch material. Price, 10 cents.

2156—Juniors' Dress—Cut in 3 sizes: 12, 14 and 16 years. Requires 4 1-2 yards of 44-inch material for a 16-year size. Price, 10 cents.

1380—Ladies' Apron—Cut in 3 sizes: Small, medium and large. It requires 6 1-4 yards of 36-inch material for a medium size. Price, 10 cents.

1932—Ladies' House Dress—Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 7 yards of 36-inch material for a 36-inch size. The skirt measures about 3 yards at the hem. Price, 10 cents.

1880—Boys' Suit—Cut in 5 sizes: 6, 8, 10, 12 and 14 years. It requires 2 1-8 yards of 36-inch material for the blouse and 1 yard of 44-inch material for the trousers, for the 8-year size. Price, 10 cents.

2145—Girls' Dress—Cut in 4 sizes: 6, 8, 10 and 12 years. It requires 4 1-2 yards of 36-inch material for a 10-year size. Price, 10 cents.

1303—Patten for Refooting Stockings—Cut in 3 sizes: 8, 9 and 10 inches. Price, 10 cents.

1920—Ladies' One-Piece Yoke Dress, with or without folds—Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 1-2 yards of 44-inch material for a 36-inch size. The skirt measures about 3 yards at the foot. Price, 10 cents.

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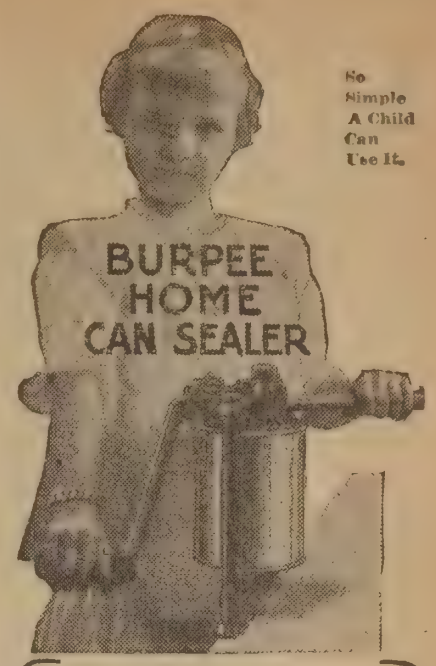


Sirup of Grapes.

The great scarcity of sugar in the district of Turin, as well as in the entire kingdom of Italy, and the government prohibition of its use in wine-making processes, has effectually drawn attention to the sweetening methods which were employed during the economic crisis of 1790-1800, when it was found that syrup of grapes furnished a fairly satisfactory solution of the problem. The experiments carried out at the period mentioned, although of great benefit, did not meet with the success desired, on account of imperfect elimination of acids, and the unpalatable character that the process of extraction imparted to the syrup. Although it is now recognized that syrup of grapes can not take the place of sugar for general purposes, it is an excellent sweetening for jam, marmalade, etc., increasing their nutritive value.

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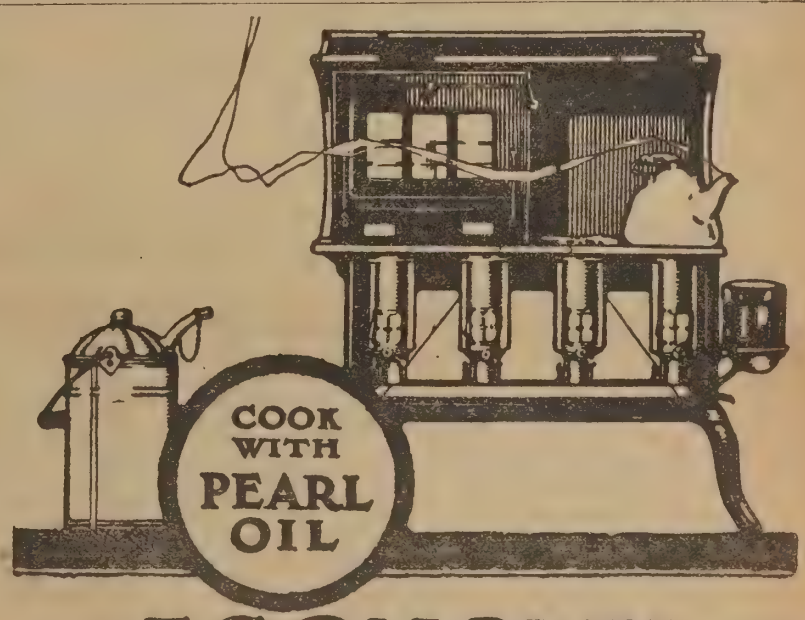
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My dear children: Vacation time is here and while you may not know it, Aunt Nellie has just returned from a most wonderful time in the hills, at the beach, where the waves roll and toss and where the little ones play in the sand and the mothers and older sisters sit and watch them envious, wishing the time had not passed so quickly and that they might do the same things once again. Such a good time, and here we are back again to our work and we hope that our boys and girls have not forgotten to write while we have been gone. I see there are many letters here and I shall sit up nights reading them and wishing you had all been with me.

As I wrote you last week, our contest had been extended for three months and I find that it does not meet with success and so we will not do it again. However, there are many fine letters and many responded to the sending of pictures. Your letters were very fine and some excellent ones on the subject of "My Country."

The next contest will begin August 1 and end October 1, and the subjects are:

My vacation.

What I want to be.

How can I help my country?

The prize winners for the contest just closed are:

Esther M. Bower, Roy, Wash.

Beulah Weyrich, R. 1, Mount Vernon, Wash.

Alexander Laurence Weitz, box 51, Endicott, Wash.

Roll of Honor.

Esther Eastman, Valley, Wash.; Lucy Jackson, Turner, Wash.; Barnetta Bartholomew, Tekoa, Wash.; Anna Fowler, Rochester, Wash.; Eva Boud, Valley, Wash.; Ora Jane Hayden, Mold, Wash.; Selena Dero, Spokane, Wash.; Leona Jacks, Raymond, Wash.; Warren Keith, Colby, Wash.; Esther Victoria Dale, East Stanwood, Wash.; Hilma Anderson, Olympia, Wash.; Harvey Norris, Goldendale, Wash.; Ethel Harriman, Monroe, Wash.; Lois Barnhart, Tekoa, Wash.; Nettie Johnson, Friday Harbor.

I want to have you do your very best; better than ever before, and I know you can. You can have your teacher or father and mother help you with advice, but the thoughts must be yours and you must write your own letters. The best way is to write it with a pencil first and then copy it.

Be careful of your spelling, punctuation marks and capitals, and be sure to write your name, address and age on every letter.

Aunt Nellie has a great deal of confidence in you and she knows that every one of you can write a splendid letter. Won't you ask your little friends to write, too, and make our little corner a big one and so overrun with letters that we will have to have two corners? Yours lovingly.

AUNT NELLIE.

The River Rises When It Is Warm.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. We take the Farmer, and I enjoy reading the cousins' letters very much. I am 9 years old. My birthday is July 4. Have I a twin? I have one brother. His name is Edgar. He is 7 years old. We have three head of horses. Their names are Jenny, Birdy and Maud. We have one cow and calf. The cow's name is Roney. The calf's is Jersey. The wagon road and railroad go through our land. I was down to the river yesterday. Whenever it gets warm the river rises and the wood begins to run. Snake river runs past our place. —Delma Fouts, Penawawa, Wash.

Had a Race This Winter.

Dear Aunt Nellie: I have often read some of the letters in the Children's Corner and enjoyed them very much. My sister wrote you a letter this evening. Her name is Clara. I think it would be nice if we could have picture printed on our page or Children's Corner. I am going to tell you about a race we had this winter. One evening as school was about to close our teacher said, "Listen, children, The Washington Farmer is going to offer a fine library for the ones who get subscriptions to it. Now you will have two sides or teams in this and the team who gets the most subscriptions has to give the other team an entertainment." We all thought that it would be great fun and as soon as school was out I got our teacher to subscribe and that was the first one on our side. I was leader of one side and my sister of the other. We ran a race up to the house and made all the men subscribe. My sister beat me three subscriptions. We got 13 altogether. It sure was fun. I have two brothers in the army. One is at Everett, Wash., and the other is on his way to France. He is in the aerial squadron. He is in New York now. I wish some girl of my age would exchange postal cards with me. Mine are all views and picture of houses and beautiful buildings. I would like to exchange them for comic postals. I have about 400. I am 12 years old.—Lucy Jackson, Turner, Wash.

A Ride Around Rattle Snake Hills.

Dear Aunt Nellie: This is my second letter to the Children's Corner. I am in the seventh grade at school now. Our school was out the 25th of May. I have been doing some crocheting lately. I like to crochet pretty well. I am making a yoke. Two weeks ago Thursday my aunt and cousin and myself rode up around the Rattlesnake hills on horseback. We rode till we came to a large spring, around the spring there were lots of pretty flowers, some yellow snapdragons and some little blue flowers and many different kinds, so we got off our horses and picked some of them. Then we went down the canyon a ways following a stream of water and we found a good sized pond. It was just full of tadpoles. They were swimming around in the dirty water. It just happened we found an old bucket, so we caught some and brought them home with us. Then as we followed the stream down a little farther we saw one of the nicest things and you can't guess what it was. It grew under a tree where it was nice and shady and the ground was very moist. It was a little violet. They are dark purple with pretty green leaves. We could hardly see them. Then we looked for some more and under every shady place we saw some violets. We took some violets and yellow snapdragons up by the roots and brought them home and planted them in a box and they are growing nicely. The tadpoles we have shut up in a jar and we are watching them turn into frogs. —Thelma Hinkle, Prosser, Wash.

Summer's Full of Gladness and Mirth.

Dear Aunt Nellie: This is the sixth time I have written to the Children's Corner. My subject this time is "In Summer Days." I like summer better than any other season of the year. In the summer time the birds are singing, the woods are green with foliage, and nature is in the very atmosphere. In summer Mother Nature paints designs more beautiful than any skilled artist could. The air is scented with the perfume of the roses, tulips and violets. Here and there you see a squirrel frisking about, very busy preparing for winter. In summer the buzz of the bee can be heard and the chirp of the cricket. Summer is a season full of gladness and mirth. This is the reason why I like summer best.—Harvey Norris, Goldendale, Wash.

Eva's Birthday Comes in May.

Dear Aunt Nellie: I am 9 years old. My birthday is May 14. I have two brothers and one sister. Their names are Louis and Bill. My sister's name is Frances. My brother, one of my girl friends and I were coming from my friend's place. After we got home we went to pick flowers out in the pasture. Then my dog came. My dog went in the brush and there was the coyote. My friend's dog was with us. The two dogs pounced upon him. We saw the coyote, so we ran to the house. I told my mother. She looked through the window. My friend's brother, Edwin, got the gun. By that time the coyote and the dogs were down the road. Then the coyote went in the pig pen and bit the two pigs. The coyote came toward Edwin. Edwin shot and killed him. The coyote bit the dogs. Edwin killed his dog when he and my sister went to town. Neighbors came and killed my dog, too, then they burned the coyote and the two dogs. I would like to correspond with some one my own age.—Eva Bond, Valley, Wash.

Pretty View of Mount Rainier.

Dear Ant Nellie: This is the second time I have written to the Children's Corner. We live in the country about two miles from town. Mt. Rainier is about 60 miles west of our home, but we have a pretty view of it. It has three points which are snowcapped the year around. In the summer many visitors climb it, although I have never had a chance to do it. I think it would be great fun. I wouldn't like to trade with a city girl at all.—We will soon have cherries to pick, while city girls have to buy theirs, and they never have the fun that a country girl has. I am 12 years old and would like to correspond with some cousin of my age. —Florence Spoolman, R. F. D. 7, Box 160, North Yakima, Wash.

Loves the Baby Best of All.

Dear Aunt Nellie: I am a girl 10 years old. My birthday was the 13th of June. We have a calf, and her name is Nellie. We have a horse. His name is Bill. Our cows are named Nigger and Rosa. I have three brothers and one sister. The boys' names are Clarence, Frederick and Edward. My sister's name is Gladys. Edward is the baby. I like him best of all. My school was out the 15th of June. I help mama do the work. I make the beds. I have two beds to make, and sometimes three. We have a big garden. I help mama in the garden. Papa is working on the road. My little brother goes with him.—Pearl Droullard, Prevost, Wash.

Raising Garden Is Favorite Work.

Dear Aunt Nellie: I am 11 years old and in the third grade. This is the first time I have written to the Children's Corner. My favorite work is to raise garden. I have a little one of my own. I have four rows of peas and some beans. I live on a big farm. We have 22 head of mules and four cows and three ponies. Their names are Peanuts, Daisy and Nancy. I like to ride best of all.—Anna Budig, Waitsburg, Wash.

George Killed 22 Rattlesnakes.

Dear Aunt Nellie: This is the first time I have written to the Corner. We live on a farm of 520 acres. I ride six miles to school. We have 19 head of horses, six colts, three cows, two calves and one dog. I have killed 22 rattlesnakes this year, as they are very thick up in the hills. I have one swarm of bees.—George Nichols, Wallula, Wash.

Snowball Hae Four Baby Kittens.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. My birthday is the 30th of June. I would like to correspond with any girl who is my age and whose birthday comes on the same day as mine. I am 9 years old. We have two cats named Fluff and Snowball. Snowball has four little kittens, one gray one and three white ones. We had a dog, but he went with the cows and never came back. His name was Billy. My aunt Helen is spending the summer with us. My grandpa and grandma have an antomobile. They are going to Seattle in it. I enjoy the Children's Corner very much.—Hazel Casberg, Clayton, Wash.

Loves Country With All Her Heart.

Dear Aunt Nellie: I received the nice book as first prize. I thank you very much for it. I was much surprised to see my name in the Farmer as a prize winner. We are very busy these days. We are trying to do a lot of building this summer. We are also going to raise more garden than we generally do. It seems slow working on our place because it is half a mile from where we live. But the tortoise was slow, too. I am 12 years old and will be 13 the 8th of September, 1917. Have I twin? I love my country with my whole heart and I hope all the cousins do, too.—Annie L. Hutsell, Mora, Wash.

Mary Lives Near the Columbia.

Dear Aunt Nellie: I like to read the Children's Corner very much. I am in the third grade and I am nine years old. We live on a 290-acre farm and close to the Columbia river. We have 400 little chickens and are going to set 360 eggs more. They are almost all white Leghorns. I like to watch the little chickens. We have 60 head of cattle and are milking 20 cows. We have three lambs and one cat and two kittens. The North Bank railroad runs through our place. I have four sisters and one brother. Their names are Frances, Gladys, Edna and Dolly and Leland.—Mary Heot, Greer, Wash.

Visiting in the Country Now.

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. My father takes the Washington Farmer and I like the children's letters very much. I am 12 years old and I am in the seventh grade. My birthday is August 6. Have I a twin? My father is the mayor of Pomeroy. I am out in the country visiting while my father and mother are at Seattle. I like it very much. My friend has 17 pet lambs and seven rabbits. He feeds the lambs with a bottle.—Ruth Matthies, Pomeroy, Wash.

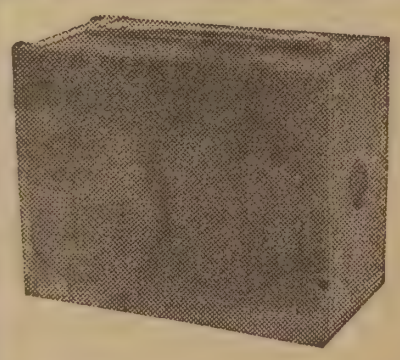
Goes After the Cows With Sister.

Dear Aunt Nellie: I am a boy and my name is Buster. I have an old hen and her name is Biddy Black. Last winter both of her feet and bill froze off. I can catch her anywhere and any time I want to. I have two dogs. Their names are Bruno and Bingo. I go after the cows with my sister. I like to tease my cousin and smallest sister.—Buster Miller, Mayview, Wash.

Ina Has Planted Beans and Tomatoes.

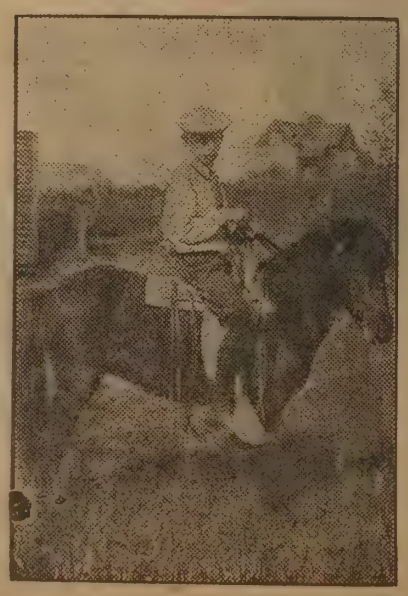
Dear Aunt Nellie: This is my first letter to you. I planted three rows of beans for myself and two rows for papa. I also set out some of my own tomato plants. I live on a farm of 80 acres. I am nine years old, but will be 10 the second of October. I would like to correspond with any one my age. —Ina Stewart, Chewelah, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the past week: Lois Carmichael, Helen Anderson, Vesta Johnson, Effie Luddington, Victoria Chevalier, Catherine Borden, Alice Duncan, Esther Hergert, Leona Machlied, Eunice Libbey, Lela Perkins, Beulah Shaw, Marie Haven.



BOYS AND GIRLS
You can still get this dandy Premo Junior Camera FREE!

Takes picture like this.



Now is the time of year to take pictures. Dozens of our boys and girls have had us send them cameras during the past week or so. Why don't you get one, too?

SEE HOW EASY IT IS TO GET ONE

Go to two neighbors and tell them if they will subscribe to THE WASHINGTON FARMER one year they will be helping you get a camera. Ask each of them to give you one dollar for the subscription, and when you have the two dollars send it to us and we will immediately send you the camera. If the first two neighbors you call on are already taking THE WASHINGTON FARMER, try other neighbors until you get the two subscriptions. It won't take but a little bit, and then the camera will be yours, to take pictures with for years to come.

Start out for your two subscriptions today. A renewal subscription counts just the same as a new one. Send the two subscriptions and $2 and right back will come the camera to you.

The WASHINGTON FARMER

Premium Dept. Review Bldg. SPOKANE, WASH.

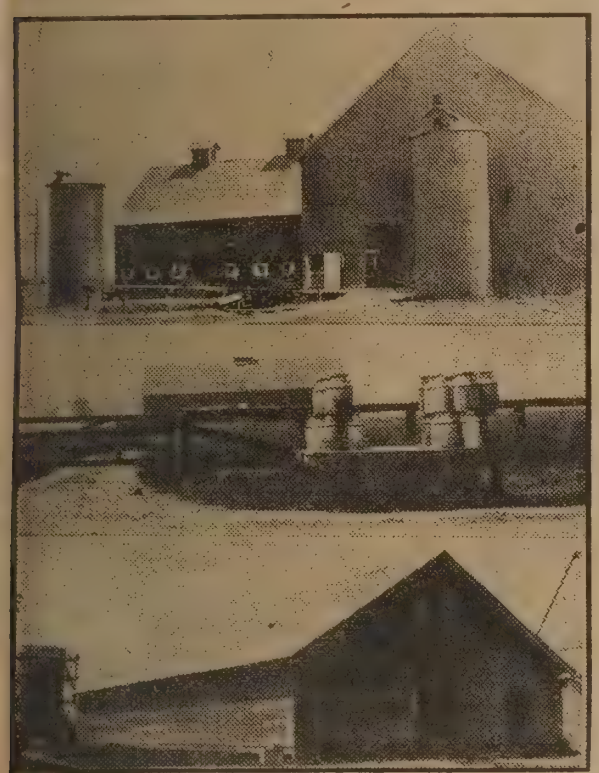
Pioneering in White River Valley

When the Nelson family moved into White river valley, back in 1884, there were more pests of one kind and fewer of another, according to N. C. Nelson.

"Things didn't look much as they do now," Mr. Nelson admits. "Back toward the bench where our hay land is now there was a swamp. Grazing horses used to get mired in there, and we'd have to pull them out with a long rope and another team, working on the solid ground some distance away. There were elk horns, overgrown with alder trees, in that swamp. I suppose the bears had driven the elks down out of the hills, and they had mired in trying to cross the valley. If a man fell off a log in those days, he would go down just the same as a horse or an elk.

"When my father bought this farm he dug a small ditch through the swamp land. A neighbor told him he never could drain the land, as it was a natural swamp, but it wasn't long before the ditch had washed deeper and wider, and was carrying off a lot of water. Clearing the brush and woods and draining the land did what you see—the ground is solid enough now.

"The pests we had in those days were different from those of today. There were mink and wild cat, but those made rather good sport for the boys of pioneer years. Now these animals are gone, and we have root maggots and cabbage woorms. One of the most serious of all this new generation of pests is the wire worm. On the roots of one kale plant, last year, I counted 26 wire worms, and in addition to that there were a lot of root maggots, with cabbage worms and aphids on the part of the plant above the ground. It's enough to discourage a plant, trying to grow under modern conditions. The wire worm is getting worse in some ways, too; in the beginning I never knew this insect to bother carrots or beans, but now it will attack both. Root maggots still stick to the roots of plants having a volatile flavor, like turnips, radishes, cabbage, etc."



Showing two dairy barns in the White river valley. The top one is the barn and silo on the H. C. Green place. Mr. Green recently installed a milking machine. The second picture gives another view of the barn. The lower picture is the barn on the Nelson place at Kent.

Mr. Nelson states that in his household considerable canning and drying is practiced every year, and that this year the quantity of food so preserved will probably be increased. He is thinking of buying a pressure cooking outfit for home canning, though he emphasizes the point that canning can be done successfully with the common utensils of the kitchen.

Problem of Food Supply

To the Editor of The Washington Farmer: The Washington Farmer has started something going when they call for expressions from the readers of their paper to tell why they thought Uncle Sam ought to take charge of the food supply of the country, and what effect it would have on the farmers.

The noted economist, lecturer and preacher, N. Dwight Hillis, addressing the graduating class of Ames four years ago, said that in two score years we shall have 250,000,000 people, and, at the present rate of consumption and progress we shall not be able to maintain ourselves. This statement bears out the predictions of the lamented James J. Hill that "if the present method of agriculture shall be pursued for another generation the American people will not be able to produce enough to feed themselves."

The amount of advice handed out to the farmer these days is tremendous. Many of the advisers know nothing from personal experience about agriculture. A great deal of futile and foolish advice is given. It is no wonder that the farmers get irritated by it. It is foolish to think that they will take it in good part when they are called unprogressive and unbusinesslike. Now the suggestion is made for a great army of college boys to be turned loose on the soil this summer. Naturally the farmer looks with considerable doubt on the feasibility of this plan, for we know from experience what a school boy is on the farm. However, let him not look sneeringly on the boys' capacity. He lacks the experience, but he will put more muscle and enthusiasm into it than three old-time skilled and sluggish farm hands.

The way to adjust ourselves to conditions is to increase production by universal gardening and fruit culture. Use evaporators for curing and saving the crop; raise more poultry; engage in high-class dairying; improve the bungling way that we now have in distribution; abolish the illegal practices of syndicates organized for the restraint of trade. We should get away form the paper sack and tin can way of living. Practice home cooking, can, dry and save all you can. If the government is going to take over the food supply problem it should guarantee farmer a living wage, say $1.50 per bushel for wheat. Cutting out 75 per cent of the useless distribution would do more good than tons of literature that are flooding the mails telling the farmer what he should do.

C. C. BROWN.

Castle Rock, Wash.

Hired Help on Farm.

For obvious reasons the writer of this article withholds his name for publication. The Washington Farmer is glad to publish letters on this subject from farmers as well as from men who work on farms.

To the Editor of The Washington Farmer: May I say a few words on the farmer's side of the hired help question? We note the way our unknown friend feels on the subject. We came to the Big Bend 16 years ago. We had more than $10, but unlike the rich farmer he mentions, we could not cash in for $100,000 as he could. We have been a farmer from boyhood, have worked for 75 cents per day and $22 per month, and did more hours work at those wages than the average hired man does on a Big Bend farm. We have hired men by the month for many years. It is our policy to have a good spring cot and mattress for each man's use, as it is more satisfactory than to crowd the boys. We have much more satisfaction in taking young men under 25 than older ones, as they are better satisfied and lack the feeling of jealousy that prevails among the older men; besides, they are more apt to be strong enough to eat pie; and all good housewives are sure to put pie to us occasionally. We make it a practice to tell each young man when he comes, to try to make himself at home. He has free access to our library and to practice on the piano. We like to hear his voice raised in song, and if he is able to sing he generally does before being on our farm very long. We are acquainted with many farmers who hire men, and I can not call to mind a single one who gives his men a board for a bed or that would keep his men from taking a bath, neither do I know of one that has a separate room for each man and private bath for his royal highness, and furthermore, I never will. Such a class are not hired men to do honest work for an honest wage, but time-killers.

A READER.

Fires in National Forests.

Lightning caused 23 per cent of the fires in the national forests of Oregon and Washington in 1916. Careless campers were responsible for almost as many.

Many Home Gardens.

More than 2,000,000 home gardens have been planted in the United States this year. Their product will add $250,000,000 worth of vegetables to the normal supply.

DISTRIBUTE CATTLE.
Stock Yards Are Clearing House.

Reports from Pasco say that the new Pasco union stock yards are acting as a clearing house for the distribution of cattle not fat enough for market among farmers with pastures capable of putting the finish on them.

The excessive dry weather has caused the upland pastures and ranges in the vicinity of Pasco to dry to such degree that many cattle are reported as being turned onto the market in poor condition. They are being distributed by the yards to farmers in irrigated districts who have alfalfa or other pasture for them.

PROTECT AMERICA'S BREAD-BASKET



FIRE IS THE ROBBER THAT WOULD STEAL YOUR WHEAT

Patriotism and Pocketbook demand that you "move heaven and earth" to save your grain from fire.

Call to your aid all the forces that are ready to give you cooperation—but ACT and ACT PROMPTLY!

The State Insurance Commissioner's forces are in the field to aid you; the State Council of Defense is enlisted; the Northwestern Mutual, with its strong organization all through the grain belt, is offering you every assistance in its power.

But after all the main responsibility is up to YOU!

Organize your own fire-fighting forces. Provide quickly movable equipment—milk cans filled with water, sharp-pointed shovels, plenty of wet sacks, etc. Conquer the fire before it has time to gain way.

Insurance will lessen your personal loss, but it will not restore lost grain or feed hungry mouths.

Save the Grain for Uncle Sam!

If a Northwestern Mutual fieldman is not in easy reach write us today for further suggestions on protecting your grain.

Northwestern Mutual Fire Association

F. J. Martin, Pres.
Main Offices—208 Columbia St.
SEATTLE

INLAND EMPIRE OFFICE
Old National Bank Bldg.
Spokane

Grain and Produce Markets

Chicago Grain.

CHICAGO, July 28.—Anxiety over shipping complications due to the switchmen's strike did a good deal today to cause an all-around advance in value of grain and provisions. Corn finished strong, 3-4c to 3 7-8c net higher, with September at $1.63 3-4 and December $1.19 1-8 to $1.19 1-4. Wheat closed unsettled, 3c to 8c up at $2.60 July and $2.29 September. Oats showed a jump of 11-4c to 15-8c and provisions 10c to 27c.

Unfavorable crop news from North Dakota and western Canada increased bullish sentiment regarding wheat. The chief other bullish factor aside from the indirect influence of the strike was the prospect of final agreement on the terms of the food control bill with a provision for a generous minimum fixed price to be paid for wheat at primary centers.

Cash Quotations.

CHICAGO, July 28.—Wheat—No. 2 red, $2.65; No. 3 red, No. 2 hard and No. 3 hard nominal.

Corn—No. 2 yellow, $2.28; No. 3 yellow $2.27@2.27 1-2; No. 4 yellow, nominal.

Oats—No. 3 white 81 1-4@82c; standard, 82@82 3-4.

Rye, No. 2, $2.12@$2.20.

Barley, $1.25@1.52.

Timothy, $4.00@7.50; clover, $12@17.

Chicago Futures.

Wheat—	Open.	High.	Low.	Close.
July	2.60	2.64	2.60	2.60
Sept.	2.30	2.30	2.28	2.29
Corn—				
Sept.	1.63	1.63¾	1.63	1.63¾
Dec.	1.17¼	1.19⅝	1.17¼	1.19⅛
Oats—				
July	.76	.79	.77½	.78½
Sept.	.60½	.61⅞	.60½	.61½
Pork—				
July	40.60	40.60	40.50	40.60
Sept.	40.55	40.60	40.50	40.60
Lard—				
Sept.	20.60	20.77	20.60	20.77
Oct.	20.80	20.85	20.72	20.85
Ribs—				
Sept.	21.87	21.87	21.80	21.87
Oct.	21.77	21.77	21.72	21.77

Pacific Northwest Grain.

SEATTLE, July 29.—Wheat—Bluestem, $2.17; turkey red, $2.17; fortyfold, $2.14; club, $2.14; fife, $2.14; red Russian, $2.12.

Barley, $43.50 per ton.

TACOMA, July 28.—Wheat—Bluestem, $2.17; fortyfold, club, red fife, $2.14; red Russian, $2.12.

PORTLAND, Ore., July 28.—Wheat—No quotations.

WALLA WALLA, Wash., July 28.—Net prices for new grain, August and September delivery—Club wheat, $2; bluestem, $2.06. Barley, $40.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $2.50@3 cwt.

Apples—New Washington apples, $1 20-lb box.

Butter—Blanchard cartons, 43c lb; Medo-Maid, 43c lb; Cascade, 43c lb; Gold Leaf, 43c lb; Better Butter, 43c lb; Attalia, 43c lb; Diadem, 40c lb; Hazelwood, 43c lb; Solid Pack, 41c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25½c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 29c lb; domestic Swiss, 35c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs,$12@12.50.

Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.

Dressed Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Wool Market.

BOSTON, July 27.—The commercial bulletin will say tomorrow:

The improvement in the tone of the wool market which became apparent a week ago has continued into the present week with a continuance of fair buying of new territory wools in the original bags at fully firm prices. There also has been some demand for fine and half blood foreign wools. Buying in the west has become rather limited although recent purchases are at full prices.

Stored basis: Texas fine 12 months, $1.65@1.70; fine eight months, $1.45@1.50; California, northern, $1.70@1.75; middle county, $1.40@1.45; southern, $1.15@1.20; Oregon eastern No. 1 staple, $1.75; eastern clothing, $1.50@1.55; valley No. 1, $1.45@1.50; territory fine staple, $1.75@1.77; half-blood combing, $1.45@1.50; 3-8 blood combing, $1.30@1.35; fine clothing, $1.55@1.65; fine medium clothing, $1.40@1.50; pulled extra, $1.80@1.85; AA, 1.70@1.80; A supers, $1.45@1.50.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., July 28.—Hogs—Receipts, 9200; steady to strong. Heavy, $14.35@15.35; mixed, $14.50@15.60; light, $14.60@15.60; pigs, $12@14.75; bulk of sales, $14.50@14.90.

Cattle—Receipts, 100; market, nominal. Native steers, $9@13.75; cows and heifers, $7@9.50; western steers, $8.50@11.50; Texas steers, $8@9.50; cows and heifers, $7@9; canners, $5.50@7; stockers and feeders, $6@9.50; calves, $9@13; bulls, stags, etc., $6@9.50.

Sheep—Receipts, none; market, nominal. Yearlings, $9.50@10.75; wethers, $9@10.50; ewes, $8.50@9.30; lambs, $14.75@15.25.

At Chicago.

CHICAGO, July 28.—Hogs—Receipts, 10c lower than the opening, which was 11c lower than the opening which was strong and 20c to 25c above yesterday's average. Bulk, $15@16; light, $14.75@16.05; mixed, $14.65@16.10; heavy, $14.45@16.20; rough, $14.45@14.65; pigs, $11.75@14.60.

Cattle—Receipts, 700; weak. Native beef cattle, $7.60@14.15; western steers, $8.40@11.50; stockers and feeders, $5.80@9; cows and heifers, $4.50@11.65; calves, $8.75@13.25.

Sheep—Receipts, 7000; steady. Wethers, $7.50@10.75; lambs, $9.75@15.60.

At Seattle.

SEATTLE, July 8.—Receipts, none; market, steady.

Hogs—Prime light, $15.60@15.70; medium to choice, $15.25@15.45; smooth heavies, $14.75@15.90; rough heavies, $14.25@14.65; pigs, $14.20@14.65.

Cattle—Prime steers, $9.25@9.50; medium to choice steers, $8.50@8.75; common to good steers, $6@7.50; best cows and heifers, $4@4.50; best bulls, $6.50@7; common to good bulls, $3.50@6.50; calves, $6.50@9.50.

At Portland.

PORTLAND, Ore., July 28.—Hogs—Steady; receipts, 244. Prime heavies, $15.50@15.60; light, butchers and packing, $15.40@15.50; bulk of sales, $15.35@15.50; rough heavy, $14@14.50; pigs and skips, $13.50@14; stock hogs, $12@13.

Cattle—Steady; receipts, 5. Steers—Prime to light, $8@9; prime heavy, $8.50@9; good, $7.50@8; cows, choice, $6.50@7; medium to good, $5.75@6.25; ordinary to fair, $5@5.50; heifers, $5@7.25; bulls, $5@6.50; calves, $7@9.

Sheep—Steady; receipts, 14. Spring lambs, $11@11.50; spring lambs, culls, $6@9; best wethers, $7.50@8; heavy ewes, $3@6.50; best yearlings, $8@8.50.

Spokane Union Stock Yards.

Hogs — Receipts, none; market, steady.—Prime light packing, $15.20@15.35; prime heavy packing, $15.35@15.50; smooth heavy, $14.20@14.50; pigs, $13.25@14.25.

Cattle—Receipts, 29; market, weak—Prime light steers, $8@8.25; prime heavy steers, $8.25@8.75; good steers, $6.75@7.25; ordinary to fair, $5.25@5.75; prime cows, $5.50@6.50; good cows, $5@5.50; common cows, $4@5; best heifers, $5.50@6.50; bulls, $5@7; calves, $7.50@9; stockers and feeders, $5@6.50.

Sheep — Receipts, none; market, steady.—Prime lambs, $12@12.75; prime yearlings, $9@9.75; prime wethers, $9@9.75; prime mutton ewes, $6.50@8.

Seattle Market.

SEATTLE, Wash., July 28.—Western avenue merchants, almost without exception, complained today that the street car strike now in its second week here was responsible for a decrease of 20 to 33 1-3 per cent in the volume of business done, in withheld orders for Washington fruit and produce, and in lower prices beyond what would have been paid by buyers. Scarcely any of the seasonable commodities escaped breaks as a result of inability of consumers to get to the retail markets.

The fresh ranch egg market has advanced to 43 cents, due to lighter receipts. Storage stocks of eggs are practically normal, although some of the dealers deferred storing until late and paid a high price for their holdings.

Poultry prices will be steady next week.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transaction by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 36@38c per dozen.

Poultry—Live hens, fat, over 4 lbs., 18c per lb.; 2 lbs. and under, 13@16c; old roosters, 11c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 10c per lb.; broilers, live, 15@17c per lb.

Butterfat—47c per lb.; dairy butter, 31@32c.

Beef—Buying prices: Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 14@15 1-2c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 30c per lb.; green hides, 17c per lb.; salted bulls, 16c per lb.; dry hides (short trim, 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 13c per lb.; dry butcher full wool sheep pelts, 38@42c per lb.

Portland Market.

PORTLAND, Ore., July 30.—Butter prices were advanced another cent by the city creameries in the latter part of the week. Production is small and the demand is good.

Cheese has weakened and Tillamooks are quoted a cent lower.

Egg trade drags, but prices are holding fairly steady.

been offered for 1917s.

Potatoes are firmer, as the dry weather is keeping back new Oregons and jobbers have been obliged again to order California stock.

Walla Walla onions are arriving in car lots and the quality is entirely satisfactory. They are quoted on the street at $1.25 per sack.

There is a good demand for large hens at 16 and 17 cents and light hens are weak at 15 cents. Springs are steady. Ducks, geese and turkeys are slow sale. Moderate arrivals hold dressed meats steady.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $46 per ton..

Corn—Whole, $80; cracked, $81 per ton.

Millstuffs—Bran, $34 per ton; shorts, $37.

Barley—No. 1 feed, $45; brewing, nominal; rolled, $49.

Hay—Buying prices: Timothy, eastern Oregon, $26; alfalfa, $18; grain, $12@15.

Eggs—Oregon ranch, case counts, 35c per dozen; candled, 38@39c.

Poultry—Hens, 15@17c; ducks, 13@17 1-2c; turkeys, alive, 18@21c; geese 8@9c.

Butter—City creamery, prints, 43@44c per pound; cubes, extras, 40c.

Cheese — Tillamook triplets, 22c; young Americas, 23c.

Dressed meats—Veal, 15 1-2@16c; pork, 19 1-2@20c.

Hops—1916, nominal; contracts, 10@12c.

Potatoes — New, 3 1-4@3 3-4c per pound.

Wool—Eastern Oregon, fine, 58@61c; coarse, 58@65c; valley, 72 1-2@75c.

Beans — California small white, 16 1-2c; large white, 16c per pound.

Hides—Salted hides (25 lbs. and up), 20c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 32c; green hides (25 lbs. and up), 18c; green stags (50 lbs. and up), 13c; dry hides, 34c; dry salt hides, 29c.

Seattle Wheat.

SEATTLE, July 28.—The suggestion from Washington that farmers should get $2 per bushel for their new crop wheat so effectually cleared the atmosphere in local grain and milling districts this week that contracts for new crop bluestem and turkey red went forward briskly.

During the week numerous sales at $2 have been reported for quick delivery and with speculation eliminated by federal control trade is settling slowly down to known normal conditions, a state of affairs that has been devoutly wished for more than 90 days. The gloom that surrounded the wheat and flour trade is gradually being dispelled and operators are turning much more hopefully to the future than they have been able to do since the country entered the war.

Heartening crop reports have had much to do with the healthier undertone. In place of half a yield, as feared during the hot winds of a week ago, Puget sound millers, basing the forecast on authentic reports from country stations, are able to outline a yield of from 60 to 70 per cent in spring wheat as the facts appear today. Washington milling bluestem is being harvested and first carload lots are promised much earlier than previously supposed. Millers now say they will be able to warehouse bluestem and turkey red between August 1 and 5.

According to the expressed and specific desire from Washington, there will be no futures, but cash sales of new wheat will prevail throughout the year. Members of the Merchants' exchange are now discussing the project of listing new crop wheat on the early August sessions.

Carload receipts at Seattle, Tacoma and Portland for the last six seasons, including the fiscal year closing June 30 last, were as follows:

	Seattle.	Tacoma.	Portland.
1916-17	5,637	7,665	6,520
1915-16	8,157	7,055	10,466
1914-15	8,144	9,245	16,630
1913-14	6,909	9,373	15,789
1912-13	7,630	11,815	17,433
1911-12	6,500	10,821	13,500

Milk Price Boosted

Producers and Distributors Raise

Another development in the dairy situation in eastern Washington was recorded last week when the milk distributors in the city of Spokane, where a keen fight has been under way for several months, announced a raise in price to 14 cents a quart for bottled milk, an increase of practically two cents a quart.

The increase to the producers is 1 1-3 cents a quart, so that the increase made by the distributors of two cents a quart means a raise to the distributor of about two-thirds of a cent. This means that the cost of the 16,000 quarts of milk consumed daily in the city of Spokane will be increased about $320 to the consumer, of which increase the producers will get a little more than $200 and the distributors a little more than $100.

Under the new schedule of prices for the milk producers, to become effective August 1, they will receive 24 cents a gallon for milk testing 3.6 per cent butterfat, with a one-third of a cent increase for each one-tenth of one per cent increase in the butterfat test. Thus milk testing 4 per cent will bring 25 1-3 cents. On the same sliding scale milk testing below 3.6 per cent butterfat will be subject to a discount of one-third of a cent for each one-tenth of one per cent decrease.

Railroads Boycott Lamb

Lamb Producers Boycott Railroads

Certain railroads, with a view to assisting in the conservation of foodstuffs, have announced what is virtually a boycott on lamb, though the announcement is made from the best of motives. It is planned to eliminate lamb from the menus of the dining cars.

In return, the growers of lamb have announced that they will boycott any railroad that puts this order into effect, declaring that the sheep industry has been built up in recent years to supply a demand for young mutton, and that the increase in amount of meat from a lamb to a yearling mutton is insufficient to pay for the additional cost of wintering over.

This is an interesting situation, and one of vital concern to the sheep industry of the northwest, as well as to the consumers of mutton. Developments and arguments on both sides will be followed up in next week's issue of The Farmer.

Cannonball Tree.

A native tree of South America, the cannonball tree, bears round, woody fruit which closely resembles baseballs.



Pay Highest Prices for Wool

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

HIDES
WOOL · PELTS
FURS · TALLOW

SHIP TO US
NO CARTAGE NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS · HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC
SEATTLE
BE SURE AND MENTION THIS PAPER

HIDES

WOOL, PELTS, MOHAIR, CASCARA BARK

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

THE H. F. NORTON CO.

53-55 No. Front St., PORTLAND, ORE.
206 3d Ave. So., SEATTLE, WASH.

Use Care in Canning

(Continued from page four.)

Use only good quality live rubber rings.

Use only fresh, sound vegetables or fruits.

Wash products thoroughly.

Blanch in boiling water or live steam—hot water or vapor will not do.

Dip quickly into and out of cold water—do not soak.

Pack into jars immediately—do not let the dipped products stand uncovered while you attend to something else.

Be sure the jars are hot when the product is put into them. They can be kept hot in vessels of boiling water.

Place the top and rubber on each jar as it is filled—do not wait until all the jars are filled.

Place the jars in boiling (not merely hot) water deep enough to cover them entirely (not merely part way up the side of the jars.)

Sterilize for the full time indicated in the directions. Count time after boiling point has been reached.

SAVE YOUR PAPERS.

For several weeks The Farmer has been publishing information on canning and drying fruits and vegetables. If you have not filed our papers away, hunt them up now, before they are destroyed, and keep them for reference. The general information, recipes and time tables given in these recent issues are valuable to you.

After sealing, turn jars upside down to cool, so that those with leaky seals may be found easily, and so that their contents may be resterilized in tight-sealing containers.

Above all, plan so that you will not be interrupted. Then work quickly, and devote your whole attention to the work in hand. Let all other housework go, if possible, until all the jars are in the sterilizer. Any delay in performing the steps between blanching and sterilizing means risk of loss.

Railroads Fight Fire

Relative to the dangers of fires along the railroads during the dry summer season, J. P. O'Brien, general manager of the O.-W. R. & N. company, has issued a statement outlining methods of prevention used by the railroad companies, and calling upon all farmers along the rail lines to cooperate as fully as possible in the work of fire prevention. Extracts from his statement follow:

"While we have had fire patrol service for years, and our section crews and trainmen are always on the alert to prevent destruction of property, we are adding to our protective measures. On all trains operating through territory where the danger is greatest, particularly through wheat sections, a watchman is stationed on the rear car. His duty is to keep careful lookout, and if smoke or blaze appears the train is stopped and the fire extinguished.

"Our right of way is kept as clear of inflammable material as possible. Adjoining this, we work in cooperation with the owners of the land. It is essential that a safeguard for grain fields be provided. The cutting of a swath, the plowing of a furrow and the burning of the stubble are things that should be looked after. Here is where the farmer can assist.

Chimes Make Cannon.

Hamburg has just bidden a touching farewell to the noted chimes of two principal churches, St. Nicholas and St. Peter's, from which the bells have been expropriated under a general order seizing all German church bells to be melted into cannon. Great crowds assembled around the churches and joined in hymns which organists played for the last time on the bells. The chimes are composed of 43 and 50 bells, respectively, and will provide about 30 tons of gun metal.

Control Peanut Market.

Marseilles, France, is the great central market for peanuts, more than 120,000 metric tons of peanuts in the shell and 240,000 tons of shelled nuts being crushed there in a single year.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

HELP WANTED—MALE 3

HAWTHORNE AUTO SCHOOL.
462 Hawthorne Ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

AGENTS—WANTED 9

TRANSFER FLAG EMBLEMS APPLIED to auto windshields, headlights and store fronts. Sample on glass 25c. U. S. Sign Co., Spokane, Wash.

SITUATION WANTED—General 24

MAN AND WIFE WANT WORK ON farm with bachelor or widower. We want work where good help is appreciated and long job is assured. Address L 26, Spokesman-Review, Spokane.

EDUCATIONAL 45

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free. BEHNKE-WALKER BUSINESS COLLEGE, 167 FOURTH ST., PORTLAND, ORE.

WHITWORTH COLLEGE, SPOKANE. COLLEGE COURSES 4 YEARS, FOR YOUNG MEN OR WOMEN. ALSO HIGH SCHOOL COURSES. WRITE FOR CATALOGUE.

SIX MONTHS' COURSE IN BUSINESS worth more to you than 2 years' high school; guaranteed positions. Blair Business College, Spokane, Wash. Free catalog.

FRESH FOOD PRODUCTS 56

MILD CURED BLACK COD BELLIES, the best part of the fish; a real delicatessen; packed in pails, 10 pounds net weight; shipped by parcel post; within 100 miles of Seattle, $1.15; 200 miles, $1.25, 300 or over, $1.40. Superior Fish Company, 2615 Railroad ave., Seattle, Wash.

FRESH FRUITS, VEGETABLES AND guaranteed fresh eggs. Write for prices, f. o. b. Freewater, Ore. E. W. Wehtje, R. 2.

MISCELLANEOUS 57

PUBLIC LANDS AND MINING MATTERS a specialty. Twenty years' experience in connection with the administration of the public land laws and the adjudication of questions arising thereunder. Best of references. James I. Parker, Southern Building, Washington, D. C.

FREE MAP AND FOLDER DESCRIBING Puget Sound Farms. Send for it. CHARLES SOMERS COMPANY, Alaska Bldg., Seattle, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
Manufactured in our own mill and sold at factory prices. We ship to anyone, anywhere. One price to everybody. Prompt shipments. Safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request.

5 cross panel doors, No. 1	$1.65
Craftsman bungalow doors	1.90
One panel, 3-ply veneer doors	2.25
French doors, 15 lights	4.00
Screen doors, 2-8x6-9, galv. wire	1.50
Standard 2-light windows, up from	1.25
8x10, 4-light sash	.57
16x16x26 spruce flour bins	1.50
Drain boards, 20x24	.75
Williams' "Gold Seal" mixed paints, per gallon	2.50

Frames, mouldings, builders' hardware, mill work.

O. B. WILLIAMS CO.
1943 1ST AVE. SO. SEATTLE, WASH.

CUT YOUR OWN TIMBER
on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With the sawmill you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine.
Write for catalog and full details.
CLYDE EQUIPMENT CO.
18TH AND UPSHUR STREETS,
PORTLAND, ORE.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

LUMBER, SHINGLES, MILLWORK. SAVE money by getting your building material direct from the mill. Let us quote you delivered prices. W. W. Wells Co., Box 1010F, Everett, Wash.

MACHINERY—FOR SALE 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS,
Carried in stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave. So., Seattle. Write for catalog.

AUTOMOBILE ENGINES
are great for tractors. If you are building a tractor, see us for a good engine at a reasonable price.
AUTO WRECKING CO.
89-91 North Broadway, Portland, Ore.

AUTOMOBILES 114

AUTO TOPS, BUILT TO ORDER, AND repaired. N. Reeder, Dept. F, Spokane, Wn.

STOVE REPAIRING 126

MYER S. RUBENS STOVE & FURNACE Repair Works; welding. W1009 1st., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

PATENTS ON INVENTIONS
secured that protect.
James I. Parker, Solicitor
of Patents, Southern Building,
Washington, D. C.

PETS—DOGS, BIRDS, ETC. 171

NATURALLY BOB-TAILED SHEPHERD pups; one male, $10; two females, $7.50 each. Lester G. Foster, Pasco, Wash.

POULTRY 174

SACRIFICE SALE—50 MATED PAIRS pure bred working Carneaux Belgian squab breeders. $50 takes them all. Ten pairs for $11. W. H. Russell, Coeur d'Alene, Idaho.

LIVE POULTRY WANTED—HONEST weights, prompt remittance. Highest market price. Smith Poultry Co., W420 2d ave., Spokane.

LIVE STOCK 177

THREE REGISTERED GUERNSEY BULLS, one six months old, sired Languater Emigrant (14076), dam Lillie Lynes (25492). Her record for 1916, 672 lbs. butter. She has two A. R. daughters, one 664.79 butter fat in 1916, Jenne Van (26274). The two other bulls are well bred, May Rose, Sir Overland's Royal Sequel. Middledale Farms, Goshen, Ore.

REGISTERED POLAND CHINA BOAR, 4 yrs., approx. weight 450 pounds, $40. Leslie G. Foster, Pasco, Wash.

VETERINARY SURGEONS 186

DR. G. R. STEWART, VET. SURG. AND dentist. W1213 2d ave. Tel. 2624, Spokane.

HOTELS 306

GALAX HOTEL,
cor. Main and Bernard sts., Spokane. A clean, respectable hotel. Rates, 75c to $1.50 per day, with or without private bath. Free taxi from depots.

DAVENPORT HOTEL, SPOKANE, RATES from $1.50; headquarters for farmers and business men of Pacific Northwest and their families; no formality; unobtrusive service.

WHITE'S HOTEL AND RESTAURANT, Rooms, hot and cold water, 75c up. Breakfast, 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

NEW WASHINGTON HOTEL, 403 1ST ave.; respectable; comfortable rms., 50c up.

INTERNATIONAL HOTEL,
234 Main ave., Spokane, 50c up.

NEW MADISON HOTEL,
First and Madison, Spokane, $1 up.

HOTEL COEUR D'ALENE, MOST POPular med. priced hotel in Spokane.

WM. BROWN HOTEL, S170 POST, SPOkane, 75c up.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

OPTICIANS 462

EYES EXAMINED; GLASSES FITTED; perfect results guaranteed. Broken glasses repaired by mail. Postage paid. Dr. Sletto, Owl Drug Store, Spokane, Wn.

DR. I. M. RADABAUGH, SPECIALIST IN examining eyes and fitting glasses, 304 Jamieson bldg., Spokane, Wash.

BUSINESS OPPORTUNITIES 516

BE A DEMONSTRATOR, AND AT THE same time make big money. Write Kamiah Asbestos Mfg. Co., Kamiah, Idaho.

NOTICES 534

INDIAN WARS PENSIONS—SOLDIERS of the old Indian wars, and their widows may now obtain pensions. Recent legislation. Write James I. Parker, Southern Building, Washington, D. C.

ARCHITECTS 558

BUILDING PLANS AND ESTIMATES. L. L. Rand, The Rookery, Spokane, Wash.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

HOMEST'DS, RELINQ'M'TS 642

FOR SALE—TWO RELINQUISHMENTS, joining, 640 a. each, and property in good town, bringing in $60 per mo. Price $5000. D 10, 36 Review Bldg., Spokane.

FARM LANDS—FOR SALE 651

FINE HOMES NEAR SPOKANE.

The tracts described below are near a good city and good market, on good state and county roads, near railroad, good schools, rural free delivery, good society, etc. The climate is conceded to be the best. Domestic and crop water plentiful. No irrigation needed—crops sure. Write for a folder showing photographs and telling of climate and other facts of interest, such as, no failure of crops, freedom from pestiferous insects, frostless belt, amount of wheat, oats, hay, potatoes, fruits, etc., per acre. If the tracts described below do not suit you, tell us what you want.

160 ACRES.

40 acres cleared; 40 acres more slashed and ready to burn; has county roads on two sides and state road on one side; in heart of growing community; ½ mile to school, 3 miles to railroad; rural free delivery, telephones, etc. Would make an excellent home. $4800; 1-10 or 1-5 down, balance 10 yrs.' time, 6 per cent.

80 ACRES.

40 cleared; on two county roads; ½ mile to school; same advantages as above; $3500; on same easy terms.

40 ACRES.

All cleared; two county roads; same advantages as above; would make a superb little home place. Only $1800; $360 cash, balance same easy terms.

50 ACRES.

All in cultivation; now in crops; pressure water system; nice little bungalow, good barn, chicken houses and runs; on county road, ½ mile to school, close to railroad, etc. Only $3750.

MILAN FARMS DEVELOPMENT COMPANY.
1322 Old National Bank Bldg.
or
ALLIN REALTY COMPANY.
408 West Sprague Ave.
Tel. Main 2750.
Spokane, Washington.

1440 A.—SOUTH OF CONNELL. ALL good land; can be farmed with tractor; $21 per acre.
1740 A.—Wheat and stock ranch; 500 A. farmed; $16 per acre.
6600 A.—A fine stock proposition; 300 A. bottom land; $13 per acre.
640 A.—Level land; 320 A. wheat; all crop, stock and machinery goes at $46,000.
1480 A.—This place is one to three miles from town; 800 A. in wheat, balance plowed; price with all crop, and plowing, $60,000.
600 A.—3 mi. from town; 265 A. crop; price with crop, $22,000.
1280 A.—2 mi. from town; 400 A. in crop; price with all crops and plowing, $50,000.
Chas. S. Bassett, Washtucna, Wash.

EQUIPPED STOCK RANCH IN IDAHO; 160 acres; ½ mile from station; 2 railroads; 80 acres in meadow and cultivation; 35 acres timber, balance bottom land with some brush; no waste land; running water; good house, 3 barns; team, wagon and all necessary farm machinery; 30 head cattle, 14 cows milking, all crop goes with place. Price $12,500, 1-3 cash, balance easy at only 6 per cent. Hege & Watkins Co., Paulsen bldg., Spokane, Wn.

A FEW GOOD FARMS IN A SECTION OF almost ideal climate, southern Oregon. These farms are on an excellent all-year auto road and will yield 7 tons alfalfa per acre and corn in proportion. River bottom land; natural drainage; plenty of outrange and good water. All within a few miles of railroad and in a paradise of good hunting and fishing. Write me at once for prices. JOHN C. WHITE, RIDDLE, ORE.

40-ACRE DAIRY FARM NEAR BOISE; mile from interurban line and cheese factory; 24 acres of pasture and alfalfa; 10 acres a little too high for gravity water, balance under plow; cross-fenced. Ridenbaugh water right. Family orchard; plastered house; barn 40x33; silo. Price $4500. Good terms. Hub Realty Company, Boise, Idaho.

FOR SALE—11,000-ACRE GRAIN AND stock farm; will include 500 head of grade Hereford cattle at market price. For full particulars address the owner, H. K. Schuster, Wibaux, Mont.

STOCK RANCH, 480 ACRES.
150 good soil, bal. pasture; the finest of range; 4 miles to R. R. station. $1000 cash. Otto A. Bittrick, 514 Rookery blk., Spokane, Wash.

SOUTHWEST ALBERTA FARMS, ANY size; square deal. No trade. Cardston Investment Co., Ltd., agents R. R., Hudson's Bay and Company lands. Cardston, Alberta.

FOR SALE—AN EXTRA GOOD 80-ACRE farm in Skagit Co., Wash. Address owner, Victor Peterson, R. R. No. 5, Box 80, Mt. Vernon, Wash.

HAY, GRAIN, STOCK OR DIVERSIFIED farm lands in the Colville valley, reasonable. We answer. H. L. Fisk, Valley, Wn.

2120 ACRES, 800 IN CROP, 23 MILES S. W. Spokane, cheap. Address M., Northwest Farm Trio, Spokane, Wash.

SUBURBAN TRACTS—For Sale 672

EXCELLENT SUBURBAN HOME, NEAR Tacoma, on electric car line, school and church; 4 acres; improvements alone at low figure, including poultry and cow, $5800; will take $5500; place must be seen to be appreciated; good reason for selling. If interested, write Louis Lundgren, R. 4, Box 201, Tacoma, Wash.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

News for Breeders

E. C. Vahlberg & Sons of Emmett, Idaho, pasture their Holstein cows in their orchard. To keep the cows from browsing off the trees they use ordinary wire netting calf muzzles made in cow halter form. Whenever the animal raishes its head the muzzle falls down over the mouth, but when the cow grazes the muzzle slips back, and the cow soon learns to eat grass with it on. As long as she eats with her head down the muzzle does not interfere in any way, but it is a complete protection against browsing, and if the knowledge helps any one the Vahlbergs are glad to pass it along.

C. C. Bales & Sons, who are breeding Herefords three miles from Caldwell, Idaho, have used as a herd header for the last two years Sir Beau Donald 3d, by Perfection 9th, from the A. B. Cook herd. He is a full brother to Woodford, the $12,000 bull of E. H. Taylor Jr. They have also used Hopeful, by Debonair 26th, from the George Chandler & Son herd. This bull has great bone and broad back, and his calves show the same quality to a remarkable degree. They find a ready sale for their Herefords in Idaho, but sell some in Oregon and Washington. They will show at the state fair of Idaho at Boise this fall. The Bales farm of 400 acres has 230 acres in pasture and 200 in hay and grain. The herd consists of 94 registered Herefords and some grades.

George Chandler of the firm of Chandler & Son, Baker, Ore., Hereford breeders, returned recently from an extended trip through the Mississippi valley, bringing back with him eight cows and four 2-year-old heifers, purchased at long prices. For one cow Mr. Chandler paid $1125. He paid $875 for one cow and calf, but sold the calf for $800 before he returned. One of Mr. Chandler's cows was purchased at the Cassidy sale at Whiting, Iowa; six cows and two heifers at the Galbert dispersion sale and two at the Blue Ribbon sale at Kansas City, out of the Luce & Morely consignment. Mr. Chandler reports great interest in Herefords in the east and hardly knows where high prices will stop. The Messrs. Chandler now have a herd that ranks with the best in the entire country. They will probably not be on the fair circuit this fall, although it will probably be shown at the Pacific International, and some animals will be consigned to that sale. Neither does Mr. Chandler think the A. B. Cook herd will be on the fall circuit and he suggests that it is a good time for new breeders to exhibit.

R. E. Tanner of Sumas, Wash., who purchased one animal at the Zorn Jersey sale held recently, also bought three head from Ed Cary of Oregon. One was a bull calf out of Poppy's Maiden, for which he paid $400: the others heifer calves out of St. Mawes Landseer and St. Mawes Retta. Poppy's Maiden is a daughter of St. Mawes Poppy, 1120 pounds, by Conan's 23d grandson, sold by Mr. Cary to Burt Pease when a heifer and repurchased at the Pease dispersal sale for $400. So she had already paid for herself and will greatly increase her already good Register of Merit record, while furnishing profit at the pail.

St. Mawes Susie, that already has an official record of 938 pounds of butter in a year, has started on an official test at 10 years old, with 96 pounds of fat or 114 pounds of butter for her first month, and gives every promise of making a 1000-pound cow or better. St. Mawes Susie Pet, that Mr. Cary bought back at the Zorn sale, has been sent to the Tillamook ranch. The Tillamook climate seems to agree with her. She has already milked up to 40 pounds and at her next lactation will be fitted and put on official test. H. A.

Zila's Pride.



Zila's Pride. This cow was sold at the Forrest sale at Whiteson, Ore. She was bought by Carl D. Irwin of Kimberly, Idaho, for $400. She is a Register of Merit cow with a record of 600.98 lbs. of butter.

Davis Sale of Jerseys

By HORACE ADDIS.

The prices received at the W. B. Davis sale of 80 head of Jerseys at Shedd, Ore., recently, was not only a great disappointment to Mr. Davis, but should be a disappointment to fanciers and well wishers of the breed. The condition in which some of the cattle were offered was against them; the catalogue was issued very late—too late to draw buyers—and lacked some information it should have contained, besides havinga few manifest errors. But all this, and the fact that there was a large percentage of calves and young stock, does not satisfactorily explain an average of less than $100 for the females and still more ridiculously low prices for the bulls, from a herd as well bred and as well known to be a good working herd as that of Mr. Davis.

While there were a few buyers from a distance, neighbors took most of the offerings. T. M. La Mond of Wolf Creek, in southern Oregon, came up and got two good ones at a bargain. The cows sold at $215 each, the top price, and both worth considerably more. J. H. Samuelson of Brownsville, Ore., took one and L. M. Allen of Shedd the other. Mr. Allen also got three good ones at bargain prices, including the good old register-of-merit cow, Smith's Pogis Belle. E. E. Dent of Jefferson was the heaviest buyer. He secured 12 head at very low prices and has now a good foundation herd. Professor McPherson of the O. A. C. bid in six for $410, mostly young stock and worth far more than he paid. Colonel Hughes and Colonel Sudtell did their parts well and secured all that was possible from the crowd present.

PRINCE BOOTH, PRIZE BULL.



William Mulhall of Fenn, Idaho, a little over 15 years ago purchased his first registered Shorthorn cow. Three years later he bought another. These two cows proved to be all and more than he expected, they were both very heavy milkers, regular breeders and the calves were the type of animals he desired. One cow raised him 15 calves and was then sold for beef for $87.50. The other raised 12 calves and is still in the herd suckling a fine calf this spring. He has purchased different herd sires, but his ideal cross on these cows was reached when he got Prince Booth, shown above. He is over a ton bull. The third crop of calves is now coming on. They are uniform in size and conformation and mostly roans in color. He expects to keep Prince Booth to use on the old cows indefinitely. To use on his calves he has purchased Types Model, junior yearling champion at the Chicago International in 1916, also champion at Minnesota, Montana, North and South Dakota state fairs and at the Pacific International in 1915. The purchase price was $2300. He weighed 1750 pounds as a junior yearling. The entire herd now numbering about 80 head are the descendents of these two cows and a large per cent are sired by Prince Booth. Mr. Mulhall believes in sticking to what has been tried and found good. His ideas have produced a herd that shows a very distinct type of breeding and no doubt will produce like in form. The father and two sons are going to make Shorthorn breeding their special business. They will erect a large new cattle born this summer and will conduct regular annual sales.

Live Stock in Denmark.

On February 20, 1917, a special census was taken of the live stock in the kingdom of Denmark and, contrary to expectations, the result of the investigation was very favorable and indicated that the number of animals had not decreased.

The number of horses and colts is set at 538,000, as against 515,000 at the same period last year.

There were 2,453,000 head of cattle, as compared with 2,290,000 the previous year. These figures are nearly as large as at the beginning of the war.

The number of swine is reported as 1,981,000, while in the spring of 1916 the total was 1,983,000. During the period 1914-17, however, the kingdom's swine have decreased one-fifth.

Sheep and lambs totaled 270,000 head, as against 254,000 last year. The statistics for 1914 and 1915 show that at these same periods the kingdom had over 500,000 of those animals.

The number of chickens in the kingdom was 8,250,000.

England Limits Stock.

Here are some of the "dont's" to farmers, issued by the British board of agriculture:

No more farm stock shows must be held.

The number of cattle must be substantially reduced before Christmas, but the milking herd must be kept up. Fat stock shows must not be held.

Auctioneers must not sell animals brought to "prime" condition by cake-feeding.

No corn must be given to pleasure horses.

Cattle should be sent to market leaner than usual.

Sheep must be killed earlier.

Next season's lambing must be deferred until more grass feed is available.

Corn must not be given to pigs.

No more poultry should be kept than can be maintained on scraps and waste food.

$8000 for Guernsey Bull.

A new high price is reported for a Guernsey bull. B. E. Nixon of Yountville, Cal., has secured from Florham Farms of Madison, N. J., the bull Itchen Daisy's May King of Langwater 17349 for an $8000 consideration. Imp. Itchen Daisy 3d 15630, the dam of Itchen Daisy's May King of Langwater 17349, was sold a number of years ago for $4000 and her son, Imp. King of the May 9001, as a calf sold for $2000. Langwater Dairymaid 26377, a daughter of Imp. Itchen Daisy 3d 15630, sold at the Langwater sale last fall for $6150.

HAMPSHIRE SWINE

HAMPSHIRE SWINE

Choice stock of all ages at bargain prices.
HIGHLAND FARM, Box 22, Underwood, Wa.

AUCTIONEERS

AUCTIONEER

Special attention given to live stock sales.
BEN T. SUDTELL. Albany, Ore.

DOGS

Fox and Wolf Hounds



of the best English strains in America; forty years' experience in breeding these fine hounds for my own sport and protection of sheep, hogs and poultry. Send stamp for catalog.

T. B. HUDSPETH.
Sibley, Jackson County, Missouri.

SHEEP

Registered Sheep

Rams—Hampshire, Shropshire, Lincoln and Cotswold. We deal in pure blood registered rams. Grade ewes, one, two and three years old.
GRANT B. DIMICK, Oregon City, Ore.

Breeding Ewes for Sale

$8.50 to $12.50 for 5-year-old Rambouillets and 2-year-old Lincoln Cross. Will sell one or 1000. Write quick.

M. F. KEMMERER & SONS, Addy, Wash.

KNOLLIN RAMS==BETTER LAMBS

Largest purebred Shropshire flock in U. S.
World famous—thirty years standing.
Hundreds of prizes won.
Address A. J. KNOLLIN, Pocatello, Idaho

MISCELLANEOUS

A FEW HIGH PRODUCING COWS FOR SALE

We held the highest herd average in the Marion County Cow Testing Assn., for the past 7 months; our herd average was over 60 lbs. butter per cow, per month, for 7 months. We are also offering a young bull ready for light service from our heaviest producing dam. Write for pedigree and price.
MELLOW LAWN FARM. F. A. Doerfler, Silverton, Ore.

Berkshire Boars for Fall Service

I have a number of thoroughbred Berkshire boars sired by W. S. C. champion boar, brother to Reserve Champion at Panama exposition. Sows from Masterpiece strain. Large, smooth, prolific type.

Delivered f. o. b. your station. Registry papers complete.

R. W. SNYDER, Washtucna, Wash.

Shorthorn Cows and Heifers for Sale by McCROSKEY & SONS

Sprague, Wash.

Young cows with calves at foot and rebred.
One and two year old heifers, bred and open.
Can supply one or a carload. Large numbers to select from.
Can also supply outstanding young bulls unrelated to these females.
Write or wire when coming.
N. P. Station, Sprague. O.-W. Station, Croskey.

FOR SALE— Percherons, Shire Stallions and Mares

Jerico 110196, a dark iron gray Percheron stallion, 3 yrs., wt. 1850; sire Jube 81251 by Coco, dam, Bird 81977 by Brilliant Jr. His 1st, 2d and 3d dams are close descendants of Brilliant. Winnings at Northwest Live Stock show, Lewiston, as suckling colt, first in class and Percheron society gold medal as best stallion under three years, owned and bred by exhibitor. As 2 yr. old, 1st in class and champion under 3 years, three Society medals, best under three years owned and bred by exhibitor, grand champion and best stallion owned and bred by exhibitor and in open class reserve grand champion.

Aaron 117566, a 2-yr.-old half-brother, dark bay, wt. 1550. Sire Salvador 51340 by Calypso. Equally good, (some say better). He has never been shown.

Callie 88642, a dark gray mare, 6 yrs. old, wt. 1750. Sire Apollon 26130. She is very strong in Brilliant blood; has mare colt by Halcite.

Lady Grace II., 15452, a 3-yr.-old Shire, bay, white face and white hind legs, wt. 1650 Sire Imp. Toga VII. 9288; dam Bay Lily 13577, by Imp. Greenham Champion.

All first class in every respect, mostly our own breeding, reserved for our own special use.

On account of the death of one of the partners, must sell to close estate.

FOLLETT & SCHOOLER, Genesee, Idaho.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO 32. AUGUST 9, 1917. ** WEEKLY.

President Pleads for Personal Efficiency

Complete Concentration of All Effort Is Necessary if United States Would Win

Describing this as an "hour of peril," President Wilson has again issued a public statement urging the individual citizens of every part of the nation to prevent waste of foodstuffs and to increase the country's efficiency in food production and conservation. Especially is the appeal made to the women of the nation.



Woodrow Wilson.

Twenty-four states, of which Washington is one, have asked the administration to assist them in insuring the conservation of these foods by canning, preserving, pickling, drying and storing. With the help of a large volunteer committee, including many of the most prominent industrial leaders of the United States, the department of agriculture is concentrating its efforts to stimulate the conservation of food in every community in the nation.

The President's Appeal.

"In this hour of peril, I am concerned, as I know you are, with the necessity of avoiding waste," President Wilson says in his official statement, issued to and through Secretary Houston of the department of agriculture.

"Every bushel of potatoes properly stored, every pound of vegetables properly put by for future use, every jar of fruit preserved, add that much to our insurance of victory, and that much to hasten the end of this conflict. To win we must have maximum efficiency in all directions. We can not win without complete and effective concentration of all our efforts.

We can all aid by increasing our consumption of perishable products. Such of them as we can efficiently utilize, we must utilize, and, by so doing, relieve the strain on our store of staples. We must aim to consume these things locally so far as possible and thus relieve the pressure on transportation agencies, freeing them for the more efficient handling of products required for military purposes. What we can not presently consume we must conserve.

"The service we are asking the people to render in this matter is a public service. It is one primarily for the household. Upon the housewife much of the burden of the task will fall. I join you in your appeal to the women of the nation, whether living in city, town or country, to devote their time, so far as it may be feasible and necessary, to the performance of this very essential work."

Here Are Some Things Each One of Us Can Do

Europe will continue to starve next year just as thousands of its people are starving now, unless we each shoulder responsibility of conserving food. That is the message that the federal food administration is trying by every means at its command to impress upon the American people. Most people fail to understand the gravity of the world food problem, and those who do find it difficult to understand how to reduce home consumption or how to save valuable foodstuffs that are now criminally wasted. The food administration has sent out some suggestions, among which are the following:

1. Eat at least one wheatless meal a day. This means just what it says—wheatless. No wheat bread, no wheat cakes, no wheat breakfast food, no anything that is made out of wheat. Wheat is the great staple food, the one most indispensable to give life and energy to the peoples who are fighting in Europe or otherwise suffering the hardships and privations of the war. Therefore, eat corn bread, corn cakes, oatmeal mush, potato bread—any of the less desirable foods for exportation.

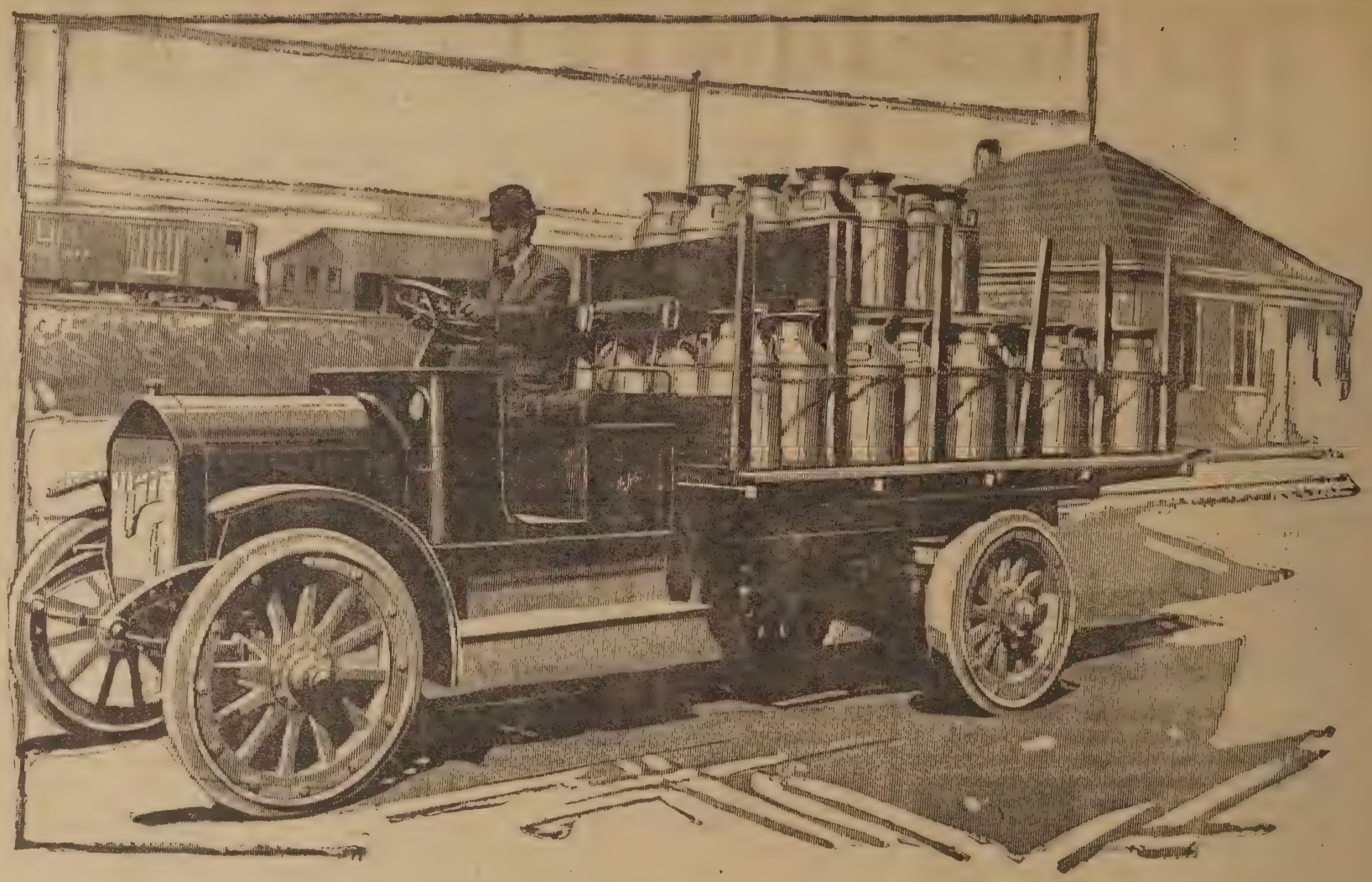
2. Eat beef, mutton or pork not more than once a day. We eat too much meat in this country anyway. We positively, most of us, would be better men and women if we reduced our meat rations—and Europe would be better if it had enough meat to keep soul and body together and half way fit for the struggles that it is enduring. Therefore, deliberately deny yourself these meats part of the time. Eat more vegetables—things that are perishable and not suited for exportation—eat more fish and more poultry. Supply your needs with the kinds of food that can't be made useful in Belgium or France or England.

3. Save sugar. Too much sugar is injurious to the health. We are stealing from a starving child when we put two spoonfuls or three lumps of sugar in our cup of tea or coffee and dissolve and use only half of it. Get along with your fruits and preserves and cakes and so on just a little bit less sweet than you are used to having them.

4. Save butter and lard and other fats. Never throw away the butter left on the plate. Cook with it if it is no longer fit for table use. Save the odds and ends of fats and oils. You will have to buy less and the dealers will have more to turn over to the government to export.

5. Don't think that the ounce or pound you save will never reach a country that needs it. Maybe that particular ounce or pound will not, but the food administration will see to it that the ounce or pound that is left in the warehouse or storage plant because you did not buy it or, if you are a producer, because you sold it, instead of eating it, will get to the mouth that needs it.

While the Smoke From the Forest Fires Settles Over the Northwest, Begin Our New Story, "Under the Black Canopy," in This Issue. It Is a Northwest Story



Garford MOTOR TRUCKS

This Garford Cuts Hauling Time In Half

"I am using my two ton Garford on a twenty-five mile milk haul.

"It formerly took all day with horses.

"I now make it in half a day at less expense."

—Says Scott Armstrong of Mt. Vernon, Wash.

The Garford factory is the largest in the world devoted exclusively to the building of a complete line of motor trucks.

Grasp that fact! Hauling time *cut in half!* Efficiency practically *doubled!*

Think of the saving a half day effects for the dairyman.

Think of the saving it will effect for *you.*

Modern farming demands modern methods of transportation.

Your problem is greater than merely *producing.* You must get your products to market in the *shortest* possible *time*—at the *lowest* possible *cost*—with the *least* possible *wastage.*

It is in the accomplishing of these things that Garford Motor Trucks play *their* part—and where they *make money for you.*

Farmers who are making real money are employing motor trucks—Garfords in hundreds of cases,—for the hauling of hogs, cattle, grain etc.

Garford Motor Trucks are *specially adaptable to farm use* because of their short turning radius and scientific weight distribution,—their economy, their power and their downright dependability.

Any type of body can be furnished on any chassis from the one ton to the 6 ton model. Get in touch with one of our dealers *today* or write direct to us for information.

Write for our booklet, "Roads—Their Influence on Social and Economic Conditions."

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Manufacturers of Motor Trucks of 1, 1½, 2, 3½, 5 and 6 ton capacity
4½, 7 and 10 ton Tractors
The Garford Road Builder
Distributors and Service Stations in all Large Cities

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

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Farmers Can Help Avoid Car Shortage

Economic Crisis in America Requires Cooperation of All Shippers

By O. O. CALDERHEAD

Traffic Expert, Washington State Public Service Commission.

It is only by concerted action on the part of every one looking to the economic conservation of car capacity that a disastrous shortage of cars to handle the crops, fuel, munitions and manufactures this year can be avoided. Unless every bit of available car capacity is used there will be a shortage that will seriously cripple the national government in this crisis.

By the word "capacity" I mean the utilization of the cubical space in the car where the commodity handled is of greater bulk than will permit of loading the car to its weight capacity.

For instance, wheat can be loaded to the full weight capacity of the car without occupying the full cubical capacity; on the other hand, hay will fill the car to its full cubical capacity without approaching the weight capacity of the car.

Load to Full Capacity.

It must be understood that the loading of cars in their capacity will result in a reduction of operating expenses to the carriers, but the prime and first consideration is that there is actual shortage of equipment if said equipment is only loaded to the minimum provided by the tariffs of the carriers; but if cars are used to capacity and loaded promptly and unloaded promptly there should be sufficient equipment to move all of the tonnage of the country without serious delay or inconvenience.

The farmers and warehousemen of the country can materially assist in bringing about the desired results by more carefully considering requirements when placing orders for cars and loading cars when furnished as quickly as possible after the same are placed, without taking the full 48 hours' free time provided in the tariffs of the carriers. Also, the farmers and warehousemen should see that shipping instructions are furnished immediately upon the completion of the loading. Farmers can materially assist warehousmen by advising in advance the approximate amount of the shipment, and wherever possible combine their shipments with others in order to secure a full loading of the cars. It may be possible, for instance, that hay can be compressed to a greater degree than at present. It is true that hay shipped to Alaska, where measurement governs instead of weight, is compressed to a much less bulk than when shipped locally. The farmers in this matter could render great assistance in allowing the hay to be thoroughly cured and then double compressed with a view of getting greater tonnage in the car. It is true that loading cars to capacity will mean some additional time and expense in placing the commodities in the cars, but this will be more than offset by the promptness with which shippers can obtain cars—if all confirm to the ruling of loading to capacity.

Facts Are Undeniable.

In some manner an impression seems to have been developed that the appeal for the capacity loading of cars is simply one of the methods of increasing the net revenue of the carriers. This is far from the actual facts. The truth of the matter is that cars can only be moved a certain number of miles in a day. The average distance the average car is moved in 24 hours is a fact known, as is also the time required for the placing of cars for unloading. The public service commission has also the figures showing the average length of time that cars have been detained under load. This means the number of hours elapsing from the time the car is placed for loading until it is released at unloading point. We know the average amount of tonnage placed in the cars. We know the actual average amount of space and weight carrying capacity of cars not utilized. Consequently, knowing approximately the number of tons to be moved, the number of tons that care will carry and the average length of time required to load and unload same, it is a simple matter of mathematical calculation to know that unless cars can be loaded more heavily, moved more rapidly and loaded and unloaded with greater dispatch, a car shortage that will greatly hamper all of the industries of the United States is a certainty, and it is this reason that is compelling all who know the facts to urge capacity use of cars and promptness in use of them.

New Cars Can Not Be Had.

It is impossible for the carriers to secure new cars to take care of the increased tonnage that will be offered. Manufacturers of cars are absolutely swamped with orders; and, except by direct command of the government, new equipment can not be secured in time to relieve the situation. Consequently it is a matter of using available equipment, which would appear to be sufficient if used to capacity.

The lumber industries, the mining industries and the manufacturing industries can all give important assistance and have responded wonderfully to the call for full loading; and the farmers and warehousemen of the interior can add greatly to car efficiency by using all means at their command in seeing that every car is loaded to its full capacity, even though some additional expense is incurred. By the more careful loading of such commodities as are liable to injury, and holding such vegetables and fruits, etc., as would be damaged by full loading until they have fully matured, thereby increasing the load and decreasing the liability to injury, a great saving can be obtained.

GRAIN STANDARDS
State Adopts Federal Rules.

The Washington state public service commission has adopted for this state the grain standards rules that were adopted last winter for interstate shipments by the federal government. The new standards are different from the old Washington state standards in only a few minor points. Under the standards fixed by the government, grain will be graded from the standpoints of weight, smut, foreign material in it, moisture, and so on, and will be the same anywhere in the United States. The federal standards, however, govern only wheat for exportation or shipment from one state into another. The state rules were made necessary to govern wheat not exported and not shipped out of the state.

First Wheat at $2.

–The Centennial Mill company of Spokane purchased its first carload of the 1917 crop of wheat recently at the price of $2 a bushel on board the cars at Trinidad, in Grant county. It was of the early Bart variety and was pronounced first class milling wheat.

Grain Farm Raises Corn, Peas, Potatoes, Alfalfa, and Stock

By PAUL CLAGSTONE.

It is a real pleasure for the traveler through our Palouse farming district to go over a ranch where not only well kept and highly productive fields testify to the efficient methods adopted by the owner, but where fine live stock, in up to date and convenient buildings hold out the promise that not only is there a certainty of an income from something besides a straight grain crop, but that the fertility of the land is being maintained. Such a ranch is the one owned and conducted by H. S. Curtis, a few miles from Palouse, Washington, on the road to Garfield, and few farms in this fertile region present as thrifty an appearance.

While primarily a grain ranch, a large portion of the 800 acres farmed by Mr. Curtis is devoted to producing feed for high grade and pure-bred milk cows and other live stock. About 100 acres is in high land, non-irrigated alfalfa, which officials of the Whitman Testing association have pronounced the best in the county. That this statement is not far out of the way is proved by the fact that Mr. Curtis' alfalfa produces an average of two and one-half tons per acre. Practically all this hay is fed to livestock on the place.

Mr. Curtis is one of the increasing number of Palouse farmers who for some time have felt that more use must be made of summer-fallow land, and each year sees an increase in crop production from this source. Corn, peas and potatoes are the main crops raised by Mr. Curtis on this class of land. He states that these methods, combined with the hauling of manure, have resulted in an improvement in the soil instead of the deterioration found on many Palouse farms, and this is borne out by the fact that many of his fields produce 45 bushels of wheat per acre.

There are two large silos on the place, and these are filled first with peas and oats, finishing then with corn. About 40 cows are milked, and the dairy barn, as well as all the other buildings on the place, is admirably neat and conveniently arranged. Plenty of hay barns, farrowing houses for the hogs, feed houses, etc., make life comfortable for live stock during the exceptionally long winters that have come during the last few years. Mr. Curtis finds that most of his land is too valuable to be used for pasture, and his milk cows are fed practically all the year round. He began grading up his herd of cows a few years ago with a fine Holstein bull, and by this method succeeded in obtaining a very greatly increased milk production. Of late years Mr. Curtis has been acquiring a number of pure-bred Holstein cows of exceptional quality, and is becoming well known in the breeding world. He expects to have a strong list of entries at the fall or winter stock shows this season. His hogs are Chester Whites, and some exceptionally good ones were seen on the place, and a number of these, also, will be seen in the show ring during the year.



Here is a view of the H. S. Curtis place near Palouse, showing harvesting operation as well as the farm improvements.

There Is Only One Brand of American Patriotism

By CARL S. VROOMAN, in Address Delivered Before a Spokane Audience During His Recent Efficiency Trip Through the Northwest

The spirit manifested today is exactly the spirit which the government at Washington, D. C., expects to find, and it is the spirit that will win for us in the great war. Our problem—and it is the problem everywhere in this country, a problem to which all others are secondary—is that of putting this nation on a war basis. What does that mean? It means, first of all, to get the right spirit. Without the right spirit we can do nothing. It matters not what intelligence we have, what technical competence we have, what sort of mechanical efficiency we have—if we have not the right spirit we can do nothing; and if we have the right spirit all other things will be added. Out of that spirit will come, as a cornucopia, every other desirable thing.

The Spirit of Service.

The spirit we need, and which is growing hourly in this land, is the spirit of service. The president struck the key note when he said: "Any man whose patriotism is not of the same high standard as the boys' in the trenches has no patriotism at all!" We have only one brand of patriotism in this country—the brand of patriotism which the boy in khaki takes over to the trenches when he makes a bullet mark of himself. This is the patriotism which you and I must have; which business men must have in their offices; which farmers must have on their farms; which government officials must have; which citizens must have; which housewives must have in their homes. It is the American spirit—the spirit of service first.

Now, if we are going to bring this war to as speedy a finish as we hope—if we are to gain victory for democracy in the near future, we shall have to send several armies in the field.

Our first army in the field was the army of food producers. The day war was declared that army began its work to fight the battles of democracy and free government. They have been fighting in an effective way. In some states they have increased the food production 10, 15, 25 or 33 per cent.

The second army in the field was our so-called army and navy. We voted enormous funds of money to make of our fighting army efficient. We have given them all of the money they need. We now have a half million men under arms and more; we will have a million within another six weeks. We are turning out rifles, cannons, munitions without a limit. That work has progressed as fast as any similar work ever progressed in the history of the world. There is not one of us but has been astonished at the snap and punch and efficiency that has been put into the work by the army and the navy; but that is not sufficient.

We now have two armies in the field. We must have a great army of food conservers among the women of the country that will be as large as the list of men of military age in this country, 10,000,000 strong—

> Without the right spirit we can do nothing. It matters not what intelligence we have, what technical competence we have, what sort of mechanical efficiency we have—if we have not the right spirit we can do nothing; and if we have the right spirit all other things will be added. Out of that spirit will come, as a cornucopia, every other desirable thing. The spirit we need, and which is growing hourly in this land, is the spirit of service.—Vrooman.

nothing less than that will do. Ten million American women must put the homes of America on a war basis.

Must Have Women's Help.

This work is going on now throughout the country. However, as soon as congress passes the bill giving authority this work will be pushed 10 times as fast, 100 times as fast as in the past. It is too bad that the work has been delayed. As a matter of fact, this delay of weeks is nothing less than a national tragedy; but this will soon come to an end. As soon as we are able to get this organization completed we will have this army of 10,000,000 women at work, and their work is as important as the work of the farmer or as of the soldier—as important as that of any other individual in this nation. This war can not be won as it should be won without the help of the women. We are going to have that help. They are going to put the homes of America on an efficient basis and on a patriotic basis.

There is still another army, and it is fully as important as any of the others. This is the army of the business men of this nation. Many of them are not young enough to take their places in the trenches. I have heard many men who are too old for service say—and you could tell by the fire in their eyes that they were not stalling, but they were speaking from the heart: "How I wish I were young enough to go out and take a place on the firing line."

I am here today, above everything else, for the purpose of saying that business men as well as the boys in khaki have a duty to perform. What is it? The president outlined it in his wonderful letter to the business men published recently. It is merely to put business on a war basis—a basis of efficiency, a patriotic basis, patriotism above profit. Now, there has never been a time in the history of the world when business men of this or any other nation showed as great a patriotism as they are showing in this country to utilize the war as an opportunity for service rather than as an opportunity for extortion. I am reminded of the story of the little boy who went to church with his mother for the first time. After the contribution box had been passed around he said to his mother, "I got a quarter. How much did you get?"

There may be a few business men in America who have misinterpreted the present crisis in just that way, looking on the war as an opportunity to gather to themselves illegitimate profit. These men are hopelessly in the minority. The great majority, the very best and most capable in this nation, are heartily and loyally serving in this crisis. It is hard for some of our people to realize that this great business revival of patriotism has taken place, but it is there. I have in mind an illustration.

There is a man in Washington, D. C., who is working for the government without a salary. He is a man who during his past life has been proud of his ability to hammer down labor to the lowest possible notch and push up prices to the highest possible notch in his industry, which is coal. He has grown rich, and has made his stockholders rich. He is a powerful man. He is now working on the problem of coal.

The other night there was a little dinner given in honor of a representative of the National Council of Defense, and he was called upon to speak. Many who were present knew him quite well, and he knew that they were conscious of the humor in the situation. They knew his record as a business man. He mentioned this in his talk, saying:

"My Boy Has Enlisted."

"Gentlemen, it may surprise some of you to hear me talk of ways and means to bring down the price of coal to the lowest notch that will leave a reasonable profit. Reasonable profits are as necessary to business as food is to a human being. I do not suppose you could cross the nation in normal times and find a man with any less desire to reduce the price of coal than I would have had, but this is not a normal time. My boy has enlisted. I have made a spiritual sacrifice. It would have been easier to go myself, but I was not fit. The question of whether I make a big profit or a little profit is a matter of indifference. I do not want to get rich out of war. The great Agassiz was once urged to go on a lecturing trip. He was told that he could make much money by doing this. His reply was, 'Don't bother me. I have no time to make money.'

"Business men in this country have not time to get rich quick. Every one of us ought to make it a point of honor during this period to give the cream of our energies to the public service. Every business man of this country will do that—if they will put the business army on the same basis of patriotism that the nation is putting the army of soldiers upon, they will perform a great service in an hour of need. They will add luster to the glory which our boys in khaki are going to throw around the Stars and Stripes during the months to come."

Five Per Cent Money

Bank Officer Shows How to Get It

The exact steps necessary for the farmers of the northwest to borrow half the value of their farms from the government through the federal farm loan bank are told by Secretary George C. Jewett of the northwestern district bank in an interview given The Farmer. While the farm loan bank is doing a great mass of business, furnishing money to large numbers of farmers throughout the northwest, its field is almost limitless.

In making applications for loans and in supplying the bank with the papers necessary, the borrowers can do much to speed up the work of the bank by exercising great care to see that every detail is correct and every necessary step correctly taken.

"There must first be associated together not less than 10 prospective borrowers whose loans when finally approved will total at least $20,000," says Secretary Jewett. "They form a national loan association under instructions which are fully furnished by the bank at Spokane. Each application for a loan must be appraised by a committee of three members of the association. When this has been done, all papers are sent to the bank in Spokane, where they are checked over, and if found in order, arrangements are made for appraisement by an appraiser from the bank at Spokane at the earliest possible date. On the completion of his appraisement, his reports are submitted to the executive officers of the bank, who allow the loan for the full amount of each application, or for a reduced amount which, in their judgment, the security will allow, or it may be disallowed entirely.

"If allowed, and there are sufficient other loans allowed to make up the minimum of at least 10 borrowers in the association, whose loans will total not less than $20,000, the association is granted a charter by the Spokane bank. At this time the Spokane office writes to the secretary of the local association notifying him of the bank's action on each loan applied for, and he is instructed to have all those whose loans are allowed to forward their abstracts of title to their farms at once.

"From this point each loan is taken care of separately, and does not have to await action on any other loan. On receipt of the abstract of title it is examined by the legal department of the Spokane bank, and if there are material corrections required in the title the legal department takes them up with the abstractor and secures the corrections. When this is done, the written opinion of the legal department is submitted to the office of the secretary, where the note and mortgage required to secure the loan are prepared and sent to the secretary-treasurer of the local association with instructions to have them executed by the prospective borrower and returned to his office.

"On their return the mortgage is placed on record direct from the secretary's office and through the abstractor. At the same time the abstractor is required to continue the abstract, showing the mortgage or sign a certificate furnished him showing the condition of the title from the date of the last continuation of the abstract to the day following the recording of the mortgage. On receipt of this information from the abstractor all prior encumbrance against the property is paid from the loan by the Spokane office. Then 5 per cent of the amount of the loan is deducted as the stock subscription which each borrower is required to make, and which makes him a stockholder in the local association. If there are any unpaid abstracts or recording fees, the amount of these is also deducted so they may be paid, and a bank draft for the remainder is made payable to the secretary-treasurer of the association and the borrower, and is sent to the former with instructions to turn it over to the latter. This closes the transaction, and the borrower may cash his draft and have the actual money with which to conduct the business of his farm."

Questions Must Be Signed.

Please remember that we can not answer questions directed to our information bureau unless the name and postoffice address of the one asking the question is given. This is not necessarily for publication. As we are answering questions by letter and only publishing those of general interest it is necessary that we should have the name and address of the writer in every case—not only this, but it is a law of all newspaper offices that all communications must be signed. We can not notice questions sent in without a signature.

Australian Mice Plague.

A plague of mice, probably never before equalled in the history of Australia, has practically besieged the southeastern portion of the continent during the last few months, says the correspondent to the Northwestern Miller. The greatest sufferers from the ravages of the invading army are the farmers and the Australian wheat pool. Many thousands of pounds of damage has been done to the wheat stacked on the farms, at the railway stations and ports.

Washington Portraits No. 27.



John H. Quick.

John H. Quick, one of the substantial and progressive farmers of Cowlitz county, has an up-to-date farm of 154 acres near Castlerock. Mr. Quick located on this farm in 1902, when the land was in a poor condition for farming, as little of it could be cultivtaed, but with perseverance and hard work he has succeeded in clearing 60 acres from stumps and the balance for grazing, which will keep 40 head of cattle in splendid condition.

The next in the series of Washington portraits will be that of Roy Allenbaugh of Malaga, and will be given in next week's issue of The Washington Farmer.

Stockmen in Arms Against Boycotters

Declare Movement Against Use of Young Animals to Be "Dead Wrong"

Live stock men of the northwest, especially the sheep men, are little less than in arms against what they declare to be unwarranted agitation against the marketing of young meat animals. They argue that the judicious use of the younger animals is more economical both to the producer and the consumer than is the use of the mature meat.

E. F. Benson, state commisisoner of agriculture at Olympia, is one of the vigorous opponents of the widespread movement against the use of lamb, veal and young pork. "The safe and sensible rule is that no animal should be produced if it consumes more food that human beings would eat than the animal makes when finished," says Commisisoner Benson.

"If we are not to sell lambs, then it is necessary for us to breed an entirely different strain of sheep, because the ewes that are to be kept for breeding purposes must of economic reasons produce more wool than the Shropshire and Hampshire sheep that are sold as mutton lambs," he says concerning the lamb problem.

Should Winter the Ewes.

"If the wether lambs that will sell in the fall at 75 to 90 pounds must be carried over until the next spring and fed hay, grain, silage, etc., in order to make a gain of only 10 or 15 pounds and produce a clip of seven or eight pounds of wool, it will reduce the number of ewes to just about the extent of the lambs that are kept over. That means that instead of feeding a ewe that will produce a lamb that will make 80 pounds of meat in the fall, we have kept over a wether lamb or a ewe lamb, as the case may be, at a very serious loss to the sheepman and a serious meat shortage for the public."

Meetings of protest against the movement that has gained much headway in the country have been held in many parts of the northwest within the last few days, and words of denunciation of lamb and other young meat boycotters are coming from stock men everywhere. A considerable gathering of producers in the vicinity of Spokane met recently and adopted a strong resolution for presentation to the railroads and to the national food administration at Washington, D. C. President Hugh Sproat of the Idaho Wool Growers' association called a special meeting of the association at Boise and vigorous action was taken.

The Economic Question.

The producers argue that the live stock business of the northwest has been built up of recent years with a view to satisfying the public demand for young meat; that quickly maturing animals have been bred up to replace the more slowly maturing animals of previous years when 3 and 4 year old beef and mature mutton were demanded by the consumers.

In his address before the special meeting of the Idaho wool growers, President Sproat touched this point as follows:

"A few years ago aged mutton at the market centers would sell at barely enough to pay the freight," said Mr. Sproat. "The stockmen, finding this an unprofitable business, changed over to the early maturing lambs, with the result that lamb is now our principal production, 90 per cent of Idaho's mutton production being in the form of lamb. Expensive lambs of the mutton breeds have been purchased and our Idaho lambs lead in numbers, size and breeding of any state of the Union. Seventy to 75 pound lambs at the age of 5 months are common in Chicago from our ranges, and it is now proposed that they should be kept till they become yearlings or older before marketing. A good yearling weighs from 90 to 100 pounds and the increase in weight has to be obtained by feeding hay or grain during the winter season."

Boycott the Boycotters.

Several of the big railroads recently announced their intention to eliminate lamb and other young meats from their dining car menus. This immediately brought the stockmen forward with a vigorous denunciation of the proposal, and with threats of boycotting the roads that put the order into effect.

"Undoubtedly those who are attempting to boycott the use of the young animals have good purposes and intentions, but they are misinformed," says one prominent grower, and the words apparently voice the sentiment of the others engaged in the industry.

The Three-Year-Old Doomed.

Cattlemen claim that the public has long since ceased to demand or accept the more mature beef, the three and four year olds, but that they are demanding "baby beef." Though stockmen are not advancing the slaughter of calves that have beef-producing possibilities, they are strong in their declarations that it is cheaper to produce a supply of meat by the "baby beef" plan than by holding the cattle till fully mature.

Pointing out that the beef animal weighing 800 to 1000 pounds at the age of 15 to 20 months is what the people want and what is most economically produced, William Hislop of the State College of Washington says:

"The heavy carcass is a thing of the past. The American public wants small joints and the American stockmen supply them because it is profitable and economical to do so. A return to former conditions would be suicidal to the interest of every meat consumer and would needlessly precipitate meatless days."

The slaughter of dairy calves is also favored by Professor Hislop in cases where the calf is strictly dairy type. He declares that there is usually an actual loss incurred in keeping a dairy calf to even veal age, and that the loss increases with the increasing age of the calf.

"The milk required to raise these calves possesses greater value as human food," he says.

Market Hogs Early.

In like manner, with the grain feed necessary for hog growing and fattening so high priced, and of such high food value for human beings, hog raisers advocate the early marketing of hogs. It is the general consensus of opinion that pigs should be ready for the market within eight to 10 months.

The wonderful development of the live stock industry in the northwest has been built up to a great extent on the principle of providing an early maturing animal—beef, mutton or pork. Not only do the people demand such meat, but it is claimed by experts and pratical breeders to be the most economical way to produce the maximum of high-grade meat.

Potato Bug Remedies

Pest Is Found in Many Sections

The investigation conducted by The Farmer relative to the appearance in the northwest of the Colorado potato beetle has resulted in the assurance that it is at work in several sections of every northwest state. Various remedies are offered, from a pan of hot water to the use of many poisons. Arsenic is recognized as the great potato bug bane, and for this reason arsenate of lead, paris green and arsenate of zinc give results.

A. W. Morris, who has a potato patch west of Spokane in Spokane county, discovered a number of the bugs in his patch and proceeded at once with arsenate of lead, with which he was successful. Mr. Morris uses a kerosene emulsion for various forms of vermin on his plants, making war on the cabbage worm with it. He takes one pound of whale oil soap, brings it to boil in a gallon of water, adds a quart of kerosene and stirs until it assumes a creamy condition. This can then be added to water in the relation of one part of the emulsion to 10 or 15 parts of water, and is ready for spraying. When biting pests like the worm or potato beetle are desired to be destroyed a little paris greet or arsenate of lead added to the emulson will get them, he says.

The following are extracts from replies received to The Farmer's inquiry sent out concerning the pests in the northwest:

BERT H. FAULKNER, Bickleton, Klickitat County, Wash.: As far as I can learn, there is no indication of the potato bug in this vicinity. I have never heard of the bug doing any damage in past years. Potatoes here now that were planted early are doing very well, but the late planted will not amount to much.

W. D. BOYNTON, Gig Harbor, Pierce County, Wash.: It is my opinion that the northwest has little to fear from the potato bug. It would have been with us a score of years or more ago had the conditions been favorable to its propagation and existence here. The nights are too cold and the late summers are too dry for it to thrive here. This is particularly true of the Coast region, where the excessively wet winters might also militate against its comfort and safe carrying over.

I do not particularly fear the bug any way. I lived 30 years in the potato regins of Wisconsin, where we grew potatoes at a cost of 12 cents per bushel, which included the cost of fighting the bug. Its presence there forced the growers to spray for the destruction of the bug and incidentally it led them to add to this spray fungicide and blight sprays which made the growing of potatoes a surer proposition than if the farmer had not been forced into the spraying work by the attacks of the bugs.

Being a chewing insect, any good stomach poison can be applied to the leaves in such volume and strength as will not do them an injury, and you may be sure that Mr. Bug will get his dose. It should be applied before the old bugs get to lay many eggs in the early part of the season. Liquid sprays are mostly used. If applied in the form of a dry powder it should be thoroughly mixed with rye flour, one to 30 parts. For liquid spraying, machines, horse-drawn, that will cover several rows at a time, have been invented and which have made the application rapid and cheap, the cost of the poison being the main item.

W. A. McGHEE, Leland, Nez Perce County, Idaho: The potato beetle is a positive pest here and a most strenuous effort is necessary to its eradication. Paris green and arsenate of lead are the chief remedies resorted to in its destruction. However, these must be persistently used if the result is satisfactory. It was here when we came four years ago this coming fall. It destroys all potato crops if not combatted to a finish.

H. C. OLIVER, Stites, Idaho County, Idaho—In reference to the Colorado potato bug, will state that it made its first appearance in Idaho county about nine years ago and was as bad by the second year as it is now. Some years it seems to be a little worse than others, and it has been quite noticeable to me that it does not work on the potato vines quite as bad or is not quite as hard to combat on a late crop as it is on an early crop. The farmers here use paris green diluted with water, and some use it with flour. Sometimes one application is all that is necessary, but generally two applications bring the crop through. My observations show that if vines are given a good application of paris green about the time that the eggs are hatching, so as to be ready for the first crop of bugs, the crop will not be seriouly menaced; but if they are allowed to run until the bugs strip the vines of leaves before anything is done, then it's a slim chance that the crop makes anything.

G. M. HENDRICKSON, Paradise, Wal-lowa County, Ore.: Our community has been afflicted with a pest known as the Colorado potato beetle for about five years—only a few appearing the first year, but they have rapidly increased materially lessening the crop where they have not been effectively combatted. In our locality, a very successful method of fighting them is to watch for their first appearance, and as soon as the potato vines show that they are at work proceed to use the Paris green solution, one tablespoonful to a gallon of water, and spray the vines thoroughly. The Paris green being like flour, can best be mixed by using a small quantity of water, mixing very thoroughly, after which the full quota of water can be added, and the mixture can be applied with a common water springler. The operation may need to be repeated three or four times, at intervals of a week or 10 days during the season.

W. W. PALMER, Bossburg, Stevens County, Wash.: Potato bugs have not been found in our part of the country as far as I can learn.

I. W. ALEXANDER, LaConner, Skagit County, Wash.: Have been searching our immediate district for some traces of the Colorado potato bug, but as yet have failed to find any trace of it.

J. C. BUSH, Chehalis, Lewis County, Wash.: So far I have been unable to learn of the presence of the Colorado potato bug in the county.

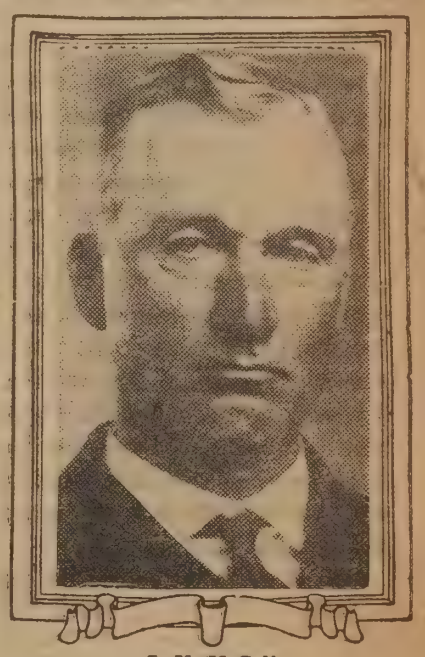
CLARENCE A. LESTER, Centerville, Klickitat County, Wash.: We have not as I have been able to hear any Colorado potato bugs in this county.

E. H. FAULKNER, Grandview, Yakima County, Wash.: There are no potato bugs nor any indication of any in this part of the country.

J. V. McCall Resigns

Leaves Office to Become Banker

President J. V. McCall of the farmers' union for Washington and northern Idaho has tendered his resignation and taken up the work of conducting a banking business at Kahlotus, Wash., according to announcement just made. The resignation has not been acted upon by the board of directors and will not be until the meeting in September, says Secretary A. D. Cross.



J. V. McCall.

The duties of president naturally fall to Mr. Riley Rice, vice president, of Cottonwood, Idaho; but Mr. Rice likely will not take up his duties until the resignation of President McCall is acted upon.

In the meantime A. A. Elmore, representing the national farmers' union, will work in the interests of the organization in this territory, doing in part, at least, the work that would otherwise be done by the president.

Fair Dates.

Pendleton, Roundup—Sept. 20-22.
Boise, State—Sept. 22-29.
Salem, State—Sept. 24-29.
Helena, State—Sept. 24-29.
Lewiston, N. W. Lvst.—Nov. 16-23.
Portland, Pac. Nat. Dairy—Nov. 16-23.
Portland, Pac. Int. Lvst.—Nov. 19-24.

Washington Fairs and Shows.

Chehalis, S. W.—Aug. 27-Sept. 1.
Spokane, Interstate—Sept. 3-8.
Elma, County—Sept. 5-9.
Mabton, Hay Palace—Sept. 11-15.
North Yakima, State—Sept. 17-22.
Woodland, County—Sept. 18-22.
Rosalia, Lvst.—Sept. 20-22.
Lynden, County—Sept. 25-29.
Garfield, Roundup—Sept. 26-29.
Shelton, County—Sept. 27-29.
Burlington, County—Oct. 1-6.
Puyallup, Western—Oct. 2-7.
Palouse—Oct. 4-5.
Port Angeles, County—Oct. 11-13.
Colville, Live Stock—Oct. 17-19.

WHAT IS THE BEST HOME TOWN IN THE STATE OF WASHINGTON?

What is the best home town in the state of Washington, under 2500 population?

Why?

The Washington Farmer will give a prize of five dollars for the best answer to these two questions, received before September 1.

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Sleeping America Must Arise to Save Her Civilization

Not for centuries has the world been so nearly in the grasp of inhuman despotism as it is at this hour. Never has civilization so needed a savior. Barbarism as ruthless as in Nero's time is running rampant; and human liberty and human righteousness are its victims. They can be saved by America, and by America alone. If only every American citizen could shake the scales from his eyes and awaken! If only we, the rank and file in the common walks of life, could arouse ourselves to the individual opportunity and duty that is ours! If only we could realize that our very own personal privileges and rights and liberties are at stake and rise to defend them! But we are not awake!

Three years ago German armies devastated Belgium and parts of France, dragging their men and women into slavery and murdering their children. We American citizens do not even yet realize that Belgium has been devastated.

Two and a half years ago a German torpedo sank the Lusitania, a crime that would have shocked the middle ages. Hundreds of defenseless and noncombatant women and children and men, among them many Americans, were sent to graves in the sea. We have not yet rallied to avenge that wrong.

Since August 1, 1914, as many men as there are in the entire northwest have been killed on the battlefields of Europe. Yet we of the northwest go on unmoved.

Since August 1, 1914, as many women as there are in the entire northwest have been made homeless, have been butchered, have been dragged into hideous slavery. The compassion of the northwest has scarcely been stirred.

Since that fateful day when savages poured across the borders of Belgium and France, more children than there are in Washington, Oregon, Montana and Idaho together, have starved to death or have died from brutal treatment or exposure. We, the people of the northwestern corner of the country that holds inalienable the right to life, liberty and the pursuit of happiness, continue our petty, selfish lives with but a passing thought of all the horror, that humanity demands must cease and be avenged.

"The gaunt spectre of famine stalks through every country in Europe," says one who knows. We continue to eat, drink and be merry; we continue to waste what the children of Europe are pleading for and for the lack of which they are dying by thousands; we continue to take little thought for the morrow, either of ourselves or of those who are crying to us for help.

No man lives to himself alone, and no nation lives to itself alone. But we Americans thought we did. We thought—we still think, in practice, at least—that we are a world to ourselves, with little responsibility beyond our borders and little dependence upon other peoples.

But we are no longer isolated. Modern inventions have eliminated both sea and air as protecting barriers. We are part of a composite world—a burning world. The fire is destroying the lands and the lives of our neighbors, but we do not awaken to bestir ourselves in their behalf. The fire is creeping upon our own land. We see it, we hear it, we feel the heat of it. But we refuse to believe that it can reach us.

What can arouse the American people? Must a fire brand alight in our midst and destroy part of us before we will believe that we are imperiled? Must disaster overtake us to arouse us from our lethargy?

Disaster will come and come speedily if we do not rise up, every man, every woman, every child of us, and shoulder our own individual duties. For three years England and France and their allies have been fighting the battle that has become our battle. If they fail, we fail. If they are conquered, the power that humbled them will humble us, and the savagery that has desolated Belgium and Serbia and northern France will desolate our own shores.

If England and France fail, we will fail, and nothing short of the most determined resistance against German and Austrian aggression with every ounce of resource at their command can prevent their failing. Therein lies America's peril. If Germany wins a victory over England, Germany's navy and England's navy, manned and officered by Germans, will wipe American shipping from the seas, enter our harbors and destroy our shipyards and terminals, bombard and demolish our seacoast cities and occupy them with the same fiendishness that characterized the occupation of Belgium and Serbia.

The spirit of humanity alone offers reasons a hundredfold why every individual in America should think and act with no other purpose than the victory of the allied armies over Prussian militarism and despotism and barbarism. No further reason should be required. But there is another reason, and one that serves when all others fail. Self-preservation is the first law of nature. We may fail to answer the pleading of starving mothers and children in devastated Europe. We may fail to avenge the wrongs that have been committed by the central powers of Europe against peaceable, helpless peoples. But we will not fail, if we but realize that only a hungry, half-exhausted allied army and an English navy taxed to its full limit by her enemies, stand between us and the destruction of everything that civilization has made dear to us.

We will not fail to rise, but we may rise too late. The cause of the allies—our allies—in Europe is in jeopardy. Russia has fallen back into her own disorganized territory. For the present, at least, Russia is defeated, whipped, and every pound of driving power that Germany and Austria possess is available to be turned onto the allied armies in the west. The submarines continue to destroy thousands of tons of food that soldiers and civilians need and must have if they are to carry on the war successfully.

The gravity of the situation can not be overstated.

Three Weeks' Saving Campaign

President Wilson and Secretary Houston of the department of agriculture have inaugurated a great, nation-wide campaign of three weeks during which the canning and preserving of perishable fruits and vegetables is to be the object of effort. The president has issued a stirring appeal to the women of the country pleading with them to let no tomato, turnip, green beans or peas or anything of food value go to waste. Fruits must not be allowed to perish, for there are thousands and thousands of women and children and men dying in stricken countries even now for want of the staple foods that this country should be able to supply them. To permit foodstuffs to go to waste is to rob a starving child of life. Oh, if the American could but realize the tragedy in foreign lands! Would they go recklessly on eating in luxury and wasting enough daily to tide over winter the helpless peoples of Belgium and Palestine and Serbia? The heart of the American people is great, great enough for any sacrifice. But we have never known hunger. We have always had plenty. We have never had to save. And we can't realize that veritable millions are dying in want and misery for lack of what we should give them.

Washington Gleanings

Dr. D. Mulder of Lynden has sold his river bottom farm, containing 77 acres, to G. Van Weerthuizen. The consideration was $10,000.

E. A. Allen of Spangle, in Spokane county, bought the N. C. McKee farm of 142 acres, one and a half miles northeast of Palouse, for $15,000.

The Seattle-Portland Stockyards company at Kennewick announces that it will have the first unit of the new yards ready for business this fall.

The Winlock Cooperative Creamery is still putting out large quantities of butter. For the month of June the output was a little over 21,000 pounds.

Thirty-two hundred head of sheep, shipped from Leavenworth recently by H. Stanfield of Portland, will bring close to $45,000 on the Chicago market.

The Spokane Fruit Growers' company expects to save growers more than $30,000 this year in their box bills through the operation of its own box-making plant.

The first Walla Walla barley which appeared on the market brought slightly above $35 a ton. It was raised on the J. E. Short farm near Lowden on irrigated land and yielded an average of better than 70 bushels to the acre.

Construction has begun in Mabton on a warehouse and fruit-packing plant. The building is being put up for the Earl Fruit company of the northwest, with headquarters at Spokane, which has seven warehouses and cold storage plants in the Yakima valley.

Secretary W. B. Meyers of the Toppenish Potato Growers' association reports that approximately 2000 tons of potatoes have been pledged of the 2500 tons required to secure the proposed starch factory. The remaining tonnage is expected to be signed up soon.

The indications now are that the tonnage of sugar beets produced in Yakima valley will swamp the capacity of the million-dollar factory which is being built at North Yakima. "We must confess that the promised tonnage excels all expectations," said Mr. Horne. "I fully expect that the tonnage yield per acre for the district will break all records for best production in the United States. The total output will be 100,000 tons."

What Others Say

The hoe in the back yard is mighty good backing for the flag on the front porch.—Green's Fruit Grower.

What the farmer is looking for is facts more than advice. He will attend to his own thinking.—The Dakota Farmer.

It has long been known that palatable, edible, digestible food nutrients are purchasable in dairy products at prices lower than in most other foodstuffs.—Kimball's Dairy Farmer.

There is a close connection between truth and freedom. One does not exist without the other, for freedom depends on truth.—Hoard's Dairyman.

The mothers of America whose sons are selected for the training camp and the battle line can find some consolation in the thought that for nearly three years past the sons of 30,000,000 other mothers have been waging the battle for civilization, and that never in the history of the world was there a cause more worth fighting for.—Wallace's Farmer.

I. W. W. Leader Lynched

Butte Vigilantes Execute Agitator

The first actual violence occurring in connection with the wide-spread I. W. W. agitation occurred last week in Butte, Mont., when six masked men entered the room of Frank Little, leader of the agitators, early in the morning, took him to a railroad bridge near the city and hanged him. A card bearing the notice, "First and Last Warning," was pinned to the clothing of the body when found by the officers.

So far, no apparent effect of the lynching among the fellow agitators of Little has been noted, except in the form of resolutions and statements of denunciation of the lynching. It was feared that the hour of his funeral, Sunday, would be observed by the I. W. W. throughout the country as an hour for violent and lawless deeds, but reports indicate that order generally prevailed. It is reported that 3000 I. W. W. marched in the funeral procession at Butte.

Not only has the I. W. W. national organization adopted resolutions condemning the hanging of Little, but government and state officials have likewise expressed regret that it occurred. Government and state officers in Montana declare that if the perpetrators of the deed are apprehended they will be dealt with as severely as the law will permit.

Various bodies of organized labor have also expressed their disapproval of the violence meted out to Little.

Little is supposed to have been executed by the so-called vigilantes because of his near-treasonable utterances against the government. He is charged with having many times referred to the United States soldiers as "Uncle Sam's scabs in uniform."

Haywood Warns Wilson.

A message to President Wilson from William D. Haywood, national secretary of the I. W. W., making threats against the industries of the country, has aroused wide-spread indignation among loyal Americans. The message threatened the causing of strikes in the farming districts of the west and middle west, involving nearly a quarter of a million men if President Wilson did not assume control of the anti-I. W. W. situation in Arizona and insure the liberty of the members of the order recently deported in that state. So far, no reply of the president has been made public. Charges from many sources that the message from Haywood borders on treason have been heard, some recomendations going so far as to urge the president to take vigorous action against him.

No Cause to Worry.

Rumors that a detachment of American troops had met with a disaster en route to France were vigorously denied by Secretary of War Newton D. Baker last week. Mr. Baker renewed his former statement that news of any disaster to American troops abroad or en route to France would be given to the public at once. Reports of movements of the war department will be withheld, however, for strategic reasons, as previously announced.

Canadian Railroads.

The government of Canada has announced its intention of taking over practically all the railroad lines and property in that country and operating them under a system of government management. Details of the plan have not been announced. The action rises out of war shipping conditions.

Congress Wants Rest.

After spending months in the discussion and drafting of various war measures, congress is beginning to pine for a vacation, and is beginning to talk of a possible recess in September. Two big measures are still to be disposed of, the food control bill and the war revenue bill. It is reported from Washington that there is likelihood the food control bill will come to a final vote this week. Though various provisions in the measure have the opposition of various members in both houses of congress, there is no doubt but that it will be adopted when once it does come to a final vote. The war tax measure will be taken up as soon as the food bill is passed. It is proposed to raise about $2,000,000,000 under the provisions of the tax bill.

Senate Votes Prohibition.

The senate of the United States voted last week to submit to the people of the states of the Union a constitutional amendment prohibiting the manufacture, sale or use of intoxicating liquor. The house has not yet taken action on the proposed submission of the amendment. The measure would give the states six years in which to approve such amendment, though it would go into effect if approved earlier. Any constitutional amendment has to be ratified by three-fourths of the states before becoming effective.

Control Freight Cars.

The activity of the government in the movement to facilitate freight handling this season is seen in an order requiring that a total of more than 60,000 cars on various railroads throughout the country be transferred to other roads where they are more greatly needed. The government's aim in issuing the order is to direct cars into those districts where the crops or other material, such as lumber and munitions, require immediate handling. It is reported that the railroad companies are cooperating heartily with the government in making their equipment serve the country in the best manner possible during this crisis.

Would Control Shipping.

President Wilson and his cabinet are desirous of concentrating as much as possible all the ocean-going ships of the world in the traffic affecting the conduct of the war. They have taken definite steps looking toward the transfer of a large number of vessels from the Pacific ocean to the Atlantic ocean, especially in the case of Japanese ships. Japan, being an ally of the United States and of England and France in the present war, is expected to comply with the requests and greatly aid the allies in securing the supplies needed to carry on the war. It is reported possible that this country will place an embargo on shipbuilding steel to Japan, and possibly other countries, unless such countries in return furnish vessels for the allied traffic.

Examining Drafted Men.

The process of examining the men drafted for the first call to the United States colors is well under way. All over the United States the exemption boards are calling before them the men in the order of their recent selection by the drawing at Washington. In order to secure the required 687,000 men, a total of about 1,350,000 will be called before the boards, which will allow exemption of about half.

Root Back From Russia.

Elihu Root, former United States secretary of state, and who last May headed a commission from this country to Russia to assist that country in organizing after the overthrow of Czar Nicholas, has returned. He brings optimistic reports, though details have not been given out yet. In an address after arriving in this country he expressed great admiration for the spirit of the Russian people, declaring that out of the tribulations through which they were passing they would emerge in due time a free, democratic people.

May Ration Neutrals.

This country has started a clear-cut movement to learn the exact food conditions in the neutral countries in Europe with a view to aiding them in so far as aid is needed, but at the same time to preventing surplus provisions reaching them for reshipment to Germany and her allies. Such countries as Holland and Norway are especially considered in the movement. For some time it has been apparent that much of the food supplies from this country to Holland have been reexported from that country to Germany. The United States is determined that this shall cease, and will go so far as to deny everything but the barest necessities to Holland or any other country that does not respect this country's position on the matter.

Heat Kills Easterners.

While the northwest's crops have been greatly damaged by the hot and dry weather, the people of eastern districts have been suffering in a different way. In New York, Philadelphia, Chicago and many other of the large cities, many deaths have occurred. Several hundred persons died as a direct result of the excessive heat, nearly 200 dying in New York alone in one day.

Captured Germans Talk.

German officers captured in the battles of the last few weeks along the northern France frontier are declared to have openly admitted in free conversation with their captors that Germany was becoming fearful that it would yet lose the war. They are reported to have stated that their country was so pressed for men that it had brought into the service at this time all the men who had been calculated to become of military standing during next year, and that some of those not to become regular soldiers until 1919 had been required to join the colors more than a year earlier than they would were not Germany in dire need of fighting men.



For Better Shooting---

A MAN is so busy these times that when he does get a couple of days' hunting or an afternoon at the traps, he is looking for *action.*

He wants to be sure about his *gun*—and that is one great reason why everybody speaks so highly of the Remington UMC Pump Gun and Autoloading Shotgun.

And in shells, you will get Remington UMC results only from Remington UMC Smokeless "Arrow" and "Nitro Club," the *steel lined* "speed shells"—and in *black powder*, the old established "New Club."



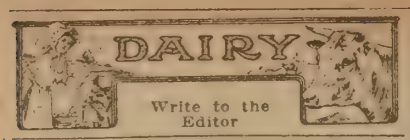
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A. B. NYSTROM, Editorial Contributor

Silo Campaign.

In his report to County Agent Leader R. B. Coglon, Klickitat County Agriculturist B. W. Cooney says: "The major part of this week was spent with N. C. Jamison, dairy field agent, in a silo campaign in the Trout Lake and Glenwood valleys. Quite a number of dairymen and stockmen were interviewed in all parts of the valleys. Eight men agreed to build silos if we would assist them in the construction and be on hand when the first silos were being filled. This we agreed to do. The silage will be made from oat and clover hay. We expect to use two loads of oat hay to one of clover. These valleys often yield a large tonnage of both these crops. One dairyman got a yield of 18 tons green oat hay to the acre, clover often yielding eight to ten tons green."

Clallam County Cows.

The Clallam County Cow Testing association ended its tenth testing period with a total number of 530 cows on test. The average for the association was 32.84 pounds butterfat and 744.48 pounds of milk, according to the report of E. W. Soper, tester. Many of the herds in the association freshen in the fall, thus the average of 32 pounds is very good.

The high cow for June, Lulu, a purebred Holstein, is owned by P. S. Govn, a breeder of Holsteins. This cow produced 2238.2 pounds of milk, testing 3.1 per cent, which totals 69.38 pounds of butterfat.

The following is a list of owners whose herds averaged above 40 pounds of butterfat for the month: Bert Simdars' 26 cows produced 922.19 pounds milk each, with 45.68 pounds of butterfat; P. S. Govan, 8 cows, produced 1257.05 pounds of milk each, with 41.97 pounds of butterfat; Edwin Pettit, 14 cows, produced 844.30 pounds of milk each with 40.88 pounds of butterfat; Roy Stone, 25 cows, produced 821.82 pounds of milk each with 40.24 pounds of butterfat.

Picnic Is Held

The Clackamas County Cow Testing association picnicked on the farm of N. H. Smith, 10 miles from Oregon City, Ore., July 28. A good sized crowd was in attendance; a sumptuous and appetizing repast was served and some very practical addresses were delivered.

Professor Simpson, manager of the Oregon Cooperative Dairy Exchange, spoke for the 17 creameries now members of the exchange, telling how the exchange helps to hold up the butter market when an excess is being produced. He said the business of the exchange is being successfully increased and that all creameries ought to join.

Mr. Finch, cow tester for the association, urged more careful selection of herd sires, better feeding and the weeding out of small producers. For the month of June the purebred cows in the association averaged a little over 35 pounds of butterfat and the grades 29. A cow in the herd of William M. Ladd at Oswego was high cow with 80 pounds of fat.

William M. Ladd spoke of the fact that no one had ever been able to go into his barn and pick out the best producer in the herd. Hence the value of the Babcock test and the cow testing association. He considered the dairymen's problem today to be the problem of the condenser and urged that the price of whole milk be not allowed to cause the calves to be killed; but that the offspring of all good producers be saved, as the time is soon coming when they will be needed.

A. I. Hughes, secretary of the association, spoke on "The Profits of Pure Bred Stock," giving figures of Jerseys, Holsteins and Guernseys, the latter breed including her own experience, which has been very satisfactory.

Professor Westover, in charge of cow testing for the O. A. C., said that there never was a time when efficient cows were so much needed, but a cow that can not produce 250 pounds of butter fat in a year should go to the butcher.

Professor Hislop of the O. A. C. told of several excellent means of conserving forage. He said thousands of acres could be used for pasture if properly seeded, and told the proper mixtures. The time to sow burned-over land is while the ashes are dry and let the fall rains carry them down into the ground. Don't burn the straw this fall. Oats and barley straw, cut early, make pretty good feed. Vetch straw not as good as vetch hay, but far better than nothing. Bean straw has feeding value, but must be stacked and kept dry. Clover is the cheapest of forage crops and the silo is one of the best ways of producing an abundance of forage for live stock.

The meeting closed with a boys' and girls' judging contest, with four of Mr. Smith's Jerseys as the subjects.

H. A.

First Months' Test

The Junction City, Ore., Cow Testing association finished its first month of testing with some very creditable records, according to the report of Linden N. Ross, tester. The six herds showing the highest average profit for the month of June are the following:

	Fat.	Profit.	Cost of Lb. B. F.
A. S. Mowbray	38.6	$11.32	$ .14
R. Q. Mills	27.4	11.02	.07
H. R. Edwards	31.2	10.57	.07
A. Benter	26.0	10.00	.03
J. A. Falk	30.00	9.48	.14
N. Nikkelson	30.6	9.33	.13
Average 6 best	30.6	10.28	.10
Poorest herd	22.7	6.69	.16

This shows an average profit of $3.59 per cow for the six best herds over the poorest herd.

The highest individual cow is a grade Jersey owned by Max Arp of Eugene. This cow produced 60.1 pounds butterfat during the month, showing a profit above feed cost of $16.71.

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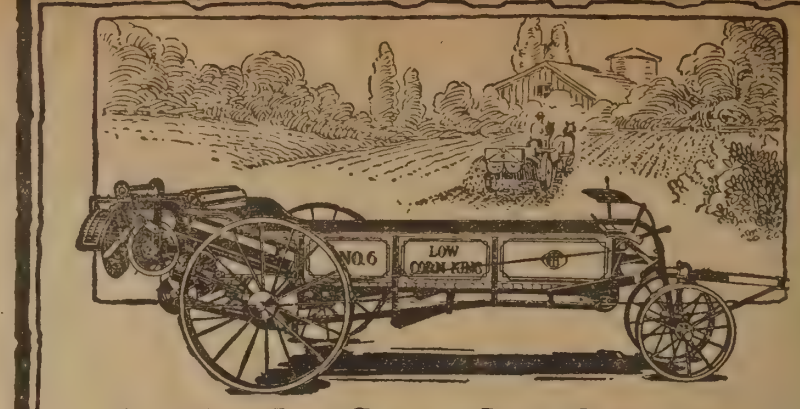
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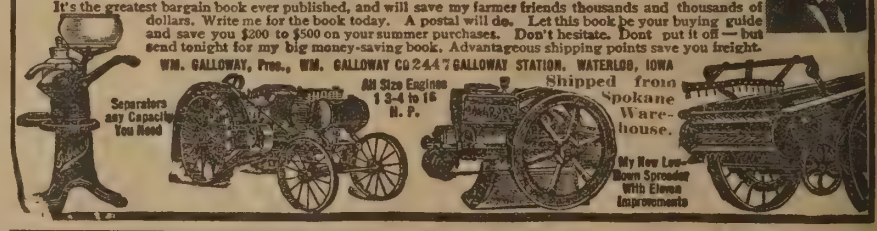
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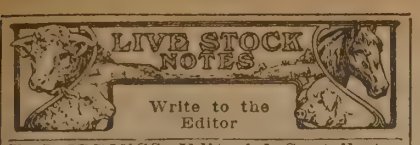
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E. J. IDDINGS, Editorial Contributor

Purpose of Pig Clubs

By E. L. POTTER.

The aims and results of the pig club work now being carried on in so many parts of the country are more significant than appears on the surface. This work is not merely to increase the production of pork, as some would suppose, since the numer actually raised by the boys and girls in these clubs is not large when compared with the total hog supply of the country.

It is not merely to train the hog raisers of the future or even to inspire an interest on the part of the coming generation in modern agriculture. Worthy as these aims may be, the work has as its real aim the training of the boys and girls for the useful work of the future by showing them that there is more real pleasure in the things worth while than in play and nonsense.

Every student of education knows that the early teens is the most difficult and most critical period in the life of an individual. The child of this age is ready to put off childish things, but not yet ready to become a man. He is too old for the one, but too immature for the other. He can not be treated as a child nor yet as an adult.

The boys and girls' club work marks the first successful effort in the history of education to present a system of education—really a combination of education, work and play—that fits this critical period in the child's development. Work of this kind affords the play which the childish side of his nature craves, but which the adult part of him is ashamed to gratify. On the other hand, there is the element of useful work about it which appeals to his maturity without having the heavy responsibility and the long hours of monotonous labor which childhood finds so irksome. It starts with a child at play and ends with an adult at useful and successful work. He learns the value of real work, and, above all, he gets a taste of the greatest of all pleasures, the satisfaction of useful tasks well done.

The man who looks at this work from the viewpoint of its influence on the pig market is taking a narrow view of the situation. The pigs raised are an insignificant part of the results obtained.

But why raise pigs instead of other animals? The work is largely confined to pigs because he is especially adapted to this kind of work. The two most essential reasons are the financial ease with which the pigs and their necessary feed and accommodations may be secured, and, second, the rapidity with which the pig matures.

The need of the first in a democratic education is apparent. The second is required because the child does not see far enough ahead to hold his interest in a steer or horse.

Veterinary

Dr. S. B. Nelson

Inbreeding—Will you kindly explain to me what is meant by inbreeding in horses? If a thoroughbred registered stallion is bred to a thoroughbred registered mare and the colt is a mare, will this colt raise a thoroughbred offspring if bred back to her father? If the stallion is bred to his granddaughter, great-granddaughter etc., will any of the offspring be thoroughbred? Could any of the colts raised be registered? 2. Which is better to feed to pigs, sour skim milk or fresh skim milk?—H. A. M., Rockport, Wash.

Answer—Inbreeding in animals means that the female is crossed with the parent male or that the male is crossed with the parent female. This system of breeding has been used by some breeders when they wished to fix some definitely strong points in the particular breed of animals. In many cases, however, the weak points of the animals are exaggerated so that oftentimes the offspring is very much poorer than either the sire or dam. Inbred young can be registered; whenever a young is produced by means of a purebred sire and purebred dam of the same breed it is eligible to registry. 2. Fresh sikm milk is just as good as sour skim milk, if not a little bit better, for pigs.

Cow May Have Rheumatism—I have a cow that is stiff in her hind legs after standing in the barn, even for an hour or so. When she starts to walk she seems to drag her hind feet for a few steps, but soon walks as well as ever. She is about three and a half years old, is in excellent health, in fact has never been sick, and looks well. The trouble began last winter and disappeared for a while this spring but still has it at times yet. It suppose it is rheumatism, but I do not know what to do for her. She is in pasture at present and only kept in the barn during milking.—F. S. M., Redmond, Wash.

Answer—It is quite possible that the cow is affected with rheumatism, and I would, therefore, recommend that you give her first a pound of epsom salts, in three quarts of water. Two days later begin giving her one ounce of salicylate of sodium in about a pint of water, morning and night for three days. Rest her 10 days and repeat the treatment if necessary.



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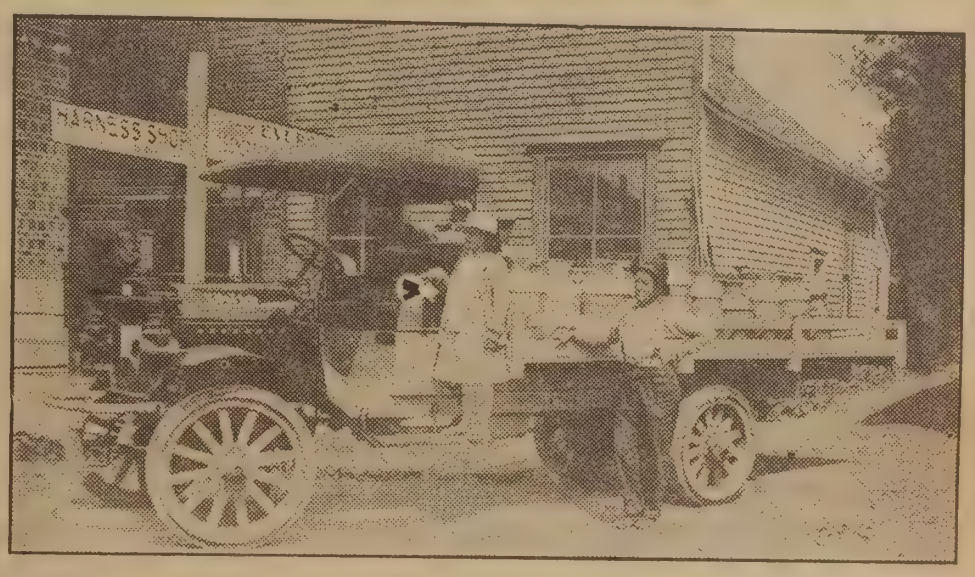


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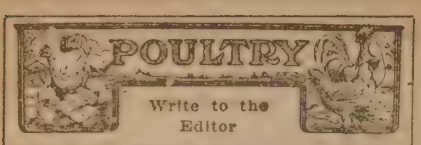
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JAMES DRYDEN
Editorial Contributor

Hot weather eggs are good if kept cool.

Gather the eggs twice a day in warm weather.

The broody hen is an egg destroyer. Put her in a separate yard or in a broody coop.

Do your bit in the conservation of food by preventing eggs from getting overheated.

Provide plenty of clean nests. This will mean cleaner eggs, fewer broken and fewer heated eggs.

Infertile eggs keep better than fertile eggs. Therefore remove the male from the flock after the breeding season.

Washed eggs do not keep as well or as long as unwashed eggs. Washing removes an oily substance that protects the egg from decay.

Hot Weather Eggs

It is safe to say that the loss from "heated" eggs and "blood ring" eggs in the United States during the last 10 days of high temperature will amount to several million dollars. That is a strong statement, but when we know from reasonably accurate estimates that the loss in quality of eggs, mainly through high temperatures, is more than fifty million dollars a year, we will understand how in 10 days of the warmest weather of the year the loss will run into millions. When we know further that this loss is almost all preventable we wonder what the food conservationist is doing. Here is a chance for poultry keepers to be doing their bit.

It is high temperature that causes this loss. How? It is heat, but it works in various ways to accomplish the destruction of the egg. First, the heat has an ally in the rooster. Most of the bad eggs are due to the combination of rooster and heat. The rooster fertilizes the egg, not to produce rotten eggs, but to produce live chickens from them, so that they in turn may produce eggs to produce more chickens to lay eggs and to crow. That was the original purpose of the egg—to produce life, to perpetuate the species. But the egg has come to have a great commercial value in these later days. It has been found that when the rooster and the heat can be kept under control the egg has a high food value, otherwise its chief use is in creating unpleasantness at the breakfast table and in helping the mob to terrify the populace and carry its point without resort to bloodshed. The rooster is a munition maker for the mob.

A fertile egg, however, is not necessarily a bad egg. It is only when it has been kept for a short time at a high temperature, or a temperature that gives life to the germ and starts the development of the embryo chick that it becomes bad. Fertilization does not make it bad. A fertile egg is just as good as an infertile one. But when heat is applied, the fertile egg becomes bad; while the infertile one remains good. If the egg is kept in a cool room where the temperature does not exceed 60 degres it will keep equally well for a week or even two weeks whether it may be fertile or infertile. But if kept at a temperature approaching 100 degrees for 18 to 24 hours the fertile egg will become what the trade calls a "heated" egg and hardly fit for human consumption, while the infertile egg will be practically as good as a fresh egg. At that temperature incubation will start in the fertilized egg, in other words development of the embryo of the chicks begins, and if after this development has continued for a day or two days, the egg is cooled below incubation temperature this development is arrested and the germ or embryo dies and we have what is technically called a "blood ring" egg. These eggs are unfit for food. The heated egg may be used for certain purposes, though they have lost a large part of their value and they can not be successfully preserved in storage. When the heating is continued long enough to develop the blood ring, and this may be in a couple of days or less if the temperature is high enough, the egg is then a total loss.

The effect of high heat on the infertile egg is not very evident. There is a loss of moisture, and this is shown by a large air space. In this respect it is like a stale egg. The higher the temperature the faster the moisture evaporates from the egg. It shows also in a darker shade of yolk. The white becomes thinner, which permits the yolk to move around more. In other respects the infertile egg may be perfectly good, even though it may have been subjected to a temperature of 100 degrees for several days. Such an egg is wholesome, while the heated fertile egg is not.

The important thing to remember is that the egg is perishable, losing its value the longer it is kept, and it loses its good quality faster when kept in a high temperature than in a cool one.

First. If the roosters are separated from the hens during the warm weather it would mean a great conservation of egg food. The males are of no use in the flock except during the breeding season, and the breeding season is over during the warm weather. The males that are not to be retained another year for breeding should be marketed at once, or, if retained, put in separate enclosure if possible.

Second. The eggs should be gathered twice a day during the warm weather, and put in a cool basement or cellar at once. The egg is at incubating temperature when laid, and the sooner it is cooled the better.

Third. The broody hens should be removed and placed in a broody coop or separate yard as soon as they show inclination to sit. The broody hens spoil a great many eggs.

Fourth. Provide sufficient nests so that there will not be hens on the nests all the time and prevent the eggs from cooling.

Probably the most important of the four points is to gather the eggs twice a day and put them at once in a cool room. Gather them at noon and at night. This alone would add several million dollars a year to the value of the eggs sold in the United States.

Will the poultry keepers do their bit in this respect and conserve this food value?

In another article I will discuss methods of preventing loss in eggs from the time they leave the farm till they reach the consumers. J. D.

The Motor Car
On the Farm

War and Automobiles.

It has been estimated by government experts that there are now in this country 1,400,000 owners of passenger automobiles that cost at the time of original purchase $500 or less each; 760,000 owners who paid between $500 and $1000 for their cars; 1,219,000 in the $1000 to $2000 class, and 231,000 having cars of which the list price was between $2000 and $3000. There are also in use, of course, many thousands of cars that cost originally more than $3000. These figures measure the cumulative quantitative demand for passenger automobiles during the last several years; one for approximately every 27th person.

The standardization of materials, methods and mounting dimensions of parts, which has been the greatest factor in the large-volume production of American cars, with simultaneous decreased cost and improved quality, has convinced many European designers and manufacturers that they should take a leaf from the book of wisdom of our automobile engineers, who are now, incidentally, working together in the same organization, the Society of Automotive Engineers, with the aeronautic, automarine and tractor engineers. Large production of moderate-priced cars in England and France has been contemplated for some time. A low-priced model was brought out by an Italian firm even during the war. Russia has shown ambition to enter the automobile manufacturing world. The production of cars of the "pleasure" type has naturally been reduced in those countries that are now at war.

Tractor Output Grows.

At this time the supply of standard tractors of all kinds and sizes for delivery in 1917 will total about 67,000 This production is much ahead of the output last year even though the material situation has grown steadily more serious.

A substantial increase in the number of tractors manufactured this year is the best proof that the tractor has passed the experimental stage and is making good in actual everyday performance.



Answering the Nation's Call

IN this "supreme test" of the nation, private interests must be subordinated to the Government's need. This is as true of the telephone as of all other instrumentalities of service.

The draft for war service which has been made upon the Bell System is summarized in a recent Government report.

Government messages are given precedence over commercial messages by means of 12,000 specially drilled long distance operators all over the country.

The long distance telephone facilities out of Washington have been more than doubled.

Special connections have been established between all military headquarters, army posts, naval stations and mobilization camps throughout the United States.

More than 10,000 miles of special systems of communication have been installed for the exclusive use of Government departments.

Active assistance has been given the Government by the Bell System in providing telephone communications at approximately one hundred lighthouses and two hundred coast guard stations.

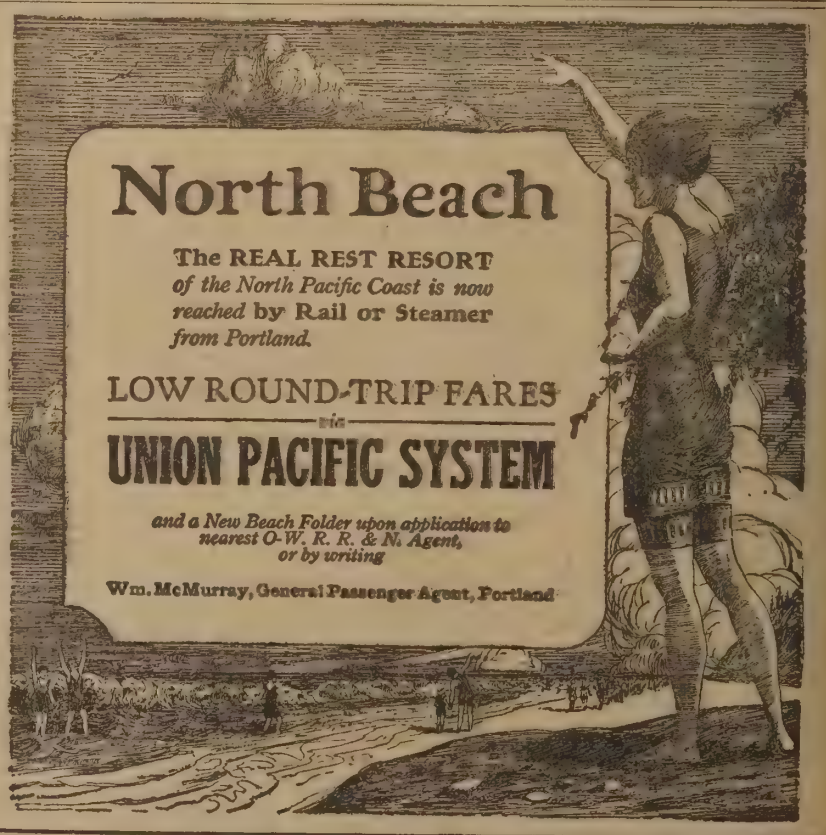
Communication has been provided for the National Guard at railroad points, bridges and water supply systems.

A comprehensive system of war communication will be ready at the call of the Chief Signal Officer, and extensive plans for co-operation with the Navy have been put into effect with brilliant success.

As the war continues, the demands of the Government will increase. And the public can help us to meet the extraordinary conditions by putting restraint on all unnecessary and extravagant use of the telephone.

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Pacific Northwest Farm Trio 36 Review Building Spokane, Wash.

Are Cutting Injured Wheat for Hay

Western Part of State Not As Hard Hit By Rainless Season As Is Dry Belt; Hay Crops Are Put Up Perfectly



TWISP, Okanogan County, Wash., July 24.—As the season advances, the dry weather lessens the prospect for an increased production of farm crops. Some of the dry-land farmers who did figure on from 25 to 30 bushels of wheat to the acre are cutting their wheat for hay. Fifty per cent of the upland will be threshed, but the yield will be light. Irrigated crops are good. Most of the grain harvested to thresh is cut with binders and labor, machinery and work stock are sufficient for the task. Very few changes in the methods of harvesting. This has been a very dry growing season and crops have suffered for moisture.

GEORGE LA RUE.

Threshing Will Tell Story.

LA CROSSE, Whitman County, Wash., (Aug. 1.—Many harvesting machines will start this week and by August 6 it will be general. Opinions differ as to loss from heat and drouth and they vary from 50 to 70 per cent loss from a normal crop. Until reports come in from actual threshinfi crops will be hard to estimate and it will be equally hard to say which of the varietfes of wheat stood it best and why.

M. E. SCHRECK.

Drainage Is Essential.

MOUNT VERNON, Skagit County, Wash., Aug. 1.—This season has demonstrated very plainly the value of good drainage in this country. Where the ground is well drained the crops, especially the oats, are good, but in low places and where the water has stood on the ground till late in the season the crops diminish in proportion as the water stood on the ground. It is interesting to note the difference in the crops on two adjoining fields. One of these was well tile drained a year and a half ago. In this field the oats are even and fine. The other had wooden drains put in years ago, but have gotten partly filled up, so that the drainage is poor. They were able to work the drained field fully two weeks earlier in the spring than the other. In the low places the oats were weedy and there was only half a crop. This condition prevails in parts of a good many fields throughout the Puget sound country. The value of proper drainage can hardly be overestimated.

Crop conditions generally are good. The potato crop seems especially good. The potato bug has not yet made its appearance here. The hay harvest is three-fourths done and the weather has been ideal for haying, so that the quality is excellent. There has been no drying up of crops from heat here. The past three or four days have been showery, which will help the pastures and the late oats and the gardens. There has been no serious shortage of farm labor. The farm labor situation probably has been relieved by so many of the logging camps and mills shutting down. Most of the farmers paid $3 per day and board for help during the haying season. C. S. PHILLIPS.

Perfect Haying Weather.

CHEHALIS, Lewis County, Wash., July 28.—Have had a fine haymaking season in western Washington this year, there having been no rain since before the Fourth of July. The crop is fairly heavy and has been put away in excellent condition. J. C. BUSH.

Egg Prices Are Too Low.

MONTESANO, Grays Harbor County, Wash., July 28.—The drouth of the last few weeks has been broken by a light rain. I would estimate that the grain yield might be cut down probably 10 per cent by reason of a lack of moisture, and potatoes about the same. There is probably a greater loss of straw than of grain, due to the lack of rain. Fall-sown grain crops are of course in better condition than those sown late this spring. Practically all of the hay in the county was put up in better condition than usual. The crops are at least 10 per cent above the normal, and the quality of the hay is doubtless 30 per cent better than for the last three years, owing to the good haying weather. If live stock prices hold up as well as they have the last three or four months I see no reason why the amount of live stock production will be decreased. This might not apply to poultry, inasmuch as the price received for eggs is not in keeping with the price of poultry feed.

C. F. MONROE.

Fruit Quality Is Good.

OMAK, Okanogan County, Wash., July 25.—There has been a great increase in crop acreage this season, especially wheat, potatoes and beans. Wheat is badly dried out and will be a light yield per acre. Potatoes will be a light yield also. The fruit crop is very light, but at present outlook the fruit will be of extra quality. Labor is somewhat scarce, and the crop will be harvested through community warehouses.

J. O. WOODS.

Planting 1918 Seed Crop.

LA CONNER, Skagit County, Wash., July 30.—As far as can be noticed the crops have not suffered from drouth or heat. The spinach fields were the only crop failures, but their failures occurred early enough so that the fields were replaced with other crops. The spinach failure was due to the wet and sour condition of the land in the spring. All unused land is being planted to beets, rutabagas and turnips for the 1918 seed crop. Do not think that the high prices on hay and oats will have any effect to either stimulate or depress live stock on the farm, as the price of milk seems to be taking care of the live stock. There is a feeling around here that if the war keeps up for a year or two more live stock will be on the increase.

I. W. ALEXANDER.

Combines Are Popular.

CENTERVILLE, Klickitat County, Wash., July 24.—So far I do not see any great advance in the crop production, only that every available acre was put into crops in the spring. Also there has been a great effort to get in something like corn and beans and the like besides the grain crop. The fall sown grain has come out fine since spring and a great many will have a normal crop of fall sown grain. The heat for the last two weeks has damaged it considerably, but the spring sown grain was damaged most. The harvest has started here, the heat having ripened the grain fast. The machinery seems to be adequate for the harvest. Several have new tractors with combines to help. Everybody has worked pretty hard to get a sufficient crew to harvest. I am afraid that it will be a little hard to get held to thresh and haul the grain at the same time on account of shortage of help. We head and combine both here, with a growing preference for the combine.

CLARENCE A. LESTER.

Dairy Herds Decrease.

PORT ANGELES, Clallam County, Wash., July 30.—Here on the Olympic peninsula we have not suffered from drought or heat. However, part of our crops have suffered some owing to an exceptionally late spring; the principal damage thus having been done is to our hay crop and I estimate it to be about 20 per cent. Peas stand exceedingly fine wherever we see them and the prospective crop, if anything, is better than the normal, thus offsetting the loss on the hay crop to some extent. The farmers complain that quotations for butter fat do not keep pace with the high prices for fodder and as a result dairy herds are decreasing. One farmer estimates the decrease in live stock to 10 to 15 per cent.

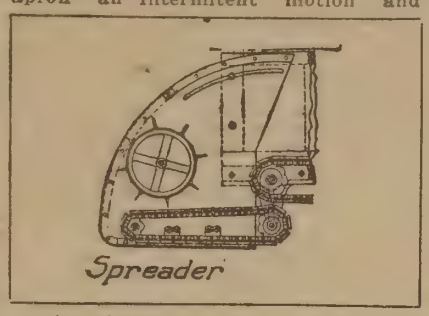
J. P. CHRISTENSEN.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Feeding Mechanism.

The improvement described here is in the mechanism which gives the apron an intermitent motion and



carries the load back at the proper speed. It consists of four cam arms and a roller which move the sprocket wheel and apron intermittently.

Chicken Feeder.

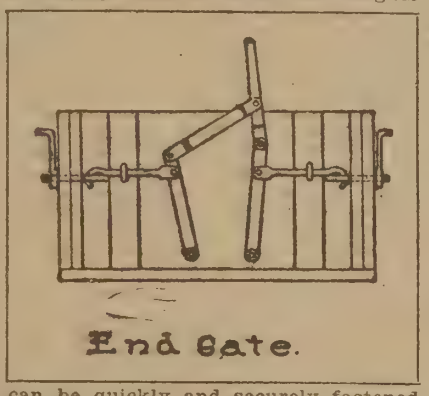
It is stated that a feeder of this shape prevents the chickens from wast-



ing food. It can be quickly made, with wooden ends and with sides and bottom of sheet tin.

End Gate for Wagons.

We show here a simple system of levers, by means of which an endgate



can be quickly and securely fastened in place and quickly released. Any blacksmith could make it.

Heater for Fruit Trees.

This device is simply a closed wedge-shaped frame of wire netting covered



with canvas. The advantage claimed is that the heat of the lamp is distributed evenly into the tree.

Halter.

The two halves of this halter are made of stout wire and are hinged together over the forehead of the horse.



They are locked and unlocked by moving back and forth the strap holding piece under the jaw.



PROTECT YOUR CATTLE WITH

Blacklegoids

NO DOSE TO MEASURE.
NO LIQUID TO SPILL.
NO STRING TO ROT.

BLACKLEGOIDS are small pills. Each pill is an accurate dose of blackleg vaccine.

BLACKLEGOIDS are easily administered—simply inject them under the skin with a vaccine injector.

TAKE NO CHANCES.

Don't wait until your calves become infected. This means certain loss—there is no *cure* for blackleg. Vaccinate now—before the deadly disease shows itself.

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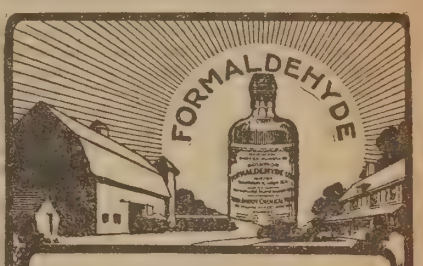
BLACKLEGOIDS are economical. The expense is trifling compared with the loss you are liable to sustain if you do not use them.

ORDER THROUGH YOUR VETERINARIAN OR DRUGGIST.

Write for free booklets on Blackleg, with full information about Blacklegoids.

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Dept. Animal Industry. DETROIT, MICH.



Successful Crops

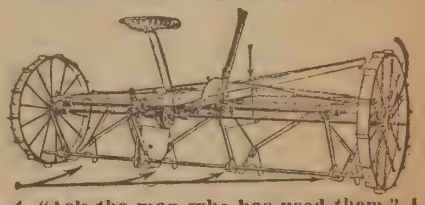
You may be certain of big profitable crops if you adopt the most up-to-date method of seed grain treatment as recommended by the U. S. Dept. of Agriculture—

FORMALDEHYDE
The Farmer's Friend

This powerful disinfectant destroys grain smuts, rust and fungus growth. It prevents flax wilt, also scab and black-leg diseases of potatoes. It rids stables and chicken houses of disease germs and flies. Formaldehyde is surely a great boon to the farmer. Our Formaldehyde at your dealer, 35 cents in pint bottles will treat 40 bushels of seed. Big illustrated Hand Book sent on request—free.

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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER XXII.

In which the bunchgrass boy is awakened by a strange bedfellow—Could it be a rattlesnake?

Blind springs rose suddenly out of a clump of rye grass growing among the rocks. The water flowing out of the ground collected into a narrow rivulet, which ambled down the gulch through sagebrush and wild rye, eventually losing itself in a mudhole which lengthened out into a strip of damp earth; then the dry prairie again, with small, warty backed, wide-mouthed, fat-bodied, short-tailed, horned lizards scooting among the gray bunches of grass and changing their color to harmonize with the ground so that you might look at one and think it was a clod.

Then there were many large black beetles that scrambled awkwardly to get out or your way if you trod near, and if compelled to act in self-defense stopped still, pointed their heads to the ground and from their upraised rear parts exuded a vile smelling moisture which was responsible for the name, "stink bugs," which the bunchgrass settlers applied to them.

Horned lizards and stink bugs were thick in the bunchgrass about Blind Springs. If you made your bed on the ground you were careful to tuck the covers under the edge good and tight, so that the bugs or the lizards would not get under the covers at night.

The night we camped at Blind Springs as we drove into the Coulee country I had an adventure with a stink bug which marked the beginning of my enmity toward that sluggish insect. It was morning; the first rays of the sun were shooting across the gray-green prairie, hitting the hilltops first and leaving the low places shady and cool. I was awake watching the prairie sunrise and wondering how near to my bed the herd of wild cattle a short distance away had come during the night. Old Prince, our big, black horse, stood near, head drooping and ooccasionally drawing in and exhaling a breath so heavy that it rattled in his nostrils, equaling in volume Dave Reavis's snores from the other side of his wagon.

Presently I detected a movement of some sort down under the covers near my bare leg. The thought flashed in my mind that it might be a rattlesnake, and if so I would do well to lie still—otherwise I might be bitten. So I lay as still as the dead.

The movement continued, and in the movement there was a crawling, creepy sensation that send a shudder all over me, but I gritted my teeth and lay still. Soon I felt something cold, clammy and shelly touch my bare leg down under the cover.

Fear of bugs was born with me, my mother used to say. It seems to be a kind of birthmark. I believe if a real rattlesnake had been in the bed I would not have been so greatly horrified as I was when I suspected that a stink bug had gotten under the covers. Cautiously, quaking with fear, I lifted the cover slightly, put my head under and sniffed like a collie. The creepy, crawling stopped. The bug had assumed a defensive attitude, likely, which I realized when the strong, repulsive, sweetish odor of the insect struck my nostrils.

I gave a wild yell and kicked covers right and left. Old Prince, startled from slumber, tugged at his rope and snorted. Dave Reavis stopped snoring with a sharp, startled exclamation, bounded out of bed and came to my rescue so swiftly that he stumbled over the tongue of his wagon, at which he swore roundly. Father and mother started up, and Dave, half way to my rescue and wider awake, retreated in embarrassment, realizing after his collision with the wagon tongue that he was clad only in a redflannel shirt.

Father was the first to reach me. As he came up I let drive at the stink bug with a stone large enough to have felled an ox, and with sufficient force, I think. Naturally, the bug, which was a monster of its kind, was mashed to paste, and its odor floated about camp and lingered till breakfast, and did not help any one's appetite. Dave said the only way to kill the smell of a stink bug was to take a big chew of tobacco. Mother scolded me for raising such a hullabaloo, and told me never to kill a stink bug as I had that one.

Thereafter, when I slew these insects I dug a hole in the ground, cautiously maneuvered the insects into the hole, and then, nerving myself for quick action and the expected shock to my nostrils, crushed them quickly with a stone, and, working at a mad rate of speed, buried them stone and all.

Dave shared my animosity toward insects of this class. One of them had spoiled his taste for coffee, he said. After breakfast he explained to my mother that one time he had made a big pot of coffee over a campfire and had drunk a lot of the coffee, thinking it was about the best he had ever made. He saved the grounds and boiled them over again at noon, and was struck by the unusually excellent flavor of that darned coffee—if he had been talking to a man he would have said "that damned coffee"; and by thunder! when he emptied out the darned grounds, a big stink bug rolled out of the coffee pot with them. The darned thing had been boiled till it had swelled up like a poisoned pup and its legs had fallen off. Maybe he had swallowed a hing leg or a forefoot for all he knew. Oosh! wow! Darned if he wasn't sick! He felt like rubbing his stomach when he thought of it. Whee!

After that he didn't like coffee any more. He used up a pound of coffee, making it every meal, and then throwing the whole mess out in the grass. Finally he threw away the pot in which the bug had been boiled and got a new coffee pot—a bright, shiny thing that wasn't worth three whoops in h——" (he stuttered). Coffee never did taste good to him unless it was made in a pot blackened by a campfire, he said apologetically.

Well, having given up coffee, he had to have a stimulant of some kind; so he went to chewing tobacco. Up to that time he had simply smoked. He was sure he never could get back his appetite for coffee. Sometimes he wished he hadn't seen the darned bug in the coffee grounds, he said. He was sure that there was nothing poison about the bugs; it was just the looks of the dam—the darned thing that had made him sick.

Blind Springs of thirty years ago were surrounded by as many miles of bunchgrass as you could see, and furnished the only water between the Wilson creek crossing south of the town now called Almira, but which was unheard of then, and the Coulee bottom 15 miles west. The springs were called "blind" because you did not know they were there till you came right upon them.

Westward from Blind Springs you struck the rocky region called "The Deadman." Why it was called by that name I hardly know. There is a legend to the effect that in the early days Chief Moses, then a bad Indian on the warpath, crept upon a man who was drinking water at Blind Springs and shot him. The man managed to get on his horse and rode west, but died finally; and the country in which he is allaged to have died, and for miles around is to this day called the Deadman. No one knows where the Deadman begins or where it ends, or where the dead man for whom it is named is now buried, or who he was, or when he was killed.

The Deadman in our early days on the farm was here and there covered with patches of big sagebrush; and if it had not been for those patches of sagebrush I do not know how we and our neighbors would have kept warm. We used it for fuel. The sagebrush grew in gnarled, twisted shapes, the butt ends often being as large around as a stovepipe, and the upper part branching in small, grayish leaved, prickly extremities. It was covered with loosely clinging, stringy bark which was excellent for kindling. You cut it, rather, beat it to pieces, with an ax. That was my job from the time I was 11 or 12 till long afterward when the incoming tide of settlers used up the sagebrush and we had to haul wood from a long distance.

The sagebrush was infested with a little insect we called "ticks." The ticks liked nothing better than to be carried into the house with armloads of cut sagebrush; then crawl up the walls of the house, and finally find their way to your person. You presently were aware of their presence by feeling an intense itch. Rolling up your sleeve or unbuttoning your waist you discovered that the tick had screwed its head into your skin. To get the tick out without leaving its head in the skin was a trick in itself, and was a trick you had to learn, or be bothered many days by the itch. We did not fear the ticks, however, though mothers were pretty careful to keep them off their babies.

But in spite of sagebrush and ticks The Deadman was a wonderfully fascinating place. I was not allowed to go into it till I was a pretty good sized boy. Riding into the Deadman, you understand, took me eight, 10, 15 miles from home into a country where there were neither roads nor trails. I rode in and rode out merely by keeping my sense of direction and this I never lost, day or night.

Since leaving the Deadman country I have been in many parts of the state and in eastern and southern states. Always I am muddled as to direction. Straight up and straight down is all I am sure of. But I believe that if now I were transported to The Deadman on a magic carpet or other lightning conveyor I would know the instant my feet struck the ground which was north, south, east and west and could strike the intermediate directions. I learned these in childhood.

There was just one exception to the unerring sense of direction I had in The Deadman country—and that was foggy weather. Anyway, there is no country in the world that is so confusing in foggy weather as a bunchgrass prairie, unless it is the ocean. The greenish gray of the bunchgrass blends exactly with the fog. As you look away you can not tell exactly where the bunchgrass leaves off and where the fog begins. The hills, if you can see them at all, loom uncertainly, and what you think is a hill may prove to be a bank of fog. You start uphill, you think, and presently, to your dismay, you discover that you are riding downhill instead. You see a herd of cattle on your right and recognize several of the individuals of the herd—and on your nearer approach discover a bunch of greasewood or sage. The grass is soggy and your horse gets discouraged in the fog quicker than in hot weather. Everything is all out of shape, you are fooled in every guess you make and presently you are hopelessly lost.

A story which went the rounds of our pioneer settlement was that William Bundschue, one of the early comers, walked out on the prairie surrounding his house to find his cow that had wandered away in the fog. He became so completely lost that when he finally wandered into his own barnyard by accident he failed to recognize his own corral, his own barn, or the cow he had been hunting that got home ahead of him. He climbed up on the corral fence to sit there till the fog cleared up and when his wife came out to milk the cow presently he failed to recognize her and she thought he had gone crazy.

One would expect small children to get lost in such a country. This happened once. It was one of Mitchell's girls that got lost, I think, and she was a mere tot of three. The word went through the pioneer countryside like wildfire—a child was lost on the prairie! Every man, every cowboy, every youth for miles around sped to the rescue and the hunt began. The baby girl had been out playing with the older children. She had lagged behind and had not been missed till they got back to the house in the evening.

The fog hung heavy over the prairie and the search was made difficult. Then the night was moonless. But all night the search continued, lanterns flickering here and there for miles around. Everywhere was calling, and the occasional firing of weapons to frighten away animals.

The country was hilly, cut up by deep, waterworn gulleys in the low places; and there was much wild rye scattered about in tall bunches and a good deal of prairie sage which was quite as high as the child's head and might easily conceal her. All night the search continued. All the next day it continued. It was fruitless till dusk of the second evening.

Then Old Man Deeter, 70 years old, stumbled onto the poor tot lying huddled under a sagebrush and unconscious. She was not dead—just chilled through and through like a small chick that is left out in the rain.

When warmed and fed and safe in her mother's arms the little girl told in her babyish lisp what she could of the pitiful story. She had wandered about on the prairie most of the night, it seemed, calling for her mamma. Some dogs barbed at her once and frightened her and she ran as fast as she could till she fell down. She got up and ran some more, till she was too tired to run and then she lay down and cried for her mamma. The dogs came near her again and barked and she cried at them and tried to find sticks to throw at them; so they want away. She was telling of coyotes, of course.

For years after that mothers would gather in their tots on dark nights or in damp, foggy weather and tell them of the little girl that got lost in the fog and make them promise never to run away in the fog; and the tots with eyes round with fear, would promise never to leave the yard when it was foggy or dark.

IN THE NEXT INSTALLMENT THE BUNCH GRASS BOY TELLS ABOUT THE "BLOW PROBLEM" OF THE EARLY DAYS IN THE BIG BEND COUNTRY; HOW HE REBELLED AGAINST WASHING HIS FACE AND BARE FEET MORE THAN ONCE A DAY DURING THE DUST STORM, AS HIS ABLUTIONS SEEMED TO HASTEN CHAPPING OF THE LIPS AND CHEEKS; NEIGHBOR LOANS HIM A BOOK TO READ FILLED WITH MANY PICTURES OF ANGELS WITH WHITE WINGS, ADVANCING IN HEAVENLY BANDS THROUGH RIFTS AND CLOUDS, AND WAS SURE THAT THESE PICTURES WERE A CORRECT REPRESENTATION OF HEAVEN; CLOUDS THE SYMBOL OF HEAVEN AND "DUST" THE SYMBOL OF THE OTHER PLACE.

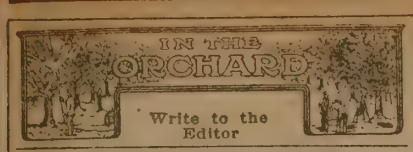
Three Plucky Girls



Here are three of those stout-hearted girls working on the land for the good of their country, which they love dearly, says the London Live Stock Journal. They will soon have been at it for a year, and their motto is "Carry on!" as they were among the very first to respond to the nation's call. For they knew the force of example and of duty, and are they not parson's daughters?

It can not be altogether pleasant or exhilarating work, for the land is among the wettest and stickiest of the Shires, and a lonely region at the best, with its wide, undulating wodland pastures and "thickthorn" coverts. These girls work hard for a low wage, and they volunteer for the hardest and dirtiest jobs, and do them, too.

It requires some endurance to let yourself out at 5:10 a. m. and attend to cows all day, especially if you find yourself practically the only available hand at a pinch, with some 30 cows demanding insistent attention; for they work in two widely separated farms, though a girl friend is usually available also. Though the working hours are not always so strenuous as this, there are many bullocks dependent on the younger sister's efforts at the other farm, pigs to ring (if necessary), stones and manure to cart and spread. It was the last-mentioned work, if we remember right, that was their apprenticeship to farming, but they stick it well. They thatch and thresh, too, and sometimes plow. England wants more of them. Let us take our hats off to all such patriots, and England will not forget them. Here they are in their bucolic dress. It is the fine, old spirit of Mary in the cornfield of our childhood days, and the old lines take on a new significance. That noble girl is living again in history.



GRANVILLE LOWTHER
Editorial Contributor

What we get out of life depends upon what we are.

All nature is instinct with the vital impulse toward some higher manifestation.

As rolls the sea, surge after surge,
Evolving life is endless Urge;
A radiant energy, a force
With solar systems in its course;
It leaps through space, outmeasures time,
Creating myriad shapes sublime;
From countless germs and countless norms
Expressing ever higher forms.

G. L.

Evolution of Orcharding

The evolution of the orchard business is a most interesting study and every man past the middle age of life can furnish his own illustration of progress. Without going back beyond a few years I want to give a few illustrations.

Eight years ago the firm of which I was at that time a member planted 100 acres of orchard. The other members of the firm deferred largely to my judgment as to the varieties to plant. I chose first of all Spitzenburgs, second Wiesaps, third Newtowns. My argument was that the Spitzenburgs had held its place as the best apple in the markets for 100 years and was the standard by which all other varieties at the expositions and fairs were judged and compared. Therefore whoever wanted to grow the best must plant Spitzenburgs. Now, the Delicious, the Winter Banana, the Red Rome Beauty and the Winesap are better sellers and also the Arkansas Black is coming to the front as a better market apple and money maker.

There is nothing permanent; change is the law of life in all its forms and he who keeps step with the march of progress is the one who succeeds. The apples of the future will be as much better than the Spitzenburg, as the Spitzenburg is better than the wild crab from which it came. G. L.

Unique Way to Irrigate

Lieutenant John Mitchell, 82 years of age, who served in the civil war, has a garden of one lot in McMinnville, Ore., and, while the entire garden would be a credit to the work of a much younger man, his plan of irrigating tomatoes is so unique as to deserve special mention. Mr. Mitchell prepared the ground well and mulched the row heavily with fresh manure. Tomato plants and cucumbers are planted in the same row. When the dry, hot weather came on he secured gallon cans, filled them with water, bent a place on the edge to make it smooth and hung a woolen rope over the edge of the can. Once wet, this drips water all day. A piece of cloth will do, but the wool rope is better. At first Mr. Mitchell set the cans away from the plants, to draw the roots out into the rich ground, but as the plants became larger and the days hotter, the cans were moved close up. They are set by a tomato one day and a cucumber vine the next. The soil keeps moist and the plants are thrifty and have grown steadily, while unwatered gardens have dried up. Mr. Mitchell claims this is far better than sprinkling once a day, and that it takes very little, if any more, time to fill the cans and move them than it would to sprinkle with a hose. M. A.

Green Cabbage Worms

Mrs. Maude Courtney writes from Knox, Penn., as follows:

"I would like to know what is a good remedy for green cabbage worms; a good spray or any other way to get rid of them. Please let me know through the columns of your paper."

I am presuming that this pest, from the description given, is what is called the "common cabbage looper." The larva is a green worm, has the looping habit like the "span worm," is about one and one-half inches long and is lined with white. It eats the leaves full of holes. If this is the right diagnosis to spray with salt water is helpful. However the following formula is successfully used:

Formula.

Copper sulphate (blue vitriol) 6 pounds
Quick lime (good stone lime) 4 pounds
Water ..... 50 gallons

For small amounts the ingredients may be mixed in the same proportions as given.

Imported Cabbage Worm.

The so-called "imported cabbage worms" in the caterpillar form are velvety green with fine dark spots. The adult butterflies have white wings, with two dark spots near the middle and larger dark spots near the tip of the wings.

The above spray is the remedy recommended for this pest.

Cabbage Pests in General.

There are a large number of cabbage pests, and about as many remedies. Among them are the following:

Cabbage louse, so common as to need no description. The lady bug is one of its greatest enemies, and is therefore the friend of the cabbage grower.

Cabbage and radish magot is very difficult to control, but among the remedies that seem to have most favor are the "carbolic acid emulsion" mixed in the proportions of crude carbolic acid, one pint; hard soap, one pound; water, one gallon. "Kerosene and sand" mixed in the proportions of one pint of kerosene, a bucketful of sand, a handful placed about each plant.

"Powdered tobacco" placed about the plants when set and renewed every week.

"Bran and glue"—Dissolve two pounds of glue in a gallon of water and the addition of enough bran to make a thin slop. Place a handful about each plant.

"Diamond Black moth"—The larva is a very small green worm; the moth is about one-third of an inch long, and folds its wings over its back. Spray with the formula recommended for the looper.

Spray for General Pests.

I am coming to the conclusion that there is no general remedy for insect pests infesting gardens, orchards and field crops that is so effective as tobacco spray. With the exception of ants, it will kill any insect on which I have tried it, and I have been experimenting with it for the last two months One part black leaf to 800 parts water. G. L.

Northwest Apple Crop.

An estimate of 23,500 cars of apples in the principal apple districts of the four northwestern states for the 1917 season is made by L. J. Blot, secretary of the fruitgrowers' agency, a cooperative marketing organization.

Following are the estimates on the various districts:

Walla Walla, Wash., 500 cars; White Salmon and Underwood, Wash., 200 cars; southern Idaho, 2200 cars; Yakima valley, Wash., 8500 cars; Lewiston, Idaho, 250 cars; Bitter Root, Mont., 500 cars; Hood River, Ore., 1200 cars; Medford, Ore., and adjoining districts, 1500 cars; Wenatchee, Wash., 8000 cars; Spokane, Wash., 650 cars.

Good Rubber Rings in Canning.

The fate of the food material canned or preserved at home may depend upon the quality of the rubber rings used on the glass jars. If the rubbers are of poor quality, the food may spoil.

Good rubber rings for the average pint and quart jar—glass top, etc.—should be not less than 1-4 nor more than 5-16 of an inch wide, and 2 1-4 inches on the inside diameter, and be cut 12 to the inch, that is, 12 rubber rings placed on top of each other will measure one inch in thickness. They should be able to stand up under sterilization in boiling hot water or in steam under pressure for at least three hours without injury to the rubber. Good rubber will stretch and return prmoptly to place without changing the inside diameter. They should also be reasonably firm, and able to stand bending without breakage.

"Fight the Flies."

Have you ever considered the amount of damage flies do each year? If you could count up the money they cause you to lose it would probably amount to enough to buy some of the things you have wanted for a long time—live stock, paint for your buildings or new machinery. Flies breed in manure piles, garbage and other decomposing filth. To flies may be traced many cases of typhoid, hog cholera, contagious abortion and other germ diseases. Do not wait until the insects begin to pester; anticipate the annoyance. An effective and economical way to do this is to thoroughly clean up and disinfect. Use a reliable disinfectant and spray your stables, outhouses and other buildings. Don't forget the manure pile and other decomposing filth. Disinfect these places freely to kill the eggs.



The "CLEVELAND" demonstrating its thorough efficiency at the Agricultural Experiment station of Washington State College, Pullman, Wash.

BIG THINGS

and lots of them, under the most rigid conditions are performed by the

Cleveland Tractor

Geared to the Ground

The tractor for year-around service—you'll be agreeably surprised at the way it "takes hold of things." One hundred per cent traction is what you can expect in the "Cleveland," together with ample power, light weight, small size, economy and high grade construction. 12-h. p. at the drawbar, 20-h. p. at the belt, high speed, heavy duty, 4-cylinder Buda motor. The Cleveland is powerful enough to plough eight to ten acres a day with two fourteen-inch bottoms, and yet small enough for use in orchards and among small fruit trees.

PRICE $1185

F. O. B. Euclid, Ohio.

The "Cleveland" has passed the demonstration stage. Write us for information and testimonials of northwest users.

McNEFF BROTHERS
DISTRIBUTORS.
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Department D.
PORTLAND, OREGON

Mr. George Severance, Acting Director Agricultural Experiment Station, Washington State College, Pullman, Washington, says in part:

We are plowing tract with a two-bottom 14-inch gang, drawn by eight horses, and they make rather hard work of it. The "CLEVELAND" drew two-bottom 12-inch gang at a greater speed, plowing same depth of furrow. The tractor was able to maintain its high speed without overheating. The tract plowed is average Palouse land, and at present is quite dry, breaking up in places quite lumpy.

Signed GEO. SEVERANCE

All the World's a Stage, and All the Men and Women Merely Players

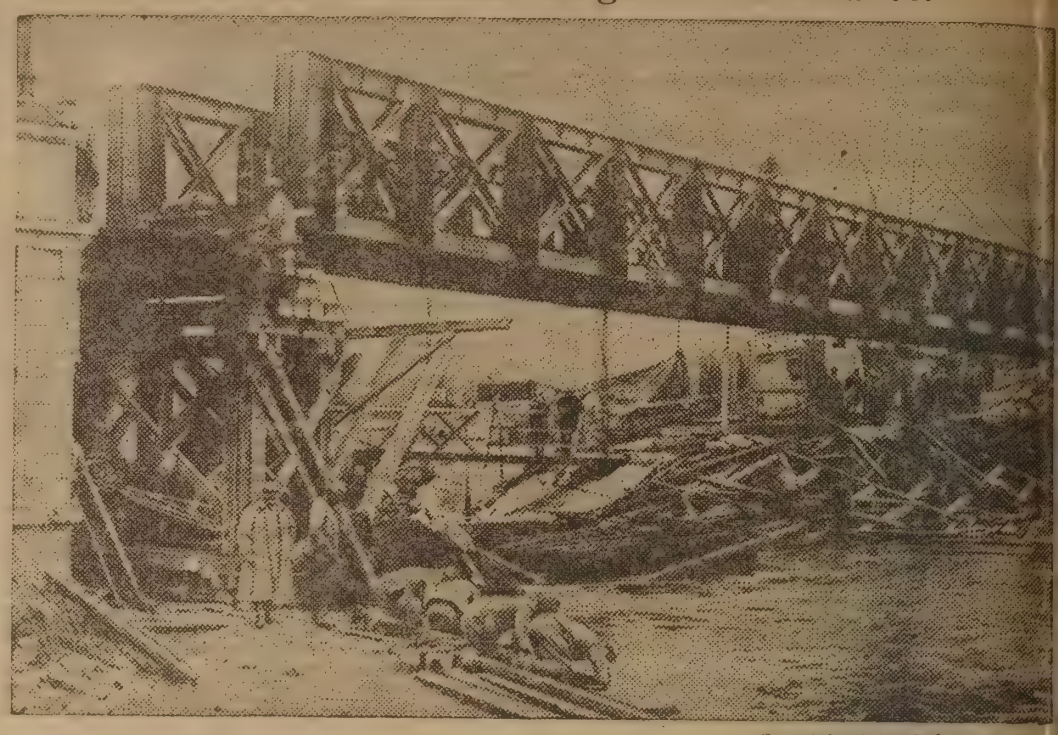
Pershing Smile Captivates France.



Copyrighted by International.

Major General John J. Pershing and his famous smile which has already captivated France. The above photograph shows him addressing the populace from the balcony of the Hotel Crillon, Paris, the capitol city of France.

Work for American Engineers in France.



Copyrighted by International.

This is the kind of work that the American engineering regiments, which are now being recruited in nine large cities of the United States, will do in France. The photograph shows a French engineering regiment erecting a "mushroom" bridge at Soissons to replace the one blown up by the Germans in their retreat. The structures erected by the engineering corps are called "mushroom" bridges because of the rapidity with which they are constructed.

How Bisbee Armed During the Strike.



Copyrighted by International.

One of the scenes that preceded the deportation of hundreds of I. W. W. from the Arizona mining town of Bisbee is shown. The men were driven from the city by about 2000 armed men, members of an organization known as the Citizens' Protective league and deputy sheriffs. The strike agitators had little chance with these heavily armed and husky miners and were soon unwillingly on their way across the desert.

Take Places of Denman and Goethals



Edward N. Hurley of Chicago has been named to succeed Chairman Denman of the U. S. shipping board, and Rear Admiral Washington E. Capps, chief naval constructor, U. S. N., to the place vacated by Major General Goethals as general manager of the emergency fleet corporation.

High Time to Enforce Food Embargo.



—Kansas City Star.

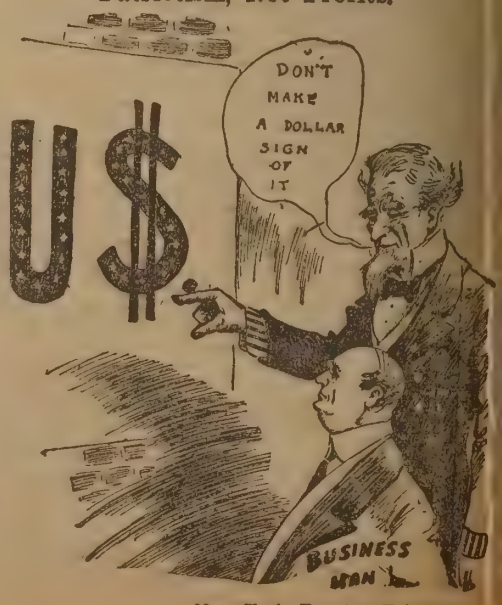
Chief of American Red Cross.



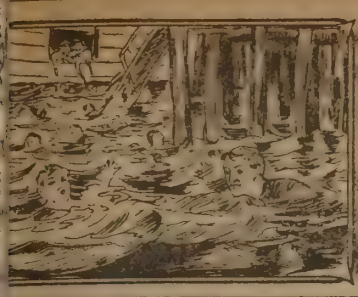
Copyrighted by International.

Henry P. Davison, the noted financier, has been appointed head of the American Red Cross society. He is shown above photographed with his son, H. P. Davison Jr., who is now an ensign in the United States navy.

Patriotism, Not Profits.



—New York Evening Telegram.



UNDER THE BLACK CANOPY



By Paul E. Triem

CHAPTER I.

A strongly-built young man, dressed
n the regulation high-laced shoes,
.out trousers and woolen "wampus"
f a lumberjack, picked his way
houghtfully among the early pedes-
ians of Second avenue. Whistles
ere blowing over the town, and the
en and women whose business it is to
pen offices and prepare for the day's
ork were scurrying to their places.
n spits of the early hour the streets
ere almost dark, for a murky curtain
f smoke hung over them.

The young woodsman stopped occa-
ionally to look in at a restaurant win-
ow; and on these occasions he became
ven more thoughtful than before.
resently he addressed himself sternly.

"Joseph Dudley, my man, if you
on't quit dallying with temptation
ou're going to make a mistake and
quander your money on breakfast.
ou haven't done anything for a week
o earn the right to eat, and you're
ot going to be silly."

Whereupon he took himself firmly in
and and set off at a brisk pace down
ie street. For ten or twelve blocks
e walked swiftly, without looking to
ie right or left. Then he paused and
moment later found himself one of
group of men gathered on the side-
alk looking up at a huge blackboard.
n this board various cabilistic phrases
ad been chalked:

"Two logging foremen for South
merica; transportation paid; contract
r two years.

"Ranch hands; $35 and board.

"Bridge carpenters; contract; trans-
rtation to Alaska."

There were some other positions
hich even at this early hour had been
alked out, showing that they had
een filled. Joe scanned the list to the
ottom and turned disconsolately away.
here was nothing for him, and he
rode on down the walk congratu-
ting himself that he had not spent
ay of his little remaining money for
reakfast.

He was passing a waffle house, from
hich came a meddening odor of pan-
akes and coffee, when an orange-col-
red sign across the street caught his
ye. He paused to stare rather indif-
erently at it. Then his eyes widened,
nd he stepped from the walk to the
reet and hurried across to the door
eside which the placard had been
splayed—for it had contained the la-
onic message, "J. Dudley, please call."
e rather thought he would!

A fleshy, red-faced man with chilly
ray eyes sat at a desk. He stared si-
ntly up at Joe, as the latter crossed
ie room and paused at a railing which
ut in the desk.

"My name is Dudley," the young man
rplained. "J. Dudley."

"Mine's Schwab," the fat man replied
ruffly. "A. Schwab. What's that got
do with anything?"

"Why, you've a sign out in front
sking me to call," Joe said, strug-
ling to master an inclination to tell
ie man at the desk what he thought
his business methods. "I registered
ere for a job, you know."

An expression of interest or remem-
rance or something like it flickered in
ie employment agent's fishy eyes and
nodded.

"I remember now," he admitted.
Well, I've got a place for you across
ie Sound—Buck Harbor; one of
tevens' camps. You'll start in limbing
swamping at forty and board. Of
ourse, you furnish your own blan-
ets."

Joe nodded. "That sounds fine," he
eclared. "How do I get over to ——"

"To Buck Harbor? You take the
eamer 'Avon' from pier three. She
aves about 2 o'clock. Now, my lad,
ay your debts and make way for
me one else. This is my busy day."

Joe left comparatively opulent, even
fter he had reduced his stock of
oney by paying the agent's fee; so
pulent, in fact, that his first act on
aving the employment office was to
take himself to the other side of the
reet and order a breakfast of bacon,
gs and coffee. The cares of the early
orning had dropped away from him,
r with a good job in sight and money
nough to take him to his destination
was safe. He finished the meal in
isurely complacency and strolled up-
wn, where he spent the morning
oking into shop windows or talking
with chance acquaintances about the forest fires, whose smoke hung like a black canopy over the city and the country adjacent.

At a quarter to two he was standing in a crowd of people who were grouped around one of the boat landings at pier three. Before him the gangplank led down at a steep angle and Joe found himself wondering how it was possible to construct this movable bridge so that it would stand the daily strain of innumerable passengers. The boat was not at her slip, but her whistle had sounded out in "the stream."

A few minutes later she drove up to the slip, and with a mighty churning of water astern and a volley of crisp commands from the mate on the fore-deck was brought to a stop. There were not many passengers on board, but when these had made their way up the plank and had forced a passage for themselves among the ranks of those waiting to take their places there was a rush of stampeding feet and Joe found himself being carried down the gangplank and toward the steamer.

It seemed to him afterwards that at one instant he was stumbling along, with the crowd pushing and jamming him from every side, while the next he had been plunged a hundred feet deep into the icy water of the Sound. There must have been a warning creak or shock as the great plank gave way, but it was swept out of his memory by the swift tide of succeeding events. Luckily, he had left his blankets up in the wharf, intending to return for them after he had assured himself that this was the right boat; so that when he realized that he was indeed under the water and was still sinking he had nothing to worry about but himself.

Instantly he realized that the water above him would be filled with struggling and desperate men and women. With a skill born of many a season spent in the rivers and lakes of Michigan he checked his downward rush and thew himself backward, so that he was lying almost horizontally, facing the surface. Then he opened his eyes, and while he continued to drive himself obliquely toward the open air he peered into the murky water above him.

It seemed an age before the last of the obscure, struggling bodies disappeared and he knew that he was free to shoot straight for the surface. He came up with his ears ringing and caught a great breath of air—the sweetest air he had ever breathed. At the same moment he swung himself about and looked at the crowd.

The sight of those white, horror-filled faces stayed with him for months. Instantly he forgot his own peril, forgot that the icy water was numbing him, and that if he ventured into that swirling mass of human wreckage he was very likely to be pinioned and dragged down. He looked swiftly about and saw that across the quay a pile-driver had been moored, and that its heavy understructure afforded a refuge for all who could reach it. In the dock above men were shouting and running about; but without waiting for them to act Joe struck out and brought himself cautiously to the edge of the crowd.

For an instant he scanned the faces nearest him. A fat middle-aged man, whose moon-like face was the color of wet putty, reached out and tried to grasp him, but Joe decided that his very bulk would keep him afloat longer than some of the others, and ducked past him. He had caught sight of the pinched face of a boy. It was swept under as Joe came within reach, but he dived swiftly and caught the youngster by the shoulder. They came to the surface, and Joe spoke briefly:

"Lie still and don't try to lift your head out of the water. I'll keep your nose out."

To his surprise the youngster obeyed him implicitly, and in a moment they had passed beyond the prow of the steamer and were headed for the raft. Joe swam on his side, with one arm supporting the boy. The crew of the pile-driver had left their work and were lined up alongside when he approached, and half a dozen pairs of strong hands reached down and grasped the limp figure which Joe surrendered to them.

"Give me a rope," he commanded, speaking to one of the men in the scow. "I can hitch on to some of the women and let you haul them over here."

The man disappeared for an instant, to return with a coil of small rope, one end of which he dropped over to Joe.

"Good luck, lad," he said hoarsely. "I wish I could swim—but I'll pull 'em in for you, and throw you back the line."

Joe was already on his way back to the crowd. As he came around the end of the steamer he saw that at last the men in the wharf had gathered their wits, and were working heroically. A couple of ropes had been lowered, and a man in a stevedore's dress had clambered down one of the piling and was working expeditiously, fastening alternate lines under the arms of such of the women as he could reach. Joe singled out a middle-aged woman, who had been clinging to one of the heavy timbers supporting the wharf, but whose strength seemed to be failing, and drew the line about her in such a way that the motion of the water, as she was drawn across to the scow, would hold her head above the surface. He saw her started safely on her way, then went to the assistance of the stevedore.

Next moment the shrill, yelping whistle of a launch sounded, and the police boat drove into the quay at full speed and was brought skilfully to a stop on the edge of the crowd.

Half an hour later Joe found himself in the engine room of the "Avon," watching his wampus steam as it hung on the railing about the boiler pit. He wore a heavy, sheep-lined coat; for, although the day had been warm, his long immersion in the water had chilled him through and through. The coat belonged to the first mate, who stood looking down at Joe as the latter sat wearily back in his chair.

"The company that owns that dock ought to give you a medal and something besides, my lad," the officer declared. "It would have been the most natural thing in the world if you had got yourself out of that mess as quick as you could, and no one would have blamed you for doing it."

"I would have blamed myself, just the same," Joe reminded him. "Is everybody all right?"

"As far as we know now. The hospitals are full of 'em—some got bruised in falling, and a lot were pretty near dead from cold and fright by the time they were fished out. However, the chances are that they'll all come through in good shape. And that reminds me there's a man looking for you. He's the father of that youngster you pulled out first. You didn't happen to know him, did you?"

Joe shook his head. "I'm a stranger in this part of the country," said he.

"Just so. Well, in that case it won't mean anything to you, but that was Jerry Stevens' boy, and Jerry is one of the kings of this corner of the world. I wasn't sure you were in shape for visitors, but I'll go up and let him know you're down here."

Joe reached out and caught the seaman's wrist in a vise-like grip. "Don't you do anything of the kind," he commanded in a voice that brought the older man to attention. "If the boy's all right I'm glad of it. You're not to say anything more about me to any one, however. Any one, you understand?"

The mate stared. "Well, you're a nice kind of lunatic," he grumbled, but the admiration in his honest eyes belied the statement. He shook his head and turned again toward the stairs leading to the dock. "We'll sail in 10 minutes," he called back. "I'll have your blankets brought aboard directly."

Joe arose stiffly and walked over to the open door looking out upon the harbor. The smoke had grown thicker, so that the sun showed as a mere blotch of yellow light; whistles boomed out across the water—fog whistles, which spoke eloquently of how the big boats were forced to feel their way through the gloom.

(To be continued.)

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University)

Why You Can Save on the Sugar You Use and Improve the Body's Condition, Too

Sugar is that valuable kind of food which is a tonic and almost an "all-healing ointment," inasmuch as it is used to heal battle wounds, and to tone up weak hearts. As a glucose solution it is injected to replace lost blood or to revive a victim of shock.



Dr. Hirshberg.

Every little movement of your anatomy where muscles are present uses up sugar. Work and play, thought and motion must ask leave of sugar. If there is not available every half minute one-one-thousandth part of an ounce of sugar, the heart will miss a beat. It burns up that much with each beat.

Heat units, or energy units, called "calories," are present to the tune of 1000 in each ounce of sugar. Therefore, each time you put a teaspoonful of sugar in your coffee, if you can properly digest sugar, you give your tissues a dozen heat units or calories. Since the average person can live upon 1200 calories a day of mixed foods, a teaspoonful of sugar is one-hundreth of his needs.

How Sugar Digests.

Glucose, also called dextrose or grape-sugar, is the simplified form of sugar which the stomach can best digest. Granulated sugar must, therefore, be changed into this least common denominator of sugars by enzymes or ferments before it becomes a "conviction," as Mrs. Malaprop might say.

The digestive juice, saliva, turns starch into malt sugar, whereas "maltose," one of the other ferments, changes the malt sugar into dextrose. Cane sugar, however, is not acted upon by these juices. There is a small amount of ferment down in the lower part of the intestine called "sucrase." This acts upon the cane sugar and transforms it into dextrose and levulose, the exact kinds of sugar found in honey.

Cane sugar is not so easily and quickly digested as malt sugar. It takes exactly four times as long to digest and make an ounce of cane sugar useful to the tissues as it does malt sugar. Another objection to cane sugar lies in the fact that it is an irritant.

Indiscriminate Use Unwise.

If starchy foods are taken into the mouth the every-ready saliva quickly converts them into malt sugar, which is, in turn, changed to dextrosse and passed along into the small intestine. The process is gradual but prompt. Only a small amount is produced, which is rapidly absorbed.

Starch is soft and non-irritating to the stomach. The sugar produced from starch is carried off as quickly as it is made, and the stomach in this way is not subject to strong solutions of sugar.

Cane sugar is not a ration for human beings. The stomach of a cow is furnished with a particular ferment which acts favorably upon cane sugar, making it a good ration for the cow, but not for human beings.

Indiscriminate and ignorant use of sugar is absurd. To put sugar on oatmeal and other cereals over which a quantity of cream is poured is superfluous. Cornmeal, oatmeal and many other breakfast foods are composed chiefly of sugar or starch. What starch is present is quickly converted into sugar, making the whole dish sugar.

The wornout expression that sugar decays the teeth is not exactly true. Sugar itself does not attack the teeth. The mischief is caused by a large amount of acid gastric juice which is caused by the irritating effect of cane sugar. Thefefore, the ordinary diet should consist of foods that will give the needed supply of sugar for the tissues and lime for the preservation of the teeth. Green vegetables, spinach and turnip greens contain much of the necessary lime. The potato is the only vegetable that does not contain some amount of lime.

FAMILY CIRCLE

Write to the Editor

ALICE W. BARLAND
Editorial Contributor

Bran Bread

And Other Ways of Economizing

By ALICE W. BORLAND.

There was an inquiry in The Farmer recently for a recipe for combining bran or shorts in the making of bread. I have made excellent biscuits by using two-thirds white flour and one-third graham and bran one-half of each). They seem more satisfying than all white flour for real hungry people.

Mrs. E. L. Armstrong of Charleston, Wash., very kindly tells us her experience based upon years of trial with bran in bread.

She says: "I put one-quarter bran in two out of three bakings, using all white flour the third time, and in this way the medicinal value of the bran is kept effective, and yet no one tires of it. The same proportions of middlings make delicious hot cakes or biscuits. I use no additional sweetening."

I am convinced we use too much fine flour for our good. I believe we should give young children more of the coarse properties of wheat. If we did that they would have better teeth.

These times, when every one is put upon his honor to save food in every possible way, brings to my mind a long list of things I have not done along lines of saving in the past, and I used to think I was a very careful housekeeper, too. Let me tell you what I have done this last few days. On Sunday I cooked for three of us a hen, young and tender, but fat, that weighed about three and one-half pounds I made a stew of it and had biscuits in the gravy. This we had for dinner. In the evening we went for a picnic supper in the woods, so I cut off a few pieces of what was left and put them through the meat grinder, and, after mixing in a simple salad dressing, I made sandwiches. On Monday for dinner I served some more pieces in a nice gravy, same as Sunday, adding a cup of broth which I saved from Sunday's cooking. Still there were some pieces left, so I cut them from the bones neatly and pieced out the supper Monday night. Today I put the few scraps of meat which were left and all the bones which I had saved together and boiled them for a half hour and poured the liquid through a strainer and returned it to the stove.

I then looked in the ice box to see what was there. I found about a tablespoon of macaroni and about two tablespoons of boiled rice, both of which I put in my broth. I seasoned it with salt, pepper, onion salt and celery salt, and all three of us enjoyed a most delicious soup. In years past I would never have given the matter so much thought and would not have had such good food all from one fowl.

More and more do I learn that it pays to concentrate on one's employment.

DO NOT QUIT SCHOOL.

This Is Advice to Young People.

There is a strong national movement afoot, not primarily among educators, but starting with the council for national defense itself, looking toward the continuation in high schools and colleges of the boys and girls and young men and young women of the country.

The world war is doing two things of vital interest to the younger generation: It is calling upon them to render their greatest possible service, and it is proving the great demand for trained minds and bodies.

Too often the patriotic young men and women on the farms and elsewhere believe that their greatest service can be rendered by quitting school and applying themselves to some other work—more intensive farm labor, perhaps, or enlistment in some form of military or hospital service. The leaders in this country, the members of the council for national defense, upon whom largely devolves the responsibility for the successful participation of this country in the war to its victorious end, are urging that, above all else, these young people finish their education. This movement is illustrated by a letter being sent out throughout the state of Oregon by Governor Withycombe and Superintendent J. A. Churchill of the Oregon department of education. In this letter they say:

"We are writing to urge you, as a patriotic duty, to continue your preparation this coming year by attending the college or university of your choice. We feel that you owe it to your country to make every sacrifice possible to do this, because through a continuance of your training you can render services more valuable and effective during the later years of the war and in the times of need that will follow.

"We urge that all boys and girls graduating from high schools enter college, technical school, or normal school; that all college women remain in school until they have been graduated; and we further urge that all college men below the age of liability to selective draft, and not recommended for special service, remain in college.

"At all times, but especially in our present hour of need, you should ask yourself how best you can serve your country. In deciding this question at the present time, you can do no better than to act upon the advice of those who are responsible for the future welfare and integrity of this government."

Old English Initials to Embroider



By WINIFRED WORTH.

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under an initial before embroidering. It aids one in washing the color from the finished design.

In padding these old English initials, different methods may be used. Some use the twilled cotton for the purpose; others make the chain stitch, while others let a skein of floss out at full length and embroider a strip of it under the thick parts while forming the letter, clipping the skein when the initial is finished. This is a splendid method, quickly done, and is suggested, too, as a help in padding all large pieces in border or crescent outline.

Initials can be made by filling in the broad space with French knots. This is used largely on elaborate pieces, such as the laundry bag, table scarfs, and ornate gifts.

Sidelights

The Advantage.

First Motorist—How many miles can you go on a gallon?

Second Motorisft—How many can you?

First Motorist—I asked you first.—Life.

A Victim.

"And why are you in prison?"

"I'm the victim of unbelief, ma'am."

"Unbelief?"

"Yes, ma'am. I couldn't convince the jury that I was telling the truth."—Detroit Free Press.

A Startling Diagnosis.

"Your wife, sir, seems to be subject to fits of verbosity."

"Good heavens, doctor, I never thought she had anything the matter with her except she talked too much!"—Baltimore American.

Or Into Wall Street.

What's an optimist?

An optimist is a person who'll go into a restaurant without a cent in his pocket and figure on paying for the meal with the pearl he hopes to find in the oyster.—Illinois Siren.

The Yankee Mind.

Victim—What has happened? Where am I?

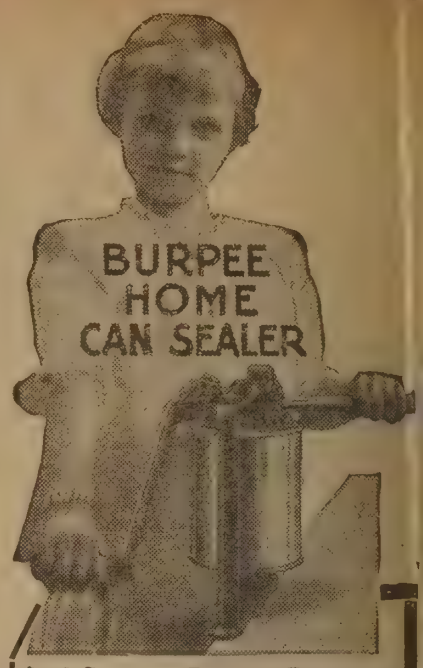
Doctor—You have been seriously injured in a trolley accident. But cheer up—you will recover.

Victim—How much?—New York Times.

Not a Good Time.

Darling, I have decided to speak to your father tonight.

Oh! not tonight, Alfred. He has cut himself shaving, missed a train, broken his glasses and lost an umbrella—all since this morning.—Browning Magazine.



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With a $10 Burpee Home Can Sealer you can put up the surplus products of your farm and sell them direct to the consumer, AT RETAIL PRICES. Big market all the year around for all you can put up. Cans easily secured.

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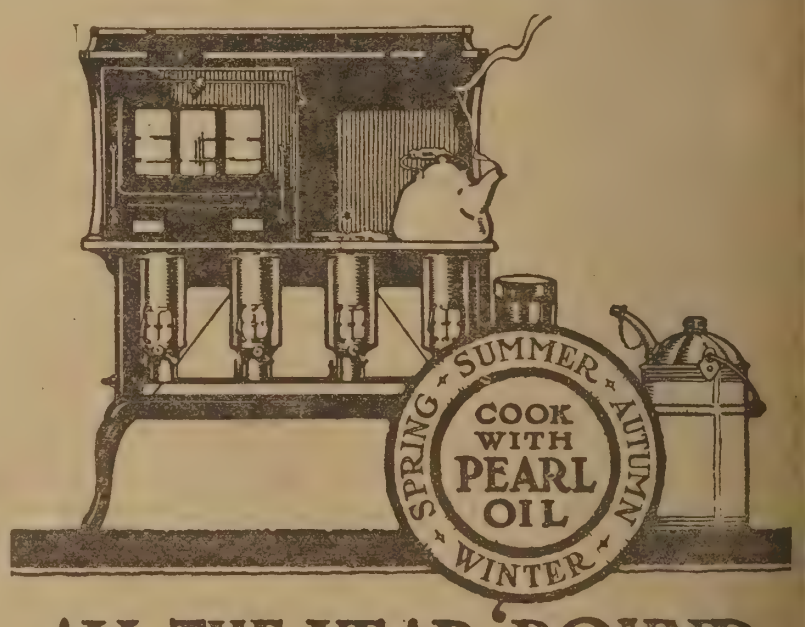
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NEW PERFECTION OIL COOK-STOVE

STANDARD OIL COMPANY
(California)

Patterns

1910—Lady's waist. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 2 3-8 yards of 44-inch material for a 36-inch size. Price, 10 cents.

1201—Child's set of dress, petticoat and drawers. Cut in 4 sizes: 1, 2, 3 and 4 years. It requires 2 3-4 yards of 27-inch material for the dress, 2 3-8 yards for the petticoat and 3-4 yard for the drawers for a 3-year size. Price, 10 cents.

2150—A simple negligee. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 4 yards of 36-inch material for a 36-inch size. Price, 10 cents.

2149—Girl's dress. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. It requires for an 8-year size, 3 3-4 yards of 36-inch material. Price, 10 cents.

2142—Dress for misses and small women. Cut in 3 sizes, 16, 18 and 20 years. It requires for an 18-year size 6 3-8 yards of 36-inch material. The skirt measures about 2 1-4 yards at the foot. Price, 10 cents.

2148-2157—A splendid combination for sports or outing. Blouse 2148 cut in 7 sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2157 cut in 7 sizes: 22, 24, 26, 28, 30 32 and 34 inches waist measure. The skirt requires 3 yards of 44-inch material and the blouse 3 1-4 yards of 44-inch material for a medium size. The skirt measures about 2 5-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

1397—Girl's dress. Cut in 4 sizes: 2, 4, 6 and 8 years. It requires 3 yards of 44-inch material for a 6-year size. Price, 10 cents.

1266—Set of baby's one-piece long clothes. Cut in one size. It requires for sack, 3-4 yard of 27-inch material. It requires for slip, 2 1-4 yards of 36-inch material. It requires for wrapper 2 3-4 yards of 27-inch material, and for Barra coat, 1 1-8 yards of 40-inch material. Price, 10 cents.

2136—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 7 yards of 36-inch material for a 36-inch size. The skirt measures about 2 3-4 yards at the foot. Price, 10 cents.

2133—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 10 will require 4 1-4 yards of 44-inch material. Price, 10 cents.

1298—Boy's blouse suit with knee trousers. Cut in 4 sizes: 6, 8, 10 and 12 years. It requires 3 1-2 yards of 36-inch material for a 12-year size. Price, 10 cents.

2132—Lady's "cover all" apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. It requires 4 7-8 yards of 36-inch material for a medium size. Price, 10 cents.



Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

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Enclosed find ..... cents, for which send me the following patterns:

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Pattern No. ..... Size .....

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BE SURE TO GIVE NUMBER AND SIZE.

Making Vinegar at Home.

Replying to an inquiry regarding the failure of cider to become vinegar after a year of waiting, Professor A. F. Barss of the Oregon Agricultural college reports that the making of cider vinegar at home is a difficult process because so many things may happen to the juice before it becomes vinegar and it is impossible to be sure of a uniform product.

Green apples or over-ripe apples will neither make good vinegar. If it is not fermented thoroughly before the organisms start to work, the vinegar test will be far below normal. If the container is not clean the product will be unsatisfactory. If the temperature is too low or too high, or if unfavorable organisms get in before the needed ones get a chance, the product may never turn to vinegar.

Even after the alcoholic fermentation is complete, other things may happen. The acetic acid bacteria may not appear, if good, old vinegar is not added or if no "mother" is put in. If the vessel in which the change takes place is not given any fresh air, or if it is jarred and moved, action is apt to stop.

Sometimes it takes as much as 18 months or even two years for good vinegar to mature. It may be that the vinegar-making process may have advanced to almost any point and then for some reason stop and deteriorate. Sometimes it is very difficult to find out why this happens.

Making vinegar at home is not an easy process and it is doubtful whether it pays to make it for sale without some investment in a plant for the purpose.

Ready-to-Serve Beets.

Rules for home canned beets are given as follows by the United States department of agriculture:

Wash your jars; wash rubbers; test rubbers for quality.

Set empty jars and rubbers in pan of water to heat and keep hot.

Fill washboiler to cover jars two inches with water.

Heat water in washboiler.

Use only fresh, sound beets.

Wash beets thoroughly; use a vegetable brush.

Cut off all but one inch of tops; can the tops later.

Place beets in colander; scald by setting over a vessel of boiling water, covered tight, for 5 or 10 minutes.

Dip quickly into cold water.

Scrape or pare to remove skin.

Pack whole beets, slives, or cross-section pieces in hot jars.

Place rubbers and caps in position; not air tight.

Place jars on false bottom of washboiler.

Submerge jars two inches.

Let water boil 90 minutes.

Start counting after water begins to boil. Remove jars.

Tighten covers.

Invert to cool and examine for leaks.

If leaks are found, change rubbers, and boil again for 10 minutes.

Wrap in paper.

Store in a cool, dry place.

Household Hints.

In sewing the tape loops on a bathroom towel take an extra minute to fasten tapes on diagonal ends so that all the wear may not come at one end. With the two loops the towel will be hung up by alternating ends.

To disinfect a sink, pour down a gallon of boiling water mixed with two tablespoonsful of soda and a teaspoonful of ammonia. This will dissolve all greasy matter in both sink and pipe.



Designed with modified curves to prevent cutting of the Shirt over the Shoulders. Ask your Dealer, or write—
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Free Tuition
Y. M. C. A.

Day and Night Schools

(Jenkins Institute of the Y. M. C. A.)

Boys! Young men! What have you done in the past three months to conserve the nation's food supply as requested by the governor of your state?

The Y. M. C. A. day and night school at Spokane, Wash., will give three free scholarships, aggregating nine months' tuition, apportioned as follows:

4 months' tuition for the best paper telling "What I Have Done."

3 months' tuition for second best paper, and

2 months' tuition for third best paper.

Papers will be judged and awards made September 15, 1917. Address educational secretary

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We buy cascara bark, Oregon grape root and Oregon balsam of fir at the prevailing market. Submit samples and quantity you have for sale.

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LET US DEVELOP YOUR FILMS. Our price is only 25c for developing a 6-exposure roll film up to postal size and making six prints. mailed back, prepaid. Cash must accompany order. **MOEN'S ART STUDIO, Preston, Minnesota.**



Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.



My Dear Children: Many of you write me that you do not see your letters. All the letters received from you are printed. Sometimes they are not printed right away, for it takes some time for them to come to the office, to be copied for the printer and maybe other letters are ahead of them and they have to wait.

So you must not be too much disappointed if they do not appear in the very next issue of the paper. You must be patient and wait and read the other letters, knowing that yours will come, bye and bye.

Whenever I write a letter, I always try to think what would interest the one I am writing to, and not what interests me. Isn't that a pretty good rule to keep? If we merely wanted to interest ourselves, we would write letters to ourselves. But when we write to others, we want to interest and please them. So let us think of things that the rest of the Corner children will like to read about.

Have you noticed the Sunshine Lady? For the older children who are sad or in trouble, I am sure she would be a friend. But what I wanted to say about her is this:

She believes in helping others and in making them happy. Can't you remember some of our letters have come from lonely children, from children who needed cheering, from children who have been sick and would like letters? Let us keep our eyes open and when we hear of such, write them a cheerful letter. Your loving, AUNT NELLIE.

The Best Day Is Christmas.

Dear Aunt Nellie: This is the first time I have written to the Corner. I like all the letters fine. My subject is "My Best Day." My best day is at Christmas. I think every one would like Christmas. Then we can get playthings. My sister and I each got a doll that we haven't had out of the box yet. I have one sister and one brother. I got a pet cat. Her name is Kalena. She hasn't been home for a long time. I forgot to tell you about our doll clothes. We got a whole lot of doll clothes from a big girl who lives a quarter of a mile from our place. We tried them on our little doll. The sleeves were too small. Then we tried a bigger dress on her, but it was too small for her arms. Then we put an underskirt on her. I will write again. —Helen Anderson, R. R. 3, box 19, Olympia, Wash.

Tells About Her Favorite Book.

Dear Aunt Nellie: I saw my other letter in print so I thought I would write again. I want to try and win a prize. My subject is "My Favorite Book." It is the Erie Train Boy. This boy worked on a train. He sold papers and candies and popcorn. He was very poor. His father was dead and he was left to support his poor mother and his little brother, Alfred. He and his mother and brother lived in an old house in care of a cross man. He made them pay more for the rent than he should have. One day while Fred was away the man came and said to the mother that he would turn them out in the street if they did not have the money to pay for the rent. I am 11 years old and in the sixth grade. I hope my cousins will enjoy my letter. I would like to correspond with any of my age and any others who will write to me. I enjoy reading the other letters very much. I hope Aunt Nellie will like my letter.—Frances McCauley, Route 1, Box 35, Dayton, Wash.

Have One Dog, His Name Is Don.

Dear Aunt Nellie: This is the first time I have written to the Childrens' Corner so I will write. I was 10 years old the 13th of April and in the fifth grade. We have one dog and his name is Don. We have two cats, 35 hens, eight horses, 30 head of cattle and six hogs. I have two brothers and no sister. My brothers' names are Frank and Jasper. Jasper is 22 years ald and my brother, Frank, is 16. I went to Spokane and Edwall and coming home there was a dust storm. Our school was out the 22nd of May. Our teacher's name was Mrs. Boyes. We all like her very much.—Lillian A. Strong, Curlew, Wash.

Going to Can for the Soldiers.

Dear Aunt Nellie: My father takes The Farmer and I always like to read the Children's Corner. I haven't any brothers or sisters. I have a little pup and two kittens. We have four horses. Their names are Flora, Mollie, Bonnie and Topsy. I am 10 years old and in the sixth grade. I am four feet four inches in height and weigh 80 pounds. We have 36 hens and 80 baby chicks. We have seven little turkeys. My birthday is December the third. I joined the Mother and Daughter Canning club to can for the soldiers. I will write another letter to the Children's Corner. —Fern Mathena, Prosser, Wash.

Wants to Find Her Twin.

Dear Aunt Nellie: Papa takes The Washington Farmer and I like to read the letters in the Children's Corner. I am nine years old. My birthday is the 15th of February. I would like very much to find my twin. I have a little brother five years old. His name is Samuel. We live on a farm about six miles out of town. I like to help plant the garden and take care of the chickens. Our schoolhouse is half a mile from home. I am in the fifth grade. My teacher's name is Mary Turner. Our school closed the 20th of April.—Leona Jacks, Raymond, Wash.

Wishes to Hear From Cousins.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and in the fourth grade. I will be 11 the 5th of July. Have I a twin? My teacher's name is Miss Gammon. I have six sisters and one brother. My brother's name is George. He was born March 7th. I live on a 10-acre farm. We have three horses and two cows and three calves. We have about 75 chickens. I would like to hear from some of the children.—Rose Annie Kramer, Kennewick, Wash.

Cow Ate Vesta's Corn All Up.

Dear Aunt Nellie: I have not written for a long time. I joined the garden and ate almost all of it before I corn in my garden. I guess I am not going to get much from my garden, for it has been so hot that nothing can grow. My corn was about two feet high when the old cow got in my garden and at almost all of it before I discovered her. The wheat is burned, too. It sprinkled a little this morning when we were getting ready to go to church, and it is clouding up again. School starts right away again. Miss Carver was my teacher last year and is going to be my teacher this year, too. I am glad, for she is such a nice teacher. Anyway, I think she is. I will be in the fifth grade next year. I was 11 years old the 20th of June.—Vesta Ada Johnson, box 60, Mansfield, Wash.

Some of May's Favorite Books.

Dear Aunt Nellie: I enjoy the letters very much. I have four sisters and two brothers. My favorite books are: Desert Gold, A Texas Ranger, Beautiful Joe, Black Beauty, The Danger Trail, The Silent Places and The Girl of the Limberlost. Desert Gold is a story of Arizona. A Texas Ranger is a story of Texas and Wyoming. Beautiful Joe tells the story of a dog and Black Beauty is about a horse. The Danger Trail is a story about a man that went to the Hudson Bay. The Silent Places is about the northern part of Canada and the Girl of the Limberlost is a story of Michigan and its woods. There is nothing I like better than to get on my cow pony and go riding. I was 15 the 18th of July.—May Prouty, R. F. D. 1, Outlook, Wash.

Busy Just Now Trapping Squirrels.

Dear Aunt Nellie: I enjoy reading the letters in Aunt Nellie's Corner. I enjoy them so much that I though I would write too. I am 14 years old. My sister and I are trapping squirrels. We get two cents a squirrel. We caught one hundred and thirteen squirrels. I live on a 200-acre farm. I help my mama milk the cows every night. We milk four cows. My mama raised 150 chickens, 2 turkeys, but she has two hens setting on turkey eggs yet. She has 27 ducks she raised this spring. I would like to correspond with a girl of my own age.—Anna Entel, Colton, Wash.

Ruth Lives on Puget Sound.

Dear Aunt Nellie: I am in the sixth grade. My teacher's name is Miss Hjaltalin. There were 18 pupils in our school. I am 11 years old. My birthday is the 31st of October. I have one brother and one sister. Their names are Oscar and Alma. He have five cows and five calves, also one horse. Her name is Jennie. I live on a farm on Puget Sound. I have a pet cat. His name is Tommie. I hope all the children will enjoy reading my letter as I do theirs. I am going to write again if my letter escapes the waste basket.—Ruth Hagen, East Sound, Wash.

Little Dog Older Than Doris.

Dear Aunt Nellie: I have written to The Washington Farmer before and then I have read the letters ever since and liked them and thought I would write again. We have four horses and 10 cows. I have a sister 15 years old. We have a little white dog. His name is Sport. He is one year older than me. I have a big doll. Her name is Josephine. She is very cute. Thursday my school let out and I passed into the fifth grade. I am nine years old and our little white dog is 10.—Doris Streeter, box 98, Bow, Wash.

Iris Is One of Our New Cousins.

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 14 years old and will be 15 the 10th of December. I live on a farm of 200 acres. We have nine cows milking. Their names are Lilly, Spot, Jess, Darling, Rosy, Butterfly, Nellie, Peggie and Blossom. We have two little calves and one horse and two heifers and a bull and a steer. The horse's name is Midget. We have three pigs and four cats, two little ones and two big ones. We have a big garden. We have an acre of corn planted. I have two sisters and three brothers. My sisters' names are Myrtle and Freda and my brothers' names are Victor, Glen and Randolph. Freda is only seven months old and Myrtle is 18 years old.—Iris Chevalier, Prevost, Wash.

William Thinks Farm Life Is Best.

Dear Aunt Nellie: I always find The Washington Farmer in the mail box or on the sewing machine. I always hunt for the Children's Corner. I am staying at my grandfather's. I live in Eatonville, Wash. My subject is "Farm Life Is Best." I have two brothers and no sisters. My brothers are both younger than I am. Their names are Orval and Graydon. Orval is seven years old and Graydon was three years old July the fifth. I go fishing almost every day. I have caught 88 fish in nine trips. I caught one 17 inches long and another a foot long and two nine and a half inches long. I will be 10 years old the sixth of October. Have I a twin. If I have will he or she please write to me.—William David Smith, Cedargrove, Wash.

Plays Her Music Every Day.

Dear Aunt Nellie: This is the second time I have written to the Corner. I like to read the letters very much. I will be in the fourth grade this year. I play my music every day. My little kittens' names are Blackjack, Johnny Jackrabbit, Tabby and Greyeyes. Have I a twin? My birthday is the 24th of November. I wish my twin would write to me. I am 9 years old. I have three brothers and no sisters. My brothers' names are Ora, Albert and Elmer.—Effie G. Luddington, age 9, Bright, Wash.

Likes to Write to the Corner Best.

Dear Aunt Nellie: I am going to write to the Corner again. I like to write to the Corner best. I think it is fun. We have about 200 little chickens, six geese, seven turkeys. I saw Ethel Miller's letter in the Corner. I wish she would write to me, as I like to write to the girls of the Corner. I was 14 the 15th day of May. I took some of the eighth grade examinations and passed some of them.—Viola Augst, Box 30, R. F. D. 1, Beebe, Wash.

Brother Goes to School With Stella.

Dear Aunt Nellie: I am eight years old. I have gone one term to school. I am ready for the third grade. My teacher's name is Gladys Rhoads. I have two brothers, one six and one five. Brother Dale goes to school with me. We ride a pony to school. It is two and one-half miles to go. I like to go to school and learn. I stay with my grandmas some in the summer. My birthday is Christmas day.—Stella Ruark, Mayview, Wash.

Glad to Hear From Ella Miller.

Dear Aunt Nellie: We take The Washington Farmer and I read the letters in the Children's Corner and like them very much. I am 7 years old and in the first grade. We have two dogs and one calf and two milch cows. We have one canary bird. I have two dolls. One of my brothers went to war three weeks ago.—Ella Miller, Peola, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the past week: Avah Sharp, Marian Holmes, Elizabeth Fogelquist, Mary Bennett, Mary King, Margarette Williams, Jane Adams, Elzina Rogers, Violet Leachman, Anna Straube, Rachel Webb, Hilda Kuki, Augusta Chevalier, Marie Haven, Beulah Shaw, Eunice Libbey, Leona Machlied, Esther Hergert, Alice Duncan and Catherine Borden.

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The above is a facsimile reproduction of a check received in payment for a subscription for one year to The Washington Farmer to be mailed to R. B. Bean, North Yakima., Wash. Mr. Bean is the expert agriculturist connected with the government irrigation projects in the Yakima valley.

Three-Thousand-Mile Highway Planned

Evergreen Route Would Divert Travel Into the Northwestern States

By A. E. GIPSON

The prospects for a great highway for the purpose of leading travelers from the east into the northwest were given a boost at Nampa, Idaho, July 27, when about 100 delegates from many parts of the northwest gathered in the interests of the "Evergreen highway."

This highway is designed to run from Vancouver, B. C., to El Paso, Texas, passing through the scenic and industrial sections of Washington, Oregon and Idaho. Under highway conditions as they now stand the bulk of the travel from the east finds its way into the southwest, especially southern California, and only its overflow is directed northward into the equally attractive northwest. The proposed Evergreen highway will cover a distance of 3100 miles and will, when completed, be one of the great arterial highways of the entire United States.

Among those present were many state officials and good roads officials and promoters, including Secretary of State I. M. Howell of Washington and Ben F. Hill and A. J. Elrod, also of Washington state, and active in good road promotion.

One of the direct results of the meeting at Nampa was the formation of the state Evergreen Highway association, which will play a great part in furthering the movement for the highway's completion. C. B. Ross, chairman of the Canyon county board of commissioners, was chosen president of the new association and J. A. Lakeness of Nampa secretary and Walter E. Miller of Nampa treasurer.

All the recommendations of the resolutions committee were approved, among them being the following:

Unqualified indorsement of the proposed highway, the selection of a vice president from each county in the state, the investigation by the government of the feasibility of making the proposed highway a military highway and the beautifying of the highway by the planting of trees along it.

A second meeting will be held at Lewiston some time in October, at which time the organization will be completed and further active work in behalf of the highway taken up.

A lively and enthusiastic banquet was given in the evening, at which F. S. Stone of Nampa presided. Among the speakers were P. Monroe Smock of Payette, President Ben F. Hill of the Evergreen association, Secretary of State Howell of Washington, Secretary Elrod of the Evergreen association, Carl E. McStay of Caldwell, W. S. Parkhurst of Richfield, J. A. Lakeness of Nampa and W. E. Meacham of Baker City, Ore.

The following comprised the resolutions committee:

Canyon county, Walter Griffiths of Caldwell; Ada county, G. C. Scarf of Boise; Payette county, E. C. Brainard of Payette; Washington county, C. A. Kenyon of Weiser; Owyhee county, R. C. Massey of Grandview; Lincoln county, W. S. Parkhurst of Richfield; Minidoka county, E. C. Maynard of Rupert; Bannock county, E. A. Bremm of Pocatello; Gooding county, George W. Wedgewood of Gooding; Baker county, Oregon, W. E. Meacham of Baker City; Malheur county, Oregon, C. C. Wilson of Malheur.

Information Department.

As a preface to a question which he asks The Washington Farmer, William Erickson of Mt. Vernon, Wash., says: "I thank you for the kind greetings through the paper of the proposed Information Department. I am sure it will render a great service in the promotion of greater and smaller requisites for the attainment of personal and public welfare."

RAISE STORAGE RATE

Warehouses May Add Five Cents.

With a view to assisting the warehouse companies in providing a more adequate fire protection for their property and the grain that will soon be stored in the houses, the state council of defense recently asked the state public service commission to allow the companies to increase their charge for storage by 5 cents a ton. The public service commission granted the request.

If the producer or holder of the grain considers the rate too high he may appeal to the commission for a reduction.

A statewide campaign is under way looking toward greater protection against grain fires this season, when wheat and other grains are so greatly needed for the food supply.

Clallam County Pomona Meets.

On July 14 the first regular meeting of the Clallam County Pomona grange was held at the Fairview grange hall near Port Angeles, Wash., with a large number in attendance from the six subordinate granges. About 45 new members were initiated during the day.

In addition to the customary business of the grange, C. E. Flint of Blaine gave a talk on marketing.

There were many expressions of approval and appreciation for the efforts of the business men of Port Angeles in establishing a public market for the farmers, of which Charles R. Pollock is director.

Orin Babcock, a farmer of Eden valley, is master of the county grange.

Government Clover Thresher.

The department of agriculture of the province of New Brunswick has purchased a clover thresher which is at the disposal of any farming community within its jurisdiction which desires to be independent of imported clover seed. In one county shortly after the machine was purchased 300 bushels of red clover seed were threshed. Any agricultural society or group of five or more farmers having a minimum of 10 acres of clover intended fgor threshing may apply to the department for the use of the threshing machine.

Million-Bushel Grain Elevator

Selection of the site for the new 1,000,000-bushel grain elevator with adjoining flat warehouse and water terminal facilities has been made by the Portland dock commission at St. Johns, Ore. The site is on the east side of the Willamette River, below all the bridges, and represents a combined area of 117.55 acres, and with additional space to be reclaimed extending from the shore to the harbor line, it is said the total will be 153.55 acres. The price of the property was $137,000.

The site is one of the best in the northwest, as it is large enough to leave room for expansion of the terminals as the growth of commerce demands. It will have connection with both of the railroads which come down the Columbia river gorge from the interior grain belt. It is below all the Willamette river bridges, thus saving vessels the trouble and risk of passing through a series of draws. Then, too, the widest part of the harbor is opposite the proposed terminal, and the site will be on deep water when dredging has provided the material required for the needed fill.

The commission plans to begin work soon on the first unit of the elevator and the pier, and on the bulkheading and shore work required for the fill, so as to be able to handle the 1918 crop.



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Grain and Produce Markets

Portland Wheat.

PORTLAND, Ore., Aug. 4.—There was a fair demand at the close of the week for old wheat, especially bluestem, and buyers offered as high as $2.35, but there were very few sellers. New bluestem was quoted at $2.25, Coast basis. There was not much disposition to operate, however, as there is absolutely no speculative interest in new wheat, pending action by congress on the food bill. At the same time farmers are not offering to sell, except an occasional small lot in the early sections. Oats and barley are firm and both are very quiet.

Flour prices were raised 20 cents a barrel to the $11.60 basis for patents. Millers are carrying very little old flour. Millfeed is also scarce and strong.

Pacific Northwest Grain.

PORTLAND, Aug. 4.—Wheat—No quotations.

TACOMA, Wash., Aug. 4.—Wheat—Bluestem, $2.25; fortyfold, club and fife, $2.23; red Russian, $2.20.

SEATTLE, Wash., Aug. 4.—No wheat market.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1917-18 and 1916-17 were as follows:

	Wheat.	Oats.	Barley.	Hay.
Seattle—				
1917-18	77	57	14	246
1916-17	417	131	13	270
Portland—				
1917-18	78	72	9	87
1916-17	344	181	19	143
Tacoma—				
1917-18	89	13	1	93
1916-17	394	21	7	99
Total—				
1917-18	244	142	24	426
1916-17	1155	333	44	508

Live Stock Quotations.

At Omaha.

OMAHA, Aug. 4.—Hogs—Receipts, 8340; market 10@15c higher; heavy, $15.25@16; mixed, $15@15.30; light, $14.90@15.85; pigs, $12.50@14.50; bulk, $15@15.35.

Cattle—Receipts, 200; market steady. Native steers, $9@14; cows and heifers, $6.50@9.50; western steers, $8@11.50; Texas steers, $7@8.50; cows and heifers, $6@9.50; western steers, $8@11.50; Texas steers, $7@8.50; cows and heifers, $6@8.50; canners, $4.75@5; stockers and feeders, $6@8.50; calves, $9@12.50; bulls, stags, etc., $5@8.50.

Sheep—Receipts, 300. Market steady. Yearlings, $9.50@10.50; wethers, $9@10.25; ewes, $8@9; lambs, $13.60@14.10.

At Chicago.

CHICAGO, Aug. 4.—Hogs—Receipts, 8000. Firm. Market 5c above yesterday's average; bulk, $15.25@16.30; light, $14.75@16.25; mixed, $14.70@16.40; heavy, $14.55@16.45; rough, $14.55@14.75; pigs, $11.25@14.

Cattle—Receipts, 1000; slow. Native beef cattle, $7.50@14; western steers, $8.15@11.40; stockers and feeders, $5.75@9; cows and heifers, $4.30@11.60; calves, $8.50@13.

Sheep—Receipts, 2000. Weak. Wethers, $7.50@10.65; lambs, $9.25@14.50.

At Portland.

PORTLAND, Ore., Aug. 4.—Hogs steady. Receipts, 65. Prime heavy, $15.40@15.60; light butchers and packers, $15.30@15.40; bulk of sales, $15.30@15.50; rough heavies, $14@14.60; pigs and skips, $14@14.50; stock hogs, $12@13.

Cattle steady. Receipts, 13. Steers—Prime to light, $8@9; prime heavy, $8.50@9; good, $7.35@8; cows, choice, $5.75@6.75; medium to good, $5@6; ordinary to fair, $4.25@4.75; heifers, $5.75@6.75; bulls, $4.50@6; calves, $8@9.35.

Sheep light. Receipts, 1136. Western lambs, $12@12.50; valley lambs, $11@11.50; best wethers, $8@8.50; heavy ewes, $3@6.50; best yearlings, $8.50@9.

At Seattle.

SEATTLE, Aug. 4.—Receipts, 25 cattle, 8 hogs; market strong.

Hogs—Prime light, $15.60@15.70; medium to choice, $15.25@15.45; smooth heavies, $14.75@15.90; rough heavies, $14.25@14.65; pigs, $14.20@14.85.

Cattle—Prime steers, $9.25@9.50; medium to choice steers, $8.50@8.75; common to good steers, $6@7.50; best cows and heifers, $4@4.50; best bulls, $6.50@7; common to good bulls, $3.50@6.50; calves, $6.50@9.50..

Spokane Stock Yards Saturday.

Hogs—Receipts none; market steady. Prime light, $15.20@15.35; prime heavy, $15.35@15.50; pigs, $13.25@14.25.

Cattle—Receipts none; market steady. Prime light steers, $8@8.25; prime heavy steers, $8.25@8.75; good steers, $7@7.50; ordinary to fair, $5.25@5.75; prime cows, $5.50@6.50; good cows, $5@5.50; common cows, $4@5; best heifers, $5.50@6.50; bulls, $5@7; calves, $7.50@9; stocker and feeder steers, $5@7.

Sheep—Receipts none; market steady. Prime lambs, $11.50@12; good lambs, $10.50@11.25; prime yearlings, $8.50@9; prime wethers, $8@8.50; best mutton ewes, $5@7.

Portland Market.

PORTLAND, Ore., Aug. 4.—The hop market is becoming excited with prices advancing about a cent a day. In Oregon and Washington contracts were written last week at 12 1-2 to 15 cents, and at the close 16 cents was offered, while in California the contract market advanced to 17 cents. Early fuggles were sold here at 20 cents and later a bid of 21 1-2 cents was turned down. Dealers report only 8 or 10 crops in the Yakima valley not contracted and but 259 bales of the old crop remaining in growers' hands.

What jobbers believe will be the last straight car of Wenatchee apricots will arrive tomorrow, but local express shipments are expected for several days yet.

Walla Walla onions are coming in regularly in carlots and have the market to themselves.

The wool market continues inactive with prices firm.

There is a better feeling in the hide market, in response to inquiries from the east, but former prices are still quoted by local dealers.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $49 per ton.

Corn—Whole, $80; cracked, $81 per ton.

Millstuffs—Bran, $35 per ton; shorts, $38.

Barley—No. 1 feed, $45; brewing, nominal; rolled, $51.

Hay—Buying prices: Timothy, eastern Oregon, $26; alfalfa, $18; grain, $12@15.

Eggs—Oregon ranch, case counts, 36c per dozen; candled, 37 1-2@39c.

Poultry—Hens, 15@16 1-2c; ducks, 13@17 1-2c; turkeys, alive, 18@21c; geese, 8@9c.

Butter—City creamery, prints, 43@44c per pound; cubes, extras, 40 1-2c.

Cheese — Tillamook triplets, 22c; young Americas, 23c.

Dressed meats — Veal, 14@14 1-2c; pork, 19 1-2@20c.

Hops—1916, 10@12c; contracts, 16c.

Potatoes—New, 2 3-4@3 1-2c per pound.

Wool—Eastern Oregon, fine, 58@61c; coarse, 58@65c; valley, 72 1-2@75c.

Beans — California small white, 16 1-2c; large white, 15c per pound.

Hides—Salted hides (25 lbs. and up), 20c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 32c; green hides (25 lbs. and up), 18c; green stags (50 lbs. and up), 13c; dry hides, 34c; dry salt hides, 29c.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potates, $2.75@3 cwt.

Apples—New Washington apples, $1 20-lb box.

Butter—Blanchard cartons, 44c lb; Medo-Maid, 44c lb; Cascade, 44c lb; Gold Leaf, 44c lb; Better Butter, 44c lb; Attalia, 44c lb; Diadem, 44c lb; Hazelwood, 44c lb; Solid Pack, 42c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 20c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $12@12.50.

Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.

Dressed Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 15c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Butter and Eggs.

ELGIN, Aug. 4.—Butter, 25 tubs at 88 1-2c.

SAN FRANCISCO, Aug. 4.—Eggs—Fresh extras, 43 1-2c; fresh firsts, 43c; fresh extra pullets', 37c.

CHICAGO, Aug. 4.—Butter unchanged.

Eggs—Receipts, 11,236 cases; unchanged.

PORTLAND, Ore., Aug. 4.—Butter—Cubes extras, 40 1-2c. Others unchanged.

San Francisco Produce Market.

SAN FRANCISCO, Aug. 4.—Butter—Fresh extras, 42c; prime firsts, 41½c.

Eggs—Fresh extras, 43½c; fresh firsts, 43c; fresh extra pullets, 37c; extra firsts, pullets, 36c.

Cheese—New firsts, 19½c; Young Americas, 24c.

Poultry—Hens, 23@24c; fryers, 27@28c; broilers, 26@28c; pigeons, $1.50@2 per dozen; squabs, $2.25@3; geese, 18@20c pound; ducks, 16@18c.

Hay—Wheat, $17@19; tame oat, $18@19; barley, $13@15; alfalfa, $13@18; barley straw, nominal.

Seattle Market.

SEATTLE, Aug 4.—With the street car trouble settled and city affairs almost back to normal, the markets are again able to control prices and free themselves of the enormous surplus that accumulated during the recent slump. Prices are now compratively steady with the Western avenue jobbing houses doing good business.

There is a big demand for apples and dealers are looking forward to the time when Yakima will flood the market. Already small shipments have been received from this district but not enough to fill the demand. Cooking stock is selling at $1.25 to $1.50 per box.

Apricots are getting scarce and the price is expected to rise from $1.25, at which they have been steady, to $1.50.

Local spuds are slow and are selling at $1.25 to $2.50 a sack. In most instances the potatoes are small and immature.

Cantaloups and watermelons are plentiful.

Eggs have advanced despite the efforts of most dealers to hold them back. Fancy ranch stock is bringing 42 to 45 cents per dozen, pullets 42 to 43 cents and checks 39 cents a dozen.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transaction by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 38@40c per dozen.

Poultry—Live hens, fat, over 4 lbs., 18c per lb.; 2 lbs. and under, 14@16c; old roosters, 11c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 10c per lb.; broilers, live, 16@18c per lb.

Butterfat—47c per lb.; dairy butter, 31@32c.

Beef—Buying prices: Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 14@16c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 30c per lb.; green hides, 17c per lb.; salted bulls, 16c per lb.; dry hides (short trim, 40c per lb.; bull and dry salts, 4c per lb. less; green bulls 12½c per lb.; dry butcher full wool sheep pelts, 36@38c per lb.; green calf, 30c.

SELLING PRICES.

Asparagus—Local, $2.25 per crate.

Apricots—$1.25 per crate.

Cherries—Local Bing, 10@12c lb.; Royal Anns, 5@6c lb.; local pie, 6@7c per lb.

Feed—Scratch feed, $80 per ton; all grain chop, $61 per ton: oats, $54 per ton; rolled oats, $55 per ton; rolled or ground barley, $52 per ton; clipped barley, $53 per ton; wheat, $82 per ton; bran, $38 per ton; shorts, $41 per ton; soy bean meal, $54 per ton; whole corn, $94 per ton; cracked corn, $95 per ton.

Hay—Eastern Washington timothy, $27 per ton; alfalfa, $22 per ton; double compressed, $30 per ton; wheat hay, $22 per ton; Puget sound, $20 per ton; straw, $15.

Raspberries—Red, $1.75@2 per crate.

Butter—Washington creamery extras, cubes, 43 c per lb.; do bricks, 44c per lb.; creamery firsts, cubes, 39c lb.; do bricks, 40c per lb.

Eggs—Fresh ranch, 45c per dozen.

Potatoes—Puget sound, 2@2 1-2c per lb.; Kennewick, $2.75@3 per sack.

Wool.

BOSTON, Aug. 3.—The Commercial Bulletin will say tomorrow:

"There has been a moderate business in wool during the last week. The market is very firm and possibly the least bit higher. Demand has entered on new arrivals of territory wools in the original bags, which are selling on a clean scoured basis of $1.80 to $1.70.

"Buying in the west has been rather weager this week, although prices keep strong."

Scoured basis: Texas, fine 12 months, $1.65@1.70; fine, 8 months, $1.45@1.50.

California: Northern, $1.70@1.75; middle county, $1.40@1.45; southern, $1.15@1.20.

Oregon: Eastern No. 1 staple, $1.75; eastern clothing, $1.50@1.55; valley No. 1, $1.45@1.50.

Territory: Fine staple, $1.75@1.80; half blood combing, $1.45@1.50; 3-8 blood combing, $1.30@1.35; fine clothing, $1.55@1.65; fine medium clothing, $1.40@1.50.

Pulled: Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.45@1.50.

CONTROL FLOUR PRICES.

Agreement Is Said to Be Reached

People who have predicted that $2 wheat—the minimum price fixed by the new food bill for next year's crop—will mean $14 flour may quiet their fears, according to reports from Washington, D. C.

The big flour millers of the northwest have been talking things over with Herbert C. Hoover. The result of the conferences has not been made public but it is stated that an agreement has been reached that when wheat sells at $2 a bushel the fancy patent brands of flour shall sell in Chicago at $11.50 a barrel and in New York at $12. The brands used by bakers will sell at $9.50 in the middle west and at $10 in New York. Western prices will be regulated on this basis.

88 Bu. Oats Per Acre

Mr. A. Taylor writes: "I had 315 acres in oats that averaged 88 bushels an acre, 30 acres in wheat that averaged 50 bushels an acre, 20 acres in barley that averaged 50 bushels an acre." This is only one of thousands of good reports from Western Canada. Yet nowhere can you buy good farm land at such low cost as along the Canadian Northern Ry.

BEST FARM LANDS at $15 to $20 per acre

Here you can buy specially selected centrally located lands close to the railway, that will produce crops that can only be equaled on farms costing $150 to $200 the acre in a more densely settled community. This includes the best grain land also adapted to dairy and mixed farming. Here the man with limited cash can become the owner of one of these fertile farms through the liberal installment payment plan.

Low Fares Low round-trip home-seekers' fares to Western Canada are in effect every Tuesday, to November 27th inclusive.

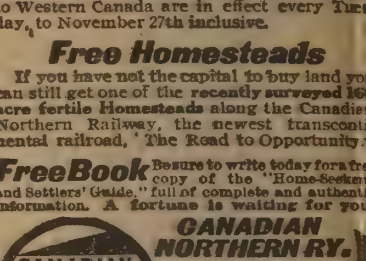
Free Homesteads

If you have not the capital to buy land you can still get one of the recently surveyed 160 acre fertile Homesteads along the Canadian Northern Railway, the newest transcontinental railroad, 'The Road to Opportunity.'

Free Book Be sure to write today for a free copy of the "Home-Seekers and Settlers' Guide," full of complete and authentic information. A fortune is waiting for you.

CANADIAN NORTHERN RY.

A. L. BROSTED
D. F. & P. A.
605 Hastings St.
Vancouver, B. C.
A. L. DAVIS, G. A.
Cor. 4th and Jackson
St. Paul, Minn.



Pay Highest Price for Wool

Write for price list and shipping tags. Address Dept. L.
PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes,
1101-09 Railroad Ave., Spokane, Wash.

STEVENS COUNTY Logged Off Lands

Low Prices.
Long Terms.

Phoenix Lumber Co.

Spokane, Wash., Dept. A.

SELF-OILING WINDMILL

With INCLOSED MOTOR
Keeping OUT DUST and RAIN — Keeping IN OIL



Constantly Filtered
Every Bearing
Oil Makes It Run
The Lightest Breeze
And Prevents Rust

DOUBLE GEARS — Each Carrying Half the Load
Every feature desirable in a windmill in the
AUTO-OILED AERMOTOR
Gasoline Engines — Pumps — Tanks
Water Supply Goods — Steel Frame Saws
WRITE AERMOTOR CO. 2500 12TH ST. CHICAGO

What Is the A. B. C.?

Audit Bureau of Circulations.

This is an association, nation-wide in its scope, not conducted for profit. Every publisher having membership in this organization pledges himself to sell circulation as a commodity, both as to quality and quantity. Advertisers using our columns are safguarded. They know that we give all the circulation we offer.

In answering advertisements don't fail to mention this paper.

Southwest Washington Fair.

Secretary George R. Walker of the Southwest Washington Fair association, says that every department is ready for a banner fair the last week in August. The daily program of the week has been made out as follows: Monday, August 27, arrangement and entry day; Tuesday, the 28th, educational and school children's day; Wednesday, Portland, Vancouver and all towns south of Chehalis and on the South Bend line; good horse racing; Thursday, governors' day, Tacoma, Seattle, Olympia, Aberdeen, Hoquiam and all points on Grays harbor line; Friday, Centralia and Chehalis day and all points on the railroads between Centralia and Tacoma; Saturday, automobile day, farmers' and stockmen's day, also Morton and eastern Lewis county day.

Sun Glasses for Ballplayers.

Sun glasses have been invented for baseball players so hinged to a cap that a touch will drop them into position for a man to see a ball coming toward him while looking directly at the sun.

Want Ads

HELP WANTED—MALE 3

HAWTHORNE AUTO SCHOOL.
462 Hawthorne Ave., Portland, Ore.
School in session all year 'round.
No books, charts or printed lessons used.
Everything practical and up to date.

AGENTS—WANTED 9

ALBANY NURSERY TREES GIVE SATISFACTION. You can earn good money selling our complete line of high-grade fruit and ornamental stock. Men or women wants wanted. ALBANY NURSERIES, 1st National Bank building, Albany, Oregon.

To Get a Flag Write Soon



With the declaration of a state of war our first supply of flags was quickly exhausted and we have had great difficulty in securing more.

We have at last secured a limited number of flags which we offer on the following terms:

OFFER NO. 1

3x5 flag together with The Washington Farmer for three years. Both for $2.50.

OFFER NO 2.

4x6 flag together with The Washington Farmer for three years. Both for $3.00.

We would suggest prompt action; orders will be filled as received.

The Washington Farmer, Review Bldg., Spokane.

Enclosed find $.... (your personal check, stamps or money order), for which send me American flag, as advertised, and The Washington Farmer for 3 years.

Size of flag .....

Name .....

Address .....

.....

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

AGENTS—WANTED 9
Continued.

AGENTS—IMMENSE PROFITS EASILY made selling flexible metallic sign letters to stores and offices. Right opportunity for live wires. U. S. Sign Co., S217 Lincoln st.

MUSICAL 38

"STAND BACK OF OLD GLORY" THRILLS you with its patriotic fervor. Words and music, postpaid, 15c., Whitney Pub Co., Spokane, Wn.

EDUCATIONAL 45

YOUNG MEN AND WOMEN
SHOULD APPLY OR WRITE TO
WHITWORTH COLLEGE,
SPOKANE, WASHINGTON,
FOR TWO YEARS' PREPARATORY AND FOUR YEARS' FULL COLLEGE COURSE, WITH BIBLE STUDY. BEGINS SEPT 18TH.

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free.
BEHNKE-WALKER BUSINESS COLLEGE, 167 FOURTH ST., PORTLAND, ORE.

SIX MONTHS' COURSE IN BUSINESS worth more to you than 2 years' high school; guaranteed positions. Blair Business College, Spokane, Wash. Free catalog.

JAMES LYON'S BOARDING SCHOOL FOR Boys, Spokane, Wash. Beautiful surroundings. Happy boys, under thorough control. Every safeguard. Send for catg.

GONZAGA UNIVERSITY, SPOKANE—Boarding and day school. Write for catg.

TEACHERS' AGENCIES 46

VACANCIES FOR TEACHERS IN ALL the western states. Write us today. Clark Teachers' Agency, 411-412 Chamber of Commerce bldg., Spokane, Washington.

SCHOOL CLERKS: WIRE OUR EXPENSE. Hazard Teachers' Agcy., Spokane.

FRESH FOOD PRODUCTS 56

FRESH FRUITS, VEGETABLES AND guaranteed fresh eggs. Write for prices, f. o. b. Freewater, Ore. E. W. Wehtje, R. 2.

MISCELLANEOUS 57

FREE MAP AND FOLDER DESCRIBING Puget Sound Farms. Send for it. CHARLES SOMERS COMPANY, Alaska Bldg., Seattle, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Manufactured in our own mill and sold at factory prices. We ship to anyone, anywhere. One price to everybody. Prompt shipments. Safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request.

5 cross panel doors, No. 1	$1.65
Craftsman bungalow doors	1.90
One panel, 3-ply veneer doors	2.25
French doors, 15 lights	4.00
Screen doors, 2-8x6-8, galv. wire	1.50
Standard 2-light windows, up from	1.25
8x10, 4-light sash	.57
16x16x26 spruce flour bins	1.50
Drain boards, 20x24	.75
Williams' "Gold Seal" mixed paints, per gallon	2.50

Frames, mouldings, builders' hardware, mill work.

O. B. WILLIAMS CO.
1943 1ST AVE. SO. SEATTLE, WASH.

CUT YOUR OWN TIMBER
on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With the sawmill you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine.
Write for catalog and full details.
CLYDE EQUIPMENT CO.
18TH AND UPSHUR STREETS,
PORTLAND, ORE.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

LUMBER, SHINGLES, MILLWORK. SAVE money by getting your building material direct from the mill. Let us quote you delivered prices. W. W. Wells Co., Box 1010F, Everett, Wash.

MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. SO., SEATTLE.
Write for Catalogue.

PORTABLE WELL DRILLING AND PROSpecting, machinery, tools, cordage, contracting, well drilling. Keystone Driller Co., Spokane. Catg. H now ready.

AUTOMOBILES 114

PETITE COMBINATION MANIFOLD, FOR Ford and Maxwell cars; 30 to 60 per cent saving of gas guaranteed. Investigate. S175 Stevens, Spokane.

AUTO TOPS, BUILT TO ORDER, AND repaired. N. Reeder, Dept. F. Spokane, Wn.

AVIATION 115

DENINE AIRCRAFT CO., BOX 2232 SPOkane, Wash. Flying taught, skilled help wanted. Investigate. Splendid opportunity.

STOVE REPAIRING 126

MYER S. RUBENS STOVE & FURNACE REpair Works; welding. W1009 1st., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

WASH. (D. C.) PAT. ATTY. SEE AD IN Polk's. C. H. Crawford, Spokane.

POULTRY 174

LIVE POULTRY WANTED — HONEST weights, prompt remittance. Highest price. Smith Poultry Co., W420 2d ave., Spokane.

LIVE STOCK 177

A HOLSTEIN BULL CALF WHO IS A fine individual, the son of Findern Pieterje Fayne and an A. R. O. dam; we will give good terms on this calf as he is a winner. Roy A. Bowers, Hay, Wash.

FOR SALE—A REGISTERED GUERNSEY bull, 3 years old. Name, Willows Pompy. Sire, Carney of the Willows. Dam, Willows Helen. Write to Meadow Dale Farm, Steilacoom, Washington.

VETERINARY SURGEONS 186

DR. G. E. STEWART, VET. SURG. AND dentist. W1213 2d ave. Tel. 2624, Spokane.

HOTELS 306

GALAX HOTEL,
cor. Main and Bernard sts., Spokane. A clean, respectable hotel. Rates, 75c to $1.50 per day, with or without private bath. Free taxi from depots.

DAVENPORT HOTEL, SPOKANE, RATES from $1.50; headquarters for farmers and business men of Pacific Northwest and their families; no formality; unobtrusive service.

WHITE'S HOTEL AND RESTAURANT, Rooms, hot and cold water, 75c up. Breakfast, 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

WHEN IN SPOKANE, STOP AT THE HOtel Majestic, opp. N. P. station. Rooms, $1 up. Strictly modern. Mrs. W. H. Murphy, Prop.

NEW WASHINGTON HOTEL, 403 1ST ave.; respectable; comfortable rms., 50c up.

INTERNATIONAL HOTEL,
234 Main ave., Spokane, 50c up.

NEW MADISON HOTEL,
First and Madison, Spokane, $1 up.

HOTEL COEUR D'ALENE, MOST POPular med. priced hotel in Spokane

HOTEL CARLYLE, 2D AND POST., SPOkane, Wash. 150 rooms, $1 up.

HOTEL TOURAINE, 23 MONROE ST. Rooms 50c and up.

WM. BROWN HOTEL, S170 POST, SPOkane, 75c up.

FAIR PREMIUM LISTS 370

WASHINGTON STATE FAIR, SEPT. 17-22. Premium list now ready. Write Frank Meredith, Secy., North Yakima.

WESTERN WASHINGTON FAIR PREmium list now ready. Write J. F. Nevius, Secy., Puyallup, Wash.

SOUTHWEST WASHINGTON FAIR PREmium list now ready. Write G. R. Walker, Secy., Chehalis, Wash.

GRAYS HARBOR COUNTY FAIR PREmium list now ready. Write J. B. Kirkaldie, Secy., Elma, Wash.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

OPTICIANS 462

EYES EXAMINED; GLASSES FITTED; perfect results guaranteed. Broken glasses repaired by mail. Postage paid. Dr. Sletto, Owl Drug Store, Spokane, Wn.

DR. I. M. RADABAUGH, SPECIALIST IN examining eyes and fitting glasses, 304 Jamieson bldg., Spokane, Wash.

PHOTO SUPPLIES 470

BUY YOUR KODAK FILMS, PLATES and photo paper from Martin, your professional photographer. Fresh stock always. Prompt reliable service. Most complete assortment hand cameras, Kodaks, etc., all sizes from $1 and up. Martin Photo Studio, on Picture Corner, Spokane, Wash.

KODAK FILM FINISHING 473

MARTIN, YOUR PROFESSIONAL PHOTOgrapher, offers expert film developing, printing and engraving. Prompt, reliable, and efficient service. Largest photographic studio in Pacific Northwest. Rolls developed, any size, only 10 cents. Save your money. Send for our price lists. Studio on Picture Corner, Spokane, Wash.

BUSINESS OPPORTUNITIES 516

BE A DEMONSTRATOR, AND AT THE same time make big money. Write Kamiah Asbestos Mfg. Co., Kamiah, Idaho.

ARCHITECTS 558

BUILDING PLANS AND ESTIMATES. L. L. Rand, The Rookery, Spokane, Wash.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

FARM LANDS—FOR SALE 651

FINE HOMES NEAR SPOKANE.

The tracts described below are near a good city and good market, on good state and county roads, near railroad, good schools, rural free delivery, good society, etc. The climate is conceded to be the best. Domestic and crop water plentiful. No irrigation needed—crops sure. Write for a folder showing photographs and telling of climate and other facts of interest, such as, no failure of crops, freedom from pestiferous insects, frostless belt, amount of wheat, oats, hay, potatoes, fruits, etc., per acre. If the tracts described below do not suit you, tell us what you want.

160 ACRES.

40 acres cleared; 40 acres more slashed and ready to burn; has county roads on two sides and state road on one side; in heart of growing community; ½ mile to school; 3 miles to railroad; rural free delivery, telephones, etc. Would make an excellent home. $4800; 1-10 or 1-5 down, balance 10 yrs.' time, 6 per cent.

80 ACRES.

40 cleared; on two county roads; ½ mile to school; same advantages as above; $3500; on same easy terms.

40 ACRES.

All cleared; two county roads; same advantages as above; would make a superb little home place. Only $1800; $360 cash, balance same easy terms.

50 ACRES.

All in cultivation; now in crops; pressure water system; nice little bungalow, good barn, chicken houses and runs; on county road, ½ mile to school, close to railroad, etc. Only $3750.

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EQUIPPED STOCK RANCH IN IDAHO; 160 acres; ½ mile from station; 2 railroads; 80 acres in meadow and cultivation; 35 acres timber, balance bottom land with some brush; no waste land; running water; good house, 3 barns; team, wagon and all necessary farm machinery; 30 head cattle, 14 cows milking, all crop goes with place. Price $12,500, 1-3 cash, balance easy at only 6 per cent. Hege & Watkins Co., Paulsen bldg., Spokane, Wn.

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150 good soil, bal. pasture; the finest of range; 4 miles to R. R. station. $1000 cash. Otto A. Bittrick, 514 Rookery blk., Spokane, Wash.

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HAY, GRAIN, STOCK OR DIVERSIFIED farm lands in the Colville valley, reasonable. We answer. H. L. Fisk, Valley, Wn.

2120 ACRES, 800 IN CROP, 23 MILES S. W. Spokane, cheap. Address M., Northwest Farm Trio, Spokane, Wash.

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WE BUY, SELL AND EXCHANGE anything photographic. Sell us your old camera, kodak, lens, tripod, carrying case, etc. Trade your small kodak for something better. Buy one of our bargain kodak snaps. Second-hand, but good as new. What have you to sell? Let us give you an offer. What do you want? We have it. Martin, your professional photograprer, Picture Corner, Spokane, Wash.

State Fair Sheep Sale

The Washington Farmer is glad to receive the following letter from William Hislop, professor of animal husbandry at the State College of Washington, with regard to the coming ram and sheep sale in connection with the Washington state fair at Yakima September 17-22. This is a new movement.

Professor Hislop's Letter.

To the Editor of the Washington Farmer: There will be held on the Washington state fair ground, during the annual state fair at Yakima, Wash., September 17 to 22, a ram and sheep sale. It will be conducted under the auspices of the management of the state fair authorities. However, I will have direct charge of its management. This sale will include 1000 registered rams and between 1000 and 2000 ewes, principally range-bred ewes, but there will be included some purebred females.

This is a new movement. It arose out of the need expressed by range breeders and farmers for more sheep in this state. There has been no place where our range flockmaster has been able to obtain a satisfactory class of rams. The Salt Lake City ram sale is most excellent, but it is too far away for the majority of our breeders to attend. We propose by this method to procure easily for them the desired class of rams and to offer a medium whereby they may sell a few of their range ewes to farmers who desire to start sheep raising.

Needless to say, this sale will be conducted along strictly nonpartizan lines. Sheep sales of a public nature are necessarily new things; consequently their development has not reached that of the public selling of beef cattle, dairy cattle, horses or swine.

We aim to include the following breeds of sheep: First, Hampshires, Shropshires, Lincolns, Cotswolds, Rambouillets, Oxfords and Romneys. We are doing so because each one of the above-mentioned breeds is represented more or less on the ranges of this state, as well as on the ranges of Montana, Idaho and Oregon.

The county agricultural agents, commercial clubs and the state college are cooperating with the sheepmen of the state in this movement. It can not but be a success. Inquiries at hand now would indicate that the sale already is an established affair.

I am enclosing an entry blank to show you the nature of our plans for conducting the auction.

WILLIAM HISLOP.

Entry Blank for Sheep Sale.

The entry blank mentioned for the sheep sale by Professor Hislop follows:

I hereby offer the following entries for the Washington State Fair sheep sale:

Registered Rams.

Breed .....Ram lambs .....No. .....
Breed .....1-year-old .....No. .....
Breed .....Aged ram .....No. .....
Total number rams entered in sale .....

Registered Ewes.

Breed .....Age .....No. .....
Breed .....Age .....No. .....
Breed .....Age .....No. .....
Total number ewes entered in sale .....

Grade Bucks.

Breed .....Age .....No. .....
Total number grade bucks entered .....

Grade Range Ewes.

Breed .....Ewe Lambs .....No. .....
Breed .....Yearlings .....No. .....
Breed .....two-year-olds .....No. .....
Breed .....Aged ewes .....No. .....
Total number graded ewes entered .....

1. The charges for selling will be sufficient only to cover sale expenses.
2. All entries must be in the hands of William Hislop, Pullman, Washington, by September 1, 1917.
3. No registered ram may be offered at this sale unless accompanied by the registration papers and carrying a label in his ear, if a label is furnished by the association in which he is recorded.
4. Above rule will also apply to any ewe offered as a pure bred.
5. When a consignor does not accompany his sheep, all transportation charges must be prepaid. Feed and care will be charged for at actual cost.
6. The manager reserves the right to disqualify any sheep of doubtful pedigree.
7. The manager reserves the right to change any and all rules when deemed expedient.
8. No sheep may be removed from the jurisdiction of the manager until all settlements are made.
9. The manager reserves the right to decline any entry offered.
10. The manager reserves the right to sell single entries in pens and to divide pen lots if necessary.
11. A check must accompany each entry list, amounting to 50 cents for each sheep entered. If sheep are withdrawn, the fee will be retained. If sheep are consigned and sold, it will be applied on the expenses of selling consignor's sheep.
12. All grade bucks and rams must be described accurately as to age and breeding.

I hereby agree to the above rules and regulations.

Name .....
Address .....

ADDRESS ALL CORRESPONDENCE TO WILLIAM HISLOP, PROFESSOR OF ANIMAL HUSBANDRY, STATE COLLEGE OF WASHINGTON, PULLMAN, WASHINGTON.

Canada Thistles

To the Editor: I would like to know how to kill Canadian thistle, please.
V. L., Pullman, Wash.

The Answer.

The above question was referred to the Washington State college, and F. L. Pickett, professor of botany, answers as follows:

There are two general methods which may be considered in discussing means of killing Canadian thistles. One of these is the use of poisonous materials to kill the plant; the other is a starvation process. If the plants are few, it has been found feasible to cut the indicidual plants off about three inches below the surface of the ground, and sprinkle over the top a generous handful of common salt, or better, of copperas, or iron sulphate. If each plant is treated in this way, the chances are very good for them to die out. However, this plan is not in every case successful.

The second and perhaps better method of treatment, especially where there is a considerable patch, is one or two means of starvation. These plants have stems deep under ground, in which there is stored up a considerable quantity of reserve food material. As the new leafy stem grows above the ground, more food material is added to these underground reservoirs so that they are able to grow for a considerable time without producing new green leaves. The underground stem also acts as a means of distributing the plant. Plows and harrows merely cut and break the underground stems into pieces which when carried to new soil will start plants there. In general it may be said that the more that these plants are cut to pieces, the more plants they will produce provided these stems are left under ground.

If the plants can be prevented from producing leafy stems at any time for two seasons or more, they will probably die. This may be done by careful cultivation as with some hoed crop. No half-way measures will serve your purpose in this case. It is a matter of killing every branch of the plant, if you would get entirely rid of it. Any plant in the bunch allowed to grow will renew the food supply and make necessary a fight again next season.

Persistent work will certainly win out, but you must remember that only the most persistent, careful work will give results. Sometimes this starvation process is carried on in a little different way. If the thistles are found in close, small patches, these patches may be covered over with tarred roofing paper, or roofing felt, and old straw and even soil piled on top of this paper to hold it in place. Such a treatment prevents the plant from getting out into the sunlight and producing more food, and in time it may be starved out in this way.

Personally, I am inclined to pin my faith to the careful cultivation method, feelinfi quite sure that very careful work will give satisfactory results.

Preparing for Larger Acreage.

A forehanded farmer is now considering the proportion of land to be plowed this fall. As a general thing throughout the Willamette valley, more land will be plowed this fall and a larger acreage will be put into crops than for many years.

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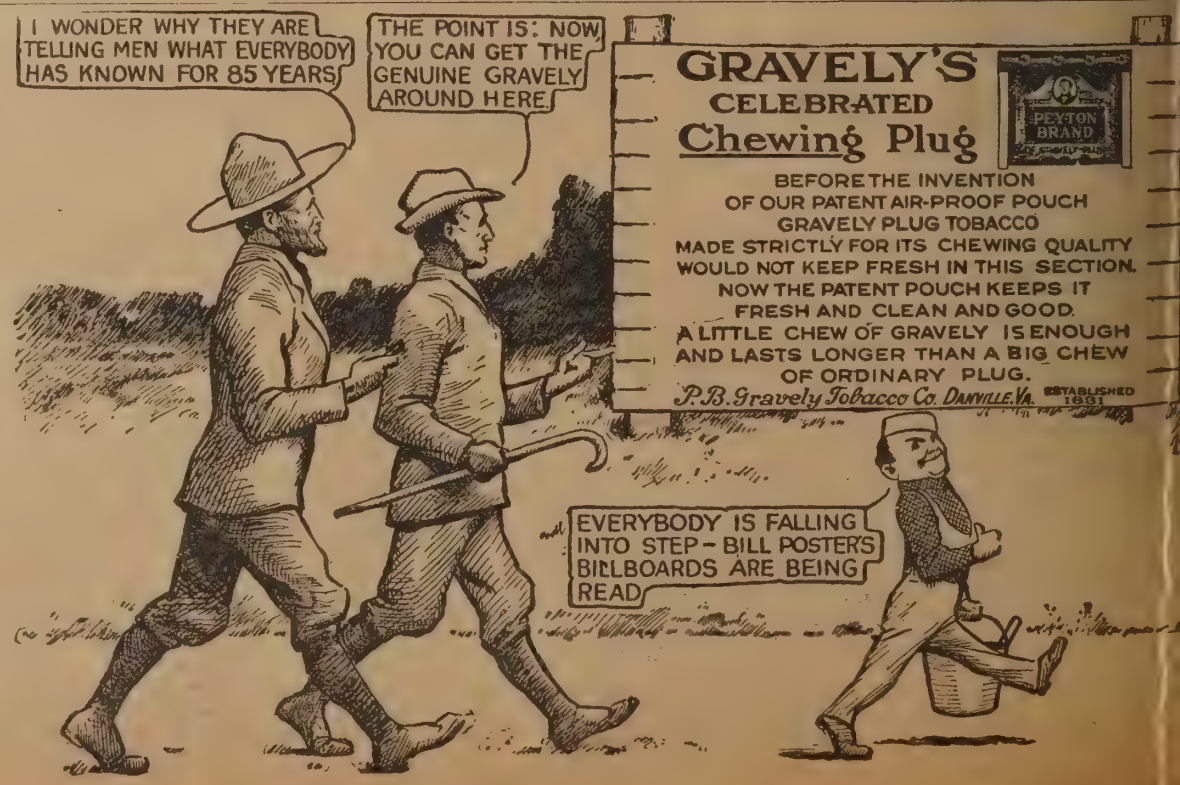
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News for Breeders

Sam Wade, the Percheron breeder of Enterprise, Ore., not long since sold to E. F. Sawyer of Palouse, Wash., two yearling fillies, one 3-year-old and the 4-year-old stallion McKinley. The horse is by Malcolm, a son of the great Calypso, and is a great horse himself. McKinley was the first prize-two-year-old and junior champion at the Cascade International Stock show at North Yakima in 1915 and is a horse of wonderful quality. Another of Mr. Wade's sales this spring was to W. D. Greer of Wallowa, Ore., who purchased Nero, another good son of McKinley.

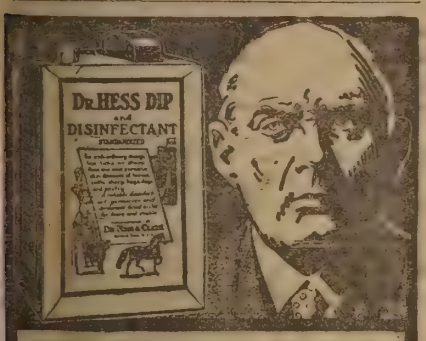
Nine years ago Mr. Wade bought Ethel, a young mare that had won first at the Iowa, Minnesota and South Dakota state fairs and was grand champion at South Dakota. Mr. Wade has shown her once at the Oregon State fair and Cascade International, and twice at the Northwest Live Stock show at Lewiston, winning first and grand champion every time. He bought Malcolm the same year, also Cerise, a yearling that won third prize at the Chicago International. Mr. Wade runs his Percherons on the hills of his 1300-acre ranch, and they have bone, muscle and nerve.

Bird, one of the grand old mares that Mr. Wade owns, is 14 years old this spring. She has produced 10 colts and has only been served 11 times, missing one year. She is the dam of McKinley and was second to Ethel when she won her championships.

Exercise Show Stock

By William Hislop.

Exercise is a most important factor in conditioning show stock. If not properly exercised, the animals get stale, their appetites pall and they soon begin to fall off in flesh instead of thriving. Horses should be exercised regularly. Cattle should be turned out over night, and hogs should be exercised by being compelled to walk from a quarter to a half mile daily. Sheep require exercise to make their flesh firm to the touch. Horses and cattle, too, should be thoroughly groomed, especially during the last two months of feeding. Sheepmen begin to trim the fleece for three or four months beforehand. Hog men usually begin to wash their animals about a month before show time. Show cattle are best not to be washed too often before show time, because their hide and hair get harsh. Likewise the legs of horses suffer (lose their freshness) by too frequent washing. The horns of beef cattle should always be polished when the animals are shown, so as to present a neat and attractive appearance. In the scraping and polishing of horns, care must be taken so as not to expose the core, and thereby cause bleeding. The shell should never be scraped and polished until a red appearance shines through it. If the horn is too long, it should be shortened by cutting a piece off with a fine tooth saw. Then file the horns at the points to their natural shape. Later use a piece of emery paper and apply some oil. The hoofs should also be cleaned before entering the show ring.



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Means Animal Health

Use about the barn, pens, chicken yards; use at the house on garbage cans, sinks, drains, cesspools. It cleanses and purifies—keeps down bad odors and smells and destroys disease germs. Dip your sheep to eradicate scab and kill ticks. Dip or spray hogs to kill lice.

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Dr. Hess Fly Chaser protects animals from flies. Does not gum, blister or discolor hair.

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DR. HESS & CLARK, Ashland, O.

Segis Pontiac Riverside.



This picture shows the richly bred bull, Segris Pontiac Rierside, that heads the herd of Ernest Johnson, Scappoose, Ore. His dam has a record of 31.47 pounds of butter in seven days and 118.99 in 30 days, with 575 and 2746 pounds of milk. He sold in the Pacific International stock show in 1914 at just two years old for $1025. He has grown and spread since then and is a bull of good capacity as well as rich breeding. The photo was taken in his two-year-old form.

Mr. Johnson added five head of females to his herd a short time back, paying $1881 for them at W. B. Scott's sale at Woodland, Wash., and now has about 40 head. They are big roomy cows and Mr. Johnson has some good young stock coming on from his present, as well as former herd bulls.

Sale of Shorthorns.

Sensational prices were received at the Carpenter & Ross sale of Shorthorns (mainly imported animals) on June 7. The sale was held at Chicago and was attended by practically all the prominent Shorthorn breeders in America. The 108 head sold for $146,650, or the remarkable average of $1357.87. Caledonia, an imported roan bull, a year old in May, bred by William Duthie and sired by Emblem, topped the sale, going to Park Salter of Wichita, Kan., for $7000. D. Kramer of Tulsa, Oklahoma, paid $3250 for Proud Baronet, a beautiful white yearling. Owen Kane of Wisner, Neb., paid $3000 for the imported cow Edgecate Winnie, and T. T. Miller of Los Angeles, Cal., paid $3100 for imp. Brandsby's Jinny 18th. This was the only animal in the sale coming to the Coast country, except the yearling bull, Maxwalton Reformer, bid in by H. P. Whitman of Pendleton, Ore., for $525. H. A.

Eight Bulls For $13,425.

And now comes another Shorthorn sale with a remarkable price average. Bellows Brothers, of Maryville, Mo., on June 14 sold eight bulls for $13,425, an average of $1678, and 43 cows and heifers for $46,485, an average of $1081, or a total of $599,910 for the 51 head. Rosewood Reserve, a two year old son of Fair Acres Sultan, out of a Rosewood dam, brought top price of $8100. He went to Mrs. J. E. McCauley of Becket, Mont. Maxwalton Clipper 8th, a daughter of Avondale, brought top price for female, going to Jackson & White of Hurley, S. Dakota, for $2650. Arkansas buyers took several, indicating the growing interest in good cattle in the south, and T. T. Miller of Los Angeles, Calif., got one good bull for $1750. H. A.

Gue Herd of Holsteins.

George A. Gue of North Yakima is debating whether or not to dispense his entire herd of Holstein cattle. Mr. Gue is not only one of the best posted auctioneers on Holstein breeding, but he believes in them and enjoys breeding and developing the stock. He now has about 40 head of such blood lines as "King of the Pontiacs," "Pontiac Korndyke," "Hengerveld De Kol," "Paul Beets De Kol," and "King Segis."

On account of the growth of his auction business he finds he can not devote the time to his own herd he should and besides some people object to an auctioneer being a consignor or a bidder in any sale he is conducting. It will be a great sacrifice for Mr. Gue to part with his herd. It may, in the end, be for his best interests and that of the breed. D. G. S.

Printer Wanted.

Wanted—A printer to take entire charge of my weekly paper while I go to war. Job may be permanent.—Mounds, Ill., Herald.

West's Heifers to Japan.

Harry West, the Scappoose (Ore.) Jersey breeder, recently sold two very promising Jersey heifers to S. Ban, Japanese merchant and importer of Portland, Ore., and Tokio, Japan. The heifers were both out of imported dams and by Mr. West's great show bull, Fussy Fern's Noble. Mr. Ban took them, along with two Holsteins purchased from P. A. Frakes, to his plantation at Tokio, Japan, sailing from Seattle June 13.

Imported Onota, the cow that won the butter contest in the Royal Jersey show on the Jersey Islands in 1913 for producing three pounds six ounces of butter in 24 hours as a 3-year-old with first calf, when 123 days in milk, dropped a fine bull calf on July 4, by Fussy Fern's Noble. It is Mr. West's intention to keep the little fellow for a herd sire, as he has both show and type and a producing ancestry.

H. A.

Oxen on Old-Time Farms.

E. J. Searls of Castle Rock, Wash., remembers the days when the principle source of traction for the farms and logging camps of the northwest was oxen. Mr. Searls owned a team of oxen, weighing a ton each. He broke the animals when they were a few months old, teaching them at first to lead and then to work with harness. In this way no real "breaking" was necessary, and the big fellows were always tractable.

And let me tell you, they could travel," the pioneer comments. "I fed them grain, just as I would a road horse, and they traveled along with any team on the road."

Mr. Searls is of the opinion that the farmers of today will have to come back to the dual purpose cow known generations ago in the east. The old, red Durham used to hold her own at the milk pail, while at the same time she and her offspring could be finished for market so as to command the top

Breeders' Department

Berkshire Boars for Fall Service

I have a number of thoroughbred Berkshire boars sired by W. S. C. champion boar, brother to Reserve Champion at Panama exposition. Sows from Masterpiece strain. Large, smooth, prolific type.

Delivered f. o. b. your station. Registry papers complete.

R. W. SNYDER, Washtucna, Wash.

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My Entire Herd for Sale

Consisting of

15 Registered Cows

two herd bulls, yearlings and calves, in all thirty head. Principally Golden Glow Chief blood. Reasons for selling, age and ill health.

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Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.

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A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.

Write for pedigrees and terms.

H. R. BOOMER. New Plymouth, Ida.

WAYSIDE RANCH HOLSTEINS.

Am offering 13 heifers for sale, sired by my herd bull Buffalo Duke Doede, a half brother to the world's champion cow. An opportunity of a life time to the man wanting No. 1 stuff.

H. H. STIYER. Buhl, Idaho.

HOLSTEIN BULL CALVES.

One from 20-lb. cow, another from a 16-lb. jr. 2-yr.-old. Herd headed by Model Fobes of Idaho, whose four nearest dams average 27.25 lbs. butter 7 days.

EARL BEEBE, R. F. D. 2, Rupert, Idaho.

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Choice Duroc Gilts

Sired by the great boar, Golden Rod.

DOERFLER BROS. Silverton, Ore.

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Boars and open or bred gilts of excellent breeding.

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Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

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Hercules Shorthorns

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Two choice yearling bulls out of Island dams by Gold Finder's Western Boy, a bull of choice breeding and a very fine individual.

Also a few choice Lincoln rams.

HAWLEY & SON McCOY, ORE.

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Highland Stock Farm

offes for sale 10 yearling bulls and eight two-year-old Polled heifers, sired by Polled Premier and bred to herd sires Majestic Fairfax 437657 by Corrector Fairfax and Western Fairfax 461126 by Fairfax 16th.

PLATT BROS., Props., Roy Jacobs, Herdsman, Genesee, Idaho.

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Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have for sale extra good spring pigs. Correspondence solicited.

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GALBRAITH RANCH BERKSHIRES.

Best breeding stock obtainable. Prices reasonable. Phone 20F.3.

T. A. GALBRAITH, Kent, Wash.

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Breeding Ewes for Sale

$8.50 to $12.50 for 5-year-old Rambouillets and 2-year-old Lincoln Cross. Will sell one or 1000. Write quick.

M. F. KEMMERER & SONS, Addy, Wash.

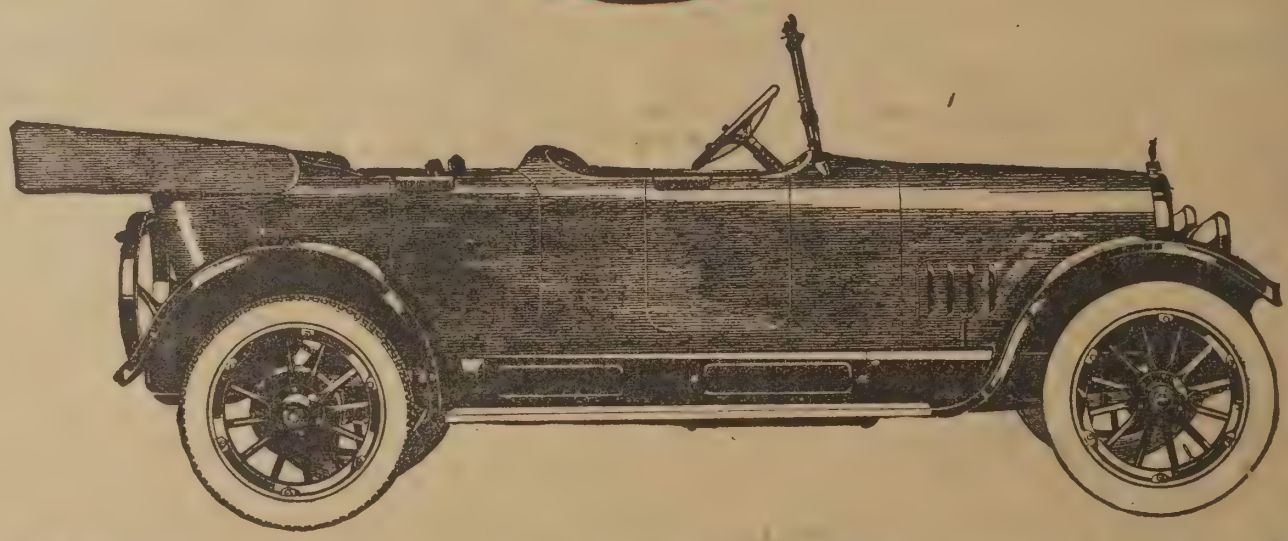
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A popular priced *Light* Six with *weight and power in scientific balance.*

Think what that means.

Economy and durability in combination with six cylinder advantages at last an accomplished fact.

Don't ask any more why you can't get a durable light weight six with real six cylinder performance.

You can—it's this new Willys Six.

By scientific designing with the aid of our great experience in building Sixes, we have produced a *lighter car* without sacrificing sturdiness.

Its forty-five horsepower motor combined with its light weight, makes it a wonderful performer.

Quick as a flash on the getaway; speedy; surprisingly economical, yet with worlds of power and the sturdiness to support it.

Think what this means figured
—in greater gasoline economy
—in additional tire mileage
—in an easier car to handle.

Now let the Willys-Overland dealer demonstrate the wonderful performance of the New Willys Six—we want you to sense what this new balance between power and weight means in an economical, durable light Six.

We want you to know, too what a wonder the New Willys Six is from the standpoint of easy riding and easy handling.

Also we want you to know what a beautiful car it is---long, sweeping graceful lines---one of the year's most advanced models---a perfect beauty.

And the price!—$1295 complete!

It's the Six you've longed for—go in and see it now—before our dealers are loaded with orders for more Willys Sixes than they can get.

Motor 3½-inch x 5¼-inch
45 horsepower
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Finished in olive green

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THE WASHINGTON FARMER

SUCCESSOR TO
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VOL. XL. NO. 33. AUGUST 16, 1917. * * WEEKLY.

Lamb Boycott Would Be Hysterical, Says Hoover

Office of Food Control Is With Stockmen in Developing the Industry

The stockmen who have developed the excellent strains of early maturing meat animals for this country have nothing to fear from the national food controller. There will be no boycott on lambs and young hogs and baby beeves. This is indicated in a message from Herbert C. Hoover, food controller, to E. F. Benson, state commissioner of agriculture at Olympia, in which Mr. Hoover says that "anything in the nature of an organized boycott against the use of young lamb is hysterical and did not originate in this office."

As reported in The Farmer last week, the stockmen have risen in arms against a movement that they believe uneconomical both to the producer and to the consumer —that opposing the use of any immature meat.

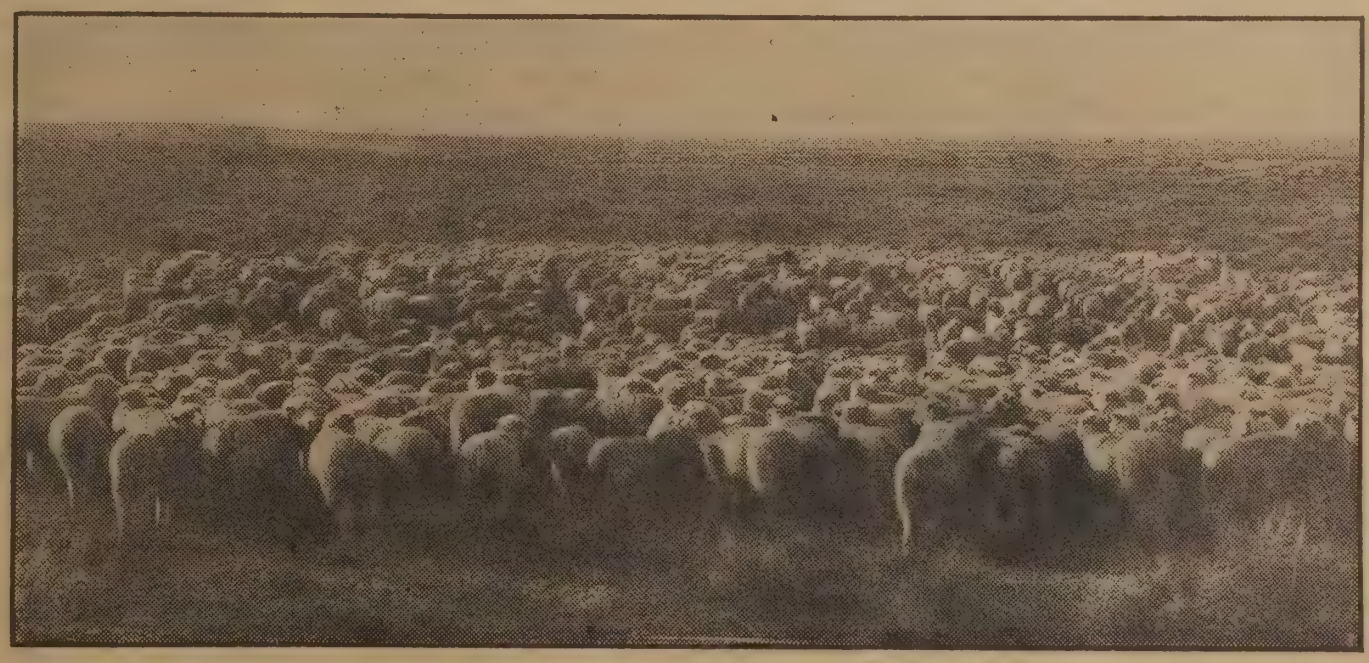
The movement grew out of the desire to conserve the meat supply as much as possible, but the stockmen immediately began to pour in evidences that the feed required to carry a lamb or pig over the winter, or to raise a dairy calf to a yearling or more, or to carry a beef animal over an 18 or 20 months' age, was usually worth more than the additional weight of meat gained.

The seriousness of the situation as viewed by the producers of the northwest was voiced in the following telegram from Mr. Benson to Mr. Hoover, which brought forth the latter's statement that a boycott was hysterical:

"The boycott on use of lamb for meat will reduce output of mutton and wool throughout the west if not throughout America. Holding over mutton lambs is uneconomical. So is keeping young cockerels until they are a year old, or feeding steers until 4 years old instead of selling as baby beef at 18 months and for the same reasons. Situation really serious and alarming. Unless boycott is raised, the damage will be far-reaching and will produce the opposite results from what you are striving for."

Controller Hoover has announced the calling of a conference to be held in Washington, D. C., this week for the purpose of working out a systematic and nation-wide plan for the conservation of the country's live stock.

The Dry Hills Along Snake River Produce Flocks Like This



Some 35 miles northwest of Walla Walla, on the hills along the Snake river, there are still considerable areas of land unreclaimed by the farmer. In the early months of the year, before the heat of summer dried up the native vegetation, it is one of the sheepmen's Edens. The photograph above shows a flock belonging to Adrien Magallon of Walla Walla, grouped and posed for the camera. Beyond them are the sagebrush stretches that vie with the bunchgrass for honors of mention. Look carefully and you will see the flockmaster standing beyond the sheep. This phototograph is similar to many that could be taken throughout the northwest, but their number and the size of the flocks are gradually diminishing. Ranges are fast disappearing. The future of the sheep industry is coming more and more to depnd on the farmer who carries a small flock on his grain or hay farm.

The Food Control Bill Just Passed Should Be Studied by Every Citizen of the Country. The Farmer Gives It in Full This Week

Adversities Bring Improved Methods

Struggles of Present Time Will Result In Betterment In Years to Come, Thinks a West Side Producer



GIG HARBOR, Pierce County, Wash., July 30.—The total injury to crops from the prevailing drought still on is not yet fully apparent. Second crops of clover, Italian rye and other forage crops, have suffered and will suffer quite severely without doubt. Strawberries very nearly escaped its effects, although a light crop from other causes. Raspberries, and loganberries will be considerably shortened in yield by reason of the drought. Upland pastures will be scant of feed, late potato and other root crops will also suffer. Oat hay is a little scant on uplands, but that and the first crop of clover and vetch cut after July 5, has been secured in such fine shape that it will very nearly offset the slight shortening of the growth by reason of the uncommonly early drought. Deep and thorough preparation of the seedbed for all spring sown crops brings its reward in such times as these.

The preesnt and prospective high prices for all cow products will undoubtedly prove a stimulant to the dairy business and check any tendency to curtail this great industry in spite of the prevailing high feed prices. If the country does not actually run short in its supply of bran and shorts the cow business will keep up. It is feared that the short wheat crop may yet take away this last crop of the northwest dairyman. The poultryman is now running heavily on bran which increases the strain on that valuable wheat product. All this must lead to better methods of farming. The thoughtful farmer who plans one, two and three years ahead will aim to cull out the star boarders in all lines of live stock as never before. The vicissitudes we are now going through will surely bring better methods to the front. W. D. BOYNTON.

Feeding Hay Already.

OLYMPIA, Thurston County, Wash., Aug. 7.—In regard to drought and heat effect on crops, all the late seeded cereals or grain crops have suffered badly and yield will range from 50 to 60 per cent. Potatoes, with lack of proper amount of cultivation, even on bottom land will yield not more than 60 per cent. Where the land was properly prepared and care taken the potato crops are good. Early seeded crops, oats, wheat and rye are all right where fertility is sufficient. All pastures are greatly injured and hay, when no soiling crop was arranged, is being fed on a large number of dairy and stock farms. Poor crops will undoubtedly cause a depression in the live stock market, then excessive sales, but only temporarily. Farmers should make special efforts to keep the best stock and not overstock in the future. This applies to small farms and local conditions. C. H. BERGSTROM.

Lectures on Canning.

SOUTH BEND, Pacific County, Wash., Aug. 1.—This county is not suffering from the drouth and heat as much as the eastern part of the state. We have had one rainfall of .30 of an inch since the first of July and the ground is only dry a couple of inches on top, although a good rain would do lots of good. We have had no excessive heat, the warmest day registering 82 degrees. The weather has been favorable to fruit and berries; wild blackberries are ripe now. The cannery located at South Bend is ready to receive beans and berries. A number of people have planted large plantings of beans for the cannery and are cultivating blackberries for this purpose. This year will be an experimental year both for the cannery and for the grower and it is hoped that both will be successful for an industry like this will not only encourage older gardeners, but will stimulate an interest among the boys and girls. Early this month the county agent has arranged for a series of lectures on canning to be given at the county seat. The lectures and demonstrations will be given by experts. Live stock prices are increasing. Looking ahead two or three years it might be well for the farmer to increase the productiveness of his cows, for help will be scarce and he will need to keep only those cows that do well and not the poorer grades. The farmer will need to study efficiency to make the most of what he has. He will have no time to care for a cow that averages only two gallons of milk a day. He will take two of this kind and sell them and buy one that yields twice the amount. The farmers need the best stock and the best seeds, if they are going to do their best raising food for the world in war times.

MRS. WINNIFED BUCKINGHAM.

Kill the Dairy Steer?

RAINIER, Thurston County, Wash., Aug. 2.—The season here has been rather peculiar, being very cold and backward and wet up to the first week in July. Since then it has been dry with the exception of two short, cloudy spells, at which times light showers fell. July was not excessively hot, with a few warm days and cool nights, making good hay weather and a good crop was put up. August has started in hot and dry with drying winds. It is getting very dry and pastures are drying up. I do not think the grain crops have been materially hurt by the dry weather; although some of them are short. Potato and garden truck need rain. The manure spreader will help for better crops. The present and prospective prices of milk and butter will stimulate the keeping of more cows. Milk at the condenser is $2.45 per hundred pounds, sweet cream is 52 cents and sour cream 44 cents per pound butterfat. There are no beef cattle. In this country hay is remaining high all the time. There is not enough to supply the home demand, as many carloads of alfalfa are shipped into this coast country. We have about two seasons, wet and dry, the latter from July 1 to October 1 to 15. The pastures are dry, compelling the farmers to feed hay from November 1 to May 1 to bring the cattle through in any kind of a growing condition. There is not much profit in feeding a ton to two tons of good hay to such cattle. Laws to prevent the vealing of calves will not work, as you can not compel the farmer to raise beef at a loss when he knows it. This is what I did as an experiment. I kept two steers calves until they were 2 1-2 years old and then sold them for less than $50 for the two. They were only of ordinary size and fed on pasture with the cows with hay as feed in the winter time and no grain. The cattle went down to almost nothing, the country being short on feed and hay was very high. That is the whole thing in a nut shell. Raise plenty of feed and feed it to the dairy cow. L. F. DAVIS.

Ideal Haying Weather.

DARRINGTON, Snohomish County, Wash., July 30.—With ideal weather for about a month the hay in this section is all in the barns. The crop turned out far better than expected, with goods of first quality. Help was hard to get with wages at $3 and $4 per day and board. Some got their hay in on the cooperative plan, one helping the other. Oats and other grains are looking fine. A good deal of the oats will be cut for hay just as soon as the weather settles again, as we have had showers for the last three days. Rain was badly needed for all garden stuff. I notice quite an increase in oats and spring wheat planted for chicken feed. We can't plant very much grain here because of the lack of cleared land and all the appliances needed for harvesting and threshing a grain crop. Owing to the closing down of all logging camps and mills around here the farmers will feel the results very keenly, as we had a good home market for practically all the beef and pork and spuds for the last two years, at fair prices.

C. B. NEIDERPRUM.

Dairy Prospects Good.

MONTBORNE, Skagit County, Wash., Aug. 2.—The dry weather has done no injury to the crops yet. Farmers are increasing their dairy herds, as they have a bright future before them. The farmers are breeding a higher and better class of live stock here in this county the past few years, and within the next three to five years, every herd will have first class males at their head. JOHN B. PETERSON.

Increased Sheep Holdings.

SALMON, Lemhi County, Idaho, Aug. 6.—The season has been extremely dry and hot, but no damages to crops have resulted, as all crops are irrigated in this county. The water for irrigating has been more plentiful than usual. The yield of hay has been short from the effect of the early freeze last winter while there was no snow. Alfalfa and clover were damaged by the freeze which came while plants were green from late irrigations. The increased acreage of hay about equals loss from the winter effects. There is a tendency to decrease the holdings of cattle on account of the high price of hay. The sheep holdings will be increased about 25 per cent. Hay is valued at $15 a ton. An effort should be made to influence the farmers to raise more hogs. Nothing but the modest American hog can avert a meat famine which is threatened within two years. The production of pork could be increased 500 per cent in two years by a campaign of education and financial aid. One billion dollars loaned to the farmers to promote hog culture under competent direction would have more effect in winning the war than $10,000,000 used for any of the proposed purposes. Why not dress the pig in red, white and blue and give him the place in society that is now occupied by the poodle dog—even give him a place in the parlor?

NEWTON HIBBS.

Hay Crop Short.

SANDPOINT, Bonner County, Idaho, Aug. 2.—The hay crop is short about one-third on account of the hot, dry weather and all root crops have stood the drouth the best. In my opinion it will depress the live stock busines as it is almost impossible to buy hay now at any price and prices will be so high most every one will think at least that they must sell, so less live stock another year.

WARREN M'CURTAIN.

RECENTLY SURVEYED HOMESTEADS NOW OPEN.

Every reader of this paper should write at once for a free copy of "The Home Seekers' and Settlers' Guide." It tells all about the rich 160-acre free farms, excellent for growing grain and mixed farming, also what others are doing. Address Canadian Northern Railway, A. A. Brostedt, D. F. & P. A., 605 Hastings st., Vancouver, B. C., Canada.—Adv.

Ford Cars Increase Mileage and Cut Fuel Bills One-Half

By equipping the motor with our new device for burning kerosene. The price of kerosene on an average is about 50 per cent less than gasoline and is guaranteed to give as good if not better results with a **Burn Oil Device.** The Burn Oil converts the kerosene into a highly explosive, powerful gas, giving greater efficiency than ordinarily obtained with gasoline.

One gallon of kerosene will run a Ford car 25 to 35 miles when operated

THE BURN OIL WAY.

Insures your motor running coolly, quietly and efficiently. Simple in construction. Positive in operation.

Easy to install. Guaranteed.

The Burn Oil Device is a demonstrated success.

The present list of over a thousand users who are saving more than 50 per cent on their fuel bills is rapidly increasing each day. Join the list now.

Cut your cost of operation. Fear not the coming shortage and high prices of gasoline.

Live agents with Ford cars wanted to work territory in Washington, Oregon and Idaho.

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Opportunity for Owner of Rig or Automobile

THE publisher of **The Washington Farmer** wants men to secure and renew subscriptions to this paper in various farming districts throughout the state. We are offering these positions only to farm owners or renters and are paying good salaries to workers who had no experience in this line before accepting our offer. In almost every neighborhood there is an opportunity for building up a successful business. Perhaps this is the very chance you want to earn some extra money.

We want to hear only from those who will be willing to give our proposition a fair trial for at least a month and who will put in good, hard licks for good pay. We give you full instructions and the right kind of help.

You will be able to earn a salary of from $25 to $150 per month, or even more, dependent upon the amount of time and effort you can give to the work. Salary check will be sent promptly at the end of each month.

We will not consider an applicant who does not live on a farm and who does not have a rig, saddle horse or automobile. In writing us tell whether married or single, whether you own or rent your place and give the names of two merchants with whom you trade. There isn't any red tape about our proposition, but we must know something about those workers we put on our payroll to receive a monthly salary check.

Give full details in your first letter.

THE WASHINGTON FARMER

Review Building, Spokane, Wash.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

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War Calls Each Community to Do Bit

What the Auxiliary League of the County Council of Defense Can Do

In accordance with the spirit of volunteer work by which the work of councils of defense are carried on, the offer of The Washington Farmer has been accepted by N. W. Durham, chairman of the Spokane County Council of Defense, to publish a statement and explanation of the work before the auxiliary leagues in the county. This saves the expense of having circulars printed.

The editorial staff of The Washington Farmer volunteered and is now doing the clerical work for the Spokane County Council of Defense. Morever, the secretary of the Spokane County Council of Defense has volunteered his efforts free of charge. The State Council of Defense and the County Councils of Defense are now giving their time, and meeting their own expenses in this great work.

It would be well for each member of the Spokane County Council of Defense who receive a marked copy of this issue of The Washington Farmer to cut out and preserve Mr. Durham's article. This article gives a most admirable summary of the work before the auxiliaries of the county councils of defense, and is also worthy of preservation by every member of county councils and auxiliary leagues throughout the state of Washington.—EDITOR.

By N. W. DURHAM

Many people are asking: "What will be expected of the members of auxiliary leagues of the County Council of Defense? What kind of service can we render to our country?"

It is the purpose of this article, so far as possible, to answer these questions.

Broadly speaking, the county council is asked by the State Council of Defense to have "the auxiliary organize with a pledge of adult members who promise to help the government in any way they can."

Every right-minded American citizen is moved by a desire to do his or her part toward supporting the government in war and sustaining our brave boys who are going into the army, the navy and other branches of the national service. To that end the government is urging its citizens to help in—

FOOD CONSERVATION.
RED CROSS WORK.
ORGANIZATION OF HOME GUARDS.
FIRE PREVENTION.
LAW ENFORCEMENT.
DEVELOPMENT OF PATRIOTIC SENTIMENT.

Food Conservation.—We are urged by Mr. Hoover, who has been appointed food controller by the president, to—

Eliminate all waste of food. To eat less meat. To eat substitutes for wheat flour, that we may have more wheat to send to our allies in Europe. To be especially saving of fats. To can or dry every available surplus pound of vegetables, berries and fruits.

On this latter subject, Mrs. Ruth Karr McKee, member of the tSate Council of Defense, says: "It is suggested that drying rather than canning for public use should be emphasized because of greater ease in shipping and a possible shortage of cans * * * As far as possible, every family should supply its own table from its own garden. Then the canning clubs should preserve surplus from home gardens—part of this to be canned or dried for home consumption, either by sale or gift; a part dried and sent abroad for war relief work."

Red Cross Work.—On this subject Mrs. McKee says: "Country women sometimes feel that because of the distances they can not have Red Cross sewing circles. Point out to them in this connection that they can give just as much help by canning extra supplies of fruits and vegetables which can be given through the Red Cross for war relief. Every country housewife can have a 'war cabinet' of her own for jellies, preserves, fruits, pickles and vegetables. She can thus find an outlet for her patriotism and be of real service, too.

"In the sewing classes, as far as possible. Red Cross sewing should be taught. To this end, consult with the local Red Cross and act in conjunction with them. Another line of sewing should be remodeling of old garments for war relief and charity. These two lines of work should receive attention in every school where sewing is done."

Fire Prevention. — Probably no better directions can be given on this subject than those contained in a recent report from E. V. Kuykendall, chairman of the Garfield County council. Mr. Kuyendall reports to the state council:

"I had all the rural telephone lines tested out, and found that 16 out of 31 were in bad repair. Some entirely out of commission, and others with impaired efficiency.

"I prepared circular letters stating the defect to be remedied in each line, calling attention to the importance of efficient telephone service, in safeguarding against fires, and mailed such a circular to each person whose name appeared in the telephone book as a patron of any rural line. At the same time I mailed out a circular urging each farmer to keep on hand certain fire-fighting equipment.

"As an adidtional safeguard, I appointed a special committee to look after fire-fighting and equipment therefor, and fire patrols.

"We have selected four of the highest points with the most commanding view in the county, and will station patrols on these points at night, as soon as the grain is ripe enough to burn.

"The telephone company has promised to furnish phones, and where no rural phone is close we will install telephones on the lookout points.

"We took up the matter of paying the patrols with the county commissioners, and they have agreed to permit the sheriff to appoint the patrols as deputy sheriffs to be placed on the county payroll while their services are required. We will try to arrange with the farmers living nearest the lookout stations to board the patrols free, in consideration of special benefit to their own fields. We think every county in eastern Washington should follow this same general plan."

Development of Patriotic Sentiment.—One of the most necessary, continuous and persistent lines of effort that we should engage in is the arousing of patriotism among all classes—not the few—and the forming of public sentiment and the informing of public opinion on the whole situation.

Other duties may be suggested by the government from time to time.

How to organize home guards will be told in next week's issue.

Community Cooperation

Live Farmers Help Out Activities of Town

Any American farmer who is worthy of the name likes to be associated with a good, clean, up-to-date, enterprising business town as his postoffice and trading center. It's an asset to the farming community to have good churches, good schools, a good commercial club, and good business houses within easy reach. The growth and prosperity and service which such a town can render to its country neighbors depends much more largely upon the farmers themselves than they are apt to think. The more you trade with the town merchant the better stock he can keep. The more you help out the creamery or the cheese factory or the grain warehouse company or the grange or the farmers' union, or any other organization that is helping out the town and country alike, the better town you will have.

Your town is sure to have some sort of a moving picture show. It is far better that you should have a good, reputable movie than a low-class picture show. Farm fathers and mothers can exert a great influence in the matter of clean amusements in the town.

If the town has a public library, it can double its value and efficiency by the cooperation of the surrounding farming families.

If the business men of the town help out in the matter of good roads, why should not the farmers cooperate in town betterment?

The fact is that the rural town is a farming town and depends not only upon the production of the farms within its territory for its own success, but this rural town is of itself an index to the farmers who live within its territory.

Community cooperation, community development, means that the farm women join with the town women as members of the commercial club, as they do in Garfield, Whitman county, Wash.; it means a community cooperation in caring for and beautifying the local cemetery, as at Oakesdale, in the same county; it means that the town people unite with the farm people in the community clubhouse, as at Oroville, in Okanogan county, Wash.; it means that the farmers and the townspeople unite in making an institution of the annual picnic, as on the irrigation project a few miles out of Caldwell, Idaho; it means that the townspeople and the farm people unite in that marvelous institution, the children's fair, as at McMinnville, Ore.

Wherever you find the farmers cooperating with the townspeople you have a good town, and when you have a good town you are pretty sure to find good people living on the farms around that town. You can not build up a successful social life without community effort. Good stores, good churches, good schools, good roads, good farm organizations must have the cooperation of the farmers as well as of the townspeople themselves.

Washington Portraits No. 28.



Roy Allenbaugh.

Roy Allenbaugh, who has been farming in Chelan county, near Malaga, only one year, has had very marked success with his farm. He plowed and seeded 100 acres last year with the tractor, and this season intends to use it in harvesting the crop.

Special Message to Alfalfa Growers

Tell Us of Your Own Experience in Raising and Feeding Alfalfa

The most valuable alfalfa knowledge comes from the alfalfa growers themselves.

Will you not write and tell us some of the points which you have found out from your own experience in

RAISING,
FEEDING,
SELLING ALFALFA?

What is your acreage of alfalfa this year and how it is yielding?

To what extent do you pasture alfalfa?

What is your experience with alfalfa as feed for

Horses,
Beef Cattle.
Dairy Cows,
Sheep or Hogs,
Poultry?

Have you had any experience with alfalfa silage?

Any experience you may have had in

Raising alfalfa,
Preparation of seed bed,
Inoculation,
Alfalfa pests,
Alfalfa and crop rotation,

Growing alfalfa for seed, will be welcomed by the readers of the Farmer.

Your failures may be fully as important as your success, as other growers of alfalfa will thank you for saving them from like failure.

We know that this is a busy season, but any point or suggestion you can write us will be welcome, and then tell us more later on.

Write today.

Tell Others What You Know of Canning

Little of the Stem Makes Trouble in Canning Tomatoes--Other Pointers

By ANNA BUCHANAN

"Mrs. Housewife, are you canning and preserving perishable fruits and vegetables now?" is the question sent out from the nation's capital by Secretary Houston of the U. S. department of agriculture.

It is being urged by the department of agriculture and by the agricultural colleges throughout the country that not only every home assist in the conservation of the surplus perishable fruits and vegetables, by canning, preserving, pickling, drying and storing, but also that every experienced woman place her knowledge at the disposal of her neighbors, and what promises to be an endless chain in the movement among women for this purpose has been started in Washington.

On July 30 there was started a week's canning school in each of the following cities: Seattle, Tacoma, Bellingham, Wenatchee, Walla Walla, Goldendale, Kelso, North Yakima, Okanogan and Spokane. Ten experts from the state college and from the Western Washington experiment station were sent out, one to each of the above places. It was their aim to train women, not only how to conserve food and preserve food to the best advantage, but also how to teach other women in their own communities who were unable to attend these meetings, and urge them to pass their knowledge along.

Mrs. Elizabeth Jones, assistant leader of boys' and girls' club work in Washington, came to Spokane and conducted a school for a whole week. She was assisted by O. S. Fletcher, assistant county agriculturist, and Miss Ida May Wilson, who will help carry on the work in the rural districts during the rest of the canning season.

This is the plan worked out by Mrs. Jones and Mr. Fletcher for Spokane county:

It was thought that if schools were carried on in 18 rural towns throughout the county and the women who attended these schools would tell the women in their own communities about what they knew and had learned, that a great many women of the county would be reached, so six women who listened to Mrs. Jones' lectures and saw her demonstrations, volunteered to devote three weeks, working three days each week, in the following communities: Moran Prairie, Valleyford, Freeman, Rockford, Fairfield, Waverly, Spring Valley, Medical Lake, Four Lakes, Deep Creek, Chattaroy, Colbert, Peone Prairie, Orchard Prairie, Opportunity, Otis, Vera and Greenacres. Work began in the first six towns named, on August 8, and the other 12 will be visited the two following weeks.

Mr. Fletcher, Miss Wilson and County Deputy Superintendent Yeager have volunteered to visit each of these places and make preliminary arrangements for work.

One-Period Cold Pack.

In her demonstrations, Mrs. Jones uses exclusively the one-period cold pack method, directions for which have been fully given in a previous issue of the Farmer.

The term "cold pack" refers to the practice of placing the vegetable or fruit in the jar before sterilization, in a wholly or partially cooked condition, and the "one-period" means that it is boiled without ceasing until thoroughly sterilized. This method has rapidly come into general favor, since it preserves more of the natural color, appearance and flavor of the fruit and also saves the time, energy and labor of the operator. It requires no special equipment other than a wash boiler with a tightly fitting cover, and a false bottom of light wooden slats nailed to cross pieces and cut to fit into the bottom of the boiler. This false bottom should be an inch or two inches in height. Never place jars on the bottom of the boiler because the water can not properly circulate if this is done. A wire netting bottom could be used if preferred.

Points to Remember.

The following are some hints gleaned by watching Mrs. Jones can fruits and vegetables:

A practical cherry pitter is made by filing the head off a good-sized nail and making grooves crosswise through the end. A wire hair pin or a coarse crochet hook are also good.

For the hot and cold dip, a square of cheese cloth or a sugar sack is good to hold the fruit or vegetables, or a wire basket could be used.

When sealing the jars before placing them in the boiler, screw them up tightly and then turn back just a little. You must leave a little room for expansion. Upon their removal from the boiler, the jars must be sealed as tight as possible. Leave plenty of room between the jars in the boiler.

After taking the jars from the boiler, do not place to cool in a draft because it is liable to cause them to crack.

Wrap jars in paper to prevent bleaching, and store in a cool place.

Never let berries or soft fruits stand in water before canning or you will lose the valuable juices.

The reason so many women have trouble with tomatoes is because a little of the stem has been left on the fruit when put up. Be sure to dig all the stem out.

Farm Loan Bank Lends $40,000 a Day

Nearly a Million Dollars Are Already in the Hands of the Farmers

The farmers of the four northwestern states are now receiving from the federal farm loan bank an average of $40,000 a day. Some days the amount of money actually sent out to borrowers is considerably less than this sum, but other days it is much greater. The daily average is gradually increasing.

Already the bank has sent out money to the farmers of Oregon, Washington, Idaho and Montana totaling almost $1,000,000. At even the present rate of loans, which will be greatly increased as time goes on, a total of more than $12,000,000 would be loaned in a year.

Financed by Bond Issues.

While the government made an appropriation of $750,000 to start the work of each of the 12 district farm banks, the large total of the loans made and to be made is secured through the sale of government bonds issued with the mortgages given by borrowers as security. The Spokane bank, which handles the business for the four states of the northwest, has already loaned considerably more money than congress actually appropriated for it. It has therefore had to sell bonds to raise the amount. Two issues of bonds have already been sold and a third issue of $250,000 is to be offered immediately.

"We expect to make loans regularly from now on in such volume as to require a bond issue of $250,000 weekly, with a gradual increase on these figures," says President D. G. O'Shea.

"Notwithstanding all that has been said and written explanatory of the federal farm loan act, we find people from day to day whose conception of the law is that the federal land bank is operated with government funds and works under government appropriation," he continued, by way of explaining the system. "While it is true that the government furnished the original capital with which the business was started, it should be remembered that the government expects that money to be returned to it; and while the land banks are operated under government supervision and direction, they do not work under an appropriation, but are expected to be operated on a thorough business basis and earn their current expenses from the operations. The land bank makes a charge of 5 per cent interest per annum, payable semi-annually (with a small amortization payment on the principal). It sells its bonds, bearing 4 1-2 per cent interest, payable semi-annually, leaving it a margin of profit of one-half of 1 per cent, out of which it is expected to meet all the expenses incidental to its organization and operation. It therefore should be remembered that the land bank does not draw on government funds, and that it needs must operate economically."

Many New Charters Granted.

The Spokane bank has chartered a total of 131 local farm loan associations and is daily adding new ones. The loans sought by the members of these associations total more than $6,500,000. These loans are approved by the land bank, and are being made as rapidly as the titles to the land on which the loans are sought can be perfected and the work of completing the loans done.

The new associations chartered during the last two weeks, together with the amount of money sought by each association, are as follows:

Oregon.

Lower Bridge, Deschutes county	$ 25,650
Imbler, Union county	51,500
Marion, Polk and Marion counties	115,000
Bandon, Coos and Curry counties	68,800
Grande Ronde, Union county	60,200
Additional loans to new members of associations formerly chartered	117,550

Idaho.

Weiser, Washington county	49,200
Coeur d'Alene, Kootenai county	22,450
Plummer, Benewah county	28,950
Nampa, Canyon county	48,000
Orofino, Clearwater county	55,820
Additional loans to new members of associations previously chartered	9,250

Montana.

Dagmar, Sheridan county	29,300
Bozeman, Gallatin county	123,400
Three Forks, Gallatin county	32,200
Nickwall, Richland county	29,800
Additional loans to new members of associations previously chartered	17,300

Washington.

Richland, Benton county	82,250
Burlington, Skagit county	33,150
Benton, Benton county	31,250
Elma, Grays Harbor county	70,600
Bayview, Skagit county	35,300
Calispel, Pend Oreille county	34,050
Peshastin, Chelan county	33,400
Davis Lake, Pend Oreille county	30,500
Wolfred, Pend Oreille county	21,250
Sumner, Pierce county	38,500
Cashmere, Chelan county	57,400
Central, Franklin county	79,600
Additional loans to new members of associations previously chartered	14,900

Wealth of U. S. Negroes.

Negroes in the United States have a taxable wealth of about $500,000,000.

For the Best Dual Purpose Cow



Here is a photograph of the Pacific Northwest Farm Trio cup, to be awarded for the best dual purpose cow exhibited at the Spokane Interstate Fair and Live Stock show, September 3-8. Specialization is to be desired, but in this crisis the cow that produces both meat and milk is greatly to be honored.

Information Bureau

It is our business as a farm paper to be of the greatest possible assistance to our readers. Any question of a practical nature that interests you or the answer to which will be of special value to you—send it in. There will be no charge for this service. All questions must be signed with your name and postoffice address and will be answered by personal letter. Replies of general interest may be published in The Farmer, your name being omitted if you so desire. Address Information Bureau, Washington Farmer, Spokane, Washington.

Stable Disinfection.

A subscriber writes: "I would like to know how to cleanse a barn after tubercular cow have been in it."

Answer.

The Farmer replied to this inquiry as follows:

"Clean your barn thoroughly, sweeping the walls and ceilings to remove dirt and cobwebs, collecting all floor dirt, manure and the like and removing all decayed or decaying matter such as old floor boards or feed wastes. Keep all the sweepings and cleanings where it can be burned or treated with a solution of chloride of lime. For this treatment, use six ounces of chloride of lime to one gallon of water, and thoroughly saturate the waste matter.

"There are several common disinfectants, among them being bichloride of mercury, chloride of lime, formaldehyde, carbolic acid, crude carbolic acid, cresol and compound solution of cresol.

"It is probable that the last mentioned, the compound solution of cresol, is the most satisfactory when all points are considered. It is a coal tar product, and as such possesses a persistent odor that is somewhat objectionable in a dairy barn, however.

"The following formula, by which both a lime disinfection and a cresol disinfection are secured at one application, is recommended as effective: Slake 7 1-2 pounds of lime in enough water to make a creamy solution when stirred. Stir in 15 fluid ounces of cresol at least 95 per cent pure. Add water to make a total of five gallons of the solution.

"Another formula is similar: Slake the lime exactly as above, and stir in 30 fluid ounces of compound solution of cresol (known commercially as liquor cresolis compositus). Add water to make five gallons.

"Either of these solutions can be applied with a brush or with a pump spray, the latter being better, as it is more rapid and permits the application of the disinfectant into the niches and corners more completely. Every possible nook, cranny and crack should be reduced if thorough disinfection is desired.

"Another formula recommended by the government is that of a good lime wash made by slaking lime to a milky consistency, to which has been added one part of formalin (a solution of formaldehyde obtainable at any good drug store) to 30 parts of water. This may be sprayed on or applied with a brush the same as the solutions previously referred to.

"We wish to call to your attention the fact that all disinfectants rely for their efficacy on poisonous characteristics. Some of them are poisonous to animals, including human beings, the same as to disease germs. Especially is this true of the bichloride of mercury mentioned on the previous page as a disinfectant sometimes used. It is an extremely violent poison. Whatever disinfectant is used, exercise the utmost care to prevent injury to persons or animals."

Food Control Bill Has Become Law

Vital War Powers Are Given the President and Food Administration

Here is a summary of the food control bill just enacted by congress, approved by President Wilson and now in effect. An act of such far-reaching effect to the agricultural interests, The farmer believes to be deserving also of more extended treatment. So many important and extraordinary powers are conferred by this bill upon the president and upon the secretary of agriculture, that the only satisfactory method of learning just what these extraordinary powers are is for the reader to have the complete act before him; to read it section by section and to preserve it for future reference. With this view of the importance of this great war measure, The Farmer has obtained from its special representative at the national capital a complete copy of the measure as finally passed by congress, and prints it in full in this issue, beginning on page 13.

The purpose of the food control bill as finally passed by congress and approved by President Wilson August 10, is to provide further for

National security and defense by encouraging the production, conserving the supply and controlling the distribution of food and feed products and fuel.

The act aims to assure an adequate supply and equitable distribution and to facilitate the movement of

Foods,

Feeds,

Fuel, including fuel oil and natural gas,

Fertilizer and fertilizing ingredients,

Tools, utensils, implements, machinery and equipment required for the actual production of foods, feed and fuel,

To prevent scarcity, monopolization, hoarding and speculation in these necessities.

To establish and maintain government control of such necessaries,

To authorize the president to make regulations to carry out the provisions of the act.

In carrying out the purposes of this act the president is authorized to create and use any agency, to accept the services of any person without compensation or to utilize any part of the government.

All persons having pecuniary interest in contracts on behalf of the United States, either as voluntary or paid agents, are prohibited from cooperating in carrying out the purposes in this act, without making a complete disclosure in writing of such pecuniary interest, nor shall they participate in the awarding of such contracts. A fine of not more than $10,000 or imprisonment of not more than five years, or both.

The president is authorized to issue licenses and prescribe regulations when he shall deem it necessary for the importation, manufacture, storage, mining or distribution of the necessaries affected by the act.

Farmers Can Hold Products.

Any person who willfully hoards any of these necessaries shall, upon conviction, be subject to a fine of not more than $5000 or imprisonment of not more than two years, or both, "provided, however, that any accumulating or withholding by any farmer or gardener, cooperative association of farmers or gardeners, including live stock farmers or any other person of the products from any farm, garden, or of the land owned, leased or cultivated by him, shall not be deemed to be hoarding within the meaning of this act."

A fine of not more than $5000 or imprisonment of not more than two years, or both, is provided for willfully destroying any of the necessaries named in the act for the purpose of enhancing or restricting the supply thereof.

A fine not exceeding $10,000 or imprisonment for not more than two years, or both, is provided for any person who enters into any combination to restrict the supply of necessaries.

The president is authorized to

Requisition foods, feeds, fuel and other supplies.

Purchase, store, sell for cash at reasonable prices wheat, flour, meal, beans and potatoes, the price paid being not less than the minimum price which the president may have established.

Requisition for operation by the government any factory, packing house, oil pipe line, mine or other plant, making just compensation for such.

Prescribe regulations governing any exchange or board of trade in order to prevent undue enhancement, depression or fluctuation of prices.

Establish a minimum price for wheat, the act itself without any action on the part of the president guaranteeing prices for the several standard grades of wheat for the crop of 1918 based on No. 1 northern spring, or its equivalent, at not less than $2 per bushel at the principal interior primary markets.

The act further provides that 30 days after the approval of the act no foods, fruits, food materials or feeds shall be used in the production of distilled liquors for beverage purposes; provided that under regulations prescribed by the president such materials may be used in the production of distilled spirits exclusively for other than beverage purposes or for the fortification of pure sweet wines. A maximum penalty of $5000 or two years' imprisonment or both is provided. Moreover, the president is authorized and directed to commandeer any or all distilled spirits in bond or stock for redistillation for the manufacture of munitions and hospital supplies.

The president is authorized to fix the price of coal and coke.

It is declared a felony, with maximum fine of $5000 or two years' imprisonment, or both, to destroy any of these necessaries for the purpose of limiting the supply and affecting the market price thereof in interstate or international business.

The president is authorized to procure such stock of nitrate of soda as he may determine to be necessary for fertilizer for increasing agricultural production during 1917 and 1918, and to dispose for the same for cash at cost, $10,000,000 being made available for this purpose.

An appropriation of $150,000,00 is made for the purposes of the act during the time it shall be in effect.

The provisions of this act are to cease when the war between the United States and Germany is terminated.

The full text of the bill begins on page 13.

August Crop Report

Wheat Prospect Cut 25,000,000

According to the government crop report, the August forecast of the total production of wheat this season in the United States is 653,000,000 bushels, 25,000,000 bushels less than the July forecast. Here are the figures for the leading crops of special interest to the Pacific northwest:

Winter wheat—Total production, August forecast, 417,000,000 bushels (preliminary estimate), against the July forecast of 402,000,000 bushels, and a 1911-1915 average of 542,000,000 bushels. Yield per acre 15.1 bushels (preliminary estimate) against the December estimate of 13.8 bushels and 1911-1915 average of 16.3 bushels.

Spring wheat—Total production, August forecast, 236,000,000 bushels against the July forecast of 276,000,000 bushels and a 1911-1915 average of 264,000,000 bushels. Yield per acre 12.4 bushels, against the December estimate of 8.8 bushels and a 1911-1915 average of 14 bushels. Condition August 1, 68.7 against 63.4 on August 1, 1916, a 10-year average of 76.9 and 83.6 on July 1, 1917. Acreage 19,039,000 or 106 per cent of 1916.

All wheat—Total production, August forecast, 653,000,000 bushels against the July forecast of 678,000,000 bushels and a 1911-1915 average of 806,000,000 bushels. Yield per acre 14 bushels against the December estimate of 12.1 bushels and a 1911-1915 average of 15.4 bushels. Acreage 46,692,000 or 88.5 per cent of 1916. Price per bushel August 1, $2.28.

Corn—Total production, August forecast, 3,191,000,000 bushels, against the July forecast of 3,124,000,000 bushels and a 1911-1915 average of 2,754,000,000 bushels.

Oats—Total production, August forecast 1,456,000,000 bushels, against the July forecast of 1,453,000,000 bushels and a 1911-1915 average of 1,230,000,000 bushels.

Barley—Total production August forecast, 203,000,000 bushels, against the July forecast of 214,000,000 bushels, and a 1911-1915 average of 197,000,000.

Cotton—11,900,000 bales.
Rye—56,000,000 bushels.
Buckwheat—19,900,000 bushels.
White potatoes—467,000,000 bushels.
Flax—60.6 per cent, 12,800,000 bushels.
Hay—84.6 per cent, 100,000,000 tons.
Sugar beets—90.3 per cent, 7,820,000 tons.

The total production of apples was estimated at 188,000,000 bushels compared with 214,000,000, the 1911-15 average.

Additional figures from the August crop report for this state will be found on the market page of this issue.

Fair Dates.

Pendleton, Roundup—Sept. 20-22.
Boise, State—Sept. 22-29.
Salem, State—Sept. 24-29.
Helena, State—Sept. 24-29.
Lewiston, N. W. Lvst.—Nov. 16-23.
Portland, Pac. Nat. Dairy—Nov. 16-23.
Portland, Pac. Int. Lvst.—Nov. 19-24.

Washington Fairs and Shows.

Chehalis, S. W.—Aug. 27-Sept. 1.
Spokane, Interstate—Sept. 3-8.
Elma, County—Sept. 5-9.
Mabton, Hay Palace—Sept. 11-15.
North Yakima, State—Sept. 17-22.
Woodland, County—Sept. 19-22.
Rosalia, Lvst.—Sept. 20-22.
Lynden, County—Sept. 25-29.
Garfield, Roundup—Sept. 26-29.
Shelton, County—Sept. 27-29.
Burlington, County—Oct. 1-6.
Puyallup, Western—Oct. 2-7.
Palouse—Oct. 4-6.
Port Angeles, County—Oct. 11-13.
Colville, Live Stock—Oct. 17-19.

First Submarine Cable.

The first submarine cable was laid in 1853.

Wool Men to Help

Services Offered to the Country

The National Sheep and Wool bureau has officially tendered to Herbert C. Hoover, national food commisisoner, its assistance in any way possible to meet the unusual demand of the country for wool and mutton. In common with other live stock organizations, the bureau is making special effort to build up the industry to meet the needs of the present crisis.

The demand for wool is indicated by reports from various sources of high-priced sales. Recently a total of 150,000 pounds in the Calgary district sold for an average of 60 cents a pound, while a small quantity of extra fine clothing wool brought 74 cents.

The government has just placed an enormous order, probably the largest in the history of the wool trade, for the navy. The order is for cloth requiring a total of 15,000,000 pounds of wool. This will make a million shirts, 800,000 trousers and 350,000 overcoats, it is stated. The total cost will approximate $16,000,000. The contract will be distributed among some 35 manufacturing concerns.

The Red Cross has purchased 1,000,000 pounds of wool for knitting.

More Live Stock

Record Exhibits at S. W. Fair

By HORACE ADDIS.

The greatest lot of live stock ever exhibited at the Southwest Washington fair, midway between Chehalis and Centralia, seems assured, and Secretary George Walker is now satisfied of its success. The dates are for next week, August 27 to September 3. It may sound strange that a large part of the stock is coming from Oregon. Clifford F. Reid, with his great show herd of Jerseys; Ray J. Fox, Poland Chinas; J. G. S. Hubbard, at least three breeds of sheep, and probably Alex. Chalmers' Shorthorns and Middledale farm Guernseys are among the Oregon fine stock that will be shown. William Bishop and Carnation Stock farm will each exhibit Holsteins and, despite these show herds, the local breeders, Hamilton, Sveenth, Framm, Bevington and Busch will probably all exhibit a few of the black and whites. George Bertrand's Shorthorns and L. P. Schumacher's Percherons are only a unit of the local fine stock. Several hog breeders are expected.

The best exhibit of grains and grasses, in which this fair always excels, seems sure, and the poultry and other departments are promised a good list of entries.

Canning Club Contract.

County Agriculturist C. H. Bergstrom of Thurston county reports that several clubs are canning commercially. One club was given a large contract for canned chicken, fry size, all material being furnished the club, who received a fixed price per can for this work. Others have taken contracts from local merchants and families to can vegetables.

This Is No Time for False Philanthropy

Germany has been drawing heavy food supplies from Norway, Sweden, Denmark, Holland and Switzerland. At the same time those countries have drawn extensively on the United States for food commodities. They have bought from us and resold to Germany at a handsome profit, or have sold off their own products to the Germans and then supplied the deficit from American markets.

Indirectly, therefore, we have been helping to feed the German armies. Now that we are at war with Germany, this practice must cease, and to that end congress has passed a law authorizing the president to lay an embargo on any or all food shipments to these German-trading countries.

Full discretion is vested in the president, and these neutral countries are exerting strong pressure on the White House for a continuance of the traffic. They have sent, or are sending, delegates to Washington to plead with the president, and are declaring that their people will suffer destitution and starvation if he shuts off food supplies from this country.

The extent of this neutral traffic with Germany is glimpsed by a reading of the export statistics of Holland, for example. In the first three months of 1917 Holland sold Germany 1847 tons of butter, 9216 tons of cheese, and 3433 tons of eggs.

Furthermore, last year Germany received 130,063 tons of Dutch butter, eggs and cheese, while England only received 9758 tons; Germany received 122,009 tons of potatoes, England, 3137 tons; Germany 49,314 tons of meat, England 9957 tons.

With oats, corn and other foodstuffs bought in America, Holland is producing butter, cheese and eggs for the German markets.

It is obviously the president's duty to shut off this traffic. Our first duty is to our own people and our allies, and it is apparent that after these needs have been met little or nothing will remain for export to countries that notoriously are supplying the Germans.

If we supply them, we must stint ourselves and deny our allies. We shall be withholding food from the soldiers that are fighting our battles in order to send it indirectly, but none the less effectively, to German soldiers, who are fighting our troops and the armies of our allies.

This is no time for false philanthropy. The president's path of duty lies plainly before him.

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Do Not Misjudge Pea Possibilities

Last year in several districts of the northwest, especially in parts of eastern Washington and northern Idaho, was an ideal year for pea growing, and many farmers both improved their land and made large profits by growing them. As a result of this successful year, which followed a few years of successful experimenting with the crop, large numbers of farmers seeded peas this year. But an unusual period of hot, dry weather hit them at the wrong time. Reports from pea-growing districts indicate that great damage has been done, and that many who are trying out the crop are discouraged.

This discouragement should not lead to a misjudgment of the value of the pea as a northwestern crop. It has proved its value. It has been shown to be adapted to the northwest. It has been shown to be a great soil builder. It has been proved that in normal seasons it is a profit-maker, turning idle summerfallow lands into good crop fields and leaving the land improved rather than impoverished as successive crops of wheat or other grain would leave it.

The pea, even this hazardous year, is making good in some localities under some conditions. Farmers will make a great mistake if they allow this year's experience to lead them to abandonment of the pea as a part of their farming scheme.

Farm Loan System Is Simple

In last week's issue of The Farmer there appeared an interview by Secretary Jewett of the federal farm loan bank in Spokane. A careful reading of the interview should be sufficient to convince any one that the system whereby farmers may secure loans is not bound around with "red tape." The system is as simple as can be consistent with sound business.

All the delays that occur are due to the determination on the part of the bank officials to live strictly up to their motto, "Safety first; then service." They decline to allow loans that their appraisers feel are larger than a mortgage on the land will properly secure. They decline to make loans until the titles to the land are letter perfect, so that they will form unquestionable security.

The mortgages given to secure the loans are the foundation of the bank's fund. Built upon them, the fund may grow and grow until thousands of farmers will be able to borrow money at 5 per cent interest. But if these mortgages are ever allowed to be questioned the security of the bank totters. These mortgages are given by the bank as collateral to secure government bonds, which are sold to provide cash for further farm loans. Let the mortgages appear imperfect and the bonds will thereby have imperfect security and therefore no market and the farm loan system fails.

That's why the officers of the bank at Spokane require absolutely perfect papers before they will make a loan. And that's why the farmers of the northwest should rally all the more loyally and confidently around the system and not be impatient when they have to wait a few weeks for their 5 per cent money.

The Live Stock Problem

The crop situation in many sections of the northwest, where certain crops are severely injured by the drouth, puts a new problem up to the farmer—how best to get returns out of his injured crops.

In some instances it is reported with seeming reliability that crops will not be worth cutting for grain. Where this is true, there is a very immediate need of determining what will bring the most out of it, and the possibilities of turning stock into it should be considered.

While grain is greatly needed this year above all years, farmers should carefully figure before they cut a crop for grain that is too badly damaged. The cattle ranges have dried up unusually early this year, and there are many cattle being placed on the markets in second class condition. Stock yards are ready to turn them back to anybody who can give them proper finish. Conditions vary so much as to the pasturage a burntup field of grain would make and the conditions of the cattle that might be placed on it, that it is impossible to offer any definite figures as to possibilities. But if cattle on the market at secondary prices could be given 50 pounds each additional finishing weight and thereby be made to bring a top price, it would be something worth considering. For instance, say there is a thousand-pound animal worth 6 cents a pound in unfinished condition. He puts on 50 pounds finish, and in his better condition is worth 6½ cents. The increase in his worth is $8.25. These are purely fictitious figures, used only for purposes of illustration. Ten such animals would increase $82.50 in value. Fifty would increase over $400.

Here is a possibility worth thinking about if you have any crops that are about to prove a loss. It is a problem for each man to figure out with his own exact conditions in mind.

"Scotch Topped Shorthorns"

E. K. K. writes: "I am thinking of going into the Shorthorn business and I want to know what you mean by Scotch topped Shorthorns. What difference is there between Scotch Shorthorns and any other kind?"

Scotch topped Shorthorns are those sired by bulls of Scotch breeding. A Scotch bred animal is one that traces directly to the herd of Amos Cruickshank in Aberdeenshire, Scotland. One hundred years ago there were two types of Shorthorns: The Bates type were very stylish, dual purpose animals. The Booth Shorthorns were big tallowy beef animals. The Bates strain gradually became the more popular and by 1870 was the only one considered worth while either in England or America. In the meantime Amos Cruickshank was developing a hardy, vigorous beef type, much thicker fleshed and smoother than any other cattle of the day.

During the '70s Herefords and Angus were introduced into America, and many of these were better beef animals than the Bates Shorthorns then so common. The Shorthorn men began to look for something that could meet this competition, and they found it in the Cruickshank cattle. Some of these cattle were brought to America and made a great success in the show ring. In 1893 the great bull, Young Abbotsburn, was champion of the World's exposition at Chicago. This was probably the greatest show bull of the breed, and he demonstrated beyond question that Scotch blood could and did win. Cruickshank's herd was sold in 1890, but he had many followers, and by 1900 all of the leading herds in America were headed by Cruickshank bulls.

Of course there are other cattle in Scotland than Cruickshanks, but they are practically unknown in America where "Scotch cattle" always means descendants of the Cruickshank herd, or of herds very closely related and bred along similar lines. Nearly all of the Cruickshank females in 1890 were purchased by William Duthie of Collynie, Scotland, and J. Dean Willis of Bapton Manor, England, and these two herds are today perhaps the fountain sources of "Scotch" cattle, although, as you will note, one of them is located in England.

E. L. POTTER.

Washington Gleanings

Washington state grain standards have been made uniform with those adopted by the government by the state grain commission.

About 50 men are employed at the new box factory at Everett, with prospects of extending employment to from 75 to 100 within the next couple of weeks.

Klickitat sheepmen are expecting to get $10 a head for lambs now fattening on the summer grazing grounds of the Columbia national forest reserve around Mount Adams.

L. J. Sticklin of Chehalis has purchased the Wall farm of 142 acres, situated five miles east of Bucoda, on the Skookumchuck river. The consideration was approximately $10,000.

D. J. Zylstra of Lynden, Wash., has just finished the erection of a new poultry house constructed entirely of cedar. Mites and vermin will be prevented by the cedar, he believes.

There will be 65 per cent of a wheat crop in Columbia county this year, according to John Brining of Dayton. One farm in Whitestone valley seeded to barley is yielding 25 sacks to the acre.

Unsettled conditions arising through strikes and disturbances on the Sound have driven scores of workingmen inland, and present indications are that there will be more than enough labor to handle the harvest.

Trail blazers are laying out the Evergreen highway from Vancouver to Augusta, Maine. It is agreed by the federal and state authorities that $150,000 will be expended between Delany and Clarkston within the next two years.

Only through the most strict conservation of food will this country be able to send any considerable amount of grain to her European allies this fall, is the belief of Edwin T. Marchetti, Spokane field agent in charge of the bureau of crop estimates, working under the department of agriculture.

The Earl Fruit company is building fireproof warehouses at 10 points—Stemilt, Tieton and Grandview in the Yakima valley, Brewster, Entiat, Chelan Falls and Cashmere in the Wenatchee, and Otis Orchards in the Spokane valley. At Lewiston, Idaho, Mabton and Terrace Heights will also get one structure each.

Sixteen hundred acres of logged-off farming lands in the Humptulips valley, 14 miles west of Hoquiam, have been sold to 15 Slavonians of Cle Elum, Wash., who plan to establish a farming colony on the land in the spring. All 15 men are married and have large families, the aggregate of the 15 numbering 100 persons.

Under the direction of O. S. Fletcher, assistant county agriculturist of Spokane county, "mother and son" and "mother and daughter" clubs are being formed in rural districts of Spokane county. The object of the clubs is mutual upbuilding and education in home products on the farms. Three clubs already have been organized and others are to be chartered soon.

What Others Say

Gazette, Reardan: Every bushel saved from this year's crop may save the life of some one.

Gazette, Colfax: It is wasteful to eat food of the staple, easily preserved kinds and allow the perishables to spoil.

Journal, Shelton: The chief opportunity for economy is in avoiding waste of food, and, within reasonable limits, the consumption of the cheaper forms of food.

American, Anacortes: It makes no difference where the community may be or what conditions prevail therein, it may only enjoy growth and development by engendering the community spirit—that unity of action that invariably accomplishes results in every undertaking of whatever nature.

Governors Plan Defense

Six State Executives Confer in Portland

A meeting of six governors of western states was held in Portland late last week to consider home defense plans and further prosecution of the food production and conservation campaign. Col. Charles E. Dentler, comcander of the federal troops for Oregon, Washington, Idaho, Montana, Utah and Wyoming, was also present. The six governors were Lister of Washington, Withycombe of Oregon, Alexander of Idaho, Stewart of Montana, Boyle of Nevada, and Bamberger of Utah.

No definite statement of the home defense plans agreed upon was made public, but it was stated positively that the western states would deal vigorously with the I. W. W., and that there would be no policy of arbitration or conciliation followed toward the organization. On the other hand, the governors expressed readiness to work for such policy with regard to regular labor organizations. Col. Dentler assured the governors that in all cases where federal troops were actually needed to quell I. W. W. distrubance or menace, they could be depended upon, but urged that the states individually control the situation in all possible cases. There was considerable talk that special sessions of the legislatures of some or all of the states might be necessary to empower the authorities to proceed vigorously in the control of the I. W. W. situation.

Optimistic sentiment prevailed among the governors concerning the results of the food campaign. While great results have been noticed this season, the most effect will be shown next season, as the campaign did not begin this year until the season was well advanced.

The Eight-Hour Day.

The government is openly advocating the adoption of the eight-hour day rule throughout the industries of the country as a means of stabilizing working conditions and reestablishing normal conditions of industry in so far as possible where they have been disturbed by the activities of the I. W. W. and other malcontents. Especially is the recommendation for the eight-hour day directed at the lumbering industry throughout the northwest, where many camps and mills are shut down because of strikes. As a member of the council of national defense at Washington, D. C., Secretary of War Newton D. Baker has sent out messages to interested parties asking that they do what they can to secure the adoption of the eight-hour day. In like manner, local and state officials in some instances have been urging the adoption of the plan. It is argued that to put into operation an eight-hour day rule would rob the agitators and malcontents of their one hold on the sympathies of willing workers and legitimate labor organizations, and thereby result not only in restoring more nearly normal conditions in the industries, but in virtually destroying the power of the I. W. W. and like elements.

Nation Not Yet Accused.

The large number of men who have sought exemption from army service when called before the exemption boards during the last several days indicates that there is still a widespread feeling that this war is a foreign war, not one in which the very life of this country is at stake. It is impossible to calculate at this time the per centage of justifiable claims for exemption, but it is evident that large numbers of enrolled men are anxious to avoid army service by securing exemptions on various grounds. As a result, the government has announced a more stringent regulation governing exemptions, designed to prevent exemptions that are not well grounded. Actual dependence of the wife must be shown before marriage can be accepted as ground for exemption, and it is reported that in cases where the wife may readily be supported by her own people or by her own work the husband will not be relieved of army duty. The work of examination has been going on rapidly throughout the entire country, and many thousands of persons have been examined and passed. It is not yet known the percentage that is being rejected, but it is running probably about half of those called.

U. S. Will Control Food.

As an immediate result of the final passage of the food control bill, the food administration has announced that if it is found necessary the government will buy the entire 1917 wheat crop in order to insure its proper distribution and guarantee the consumer and the producer against unjust prices. The $2-per-bushel minimum price fixed by the food control bill does not apply to the 1917 crop, but only to that to be produced next season, but the measure does give the administration sweeping regulatory power over the present crop. The threat of the government to take over this season's crop, even though the plan is not finally carried out, will undoubtedly do much to stabilize the marketing and distribution of grain. The elimination of the speculator is one of the principal aims of the government in taking the action which it promises.

Vote on Food Bill.

After months of wrangling over details of the government food bill, when it did finally come to a vote in the senate after overwhelming passage in the lower house of congress, it was adopted by a vote of 66 to 7. Questions of prohibiting the use of grain in the manufacture of liquors and of whether or not there should be a food control commission or a one-man board were the cause of the long-drawn-out controversy over the measure.

New Export Record.

Figures have been issued by government officials showing that for the fiscal year ending June 30 last, this country's exports totaled $6,294,000,000, an increase over the previous year of nearly $2,000,000,000. The previous year had been the banner year. This is taken to indicate the importance of the German submarine campaign, as the export of goods from this country has been the object of the most determined attack by Germany. The same report says that the English commerce has maintained nearly normal figures, in spite of the destruction of British shipping vessels. It is also shown that Great Britain, the United Ctates, Japan, Holland, Norway and Canada are building ships today at the rte of probably more than 5,000,000 tons per annum, compared with losses of about 7,000,000 tons or less. As the world tonnage is about 40,000,000 the chances of submarine success are growing less and less in view of the rapid increase in shipbuilding and the more efficient methods of dealing with the submarines.

Japanese Mission Here.

For the purpose of discussing cooperation with the United States in the conduct of the war against Germany, especially from the viewpoint of commercial and industrial activity, an official commission of Japanese has arrived in this country. This is the first like mission ever to come from the orient to America, and is heralded as marking a new epoch in the relations of this country and the Nipponese. It is looked upon as a part of the great movement in cementing the friendship of these nations for all time to come, and wiping out for all time the talk of war between them.

Want Corn Regulated.

The Chicago Live Stock exchange has adopted a resolution asking the food commission to fix a minimum of 75 cents a bushel and a maximum price of $1 a bushel for corn next season. The resolution also asks the government to exempt from army service stock feeders.

THE ORIGINAL

2-WHEEL TRACTOR

That Does All Farm Work

WITHOUT HORSES



When you come to buying a tractor, whether for a farm of 80 acres, 280 acres or more, there are a number of questions you will need to ask yourself before you buy. Here are some of them:

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—Will it do ALL my farm work without horses?
—Will it work on plowed ground without packing the soil?
—Will it do the work quicker; easier; and save on hired help?
—Is it really a ONE-MAN tractor?
—Will it handle as easy as a team of horses, rather than be too heavy, clumsy, and inconvenient?
—Do I ride on the tool where I can see the work I am doing, or will I have to have someone run the tractor while I am operating the farm implement?

The tractor that answers these and all other farm power problems most practically and profitably is the

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This is the original Two-Wheel Farm Tractor. It pulls two 14-in. plows; will disc, harrow, plant, CULTIVATE all hill and row crops, pull mower, binder, manure spreader, fill your silo—and do all belt work on the average farm. In fact, it will do anything you can do with horses; do it quicker; easier; and with less hired help. It weighs only 2,800 lbs., but all its weight being on its two wheels—*all its weight is traction weight.* The tool you hitch it to forms the rear wheels and you do not have to pull around a ton of needless weight. It will back up with tools attached easier than a team will back. You can turn around in a small space; get close to the rows and the fences. It is the ideal tractor for the farmer because it costs less than four horses; is as powerful as five horses; does more work than seven horses; is inexpensive to operate; and eats only when it works.

Write for our new Tractor Catalog and read how farmers everywhere are solving the power and hired help problems on their farms; how they are changing the drudgery of farming to a profitable pursuit. Learn how you can make your work easier and get it done on time and grow bigger, better crops. Write today.

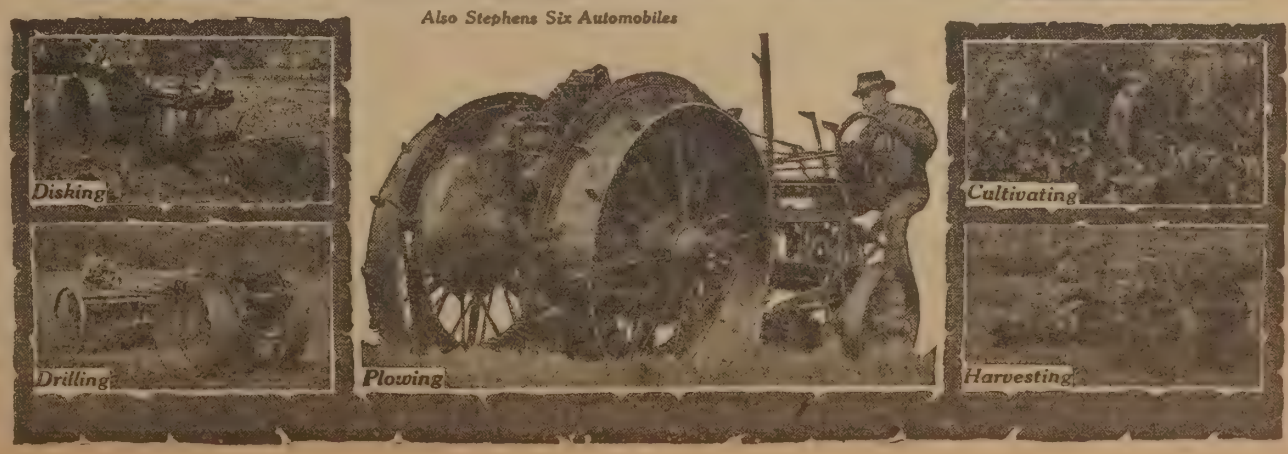
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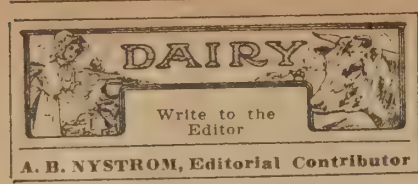
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(11)

Also Stephens Six Automobiles





A. B. NYSTROM, Editorial Contributor

THE KAISER AGAIN?
He's Blamed for High-Priced Milk.

Loton Norton, president of the Sheffield Farms Dairy company of New York, declares that the rise in milk prices in this country is due to the German kaiser. He claims that Germany intrigued with concerns in Switzerland whereby American milk products may be shipped into Switzerland and from thence on into Germany and that the American people are paying the costs, thereby, of feeding the enemy first-class milk.

This claim, the proof of which was not presented, was made following the charge by John J. Dillon, food commissioner of New York state, that the Sheffield farms were destroying buttermilk with a view to elevating the price for their other milk or milk products.

Mr. Norton replied to this charge that the farms were feeding 150 head of hogs on the buttermilk and that when they had an oversupply they placed it on the land as fertilizer.

Milking Shorthorn Cow, $4150.

At a recent dispersal sale of milking Shorthorns at Bedford, England, the high average of $935 was received for the 92 head. Top price of $4150 was realized for Primrose Dairymaid, a 4-year-old cow of the most approved milking strain. Dairy Shorthorn men are feeling very much elated both in England and America.

JERSEY BREEDERS' PICNIC.

In an entrancing spot in the Waldo hills the Marion county Jersey breeders picnicked last month. Frank Doerfler was host in a beautiful grove on the place he has recently purchased from his father. The big dairy barn, 110x40, the foundation and frame of which are up, was one of the day's attractions and its features were much discussed. Some fine Duroc Jersey hogs and Shropshire yearlings owned by Doerfler Bros. were penned in the grove and before leaving the crowd went to the pasture and viewed the very fine herd of Jerseys owned by Frank Doerfler that have led the Marion County Cow Testing association in production of butterfat the past seven months.

A Few Jerseys in the Behrmann Herd



The above picture shows part of the Behrmann Jersey herd. William Behrmann Jr. of Cornelius, Ore., whose purchase of a herd of 16 registered Jerseys from Mr. Hiatt of Creswell, Ore., in January, was mentioned in these columns, also purchased two very fine young cows from William Schulmerich of Hillsboro, Ore. One of them, Melissa Monmouth Noble, has a register of merit record of 402 pounds 14 ounces of butter, begun at one year and 10 months. She was put on test with second calf and prodced 60 pounds of fat, or over 70 pounds of butter. She promised a big record, but Mr. Behrmann, when he got her, did not keep up the test. She is by Monmouth Noble. The other heifer is by Golden Maid's Prince. Her year's test was almost as good. She is decidedly a show cow an won first prize as a calf at the Pacific International. Helena of Xanthadale, one of the Hiatt heifers, freshened July 1 and was milking 30 pounds a day when I called. Mr. Behrmann regrets that he was not ready to put her on official test, as she would make a great record with proper feed and care. She is by Oxford's Torono, a son of Hood Farm Torono, that is sire of three 1000-pound cows and nearly 50 others were register of merit records. On the dam's side she goes back in two generations to Eminent and is a showy cow. Four of the 16 are by the same bull and 12 are bred to a son of his out of Brighton Lad's Eminent, a well-bred, heavy-milching cow.

Coomassie's Lulu's Noble, Mr. Behrmann's herd bull, is a grandson of Noble of Oaklands, with Coomassie and Tormentor on the dam's side. Mr. Behrmann has an unborn bull contracted for from choice of two of Ed Cary's best heifers. He plans to begin an official testing not later than next year. He has an excellent foundation herd, is ambitious and is likely to "be heard from" a little later. H. A.

Figures From White River Valley Tests

The White River Valley Cow Testing association of western Washington reports 605 cows tested in the month of July. Average pounds of milk per cow was 902 and butterfat 31.32, according to the report of Robert Cowan, tester. Average feed cost per cow was $4.41 and the average feed cost per 100 pounds of milk was 48 cents. A. Zeeuw's cow No. 117 gave during the 92 days of May, June and July 5876 pounds of milk and 230.03 pounds butterfat, or an average of 7½ gallons per day, testing 3.9 per cent butterfat. She is on pasture and receives no grain.

The following table gives records of the cows in the association which have produced more than 60 pounds of butterfat during the 30 days ending July 31:

Owner of Cow.	Name of Cow.	Breed of Cow	Age (Yrs.)	Lbs. Milk.	Per Cent of Fat.	Lbs. Butter-fat.
A. Zeeuw	No. 143	Grade Holstein	5	1547	5.0	77.35
Cochrane Bros.	E123	Grade Holstein	7	2142	3.3	70.69
A. Zeeuw	No. 117	Grade Holstein	8	1857	3.7	68.71
A. Zeeuw	No. 22	Grade Holstein	3	1528	4.3	65.70
Fred Nelsen	No. 40	Guernsey	4	1386	4.7	65.14
Cochrane Bros.	E188	Grade Holstein	5	1916	3.3	63.29
A. Zeeuw	No. 1	Grade Holstein	5	1658	3.8	63.00
John Steel	No. 42	Grade Holstein	6	1550	4.0	62.00
Fred Nelson	No. 28	Ayrshire	5	1308	4.7	61.48
O. E. Ingebright	No. 2	Grade Holstein	7	1575	3.9	61.43
A. Zeeuw	No. 35	Grade Holstein	6	1516	4.0	60.64
A. Zeeuw	No. 87	Grade Holstein	6	1724	3.5	60.34

Frakes' Bull to Japan.

P. A. Frakes, the pioneer Holstein breeder of Scappoose, Ore., recently sold to S. Ban of Tokio, Japan, and Portland, Ore., the young bull Oriental Ring Segis Pontiac, and the heifer Oregon Homestead Friesland. Mr. Ban, who for some years was Japanese consul at Portland, Ore., and is a well-known importer and merchant, took the two animals on the same steamer with himself to Tokio, Japan, where the bull will head his Holstein herd.

Oriental King Segis Pontiac was sired by King Segis Pontiac XIII., a grandson of the two great bulls King Segis and King of the Pontiacs, and his dam and sire's dam average 571.6 pounds of milk and 30.39 pounds of butter in seven days with a per cent of fat of 4.25. His dam is Chloe Mechthilde Korndyke, and she is a daughter of the great show cow Chloe Mechthilde, that was grand champion at the Lewis and Calrk exposition in 1905 and the state fair in 1906. His breeding is practically the same as the Holsteins that are selling in the east for the extreme high prices.

The heifer's sire, Lunde Oregon Friesland, was grand champion at the Pacific international in 1916, and Mr. Ban is to be congratulated in selecting such breeding stock for Japan.

H. A.

Sterilizer for Farm Dairy.

If you wish to have high-grade dairy products, clean, free from bacteria and disease germs, and milk and cream which will remain sweet longer, cleanliness and sterilization of the dairy utensils are absolutely essential. The sterilizers now generally used are often considered too expensive, especially on farms where only a few cows are milked. A simple, inexpensive sterilizer is described in farmers' bulletin 748, issued by the bureau of animal industry, U. S. department of agriculture, Washington, D. C.

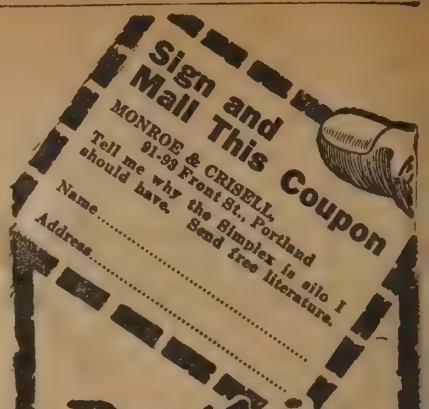
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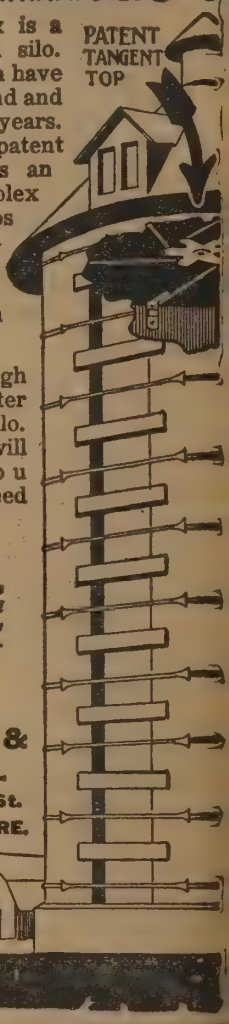


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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

U. S. WANTS HORSES

Buying in Open Market Planned

The war department has authorized its agents to proceed with the purchase of war horses to considerable numbers in the open markets. In the instructions sent out, it is stated that any responsible dealer, breeder or farmer who can supply one or more carloads of animals at a sanitary place, suitable for feeding, inspecting, branding and loading on cars, is invited to get in touch with army purchasing officers.

The types required are cavalry horses, light artillery horses heavery artillery horses for siege batteries, wheel mules, lead mules and pack mules.

Breeders, farmers and dealers are asked to notify purchasing officers of the zones in which they desire to supply animals, the prices and points of delivery.

The quartermaster's depot, Fort Keogh, Mont., is the headquarters for the purchases in the states of Washington, Oregon, Idaho, Montana and other northwestern states.

Veterinary

Dr. S. B. Nelson

May Be Cow Pox—My cows' teats have become covered with little lumps like warts. The top of the lump is scabbing over. There are many of these small lumps.—H. A. G., Porthill, Idaho.

Answer—Your cow is probably affected with cow pox. This is an infectious disease. The cow should be milked last if you have more than one cow to milk. Wash her udder and teats with a 2 per cent solution of creolin before milking, also affer milking. Then apply to the teats a little benzoated zinc oxide ointment.

Rabbits Are Diseased—In the two years we have lived here we have killed jackrabbits, which are quite numerous here, to eat and among them were two which we did not consider fit for food because each one had on the body a soft, spongy lump about two inches through, filled with a substance resembling white of an egg and floating in that were little tiny white eggs somewhat after the manner of frogs' eggs. We killed both affected in the winter time. Recently I bought two Belgian hares and I find one of them is affected the same as the rabbits. I supposed the trouble was caused by the sting of some kind of fly similar to the warbles on backs of cattle, but I do not know and would like any information you can give me on the matter. I would like to know what is the cause of it and if it makes them unfit for food and also if young ones would be liable to be affected the same way, as I think the affected one is the female rabbit.—F. H. F., Leese, Wash.

Answer—If you will send a specimen of the diseased rabbits to the veterinary department of the State College of Washington we will be glad to make a bacteriological examination of the tissues and advise you what the trouble is and if possible, what to do for it.

Secure Clearing Supplies.

The freight situation is, in the words of that certain old easterner, "getting no better fast." The day of half-a-mile-an-hour progress of anything in less than car lots and even of the larger shipments is upon us, and it is resting heavily on those farmers who are planning to take advantage of the war prices to cash in on the store of plant food in new ground next year.

The acreage of pasture land and logged-off land that has been selected by the owners for clearing this fall and winter perhaps is larger than for many a year, but the amount of powder that has been bought and delivered is reported to be unusually low.

The farmer who wants to harvest the greatest profit from the present opportunity and at the same time to serve his country by producing extra supplies will put out all his new ground that is possible next year. To do it he will have to clear the land this fall and winter, however, and he should be looking now to the securing of his powder or other supplies for the work.

Fitting Horses for the Show Ring

By E. L. POTTER

In no class of live stock does beauty count for as much as it does with horses, and beauty is the result of condition as much as of natural conformation.

A draft horse, to show to any advantage at all, must be fat. The fat horse will weigh from 200 to 400 pounds more than a thin horse; he will be wider in body, deeper and, in proportion, shorter in the legs. He will have a better sprung rib, a wider chest and will be smoother all over. There is not one person in 5000 who can recognize the true value of a thin horse. There is a saying that "fat covers up a multitude of sins," but it is even more true that lack of fat covers up a multiude of virtues.

It takes a good while to fatten a horse properly, and in selecting horses for the season's shows the very thin ones are usually left out. Horses that have been running on poor feed or suckling a colt or working very hard will be hard to put in show condition unless they are unsually easy feeders. The latter point is really quite important. A horse with a broad back, deep flank and short coupling will fatten easily, while the opposite kind fatten with difficulty, and if once made fat get thin at the first opportunity.

Temper Him to Grain.

The best method of fattening a horse is to put him in the barn and feed him all the grain he will eat, taking some time to get him on full feed, of course. Oats are the best single feed. Ground barley is good to the extent of one-third of the ration, and a small portion of bran may be added. Grain is so high priced this year that horses that are thin enough to require a long period of fattening had better be left at home.

In addition to fat, grooming and training are required. The horse must be thoroughly broken so that he can be handled in any crowd. Stallions are led with a stallion bridle, while fillies and mares are more commonly handled with a halter, although a bridle may be used if necessary, especially with Percherons and Belgians. For Clydesdales and Shires showring custom demands a clean new halter made out of twisted cotton rope. The use of surcingles, side straps, cruppers and similar arrangements is not allowed in the larger show rings. It is customary, however, to braid the manes and tails with yarn.

Use Blanket for Shine.

Blankets are used for several weeks, before the showing begins, and it is hardly possible to keep the hair short and glossy without them. Blankets and plenty of brushing are the things that make a fine coat. Many people are looking for some mysterious sleight-of-hand method of making a horse shine, but there is no easy way. It takes grooming of the old-fashioned kind and it must be done every day for several weeks before the show.

The essential points of training are to make the horse stand well and to lead up properly. The proper standing position is with both the two front feet and the two hind feet exactly side by side and stretched slightly, that is, with the front and hind feet rather farther apart than usual. A horse will learn this quickly if handled carefully. Move him around until the hind feet are in the right position. Then move the front feet into position by pulling upward and forward on the bit. Tapping the back of the fetlock with a whip or stick will often make the horse move the foot. After the horse has once learned the position desired he will take it whenever he is asked.

In showing a horse in action the horse must lead up beside the attendant so that the latter can hold backward and upward on the rein instead of forward and downward, as is usually the case. The horse is really driven instead of led. Holding the rein high will keep the horse's head up, lengthen the stride and keep him from stumbling. In order to hold the rein steady the attendant must keep step with the horse, otherwise he will jerk the horse's mouth every step.

On the whole, fitting horses for show is not difficult if one tries. Plenty of hard work and strict attention to business are sure to bring success.

FUR INDUSTRY

United States Captures Traffic.

Before the war Paris and Petrograd were not only the centers of the industry for undressed skins, but supplied the opulent customers the finished fur products.

After the war those European capitals may again outbid the world for this fur wealth; but the United States has captured the traffic that for hundreds of years has been the monopoly of Europe's adventurous characters.

It is estimated that $10,000,000 worth of the 1916-17 fur exports will pass into the American channels before next June. The manufactured product, of course, will more than double these figures, for every one who touches a skin increases the profit which the ultimate purchaser must pay to the ancient industry.

Flax Not Hard on Land.

The more or less common belief that flax is hard on the land, and particularly bad for the crop that follows it, is unwarranted, according to the specialists of the United States department of agriculture. Farmers can safely plan to grow wheat or other crops on flax land the next season. The increased demand for flaxseed to supply linseed oil, widely needed for naval and other war purposes, has caused more than usual interest in flax production.

Farmers need not hesitate to plow up new land or sow old land to flax. While in much of the flax-growing territory flax grown after flax may fail because of flax wilt, this disease does not affect the health or productivity of any other crop than flax. Flax wilt introduced into the soil under most conditions prevents profitable repetition of flax, but does not deteriorate the soil.



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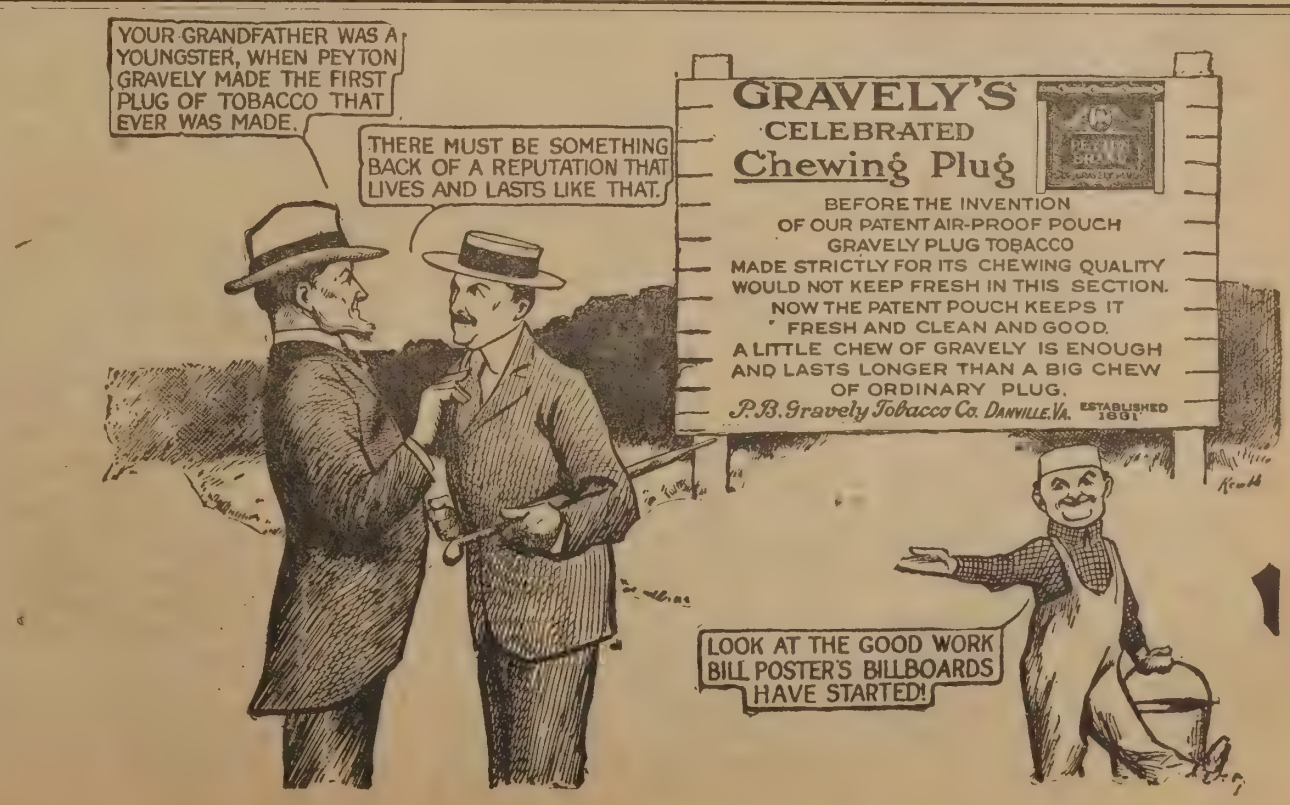
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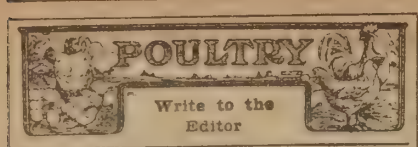
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Read the "Want Ads"

You will find it well worth while to read the "Want Ads" in each issue of this paper.





JAMES DRYDEN
Editorial Contributor

Losses in Eggs

Often Occur on Way to Market

In a former article I showed how great losses occur in the handling of eggs on the farm during warm weather. It is a question of heat. High temperature causes the kernel of grain to decay and a plant to grow from it. So it is heat that starts the process of decay in the egg and a chick to grow in it. If a proper temperature is maintained a live chick will develop in the egg, if it has been fertilized. If the temperature is not steady the embryo chick will start to develop and die, making a bad egg. If the egg be put in cold storage and kept at a temperature of about freezing neither will the various forms of bacteria or germs, which are other forms of life, develop. It is heat that causes bacteria to develop and the growth of bacteria causes the egg to decay or decompose.

It is imperative, therefore, if we want to eat eggs that we keep them at a temperature that will inhibit the development of life in them. This is the first principle of preservation or conservation of eggs for human consumption. Let this lesson be learned thoroughly by all egg producers and it will mean millions of dollars added to the value of the eggs produced in the United States in a year.

There are losses in eggs before they are sent to market, but there are also great losses after the eggs leave the farm. Let us see how the losses occur from the time the eggs leave the farm till they get to the consumer. I refer now to losses due to heat. There are losses from other causes, such as broken or wirty eggs and stale eggs. Let us leave those out of consideration and discuss only losses due to heat or hot weather.

First, the keeping of males with the laying hens is the primary cause of the large part of the loss in warm weather. The fertilized egg very often shows chick development between the time it leaves the farm till it reaches the city. There are sections of the country where the weather is so hot in summer that it is impossible at times to get the egg to market without the incubating process beginning. In some states the heat may reach incubation temperature and continue at that both night and day for several days at a time. In such places there is little probability of getting the fertilized eggs to market in good condition. But in our northwest country where the nights are usually cool, though the day temperature may be high, there is not the same danger from heated and spoiled eggs. The rooster is not the same menace to the egg supply here as in warmer states such as Missouri and Mississippi. In this respect we should have a better egg country than those states. The cool nights serve to prevent great losses in eggs that other states must suffer. If we can take advantage of this fact there need be no loss, or very little, in this country from overheated fertile eggs.

To get the eggs to market in good condition there are certain things that must be observed to prevent losses from heat. First, the eggs may be in good condition when taken out of the cellar, but before they get to town the hot sunshine may strike on the egg case and start incubation. The case or basket of eggs is very often put back of the buggy seat where the sun will strike on it. If the eggs are not fertile this will not hurt them very much, but the combination of heat and fertility means bad eggs. In taking the eggs to market, they should not be exposed to the sun.

Second, if the eggs are taken to a store in town they are very often kept in a warm room for a day or two before being shipped to the city, and the incubation started on the way to town continues. This is the second place where losses occur. The storekeeper who handles the eggs for farmers keeps them too long and does not keep them cool enough before he ships them to the city market.

Third, the eggs are next taken to the depot for shipment, where, very often, the cases stand on the platform for several hours in the full sunshine, and the incubation process, the wastage of the egg, continues.

Fourth, sometimes the temperature of the express car is such as to make it a good incubator and eggs lose value here.

Fifth, after the eggs reach the city and are carted a mile or two through oppressively hot streets and perhaps exposed to the sun at times, there will be a further loss in egg quality.

The dealer now finds it necessary to candle them to separate the good from the bad; then they are sold out to the trade, some at 40 cents and some at 20, and a great many are thrown into the dump. All because proper care was not exercised from the time they were laid by the hens, till delivered in the city. The heat of the broody hen and the heat of the sun has destroyed a large part of their value. And all this loss can be prevented by keeping the eggs cool, or reasonably cool.

The producer, of course, pays the bill, or the large part of it. Why should the farmer feed $2 wheat to his hens or other high priced feed, and then let the broody hen and the sun rob him of his profit. The sun is good in many ways for the farmer. It makes the crops grow. It kills disease germs and purifies things generally. It does not make eggs grow, however. It makes chicks grow in them, but kills the egg so far as its human food value is concerned. It makes for life in one case and death in another.

How is all this loss to be prevented, this loss of millions of dollars in a valuable food product? First, by a clear knowledge on the part of the farmer and poultryman of the effect of heat on the egg. When they know that the heat of the sun and of the broody hen starts the chick to grow in the egg they will naturally exercise more care.

But this is not enough. A great many farmers do take good care of the eggs, but they get no more for their eggs at the store than the farmer who takes no care. They are all thrown into the same hopper and paid for at the same price in cash or groceries. What can we expect of the average human being from such a system?

The second point, then, in the prevention of this loss is that eggs should be bought and sold on the basis of food value, not of numbers. They should be paid for according to quality, the same as other food products are paid for. When that is done there will be some justice in the marketing of eggs and this almost criminal waste of food will be stopped. J. D.

Success With Turkeys

Thomas W. Brunk, the veteran breeder of Salem Ore., is best known as a breeder of Poland China hogs, though his Mammoth Bronze turkeys have a wide reputation. What many people do not know is that Mrs. Brunk is the turkey breeder. She has wonderful success with them, due, she thinks, to a few simple rules, some of which are contrary to those usually advised. She uses mostly chicken hens for setting, especially early in the season, allowing the turkey hens to set later. Mrs. Brunk says a hen can be taught just as easily as a horse to be staked by the foot. So when the young turkeys come off she stakes the hen with a long, soft string, usually of old cotton cloth. She has a coop for the hen and turkeys, into which they go at night or when it storms. She feeds the hen as well as the young turkeys well and in about a month the hen will begin to lay, but will continue to hover the turkeys and care for them.

Mrs. Brunk's method of dealing with a setting turkey is to put her in a wire net coop about three feet square, with a small board coop inside, with the nest in it. An oil cloth is thrown over the wire coop when it rains. After a while she arranges so the young turkeys can go in and out, but the hen has to stay in until the turkeys are better able to travel. Mrs. Brunk feeds the turkey hen every day while she is sitting and while in the pen. Then when she is turned out with her brood she is not thin and will not run all over creation trying to find enough to eat and lose the little turkeys. Both hen and turkeys are fed liberally until the grain fields are cut, when the turkeys, chickens, hogs and horses are all turned in. The turkeys, besides the shattered grain, eat grasshoppers and grow and get fat. A sour milk bran or bran and rolled oat mash is a favorite and principal feed for the turkeys while young. This season so far Mrs. Brunk has saved fully 95 per cent of her turkey hatch and she had a fine hatch. She has White Rock chickens and has equally as good success with them.

Mr. Brunk's turkey Tom is hatched from noted English stock. He is large and most wonderfully colored. H. A.

Not So Very Meek.

"Blessed are the meek," quoted the deacon, in reproving the backslider, "for they shall inherit the earth."

"They may inherit, all right, deacon," said the irreverent one, "but somehow or other they never seem to get possession."

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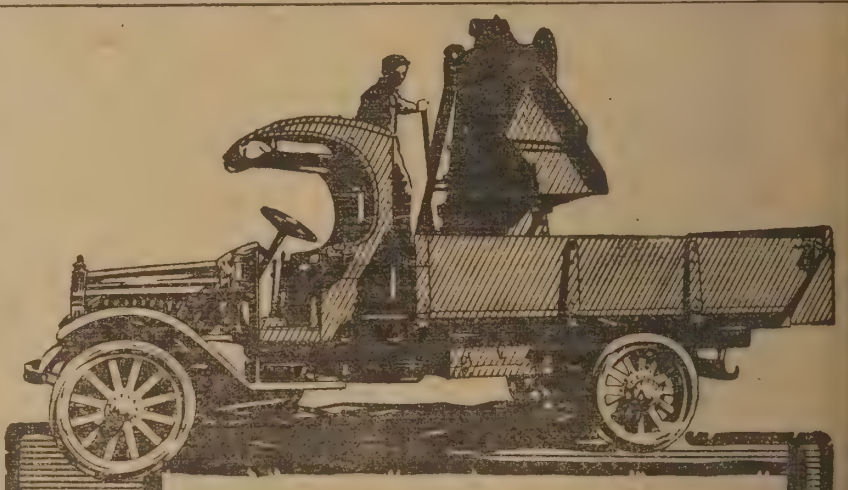
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GRANVILLE LOWTHER
Editorial Contributor

It is estimated that one ton of hardwood ashes for orchards is worth five tons of barnyard manure. I have no question that on the average orchard soil of the United States that this is true, but I question it on the volcanic ash soils of the northwest, where they lack humus.

One of the best ways to get rid of gophers in an orchard is to poison raisins by soaking 48 hours in a solution of strychnine and put them in the holes. This will also kill ground squirrels and sage rates. G. L.

Fruit Exhibitions

The time for exhibitions at the county fairs, state fair and the Spokane Apple Show is near at hand. I will venture a few suggestions growing out of observation, experience, and reading.

First, I think there should be three judges instead of one, because contests are often close, and if there is only one, his judgment might be called in question, whereas if there were three, their opinions would carry weight and influence not possible to one.

Second, at least one of these judges should be a practical fruit dealer, because he is more in touch with the demands and requirements of the trade, while the professional pomologist considers mostly whether the apple is true to an established type, regardless of whether that type is the best suited to the trade, or for commercial purposes. Perhaps I should not have used the word "regardless," but it is true, nevertheless, that a judge is a man, and men incline to emphasize that which comes most in their line of study. The pomologist studies the characteristics of certain varieties, the qualities that under the laws of heredity should belong to that particular quality, and the features that differentiate it from others. Then, that exhibit must in his thinking conform to that type.

Third, since exhibitions are designed to be educational in their nature, and the market value of apples, not their ancestry, is the most interesting question to the grower, there should be a marketing judge on the job.

Spokane Score Card.

One of the score cards in use at the "International Apple Show at Spokane," several years ago, read as follows:

Quality	20
Color	20
Size	10
Uniformity	10
Freedom, blemish	20
Pack	20
Total	100

Items of Pack.

Height of ends	4
Bulge	4
Alignment	4
Compactness	4
Attractiveness and style	4

Changes have been recommended, and not having before me the card of last year, I am not sure but some of these changes may have been adopted, but the above items will give exhibitors and growers an idea of requirements. G. L.

Spray Burn Warning

Recommend Tobacco Spray Highly

By Granville Lowther.

One man near Yakima discovered by experimentation that lime-sulphur, mixed with arsenate of lead, one to 23, burns the fruit. He has lost probably half his apples in one orchard by that mistake. He was under the impression that the bulletins recommend one to 20, and in order to be safe, mixed the solutions in the proportion of one to 23. It has always seemed to me dangerous to mix the arsenate of lead spray intended for codling moth with the lime sulphur intended for scale. One is stomach poison; the other kills by contact. Now, if the contact spray is strong enough to kill scale, there is danger that it will injure both foliage and fruit.

It seemed, too, that the apples most exposed to the sun were most injured by the spray. If you are going to spray for scale this summer and had intended to use lime sulphur, don't do it; use tobacco spray. Lime sulphur can be used successfully if properly mixed, but the danger of injury to fruit is so great that the average man can not safely use it.

However, the latest experiments seem to justify the use of lime sulphur in the following proportions:

Thirty-five degrees Baume, one gallon to 45 gallons of water. Thirty-two degrees Baume, one gallon to 40 gallons of water. Twenty-two degrees Baume, one gallon to 22 gallons of water. The average orchardist uses his lime sulphur at about 32, therefore should be added for summer spray to 40 gallons of water. G. L.

Tree Yields 1500 Pounds Cherries.

Fifteen hundred pounds of cherries from one Bing tree on the L. B. Haberly place, northeast of Salem, Ore., with a value of $90 for the product from one tree, is a record just reported. The cherries sold for 6 cents a pound.

Why We Have Movies.

Next year will mark the silver jubilee of the introduction of moving pictures. Nothing in the world's history has ever happened to so stimulate the prompt serving of the evening meal.—Santa Ana (Cal.) Blade.

The Motor Car
On the Farm

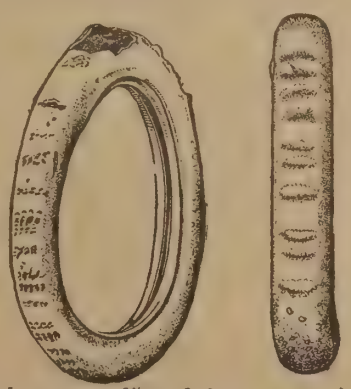
How to Save Tires.

By W. D. ALBRIGHT.

We Americans have been extravagant. We have literally educated ourselves to be careless with the most expensive things we buy. Price has been no object and our prosperity has led us on and on until now we are obliged to face a period of economy.

It is conservatively estimated that the carelessness of American motor car drivers during 1916 cost them in round figures $150,000,000, and this applies only to tires. What has been your share? You have contributed your "bit." You must now take this tire problem seriously. Get every mile out of every tire that the manufacturer has built into it. If you don't, you are the loser, and if everybody is a loser, then the "tire deficit" for 1917 will outrival last year, for there are thousands more motor car owners today than there were a year ago.

The photographs shown here are of the genuine abused tires, hundreds of



which are discarded every day throughout the United States before they have given the service for which they were built. It isn't the manufacturer's fault. The mileage was built into each tire, but the car driver lost it through carelessness.

Injured by Chains.

The illustration at the left shows the result of improper application of tire chains. Leave chains just loose enough so that every time the wheel turns the cross chains will not strike the same spot in the tire. If you do not heed this advice, you might preserve the illustration as an actual photograph of your tire.

Underinflation.

Underinflation is the "white plague" of the pneumatic tire. More damage, such as shown in the illustration at the right, is done, possibly, by underinflation than by any other cause. The wavy condition of the tread of this tire is due to its having been run soft, with insufficient air, and consequently becoming loose from the fabric through no fault of the manufacturer. Most tire manufacturers have inflation schedules which they are very anxious to place in the hands of every motorist. A tire caliper is the best method of measuring the air pressure in your tires. It is a recent invention of one of the large rubber companies and is made adjustable to all sizes of tires. When adjusted to the size of tire you are using, if the tire is properly inflated, it should slip over the tire snugly. If it does not fit your tire, then the pressure is too high or too low.

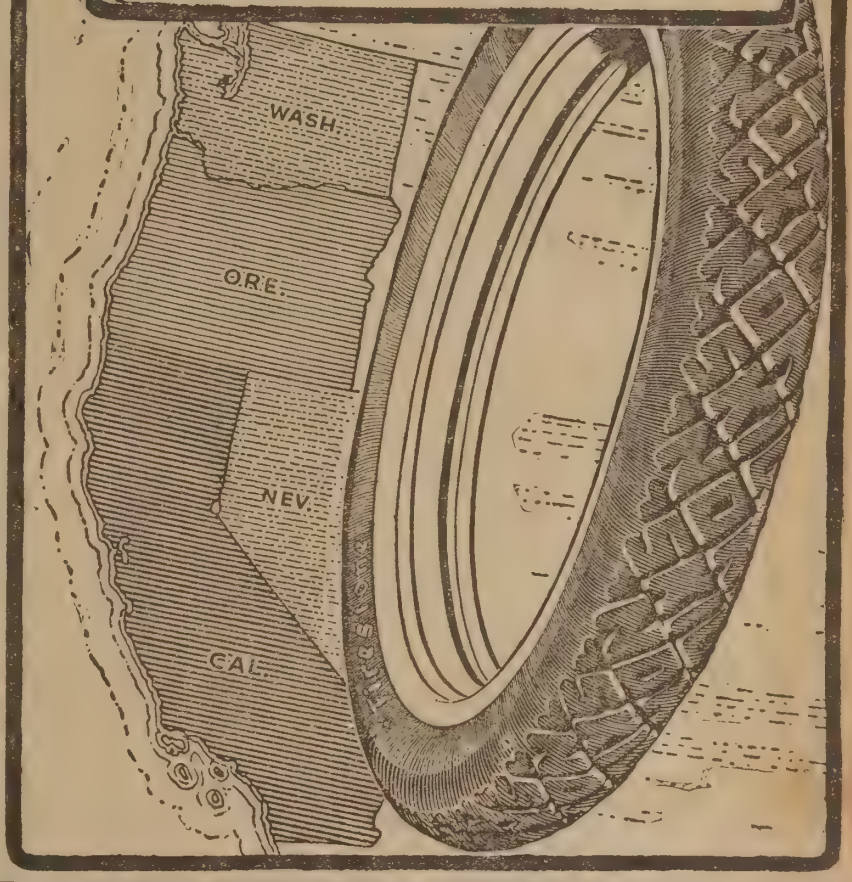
These illustrated tire talks will appear regularly in The Farmer for several weeks. It will pay every subscriber who drives a car to read every one of them.

Firestone

WHERE specialization and intensive cultivation of the soil holds sway on the West Coast, Firestone Tires have justly won high recognition. The same attention to detail which has made western groves and fields treble their yield is responsible for the strength of the Firestone Tire and its Most Miles per Dollar.

If you are not a Firestone user, a thorough trial is only fair to yourself. Most Miles per Dollar means just what it says. See your dealer. Write for Free Book, "Mileage Talks," No. 138

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That is why he is willing to back you up and help you buy a truck, for in these days of high farm labor, the truck will make profit out of loss by reducing hauling and labor costs.

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Complete stock of parts, and expert mechanical advice always within reach.

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SEATTLE Distributors SPOKANE

FARMER.

How Farm Loans May Be Used

"The farm loan law says that loans may be made for one or all of four purposes; (1) To provide for the purchase of land for agricultural uses; (2) to provide for the purchase of live stock equipment, fertilizers and reasonable necessary for the proper and reasonable operation of the land; (3) to provide buildings and for the improvement of the land; and (4) to pay existing debts.

"The Spirit of the Law.

"If a automobile or truck is so constructed and equipped as to be a piece of farm machinery, and if it is used in such a way as to take the place of some other necessary piece of farm equipment, I believe it comes within the field of legitimate purchases with farm loan money," said President O'Shea in explaining his position to a representative of the Farmer. "An automobile for pleasure or mere convenience in traveling certainly would not be in accord with the spirit of the law, for the law is designed purely as a farm development measure. But when the automobile is in the form of a tractor, to plow, or seed, or cultivate, or harvest, or when it is hitched to pump water or to pump to generate electric plant to generate electric as a delivery wagon market, it beco farm equipmen mate purchas "How

From an interview with President OShea of the Federal Farm Loan Bank, Spokane, printed in the Washington Farmer, July 5.

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wf MAIL TO NEAREST OFFICE

War Power of the Food Control Bill

To Assure an Adequate Supply and an Equitable Distribution of Foods, Feeds and Fuel

Here is given in full the food control act of congress, which became effective on the approval of President Wilson on August 10.

By carefully taking out these four pages from the center of the Farmer, our readers can easily preserve this most important and far-reaching measure, especially affecting agricultural interests of the country.

An act to provide further for the national security and defense by encouraging the production, conserving the supply and controlling the distribution of food products and fuel.

Be it enacted by the senate and house of representatices of the United States of America, in congress assembled:

Section 1. That, by reason of the existence of a state of war, it is essential to the national security and defense, for the successful prosecution of the war, and for the support and maintenance of the army and navy, to assure an adequate supply and equitable distribution, and to facilitate the movement of foods, feeds and fuel, including fuel oil and natural gas, and fertilizer and fertilizer ingredients, tools, utensils, implements, machinery and equipment required for the actual production of foods, feeds and fuel, hereafter in this act called necessaries; to prevent, locally or generally, scarcity, monopolization, hoarding, injurious speculation, manipulations and private controls, affecting such supply, distribution, and movement; and to establish and maintain governmental control of such necessaries during the war. For such purposes the instrumentalities, means, methods, powers, authorities, duties, obligations and prohibitions hereinafter set forth are created, established, conferred and prescribed. The president is authorized to make such regulations and to issue such orders as are essential effectively to carry out the provisions of this act.

Voluntary Agencies.

Section 2. That in carrying out the purposes of this act the president is authorized to enter into any voluntary arrangements or agreements, to create and use any agency or agencies, to accept the services of any person without compensation, to cooperate with any agency or person, to utilize any department or agency of the government, and to coordinate their activities so as to avoid any preventable loss or duplication of effort or funds.

Section 3. That no person acting either as a voluntary or paid agent or employe of the United States in any capacity, including an advisory capacity, shall solicit, induce or attempt to induce any person or officer authorized to execute or to direct the execution of contracts on behalf of the United States to make any contract or give any order for the furnishing to the United States of work, labor or services, or of materials, supplies or other property of any kind or character, if such agent or employe has any pecuniary interest in such contract or order, or if he or any firm of which he is a member, or corporation, joint stock company, or association of which he is an officer or stockholder, or in the pecuniary profits of which he is directly or indirectly interested, shall be a party thereto. Nor shall any agent or employe make, or permit any committee or other body of which he is a member to make, or participate in making, any recommendation concerning such contract or order to any council, board or commission of the United States, or any member or subordinate thereof, without making to the best of his knowledge and belief a full and complete disclosure in writing to such council, board, commission, or subordinate of any and every pecuniary interest which he may have in such contract or order and of his interest in any firm, corporation, company or association being a party thereto. Nor shall he participate in the awarding of such contract or giving such order. Any wilful violation of any of the provisions of this section shall be punishable by a fine of not more than $10,000, or by imprisonment of not more than five years, or both: Provided, that the provisions of this section shall not change, alter or repeal action 41 of chapter 321, 35th statutes at large.

Section 4. That it is hereby made unlawful for any person wilfully to destroy any necessaries for the purpose of enhancing the price or restricting supply thereof; knowingly to commit waste or wilfully to permit preventable deterioration of any necessaries in or in connection with their production, manufacture, or distribution; to hoard, as defined in section 6 of this act, any necessaries; to monopolize or attempt to monopolize, either locally or generally, any necessaries; to engage in any discriminatory and unfair, or any deceptive or wasteful practice or device, or to make any unjust or unreasonable rate or charge, in handling or dealing in or with any necessaries; to conspire, combine, agree or arrange with any other person: (a) to limit the facilities for transporting, producing, harvesting, manufacturing, supplying, storing, or dealing in any necessaries; (b) to restrict the supply of any necessaries; (c) to restrict distribution of any necessaries; (d) to prevent, limit, or lessen the manufacture or production of any necessaries in order to enhance the price thereof, or (e) to exact excessive prices for any necessaries, or to aid or abet the doing of any act made unlawful by this section.

Power to License.

Section 5. That, from time to time, whenever the president shall find it essential to license the importation, manufacture, storage, mining or distribution of any necessaries, in order to carry into effect any of the purposes of this act, and shall publicly so announce, no person shall, after a date fixed in the announcement, engage in or carry on any such business specified in the announcement of importation, manufacture, storage, mining or distribution of any necessaries as set forth in such announcement, unless he shall secure and hold a license issued pursuant to this section. The president is authorized to issue such licenses and to prescribe regulations for the issuance of licenses and requirements for systems of accounts and auditing of accounts to be kept by licensees, submission of reports by them, with or without oath or affirmation, and the entry and inspection by the president's duly authorized agents of the places of business of licensees. Whenever the president shall find that any storage charge, commission, profit or practice of any licensee is unjust, or unreasonable, or discriminatory and unfair, or wasteful, and shall order such licensee, within a reasonable time fixed in the order, to discontinue the same, unless such order, which shall recite the facts found, is revoked or suspended, such licensee shall, within the time prescribed in the order, discontinue such unjust, unreasonable, discriminatory and unfair storage charge, commission, profit or practice. The president may, in lieu of any such unjust, unreasonable, discriminatory and unfair storage charge, commission, profit or practice, find what is a just, reasonable, nondiscriminatory and fair storage charge, commission, profit or practice and in any proceeding brought in any court such order of the president shall be prima facie evidence. Any person who, without a license issued pursuant to this section, or whose license shall have been revoked, knowingly engages in or carries on any business for which a license is required under this section, or wilfully, fails or refuses to discontinue any unjust, unreasonable, discriminatory and unfair storage charge, commission, profit or practice, in accordance with the requirement of an order issued under this section, or any regulation prescribed under this section, shall, upon conviction thereof, be punished by a fine not exceeding $5000 or by imprisonment for not more than two years, or both. Provided, That this section shall not apply to any farmer, gardener, cooperative association of farmers or gardeners, including live stock farmers, or other persons with respect to the products of any farm, garden or other land owned, leased or cultivated by him, nor to any retailer with respect to the retail business actually conducted by him, nor to any common carrier, nor unjust, unreasonable discrimatory shall any thing in this section be construed to authorize the fixing or imposition of a duty or tax upon any article imported into or exported from the United States or any state, territory or the District of Columbia. Provided further, That for the purposes of this act a retailer shall be deemed to be a person, copartnership, firm, corporation or association not engaging in the wholesale business, whose gross sales do not exceed $100,000 per annum.

Fines for Hoarding.

Section 6. That any person who wilfully hoards any necessaries shall upon conviction thereof be fined not exceeding $5000 or be imprisoned for not more than two years, or both. Necessaries shall be deemed to be hoarded within the meaning of this act when either (a) held, contracted for or arranged for by any person in a quantity in excess of his reasonable requirements for use or consumption by himself and dependents for a reasonable time; (b) held, contracted for or arranged for by any manufacturer, wholesaler, retailer, or other dealer in a quantity in excess of the reasonable requirements of his business for use or sale by him for a reasonable time, or reasonably required to furnish necessaries produced in surplus quantities seasonally throughout the period of scant or no production; or (c) withheld, whether by possession or under any contract or arrangement, from the market by any person for the purpose of unreasonably increasing or diminishing the price: Provided, that this section shall not include or relate to transactions on any exchange, board of trade or similar institution or place of business as described in section 13 of this act that may be permitted by the president under the authority conferred upon him by said section 3.

Provided, however, that any accumulating or withholding by any farmer or gardener, cooperative association of farmers or gardeners, including live stock farmers or any other person of the products of any farm, garden or other land owned, leased or cultivated by him shall not be deemed to be hoarding within the meaning of this act.

Libel for Condemnation.

Section 7. That whenever any necessaries shall be hoarded as defined in section 6 they shall be liable to be proceded against in any district court of the United States within the district where the same are found and seized by a process of libel for condemnation, and if such necessaries shall be adjudged to be hoarded they shall be disposed of by sale in such manner as to provide the most equitable distribution thereof as the court may direct, and the proceeds thereof, less the legal costs and charges, shall be paid to the party entitled thereto. The proceedings of such libel cases shall conform as near as may be to the proceedings in admiralty, except that either party may demand trial by jury of any issue of fact joined in any such case, and all such proceedings shall be at the suit of and in the name of the United States. It shall be the duty of the United States attorney for the proper district to institute and prosecute any such action upon presentation to him of satisfactory evidence to sustain the same.

Section 8. That any person who wilfully destroys any necessaries for the purpose of enhancing the price or restricting the supply thereof shall, upon conviction thereof, be fined not exceeding $5000 or imprisoned for not more than two years, or both.

Against Combinations.

Section 9. That any person who conspires, combines, agrees or arranges with any other person (a) to limit the facilities for transporting, producing, manufacturing, supplying, storing or dealing in any necessaries (b) to restrict the supply of any necessaries; (c) to restrict the distribution of any necessaries; (d) to prevent, limit or lessen the manufacture or production of any necessaries in order to enhance the price thereof shall, upon conviction thereof, be fined not exceeding $10,000 or be imprisoned for not more than two years, or both.

Power to Requisition.

Sec. 10.—That the president is authorized, from time to time, to requisition foods, feeds, fuels, and other supplies necessary to the support of the army or the maintenance of the navy, or any other public use connected with the common defense, and to requisition or otherwise provide storage facilities for such supplies; and he shall ascertain and pay a just compensation therefor. If the compensation so determined be not satisfactory to the person entitled to receive the same, such person shall be paid 75 per centum of the amount so determined by the president, and shall be entitled to sue the United States to recover such further sum as added to said 75 per centum will make up such amount as will be just compensation for such necessaries or storage space, and jurisdiction is hereby conferred on the United States district courts to hear and determine all such controversies: Provided, That nothing in this section, or in the section that follows, shall be construed to require any natural person to furnish to the government any necessaries held by him and reasonably required for consumption or use by himself and dependents, nor shall any person, firm, corporation, or association be required to furnish to the government any seed necessary for the seeding of land owned, leased, or cultivatd by them.

To Buy and Store.

Sec. 11. That the president is authorized from time to time to purchase, to store, to provide storage facilities for, and to sell for cash at reasonable prices, wheat, flour, meal, beans, and potatoes: Provided, That if any minimum price shall have been theretofore fixed, pursuant to the provisions of section 14 of this act, then the price paid for any such articles so purchased shall not be less than such minimum price. Any moneys received by the United States from or in connection with the disposal by the United States of necessaries under this section may, in the discretion of the president, be used as a revolving fund for further carrying out the purposes of this section. Any balance of such money not used as part of such revolving fund shall be covered into the treasury as miscellaneous receipts.

Requisition and Take Over.

Sec. 12. That whenever the president shall find it necessary to secure an adequate supply of necessaries for the support of the army or the maintenance of the navy, or for any other public use connected with the common defense, he is authorized to requisition and take over, for use or operation by the government, any factory, packing house, oil pipe line, mine, or other plant, or any part thereof, in or through which any necessaries are or may be manufactured, produced, prepared, or mined, and to operate the same. Whenever the president shall determine that the further use or operation by the government of any such factory, mine, or plant, or part thereof, is not essential for the national security or defense, the same shall be restored to the person entitled to the possession thereof. The United States shall make just compensation, to be determined by the president, for the taking over, use, occupation, and operation by the government of any such factory, mine, or plant, or part thereof. If the compensation so determined be unsatisfactory to the person entitled to receive the same, such person shall be paid 75 per centum of the amount so determined by the president, and shall be entitled to sue the United States to recover such further sum as, added to said 75 per centum, will make up such amount as will be just compensation, in the manner provided by section 24, paragraph 20, and section 145 of the judicial code. The president is authorized to prescribe such regulations as he may deem essential for carrying out the purposes of this section, including the operation of any such factory, mine, or plant, or part thereof, the purchase, sale, or other disposition of articles used, manufactured, produced, prepared, or mined therein, and the employment, control, and compensation of employees. Any moneys received by the United States from or in connection with the use or operation of any such factory, mine, or plant, or part thereof, may, in the discretion of the president, be used as a revolving fund for the purpose of the continued use or operation of any such factory, mine, or plant, or part thereof, and the accounts of each such factory, mine, plant, or part thereof, shall be kept separate and distinct. Any balance of such moneys not used as part of such revolving fund shall be paid into the treasury as miscellaneous receipts.

To Prevent Speculation.

Sec. 13. That whenever the president finds it essential in order to prevent undue enhancement, depression or fluctuation of prices of, or in order to prevent injurious speculation in, or in order to prevent unjust market manipulation or unfair and misleading market quotations of the prices of

(Continued on following page.)

War Power of Food Bill Designed to Insure Supply and Distribution

(Continued from preceding page.)

necessaries, hereafter in this section called evil practices, he is authorized to prescribe such regulations governing, or may either wholly or partly prohibit, operations, practices and transactions at, on, in, or under the rules of any exchange, board of trade, or similar institution or place of business as he may find essential in order to prevent, correct, or remove such evil practices. Such regulations may require all persons coming within their provisions to keep such records and statements of account, and may require such persons to make such returns, verified under oath or otherwise, as will fully and correctly disclose all transactions at, in, or on, or under the rules of any such exchange, board of trade, or similar institution or place of business, including the making, execution, settlement, and fulfilment thereof. He may also require all persons acting in the capacity of a clearing house, clearing association, or similar institution, for the purpose of clearing settling, or adjusting transactions, at, in, or on, or under the rules of any such exchange, board of trade, or similar institution or place of business, to keep such records and to make such returns as will fully and correctly disclose all facts in their possession relating to such transactions, and he may appoint agents to conduct the investigations necessary to enforce the provisions of this section and all rules and regulations made by him in pursuance thereof, and may fix and pay the compensation of such agents. Any person who wilfully violates any regulation made pursuant to this section, or who knowingly engages in any operation, practice or transaction prohibited pursuant to this section, or who wilfully aids or abets any such violation or any such prohibited operation, practice or transaction, shall, upon conviction thereof, be punished by a fine not exceeding $10,000 or by punishment for not more than four years, or both.

Wheat Minimum.

Section 14. That whenever the president shall find that an emergency exists requiring stimulation of the production of wheat, and that it is essential that the producers of wheat produced within the United States shall have the benefits of the guaranty provided for in this section, he is authorized from time to time seasonably and as far in advance of seeding time as practicable to determine and fix and to give public notice of what, under specified conditions, is a reasonable guaranteed price for wheat, in order to assure such producers a reasonable profit. The president shall thereupon fix such guaranteed price for each of the official grain standards for wheat as established under the United States grain standards act, approved August 11, 1916. The president shall from time to time establish and promulgate such regulations as he shall deem wise in connection with such guaranteed prices, and in particular governing conditions of delivery and payment and differences in price for the several standard grades in the principal primary markets of the United States, adopting No. 1 northern spring or its equivalent at the principal interior primary markets as the basis. Thereupon, the government of the United States hereby guarantees every producer of wheat produced within the United States, that, upon compliance by him with the regulations prescribed, he shall receive for any wheat produced in reliance upon this guarantee within the period, not exceeding 18 months, prescribed in the notice, a price not less than the guaranteed price therefor as fixed pursuant to this section. In such regulations the president shall prescribe the terms and conditions upon which any such producer shall be entitled to the benefits of such guaranty. The guaranteed prices for the several standard grades of wheat for the crop of 1918 shall be based upon No. 1 northern spring or its equivalent at not less than $2 per bushel at the principal interior primary markets. This guaranty shall not be dependent upon the action of the president under the first part of this section, but is hereby made absolute and shall be binding until May 1, 1919. When the president finds that the importation into the United States of any wheat produced outside of the United States materially enhances or is likely materially to enhance the liabilities of the United States under guarantees of prices therefor made pursuant to this section, and ascertains what rate of duty, added to the then existing rate of duty on wheat and to the value of wheat at the time of importation, would be sufficient to bring the price thereof at which imported up to the price fixed therefor pursuant to the foregoing provisions of this section he shall proclaim such facts, and thereafter there shall be levied, collected and paid upon wheat when imported, in addition to the then existing rate of duty, the rate of duty so ascertained; but in no case shall any such rate of duty be fixed at an amount which will effect a reduction of the rate of duty upon wheat under any then existing tariff law of the United States. For the purpose of making any guaranteed price effective under this section, or whenever he deems it essential in order to protect the government of the United States against material enhancement of its liabilities arising out of any guaranty under this section, the president is authorized also, in his discretion, to purchase any wheat for which a guaranteed price shall be fixed under this section, and to hold, transport or store it, or to sell, dispose of and deliver the same to any citizens of the United States, or to any government engaged in war with any country with which the government of the United States is or may be at war, or to use the same as supplies for any department or agency of the government of the United States. Any moneys received by the United States from or in connection with the sale or disposal of wheat under this section may, in the discretion of the president, be used as a revolving fund for further carrying out the purposes of this section. Any balance of such moneys not used as part of such revolving fund shall be covered into the treasury as miscellaneous receipts.

Distilled Spirits Regulation.

Sec. 15. That from and after thirty days from the date of the approval of this act no foods, fruits, food materials, or feeds shall be used in the production of distilled liquors, for beverage purposes: Provided, That under such rules, regulations, and bonds as the president may prescribe, such materials may be used in the production of distilled spirits exclusively for other than beverage purposes, or for the fortification of pure sweet wines as defined by the act entitled "An act to increase the revenue, and for other purposes," approved September 8, 1916. Nor shall there be imported into the United States any distilled spirits. Whenever the president shall find that limitation, regulation, or prohibition of the use of foods, fruits, food materials, or feeds in the production of malt or vinous liquors for beverage purposes, or that reduction of the alcoholic content of any such malt or vinous liquor, is essential, in order to assure an adequate and continuous supply of food, or that the national security and defense will be subserved thereby, he is authorized, from time to time, to prescribe and give public notice of the extent of the limitation, regulation, prohibition, or reduction so necessitated. Whenever such notice shall have been given and shall remain unrevoked no person shall, after a reasonable time prescribed in such notice, use any foods, fruits, food materials, or feeds in the production of malt or vinous liquors, or import any such liquors except under license issued by the president and in compliance with rules and regulations determined by him governing the production and importation of such liquors and the alcoholic content thereof. Any person who willfully violates the provisions of this section, or who shall use any foods, fruits, food materials, or feeds in the production of malt or vinous liquors, or who shall import any such liquors, without first obtaining a license so to do when a license is required under this section, or who shall violate any rule or regulation made under this section, shall be punished by a fine not exceeding $5000, or by imprisonment for not more than two years, or both: Provided further, That nothing in this section shall be construed to authorize the licensing of the manufacture of vinous or malt liquors in any state, territory, or the District of Columbia or any civil subdivision thereof, where the manufacture of such vinous or malt liquor is prohibited.

Section 16. That the president is authorized and directed to commandeer any or all distilled spirits in bond or in stock at the date of the approval of this act for redistillation, in so far as such redistillation may be necessary to meet the requirements of the government in the manufacture of munitions and other military and hospital supplies, or in so far as such redistillation would dispense with the necessity of utilizing products and materials suitable for foods and feeds in the future manufacture of distilled spirits for the purposes herein enumerated. The president shall determine and pay a just compensation for the distilled spirits so commandeered, and if the compensation so determined be not satisfactory to the person entitled to receive the same such person shall be paid 15 per centum of the amount so determined by the president and shall be entitled to sue the United States to recover such further sum as, added to said 75 per centum, will make up such amount as will be just compensation for such spirits, in the manner provided by section 24, paragraph 20, and section 145 of the Judicial Code.

Section 17. That every person who wilfully assaults, resists, impedes or interferes with an officer, employe or agent of the United States in the execution of any duty authorized to be performed by or pursuant to this act shall upon conviction thereof be fined not exceeding $1000 or be imprisoned for not more than one year, or both.

Appropriates $150,000,000.

Section 18. That the sum of $2,500,000 is hereby appropriated out of any moneys in the treasury not otherwise appropriated to be available until June 30, 1918, for the payment of such rent, the expense, including postage, of such printing and publications, the purchase of such material and equipment, and the employment of such persons and means, in the city of Washington and elsewhere, as the president may deem essential.

Section 19. That for the purposes of this act the sum of $150,000,000 is hereby appropriated, out of any moneys in the treasury not otherwise appropriated, to be available during the time this act is in effect. Provided, That no part of this appropriation shall be expended for the purposes described in the preceding section. Provided further, That itemized statements covering all purchases and disbursements under this and the preceding section shall be filed with the secretary of the senate and the clerk of the house of representatives on or before the 25th day of each month after the taking effect of this act, covering the business of the preceding month, and said statements shall be subject to public inspection.

Section 20. That the employment of any person under the provisions of this act shall not exempt any such person from military service under the provisions of the selective draft law approved May 18, 1917.

Sec. 21. The president shall cause a detailed report to be made to the congress on the first day of January each year of all proceedings had under this act during the year preceding. Such report shall, in addition to other matters, contain an account of all persons appointed or employed, the salary or compensation paid or allowed each, the aggregate amount of the different kinds of property purchased or requisitioned, the use and disposition made of such property, and a statement of all receipts, payments, and expenditures, together with a statement showing the general character, and estimated value of all property then on hand, and the aggregate amount and character of all claims against the United States growing out of this act.

Sec. 22. That if any clause, sentence, paragraph, or part of this act shall for any reason be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, or part thereof, directly involved in the controversy in which such judgment shall have been rendered.

Sec. 23. That words used in this act shall be construed to import the plural or the singular, as the case demands. The word "person," wherever used in this act, shall include individuals, partnerships, associations, and corporations. When construing and enforcing the provisions of this act, the act, omission, or failure of any official, agent, or other person acting for or employed by any partnership, association, or corporation within the scope of his employment or office shall, in every case, also be deemed the act, omission, or failure of such partnership, association, or corporation as well as that of the person.

During the War.

Sec. 24. That the provisions of this act shall cease to be in effect when the existing state of war between the United States and Germany shall have terminated, and the fact and date of such termination shall be ascertained and proclaimed by the president; but the termination of this act shall not affect any act done, or any right or obligation accruing or accrued, or any suit or proceeding had or commenced in any civil case before the said termination pursuant to this act; but all rights and liabilities under this act arising before its termination shall continue and may be enforced in the same maner as if the act had not terminated. Any offense committed and all penalties, forfeitures, or liabilities incurred prior to such termination may be prosecuted or punished in the same manner and with the same effect as if this act had not been terminated.

Fix Price of Coal.

Sec. 25. That the president of the United States shall be, and he is hereby, authorized and empowered, whenever and wherever in his judgment necessary for the efficient prosecution of the war, to fix the price of coal and coke, wherever and whenever sold, either by producer or dealer, to establish rules for the regulation of and to regulate the method of production, sale, shipment, distribution, apportionment or storage thereof among dealers and consumers domestic or foreign; said authority and power may be exercised by him in each case through the agency of the federal trade commission during the war or for such part of said time as in his judgment may be necessary.

That if, in the opinion of the president, any such producer or dealer fails or neglects to conform to such prices or regulations or to conduct his business efficiently under the regulations and control of the president as aforesaid, or conducts it in a manner prejudicial to the public interest, then the president is hereby authorized and empowered in every such case to requisition and take over the plant, business and all appurtenances thereof belonging to such producer or dealer as a going concern and to operate or cause the same to be operated in such manner and through such agency as he may direct during the period of the war, or for such part of said time as in his judgment may be necessary.

That any producer or dealer whose plant, business and appurtenances shall have been requisitioned or taken over by the president shall be paid a just compensation for the use thereof during the period that the same may be requisitioned or taken over as aforesaid, which compensation the president shall fix or cause to be fixed by the federal trade commission.

That if the prices so fixed, or if, in the case of the taking over or requisitioning of the mines or business of any such producer or dealer the compensation therefor as determined by the provisions of this act be not satisfactory to the person or persons entitled to receive the same, such person shall be paid 75 per centum of the amount so determined and shall be entitled to sue the United States to recover such further sum as, added to said 75 per centum, will make up such amount as will be just compensation in the manner provided by section 24, paragraph 20, and section 145 of the judicial code.

While operating or causing to be operated any such plants or business the president is authorized to prescribe such regulations as he may deem essential for the employment, control and compensation of the employees to conduct the same.

Or if the president of the United States shall be of the opinion that he can thereby better provide for the common defense and whenever, in his judgment, it shall be necessary for the efficient prosecution of the war, then he is hereby authorized and empowered to require any or all producers of coal and coke, either in any special area or in any special coal fields or in the entire United States, to sell their products only to the United States through an agency to be designaed by the president, such agency to regulate the resale of such coal and coke and the prices thereof and to establish rules for the regulation of and to regulate the methods of production, shipment, distribution, apportionment or storage thereof among dealers and consumers, domestic or foreign, and to make payment of the purchase price thereof to the producers thereof, or to the person or persons legally entitled to said payment.

That within 15 days after notice from the agency so designated to any producer of coal and coke that his or its output is to be so purchased by the United States as hereinbefore described, such producer shall cease shipments of said product upon his own account and shall transmit to such agency all orders received and unfilled or partially unfilled, showing the exact extent to which shipments have been made thereon, and thereafter all shipments shall be made only on authority of the agency designated by

(Continued on page sixteen.)

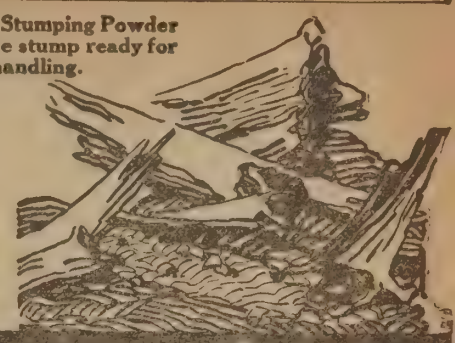




The first step in stump blasting; making hole under the stump.



Loading sticks of Giant Stumping Powder in hole under center.



Giant Stumping Powder left the stump ready for easy handling.

Save money on your stump blasting

The explosives that get stumps out cleanest and cheapest are those that have a heaving and lifting effect, shattering the stumps just enough to break them up. Then you can handle them easily.

"The farmer," says an Experiment Station, "should use an explosive prepared especially for his work; one that stands all ordinary shocks of handling and transportation and does not easily freeze. He does not need and should not use the expensive nitroglycerine explosives." Thousands of farmers have taken this advice and have found that

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

always save them money because they go further than any other stumping powders. Also, because they are made especially to suit *western* farm conditions and because they are always uniform in composition and action.

Giant Farm Powders—the product of the oldest manufacturer of high explosives in the United States—are the only genuine "giant powders" for agricultural use. They are made in two brands—Giant Stumping Powder and Eureka Stumping Powder.

Giant Stumping Powder is the ideal explosive for blasting stumps in wet ground. It keeps perfectly for months, resists water and chilling, and gets the stumps out economically.

Eureka Stumping Powder is the money-saving, low-freezing explosive for blasting stumps in dry soil. It costs less than Giant Stumping Powder and careful blasters save many dollars by using it for wet work also.

EVIDENCE

I bought five boxes of your Stumping Powder and now I want to sell a lot of other powder that I have.
RUDOLPH STADELI, Silverton, Ore.

Your Stumping Powder has a wide breaking power and less fumes to contend with after being exploded than any other on the market.
G. L. METZGER, Hillsdale, Ore.

In using a thousand pounds of your Stumping Powder neither I nor any of my men had the least bit of trouble in getting the very best results. I have used practically every powder on the market and find there is more strength in yours. J. L. EIDSON, Silverton, Ore.

Your Stumping Powder shoots the roots and spreads wide in the ground instead of going down. It is the best powder we have used.
G. S. McCARTNEY, Russellville, Ore.

I find your Stumping Powder all you claim for it. ELI CLINKER, Camas, Wash.

I am a large user of powder in stump blasting as well as in grading roads, breaking boulders and making ditches. I get good results from the Giant brands all the time.
MICHAEL HARVEY, Charleston, Wash.

Giant Stumping Powder gives good results when all other means of removing stumps have failed.
ROBERT CHABOT, Moclips, Wash.

Make This Test

You want to clear your land as cheaply as you can. If you are not using Giant Farm Powders, try them *now*. Mark and mail the coupon at the right. We will have our nearest distributor supply you—at the lowest market price—with a 25-pound or 50-pound case of Giant Stumping Powder or Eureka Stumping Powder. Compare this with any other and *prove* for yourself that Giant Farm Powders will save you money, time and work.

We Issue Five Valuable Books for the Farmer

They tell and show how to remove stumps and boulders, how to increase the fertility of the farm by blasting the subsoil, how to have earlier-bearing, thriftier orchards by blasting holes for trees, and how to drain your land by using Giant Farm Powders. These books are written especially to cover Pacific Coast conditions, and will be helpful to every farmer. Choose the books that you prefer and *mark and mail the coupon.*

THE GIANT POWDER CO., Home Office: **SAN FRANCISCO**
CONSOLIDATED *"Everything for Blasting"* ESTABLISHED 1866

Branch Offices: SEATTLE, SPOKANE, PORTLAND, SALT LAKE CITY, DENVER



FREE BOOK COUPON

The Giant Powder Co., Con.
San Francisco.

Send me your illustrated books on the subjects which I have marked X.

☐ Stump Blasting ☐ Tree Planting
☐ Boulder Blasting ☐ Ditch Blasting
☐ Subsoil Blasting 203

Trial Order Blank

(Kindly fill out if ready to purchase)

Have your nearest distributor supply me with

_____ lbs. Giant Stumping Powder
_____ lbs. Eureka Stumping Powder

NAME _____

ADDRESS _____

Write below your dealer's name.

Tear out and mail this coupon NOW
—before you forget it

War Power of Food Bill Designed to Insure Supply and Distribution

(Continued from page fourteen.)

the president, and thereafter no such producer shall sell any of said products except to the United States through such agency, and the said agency alone is hereby authorized and empowered to purchase during the continuance of the requirement the output of such producers.

To Pay Fair Prices.

That the prices to be paid for such products so purchased shall be based upon a fair and just profit over and above the cost of production, including proper maintenance and depletion charges, the reasonableness of such profits and cost of production to be determined by the federal trade commission, and if the prices fixed by the said commission of any such product purchased by the United States as hereinbefore described be unsatisfactory to the person or persons entitled to the same, such person or persons shall be paid 75 per cent of the amount so determined, and shall be entitled to sue the United States to recover such further sum as, added to said 75 per cent, will make up such amount as will be just compensation in the manner provided by section 24, paragraph 20, and section 145 of the Judicial Code.

All such products so sold to the United States shall be sold by the United States at such uniform prices, quality considered, as may be practicable and as may be determined by said agency to be just and fair.

Any moneys received by the United States for the sale of any such coal and coke may, in the discretion of the president, be used as a revolving fund for further carrying out the purposes of this section. Any moneys not so used shall be conveyed into the treasury as miscellaneous receipts.

That when directed by the president, the federal trade commission is hereby required to proceed to make full inquiry, giving such notice as it may deem practicable, into the cost of producing under reasonably efficient management at the various places of production the following commodities, to-wit, coal and coke.

The books, correspondence, records and papers in any way referring to transactions of any kind relating to the mining, production, sale, or distribution of all mine operators or other persons whose coal and coke have or may become subject to this section, and the books, correspondence, records, and papers of any person applying for the purchase of coal or coke from the United States shall at all times be subject to inspection by the said agency, and such person or persons shall promptly furnish said agency any data or information, relating to the business of such person or persons which said agency may call for, and said agency is hereby authorized to procure the information in reference to the business of such coalmine operators and producers of coke and customers therefor in the manner provided for in sections 6 and 9 of the act of congress approved September 26, 1914, entitled "An act to create a federal trade commission, to define its powers and duties, and for other purposes," and said agency is hereby authorized and empowered to exercise all the powers granted to the federal trade commission by said act for the carrying out of the purposes of this section.

Having completed its inquiry respecting any commodity in any locality, it shall, if the president has decided to fix the prices at which any such commodity shall be sold by producers and dealers generally, fix and publish maximum prices for both producers of and dealers in any such commodity, which maximum prices shall be observed by all producers and dealers until further action thereon is taken by the commission.

Maximum Prices.

In fixing maximum prices for producers the commission shall allow the cost of production, including the expense of operation, maintenance, depreciation, and depletion, and shall add thereto a just and reasonable profit.

In fixing such prices for dealers the commission shall allow the cost to the dealer and shall add thereto a just and reasonable sum for his profit in the transaction.

The maximum prices so fixed and published shall not be construed as invalidating any contract in which prices are fixed, made in good faith, prior to the establishment and publication of maximum prices by the commission.

Whoever shall, with knowledge that the prices of any such commodity have been fixed as herein provided, ask, demand, or receive a higher price, or whoever shall, with knowledge that the regulations have been prescribed as herein provided, violate or refuse to conform to any of the same, shall, upon conviction, be punished by fine of not more than $5000, or by imprisonment for not more than two years, or both. Each independent transaction shall constitute a separate offense.

Nothing in this section shall be construed as restricting or modifying in any manner the right the government of the United States may have in its own behalf or in behalf of any other government at war with Germany to purchase, requisition, or take over any such commodities for the equipment, maintenance, or support of armed forces at any price or upon any terms that may be agreed upon or otherwise lawfully determined.

Sec. 26. That any person carrying on or employed in commerce among the several states, or with foreign nations, or with or in the territories or other possessions of the United States in any article suitable for human food, fuel, or other necessaries of life who, either in his individual capacity or as an officer, agent, or employe of a corporation or member of a partnership carrying on or employed in such trade, shall store, acquire, or hold, or who shall destroy or make away with any such article for the purpose of limiting the supply thereof to the public or affecting the market price thereof in such commerce, whether temporarily or otherwise, shall be deemed guilty of a felony and, upon conviction thereof, shall be punished by a fine of not more than $5000, or by imprisonment for not more than two years, or both. Provided, That any storing or holding by any farmer, gardener, or other person of the products of any farm, garden or other land cultivated by him shall not be deemed to be a storing or holding within the meaning of this act. Provided further, that farmers and fruit growers, cooperative and other exchanges or societies of a similar character shall not be included within the provisions of this section, and provided further that this section shall not be construed to prohibit the holding or accumulating of any such article by any such person in a quantity not in excess of the reasonable requirements of his busines for a reasonable time or in a quantity reasonably required to furnish said articles produced in surplus quantities seasonally throughout the period of scant or no production.

Nitrate of Soda.

Sec. 27. That the president is authorized to procure, or aid in procuring, such stocks of nitrate of soda as he may determine to be necessary, and find available, for increasing agricultural production during the calendar years nineteen hundred and seventeen and eighteen, and to dispose of the same for cash at cost, including all expenses connected therewith. For carrying out the purposes of this section there is hereby appropriated, out of any moneys in the treasury not otherwise appropriated, available immediately and until expended, the sum of $10,000,000, or so much thereof as may be necessary, and the president is authorized to make such regulations, and to use such means and agencies of the government, as, in his discretion, he may deem best. The proceeds arising from the disposition of the nitrate of soda shall go into the treasury as miscellaneous receipts.

Food Survey Bill Is Also Law

Another Important War Measure Stimulating Agricultural Production

The adoption of the conference report on the food survey bill immediately followed the adoption of the conference report of the food control bill and both bills were approved by the president on August 10.

The food survey bill is entitled "An act to provide further for the national security and defense by stimulating agriculture and facilitating the distribution of agricultural products." By the provisions of this bill the secretary of agriculture, with the approval of the president, is authorized to investigate and ascertain the demand for, the supply, consumption, costs and prices of and the basic facts, relating to the ownership, production, transportation, manufacture, storage and distribution of foods, food materials, feeds, seeds, fertilizers, agricultural implements and machinery, and any article required in connection with the production, distribution or utilization of food.

It is provided that whenever the secretary of agriculture shall find that there is or may be a special need in any restricted area for seed suitable for the production of food or feed crops, he is authorized to purchase or contract with persons to grow such seed, to store them and to furnish them to farmers for cash, at cost, including the expense of packing and transportation. The secretary is also authorized to require any person having at his disposal any such seeds, except the producer thereof, to furnish the whole or any part thereof to the secretary of agriculture in such quantities, at such times and at such price as shall be determined by him to be reasonable.

The president, by and with the advice of the senate, may appoint two additional assistants of agriculture, each at a salary of $5000 per annum, and is also authorized to direct any agency or organization of the government to cooperate with the secretary of agriculture in carrying out the purposes of this act.

For the purposes of this act, the following sums are appropriated, available immediately and until June 30, 1918:

For the prevention, control and eradication of the diseases and pests of live stock; the enlargement of live stock production and the conservation and utilization of meat, poultry, dairy, and other animal products, $385,000.

For procuring, storing and furnishing seeds, $2,500,000.

For the prevention, control and eradication of insects and plant diseases injurious to agriculture and the conservation and utilization of plant products, $441,000.

To increase food production and eliminating waste and promoting conservation of food by educational and demontrational methods, through county, district and urban agents and others, $4,348,400.

For gathering authoritative information in connection with the demand for, and the production, supply, distribution and utilization of food, and otherwise carrying out the purpose of this act; extending and enlarging the market news service; and preventing waste of food in storage, in transit, or held for sale; advise concerning the market movement or distribution of perishable products; for enabling the secretary of agriculture to investigate and certify to shippers the condition at such important central markets as the secretary of agriculture may from time to time designate and under such rules and regulations as he may prescribe; provided, that certificates issued by the authorized agents of the department shall be received in all courts as prima facie evidence of the truth of the statements therein contained; and otherwise carrying out the purpose of this act, $2,522,000; provided, further, that the secretary of agriculture, shall so far as is practicable, engage the services of women for the work herein provided for.

For miscellaneous items, including larger informational work of the department of agriculture, $650,000.

This act amends the meat inspection act of congress of August 30, 1890, by authorizing the secretary of agriculture, under joint regulations as may be prescribed by the secretary of agriculture, and the secretary of the treasury, to permit the admission for immediate slaughter at points of entry of tick-infested cattle which are otherwise free from disease and which have not been exposed to the infection of any other disease within 60 days next before their exportation; from Mexico, South and Central America, the islands of the Gulf of Mexico, and the Caribbean sea, into those parts of the United States below the southern cattle quarantine line at such ports of entry as may be designated by said joint regulations and also subject to the provisions of sections 7, 8, 9 and 10 of the act of August 30, 1890: Provided, that the importation of tick-infested cattle from any country referred to in which foot-and-mouth disease exists, which existence shall be determined by the secretary of agriculture, is prohibited: Provided further, that all cattle imported under the provisions of the act shall be slaughtered in accordance with the provisions of the act of June thirtieth, nineteen hundred and six, commonly called the meat-inspection amendment, and the rules and regulations promulgated thereunder by the secretary of agriculture, and that their hides shall be disposed of under rules and regulations to be prescribed by the secretary of agriculture.

The last three sections on the food survey act are given in full:

"That whenever the secretary of the interior shall find any tracts of land in the state of Idaho, subject to entry under this act, do not have upon them such a sufficient supply of water suitable for domestic purposes as would make continuous residence upon the lands possible he may, in his discretion, designate such tracts of land, not to exceed in the aggregate one million acres, and thereafter they shall be subject to entry under this act without the necessity of residence upon the land entered: Provided, That the entryman shall in good faith cultivate not less than one-sixteenth of the entire area of the entry which is susceptible of cultivation during the first year of the entry, not less than one-eighth during the second year, and not less than one-fourth during the third year of the entry and until final proof; Provided further, That after six months from the date of entry and until final proof the entryman shall be a resident of the state of Idaho.

"That the secretary of the interior is hereby authorized in his discretion to suspend during the continuance of this act that provision of the act known as the 'Reclamation Act,' requiring residence upon lands in private ownership or within the neighborhood for securing water for the irrigation of the same, and he is authorized to permit the use of available water thereon upon such terms and conditions as he may deem proper.

"That the provisions of this act shall cease to be in effect when the national emergency resulting from the existing state of war shall have passed, the date of which shall be ascertained and proclaimed by the president; but the date when this act shall cease to be in effect shall not be later than the beginning of the next fiscal year after the termination, as ascertained by the president, of the present war between the United States and Germany."

An Easy Way to Preserve Cucumbers and String Beans

Try the new fermentation method approved by the United States department of agriculture.

Containers cider or wine barrels, kegs, tubs, or crocks. (Do not use any made of yellow or pitch pine.)
Wash thoroughly and steam containers.

Wash your vegetables.
Remove strings from string beans.
Place on bottom of container a layer of dill and a handful of mixed spice.
Pack the vegetables into the container.
When half full, add another layer of dill and spice.
When almost full add another.
When contents come to within a few inches of top, add a layer, one inch thick, of beet tops or grape leaves.
Press down with a clean board, weighted with bricks or stone (not limestone or sandstone).
Add brine to cover material.
Allow it to ferment (in a warm place, from five days to one week; in a cool place, from three to four weeks).
After bubbles cease to rise, exclude air by neither of the following methods:
(1) Set containers where they will not be disturbed.
Cover surface with paraffin hot enough to make brine boil when poured upon it. If paraffin breaks, remove, remelt and replace.
Or (2)—Pack the container as full as possible.
Replace head.
Allow to stand for 24 to 48 hours.
Remove boards and weights.
Head up container tight.
Bore a 1-inch hole in head.
Fill container full with brine.
Let stand until bubbles cease to rise.
Add more brine if possible.
Plug vent tight.
Store in a cool place.

To make brine:
One pound salt.
Ten quarts water.
To each 15 quarts of the brine add one quart of vinegar.

DON'T MISS ANY STEP.

Ups and Downs of a Bunch Grass Boy

(Each instalment of the "Ups and Downs of a Bunch Grass Boy" is complete in itself and will be found full of interest for the new readers of The Farmer.)

By JOE L. ASHLOCK

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CHAPTER XXIII.

I have never seen a boy who wouldn't travel half a day to find a mudhole to play in on a hot day. Also, they like to build mounds and hills of cool road dust, which is mud minus water. But when the wind picks up this road dust and peppers it on your hair, nose, eyes, through your clothes and makes you eat it, then it is different—and even a boy does not like soil dosed to him in this way.

We pioneers in eastern Washington did not know the trouble we were making for ourselves when we plowed under the bunchgrass. It was all right for a year or two, for the fibrous roots of the soil and the turned-under grass served to keep the light, fluffy, seldom-rained-upon dust from blowing far and near. Then, too, the farms were far apart. The dust that arose from a pioneer's plowing lost itself in five or ten miles of bunchgrass. The dust-lifting winds came from the southwest. If a farm chanced to be in the wind from a farm lying southwest, then that man was in for a severe dusting several times a year. The soil was dry and fluffy when plowed and uncropped. A heavy southwest wind swept up great clouds of dust and hurled the stifling dust-clouds like pelting needles on the farm of the unfortunate neighbor.

Our pioneer farm was in the wind just right for the dust from Kirkland's farm, lying a mile south. Many a time the prairie gale swept upon us and our house was filled with fine, floury dust that found its way into every crack and cranny, into every stitch of your clothing, into eyes, nose, hair, ears—and if the gale kept up long enough you could feel the grit between your teeth. It was not like ordinary dust. The air seemed to hold it in solution. Where this soluble dust could not blow it soaked. It soaked into the hay our horses ate, swirled down into our well and colored the water brown, soaked into food in our cupboard or stowed away in trunks for protection—wherever the air went the dust went!

We did not know how to handle the soil to keep it from blowing. Kirkland rolled his farm one summer, using a revolving log three feet in diameter to smash the clods. Other farmers near and far did the same thing, all having the idea that this clod-smashing was good for the soil.

For days after that we simply lived in dust. It became as much our native element as water is for a fish. When the duststorms were blowing I rebelled against washing my face and bare feet more than once a day. Washing the face while the dust was in the air seemed to hasten chapping of the lips and cheeks. My lips would crack and bleed and there would be tiny, hairlike, crisscrossed marks of blood on my neck, cheeks, hands and feet. The pelting, grinding dust and wind was chiefly responsible, I think. Putting cold or warm water on the skin at such a time was agony itself.

My rebellion produced a compromise—once a day I must wash up. At other times I must have my face, neck and hair dusted off with a whisk broom or dry cloth. There was a good deal of argument about when I should wash. Mother objected to my going to bed with my hair and face covered with dust—it was hard on white pillows and sheets! Then too, there seemed to be an advantage in starting the day with a clean face. So it came about that it was agreed that I should submit to the torture of washing before the evening meal, and take all possible precautions against dust between then and bedtime.

Of course we longed for rain to settle the dust. But our longing was seldom productive of rain. Not infrequently during the hot, dry summer, storm clouds would gather on the southwestern horizon—great, cool looking masses which were rimmed with white, blue and black underneath and sharply edged against the clean, steely blue sky. The clouds looked cool and inviting, and in the days before aeroplanes I used to wonder if after I had died and gone to heaven I might not ride my buckskin cayuse—who in the transfiguration of the Hereafter would be turned snowy white with lovely wings—on the mountain-like crests of the advancing cloud line. Often the clouds would come up when the sun was getting low in the west. Stretching out in a great arc in the western, sunlit sky, the clouds were clean and cool as the ocean and massed in solid lines of blueish black and green and smoky blue with edges of fire and feather-white through the great distances of the sky. To rise above the swirling, puffing, scorching, smothering dust of my native element was one of my earliest hopes; and I knew of no place to rise except to the clouds that flew overhead.

A neighbor gave me a book to read one time. It was called "The Beautiful Story." It contained many pictures of angels with white wings; and usually they were advancing in heavenly bands through rifts in the clouds, or were surrounded by clouds done in beautiful colors wherein were predominant the tints of gold and purple and white and other lovely cloud-lights symbolizing in my youthful mind, purity and all that was opposite to our peppering dust.

I was told that these pictures were correct representation of Heaven; and that the beautiful tints in the clouds, and that the charming effects which marked the angels' pathway through the cloud-strewn skies were all a part of the Hereafter and would be in the reward of good little boys who were really, unequivocally good.

So I watched the skyward drift of the clouds in the clean, upper reaches of air, sure that I was looking straight into Heaven; and that angels were walking and talking and flying in these cloud-paths, though invisible to my mortal eyes. The wind that roared out of the southwest carried what stood in my mind as the opposite sign and symbol to Heaven—dust! In the advance of the cloud banks through the cool, clean, moist heights of the upper air, and the undersweep and roar of the dusty wind, I came to see a mighty conflict between good and evil, though my boy's mind did not frame the thought in just those words.

The wind whistled and roared and pelted me with dust; high, cool, and clean floated the clouds, sending down a few drops of clean, cool water on our parched, dust-blown prairie. Always we were sure it was going to rain hard this time and settle the dust. But it seldom rained hard, and the roaring, whistling prairie wind swept the clouds over the northern mountains; and in the morning the sky would be a toneless dome of dusty blue, with neither life, nor color, nor angel paths on high, nor a promise of cooling rain.

But once in a while the good angels in the clouds won their battle with the dust demon—and down would fall torrents of rain. We could hear the torrent coming far across the prairie—a low, steady, rising hum like millions of tiny bees flying in the bunchgrass. The wind of a sudden ceased to be sharp and unfriendly. It struck one's face with a moist, kindly touch, and carried to one's nostrils the odor of prairie sage and the earthy, evlusive prairie fragrance which was a stranger to us for long, dry summer months.

One long, hot, dry summer the battle between the angels up in the clouds and the Dust Demon below went on for day after day—and every night the Dust Demon won. During the forenoon the Dust Demon celebrated his victory by stirring up vast clouds of fluffy, smoke-like dust that shaded the sun. I was trudging barefooted to school two miles away every morning, sure always that the morning wind would bring an evening rain. By noon we children in school, a dozen of us, would be looking away from our books at the gathering cloud banks in the southwest. The whisper would run through the school, "It's going to rain!" And it was hard to study when we thought a rain was coming.

By and by the cloud banks would be nearer and cooler and the wind would blow harder. Then with a roar that shook the schoolhouse the storm would be upon us—not rain though; Merely some more dust! While the wind roared and the dust pelted and big black clouds flew overhead with now and then a low rumble of thunder and a flash of lightning we huddled in our seats hoping that it would rain; and longing for the wet swish of the cool grass on our feet as we went home.

The wind blew all night, finally. In the morning we fought our way to school through thick, fluffy, pelting dust clouds that floated in the air as high as smoke.

All of one night and all of one day the wind howled and thundered at us. By mid-afternoon we could hardly see across the road from the schoolhouse. At recess we huddled in the lee of the building, discouraged and dusty. Only a few clouds blew up that afternoon and these hurried across the sky in torn, frightened fragments. The dust was so thick that it shaded the sun. One of the boys remarked that we were standing in the shade of the dust.

We wondered how high up in the air the dust was floating. Jim Paullus said he bet it was a hundred miles up. Tommy East scoffed at Jim; he said it wasn't a foot more than 10 miles high.

One of the big girls spoke up. She didn't believe the dust was even 10 miles high. Clouds didn't float that high, and she was sure the dust wasn't higher than the clouds. Also, it would take all the dirt on Kirkland's farm to fill the air with dust 10 miles high.

Jim Paullus defended his former statement by saying that most of the dust on Kirkland's farm was in the air, and quoted Kirkland to that effect. Only the day before Tom Kirkland had said that if the darned wind didn't quit blowing he'd have to beat it across the bunchgrass after his farm, which was blowing away.

Then Miss Good, the teacher, joined our conversation. She did not tell us how high the dust was floating. She told us to look at the sun, which was getting low in the west. It shone like a great drop of blood through the long distance of moving dust clouds. It was so red that we could look at it without blinking. Now and then a cloud mass scurried across it, but the sun dodged out again and shone steady and red. When the dust clouds thickened it shone redder still, brightening and reddening as the floating dust varied in density.

One of the girls said the sun was very pretty when you saw it in the dust. She said it was so beautiful that she could look at it and forget about the dust getting in her hair and clothes. Jim Paullus said he also thought it was pretty. He didn't care about the dust getting in his hair and clothes, but he wished it would keep out of his dinner pail.

We went home that evening, and I think most of us told our home folks how pretty the sun had looked shining down through the dusty sky. Afterward, when the wind began to rise and the dust came up, we craned our necks to be first to see the red disk of the sun shining in the dusty sky.

Next week the Bunch Grass Boy tells how, after the dust storm, you could see the tracks of bugs and worms, mice, large and small lizards and queer living things of all kinds. Then he tells of a safe and easy way to kill a rattlesnake when you have neither stick, stone or gun and are barefooted.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University)

A Disinfectant for Drinking Water Is Sciences' Newest Aid

While it is true that a few summer maladies are otherwise contracted, the large majority, such as typhoid, dysentery, cholera, summer complaints and the various absurdly named "autotoxemias" or "ptomaine poisonings" enter the human form divine by way of the mouth.



Dr. Hirshberg.

It is not, however, heat, dirt or chemicals which cause such diseases. It is the specific bacteria which enter the water, milk or other substance, there to multiply and nourish microscopically like unseen green bay trees.

Plainly the proof of the pudding of no disease is in the drinking of fluids without germ life being present. Since the bacteria of diseases are sweet, there is no evidence by a sour taste that germs are present, or in the presence of sweetness and cleanliness that they are absent.

Boiling milk or water kills the microbes, but occasions present themselves when there are neither the facilities nor the time to boil. An excellent and sure disinfectant should then be available for use. Such an antiseptic must be safe and harmless and easily applied to the liquids. The man who discovered the great wound disinfectant and wash, Dr. Dakin, has just announced the discovery of a new and efficient disinfectant for drinking water which in no way interferes with the use of the water for vital purposes.

Simpler Than Its Name.

The new chemical has a most ferocious, formidable name :"parasulphondichoraminobenzoic" acid. Luckily it is more benign than its name would justify.

So effective is this new acid that it may be weakened 300,000 times and still destroy all of the germs and microbes present in the contaminated water one-half hour after it is dissolved in it.

Cholera, typhoid and dysentery bacilli placed in water to test it, were all killed half an hour afterwards. Made up in tablet form this new disinfectant could be conveniently carried on vacations, excursions, picnics, and in first-aid kits of soldiers. It acts very slightly upon aluminum vacuum bottles and drinking cups.

Parasulphondichloraminobenzoic acid is hardly perceptible to the taste. The water thus disinfected is perfectly palatable. Its active chlorin is used up so slowly that the taste of it is absent and the disinfection continues over a long time.

How It Is Made.

Moreover it is easily made. To prepare this disinfectant, Dakin and Dunham take 250 grams of commercial sodium dichromate to a mixture of 200 centimeters of concentrated sulphuric acid and 600 cubic centimeters of water. This is put in a two-quart jar, and 100 grams of crude toluene parasulponamid are added to it. The whole mixture is then heated for one hour on a sand bath with a condenser.

As it cools, the crystals are removed and washed well with cold water and redissolved in hot, but weak hydroxide of soda, also called caustic soda. It is then filtered while hot and an excess of hydrochloric acid is added, after which the precipitate acid is filtered, washed with water and dried. Twenty grams of acid are dissolved in 200 cubic centimeters of normal hydroxide of soda, to which are added 200 grams of crushed ice, the mixture being saturated with chlorin gas. The chalky deposit left is then washed and dried in a vacuum. This is the new disinfectant.

Sidelights

Nonpatriotic.

Gladys—Mother, I don't speak to Jeanette any more.

Mother—Why, dearie, what is the matter? And poor little Jeanette has been ill, too.

Gladys—That's just it, mother. She went and had German measles.

Her Belief.

"Do you believ in the Darwin theory of evolution?" he asked.

"Yes," she replied, "and after the monkey became a man he was given the power of speech that he might again make a monkey of himself at will."

Must See It in Print.

Smith, the hotel manager, and Jones, a manufacturers' agent, were talking one day about their respective business interests.

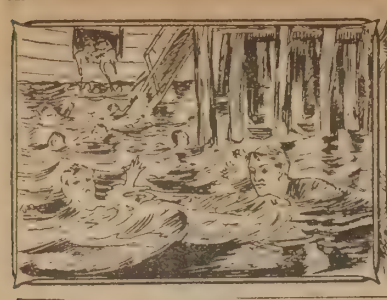
"I say," remarked Jones, "how ever did you use such an enormous quantity of peaches and pears?"

"Well," replied Smith, "we eat what we can, and what we can't eat we can."

"Indeed!" said the other. "We do about the same in our business."

"How is that?"

"We sell an order when we can sell it, and when we can't we cancel it."



UNDER THE BLACK CANOPY

By Paul E. Triem



SYNOPSIS.

Joseph Dudley, a strong young woodsman, is about to board the boat for one of Stevens' logging camps, where he has secured employment, when suddenly the gangplank gives way and he, with many others, is plunged into the deep, icy water. Forgetting his own peril, he does heroic work in rescuing the others, among whom is a young boy, who, he learns later, is the son of Jerry Stevens.

CHAPTER II.

The Wrestling Match.

Before the last echo of the "Avon's" warning whistle, as she backed away from the pier, had died out, the wharf and the rest of the shore line had been swallowed in the yellow fog. Joe sat beside the open engine house door and peered into the gloom. From somewhere above, the hoarse voice of the fog horn sunded at regular intervals. Sometimes other whistles answered from the smoke, and once a threatening mass loomed suddenly upon them. The gong in the engine room rang for full speed astern, and the "Avon" wheeled sharply, so that the two ships missed each other by a scant foot and passed on into the darkness.

"Ever been over to Buck Harbor?" the mate asked, when he again appeared below decks.

"No. I got a job swamping in one of the camps over there, but I don't know anything about where it lies from the dock."

"What camp you booked for?"

"It belongs to a Mr. Stevens, and the foreman's name is McClosky."

The mate stared down at him. "Well, if that isn't the querest thing I ever heard of," he commented presently. "Jerry Stevens—and it was his youngster you hauled out of the water a while ago. He won't let you go to work swamping—he'll give you a big job."

"See here," Joe replied impatiently, "I thought we had settled that. What I was able to do, I did as much for my own sake as for any one else. I certainly wasn't fishing for any sort of reward, and if Mr. Stevens should make the mistake of thinking that I expected to be paid for being just an ordinary human being, it wouldn't take me long to undeceive him."

The mate was watching him from the corner of his eyes, as if he were some sort of strange insect. Then he laughed ruefully.

"Well, well, don't get mad about it. I suppose you are right from your way of looking at it. And as to finding your camp, you can't miss it. There's just one road away from the Buck Harbor wharf, and that will lead you square through the center of the big camp. As near as I can remember, it's about half a mile from the water front."

"Have you any other passengers for there?" Joe asked, turning from his fruitless inspection of the sound.

"No, I don't believe so. Everybody that didn't land in the hospital is headed for Crystal Springs, around the point from Buck Harbor. There's a summer hotel there—that's where young Stevens and his father are going."

"Didn't he have to go to the hospital?"

"Not he. He's just like old Jerry—game clear through; it's too bad he's such a sickly little chap. They wanted to send him back home, but he wouldn't hear of it, and his father backed him up in doing what he started out to do."

Although it was only 7 o'clock when Joe finally clambered down the gang plank and found himself on the Buck Harbor wharf, night seemed to have fallen. A solitary lantern bobbed toward where he was standing; and as the boat's lines were cast off and she backed out into the Sound, the mate called to Joe.

"There comes old Peterson—he'll start you toward the camp."

The lantern bobbed nearer, and Joe saw that it was carried by a tall, lean old man, who wore his cap pulled down over his ears in spite of the sultriness of the weather. He thumped industriously along, pounding the wharf platform with a heavy cane which he carried in his right hand; suddenly he caught sight of Joe, and pulled up short.

"Stand back thar!" he commanded querulously. "I'm armed, I warn ye—and I'm a desperate man! Stand back! Don't you go to interfering with the United States mail!"

By this time he had discovered that Joe was not the highwayman he had taken him for, and his cane came down from the threatening attitude into which he had thrown it.

"Who be you, anyhow?" he demanded suspiciously.

"I'm a stranger, looking for Stevens' logging camp," Joe explained, striving to hide his amusement at the old man's outburst. "I thought maybe you could show me which way to take."

The man with the lantern concluded his inspection of Joe and hobbled over to where a mail sack had been thrown from the "Avon." He picked up this mail pouch and turned about.

"Come along," he commanded. "I expect I must have scared you considerable, but I really wouldn't have done any daamge without being sure of my man. You see, it's a mighty responsible position I've got—the United States government pays me 12 1-2 cents for every trip I make with this bunch of mail, and I guess they know I'm not the kind of person to be trifled with. There's desperate characters about sometimes, but I'm desperater than any of them, especially when I'm a leetle scared.'

They left the long wharf and struck into a narrow country road. Joe offered to carry the mail bag, which seemed too heavy for the old man, but the latter wouldn't hear of it.

"It's nothing against you, you understand," he explained, "but I couldn't let my own brother carry this mail."

Mr. Peterson told Joe that he always carried the lantern, even on bright summer evenings, on account of cougars.

"But you're armed," Joe commented mischievously. "I should think you would be perfectly willing to let them come, if they wanted to."

The carrier looked suspiciously at him; then he grinned. 'I'm perfectly willing to have 'em come, if they don't come too close," he admitted. "The trouble with a cougar is that he doesn't realize the difference between plenty and too much."

Presently a lighted building loomed ahead; and as the two pedestrians reached the road in front of it, the mail carrier paused.

"All you got to do," he explained, "is to follow this road till you come into the camp—it runs smack through it. And you'd better take my lantern—you can send it down by the fellow that comes for the camp mail."

Joe was very glad to accept this offer, and with the lantern in one hand and his bundle balanced on his shoulder, he strode along the gloomy road.

Half an hour later he caught the glimmer of lights ahead. They came from several directions, and presently he discerned close at hand the ghostlike outline of a great canvas-walled and canvas-roofed building, which glowed phosphorescently with the lights which shone through its walls. Joe groped his way through some bushes and skirted a small mountain of empty cans, and came suddenly around the corner of the tent upon a group of men, some of whom were sitting upon a porch, while others stood in front of it.

They ceased a desultory conversation which they had been carrying on and turned curiously upon Joe.

"Where'll I find Mr. McClosky?" the newcomer asked the man nearest him.

"I guess you'll find him about five feet from here," the stranger replied jocosely. "That's him, there."

He pointed to the only man in the group who had paid no attention to Joe; a huge, bearded fellow, who lounged awkwardly on a corner of the porch and seemed to be communing with himself. He looked indifferently around, on hearing his name spoken, and surveyed Joe from under shaggy brows. His lean, high-bridged nose caught the light from the tent door, and gave him the appearance of a huge bird of prey.

"Is this Mr. McClosky?" Joe asked, advancing a couple of steps, so that he was standing directly before the bearded man. The latter nodded. "I was sent here from an agency in town to fill a job as swamper," Joe explained.

"Name?" the logger demanded laconically.

"Joseph Dudley."

"Ever work in the woods?"

"Till I was 18. I was born in Michigan."

"All right. Go in and see if Neville will give you some supper. It's late, and the chances are that he'll throw you out the back door, but you can try."

As Joe deposited his bundle beside the steps leading up into the tent and turned to enter, he encountered a pair of brilliant eyes fastened upon his own. At first he was conscious only of the eyes; but as he mounted the steps, he caught other details; the man back of the eyes was tall and lithe, and his arms were unusually long. His smooth brown face was that of one who thinks swiftly and acts impulsively; it was not altogether a pleasant expression that Joe had caught upon it, but rather one of challenge and hostility.

He forgot the stranger next moment for as he entered the tent there came to him a swift, high-toned command that brought him to an abrupt stop.

"Here, you, get out of here as quick as your feet will carry you! What do you think this is—an all-night restaurant? Go on—not a bite do you get till morning!"

From the farther end of the tent there emerged a short, fat man, whose bald head glistened in the light of an overhead lamp. He wore a cook's apron, and his arms were bare to the elbow. He came forward with a mincing, affected step and peered into Joe's face.

"I just lit," the younger man explained meekly, for he knew the autocracy of camp cooks. "I came on the night boat, and I thought perhaps you could let me have a little something to eat—though I'm willing to wait till morning if you can't."

The man in the apron threw up his hands in a gesture of exaggerated protest.

"Wait till morning!" said he, "why you ought to be ashamed to talk that way! Sit down—there's a place for you!"

Joe was totally unprepared for this change of front, but he accepted it willingly and dropped into the chair indicated. Mr. Neville disappeared into the kitchen, and returned a minute later with a tray loaded with dishes and food; coffee, corn bread, biscuit, steak, potatoes and two kinds of pie. These he stacked expeditiously around Joe. Then he withdrew, leaving the young man to eat his supper in solitude.

The smoke had cleared somewhat when Joe finally emerged from the tent, and a huge, silver moon peered over the fringe of trees in the distance. The men whom he had left idling about the porch were some distance away now, standing in a semicircle from beyond which came a mysterious sound of stamping feet and heavy breathing. Joe approached the circle, and as he did so there came to him the thud of a heavy body striking the ground, and the men before him began to dance and yell.

"Now you've got him, Andy—pin him down!"

Joe pushed into the fringe of spectators just in time to see the uppermost of two struggling figures on the ground catch the other swiftly, twist him over and plant him with his shoulders squarely against the dirt. Then the two scrambled to their feet and Joe saw that the victor in this wrestling match was the long-armed young man who had watched him enter the dining tent a few minutes previous. Again he was impressed by the brilliant and rather scornful light in the stranger's eyes.

The men had not had enough entertainment and were casting about for a new victim for Andy's prowess. Suddenly one of Joe's neighbors turned upon him and caught him by the shoulders.

"Here, young man, you look like you ought to be able to handle yourself at this game. You're up to Andy's weight, and you can't expect to hang around this camp unless you're willing to sing, play the fiddle or wrestle."

Joe protested, but strong hands gripped him and he was thrust out into the moonlit circle.

"Here, here," he protested, "I'm too tired to wrestle tonight. Wait till I'm rested."

"It wouldn't make a particle of difference," a lazy and somewhat contemptous voice said close to him.

Joe turned and looked at the tall woodsman. The latter was regarding him with eyes that had become openly hostile, and Joe felt his anger rising. He had done nothing to draw down upon himself this feeling.

"All right," he said simply. "If that's the way you look at it, I suppose I might as well take my medicine."

He stripped off his wampus and tightened his belt. Then faced his companion.

"I'm ready," he announced.

The logger was crouching toward him. His eyes shone when the moonlight caught them and his whole being suggested the tense, muscular pose of a cougar. Suddenly he leaped forward and his long arms shot out. Joe ducked under them and caught his antagonist about the waist; swiftly he lifted him from the ground and threw him—but Andy whirled like a cat in the air, lit on his hands and knees and in an instant was up. Joe could see the hard, cruel lines of his mouth as his teeth clicked together.

He approached more cautiously, feinted as if to repeat his former attack, then caught Joe's wrist in a grip of steel and jerked the shorter man toward him. He whirled as he did so and threw his shoulder under Joe's arm pit, and with a swift twist of his lithe body had thrown his prisoner over his shoulder. Joe broke his fall with his heels, pivoting as he did so and breaking the grip on his wrist. He was on his hands and knees now; and as he leaped to his feet he threw himself forward and succeeded in catching the logger with one arm about the waist, while the other hand pressed under Andy's chin. At the same instant Joe kicked his antagonist's feet out from under him and threw him to the ground.

The move had been so expeditiously made that no one was prepared for it, least of all the tall woodsman. For a moment he lay on his back, staring up at Joe. Then he sprang to his feet with the swift and terrible anger of a creature of the forest, for the first time feeling the superior will of man.

For a single instant he crouched. The crowd behind had set up a cry of amazement and congratulation at his downfall, but now everyone was still. Swiftly Andy leaped. He reached for the lower hold, missed it and as swiftly turned himself and threw an arm around Joe's neck. Next moment they were on the ground, and Joe felt the woodsman's arm working around until it crossed his throat and shut off his breath. He realized that the stranger was prepared to resort to any tactics to win, for such a hold is barred from all clean wrestling. He reached up and tried to loosen the steel fingers that were locked on the other man's jacket, enabling Andy to make his hold almost unbreakable. He might as well have struggled to force the lock of a bank vault with his bare hands.

From a great distance he seemed to hear protesting voices—"Andy, not that! That's not square!" But the strangle hold did not relax, and Joe realized that he must do something speedily, or he would be thrown from sheer weakness—and he had resolved not to be conquered by such unmanly tactics. He let himself sink forward, as if overcome; and in the same instant he had taken advantage of a momentary loosening of the hold about his neck, as Andy prepared to follow up his gain, and had torn the other's arm loose, bringing it around and under his own chest. Swiftly he rolled to the side; and with a cry of surprise and pain, the logger was forced to allow himself to be rolled under. The pressure against his arm had been severe, but Joe believed the occasion merited such treatment.

Andy, taken completely off his guard, was whirled to his shoulders before he could catch himself. Joe staggered to his feet and stood swaying. The moon had come out from behind a cloud which had hidden it a moment ago, as he looked down with smarting eyes at his rival—and instantly he stooped and held out his hand.

"I beg your pardon," he cried, for the sight of the logger's bitter disappointment took him by surprise. "I did that without thinking—it wasn't a square hold, and the fall belongs to you!"

Andy climbed slowly to his feet, without touching the proffered hand. For a moment he stood looking curiously at Joe. His lids drooped over blazing eyes, and he held himself stiffly.

"I'm not the kind to beg a favor from anyone," he said softly. "You won—this time."

He turned on his heel and next moment had disappeared.

The men who crowded about Joe were as pleased as children, and for the first time the young man observed that two people on horseback had ridden up to the edge of the circle and

(Continued on page twenty.)

All the World's a Stage, and All the Men and Women Merely Players

Bryn Mawr Girls Till the Fields



Copyright by International.

These young women are Bryn Mawr girls at work on the Sharpless farm, near Winchester. Miss Helen Taft, daughter of the former president, recently appointed dean of the college, is shown with two of the college students busy at the task of farming.

Big Work for Engineers.



The scope of engineering operations in France, as explained by General William M. Black, chief engineer of the army, will cover the building of a great railroad system, construction of huge electrical plants and pumping stations, a water supply system, and the building of docks and terminals.

Doctors and Women in Mercy Work



Copyright by International.

Many United States doctors and nurses are already engaged in caring for the sick and wounded on the battlefields of France. Miss Marjorie Kay, a New York girl, is serving as nurse in the American hospital in Paris. She is shown at the side of a poilu whose jaws are being reconstructed.

French Marksmen Lie in Wait for Taubes



French Official Photo.

This photograph shows the famous new French 75-mm. gun mounted on an auto truck painted and covered with boughs and branches to protect it against the enemy. The crew, wearing their newest gas masks, are waiting for the enemy airplanes.

Thank Goodness, He's Through the Worst.



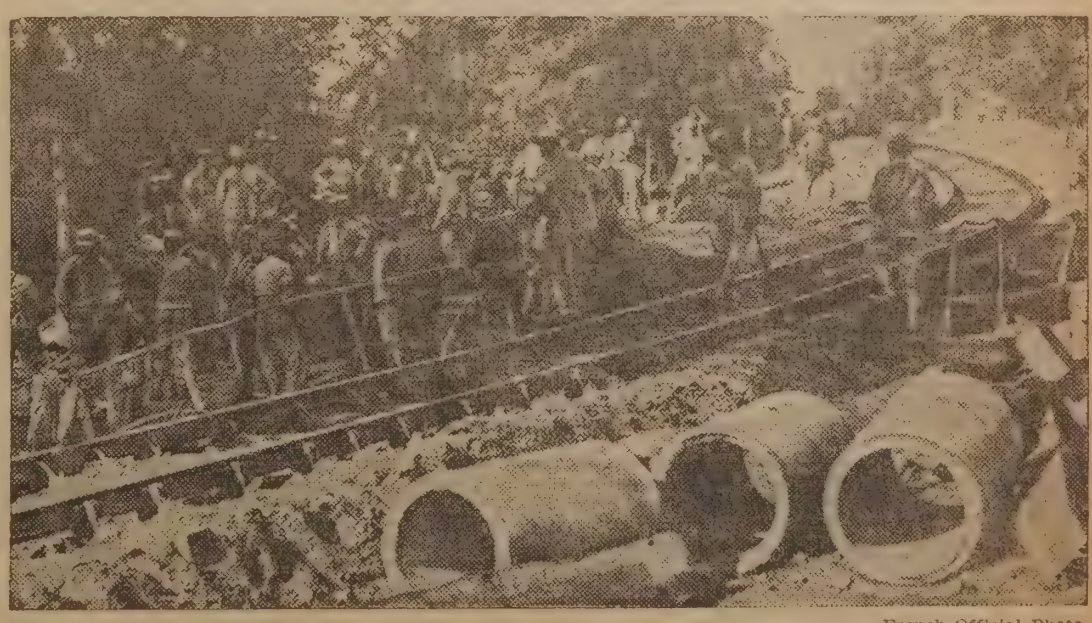
—Dallas News.

A New Standard of Weights and Measures.



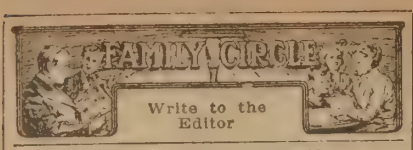
—Wichita Eagle.

Building a Trench Railway in France



French Official Photo.

In order that supplies may be brought up as speedily as possible every trench must have railways near. Men in the photograph are building such a railway line to new French trenches.



ALICE W. BARLAND
Editorial Contributor

A Quotation to Abide By

What is the quotation or what are the words which have helped you in the journey of life?
Send it to the editor of The Farmer and let it help another.

To the Editor: I think the best quotation I have ever heard for one to abide by is "Trust in the Lord and do good; so shalt thou dwell in the land and verily shalt thou be fed."

MRS. W. C. JOHNS.

Moscow, Idaho.

How to Serve Leftovers

To the Editor: I always plan to save all the leftovers and use them in other dishes soon. For instance, when I buy meat I get a good lean piece of beef either boil or roast, cut off a piece for hamburg steak if I like, roast or boil the main piece, serve hot the first meal, the fat portions hot, the leaner ones cold for supper, and then maybe have pieces left for hash another meal. I find I can serve a 10-pound roast or boil three and often four times to six men and my family of five children. I never throw awy bones without trimming off every bit of lean meat for hash. I could also use the last meat left in a creamed dish, or croquettes,, but we like hash.

Vegetables, except beans and potatoes, are harder to serve the second meal, so I learn by experience how to cook only enough for one meal at a time. Left over tomatoes I use in cream soup or macaroni. Some people like a few tomatoes in beans, especially red or bayou beans, so that is a good way to use leftovers.

If I have not enough eggs for two apiece for each man I scramble them with a cup of milk added, or with stale bread make egg toast, by heating a few eggs and a little milk and dipping the slices in that and frying in good grease.

In making cake I economize on all the expensive items like butter and eggs and make very good-tasting, healthful cake with less.

Stewed fruit I have for breakfast, use the remainder in a pie, if not sufficent use an egg or two, a tabespoon of cornstarch and a cup of milk, makes a fruit custard pie, nicer with a meringue. I often use a tablespoon of cornstarch in puddings to take the place of an egg. I find the humble prune makes a very good pie with the seeds extracted. Sometimes I season it with spice.

I forgot to mention meat dumplings. Every one likes them with boiled meat and that makes meat go farther. I often use them also when I have a ham bone to boil.

These are my main ways of saving. I would like to learn of other ways myself.

MRS. RUBY C. NELSON.
R. F. D. 1, Box 54, Echo, Ore.

One Crop That Is Not Short.

Let the flag fly in the front yard; the dirt fly in the back yard and the house fly nowhere.

"One thing we have an oversupply of," said the farmer as he paused for a minute at the corner of the field, "and that is advice. We get it from everybody. That is a crop that is never short. If people would watch those who need a little watching and straighten out the kinks in marketing I think the production end of the business will be taken care of."

Under the Black Canopy

(Continued from page eighteen.)

were sitting where they could take in the match. One of these newcomers, whom Joe made out to be a tall, erect man, who sat his cayuse like a cavalryman, spoke, and his voice carried through the tumult like the crack of a whip.

"If you're quite through with your tournament," the stranger said, "I would like to speak with you a moment."

Joe approached the horseman, who held out his hand.

"My name is Stevens," he explained. "This young man here wouldn't rest till I had brought him over to thank you for pulling him out of the water—he's a young rascal who hangs around my house and seems to think he has a claim on me. And of course you know, my friend, that I'm grateful for what you did."

From his mount high up on one of the other horses, the boy spoke with tremulous enthusiasm. "And I say," he cried, "where did you learn to wrestle? You've got to teach me, when I get big and strong!"

(To be continued in the next issue.)

Do You Know That

The consciousness of having helped your neighbor is worth more than the dollars you might charge him for the service?

Old English Initials to Embroider



By WINIFRED WORTH

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under the initial before embroidering. It aids one in washing the color from the finished design.

In padding these old English initials, different methods may be used. Some use the twilled cotton for the purpose; others make the chainstitch, while others let a skein of floss out at full length and embroider a strip of it under the thick parts while forming the letter, clipping the skein when the initial is finished. This is a splendid method, quickly done, and is suggested, too, as a help in padding all large pieces in border or crescent outline.

Initials can be made by filling in the broad space with French knots. This is used largely on elaborate pieces, such as the laundry bag, table scarfs, and ornate gifts.



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11.0 lbs. of cabbage
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Patterns

2175—Dress for misses and small women—Cut in 3 sizes: 16, 18 and 20 years. Size 18 requires 6 3-8 yards of 44-inch material. The skirt measures about 3 1-8 yards. Price, 10 cents.

2186—Infants' set, consisting of a cap, a sack, a night gown and a dress. —Cut in one size. For the dress of flouncing it will require 1 3-4 yards of 36-inch material with 1 1-4 yards of plain material for yoke and sleeves. Of nainsook or lawn 36 inches wide it will require 2 1-4 yards. The gown will require 2 1-2 yards of 24 or 27-inch material. The cap 1-2 yard of 18-inch material. The sack requires 7-8 yard of 27-inch material. Price, 10 cents.

1817-1818—Ladies' Costume—Waist 1817 cut in 8 sizes: 34, 36, 38, 40, 42, 44, 46 and 48 inches bust measure. Skirt 1818 cut in 8 sizes: 22, 24, 26, 28, 30, 32, 34 and 36 inches waist measure. To make the costume of one material will require 5 3-8 yards of 44-inch material for a medium size. Skirt measures 3 1-3 yards at the foot. Two separate patterns, 10 cents for each pattern.

2163-2179—Ladies' Costume—Waist 2163 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 1-4 yards of 36-inch material for a medium size. The skirt pattern is cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires 3 1-8 yards of 44-inch material for a 24-inch size. The skirt measures about 2 1-2 yards at the foot. Two separate patterns, 10 cents for each pattern.

2036—Ladies' dress—Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 7 1-4 yards of 36-inch material for a 36-inch size. The skirt measures about 3 1-3 yards at the foot. Price, 10 cents.

1955—Lady's overall apron. Cut in 4 sizes: 34, 38, 42 and 46 inches bust measure. It requires 6 1-2 yards of 36-inch material for a 38-inch size. Price, 10 cents.

2174—Girl's dress. Cut in 4 sizes: 2, 4, 6 and 8 years. It requires 2 1-2 yards of 27-inch material for the dress and 1 1-2 yards for the guimpe, for a 4-year size. Price, 10 cents.

2046—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It required 6 1-2 yards of 44-inch material for a 38-inch size. The skirt measures about 2 3-4 yards at the foot. Price, 10 cents.

2194—Lady's guimpe. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 2 1-4 yards of 36-inch material for a 36-inch size. Price, 10 cents.

1829—Girl's dress. Cut in 4 sizes: 6, 8, 10 and 12 years. It requires 3 3-4 yards of 36-inch material for an 8-year size. Price, 10 cents.

1848—Girl's coat. Cut in 7 sizes: 2, 4, 6, 8, 10, 12 and 14 years. It requires 2 3-8 yards of 44-inch material for a 6-year size. Price, 10 cents.

1841—Boy's blouse. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. It requires 3 1-8 yards of 36-inch material for a 12-year size. Price, 10 cents.



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BE SURE TO GIVE NUMBER AND SIZE.

Plan to Save Fuel

To the Editor: "Eternal vigilance is the price of a clean kitchen," but just now the eternal vigilance of the housewife in a clean kitchen needs to be along the line of thrift in every possible way. The patriotic home may serve one o fthe nation's greatest needs in conserving food, fuel, clothing and all else which must be provided for those who are in a more direct way defending these homes of ours.

At this season of the year every extra amount of vegetables the garden affords should be canned if possible when there is a fire in the range so that no extra cost of fuel is attached to it. Fuel is money, and when two women are working in one kitchen the same fuel may be made to serve many purposes. One can iron or attend to canning while the other is baking, brewing and stewing several articles to be used in meals for the next day or two, such as steaming rice, cereals, macaroni and hominy ready for creaming or escalloping. These articles are good substitutes for potatoes. For many meals wood cut very short or coal used under only one round of the stove will give all the intense heat needed while the rest of the stove is hot enough for heating water or for other purposes.

When short of milk the water in which potatoes have been boiled answers for cake making, and a little extra baking powder will allow you to use fewer eggs.

By the dry sugar cure method one can make choice bacon from the fresh side meat which costs only little more than half the price of bacon. Fish furnishes a light, nourishing and cheap substitute for meats. Potato water should be used in soups and stews.

Sweet corn and prunes can be easily dried in the oven and save cans for other purposes. The oven from the gasoline stove can be placed on top of the range to give extra space for drying. Fruit juices heated to boiling point and canned may be made into jelly when sugar is cheapest. Rhubarb and gooseberries can also wait for cheap sugar, and by adding a very little soda to them less sugar is required.

Excess chicken fat is fine for pastry if used in ratio of one to two with lard. Any fats not fit for cooking can be easily made into the finest hard, white soap.

Using local productions as far as possible saves freight and keeps the money at home.

Many articles of clothing can be made to look like new by the use of reliable dyes.

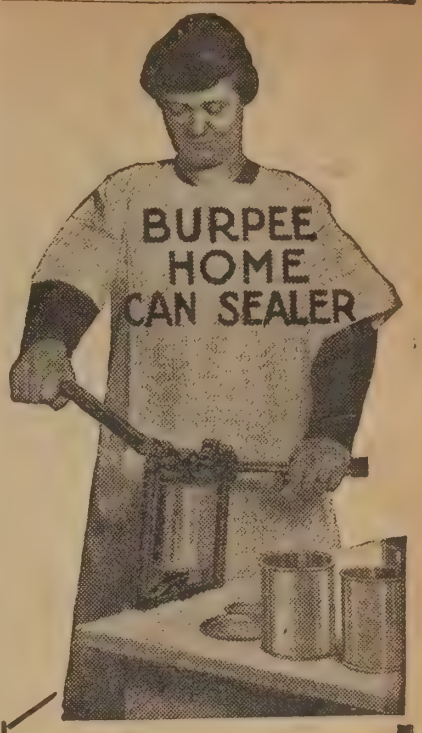
MRS. DAVID DOUNAN.
Weiser, Idaho.

Youngest Bond Holder.

The honor of being the youngest Liberty bond holder is claimed to belong to Henry M. Foley Jr. of Palmer, Mass., who was born at 6:30 in the morning of June 1, and whose father purchased him a bond before he was 2 hours old.

Florence Estelle Rogers of Medford, Mass., whose father purchased a bond for her when she was 8 hours old, has been considered the youngest bondholder.

At any rate, Massachusetts retains the honor of having the youngest Liberty bondholder.



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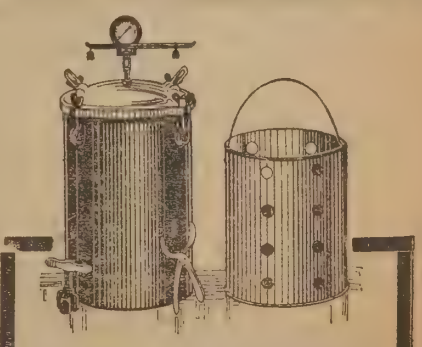
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Duroc-Jersey Record

Rapid Growth of Association

Volume 52 of the National Duroc-Jersey Record association, dated April, 1917, has just been received by the Farmer. The males recorded in this number are from 201501 to 210999; the females from 508700 to 539998. J. R. Pfander, the secretary of the association, calls attention to the rapid growth during the last five or six years, saying: "This association is now the largest swine record association in the world, having at the present time over 6600 members and this number is rapidly increasing." The volume also contains a picture of the "ney up-to-date fire-proof office building of three stories, the entire first floor of which is occupied by the association and it is so arranged that as time and business demand the other floors can also be used by us. It is absolutely the finest building of its kind owned by any simlar association."

The Washington members of the association follow: H. E. Angel, Wapato; T. S. Anglin, Anglin; M. Augstl, Pullman; Attalia Dairy Products company,



New home of the National Duroc-Jersey Record association.

Attalia; Augustine & Kyer, Seattle; A. H. Barker, Entiat; Daniel Bekins, Bothell; William Bishop, Chimacum; Boston-Okanogan Apple company, Okanogan; G. H. Boundy, Albion; David Brown, Spokane; R. B. Brown, North Yakima; C. S. Card, White Salmon; H. Stanley Coffin, North Yakima; Oscar W. Collins, Uniontown; S. D. Cornell, North Yakima; J. G. Crosby, Washtucna; M. J. Cnuningham, Albion; Lester Daily, Palouse; Clarence A. Davis, Goldendale; John F. Davies, Opportunity; H. C. Davis, Granger; W. G. Davis, Goldendale; G. A. Draper, Elberton; G. M. Dyer, St. John; Mack Edwards, Valley; H. E. Goldworthy, Rosalia; L. L. Graves, Wapato; Jay P. Graves, Spokane.

D. B. Greenwalt, North Yakima; Thomas E. Haden, Wilbur; J. Hanks & Sons, Ellensburg; C. A. Harper, St. John; W. H. Harrison, Sunnyside; T. J. Hastings, Rosalia; H. J. Howser, Jerry; John F. Irby, Garfield; A. H. Irish, Wapato; Ben E. Kelley, Penawawa; H. E. Kendall, Oakesdale; George W. Kimber, Deer Park; J. L. Kindsbury, Carrolls; Knickerbocker company, Seattle; Kraber Brothers, Medical Lake; O. N. Lawrence, Chesaw; E. N. Marks, North Yakima; E. N. Martin, Sunnyside; Harry S. Martin, Spokane; J. H. McCroskey, Garfield; Ernest S. McCulloh, Sunnyside; J. Nelson, Thornton; Robert Nelson, North Yakima; J. J. Nichols, Davenport; T. A. Noble, North Yakima; R. W. Parr, Pullman; L. G. Passmore & Sons, Spokane; C. F. Peabody Son, Outlook; E. N. Peaslee company, Seattle; John B. Peterson, Montborne; A. H. Poston & Sons, Spokane; R. E. Pratt, Kennewick; E. C. Prusia, Tacoma; E. I. Radcliffe, Goldendale; Robb & Shaffer, Kent; E. H. Seiling, Spokane; H. C. Sherrett, La Center; S. W. Shoemaker, Garfield; Frank Smawley, Pullman; B. E. Smead, Opportunity; A. E. Smith, Seattle; Charles G. Sprong, Grandview; F. S. Stimson, Hollywood; Taylor-Hartzell company, Mabton; A. G. Treffry, Spokane; A. L. Tucker, Coulee City; H. W. Turner, Sunnyside; E. W. Van Tassell, Wenatchee; Alex A. Weaver, Wilson Creek, Western Hospital for Insane, Fort Steilacoom; W. R. White, Sunnyside; J. L. Williams, Oakville; Park Weed Willis, Seattle; A. B. Winter, Everett.

Pure Breeders' Picnic

Suggestions almost sensational in their character, regarding land problems, were made by E. F. Benson, commissioner of agriculture for the state of Washington, in his address at the third annual picnic of the Lewis County Pure Breeders' association at Chehalis, Wash., August 9. And his utterances were vigorously applauded.

A crowd of fully 500 was in attendance. This was the third annual picnic and the importance with which it is viewed in Chehalis is shown by the fact that the stores closed at noon. It is now known as the Breeders' and Merchants' picnic and well-filled baskets came from town as well as country, all being placed on tables that seated 300, but were totally insufficient, the balance of the crowd being served cafeteria style.

Charles Gessell, president of the association, called the meeting to order. He introduced N. B. Coffman, banker and Jersey breeder, who acted as toastmaster.

Mr. Benson began by saying the utilization of the land is the bulwark of civilization; that no person has a moral right to own any kind of land unless he puts it to some reasonable use. Lewis and Chehalis have accomplished more than any other counties in the settlement of the logged-off land problem, but they have only commenced. Much of the logged-off land is held at an unreasonably high price. It should be a price at which the owner is willing to pay taxes and, if not, some one else should have the land.

Logged-off land is of two classes, one that should be kept for timber and another fit for farming. Suckers have had both logged-off and irrigated land sold to them that was totally unfit for agriculture. The state should classify and report which is farming land. The timber land could be turned over to the state, allowing the owner some interest in the timber that again grows, but with protection to the settlers. Some land has been cleared at a cost of $200 an acre and is only worth $100. Instead it should have the undergrowth cleared out, grass seed sown and the growing of more live stock encouraged.

He urged the value of irrigation, even in western Washington, and said the people here have scarcely awakened to the value of the sheep business. He urged small bands of 20 to 200 on each farm and for farmers to unite and send one herdsman with the flocks from an entire neighborhood out to the hills in summer, where they will do well.

He urged farmers to visit and spend time away from home among neighbors and at such gatherings as this. The farm makes for manhood and he pitied the city boy who is raised without that sense of duty developed in the farm boy by performing tasks whether pleasant or not.

P. G. Kinger of the Carnation Milk company; Dr. R. J. Donahue, chief of the dairy and live stock division; M. L. Dean, commisisoner of horticulture; George Walker, secretary of the Southwest Washington fair; Newell Wright, secretary of the Centralia Commercial club, and Professor Nystrom, dairy instructor of the state college, now acting as county agriculturist, all spoke entertainingly. And R. T. Siler of Big Bottom invited the farmers to act on Commissioner Benson's suggestion and send their sheep up in the mountains above "Bottom," which is yearly being more and more encroached on by the Yakima Valley sheepmen.

The afternoon's exercises were closed by a stock-judging contest, in which Professor Nystrom lectured on the points of dairy animals. Holsteins were shown by S. Sventh and J. C. Bush and Jerseys by M. C. Lowery and Paul Winzelberger. E. P. Layton & Sons showed Berkshire hogs and J. A. Scollard large Yorkshire.

Thrift in Farming.

North Dakota has a state efficiency commission. One of the members of this body remarked at Fargo, after returning from a rather extensive trip over the state, that he noticed many farmers "have gone behind their barns, dragged out abandoned equipment that was believed to be useless and have patched it up for another year's service. They are doing this instead of buying new machinery." In other words, thrift is entering into American farming.

Farm Labor and Products in Yakima

During conferences with Assistant Secretary of Agriculture Carl Vrooman at Spokane L. W. Fluharty, Yakima county agricultural agent, said in part:

"I have spent much of my time in correlating the work of other organizations in Yakima county, who, like the county agricultural agents, were interested in the world work.

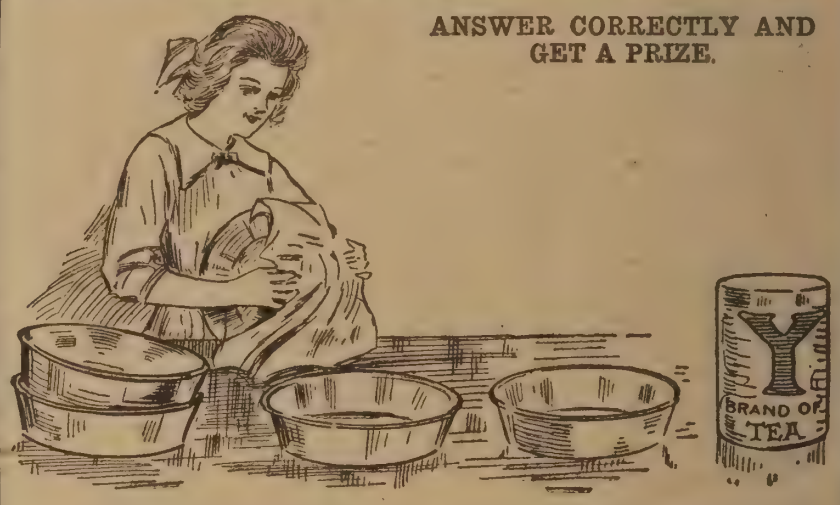
"It seemed that there was going to be labor shortage. By working with the different organizations already there we have come to the conclusion that by the proper distribution in Yakima county we can take care of our crops with approximately 1000 outside helpers. In this labor conservation work the county has been organized into 11 districts. There are labor agents in each district, and the labor agents take care of the labor situation. All men who want work register with the labor agents and all farmers who want help register with the labor agents. In this way those who want work and those who have work to be done are brought together. This plan eliminates the man with a pack on his back going from farm to farm asking for work. It also eliminates the necessity of the man coming to town and hunting the streets for men to hire. The plan minimizes the efforts on both sides, and we know at all times about how much work is to be done and where in our county the needed supply of labor can be secured. Judging from the present indications I do not think we will have any trouble in taking care of our labor situation. We have taken up actively all matters pertaining to increasing the food supplies of Yakima county. There are in Yakima county 255,000 acres of land under irrigation. From project managers and others we have gathered information concerning crop acreages of this year as compared with last, and find a gratifying response to the national call for larger farm production.

"In 1916 we had 345 acres of beans, this year we will harvest 2282 acres of beans. In 1916 we had in 6800 acres of potatoes; this year our potato crop includes at least 11,810 acres.

"For 1916 we have no recorded acreage of sugar beet; in 1917 we have 6324 acres. In 1916 the corn acreage of Yakima county amounted to 4250 acres; this year there are over 6000 acres of corn in the county. I may say that this increase in beans, potatoes, sugar beets and corn does not mean that alfalfa, which is a leading crop of the county, has been decreased. There has been a considerable increase in the acreage of alfalfa, as compared with last year. There has been an increase in the acreage on the Indian service ditch, which represents approximately 25 per cent of the total area under irrigation. In 1916 under this ditch there were 48,123 acres under cultivation; in 1917 there are 57,707 acres under cultivation, an increase of 9584 acres, which is one-fifth of the total irrigated acreage of the county.

"The cold storage facilities of Yakima county have been materially increased. In 1916 we had cold storage for 1150 cars; in 1917 we have cold storage for 2300 cars. I may say that these figures are only tentative, but that they do not overestimate the increases of cold storage facilities in Yakima county. The facilities for food conservation have been greatly increased. We have a cannery in operation now. It has already handled over 500 tons of cherries. There is a sugar factory being built that will handle 6000 cars of beets. Two evaporators will be completed in a short time. There are two cheese factories in operation in the county. Two more are being organized. There is a starch factory, or potato by-product factory, which bids fair to be a success.

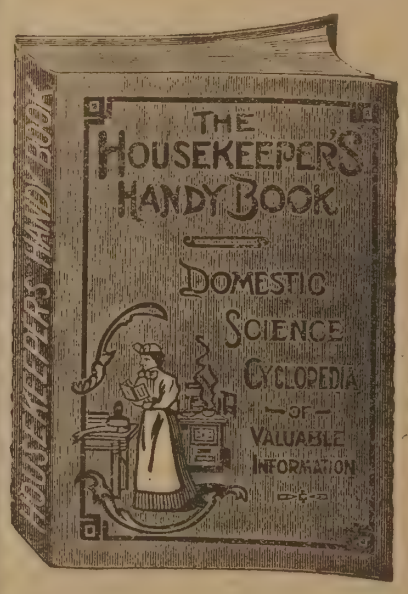
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Esther's First Day of School.

Dear Aunt Nellie: This is my second letter to the Corner and as I thought you might want to hear about my first day at school I have chosen that as the subject of this letter. I started to school at the age of 6. I lived on a farm four miles from a country town named Morton. The nearest schoolhouse was four miles distant. It was decided that a schoolhouse should be built nearer. It was not yet built when school was supposed to open. Of course, we could not have school in a half built schoolhouse so one of our neighbors said we could have school in their meadow until they fixed their parlor to serve as a schoolroom. There was a brook flowing beneath some trees in the meadow and there were some logs on which we coud sit. We met at the house and when we were all there we took our books, slates, pencils and trooped merrily down to the clump of trees beside the stream with our teacher, whose name was Mrs. Woods, in the lead. We sat on some logs and began to study very hard. It was very still when all of a sudden, splash! splash! Of course we all jumped up. We saw the biggest boy, his name was Willie, just crawling out of the brook. He was wet from head to foot. His books were scattered all about and his pencil, which was floating down stream, was caught by one of the smaller boys. Every one wanted to know how it happened and so Willie told us. He said he was rocking his log back and forth when he rocked a little too far and it rolled into the stream taking him along. The teacher sent him home to get dry clothes and quiet was once more restored. I live on Twin Oaks farm, three miles from Roy. I was 13 years old July 1.—Esther M. Bower, Roy, Wash.

Picks Blackberries and Raspberries.

Dear Aunt Nellie: This is the second time I have written to you. I enjoy reading the Children's Corner. I am 10 years old. My school was out May 19 and I passed in the seventh grade. We live on a little place in Fragaria. We have raspberries and blackberries in summer. I like to pick them, but of course I like to eat them, too. The raspberries are getting ripe now. We have two kinds of them. One kind is yellow and the other kind is red. I like to eat the yellow ones best. I did not earn much money in strawberry picking this year. I earned more last year. I always like to read the letters that you write and I hope there will be one from you soon. There are six rooms in our house, three upstairs and three downstairs. I have gone to Sundoy school every Sunday except July 15. I did not go that day. It was raining in the morning quite hard, but my mother said I couldn't go. When the sun was shining it was after Sunday school. My three sisters, Louise, Josephine and Jennie, go to Sunday school with me, too. It is one and a half miles from my place.—Florence Hwang, Olalla, Wash.

In School They Play Games.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and will be in the fifth grade this year. I like to go to school. I go to school in a truck and in the evening coming home we have lots of fun. In school we play games. My birthday is April 11.—Lois Carmichael, Box 3, Issaquac, Wash.

Clara Would Appreciate Some Letters.

Dear Aunt Nellie: I live out in the country on a big ranch. I like it very much. I used to have a big lamb, but it is gone. I am 11 years old and in the fifth grade. I have brown hair and brown eyes. I wish some other girl would write to me, as I appreciate letters.—Clara Jackson, Turner, Wash.

In the Hills of Stevens County.

Dear Aunt Nellie: We live up in the hills in Stevens county. It is timber all around. There is our field and our neighbors' fields, but the rest is timber. I am 11 years old. I have two brothers. My oldest brother is 6 years old and the other one is 1 month old.—Esther Eastman, Valley, Wash., box 272.

Uncle John Is a Soldier.

Dear Aunt Nellie: I live on a farm and have Rhode Island Red chickens. I have a little brother, George, and a little sister, Isabelle. I walk a mile and a half to school and am in the third grade. We have a Ford and I like to go to Horseshoe Lake and go in wading. My Uncle John is a soldier. I am almost eight years old and may have a birthday party.—Warren Keith, Colby, Wash.

Living in Tents for a While.

Dear Aunt Nellie: I saw my letter in the last Washington Farmer, so I thought I would write again. It is altogether different now than when I wrote before. Our house caught on fire and burned down. It was all burned up in 10 minutes. We four children were there alone. We never got anything out but the sewing machine and the birds. We are living in four tents. I would rather live in a tent than in a house. We live in the mountains. I have read lots of letters from the cousins that I used to play with at school. Their names are Ellen Purcell, Byron Robinson and Grace Wills. We have 13 horses, one saddle horse, five cows, five calves, three birds, two guinea pigs, five pigs, three dozen chickens, two cats, two dogs and many pine squirrels.—Gertrude Ruchest, Peola, Wash.

Brother Plays the Cornet.

Dear Aunt Nellie: I want to join the Children's Corner. I am 8 years old. My birthday is July 10. I am in the third grade. My teacher's name is Miss Lauderdale. I have two and a half miles to go to school. I have blue eyes and light hair. My brother, Elton, plays the cornet. I would like to correspond with Maxine Orr, Northport, Wash.—Juanita Nunn, Meyers Falls, Wash.

Glad She Could Help the Bird.

Dear Aunt Nellie: I am a girl 12 years old in July. My subject is "The Bird's Nest." One day I was helping my sister pick gooseberries and I looked up and saw a bird's nest in a tree not far away from where we were picking the berries and I went up close to it and it had scraps of my dress. I told my sister that I was glad the scraps of my dress could help something somewhere. My oldest brother had to register. I am going to take music lessons from my sister this summer.—Alice Miller, Mayview, Wash.

A Nice Trip to Colville.

Dear Aunt Nellie: I am 10 years old and in the sixth grade. I was reading in the Farmer this morning and saw a girl's letter. Her name was Nettie R. Jackson, from Sunnyside, Wash. My middle name is Nettie, also. I live on a farm, but it is not our own farm. We have 21 horses and three colts. Their names are Dick, Fay and Roy. We also have one cow and a calf. We have about 60 hens and roosters and 60 little chickens. Last week we went to Chewelah, Wash., and the Fourth of July we went to Colville. We had a very nice trip. We are buying a farm of 40 acres near Chewelah. My birthday is the 12th of December. Have I a twin?—Ruth Nettie Draper, Govan, Wash.

Life in the Philippine Islands.

Dear Aunt Nellie: I was 9 years old the last day of July. I am in the fourth grade. I have been to school only two sessions because I lived in the Philippine islands for six years. My father and mother were teachers there. The Filipino children like to go to school and learn English. The Filipino people have brown skin and black hair. When we came from the Phillipines our boat stopped at many places in China and Japan. We stopped at the capital of Japan. We rode in an auto and in a very small buggy with only two wheels and pulled by a man instead of a horse. It is called a jinrikisha. I like to live in America, but I also like to live in the Philippines. It takes 30 days to cross the ocean. The children had a fine time on the big ship.—Martina B. Pruiet, Cowiche, Wash.



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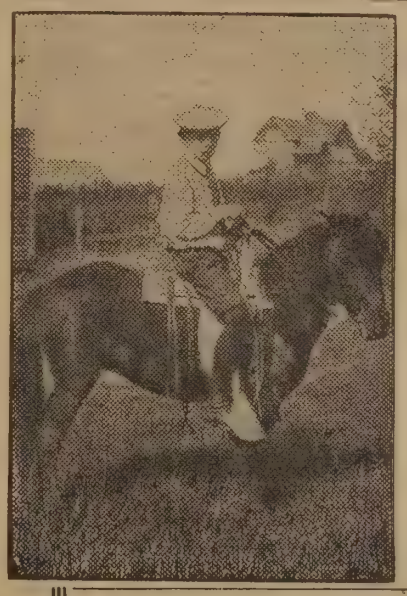
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Grain and Produce Markets

Chicago Grain.

CHICAGO, Aug. 11.—Sensational breaks in prices of corn for immediate delivery almost monopolized attention today in the grain trade. The fall amounted in some cases to 27c a bushel, as compared with 24 hours before. No other reason for the setback was apparent except the fact that distillers were at least temporarily out of the market altogether. Future deliveries closed nervous at the same as yesterday's finish to 3-4c lower, with December $1.14 3-4 to $1.14 7-8, and May $1.12 1-8 to $1.12 1-4. Wheat closed 3c down, but steady at $2.15 September, and oats off 1-4c to 1-2c. Provisions showed advances of 15c to 30c.

Cash Quotations.

CHICAGO, Aug. 11.—Wheat—No. 2 red, $2.37@2.40; No. 3 red, nominal; No. 2 hard, $2.60@2.62; No. 3 hard, $2.55.

Corn—No. 2 yellow, $1.90@1.96; No. 3 and 4 yellow, nominal

Oats—No. 3 white, 68@71c; standard, 68 1-2@70 1-2c.

Rye—No. 2, $1.89.

Barley—$1.30@1.46.

Timothy—$4.@7.50.

Clover—$12@17.

Pacific Northwest Grain.

WALLA WALLA, Aug. 11.—Net prices for new grain, September delivery: Club, $2.27; bluestem, $2.33; barley, $40.

SEATTLE, Aug. 11.—Wheat—Bluestem, $2.40; Turkey red, $2.40; forty-fold, $2.37; club, $2.36; fife, $2.36; red Russian, $2.35.

Barley, $49 per ton.

TACOMA, Aug. 11.—Wheat—Bluestem, $2.40; fortyfold, $2.37; club and red fife, $2.36; red Russian, $2.35.

PORTLAND, Aug. 11.—Wheat—No quotations.

San Francisco Grain.

SAN FRANCISCO, Aug. 11.—Barley—December, $2.40; May, $2.45 bid, $2.45 1-2 asked.

Minneapolis Grain.

MINNEAPOLIS, Aug. 11.—The price of September wheat hardened today and closed 1 cent higher. Corn 3 cents lower. Wheat—Receipts 134 cars, compared with 253 a year ago.

Wheat—September opened, $2.17; high, $2.17; low, $2.15; closed, $2.17 bid.

Cash—No. 1 northern, $3@3.05; No. 2 northern, $3@3.05; No. 3 northern, $2.90@3; No. 4 northern, $2.85@2.95; No. 2 hard Montana, $2.80@2.90; No. 2 durum, $2.40@2.55.

Corn—No. 3 yellow, $2.21@2.22.

Oats—No. 3 white, 67@68c.

Flax—$3.40@3.47.

Flour—Unchanged. Shipments, 37,968 barrels.

Barley—$1.15@1.45.

Rye—$1.93@1.95.

Bran—$33@35.

Wool Market.

BOSTON, Aug. 10.—The Commercial Bulletin of Boston will say tomorrow.

While the volume of business in the wool market during the week was hardly up to the average, the tone was unquestionably better, due in part perhaps to the clarifying announcement with reference to the plan of the federal government to purchase wool for military purposes. Values on all grades are fully firm.

At the mills a considerable part of the machinery is engaged on domestic war orders. No important changes are reported from the west.

Scoured basis:

Texas—Fine, 12 months, $1.65@1.70; fine, 8 months, $1.45@1.50.

California—Northern, $1.70@1.75; middle county, $1.40@1.45; southern, $1.15@1.20.

Oregon—Eastern No. 1 staple, $1.75; eastern clothing, $1.50@1.55; valley, No. 1, $1.45@1.50.

Territory—Fine staple, $1.75@1.80; half blood combing, $1.65@1.70; three-eighths blood combing, $1.35@1.40.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $3 cwt.

Apples—New Washington apples, $1 20-lb box; $1.75@2 50-lb box.

Butter—Blanchard cartons, 44c lb; Medo-Maid, 44c lb; Cascade, 44c lb; Gold Leaf, 44c lb; Better Butter, 44c lb; Attalia, 44c lb; Diadem, 44c lb; Hazelwood, 44c lb; Solid Pack, 42c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 20c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $12@12.50.

Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.

Dressed Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Live Stock Quotations.

At Omaha.

OMAHA, Aug. 11.—Hogs—Receipts, 3900. Market, 25c to 30c higher. Heavy, $15.90@16.40; mixed, $16@16.30; light, $15.85@16.60; pigs, $13@15; bulk of sales, $16@16.0.

Cattle—Receipts, 105; steady. Native steers, $9.15@14.15; cows and heifers, $6.50@9; western steers, $8.50@12.50; Texas steers, $7@8.50; cows and heifers, $6@8; canners, $5@6; stockers and feeders, $6@9.25; calves, $8@12; bulls, stags, etc., $6@8.50.

Sheep—Receipts, 8000; market steady. Yearlings, $9.75@10.50; wethers, $9.50@10.25; ewes, $8@9.25; lambs, $14.25@15.25.

At Chicago.

CHICAGO, Aug. 11.—Hogs—Receipts, 17,000; unsettled, 10c under the opening, which was strong and 15c to 25c above yesterday's average. Top, $17.25, a new high price record; bulk, $16.30@16.90; light, $15.60@17; mixed, $15.75@17.10; heavy, $15.60@17.10; rough, $15.60@15.80; pigs, $11.25@14.40.

Cattle—Receipts, 600; steady; native beef cattle, $7.90@14.35; western steers, $7@12.25; stockers and feeders, $5.80@9.25; cows and heifers, $4.50@12; calves, $8.75@13.50.

Sheep—Receipts, 3000; steady. Wethers, $7.60@11; lambs, $9.75@15.20.

At Portland.

PORTLAND, Ore., Aug. 11.—Cattle steady; receipts, 40. Best beef steers, $8@8.75; good beef steers, $7@8; best beef cows, $6@7; ordinary to good cows, $4@6; best heifers, $6.25@7.25; bulls, $8.30@9.50; calves, $4.50@6; stockers and feeders steers, $4.50@6.75.

Hogs steady; receipts, 10. Prime light, $15.70@15.85; prime heavy, $15.60@15.75; prime heavy, $14@14.50; pigs, $15.60@15.70.

Sheep steady; receipts, 30. Western lambs, $12@12.75; valley lambs, $11@11.50; yearlings, $8@9.25; wethers, $8@8.50; ewes, $3.50@7.

At Seattle.

SEATTLE, Aug. 11.—Receipts, 51 cattle, 263 sheep.

Hogs—Prime, $15.75@15.85; medium to choice, $15.50@15.60; smooth heavies, $15@15.25; rough, $14.50@14.85; pigs, $14.50@14.85.

Cattle—Prime steers, $9.25@9.60; medium to choice steers, $8.50@8.75; common to good steers, $6@7.50; best cows and heifers, $4@4.50; best bulls, $6.50@7; common to good bulls, $3.50@6.05; calves, $6.50@9.50.

Spokane Stock Yards Saturday.

Hogs—Receipts none, market strong. Prime light, $15.40@15.60; prime heavy, $15.60@15.85; pigs, $14@15.25; stockers, $13@14.

Cattle — Receipts, 27; market steady. Prime light steers, $8@8.25; prime heavy steers, $8.25@8.75; good steers, $7@7.80; ordinary to fair, $5.25@6; prime cows, $6@6.75; good cows, $5.25@6; common cows, $4@5; best heifers, $6@7; bulls, $5@7; calves, $7.50@9.50; stockers and feeders, $57.

Sheep—Receipts, 1800; market steady. Prime lambs, $11.50@12; good lambs, $10.50@11.25; prime yearlings, $8.50@9; prime wethers, $8@8.50; best mutton ewes, $5@7.

August Crop Report.

A summary of the August crop report for the state of Washington and for the United States, as compiled by the bureau of crop estimates, U. S. department of agriculture, is as follows:

Winter Wheat—State: Aug. 1 forecast, 10,900,000 bushels; production last year (final estimate), 18,285,000 bushels. United States: Aug. 1 forecast, 417,000,000 bushels; production last year (final estimate), 481,744,000 bushels.

Spring Wheat—State: Aug. 1 forecast, 20,300,000 bushels; production last year (final estimate), 19,350,000 bushels. United States: Aug. 1 forecast, 236,000,000; production last year (final estimate), 158,142,000 bushels.

Oats—State: Aug. 1 forecast, 10,800,000 bushels; production last year (final estimate), 14,300,000 bushels. United States: Aug. 1. forecast, 1,460,000,000 bushels; production last year (final estimate), 1,251,992,000 bushels.

Barley—State: Aug. 1 forecast, 5,320,000 bushels; production last year (final estimate), 6,814,000 bushels. United States: Aug. 1 forecast, 203,000,000 bushels; production last year (final estimate), 180,927,000 bushels.

Potatoes—Aug. 1 forecast, 10,110,000 bushels; production last year (final estimate), 9,900,000 bushels. United States: Aug. 1 forecast, 467,000,000 bushels; production last year (final estimate), 285,437,000 bushels.

All Hay—Aug. 1 forecast, 1,800,000 tons; production last year (final estimate), 2,048,000 tons. United States: Aug. 1 forecast, 100,000,000 tons; production last year (final estimate), 109,786,000 tons.

Apples (agricultural crop)—State: Aug. 1 forecast, 2,840,000 barrels of 3 bushels; production last year (final estimate), 3,225,000 barrels. United States: Aug. 1 forecast, 62,600,000 barrels of 3 bushels; production last year (final estimate), 67,415,000 barrels.

Prices—The first price given below is the average on Aug. 1 this year, and the second the average on Aug. 1 last year. State: Wheat, 200 and 84 cents per bushel. Corn, 160 and 100. Oats, 70 and 42. Potatoes, 161 and 107. Hay, $15.00 and $11.70 per ton. Eggs, 36 and 26 cents per dozen. United States: Wheat, 228.9 and 107.1 cents per bushel. Corn, 196.6 and 79.4 cents. Oats, 73.7 and 40.1 cents. Potatoes, 170.8 and 95.4 cents. Hay, $13.42 and $10.68 per ton. Eggs, 24.3 and 20.7 cents per dozen.

Portland Market.

PORTLAND, Ore., Aug. 11.—The warm weather has put a check to the country produce trade. Eggs are sluggish and buyers are offering less, case count; but candled stock is firmer, owing to the big shrinkage. Poultry sales also drag. Veal is quoted higher this week, as very little is coming in.

Butter is no more than steady, although the make is restricted. The cheese market is firm.

Walla Walla onions are higher this week, at $125@1.40. Potatoes are steady at the old price.

The boom in the hop market shows no sign of abatement. Buyers are offering 26½@27 cents for new Yakimas and Oregons on contract, and choice spots are quoted at 20 cents. It is figured that 75 per cent of the small crop growing on the Coast has already been signed up. The latest estimates of the Coast crop are: Washington, 20,000 bales; Oregon, 35,000 bales; California, 70,000 to 75,000 bales.

Hides are weaker, with the most active kinds a cent lower.

The wool market is still quiet.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $50 per ton.

Corn—Whole, $91; cracked, $92 per ton.

Millstuffs—Bran, $36 per ton; shorts, $39.

Barley—No. 1 feed, $47; brewing, nominal; rolled, $51.

Hay—Buying prices; Timothy, eastern Oregon, nominal; alfalfa, $20@22; grain, $16.

Eggs—Oregon ranch, case counts, 35c per dozen; candled, 37½@40c.

Poultry—Hens, 14@16c; ducks, 13@17 1-2c; turkeys, alive, 18@21c; geese, 8@9c.

Butter—City creamery, prints, 44@45c per pound; cubes, extras, 40½c.

Cheese—Tillamook triplets, 22c; young Americas, 23c.

Dressed meats—Veal, 14½@15c; pork, 19 1-2@20c.

Hops—1916, 20c; contracts, 26½@27c.

Potatoes—New, 2 3-4@3 1-2c per pound.

Wool—Eastern Oregon, fine, 58@61c; coarse, 58@65c; valley, 72 1-2@75c.

Beans — California small white, 16 1-2; large white, 16c per pound.

Hides—Salted hides (25 lbs. and up), 19c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 32c; green hides (25 lbs. and up), 18c; green stags (50 lbs. and up), 13c; dry hides, 34c; dry salt hides, 29c.

Portland Wheat.

PORTLAND, Ore., Aug. 11.—Wheat buying, which slowed down in the latter part of the week, came to a full stop Saturday. The enactment of the food control law and the prospect of an early statement by Mr. Hoover as to what the government intends to do about wheat distribution made it wise, in the opinion of wheat dealers here, to withdraw from the market. The few bids put out were at a lower level, based on $2.40 bluestem, Coast.

The opinion prevails that the government's first steps will pertain to the flour industry. It is likely that all the breadstuffs exported to the allies will go abroad in the form of flour. A meeting of the national millers' committee will be held in the east this week and following it an official announcement is expected.

There is a limited business doing in new crop barley on the basis of $47 here. Oats are quoted strong at $50, with very small offerings. The hay market continues firm.

Seattle Market.

SEATTLE, Aug. 12.—Western avenue dealers have had what might be called a tomato and cantaloup week. They have centered their efforts on these two products in order to clear up the great surplus that had accumulated because of a slump and double shipments. At the present time they have succeeeded fairly well, although even yet the houses are flooded with tomatoes and cantaloups and the prices are at rock bottom.

When Yakima first sent over a carload of tomatoes, brokers who controlled the deal forced dealers to sell at too high prices. As a result this produce began to accumulate and become overripe. A few days ago the brokers relaxed and every house on the street started in to clean up the market. Cantaloups have had the same experience. All produce will probably move along at a steady gait hereafter.

Apples are going to hold the limelight in the near future. Already Wenatchee has given the street a small sample of what to expect. The sample included Winter Bananas, Spitzenbergs and Delicious and all were well-formed and matured. The Wenatchee district has contracted for a shipment of 600 boxes of the varieties named by August 20. This is the earliest date ever known for apples.

This is the off year for Wenatchee Gravensteins and receipts in this variety are not expected to amount to much. Dealers are very anxious as to the Yakima crop, as the outcome is as yet uncertain.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transaction by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Poultry—Live hens, fat, over 4 lbs., 18c per lb.; 2 lbs. and under, 14@16c; old roosters, 11c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 10c per lb; broilers, live, 18c per lb.

Butterfat—47c per lb.; dairy butter, 31@32c.

Beef—Buying prices: Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c; heifers, 6@8c per lb.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 14@16c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 30c per lb.; green hides, 16c per lb; salted bulls, 16c per lb.; dry hides (short trim, 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12 1-2c per lb.; dry butcher full wool sheep pelts, 36@38c per lb.; green calf, 30c.

Butter and Eggs.

SAN FRANCISCO, Aug. 11.—Eggs—Fresh extras, 40c; fresh firsts, 39c.

ELGIN, Ill., Aug. 11.—Butter price, 39 1-2c; 100 tubs offered; no sale.

WANTED
Cascara Bark

We buy cascara bark, Oregon grape root and Oregon balsam of fir at the prevailing market. Submit samples and quantity you have for sale.

BLUMAUER-FRANK DRUG CO.
357 Everett. Portland, Oregon.



Pay Highest Prices for Wool

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

HIDES
WOOL · PELTS
FURS · TALLOW
SHIP TO US
NO CARTAGE - NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS - HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC.
SEATTLE
BE SURE AND MENTION THIS PAPER

HIDES
WOOL, PELTS, MOHAIR, CASCARA BARK

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

THE H. F. NORTON CO.
53-55 No. Front St., PORTLAND, ORE.
206 3d Ave. So., SEATTLE, WASH.

HELP WANTED—MALE 3

HAWTHORNE AUTO SCHOOL, 462 Hawthorne Ave., Portland, Ore. School in session all year 'round. No books, charts or printed lessons used. Everything practical and up to date.

AGENTS—WANTED 9

ALBANY NURSERY TREES GIVE SATISFACTION. You can earn good money selling our complete line of high-grade fruit and ornamental stock. Men or women agents wanted. ALBANY NURSERIES, 1st National Bank building, Albany, Oregon.

AGENTS—IMMENSE PROFITS EASILY made selling flexible metallic sign letters to stores and offices. Right opportunity for live wires. U. S. Sign Co., S217 Lincoln st.

SITUATION WANTED—Male 21

WRITER NEEDS EXERCISE; WILL HELP farmer with crops; small wages; no Sunday work. Hooper, 803 Madison st., Seattle.

MUSICAL 38

"STAND BACK OF OLD GLORY" THRILLS you with its patriotic fervor. Words and music, postpaid, 15c. Whitney Pub. Co., Spokane, Wn.

EDUCATIONAL 45

YOUNG MEN AND WOMEN SHOULD APPLY OR WRITE TO WHITWORTH COLLEGE, SPOKANE, WASHINGTON, FOR TWO YEARS' PREPARATORY AND FOUR YEARS' FULL COLLEGE COURSE, WITH BIBLE STUDY. BEGINS SEPT 18TH.

GONZAGA UNIVERSITY, SPOKANE—Boarding and day school. Write for catg.

Get Your FLAG for Labor Day



We have a limited number of flags which we are offering on the following terms:

Offer No. 1:

3x5 AMERICAN FLAG

and The Washington Farmer for three years.

ONLY $2.50.

Offer No. 2:

4x6 AMERICAN FLAG,

and The Washington Farmer for three years.

ONLY $3.00.

GOOD ONLY WHILE THEY LAST.

The Washington Farmer, Review Bldg., Spokane.

Enclosed find $...., for which send me American flag, as advertised and the Washington Farmer for three years.

Size .....

Name .....

Postoffice .....

R. F. D..... Box..... State.....

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

EDUCATIONAL 45 Continued.

STUDY TELEGRAPHY, BOOKKEEPING, shorthand and typewriting at a national accredited school. Catalog free. BEHNKE-WALKER BUSINESS COLLEGE, 167 FOURTH ST., PORTLAND, ORE.

SIX MONTHS' COURSE IN BUSINESS worth more to you than 2 years' high school; guaranteed positions. Blair Business College, Spokane, Wash. Free catalog.

JAMES LYON'S BOARDING SCHOOL FOR Boys, Spokane, Wash. Beautiful surroundings. Happy boys, under thorough control. Every safeguard. Send for catg.

TEACHERS' AGENCIES 46

VACANCIES FOR TEACHERS IN ALL the western states. Write us today. Clark Teachers' Agency, 411-412 Chamber of Commerce bldg., Spokane, Washington.

SCHOOL CLERKS: WIRE OUR EXPENSE. Hazard Teachers' Agcy., Spokane.

FRESH FOOD PRODUCTS 56

FRESH FRUITS, VEGETABLES AND guaranteed fresh eggs. Write for prices, f. o. b. Freewater, Ore. E. W. Wehtje, R. 2.

MISCELLANEOUS 57

FREE MAP AND FOLDER DESCRIBING Puget Sound Farms. Send for it. CHARLES SOMERS COMPANY, Alaska Bldg., Seattle, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Manufactured in our own mill and sold at factory prices. We ship to anyone, anywhere. One price to everybody. Prompt shipments. Safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request.

5 cross panel doors, No. 1	$1.65
Craftsman bungalow doors	1.90
One panel, 3-ply veneer doors	2.25
French doors, 15 lights	4.00
Screen doors, 2-8x6-9, galv. wire	1.50
Standard 2-light windows, up from	1.25
8x10, 4-light sash	.57
16x16x26 spruce flour bins	1.50
Drain boards, 20x24	.75
Williams' "Gold Seal" mixed paints, per gallon	2.50

Frames, mouldings, builders' hardware, mill work.

O. B. WILLIAMS CO.
1943 1ST AVE. SO. SEATTLE, WASH.

CUT YOUR OWN TIMBER

on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With the sawmill you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine.

Write for catalog and full details.
CLYDE EQUIPMENT CO.
18TH AND UPSHUR STREETS, PORTLAND, ORE.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

LUMBER, SHINGLES, MILLWORK. SAVE money by getting your building material direct from the mill. Let us quote you delivered prices. W. W. Wells Co., Box 1010F, Everett, Wash.

MISCELLANEOUS WANTED 63

STRAINED HONEY WANTED. WRITE US the quantity you have to offer. Commercial Creamery Co., Spokane, Wn.

FARM LIGHT PLANTS 73

EDISON ELECTRIC LIGHT PLANT. Lasts a life time. Guaranteed 4 yrs. Either direct connected or belted. Automatic stop, self cranking. Sold by the oldest and largest electrical supply and repair house. Nixon & Kimmel, 901 Main st., Spokane, Wash.

PERKINS SUPPLY CO., S. 111 MONROE st., Spokane, Wash. Farm lighting plants, gasoline engines and pumping machinery.

MACHINERY—FOR SALE 93

FOR FARM LUMBERING USE "AMERICAN" PORTABLE SAWMILLS, Carried in stock by HIGGINS MACHINERY COMPANY. 312 1st Ave. So., Seattle. Write for catalog.

PORTABLE WELL DRILLING AND PROSpecting, machinery, tools, cordage, contracting, well drilling. Keystone Driller Co., Spokane. Catg. H now ready.

AUTOMOBILES 114

PETITE COMBINATION MANIFOLD, FOR Ford and Maxwell cars; 30 to 60 per cent saving of gas guaranteed. Investigate. 8175 Stevens, Spokane.

AUTO TOPS, BUILT TO ORDER, AND repaired. N. Reeder, Dept. F, Spokane, Wn.

AVIATION 115

DENINE AIRCRAFT CO., BOX 2232 SPOkane, Wash. Flying taught, skilled help wanted. Investigate. Splendid opportunity.

STOVE REPAIRING 126

MYER S. RUBENS STOVE & FURNACE REpair Works; welding. W1009 1st., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

WASH. (D. C.) PAT. ATTY. SEE AD IN Polk's. C. H. Crawford, Spokane.

LIVE STOCK 177

A HOLSTEIN BULL CALF WHO IS A fine individual, the son of Findern Pieterje Fayne and an A. R. O. dam; we will give good terms on this calf as he is a winner. Roy A. Bowers, Hay, Wash.

VETERINARY SURGEONS 186

DR. G. R. STEWART, VET. SURG. AND dentist. W1213 2d ave. Tel. 2624, Spokane.

HOTELS 306

GALAX HOTEL,
cor. Main and Bernard sts., Spokane. A clean, respectable hotel. Rates, 75c to $1.50 per day, with or without private bath. Free taxi from depots.

DAVENPORT HOTEL, SPOKANE, RATES from $1.50; headquarters for farmers and business men of Pacific Northwest and their families; no formality; unobtrusive service.

WHITE'S HOTEL AND RESTAURANT, Rooms, hot and cold water, 75c up. Breakfast, 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

WHEN IN SPOKANE, STOP AT THE HOtel Majestic, opp. N. P. station. Rooms, $1 up. Strictly modern. Mrs. W. H. Murphy, Prop.

NEW WASHINGTON HOTEL, 403 1ST ave.; respectable; comfortable rms., 50c up.

INTERNATIONAL HOTEL,
234 Main ave., Spokane, 50c up.

NEW MADISON HOTEL,
First and Madison, Spokane, $1 up.

HOTEL COEUR D'ALENE, MOST POPular med. priced hotel in Spokane

HOTEL CARLYLE, 2D AND POST., SPOkane, Wash. 150 rooms, $1 up.

HOTEL TOURAINE, 23 MONROE ST. Rooms 50c and up.

WM. BROWN HOTEL, S170 POST, SPOkane, 75c up.

FAIR PREMIUM LISTS 370

SPOKANE INTERSTATE FAIR AND live stock show, Spokane, September 3-8. Premium list now ready. Write W. L. Tennant, Secy., Spokane.

WASHINGTON STATE FAIR, SEPT. 17-22. Premium list now ready. Write Frank Meredith, Secy., North Yakima.

WESTERN WASHINGTON FAIR PREmium list now ready. Write J. P. Nevius, Secy., Puyallup, Wash.

SOUTHWEST WASHINGTON FAIR PREmium list now ready. Write G. R. Walker, Secy., Chehalis, Wash.

GRAYS HARBOR COUNTY FAIR PREmium list now ready. Write J. B. Kirkaldie, Secy., Elma, Wash.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

OPTICIANS 462

EYES EXAMINED; GLASSES FITTED; perfect results guaranteed. Broken glasses repaired by mail. Postage paid. Dr. Sletto, Owl Drug Store, Spokane, Wn.

DR. I. M. RADABAUGH, SPECIALIST IN examining eyes and fitting glasses, 304 Jamieson bldg., Spokane, Wash.

PHOTO SUPPLIES 470

BUY YOUR KODAK FILMS, PLATES and photo paper from Martin, your professional photographer. Fresh stock always. Prompt reliable service. Most complete assortment hand cameras, kodaks, etc., all sizes from $1 and up. Martin Photo Studio, on Picture Corner, Spokane, Wash.

KODAK FILM FINISHING 473

MARTIN, YOUR PROFESSIONAL PHOTOgrapher, offers expert film developing, printing and engraving. Prompt, reliable, and efficient service. Largest photographic studio in Pacific Northwest. Rolls developed, any size, only 10 cents. Save your money. Send for our price list. Studio on Picture Corner, Spokane, Wash.

ARCHITECTS 558

BUILDING PLANS AND ESTIMATES. L. L. Rand, The Rookery, Spokane, Wash.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

FARM LANDS—FOR SALE 651

REAL SNAPS IN STOCK, HAY, GRAIN AND FRUIT LANDS NEAR SPOKANE.

Improved and unimproved tracts described below are near a good city and good market, on good state and county roads, near railroad, good schools, rural free delivery, good society, etc. The climate is conceded to be the best. Domestic and crop water plentiful. No irrigation needed — crops sure. Write for a folder showing photographs and telling of climate and other facts of interest, such as no failure of crops, freedom from pestiferous insects, frostless belt, amount of wheat, oats, hay, potatoes, fruits, etc., per acre. If the tracts described below do not suit you, tell us what you want.

40 ACRES.

40 acres of raw cut-over land; very productive soil, with an abundance of moisture, as would be indicated by willow bush; in good locality, on public road, close to railroad; on easy terms.

160 ACRES.

25 acres cleared; on county road, rural free delivery, etc.; sandy loam soil; good subirrigation; lies fairly level; in good community. Price right and terms easy.

80 ACRES.

40 acres cleared; on state road and two county roads; very centrally located, in good community; would make an excellent home; would make some improvements for proper party. Small payment and very easy terms.

480 ACRES.

480 acres, within half mile of railroad; cordwood enough to pay for it; in dollar limit of Spokane; (good soil; make good stock proposition; more land could be had adjoining); $12.50 per acre, easy terms.

MILAN FARMS DEVELOPMENT COMPANY,
"REALTORS."
1322 Old National Bank Bldg.
or
ALLIN REALTY COMPANY.
408 West Sprague Ave.
Tel. Main 2750.
Spokane, Washington.

VERY FINEST CRANBERRY PEAT LAND in center of coast cranberry industry, for sale in 1 to 5 acre tracts at $200 per acre, with only 20 per cent cash payment; no other payment for five years, balance in ten years. By planting part of holdings in cranberries, crops should meet future payments. If desired, will plant for buyer. Adjacent lands producing 150 bbls. to the acre, with cranberries selling at $8 to $12 per bbl. The coast consumes 20 times the present production. For a money-maker, do you know of any other crop that compares favorably with cranberry growing? Home markets at $2 per bbl. higher price than eastern grower gets, owing to freight west. Cranberry grower myself. Henry S. Gane, Long Beach, Pacific County, Washington.

EQUIPPED STOCK RANCH IN IDAHO; 160 acres; ½ mile from station; 2 railroads; 80 acres in meadow and cultivation; 35 acres timber, balance bottom land with some brush; no waste land; running water; good house, 3 barns; team, wagon and all necessary farm machinery; 30 head cattle, 14 cows milking, all crop goes with place. Price $12,500, 1-3 cash, balance easy at only 6 per cent. Hege & Watkins Co., Paulsen bldg., Spokane, Wn.

FOR SALE—11,000-ACRE GRAIN AND stock farm; will include 500 head of grade Hereford cattle at market price. For full particulars address the owner, H. K. Schuster, Wibaux, Mont.

STOCK RANCH, 480 ACRES.

150 good soil, bal. pasture; the finest of range; 4 miles to R. R. station. $1000 cash. Otto A. Bittrick, 514 Rookery blk., Spokane, Wash.

SOUTHWEST ALBERTA FARMS, ANY size; square deal. No trade. Cardston Investment Co., Ltd., agents R. R., Hudson's Bay and Company lands. Cardston, Alberta.

20 A. FOR SALE, WITH CROP, STOCK and machinery; income now $200 per mo. Price $5000. Write for particulars. J. E. Froom, R. 1, Bellingham, Wn.

FOR SALE—AN EXTRA GOOD 80-ACRE farm in Skagit Co., Wash. Address owner, Victor Peterson, R. R. No. 5, Box 80, Mt. Vernon, Wash.

HAY, GRAIN, STOCK OR DIVERSIFIED farm lands in the Colville valley, reasonable. We answer. H. L. Fisk, Valley, Wn.

2120 ACRES, 800 IN CROP, 23 MILES S. W. Spokane, cheap. Address M., Northwest Farm Trio, Spokane, Wash.

IRRIGATED LANDS—For Sale 663

IRRIGATED FARM LANDS.

ALFALFA LANDS, under government irrigation; abundant water; low altitude; rail and water transportation to coast markets; good schools, good roads; products alfalfa, corn, cream, hogs, honey, fruits, vegetables; long growing season; unimproved land $30 to $60 per acre; improved $100 to $250. Write for further information and literature. Dodd & Knapp, Hermiston, Ore.

FOR SALE OR EXCHANGE 702

WE BUY, SELL AND EXCHANGE anything photographic. Sell us your old camera, kodak, lens, tripod, carrying case, etc. Trade your small kodak for something better. Buy one of our bargain kodak snaps. Second-hand, but good as new. What have you to sell? Let us give you an offer. What do you want? We have it. Martin, your professional photographer, Picture Corner, Spokane, Wash.

FOR SALE OR TRADE.

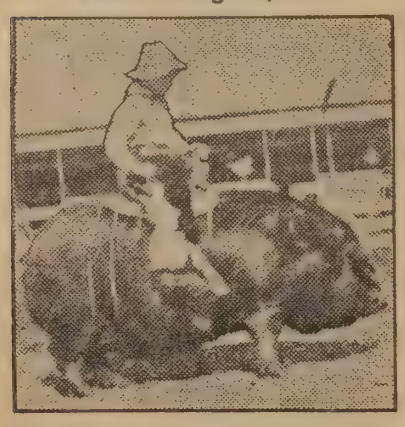
10 acres, level, clear, garden land; 3½ miles from center of Seattle; valuation, $16,000, or trade for stock ranch. C. Muller, Columbia station, Seattle.

NEWS FOR BREEDERS

W. O. Morrow of Independence, Ore., is wearing feathers in his hat because four of the cows that sold at high prices at the McArthur & Stauff Jersey sale were of his breeding. It was Mr. Morrow's intention to show Jerseys at the Oregon state fair and Pacific dairy show, but owing to the extremity of the labor problem, the almost impossibility of securing competent help, he has decided to keep the Jerseys at home. He will put quite a number of young cows and heifers on official test this fall.

Pert Peggy, an imported Jersey and a show cow, made the best record in the herd of J. W. Vandervelden & Sons of Roy, Ore., for the year ended April 20, 1917, as shown by the records of the Washington County, Ore., Cow-Testing association. Pert Peggy's production was 492.49 pounds of fat, or 579.4 pounds of commercial butter. What pleases Mr. Vandervelden most is the fact that Peggy is a sister of Simone of St. Saviour, a cow with both show and production records, that topped the Cooper sale at $2000. Twenty-six cows were on test, 13 of them for the full 12 months, the others ranging from nine down to two months. The average age was five years and 11 months. The total amount of fat produced was 8621.07 pounds, or an average production of 417.08 pounds of fat, equal to 490.68 pounds of butter. The value of the product was $4387.20, an average of $212.25 per cow. The feed cost was $2934.48, an average of $142.11 per cow. This shows a profit per cow of $70.14. Several of the cows are pure bred, the balance grade Jerseys. Generally the pure-bred cows had the largest records.

Ferrell's Big Orphan.



The above picture of the wild and woolly west shows "Bronco Pete" riding "Big Orphan." Big Orphan is a Poland China boar owned by J. E. Ferrell of Weiser, Idaho, that was first prize senior boar pig in 1915 and first prize senior yearling and grand champion in 1916, all at the Idaho state fair. He weighed 800 pounds September 28, 1916. The rider is Mr. Ferrell's little boy, who, with his chaps and gun on, very much enjoys the ride.

Red Wing Farm Buys Bull.

A. J. and J. Hughes, proprietors of Red Wing Farm, Oregon City, Ore., this spring purchased from Gene Duluth farm of Minnesota the young bull May Rose Yexa Starlight to serve as a supplemental herd sire to their Guernsey herd. His sire is May King of Linda Vista, that sold for $4600, and whose dam, Queen of the Roses, has an A. R. record of 852 pounds of butterfat in a year. May Rose Yexa Starlight's dam is Lime Girl, leader for the breed in class B (4 1-2 years old), with 728.69 pounds of fat. Her best day's milk was 71 pounds and her best month 84.1 pounds of fat. The young bull was first at the Waterloo, Iowa, dairy congress and several other shows. Red Wing farm does not plan to show this, but it also has some very showy calves. Six of the cows in the herd have official tests, the average being 457 pounds of fat, and the average age 7 3¼ years. The highest record is 664.79 pounds.

H. A.

Poppy's Grace



Poppy's Grace, a Jersey heifer owned by F. E. Lynn of Perrydale, Ore., that freshened at 2 years and 14 days, milked up to 40 pounds the first month and produced over 60 pounds of butter fat, 75 pounds of commercial butter, her first 30 days. Her second month promised to equal the first. Poppy's Grace, whose photo appears above, is a daughter of Mr. Lynn's herd bull, St. Mawes' Golden Poppy, and he is a son of St. Mawes' Poppy, that has an official record of 1120 pounds of butter in a year. Her dam has an official record of 520 pounds of butter in a year, and three daughters in the Register of Merit, two of them with over 500 pounds, and the other 470 pounds as a 2-year-old. As they are all persistent milkers, Poppy's Grace bids fair to make the big record of over 800 pounds with her first calf.

Another cow on official test is Deufrano's Jessie, shown above, a daughter of Cowslip's Ashley, a 5-year-old cow that produced over 400 pounds as a 2-year-old. She is big and strong and has an average test of close to 6 per cent. Another daughter of St. Mawes' Gold Poppy will freshen with first calf in June, and will be put on official test, with first calf. Mr. Lynn has five others of his daughters all heavy milkers, that will be tested at their second freshening. He expects them to establish the bull's reputation as a sire of producers.

Newell Quits Breeding Business.

A few weeks since W. K. Newell, the well-known proprietor of Cloveridge farm, at Seghers, Ore., and president of the Northwest Holstein Breeders' association, has disposed of the farm to M. Olsen of Portland, taking an apartment house in exchange. The trade included both the dairy and fruit ranch and all the fine herd of about 90 head of Holsteins. Mr. Newell has carefully built up one of the front-rank Holstein herds of the northwest. Mr. Olsen has decided to greatly reduce the herd, and about the middle of September will hold a sale of about 75 head, including both cows in milk and young stock of both sexes. George Gue, auctioneer, will have entire charge of the sale, and catalogues, dates and full information will be given in due time.

H. A.

Netherland Baker Mercedes

"Netherland Baker Mercedes," No. 154230, sold by Charles Eldridge to Yarr Bros. of Chimacum. This cow, 100 per cent the same breeding as Margie Newman 2d, is one of the greatest milk factories in the world and is particularly conspicuous for her size and vigor and for the wonderful development of her milk veins and udder. Although she has never been fitted for test, she has an A. R. O. record for seven days of 25.1 pounds of butter and 702 pounds of milk.



Help Out Feed Situation

Silage for Horses, Sheep, Cattle and Swine

By WILLIAM HISLOP, Pullman, Wash.

Hay, grain, mill feeds and oil cake have reached such forbidding prices as to discourage some stockmen. Those men who have silos are less fearful of "dried-up" pastures and winter feed than those who have none. Silage, however, is not a panacea for all these troubles, but it mitigates them to a very large extent. Dairymen are given credit for having used silage first and some people think that it is a feed fit only for the dairy cow. True, the use of silage and profitable dairying are closely associated, but such are not its limitations.

Horses and Mules.

Experiments at the Pennsylvania, Missouri and North Carolina stations have shown that corn silage can be used as a part of the rations for all classes of horses and mules. Mouldy, spoiled, rotten acid or frozen silage is very unsafe as a horse feed and none but the best should be fed. A good daily ration for a 1400-pound draft horse at work consists of 15 pounds of silage, 10 pounds of legume hay and 10 to 12 pounds of oats. Idle horses can consume profitably about 25 pounds of silage daily plus 10 to 12 pounds of hay. Weanlings, yearlings and two-year-olds will make satisfactory growth when silage constitutes a part of their roughage. In addition, they should receive some grain and hay. Mature, in-foal mares, have produced strong foals in a ration of legume hay and corn silage. Silage is also a very excellent winter feed for horses on dry hay or oat and wheat straw. Many horses in the wheat belts of Washington would be in better shape for spring work if they received some silage. In starting horses and mules to eat silage only three or four pounds per head should be given daily along with other feeds. The silage should be increased and the other feeds decreased.

Sheep.

As with horses, the addition of silage to rations for all classes of sheep reduces their cost and supplies succulence, palatability and variety. Likewise rotten, moldy, sour or frozen silage should not be used. Pregnant ewes should receive from three to four pounds per head daily during the winter. This should be supplemented with two or three ounces per head daily of cottonseed cake and some hay. After the lambs are born silage increases the milk flow of the ewes. In the fattening of lambs and yearlings for market the cheapest gains have usually been made when silage constituted a part of the ration. Rams winter well on silage as a part of their feed.

Cattle.

Silage is just as indispensable to successful beef cattle raising as it is to successful dairying. In fact, during these times of high-priced feedstuffs it is highly essential. As with sheep and horses, silage alone is too wide a ration. Cattle receiving silage exclusively will not do well. Cotton seed meal, linseed oil meal, clover, alfalfa or pea hay should be fed with it. Fattening steers will eat 20 to 25 pounds per head daily. Wintering yearlings will do likewise. Calves may be fed all the silage they will clean up twice a day. Grain and legume hay should, in all cases, be fed in addition. Bulls also thrive on silage. Even 10 to 15 pounds per head daily plus hay and some grain are sufficient to keep them in good condition. Pregnant beef cows will eat 30 to 40 pounds of silage per head daily plus some hay.

Swine.

Silage is too bulky for swine. However, it may be fed as a conditioner or tonic, especially during winter; but hogs will not fatten profitably on it. They waste more of it than they consume. When pasture is unavailable sows that are suckling litters would benefit by receiving a limited quantity.

Careful Handling Pays

Careful handling often will get a high-grade and a relatively high price for grain and hay which otherwise would grade low and sell low, say specialists of the United States department of agriculture.

It is worth while for producers to keep this fact in mind now that the harvest season for grain and hay is approaching in many sections. The supply of the best grades of grain and hay on the market is always light. This frequently may be attributed directly to poor handling and care. Quality always demands the best price, hence the greatest care should be exercised in harvesting and storing.

Practical Hay and Grain Hints.

Do not store damp grain or hay unless you have adequate facilities for frequent "turning," otherwise they are likely to go out of condition. Few farmers realize how small a per cent of moisture will cause otherwise good grain or hay to heat and deteriorate.

Never bale damp hay.

If your grain contains a large per cent of foreign material clean it. It keeps better.

Feed low grades and screenings on the farm.

Do not mix varieties. In most cases it can be avoided. It nearly always causes the commodity you are selling to grade low.

Do You Know That

That every spoonful of leftover gravy can be used in soups and sauces or as flavoring for meat pies, croquettes and vegetables?

AUCTIONEERS

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Aaron 117566, a 2-yr.-old half-brother, dark bay, wt. 1550. Sire Salvador 51340 by Calypso. Equally good, (some say better). He has never been shown.

Callie 88642, a dark gray mare, 6 yrs. old, wt. 1750. Sire Apollon 26130. She is very strong in Brilliant blood; has mare colt by Halicite.

Lady Grace II., 15452, a 3-yr.-old Shire, bay, white face and white hind legs, wt. 1650. Sire Imp. Toga VII. 9288; dam Bay Lily 13577, by Imp. Greenham Champion.

All first class in every respect, mostly our own breeding, reserved for our own special use.

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FOLLETT & SCHOOLER, Genesee, Idaho.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 34. AUGUST 23, 1917. * * WEEKLY.

Government Is Ready to Control Wheat Market

Powers Vested in the President by Food Bill Will Be Made Effective

The federal government provided in the recently enacted food bill for complete control of the food situation, especially with regard to wheat, and steps were taken immediately looking toward the exercise of the control. Plans were made whereby the food administration will buy not only the grain needed for the use of its army and navy, but if need be to control the price and distribution will buy for resale. The administration immediately formed a $50,000,000 corporation for the purchase of grain and appointed 13 men as representatives at the 13 great market centers or terminals.

Houser Appointed.

For the northwest, M. H. Houser of Portland, formerly of eastern Washington, was selected. He has announced that he will devote his entire time to this service for the government, and that, in addition, he will devote the proceeds from his grain buying business this season to the Red Cross. He is recognized as one of the big grain buyers of the country, having bought and exported many millions of bushels in recent years.

Looking ahead to next year, the government is making strenuous effort to insure the greatest possible production, and has guaranteed to the farmer that he will receive not less than $2 a bushel for his wheat next fall. Conditions later will determine how much more than that, if any more, he shall receive.

Farmers Not "Preferred."

Thinking of this guarantee of not less than $2, a working man recently wrote to a newspaper complaining bitterly because, as he erroneously asserts, the new food control law makes the farmers a "preferred class for whom special legislation is enacted, while those of us who work day in and day out have to pay their outrageous prices and foot the bill."

This complaint objects particularly to the $2 wheat guarantee, thinking that it was passed primarily to benefit the farmer. No doubt that misunderstanding of the true intent of the law lies in the minds of many others, and the purpose of this article is to show, by the text of the law itself, and by action just taken by the government, that the broadest object is protection of the consumers and the strengthening of the national defense in order that we may the more quickly win the war.

In the first place the $2 a bushel guarantee does not apply in any way to the 1917 wheat crop. It is offered for next year's harvest, for "stimulation of production"—to encourage the American farmers to grow more wheat and thus hold down prices.

The president and congress wisely foresaw that unless this measure was adopted and speculation curbed there could be no telling where the price of wheat would go. It has been mounting steadily since the outbreak of the war, and it is tremendously important that America grow larger wheat crops to offset decreased production in the fighting countries.

Means Great Benefit.

The Farmer is convinced that this legislation will carry great benefits to the consumers—to workingmen in the towns and cities—and that the American wheat-growers would probably have enjoyed higher prices if the government had taken no action, but will be content with government control out of patriotic considerations.

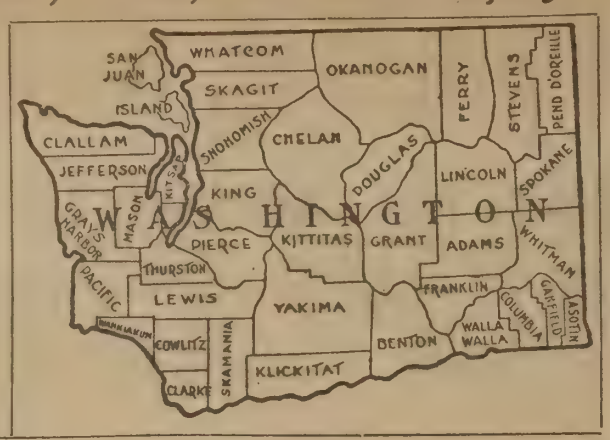
As said before, the $2 guarantee has no application to this year's harvest, and Food Administrator Hoover, acting under the

Continued on page three.

Can a Farmer Sell His Land If It Is Mortgaged to Secure a Loan From the Federal Land Bank? Read Our Information Bureau, Page 10

Rain, Drouth, Heat, Frost Do Injury

Crop Reports Show Damage From Unusual Season to Be Great; Frost Is Among the Elements of Destruction



LEAHY, Douglas County, Wash., Aug. 10.—Injury to the wheat crop in this part of the county from drouth and frost will be 75 per cent. The frost July 29 did more damage than the dry weather, as it killed all the wheat on the low ground where the drouth did not hurt it. I think the prospective price conditions will have a tendency to stimulate live stock, as there seems to be an increase in stock. Almost every one is trying to raise some stock now where there were but few a few years ago. I think every farmer should make a special effort to grow all the stock that circumstances will allow. W. A. GRAY.

First Rain; Then Heat.

STEVENSON, Skamania County, Wash., Aug. 12.—This has been a very unusual season. In the spring there was continuous rain until the last of June so we could not plow or sow, and since then it has been hot and dry. The potato will be a short half crop. The hay did very well and was saved without damage. Corn will not amount to anything unless rain comes soon. Very high water prevented planting bottom land, so the area in crops is reduced by that much. There is quite an acreage of beans and they seem to stand the dry weather pretty well and will make a good crop. There does not seem to be much disposition to dispose of stock nor to increase herds either. I would suggest to increase the meat supply that they allow no calves to be slaughtered for several years, especially females. This is no hog country, so we do not raise hogs for market. I think an increase in stock is badly needed. The strawberry crop was in many parts of the country a failure, while in the eastern end they had a half crop. Cherries were scattered many places and some had a half crop. Pears are next to a failure, while prunes are the same, which never was known before. Apples are heavy and doing well, with some sun scald this hot weather. Apples seem to be falling badly, which I think is due to dry weather. Crop conditions are about the same all over the county. No grain is raised here. Potatoes, hay and fruit are the main products. Blackberries are a heavy crop.

W. T. JACKSON.

Should Import Seed Wheat?

NEPPEL, Grant County Wash., Aug. 9.—The per cent of loss in the wheat crop is 60 per cent. I know two fields, one an early sowing of spring wheat and one a very late sowing, that showed good yields and I believe the better yield was due, in each case, to an imported wheat, early Baart, which has shown good returns for two years past. I think the strain of wheat that the average farmer seeds in the Big Bend is utterly worn out and hundreds of thousands of bushels are lost to trade by such seed. A new seed every two years is best, and no extra labor or expense is required. The trouble is the farmer too often is loth to pay a cent or two extra for seed. The same condition holds him up in live stock products. He cross breeds his stock so many years, and the stock, in most cases, have lost all their original good points. The prices of live stock are no inducement for live stock interests, on account of feed conditions and price of feed, and the short crop of hay is having a tendency to lower the holding of stock. If the farmer could be induced to raise and cure his own pork and bacon for market instead of paying freight to a packing house and all undue expense and profits to several who handle the pork from him to the consumer, it would raise the live stock industry profitably. The storekeeper could be a medium in that respect, were it not for the fact that the catalogue houses are eliminating him. The best way is for the farmer to make his own products for market, and each store using them should be controlled and owned the same as the other combines. This way he controls his own price and stimulates production with the profits that the packer is now making. But the thing sifts back to one sure of equality to all, and federal control is the remedy.

MARTIN PENHALLICK.

Dairymen Are Quitting.

MEAD, Spokane County, Wash., Aug. 11.—As the injury to crops from drouth has not been uniform, it is difficult to give figures, but I should say a fair estimate would be 35 to 40 per cent injury to winter wheat, 50 per cent to spring wheat, and 60 per cent to oats. Potato, summer fallow and cabbage ground seem to have grown the best crops of oats followed by spring plowing packed with a sub-surface packer. Crops and prices will rather tend to depress live stock industry. There is so much of the gamble in the live stock business that few are able to stay with it, notwithstanding the high prices for stock of all kinds. The shortness and high prices of feeds the last two years have driven most men out of the business in this vicinity, many of them probably for good. Regardless of the increase in milk prices, dairymen are still offering their cows for sale. GEORGE HINGSTON.

Use Home-Grown Feed.

PORT ANGELES, Clallam County, Wash., Aug. 15.—Reports from the farmers indicate that the potato acreage in Clallam county this year is about 500 acres and more than double the acreage of last year. Present prospects are that the yield per acre will be light, owing to the unusual dry weather. The acreage of field peas is probably treble that of 1916, but the dry weather has seriously damaged the yield in some of the more dry localities. The reports of the farmers would justify placing the number of hogs to be marketed from the county at 1880, with an average weight of 175 pounds each; beeves and old cows at 800, not including veals. As near as can be ascertained there has been a decrease of 10 per cent in the number of dairy cows in the county. The decrease is due to the reducing of the number of cows in overstocked herds, to avoid buying so much high priced feed. More feed for dairy cows is, as a matter of fact, being produced this season. Some 30 new silos have been built in the county to house silage crops, which means that the farmers are making efforts to make the dairy business one supported by home-produced feeds.

O. T. McWHORTER.

Baart Wheat Stands Drought.

EPHRATA, Grant County, Wash., August 14.—The crop in Grant county this year will be from 50 to 65 per cent of what can usually be expected. However, some of the yields are exceptionally good and are making more than was thought at first. A number of fields will grow 20 bushel or more. The Baart wheat has withstood the drought much better than the Bluestem, and the Bluestem better than the Marquis. Nearly all of the wheat in the county is of either Baart or Bluestem variety. This is the year when good farming shows up. The fields that have been well taken care of and well farmed and properly handled are giving much better results. The early summer fallowing is much better than the late and the crops show it. At a sale held near here recently, stock cattle brought a good, stiff price, showing that the people were interested in increasing their herds.

H. W. REAUGH.

Cultivation Replaces Rain.

CHEHALIS, Lewis County, Wash., July 30.—There has been no crop injury in this county from drouth and heat. We have had a normal July, that is, practically without rain, which has allowed the hay crop to be saved in fine shape. Of course, rain now would help make the potato crop heavier and would benefit the gardens and pastures, but a dry August will not be a material detriment to the crops of this county, providing we have the usual good rain about the first of September that will start the fall pasture to growing. The people who "hollow" every few days for rain are not the ones who have their ground properly prepared and seeded in the spring and give crops a decent amount of cultivation. Crop conditions and prices, especially for milk, are materially stimulating Lewis county live stock conditions. The farmers who are wise and inclined to look ahead are improving their herds and arranging for more feed for stock.

J. C. BUSH.

Rains Help Whatcom County.

FERNDALE, Whatcom County, Wn., July 29.—It is estimated that the recent rains have added from 50 to 60 sacks of potatoes to each acre planted. Kale and mangels have improved accordingly. Pasture is short at present, but most farmers are feeding their milch cows green feed, consisting of oats and vetch or red clover. Now that the haying season is over farmers are devoting their time to picking raspberries and cherries. The local cannery is running to its fullest capacity, furnishing employment for 40 persons and canning about 500 cases a day. There is the usual shortage of pickers on the big places. Beans will soon be ready for canning also and an enormous quantity of them have been raised here this year. Oats are looking fine and promise a bountiful harvest this fall.

MRS. JACK PLASTER.

Should Raise Cattle.

CHIMACUM, Jefferson County, Wash., July 28.—So far the drouth and heat have not injured any crops, but have dried the pastures to some extent. Grass hay is most all in the barns and grain hay is looking good and indicates good hay crops. Early potatoes are good crop and the lowlands were damaged during June to a certain extent. At the prices of grains, hay, etc., it is hard to tell what the farmers should do in the live stock business, but we think there will be nothing lost if the stockmen raise all they can, of both beef and dairy stock. JOHN VAN TROJEN.

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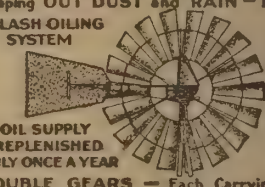
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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 34 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF August 23, 1917

Will Assemble 1000 Head of Stock

Interstate Fair Board Promises Best Features in History of Fair

When the gates of the Spokane Interstate fair grounds open on Monday, September 3, there will be more than 1000 head of the choicest live stock of the northwest and a series of the greatest educational displays and features the fair has ever offered ready for the public to enjoy and profit from.

This is the promise that the fair board is making and which it is striving to fulfill. W. L. Tennant, assistant to President T. S. Griffith, who is handling the entries, expresses assurance that the exposition this year will be the most successful from the standpoint of educational value that the association has ever put on. He states that he has assurance of much larger interest in the live stock departments this year than ever before.

Some idea of the prospects is had from the fact that a total of 3723 prizes are offered this year. There are 120 classes and 15 departments. In every class of each department an unusual interest is already indicated. For instance, in the farm machinery division every inch of space has been sold. The exhibits in this division will include everything from a gopher trap to a combined harvester in operation. The space assigned is double that of last year and all of it was applied for by July 1, where formerly space frequently went begging until a week before the fair opened its gates. This year contracts for exhibition space were actually made while snow was still upon the ground.

This year, with the nation calling for every kernel of grain and every ounce of animal food, the educational scope of the fair becomes broader than ever.

Agricultural products have been the basis of the Spokane exhibition ever since the heavy old time racing program was cut down. In recent years, with the growth of the agricultural area in the northwest, the fair has been offering more liberal cash prizes to induce displays. Until the fair of 1916 the general displays of agricultural products were usually made by counties or district organizations. As a result individuals and small societies objected, claiming that they did not have a fair chance of winning against the competition of the larger organizations. Last year the management adopted the pro rata plan of judging display exhibits in this department.

The New System.

Under the new arrangement, all displays compete together in every section and additional prize money is paid for exhibits made by individuals, farmers' unions and granges, the money in each section being divided according to the score and the extra money offered for the exhibits made by individuals, granges and farmers' unions being added to their winnings in the regular classes.

Under this arrangement a small display of superior quality will win over a large display of poorer quality and every exhibit entered is sure to take away some money. As an instance, the association will give to each grange and farmers' union having an exhibit at the fair, $10 if the society is located within 10 miles of the fair grounds and $15 if it is located beyond the 10-mile limit. This is in addition to the prize of $200 offered for the best display of sheaf and shell grain; $150 for display of grasses and forage crops; $250 for best fruit display; $200 for best vegetable display and $200 additional for displays by local granges or farmers' unions and another $200 added for displays for individuals.

Charles Hebberd



Charles Hebberd, member of the Washington state council of defense, and chairman of the food conservation division of the council, has been appointed state food commissioner by the national food administration. He has gone to Washington, D. C., to consult with national leaders on the work to be done in this state.

Dairymen May Build Condensery

Possibilities of a big cooperative dairy products plant in western Washington loomed up on the horizon of the dairy industry last Saturday when the Skagit County Association of Milk Producers, in called meeting, voted unanimously to raise $200,000 to build a condensery or otherwise control the milk situation in that district. Messages from the associations of dairymen in Whatcom and Snohomish counties indicated support from those counties.

The meeting at Burlington, Saturday, was one of the most significant of the meetings held in connection with the widespread agitation on the part of the milk producers for better prices. A full report of it will appear in next week's issue of The Washington Farmer, and developments will be followed in subsequent issues.

Government Ready

Will Control the Food Situation

(Continued from page one.)

law, has promptly taken steps to cut out speculation, reduce middlemen's profits and hold down wheat and flour prices this year. It is Mr. Hoover's purpose, however, to do that in a way to benefit both the producer and the consumer. As he logically points out in his official announcement:

"It must be clearly understood that the guaranteed minimum price of $2 per bushel for wheat, set out in the food bill, does not apply to the 11917 harvest but only to the 1918 harvest. There is therefore no determined price for the 1917 harvest. The result of this situation is that the normal price-making machinery is entirely broken down, and unless some efficient government action is brought into play, either—

"(a) The American producer may face a slump in wheat, possibly below his production cost.

"(b) The export price of wheat, which ultimately determines the real price, will vary at the will of a single agency (through the allies' plan of concentrating all their buying in the hands of a single agent).

"(c) Some one might buy the surplus wheat at any given moment, and if the surplus passes into speculative hands, it will be held for higher prices later in the year.

"(d) Without stabilized prices extra hazards are introduced into all distribution links, which must be paid for by the consumer."

The Government's Plan.

Therefore, as Mr. Hoover announces, the food administration has determined to take the following course:

First—In order to eliminate speculation in wheat and flour, all elevators and mills of over 100 barrels daily capacity will be required to take out a government license, and the conditions of this license to be that only reasonable and customary charges shall be made for warehouse service.

Second—The grain exchanges are being asked to suspend all dealings and quotations in future wheat.

Third—In substitution of the broken down marketing machinery, the food administration plans to open agencies for the purchase of all wheat at the principal terminals, carrying on its transactions with the usual dealers, and is prepared to take the whole harvest if necessary, in order to maintain a fair price, and will resell wheat for export in such quantities as we can afford to part with in protection of our own people on one hand, and to sell on the other to the millers for domestic consumption.

The price of the 1917 crop of wheat to the farmer will be fixed soon by a committee, of which President Garfield of Williams college, son of former President Garfield, will be chairman. As Mr. Hoover further points out:

"It should thus be clear that it will not be to the advantage of any producer to hold back his grain in anticipation of further advance, for he will do so only at his own cost of storage and interest."

As soon as the wheat and flour industries have been put under regulation, the food administration plans to extend its control to bakeries, hoping to reduce the price now paid for bread.

Mr. Hoover, therefore, is seen to have at heart both the interest of the producer and the consumer, and it is the duty of all patriotic citizens to help him in every way possible. The plan holds out great benefits to the nation.

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WILL CONFER ON GRAIN.

Experts Meet in Spokane Aug. 27.

A conference of national agricultural experts, called by the United States department of agriculture, will be held in Spokane on August 27 to formulate a program to stimulate the production of wheat next year. A preliminary conference was held at Washington last week, and before coming to Spokane conferences will also be held at Atlanta, Indianapolis and Kansas City. Dr. I. A. Pearson of Iowa State college will preside.

The new food law has laid a good foundation for this important endeavor by prescribing a guaranteed price for the 1918 wheat crop of "not less than $2 per bushel at the principal interior primary markets," to be "based upon No. 1 northern spring or its equivalent."

Under the law the guaranteed price for the 1918 crop must be not less than $2. It may be more in the discretion of the president. Full investigation by the experts who are called to the Spokane conference may disclose the advisability, from the viewpoint of national interest, of the government pledging a better price than $2.

To increase production we must increase acreage. We must induce the American farmers to sow wheat on

(Continued on page seventeen.)

GRANGES WILL PICNIC

Fair and Good Time Are Promised

Next Thursday, August 30, the Valley Prairie grange near Hillyard, Wash., and other adjoining granges will join in a fair and picnic. Every one is invited, say the representatives of the Valley Prairie grange, who have charge of the affair, whether a grange member or not. Each family is expected to bring a basket of food and every producer is urged to bring a sample of his products to add to the display. The day will be spent at the Valley Prairie schoolhouse.

HEAVY LAMBS GO EAST.

Oregon Producer Ships to Chicago

A shipment of unusually heavy spring lambs was recently made by Smythe Brothers of Pendleton, Ore., to Chicago, and reports of their weight and the price which they brought have just been received. The average weight was 86 pounds, and the price received 15 cents a pound, making an average of $12.90 each. There were over 4000 head in the shipment.

Three New Silos.

Three farmers have definitely decided to put up stave silos as a result of a silo campaign at Neppel conducted by County Agriculturist H. W. Reaugh. There are no silos now within 25 or 30 miles of Neppel.

Should Fix Price on Potatoes

Government Should Protect Farmers Who Answered Call

Unless quick action is taken by the government under the new food control bill, enormous quantities of potatoes will perish in the Pacific northwest.

L. J. Blot, sales manager of the Spokane Fruit Growers' company, which last year handled a big potato tonnage, declares that the situation is critical.

With a total acreage in potatoes this year of 27,783 in Washington alone, according to the figures of the department of agriculture, compared to little more than 10,000 acres in 1916, Washington potato growers face a financial setback the coming season, unless the food administration places a minimum on the price to the grower.

"The Washington potato deal will open in September," said Mr. Blot. "I expect to see it open at 75 cents per 100 pounds and will not be surprised if it opens at 50 cents."

"Potatoes are sprouting now because of the hot, dry, short season. That shortens their life at least 30 per cent and at best they keep in storage not more than seven months. The demand for potatoes is fixed and it is almost impossible to increase it.

"The grower is confronted with the prospect of unusually low prices, for the acreage is large and the crop fairly good in all sections this year. The government last spring urged every farmer to put every acre into potatoes that he could, and the increased acreage is the result, although the farmer had to pay $3.50 to $4 per hundred for his seed, an exorbitant price.

"I believe the minimum should not be less than $20 per ton, or $1 per 100 pounds, net to the grower. That will insure the grower a reasonable profit and will not make a high price for the consumer. If the minimum is not established, many growers will face ruin, and the next season will see a falling off in acreage, for the potato grower, once bitten by a bad year, is twice shy."

This serious situation calls for prompt action by the government, and the new law is framed for just such emergencies. Section 11 provides:

"That the president is authorized from time to time to purchase, to store, to provide storage facilities for, and to sell for cash at reasonable prices, wheat, flour, meal, beans and potatoes."

Under this provision the government could set a reasonable price to the grower, buy up their potatoes, store them and distribute them throughout the year to consumers at reasonable prices.

Quick action is needed. The situation should promptly be brought to the attention of Mr. Hoover by the granges, farmers' unions, farm loan associations and other agricultural bodies, and by senators and representatives in congress.

Alfalfa, "the Best Kind of Fodder"

It is interesting to note that alfalfa is a Spanish word from the longer Arabic word, al-facfacah, meaning "the best kind of fodder." The alfalfa plant is a native of Asia, but has been cultivated in the east since ancient times. It was introduced into South America by the Spaniards. About 1850-60 it began to be cultivated in California and since then has spread throughout the western and eastern states, being now one of the best forage crops of the United States. The plant is also known as lucern from the French luzerne. It is also interesting to note that the American type of alfalfa is sometimes called western alfalfa to distinguish it from the German or eastern type. It grows taller and is more productive, and withstands more cold and drouth. These characteristics have probably been acquired through acclimatic conditions during the slow migration of the Spanish or Arabic type of alfalfa throughout the arid and semi-arid regions of Mexico, California, Colorado and western Texas, so that by the time it has reached the plains and central west and is invading the eastern states, a type more or less distinctly American has been fixed.

In 1916 the alfalfa crop of the United States was estimated by the department of agriculture at 16,591,000 tons, some 3,500,000 tons less than the crop of 1915. In 1916 Nebraska leads with a production of 2,646,000 tons, California following with 1,838,000 tons, Kansas comes third with 1,588,000 tons, Colorado fourth with 1,213,000 tons, Idaho fifth with 888,000 tons, Wyoming sixth with 741,000 tons, Montana seventh with 715,000 tons, Utah eighth with 600,000 tons, South Dakota ninth with 583,000 tons, Arizona tenth with 527,000 tons, Oklahoma eleventh with 487,000 tons, Washington twelfth with 441,000 tons, and Oregon thirteenth with 430,000 tons.

For a score of years more or less the State College of Washington at Pullman has been hammering away on the alfalfa question and many facts of interest and value are connected with the field on the college farm which has been in alfalfa for a series of years. Former President Bryan of the state college declared more than once that the alfalfa campaign waged during the years by the college had been worth a million dollars to the state.

Alfalfa Is Tested

Growers Report Success With It

Wishing to learn something of the progress of alfalfa growing in this state, The Washington Farmer sent out inquiries to several hundred alfalfa growers in different parts of the state. Replies are beginning to come in, the first instalment being herewith given:

B. F. REED, an extensive alfalfa grower of Kittitas county, in speaking of his experiences with the growing of the plant, says: "I have about 850 acres in meadow this year. As almost all of my meadow is timothy and alfalfa mixed, the first crop will be mixed hay, of which I will probably have 2000 tons, and the second crop alfalfa, about 500 tons. I do not have water on all places for the second crop. I pasture my meadows after the second crop has been taken off, mostly with sheep, and it brings about $1.50 per acre. Alfalfa is fine pasture for any kind of live stock. I have had no experience with alfalfa as silage. Two years ago we planted 400 acres of wheat on an alfalfa meadow, which we plowed up. Although we worked the ground over time and time again some of the old roots remained. We got a fine crop of wheat and from the plants which grew from alfalfa roots there came so much alfalfa seed that the thresher offered to accept alfalfa seed for his pay for threshing. However, we saved and cleaned this heed and had some 1200 pounds, which brought us 16 cents a pound for that we sold."

HANS HARDER, owner of one of the largest stock ranches in eastern Franklin county, and whose horses, cattle, sheep and swine are of the best breeds, has been growing a small acreage of alfalfa for four or five years. Mr. Harder is well satisfied with alfalfa as stock feed, especially as cattle pasture. He writes of his experiences as follows: "The average of my 60 acres of alfalfa is about five tons to the acre per season, and the yield now is a little less than last year. After cutting my third crop of alfalfa I pasture the field until New Years and find it excellent cattle pasture. I find it good feed for all stock, horses, cattle and sheep, excepting aged horses and colts. There is a sort of blue grass which succeeds with the help of a little time to crowd out our alfalfa. I find that it is exceedingly hard to start alfalfa on alkali ground, but after it has once shaded the ground, it is practically safe and does quite well. I have had no experience with alfalfa silage."

One of the Best Crops.

Mike Moran, a farmer of Chelan county, who has always had a good acreage of alfalfa, says about its use: "I think alfalfa is one of the most profitable crops any farmer can raise, and one of the best single feeds he can feed to all kinds of stock. Horses do well on it, better than any other hay, and for cattle, hogs or sheep it has no equal. Any dairy farmer who has alfalfa and good corn silage, well eared, need not worry very much about the high cost of grain as his stock will do well on these two feeds alone and look well."

In Columbia county William Chandler has not raised any alfalfa during the last four years, although at one time he had about 15 acres in. Mr. Chandler has had to contend with so many gophers that he has planted his acreage to wheat, but intends to return to alfalfa this fall.

In Benton county the farmers cut on the average three crops a year, although many get four crops, but usually the meadow is pastured in the winter. They do not find it necessary to inoculate the soil before sowing and usually sow wheat as a nurse crop. It is the standard feed in the Prosser valley for horses and cows, with silage also for the cows. There is a mill at Prosser that makes alfalfa meal, which many farmers feed to the hogs and chickens.

Uses Alfalfa Meal.

Another successful grower of alfalfa under irrigation in Franklin county is the Carstens ranch at Pasco. O. Richter, superintendent of the ranch, writes: "We have about 160 acres in alfalfa now and we grow this entirely under irrigation, under our own pumping system. The first and the second crops this year are splendid, although a bit later than other years; the third crop has not been cut and will also be several weeks later than formerly, and owing to that, we may not have any fourth cutting this year, but excellent pasture in late fall. Outside of this ranch there is not a general increase in the acreage or production of alfalfa, owing perhaps to the inability to secure enough water cheaply to irrigate the fields; in fact, this year the production seems to have decreased considerably under the other public water and irrigation systems. We pasture our hogs on alfalfa and add a little grain to the fattening hogs as well as to growing shoats, the latter about one pound of grain per day and all the green alfalfa they can eat. In the winter we make alfalfa meal and feed this to all the stock, hogs, chickens, beef and dairy cattle, horses, plus a certain amount of cut and shredded corn stover (combining the protein with the hydrates). Thus far we have not cut green alfalfa for silage."

Organization of Home Guards

Communities wishing to organize guard companies will find their procedure clearly laid down in the following blank prepared by the state council of defense:

The question of arms to be furnished by the state is as yet undecided, and for the present no definite information can be furnished on this subject. Several of the home guard companies are furnishing their own arms.

I, the undersigned, a citizen of the state of Washington, county of.....

....., do hereby make application to the governor of the state of Washington for permission to organize a company of home guards, as a military company with arms, to the number of not more than.....

men, to be known as home guards company.....of.....;

this permission to extend for one year and until the termination of the present war with Germany; subject, however, at all times to revocation at the will of the governor.

.....

Residing at....., in the County of

....., State of Washington.

Street address .....

I have examined the qualifications of the above applicant and the character and class of men that he proposes to recruit, and I hereby approve of the granting of such application.

.....

Chairman of Council for Patriotic Service

for.....County, Washington.

STATE OF WASHINGTON, COUNTY OF THURSTON, CITY OF OLYMPIA.

The foregoing application of.....

to recruit and maintain a company of home guards, is hereby granted for the period of one year and until the termination of the present war, the applicant to file in triplicate within 30 days with the state council of defense, at Olympia, a list of the names and addresses of the men composing each company, and from time to time to file additions or alterations thereto as any changes in his company demand.

Dated at Olympia, this.....day of.....1917.

.....

Governor.

SWAT POTATO BUG.

Prevention Is Better Than Cure.

To the Editor: Western Washington is a great potato raising section. During the last 35 years here I have not seen or heard of any striped Colorado potato bugs or beetles. If they come every one should fight them as they would a prairie fire or a fire in a neighbor's house that touched their home. An ounce of prevention if worth 50 pounds of cure. Fifty years ago we fought them out of Wisconsin by killing every bug that could fly and crushing every cluster of eggs they laid under the potato leaves. We poisoned the larvae by lightly sprinkling potato tops with water containing a teaspoonful of paris green to a bucket of water or dusting the leaves with road dirt or air slacked lime containing paris green or by a tight bottom sled drawn by a horse through the rows, one bright boy riding the horse and another riding on the end of the sled, turning a crank on one reel connected by a rope or belt that turned a reel on the other side. As the horse rapidly walked, the reels beat the larve into the sled and they were crushed or burned. An extra fast growth of tops keeps ahead of the bugs.

L. K. COGSWELL.

Chehalis, Wash.

Fights Fire With Brush.

To the Editor of The Washington Farmer: In reading Mr. Fishback's list of modes of fighting fires, will add a great improvement on his wet sack. I came from a state where we had more or less fires to fight, spring and fall. What we used there was brooms; one that is half worn is best, as it is stiffer, or a new one with three or four inches chopped off. One man with a broom and one with a bucket of water can sweep out more fire than five men can with sacks, as the sack has a tendency to fan the flame. If you have occasion, try the broom-and-bucket-of-water method. W. S. MALTMAN.

Yelm, Wash.

No Napkins in Germany.

The textile shortage now deprives Germany of napkins and tablecloths, the use of which in hotels and restaurants in that country has been forbidden. Hotels are prohibited changing bed linen oftener than once a week.

King May Join Other Dairy Counties

Western Washington Milk Producers Strengthen Their Organizations

By PAUL E. TRIEM

One hundred King county dairymen attended a meeting at Kent a few days ago, at which addresses were delivered by organizers from Snohomish and Whatcom counties. The officers of the King county association—D. E. Griffith, president; Fred Nelson, vice president; F. B. Cavanaugh, treasurer; and M. F. Swalwell, secretary, report the work of organizing the county as progressing rapidly, in spite of the delays which the progress of harvesting inevitably entails.

O. P. Brown of the Whatcom association presented some interesting figures and calculations on the ratio of investment between the farmers who produce the milk and the condensers who finish it for market.

"My farm is valued for taxation purposes at $20,000," explained Mr. Brown. "In the course of one year, I furnish enough milk for approximately a two-day run of the condensery. That means that it will take about 180 farms like mine to supply the milk for the year's run. These 180 farms will represent an investment of $3,600,000, while the condensery which practically controls our output and makes the price to us for our milk and the price to the public for the finished product is valued at just $50,000."

Taking up the subject of milk, in which butterfat has been replaced with vegetable oil, Mr. Brown stated that one of the condenseries in Mt. Vernon and two in Snohomish county were turning out nothing but this milk produce. Under the milk bill passed by the last session of the state legislature, it can not be sold as "condensed milk"; it can be sold as a "milk product," however, and as it is said to be impossible for any one but an expert to distinguish this article from the best grades of condensed milk, the possibilities to the manufacturer who controls the patented process for making it are seen to be immense. The butterfat taken out of the milk and replaced by vegetable oils can be thrown upon the market in quantities, and just what bearing this will have upon the output of country creameries is a matter of considerable difference of opinion. Some dairymen who have made a study of the subject claim that the process will give the people controlling it practically a domination of the northwest butter market.

In Union Is Strength.

In concluding his address Mr. Brown touched upon the constructive possibilities of the new move for organization.

"So long as we act individually," he commented, "we are absolutely helpless. We can go to the condensery people and tell them that we must have more money for our milk if we are to continue in business, but that is as far as we can get until we are able to act as one body. We must be in a position to have a fair understanding with the manufacturers as to production costs and profits; and if we can not have this understanding and can not get them to agree with us on a fair and constructive program, we must copy their methods by employing the best technical experts to be found anywhere, and setting them to work to determine whether we should build a condensery or a cheese factory or a creamery. From 5 to 7 1-2 per cent added to the present investment of the dairy farmers will build a better plant than the manufacturers now have. We, the producers, already have invested 50 times as much as the condensers have. We must protect our investment by following their method of employing the best technical advisers we can find."

President Lee of the Snohomish association declared that dairymen are making very little more now than they formerly made. Milk prices are high, probably higher than they have ever been before; but the great increase in feed prices has largely offset this.

Great applause following Mr. Lee's declaration in favor of a consolidation of the four associations now organized in King, Snohomish, Skagit and Whatcom counties.

"Every other line of industry is organized," President Lee pointed out, "and the farmer must organize or be frozen out. We are going to see if the farmers for once can't get a square deal."

Give Low Tests.

The Snohomish county man had a few practical details to add to the indictment of the condenseries. After the formation of the testing association, to which he belongs, he was not long in discovering that his test as determined by the association tester was about three points above the test given him at the condensery. He called there, and was told that the association tester didn't know anything about the business. Mr. Lee invited the condensery man to come to his farm and see the association tester work.

"And he came, and I left him and the tester together while the test was made. My test was 3.7—I didn't have a cow in the herd that tested as low as the condensery was rating me. When I asked the condensery man if he was satisfied with the test, he said he was. He had seen it all, and he had to admit that the association tester did know his business after all—but that was as far as it went. My test at the condensery remained just where it had been, and when we suggested that our tester be allowed to come down there and test our milk after it was received at the plant, permission was granted provided he used the testing apparatus furnished by the company. No other apparatus would do. And I am told that the same thing is happening right along at Monroe and in Whatcom county—there is a three-point difference between the condensery test and that of the testing associations. When you go to the condensery to kick, they are sorry—but that is as far as it ever goes. They will promise to investigate—but nothing ever comes of their investigations."

Membership Increasing.

Mr. Lee predicted that before long 90 per cent of the Snohomish dairymen would be members of the association.

J. Guiteau, also of the Snohomish association, said that 2000 cows had been signed up with the association in one period of 30 days, and predicted that 1000 additional cows would be secured within the next 30 days. Mr. Guiteau explained in detail one clause of the contract which is being used in King county, and which is very similar to the contracts used by the other northern counties. This clause, which gives the trustees of the association power to control the sale of milk by all members, has been misunderstood by many dairymen.

"A tight contract is necessary," the speaker commented. "That is where our previous organizations have failed—they have not been sufficiently powerful to act in more than an advisory capacity. When a committee from one of these loosely organized associations called at the condensery office, the members were given a three-minute interview in the outer office with some minor official. Now the company people are going up into Skagit county and are doing the interviewing themselves; their cry is, 'Be fair, boys!' The truth of the matter is that after all expenses have been paid, the dairymen who produce the milk are entitled to a fifty-fifty division of all profits made on it."

Mr. Guiteau concluded by telling a story which he insisted was "true." It seems that J. B. Hall, of the Skagit association, buys calves in the intervals of his other farm work. One day Mr. Hall drove into John Kill's farm yard, only to find that the Kill family was away from home. In the barn, however, the visitor found a calf which he thought he could use in his business, so he dumped the animal into his machine and drove home. He didn't see Mr. Kill for some time, and then they met in the office of the local condensery. The calf buyer explained the details of his visit, and told of finding and helping himself to the calf.

"And I'm going to give you two dollars for him," Joe Hall concluded.

"Why, that is a fine calf," said Mr. Kill. "He's worth more than that—I ought to get at least three dollars!"

"Nothing doing!" his neighbor assured him. "I'm going to pay you two dollars, and that's all."

One of the condensery people had overheard the argument, and at this point he interrupted:

"Is that the way you people do business?" he demanded. "First take a man's property away from him, and then make your own price on it?"

"Sure," said Mr. Kill. "You condensery people have been doing that to us for so many years that we're used to it!"

Interest and Principal Go Together

Land Bank President Illustrates Payment of Farm Loan

There are numerous persons who do not understand the difference between the method of paying off a loan under the farm loan act and the method used in paying off a common loan. The amortization plan of the farm loan system provides that a small payment shall be made semi-annually, this payment to include the accrued interest and a small part of the principal. Thus, with each payment the principal is reduced and therefore the interest accruing for the next payment is also reduced, so that each succeeding payment is made up of a gradually decreasing interest payment and a gradually increasing principal payment. The payments are calculated so that at the expiration of the loan the last payment will completely wipe out the debt, both principal and interest.

The difference between this and the ordinary loan is that when the time of the common has expired the entire loan must be paid off at once, with whatever interest may have accrued.

The Thirty-six-Year Loan.

The farm loan bank prefers to have its borrowers take out loans on the 36-year payment plan. The regular payments under the 36-year plan is equivalent to the payment of 6 per cent interest on a private loan, but at the end of 36 years the principal of the farm loan under the federal act will have been wiped out.

President D. G. O'Shea of the northwest district bank aptly illustrates the payment method as follows:

"It may be illustrated by saying that the charges are similar to a case in which one person would offer to loan to another a stated sum on a farm mortgage and say to him, 'Pay me 6 per cent on this for 36 years and then I will cancel the principal and you will owe me nothing, and during all the time I will ask you for nothing other than the semi-annual payments that will aggregate 6 per cent.' If put that way, every borrower would seek such a lender and not be deterred by a fanciful perplexity of 'red tape.'"

The following table shows the semi-annual payment on a loan of $100 from the farm bank on the 36-year plan, and shows also the proportion of each payment that goes to pay interest and to reduce the principal of the debt. For any sum larger than $100 the payment will be in exact proportion.

Payment No.	Instalment.	Interest.	Applied on principal.	Principal still unpaid.
1	$3.00	$2.50	$0.50	$98.50
2	3.00	2.49	0.51	98.99
3	3.00	2.48	0.52	98.47
4	3.00	2.46	0.54	97.93
5	3.00	2.45	0.55	97.38
6	3.00	2.43	0.57	96.81
7	3.00	2.42	0.58	96.23
8	3.00	2.41	0.59	95.64
9	3.00	2.39	0.61	95.03
10	3.00	2.38	0.62	94.41
11	3.00	2.36	0.64	93.77
12	3.00	2.34	0.66	93.11
13	3.00	2.33	0.67	92.44
14	3.00	2.31	0.69	91.75
15	3.00	2.29	0.71	91.04
16	3.00	2.28	0.72	90.32
17	3.00	2.26	0.74	89.58
18	3.00	2.24	0.76	88.82
19	3.00	2.22	0.78	88.04
20	3.00	2.20	0.80	87.24
21	3.00	2.18	0.82	86.42
22	3.00	2.16	0.84	85.58
23	3.00	2.14	0.86	84.72
24	3.00	2.12	0.88	83.84
25	3.00	2.10	0.90	82.94
26	3.00	2.07	0.93	82.01
27	3.00	2.05	0.95	81.06
28	3.00	2.03	0.97	80.09
29	3.00	2.00	1.00	79.09
30	3.00	1.98	1.03	78.07
31	3.00	1.95	1.05	77.02
32	3.00	1.93	1.07	75.95
33	3.00	1.90	1.10	74.85
34	3.00	1.87	1.13	73.72
35	3.00	1.84	1.16	72.56
36	3.00	1.81	1.19	71.37
37	3.00	1.78	1.22	70.15
38	3.00	1.75	1.25	68.90
39	3.00	1.72	1.28	67.62
40	3.00	1.69	1.31	66.31
41	3.00	1.66	1.34	64.97
42	3.00	1.62	1.38	63.59
43	3.00	1.59	1.41	62.18
44	3.00	1.55	1.45	60.73
45	3.00	1.52	1.48	59.25
46	3.00	1.48	1.52	57.73
47	3.00	1.44	1.56	56.17
48	3.00	1.40	1.60	54.57
49	3.00	1.36	1.64	52.93
50	3.00	1.32	1.68	51.25
51	3.00	1.28	1.72	49.53
52	3.00	1.24	1.76	47.77
53	3.00	1.20	1.80	45.97
54	3.00	1.15	1.85	44.12
55	3.00	1.10	1.90	42.22
56	3.00	1.06	1.94	40.28
57	3.00	1.01	1.99	38.29
58	3.00	0.96	2.04	36.25
59	3.00	0.91	2.09	34.16
60	3.00	0.85	2.15	32.01
61	3.00	0.80	2.20	29.81
62	3.00	0.75	2.25	27.56
63	3.00	0.69	2.31	25.25
64	3.00	0.63	2.37	22.88
65	3.00	0.57	2.43	20.45
66	3.00	0.51	2.49	17.96
67	3.00	0.45	2.55	15.41
68	3.00	0.39	2.61	12.80
69	3.00	0.32	2.68	10.12
70	3.00	0.25	2.75	7.37
71	3.00	0.18	2.82	4.55
72	4.66	0.11	4.55	.....
	$217.66	$117.66	$100.00	

Washington Portaits No. 29.



W. L. Allen.

W. L. Allen, one of the progressive men of Cowlitz county, believes in raising all that one can at home, such as beans, potatoes and onions. He has a method of treating his soil that prevents wire-worms in the vegetables. Mr. Allen received his early training in farming on a large farm in North Carolina, where he raised a large variety of farm produce, and had a fine herd of choice dairy cattle, horses, sheep and hogs.

The next in the series of Washington portraits will be that of S. S. Wilson of Vader, and will be given in next week's issue of the Washington Farmer.

Fair Dates.

Pendleton, Roundup—Sept. 20-22.
Boise, State—Sept. 22-29.
Salem, State—Sept. 24-29.
Helena, State—Sept. 24-29.
Lewiston, N. W. Lvst.—Nov. 16-23.
Portland, Pac. Nat. Dairy—Nov. 16-23.
Portland, Pac. Int. Lvst.—Nov. 19-24.

Washington Fairs and Shows.

Chehalis, S. W.—Aug. 27-Sept. 1.
Spokane, Interstate—Sept. 3-8.
Elma, County—Sept. 5-9.
Mabton, Hay Palace—Sept. 11-15.
North Yakima, State—Sept. 17-22.
Woodland, County—Sept. 18-22.
Rosalia, Lvst.—Sept. 20-22.
Lynden, County—Sept. 25-29.
Garfield, Roundup—Sept. 26-29.
Shelton, County—Sept. 27-29.
Burlington, County—Oct. 1-6.
Puyallup, Western—Oct. 2-7.
Palouse—Oct. 4-6.
Port Angeles, County—Oct. 11-13.
Colville, Live Stock—Oct. 17-19.

Closed Shop Danger.

The employers of Berkshire county, Massachusetts, have organized an association to "educate people to the danger of the closed shop and to establish a free employment bureau.

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GUARANTEE OF ADVERTISEMENTS.

We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

It Is Because We Do Not Realize

If one member of your family were sick and required a certain amount of a particular kind of food to sustain life for the coming month, and you had or could get only twice or three times that much for the entire family, what would you do? You would immediately begin to reduce your own eating of that particular kind of food and make your meals of other foods so that the ill member of your family would be assured what he had to have to live.

There is a world-wide parallel to a case just like this. America's allies in Europe are facing a shortage of wheat, meat, fats and sugars that threatens their very existence. America has enough of these articles to supply them, but not enough to supply both them and itself full rations. What are we American citizens going to do about it?

If our patriotism is what it ought to be in the face of this unprecedented crisis we will reduce our eating of wheat bread, wheat cakes, wheat mush, beef, bacon, mutton, butter, lard, sugar and the like, and make a greater part of our meals from such foods as vegetables, fish, poultry, eggs, corn bread, rye bread, oatmeal and other perishable or semi-perishable foods.

A change like this is not going to work a hardship on anybody. It is not going to require anybody to eat less than he wants or needs. It is not going to require anybody to eat less nourishing or less palatable foods. It is merely going to require that foods which the soldiers in Europe can not use satisfactorily, or which can not be shipped to them, be eaten here and the staples—wheat, red meat, bacon, sugar and fats—which they must have if they are to win over Germany, saved for exportation to them.

The idea that the policy of saving these staples will reduce the price of them is likewise foolishly founded. There is need for more of them than the world possesses or can produce. To save them for allies in Europe, includuing our own soldiers, is merely to divert them to a different market. The grower of wheat or beef has nothing to fear from the movement. He should join heartily and loyally in it. Every man, woman and child should join in it. The success of England and France depends upon it; our own success depends upon it; our own liberties depend upon it; civilization itself depends upon it.

When we continue to eat wheat three times a day, or staple meats every meal that we want them, or use more butter or sugar than we need we are disloyal; we are—no, we are not slackers. We just don't realize.

Making Judges of Boys and Girls

When the county and state fairs, and many of the smaller district fairs, established the custom of awarding prizes to boys and girls for judging stock, poultry, fruits, vegetables and all manner of exhibits, they did a great thing for the future of the farming industry. They put a premium on practical study and observation.

Now, in several northwestern counties, the county agents and others directing various movements for the betterment of agriculture are going one step further. They are conducting classes throughout their counties or districts for the purpose of educating the boys and girls along the lines of judging products.

To illustrate, one agent in the state of Washington has arranged 11 stock-judging schools for the last few days previous to the fair, in his territory. Boys in eleven localities covering the county are called together to get pointers on judging, and they will go to the fair and compete for prizes in judging the beef cattle, sheep, hogs, horses and dairy cows.

The live stock and agricultural industry of ten years hence will show the result of this movement. It is making better farmers and better men and women out of the boys and girls.

The Submarine a Benefactor

Kaiser Wilhelm intended that the submarine should prove the downfall of England and America, but he miscalculated. It proved a great weapon. For a time it actually threatened to bring England to her knees, and if it had succeeded, this country would have been in jeopardy. But the submarine is proving a boomerang. It is already turning and very soon will deal a smashing blow to Germany.

Heretofore the ocean shipping of this country has been almost negligible compared to either that of England or Germany, but the submarine made it necessary that the United States build up a merchant marine. Consequently, shipbuilding is under way in American yards now that within a few years will establish this country in the foremost ranks of carriers of ocean commerce. Instead of destroying the power of England and America on the seas as he planned, the German dictator has started the wheels of English and American industry that will not only insure the livelihood of these countries, but will insure to them commercial supremacy over Germany for all time to come.

Quality Rather Than Quantity

Every once in a while we come across a story of somebody who has made surprising records and a large net profit from a few hens, or a few cows. The secret of this is in the quality rather than the quantity of animals.

The successful live stock producer, whether he raises beef cattle, hogs or poultry, is the man who gets high production at a low cost. It is not always true that the good cow costs no more to feed than the poor cow, but it is true that the difference in the production of the two is so great that the slight difference in feeding cost is far overbalanced.

When poultrymen get down to business and prove their layers as thoroughly as the successful dairyman tests his cows, the poultry business will begin to establish itself solidly on right principles.

Community Canning Plant

O. T. McWhorter, county agriculturist of Clallam and Jefferson counties, Washington, reports that the projected community canning plant for the Port Townsend schools has been installed, having a capacity of 800 cans per day. This has been placed in the basement of the high school for the use of the community. The Quilcene school also asked the county agent to secure a family size pressure cooker for their school, and this cooker has been delivered. It will be for the general use of the community.

Weed Out the Culls

"Don't sell your breeding stock!" cry a host of farmers' advisers. Why not add, "if the breeding stock is any good"? Better stock conserved will be of immense benefit to the country. Merely keeping the poorest for foundation stock is of no benefit to the farmer or to his country.

Washington Gleanings

Contract has been let for a $17,000 warehouse at Wenatchee.

Professor A. B. Nystrom, head of the dairy department of the state college, has established headquarters at Chehalis as county agriculturist of Lewis county for at least two months. Dairying is one af the leading industries of that county.

The price of alfalfa in carload lots gives every prospect of being higher than it was last year. Buyers for western Washington deliveries are unable to secure contracts for less than $16 and $17 in carload lots. This means $20 the ton.

Reports that have come to the office of State Fire Warden Pape at Olympia indicate that much of the fire danger in the state is caused by carelessness of motorists and campers, who leave their fires burning to the menace of surrounding timber.

Girls and boys' canning clubs of Spokane county will can close to 50,000 gallons of foodstuffs if expectations of O. S. Fletcher, assistant county agriculturist, are realized. Mr. Fletcher recently estimated that the clubs of Spokane county would make a net profit of $12,000 this summer.

Encouraging reports on corn planted throughout the Pacific northwest this spring as the result of the corn-raising campaign being conducted by the Exchange National bank of Spokane, are being received by the bank officials, who will stage the second annual corn show in Spokane November 19 to 24.

According to an estimate made by F. L. Miller and A. J. Buchet, the number of cattle in Garfield county is 25 per cent below the average, and hogs are still more scarce. A little bunch of hogs running with the Miller cattle last winter, after being fed 300 bushels of wheat in the spring, sold for $5400.

The Pride Brothers' Preserving company of Bellingham have received a $200,000 order from a San Francisco wholesale company for jams and jellies, but will not be able to furnish more than three or four carloads of the 40 carloads required to fill the order, on account of the inability to secure the necessary fruit.

A. L. Rogers, Waterville banker, farmer and former regent of the state university, and now the farm labor member of the state council of defense, says that the Washington State Harvesters' league is the weapon that will put the I. W. W. element out of business as far as interference with the gathering of the crops is concerned.

The 1917 Puyallup summer session has been adapted to present and future war time needs of the country. Academic branches have been dropped and the energy and effort of the school have been concentrated on problems of more efficient production, greater conservation of wealth and energy, and wiser and more economic consumption.

Eighteen hundred acres of potatoes are being grown in the Tieton project, according to a report compiled by G. C. Finley, superintendent of irrigation. Last year 1350 acres were raised. Nine hundred acres of beans are in this year, compared with 160 in 1916, and 650 acres of sugar beets are being grown, where last year there were none.

What Others Say

Advance, Wenatchee: The truest patriotism in times like this is the patriotism that is willing to be fair.

Advocate, Richland: If people would play more they would live longer, work better, accomplish more and be far happier.

Gazette, Colfax: One of the most fatal errors that one can make is to underestimate the strength of a foe. That is one error this government is not making.

Citizen-Journal, Rosalia: If you have plenty of eatables, more than needed, make it known and allow the people who really need it to take it at a price agreeable. This is patriotism and will help solve the food problem in this country this year.

Republic, North Yakima: Reduced to an acreage basis and distributed over a period of 20 years good roads are costing farmers in some of the eastern states from 8 to 10 cents an acre per year. There is no farmer in the Yakima country who would not afford to pay that price for roads which would enable him to come to town 365 days in the year.

Pope Proposes Peace

Terms Not Satisfactory to Allies

The first definite step in the direction of possible peace negotiations from a source of influence recently was recorded last week when Pope Benedict, head of the Roman Catholic church, directed a message to all the warring governments suggesting terms upon which he expressed the hope peace could be built up. At this writing no favorable action has been taken upon it, and it seems assured that the nations opposing Germany and her allies will reject the offer to confer on the proposal. It is considered by them, in unofficial expressions of sentiment, that the proposed terms would not insure the abandonment of the present autocracy and militarism of Germany and Austria, which is the object for which the war is being fought by America and her allies.

The proposal of the pope includes the restoration of Belgium and the northern Franch territory now held by Germany, and the restoration to Germany of all her colonial possessions that have been taken by the allies. It does not, however, provide for the restoration of Serbia and Rumania, which are now held by Germany, and it leaves to later discussion the questions involving the Austrian-Italian front. If the terms of peace suggested by Pope Benedict were agreed upon it would give Germany control of a vast stretch of terrritoy from the Baltic sea to Palestine, including the present territory embraced in Germany, Austria, Serbia, Rumania, Bulgaria, Turkey and Turkey in Asia Minor. It would leave in the control of Germany the Dardanelles and Constantinople, the hoped-for outlet of Russian produce to the Mediterranean and thence to the Atlantic ocean.

The proposal provides that under international agreement armaments shall be reduced, which is one of the objects sought by the allies. But it does not require that the form of Prussian government shall be democratized. It would leave the present autocratic family of Hohenzollerns in control of the German empire, the principle of the divine right of kings still in force. America, England, France and their allies are prone to look upon a continuance of the kaiser's line on the throne as a perpetual menace to free government. Prussian disregard for treaty rights has convinced the democratic governments that nothing short of the complete overthrow of the autocracy in Germany can insure to the world lasting peace, and it is evident that the war will continue until this accomplishment is recorded.

The allied nations are taking time to prepare a courteous and definite reply to the pope's message. They recognize that his humanitarian motives are commendable, but believe that the terms he proposes are not such as to warrant actual negotiations.

The result of the pope's proposal on Germany has been to stir up considerable strife between the various factions. it appears from unofficial reports. There are those in Germany who cling to the hope of complete German success, and there are those who favor the acceptance of anything in the nature of a reasonable peace. The former appear to be vigorously opposed to the pope's suggestions, while the latter look upon them with favor.

Plan Army Transportation.

How to transport the more than 500,000 men who are soon to be taken from their various walks of life to the training camps of the great new national army is the problem now being worked out by the government and the railroad companies. The transportation will begin with the first call to service, about September 5, according to present plans, and the railroads believe that between that date and September 9 they will be able to place 200,000 men in camps if the government requires it. In addition to the new army, more than a quarter of a million national guardsmen are to be taken to camp.

Farmers Not Exempt.

Among the important developments in the army drafting procedure during the last week was the general agreement of exemption boards to whom occupational claims for exemption are referred, that the mere fact a man is a farmer or employed on a farm is insufficient to secure exemption for him. The ruling, while not made by all boards as yet, is based on the idea that a man must be actually essential to the operation of a particular farm before he is entitled to exemption from army service. If his service on the farm can be rendered by another or others not subject to draft, the general holding is that he should not be exempted.

The tendency among all exemption boards is to be less lenient than at first. Exemptions are not being allowed in the case of dependents except where it is shown that such dependents would suffer actual hardship if the party drawn were drafted into the service of the country.

President Wilson has issued a message to the soldiers in the army and national guard and to those being drafted urging them to make a habit of reading the Bible regularly. His message will be printed on the fly leaf of an edition of 75,000 copies of the Bible now being printed for distribution in the army camps.

Congress to Keep Busy.

Congress will be in session till the middle of September or even till October 1, according to present indications. Chief among the matters still to be cared for are the war tax measure to raise about $2,000,000,000, and the new war budget authorizing the issuance of some $7,000,000,000. The measure is also to be fought out providing govererment insurance of soldiers and sailors, such insurance to take care of the pension question that has been so troublesome in the past.

Council of National Defense.

That the scope of the work undertaken by the national council of defense is remarkably broad is indicated by an official statement of its accomplishments up to date. The statement shows the following branches of its endeavor:

The active direction and adaptation of the nation's railway facilities for war purposes; further development of sources of supply for all kinds of war munitions and their component parts, from artillery and machine guns to various forms of motor transport; unusual progress on a comprehensive aviation program; very material assistance to the war department in the construction of the new army cantonments; the adaptation and augmentation of the electric communication lines, both telegraph and telephone.

The procuring of leather and textile supplies of all kinds for the new armies; the cooperative development of lumber, copper, aluminum, steel and other raw material sources for the war needs of the government; notable progress on many phases of the difficult labor problem; extensive assistance in the consummation of the medical preparations for the care of the military forces of the country and the definite accomplishments in the adjustment of commercial conditions and methods to war needs.

Increases Wheat Yield

Government Wants Billion Bushels

With a view to insuring the production in this country of a billion-bushel crop of wheat next season, the United States government through the department of agriculture has started a movement to increase the fall sowing this year to over 47,000,000 acres. Increase of rye sowing is also planned to a total of 5,000,000 acres.

The state of Washington is asked to increase its acreage about 13 per cent, Idaho about 17 per cent, and Oregon about 50 per cent. The large increase required of Oregon is due to an abnormally low acreage last fall. The average increase the country over will be about 13 per cent.

The planting of approximately 47,337,000 acres to winter wheat, on the basis of the average yield for the last 10 years indicates a total production of 672,000,000 bushels, which exceeds all previous winter wheat crops harvested in the United States, with the exception of the crops of 1914 and 1915, when the acreages harvested and yield per acre were both above normal.

It is too early to determine the area which should be sown to wheat next spring, but if this is equal to that sown in the spring of 1917, or 19,000,000 acres, and the yield is up to the average of the last 10 years, a crop of 251,000,000 bushels of spring wheat will be harvested, and if the yield per acre should equal that obtained in 1915 the crop will be 350,000,000 bushels, the same as the greatest spring wheat crop ever produced.

Negro Population.

There are 10,000,000 negroes in the United States.

A Truck Is a Paying Investment 12 Months in the Year



This Velie truck is used by the State of Washington at the Monroe State Reformatory. It is used for hauling farm produce—shingle bolts—or for carrying their men to their various jobs—and it is **used advantageously twelve months in the year.**

How much could you make with a Velie truck? Your transportation facilities must equal everything else or you lose money. It is our business to figure out the usefulness of our trucks, AND HOW THEY CAN MAKE YOU MONEY.

HOW MUCH LAND HAVE YOU?
WHAT DO YOU RAISE AND WHERE DO YOU MARKET IT?
ARE YOU INTERESTED IN THE LUMBER INDUSTRY IN ANY BRANCH?
IT DOESN'T COST ANYTHING TO INVESTIGATE, BUT IT MAY MEAN MONEY IN YOUR POCKET. USE THE ATTACHED COUPON.

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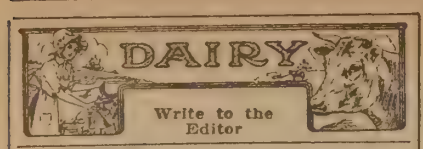
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A. B. NYSTROM, Editorial Contributor

Who Gets Best Milk?

The People in the Large Cities

Dairy and Food Commissioner Weigle of Wisconsin has been investigating the milk supply of the cities of that state, and the facts there revealed are interesting and important.

The commissioner's department inspected dairy farms supplying milk to 221 towns and cities, and took and tested 691 samples of milk and 347 cream samples, testing them for butterfat, and making lactometer tests with sediment tests. He told the results of his investigations to a national convention of food officials at Atlantic City last week.

The average test of butterfat in milk was found to be 3.8 per cent. Only 1.01 per cent of the samples taken contained less than 3 per cent. Much of this below-standard milk was the normal product of the herd. To overcome this condition cows known to produce milk rich in butterfat should be added to the herd in order that the fat content of the milk from the entire herd might be increased. About 18.93 per cent of the milk samples taken tested between 3 and 3.4 per cent, 37.33 per cent between 3.5 and 3.9, 30.82 between 4 and 4.4, 8.40 between 4.5 and 4.9 and 3.47 between 5 and 5.6 per cent of butterfat. Of the cream samples taken 5.76 per cent tested between 12 and 17 per cent, 80.31 per cent between 18 and 27, 21.03 between 28 and 37 and 2.86 between 38 and 50 per cent of butterfat. The average per cent of butterfat in the cream was found to be 24.1 per cent—the standard being 18 per cent.

Commissioner Weigle divided the 221 cities, towns and village into four groups—A, B, C and D.

Group A. In this group may be found the cities where nearly all of the milk is handled by dealers who depend upon dairymen for their supply.

Group B. This group comprised the cities where possibly 50 per cent or more of the milk is handled in the same manner as Group A, while the balance is furnished to the consumers by dairymen who sell their own product bottled at the farm. City milk plants in groups A and B deliver pasteurized milk of low bacterial count. In some of the city plants it was found that the bacterial count before pasteurization ran as high as 3,000,000 per cc., and after pasteurization the milk contained only 87,000 per cc. Here was an infusion of dead bacteria. Milk for city supply with a high bacterial count should not be permitted to be pasteurized and sold.

Group C. In this group may be placed the large number of villages and cities of the state that do not have a milk plant. Possibly 50 per cent or more of the milk is delivered by dairymen who bottle and sell the product of their own dairies; the balance is obtained by the consumers directly from neighbors who may own one or more cows. The milk from these "family cows" is sold in bottles or in pails furnished by the person who calls for the milk.

Group D. This group consists of the villages or communities where the entire population depends upon families who own one or more cows. All of these so-called "family cows" are located within the cities.

These investigations overturn the long-cherished popular notion that if you want the best, purest and richest milk you must seek it far out in the country districts, and that the people of the larger cities have to take an inferior product. In Wisconsin, at least, "it is the other way around." City dwellers get the best and purest milk. On that point the commissioner says:

"The cities of group A are not so much in need of state investigation; it is the smaller cities where our trouble begins. Although the milk inspection may be under the jurisdiction of the local health officer, little work is done owing to political reasons, or perhaps because the young practicing physician acting as health officer does not wish to antagonize people lest he lose their patronage. We have tried to introduce a uniform milk ordinance, but not two cities have the same ordinance. It is in the smaller cities also that the greatest danger of epidemics lies. We have had several epidemics during the last year in Wisconsin. A very severe one occurred in Galesville in February of this year, when there were 325 cases of disease and when 16 people died. This epidemic was traced to milk produced from diseased cows. There was an absolute lack of supervision of the milk supply. The barns were in dilapidated, filthy condition, and the barnyards were filled with filth through which the cows had to wade. It is epidemics of this kind that open the eyes of the local health departments, but 16 lives is a terrible toll to exact. I regret that we have no law in our state making pasteurization compulsory. I realize that pasteurization does not necessarily mean clean milk, but at any rate it means a safe milk."

Silo a Necessity

"You ought to conserve feed so that you can conserve food," said Frank Welch, secretary of the Pacific National Dairy show the other day. "I am a strong advocate of the silo—any kind of a silo. A good many of the silo manufacturers have been a little inclined to give the idea to the dairyman that his particular silo is the only one that has any real value. This is natural enough, but I believe that for the good of the dairymen he should know that anything which will permit of packing feed in it and keeping it practically airtight, will do as a silo and is far better than no silo at all.

"'I am figuring on putting up an experimental silo myself, and if it proves a success I'll let the plans be published. I do not believe it will keep the feed in better shape than all silos; I doubt if it works quite as well; but it will be practical and low priced and serve for the man who can not afford to put up one of the better ones.

"The day is coming, if it is not here already, when some sort of a practical silo is a necessity for every dairy farmer. It is more important to get some kind than it is to hesitate over what kind."

Mr. Welch reports the affairs of the Pacific National Dairy show as rounding into shape very nicely, and he anticipates a big show this fall.

Wellsville Cow Testing.

Hot weather and flies caused a slight drop in the average production of the Wellsville, Utah, Cow Testing association last month. During this period 419 cows were tested with an average of 748 pounds of milk and 29.8 pounds of fat per cow for the whole association. This is practically three pounds of butter fat per cow lower than June's average. Of these 419 cows 70 are on the "honor roll" each having produced over 40 pounds of butter fat for the month. Nineteen of this number produced over 50 pounds of fat, while two produced over 60 pounds. Ninety-three cows produced over 1000 pounds of milk.

The high cow for the month was Rosie, a grade Holstein, owned by John Stuart. She produced 1628 pounds of milk testing 4 per cent, producing 65.1 pounds of butter fat. This is the second month this cow has led the association out of the three months in which she has been fresh. Second place went to John Darley's grade Jersey Blooch; she produced 1398 pounds of milk, testing 4.4 per cent, making 61.5 pounds of fat. Roanie II, a grade Jersey, also owned by John Darley, was third, with a production of 1168 pounds of 5 per cent producing 58.3 pounds of fat.

Twenty-three herds with a total of 211 cows out of the 46 herds on test averaged over 30 pounds of butter fat per cow.

Close Quarters.

Ethel has the gift of graphic description. Until recently she was a little country girl; now she lives in a large town. The first letter she wrote back to her old home began like this:

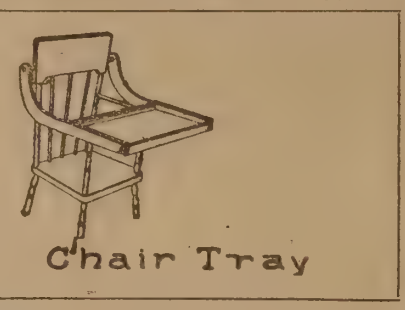
"This is a queer place. Next door is fastened on to our house."—Baltimore Sun.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Baby Chair.

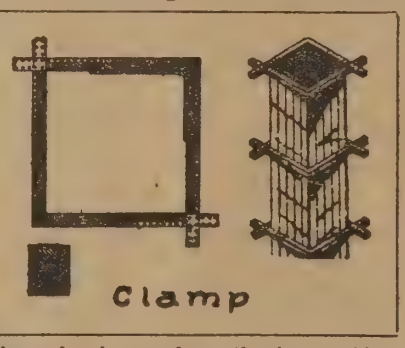
The tray shown here can be turned over the back out of the way; also



it can be tilted forward over the front edge to seat the baby or for convenience in cleaning.

Column-Form Clamp.

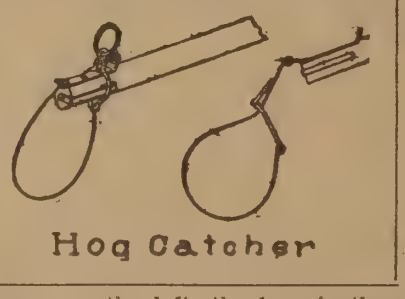
These clamps are made of iron and have interlocking slots at the ends.



They also have, along the inner sides, grooves for the wooden strips to which the boards are nailed.

Hog Catcher and Holder.

When it is desired to catch a hog with this device, the ring is drawn back over the end of the handle, as



shown on the left, the loop is then slipped over the nose or neck of the hog and a slight jerk loosens the ring and causes the loop to tighten.



NO DOSE TO MEASURE.
NO LIQUID TO SPILL.
NO STRING TO ROT.

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Enthusiastic Holstein Clubs, county, district and state, have been organized all over the country, and they are making wonderful progress in establishing testing associations, and in co-operative effort in eradicating disease among their animals. They inspire in their members a high standard of dealing, and in many ways accomplish the maximum of good for all breeders of Holsteins in their localities. There's big money in the big "Black and White" Holsteins. Send for FREE Illustrated Descriptive Booklets, THE HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA, F. L. Houghton, Sec'y, 205 Brattleboro, Vt.

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all Stiff Joints

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Cornhill, Tex.—"One bottle Caustic Balsam did my rheumatism more good than $120.00 paid in doctor's bills." OTTO A. BEYER.

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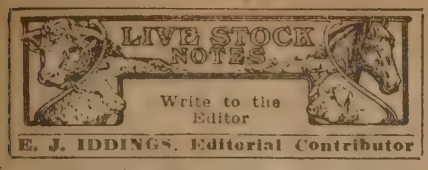
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E. J. IDDINGS, Editorial Contributor

Pure Bred Cows

What Is the Best Grain to Feed

By E. L. POTTER.

J. K. T. writes: "What is the best grain to feed to calves that are to be crowded as rapidly as possible. They are good purebred registered calves."

A mixture of ground barley, oats, bran and oil meal is the most satisfactory in nearly all cases. The common proportions are 3-3-3-1 by weight, but sometimes twice as much of either the barley or oats may be used, and where there is plenty of green feed the oil may be left out. We would not recommend any of these feeds alone except oats, and that seems hardly as good as the mixture. The barley should be coarsely ground or rolled. There is some question as to whether the oats should be ground or left whole. We have found that cattle seem to prefer whole oats and that they should not be changed from whole to ground after they have been on feed a while, but if fed ground oats from the start we prefer them to whole grain. During the past winter we have used whole oats. Our results seem hardly as good as in prevous seasons on ground oats, but we have not been able to change successfully from whole to ground after the cattle were on full feed. One will not make a great mistake with either.

Where good corn is available it should be used in place of the barley, and for fattening as much as two-thirds corn may be used. Corn and barley are much alike except that barley is not so palatable and so can not be fed in such large amounts.

Veterinary

Dr. S. B. Nelson

Udder swollen and hard— About two weeks ago I found a clot of blood in the milk. The cow's udder on the right side hangs heavy and seems swollen and hard. There is a knot the size of a pea at the root of the teat. It takes longer to milk that teat and seems to pain some. I am feeding shorts and bran, sometimes alfalfa meal and oil meal. D. C. M., Newberg, Ore.

Answer—I would advise you give your cow one teaspoonful of sodium hyposulphite of soda in a pint of water once daily for a week or 10 days. Also take the teat where the clot is located, or lump as it may be, and paint it with iodine after each milking. Do this for 10 days to two weeks if necessary. In feeding your cow you can nearly always figure that you are feeding her about right when she gets what hay she will eat, and about three pounds of grain for every gallon of milk she gives per day, and then she should have roots or succulence, either silage or roots, to the amount of 10 to 40 pounds a day, according to her appetite. If she is on green pasture, naturally she does not need the succulence when taken to the barn to be milked.

Cow Affected by Worms.—One of our cows is passing a curious worm from her intestines. The worm is about one inch long and of a dirty whitish color like a grub, but having a thin, wiry tail as long as itself. The worms crawl out of the excrement each morning. The cow gives good, rich milk, but does not have a good appetite and looks rather thin and poor. C. C. L.
Benton Siding, B. C.

Answer: If you will select a few specimens of the parasite affecting the cows, and mail them to the veterinary department at the state college, they will examine these for you and advise you just what the specimen is and what the treatment should be. It is nearly impossible for me to say without seeing the parasite what it is.

I have a calf a little over a week old and I notice this morning that the navel string has come off and there is a protrusion. It looks like a small piece of raw flesh. There is no swelling, only this little piece of flesh hanging through the skin about three-quarters of an inch.—W. H. L., Tumwater, Wash.

Answer—I would advise you to wash the protruding portion with a two per cent solution of lysol. Then dust the part with a dusting powder composed of two parts of boracic acid and one part of tanic acid. Dust lightly but cover completely. Repeat the dusting two or three times daily.

Cow Makes Profit.

An unusual cow, owned by B. L. Patterson of Lacombe, Linn county, Oregon, under ordinary herd care, fed and milked twice a day, in the last six months of lactation period gave 352.58 pounds of fat, valued at $141.59, according to the report of E. W. Bartruff, official tester of the Linn County association. The feed cost was $59.01.

The Motor Car

On the Farm

Saving Your Tires.

By W. D. ALBRIGHT.

The illustration at the left, below, shows the correct use of the tire caliper in judging the proper amount of air pressure to carry in the tires. A scale is arranged along the polished steel surface along which the two prongs that fit over the tire, slide. In this way the pressure in the tires is



Neglected Cuts.

determined without disturbing the valve of the tube.

The illustration at the right, above, shows a casing with two-thirds of its life wasted, for neglected cuts in the tough rubber tread have caused it to blister. In this instance sand and dirt had been forced into the cuts and worked around under the tread. Note the several large "bumps" where the sand and dirt have accumulated.



Rut Worn.

This illustration shows a tire that has been run in ruts. Whether the ruts in the road are too large or too small for the tire, this wear on the side walls occurs regardless. What's the answer? Keep out of the ruts. Tires were not made to withstand wear of this kind.

Fast Coming Into Its Own.

Here is the story told by J. B. Hahn of Forks, Wash. Mr. Hahn is the proprietor of a transportation company, and part of his work consists in freighting over the mountainous road between Forks and Clallum Bay. The grade runs as high as 14 per cent, and one stretch of three miles is all gear work. Under conditions such as these, his truck has averaged 13 miles to a gallon of gasoline, and from the time of purchase up to the present date there has been no expense for repairs.

Rumania After the War.

A great majority of the large land owners of Rumania will be confronted by the problem of reequipping their estates after the war. Much of their land lies in the occupied portion where the soil is richest. They will find it necessary to replace oxen in great part with machinery, says a land owner who has large interest in Rumania. They will require easy terms of payment as they are for a time deprived of their revenues.

Athena Ranch Sold.

Joseph N. Scott has purchased of W. R. Taylor, of near Athena, Ore., the Mansfield land comprising 320 acres and 40 acres of the Dudley land adjoining, for a consideration of $50,000. The land adjoin 160 acres already owned by him, and with his home place, gives him 925 acres all west of Athena.

IT DEALS
DEATH
TO THIS



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Spokane Interstate Fair
and Live Stock Show

Spokane, September 3-8.

AND DON'T FORGET

The Pure Bred Live Stock Auction Sale
Friday, September 7, at fairgrounds.

Pure Bred Stock ONLY will be offered at this sale, to include cattle, horses, swine and sheep.
(Sale will be held in Judging Arena, in Live Stock Department, starting at 10:30 a. m.)

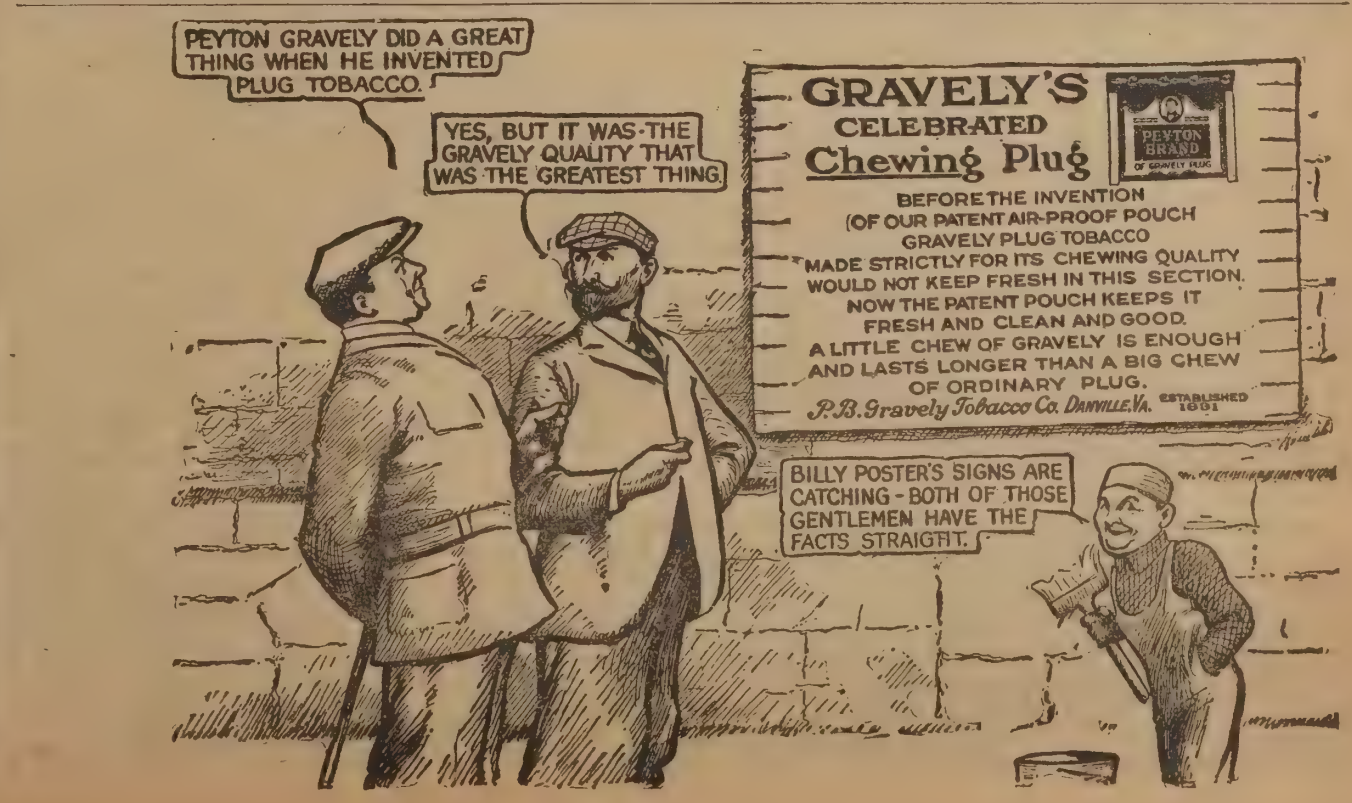
As stock judging will be completed on Thursday, this date (Friday, September 7) has been selected as giving exhibitors and buyers an exceptional opportunity to devote undivided attention to the careful buying of high class live stock.

Consignments should be made as early as possible. Sale Catalog will go to press on Monday, August 27th.

TERMS OF SALE—CASH, UNLESS ARRANGED WITH OWNERS.
Auctioneers

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HARRY C. CRANKE, Union Stock Yards, Spokane, Wash.

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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

Feeding Linseed Meal

To the Editor: 1. What is a good method of feeding poultry to keep them laying through the moulting period? and,

2. How should linseed meal be fed for best results.

I have often heard it advocated by those who ought to know that the best way is to keep chickens laying right through the moult by increasing the quantity of feed and the addition of certain other kinds in such proportions as to provide for both egg production and also new feathers at the same time, but I can not find any recommended formula. I recently purchased some linseed meal for this purpose, but now that I have it I am at a loss as to how to feed it. L. C. R.

Rupert, Idaho.

1. To get the largest number of eggs during the moulting period the fowls should be fed practically the same ration that has been fed during the rest of the year, providing, of course, that the ration gave good results. A little heavier feeding of bran, linseed meal and meat scrap is advisable. A little sunflower seed is also good at this season of the year. Less of the heat-producing foods, such as corn and wheat, especially corn, should be fed during the summer and early fall than during the winter. If a dry mash is fed in a hopper the meat scrap or fish scrap, whichever is fed, should be increased 20 or 25 per cent. If a moist mash is fed and the meat scrap is hopper fed the fowls will eat just what they need and this system on the whole is very satisfactory. It is very important also that the moulting hens have all the green food they can eat all the time. Free access to alfalfa will help them in the growth of new feathers and therefore shorten the moulting period. Other green food will serve the same purpose.

2. Linseed meal should be mixed in the mash, one part to six or seven of other ingredients by weight. The following will make a good dry mash for the hopper:

Bran, four parts; middlings or shorts, one part; ground corn, one part; ground oats or barley, one part; linseed meal, one part; meat or fish scrap, two parts.

If the mash is fed moist, omit the meat scrap and feed it in a hopper, keeping the hopper supplied all the time.

For whole grain food, give wheat, oats and barley, equal parts, fed in a stray litter. If corn is cheaper than wheat, omit the wheat and feed corn.

It should be understood that no system of feeding will keep the fowls laying all through the moulting period. We find that some individual hens lay right through the moult, but this is a question of hen, not feed, probably hereditary J. D.

Need Green Feed

To the Editor: I had about 30 little chicks, apparently in good health, till a few days ago, when they all began to look stupid and seemed to be sick. At first they would all stand around with their heads hanging down, then they were not able to stand up. They all seemed to get blind. Within two days 29 little chicks were dead. Now my old hens seem to be getting the same way. I feed my chickens corn and wheat and I give them milk and good, pure water to drink. Can it be the heat? C. R.

Edenbower, Ore.

It could not be said without further information and possibly an examination of the chickens whether this is a contagious disease or not. So far as the information contained in the letter would indicate it may very probably be that the excessive heat and the feeding were responsible for the losses. A high summer temperature combined with rather heavy feeding is hard on chickens and especially on overfat hens. It is much better in hot weather to feed liberally on mashes in which there is a large proportion of bran and to reduce the amount of whole grain fed, especially corn. The latter has a high caloric value, in other words a large percentage of the corn goes to the production of heat in the body. That is one of the uses of food, to keep up the heat of the body, and corn is especially high in heat value compared with most other grains. If the chickens were fed liberally on corn and wheat only, as the letter states these were fed, I would expect trouble during the excessively hot weather. The chickens should have an abundance of cooling green feed to eat and not too much whole grain during hot weather. They should also have plenty of shade.

If the trouble continues in the flock it would be well for you to make a postmortem examination of the different organs and then write us as to what condition you find them in.

J. D.

Cause of Scaly Leg.

To the Editor: What causes scaly leg on chickens and what is the cure? R. F. T., Dungeness, Wash.

Scaley leg on chickens is caused by a mite which works underneath the scales. The cure is to kill the mite. In ordinary cases it is sufficient to dip the leg in a can of coal oil and hold it there about half a minute. The oil works up under the scales and kills the mite. Use a tomato can and pour the oil in it till near the top. If there are considerable growths on the legs, it is well to rub them with vaseline or other ointment to soften the scales when they can be removed without causing bleeding. When the scales come off rub with vaseline.

J. D.

His Idea.

First Regular—That young college student is some puffed up over joinin' the army.

Second Regular—Aw, he thinks the army joined him.—Puck.

Poultry Food Control

The feeding of wheat and other cereals fit for human consumption is prohibited in Great Britain. Poultrymen are compelled to rely upon waste food or damaged grains, and as a consequence they are hard pressed. A recent issue of the Poultry World of London quotes a ruling of the government food control board in regard to wheat screenings. This ruling set the price of screenings at $73 a ton. The mills must not charge more than this sum. The government is guarding the interest of the farmer or poultryman by setting a maximum price, and the maximum price for screenings is about what wheat sells for here at the present time. There is nothing the matter with feeding screenings. I have known a large poultry farmer to feed them almost entirely, but a great many of our poultrymen would take it as an affront to be asked to feed their poultry in this way. The war is certainly forcing many readjustments. The trouble is in making readjustments there will be an inevitable loss due to lack of knowledge as to the effect of substitute rations. Most poultrymen have one method of feeding, and if compelled to change they are very likely to make serious mistakes. J. D.

Good Plan to Mark Hens.

To the Editor: Could you please tell me where I can obtain leg bands or something suitable to mark my old chickens from the young ones?

MRS. J. F. J.

St. Anthony, Idaho.

The poultry supply houses in the cities keep for sale leg bands for fowls. It is an excellent plan to mark the hens so that it is possible to know the old hens from the pullets. Would suggest banding the pullets rather than the old hens this year, and next year it will not be necessary to band the pullets, and the old hens can be marketed.

J. D.

Information Bureau

It is our business as a farm paper to be of the greatest possible assistance to our readers. Any question of a practical nature that interests you or the answer to which will be of special value to you—send it in. There will be no charge for this service. All questions must be signed with your name and postoffice address and will be answered by personal letter. Replies of general interest may be published in The Farmer, your name being omitted if you so desire. Address Information Bureau, Washington Farmer, Spokane, Washington.

Selling Mortgaged Farm.

A subscriber asks: "After a man makes a loan from the U. S. farm loan bank, can he sell his farm without permission from the local land board?"

Answer.

The Farmer replied by personal letter as follows, in part:

He can not sell without permission from the association. The man to whom he sells must first apply to the local association for membership. As soon as he becomes a member the sale may be made. The seller will have to assign to the buyer the stock the former holds in the association, transfer to him his property and have him assume the mortgage which the seller originally gave to the bank to secure the loan. The buyer will have to carry the loan in exactly the same manner as would have the one who originally made it had the sale not taken place. He can pay out the entire loan any time after five years from its date if he so desire. A complete record of all the transactions will be made by the board of the local association and by the central office at Spokane.

A subscriber asks: "Will joining an association (farm loan) make one party responsible for the non-payment of another should that occur? Do you have to join in the county in which you live?"

Answer.

The Farmer replied as follows:

A member of a farm loan association is liable to the extent of the amount of stock he owns in the association and an additional equal amount of cash. A member is required to take stock in the association for an amount equal to five per cent of the loan he takes. Suppose his loan is $1000. He has to take stock to the amount of five per cent, or $50. Should the local association lose money or fail for any reason, such borrower would be liable for his $50 in stock and an additional $50, making $100 in all, but no more. If his loan were $2000 he would be liable for $200, and so on in case of still larger loans.

He does not have to join an association in the county in which he lives. The association, however, would have to extend its boundaries so as to include his farm.

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THE TRUE TEST.

Most students, through a feeling of loyalty, will say a good word for their school, and if a school sends you to inquire of certain "business men" you may well suspect a "game"; therefore, make the true test of our standing, ask the best business men of Spokane and the towns of the Inland Empire about The Northwestern. We furnish bookkeepers and stenographers to business men, and these men are the best judges of the efficiency of our school—even better judges than the students themselves.

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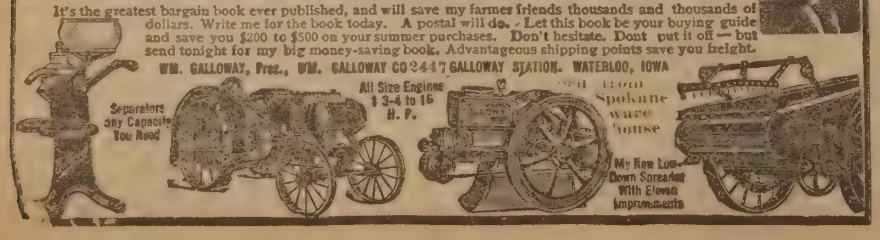
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First prize, four months' free tuition; second prize, three months; third prize, two months. Papers will be judged and awards made September 15, 1917. Address

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We are offering our readers some choice articles that we have selected as special prizes to be given ABSOLUTELY FREE for securing subscriptions to our paper.

Here is a list of a few of the items we picked out.

Mark an "X" in the square for the prize you wish and sign your name and address. We will tell you how easily you can get it.

- ☐ King Air Rifle
- ☐ Ladies' Auto Veil
- ☐ Birth Stone Ring
- ☐ Pocket Flash Light
- ☐ American Flag
- ☐ Ladies' Needle Case
- ☐ Premo Junior Kodak
- ☐ Boy Scout Knife
- ☐ Six-Piece Kitchen Set
- ☐ Unbreakable Doll
- ☐ Pocket Ben Watch
- ☐ Coaster Wagon
- ☐ Harmonica
- ☐ 36-Piece Dinner Set

If you don't find what you want in this list write it in the following space:

Remarks .....

FILL THIS BLANK IN NOW.

....., 1917.

Washington Farmer,
7th Floor Review Bldg., Spokane, Wash.

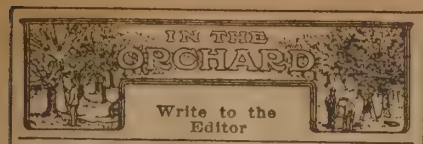
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GRANVILLE LOWTHER
Editorial Contributor

SPITZENBURG APPLE
For 100 Years Held First Place.

Twenty-five years ago the Spitzenburg was considered the best of all the apples grown in America. Thirteen years ago we sold Spitzenburgs for $2.50 per box, and for several years after made more money on Spitzenburgs than on any other variety. For 100 years the Spitzenburg held the first place among apples and at the expositions and fairs was the standard of excellence by which other varieties were judged. It is still a good apple and brings a good price; but for various reasons other varieties, some of them new productions, have superseded it.

Spitzenburg Facts.

In the first place, the tree is tender, susceptible to attacks of fungus diseases, bacterial diseases, and not very resistant to the extremes of heat and cold. There is no other variety, perhaps, that is so likely to be attacked with blight as this; and it lacks vigor and resisting power against the attacks of aphis, scale and other pests. It is a slow grower and a late bearer. At the age of eight years the Winesap, the Jonathan and a few other varieties would bear a fairly good crop under the climatic conditions of the Pacific northwest, but the Spitzenburgs would not at that age have come into profitable bearing. It has also been proven that it is not a long-lived tree and that when other varieties are in full vigor it is on the decline. As a money maker, covering a long period of years, it is not therefore considered the best.

For baking the Spitzenburg is very good, but the consensus of opinion as expressed by the hotels, restaurants and dining car service of the railroads of the northwest, is that the Rome Beauty, Yellow Newtown, Red Cheek Pippin and Twenty Ounce Pippin are a little better.

The Spitzenburg makes good pies; in fact it was once supposed to make the best pies; but now the Yellow Newtown, Winesap, Rhode Island Greening, Duchess and Gravenstein, are thought to be at least equal.

I like the flavor of a good crisp, ripe Spitzenburg, but ordinarily I prefer a Delicious. I made a test of what people prefer in the three leading varieties one winter, in the following manner. I kept Spitzenburgs, Yellow Newtowns, and Delicious in a large plate on the dining room table. The purpose was to see what would disappear first. Our own family and our visitors, almost invariably prefered a Delicious to either of the others, and we had to supply the dish with Delicious apples twice, before the others were gone. However, this was not quite fair to the Newtown, for it is a longer keeper than either the Spitzenburg or Delicious, and they were at their best when the Newtown was not quite so ripe. Next to the Delicious and the Winter Banana, I think the Spitzenburg will bring the best prices in the markets, with the Arkansas Black next; but the fact that it is a light bearer, a tender tree, susceptible to disease, and not long lived, will cause other varieties to be preferred in the plantings of the future.

I find a great many persons pulling out Spitzenburgs, and when I ask them why, they almost invariably assign the reasons I have given.

The following prices represent an average for three years received for certain varieties by the Hood River Apple Growers' union, by Richey and Gilbert of Toppenish, Wash., Wenatchee Fruit Growers' association and the Yakima Valley Fruit Growers' association. Winter Banana, $1.91; Spitzenburg, $1.52; Yellow Newtown, $1.47; Arkansas Black, $1.39; Winesap, $1.39; Stayman, $1.23; York Imperial, $1.18; Red Cheek Pippin, $1.17; Rome Beauty, $1.17; Black Twig, $1.13; White Winter Pearmain, $1.10; Missouri Pippin, $0.99; Gano, $0.97; Delaware Red, $0.95; Wagener, $0.91.

The Delicious was not included in this estimate, but today it ranks very high, ranging in price nearly as high as the Winter Banana, is a heavy bearer and good shipper.

The Apple Show at Spokane.

The 19 leading varieties, according to the estimate at the apple shows held at Spokane for several years past, when arranged alphabetically, are as follows: Arkansas Black, Baldwin, Delicious, Gravenstein, Grimes Golden, Jonathan, McIntosh Red, Northern Spy, Rhode Island Greening, Rome Beauty, Spitzenburg, Stayman, Wagener, Wealthy, White Winter Pearmain, Winter Banana, Winesap, Yellow Belleflower, Yellow Newtown. It should be borne in mind that this arrangement is not according to merit, naming the best first, but that it is alphabetical.

The Arkansas Black is coming to be a great favorite for the fruit stands on account of its color. It is the most beautiful apple grown, but not the best.

The Arkansas Black.

The Arkansas Black, for eating, is not the best apple. Yet, that variety is gaining favor for the following reasons: It is the most beautiful apple grown. It is the best keeper and the best shipper. For evaporating it is likely to be preferred to all others, because, when dried, it is a clean white color, requiring no bleaching to make it look well. It contains also the solids in greater degree than most other varieties. Now that evaporation is a growing industry in the care of cull fruits, the Arkansas Black will become more popular.

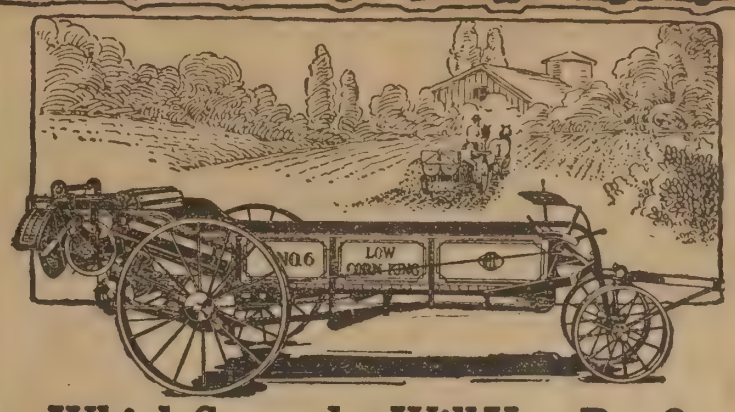
Nothing endures; change is the law of life; and the apples of the future will be as much better than the best we have now, as the best we have now are better than those of the centuries past.

I am not following the example of those who are pulling out their Spitzenburgs. We have in our orchard 121 trees of that variety, and we let them stand, because, while the crop is often light, when the good prices they bring are considered, they make us good profits. We fertilize them, water them carefully and baby them generally; but it pays better than digging them out and planting new varieties. G. L.

Famous Pear Orchard

When I wrote the article on pears for the Encyclopedia of Horticulture I believed that at that time I was describing the oldest pear tree in the world, but I find now that I was mistaken. Near El Paso, Texas, is a pear orchard which is now being destroyed by the fruit inspectors because it is a breeding place for insect pests that affect the orchards adjacent to it. This old orchard is supposed to have been planted by the Franciscan Fathers, who accompanied the Spanish invaders who passed that way during the sixteenth century and is near the old Spanish mission. The trees now are probably 300 years old at least. They have little value except that which is based on sentiment.

They are seedlings and the fruit was not of good quality. Yet a few years ago one of them was grafted to Bartlett varieties of grafts brought from California and yielded a fine quality of fruit. These trees, without spraying or pruning or care of any kind, any more than would be given to shade trees or forest trees, have reached a height of about 75 feet and a top system of 60 to 75 feet broad. I talked with a man who seems in every way reliable and who did not believe the big stories told with reference to the size of the trees, and took his tape line and measured them and claims that the largest tree, which had been headed 18 inches from the ground, had two prongs, was measured between the prongs and the root and had a circumference of 14 feet eight inches. Now you mathematicians may tell, if you desire, what is the diameter of that tree, but the point I want to impress is that, pear trees planted in a soil where the root system will go down to the moist subsoil and where the soil is rich and there is no obstruction to development of the root, will live to be much older than we had formerly supposed. G. L.



Which Spreader Will You Buy?

THE popular call today is for a low down wide spread machine. Farmers who have had experience are all turning to the wide spread. Ask any of your neighbors who is using a **Low Cloverleaf, Low Corn King** or **Low 20th Century** spreader why he bought it. Does he find it more economical? Does it do better work? Are his crops heavier where he uses it? What is there about it that makes it worth having?

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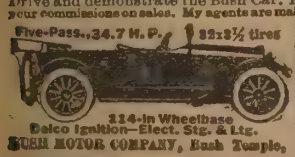
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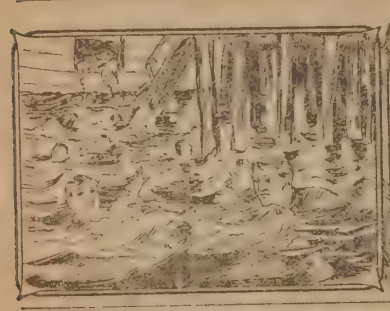


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UNDER THE BLACK CANOPY

By Paul E. Triem



SYNOPSIS.

Joseph Dudley, a strong young woodsman, is about to board the boat for one of Stevens' logging camps, where he has secured employment, when suddenly the gangplank gives way and he, with many others, is plunged into the deep, icy water. Forgetting his own peril, he does heroic work in rescuing the others, among whom is a young boy, who, he learns later, is the son of Jerry Stevens.

On his arrival in camp, Joe is forced, for the entertainment of the other men, to wrestle with Andy Dubois. Joe wins and by doing so makes an enemy of the big Frenchman.

CHAPTER III.

Mr. Stevens and his son rode away soon afterward, and Joe was greatly relieved by the fact that the man had said nothing about the incident on the waterfront except to thank him briefly. He had spoken of other things, chiefly the menace to the camps from the forest fires.

As Joe was going back toward the cook tent to get his bundle and the lantern which he had borrowed from Mr. Peterson, the huge figure of Steve McClosky, the camp foreman, loomed in front of him. Mr. McClosky had been among the spectators of the wrestling match, but he had disappeared before its conclusion. Now he stopped in front of Joe and stood looking gloomily down at him.

"I'm sorry you got into this business with Andy Dubois," he said gruffly. "I ought to have stopped the thing when I saw what was coming—but Andy is as touchy as a setting hen, and I didn't know what to do."

"I'm sorry for my share in it," Joe admitted. "I didn't suppose he would take it as he did."

"He's a queer fellow—proud as all get-out, and this is the first time he was ever thrown in camp. I'm afraid there'll be trouble; and this is no time for foolishness either," the foreman added, looking up to where the moon glimmered through a floating mist of smoke. "We need every available man right where he'll do the most good."

"Do you think the fires are going to make trouble?" Joe asked.

The logger shook his head noncommitally. "Can't say. They were pretty bad till a couple of days ago, when the rain checked 'em a bit. Now they're turning up again—and we've got to prepare for what they may do. I want to make a killing with the logs this week, and then if we have to shut down it won't make much difference. Get your things, and I'll show you where you're to bunk."

Joe secured his roll of blankets and followed Mr. McClosky to the bunk house, a long, board building with rough bunks along each side. There was plenty of clean straw to serve as a foundation, and upon this the new man built a superstructure of blankets which suited him admirably. He fell asleep wondering whether Andy Dubois was as sore and lame as he himself was as a result of the match.

It was very evident that Mr. McClosky intended to make good his desire to rush the work, and by 8 o'clock next morning Joe found himself part of a small and perfectly directed army of woodsmen whose aim it seemed to be to lay waste as much timber as possible. But it wasn't waste, after all. In the front ranks, scattered through paths which had previously been cleared by swampers, a dozen teams of fallers worked. Two men with an eight-foot saw comprised each team, and after undercutting a notch in the tree they were to fell they would attack it from their spring boards on the side opposite this notch. Soon there would be room for a wedge to be inserted back of the saw; and from this time until the top began to sway, a helper with a nine-pound maul would be kept busy driving the wedge farther in, so that the blade should have plenty of clearance. Presently a groan from the heart of the tree and a tremor, extending up the trunk and out to the farthest branches, would tell that the monarch was about to fall. A hoarse shout from the men, a swift and perfectly timed spring for safety by some who were in the path of the descending mass, and with a mighty rush of wind the fir would crash to the ground.

At this point Joe's work began. He was following Andy and his partner, and before the echo of the fall had died away he was at work "limbing" the trunk up to a point where it was too small to be used. Swiftly his axe rose and fell, each time with a twist at the end of the blow which sent the neatly severed limb up into the air and clear of the trunk. Before he reached the end of the tree, a pair of "buckers" with another long saw would be sawing the trunk up into saw logs.

His hands were soft, for he had not used an axe for nearly a year. Thanks to plenty of work in the college gymnasium, which had lasted up to a fortnight ago, his muscles were in good condition; and he could ignore the blisters which twelve o'clock brought to his tender palms. McClosky came past from an inspection of the logs stacked down upon the beach and stopped to watch Joe. He nodded and passed on, but the young man instinctively knew that he would have spoken readily enough if he had not been satisfied with the way the work was being done.

At times Joe paused to watch his antagonist of the previous night. Andy was a genius with a saw, and a sort of feverish impatience seemed to drive him on; he scowled at his partner and spoke angrily to him when the other man paused for an instant to rest.

His own long arms drove back and forth with the resistless momentum of a piston rod; and as the day passed he seemed to be gaining speed, as an engine might, running down hill. Joe could see that the man at the other end of the saw was too tired to work to any advantage, but still the Frenchman insisted on the furious pace.

"Andy's pride hurts him," an axeman near Joe commented in a low voice. "I was mighty glad to see you flop him last night—he's been aching for that kind of medicine for a long time."

"I'm sorry I did it," Joe replied. "He's not the kind to take defeat sensibly."

"Who, Andy? Well, I should say not. It's killing him. The only way he can get it out of his system is to punish Jensen there, by making him work twice as fast as any sensible man would think of working."

A breeze crept up toward evening, and the smoke, which had drifted into the valley until the air was thick and bitter with it, cleared gradually. Joe was too tired to waste any time loafing about camp after supper. He went to the bunkhouse and was soon asleep.

The day following passed without incident. Joe felt a little stiff and sore in his shoulders, but his hands lost their burning irritability and he was able to keep up with his work. From the corner of his eyes he watched the young Frenchman—Andy was quick to catch him at it if he paused in his work, and then his frenzy seemed to redouble and a sickly pallor spread over his dark face.

On the third day Joe arose with the comforting conviction that he had found a solution to the whole problem. He would watch for a chance to apologize to Dubois—he had done nothing of which he felt ashamed, but that made it all the easier for him to make the first move toward reconciliation. He tried to catch Andy's eye as they left the dining room, but failed.

"I'll wait," he decided. "I'm sure to get a chance later on."

Under the stimulus of this idea he kept track of the faller's movements, and managed to keep close to him. The Frenchman was working at his old feverish pace, and his partner stopped once to protest.

"Look a-here, Andy," Jensen said, "we've got all the time there is—it isn't goin' to be possible to clean up all the trees in this state for a week or so. You want to remember it took 'em a good many hundred years to grow, and we can't strip 'em off in a day. And, besides, you're taking too many chances. One of us is going to get knocked stiff if you don't watch your side better."

Andy rubbed his hands on his shirt front and gripped his saw handle without replying; and a moment later the long glistening blade was singing through a fresh cut. A feeling of depression had come over Joe, and he worked mechanically. Presently he realized that some one had come up behind him and was standing there, watching either Joe or the fallers. He turned and caught sight of Steve McClosky.

"Andy's going to work himself into the ground—or the hospital," the big logger commented gruffly. "I like to see a man take an interest in his work, but he oughtn't to go at it that way. It isn't human."

"I've been wondering," Joe replied softly, so as not to be overheard, "Whether it would help things any for me to apologize to him. He's still used up about that idiotic match we had the other night."

McClosky stood watching the fallers intently; apparently he had not heard the question. Suddenly he sprang forward with a warning shout.

"Jump, men! She's splitting out beside the cut—duck, Jensen—"

The warning trailed off into a groan, and as Joe whirled and stared down from his position on the saw

(Continued on page fourteen.)

Ups and Downs of a Bunch Grass Boy

(Each instalment of the "Ups and Downs of a Bunch Grass Boy" is complete in itself and will be found full of interest for the new readers of The Farmer.)

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

CHAPTER XXIV.

One morning Miss Good, our teacher, came to school looking pale and tired. She got paler as the days went by, and finally she did not come at all, and a new teacher met us.

We were told that she had gone a long way off to have an operation. Then one morning the new teacher told us that Miss Good was dead.

All of us cried. The little girls cried out loud with their faces on their desks and their hair ribbons and pigtails bobbing up and down as they sobbed. The little boys tried to be gritty, but the big tears rolled down their dusty cheeks and were wiped away with a dusty sleeve or the back of a dusty hand.

By the afternoon recess the dust storm was at its height. We huddled together beside the school house. No one said anything about the red sun. But all of us were thinking the same thing. Pretty soon the little girls began to cry out loud and then the little boys chimed in unabashed. The big girls bit their underlips and clinched their hands; and the big boys looked at the red sun with faces that were set and hard.

One afternoon the wind roared past us and receded in the distance—and was gone. Fall was well advanced then; the next morning the air was still, clean, and cold; but everywhere were heaps of dust.

Not a breath of wind stirred after that; the dust lay still where the last rush of wind had laid it, and soon, in the mornings, it was as cold to your bare feet as ice water. In the night time bugs and worms and mice, large and small, scampered all over, and you saw their tracks in the dust in the morning. You could see the prints of the bug toes and the mouse toes; and you could also see a smooth line between the toe prints of the mice, where the mouse had dragged its tail.

Much fun we had tracking this big game to its lair. We found queer bugs, queer lizards, queer living things of all kinds.

Once in a while we saw a sinister looking trail winding smoothly through the dust—and when we saw such a trail, we stepped high with our bare feet, and with sharp eyes scanned every inch of the ground about us. That smooth, sinuous trail in the dust had been made by a rattlesnake. Fearful as we were, we always followed the rattlesnake, and if the venomous serpent had not passed that way too long before, we generally discovered and slew it.

Going to school one morning, I crossed a rattlesnake's trail and soon found the rattler—a big fellow numb from creeping through the cold dust, and as bad tempered as a cold snake can be. It was a law of the bunchgras that whoever found a rattlesnake must kill it before passing on. Though nervous, I was compelled by that law to give battle to the snake.

I had neither stick nor stone; so I seized handfuls of dust, and with the dust pelted the rattler. The serpent coiled and struck, and coiled and struck again, its black, forked tongue darting out angrily. Nothing enrages a rattler so much as pelting its eyes and mouth with dust. The snake was a bit sluggish from the night's cold, but it fought gamely, and finally, in a paroxysm of rage it bit its own spotted coils time and again. I watched it for a while, peppering it with dust occasionally so that it would do a thorough job in biting itself. The snake would coil and lash out in all directions blindly, but with whip-like quickness. One might as well try to dodge a bullet as the thrust of a rattler; so I gauged the distance of its reach, and kept my bare legs well beyond the fatal circle of its leap.

I caught the snake fairly in the mouth with a handful of dust as it lashed out in one of its lightning lunges; whereupon the spotted thing quivered from end to end with rage and ended by flinging its mouth wide open at its own tail a little above the rattles; and time and again it stabbed its quivering, spotted skin with its poisonous fangs.

A rattler's bite is as fatal to itself as to any other animal. That evening when I returned home, there lay the snake, dead in the dust; and you could see where it had bit and chewed itself from its tail to as close up on its neck as it could turn. I poked it about with a bit of sagebrush for a while to make sure it was dead; then I tried to bring it to life by peppering it with dust. But it was dead as dead could be. So I cut off its rattles with my pocket knife, though the knife was so dull that I couldn't make a clean cut through the serpent's tail. I scraped off every vestige of the serpent's flesh where the rattles join the body, and then scrubbed this end on a hard clod to make sure that all the snake's meat was off—for I judged that the meat might be contaminated with the venom with which the spotted creature had killed itself. These precautions attended to, I rubbed my knife blade in the soil for a long time, to be sure no venom was on it; and when satisfied, I stuck the rattles in my pocket, and made for home, with ane eye on the road—for other rattlers might be about. I wanted more rattles, for rattles in a boy's pocket stood for an enemy scalp hoisted on an Indian warrior's spear. The more rattles a boy had the more nearly was he chief among his fellows.

The new teacher had been troubled with headache. Wearing a rattlesnake's rattles in your hair cured headache, people said. So the next morning I laid my rattles on her desk within three inches of her hand, and advised her to stick them in her hair.

The new teacher snatched her hand away and screamed. She seemed inclined to jump upon a stool and gather her skirts about her. I told her the rattles couldn't bite—that the only possible danger would be from a bit of poison snake meat sticking to them, and I tried to show her how I had rubbed and polished all of this off with a hard clod. She screame again and told me to put those rattles down. I did so.

She drew from her hair a brand new pencil of the wonderful, three-cornered kind, and with this pencil she maneuvered the rattles onto the end of a new, flat ruler. Carrying the ruler at arm's length with the rattles balanced on the far end, she tiptoed to the stove, opened it, and threw brand new ruler, brand new pencil, and brand new rattles into the fire.

I forgave her because I knew that she was a tenderfoot and knew no better than to do a thing like that.

All the World's a Stage, and All the Men and Women Merely Players

New York Bids Farewell to Horse Cars



Copyright by International.

On July 20 New York's last horse car made its last run. The photograph shows James Cussack, who drove the last car, shaking hands with Vice President Hedley of the Interborough Rapid Transit company.

New German Chancellor.



Latest photograph of Dr. George Michaelis, the German imperial chancellor, who recently replaced Dr. von Bethmann-Hollweg. A complete reorganization of the ministry followed his taking office. Michaelis formerly was Prussian under secretary of finance and food controller. Hollweg's resignation was precipitated by the crown prince's hostility toward him.

In a French Ammunition Factory



French Official Photo.

Workmen are shown in the picture above assembling 75-mm. gas bombs in an ammunition factory of France.

They're Doing a Double Bit



Convicts in the Eastern penitentiary at Philadelphia, are doing "their bit" for their country. The prisoners have been set at the task of rolling bandages for the Red Cross. They are placed in bags, 300 to each. The work is done under the most sanitary conditions and under the supervision of a trained Red Cross nurse.

Ready for Action



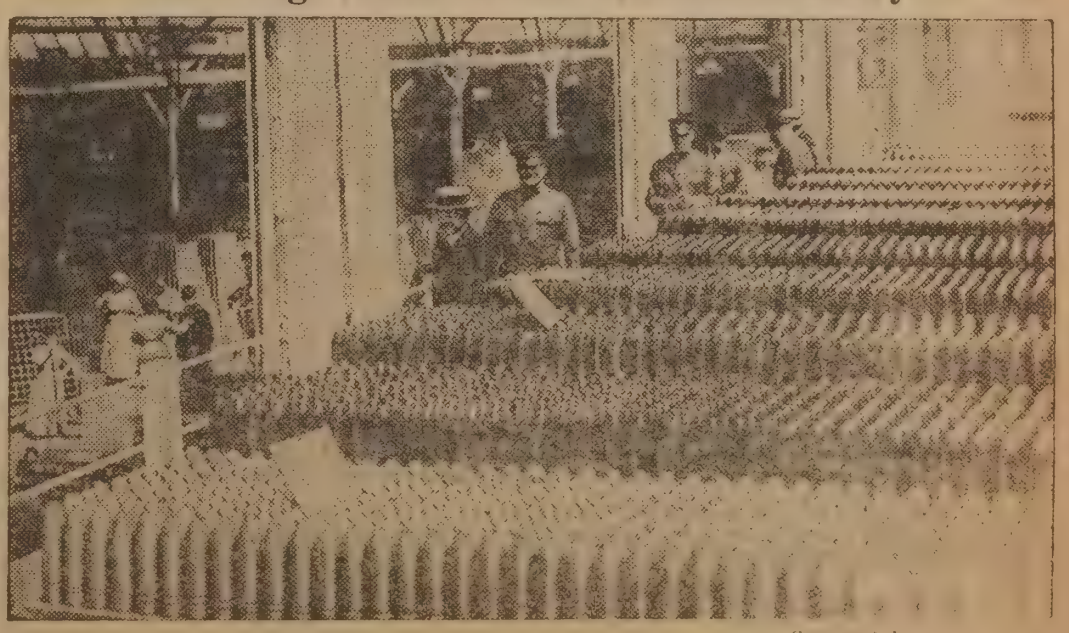
—New York Evening Telegram.

Since We Are Nearing the Woodshed



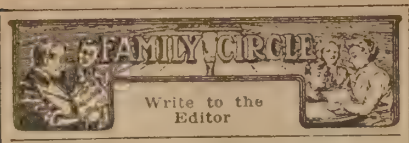
—Buffalo News.

Pershing Visits French Munition Factory



Copyright by International

General Pershing in this picture looks as pleased as though he were passing through a rose garden instead of the storeroom of a Paris munition factory. The glittering rows of projectiles look good to him for he is thinking of the time when he will be throwing them at the Germans.



ALICE W. BARLAND
Editorial Contributor

Is It a Small Thing?

Did you ever stop to think what it means to throw away a half cup of milk? Perhaps it is not much, but if each of the 20,000,000 homes in the United States does it, it amounts to 2,500,000 quarts a day, or 912,500,000 quarts yearly. It would take 400,000 cows to produce this amount.

A slice of bread is a small thing but—a good slice of bread weighs an ounce. If every household in the United States wastes this amount a day, the country is throwing away daily over 14,000,000 ounces of flour over 875,000 pounds a day, or flour enough for over 1,000,000 one-pound loaves per day. For a year it would be 319,000,000 pounds, or 1,500,000 barrels, or 365,000,000 loaves of bread. It takes 4 1-2 bushels of wheat to make a barrel of ordinary flour; this represents a waste of 7,000,000 bushels of wheat.

It would take 470,000 acres to produce fruit to equal this value of wasted flour. Think of the army of farmers, mill men, transportation employes to take care of this waste!

About Dress Materials

The one-piece dress is a great boon to busy mothers, being easy to make and to wash and iron. If the kimono sleeve is used, the dress will be cooler, but in some garments the set-in sleeve is less clumsy and wears better, says a bulletin from the United States children's bureau. Rompers, loose at the knee and low-necked and short-sleeved may be used for little girls and boys alike. Denim overalls are rather cumbersome for the hottest weather, but are adapted to cool days.

Starched, frilled, and fussy garments are all alike unsuitable for young children, whose clothing should be such as will make them perfectly comfortable and permit the freest play. No child should have to think of his garments during the play hours; he should, of course be subject to reasonable restrictions upon wilful or mischievous soiling or destruction of his clothing.

Cotton is the best material for outside garments, since a child of this age should have no clothes that can not be washed. Mothers disagree as to the comparative merits of white clothing and colored. White garments may be boiled, and thus the amount of rubbing necessary to get them clean is very greatly lessened. On the other hand, white dresses are soiled almost as soon as the child begins to play out of doors. It must be remembered that while white or light colors show the soil sooner, there may be just as much actual dirt on the darker ones. It must also be remembered that light colors like blue, green, lavender, or pink are almost certain to fade unless they are washed with special care. Striped and check ginghams fade less than plain materials, but often shrink badly in washing. Such materials should be shrunk before being made up. Seersucker and cotton crepe materials of many kinds have the great advantage of needing no ironing. These rough materials are not very cool and if used for summer wear should have short sleeves and round neck to avoid chafing of the skin of the arms and neck. Percale, galatea, madras and the better grades of gingham or dress linen are all good materials for children's clothes. For hot weather almost any of the thin materials may be used.



Be still, sad heart! and cease repining.
Behind the clouds is the sun still shining;
Thy fate is the common fate of all,
Into each life some rain must fall,
Some days must be dark and dreary.
—Henry Wadsworth Longfellow.

Only Way to Succeed

"There is a way to farm and a way not to farm," said H. Wonder, a German farmer who conducts a ranch near Independence, Ore. "It takes hard, continuous, intelligent work to succeed as a farmer anywhere. I believe that you should not try to handle more ground than you can find fertilizer for. Put all the manure that you can get on the land, use the straw from your grain and work it in. Land is seldom worked too much. It is mostly the other way. Sitting on the fence and complaining about the weather and hard times never brings a crop. Thorough cultivation and plenty of manure will produce more profit off 10 acres than the same amount of manure and work put on 40 acres."

Mr. Wonder owns a farm in northern Germany and was just about to consummate a sale of it when the war broke out. There is no more loyal American than Mr. Wonder. He does not hanker after hyphens. H. H. B.

Old English Initials to Embroider



By WINIFRED WORTH.

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under the initial before embroidering. It aids one in washing the color from the finished design.

In padding these old English initials, different methods may be used. Some use the twilled cotton for the purpose, others make the chain stitch, while others let a skein of floss out at full length and embroider a strip of it under the thick parts while forming the letter, clipping the skein when the initial is finished. This is a splendid method, quickly done, and is suggested, too, as a help in padding all large pieces in border or crescent outline.

Initials can be made by filling in the broad space with French knots. This is used largely on elaborate pieces, such as the laundry bag, table scarfs and ornate gifts.

Under the Black Canopy

(Continued from page twelve.)

log he understood. The tree, which had been sawed nearly through, was one of those perfectly balanced trunks which stand upright until they are toppled by the wedge. In this one a cleft had suddenly developed, running up from the cut in such a way as to leave a huge, upright sliver above the notch, and on this sliver, as a fulcrum, the trunk caught and hung for a moment, then swiftly shot back. This "kick back" is one of the things against which a woodsman must always be on the alert. But in this case neither of the fallers was looking for it. They had been working frantically, and Jensen seemed to be numbed with weariness, although it was still morning. The flying butt struck his shoulder and hurled him back as if he had been a suspended chip. He fell to the ground directly in line with the upraised trunk, which hung suspended for an instant, then swung down with increasing speed.

Joe, from his position on top of the trunk at one side, realized what was happening, and without stopping to consider he threw himself from the log to the ground. The instant that followed seem an eternity, for in it he hurled himself under the descending trunk, caught frantically at the figure lying there and floundered ahead. His foot caught and he and his burden went to the ground in a heap.

At the same instant there came the terrific crash of the giant fir, as it struck the ground, and he knew that he had won. He rolled away from the limp figure under him and climbed to his knees. A dozen pairs of strong hands dragged him to his feet, but he was looking at Jensen. Steve McClosky had dropped down beside the injured faller and was examining him with the skill of one who is used to emergencies; presently he looked up and nodded to the men who waited for his verdict.

"He's got a broken collar bone, but as near as I can figure he is all right aside from that; stunned him, of course. Here—four of you fellows get a plank long enough to hold him straight and carry him up to the kitchen. Neville can fix him up so's he can make the trip to town on tomorrow morning's boat."

The foreman stood silent while this order was being carried out. Then he turned suddenly and spoke to Andy Dubois, who was standing, almost as if he had been stunned, a few feet distant.

"My lad," the logger said with a sort of gruff kindliness, "I want you to go a little bit slow after this. We came near having a tragedy here, and next time we might not miss it even by the hair's breadth we did this time."

Andy turned white to the lips. Then his eyes began to smolder and he whirled upon Joe.

"Then make this fellow quit watching me and laughing at me, behind my back," he cried in a tremulous voice. "It was as much his fault as mine!"

For a moment the foreman regarded him curiously; then he turned to Joe and spoke, and his voice was as even as if he were asking for a match or the time of day.

"You're to take Jensen's place, Dudley," he commanded. "I'll send some one up to limb for you. Now go to work, and both of you remember that this is a logging camp and that we're working against time. Quit your foolishness."

Joe was so astounded by this unexpected event that he had hardly wits enough to pick up his end of the saw. The Frenchman's face twisted spasmodically, and his eyes still glowed with an angry light. He had accepted the verdict in silence, however, and was waiting with ill concealed impatience.

Joe Gripped the smooth, hardwood handle, and a moment later they were at work. He was beginning to realize what it meant—McClosky had determined to let them fight it out not only in a peaceable manner, but in such a fashion that no matter how strenuously each might try to get the best of the battle the camp would be he gainer. He realized that the time for an apology had passed or had not yet arrived; and, however much he might regard the events which had led up to this climax, he knew that he could not honestly surender.

By noon he was breathing hard and his arms were beginning to tingle as if they were going to sleep. He lay down for a few minutes after finishing the meal, but the whistle of a donkey engine soon notified him that it was time to go back to his end of the saw. He caught the men looking curiously at him, and the limber who had expressed his satisfaction at Joe's having conquered Andy in the wrestling match spoke to him again.

"Stay with him," he advised. "He's long geared, but he hasn't got the arms and shoulders you have. You can tucker him if you keep up your grit."

Joe didn't reply, for he felt a dislike for this vindictive person who seemed always anxious to stir up trouble. And still he knew that he must practically do as the other had pointed out. He couldn't quit.

The afternoon passed with all the confusing unreality of a nightmare. Joe's head ached and his arms felt like sticks; his clothing was drenched with perspiration—and still, he forced himself to drive his end of the saw back and forth with the swift strokes which best suited Dubois. Evening came at last, and the most welcome sound that Joe had ever listened to was the blast of the whistle proclaiming quitting time.

Some one touched his arm as he walked wearily along toward the tents, and he turned and saw at his elbow a youngster who, under the title of "Cookey" was supposed to be a sort of assistant to Mr. Neville. Joe had noticed him as he worked industriously, peeling huge heaps of potatoes or turning beefsteak as it fried on top of the kitchen range; but he had never spoken to him before.

"What is it?" he demanded.

"Come into the kitchen—come right now. Charley wants to see you."

Vaguely puzzled to know what the cook could want with him, especially at the all important hour of serving supper to a ravenous camp of loggers, Joe followed the boy around to the back door of the canvas dining tent and presently found himself standing before Mr. Neville. The latter paused in his occupation of dishing up baked beans, and crossed to a shelf which ran along one wall. From this shelf he took a pint bottle, filled with an amber colored fluid.

"Here," he said, putting the bottle into Joe's hand, "you rub your arms and shoulders and sides with this liniment before you cool off. And after supper you come in here and let me rub you down. I watched you working today—you've got to win, you know, and you can't do it if you tie your muscles up in knots. Hurry now—and come back after supper."

Joe expressed his gratitude rather awkwardly, for he was taken by surprise. He realized that Mr. Neville's advice was sound, however, and carried out his instructions in regard to rubbing some of the pungent liniment into his aching muscles. He hesitated about complying with the other command, for it seemed to him that it was an imposition to let the cook wait on him after finishing a strenuous day over the hot range.

There was no escaping Mr. Neville's authority, however, and after he had yielded himself to the other's deft manipulations, he was forced to admit that the amateur trainer knew what he was doing. He rubbed and kneaded Joe's arms and shoulders in a way that spoke of long practice, and the young man could feel the blood tingling through his muscles with a pleasant warmth.

"Now you go to bed just as quick as you can get there," Mr. Neville commanded. "Come here in the morning and I'll limber you up, and tomorrow night after you finish work we'll touch you up again. By that time you'll be catching your pace. Goodnight—and good luck!"

As Joe was on his way to the bunkhouse, he came upon Steve McClosky standing with his hands in his pockets, staring gloomily at the distant, smoke filled sky. The foreman nodded to Joe, and for a moment stood looking musingly down at him.

"I see you're still alive," he commented. "Well, I wish the rest of the men could work at the pace you two fellows struck up today—I'm thinking we have trouble ahead."

"On account of the fires?" Joe asked.

"Yes. This is just the kind of weather to stir 'em up—hot days, plenty of wind, and little chance of rain. It was just this way before 'Black Friday,' and, if you've lived in this country long you'll know what that means."

"I've heard of Black Friday," Joe admitted, vaguely disturbed by the foreman's gravity. "Well, the only thing to do is to hope for the best and prepare for the worst."

"That's right," McClosky agreed, "but I reckon you don't realize just what the worst would mean. And there isn't any very good way of preparing for it."

(To be continued in next issue.)

Patterns

1800-1756—Ladies' coat suit. Coat 1800 cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 1756 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires four and one-half yards of 44-inch material for the coat and three and five-eighths yards for the skirt for a medium size. The skirt measures a little over three and one-fourth yards at the foot. Two separate patterns, 10 cents for each pattern.

2018—Girls' one-piece dress. Cut in four sizes: 6, 8, 10 and 12 yards. It requires three and three-fourths yards of 36-inch material for an 8-year size. Price, 10 cents.

2188—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires five and three-eighths yards of 44-inch material for a 36-inch size. The skirt measures about two and one-half yards at the foot. Price, 10 cents.

1990—Ladies' apron and sleeve protector. Cut in four sizes: 34, 38, 42 and 46 inches bust measure. Size 38 requires five yards of 36-inch material for the apron and three-eighths yard for the sleeve protector. Price, 10 cents.

2176—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. It requires one and three-fourths yards of 27-inch material for the guimpe and three and one-half yards for the dress, of 36-inch material, for a 10-year size. Price, 10 cents.

1944—Girls' one-piece dress. Cut in four sizes: 2, 4, 6 and 8 years. Size 8 will require two and three-fourths yards of 44-inch material. Price, 10 cents.

1909—A new coat dress for misses and small women. Cut in four sizes: 14, 16, 18 and 20 years. Size 16 requires six yards of 44-inch material. The dress measures about three yards at the foot. Price, 10 cents.

2190—Ladies' one-piece corset cover. Cut in six sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. It requires one and three-eighths yards of 36-inch material for a medium size. Price, 10 cents.

2165—Juniors' dress. Cut in three sizes: 12, 14 and 16 years. It requires 4 1-4 yards of 44-inch material for a 14-year size. Price, 10 cents.

1987—Ladies' house gown or negligee. Cut in four sizes: 34, 38, 42 and 46 inches bust measure. It requires seven yards of 44-inch material for a 38-inch size. Price, 10 cents.

2170—An ideal house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires for a 38-inch size six and seven-eighths yards of 36-inch material. The dress measures about three yards at the foot. Price, 10 cents.

2041—Girls' underwaist and drawers. Cut in six sizes: 2, 4, 6, 8, 10 and 12 years. It requires one yard of 36-inch material for the waist and one and one-fourth yards for the drawers, for an 8-year size. Ruffles on drawers will require about two and one-half yards of edging, three and one-half inches wide. Price, 10 cents.



Fill in this coupon and mail to Pattern Dept.

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Pattern No. ..... Size .....

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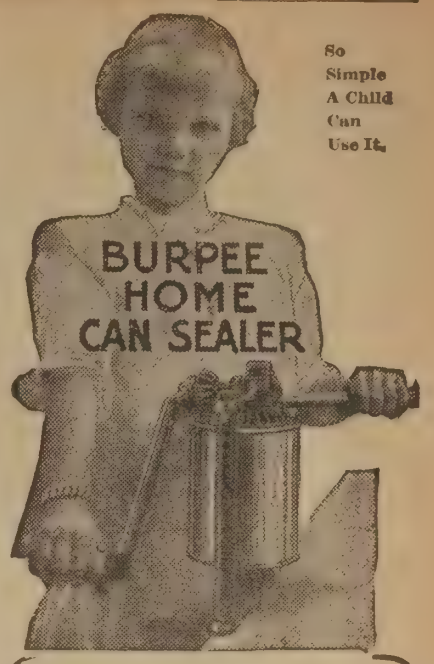
Do You Know That

Desire to win over somebody is all right if you are trying to do better yourself rather than hoping that he will do worse?

That every bit of meat and fish can be combined with cereals or vegetables for making meat cakes, meat or fish pies, and so on, and to add flavor and food value to made dishes?

Wasted Sugar.

Many people have the wasteful habit of putting two full spoons of sugar into a cup of coffee and never stirring it up; so that more than half of the amount remains at the bottom of the cup with the grounds to be washed into the sink. If they stirred their coffee after adding so much sugar most of them would find it too sweet. It is calculated that if everyone in America saved an ounce of sugar daily the total would amount to more than a million tons in the course of a year.—Milwaukee Evening Wisconsin.



Can Your Own Foods

ECONOMIZE!
SAVE YOUR SURPLUS

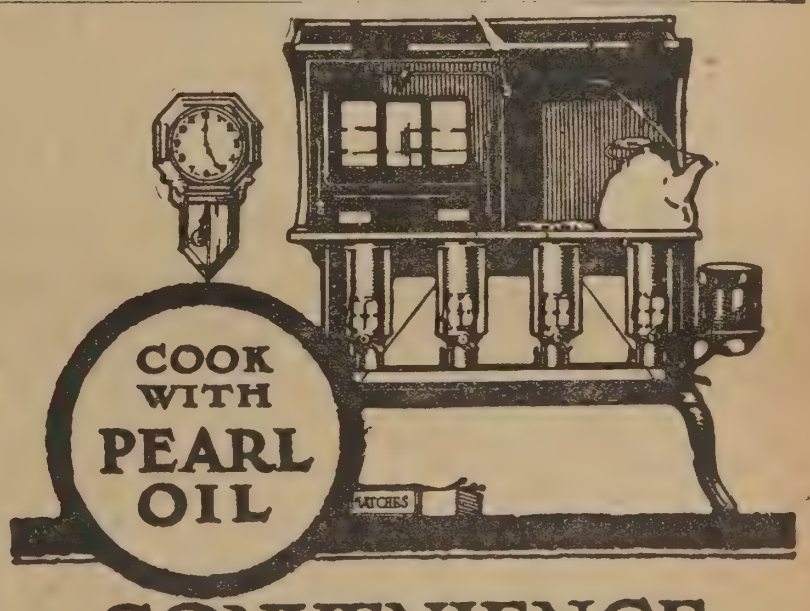
Let nothing go to waste—but put up your fruits, meats, vegetables and fish in sanitary tin cans. Turn them into money or enjoy them yourself.

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In 1, 2, 3 and 4 burner sizes, with or without ovens. Also cabinet models. Ask your dealer today.

NEW PERFECTION OIL COOK-STOVE

STANDARD OIL COMPANY
(California)



Dear Nieces and Nephews: I heard a fine talk the other night by a man who has gray hair. He said that we must look to the children and pay more attention to them, for grown-ups have done most of their work. And then he said that he hoped that the children now, who would be the men and women in a few years, would be better even than their fathers and mothers; and he said he thought the fathers and mothers wished and hoped for this thing more than anything else.

Does it you ever realize the responsibility that old folks have put on children? Responsibility is a big word. It means that they depend on us to do what they are doing now—be grown ups, farm, sew, cook, run automobiles, be the men and women, and do it better!

Is this not a fine thought for us? Let us make up our minds we will do it! Let us make our fathers and mothers proud of us, and make them feel that their pains and time and money were not wasted—that we have done just as well as we could. Your affectionate

AUNT NELLIE.

First Day of School Was Worst.

Dear Aunt Nellie: This is the second time I have written to the Corner. Last time I wrote about our farm so I won't write about it in this letter. I have planted a garden and it is coming up very well. Our potatoes are growing fine, too. I hope that all the cousins and you had a good time on the Fourth of July. I hope none of the cousins got hurt shooting firecrackers. My subject is "The Worst Day." My worst day was when I started to school. I didn't know any one at school so I cried nearly all day. I hope that I don't cry like that any more in school. My little brother is going to start to school next year. I will be 11 years old August 8. I enjoy all the letters that come. I have just finished reading the letters that came in the Corner today. I liked them all very much so I thought I would write again. I liked the story very much that Selena Elizabeth Dero wrote. I thought her story was very nice. I hope that some of the cousins will write to me. We have cleaned up the house today. We sell cream now because it is too warm to make butter. I earned 50 cents in cleaning the potato land. Our school let out June 7th, so I don't have to go to school until September. I passed into the fifth grade. My sister passed into the 3d.—Hilma Anderson, R. D. 3, Box 19, Olympia, Wash.

Wanted—A Name for a Kitten.

Dear Aunt Nellie: My father takes The Farmer and I enjoy reading the Children's Corner. This is the first time I have written to it. I live on a 60-acre farm five miles north of Lynden. We have a nice bungalow and a large barn. We have two work horses, Bob and Queen, two ponies, Fanny and Tony, and a colt named Prince. Tony took the first prize in the county fair year before last. I have a white dog and a white cat and a little grey kitten. The dog's name is Snowball. The cat's name is Juanito Snickerfritz Twilight. The kitten isn't named yet. If any of the cousins could suggest one I would be delighted. We have four cats besides these. I am 14 years of age and my birthday is April 25. I am in the eighth grade. Have I a twin? I would like to have some of the cousins write to me.—Jennie Van Wyke, Lynden, Wash.

A Swing Under the Big Pine Tree.

Dear Aunt Nellie: This is the first time I have written to the Corner. I hope to see my letter in print. Have I a twin I hope so. If I have please write. I am 10 years old and I have brown hair and brown eyes. There are lots of wild flowers around here. I have a flower garden and in it I have sweet peas, nasturtiums, pinks and pansies. I am 4 feet and 10 inches tall and I am in the fourth grade. We are a mile from the mail box and 13 miles from town. I have a swing under a big pine tree and I like to swing in it. I am reading a book by the name of Bound to Rise. I like it, too. It is about a poor boy.—Joyce Hatch, Goldendale, Wash.

Big Windstorm Makes a Bad Day.

Dear Aunt Nellie: This is a very good chance for me to write a letter. I will tell you about my worst day. It was the day that the wind blew so hard, that it was dark in the middle of the day and we lighted our lamp to eat dinner. I was very scared. Worst of all we had a playhouse out in the chicken yard. That is my sister Nellie and I had. It was in a header box. It had six rooms in it. It was propped up with poles and bad boards on all sides. We had sacks for walls. Papa used it for a place to put pig feed so we built a playhouse in it. We had my table and our toy dishes and after the wind, mama said we had better go and look at our dishes because the header-box was lifted right up off of the braces, but the dishes were all right. We have 14 horses and four colts. The colts' names are Ted, Pete, Martha and Eunice. There are two horses that we can ride, one named Fly, who weighs about 800 pounds. She is a sorrel. The other one's name is May. She has a colt named Ted. The books I have read are, "Alice in Wonderland," "Dorothy Dimple," "Strong and Steady," "The Rover Boys Out West" and "The King's Daughter." They are all good books. We have two dogs and one little pup. The dogs' names are Shep and Tabby. The pup's name is Lucy. She follows mama around all the time and barks at her.—Ora Jane Hayden, Mold, Wash.

Blacky and Patsy Are Ruby's Cats.

Dear Aunt Nellie: This is my first letter to the Corner. I live on a farm. I am 11 years old and in the sixth grade. We have five cows, 80 chickens, three pigs and three cats. Two of the cats are mine. One is all black and its name is Blacky, the other is black and white and its name is Patsy. I have one sister and no brothers. My sister's name is Agnes. We have many kinds of fruit. We have some cherries which are ripe now. I wish some girls of my age would write to me.—Ruby Johnson, Fir, Wash,, box 23.

Haven't Named Baby Sister Yet.

Dear Aunt Nellie: I enjoy reading the Corner very much. Many of my friends have written to the Corner. I live on a 480-acre farm. We have three cows and 24 horses. I have a pet horse. Her name is Bird. I ride her. I was in the fourth grade this year. I was promoted to the fifth. I have one sister and three brothers. Their names are Donald, Wendell, Ora and we have not named our sister yet. She was two months old last Tuesday.—Mildred Rees, aged 10, Hartline, Wash.

Buster and Tige Are Grace's Dogs.

Dear Aunt Nellie: I am 11 years old. My birthday is the eighth of December. Have I a twin? My sister and two brothers and I walk three miles to school. I like to go to school. I am in the fourth grade. We have 52 head of sheep. I have two dogs. Their names are Buster and Tige. I have a little colt. Its mother died and I have to feed it milk. Its name is Pearl. We have a car and I like to ride in it.—Grace Edna Milbrath, Schrag, Wash.

Helps With the Garden and Chickens.

Dear Aunt Nellie: I am 13 years old. My birthday was the 21st day of June. I am in the fifth grade. My teacher's name was Mr. Stram. I like him fine. We have three miles to go to school. We ride horseback to school. The name of our school is Pleasant Valley school. It was out the 31st of May. We are going to have a new schoolhouse with two rooms in it. There are 30 pupils in our school. We live on a farm of 880 acres. We have nine horses, 18 range cattle, four range calves, and four pet calves, three milch cows and one colt. The calves' names are Buttercup, Pansy, Betsy and Jumbo. The cows' names are Calice, Brownie and Boss. The colt's name is Bonnie. She is black. My papa takes The Washington Farmer. I like to read the Children's Corner. I have three sisters and two brothers. Their names are Elsie, Alice, Clara, Victor and Chester. Elsie is 15 years old, Victor is 14, Chester is 4 years old, Alice is 9 and Clara is 7. We help mama with her garden and help her feed the chickens. We have 130 little chickens and 25 old chickens. We have a dog and two cats. The dog's name is Bluch and the cats' names are Pussy and Snowball. We have a player piano and 60 pieces of music. My sister Elsie has taken a few music lessons.—Marie Ganguin, Goldendale, Wash.

A Good Time in Spokane.

Dear Aunt Nellie: It has been a long time since I have written to you, but I enjoy reading the letters better than to write them. I passed into the eighth grade and am very proud of it. I spent my celebration in Spokane this year and surely had a good time. I have five rows of potatoes this year and have also another small garden of my own. I would like to correspond with Violet Cronn.—Flora Lamm, Johnson, Wash.

Calls Her Little Calf Daisy.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 11 years old and my birthday is September 21. I will be in the sixth grade when school starts this fall. My sister Bessie will be in the tenth grade. We have five little calves. One is mine and I call it Daisy. We have about 200 little chickens. I would like for some of the girls to write to me.—Libbie Latimer, R. F. D. 1, Plaza, Wash.

Teddy and Taft Are Twins.

Dear Aunt Nellie: This is the first time I have ever written to the Childrens' Corner. I have been reading the letters. I thought I would write. I have two sisters and five brothers. Teddy and Taft are twins. They are 4 years old. Charles and Frank are twins, too. Their birthday is the same month. I have got one cow. I milk her. I am 10 years old. My birthday is in January.—Louise Blackburn, Pullman, Wash.

Lyda Has Found Some New Friends.

Dear Aunt Nellie: I have found some new friends. We are having bad luck with our little geese this year, but we have a number of little chickens that are doing fine. We have a big Reo car. It is a nice one. Viola runs it. My sister has the sweetest little baby. Our school is out. It was out the 25th of May. I hope some of the girls will write to me.—Lyda Augst, R. F. D. No. 1, box 30, Beebe, Wash.

Little Mother for a Day.

Dear Aunt Nellie: Here I am again. Our school was out the 27th of April. I passed to the fifth grade. I am 12 years old now. We have one cow now. Her name is Reddie. We have seven horses, two colts and two mules. Their names are Jack and Queen. Our horses' names are Topsy, Fanny, May, Jimbo, Nellie, Gladys and Jennie. Gladys and Jennie have colts. Their names are Carrie and George. Mamma and papa and the baby went to Centralia today. I am the mother today. Ralph, Ruby, Kenneth, Kathy and I went to the Cowlitz store this morning. We are going to pick strawberries today. Well, my letter is quite long so I will close, hoping to hear from some of the cousins. The first time I wrote, a boy named Adolf Johnson asked my Aunt Bessie Cantrell if I was a boy. I think he was mistaken, don't you?—Blanche Cantrell, Lacamas Stock Farm, R. F. D. 1, Box 115, Winlock, Wash.

Gets the Cows in Every Night.

Dear Aunt Nellie: I have a pony, Foxy, and a steer, Star, and a cat, Puss, and a little white rooster, Bandylegs. The rooster will try and fight us but he is so little that he can not hurt us. I get in the cows almost every night except when they are here. We milk two cows but have seven. Papa has 31 horses. We have three cats and two little puppies. I will be in the fifth grade next year. My teacher's name was Miss Florence Binkheimer. I liked her fine. I was 10 years old January 24, 1917. Have I a twin? If I have I wish she would correspond with me.—Adda Beckley, Box 83, Benge, Wash.

Call the Pet Pig Betsy.

Dear Aunt Nellie: I have been reading the letters in the Corner, and think them quite interesting. I am 10 years old and in the fourth grade. We live on a farm of 720 acres. We have a little pet pig. We call her Betsy. We live two miles from school, and when the weather is nice we walk. My techer's name is Miss Folsom, and I will have her next term of school, also. I have two sisters and two brothers.—Mary E. Walker, Malden, Wash.

A Red Calf Named Juliet.

Dear Aunt Nellie: This is my first letter to the Children's Corner. I like to read letters written by the other children. I live on a large farm. My papa keeps registered Holstein cows and I have a pet calf. Her name is Juliet. I want a Shetland pony so I can ride to school. I have 11 little bantams. I am eight years old and weight 56 pounds. I am in the third grade at school.—Eva Simmons, Ridgefield, Wash.

Irene Likes the Corner Fine.

Dear Aunt Nellie: I saw my letter in print so I thought I would write again. I am going to tell you about my schoolhouse. My teacher's name is Miss Gildez. There is two rooms in the schoolhouse. My sister's teacher's name is Miss Hendrickson. I read the Children's Corner and like it very much. I would like some of the girls my age to write to me. I am 7 years old.—Irene Mae Hett, Kelso, Wash.

Elsie Is Going to Write Again.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 12 years old. My birthday is the 24th of August. Have I a twin? I live on a 10-acre farm. We have four horses. We have two cows named Rona and Blackie. I have a dog whose name is Rover. I have one brother. His name is David. I will write to the Corner again.—Elsie E. Johnson, R. 2, boxx 116, Selah, Wash.

Have 11 Little Turkeys on Their Farm.

Dear Aunt Nellie: I like to read the Children's Corner. I am 9 years old and am in the fourth grade. We live on a 40-acre farm. We have three horses and 13 cows. I have two brothers. Their names are Albert and Jesse. Mama has 11 little turkeys and two big turkeys. Jesse has two rabbits. I can bake a cake and crochet.—Hazel Rose, R. R. 2, boxx 52, Enumclaw, Wash.

Hazel Is a Farmer Girl.

Dear Aunt Nellie: This is my second letter to the Corner. I saw my other letter in print and hope to see this one in print, too. I am 11 years old. My birthday was December 29, 1916. I will be in the sixth grade next term. I have a pony named Bonny. We have 20 colts. One is named Jack and one Daisy.—Hazel Saltmarsh, Coulee City, Wash.

The Youngest Girl in the Family.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 8 years old. My birthday is March the third. I am in the third grade. We have 36 little chickens and we have two cows and two calves. I am the youngest girl in the family. I have a sister 14 years old. She is in the seventh grade.—Fannie Blackburn, Pullman, Wash.

Belongs to the Sewing Club.

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 12 years old and will be 13 October 12. I will be in the seventh grade next term. I belong to the sewing club at school. We have two cats and one dog named Penny. I have two sisters and two brothers. I am the oldest girl in the family.—Kathleen Jump, Peach, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following: Rudolf Freeland, Edna A. Tueth, Velma Le Master, Gertrude Crawford, Lucile Turnley, Mae Turnley, Mollie Hergert, Emma Brune, Grace Jones, Ethel Cervin, Marie Haven, Catherine Borden, Avah Sharp, Ruby Gertrude Hicks, Margarette Ruth Williams, Violet Leachman, Leona Machlied, Elzina Rogers, Anna Straube, Rachel Olivene Webb, Elizabeth Fogelquist, Hilda Kuki, Augusta Victoria Chevalier, Marian Holmes, Mary King, Jane Adams, Beulah Shaw, Eunice Libbey, Alice Duncan, Esther Hergert and Mary Alice Bennett.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University).

Stomach Troubles Sometimes Actually Due to Ear Trouble

Sometimes your eyes may be "bigger than your stomach," for time and again the stomach has "the whip hand" and makes the eyes pop, dilate, contract and actually "see things."



Dr. Hirshberg.

Dr. Milton Goldsmith of Pittsburg has made a novel report about the effects upon the stomach of irritations and affections of the canal of the outer ear. It will perhaps come as a great surprise to many to learn that so distantly situated a structure as the ear may have a profound influence upon one of the main engines of the human motor car—the stomach.

A little girl, 12 years of age, was sent to Dr. Goldsmith because she vomited early and often. She had this trouble for two years, which was attributed to "nervousness," whatever that can mean.

Whenever this little girl ate, no matter what composed the diet, she promptly began to vomit. An examination of her ears revealed a small glass bead, imbedded in wax, in one ear. After the bead and the wax were removed there promptly occurred complete and permanent relief from the stomach disturbance.

Another Strange Case.

A waiter became "sick at the stomach" every morning before breakfast. The attempt to eat made him dizzy. He felt as if he were about to strangle. Unlike the little girl, who had a soreness or pain, he complained of a sensation of heaviness in the pit of the abdomen.

Half an hour after breakfast he would vomit. However, the discomfort would gradually wear away and he could successfully eat a hearty dinner.

A search of the waiter's ears showed two solid lumps of stonelike, impacted wax, and their removal was rewarded with full relief from the stomach symptoms.

Another example of these strange bedfellows, stomach and ears, is the case of a young school teacher who, the day after her teeth were filled, said that she tasted rubber and felt nauseated. On the fourth day she was cramped, had stomach ache and vomited once. This relieved her for a few hours, when the pain returned.

Proves Interdependence.

For five weeks thereafter, until she saw Dr. Goldsmith, the nausea and vomiting continued in just this manner. She lost her appetite and had slight "burning in the oesophagus," worse after meals. She also belched much.

When all other measures failed to relieve, her ears were examined, when lo! a lump of hard wax was discovered in the right ear. This was removed and the whole potpourri of "indigestion" and stomach trouble went by the board. She was cured and has had no return of the ailment.

These are only a few of many instances where wax, foreign objects and other annoyances of the ear were found guilty of a bad influence upon a structure as far removed as the stomach. It also helps to bring home the extraordinary and many-sided lines of intercommunication between the various parts of the human form divine.

Will Confer on Grain

(Continued from page three.)

lands that, with ordinary prices, could not yield profitable crops.

Incidentally, that would mean handsome prices for farmers owning choice wheat lands, but that fact should not blind us to the true consideration of national welfare. For it must be obvious that if the government fixed a price that would only net a moderate profit on crops grown on the most productive lands, millions of acres of less fertile soil could not be profitably cropped. The nation would lose the necessary increased production.

In this connection the following letter opens up points that should be given a hearing at the forthcoming Spokane conference:

The plan of the food control administration to fix a "reasonable" price on wheat comes to the farmer as a bolt of lightning out of a clear sky. If the price is set below $2 per bushel at primary markets it will mean ruin and bankruptcy for thousands of tenant farmers of the Palouse country.. The situation is so serious that the farmers should lose no time in bringing the matter to the attention of the government.

This is the situation here: Summer fallow was last fall seeded to wheat that was worth $1.50 a bushel. One and one-half bushels per acre were seeded, costing $2.25 an acre for seed last fall. This was winter killed. The ground was reseeded this spring to wheat costing $3 a bushel, and one bushel was used to the acre, making a total cost of $5.25 an acre for seed alone. The present drouth has damaged this wheat until it will make only 10 to 15 bushels an acre. Sacks are costing 15 cents each. Binding twine costs 18 cents a pound. Threshing has advanced to 12 1-2 cents a bushel, and harvest labor has increased $1 a day per man. Implements have advanced 50 per cent in price. Groceries the same, and shoes 100 per cent.

Farmers have been paying exorbitant prices on everything they have had to buy for the last year. On top of all this the tenant farmers must deliver one-third of all crops to the warehouse with all expenses paid. All this crop was seeded on feed worth, oats, $60 a ton and hay $25 to $40 a ton. It will have cost the farmer $20 an acre by the time his crop is in the warehouse, and if he is a tenant it will have cost him $30 an acre.

The situation is serious, not only to the farmer but to his creditors as well. Farmers who bought Liberty bonds on instalments will fail to meet the payments if wheat sells for less than $2 a bushel. A price less than $2 will paralyze the farming industry of the Palouse indefinitely.

E. C. HUNTON.

Steptoe, Wash.

Mr. Hunton is referring to the government price on the 1917 wheat crop, which is yet to be fixed by a commission headed by President Garfield of Williams college.

Want Ads

AGENTS—WANTED 9

ALBANY NURSERY TREES GIVE SATISFACTION. You can earn good money selling our complete line of high-grade fruit and ornamental stock. Men or women agents wanted. ALBANY NURSERIES, 1st National Bank building, Albany, Oregon.

AGENTS—IMMENSE PROFITS EASILY made selling flexible metallic sign letters to stores and offices. Right opportunity for live wires. U. S. Sign Co., S217 Lincoln st.

SALESMEN WANTED, TO SELL OUR choice nursery stock. Write for particulars. Donald Nursery Co., Donald, Ore.

SITUATION WANTED—Male 21

WRITER NEEDS EXERCISE; WILL HELP farmer with crops; small wages; no Sunday work. Hooper, 803 Madison st., Seattle.

MUSICAL 38

"STAND BACK OF OLD GLORY" THRILLS you with its patriotic fervor. Words and music, postpaid, 15c. Whitney Pub Co., Spokane, Wn.

EDUCATIONAL 45

YOUNG MEN AND WOMEN
SHOULD APPLY OR WRITE TO
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SPOKANE, WASHINGTON,
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TEACHERS' AGENCIES 46

VACANCIES FOR TEACHERS IN ALL the western states. Write us today. Clark Teachers' Agency, 411-412 Chamber of Commerce bldg., Spokane, Washington.

SCHOOL CLERKS: WIRE OUR EXPENSE. Hazard Teachers' Agcy., Spokane.

FRESH FOOD PRODUCTS 56

FRESH FRUITS, VEGETABLES AND guaranteed fresh eggs. Write for prices, f. o. b. Freewater, Ore. E. W. Wehtje, R. 2.

MISCELLANEOUS 57

EAT WITH S. MONK WHEN VISITING the Interstate Fair. Regular meals served all day, 25c; also short orders. We serve the best the market has to offer. W906 Second ave., Spokane, Wn.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Manufactured in our own mill and sold at factory prices. We ship to anyone, anywhere. One price to everybody. Prompt shipments. Safe delivery to destination guaranteed. Our big illustrated catalog No. 27 mailed free, postpaid, on receipt of request.

5 cross panel doors, No. 1	$1.65
Craftsman bungalow doors	1.90
One panel, 3-ply veneer doors	2.25
French doors, 15 lights	4.00
Screen doors, 2-8x6-9, galv. wire	1.50
Standard 2-light windows, up from	1.25
8x10, 4-light sash	.57
16x16x26 spruce flour bins	1.50
Drain boards, 20x24	.75
Williams' "Gold Seal" mixed paints, per gallon	2.50

Frames, mouldings, builders' hardware, mill work.

O. B. WILLIAMS CO.
1943 1ST AVE. SO. SEATTLE, WASH.

BUILDING MATERIAL AT WHOLESALE prices. Doors, $1.25; windows, 84c; roofing paper, $1.35 per square. All building materials in proportion. Send for our complete ILLUSTRATED CATALOGUE, with net prices. P. A. Rovig Co., 1120 Western avenue, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

LUMBER, SHINGLES, MILLWORK. SAVE money by getting your building material direct from the mill. Let us quote you delivered prices. W. W. Wells Co., Box 1010F, Everett, Wash.

MISCELLANEOUS WANTED 63

STRAINED HONEY WANTED. WRITE US the quantity you have to offer. Commercial Creamery Co., Spokane, Wn.

FARM LIGHT PLANTS 73

EDISON ELECTRIC LIGHT PLANT. Lasts a life time. Guaranteed 4 yrs. Either direct connected or belted. Automatic stop, self cranking. Sold by the oldest and largest electrical supply and repair house. Nixon & Kimmel, 901 Main st., Spokane, Wash.

PERKINS SUPPLY CO., S. 111 MONROE st., Spokane, Wash. Farm lighting plants, gasoline engines and pumping machinery.

MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. SO., SEATTLE.
Write for Catalogue.

PORTABLE WELL DRILLING AND PROSpecting, machinery, tools, cordage, contracting, well drilling. Keystone Driller Co., Spokane. Catg. H now ready.

AUTOMOBILES 114

PETITE COMBINATION MANIFOLD, FOR Ford and Maxwell cars; 30 to 60 per cent saving of gas guaranteed. Investigate. S175 Stevens, Spokane.

AUTO TOPS, BUILT TO ORDER, AND repaired. N. Reeder, Dept. F, Spokane, Wn.

AVIATION 115

DENINE AIRCRAFT CO., BOX 2232 SPOkane, Wash. Flying taught, skilled help wanted. Investigate. Splendid opportunity.

STOVE REPAIRING 126

MYER S. RUBENS STOVE & FURNACE REpair Works; welding. W1009 1st., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

WASH. (D. C.) PAT. ATTY. SEE AD IN Polk's. C. H. Crawford, Spokane.

POULTRY 174

DOUCETT & KRAMER PAY HIGHEST price for butter and eggs. Prompt remittance. 2d and Post, Spokane, Wash.

LIVE STOCK 177

A HOLSTEIN BULL CALF WHO IS A fine individual, the son of Findern Pieterje Fayne and an A. R. O. dam; we will give good terms on this calf as he is a winner. Roy A. Bowers, Hay, Wash.

HOTELS 300

GALAX HOTEL,
cor. Main and Bernard sts., Spokane. A clean, respectable hotel. Rates, 75c to $1.50 per day, with or without private bath. Free taxi from depots.

DAVENPORT HOTEL, SPOKANE, RATES from $1.50; headquarters for farmers and business men of Pacific Northwest and their families; no formality; unobtrusive service.

WHITE'S HOTEL AND RESTAURANT, Rooms, hot and cold water, 75c up. Breakfast, 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

WHEN IN SPOKANE, STOP AT THE HOtel Majestic, opp. N. P. station. Rooms, $1 up. Strictly modern. Mrs. W. H. Murphy, Prop.

NEW WASHINGTON HOTEL, 403 1ST ave.; respectable; comfortable rms., 50c up.

INTERNATIONAL HOTEL,
234 Main ave., Spokane, 50c up.

NEW MADISON HOTEL,
First and Madison, Spokane, $1 up.

HOTEL COEUR D'ALENE, MOST POPular med. priced hotel in Spokane

HOTEL CARLYLE, 2D AND POST., SPOkane, Wash., 150 rooms, $1 up.

HOTEL TOURAINE, 23 MONROE ST. Rooms 50c and up.

WM. BROWN HOTEL, S170 POST, SPOkane, 75c up.

FAIR PREMIUM LISTS 370

SPOKANE INTERSTATE FAIR AND live stock show, Spokane, September 3-8. Premium list now ready. Write W. L. Tennant, Secy., Spokane.

WASHINGTON STATE FAIR, SEPT. 17-22. Premium list now ready. Write Frank Meredith, Secy., North Yakima.

WESTERN WASHINGTON FAIR PREmium list now ready. Write J. P. Nevius, Secy., Puyallup, Wash.

SOUTHWEST WASHINGTON FAIR PREmium list now ready. Write G. R. Walker, Secy., Chehalis, Wash.

GRAYS HARBOR COUNTY FAIR PREmium list now ready. Write J. B. Kirkaldie, Secy., Elma, Wash.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, S2 Bernard, Spokane.

OPTICIANS 462

EYES EXAMINED; GLASSES FITTED; perfect results guaranteed. Broken glasses repaired by mail. Postage paid. Dr. Sletto, Owl Drug Store, Spokane, Wn.

DR. I. M. RADABAUGH, SPECIALIST IN examining eyes and fitting glasses, 304 Jamieson bldg., Spokane, Wash.

PHOTO SUPPLIES 470

BUY YOUR KODAK FILMS, PLATES and photo paper from Martin, your professional photographer. Fresh stock always. Prompt reliable service. Most complete assortment hand cameras, kodaks, etc., all sizes from $1 and up. Martin Photo Studio, on Picture Corner, Spokane, Wash.

KODAK FILM FINISHING 473

MARTIN, YOUR PROFESSIONAL PHOTOgrapher, offers expert film developing, printing and engraving. Prompt, reliable, and efficient service. Largest photographic studio in Pacific Northwest. Rolls developed, any size, only 10 cents. Save your money. Send for our price lists. Studio on Picture Corner, Spokane, Wash.

ARCHITECTS 558

BUILDING PLANS AND ESTIMATES. L. L. Rand, The Rookery, Spokane, Wash.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

FARM LANDS—FOR SALE 651

MONTANA WEEKLY EXCURSIONS! 500,000 acres in Hill, Teton, Choteau, Blaine, Valley, Cascade, Fergus, Custer and Dawson counties; Blackfoot, Redwater, Yellowstone, Missouri river and Judith Basin districts; $5 to $50 per acre; 160 to 50,000 acre ranches; raw or improved; 10 years' time. ALL EXPENSES ALLOWED if you purchase. Address Box 1995, Spokane, Wash.

CUT-OVER LAND.

Half section of all good land, 2 miles from station, very easy to clear; running water. See the crops on land in this district. Only $19.50 per acre; easy terms.
HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG.

FOR SALE—AN EXTRA GOOD 80-ACRE farm in Skagit Co., Wash. Address owner, Victor Peterson, R. R. No. 5, Box 80, Mt. Vernon, Wash.

FARM LANDS—FOR SALE 651 Continued.

REAL SNAPS IN STOCK,
HAY, GRAIN AND FRUIT
LANDS NEAR SPOKANE.

Improved and unimproved tracts described below are near a good city and good market, on good state and county roads, near railroad, good schools, rural free delivery, good society, etc. The climate is conceded to be the best. Domestic and crop water plentiful. No irrigation needed — crops sure. Write for a folder showing photographs and telling of climate and other facts of interest, such as no failure of crops, freedom from pestiferous insects, frostless belt, amount of wheat, oats, hay, potatoes, fruits, etc., per acre. If the tracts described below do not suit you, tell us what you want.

40 ACRES.

40 acres of raw cut-over land; very productive soil, with an abundance of moisture, as would be indicated by willow bush; in good locality, on public road, close to railroad; on easy terms.

160 ACRES.

25 acres cleared; on county road, rural free delivery, etc.; sandy loam soil; good subirrigation; lies fairly level; in good community. Price right and terms easy.

80 ACRES.

40 acres cleared; on state road and two county roads; very centrally located, in good community; would make an excellent home; would make some improvements for proper party. Small payment and very easy terms.

480 ACRES.

480 acres, within half mile of railroad; cordwood enough to pay for it; in dollar limit of Spokane; (good soil; make good stock proposition; more land could be had adjoining); $12.50 per acre. easy terms.

MILAN FARMS DEVELOPMENT COMPANY.

"REALTORS."

1322 Old National Bank Bldg.
or
ALLIN REALTY COMPANY.
408 West Sprague Ave.
Tel. Main 2750.
Spokane, Washington.

FOR SALE OR RENT.

166 acres, well improved dairy ranch, half mile to shipping point, near Sandpoint, Idaho; will rent the land and sell stock and equipment as follows: 13 head milk cows, imported Swiss bull, 16 head young stock, mostly good heifers, 2 horses, wagons, mower, rake, baler, etc.; about 70 tons hay; cream check amounts to about $90 a month; extra good pasture; land has 80 acres hay meadow; good seven-room house 2 barns, 2 good wells, 2 springs, fine stream, balance land all good when cleared; will sell land and equipment or sell equipment and rent place. If place is rented will make good deal with renter to have ties and cordwood cut on share basis; will also pay for clearing land. Call or write for particulars. Quick action necessary, as this is extra good deal for a hustler with some money.
HEGE & WATKINS CO.,
717 PAULSEN BLDG., SPOKANE, WASH.

VERY FINEST CRANBERRY PEAT LAND in center of coast cranberry industry, for sale in 1 to 5 acre tracts at $200 per acre, with only 20 per cent cash payment; no other payment for five years, balance in ten years. By planting part of holdings in cranberries, crops should meet future payments. If desired, will plant for buyer. Adjacent lands producing 150 bbls. to the acre, with cranberries selling at $8 to $12 per bbl. The coast consumes 20 times the present production. For a money-maker, do you know of any other crop that compares favorably with cranberry growing?. Home markets at $2 per bbl. higher price than eastern grower gets, owing to freight west. Cranberry grower myself. Henry S. Gane, Long Beach, Pacific County, Washington.

SOUTHWEST ALBERTA FARMS, ANY size; square deal. No trade. Cardston Investment Co., Ltd., agents R. R., Hudson's Bay and Company lands. Cardston, Alberta.

20 A. FOR SALE, WITH CROP, STOCK and machinery; income now $200 per mo. Price $5000. Write for particulars. J. E. Froom, R. 1, Bellingham, Wn.

320 A. LEVEL AND FERTILE; 30 BU. wheat or 2 to 3 tons alfalfa; 2 good wells; $12,800; terms. F. Orr, Fairfield, Ida.

IRRIGATED LANDS—For Sale 663

MONTANA IRRIGATED LAND.

560 acres near good town in Montana; 400 acres irrigated; 250 in hay; 87 acres barley; not over 60 acres waste land; several good springs; land lies nice and level for irrigating; water maintenance free. Good seven-room house; half the hay and one-third barley goes to buyer at $60 per acre. Want Palouse land as part payment; easy terms on balance.
HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG.,
SPOKANE, WASH.

IRRIGATED FARM LANDS.

ALFALFA LANDS, under government irrigation; abundant water; low altitude; rail and water transportation to coast markets; good schools, good roads; products alfalfa, corn, cream, hogs, honey, fruits, vegetables; long growing season; unimproved land $30 to $60 per acre; improved $100 to $250. Write for further information and literature. Dodd & Knapp, Hermiston, Ore.

FOR SALE OR EXCHANGE 702

WE BUY, SELL AND EXCHANGE anything photographic. Sell us your old camera, kodak, lens, tripod, carrying case, etc. Trade your small kodak for something better. Buy one of our bargain kodak snaps. Second-hand, but good as new. What have you to sell? Let us give you an offer. What do you want? We have it. Martin, your professional photographer, Picture Corner, Spokane, Wash.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Aug. 18.—Increasing likelihood of a bumper crop of corn did a good deal today to smash down prices of that cereal. The market closed heavy, 3 1-4 to 4 3-8 cents net lower. Wheat finished easy at $2.02 for September, an overnight advance of 1 cent. Oats lost 3-4c to 4 3-4c. In provisions the outcome was a rise varying from 10 to 35 cents.

The fine crop outlook in corn was a big factor in causing would-be purchasers of corn for immediate use to withhold action and in forcing a decline in cash values to a point where for the first time in a long while No. 2 guaranteed to be delivered in Chicago by September 30 was sold at $1.65, the settlement price which the board of trade directors recently fixed for the September future. Bulls were further handicapped by the general workings of the government food control measures, and in particular by announcement of the unloading of neutral vessels at Baltimore. The market closed semi-demoralized at about the lowest level of the day.

Trifling amounts of wheat changed hands to even up yet outstanding contracts in the September delivery, the only option traded in. It was said the government price-fixing committee was not likely to report until September 1. Oats tumbled with corn.

Hogs commanding as high as $19 a hundred weight led to new upturns in the provision market. Belief was general that large export transactions were under way.

Cash Quotations.

CHICAGO, Aug. 18.—Wheat—No. 2 red, $2.20; No. 3 red, nominal; No. 2 hard, $2.25; No. 3 hard, $2.20.

Corn—No. 2 yellow, $1.75@1.79; No. 3 and 4 yellow, nominal.

Oats—No. 3 white, 55 1-4@58c; standard, 55 3-4@58 1-2c.

Rye—No. 2, $1.73.

Barley—$1.15@1.35.

Timothy—$4.50@8.

Clover—$12@17.

Pacific Northwest Grain.

PORTLAND, Aug. 18.—Cash quotations, August delivery: Oats—No. 1 white feed, $47 bid; barley, No. 1 feed, $45 bid; brewing $47 bid; bran, $35 bid; shorts $37.50 bid.

SEATTLE, Aug. 18.—Wheat—Bluestem, $2.10; Turkey red, $2.10; forty-fold, $2.07; club, $2.05; fife, $2.05; red Russian, $2.03.

Barley—$45 per ton.

TACOMA, Aug. 18.—Wheat—Bluestem, $2.16; fortyfold, $2.13; club, $2.10; red fife, $2.10; red Russian, $2.09.

San Francisco Grain.

SAN FRANCISCO, Aug. 18.—Barley—December, $2.01 1-2; May, $2.25 bid, $2.32 asked.

Minneapolis Grain.

MINNEAPOLIS, Aug. 18.—Wheat closed a fraction lower. Corn lower. Wheat receipts, 204 cars, compared with 246 cars a year ago.

September wheat opened $2.05; high, $2.05; low, $2.03 1-2; closed $2.04 1-2.

Cash No. 1 northern, $2.40@2.45; No. 2 northern, $2.35@2.40; No. 3 northern, $2.15@2.30; No. 4 northern, $2.05@2.20; No. 2 hard, Montana, $2.20@2.30; No. 2 durum, $1.90@2.

Corn—No. 3 yellow, $1.78@1.80.

Oats—No. 3 white, 52c@53c.

Flax—$3.40@3.45.

Barley—$1.10@1.34.

Flour—Unchanged; shipments, 43,879 barrels.

Rye—$1.68@1.70.

Bran—$31@31.50.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1917-18 and 1916-17 were as follows:

Seattle.	Wheat.	Oats.	Barley.	Hay.
1917-18	101	81	20	524
1916-17	554	191	24	506
Portland				
1917-18	141	94	18	174
1916-17	555	258	23	283
Total.				
1917-18	242	175	38	698
1916-17	1109	449	47	789

Live Stock Quotations.

At Chicago.

CHICAGO, Aug. 18.—Hogs—Receipts, 2000; strong, 25c above yesterday's average. Top, $19, a new high price record; bulk, $18.10@18.80; light, $17.40@18.90; mixed, $17.50@19; heavy, $17.30@18.90; rough, $17.30@17.55; pigs, $12.25@15.75.

Cattle—Receipts, 2000; weak. Native beef cattle, $8.15@14.90; western steers, $7@12.45; stockers and feeders, $6.10@9.25; cows and heifers, $4.50@12.60; calves, $10.50@15.

Sheep—Receipts, 5000; weak. Wethers, $7.75@11.10; lambs, $10.25@16.50.

At Omaha.

OMAHA, Aug. 18.—Hogs—Receipts, 3000; market 50@75c higher. Heavy, $18@19; mixed, $18.25@18.75; light, $18@18.75; pigs, $15.50@17.50; bulk of sales, $16@18.75.

Cattle—Receipts 200; market steady. Native steers, $9.25@14.25; cows and heifers, $6.75@9.75; western steers, $8.50@12.50; Texas steers, $7.50@10.25; cows and heifers, $6.50@9; canners, $5.25@6.50; stockers and feeders, $6@10.25; calves, $8.50@12.50; bulls, stags, $6@8.50.

Sheep—Receipts, 2400; steady. Yearlings, $10.50@11.25; wethers, $10@11; ewes, $9@10; lambs, $15.75@16.25.

At Portland.

PORTLAND, Ore., Aug. 18.—Cattle—Steady; receipts, 36 head; steers 25c higher. Best beef steers, $8.25@8.75; good beef steers, $7.25@8.25; best cows, $6@7; ordinary to good cows, $6; best heifers, $6.25@7.25; bulls, $4.50@6; calves, $8.50@9.50; stockers and feeder steers, $4.50@6.75.

Hogs—Steady; receipts, 160 head. Prime light, $16.65@16.75; prime heavy, $16.50@16.65; pigs, $15.50@16; bulk, $16.75.

Sheep—Steady; receipts, 86; lambs 25c higher. Western lambs, $12@12.75; valley lambs, $11.50@12; yearlings, $9.50@10.25; wethers, $9.25@10; ewes, $8@8.50.

Spokane Stockyards Saturday.

Hogs — Receipts, none; market strong. Prime light, $17@17.25; prime heavy, $16.75@17; pigs and skips, $15.75@16.25; stockers, $13.75@15.

Cattle — Receipts, none; market steady. Prime light steers, $8@8.25; prime heavy steers, $8.25@8.75; good steers, $7@7.80; ordinary to fair, $5.25@6; prime cows, $6@6.75; common cows, $4@5; best heifers, $6@7; bulls, $5@7; calves, $7.50@9.50; stockers and feeders, $5@7.

These quotations are made on cattle of the beef breeds, all dairy stuff to take a cut of $1 per cwt.

Sheep — Receipts, none; market steady. Prime lambs, $12@12.50; good lambs, $10.50@11.25; prime yearlings, $8.50@9; prime wethers, $8@8.50; best mutton ewes, $5@7.

Portland Market.

PORTLAND, Ore., Aug. 20.—The merchants' exchange has resumed regular sessions for the sale of oats, barley and millfeed, but wheat will not be handled. There was a fair trade in oats and feed at prices that show a declining tendency.

In the following list of quotations the grain, hay, millfeed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $48 per ton.

Millstuffs—Bran, $37 per ton; shorts, $39.

Barley—No. 1 feed, $47; brewing, $48; rolled, $51.

Hay—Buying prices; Timothy, eastern Oregon, $28; alfalfa, $23; grain, $16.

Eggs—Oregon ranch, case counts, 35@36c per dozen; candled, 37 1-2@40c.

Poultry—Hens, 15@16 1-2c; ducks, 13@17 1-2c; turkeys, alive, 18@21c; geese, 8@9c.

Butter—City creamery, prints, 44@45c per pound; cubes, extras, 40@40 1-2c.

Cheese — Tillamook triplets, 23c; young Americas, 24c.

Dressed meats—Veal, 15@15 1-2c; pork, 20@20 1-2c.

Hops—1916, 22c; contracts, 35c.

Potatoes—New, 3@3 1-2c per pound.

Wool—Eastern Oregon, fine, 60c; coarse, 60c; valley, 60@65c.

Beans — California small white, 16 1-2; large white, 16c per pound.

Hides—Salted hides (25 lbs. and up), 19c; salted stags (50 lbs. and up), 16c; green and salted kip (15 lbs. to 25 lbs.), 20c; green and salted calfskins (up to 15 lbs.), 30c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 14c; dry hides, 35c; dry salt hides, 26c.

The Wool Market.

BOSTON, Aug. 17.—The commercial bulletin will say tomorrow:

"Offerings of the wool are being made to the government by sample to the extent of 50 per cent of the stock owned here and valuations by the various committees have already begun. The demand for wool during the week has been moderate at very firm prices.

"Employment at the mills is good, although the machinery occupation returns of the National Association of Wool Manufacturers show a slight decrease on August 1, compared with a month earlier. Only scattering sales are reported from the west."

Scoured basis: Texas fine, 12 months, $1.65@1.70; fine eight months, $1.45@1.50.

California northern, $1.70@1.75; middle county, $1.40@1.45; southern, $1.15@1.20

Oregon: Eastern No. 1 staple, $1.75@1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.55@1.60.

Territory: Fine staple, $1.80; half-blood combing, $1.70@1.75; three-eighths blood combing, $1.40; fine clothing, $1.60@1.65; fine medium clothing, $1.45@1.55.

Pulled: Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.45@1.50.

Butter and Eggs.

SAN FRANCISCO, Aug. 18.—Eggs—Fresh extras, 43c; fresh firsts, 42 1-2c. Cheese—New firsts, 20c.

PORTLAND, Aug. 18.—Butter steady. Two creameries paying 48c for No. 1 sour cream, 4 cents over market.

CHICAGO, Aug. 18.—Butter higher; creamery, 36 1-2@40 1-2c.

ELGIN, Ill., Aug. 18.—Fifty tubs butter sold at 40 cents.

Seattle Market.

SEATTLE, Aug. 18.—Orders through brokers here for 75 carloads of potatoes have been filled, and the market is expected to be easier next week. A large portion of these potatoes were shipped to eastern Washington, where growers have been unable to give time to digging because of the late crop and labor is scare. This order has been moving for two weeks.

The second carload of early Yakima potatoes was received today, but outside of Kennewicks at 2 1-2c no quotations have yet been offered from that section.

Jobbers are advised that peaches are being contracted f. o. b. eastern Washington at 50c, which will mean a 75@80-cent market here and slow selling for a time. The impression prevails here that the bulk of the Washington peach crop will be sold in Montana, Dakota and Nebraska this year.

The demand for apples has been brisk all week, with transparencies leading at $1.25. A good quality of duchess and astrachans will be due next week.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 40@43c per dozen.

Poultry—Live hens, fat, over 4 lbs., 18c per lb.; 2 lbs. and under, 14@16c; old roosters, 11c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 10c per lb.; broilers, live, 18c per lb.

Butterfat—47c per lb.; dairy butter, 31@32c.

Beef—Buying prices: Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c; heifers, 6@8c per lb.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 14@16c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 30c per lb.; green hides, 16c per lb.; salted bulls, 16c per lb.; dry hides (short trim), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12 1-2c per lb.; dry butcher full wool sheep pelts, 36@38c per lb.; green calf, 30c.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $3 cwt; sweet potatoes, 5c lb.

Apples—New Washington apples, $1 20-lb box; $1.75@2 50-lb box.

Butter—Blanchard cartons, 44c lb; Medo-Maid, 44c lb; Cascade, 44c lb; Gold Leaf, 44c lb; Better Butter, 44c lb; Aftalia, 44c lb; Diadem, 44c lb; Hazelwood, 44c lb; Solid Pack, 42c lb.

Cheese—Wisconsin full cream, twins, 23c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 20c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $12@12.50.

Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.

Dressed Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Hog Prices Soar.

PORTLAND, Ore., Aug. 18.—Sharply advancing hog markets in the eastern centers have had the effect of further strengthening values at the local yards. Wednesday top grade hogs were sold at North Portland at $16.75, an advance of fully half a dollar over the preceding day. This is the highest hog price ever known here. Other lines were also firm, but prices were not altered. Receipts, especially of hogs, were light.

There was a liberal run of 21 loads of stock at the yards Friday, mostly cattle and sheep, the latter coming direct. The market retained all its firm features of the preceding day. Hogs, of which only 270 head were received, were quoted at $16.75 as the top, though a few head brought in by wagon were sold at $17 without fill. Cattle quotations were not changed.

There was a small run of stock at the yards Thursday and the volume of trading was limited. Strength still characterizes the hog market here, as elsewhere, and $16.75 was again paid for local offerings. Firmness prevails in the cattle division. The sheep and lamb supply continues light.

Receipts were 28 cattle, 4 calves, 160 hogs and 45 sheep. Shippers were GeorgeD. Burdick, Halsey, 1 car cattle and calves; H. R. Nelson, Monitor, 1 car cattle, calves, hogs and sheep.

The week closed quietly at the stockyards with prices in all lines firm at the range established during the previous days of active trading.

Fruit Sales Recorded.

NORTH YAKIMA, Wash., Aug. 16.—Yakima's first car-lot of Bartlett pears sold today at $1.70 a box, f. o. b., the sale being made by Manager Fred Eberle of the horticultural union. Pears in mixed cars have been moving to market this week at $1.75 a box as the top price.

The pear movement will begin in volume next week when most orchardists will start harvest.

Peach picking for early varieties is in full swing in the lower valley. The first car-lot shipped by Lombard and Horsley from their Buena orchard sold for 60 cents a box.

The cannery is contracting early Crowfords and Carmans at $20 a ton.

Angus Cattle

The early maturing baby beef kind.

Stock for Sale.

A. H. EAGLESON & SON,

Boise Idaho



Pay Highest Prices for Wool

Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

HIDES
WOOL PELTS
FURS TALLOW

SHIP TO US
NO CARTAGE - NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS - HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC.
SEATTLE
BE SURE AND MENTION THIS PAPER

The Gasoline of Quality

RED CROWN GASOLINE

Clean cylinders because Red Crown explodes completely, having correct boiling points in a continuous chain.

Standard Oil Company
(California)

Clean Cylinders

NEWS FOR BREEDERS

S. A. Riches of Silverton, Ore., recently sold three registered Jersey cows and one heifer to Dr. E. F. Hertz, whose farm is at Vancouver, Wash., and who is an instructor in the Northwest Dental college at Portland. This is Dr. Hertz's foundation for a Jersey herd. Two of them are granddaughters of Golden Glow's Chief and one is of Island breeding.

W. L. Sheard, the Dayton (Ore.) Duroc Jersey breeder, recently purchased a fine gilt from W. M. Putnam of Nebraska. She is very smooth, has a good back and feet and neat head. She is bred to King's Col., and cost Mr. Sheard $130, laid down. His Pathfinder boar is growing and showing more and more type of his sire. His spring pigs have met with some bad luck, but Mr. Sheard will have a creditable showing in the Duroc futurity at the state fair this fall.

Thomas Withycombe & Son of Gaston, Ore., recently purchased from Emery T. Smith of Oakland, Ore., the fine Jersey cow Salem's Jolly Buttercup. This was the only daughter of Golden Jolly that was procurable on the Island when Harry West imported her in 1912. She sold in Mr. West's sale for $350 and as she is a very typy Jersey she sold cheap. She has an official test of 17 pounds of butter in seven days, with a grain ration of only three pounds per day.

The Duroc Jersey futurity at the Oregon state fair this year is going to be "some show." J. E. Finnicum, who has been out of the hog business for the past few years will be a contestant. W. L. Sheard, who has some of the best Golden Rod blood; Doerfler Bros., who now own Golden Rod himself, and will show his offspring; Charles Hoover, who made almost a complete sweep at the Panama-Pacific International exposition, and other new breeders are preparing for the competition that they must meet. J. W. Fruit will not show in the futurity, but will have a few very strong entries in the senior pig class. The Messrs. Doerfler will show a full herd, probably Mr. Weismer will show, and it is probable E. M. Clark, a new breeder over in the Tillamook country, will make an exhibit. It promises to be a very high-class hog show.

F. J. Chalmers of Cornelius, Ore., who is breeding jacks and jennettes, says he finds a fair demand for jacks, and believes the use of mules in the Willamette valley will steadily increase. He considers them well adapted to this region. His jennettes are close up to Spanish breeding, and his service jack, one of those compact, good-bodied jacks from Swaggart's Eastern Oregon jack farm. Mr. Chalmers raises a few Duroc hogs, because he likes the breed. He will show jacks and jennettes, including some baby colts at the state fair this fall, if labor conditions are such that he can get his farm work out of the way and get them ready.

Will Be Seen at Oregon Fair.



Frank Laighary, one of the well-known Jersey breeders of Monmouth, Ore., has 12 cows now on test, all young and all daughters of Octavia's Duke. All his daughters test high, one of them averaging eight and two-tenths per cent for two months. Some good records are being made. Mr. Laughary will take a show herd to the state fair this fall and the Pacific Dairy show at Portland if labor conditions are so he can. The photo above shows one of the handsome young bulls in the herd.—H. A.

Won a Championship.



The photo above shows Chief Bender, a two-year-old Clydesdale stallion that was both junior and grand champion of his breed, at the Oregon State fair, as a yearling, in 1916. He was first in class at the Union, Ore., stock show in June, 1917. Chief Bender is a colt of good size and great quality. He is owned by Ledbetter & McKinnon, well-known horse raisers of the Grande Ronde valley, and will be shown at the state fair again this fall.—H. A.

Ships Out Tons of Big Four.

Two good sons of Big Four, grand champion boar of the 1915 Oregon state fair, were sent out recently by Winona ranch, Grants Pass, Ore. One went to J. J. Morris, Morris Heights, Bandon, Ore., and the other to H. B. Banks, Dockton, Wash. Both these herds already have a large amount of Winona blood either in daughters or grand-daughters of Laurel Champion. Mrs. L. F. Jones, Elma, Wash., has just secured a young son of Laurel Champion. R. C. Gruhlke, Dixon, Cal., has recently started a registered Berkshire herd with a foundation trio of one boar pig and two sows purchased from Winona ranch. The boar is a son of Berryton Belle 31st, sired by Laurel Champion. One sow is by Big Four out of a daughter of Laurel Champion, and one is by Ballamoor's Master.

M'MONIES' TRIP POSTPONED.

The 10-days' trip through Oregon of Mr. McMonies, publicity man for the American Jersey Cattle club, has been indefinitely postponed. While in Texas Mr. McMonies, who is quite a young man, received word he was drafted; hence had to return immediately to his home in New York. Mr. McMonies was to reach Oregon about the 25th of August and arrangements for speaking dates and visits to the leading herds of the State were well under way.

High Priced Hay and Beef Cattle Supply

By E. L. POTTER.

There are those who are advising the farmers to hold their hay for higher prices and not to be content with the $12@$15 that is now being offered them.

We wonder if they have any idea of the effect of this high priced hay on the supply of beef cattle. The best steers are now bringing in Portland around $8.00 to $8.50. On this basis an average bunch of range cattle will yield a gross return of about $15 to $17 a head per year. The customary allowance of hay is one ton per head per winter, and some feed even more, especially in hard winters. If the cattleman pays $15 for the one ton of hay it does not take an efficiency expert to see that by the time he pays his other expenses he is behind the game.

Under these circumstances there is but one thing for the cattleman to do, and that is, sell out as fast as he can. That is exactly what hundreds of cattlemen are planning to do within the next few weeks. At the beginning of the "preparedness" campaign we said repeatedly that the only hope of more beef was more feed. Feed prospects are, unfortunately, very poor and instead of having a good crop of hay, as we had hoped, we are having a very light one. The cattleman is up against it. He can not do without feed and he can not pay the big prices. The only thing he can do is to quit or, at least, sell off cattle to the point where he can feed them on his own hay. The farmer who holds up a stockman for $15 a ton for hay is killing the goose that laid the golden egg, since he simply is forcing his customer out of business.

The public has from some unknown source obtained the idea that ordinary beef cattle are high priced on account of the war. In the month of July, 1914, the Eastern Oregon experiment station sold good hay and grass fed steers in Portland for $8.00. In August, 1915, somewhat better cattle were shipped to Kansas City where they brought $8.80. In July, 1916, similar cattle were sold in Seattle for $8.00, after Portland buyers refused to bid over $7.50. This present July this same class of cattle are not worth in Portland over $8.50. A few days ago a prominent eastern Oregon cattleman sold his fat cows for 25 cents per hundred lass than he sold the same class of cows for, three years ago.

We have been asked again and again: "What are you doing to get the cattlemen to increase their herds?"

What we are trying to do is rustle more and cheaper feed. It would be an insult to ask a cattleman to raise more $8.00 beef on $15.00 hay. Whenever a cattleman can not buy a ton of hay for the price of 100 pounds of live beef, something is going to happen. In the present situation either beef must go to $15 a hundred or hay must come down to $7 and $8.

The situation is not entirely new. Along about 1909 and 1910 hay got so high that the cattlemen sold out and went to raising hay. Within two years hay, in many places, could not be sold at all, and there is nothing much more worthless than a stack of hay with nothing to feed it to.

We sincerely hope that this time cattle and hay prices may be adjusted without such serious damage to either the stockman or the hay producer, but an adjustment of some kind is inevitable.

Breeders' Department

HOLSTEIN CATTLE

Registered Holsteins

A FEW BRED A. R. O. YOUNG COWS and a fine lot of young bulls, some about ready for service. Herd sire an undefeated Grand Champion, backed by a wonderful array of world-renowned high-producing ancestry.
Write for pedigrees and terms.
H. R. BOOMER, New Plymouth, Ida.

WAYSIDE RANCH HOLSTEINS.
Am offering 13 heifers for sale, sired by my herd bull Buffalo Duke Doede, a half brother to the world's champion cow. An opportunity of a life time to the man wanting No. 1 stuff.
H. H. STIYER, Buhl, Idaho.

HOLSTEIN BULL CALVES.
One from 20-lb. cow, another from a 16-lb. jr. 2-yr.-old. Herd headed by Model Fobes of Idaho, whose four nearest dams average 27.25 lbs. butter 7 days.
EARL BEEBE, R. F. D. 2, Rupert, Idaho.

SHORTHORN CATTLE

Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.
A. D. DUNN, Wapato, Wash.

Hercules Shorthorns

For particulars write
DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

HEREFORD CATTLE

Highland Stock Farm

offes for sale 10 yearling bulls and eight two-year-old Polled heifers, sired by Polled Premier and bred to herd sires Majestic Fairfax 437657 by Corrector Fairfax and Western Fairfax 461126 by Fairfax 16th.
PLATT BROS., Props., Roy Jacobs, Herdsman, Genesee, Idaho.

AYRSHIRE CATTLE

AYRSHIRE BULL CALF

Vigorous, of splendid type, with exceptional production behind him. Snap shot and full particulars on application.
MEADOW BROOK FARM, Montesano, Wn.

JERSEY CATTLE

A 600-Pound Bull for $100

Dropped May 19, 1917. Dam Creole Bess, 684 lbs. butter, 12,363 lbs. milk in one year. Sire Dominus, who is out of an 817-lb. cow, and sired by a bull out of an 853-lb. cow. This calf is broken colored but will make a great producing sire.
J. B. STUMP & SON, Monmouth, Ore.

Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.
WAIKIKI FARM, R. 7, Spokane, Wash.

DUROC-JERSEY SWINE

Duroc Boars

Four extra fine large January boars, whose dam is a litter mate to the junior champion sow at the Interstate fair in 1916.
Her dam is a litter mate to the first prize and reserve grand champion at the San Francisco world's show.
The first check for only $35 each will get them. They are $50 pigs.
DAVID BROWN, R. F. D. 1, Spokane, Wn.

Hillcrest Duroc Jerseys

For immediate sale:
1 11-mo. gilt, bred to farrow Oct. 3d, $60.
1 10-mo. gilt, to farrow Nov. 8, $50.
3-month pigs, $25.
Extra fine stock, combining the blood of noted show winners.
R. P. Camp, Ione, Wash.

Choice Duroc Gilts

Sired by the great boar, Golden Rod.
DOERFLER BROS. Silverton, Ore.

Only $15 Each

Well grown, lately weaned Duroc spring pigs, from prize winning stock, with papers, $15 each.
MIDDLEDALE FARM, Goshen, Ore.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Pullman, Wash.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.
Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have for sale extra good spring pigs. Correspondence solicited.
J. M. ROYSTON EST., C. ROYSTON, MGR.
Payette or Fruitland, Idaho.

Medium Type Polands

Quick growing, easy feeding breeding stock, sired by the 1915 grand champion at Pacific International.
FRANK NEEDHAM, Eugene, Ore.

BERKSHIRE SWINE

Choice Berkshire Gilts

Just a few March pigs, of most approved breeding, best type, good size and in fine condition, $40 each. This advertisement will not appear again.
F. H. PORTER, Halsey, Ore.

SHEEP

REGISTERED COTSWOLD BUCKS.
A few February and March lambs.
TWO YOUNG GUERNSEY BULLS.
B. F. Baughman, Redmond, Ore.

DOGS

Fox and Wolf Hounds



of the best English strains in America; forty years' experience in breeding these fine hounds for my own sport and protection of sheep, hogs and poultry. Send stamp for catalog.
T. B. HUDSPETH.
Sibley, Jackson County, Missouri.

Real Bargain in Five Jersey Heifers

Four sired by a grandson of Golden Glow's Chief (31 Register of Merit daughters), and double grandson of Rioter B. K. Helma (sire of 8). One a granddaughter and one a double granddaughter of Picabo (734.1 lbs. butter in a year.) All well bred. Ages sixteen months down to two. To feed my herd properly must dispose of part. $350 takes them.
C. A. SWARTS, Springfield, Ore.

FISK

(*World Standard*)

Tire Sundries

Have the Confidence of Motorists Everywhere

—a confidence bred by years of thorough acquaintance with Fisk quality and dependability.

In the purchase of such products bear in mind that dependable quality is absolutely essential. A patch that won't stick is worthless—a cement that doesn't hold is worse than none at all. To spend money for sundries just because they are cheap is like buying shoes with paper soles.

Every Fisk Sundry made is backed by the Fisk trademark of highest quality and economy, and the pride of the manufacturer in maintaining this high standard of value.

When you buy Fisk Sundries you pay a trifle more in *some* cases—but *you get what you pay for and you can bank upon the quality of what you buy.* That is the essence of true economy and sensible buying.

This New Cementless Patch Is an Evidence of Fisk Initiative in the Sundry Field

FISK MOLDED

—an aggressiveness that has been characteristic of the Fisk Company nearly twenty years. The Fisk Molded Patch is diamond shaped. It will cover a larger cut, but, because all waste rubber is eliminated, costs less. It has strength where strength is needed—built up heavy in the center. Can be applied easily and when you put it on your tube you know it will stick. Unquestionably the most efficient and best value cementless patch on the market.

6 for 25c—A New Patch—A New Package—A New Price—6 for 25c

Fisk Sundries include besides the above:

Emergency Patches	Tube Splices	Air Bags	Uncured Stocks
Pure Para Cement (*in tubes, large and small cans*)	Air Hose	Air Valves	Valve Pads
	Fabric Patches	Bead Mold Filler	Bead Strips
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General Offices: Chicopee Falls, Mass.

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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 35. AUGUST 30, 1917. WEEKLY.

THE SPOKANE INTERSTATE FAIR



On Monday, September 3, the Spokane Interstate fair will open its doors for the 24th consecutive season. While the usual features, both of exhibits and entertainment, are promised without curtailment, special stress is being laid on practical education to assist the public to do its bit toward meeting the nation's present crisis.

"Some Men Try to Farm Too Much"

Good Farming Proves to Be Best Way to Overcome the Drouth; Small Farms Would Permit Better Cultivation



PROSSER, Benton County, Wash., Aug. 19.—The weather is hot and dry, but is good weather for harvesting, and most of the wheat is cut. Wheat is going from two to 20 bushels per acre. It makes all the difference in this part of the state when the ground was summerfallowed and time of year it is seeded. If the wheat farmer expects to get a good crop of wheat he must summerfallow his ground in the spring and thus keep the weeds out. Some men try to farm too much. Some farmers paid $3 per bushel for their seed wheat this spring and put it in late, and with no rain they got a poor crop. The farmers lost fully one-third of their wheat crop by drouth. The man that summerfallows his ground in the spring, keeps the weeds out and sows his wheat early, is the man that gets a good crop. Feed is going too high to feed to live stock. Hay is $15 and $16 in the stack. You can't feed young stock and get that amount out of it. G. W. WILGUS.

Fruit Indications Good.

ZILLAH, Yakima County, Wash., Aug. 21.—Owing to ours being an irrigated section, we are not, in any way, effected by the drouth, and but few crops were affected by the heat. Potatoes suffered the most. Corn, when it had a good start and water was available, has made a splendid growth.

With the fruit harvest at hand indications are, while prices may not be up to last year's level, they will be good Pears bring $1.50 f. o. b. Elberta peaches are being sold all the way from 50 to 60 cents. The prunes can not be expected to be as good as last year, owing to the heavy crop in competing sections. It is a question what encouragement prices will have on the live stock interests. In our particular section there has been considerable corn grown and the corn market was not good until later in the season last year. This season every one is raising a few hogs and it is a question how far the production of grain and hogs will be out of balance. In a section which produces heavy tonnage to the acre, the farmer should be equipped with a silo and utilize what is now wasted. J. F. M'CURDY.

Crops Are Good.

MALAGA, Chelan County, Wash., Aug. 16.—Crops are good here and prices better. Of course those who have raised wheat have lost some on account of the drouth, but the most of the hay here is alfalfa and timothy and some red top and that has had plenty of water, so will be a good crop. Alfalfa is $18 per ton, just loose hay. Early fruit, such as cherries and apricots, have sold for a better price here than ever before. Prospects for the apple look good now. There has been a bigger effort in this county to raise more of the food that is used in the homes than ever in the history of this country and I believe it has been fairly successful. Butter and cream bring a good price, and eggs have never been lower than 30 cents a dozen. Beef is a profitable item here, as there is such a vast range for spring and summer feed. Hogs are not raised to any extent, but they could be and in the next few years I think there will be more hogs raised.

MRS. O. ALLENBAUGH.

Favors City Poultry Lot.

COLFAX, Whitman County, Wash., Aug. 18.—The crop here will be about 50 per cent normal. Of the fall-sown wheat forty-fold stood the winter and drouth best. But little of it was sown, as red Russian was a more popular variety, being a heavier yielder if conditions are favorable. I think from now on the popularity of red Russian will wane and forty-fold and the white hybrids grow in favor. Red Russian winter killed badly and the drouth has shriveled what was left. I believe crop conditions and prices will tend to depress live stock growing. What is the matter with the backyard poultry farm? If farmers can feed high-priced feed profitably why can not city folk? City folk are supposed to be of a superior business capacity. They ought to make it a howling success—a crowing success at least. If this suggestion is offensive to the esthetic taste of city people they will have to satisfy their carnivorous taste on cereals and vegetables, as farmers are not much interested in meat production. Looking ahead one, two or three years into the live stock industry requires a more powerful telescope than I have been able to muster into service. With trade conditions so abnormal, the possibilities of civil strife, the uncertainty of the issue of the war or its duration, and fopsy turviness of conditions in general, I am not much disposed to look ahead with any degree of certainty. E. C. HUNTON.

Cowlitz County Is Safe.

CASTLE ROCK, Cowlitz County, Wash., Aug. 7.—Owing to the late spring and the difficulty in preparing the ground for the seeding, it has put the crop so backward that when the hot, dry weather came the young plants were not in a condition to withstand the change. However, there has not been as great a loss as would be expected. Potatoes are going to be less than normal despite the large acreage that was planted last spring; some have blighted enough to make them almost worthless; those planted on the sandy soil have started in to wilt and on the uplands the weeds have a good start on the land. Farmers are filling their silos and report a bumper crop. The dairy business in this county has steadily increased and has proved a very profitable thing as the Mutual Creamery company from Seattle has established cream stations in the principal towns in the county. The predictions are that two or three years hence, Cowlitz county will be one of the foremost dairy counties in the state. Already blooded bulls are coming in from the best herds in the west, making a healthy, vigorous stock, and with the interest that has been shown in the cow testing by the dairymen will have a tendency to weed out the boarders. Crops, as a rule, are better than usual; corn looks well; grain was harvested in good condition; the hay was better than last year, which was considered above the average. No demand for poultry in the local market. Seattle is getting most of the veals and pigs. Poultry buyers are scouring the country for fall delivery. Hay is selling for $12 per ton in the field, new potatoes for three and a half cents per pound and not many in the market at that. Eggs are 37 1-2 cents a dozen. The county is pretty well cleaned up of the old stock of hens. The canning clubs and boys' potato clubs are holding their meetings and seem to be getting considerable interest aroused in the work. Cherries are nearly all picked and the crop was better than common owing to the weather; no rain to crack them and sold to the canneries for five cents per pound. Blackberries are scarce. The prune crop will be good, but no large orchards. Road work, forest fires and work in the woods and mills have made help very scarce for the farm. In some cases the women are going out into the field and helping gather the grain and hay crop. C. C. BROWN.

Dry Land Alfalfa Good.

METHOW, Okanogan County, Wash., Aug. 20.—The injury from drouth and heat will be at least 50 per cent or half a crop. The crop which withstood the heat best is corn that was planted by the 15th of May. Corn planted after the first of June never came up or is a failure. Some fields succeeded better than others owing to the fields being manured and cultivated clean. Crop conditions will temporarily depress live stock conditions. Looking ahead one, two or three years, the special effort farmers ought to make along live stock lines is to put more land in alfalfa, dry land or irrigated. My dry land alfalfa is making excellent pasture for my beef steers as the range is burned as dry as the Sahara except the forest reserves. This is the reason of the flood of cattle on the markets. CHARLES GRANT.

Foothill Crops Are Good.

WALLA WALLA, Walla Walla County, Wash., Aug. 8.—All crops around here with the exception of the foothills will run 25 per cent short. Irrigated crops are about normal. The ground in the foothills is heavier and the nights are cooler. The evaporation is not as great as in the lower and hotter sections. The present price of grain and hay is not a very great stimulant in the live stock business. I would not wish to venture an assertion what might take place three, two or even one year from now owing to the unsettled labor and war conditions. One person's guess is as good as another. W. A. RITZ.

Sees Feed Possibilities.

COLVILLE, Stevens County, Wash., Aug. 19.—On account of the great variations of soils and climate it is a difficult problem to estimate the possible loss from drouth and heat. Taken as a whole this county will produce on a conservative estimate from 50 to 60 per cent of a normal crop. In some cases where the soil is sandy and in the valleys that were overflowed the land will yield from 10 to 70 per cent normal crop. Alfalfa and clover hays were damaged least, about 20 to 40 per cent; timothy about 40 to 50 per cent; wheat 20 to 60 per cent; oats 30 to 60 per cent. Some of the oats in the valley was severely frosted and is being cut for hay. Some land this season would not have produced a fair crop under any system of dry land farming. But one thing is noticeable this season. Where good tillage and manuring are prtcticed one can plainly see the difference in favor of this practice. With the amount of hay that this county can produce it is plainly evident that more dependence must be placed on live stock for the farm income. In some sections where the range is limited and the farms are small, dairying will be the main line. Beef production will be found in sections removed from the railroads where the range is plentiful. Where it is possible to grow corn, cereals and alfalfa hogs do well and are profitable. Many farmers will be forced to sell some live stock due to the feed shortage and here attention shoud be paid to weeding out the unprofitable animals. If the feed shortage accomplishes this it will be a benefit in disguise. A. R. HAHNER.

Quality Good; Yield Poor.

OTHELLO, Adams County, Wash., Aug. 16.—The prospect for a crop of at least an average of 15 or 16 bushels per acre in June was cut to a possible average of eight or nine bushels for this immediate vicinity. Many fields that the farmer expected 12 to 15 bushels are yielding about nine or ten. The quality is generally fair, averaging 57 to 58 pounds. Some fields that were the best were the earliest seeded and the shallowest cultivation; they ripened more rapidly than the deeper tillage, hence were ahead of the two weeks of 104 degree weather in July. Crop and price conditions will have a tendency to cause every man to put on the market any beef or hog that is marketable. Looking ahead all farmers, even at a sacrifice, should keep all breeding stock so as to increase rather than decrease the output. We believe that the people will generally realize that we are at war before 12 months pass by.

A. O. LEE.

Half a Wheat Crop.

OMAK, Okanogan County, Wash., Aug. 18.—There will be about a half crop of wheat in the county, owing to drouth and heat. Spare hay is being bought up and will be scarce in winter. There will be a great increase in potatoes and beans. There is considerable interest being taken to increase the number of milch cows, while horses are being sold for army purposes. Everything that can be used for stock food should be carefully saved. There will be an increase of about 25 per cent of the apple crop.

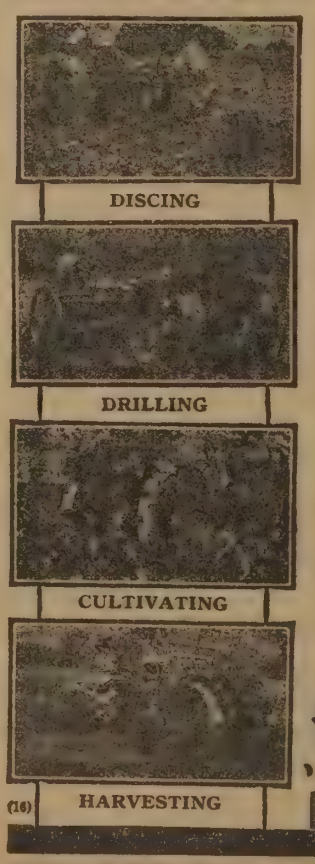
J. O. WOODS.

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WHEN you begin to consider the purchase of a tractor, whether for a farm of 80 acres or more, there are a number of questions you will need to ask yourself before you buy. Here are some of them:

—Will it CULTIVATE as well as plow? Will it do ALL my farm work without horses? Will it work on plowed ground without packing the soil? Will it do the work quicker; easier; and save on hired help? Is it really a ONE-MAN tractor? Will it handle as easily as a team of horses, rather than be too heavy, clumsy and inconvenient? Do I ride on the tool where I can see the work I am doing, or will I have to have someone run the tractor while I am operating the farm implement?

Here is the tractor that answers these and all other farm power problems of the average farm most practically and profitably. A tractor that is heavy enough to do all farm work that horses will do, yet light enough to be handy and work on plowed ground without packing your soil.



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UNIVERSAL TRACTOR

This is the original Two-Wheel Farm Tractor. It pulls two 14-in. plows; will disc, harrow, plant, CULTIVATE all hill and row crops, pull mower, binder, manure spreader, fill your silo—and do all belt work on the average farm. In fact, it will do anything you can do with horses; do it quicker, easier; and with less hired help. It weighs only 2800 lbs., but all its weight being on its two wheels —*all its weight is traction weight.* The tool you hitch it to forms the rear wheels and you do not have to pull around a ton of needless weight. It will back up with tools attached easier than a team will back. You can turn around in a small space; get close to the rows and the fences.

Write for Catalog Folder and read how farmers everywhere are solving the power and hired help problems on their farms.

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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 35 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF August 30, 1917

Interstate Fair Program Is Ready

Entries Indicate Good Displays; Educational Features Predominate

Everything is in readiness for the opening of the gates of the Spokane Interstate fair next Monday, September 3, and the management is enthusiastic over the prospects. Display room is taxed, and arrangements have had to be made for additional facilities, according to W. L. Tennant, secretary.

The premiums offered this year total approximately $16,000, and will be distributed over the entire northwest, as entries are booked from many sections.

The keynote of the exposition this season will be education. The fair management has made special effort to place before its patrons exhibits and demonstrations designed to assist the individual in solving his or her own personal problem in doing his or her respective "bit" in this, the nation's crisis.

Finances Are Sound.

For the first time in many years, says the management, the fair is beginning the season without the necessity of making a preliminary loan to finance the exposition. It is declared to owe no bills and to have a balance of cash in the bank. This statement is issued to indicate the ability of the association to omit no item that would contribute to this season's success.

Granges Will Exhibit.

It is stated that the granges have reserved already a fourth more space than any previous year. Among the granges that have already made their reservations and will have their exhibits ready when the gates open are the following:

Chattaroy grange, Everett I. Janney, master, Buckeye, Wash.; Manito grange, R. Bernet, master, Rockford, Wash.; Freeman grange, Ed Olson, master, Freeman, Wash.; Mt. Spokane grange, Ed. C. Mitchell in charge, Colbert, Wash.; Half Moon grange, F. W. Thurber, master, Buckeye, Wash.; Glenrose grange, E. J. Peterson, master, Glenrose station; Green Bluff, C. E. Atkinson, master, Mead, Wash.; Foothills grange, A. A. Johnson, in charge, Millwood, Wash.; Elk Farmers' union, Elk, Wash.; East Spokane grange, Mrs. F. A. Noteware, master, Spokane, Wash.; Valley prairie, W. W. Fisher, Colbert, Wash.

The reservations of space for individual exhibits in the agricultural hall are not made ordinarily until just before the opening. Among those that have entered early, however, are: Wenatchee Chamber of Commerce, Wenatchee, Wash.; Mansfield Commercial club, Mansfield, Wash.; J. R. Orrock, Sharon, Wash.; J. N. Grieve, Canadian government agent, Spokane, Wash.; F. C. Sudnoff; Arcadia Orchards company, Deer Park, Wash.; Colville Commercial club, Colville, Wash.; Nespelem Indian reservation, Nespelem.

Food Conservation.

It is the plan of the fair association to make the exposition a special force in the campaign for greater food production and conservation. Features designed to be of great practical assistance in the movement will be offered. Demonstrations by experts will be made. Literature will be distributed by many booths.

Live Stock Show.

The live stock show promises to be unusually attractive, declares Secretary Tennant. In the last five years the association has paid out in premiums to live stock exhibitors more than $28,000, an average of more than $5600 annually. This does not include the prizes offered by the various breeders' associations.

During the five years there have been a total of 5117 head of live stock shown at the fair, or an average of more than 1000 each year. These figures indicate what can be expected this year if the promises of early entries materialize, as there is reason to believe they will.

Of special interest to the live stock industry is the auction sale of pure-bred stock. This sale is scheduled for Friday, September 7, and the interest taken in it will be something of an indication of the actual sentiment prevailing throughout the northwest regarding the advisability of continuing the live stock business at this time.

The following are the entries for the show, compiled a few days before the closing date. Others will be added to

(Continued on page sixteen.)

Judges of Interstate Fair.

Horses	James Clements, Edmonton, Alberta.
Races	Robert F. Leighton, Vancouver, B. C.
Apiary	L. C. Fones, Carlton, Ore.
Cattle	John A. Lee, Shelbyville, Ky.
Beef breeds	E. L. Potter, Corvallis, Ore.
Sheep	William Hislop, Pullman, Wash.
Swine	Thomas W. Brunk, Salem, Ore.
Fruits	Charles A. Cole, Tacoma, Wash.
Dairy products	G. E. Frevert, Salt Lake City, Utah.
Poultry	James A. Tucker, Royal Oaks, Mich.
Nomenclature	Professor W. S. Thornber.

Nation Takes Up Meat Problem

Big Committee of Stock Men Will Handle the Situation

For the purpose of preventing the further disintegration of the meat-producing industry in this country, and of laying the foundation for greater increased production in the years immediately ahead, the United States department of agriculture and the national food administration have joined in the appointment of a committee of about 100 leading live stock men and dealers to struggle with the problem. This action has grown out of the unprecedented demand for meats from this country owing to the depletion of the supplies in war-stricken Europe.



Frank M. Rothrock, who has been appointed a member of the national live stock committee.

Since the war started there has been a total decrease of 115,005,000 in the world's supply of meat-producing animals. Cattle increased 7,090,000 in the United States, while the total world decrease was 28,080,000. Sheep decreased 3,000,000 in this country while the world supply was diminished by 54,500,000. Hogs increased 6,275,000 in America, but the general supply decreased 32,425,000. The capital stock of animals in the countries of Europe now at war with Germany, has decreased 33,000,000 head.

In a statement issued by the food administration the situation is summed up in this wording:

"The problem facing America is not only of supplying the immediate demand of the allies, but one which is more far-reaching in significance. As the war goes on there will be a constant lessening of the capital stock of the world's food animals. Among our western allies the demand outruns further every day the decreasing production, and as shipping becomes further shortened by submarine destruction, further destruction of herds must ensue."

Announcement has been made of the appointment of an executive committee of the large committee to be headed by Gifford Pinchot of the food administration. The other members of the executive committee are G. H. Rommel of the department of agriculture and E. C. Lassater, a Texas stock man.

Among the members of the big committee is Frank M. Rothrock, one of the proprietors of the Hercules stock farm of eastern Washington, and one of the best known stock men of the northwest.

Announcement is made that the first meeting of the committee will be held in Washington, D. C., September 5, and all members are urgently requested to attend. They are giving their services voluntarily and paying their own expenses, indicating the patriotic sentiment of the movement.

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I. W. W. Strike Fails

Industry Continues Undisturbed

"Let our answer be a general strike of all men employed in the harvest fields and the fruit orchards in these states. Let the harvest go to waste and let the fruit rot on the ground. If the laws of the country are set aside and the constitution overruled in the interests of a gang of profit-hungry pirates, then we will have recourse to the court of the working class."—Excerpt from the recent strike orders issued by James Rowan, district secretary, I. W. W.

The audacious threat of the I. W. W. organization, to call a general strike in the harvest fields, the orchards, and the stock camps of the Pacific northwest, on Monday, August 20, proved a complete failure.

The man who issued the threat and its accompanying disloyal demand on the governors of Montana, Idaho, Washington and Oregon to release all I. W. W. prisoners in the four states, was placed under military arrest in the county jail at Spokane by United States soldiers. With him were more than a score of his unpatriotic associates—all dragged in when the military authorities, at the request of Governor Lister, took the menacing situation in hand.

Harvest Continued.

Reports from all parts of the Pacific northwest say there was almost no response whatever to the strike call. Only here and there an occasional harvest worker quit, and the hum of threshing activity went unbrokenly on.

The reason is apparent. All patriotic workers saw through the gauzy scheme to cripple the American government and aid the kaiser and his Prussian generals. They realized that we are at war with an oppressive and autocratic government that is opposed to liberty and progress, and that to win this war we must save the produce of our farms, ranges and orchards.

It is plain that any interference at this critical hour with the work of saving the harvest would injure our country and help Germany.

So the strike is a failure and the conspirators who tried to intimidate the governors of four states and Uncle Sam find that they can not be bulldozed.

Of the 27 men arrested by the military authorities in connection with the threatened I. W. W. strike 13 have been released, authorities not feeling them "dangerous." James Rowan, the leading spirit, together with 10 other members of the organization, are still in the county jail. Two German aliens and an alleged slacker have been turned over to the department of justice. The men held are detained as military prisoners. The army officers and United States District Attorney Garrecht are considering courtmartial for some of the military prisoners.

S. W. Stevens County Fair.

Liberal prizes for exhibits of grains, grasses, fruits, vegetables, poultry, horses, cattle, hogs, women's work, school work, etc., are offered by the management of the southwestern Stevens county fair, which will be held at Hunters Sept 20 to 22, inclusive. Saturday, September 22, will be live stock day. The noticeable feature will be the exhibit of pigs by members of the boys and girls' pig club. Horse racing and sports are not overlooked.

Potato Storage Demands Attention

Makes Possible Longer Marketing Period and Insures Minimum Loss

Potatoes are one of the most important food crops in the United States and storage has necessarily been utilized to a very considerable extent to hold over supplies for both seed and food purposes from one season to another.

When potatoes were plentiful and relatively cheap, little attention was given to such wastage and loss as usually occur in storage; in fact, a considerable loss was considered inevitable. With high prices and scarcity of supply the need of conserving the entire production for seed and food purposes is of the utmost importance, says Farmers' Bulletin 847 of the U. S. department of agriculture.

Potato storage serves two purposes, the first of which is to make possible a longer marketing period for the crop, and the second to insure the minimum amount of loss from moisture and decay.

The successful storage of potatoes is dependent on a number of factors; as, for example, the quality of the tubers stored, the temperature at which they are held, the moisture content of the air, the size of the storage pile, and the exclusion of light. The proper storage temperature for potatoes is supposed to range from 34 to 38 degrees F.

Careful investigations during several seasons have clearly demonstrated that losses in storage can be largely prevented by the proper construction and intelligent management of storage houses.

Storage is employed generally for the purpose of prolonging the season of food products.

The best storage temperature for table or seed potatoes is one that will keep the tubers in a dormant condition and preserve their edible quality and their vigor for seed purposes with minimum decay and moisture losses.

The humidity content of the air of the storage cellar plays an important role in conserving moisture losses. The moisture content of the air should not be so high as to deposit a moisture film on the surface of the tuber, or so low as to cause an unnecessary loss of moisture through transpiration.

Thorough aeration of the stored tubers is an essential for the best preservation of seed stock and the reduction of storage losses.

The exclusion of light from the storage house is an essential feature in the storage of table stock.

Good storage is a vital factor in maintaining the vigor of seed stock. Its value is not yet fully recognized by the grower.

The simplest form of potato storage is the pit.

The next simplest form is the dugout pit or storage cellar.

Potatoes may be successfully stored in pits if provided with good drainage and given sufficient covering to insulate them against external heat and cold. The first consideration is a well-drained site, or one which can easily be provided with good drainage.

The depth of the excavation may vary from practically nothing to two feet or more. It is usually not advisable to excavate more than six inches. The shape of the pit should be long and narrow rather than square.

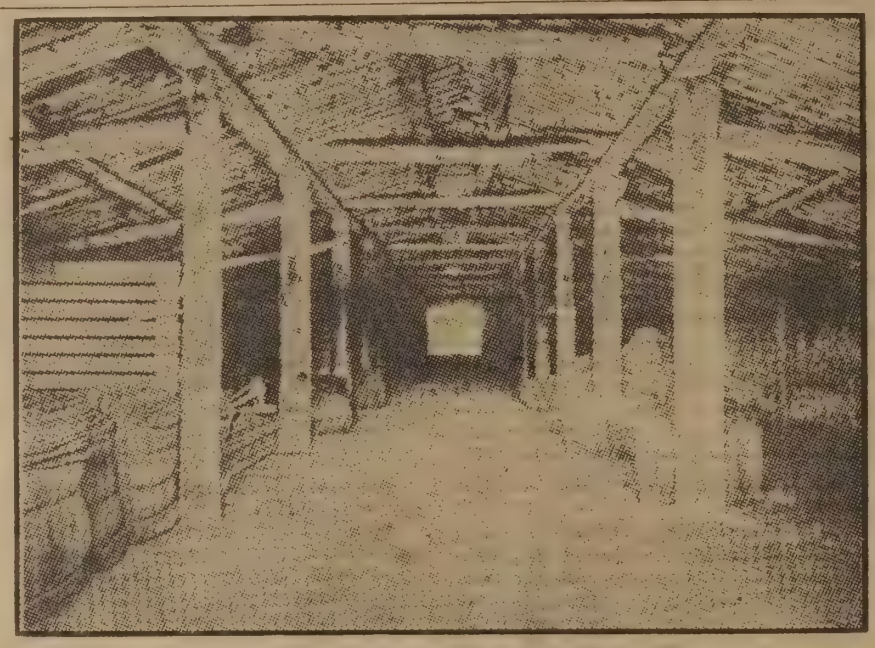
The size is dependent to a certain extent on the quantity to be stored. It is not advisable to store too large a quantity in one pit, just as it is inadvisable to store too large a quantity in a bin or house.

In preparing the pit for the reception of the potatoes it is desirable to place a light layer of straw on the floor to protect the tubers from direct contact with the soil. The tubers should be piled in a ridge of inverted V-shape. When piled in this way a great area of the pile is exposed to the air, and at the same time when covered it sheds rain much better. Before covering the pile, or, in fact, before the potatoes are piled, it is desirable to make some provisions for ventilation to take care of the moisture given off in respiration.

The potatoes are best insulated against cold and heat by covering with alternate layers of straw or hay and soil. The first layer should consist of straw, adding only sufficient soil to prevent injury to the tubers from exposure to light or frost. The object is to cool off the tubers, and as soon as possible get rid of the moisture resulting from the sweating process. As the weather grows colder more straw should be added and then a layer of soil. With the approach of winter another heavy layer of straw should be put on and an additional layer of soil. The two layers of straw and the soil are usually a sufficient protection, but in sections where the winter temperatures drop to 20 degree F. or more below zero an extra layer of each will be necessary. Each layer of straw when compacted may be 6 to 8 inches deep, depending upon the amount of rain and snow likely to fall during the storage period.

Ventilation may be provided by means of a wooden flue, the lower end of which extends almost to the bottom of the pit, while the upper end projects well above the covering. The ventilating flue should be provided with a wooden cap to prevent the entrance of rain or snow, but at the same time it should be so constructed that it can be closed entirely during extremely cold weather. If the required attention be given to the preparation and protection of a pit of this sort one can be reasonably certain that the tubers will keep in almost perfect condition until spring. The objection to the pit is that the potatoes stored therein are not always accessible during the winter.

The dugout pit or potato cellar in some of its various forms of construction is probably more widely used than any other type of storage space. In the central and western portions of the United States it is practically the only kind of storage employed. It is found in its most primitive state in the arid and semi-arid regions of the west, where the low rainfall makes a water-tight roof unnecessary. As a rule the excavation for the cheaper structure of the dugout pit or cellar type when erected on level or nearly level land does not exceed three feet. The soil removed from such an excavation, particularly if the dugout is of any considerable size, is ample for banking the side and end walls and also for the roof. The cost of construction may be greatly modified, according to the character of the location.



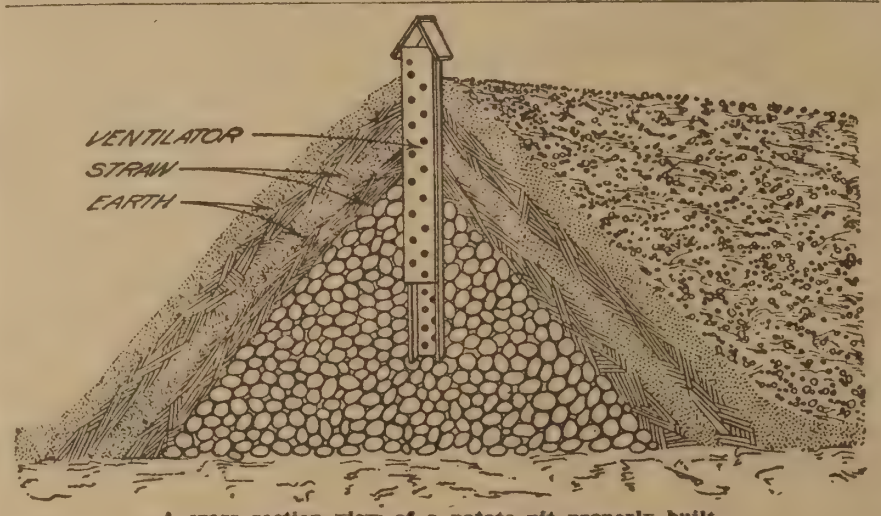
Interior view of potato storage cellar.

In the cheaper dugouts, where the soil is of such a nature as to remain intact, it is allowed to form the side and end walls, the roof being supported on plates resting on the soil and held together by boards or joists. This form of construction involves a deeper excavation and a constant element of risk from a vacein. A better type of construction is that in which rough posts are set at intervals along the side walls and to these the plate is fastened. These posts may be recessed into the wall of earth so as to present an even face, or they may be set out far enough to allow covering them with wire, planking or poles and a heavy layer of straw.

Occasionally, where the land is level and there is danger from irrigation seepage, the storage house is built entirely above ground. In this case, while the construction of the side and end walls and roof is practically the same as the preceding, the cost is usually increased on account of the greater quantity of soil required to cover the roof and the side and end walls.

Where a tough sod is available, such as that formed by flags or other wiry-rooted plants, the side and end walls above ground may be constructed entirely of blocks of sod two feet or more in thickness. One of the most unusual storage houses seen in the course of these studies was built entirely above ground, with the side and end walls constructed of baled alfalfa hay.

A ventilator should be so constructed that the opening at the top is protected by a cap, which may be rigid or hinged. It should extend through the roof into the cellar far enough to permit a swivel damper to be inserted and operated by a spring or lever, or else a slide damper which can be opened or closed at will.



A cross section view of a potato pit properly built.

Dairymen Hurl Defy at Condenseries

Significant Move Taken by a Western Washington County

As a significant step in the movement of the dairymen of the northwest for improved conditions of the industry through increased prices for milk, the Skagit county (Washington) Dairymen's association has voted unanimously to raise $200,000 with which to build a condensery or otherwise control the milk market. Representatives of three other county associations were present and took part in the meeting, expressing approval of the move.

For many months the dairymen of the northwest have been contending for increased returns from their business. President O. P. Brown of the Whatcom county (Washington) association told the 400 dairymen at the recent meeting in Skagit county that at the present time the farms producing the milk were capitalized at 30 times as much as were the condenseries that handled the milk, but that the latter made by far the greater profit.

Under the scheme as outlined at the massmeeting, it is hoped that each of the dairy counties will build a cooperative condensery, with all of them under one central board of directors to coordinate the entire dairy industry of western Washington.

The turn affairs have taken in western Washington is but typical of the situation in other dairy districts of the northwest. Dairymen everywhere will watch with interest the success of the movement.

Potato Growers

Deserve Protection by Government

The United States department of agriculture forecasts a potato crop this year of 467,000,000 bushels. That is 182,000,000 bushels more than the United States produced last year, and 107,000,000 bushels greater than the crop of 1915.

Unless the government takes control and stabilizes prices, there is danger that in many sections of the Union, particularly in the Pacific northwest, potato prices will drop so low that it will not pay producers to dig them and haul them to market. That condition would mean not only severe losses to the growers, but a food loss to the nation.

Quick action is demanded of the national food administrator, for government control is the only saving solution. As The Farmer pointed out last week, the new food control law authorizes the president to "purchase, to store, to provide storage facilities for, and to sell for cash at reasonable prices, wheat, flour, meal, beans and potatoes."

Under this law the president has clear authority to fix a price for potatoes that will insure the harvesting of the entire crop in every part of the country, and to distribute the crop to the best advantage of the public and our allies.

When we have done our utmost it is doubtful if we can fully supply the wheat needs of Great Britain, France, Italy and other allies, But as the department of agriculture points out, next to breadstuffs potatoes are the most important food crop of the European countries. They are all the more important now that the world's wheat supply is short, as they furnish starch, the principal food element contributed by bread, and so may be substituted in part for bread.

This matter should be brought to the urgent attention of congressmen and senators. Discussion should be held in the grange, the farmers' union and at all other community gatherings.

Not Killing Dairy Cows

Reports are persistent that large numbers of excellent dairy cows are being sent to the butcher and disposed of for beef through the stock yards. Inquiry was made recently of L. R. McGee, secretary of the Portland Union stock yards.

Mr. McGee says that while some dairy cows are coming into the yards, he does not think the proportion is abnormal. Most of them are culls from the dairy herds and are not to be classed as first class dairy cows by any means.

"Some fair dairy cows have been received at various times," said he, "but I do not believe a single good dairy animal has been killed for beef. Instead, they have been sold again and have gone out to some other dairy farm. As far as the Portland Union stock yards is concerned, I am safe in saying that this territory has lost no cows.

Milk Producers Will Cooperate

String of County Condenseries Is Aim; Skagit Starts Big Movement

By PAUL E. TRIEM

Approximately 400 members of the Skagit County Dairymen's association, assembled in Burlington August 18, and voted to raise $200,000 to be used by the directors of the association, without restrictions of any kind, in solving the milk marketing problem. This action was taken at the close of an all-day session, remarkable for its unanimity of opinion on all questions touching the welfare of the organization.

The meeting was called to order by John Kill, president, who spoke vigorously of the need of continuous progressive action. By way of text to his speech, President Kill displayed a cartoon vividly setting forth the relations now existing between producer, condenser, and the consuming public. The condensery interests were represented in the drawing by a hog of vast proportions.

"There he is, gentlemen!" cried Mr. Kill. "You can see for yourselves that he has got too big for any one man to handle—we've got to get together and stick together unless we want him to continue to be our boss!"

Burlintgon Will Help.

Mayor Kirkpatrick of Burlington welcomed the dairymen on behalf of the city of Burlington. Evidently referring to rumors which have been in the air for some time, the mayor stated that if the association should contemplate building a condensery or plant of any sort at this time, the active cooperation of Burlington business men could be counted upon.

President O. P. Brown of the Whatcom association, brought to bear upon the problems confronting the association his training as a business man. After explaining the difficulty of obtaining direct figures on the operating expenses of the condenseries, President Brown showed how the directors of the allied associations had been able to estimate with considerable probable accuracy these operating expenses, and that after allowing a wide margin in favor of the condenseries for possible error, the profit to the manufacturer was out of all proportion to the profit secured by the milk producer.

Business on Business Basis.

"At such a time as this," continued Mr. Brown, "it is not simply our right, it is our duty to put the farmer's business on a business basis. We must substitute collective contracting for individual servitude, in dealing with the condenseries. Our present system of giving our profits to a grasping corporation which furnishes one dollar of capital to our $30, is unfair to the public, as well as to ourselves.'

Mr. Brown concluded his address by pointing out that the sort of technical skill needed for managing a condensery could always be hired, according to the custom of the present corporations, and that foresight and circumspection in dealing with the problem, a willingness to act carefully and with full knowledge of the facts, was all that was necessary to insure success.

State Senator Brown, also of Whatcom county, told of trying to hire a young man to help him milk his dairy herd.

"What will you take to help me with those cows?" the senator inquired.

"Six months in the penitentiary!" was the prompt reply.

This indication of the impossibility of obtaining help on dairy farms was fully appreciated by the auditors. Senator Brown went on to tell of his efforts to get through some sort of legislation dealing with the manufacture of milk in which vegetable oils are substituted for butter fat, and of the need of a good man in the house to insure the passage of legislation affecting the dairy interests.

A unanimous vote of thanks was tendered the speaker for his work in behalf of the milk farmers, at the conclusion of his address.

Snohomish Association Strong.

President John Lee of the Snohomish association told of the success Snohomish organizers have had in siguing up more than 4000 cows, even with the handicap of the rush season of midsummer in farm work to contend against. Mr. Lee stated that the dairymen in his county were being mulcted by a three-point drop in their test, and that on this three-point loss basis they were contributing $30,000 in added profits to the "earnings" of the condenseries.

"Organization will put a stop to this source of loss at once," he declared.

The real fireworks of the meeting appeared with the opening of the afternoon session. Organization in the four West Side dairy counties has now proceeded to a point where definite action is logical in dealing with those problems which have been handed down from one generation of dairymen to another. The present movement differs from many others which have gone before it in the close and efficient organization effected, in the reasonableness of the men at the head of the county associations, and finally in the unswerving determination of all involved to see the thing through to a finish. All of this was crystallized by the addresses of the afternoon.

Directors Ask Orders.

"Having told you all that we have done up to this point, we, the directors of your association now come to you for further orders," declared President Kill in opening the afternoon meeting. "What do you want us to do? Shall we allow the condensery to dictate to us in the future as we have in the past? You know their old bluff—'If you don't like our methods, we'll move our plant away from here!' Recently I have said, in answer to such remarks, 'Gentlemen, when you first wanted to come here we did everything we could to help you, for we thought you would be a benefit to the community. Now we are inclined to think you are a nuisance, and if you want to move, perhaps we can take up a collection and move you!'"

Great applause followed President Kill's charge that when the condenseries raise the price of milk, they lower the test.

"Some people tell us that it is useless for us to talk of building and running our own condensery," Mr. Kill continued. "They say we would have to pay $10,000 a year for a manager. Well, we are now paying much more than that in the interest we lose on our milk accounts. What security have we for the $200,000 the condensery owes us most of the time? None. It seems to me it is time we stopped trusting these other people quite so much, and began to trust each other more."

Declaring himself wholly in favor of building a condensery, if that proved to be the most satisfactory solution of the marketing problem, Mr. Kill declared that the directors were willing to give to the association the time needed for organizing the enterprise.

"It will take a good deal of money," he commented, "but as far as our time goes, that is worth nothing! Having given it to the condensery so many years, we are willing to give it to you for a year or two."

The Business End of It.

President Brown of Whatcom took up some of the practical details of building and running a condensery. He called attention to the example set by the California Fruit Growers' association, and pointed out that by owning their own manufacturing plant and selling organization, the producers would be in the unique and strategic position of controlling their milk from the milk pail to the consumer.

"There are just two essentials to success in this matter," he concluded. "We must get at this in a business-like way, and we must furnish the necessary capital. We can do all of this, without doubt or difficulty, if only we don't try to be in a hurry!"

Various members of the association took the floor to support the idea of building. An idea of considerable importance uppermost in the vast majority of these speeches was put into direct and vigorous form by Secretary Joe Hall.

"The plan, as we have finally worked it out," said Mr. Hall, "if for a condensery in each county, with some sort of centralized council or selling agency to insure our all working together. In this way the product of each county can be handled as the county directors determine, just so that this does not conflict with the interests of the other counties.

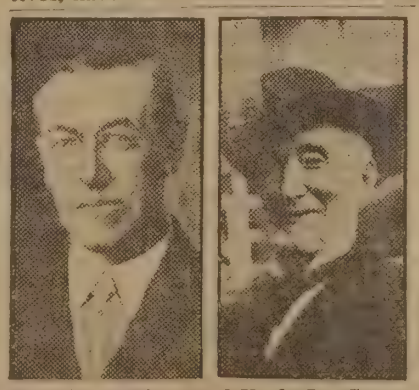
"And now, gentlemen," the speaker continued earnestly, "let me say just one thing more: If you are going to vote funds for this work, do it in a way that will not tie the hands of the directors! We have always trusted the other fellow with our money. Surely at a time like this we can trust ourselves. And that is the only way we can hope to do anything—we must have our hands free to do business according to the circumstances that arise. If you vote an appropriation and hedge it in with ifs and provisos, the condensery people will say, 'See there—they don't trust each other! They voted the money, but tied a string to it!' And so I am going to ask you in this matter either to trust us entirely and give us a chance to work with free hands, or don't trust us at all!"

A motion substantially along the lines suggested by Mr. Hall and other speakers was unanimously adopted. It calls for the raising of a fund of $200,000 in Skagit county, this money to be at the disposal of the directors in buying or building a condensery, or in otherwise solving the marketing problem. This vote, as has been said, was passed without a dissenting voice; and it was passed by a body of farmers representing an investment in farm land and equipment of from two to three or four million dollars. In comparison with this latest move of the West Side dairymen, all that has gone before is but the signing up of recruits for a probable conflict. This is the first gun—and there appears to be lots of powder and lead available.

Wilson and Uncle Joe Buy Bonds

Soundness of Farm Bank Bonds Indicated by Purchases

President Woodrow Wilson and Joseph G. Cannon, commonly known as "Uncle Joe," and for many years speakers of the national house of representatives, have attested to their faith in the federal farm loan bank and in the farms of the northwest by investing some of their money in bonds of the Spokane district bank, which serves the states of Oregon. Washington, Montana and Idah



President Wilson and Uncle Joe Cannon

President Wilson Purchased a $10,000 block of the bonds, and Uncle Joe invested $30,000 of his cash in them.

There is nothing safer as an investment than the farm bank bonds, says President D. G. O'Shea of the Spokane branch. These bonds are secured first by the mortgages on the land on which loans are made. Secondly, the indorsement of the national farm loan association stands back of them. Thirdly, the district bank stands back of them, and finally the entire farm loan system stands back of them, all 12 of the district banks being mutually responsible for the bonds of each.

Another feature that makes the bonds good investment is that they are totally free from taxation. Not even the income tax or the war tax can be levied on them. In addition, they are virtually legal tender in doing business with the government. They are acceptable for all manner of government deposits. The bonds bear 4 1-2 per cent interest. The farm loans draw interest of 5 per cent, leaving a half per cent as the margin of profit to pay the operating expenses of the bank.

Food Regulation

What Does the Expression Mean?

Under the new food control law the government is empowered either to fix prices for, or to buy and sell, the following necessaries, whenever in the judgment of the president, the public welfare calls for that action:

Wheat, flour, meal, beans and potatoes.

Coal and coke.

Nitrates for soil fertilization.

The law further gives the government power to regulate, but not to buy or sell, these additional commodities:

All foods and foodstuffs; all fuel, including fuel oil and natural gas; fertilizers and fertilizer ingredients; tools, utensils, implements, machinery and equipment required for the actual production of foods, feeds and fuel.

Regulation is defined in section 5, as follows:

"That from time to time, whenever the president shall find it essential to license the importation, manufacture, storage, mining or distribution of any necessaries, in order to carry into effect any of the purposes of this act, and shall publicly so announce, no person shall, after a date fixed in the announcement, engage in or carry on any such business, . . . unless he shall secure and hold a license issued pursuant to this section. . .

"Whenever the president shall find that any storage charge, commission, profit or practice of any license is unjust, or unreasonable, or discriminatory and unfair, or wasteful, and shall order such licensee within a reasonable time fixed in the order to discontinue the same, unless such order, which shall recite the facts found, is revoked or suspended, such licensee shall, within the time prescribed in the order, discontinue such unjust, unreasonable, discriminatory and unfair storage charge, commission, profit or practice. The president may, in lieu of any such unjust, unreasonable, discriminatory and unfair storage charge, commission, profit or practice, find what is a just, reasonable, non-discriminatory and fair storage charge, commission, profit or practice, and in any proceeding brought in any court such order of the president shall be prima facie evidence."

The penalty for refusal to discontinue the acts prohibited by the president, or to carry on business after a license is suspended, is a fine not exceeding $5000, or imprisonment for not more than two years, or both.

Does Not Apply to Farmers.

This section does not apply to "any farmer, gardener, cooperative associations of farmers or gardeners, including live stock farmers, or other persons with respect to the products of any farm, garden or other land owned, leased or cultivated by him, nor to any retailer with respect to the retail business actually conducted by him, nor to any common carrier."

The distinction is this: The government may regulate business in all of the necessaries named in the law.

Or it may go further and buy and sell the following commodities only: Wheat, flour, meal, beans and potatoes; coal and coke, and nitrate fertilizer.

But it can not buy and sell other foodstuffs, nor firewood, fuel oil and natural gas; nor fertilizers other than nitrate; nor tools, utensils, implements and machinery.

They Should Head the List.

We now have an embargo on everything useful to Germany except La Follette's speeches.—Brooklyn Eagle.

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Peace, But Only Upon Firm Ground

In colonial days Patrick Henry, in his immortal oration in favor of vigorous action by the colonists against oppression, said, "Gentlemen may cry peace; but there is no peace."

His words may well be reechoed today. The American people are lovers of peace, and many of the extremely pacifist type are crying peace when there is no peace. From across the waters comes a plea from that great center of influence, the Vatican, but the world is not ready for the kind of peace that could now be obtained. It will never be ready for that kind. It will never be ready for any brand of peace that leaves autocracy enthroned, biding its time to spring again upon helpless people. The snake must be not merely scotched, but killed, never again to sink the venomous fangs of despotism into the body of democratic civilization.

America and her allies are anxious for peace. The European enemies of Prussianism have paid an awful price for their stand against inhumanity and for the rights of human liberty. America may yet be called upon to pay with the lives of thousands of her sons, but she must not and will not shrink from the responsibility. Without material gain to herself she would gladly make peace today, but the conditions of that peace must be the complete abdication or banishment of militarism and the divine right of kings and kaisers, and the enthronement in their stead of government guaranteeing to the world the inalienable right to life, liberty and the pursuit of happiness.

The Call of Higher Education

There is no longer the sentiment abroad in the land that there is no need for the farmer to be educated, as once there was. Just as the people of our own country outgrew the idea that education was for men, but not for women, so have we outgrown the ridiculous idea that high school and college education was for lawyers and doctors and preachers, but not for the man and woman on the farm.

The school year is soon to open, and it should find many hundreds of boys and girls from the farms of the northwest entering high school or college. No class of young people better deserve the best that education can give them, and nowhere is a broad education of more genuine value than on the farm. Education does not mean ability to read Latin or poetry, to solve problems in intricate mathematics, or to run a gas engine. It means a training of the mind to comprehend the things of life in their relation to each other, to judge properly of the comparative values of all those features that go together to make up human life. It means in addition the disciplining of the mind and the heart of man, that he may acquire and maintain a broad view of the activities of the world in which he lives, and adjust himself to the fundamental principles and truths of life so that he may better fit in and harmonize with the great scheme of the universe. Algebra, Latin, history and English are but means to this great end.

There will be great temptations this year for the young man or the young woman who has finished the lower school to stay out of high school or college. There is an unusual demand for farm labor to meet the requirements of the national food administration. But only in the most extreme cases should this condition be permitted to interfere. The education of the boy or girl is a matter of a certain period. It can not safely be postponed. This year, this very month, will decide the futures of many young men and young women in the northwest. In every case where possible the decision should be in favor of going to school.

Go to the Fair to Get Something

The season for fairs is now open in the northwest, and with its opening there comes a real opportunity to the person who attends and grasps it.

The fair is too often looked upon as about 90 per cent entertainment and 10 per cent educational. This year the educational features are going to take precedence, though the purely pleasurable features will not be dispensed with. For the man, the woman, the boy or the girl there will be wholesome entertainment and genuine fun. But for each one of them also there will be education of a very real nature.

There Is a Reason.

Exhibits are for a purpose other than to please the eye. Where there are extra fine fruits or vegetables or grains or grasses on display, there are persons about who are ready and willing to tell what made them extra fine.

Where there are prize-winning live stock there are owners or caretakers or judges who are ready and willing to tell why they are prize-winners, and how they were developed and prepared.

Where there are inventions and improvements in farm machinery, fencing, household equipment, farm buildings and the like, there are always persons whose business it is to explain them.

Exhibitors of dairy stock or dairy products are anxious to tell what experience has taught them to any one who will listen with a view to learning. Breeders of hogs and sheep and horses and cattle and poultry are on the ground with their exhibits to compete for honors and secure advertising, and they know that the best kind of advertising they can get is conversation with some one who wants to know something of the different breeds and the methods of caring for them.

Go Through Systematically.

Therefore, when you enter the fair grounds, be they of the state fair or a live stock show, or the county fair, begin with the first exhibit at your right. There will be something about it that you ought to know that you don't. Ask the exhibitor. Put the points learned down in your notebook, even though you do not see any particular application to your own problems at the present time. Pass on to exhibit No. 2. Ask the man in charge. Put a fact or two down in the notebook. Pass on to the next exhibit, and on and on, questioning somebody at every stop and putting down a fact or two each time. Occasionally you will come onto a demonstration, or a moving picture of educational purpose or entertainment, or a government or college exhibit with lectures on modern discoveries or improvements. Take them in. Sit down and rest a few moments. Move on to the next exhibit, patronize the water fountain or the soda fountain, according to your choice. Attend the auction sale of live stock, watch the tractors and threshers and milking machines and washing machines and churns and lighting plants and wire stretchers and pumps and engines and incubators and fly traps, and all the other things work. Find out how they work and put it down in your notebook.

It Is Sure to Pay.

Somewhere along the line you will discover something that will be worth real dollars to you. Everywhere you will find something that it is worth while to know. And when the day is over, or fair week is ended, you will have seen maybe a hundred, maybe five hundred displays and learned maybe two hundred and maybe a thousand facts.

Go to the fair to be entertained, to have fun, to hear the band play and watch the horses race and the high divers dive. But go to learn, and go through systematically, from first to last, just like you went through the little red or white schoolhouse.

Washington Gleanings

King county farmers, more than 500 strong, visited the experiment station at Puyallup recently.

John Strohm, a rancher near Colfax, recently bought from P. H. Lich and wife a half section near Rockford for $20,800.

The chief cause of the forest fires recently reported, according to State Fire Marshal Fred E. Pape, is the fires built by berry pickers.

Shipments of wheat by water from Puget Sound ports during July were the heaviest for many years, amounting to 600,560 bushels.

Stevens county farmers have borrowed $41.835 in the last two months through the federal farm loan bank, according to the records kept by the county auditor at Colville.

A prize of $50 has been offered by the management of the southwest Washington fair for the best grange exhibit at the 1917 fair, which opens August 28 at Centralia.

Fred C. Morgan, former superintendent of the Flathead Indian reservation in Montana, has relieved J. N. Johnson as superintendent of the Colville Indian reservation at Nespelem.

Rothrock & Day have purchased the E. W. Wells farm, lying east of Sprague. The property consists of 960 acres, of which 300 acres is fine meadow land. The consideration is reported around $50,000.

A. N. Saxton of Walla Walla disposed of 5000 bushels of club wheat at $2.25, and Stewart Brothers sold 8000 sacks of barley at $41.25. Adrian Magallon, also of Walla Walla, sold a small lot of club wheat at $2.15.

The Walla Walla Live Stock company recently sold to Joseph Davin about 8000 acres about 10 miles southeast of Ritzville for $100,000, and Bridget M. Dunigan sold to Joseph Charrier about 800 acres for $13,500.

Farm crop specialists and investigators from experiment stations and agricultural colleges of 11 western states met in Pullman recently for the discussion of problems affecting farm production in the western part of the United States.

Douglas county is now included in a group of 10 counties given financial support from the state to maintain a club leader for boys' and girls' agricultural and canning work. There are about 400 boys and girls engaged in gardening and canning this summer. Douglas county expects to be represented at the state fair in the boys' and girls' contests.

What Others Say

Rye made into whisky means riot; plowed into the soil as humus it means richness.—The Rural New Yorker.

Every farmer is his own detective when he weighs the milk from his own cows and tests it.—The Dakota Farmer.

For each farmer to plant none but the seed matured on his own farm is not sound husbandry.—Breeders' Gazette.

Even in spite of the high prices for feed and labor, prospects were never so bright for a prosperous future for the dairyman who will breed, milk and care for good cows properly and raise well his best heifer calves. — Kimball's Dairy Farmer.

Greater efficiency on the farm is just as vital a need now as in the factory, on the railroad or in the army. The decision of students in one state college each to return this fall with at least one new student needs to be made a national policy.—The Country Gentleman.



PROOF that Blasting the soil pays fruit growers

EVIDENCE

"In preparing the ground for the planting of trees the *Rural Press* recommends the use of powder." PACIFIC RURAL PRESS, San Francisco.

"We advocate the use of explosives for loosening up compact soils and hardpan in tree planting, knowing the value of such work."
FANCHER CREEK NURSERIES, Fresno, Cal.

"The use of a good explosive is of great benefit in planting an orchard, as the ground should be loose enough to allow roots to go to their natural depth easily."
BENEDICT NURSERY CO., Portland, Ore.

"We favor blasting holes for trees where the soil is heavy. Powder will loosen the soil, giving it a better chance to become aerated, as well as making it more retentive of moisture."
OREGON NURSERY CO., Orenco, Ore.

"My orchard has made excellent growth, due to the fact that I used dynamite, breaking up the soil and making excellent beds for the roots. If I were to set another orchard I would not think of doing so without blasting each tree hole."
T. A. JOHNSON, Boise, Idaho.

"We have used explosives in digging tree holes in the hard caliche subsurface layers which occur here. We find this cheaper than the use of pick and crowbar, and more satisfactory in that the soil is shattered deeper than the hole could be dug."
GEORGE T. FREEMAN,
Arizona Agricultural Experiment Station, Tucson.

"The use of Farm Powders in the orchard industry is rapidly being learned and appreciated. The worst looking orchard I ever saw, suffering from a lack of drainage, was blasted two or three years ago, and now it looks as fine as any other well kept orchard in this valley."
E. H. SHEPARD, Publisher "Better Fruit," Hood River, Ore.

"We have observed many cases in which powder has been used for blasting beds for fruit trees, invariably with great success. The use of explosives is of material benefit when the soil is inclined to be rather shallow and underlaid with a hard subsoil. There are few soils in which blasting cannot be done profitably."
THE FRUIT GROWER, St. Joseph, Mo.

"I have done a great deal of orchard planting and use powder for making the holes. At first it was used chiefly on heavy hardpan or other soils that were difficult to prepare with the spade, but is now used on all classes of soil. If I were planting trees even in light soil, easily handled, I should prepare all the holes with powder. Trees so planted make extraordinary growth."
FRANK FEMMONS, Oakhurst, Cal.

"Generally speaking the growth of plants depends upon the condition of the soil into which the roots penetrate. If the depth of loose soil is too limited or the surface water is permitted to stand too long, the growth is impaired. Explosives properly used in such instances have invariably relieved the condition and resulted in excellent growth. The yield is often three times as great on blasted soil as from those untreated in the same vicinity."
ROSECROFT NURSERY & FRUIT FARM, Sumner, Wash.

"The O'Connor prune orchard near Los Gatos in the Santa Clara Valley, California, was blasted in 1913. During the previous six years the largest crop was 3,900 pounds. In 1914 after the blasting, the crop was 8,000 pounds, more than double. It was a dry year, too. Where there were from 30 to 40 per cent. of drops in the orchards on both sides, the O'Connor place lost only about 5 per cent. Prunes from the blasted orchard averaged much larger and the trees made a better growth and retained their foliage a month longer than the orchards on either side."
JOHN A. GALPIN, Los Angeles, Cal.

"My orchard was planted three years ago and all trees were of even age and size. I intended to blast the whole orchard but ran out of powder and finished the small balance without it. This enabled me to compare the growth of the trees and satisfy myself that the expense was justified. The trees that were planted in blasted ground show a growth of 75 to 100 per cent. over the trees that were planted in ground not blasted. They also appear healthier and more satisfactory in every way. I have just bought 1100 more prune trees and would not think of planting them without preparing the ground with powder."
HERMAN H. SMIDT, R. 3, Oregon City, Ore.

2

is given by many fruit growers in the accompanying page from the Giant book, "Better Orchard Tillage." These men say that blasting

- enables the trees to root deeper;
- adds moisture storage capacity;
- saves labor and money;
- improves orchards that are not doing their best;
- is always profitable when properly done;
- places the soil in the ideal condition that permits newly planted trees to make extraordinary growth;
- increases the yield of fruit.

Scores of the most successful fruit growers in the Pacific Coast States plant all of their trees in beds blasted with one of the

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

—Eureka Stumping Powder or Giant Stumping—both of which are made especially for this and other agricultural work. They have found these Giant Powders particularly well adapted to subsoiling and for blasting tree beds.

Some kinds and grades of explosives tend to shatter and pulverize anything they come in contact with. They act too quickly. These ordinary dynamites do not do the work well and cost more. Eureka Stumping Powder exerts its strength slowly, comparatively speaking. It tends to disrupt, crack, split and heave the soil and it extends its influence over a wide area. It loosens and pulverizes the soil instead of packing it and throwing it high in the air. This is the action that is wanted in soil work and this action the "high percentage" dynamites will not give.

Warning Giant Powder is the trade name of explosives manufactured by the Giant Powder Co., Con. Because Giant Powders are best known everywhere, many have assumed that all high explosives are Giant Powders. Insist upon having the genuine, made only by The Giant Powder Co., Con. If your dealer has only ordinary dynamites, write us and we will see that you are supplied with *real* Giant Powders.

Try ONE BOX

Perhaps you have never planted trees in blasted beds. To make it easy for you to prove the value of blasting the soil, we print a trial order form in the coupon to the right. Fill it out and we will have our nearest distributor supply you—at the lowest market price—with a 25- or 50-lb. case of either of the Giant Farm Powders. Blast beds for all of your trees. Plant one in a spade-dug hole, the ordinary way. Note the difference in growth.

If you *are* using explosives for tree-planting, test a case of Giant alongside of the brand you have been using. After blasting with each, take a spade and see how much more thoroughly Giant does the work.

Remember that you can blast whenever the soil is dry, from a day to a year before planting time. Many growers keep Giant Farm Powders always on hand.

Have You Had the Book "Better Orchard Tillage"?

Prepared especially to tell the facts about blasting soils for orchards and in orchards of the West. It tells how to secure the proper sub-irrigation conditions by blasting. It explains how blasting promotes drainage and increases both moisture-storage capacity and fertility. It gives detailed directions for preparing the soil for tree planting or for deep cultivation of established trees. We will send a copy free on request. Tell us about your problems and mark and mail the coupon. Other books on Ditch Blasting, Boulder Blasting, Subsoil Blasting for all farm crops, and Stump Blasting will also be sent on request. Ask for the books that interest you.

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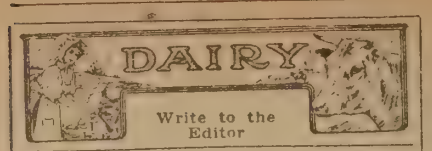
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- ☐ Ditch Blasting
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..... lbs. Eureka Stumping Powder

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A. B. NYSTROM, Editorial Contributor

Honor List Grows

The honor list of the Gresham Columbia Slough Cow Testing association in Oregon has grown to such an extent that it is necessary to raise our standard to 45 pounds in the place of 40 pounds, says Dana S. Frame, the official tester.

John Farr's herd, at Warren, Oregon, consisting of 11 cows in milk heads the list with an average of 957.6 pounds of milk and 38.49 pounds of butterfat per cow. Mr. Farr also has the high cow of the association for this month, producing 64.25 pounds of butterfat.

Empress Ladd's Bessie No. 380112, a registered Jersey belonging to C. H. Johanson, made 61.07 pounds of butterfat in her 10th month of lactation. She was the high cow in the association the past year and has over 550 pounds butterfat to her credit in her present lactation period.

Pasture is practically gone and many of the dairymen are feeding from their winter hay. Grain prices are practically prohibitive and consequently little grain is fed. Prices for butterfat vary from 45 cents sour cream to 50 cents for sweet cream.

Raise More Heifer Calves.

The report of the Walla Walla Valley Cow Testing association for the month of July, 1917, shows that 19 more cows were sold for beef on the strength of the association records, making a total of 83 cows since November 1, 1916, and a total of 209 cows in the past 21 months.

A large increase has taken place in the number of heifer calves being raised. 132 of those born since November 1, 1916, being saved from the best cows.

The average milk production per cow of the 476 cows tested since November 1, 1916, is 620 pounds greater than for the nine months of the preceding year.

Fourteen pure bred cows, ten Holsteins and four Jerseys, were purchased by two association members last month.

St. Mawes Susy Heads List.

Of the 50 cows on the register of merit test in the Yamhill County Cow-Testing association, 17 were on the honor roll, according to a recent report submitted by M. S. Shrock, county agriculturist. This honor roll includes the cows that produced 50 pounds or more of fat per month. St. Mawes Susy, belonging to Ed Cary, heads the list with a record of 79.39 pounds of butterfat.

Success in Farming

To the Editor: In your issue of July 12 you say that because the American farmer produces more per head this places him on a higher plane of success than the English farmer. This I do not understand, as when I see thousands of acres round me being cropped year after year with wheat and producing less every year it seems to me like comparing a man who from seven acres produces 100 bushels to a man producing 230 from 27 acres. One is keeping his land up; the other is impoverishing it; to a workman who from one pound of raw material produces $14 and a man who from one pound produces $8.50, the one having all his material left and the other wasting a quantity of his.

Loomis, Wash. W. P. B.

When the American farmer, on the average, is producing two and three times as much as the European farmer, enabling him to have a better home, better farm implements, better conveniences in his home, more privileges for his children, then we still believe he is "on a higher plane of success than the European farmer." The fact that he may be "mining the land" in some cases in order to get this increased income is almost a necessary result of a new country with cheap land. It will give place and is giving place more and more to greater attention to the questions of soil fertility. As stated in a previous article in The Farmer, "when you can show the American farmer that he can increase his income by increasing his acre yield he will increase his acre yield." The American farmer, like every other class of American citizen, can improve on his calling, goes without the saying, but the article in The Farmer was written with the aim of combating the more or less prevalent notion that the European farmer is a better farmer when measured by the results of his farming.

Ever since the American farmer started on his westward migrations from New England he has left the land poorer than he found it. Now the tide is turning and many a man and many a farmer is returning to those "worn out" lands and believe there is a more permanent farming success by the most approved methods of soil building.

When necessity grips him the American farmer will continue to remain on the high plane of success even if he has to pay a big price for his land, together with the added cost of soil maintenance. American efficiency is illustrated by the following item in connection with the war preparations of the American people: "The German imperial government was nearly 50 years in perfecting its military efficiency. In less than four months the American republic has made such strides as to indicate that in less than two years' time the boasted superiority of German efficiency will have been discredited. There is such a thing as American efficiency, and time will prove that German efficiency can not withstand it, fighting as it is for liberty, justice and humanity."

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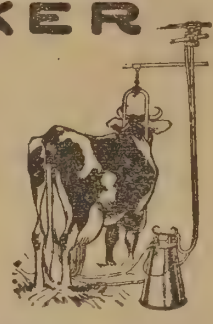
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and sell the milk

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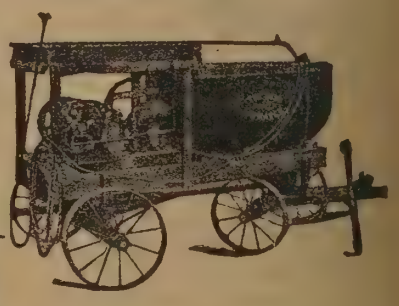
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MILK MASH for little chicks and for finishing milk-fed poultry for market.

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USE TEN MINUTES to see how it takes away the druggery and keeps the boys on the farm. Also examine the Loudon line of stanchions, stalls, hay tools and barn door hangers.

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LIVE STOCK NOTES.

Write to the Editor

E. J. IDDINGS, Editorial Contributor

Lamb Boycott a Mistake

By E. L. POTTER.

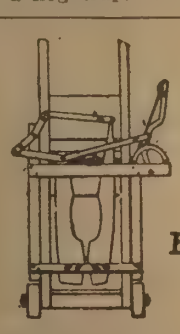
Anything in the nature of a boycott on lambs is a sad mistake. We who are in agricultural educational work feel it especially since we have for years been advocating less mature mutton and more lambs and this because all our experiments showed that a pound of lamb can be produced on less feed than mature mutton and the meat is of better quality. Nowadays practically all the mature mutton we get is from ewes that have served their time for breeding purposes. None of the farmers and but very few of the range men can raise a wether to maturity, that is to an age of 18 months or more, and do it at a profit even with present high prices. The fact is that a yearling or older wether is worth just about the same for mutton as a lamb. The only return the grower gets for holding him over the additional year is the wool, and there are very few men so favorably located that they can run a sheep a year just for the wool. The move is a mistake from all standpoints for both consumer and producer.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Hog Trap.

We show here a system of levers used to operate the neck engaging bars of a hog trap. These bars hold a hog

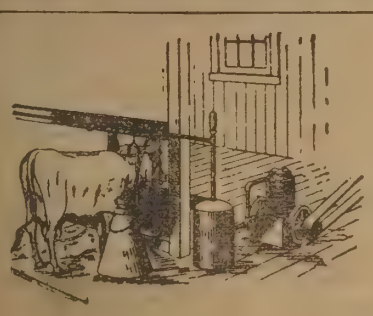


Hog Trap.

during the operation of ringing and can be adjusted to hogs of different sizes.

Milking Machine.

The new feature of this machine is that it works partly by compressed air. The gasoline engine drives a compressor which forces air into the

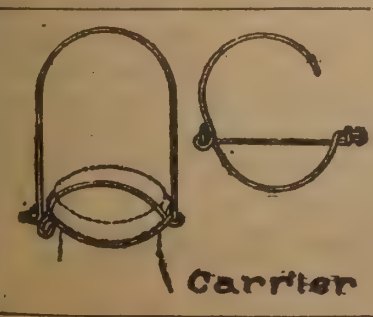


Milking Machine

tank and pipes, and this compressed air works a vacuum pump placed on the milk pail. The advantage claimed is that animal matter is not drawn into the stationary pipes and tanks.

Bottle Carrier.

This carrier is made of stout wire bent as shown and is quickly attached



Carrier

or detached. Get a piece of wire and try your hand at making one.

Breeds for Prolificacy.

A. D. Erb of Hubbard, Ore., has a big type Poland China sow, purchased in Michigan, out of a litter of 13. She had 11 pigs her first litter and Mr. Erb this spring purchased from J. R. Cole of Molalla, Ore., a young boar out of a litter of 14. The young boar is sired by Mr. Cole's grand champion boar at the Oregon State Fair, a Poland China of true big type. Mr. Erb believes in breeding for prolificacy and likes the big type Poland Chinas for this as well as other traits.

Stillaguamish Cow Testing.

During July 573 cows from the Stillaguamish (Wash.) Cow Testing association were tested. The average production for the association was 730.2 pounds of milk, and 31.85 pounds of butterfat. Average cost of feed was $3.45. Five herds averaged 37 pounds of butterfat. The highest herd average was that of Zenas Farrington, 10 cows averaging 39.1 pounds butterfat. Eighty-one cows produced 40 pounds of butterfat, 23 produced over 50 pounds and one Jersey, owned by W. G. Grimm, on register of merit test, produced 62.4 pounds butterfat.

Veterinary

Dr. S. B. Nelson

Kidney Trouble.—We have a 5-year-old stallion that has kidney trouble.—F. J. S., Valley, Idaho.

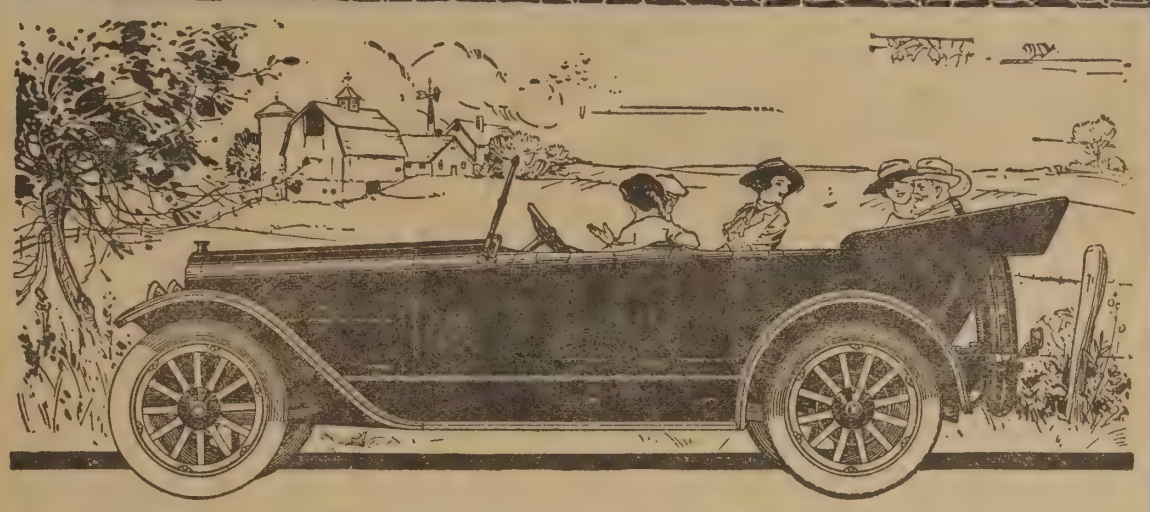
Answer.—Give your stallion a small handful of Buchu leaves on his feed morning and night. At noon give him one teaspoonful of tincture iodine in his drinking water.

Mare Is Too Fleshy—I have a working mare that is too fleshy. I am trying to reduce her by leaving out grain. She usually gets two quarts of oats and all the alfalfa hay she wants. She is too fleshy to stand the heat. Which would you advise cutting down, the hay or the oats?—A. S., Corfu, Wash.

Answer—Cut down both the hay and grain. Do not feed her any hay in the morning or at noon, but feed her what hay she should have during the 24 hours at night, and feed her hay at night and let her eat hay for an hour before you give her her evening feed of grain. You do not say how heavy the mare is but you can figure that a pound to a pound and one-half of hay and a pound to a pound and one-quarter of grain for a working horse per hundred pounds is about right in proportion.

Holds Back Milk—I have trouble in getting my cow to give down her milk. Have tried feeding while milking, but it does no good.—H. H. W., Yachats, Ore.

Answer—Sometimes the following treatment will cause a cow to give down her milk. The reason that she does not give down her milk is that she nervously keeps control of the secretion. You overcome this through the nerves and the best way to soothe the cow and get her to forget her nervousness is to wash the udder with medium warm water for a few minutes. Then rub the udder nearly dry with a cloth following this, massage the udder gently, rubbing the teats, and the teats will swell, the cow becomes quiet and you can then begin to milk her, milk gently and the milk flow will follow. This process has been used in many cases of where the cow nervously held up the milk.



On Country Roads

We Claim a Car Needs 100% Over-Strength

Up to three years ago our margins of safety were 50 per cent in the Mitchell. And that was considered excessive. The chief trend then was toward exceeding lightness.

But we had watched 70,000 Mitchells under all road conditions. They showed wonderful endurance. Still we saw that some conditions called for stronger cars.

So we started to double our margins of safety. We adopted the standard of 100 per cent over-strength. And we still maintain it, despite advancing steel costs.

Our safety parts are vastly oversize. Over 440 parts are made of toughened steel. And we use much Chrome-Vanadium.

Some Sample Results

Two Mitchell cars have been run over 200,000 miles each. That is 40 years of ordinary service. So we know that Mitchells as now built can give lifetime service.

Not one Mitchell rear spring has broken since this standard was adopted. That is an amazing record.

The demand for Mitchells has multiplied, especially in hard-road sections. The export demand has grown enormously, to countries like South America. And scores of America's leading engineers have chosen Mitchells for their personal cars.

Many Other Extras

In the latest Mitchells you will find 31 features which nearly all cars omit. You will find vast added luxury—about 25 per cent. You will find a heat-fixed finish which stays new.

You will find at least 20 per cent extra value as compared with other cars in this class. All paid for by factory economies due to Bate efficiency methods.

See these superlative cars. If you don't know our nearest dealer, ask us for his name.

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Mitchell—a roomy 7-passenger Six, with 127-inch wheelbase and a highly developed 48 horsepower motor.
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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

Poultry Conference at Corvallis.

A conference of the leaders in poultry husbandry of the entire northwest was held recently at Corvallis, Ore. Professor James Dryden served as chairman of the meeting. Men and women who represent the poultry interests of British Columbia, Washington, Oregon, Idaho, California, Utah and New Mexico were present, discussing conditions and consulting as to the future.

The consensus of opinion appeared to be that the war demanded of the poultry interests in particular economical increase in production. English and French consumption of American eggs is increasing greatly. Hospital demands are greater than ever. Patriotism and self-protection combine to urge the poultryman to study how to get better returns from less of an investment.

The conference recommended a careful culling of flocks, reducing the non-producers, giving more room for the better hens and the feeding of more succulent feeds. Green feeds are healthful and to a limited degree at least take the place of the high-priced concentrates.

May Be Tuberculosis.

To the Editor: Several of my hens are sick. They first get lame and then droop and get thin, mope around until they can hardly walk and then finally die. I feed dampened bran mash with a little salt in the morning and wheat mixed with barley in the evening. They at all times have access to grit, shell, charcoal and "Lilly's Egg Mash" dry. Is bran as good a food as shorts for chickens and does it make any difference if fed dry or dampened.

G. R. BRAUN.

May View, Wash.

The symptoms described point rather strongly to tuberculosis as the trouble. Tubercular hens very often get lame, and usually get thin and mope around quite a while before they die. Sometimes heavy fat hens die of it. Would suggest that one of the sick fowls be sent to the state college experiment station for examination. In making a postmortem examination the liver is usually covered with yellowish spots and the intestines are very often affected. The surest way to determine the trouble is to have an examination made at the experiment station.

Bran is a good food for poultry, in fact most poultrymen wouldn't know how to get along without it. It is better to mix the shorts with the bran.

J. D.



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FARM BOARD ORGANIZED.
Many Associations Will Cooperate

Formation of the federal board of farm organizations marks the culmination of several days' meetings held in Washington of agricultural leaders from 24 states. In this board are represented associations having a total membership of more than a million and a half farmers, for whom for the first time come true long-held dreams of a national federation of farm bodies.

Active in organizing this board are the Farmers' Educational and Cooperative Union of America, Farmers' National congress, Pennsylvania Rural Progress association, National Dairy union, National Agricultural Organization society, National Conference on Marketing and Farm Credits, and the National Council of Farmers' Cooperative associations. Representatives of several other large farm organizations were present at the meeting and will report to their respective bodies on the work of the board.

Objects of the federal board, which came into existence as a result of the present national emergency, are to coordinate the work of the farmer with that of the nation and to give the farmer greater influence and recognition in national affairs.

The board will keep constantly in touch with national legislative matters, passing on to the farmers what they wish to know concerning congress and keeping the legislators informed of the wishes of the people on the farms. Permanent headquarters will be maintained in Washington, D. C., with a general secretary in charge. Following the organization of the board the executive committee elected Charles W. Holman of Madison, Wis., to this position. Mr. Holman has already made arrangements for the immediate opening of national headquarters in Washington.

Upon a three-fourths vote of the general board any organization of actual farmers may affiliate with the federal board. Each of the separate organizations contributes to the support of the board.

The first regular meeting of the organization will occur in Washington in January, 1918, at which time permanent organization will take place.

As to Pit Silos.

Inasmuch as it is impracticable and even dangerous to dig a pit silo in a great many soils, the farmer should know the character of his soil before attempting to construct a silo of this type, says Farmers' bulletin 825 of the United States department of agriculture. The soil must be well drained, so that water will not stand in the bottom of the silo, and of such nature that it will not readily cave in. Soils which contain boulders or rocks, are hardly satisfactory for pit silos, as the walls of the silo can hardly escape being materially defaced and weakened when the rocks are removed. Any firm, well-drained, and comparatively dry soil, free from seeps, rocks, and sand strata should prove satisfactory. Where pit silos have not been tried, the farmer should study the soil and the depth of the water table by observing any nearby well. If this is not possible, it would be advisable to bore a two-inch hole as deep as the silo is to be, and in this way to learn the character of the soil. The maximum height of any ground water which may appear at any time in this test well will indicate the lowest point to which a pit silo should be dug in that place.

Parade in Form of Cross.

The outstanding feature of Red Cross week at West Chester, Pa., was the Red Cross parade. The Sharples Separator company furnished the largest unit of the whole parade, nearly 400 employes stepping into the marching line. Eight of the girls headed the unit, bearing a large American flag, and they were followed by half a hundred girls, all in Red Cross uniforms, who marched in the form of a cross and sang patriotic songs. The Sharples folks subscribed nearly $20,000 worth of Liberty bonds and the West Chester organization gave over $2000 to the Red Cross.

In Danger.

Friend (to professor, whose lecture, "How to Stop the War," has just been concluded) — Congratulate you, old man — went splendidly. At one time during the afternoon I was rather anxious for you.

Professor — Thanks. But I don't know why you should have been so concerned on my behalf.

Friend—Well, a rumor did go round the room that the war would be over before your lecture.—London Punch.

All Previous 12 and 24 Hour Speed Records Broken by a CHALMERS

The secretary of the contest board, American Automobile Association, sent the following telegram to the Chalmers Company on August 14th, 1917:

"Please be advised contest board has allowed and accepted following times as official records for stock chassis with piston displacement of 161 to 230 cubic inches.

1 mile—44.37 seconds.	15 miles—10 minutes 58.55 seconds.
2 miles—1 minute 27.44 seconds.	20 miles—14 minutes 30.30 seconds.
3 miles—2 minutes 11.80 seconds.	25 miles—18 minutes 15.67 seconds.
4 miles—2 minutes 54.61 seconds.	50 miles—36 minutes 12.93 seconds.
5 miles—3 minutes 37.83 seconds.	75 miles—54 minutes 32.45 seconds.
10 miles—7 minutes 16.80 seconds.	100 miles—1 hour 12 min. 10.17 sec.

And the following hour records in same class:

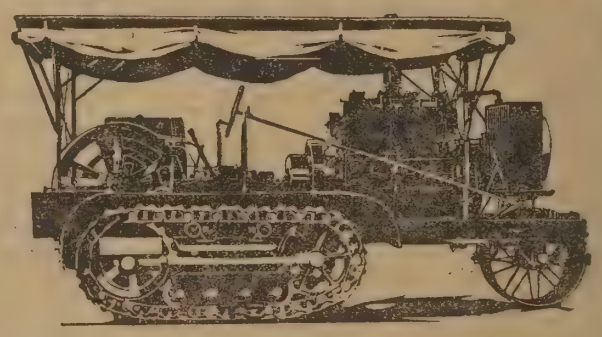
1 hour, 83 miles; 12 hours, 957 miles; 24 hours, 1898 miles. Car, Chalmers record speedster, stock chassis. Driver, Joe Dawson. Place, Sheepshead Bay speedway, July 28, August 1st and 2nd.

The records broken by the Chalmers car were established by a car with a motor 28 per cent larger than that of the Chalmers.

The Chalmers in various models will be on exhibition at the Interstate fair. There is no better car made. Come and see for yourself.

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The Tractor for Service



The Caterpillar is built to give service, and it is backed by service, of which our annual Caterpillar School, free to owners and operators, is only one of the big features. That the Caterpillar gives exceptional service—day after day, year after year—is testified to by thousands of satisfied Caterpillar owners.

CATERPILLAR
Reg. U.S. Pat. Off.

The Caterpillar won't slip, won't mire, won't pack the soil. It does all the work that other tractors do, and does it better. Besides, it works in places and under conditions where no other form of tractive power can be used successfully. Caterpillars are at work in Alaska, at 40 degrees below Zero; in the Sierras, hauling ore over rough and rocky roads; in swamp lands, where even horses cannot work without bog shoes.

Holt design and Holt construction have put into the Caterpillar endurance, long life with low upkeep, the sort of dependability that makes the work run smoothly without annoying and costly delays.

Write for further information about the Caterpillar—the leading tractor in the United States today. The Caterpillar is built in several sizes—a size for every sort of tractive work.

There's Only One Caterpillar
Holt Builds It

HOLT

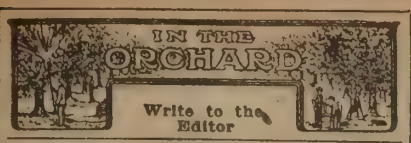
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GRANVILLE LOWTHER
Editorial Contributor

DUCKS AND GEESE

Do No Damage to the Orchards.

Recently I have observed several orchards where ducks and geese are being kept and it raises the question of their adaptability to orchard conditions, and whether they can be made profitable. I am familiar with the habits of those fowls, for we grew them on the farm where I grew up as a boy.

As compared with sheep, they are preferable because they do not eat the tender twigs, nor bark the young trees.

As compared with hogs they are preferable, because they do not root or disarrange the soil for irrigation.

As compared with chickens they are preferable, because they do not scratch and fill up the irrigation ditches.

They simply paddle in the water, but do not in any appreciable degree interfere with the work of irrigation. No stock should be permitted in the orchard that damages the trees.

Since ducks and geese do not damage an orchard, the only question is will they pay? I have not gone carefully into the cost of growing under orchard conditions, nor the profits in meat eggs and feathers they produce; but I am strongly of the impression they can be made profitable and at little cost of trouble or expense. If any one has practical experience, may we not have it? G. L.

Mutilating Spitzenburgs

A letter from Mrs. Mollie Maas and the answer, I think would be interesting to many growers of fruit. The letter reads in part as follows: "My Spitzenburg apples, 10 years old, do not bear a full crop. The ground was plowed this spring, and was in clover. On a few limbs I cut a ring four inches wide; is that a detriment to the tree? Would summer pruning set fruit for next year?"

My Answer.

The Spitzenburg is a light bearer and has its so-called "off years"; years when it is storing vigor for another crop. Generally it bears a fairly heavy crop every second year, but is not like the Winesap and Rome Beauty, a heavy annual bearer.

Summer pruning causes the setting of fruit spurs, but should be done not later than the first week in August. The last of July is better.

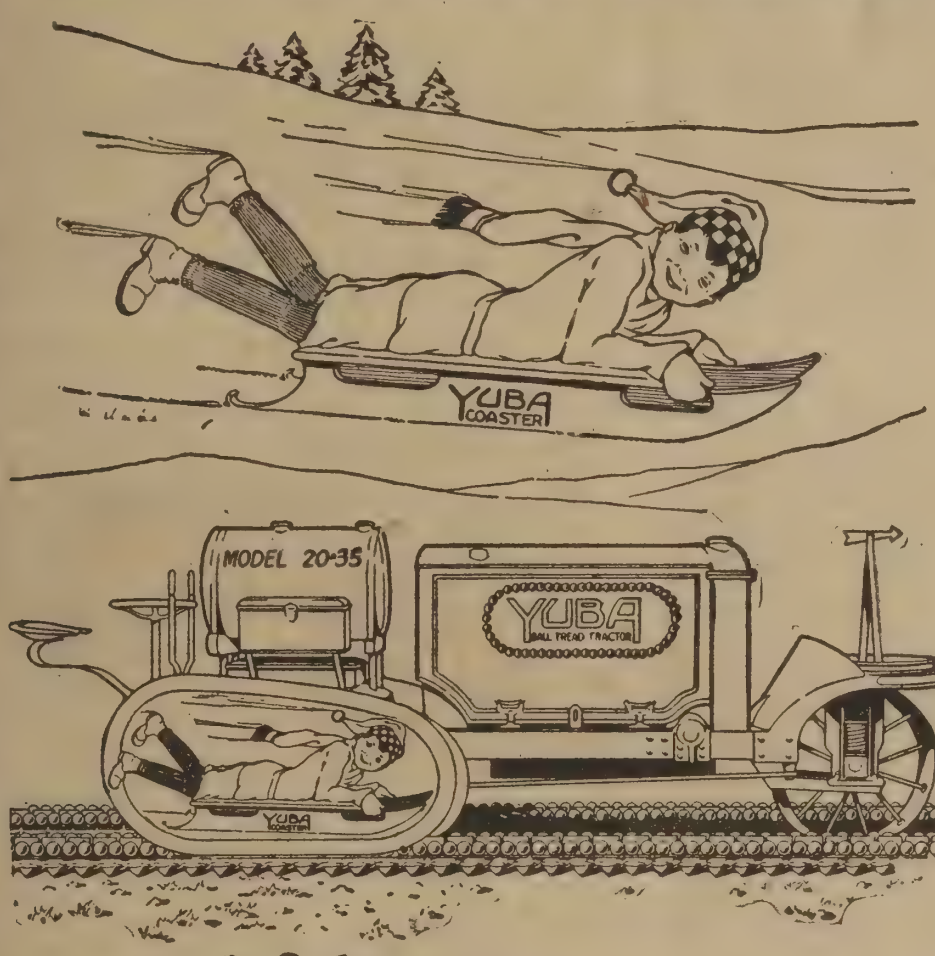
Never cut the bark of a tree to make fruit spurs. It is done sometimes, and I have known some good orchardists to recommend it, but my objections are, first, that in cutting the bark you wound the tree and check its growth, thereby lowering its vitality and its vigor. It is a little like bleeding a person for fever. Second, into these wounds bacteria enter and flies, bees, aphids and other insects carry blight and other disease germs that get into the sap, circulate through the cambium, just as bacteria would get into the human flesh and cause ferment if the skin were broken and the air not excluded.

Such a practice is especially bad on Spitzenburgs that are a tender variety, susceptible to disease and need all the vitality they can conserve to prolong their lives. It is true that such a practice will check wood growth, make fruit spurs, and temporarily produce more fruit; but it will be at the expense of the longevity of the tree. Summer pruning is much better.

Now I will add to what I said in my letter of reply, and say that ever since I have been in the Pacific northwest I have watched the results of "stripping the bark," which means beginning generally near the root, cutting the bark into diamond-shaped wounds, leaving strips of half or one-third the bark for the circulation of sap; "ringing the tree," which means that the bark is cut all around for a width of two to six inches. When I first came to this country an orchard near North Yakima was being treater in that manner. The orchard was then about 6 years old, trees healthy, growing vigorously, but were not bearing to suit the owner. The next year there was an unusually heavy crop for trees of that age; but the trees lacked vigor, and the fruit was small. The trees have seemed to recover, but they have had all the diseases orchards in this country are subject to.

A few varities are especially vigorous growers and develop limbs and few fruit spurs; but the better way to manage that is to give the trees less water, less manure, prune but little in the dormant period and prune heavily in summer. G. L.

as the sled slides over snow



so the Yuba moves over the ground.

The steel ball race castings are the runners of the tractor. They slide over the freely rolling balls of the Ball Tread as the steel shod sled over snow.

The upward pull of the sprocket on the manganese chain furnishes the impetus for the Yuba.

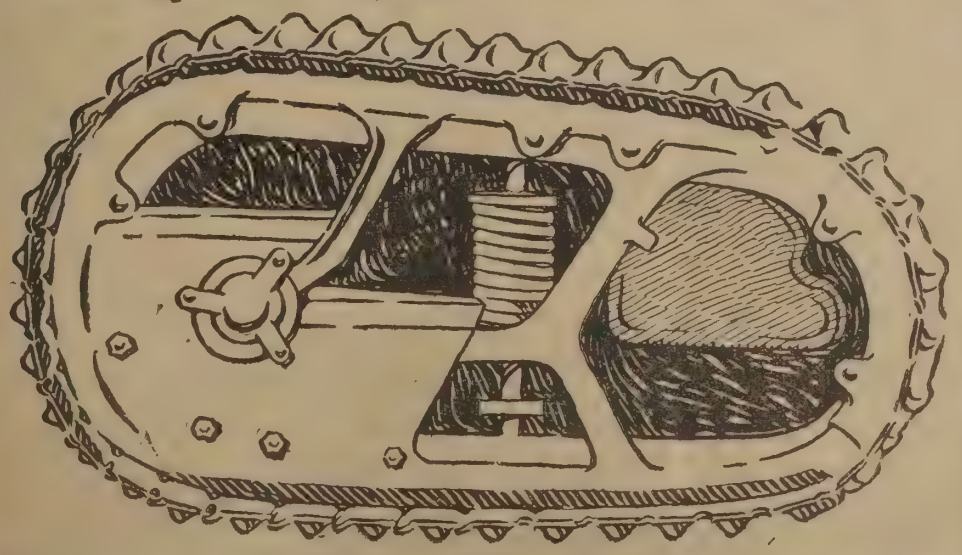
The Yuba has a rigid track. Most other "track" machines lay a so-called "track" of flexible links and roll over it on flanged pulleys or wheels.

Such a track is no better than the ground on which it is laid—often it is more of a corduroy road than a track.

The rigid track of the Yuba does not kink nor cramp to minor irregularities of the ground. It follows the general contour smoothly and easily. The shock of meeting any obstruction is evenly distributed.

The Yuba slides over a ridge just as the sled takes a "Thank-ye-marm."

Like the sled the Yuba will coast of its own weight on a 3% grade!



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Gentlemen: Kindly send me catalog and prices on the Yuba Ball Tread Tractor.
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Foreign Officials Also at Great Show of New Things in Agricultural Power Machinery

By CLARENCE LUCAS, Fremont, Neb.

The fifth annual tractor demonstration held at Fremont, Neb., proved an event of international importance from every standpoint. It received general recognition in the world of agricultural machinery—through the attention of farm publications and by the attendance of manufacturers or their accredited representatives.

A tractor manufacturers' committee headed by J. C. Bartholomew of Peoria, Ill., and the Fremont Commercial club, led by George F. Wolz, stood sponsors for the undertaking and A. E. Hildebrand of Omaha, Neb., who has served in similar capacity for all the big tractor shows that have been held, officiated as superintendent.

The show was scheduled for the period August 6 to 10, but a sudden windstorm on the Sunday preceding the opening razed the tent city that had risen in a night, and accompanying rain soaked the fields to such an extent that the actual plowing demonstration did not begin till August 8.

The tractor grounds lie just north west of Fremont on a particularly level stretch, along which runs the famous transcontinental route, the Lincoln highway. Two other automobile routes, the Cornhusker route and the B line, have juncture here. Three thousand acres mostly in the fertile valley where the Elkhorn and Platte rivers join, comprised the demonstration field. Having one corner of the great plat extend upon the slope of the bluffs was a new undertaking this year, for the purpose of proving that tractors will perform in satisfactory manner on the slopes.

Fifty-two tractor comupanies participated in the demonstrations or made exhibits on the grounds; and in addition there were 36 accessory companies represented with accredited shows.

There were in the neighborhood of 350 tractors, representing some half hundred different patterns, brought to Fremont for the show, and nearly 150 of these took part in the great demonstration. The first concert plowing was done on Wednesday, August 8, with 123 tractors in line. It was roughly estimated that farm machinery exhibited in or near the tractor city, possessed a value of a rough million dollars.

People came from nearly every state in the union and from a dozen foreign lands to view this great show of the new things in agricultural power machinery. By far the greater portion of the crowds, naturally, represented Nebraska and the close-by agricultural states of Iowa, Kansas, South Dakota and Colorado. Probably two-thirds of them came in automobiles and the almost inconceivable number of these conveyances packing the roads for a mile or more in every direction and filling the parking spaces at the sides and in adjoining fields, furnished a sight that in itself was a wonder. Facilities had been provided in the tented city for accommodating just such a rush as this, but it is doubtful whether all could have been handled, but for the foresight of the visitors themselves who in large part, brought their own lunches and sometimes their camping outfits with them. At the busiest period of the show the valley was dotted with tents of tractor show visitors.

Fremont itself had its hands full caring for 1400 or 1500 salesmen, demonstrators and others connected with the exhibiting companies. It had, in addition to rushing to completion a new $300,000 hotel in time for the show, thrown open hundreds of the homes of its best citizens, as temporary boarding and lodging houses.

The presidents of nine well known automobile manufacturing concerns arrived in special cars from New York city on Tuesday of show week and with them came officials of their own and of a dozen other automobile factories. At the head of this party was Howard E. Coffin, chairman of the national defense council, and included were Roy D. Chapin, president of the Hudson Motor Car company, Detroit; Harry W. Ford, president of the Saxon Motor company, Detroit; H. B. Jewett, president of the Paige Motor company, Detroit; Walter Chrysler, president of the Buick Motor company, Flint; G. J. Heaslet, former president of the Studebaker corporation, South Bend; Otis F. Friend, president of the Mitchell Motors company, Racine; John W. Bates, general manager and chief engineer of the Mitchell Motor company, Racine; Charles W. Nash, president of the Nash Motor company, Kenosha; H. W. Griffith, general manager of the Remey Electric company, Detroit; Clair Barnes, president of the Barnes Foundry company; Henry Ewald, president of the Campbell-Ewald company, Detroit, and J. G. Weiss, works manager of the Hyatt Roller Bearing company.

These men were guests at the banquet of automobile engineers, held at the Pathfinder hotel on Wednesday evening, when Howard E. Coffin was the principal speaker.

A predominating theme in connection with the tractor exhibition was the part that farm power machinery will play in winning the world's war. American tractors, it was contended, would be the final factor that would triumph over the guns of Krupp. The ability of modernized agricultural machinery to increase the food production of the world while needed laborers were fighting at the front, would enable the entente allies to win. In this connection, the Nebraska state council for defense gave official recognition to the demonstration, maintaining headquarters on the grounds in a large tent where lectures on food production and food conservation were given daily at the noon hour.

Among the foreign visitors who lent their presence were Lieutenant Paul Mittaine, head of the auto and public works department of the French purchasing commission; General Baldin of the technical department of Russian government engineers; J. L. Kennedy of Mexico City, Mexico; Blake Ozias, manager for F. S. Bennett, Ltd., London, England; D. J. Johnston, Toronto, Canada, and Lieutenant Stefana Avonzo of Rome, Italy.

Direct sales of tractors on the grounds were not as large as they were at the demonstration a year ago, but this was due, in all probability, to the fact that power farming has been given general recognition and the every day run of business with the sales departments has multiplied. This condition led to expressions from many of the demonstrators, that tractor farming had reached a stage where future shows would prove unnecessary and that this one might be the last. However, sentiment in this respect is divided and it will remain for the tractor manufacturers' committee, which took over the subject of national demonstrations two years ago, to determine. This year's attendance was estimated at 125,000 against 150,000 a year ago, but the difference might easily have been made up had weather conditions during the 1917 demonstration been more favorable.



Sizing up the possibilities of the tractor.

OFFICIAL LIST OF TRACTOR COMPANIES

Here is the official list of tractor companies participating in the demonstration at Fremont, Neb.:

Advance Rumely Thresher company, LaPorte, Ind.
Albert Lea Tractor company, Albert Lea, Minn.
Allis-Chalmers Manufacturing company, Milwaukee.
Aultman-Taylor Machinery company, Mansfield, O.
Avery Company, Peoria, Ill.
Bull Tractor company, Minneapolis.
Bullock Tractor company, Chicago.
J. I. Case Plow Works, Racine, Wis.
J. I. Case Threshing Machine company, Racine, Wis.
Cleveland Tractor company, Cleveland, O.
C. O. D. Tractor company.
Dauch Manufacturing company, Sandusky, O.
Deere & Co., Moline, Ill.
Electric Wheel company, Quincy, Ill.
Elgin Tractor corporation, Elgin, Ill.
Emerson-Brantingham company, Rockford, Ill.
Four Drive Tractor company, Big Rapids, Mich.
Fargol Tractor company.
Gray Tractor Manufacturing company, Minneapolis.
Grand Detour Plow company, Dixon, Ill.
Gile Tractor company.
Hart-Parr company, Charles City, Iowa.
Holt Manufacturing company, Peoria, Ill.
Huber Manufacturing company, Marion, O.
Huron Tractor company, Chicago.
International Harvester company, Chicago.
Joliet Oil Tractor company, Joliet, Ill.
Kardell Tractor company, St. Louis.
LaCrosse Plow company, LaCrosse, Wis.
John Lauson Manufacturing company, New Holstein, Wis.
Lyons-Atlas company, Indianapolis.
McIntyre Manufacturing company, Columbus, O.
Minneapolis Steel and Machinery company, Minneapolis.
Moline Plow company, Moline, Ill.
Nilson Tractor company, Minneapolis.
New Age Tractor company.
Oliver Chilled Plow Works, South Bend, Ind.
Parlin & Orendorff Co., Canton, Ill.
Parrett Tractor company, Chicago.
Pioneer Tractor Manufacturing company, Winona, Minn.
Roderick Lean Manufacturing company, Mansfield, O.
Rock Island Plow company, Rock Island, Ill.
Russell & Co., Massillon, O.
Square Turn Tractor company.
Stinson Tractor company.
Velie Motors corporation, Moline, Ill.
Vulcan Plow company, Evansville, Ind.
Waterloo Gas Engine company, Waterloo, Iowa.
Wolverine Tractor company.

Sidelights

A Matter of Prefix.

Willis—What are you going to do in this war?

Gillis—What do you mean?

Willis—Go to the front and intrench or stay at home and retrench?—Puck.

Slow Processes.

"Here's an account of a fellow who took two years to make a toothpick."

"Some overdrawn, eh?"

"Oh, I don't know. I know of a mother who took five years to make a match."—Louisville Courier-Journal.

A Slip.

Poor—What made Vulcan lame?

Simp—Why, he slipped on a thunder peal!

May Be Girl Has It.

Because the recruiting officers could not find where his heart is, Harry Lewis was rejected in an army examination in Bellaire, Ohio. Except that his heart action was so weak the doctors could not locate the organ in his chest, Lewis was found physically perfect.



A million dollars' worth of machinery was on exhibit at the demonstration of farm power inventions at Freemont, Neb. This is a panoramic view of a portion of the tractor city that rose in a night.

Prices Being Fixed

President Exercises Vital Powers

Never before in the history of the United States has the government been called upon to exercise so many functions of a paternalistic nature as at the present time. Price-fixing and regulation of the distribution of foodstuffs and feeds and fuels are taking up much of the time of many of the leading minds of the country.

The 1918 wheat crop will sell at not less than $2 a bushel because the government has placed that minimum on it. The 1917 crop price is soon to be fixed by a special committee working upon it at the present time. The price of coal at the mines has been fixed recently under the authority vested by congress in the president. A practical survey of foods and foodstuffs was authorized under a measure enacted by congress, and within a short time the actual stores of such articles in the homes and warehouses of the country are to be enumerated.

The coal prices in the northwest have been fixed by President Wilson as follows, the figures being for the run of the mine on board the cars at the mine: Washington, $3.25 a ton; Wyoming, $2.50 a ton; Utah, $2.60 a ton; Montana, $2.70 a ton. Prices in other states range as low as $1.90 a ton, that of Washington being the highest in the United States. This is claimed to be due to unusual mining conditions in Washington. Most of the Washington coal is used for railroads and factories, however, and the Wyoming and Utah prices will more nearly regulate the price to the average consumer.

Wheat Deficit Large.

The United States and its allies face a wheat deficit of 400,000,000 bushels unless new economies are introduced, declares Herbert Hoover in appealing again to the American people to eliminate waste and to conserve wheat by substituting other cereals. A saving of one pound of wheat flour a week for every person, he declared, would go far toward solving entirely the food question.

"The allies," said Mr. Hoover in a formal statement, "are isolated from those markets, other than Canada and the United States on which they were accustomed to rely before the war.

"The deficit of 400,000,000 bushels can be at least partially overcome if we can increase exports from 88,000,000 to 220,000,000. This can be accomplished if we will substitute one pound of other cereals for one pound of wheat flour weekly per person; that is, if we reduce our consumption of wheat flour from five pounds per week to four pounds per week per person.

"It will be no privation to us and will reduce the privations of our allies."

France, Italy, the United Kingdom and Belgium, Mr. Hoover estimated, must import during the next 12 months 577,000,000 bushels of wheat and 674,000,000 bushels of other cereals to meet normal consumption requirements.

Against this is balanced an estimated wheat surplus of 88,000,000 bushels in the United States and 120,000,000 bushels in Canada and a surplus of other cereals of 829,000,000 bushels in the United States and 119,000,000 in Canada.

These figures alone represent a wheat deficit of 369,000,000 bushels, but in addition it is pointed out that the United States must reserve a part of her supply for neutrals furnishing the country vital supplies and must also protect its reserve stocks, bringing the total deficit up to about 400,000,000 bushels.

"While this situation is one of great dificulty and concern," said the food administrator, "it must be met and met by elimination of waste and reduction in wheat consumption and proper substitution on the part of the allied people and ourselves; in one word, by an effective administration o the available supply."

Predicts Dollar Eggs.

As a result of high prices of feed we have $20 hogs, and predictions are heard that the country will soon see dollar eggs. Secretary Wheeler of the Massachusetts board of agriculture tells Boston folks to be prepared for that shock, as high prices of feed are causing wholesale killing of poultry.

Milk prices are also likely to mount upward from the same influence. A committee of the Chicago city council has returned from a tour of the dairy regions, convinced that consumers in that city will have to pay 12 or 13 cents a quart for milk this fall. Farmers in northern Illinois and southern Wisconsin told the committee that high prices of grains and feeds resulted in a loss on all milk sold to the distributors at the present rate of 5 cents a quart. They are demanding a 50 per cent increase and say they will have to slaughter their dairy herds if they do not get the higher price and if the city places further restrictions on the quality of milk.

Dairymen in northeastern Ohio are throwing away milk because of a disagreement with the distributors over prices. Governor Cox has been asked to suggest some means of preventing this waste, and the Ohio war defense council has taken up the matter.

TRACTOR DEMONSTRATION

During Interstate fair at Spokane. Inquire at the Buick booth at the fairgrounds.—Adv.

A La Crosse Happy Farmer Tractor
Will Make
Pacific Northwest Farmers Happy

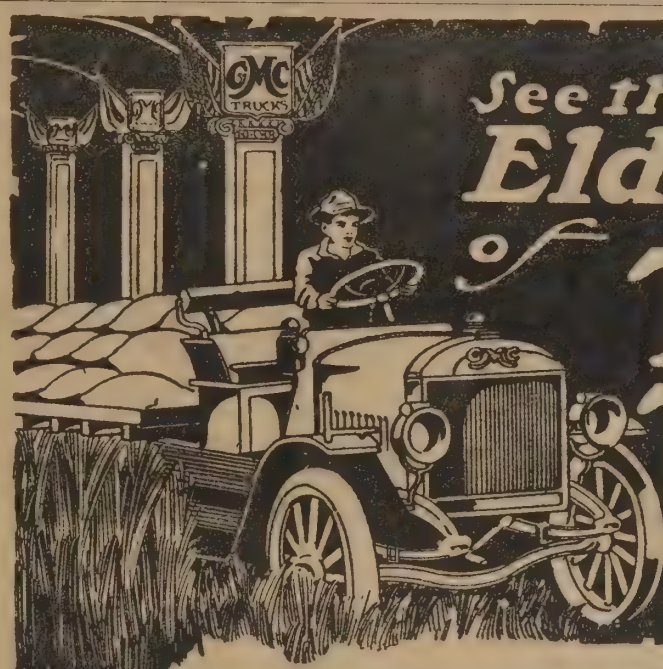
Model B 12-24
$875
F. O. B. Factory.
Immediate Deliveries



Model A 8-16
$685
F. O. B. Factory.
Immediate Deliveries

SEE THIS TRACTOR IN MACHINERY ROW AT THE INTERSTATE FAIR NEXT WEEK AND LET US DEMONSTRATE ITS MERITS.

O. E. PEPPARD, Distributor — Spokane, Washington



See the Eldridge Line of TRUCKS & TRACTORS at the Fair!

WHEN YOU COME TO THE INTERSTATE FAIR BE SURE AND VISIT THE ELDRIDGE BUICK COMPANY'S EXHIBIT WHERE WE WILL BE VERY GLAD TO SEE YOU AND SHOW YOU THE GREATEST LINE OF TRUCKS AND TRACTORS IN THE NORTHWEST

SEE THE GMC TRUCKS

If you are interested in the farm hauling problem be sure and see the GMC trucks, the **one truck that has made good on farms in the NORTHWEST.**

From every angle; first cost, maintenance, and all round good service; the GMC is the best truck for farm use that money can buy.

If you have any special hauling problems, talk it over with the **ELDRIDGE GMC** man at the fair. We can suggest a special body for your particular need.

GMC TRUCKS

WATCH THE BULL TRACTOR WORK

THE "BULL with a PULL," the sturdy tractor that has been doing things in the NORTHWEST, will be there.

Be sure and have the **Eldridge** BULL TRACTOR MAN show you the many exclusive features which have placed more BULL TRACTORS on Northwest farms than any other make.

THE BULL TRACTOR

The Eldridge Buick Company service extends all over the great northwest. The farmer who buys a truck, tractor or pleasure car from us is backed by the most complete service department anywhere. A complete line of parts —no delay—and experts always at your service.

WE WILL EXHIBIT AT

Southwest Washington Fair, Chehalis, Aug. 27-Sept. 1.
Interstate Fair, Spokane, Sept. 3 to 8.
Washington State Fair, North Yakima, Sept. 17 to 22.
Western Washington Fair, Puyallup, Oct. 2 to 7.

Eldridge Buick Co.

SEATTLE — SPOKANE

Early History of the Red Hog

In the introduction to volume 51 of the National Duroc-Jersey Record association, Secretary J. R. Pfander takes up the origin and early history of the Duroc-Jersey breed of swine. He says:

"It seems to be well authenticated that the exact origin or early history of the red hog, now recorded as Duroc-Jersey, is not positively known. Many are of the opinion that they are strictly American-bred, while we have gathered much information pointing toward stock that was imported at an early date. It is now conceded by all who are interested in this popular breed of swine that there were two families of them in earlier years, one known as Jersey Reds and the other as Durocs. The name Jersey Red was probably given to this family by Joseph B. Lyman, who at that time resided in New Jersey and was the agricultural editor of the New York Tribune. Previous to this the breed had been called Red hogs.

"Mr. Lippencott of New Jersey was the first person to advertise these hogs as Jersey Reds. We find in Clark Pettit's History of Jersey Reds, that in the year 1832 there was a pair of red pigs shipped from England to Salem, N. J., and he says: 'Their unique color rendered them objects of special interest in a locality long noted for successful swinebreeders and feeders, among whom had long existed a great spirit of rivalry as to whom should annually win the honor of raising the best lot of hogs, making the greatest average weight at different ages, for which prominent Philadelphia butchers paid advanced prices.' The Duroc family of Red hogs were so called by Isaac Frink, a farmer living in the town of Milton, Saratoga county, N. Y. In the spring of 1832 Mr. Frink took a mare to a noted stallion, Duroc, then owned by Harry Kelsey, in the town of Florida, N. Y., about 25 miles away, and he saw a litter of 10 red pigs, the production of a pair of red pigs brought here by Mr. Kelsey from Oyster Bay, N. Y., or imported by him from England. He moved from Oyster Bay to Florida. In regard to the importance of the pigs, the history is not authentic, although Mr. Kelsey told Mr. Frink that they were imported, but the term imported may have been improperly used, as is often the case, even at this late date. The production of these pigs was much sought after and assumed the name of Mr. Kelsey's famous stallion, and spread all through the New England states, becoming very popular on account of their great qualities. In 1830 William Ensign of Wilbur's Basin, in the town of Stillwater, brought a pair of Red hogs from Connecticut, and in the next year he got a few more from the same place. He bred and sold them far and near. The Frink and Ensign families of Red hogs were crossed and bred to advantage, and have been bred ever since with more or less effort toward keeping them thoroughbred, but no model or type was followed except individual ones. These hogs, according to what information we can get, possessed more of the character of the Jersey Red family, except that they were not so large and were rather finer boned. Thomas Bennett of Rossville, Ill., through correspondence with Cassius M. Clay of White Hall, Ky., the honorable gentleman says: 'That the Spanish hogs were imported by J. B. Clay from Spain or Portugal, when minister to Lisbon, under Zachary Taylor, in 1850. He gave me a pair, the progeny of which I widely distributed.' About the year 1882 the first association was organized to perpetuate the records of the Duroc, while in 1891 the national association was organized and incorporated with J. M. Stonebraker as president and J. W. Phillippo as secretary. On April 10 1893, the resignation of Mr. Phillippo as secretary was accepted and Robert J. Evans was elected secretary, remaining such until June 8, 1906, when H. C. Sheldon was elected, and remained secretary until December 2, 1909, when the preesnt secretary was elected."

Good Fair Promised at Elma.

The Grays Harbor county fair at Elma, Wash., Sept. 5-9, is expecting the best live stock exhibit in its history, as several breeders from outside the county will exhibit. This will include the fine herd of Shorthorns owned by George Bertrand of Olequa, Wash. A fine lot of outside poultry is also promised and a good racing card is assured. Crops in the Chehalis valley are better than in most of the northwest and so good an agricultural and horticultural exhibit is expected that plans are already matured to take it to the state fair, as was done last year.

Fair Dates.

Pendleton, Roundup—Sept. 20-22.
Boise, State—Sept. 22-29.
Salem, State—Sept. 24-29.
Helena, State—Sept. 24-29.
Lewiston, N. W. Lvst.—Nov. 16-23.
Portland, Pac. Nat. Dairy—Nov. 16-23.
Portland, Pac. Int. Lvst.—Nov. 19-24.

Washington Fairs and Shows.

Chehalis, S. W.—Aug. 27-Sept. 1.
Spokane, Interstate—Sept. 3-8.
Elma, County—Sept. 5-9.
Mabton, Hay Palace—Sept. 11-15.
Walla Walla Pow-Wow—September 13-15.
Kelso, Local—September 15.
North Yakima, State—Sept. 17-22.
Woodland, County—Sept. 19-22.
Rosalia, Lvst.—Sept. 20-22.
Lynden, County—Sept. 25-29.
Snohomish, County—September 25-29.
Garfield, Roundup—Sept. 26-29.
Shelton, County—Sept. 27-29.
Burlington, County—Oct. 1-6.
Puyallup, Western—Oct. 2-7.
Palouse—Oct. 4-6.
Goldendale, County—October 9-13.
Port Angeles, County—Oct. 11 ..
Colville, Live Stock—Oct. 17-19

A Portable Lawn.

An Englishman is said to have worked out a scheme for growing grass in a sort of frame, so that a lawn can be handled in sections, somewhat like rugs or a carpet.



Vaughan's Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $140 f. o. b. Spokane and common points. FOR SALE BY

Washington Machinery & Supply Company

S122 Monroe. SPOKANE, WASHINGTON.

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10,000 miles-repair-cost 80¢

ATTERBURY

THAT is what one Atterbury truck-user experienced.

And the truck that can produce 100 miles a day—day in and day out—is the truck you want.

"The Atterbury gives maximum service at minimum cost"—that is what you will say after you have used an Atterbury for six months.

An Atterbury will teach you what truck-economy means.
Will you let us send you the new Atterbury book?
Write or phone us today.

See the ATTERBURY
At Interstate Fair

Snyder Motor Car Co.

DISTRIBUTORS
Spokane, Wash.

GENERAL SPECIFICATIONS

MOTOR. 4 cylinder—Water Cooled. "L" head.
CARBURETOR. Automatic.—Non-adjustable.
IGNITION. Waterproof high-tension magneto.
RADIATOR. Vertical seamless tube, helical cooling fin. Cast tanks, Atterbury special shock absorbing suspension. (Ask to see Manufacturers' Special Guarantee.)
CLUTCH. Dry plate. Multiple disc completely enclosed. Operates without oil. This clutch is unaffected by atmospheric conditions.
TRANSMISSION. Selective sliding gear type, casing bolted to motor crank case, forming a unit power plant. Extra large nickel steel gears with stub tooth formation, 4 speeds forward and reverse. Timken Bearings throughout.
DRIVE. From transmission to rear axle by tubular shaft and two large oil-tight universal joints.
REAR AXLE. Full floating, worm gear construction. Timken Bearings throughout.
FRONT AXLE. Drop-forged "I" beam. Tie rod in front of axle. Timken Bearings throughout.



GENERAL SPECIFICATIONS

SPRINGS. Chrome manganese steel, heat-treated special.
FRAME. Hydraulic pressed steel.
CONTROL. Steering gear on right hand side with control levers on right hand side.
GASOLINE TANK. Mounted under seat. Capacity, 30 gallons.
EQUIPMENT. Two locomotive type dash and one tail oil lamps. Mechanical hand horn, heavy jack, complete set of tools and instruction books. Cab or plain seat, optional.
STANDARD FINISH. Two coats of lead on chassis and seat, black enameled hood, radiator, fenders, dash and lamps. Quotations for painting other than standard finish upon request.

TERMS. All trucks f. o. b. Buffalo, N. Y., and are at owner's risk after delivery, in good order to transportation company. All orders are accepted subject to strikes, fires or other causes beyond our control.

ATTERBURY
MOTOR TRUCK
MAXIMUM SERVICE

Index Figures of Crop Prices

The trend of prices to farmers for important crops is indicated in the following figures tabulated by the department of agriculture; the base, 100.0, is the average price December 1 in the 43 years 1866-1908, of wheat, corn, oats, barley, rye, buckwheat, potatoes, hay, flax and cotton:

	1917	1916	1915	1914	1913	1912	1911	1910	1909
Jan. 1	183.6	129.0	126.7	132.5	110.9	133.9	118.6	134.1	117.8
Feb. 1	195.6	139.9	140.5	132.1	112.6	140.2	119.8	138.5	120.4
Mar. 1	206.5	138.6	144.0	133.8	113.3	144.7	117.9	139.9	126.3
Apr. 1	225.2	140.2	144.5	134.2	113.6	153.4	118.0	138.8	130.6
May 1	280.6	143.3	150.0	135.9	116.2	166.3	122.2	133.5	139.6
June 1	291.3	145.8	147.3	138.8	121.2	168.3	127.7	133.5	146.5
July 1	.....	144.8	139.1	137.7	122.9	160.1	136.3	133.1	149.5
Aug. 1	.....	147.7	138.9	137.6	125.4	148.0	148.2	137.1	142.3
Sept. 1	.....	161.5	132.5	141.3	136.3	137.6	141.6	137.0	132.9
Oct. 1	.....	162.6	128.2	136.4	139.1	128.6	138.0	129.8	130.5
Nov. 1	.....	178.8	124.4	127.4	133.9	118.3	135.6	122.2	129.3
Dec. 1	.....	187.8	120.4	122.8	132.7	110.3	133.1	118.4	127.7

Potato Loans

Reserve Bank Provides for Them

After a conference between officials of the food administration and the federal reserve board, a plan was agreed upon for classifying potatoes among the nonperishable staples, under the regulations for rediscounts under section 13 of the federal reserve act, in order that loans upon warehouse receipts for potatoes may now be rediscounted at the federal reserve banks and thus become negotiable paper throughout the country at the federal reserve rate, which is now in most states 3 1-2 per cent.

The objective sought by the food administration is to stimulate the proper storage of potatoes by growers and others, and to thus enable the carrying over of the large autumn potato crop; also by enabling the growers and local dealers to finance their potatoes they will be freed in a large measure from dependence upon speculators and profiteers in control of the potato market.

In accepting the proposal of the food administration that the federal reserve board classify potatoes as a nonperishable staple, a unique step has been taken in the financing of American vegetable products, and one that brings American banking practice into line with practice in Europe, which has been so material to the preservation of potatoes throughout the year and the stabilization of their prices.

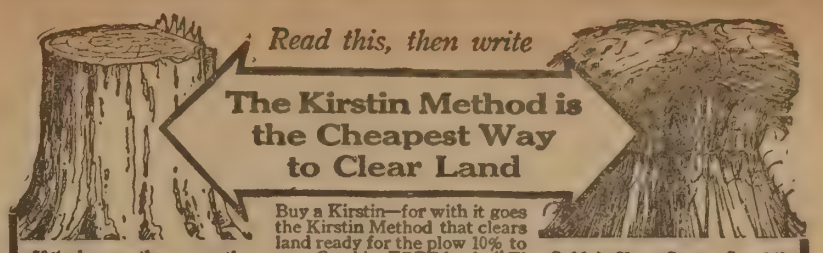
Governor Harding of the federal reserve board in a letter to Mr. Hoover makes the following statement:

"Potatoes, properly graded and packed, and stored in weather-proof and responsible warehouse, as evidenced by its receipt, would undoubtedly constitute a readily marketable, nonperishable staple, within the meaning of the regulation. The member bank making loans against warehouse receipts for potatoes, properly insured, would, of course, have to satisfy itself as to the margin of its security and the conditions of warehousing, but after having done so, and making the loan, it could rediscount such paper with the federal reserve bank, for periods not longer than 90 days."

It is considered by the food administration that this step taken by the federal reserve board is the most important financial aid that has yet come to growers and consumers of potatoes. Moreover, it will greatly assist local and state organizations and authorities in providing and stimulating increased and properly regulated storage. In order to make acceptable warehouse receipts, it will be necessary for potatoes to be sorted and graded, properly sacked and deposited in acceptable storage warehouses; thus the preservation of potatoes and the quality to the consumer will have been materially improved.

Substitutes for Wheat.

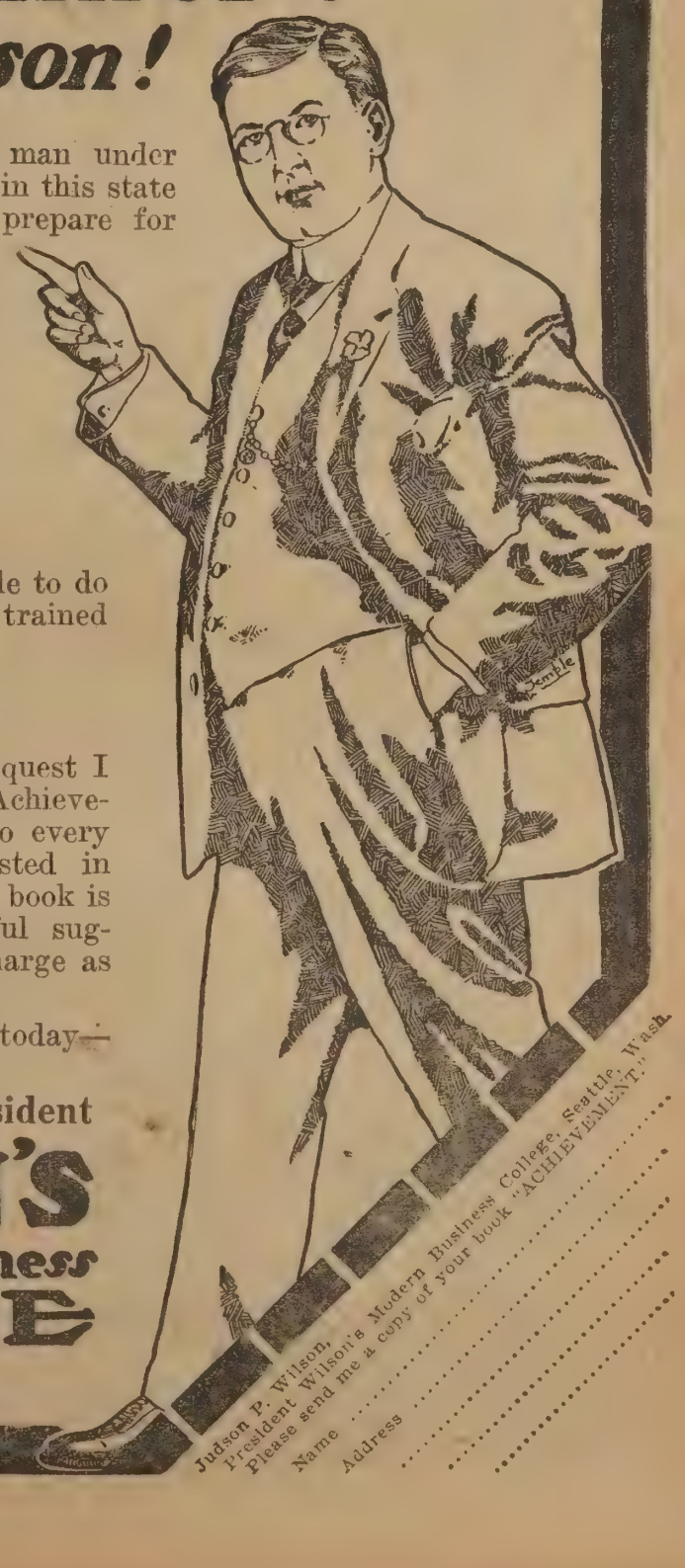
The Farmer has received from the secretary of the flour committee of the New York Produce Exchange the suggestions that so far as it is possible there should be a substitution on all tables—of both the rich and the poor—in all public dining rooms of hotels and restaurants and in the homes of the people of the food products of corn, oats, rye, barley and rice, in place of the products of wheat. This might conveniently take the form of the elimination of wheat bread from the breakfast table until the end of the war, its place being taken by corn bread or other corn products and oatmeal. It is declared that if there should be a country-wde adoption of this idea it would mean the diversion of 300,000,000 bushels of corn from stock feeding to direct food of the people.



In answering advertisements please mention this paper.

What have you Planned for this Winter?

asks Pres. Wilson!



Uncle Sam wants every young man under draft age and every young woman in this state to utilize this coming winter to prepare for stenography, bookkeeping and office work. By doing so you will help carry on the work of the great industries of the country which may possibly be hindered because of the scarcity of young people to fill the many thousands of vacancies made by the calling out of so many for the national army.

Uncle Sam is urging young people to do this because of the great need for trained experts in all departments.

Business Must Go On

In keeping with Uncle Sam's request I have written a book called "Achievement," and I want to send one to every ambitious person who is interested in utilizing his time this winter. The book is brim full of inspiration and helpful suggestions. I will send it free of charge as long as the supply lasts.

Fill out the coupon and mail today—NOW.

JUDSON P. WILSON, President

WILSON'S Modern Business COLLEGE

Seattle, Wash.

Judson P. Wilson,
President Wilson's Modern Business College, Seattle, Wash.
Please send me a copy of your book "ACHIEVEMENT."
Name .....
Address .....

Interstate Fair Program

(Continued from page three.)

them before the fair opens. The figures indicate the number of entries made by the respective exhibitors:

Horses.

Colfax Blue Ribbon Stud, M. A. Metz, prop., Colfax: Clydesdale 24, Shire 8, Percheron 5.

Otto Sykes, Spokane: Percheron 1.

Richard Allman, Coulee City: Thoroughbred 2.

C. D. Boswell, Spokane: Standard Bred 1.

J. K. Ralph, Spokane: Percheron 1.

Fisk Farm, Spring Valley, Wash.: Farm and General Purpose 10.

Cattle.

Congdon & Battles, North Yakima: Aberdeen Angus 36.

Waikiki Farm, Spokane: Ayreshires 12, Jerseys 34, Dual Purpose 1.

Floyd Polmeteer, Spokane: Jerseys 2, Grade 1.

A. V. Braderick & Son, Palouse: Shorthorn 7, Dual Purpose 7.

Day & Rothrock, Spokane: Shorthorn 13.

James M. McCroskey, Sprague: Shorthorn 20.

B. E. Smead, Opportunity: Jersey 2.

Bellwood Farms, Valleyford: Holstein 1.

W. S. C., Pullman: Shorthorn 4. Aberdeen-Angus 2.

Sheep.

W. S. C., Pullman: Shropshires 1, Merinos 1.

W. H. Hastings, Thornton: Oxford 7.

Fisk Farm, Spring Valley: Oxford 21.

Frank Donison, Lyons, Ore.: Shropshires 2.

Vaughan & Fox, Lyons, Ore.; Shropshires 2.

Felzer Bros., Tangent, Ore.; Shropshire 10.

Ed. Schoel, Tangent, Ore.; Hampshire 9, Merinos 7.

Hogs.

B. E. Smead, Opportunity, Duroc Jersey 21.

Bellwood Farms, Valleyford, Duroc Jersey 15.

Robt. Nelson, North Yakima, Duroc Jersey 35.

Wood Lower, Colbert, Chester White 9.

C. M. Payne, Spokane, Berkshire 11.

Willis M. Fisher, Colbert, Duroc Jersey 4.

Lester Daily, Palouse, Duroc Jersey 1.

Ray J. Fox, Lyons, Ore., Poland China 36.

Frank Donison, Lyons, Ore.; Poland China 4.

C. M. Meenach, Kiesling; Chester White 16.

Ed. Schoel, Tangent, Ore.; Chester White 26.

Boys and Girls' Pig Club.

Clarence MacDonald, Colbert; 5.
Wallace T. MacDonald, Colbert; 1.
Edward Fisher, Colbert; 2.

Boys and Girls' Sheep Club.

H. W. Hastings, Thornton, Wash.; 3.

Alex Petyus, Chatteroy, Wash.; 1.
Steve Petyus, Chatteroy, Wash.; 1.
Thomas Zeimantz, Colbert, Wash.; 3.

WILL SEE 1000 BIRDS.
Good Poultry Show Is Promised.

J. G. Dickson, superintendent of the poultry division of the Spokane Interstaet fair, promises a show of 1000 birds, and announces a premium list totaling $1500. The birds that will be displayed and will compete for honors are coming from all parts of the northwest, it is stated.

James H. Tucker of Royal Oak, Mich., will place the ribbons.

AUTOS AND MACHINES.
Many Concerns Will Show Goods.

The list of automobile, tractor and machinery concerns, who will display and demonstrate their products at the Interstate fair is already a long one. Here are a few of them:

In Automobile Hall.

John Doran company, Floyd J. Logan, Mitchell, Lewis & Staver, Chalmers Auto company, Fancher-Larsen company, Northwest Buick company, Pyrene company, Culton-Moylan & Reilly, Brewer Motor Car company, Traders Motor & Supply company; Ross Traders Motor & Supply company, Rossler Auto company, T. G. Young, Scripps-Booth Distributing company, Spokane Auto company, J. Mann Motors company, Oldsmobile company of Washington, Snyder Motor Car company, Hodgins Motor company, Highhouse & Sandusky, Inland Motorcycle company, Farnham Brothers, Seven-Seven company, Donart Flower company, Falls City Cycle company, Eastman Motor Car company.

In Industrial Building.

Singer Sewing Machine company, Christian Science church, Fairmont Creamery company, Tru-Blu Biscuit company, Sherman-Clay & Co., Carstens Packing company, Hazelwood company, Gray Manufacturing company, Spokane Flour Mills company, Commercial Creamery company, Armour & Co., Closet & Devers, Albers Brothers Milling company, the Crescent, Eureka Vacuum Cleaner exchange, Washington Cracker company, Spokane Expert School of Business; Palace Store company, W. P. Fuller & Co., Humane Stock Remedies company, Northwest Fruit Products company, Ahrens & Ahrens, Toledo Computing Scales company.

Outside Space.

Northwest Buick company, Brewer Motor Car company, Western Electric company, Oldsmobile Company of Washington, Hold Manufacturing company, Rhodes Harvester company, Yuba Construction company, Sieler Machinery company, Oregon-Moline Plow company, Hodson-Feenaughty company, Spokane Corrugated Culvert and Tank company, Gallagher & Co., De-Laval Separator company, Witherspoon Brokerage company, Thos. C. Bush company, Northwest Kaustine company, Modern Appliance company, Consolidated Land company, McNeff Brothers, Nilson Tractor Sales company, Ticknor & Co., M. Grieve, Nixon-Kimmel, J. Ira Hawley, LaCrosse Tractor company, J. J. Goebel.

Quotes Apple Prices.

The first 1917 apple prices announced in the northwest have been published by Spokane Fruit Growers' company. They represent an average increase of 10 per cent over the opening prices of 1916.

The quotations apply on tonnage shipped from the Yakima, Wenatchee, Idaho and Spokane districts.

The opening prices on all varieties handled by the company are as follows:

Variety.	Extra fancy.	Fancy.	C. grade.
Jonathans	$1.35	$1.20	$0.90
Winesaps	1.50	1.30	.95
Spitzenburgs (Esopus)	1.75	1.50	1.10
Baldwins	1.25	1.10	.85
King David	1.25	1.05	.85
Black Ben Davis	1.25	1.05	.85
Arkansas Black	1.85	1.60	1.25
Ganos	1.25	1.05	.85
Ben Davis	1.10	.90	.75
Black Twigs	1.25	1.10	.85
Delicious	1.85	1.60	1.25
Staymen Winesaps	1.30	1.10	.90
Missouri Pippins	1.25	1.00	.85
Rome Beauty	1.35	1.10	.90
"Miss Spokane" Wageners	1.25	1.05	.85
York Imperials	1.30	1.10	.85
Northern Spy	1.25	1.10	.85
Winter Banana	2.00	1.60	1.25
Red Cheek Pippin	1.25	1.00	.85
Grimes Golden	1.35	1.20	.90
White Winter Pearmain	1.65	1.40	.90
Yellow Newtown Pippin	1.65	1.40	.95
Aiken Red	1.25	1.00	.85
McIntohs Red	1.25	1.00	.85
Kaighn Spitzenburgs	1.25	1.05	.85
Hubbardston Nonsuch	1.40	1.20	1.00
Snow	1.40	1.20	.90
Wealthy	1.25	1.00	.85
Jeffries	1.20	1.00	.85
King of Tompkins Co.	1.25	1.00	.85
Rhode Island Greenings	1.25	1.00	.85
Yellow Bellefleurs	1.20	1.00	.90

WANTED—AGENTS

for 1918 cars with all the up-to-the-minute improvements. Apply
CROW-ELKHART MOTOR CO.
Interstate Fair Exhibit (Automobile Hall) or 8126 Walnut, Spokane.

WANTED
Cascara Bark

We buy cascara bark, Oregon grape root and Oregon balsam of fir at the prevailing market. Submit samples and quantity you have for sale.
BLUMAUER-FRANK DRUG CO.
357 Everett. Portland, Oregon.

EYE EXAMINATION
RECOGNIZED METHODS.
RESULTS ASSURED.
O. B. Spillman, Specialist
214 Peyton Bldg., Spokane.
Over Murgittroyd's.



Hides, Fur, Wool, Horse Hair, Metal and Rubber. We are the largest dealers in the Inland Empire. Highest markets paid. Prompt returns. Deal with a home firm.
Write for price list and shipping tags. Address Dept. L.
PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

Here Is a Tractor That Creates its Traction by PULL, not Weigth

THE NILSON

has solved the problem of light weight combined with HEAVY PULL by means of its patented lever hitch that makes the drive wheels GRIP the ground harder when more traction is needed. The NILSON—the lightest tractor made in proportion to its power—carries no dead weight, and being light it works at an extremely low cost of fuel and upkeep.

Many NILSONS Are Working on Farms of the West

This Picture Shows You at a Glance How
THE NILSON TRACTOR



Creates Its Traction by PULL, Not WEIGHT

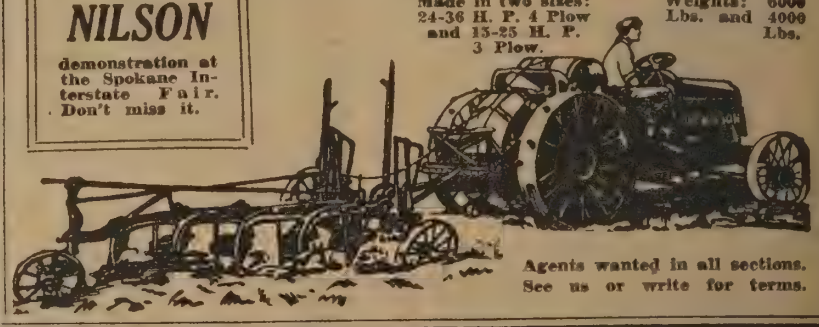
To illustrate this principle, tie a rope to a stump, hitch a team to the other end, pass the rope over your shoulder, and then make your horses pull. You'll find you have plenty of TRACTION under your feet, and the harder your horses pull, the harder your feet will GRIP the ground. That's the principle of the NILSON patented hitch—the harder the pull against its load, the harder the drive wheels GRIP the ground.

WRITE US TODAY.

SEE THE NILSON
demonstration at the Spokane Interstate Fair. Don't miss it.

Nilson Tractor Sales Co.
155 Union Ave., Portland, Ore. Distributors for Oregon and Washington.

Made in two sizes: 24-36 H. P. 4 Plow and 15-25 H. P. 3 Plow.
Weights: 6000 Lbs. and 4000 Lbs.



Agents wanted in all sections. See us or write for terms.



An Invitation From Mack Trucks

Of course, you're coming to the Spokane Interstate Fair, and MACK TRUCKS want you to make your headquarters at the double booth set apart for the MACK TRUCK line. Come in and inspect these money-earners for the farm. See how well built they are; then you'll understand why they "stand up" under all kinds of usage. We can show you just the type of MACK TRUCK for you—they range from 1 to 7 1-2 tons.

"Performance Counts."

T. G. Young, Distributor
1201 Sprague Ave.
SPOKANE.
1000 Pike St.
SEATTLE.

T. G. YOUNG, Distributor,
1201 Sprague Ave., Spokane. 1000 Pike St., Seattle.
Please send me your latest literature on MACK TRUCKS.
Name .....
Address .....
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Ups and Downs of a Bunch Grass Boy

(Each instalment of the "Ups and Downs of a Bunch Grass Boy" is complete in itself and will be found full of interest for the new readers of The Farmer.)

CHAPTER XXV.

I wanted to raise chickens when I was a youngster. I also wanted to learn how to play a fiddle. Also I wanted to learn how to dance. Triple-headed ambition struck me thus when I was 14 and our pioneer farm was a dot

I suppose I wanted to fiddle because

I suppose I wnted to fiddle because this was about the only music I had heard—barring the "juice harp," as we called the "harmonica." Fiddlers were few and far between in that country, but the tunes they played were all alike, barring different "frills" which different fiddlers chose to add to such melodies as "The Devil's Dream," "Pop! Goes the Weasel," "The Fisherman's Hornpipe," "The Arkansaw Traveler" and so on.

And among all of these tunes "The Arkansaw Traveler" was the classic. It seemed to give greater leeway to the individuality of different fiddlers. Each fiddler played it different from the others and was sure he was the only one that was right. The public liked or disliked a fiddler according to the way he rendered "The Arkansaw Traveler."

My first aim, therefore, was at "The Arkansaw Traveler" and I aimed so persistently that one day mother chased me from inside the house to the shady north side, and in a little while from the shady side to the barn.

The barn suited me and the rest of the family better. When I was through fiddling I could hang my fiddle on a 20-penny spike I had driven in a rafter so high up that I had to stand on a nail keg to reach the nail.

Some one saw my fiddle hanging there one day and made fun of it. I was deeply offended, and to protect my fiddle from sacriligious comment thereafter I took a gunnysack, whacked it on the side of the barn till the dust was shaken out and used this to wrap my fiddle in after my music lessons.

The fiddle consisted of a cigar box strung up with a handle and three strings. The lid of the cigar box was on the back side and underneath the lid was the most beautiful picture of a girl I have ever seen. The beauty of the girl whose likeness was pasted to the lid of my fiddle I was sure had a geat deal to do with the exquisite tones of the instrument. I supposed that some day I would own a "real fiddle." But, in my heart, I knew that no fiddle would be real to me unless the picture of that girl were taken from the cigar box and pasted in the back of the fiddle.

Holes were cut near the bridge of my cigar-box fiddle, and sometimes when I had played a long time and the tones were especially sweet, I would pause and peep through one of these holes at the beautiful picture nestling down there in the mysterious fiddle-interior whence came the music that charmed me by the hour, but which I think failed to exert much of a charm upon anybody else. Maybe it was because I would never let the uncouth and unappreciative public into the secret of the beautiful picture.

She had wonderful eyes, wonderful hair, wonderful jewels in her hair, and a wonderful necklace on her neck—and the necklace was all! It never occurred to me that this was not the picture of a sure-enough person whom some day I would meet. I supposed that she was a great singer. I reasoned that she likely left her neck and shoulders devoid of any covering but the nacklace so as to give her lungs more room when she sang.

The lady in the cigar box was the secret of my liking for our new school teacher, one fall. The new school teacher combed her hair like the cigar box lady, and like her, had dark eyes and a brunette complexion. I must say that the resemblance ended there, though, especially in the matter of jewels and style of waist. I remarked to mother one day that I thought Miss So and So would look better if she dressed differently. Mother wished me to be explicit. I endeavored to do so, but was not very successful; so, to make my notion clear, I made a fatal mistake: I let mother in on the secret of the cigar box lady. I gave her the fiddle. I told her to peep through one of the "music holes" as I called them, and look at the lady. That was how the teacher ought to dress—she had the hair, the eyes, the complexion!

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

But her stuffy collar spoiled the picture.

Mother laughed till tears were in her eyes. Then she scolded me, and laughed again. A few days later, the new teacher was at our place for supper. Mother had the nerve to go out to the barn, take my fiddle down from the 20-penny nail, pull it out of the gunny sack, and invite the teacher also to take a peep into one of the music holes to see how I thought she should dress. Then the teacher laughed. I heard them laughing where I was hiding up in the hay loft; and in the hay I stayed till the teacher had gone. They came out to hunt for me, but I burrowed down into the hay like a badger, and hid.

The Arkansaw Traveler was too much for me and my fiddle and the cigar box lady. It had too many "notes" for my strings, of which there were three, tuned one note apart. I had not caught onto the fact that one uses his fingers in playing a violin. It was strange that I made this mistake; but I think when I heard a fiddle played, I was so entranced with the music that I never noticed how the trick was done.

Eventually I learned that the strings of a fiddle are tuned four notes apart; that is, you play the open string; then put down your forefinger; then the second and third finger, going up on the fingerboard all the while. Your little finger should make the same note that the next string makes when played open.

This to me was a stunning discovery and I had to forget all I knew and start in all over again after my musical education was fairly well completed. With my strings tuned one note apart, I could bounce my bow from string to string and play "Mary Had a Little Lamb" or "Go Tell Aunt Rhoda That Her Old Gray Goose Is Dead" in a way that I was sure pleased the cigar box lady. But when I began to play these melodies on one string by using two fingers and the open note, I had a strong suspicion that the lady in the box wanted to climb through one of the music holes from which no music was issuing and run away with a more nimble-fingered suitor. It was to me a most discouraging experience. Up in the hay I toiled for days. My fingers were about as supple as corn cobs, and always got on the wrong string, or hit the right string in the wrong place. Finally, after many weeks, I acquired sufficient expertness to play "Mary Had a Little Lamb" without giving offence to the cigar box lady.

All the while my cigar lid angel was teaching me to fiddle I was also trying to raise chickens. I had about 20 setting hens in midspring, and many of them I was compelled to set twice. My hens, myself and my cigar box lady together hatched about 300 chickens. But neither my wisdom, my energy or the inspiration I got from the cigar box could save my chicks. Most of them died.

I got on swimmingly for a while—that is, while the grass was green and bugs plenty, and the spring hatching of young coyotes had not become self-supporting at the expense of my henyard. Then the green grass died in the hot sun, the ground crusted over and dried; the worms and bugs either died of disappeared into the cooler, moister depths of the soil; and the coyotes sneaked up in the bunchgrass adjoining my henyard and grabbed my chickens, both large an small. Also, there were hawks, with only scant vegetation to offer hiding for my chicks. All told, my battles began at dawn when my chicks and their loudly clucking mothers issued in hungry, reckless, clamorous hordes from the numerous boxes and coops I had scattered all over the place. It ended only when the last clucking hen and peeping chick had returned to the same boxes and coops of miscellaneous shapes, sizes and colors. And the final act of the day was my examination of the casualty lists for the day. The coyotes and hawks were less active in the afternoon; and it was during these hours that I retired to the hay loft and communed with the cigar box lady, only to be recalled from this blissful retreat by the loud squawking of hens and the shrill shrieks of young chicks; and in haste I would return to the firing line. Sometimes it would be a feathered marauder from the sky; again, a furry thief from the bunchgrass. Occasionally it was both.

One of our bachelor neighbors who was going to the harvest fields to earn a winter's grub stake left me his 22-caliber rifle and a lot of ammunition. This was when my fight with coyotes and hawks was at its worst. I learned to shoot with deadly aim at any standing target in a marvelously short time—the inspiration of dire necessity, I suppose. I do not think I shall ever forget the savage satisfaction with which I pumped lead into the coyotes that stole up through the grass to get at my chickens. I cleaned them out in a week. The hawks were more troublesome. It takes a good shot to hit a hawk on the wing, though I did it twice, dropping them stone dead, straight down as a plummet into my wildly stampeding flock of chickens. To help out in the hawk business I set poles all about in just the places a hawk would like to sit while he looked over my flock. Two or three times a day hawks would fly down and light on these roosts. They ended their mortal career right there. I cut off the head and wings of each hawk and nailed them up on the side of the henhouse, spreading out the wings in the posture of flying, with the head between them. Whenever I got a coyote I cut off his tail and flew it as a banner from one of the poles I had standing about for the hawks to light upon while I shot them.

I got the better of the hawks and coyotes; but by this time spring had gone, and with spring had passed the moisture, the green vegetation and the bugs which had kept my chicks in health. They began to die in flocks. Some one told me to give them blue vitriol in their drinking water. This I did, but as I recall they died faster than before.

As I look back over my experience with 300 chicks during that long, dry, hot summer in the Big Bend years ago I can understand how greatly a youngster can love the small, growing things in his charge and how greatly he feels such responsibility when it is put upon him.

Why my chicks died I had not the slightest idea. Up in the haymow I held communion with my lady of the cigar-box lid, but she could give no no hint to help me and seemed just as sad and discouraged as I. I tried all kinds of schemes. I constructed shades for the chickens by setting up stakes supporting cross-pieces overlaid with a gerat depth of grass and soil. I built these shading structures all over the place, with prodigious labor in a hot, dry sun. But the chicks died just the same, and one day a heavy whirlwind knocked one of the shades down on a lot of chickens and killed or hopelessly injured a dozen. It was a sad day for us both, and when up in the haymow I played "Mary Had a Little Lamb" it came out in funereal tones, as if the cigar lady inside were weeping for the dead and maimed chickens, as was I.

If I had only known of one simple little trick I could have saved most of them. I should have dug a soil trench six inches deep, a foot wide and as long as desirable, spreading the flat bottom of the trench with an inch layer of freshly soaked oats; and, covering these with soil which was kept moist by an occasional bucket of water drawn from our well. Treated thus, the inch layer of soaked oats, covered with moist soil in the trench, would have sprouted in solid, clinging masses of white, which was the very thing my chicks needed—for they were dying for want of green stuff.

I had the soil, the water and the oats—but not the knowledge of how to put these things together in the right combination. So of my 300 chicks the cigar lady and I reared 50 or less, many of them weak.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University).

Teeth and Tonsils Gateways for Germs of St. Vitus' Dance

Except that St. Vitus' dance is not a dance or a saintly maneuver of one sort or another, this name is as good as chorea or any other nom-du-malade! A disease by and other name is just as bitter.



Dr. Hirshberg.

St. iVtus' dance has been usually called "a nervous disease." Yet it is nothing of the sort. It was so called from a superficial view of its symptoms, for conspicuous among its signs and symptoms are a restless, fidgety twisting and jerking of the hands, head, eyeballs and legs.

The victim, more often a child than a grown-up, fumbles and foozles. Jerks and awkward movements are common, for firmness and the finer movements of precision seem to be lost to the child at the height of the attack.

St. iVtus' dance, nevertheless, in spite of these erroneously called "irritable" and "nervous" movements, is an infectious disease caused by bacteria, which invade the tonsils, teeth or adenoids of the victim.

The Commoner Symptoms.

The poisons or toxins of these germs lodge in the muscles, joints, skin and other fleshy parts, and there set up changes which interfere with precision and control of the muscles.

Over and above the eternal presence of bacteria, choera is also accompanied by fever and other evidences of an infection. Pallor, anemia, weakness and often swollen, painful joints or sore throat are among the symptoms.

St. Vitus' dance does not begin without an apparent cause. Neither fright, mimicry nor sudden shocks are responsible for it.

Occasionally a child that is subject to joint fevers, arthritis, acute inflammatory joint infections, endocarditis or inflamed heart valves, tonsilitis, is also a victim of chorea. All of these bacteria infections seem to be closely related.

Rest and Quiet Aid.

Since a child may in a manner acquire bad habits of facial or other involuntary movements by imitation, all other children should be kept away from those with St. iVtus' dance.

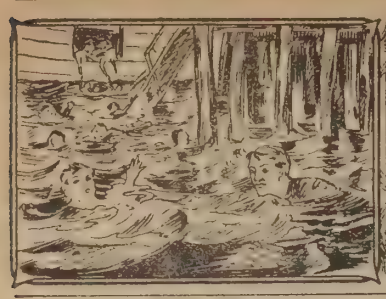
The very presence of fever and germs in the blood of the sick child means that he should be kept in bed from one to six weeks or for the entire duration of the fever. The fever is seldom high. It may not reach 100 degrees, nevertheless, the rest in bed is particularly necessary to prevent exhaustion, to keep the effects of the St. Vitus' dance poisons at a minimum and to allow the over-stirred human tissues time to do nothing else but fight the malady.

Rest, quiet and ice bags applied to the head, a simple and nourishing diet of whites of eggs, milk, ices, ice cream, fruits, cereals, meat juice and juices of vegetables with frequent and copious draughts of a good drinking water make up a large measure of the treatment.

If the source of this abomination is traced, as it sometimes is, to the tonsils or teeth these michief-makers must be given short shift. The sooner they are removed the sooner will the focus and abiding place of the bacterial marauders be ousted from their lair.

Good Manners.

If a child lives among people whose language is correct and agreeable, whose manners are pleasant, who show always a thoughtful consideration for others and whose behavior is gentle and kindly, he unconsciously acquires similar ways, says a bulletin from the United States Children's Bureau. The habit of courtesy comes not alone nor chiefly from direct instruction, but from imitation. If a child sees that his elders are habitually courteous in their association with each other, if kindliness and consideration for each other are the habits of the home, these qualities will inevitably stamp themselves upon the child. Good manners are an invaluable asset to every person, but good manners have their root and foundation in fine qualities of mind and heart, and only the constant daily exercise of them will help give the children that charm of manner which is such a delight in persons of every age.



UNDER THE BLACK CANOPY

By Paul E. Triem



SYNOPSIS.

Joseph Dudley, a strong young woodsman, is about to board the boat for one of Stevens' logging camps, where he has secured employment, when suddenly the gangplank gives way and he, with many others, is plunged into the deep, icy water. Forgetting his own peril, he does heroic work in rescuing the others, among whom is a young boy, who, he learns later, is the son of Jerry Stevens.

On his arrival in camp, Joe is forced, for the entertainment of the other men, to wrestle with Andy Dubois. Joe wins and by doing so makes an enemy of the big Frenchman.

The next few days Andy works frantically and Jensen, his partner, numbed with weariness, is hurled in the road of the tree they are felling. Joe tears Jensen away just in time to save his life, but Jensen suffers a broken collar bone. Joe is ordered to take Jensen's place and Andy purposes to outdo Joe. Their first day proves a hard one for Joe.

CHAPTER IV.

Joe fell into a heavy sleep as soon as his head touched the pillow, and did not awaken till the whistle blew next morning. In spite of Mr. Neville's liniment and rubdown, the young man was conscious of such an insistent pain in his shoulders and sides when he moved that at first he felt he would be unable to get up. Then he set his teeth and dressed himself painfully, and was among the last of the long procession which entered the dining room.

He had not forgotten the cook's command that he should come in for another rubdown before going to work, but he was unwilling to let Mr. Neville, who was sure to have a big day's work ahead of him, go to this trouble. The little man in the white uniform was not to be put off so easily, however; as Joe was finishing breakfast he saw the master of the kitchen standing in the narrow doorway, beckoning him, and there was nothing for him to do but obey the summons.

Mr. Neville went at him energetically. "If you'd gone to work without coming here first," he explained, "it would have taken you a good hour and a half to get limbered up. And Andy would be making things mighty disagreeable during that time. I know him—he is a countryman of mine, and I've worked in the same camp with him before. It's for his good as much as yours that I'm doing this—I don't know that it will help him any to have to eat humble pie, but I'm sure nothing else can reach him. You've got to beat him, my friend."

"I'm going to win if I can do it squarely," Joe replied. "I don't like this business at all, but I didn't get into it voluntarily, and there's only one honest way for me to get out. I wish Anly wasn't such a tinder box."

He left, after promising Charley Neville to return at the close of the day's work. He walked along the narrow-guage railroad which led into the forest, stepping aside at one time to make way for a diminutive engine and an odd-looking car, upon which a sort of crane was mounted. This was the "jammer," which was used for carrying logs from the skidways down to the huge piles on the beach. It did away with much of the team work which made the oldtime camp a graveyard for horses and oxen.

Andy Dubois appeared at the place where the day's work was to begin a moment after Joe, and silently the two young men took up the saw. The Frenchman's face was drawn and tense, just as the face of a bank teller might be during a panic. His eyes glowed when they rested for a moment on Joe's, but neither spoke. They began to work silently, at the same swift pace which they had kept up all the previous day.

Although Joe did not realize it at the time, this second day of his contest with Andy Dubois was the crisis, in so far as he was concerned. The morning dragged through and by afternoon he was beginning to feel like a sleepwalker. The pain had gone out of his shoulders and sides, and in its place had come a gradually increasing numbness which crept through his body until it seemed impossible that he should longer hold his end of the saw. When he looked toward his partner, the Frenchman seemed to be enveloped in a sort of hazy cloud and to have grown enormously, so that he towered into the air like a figure in a mirage. And still, through it all, one idea stood out clear and unwavering in Joe's mind—in justice to himself he could not quit while he had one additional ounce of strength to put into the battle.

Toward the close of the afternoon he noticed a curious circumstance—the numbness of mind and body was leaving him, and instead of growing more weary—which, indeed, was impossible—he seemed to be slowly gaining strength. He threw back his shoulders and sucked in deep breaths of the smoke-tinged air. Yes, undoubtedly he was coming into possession of a sort of belated "second wind."

By the time he reached Charley Neville's quarters, after supper, he knew that he was not mistaken, and he told the cook of the experience. Mr. Neville drew a breath of relief, but kept on pounding and rubbing the young man's muscles.

"There were just two things that could happen," he commented, "and I didn't know which of 'em it would be: you might have gone out of commission—'collapse,' they call it; barring that, you were bound to pick up as soon as your system got used to the extra work. You are in good shape, and you caught your pace in a hurry. It's your race from now on."

So it seemed. Joe woke up in the morning half an hour before the first whistle blew, and was instantly conscious of a feeling of exhilaration, as if he were saturated with a new power. He realized that this was one of the rewards of having conquered himself, of having stayed in the battle when it was going against him; but he was chiefly glad because it made it possible for him t try to do something for Andy. He could not have surrendered to his own weakness; but now that he no longer had this to fear, he believed he might find a way of saving the young Frenchman the humiliation of defeat. At any rate, he was determined to try.

As he was going to work after breakfast he saw a man on horseback talking with Steve McClosky. He recognized the tall, erect figure of Mr. Stevens, but was passing some distance away, inent on getting to work, when the latter called to him. Joe turned back, and a moment later was shaking hands with the owner of the camp.

"I'm glad t see they haven't killed you off," Mr. Stevens said, in the slow, gentle voice which was habitual with him, and which filled Joe with a sense of vast reserve power and grave kindliness. "Mr. McClosky tells me that he is putting the work through on an emergency schedule."

"Joe and his partner are doing more work than any two of the other teams," the foreman commented, looking curiously down at the faller. "I don't know how long they can keep it up."

"I believe I could keep it up all summer, now that I've got toughened to it," Joe replied, "but Andy is fretting himself sick. I'm agraid he can't stand much more of it—although he'd be a better man with a saw than I, if he wasn't so high strung."

Mr. Stevens shook his head. "Better go slow," said he. "I'm leaving for the city on this morning's boat—that boy of mine wanted me to bring him over to see you, but I've been too busy. Perhaps I can manage it next week. He stays on at the hotel."

Joe excused himself a minute later and trotted up the track, for he did not want to chafe his partner unnecessarily by keeping him waiting. The Frenchman was already at his post, and Joe read in his eyes a bitter sense of impending failure. For a moment he hesitated, on the point of speaking. Something of impatience in Andy's manner, however, advised him to wait for a better time, and he picked up his end of the saw and started to work.

It was easy for him today. His muscles had caught the rythm of the saw and he felt a positive joy in his work. Sometimes he glanced at Andy. He could feel the other's tense and desperate will, driving his body on hour after hour, through what must have been a veritable nightmare; and finally, when the afternoon was half gone, Joe could stand it no longer. They had just started on a tree—a big, rough barked veteran which looked like a green-feather arrow dropped from a giant's quiver. Joe looked around and saw that there was no one within earshot. He let his end of the blade sag.

"See here, Dubois," he said quietly, "you and I have carried this thing far enough. We aren't children, and it's silly for us to act like a couple of miffed 5-year-olds. We've both made a good showing—better than any other two men in the camp could, I believe. Let's call things quits. I'm willing to apologize."

He held out his hand, but the Frenchman jumped back as if he had received a blow on the cheek.

"You think I'm a quitter?" he cried, hoaresly. "Me—Andy Dubois—but I will never accept your pity! Come, we are wasting time."

Joe could see that he was holding himself by a superhuman exercise of will, and silently he picked up his handle. Much as he pitied his companion, he saw that he could do absolutely nothing for him—yet. He would not give up hope for the future.

Andy, as if to purge himself of the insult which he considered had been offered him, threw himself into the work with increasing energy. His lower lip was thrust between his teeth and his face was white and glistening His motions had become spasmodic—Joe could feel the blade jerk and quiver.

The end came unexpectedly. It was within half an hour of quitting time and Joe himself was feeling the effects of the long day's struggle. He had forgotten his companion and was occupied in trying to keep the blade straight, for Andy was running his end so erratically that it clung in the cut. Suddenly there came a sharp, silvery snap, and the saw, relieved of a sudden weight, responded so readily to Joe's pull that he was nearly thrown from the springboard. From the corner of his eye he saw his partner whirl and leap wildly to the ground. Next moment Andy was running across the trail, staggering as he ran; and before Joe could speak he had disappeared into the brush.

Joe waited a few minutes for him to come back, then extracted the broken saw and started slowly toward camp. In the road he met Steve McClosky, to whom he told of the Frenchman's sudden departure. The foreman nodded.

"It was bound to come," he said. "Andy is a good boy, but he's too high headed. Well, he probably won't show up here agaian—and it's just as well." For a moment he stood pondering; then he turned to Joe. "You don't know anything about running a donkey engine, do you?" he demanded.

"I handled an engine all through last summer's vacation," Joe told him.

"All right, You'll take the engine at the head of the skidway tomorrow morning—there's a lot of dry slashing about, and the fellow who has been working there likes to show how brave he is by taking all sorts of chances."

Joe slept poorly that night, for a man who had been working hard in the open air. A dozen times he woke up to find himself going over and over the last scene with Andy Dubois. He was glad to crawl out of his bunk when the first yellow rays of sunlight gilded the floor and to hurry into his clothes.

After breakfast the foreman took him up to the top of a long, wooden slide and showed him about handling the donkey engine which was used for drawing logs from a valley beyond.

"Be sure to keep your spark cage down and the firebox door shut," McClosky cautioned him. "It may not make much difference in the end—I'm afraid we're going to be smoked out anyhow. But we've got to do what we can for ourselves."

He paused to stare gloomily away over the hazy valleys and ridges; then he turned and was gone, and Joe was left to himself.

The work was child's play, after the strenuous days he had put in at the big saw; and when the whistle blew, down in the valley, he hardly felt that he had earned his dinner. He adjusted his engine and clambered down in the wake of his helper, however, for this consideration had not modified his appetite.

The men at the table were talking about Dubois; and as Joe entered, one of them turned to him and spoke dubiously.

'I reckon it isn't no more than fair to warn you to look out for trouble," he explained, evidently acting as spokesman for the rest. "We've all of us knowed Andy quite a while, and it's as certain as death and taxes that he won't quit until he's done something to wipe out his disgrace. It ain't Andy's fault, you know—he was raised that way. Fair play looks different to some folks than it does to us."

"I know it," Joe agreed. "Well, I'll be careful—I don't want him to make any trouble, for his own sake as much as for mine."

He was half way through dinner when "Cookey" touched him on the shoulder and whispered into his ear.

"The boss wants to see you right away," he said, and there was a hint of fear in his voice.

Joe arose and went quickly outside, where he found McClosky waiting for him. Without speaking, the foreman pointed up to the summit of the ridge, where Joe's engine was located. The young man followed the direction of his outstretched hand. Then he cried out:

"The slashing has caught!" he exclaimed. "How——"

"The sleeve was off your stack," Steve McClosky remarked quietly. "It caught from a spark."

"But I left the spark cage in place," Joe protested helplessly. "I looked to it the last thing before coming down to dinner—although it hasn't been off all morning."

For an instant the foreman eyed him narrowly. "I believe you," he commented. "I was up there just now—couldn't get close to the engine, but I saw that the cage was gone."

"Who——" Joe began; then his lips closed tight, as if to keep in an unwelcome thought.

"Yes," McClosky said, gravely. "Andy has been up to mischief, I'm afraid. He must have been hidden somewhere in the brush, watching you all morning. Well, it won't make much difference, anyhow. We might have saved the engine, but the chances are that the camp is going to be wiped off the map. The wind is coming pretty stiff from the south, and I can make out a bad fire in some burned-over timber a few miles away. As soon as the men finish eating, we'll get at it and move as much as we can down on to the beach. It may be neecssary to float some of the logs—the ones that are nearest the edge of the timber."

The little engine and its string of cars were put into commission, and the men were divided into groups, some of which were set to work in the camp itself, loading up such of the equipment as could most easily be moved.

(Continued on page twenty-four.)

Is It a Good Time to Go Into Cattle?

By E. L. POTTER.

H. J. K. writes: "I have an opportunity to rent a good ranch at what seems to be a reasonable figure. Is now a good time to go into the cattle business?"

If our correspondent can rent a ranch that has plenty of feed for next winter he should find this a splendid time to go into the cattle business. Cattle prices are off right now and the indications are that they may be sold within the next few months at reasonable prices and again that next spring they will be much higher. This looks like an easy thing, but the difficulty is to winter the cattle. Feed will probably be very hard to buy, and if bought at all will be at such prices as to make the cost of wintering a cow $10 to $15 above normal. Therefore if one has the feed, cattle are a mighty good proposition, but without feed it is a good time to be careful. It would certainly be foolish to buy a bunch of cattle without knowing where the feed was coming from.

All the World's a Stage, and All the Men and Women Merely Players

American Fliers on European Front



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Left to right, standing—Soubiran, Campbell, Parsons, Bridgeman, Dugan, McMonagle, Lovell, Willis, Jones, Peterson and Lieutenant Maison Rouge. Sitting, left to right—Masson, Lieutenant Thaw, Captain Thenault, Lufberry, Johnson, Bigelow and Rockwell.

Members of the Lafayette escadrille in France and the new American flag recently presented to them by Mrs. William G. McAdoo. This picture also shows some of the extraordinary mascots of the escadrille—"Archie" a black dog; "Whiskey," a lion pup; "Soda," a lioness, and "The Brat," a white dog.

War Brings Novel Bridge



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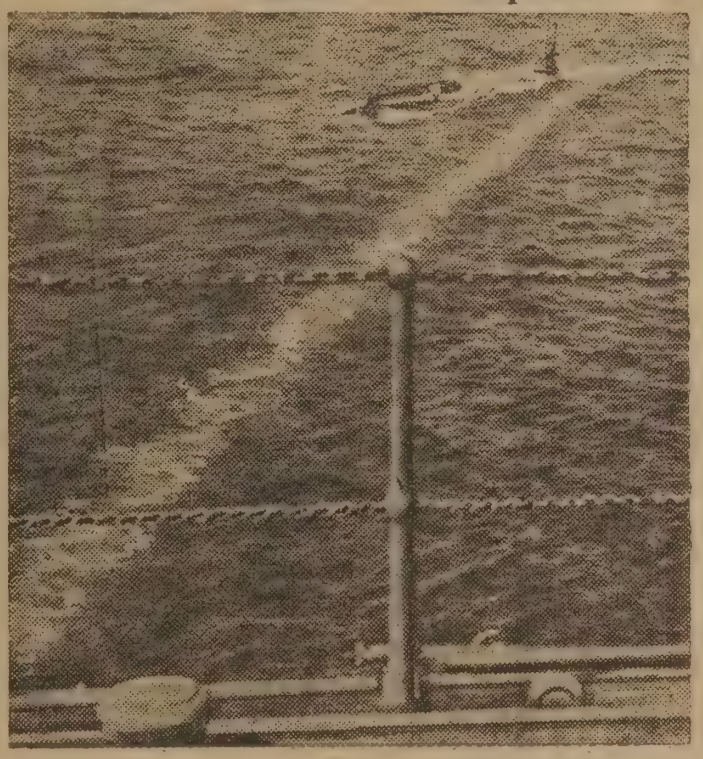
A temporary pontoon bridge of short length slats used by the French across the Aisne river in France.

Florida's Woman Mayor.



Mrs. George Horwitz, mayor of Moorehaven, Fla. An efficient business administration is looked for in the light of her success as a farmer. Her estate has produced 50 carloads of potatoes this year and 30,000 bushels of corn will soon be ready for harvest.

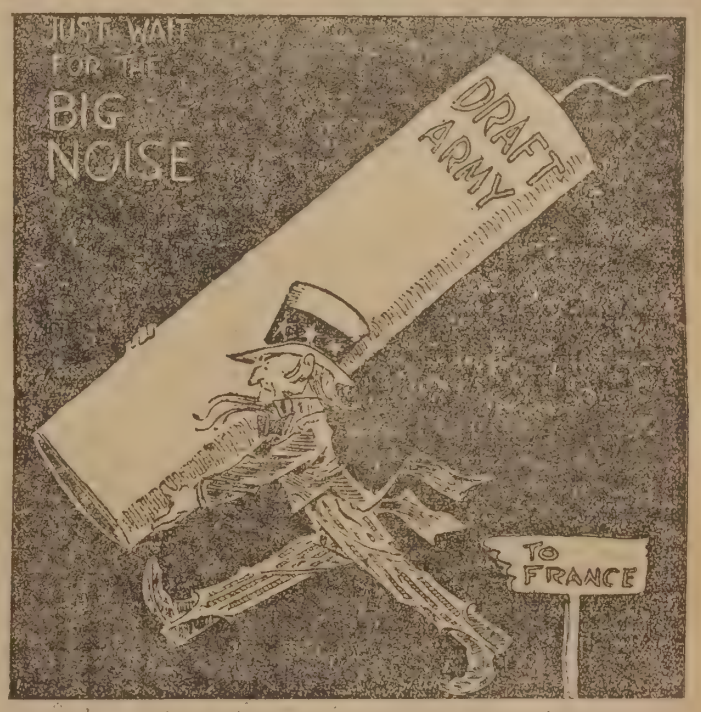
Takes Picture of Torpedo



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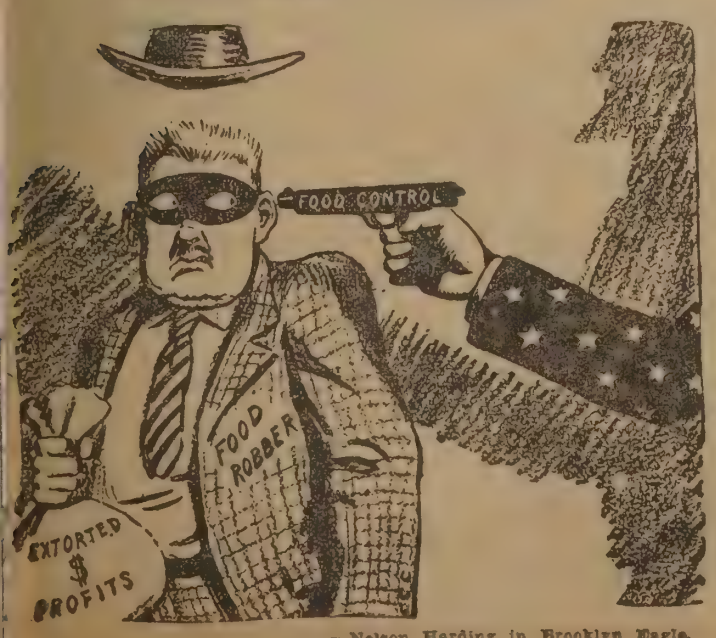
Here is a photograph showing a German U-boat in the act of submerging after having fired a torpedo at a merchant vessel. The photographer, undaunted by the fact that it was about to explode against the side of the vessel on which he was traveling, focused his camera on the disappearing sumbarine and pressed the button. The torpedo, for some reason, failed to explode.

Haven't Begun to Make a Racket Yet



—Chapin in St. Louis Republic.

This Gun Is Loaded



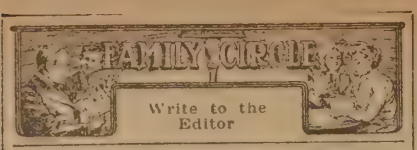
—Nelson Harding in Brooklyn Eagle.

Barge of Cheering American Troops



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The picture shown above is that of a transport bearing a contingent of American troops bound for "somewhere" just after it had passed under one of the bridges that span one of the rivers in the vicinity of New York city. As the men passed under the bridge they cheered and waved their hats and seemed glad that they were bound for "somewhere" whether it was to some camp in America for further training, or to some seaport where they were to embark for the trenches "somewhere in France." Complying with the strict military rules, this photograph was censored by official "J. C. G." and passed by the committee on public information.



ALICE W. BARLAND
Editorial Contributor

Fresh Vegetables

Plans to Have Them All Year

To the Editor: There are many ways in which we housewives may help to conserve the food supply of the nation, but my pet economy is by the glass-jar method. Of course, we all can fruit in season, and most of us string beans or perhaps sweet corn, but not all of us who have an abundant garden realize that by a little planning we might just as well have fresh vegetables of all kinds all the year round.

Bushels of fruit go to waste every year in almost every farm orchard. How many of us can apples when the fall apples are plentiful? They make a variety of apple sauce superior to the winter kinds, are delicious for pies and puddings and many of them—would otherwise go to waste.

Few people can greens, and yet, where they are liked, nothing is more acceptable in the late winter and early spring than a dish of spinach, beet tops, dandelions or whatever your favorite may be, tasting as if just freshly gathered. They are not difficult to can, and retain their flavor better than many other vegetables. They should be boiled in an open kettle for 15 miutes in order to shrink them, then packed in sterilized jars and boiled for three hours.

Another candidate for early spring canning is rhubarb. This may be canned with very little work and trouble by the cold-water method. Simply wash and cut the stalks into one-inch pieces, pack in sterilized jars, and fill to overflowing with cold water. Continue pouring on water for several minutes, until all air seems to be out of the jar, then screw down covers and your work is done. This is fine for winter pies.

Young carrots, beets and turnips, etc., can easily be kept by the canning process and are far better flavored than when put away in the cellar after they are full grown. It is useless, of course, to try to preserve foods that your family does not like, but choose their favorites and you will find the glass jar a great aid in keeping on your table a healthful variety of foods at small expense. MRS. IVER LONGETEIG.

Vollmer, Idaho.

Trials of a Vice President.

Another bad thing about being vice president of the United States is having to look patient while Senator Nuisance of Wisconsin or Senator Piffle of Missouri is addressing the senate.—Dallas News.

Thrift Thought.

What are you going to do with that half bottle of left-over milk in your refrigerator, Madam Housewife?

The cream has been taken off, but there is good food value in what is left.

Here is one possibility, says the United States Department of Agriculture, for a nourishing dish for either luncheon or supper:

Enough for family of two adults and three children. Reduce proportions if for smaller number.

1 pint skim milk,
½ cup flour,
2 level teaspoons butter or cooking fat.
½ teaspoon salt.

Melt butter or other fat in saucepan. Add flour and salt mixed. Blend. Add milk gradually. Heat, stirring constantly until thick.

Flavor, if desired, with any left-over minced meat or fish which may be on hand, or minced ham or a slice of broiled bacon, crumbled.

Serve on boiled hominy, samp, rice, potatoes, macaroni, or slices of corn or other bread, or toast.



So nigh is grandeur to our dust,
So near is God to man,
When Duty whispers low, Thou must,
The youth replies, I can.
—Ralph Waldo Emerson.

To Dry Corn on Cob

To the Editor: I receive so much good from your paper that I thought I ought to send you my way of drying green corn so as to help some one else. Select good ears, then prepare for cooking on the cob until the milk is set or until just right to eat. Then dry on the cob. Drive nails in boards far enough apart so the ears won't touch. Then stick the ears on. They dry faster this way. When there are a few ears left over from a meal they can be put to dry in this way.

When ready to use put them in cold water and let boil a few minutes. Eat with salt and butter as when fresh. I also cut it off the cob after it is cooked and dry it that way. One can save every ear that is left from a meal. I dry tender, green beans. Just select them when they have no beans in them and break in small pieces and dry. They are fine and one can save a small lot at a time.

MRS. A. FULLER.

Pateros, Wash.

Old English Enitials to Embroider



By WINIFRED WORTH.

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under the initial before embroidering. It aids one in washing the color from the finished design.

In padding these old English initials, different methods may be used. Some use the twilled cotton for the purpose; others make the chain stitch, while others let a skein of floss out at full length and embroider a strip of it under the thick parts while forming the letter, clipping the skein when the initial is finished. This is a splendid method, quickly done, and is suggested, too, as a help in padding all large pieces in border or crescent outline.

Initials can be made by filling in the broad space with French knots. This is used largely on elaborate pieces, such as the laundry bag, table scarfs, and ornate gifts.



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Oregon State Fair, Salem
September 24 to 29

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TO SALEM—From Oregon Electric railway stations and all Central Oregon points on Oregon Trunk and on The North Bank Road, Fallbridge to Rainier, inclusive, reduced tickets sold daily Sept. 20 to 29.

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Patterns

2162—Ladies' two-piece house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires for a 38-inch size, 5 3-8 yards of 36-inch material. The skirt measures about 2 5-8 yards at the foot. Price, 10 cents.

2195—A group of serviceable sleeves. Cut in 4 sizes: Small, 11 inches; medium, 13 inches; large, 15 inches, and extra large, 17 inches arm measurement. Medium size requires for one pair of sleeves 1 1-8 yards for No. 1, 1 3-8 yards for No. 2, 1 3-8 yards for No. 3 and 1 3-8 yards for No. 4, of 27-inch material. Price, 10 cents.

2034—Ladies' dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires eight yards of 36-inch material for a 36-inch size. The skirt measures about 2 2-3 yards at the foot. Price, 10 cents.

1890—Girl's coat and "Tam o' Shanter." Cut in 5 sizes: 4, 6, 8, 10 and 12 years. It requires 3 yards of 36-inch material for an 8-year size, and 3-4 yard of 24-inch material for the cap. Price, 10 cents.

1807-1815—Ladies' costume. Waist 1807 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 1815 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. For the entire dress 6 7-8 yards of 36-inch material will be required for a medium size. The skirt measures a little over 3 yards at the foot. Two separate patterns, 10 cents for each pattern.

2184-2187—A charming three-piece suit. Coat-waist 2184 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 2 3-8 yards of 36-inch material for the waist and 3 3-8 yards for the blouse for a 36-inch size. Skirt 2187 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure, and requires 3 3-8 yards of 36-inch material for a 24-inch size. The skirt measures about 2 1-2 yards at the foot. Two separate patterns, 10 cents for each pattern.

2167—Girls' "cover all" apron. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 10 requires 2 1-2 yards of 36-inch material. Price, 10 cents.

2022—Ladies' apron. Cut in 4 sizes: Small, medium, large and extra large. It requires for a medium size 4 3-8 yards of 36-inch material. Price, 10 cents.

2166—Boys' "overall" or play suit. Cut in 4 sizes: 2, 3, 4 and 5 years. It requires 1 1-4 yards for the blouse and 2 1-8 yards for the overalls, of 27-inch material, for a 3-year size. Price, 10 cents.

2183—Girls' dress. Cut in 4 sizes: 2, 4, 6 and 8 years. It requires for a 6-year size 1 1-2 yards for the guimpe and 2 1-2 yards for the dress, of 27-inch material. Price, 10 cents.

2007—Girls' one-piece dress. Cut in 4 sizes: 4, 6, 8 and 10 years. It requires 3 3-4 yards of 36-inch material for a 6-year size. Price, 10 cents.

1836—Dress for misses and small women. Cut in 3 sizes: 16, 18 and 20 years. It requires 6 1-2 yards of 44-inch material for an 18-year size. The skirt measures about 3 1-2 yards at the foot. Price, 10 cents.



NOTICE.

We continually receive orders for patterns that do not have the name and address filled out and are, therefore, unable to forward the patterns requested. If you have not received the patterns you have ordered, please send us your name, giving the pattern number and size and approximate date on which same was ordered, and we will endeavor to locate it in our suspense file. Please be sure to write your name and address plainly.

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Patterns No. ..... Size .....

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BE SURE TO GIVE NUMBER AND SIZE.

Swat Speculation in England.

Lord Rhondda, the British food controller, is equipping himself with additional powers of control in regard to food prices with a view to dealing drastically with speculation and profiting wherever it is established that they exist. In an official announcement he is now empowered to requisition the whole or part of the output of any factory and to pay a price based on the cost of production with the addition of a reasonable pre-war rate of profit without regard to the price ruling in the open market.

According to the London News it is becoming clear that if action can be taken without endangering the wheat reserves of the country some amendment of the bread regulations is desirable. Among the complaints made against the present war bread are that it quickly palls on the palate, that it is rough to the tongue, that it does not appear to be digestible, that it often tastes musty, and that it soon becomes stale and mouldy.

The national war savings committee states that its campaign to eat less bread is surpassing expectations, a total decrease of ten per cent being recorded for the three months of March, April and May.

Cheese Toast.

Sprinkle grated over freshly made dry toast; heat in a moderate oven until cheese is just melted, not brown. Serve hot.

Didn't Like the Sound!

She—Will you have some lemon drops?

He—Don't mention drops to me—I've just been treated to a bad one in the stock market!—The Lamb.



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Dear Children: For a long time I have been watching for a perfect letter—not exactly perfect, but one which is written plainly and neatly, with no misspelled words, with the punctuation done aright, written in ink without blot or error, and on but one side of the paper, in your own writing and all your own composition or wording. When such a letter comes—a letter which is bright and clever and original, signed properly and with the age of the writer—I expect to have a picture made of it and put it in the paper, just so grown folks can see how nicely their children can do.

Now, there is hardly a letter that comes to the Children's Corner but what has some of these good points; some of them have nearly all of them; I haven't found one that has them all. But I'm hoping. Yours lovingly,

AUNT NELLIE.

Glad to Hear From Jane Adams.

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 7 years old. My birthday is the third of September. I go to the Maple Grove school. I will be in the third grade next year. We have six cows and three horses and some calves. I have a canary bird and am keeping one for a neighbor who is sick. We have a brown and white rabbit.—Jane Adams, Sunnyside, Wash.

Wants the Cousins to Write to Her.

Dear Aunt Nellie: This is the first time I have written to the Children's Correr.. I am 12 years old the sitxh of September.. Have I a twin? If I have I would like to hear from her. I live on a 40-acre farm. I am trying to get two subscriptions for The Washington Farmer for the camera. I hope some of the cousins will write to me. If my letter is in print I will write again.—Mary King, Menlo, Wash.

See the Big Boats Pass By.

Dear Aunt Nellie: I have been reading all of the letters of the little girls and boys in The Washington Farmer. I like them very much. I live on a farm on an island. We are close to the boundary line between the United States and British Columbia. We see lots of big boats pass by. I have two brothers. One is 12 and one is 8. We also have four cows and two horses. I have seven little ducks. There is no school now. School will start again the first of October. I like school very much. I am 10 years old and in the fourth grade.—Augusta Victoria Chevalier, Prevost, Wash.

Brown Betty Is a Banty Hen.

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I am 9 years old and I am in the fourth grade. I have two sisters and two brothers and my sisters' names are Mabel and Marie. My brothers' names are Robert and Orval. I have two pets. One is a banty hen. Her name is Brown Betty. I have a little dog. His name is Tip. My father has two pigs, one cow named Spot, two horses named Flora May and Dolly and a little colt named Dixie Queen. I hope I will see my letter in print.—Beulah Shaw, Grandview, Wash.

Rachel Has Found Three Twins.

Dear Aunt Nellie: I enjoy reading the Children's Corner very much and thought I would like to write a letter. I am a member of the Chronicle Juniors' Corner and I have written two stories and answered the puzzle. They only put one of my stories in print, but they sent me a Chronicle Junior's button. I am 11 years of age and my birthday is the 12th of September. I have found three twins. Their names are as follows: Hilda Hilstrom, Kathryn Tattler and Ruby E. Werz. I am in the seventh grade.—Rachel Olivene Webb, R. F. D. 1, Lind, Wash.

Come Again Soon, Elizabeth.

Dear Aunt Nellie: This is my first letter to the Children's Corner and I hope to see it in print. I live on a 10-acre farm. We have two horses whose names are Prince and Della. We have two cows. Their names are Molly and Daisy. Our school let out the eighth of June. We had a picnic the last day. I am 13 years old and in the eighth grade. My birthday is the seventh of December I have three brothers and one sister. My sister's name is Judith and my brothers' names are Friedolph, Floyd and Donald. I would like to correspond with some of the cousins of my age. Have I a twin?—Elizabtth Fogelquist, R. F. D. 2, Selah, Wash.

Mary Has Two Big Brothers.

Dear Aunt Nellie: This is the first time I have ever written to you. I live on a 52-acre farm. We live 10 miles from Olympia. My father is one of the county commissioners. We have an auto. We have two horses, one colt, four calves, four cows, 52 geese, three cats and one dog. I have two brothers but no sisters. Gorden is 17 and Arthur is 19. I am washing dishes and sweeping and making beds. I am 10 years old and in the sixth grade. My birthday is the 19th of February.—Mary Alice Bennett, Puget, Wash.

Hilda's First Corner Letter.

Dear Aunt Nellie: My two sisters and I are visiting our neighbors and they take The Washington Farmer. I was reading the Children's Corner today and thought I would like to write a letter, too. I will be 11 years old the 14th of November. When school starts again I will be in the sixth grade. I live on a 20-acre farm. We have six cows and three yearlings and two calves and two horses. We have about 28 hens and 30 little chicks and the most interesting of all are two pigs about two and one-half months old. This is my first letter to the Children's Corner and I hope to see it in print. I may write again some other time.—Hilda Kuki, Route No. 1, Buckley, Wash.

So Much Fun With Waterwings.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner so I thought I would write again. This time I am going to tell about my waterwings. My two brothers, Paul and Roudolf, and I have a pair and go swimming in the river and we can't drown. We go swimming every day and my friends go in with me and we have lots of fun, too. I can almost swim now. I would not exchange with any city girl. I wish some of the girls of the Children's Corner would write to me. I would surely be glad to anser.—Anna Straube, Pampa, Wash.

Elzina Hopes She Has a Twin.

Dear Aunt Nellie: Ths is the first time I have written to the Children's Corner, and I hope it will not be the last time. I am going to visit my sister in Stanwood the week after next. She is the oldest in the family. I am 10 years old. My birthday is April 4. My sisters' names are Meredes, the one I am going to visit; Lauredo, who lives in Oregon; Vicenza, Irene and my little sister, Mae. I have three brothers living. Their names are Louis, Lambert and the 15-months-old boy of ours. His name is Stanley. I hope I have a twin. —Elzina Rogers, R. F. D. 2, Box 12, Arlington, Wash.

Little Benjamin Bunny Ran Away.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I probably would have written before, only mama just started to take The Farmer a few days ago. We have 150 chickens and one turkey. We did have 10, but five died and a skunk got four. We caught the skunk afterward and shot it. I have an Angora rabbit named Peggy. I am 11 years old and will be in the seventh grade next year. We have a Scotch collie puppy named Lady. I have one sister and three brothers. Their names are Hilma, Everett, William and Marvin. I live on a 10-acre farm, two miles east of Olympia, Wash.—Marian Holmes, R. F. D. 2, box 164 A, Olympia, Wash.

Proud of His Big School.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I enjoy reading the letters very much and I am anxious when it is Thursday, for that is usually the day when we receive The Washington Farmer in which we have the Children's Corner. I am 13 years old. My birthday is February the first. Have I a twin? My subject is our schoolhouse. It is located on a tract of 20 acres, somewhat out of town and a really beautiful building. It contains about 24 rooms and is constructed of bricks and I feel proud of it. My room has many beautiful pictures such as the signing of the Declaration of Independence and one of President Wilson. My favorite studies are history and arithmetic. The windows in my room are located on the side which faces the grain fields. Sometimes I look out of the windows upon the beautiful hills and I see many pictures. The baseball grounds are also located on the school tract. The town folks plowed up some of the ground and planted potatoes and various other vegetables on it because of the food shortage in the United States. I also planted a little vegetable garden for myself. I would like to correspond with any member of the Children's Corner.—Alexander Laurence Weitz, box 51, Endicott, Wash.

About Edith's Week in Spokane.

Dear Aunt Nellie: I am going to write about a week in Spokane. I live in the country and like it much better than the city. I went to Spokane Sunday, and got home yesterday, which was Tuesday. I stayed with grandmother most of the time, but I will start at the beginning of my trip. The

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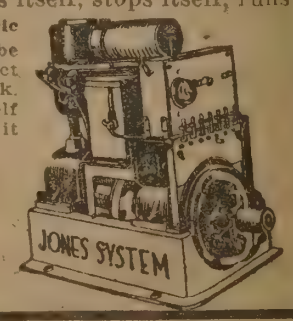


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first night I stayed with my Aunt Mae. The second night I stayed with grandmother. Then I stayed with by Aunt Mae for two or three nights, then I stayed at my cousin, Catherine's, then with grandmother again and there I stayed until yesterday. I had much fun with my cousins, but I believe I had more fun with grandma, for she taught me how to crochet. Monday, grandma and I washed and I was having a fine time. But anyway you may be sure I was very glad when papa came after me and you may be sure I was very glad to get home. I have dark eyes and wark hair and weigh 90 pounds and am 10 years old. I should be very glad to correspond with any girl my age. I have a little brother named Si. He fell down and cut his lip clear through. I have a dog named Fritz and four chickens. We have eight head of cattle. Their names are Bib Babe, Little Babe, Big Roney, Little Roney, Hallie, Sleepy, Belle and Snowball.—Edith Annetta Parmeter, Reardan, Wash.

What Graham Is Doing.

Dear Aunt Nellie: My subject is What I am Doing. I am taking care of Rood's cows. I get milk for herding them. That helps. I saw my last letter I wrote in the paper and was very glad. I had a nice time the Fourth of July. I am 9 years old and will be 10 June 16, 1918.—Graham Potter, R. R. 10, Hillyard, Wash.

Write to Us Again, Eunice.

Dear Aunt Nellie: I enjoy reading the letters in The Farmer. I am 9 years old and in the fourth grade at school. I have a brother and his name is George. We have a Chevrolet car. Have I a twin? If I have I would like to hear from her. I live on a farm. We have three horses, six cows, one dog, four cats, two kittens and 16 pigs. Papa takes the Farmer. We have 75 chickens.—Eunice Libbey, Box 9, San de Fuca, Wash.

Call Their Mule Colt, Nifty.

Dear Aunt Nellie: This is the second time I have written to the Corner and I enjoy reading the letters of the cousins. I live on a 160-acre farm and we have 12 horses. We have two cows and two calves. The cows' names are Bossie and the calves' names are Tuts and Dot. We also have one colt and one mule colt whose name is Nifty, because he is so nifty. The colt's name is Prince. I have seven brothers, whose names are John, Alex, Henry, Conrad, Daniel, Edward and Thient. I have two sisters, and their names are Pearl and Lillian. Have I a twin? I am 14 years old and my birthday is the 23d of March.—Leona Machlied, LaCrosse, Wash.

A Little Kitten Named Pinknose.

Dear Aunt Nellie: I have been reading the Children's Corner. I like it fine. I am 9 years old and in the fifth grade now since I passed. My birthday is on September 11. Have I a twin? I have two sisters and three brothers. Their names are Everett, Robert, Earl, Lena and Hazel. I have a little kitten named Pinknose. We have a black kitten, too Its name is Sweetheart. The mother is pretty nice. She is gray like Pinknose.—Alice Duncan, Benge, Wash.

Will Write Sooner Next Time.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My father takes The Washington Farmer and I enjoy reading them. I have light hair and blue eyes. I am a little girl 9 years old. My birthday is January 12. Have I a twin? I have gone five years to school and I'm in the fifth grade. I have one brother and four sisters. I will write sooner next time.—Esther Hergert.

The First, but Not the Last.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but it isn't going to be the last time. I like summer because it is warm and we can go car riding. I am 13 years old and in the eighth grade. Have I a twin? I live on a farm 10 miles from Pullman. I have four sisters and three brothers. My oldest brother is married and has two children, a boy and a girl. Their names are Lorence and Lorena. We all like them very much. I hope my letter will not be thrown in the waste basket.—Iva Brannan, Pullman, Wash.

Beulah Never Wrote Before.

Dear Aunt Nellie: I have read the Children's Corner for a number of weeks, but this is the first time I have written to it. We get from 25 to 28 eggs a day. We have 54 hens and a number of little chicks. We have four horses. Their names are Mabel, Charles, Beulah and Bonnie. I am in the eighth grade. I am 13 years of age. I am four feet, six inches in height. My weight is 75 pounds. I live on a farm of 10 acres. I have three brothers and five sisters. The youngest is 3 in July. I have enjoyed the children's letters very much.—Beulah Tuttle, Prosser, Wash.

Do Something for Our Soldier Boys.

Dear Aunt Nellie: I have often wondered how many girls who have written to you would like to be a Red Cross nurse. I have often wished I was old enough to train to be one. I think it would be nice for girls not old enough to make things and send them to the boys who have gone to fight for us. I have three cousins who have gone to fight for Uncle Sam. I think those boys are brave and will fight as well as they can. I think all the boys who have gone are brave and I think all who are interested in the Children's Corner will quite agree with me. I send love to all the cousins and also to Aunt Nellie.—Violet Leachman, Pomeroy, Wash.

Wonders if She Has a Twin.

Dear Aunt Nellie: This is the first time I have written to the Corner. Papa takes the paper and I think it is nice to read the letters. I live on a farm eight miles from town. I am 11 years old and in the fifth grade. I have three sisters and two brothers. My oldest sister goes to high school. We have three little calves. Spot will fight. Spot has a white ball face and is red and is pretty. Daisy is red and white. Rose is all red. They are all pretty. For pets I have a little yellow cat and a calf. I wonder if I have a twin. If any of the cousins want to write to me I would like to hear from them. I would like to hear from some one whose name is Thelma.—Thelma Hendrickson, Palouse, Wash.

Loves to Play With Her Dolls.

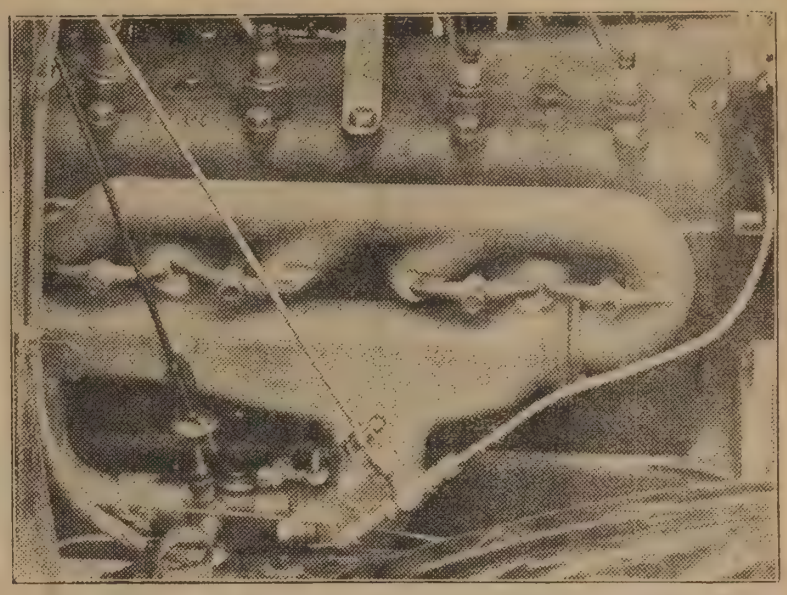
Dear Aunt Nellie: I was overjoyed when I saw my letter in print and also wish to see this one in print. The Fourth of July was a great day with my little girl friend and I. We went horseback riding and took our lunch with us and ate under a big cherry tree and then we went home. I like to ride horseback. We have four horses, two mares and one colt. I have three more dolls since I wrote to you last. Their names are Bessie, Rosebud and Dorothy. I love to play with dolls. That is the reason I have so many. I like to read books awfully well. I would like to read all the time. I am reading the "Ups and Downs of a Bunchgrass Boy." I am going to try to get my chum to write. I like to play outdoors. I like to wade in a creek, climb trees, play with my dolls, ride horseback and gather the eggs. Those are the things I like to do. I am glad the Children's Corner is growing. I will help it out as much as I can.—Avah Sharp, Alameda, Wash.

Aunt Nellie is glad to announce the receipt of letters for the Children's Corner from the following during the last week: Julia Newmeier, Kathryn Smith, Alexander Weitz, Pearl Franz, Bella Harturg, Esther Carlsin, Bertha Ellison, Barnetta Bartholomew, Beatrice Freddie Giles, Cecelia Viola Jones,



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The Motor Car
On the Farm

Faulty Alignment.

A common tire injury is shown in the illustration at the left. This effect is due to faulty alignment of the front wheels. A bent axle or steering knuckle may be responsible or possibly the demountable rim was not properly applied.

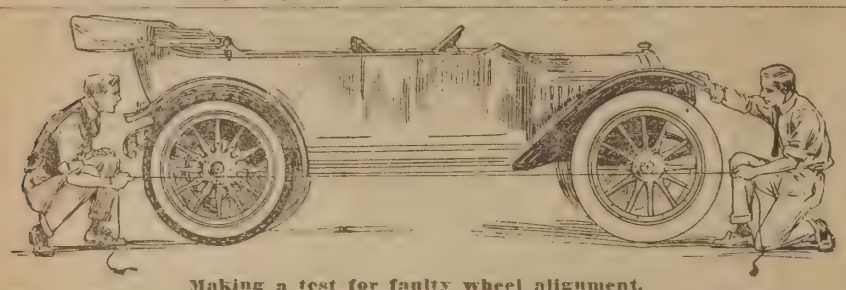


Accidents are not always responsible for the front wheels being out of alignment, but frequently this is the case. All cars, through no fault in manufacture, are subject to this condition and the first indication will be given when you notice the tread of one or both tires wearing as though a rough file had been used on them. If the tread becomes worn through, and the fabric affected, then the tire is beyond repair. Correct trouble quickly to avoid necessity of this. There is but one remedy and that is care. Test your front wheels frequently and be sure that they are in proper alignment. See the two-column illustration at right above.

MAKE FEED SURVEY.
Problem Presents Serious Aspect.

Announcement has been made by the Spokane Chamber of Commerce that it is undertaking a wide survey of the hay and feed situation in the northwest with a view to better determining the actual needs and helping devise means of meeting the situation if it proves bad.

Inquiries are being sent out to practically every district in the northwestern states. It is hoped that through the effort it will be determined how nearly adequate the supply of hay and other feed is, and where the greatest need and the greatest supply are. It is hoped that a scientific distribution of the supply over the northwest will enable farmers and stockmen to carry over their breeding stock until the pasture comes on in the spring.



Making a test for faulty wheel alignment.

Under the Black Canopy

(Continued from page eighteen.)

while others took the other end of the track and unloaded the cars as fast as they were switched on to the beach. Joe was among the latter. Even if he had been the laziest man in camp, he must have worked furiously this afternoon, for the contagion of excitement was in the air. The hours passed swiftly. Smoke drifted in black clouds over the little army, and the sun had disappeared. Joe's last impression of it was of a glimmering spot which looked like the bottom of a greased pie tin, suspended midway in the sky.

By 6 o'clock most of the moving had been done, and huge piles of goods were stacked on the beach. Charley Neville was cooking supper on the camp range which had been set up without roof or walls about it, on the sand; the men were wandering about like ants which have been driven out of their nest.

Joe had washed himself and was standing looking out over the sound when Steve McClosky joined him. The foreman's face was black with dust and smoke, and his eyes seemed to be peering out from behind a mask. There was something in his expression which caught Joe's attention at once.

"Well, you made it in time," he commented. "I suppose the men will go into town till the fires are over, won't they?"

McClosky nodded absently. "I suppose so," he said. Suddenly he turned to Joe and spoke vehemently. "Do you know, I don't feel easy about the people at Crystal Springs? There's that youngster of Mr. Stevens, and no telling how many women and other children. And there's a fire of some kind over in that direction—if it should get between the hotel and the beach, it might hem in the whole outfit."

"How far is the hotel from the waterfront?" Joe demanded.

"About three miles. The hotel stage meets the boats, and the managers should have had plenty of time to get every one down to the wharf, where they would be safe."

"But you don't think they've done it?" Joe asked, prompted by something in his companion's manner.

"I'm afraid not. The hotel people are city folks, and they don't know the ways of a forest fire. They would hate to scare visitors away for the season——"

Joe settled his hat upon the back of his head and turned toward the beach. "I can follow the edge of tidewater along till I come to the wharf, can't I?" he demanded.

"Yes, but——"

"Then I'm going. It won't do any harm to go over and see if they're all right. I'll be back by morning if I can make it."

"Wait," Mr. McClosky commanded. "Instead of going on to the wharf, you can save time by taking a short cut along an old skid road you'll pass about three miles from here. You'll have to keep a close watch for it. The fire seems to be running down along the beach, and it will strike the regular road from the wharf to the hotel first, so you'll serve two purposes by striking into this old road, if you find it. You'll take a lantern?"

"Yes. Mr. Neville will lend me one."

"Goodby, my friend. It takes a brave man to do a thing like this. I wish I could go with you."

"Your place is here," Joe called back.

He secured a lantern from the cook, and presently was skirting a group of loggers who were sitting forlornly on the sand. Then the smoke closed in behind him, and he was alone—as much alone as he could have been in a new world.

(To be continued in the next issue.)

Popular Government in Germany.

Just paste it in your hat that the German people will be running Germany when its legislature fairly represents the workers of Germany, when the reichstag has, also, the power to make or break the chancellor, and when the chancellor has control of the army. Until then the kaiser's mailed fist is the seat and source of German government.—Collier's.

Feed the Fighters! Win the War!
Harvest the Crops! Save the Yields!

On the battlefields of France and Flanders the United States boys and the Canadian boys are fighting side by side to win for the World the freedom that Prussianism would destroy.

While doing this they must be fed and every ounce of muscle that can be requisitioned must go into use to save this year's crop. A short harvest period requires the combined forces of the two countries in team work, such as the soldier boys in France and Flanders are demonstrating.

THE COMBINED FIGHTERS IN FRANCE AND FLANDERS AND THE COMBINED HARVESTERS IN AMERICA WILL BRING THE ALLIED VICTORY NEARER.

A reciprocal arrangement for the use of farm workers has been perfected between the Department of the Interior of Canada and the Departments of Labor and Agriculture of the United States, under which it is proposed to permit the harvesters that are now engaged in the wheat fields of Oklahoma, Kansas, Iowa, North Dakota, South Dakota, Nebraska, Minnesota and Wisconsin to move over into Canada, with the privilege of later returning to the United States when the crops in the United States have been conserved, and help to save the enormous crops in Canada which by that time will be ready for harvesting.

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For particulars as to routes, identification cards and place where employment may be had, apply to Superintendent of Immigration, Ottawa, Canada, or to

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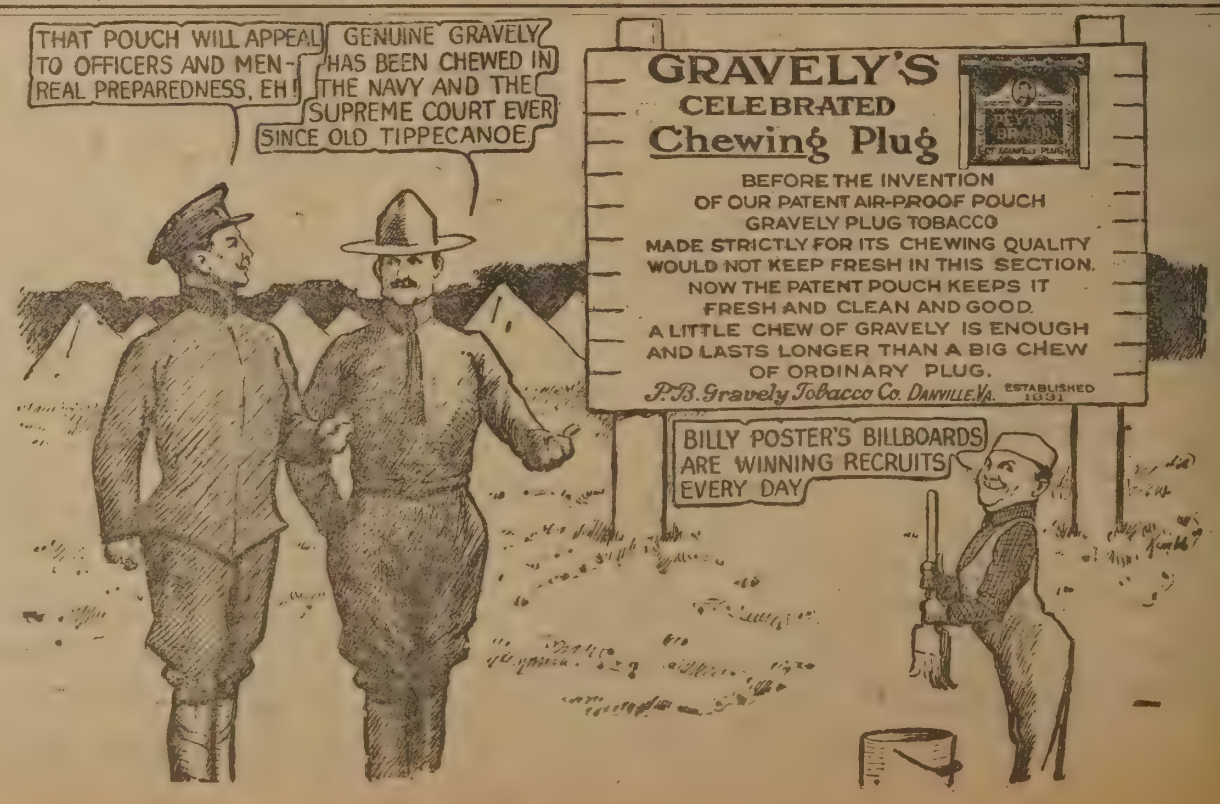
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News for Breeders

Will Be at Oregon State Fair.



Golden Minority, the 2-year-old Shorthorn bull shown above, is the junior herd sire in the purebred herd of J. B. Cornett, Shedd, Ore. He is by Minority's Welcome, dam Golden Lass by Goods. Golden Lass was out of Chief's Lady and by Roan Marland, all noted show and breeding Shorthorns. Golden Minority won first prize in his class at the Oregon state fair last fall and was made grand champion at the Willamette valley exposition. He has grown and thickened and rounded out a great deal since then and will be a hot contender for honors again this fall.

Mr. Cornett is one of the few men in the Willamette valley who has bred beef cattle for years, and he is a Shorthorn enthusiast. He recently bought the herd of O. B. Labaree, at Klamath Falls, Ore., because Mr. Labaree was going out of the business, and then resold them so they remained in Klamath county. The 22 head, all registered and all well bred, were sold to J. H. McCormack & Son of Klamath Falls. They have been in the cattle business for years, but these are their first purebred Shorthorns. Eugene, the son, is a student at the Oregon Agricultural college and will graduate this year. He takes great interest in fine stock, and on him, to a great extent, will devolve the care and breeding up of the registered herd. H. A.

COLORADO PIG HEADS HERD.

George Swales, who was well known as a breeder and exhibitor of Duroc swine while at Salem, Ore., and who returned to his boyhood state of Washington last fall and is now on a 360-acre farm at Johnson station, nine miles from Pullman, writes that he has recently purchased a boar to head his herd from Mr. Burke of Colorado, owner of the great hog "Burke's Good Enough." The pig is sired by Western Cherry King, grand champion of Colorado, and of Burke's grand champion sow. Mr. Swales describes him as extra large, heavy boned, smooth, pretty head, deep and the largest hammed hog he ever saw. All of which indicates that Mr. Swales is continuing to improve his good Duroc herd.

POLAND CHINA SWINE

Fruitland Stock Farm
Poland China Hogs.

Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have for sale extra good spring pigs. Correspondence solicited.

J. M. ROYSTON EST., C. ROYSTON, MGR.
Payette or Fruitland, Idaho.

$20—SPRING PIGS—$20.

Big type boars and gilts of April farrow, from big litters and of good breeding; $20 if taken soon.

W. HUNTINGTON, Kelso, Wash.

DUROC-JERSEY SWINE

Hillcrest Duroc Jerseys

For immediate sale:
1 11-mo. gilt, bred to farrow Oct. 3d, $60.
1 10-mo. gilt, to farrow Nov. 8, $50.
3-month pigs, $25.
Extra fine stock, combining the blood of noted show winners.

E. P. Camp, Ione, Wash.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Pullman, Wash.

DOGS

Fox and Wolf Hounds



of the best English strains in America; forty years' experience in breeding these fine hounds for my own sport and protection of sheep, hogs and poultry. Send stamp for catalog.

T. B. HUDSPETH.
Sibley, Jackson County, Missouri.

GUERNSEY MEN ELECT.

Will Buy a Community Shipment.

The Guernsey breeders of Clackamas county, Ore., have shown their wisdom by organizing a county Guernsey breeders' association. In a beautiful grove on Redwing farm of A. I. and J. Hughes, August 18, a picnic was held, a most enjoyable repast partaken of, a number of interesting addresses listened to and a stock judging contest for boys and girls was held, before organization was effected. Quite a number of breeders in the county and a few just over the border were enrolled and the following officers elected: President, John A. Riches; secretary, Mrs. A. I. Hughes; directors, John T. Whalley, H. T. Buckman and F. W. Hutchins.

Another meeting will be held in Oregon City in a short time, at which plans will be perfected for the buying of a carload of Guernseys in the east. The Bank of Commerce at Oregon City has offered to advance the money and the meeting will be held at the bank. The cattle purchased will be distributed by auction.

The judging contest was won by Roy Smith, with Walter Funk second and Kenneth Hughes third.

The principal address was delivered by Judge Grant B. Dimmick of Oregon City. He frankly said that many men would never make good dairymen and that an opportunity was being overlooked that would make Clackamas one of the greatest counties in the northwest. He then gave figures of actual profits in sheep and goats, called attention to the immense amount of land going to waste that could be made available for sheep and goat pasture, and said even for the dairy business there was much land that ought to have the underbrush cleared off and mixed grass seed sown, making the finest of pasture. He closed with a tribute to the dairymen that have worked hard and made good and said the breeders of purebred dairy cattle were making the most out of the business, hence the wisdom of the organization of the Guernsey Breeders' club.

John T. Whalley presided and other speakers were Professor Fowler, superintendent of Foothills farm, who urged the value of organization; Octav Voget, manager of the Hubbard creamery, who told why he likes the Guernseys; Professor Westover of the O. A. C., who spoke on "Community Breeding," and Horace Addis of The Oregon Farmer, who spoke on "Community Advertising." H. A.

Promises Good Record.

Nutwood Figgis, a senior 2-year-old Jersey, owned by Frank Doerfler of Silverton, Ore., stood at the head of the list of Jerseys of her class in the United States for fat production for the month of April. Oregon Jerseys have a habit of standing at or near the head of the list, and Mr. Doerfler, who is a comparatively new breeder, feels proud of the place his heifer held. Nutwood Figgis first freshened as a senior yearling and made an official record of 400 pounds of fat or 470.5 pounds of butter in a year, or rather in 10 months, as she was bred early and was dried off to prepare her for the next calving. She will be run the full year this time and promises to make a great record.

WELL KNOWN BULL SELLS.

The Guernsey bull Katonah's Sequel Masher has recently been purchased by Foothills Farm of Carlton, Ore., from A. I. & J. Hughes, proprietors of Red Wing Farm, Oregon City, Ore., for a price reputed to be close to four figures. Katonah's Sequel Masher was grand champion of the Oregon state fair in both 1915 and 1916 and is a wonderful show animal, with great size, fine style, good Guernsey type, a mellow hide, long hips and much capacity. He is a son of imported Sequel's Monogram, that has 20 daughters in the Advanced Register. Foothills Farm is perhaps best known for its milking Shorthorns, but it has a very fine little herd of Guernseys, mostly of the imported foundations and Katonah's Sequel Masher ought to prove a sire of both show and production stock. Whether they will be shown this fall has not been definitely announced. H. A.

SKAMOKAWA MAN GETS JERSEY.

Theodore Anderson of Skamokawa, Wash., has purchased the A. J. C. C. Jersey bull, Tootsie's Major 144196 from Henry Stewart of Green Meadows farm, near Albany, Ore. This is the second bull Mr. Anderson has purchased from Mr. Stewart, the former having been used a number of seasons and sold to a neighbor dairyman. There is record of excellent milk and butter production back of Tootsie's Major, his dam having a record of 756 pounds of butter in a year.

Breeders' Department

Auction Sale

160 Registered HOLSTEINS

At Carnation Sales Pavilion.

October 3 and 4 . . . . Kent, Washington

About 85 Registered Holsteins, females and males. Selected from the U. S. inspected and healthy herd of

Carnation Stock Farms

Many of the 75 females are A. R. O. cows, of good breeding, safe in calf, by our herd sires Johanna McKinley Segis, King Segis 10th, Matador Segis Walker and Dutchland Governor Sir Colantha.

The 10 young bulls offered are sired by the above. Full description in our special catalogue.

Hazelwood Farm Holsteins

owned by **John L. Smith, Spokane,** will offer about 75 head Registered Holsteins, many of which are prize winners or descendants of prize winners.

Full description in separate catalogue.

Write Today for Free Catalogue.
Carnation Stock Farms, 1069 Stuart Bldg., Seattle, Wash.

George A. Gue, Auctioneer.

HOLSTEIN CATTLE

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

Waterloo Holstein Farm

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje	King Segius 10th Segius Walker Pietertje 2d

C. F. JENNESS, Meridian, Idaho.

WAYSIDE RANCH HOLSTEINS.

Am offering 13 heifers for sale, sired by my herd bull Buffalo Duke Doede, a half brother to the world's champion cow. An opportunity of a life time to the man wanting No. 1 stuff.

H. H. STIVER. Buhl, Idaho.

HOLSTEIN BULL CALVES.

One from 20-lb. cow, another from a 16-lb. jr. 2-yr.-old. Herd headed by Model Fobes of Idaho, whose four nearest dams average 27.25 lbs. butter 7 days.

EARL BEEBE, R. F. D. 2, Rupert, Idaho.

SHORTHORN CATTLE

Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN, Wapato, Wash.

Hercules Shorthorns

For particulars write
DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

SHEEP

REGISTERED COTSWOLD BUCKS.

A few February and March lambs.
TWO YOUNG GUERNSEY BULLS.

B. F. Baughman, Redmond, Ore.

JERSEY CATTLE

A BARGAIN IN JERSEYS.

Two registered Jersey cows and one heifer eligible to register, all close up in blood of Gertie's Lad, Oregon's Exile and King Koffee's Count; all freshen this fall. All three for $300. I have no place to keep them. Write.

JOHN YODER, R. 2, Aurora, Ore.

Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding

WAIKIKI FARM, R. 7, Spokane, Wash.

HEREFORD CATTLE

Highland Stock Farm

offes for sale 10 yearling bulls and eight two-year-old Polled heifers, sired by Polled Premier and bred to herd sires Majestic Fairfax 437657 by Corrector Fairfax and Western Fairfax 461126 by Fairfax 16th.

PLATT BROS., Props., Roy Jacobs, Herdsman, Genesee, Idaho.

GUERNSEY CATTLE

FOR SALE.

3-year-old purebred Guernsey bull.
Registered No. 35942 American Guernsey Cattle Club.
Sire—Imp. Prince of Venelle Farm (22481.)
Dam—Imp. Gay Lass du Braye (34312.)
Parents—Pure Guernsey Island blood.
Name of bull—Sir John of Mountview.
Daughters all high merited animals.
Price of bull—$250.00 if sold before Oct. 1, 1917. Inquire of

WM. OGG, Owner, Redmond, Ore.

AYRSHIRE CATTLE

AYRSHIRE BULL CALF

Vigorous, of splendid type, with exceptional production behind him. Snap shot and full particulars on application.

MEADOW BROOK FARM, Montesano, Wn.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Real Bargain in Five Jersey Heifers

Four sired by a grandson of Golden Glow's Chief (31 Register of Merit daughters), and double grandson of Rioter B. K. Helma (sire of 3). One a granddaughter and one a double granddaughter of Picabo (734.1 lbs. butter in a year.) All well bred. Ages sixteen months down to two. To feed my herd properly must dispose of part. $350 takes them.

C. A. SWARTS, Springfield, Ore.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Aug. 25.—Trading in wheat for future delivery ceased today on the board of trade until after the war. September, the sole remaining option, made a dignified exit from the market at $2.11 1-2, which was 1-2c below final figures yesterday. Corn was subjected to selling pressure throughout the session and closed weak 2 3-8c to 2 7-8c net lower, with December at $1.07 3-4 to $1.07 7-8, and May at $1.05 3-8 to $1.05 1-2. Oats lost 3-4c to 1c, and provisions had weak support and finished from 50c to $1.10 lower.

Cash Quotations.

CHICAGO, Aug. 25.—Wheat—Red, No. 2, $2.20@2.23; No. 3 red, $2.18@2.20; No. 2 hard, $2.20; No. 3 hard, nominal.
Corn—No. 2 yellow, No. 3 yellow and No. 4 yellow, nominal.
Oats—No. 3 white, 54@54¾c; standard, 54¼@55¼c.
Rye—No. 2, $1.77.
Barley—$1.05@1.28.
Timothy—$4@7.75.
Clover—$14@18.50.

Minneapolis Grain.

MINNEAPOLIS, Aug. 25.—September wheat prices sagged and closed 4 1-2 cents down today. Corn higher.
Wheat—Receipts, 255 cars, compared with 239 a year ago. September opened, $2.18; high, $2.19; low, $2.14 1-2; closed, $2.14 1-2.
Cash—No. 1 northern, $2.60@2.65; No. 2 northern, $2.55@2.60; No. 3 northern, $2.50@2.55; No. 4 northern, $2.45@2.55; No. 2 hard Montana, $2.50; No. 2 durum, $2@2.10.
Corn—No. 3 yellow, $1.82@1.84.
Oats—No. 3 white, 51 3-4@52 1-4c.
Flax—$3.71@3.76.
Flour—Unchanged. Shipments, 48,896 barrels.
Rye—$1.77@1.78.
Barley—97c@$1.23.
Bran—$25.50@26.

Pacific Northwest Grain.

PORTLAND, Ore., Aug. 25.—Cash quotations: August delivery bids—Oats—No. 2 white, feed, $51; barley, standard feed, $48; barley, standard brewing, $49; bran, $38; shorts, $37.50.
SEATTLE, Aug. 25.—Wheat—Bluestem, $2.16; turkey red, $2.16; fortyfold, $2.13; club, $2.12; fife, $2.12; red Russian, $2.11.
Barley—$47 per ton.
TACOMA, Aug. 25.—Wheat—Bluestem, $2.18; fortyfold, $2.14; club and red fife, $2.13; red Russian, $2.12.

Portland Market.

PORTLAND, Ore., Aug. 26.—Four car loads of wheat were received today, but there is no market. There was nothing doing in other grains.
Hide dealers expect to resume buying Monday at 3 cents under this week's quotations, all around. There has been very little selling during the week.
Walla Walla is still supplying this market with onions, which are firm at $1.50. Thehe is none from other localities.
Butter made a record market today at 55 cents a pound and $1 a brick retail. The wholesale quotation is 47 cents, a rise of 3 cents. Butter fat is 46 to 48 cents. Dairy butter is dragging at 33 cents.
The hay market is firm, with a very good local demand. Alfalfa is quoted at $24.
In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.
Oats—No. 1, $48 per ton.
Mill stuffs—Bran, $37 per ton; shorts $39.
Barley—No. 1 feed, $47; brewing, $48; rolled, $51.
Hay—Buying prices; Timothy, eastern Oregon, $26; alfalfa, $24; grain, $18.50.
Eggs—Oregon ranch, case counts, 35 1-2@36c per dozen; candled, 37@38c.
Poultry—Hens, 14 1-2@16c; ducks, 12@13c; turkeys, live, 20@22c; geese, 7@8c.
Butter—City creamery, prints, 47c per pound; cubes, extras, 41 1-2c.
Cheese—Tillamook triplets, 22c; young Americas, 24c.
Dressed meats—Veal, 15@15 1-2c; pork, 20@20 1-2c.
Hops—1916, 20c; contracts, 30c.
Potatoes—New, 2 1-2@3 1-4c per pound.
Wool—Eastern Oregon, fine, 52@61c; coarse, 60c; valley, 58@60c.
Beans—California small white, 15 1-2c; large white, 15c per pound.
Hides—Salted hides (25 lbs. and up), 16c; salted stags (50 lbs. and up), 13c; green and salted kip (15 lbs. to 25 lbs.), 17c; green and salted calfskins (up to 15 lbs.), 27c; green hides (25 lbs. and up), 17c; green stags (50 lbs. and up), 14c; dry hides, 35c; dry salt hides, 30c.

Live Stock Quotations.

At Chicago.

CHICAGO, Aug. 25.—Hogs—Receipts, 5000; slow and mostly 25c lower than yesterday's average. Early top, $17.40; bulk, $15.85@17; light, $15.50@17.15; mixed, $15.60@17.25; heavy, $15.50@17.10; rough, $15.50@15.75; pigs, $11@14.
Cattle—Receipts, 3000; steady. Native beef cattle, $8.25@15.50; western steers, $7@12.40; stockers and feeders, $6.10@9.25; cows and heifers, $4.65@13; calves, $11.50@16.
Sheep—Receipts, 3000; weak. Wethers, $7.75@11.10; lambs, $10.50@16.75.

At Portland.

PORTLAND, Ore., Aug. 25.—Cattle—Receipts, 61; steady. Best beef steers, $8.25@8.75; good beef steers, $7@7.80; best beef cows, $6@7; ordinary to good cows, $3.50@5.50; best heifers, $6.25@7.25; bulls, $4.50@6; calves, $6.50@9.25; stockers and feeders, $4.50@7.
Hogs—Receipts, 275; steady. Prime light, $17@17.15; prime heavy, $16.90@17; pigs, $15@16; bulk, $17.
Sheep—Receipts, 3; steady. Western lambs, $12@13; valley lambs, $11.75@12.75; yearlings, $10@10.50; wethers, $9.75@10.25; ewes, $8@8.50.

At Seattle.

SEATTLE, Aug. 25.—Receipts, 91 hogs, 30 cattle. Cattle and sheep steady.
Hogs—Lower. Prime light, $17.40@17.50; medium to choice, $17.25@17.35; smooth heavies, $16.75@17; rough heavies, $16.25@16.50; pigs, $16.25@16.50.
Cattle—Prime steers, $9.25@9.60; medium to choice steers, $8.50@8.75; common to good steers, $6@7; best cows and heifers, $4@4.50; best bulls, $6.50@7; common to good bulls, $3.60@6.05; calves, $6.50@9.50.

Spokane Stock Yards Saturday.

Hogs—Receipts 75, market steady. Prime light, $17.25@17.50; prime heavy, $16.75@17.25; pigs and skips, $16.25@16.50; stockers and feeders, $13.75@15.75.
Cattle—Receipts 69, market steady. Prime light steers, $8@8.25; prime heavy steers, $8.25@8.75; good steers, $7@7.80; ordinary to fair, $5.25@6; prime cows, $4@5; best heifers, $6@7; bulls, $5@7; calves, $7.50@9.50; stockers and feeders, $5@7.
Sheep—Receipts none, market steady. Prime lambs, $12@12.50; good lambs, $10.50@11.25; prime yearlings, $8.50@9; prime wethers, $8@8.50; best mutton ewes, $5@7.

Seattle Market.

SEATTLE, Wash., Aug. 25.—Optimism as regards potato prices, backed by a bearish government crop review and report, finds little place among Seattle dealers. The east has no bumper crop, local production is far below estimates, and in view of abnormal costs of beef, flour and dairy products consumers will be forced, it is believed to greater use of spuds.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.
The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:
Eggs—Local, 42@43c per dozen.
Poultry—Live hens, fat, over 4 lbs., 18c per lb.; 2 lbs. and under, 14@16c; old roosters, 11c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 10c per lb.; broilers, live, 18c per lb.
Butterfat—49c per lb.; dairy butter, 33c.
Beef—Buying prices: Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c; heifers, 6@8c per lb.
Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.
Veal—Fancy light, 14@16c per lb.; do heavy, 9@13c per lb.
Hides—Salted, 20c per lb.; salt kip, 22c per lb.; salted calf, 30c per lb.; green hides, 16c per lb.; salted bulls, 16c per lb.; dry hides (short trim), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12 1-2c per lb.; dry butcher full woo sheep pelts, 36@38c per lb.; green calf, 30c.

The Wool Market.

BOSTON, Aug. 24.—The Commercial Bulletin will say tomorrow:
Demand for wool was comparatively light during the last week, although prices were firm. Doubtless the fact that the government has reached the purchasing point has been a quieting effect, although it probably is true that the mills generally are well covered against current needs.
The mills report a fair business on light-weight initial orders and this business has been reflected more or less in the yarn and tops markets. Buying in the west has been both scattered and limited.
Oregon—Eastern, No. 1 staple, $1.75@1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.55@1.60.

San Francisco Produce Market.

SAN FRANCISCO, Aug. 25.—Butter, prime firsts, 41c.
Eggs—Fresh extras, 43c.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.
Potatoes—New local potatoes, $2.50 cwt; sweet potatoes, 5c lb.
Apples—New Washington apples, $1 20-lb box; $1.75 50-lb box.
Butter—Blanchard cartons, 44c lb; Medo-Maid, 44c lb; Cascade, 44c lb; Gold Leaf, 44c lb; Better Butter, 44c lb; Attalia, 44c lb; Diadem, 44c lb; Hazelwood, 44c lb; Solid Pack, 42c lb.
Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25@26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 29c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.
Eggs—Fresh local ranch eggs, $12.
Live Poultry—Hens, 19c lb; old roosters, 10c; ducks, 13@14c; geese, 11c; turkeys, 20@25c.
Dressed Poultry—Hens, 22c lb; old roosters, 13c; ducks, 17c; geese, 14c; turkeys, 28c.

Hide Quotations.

Green cows and steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Butter and Eggs.

PORTLAND, Aug. 25.—Butter at record. Three cents higher. City creamery prints, parchment wrapped, 47c; cartons, 48c; butterfat, 46@48c. Cube extras, 41 1-2c; prime firsts, 39 1-2c; firsts, 36 1-2c; dairy, 33c. At retail, print butter is 55c a pound, $1.05 brick.
CHICAGO, Aug. 25.—Butter higher; creamery, 37 1-2@41 1-2c.
Eggs unchanged; receipts, 7766 cases.
ELGIN, Ill., Aug. 25.—Forty-one cents was bid for 100 tubs of butter on the Elgin Board of Trade today. There were no sales. This is an increase of 1 cent over last week's price.
SAN FRANCISCO, Aug. 25.—Butter—Prime firsts, 41c. Eggs—Fresh extras, 43c.

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I have ..... acres. Timber land .....
I raise the following .....
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Address .....

Want Ads

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ALBANY NURSERY TREES GIVE SATISFACTION. You can earn good money selling our complete line of high-grade fruit and ornamental stock. Men or women agents wanted. ALBANY NURSERIES, 1st National Bank building, Albany, Oregon.

AGENTS WANTED, TO SELL ECONOMY Laundry Tablets. Washes clothes clean without rubbing. Every home a possible customer. Big repeater. Sample and particulars free. Economy Prod. Co., Spokane, Dash.

AGENTS—IMMENSE PROFITS EASILY made selling flexible metallic sign letters to stores and offices. Right opportunity for live wires. U.-S. Sign Co., S217 Lincoln st.

SALESMEN WANTED, TO SELL OUR choice nursery stock. Write for particulars. Donald Nursery Co., Donald, Ore.

MUSICAL 38

"STAND BACK OF OLD GLORY" THRILLS you with its patriotic fervor. Words and music, postpaid, 15c. Whitney Pub Co., Spokane, Wn.

EDUCATIONAL 45

YOUNG MEN AND WOMEN SHOULD APPLY OR WRITE TO WHITWORTH COLLEGE, SPOKANE, WASHINGTON, FOR TWO YEARS' PREPARATORY AND FOUR YEARS' FULL COLLEGE COURSE, WITH BIBLE STUDY. BEGINS SEPT 18TH.

POSITIONS GUARANTEED GRADUATES OF BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog free.

SIX MONTHS' COURSE IN BUSINESS worth more to you than 2 years' high school; guaranteed positions. Blair Business College, Spokane, Wash. Free catalog.

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GONZAGA UNIVERSITY, SPOKANE—Boarding and day school. Write for catg.

TEACHERS' AGENCIES 46

VACANCIES FOR TEACHERS IN ALL the western states. Write us today. Clark Teachers' Agency, 411-412 Chamber of Commerce bldg., Spokane, Washington.

SCHOOL CLERKS: WIRE OUR EXPENSE. Hazard Teachers' Agcy., Spokane.

MISCELLANEOUS—FOR SALE 60

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Notice advance in prices.
Largest factory in the west selling direct from mill to consumer.
We sell anybody, ship anywhere and guarantee safe delivery.
Send for our large illustrated catalog No. 27, mailed postpaid, without charge, on request.
5 cross panel doors $1.92
Cottage front glass doors $3.50
Cottage windows; large bottom glass, 40x40; transom glass, 40x16 ..... $4.05
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Screen doors, 2-8x6-8, heavy galv. wire $1.50
See our prices on Frames, Moldings, Millwork, Builders' Hardware, Prepared Roofing, Plaster Board, etc.
O. B. WILLIAMS CO.
1943 FIRST AVE. SO., SEATTLE, WN

LUMBER, SHINGLES, MILLWORK. SAVE money by getting your building material direct from the mill. Let us quote you delivered prices. W. W. Wells Co., Box 1010F, Everett, Wash.

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SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORSE AND HOOF

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Fix $2.20 Wheat Price for 1917 Crop

Rank Discrimination of 35 to 40 Cents Against the Farmers of the Pacific Northwest

A price of $2.20 a bushel has been fixed for the 1917 crop of wheat by President Wilson on the recommendation of the wheat price committee headed by Dr. H. A. Garfield. The basis will be No. 1 Northern spring wheat delivered at Chicago.

Representatives of the producers began by voting for a price of $2.50 and labors' representatives for $1.84. The two extremes eventually narrowed down until the last vote was unanimous. Besides Dr. Garfield, the chairman, the other members of the committee were: Charles J. Barrett of Georgia, president of the farmers' union; Eugene E. Funk of Illinois, president of the Corn Growers' association; Edward F. Ladd, president of the North Dakota Agricultural college; J. W. Shorthill of Nebraska, secretary of the National Council of Farmers' Cooperative associations; L. J. Taber, master of the Ohio State grange; Henry J. Waters, president of the Kansas Agricultural college; W. N. Doak of Roanoke, Va., vice president of the Brotherhood of Railway Trainmen; James W. Sullivan of New York of the American Federation of Labor; F. W. Taussig, chairman of the tariff commission, and Theodore N. Vail, president of the American Telephone and Telegraph company.

Work Out Differentials.

The price differentials worked out by the food administration are: No. 1 hard winter, $2.24; hard winter basic, $2.20; red winter basic, $2.20; yellow hard winter, $2.16; soft red winter, $2.18; dark northern spring, $2.24; red spring, $2.18; humpback, $2.10; amber durum, $2.24; durum basic, $2.20; red durum, $2.13; red walla, $2.13; hard white basic, $2.20; soft white, $2.18; white club, $2.18; No. 2 of each grade is 3 cents less; No. 3, 6 cents less; No. 4, 10 cents less.

Relative market basis: Chicago, Galveston, New Orleans, basic; Duluth and Minneapolis, 3 cents less; St. Louis, 2 cents less; New York, 10 cents more than basic; Baltimore and Philadelphia, 9 cents more; Buffalo, 5 cents more; Omaha and Kansas City, 5 cents less than basic.

Although the prices are fixed on government purchases only, the food administration, through its wheat corporation, expects to control the market without difficulty. The corporation will make all government and allied purchases and has under consideration to buy for millers. In its service as broker between the terminal and the flour mills the corporation will become purchaser of virtually all the country's wheat crop.

In its statement to the president the committee recites the factors considered in its decision. Chief among them was the mounting cost of living. The condition of world markets was given careful thought as was the probable effect of an early termination of the war, which would loose great stores of wheat in other countries now tied up because of lack of shipping.

The cost of production came in for considerable attention. The experts of the department of agriculture were asked for production cost figures and the committee studied data supplied by growers' organizations. It was realized that some growers will be forced to sell their wheat at a loss, while many others will make a high profit.

Prices at Primary Markets.

The price basis which the administration expects to maintain in accordance with the recommendation of the president for the period of this crop year will be at the various seaboard and interior primary markets as follows:

For No. 1 northern, No. 1 red winter, No. 1 hard winter, No. 1 durum and No. 1 hard white.

New York	$2.30
Philadelphia	2.29
Baltimore	2.29
Buffalo	2.25
Galveston	2.20
New Orleans	2.20
Chicago	2.20
St. Louis	2.18
Duluth	2.17
Minneapolis	2.17
Omaha	2.15
Kansas City	2.15

The No. 2 of each of these grades, 3 cents a bushel less.

The No. 3 of each of these grades, 6 cents less.

The No. 4 of each of these grades, 10 cents less.

Mixed wheat, 4 cents less than the price of the predominating grade.

Premium Over Basic Grade.

Dark hard winter, dark northern spring and amber durum, 4 cents a bushel premium over the basic grades.

Soft red winter, red spring and soft white, 2 cents discount under basic grade.

Yellow hard winter and white club wheat, 4 cents discount under basic grade.

Red durum and red walla, 7 cents under basic grade.

Humpback, 10 cents under basic grade.

Lower grades will be purchased by sample on basis of relative values.

Purchases all will be on the basis of government's standards of grades of grain.

Grain bought for export will be paid for after being unloaded and warehouse receipt issued in a public elevator, or in private elevator where receipts are issued under safeguards provided by state governments.

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Growers Wire Protest

Wheat growers of the Big Bend, Palouse and other districts declared that the Pacific northwest must have a primary market as accessible to them as Chicago is to the middle west or they will suffer discrimination of 35 to 40 cents. This discrimination will be sufficient to cause growers to hold their 1917 crop off the market until the $2 guarantee of the food control bill goes into effect next year, and will tend to discourage wheat producers and cause a decrease in acreage.

One of the first protests, if not the first, was a telegram to Senators Poindexter and Jones and Congressman La Follette, signed by President J. L. Paine of the Spokane Chamber of Commerce and R. Insinger, chairman of the agricultural committee of that organization, which said:

"Government wheat price as published makes no provision for the country west of the Rockies formerly shipping to Pacific terminals. Under the published schedules the bulk of our crop would sell at a basic price of $2.17, less 30 cents rail freight, less about 5 cents interior warehouse charges and government brokerages, and less 5 cents loss on 10-cent bags if shipped east, or $1.77 to the grower.

"Also, if shipped to New Orleans, we lose, besides, extra freight of 6 cents. All figures are per bushel. All points except the Pacific coast have been allowed some equalization of freight rates.

"We urge specific prices for north Pacific terminals and shipping facilities supplied through the government to equalize Chicago basic prices for our growers."



Hauling 3 Tons to Market

Here are two farms side by side.

Each farmer has three tons of produce to haul to the same market. They start at the same time.

One owns a Garford three ton motor truck.

The other uses horses.

The Garford owner gets to market with his load in one hour—uses one man.

The horse owner drives for three hours to cover the same distance. He requires two wagons, two teams and two drivers.

The Garford owner is home again before the horse owner reaches the market.

And when it comes to figuring the upkeep of these two hauling systems the motor truck has the horse badly beaten.

There in no comparison between the two methods.

Progressive farmers everywhere are using motor trucks—in many cases Garfords.

The horse is going to the discard. He can't stand the pace. He can't beat his iron and steel competition in power, endurance, economy or efficiency.

Which one of these two farmers are you?

Garford Motor Trucks

Garford Motor Trucks are built in sizes and styles to fit the hauling requirements of any farmer.

We have an interesting booklet entitled "Roads—Their Influence on Social and Economic Conditions." We'll send it to you free upon request.

Garford Motor Truck Co., Inc.
1701 Broadway Seattle, Washington

Motor Sales Corporation
344 Burnside St. Portland, Oregon

The Garford Motor Truck Company, Lima, Ohio
Manufacturers of Motor Trucks of 1, 1½, 2, 3½, 5 and 6 ton capacity
4½, 7 and 10 ton Tractors
The Garford Road Builder
Distributors and Service Stations in all Large Cities



FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 36 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF September 6, 1917

Southwest Washington Fair

Better Than Ever With Larger Attendance at Gate and Grandstand

By HORACE ADDIS

Midway of the five miles between the towns of Centralia and Chehalis is the Southwest Washington fair grounds. This fair each fall opens the North Pacific circuit and, with the untiring efforts of the secretary, George Walker, the cooperation of President B. F. Hubbard and the board of directors, and the loyal support of the two towns and the surrounding country, the fair is always a success. This year of dry weather, short crops, war and unsettled business conditions it was again an unqualified success. The first four days each showed a greater paid attendance at gate and grandstand than last year and Saturday appeared to hold out the same promise. The foundation reason is not far to seek. The fair was a little better than any of its predecessors, and this was true of almost every department.

If the Chehalis valley was affected by the dry summer the agricultural and horticultural exhibits did not reflect it. Not only was the exhibit of grains and grasses, which has made this fair famous, even better than its previous high standard, but there was a large display of fruits and vegetables of good quality.

Superintendent F. A. Degley admitted that it took more work than usual to find and arrange the displays; but this is work in which he delights and the splendid arrangement as well as high quality of all entries reflected his efforts.

Competition Among Granges.

For the first time granges competed and very creditable exhibits were made. Bawfaw grange, Boistfort, Wash., Miss Florence Foster in charge, won first prize, largely on the arrangement and completeness of the display. This grange will hold a grange fair in October. Adna grange, O. C. Weisner, Chehalis, Wash., in charge, won second; Ford's Prairie, F. A. Ipe, Centralia, in charge, third; and Mossy Rock, nearly 30 miles away, with Mr. Belcher in charge, fourth. Mossy Rock showed a sheaf of oats from a crop that threshed 91 bushels to the acre, and Adna had on exhibit a loaf of bread from the farm of M. C. Raschke, the wheat for which was raised and ground this year and the bread baked on the farm.

School Exhibits.

The educational features of this fair were strongly emphasized. The school exhibits, in charge of Professor A. C. Canterbury, occupied over twice as much space as a year ago and an educational building for next year is practically assured. On Tuesday, children's day, an auto parade of schools, that seemed to stretch for miles, was made through both towns. Besides this, 2500 children took part in a patriotic drill parade in the infield of the race track.

A cooking contest was a part of the educational work, resulting in three girls winning a trip to the state fair. These are Marjory Merrell and Beth Dodge of Chehalis and Myrtle Kibbe of Centralia.

Young Folks Stock Judges.

Perhaps in the educational department should be included the stock judging contest, though that was in charge of County Agent Nystrom, N. B. Coffman, president of the Coffman-Dobson bank, Chehalis, had offered beautiful silver cups in each class to the boys and girls under 15, or rather to the school from which the boy or girl came, who made the best score, the cup to be permanently owned when won three times by the same school. Much interest was manifested, over 20 youngsters participating in the dairy cow contest. The winners were: Dairy cattle, Daryl Leonard, first; Ewald Richardt, second, both of Chehalis. Hogs, Cleo Pier, first; Elmo Taylor, second, both of Forest. Beef cattle, Edison Smith, Toledo, first.

The ladies' art room was filled with articles of both use and ornament. The flower department was magnificent, and every exhibit was from a home garden.

In the babies' department over 100 babies were scored, and one perfect baby was found, the daughter of Mr. and Mrs. James R. Grover, farmers, living a few miles from Chehalis, and aged 42 and 24, respectively.

Large Poultry Exhibit.

The poultry department had the largest number of entries this fair has ever seen. Over 1000 birds were shown. The display of bantams of various kinds was said to be the greatest ever seen in the northwest, and the large number of breeds indicated a returning interest in poultry. The Barred Rocks had perhaps the largest number of birds, and all the utility breeds were well represented.

The merchants' and manufacturers' pavilion was crowded with creditable exhibits, and the showing of auto tractors and farm machines was large.

Live Stock Chief Feature.

Yet, when all is said, the chief interest in this fair, as in almost all fairs everywhere, was in the live stock. Holstein cattle made the strongest showing, two great herds coming from a distance, those of the Carnation stock farm, near Seattle, and J. H. Hulbert of Mt. Vernon, Wash. Besides these, five local exhibitors showed from one to eight head. These were H. W. A. Tram, W. A. Hamilton and Sons, F. M. Svinth, J. C. Busch and Adam Wackerbarth. Their entries had not the fitting or finish of the two herds, but they had excellent individuals. Senior and grand championship on both bull and female and junior champion heifer went to Carnation stock farm, while Hulbert won Junior Champion honors on bull. The very fine herd of Clifford F. Reid's Jerseys in very fine show condition from Portland, Ore., was the only one shown, although Grant Gleason of Chehalis showed two animals, winning first on each. The heifers were in strong competition.

George Bertrand of Olequa, Washington, had the only herd of Shorthorns, but they made a worthy representation of the breed. Half a dozen brown Swiss completed the cattle show.

The stock judges were John L. Smith, Holsteins, Shorthorns and Brown Swiss; Professor W. A. Linklater, Jerseys and swine; Professor C. F. Monroe, horses and sheep. The following is a complete list of the awards:

LIVE STOCK AWARDS.

Holsteins.

Bull, thee years and over, Carnation stock farm on Matador Segis Walker; 2, J. H. Hulburt, Mt. Vernon, Wash., on Segis Pontiac Acme, Two-year-old—1, Carnation stock farm on Carnation Mutual Lad Tritomia 2d; 2, J. C. Busch, Chehalis, Wash., on Palmyra of Shady Grove. Junior yearling—1, J. H. Hulburt on La Connor Pontiac Houwtje; 2, Carnation stock farm on Matador Segis Walker Delma. Senior bull calf—1, J. H. Hurlburt on La Connor Pontiac King; 2, Carnation stock farm on Korndyke Segis Klaver. Junior bull calf—1, Carnation stock farm, on Matador Segis Walker 6. Cow, three years and over—1 and 2, Carnation stock farm on Nena Kahn Selah and Nena Newman Cornucopia. Two-year-old—1, Carnation stock farm, on Matador Mechthilde Vara; 2, H. W. A. Fram, on Linden Clara Pasma. Senior yearling heifer—1, Carnation stock farm, on Lady Parthenia Segis; 2, J. H. Hulburt on Beatrice La Connor Pontiac. Junior yearling—1, Carnation stock farm on Carnation Segis Queen; 2, J. H. Hulburt on La Connor Pontiac Bess. Senior heifer calf—1, J. H. Hurlburt on La Connor Pontiac Netherland Girl; 2, Carnation stock farm on Maud Walker Pietertje Jr. Junior calf—1 and 2, Carnation stock farm on Queen Tsussie Segis and Abbekirk Segis Pauline. Exhibitor's herd—1, Carnation stock farm; 2, J. H. Hulburt. Breeders' young herd—1, J. H. Hulburt; 2, Carnation stock farm. Get of sire—1, Carnation stock farm; 2, J. H. Hulburt. Produce of cow—1, W. A. Hamilton and Sons. Senior and grand champion bull—Carnation stock farm on Matador Segis Walker. Junior champion bull—J. H. Hulburt on La Connor Pontiac Houwtje. Senior and grand champion cow—Carnation stock farm on Nena Kahn Selah. Junior champion heifer—Carnation stock farm on Carnation Segis Queen.

Jerseys.

Bull, three years and over—1 and 2, C. F. Reid, Portland, Ore., Anota's Cotillon Boy and Violet's Noble Fern. Two-year-old—1, Grant Gleason, Chehalis, Wash., on Aribma's Golden Pogis. Junior yearling—1 and 2, C. F. Reid on Fussy Fern's Noble Boy and Fussy Fern's Noble 9th. Senior bull calf—1 and 2, C. F. Reid on Cotillon Boy's Premier and Noble Cotillon of Reid Farm. Junior calf, C. F. Reid on Fern's Carnation Fern.

Cow, three years and over—1 and 2, C. F. Reid on Lady Lecq and Cowslip's Golden Begonia. Two year old—1, C. F. Reid on Eminent's Wardress. Senior yearling heifer—1 and 2, C. F. Reid on Fussy Fern's Cowslip and Fussy Fern's Roseleaf. Junior yearling—1, Grant Gleason on Virginia Sunshine Lass; 2, C. F. Reid on Fussy Fern's Lucy. Senior heifer calf—1, C. F. Reid on Goldie's Cotillon Beauty. Junior calf—1 and 2, C. F. Reid on Goldie's Princess and Goldie's Onota.

C. F. Reid also won first and second on exhibitor's herd, young herd, calf herd and get of sire. His bull, Onota's Cotillon Boy, was made grand champion and his cow, Lady Lecq, grand champion female.

Brown Swiss.

O. O. Phelps and Sons showed four head on which they were awarded all prizes for which they entered, and Mrs. Peter Jensen showed a junior bull calf which won first. Philps' bull Menlo Mark and his two-year-old heifer Velva N. were given the championships.

Shorthorns.

George Bertrand of Olequa, Wash., the only exhibitor, received awards as follows:

Bull, three years and over—1, on Chief Goods. Junior yearling—1 and 2, on Gold Mine and Chief's Golden Goods. Senior calf—1, on Chief Goods Jr. Junior calf—1 and 2, on Chief Sultan and Chief's Duke.

Cow, three years and over—1 and 2, on Roselawn Daisy and Miss Rose 3d. Two-year-old—1, on Rose 4th. Senior yearling—1 and 2, on Chief's Lady Pet and Roon Welcome 81st. Senior calf—1 and 2, on Bonnie Lass, and Bessie Lass.

Brown Swiss.

O. O. Phelps and Son won all prizes awarded except on junior bull which was won by Mrs. Peter Jensen.

Horses.

The number of horses shown was smaller than usual, but the quality was excellent. Pure bred animals of only two breeds were shown.

Percherons.

L. P. Schumacher, of Chehalis, Wash., was the only exhibitor. His awards were as follows: Stallion, two-year-old—1, on Kyrube, a magnificent colt.

(Continued on page fifteen.)

BEGIN JAIL SENTENCE.
N. W. General Trading Co. Men.

Gale Smith, president of the defunct Northwest General Trading company, sentenced February 16 to serve one year in jail and pay a fine of $10,000 on conviction in the federal court on a charge of conspiracy to defraud by the use of the United States mails, surrendered himself to the United States marshal's office Sunday and began serving his sentence in the Spokane city jail.

Stephen T. Knudson, sales agent of the Northwest General Trading company and president of the Olympic Trading company of Seattle, a subsidiary, whose sentence was one year in jail and $7500 fine, surrendered at the same time and entered the jail with Smith.

Clyde L. Davies, whose sentence was nine months in jail and a fine of $5000, failed to appear, although he had telegraphed the United States marshal's office from Great Falls that he would surrender himself.

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Bank Makes Loans
Approved Applications $8,741,095

That the intricate machinery of the federal loan bank of Spokane is at last in order and working at high speed, is shown by the report just issued by D. G. O'Shea, president.

According to this report, which covers the operations of the institution from its creation up to date, $1,505,445 has been paid out in loans to farm loan organizations in the four states covered by the Spokane bank; applications have been received for $19,954,313, of which loans amounting to $8,741,095 have been appraised and approved.

Of this amount, $1,356,190 is credited to Idaho, $2,213,350 to Montana, $2,274,890 to Oregon and $2,896,665 to Washington. Applications for loans have been received and tabulated: From Idaho, $2,611,870, from Montana $5,200,964, from Oregon $5,074,855 and from Washington, $7,066,624.

In reply to a question as to whether any friction had developed in the working of his new machine, President O'Shea said:

"In the organization of a system as large as this, covering four large states, in which the people of every community apparently desire service at one time, it is to be expected that some who have to wait longer than others may feel aggrieved. The conduct of a mortgage loan business necessitates inspections, examination of reports, examination of land titles, drawing up of legal papers necessary, satisfying old liens and distributing the proceeds of the loan. In addition to that it is necessary to organize the various associations.

"After all those things have been done it is necessary to submit securities for approval for bond issues and to receive such bonds as may be allotted, and then dispose of the bonds. It is a long road to follow, but we have covered it all and have been making loans all over the territory in large amounts and chartering associations daily. Where many are waiting, one has to begin somewhere and in making appraisals in a certain locality of our district, we always try to give service in the order in which the papers reached us since our records were established."

In the four states of Washington, Oregon, Idaho and Montana there are 169 loan associations for which charters have been recommended, and 36 additional associations which have been appraised and reported on.

President O'Shea has also announced the appointment of W. J. Crismas, a farmer of Joliet, Mont., as appraiser for the Spokane bank, the appointment being made by the farm loan board in Washington. Mr. Crismas, who is experienced in the farm and mortgage business, will report for duty soon, making 16 appraisers for the Spokane bank.

Appeals to War-Ridden German People

President Wilson's Forceful Reply to the Peace Proposals of the Pope

President Wilson's rejection of the pope's peace proposals comes as a climax to the remarkable series of state documents in which the chief executive of the American republic has argued the cause of world democracy against autocracy in the court of public opinion and accepted more and more by the people of all allied countries as expressing their ideals.

Text of the Note.

WASHINGTON, D. C., Aug. 28.—President Wilson has rejected the pope's peace proposals. The text of the note follows:

"August 27, 1917.

"To His Holiness, Benedictus XV., Pope:

"In acknowledgement of the communication of your holiness to the belligerent peoples, dated August 1, 1917, the president of the United States requests me to transmit the following reply:

"Every heart that has not been blinded and hardened by this terrible war must be touched by this moving appeal of his holiness, the pope; must feel the dignity and force of the humane and generous motives which prompted it and must fervently wish that we might take the path of peace he so persuasively points out. But it would be folly to take it if it does not in fact lead to the goal he proposes. Our response must be based upon the stern facts and upon nothing else. It is not a mere cessation of arms he desires; it is a stable and enduring peace. This agony must not be gone through with again, and it must be a matter of very sober judgment that will insure us against it.

"His holiness, in substance, proposes that we return to the status quo ante bellum and that then there be a general condonation, disarmament and a concert of nations based upon an acceptance of the principle of arbitration; that by a similar concert freedom of the seas be established; and that the territorial claims of France and Italy, the perplexing problems of the Balkan states and the restitution of Poland be left to such conciliatory adjustments as may be possible in the new temper of such a peace, due regard being paid to the aspirations of the peoples whose political fortunes and affiliations will be involved.

"It is manifest that no part of this program can be successfully carried out unless the restitution of the status quo furnishes a firm and satisfactory basis for it. The object of this war is to deliver the free peoples of the world from the menace and the actual power of a vast military establishment controlled by an irresponsible government which, having secretly planned to dominate the world, proceeded to carry the plan out without regard either to the sacred obligations of treaty or the long established practices and long cherished principles of international action and honor; which chose its own time for the war; delivered its blow fiercely and suddenly; stopped at no barrier either of law or mercy; swept a whole continent within the tide of blood—not the blood of soldiers only, but the blood of innocent women and children also, and of the helpless poor; and now stands balked, but not defeated—the enemy of four-fifths of the world. This power is not the German people. It is no business of ours how that great people came under its control or submitted with temporary zest to the domination of its purpose; but it is our business to see to it that the history of the rest of the world is no longer left to its handling.

"To deal with such a power by way of peace upon the plan proposed by his holiness, the pope, would, so far as we can see, make it necessary to create a hostile combination of nations against the German people, who are its instruments; and would result in abandoning the new-born Russia to the intrigue, the manifold subtle interference and the certain counter-revolution which would be attempted by all the malign influences to which the German government has of late accustomed the world. Can peace be based upon a restitution of its power or upon any word of honor it could pledge in a treaty of settlement and accommodation?

"Responsible statesmen must now see, if they never saw before, that no peace can rest securely upon political or economic restrictions meant to benefit some nations and cripple or embarrass others, upon vindictive action of any sort or any kind of revenge or deliberate injury. The American people have suffered intolerable wrongs at the hands of the imperial German government, but they desire no reprisal upon the German people, who have themselves suffered all things in this war, which they did not choose. They believe that peace should rest upon the rights of peoples, not the rights of governments—the rights of peoples great or small, weak or powerful, their equal right to freedom and security and self-government and to a participation, upon fair terms, in the economic opportunities of the world—the German people, of course, included, if they will accept equality and not seek domination.

"The test, therefore, of every plan of peace is this: Is it based upon the faith of all the peoples involved or merely upon the word of an ambitious and intriguing government, on the one hand, and of a group of free peoples on the other? This is a test which goes to the root of the matter; and it is the test which must be applied.

"The purposes of the United States in this war are known to the whole world—to every people to whom the truth has been permitted to come. They do not need to be stated again. We seek no material advantage of any kind. We believe that the intolerable wrongs done in this war by the furious and brutal power of the imperial German government ought to be repaired, but not at the expense of the sovereignty of any people—rather a vindication of the sovereignty both of those that are weak and those that are strong. Punitive damages, the dismemberment of empires, the establishment of selfish and exclusive economic leagues we deem inexpedient and in the end worse than futile—no proper basis for a peace of any kind, least of all for an enduring peace. That must be based upon justice and fairness and the common rights of mankind.

"We can not take the word of present rulers of Germany as a guarantee of anything that is to endure unless explicitly supported by such conclusive evidence of the will and purpose of the German people themselves as the other peoples of the world would be justified in accepting.

"Such guarantees, treaties of settlement, agreements for disarmament, covenants to set up arbitration in the place of force, territorial adjustments, reconstitutions of small nations, if made with the German government, no man, no nation could now depend on. We must await some new evidence of the purposes of the great peoples of the central powers. God grant it may be given soon and in a way to restore the confidence of all peoples everywhere in the faith of nations and the possibility of a covenanted peace.

"ROBERT LANSING,

Farming Logged-Off Lands

Requires Much Hard Work and Common Sense

By RAY W. FELTON

"Settlers will make good on logged-off land if they will stick," said J. B. List, a young farmer of Bonner county, Idaho, the other day to a representative of The Farmer. "The failure usually is the person who comes here expecting to make a Garden of Eden of his place the first year. He drives by places which have been under cultivation a few years and thinks he will be able to accomplish the same results in a year's time. It can hardly be done. This job, like most any other successful undertaking, requires lots of good, hard work and common sense. When applied, that combination will win out big here."

Mr. List's views are shared by almost every other successful farmer in the community in which he resides, an old lake bed of rich loam with a deep subsoil in the vicinity of Pack river, about 10 miles north of Sandpoint. Farming the wild lands of the logged-over areas from which great quantities of merchantable timber have been taken by the Humbird Lumber company has been in progress only a few years in this district, but remarkable results have been achieved in most every instance where the "combination" Mr. List speaks of, has been applied.

The high price of stumping powder is the chief difficulty experienced in the development of this detimbered section, but this has served to discourage only the faint-hearted. It has, in some cases, been an actual help, because it has emphasized the necessity of producing crops among the stumps before actual clearing operations are possible. Failure to realize the possibilities of "stump farming" has been the cause of many an abandoned attempt to make good on cut-over land.

In this endeavor Charles Selle, the first permanent settler in the Pack river district, has led the way. Twenty years ago Mr. Selle bought a homestead relinquishment for $50. From the claim Mr. Selle sold timber amounting to approximately $25,000. Nine years ago, the timber gone, Mr. Selle began to demonstrate what could be done on the same land from which the timber had been taken. He didn't wait to blow the stumps. He cleared patches of brush and bark, plowed and disked and then sowed his crop. He has produced bumper yields of hay and grain, the wheat running some years as high as 35 and 40 bushels per acre on land still thickly dotted with big white pine stumps. He is now past 60 years of age, but he is just as active a stump fighter as he ever was. He has made it pay and his efforts are a source of inspiration to the younger farmers in the district.

The List brothers, J. B. and Edwin, went to the valley four years ago with Rudolph Bierlein and Herman Benthal. All had farmed in the Camas prairie country. They have farmed here much after the fashion established by Mr. Selle and their places show the result of careful management and good judgment. Their farms adjoin and they trade their labor with each other. Three years ago they began growing field peas and have experienced good results, all coming to the conclusion that the pea is a legume highly beneficial to raw land of this character. They found a ready market in their own district for the seed. Last year their places averaged 20 bushels to the acre and they disposed of the crop at 5 cents a pound. Due to dry weather and late spring the crop will not be as heavy this year, although indications are that it will be fair.

William Ahlborn settled in the valley three years ago. He is farming a place of 120 acres owned by his son, William H. Ahlborn. They came from Pennsylvania.

J. Shelton owns 240 acres in the valley, 12 of which is cleared entirely of stumps, with 12 more now being made ready for a spring crop.

Victor V. Hannus is a Butte miner who has purchased 20 acres and is gradually getting it ready for cultivation. Mr. Hannus spends his summers on the farm and goes back to the mines in the winter, leaving Mrs. Hannus and their baby boy to look after things. Asked if she became lonely during the long winter days Mrs. Hannus said she really hadn't time to be lonely. She finds contentment and satisfaction in being able to help her husband provide a home which they hope to enjoy together all the year round in a little while.

Many of the men in the valley find employment in the logging camps and mills during the season when farm work can not be pushed to advantage.

F. A. Sager came to the valley this spring from Montana. He is clearing 27 acres as fast as he can supply the muscle and financial wherewith and soon hopes to have his family with him.

W. J. McRae settled in the valley a year ago. He has 76 acres partly cleared and with some improvements.

R. H. Hoss left Morrow county, Oregon, in February and settled on an 80-acre tract near the McRae and Sager farms. He has built a substantial dwelling and, with his wife and four children, has made a good start toward a good home near the junction of Lightning creek and Pack river. Mr. Hoss tried an experiment with clover this year which is interesting. On one patch he planted clover with a nurse crop of oats. The oats seemed to sap the ground of needed moisture and a poor catch of clover was the result. In a field adjoining he planted clover alone and secured a good stand.

Fred Foster is one of the new settlers from western Washington. He has 40 acres, three and one-half of which he has cleared.

C. A. Larson, who comes from La Grande, Ore., is making good on 120 acres.

H. E. Wilkinson has 100 acres seeded to clover and is keeping a number of cows, which he finds profitable.

F. A. Knodel left Seattle a short time ago and is successfully farming 80 acres in this district. His Jersey cows are finding the natural pasture grass a feed upon which they are able to produce results for their owner.

George L. Beckwith arrived in the valley a short time ago from Willamette valley, Oregon, in search of land upon which to graze 300 head of cattle. He found it and bought a half section. He has a meadow which he has drained and in good shape. He is clearing with a donkey engine.

C. H. Robison is another Willamette valley man who has established a new home in this district.

K. H. Sletager and sons own 320 acres. They came last spring from Canby, Ore. They are carying on extensive clearing operations.

A. A. Brackett, Peter D. Brackett and Percy E. Brackett, accompanied by Kirk P. Doolley, all of North Yakima, have new places in the vicinity of Grouse creek.

Dairying and stock raising are promising industries for this section, as it is a natural grass country and is well protected from severe weather by the hills which form a part of the western slope of the Rocky mountains.

Condensery at North Yakima.

S. J. Simonson, manger of the Cascade Creamery company, announces plans for establishing a milk condensery at North Yakima. Contracts have been made for machinery, and negotiations are pending to turn the Read laundry building into an up-to-date plant to house both creamery and condensery at an outlay of $25,000, to be ready for operation next spring.

M. H. Houser



—Photo by C. Elmore Grove.

Few names are more familiar in wheat market circles than that of M. H. Houser, whom the food commission has appointed to represent the administration in the northwest in connection with the control of the wheat market and the probable purchase by the government of large quantities of grain. He began his grain business in a flour mill in Garfield county, Wash., and has increased it until he is now one of the greatest wheat exporters in America. He has announced that he will devote his entire time to the position to which he has been appointed, and give to the Red Cross the profits from his regular wheat buying business this year.

Calls for More Winter Wheat and Rye

Assistant U. S. Secretary of Agriculture Conducts Important Conference at Spokane

Dr. Raymond A. Pearson, assistant United States secretary of agriculture, and until recently president of Iowa State Agricultural college, at Ames, conducted at Spokane Monday, August 27, the fifth and last conference in a series of five great regional gatherings to weigh problems of deep concern to the American farmers and the nation.

The dominant purpose of the conference was the devising of ways and means to increase the wheat and rye production for 1918; and to that end three main points were considered:

First. Stimulation by various agencies —government price-fixing, more efficient tillage, etc.

Second. A survey of soil and other conditions, particularly with reference to learning the seed needs of the various districts.

Third. Means of financing those farmers who will have to buy seed, and particularly such farmers as suffered losses through adverse conditions in 1917.

The Spokane conference dealt with conditions in eight western states—North Dakota, Montana, Idaho, Washington, Oregon, California, Nevada and Utah, and was attended by representatives from the agricultural colleges, government experiment stations, county agricultural agents, bankers, railroad officials and millers and warehousemen.

Opening the conference, Dr. Pearson declared the war "is not one of bullets alone," and stated the grain requirements for feeding the allied nations. The normal wheat crop of the United States, he declared, ran between 750,000,000 and 800,000,000 bushels, having been cut down in 1916 to about 650,650,000 bushels. Normal exports of wheat ran about 100,000,000 bushels annually, but had run up to 330,000,000 in 1915, gradually being reduced since that time, being 240,000,000 in 1916, and promising to be 175,000,000 in 1917.

"Unless Mr. Hoover succeeds in a large way to decrease the consumption at home," Dr. Pearson said, "our export next year will be even smaller."

Summarizing the conference Dr. Pearson said that weather conditions with difficulties in getting seed wheat, presented the only obstacle, and that with rain in the northwest, the average increase of 20 per cent in winter wheat sowing would be attained.

The government is urging that the winter wheat seeding this fall be increased to 47,337,000 acres, as compared with an acreage sown in the fall of 1916 of 40,090,000 acres—a requested increase of 18 per cent.

Under the proposed schedule California is asked to increase its winter wheat seeding 20 per cent; Idaho, 27 per cent; Montana, 29 per cent; Oregon, 50 per cent; Utah, 12 per cent; Washington, 13 per cent, and Nevada, 14 per cent.

It is further urged that Montana increase its rye acreage 173 per cent; North Dakota, 11 per cent; Oregon, 41 per cent; Washington, 67 per cent, and that California, Idaho and Utah maintain their normal rye acreage.

Wheat Acreages Recommended.

	1917.	1916.
California	509,000	413,000
Idaho	465,000	346,000
Montana	1,000,000	775,000
Nevada	25,000	22,000
Oregon	708,000	472,000
Utah	275,000	246,000
Washington	850,000	754,000

Rye Acreages Recommended.

	1917.	1916.
California	12,000	12,000
Idaho	3,000	3,000
Montana	30,000	10,000
North Dakota	1,036,000	936,000
Utah	12,000	12,000
Washington	10,000	6,000
Oregon	45,000	32,000

Expect Crop Increases.

Notwithstanding certain minor difficulties, all of the states present expected to make the crop increases requested by the government, if crop conditions were at all favorable. California, asked for 509,000 acres of winter wheat, expected to exceed the request by replacing barley with wheat, plowing up and seeding poor alfalfa fields to wheat, and bringing new lands into cultivation. Friendly rivalry in that state has been started to see whether the larger increases can come from more acres of wheat, or from higher yields per acre following improved farming, two professors in the agricultural college leading in the two sides of the contest.

As experiences of the present year were told, it came out very clearly that in thoroughly good farming lies the way to increased crop production. In the Dakotas, Montana, Idaho, Washington, Oregon and Utah numerous instances were cited of the farmers who last spring responded to the nation's call for large farm production by putting in a great deal of ground which they had expected to reserve for summer fallow and fall sowing. Many of the farmers had in other ways departed from farming practices which in their experience had proved good.

An unfavorable crop season in many parts of these states had resulted here and there in disaster. President W. J. Kerr of the Oregon Agricultural college very strongly held that farmers should be urged to do better farming, rather than reckless farming, in behalf of increased farm production. The same view was held by Director W. S. Thornber of the Washington extension service and by O. L. Waller, vice president of the Washington State college. D. W. Davis, banker, of American Falls, Idaho, stated that he would prefer to loan to farmers who were intensifying and improving their farming operations rather than to farmers who were spreading out over larger acreages.

A survey of the seed situation in the different states brought out the fact that here and there were regions in which there was a shortage of the particular kind of seed needed; and that here and there were small groups of farmers who might need financing for the next year's seed. A canvass of the situation from state to state revealed the presence in the states of all the seed that was necessary; the problem merely being one of locating the seed and getting it at the right time and in the needed amounts to the places needing such seed.

On Tuesday, August 28, Director W. S. Thornber of the Washington State college extension service, acting under instructions from Dr. A. C. True of the States Relations service, appointed a seed committee for Washington, consisting of himself, R. Insinger of Spokane, R. J. Stephens of Spokane, E. G. Shafer of the Washington State college and M. A. McCall, superintendent of the Adams county branch experiment station. This committee met with the leading grain men of the Inland Empire Tuesday noon, all of whom agreed to do their utmost in locating good seed in their respective territories and in holding this seed so that it would not be milled or shipped out of the country before seeding time. They agreed to report the locality, amount and kind of the desirable seed wheat to the state seed committee, above named, which committee would reecive requests for seed from farmers throughout Washington, and immediately put them in communication with the source of supply for the seed they needed.

It was the expectation that the Washington seed committee organization would be at once duplicated in all the western states present at the Spokane conference, extension directors of these states having been requested by Director True to at once appoint seed committees to aid in the location and prompt distribution of seed wheat or rye.

C. B. Kegley, master of the state grange, said smut-free seed wheat of the highest quality, taken direct from the field and not to the warehouses or elevators, cleaned and treated, ought to be worth an advance of 25 per cent on the market price for the same kind of wheat. This was the consensus of opinion.

E. F. Benson, state commissioner of agriculture, said burned-over forest land in Idaho and Montana ought to be sowed to pasturage grasses. Millions of acres might be converted into summer pastures for sheep, he said.

Byron Hunter, representative of the U. S. bureau of farm management, suggested that the wheat production would be increased if summer fallow land were planted to beans and peas. This could be done where the raintail is not less than 20 inches per year. The wheat crop the following year would be greater than that following summer fallow.

Representatives from the agricultural colleges, government experiment stations, bankers and other prominent men attending the conference, coming from the eight states, were:

California—J. W. Gilmore, Berkeley; J. W. Schmitz, Madera; C. J. Shepherd, San Francisco.

Idaho—J. S. Jones, Moscow; D. W. Davis, American Falls; O. D. Center, Boise; G. S. Ray, Moscow; H. W. Hulbert, Moscow; F. S. Randall, Lewiston.

Oregon—F. L. Kent, Portland; Paul V. Maris, Corvallis; A. E. Blackland, La Grande; F. L. Myers, La Grande; A. R. Hunter, Island City; C. L. Smith, Portland; W. J. Kerr, Corvallis; W. W. Harrah, Pendleton; Albert S. Roberts, The Dalles.

Montana—F. S. Cooley, Bozeman; C. D. Greenfield, Helena; F. S. Luck, Missoula; Charles Vanderhook, Bozeman; T. B. Story, Bozeman; Thomas Connolly, Cottonwood; Paul P. Banker, Havre; Guy Fitzpatrick, Reno.

Nevada—C. A. Norcross, Reno.

North Dakota—L. M. Thomas, Fargo; J. E. Phelan, Bowman; Thomas Cooper, Fargo.

Utah—John T. Caine, Logan.

Delegates From This State.

Washington—C. B. Kegley, Spokane; R. B. Coglon, Pullman; J. L. Ashlock, Pullman; Byron Hunter, Walla Walla; E. F. Benson, Olympia; T. W. Busby, Oakesdale; C. M. Chatham, Spokane; P. W. Smith, Spokane; H. R. Raymond, Spokane; N. A. Roberts, Spokane; Richard N. Stephens, Spokane; E. L. Farnsworth, Wilbur; R. K. Stephens, Spokane; David Munroe, Spokane; John Harris, Mead; R. Insinger, Spokane; Joshua Beeman, Usk; F. S. Barrett, Spokane; R. C. McCroskey and wife, Garfield; P. J. Sweeney, Tacoma; E. A. Smith, Spokane; N. W. Durham, Spokane; J. R. Shinn, Spokane; W. H. Childs, Spokane; R. T. Lord, Spokane; A. J. Porter, Cheney; M. Hergood, Chester; George W. Martin, Spokane; H. C. Blair, Spokane.

Proposes $3 and $4 Wheat

Says It Would Add Little to the Food Costs

"Instead of quibbling over a few cents more or less, and proposing a $2 wheat price, the government ought to guarantee $3 wheat next year and fix this year's price at $4," declared Louis W. Hill, president of the Great Northern railway, who attended the Spokane regional conference conducted by Assistant Secretary of Agriculture Pearson.

Mr. Hill made this statement to the Washington Farmer after he had addressed the conference, and in further conversation with a representative of the Farmer said:

"Even $4 or $5 wheat would add very little to the food costs of the average workingman. If the government wants a billion bushels of wheat in 1917 it must hold out extraordinary inducements to the farmers. After all, the American farmer is entitled to generous profits. He has not had his share of national prosperity. We ought to give it to him now. Instead of the government arbitrarily fixing the price at $2 this year, it ought to consider the laws of supply and demand, at least to a generous extent. Where do you think wheat would go this year if not for government action?

"Now what I am going to say next might not please some of the business men of the towns and cities, but it is true none the less. It takes a high degree of intelligence to succeed at farming—more intelligence and more hard work at weighing and solving problems than are necessary to succeed in the business world. Show me a successful farmer and I will show you a keen and intelligent mind.

"Patriotism is fine, and we demand it from all classes, but something more than patriotism is needed in this great work of increasing food production in the United tSates. The farmer must have his financial reward. Suppose we have two tables. On one you put a sack labeled $1.50 wheat, and with it an American flag. On the other you put only a sack labeled $3 wheat. At which table is the farmer going to take his seat?"

President Hill impressed his views on Assistant Secretary Pearson of the United States department of agriculture. The two met in the lobby of the Davenport hotel, just prior to the conference of agricultural experts gathered in Spokane from eight western states.

"Even with $3 wheat, there isn't enough labor in the country to run up this wheat acreage to the point the government wants," Mr. Hill told Dr. Pearson. "Wait and see."

"——but we have the assurance of representatives of nearly all the wheat-growing regions outside of this that the demand will be met," Dr. Pearson interjected. "Don't you consider that this sort of a difficulty can be overcome?"

"Well, we've been trying for 28 years to run up production," Mr. Hill said. "I'm sorry for Hoover if he has this job of increasing production."

"Mr. Hoover's job is that of conservation and of distribution, Mr. Hill," Dr. Pearson inserted again. "It's up to the department of agriculture to try and stimulate production."

"Well, whoever has it has a hard job," President Hill returned. "I'm not criticizing. But don't get any idea that you can appeal to the farmers' patriotism to accomplish results when it comes to fixing prices. He'll get out and fight for his country, all right, but when it comes to accepting a lower price for his wheat, he isn't there. Most humans aren't.

"The government ought to throw open these Indian reservations, and get them into use. We are feeding and supplying an army of Indians in this country, and it probably costs more to administer the supplies than it does to buy them.

"I've just been down through the Horse Heaven country, a place I'd never been in before. They have got an imemnse range there, with nothing but horses on it. If we need food, they ought to can them and ship the meat to Japan, and restock that range with cattle.

"There's planty of range in the mountains. The grass is long enough to mow on some slopes. I don't care what the sheepmen say, we ought not be killing the young females, for either lamb or veal. But open up the Indian reservations, and put the ground to work."

Interstate Fair

Record Crowd Marks the Opening

The Interstate fair at Spokane opened its doors for the 24th consecutive time Monday with a crowd that broke the first day's record since 1911. The paid admissions Monday were 15,495.

Everything, weather included, points to a successful fair at the time of opening. The displays are excellent, equal to those of former years, except where the unkindly drouth of the last two and a half months cut into the agricultural displays. But even in this department there are many features of especial interest and educational value.

Several strong exhibits are on display by various granges and farmers' union locals. The state college has a booth specially educational this year. The machinery, automobiles, tractors and trucks, live stock and the like are prominent. The boys' and girls' club work is ably portrayed. Women's work is featured.

All in all, it is believed that when the fair closes Saturday it will have proved to be one of the best, if not the best, ever given by the association.

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The Cost of Education

We note some interesting and enlightening items on the cost of the state college of Washington at Pullman. This institution is supported by the taxpayers of the state, and is a large, well financed and thoroughly equipped school. It educates a host of young men and women every year, and they go out from its portals stronger and better fitted for a battle with life.

If your taxes are $25 a year, the college costs you 22 1-2c. If your taxes are $100 a year, the college costs you 90c. Less than 1 per cent of the income of the state is spent on the college. Less than 3 per cent of the income of the state is spent for higher education.

After a visit through eastern states a few years ago, and a comparison of the rural communities with those of Washington, the writer has come to the conclusion that Washington and the northwest is in advance of the eastern and the central states when it comes to a regard for education.

In Washington it is not unusual to find a high school in a small place of perhaps a few hundred inhabitants. You will go a long way in the east before you find high schools in such small places. Perhaps they do not need them; but this is only typical of the attitude you will find in the country toward education. In the northwest it is prized and sought and cherished. It is valued. But once in a while you will find a man who does not regard it very highly, who thinks it "costs too much."

Shortening the Road

It seems almost certain that the government will shorten the road between producer and consumer, and that the producer will get a decent profit, while the consumer will pay less. It is necessary to allow the producer a fair profit, in order to stimulate production. It is necessary to reduce the cost of food to the masses of consumers, in order that they may live in comfort and bring up and educate their children. In order to do this it is only necessary to cut out a lot of food speculators who earn nothing, add nothing to the wealth of the country and grow to be wealthy on the labor of others. This is not confined to commission men entirely. Occasionally our own home merchants catch the spirit of speculation and charge too much for many of their goods. For instance, it is common in the apple growing sections of the northwest for grocers to buy of neighboring farmers apples at 75c to $1.00 per box, and sell them to their customers at $1.50 to $2.00.

A few years ago we bought tomatoes at 10c per pound of a grocer who bought them of the grower for two and one-half cents. Of course tomatoes are perishable and must be moved quickly, but not so with apples in general.

Consider what the producer contributes to a box of apples. He owns the land on which he pays interest, or, if not, that has an interest value. He pays taxes, keeps up repairs, plants an orchard, waits for it come into bearing, prunes, sprays, irrigates, cultivates, thins fruit, picks, packs, buys boxes and paper, hauls to town, and so on. Now, is it reasonable that he should only get as much as the merchant who simply buys and sells?

GRANVILLE LOWTHER.

"She Flies With Her Own Wings"

The problem of financing farmers unable to buy seed grain for the 1918 harvest precipitated a lively discussion at the Spokane conference of agricultural experts, bankers and others last week. Bankers present from North Dakota and Montana wanted to "pass the buck" to Uncle Sam or the state legislatures, but expressions from bankers of other states indicated a pretty confident belief that the community interests that benefit from the farming industries were able and willing to take care of local needs in that respect.

One of the delegates thought government action should be taken under the food control law, but Assistant Secretary Pearson of the U. S. department of agriculture reminded the conference that this law only authorizes government sale of seed for cash.

The conference refused to adopt a resolution proposed by a Montana banker asking for government relief in the purchase and sale of seed to such farmers as could not get local credit.

When the pioneers settled old Oregon nearly three-quarters of a century ago, they took for their motto a Latin maxim translatable thus: "She flies with her own wings." It was eloquently expressive of the high spirit of independence that animated the people of the Pacific northwest. Out of old Oregon, the mother state, have sprung Washington, Idaho and a portion of Montana. It is a region rich in natural resources and abounding in created wealth, and the men and women who have prospered here should regard it as a patriotic privilege to finance such agricultural products as may need a temporary helping hand in their willing response to their country's call for increased production of food.

Proof of the Farmers' Loyalty.

The August crop forecast of the United States department of agriculture shows conclusively that the American farmers have responded right loyally to the president's appeal for increased production of foodstuffs.

The United States harvested last year 4,703,000,000 bushels of cereals. But the cereal harvest this year, if the August forecast of the department of agriculture holds true, will be 5,559,000,000 bushels. Detailed comparisons are as follows:

	1916.	1917.
Wheat	640,000,000	653,000,000
Corn 2,583,000,000		3,191,000,000
Oats 1,252,000,000		1,456,000,000
Barley	181,000,000	203,000,000
Rye	47,000,000	56,000,000
Totals 4,703,000,000		5,559,000,000

In other words, this year's cereal harvest bids fair to exceed that of last year by 746,000,000 bushels, and the five-year average, 1911-15, by more than 500,000,000 bushels.

All of these cereals can be made into nutritious breadstuffs, and the 746,000,000 bushel increase is more than sufficient in itself to feed all the people of Great Britain and France for a year.

These figures will carry consternation to the minds of the kaiser and all his junker lieutenants, for their unmistakable meaning is that out of our abundance we shall have a great surplus for our allies. In spite of German submarines we shall find ways to transport that surplus to our friends across the sea. In scores of American yards ships are now building to help carry America's surplus grain to the allies, and congress has laid on the president the bounden duty to make it certain that none of these precious breadstuffs shall find their way into Germany.

Washington Gleanings

Okanogan county proposes to spend more than $100,000 on its highways next season.

Wenatchee orchardists are making surveys against car shortage, labor shortage and storage facilities.

Irving West of Colfax has sold 337 acres to Joseph Faires of Endicott for $34,500. The land lies three miles east of Colfax.

S. J. Simonson, manager of the Cascade Creamery company at North Yakima, announces plans for establishing a milk condensery.

Some of the larger farmers of Klickitat county are installing farm elevator plants with bins having a capacity up to 5000 bushels with lifts operated by a gasoline engine.

The first big food contract for the American Lake cantonment was awarded in Seattle recently when the government placed an order for 3,000,000 pounds of potatoes with commission merchants there.

During the last few weeks over 200 Seattle professional and business men, together with many women, left for eastern Washington, where they will spend their vacations in aiding in the harvesting of crops.

The official statement of the cost for the Benton extension of the Sunnyside project, received at the reclamation office in North Yakima, shows a total of $349,460, or $70,000 less than the original estimates.

One hundred dollars in extra prize money will be awarded at the Whatcom County fair this year, as a part of the program of the Bellingham Chamber of Commerce to encourage the farming industry of Whatcom county.

Northwestern Washington, including King, Pierce, Kitsap and the other northwest counties, will produce about 400 cars of apples, 80 of pears, 40 of prunes, six of peaches, beside the cherry crop, which totals about 130 carloads.

The Wahkiakum county commissioners have made and entered an order establishing a new diking district composed of all the land on Puget island, enclosed by what is known as the Brown dike in the west end of the island.

The first shipment of fruit and vegetables for troop A, now stationed at Camp Lewis, was carried across the mountains by express to American Lake recently, a message of remembrance from Ellensburg farmers and Elks' lodge, which paid the freight.

The Yakima valley beet crop promises a better yield than crops in Idaho and Utah, according to Mark Austin, agriculturist for the Utah-Idaho Sugar company, who is in the valley for an inspection of crop conditions to report to the headquarters of the company at Salt Lake.

Joe Devan, one of the best-known sheepmen of the Walla Walla country, and J. M. Davis of Benge, an extensive sheep operator of that district, have consummated sheep ranch deals recently involving 20,000 acres of Walla Walla and Adams county land, valued at approximately $180,000.

Apple growers in the White Salmon valley of western Klickitat county and the Underwood district of Skamania county will have a market this season for all of their cider and cooking apples brought about by the leasing of the White Salmon fruit cannery plant to the Hood River Valley Produce company, which will install machinery for making cider.

What Others Say

Green's Fruit Grower: If you sit down a mere philosopher you will rise almost an atheist.

Hoard's Dairyman: When milk sells for 12 cents a quart it is cheaper food than beef at 30 cents a pound.

Farmers' Mail and Breeze: The time to begin to educate men away from war is now when the nations are war-weary.

The National Wool Grower: The tick remains not because its eradication can not be accomplished, but because some of you are not sick enough of its presence.

Successful Farming: If every town and city would cooperate with the farmers in a campaign against rats millions of dollars' worth of food products would be saved for human consumption.

Labor Holds Council

Would Unite in National Democracy

One of the most significant gatherings in America since the beginning of the war marked this week when, on Tuesday, representatives of labor from all parts of the nation met in Minneapolis in a "conference of American Alliance for Labor and Democracy." The coordination of all interests in behalf of the country was the object of the meeting. The greatest national labor leaders and others prominent in public life were present. President Wilson was invited to address the meeting, but was unable to do so, though he sent a warm message approving the objects of the meeting.

Union Labor and I. W. W.

The labor committee of the Washington state council of defense, a committee consisting entirely of labor union officials, has been in Spokane looking into the causes and conditions surrounding the arrest of I. W. W. leaders, as well as the action of the Spokane Central Labor council in denouncing those military arrests as an "outrage." The committee reports that "in view of the fact that the I. W. W. had openly defied the governor of the state * * * the committee believes the governor of this state acted honestly and fearlessly in meeting the situation and is deserving of no word of criticism or censure."

The committee adds: "We believe the I. W. W. philosophies to be founded on utter fallacy. We believe its tactics to be destructive and productive of no lasting good to labor. No movement founded on utter hatred and contempt of all things and all men not subscribing in toto to its fantastic doctrines, un-American, illegitimate, and without the pale of society's respect. We disapprove absolutely of this organization's teachings and its practices. We believe the trade union movement has everything to lose and nothing to gain through identification through actual support or by inference with the I. W. W."

Pause in Heavy Fighting.

There has been somewhat of a pause in the big campaigns now in progress by the allied armies, while the Italians are displaying an activity more pronounced on the Austrian frontier than either General Petain for the French or General Haig for the British, in their respective fields of Verdun and in the Arras-Flanders areas. Although the British armies on the Franco-Belgian front were engaged in much notably heavy fighting during August, including the great attack of the Anglo-French forces in Flanders, the casualties were notably less than during July. The British figures for August total 59,811, as compared with 71,832 for July, a falling off of more than 12,000. The casualties have been on a descending scale during the entire period since the active campaigning season opened, the high mark being set in the May figures, which totalled 112,233.

Riga Has Fallen.

The port of Riga, situated on the Baltic sea, has fallen before the relentless attacks of the Germans. It was the Baltic outlet for Russia, being at the head of the railroad direct to Petrograd, the Russian capital. This is not taken to mean any immediate danger to Petrograd, however.

War Bonds of $21,000,000,000.

Two billion dollars may be added to the total of bonds to be authorized at the present session of congress, making a total of approximately $31,000,000,000 available to the government during the fiscal year ending June 30, 1918.

It is now expected that the next Liberty loan campaign will open October 1 and close November 1. The next offer will approximate $3,000,000,000.

Voting on the war profit section of the war tax bill was begun in the senate Saturday.

Moscow Conference.

Premier Kerensky of Russia declares that the Moscow conference will have a lasting effect upon the Russian nation and the conduct of the war will be speeded up. The premier adds that the conference was called in order to get acquainted as fully as possible with the opinions, tendencies and needs of the country, to tell the representatives of all classes, races and creeds the truth concerning the crisis through which Russia is passing and to impress the entire nation with the necessity for united effort for the defense of the country and for securing liberty for the Russian people.

"I am sure," the premier said, "that the truth learned by the whole nation at the conference will not fade away. On the contrary, it will have an effect for a long time to come and will burn in an ever-increasing flame. The conduct of the war and the struggle against our enemies will gain greatly."

Homemade Liquor.

That the manufacture of liquor for private use in one's home is illegal under the state-wide prohibition law of Washington, known as initiative measure No. 3, is the ruling of the state supreme court.

Liquor Imports to Stop.

All distilled spirits will be refused entry into the United States after midnight of Seyptember 9, according to orders issued by the treasury department. Not only will entry be refused, but the spirits will be seized and the case reported to the United States district attorney. Also after this date, no food, fruits, food materials or feed shall be used for the purpose of making beverages.

Exemption of Farmers.

In disapproving the proposal by Representative Shouse of Kansas, that all men engaged in agricultural pursuits last March be exempted from military service, President Wilson writes to the congressman that a class exemption would lead to "many difficulties and to much heartburning." Adding that "the matter of leaving the farmers on the farms has been given the most careful and sympathetic attention by the war department."

No Third Term.

In an interview regarding the work of the state board of equalization, Governor Moses Alexander of Idaho declared:

"My term will epire the first Monday in January, 1919, and I shall retire to private life with the highest regard for the consideration that I have received from coworkers in the cause of good government without which aid and assistance nothing could have been accomplished."

Waste of Feeding Stuffs.

A tremendous waste of feeding stuffs occurs annually on American farms, according to figures presented in this publication. In 1914 about 120 million tons of straw were produced in the United States. Of this amount 55 per cent was fed to live stock, 15 per cent was burned, 8 per cent sold, and 22 per cent plowed under or otherwise disposed of.

Poultry a Good War Crop.

Poultry has been called the crop that never fails. It offers one of the best ways of increasing food production on short notice. Pountry uses feed more economically probably than any other class of farm animals when it is carefully handled. It will produce a pound of meat or eggs on four pounds of grain when protein concentrates are fed. Pullets will begin laying in from 6 to 8 months. Cockerels are ready for market at the age of 12 to 16 weeks.

The above pointers are from the Missouri College of Agriculture.

Venison as a Food Resource.

The department of agriculture urges all persons to cooperate to secure the best possible protection of deer so as to get the maximum amount of venison as a source of meat. It is estimated that about 80,000 deer are killed legally in the United States each year. These produce nearly 10,000,00 pounds of venison.

More Stock on Forset Range.

District Forester, George H. Cecil, Portland, Ore., announces that the national forests of Oregon and Washington are furnishing grazing during the present summer for 177,167 head of cattle and horses belonging to 3269 ranchers, and 1,025,843 head of sheep, owned by 705 sheepmen. These figures show an increase of 462 cattlemen, with 19,478 head of cattle, and 48 sheepmen with 29,102 head of sheep above the numbers taken care of in 1916. This increase is due to the introduction of better methods of handling the stock.

Boys If you want to earn some dandy prizes by doing some easy work among your neighbors, write to the **Prize Editor of the Washington Farmer, Review building, Spokane, Wash.**

IDEAL heating makes a home out of a house



Put in AMERICAN Radiators and an IDEAL Boiler right away and have plenty of heat all winter with a great saving of fuel and labor. Not necessary to have basement or water pressure

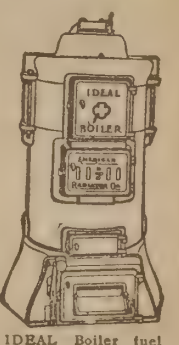
Any building *old* or *new*, in country or city, can be successfully heated with an IDEAL Boiler and AMERICAN Radiators. The economy of IDEAL heating outfits is known to all users. They cannot say enough about the great fuel savings, the splendid comfort, the lack of repairs, the little attention, the cleanliness, and the every-day good, solid service that they get from their IDEAL Boiler and AMERICAN Radiators. They have made *homes* out of their *houses*.

AMERICAN RADIATORS & IDEAL BOILERS

Especially this year you should choose an IDEAL heating outfit for its *great fuel saving features.*

***Any fuel anywhere* can be burned with greatest heating results.**

The IDEAL heating outfit will last forever. We have never heard of one wearing out. Repair bills are unknown and the attention is so slight for getting plenty of heat day and night that you will wonder why you do not have to look after it more than once a day.



IDEAL Boiler fuel pots mix the air and coal gases as in a modern gas mantle, extracting ALL the heat from the fuel.

Save fuel this year with IDEAL heating

If everyone would use IDEAL Boilers in their homes, we would have no high priced fuel question. You can burn the low priced fuels of any localities and IDEAL Boilers and AMERICAN Radiators are such great savers of fuel that you will soon save the first cost of the outfit.

Phone or call on your heating dealer today and get estimate for putting in an IDEAL heating outfit.

Send for this book (free)

Write today for copy of "Ideal Heating." We want you to read this book through, for it gives you the truth about the heating question and shows why we want you to have IDEAL heating to change your house into a *home*.

Sold by all dealers. No exclusive agents

AMERICAN RADIATOR COMPANY

Write to Department F 24 Chicago

Feed the Fighters! Win the War!

Harvest the Crops! Save the Yields!

On the battlefields of France and Flanders the United States boys and the Canadian boys are fighting side by side to win for the World the freedom that Prussianism would destroy.

While doing this they must be fed and every ounce of muscle that can be requisitioned must go into use to save this year's crop. A short harvest period requires the combined forces of the two countries in team work, such as the soldier boys in France and Flanders are demonstrating.

THE COMBINED FIGHTERS IN FRANCE AND FLANDERS AND THE COMBINED HARVESTERS IN AMERICA WILL BRING THE ALLIED VICTORY NEARER.

A reciprocal arrangement for the use of farm workers has been perfected between the Department of the Interior of Canada and the Departments of Labor and Agriculture of the United States, under which it is proposed to permit the harvesters that are now engaged in the wheat fields of Oklahoma, Kansas, Iowa, North Dakota, South Dakota, Nebraska, Minnesota and Wisconsin to move over into Canada, with the privilege of later returning to the United States when the crops in the United States have been conserved, and help to save the enormous crops in Canada which by that time will be ready for harvesting.

HELP YOUR CANADIAN NEIGHBORS WHEN YOUR OWN CROP IS HARVESTED.
Canada wants 40,000 Harvest Hands to take care of its
13 Million Acre Wheat Field.

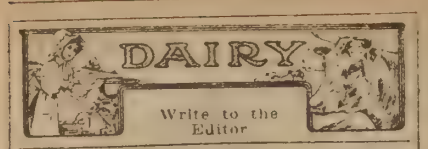
One cent a mile railway fare from the International Boundary line to destination and the same rate returning to the International Boundary. High wages, good board, comfortable lodgings.

An Identification Card issued at the boundary by a Canadian Immigration Officer will guarantee no trouble in returning to the United States.

AS SOON AS YOUR OWN HARVEST IS SAVED, move northward and assist your Canadian neighbor in harvesting his; in this way do your bit in helping "Win the War."

For particulars as to routes, identification cards and place where employment may be had, apply to Superintendent of Immigration, Ottawa, Canada, or to

J. N. GRIEVE, Cor. First and Post Sts., Spokane, Wash.
Canadian Government Agent.



A. B. NYSTROM, Editorial Contributor

REASONS FOR TESTING.
Jefferson Association Ends Year.

The five reasons given by O. E. Leonard, tester for the Jefferson County (Wash.) Cow-Testing association, why testing should be practiced by all dairymen should be considered by every owner of dairy stock.

The Jefferson county association recently completed its first year's work. All conditions considered, the association was a success and the cows entered made a very creditable showing in comparison with other cows in the state.

During the year a total of 654 cows were tested; of these 26 were sold to other herds, 52 were sold for beef, 4 died, 119 were withdrawn from test and 144 were entered after the year's work began, leaving 309 cows of which there is a complete yearly record.

Cows Show Strong Records.

Of the 309 cows entered for the 12 months 20 produced over 400 pounds of butterfat; 96, or 31 per cent of the cows produced over 300 pounds of butterfat and 176, or 57 per cent produced over 250 pounds of butterfat.

The average of all cows having 12-month records, was 6993 pounds of milk containing 278.55 pounds of butterfat.

The champion cow in the association was a graded Holstein, owned by H. L. Hansen. She produced 16,161 pounds of milk and 574.34 pounds of butterfat in the year.

The high herd honors for both butterfat and milk goes to George Hendricks. His herd of purebred and grade Holsteins produced an average of 11,028 pounds of milk and 392.50 pounds of fat, at a food cost of 16 cents for each pound of fat produced.

High and Low Production Compared.

Comparisons of high and low production shows clearly the economy of good cows; 10 cows with the average of the best herd would produce as much butter in a year as 23 cows having the average of the poorest herd. And as for net profit over feed cost, it would take 35 cows of the poor herd average to make the net profit of 10 cows with the average of the best herd. Owners of both herds were selling cream at the same price per pound.

The association has been reorganized for another year with increased interest and enthusiasm. The farmers are finding the association of much value to them.

1. The records show the cost of producing milk and butterfat from each cow in herd.
2. Calves can be selected from the best cows.
3. Value of the herd sire is shown by comparing his daughters with their dams.
4. Results from different methods of feeding are shown by the records.
5. Cows need not be kept for the pleasure of their company—unprofitable cows are soon detected and may be disposed of.

Oregon Dairymen's League.

The committee of the Oregon Dairymen's league held its meeting in Portland, August 27, as scheduled. This committee, it will be remembered, was selected at a meeting called to devise ways and means if possible, to meet the conditions that confront the dairy industry—higher cost of feed, labor and everything necessary for the dairy, without a corresponding increase to the producers in the price of dairy products, especially market milk.

At the committee meeting the plans under which the New York Dairymen's league is operating was read and reports from other dairymen's associations, organized for the same purpose, was read. From these in the very near future a plan that can be operated under the laws of Oregon and that will give the dairyman some voice in the price of his products will be evolved. In fact, it is already pretty well worked out and as soon as completed the committee will ask a good number of the leading dairymen of the region to meet with them and give it their indorsement. This being accomplished, a general meeting will be called and comprehensive organization attempted. While it takes time to get reports and make plans to fit our western conditions, the committee is hard at work and the dairymen and public will be kept apprised of whatever they accomplish or attempt.

Montesano Cow Testing.

The July report of the Montesano Cow-Testing association in western Washington contains a list of 27 cows, a greater number of cows in the 50-pound list than any month so far during this year of the association. Three of the cows produced over 70 pounds of butterfat, the high cow being a purebred Jersey belonging to J. R. Martin, producing 73.1 pounds of butterfat. The other two purebred Jerseys producing 70 pounds belong to E. L. Brewer.

There were 337 cows tested during the month which average 788 pounds milk, 3251 pounds of butterfat, at a feed cost of $2.76 per cow. Some of the individual herds of the association did very well. The herd of J. R. Martin averaged 51.02 pounds of butterfat and 1151 pounds of milk. Mr. Martin is a very careful feeder and gives his cows good care all the year round, as his high averages for the year would indicate.

The 1917 Dairy Cattle Congress.

The dairy cattle congress, which will be held at Waterloo, Iowa, October 1 to 7 inclusive, will undoubtedly surpass all previous shows because its purpose is in direct line with the extensive food conservation campaign now being conducted by the government. Arrangements are under way to give a practical demonstration of every important phase of dairying and emphasize the magnitude of the industry. The Iowa State Dairy association will again hold its interesting sessions on the grounds. Special emphasis will be placed on the dairy product exhibits consisting of butter, cheese and market milk.

Makes Record of 70 Pounds.

Ormsby Hemgewold, a 4-year-old cow belonging to E. B. Marks, heads the list of the high producing cows in the Ahtanum Wide Hollow Cow-Testing association for the month of July, according to the report of Roy Larsen, the official tester. She has the record of 70 pounds of butterfat for the month.

Adds to Dairy Herd.

Andrew Townsend of Oakland, Ore., recently purchased eleven head of Jerseys from F. L. Calkins of Roseburg, Ore Mr. Calkins has used a bull of Sweet breeding and a Flying Fox bull and has a very creditable little herd. Mr. Townsend got considerable of the foundation herd, besides some young stock, and has a start that should make him a fine herd of Jerseys.

THICK, SWOLLEN GLANDS

that make a horse Wheeze, Roar, have Thick Wind or Choke-down, can be reduced with



ABSORBINE

also other Bunches or Swellings. No blister, no hair gone, and horse kept at work. Economical—only a few drops required at an application. $2 per bottle delivered. Book 3 M free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Cysts, Wens, Painful, Swollen Veins and Ulcers. $1 and $2 a bottle at dealers or delivered. Book "Evidence" free.
W. F. YOUNG, P.D.F., 371 Temple St., Springfield, Mass.



Hides, Fur, Wool, Horse Hair, Metal and Rubber. We are the largest dealers in the Inland Empire. Highest markets paid. Prompt returns. Deal with a home firm.
Write for price list and shipping tags. Address Dept. L.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
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STEVENS COUNTY
Logged Off Lands
Low Prices.
Long Terms.
Phoenix Lumber Co.
Spokane, Wash., Dept. A.

Tractor Tests
Conducted at Fremont, Neb.

July 26 to August 2, 1917, by the Agricultural Engineering Department of the University of Nebraska

Prof. L. W. Chase in Charge

A series of interesting tractor tests have just been made. Every farmer may now know facts.

The object of the experiments was to determine under actual farm conditions the amount of fuel required and the rate of doing various field operations, and to study the quality of the work done. Also the effect of different depths of plowing in the same field.

The tests were not of a competitive nature, but were made with the object in view of observing tractors in actual farm work so that all farmers might have actual figures.

The tests were made with Case tractors operating standard farm equipment, under the auspices of the Department of Agricultural Engineering of the University of Nebraska, directed by Prof. L. W. Chase, assisted by Prof. O. W. Sjogren, Mr. Louis Runnels and Mr. Ray W. Carpenter.

For Free Distribution

A bulletin has just been published covering twelve tests. This is the first authoritative statement of its kind.

It shows the equipment used, the kind of fields, the different operations. Of chief interest to all farmers is the fuel consumption and cost per acre. Much of this information has hitherto been speculative. Now it is down in black and white. It shows the advantages of Case tractors.

Some of the Data

Each test is complete. Different size tractors are used. Some tests are for plowing at different depths. Some are for spike-tooth harrowing and disking, drilling, etc.

Kerosene was used, and based on a cost of 8½ cents per gallon, the cost per acre for plowing under different conditions and depths is shown. These are exact figures—not estimates. The temperature was 100 degrees in the shade—but the heat, however, had no effect on the operation of the tractors in any way.

Send for Your Copy

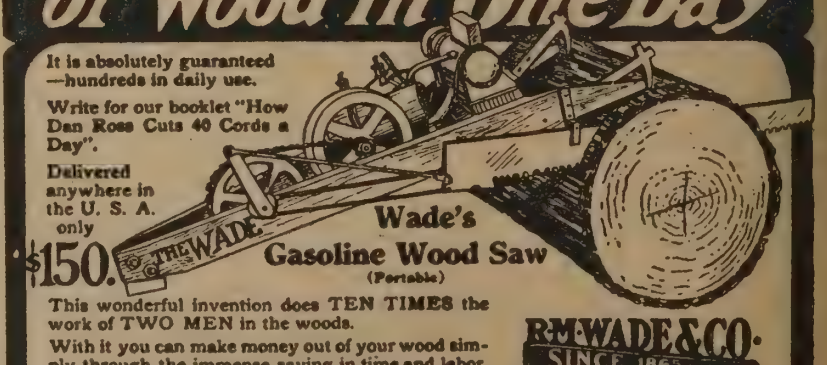
This bulletin created a sensation at the Fremont Tractor Demonstration. All farmers have been waiting for conclusive figures. Case, the leader for 76 years in power farming, now sets a new pace. No farmer should fail to get this bulletin.

Copies are free. Merely send us your name and address, asking for "The Tractor Tests Bulletin," and a copy will be forwarded at once—without charge. The first edition is just off the press. So don't delay—write today.

J. I. Case Threshing Machine Company, Inc.
FOUNDED 1842
626 Erie Street, Racine, Wis.

CASE

This Saw Cuts 25 Cords of Wood in One Day



It is absolutely guaranteed —hundreds in daily use.

Write for our booklet "How Dan Ross Cuts 40 Cords a Day".

Delivered anywhere in the U. S. A. only

$150.

Wade's Gasoline Wood Saw
(Portable)

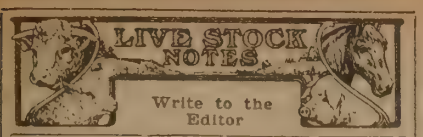
This wonderful invention does TEN TIMES the work of TWO MEN in the woods.

With it you can make money out of your wood simply through the immense saving in time and labor. One man can handle it on a log and two can move it from log to log. Will cut a 40 inch log in five minutes. Write us today.

R. M. WADE & CO.
SINCE 1865

354 Hawthorne Ave., Portland, Ore. 910 N. Howard st., Spokane, Wash.

In answering advertisements please mention this paper.



E. J. IDDINGS, Editorial Contributor

American Royal Stock Show.

The annual American Royal Live Stock show will be held at Kansas City, Mo., October 1 to 6, inclusive. On account of the prevailing high price of beef cattle, unusual interest is taken in the raising of beef cattle, and herds of the four leading beef breeds of America, namely, Herefords, Shorthorns, Aberdeen-Angus and Galloways, will be represented at the American Royal this year from all quarters of the United States. There will be a horse show several nights and space also has been provided for a poultry show.

Herds and Flocks of Europe.

It is estimated that the herds and flocks of Europe have been reduced during the present war by 28,000,000 cattle, 54,000,000 sheep and 32,000,000 hogs. This reduction will increase, too. The future of our live stock industry looms large.

Veterinary

Dr. S. B. Nelson

Rubs Hair Off—I have a mare that each summer rubs off her tail hair and mane. She has no lice. Also, what is best remedy for inflamed and caked udder? H. L., Goshen, Wash.

Answer—Try washing the root of the tail with a one to one-thousand solution of corrosive sublimate. You may also find some benefit from taking a rag dipped in kerosene and rubbing the under side of the tail and the parts about the tail with that. Give this treatment each day or every other day. Do not get too much kerosene on the rag so as to blister the parts to which it is applied. Regarding your cow with the inflamed udder, I would advise the following treatment: First, I must suggest that the treatment of mammitis is a serious matter, and takes considerable time on the part of some one, owner or employer.

It requires the frequent bathing of the udder with hot water, in which has been dissolved a handful of common salt. This pailful of water should be as hot as possible without burning the animal. Wash the udder until the water is cool, then rub dry and apply a little of the following liniment: Fluid extract of bella donna, two ounces. Fluid extract of phytolacca, two ounces. Then massage. The application of this medicine should not be severe. In bad cases it is advisable to give from a teaspoonful to a tablespoonful of the fluid extract of phytolacca morning and evening.

Sometimes it becomes necessary to poultice the udder. Take about five yards of 7c to 9c unbleached muslin, tear the ends into strips, and tie these over the loins, so that the udder is supported in this bandage. Cut four holes where the teats of the udder should come through. Now fill in the poultice made of dried hop leaves. The leaves should first be pulled apart, then soak with hot water; in order to keep the poultice hot, I have found that a Chinese hand warmer is very fine. This is a small tin box, in which tinders made of charcoal, rags, etc., may be burned, and which when wrapped up in a piece of cloth and placed in the poultice, so as not to burn the cow, will keep the poultice warm from two to three hours.

Frequently it is advisable to give the animal at the beginning of the treatment one pound of Epsom salts in about two gallons of water.

Twin Heifer Calves.—I have twin heifer calves and am told not to keep them as they will not bring calves.
W. O. N., Taylor, Wash.

Answer: There is a general belief that twin calves—twin heifer calves or one male and one female—that the heifer calves will not breed. There are quite a number of instances on record where they have bred and brought calves. There occurred at Colfax some years ago an instance, of which very careful record was kept, in which there was four generations of twin calves and they all—all of the heifer calves—bred and brought twin calves. It happens sometimes that the twin heifer calves with the bull calves, generally known as freemartins, do not breed. But if you have good stock, I would advise you to keep them and try to breed them.

Cow's Teats Close—I had a cow last winter that I was milking. One of her teats began to close up until I could not milk it. Of course, it got sore. I got a milking tube and used it a while, but the teat closed entirely and her milk got slimy. Then another one of her teats closed up, and in a few days the other two did also. One teat of another one of my milch cows is closed so I can not milk it. What disease is it, and is there a cure?
C. E. G., Creston, Wash.

Answer—The chances are that the first cow had an injury which caused the teat to close up. It may also have gotten an infection. I would advise that you, for some time, wash all of your cows' udders and teats with a 2 per cent creolin solution before and after milking. The trouble with your first cow was that you carried the infection into the first quarter and then later from the first quarter to all the rest of them. Now, if you want to keep the first teat open, use the following: First dip the teat in ticture of iodine; then, before this, having bought at the drug store the largest violin catgut that you could buy, tie a knot in the end of it; cut off two inches then and dip that thoroughly into 10 per cent carbolic acid solution, after which slip the catgut up into the teat, which, as before stated, has been dipped in tincture of iodine, and leave it there until the following milking. The heat and moisture from the teat will cause the catgut to swell and open the teat.

Lame Horse.—We have a horse that is real lame in one front foot and stiff when starting out. Sometimes it is not as bad as others. Sometimes it will set the toe down first and stumble. It sets that foot ahead of the other when standing. What is the cause? And what can I do to cure it?
Mrs. A. J. A., Sedro-Woolley, Wash.

Answer—The fact that your horse sets his foot out in front when standing would indicate his trouble is in the foot. Likewise that he sometimes steps on his toe when starting would indicate that the trouble is in the back part of the foot. It may, therefore, be one of three troubles. In the disease known as sidebones the lateral cartilage has hardened and become bone. There is only one remedy, and that is to enlarge the hoof by rasping it quite through and then oil the hoof at the hair line night and morning with equal parts of lard and tar. The other troubles might be a sore tendon or a disease of the navicular or coffin bone. I could not give you a general treatment for either one of these two troubles. You would require the services of your veterinarian.

Punishment by Pillory.

The term "stocks," as an instrument of punishment, is applied to the authorized version of the Bible to two different articles, one of which answers rather to the pillory. The other answers to the stocks, the feet alone being confined in it.

CUTTER'S
BLACKLEG PILLS
"California's Favorite" for nearly 20 years
For the Prevention of Blackleg in calves and young cattle

Their superiority is due to nearly 20 years of specializing in "Vaccines and Serums only."
Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.
Single Pills may be used for ordinary and range stock.
Double Pills should be used for pure bred and high grade stock.
Use any Injector, but Cutter's simplest and strongest.
Prices:
10 dose pkge. Single pills $1.00
50 dose pkge. Single pills 4.00
10 dose pkge. Double Pills 1.50
50 dose pkge. Double Pills 6.00
Cutter's Pill Injector.... 1.50
Insist on Cutter's. If unobtainable, order direct.
Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.
The Cutter Laboratory, Berkeley, Calif.
The Cutter Laboratory of Illinois, Chicago
Eastern Agent

Jerseys for Net Profits



You're in the dairy business for profit—the *net* profit that your herd has made you at the end of the year will determine the size of your bank account. Jerseys yield the largest returns from every ounce of feed—proved by tests at two great expositions. Jersey milk averages 5.3% butter fat, 9.1% solids not fat—highest of all breeds. Buy a Jersey bull. Write the breeders advertised below for prices, pedigrees, etc.



The American Jersey Cattle Club, 324 West 23rd Street, New York City

Jersey Isle Stock Ranch
Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castilian Lady 26628 made 603.3 lbs. fat (715.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.
C. E. LONG, Buhl, Idaho.

Waikiki Farm
Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.
IRA P. WHITNEY, Manager.
ROUTE 7, SPOKANE, WASH.

Two Choice Bull Calves
From cows with official records of 914 and 663 lbs. butter in a year. Prices in proportion to production and quality.
ED CARY. P. O. Carlton, Oregon.
Station, Lafayette, Ore.

MEET ME AT THE FAIR
where I will show a few bull calves from some of my best cows. For 8 months my herd has had highest average in Marion County Cow Testing association. For 8 months the whole herd averaged almost 60 lbs. of fat per month, per cow.
F. A. DOERFLER, Silverton, Ore.

Pearl Riga 206648
dropped bull calf July 10, 1917. Her record 458 lbs. butter in 297 days. Sire, Upright's Chief, sire of 6 in R. of M.; half bro. to Golden Glows Chief, sire of 31. Calf's sire, Dominus, out of 817-lb. cow and by bull out of 853-lb. cow. $75 if taken soon.
JOHN B. STUMP & SON, Monmouth, Ore.

$100 to $250
Young Jersey bulls, ready for service, sired by St. Mawes Golden Poppy, whose dam has official record of 1120 lbs. butter in a year. Some out of Register of Merit dams, priced according to quality of dam.
M. H. JONES, Perrydale, Ore.

1120 Pounds of Butter in a Year
by St. Mawes Poppy is the sixth highest official record of a Jersey cow in the world. She is dam of my herd bull, and his first heifers in milk are heavy producers. Write for prices on young bulls by him out of register of merit dams.
F. E. LYNN. Perrydale, Ore.

Bull Calf, 8 Months Old
Dam — 10,851 pounds milk, 710.38 pounds butter in 365 days, at three years and eight months.
Sire's dam—535 pounds 5 ounces butter in 365 days.
H. THIESSEN & SON, Milwaukie, Ore.

Every Cow a Record
Fifty per cent of our cows that have dropped more than one calf have records above 700 lbs. butter, 85 per cent fat. Golden Glow's Chief and Adelaide of Beechlands blood predominates. Special prices on bull calves under 9 months old.
LADD FARM. Oswego, Ore.

Bull From Gold Medal Dam
Out of Brown Bessie Alphena's Gem, 827 lbs. butter in year. Sire, Engineer's Bluster, whose dam, Mabel's Bluster, once held world's record for 3-year-old production. His first daughter on test, in this herd, beginning under 2 years old, will make over 500 lbs. butter. Other bulls from Register of Merit dams.
N. H. SMITH, R. D. 2, Oregon City, Ore.

Green Meadows Farm
Jerseys
Young bull out of dam on official test making good record. Sire a grandson of Goldon Glow's Chief, out of dam with official test of over 700 lbs. butter in a year. Other bull calves from register of merit dams. Also cows and heifers.
HENRY STEWART, Prop., Albany, Ore.

Ashburn Farm
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Offering of the great butter sire Valentine's Ashburn Baronet, from dams carrying the blood of St. Mawes and Golden Glow's Chief. Real foundation heifer calves for sale.
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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

Poultry Judges Judged

At a recent meeting of poultrymen at the Ontario Agricultural college there were 22 Canadian poultry judges that were put through a judging test. The results of the test are published in the Canadian Poultry Journal. The variations were very striking, so much so that Professor Graham remarked after the judging was completed that: "You judges have about all the possible placings there could be on these five birds." In one class of five Buff Orpingtons, for example, just 12 of the 22 judges agreed on the bird that should be given first place. That would be about 50 per cent perfect judging. Twelve of the 22 judges agreed that bird 2 should be placed first, while in the case of the bird that received the most votes for second place, only seven agreed that it should be second, about 31 per cent perfect. Each of the five birds was placed first by one or more of the judges, and the same was true of the second place.

Poultry judges are evidently not infallible. I don't wish to slur the judges. They are doing the best they can. If there is anything wrong, it is in the system, not the judge, usually. In the first place the poultry judge has more than a hundred breeds and varieties to pass upon, and when it is understood how many and various are the points in each variety that he has to pass upon we need not be surprised if he is only 50 per cent perfect. Not many of them can become expert in so many breeds.

But the chief difficulty is in the system itself or the standard of perfection which judges follow. The standard is loaded down with too many immaterial points, too many for the judge to master. A great many of them could be cut out of the standard without sacrificing either beauty or utility. If judging can be only 50 per cent perfect that means that the balance is 50 per cent lottery or chance. This may be some comfort to the fellow at the next poultry show whose birds do not get a first prize.

J. D.

Judging Hens

In a yard are four hens, one lays 175 eggs per year, another 154 eggs, another 125 eggs and the fourth hen but 60 eggs in the same time. An expert passing this yard is able to pick out the best layer and the poorest layer of the four hens. What physical characteristics does he look for in the good layer and what are missing in the poor layer? I am well aware that there is but one real sure way of determining this, viz., the trap nest. That is all right if one is in a position to handle trap nests, but if you want to buy hens you are not then in a position to use a trap nest. Therefore if you do not know how to choose a good layer it is a gamble. I think this would be very valuable information.

T. J. M., Lake Bay, Wash.

It is not always possible to pick out the best and the poorest layers in the flock by external or physical characteristics. The best experts fail in this very often. Type is not very well correlated to egg production in the fowl. It is possible, however, for the expert who handles his fowls and closely observes them to get a good line on which are the best and the poorest if they are all of the same breed and same age. Before the end of the year, if he has been observant he should be able to tell, on the average, what are the poor producers.

The poor layer will quit laying and molt earlier than the good layer. Those that do not molt before the first of October and continue laying up to that time are usually good layers and should be kept over.

It has been found, also, that if the hens are of a yellow-legged breed, at the end of the laying year, or before, the good layers will have lost more of the yellow in the legs than the poor layers. The hen is drawing upon the yellow coloring matter for the making of the egg yolk. The same thing happens with the yellow color in the earlobe. A hen that starts the laying year with yellow earlobes will, at the end of the year, if she has been a good layer, have pale or white earlobes. These two tests, of course, apply only to breeds that have naturally yellow legs and earlobes.

If the correspondent wishes to purchase a flock of year-old hens at about the end of the laying year, say in October, he should select those preferably that have not finished the molt and discard those that are through with the molt and have a new coat of feathers. The slick, well-feathered hens at that time have been the poorest layers and will be poor layers in subsequent years because it has been well demonstrated that the best layers in the first year are, on the average, the best layers in subsequent years. This test, however, will not be very accurate if the flock from which the selections are made have not all had the same feed and care during the year.

Old hens, of course, are poor layers, on the average, and it is a safe plan to discard all that have been through two laying years. It may pay to keep some of them another year if the above test can be carefully made; otherwise they should be killed off at the end of the second year.

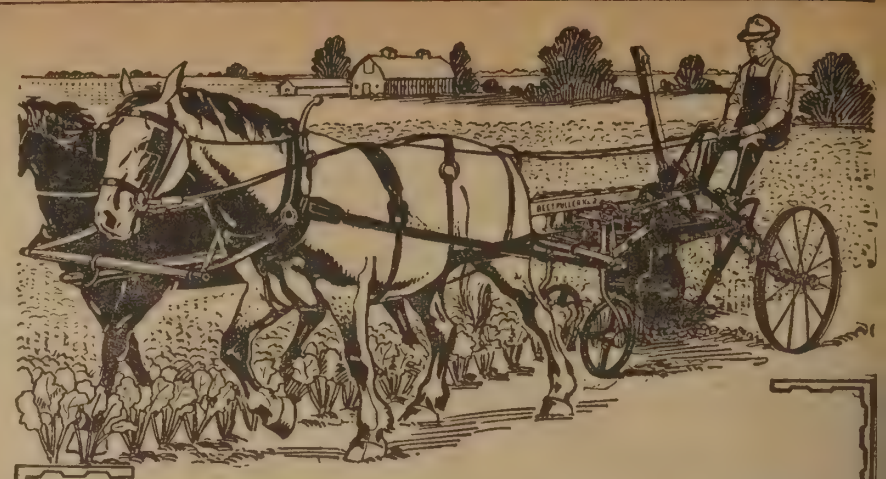
These tests apply to hens that have been kept a year. It is another thing to make a selection at the beginning of the year, or before the pullets have been laying or shortly after laying. A very accurate test, however, can be made of the pullets. The principle is this: Good layers come to laying maturity early. It may take the poorest layers two or three months longer to reach laying maturity than the good layers. I have found this to be true in the great majority of cases at the Oregon station. To make this test the pullets should be of about the same age and of the same breed. We have found that pullets that lay at 200 days of age, say six months, on the average lay 200 eggs in the year. Those that do not lay till 300 days of age are poor layers and should be marketed at once. If Leghorns or the smaller breeds, under good care, do not lay at eight months of age they should be killed off and save feed. The trapnest is the best way to tell which are laying, but in the absence of trapnests laying will be evident by bright comb and wattles, soft or flexible abdomen, good width between the pelvic bones and good depth between the pelvic bones and keel bone.

There are other points that a close observer will notice. It is not a good plan to pick out the nice, large hens as the best. The best layers are usually the smaller or medium sized hens of the breed. The nice, slick hen is the one that has molted early and stopped laying, and is therefore a poor layer. The active hen of bright eye, rather fine in bone and not too fluffy in feather is the good layer. The temperament of the hen is a point of value. The good layer usually has plenty of nervous energy. The head should not be coarse. There should be no suggestion of the rooster in the head. The rooster head is very often evident in the poor layer. The size of head does not seem to indicate much, but it should not be coarse.

These tests, however, are not infallible. They may sometimes result in the good hen being sent to market and sometimes in the poor layer being retained. But on the average they will work. If it is 75 per cent accurate, then it is worth using. We can afford to kill off one good layer if we get half a dozen poor ones.

The trapnest is the most accurate; in fact, the only sure test, and poultrymen should be encouraged to use it, especially those who make a business of selling breeding stock. In fact, it would be well if the latter should be required to use them.

J. D.



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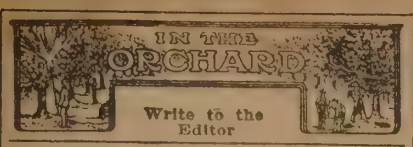


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GRANVILLE LOWTHER
Editorial Contributor

Supply and Demand.

The farmers never fix the prices of their products. Of course, the old theory is that prices are determined by the law of supply and demand. That would be true if the law were not interfered with and if commodities could flow freely without obstruction. But it is a little like the old theory that "Waters flow in the river beds toward the seas." That is true where waters are not obstructed or diverted in their flow. In this irrigated country, we impound large quantities of water for irrigating purposes. We also divert large quantities that are used in crop production, are absorbed by the soil and never find their way to the sea. At certain seasons the river beds are comparatively dry. The same is true of the law of supply and demand. When speculators buy up the principal commodities, store them, keep them in storage until the needs of the people are so great that they are willing to pay two prices for them, then the law does not work freely. Now, I would rather the government would fix the prices of food products at a fair profit to the producer, and sell at a fair price to the consumer, than for the speculator to fix them. The government is the only force that can make an equitable adjustment between the producing and consuming public.

Barrels or Boxes, Which?

A new discussion has been started on the advantages of barrels for shipment of fruits and other commodities, instead of boxes. "The war is the cause of it," as we so often hear when we ask the reason for high prices, and it has grown partly out of the difficulty of transportation. There is no reason to suspect that there will be any considerable number of apples shipped in barrels, because the rules for grading are fixed by law, and because the habit of shipping in boxes is pretty well fixed for this whole northwest. However, it is well to consider the arguments, and they are as follows. "The barrel can be handled with less labor than boxes, because it can be rolled and the box must be lifted." "It costs less in shipping, because of the ease with which it can be handled."

On the other hand, box apples have grown into favor partly because of the ease with which the boxes can be examined. The old habit of "facing the tops and bottoms of the barrels with good fruit and putting culls in the middle," is responsible for the larger amount of the sentiment for boxes.

In boxing cherries, we in the northwest follow the rule of "facing" practiced by the apple growers of other sections, and which has made the barrel as a container for apples odious. I do not like it; I think the cherries in the bottom or center of the box should be the same as those on the top. To make them anything else, is an effort to deceive. It is true, as it has been said in reply, that it deceives no one because everybody knows they are faced. Then why face them? G. L.

Drying Prunes.

By J. F. STOUT, Caldwell, Idaho.

To dry prunes it is necessary to break the skin in some way to let the moisture escape. Some people have been growing prunes many years who dried a few by cutting them open and let the hogs have the rest, and yet they can be very easily and cheaply dried.

If you have but a few, combine with neighbors if convenient and rig up an outfit to dip them. It is very much the old-fashioned plan for making sorghum molasses. Use galvanized iron 32 to 36 inches wide and nine feet long for bottom and ends. The sides and three cross pieces should be of 2x12 pine. One should be placed across center of pan to divide it into two equal vats. Saw side pieces at both ends at an angle of about 60 degrees and put short edges at bottom. It makes a better job to mortise the cross pieces, which should be set vertical one-quarter inch into the sides. Nail on bottom with 6d nails, driving them about three inches apart and letting the iron extend upward on the slanting ends to top of boards. This will leave a small triangular cavity across each end of the pan, which should be kept filled with water to prevent wood from checking. Place pan on furnace, two feet high with low chimney. The dipper should be of cubical shape and large enough to hold one and a half bushels of prunes, although you seldom should put more than a bushel in at a time. Make it of galvanized screen, quarter-inch mesh is good. For handles nail on two pieces 1x4x6. This dipper should be used by two men. To make the dip for cutting the skin of prunes use any good commercial lye in water, making the mixture strong enough to cause the skin of prunes to check that have been submerged 40 seconds in the boiling dip, and then dipped in cold water. If left in too long the skin will all be removed, which is not desirable. While dipping the lye becomes weaker and a little lye must be added occasionally.

The dip must be kept boiling, which can be done more easily by using vats alternately. Have clear, running water convenient, into which prunes must be dipped and rinsed as soon as scalded. This is done by moving the dipper containing prunes up and down a few times. Then pour them into boxes and when you have a load haul to drying grounds. Trays are best to dry them on, but any kind of clean boards laid close together on cross pieces will do. Place where there is plenty of sunshine and where they can not be damaged by stock or fowls. The writer once dried two tons in his garden, on boards that were afterwards used for building a barn. If it should rain fruit should be put into boxes and covered, or if trays are used they must be stacked. When dry enough dip again in vat in boiling water, to which a little salt has been added. This will help to keep the fruit moist and destroy all insect life. Pour out again on trays for about three hours or until fruit is in the proper "condition." Then store in tight room or cellar and keep covered with canvas. If you prefer a black gloss on fruit, boil some of your prunes till the mixture is of the consistency of paint, and dip prunes into that instead of the salt water. Now don't be afraid you can't do it. It's easy. The writer had many years of experience in fruit drying in California, but the two tons referred to above were dried in Idaho. They were fully equal to those shipped in and were sold for the same price. If you have but a few, heat lye in wash boiler, using any kind of convenient dipper, and dry on roofs. All figs and nearly all raisins are dried right on the ground, but the figs are afterwards dipped. Only ripe, sound fruit should be used, and all trays and boxes kept clean, then the fruit from a small drying plant will be fully equal to that from a large one.

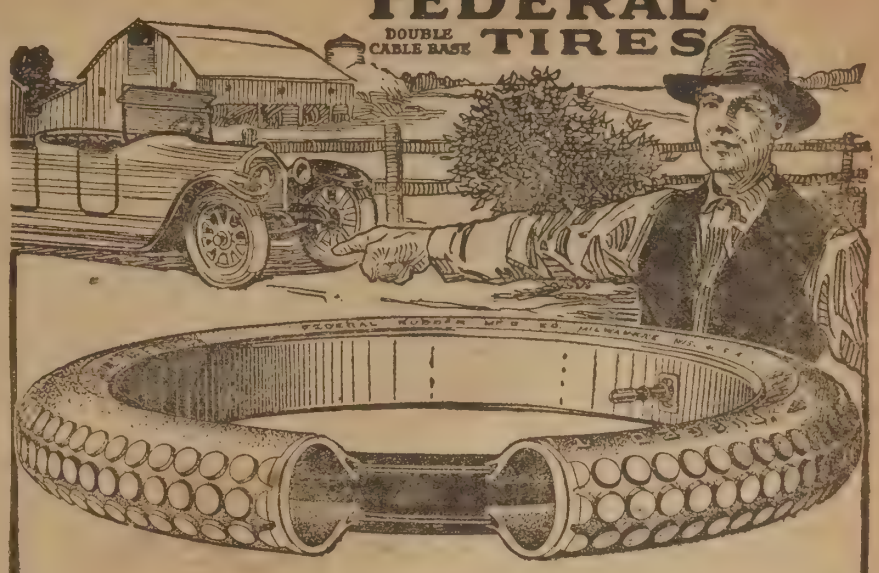
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Potato Crop Is Normal and Farmers Generally Giving Their Efforts to Meet Demands of the War



SHELTON, Mason County, Wash., Aug. 27.—The prospects for winter's supply of food is about up to standard for man but below par for stock. The cold, wet spring and the hot, dry summer cut short the hay crop. Grain is good, but the dryness cut the quantity. It is the custom here to save and utilize all forage growth and this summer will be no exception. Farmers use all the straw they raise, selling none except occasionally a little in loose form as a special favor to cover some pressing need. None has yet been shipped in to establish a price. The potato crop is about normal, but will not come up to expectations. Larger acreage was planted, but the dry weather will reduce the percentage of yield. About the usual effort is being made to increase tillable acreage. Hardly more could be expected because the logging interests demand the workers. Our farmers are giving their best efforts to meet the demands of war and are heart and soul for our country's good. SCOTT HAYES.

Get a Few Sheep.

CENTERVILLE, Klickitat County, Wash., Aug. 21.—The crop injury from drouth does not seem to be very high here in Klickitat county to small grain. The loss is more severe on corn and very late sown spring grain. The grain crops now threshing are turning out quite well for what seemed an off year from the start. The worst is potatoes, which are going to be almost an entire failure. The price for wheat and other crops are a stimulant to everybody to keep up the amount of acreage if possible. We have managed to get through the harvest with sufficient help, but the draft is beginning to tell in the help line. The best plan, as I see it, is for every farmer to get a few sheep as well as other stock. He can handle these most economically without outside help. The labor question will have a good deal to do in the future crop condition. Turn the wheat fields into alfalfa or grass to feed stock which will not take so many to look after. Potatoes are about 4 cents in the market and no prospect of much relief. The fruit condition is good, with some apples beginning to arrive in the market.

CLARENCE A. LESTER.

Hay and Fruit Active.

TOPPENISH, Yakima County, Wash., Aug. 18.—The second cutting of alfalfa is now in stack. Very little if any trouble was had in getting sufficient help to care for the crop. The quality is good and the average yield is considerably larger than last year. Some sales have been made f. o. b. car at $22.50 for alfalfa and $25 for clover. The market on timothy is not proportionately as high as for alfalfa and clover. A great many sales have been made to feeders, who expect to bring their stock to the valley at prices ranging from $12 to $16 in the stack. The third cutting of hay is well started and the water supply is better than usual, consequently an excellent third cutting is to be expected. The long-continued, extremely hot weather is forcing the corn and alfalfa to a very rapid growth, but has done considerable injury to the potato crop and has perhaps damaged some beets where not properly watered. The beets that have been properly watered are making an excellent growth and the growers who prepared their ground carefully and have given them proper care are going to be well repaid for their labor. Wheat in the irrigated sections is making an excellent yield and is of very fine quality. The yields so far reported for wheat are from 25 to 65 bushels per acre; oats are ranging from 50 to 100 and barley from 25 to 80. Barley has been selling from $45 to $50 per ton and oats at about $50. Wheat is selling today for $2.20 per bushel and has sold as high as $2.35.

The acreage of watermelons and cantaloups is smaller, but the extremely hot weather has produced an excellent quality of melons. The first picking of pears is just now under way, and the prices being offered are $40 per ton for loose pears, or $1.25 for those boxed. The first prune picking is well under way, but none of the firmer peaches are yet on the market in any quantity. Slappys will go on the market next week and a few Elbertas in the following. One sale of apples and pears of three grades has been made at $1.10 per box, the buyer to pick and pack the fruit. The orchard will produce about 10,000 boxes combined apples and pears. This sale was made by Dick Hart of the Buena district. Mr. Hart sold his crop last year at $1 f. o. b. car. The general offer for staple varieties of apples is considerably higher than last year. Early potatoes are now selling at $35 per ton, but no quotations are yet offered on the Gems and Burbanks. Tomatoes are plentiful and reasonably cheap. Beets are looking well and promise a good yield. The supply of garden vegetables in the Yakima valley will be much the best ever produced. The extreme high price of feed is causing a few people to dispose of their cattle and cattle prices are lower than in the early summer. Sheep and hogs remain high and are in much demand. The onion crop is excellent, but the prices promise to be not so good as formerly. C. A. WYCKOFF.

Spring Wheat Is Poor.

GARFIELD, Whitman County, Wash. Aug. 17.—Threshing began the first of this week. East of here, especially near the mountains, many fields of fall wheat made 30 or more bushels to the acre of wheat that was seeded in August. Some of the earliest seeded near Garfield and a fine stand made a very poor crop, but think it was pastured too heavily.

The largest yield reported so far is 14 acres joining Garfield on the west, which made 37 bushels to the acre. This belongs to Walter Noble, a rural letter carrier, and was the first wheat taken to the warehouse. It was seeded in August. Spring wheat is poor, and the oats also. There is very little smut. Most of this wheat reported is forty-fold and shattered badly this year. No rain here since June 23, so the wheat was not up to what it should have been for prospects.

M. KIDWELL.

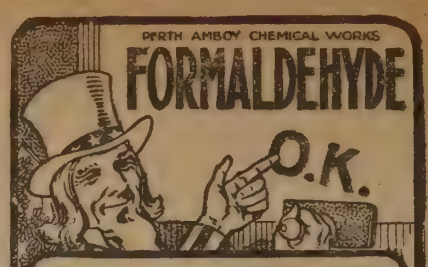
Peas Will Help Stockmen.

SPOKANE, Spokane County, Wash., Aug. 21.—I have just completed a tour through the southeastern portion of Spokane county and can report that the crop conditions this season are very bad indeed. In fields where we should be harvesting from 35 to 40 bushels of oats per acre it is likely that not over 10 bushels will be threshed. The same conditions prevail with the pea crop and in some instances the farmers will not be able to harvest more than the amount of seed they planted. Spring wheat promises to do somewhat better, but it is hard to say just how good a yield will be secured. Some fields are not making over eight or 10 bushels per acre, while others are making as high as 15 bushels per acre. The greatest difference in the yield of peas seems not to agree with what we would naturally expect during a normal season. The earlier seeded peas this year are generally a shorter crop than those seeded late. This is due entirely to the hot weather which seemed to blight the blossoms. The late seeded peas which are yet to be harvested promise a very good crop compared to the earlier ones. These peas came into blossom after the hot weather had abated. In regard to the price conditions of grain there seems to be a chance that the live stock business will be somewhat displaced, but there is no special reason for this, owing to the fact that on all of our farms there is generally enough waste material to keep several hogs. If it were possible to place hogs in the pea fields after the crops have been gathered this season Spokane county could produce enough pork to materially increase the profits of the farmers and at the same time do much toward meeting the market demands for pork in Spokane. As we look ahead into the future, our farmers are not greatly discouraged over the outlook for growing peas here and with the peas we will be able to produce more live stock. As I see it, there are many ways in which the pea business will assist us in developing the live stock industry in this country. The shattered peas in the fields, of course, offer the greatest opportunity for pork production, while the split peas offer cheap feed not only for pigs, cattle and sheep, but also for poultry. Further than this, the straw which is left behind after the peas are threshed means excellent feed for cattle, sheep and horses and the farmer this season can rely upon this source to materially decrease the cost of his hay in wintering his stock. Wherever possible, we are endeavoring to get the dairymen to buy pea straw and ship it from the pea fields to the various parts of the county where their dairy stock is to be fed. After our people become sufficiently acquainted with the value of peas and byproducts, I am sure that the live stock industry will develop extensively here. J. R. SHINN.

Grain Being Stacked.

CHIMACUM, Jefferson County, Wash., Aug. 24.—We have had about two weeks' dry weather that has dried up the pastures, also has hurt the late crops of grain that have been planted for ensilage. Carrots and mangels also need rain, but might turn out all right later on. Grain is being stacked at present and the straw, such as oats, which is the best, is going to be saved for feed during the winter. The potato crop is not very good by indications at present. A large acreage is in the ground, but the early drouth stopped the growth three weeks ahead of time.

JOHN VAN TROJEN JR.



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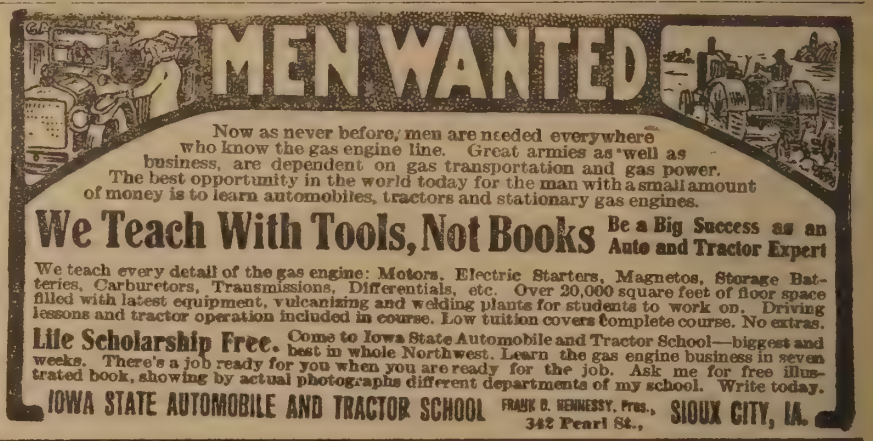
Mr. Man Do you want a fine stockman's pocket knife? Let us tell you how you can get one absolutely free. Write today, Prize Editor, the Washington Farmer, Review building, Spokane, Wash.

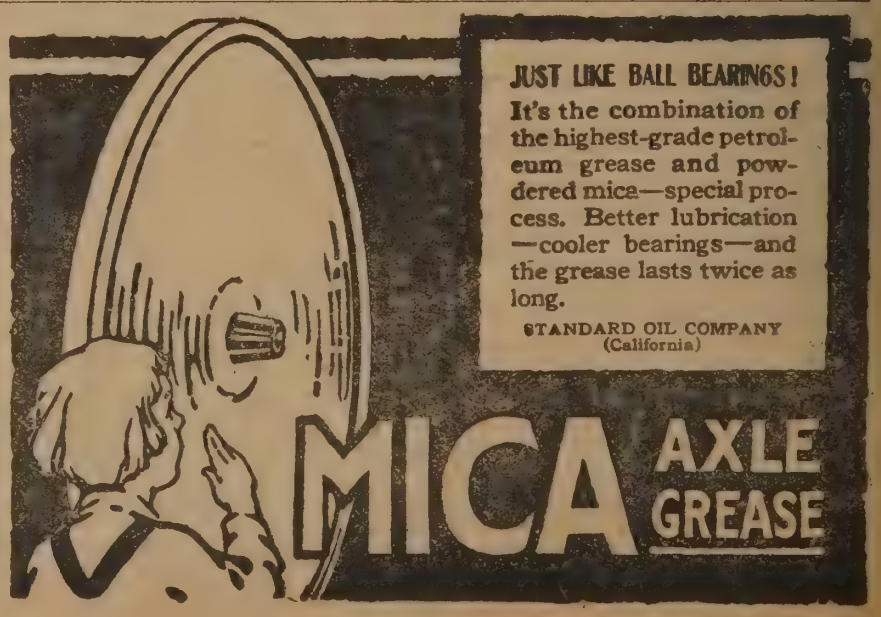
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Humbird Lumber Company, Box T, Sandpoint, Idaho.





Fix $2.20 Wheat Price for 1917

(Continued from page one.)

According to Max H. Houser, federal grain representative for the northwest, the markets here will be classed as northern spring. The freight rate on wheat between Portland and Chicago is 30 cents a bushel.

Turkey red will be classed under hard red winter based on the Chicago price of $2.20, as will bluestem, early baart, Allen, Galgalos and Martin amber. The best quaities will be graded hard white wheat.

Fortyfold, white Russian, gold coin and Palouse bluestem will be classed as soft white wheat on a basic price of $2.18 at Chicago.

Club, white hybrids and Sonora will be classed white club and the basic price will be $2.16 at Chicago.

Red fife will be classed as soft red winter on a basic price of $2.18 at Chicago.

Red Russian and red hybrids will be classed as red Walla Walla on a basic price of $2.18 at Chicago.

The above are basic No. 1 in the federal grades.

Farmers Holding On.

Farmers all over the Inland Empire are now holding on. Records in several local offices show grain was being purchased in rather large quantities under the milling-in-transit rates, by Spokane flour mills, at a price of $2.23 to $2.25 Coast. This meant between $2.13 and $2.15 a bushel for the wheat producer, whose product under the fixed rate dropped suddenly overnight to a figure somewhere between $1.85 and $1.90 at the shipping points in eastern Washington.

"There is no question that the big chance for the northwestern wheat raiser is to get the discrimination between the price paid him and the price paid the eastern grower," said R. J. Stephens of the Stephens-Smith Grain company. "The government has the shipping and the market control.

"We must export from this coast, but the system of subtracting the cost of carrying the wheat to Chicago from the national price fixed can be avoided if the wheat is put in vessels and shipped straight to Europe from Pacific coast points. This is the only way out for the northwest. In the meantime the farmers are holding on everywhere."

Millers Pleased.

A Seattle dispatch reports that: "Local millers, brokers and exporters are practically a unit in declaring that the food committee's price of $2.20 for wheat at Chicago, working out at $1.85 on Washington farms, is equitable."

Naturally the millers want cheap wheat to stimulate their export trade in China and other countries of the Orient, but there is no valid reason why American wheat should be sold at better prices to the Chinese than to our own people in the eastern part of the United States or the price paid by our allies in Europe. It is hoped that, on second thought, Coast millers will take a fairer and broader view of the problem. The difference between $1.85 wheat and the price our growers should receive and would receive if they had basic prices and basic markets at Coast terminals means a difference on this year's crop in the Pacific northwest of from $15,000,000 to $20,000,000. That vast sum is about to be unjustly taken out of the northwest, and its loss would mean an injury to all lines of business, both on the Coast and at the interior.

More Protests.

A statement of the feelings of the wheat men of the northwest, that their geographical position has been ignored while those of the growers of Texas, Nebraska, Kansas and Minnesota have been taken into account, also has been telegraphed to H. A. Garfield, chairman of the committee which recommended the $2.20 basic price, and to Max H. Houser of Portland, federal grain representative for the northwest.

Numerous telegrams are being sent to the national capital from wheat growers and others interested in all parts of the Inland Empire. R. C. McCroskey of Garfield has been visiting points in the Palouse and urging growers to send protests to Washington.

Can Hold Their Wheat.

Ex-Governor Hay of Washington predicts that unless the government deals more justly with the wheat-growers of the Pacific northwest, farmers will organize and withhold their grain until they are put on an equality with the growers of the eastern states.

They would have that right under the law. The government can name a price, but it can not compel the producers to take it. Section 6 of the food control law relates to hoarding by dealers, and expressly exempts the producer in the following proviso:

That any accumulating or withholding by any farmer or gardener, cooperative association of farmers or gardeners, including live stock farmers, or any other person, of the products of any farm, garden or other land owned, leased or cultivated by him, shall not be deemed to be hoarding within the meaning of this act.

Drop in Flour.

Flour in the northwest market, Tuesday, dropped 40 cents a barrel or 20 cents per 49-pound sack, as a result of two days of deliberation by representative Pacific coast millers at Portland.

Best new crop wheat will bring from $1.90 to $2 a bushel at northwest points in the judgment of leading grain men at Portland, including Max H. Houser, government grain commissioner for the northwest. Grain dealers claim that the agitation for a government fixed, based price on the Pacific coast to match that at Chicago would result in shipments of grain to the Pacific coast rather than the eastern markets and that congestion would result because tonnage is not available to carry the wheat to European ports. The only practical plan, it was said, was to make a differential between the Portland and the Chicago price which would absorb the freight charge and thus cause the shipment of wheat or flour eastward for export. This freight charge is 30 cents a bushel.

Walla Walla Growers.

WALLA WALLA, Wash., Sept. 1.—(Special to The Farmer.)—Walla Walla farmers describe themselves as "between the devil and the deep blue sea" on the grain question. Local buyers are equally befuddled and until something more definite is learned they will "wait and see."

Hugh A. Martin of Portland, a federal grain inspector who was here Friday explaining the new grain standards act, told the farmers that they might as well submit, that to store up their grain would do no good, as the government was empowered to take it. The government can as easily take a farmer's wheat as it can his boys, Mr. Martin said. Some farmers have argued that as long as they keep their grain in their barns or private elevators the government can do nothing; that the law applies only to public warehouses.

About 50 of the leading farmers met in Walla Walla Friday to listen to Mr. Martin and they also discussed the wheat prices. Most of them seemed dissatisfied, having hoped for higher figures, but no action was taken toward a protest.

The principal objection the farmers have is that the western farmer is discriminated against in favor of the eastern grower.

The consensus of opinion of the farmers was that the wheat would be largely sold on a consignment basis.

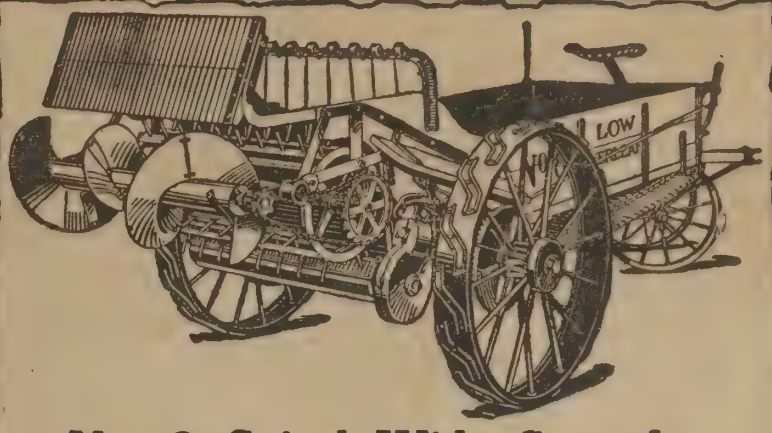
It is believed that bluestem and turkey red will bring about $1.90 to the farmer and club about $1.85.

Men who have expressed themselves —Henry Vincent, O. T. Cronwell, George Ginn, Fred Hofer, Arthur Cornwell, B. F. Brewer and others, all big wheat growers, declare that the western farmers have good grounds for complaint because a middle western terminal was named and the western farmers will have to take less for wheat than the eastern farmer. They said they believed the government should pay all the farmers a uniform price, regardless of location.

Until the market steadies and something more definite is known here there will be no buying or selling and no decisions on whether to sell or hold, the farmers said.

King County Grange Fair.

It is the pleasure of the managers and directors of the King County Grange Fair association to thank in advance the friends and patrons of the association for the very hearty cooperation given them in the development of what portends to be a grand and successful fair at Renton, September 14, 15, 16, 1917. Every one is cordially invited to contribute a specimen of his or her products, skill or ingenuity, so as to make the annual fair an epitome of the accomplishments and advancements in agriculture, manufacturing and live stock during the year. For information concerning the fair write to Fred Nelson, president and general manager King County Grange Fair, Seattle, Route 5, or W. B. Satterthwaite, Secretary, Renton, Wash.



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WE have added the **New No. 8** Spreader—Spiral Wide Spread, Light Draft—to the **Low Corn King** and **Low Cloverleaf** lines. We are in a position to suit exactly any regular farmer, whatever his previous spreader experience may have been.

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The undersigned have for sale, as administrators, the following parcels, which must be realized on to enable them to close up the estates under their care, and the beneficiaries are prepared to accept, for a quick turn, reasonably low figures for the properties compared with their actual values.

Parcel 1 5066 acres south of Lethbridge, Alberta, on the famous Milk River ridge, with the Milk river running through it, fenced and cross fenced; A1 for mixed farming and stock. Excellent buildings, outbuildings, corrals, etc. Large area under cultivation, magnificent pasturages and hay lands, 400 acres in summerfallow. Price for the whole only $15 per acre. Easy terms.

Parcel 2 6 sections open undulating prairie near Cardstone, Alberta, a large proportion of which has already been broken and cultivated; soil of the best, elevator close at hand. Acquired at $25 per acre. Will sell for quick turn-over at $17.50.

Parcel 3 2400 acres with large summerfallow, about 800 acres crop land, excellent buildings, close to the famous wheat city of Brandon, Manitoba. Location to market and elevator quite convenient. Soil of the best. Our close valuation $35 an acre. For quick sale will sell for $25.

Parcel 4 640 acres near Otterburn in the famous Red River valley. Splendid house and barn. All the cultivated land summerfallowed and ready for 1918. Soil black clay loam of the best. Our close valuation $25 an acre. For quick turnover will sell for $18.

Parcel 5 26,000 acres suitable for colonization, convenient to Winnipeg. A decided snap. $20 per acre. Another 7000 acres near Raymond, Alberta, at $16.50 per acre.

Further details of all or any of these properties forwarded on application.

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Community Cooperation

Success Follows Neighborhood Pulling Together

Did you ever hear the story of the 10 negroes who went out to hoe cotton? Nine of them started to work in one field, while the tenth darkey commenced in a field all by himself just over the fence in the next field. He hoed down one row and back on another. Then he looked over the fence and saw the swath of nine clean rows made by the other workers.

"Huh," he said, "nine niggers, nine rows; one nigger, one row. Drat one nigger."

And he climbed over the fence and joined the other nine. This is a pretty good illustration of the difference between community team work and trying to rely altogether on one's individual effort. Where a whole neighborhood is pulling together to accomplish certain things you usually find that success comes out of the united effort. If you, personally, have joined in the community effort, you have not only gained your share of the good accomplished, but you have the satisfaction of knowing that your work has helped all the others. After all, then, being actively interested in the welfare of your community is securing for yourself a share of the advantages coming from the efforts of all those who have helped make these advantages possible.

Do you fully realize what the community in which you live means to you individually? If you are in a live, progressive comomunity, it's ten to one the town that is your trade center is an "up-and-coming" place with good stores, good streets, good schools, good churches, and good places of amusement.

If your community is the other kind, then manifestly there is lacking the spirit of community cooperation and your home town is lagging behind—listless, unprogressive.

At present your local stores may not be as large, or as handsomely equipped as some of the big city stores, but you will agree with me that your home merchants can not possibly enlarge or improve their businesses if they are not patronized. If you are interested in bringing about better local shopping facilities, it is squarely up to you, and other residents of your community, to patronize home merchants, thus keeping your money where it will circulate in various channels for the improvement of the community.

There are only two possible reasons why a person should remain in any certain town or community; their duty demands it, or they simply like to live there. Isn't this true in your case? In either event, it is to your distinct advantage to do everything in your power to assist in improving local conditions. The community belongs to you and your neighbors, and you are necessarily governed by conditions as they exist.

A prosperous community is in every instance a desirable place in which to live, as it affords its residents advantages which invariably are limited to and controlled by the amount of local commercial activity.

State Council of Defense

To Protect Grain and Other Food Crops Against Fire

By N. W. DURHAM.

Leonard S. Martin, fire preventing engineer of the state council of defense, has been touring the grain districts of eastern Washington to stir up interest and urge communities to organize to protect grain and other food crops against fire.

"Owing to the long drouth fires are increasing at an alarming rate," said Mr. Martin.

"To what extent to you find them of incendiary origin?" he was asked.

"To a very slight extent. The great majority of the fires which I have investigated were the result of carelessness and due to natural causes. I am convinced, however, that in some instances fires were deliberately set."

Mr. Martin asks that county defense councils give wide circulation to the following bulletin from the office of the state fire marshal:

To the owners, operators, and all having charge of grain warehouses and elevators, or warehouses where food products of any kind are accumulated and stored:

The serious conditions which confront us in regard to food production and conservation, makes it our duty to use every possible effort to preserve, for the needs of our own people and those depending upon us, every item of food that can be harvested or produced. The loss of a single item at this critical period means hunger for some one depending thereon for sustenance.

In my official capacity as state insurance commissioner and exofficio state fire marshal, I deem it expedient that the following rules be established regarding the care and conduct of storage properties.

Warehouses—All warehouses wherever maintained should be kept clear of all rubbish and where open spaces exist underneath where litter can accumulate, the same should be cleaned out and either boarded up or enclosed with close wire netting. Where possible a clear space of at least thirty feet should be maintained around the warehouses and in localities where weeds drift with the wind and accumulate, a barrier constructed of wire net or boards should be erected along the outer edge of the clear space to hold back the dangerous matter.

Every warehouse should have two 2½-gallon chemical fire extinguishers and one or more barrels of water and buckets located at convenient points readily accessible.

Smoking should absolutely be prohibited in and around all warehouses where food products are stored.

Special representatives working under the authority of this department will visit and inspect conditions in the various localities in the state and are instructed to require immediate compliance with such of the above provisions as in their judgment may be deemed necessary for the protection of the properties.

As it will be impossible for our limited force to cover each individual property in the short time allowed, it is made a special request that any one having knowledge of conditions which appear to be dangerous or which are likely to cause fires or be conducive to the spread of fires shall furnish information at once to our representative in the field or report to this department using wire at our expense if it is deemed circumstances warrant.

H. O. FISHBACK,
Insurance Commissioner, and Ex Officio State Fire Marshal.

Failure by owners of grain and food warehouses to heed this apepal may result in the prosecution of the offenders under the following provision of the state law:

"Any owner or occupant of buildings or premises failing to comply with the orders of the authorities above specified shall be punished by a fine of not less than $10 nor more than $50 for each day's neglect."



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Spokane Interstate Fair
September 3 to 8

Oregon State Fair, Salem
September 24 to 29

With all the nation farming and arming for more stressful times, city and country alike are urged to rally around the agricultural fairs. Send exhibits, attend where possible.

Reduced Round Trip Tickets---

TO SPOKANE—From stations on the North Bank road between South Cheney and Plymouth, Wash., tickets sold daily September 2 to 8; from stations between Plymouth and Rainier, including Goldendale Branch and all Central Oregon points on Oregon Trunk, tickets sold September 2 and 6 ONLY.

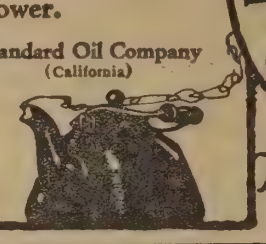
TO SALEM—From Oregon Electric railway stations and all Central Oregon points on Oregon Trunk and on The North Bank Road, Fallbridge to Rainier, inclusive, reduced tickets sold daily Sept. 20 to 29.

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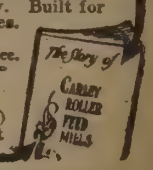


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Trademarks are placed only on articles that the manufacturer knows will do the work expected of them—that will satisfy the buyer. The manufacturer isn't afraid to let it be known that he made the goods—and it is certain that he isn't going to send out anything that will be a discredit to his trademark or that will cause the buyer to pass that mark when he is buying again.

The trademarks of the various lines of equipment and merchandise you buy are safe guides to follow. They will lead you to goods of high quality and goods that are sold at one price. Your dealer who sold these goods can stand back of them, for he knows that the manufacturer who sold them to him will stand back of the goods and back of him, too.

Contagious Keratitis

Disease Affects Eyes of Cattle

By DR. S. B. NELSON,
State College of Washington.

The College of Veterinary Science has received during the past few weeks numerous reports relative to a peculiar disease affecting the eyes of cattle, in some cases the affecting being so serious that it resulted in the destruction of the eyesight.

Investigations made to determine the nature of the disease show it to be identical with contagious keratitis—contagious opthalmia—which has been observed in the middle eastern states for some years past.

Symptoms.

The first symptoms noticed is a swelling of the eyelids and a flow of tears over the face. The animal will also try to rub the eye on some object, generally its front leg, showing the presence of an irritation or itching. These premonitory symptoms are followed by a true inflammation of the cornea.

Upon a close examination of the eye it is seen that the disease has its beginning in or near the center of the cornea, the clear part of the eye. Near the center of the cornea there is found a small blister projecting slightly from the rest of the eye. A little later this blister breaks, discharging its contents, and forms a ragged-edged ulcer. Toward this ulcer the blood vessels radiate, giving a very characteristic appearance to the eye. As the disease continues, the front of the cornea becomes opaque, having a scum over it, due to the dying and passing off of the outer layers of the cells forming the cornea. If the disease assumes a light form, the ulcer heals, leaving a scar that is hardly noticeable after the eye has cleared. However, if it should be a severe attack, the ulcer may slough through the cornea and cause the destruction of the eye.

The period of incubation, the period that the disease is in the animal's system without the symptoms being visible, is probably from three to seven days. The full course of Keratitis is from three to six weeks, depending on the severity of the attack. All cattle, both young and old, are subject to it.

Treatment.

Isolation, the separation of the diseased animal from the well ones is of great importance, and should be practiced whenever it is practicable.

Treatment has proven quite satisfactory. If possible, the affected animal should be placed in the dark as the light is often painful to the eyes. We would recommend the following treatment out of the many that have come under our observation:

Drop into the eye two or three times every day, morning, noon and night, a few drops of the following eye-wash:

Argyrol, two grains; water, one ounce, or protaryol, two grains, water, one ounce.

If the ulcer refuses to heal it may be stimulated by touching it with a solution of silver nitrate, five grains, to one ounce of water.

The opacity of the eye will gradually disappear but it can be materially hastened by the use of three grains potassium iodide to the ounce of water dropped into the eye two or three times daily.

To put the medicine into the eye use a small eye dropper. Place the hand that holds the dropper firmly against the head of the animal so that the hand will follow all of its movements and so prevent any accident of injuring the eye with the dropper. The medicine should always be put in at the outer angle of the eye as the lids commence to close at this angle and will therefore force the fluid over the surface of the eye.

Deers Drop Old Horns for New.

As every year horses shed their old coats for new ones, so the deer drop their old horns. Then in about 13 weeks a new pair of horns arrives, but they are tender and easily hurt.

Now Is the Time to Learn Telegraphy!

We know of nothing that will bring such quick and sure returns for a small investment of time and money than a thorough course of Telegraphy. Not only are the railroads and telegraph companies short of men, but the United States army is needing hundreds of operators for the signal service. We have the strongest school of telegraphy in the northwest. We can not fill the demand for our graduates.

Other practical courses given, such as bookkeeping and accounting, shorthand, college preparatory and vocational training.

Write our educational secretary for information regarding any of your educational wants. He can help you.

Address Educational Secretary.
Y. M. C. A. DAY AND NIGHT SCHOOLS.
The Jenkins Institute.
Spokane, Washington.

Southwest Wash. Fair

(Continued from page three.)

Mare, four years and over—1, on Louise. Three years old—1, on Thelma. Yearling filly—1, on Lyzetta. Colt unnamed—1, on unnamed.

Belgian.

Stallion, four years and over—1, C. A. Packenham, Chehalis, Wash., on Bourbon; 2, Fred Blechschmidt, Oakville, Wash., on Carlos d'Elst.

Grade Draft.

Two very fine draft teams were shown. H. W. A. Tram, Adna, Wash., was first; W. A. Hamilton and Sons, second. A few other mares, geldings and colts were shown.

Duroc Jerseys.

C. W. Shumate was the only exhibitor, with eight head. Little Chief was the champion boar and Jennie L. Goodwin, champion sow.

Large Yorkshire.

J. A. Scollard showed one magnificent sow and litter of eight pigs. They were awarded first in their class.

Berkshires.

George Bertrand of Olequa, Wash., and C. W. Shumate, Tumwater, Wash., exhibited Berkshires. Mr. Bertrand received every first. His three-year-old boar, Woodrow Wilson, was made champion, and Majestic Girl, champion sow.

Poland Chinas.

C. W. Shumate, Tumwater, Wash., was the only exhibitor, with a full herd. Championship on boar was awarded to Hercules Pride and on sow to Pride's Lily.

Chester White.

Ed Schoel had a full herd and O. O. Phelps and Son a few. The latter received first and second on sow pig, without competition, and Mr. Schoel all the rest, including championships.

The sheep shed was well filled and most of the exhibit was of excellent quality, though some might have had more fitting.

Southdowns.

J. S. Hubbard, Monroe, Wash., was the ony exhibitor. He showed 16 very fine, highly-fitted animals and was awarded first and second in all classes.

Hampshires.

J. G. S. Hubbard and Ed Schoel of Tangent, Ore., each had an exhibit, Hubbard winning all firsts and seconds.

Shropshires.

Felzer Brothers, Tangent, Ore., filled all classes and were awarded all firsts and seconds.

Oxfords.

C. P. Kizer, the only exhibitor, was awarded all premiums competed for.

Rambouillets.

Ed Schoel showed the only sheep of this breed and received all awards for which he made entry.

Lincolns.

Just two very nice Lincoln yearling rams were shown by J. G. S. Hubbard. They were awarded first and second.

Entiat Fruit Shipments.

From reports of the various district horticultural inspectors in central Washington, compiled by the United States agricultural department, the Orondo and Entiat fruitgrowing district will ship 643 cars of all kinds of fruit during the season of 1917. Six hundred cars will be apples. There will be a normal crop. There has been little difficulty in obtaining the necessary help.

Farms Sixteen Sections.

Luther P. Turner, who farms 16 sections of land near Harrington, in the Big Bend country of Washington, has returned to Spokane after a visit to his property, where harvesting is under way. Mr. Turner has four combines working on his 4700 acres of wheat, and they are cutting about 130 acres a day. "We will not have a heavy crop this year," says Mr. Turner. "In fact, we will have very little wheat. The grain is not running more than 12 to 15 bushels to the acre."

Fair Dates.

Pendleton, Roundup—Sept. 20-22.
Boise, State—Sept. 22-29.
Salem, State—Sept. 24-29.
Helena, State—Sept. 24-29.
Lewiston, N. W. Lvst.—Nov. 16-23.
Portland, Pac. Nat. Dairy—Nov. 16-23.
Portland, Pac. Int. Lvst.—Nov. 19-24.

Washington Fairs and Shows.

Mabton, Hay Palace—Sept. 11-15.
Walla Walla Pow-Wow—September 13-15.
Renton, County—Sept. 14-16.
Kelso, Local—September 15.
North Yakima, State—Sept. 17-22.
Woodland, County—Sept. 19-22.
Rosalia, Lvst.—Sept. 20-22.
Lynden, County—Sept. 25-29.
Snohomish, County—September 25-29.
Garfield, Roundup—Sept. 26-29.
Shelton, County—Sept. 27-29.
Burlington, County—Oct. 1-6.
Puyallup, Western—Oct. 2-7.
Palouse—Oct. 4-6.
Goldendale, County—October 9-13.
Port Angeles, County—Oct. 11-13.
Colville, Live Stock—Oct. 17-19.

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Ups and Downs of a Bunch Grass Boy

CHAPTER XXVI.

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

Looking back to the days of pioneering in the Big Bend bunchgrass when I was beginning to take hold of the heavier tasks on the farm, I can remember a few brights spots in the weather. There were days when the wind blew cool and moist across the miles of waving grass, and the sun smiled down in a friendly way, neither too hot nor too cool; and if it did begin to get a bit warm, an accommodating cloud blew across it about that time and cooled it down a bit. The country was very nice to live in then.

But more frequently I can remember the mornings when the wind was cold and raw, and searched out the holes in one's clothes, chapped his hands, face, lips and bare feet. A child's skin is more tender to the cold wind than that of a grownup. Under the constant beating of the cold wind a child's skin becomes raw and inflamed. Tiny lines of blood appear, and crisscross the top of one's bare feet and neck and cheeks and hands. The lips crust hard, and then the crust cracks in lines and bleeds. The dust gets into these bleeding places, and if the dust happens to be a bit alkali, it is most irritating.

But the real trial came at night when mother got out a bottle of glycerine and rubbed my face, lips, feet and neck. Wherever she found the crisscrossed lines of blood she put on plenty of glycerine. The pain was excruciating. It was a good deal like being scalded with hot water, or stepping on a hot iron. Out in the wind when my face and neck and hands began to chap I thought not of the pain of the chapping. I shrunk when I thought of bathing these chapped places with cold water, and having glycerine rpbbed on them. Sometimes I howled and kicked, but, finding resistance useless, I gave up. About that time I read a story in which was emphasized the "stoicism" of Indians when tortured. The story aroused my admiration for the noble, intrepid red man. Thereafter, when I saw the glycerine bottle coming, I "played Indian" and suffered in silence. There was some consolation in thinking how much worse it would be if I were being burned alive.

Next to the chapping wind, a hoe handle, or the handle of a pitchfork, used all day long, ranked as a producer of misery. The country life enthusiast who gets out in the nice spring mornings and basks in the fresh morning air at the end of a hoe handle for a little while misses the real pleasantries of a task of this kind. Let him hoe all day long—or, better still, let him pitch hay all day long. If he is not "hardened to the work" by evening he will feel numerous aches and pains where he never felt aches and pains before. Many oth his joints will feel as if they were loosely strung together and would fall apart if he moved too suddenly. In short, he will feel as if he had been used as the rope in a Fourth of July tug-of-war.

But that is not all, nor the worst. His hands will have most of the skin worn from the palms and parts of the fingers that were in constant friction with the fork handle. If his untrained muscles had stood the tension during the day and his bones continued to work in their customary sockets, he would have hands so stiff, raw, and inflamed that he could hardly use them at the supper table. Of course, if one could wear gloves during the day his hands would be saved. But wearing gloves in farm work was an indication of wealth which none of us bunchgrass youngsters ever dreamed we would possess.

My first farm task of real importance was to pull water hand over hand from our 50-foot well for the farm stock. Two buckets were put on a rope, one at each end. The rope ran through a pulley up above your head. While you pulled one bucket up, the other went down. One must be careful not to bang the buckets together as they passed in the well, nor should one bang the upcoming or the downgoing bucket on the side of the well.

My dog chased a squirrel under the curbing once, and right away afterward I heard a squeal and then a splash down in the well. Looking down I could see a few ripples in the water and thought I saw a swimming squirrel. Of course it drowned in a little while and, of course, it was my job to go down in the well and get the squirrel.

Mother and father both remarked upon my courage while they were fitting up the windlass and rope to let me down. I was surprised that they did so. Inside, I felt like ice water, and the only reason I did not talk was that I knew my teeth would chatter if I did so. I examined every inch of the rope twice to make sure that each strand was good and strong. I would trust no one, not even my father, to tie the loop in which I was to sit while being let down. These details I looked to myself. The time at last was at hand. I slipped into the loop, took a farewell look at the sun, and told father to "let 'er go." Down I went.

I reached the bottom of the well without mishap. It had been dipped almost dry, but there was still six inches or so of water, and it was trickling in from the sides. I felt about till I found the squirrel, then another and another. After that came a pocket knife I had lost; then a couple of tin cans that somehow had gotten in the well, and there was a lot of mud. I asked for a broom and a tin pail, both of which presently came down. I could see the anxious faces of my parents hanging over the edge of the well, and I yelled at them to keep back—I was afraid they would fall in on me. With my bucket and broom I scrubbed the well till the black rocks were perfectly clean, and sent up bucket after bucket of mud. By the time the job was done my courage had returned; but just the same I was glad when they wound me out of the well and with steadying hands helped me away from the edge of the deep hole.

By the time I was 15 we had several horses and a few cows and some hogs and chickens. I suppose I pulled water from the well two hours a day. One can imagine what several years of daily exercise of this kind would do to the arms and shoulders of a growing boy. It gave me a muscular development in those "pulling places" clear beyond the average for my years; and helped to put me into the harvest field a bit ahead of time.

My first season in the harvest field was the hardest. I think that for days the ache never left my shoulders, arms and wrists. I did a prodigious amount of lifting—much more than I needed to do. I had not learned the tricks of the trade.

Gradually I learned. I found that muscle was not all that counted. One must use muscle shrewdly and conservatively if it lasted all day in the hot harvest field when the grain was heavy. I learned to know by the "feel" of the straw when I shoved my fork in whether the load would pull out well balanced and compact, or loose, unbalanced, and stringy. If it came up lop sided, I felt again. I learned to get under the lift, instead of pulling up a forkful at arm's length. Pitching onto high stacks, I learned the trick of giving a well-balanced forkful an artful, upward shove just at the right time as it went up, so that it would by its own momentum spring up on the stack. Tricks of this kind made one's muscle last.

I learned to take hold of the fork low; to apply the leverage of my body to exactly the right spot in the fork handle so that my leverage would bring up the load with the minimum lift. I learned the crime of pulling at a load that was bound in the bunch—always feel for the top, loose part. These and a lot of other pitchfork tricks I learned, and all this was merely in the pitchfork department of my training for farm work.

When I started to handle horses in the field I had another education to acquire. The driver of a team has more to do than to hold the lines and yell "get up" and "whoa." The big horse will shirk, maybe, and do it so cunningly that the untrained driver would think he was pulling his heart out. The little horse may dig in and kill himself if not held back. There is the right and the wrong adjustment of every buckle on the harness, the collar, the tugs, the eveners, and so on. It is an education by itself, merely driving a team in the field, if it is done right.

Joe Hennon, fresh from Missouri, where he had worked at the barber's trade, helped us in harvest one summer. He had had a little experience in pitching bundles. But he had never pitched loose grain. He could not tell by the "feel" when he struck in his fork whether it would bring out a well balanced load, or a loose, unbalanced load that woul dspill apart when he raised it. He would try to take a big forkful and get more than he could lift because he simply couldn't get the trick of getting under the load. Finally he would tear out his big forkful. It would come up lop-sided, the fork handle would twist in his hands, and half the load would spill off after he had lifted it once—waste of energy!

Joe was strong and wiry and determined and he went at the job with the energy of three men. But in spite of his frantic efforts, he began to get behind. We would drive into the stack, unload, and before he could get away from the stack, a wagon would be waiting for him to get out of the way, and the header puncher would be yelling "wagon" and waving his hat. Joe nearly went wild, and the harder he worked, the less he accomplished.

He began the job wearing a derby hat. In his stampede on the hardest day he had an accident of some kind, in which his hat fell off, nd in the confusion, he stepped on his hat and broke a triangular piece out of the crown; and the fragment flopped down over the back of his neck while he fought and worked madly.

Finally, towards the close of a hot day in fairly heavy grain, Joe gave out. I though he would die, he looked so white and weak. I climbed into his wagon to help him get his last load upon a high stack; but this offended his pride, and with the remnant of his strength he staggered to his feet, brandished his pitchfork and vowed he would hit anybody that climbed into his wagon. The poor devil was half delirious, but had the grit to stay with the job.

The next morning Joe was so stiff and sore that when he got out of bed he had to roll over and over and slide out standing up. He could not bend himself anywhere without groaning. When he walked he took steps about a foot long and moaned every third or fourth step. In his body he had some badly misused muscles, and they were getting even with him.

A few days later Joe was sent out into the field to harrow. This task involved driving four horses abreast hitched to a three-section harrow. It was assumed that he could do this, since it was mainly a matter of walking, turning corners, and hanging to the lines.

So far as Joe Hennon was concerned, all horses were wild, I suppose. Anyway, he had a runaway his second day in the field. Why under the sun the horses ran away I can not imagine, for they were all gentle and well broken, except one, a big, clumsy, 1400-pound colt that was so lazy that it would go to sleep and fall down while standing in the harness.

The horses broke loose from the harrow, and ran into a two-strand barbed wire fence. Two went over the wires and two stopped. The runaways then swung around and raced down the fence, two horses on each side of the wires. No one will believe me, I suppose, but, anyhow, it is the truth that not a horse was injured, barring a few scratches. Nor was the harness badly broken.

Joe Hennon was scared nearly out of his wits. He raced over the plowing behind the team yelling "whoa" and falling down now and then in his extremely great excitement. After it was over, it seemed funny, and some one said that nobody but a greenhorn from Missouri could have a runaway like that and not smash something or kill a horse. Joe didn't see the humor of it all, when we told him that on the morrow we would send him out in the field driving a cow, a pig and a sucking calf. At the supper table he trembled so that several times he spilled potatoes from his fork before reaching his mouth.

While I never learned to handle "wild horses" with my great amount of confidence, I at least had a good bump of caution; so on the morrow it was my lot to take Joe's spoiled team out in the field. Most people will know that a spoiled gentle team is even more treacherous than a wild team. Spoiled horses are liable to do anything at any time, and when they do it, they do it all at once.

On my first day I shaved so closely to disaster with this spoiled team that I do not think of it with any great comfort now.

I had been riding and driving all day. That is, instead of walking behind the harrow, I rode a tolerably well broken saddle horse. When I stopped to

(Continued on page twenty.)

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University).

What Red Hair May Tell Those Who Read Character

Human hair contains bits of substance called particles or pigments, which are either reddish yellow or a sepia brown in tint. These are the only two colors which tint the hair. According as your hair is red or brown, flaxon or black, the numbers of these pigments specks are large or small, numerous or few, intensely colored or not.

Red hair, for instance, may be Titian or light red. The intensity of the yellow pigment in each hair occurs in such variation that almost any shade of red may be formed. Combined with brown pigment, the yellow yields the more sombre shades of red hair. An excess of brown pigment may completely hide the few yellow particles. This will yield chestnut, brown or black tresses. Often the brown particles are all absent. When this occurs red hair appears at its best.



Dr. Hirshberg.

The Laws of Nature.

When a brilliantly red-haired girl is married to a bright red-haired man, the entire absence of brown pigment in their hair will be passed on to their offspring. The children will all have red hair and usually the temperaments, such as bravery, quick temperedness and good nature, which often go along with red hair.

However, the laws of heredity make it equally certain that when a red-haired person marries a dark-haired individual, there will be no red-haired children. All of the children born of this match will be dark-haired. There is one exception. If the dark-haired mother or father of such a union had any red-haired ancestor not too far back, half of the children may have red hair. Should there be a few red-haired persons among the immediate ancestors and progenitors of both the mother and the father, these two may have hair ever so dark, yet a few of their children will have red hair.

Some Characteristics.

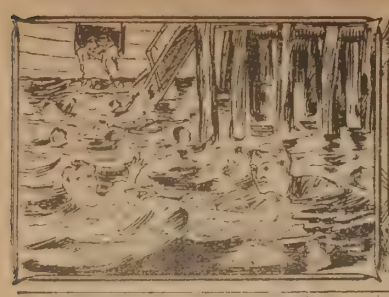
Obviously, if red hair is a temperament-linked factor in heredity, as it sometimes appears to be, such traits as this red badge of courage seems to picture in most minds, may be expected to be present.

Sandy, reddish, ruddy, auburn, aurora, sunburst and Titian are names given to various shades of red hair, but there is no certainty as to which is which in so loose a classification. Andrew Jackson, James Russell Lowell, Swinburne, Savonarola, Thomas Hobbes and other famous men had red hair of one tint or another.

Often characteristic of those who have red hair is an openness of deed and word, a care-free disregard of peril, a quick resentment of insult, a fine and fair sense of humor and justice and a wholehearted absence of all such mean impulses as malice, hypocrisy, insincerity and backbiting.

Cause of Lumbago.

Lumbago may be caused by the poisons from constipation, bad teeth, tonsils, prostate gland, position of standing or walking, posture, occupation, over-reaching or excessive bending. The cause must be searched for diligently by a qualified diagnostician, and treatment given accordingly. The use of a small electric vibrator on the painful part may relieve, but the search for the cause must be made.



UNDER THE BLACK CANOPY



By Paul E. Triem

CHAPTER V.

From somewhere on his right Joe could hear the silvery ripple of water on the pebbly beach, and with this sound as a guide he was able to strike a fairly even course along the smooth, firm shorelands. Sometimes he stumbled upon grotesque heaps of driftwood and logs, twisted and riven stumps showed white and ghastly in the days of his lantern. Sometimes the wind from the Sound was quickened, so that for a moment the smoke was driven back in swirling clouds, and at these times he could look over the distant forest, and could catch the sinister reflection of fire against low-lying clouds.

He walked swiftly and kept as close to the edge of the timber as he could, looking for the skid road of which Mr. McClosky had spoken. The night thickened about him and he broke into a trot. Once he tripped on a root and went heavily to the ground, extinguishing his light and narrowly missing breaking the chimney, but he was up and on his way a minute later. The long, strenuous afternoon was forgotten, and his mind was set upon but one thing—to find the logging road and follow it to the hotel before the racing fires should shut off this means of approach. As to what he would do when he got there he had not the faintest idea. He would answer that problem when he reached it.

A black niche showed in the underbrush at his left, and he paused suddenly and went closer. Then his heart jumped with exultation; it was, indeed, the entrance of an old road, whose corduroyed surface showed that it had been used for conveying logs. Joe held his lantern up and tried to see something of the trail ahead, but the air was thick and he might as well have been shut in a closet.

He had advanced perhaps a quarter of a mile along this road when there came to him from somewhere in the darkness which had closed down about him a sound that brought him to a standstill. A chill struck him, for it had been the sound of a human voice, thick and guttural and apparently almost beside him. He listened with his nerves strained to the snapping point, and next moment it came again. Joe thrust his lantern into the thicket at his right and stooped forward till he was peering at the ground some five feet away.

Then he threw out his hand and thrust the bushes aside, and in a moment was stooping over a figure huddled against the root of a tree. No second glance was necessary to identify it—the tall, lithe body was drawn up with a spasm of pain and the long arms were doubled under—but it was Andy Dubois, undoubtedly. Joe placed his lantern on the ground and gently rolled the Frenchman over upon his back. Andy's face was white, and a deep cut across the forehead and running up into the hair showed what had happened; in some way he had fallen and cut his head upon a rock. Afterwards he must have tried to resume his journey, though what his destination could have been Joe could not comprehend.

For a moment Joe paused to consider. Then he took up the lantern and crawled back into the road and hurried along it to where he had passed a puddle of water. In this he wet his handkerchief and hurried back to Andy. Carefully he bathed the wound, then wrung out the handkerchief and bound it in place with a strip torn from his shirt. He realized that this was a most unscientific method of treating a cut, but it was the best he could do.

Andy moved restlessly and spoke.

"Mighty dull ax you've got there, Jensen. Don't let it slip again—you've nearly killed me."

His eyes remained shut, and Joe realized that whatever he did for the injured man he would have to do unassisted. Andy was delirious, and might remain so for hours or days. With another strip from his shirt he tied the lantern about his neck. Then he raised the Frenchman into a sitting posture and braced him against the tree. Andy cried out incoherent protests, but Joe kept steadily at work. It was no easy task to kneel in front of that limp figure, to get it upon his back and to climb to his feet. After he had accomplished this Joe stood puffing. Then he pushed into the road and resumed his journey, which had become almost a hopeless one.

A score of times during the hours that followed it seemed to him that he must give up. If Andy could have helped a little, could have held himself upon the rescuer's back, it would have been infinitely easier, but to hold that nerveless weight in place and to stagger along through the thick, bitter air of the burning forest, minute after minute, became an unspeakable torture. But all the time there came to him the remembrance that if he surrendered he had no choice but to leave the Frenchman in the direct path of the fire, which was sweeping down along the edge of the Sound. Whether or not Andy would be better off by sharing Joe's fortunes remained to be seen, but it was very certain that he had no chance for his life if he were deserted.

The red flicker in the sky was visible constantly, and Joe imagined that at times he could catch the distant sound of wind or flames rushing toward him. Doggedly he staggered forward, with his mouth dry and his lungs aching.

And then, just as it seemed to him that he must surrender, that he must drop to the road under the weight of his insensible burden, the track widened before him and he came out into a clearing at the farther end of which stood a great log building. It was a two-story affair, built after the bungalow fashion and all of its windows were brilliantly lighted. The porch, too, was illumined with the subdued rays of a number of huge paper lanterns, and in this light Joe made out a group of people, sitting about in easy chairs. He called out hoarsely as he staggered into the clearing; and as they crowded about him he sank to his knees and let Andy slide to the ground.

A shrill, excited voice sounded close to him. "Why, it's Mr. Dudley—the man that pulled me out of the water! How ever did you get here?"

"Walked," Joe explained breathlessly. "What are you people sitting around here for—don't you know that the fires are closing in and that you'll be roasted like peanuts?"

A stout, florid, middle-aged man stepped close to him, his eyes bulging with excitement. "Do you think there is any danger?" he asked, in great excitement.

Joe, who had been examining the figure on the ground, looked up impatiently. "Danger," he repeated; "I hope it's no worse than that! I'm dead tired, but I want you people to get together what few things you actually need, and to be ready to come with me in twenty minutes. Don't load yourselves down with a thing that isn't necessary—just take a little food and some bottles of water."

The florid man, whom Joe afterward learned to be the landlord, led the race back to the hotel; and when the young man looked up, a moment later, there was no one near him except the youngster who had first recognized him.

"You must go and get something to eat, my boy," Joe told him. "And listen—is there a horse here that I can put this poor fellow on? He's coming to, but he'll be too weak to walk for some time."

"My horse is in the stable," Jerry told him. "I'll bring him in a jiffy—and I'll have Mrs. McCarty put up lunch enough for you and me."

He was gone, and Joe was alone with Andy Dubois. The young Frenchman was beginning to stir restlessly, and presently his eyes opened and he stared up at Joe. Then he tried to sit up, but the effort was too much for him and he dropped back with a groan.

"What's the matter?" he demanded in a husky whisper.

Joe shook his head. "I don't know. I found you beside the skid road with a nasty cut across your head. I brought you on here—this is the Crystal Springs hotel, and the fires are all about us."

An expression of bitter hopelessness settled over the logger's face, and he tried to turn away

"It was my own fault," he muttered sullenly. "I did a pretty mean trick to you—I think I was out of my head. And then I started to run, and I fell into a stump hole."

"How did you get so far in this direction?" Joe asked gently.

"I can just remember figuring that the fires were going to get in between these folks and the water, and I must have tried to get over here. I—I don't have much luck doing the square thing, even when I try."

Joe had taken off his coat and folded it into a thin pillow, which he placed under Andy's head. Jerry Stevens returned a few minutes later, leading his pony and carrying a basket of lunch.

"Mrs. McCarty put up mine first," he explained. "I knew she would—I say, you better let me get some bandages and cotton and fix that up. I know how," he added proudly, surveying Andy with a sort of professional interest. "I learned when I was in the hospital."

"That'll be fine," Joe assured him. "But don't waste time. We've got to be on the road in ten minutes."

Jerry was back in an incredibly short time, carrying a roll of bandage and some absorbent cotton. Joe had stripped of his own crude dressing, and helped the youngster, whom he quickly discovered to be as deft as a hospital intern. By the time the first of the summer boarders arrived, Andy was rigged up with a trim, white bandage.

He rebelled at the idea of riding, while the women and children walked.

"No, I won't do it," he declared tremulously. "I've done lots of things I'm ashamed of, but I couldn't do that, you know."

"You'll have to," Joe assured him kindly. "We've got to make good time, and you're in no shape to walk. Please hurry."

For an instant the Frenchman seemed on the point of rebelling fiercely; then he dropped his head and allowed Joe to help him into the saddle.

the landlord had marshaled his forces and had provided lanterns for about half a dozen out of the 15 guests and servants who formed the little company. Joe and Jerry started ahead with a lantern, and a few minutes later the forest had closed in behind and above them. Joe had explained his plan to the men.

"We must try to get back to the sound by following this skid road. I'm afraid it will be too late, but the fire won't run as fast in this green timber as it would in a slashing. If we can make the beach, we'll be all right."

Smoke was driving over them in inky clouds, and the sullen glare of the fires against the sky was creeping along so that it threatened soon to be directly over them. A little girl who had been bravely limping along beside her mother began to cry, than sat down in the road and declared she could go no farther.

"I've got a stone bruise from going barefoot," she wailed, "and I'd rather stay here alone till morning than walk another step."

"But, dear, you couldn't stay here," her mother told her. "The fire will sweep all of this timber, I suppose."

Andy Dubois leaped forward and spoke awkwardly to the woman. "If the little girl wouldn't be afraid, she could ride here behind me," he said. "I'm ashamed to ride with the rest of you walking—and I could at least do this much."

Without waiting for the youngster or her mother to accept this offer, Joe swung her up behind Andy.

"Hold tight!" he cried. "Come on—we can't stand here."

For half an hour the little procession hurried silently along the road. Then Jerry Stevens pulled Joe's sleeve and whispered to him.

"I don't want to scare the women," he said, "but—I saw a spark a moment ago—a big one—flying over."

Joe nodded. "We're not going to made it this way," he agreed. I've seen them before—and we must have two miles to go."

He stopped and explained in a few words what had happened and what it meant.

"We've got to turn back and try another direction, he concluded. "It is traveling pretty fast, in spite of the green timber. I'm afraid the wind is rising."

In spite of the darkness and hardships of the night it was a brave-hearted little company that fell in behind Joe when he made this announcement and faced in the opposite direction. Only Mrs. McCarty, the hotel cook, rebelled.

"Sure I'll not budge another step," she declared, seating herself firmly on a log beside the road. "I've been boiled and roasted ivery day for the last 30 years, and I'm thinkin' it's useless for me to run away from a forest fire. It would no more than give me a good sunburn—the rest of you run along, now, and lave me."

Joe looked at the set and unyielding pose of Mrs. McCarty, and his heart sank. Jerry Stevens, however, went over and whispered something into her ear; and with a sigh of resignation the good woman stood up and joined the others.

"All right, Jerry, boy," she agreed wearily; "if your heart's set on it I'll come; but it's not the loikes of a fire like this can scare me, remember."

By the time they had reached the clearing surrounding the hotel they could catch the roar of flames as they swept through the strip of timber lying between the hotel and the beach. Joe told the others to sit down and get a few minutes' rest while he climbed into the upper branches of a fir tree and reconnoitered.

The tree he chose was one which lifted him well above most of the others in the neighborhood, so that he had a distinct view of such parts of the adjacent country as were lighted by the fires. The others, which represented possible avenues of escape, stood out as indistinct masses. Joe tried to impress upon his memory the relative positions of these light and dark squares on the checkerboard on which he was playing his desperate game; then climbed swiftly down, and by the light of a lantern which Jerry held for him he committted it to paper.

"It won't be possible for us to reach the beach directly," he explained to his companions, "as the fire has cut us off for miles in each direction. We must strike out toward the west and try to find a river or creek large enough to help us."

He helped Andy back into his saddle and lifted the little girl up behind; and the diminutive army was on the point of resuming the march when there came from a thicket close at hand a sudden crashing and scrambling, accompanied by muffled exclamations. An instant later they could see him—a tall, lean figure, dressed in khaki. He plunged into the light of the lanterns and for an instant stood with his hand over his eyes as if to protect them from the sudden glare. Then he spoke.

"If I'm dreaming, please don't wake me up," he begged, and his voice was hoarse and tremulous. "And if I'm not dreaming tell me where I am.'

"You're not dreaming," Joe assured him. "You are within a few rods of the Crystal Springs hotel—though that won't help you much. We're trying to find a way out of the timber before the fire hems us in—if it hasn't already done so."

The stranger's hands dropped from before his eyes, and at the same instant his manner became assured and confident.

"Just so," he agreed, with a sigh of relief. "But at least I know now where I am—my name is Stirling, and I'm a government ranger. I started out to reach my telephone box last evening, and the smoke swept down around me till I was choked and confused. I've been floundering through the brush ever since."

Joe looked wonderingly at him. "With your help we ought to be able to make it," he commented. "Here—I've drawn off a rough map of the country, showing the location of the fires from here. Maybe you can make something of it."

The ranger took the sheet of paper. His eyes narrowed and his lips were pressed close together. Then he placed the tip of his forefinger on a spot in Joe's map.

"My phone is there," said he, "and as near as I can figure we ought to be able to reach it. There's nothing in the way."

"How will that help us?" one of the hotel men asked querulously. "I don't want to talk to some one over a telephone—I want to get out of this and do it quick!"

Mr. Stirling nodded, with his eyes still fastened on the fire map.

"Sure, I know," he agreed. "But the phone is not far from here, and we may be able to get help, or at least information through it. If I can get headquarters they can tell us the best route out. Otherwise, we'll have to figure it out as we go."

He paused, and in the instant which followed there came to them from the distant forest the sullen roar of the fire and the crash of trees.

"Come," Joe said, "we must hurry."

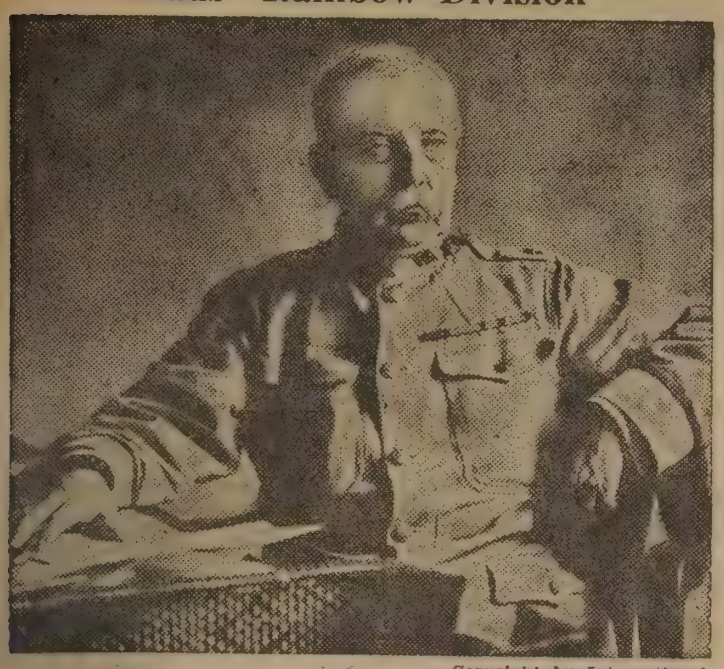
(To be continued in next issue.)

English Army Grows.

In 1914 the British army, for which munitions were required numbered 275,000; today it numbers more than 5,000,000.

All the World's a Stage, and All the Men and Women Merely Players

Leads "Rainbow Division"



Copyright by International.

A new specially posed photograph of Major General William A. Mann, who will command the Forty-second division, composed of national guard troops and known as the "Rainbow division," to leave soon for France. Some 26 states contributed troops to this division. The picture was made in Washington, D. C., and shows the major general at his desk.

Baking Bread for Fighting Men



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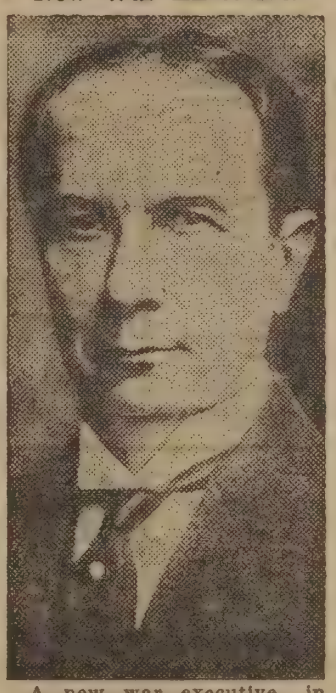
Down on the old American battlefield of Gettysburg these days a huge corps of patriotic young nephews of Uncle Sam are learning the kind of "baking" that counts—they are baking bread for their uncle's fighting men. These bakers get good money, good clothes, good lodgings, good food and free medical attention—why don't you drop around to a recruiting office and see if Uncle Sam can't use you, too? What's more, he needs you. The picture shows some of those who have responded.

New Honor to Lafayette



Statue of the Marquis de Lafayette, the work of Paul W. Bartlett, the famous sculptor, which stands in Paris and which will be formally unveiled on Lafayette day, September 6, in the French capital. It is likely that some of General Pershing's "Sammies" will take part in the exercises.

New War Executive.



A new war executive in Washington is Judge Lovett, executive chairman of the Union Pacific railway. President Wilson selected him to take charge of the determining of the priority of railroad shipments.

Ready for New York Guardsmen



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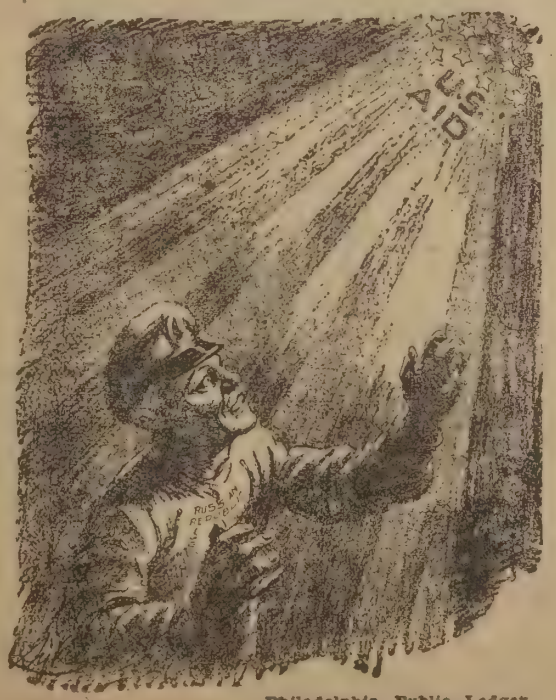
The picture above gives a general view of Camp Wadsworth, Spartanburg, South Carolina, showing buildings erected for the great division of New York National guardsmen who left for the encampment August 30. Things are on the hum at Camp Wadsworth. The arrival of the entire division makes the post among the largest in the country. From here the guardsmen will embark for France at a time kept secret by the war department. Their departure from New York was marked with a big parade and send-off dinners. The division consists of about 32,000 men.

The Answer



—New York Evening Telegram.

Light



—Philadelphia Public Ledger.

Cruel Choice



—Springfield Union.

FAMILY CIRCLE

Write to the Editor

ALICE W. BARLAND
Editorial Contributor

Many Ways to Save

To the Editor of The Farmer: I never throw out anything without thinking "can I use it." I never throw out any milk or cream. I use the cream to shorten biscuits or cookies and add the milk to the sour dough jar. I get a great many compliments on my biscuits and I make them with sour milk using baking powder, with a bit of soda to sweeten. Also use a little shortening.

Do you know that sour cream is much better with fresh strawberries than sweet cream? Prepare it as I say and you will never know it is sour cream. It has a velvet taste sweet cream never brings. It doesn't curdle.

Wash the berries, put on sufficient sugar to sweeten and stir thoroughly. Add cream and stir. I also use it in my short cake, as I prepare my berries this same way adding sweet cream to make thin, then put between layers of rich biscuit dough.

Never waste any fruit at all. Often there has been a little jelly, jam or preserve left from day to day. I put them all in a jar with what fruit is left over, add sugar and water and cook. You can combine anything except prunes, but these make dandy "prune cake."

Watch your bread can, as that is a leak in most households. What bread you cannot use, dry in the oven and grind to use over macaroni and cheese, or roll meat or fish in.

I always plan the general part of my meals in the morning. Even if there is only a little steak left over I cut it in small pieces, put it on the stove with some water and a chopped up onion, adding what gravy is left and cook it tender while there is a fire. You know we have to economize on wood at present. Just before a meal I repeat it, season, cover it with a short biscuit dough and have a meat pie, after it is baked.

We have a fine garden, but as space is limited in the city, I am putting a broccoli plant occasionally between my roses. As my radishes and lettuce were taken out I have transplanted cabbage and chard. I trim my roses in July for fall blooming for the showing at "State Fair." I have taken a good many prizes at fair on roses, dahlias, fancy work and canned fruit and vegetables, and why do not more of the women try for that? I don't find it hard.

I am going to dry corn so as to save the jars for other things we can't dry. Put the corn on to cook until the milk is set, cool a few minutes, then with a sharp knife cut off the top of the corn and scrape the rest. Put it on a cloth in the sun with mosquito netting over it. When dry heat in the oven but do not brown, then place in a tight bag.

I find you can make fine soup out of the leftovers, as beans, carrots, macaroni and cheese, rice, bits of meat and fish (not too strong), potatoes, etc., (anything except beets, and they make good pickles) by cooking, washing, straining and adding seasoning. Dice bread, brown and serve.

We have a large lot 100x130 feet with a large house and lawn, but we keep the rest of the ground busy. Even if people are only renting they could put out vines, berries and a few other things with the cost of only a few cents and sometimes they have them given to them. Think of the comfort some one else will derive. We have a plot 50x70 feet in garden, the rest of the place has a row of 50 feet in length of loganberries, Hymalalia berries of which I sold over 10 crates last year besides the jelly, jam and canned berries I used. Also Phynominal berries, everbearing raspberries, two peach and one quince and three cherry trees. We have four bearing walnut trees on the parking, six rhubarb plants, over 100 rose bushes, three lilac trees, one red Hawthorne tree, over 100 dahlias of different kinds, and this year planted over two bushels of Gladiolus bulbs. Besides we have some sweet peas, iris and lilies.

We derive quite a little revenue from the flowers as my small son has sold loads of them to the stores and restaurants up town. One summer we sold over $60 worth besides taking in $85 in prizes at the state fair. We have a lavender bush from which my daughter makes coat hangers and lavender sticks and makes quite a bit of pin money. Our lawn is 16 feet at the front of the house and 10 on each side. Our house is a large seven-room square one, hard finished and with a large porch. We have our bed on the porch this summer as it saves time and labor. A couch on the side porch behind the Virginia creeper for son and a bed on the screened in back porch for girls makes the work very much easier and by turning the hose on the porches it is cleaner for the summer than bedrooms. We have only lived in this place eight years and built our house in a bare lot. Any one could do with their lots as we have and it would cut down the high cost of living wonderfully. We do all our own work except sending our clothes to the "wet wash" besides doing dressmaking and growing about 200 varieties of dahlias. Interest the children is one secret of economy.

S. JENNIE PURVINE.

Salem, Ore.

Ups and Downs of a Bunch Grass Boy

(Continued from page seventeen.)

unhitch in the evening, I was busy with the saddle or the lines for a moment, and my saddle horse started home. Busy, and used to being in the saddle, I did not notice that the animal was moving under me till he had passed the far end of the harrow, and the line to the far horse—the clumsy colt—was suddenly jerked out of my hand.

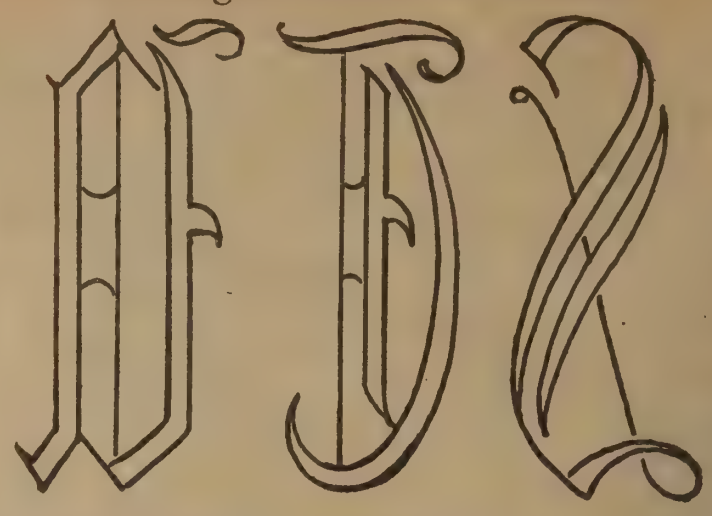
I did not shout "whoa," as oJe Hennon had done; that would have started the team like gunpowder. I did not have time to stop my pony; bent on getting the lost line, I reached for it, and lunged headlong out of the saddle as I did so.

My foot hung in the stirrup. I felt the yank as my startled horse bounded away. I snatched the lost line the very instant that the big colt made a forward lunge, stopping when he felt the strong jerk of the bit. It all happened in a breath, and silently. But at supper, like Joe Hennon the evening before, I was trembling a bit; and it was days before I got my nerve back to the point where I could safely ride behind a harrow and drive from the saddle.

Old Term for Judah.

The word "Jewry" occurs several times in the Apochrypha and New Testament, but only once in the Old Testament (Daniel v., 13). The same word is elsewhere rendered Judah and Judea

Old English Initials to Embroider



To transfer this design, put some soap in a pint of water, stir and remove excess moisture by partially drying design. Place material on a hard, flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under the initial before embroidering. It aids one in washing the color from the finished design.

In padding these old English initials, different methods may be used. Some use the twilled cotton for the purpose; others make the chain stitch, while others let a skein of floss out at full length and embroider a strip of it under the thick parts while forming the letter, clipping the skein when the initial is finished. This is a splendid method, quickly done, and is suggested, too, as a help in padding all large pieces in border or crescent outline.

Initial can be made by filling in the broad space with French knots. This is used largely on elaborate pieces, such as the laundry bag, table scarfs, and ornate gifts.

Perhaps He Had.

Outside on a board it had "Woman's Exchange" written in large type, and he walked in.

A tall, spinster-looking person, with a face that would have taken the polish off the furniture, came forward.

"Is this the woman's exchange?" he asked.

"Yes."

"And you are the woman?"

"Yes."

He scratched his head and regarded her for a few seconds, and then he said:

"Well, I think I'd better keep Sal, after all."—Ideas.

Any Way.

They were discussing the joke about getting down off an elephant.

"How do you get down?" asked the jokesmith for the fourth time.

"You climb down."

"Wrong!"

"You grease his sides and slide down."

"Wrong!"

"You take a ladder and get down."

"Wrong!"

"Well, you take the trunk line down."

"No, not quite. You don't get down off an elephant; you get it off a goose."—Indianapolis News.

how Mrs Sensible saves on her table —



Knowing that good, well-baked white bread gives more in food value than any other food, for what it costs, the economical home manager makes bread a most important article in the family diet at every meal. Profiting by the experience of her mother and grandmother she bakes with



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the flour that was awarded the Grand Prize, the highest honor, at the Panama Pacific International Exposition, San Francisco.

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11

Patterns

2172—A new and popular style. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium will require 6 1-4 yards of 48-inch material. Price, 10 cents.

2191—Dress for elderly ladies. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 1-8 yards of 30-inch material for a 36-inch size. Price, 10 cents.

1938—Dress for misses and small women, with underwaist. Cut in 3 sizes: 16, 18 and 20 years. It requires 4 1-4 yards of 44-inch material for the underdress, and 3 yards for the overdress, for an 18-year size. The underskirt measures about 2 1-8 yards at the foot. Price, 10 cents.

1968—Girls' dress. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. It requires 3 3-8 yards of 44-inch material for a 6-year size. Price, 10 cents.

1801—Girls' apron and cap. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. It requires 2 1-2 yards of 36-inch material for a 10-year size, for the apron, and 3-4 yard for the cap. Price, 10 cents.

2169—Girls' dress. Cut in 4 sizes: 4, 6, 8 and 10 years. It requires 3 5-8 yards of 36-inch material for an 8-year size. Price, 10 cents.

1952—Lady's house dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 6 1-8 yards of 44-inch material for a 36-inch size. The skirt measures about 3 yards at the foot. Price, 10 cents.

2178—Girls' dress. Cut in 4 sizes: 4, 6, 8 and 10 years. It requires 3 3-4 yards of 36-inch material for an 8-year size. Price, 10 cents.

2189—Lady's waist. Cut in 6 sizes: 34, 36, 38,40, 42 and 44 inches bust measure. It requires 3 1-4 yards of 27-inch material for a 36-inch size. Price, 10 cents.

2168—A practical apron model. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 6 1-8 yards of 36-inch material. Price, 10 cents.

Waist 1849, Skirt 1871—Lady's costume. Waist 1849 cut in 6 sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. Skirt 1871 cut in 6 sizes: 20, 22, 24, 26, 28 and 30 inches waist measure. It requires 3 1-4 yards of 36-inch material for the waist, and 4 1-8 yards of 44-inch material for the skirt for a medium size. The skirt measures 3 yards at the foot. Two separate patterns, 10 cents for each pattern.

2177—Lady's maternity skirt. Cut in 7 sizes: 24, 26, 28, 30, 32, 34 and 36 inches waist measure. Size 26 requires 3 7-8 yards of 44-inch material. The skirt measures about 3 yards at the lower edge. Price, 10 cents.

British Jackie Expensive.

To equip a British sailor takes nearly eight times as many workmen as are required to provide a soldier with all he needs in the way of munitions.



Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

Germans Death Toll.

According to German official reports, which place the German dead at one and one-half millions, more than 22 times as many Germans have been killed in action as were killed outright in our civil war. Nearly five times as many have perished in battle as died of wounds, of disease and on the field in the civil war. The number of these German dead are five times the total of men who engaged in the American revolution, and they are nearly three times as many as fought or shared in the war of 1812.

Federal Child Labor Laws.

The new federal child labor law went into effect September 1. Hereafter no child under 14 may be employed in any factory, mill, workshop, or cannery in the United States whose products are to be shipped in interstate commerce, and no child under 16 in any mine or quarry. The working day of children 14 and 15 years of age in factories may not be longer than eight hours and they may not be employed between 7 p. m. and 6 a. m.

Street railway employes at Vancouver, B. C., have received an increase in wages.

The DREADNAUGHT (REGISTERED)

$6.00

With 2 Pairs Full-lined Knicker-bockers.



A GREAT suit for school wear, because it wears so splendidly.

Smart, too, in new plain-front model with two-piece belt and three patch pockets. Specially reinforced at all vital points. Buttons will not come off.

Tailored from handsome gray and brown mixtures. Sizes 6 to 18 years.

To be obtained from Frederick & Nelson only, and will be sent promptly by mail to any address.

ADDRESS: MAIL ORDER-DEPARTMENT-F-

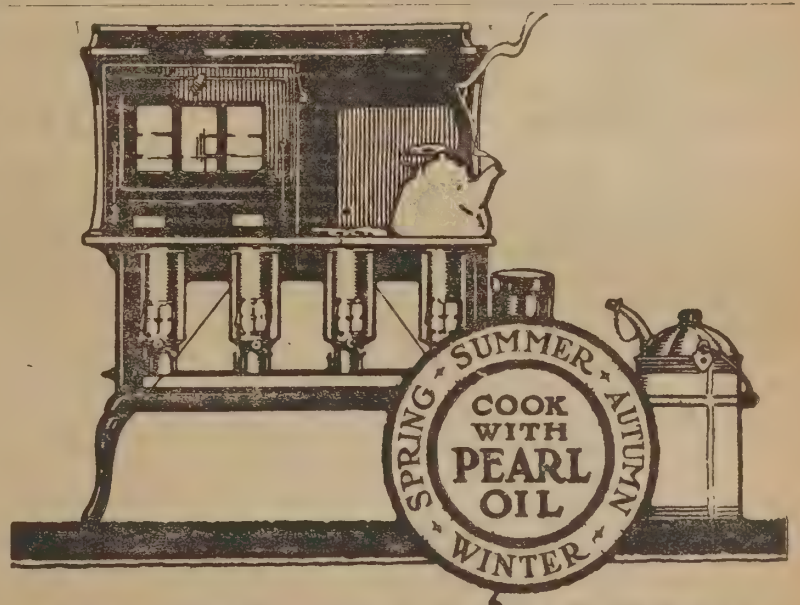
FREDERICK & NELSON

• SEATTLE •

Send for a copy of "Autumn Fashion News."

LET US DEVELOP YOUR FILMS. Our price is only 25c for developing a 6-exposure roll film up to postal size and making six prints. Cash must accompany order. mailed back, prepaid. MOEN'S ART STUDIO, Preston, Minnesota.





ALL THE YEAR ROUND

Cooler cooking in summer—better and more economical cooking all the year 'round.

A good oil stove will cook anything that any wood or coal range will cook, and do it better because of the steady, evenly-distributed heat.

All the convenience of gas. Meals in a jiffy, and a cool kitchen in summer.

The long blue chimneys prevent all smoke and smell.

In 1, 2, 3 and 4 burner sizes, with or without ovens. Also cabinet models. Ask your dealer today.

NEW PERFECTION OIL COOK-STOVE

STANDARD OIL COMPANY
(California)



Dear Little Corner Children: I have received two letters recently which I classify together. One tells how a little girl earned quite a sum of money. The other tells of how another invested the money she had—buying a Liberty bond. Both these things are good and I am glad my nephews and nieces are earning money by honest work with the use of their hands and their brains, and also are spending it in such a fine way. While we think the Liberty bonds are going to be a fine investment, still that is not the real reason why we have bought them. The real reason is that we love our country and believe in her and want to help her.

This is a mesage to grown-ups, too.

Yours affectionately,

AUNT NELLIE.

Another Nice Letter From Alexander.

Dear Aunt Nellie: I have written to the Children's Corner before and was indeed surprised when I received my unexpected prize. I will have to thank Aunt Nellie many times for it. The prize was a story book by the name of "The Dog of Flanders." I thought it was a very good book. Its main characters were Nello, the little boy Patrasche, the old dog, and Jehan Daas, the old soldier. Jehan Daas lived in a little hut near Antwerp. Nello and the dog were both orphaned. Nello was Jehan's grandson. The old soldier was a very poor man. He was old and a cripple. Pat Rasche had to endure many hardships. His first master was a brute. He treated the poor dog terribly, and finally the dog had to give up. His master spent his time hunting pots, pans, buckets and wares of crockery and left Patrasche to draw the load as best he could. The load soon became too heavy and he gave up his work. He left him by the roadside where Jehan Daas found him and took good care of him. His only occupation was hauling milk to Antwerp. The dog, being very large and strongly sympathizing with Jehan, helped him take milk to town. Jehan soon died and left them all alone. They were too poor to pay rent to the owner and he being cruel now bade them to clean the home and leave everything to him for not paying rent. Nello and Patrasche were left to die in the cold. I am 13 years old and am in the seventh grade. I hope that my letter will please my cousins. Trusting to hear from anyone of my age and many others. Alexander Laurence Weitz, box 51, Endicott, Wash.

Loves the Beautiful Summer Days.

Dear Aunt Nellie: I enjoy the letters of the Children's Corner very much. I passed to the seventh grade and will be 13 years old August 25. Emma Sneva is my twin. She writes to me. Ellen Purcell is one year older than I am. There is a small creek that run into a larger creek and that is called the Olalla creek. We go swimming and fishing in it. I think summer is the best season in the year because then all sorts of berries are ripe and Oh, the beautiful summer days and the fun we have hauling hay and going swimming and wading. I live on a 26-acre farm. We have two cows, one bull, one heifer, one horse, one pig. The cows' names are Dollie and Lillie. The bull's name is Mutt. The heifer's name is Rosie. The horse's name is Maggie. We have three ducks, about 75 chickens, one dog and one cat. The dog's name is Duke. My cat hasn't a name. My brother and I have a strawberry patch together.—Esther Carslin, Olalla, Wash.

Has Fun Coming From School.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and am in the fourth grade. I like to go to school. I live a mile and a half and more from school. I have lots of fun coming from school. We have 30 chickens, 24 chicks, four bantams and two big mother hens. I have light brown hair and gray eyes. My birthday is December 7.—Cecelia Viola Jones, Eatonville, Wash. R. F. D. No. 1, box 92.

Wants the Cousins to Write.

Dear Aunt Nellie: I have not written to the Children's Corner for a long time. I will choose for my subject "My Vacation." For my vacation I went up to my sister's and stayed up there three weeks. I came home and will stay until school starts. I will be glad when school starts. I have a garden of beets, lettuce, carrots, onions and cucumbers. There are four girls in our family and one boy. The girls' names are Minnie, Mamie, Pearl and myself. The boy's name is Wayne. He will be 2 years old the 16th of September. I am 11 years old and in the fifth grade at school. My birthday is the 14th of May. I have two ponies, and their names are Pet and Prince. I can ride Pet. Her color is black. Pet is a yearling, and Prince is just a little colt. I have a dog, and his name is Bonnie. He will speak. I have nine chickens. We have about 100 chickens. I have two sisters married and their names are Minnie Nickerson and Mamie Lenville. I have a little nephew named Glen Dale Nickerson. They call him Glen. He is seven months old and can stand against the wall. I would be very glad if some of the girls would write to me.—Beatrice Freddie Giles, Marengo, Wash., Box 24.

Tramping in the Hay Is Fun.

Dear Aunt Nellie: It is a long time ago since I wrote last. I thought I would write again. I was 9 years old March 10 and passed into the sixth grade at school. I am having a good time this vacation picking blackberries and they are hauling hay here now, so I have lots of fun tramping in the haymow. I am staying home this vacation. I wouldn't trade with a city girl for all the pleading one could say to me. Everything is lovely here now. There are many roses beside our house and around the yard. There are daisies and other kinds of flowers, too. The blackberries are ripe and the tame blackberries are in flower. The vegetables are in flower. The vegetables look very nice, too, as war is raging almost all over the world. I weigh 72 pounds. If I have a twin I would like to hear from her.—Walborg Brandt, Mount Vernon, Wash.

Fun to Go Wading in the Creek.

Dear Aunt Nellie: This is the first time I have written to the Corner and it may not be the last. I am 11 years old and my birthday is the 7th of January. I will go into the sixth grade in September. My two sisters, my brother and I are visiting on our grandfather's farm four miles from Northport. Grandpa has two horses, one cow, a calf, 12 hens, one rooster and about 90 little baby chickens. My uncle has a cat and a dog, too. We go fishing and wading in back of our house in the creek. We have lots of fun. I have three or four dolls, but the one I like best is named Evelyn May. I like to read the letters in the Corner.—Kathryn Smith, Northport, Wash.

Stand By Uncle Sam to the Very Last.

Dear Aunt Nellie: I am 12 years old and in the seventh grade. My birthday is January 31. I have written to the Children's Corner several times before. My subject this time is Loyalty to Country. Many heroes have bled and died on the battlefield serving and plodding onward for their country. These heroes died noble deaths and we should honor them. In this great world conflict we are now engaged in, we should especially honor it for it stands for our nation. We should support the United States boys who are in Europe for they may give their lives to give us freedom. We should all stand by Uncle Sam to the very last and help for world democracy. — Harvey Norris, Goldendale, Wash.

Julia Loves to Read the Letters.

Dear Aunt Nellie: This is the first attempt that I have made to write to the Children's Corner which I love to read. I live in the country on a farm of 120 acres. We have nine cows to milk of which I milk one. My father has four horses. Their names are Charlie, Fannie, Jessie, and Dolly. For pets I have three cats and two dogs, whose names are Cubbie and Dash, which is a hound. I have three brothers and one sister. Her name is Lena. My birthday is May 26 when I was 13. Have I a twin? I would like to correspond with any of the cousins about the same age as I am.—Julia Marie Neumeier, box 112, route 1, Chehalis, Wash.

Belong to the "Garden Club."

Dear Aunt Nellie: It has been about a year since I wrote to the Corner, but hope I am welcome again. I have one brother and one sister. My brother is 10 years old, and my sister 5. I am 12, and will go into the eighth grade when school starts. My brother and I belong to the "garden club" and are raising a garden. My garden contains beans and onions. I have 16 rows of beans about 100 feet long. By raising this small garden I am doing my bit for my country. I would like to get letters from my cousins and will answer all the letters I get.—Bertha Ellison, Thorp, Wash.

Kitty Lucy Is Belle's Pet.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am a girl 9 years old and in the fourth grade. I live on a 55-acre farm. We have 27 calves and 23 cows. We have eight big pigs and four little ones. I have one kitten. Her name is Kit Lucy. I have one sister and three brothers. Their names are Jennie Orral, Hampton and Wilbur. I would like to hear from some of the children.—Belle Hartung, Kennewick, Wash.

Is Visiting Her Grandmother.

Dear Aunt Nellie: I was very glad to see that the first letter I wrote to the Children's Corner was published. The subject I am going to write about is my vacation. I am spending my vacation with my grandpa and grandma. They live on a 160-acre farm. My home is in Spokane. My address is 302 West Indiana. I am 11 years old and in the sixth grade. I would like it if some girl woud write to me, because I have no sister. The first week while I was at my grandma's she gave me a little garden spot. I planted corn, beans, pumpkins, cabbage, carrots and muskmelon. I have to water my garden every day because it is so dry. I caught 100 squirrels in three months; I got 2½ cents apiece. There is always plenty of work to do, and I haven't much time to crochet as much as I want to. Last month I was very busy picking raspberries. There aren't any little girls around my grandma's for me to play with. I have a cluck hen with eight little chickens to tend to. I do not like to leave the farm, but I must as school starts next month. My grandpa takes The Washington Farmer, and I enjoy reading the letters very much. When I go home grandma is going to send the Children's Corner to me. And I will be glad to get it.—Barnetta Bartholomew, Tekoa, Wash.

Fido and Shep Are Ruby's Dogs.

Dear Aunt Nellie: This is the first time that I have ever written to the Corner, but I hope it won't be the last. I live on a 160-acre farm. We have 250 little chickens and 75 old chickens. We have 10 pigs, six head of horses, five geese, 10 head of cattle. I have three cats and two dogs. Their names are Fido and Shep. I have a piano. I like to play on my piano. I have taken 13 lessons. I am 11 years old. I have three brothers and one sister. My oldest brother's name is Alfred. He is 39 years old. Leona is 30, Henry is 37, and Sister Laura is 29. I go to the Lone Butte school. I am in the seventh grade. My teacher's name was Miss Rickerd. There are 15 pupils in my school. I live a mile from school.—Ruby Gertrude Hicks, R. R. 1, Box 24, Mansfield, Wash.

All About Margarette's Home.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My subject is My Home. My home is at the foot of a hill and is entirely surrounded by trees. It is very pretty and very cool in the summer time. Our house was almost entirely surrounded by verandas. The roof slid off of one last winter. Our house is light green trimmed in dark green. We have an upstairs to our house. There are eight rooms in the whole house. I have some pets. I have two dogs, one cat, two bantams, one colt, named Prince, and chickens. I am 11 years old and in the fifth grade. My birthday is January 22. Have I a twin? I would like for some of the cousins to write to me. If this escapes the waste basket I will write again and tell you about being in the hospital sick.—Margarette Ruth Williams, Box 54 Anatone, Wash.

Collie and Dollie Are Saddle Ponies.

Dear Aunt Nellie: I will tell you this time how many sheep and hogs we have. We have 14 little lambs and 17 old sheep and we have 24 little pigs and 11 old pigs. My little sisters and I herd sheep, but Alice and I herd them most of the time. We have 13 horses and one spring colt and two yearlings. Our saddle ponies' names are Collie and Dollie. We have two cats and one dog. Their names are Snowball and Pussy and the dog's name is Bluche. I have three sisters and two brothers. Their names are Elsie, Alice, Clara, Victor and Chester. Elsie is the oldest of our family. She is 15. My little sister, Alice, will be 10 the 19th of December. I want the little girl that wrote to The Washington Farmer that is 9 and will be 10 the 19th of December to know that she has a twin. Our school was out the first of June. Our teacher's name was Mr. Stram. I like him fine. They are going to build a two-room schoolhouse. We milk three cows. We milk them twice a day. My papa is hauling hay. He will be through today. My birthday is the 21st of June. I was 13 years old.—Marie Ganguin, Goldendale, Wash.

A Good Time Wherever She Goes.

Dear Aunt Nellie: I have not much to say. This is just about what I did in the summer. I was out in the country and had lots of fun milking, feeding the chickens, getting the cows and taking care of the baby. My uncle and aunt live on the farm now. I baked cakes on the farm and in town I have lots of fun, too. I have a piano and am taking music lessons from Miss Inkster. I have been reading The Washington Farmer. I enjoy reading the stories that the children have been writing. I spent my Fourth of July in Spokane at Natatorium and had a very good time and in the evening we came back to Davenport to see the fireworks. We had a Sunday school picnic and had a good time. We had a program and dinner and in the afternoon we played games. I went to Minnie Falls and had a good time there fishing and playing. I was having a good time on Sundays. I go to Sunday school every Sunday. School is going to start pretty soon and I am going to be in the fifth grade. I am 11 years old. My birthday is the 12th of June.—Alice Reinbold, Box 136, Davenport, Wash.

We Can Help to Cheer the Soldiers.

Dear Aunt Nellie: I have chosen my subject which is How Can I Help My Country? Now I shall tell you. First, I can try to make money and help the auxiliary. Children can join the auxiliary and sew, crochet wash rags, knit sponges and so on. I can also economize. We can correspond with the soldiers in the trenches to cheer them up and many other things, too. I think I will write another subject which will be, What I Want to Be. Could you guess? I want to be a Red Cross nurse and nurse the soldiers that get wounded. I would like to be a nurse because you can help your country that way. I would like to win a prize if I could. There is a girl in Selleck, Wash., named Esther M. Bowers. Esther M. Bower of Roy, Wash., has the same initials as she has. I know Lucile Bowers. She lives in Selleck. I used to let her look at the Children's Corner in our Washington Farmer till she asked her father to subscribe for it and now they get it.—Mary Esther Symington, Box 97, Selleck, Wash.

Girls What would you like to have as a reward for securing your neighbor as a subscriber? Write the prize editor of the Washington Farmer, Review building, Spokane, Wash.

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Cow Testing Summary Figures in Oregon and Washington

W. E. Meyer of the western office of the dairy division of the United States department of agriculture has compiled a brief report of the July cow testing figures. The figures for Oregon and Washington follow:

Name of Association.	No. Cows Tested	Average Lbs. Milk.	Average Lbs. Fat.	Cost Feed Per Cow.
OREGON:				
Coquille-Myrtle Point	758	708.2	30.25	....
Coos Bay	485	850	32.2	$1.75
Curry	556	692.4	31.06	....
Siuslaw-Smith River	432	....	....	....
Tillamook County	739	879	36.47	3.50
Lane County	362	509.9	21.8	2.93
Linn County	289	525	24.7	4.03
Polk County	223	481.7	26.2	4.70
Yamhill County	306	554	27.2	....
Gresham-Columbia Slough	528	....	....	....
Washington County	289	575	28.75	4.35
Marion County	350	611.7	27.13	4.46
First Central Oregon	231	560	27.7	2.84
WASHINGTON:				
Enumclaw	326	693.3	27.19	$2.68
Duvall	491	743	29.1	3.38
Montesano	337	778	32.51	2.76
Chehalis	448	790	29.1	2.70
Pierce County	514	784	30.3	5.24
Snohomish Valley	357	815	31.8	3.73
Skagit Valley No. 1	604	968	33.7	2.77
Skagit Valley No. 2	604	904	32.8	2.62
Snoqualmie Valley	477	667	26.6	3.42
Stillaguamish Valley	573	730.2	31.85	3.45
Clallam County	521	692.7	30.8	2.75
White River Valley	605	902	31.32	4.41
Wahkiakum	586	666.7	31.09	....
Ahtanum-Wide Hollow	595	601.4	22.8	2.15
Whitman	270	733	31.9	6.94
Sunnyside	369	572.2	23.1	4.07

Coos Bay, Marshfield; W. C. Persinger, tester—"Ordered three carloads of alfalfa hay for members of association. 184 association cows tested for tuberculosis and only one reacted."

Siuslaw & Smith River, Florence; J. J. Henricks, tester—"We are making our plans for a dairymen's picnic on August 25th."

Lane County, Junction City; L. N. Ross, tester—"Two cows went to the butcher."

Linn County, Albany; E. W. Bortruff, tester—"Pastures are very poor. Many farmers are beginning to feed, while in a normal year they would still pasture for a month or two. Nearly all dairymen will have enough corn to fill their silos."

Polk County, Independence, W. J. Morgan, tester—"McArthur & Stauff's sale, the most successful ever held in Polk, again illustrates the value of records as an aid in selling animals."

Yamhill County, Amity; R. W. McNeal, tester—"Two men in the association are cooperating in the purchase of a purebred bull."

Gresham-Columbia Slough, Gresham; D. S. Frame, tester—"Pasture is practically gone and many of the dairymen are feeding from their winter hay."

Marion County, Salem; K. Hanneman, tester—"The members of the local cow-testing association expect to buy a number of carloads of feed if obtainable."

First Central Oregon, Redmond; G. M. Alexander, tester—"Heifers from best cows are being saved."

Washington County, Hillsboro; H. A. Stone, tester—"July being hot and dry with a scarcity of pasture as well as other feeds has resulted in a lower production; many cows being dried up has also caused a lower production; 12 unprofitable cows went to the butcher."

Tillamook Assoc., Tillamook; Ira J. Wolf, tester—"Since organization for 1917 work, four members have added purebred bulls to their herds for the first time. Twenty-five members out of 31 in the association have purebred bulls."

Washington Notes.

Enumclaw Assoc., Enumclaw—This association, which was without a tester during the month of June and which has never completed a year's record without a break or two of some kind, is now again on its feet.

Duvall Assoc., Duvall; A. J. Leonard, tester—"The state reformatory were feeding rye silage as a supplement to pasture. While some cows did not seem to relish it, most of them ate their feed up clean. Owing to the high price of milk, many farmers are trying to raise calves without feeding milk."

Montesano Assoc., Montesano; H. P. Hansen, tester—"One member who feeds about one-third of his milk to calves which he intends to raise for beef told me last month that they more than save their testing bill every month by picking out the low-testing cows for the calves."

Chehalis Assoc., Chehalis; B. C. Wright, tester—"The outstanding feature this month is the number of milking machines being installed. The labor factor is the principal stimulus. Cow-testing records here do not show that the machines are not as efficient in keeping up the production as the hand method; neither do they show the increased yield which salesmen very often claim for them."

Pierce County Assoc.; William C. Buell, tester—"Pasture is getting poorer, causing decreased production. Several members have filled their silos with a legume and grass crop and are now using the new silage to help out with the pasture."

Snohomish Valley, Snohomish; V. B. Riley, tester—"Ed Holcomb found that soiling and pasture were cheaper than pasture alone."

Skagit Valley No. 1, Mount Vernon; R. L. Lauderdale, tester—"With the present high price of milk, members are attempting to produce the most milk possible, dairying being the principal industry throughout the valley. New silos are going up rapidly."

Skagit Valley No. 2, Mount Vernon; Ray W. Ropes, tester—"The new wooden hoop silo which is now under construction on L. E. Jenning's farm is attracting a great deal of attention throughout the community. Many people have received bulletins from Puyallup and are planning on constructing one later, if Jenning's silo proves satisfactory."

Snoqualmie Valley, Fall City; Ray A. Walker, tester—"Pasture has been short the last month and in almost every case additional feed has been necessary."

Stillaguamish Assoc., Arlington; W. W. Henry, Tester—"The decrease in production last month is a good stimulus to induce the farmers to purchase milk scales. The most striking cases of decrease were due to pasture becoming short. Many cows dropped as much as 10 pounds per day. One member immediately began feeding green feed after the test last month. There are three members of the association who weigh each milking from every cow. These men have been able to hold their herd production up remarkably well."

Clallam County, Sequim; E. W. Soper, Tester—"Eleventh testing period finished and the association members are beginning to do some real thinking about signing for another year. From a personal standpoint I believe all the members have taken enough added interest in their herds to well repay them for the money spent in the cow-testing association."

White River Valley, Kent; Robert Cowan, Tester—"The farmers are commencing to wonder what they can feed this winter, so it behooves the testers to brush up on the fine points of feeds and feeding as the farmers must figure closely this year, and I find them already asking questions."

Wahkiakum Assoc., Skomakawa—"There were testing outfits on about half the farms visited, and although most of them have fallen into disuse, their effect on improving the dairy herds in the county is strikingly visible. So it naturally follows that the greater use of the tester will cause a marked improvement on the herds in the association. A. Grandberg has been using his tester for several years and I found that his lowest test for the month was 5.4 per cent in his herd of nine cows. I am arranging for the exchange of two Holstein bulls between William Morfitt and H. E. Caruthers. Both bulls are registered. I was called by Mr. Meserve to see a sick heifer suffering with some form of indigestion. I gave her one and a half pounds of Epsom salts, which had the desired effect and she was put on pasture the next morning."

Sunnyside Assoc., Sunnyside; G. W. Huston, Secretary—"A large number of the members are now stacking their cutting of alfalfa. Some is being contracted at $15 per ton, f. o. b. The tester, Mr. Keene, mysteriously disappeared at the close of the month and another tester has not yet been secured."

Ahtanum-Wide Hollow, North Yakima; R. Larsen, Tester—"The first six months of this association have just been completed with very encouraging results. We started the testing year with 550 cows listed. After the first month's test, two members of our association with eight cows each decided that they would change from dairying to beef raising—and a wise move too in consideration of the stock they had and the methods practiced. During the first six months in addition to the two herds of eight cows each which were doomed for the slaughtering block, a total of 30 cows have either been sold directly to butcher or are in process of preparation for the butcher.

A cooperative cheese factory located on the Tieton project has been recently set in operation and promises to give very excellent results. Mr. Bean has had personal charge of the work.

I think Cowan's idea of noting wants in exchange of dairy stock as well as supply, a good one. I frequently have demands for some good grade cows and nothing seems to be available around here except for the butcher. Of course, we will have some heifers from the hills this fall which will help some, but I have men who want tried and proven cows. I have heard that in Oregon quite a number of good dairy cows are being sold because of shortage of feed for this coming winter. I would like to hear more about this and something of the prices expected.

I would like to comment on the helpfulness of the monthly news letter which certainly contains many helpful ideas and suggestions concerning our work."

The Motor Car
On the Farm

Tractor Efficiency.

Reports we have gathered during the past few weeks show many tractors will be bought in the Pacific northwest during the next 12 months. This being the case, the following report from O. F. Weske, who farms 600 acres with a tractor having 8 horsepower at the drawbar and 16 horsepower on the belt, is especially interesting. Here is the way Mr. Weske sets it down:

One man, 6 months, at $65 a month.	$ 390.00
One man, 22 nights, at $2.50 a night	55.00
Repairs used on tractors, plows, disks and drills	56.22
Gasoline and lubricating oil used	333.45
Figuring 20 per cent depreciation on the tractor and 10 per cent on the other machines	195.00
Interest on $1200 invested in the tractor and other machines	72.00
Miscellaneous expense	54.44
Total cost of putting in 600 acres of wheat	$1156.11

"This is a total cost of $1.93 an acre, which, of course, does not include harvesting. When harvest time comes, I hitch two binders behind the tractor, and the work goes ahead pretty fast when it is done in this way.

"At the time I put these figures together, I was eager to know how they compared with the cost of doing the same work with horses, so I worked out the following comparison between the two methods:

"I have two horses, which I have owned for the last nine years, so I figured up the cost of these for the nine years and then divided it by nine to get the average cost of the horses per year. The result was $276.04, or $138.02 per year per horse.

"My tractor, which has a capacity of eight horsepower on the drawbar and 16 on the belt, is equal to at least eight horses. If you figure the cost of feeding one horse for one year at $138.02, it will cost $1,104.16 to feed eight horses. The cost of the fuel and oil for the tractor is $333.45. The difference in cost in favor of the tractor is $770.71 a year.

"Furthermore, it required only one man to operate the tractor and the implements behind it. It would require at least two men to drive the eight horses, which means the additional expense of one man. More time is required to take care of eight horses than to take care of one tractor, and, counting the original cost of eight horses and harness, it would mean twice the amount invested in horses as in the tractor.

"I think that sometimes we farmers do not realize that we can buy a tractor cheaper than we can buy horses for the same work. The depreciation of eight horses and eight sets of harness would be much more than depreciation on the tractor, and the interest on the investment would be at least twice as large.

"Besides making this splendid saving by the use of a tractor instead of horses, I do not believe that any average eight horses would do the same work under the same conditions, that was done with this tractor, and do it so well. We had very little rain while the work was being done, and I am sure the horses would not have stood up under these trying conditions. The tractor, however, works even better when it is hot than when it is cool. Moreover, you know that the average farmer who puts in as much as 600 acres of wheat keeps more than eight horses."

Here Is the Conservation Program

This is what the government is urging upon everybody as a means of preventing great suffering from hunger in many parts of the world, with the possible loss of the war as a result of improperly fed armies:

1. To eat one wheatless meal a day.
2. To eat beef, mutton or pork not more than once a day.
3. To economize in the use of butter.
4. To cut the daily allowance of sugar in tea or coffee and in any other ways.
5. To eat more vegetables, fruit and fish.
6. To urge, in the hotel or the restaurant frequented, the necessity of economy.

For The Ladies

Every housewife and home lover in the state would be proud to possess one of these fine quality articles.

- ☐ Coffee Percolator
- ☐ Table Silverware
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- ☐ Stag Carving Set
- ☐ Tea Ball Tea Pot
- ☐ Set of Dishes
- ☐ Ironing Board
- ☐ Aluminum Tea Kettle
- ☐ Peerless Cooker
- ☐ Casserole

Mark an X in the square of the prize you desire to earn. Any one of those ten quality value items would make a woman's heart glad. Each and every one is a useful article of exceptional quality that would add to the finest home in the state.

These fine articles are given away to our readers who secure a few of their neighbors and friends as subscribers to our paper. It's very easy.

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News for Breeders

An Oregon Prize Winner.



C. P. Hembree of Monmouth, Ore., will show his fine Jersey herd at the California state fair this fall. His old herd bull, Unduletta's Prince, is looking good and he has a very showy lot of young stock, sired by Unduletta's Prince and Rochette's Noble. Imported Brilliant Spray, the cow shown above, that has a number of firsts and one or two championship ribbons, promises to show as good as ever before; and Noble Peer's Jewell, a cow with a show record begun as a calf, is looking well. Mr. Hembree has some Register of Merit records as well as show records, made by his herd. He is being urged to disperse his herd at a California sale this fall and seriously contemplates doing so.

H. A.

Green Meadow Chief.



The above picture snows Green Meadow Chief, one of the herd sires in the Jersey herd of Henry Stewart, Albany, Ore. He is a grandson of Mr. Stewart's senior herd sire, King Melia Ann Albany, and his dam, Abbe Lorinda, daughter of Golden Glow's Chief, that has 31 daughters in the register of merit. She has an official record of 701 pounds of butter in a year and an average test of 6.37. Her record was made with cheat hay and no kale. Tootsie of Wild Rose, another of Mr. Stewart's good cows, mentioned in these columns nearly a year ago, has a record of 755.8 pounds, made under the same conditions.

At present Mr. Stewart has 11 Jerseys on official test, one of them, 4 years old, on test the second time. The balance are all heifers with first calf and all making nice records. They are all daughters of the old bull King Melia Ann of Albany. This bull was bred in New York and his dam has an official record of 18 pounds, 15 ounces of butter in seven days. He already has seven register of merit daughters. Some of them began their test under 2 years old and produce from 405 to 455 pounds of butter.

H. A.

Spozza of Auburn.



The picture above shows Spozza of Ashburn 2d, one of the good Jersey heifers owned by J. M. Dickson & Son, Shedd, Ore. The photo was taken while she was under two years old, when fresh with her first calf. She has milked 42.1 pounds of a 5.3 test. She is one of the 20 arguments they present in favor of their senior herd sire, Baronet of Ashburn. This bull has one daughter with an official record of 545 pounds of butter in a year, begun under two years old. The Messrs. Dickson test all their cows the first year they freshen and at least once more. All Baronet of Ashburn's heifers have made good records. The one that produced 545 pounds as a senior yearling is again on test as a three-year-old. She has started off 50 per cent better than at her first lactation.

Bull Sold for $770.



St. Mawes Korree Violet Lad, the young bull that sold in the Henry Zorn Jersey sale June 22 for $770, and Ward L. Hull, the man who bought him.

WINONA HOG DEMONSTRATION.

The annual Winona hog demonstration was held on August 11 under the auspices of the extension service of the O. A. C., the U. S. department of agriculture, and Winona ranch at Grants Pass., Ore. About 150 farmers and breeders enjoyed a picnic lunch, including roast Berkshire pig—a real pure bred Laurel Champion barrow—after which talks were given by Prof. George R. Samson, head of the hog department of the O. A. C.; C. D. Thompson, county agricultural agent of Josephine county (who was in charge of the demonstration), and F. R. Steel, president of the Western Berkshire congress. After the talks the crowd was taken through the breeding plant, thence to the sweet clover fields, sown in slashings that have not yet been plowed, where the herd of registered Holstein-Fresians grazed. The Holsteins have been fed almost entirely on this sweet clover since February and are in splendid condition and making excellent milk yields practically without grain, and without either hay or silage, which latter is used only in the winter at Winona. The sweet clover was merely sown broadcast on top of the ashes at the burning of the timber and brush slashed. The combination of good clover with Berkshire hogs and Holstein cattle was generally admitted to be a winner.

AUCTIONEERS

AUCTIONEER

Special attention given to live stock sales.
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of the famous Ohio Improved Chester White Hog. All stock registered. Write for prices. Orders filed after Oct. 1.

Chimacum, Jefferson County, Washington.

SHEEP

Registered Sheep

Rams—Hampshire, Shropshire, Lincoln and Cotswold. We deal in pure blood registered rams. Grade ewes, one, two and three years old.
GRANT B[illegible]DIMICK, Oregon City, Ore.

REGISTERED COTSWOLD BUCKS.
A few February and March lambs.
TWO YOUNG GUERNSEY BULLS.
R. F. Baughman, Redmond, Ore.

JACKS and JENNETTES

Jacks and Jennettes

DUROC SPRING PIGS.
15 head, including one service jack, younger jacks ond colts, all at reasonable prices. A few well-bred registered Duroc Jersey spring pigs, only $15.
F. J. CHALMERS. R. 1. Cornelius, Ore.

DOGS

Fox and Wolf Hounds



of the best English strains in America; forty years' experience in breeding these fine hounds for my own sport and protection of sheep, hogs and poultry. Send stamp for catalog.

T. B. HUDSPETH.
Sibley, Jackson County, Missouri.



Get Rid of Worms

Figure how much it's worth to you in dollars and cents to keep your hogs free from worms. Worms prevent thrift—retard growth—rob you of good, high-priced pork.

Dr. Hess Stock Tonic
Drives Out the Worms

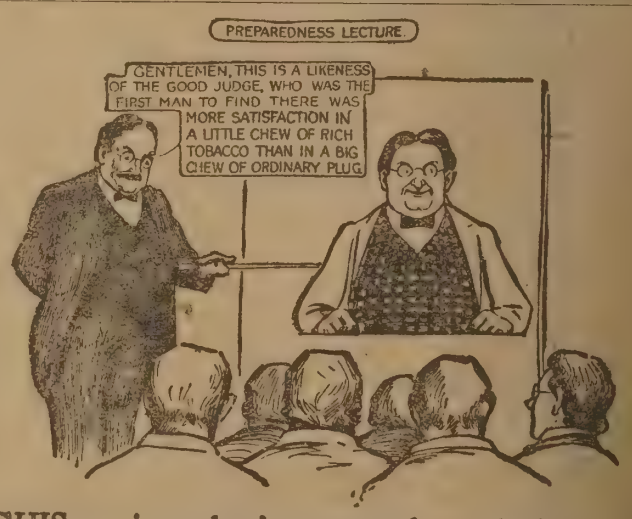
and at the same time tones and conditions the system. It enables your hogs to be at their best—to do their best. You take no chances. My Stock Tonic is guaranteed. You buy it at an honest price, from my dealer in your town who will return your money if it does not do as claimed.

Why Pay the Peddler Twice My Price?
25-lb. Pail, $2.25; 100-lb. Drum, $7.00
Smaller packages in proportion.

DR. HESS & CLARK, Ashland, Ohio

DR. HESS POULTRY PAN-A-CE-A
will help your hens through the moult.

Dr. Hess Dip and Disinfectant Kills Hog Lice



THIS war is awakening men to the truth about a lot of things besides Preparedness—and chewing tobacco is one of them. Soldiers are strong for W-B Cut and the facts are right before you. These shreds are *all* tobacco, no gummy sweetening—*rich* tobacco—more sap in the leaf than in ordinary tobacco by a long shot. That's why it's so satisfying and so economical—a little bit goes a long way.

Made by WEYMAN-BRUTON COMPANY, 1107 Broadway, New York City

HIDES

WOOL, PELTS, MOHAIR, CASCARA BARK

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day goods are received. Trial shipments wanted and appreciated, but all handled as regular shipments and not at inflated values.

THE H. F. NORTON CO.

53-55 No. Front St., PORTLAND, ORE.
206 3d Ave. So., SEATTLE, WASH.

Breeders' Department

JERSEY CATTLE

Jersey Home Dairy
FOR SALE. BULL READY FOR SERVICE.
Sire Oxford You'll Do Jr. Sire of 4 R. of M. daughters, averaging 415 lbs. 7 oz. butter, at 2 yrs. 1 mo. He by Oxford You'll Do, grand champion as best bull with 5 daughters, also sire of grand champion cow in class of (76 entries), at the Royal Show, and is sire of 30 R. of M. daughters, including You'll Do's Favorite, 964 lbs. 13 oz. butter. Dam Creoles Belinda, of the Governor Marigold line of breeding. ERICKSON BROS., North Yakima

A BARGAIN IN JERSEYS.
Two registered Jersey cows and one heifer eligible to register, all close up in blood of Gertie's Lad, Oregon's Exile and King Koffee's Count; all freshen this fall. All three for $300. I have no place to keep them. Write.
JOHN YODER, R. 2, Aurora, Ore.

MERIDIAN DAIRY AND FRUIT FARM.
Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams.
B. C. CRABTREE, Lynden, Wash.

ABERDEEN ANGUS

Yakima Herd of Aberdeen Angus
In the famous valley of the Yakima is one of America's greatest collections of the breed.
At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.
Congdon & Battles
Otto V. Battles, Mgr.
North Yakima, Wash.

HEREFORD CATTLE

Highland Stock Farm
offes for sale 10 yearling bulls and eight two-year-old Polled heifers, sired by Polled Premier and bred to herd sires Majestic Fairfax 437657 by Corrector Fairfax and Western Fairfax 461126 by Fairfax 16th.
PLATT BROS., Props., Roy Jacobs, Herdsman, Genesee, Idaho.

BULL RANCH
Registered Hereford cattle.
CHAS. BULL, Prop. Mabton, Wn.

BROWN SWISS CATTLE

Brown Swiss Stock Farm
Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.
THEO. BRUGGER, Route 3, Gresham, Ore.

BERKSHIRE SWINE

Kintyre Farm Berkshires
Exceptionally fine breeding stock for sale at reasonable prices.
CLARK BROS., R. F. D. 2, Prosser, Wn.

Bred Gilts and Boars
Farrowed last September. Sired by Royal Kintyre, 212283, that was second at P. P. I. E. stock show in class of 52. Good enough to show and win, or improve your herd.
E. E. METCALF, Dayton, Ore.

Early Spring Pigs
Well grown, best quality, sired by a son of the great Laurel Champion and out of prize sows.
GEO. BERTRAND, Olequa, Wash.

RIVERBY ORCHARD BERKSHIRES
won 12 out of 15 first prizes at the Washington State Fair, 1916. A few outstanding boars for sale at reasonable prices.
D. C. BUNN, Prosser, Wash.

HAMPSHIRE SWINE

HAMPSHIRE SWINE
Choice stock of all ages at bargain prices.
HIGHLAND FARM, Box 22, Underwood, Wn.

YORKSHIRE SWINE

Brodmead Farm
Large Yorkshire Swine.
A. SCOLLARD, R. D. 1., Chehalis, Wn.

HOLSTEIN CATTLE

Holstein Friesian Cattle
All our own breeding. A herd equally strong at both ends. Herd head, Sir Korndyke Ormsby Piebe, sired by Sir Korndyke Hengerveld De Kol 36th; dam Queen Piebe Ormsby Mercedes, record junior 2-yr.-old, 24.65 lbs. butter in 7 days, 3-yr.-old in 365 days, 952.28 lbs. butter, 20,286.20 lbs. milk; 4-yr.-old, 35.16 lbs. butter in 7 days. She is ¾ same blood as Queen Piebe Mercedes, world's record 4-yr.-old, record 1389.45 lbs. of butter in 365 days.
Most of the cows are sired by Sir Jonathan Ruth Fayne, now 9 yrs. old, still in service. For average A. R. O. test of daughters, age and production considered, he stands near the top of the list.
WM. TODD & SONS, R. 4, North Yakima, Wn.

HOLSTEIN BULLS
and a few females for sale out of A. R. O. dams of the noted Segis family. Herd bull, Model Annie De Kol Segis, No. 81071, dam's record, 30.91 lbs. butter in 7 days, his 4 nearest dams' average, for 7 days, 29.63 lbs.
MOREHEAD & HOBSON, Outlook, Wn.

Bargains in Bull Calves
Just a few, sired by Barrington Fayne, son of the great sire Sir Johanna Ruth Fayne, sire of over 20 A. R. O. daughters, including Ruth Illustrates (4 years), 27.42 lbs. butter, and out of a show cow that produced 23.93 lbs. at 10 years old. $60 to $75 if taken while young.
THURSTON & SON, Jefferson, Ore.

Holstein Bull Calves
sired by Segis Riverside Pontiac, that sold in the Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days, 118.99 in 30 days and big records all through his pedigree.
ERNEST JOHNSON, Scappoose, Ore.

WAYSIDE RANCH HOLSTEINS.
Am offering 13 heifers for sale, sired by my herd bull Buffalo Duke Doede, a half brother to the world's champion cow. An opportunity of a life time to the man wanting No. 1 stuff.
H. H. STIYER. Buhl, Idaho.

HOLSTEINS
Well bred young bulls for sale.
THOS. CARMICHAEL, Gaston, Ore.

HOLSTEIN BULL CALVES.
One from 20-lb. cow, another from a 16-lb. jr. 2-yr.-old. Herd headed by Model Fobes of Idaho, whose four nearest dams average 27.25 lbs. butter 7 days.
EARL BEEBE, R. F. D. 2, Rupert, Idaho.

GUERNSEY CATTLE

FOR SALE.
3-year-old purebred Guernsey bull. Registered No. 35942 American Guernsey Cattle Club.
Sire—Imp. Prince of Venelle Farm (22481.)
Dam—Imp. Gay Lass du Braye (34312.)
Parents—Pure Guernsey Island blood.
Name of bull—Sir John of Mountview.
Daughters all high merited animals.
Price of bull—$250.00 if sold before Oct. 1, 1917. Inquire of
WM. OGG, Owner, Redmond, Ore.

Guernsey Bull for Sale
Sired by Middledale Lad of the Langwater strain. Will be old enough for service this fall. Fine individual.
F. J. LEWIS, Banks, Ore.

MIDDLEDALE FARMS GUERNSEYS.
Young stock of both sexes by Langwater Emigrant (one of the best bred May Rose bulls) and imp. Ivy's Masterpiece, out of high producing cows.
MIDDLEDALE FARMS, Goshen, Ore.

AYRSHIRE CATTLE

AYRSHIRE BULL CALF
Vigorous, of splendid type, with exceptional production behind him. Snap shot and full particulars on application.
MEADOW BROOK FARM, Montesano, Wn.

GLENWOOD HERD
Registered Holstein Friesian cattle.
"A breeder is known by his Herd Sire."
Prince Aralia De Kol Burke—No. 142092. His 3 nearest dams, Sadie De Kol Acme, Riverside Sadie De Kol Burke and Arillia De Kol, have an average yearly record of 25,300 pounds milk and 1037 pounds butter. Bull calves of his get, from good cows, for sale at farmers' prices.
A. H. Buck and ED HOEM, Monroe, Wn.

Established 1887—100 in Herd.
REGISTERED HOLSTEIN CATTLE.
As I wish to reduce my herd I am offering the blood of such bulls as King Segis Pontiac 13th, 30.39 lbs. breeding, 4.25 per cent fat; Iowana Rochdale Korndyke, 26 lb. breeding, and Prince Segis Korndyke De Kol, 31.41 lbs. breeding.
LAKE SIDE STOCK FARM.
P. A. FRAKES, Scappoose, Ore.

Record Holsteins
Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.
ERNEST WERNER. AURORA, ORE.

Registered Holsteins
Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to
H. B. BOOMER, New Plymouth, Idaho.

Waterloo Holstein Farm
Holstein bull calves for sale.
Herd Sire—Prince Walker Pietertje | King Segius 10th Segius Walker Pietertje 2d
C. F. JENNESS, Meridian, Idaho.

YOUNG HOLSTEIN BULLS
Ready for light service; sired by Wapato Bellevewere Colantha Boy and out of heavy milking dams.
E. P. SAWTELL. Independence, Wash.

SHORTHORN CATTLE

SHORTHORNS
A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.
R. E. BOYCE, Baker, Ore.

Shorthorn Cattle
Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.
A. D. DUNN, Wapato, Wash.

Hercules Shorthorns
For particulars write
DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

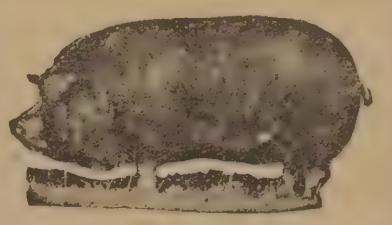
For Sale—Shorthorn Bulls
Fine individuals, sired by Lavender Gord's No. 370358, a bull produced by the blending of the blood of two great families, one headed by Count Lavender, the other by Choice Gords
ANDREW OLSEN, R. 4, Ellensburg, Wash.

H. H. Schildman
breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.
Filer, Idaho.

FOR SALE--Percherons, Shire Stallions and Mares
Jerico 110196, a dark iron gray Percheron stallion, 3 yrs., wt. 1850; sire Jube 81251 by Coco, dam, Bird 81977 by Brilliant Jr. His 1st, 2d and 3d dams are close descendants of Brilliant. Winnings at Northwest Live Stock Show, Lewiston, as suckling colt, first in class and Percheron society gold medal as best stallion under three years owned and bred by exhibitor. As 2-yr.-old, 1st in class and champion under 3 years, three Society medals, best under three years owned and bred by exhibitor, grand champion and best stallion owned and bred by exhibitor and in open class reserve grand champion.
Aaron 117566, a 2-yr.-old half-brother, dark bay, wt. 1550. Sire Salvador 51340 by Calypso. Equally good (some say better). He has never been shown.
Callie 88642, a dark gray mare, 6 yrs. old, wt. 1750. Sire Apollon 26130. She is very strong in Brilliant blood; has mare colt by Halicite.
Lady Grace II., 15452, a 3-yr.-old Shire, bay, white face and white hind legs, wt. 1650. Sire Imp. Toga VII. 9288; dam Bay Lily 13577, by Imp. Greenham Champion.
All first class in every respect, mostly our own breeding, reserved for our own special use.
On account of the death of one of the partners, must sell to close estate.
FOLLETT & SCHOOLER. Genesee, Idaho.

POLAND CHINA SWINE

POLAND CHINAS



PEERLESS TRIXIE 590272
Grand Champion N. W. S. Show, 1916.
Weight at 13 Months, 530 Lbs.
Registered gilt and boar pigs. From same strain as PEERLESS TRIXIE. Of large and healthy litters, insuring excellent breeding stock.
We Aim to Satisfy You.
S. M. MEARS JR.
Woodland, Wash.

Fruitland Stock Farm
Poland China Hogs.
Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have for sale extra good spring pigs. Correspondence solicited.
J. M. ROYSTON EST., C. ROYSTON, MGR.
Payette or Fruitland, Idaho.

Locust Lawn Herd
Booking orders for strictly big type Poland China spring boars, sired by Overlook, 1st and senior champion, Idaho State Fair and Gem State Fair, 1916; weight 820 lbs.; out of the 1st, 2d and 4th prize sows at Idaho State Fair, 1916, in strongest competition; satisfaction guaranteed.
W. F. HOWARD & SONS, Parma, Idaho.

Medium Type Polands
Quick growing, easy feeding breeding stock, sired by the 1915 grand champion at Pacific International.
FRANK NEEDHAM, Eugene, Ore.

$20—SPRING PIGS—$20.
Big type boars and gilts of April farrow, from big litters and of good breeding; $20 if taken soon.
W. HUNTINGTON, Kelso, Wash.

Pure-Bred Poland China Fall Gilts
will be shipped c. o. d., subject to your approval. Write to
HERBERT WILLARD. Dayton, Ore.

QUALITY HERD.
If you want to improve your herd, try stock from my winners at the Oregon state fair.
RAY J. FOX. Lyons, Ore.

DUROC-JERSEY SWINE

Crescents Top Col.
for sale, at a bargain. An extra large 2-year-old prize winning boar. Also younger pigs by this great boar.
G. O. SWALES, Johnson, Wash.

Hillcrest Duroc Jerseys
For immediate sale:
1 11-mo. gilt, bred to farrow Oct. 3d, $60.
1 10-mo. gilt, to farrow Nov. 8, $50.
3-month pigs, $25.
Extra fine stock, combining the blood of noted show winners.
R. P. Camp, Ione, Wash.

TOP DUROC BOARS.
To make room for fall litters, I must close out my spring boars. I have saved 12 of the tops, of such breeding as Sprong's Prince, Topeka, Advance Wonder and Western Leader. Hogs with show records and of most popular breeding.
CHAS. G. SPRONG, Grandview, Wash.

Prolific, Profitable Durocs
Pigs from Champion Sow, bred by Exhibitor of the state of Washington, and other blue-ribbon sows, headed by the great 900-lb. boar, Red Dandy, 159453. Choice boars and gilts for sale from these prize-winning sows.
JNO. B. PETERSON, Mountbourne, Wash.

PREMIUM HERD
Spring pigs from champion and first prize sows at Ontario, Ore., and Gem State and Idaho State fairs.
C. H. KIRKPATRICK. Parma, Ida.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Pullman, Wash.

When you write to advertisers be sure to state that you saw their advertisement in this paper.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Sept. 1.—Corn futures showed an easy tone today. Holders of abundant stocks offered freely and shorts seemed to have satisfied their wants. Pre-holiday dulness prevailed in view of the two days closing over Labor day. Frosts in the northwest were generally ignored, though with cooler weather coming they were expected to be a bullish factor.

The buying was mainly on resting orders. The close was weak, 3-8 to 1 1-8c lower, with December at $1.11 1-2 to $1.11 5-8, and May at $1.07 3-4. Oats finished 3-8 to 3-4 to 1c lower. Provisions advanced, with a firm undertone and a moderate shipping demand.

There were light offers of cash wheat and fair demand, with some sales above the government price limit. No deliveries of wheat on September contracts were recorded today. Sales aggregated 25,000. Traders generally were waiting for the government buying and selling to begin. There was a slow cash demand for corn, but receipts were small and prices advanced somewhat, No. 2 yellow selling at $2.10.

Evening up trades over the holidays were a feature in the oats market. Casn sales aggregated 215,000 bushels.

Packers were the principal buyers of provisions and produce prices advanced, closing about the top. Strength of the hog market continued to be the controlling factors.

Cash Quotations.

CHICAGO, Sept. 1.—Wheat—No. 2 and No. 3 red and 2 and 3 hard, nominal.

Corn—No. 2 yellow, $2.10; No. 3 and 4 yellow, nominal.

Oats—No. 3 white, 57¾@58½c; standard, 58@58¾c.

Rye—No. 2, nominal.

Barley $1.10@1.28.

Timothy, $5@8.

Clover, $15@20.

Chicago Futures.

Corn—	Open.	High.	Low.	Close.
Dec.	1.12	1.12½	1.11¼	1.11½
May	1.08⅝	1.09⅝	1.07½	1.07¾
Oats—				
Dec.	.56⅛	.56½	.55½	.55⅝
May	.59	.59⅛	.58⅝	.68⅞
Pork—				
Oct.	43.40	43.40	43.35	43.40
Lard—				
Oct.	23.60	23.70	23.60	23.67
Jan.	22.40	22.47	22.40	22.42
Ribs—				
Oct.	23.80	23.82	23.75	23 75
Jan.	21.30	21.30	21.25	21.27

Minneapolis Grain.

MINNEAPOLIS, Sept. 1.—Wheat—Receipts, 308 cars compared with 244 a year ago.

Wheat not quoted.

Corn—No. 3 yellow($2@2.01.

Oats—No. 3 white, 55¼@55¾c.

Flax, $3.37@3.42.

Flour—Fancy patents declined 50c; quoted at $11.75. Other grades unchanged; shipments, 59,186 barrels.

Rye, $1.78@1.79.

Barley, 98c@$1.23.

Bran, $27.75@28.25.

Pacific Northwest Grain.

PORTLAND, Ore., Sept. 1.—Cash quotations, September delivery: Oats, No. 2 white, feed,, $47.50 bid; barley, standard, feed, $45.50; brewing, $48 bid. bran, $33.50 bid; shorts, $35 bid.

San Francisco Grain.

SAN FRANCISCO, Sept. 1.—Barley—December, $2.37; May, $2.40 bid, $2.45 asked.

Live Stock Quotations.

At Chicago.

CHICAGO, Sept. 1.—Hogs—Receipts, 3500; weak. Early top, $18.85; bulk, $17.60@17.75; light, $17@18.75; mixed, $16.85@18.75; heavy, $16.85@18.75. rough, $16.85@17.15; pigs, $12.25@16.50.

Cattle—Receipts, 3000; weak. Native beef cattle, $8.20@16.50; western steers, $7@14; stockers and feeders, $6@9.25, cows and heifers, $4.85@13.15; calves, $12@16.

Sheep—Receipts, 4000; steady. Wethers, $8@11.35; lambs, $11.25@17.75.

At Omaha.

OMAHA, Neb., Sept. 1.—Hogs—Receipts. 3800; steady to 25c higher. Heavy, $17.50@18.35; mixed, $17.60@18.10; light, $17.85@18.60; pigs, $15.50@17.50; bulk of sales, $17.60@18.15.

Cattle—Receipts, 500, steady. Native steers, $10.55@15.55; cows and heifers, $7@9.50; western steers, $9@13.50; Texas heifers, $7@9.50; Texas steers, $7.50@10.50; cows and heifers, $6.50@9; canners, $5@6.50; stockers and feeders, $6@11.50; calves, $8@12.25; bulls, stags, etc., $5.50@8.25.

Sheep—Receipts, 500; steady. Yearlings, $10.50@12; wethers, $10.25@11.75; ewes, $9.50@10.50; lambs, $16.40@17.40.

At Portland.

PORTLAND, Ore., Sept. 1.—Hogs—Receipts 90; steady. Prime light, $17.25@17.50; prime heavy, $17@17.25; pigs, $15.50@16; bulk, $17.50.

Cattle—Receipts 92; steady. Best beef steers, $8.25@8.75; good beef steers, $7@8; best beef cows, $6.50@7.25; ordinary to good cows, $3.50@5.50; best heifers, $6.25@7.25; bulls, $4.50@6; calves, $6.50@9.25; stockers and feeder steers, $4.50@7.

Sheep—Receipts 360; steady. Western lambs, $13@13.50; valley lambs, $11.75@12.75; yearlings, $10@10.50; wethers, $9.75@10.25; ewes, $8@8.50.

Stock Yards Saturday.

Hogs—Receipts none, market strong. Prime light, $17.50@17.75; prime heavy, $17.25@17.50; pigs and skips, $16.50@16.75; stockers and feeders, $13.75@15.

Cattle—Receipts 28, market steady. Prime light steers, $8@8.25; prime heavy steers, $8.25@8.50; good steers, $7@7.80; ordinary to fair, $5.25@6; prime cows, $6@6.75; good cows, $5@6; common cows, $4@5; best heifers, $6@7; bulls, $5@6.50; calves, $7.50@9.25; stockers and feeders, $5@6.75.

Sheep—Receipts none, market steady. Prime lambs, $12.50@13.25; good lambs, $11.25@11.75; prime yearlings, $9.75@10.25; prime wethers, $9.50@10.25; prime mutton ewes, $6.50@8.

Portland Wheat.

PORTLAND, Ore., Sept. 1.—There are many points not clear in the government rules for wheat buying, as they relate to the Pacific coast, but M. H. Houser, administrator for this zone, believes they will be cleared up so buying can begin Tuesday morning. In the meantime the big grain dealers are idle. Millers are also unable to proceed in their readjustmnt of flour prices until Mr. Houser has definitely announced wheat prices. As the matter now stands wheat is considered to be worth here 20 cents under the Chicago base, or $2 at Portland for bluestem, $1.98 for fortyfold, $1.96 for club and $1.95 for red Russian. Interior prices are 30 cents under Chicago and freight from the interior to tidewater averages 10 cents.

Flour is likely to be on a $10 basis for patents, but millers think it probable the new price will not apply until flour milled from 1917 wheat is ready for market, which will be several weeks hence. The flour now selling is made from old wheat, which cost the millers about $2.50 in the country, but as a starter toward a general reduction they cut the price 40 cents at the close of the week, which put patents at $11.20.

Millfeed holds firm, as there is but little of it on hand, but when the mills begin grinding government flour in the fall, much lower feed prices are expected.

Oats and barley are firm. The oats crop is small, not over half a crop in the northwest, according to local authorities. Thousands of cars of eastern oats, it is said, will have to be brought in this winter to supply the deficiency. whereas in past years the northwest has shipped oats to California, east and abroad.

The Wool Market.

BOSTON, Aug. 31.—The Commercial Bulletin will say tomorrow:

The demand for wool, aside from what the government has taken, has been only moderate the last week. Government purchases thus far have not been heavy.

Fair quantities of scoured wools, principally of quarter blood grades, have been secured. Manufacturers appear to be waiting the result of the publication of maximum prices by the government wool committee, having already covered fairly well for several months ahead. The goods market, except for further government contract awards, has been sluggish.

Scoured basis:

Texas—Fine, 12 months, $1.65@1.70; fine, eight months, $1.55@1.60.

California — Northern, $1.70@1.75; middle county, $1.45@1.50; southern, $1.35@1.40.

Oregon—Eastern—No. 1 staple, $1.75@1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.55@1.60.

Territory—Fine staple, $1.80; half-blood combing, $1.70@1.75; three-eights blood combing, $1.40@1.45; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled—Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65; C supers, $1.25@1.28; fine combing, $1.40@1.45; medium combing, $1.25@1.30; coarse combing, $1.05@1.10.

Butter and Eggs.

PORTLAND, Ore., Sept. 1.—Butter firm; city creamery prints, 47c; cartons, 48c; buying price butterfat, 46@48c, Portland; cube extras, 44c; prime firsts, 41 1-2c; firsts, 36 1-2@40c; dairy, 34c.

SAN FRANCISCO, Sept. 1.—Butter—Fresh extra, 41 1-2c; prime firsts, 41c. Eggs—Fresh extra pullets, 41c.

CHICAGO, Sept. 1.—Butter receipts, 10,799 tubs; unchanged. Creamery, 38@41 1-2c.

Eggs—Receipts, 7716 cases; unchanged.

ELGIN, Sept. 1.—Butter market, 41 1-2c; no sales.

Seattle Market.

SEATTLE, Sept. 1.—Some exhaustive investigations have just been made of the fruit districts of western Washington by Seattle jobbers, and the present stiff f. o. b. market in peaches, pears and apples is conceded. That there will be a reactionary tendency as soon as the excitement induced by eastern buyers subsides is now claimed.

Many contracts have been made for apples for future fall delivery and prospects are that there will be few if any consignments. Jobbers concede that the trade will be on a cash basis this year.

The flood of tomatoes from eastern Washington shippers has ceased and the demoralized market strengthened. Prices today are 60@70c per crate.

Producers have been shipping in their heavy hens, but the demand is sufficient to buoy up the market. Buying prices of poultry will be strong and unchanged for next week.

The butter market is very firm, but none of the city creamerymen are willing to take steps to meet the shortage by advancing prices.

The fresh ranch egg trade is quiet, due to the large volume of receipts. The city trade is flat, and jobbers are not active after country offerings.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered for the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 42@44c per dozen; eastern Washington, Idaho and Oregon, 40c per dozen.

Poultry—Live hens, fat, 4 lbs. and over, 19@20c per lb.; 2 lbs. and under, 15@17c; old roosters, 11c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 10c per lb.; broilers, live, 18c per lb.

Butterfat—49c per lb.; dairy butter, 33c

Beef—Buying prices: Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c; heifers, 6@8c per lb.

Veil—Fancy light, 14@16c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 19c per lb.; salt kip, 19c per lb.; salted calf, 30c per lb.; green hides, 16c per lb.; salted bulls, 16c per lb.; dry hides (short trim), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12 1-2c per lb.; dry butcher full wool sheep pelts, 36@38c per lb.; green calf, 30c.

SELLING PRICES.

Raspberries — Red, $2.25@2.50 per crate.

Feed—Scratch feed, $82 per ton; all grain chop, $66 per ton; oats, $58 per ton; rolled oats, $59 per ton; rolled or ground barley, $61 per ton; clipped barley, $63 per ton; wheat, $82 per ton; bran, $38 per ton; shorts, $41 per ton; soy bean meal, $70 per ton; whole corn, $88 per ton; cracked corn, $89 per ton; alfalfa meal, $36 per ton.

Hay—Eastern Washington timothy, $30 per ton; alfalfa, $26 per ton; double compressed, $33 per ton; wheat hay, $25 per ton; Puget Sound, $22 per ton; straw, $12.

Butter—Washington creamery extras, cubes, 46c per lb.; do bricks, 47c per lb.

Eggs—Fresh ranch, 48c per dozen.

Potatoes—Puget Sound, $45@50 per ton.

Portland Market.

PORTLAND, Ore., Sept. 1.—All lines of country produce are strong with light receipts. Poultry and dressed meats are selling at nigh prices as the supply is not large enough for local requirements. Butter and eggs are tending upward, and an advance in cheese is expected soon unless rain improves the Tillamook pastures.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1 $47.50 per ton.

Mill stuffs—Bran, $37 per ton; shorts $40.

Barley—No. 1 feed, $45.50; brewing, $48; rolled, $55@57.

Hay—Buying prices; Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch. case counts, 36c per dozen; candied, 37@40c.

Poultry—Hens, 16@17c; ducks, 12@13c; turkeys, live, 20@22c; geese, 7@8c.

Butter—City creamery, prints, 47@48c per pound; cubes, extras, 44c.

Cheese—Tillamook triplets, 24c; young Americas, 25c.

Dressed meats—Veal, 15½@16c; pork, 22c.

Hops—1916, 21c; contracts, 30@35c.

Potatoes—New, 2½@2¾c per pound.

Wool—Eastern Oregon, fine, 52@61c; coarse, 60c; valley, 58@60c.

Beans — California small white, 15 1-5c; large white, 15c per pound.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers: they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $2.50 cwt; sweet potatoes, $4.50 cwt.

Apples—New Washington apples, $1 20-lb box; $1.75 50-lb box.

Butter—Blanchard cartons, 47c lb; Medo-Maid, 47c lb; Cascade, 47c lb; Gold Leaf, 47c lb; Better Butter, 47c lb; Attalia, 47c lb; Diadem, 47c lb; Hazelwood, 47c lb; Solid Pack, 46c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25@26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 29c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $12.50; fresh eastern eggs, $12.50 case.

Live Poultry—Hens, 13c lb; broilers, 20c lb; old roosters, 8c; ducks, 12½c lb; geese 10c; turkeys, 20@25c.

Dressed Poultry—Hens, 18c lb; broilers, 28c lb; old roosters, 12½c; ducks, 18@20c; geese, 16c; turkeys, 25@30c.

Hide Quotations.

Green cows and steers—25 lbs and up 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Scores Lamb Boycott

The so-called boycott of lamb is effectively nailed by Herbert C. Hoover, food administrator, in a communication to Frank M. Rothrock of Spokane, recently appointed to the United States live stock industry committee, outlining the proposed work of the committee. Mr. Rothrock was the first sheep raiser to protest to the administration against what he considered a hysterical movement in the way of food conservation. Mr. Hoover says:

"Some sections of our country are stocked to capacity with mother ewes, from which lambs are marketed at from 70 to 80 pounds weight. This is the most economic method of producing mutton just as 'baby beef' is the most economic method of producing beef and the quality of both these meats is of the best.

"What we need is more cows and more ewes producing the 700-pound calf and the 70-pound lamb. We wish to restore the confidence of the farmer in his industry by convincing him that he will get a fair share of a fair price paid by the consumer and extending to him credit on a reasonable basis so he may be able to equip his farm for handling sheep, hogs and cattle successfully.

"The law that we are now operating under as to food control is conceived and administered in a desire to maintain remunerative and stimulative returns to the producer and to enable these products to reach the consumer with only a reasonable profit allowed for services rendered. Therefore, it is the object of the administration to eliminate unnecessary cost between producer and consumer.

"One of the incidents of the European war has been the slaughter of large numbers of animals and it is estimated that already the herds of Europe have been diminished by 28,000,000 cattle, 54,000,000 sheep and 32,000,000 hogs. An accelerated increase in this diminution of meat animals must take place in Europe from month to month as long as the war lasts.

"We have two problems in meat supplies: First is the task of supplying our own soldiers and citizens and helping feed the soldiers and citizens of our allies during the war. The second is the one which we desire to bring particularly to the attention of the American producer, and that is:

"After the war, Europe, with diminished animals and therefore diminished animal production of animal food, will require larger imports of meats during the years of recuperation and will probably require the actual importation of breeding animals. Therefore, in a broad way, the outlook to the American producer from now on and after the war will be (a) larger demand for animal products, (b) continuing necessity for meat and dairy animals to convert forage and grains not needed for human consumption into meats and dairy products. The herds and flocks of the country can only be increased over a period of years and the foundation of such an increase should be laid at once. Such interest is a national interest and it must be made to the interest of the American producer."

The first definite step to increase live stock production is outlined by Mr. Hoover as follows:

"The county agents of the department of agriculture will take orders for cattle, ewes or ewe lambs, among the small farmers of communities, in less than carload lots and we have arranged with the live stock exchanges to contribute to this mobilization of the nation by buying the stock and seeing to it that it is properly handled while in the yards, free of any charge to the buyers.

"This campaign should not be considered to have terminated successfully until the great majority of our farms have their flocks of sheep and a sufficient stock of cattle to consume all roughage now largely wasted."

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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

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FAIR NUMBER

The State Fair Is Ready Once More to Entertain and Instruct



The prospects for the state fair at North Yakima this season are declared to be excellent. The Interstate fair at Spokane last week opened the northwest season auspiciously and the state fair promises to equal or excel it. Above are some illustrations of what will be seen at North Yakima next week. At the top are shown members of the boys' and girls' industrial teams. In the center are seen stock judging and the new grandstand with 4000 seating capacity. Below is a typical fairgrounds street scene.

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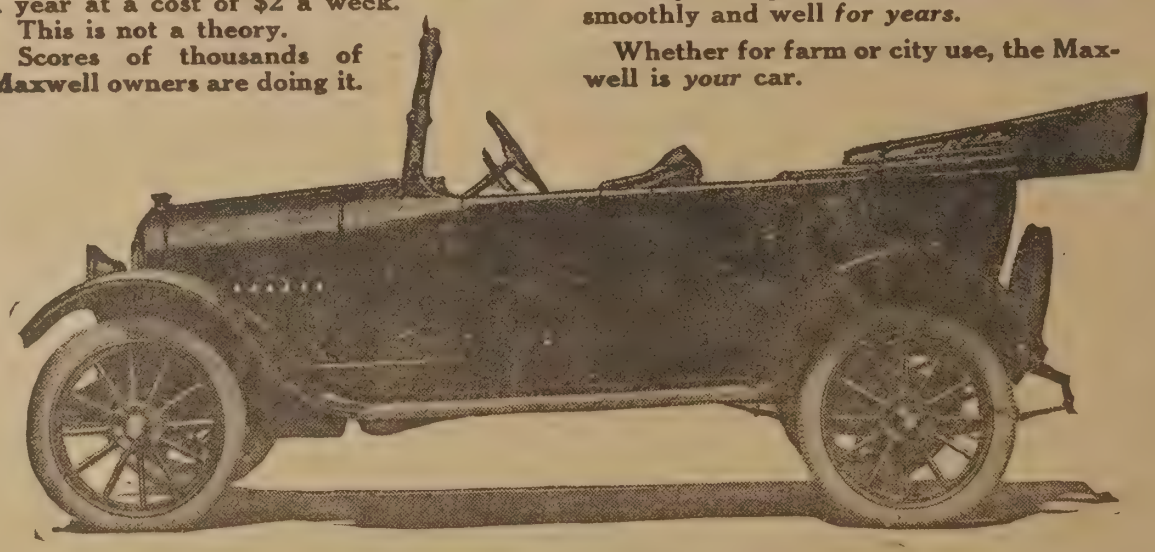
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Vol. 40. No. 37 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF September 13, 1917

Interstate Fair Breaks Records

Dry Season Fails to Diminish Excellence of Agricultural Exhibitions

Nearly 76,000 persons paid admission to the interstate fairgrounds at Spokane last week to enjoy and learn from the twenty-fourth annual fair given by the association. This number exceeds that of last year by about 16,000.

There is no positive basis for comparison, but the 1917 fair was probably the best ever put on by the interstate association, and augurs well for the other fairs that are now following it in rapid order.

The exposition began with money in the association's bank account. The excellent attendance increased this deposit.

"I would not attempt to give an accurate statement now, for many bills have not yet been audited, but I will say that the fair association has a small amount of velvet," said President T. S. Griffith of the fair association.

Agricultural Exhibit Good.

Contrary to early expectations, the display of agricultural products was one of the best if not the best ever shown in Spokane. A. A. Kelly, superintendent of the agricultural exhibit, said after the close Saturday evening:

"It has been the best exhibit of agricultural, horticultural and industrial exhibits ever seen in Spokane. Notwithstanding 67 days of unprecedented drouth, the showing in all agricultural departments has been, without doubt, the best in the history of the country. The exhibits from the soil compare favorably with the exhibits of former years when the season was better and the show was held enough later to permit of many exhibits that are not now ready."

Industrial Interest Great.

Superintendent G. E. A. Bond, having charge of the general grounds and the industrial exhibits, said that there was an increase of about 400 per cent in the farm machinery displays this year over previous years. The automobile and tractor displays, he said, exceeded former shows by three times, while the exhibitions of industrial companies were considerably larger than previously.

Good Hog Showing.

Stockmen agreed that there had never before been so good a showing of hogs as were on display at the fair this season. Especially was this true with regard to the Duroc Jerseys, which were present en masse. While in some branches of the live stock section numbers were lacking, the quality of horses, sheep and cattle is generally conceded never to have been surpassed.

"The quality of stock shown here has never been surpassed. There have been more hogs and cattle, but never a showing of better quality in these classes. There have never been as good hogs here as were shown this year, and the showing of sheep is indeed creditable," said E. E. Jones, assistant superintendent of the live stock department.

The Live Stock Awards.

The ribbons were placed on the winning horses by James Clements of Edmonton, Alberta. John A. Lee of Shelbyville, Ky., judged the cattle, except the beef breeds, which were judged by E. L. Potter of Corvallis, Ore. William Hislop of Pullman, Wash., judged the sheep, while Thomas W. Brunk of Salem, Ore., judged the swine.

(Owing to space limitations only the horse, beef cattle and dairy cattle awards are given this week. The awards in the sheep and swine divisions will be given in next week's issue.)

HORSES.

Percherons.

The awards in the Percheron division were made to five competitors, the Colfax Blue Ribbon stud, Colfax, Wash.; J. W. Prall, Spokane, Wash.; E. S. Jordan, Cheney, Wash.; J. K. Ralph, Spokane, Wash., and Auto Sykes, Spokane, Wash. The awards follow:

Stallions, 4 years old and over—1. Royal Duke. Colfax Blue Ribbon stud. 2. Carlo, J. W. Prall. 3. Hamack, E. S. Jordan. 4. Beauty Steel, E. S. Jordan. 5. Artiste, J. K. Ralph.

Stallion, 3 years old and under 4—1. Royal Quartermaster, Colfax Blue Ribbon stud. 2. State of Maine, E. S. Jordan.

Stallion, 2 years old and under 3—1. Pickard, Colfax Blue Ribbon stud. 2. Picket, Colfax Blue Ribbon stud. 3. Royal, E. S. Jordan. 4. Freeman, Auto Sykes.

Mare, 4 years old and over—1. Galere, E. S. Jordan. 2. Gardienne, E. S. Jordan. 3. Mignonne, E. S. Jordan. 4. Paree, E. S. Jordan.

Three-year-old mare—1. Marie Douglas, E. S. Jordan.

Two-year-old mare—1. Beau Ideal, E. S. Jordan.

Foal, under 1 year—1. Black Rover, E. S. Jordan. 2. Beaulah, E. S. Jordan.

English Shires.

The Colfax Blue Ribbon stud was given all the Shire awards, as follows:

Stallion, 4 years and over—1. Bushnell Hero. 2. Bushnell Pride.

Mare, 4 years old and over—1. Sylvia's Best.

Foal, under 1 year—1. Cottered Prince Royal.

Clydesdales.

All awards for Clydesdales went to the Colfax Blue Ribbon stud of Colfax, Wash., as follows:

Stallion, four years old or over—First, Victor Favorite, also Champship second, Bobbie Burns; third, Prince of Orion.

Stallion, two years old and under three—First, Majesty's Chief; second, Delightful Caliph; third, The Clinker.

Stallion, one year old and under two—First, Clydesdale Baron; second, Orion Times.

Mare, three years old and under four—First, Thelma.

Mare, two years old and under three—First, Maid's Darling. Also championship.

Thoroughbred.

The following are the thoroughbred awards:

Stallion, four years old or over—First, Unnamed, Galbraith, Independence, Ore.; second, Marta Mac; J. Z. Smith, Walla Walla, Wash.

Stallion, three years old and under four—First, Chokio; Franklin & Randall, MacLeod, Alberta.

Stallion, two years old and under three—First, Hustler Joe; Franklin & Randall, MacLeod, Alberta; second, Fort MacLeod; Franklin & Randall, MacLeod, Alberta.

Standard Bred.

Stallion, four years old or over—First, Catoma; C. J. Maxwell, Spokane, Wash.; second, Lucifer, William Beck.

Stallion, two years old and under three—First, Gar M.; A. B. Wentworth, Spokane, Wash.

Mare, four years old or over—First, Mayon Line; Allan Maxwell, Spokane, Wash.; second, Colyess, Rule 1, Vol. XXI.; C. D. Boswell, Spokane, Wash.; third, unnamed; David Gouin, Spokane, Wash.

Boys' Colt Show.

Best driving colt foaled during 1917—First, Judge Dilliard Junior; Allen Maxwell, Spokane Wash.

BEEF CATTLE.

Shorthorns.

Four exhibitors shared the premium awards in the Shorthorn division, as follows: Alex. Morrison, Valley, Wash.; J. H. McCroskey & Sons, Fishtrap, Wash.; Washington State college, Pullman, Wash., and Day & Rothrock, Sprague, Wash. The following are the Shorthorn awards:

Bull, 3 years old or over—1. Western Star II.; Alex Morrison.

Bull, 2 year old and under 3—1. Cottonwood Sultan; McCroskey & Sons.

Senior yearling bull—1. Golden Heir; McCrosky & Sons; 2. Village Excelsior, State college.

Junior yearling bull—1. Rusper Sulton II., Day & Rothrock; 2. Golden Robin, McCroskey & Sons; 3. Golden Dale, McCroskey & Sons; 4. Red Star, Alex Morrison.

Senior bull calf—1. Superb Clarion, Day & Rothrock; 2. Fair Cumberland, Day & Rothrock; 3. Wry Marshall, McCroskey & Sons.

Junior bull calf—1. Hercules Good, Day & Rothrock; 2. Unnamed, McCroskey & Sons; 3. Unnamed, McCroskey & Sons; 4. Golden King, Alex Morrison; 5. Achilles, State college.

Cow, 3 years old or over—1. Olive V. II., Alex Morrison.

Cow or heifer, 2 years old and under 3—1. Canadian's Lassie, McCroskey & Sons; 2. Olive V's Jewel, Alex Morrison.

Senior yearling heifer—1. Topsy IV., Day & Rothrock; 2. Fancy Mine II., McCroskey & Sons.

Junior yearling heifer—1. Luana II., McCroskey & Sons; 2. Village Rose IV., Day & Rothrock; 3. Lady Rothrock, Alex Morrison; 4. Violet of Valley, Alex Morrison.

Senior heifer calf—1. Perfection's Pearl, Day & Rothrock; 2. Lady Missie, X., Day & Rothrock; 3. Dale's Lady, McCroskey & Sons; 4. Bonny Lorne IV., McCroskey & Sons; 5. Louisa Faulson, Alex Morrison.

Junior heifer calf—1. Hercules Topsy, Day & Rothrock; 2. Escana Laura, McCroskey & Sons; 3. Golden Light, Day & Rothrock; 4. Marry Lady, McCroskey & Sons; 5. Golden Queen, Alex Morrison; 6. Little Bo Peep, Alex Morrison.

Graded herd—1. One entry, McCroskey & Sons; 2. One entry, Alex Morrison.

Exhibitors' young herd—1. One entry, Day & Rothrock; 2. One entry, McCroskey & Sons.

Breeders' calf herd—1. One entry, Day & Rothrock; 2. One entry, McCroskey & Sons; 3. One entry, Alex Morrison.

Get of one sire—1. One entry, McCroskey & Sons; 2. One entry, Alex Morrison.

Produce of cow—1. One entry, Day & Rothrock; 2. One entry, McCroskey & Sons; 3. One entry, State college; 4 and 5. Two entries, Alex Morrison.

Aberdeen Angus.

The Aberdeen Angus premiums were shared by Congdon & Battles of North Yakima and the Washington State college of Pullman. The awards were as follows:

Bull, 3 years old or over—1. Eileenmerer; Congdon & Battles, also senior and grand championship.

Bull, 2 years old and under 3—1. Meraman of Tierra, Alta.; Congdon & Battles.

Bull, junior yearling—1. Blackburr of Rosemere; Congdon & Battles, also junior championship. 2. Irenmere, second; Congdon & Battles.

Bull, senior calf—1. Heatherburr of Yakima; Congdon & Battles. 2. Yakima Black; Congdon & Battles.

Bull, senior calf—1. Heatherburr of Yakima; Congdon & Battles. 2. Yakima Black; Congdon & Battles.

Bull, junior calf—1. Yakima Eric; Congdon & Battles.

Cow, 3 years old or over—1. Idessa of Rosemere; Congdon & Battles. Also senior and grand championship. 2. Inez of Woodlawn; third, State college.

Cow, 2 years old and under 3—1. Heather of Rosemere, fourth; Congdon & Battles.

Heifer, senior yearling—1. Blackbird of Rosemere, 22nd; Congdon & Battles. Also junior championship.

Heifer, junior yearling—1. Blackbird of Rosemere, 23d; Congdon & Battles.

Heifer, senior calf—1. Blackcap of Rosemer, 10th; Congdon & Battles. 2. Blackbird of Rosemere, 24th; Congdon & Battles. 3. Jerome's Queen, 2nd; State college. 4. Rose of Rosemere, 4th; Congdon & Battles.

Heifer, junior calf—1. Barbara of Rosemere, 24th, Congdon & Battles.

Graded herd—1 and 2. Two entries; Congdon & Battles.

Exhibitors' young herd—1 and 2. Two entries; Congdon & Battles.

Breeders' calf herd—1 and 2. Two entries; Congdon & Battles.

Get of sire—1 and 2. Two entries; Congdon & Battles.

Produce of cow—1 and 2. Two entries; Congdon & Battles.

Special Beef Breeds.

A. V. Bradrick & Son of Palouse, Wash., and Alex. Morrison of Valley, Wash., divided the premiums on the special beef breeds as follows:

Bull, 3 years old or over—1. Western Star, 2d; Alex. Morrison.

Bull, 2 years old and under 3—1. General Clay's Palouser; Bradrick & Son.

Bull, junior yearling—1. Red Star; Alex. Morrison.

Bull, junior calf—1. Golden King; Alex. Morrison.

Cow, 3 years old or over—1. Lady Washington; Bradrick & Son. 2.

(Continued on page sixteen.)

Breeders Get No Special Favors.

The shipment of live stock for breeding purposes will have to continue to pay regular live stock freight rates, says the interstate commerce commission to the breeders of the northwest. This was brought out at the stockmen's banquet at the Interstate fair when a report from Frank M. Rothrock was read. The commerce commission said that it had been a long established custom to deny special freight rates on the ground of the use to which the article shipped was put. This report was taken by the stockmen to mean that there was no immediate prospect of securing the reduced rates on breeding stock that have so long been sought. The fight will be kept up, however,

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GRANGES SHOW PRODUCTS

Oregon Farm Wins First Premium.

One of the distinctive features of the interstate fair was the excellent exhibitions of a number of granges, mostly within a short distance of Spokane. While the individual farm display of Leonard Gilkey of Linn county, Ore., was awarded first place for best individual exhibit over the granges, the half dozen grange booths can not be adequately described. To illustrate the possibilities of production in small localities the following list of products shown by the Glenrose grange of Spokane county is given, though it is little if any more elaborate than the exhibitions of others:

Dahlias, sunflowers, cherries, plums, geraniums, grapes, pears, apples, peaches, crabapples, prunes, tomato cherries, tomatoes, sweet clover, hops, lettuce, kale, pepper, onions, beans, hydrangeas, cucumbers, parsley, rutabagas, turnips, beets, carrots, parsnips, buckwheat, mangels, salsify, rhubarb, leaks, potatoes, grass seed, vetch, peas, gladioluses, corn, popcorn, gourds, squash, egg plant, muskmelon, cabbage, asters, cauliflower, citron, chic peas, alfalfa, asparagus, oats, red clover, red top and castor beans.

The following canned or preserved goods: Chicken, soup filling, veal, vegetable soup, soup stock, mincemeat, tomatoes, peas, asparagus, corn, beans, squash, beets, apricots, gooseberries, peaches, strawberries, pears, watermelon pickle, olive oil pickle, cherries, peach conserve, jellies, raspberries, fruit juices, corn salad and dried cherries.

Half Moon grange added a further touch to the community exhibits by a tempting display of foods, including cakes, cookies, pies, biscuits, butter and eggs.

Scant Purpose to Curb Retailer

Finds the Producer Is Not the Man Receiving Abnormal Profits

By N. W. DURHAM

Governor Edge of New Jersey says that from his investigations he has not found that the producer is the man receiving abnormal profits. "It is the continuous adding to the producer's price multiplied through many hands that establishes the retail price."

Apparently there is no standardization of profits in farm produce in New Jersey. Reports to Governor Edge showed that on cabbage the price at Atlantic City grew 900 per cent in its route between the producer and the consumer. In Trenton it was 140 per cent. Jersey City and New York were content with 80 per cent, and Newark retailers asked but 50 per cent more than the farm price.

Governor Edge is convinced that government control will not benefit the consumers if price-fixing stops with the producer. That unless it is the intention of the federal government to follow this down to the price that can be exacted by the retailer there will be little relief from food gouging.

A study of the law reveals but scant purpose to curb the retailer. For example, take section 5, the section authorizing the president to license wholesalers and curb excessive profits. It expressly exempts the retailer, and defines a retailer as "a person, copartnership, firm, corporation or association not engaging in the wholesale business whose gross sales do not exceed $100,000 per annum."

Section 11, under which the government has fixed the price of wheat, provides "that the president is authorized from time to time to purchase, to store, to provide storage facilities for, and to sell for cash at reasonable prices, wheat, flour, meal, beans and potatoes."

So far the government has acted only with respect to wheat. It has fixed the price which it will pay for wheat wanted by the allies and wheat which it will buy for distribution to the mills, and by a voluntary agreement has limited the millers' profit at 25 cents a barrel. There it seems to drop the product. Apparently it has no intention of cutting out the retailer by selling flour direct to the consumer.

Mr. Hoover, in fact, has issued a statement that under the food control act, except in isolated instances, the food administration has no control of prices from the time flour reaches the wholesaler until it is sold by bakers and retailers as bread. A price reduction, he says, can be accomplished only by voluntary action by bakers and retailers and by the assistance of the public in eliminating waste.

But that is the case only because the government is not exercising the full extent of its powers.

The government can buy wheat and it can sell, and the law sets no limitation on the extent to which it can carry its sales. But so far it will sell only to the mills, and after that it is hoped that the price will not run wild before it reaches the consumer. The wholesaler and the retailer are being given an opportunity to handle the product at moderate profits. If they fail, if they show greed, the president has ample power under the law to sweep them aside and sell government flour direct to the consumers.

Looks Good for the State Fair

Sheep Sale Leading Feature and Splendid Agricultural Exhibits

The Washington state fair sheep sale gives promise of being a distinguishing feature of the state fair at North Yakima this year. The innovation was suggested by Agricultural Commissioner E. F. Benson and the management of the sale has been given over to Professor William Hislop, head of the animal husbandry department of Washington State college, who reports excellent success in listing animals for the sale. He announces he will have 1000 to 1500 registered rams and ewes which will be put at auction Friday and Saturday, September 21 and 22, 1917.

Prof. Hislop attended the big sale at Salt Lake last week and secured listings from some of the best breeders in the United States. A. G. Butterfield of Weiser, Ida., will send 60 Hampshire rams and five Rambouillets. A. J. Knollin, Pocatello, Ida., 25 Hampshire and 25 Shropshire rams and 40 Shropshire ewes; Queal Sheep company, Casewell, Wyo., 80 Rambouillet ewes; Walnut Hill Farms, Donerail, Ky., 65 head Hampshires, and F. W. Harding, Waukesha, Wis., 40 imported Lincoln and Hampshires.

Fine Stock Show.

The Washington State fair, which is held this year the week beginning September 17, gives promise of being one of the best ever featured by the state, taking all departments into consideration. Dr. R. J. Donohue, superintendent of the live stock department, after making a trip through the Olympic peninsula and meeting the stockmen who are fitting herds for the fair, says he expects to see the finest stock show ever pulled off in the northwest.

Children's Department.

The county and district exhibits that have already contracted for space insure a splendid showing in the line of agricultural crops. The children's industrial department that was launched with such success last year is to be continued and enlarged this year. This is under the supervision of Supt. Rodney Ackley, who is confident that 250 boys and girls will be at the fair during the week competing for the prizes and exhibiting their products.

Secretary Frank Meredith has the race cards well filled and offers five days of splendid sport in this line. He calls attention to the new $20,000 grandstand built this year for the comfort of those who wish to see the races. The new grandstand is set at an angle to the quarter stretch, which will give the spectators an unobstructed view of the races from start to finish. The seating capacity will furnish ample room for the crowds that overran the old accommodations.

The White Hussar Singing band will be the chief music feature and will give two concerts daily during the week. They will play in the afternoon at the grandstand and in the evening at the Horticultural building. In addition there will be two other bands. Crawford's band will play during the day wherever there is a center of attraction on the grounds and the Wortham shows that furnish the midway attractions will have a special band.

Governor's Day.

Thursday is Governor's Day at the fair and Governor Ernest Lister has consented to address the people at the grand stand. Special music by the White Hussar band and the biggest racing events of the week will mark this as one of the big days of the week. Monday is automobile day with five big races on the card and $1250 in purses and a silver cup will be hung as prizes.

Patriotic Day.

Tuesday is Children's day and all children under 14 will be admitted free. Friday is Elks' day, which means there will be something worth while doing in the way of amusement. Saturday is Patriotic day and a program to stir enthusiasm in this line is being worked out by the secretary.

Not only does the Washington state fair at North Yakima, Wash., September 17-22, promise to be one of the best yet held in the line of agricultural, horticultural and live stock exhibits, but there seems to be a closer cooperation between the fair management and the business interests of the city than on any previous fair. Among the plans this year the business men are placing a large number of autos at the convenience of outside visitors and those who come from a distance will be taken on trips out over the beautiful valley and shown the country that produces the major part of the material exhibited. Commissioner of Agriculture Benson is enthusiastic over this feature of cooperative work and Secretary Meredith, who has been untiring in his efforts to secure exhibits commensurate with the importance of a state fair, is assured of a display in all departments that will be satisfying and feels very sure of a large attendance.

Fruits and Grasses

The Spokane Interstate Winners

The following were prize winners at the Spokane Interstate fair on fruits and on forage and grasses:

A. J. Gage, Mica—Apples, crabapples, pears.
W. L. Perriman, Spokane, R. F. D. 3—Strawberries.
P. H. Hebert, Trinidad—Apples, pears, grapes.
Oscar Reinhardt, Brewster—Apples, pears, prunes, quinces.
E. W. Bennett, Opportunity—Apples.
R. A. Jones, Hillyard, R. F. D. 10—Apples, pears, plums, prunes, nuts, corn.
F. P. Spencer, Trinidad—Apples.
W. R. Sanders, R. F. D. 1, Mead—Apples, pears, plums.
Mrs. Hans Peterson, Mead—Apples, pears.
J. C. Ristan, R. F. D. 3, Spokane—Apples, alfalfa.
Ed Tiedt, Soap Lake—Apples, pears, corn.
M. R. Emerson, Opportunity—Apples, crabapples, pears, grapes.
Nels Munson, Trinidad—Apples, pears.
P. H. Cronkite, Trinidad—Apples.
H. Johnson, Trinidad—Apples.
H. A. Jones, R. F. D. 10, Hillyard—Apples.
C. M. Lockwood, Opportunity—Apples, crabapples, grapes, prunes.
W. S. Gatten, Mead—Apples, pears.
J. B. Felts, Opportunity—Apples, crabapples.
A. Knutson, Harrison—Apples, pears, alfalfa, bluegrass, orchard grass, red clover, sunflower.
Marguerite Wright, Opportunity—Apples.
W. T. Robbins, Mead—Apples, grapes.
T. C. Lenny, Opportunity—Apples.
R. Kiesling, Kiesling—Apples.
C. Atkinson, Mead—Apples, crabapples.
Henry Sudhoff, Elk—Apples, rye, wheat, peas.
Henry Knebel—Crabapples, prunes.
D. E. Black, Trinidad—Pears.
E. Schlinker, Kiesling—Pears.
A. J. Fearon, Neppel—Pears.
Dr. Utzey—Grapes.
W. J. Chambers—Grapes.
H. A. Feller, Greenacres—Grapes.
Edwin Perry, Greenacres, R. F. D. 1—Grapes.
Joseph Break—Plums.
W. W. Ferdham—Plums.
W. A. Hughes—Alfalfa, sweet clover, sheaf bluegrass, spring oats, red clover, sheaf vetch, oats, barley, beans, rye, winter wheat, spring wheat.
B. F. Hughes, Colville—Alfalfa, sweet clover, alsike clover, oats, rye, flax, winter wheat, spring oats.
J. R. Orrock, Sharon—Alfalfa, sudan grass, timothy, orchard grass, sheaf vetch, spring wheat, spring oats.
Leonard Gilkey—Sudan grass, alsike clover, field peas, corn.
Carl Mickelson, R. F. D. 3, Spokane—Sudan grass.
I. R. Remlinger, Springston, Idaho—Timothy, alfalfa.
R. J. McClure—Sunflower.
M. W. Curtis, Opportunity—Corn.
James Crumn, Opportunity—Corn.
Mrs. Ellen McKenzie—Corn, peas.
Joseph Fisher, R. F. D. 2, Spokane—Corn, peas.
J. N. Grieve—Corn, barley, oats, flax, wheat.
G. O. Kennedy, Box 24, Colbert—Barley, wheat.
R. L. Danson—Beans.
Willis M. Fisher—Rye.
G. W. Berries, Rathdrum—Wheat.
Mark W. Gitthens, Medical Lake—Barley.
William Long, Ephrata—Wheat.
C. E. Maynard, Ephrata—Wheat.
Mrs. F. F. Dodge, Kiesling—Beans.

Injury by Moles.

Considerable complaint is reported by Agriculturist G. B. Sprague of Kitsap county, Washington, in regard to the injury done by moles, mountain beaver and small squarrels. A campaign for their extermination is being planned.

Cooperative Bull Association.

By getting seven farmers to sign up the first cooperatively owned bull in Pend Oreille county, Wash., is an assured fact, says County Agent M. J. Newhouse.

Ask Pacific Coast Basis of $2.20

Wheat Growers Will Carry Their Fight Direct to President Wilson

Wheat growers of Washington, Oregon and northern Idaho assembled in a meeting at Portland September 7, decided unanimously to carry their fight for a north Pacific coast terminal as a base in the establishment of a 1917 wheat price direct to President Wilson.

The meeting was attended by 150, virtually all previously chosen from massmeetings in their respective communities forllowing the Spokane conference of September 4. While the majority of the wheat growers present were members of the grange or farmers' unions, there was a substantial representation of unattached growers, as well as delegates from the various commercial organizations and financial interests. Eastern Washington sent nearly 40 men, and the Washington delegation represented nearly 90 per cent of the total attendance.

A delegation will be sent in the near future to Washington, D. C., to confer with the congressional delegation of the northwestern states in an effort to secure a personal hearing before President Wilson.

The following were declared elected after a vote by ballot: R. Insinger of Spokane, commercial organizations; W. W. Harrah of Pendleton, farmers' union; C. L. McKenzie of Colfax, at large; R. J. Stephens of Spokane, commercial organizations; C. W. Nelson of Seattle and Nez Perce, Idaho, farmers' union; S. C. Armstrong of Seattle, commercial organizations, and C. E. Spence of Oregon City, grange.

R. Insinger, chairman of the agricultural committee of the Spokane Chamber of Commerce, was chairman of the conference and A. A. Elmore, national organizer of the farmers' union, acted as secretary. The meeting was entirely harmonious, unanimity of action and thought marking the discussions. The attitude of Mr. Houser, while he was unable to assure any relief in his official capacity, was gratifying to the growers, as he frequently expressed his desire to do all in his power to help the northwestern situation and to transmit to Mr. Hoover the sentiment of the wheat growers as expressed at today's conference.

Some Consumers Favored.

Chairman Insinger declared the northwestern farmer was willing to have the consumer get flour at the lowest possible price, but objected to giving the consumer in certain parts of the country a present because of price discrimination. He contended that the price differential was less than the freight rate differential in many instances, while the northwest is to be assessed the full freight rate of 30 cents a bushel to Chicago on a price of $2.20 on the Chicago base. He handled. He estimated the 1917 production in Oregon, Washington and northern Idaho at 42,000,000 bushels, of which 18,000,000 would be needed for home consumption and seed and 12,000,000 for California, Alaska and other natural northwestern markets, and 1,000,000 for flour sales to the southeast, leaving 11,000,000 bushels to export. He declared the fair northwestern wheat price must be based on the water rate via the Panama canal from a north Pacific terminal base.

In reply to questions, Mr. Houser declared that probably not one man on the price-fixing board knew what wheat was sacked in the northwest. He said the farmer could retain his sacks if he cared to, the prices fixed being on bulk grain. He suggested that an investigation be made as to the sacks available. Northwestern wheat shipped via Chicago for the southeast, he said, would take the Chicago rate, and the suggested that the government could commandeer ships now building on the Pacific coast to move northwestern grain just as easily as it could commandeer the wheat. He said it is a waste of effort to ship interior wheat to the coast for milling and back to the interior as flour.

Stephens Talks of Tonnage.

R. J. Stephens of Spokane, chairman of the Washington grain convention, stated that new shipping now on the Puget sound ways could handle 100,000 tons of wheat by January 1. Others declared twice this amount could be buyer must absorb the difference between the Chicago and southeastern basic port prices.

Means Tax on Farmers.

A. A. Elmore, national organizer of the farmers' union, declared price control meant a direct patriotic contribution from northwestern wheat growers of $20,000,000 on the estimated 1917 crop.

C. E. Spence of Oregon City, master of the Oregon grange, pledged the support of that organization behind the movement to secure redress for northwestern wheat growers.

"We want equal rights and privileges with other sections of the country," he said. "There is no reason for discrimination. The northwest has never been the tail of the Chicago kite."

The report of a special commission composed of R. Insinger, A. A. Elmore, J. S. Klemgard, R. J. Stephens and C. L. McKenzie was read by Mr. McKenzie. He submitted figures for 10 years showing that the Chicago price had never been 20 cents over the Portland price, that 15 per cent of the time the Portland price was higher and that the average differential favoring Chicago was only 5 cents.

Among those present were the following:

Washington.

Spokane—Thomas H. Brewer, M. E. Hay, W. B. Davis, J. K. McCormack, C. B. Kegley, P. J. Stephens, David Munroe, F. Alspaugh, William Huntley, C. T. Hansen.
Lind—J. M. Robbie.
Seattle—George Albers, S. C. Armstrong, H. P. Chapman, C. W. Nelson, A. A. Ryer, M. J. Lehman, William Levengood, J. H. Noyes, William J. MacDonald, A. E. Sutton.
Garfield—A. C. Whisler.
Ephrata—Will J. Logg.
Reardan—W. H. Childs.
Pullman—George A. Olson, J. S. Klemgard, O. G. Waller, H. W. Price.
Tacoma—P. J. Sweeney.
Colfax—C. L. MacKenzie, W. R. Anderson, George L. Neil.
Kahlotus—Logan E. Perry.
St. John—Frank A. Ratliffe.
Lacrosse—Ira M. Camp, C. E. Helm, M. E. Stansell.
Oakesdale—J. J. Browder, S. M. Lathrum.
Latah—H. C. Kreyssler.
Odessa—Joseph Nechanicky.
Hooper—Peter McGregor.
Krupp—H. W. Hull.
Wilbur—J. F. Kunz.
Tekoa—L. J. Lauritzen.
Lyle—J. E. Foss.
Centerville—J. Crocker.
Palouse—A. J. Webster.
Goldendale—R. D. Sunderland.
Othello—J. F. Lee.
Dayton—R. M. Jonas, John Brining, G. M. Thompson.
Sprague—C. L. Fish.
Hatton—B. L. Sutton.
Uniontown—Lambert Taufer.
Wheeler—C. G. Henderson.
Warden—Ed G. Bowker.
Ruff—C. L. Barnham.
Bickleton—George Matsen.
Rosalia—A. J. Stone.
Walla Walla—John F. Casper, O. T. Cornwell, W. H. Kirkman.

Oregon.

Portland—M. G. Bussi, William Albers, J. D. Brown, R. J. Patterson, A. Cohn, T. E. Morgan, D. W. L. MacGregor, Leo Peterson, Sherman C. Draper, D. A. Pattullo, William MacMasters, H. A. Cushing, R. P. Knight, E. Rohlfing, N. P. Peterson, L. Smith, George H. Crawford, A. R. Jobes, C. E. Kindt.
Heppner—C. E. Jones.
Oregon City—C. E. Spence.
The Dalles—Louis J. Gates.
Ione—E. R. Lundell.
Gilliam county—E. J. Clough.
Pendleton—T. G. Taylor.

Idaho.

Nez Perce—B. L. Cole.
Ilo—U. R. Warnacht.
Cottonwood—George S. Downer.
Genessee—H. J. Herman.

Spokane Conference.

The Spokane conference of September 4, made up largely of wheat growers, together with business men, adopted resolutions to ask the food administration's price fixing commission to establish a Pacific northwest terminal on a $2.20 basis for No. 1 northern wheat. That would mean $2.10 in interior northwestern points. At the Spokane meeting, A. A. Elmore, national organizer of the farmers' union, submitted the following figures to show the trend of relative prices in Chicago and Portland:

The wheat market in Chicago in 1914 was $1.09 per bushel. In Portland in 1914 was $1.12 per bushel.

Chicago in 1915 was 94 1-2 cents per bushel; in Portland in 1915 was 89 cents per bushel.

Chicago in 1916 was $1.38 3-4 per bushel; in Portland in 1916 was $1.26 per bushel.

Chicago on August 29, 1917, was $2.20 per bushel; in Portland on August 29, 1917, was $2.25 per bushel.

"It is argued that we must assume or absorb the freight rate to Chicago in order properly to meet the middle west competition in the flour trade," continued Mr. Elmore. "I want to ask who absorbed the freight rate of 30 cents per bushel and 5 cents per bushel premium on August 29, 1917?"

Interstate Fair Live Stock Show

Courage, Enterprise and Staying Qualities of Northwest Stockmen

By E. J. IDDINGS

It is happy augury of the future when realization of any event far surpasses expectations. This is true of the live stock show at the Spokane Interstate fair.

Feed has been so high in price as to discourage many from preparing animals for public exhibition; many of the able men interested in live stock production have been called to assist in some of the many phases of the national effort for effective prosecution of the war; herdsmen have enlisted or have been drafted; many of the small shows, which are in some cases feeders for such exhibitions as is now closing at Spokane, have been abandoned, and other facts of a similar nature made many feel that there would not be "much doing" with live stock at Spokane this year.

It is, therefore, a pleasant surprise for the visitor as he steps on the fairgrounds, and it gives one a new and deeper appreciation of the courage, enterprise and staying qualities of the stockmen of the northwest to find on the grounds this year a large and very fine display of purebred live stock.

Some of the old horsemen who are veterans of many a battle of the arena were not on hand, but new men brought horses to fill the vacant stalls, and displayed well-groomed specimens of the horsebreeders' skill to admiring throngs that do not own and never will permit a gas-driven means of transportation to take the place of affection that the horse has had in man's heart since early ages.

Space does not permit extended comment on the Percherons, Shires and Clydesdales which made up the larger part of the show. A newcomer, the blue ribbon stud of Colfax, took all championships in the above breeds except in Percherons, when the purple award went to S. E. Jordan of Cheney. Particularly worthy of most favorable comment is the 3-year-old Percheron, Royal Quartermaster and the 4-year-old Clydesdale Victor Favorite, stallions of the Percheron and Clydesdale breeds, respectively.

The beef cattle show consisted almost altogether of Shorthorns and Aberdeen-Angus. It is a matter of regret that the Herefords, long a prime favorite at Spokane, are not represented except by fat steers in the awards of the Washington State college and the University of Idaho. These two schools have well-finished steers for the fat classes. The purple award for grand champion after the battle of the various classes for ages, went to the varsity yearling, a purebred Shorthorn.

The Aberdeen-Angus exhibit is probably the best of any ever seen in Spokane, and is made solely by one exhibitor, Congdon & Battles of North Yakima.

The reds, whites and roans exhibits attracted the eyes of visitors, with McCroskey, Hercules farm, Morrison and Bradrick making the greater share of the showing. These herds, three of which have been at Spokane before, show an improvement year by year. This is not only the result of judicious selection from herds long used by these men as foundation, but there is further a marked evidence of improvement from the introduction of Shorthorn blood secured from the distant and well-known breeding districts of America and Canada.

The showing of dairy breeds is excellent with the four principal breeds, the Holstein-Friesian, Jerseys, Guernseys, Ayrshires well represented. The Holstein interests were well taken care of by the splendid herd from the Carnation stock farm, and a smaller but very creditable exhibit from Hulbert of Mount Vernon.

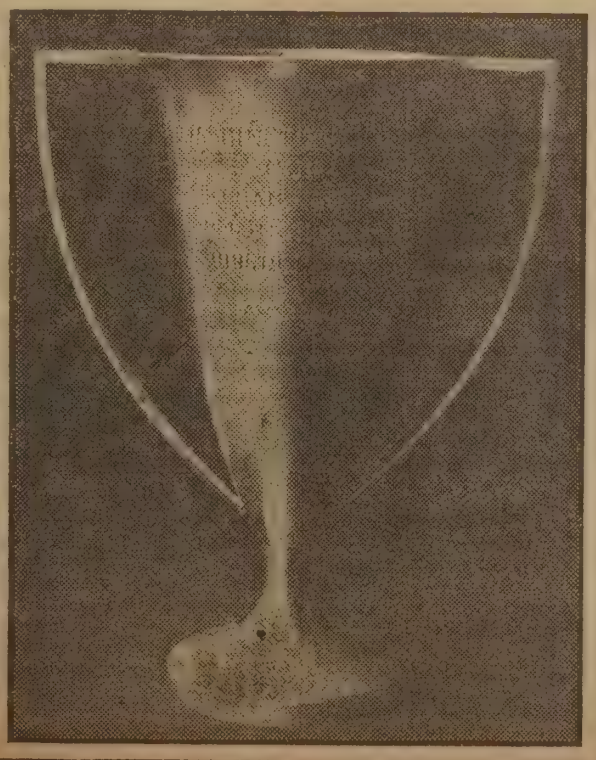
The Jerseys and Guernseys, those two sister breeds representing the constructive skill in animal breeding of the Channel islands, made a most notable showing. The herds were of uniform and outstanding individuality and noticeable in most of the classes entered for competition. The Ayrshire exhibit came from Waikiki.

The swine breeders of Washington and contiguous states may feel proud of this year's show at Spokane. There

(Continued on page sixteen.)

For Grand Champion Holstein Female

The cup shown herewith will be given by The Washington Farmer to the exhibitor of the Holstein female that wins the honor of grand champion at the Washington State fair at North Yakima, September 17-22. The state possesses some of the best Holsteins in the country, and the competition should be keen for honors.



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Farm With Extreme Care This Year

The soil of the United States is asked to produce the largest crops next season in the history of American farming. Promise of good prices, as well as the spirit of loyalty to their country, will lead farmers to put forth special effort to meet the requirements. The world must have food; the soldiers of the allied nations must be well nourished if they are to win the war.

The farmers must, and will, rally to the call for the production of bumper crops, but they must farm judiciously. Never before was there so great need for careful farming. Scientific cultivation of the soil was never so much needed. Fertilization is necessary as it never was before. Patriotism and the temptation of high prices are likely to lead the farmer to take from his soil at this time the maximum yields possible, without putting back any fertility. But he must look to the future as well as to the present. It is immeasurably harder to build up depleted soil than to maintain it year after year in a state of fertility. Therefore, it behooves the owner of land to see that every fertilizing element obtainable is put into the soil. No waste vegetation should be burned. There are practicable ways of putting even straw and stubble into the soil. Every pound of manure should be utilized. Every drop of moisture should be conserved by means of cultivation.

This is necessary in order to meet the present crisis, but it is more necessary for confronting future conditions in crop production. Carl Vrooman of the department of agriculture uttered a profound fact while in the northwest recently when he said, "We ought almost to thank God that this crisis has come to force upon us the adoption of scientific agriculture."

Direct Marketing Plan

The direct marketing plan that has been under way for some time bids fair to be in operation soon, is the report of Agriculturist C. B. Sprague of Kitsap county, Washington. The committee has been at work changing the plans to better suit the conditions of the present time, and have made their final report to the Pomona grange, under which the market project was first given its start. The matter of trying to standardize package and parcel best suited for the consumer as well as the producer is still up for adjustment. The committee is to encourage the buying in quantity rather than the day-to-day plan that is commonly used, so as to do away with as much overhead charges as possible.

Accept Just Punishment for Plunder ng Farmers

Gale Smith, president of the swindling Northwestern General Trading company, and Stephen T. Knudson, sales agent of that company, and president of the Olympic Trading company, a subsidiary concern, have wisely quit battling against their just sentence and will now serve out and accept their penalties—a year in the county jail and fines, respectively, of $10,000 and $7500.

The conviction of these men and two lesser offenders—Clyde L. Davies and Olin C. Fowler—will have a wholesome and far-reaching influence. The audacity and the magnitude of their operations, resulting in the fleecing of honest and hard-working farmers and other workers out of hundreds of thousands of dollars, came to the attention of vigilant officials of the United States government, who fearlessly turned the searchlight on their dark manipulations.

They had a fair trial before an unbiased judge of the United States court, and were ably defended by capable and resourceful counsel. But their guilt was so obvious that a jury of fair-minded citizens found them culpable and returned a righteous verdict against them.

This just ending of a celebrated case should stand as an enduring and impressive warning to all schemers bent on plundering farmers and other investors. In its proper work of exposing the swindling operations of the Northwestern General Trading company, and giving its readers full and accurate reports of the trials, The Farmer had clearly in mind and purpose a plain duty to the public. It felt that it was of the highest importance that these men should be punished for their improper exploitation of the cooperative principle.

Cooperative movements are of large and increasing benefit to farmers when conscientiously conducted by honest men, but if plundering schemes like the Northwestern General Trading company, cloaking themselves under the false guise of honest cooperative effort, were allowed to go unpunished, and their managers were permitted to walk off with their ill-gotten gains, it would not be long till worthy cooperative undertakings would be discredited.

If You Must Cuss, Don't Forget Congress

The New York Journal of Commerce thinks that "in one great vital respect we have fallen down on our war plans for obtaining a big supply of food."

It points out that the farmers have responded to the government's appeal for increased production, but the government has not been forehanded in providing marketing machinery and storage facilities to handle the increased output.

Excepting wheat, the country is harvesting abnormally large crops in the cereals, and the potato yield promises to be the largest in history. Eventually all this food will be needed—for home consumption and exports to our allies. But that much of the production will go begging for a temporary market seems inevitable.

The responsibility for this unpreparedness rests with congress, not with the president and Mr. Hoover. Congress took all summer to debate and wrangle over the food control legislation, and until it acted the administration could do nothing.

Now the whole complicated, gigantic problem is thrust suddenly on the administration, which must work out details in days for which it should take weeks.

There will be costly mistakes, and at times the undertaking may seem hopeless in many lines; but the Farmer believes that we shall muddle through it some way. But when the tangle seems hopeless, and you feel that you must express your feelings in emphatic language, don't forget that a great part, if not all, of the blame belongs to those senators and representatives who kept the bill hung up for months after the president had outlined his program.

Washington Gleanings

The canning school in Everett, which has been so popular this summer, will be continued through September.

T. H. McBroom of Garfield has sold his country home of 75 acres to S. G. Leach for a consideration of $10,000

E. C. Bradley, assistant secretary of the interior, has been investigating irrigation districts in the section of North Yakima.

According to reports, there will be about 25,000 more stock on the ranges of the Oregon-Washington grazing district next year than this.

For the purpose of securing more effective results in marketing their produce, Thurston county dairymen and farmers have formed the Thurston County Dairy and Farm Produce association.

Plans for installing the starch factory in Toppenish have been abandoned for the present year. The company is unable to obtain the necessary machinery at the present time. The project will probably be carried out next year.

A fruit drying plant with a capacity of 20 tons a day is to be in operation at Walla Walla prison within the next few days, work of excavating for the kilns having been started. Culls and the ordinary waste fruit of the valley will be handled.

Lynn S. Keyes, county agricultural agent of Cowlitz county, is taking a census of the horses which will be available for sale to the United States army and government, who are in the market for a large number of first-class horses for war service.

Beet farmers in the Yakima valley who sell their produce to the Utah-Idaho Sugar company, whose new plant at North Yakima will be open for this year's run are to receive a profit-sharing contract this year, provided they feel inclined to accept this type of paper.

The advance agent of a circus and menagerie that visited Seattle recently found the only available show ground convenient to the center of the population occupied by 24 war gardens and he was obliged to compensate the owners before he could lease the land for the show.

Timber appraised at $193,559.33 will be offered for sale by county auditors of the state on October 2, together with uplands valued at $116,503.89 and tide lands valued at $4934.63. Practically all of the land is east of the mountains. The sales will be held in 29 counties.

Washington farmers have not yet suffered from a shortage of harvest hands, according to L. Wood, federal director of employment in charge of the Seattle office. He says that the establishment of subagencies throughout the state, which keep in direct touch between farmers and jobless, has worked splendidly.

Irrigation of an additional 30,000 acres on the Yakima Indian reservation next year, raising the total to about 90,000, is promised if congress approves the recommendation of the department of the interior that Senator Jones' amendment appropriating $750,000 for work on the Wapato project this fall and winter be passed.

A committee to handle the problem of providing wheat and rye seed for farmers of the state has been appointed, with Professor W. S. Thornber of Washington State college as chairman. A sufficient quantity of wheat suitable for fall planting will be held by the warehouse men, they promise, until the needs of the farmers have been supplied.

What Others Say

Hoard's Dairyman: Let us not make the mistake of giving the land on which alfalfa is to be grown too little preparation.

Rural New Yorker: The potato is a necessary part of the food for Americans, and the more of the skin we eat the better off we are.

Dakota Farmer: The man who makes two motions grow where only one is needed for the task is not a public benefactor—he is merely wasting time, muscle and energy.

Country Gentleman: Children who are regularly taught methods of thrift in school will constitute a bodyguard of criticism of extravagance in the home. A national department of thrift is needed.

National Stockman and Farmer: The great monument which marks the graves of 4760 soldiers on the Antietam battlefield bears this inscription: "Not for themselves but for their country." And that spirit should actuate all of us these days.

Five Books Free

DO YOU want to save money on your stump blasting? Do you want to get the stumps out cleaner—split them up better—and cut down the quantity of powder required? Our Stump book, "Better Stump Removing," tells and shows how to do it.

OR do you want your fruit trees to grow faster, yield sooner and bear bigger crops. Our Tree book, "Better Orchard Tillage," shows how you can secure these results by blasting when planting.

IF you want to save fertilizer and grow bigger crops, send for our Crop book, "Better Farm Tillage." It tells how blasting will make the subsoil mellow several feet deep and release new plant food for your crops.

ARE there rocks on your farm? Our folder, "Better Boulder Breaking," shows how a few minutes' work will get them out of your way forever.

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Here are some of the reasons why you should insist upon Giant Farm Powders for all farm blasting.

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4. They will not freeze at ordinary temperatures, standing 32° for days without requiring thawing.
5. They are being used by thousands of farmers, scores of whom state that the Giant brands "give better results"—"save money"—"have wider breaking power"—"shoot the roots"—and "are always uniform in strength and action."

There are two of the Giant Farm Powders: Giant Stumping Powder, for wet work, and Eureka Stumping Powder, for dry work. Eureka costs less and many careful blasters use it for wet work, too.

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Your local dealer probably has Eureka and Giant Stumping Powders and other Giant blasting supplies. If he does not have them, write us. We will see that you are supplied promptly through the local dealer with whom you prefer to trade, through a dealer in a nearby town who has a magazine, or direct from our nearest distributing point.

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Blast with each. Keep track of the quantities used. Figure the cost. You will find—as farmers everywhere have found—that the Giant Farm Powders save farmers time, work and money.

To make it easy for you to secure Giant Farm Powders we print a trial order form in the coupon at the right. Fill it out and we will have our nearest distributor supply you with a trial case at the lowest market price.



Mail the coupon below or a post card and get one or all of the Giant books. You will find them valuable. They contain illustrations of the most economical ways of doing farm work with Giant Farm Powders.

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Send me your illustrated books on the subjects which I have marked X.

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Trial Order Blank
(Kindly fill out if ready to purchase)
Have your nearest distributor supply me with

_____lbs. Giant Stumping Powder
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NAME _____

ADDRESS _____

Write below your dealer's name.

Farmers Live on Last Year's Profits

So Says One Writer in a Letter About the Crop and Price Condition; He Says It Takes Two Dollar Wheat To Break Even



BICKLETON, Klickitat County, Wash., Aug. 30.—Harvest operations are about through in this locality, but threshing will last about two weeks yet. Grain is beginning to come in the warehouses and the testing shows serious damage by the hot weather. I doubt if there will be any wheat in this vicinity that will test No. 1. It is going from 48 to 58 pounds to the bushel, and the bulk of it going at 50 and 54 pounds. I judge the crop will be about 65 per cent of a normal yield. Oats and barley stoed the east winds a trifle better than wheat. The acreage of spuds this year is large, but they are also affected by the dry season. We have not had a rain for nearly three months. Stock is looking well, as there are lots of stubble fields to run on. The water supply is getting low with the continued dry season and many are drilling new wells. The farmers as a rule are in good circumstances from last year's big crop, having paid off many old debts, but the increase in wages paid harvest hands and the great increase in the price of supplies of all kinds and also considering the low test of his grain, the farmer must have $2 per bushel for his wheat if he is going to break even and $2.50 if he is going to make a profit. If Uncle Sam wants a big acreage next year he must let the farmer make a profit this year. No farmer can accomplish anything by just merely making a living, as it takes the best part of a man's life to start from nothing, and accumulate land by degrees until he has a moderate-sized farm and then improve and equip it so he can live in comfort. By the time he has all this paid for and is out of debt he is beginning to gray around the temples. Then the I. W. W.s and certain laboring men make a great howl that he is rich, with a bulging bank account, as one man expressed it. They ought to be thankful that he is able to pay them double the wages they used to receive, so as to enable them to bear the increased price of living.

BERT H. FAULKNER.

Future Stock Outlook.

TWISP, Okanogan County, Wash., Aug. 21.—All farm crops have been injured more or less from drouth and heat. Even the men that irrigate have learned their crops can be affected by heat and drouth. Of course, they make some kind of a crop; but the heat has been so intense this season that the second cutting of alfalfa is far below normal. Good heavy soil on upland will always produce one fair crop of alfalfa, some seasons two. A good seed bed and deep planting is the greatest defense against drouth on dry land. The crop condition will have a tendency to discourage, but the price and demand will stimulate live stock. The future looks bright for the fellow that will hold on to and care for his young stock for the next two or three years.

GEORGE LA RUE.

Must Farm Intensively.

GIG HARBOR, Pierce County, Wash., Aug. 28.—From such observations as I have been able to make would say that the stock feed question for the coming winter is better in hand than it has been heretofore. A stronger effort is apparent to produce something nearer an adequate supply of roughage and roots for winter feeding. The weather for gathering and housing the former could not have been better. Considerable corn for fodder was planted in favorable locations along our creek bottoms, and that, too, is doing finely these warm sunny days. Threshed straw is but little used here, there being no threshing done in this section. It is occasionally bought in baled form from the east side, but is not relied upon as a main feed. It is not thought that its value will bear the high freight rates that must be added to its first cost. It usually sells at about one-half to two-thirds the price of alfalfa. Potatoes will yield moderately well on lands of suitable moisture. With the larger acreage that prevails there will be a considerable surplus over the needs of the local markets. Generally speaking, the acreage here that is being planned for next year's crop in all lines can not, under existing conditions be greatly increased; but there will be a strong move toward getting larger yields from the areas available. We here must necessarily give our strongest efforts toward intensive rather than extensive farming. W. D. BOYNTON.

Increase in Silos.

CHEHALIS, Lewis County, Wash., Aug. 26.—There was a fairly large crop of hay in Lewis county which was saved in good condition. Weather conditions have been favorable for the growth of corn for ensilage and the crop looks fine. There has been a large increase in the number of silos in the district and in the acreage of ensilage corn. The practice of saving straw is now almost universal here. Great quantities of straw is baled and sells at $7 and $8 a ton in the bale. The oat crop is short and some pieces of oats have been cut for hay because they promised to yield but little grain. The yield of potatoes will generally be light although there are some fine fields. The acreage was largely increased last spring so there should be more than an average tonnage for the market. Acreage of crops can only be gradually increased in this country because of the labor necessary to clear the land of timber and stumps. However, the acreage under cultivation next year will undoubtedly be larger than in any previous year.

J. C. BUSH.

Pea Crop Is Light.

FAIRFIELD, Spokane County, Wash., Aug. 25.—All spring sown crops seem to be injured from 50 to 75 per cent, but the fall-sown wheat on summer fallow, where it was sown early, has yielded a normal crop. The pea crop, while very light, will pay expenses, and in some cases have a profit, especially is this true where peas were grown on old pea land. The first crop of peas were generally very light. Spring oats and spring wheat are less than one-half normal crop. The shortage and high price of feed will tend to depress live stock. Farmers should keep their hogs where peas are grown and this can be done by providing alfalfa pasture for the spring and summer range, then run them on the pea-stubble in the fall and a double profit is made. ROY G. ADAMS.

Go Slow Selling Cattle.

GRANDVIEW, Yakima County, Wash., Aug. 20.—There is no injury to crops, for we irrigate here. Prices of feed will make many sell stock for what they can get for them. I think we should be slow to sell off cattle at a low price. Butter fat is not high priced as feed. This is very hot weather but all crops are doing well.

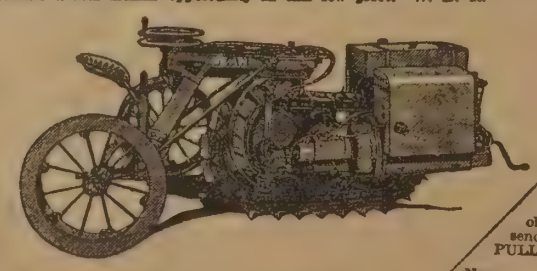
E. H. FAULKNER.

Farmers Not Discouraged.

BOSSBURG, Stevens County, Wash., Aug. 27.—This has been the worst year we have had since the country was settled. There has been no rain since June 4, about the time of the last spring seeding and we have had more wind than ever before. All crops are short. Wheat, oats and barley are about one-third of a crop. Corn is not more than one-fourth of a crop. Potatoes are 50 per cent of a crop. Hay is not quite so bad as we had a pretty fair first crop of alfalfa and the timothy was fair, but the second crop of alfalfa was a failure where there was no irrigation so we have about 60 per cent of a hay crop. Wheat seems to have stood the drouth best and may make a little better than 30 per cent of a crop. Fields that were plowed last fall have stood the dry weather best. Some of the early spring plowing has produced some grain, but where the grain was put in with a disk or drill without plowing there will be no crop this year. In fact the latter style of farming will not do in this part of the country, and I doubt if it pays anywhere. The short crops have not discouraged our farmers in regard to live stock, as they will hold to all they have except those ready for the market. Most of our farmers have enough feed to keep what stock they have, but few will be able to buy any more this fall. I have heard several farmers say if they had feed they would buy more cattle. Most every one seems to think prices will be better in the next two or three years. Hogs are scarce and there are none for sale at any price. That does not seem to stimulate the breeding of more hogs in our part of the country. Most farmers will continue to raise enough hogs for home use, but none for market. We have no irrigation here and hogs will not pay on dry pasture. Cattle and sheep do well on our dry pastures and should be kept on every farm. There is not a farmer in our part of the country, but has made money on what cattle and sheep he has been able to keep, and they are all in favor of keeping more rather than selling a part of what they have. As I have stated before I believe there is more money in sheep here than any other stock. As we have a lot of rough hill land that produces mutton and wool, any farmer that has not tried sheep will be surprised at what a few head will do on the small farm. I know of many small farms in this country where less than one-half of the land inclosed is in cultivation on account of being too steep or rocky to plow. All this class of land will produce, if given a chance to grow mutton and wool. So let us all boost for cattle and sheep in our non-irrigated districts and boost for the hog where we have fresh green pastures. The market is sure to be good for the next few years.

W. W. PALMER.

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It tells all about the most wonderful little Track-laying Tractor ever built for Orchard and Vineyard work. Write me direct today, or send the "Tractor Opportunity" coupon. Lowest prices now.
My name is W. B. Raymond, and I am the man in this concern whose job is to get the story of the wonderful little Bean TrackPULL Tractor before orchardists and vineyardists. And I say "Don't buy *this* tractor or any other until you get the TrackPULL story, because that story may revolutionize your tractor ideas to your great benefit.
"There are some things that the TrackPULL won't do, and you want to know those things before you buy a Bean TrackPULL—and there are other things it *will* do that other tractors *can't* do, and *those* things are *vitally important*, particularly to vineyardists and orchardists.
"The front drive principle—steering with the track that PULLS—is just one of the features of this great little tractor that is patented. No other tractor is like it. A patent, of course, always means a *big advantage*.
"Look at the illustration. The Bean —6 h. p. at the draw bar — *pulls* instead of *pushes* itself over the ground, and you *steer* with the track that pulls. That means you can do everything with the Bean that you do with horses plus a lot of things horses and other tractors *never* have done—like going under tree-boughs only four feet off the ground and pulling full load on turns. The Bean works between seven-foot rows in vineyard—that's another advantage.
"But I couldn't begin to show you in an *ad* all the advantages. They've got to go in a book, and you ought to have that book before you buy a tractor because it will *save you money*."
BEAN TrackPULL Tractor
Send me the coupon below and I'll send you the book free. Read about the "Fifteen Features of the Bean." The price is $1150.00 now—the lowest priced track-laying type of tractor built—but material costs are steadily going up so I suggest you act quickly before a raise. There's a real tractor opportunity in this low price.—W. B. R.

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Number of acres
Kind of crops grown
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No More Whisky

Grain to Be Eaten; Not Distilled

The new federal law, a part of the far-reaching food administration law, prohibiting the manufacture of distilled liquors from grains, is in effect, and any distillery now in operation is running illegally. The law went into effect with the closing of the plants Saturday night, and thousands of distilleries in the United States have closed their doors.

For some time since it became evident that national war legislation was coming to prohibit the use of grain for liquor manufacture, the distillers have been working overtime manufacturing whisky for storage. It is now estimated that there is plenty of whisky in the United States to satisfy the demand for at least a year, and possibly longer, and the distillers are hopeful that the war will be over and the prohibition removed before the supply is exhausted. The law does not interfere in any way with the prohibition laws already existing in the states or the nation except that the manufacture of grains into distilled liquors is forbidden, in order to conserve the grains for food.

Some of the distilleries are continuing to operate for the production of alcohol for commercial uses, but most of them have closed down and placed their employes in other kinds of work.

Lumber Strike Off.

The I. W. W. lumber strike in the northwest has been called off. What the reasons back of it are is not announced by the union officials. In some quarters it is believed that the action is taken because of the apparent failure of the strike to result in betterment of conditions as sought by the strikers; in others it is believed or feared that the malcontents are planning to hamper the industry more by resorting to practices of sabotage. In some localities the merchants have banded together and absolutely refused to grant credit to the strikers, thus virtually forcing some of them to return to work or go hungry.

Business Men to Meet.

A great meeting of business men has been called for Atlantic City, N. J., next Tuesday for the purpose of formulating plans for the more efficient conduct of the business life of the country in behalf of the nation and her allies. The meeting is under the auspices of the Chamber of Commerce of the United States. Secretary Baker of the war department and Secretary Lane of the interior department will address the men as representatives of the government. It is proposed to organize the great industrial and business resources of the nation with a view to strengthening as far as possible the government in its war against Prussianism.

Sweden Not Neutral?

Evidences are declared to be had that the representatives of Sweden at Buenos Aires, the capital of Argentina, in South America, have been acting as the allies of Germany in furthering the submarine campaign. The Swedish legation is charged with having been transmitting messages for the German government secretly and in direct violation of the regulations governing neutral nations. There has been talk in official circles of possible breaking of diplomatic relations between this country and Sweden as a result of the disclosures, but that is not likely at this time.

Exempt From Mortgages?

A meeting of the Farm Mortgage Bankers' association is in progress at Minneapolis this week, and one of the big subjects before them is whether or not enlisted or drafted men should be exempt from foreclosure of farm mortgages during the period of service. There appears a strong sentiment throughout the country to grant concessions of this general character to men enlisted in the country's service, and it is not unlikely that some such action will be taken by the bankers.

More Peace Terms.

More talk of peace terms in the air. This time rumors of what Germany is likely soon to propose are sifting through the lines. The rumors fix Germany's terms in language very similar to that of Pope Benedict, recently rejected by the United States and her allies. In a general way the terms as proposed are not wholly objectionable, and may form the basis for actual negotiations within the near future, but the one great fundamental necessity, the elimination of German autocracy and militarism, is not included in the rumored proposal.

Russia Takes Stand.

After evacuating Riga, the port on the Baltic sea, to the German forces, the Russians retreated some distance and at this time appear to be entrenching themselves with a view to making a deliberate stand against further invasion. It is apparent that the German generals have no intention of attempting to march on Petrograd.

The fighting continues on the northern French front, with the allied armies having the better of the conflict, though no great gains are reported of late.

Apple Men Cooperate.

A meeting of persons directly interested in the apple crop is being held in Portland this week, with a view to uniting all such parties for the more efficient distribution and conservation of the apple crops. The meeting was called by W. B. Ayer, Oregon state food commissioner, at the request of National Commissioner Herbert Hoover.

High Bred Stock.

One of the plans of Armour & Co. of Chicago in connection with their big packing plant in Brazil is to establish a breeding department that will be stocked with high bred cattle, hogs and sheep. It is proposed to institute an active campaign of education among Brazilian breeders and to loan them stud animals when necessary, as well as to sell breeding animals at practically cost prices. The projected plant at Sao Paulo is to handle 2000 cattle, 3000 hogs and 2000 sheep a day when running at full capacity, and to eventually have 3000 employes on its payroll.

More Grain; Less Cattle.

The 1918 harvest program for England and Wales contemplates 2,000,000 acres less grass and 2,600,000 more grain, according to an official statement received by the national food administration at Washington. The first plan was to plow up an additional 3,000,000 acres of grass land, in the hope of making England as near self-sustaining for cereals as possible. The agricultural program proposed, taken in conjunction with the declining scale of prices fixed by the government for cattle, indicates that cattle are to be sacrificed for grain in the present emergency as a part of the British government policy, and that the end of the war will find the meat and live stock problem left largely to the United States for solution, with increased demands upon us for live stock and dairy products and lessened demand for grain.

Live Stock Decreases.

At the close of 1916, according to official figures, cattle in France have decreased to 12,341,900, as compared with 14,807,000 in 1913, or 16.6 per cent; sheep decreased from 16,213,000 in 1913 to 10,845,000 December 31 last, or 33 per cent; swine decreased from 7,048,000 in 1913 to 4,361,900 at the close of last year, or 38 per cent.

The French figures emphasize the recent statement of the United States food administration that the nations of Europe are now rapidly depleting their supply of live stock and must, therefore, depend largely upon the United States for their meat and dairy products after the war.

Windmill Makes Dough.

A windmill in Europe grinds grain into flour for a baker and then mixes and kneads it into dough.

MUST CONSERVE STOCK.

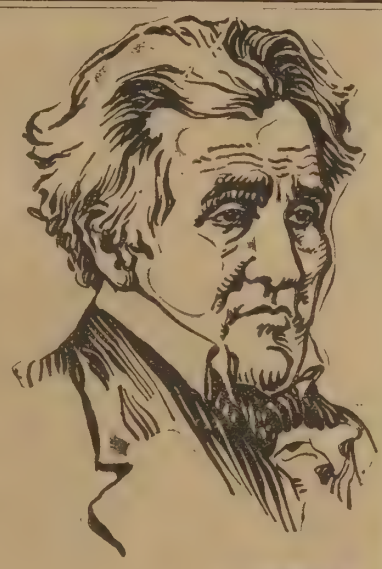
Industry Is a Fundamental One.

At the stockmen's banquet, at the auction sale and everywhere at the Interstate fair last week leaders in the live stock industry were heard pleading for the conservation of live stock. C. M. McAllister of Portland, E. F. Benson of Olympia, E. J. Iddings of Moscow, E. S. Sweet of Grangeville, George Gue of North Yakima, and many others urged continuously the holding of stock by the farmers in every case possible, rather than sacrificing them because of feed shortage.

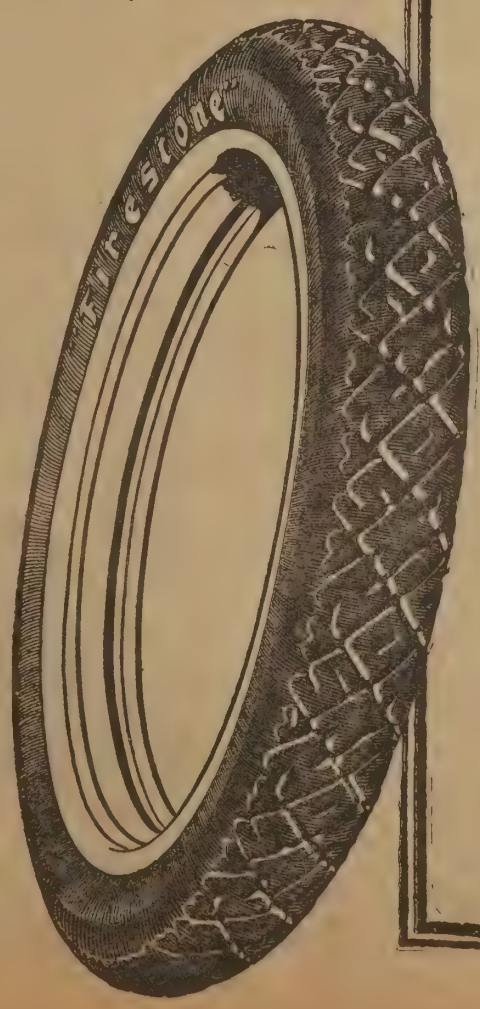
In spite of these pleas, however, there was little interest expressed by buyers at the auction sale on the fairgrounds. Few bids were placed and few animals sold for good prices. Only one hog sold, a Chester White boar that went for $50. Fifteen cattle sold for an average of about $67 each, the highest price being $115 paid for a Holstein bull. A considerable number of reasonably good private sales were made. Two Duroc hogs were sold by B. E. Smead at $150 each. Both were excellent animals, pure bred and prize winners. A few horses were sold at fair figures at private sale. But on the whole, the sales aroused slight interest.

Loses Purse, Finds Brother.

A lucky thing that happened to Sophie D'Amour of Lowell was the loss of a pocketbook containing $5320. The account of it in a New York newspaper attracted the attention of her brother, who found her at the trial of the Pullman porter accused of stealing the pocketbook. They had not seen each other since the family became separated when they first reached this country, 12 years ago.



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Andrew Jackson



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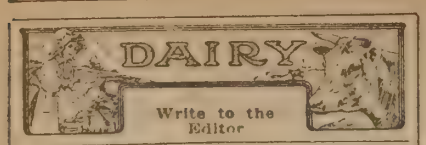
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A. B. NYSTROM, Editorial Contributor

The fine point in feeding dairy cows is to use such feeds in such amounts as will give the greatest production at the most profit. This calls for balanced rations. With feed prices at their present altitudes it will pay dairyman to make a special study of their feeding practices.

Buhl Association

Cow Testing Report for August

By R. E. Snell, Tester.

There was a great decrease in the number of cows on test for the full month. In a number of herds over half the cows were dry and two herds, those of Bower & Hatfield and O. R. Smith were sold. The 383 cows on test for the 31 day period produced 272,907 pounds of milk testing 3.77 per cent, or 10,363.7 pounds fat, giving averages of 712.5 pounds milk and 27.05 pounds fat per cow for the month, which compared very favorably with July, when the average milk production was only 2.5 pounds higher and the average fat production .05 lower. This average is being maintained by cows which have been milked for several months; relatively few freshened in July.

Seven herds have averages over 30 pounds fat, one less than last month. Only 28 cows produced over 40 pounds fat during the month; 12 of those produced over 45 pounds.

Hy G. Schaefer had the honor herd for the month, with an average of 35 pounds fat. H. H. Payne's herd was second with an average of 33.85 pounds.

H. H. Payne's grade Holstein No. 9 was the high cow for the month. She is six years old and weighs 1050 pounds and was fresh July 25; her fat production for the month was 69.1 pounds. C. F. Smalley's grade Jersey Pet was second with 51.1 pounds.

The Schools and Harvest.

The term in most of the schools of Chelan county is starting from one to four weeks earlier than usual, the plan being to have a vacation during the apple harvest in October. Provision for this vacation has been made by most of the school boards in their contracts with teachers.

Warranted to Give Satisfaction.

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Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for

Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable.

Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

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100,000 Second-Hand Grain and Potato Sacks for Sale

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

Twenty Silos Built

Professor C. F. Monroe, county agriculturist of Gray's Harbor county, Wash., reports about 20 silos built in the county during the past year. They are all of wood and of several types. Three of them are wooden hoop silos, 12x30 and cost only $71 each for material. The labor is some greater than on a patent silo. So far they seem to be entirely satisfactory. The name indicates the kind of silo. Usually 3-8x8-inch flooring is used for the hoops, which are set two feet apart. Two thicknesses of common four-inch flooring, set upright inside the hoops tells almost the whole story of how the silo is built. The Western Washington Experiment station bulletin for May, 1917, is devoted partly to a description of this silo.

Oats and vetch, oats alone, wheat and vetch and peas and vetch, are the principal silage crops in this region. Corn has not yet been satisfactorily grown, but small grains with vetch or peas make heavy yields. Alfalfa has been started in a few places and seems to promise fairly well.

Clallam County Report.

The following cows in the Clallam County Cow Testing association of Washington, produced over 50 pounds of butterfat during the month of August, according to the report of E. W. Soper, tester:

A. F. Fasola, Gr. Holstein, 1200 lbs. milk, 58.80 lbs. fat; J. F. Willis, Gr. Jersey, 1365 lbs. milk, 57.33 lbs. fat; Edwin Pettit, P. B. Jersey, 876 lbs. milk, 56.94 lbs. fat; E. F. Gierin, P. B. Holstein, 1596 lbs. milk, 51.85 lbs. fat; Thos. Laurenson, Gr. Jersey, 894 lbs. milk, 51.85 lbs. fat.

Better Sauerkraut

How to Save Early Cabbage

The popular idea that sauerkraut made from early cabbage will not keep is based upon the fact that the fermentation occurs in warm weather and the rapid growth of scum soon destroys both brine and kraut, if the surface is not properly protected, says an expert of the United States department of agriculture. Vinegar at the rate of one quart to 25 pounds of cabbage will prevent decomposition which sometimes takes the form of a soft and slippery product.

Sauerkraut of excellent quality can be made from cabbage maturing at any season of the year. This is the process:

Remove the outer green leaves of the cabbage, just as in preparing for boiling. If an instrument for chopping is not available quarter the heads and slice off the part of the core remaining on each quarter. Inexpensive shredding machines are now sold upon the market, but if these are not available the quarter heads may be cut into thin slices with a large knife. Pack the shredded cabbage immediately in a clean watertight receptable such as a cider or wine barrel, keg, or tub. Except in the case of large families four or five gallon earthenware crocks are preferable. This quantity after opening can be used up before spoilage begins.

As the cabbage is packed salt at the rate of one pound to 40 pounds of cabbage should be added and distributed evenly. When the barrel or crock is nearly full the cabbage should be pressed down as firmly as possible and covered with a clean board. It is desirable, but not essential, that a cloth be placed over the cabbage before the cover is put into place. The salt soon extracts a considerable amount of the cabbage juice, and a sufficient weight of clean brick or stone should be added to cause the brine to rise above the wooden cover. Do not use limestone or sandstone for weights, as the action of the acid produced by fermentation on these substances destroys the keeping quality of the brine. Tubs and covers made of yellow or pitch pine should not be employed, as such woods cause disagreeable flavors.

The container then is set aside and fermentation allowed to proceed undisturbed. If the weather is cool or a cold cellar is used three to five weeks may be necessary for the fermentation to be completed; if in a warm room 10 days to two weeks. Scum should not be allowed to grow on the surface of the brine. As soon as gas bubbles cease to rise the scum should be removed and a layer of hot melted paraffin about one-fourth to one-half inch thick should be poured upon the brine while very hot.

If the sauerkraut is made during the fall and stored in a cool place there is no absolute necessity for a layer of paraffin. The low temperature will prevent decomposition.

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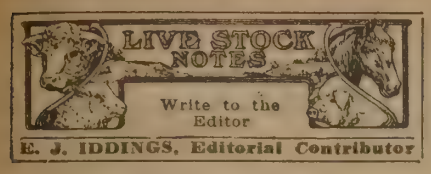
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E. J. IDDINGS, Editorial Contributor

Summer Pastures

Burnt Areas Should Be Seeded

All over this western country, when pasturage in the low lands is cropped down or shriveled by the heat of summer, stockmen operating under government permits drive their flocks and herds to the green heights of the mountains—into the national forests.

So great is the demand for this summer pasturage that the forest reserves are always pastured up to their capacity.

E. F. Benson, Washington state commissioner of agriculture, is urging government action looking to the increase of this summer pasturage. At the recent Spokane conference of agricultural experts, bankers and millers from eight western states, Mr. Benson dwelt upon the importance of extensive seeding of burned over areas. Millions of acres can be converted into summer pasturage, he said, and thus provide at little cost a material increase of the country's meat supply.

"Right now is the time to attend to this matter," said Commissioner Benson. "Extensive areas have already been burned over this summer, with a probability that forest fires will spread over larger areas. After these forests are burned over it costs little to scatter timothy seed in the ashes. There would be no outlay for labor, for the forest rangers and the stockmen could easily and gladly scatter the seed in the ashes.

"But unfortunately no one under the government has made it his business to see that the seed is provided. The whole government organization is so busy with other matters that this opportunity is neglected."

We should think that the stockmen who range their cattle and sheep on the public forests might well make it their business to stir up their senators and congressmen to stir up the United States department of agriculture until some one at Washington made it his business to attend to this important matter.

As a war emergency measure the national rorest ranges are carrying this summer approximately 100,000 more cattle and 200,000 more sheep than in ordinary years. Ordinarily the national forests furnish pasturage for about 1,800,000 cattle and horses and 700,000 head of sheep.

An announcement from the forestry bureau at Washington says:

"It is fully recognized that the increases which have been made in the allowance of stock on the national forests involve danger that the range will be depleted through orvergrazing, but it is believedi by the grazing experts of the government that the emergency increases made can be taken care of, at least this year, without material sacrifice of producing capacty. The condition of the ranges is, however, being made to secure the most intensive utilization consistent with sustained productiveness, by improved methods of handling the stock. Better salting methods and the development of new watering places are among the means employed for this purpose.

"At the close of the grazing season a careful examination will be made of the range on each forest to determine its condition and to find out how many cattle or sheep it will support next season. On areas which are found to be overgrazed, an attempt will be made to shift the surplus stocks to ranges that can stand the strain better.

"While the grazing officials do not think that the increase could be carried indefinitely without serious damage to the forage, regulated grazing has brought about a steady improvement of ranges and some areas will probably be able to support the larger number permanently."

Frazier Farm Is Sold.

One of the biggest farm deals consummated for some time was closed when Charles Playle, Floyd McKennon and Charles Webster bought the Colon R. Frazier farm of 1280 acres on the Sand ridge for approximately $150,000, says the La Grande Observer. This farm was accumulated by Colon R. Frazier, one of the pioneers of the valley now deceased, and on his death was devised to George and Marie Frazier (now deceased) and was held in trust for the heirs in the name of Charles R. Frazier, a prominent business man of Portland and a nephew of Colon R. Frazier.

Demand for Prune Trees.

Large acreage of hay land in the vicinity of McMinnville, which was planted to beans this season will be set out in prune trees.

Colorado Beetle

Is Quick in Stirring Up Trouble

To the Editor of The Washington Farmer: Having read the several discussions on the Colorado beetle, would say that I am well acquainted with him and can not give him any credit except that he can stir up trouble faster than most insects. Having been born in Ontario and made his acquaintance in the year 1872 and fought him for 35 years, I therefore would like to offer the following suggestion, which I found to be the most effective way to lessen his depredations. As soon as spring opens with heat sufficient that you see him crawl around cut pieces of potato and soak in paris green or arsenate preparation and scatter on all plowed fields where the stock are not allowed to run. The old bugs will eat freely of them and die, thereby nipping the crop of bugs in the bud. Then spray as often as necessary. In Michigan I sprayed every two days in the heat of summer, using six pounds bluestone, six pounds lime and six ounces paris green, which also prevented blight. It is very important that every farmer should realize the importance of fighting the pest and should go after him to win the war. I do not know of any in Whatcom county, however. T. E. POMEROY.

Ferndale, Wash.

Twelve Official Records.

Years ago the J. H. Hulbert herd of Jerseys at Albany, Ore., was famous as a working herd. Riley E. Hulbert, who now has his father's farm and herd, is again bringing the herd to the front. He now has 12 official records completed and six more on test. Quite a number of these are young cows. One of the mature cows, Olga's Pomela, produced 620.01 pounds of butter and 8923.9 pounds of milk in 344 days, with an average test of 5.91. All of the herd but two or three test above 5 per cent. This is the herd that originally used Golden Glow's Chief, and it has considerable of his blood. Besides this, several daughters of Pride Olga 3d's Son have register of merit records. The present herd bull is from one of Ed Cary's high-producing cows, and he is siring nice calves. H. A.

Potato Bug Surprises.

Agriculturist H. W. Reaugh of Grant county, Washington, reports surprise in finding the Colorado potato beetle. Numbers of the larvae were found in a field near Wilson Creek. This field is being watched closely in an endeavor to keep the pest from spreading. The seed for this field came from the Coast, but it is not known whether the pest came with the seed or not."

Test Whatcom Cows.

To the Editor of The Washington Farmer: Dr. W. D. Garrett, state veterinarian, has been in Whatcom county the past two weeks, where he tested dairy stock for tuberculosis. In the vicinity of Ferndale only five out of something over 500 reacted to the test, and they were promptly butchered and their owners compensated according to the assessed value of the affected cow, the price not to exceed $35.

MRS. JACK PLASTER.

Ferndale, Wash.

Hog Raising Will Receive Stimulus

College and Business Men Finance Wide-Spread Scheme

With a view to increasing the output of meat in the state of Washington, a wide-spread movement has been launched whereby a swine expert will be placed in the field to work with farmers and boys and girls for the stimulation of the industry. Under the plan as announced, a group of Spokane business men, headed by the Spokane Clearing House association, have raised $1000, to which the state college at Pullman will add enough from its available appropriations to finance the work of the expert in a thorough manner.

It is declared not to be the purpose of the movement to stimulate wholesale hog production, but rather to endeavor to induce thousands of farms to carry one or two brood sows, which, with their pigs, will be raised as nearly as possible from feedstuffs that would otherwise go to waste.

The movement embraces the organization of scores of new pig clubs among the boys and girls, and the bankers throughout the country districts are being urged to make provisions for financing them. Commercial clubs in many of the small cities and town are being requested to take up the movement for the organization of more clubs. The expert is expected to be in the field not later than September 1. It is the aim of the college extension department to secure a man of special adaptation.

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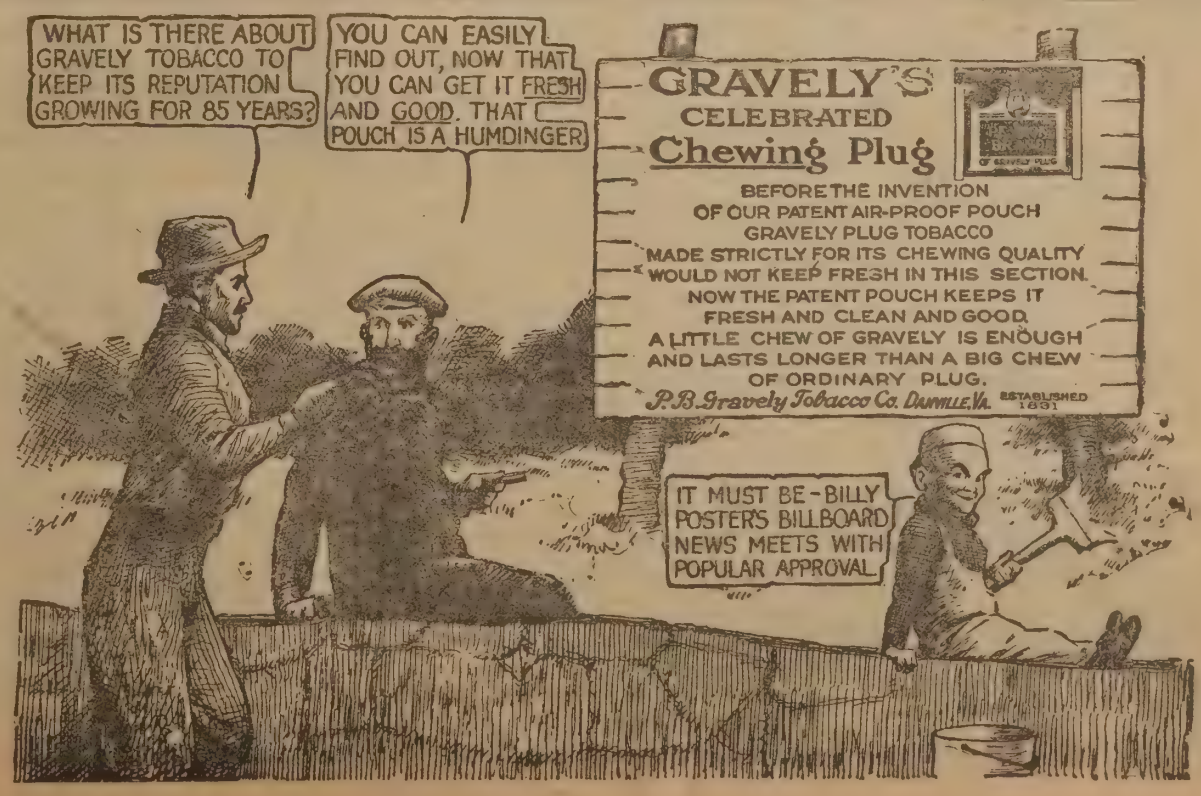
WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

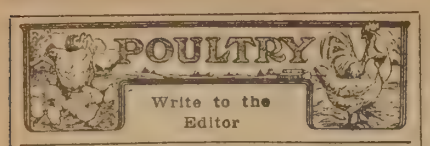
Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

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JAMES DRYDEN
Editorial Contributor

Find Liver Spotted.

We have lost several hens this summer and have examined them after they died and find the liver spotted and soft. They mope around for a few days and die. Some of them are fat and some get poor. Could you tell us, through the columns of your paper, what is the trouble and what to do for them? A. A. B.
Creston, Ore.

This is evidently a case of tuberculosis. There is very little doubt of it. The liver is the organ most commonly affected. As the disease progresses the liver becomes enlarged by the growth of the tubercles. It is not often that there will be found spots on the liver from other causes. The tuberculous spots are rather hard and gritty when touched with a knife, while other spots are soft. The symptoms are not always the same. While the disease usually affects the liver sometimes it affects the intestines and may not be evident in the liver. It very frequently affects the intestines and often both liver and intestines. Sometimes the hen will be lame. There is usually a loss of flesh, but occasionally a fat hen will die of the disease. In the former case the hen becomes so emaciated before death that there is little flesh on the bones. In other cases the hen becomes filled with a watery fluid and the abdomen is full and hard. This is a dropsical condition frequently found. On opening the fowl after death there will be little trouble in diagnosing the case. If there should be any doubt as to the disease a specimen should be sent to the state experiment station for examination. Occasionally the fowl dies when the symptoms are not very positive, and it is then that a bacterilogical examination will be necessary.

There is no cure for the disease. When the disease has been in the flock for some time and the stock has no special breeding value the best plan is to kill off all the stock and start anew. The carcasses need not necessarily all be destroyed. Quite a large percentage of them may not be affected. Others will be but slightly affected. With proper cooking it is perfectly safe to use them. The edible portions are not usually affected, the disease being confined largely to the digestive organs. Diseased fowls should not be marketed alive. In some states there is a law against selling tuberculous fowls.

The remedial measures necessary will be indicated when it is understood that the baccilli pass through the fowl in the droppings. The intestinal wall breaks down when the tubercle becomes large and the germs are passed out in the excreta. A healthy fowl picking up feed that has come in contact with the infected droppings may take the disease. This is how the disease spreads in a flock and probably the only way, and is why the disease is confined largely to the digestive organs. Before other fowls, therefore, are put in the same house or same yards the ground must be thoroughly disinfected. They had better be left vacant for six months. If the direct rays of the sun can get at the ground the germs will be killed. The ground should be plowed or spaded up. The house should be sprayed as well as all drinking vessels and food troughs. In purchasing fowls it is a good plan to inspect the yards from which they come and not to purchase any from a flock that has shown any suspicion of the disease. J. D.

Hen Lays Four Ounce Eggs.

Dr. L. F. Straight of Eugene Ore., is the owner of a hen that lays eggs weighing four ounces each. Dr. Straight states that an egg is produced every other day and that all are of uniform size. The hen is of the barred Plymouth Rock variety.

Named "Garden City"

By H. H. BUSHNELL.

It is a fine custom to call a city by some title which describes its characteristics and gives a handle for its citizens to exercise their civic pride with. Sometimes these titles are not appropriate.

But with Walla Walla the "Garden City" is the most natural in the world. No matter how you approach it, you conclude that that is what it is, for its suburbs and the country adjacent on all sides are devoted to gardens. There are big gardens and little gardens; flower gardens, fruit gardens and vegetable gardens; there are private gardens and commercial gardens.

Soil, climate and an ample supply of water makes this a splendid garden section; and a conjunction of railways enables Walla Walla to handle the very large quantities of products without any serious glut. It is a garden city indeed, and it is a market city, too.

Riding into Walla Walla by electricity, steam or gasoline, the fertility of the soil is enforced on the imagination. Here is a field of onions, bulging from the ground and goggling at you; there is the misty, fringy asparagus gone to seed, for the season is over. Here is an orchard extending into the environs of town; melons ripen in the genial sun; corn waves its green banners; on the hillsides are long rows of beans. In the distance they look like little green stitches taken in the brown garments of the earth, and farther back are the wheat fields.

Walla Walla drains 2500 square miles of their products. It seems especially adapted to meet the needs of the market gardener; some arrangement of the hills it must be that enables green things to mature earlier here than elsewhere. This is not the doing of the Walla Walla people, but they have taken advantage of it.

The following figures are vouched for by a number of growers in the immediate vicinity of Walla Walla:

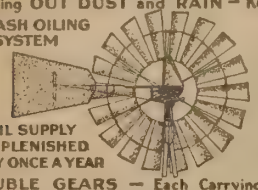
Yield per acre of onions, 600 sacks; carrots, 100 sacks; spinach, 600 boxes and a second crop, and other things in proportion.

Snohomish County Dairymen.

The board of directors of the Snohomish Dairymen's association met with County Agent C. C. Farr and went over plans for a series of meetings in advancing the association membership. They report 500 cows under contract at present.

On account of the great variation in local climatic conditions, moisture, soil, etc., it is up to the readers of The Washington Farmer always to remember that methods which prove successful in one locality may not work out in others. It is our aim to gather the experiences of farmers in every section of this state and pass these experiences on to our readers, that they may try out or adopt such as may be applicable to their locality and conditions.

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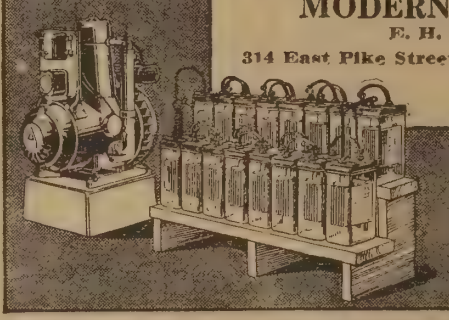
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IN THE ORCHARD

Write to the Editor

GRANVILLE LOWTHER
Editorial Contributor

Apple Picking Rules

Hand Should Be Wisely Directed

It is rather a fine art to know when to pick apples, and published rules do not make a good picker. When to pick depends first of all on the nature of the apple in relation to its general time of ripening. A Red June, in this climate is supposed to be ready in July and the early part of August, while the winter varieties are at this season undeveloped. All varieties have a natural period of development and of ripening, but on account of the differences in seasons and locations, can not be determined by the calender, or the days of the month, but by the appearance of the fruit.

If apples are to be shipped long distances, they must be picked earlier than if they are to be used at home or in the local markets. By leaving them longer on the trees they will become more highly colored, more fully ripened and have a better flavor.

Some Judge by Seed.

A rule with a great many orchardists, is to pick when the seed is brown. When this stage is reached, the apple is supposed to have reached it full growth and development, and after that the changes which occur are of a chamical nature and may go on as well off the tree as on it.

Some orchardists depend more on the color of the fruit than on the browning of the seed. An expert can walk through an orchard and tell by looking at the trees when the fruit is ripe enough to pick. This, of course, implies a knowledge of the habits of the different varieties, for the Arkansas Black, for instance, has a deeper color a month before picking time than some apples ever take on.

Some apples, like the Ruby, begin to fall as soon as they are ripe and are bruised in falling, therefore should be picked as soon as they are ready. It takes observation and experience to teach persons at what time the different varieties should be picked, and nothing but a practiced eye can determine.

There are various mechanical devices for picking, such as a pole by means of which the highest limbs can be reached. To this pole is attached a canvas sack large enough to conduct the apple from the tree to the vessel held by the picker as he stands on the ground. Having tried this, I do not think it satisfactory. My observation is that picking should be done by hand and that the hand needs intelligent guidance. Generally there should be more than one picking, since the apples ripen irregularly. At a time when one-third of the apples are ready for picking, another one-third should hang on the trees a week, two weeks, or possibly three weeks longer in order to reach their largest growth, the best color and flavor. Two or three pickings costs more, but the extra cost is more than met by the increased value of the fruit.

Pickers should be trained. Especially should they be trained on the following points:

First, they should be trained to pick apples without pulling off fruit spurs, because if the spur is pulled off it is certain that spur will never bear another apple, whereas if it is left on the tree it is probable that it will bear fruit the following year.

Second, care should be taken not to pull out the stems, or in any way break the skin. Wherever the skin of an apple is broken ferment begins at once, decay rapidly follows and the apple is not fit for market. It is a cull and a total loss to the grower except as he may at very low price find a market for culls, which market does not usually pay the cost of picking and hauling to the cider mill or vinegar factory.

Third, apples should be placed carefully into the picking bag or bucket, without bruishing, and then should be emptied from the picking vessel carefully into the lug box, as carefull as if they were eggs. In fact, certain varieties of eggs are much less likely to be damaged by rough handling than the tenderer varieties of apples.

Habits of Certain Varieties.

The habits of certain varieties in relation to the subject of picking are as follows:

Those dropping badly when they are ripe are Grimes Golden, Wagner, Wealthy and Winesap.

Those dropping badly before they are ripe are Gravenstein, McIntosh and Snow.

Those that may hang on the trees indefinite periods of time after ripening ar Northern Spy and Ben Davis.

Other varieties if they hang too long on the trees get mellow or soft after picking and have a short season in which they can be marketed or consumed. Among this class are the Jonathan, King and Baldwin.

Some, if they hang too long on the trees, develop core rot, as in the case of Jonathan, Delicious and Ortley.

Some apples, especially the Thompkins King, incline to water core and our observation in our own orchard is that this is worse in the latest pickings.

BOYS' AND GIRLS' WORK

Club Demonstrations High Grade

So succesful was the work of the boys and girls' department of the interstate fair this year that President Thomas S. Griffith announced upon conclusion of the fair that the department would not only be maintained next year, but that it would be more fully financed and developed. Interest among the boys and girls was keen, and illustrated the widespread activity among them in their homes. Aside from the pig clubs, canning clubs, sewing clubs and the like, in which there were scores of boys and girls competing in friendly rivalry, there were 460 entries in the garden display division. This is the largest number ever to exhibit at the interstate fair.

The test of real oratory is the power of the speaker to convey a message to his or her hearers. Measured by this standard, the boys and girls of the various clubs proved themselves real orators in some instances, when they told the fair visitors in short speeches of their club work, and why they did things as they did, and what results they produced. Especially was this feature interesting and educational in the canning club demonstrations. The girls' teams of three each were organized for one to lecture on canning while the other two performed the canning operations.

In the canning contest the Benton county team won first place. Greenacres and Yakima tied for second. The Dalles (Ore.) team won third.

In the speaking contest each speaker was given three minutes in which to tell of the value of club work. Leona McBride of Adams county, Wash., won first; Robert Pease of Pend Oreille county, Wash., second, and Vera Cowens of Heppner, Ore., third.



Courier of Soldier and Civilian

Our troops are now on the firing line in France. While at home every instrumentality of our government and private industry is being urged at top speed to insure victory. The telephone is in universal demand as courier, bringing to the front men and the materials of war.

From the farms the telephone courier brings foodstuffs; from the mines the telephone courier calls forth metals; from the factories this courier gathers manufactured products. The telephone courier leads troop and supply trains to the front; summons fighting flotillas and transports; and, in fact, leads practically every contributing unit of supply to the firing line.

At such a time, when the government is straining at its task and every industry is loyally contributing its energy, this national courier is constantly being used to call up the reserves. It is at the base of every contributing activity.

The right of way must be given to the military for the direction of troops and to the government for the marshaling of endless supplies. To do this, and also make the telephone serve all other needs, both patriotic and private, all must economize.

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Feed the Fighters! Win the War!

Harvest the Crops! Save the Yields!

On the battlefields of France and Flanders the United States boys and the Canadian boys are fighting side by side to win for the World the freedom that Prussianism would destroy.

While doing this they must be fed and every ounce of muscle that can be requisitioned must go into use to save this year's crop. A short harvest period requires the combined forces of the two countries in team work, such as the soldier boys in France and Flanders are demonstrating.

THE COMBINED FIGHTERS IN FRANCE AND FLANDERS AND THE COMBINED HARVESTERS IN AMERICA WILL BRING THE ALLIED VICTORY NEARER.

A reciprocal arrangement for the use of farm workers has been perfected between the Department of the Interior of Canada and the Departments of Labor and Agriculture of the United States, under which it is proposed to permit the harvesters that are now engaged in the wheat fields of Oklahoma, Kansas, Iowa, North Dakota, South Dakota, Nebraska, Minnesota and Wisconsin to move over into Canada, with the privilege of later returning to the United States when the crops in the United States have been conserved, and help to save the enormous crops in Canada which by that time will be ready for harvesting.

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An Identification Card issued at the boundary by a Canadian Immigration Officer will guarantee no trouble in returning to the United States.

AS SOON AS YOUR OWN HARVEST IS SAVED, move northward and assist your Canadian neighbor in harvesting his; in this way do your bit in helping "Win the War."

For particulars as to routes, identification cards and place where employment may be had, apply to Superintendent of Immigration, Ottawa, Canada, or to

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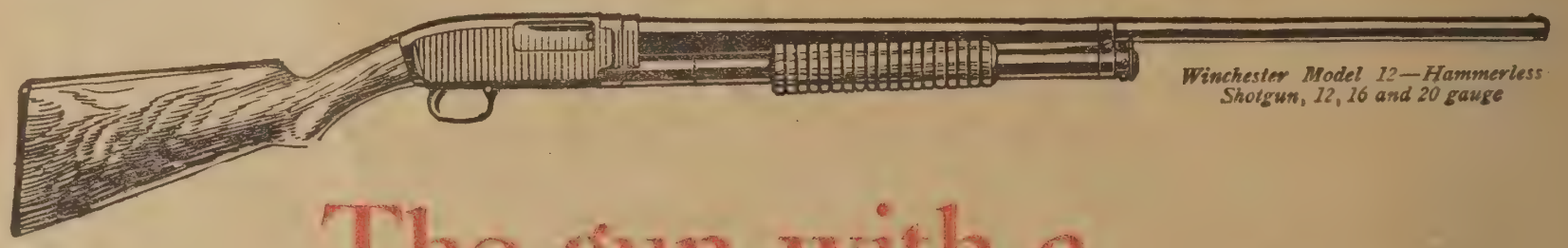
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Winchester Model 12—Hammerless Shotgun, 12, 16 and 20 gauge

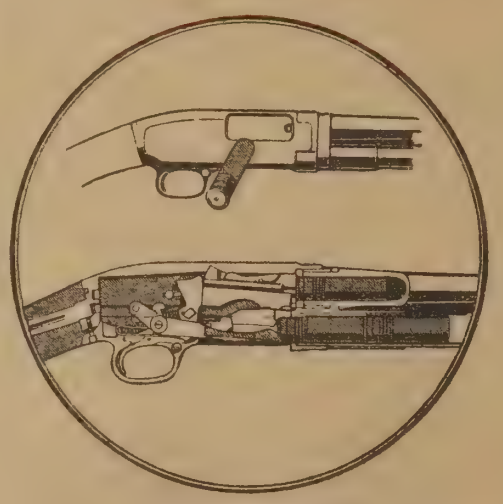
The gun with a dog's pointing instinct

A dog points by instinct. Its nose, body and tail come into line naturally—instantly. So with the hunter and his gun.

Armed with the right gun, he "points" it instinctively. If properly balanced, his gun comes up into line naturally, as easily as pointing a finger.

But if the gun is not right, if it has not been perfectly balanced in the shop, it won't work out well in practice, just as a dog, if not properly bred, will not work out well with its master in the field.

The Winchester Model 12 Repeater is a *thoroughbred* of shotguns. It has been classed by experts as "The Perfect Repeater."



Quick feeder, sure ejector. Throws empty shells to the side, out of your way

Its balance enables you to get onto fast flying birds instantly. Pointed right, it never fails to bring down the game.

Fifty years of the best gun making traditions have produced in the Winchester Model 12 a gun of almost human instincts.

The right amount of choke for different loads has been worked out after exhaustive experiment. Result: a pattern that spreads out evenly—neither too scattered nor too bunched—and lands with lots of steam behind it.

It is a triumph of guncraft. Nicely balanced, with its slim, graceful barrel, the Model 12 is a beautiful weapon, with a fascination about it that few sportsmen can resist.

WINCHESTER

World Standard Guns and Ammunition



Even spread, maximum penetration. Winchester shot pattern brings down the game.

The pattern that brings down the game

The remarkable game-getting pattern of the Winchester Model 12, shooting its own standard ammunition, is the result of infinite care taken in boring the barrel.

The barrel *is* the gun

Men who know guns realize that the accuracy and durability of a gun lie in the barrel. On the quality of the barrel depends the quality of the gun. There is absolutely no difference in the standard quality of the barrels on the highest and lowest priced Winchester guns. With Winchester, the barrel *is* the gun, and the single standard of quality has been attained only by the most unremitting attention to the boring, finishing and testing of the barrel. The same high quality of Winchester barrel is found on every gun made by Winchester. The great volume of guns sold makes this policy possible.

The Winchester barrel

The barrel of the Winchester Model 12 has been scientifically bored to micrometer measurements for the pattern it is meant to make. The degree of choke exactly offsets the tendency of the shot to spread. Until its pattern proves up to Winchester standard, the gun cannot leave the factory. The Bennett Process, used exclusively by Winchester, gives the Winchester barrel a distinctive blue finish that with proper care will last a lifetime. The Nickel Steel construction preserves the original accuracy forever.

What (WP) means

This mark on the barrel means *Viewed and Proved Winchester.* This stamp stands for Winchester's guarantee of quality, with fifty years of the best gun-making reputation behind it.

Every gun that bears the name "Winchester" and that is marked with the Winchester Viewed and Proved stamp has been fired many times with excess loads for strength, smooth action and accuracy.

At every stage of Winchester manufacture, machine production is supplemented by human craftsmanship. It is a *test and adjustment process.*

It is this care in manufacturing that has produced in the Model 12 a gun of unsurpassed game-getting qualities and whose grace, balance, beauty of lines, and never failing performances in the field have earned it the title of "thoroughbred of shotguns"—*the gun with a dog's pointing instinct.*

For those who prefer a hammer action gun, we have made the Model 97. It is built on exactly the same lines as the Model 12, but with hammer action.

Write for details of Winchester shotguns, rifles and ammunition

The Winchester catalog is an encyclopedia on shotguns, rifles and ammunition. Every hunter should have one. It gives detailed specifications of the Model 12 and describes at length the principles on which every one of the world famous Winchester shotguns and rifles is built. Write today. We will mail you a copy free, postpaid.

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Winchester Model 97 Hammer Shotgun

Take-down Repeating Shotgun. Made in 12 gauge, weight about 7¼ lbs.; in 16 gauge, weight about 7⅛ lbs. The favorite with shooters who prefer a slide forearm repeating gun with a hammer.

WINCHESTER

World Standard Guns and Ammunition

The Motor Car
On the Farm

The "Why" of Cord Tires.

By A. G. PARTRIDGE.

Cord tires effect a saving of at least 12 per cent in power, according to data compiled by engineers of one of the largest manufacturers of tires. Practical tests again and again have proved the superiority of cord tires as to power saving as well as long mileage, but until an accurate laboratory test was devised the exact saving in power was not known.

Tests were made under varying conditions and loads and were checked against error several times before they were accepted as final. In almost every case the cord tire consumed only 88 per cent as much power as the fabric.

Translated into popular terms, this conservation of power means increased speed in racing cars and a saving of gasoline in the ordinary passenger car. In practical tests the value of cord tires to the auto racer has been shown many times. Many world's records already have been shattered on cord tires within the present racing season.

In a scientific analysis of the cord tests the engineers pointed out that the power lost in the fabric tires is consumed by the greater resistance to flexing and is transformed into heat. The fabric tire supports much of the weight of the car instead of acting merely as a resistance to the air pressure within, while the cord tire "makes the air column do the work." Hence, the cord tire is able to deliver more of the power received from the motor to the road.

Truck Spells Economy.

"Horse and wagon travel is impossible these days," says F. E. Sheldon, a well-known rancher living near Cheney, Wash. "My work," says Mr. Sheldon, "is to collect and haul cream and milk to the big creameries of Spokane. For a good many years I have been using horses and wagons. But since the motor truck has been made more and more useful for ranch work and hauling of all kinds, I made up my mind that it was money in my pocket to cut down time and push up on accomplishment. So I recently selected a light, fast truck having one and a half ton capacity and my story from the day of purchase is much like that of the thousands of truck users all over the country. It is saving me money every day and I would never dream of again going back to the old, slow and more expensive plan of hauling with horses and wagons. My belief is that every farmer should have either a good truck or truck attachment, because either spells economy."

The Tractor Attachment.

For the man who, for one reason or another, prefers the tractor attachment, with which he can convert a new or used motor car into a tractor, there are some very satisfactory and serviceable attachments of this kind on the market at attractive prices. Practically all of them have passed the experimental stage and are thoroughly practical in every way.

Interstate Fair Stock

(Continued from page five.)

are Berkshires, Durocs, Chester Whites, Poland Chinas and Hampshires. There are better than 200 Duroc Jerseys on the grounds, representing the herds of the northwest, and many of the animals on display carried the most famous blood lines of red hog history. The Duroc men are progressive, and have built herds that have been of great value in the development of the business of swine production during the last few years, and these herds will be of great value in the days of reconstruction, when Idaho, Oregon, Washington and Montana must come again to the hog as one of the fundamentals in a wise and permanent system of diversified farming

The same thing in a way of commendation for constructive breeding skill may be said of the other breeds that are represented this year at Spokane. Numerically speaking, however, the Durocs are noticeably in the ascendancy on the fairgrounds. The Berkshire exhibit consists of swine from three breeders, but the large herd of Silver Birch farm that has been seen on many a large circuit, carried away the larger share of the awards. The Chester Whites have been improving year by year, and this year's showing was most creditable. The single Hampshire exhibit of Fruitts of Oregon is, as in past years, highly finished and a credit to the breed and the breeder. The Poland Chinas were not numerous but of excellent quality. Ray J. Fox, a comparatively new exhibitor in Poland China circles of the northwest, made the stronger showing with a herd of Poland Chinas of very great excellence.

Sheep are fast coming into their own, and the era of the golden hoof seems near at hand. A sheep show of Hampshires, Southdowns, Shropshires, Oxfords and Lincolns and fat wethers is one of the largest and best ever seen at Spokane. The broad backs of the fat wethers of the university and the state college, the plump Southdowns sent up by Hubbard of Oregon, the woolly faced Shropshires of Kizer, Felzer Brothers, Donison, Vaughn, Fox and Ed Shoell, the growthy Oxfords of Fiske, Hastings and Kizer, the long wools represented by Hubbard's Lincolns, and the Hampshires of Hubbard and Shoell all held the attention of the visiting public, and the only regret of the exhibitor was that there was not enough breeding stock for sale, especially for foundation flocks, to satisfy the unusual demand.

On the whole, the live stock show is unusually satisfactory, has been splendidly handled and judged, and a distinct credit to the live stock industry.

Interstate Fair Awards

(Continued from page three.)

Naomi, 2d; Bradrick & Son. 3. Olive, 2d; Alex Morrison. 4. Lady Mayflower, 27th; Bradrick & Son. 5. Janesville Rose, 79th; Bradrick & Son.

Cow, 2 years old and under 3—1. Olive V.'s Jewel; Alex Morrison. 2. Lady "B," 8th; Bradrick & Son.

Heifer, junior yearling—1. Violet of Valley; Alex. Morrison.

Heifer, senior calf—1. Louise Faulson; Alex. Morrison. 2. Milkman's Laurel; Bradrick & Son.

Heifer, junior calf—1. Little Bo Peep; Alex. Morrison. 2. Golden Queen; Alex. Morrison.

Graded herd—1. One entry; Alex. Morrison.

Breeders' calf herd—1. One entry; Alex. Morrison.

Get of sire—1. One entry; Alex. Morrison.

Produce of cow—1 and 2. Two entries; Alex. Morrison.

Fat Cattle.

Aside from one prize taken by Alex. Morrison of Valley, Wash., the University of Idaho and the Washington State college herds secured all the awards in the division of fat cattle, any breed, grade or purebred. The awards were as follows:

Junior 2-year-old steer, spayed or martin heifer—1. Washington State college. 2. University of Idaho. 3. University of Idaho.

Senior yearling steer, spayed or martin heifer—1. University of Idaho.

Junior yearling steer, spayed or martin heifer—1. University of Idaho. 2. Washington State college. 3. Washington State college. 4. University of Idaho.

Senior calf, spayed or martin heifer—1. University of Idaho. 2. University of Idaho. 3. University of Idaho.

Junior calf, spayed or martin heifer—1. Washington State college. 2. Washington State college. 3. Alex. Morrison.

Herd, consisting of one 2-year-old, one yearling and calf—1. Washington State college. 2. University of Idaho, 3. University of Idaho.

Grand champion steer—1. University of Idaho.

DAIRY CATTLE.

Holsteins.

The Holstein awards went to four exhibitors—the Carnation Stock farms of Monroe, Wash.; J. H. Hulbert of Mount Vernon, Wash.; William Sanders of Hermiston, Ore., and Bellwood farm of Valleyford, Wash. They were as follows:

Bull, 3 years old or over—1. Matador Segis Walker, Carnation farm; 2. Segis Pontiac Acme, J. H. Hulbert; 3. Dutchland Governor Sir Colantha, Carnation farm; 4. Canary Paul Umatilla Homestead, William Sanders.

Bull, 2 years old and under 3—1. Mutual Lad Tritonia 2d, Carnation farm; also senior and grand championship.

Bull, 1 year old and under 2—Laconner Pontiac Houttje, J. H. Hulbert, also junior championship; 2. Carnation Rouble Segis, Carnation farm; 3. Carnation Fayne Colantha, Carnation farm; 4. Unnamed, Bellwood farm.

Bull, senior calf—1. Laconner Pontiac King, J. H. Hulbert; 2. Governor Tsussie Colanthan, Carnation farm; 3. Matador Segis Walker Delman, Carnation farm.

Bull, junior calf—1. Matador Segis Walker, Carnation farm; 2. Korndyks Segis Klaver, Carnation farm; 3. Laconner Pontiac Sir Hartog, J. H. Hulbert; 4. Carnation Walker Pontiac, Carnation farm.

Cow, 4 years old and over—1. Nena Newman Cornucopia, Carnation farm; also grand and senior championships; 2. Nena Kaan Selah, Carnation farm.

Cow, 3 years old and under 4—1. Korndyks Model Hartog, Carnation farm; 2. Laconner Pontiac Beatrice, J. H. Hulbert.

Heifer, 2 years old and under 3—1. Segis DeKol Flower, Carnation farm; 2. Mercedes Pontiac DeKol Elbate, J. H. Hulbert; 3. Matador Mechthilde Vera, Carnation farm; 4 Leda Hartog Ormsby, Carnation farm.

Heifer, senior yearling—1. Lady Parthenea Segis, Carnation farm; 2. Laconner Pontiac Beatrice, J. H. Hulbert; 3. Carlotta Mechthilde Rooker, Carnation farm.

Heifer, junior yearling—1. Segis Daisy Fern 2d, Carnation farm; 2. La-

(Continued on page twenty-seven.)

What Is the Nonpartizan League?

This question has been asked from many sources concerning the organization that sprang into existence in North Dakota a few years ago. The organization is expanding until Dakota no longer contains it, and the Pacific northwest is feeling an interest in its activities. In order to answer the question, "What is the nonpartizan league?" The Farmer has secured an exclusive article by a member of the editorial staff of the official publication of the National Nonpartizan league. Watch for this article in next week's issue.

Can't Fix Meat Prices

Price fixing for meat and dairy products has no place in the government's food control plans, Herbert Hoover, the food administrator, told the national live stock conference held at Washington last week. Not only would it be inadvisable to institute price fixing in these industries, he declared, but the food administration has not been given such power.

As long as there is a heavy demand for meat, with a decreased production, Mr. Hoover said, meat prices will continue to soar. The hope of the food administration is that it can stabilize quotations and thus eliminate speculation.

England Says No
Will Accept No American Apples

That the fruit industry of this country should make a strenuous and unceasing effort to induce the British government to remove its embargo on American apples and thereby allow them to be shipped into that country is the attitude taken by Wilmer Sieg, sales manager of the Earl Fruit company at Spokane.

Manager Sieg says that the average annual exportation of apples to England is about 3,000,000 barrels, or 9,000,000 boxes, of which the northwest has furnished about 1,000,000 boxes.

The result of the present British embargo, if allowed to stand, will not be so great a disadvantage this season as it will next year and subsequent years, Manager Sieg believes, as he thinks that if the regular trade is destroyed it will have to be built up again through the same long drawn-out effort that marked its establishment.

The people of Europe, he says, are apple hungry, but are denied the use of American fruit by this embargo. Australia and Canada are allowed to export apples to England, and Spanish and tropical fruits are admitted.

Will Keep Milk Records.

Agriculturist A. R. Hahner of Stevens county, Washington, reports that he has secured the consent of three men to keep records of milk produced and have the milk tested twice monthly at the local creamery. They will keep the records on blanks furnished by the extension department of the state college.

Chinese Pheasants.

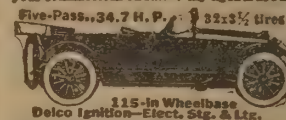
State Game Warden L. H. Darwin has announced the first shipment of birds to Spokane county from the new state game farm at Walla Walla will be made soon. Spokane county will receive Chinese pheasants from the state in the shipment for distribution in this county.

Spotted Beetle Pest.

The bean and potato crop of J. N. Martin near Knab, Lewis county, Wash., will be saved as the result of spraying with lead aresenate for the western spotted beetle pest, is the report from County Agriculturist A. B. Nystrom.

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Rochdale Plan of Cooperation

Assistance From Accumulated Earnings of Nine Months

To the Editor of The Washington Farmer: An article in your issue of May 3-17, ostensibly written by Mr. Paulhamus, has just been called to my attention, and while not wishing to belittle the work of that worthy gentleman, I do feel it my duty, as manager of a cooperative store run on the "English Method," or Rochdale plan, to endeavor to correct the impression which any reader of that article would naturally get, namely, that stores run on the Rochdale plan are working a deception on their members and "doing something they do not mean."

I believe cooperation, once thoroughly understood by both producer and consumer, will sound the death knell of the trusts; it is the only agency in sight at the present time capable of distributing the earnings of exchanged commodities equitably, or in such a manner that each individual receives the gain or saving created by his dealing with such enterprise. The question then is this: Has Mr. Paulhamus originated a plan which is superior in fairness to all, than the old Rochdale plan? Kindly allow us to use his own figures and comment, and compare same with exact figures from the records of The Enumclaw Rochdale company of Enumclaw, Wash.

The business of the Puyallup and Sumner stores for the month of March, 1917 (banner month for feeds and seed), is given as $39,799.67, with a profit of $5869.46 or 14.75 per cent, expenses $2706.13 or 6.8 per cent, which you will please note leaves just about 8 per cent net profit, or, in round figures for the month, $3163.33. We will now admit that the purchasing is done on a keen basis, that the expenses are minimum, but how about that profit? Especially when it is remembered that interest on the capital has already been deducted, isn't that "taking from the customer each day of the year a surplus of money for the food products and keeping it?" That is what Mr. Paulhamus charges us with doing and we plead guilty, but what is he doing? The very same thing—his statement shows it in plain figures, and we are also told in the same article: That "the net earnings of the stores are turned into the association to be distributed pro rata upon the number of pounds of fruit that each grower delivers to the association."

We pay our member at a certain stated time of the year his share of the earnings of the store in the shape of a dividend, based on the amount of his purchases and in cash, while the purchaser at the Puyallup store will get the earnings from the store operation only in proportion to the amount of fruit he brings in; if he happens to be a small fruit grower with a large family and keeps a few cows to keep up expenses, between paydays from the association, and hence must buy heavy at the store he will only get a small share of the earnings, while the large fruit grower who may not even trade at the store, gets the lion's share. Is that fairer than the "Old Rochdale?" Think it over, go over that article of The Washington Farmer of May 3 again and see if you can find where the little fellow gets a lift from the association stores; and the little fellow of today may be the mainstay of our community tomorrow; he should not be neglected; it is better to have thousands of small farmers in a community than a few multimillionaires. Do the "stores" extend a hand during the spring months in the line of credits? No. Do they make delivery when you are busiest in the field? No. Even if a man has his entire fruit crop in the association warehouses and not far enough advanced for payments, he can not get a sack of flour "on tic."

Why do we charge a profit? For three principal reasons:

First—Very few people of this prosperous nation realize the importance of small savings and as the GAINS to be made in supporting a Co-op is the all-important binding material of our institution. Those would be lost sight of unless collected for a reasonable period and then turned back to the member in a lump sum.

Second—It enables us to maintain respect and standing among business houses as well at the wholesale houses, as in our own community we are the pioneers in this line of distribution; we are as yet only a small part of the great commercial organization of this country and, as such, it is better for all that we work in reasonable harmony, and as the entire earnings are paid back to the members, they can not lose.

Third—We are doing a general conservative credit business; on the first day of March, each year, we have on hand the accumulated earnings of nine months. This enables us to extend assistance in the line of credit to the farmer at a time when he most needs it. We have at times gone as high as $29,000. This would, for us, be impossible if we did not have these earnings. On our close capitalization we could not otherwise extend this help. (We are now going to shift the dividend date to February, so the patrons may have the cash at this period).

In the four years during which the writer has been manager of the Enumclaw Rochdale company we have paid back to the shareholders over $40,000 in interest on stock and dividend. Our business for the year just past was $276,273.92. The total expenses were $16,882.52, or less than 6 1-4 per cent. We do not figure on a heavy profit, but aim to give a dividend of 5 per cent on purchases each and every year. It should also be noted that we handled 56 carloads of feed grain and hay on a strictly no-profit, no-dividend basis, besides 35 carloads of drain tile in like manner.

In conclusion I wish to say that it is far from my intention to ascribe to Mr. Paulhamus any intent to place us in a false light. The article was possibly dictated hurriedly, but it does seem that at this time when cooperation is struggling to get a permanent foothold all over the nation we should have no doubt as to the fairness and practicability of the English Rochdale system. PETRUS NELSON.

Enumclaw, Wash., July 27, 1917.

Veterinary

Dr. S. B. Nelson

Lump at Navel—I have a 4 months old sow pig with a lump the size of a lemon at the navel. Does not seem to bother it much except that it has not the pep at feeding time that it should have. I thought it to be a rupture, but examination showed it to be very solid. It has been there about a month. There was no sign of a wound except a slight abrasion, which I thought to be caused from rubbing on logs. R. L. C., Carson, Wash.

Answer—The chances are that a tumor is forming at the navel. You might try, for a few days, painting the lumps with tincture of iodine three times daily. However, if that does not remedy it it will be necessary to operate on the pig and remove the tumor. This will have to be done very carefully, because the tumor may be in connection with the intestines. I do not know that you could do this without the services of a veterinarian. I rather doubt it. I am therefore recommending the iodine treatment.

Curing Hay in Rainy Season.

To the Editor: In many of the upland districts of western Washington, where the clover is heavy and ready to cut for hay during the rainy season, considerable trouble is had in drying the hay quickly and not getting it spoiled by rain.

To help remedy this trouble, many resourceful farmers that have migrated to this country from northern Europe have reverted to the old country's method of curing hay. Briefly, the method followed is to drive a row of posts in a zig-zag line—to prevent the rack from blowing over—and to string a wire along, near the ground, and then pile the green grass on the wire to a depth of about eight inches. When the first wire has been covered, another is stretched, so that an air space remains, and then it is covered with hay as the first wire. The method is continued this way until the tops of the posts are reached. Those who use this method claim that the hay dries quicker, will withstand a rain better and is most practical for a heavy, early crop in a rainy season.

CARL J. MENZE.

Ferndale, Wash.

Whatcom Pea Crop.

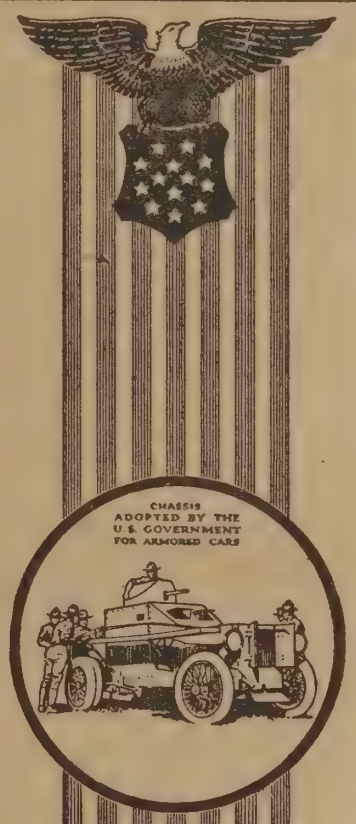
Pea harvest in Whatcom county is well under way, with weather conditions favorable. The yield is expected to be about an average, and, with the increased acreage, the quantity will be much larger than ever before.

Fair Dates.

Pendleton, Roundup—Sept. 20-22.
Boise, State—Sept. 22-29.
Salem, State—Sept. 24-29.
Helena, State—Sept. 24-29.
Lewiston, N. W. Lvst.—Nov. 16-23.
Portland, Pac. Nat. Dairy—Nov. 16-23.
Portland, Pac. Int. Lvst.—Nov. 19-24.

Washington Fairs and Shows.

Mabton, Hay Palace—Sept. 11-15.
Walla Walla Pow-Wow—September 13-15.
Renton, County—Sept. 14-16.
Kelso, Local—September 15.
North Yakima, State—Sept. 17-22.
Woodland, County—Sept. 19-22.
Rosalia, Lvst.—Sept. 20-22.
Lynden, County—Sept. 25-29.
Snohomish, County—September 25-29.
Garfield, Roundup—Sept. 26-29.
Shelton, County—Sept. 27-29.
Burlington, County—Oct. 1-6.
Puyallup, Western—Oct. 2-7.
Palouse—Oct. 4-6.
Goldendale, County—October 9-13.
Port Angeles, County—Oct. 11-13.
Colville, Live Stock—Oct. 17-19.



KING EIGHT CYLINDER

Unfailing Service

On the Farm, in the City, or Battlefield

WILLIAM G. McADOO, secretary of the treasury, in giving the signal that started the King on its 7-day non-motor stop run in St. Paul-Minneapolis honored with his presence the placing of one more block on the carefully reared structure of King RELIABILITY.

The stock car which began that seven-day test had already traveled 29,550 miles, and is the same car used in the famous 10,850-mile non-motor stop run at Sheepshead Bay under official A. A. A. supervision.

King RELIABILITY was most adequately proved when the United States government, after the most severe official tests, adopted the King chassis for armored cars.

It has been proved by high-gear climbing achievements on Mt. Wilson, the San Bernardino Mountains, Mt. Hilo, Mt. Diablo and Lookout Mountain.

It has been proved by the "sealed-in-high-gear" non-stop and fuel-economy tests made in California, Colorado, Virginia, New York and seven other states—every test either officially conducted or made under impartial supervision.

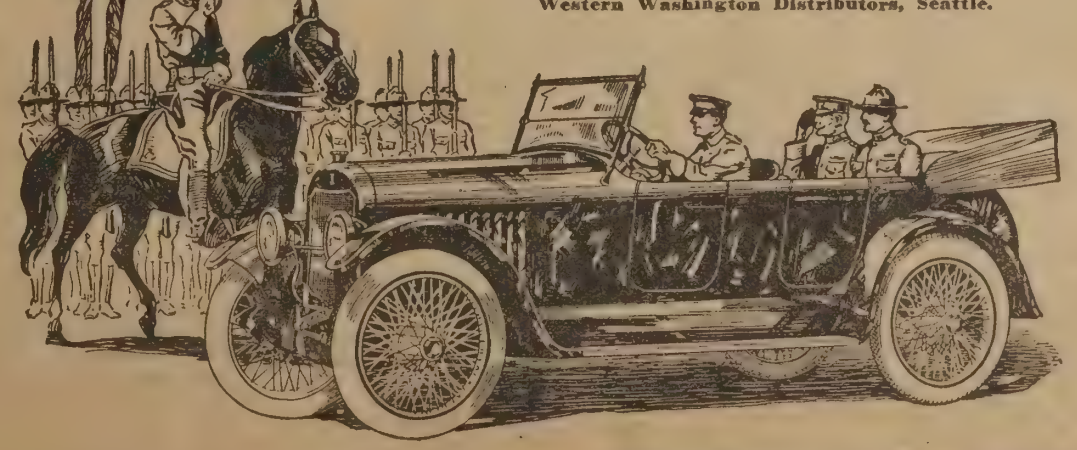
It is being proven daily by the satisfactory operation of King cars all over America and in fifty-two foreign countries—in every climate and on all kinds of roads.

PRICES $1,585 TO $2,300

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DULMAGE MOTOR CAR CO.
Western Washington Distributors, Seattle.



"The Car of No Regrets"

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The Ups and Downs of a Bunch Grass Boy

By JOE L. ASHLOCK

(Copyright, 1917, Joe L. Ashlock.)

A squirrel poked its head through a knothole in the schoolhouse floor one day, and espied Jim Paullus' big toe about two inches from its nose and sharp teeth.

Maybe the rodent thought Jim's toe was a dusty young potato, or some other vegetable; anyway, it edged cautiously up through the hole and after an examining sniff or two, nibbled sharply at Jim's big toe.

Jim was asleep when it happened. He should have been studying, of course; but the afternoon was hot, and at the noon recess Jim had been "it" in a spirited game of Andy Over. He was tired; so, disregarded or overlooked by the teacher he had propped his big geography up in front of him, reclined his head on his folded arms, and was soundly, blissfully, dreamlessly asleep.

He awoke with a howl—a most unearthly howl that elicited echoing screams from the teacher and all the big and little girls. The squirrel, innocent author of the din, whistled and made a rush at the knot hole; but Jim's foot had accidently moved over the hole. So the squirrel raced down the aisle and under the seats, looking vainly for a hole into which it might dive.

Jim hopped about on one foot and held his toe. He saw that the big boys were laughing at him, and wrath rose in his soul like a flame. Bent on vengeance, he made after the fleeing squirrel, telling the nimble creature what he meant to do to it. His pursuit took him between and over seats, under seats, thrice around the aisle, and a dozen times around the teacher's desk while she stood on a stool with skirts drawn tightly about her ankles. With a great inspiration, Jim at length repaired to his seat and lay his big geography over the knot hole, shutting off this avenue of escape for the squirrel. Then he went out of doors, coming back in a moment with the school's only baseball bat in his hands. Unfortunately, he left the door slightly ajar as he came in; and through the crack the squirrel darted. Jim flailed vengefully at it with the bat as it darted through. He missed the squirrel, but bent the doorknob.

To guard against similar mishaps in the future, Jim stuffed his slate sponge in the knothole; and then proceeded to doctor his toe. Tommy East had a tube of arnica. This was passed across the aisle to Jim, who saturated his big toe and most of his dusty foot with the arnica. In his ministrations he occasionally said "ouch"; and also paused to smell the arnica in an admiring way. He whispered to Tommy that he guessed the arnica would fix his toe all right; it smelled like some chewing gum he once had had. Not only did the arnica give forth a pleasant odor, but it also quelled the sting in his toe.

One of the big girls tore her handkerchief in two and passed half of it to Jim. He thereupon wound the white rag about his toe, tying it in place with the red string which formerly had attached his sponge to his slate. The string was long, so he had to wind it about the toe many times. He took up part of the excess length by tying the string in a big bow knot. This done, he and some other tots were called to the front to recite. Jim walked proudly down the aisle, not neglecting to limp. He sat next to the aisle, crossed his legs, and stuck his injured foot out where a third of the pupils of the school could look admiringly at it.

Jim's adventure with the squirrel that mistook his big toe for something good to eat was my hunch or "tip" on a literary production which I proudly called "my novel." I wrote on my novel till I had filled a huge, thick writing tablet clear through one way, and half way back the other. For a long time this novel of mine sat on a high shelf in the cupboard. Mother used it to set the coffee pot on, not desiring to set the blackened bottom of the coffee pot on the clean, white oilcloth that lined her cupboard shelves. I would hunt through the bunchgrass for "material"; then with some material in mind, would mount a stool, slip the thick writing tablet from under the coffee pot, hie away to seclusion, and write.

Oddly enough, all the while I told no one about my novel. Mother scolded me once for taking the writing tablet from under the coffee pot; so thereafter, when I wanted to write, I would replace it under the coffee pot with a newspaper folded together. But I never thought of telling any one of my work; so it came to pass that one time when I mounted the stool and reached for my tablet, it was not under the coffee pot. It was gone forever.

Instantly I raised a yell—a more distressed yell, if anything, than Jim had uttered when the squirrel pierced his dusty toe with his sharp, white teeth. Mother was sorry. Why hadn't I told her I was writing a novel? She had used my novel to start a fire with. She told me to get her some kindling—why hadn't I minded her? If I had done as I was told, she wouldn't have needed my novel to start a fire.

Years later, when a student in college, I was reading the life of the Scottish historian, Thomas Carlyle. When I came to the part telling of his great grief when his wife mistakenly threw the notes and manuscript of one of his books into the fire, I knew how to sympathize with him. I admired him intensely because he had the nerve to start the job all over again.

The connection between a squirrel poking its head through a knothole and nibbling at the toe of a barefooted boy, and the plot of a noval written by a 14-year-old boy may, to the unliterary person seem remote. However, I did not find it at all difficult to use the idea I evolved from the incident in the schoolroom.

First, I should explain that the teacher had asked us to write an "essay" about "something." In the school I was racking my brain for "something" when I saw the tip of the squirrel's nose come sniffing cautiously up through the knothole under Jim's seat. I had also observed Jim falling to sleep behind his big geography, so adroitly curled up behind the book that from the little of him the teacher could see, she might easily mistake his recumbent attitude for one of deep study. I saw the squirrel stretch its neck while it sniffed at Jim's big toe, which undoubtedly had an earthy smell, like a young potato freshly removed from the soil. It sniffed several times; arrived at a decision; bit with decision, and deeply. I have already told what followed.

Having observed all this, I decided to write an essay about it, but at once encountered an obstacle. I should have to say that Jim was asleep behind his geography when the squirrel bit him. That would not be honorable.

I decided to change the names of my principal characters. Jim I could turn into a young calf adroitly leaving the two teats "on its side of the cow," and reaching across to the teats whose white stream was intended for the household milk supply; the squirrel I could turn into a pup biting the calf's heels. But the combination did not work just right. It seemed to lack something.

I did some more thinking. A few days before I had looked through a "telescope"—a small field glass—at some cows a mile away, and was amazed to see them move up to within a few hundred feet of me. Then I had looked at my pony a few rods away, and he had looked as big as an elephant.

So I decided to enlarge upon the incident, visualizing it through my mental telescope so that the squirrel's head poking up through the knothole would appear as the head of a fierce mountain lion glaring through a hole of some kind at its intended prey of some kind. What kind of a hole would the mountain lion look through? What would it look at? For a minute or two I was stuck.

An inspiration came through the open window. Far away, out somewhere in the gray-green sea of bunchgrass that surrounded our small, rough-board schoolhouse with knotholes in the floor, a coyote yelled two or three times; and the yelping came to me on the slow breeze that drifted into the open window. I had it!

My mountain lion with fierce, round eyes and teeth like daggers, and an appetite like our big, black hound whom I had fed small cubes of chewing tobacco spread with butter or lard to see what manner of stuff he could swallow as I tossed it to him, was glaring down into a badger-hole, at the lower extremity of which cowered a father coyote, a mother coyote, and a lot of little son and daughter coyotes.

How could I tell the story about a mountain lion poking his head and neck into the mouth of a coyote den, unless I had been there to see it. That was easy. I decided to be the coyote telling his own story. I was ready to begin; and did so by writing the title of my first novel in high, staggering lead pencil print:

TOLD BY A COYOTE.

I wrote one chapter that afternoon before reciting time; observing as I did so that Jim had again fallen to sleep; that Tommy East had slyly pulled the sponge from the knot hole, in the hope that the squirrel would come up and take another bite.

I got away with the first chapter in fairly good shape, I suppose. The teacher reprimanded me for copying my "essay" out of a book, or paper. She wanted to know where I had found the story. Up to that time I had possessed at least an average reputation, as boys go, for veracity. She was inclined to doubt, however; finally, to clear myself, I told her in detail, whence came the idea, omitting, however, that Jim had been sleeping. She laughed at my turning a squirrel head into a mountain-lion. I told her, truthfully enough, that when I was "little" I used to "imagine" all kinds of queer things, but that people made fun of me for it, and that I had quit—at least, I had ceased telling people about my queer imaginings.

This teacher was young, pretty and inexperienced in her profession. She thought I knew more than I did, I suppose; she told me a lot of things about books and novels and great writers and "imagination" which I totally failed to comprehend; and when she asked me for this scrawling, lead pencil chapter of "Told by a Coyote," saying that she knew that some day I would be a great writer and then she would show the lead pencil chapter to her grandchildren, I didn't know whether to be pleased, puzzled, or hurt. But I gave her the story, and reconstructed it from memory.

I am sure that the story had no real merit; but the teacher was young, inclined to be a bit romantic, and had her head full of notions about "genius" which she discussed learnedly with me, not a bit of which I comprehended; she saw I was interested in the coyote yarn, and encouraged me to go ahead with it, saying I could do this in lieu of other class work in grammer. So it came to pass, in the course of weeks and months that the big tablet under mother's coffee pot was written clear through and I had started back the other way—for I did not have 10 cents with which to buy another tablet; so I had to write on both sides of the paper.

My speaking character was an old, lean grandfather coyote—a regular Moses, leading his tribe out of the land of Egypt. He had lived a hundred years or more, and had founded a tribe of coyotes in a rock-bound, inaccessible place, from which coyotes could sally forth and steal chickens, young pigs, calves and lambs, always returning safely. I told how the baby coyotes played about in the grass and became large, sleek, swift-footed coy-

(Continued on page twenty-four.)

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University).

Appetite Increased by Food—Real Hunger Satisfied



Dr. Hirshberg.

Time was, and very recently at that, when the most learned doctors and physiologists, like the rest of the plain people, did not even stop to consider that appetite and hunger were as different as a tadpole from a teetotaler. Then came the researches of Professor W. B. Cannon of Harvard, with his investigations upon the sensations of appetite and hunger.

Professor Cannon unearthed the fact that these two sensations were as distinct and independent of each other as are tapeworms from tape measures. Until these new facts were brought to light, medical men generally took it for granted that appetite passed by quantitative graduations into hunger.

We know now that appetite is one human experience and that hunger is wholly distinct and fundamenentally different. Instead of tweedledum and tweedledee, they are as different as Macedon and Monmouth, or chalk and cheese.

Appetite is intimately related to the perceptions of smell and taste and memories of such sensations as related to food and drink. Appetite, obviously, is largely determined by odors or tastes associated with edibles, which please or disgust.

By taking thought you may be able to form the image of a delectable food, the memory of which may stir your appetite to the point of sending you to a chop house there to realize in actual consumption, appeasing the sensations felt in your tongue, palate and nose, by eating of that dish.

Anticipation and realization are pleasures of the saliva and stomach fluids which appetite engenders, but they are far removed ordinarily from the pangs of hunger.

Appetite May Be Dangerous.

Holy scriptures, inspired divinely, seems to have taught physiologists what Prof. Cannon has just made known. "And put a knife to thy throat if thou be a man given to appetite," says Proverbs xxiii., 2. Good digestion, contrary to Macbeth, does not wait on appetite nor does health wait on both. An epicurean's cook can sharpen your appetite only too easily, when you should not have it.

The well man or woman who boasts "My appetite is always excellent; I was never sick a day in my life," is talking ancient, medical lingo of ignorance. The much heralded appetite may lead to the downfall or illness supposed to be absent.

Your Stomach Calls."

The sense of hunger is unpleasant. A good appetite is pleasant. The dull, gnawing, "empty feeling," which children, hard manual laborers, athletes and others feel in the pit of the stomach, after many hours of privation or want of pabulum, is almost painful. It is hunger.

Appetite grows on what it feeds on. It demands delectable viands. Peppers, condiments, seasoning, irritants, fresh air and drinks often sharpen an appetite. Hunger may make the starved person gulp some of the most distasteful, disgusting foods. The pleasures of the table are not for him—he needs must eat irrespective of quality, but in huge quantities.

Hunger occurs in stages which may begin with a gnawing, empty feeling of the inner man through aches, pangs and lassitude up to real pain. There may be a dull pressure, nausea and headache in addition to "an emptiness."

Prof. Cannon found that the muscles of the stomach begin to roll and gyrate in their search for food, when honest-to-goodness hunger is present and not mere appetite.

Hunger may be checked by tightening the belt or otherwise checking the muscular movements of the stomach. By instruments and stomach tubes the sensation of hunger has been definitely traceable to these contractions of the stomach. Whenever the stomach or intestines growl much or twist a great deal, it is evidence that they are empty and are begging for bread. Neither of them can sit up on their hind legs and bark like your pet poodle, but they can give you by growls and rumbles unmistakable signs that your body is needing nourishment.

All the World's a Stage, and All the Men and Women Merely Players

Accused of Treason.



General Sukhomlinoff, former minister of war, who is accused by M. Rodzianko, president of the Russian duma, of systematically resisting efforts to keep the Russian army at the front supplied with ammunition and that, as a result, the army retreated.

French Marksmen Lay in Wait for Taubes



French Official Photo.

The above very curious photograph shows one of the famous 75-mm guns mounted on an auto truck, painted and covered with boughs and branches so as to protect it against the enemy. The crew, whose appearance reminds one of the famous American Ku Klux Clan, are really in their newest gas masks, and are waiting for the enemy airplanes to appear in the sky. This is the newest type of the anti-aircraft guns to be seen on the French battle front.

Dr. Agramonte.



Dr. Eugenio Sanchez Agramonte, recently appointed secretary of agriculture of the republic of Cuba by President Menocal.

Women Are Serving the Country



Copyright by International.

The above photograph gives one some idea of how the members of the military training for women committee of Brooklyn, N. Y., are preparing to serve their country in this time of need. They are here shown giving an exhibition of first aid to the injured. This committee has succeeded in organizing a body of women "soldiers," all mounted and all well trained.

Asks World Peace.



Pope Benedict, who has made peace overtures to the belligerent governments. He recommends that the warring nations seek a basis for arriving at a solution of the differences existing among them, and suggests restoration by the central powers of Belgium, Serbia and Rumania.

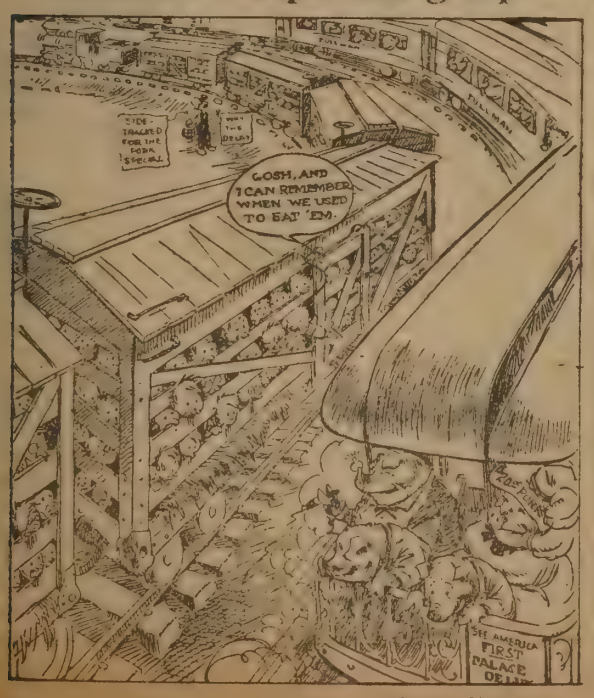
Heroic Russian Women



Copyright by International.

Russian girls of all classes, and many married women, were members of the "Battalion of Death," which recently emerged so gloriously from its first actual conflict with the enemy. Fearing the most despicable of deaths if captured, each member of the battalion carried a small phial of cyanide of potassium. The picture shows two of the young women who made up the battalion. Like all other fighters, they have their mascots.

If Pork Keeps Going Up



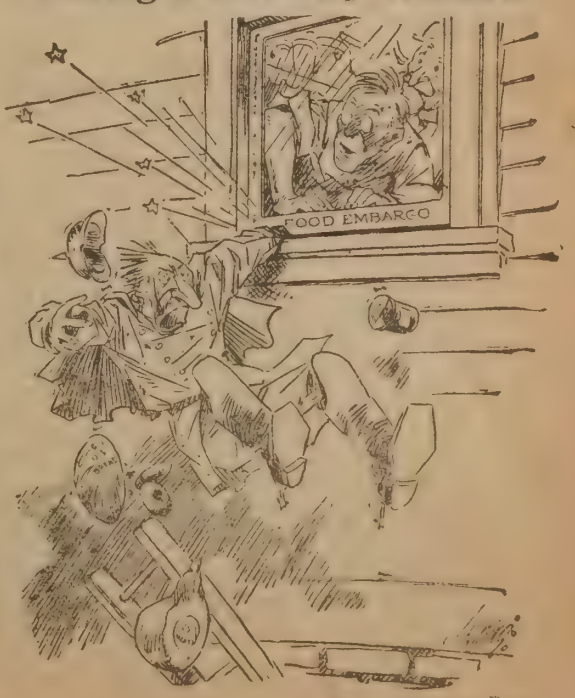
—Kansas City Star.

"Where Angels Fear to Tread!"

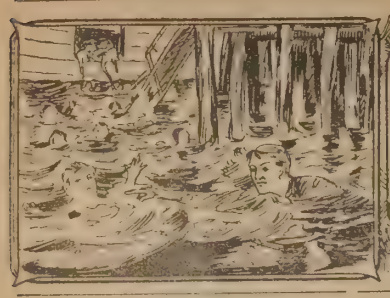


—Memphis Commercial Appeal.

Closing the Pantry Window



St. Paul Pioneer Press.



UNDER THE BLACK CANOPY

By Paul E. Triem



CHAPTER VI.

For some time after the march had been resumed, with Mr. Stirling in the lead and Joe a few steps behind, the latter was puzzled by the behavior of Andy Dubois. He had given the Frenchman credit for abundant courage, but unmistakably Andy was rather showing the white feather at present. His eyes were dazed and his face was drawn and desperate. It seemed to Joe that he should make a better showing—the cut across his forehead could hardly be painful enough to account for all this display of suffering.

The smoky pall above them was flecked with sparks, and the wind that drove against their faces was hot and acrid. Another child began to cry, and the ranger quickly swung her up in front of Andy.

"At the gait we're going, the cayuse can carry three all right," he commented. "And we can't waste a moment."

They had broken into a half obliterated trail which Mr. Stirling said would take them past the phone and at the same time carry them toward the river

"The phone is near the boundary of the reserve," he told Joe, "and a quarter of a mile beyond it is the Stevens river. If we can make the river, we ought to be all right."

Half an hour later they passed a blazed fir which the ranger said was on the boundary of the government forest reserve. He went ahead, telling Joe to follow the trail while he went forward and tried to get help over the phone.

During the next 10 minutes Mrs. McCarty rebelled twice, announcing each time that she positively would not take another step for all the fires in the state.

"Me, indade!" she protested when Joe tried to argue with her, "wid me sufferin' fate, trepsin' through the woods like I was tryin' to disciver the South Pole! No, I will not budge!"

Each time Jerry Stevens saved the day by whispering cajolingly in her ear, and the march was resumed.

Presently they came within sight of Mr. Stirling, standing before an open telephone box, nailed to a painted cedar post. He dropped the receiver as they approached and shook his head.

"The wire's dead," he announced. "Come on—we'll head for the river. I'm sorry, but I'll have to warn you that the lives of every one of us hang in the balance, and that we've got to travel faster. All ready!"

With the path before them almost indistinguishable in the swirling smoke, and with their eyes suffused and their breath poisoned, the refugees hurried desperately along. The roar of the fire came to them distinctly. Minute after minute passed, and finally the trail began to dip before them.

"Keep up your grit, everybody!" Mr. Stirling cried. "We're at the summit of the valley—we're going to make it! One more sprint, and you'll be able to rest!"

Jerry Stevens was tugging at Joe's sleeve, and when the logger looked down he saw that the youngster's face was white and that his eyes glowed with a strange terror.

"He's gone!" the boy said, fearfully. "The man that was riding my pony—see—he's gone!"

Joe whirled and looked back at the place in the procession where Andy Dubois had been riding. The cayuse still plodded along with the two children clinging to the saddle—but the saddle was empty! Andy had disappeared. The young man ran back and asked the children what had become of the wounded man.

"He got off a little while ago and told us to ride on. He said he would walk," one of the children told him, timidly.

Joe began tying some bundles, which he had gradually accumulated in helping the weaker members of the party, to the saddle. The ranger looked back and asked him what he was doing.

"You'll have to go on by yourselves," Joe told him quietly. "My friend must have become too faint to ride. I should have looked after him more carefully."

"But you're not going back into that furnace!" Mr. Stirling shouted.

"Yes. I can't let him die in there."

The ranger was a man who had seen life and its uncertainties reflected from a good many angles, and he wasted no time in argument.

"Take this blanket with you," he commanded, "and try to find a stumphole with some water in it. Goodby. I'll get the rest of them into the water within five minutes."

He gripped Joe's hand in an iron clasp that left the fingers tingling, and next moment he and his party had disappeared. Little Jerry had waved a broken-hearted farewell, and had insisted on giving Joe half a dozen cakes of sweet chocolate which he had been carrying, but the others were dazed with the swift movement of the night. Only Mrs. McCarty eyed him envyingly, thinking perhaps of her aching feet.

Joe sped back along the trail, which became each moment thicker and more stifling. He swunk his lantern before him, and presently, as he peered ahead, he caught sight of a black something in the path ahead. He dropped down beside it and a moan came to him.

"Why didn't you go on? I couldn't stand it any longer; my forearm's broken and the pain made me weak."

Suddenly Joe understood. "You ought to have told me," he said gently. "Come. We must get away from here. I saw a windfall back a few rods, and we may be able to find water where its roots were torn out. Put your other arm over my shoulder—so."

The light of battle had come into Andy's face and he forced himself to hurry forward beside his companion, although every step must have increased his agony. Suddenly Joe paused, looking up to where a sheet of fire sped over them, running through the tops of the trees. He realized that he had missed the windfall, and as far as he could remember there was nothing ahead that could help them.

Andy was speaking faintly.

"There's a gully in there," he said. "There might be some water in it——"

Joe swung him about and they plunged into the brush. The gully had evidently started during the last rainy season, and for a few rods after they entered it it was too shallow to offer any protection. Then it dropped suddenly before them and Joe cried out hoarsely:

"Careful, now—let me lower you over this step-off. Hold the lantern if you can—I can't see bottem, but I'll have to drop you."

Andy lit, and there came to the man in the trough above the welcome sound of splashing water. Next moment he had slid over the step-off and felt himself dropping swiftly, until he brought up with a chug and comprehended that he was knee deep in some sort of spring or bog.

Andy was leaning against the gravel wall that shot up almost vertically into the night, and as Joe turned toward him he smiled faintly.

"Perhaps we can stick it out here," he said. "At least, it gives us a chance."

Joe looked up to where, 100 feet above them, the fire was racing through the branches. He had to shield his face from the terrific heat, and speedily he remembered the blanket which Mr. Stirling had thrust upon him. Next moment he had plunged it into the water in which he and Andy were standing and had drawn it out and pulled it over them.

"Sit down," he commanded.

The noise above them increased and the air became moist and hot. Fragments of burning branches dropped down upon their shelter, and as often as Joe had to remove the blanket to wet it in the spring the heat seemed to settle down about them till their skin was seared and their eyes blinded.

Suddenly the Frenchman spoke. "You're a good fellow, Joe," he said faintly. "I don't know why you ever bothered about me—and it's likely to cost you dear. Why didn't you let me go, as I deserved?"

"Because I knew that you were a good fellow, too," Joe explained. "You and I started out wrong, but that was as much my fault as yours."

Andy remained silent a moment. "There's no use talking about that," he replied sadly. "I always was a sorehead, and I thought you were stuck up—I wanted to go to college when I was a boy and I never got a chance. I could see that you were better educated than I and it made me wild."

Joe nodded. He was listening tensely for some indication that the height of the fire had passed, but each minute the heat grew more stifling and the roar above them deepened. A scorching wind blew against their shelter, so that he was forced often to remove it long enough to plunge it into the water. Otherwise it would quickly have been reduced to a mass of tinder. His companion was silent, and his breath came faintly. When Joe spoke to him presently he did not reply, and the young man realized that he had collapsed.

Again he drew the blanket from over them and plunged it desperately into the spring. Blinded and almost overcome himself by the blistering atmosphere, he succeeded in drawing it back over them. Then he felt himself drifting out into a hazy sea of unconsciousness.

He awoke to a dim realization that he was very miserable; his face and hand smarted terribly and every breath he drew was an aded touch of torture. He stared about him with half-blinded eyes and realized that it must be day—a hazy and unreal day, but better than the night which had passed, at any rate.

Andy was lying against the sloping walls of the little canyon which had sheltered them, and for a moment Joe feared that the terrible ordeal through which they had passed had been too much for his companion. Then he saw that the young Frenchman was breathing, ever so slightly, and in a moment he had forgotten his own suffering.

His eyes rested on his companion's left hand and wrist, which were swollen and discolored. With his knife he carefully ripped open the sleeve and disclosed the injured forearm, and after examining it he stood up and looked about for something which he could use for a splint. Present he found it—a fragment of bark which had dropped from one of the trees high overhead and been quenched in the spring. Joe had had little experience at his kind of work, but he managed to wrap the forearm in a cradle of bandages and splint which would at least hold it firmly until they could do better.

The canyon led steeply down toward what Joe imagined was the river valley; and after he had bathed his companion's hands and face with some of the muddy water he lifted him gently and began to feel his way along the miry channel. The air was still torrid and smoky, but the fire had passed. Joe realized that it had run through the tops of the trees without doing much damage on the surface of the ground.

He found a level spot where the canyon opened out and became a tiny plateau. Here he deposited the limp figure which he had been carrying and sat down to rest. The night had left him so weak that his knees trembled with every step, and the bitter air which he drew into his lungs did little to strengthen him.

He had been sitting beside Andy for nearly an hour, bathing his face and hands and sometimes letting a little water trickle through his parched lips, when the Frenchman opened his eyes and stared confusedly up at Joe.

"Where are we?" he whispered.

"I think we're somewhere on the ridge above the Stevens river," Joe told him. "As soon as you're strong enough w'll get down into the valley and try to make our way along the river to the coast."

Andy laid his hand on Joe's arm and pulled himself up. His left arm Joe had bandaged in through the front of his shirt in such a way as to support it, and as Andy climbed slowly to his feet and stood steadying himself by holding his companion's shoulder, the two of them showed to the full the ordeal through which they had passed. Silently they turned toward the lower valley; and a couple of hours later the river opened out before them.

"We ought to make the beach by night," Joe said cheerfully, after they had rested for a time. "We'll have the rest of this chocolate and then be off."

He drew from his pocket a bar of sweet chocolate, the last of the supply which Jerry had pressed upon him the night before. It had proved wonderfully effective in renewing his companion's strength and courage, and without it they could hardly have reached the river.

"All right," Andy announced, after he had finished his share.

The march was resumed. An hour passed and another, and then in the distance they caught the shimmer of the sound. Silently, doggedly, they forced themselves along the uncertain track beside the river until suddenly they came out of a brushy thicket and caught the murmur of voices. Joe

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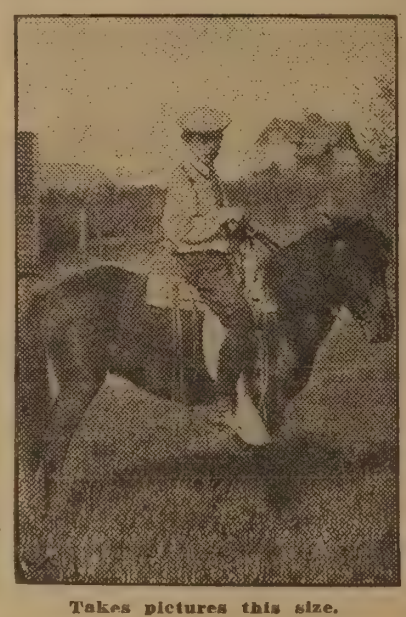
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paused, with his heart pounding so that it threatened to smother him. Next moment a shrill, boyish voice was raised in a triumphant shout, and Jerry Stevens came racing across the beach and threw his arms about Joe.

"See who's here!" he cried. "Both of 'em—and they're alive—and I'll bet they're hungry enough to eat everything in camp!"

Among the people who followed Jerry and who were now standing around Joe and his companion, the young man recognized not only the faces that had been burned into his memory by the terrible march of the night, but also Charlie Neville's round and prosperous visage.

"Of course they've starved," the cook declared, grasping Andy's uninjured arm and helping him along toward a spot where a camp fire smouldered near the water's edge. "McClosky and that government ranger and a bunch of the boys have gone in along the hotel road to try to find you, and they probably won't get back before night or maybe tomorrow morning. The ship will be in some time this afternoon—Mr. Stevens has been over in a launch, but no one was willing to leave until the search party reported."

Whistles boomed across the Sound, and Joe, from his seat near the prow of the "Avlon," could hear the hiss of water along the ship's sides. Mr. Stevens and Jerry sat beside him, and the other refugees were scattered in little groups over the ship.

"There's nothing you can do directly for me," Joe said, in answer to a question of Mr. Stevens'. "You know as well as I do that it isn't a kindness to any man to boost him—if I've got it in me to do good work, I'll get along all right; and if I haven't, no amount of help could keep me from sinking to my natural station. But I'd be glad if you could help Andy in some way—he's hungry for an education, and he never had a chance to get one. I think he'd take to forestry or some sort of applied science."

"Aren't you rather suggesting that I should boost Andy into an education?" Mr. Stevens asked quietly. "As nearly as I can figure you went through college without any one to help you. What was to hinder his doing the same thing?"

"I had no one but myself to look after," Joe replied goodnaturedly, "while Andy has his mother and a couple of sisters to support."

"I didn't know that," the lumberman admitted.

"No one has known it. Andy's faults stick out like door knobs, while he keeps his virtues hidden."

"The whole thing is as easy as pie," young Stevens broke in suddenly. He had been sitting with his hand on Joe's arm, looking from one of the speakers to the other. "Joe's to take that job you were talking about at the head of the mill; and if he doesn't get along without boosting, why it's easy enough for him to quit—and we'll try again. And Andy shall start to school this fall, and Dad will help him all he needs. There's no use talking a whole evening about a little thing like that."

Jerry, senior, laughed. "I think you've hit the nail on the head," he agreed. "Your way looks simple, and I'm pretty sure it will work. It isn't 'boosting' to promote a man when he's proved that he has initiative and energy and courage; that's simply a good business move on my part, and we'll consider it settled."

From the stern of the ship there came a sound of a voice, which floated out into the night with a weird pathos. The words were French, and Joe listened, spellbound, to the silvery tenor which gripped him and seemed to carry him out over the brooding water. There was a burst of applause at the end, and he heard Andy pleading that he could sing no more, as his throat was still parched from the torrid air of the fire. Then they were shouting his own name, and he understood that they were demanding a sort of "curtain speech." He tried to slide back into the shadow of a coil of rope, but Mr. Stevens caught him and forced him out into the light. Next moment they had surrounded him and had borne him, irresistibly, to the steps which led to the upper deck.

Joe stood looking down into the upturned, happy faces. Some of the women were crying—Mrs. McCarty among them, with her face so inflamed by alternate tears and laughter, that it looked very like a full moon. From the farther edge of the circle, Andy Dubois looked at him with a new gentleness in his dark eyes. And Joe realized that he was glad to be alive.

THE END.

"Rome Beauty Cookers."

I have received an inquiry about the meaning of the term "Rome Beauty Cookers" as used by growers and shippers of fruits.

To begin with, the Rome Beauty is probably one of the best cookers on the markets. Especially is this true as a baker. It is prized by the proprietors of hotels and restaurants because it is supposed to be one of the best bakers among the winter varieties of apples. Whatever else may be said for or against the Rome Beauty as compared with other varieties, it is conceded to be a good cooker.

Second, the Rome Beauty cooks well and has a good flavor, before it is fully grown. It is therefore common for growers, in thinning their fruit, to leave a large crop on the Rome Beauty trees than they would leave on the other varieties, and thin them later, saving the apples taken off in the thinning process for sale to the trade as cookers. They make good sauce, the consumer gets value received, besides the thinning are not wasted. Then the apples left on the trees develop and make good marketable fruits. The first pickings of the Rome Beauties are called cookers, to distinguish them from the second and third that have other values besides.

Discrimination Against Cheese.

The Snohomish County Pomona grange held its quarterly session at Twin Valley, with Twin Valley grange as host. A matter claimed to be of vital interest to the dairy interests of the state, and which, it is thought, will undoubtedly receive serious consideration, was brought before the Pomona in the form of a resolution dealing with the laws now on the state statutes which favor the condensery product known as "hebe milk" and discriminate against the dairy product known as filled cheese.

Reorganize Testing Association.

The Jefferson County (Wash.) Cow Testing association was recently organized for another year, with all but four of the former members joining for the second year. O. E. Leonard is the tester.

Farm Calispel Valley Lands

By RAY W. FELTON

Eureka Ranch, Inc., is one of the larger farms of the Calispel valley, Pend Oreille county, Washington. It is managed by H. O. Schumacher, son of A. Schumacher, well-known Spokane business man. With his mother to keep house for him young Schumacher, until recently a "city chap," finds the operation of 280 acres a task not at all unpleasant. He is going in for Duroc-Jersey hogs and has a good sized herd in splendid condition.

F. H. McLeish is farming 400 acres in the Calispel valley and is raising a fine type of roan Durhams. He has 40 head including calves and young stock and annually produces a large quantity of hay for shipment. The McLeish place is outside the main dyking district in the valley and is subject to overflow. This fact has resulted in green meadows on his farm this summer.

C. E. Rice of Locke, Wash., has 385 acres, a majority of which is cleared and under cultivation. He raises wheat and oats and produces cattle both of the beef and dairy type. The Locke district will harvest a fair crop this year, due to moisture provided by the overflow of the Calispel valley. Small crops were experienced by ranchers of this district last year and year before as the water stayed on until it was too late for cropping.

Baker brothers, in the main Calispel valley, are farming 280 acres, most of which is in grain.

John Leibrecht, a neighbor of the Baker boys, has 115 acres, a large part of which he has cleared himself. Mr. Leibrecht finds it is cheaper to blow stumps than to pull them. He has tried both ways. As a rule he undertakes this work after a rain or at any time when the ground is wet. Blowing stumps leaves a smaller hole than is caused by the stump pullers, he finds; the ground is less expensive to level afterwards and the stumps easier to burn.

Father and sons work side by side at the Crown ranch. A. Crown and his two sons are partners in every sense of the word and the fine spirit of the boys reflects the wholesome influence of well-conducted home life.

Mr. Crown and his sons have 290 acres, all under the plow. It is given over to the raising of hay, grain and pacsture for 20 head of cattle.

Mrs. L. Hunz is one of the successful women farmers of the Calispel valley. She manages 500 acres and is one of the few persons in the valley to report a normal crop of hay this year in spite of the dry season.

P. J. Sullivan has been in the valley 30 years. He is farming 320 acres. Mr. Sullivan remembers the day when stock raising was the principal agricultural industry of the Calispel and he is of the opinion that dairying will yet be the main occupation as it seems more certain of fruitful returns than most any other line of endeavor in that section.

Farmers in the Calispel valley will harvest short crops of grain and hay this year in most instances. The prolonged dry spell has worked a real hardship on this community although most farmers are in comfortable circumstances as the result of fair crops last year and prevailing high prices for all lines of farm produce. A July frost killed oats on many farms.

Grays Harbor Pioneers.

O. F. Fry of Oakville has been elected president of the Grays Harbor County Pioneer association. Other officers are: Mrs. E. P. French of Elma, first vice president; J. J. Carney of Aberdeen, second vice president; Mrs. J. S. McKee of Hoquiam, third vice president; J. A. Hood of Aberdeen, director for three years.

Organize to Sell Potatoes.

An organization to dispose of the potato crop of Whatcom county farmers jointly will be formed at the Laurel grange hall in Lynden on Saturday, September 8.

Vaccinating Hereford Calves



The photograph herewith shows Roy P. Bean, United States agriculturist for the Tieton irrigation project, vaccinating a calf with the aid of a man on the farm. The vaccination is for the prevention of blackleg. Mr. Bean made a community job of his work the day this photograph was taken, vaccinating 105 calves for a number of farmers. The picture was taken on the C. C. Bull ranch on the project.

Fats for Frying Are a Luxury in Germany

The demand for fats in Germany, notwithstanding the enormous quantities that have until recently been received throughout the neutral nations, is illustrated by advertisements in German newspapers just received in Washington.

"For sale, for cash on delivery, fat for frying, 17 marks ($4.05) per pound," reads one advertisement.

"Goose fat, 22 1-2 marks ($5.36) per pound," reads another.

"Duck fat, 1-4 pound for 4.75 marks ($1.13)," is a Dresden bargain sale announcement.

Salted goose legs are quoted at 94 cents each. Minced goose meat brings the same price. Larded goose breast, a delicacy, will cost the epicures $2.08 per pound. Fresh fowls for soup are quoted at from $1.01 per pound and up.

An official distribution of cheese is announced for Dusseldorf, with the announcement that there will not be sufficient to supply every one, but that "those who were not supplied at the last distribution and also go empty at the forthcoming distribution will be given preference at the next distribution. They must, therefore, preserve the current voucher." Prices quoted are 82 cents per pound for Gouda and 36 cents per pound for Swiss cheese.

Young country laying hens are advertised for sale at $3.32 each.

"Well-fed, snow-white Emden giant geese" are offered for sale at prices ranging from $11.91 to $19.08 each.

The egg ration at Hamburg for one week in June was one egg per person.

Rabbits bring high prices. "One buck, one doe and three young rabbits" are offered for $8.34.

Horses are in great demand for killing, and delicacies made of horse flesh are advertised at prices varying from 53 cents to 86 cents per pound.

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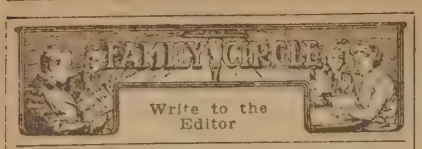
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ALICE W. BARLAND
Editorial Contributor

Down the Mississippi

By MRS. A. W. BARLAND.

Dear Women of the Family Circle: You are busy these days in the midst of the harvest work, and the days are full of cooking and dishwashing. I know all about it from actual experience and can see clearly, in my imagination, the rows of bread and pies and doughnuts that you are seeing disappear as the harvesters gather around the table three times a day. I have been going about through the middle west, and the last three weeks traveling by steamboat, rail and automobile.

I am thinking it might interest you to hear something of what I have seen as you pick up the Farmer to read and rest a while. One does not care always to read recipes and household notes, so let me share my vacation good times with you. Since people do not go to Europe on summer vacations, it has become popular to see things worth seeing in our own United States, and the grand old Mississippi river is one of those things.

When I was a child of 10 years I went down the river with my mother and the memory of that trip has stayed with me so I thought to go again. I took a long, unwieldy steamboat at St. Paul, Minn., with accommodations for 300 people and about 225 on board. We left the dock at 8 o'clock with the moon full. The boat was not much to brag about, being old-fashioned and rather crude, but it puffed along about 10 miles an hour. There was dancing in the cabin during the evening for those who enjoyed it, but many, like myself, preferred to stay out on deck and watch the wonderful and beautiful moonlight on the water and the shore. The boats follow the current of the river which, for some reason always is close to the shore, making it easy to see into the little towns, almost into the windows. Very picturesque they look against the green hillside. Always there would be a church spire or two and occasionally the white stones in a hillside cemetery would show in ghostly shadows as the moonlight played upon them. We would stop at the large towns such as Davenport and Redwing, but the small ones had to be content to see the big boat drift by.

Very reluctantly we left the deck for our staterooms. It seemed a pity to waste time in sleep when there was so much beauty outside. But we were up betimes in the morning and saw the sun come up behind the green hills. One of the diversions of the morning was to stand at the forward end of the boat on the first deck and throw coin down to the colored "roustabouts" congregated below. There were about 50 of them, all shades of black. Some one would toss down a coin which was the signal for every one of the 50 to try to get it. Pennies, nickels and dimes were tossed down, and sometimes a quarter of a dollar. How those black fellows would scramble for the coin! Sometimes there would be 10 or 15 of them piled up over the money like in a football rush. One and another would get his hands on it but before the coin could be grasped it would be slid out from under and a dozen hands would be after it. There was perfect good nature among the black boys. So soon as the coins ceased to fall from the deck above the boys would gather in groups and "shoot craps" which means they gambled. All along the river were house boats tied up for a while or being towed slowly along by a small motor boat.

One of the diversions of those days was steamboat racing. Accidents were of frequent occurrence in these days. There used to be collisions and bursted boilers in the effort to make more steam.

There is nothing like that now. If there chances to be a fog or a high wind the steamers tie up to shore and wait. Sometimes the drifting sand sticks them fast to the bottom for a while; nobody worries, but just wait till things loosen up. For real beauty of scenery the boat trip on the Mississippi excels either a lake trip on the great lakes or an ocean ride, because in either of the latter there is only the water to look out upon, but the shores of the river are like the unfolding of a great canvas and furnish a beautiful moving picture. After leaving the river I traveled nearly 700 miles by automobile and I will tell you next time about that ride.

To Test Oven Heat.

Do you know how to test the heat of your oven, with a piece of white paper, on baking days? asks The Christian Science Monitor. It is really quite a simple thing, but it is also a bit of knowledge which is quite well worth knowing. Suppose you are making pastry, patties or something of that sort: Light your oven and then, pretty soon, slip in the sheet of white paper to try it. If the paper burns right up, why then, naturally, you will know that the oven is too hot and must be cooled before it can be used. If, however, in a minute or two, rather, it turns a nice deep rich brown—but not black—it is all right for your tarts and patties. If, though, you wished to bake bread or meat pies or pound cake, for example, this would not do; it would be much too hot. What you would need, in this case, for a proper test, would be to have your sheet of paper turn a very light, yellowish brown, a sort of golden brown. Now, suppose you desire to bake a sponge cake or something on that order, which must be baked rapidly, but not browned very much. Put your sheet of white paper in the oven and if, after the two minutes, it is just daintily and delicately tinged with tan or yellow, the oven will be at the proper heat for your purpose.



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A dearer, sweeter spot than all the rest.

—James Montgomery.

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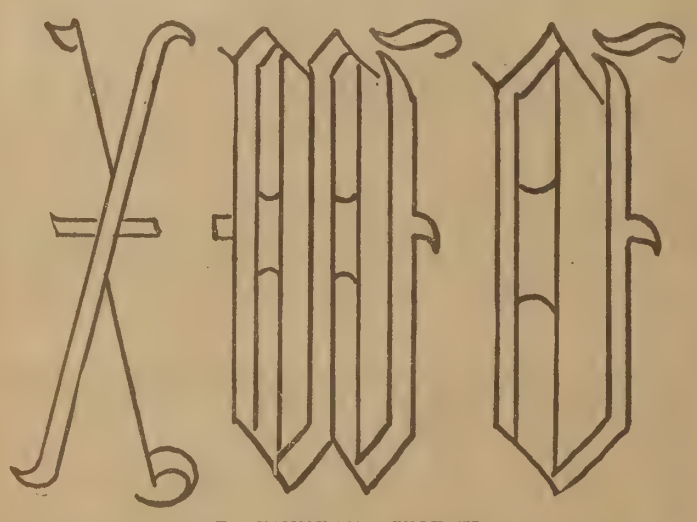
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By WINIFRED WORTH.

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White embroidery floss of linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under the initial before embroidering. This aids one in washing the color from the finished design.

In padding these old English initials, different methods may be used. Some use the twilled cotton for the purpose, others make the chain stitch, while others let a skein of floss out at full length and embroider a strip of it under the thick parts while forming the letter, clipping the skein when the initial is finished. This is a splendid method, quickly done and is suggested, too, as a help in padding all large pieces in border or crescent outline.

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1947—Ladies' House Dress.—Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 7-8 yards of 36-inch material for a 36-inch size. The skirt measures about 3 1-4 yards at the foot. Price, 10 cents.

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All good coffee; no tin cans to throw away, or premiums you do not need.

Coffee sent whole or ground, as ordered. If you want it ground, state whether coarse, medium, fine, for percolator, or pulverized.

Fill in the coupon below and send with 50 cents or $1.00 in stamps, coin or money order, to

NORTHWEST GROCERY COMPANY

13th and Commerce Sts.
Tacoma, Wash.

Send me 1½ lbs. 3 lbs. Northwest's Best Coffee.
Whole, ground (how?) .....
Name .....
Address .....



Dear Children: What do you think we ought to do to make our Corner cozier, nicer, better and have more children read it?

I am going to ask you all. Won't you tell me what you think?

The best of the suggestions I am going to answer personally.

With lots of love for all of you.

Aunt Nellie.

We're Glad to Know Cousin Marie.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am up in the Rattlesnake Hills about 10 miles from Sunnyside, visiting my cousin, Melvin Franks. Cousin Melvin and another of my cousins, Thelma Hinkle, have written to the Children's Corner before, so I thought I would write and get acquainted with the cousins of the Corner, too. I live in Pasco. I have two brothers and one sister. My brothers' names are Carl and Alvin. Carl is eight years old and Alvin is three years old. My little sister's name is Pearl. She is two years old. In about two weeks more I am going to visit my grandma in Euclid valley. It is about two miles from Grandview and about seven miles from Prosser. I have two aunts in Prosser that I have to visit before I go home. When I came up to my cousins we were driving along the road about three miles from home and we heard a rattlesnake rattle beside the road so my cousin, Melvin, and Uncle Will got out and killed it. The snake had nine rattles and a button. Since I have been here I have learned to crochet an edge. This week I am going to learn to crochet an edge on a handkerchief. I am having just a fine time here and I know I will have a fine time at grandma's. I wonder if I have a twin? I was 13 the 27th of March. If I have a twin I wish they would write to me, please. Marie Haven, 320 Lewis street, Pasco, Wash.

What Marie Wants to Be.

Dear Aunt Nellie: My subject is what I want to be when I grow up. I want to be a school teacher and also a music teacher. I never, never want to get married and always live with papa and mama and live on a farm, for I love outdoor sport and animals. I am eight years old and will be nine February 21. I love to read the children's letters and am glad when papa gets his paper. Our school will begin next week and my teacher's name is Miss Greene. She is the same teacher that I had last year. I am in the fourth grade. This is the second time I have written to the Corner.—Marie Houk, White Bluffs, Wash.

Mabel's Vacation Has Seemed Short.

Dear Aunt Nellie: Well, September is here and school will soon be starting. This has been a good vacation, but has seemed rather short. This is the second time I have written to you. I have just been reading the letters from the Corner and liked them so well I thought I would write again. I have four nice little kittens now. One is black, one is gray and one is black and white, but the prettiest one is gray and white. Our apples are soon ripe. They are large red ones.—Mabel Irene Iverson, R. F. D. 3, Box 105, Mt. Vernon, Wash.

Schoolhouse Has a New Room.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have three brothers and one sister. Our school will start the 10th of September. We only had one room last year, but they have built another room onto it this year. I am 12 years old and in the seventh grade. My birthday is the 27th of August. We have three horses, three cows, two heifers, two calves, one cat and 55 chickens. We have a big garden and quite a lot of potatoes planted.—Minnie Flem, R. F. D. 4, Box 323, Tacoma, Wash.

Gertrude's Trip to the Beach.

Dear Aunt Nellie: This is my second letter to the Corner. I am 12 years old. Our school will soon start. It starts next month, September 4, 1917. We will have Mrs. Anderson for our teacher. I will tell you about our trip to the beach. We got up early in the morning and packed our things. We saw lots of things on our way. We were going to Birmingham. It was 11 when he got to Birmingham. We stayed there three days. Every day we were in swimming. I enjoyed the time very much.—Gertrude Sande, Mt. Vernon, Wash.

Catherine Is a Busy Cousin.

Dear Aunt Nellie: I will write once more to the Children's Corner. I have been so busy that I do not get time to write to any one. I work in the field and I also have to get the cows up at night. I have to work in and outside of the house, as my father, my oldest brother, whose name is Edward, and my sister, whose name is Charlotte, are out camping now. I have to do their work at home. Our school was out May 18. There were eight children who graduated out of nine. They might have the ninth grade at Satsop. We have five cows, five calves, two horses, 24 geese, 24 ducks and about 75 chickens, five old canary birds and five young ones. One bird is sitting on four eggs. We had a telephone put in since I wrote to the Children's Corner. I was writing to Josephine Robinson and Velma Batie. I have five brothers and one sister. Their names are Charlotte, Edward, Charles, Delmar, Clifton and John. Charlotte is 15 years old, Edward is 11, Charles is 9, Delmar is 6, Clifton is 5 and John is 2. I am 5 feet 6 inches tall. I weigh about 98 pounds. My hair is light brown. My eyes are a grayish blue color. I am 14 years old. I will have to close for this time so that I can tend to my bread that I am making.—Catherine Borden, Satsop, Wash.

Many Animals in the Woods.

Dear Aunt Nellie: I am 12 years old and am 5 feet high and weigh 93 pounds. I am in the sixth grade next year. My school starts September 10. I have one cat, and her name is Tabby. We have two ponies, and their names are Babe and Billy. My brothers' names are William and Frank. There are wild rabbits, squirrels, bears and things like that in our woods. My birthday is April 7. Have I a twin? If I have I would like for them to please write to me.—Merna Elliott, Alpha, Wash.

Playing in the Hay Is Fun.

Dear Aunt Nellie: I have written to the Corner twice and now I am writing again because I think it is fun, and you may look for more of my letters for I will write again. My subject is Snider and Bonnie, for they are my pets. Snider can open a door, and Bonnie can open a gate and a barn door. I have lots of fun playing in the hay. I would like to hear from Ruby Johnson. I am 11 years old and in the sixth grade.—Hazel Saltmarsh, Coulee City, Wash.

Stella Has a Big White Cat.

Dear Aunt Nellie: I am 8 years old and I will be 9 December 24, 1917. I am in the third grade. This is the second time I have written to the Children's Corner. Have I a twin? I would like to correspond with one my own age. I have a big white cat and she has four little kittens. My school starts September 3 and I am glad. Gladys Rhodes is my teacher this year. —Stella Ruark, Mayview, Wash.

We All Want to Help Uncle Sam.

Dear Aunt Nellie: Hello! Here I am again. I have just been wondering who would like to be a Red Cross nurse. Of course we all would like to help Uncle Sam. If I were old enough I would be in training now. If my brother was old enough I would be willing for him to go. I am helping as much as I can by raising a garden. —Letha Dwire, Garfield, Wash.

Big Fires Make It Smoky.

Dear Aunt Nellie: We live on a 160-acre farm. We will milk 16 cows next year. I wrote before and saw my letter in print and was glad that was good. I will write again and see if it is good. My favorite book is Black Beauty. I like it very much. There are big fires here and it is very smoky around. Lilliana Strong, Curlew, Wash.

Poppies and Sweet Peas in Her Garden.

Dear Aunt Nellie: I enjoy reading the Children's Corner. We have three horses, two cows and 75 chickens. I have poppies and sweet peas in my garden. I have thre sisters and one brother. My sisters' names are Maude, Elsie and Hazel and my brother's name is George. I am 11 years old. My birthday is May 12 and I passed to the sixth grade. I wonder if I have a twin. I have to walk one mile to school. My teacher's name is Miss Holm. I can tat and sew.—Pearl Franz, Rockford, Wash.

The Country Is Cousin Ruth's Choice.

Dear Aunt Nellie: I have not writen to the Children's Corner for a long time but I am going to write again. I will be in the fourth grade next year. I was 9 the first of July. I would like for Florence Spoolman to write to me if she would. We live on a 60-acre farm. If anybody would give me my choice of the city and the country I would take the country. I ride horseback. I like to ride. I have a horse. Her name is Ribbon. My grandma was here but she has gone away to see her son. He came over after her. He wanted my brother to go along home with him and so he went along. My uncle lives over in Idaho. I don't know how soon my brother will be home.—Ruth Wagner, Gilmer, Wash.

Lydia's Summer Has Been Busy.

Dear Aunt Nellie: I have quite a lot to tell you about my summer vacation. The water was up again this year, but not quite as high as last year. My brothers, sisters and I have had a fine time since school is out. When the water was up we camped two weeks at Buris creek; papa had the cows up there for 19 days before the rest of us went up there; we had lots of fun boat riding and swimming. I have been picking cherries, planting kale and weeding garden. My sister and I went blackberry picking yesterday and got two gallons. I was 13 years old the 16th of July.—Lydia Guild, box 25, Woodland, Wash.

Call Their Little Dog Bum.

Dear Aunt Nellie: I am a little girl 9 years old. My birthday is August 30. I am in the fourth grade. I have one sister and one brother. I have two calves and one cow. The calves' names are Spotty and Midget and the cow's name is Flora. We have a little dog and its name is Bum. My brother and I get the cows every night. I wash the dishes every morning. My brother and I walk two miles and a half to school. We have 11 milch cows and 13 calves. I like to milk, but mama won't let me. I will write again to the Corner.—Ellen Selun, Wilson Creek, Wash.

Across the Lake to Pick Berries.

Dear Aunt Nellie. I think the Corner is growing fast. I went to Sunday school yesterday. I white to Evelyn Willey and she writes to the Corner, too. I had a long ride over the lake to pick berries. There was mama, papa and a man that works here, besides me. My little brother is eating his breakfast now.—Elzina Rogers, Arlington, Wash.

Welcome to Our New Cousin, Mabel.

Dear Aunt Nellie: I like to read the letters of the Children's Corner very much but I have never written before. I live on Lincoln creek, 12 miles from Centralia. I am 11 years old and will be in the seventh grade. We have 14 cows and six horses. We have quite a few chickens and pigs. I like to go swimming very much and go often.—Mabel Kosola, Rochester, Wash.

Ups and Downs of a Bunch Grass Boy

(Continued from page eighteen.)

otes, every one bred in the purple, possessing courage, fleetness, daring, cunning, and the ability to discuss their adventures and frustrated hopes in the language of human beings.

All went well till the mountain lion, gaunt, bony, starving, with long, sharp teeth and softly padding feet and yellow, glaring eyes, found his way into the hidden coyote nation, and signalized his arrival by poking his big, catlike head into the coyote den wherein lurked Moses and the younger fry of his generation, whom the mountain lion sought to devour, but could not reach because the hole was too small to admit his sinewy body.

It was the reign of terror following the arrival of this tawny interloper that ended my first chapter. My next chapter developed a cunningly laid plan which the coyote Moses laid to rid the land of the enemy. All the young, daring coyotes sped forth and returned with chickens. They piled the lurking place of the mountain lion high with chickens, being sure not to pull out any of the chicken feathers. The mountain lion ravenously gulped down one chicken after another, feathers and all; and eventually filled himself so full of feathers that his sides stuck out with the plumpness of feather beds; and the feathers made him sick.

When thus he was sick and torpid, a hundred of the coyote warriors assailed him, and with some loss of their own number, pulled him to bits, each of the warriors taking a bit of his tawny hide for a trophy. I told of this battle in terms so graphic that goose bumps tingled over me while I wrote.

Other adventures in coyote-land followed; and I adopted rather unique means of getting the "material" for these adventure stories. That summer I was in a battle with the coyotes to keep them away from the chickens I was trying to raise. Whenever a coyote raided my hen-yard and got away with a prize, I told triumphantly of it in the coyote's own boastful language. I realize now that I was influenced a good deal by Cooper's Leather Stocking Tales, several of which I had read. My coyotes spoke in the language of Cooper's Indian heroes.

That summer I adopted may expedients to outwit the coyotes, but they generally outwitted me. Back in coyote-land, at the coyote-council I had the young coyotes tell of these exploits in language flowery with eloquence of the Old South—the old-time magnolia and cotton blossom kind, which I had picked up somewhere in my boyhood readings.

A rifle came into my possession that summer; and then I began to get the better of the coyotes. Some of them I wounded and they galloped off on three legs. Once my bullet clipped a spray of fur from the back of a coyote and he made off uncertainly, with his back sagging and hind legs numb. Others I shot dead, or mortally wounded them.

These chapters of my coyote book were dark and graphic. There was an old Doctor Coyote who could set broken legs, and staunch bleeding wounds. There was a preacher Coyote who could revive failing courage, and restore waning faith in the bliss of the Happy Hunting Ground—I borrowed the Indians' idea of Heaven—to which all coyotes would go who died in battle. There was a beautiful Miss Coyote, whom all the handsome coyote warriors courted. The number of chicken feathers about a warrior-coyotes' "lodge" was the index of this coyote maiden's esteem of any of her four-footed suitors. To get more chicken feathers, saying nothing of more chicken meat, the warriors would do all kinds of daredevil tricks.

One day I rode my buckskin cayuse after a coyote till I was right at the heels of the tiring creature. Just as I had the animal nearly under my pony's hoofs, those flying hoofs went astray into a grass-screened badger hole. My flying cayuse turned a couple of somersaults and rolled over on his side. For me, all was darkness, with sprays of shooting lights in my eyes and a weight of tons on top of me for an age. Light and senses returned; and I realized that my pony had merely stepped into a badger hole and rolled over me. The coyote was gone.

That, I suppose, would have made a thrilling chapter, told from the viewpoint of the warrior-coyote who had cungingly led my pony and me into that very badger hole; but when I mounted the stool and reached under the coffee pot for my thick, 10-cent writing tablet, the tablet was gone—all because I had not heeded, when mother told me to get some kindling! So the chapter was never written, and the cooyte book was not finished.

Rewards We have some valuable prizes we are offering to our readers as rewards for securing their neighbors as subscribers to our paper. Write the Prize Editor, care of the Washington Farmer, Review building, Spokane, Wash.

For You

We are offering our readers some choice articles that we have selected as special prizes to be given ABSOLUTELY FREE for securing subscriptions to our paper.

Here is a list of a few of the items we picked out.

Mark an "X" in the square for the prize you wish and sign your name and address. We will tell you how easily you can get it.

- ☐ King Air Rifle
- ☐ Ladies' Auto Veil
- ☐ Birth Stone Ring
- ☐ Pocket Flash Light
- ☐ American Fing
- ☐ Ladies' Needle Case
- ☐ Premo Junior Kodak
- ☐ Boy Scout Knife
- ☐ Unbreakable Doll
- ☐ Pocket Ben Watch
- ☐ Coaster Wagon
- ☐ Harmonica

If you don't find what you want in this list write it in the following space:
Remarks .....

FILL THIS BLANK IN NOW.

....., 1917.

The Washington Farmer,
Spokane, Wash.

Gentlemen:

Please send me full particulars of your free prize offers for securing subscriptions to your paper.

Name .....

Postoffice .....

R. F. D. .... Box.... State.....

News for Breeders

Oscar Bleckschmidt of Oakville, Wash., last spring purchased from H. C. Crandall of Michigan a young O. I. C. boar, a son of Schoolmaster, to take the place of a very fine boar, also bought from Mr. Crandall. Mr. Bleckschmidt has a good little herd. He feeds out a good many and says that at present prices if people don't want them for breeding stock there is money in them for market hogs, even with the high price of feed. For fattening he feeds mostly straight barley, with a little milk. H. A.

Registered Jersey Sale.

Owing to the fact that Ivan, son of Frank Laughary, Monmouth, Ore., has joined the army and is now in the officers' training camp at San Francisco, Mr. Laughary has decided to sell his Jersey herd. G. G. Hewitt, who is a near neighbor, will add 15 head, making close to 60 head in the sale. This makes a very important sale, both to Jersey fanciers and to dairymen desiring to improve their herds during these times of high prices of feed, when only cows of large production and low cost of maintenance are profitable.

Mr. Laughary will positively sell every animal except two cows and their offspring. Every cow in the sale belonging to both Mr. Laughary and Mr. Hewitt, that has been in milk a year, has a Register of Merit record and the young stock have Register of Merit sires and dams either with records or on test—some of them quite large records. Two very fine Register of Merit bulls will also be sold—bulls whose daughters make their records mostly with first calves. These are Octavia's Duke and Golden Fern's Noble Jr. There will surely be a strong demand for each of them.

The sale will be held on Mr. Laughary's farm, seven miles from Monmouth, October 15, with Colonel J. W. Hughes as auctioneer. Catalogues will soon be ready and announcement of means of transportation, etc., will be made in good time. H. A.

HOLSTEINS STAND TEST

J. F. Peerenboom of Roy, Ore., in July had four of his Holsteins on official test, two of them 2 year olds, one 3 year old and one a matured cow. The tests were made under ordinary conditions, with no special care. The cows were, however, milked three times a day. Lady Hengerveld Annie, one of the 2 year olds, produced 314.3 pounds of milk and 13.01 pounds of fat, or 16.26 pounds of butter, which was the best record, age considered, though not as large as Columbia Rose DeKol, the mature cow.

Last April Mr. Peerenboom purchased the fine young bull Woodmont Duke Netherland, from Woodmont farm of New York. His dam has not been tested, but outside of that he is over 30 pound breeding on both sides. Mr. Peerenboom's herd is small and all will be given official tests.

Breeders' Department

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have for sale extra good spring pigs. Correspondence solicited.

J. M. ROYSTON EST., C. ROYSTON, MGR. Payette or Fruitland, Idaho.

BIG TYPE POLAND CHINAS

June and July pigs for sale, either sex, eligible to registration, at farmers' prices.

E. E. STREITZ, Richfield, Idaho.

DUROC-JERSEY SWINE

Duroc Jersey Swine

Pigs of various ages and both sexes. The finest breeding, perfect condition. Also one Fall Boar, sire King of Bonniehome, grandsire, the famous King the Col. Satisfaction or your money back.

CHARLES A. BRAND, Wilbur, Ore.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR JAMES N. PRICE, Pullman, Wash.

HOLSTEIN CATTLE

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

WAYSIDE RANCH HOLSTEINS.

Am offering 13 heifers for sale, sired by my herd bull Buffalo Duke Doede, a half brother to the world's champion cow. An opportunity of a life time to the man wanting No. 1 stuff.

H. H. STIVER. Buhl, Idaho.

HOLSTEIN BULL CALVES.

One from 20-lb. cow, another from a 16-lb. jr. 2-yr.-old. Herd headed by Model Fobes of Idaho, whose four nearest dams average 27.25 lbs. butter 7 days.

EARL BEEBE, R. F. D. 2, Rupert, Idaho.

YOUNG HOLSTEIN BULLS

Ready for light service; sired by Wapato Bellevewere Colantha Boy and out of heavy milking dams.

E. P. SAWTELL. Independence, Wash.

SHORTHORN CATTLE

Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN, Wapato, Wash.

Hercules Shorthorns

For particulars write

DAY & ROTHROCK

Exchange Bank Bldg.

Spokane, Washington.

Shorthorn Cattle

SHIRE HORSES.

DR. G. E. NOBLE, Boise, Idaho.

HEREFORD CATTLE

Highland Stock F[illegible]

offes for sale 10 yearling bulls and eight two-year-old Polled heifers, sired by Polled Premier and bred to herd sires Majestic Fairfax 437657 by Corrector Fairfax and Western Fairfax 461126 by Fairfax 16th.

PLATT BROS., Props., Roy Jacobs, Herdsman, Genesee, Idaho.

GUERNSEY CATTLE

FOR SALE.

3-year-old purebred Guernsey bull. Registered No. 35942 American Guernsey Cattle Club.
Sire—Imp. Prince of Venelle Farm (22481.)
Dam—Imp. Gay Lass du Braye (34312.)
Parents—Pure Guernsey Island blood.
Name of bull—Sir John of Mountview.
Daughters all high merited animals.
Price of bull—$250.00 if sold before Oct. 1, 1917. Inquire of

WM. OGG, Owner, Redmond, Ore.

JERSEY CATTLE

Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.

WAIKIKI FARM, R. 7, Spokane, Wash.

SHEEP

REGISTERED COTSWOLD BUCKS.

A few February and March lambs.
TWO YOUNG GUERNSEY BULLS.

B. F. Baughman, Redmond, Ore.

SHROPSHIRE RAMS

Good ones, some from our imported Cooper ram.

GEO. ARMSTRONG, Corvallis, Ore.

RAMS

Hampshire and Southdown. Also large Yorkshire pigs. All stock registered.

J. G. S. HUBBORD, Monroe, Wash.

DOGS

Fox and Wolf Hounds



of the best English strains in America; forty years' experience in breeding these fine hounds for my own sport and protection of sheep, hogs and poultry. Send stamp for catalog.

T. B. HUDSPETH.
Sibley, Jackson County, Missouri.

In answering advertisements don't fail to mention this paper.

Register of Merit Jerseys

Public Auction

Monmouth, Oregon, Oct. 15, 1917

60 registered Jerseys, including herd bulls, cows, bred heifers and younger calves, both sexes. Every animal (excepting two beautiful heifers whose dam has not been tested) is either a Register of Merit animal or from R. of M. parents. This sale is a dispersal of the herd of Frank Loughary and a consignment from G. G. Hewitt. Both herds have furnished many prize winners and have been leaders in production. Sale to be held on Luckiamute Farm, Frank Loughary, Prop. Full details will be given later. Catalog will be issued. Send name to E. A. Rhoten, Sale Manager, Salem, Oregon, and one will be mailed when published.

Frank Loughary
G. G. Hewitt } Proprietors

Col. J. W. Hughes, Auctioneer.

A GREAT AUCTION SALE AWAITS YOU

150 HEAD Selected From Two of the GREAT HERDS of the West, Viz., HAZELWOOD STOCK FARMS, Spokane, Wash., and CARNATION STOCK FARM, Seattle, Wash.

The sale takes place in the Carnation Sales Pavilion, at KENT, WASH. (the most central shipping station on Puget Sound, between Seattle and Tacoma), on October 3 and 4, at 10:30 each morning.

Each HERD Consigns 75 Head of Selected Cattle

The HAZELWOOD IS THE WORLD'S GREATEST SHOW HERD, having made a clean sweep at the CHICAGO INTERNATIONAL AND THE WATERLOO CATTLE CONGRESS and the great fairs of the west. The consignment of this herd includes the greater portion of this splendid show herd.

This sale affords a LIFE TIME OPPORTUNITY to the Holstein enthusiast.

GEORGE A. GUE, Sales Manager. North Yakima, Wash.
JOHN L. SMITH, Prop. Hazelwood Stock Farm. Route 1, Spokane, Wash.

GEORGE A. GUE AND HARRY C. CRANKE, Auctioneers.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Sept. 8.—Broad demand for corn resulted today from cold weather that increased danger of crop maturity being too long delayed to escape killing frost. The market closed unsettled, 1 to 1 3-8 net higher, at $155-8 to $153-4; December and May, $113-4 to $117-8. Oats bulged 1-2 to 7-8@c, and provisions 2 to 17c.

Investors purchased corn freely and shorts also covered on a large scale.

Active call from the seaboard did a good deal to lift the value of oats.

Protests against the lowness of the basic price of wheat as fixed for the Chicago market brought an answer today from the government food administrator. President Griffin of the board of trade said the communication was being analyzed by the transportation committee of the board. Receipts here continued scanty and were absorbed by millers.

Provisions rose in response to the government report showing a reduction of more than 5,000,000 hogs on farms as compared with a year ago.

Live Stock Quotations.

At Omaha.

OMAHA, Sept. 8.—Hogs—Receipts, 1000; market 50c higher. Heavy, $16.85@17.50; mixed, $17@17.50; light, $17.35@18; pigs, $15.50@16.50; bulk of sales, $17@17.50.

Cattle—Receipts, 300; market steady. Native steers, $10.50@16.55; cows and heifers, $7@10.50; western steers, $9@13.50; Texas steers, $7.50@10.50; cows and heifers, $6.50@9; canners, $5.25@6.75; stockers and feeders, $6@12.50; calves, $8@12; bulls, stags, etc., $5.50@8.

Sheep—Receipts, 300; market steady. Yearlings, $11.50@12.50; wethers, $10.50@12; ewes, $9.75@10.75; lambs, $16.25@17.

At Chicago.

CHICAGO, Sept. 8.—Hogs—Receipts, 20,000; strong, 10c above yesterday's average. Bulk, $17@18.15; light, $16.65@18.35; mixed, $16.55@18.50; heavy, $16.45@18.45; rough, $16.45@16.70; pigs, $11.75@16.35.

Cattle—Receipts, 2000; unsettled. Native beef cattle, $7.50@17, western steers, $6.50@13.25; stockers and feeders, $6@9.50; cows and heifers, $4.65@12.85; calves, $12@16.

Sheep—Receipts, 10,000; unsettled. Wethers, $8.50@12; lambs, $11.40@17.60.

At Portland.

PORTLAND, Ore., Sept. 8.—Cattle—Receipts, 440. Best beef steers, $8.25@8.75; good beef steers, $7.25@8.25; best beef cows, $6.75@7.25; ordinary to good cows, $3.75@6.50; best heifers, $7@7.75; bulls, $4.50@6.50, calves, $7@9.50; stockers and feeders steers, $4.50@7.

Hogs—Steady. Prime light, $16.35@16.50; prime heavy, $16.25@16.35; pigs, $14@15.50; bulk, $16.

Sheep—Steady; no receipts. Western lambs, $13@13.50; valley lambs, $11.75@12.50; yearlings, $10@10.50; wethers, $9.75@10.50; ewes, $8@8.50.

Spokane Stock Yards Saturday.

Hogs—Receipts, 21; market steady. Prime light, $17.25@17.50; prime heavy, $17.25@17.50; pigs and skips, $15.50@16.75, stockers and feeders, $12@14; bulk of sales, $17.50.

Cattle—Receipts, 13; market steady. Prime light steers, $8@8.25; prime heavy steers, $8.25@8.50; good steers, $7.25@8; ordinary to fair, $5.25@6; best cows, $6.25@7, good cows, $5.25@6; common cows, $4@5; best heifers, $6.50@7; bulls, $5@6.50; calves, $7.50@9; stockers and feeders, $5@6.75.

Sheep—Receipts, 2546; steady. Prime lambs, $12.50@13.25; good lambs, $11.25@11.75; prime yearlings, $9.75@10.25, prime wethers, $9.50@10.25; best mutton ewes, $6.50@8.

Portland Market.

PORTLAND, Ore., Sept. 10.—Not until definite word comes from Washington as to the wheat price that will apply in this territory will there be any selling of wheat by farmers, according to the views of the trade here. The mills are badly in need of wheat and offers were out at the close of the week on the $1.90 basis in the country, but no wheat was forthcoming. The committee appointed at the wheat growers' meeting in this city Friday expects to start for Washington immediately, having wired asking for an appointment with the president, and they are in hope some definite agreement may be reached before the week is over. In the meantime, until the matter is settled, one way or another the mills can not buy wheat.

The oats and barley markets are as quiet as wheat, as there are practically no sellers to meet the increasing demand. There is not likely to be any speculation in these lines with the indications of a closer government supervision.

High prices have cut down the consumption of butter in this city about one-half, according to jobbers' estimates, but the supply is so short that prices are tending upward.

Eggs are also firmer in spite of reduced demand. Receipts are very small and storage stock is being used in increased quantities.

An advance in cheese was expected at the close of the week, but was staved off by the heavy rainfall, which should soon improve the pastures in all the cheese making districts.

Poultry and country dressed meats are higher owing to the very small receipts.

A short peach season is looked for by jobbers and lower prices are not expected. The current quotation is 75 cents to $1, and the supply is inadequate even at this high price.

The demand for hops is strong with no sellers of the new crop. Last year's growth is now quoted at 35 cents.

Calf skins are lower this week, at 25 cents. The hide list otherwise is unchanged.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $47.50 per ton.

Mill stuffs—Bran, $37 per ton; shorts $40.

Barley—No. 1 feed, $45; brewing, $47; rolled, $55@57.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch, case counts, 38c per dozen; candled, 40@43c.

Poultry—Hens, 16 1-2@18c; ducks, 13@18c; turkeys, live, 20@22c; geese, 10@11c.

Butter—City creamery, prints, 47@48c per pound; cubes, extras, 45c.

Cheese—Tillamook triplets, 24c; young Americas, 25c.

Dressed meats — Veal, 15 1-2@16c; pork, 22@22 1-2c.

Hops—1916, 25c; contracts, 35c.

Potatoes—New, 2 1-2@2 3-4c per pound.

Wool—Eastern Oregon, fine; 52@61c; coarse, 60c; valley, 58@60c.

Beans — California small white, 15 1-2c; large white, 15c per pound.

Spokane Market.

The wholesale prices quoted in the list below are not the prics paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $2.50 cwt; sweet potatoes, $4.25 cwt.

Apples—New Washington apples, $1 20-lb box; $1.75 50-lb box.

Butter—Blanchard cartons, 47c lb; Medo-Maid, 47c lb; Cascade, 47c lb; Gold Leaf, 47c lb; Better Butter, 47c lb; Attalia, 47c lb; Diadem, 47c lb; Hazelwood, 47c lb; Solid Pack, 47c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25@26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 29c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $12.50; fresh eastern eggs, $12.50 case.

Live Poultry—Hens, 13c lb; broilers, 20c lb; old roosters, 8c; ducks, 12½c lb; geese, 10c; turkeys, 20@22c.

Dressed Poultry—Hens, 18c lb; broilers, 28c lb; old roosters, 12½c; ducks, 18@20c; geese, 16c; turkeys, 25@30c.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

Seattle Wheat.

SEATTLE, Wash., Sept. 8.—Practically refusing bids of $1.87 in the country for 58-pound graded No. 2 soft white or bluestem farmers of eastern Washington are holding out for higher prices. The unsettled condition of the market and the fact that it is not yet known what wheat is really worth, country or Coast basis, is deterring growers from showing any interest at this time. A few farmers are standing out for $3, as reported by country buyers for Puget Sound mills.

Farmers are stating that every bushel of wheat raised this year cost them $1, due to the increased cost of labor and materials, and that the 87 cents additional offered by millers is not a satisfactory margin under existing conditions.

There have been no quotations this week on the merchants exchange for wheat, due to the uncertainty of what it is worth. There is considerable difference of opinion as to how much of the Washington crop will run 58 pounds and how much 56 pounds to the bushel. The premium of 5 cents per bushel for No. 1 over No. 2, and dockage of 3 cents on No. 3 is creating much confusion. Millers and wheat buyers here estimate that 25 per cent of the Washingon crop will grade under 55 pounds to the bushel and will be sold on sample for feed. On the estimate of 45,000,000 bushels for the three northwestern states only 33,500,000 bushels will be left for milling.

Soft wheat patent flour is being quoted at $11.10 per barrel for bakers and $11.25 for domestic patents. Montana hard wheat patents today are $11.25. Eastern hard wheat flour manufacturers have stated that these quotations will stand for 30 days, and perhaps to the end of the 1917 crop year. It is generally believed that farmers in October will sell on the basis of $1.87.

Millers of Puget Sound are opposing the proposed coast terminal rate on wheat, asserting that since the all-water and Liverpool basis of normal times has gone and the all-rail haul to Chicago must be considered they would be shut out effectually from shipping any flour into eastern domestic territory. The flour and wheat trade, with the prices of each, are now regarded as more inseparably linked than ever before.

Millers are making all possible efforts to induce farmers to sell in order that they can have assurances of sufficient wheat for their season's grinding to establish the quality, [illegible] on a few scattered carloads.

Bid and asked prices on 'change for the weekend were as follows:

	Prompt.
Barley	48.00@49.50
Oats	47.00@50.00
Timothy	27.00@29.00
Alfalfa	22.00@24.00
Straw	8.00@10.00

The Wool Market.

BOSTON, Sept. 7.—The Commercial Bulletin will say tomorrow:

Trading, while irregular, has on the whole been of fair proportion in the local wool market this week, especially when government purchases of wool are considered. Prices were generally firm and particularly on good fleece wools. The mills in this country are finding civilian trade slow, but some new orders are being placed from time to time in military cloths.

Scoured basis:

Texas fine 12 months, $1.65@1.70; fine 8 months, $1.55@1.60.

California, northern, $1.70@1.75; middle county, $1.45@1.50; southern, $1.35@1.40.

Oregon, eastern No. 1 staple, $1.75@1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.55@1.60.

Territory fine staple, $1.80; half blood combing, $1.70@1.75; ⅜ blood combing, $1.40@1.45; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled: Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

Government Crop Report

A summary of the September crop report for the states of Oregon, Washington and Idaho, and for the United States, as compiled by the bureau of crop estimates (and transmitted through the weather bureau), U. S. department of agriculture, is as follows:

CROPS.	Oregon.	Washington.	Idaho.	United States.
Winter Wheat, bu., preliminary estimate	8,400,000	10,900,000	5,910,000	417,347,000
Production last year, December estimate..	13,340,000	18,285,000	8,256,000	481,744,000
Spring Wheat, bu., September 1 forecast	4,170,000	20,600,000	7,630,000	250,000,000
Production last year, December estimate..	6,210,000	19,350,000	6,815,000	158,142,000
Oats, bu., September 1 forecast	10,600,000	10,600,000	12,100,000	1,530,000,000
Production last year, December estimate..	17,280,000	14,300,000	13,330,000	1,251,992,000
Barley, bu., September 1 forecast	4,700,000	5,010,000	5,910,000	204,000,000
Production last year, December estimate..	5,390,000	6,814,000	7,410,000	180,927,000
Potatoes, bu., September 1 forecast	5,540,000	9,400,000	6,280,000	462,000,000
Production last year, December estimate..	8,250,000	9,900,000	4,050,000	285,437,000
All Hay, tons, preliminary estimate	1,810,000	1,810,000	2,340,000	92,000,000
Production last year, December estimate..	2,175,000	2,048,000	1,946,000	109,786,000
Apples, agricultural crop, barrels of 3 bu...				
September 1 forecast	1,110,000	.....	697,000	59,100,000
Production last year, December estimate..	1,285,000	.....	147,000	67,415,000
Apples, bu., comm'l crop, Sept. 1 forecast	.....	10,750,000	.....	63,900,000
Production last year, December estimate	.....	10,400,000	.....	77,100,000

PRICES.

The first price given below is the average on September 1 this year, and the second the average on September 1 last year.

Crops.	Oregon.	Washington.	Idaho.	United States.
Wheat, cents per bushel	214 and 113	215 and 115	196 and 113	209.7 and 131.2
Corn, cents per bushel	162 and 78	118 and	143 and 83	175.5 and 83.6
Oats, cents per bushel	74 and 43	78 and 43	74 and 44	61.7 and 43.1
Potatoes, cents per bushel	157 and 80	120 and 84	169 and 92	139.1 and 109.3
Hay, dollars per ton	15.10 and 9.80	17.10 and 11.70	15.40 and 8.60	13.68 and 10.42
Cotton, cents per pound	.....	.....	.....	33.4 and 14.6
Eggs, cents per dozen	34 and 28	41 and 30	36 and 24	33.3 and 23.3

Bumper Corn Crop

WASHINGTON, Sept. 7.—Better weather favored crops generally during August, and as a result larger yields were forecast today by the department of agriculture in its estimates based on conditions existing September 1.

In a summary of crop conditions, the crop-reporting board said:

"The great corn crop of 3,250,000,000 bushels promised on September 1, which is 123,000,000 bushels above any previous year, will be realized fully in the form of sound corn, only provided frost holds off unusually late. A good, big crop of sound corn is promised if killing frost in the main belt does not come earlier than usual. The indicated outcome results from a big acreage rather than exceptional promise of yield per acre.

"The oats crop for 1917, promised and largely realized on September 1, is 1,533,000,000 bushels, within 6,000,000 bushels of the greatest previous crop. Conditions are reported 10 per cent above normal in Iowa and Missouri. In North Dakota, however, the crop promises only two-fifths, and in Montana less than half of a normal yield, while it is less than two-thirds in Washington and Oregon.

"The spring wheat report on September 1 promises 250,000,000 bushels, 14,000,000 bushels more than on August 1, early threshings having shown heavier yield than anticipated in many sections, particularly in Minnesota, South Dakota and Iowa. The conditions in North Dakota, as well as Montana, Washington and Oregon, remain poor from the effect of drouth."

Other details of the report follow:

Spring wheat, condition 71.1 per cent of a normal; indicated yield, 13.1 bushels per acre.

All wheat, acre yield, 14.3.

Corn, condition, 76.7; yield, 26.8; estimated crop, 3,248,000,000 bushels.

Oats, condition, 90.4; yield, 35.5.

Barley, condition, 76.3; yield, 24.3.

Buckwheat, condition, 90.2; yield, 21.0.

White potatoes, condition, 82.7; yield, 106.2.

Sweet potatoes, condition, 85.7; yield, 97.5.

Tobacco, condition, 84.5; yield, 861.9.

Flax, condition, 50.2; yield, 5.7.

Rice, condition, 78.4; yield, 33.2.

Hay, yield, 1.36.

Sugar beets, condition, 91.7; yield, 10.82.

Seattle Market.

SEATTLE, Sept. 8.—Peaches are selling at 70@80c per case. Next week is to be the big week in volume and the minimum for prices. Jobbers say the market can not get much lower. Approximately one-half the peaches now on this market came on consignment.

The bottom has dropped out of the pear market, and it is manifestly a buyers' proposition. Good fruit is selling at $1, although the greens bring a little more, due to the fact that they will keep. The break in the eastern market is responsible for the decline here.

Receipts of pullet eggs, twice the number that arrived at this time last year, has pressed home to jobbers that poulterers are not going out of the business because of the high prices of feed, as threatened earlier in the season. In fact, as shown by the volume for August and September to date, poultry raising is sharply increasing. While spring chickens are pretty well cleaned up, the supply of small pullet eggs is overcoming the high records of the same month last year. Jobbers are paying 36c for "pewees," or the first lay of young chickens, and 36c for pullets.

The rains of the last two days have had the effect of easing futures of butter, although there have been no changes in quotations. The direct benefit from the moisture in increased grass feed and production will not be felt for 30 days, but the immediate effect has been to take some of the stiffness out of the market and restore in a measure the hope that the peak has been reached.

There is no activity in cheese. Jobbers are unable to recall the time when cheese was used as little as a substitute for high priced beef and pork as at present.

Indiscriminate buying by commission houses, oversupply by brokers, who have been crowded out of the trade temporarily and purchases f. o. b. by public market agencies have combined to demoralize the cantaloup market for the week-end and prices have fallen to $1.50 for good eastern Washington standards. The record number of buying and shipping avenues for this city has now been established.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 42@43c per dozen; eastern Washington, Idaho and Oregon, 40c per dozen.

Poultry—Live hens, fat, over 4 lbs., 19@20c per lb.; 2 lbs. and under, 15@17c; old roosters, 11c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 10c per lb.; springs, live, 28c per lb.

Butterfat, 49c per lb.; dairy butter, 33c.

Beef—Buying prices: Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c; heifers, 6@8c per lb.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 14@16c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 19c per lb.; salt kip, 19c per lb.; salted calf, 30c per lb.; green hides, 16c per lb.; salted bulls, 16c per lb.; dry hides (short trim), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 12½c per lb.; dry butcher full wool sheep pelts, 26@28c per lb.; green calf, 30c.

Interstate Fair Awards

(Continued from page sixteen.)

conner Pontiac Bess, J. H. Hulbert; 3. E. T. 124, Carnation farm; 4. Laconner Pontiac Princess, J. H. Hulbert.

Heifer, senior calf—1. Maude Walker Pieterje, Carnation farm; 2. Laconner Pontiac Winnie, J. H. Hulbert; 3. Carnation Skylark Segis, Carnation farm; 4. Laconner Pontias Netherland Girl, J. H. Hulbert; 5. Carnation Leda Hartog, Carnation farm.

Heifer, junior calf—1. Laconner Pontiac Grant, J. H. Hulbert, also junior championship; 2. Abbe Kirk Segis Pauline, Carnation farm; 3. Queen Tsussie Segis, Carnation farm; 4. Laconner Pontiac Lady Netherland, J. H. Hulbert; 5. Carnation Matador Hartog, Carnation farm.

Graded herd—1. One entry, Carnation farm; 2. One entry, J. H. Hulbert; 3. One entry, Carnation farm.

Exhibitors' young herd—1. One entry, J. H. Hulbert; 2. and 3. Two entries, Carnation farm.

Breeders' calf herd—1. One entry, J. H. Hulbert; 2. One entry, Carnation farm.

Get of sire—1. One entry, Carnation farm; 2. One entry, J. H. Hulbert; 3. One entry, Carnation farm; 4. One entry, H. Hulbert.

Produce of cow—1. One entry, Carnation farm.

Jerseys, Including Polled.

Five exhibitors won prizes with their Jerseys, the following awards being made to Clifford Reid of Portland, Ore., Silver Birch farm of Newport, Wash., Waikiki farm of Spokane, Wash., Floyd Polmeteer of Spokane, Wash., and B. E. Smead of Opportunity, Wash.:

Bull, 3 years old and over—1. Onota's Catillion Boy, Clifford Reid. 2. Violet's Noble Fern, Clifford Reid. 3. Jolly Valentine Lad, Silver Birch farm.

Bull, 1 year old and under 2—1. Model's Pilot of Waikiki, Waikiki farm. 2. Owlet's Jolly Lad, Waikiki farm. 3. Trilby's Count of Waikiki, Waikiki farm. 4. Fussy's Fern's Noble, 9, Clifford Reid. 5. Glen Tana Golden Prince, Floyd Polmeteer. 6. Fussy's Fern's Noble Boy, Clifford Reid. 7. Valentine's Oxford, Silver Birch farm.

Bull, senior calf—1. Catillion Boy's Premier, Clifford Reid. 2. Alberta's Count of Waikiki, Waikiki farm. 3. Valentine's Noble Lad, Silver Birch farm. 4. Noble Catillion of Reid farm, Clifford Reid.

Bull, junior calf—1. Fern's Carnation Fern, Clifford Reid. 2. Lucy's Sultan of Waikiki, Waikiki farm. 3. Defender Marseil, B. E. Smead.

Cow, 4 years old or over—1. Genesta's Duchess, Waikiki farm. Also senior and grand championship. 2. Lady Trilby DuVal, Waikiki farm. 3. Maitland's Noble Maid, Clifford Reid. 4. Fern Lad's Delice, Waikiki farm. 5. Lady Lecq, Clifford Reid.

Cow, 3 years old and under 4—1. Onota's Lady, Clifford Reid. 2. Cowslip's Golden Begonia, Clifford Reid. 3. Waikiki Landseer Fern, Waikiki farm. 4. Waikiki's Golden Alberta, Waikiki farm.

Heifer, 2 years old and under 3—1. Waikiki's April Winnie, Waikiki farm. 2. Eminent's Wardress, Clifford Reid. 3. Waikiki's Noble Mary, Waikiki farm. 4. Fancy Little Duchess, Waikiki farm. 5. Cowslip's Financial Maid, Clifford Reid. 6. Lady May Dauphine, Floyd Polmeteer.

Heifer, senior yearling—1. Fussy's Fern Cowslip, Clifford Reid. Also junior champion. 2. Waikiki's Countess Ella, Waikiki farm. 3. Fussy's Fern Roseleaf, Clifford Reid.

Heifer, junior yearling—1. Fussy's Fern Lucy, Clifford Reid. 2. Owlet's Duchess of Waikiki, Waikiki farm. 3. Fussy's Fern Beauty, Clifford Reid. 4. Onota's Fairy Girl, Clifford Reid.

Heifer, senior calf—1. Onota's Eminent Wardress, Clifford Reid. 2. Pilot's Golden Kate, Waikiki Farm. 3. The Owl's Delice of Waikiki, Waikiki Farm. 4. Pilot's Fern of Waikiki, Waikiki farm. 5. Pilot's Golden Lassie, Waikiki farm. 6. Goldie's Catillion Beauty, Clifford Reid. 7. Onota's Golden Cowslip, Clifford Reid. 8. Valentine's Expectation, Silver Birch farm. 9. Pilot's Francess of Waikiki, Waikiki farm. 10. Jolly Sultana, Silver Birch farm. 11. Sillbirfa Belle Second. Silver Birch farm.

Heifer, junior calf—1. Pilot's Genesta of Waikiki, Waikiki farm. 2. Goldie's Princess, Clifford Reid. 3. Waikiki's Golden Pet, Waikiki farm. 4. Goldie's Onota, Clifford Reid.

Graded herd—1. One entry, Waikiki farm. 2 and 3. Two entries, Clifford Reid.

Exhibitors' young herd—1. One entry, Clifford Reid. 2. One entry, Waikiki farm. 3. One entry, Clifford Reid.

Breeders' calf herd—1. One entry, Clifford Reid. 2. One entry, Waikiki farm.

Get of sire—1 and 2. Two entries, Waikiki farm. 3 and 4. Two entries, Clifford Reid.

Produce of cow—1 and 2. Two entries, Waikiki farm. 3. One entry, Clifford Reid.

Guernseys.

The Middledale Farms of Goshen, Ore., took everything in the Guernsey division, the following being the awards:

Bull, 1 year old and under 2—1. Sir Julian of Middledale; also senior and grand championship.

Bull, senior calf—1. Middledale Idlewise; 2. Middledale Red Raider.

Cow, 3 years old and under 4—1. Middledale Juliaetta; also senior and grand championship.

Heifer, 2 years old and under 3—1. Middledale Mabel.

Heifer, senior yearling—1. Middledale Nanna; 2. Eugenie D.

Heifer, junior yearling—1. Middledale Queen of the May; also grand championship; 2. Middledale Jewel.

Heifer, senior calf—1. Middledale September Morn; 2. Middledale Jitney.

Heifer, junior calf—1. Middledale Rosemund; also junior championship; 2. Middledale Golden May.

Ayrshires.

The Waikiki farm of Spokane was awarded all the premiums in the Ayrshire division, as follows:

Bull, 2 years old and under 3—1. Cavalier's Hover-o-Bleak.

Cow, 4 years old and over—1. Waikiki's Beauty I.; 2. Emperor's Lady Scott.

Heifer, 2 years old and under 3—1. White Muriel of South Farm; 2. Glengarry's Barcheski of Waikiki; 3. Glengarry's Lady Ellen of Waikiki.

Heifer, senior yearling—1. Glengarry's Scottish Queen.

Heifer, senior calf—1. Glengarry's Beauty of Waikiki.

Heifer, junior calf—1. Cavalier's First Lady.

Want Ads

HELP WANTED—MALE 3

SALESMEN WANTED—OWING TO DRAFT and enlistment we have a few well-worked territories open and will be pleased to hear from interested persons. Applicant must be exempt from draft. McConnon & Company, Dept. J, Winona, Minn.

AGENTS—WANTED 9

AGENTS—IMMENSE PROFITS EASILY made selling flexible metallic sign letters to stores and offices. Right opportunity for live wires. U. S. Sign Co., S217 Lincoln st.

SALESMEN WANTED, TO SELL OUR choice nursery stock. Write for particulars. Donald Nursery Co., Donald, Ore.

MAN TO WEAR FINE SUIT, ACT AS agent; big pay; easy work. Banner Tailoring Co., Dept. 738, Chicago.

EDUCATIONAL 45

POSITIONS GUARANTEED GRADUATES OF BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog free.

GONZAGA UNIVERSITY, SPOKANE—Boarding and day school. Write for cats.

TEACHERS' AGENCIES 46

VACANCIES FOR TEACHERS IN ALL the western states. Write us today. Clark Teachers' Agency, 411-412 Chamber of Commerce bldg., Spokane, Washington.

SCHOOL CLERKS: WIRE OUR EXPENSE. Hazard Teachers' Agcy., Spokane.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Notice advance in prices.

Largest factory in the west selling direct from mill to consumer.

We sell anybody, ship anywhere and guarantee safe delivery.

Send for our large illustrated catalog No. 27, mailed postpaid, without charge, on request.

5 cross panel doors $1.92
Cottage front glass doors $3.50
Cottage windows; large bottom glass, 40x40; transom glass, 40x16 ..... $4.05
Spruce flour bins, 16x26x16 ..... $1.50
Screen doors, 2-8x6-8, heavy galv. wire $1.50

See our prices on Frames, Moldings, Millwork, Builders' Hardware, Prepared Roofing, Plaster Board, etc.

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1943 FIRST AVE. SO., SEATTLE, WN

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave. So., Seattle, Wash.

1 RUMELY OIL-PULL TRACTOR.
1 six-gang 14-inch plow outfit.
1 Minneapolis separator.
This outfit is in excellent shape. Price $3600; original cost $5600. Write to Mr. Patterson, 1000 Pike st., Seattle.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

LUMBER, SHINGLES, MILLWORK. SAVE money by getting your building material direct from the mill. Let us quote you delivered prices. W. W. Wells Co., Box 1010F, Everett, Wash.

FOR SALE CHEAP—SHARPLES MILKing machine, second hand, in good running order. O. Ingebright, Earlington Gardens. P. O. Box 1021, Renton.

MISCELLANEOUS WANTED 63

STRAINED HONEY WANTED. WRITE US the quantity you have to offer. Commercial Creamery Co., Spokane, Wn.

HONEY WANTED—IF YOU RAISE honey to sell, write to J. B. Chaney, City Market, Spokane.

MACHINERY—FOR SALE 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS,
Carried in Stock by
HIGGINS MACHINERY COMPANY,
312 1st Ave. So., Seattle. Write for Catalog.

PORTABLE WELL DRILLING AND PROSpecting, machinery, tools, cordage, contracting, well drilling. Keystone Driller Co., Spokane. Catg. H now ready.

AUTOMOBILES 114

AUTO TOPS, BUILT TO ORDER, AND repaired. N. Reeder, Dept. F, Spokane, Wn.

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Want Ads

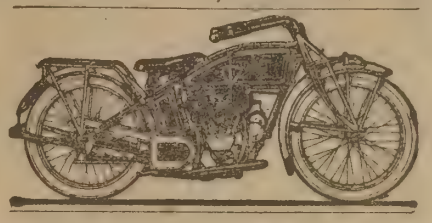
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ONE OF THE BEST LINES OF USED motorcycles in Pacific northwest; every machine a bargain. See us at 426 First ave., Spokane, during Interstate fair week. We will have the 18 model Excelsior on display at fairgrounds. Look us up and get acquainted.
INLAND MOTORCYCLE CO.

STOVE REPAIRING 126

MYER S. RUBENS STOVE & FURNACE REpair Works; welding. W1009 1st., Spokane.

PATENTS 150

WASH. (D. C.) PAT. ATTY. SEE AD IN Polk's. C. H. Crawford, Spokane.

LIVE STOCK 177

GUERNSEY BULL, SIRED BY MIDDLEdale Lad of the Langwater strain. Will be old enough for service this fall. Fine individual. F. J. Lewis, Banks, Ore.

FOR SALE—REG. GUERNSEY BULL 18 months old, and reg. Guernsey heifer, 14 months old, both from A. R. dams. Octav Voget, Hubbard, Ore.

PUREBRED KENTUCKY JACK, REGISTered; 1000 lbs. Ross Cogswell, Sharon, Wn.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

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80 ACRES FOR SALE.

30 acres cleared; new buildings; all fenced. Andrew Roppert, Winlock, Wn.

FARM LANDS—FOR SALE 651

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ALFALFA LANDS, under government irrigation; abundant water; low altitude; rail and water transportation to coast markets; good schools, good roads; products alfalfa, corn, cream, hogs, honey, fruits, vegetables; long growing season; unimproved land $30 to $60 per acre; improved $100 to $250. Write for further information and literature. Dodd & Knapp, Hermiston, Ore.

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Year after year for many years the thirty-five horsepower Overland has outsold, by a wide margin, all cars of such comfortable size.

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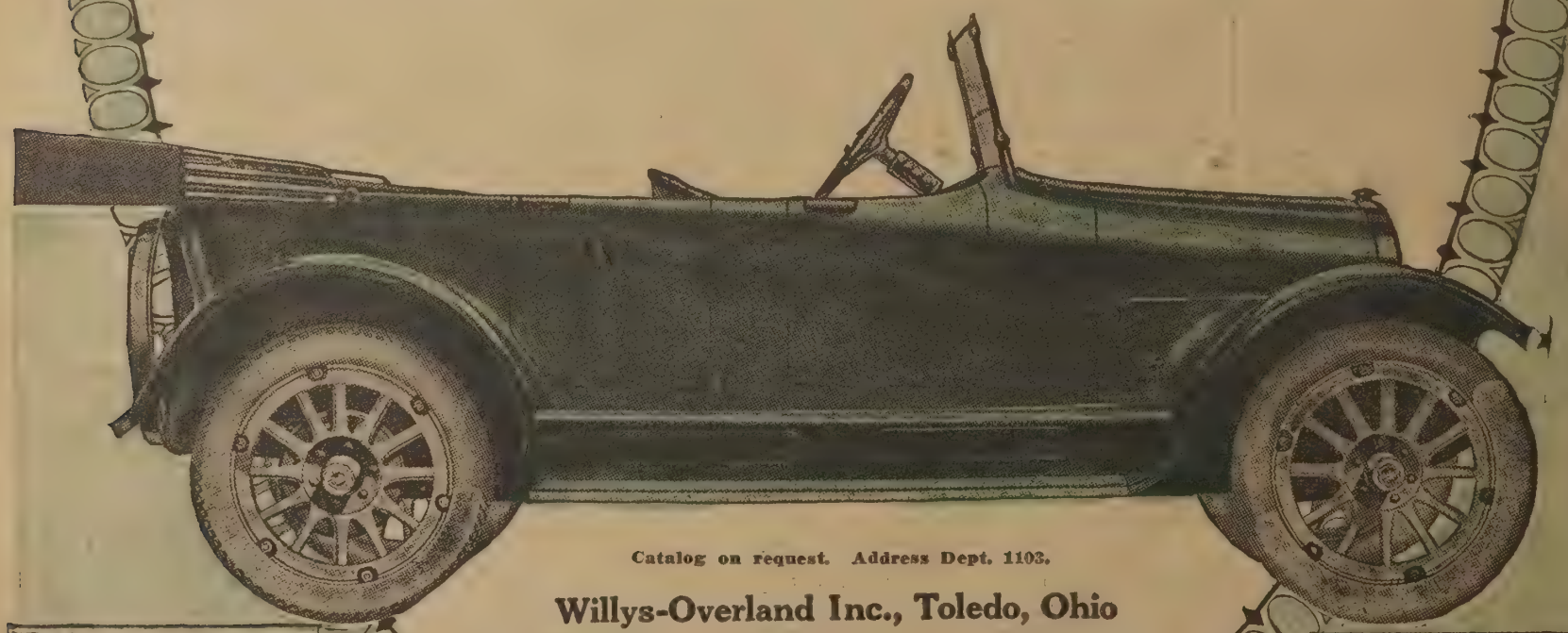
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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 38. SEPTEMBER 20, 1917. ** WEEKLY.

What Is a Principal Interior Primary Market?

Will Next Year's Two Dollar Minimum for Wheat Apply in Northwest or at Chicago? Now the Time for Farmers to Exert Their Influence.

It is not too early for farmers to begin to inquire what construction the national food administration will put upon the wording of the 1918 wheat price guarantee of the food control law. Will the guaranteed price be $2 a bushel here in the Pacific northwest, or only $2 for Chicago delivery, the growers here to be docked 30 cents for freight rate?

The wording of the law is somewhat vague, or at least it leaves much to the discretion of the food administration. Section 16 authorizes the president to fix the guaranteed prices and to prescribe regulations "in particular governing conditions of delivery and payment, and differences in price for the several standard grades in the principal primary markets of the United States, adopting No. 1 northern spring or its equivalent at the PRINCIPAL INTERIOR PRIMARY MARKETS as the basis." And—

"Thereupon, the government of the United States hereby guarantees every producer of wheat produced within the United States that, upon compliance by him with the regulations prescribed, he shall receive for any wheat produced in reliance upon this guarantee within the period, not exceeding 18 months, prescribed in the notice, a price not less than the guaranteed price therefor as fixed pursuant to this section. In such regulations the president shall prescribe the terms and conditions upon which any such producer shall be entitled to the benefits of such guarantee.

"The guaranteed prices for the several standard grades of wheat for the crop of 1918 shall be based upon No. 1 northern spring or its equivalent at not less than $2 per bushel at the PRINCIPAL INTERIOR PRIMARY MARKETS. This guarantee shall not be dependent upon the action of the president or said board under the first part of this section, but is hereby made absolute and shall be binding until May 1, 1919."

What is meant by the phrase: "Principal interior primary markets"? One would naturally suppose that such towns as Colfax, Davenport, Ritzville and Walla Walla in Washington; Moscow, Grangeville and Lewiston, Idaho, and Pendleton, Heppner, Eugene and Salem, Oregon, would fall within that classification. They are primary markets. Chicago is not a primary market, for primary means first or initial market. But the question is, what construction will the food administration put upon that term?

The price may not be less than $2. The president, under the law, may set the price at more than $2, but he can not set it at less. What will be his policy?

In Great Britain the government has just fixed grain prices for the 1917 harvest that are considerably above the government guarantee.

"Farmers generally will regard the new schedule of prices with satisfaction," says the Glasgow Herald, "although the balance of the scale may not be regarded as accurate, oats being, according to Scottish opinion at least, rather underpriced in proportion to wheat. The farmer's view of the new prices may be gathered from the fact that whereas he grew his wheat and oats under guarantees of 60s and 38s 6d respectively, on the weights specified, he may now receive 73s 6d and 44s 3d instead, with a slightly higher maximum arranged presumably for oats of a particularly good sample and a deduction prescribed for both wheat and oats not of the best class."

The British prices are based on measures of a "quarter," a quarter of wheat being fixed by law as 504 pounds, and of oats as 336 pounds. The British wheat grower is to receive $2.10 a bushel, 37 cents a bushel more for his wheat than the government had guaranteed him, and about $1.38 more per quarter of 336 pounds of oats.

Evidently the British policy aims at fair and liberal treatment of the farmer. His government finds it wise, from the national viewpoint, to give him a well rounded measure, thus expecting that he will be stimulated to renewed and extraordinary effort to increase the country's supplies of foodstuffs.

These facts should be drawn to the attention of the president by our northwestern senators and representatives, and they should be used now, in good season, against a possible repetition of the injustice laid upon our growers when they were deprived of base ports and basic markets for the wheat harvest of 1917.

Food Commission Will Fix No Meat Price

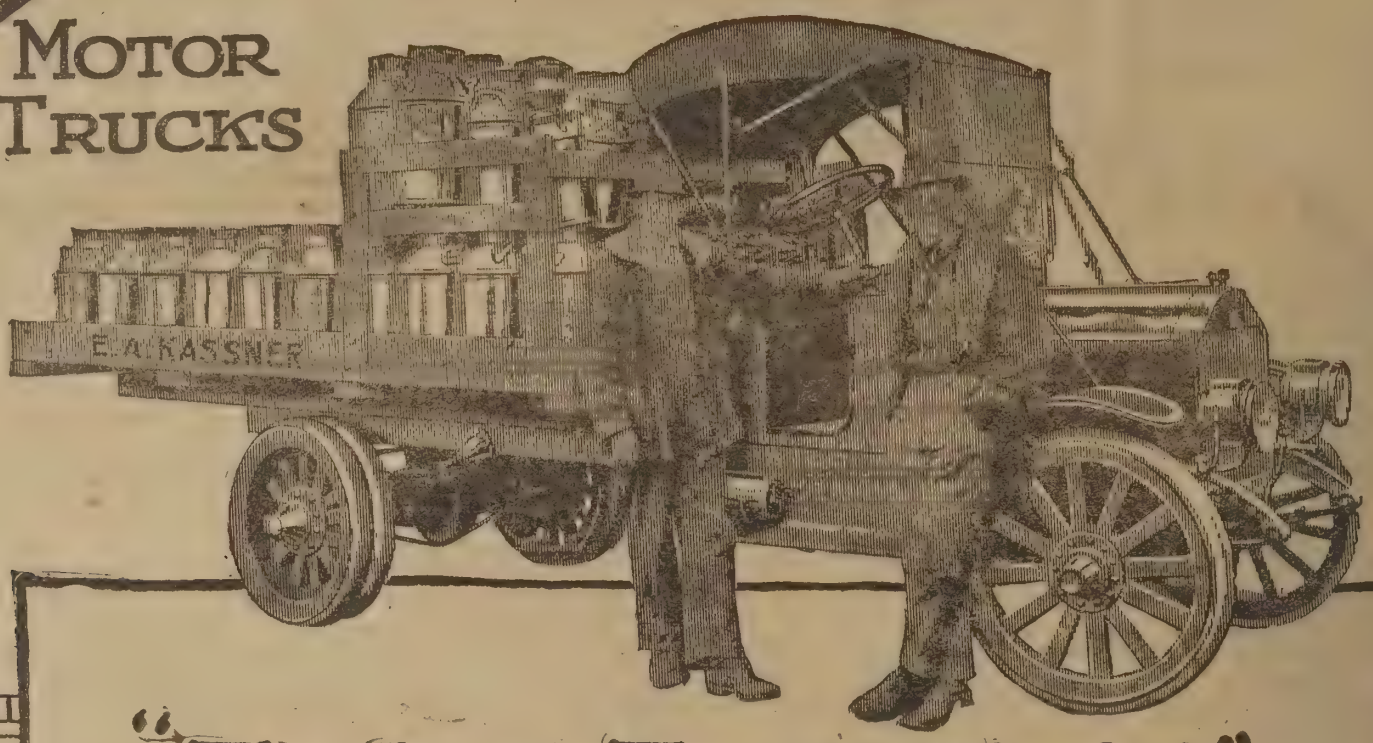
F. M. Rothrock Will Be Member of Committee to Increase Production of Meats.

It is not the intention of the national food administration to fix a price on meats. This is the word brought back to the northwest by Frank M. Rothrock, who has just returned from Washington, D. C., where he attended a meeting of representative live stock men called together by Herbert C. Hoover to discuss the production and conservation of meat animals. Mr. Rothrock has been appointed by Commissioner Hoover as one of five men to represent the sheep industry on a national committee of 25 who will work together for the increase of the country's meat production.

There is a serious live stock shortage, says Mr. Rothrock, after receiving the information available at the offices of the food commission in Washington, D. C. This is especially true in the case of hogs, but is true to some degree in all classes of stock. Strenuous effort will be made to increase the output as rapidly as possible.

In an Early Issue The Farmer Will Begin a Series of Articles by President O'Shea of the Spokane Farm Loan Bank. Watch for Them. They Will Be Instructive

Garford MOTOR TRUCKS



"The Best Truck Made!" —says E. A. Kassner

"Our 2-ton Garford Motor Truck has operated steadily for the last ten months, hauling milk to the Carnation Milk Company, at Kent, Washington.

"The distance covered by the truck each day is forty-one miles—handling about twelve tons of milk.

"IT TOOK SIX TEAMS TO ACCOMPLISH WHAT THIS TRUCK IS NOW DOING.

"I am extremely well pleased. It is my belief that anyone who contemplates buying a truck should give the Garford very serious consideration, as I consider it THE BEST TRUCK MADE IN THE UNITED STATES.

"The hauling is done over rough country roads. During certain periods of the year they are very bad—but at no time has our Garford been unable to cope with the situation."

— (Letter from E. A. Kassner, owner of the truck.)

That is not an isolated example of what *one* Garford Motor Truck is doing.

It's typical of what thousands of them are accomplishing. It's an index of what *you* may expect if *you* own one.

Your neighbors are using motor trucks at a *profit*. They are keeping their hauling systems up to the *same intensive standards* that they are following in the rest of their work.

And it is significant that in so many cases Garford Motor Trucks have been chosen for the hard, grinding, continuous work required of the modern farm truck.

A little study into Garford manufacturing methods and Garford specifications will show you *why* a Garford Motor Truck is the logical "buy" for *you*. We can fit your requirements with *just the right model.*

Write for free booklet—"Roads—Their Influence on Social and Economic Conditions."

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344 Burnside Street Portland, Oregon

The Garford Motor Truck Company, Lima, Ohio
Manufacturers of Motor Trucks of 1, 1½, 2, 3½, 5 and 6 ton capacity
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Distributors and Service Stations in all Large Cities

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 38 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF September 20, 1917

War's Call on Women

Importance of Efforts for Soldiers' Welfare

By N. W. DURHAM

Next to Chairman Suzzallo of the Washington state council of defense, Mrs. Ruth Karr McKee, in charge of women's work, is probably the most active member of that organization. She is giving a great deal of time, thought and work to her duties, and is trying to organize all the mothers and daughters of the state.

Many wives and daughters of farmers are moved by a desire to help their country, but from lack of organization and guidance are at a loss to know how to proceed and what to do. A recent letter from Mrs. McKee to the women members of the various county councils of defense will give a clearer understanding of the work.

Mrs. McKee urges the importance of efforts for the soldiers' welfare. "Proper recognition of the young men who are leaving their homes to enter the army training camps is of the utmost importance," she says, and then points out ways in which this may be done:

"Is any organization or club of women preparing to furnish comfort bags and 'housewives' for the men who are going from each town?

"Is there any organization, committee or club of women preparing to see that every soldier from each town will receive news from his home town, by personal letter or otherwise?

"What steps are being taken to carry out a program as a 'send-off' for each group as it starts for American Lake? These young men should be made to feel that the whole community is interested in them, is back of them and will fight them through.

"Is there any organization, aside from the Red Cross, which is preparing to investigate conditions and secure assistance for families needing it for their support? If so, is this organization cooperating with the Red Cross and thereby avoiding duplicate investigations and labor.

"Begin to plan now to secure clubs and groups of women who will knit outfits in gray for boys in the navy and outfits in khaki color for those in the army. These can be sent after the men are gone, but the preliminary work should be under way now. Do not attempt to form new organizations if the work is already being done.

"It is none too early to delegate to some one in each community the whole question of Christmas parcels. This work is in charge of the woman's section of the Navy league. The chairman for Washington is Mrs. John McFadon, 415 North Sixth street, Tacoma. Write to her yourself, or have some one to whom you delegate this duty, and carefully consider her directions and suggestions. If you wish to reach the men by Christmas, it will be necessary for the parcels to be in Washington early in October.

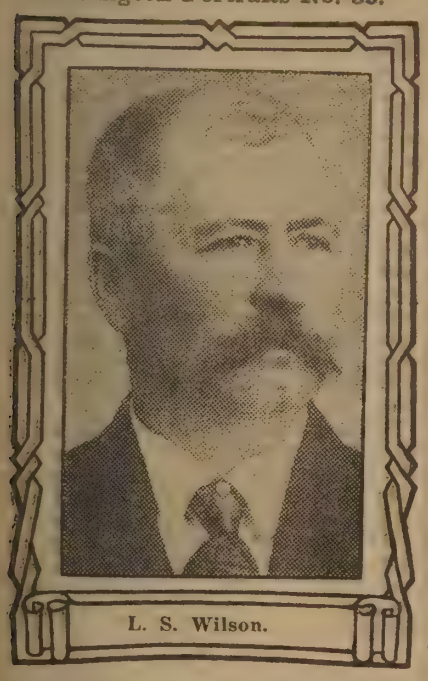
"With the need of knitting many thousands of socks for the men who do trench work, it becomes necessary to save both time and labor. To this end a knitting machine is very desirable. In many communities a number of women go in together for the purchase of a machine. The legs of the socks are knitted on the machine and the feet finished by hand. The price is $17. A 72-needle machine is recommended."

While these suggestions are to the women representatives on the various county councils, they will be helpful to all others who want to do their part. Here is a special suggestion that can be readily followed by any woman:

"Good reading matter is one of the most acceptable things that can be sent to our soldiers. For that reason the government has made it very easy to reach them. All that is necessary is to place a one-cent stamp on a magazine, take it to the postoffice, tell the postmaster that it is for the soldiers, and the government will see that it reaches some soldier or sailor in the service. No address is necessary. When you have finished with your magzaines, send them on to bring recreation or instruction to the soldiers."

Women who may desire more definite information regarding relief work and patriotic service to their country may write to Mrs. McKee, care of the State Council of Defense, Olympia, Wash.

Washington Portraits No. 30.



L. S. Wilson.

One of the pioneer stump burners of western Washington is L. S. Wilson of Vader, Lewis county. Mr. Wilson has had considerable experience working in shingle camps and sawmills, and has also had experience in making farms out of logged-off lands by burning the stumps. He tells us of his method as follows:

"I first dig a hole by the side of the stump and a little under it if possible. I peel the bark off the stump where I dig the hole then take an armload of wood or dry bark and make a fire in the hole by the side of the stump. When the wood gets well burnt down and plenty of coals I cover the fire with dirt, not covering it too deep, and leaving room for the smoke to escape. I visit the stumps three times a day for the first few days until I get the fires well started, after that twice a day will do. I always keep the fire well covered, never allowing it to burn out through the dirt so that it will blaze or it will soon go out. The length of time it takes to burn out a stump can not be definitely answered as some stumps burn much faster than others. Some stumps from two to three feet in diameter may burn out in one week, while others the same size may take three or four times as long. The fire generally follows all of the roots deep in the ground leaving but very little if any grubbing to remove what roots are left. If the hole is dug by the stump and the bark peeled off a year ahead they fire a great deal easier. This is what we call charring them out."

Community Cooperation

Some Pleasing Results in a Western Washington Town

By CARL J. MENZ, Ferndale, Wash.

The Washington Farmer offered a prize of $5 for the best answer to the two questions, "What Is the Best Home Town in the State of Washington?" "Why?" The prize has been awarded to Carl J. Menz of Ferndale, Wash.

In the first place, I can not write about Ferndale without mentioning the surrounding country. They both depend to a certain extent for their success on each other. The business men depend on dealing with the farmers. The farmers depend on selling their products and buying their supplies in Ferndale. If it were not for the condensery, creamery and fruit cannery, the farmers could not market their products to an advantage. And if it were not for the farmers, there would be no industries and no town to speak of.

Therefore, to further the welfare of all concerned, the business men and farmers, after much discouragement, have built and equipped a fruit cannery that provides a market for all perishable fruit products that formerly went to waste. This cannery has been a great help to city and country alike.

The local condensery and creamery, and business men as well, are interested in the upbuilding of the country as well as city. They are interested in good dairy herds, in good farming methods and in the reclamation of uncleared land for agricultural purposes. They realize that the farmers need good roads to market their products; therefore they are enthusiastic over the building of cement roads to tap the farming districts. The businessmen realize that buying from mail order houses in a distant city is detrimental to the welfare of city and country alike, and consequently they offer as good service as is consistent with good business management. They offer only standard advertised merchandise because they and the manufacturer stand back of it.

Ferndale and adjacent country are closely united by a consolidated school district—five small districts being consolidated into one large district. This is merely a progressive step in the unionization and coordination of educational affairs. Consolidation also helps to instill the spirit of mutual cooperation between city and country.

But what makes Ferndale and surrounding country what it is? There is only one answer—the people. If it were not for the people the country would still be a virginal forest, and the home of wandering animals. Although of many nationalities, the people are gradually blending into a new race—Americans. They are striving to form the integral part of a nation that shall eventually be foremost in the world. Passing events are verifying this claim.

The imaginary economic barrier that so often exists between city and country has long since vanished from Ferndale and vicinity. The people realize that the day of individuality has passed, and gradually knowing that the only path for them to follow is the path of prograss, they are changing to the inevitable—cooperation; not destructive cooperation, but constructive cooperation; cooperation that serves a useful purpose, conducted by men of honesty and integrity of character who will not forsake principle for principal; cooperation that develops the city and country alike; in short, cooperation that means help yourself at the same time helping your fellowmen.

Postpone Creamery Combine Case

Anti-Trust Case Put Over Till February Court Term

Announcement has been made at Boise, Idaho, that the hearing in the case in which several big creamery concerns were charged with violation of the Sherman anti-trust law has been postponed until February term of court at Boise. The hearing was to have been held at the fall term of court, but was put over by mutual agreement, owing to the fact that the war situation has made it impossible for the special government investigators who brought about the indictments to complete their case for presentation at this time.

The case came up a few months ago, when indictments were made in the federal court charging that the big creamery concerns had combined to control the dairy products business, and that the alleged combine was working great injustice on 172 independent firms. The case is one affecting not only the four northwestern state, but Utah, California, Wyoming and Nevada as well.

The following corporations are named in the charges: Jensen Creamery company, Salt Lake; Mutual Creamery company, Salt Lake; Henningsen Produce company, Butte; Schallinger Produce company, Spokane; Commercial Creamery company, Spokane; Hazelwood company, Portland; Hazelwood company, Ltd., Spokane; Klock Produce company, Seattle.

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Plenty of Boxes.

In a report to Charles Hebbard of the state council of defense, E. D. Rowley of the Western Pine Manufacturers, says that the fruit box factories will be able to supply all the boxes required for fruit in this state this season. Contracts call for about 9,000,000 boxes.

What Is the National Non-Partizan League?

Rapid Growth of the Farmers' Movement Started in North Dakota; Other States Feel Interest

By E. B. FUSSELL of the Editorial Staff of Non-Partizan Leader

A year ago, outside of the state of North Dakota, practically no one had heard of the Farmers' Nonpartizan Political league. Inside the state professional politicians knew the league members had been able to nominate their candidates for state offices at the primaries, but it remained to be seen what luck they would have at the ensuing general election.

Today it is the National Nonpartizan league. Instead of having a state office only for the state of North Dakota it has national offices at St. Paul from which point general direction is given the work of organization in a dozen states. The league has 100,000 members and is adding to its membership at the rate of 3000 a week.

The league has elected its own governor and every other state officer but one in North Dakota and has made its entrance into national politics by electing to congress, at a special election in the First North Dakota district July



Governor Lynn J. Frazier.

10, John M. Baer, running as a nonpartizan against republican and democratic opposition.

The center of the league's activity is still North Dakota, that state having the largest membership, about 40,000, at the present time. Minnesota, however, is pressing closely, adding about 1000 members a week, and as it is a larger state, may yet pass North Dakota. The next states, in the line of progress of organization, are Montana and South Dakota. In these four states work was started last year.

The league has stretched out this year, however, into a number of other states, extending its territory south, east and west. Of the new states, in which organization work has been started during the spring and summer of 1917, Idaho is coming to the front as one of the most active. Organization work with a crew of no less than 20 men has been under way for a few months under the direction of Ray McKaig, a North Dakota farmer, prominent in past years as a leading fighter for the farmers in the North Dakota legislature. Although a smaller number of organizers has been working in the Gem state than in many others, results have been astonishing, even to the league leaders with experience in North Dakota, and Idaho promises to become one of the leading league states.

Other states in which the league has organization work under way in force are Colorado, Nebraska and Wisconsin. Preliminary work has also been done in Texas, Oklahoma and other southern states and as winter closes down and interferes with organization work in the blizzard-swept prairies of the north, organizers will be put to work in greater numbers in the south and west where roads will still be passable.

Any one interested in learning why the movement in North Dakota came to be started must consider three things. One is the 10-year fight of the farmers for a state-owned terminal elevator. In 1907 they started their fight and kept it up, year after year. The farmers had seen the market at Minneapolis manipulated every fall so that prices were at the lowest level when they came to dispose of their grain, and as soon as their grain was sold, they saw the price jacked up 10 or 20 points. They decided that paying attention to growing grain wasn't enough; they must have a hand in marketing, and this involved operation of their own terminal elevator. It was necesary to pass a constitutional amendment. This went before two successive legislatures, was submitted to the people and adopted with a whoop. The business of arranging for the building of the elevator was turned over to the state board of control. Instead of making arrangements to build the board of control reported back to the 1915 legislature that the project was not feasible and the legislature decided to accept the board's advice.

That was one condition that existed in North Dakota. Another condition was connected with the 1916 wheat crop, which was stricken with rust as it approached maturity. Instead of a normal crop of 100,000,000 bushels there were only 39,000,000 bushels and this was grain with light, shriveled berries. Under the Minnesota laws, under which Dakota wheat is sold, certain legal grades are established. The Minneapolis Chamber of Commerce, however, established an additional extra-legal series of "feed grades," A, B, C and D, so arranged that practically the entire North Dakota crop graded as Feed D and brought a price considerably less than $1 a bushel. The buyers claimed it was fit only for feed.

Meanwhile, however, it began to be learned that much of this wheat, probably most of it, was being mixed with light western wheat and was going into high grade flour. A series of investigations made at the North Dakota agricultural college showed that flour made from the Feed D wheat, sold at less than $1, made bread better in some respects and practically as good in others as bread made from No. 1 Northern wheat flour. The reason was that while the berries were shriveled the gluten, which forms first in a wheat berry, was all there. The shriveled wheat actually had a much higher percentage of gluten, the most valuable flour material, than No. 1 Northern wheat, lacking only in starch, and by mixing with western and southern wheat, rich in starch, made an excellent flour.

The third condition that resulted in the organization of the league was the presence in the state of a young farmer named A. C. Townley. Townley, a few years before, had attempted flax farming on a bonanza scale. Bad weather partly destroyed what looked like a bumper crop, but Townley still would have cashed in if the market had not been tilted sharply downward just as his crop came in and had to be marketed, the same thing that had happened to the wheat farmers year after year. The result was that Townley, instead of getting rich, went broke.

Townley spent a good deal of time in the next year or two studying what was the matter with the farmer and why the average farmer of Dakota couldn't farm at a profit. He was struck with the idea that if the farmers could get hold of the marketing machinery, own terminal elevators, cold storage warehouses, flour mills and packing plants, they could have something to say about fixing the market prices on what they had to sell instead of taking whatever prices the chamber of commerce at Minneapolis and the Chicago packers happened to fix at the time. Townley's idea was that the way to obtain these things was by state ownership. He saw that the farmers could control the state government and get state ownership if they voted in a body, but not if half were in one political party and half in another. He saw that a political organization would be necessary. He also saw that no large financial interests would be likely to contribute finances for such a movement—that it would be necessary for the farmers to provide the money for organization and campaigning. He talked the idea over with a number of friends, most of whom said he was foolish to think that the farmers could be induced to give him money to be used in building up a political organization when they had hardly enough for themselves. But Townley started out, just for an experiment, one day early in 1915, to see what could be done. The first farmer he talked to was told the plan to organize the farmers and was asked for $6 to help the work along. He gave it. So did the next farmer and the next and the next. When a farmer was struck who was doubtful about the chances for success, or who didn't have the cash, Townley took a post dated check, which would not have to be paid for some months.

It would take too long to tell how enough money was obtained to make the first payment on a cheap automobile, how other organizers were put to work, how, when 20,000 members had been secured, a state paper was established and the people in the towns and cities heard about the movement for the first time.

On Washington's birthday, 1916, the league held a convention in every township in the state. The township conventions elected delegates to legislative district conventions which selected candidates for the legislature who indorsed the farmers' program and also elected delegates to a state convention, which selected candidates for state offices. For governor they selected a farmer who had never been heard of in state politics before, Lynn J. Frazier, nominated him against one of the most popular farmer-politicians the state has ever produced, and elected him with the largest majority ever given any candidate. Other candidates were selected in the same way. The league elected every state officer but one, the state treasurer, three members of the supreme court, a majority, 85 out of 113 members of the lower house of the legislature, and 18 of 25 members of the state senate who were elected last year.

But here came the rub. There were



John M. Baer.

24 holdover senators, and these were lined up practically solidly against the league. This prevented the enactment of most of the measures passed by the house. As soon as they struck the senate their doom was sealed. The league's principal measure was a bill submitting a proposed new constitution, it appearing impossible to make the sweeping changes necessary to carry out the farmers' program without general constitutional changes. The Feed D wheat situation made a flour mill seem necessary in conjunction with the state elevator and while a small elevator, without a flour mill, could have been provided under the previous constitutional amendment, it would not have served to compete with the terminal facilities offered by private Minneapolis concerns. But the new constitution went down to defeat.

The league did get some of its legislation through. One measure passed in spite of senate opposition was a state grain inspection law. This provides for state weighing and grading of grain to eliminate abuses of private weighing and grading at line elevators. Many of these elevators in past years, according to their own reports, finished the season hundreds of bushels "long," that is, selling more wheat than they bought.

Another measure provides for a sweeping tax reform, largely doing away with taxes on farm improvements and personal property by decreasing the rate of assessment for such property as compared with real estate. The penalty of taxation of farm improvements, it was found, had held back much progress toward better farming.

The league program in other states is much the same as that for North Dakota. In every state the demand is for state ownership of the machinery of marketing, such as terminal elevators, warehouses, flour mills and packing plants. There is also a demand for exemption of farm improvements, a nonpartisan election law and for state hail insurance. In other matters the programs differ according to differing needs. In Minnesota there is a demand for a tonnage tax on iron ore, which is paying only a small portion of the cost of state government. In Montana, where a constitutional provision virtually exempts all mines from taxation, there is demand for reform on this line. Farmers of Nebraska are out with a demand for a state-owned beet sugar factory.

The league made its first step into national politics in the special election in North Dakota last July. John M. Baer, a young farmer who had been the cartoonist for the Nonpartisan Leader, the official organ of the league, was elected, receiving more votes than the combined votes of his republican and democratic opponents. Last year in North Dakota the league took no part in the congressional or senatorial campaigns, but hereafter it is committed to the policy of interest in national affairs.

The league's national program calls for closer government supervision of the machinery of food supply to eliminate speculation, conscription of profits by heavy war profits taxes, as a means of financing the war in preference to placing chief reliance upon bond issues, and an early statement by the United States and its allies of definite peace terms.

Profiteering

A contributor to the London Times says: May I remind your readers that this novel name for buying and reselling at prices detrimental to the public describes practices formerly known as forestalling, ingrossing and regrating, made punishable by several statutes, which were repealed by 12 George III., chapter 71? It would seem, however that apart from acts of parliament, these practices are crimes at common law, and that the offenses consist in unjustifiably enhancing prices to the injury of the public. Forestalling is a general word signifying any maneuver or artifice intended unduly to enhance prices. Ingrossing was the word in use to signify what is now meant by cornering, i. e., the buying of a considerable quantity of a commodity, sufficient injuriously to affect prices; while regrating is the offense of buying and selling a commodity, especially foodstuffs in the same market. I think this is called "scalping" in America. It is this latter practice indulged in by traders whose only intention is to snatch a quick profit, which seems chiefly suspected of causing prices to rise to unjustifiable heights in some commodities, while it may very well be that scarcity has encouraged the ingrossers or cornerers. Although prosecutions for these offenses have fallen into disuse the offenses will surely remain crimes, and, if so, it would seem that our law officers might well consider the revival of this class of prosecution.

Loganberry Juice.

A cannery at Forest Grove has contracted for 20,000 gallons of Loganberry juice.

Why Farmers Object

One Rule for East and Another for the West

One foolish farmer somewhere in the broad Inland Empire unpatriotically declared that rather than sell his wheat at $1.80 a bushel he would burn the crop. A number of consumers and I. W. W. sympathizers have seized on that reprehensibe threat, and in communications to the newspapers are harping on it as evidence that farmers generally are unpatriotic. Their efforts in that direction are ridiculous. No wheat will be burned in the Inland Empire. If any farmer were foolish enough to make the attempt, his farmer neighbors would promptly take steps to send him to the asylum, if he were found to be insane, or to prison if he proved to be criminally responsible.

The new food control law expressly guards against crimes of that nature. Section 8 provides—

"That any person who willfuly destroys any necessity for the purpose of enhancing the price or restricting the supply thereof, shall, upon conviction thereof, be fined not exceeding $5000 or imprisoned for not more than two years, or both."

Unfair critics entirely miss the point of the farmers' objections to the prices fixed on Pacific northwestern wheat by the food administration. Our farmers are only objecting to the injustice of discrimination—against the application of one rule for the east and another rule for the west. They object to an arbitrary order requiring them to pay 30 cents a bushel on fictitious shipments of wheat from this region to Chicago.

They are demanding that the government names basic ports in the Pacific northwest and let their grain go to Europe over its natural route.

The surplus yield of the Pacific coast should be shipped to Europe through the Panama canal in ships the government is now building at Pacific ports, and the allied and neutral buyers should be required to absorb the cost of water transportation, as they will be required to absorb and bear the freight charges on grain shipped from gulf and Atlantic ports.

The government is building large fleets of vessels on the Pacific coast—building them for the express purpose of transporting to our allies the surplus food products of the Pacific slope—our wheat and other cereals, our salmon and other fish food, our metals and our lumber.

The allies must have this surplus wheat, and the government is going far on the road to generosity when it arbitrarily steps in and knocks down the normal price for their benefit. In taking that action it should not discriminate against the growers of the Pacific northwest.

Grange Awards

Green Bluff Captures the First

Agricultural day at the Interstate fair Thursday was featured by the awarding of prizes for farmers' union and grange exhibits in agricultural hall. Green Bluff won first prize, $50 in cash, for the best display by any grange, and also won first prize on display of vegetables, despite stiff competition.

Other granges that won prizes were: Mount Spokane, third prize for the best display of fruits and fifth place for grange display. Foot Hills grange took fourth place for fruits. Half Moon grange took second prize for fruits, third prize for best display of sheaf and shelled grains and favorable mention for attractiveness of exhibit. Glenrose grange got fourth place for display of grange and fifth for display of fruit. Elk Mountain farmers' union got second for best display by farmers' union, second for attractiveness of exhibit, fourth for sheaf and shelled grains and fifth for grasses and forage crops.

Oregon carried off the palm for best individual exhibit from one farm. Leonard Gilkey of Linn county captured four firsts and two seconds. Mr. Gilkey was awarded first for display by individual, first for display of sheaf and shelled grain, first for attractiveness of exhibit, first for best 10 ears of corn shown at the fair, second for display of vegetables and second for grasses and forage crops.

Spokane county took second place in the individual contest. J. R. Orrock of Sharon got first on grasses and forage plants, first on alfalfa, first on sheaf of vetch, first on timothy, first on not less than 10 bunches of forage crops shown by one man, second on bluegrass, oats and wheat, third on Sudan grass and fourth individual display.

W. A. Hughes, Colville, carried off a number of prizes for individual farm exhibits, taking second for best exhibit by individual, second for display of sheaf and shelled grains, third for attractiveness of exhibit, third for display of forage crops and fourth for display of vegetables.

Mountain View farm, of Elk, was awarded third place for display by individual, third for best display of sheaf and shelled grains, fourth for grasses and forage crops and fifth for best display of vegetables.

Record Crowd

State Fair Opens With a Rush

All records for attendance for the first day at the Washington state fair were broken Monday by the crowd that thronged the grounds and filled the new $20,000 grandstand to capacity.

The new stand seats 3500 and the bleachers 1000. The first day's crowd was estimated at 5000.

Five high schools have entered teams for the stock judging contest, and began work late this afternoon under the supervision of Professor Krantz of Washington State college. Teams were entered from North Yakima, Ellensburg, Kittitas, Sunnyside and Wapato.

About 90 boys and girls, representing the teams sent to compete in the industrial contests, arrived on the grounds early, and under the general supervision of Superintendent Rodney Ackley were soon engaged in canning, cooking and manual training. The stock judging teams will begin their work tomorrow.

By arrangements made by Superintendent Ackley the boys and girls will be given a free automobile ride through the orchards tomorrow morning, with visits to the beet sugar factory, cannery and other industrial plants. This trip will be repeated Thursday when the second group of clubs come on for their work.

Herefords Are Sold.

Charles Bull of Mabton purchased most of the herd of Hereford cattle sold recently at auction by Dr. H. H. Hartley of Goldendale. The herd sold for approximately $10,000. One purecred heifer sold for $180. Calves sold for an average of about $40. Dr. Hartley will go into the sheep business. Mr. Bull is a breeder of Herefords at Mabton.

Cooperate on Tuberculin Test.

The Washington state department of agriculture, of which E. F. Benson is commissioner, has recently signed an agreement with the United States bureau of animal industry to cooperate on the tuberculin test. Dr. Sam B. Foster is in charge of the federal work at Portland, and Dr. R. J. Donahue of the state work. Breeders will now get certificates that give them shipment into any state, which is a distinct advantage. The state department has tested about 22,000 cattle in the last year and has found a light percentage of tuberculosis.

Farmers Get a Million a Month

Farm Loan Bank Distributes Money for Land Development

The northwest district farm loan bank, with headquarters at Spokane, has its operation speeded up now so that it is making loans to the farmers of Oregon, Washington, Idaho and Montana at the rate of more than $1,000,000 a month, and President D. G. O'Shea says that this amount will gradually increase from this time on. This means that money is being sent out from the bank at the rate of nearly $5000 an hour for 10 hours every day except Sunday.

As President O'Shea looked over the long list of new charters granted and loans approved he remarked: "That ought to convince the people that we are getting something done, except possibly the fellow that we can't get to. The more we get done the worse he feels.

"If the farmers who are seeking loans, but whom we have not yet been able to reach, will appreciate the situation and realize that the bank is doing everything possible to complete their loans, and will have patience and courage, they can be assured all will be reached in the near future," continued President O'Shea.

"The land bank law is intended to serve the farmers, and no one else, and it should be expected of them that they be loyal to the movement and assist it, and, above all, to see that the values are not inflated."

New Associations Chartered.

The following are now associations chartered, together with the loans approved for each, since the last list published in The Farmer:

Oregon.

Ashland, Jackson county	$ 90,500
Hood River, Hood River county	73,800
Gold Beach, Curry county	47,750
Ione, Morrow county	77,100
Hardman, Morrow county	40,500
South Prairie, Tillamook county	138,700
Gold Hill, Jackson county	29,175
Williams, Josephine county	31,315
Hamilton, Grant county	28,550
Ontario, Malheur	57,800
Klamath Falls, Klamath county	36,900
Corbett, Multnomah county	31,400
Macksburg, Clackamas county	62,600
Additional loans to associations previously chartered	119,100

Idaho.

Sterling, Bingham county	$ 43,450
Cambridge, Washington county	54,170
Bonners Ferry, Boundary county	85,650
Granite, Bonner county	36,750
Archer, Madison county	28,000
Medimont, Kootenai county	20,725
Priest River, Bonner county	26,500
Rigby, Jefferson county	24,100
Additional loans to associations previously chartered	104,400

Washington.

Sunnyside, Yakima county	$ 87,600
Silver Creek, Lewis county	27,650
Naches, Yakima county	32,150
Newport, Pend Oreille county	20,900
Chattaroy, Spokane county	27,600
Okanogan, Okanogan county	52,700
Burton, King county	25,600
Kitsap, Kitsap county	57,900
Malaga, Chelan county	74,800
Kettle Falls, Stevens county	35,850
Hunters, Stevens county	37,850
Satsop, Grays Harbor county	62,500
Warden, Grant county	31,750
Orin, Stevens county	27,250
Cheney, Spokane county	55,600
Touchet, Walla Walla county	30,800
Leavenworth, Chelan county	27,025
Monroe, Snohomish county	33,600
Manson, Chelan county	34,250
Chesaw, Okanogan county	59,150
Grandview, Yakima county	22,400
Granger, Yakima county	36,200
Elk, Spokane county	21,350
Centralia, Lewis county	37,800
Oso, Snohomish county	42,200
Moxee, Yakima county	34,150
Additional loans to associations previously chartered	136,605

Montana.

Sidney, Richland county	$ 32,400
Hamilton, Valley county	96,850
Darbey, Valley county	26,900
Stevensville, Valley county	71,900
Richey, Dawson county	34,100
Mizpah, Custer county	38,200
Snowbelt, Dawson county	20,100
Perma, Sanders county	52,000
Crowley, Prairie county	25,300
Glendive, Dawson county	30,700
Joliet, Carbon county	37,800
Circle, Dawson county	45,500
Additional loans to associations previously chartered	320,950

Secure Dried Beet Pulp.

In order to help out with the feed question this winter the office of County Agriculturist M. J. Newhouse, Pend Oreille county, is taking steps to secure carload lots of dried beet pulp and skimmings.

Lady Washington

Handsome is as handsome does. That is why Lady Washington won the silver trophy cup offered by the Pacific Northwest Farm Trio for the best dual purpose cow exhibited at the Interstate fair at Spokane this season. Lady Washington was shown by A. V. Bradrick & Sons of Palouse, Wash. She is a wiuner among cattle that can make good both as beef and milk producers. She is three years old, with her life of dual usefulness before her. Her male calves will not have to be vealed to prevent waste of feed, as is too often the case with the purely dairy breeds. They will grow up to an age of 15 to 18 months and go onto the market as baby beeves only a little below the standard of the single purpose beef animal. Her heifer calves will grow up into animals capable of producing profit from either of two directions as most suits the needs and the convenience of their owner. Hats off to Lady Washington and her kind!

Breeders Will Show at Portland

Pacific International Reconsiders Former Action

"We are going to have the show."

This is what President William H. Daughtrey of the Portland Union Stock Yards said to a representative of The Farmer after he had received telegrams and letters galore protesting against the cancelation of the breeding animals' exposition at the Pacific International Live Stock show this winter. The cancelation had been made owing to inadequate buildings, but the breeders rallied in their protests, with promises to show under canvas, as last year.

"The mistake that many have made," said Mr. Daughtrey, "was in thinking that the Pacific International Live Stock show belonged to the stockyards. We did start the show, and we did pay the necessary expenses through last last year, not because it benefited us, but because we felt that Portland should have such an exposition. As a matter of fact, it never brought us any money, except in the indirect way of improving breeds and gradually bringing better animals to the yards. We have had to bear the dead weight of expense.

"Last year it was decided that buildings to house the show adequately must be erected. These, it was estimated, would cost in the vicinity of $200,000. Committees set to work, but the war and other things came on and the work was dropped. It was hard to raise the money.

"Heretofore, with the exposition, it has been 'let George do it,' and the time had come when 'George' couldn't do it alone any more. So we decided to drop the purebred show feature and hold a fat stock show only. As soon as this was announced we began to receive protests from all over the northwest. The first came by mail. Of late, from the gatherings of live stock men, wire protests have come.

"The Portland Chamber of Commerce has decided to back the purebred live stock show, and I feel assured that we will have the purebred show. Committees have been formed to secure the funds, and I am sure the success of this great show is assured again.

"Of course, it will have to be a tent show again, but I believe that it will result in permanent buildings for next year. Portland realizes that it is a Portland show, and an important one. We shall do all in our power to help.

"In some ways this may have been a good thing. If the breeders and the people realize that this is their exposition, and that it will grow only with their interest and attention, then it will be all the better."

Dr. Ernest C. Wheeler of Tacoma, chosen to represent the medical profession on the state council of defense, has written a special article for The Farmer on "The Physician's Part in the War." Remarkable facts are brought out in this article, bearing on the vastly increased danger line for the army surgeons in this war, as well as the vastly lessened danger of pestilence and plague, which in former wars have killed more soldiers than the tax of the enemy. This article will appear in next week's issue of The Farmer.

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Whisky Is in Full Retreat.

The forces of efficient and morally upright manhood and womanhood have long been in conflict with whisky and other intoxicants. They fought a winning battle, though progress was made somewhat slowly. Now strong reenforcements in the form of world war have come up and whisky is in full retreat.

One of the first things the European governments did when their countries became involved in this war was to prohibit the use of intoxicants and prevent the use of foodstuffs in the manufacture of liquors. Long, long ago it became a settled fact that armies could not maintain the desired standard of efficiency unless liquors were denied the soldiers. Now there is sweeping over the entire world a recognition of the fact that neither soldiers nor civilians can maintain themselves efficiently if intoxicating drinks are used.

The United States has taken a great forward step in prohibiting the use of grains in the manufacture of whisky, but the distillers are already looking forward to the end of the war, when the prohibition will be taken off—they hope. Let us hope the manufacture of distilled liquors will never again be permitted in our country. If a country is more efficient in time of war under a prohibition law than under a license law, it stands to reason that it will be more efficient in time of peace under prohibition. Industry as well as war demands the best powers of men. Prohibition now is a war measure, but it must be continued as a peace measure. The present terrible conflict should mean the utter banishment of the world's two great scourges, war and intoxicating liquor.

The Belgian Hare

At this time of food conservation more attention is being called to the Belgian hare and other hares of the race as a source of food. A number of years ago the hare fad was introduced in this country, ran wild and died out. Those who kept them grew disgusted with them and quit. Now it would seem that the animal is coming back into his own. Probably the reason for the reaction was that it was run as a fancy stock rather than on a business basis.

The hobbies of live stock fanciers have done far more harm than good. They have injured practically every breed of stock at one time or another. But gradually every line which has real worth overcomes the handicaps imposed by those who want style and who will sacrifice everything else for it.

The hare bred for meat is worthy of attention. Its feed is as inexpensive as any animal's, and the meat is excellent when properly prepared. It can be raised in small quarters. Surely it deserves the notice of food conservationists.

Young Man! Young Woman! Don't Neglect Your Education!

Dr. E. A. Bryan, now commissioner of education in Idaho, but formerly president of the State College of Washington, said the other day: "It is assumed as a matter of course everywhere that there will be a decrease in the number of college, university and high school students this year. Instead, there should be an actual increase. The young man went to college before for his own sake; now he should go for the nation's sake."

Commissioner Bryan is emphatically right. There never was a time when the young people of this counfry were so urgently called by their country into the high schools and colleges. There are great needs for immediate service in many lines, but there will be greater need for trained service one year, two years or five years hence. Leaders everywhere see the danger the country faces in the withdrawal of its young men and women from the educational institutions.

"If the war is long," says Commissioner Claxton of the United States department of education, "the country will need trained men and women beyond all possible supply, unless our colleges and technical schools increase their attendance."

General Leonard Wood of the army writes: "The war promises to be long. Urge young men to finish their education."

Secretary of War Baker says: "When the war is over, there will be made upon us such demands for men and women of knowledge and training as have never before come to any country. The colleges of Europe are now almost empty. Their older students, graduates and professors are fighting in the trenches or are already dead, as are many scientific and literary men whose work is necessary for the enlargement of cultural life. For many years after the war some of these countries will be unable to support their colleges. America must come to the rescue. How well we can do this will depend upon you young men and women who are this year graduating from our high schools. Therefore, a right conception of patriotism should induce all students who can not render some immediate service of great value to remain in college, and thus be all the more fit when their services may be needed."

There is no more patriotic service the young man and the young woman on the farm or elsewhere can render to his or her country than to begin or complete a thorough course of higher education.

The Foundation of Agriculture

At the Interstate fair at Spokane this year, prominent men more than once referred to the live stock industry as the foundation of agriculture. Time after time various speakers pleaded with their hearers to make every effort consistent with reason to conserve their own or their neighbors' animals instead of throwing them on the market for slaughter because of the scarcity and high cost of feed.

Live stock may almost properly be called the foundation of agriculture, and at this particular time the foundation is being shaken. There is urgent need for the greatest possible conservation of stock.

Conservation of stock does not always mean the holding over the winter of animals, even though they might be of considerably more value for food purposes than in the fall. There are times when it would be extremely unwise for the owner of a steer or a pig to hold him. While patriotism enters into the problem, it is fairly safe to assume that it is unwise (and therefore unpatriotic) to keep an animal over when its keep is sure to cost more than the increase in food value will be.

But sometimes when one person has not the facilities to feed such animal, a neighbor, near or more distant, may have them, and the patriotic thing for the owner to do is to sell such animal to such neighbor rather than to the slaughter yards. And on the other hand, it is the part of patriotism for such neighbor to purchase animals that would otherwise be slaughtered, if by so doing he can conserve food supplies.

We do not want sentimental patriotism. We want merely good, sound business patriotism. Business and patriotism are not opposites. They are coworkers. The one does not interfere with the other if both are genuine. There is room and need for both in their most practical form in the live stock industry today.

Good Material Available

The federal department of agriculture and its allied departments and the various agricultural school over the country have never been more active in producing bulletins than they are today. And a reading of them leads to the conclusion that nearly all of them are practical and suited to the needs of the people.

The government stands ready to supply them where there is need of them. They are particularly strong on food conservation.

Washington Gleanings

The annual reunion of the Stillaguamish valley pioneers was held in Arlington recently.

J. S. Meador disposed of 1200 acres near Cloverland to F. A. Boozer for $30,500. The deal gives the crop to Mr. Boozer.

Work has been started on the new Colfax park. It is planned to have a triumphal arch at the entrance in honor of L. Schmuck, the donor of the 11 acres for the park site.

Game Warden Van Ausdale, accompanied by Louis Stenger, superintendent of the fish hatchery at Walla Walla, has brought from the hatchery 12,000 rainbow trout fry and planted them in the Touchet.

The state fisheries department is preparing to install a fish rack on Jim creek near its confluence with the South Fork just above the Snohomish county bridge. This plant takes the place of the hatchery further up the creek, the location of which has been found unfavorable.

Under direction of Game Warden D. C. Holmes, 58,000 trout were planted in streams tributary to the Washington Central railway lately. Hawk creek, Crab creek, Wilson creek and the Spokane river received liberal allotments. More than a half million trout have been planted in Lincoln county waters this season.

Fire of uncertain origin, presumably starting in the dynamo room, destroyed the Chelan Falls flour mill a few days ago. About 3000 bushels of wheat are reported to have been destroyed as well as a large supply of flour. The government had just awarded a contract to the mill for a large quantity of flour to be used in feeding the soldiers.

In an effort to restore the old-fashioned potato seed, an experiment is being made in the garden of the University of Washington. The white fruiting berry of the potato, which was found everywhere a generation ago and has now almost disappeared, was used to plant a patch, and the fruiting potato plants are being raised. The experiment is being conducted under the direction of Assistant Professor John W. Hotson of the department of botany.

What Others Say

Green's Fruit Grower: More and larger horses in a team is one way to meet the scarcity of farm labor.

Southern Ruralist: Barley is one of the great fattening and feeding grains of the world where corn is not grown.

National Stockman and Farmer: Idleness, total or partial, is not a good thing for the boys or for their neighbors.

Iowa Homestead: Where fields are fenced hog tight there is always considerable good picking in stubble field.

Country Gentleman: It may not be the best policy, but the individual can not decide his own case. It's tough, but it's war!

Hoard's Dairyman: There is nothing alarming in selling the unprofitable cow; in fact, it is an encouraging sign of better dairying.

Shorthorn World: The idea of breeding pure bred cattle is to grow more beef for the butcher with the same amount of feed and in a shorter space of time.

Your Lifetime Car

These Mitchell standards are essential in the car you buy to keep. Some may not seem vital when the cars are new. But 14 years have taught us that they are.

Where the Mitchells differ from most fine cars is in standards some call extreme.

Instead of usual margins of safety —50 per cent—the Mitchells are built to the standard of 100 per cent over-strength.

In addition to all the usual attractions, there are 31 features in Mitchells which nearly all cars omit.

We use heat-fixed finish to be long-enduring. We use extra-grade leather to last. We use shock-absorbing rear springs which never yet have broken. Thus the Mitchell excels in scores of ways which you will find important.

A 200,000-Mile Car

What we aim at is 200,000 miles of satisfactory service. Two Mitchells have exceeded that already.

We also aim at dependability under difficult road conditions. The Mitchell has won great fame in South America, in Australia, in Russia—where few cars prove enduring. In the rough-road sections of America our sales have multiplied of late.

The reason lies in our 100 per cent over-strength. Every vital part is built and tested for twice the expected strain. Part by part, our safety margins have been doubled in three years.

Over 440 parts in the latest Mitchells are built of toughened steel. Castings are almost eliminated. Safety parts, like steering parts and axles, are all vastly oversize. Parts which get a major strain are built of Chrome-Vanadium.

Nothing Omitted

We study to include in Mitchells all the known attractions. There are 31 features rarely found in cars. These include a power tire pump, reversible headlights, dashboard engine primer, shock-absorbing springs, etc.

Our experts examined 257 show models before designing the latest Mitchells. And all their best attractions are combined in these new cars.

Mitchell SIXES

TWO SIZES

Mitchell—a roomy 7-passenger Six, with 127-inch wheelbase and a highly-developed 48-horsepower motor.

$1525

Three-passenger Roadster, $1490.
Club Roadster, $1560. Sedan, $2275.
Coupe, $2135. Cabriolet, $1960.
Club Sedan, $2185.
Also Town Car and Limousine.

Mitchell Junior—a 2 or 5 passenger Six on similar lines, with 120-inch wheelbase and a 40-horsepower motor, ¼-inch smaller bore—

$1250

Club Roadster, $1280.
Sedan, $1950. Coupe, $1850.
All Prices f. o. b. Racine.

In these new models we have also added 24 per cent to the cost of finish and upholstery. That to give unique endurance, beauty, luxury and comfort.

Yet An Under-Price

Despite all these extras, both sizes of the Mitchell Six undersell cars of like class and size and power. The reason lies in our factory efficiency.

John W. Bate, the great efficiency expert, built and equipped this mammoth plant to produce this one type economically. He has spent millions of dollars to reduce labor cost to minimum.

We build the complete car—chassis and body—under these up-to-date methods. They have cut our factory costs in two. And those vast savings pay for this over-strength, these extra features and this added luxury.

See these new Mitchells. Compare them with ordinary Sixes. See at your dealer's the list of noted engineers who have chosen the Mitchell for their personal car. See its endurance records.

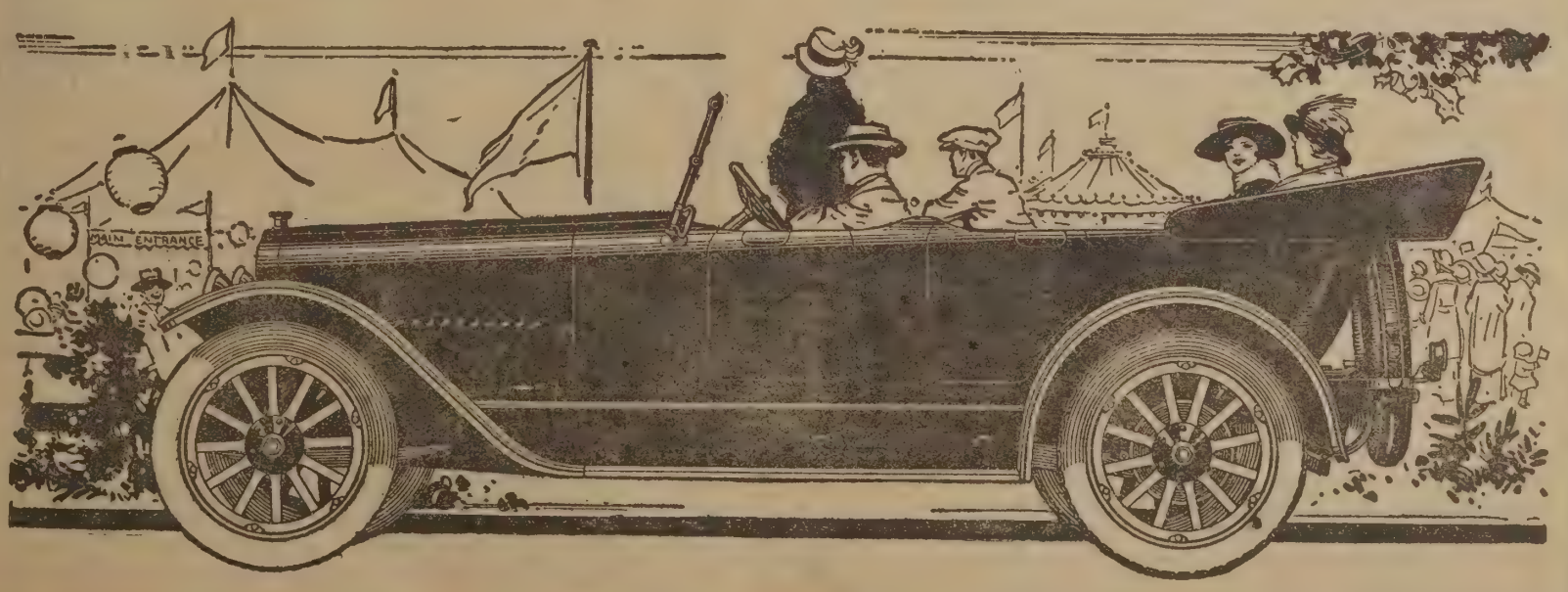
When you buy a fine car for life-time service, you will want this car. You will save much money if you get it now. You will save in upkeep and repairs. You will save by having an ideal car which you never will outgrow.

If you don't know our nearest dealer, ask us for his name.

MITCHELL MOTORS COMPANY, Inc., Racine, Wis., U. S. A.

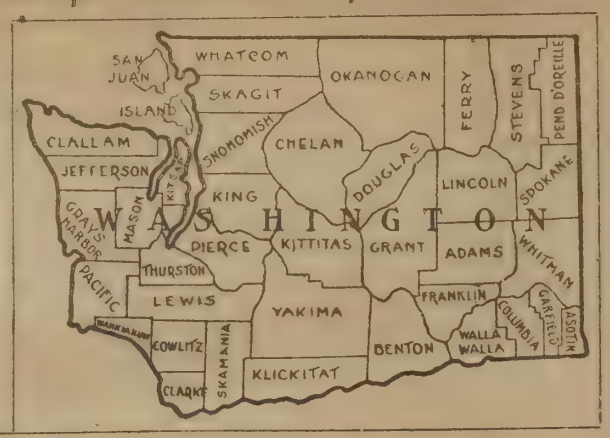
Mitchell Lewis & Staver Co,, Pacific Northwest Distributors

8120 Lincoln St., Spokane, Wash. East Morrison and E. First Sts., Portland, Ore.



Whatcomb Crops Good Despite Drouth

Harvest Conditions Very Abnormal, but Production Is Satisfactory; Labor Shortage Is Felt but Not Seriously



FERNDALE, Whatcom County, Wash., Sept. 8.—Threshing, silo filling, and the oat hay harvest all came at once this year, and while labor is scarce it is not alarmingly so. The crops are up to the general average in spite of the continued dry weather. Oats and wheat ripened a little earlier than usual on most places. On the river bottom some crops were drowned out during the heavy rains last spring and had to be replanted. They' of course, will be very late and will not mature at all unless the fall rains hold off later than usual. Only a few years ago the straw was all burned as soon as the rain threatened, but this year it is cared for as one of our most valuable possessions. Oats are bound and shocked, then left to cure for several days and threshed from the shock. Instead of hiring a crew, farmers exchange help. This is possible because the places are all small, but more land is being seeded every year. Pasture is short though the heavy dews that we always have in the fall prevents the grass from burning and the meadows are still green. Weeds have been more troublesome this year than ever before. The milk thistle seems to have made an affinity of our gardens. No live stock of any value as milk producers are being butchered. All dairymen are gradually exterminating culls from their herds and heading the herds with registered sires of the breed they prefer, usually Holsteins, Guernseys or Jerseys. No beef stock is raised at all. MRS. JACK PLASTER.

Rain Helps Late Stuff.

RAINIER, Thurston County, Wash., Sept. 10.—Rain has come after over two months of dry weather, which will help late vegetables and potatoes. A good supply of hay was put up here and quite a lot of grain has been threhed but the straw is rather short. No straw is burned, but is used up on the farms where raised, except a few loads sold to neighbors. The potato crop at the present time is about a half a crop, but if the weather keeps warm and moist until October 1 without frost, the very late potatoes will make a crop. To make larger acreage of crops next season, the land has to be cleared of brush and logs. The last month has been ideal weather for that and some have taken advantage of it. L. F. DAVIS.

Prepare for Winter Feeding.

PORT ANGELES, Clallam County, Wash., Aug. 25.—The dairying interests are preparing for winter feed on a far better scale than the previous winter and this is natural for the severe winter of the past, combined with the high prices, have made the local farmers very provident. A considerable quantity of straw is shipped into the county annually and there is very little barter in that commodity. The potato crop is larger than for many years and our farmers are scanning the market lists with some anxiety for quotations; it is also absorbing a goodly portion of the conversation when the producers gather at picnic grounds. I should judge that the increased tillable land for 1918 crop will be about 10 per cent, for there is much activity in burning over brush and grubbing out stumps in logged-off land. J. P. CHRISTENSEN.

Hog and Sheep Awards, Interstate Fair

The following are the swine and sheep awards at the recent Interstate fair at Spokane, the horse and cattle awards having been given last week:

SWINE.

Duroc Jerseys.

There were eight Duroc owners who shared in the premium awards. They were: R. P. Camp, Ione, Wash.; A. H. Poston, Spokane, Wash.; Robert Nelson, Yakima, Wash.; B. E. Smead, Opportunity, Wash.; David Brown, Spokane, Wash.; Emery Donohue, Colbert, Wash.; Bellwood farm, Spring Valley, Wash., and S. W. Shoemaker, Garfield, Wash. The awards were as follows:

Boar, 2 years old or over—First, R. P. Camp; second, A. H. Poston; third, Robert Nelson; fourth, A. H. Poston; fifth, Robert Nelson.

Boar, 18 months old and under 2 years—First, Robert Nelson; second, B. E. Smead.

Boar, 1 year and under 18 months—First, A. H. Poston; second, Robert Nelson; third, Robert Nelson; fourth, David Brown; fifth, Emery Donohue.

Boar, 6 months and under 1 year—First, David Brown; second, David Brown; third, Bellwood farm; fourth, B. E. Smead; fifth, A. H. Poston.

Boar, under 6 months—First, S. W. Shoemaker; second, David Brown; third, Robert Nelson; fourth, A. H. Poston; fifth, A. H. Poston; sixth, David Brown; seventh, B. E. Smead.

Sow, 2 years old or over—First, B. E. Smead; second, Robert Nelson; third, A. H. Poston; fourth, A. H. Poston; fifth, David Brown; sixth, David Brown.

Sow, 18 months and under 2 years—First, B. E. Smead; second, Robert Nelson; third, A. H. Poston; fourth, Robert Nelson.

Sow, 1 year old and under 18 months—First, Robert Nelson; second, Robert Nelson; third, David Brown; fourth, A. H. Poston; fifth, Bellwood farm; sixth, David Brown.

Sow, 6 months and under 1 year—First, David Brown; second, David Brown; third, A. H. Poston; fourth, A. H. Poston; fifth, R. P. Camp.

Sow, under 6 months—First, A. H. Poston; second, A. H. Poston; third, David Brown; fourth, David Brown; fifth, Bellwood farm; sixth, Robert Nelson; seventh, Robert Nelson; eighth, B. E. Smead.

Boar and three sows, 1 year old or over—First, Robert Nelson; second, David Brown; third, A. H. Poston; fourth, Robert Nelson.

Boar and three sows, under 1 year—First, David Brown; second, A. H. Poston; third, A. H. Poston; fourth, Robert Nelson.

Boar and three sows, over 1 year, bred by exhibitor—First, David Brown; second, A. H. Poston; third, A. H. Poston.

Boar and three sows, under 1 year, bred by exhibitor—First, David Brown; second, A. H. Poston; third, A. H. Poston; fourth, Robert Nelson.

Get of one boar—First, Robert Nelson.

Produce of one sow—First, David Brown.

Champion boar, 1 year or over—First, A. H. Poston.

Champion boar, under 1 year—First, S. W. Shoemaker.

Champion sow, 1 year or over—First, B. E. Smead.

Champion sow, under 1 year—First, A. H. Poston.

Grand champion boar—First, A. H. Poston.

Grand champion sow—First, B. E. Smead.

Poland Chinas.

Only three breeders divided the premiums in the Poland China competitions. The winners were Ray J. Fox, Lyons, Ore.; P. L. Sain, Oakesdale, Wash., and Frank Donison, Lyons, Ore. Their winnings were as follows:

Boar, 2 years old or over—First, Ray J. Fox; second, P. L. Sain.

Boar, 18 months and under 2 years—First, Ray J. Fox; second, Ray J. Fox.

Boar, 1 year and under 1½—First, Ray J. Fox.

Boar, 6 months and under 1 year—First, Ray J. Fox; second, Ray J. Fox; third, P. L. Sain.

Boar, under 6 months—First, Ray J. Fox; second, Ray J. Fox; third, Frank Donison.

Sow, 2 years old or over—First, Ray J. Fox; second, P. L. Sain; third, Ray J. Fox.

Sow, 1½ years and under 2—First and second, Ray J. Fox, one entry.

Sow, 1 year and under 1½—First, Ray J. Fox; second, Ray J. Fox.

Sow, 6 months and under 1 year—First, Ray J. Fox; second, P. L. Sain; third, Ray J. Fox.

Sow, under 6 months—First, Ray J. Fox; second, Ray J. Fox; third, Frank Donison.

Boar and three sows, over 1 year—First, Ray J. Fox; second, Ray J. Fox.

Boar and three sows, under 1 year—First, Ray J. Fox; second, Ray J. Fox; third, P. L. Sain.

Boar and three sows, over 1 year. Bred—First, Ray J. Fox.

Boar and three sows, under 1 year. Bred—First, Ray J. Fox; second, Ray J. Fox; third, P. L. Sain.

Get of one boar—First, Ray J. Fox; second, Ray J. Fox; third, P. L. Sain.

Produce of one sow—First, Ray J. Fox; second, Ray J. Fox; third, P. L. Sain.

Champion boar, 1 year or over—First, Ray J. Fox.

Champion boar, under 1 year—First, Ray J. Fox.

Champion sow, 1 year or over—First, Ray J. Rox.

Champion sow, under 1 year—First, Ray J. Fox.

Grand champion boar—First, Ray J. Fox.

Grand champion sow—First, Ray J. Fox.

Berkshires.

C. M. Payne, Spokane, Wash., Silver Birch farm, Newport, Wash., and J. B. Tarbett, Newport, Wash., were given all the awards for Berkshires, the winnings being as follows:

Boar, 2 years old or over—C. M. Payne, first; Silver Birch farm, second; C. M. Payne, third.

Boar, 1 1-2 years old and under 2—Silver Birch farm, first.

Board, 1 and under 1 1-2—Silver Birch farm, first; C. M. Payne, second; Silver Birch farm, third.

Boar, 6 months and under 1 year—Silver Birch farm, first.

Boar, under 6 months—C. M. Payne, first and second; Silver Birch farm, third and fourth; J. B. Tarbet, fifth.

Sow, 2 years old or over—Silver Birch farm, first and second.

Sow, 18 months and under 2 years—J. B. Tarbett, first; Silver Birch farm, second and third.

Sow, 1 year old and under 18 months—Silver Birch farm, first and second; C. M. Payne, third.

Sow, 6 months and under 1 year—Silver Birch farm, first and second.

Sow, under 6 months—Silver Birch farm, first; C. M. Payne, second, third and fourth; J. B. Tarbet, fifth.

Boar and three sows, over 1 year—Silver Birch farm, first and second.

Boar and three sows, under 1 year—Silver Birch farm, first and second.

Boar and three sows, over 1 year (bred)—Silver Birch farm, first.

Boar and three sows, under 1 year (bred)—Silver Birch farm, first and second.

Get of one boar—Silver Birch farm, first and second.

Produce of one sow—Silver Birch farm, first; J. B. Tarbet, second; Silver Birch farm, third.

Champion boar, 1 year or over—C. M. Payne, first.

(Continued on page fourteen.)

$1.00 Puts It On Your Farm



SIMPLEX "2 in 1" Double Duty—STRAW and Manure SPREADER

Here is positively the only machine that actually spreads straw and manure perfectly. Shreds hardest lumps of manure or bright straw into fine pieces and spreads it 21 ft. at a time—20 acres a day! Greatest invention of the day. Thousands of farmers using it to insure big crops this year.

Save Your Wheat From "Winter Kill"

Don't risk $2.00 seed this winter. A straw mulch will save it from Winter Kill—insure big yields. Spread straw and manure for fertilizer. My machine does both. Add 5 to 10 bushels to your crops. Fits any wagon! Has double drive and differential! Will last a lifetime. Costs half the price of a good manure spreader. Write for big catalog, low price, long credit and details of my amazing "Dollar Installing Terms," which puts it on your farm for 30 day trial. Do it now.

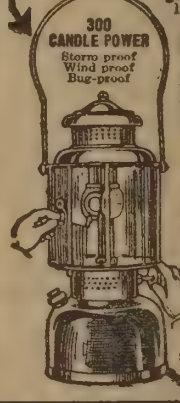
Manson Campbell, Pres.
Simplex Spreader Mfg. Co.
832 Traders Building Kansas City, Mo.

30 Days Free TRIAL

A Match-Lighting Gasoline Lantern!

No torch needed. Lights with a match like the old time oil lantern but makes and burns its own gas from common gasoline, giving a brilliant, steady, white light of 300 candle power.

300 CANDLE POWER
Storm proof
Wind proof
Bug-proof



Most Brilliant Light Made

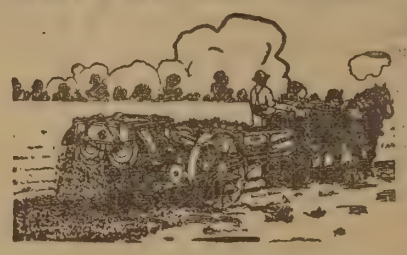
Brighter than the brightest electric bulb. More light than 20 oil lanterns. Cheapest and best light made. Costs less than one-third of a cent per hour. Safer than the safest oil lantern. The

Coleman Quick-Lite

No wicks to trim—No globes to wash. No dirt or grease, no glare or flicker. Absolutely safe. Fuel can't spill—no danger if tipped over in straw. Guaranteed Five Years—will last a lifetime.

If your dealer can't supply, address our nearest office for Catalog No. 69
COLEMAN LAMP CO.
St. Paul, Wichita, Toledo, Dallas, Chicago.

Invest in One of These!



WHEN corn was selling for 50 cents a bushel, one of our dealers made this offer to a skeptical farmer: "Use this manure spreader to top-dress 20 acres of your 40-acre corn field, putting on eight loads to the acre. Leave the other 20 unmanured as you meant to do with the whole 40. I will take the difference in the yield between the two 20's for the spreader." The farmer agreed, thinking to get his spreader at a low price.

The 20 on which he used the machine produced 512 bushels more than the other 20. He paid the dealer $256.00 for the spreader—a great deal more than its present selling price. Today, higher prices would make that difference about three times $256.00!

You simply cannot afford to be without a spreader when it will pay for itself like that. Hand spreading is out of the question. You want the manure pulverized and spread evenly, not dumped out in big lumps unevenly.

Now that we have added the New No. 8 Spiral Wide Spreader to the Low Corn King and Low Cloverleaf lines, we are in a position to suit any farmer. The No. 8 machines are for the average small farm, very light draft, narrow boxes, spiral wide spread (regular). Our big No. 6 machines—Corn King, Cloverleaf and 20th Century—are "whales for work", easy handling and loading, steel construction, light draft. With the No. 6 spreaders you may have the efficient disk wide spread (regular) or the new spiral wide spread (special).

Here is a spreader for every farm. This year, of all years, you need one. Write us for full information.

International Harvester Company of America
(Incorporated)

Crawford, Neb. Denver, Colo. Helena, Mont. Los Angeles, Cal.
Portland, Ore. San Francisco, Cal. Spokane, Wash. Salt Lake City, Utah

Ten Billions for War

Stupendous Annual Cost Estimated

The treasury department of the United States has coldly calculated that it will take $10,735,807,000 to pay the running expenses of the government for this first year of the war. This does not include the money that is being lent and will be lent in huge sums to the allies of Europe. It covers only the maintenance of the government, the maintenance of the army and navy, the building of vessels, the construction of airships and all the other incidentals of war, including munitions. It is calculated that the revenues to be collected by the government under existing laws to go toward these expenditures will total about $1,333,000,000, leaving about $9,400,000,000 to be raised by other means. This is the cause of the great financial problems with which congress has been wrestling, of which the enactment during the last few days of the eleven billion dollar credits measure.

The money to be expended by the government during the first year of the war will be approximately ten times that ever spent by the government in one year. Only twice in the history of the country has the government expense exceeded one billion dollars a year. Last year it was about $1,040,000,000, or something less than one-tenth what it is estimated to be for this first year of the war.

U-Boats Raid America?

Reports for several days have been prevalent that a submarine, or perhaps more than one, was approaching the American coast and was attacking ships within 100 miles of the Atlantic coast. Ships brought in reports of hearing distress calls from other vessels that claimed to be endangered by submarine attack. It appeared finally, however, that the reports were erroneous, as proof of the presence of submarines could not be had. It is a new rule of the sea that one vessel must not go to the aid of another that is being attacked by a submarine, owing to the danger it would have to face.

Russia Still Struggles.

Russia is still struggling with herself in an attempt to set up a modern, popular government in the place of the old regime which collapsed with the abdication of Czar Nicholas a few months ago. After successfully quelling, for a time at least, a rebellion by a considerable portion of the army under the leadership of General Korniloff, Minister Kerensky has issued a formal proclamation of the establishment of a republican form of government. Pending the formation of a republican cabinet as the first step in setting up the republican form of government, he has called together four leading men of the nation to act with him as a cabinet to conduct the affairs of government. It is his expressed hope that this action will coordinate the opposing elements and enable Russia to unite solidly for the conduct of the war against Germany.

"Reconstruct" Wounded.

That the United States government is not underestimating the dangers that it is calling upon its soldiers to face is indicated by the fact that a far-reaching hospital system is planned and announced for caring for wounded soldiers who are brought back from the battle fields of Europe. Major General Gorgas, surgeon general of the army, has announced the selection of sites for 19 hospitals in 19 of the largest cities of the United States, and it is the plan to equip hospitals on them for the sole purpose of "reconstructing" maimed soldiers so as to fit them for earning a livelihood. Special studies are being directed to fit surgeons for the work of preventing deformities, and an enormous hospital force will have to be trained and enlisted in the service.

Sweden Caught Napping.

The government of Sweden says that if it had realized the serious possibilities of acting as Germany's messenger in transmitting messages for the German embassy in Buenos Aires, Argentina, it would not have agreed to perform this service. This disclaimer is made as a result of the disclosure by the United States of gross violations of international law by the Swedish representatives in the South American republic. In messages transmitted by these representatives in Buenos Aires, instructions were being given to German agencies to destroy Argentine shipping, notwithstading the repeated pledges of friendship for the Argentine republic. Violent anti-German and anti-Swedish demonstrations have taken place in Argentina, and it is still highly probable that a severance of diplomatic relations, followed by possible declaration of war, will resut.

Ship Builders Strike.

Most of the ship building yards on the Pacific coast have been tied up temporarily by a general strike of certain unions affiliated with the iron workers' union. More than 25,000 workmen on the Coast have walked out, their claim being that they are underpaid. They ask $6 a day. The ship building in Puget sound yards, Portland yards and San Francisco yards has been practically completely tied up. Contracts for more than $150,000,000 construction are stopped.

The Motor Car
On the Farm

"Gum" Blow-Out.

By W. D. ALBRIGHT.

The cut herewith shows a tire that has been a victim of a slow leak which caused a surface of "gum" blowout.



Very frequently "slow leaks" are caused by picking up loose nails or tacks. The head of the nail or tack prevents the air from coming out of the casing at the punctured spot, but not so of the tube. Possibly before the slow leak is noticed the head of the nail or tack has been worn off so that it can not be located from the outside. This happens every day and generally the motorist will put several tubes in the casing with the result that they are punctured by the concealed nail or tack. Take the precaution, always in changing a tire, to run your hand carefully around the inside of the casing in search of these sharp objects which puncture your tubes. This casing was originally punctured in the center of its tread. While, usually, the air would escape through the puncture, in this case it has followed the fabric plies and come out between the outer ply and the rubber tread. In seeking the point of least resistance it has accumulated where the rubber was thinnest and formed an air pocket. The thin rubber soon gave way to a blowout. This casing could have been easily repaired. A new tube should have been put in the casing and at the earliest opportunity the loose rubber should have been vulcanized to the carcass of the casing where it had become loose.

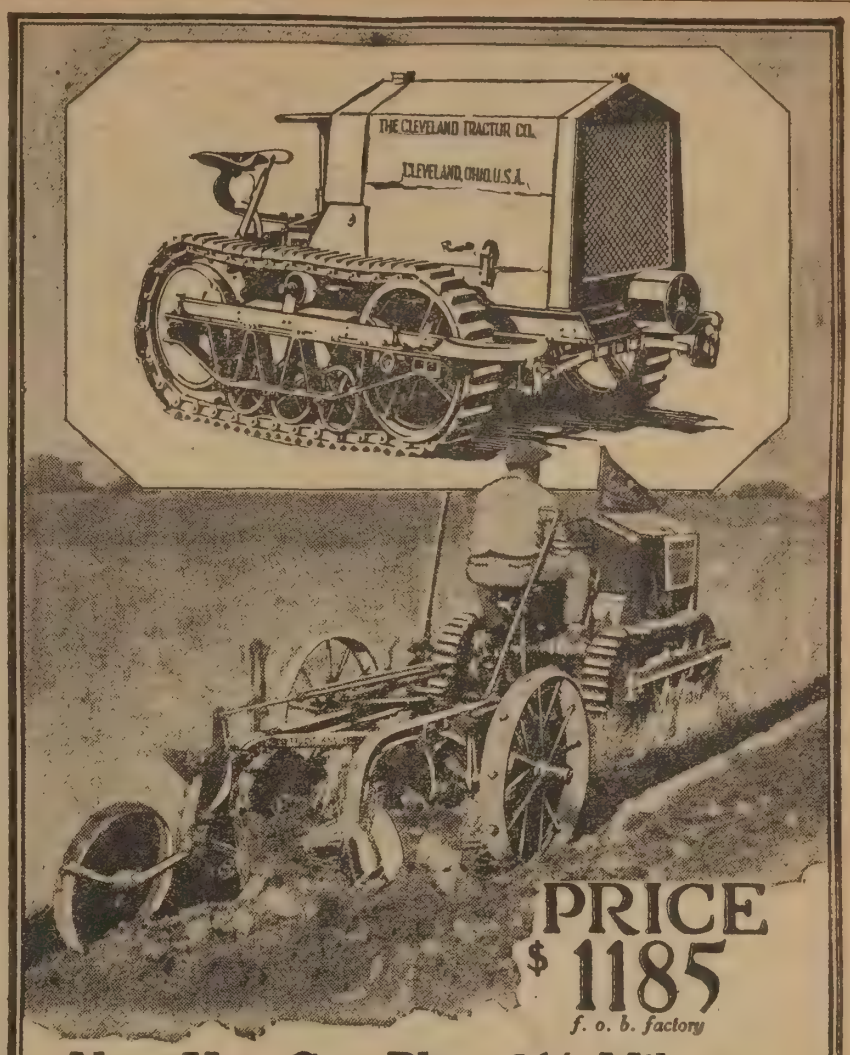
Low-Gear Performance.

What is your opinion about using a motor car for work that requires hard pulling in low gear? And is there any way of telling whether any parts of a car have been strained? These questions come from an Oregon reader who apparently thinks he has abused his car.

The use of a motor car for pulling heavy loads that require it to be in low gear is not particularly injurious if the amount of such work is limited. Naturally, a great deal depends on the skill of the driver in handling his clutch and throttle. However, continual low-gear performance is likely to make the water in the radiator boil and also cause considerable carbon in the cylinders. Do not let the water in the radiator get below the upper hose connection. And if the water boils violently and continuously, that is a warning to stop.

To Make Pickles Crisp.

Add fresh grated horseradish to every jar of pickles and they will be not only crisp, but extremely well flavored.



PRICE
$ 1185
f. o. b. factory

Now You Can Plow 3½ Miles an Hour—Even Faster

Such plowing speed used to be considered impracticable — even impossible.

But the Cleveland Tractor has proved that it can not only plow at that rate—*but plow in a way that cannot be approached by horses.*

The Cleveland Tractor has proved that it can plow—and plow well—at 3½ miles an hour.

At the Fremont Tractor Demonstration, *over land that was literally muck*, it pulled two 14-inch bottoms running 8 inches deep at an average speed of 3½ miles an hour.

The thousands who saw the performance pronounced it the finest job of tillage they had ever seen.

Small and light, and hauling two bottoms instead of three the Cleveland Tractor is remarkably easy to handle. It works with such speed that it does as much and in some cases more than 3-plow tractors—*and more economically.* At plowing the Cleveland Tractor actually does the work of three 3-horse teams and three men. Its speed can be applied not only to plowing—but to any one of a wide variety of tasks—even to riding in to dinner or home when work is through.

It crawls on its own tracks. It can go anywhere—through sand or mud, up hill or down dale—even over ditches and gullies.

Because it has 600 square inches of continuous traction surface it does not slip, mire or pack the soil.

The Cleveland gives 12 h. p. at the drawbar and 20 at the pulley—plenty of power to meet the requirements of any farm.

It only costs $1185, yet it is constructed of the best materials.

It is built by Rollin H. White, one of the country's greatest motor truck engineers. All gears are identical with those used in the finest trucks and all are protected by dirtproof, dustproof cases.

The Cleveland will enable you to plow when and where needed—without a moment's loss of time. It will help you increase the yield of your acres as it is doing for many others.

We are crowded with orders from all sections of the country. We advise ordering early if you want your Cleveland in time for early spring work.

Get full information now. Use the coupon.

Cleveland Tractor Co.
CLEVELAND, OHIO.

Cleveland Tractor
Geared to the Ground

Cleveland Tractor Company
Dept. BK Cleveland, Ohio

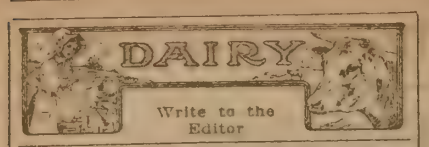
Please send me full information about the Cleveland Tractor.

Name_____
City_____ County_____
State_____

McNeff Motor Co.

Northwest Distributors

Portland, Oregon



A. B. NYSTROM, Editorial Contributor

Wellsville Tests

Though August is perhaps the worst month of the year for the dairy cow, the Wellville Cow Testing association, according to the report of LeRoy W. Hillam, tester, made a very creditable showing in the Cache valley of Utah. The association average for the month was 731 lbs. of milk and 29.2 lbs. of butter fat, .6 of a lb. of fat lower than the average of last month. Considering the oppresion of heat and the large number of flies and the drying up of the pastures, this is a very good showing for the month. This month 64 cows are on the "honor roll" each having produced over 40 lbs. of butter fat for the 31 days testing period. This is a decrease of six over last month; 73 cows made over 1000 lbs. of milk.

The leading cow this month is a grade Holstein, "Beauty," belonging to C. W. Perkinson, she having produced 1240 lbs. of milk testing 6.1 per cent, making 63.2 lbs. of fat. Second place for the month is a native cow owned by LeRoy W. Hall. Her production was 1566 lbs. of 4 per cent milk making 62.6 lbs. of fat. Next to this and third place is John Stuart's "Rosie" with 1420 lbs. of milk testing 4.4 per cent, making 62.5 lbs. of fat. During the lat four months this cow has led the association twice and has been second place twice, a remarkable showing for this time of the year. Fourth place goes to D. A. Leishman's Shorthorn cow "Wart." She produced 1369 lbs. of milk testing 4.4 per cent making 56.2 lbs. of fat.

The high herd average again goes to John Darley's Jerseys. These 21 cows averaged 970 lbs. of milk and 44.6 lbs. of fat.

White River Valley Figures.

In his August report Robert Cowan, tester in the White River Valley Cow Testing association, in western Washintgon, says there has been a decrease in milk flow and an increase in feed cost. The average milk yield per cow was 818 pounds; the average butterfat, 29.62 pounds; the average feed cost, $5.24. Of the 601 cows tested, 152 gave over 1000 pounds of milk. Seventy-six gave over 40 pounds of butterfat, 24 over 50 pounds, and 12 over 55 pounds. During the last six months 18 cows have given over 240 pounds of fat. A cow from John Steele's herd heads the list for the month, having produced 74.78 pounds of butterfat.

Figures From Tests.

The following table gives the names and records of the cows in the Coquille-Myrtle Point Cow Testing association, which have produced more than 45 pounds of butterfat during the period of 30 days ended August 31, according to the report of C. H. Bryant, the official tester:

Owner.	Breed.	Age.	Lbs. Fat.
Herman Peterson	Jers.	7	50.0
Alb. Schroeder	Jers.	5	49.3
John Strong	Jers.	6	48.1
Martin Schmidt	Jers.		48.0
S. S. Reed	Jers.	7	47.7
Alb. Schroeder	Jers.	14	45.3
John Strong	Jers.		45.3

Two-Year-Old Guernsey.



Follyland Nancy 52,457, a 2-year-old Guernsey heifer, bred and owned by I. C. Blandy of Greenwich, N. Y., recently completed an official year's record of 12,270.9 pounds of milk and 712.60 pounds of butterfat, her average test being 5.81 per cent. Three weeks after finishing her record she dropped a fine heifer calf, which is now growing well. Follyland Naney ranks third in butterfat production among 2-year-old Guernseys.

Investigate Milk Conditions.

Mayor Baker of Portland has appointed a milk investigation committee, composed of Henry E. Reed, W. L. Brewster and Mrs. W. B. Ayer.

The commission expects to make a study of present milk conditions in the city and through the district serving it. About 60 dairymen have gone out of business already, according to report. Help is scarce, feed is high and distributing conditions are not good.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Bird Food Holder.

This holder is simply a wire basket, hinged at the bottom and held by a

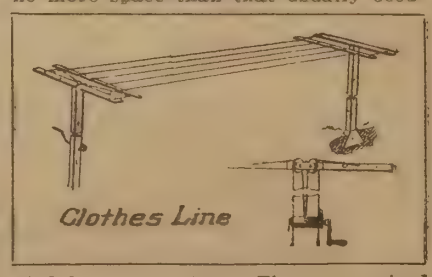


Bird-Food Holder

latch at the top. It is easily filled, and the food is accessible to the birds until entirely consumed

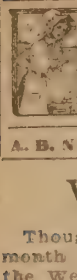
Clothes Line.

The five lines of this device take up no more space than that usually occupied by one or two. They are raised and lowered by means of a windlass attached to one post.



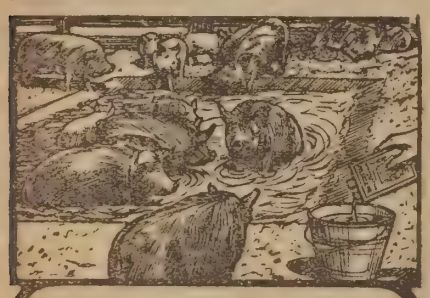
Clothes Line

YOU CAN'T CUT OUT A
Bog Spavin or Thoroughpin
but you can clean them off promptly with



ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.

and you work the horse same time. Does not blister or remove the hair. $2.00 per bottle, delivered. Will tell you more if you write. Book 4 M free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Varicose Veins, Ruptured Muscles or Ligaments, Enlarged Glands, Wens, Cysts. Allays pain quickly. Price $1 and $2 a bottle at druggists or delivered. Made in the U. S. A. by W. F. YOUNG, P.D.F., 371 Temple St., Springfield, Mass.



It's Natural for a Hog to Wallow

Here's a good thing to do: Provide a wallow close to the feeding grounds to which add Dr. Hess Dip and Disinfectant. As the hogs pass back and forth from the wallow to the feed trough, the **DIP** will kill the lice and cleanse the skin, while the **DRIP** will destroy the disease germs and the worms that pollute the ground. That will mean a clean, healthy skin, freedom from lice, a safeguard against disease and larger, better porkers.

Dr. HESS & CLARK
Ashland Ohio

DR. HESS DIP and DISINFECTANT



Feed the Fighters! Win the War!

Harvest the Crops! Save the Yields!

On the battlefields of France and Flanders the United States boys and the Canadian boys are fighting side by side to win for the World the freedom that Prussianism would destroy.

While doing this they must be fed and every ounce of muscle that can be requisitioned must go into use to save this year's crop. A short harvest period requires the combined forces of the two countries in team work, such as the soldier boys in France and Flanders are demonstrating.

THE COMBINED FIGHTERS IN FRANCE AND FLANDERS AND THE COMBINED HARVESTERS IN AMERICA WILL BRING THE ALLIED VICTORY NEARER.

A reciprocal arrangement for the use of farm workers has been perfected between the Department of the Interior of Canada and the Departments of Labor and Agriculture of the United States, under which it is proposed to permit the harvesters that are now engaged in the wheat fields of Oklahoma, Kansas, Iowa, North Dakota, South Dakota, Nebraska, Minnesota and Wisconsin to move over into Canada, with the privilege of later returning to the United States when the crops in the United States have been conserved, and help to save the enormous crops in Canada which by that time will be ready for harvesting.

HELP YOUR CANADIAN NEIGHBORS WHEN YOUR OWN CROP IS HARVESTED.
Canada wants 40,000 Harvest Hands to take care of its 13 Million Acre Wheat Field.

One cent a mile railway fare from the International Boundary line to destination and the same rate returning to the International Boundary. High wages, good board, comfortable lodgings.

An Identification Card issued at the boundary by a Canadian Immigration Officer will guarantee no trouble in returning to the United States.

AS SOON AS YOUR OWN HARVEST IS SAVED, move northward and assist your Canadian neighbor in harvesting his; in this way do your bit in helping "Win the War."

For particulars as to routes, identification cards and place where employment may be had, apply to Superintendent of Immigration, Ottawa, Canada, or to

J. N. GRIEVE, Cor. First and Post Sts., Spokane, Wash.
Canadian Government Agent.



LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

Shall We Chop Hay?

By E. L. POTTER.

Chopping hay is a practice that deserves most serious attention in times like these when feed is so scarce and high priced. Chopping hay may have two advantages; first, the waste of stems and coarse portions is largely prevented, and second there may be some slight increase in digestibility so that each pound actually eaten will produce greater gain. The latter point, however, is not well proved and in case of wintering stock is rather doubtful. There can be, however, no question as to the waste. Unless the hay is exceptionally good or the stock kept very hungry the waste will run around 10 per cent and sometimes as high as 15 per cent.

The cost of cutting depends largely upon the cost of the machinery and power. The labor cost of cutting hay from the stack or mow runs slightly under $1 per ton with small cutters, say 12 to 14 inch. With cutters 24 inches or larger the cost should not exceed 75 cents per ton. To this must be added the cost of the machine and the power. A 12-inch cutter will require 15 horsepower or more and will cut about one ton of dry hay per hour. The larger cutter will do a little more work per inch capacity than the smaller one. From experience as a stockman rather than as a machinery expert I would consider one-half to three-fourths ton of dry hay per working day per horsepower as about what can be expected.

In previous years $1.50 per ton has been a common contract price for cutting. With hay worth $6 in the stack this increased the cost 25 per cent and it is very doubtful if the gain from cutting was this great unless with fattening cattle on alfalfa alone. With hay at $20 the cost of cutting may be $2 per ton without increasing the cost but 10 per cent, an amount which cutting may be reasonably expected to save. Then in many cases there is not enough hay to feed the stock regardless of the price. Cutting will in this case serve to increase the amount of hay not less than 10 per cent.

Cutting hay has become almost a fad during the last few years, and we have hesitated to recommend it except under unusually favorable circumstances, but now with hay so high and scarce we feel that every stockman should cut his hay providing he is in a position to do so at a reasonable expense since by so doing he will not only work to his own profit, but will help the feed situation by the saving of that much waste.

LOGGED-OFF Stevens County LANDS

Where Stock-raising and Dairying pay



PHOENIX LUMBER CO Spokane Wash.

Write Department "A" for free illustrated folder.

National Dairy Show

The National Dairy show and horse sale will be held at Columbus, Ohio, October 18-27, inclusive. One of the continuing features of the dairy program will be cattle demonstrations and demonstrations of manufacturing various dairy products by the United Staets department of agriculture and agricultural colleges.

On Monday morning, October 22, there will be a massmeeting of the American dairy industry in which the leading men of the country will discuss with the dairymen the great importance of production of dairy products, that the world may be properly fed. The convention of the American Jersey Cattle club will also be held on this day. The American Guernsey Cattle club convention will be held October 23; convention of the Holstein-Friesian association of America, October 24; the horse sale and cattle parade will be features of the evening sessions. Cattle judging will also be an important part of the program.

Veterinary

Dr. S. B. Nelson

Sores on dog's back.—I have a dog that scratches himself most of the time. Have washed him with sheep dip and soap suds, but it does not do any good. He has sores along his back.

F. S., Albany, Ore.

Answer.—Try obtaining the services of a veterinarian. There are parasites affecting dogs that create the condition that you mention, and I think that you really ought to have the services of a veterinarian to overcome this trouble. In the meantime, try applying to the sores a little of the 1 per cent solution of picric acid.

Scours—I have a cow that gets scours as soon as she is put on green feed in the spring. She seems to be perfectly well otherwise, and gives a large amount of milk, but does not get fat. W. J. C., Nampa, Idaho.

Answer—Try giving your cow a feed of dry fodder hay before you put her on pasture, and that may overcome the trouble.

Teat is injured—I have a heifer that I can only milk by stripping. The udder is soft and has not been sore at any time, but there is a lump at the top of the teat about the size of a pea.

D. S., Santa, Idaho.

Answer—The little valve at the top of the teat has been injured and has formed a lump there. The proper way to do would be to have your local veterinarian, if you have one, operate on the teat and remove the lump. This may be done by an external operation, or it may be done by inserting into the teat the special cutting knife which slashes the tumor so that it can be milked out. If you do not have a veterinarian in your neighborhood I would recommend that you apply tincture of iodine around the base of the teat morning and evening after milking, and keep on stripping the heifer. This may be of value. It has been in some instances.

Fails in breeding—I have a 2-year-old heifer that seems perfectly healthy that I can not get with calf. Also what can be done for pink eye in cattle? H. L. S., Banks, Idaho.

Answer—It is most difficult to say just what is the trouble that is causing your heifer to fail in breeding. I am going to advise two treatments. You can try first one and then the other if the first fails. Put a teaspoonful of sodium bicarbonate into a quart of warm water. Wash out the vagina with this solution two or three days prior to breeding. The second treatment is known as the yeast treatment. Put a cake of yeast in a quart of water and place it on the back of the stove and allow it to ferment. Use this as a vaginal injection the first and second day prior to breeding. Regarding the pink eye in your cattle, I would refer you to the article in this paper on "Contagious Keratitis."

Need more lime.—This summer I have noticed my cows pick up small weather beaten bones they find on the prairie. They seem to suck the lime from them. They have plenty of pasture and salt.

H. L. M., Lothair, Mont.

Answer.—I think if you would mix one part of precipitated calcium phosphate with 50 parts of salt the picking up of the bones would stop. I am quite sure that you are correct in the supposition that it is the lime that they want.

Jerseys for Net Profits



You're in the dairy business for profit—the *net* profit that your herd has made you at the end of the year will determine the size of your bank account. Jerseys yield the largest returns from every ounce of feed—proved by tests at two great expositions. Jersey milk averages 5.3% butter fat, 9.1% solids not fat—highest of all breeds. Buy a Jersey bull. Write the breeders advertised below for prices, pedigrees, etc.



The American Jersey Cattle Club, 314 West 23rd Street, New York City

Jersey Isle Stock Ranch

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castilian Lady 26628 made 603.3 lbs. fat (715.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.

C. E. LONG, Buhl, Idaho.

Two Choice Bull Calves

From cows with official records of 914 and 663 lbs. butter in a year. Prices in proportion to production and quality.

ED CARY, P. O. Carlton, Oregon. Station, Lafayette, Ore.

Pearl Riga 206648

dropped bull calf July 10, 1917. Her record 458 lbs. butter in 297 days. Sire, Upright's Chief, sire of 6 in R. of M.; half bro. to Golden Glows Chief, sire of 31. Calf's sire, Dominus, out of 817-lb. cow and by bull out of 853-lb. cow. $75 if taken soon.

JOHN B. STUMP & SON, Monmouth, Ore.

1120 Pounds of Butter in a Year

by St. Mawes Poppy is the sixth highest official record of a Jersey cow in the world. She is dam of my herd bull, and his first heifers in milk are heavy producers. Write for prices on young bulls by him out of register of merit dams.

F. E. LYNN. Perrydale, Ore.

Every Cow a Record

Fifty per cent of our cows that have dropped more than one calf have records above 700 lbs. butter, 85 per cent fat. Golden Glow's Chief and Adelaide of Beechlands blood predominates. Special prices on bull calves under 9 months old.

LADD FARM. Oswego, Ore.

Green Meadows Farm Jerseys

Young bull out of dam on official test making good record. Sire a grandson of Golden Glow's Chief, out of dam with official test of over 700 lbs. butter in a year. Other bull calves from register of merit dams. Also cows and heifers.

HENRY STEWART, Prop., Albany, Ore.

Fit for Herd Headers

Young bulls of good individuality, ready for service, sired by Landseer's Tormentor Boy, a strongly bred Tormentor bull, with high-producing cows in his pedigree. Dams of Brown Bessie and Tormentor breeding, with register of merit records. Price reasonable.

J. C. BROWN & SON. Shedd, Ore.

Wynoochee Home Farm

Home of
The Gold Medal Jerseys.

Young stock whose dams or granddams in my herd have won gold medals from the A. J. C. C.

JOHN H. TAYLOR, Montesano, Wash. Box 426.

MAPLE LAWN PLACE, ALBANY, ORE., Home of
Register of Merit Jersey Cattle.

Herd headed by a double grandson of Spermfield Owl—"Moose o' Fernwood" No. 137024, whose dam has an official record of 916 lbs. butter.

We are offering young stock from this rich butter inheritance whose dams are now on official test.

ROBT. L. BURKHART, Albany, Oregon.

Waikiki Farm

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.
ROUTE 7, SPOKANE, WASH.

Meet Me at the Fair

where I will show a few bull calves from some of my best cows. For 8 months my herd has had highest average in Marion County Cow Testing association. For 8 months the whole herd averaged almost 60 lbs. of fat per month, per cow.

F. A. DOERFLER, Silverton, Ore.

$100 to $250

Young Jersey bulls, ready for service, sired by St. Mawes Golden Poppy, whose dam has official record of 1120 lbs. butter in a year. Some out of Register of Merit dams, priced according to quality of dam.

M. H. JONES, Perrydale, Ore.

Bull Calf, 8 Months Old

Dam — 10,851 pounds milk, 710.38 pounds butter in 365 days, at three years and eight months.

Sire's dam—535 pounds 5 ounces butter in 365 days.

H. THIESSEN & SON, Milwaukie, Ore.

Bull From Gold Medal Dam

Out of Brown Bessie Alphena's Gem, 827 lbs. butter in year. Sire, Engineer's Bluster, whose dam, Mabel's Bluster, once held world's record for 3-year-old production. His first daughter on test, in this herd, beginning under 2 years old, will make over 500 lbs. butter. Other bulls from Register of Merit dams.

N. H. SMITH, R. D. 2, Oregon City, Ore.

Ashburn Farm Register of Merit Jerseys

Offering of the great butter sire Valentine's Ashburn Baronet, from dams carrying the blood of St. Mawes and Golden Glow's Chief. Real foundation heifer calves for sale.

J. M. DICKSON & SON. Shedd, Ore.

Oak Ridge Jersey Farm Register of Merit Cattle

Twenty-nine years breeding Jersey cattle. Write us for prices and pedigrees. For information address

RILEY E. HULBURT, Albany, Ore.

Ashwood Farm Jerseys

Herd headed by the great sire, HOLGER, and the young bull, ST. MAWES OF ASHWOOD (son of Poppy's St. Mawes and Gertie's Fern Princess). Nothing for sale at present.

McARTHUR & STAUFF, Rickreall, Ore.

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Jersey breeders advertising on this page as well as the American Jersey Cattle Club will appreciate it if you will mention this paper when writing any of them. They want to be able to trace the exact source of your inquiry. Will you kindly show them this courtesy?

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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

About the only green thing in western Oregon and Washington at the end of this unprecedentedly dry summer are the patches of kale here and there, and the poultryman who has a patch of it for his fowls is fortunate. In spite of the dry weather the kale keeps growing. Those who took our advice to plant kale will I am sure have no regrets that they did so.

If kale is planted on good rich soil it will grow and thrive in spite of the summer drouth and the heat. Give the chickens all they will eat of it.

J. D.

Is a Critical Time

The pullets should be laying soon, those hatched in March and April. Very often, however, owing to crowding in small houses or coops the pullets make very slow development. Their development often receives such a check that they will not begin to lay till midwinter, and they will be permanently injured as egg producers. It is a hard lesson to learn the necessity of furnishing the growing pullets with housing room enough or with fresh air enough, which is the same thing. If there is not house room enough the door of the house should be shut and the pullets allowed to roost outdoors—in the tree or on the top rail of the fence. When the wet weather or the cold weather comes, of course, they should have shelter.

It is surprising how the pullets thrive on fresh air. It is no use feeding wheat or corn or oats to pullets that are starved on fresh air. An open shed house, one with one side altogether open, with roost perches not less than 18 inches apart, is all the housing that is necessary or desirable. It is a waste of valuable feed to give chickens all they will eat and then allow them to crowd themselves together like sardines on perches six, eight or 10 inches apart in a close house. Cut out half of the perches and all of one side of the house and they will return value for the feed they eat.

J. D.

Vigor or Physical Fitness



Strong and weak constitution cockerels.

The accompanying photograph of two barred Plymouth Rock cockerels, which was taken at the Oregon station, shows a very striking case of difference in vigor. One shows very high vigor, the other low. The difference in size and development was not due to age, for the cockerels were both of about the same age. It was not due to feed, for they were both fed alike.

Unfortunately the data are not available to make a positive statement as to the cause of this difference. The most reasonable explanation that can be given of the high vigor in the one case and the low vigor in the other is that they came into the world on an unequal footing, that the vigor or lack of it was inherited from the parent stock. It was not a question of environment, or feeding and care. Environment will not overcome the handicap of an inherited weak constitution. The environment of the parent stock, however, may be responsible for the lack of breeding quality, which will affect the vitality of the offspring.

It is important, therefore, that the breeding stock be kept under conditions that will preserve vitality and breeding quality. Improper feeding and housing will lower the vitality of the breeding stock. Persistent inbreeding will result in lower vigor. This, however, was not the case with the cockerel shown in illustration.

It should also be remembered that in a flock of chickens, especially in large flocks, the old evolutionary law of the survival of the fittest operates to a considerable extent. The chick that is hatched weak gets no more consideration from the majority than the strong. It is pushed aside at the feeding trough. In the race after the grasshopper or bug the vigorous gets there first. He takes more exercise, ranges farther and scratches more, develops a better appetite and eats more and consequently grows faster. The larger the flock the poorer the show for the weak. It may happen, of course, that in large flocks, under crowded conditions of brooding and housing, chicks hatched with good vitality develop weak constitutions. That is true. But inherited weakness is the serious problem.

Vigor or physical fitness, however, is not always evident to the eye. It is not measurable. The camera can not always show vigor or lack of it in the photograph, as it has done in the case of the illustration given herewith. It would be an easy matter if, by a glance at a chicken, we could always tell whether it had vigor or not; I mean vigor in all of its parts or functions. It may have a vigorous crow or cackle; it may have a beautiful plumage and a bright red comb. It may have good size and form, and yet have a weakness in some other vital part. The chickens may look vigorous and healthy, and yet fail to do well in production or in breeding. When it comes to reproduction or the laying of eggs it shows a lack of vigor. It may not lay well, or it may lay well and the chicks hatched from the eggs may not grow well.

Production rather than form should be the measure of vigor of the egg layer, and the growth and vigor of the chick should be the final test of the vigor of the breeding hen.

J. D.

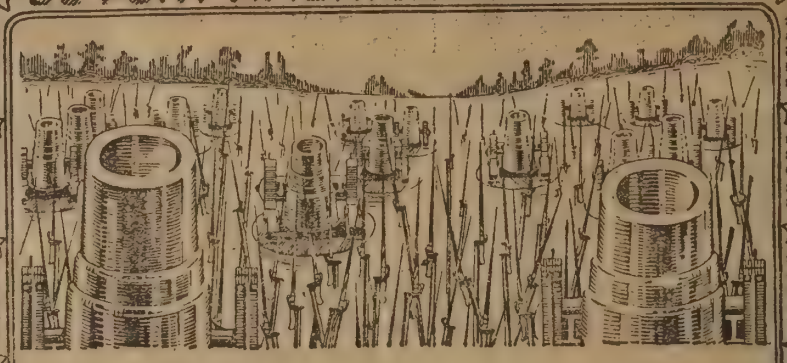
Wheat Milling in Italy.

The foodstuffs commissioner of Italy announces the government regulation that the taking from the flour of any other substance than bran is forbidden. This ruling also applies to milling by private individuals. It requires a fixed yield of 85 kilos of flour from every quintal (100 kilos or 220.46 pounds) of wheat for bread making. The regulation forbids any person to prepare, cook, keep for sale or deliver bread made otherwise than according to the percentage indicated.

Ship by Inland Waterways.

Experiments are being made as to the advisability of reviving transportation by inland waterways. One of these experiments has been successfully carried out by the Steel and Wire company of Peoria, Ill., in a recent shipment of pig iron from Sheffield, Alabama, to Peoria, via the Tennessee, Ohio, Mississippi and Illinois rivers, covering a total distance of about 681 miles. The pig iron, consisting of 1200 tons, was loaded upon three barges. The steamer with these barges in toll left Sheffield on July 21 and arrived in Peoria August 1. The shipment was successful financially as well as otherwise and the company has made plans for further transportation of its pig iron in this way.

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This is a war of endurance. Men and money are important but—*food counts most.* Soldiers who fight must eat. So must their dependents at home. The world must be fed.

Every idle acre of reclaimable land on your farm aids the enemy. Every acre of untilled soil deprives many needy mouths of food.

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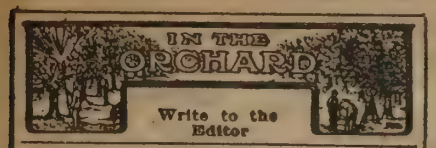
Orchard Supply Dept.
Spokane, Wash.

Increase the Food Supply

Let hoed crops provide for the present and the high prices obtained pay for a walnut orchard to provide for your future. Hoed crops, such as corn, beans and potatoes, grown between walnut trees will produce more food and income than grain grown on the whole ground. Walnut trees planted 40 feet apart use only a small part of the ground for the first few years. Plant our grafted Vrooman Franquettes. They have won a reputation for reliability and superior quality.

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GRANVILLE LOWTHER
Editorial Contributor

ORCHARDING IS ART.

Success Requires Real Application

By GRANVILLE LOWTHER.

Commercial fruit growing, for the best markets, is as much an art as sculpture, painting, music, literature or poetry. In order to excel it will require as much skill as to chisel a statue; as much taste for esthetic beauty, as to paint a picture; as much knowledge of science, as to fill a professor's chair in college, and more technical study than to prepare for the professions of journalism, law or medicine. The idea that anybody with or without preparation or study can grow fruit, is true if there is no standard of quality requirement. In that case if the trees are planted and live to the bearing age, the fruit will grow itself. Then, all the consumer has to do is to pick it off the trees and eat it. But, if the best is to be grown, there must be a knowledge of ecology; that is, the adaptation of varieties to environment. In order to illustrate that, it is only necessary to know that the Baldwin is one of the best apples for New York, and one of the porest for the Pacific northwest. The Newtown and Belleflower are the best apples for California, but the Belleflower grown in the state of Washington, will not pay expenses. The Jonathan is the best apple for Colorado, but not good for the lower warmer altitudes of the Gulf states. The Ben Davis is one of the best for the Ozark mountains, but one of the poorest for the Pacific and Rocky mountain states. The Wagener is a good apple for the Spokane district, but in the Yakima country, we are digging them out and planting better varieties. I mean, varieties better adapted to our conditions. This illustrates what I mean by the study of ecology.

If a man would know what to do under the varied conditions that confront him in orchard work, he must know the laws of biology, plants and plant physiology. I think I will be pardoned the apparent egotism of saying, that it was by this means I discovered the causes of "apple rosette," and published my opinions, amidst a dozen or more conflicting theories, demonstrated that I was right by a cure of my own orchard, and have the pleasure of seeing hundreds of orchards cured by the same process. The orchardist should know how the plant gets its food, and what varieties of food it needs. The stock man knows what to feed his cattle, horses, sheep, hogs and chickens; the fruit grower should know equally well what to feed his trees.

In a further article on the art of fruit growing Dr. Lowther enumerates a long list of the necessities of successful orcharding, showing that each of them is in itself a fine art. —Editor.

Prices of Fruits.

It now seems that growers will get good prices for apples. Reports from Canada show that they are paying $7 to $8 per barrel, and for boxed apples $2 to $2.50 per box. If the growers on this side of the line can get prices equal to those they will even up for some of the struggles they have had for the past few years against small profits and losses.

Pears are now selling for $35 to $40 per ton, and peaches 40 cents to 50 cents per box. This seems like old times when we used to get similar prices and sold for cash.

However, this is not at all out of proportion to the prices of other food products, and of other commodities. Even at these prices the fruit grower will not receive more in proportion than the hay grower. Neither will he receive profits equal to the advance in manufactured articles. Considering the higher cost of labor, boxes, paper and other materials, he will make a decent profit. G. L.

Apple Outlook Good.

"While apples have advanced less in value than any other food articles," writes H. F. Davidson, who recently left Hood River, Ore., for New York city to attend the annual convention of the International Apple Shippers' association and to open his eastern and export office for the season, "the advance of approximately 25 cents per box at the present time as compared with last season will take the apple growers out of a class of business men who have been doing business at a loss. Further advances will bring profit to the growers."

Pig Club Members.

Agriculturist A. R. Hahner of Stevens county, Wash., reports visiting the Hunters Boys' and Girls' Pig club and finding eight active members, two of which have purebred Poland China pigs. A daily record of the feed eaten by the animals is kept. Elias Nelson calls the club together bi-weekly to discuss the various phases of hog raising.

After Yakima Hay.

Montaan stockmen and dairymen are seeking to buy Yakima hay in car lots and through associations.

Offers Lot for Condensery.

The Grand Hotel, Sumas, Wash.—To the Editor of The Washington Farmer: I have got a plot of land in Sumas, 150 by 100 feet, which I will present to a first class milk condensery. It is situated in the center of the city and adjoins the railroad.

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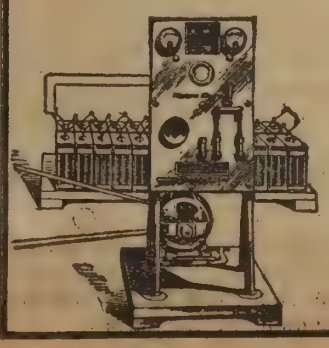
YOU are considering electric lights for your farm—every progressive farmer is. Don't overlook this: electricity on the farm brings more than safe, bright lights; it brings a farm hand that never sulks or grumbles, one that will work 24 hours a day, every day in the year—a hired man that will never quit.

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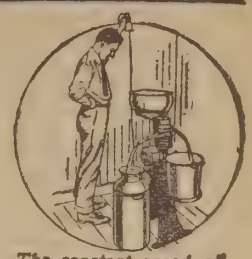
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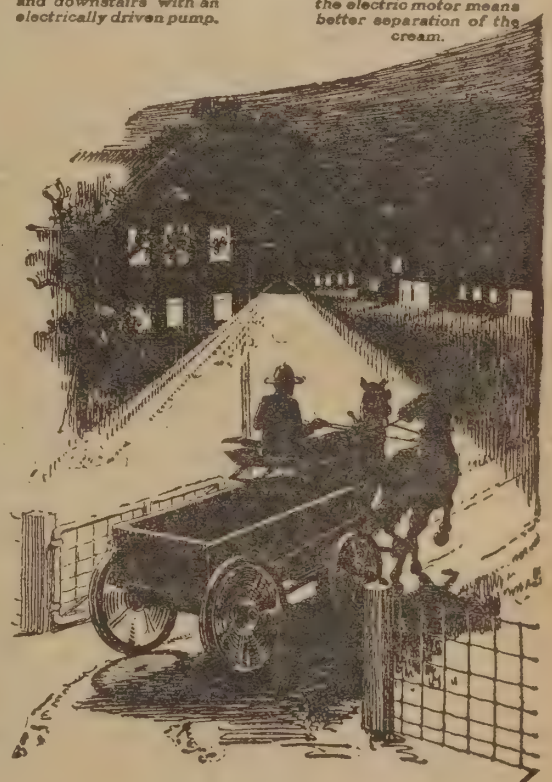




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Hog and Sheep Awards

(Continued from page eight.)

Champion boar, under 1 year—Silver Birch farm, first.
Champion sow, 1 year or over—Silver Birch farm, first.
Champion sow, under 1 year—Silver Birch farm, first.
Grand champion boar—C. M. Payne, first.
Grand champion sow—Silver Birch farm, first.

Chester Whites.

The Chester White awards were distributed between Ed Schoel, Tangent, Ore.; Wood Lower, Colbert, Wash., and C. M. Meenach, Kiesling, Wash. They were as follows:

Boar, two years old or over—First, Wood Lower; second, Ed Schoel.
Boar, one and one-half years and under two—First, Ed Schoel.
Boar, one year old and under one and a one-half—First, Ed Schoel; second, C. M. Meenach; third, Wood Lower.
Boar, six months and under one year—First, Ed Schoel; second, Wood Lower; third, Wood Lower.
Boar, under six months—First, C. M. Meenach; second, C. M. Meenach; third, Ed Schoel.
Sow, two years old or over—First, Ed Schoel; second, Ed Schoel; third, C. M. Meenach.
Sow, one and one-half years and under two—First, Ed Schoel; second, Ed Schoel.
Sow, one year old and under one and one-half—First, Ed Schoel; second, Ed Schoel.
Sow, six months and under one year—First, Wood Lower; second, Ed Schoel; third, Wood Lower; fourth, C. M. Meenach.
Sow, under six months—First, C. M. Meenach; second, Ed Schoel; third, C. M. Meenach.
Boar and three sows, one year old or over—First, Ed Schoel; second, Ed Schoel.
Boar and three sows, under one year—First, Ed Schoel; second, C. M. Meenach; third, Wood Lover.
Boar and three sows over one year—First, Ed Schoel; second, C. M. Meenach; third, Wood Lower.
Boar and three sows, under one year (bred)—First, Ed Schoel; second, C. M. Meenach; third, Wood Lower.
Get of one boar—First, Ed Schoel; third, C. M. Meenach; third, Wood Lower.
Produce of one sow—First, C. M. Meenach; second, Wood Lower; third, Ed Schoel.
Champion boar, one year or over—First, Wood Lower.
Champion boar, under one year—First, Ed Schoel.
Champion sow, one year or over—First, Ed Schoel.
Champion sow, under one year—First, Wood Lower.
Grand champion boar—First, Wood Lower.
Grand champion sow—First, Ed Schoel.

Hampshires.

J. M. Fruits of Enterprise, Ore., won everything in the Hampshire class with a very complete exhibit of excellent representatives of the breed.

Fat Hogs.

The premiums in the fat hog division went to Robert Nelson, North Yakima, Wash.; Ray J. Fox, Lyons, Ore.; J. M. Fruits, Enterprise, Ore., and Edward Schoel, Tangent, Ore. The awards follow:

Barrow, 250 to 300 pounds—First, Robert Nelson; second, Ray J. Fox; third, J. M. Fruits.
Barrow, 200 to 250 pounds—First, J. M. Fruits; second, Robert Nelson; third, Robert Nelson.
Barrow, 150 to 200 pounds—First, Edward Schoel; second, Edward Schoel.
Best pen of three barrows—First, Ray J. Fox; second, Robert Nelson; third, Edward Schoel.

Special Awards.

Sow, largest litter pigs, 2 months or under—First, A. H. Poston, Spokane, Wash.
One boar and three sows, amateur breeder (Hemmenway & Moser Cigar company)—First, R. P. Camp, Ione, Wash.

SHEEP.

Hampshires.

In the Hampshire sheep two Oregon men, J. G. S. Hubbard of Monroe and Edward Schoel of Tangen, divided the honors as follows:

Ram, 1 year old and under 2—First, J. G. S. Hubbard; second, J. G. S. Hubbard; third, Edward Schoel.
Ram lamb, under 1 year—First, J. G. S. Hubbard; second, J. G. S. Hubbard; third, Edward Schoel.
Ewe, 1 year old and under 2—First, J. G. S. Hubbard; second, J. G. S. Hubbard; third, Edward Schoel.
Ewe, under 1 year—First, J. G. S. Hubbard; second, J. G. S. Hubbard; third, Edward Schoel.
Flock—First, J. G. S. Hubbard; second, J. G. S. Hubbard; third, Edward Schoel.
Pen—First, J. G. S. Hubbard; second, J. G. S. Hubbard; third, Edward Schoel.
Champion ram—First, J. G. S. Hubbard.
Champion ewe—First, J. G. S. Hubbard.
Best showing, ram 2 years old or over; ewe, under 1 year—First, J. G. S. Hubbard.
Best showing, ram, 1 year old and under 2; ewe, under 1 year—First, J. G. S. Hubbard.
Flock of two yearling ewes, two ewe lambs and one ram (American Hampshire Sheep association special)—First, J. G. S. Hubbard; second, J. G. S. Hubbard; third, Edward Schoel.
Flock, ewe, 2 years old or over; ram, any age, two yearling ewes and two lambs—First, J. G. S. Hubbard; second, J. G. S. Hubbard; third, Edward Schoel.

Southdowns.

J. G. S. Hubbard of Oregon was given all the awards in the Southdown divisions, winning all the prizes for the following:

Ram, 2 years old or over; ram, 1 year old and under 2; ram lamb, under 1; ewe, 1 year old and under 2; ewe, under 1 year; pen; flock; champion ram; champion ewe; best showing by breeder; best showing by exhibitor; ewe, 2 years old or over.

Lincolns.

Mr. Hubbard also won with his Lincolns, the only prizes awarded being on his entries of ram one year old and under two and champion ram.

Shropshires.

Oregon sheep men captured all the honors in the Shropshire exhibition, being Vaughn & Fox of Lyons, Francis Kizer of Harrisburg, Pelzer Brothers of Tangent and Frank Donison of Lyons. The awards were as follows:

Ram, two years old or over—First, Vaughn & Fox; secnd, Vaughn & Fox; third, Francis Kizer.
Ram, one year old and under—First,

(Continued on page twenty-seven.)

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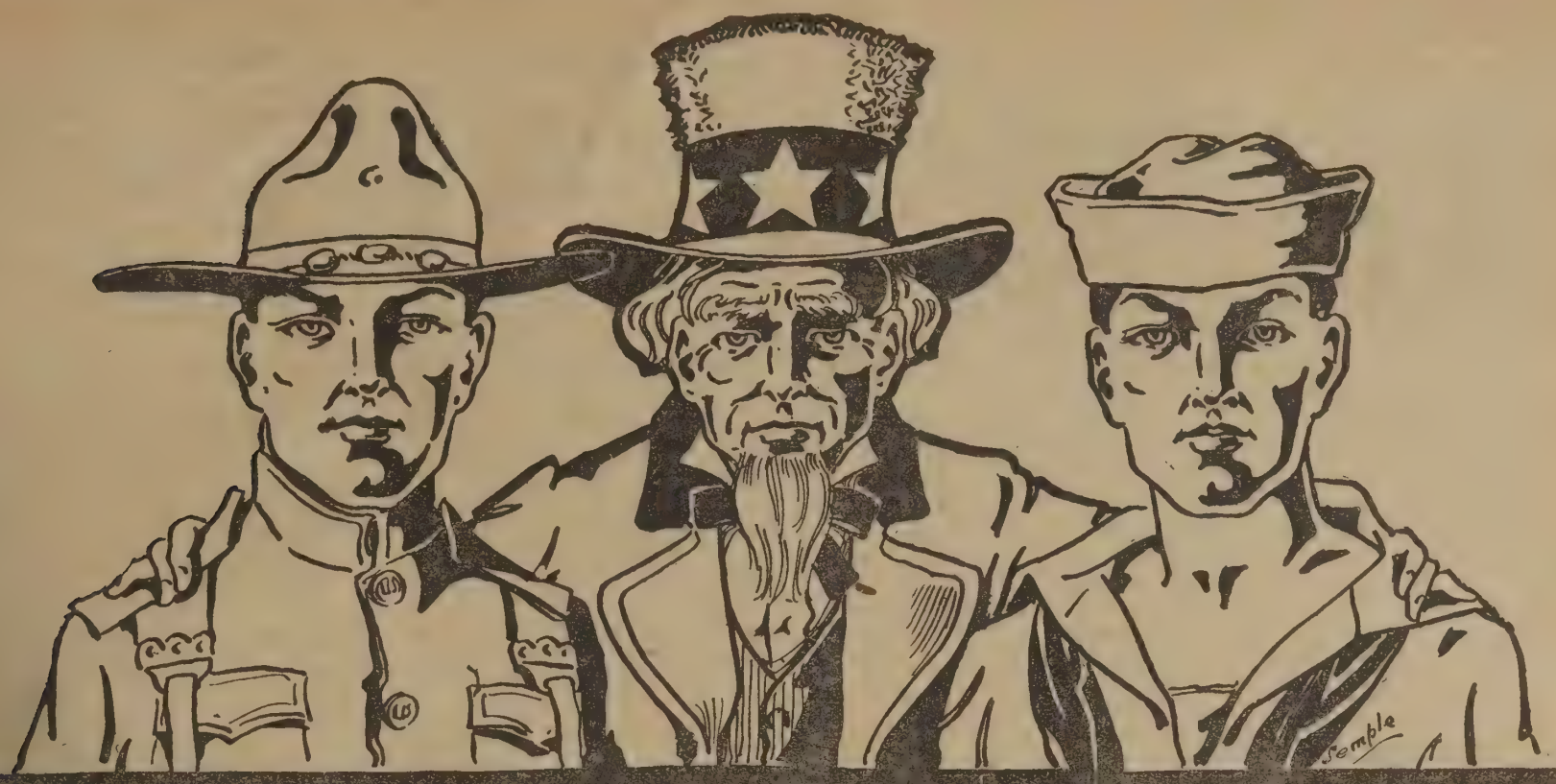
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The Ups and Downs of the Bunchgrass Boy

For $10 Buys a Pony With an Evil Reputation

PART I.

By JOE L. ASHLOCK

(Copyright, 1917, Joe Ashlock.)

Most people know that if you wish to lose a man's friendship, just kick his dog. It is the same with a boy and his pony.

Rover is a dog's name, generally speaking; in fact, a loved playmate of mine on the eastern Washington bunchgrass of long ago was a pup named Rover. Rover was a lovely, brown-eyed, kind and playful pup, and would follow at my heels all day on the chance of a kind word or look. He died young. He ate a poisoned squirrel.

The next Rover I owned also had gentle brown eyes, a glossy brown coat and nimble feet. Down somewhere inside, he also had a kind, though sadly misunderstood heart. This Rover was a broncho cayuse—thick, powerful neck, deep chest, slender legs corded with muscles of steel, and small, black hoofs which, when whipped all day by the bunchgrass, gleamed like the ebony fingerboard of a new fiddle.

He had a light, supple, velvety tread; just the same, when you were in the saddle on his back you could feel the power and lightning in his chunky, muscular body; and knew that he could jump out from under you quick as wink. Looking back, I think of my broncho Rover as a high-power dynamo, ready to sparkle with electrical energy if touched or brushed in the right spot.

I was told that Elam Rice touched Rover in a way that produced an electrical discharge once—and, in consequence, good rider though he was, Elam sailed from Rover's back all spread out like a flying squirrel.

Elam was riding Rover through the wheat stubble, carrying a babbitt metal spoon. Rover was glancing at the babbitt spoon with the white of his eye showing. Just for fun, Elam poked the spoon at his nose and said, "Boo!"

Elam does not know yet just what happened. He thinks maybe Rover turned a couple of back somersaults. In a flash Elam found himself astride the empty air and descending. He came down head first, face downward, in the deep dust of the field. When he got up, spat the dust from his mouth and rubbed it from his eyes and dug it out of his ears and collar, Rover was 20 feet away biting at stray wheat heads and keeping a bright, white-rimmed eye on the babbitt spoon.

A while after that, Rover was tied to the derrick rope of a horsepower threshing machine—just beyond reach of the wheat stack, into which he much desired to shove his velvety nose. He pulled and twisted and squirmed with this object in view. He persisted till he got the saddle-horn caught against the derrick rope, which, by and by, gave a powerful jerk against the saddle horn, caused by the starting of a big forkful up toward the derrick table.

The jerk against the saddle-horn excited Rover. He gave a lightning surge against the taut derrick rope, and up came the steel derrick pin, letting the derrick rope jerk loose when two horses and a big forkful of grain were pulling against it—and in consequence, nearly upsetting the derrick table. The hoe-down men yelled and jumped for their lives. The driver of the derrick team was standing on the double-trees and riding—and suddenly collapsed into the dust. The forker saw the big derrick tripod tipping down onto the haystack toward him and he yelled "What's the matter?" and then beat it off the stack without waiting for an answer.

Meanwhile, Rover was having a time all by himself. His rawhide halter rope had been tied to the derrick rope, and the man who tied it, meant for it to stay tied. It did. As the heavy rope fell, the steel derrick pin was banged against Rover's side and raked him on the back. His snort was like the crack of a rifle, and he moved out of there like a highpower skyrocket.

So many things happened in the next few minutes that no one can tell them all. Rover charged like a thunderbolt as far as the big derrick rope tied to his halter would let him, and then was yanked backward. If his neck had not been a good combination of steel and rubber, it would have been broken. He did this thing perhaps half a dozen times, each time going to the end of the big derrick rope harder than before, and each time in a different direction. Pandemonium reigned.

He presently, in one of his wild charges, went through and over the 12 or 16 horses that were hitched to the power. This created some confusion. He added to the confusion by dragging the big derrick rope over the backs of all the horses, and under the feet of three whom he tripped and threw down. Also, the rope knocked the power driver off his platform; and then the power horses got rattled and reared, plunged, twisted the coupling rod to the separator and broke one of the connections, letting the horsepower go wild with all the horses hitched to it and plunging in all directions.

There was real danger in the situation, you see; for no one knew when Rover would plunge into the mess again and knock everybody and the horses down with the big rope that was trailed in his rear.

Luck ended the mixup without fatalities. Going like an express train, Rover struck the wheat-stack head on, partly burying and partly stunning him. Half a dozen nervy men laid rude hands on him then, and one of them, an ex-cowpuncher, expertly cast a rope about his feet, threw him and had all four feet yanked together in a hard knot in a second or two. Then they unsaddled him, haltered him, untied him, and led him a safe distance from the machine and tied him to a wagon wheel. At noon the next day, threshing was resumed. I believe Rover, unfed and without water, but cussed many times, stayed tied to the wagon wheel all that time.

So Rover, for the price of $10, came into my hands with a most evil reputation. I looked him over. His softly brown, velvety eyes belied his reputation. I decided that he had been mistreated and misunderstood. Right from the start I loved him just as much as I had Rover the pup; and I never ceased loving and admiring him, notwithstanding the battles I had with him.

The broncho and I got on quite well, however. Maybe this was because I knew beforehand what he would do, and tried no experiments. People who have handled horses only now and then, a livery team, maybe, or a saddle horse taken care of by some one else, do not realize the depth of understanding that can spring up between a boy and his horse when they are in constant association with each other. I could tell by Rover's glance or action, the white of his eye, the poise of his ears, the shifting of his feet, or the tenseness of his posture, just about what he was thinking about doing—and stood away, or came close, according to my reading.

"Morning Stars"

By PAUL E. TRIEM.

As the door closed on the departing visitors, Mildred Stirling threw herself back in her chair with an exclamation of utter weariness.

"Grandma," she said, "I don't see how you stand that kind of people around you all the time! I didn't used to mind them when I was a little girl, but now—I think you must be a saint!"

Grandma King looked at the pretty girl in the high-backed, chintz-covered arm-chair with gentle deprecation. "They're my neighbors, you know, Milly," she replied. "And they're—well, they're human, just like the rest of us. I'll own they gossip a wee mite too much, and they aren't always careful to modulate their voices and to use good grammar. But when any one's in trouble, the Jensens are the first to do something practical to help. That's what I look at, more than the surface things."

Mildred sat up very straight, her eyes bright and a little touch of color flaring suddenly into each cheek. "Surface things—why, that's one of the principal aims of education, Grandma! It's the 'finish' which enables one always to recognize and to respect the niceties of life which distinguishes the educated person from the boor! I could respect these people if they simply were ignorant of the facts of Roman history. It's their crudities of manner which make them impossible."

"Well, well, dearie, I guess I must be used to them. I never notice these things you complain of, anyhow."

Mrs. King smiled the gentle, kindly smile which was habitual to her. Then she went out into the hot morning sunshine and began to "potter" with her flowers.

Mildred followed her presently and found her hanging lovingly over some little pails filled with leaf mold and garden loam, from which grew slender sheafs of lily-like flowers. The little pails were standing in the shade of the north wall.

"Why, what wonderful flowers!" the girl exclaimed as she stooped to catch the evasive fragrance of the star-shaped blossoms. "What are they, Grandma? And why are they standing here behind the house—I should think you'd have them out in the front garden, with the others!"

"I don't know what the right name for them is," Grandma replied musingly. "Your grandpa and I brought them from the woods, 20 miles north of here, a good many years ago. We call them 'Morning Stars.'" She paused to look thoughtfully from the flowers to the pretty face bending over them. "You can take a couple of pots out into the front garden, if you like," she added indulgently.

Mildred hastened to avail herself of this permission. She carried two large clusters of grandma's "Morning Stars" into the sunny front garden and set them in the warmest, brightest corner.

"There," she commented, "now they'll have a chance to show themselves and to get all the sunlight they want!"

Mrs. King nodded approval. "They'll get plenty of sunlight there," she agreed.

Grandma was bustling about clearing up the breakfast things, next morning, when Milly came running in from the garden.

"Oh, Grandma!" she cried, "something must have happened to those 'Morning Stars—' they look as if they had been frosted! They're all black and wilted!"

Mrs. King stood looking sympathetically at the girl. "Well, now, that's too bad," she said gently. "But—I knew they would be that way, dearie. Maybe I should have warned you—but you see—"

She paused, a little wrinkle of deprecating pity on her usually serene forehead.

"Yes?" Milly said. "You knew it—and still you let me do it! I feel like a murderer!"

Grandma sat down beside her. "You didn't kill them," she said. "It was the sun. You see, dear, those Morning Stars aren't like other flowers—they have to be protected from the sunlight, and do well only in the deep, cool shade. I suppose they've grown in the forest so many hundreds of years, that they've become educated to shadow, as you might say. Sunlight and the beat of the wind and the rain are the normal, natural surroundings for other flowers and plants, but these Morning Stars have been shielded so long that they've lost their power of resistance. There's always the danger of that sort of education, you know—the kind that makes plants or animals or men narrow and exclusive. It needn't do that, and of course real education has just the opposite effect: it broadens the mind and develops tolerance and sympathy; teaches its possessor to see the good and to understand the bad; teaches him above all, I think, to distinguish mannerisms and peculiarities which are merely personally unpleasant from greater foults and flaws of character

(Continued on page eighteen.)

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

Why a Twinkling Eye Is Said to Denote Good Humor



Dr. Hirshberg.

AS the eyes sparkle, so shines the intellect. There may not always be a quantitative relationship between the mind and the eyes, but the quality of the one seems often to reflect that of the others.

A twinkling eye is correctly considered to denote great good humor and harmless mischief. The dull, cavelike eye seems properly to mirror a clinging, dependent soul.

Friar Laurence in "Romeo and Juliet" wisely says: "Young men's love then lies not truly in their hearts, but in their eyes." What he really meant was that hearts were window-paned through the eyes.

The eye is not satisfied with seeing. It must show something itself. That something may be exhibited in its color or in its loveliness. The eyes may be homes of silent prayer or lodestones of fidelity, power and strength. The clearness and color of the eyes may point to a character for genius or one of bigotry. A colorless, prominent eye with a very small pupil, scarcely a dot of color, sometimes means a cold, mercenary nature or a narrow, superficial intellect.

Gerald Elton Fosbroke, who has written a book on character-reading, holds that very dark blue eyes, dilated and transparent, indicate large qualities of soul, clear-mindedness, a good intellect, enthusiasm and constancy.

Gray eyes seem to be distinguished representations of a fine intellect, keen sensibilities, calmness, a careful and deliberate nature and self-control.

Large, bold, black eyes are somehow associated with temperaments which show deep feeling. There is a depth of emotion frequently in those whose eyes are a deep dark shade, which can not be found commonly in light-eyed individuals.

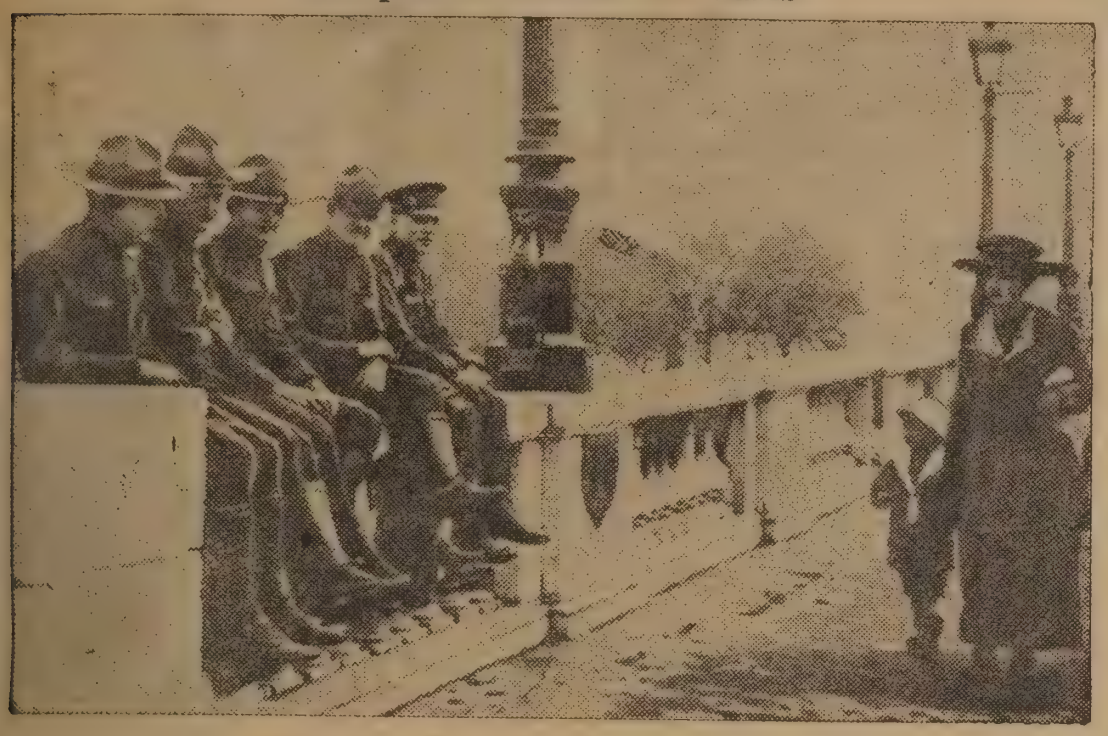
Brown-eyed persons are of the optimistic, cheerful, sanguine type. True enough, like other dark-eyed people, they may hide uncontrollable passions and temper, but they also point to faith and sentiment, qualities sometimes wofully wanting in the gray and blue-eyed.

Independent of their color, the eyes are a telltale language to those who are observant. The brilliant, sparkling eye, generally dark, drawn upward enough to show something of the white, makes the student think of unchecked feelings and wilful disregard of the usually fine mind which accompanies them. Full, dark eyes of this sort delight in action and are seldom content to live a reflective, contemplative life.

Big dark eyes mean love, devotion, action, animation, ambition and often great impulsiveness and impetuosity. The darker the eyes, the greater the quantity of these qualities; the lighter the eyes, the less of such qualities.

All the World's a Stage, and All the Men and Women Merely Players

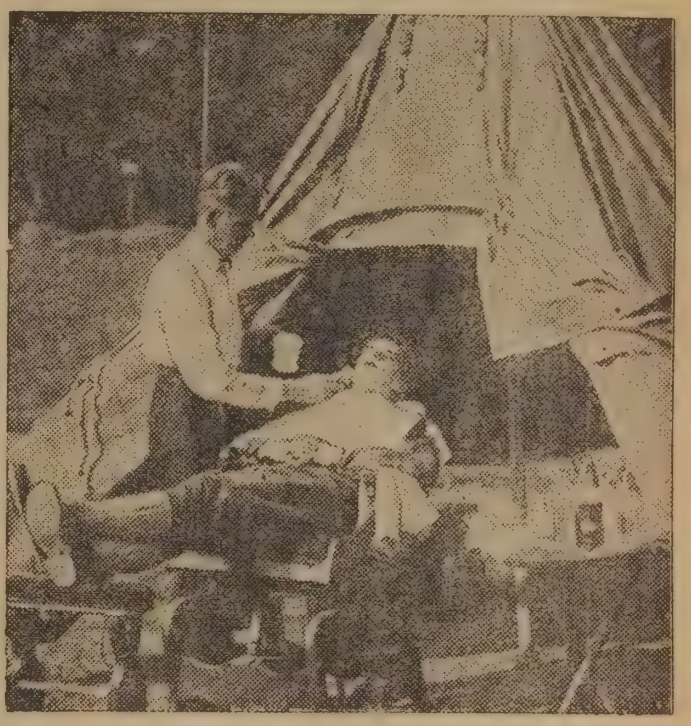
Troopers at Home in Paris



Copyright by International.

Some of Major General Pershing's doughboys enjoying short leave in Paris. The old sight-seeing bug has followed our American boys abroad and so when they are off duty they train it to the nearest big city and "do" it from the Hotel de Ville to the last farm on the outskirts of the town. The photograph shows a group of our American soldier boys making themselves at home on the bridge of La Concorde, viewing passing Paris with intense interest.

Regimental Barber at Work



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The members of the Twenty-third regiment, New York National Guard, now in camp at Van Cortlandt park, New York city, won't go unshaved when they reach France. They probably won't be strong on the massage and shampoo stuff, but the regimental barber will keep his razor busy.

What Are You Doing?



—Rip, in Boston Globe.

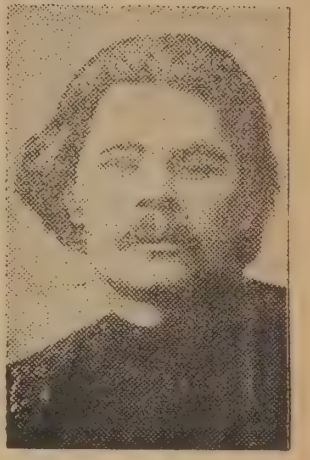
American Indians Volunteer for War



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American Indians are not behind in their obligations. Many of them have already volunteered for the regular army and in guard regiments. Especially eager to serve are graduates from Uncle Sam's school at Carlisle and other government institutions. Company F, Sixth Nebraskan infantry, organized less than five weeks, carried off the honors at the military tournament at Walthill, Neb., recently. The Winebago, Omaha, Santee, Sioux and Yankton tribes of the Sioux are represented in the company.

Accuses Maxim Gorky.



The famous Russian writer has been accused of unintentionally being the agent of the kaiser by Vladimir Bourtzeff, the Russian revolutionist. He has worked recently in accord with Lemine.

The Awakening



—Aymond, in New Orleans Daily States.

English Women Assume Hard Tasks



Copyright by International.

Another field has been found in which English women are successfully replacing men. In the above picture are shown two of the women foresters who are taking the place of men in this difficult work in England and whose saws and axes are ringing through many a wood in the tight little isle these days. Women in England are doing almost all sorts of work nowadays, not stopping at even the heavier kinds of manual labor, as the photograph shows.

Must Not Make Whisky or Brandy

Uncle Sam Clapped the Lid Down Tight on Night of September 9

For the first time since America was settled the manufacture of whisky and brandy has come to a full stop. The prohibition clause of the food control law did the business, and Uncle Sam clapped down the lid at 11 o'clock on the night of September 9. This action was taken under section 15 of the law, which provides:

"That from and after 30 days from the date of approval of this act no foods, fruits, food materials or feeds shall be used in the production of distilled spirits for beverage purposes. Provided, that under such rules, regulations and bonds as the president may prescribe, such materials may be used in the production of distilled spirits exclusively for other than beverage purposes, or for the fortification of pure, sweet wines."

That is, the distilleries can manufacture alcohol, but they must not make whisky or brandy.

Under the law as it now stands, the making of beer and other malt drinks and of wines is permitted in those states that do not prohibit their manufacture. The law, however, gives the president authority, whenever his judgment so descrees, to prohibit also the manufacture of malt beverages and wines. This optional authority is conferred in the following provision of the law:

"Whenever the president shall find that limitation, regulation or prohibition of the use of foods, fruits, food materials or feeds in the production of malt of vinous liquors for beverage purposes, or that reduction of the alcoholic content of any such malt or vinous liquor is essential, in order to assure an adequate and continuous supply of food, or that the national security and defense will be subserved thereby, he is authorized, from time to time, to prescribe and give public notice of the limitation, regulation, prohibition or reduction so necessitated."

The penalties for violation of this law are a fine not exceeding $5000, or by imprisonment for not more than two years, or both. The law has sharp teeth.

Here are some timely and important facts in this connection:

Approximately 116,000,000 gallons of whisky are produced each year by American distilleries. Production of alcohol by the same distilleries for commercial and medicinal uses other than beverages approximates 146,000,000 gallons. The manufacture of alcohol for the latter purposes will continue as usual, probably in greater volume, and few of the larger distilleries, if any, will have to shut down, according to government authorities.

The class of distilleries which will be put out of business is composed almost wholly of small plants operated by from one man to half a dozen men, located in California, Ohio and New Jersy and producing brandy from grapes, apples and peaches. These produce approximately 2,600,000 gallons a year. Those in New Jersey and Ohio, officials believe, will suspend business. The California distilleries, it is thought, will continue to operate in part for the manufacture of spirits for fortifying sweet wines.

Stopping whisky manufacture, instead of curtailing the government's revenues, will increase them for the next two years, officials, believe. Coupled with the pending revenue bill, the withdrawal of whisky from bond will probably treble the revenues within the next 12 months, as the present law imposes a tax of $1.10 and the revenue bill contemplates a tax of $3.20 a gallon. A stock of approximately 230,000,000 gallons has accumulated in the bonded warehouses and on the shelves of wholesale and retail liquor dealers. Approximately 190,000,000 gallons are in warehouses, and upon that quantity the government will collect taxes upon alcohol for commercial purposes, except alcohol for denaturization. The revenue bill would impose a tax of $2.20, doubling the present income.

There are approximately 700 distilleries in the country, of which more than half are small fruit brandy plants. The amount of capital invested in the latter class is not great in the aggregate. The capital invested in the big producing plants mounts high into the millions. Officials here believe that losses will be more than wiped out by the prices distillers will obtain for product already manufactured. In the opinion of some officials, whisky will be selling at $15 a gallon within 12 months, affording distillers enormous profits.

Free Yourself From Food Prejudice

The following thrift program was prepared by Helen Knowlton, dean of women, New Hampshire college and experiment station, and published as a press bulletin by the college:

TACKLE your job as a patriotic duty. The world needs food. Are you using more than you need? Are you wasting any food by throwing away left-overs? Do you store your food in such a way that it never spoils? Are you using some cheap substitutes for expensive foods? Do you ever waste food by careless cooking?

HELP train yourself. Tell others of your successes in thrift. Teach those who know less than you do. Take food saving seriously. Enlist at once in the army for food conservation.

RESOLVE to save on food expenditures: by using less meat and cheaper cuts, and more milk, cheese, fish and nuts in place of meats; by using more cereals, especially corn products, oatmeal and rice; by using some dried fruits; by using the cheaper vegetables such as turnips, carrots and greens; by omitting some luxuries.

INQUIRE diligently as to the best and wisest ways of economizing. Do not, for example, if you omit meat on some days, expect starch to replace it. Use milk, cheese, beans or peas, eggs, or fish.

FREE yourself from food prejudice. Sirloin steak may taste good, but it must be as cheap as 19 cents a pound if it is to supply body-building food (protein) as cheaply as milk at 8 cents a quart. One quart of milk builds as much body tissue as 7 ounces of sirloin steak. Cease to say "don't like" or "can't eat."

TRY definitely to eliminate waste.

MILK: Do you use even the last quarter cup? Do you use buttermilk, sour milk, and skimmed milk? Do you make cottage cheese out of left-over milk?

FATS: Do you save every bit of bacon fat, beef fat and other fats? Do you know how to use mutton fat?

BREADSTUFFS: Do you store cereals and flour so that insects cannot get into them? Do you use left-over crusts and stale bread? Is your bread always good? If not, do you know why not? Do you scrape out your mixing bowls thoroughly?

FRUITS: Do you let any spoil? Do you know how to can all kinds?

VEGETABLES: Do you know how to store them? Do you buy more than you care to use so that some wither or spoil? Do you throw away the water in which they are cooked instead of using it for soups? Do you let cooked left-overs spoil? Do you pare carefully so as not to waste? Do you know how to can vegetables?

MEATS: Do you store carefully to prevent spoiling? Do you ever over-cook meat and so waste it by making it inedible? Do you use more than you need? Do you save and use all trimmings, bones and fat? If your family numbers five, do you buy 3 quarts of milk before you buy 1 pound of meat?

Sidelights

Disavowal.

Private Biggs (whose period of training is over)—See here, Cap'n Miggs, now that I am a civilian again, I want you to understand that I take back all the salutes I've given you since I came here.—Life.

The Wonders of Science.

A camera man, working for the educational department of a film company, met an old farmer coming out of a house in the town where he was working, and explained his presence in these words:

"I have just been taking some moving pictures of life out on your farm."

"Did you catch any of my laborers in motion?" asked the old man curiously.

"Sure, I did."

The farmer shook his head reflectively, then said: "Science is a wonderful thing."

Has a Fascination.

"You seem to spend a lot of time at the aquarium."

"Yes, it has a fascination for me since coming back from vacation. I went to so many places where there were no fish."—Louisville Courier-Journal.

Girls of Other Days.

"Speaking of the peaches we knew 20 years ago—"

"Yes."

"Some of them seem to be pretty well preserved."

"Morning Star"

(Continued from page sixteen.)

which often enough are not repellant in themselves, but which indicate real spiritual sickness."

She paused to lay her hand comfortingly on the girl's. Mildred had been looking out through the open window to where, in the sunny corner of the old fashioned garden, the clusters of Morning Stars drooped their disspirited heads.

"Yes," she said huskily. Then she cleared her throat and turned a bravely smiling face toward Grandma King. "You're right," she said. "And I'm not going to tolerate any symptoms of the 'Morning Star' sort of education in myself. I want to be broad, and kindly, and gentle; to be able to live in the everyday world, with everyday people, and to radiate cheerfulness rather than disparagement and gloom. After all, I think mignonette and sweet alyssum and hollyhock and wall flowers are more practical than Morning Stars"

Women's Military-Heel Walking Boots



The vogue for trim, military lines in women's footwear is well exampled in the smart new Autumn model pictured, built of

FINE NUT-BROWN RUSSIA CALFSKIN

with blind eyelets, perforated vamp and tip, flexible overweight welt sole and 1⅝-inch military heel. Exceptionally smooth fitting and comfortable. Sizes 3 to 8; widths AA to D. Your money back if not satisfactory.

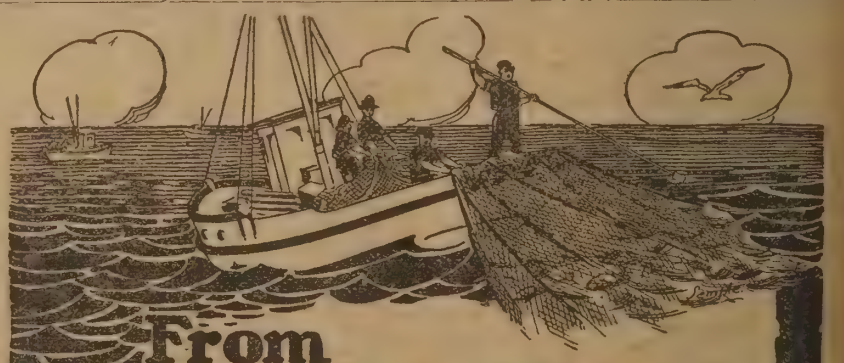
Copy of Autumn Fashion News, with self-measurement blanks for shoes and garments, sent on request.

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Grange Picnic at Valley Prairie

By C. V. REECE

Northwest of Spokane, about 30 miles, as the crow flies, one comes into a farming community called Valley prairie. Perhaps the spirit of friendly, constructive cooperation is no greater in the Valley prairie community than it is in many other communities. It is quite likely, too, that in some longer settled sections of Washington more evidence of farming progress is apparent. But in no farming community that we have visited are there more promising indications of permanent future development along the right lines.

A week or so ago we were invited to attend a basket picnic and fair held at the Valley prairie schoolhouse. It was an informal affair, but every one of the 20 or 30 families present was frankly and thoroughly interested in helping to bring home to each other and to all visitors who attended a fuller appreciation of the farming possibilities of the section.

The fair was held under the auspices of the Valley Prairie grange. In the basement of the schoolhouse was arranged a display of grains, hay, fruits and vegetables that would have been a credit to any community during a season of normal rainfall; but which, in this season of unusual drouth, were of a quality to cause downright admiring wonder.

There was an exhibit of winter rye grown by W. M. Fisher which spoke eloquently of what can be done with this profitable crop on Valley prairie soil. We believe it can be pretty safely predicted that winter rye will be grown quite generally in that section in years to come. Although not a wheat section, from the standpoint of extensive production, the exhibits of bluestem grown by T. L. Donaho and M. A. Slinkard were especially good. The pea crop of the valley, too, judging from the samples displayed, was much better than that in most other parts of Spokane county. Corn—big, heavy-stalked corn carrying good ears—was shown by Peter Darcy. It had grown lustily and the leaves were of darkest green—this, mind you, without a drop of rain all summer. This corn and rye and peas and the many evidences of heavy yields of root crops, brought visions of a day when Valley prairie will be known as a favorite section for hog raising.

In fact, some very good purebred Durocs were exhibited by W. M. Fisher, C. C. Nelson and others—an example of what may be expected in future.

There were 16 entries of potatoes grown by the Valley prairie boys and girls' potato club, organized by O. S. Fletcher, assistant county agriculturist. Maude Nelson won the first prize with a plate of Earliest of All. Thomas Darcey took the second prize with Early Ohios, and the third prize went to Emory Donaho for White Minister.

It is pleasing now to announce that these same potatoes were awarded first and second prizes at the Interstate fair at Spokane. Also that first prize for all boys and girls' potato clubs was awarded the Valley prairie potato club by the Interstate judges.

Live stock prizes were awarded to Edward Fisher for a Duroc brood sow over 1 year and Duroc pigs under 6 months and to Edward Kerr for a Shorthorn heifer over 1 year.

Everything considered, we feel, in reviewing our acquaintance with the folks of Valley prairie, that we like their optimism, their practice of sensible community cooperation, their broad-gage ideas about farming and their hospitality. Their fair and picnic was in every way a success. More than 150 Valley prairie granges were present. T. L. Donaho, chairman of the program committee, had arranged for addresses from D. G. O'Shay, president of the Northwest Federal Land bank; J. R. Shinn, county agricultural agent for Spokane county, and others. Music was furnished by W. W. V. Winans and his two sons. Mr. Winans also gave a short talk on the advantages of establishing young people's bands and orchestras as a pleasing and effective means of promoting neighborhood interest and for cementing the home ties that the call of the city can not break.

Those of the Valley Prairie grange who were in attendance at the community fair were: T. L. Donaho and family, W. M. Fisher and family, M. A. Slinkard, P. J. Darcy, J. G. Mihm, F. H. Wilson, W. H. McVey, A. Beaton, R. Green, C. C. Nelson, M. F. Magner, J. C. Rice, M. C. Dean, John Walker, their families, and others.

Home Canned Tomatoes.

Don't miss any of the following steps in canning tomatoes, is the injunction of the United States department of agriculture:

Wash your jars; wash rubbers; test rubbers for quality.

Set empty jars and rubbers in pan of water to heat, and keep hot.

Fill washboiler to cover jars two inches with water.

Heat water in washboiler.

Use only sound, fresh fruit.

Place tomatoes in a colander; scald by setting over a vessel of boiling water, covered tight, or plunging into boiling water 1 1-2 minutes.

Dip quickly into cold clean water.

Remove skins and cores.

Pack quickly into hot jars.

Press down with tablespoon; add no water.

Add level teaspoonful salt per quart.

Put rubbers and caps in position; not tight.

Place jars on false bottom of washboiler.

Submerge jars two inches.

Let boil for 22 minutes.

Start counting when water begins to boil.

Remove jars.

Tighten covers.

Invert to cool and examine for leaks.

If leaks are found, change rubbers and boil again for 10 minutes.

Wrap in paper.

Store in cool, dry place.

The Real Aristocrat

The Farmer Coming Into His Own

"Once the people realize that the farmer is the true aristocrat, and that will come only when they realize the need of food, then we will have a 'back to the land' movement that will amount to something," said E. F. Benson, state commissioner of agriculture in discussing the food price situation in this state. "Washington has the greatest natural advantages for dairying of any state in the union," he says, "and yet milk and butetr are high now and are going higher, although not so high perhaps as some fear."

He made the foregoing remarks when questioned as to the accuracy of the statement that as a result of the establishment of the big army post at American Lake eggs would go to a a dollar a dozen, milk to from 15 to 25 cents a quart, and butetr $1 a pound or better while cream may vanish from the market.

The advent of the army post has upset all calculations in the southwestern part of the state. Never before have the prices for foodstuffs been so high for the farmer.

Commissioner Benson is inclined to think some of the prices are a little high. But he says the people will only begin to produce their own food in some measure or other when they begin to get hungry.

"For some time past the teaching has been in the wrong direction. Many a boy has been raised by fond parents to think that it is not proper for him to have callouses on his hands or tan on his cheek. The family would not like to have a producer in the family who produced in such a manner. But all that is going to change.

"Many youth have been trained to believe that it is necessary to wear a white collar while at work to be a gentleman. The country has not awakened to the value of the farm producer. He is now coming into his own. Once the people get to raising a part of their own food supply, learn to conserve what they have and to waste nothing, to utilize the resources about their premises, then relief will come from high prices. But they must all help.

English Thoroughbred Horse.

In view of the demand that this war is making on the world's supply of horses, and the many that are being killed or rendered well nigh useless for any purpose, even agricultural, a correspondent of the Manchester Guardian has recently made an interesting study of the nation's horses, and has written a report on the subject. The facts shown indicate that every possible encouragement will be given after the war to the continued breeding of the English thoroughbred horse. The correspondent says: The national value of the thoroughbred horse extends far beyond the limits of the race course. It is indispensable to the production of useful half-bred stock and army mounts. After the war every nation will find its stock of horses seriously depleted by the constant drain of the last three years.



SNAPS in ALBERTA and MANITOBA FARM LANDS

The undersigned have for sale, as administrators, the following parcels, which must be realized on to enable them to close up the estates under their care, and the beneficiaries are prepared to accept, for a quick turn, reasonably low figures for the properties compared with their actual values.

Parcel 1 5066 acres south of Lethbridge, Alberta, on the famous Milk River ridge, with the Milk river running through it, fenced and cross fenced; A1 for mixed farming and stock. Excellent buildings, outbuildings, corrals, etc. Large area under cultivation, magnificent pasturages and hay lands, 400 acres in summerfallow. Price for the whole only $15 per acre. Easy terms.

Parcel 2 6 sections open undulating prairie near Cardstone, Alberta, a large proportion of which has already been broken and cultivated; soil of the best, elevator close at hand. Acquired at $25 per acre. Will sell for quick turn-over at $17.50.

Parcel 3 2400 acres with large summerfallow, about 800 acres crop land, excellent buildings, close to the famous wheat city of Brandon, Manitoba. Location to market and elevator quite convenient. Soil of the best. Our close valuation $35 an acre. For quick sale will sell for $25.

Parcel 4 640 acres near Otterburn in the famous Red River valley. Splendid house and barn. All the cultivated land summerfallowed and ready for 1918. Soil black clay loam of the best. Our close valuation $25 an acre. For quick turnover will sell for $18.

Parcel 5 26,000 acres suitable for colonization, convenient to Winnipeg. A decided snap. $20 per acre. Another 7000 acres near Raymond, Alberta, at $16.50 per acre.

Further details of all or any of these properties forwarded on application.

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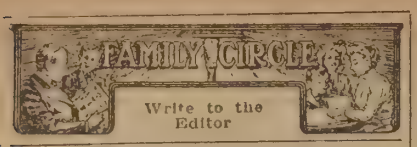
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ALICE W. BARLAND
Editorial Contributor

Ways to Save Food

To the Editor of The Farmer: I received your letter some time ago, in which you request me to answer and let you know how I manage to save food, etc., and prepare wholesome dishes on the farm. I will tell of a few ways I try to save.

In the first place, I think any housewife can soon easily tell how much to cook for the number she has to do for every day. Then I think there is much less wasted if everything is nicely cooked, well seasoned and nicely served. I do know that much depends on the way food is put on the table.

I always use a clean white tablecloth and freshly washed dishes and cleanly scoured cutlery and silverware. I think men like to sit down to a clean table. If I have anything left from a meal I always save it and fix it over some other way to go on the table next time. If I have vegetables left over I generally make them into soup for the next meal. Almost any cooked vegetables make a delicious soup if mixed together and cream, milk and butter added and salt and pepper to taste.

It seems a "snap" to me to get up a good meal on the farm when one has all kinds of vegetables and cream, milk, butter and eggs. We don't always have meat, but when we don't we don't miss it very much, for I just add a couple of dishes more of vegetables, and we get along nicely without meat. I make a dish of canned salmon that everyone likes, and it is not expensive.

To a tall can of pink canned salmon I make a nice, rich dressing like for roast pork. I take a large onion and fry light brown in a baking spoonful of butter or other shortening. I take about the amount of one-half loaf of bread or cold biscuit and wet them thoroughly in cold sweet milk. Then I put them in the frying pan with the opion and season to taste with sage, salt and pepper. Then I put in the salmon and mix all together into a nice loaf, take out and put in a baking pan with more butter or shortening around and put in the oven and bake to a nice light brown. When done I take it from the baking dish and make a nice gravy in the pan with a tablespoon of flour and sweet milk. One can of salmon so fixed up will quite nicely serve seven or eight people.

A very nice cake is made with one tablespoon well rounded up of butter or other shortening, one and one-fourth cups of sugar rubbed well together and one-fourth teaspoon of salt (if you don't use butter), one cup of buttermilk or sour milk, one-half cup of black cooking molasses, into which stir two-thirds teaspoonful of soda till it foams up and fills the cup, then add to above one-half teaspoon cinnamon, one-fourth of nutmeg, one of ginger, one-fourth of cloves and one-fourth of allspice and two and one-half cups of flour, into which add one rounding teaspoon of baking powder. This can be baked in a loaf, or, if baked in gem pans, can be served as pudding while warm, with either whipped cream or some nice sauce made with fruit juice or vinegar.

One thing more I would like to tell some of the women is that I found out last summer that ants can be got rid of by sprinkling concentrated lye around where they are bothering and around on the floor where they come in. I was so glad I made the discovery, for I do think thtey are such a nasty nuisance. MRS. WILL LLOYD.
Cabinet, Idaho.

Hominy Grits.

In the far south hominy grits is a breakfast dish, a dinner dish or a supper dish. It goes well and quickly with bacon or hash for breakfast. Sometimes a southern child will stir into his grits a soft-boiled egg, making a complete meal. Usually it is eaten with gravy or butter.

To cook hominy grits. Wash thoroughly; allow 3 cups of water to 1 cup of hominy; salt to taste. Cook in single boiler until hominy begins to thicken. Then set on back of stove or on asbestos mat and cook slowly until done. Hominy needs about an hour's cooking. It burns very easily. It is much improved by beating in half a cup of milk just before dishing up. The pan in which hominy has been cooked should be put to soak in cold water at once. If hot hominy is poured into a deep dish it can be turned out when cold, cut in slices and browned under the blazer or fried like mush. Fried hominy is usually served with duck. It is also an appreciated addition for breakfast.

Those who wish to try out hominy are advised not to serve it as a breakfast food with milk and sugar. It is too starchy to be satisfactory; it needs the flavor of the meat or egg. Serving it as a breakfast food will only prejudice the family against a really valuable food product.

To Mold Rice and Potatoes.

Women who know are using the nickel plated ice cream servers for molding rice, making potato borders for the roast, and for cutting fruit in balls for compotes. This little implement is substantially made. A thumb lever automatically releases the substance molded in a perfectly round ball.



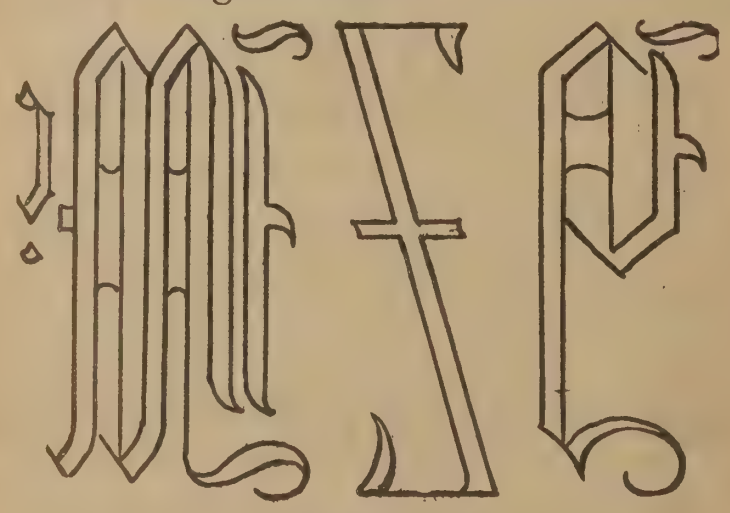
Who has not dreamed a world of bliss
On a bright sunny noon like this,
Couched by his native brook's green maze,
With comrades of his boyish days,
While all around them seemed to be
Just as in joyous infancy?
Who has not loved at such an hour,
Upon that heath, in birchen bower,
Lulled in the poet's dreamy mood,
Its wild and sunny solitude?
—William Howitt.

New Potato Stuffing.

Take large baked potatoes, cut a slice off the top of each and scoop out the insides, taking care not to break the shell. Mix the potato with chopped meat (any leftover will do) seasoned with salt paprika and horseradish or Worcestershire. Moisten with stock or gravy, or a little hot water. Fill potato shells with this mixture, place a small bit of butter on top of each and brown in the oven.



Old English Initials to Embroider



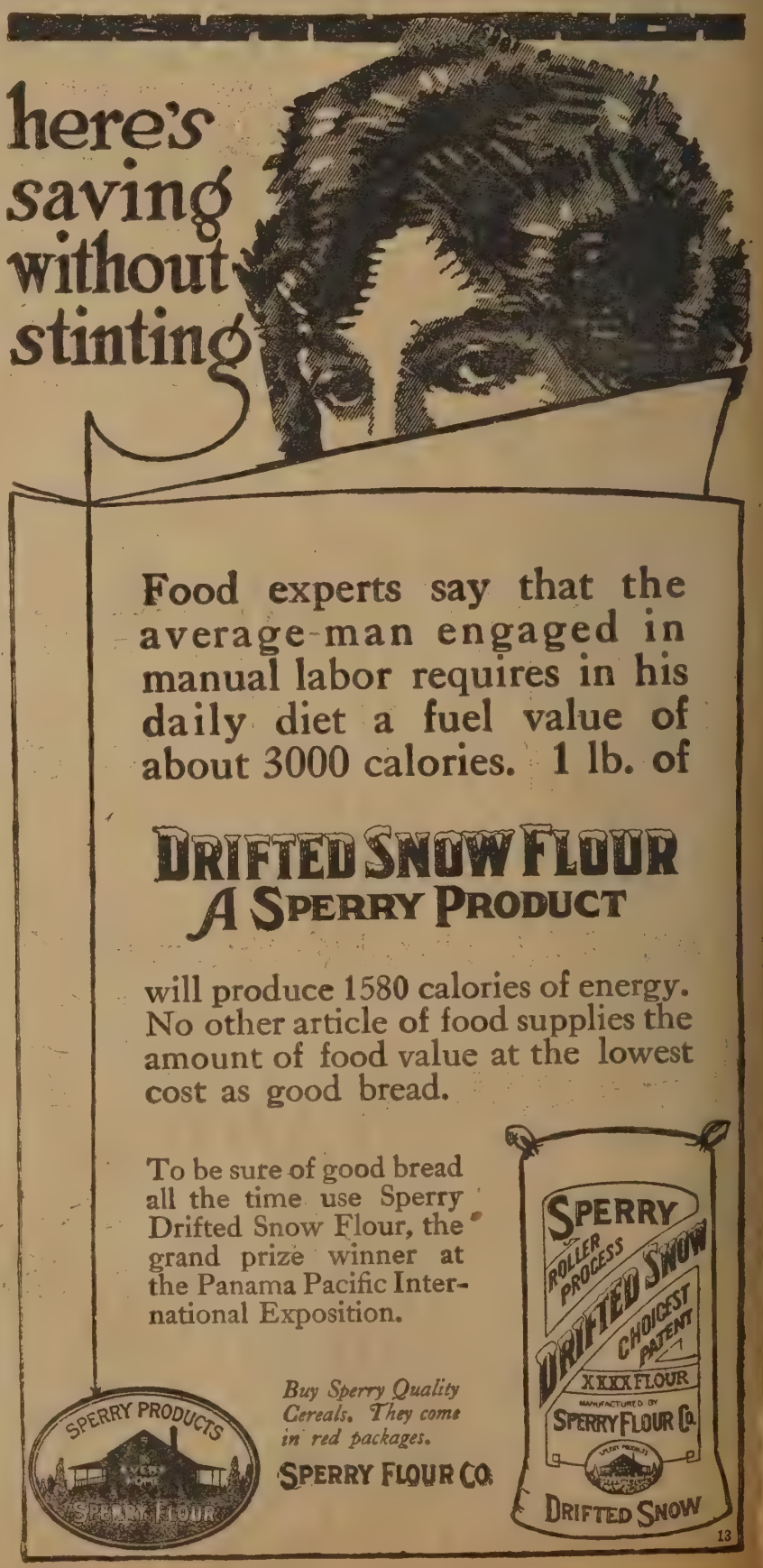
By WINIFRED WORTH.

To transfer this design, put some soap in a pint of hot water, stir and remove excess moisture by partially drying design. Place material on a hard flat surface and lay the design, face down, upon the material, cover with two folds of newspaper and, with a tablespoon, rub, pressing hard, until the design is entirely transferred.

White embroidery floss of linen quality, or the mercerized, is the best for making letters. Always soap the fabric with white soap under the initial before embroidering. This aids one in washing the color from the finished design.

In padding these old English initials, different methods may be used. Some use the twilled cotton for the purpose, others make the chain stitch, while others let a skein of floss out at full length and embroider a strip of it under the thick part while forming the letter, clipping the skein when the initial is finished. This is a splendid method, quickly done, and is suggested, too, as a help in padding all large pieces in border or crescent outline.

Initials can be made by filling in the broad space with French knots. This is used largely on elaborate pieces, such as the laundry bag, table scarfs and ornate gifts.



Patterns

2220—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 10 years requires 3 1-4 yards of 44-inch material. Price, 10 cents.

2225—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 36 requires 6 1-8 yards of 44-inch material. The dress measures about 2 7-8 yards at the lower edge, with plaits drawn out. Price, 10 cents.

2217-2218—Ladies' costume. Waist 2217 cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 2218 cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 3 yards of 27-inch material for a medium size for the entire dress. The skirt measures 2 1-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2226—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. It requires 4 1-2 yards of 44-inch material for a 10-year size. Price, 10 cents.

1885—Ladies' combination corset cover and drawers. Cut in seven sizes: 32, 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 3 5-8 yards of 36-inch material for a medium size. Price, 10 cents.

2207—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires for a medium size 6 3-4 yards of 44-inch material. The skirt measures 2 2-3 yards at the foot, with plaits drawn out. Price, 10 cents.

1977—Ladies' apron. Cut in four sizes: 34, 38, 42 and 46 inches bust measure. It requires 7 1-4 yards of 36-inch material for a 38-inch size. Price, 10 cents.

1978—Child's dress. Cut in four sizes: 2, 4, 6 and 8 years. It requires 2 1-2 yards of 36-inch material for a 4-year size. Price, 10 cents.

1918—Child's rompers. Cut in 3 sizes: 2, 4 and 6 years. It requires 3 yards of 36-inch material for a 4-year size. Price, 10 cents.

2222—Union suit with or without sleeves, for men and boys. Cut in six sizes: 28, 32, 36, 40, 44 and 48 inches breast measure. Size 36 requires 2 7-8 yards of 36-inch material without sleeves. With sleeves it requires 3 1-8 yards of the same width. Price, 10 cents.

1998—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. It requires 6 1-2 yards of 36-inch material for an 18-year size. The skirt measures about 2 3-4 yards at the foot. Price, 10 cents.

2210—Ladies' dressing sack. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires, for a 38-inch size, 3 5-8 yards of 36-inch material. Price, 10 cents.

The value of precious stones imported in 1916 for the first time crossed the $50,000,000 mark.



Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

For Baby's Bassinet.

A cover for baby carriage or bassinet which will protect him from flies and mosquotoes is made of one and one-half yards of white net, 72 inches wide, small piece of bright blue voile and two and one-half yards white elastic, says the Kansas City Star. The corners of the net should be cut to be even, a three-fourths inch hem put all around and the elastic inserted.

The blue voile is used for bluebirds. Five or six about seven or eight inches long are enough to interest baby. These can be button holed around with the eye and the wings marked in heavy thread and can be machine stitched.

Mosquito netting can be used if one prefers, but wash net is much better.

Fitting Hogs for Fairs.

Doerfler Bros. of Silverton are selecting a fine herd of Duroc-Jersey hogs from some 50 head.



Trade-Mark

Longer Wear for the Entire Family

because Durable-DURHAM Hosiery is the most dependable and *economical* hosiery you can buy.

DURABLE
DURHAM HOSIERY

FOR MEN, WOMEN AND CHILDREN

Made Strongest
Where the Wear is Hardest

The heels, soles and toes are strongly reinforced. The wide elastic, garter-tear-proof tops with the anti-run stitch are knit on *to stay*. The quality is uniform throughout, sizes correctly marked, and the legs are full length. The feet and toes are smooth, seamless and even. The famous Durham dyes prevent color from fading or turning green after wearing or washing. Durable-DURHAM Hosiery sells for 15, 19, 25 and 35 cents the pair.

Buy Durable-DURHAM Hosiery for the entire family.

Ask your dealer to show you our women's and men's 35-cent silk mercerized hosiery with the patented anti-run stitch.

DURHAM HOSIERY MILLS, Durham, N. C.



1½ lbs. by parcel post to any point in first, second or third zones ..... 50¢

3 lbs. by parcel post to any point in first, second or third zones $1.00

DELIVERED FREE!

As a trial proposition, send us 50 cents and we will send you 1½ pounds of Northwest's Best Coffee, and after using it, if you believe it is not honestly the best coffee you ever used, we will refund the purchase price without question.

You take no chances.

This is not a package coffee, but a bulk coffee, freshly roasted and ground for you the way you want, after the order is received.

All good coffee: no tin cans to throw away, or premiums you do not need.

Coffee sent whole or ground, as ordered. If you want it ground, state whether coarse, medium, fine, for percolator, or pulverized.

Fill in the coupon below and send with 50 cents or $1.00 in stamps, coin or money order, to

NORTHWEST GROCERY COMPANY

13th and Commerce Sts.
Tacoma, Wash.

Send me 1½ lbs. 6 lbs. Northwest's Best Coffee.
Whole, ground (how) .....
Name .....
Address .....
.....



My Dear Boys and Girls:

What do you suppose are the things important in life?

Here are some of them:

Smile whether we feel like it or not.
Keep sweet temper all the time.
Never tell a lie.
Never steal.
Never be cruel.
Help others.

I am sure every one of the members of our Corner tries to do all these things. And we must not be discouraged if we fail sometimes. Let us put failure behind us and try again. I trust you all; I love you all; I feel sure you try hard. Your loving

AUNT NELLIE.

Some Ways to Help Our Country.

Dear Aunt Nellie: As I have not written for quite a while I am going to write you again. I am 13 years old and will be 14 the 31st of January. I am going to try to win a prize. My subject is "How Can I Help My Country?" For one thing we can grow all kinds of vegetables so as to help feed the United States soldiers and the allies. Also if we were old enough to become Red Cross nurses for the wounded soldiers that would be about the nicest thing any one could do for their country. If we were boys we could go and fight for Uncle Sam. If we are girls we can be sailorettes and take the places of men on the ships doing typewriting and things like that. I hope Uncle Sam wins in the war, which I think he will. If Russia wouldn't turn back it would help the United States an awful lot. The schools of Yakima county took up a collection to help put a flag pole at North Yakima and those that helped had their names buried in a box underneath it. It is in front of the courthouse. We have been having awful hot weather this week. I have been going in swimming. My mother is going to take a trip back to Greenville, Ohio, this fall so I am learning to bake bread and cook. I baked bread today and a cake. If I have a twin I would like to correspond with her or him.—Mary Weaver, Wapato, Wash.

Real Patriotism Begins in the Heart.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am 14 years old. I will be in the eighth grade this year. I am going to write about "How Can I Help My Country?" I can help my country by increasing, conserving and preserving the food supply that comes directly under our control. I can help my country by joining the Red Cross and influencing one other person to do the same. I can help my country by being saving not only by money, but food. I can help my country by increasing my efficiency, no matter where I am or what I am doing. I can help my country by being constructive in word, thought and deed, by avoiding criticism, and by going about my daily life with a new consecration to duty. Real patriotism begins in the heart. If you are patriotic within, the outward expression will take care of itself.—Gladys Powell, Bow, Wash.

Clelah Likes to Climb Trees.

Dear Aunt Nellie: This is the first time I have written to the Farmer. I like the Children's Corner very much and would like to be one of your nieces. I am 11 years old, and would rather live on a farm than any place. The other day my sisters went out on the farm and cleaned out the horse trough and went in swimming. On the farm we sleep out in the open air. Once when I was riding a horse bareback I wanted to gallop. The horse I was on trots very hard, but she trots before she gallops. I bumped up off her back and landed on my feet on the ground. I wear overalls most of the time. Overalls keeps our dresses clean, and mama doesn't have such big washings then. I like to climb trees and ride horseback very much. I suppose most children do. I am in the sixth grade. I would like to correspond with any of the cousins.—Clelah Cooper, Ritzville, Wash.

Not Very Easy to Drive Hogs.

Dear Aunt Nellie: I will shamefully say that this is the first letter I have written to the Children's Corner. My subject is "Hog Driving." I am at my grandmother's. My grandfather is a great hog lover. He calls them his little pets. I have to drive hogs many times and I expect you know how they act; they go any way but the way you wish for them to go. We have about 100 hogs. I have one sister named Claire. She is a mere babe, and I also have two brothers named Lowell and Ralph. I am 14 and in the eighth grade.—Edna A. Tueth, May View, Wash.

Keep House While Mother's Away.

Dear Aunt Nellie: My folks take The Washington Farmer and I enjoy reading the cousins' letters. This is the second time I have written to the Corner and I hope to write again. I am 10 years old and in the fifth grade. My birthday is March 19. Have I a twin? If I have I wish they would please write to me. I live on an 80-acre farm and would not exchange with any city girl. My mother and my baby sister are going on a trip to Ohio to see our folks. My sister and I are going to keep house. I have six sisters and three brothers. During school vacation I stayed with my brother in North Yakima about a month and then came home and then went up to see my teacher in Selah. Her name is Miss Oliver. We went with our neighbor in a car. We have a Ford. My sisters, Mary and Mildred, and I sang some school songs at a little schoolhouse in Selah that Sunday night. My sister, Mary, is writing about "How I Can Help My Country?" She forgot to tell that she has a sister in Columbus, Ohio, waiting on the tables for the soldiers.—Ruth Naomi Weaver, Wapato, Wash.

Likes to Watch Them Fill the Silo.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I like to read the letters very much. I am in the fifth grade. I am 10 years old. I will be 11 on March 31. My school teacher's name is Mr. Dailey. I live on a 40-acre farm. I can crochet an edging. I went up to the foot of the Cascade. The roads were very hilly. We picked flowers on the way up. We saw two blue racers, one snake was trying to seat the other up. We went a little farther and we saw two lizards. We have a sewing club. My brother used to work in the sheep camp. There was a spring where they used to get their water. In the water there was some little water lizards. We have a big silo and when they fill it I like to watch them. We have to go after the cows at night. We have one dog of our own and his name is Fritz. I take music lessons. We have a piano.—Lucile Turnley, Moxee City, Wash.

Cousin Gertrude Has Found Her Twin.

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. We take the Farmer and I enjoy reading the Corner very much. Yesterday when I was reading the letters of the Corner I saw one from a girl that was the same age as I and her birthday is the same and she is in the same grade. Her name was Ruth Matthies. She lives at Pomeroy. We get some of our mail there. I would like for her to write to me. I have three sisters and one brother. My sisters' names are Ella, Laine and Leta. My brothers names is Clement. I hope to see my leter in print.—Gertrude Crawford, Unfried, Wash.

Brother Rides the Spotted Pony.

Dear Aunt Nellie: I think I will write to the Children's Corner for the first time. Papa takes The Washington Farmer and I always read the letters from the cousins. I will be 12 years old on the 31st of October, and will be in the seventh grade this year. I hope that I have a twin and would like to have her write to me. Papa owns a fruit ranch and a small dairy. We have four cows and five calves. We also have four horses. One of them is a pretty spotted pony that my brother rides. The pony is 16 years old and my brother, Lawrence, is 15. I do not like to ride horseback. I hope to see this letter in print.—Leona Baker, Selah, Wash.

Mildred's Glad When School Starts.

Dear Aunt Nellie: I thought I would write a letter to the Corner. I am 8 years old. My birthday is November 27. They are building on the schoolhouse now. I am glad when school starts. My two sisters are going to go to school when it starts. Their names are Dorothy and Elsie. I have six sisters and three brothers. The cookhouse is in front of our place now. We live on an 80-acre farm. We have six cows and one of them has her leg broken. We have four calves and six horses.—Mildren Eunice Weaver, Wapato, Wash.

Likes Summer Because He Can Swim.

Dear Aunt Nellie: This is the first time I have written to the Corner. I like summer best, because I can go swimming. There is a lake a mile away from our house. My brother and I go swimming every Sunday afternoon. I am going to tell you about our farm. We have 13 acres of land. We have two head of cows and one horse and two hogs and some chickens. We have one dog and his name is Teddy. I was 10 years old on Decoration day.—Rudolf Freeland, R. R. 3, Box 18, Olympia, Wash.

Is On the Roll of Honor.

Dear Aunt Nellie: I have seen two of my friends' letters in the Washington Farmer. I saw my name in The Washington Farmer on the roll of honor. I got a letter from one of the girls. Her name was Lenore Mitty. I would like to be a teacher. I would like to teach about 35 pupils. I like to teach my brothers. I wish some other girl would write to me.—Eva Boud, Valley, Wash.

Twelve Pupils Go to Grace's School.

Dear Aunt Nellie: This is the first time I have written to the Corner. I was 10 years old the second day of August. Our school was out the 28th of May and it starts the 4th of September. We have 12 pupils going to our school. I am in the fifth grade. I have five brothers. My oldest brother is 15 years old.—Grace Jones, Vaughn, Wash.

Boat Riding Every Sunday.

Dear Aunt Nellie: I saw my letter printed in the Corner. I have been helping papa haul hay. We got 20 tons in the barn. We gave the Elms a big cat and it got seasick, so they gave it away. We sold nearly all of our chickens. We only have two big ones and 40 little ones. We have a launch. Her name is Phantom and the skiff's name is Bud. We go boat riding every Sunday. We get lots of fish. Papa is going after a horse this Sunday. One of my brothers went out fishing with a line and caught 15 fish. We have a big dog. A man gave it to us. His name was Nip and we named him Spike. We have a few apples ripe now. I am four feet nine inches and have dark brown hair and gray eyes. I would like to hear from Viola Augst. She is the same age as I am. I will write to the Corner again. I like to read the letters very much.—Iris Chevalier, Provost, Wash.

Laura Won the Race.

Dear Aunt Nellie:: This is the third time I have written to the Corner. My father takes the Washington Farmer and I enjoy reading the letters. We live on a farm of 320 acres one mile from town. We have a very large farm house and many shade trees. Last Friday a girl friend and I went out horseback riding. We went many miles and had a fine ride. When we came to some good road we ran a race and when my horse found out we were racing we left my friend out of sight. I am 13 years old and would like to correspond with any boy or girl cousins.—Laura Lee, Ritzville, Wash.

Dorothea Writes a Welcome Letter.

Dear Aunt Nellie: I wrote to the Children's Corner once before and thought I would write again. We have two dogs and four kittens. We live out in the country. We have a bird. His name is Tony. We have five sheep and one lamb. I am 10 years old and will be in the fourth grade next year. I have five sisters and two brothers. Their names are Agnes, Edna, Violet, Grace, Reva, Billie and Bruce. I have blue eyes. My birthday is March 24. Have I a twin?—Dorothea W. Hicks, Box 162, Coulee City, Wash.

Enjoys the Cousins' Letters.

Dear Aunt Nellie: This is the first time I have written to the Corner. I enjoy reading the letters in the Children's Corner very much. I live on a 20-acre farm. I was 10 years old July 30 and I am in the fifth grade. I have four brothers and two sisters. Their names are Amos, Daniel, Kermet, Humbert, Leona and Dorothy. We have four cows, one calf and also two horses. My teacher's name is Miss Walker. I like her very much.—Esther Bergevin, Moxee City, Wash., R. F. D. 1, Box 339.

Finds Another Girl Her Age.

Dear Aunt Nellie: I have been reading the Farmer this morning and I see a girl in the Corner who is the same age as I am. I am 12. I would be very glad if some of the cousins write to me. I love to write to the Corner very much. Our school will start in September. We have a pony and his name is Tony.—Lyda Augst, Beebe, Wash., R. F. D. 1.

Mary and Dick Are Mae's Sheep.

Dear Aunt Nellie: I like to read the Children's Corner. We have two lambs and their names are Mary and Dick. I have two sisters and their names are Lois and Lucile. I have three brothers and their names are Forrest, Roy and Hial. My birthday is October 23. We have four horses and six cows. We have five cats and five kittens.—Mae Turnley, Moxee City, Wash.

Mary Goes Swimming Every Day.

Dear Aunt Nellie: My subject is "My Pets." I am 7 years old and have two sisters and no brothers. We have one cow and one calf. Say, we were out to Spokane and when we got back we had seven little pigs. I go swimming or wading almost every day.—Mary Luting Hulett, Nespelem, Wash.

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The demand for trained men in the business world today far exceeds the supply.

Never before has there been such an opportunity for the young man who wants to enter business as now. Prepare this winter for a well-paying position.

The Y. M. C. A. Commercial School

offers instruction in all departments—preparing for positions as bookkeepers, stenographers and general office work.

The Y. M. C. A. builds men of character as well as prepares you for responsible positions. Students can live in the Y. M. C. A. building and enjoy all privileges of gymnasium, swimming tank, reading rooms, etc.

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Write our educational secretary for information regarding any of your educational wants. He can help you.

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Terms very reasonable. School year opens September 25, 1917.

J. JORGEN THOMPSON, President. Telephone Riverside 706. 29th and Grand.

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Stenography, Bookkeeping, Commercial Training

Give you a GOOD SALARY from the start; a BETTER INSIGHT into the methods and usages of business, and the BEST OPPORTUNITY to advance to competence and commanding influence in commercial life.

What school? Make no mistake.

THE TRUE TEST.

Most students, through a feeling of loyalty, will say a good word for their school, and if a school sends you to inquire of certain "business men" you may well suspect a "game"; therefore, make the true test of our standing, ask the best business men of Spokane and the towns of the Inland Empire about The Northwestern. We furnish bookkeepers and stenographers to business men, and these men are the best judges of the efficiency of our school—even better judges than the students themselves.

See the Northwestern and its equipment. Use your better judgment. Decide after inspection and inquiry. Enroll at

NORTHWESTERN BUSINESS COLLEGE

S317 Howard St. M. M. HIGLEY, President. Spokane, Wash.

Be an Auto and Tractor Expert

The demand for trained men in all branches of the Auto and Traction Engine Business is greater than ever before.

MY GRADUATES are filling responsible positions in large factories and assembling plants, also as GARAGE OWNERS. They are making big money as experts.

THE HAWTHORNE AUTO SCHOOL'S $30,000 equipment gives you the actual PRACTICE, TRAINING and EXPERIENCE on REAL AUTOS, TRUCKS and GAS ENGINES. We occupy 10,000 square feet of FLOOR SPACE. Write for particulars at once.

HAWTHORNE AUTO SCHOOL

462 Hawthorne Ave., Portland, Ore.

Oldest, best equipped and most practical Auto School on the Coast. Established 1907.

Why Salesmanship on the Stock Farm?

By E. L. POTTER

Just as good agriculture is the art or science of making two blades of grass grow where only one grew before, so is good salesmanship the art or science of selling two articles where only one was sold before.

On the farm some products demand salesmanship of a high order, while others demand the minimum of salesmanship. An article for which the apparent demand equals or exceeds the supply requires no especial salesmanship and is therefore designated as being a "staple" article, since it may be sold at any time at the market price. On the other hand, products in which the apparent demand is less than the supply will remain partly unsold unless the demand receives some form of stimulation. The art of increasing demand is what we call salesmanship.

These nonstaple articles may in turn be divided into two classes—those that are needed in larger quantities than they are now being sold, and those that are not needed. The sale of the latter can be promoted, but only by dishonest or misguided methods. The other class of products may be sold by absolutely and praiseworthy, and, we might even say, altruistic methods.

But why, we ask, should a man who needs an article not buy it without having to be the object of any especially selling methods on the part of the producer? There may be several reasons why a man does not buy a certain product which perhaps he really needs: He may not know that there is such a product; if he knows of it, he may be ignorant of its value; he may be merely indifferent to the whole idea and have never given the matter any consideration; he may have a personal dislike for the product or more commonly for some person connected with its sale or manufacture; lastly, he may not know how to finance the purchase.

It will be noted that the most important of these reasons are based on a lack of knowledge. Salesmanship in these cases consists of bringing the necessary knowledge to the possible purchaser; in other words, in advertising. Even the question of financing the purchase is largely dealt with in the same way, that is, by bringing to the possible purchaser's attention either reasons why the purchase would be more profitable than had been supposed, or in proposing new methods of financing the deal.

The first step in advertising is the creation of interest. After interest is created the matter of supplying information is relatively easy. In fact, the purchaser may come to look for information. The great interest stimulators are promises of financial profit or of personal pleasure, and the latter is perhaps even stronger than the first. If the prospect once feels that it will be either to his pleasure or profit to make the purchase, he will then take the initiative in looking for further information and he will surely buy if it is at all wise for him to buy. Personal friendship does not lead to so many new purchases, but it is certainly true that a prospect who is wavering between two salesmen will be much inclined to deal with the one he likes best, but, what is even more important, he will not buy from a man whom he does not like at all.

Let us see just what all this means to the farmer or stockman. In the first place, such products as grain and hay, dairy products, and some kinds of fruit and vegetables are staples; that is, the demand exceeds the supply. Fat cattle, sheep and hogs also come under the same head.

On the other hand, many kinds of purebred animals do not always meet with such a keen demand. For example, there are more good bulls in the country than there are men who have definitely made up their minds to buy a bull. Hence the selling of bulls requires a certain degree of salesmanship. Fortunately, there is no more fertile field for salesmanship than with the purebred live stock, since there is such an enormous number of men who could profitably purchase, but who are indifferent to or unaware of the advantages of such a purchase. These men may be reached by the proper methods of salesmanship, and in this way the demand may be multiplied many times. Viewed in this light, the possible demand for purebred live stock of all kinds far exceeds the supply.

Ignorance of these points has been the cause of most of the failures in the purebred business. Men who have been successful in raising market stuff have gone into purebreds expecting to follow the same methods. As a result they soon become disgusted with the "lack of demand." They do not realize that it is absolutely necessary to develop the demand if it is to meet the supply. The time will doubtless come when so much salesmanship will not be necessary in the handling of purebred live stock. That condition is reached now in some places and at some times. One fortunate thing about selling purebred live stock is that once a man becomes a customer he no longer has to be "sold," but on the contrary purebred sires become to him a staple article and he buys the number which his business demands without any especial encouragement on the part of the salesman. Even then, however, the breeder must not assume that his task is finished when the stock is raised. It is as much his business to encourage the more extensive use of purebred stock as it is to raise them.

Corn on the Ladd Farm.

D. Brooks Hogan, superintendent of William Ladd's Iron Mine farm, at Oswego, Ore., where his fine herd of Jerseys is now kept, is having a rather puzzling experience with corn this year. Mr. Hogan, two years ago, planted Minnesota No. 13 corn. This is the basis of the Oregon Improved Minnesota 13, and is the most recommended as a good early corn. He selected his own seed and last year instead of having earlier corn, it was a little later and a little larger. This year the corn is still later, is large for a dry season and is very loby. But on August 20 it had started practically no ears and the tassels gave promise of ripening and shedding the pollen before the ears would be in silk. A crop failure so far as ears are concerned was indicated, though there will be much stalk and leaf for silage. Mr. Hogan planted considerably of a corn known as Golden Glow. He planted it a week later, yet it is maturing much earlier and the ears are large and plentiful. I have heard the same corn spoken of very favorably at one or two other places.

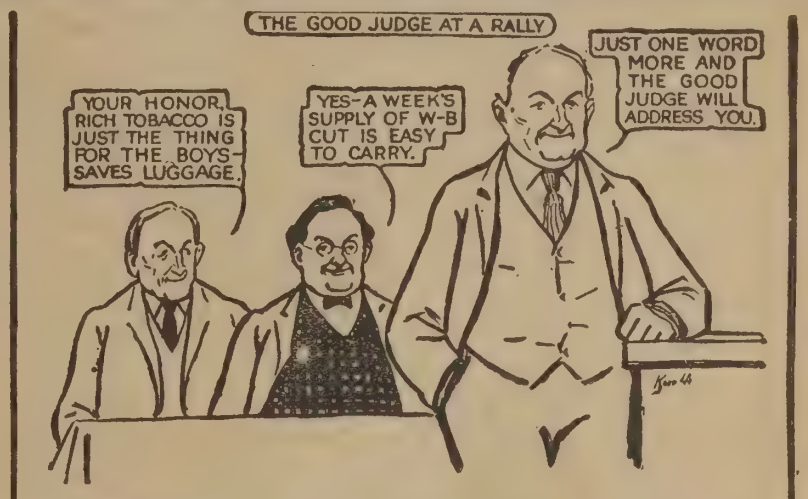
William Ladd is the breeder of the great bull, Golden Glow's Chief. He is now working toward a line-bred Golden Glow's Chief herd. He has two sons of the old bull, one a Hood Farm Pogis 9th on the dam's side, the other, 75 per cent Golden Glow's Chief and his dam, now on official test after nine months' promises to make a world's record. There are six daughters. The herd has always been noted for big official records and several cows now on test are doing well.

It is a rather curious coincidence that the Golden Glow corn should be the one making good, when the herd is getting so strongly into the Golden Glow blood. H. A.

Live Stock in Australia.

At the annual meeting of the New South Wales Sheepbreeders' association the president, in his address, said that drouth and plague had reduced the stock and earnings during the past two years, but that the breeders were still in a strong position. Estimates of the stock in the commonwealth compared with prewar years were: In 1913-14—sheep, 78,600,334; cattle, 11,051,573; horses, $2,521,272; in 1916—sheep, 72,309,507; cattle, 9,738,467; horses, 2,410,923.

High prices for meat had led to the killing of both immature and female stock far in excess of what would ordinarily have been disposed of, and that must sooner or later react on returns.



THE Call to the Colors calls for thrift and common sense by everybody. A 10c. pouch of W-B Cut Chewing goes twice as far as 10c.'s worth of ordinary tobacco. That's the big point: W-B Cut isn't ordinary tobacco, it's *rich* tobacco, and a lasting chew.

Made by WEYMAN-BRUTON COMPANY, 1107 Broadway, New York City

OPPORTUNITIES IN JERSEYS

42 head cows, bulls and young stock, all of richest breeding, and good individuals, representing the blood of such noted sires as Golden Cicero, Foxhall's Fern Lad, and Noble Peer. With foundation of some of the leading American families. Complete dispersal of my registered herd. Will be sold at auction

October 4, 1917, Corvallis, Oregon

Catalogue giving full particulars is being compiled. Send name to E. A. Rhoten, Sale Manager, Salem, Oregon, and one will be mailed when published.

A. J. JOHNSON, Corvallis, Owner

COL. A. L. STEVENSON, Auctioneer.

IF YOU ARE INTERESTED IN REGISTERED HOLSTEINS

you should send to the Carnation Stock Farms, 1060 Stuart Bldg., Seattle, Wash., for a copy of their Auction Sale Catalogue, containing pedigrees of approximately 90 animals, including 4 herd sires, Johanna McKinley Segis (a 40-lb. bull), King Segis 10th, Matador Segis Walker and Dutchland Governor Sir Colantha.

Carnation Stock Farms will offer for sale 75 Registered Holsteins, most of them bred to the above herd sires. They will also offer 10 registered Holstein bulls, most of them ready for service. Among them will be at least one son each of the above herd sires.

VISIT SEATTLE AND PLAN TO ATTEND THIS

AUCTION SALE
160 REGISTERED HOLSTEINS
Kent, Wash., Oct. 3-4, 1917

All animals above six months offered for sale will be guaranteed to be absolutely free from tuberculosis. Study the pedigree of the Holstein cow and you will note that she holds records not only for quantity but for quality of milk. Plan to visit Seattle and attend this sale and arrange to buy at least one cow bred to a favorite herd sire.

SEND TODAY FOR CATALOGUE

Carnation Stock Farms, 1080 Stuart Bldg., Seattle, Wash.
Farm Located at Carnation, Wash. (formerly Tolt). Visitors Welcome.

NEWS FOR BREEDERS

Octavia's Duchess, a 3-year-old Jersey cow owned by Frank Laughary of Monmouth, Ore., recently finished a 10-month's official test, with an average test of 7.589 per cent. Her butter production was about 563 pounds. She was on test the full 12 months as a 2-year-old and made almost exactly the same record.

Henry Keyt of Perrydane, Ore., who purchased Prime Prince at the Shorthorn sale at the North Portland stock show last winter paying $1250 for him and who has paid good prices several times at that sale, including $610 for the fine heifer, Lilly Dale, has decided to disperse his Shorthorn herd. A few of them are already sold and the balance will be put on sale this winter. The sale promises to be very high class, as usual.

Clifford F. Reid is feeling pretty good because he has had five heifer calves in succession, dropped in his Jersey herd. One of these is out of Fussy's Fern Cowslip of S. B. Jr., that was champion at the Oregon State fair in 1916; another from Anota's Lady of S. B., that won sweepstakes of all breeds at the southwest Washington fair in 1916, and has an official ercord of well over 450 pounds of butter, begun under two years old and part of the time on the show circuit.

J. K. Conger of Castle Rock, Wash., put up the first silo in that neighborhood two years ago. Now there are fully 30 of them and over half were built this season. Mr. Conger fills his silo with corn every fall, but puts in oats and vetch or clover or oats alone for summer feed. Mr. Conger now has 12 registered Jerseys. Four of these were bought at the Henry Zorn sale and Mr. Conger already has one bull calf by King Coffee Violet Lad, the bull that sold in that sale for $770. He is a fine little fellow and probably will be kept for a herd sire.

L. Galbraith of Independence, Ore., who owns the two thoroughbred stallions, Tony Faust and Milton Bowles, reports 19 mares served the last season. Of this number 14 were from outside the state and not all were registered thoroughbreds. A few were polo ponies, whose owners wish to raise polo horses of more speed as well as size. Mr. Galbraith says there is a revival of interest in the thoroughbred which he thinks is not alone on account of the recognized value of the thoroughbred blood cavalry horses. Tony Faust is a very high class horse, being a son of the well-known sire, Sane, and his dam, St. Rose. Milton Bowles is by Salvation and out of Chico.

Nutwood Figgis, a Jersey cow owned by Frank Doerfler of Silverton, Ore., stood at the top of the list of all senior 2-year-olds on official test in the United States for the month of April. She produced 400 pounds of fat, or 470.5 pounds of butter, in 10 months as a senior yearling. She was bred early; and while another immediate test is working the little cow rather hard, she will evidently make a great record.

A. E. Westcott of Banks, Ore., reports that the Jersey cow, Princess Casarinda, that has an official record of 527 pound of butter in a year, will make a cow-testing association record of over 700 pounds this year. She has averaged over 70 pounds a month for seven months, her best month being a little over 74 pounds. She has a fine bull calf, and Mr. Westcott will probably keep him for his own use. Mr. Westcott has 21 head in the cow-testing association, 10 of them pure bred. Most of them are young, and the records they are making are good. Mr. Westcott had the high cow in the Weshington County Cow testing association last year, and has hopes of doing so again this year, though he says most of the members are making good records.

H. A.

St. Mawes Lad.



The above photo shows St. Mawes Lad, a young Jersey bull, recently purchased by G. G. Hewitt of Monmouth, Ore., from E. F. G. Carlyon of Bellingham, Wash. The young bull has long hips and a strong back, only the pose causing the swayed appearance. He is sired by Poppy's St. Mawes whose dam has an official record of 1120 pounds of butter in a year. His dam is St. Mawes Beauty, that made an official record of 690 pounds of butter in a year, beginning at 1 year and 11 months, and 879.9 pounds as a junior 3-year-old, while her dam, St. Mawes Susie, has a record of 918 and 938 pounds made in successive years. Rosaire Olga Lad, sire of over 20 Register of Merit daughters, is sire of both sire and dam. He was bred by Ed Cary, as the breeding indicates, and certainly has production inheritance entitling him to become a great sire. Mr. Hewitt has a herd almost entirely of Register of Merit Jerseys, some of them with big records and mated to a bull with such production inheritance he is in line for remarkable records for his coming calves. H. A.

Sells Registered Guernseys.

Middledale Farms of Goshen, Ore., reports the sale a short time ago of ten head of registered Guernsey females to J. H. Bowles of Merced, California. The animals Mr. Bowles got are a choice lot and are well worth the purchase price of $450 each. Among them was Lillie Lynes, the dam of two Advanced Register daughters. One of these, Jennie Van in the Hughes herd, holds the state record of 666.79 pounds of fat in a year. Jennie's April Rose, a daughter of Jennie Van, milks 38 pounds. She, as well as the others will be put on official test by Mr. Bowles. The entire lot, with one exception, are daughters of Longwater Emigrant, Middledale Farms' herd sire and he is of the same line of breeding as Itchen Daisy's May King of Longwater, that recently went from New York to a California breeder at $8000, the highest price ever paid for a Guernsey bull. Mr. Bowles is to be congratulated on his purchase, especially as he took with them the fine imported bull, Ivy's Masterpiece. Middledale Farms reports other sales at good prices and finds a strong demand for Guernseys. —H. A.

CUTTER'S
BLACKLEG PILLS
"California's Favorite" for nearly 20 years

For the Prevention of Blackleg in calves and young cattle

Their superiority is due to nearly 20 years of specializing in "Vaccines and Serums only."

Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.

Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

Prices:

10 dose pkge. Single pills	$1.00
50 dose pkge. Single pills	4.00
10 dose pkge. Double Pills	1.50
50 dose pkge. Double Pills	6.00
Cutter's Pill Injector....	1.50

Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

The Cutter Laboratory, Berkeley, Calif.

The Cutter Laboratory of Illinois, Chicago
Eastern Agent

SCRUB COWS

never were profitable, and as the price of feed advances it becomes more necessary to get the producing kind.

Our Register of Merit
JERSEYS

would soon pay for themselves in the added production, to say nothing about laying a foundation for a future profitable herd. It is the PROVEN RECORD THAT COUNTS. Then when you not only have a producing cow, but her dam and her sire's dam were also producers and there are producing parents all the way back, you have a right to also expect that her calves will be producers. The 60 registered Jerseys that we are going to sell at auction are either Register of Merit animals or from R. of M. parents (excepting two heifers whose dam is untested). The offering is the dispersal of the herd of Frank Loughary & Son and a consignment from G. G. Hewitt, and includes Herd Bulls, Cows, Bred Heifers and younger Calves. The sale will be held on the Loughary farm near Luciamute station, about 7 miles southwest from

Monmouth, Oregon, Oct. 15, 1917

Complete catalog will be issued. Send name to either of the proprietors or to E. A. Rhoten, Sale Manager, Salem, Oregon, and one will be mailed when published.

Frank Loughary, G. G. Hewitt, } Proprietors, Monmouth, Oregon.

Col. J. W. Hughes, Auctioneer.
Forest Grove, Oregon.

HAMPSHIRE RAMS

One three-year-old, bred by the Butterfield Company, also a few

CHOICE SPRING RAM LAMBS

The stud ram has been used in our flock and as we are introducing new blood this is a chance to get him in his prime.

FOOTHILLS FARM
Carlton, Ore.

W. B. AYER, Owner. R. D. FOWLER, Supt.

Maple Farm Holsteins

Why buy a poorly bred bull and waste time, when you could, by buying a good one, raise a herd of great value? It costs no more to raise good ones than poor ones.

Our herd is headed by Sir Colantha Champion Fayne 103802. The average of his dam and sire's dam are as follows: Milk, 594 lbs.; butter, 30.16 lbs.; per cent fat, 4.06. He is a grandson of Colantha 4th Johanna and the best son of Colantha Johanna Champion.

We are offering some splendid young bulls of this breeding from heavy producing A. R. O. dams.

Write us for full pedigrees and description.

Come and see our splendid herd.

Pomeroy & Son

MAPLEWOOD FARM. SCAPPOOSE, ORE.

DOGS

Fox and Wolf Hounds



of the best English strains in America; forty years' experience in breeding these fine hounds for my own sport and protection of sheep, hogs and poultry. Send stamp for catalog.

T. B. HUDSPETH.
Sibley, Jackson County, Missouri.

Mr. Man

Do you want a fine stockman's pocket knife? Let us tell you how you can get one absolutely free. Write today, Prize Editor, the Washington Farmer, Review building, Spokane, Wash.

In answering advertisements don't fail to mention this paper.

Breeders' Department

JERSEY CATTLE

Jersey Home Dairy

FOR SALE. BULL READY FOR SERVICE.

Sire Oxford You'll Do Jr. Sire of 4 R. of M. daughters, averaging 415 lbs. 7 oz. butter, at 2 yrs. 1 mo. He by Oxford You'll Do, grand champion as best bull with 5 daughters, also sire of grand champion cow in class of (76 entries), at the Royal Show, and is sire of 30 R. of M. daughters, including You'll Do's Favorite, 964 lbs. 13 oz. butter. Dam Creoles Belinda, of the Governor Marigold line of breeding. **ERICKSON BROS., North Yakima**

A BARGAIN IN JERSEYS.

Two registered Jersey cows and one heifer eligible to register, all close up in blood of Gertie's Lad, Oregon's Exile and King Koffee's Count; all freshen this fall. All three for $300. I have no place to keep them. Write.

JOHN YODER, R. 2, Aurora, Ore.

MERIDIAN DAIRY AND FRUIT FARM.

Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams.

B. C. CRABTREE, Lynden, Wash.

GUERNSEY CATTLE

FOR SALE.

3-year-old purebred Guernsey bull. Registered No. 35942 American Guernsey Cattle Club.
Sire—Imp. Prince of Venelle Farm (22481.)
Dam—Imp. Gay Lass du Braye (34312.)
Parents—Pure Guernsey Island blood.
Name of bull—Sir John of Mountview.
Daughters all high merited animals.
Price of bull—$250.00 if sold before Oct. 1, 1917. Inquire of

WM. OGG, Owner, Redmond, Ore.

MIDDLEDALE FARMS GUERNSEYS.

Young stock of both sexes by Langwater Emigrant (one of the best bred May Rose bulls) and imp. Ivy's Masterpiece, out of high producing cows.

MIDDLEDALE FARMS, Goshen, Ore.

Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
Redmond, Wash.

ABERDEEN ANGUS

Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the breed.

At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

Congdon & Battles
Otto V. Battles, Mgr.
North Yakima, Wash.

HEREFORD CATTLE

BULL RANCH

Registered Hereford cattle.

CHAS. BULL, Prop. Mabton, Wn.

BROWN SWISS CATTLE

Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

THEO. BRUGGER, Route 3, Gresham, Ore.

SHEEP

Registered Sheep

Rams—Hampshire, Shropshire, Lincoln and Cotswold. We deal in pure blood registered rams. Grade ewes, one, two and three years old.

GRANT B. DIMICK, Oregon City, Ore.

RAMS

Hampshire and Southdown. Also large Yorkshire pigs. All stock registered.

J. G. S. HUBBARD, Monroe, Ore.

HOLSTEIN CATTLE

Established 1887—100 in Herd.
REGISTERED HOLSTEIN CATTLE.

As I wish to reduce my herd I am offering the blood of such bulls as King Segis Pontiac 13th, 30.39 lbs. breeding, 4.25 per cent fat; Iowana Rochdale Korndyke, 26 lb. breeding, and Prince Segis Korndyke De Kol, 31.41 lbs. breeding.

LAKE SIDE STOCK FARM.
P. A. FRAKES, Scappoose, Ore.

Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

Waterloo Holstein Farm

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje	King Segius 10th Segius Walker Pietertje 2d

C. F. JENNESS, Meridian, Idaho.

HOLSTEIN BULLS

and a few females for sale out of A. R. O. dams of the noted Segis family. Herd bull, Model Annie De Kol Segis, No. 81071, dam's record, 30.91 lbs. butter in 7 days, his 4 nearest dams' average, for 7 days, 29.63 lbs.

MOREHEAD & HOBSON, Outlook, Wn.

Bargains in Bull Calves

Just a few, sired by Barrington Fayne, son of the great sire Sir Johanna Ruth Fayne, sire of over 20 A. R. O. daughters, including Ruth Illustrates (4 years), 27.42 lbs. butter, and out of a show cow that produced 23.93 lbs. at 10 years old. $60 to $75 if taken while young.

THURSTON & SON, Jefferson, Ore.

Holstein Bull Calves

sired by Segis Riverside Pontiac, that sold in the Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days, 118.99 in 30 days and big records all through his pedigree.

ERNEST JOHNSON, Scappoose, Ore.

Young Holstein Bulls

Out of A. R. O. dams and sired by Chimacum King Segis, whose dam and granddam average 30.98 lbs. butter in 7 days. Very reasonable.

FRANK W. CONNELL, Hillsboro, Ore.

LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

J. H. HULBERT, Mt. Vernon, Wash.

WAYSIDE RANCH HOLSTEINS.

Am offering 13 heifers for sale, sired by my herd bull Buffalo Duke Doede, a half brother to the world's champion cow. An opportunity of a life time to the man wanting No. 1 stuff.

H. H. STIVER. Buhl, Idaho.

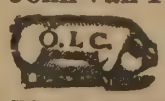
HOLSTEINS

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

O. I. C. SWINE

John Van Trojen Sr., Breeder



of the famous Ohio Improved Chester White Hog. All stock registered. Write for prices. Orders filed after Oct. 1.

Chimacum, Jefferson County, Washington.

SHORTHORN CATTLE

SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

R. E. BOYCE, Baker, Ore.

Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN, Wapato, Wash.

Hercules Shorthorns

For particulars write
DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

For Sale—Shorthorn Bulls

Fine individuals, sired by Lavender Gord's No. 370358, a bull produced by the blending of the blood of two great families, one headed by Count Lavender, the other by Choice Gords

ANDREW OLSEN, R. 4, Ellensburg, Wash.

H. H. Schildman

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.

Filer, Idaho.

Shorthorn Cattle

SHIRE HORSES.

DR. G. E. NOBLE, Boise, Idaho.

DUROC-JERSEY SWINE

DUROC JERSEY

Gilts and Boars

I am booking orders for fall weanling pigs for October and November delivery. Can furnish them singly or in unrelated pairs or trios. Special prices to members of boys' and girls' pig clubs. An exceptional strain of Durocs, carrying the best blood lines found in the northwest. Have been prize winners wherever shown.

Chas. G. Sprong, Grandview, Wn.

Duroc Jersey Swine

Pigs of various ages and both sexes. The finest breeding, perfect condition. Also one **Fall Boar,** sire King of Bonniehome, grandsire, the famous King the Col. Satisfaction or your money back.

CHARLES A. BRAND, Wilbur, Ore.

Young Pigs for Sale

From prize winning stock of Washington and Oregon. Shipped C. O. D. on approval.

G. O. SWALES, Johnson, Wash.

Hillcrest Duroc Jerseys

For immediate sale:
1 11-mo. gilt, bred to farrow Oct. 3d, $60.
1 10-mo. gilt, to farrow Nov. 8, $50.
3-month pigs, $25.
Extra fine stock, combining the blood of noted show winners.

R. P. Camp, Ione, Wash.

Prolific, Profitable Durocs

Pigs from Champion Sow, bred by Exhibitor of the state of Washington, and other blue-ribbon sows, headed by the great 900-lb. boar, Red Dandy, 159453. Choice boars and gilts for sale from these prize-winning sows.

JNO. B. PETERSON, Mountbourne, Wash.

PREMIUM HERD

Spring pigs from champion and first prize sows at Ontario, Ore., and Gem State and Idaho State fairs.

C. H. KIRKPATRICK. Parma, Ida.

Duroc-Jersey Spring Boars

Sired by Colonel's Lad No. 203791, grand champion of the Minnicassia fair, 1916. Meet me at the Boise state fair; look my herd over and get acquainted.

H. C. POLLY. Burley, Idaho.

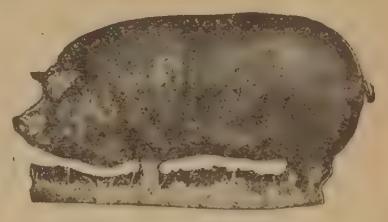
DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Pullman, Wash.

POLAND CHINA SWINE

POLAND CHINAS



PEERLESS TRIXIE 590272
Grand Champion N. W. S. Show, 1916.
Weight at 13 Months, 530 Lbs.

Registered gilt and boar pigs. From same strain as **PEERLESS TRIXIE.** Of large and healthy litters, insuring excellent breeding stock.

We Aim to Satisfy You.

S. M. MEARS JR.
Woodland, Wash.

Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have for sale extra good spring pigs. Correspondence solicited.

J. M. ROYSTON EST., C. ROYSTON, MGR.
Payette or Fruitland, Idaho.

Locust Lawn Herd

Booking orders for strictly big type Poland China spring boars, sired by Overlook, 1st and senior champion, Idaho State Fair and Gem State Fair, 1916; weight 320 lbs.; out of the 1st, 2d and 4th prize sows at Idaho State Fair, 1916, in strongest competition; satisfaction guaranteed.

W. F. HOWARD & SONS, Parma, Idaho.

Medium Type Polands

Quick growing, easy feeding breeding stock, sired by the 1915 grand champion at Pacific International.

FRANK NEEDHAM, Eugene, Ore.

Pure-Bred Poland China Fall Gilts

will be shipped c. o. d., subject to your approval. Write to

HERBERT WILLARD. Dayton, Ore.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX. Lyons, Ore.

BIG TYPE POLAND CHINAS

June and July pigs for sale, either sex, eligible to registration, at farmers' prices.

E. E. STREITZ, Richfield, Idaho.

BERKSHIRE SWINE

Kintyre Farm Berkshires

Exceptionally fine breeding stock for sale at reasonable prices.

CLARK BROS., R. F. D. 2, Prosser, Wn.

Early Spring Pigs

Well grown, best quality, sired by a son of the great Laurel Champion and out of prize sows.

GEO. BERTRAND, Olequa, Wash.

RIVERBY ORCHARD BERKSHIRES

won 12 out of 15 first prizes at the Washington State Fair, 1916. A few outstanding boars for sale at reasonable prices.

D. C. BUNN, Prosser, Wash.

HAMPSHIRE SWINE

GREEN GROVE STOCK FARM.
ENTERPRISE, OREGON.

Breeder of HAMPSHIRE SWINE. For immediate sale—Bred from Panama-Pacific Exposition championship herds. 10 head spring males, 15 head gilts, 25 to 200 pounds.

J. M. Fruitts, Prop.

HAMPSHIRE SWINE

Choice stock of all ages at bargain prices.

HIGHLAND FARM, Box 22, Underwood, Wn.

YORKSHIRE SWINE

BROADMEAD Farm

Large Yorkshire Swine.

J. A. SCOLLARD, R. D. 1., Chehalis, Wn.

AUCTIONEERS

AUCTIONEER

Special attention given to live stock sales.

BEN T. SUDTELL. Albany, Ore.

FOR SALE--Percherons, Shire Stallions and Mares

Jerico 110196, a dark iron gray Percheron stallion, 3 yrs., wt. 1850; sire Jube 81251 by Coco, dam, Bird 81977 by Brilliant Jr. His 1st, 2d and 3d dams are close descendants of Brilliant. Winnings at Northwest Live Stock Show, Lewiston, as suckling colt, first in class and Percheron society gold medal as best stallion under three years owned and bred by exhibitor As 2-yr.-old, 1st in class and champion under 3 years, three Society medals, best under three years owned and bred by exhibitor, grand champion and best stallion owned and bred by exhibitor and in open class reserve grand champion.

Aaron 117566, a 2-yr.-old half-brother, dark bay, wt. 1550. Sire Salvador 51340 by Calypso. Equally good (some say better). He has never been shown.

Callie 88642, a dark gray mare, 6 yrs. old, wt. 1750. Sire Apollon 26130. She is very strong in Brilliant blood; has mare colt by Halicite.

Lady Grace II., 15452, a 3-yr.-old Shire, bay, white face and white hind legs, wt. 1650. Sire Imp, Toga VII. 9288; dam Bay Lily 13577, by Imp. Greenham Champion.

All first class in every respect, mostly our own breeding, reserved for our own special use.

On account of the death of one of the partners, must sell to close estate.

FOLLETT & SCHOOLER. Genesee, Idaho.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Sept. 17.—Corn slid downward in value today, influenced mainly by the prevailing ideal weather for maturing the season's crop. Prices, although steady at the close, were 1 1-8c to 1 7-8c net lower at $1.15 3-8 to $1.15 1-2 December, and $1.12 1-2 to $1.12 5-8@1.12 3-4 May. Oats finished 1-2c to 1 1-8c off. In provisions the outcome ranged from 25c decline to an advance of five cents.

General selling of corn started as soon as trading began. Clear skies and warm temperatures formed the rule in every direction, and besides there were advices at hand distinctly minimizing the amount of damage said to have been inflicted last week by frost.

Oats sympathized with the weakness in corn.

Arrivals of wheat showed a notable enlargement, especially in the northwest, Duluth and Minneapolis getting 809 carloads, as against 262 a week ago. Gossip was current that neutrals would obtain no more American wheat for some time and that no foreign shipments would be made except on the strictest rationing basis.

Chicago Futures.

	Open.	High.	Low.	Close.
Corn—				
Dec.	1.15¾	1.16	1.14¼	1.15⅝
May	1.12¾	1.13½	1.11¼	1.12½
Oats—				
Dec	.56⅝	.57½	.56¾	.56¾
May	.60	.60¼	.59½	.60
Pork—				
Oct.	42.80	42.80	42.40	42.50
Jan.	43.15	43.15	42.75	42.95
Lard—				
Oct.	23.82	23.82	23.70	23.75
Jan.	22.80	22.82	22.60	22.67
Ribs—				
Oct.	24.10	24.15	23.97	24.07
Jan.	22.12	22.15	21.95	22.00

Cash Quotations.

CHICAGO, Sept. 17.—Corn—No. 2 yellow, $1.99@2.02; No. 3 yellow, $2@2.50; No. 4 yellow, nominal.

Oats—No. 3 white, 57½@59c; standard, 57¾@59¾c.

Rye—No. 2, $1.83½@1.84.

Barley, $1.20@1.44.

Timothy, $6@8.

Clover, $17@22.

Pacific Northwest Grain.

PORTLAND, Ore., Sept. 17.—Grain futures—October oats, $48; feed barley, $46; brewing barley, $47.50; bran, $28.50; shorts, $29.50.

TACOMA, Sept. 17.—Wheat—Bluestem, sacked, f. o. b. country, $1.94; fortyfold, $1.92; red fife, $1.92; club, $1.90; red Russian, $1.87.

Minneapolis Grain.

MINNEAPOLIS, Sept. 17.—Wheat receipts 599 cars, compared with 846 a year ago.

No. 3 yellow corn, $2.08@2.10.

Oats—No. 3 white, 55 1-4@57 1-4c.

Flax, $3.33 1-2@3.38 1-2.

Flour unchanged. Shipments 86,204 barrels.

Rye, $1.82@1.83.

Barley, $1.18@1.42.

Bran, $29@29.50.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1917-18 and 1916-17 were as follows:

Seattle.	Wheat.	Oats.	Barley.	Hay.
1917-18	282	127	42	1244
1916-17	1240	370	52	898
Portland.				
1917-18	439	216	49	289
1916-17	1097	407	34	382
Total.				
1917-18	721	343	91	1533
1916-17	2337	777	86	1281

The Wool Market.

BOSTON, Sept. 14.—The Commercial Bulletin will say tomorrow:

"The demand for wool on private trading has been decidedly better this week, several million pounds of territory original and graded wools alone having been sold at fully recent rates. The government has continued to purchase wool, but just how much is not revealed.

"A little more interest is reported in goods by the mills and the purchases during the week would seem to reflect a better tone to the goods market.

Scoured basis:

Texas, fine 12 months, $1.65@1.70; fine, 8 months, $1.55@1.60.

California northern, $1.70@1.75; middle county, $1.45@1.50; southern, $1.35@1.40.

Oregon, eastern No. 1 staple, $1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.60@1.65.

Territory—Fine staple, $1.80@1.82; half blood combing, $1.70@1.75; three-eighths blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled extra, $1.80@1.85; AA, $1.70@1.80; A superior, $1.60@1.65.

Butter and Eggs.

PORTLAND, Ore., Sept. 15.—Butter firmer, up 1c. City creamery prints, 48c; cartons 49c. Buying price butterfat, 47@49c; Portland cube extras, 45c; prime firsts 42½c; firsts, 37½@41½c; dairy 35c.

Live Stock Quotations.

At Omaha.

OMAHA, Sept. 17.—Hogs—Receipts, 3800; steady to 10 higher. Heavy, $17.30@17.75; mixed, $17.40@17.70; light, $17.80@18.30; pigs, $15.50@17; bulk of sales, $17.40@17.70.

Cattle—Receipts, 17,000; market steady to easier. Native steers, $9.50@16.50; cows and heifers, $6.75@18.25; western steers, $8.50@14; Texas steers, $7.50@10.50; cows and heifers, $6.50@9; canners, $5@6.50; stockers and feeders, $5.50@12.50; calves, $8.50@12; bulls, stags, etc., $5.50@8.75.

Sheep—Receipts, 27,500; market steady, 25c higher. Yearlings, $11.75@13; wethers, $11@12.35; ewes, $9.75@11; lambs, $17.50@18.40.

At Chicago.

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CHICAGO, Sept. 17.—Hogs—Receipts, 18,000. Slow at Saturday's average. Bulk, $17.35@18.40; light, $16.90@18.35; mixed, $16.95@18.65; heavy, $16.80@18.65; rough, $16.80@17.05; pigs, $13@16.80.

Cattle—Receipts, 23,000; firm. Native beef cattle, $7.50@17.85; western steers, $6.70@15.50; stockers and feeders, $6.50@11; cows and heifers, $5.15@12.90; calves, $12.50@16.50.

Sheep—Receipts, 20,000; firm. Wethers, $9@12.75; lambs, $12.50@18.30.

At Salt Lake.

Cattle—Receipts, 55; market steady. Choice steers, $8.50@9; good steers, $7.50@8.50; fair steers, $6@7.25; choice cows and heavy heifers, $6.25@7; fair to good cows and heifers, $5.75@6.25; cutters, $5@6.25; canners, $3.50@5; fat bulls, $6@7; bologna bulls, $5@6; veal calves, $9@11.

Hogs—Receipts, 240; market steady. Choice hogs, $17.75@18.25; feeders, $13.50@14.50; mixed, $16.75@17.75.

Sheep — Receipts, none; market steady. Choice lambs, $15@15.50; ewes, $8.50@9.50; wethers, $10@10.50; yearlings, $10.50@11.

At Portland.

PORTLAND, Ore., Sept. 17.—Cattle steady to higher; receipts, 2108. Best beef steers, $9@9.75; good beef steers, $7.50@8.75; best beef cows, $6.75@7.50; ordinary to good cows, $4@6.75; best heifers, $7@8; bulls, $4@6.75; calves, $7@9.50; stockers and feeder steers, $4@7.25.

Hogs strong; receipts, 1040. Prime light, $15.70@17.80; prime heavy, $17.65@17.75; pigs, $14@16; bulk, $17.75.

Sheep steady; receipts, 1850. Western lambs, $13@13.50; valley lambs, $11.75@12.50; yearlings, $10@10.50; wethers, $9.75@10.50; ewes, $8@8.50.

Spokane Stock Yards, Monday.

Hogs—Receipts 21, market strong. Prime light, $17.60@17.75; prime heavy, $17.50@17.60; pigs and skips, $15.50@16.25; stockers and feeders, $12@14.

Cattle—Receipts 96, market strong to 25c higher on best beef steers and cows, steady on other grades. Best beef steers, $8.50@9; good steers, $7.25@8.25; ordinary to fair, $5.75@6.50; best beef cows, $6.75@7.50; good cows, $5.50@6.50; common cows, $4@5.25; best heifers, $7@7.75; bulls, $5@6.50; calves, $7.50@8.75; stockers and feeders, $5@6.75.

Sheep—Receipts none, market steady. Prime lambs, $12.50@13.25; good lambs, $11.25@11.75; prime yearlings, $9.75@10.25; prime wethers, $9.50@10.25; best mutton ewes, $6.50@8.

Spokane Market.

The wholesale prices quoted in the list below are not the prics paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $2.50 cwt; sweet potatoes, $4 cwt.

Apples—New Washington apples, $1.40@1.50 50-lb box; crabapples, $1.25; cooking apples, $1.25 box.

Butter—Blanchard cartons, 48c lb; Medo-Maid, 48c lb; Cascade, 48c lb; Gold Leaf, 48c lb; Better Butter, 48c lb; Attalia, 48c lb; Diadem, 48c lb; Hazelwood, 48c lb; Solid Pack, 47c lb; Jersey Bell 47c lb; Peerless, 44c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 25@26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 29@30c lb; brick cheese, 30c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $13 case; fresh eastern eggs, $13 case.

Live Poultry—Hens, 13c lb; broilers, 20c lb; old roosters, 8c; ducks, 12½c lb; geese, 10c; turkeys, 20@22c.

Dressed Poultry—Hens, 18c lb; broilers, 28c lb; old roosters, 12½c; ducks, 18@20c; geese, 16c; turkeys, 25@30c.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 17½c; salted cured, 20c; green bulls and stags, 13c; salted cured, 16c; kip, 15 lbs to 25 lbs, 23c; calf skins up to 15 lbs, 31c; dry flint hides, 34c; dry salted, 27c; dry calf skins, under 7 lbs, 42c; dry sheep pelts, full wooled, 22@26c; dry shearlings, 10@75c each; green horse hides, $3@5 each; dry horse hides, $1@2.50 each.

British Navy Increases.

Since the outbreak of war the personnel of the British navy has increased from 146,000 to 350,000.

Portland Market.

PORTLAND, Ore., Sept. 15.—Statistics just compiled by the Confederated Onion Growers' association show a crop in Oregon of 437 cars of onions on an average of 824. Last year, 374 cars were produced on 661 acres. The association expects a good market this year, but a repetition of the abnormally high prices of last winter is not looked for. The crop will not be marketed until other onions are out of the way.

Butter prices were raised a cent at the close of the week on account of the scarcity of the product. There was also a cent advance in cheese, the strong eastern demand being given as the reason. Eggs, which are scarcer, are also advancing. Poultry and dressed meats continue firm.

The peach market now is chiefly supplied with Yakima Elbertas, which are selling for the most part at 75 cents.

The hop market shows a tendency to advance again. Dealers are generally bidding 35 cents, but some business at 36 cents is reported. Picking will be finished in this state this week. The Oregon crop is estimated at 25,000 to 30,000 bales and Washington at 20,000 to 25,000 bales. The Yakima crop is reported by dealers there to be cut to 15,000 bales by red spider.

Another 2 cents decline in hide prices has been announced by buyers in this market.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $49.50 per ton.

Mill stuffs—Bran, $37 per ton; shorts $40.

Barley—No. 1 feed, $48; brewing, $49; rolled, $55@57.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch, case counts, 40c per dozen; candled, 42 1-2@44c.

Poultry—Hens, 16 1-2@18c; ducks, 13@20; turkeys, live, 20@22c; geese, 10@11c.

Butter—City creamery, prints, 48@49c per pound; cubes, extras, 45c.

Cheese — Tillamook triplets, 25c; young Americas, 26c.

Dressed meats — Veal, 15 1-2@16c; pork, 22c.

Hops—1916 25@26c; contracts, 35@36c.

Potatoes—New, 2 1-4@2 3-4c per lb.

Wool—Eastern Oregon, fine, 52@61c; coarse, 60c; valley, 58@60c.

Beans — California small white, 15 1-2c; large white, 15c per pound.

Seattle Market.

SEATTLE, Sept. 15.—One more week will see the finish of the most remarkable movement of peaches in the history of Western avenue. Jobbers claim that deferred domestic canning operations, because of high prices of sugar and other fruits, centralized when the peach market opened at 65@75 cents, the level to which buyers had long been accustomed, burst suddenly and it has been difficult to keep pace with the demand. The movement throughout the week has been five, six and seven carloads a day. More peaches have been sold in Seattle during the last six days than at any similar period to the memory of the oldest commission merchants.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 42@43c per dozen; eastern Washington, Idaho and Oregon, 40c per dozen; pullets, 32@35c dozen.

Poultry—Live hens, fat, over 4 lbs., 20c per lb.; 4 lbs. and under, 16@17c; old roosters, 12c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 10c per lb.; springs, live, 20c per lb.

Butterfat—53c per lb.; dairy butter, 33c.

Beef—Buying prices. Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c; heifers, 6@8c per lb.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 14@16c per lb.; do heavy, 9@13c per lb.

Hides—Salted, 16c per lb.; salt kip, 16c per lb.; salted calf, 30c per lb.; green hides, 13c per lb.; salted bulls, 16c per lb.; dry hides (short trim), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 11c per lb.; dry butcher full wool sheep pelts, 36@38c per lb.; green hides, 13c; green calf, 22c per lb.

Wool—Puget sound, 52c per lb.

Portland Wheat.

PORTLAND, Ore., Sept. 15.—There has been no clearing up of the wheat price situation yet, but dealers report a rather freer selling movement on the part of farmers, who evidently believe the government will not alter the price announced for the Pacific coast. It is understood that most of the wheat bought in the past week is intended for California mills.

Women May Help

To Speed Up Apple Box Output

How to speed up the manufacture of boxes to take care of the northwest apple crop was the subject that drew to a conference in Portland last week representative men in the various lines concerned in Oregon, Washington and Idaho. The meeting was presided over by W. B. Ayer, representative in Oregon for Herbert C. Hoover, federal food administrator.

An important result of the conference was the telegraphic appointment by Mr. Hoover of J. B. Knapp of the Shevlin-Hixon Lumber company of Bend, Ore., as chairman of the special committee to mobilize the northwest box output with the cooperation of makers and growers to get the required number of boxes into short territory from the nearest manufacturing plants. Mr. Knapp is empowered by Mr. Hoover to appoint as many assistants as necessary to handle the situation. These are to serve without pay as a patriotic voluntary proposition.

It was sharply developed during the meeting that, in addition to the strike troubles, all wages for labor are much higher, and working hours are shorter, generally, than when some of the contracts for boxes were made.

Strong demands from eastern points, from the government and from private concerns for boxes of all kinds have worked an increase in box prices, it was explained. Fully 20,000,000 are wanted by manufacturers of various products, including the oil companies and food concerns.

Mr. Ayer and Mr. Knapp advised the growers to order, even at increased prices, the boxes necessary to care for their crops, if their original contractors have been or are now unable to supply enough.

Eastern Washington Wheat Moves.

Colfax dealers are buying wheat for shipment to the Coast, paying $1.90 for bluestem, $1.88 for fortyfold and $1.86 for club. This is on a No. 1 basis. Off grades are commanding several cents below these figures.

Within the last five days, Walla Walla dealers estimate, close to 1,000,000 bushels of wheat have been sold by farmers. Rush orders for cars were received by the railroad companies as a result, and the grain is moving to tide water. The Jones-Scott company alone has bought nearly 250,000 bushels of wheat, including an amount today when selling was heavy.

Nothing to Dread.

Why dread gray hair? Usually it is very becoming.

Vetch Seed

$4.00 per 100, F. O. B. Albany.
All Clover Seed at Reasonable Prices.

Murphy's Seed Store
Albany, Ore.



100,000 Second-Hand Grain and Potato Sacks for Sale

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

Highest Prices Paid for Hides

Send your hides to us for highest cash market price—check by return mail. References, any bank in Seattle.

North Coast Tanning Co.
Ballard Station,
SEATTLE.

Hog and Sheep Awards

(Continued from page fourteen.)

Vaughn & Fox; second, Felzer Brothers; third, Vaughn & Fox.

Ram lamb under one year—First, Vaughn & Fox; second, Vaughn & Fox; third, Francis Kizer; fourth, Felzer Brothers.

Ewe, one year old and under two—First, Vaughn & Fox; second, Frank Donison; third, Frank Donison; fourth, Vaughn & Fox.

Ewe, under one year—First, Vaughn & Fox; second, Vaughn & Fox; third, Felzer Brothers; fourth, Felzer Brothers.

Pen—First, Vaughn & Fox; second, Vaughn & Fox; third, Felzer Brothers.

Flock—First, Vaughn & Fox; second, Felzer Brothers; third, Francis Kizer.

Champion Ram—First, Vaughn & Fox.

Champion ewe—First, Vaughn & Fox.

Best showing by breeder—First, Vaughn & Fox.

Best showing by exhibitor—First, Vaughn & Fox.

Ewe, two years old or over—First, Vaughn & Fox; second, Felzer Brothers; third, Felzer Brothers; fourth, Vaughn & Fox.

Flock, ram, any age; two-year ewes, two lambs (American Shropshire Registry association)—First, Vaughn & Fox; second, Felzer Brothers; third, Francis Kizer.

Merinos.

The State College of Washington at Pullman shared the winnings on Merinos with Edward Schoel of Tangent, Ore., as follows:

Ram, one year year old or over—First, state college.

Ram lamb, under one year—First, Ed Schoel.

Ewe, one year old under two—First, Ed Schoel; second, Ed Schoel.

Ewe, under one year—First, Ed Schoel; second, Ed Schoel.

Champion ram—First, Ed Schoel.

Champion ewe—First, Ed Schoel.

Ewe, two years old or over—First, Ed Schoel; second, Ed Schoel.

Oxfords.

C. P. Kizer of Harrisburg, Ore., and the Fisk Farm of Spring valley, Wash., received all the awards in the Oxfords, as follows:

Ram, 2 years old or over—C. P. Kizer, first; Fisk farm, second.

Ram, 1 year old and under 2—Fisk farm, first; C. P. Kizer, second and third.

Ram lamb, under 1 year—C. P. Kizer, first and second; Fisk farm, third.

Ewe, 1 year old and under 2—Fisk farm, first; C. P. Kizer, second and third.

Ewe, under 1 year—C. P. Kizer, first and second; Fisk farm, third.

Pen—C. P. Kizer, first; Fisk farm, second.

Flock—C. P. Kizer, first; Fisk farm, second.

Champion ram—C. P. Kizer, first.

Champion ewe—C. P. Kizer, first.

Best showing by breeder—C. P. Kizer, first.

Best showing by exhibitor—C. P. Kizer, first.

Ewe, 2 years old or over—C. P. Kizer, first; Fisk farm, second and third.

Fat Sheep.

With the exception of one third prize, which went to J. G. S. Hubbard of Monroe, Ore., the State College of Washington and the University of Idaho received all the fat sheep awards as follows:

Yearling wether, middle—University of Idaho, first; State college, second; University of Idaho, third; State college, fourth.

Wether lamb, middle—State college, first; University of Idaho, second and third; State college, fourth.

Best pen of three yearlings—University of Idaho, first; State college, second and third.

Best pen of three lambs—State college, first; University of Idaho, second.

Yearling wether, long—University of Idaho, first and second; J. G. S. Hubbard, third.

Yearling lamb, long—University of Idaho, first and second; State college, third.

Best pen of three yearlings—University of Idaho, first.

Best pen of three lambs—University of Idaho, first; State college, second.

Best pen of three wethers—University of Idaho, first.

Grand champion wether—University of Idaho, first.

Want Ads

HELP WANTED—MALE 3

SALESMEN WANTED—OWING TO DRAFT and enlistment we have a few well-worked territories open and will be pleased to hear from interested persons. Applicant must be exempt from draft. McConnon & Company, Dept. J, Winona, Minn.

AGENTS—WANTED 9

MAN TO WEAR FINE SUIT, ACT AS agent; big pay; easy work. Banner Tailoring Co., Dept. 738, Chicago.

SITUATION WANTED—Male 21

POSITION AS WORKING FARM MGR.; married; 42 years old; experienced all branches farming; American, Protestant; small family; references. F. R. Welch, R. 1, Box 546, Portland, Ore.

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Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

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Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

EDUCATIONAL 45

POSITIONS GUARANTEED GRADUATES OF BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog free.

TEACHERS' AGENCIES 40

SCHOOL CLERKS: WIRE OUR EXPENSE. Hazard Teachers' Agcy., Spokane.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Notice advance in prices.

Largest factory in the west selling direct from mill to consumer.

We sell anybody, ship anywhere and guarantee safe delivery.

Send for our large illustrated catalog No. 27, mailed postpaid, without charge, on request.

5 cross panel doors $1.92
Cottage front glass doors $3.50
Cottage windows; large bottom glass, 40x40; transom glass, 40x16 .....$4.05
Spruce flour bins, 16x26x16 .....$1.50
Screen doors, 2-8x6-8, heavy galv. wire $1.50

See our prices on Frames, Moldings, Millwork, Builders' Hardware, Prepared Roofing, Plaster Board, etc.

O. B. WILLIAMS CO.
1943 FIRST AVE. SO., SEATTLE, WN

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave. So., Seattle, Wash.

1 RUMELY OIL-PULL TRACTOR.
1 six-gang 14-inch plow outfit.
1 Minneapolis separator.
This outfit is in excellent shape. Price $3600; original cost $5600. Write to Mr. Patterson, 1000 Pike st., Seattle.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

LUMBER, SHINGLES, MILLWORK. SAVE money by getting your building material direct from the mill. Let us quote you delivered prices. W. W. Wells Co., Box 1010F, Everett, Wash.

FOR SALE CHEAP—SHARPLES MILKing machine, second hand, in good running order. O. Ingebright, Earlington Gardens. P. O. Box 1021, Renton, Wash.

MISCELLANEOUS WANTED 63

FOR SALE—BEES, WITH UP-TO-DATE equipment and buildings; also extracted honey, two 60-lb. cans, $15. John Ruyts, Buhl, Idaho.

STRAINED HONEY WANTED. WRITE US the quantity you have to offer. Commercial Creamery Co., Spokane, Wn.

MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. SO., SEATTLE.
Write for Catalogue.

PORTABLE WELL DRILLING AND PROSpecting, machinery, tools, cordage, contracting, well drilling. Keystone Driller Co., Spokane. Catg. H now ready.

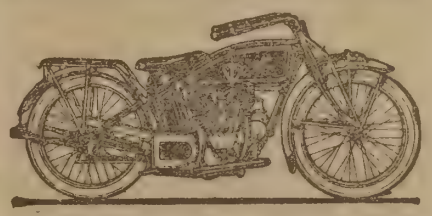
AUTOMOBILES 114

AUTO TOPS, BUILT TO ORDER, AND repaired. N. Reeder, Dept. F, Spokane, Wn.

AVIATION 115

DENINE AIRCRAFT CO., BOX 2232 SPOkane, Wash. Flying taught, skilled help wanted. Investigate. Splendid opportunity.

MOTORCYCLES, BICYCLES 120



ONE OF THE BEST LINES OF USED motorcycles in Pacific northwest; every machine a bargain. See us at 426 First ave., Spokane, during Interstate fair week. We will have the 18 model Excelsior on display at fairgrounds. Look us up and get acquainted.
INLAND MOTORCYCLE CO.

STOVE REPAIRING 126

MYER S. RUBENS STOVE & FURNACE REpair Works; welding. W1009 1st., Spokane.

PATENTS 150

WASH. (D. C.) PAT. ATTY. SEE AD IN Polk's. C. H. Crawford, Spokane.

POULTRY 174

DOUCETT & KRAMER PAY HIGHEST price for butter and eggs. Prompt remittance. 2d and Post, Spokane, Wash.

LIVE STOCK 177

FOR SALE—REG. GUERNSEY BULL 18 months old, and reg. Guernsey heifer, 14 months old, both from A. R. dams. Octav Voget, Hubbard, Ore.

6 REGISTERED JERSEY FEMALES, 1 Foxhall bull. W. F. Lillard, Jefferson, Ore.

PUREBRED KENTUCKY JACK, REGISTered; 1000 lbs. Ross Cogswell, Sharon, Wn.

LIVE STOCK 177
Continued.

STALLION AND MARES.

Registered Clydesdale stallion "Gladstone," three mares and two geldings. The price for the six horses is

ONLY $700

at our farm on Whidby Island. The stallion is 11 years old and weighs about 1600 lbs., is gentle and works daily as part of a regular team. The mares and geldings range in age from 5 to 10 years and in weight from 1100 to 1600 lbs.

THE GREENBANK COMPANY.
800 LEARY BLDG., SEATTLE.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

JOB PRINTING 372

OUR PRINTING WILL GET RESULTS for you. It will help to sell your goods and earn you profits. Send for samples and price list. G. C. Gallagher, 436 Sacramento st., San Francisco, Cal.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

OPTICIANS 462

EYES EXAMINED; GLASSES FITTED; perfect results guaranteed. Broken glasses repaired by mail. Postage paid. Dr. Sletto, Owl Drug Store, Spokane, Wn.

DR. I. M. RADABAUGH, SPECIALIST IN examining eyes and fitting glasses, 304 Jamieson bldg., Spokane, Wash.

BUSINESS OPPORTUNITIES 516

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

ARCHITECTS 558

BUILDING PLANS AND ESTIMATES. L. L. Rand, The Rookery, Spokane, Wash.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

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WHEAT FARM.

The price of wheat being fixed at $2.20 per bushel makes of wheat farms a splendid purchase at $20 per acre. We are authorized to offer 160 acres in a proven section of western Lincoln county, near the Great Northern railroad. The land has been summer fallowed and is now ready for seeding. If the yield should be as little as 15 bushels per acre the gross receipts for the place next year will be $30 per acre. Terms of $1200 cash and the balance to suit the purchaser.

CALVIN PHILLIPS & COMPANY.
800 LEARY BLDG.,
SEATTLE, WASH.

FARM LANDS—FOR SALE 652
Continued.

THIS LONG, DRY, HOT SPELL has proven the value of our subirrigated cut-over lands. Send for folder and ask for particulars.

Good lands of this character produced nearly as well as in ordinary seasons.

We have lands to suit nearly every requirement, from forty acres up, for grain, hay, stock and fruit growing, on a good state road and railroad; good communities, schools, etc. Send to either of the offices named below for folder containing pictures of some of the homes and lands, or come and let us show them to you.

THE FOLLOWING TRACTS GIVE AN IDEA OF WHAT WE HAVE TO OFFER. IF THEY DON'T SUIT YOU, LET US KNOW WHAT YOU WANT.

40 ACRES.

40 acres of raw cut-over land; very productive soil, with an abundance of moisture, as would be indicated by willow bush; in good locality, on public road, close to railroad; on easy terms.

160 ACRES.

25 acres cleared; on county road, rural free delivery, etc.; sandy loam soil; good subirrigation; lies fairly level; in good community. Price right and terms easy.

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40 acres cleared; on state road and two county roads; very centrally located, in good community; would make an excellent home; would make some improvements for proper party. Small payment and very easy terms.

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480 acres, within half mile of railroad; cordwood enough to pay for it; in dollar limit of Spokane; good soil; make stock proposition; more land could be had adjoining; $12.50 per acre, easy terms.

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960 acres in as good a country as can be found in the northwest for raising winter or spring wheat, alfalfa or stock; about half in cultivation; not over 100 acres of waste land on the entire tract; 200 acres already sowed to winter wheat; 200 to 400 acres more will be put into fall or spring wheat; about 30 acres in alfalfa; fine stream; 12 head of extra good mares, all with foal; 8 colts, 20 head of cattle, lot of hogs, implements and machinery of all kinds, including tractor; 6-room house; fair barn; good spring; everything goes. Place would not be offered for sale but it is owned by three different parties, all of draft age, and two of them expect to be called very shortly for war duty, as they are single men. Price $55 per acre, on good terms, which includes all of the personal property mentioned above.
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YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay, $2000 loan in improvements, or ready-made farms. Loans of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Alan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

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15 to 25 miles n. e. of Spokane; rich soil; abundance of soft spring water; good dairy and stock country; above frost; fine fruit; free lumber and use of stump puller. Price $10 and $25 per acre; 10 years' time. Write for book to owner. Consolidated Land Co., Elk, Wash., or call 109 Stevens st., Spokane.

BIG LAND OPENING—6000 ACRES A1 farm land in Snohomish county, $25 per acre; 10 yearly payments. Canneries, factories, mills, plenty of labor. Opportunity of your life. Send for literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

BOISE VALLEY—40 ACRES; GOOD WAter right; woven wire fences; alfalfa, clover, grain, pasture and family orchard; new bungalow; fair barn. Price $7500. Day Realty Co., Boise, Idaho.

FOR SALE BY OWNER—20-ACRE, WELLimproved ranch, near Poulsbo, Wash. A snap. Write for description and price. C. E. Nelson, Pilchuck, Wash.

IRRIGATED LANDS—For Sale 663

IRRIGATED FARM LANDS.

ALFALFA LANDS, under government irrigation; abundant water; low altitude; rail and water transportation to coast markets; good schools, good roads; products alfalfa, corn, cream, hogs, honey, fruits, vegetables; long growing season; unimproved land $30 to $60 per acre; improved $100 to $250. Write for further information and literature. Dodd & Knapp, Hermiston, Ore.

TO EXCHANGE—REAL EST. 705

FOR EXCHANGE—2-STORY PRESSED brick building, 50x150; steam heat; good condition; 3 store rooms below, 20 office rooms above; cost $26,000; in Cripple Creek, Col. Exchange for good ranch, plenty water. Address H. J. Chambers, Carson, Ore.



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for this great United States, you soldiers of the soil should not forget that the national health—*your* health—must be conserved to the utmost.

Rest and recreation are as vital as work if we are to do our best. And what better rest and recreation can one have than an hour's exhilarating spin in the cool of the evening, along country roads, banked with their fields of golden grain.

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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 39. SEPTEMBER 27, 1917. WEEKLY.

Northwestern Wheat Growers Win Better rice

Instead of receiving for their wheat $2.20 a bushel less a 30-cent freight rate to Chicago, as against the full $2.20 at Chicago, the northwestern growers will receive a price based on a basic price of $2.05 in bulk at Coast points. Exactly what this will mean at interior points is still doubtful, but it is evident that it will mean an increase of several cents a bushel for all the wheat of the northwest. It is interpreted by northwestern representatives now in Washington, D. C., as meaning about $2 per bushel for sacked grain at the interior shipping points. While the gain is appreciable and very welcome, it is apparent that it only partially removes the discrimination previously declared against growers of the northwest.

Representatives of the wheat-growing interests met at Portland, framed up the argument against the previous announced unjust discrimination against northwestern growers and sent a committee to Washington, D. C., to lay the argument before the officials. The increased price is the result. The following telegram from Herbert Hoover to Charles Hebberd, Washington state food commissioner, is official announcement of the raise:

"The representatives of the Pacific northwestern grain producers and handlers in conference with the food administration today arrived at a settlement in regard to handling the northwestern wheat crop, with the assistance of the shipping board.

"The food administration has been given assurance of overseas transport for Pacific northwest grain and it, therefore, is able to make a base price at north Pacific export coast points on an overseas basis instead of the previous footing of a price based on rail transport to Chicago. The base price unanimously agreed upon by the northwestern representatives is $2.05. No. 1 northern, or equivalent, at Portland, Seattle and Tacoma for bulk wheat, with the usual premium for sacked wheat.

"In order to adjust difficulties of the new federal grading act the food administration will, until further notice, purchase everything below No. 3 grade on sample."

Immediately after receiving this notice from Commissioner Hoover a telegram was sent to members of the committee in Was on, asking whether or not the 5 price was a flat price for th hole northwest or whether it s Coast only and therefore a co tinued discrimination against interior points. The following wire from R. Insinger of Spokane, a member of the growers' committee, indicates the food commission's intentions, Spokane being taken as a representative interior point:

"After meeting the president Thursday, Hoover on Friday and Hoover and Barnes Saturday, wheat price is fixed at $2.05, bulk, at Coast points, giving $2 sacked in Spokane county, as against $1.50 in bulk at the Coast heretofore."

As pointed out in the telegram sent to Washington by J. L. Paine and other members of the Spokane Chamber of Commerce, a fair application of the food administration's decision would give the growers $2.05 at Inland Empire shipping points. It reads:

"Two dollar and five wheat price is interpreted here to apply as uniform price in all Pacific northwest territory having a 30-cent freight rate to Chicago. Can the food administration be induced to put this construction on today's decision? It is contended here that much of our wheat will probably be moved by government by rail to Chicago, and as Inland Empire wheat will have the shorter haul to Chicago, growers here should be paid at least $2.05, the price received by Willamette valley farmers."

The freight rate on wheat from the Pacific northwest to Chicago is 30 cents flat, whether shipped from the Willamette valley, near Portland, from eastern Oregon, eastern Washington, northern Idaho or western Montana points west of Havre.

The food administration has insisted that after the government has bought the wheat of the Pacific northwest it will ship it east by rail to Chicago, and gave that plan as its original reason for buying northwestern

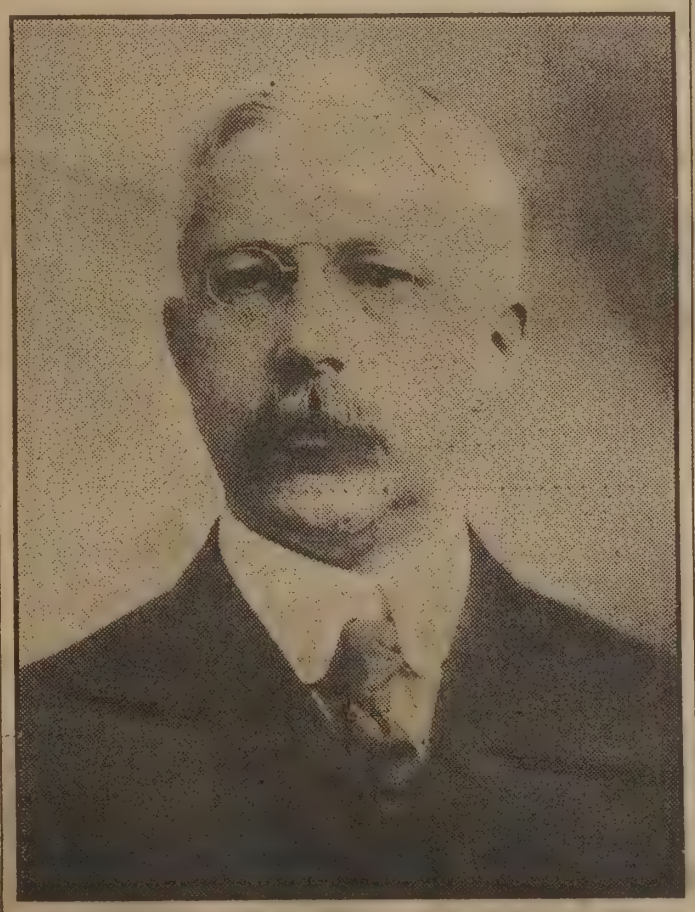
Continued on page five.

Future Makes New Demands

By STEPHEN B. L. PENROSE.

A new era has begun for the United States. Whether we like it or not, we have been forced into the world war and certain far-reaching changes have been forced upon us, which will affect the nation from center to circumference. I mention three of these effects: First, a new horizon has been created for us people of the United States. Henceforth we must be citizens of the world, must see beyond our own borders, must be in sympathetic relations with foreign nations, and be intelligent friends of the en-

Continued on page three.



President S. B. L. Penrose, whose photograph appears above, is an educator peculiarly qualified to speak of the past, the present and the future of educational needs in the northwest. For nearly a quarter of a century he has been president of Whitman college at Walla Walla, playing a leading part in the development of the northwestern territory. He knows its past; he knows its present. With keen perception of new conditions and new requirements he looks into the future and urges its young manhood and young womanhood to prepare for a larger part in a larger world by securing the best education possible.

WAR TIME SAVING

In these strenuous war times, when the ever thought of saving in every way possible is foremost in each mind, mighty few real opportunities are placed before the farmers of this glorious Pacific Northwest. No real bargains, when any big saving worth while can be made, are offered to the reading public. Right now, when prices of all things are mounting skyward, here comes a bargain offer that should appeal to every one that it reaches. Instead of adding to the increased expense of our readers, we are making them an offer that they can not and should not hesitate to grasp. Read this big bargain offer and see for yourself the saving you are making.

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(A Three-Year Subscription.)

(Annual Subscription Price $1.00)

Included in this special saving offer is a three-year subscription to The Washington Farmer, the biggest and best exclusive farm paper published in your own state, for your own interest and of such value to the farmer that he can not afford to be without it. Its various features, its many departments, its interesting and educational items and facts, and its general farm news are worth their weight in gold to the farmer. It's the most complete farm paper published.

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Spokane, Wash.
Enclosed find $2.00 in payment for

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(For Three Years.)

Twice-a-Week Spokesman-Review
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Signed .....

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Benson told a repr
Farmer that the total b
night was as great as the en
1916. Friday and Saturday wo
"velvet," he said.

Fair visitors this year found a new $20,000 grandstand, with a capacity of 4000 persons, awaiting them.

Entertainment features were numerous and of a high standard. Harness races, running races, Indian sports, automobile races and a blaze of fireworks Saturday night, besides vaudeville attractions and lectures during the week, afforded splendid recreation.

Patriotism Manifested.

The patriotic decorations on all buildings and over the drives were more numerous than on any former occasion in years.

Monday, opening day, broke all records for attendance. Over twice as

The Future Makes New Demands on All

(Continued from page one.)

tire world. Secondly, we are being forced into cooperation and all classes of citizens, under the pressure of war, are being driven close together to meet the nation's needs. Third, we are being spurred to new effort. If anyone has been sluggish or lazy, he can be so no longer. The pulse of the nation has quickened, and a tremendous effort is being put forth, not spasmodically for a brief time, but with a steady pressure which will not be relaxed.

These changes in our national life make new demands upon the citizens of the future. Education henceforth must be for world citizenship and not village citizenship. The United States will need men and women who can enter intelligently into the world life, can speak modern languages as well as English, are acquainted with economic conditions and with the politics of England, France and Germany, as well as of Japan, Italy and China. The citizen of the future must be not only thus broadly educated, but he must be wide awake, keen, and quick as never before. He will be resolute and active as well as intelligent, for the next generation will put a greater premium upon efficiency than this generation has done.

The cry "no slackers," has already been heard, but it will be heard henceforth more loudly and more steadily. The slacker of the future will be the man or woman who refuses to prepare himself for this enlarged kind of citizenship and prefers the lazy life of the village to the large and efficient life which the nation will call for. Education aims to do away with slackers. Every boy or girl who wants to do his "bit" in the future will seek to get the best education possible. Don't be a slacker.

Members of ... families held sway Friday and kept things moving.

Saturday was patriotic day, and demonstrations of a patriotic nature were spectacular.

For the constructive progress of the fair Secretary Meredith is given much praise by those familiar with its growth since the reorganization. Mr. Meredith's determined effort to make the state fair an institution of real aid to the agricultural development of the state finds appreciation in every quarter.

In line with other northwestern fairs this season the Washington State fair at North Yakima devoted attention to exhibits of an educational character. They were far above the standard ordinarily maintained, and in many instances one was reminded of the fact that the nation has at last settled down to the business of war preparation.

The Yakima county Red Cross society demonstrated the art of making bandages and of dressing wounds and otherwise caring for the sick and injured. This feature of the demonstration was in charge of Mrs. H. S. Rand Jr., Mrs. W. L. Lemon had charge of the Red Cross exhibit in general. Yarn for soldiers' socks was spun by Mrs. B. F. Benson, 84 years old. An old spinning wheel operated by her every afternoon was a feature of great interest.

Y. M. C. A. Gives Service.

What the Y. M. C. A. is doing for Uncle Sam's soldiers at the various cantonments was shown by exhibits of models of Y. M. C. A. army post buildings, and an explanation of the various features of the work asked for by the federal government, and for which money was recently contributed throughout the nation.

The U. S. army and navy and their different branches were represented by an interesting exhibit of ammunition, including a huge submarine torpedo. Equipment used in army and navy life was shown.

State Commissioner of Agriculture E. F. Benson and a number of his assist-

...man is doing ... the progress he and his sons and daughters are making in an industrial way was shown by exhibits of a splendid character from the Cushman Trades school Indian exhibit and from the Yakima Indian reservation.

Is Flour Too High?

Figures Indicate Millers' Profit

F. H. McKay, for 19 years a grain buyer for northwest mills and now the farm loan expert with the Union Trust company of Spokane, Wash., has made an interesting computation, which is true elsewhere if true there. According to his figures the present wholesale price of flour should be $8.33 a barrel instead of $10.60 to $10.80, as quoted in Spokane. Look over his figures and judge for yourself:

"It takes four and one-half bushels, or 270 pounds, of wheat to make a barrel of flour. A barrel of flour weighs 196 pounds. After allowing four pounds' waste or loss to each barrel the miller still has 70 pounds of mill feed left, which sells at $35 per ton, or 1 3-4 cents per pound. So the mill feed from each barrel of flour is worth $1.22 at present and four and one-half bushels at $1.90 per bushel amounts to $8.55. The government allows for cost of manufacture 75 cents per barrel and also allows 25 cents per barrel as a legitimate manufacturer's profit.

The Calculation.

"If the above outline is correct, to decide what the wholesale price of a barrel of flour should be we first figure up the cost of the wheat used in producing a barrel of flour and add to this the cost of manufacture and the allowed profit. We have found that the wheat cost $8.55, to which should be added $1 per barrel, government allowance. Therefore, the total selling price of flour and feed should be $9.55. If from this we deduct the value of the mill feed, which is $1.22, we have left a balance of $8.33, which should be the wholesale selling price

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...of the ... they are ready ... going down into their pockets, was shown when two sheep, sold at the Washington State fair for the benefit of the Red Cross, brought $925. And this was but one sample of the many high prices received at the first annual sheep sale at the fair held on the fairgrounds at North Yakima September 20-21.

The sale was promulgated and managed by Professor Hislop, head of the animal husbandry department of the Washington State college, with George Gue as auctioneer, and 812 sheep were put through the ring for a total of $28,979.50, an average of $35.69. Most of them were pure bred, though there were some good unregistered sheep.

The Red Cross sheep were purebred Lincoln lambs, and were donated by H. Stanley Coffin of North Yakima. F. M. Rothrock of Spokane first bid them in for $56 each. He ordered them sold again and Arthur Griffin got them at $66 each. They were then bought and sold successively as follows: Mr. Buckholtz of North Yakima, $65 each; John McGregor, Spokane, $51 each; A. G. Butterfield, Weiser, Idaho, $54 each; William McGuffey, North Yakima, $59 each; P. B. Stice, North Yakima, $59 each; E. Berg Sheep company, North Yakima, $35 each. Then Mr. Coffin bought one back for $36 and Mr. Buckholtz one for $25.

The first ram up in the regular sale, a Rambouillet, consigned by Butterfield, was sold to H. Stanley Coffin for $105. Two more Butterfield Rambouillets went to L. L. Robinson of Walla Walla, Wash., for $110 and $130. A Butterfield Hampshire ram went to Coffin for $115, and one to Robert Nelson of North Yakima for $75.

The second prize Rambouillet of the show, consigned by John Seely of Mt. Pleasant, Utah, topped the sale, going to H. Stanley Coffin for $300, and Seely's third prize ram went to L. L. Robinson for $250. Two of Seely's yearling ewes were taken by Robinson for $140. C. C. Beers of Lyons, Ore., sold his first prize Hampshire ram to Dr. Gardner of Anaconda, Mont., for $150, and J. G. S. Hubbard's champion Hampshire, a ram lamb from Monroe, Ore., went to Harry Ruffle of Walla Walla for $155, and another Hubbard Hampshire was taken by J. S. Proul of Leavenworth, Wash., at $100. Lincolns, Cotswolds and Oxfords were sold, as well as Hampshires, Rambouillets and Shropshires.

Professor Hislop, who has been very highly complimented on his management of the sale, says that it will probably be a permanent feature of the fair, and George Gue has now established a high reputation as a sheep auctioneer as well as of all other stock he has ever attempted to sell.

…ld, …higher …ices yet before spring.

With wheat and oat straw available at from $9 to $10 a ton, many western Washington dairymen will be considering the practicability of feeding some straw and less alfalfa hay than usual. This can be done profitably this season..

Wheat straw shows 36.9 pounds of digestible matter per 100 pounds, as against 45.6 pounds of digestible matter in 100 pounds of oat straw. Wheat straw is much less palatable to live stock than oat straw and, as shown by the amount of digestible matter, it is seldom practical to feed it unless it can be bought for, at most, two-thirds the price of oat straw. As it is seldom practical to buy wheat straw for feeding dairy cows, we will not give it further consideration in this article.

Oat straw contains 45.6 pounds of digestible matter per 100 pounds, as against 51.6 pounds of digestible matter contained in alfalfa. Were we to consider only the total digestible matter contained in oat straw, we might come to the conclusion that it was 75 per cent as valuable for feeding dairy cows as alfalfa, but the proportion of digestible protein to digestible carbohydrates and fat in oat straw is only about 1.45, while in alfalfa it is about 1.4. It is because alfalfa is so palatable to stock and so rich in protein that it is such a valuable dairy feed. It is because oat straw is less palatable and is low in protein that it is a low-grade dairy feed.

With alfalfa costing $25 a ton or more and oat straw available at $10 a ton or less, it will pay most dairymen to feed some oat straw. This straw may be offered to the cattle whole, in which case if it is of good quality they will probably eat half of it and the balance may be used for bedding. If the dairyman wants his cows to eat all of the oat straw he must cut it up and mix it with cut hay or alfalfa and add molasses, or if silage is available mix the cut straw, cut hay and silage for 24 hours' feeding together as follows: Spread on the feeding room floor a two or three inch layer, first of cut straw, then of silage, then of cut hay, then of cut straw, then of silage, then of cut hay, etc., until there is a pile at least about three feet deep. Dampen the pile with water; hot water is better than cold. Cover with gunnysacks or some such material. This pile should be allowed to stand 24 hours before it is ready for feeding. In that time it should heat through thoroughly and the whole will be very palatable to cows. One hundred and fifty pounds of cut alfalfa hay, 200 pounds of cut oat straw and 750 pounds of silage

…wintered t… …ble. Another use … …with grain for the purpose of …the ration. In this case it, of course, must be chopped.

Chaff is of higher feeding value than straw from the same plant. The market value of straw should depend largely on the market value of the roughage that it particularly displaces. It would seem that this time of high-priced roughage that straw should be used to a greater extent than ever before. While speaking of straw in general it might be well to consider the straw from the legumes. As a rule this kind of straw contains considerable more protein and less fiber than straw from the cereals and is more digestible. The straw from field peas being finer than straw of the bean plant, is more digestible and has a higher feeding value. C. F. MONROE.

Montesano, Wash.

Pea and Bean Straw Valuable.

To the Editor of The Washington Farmer: The feeding value of the various straws will differ widely, depending on the stage at which they are harvested. If they contain large quantities of green material their feeding value is naturally increased. Peas and bean straw are the most valuable, then oats, barley and wheat in order. In no case should straw be considered as a complete ration, but rather as a supplement to other feeds or to tide the animal over winter.

It is economical and satisfactory to allow milch cows, growing animals and work horses all the straw they will eat, and this will be considerable when legume hays are fed. Pea straw can be fed as a part of the ration to these type of animals, or alone with satisfactory results to dry cows and idle horses. During the first portion of the winter it will be sufficient for sheep. Growing or pregnant animals should receive concentrates in addition.

While oats, barley and wheat straw are often fed alone to cattle and horses, they will lose weight on this ration, especially if not sheltered. From two to four pounds of alfalfa or clover hay, or one-half to one pound of cottonseed or linseed meal daily will make up this deficiency and is more satisfactory than to try to add weight by heavy feeding in the spring. A few pounds of roots daily will be valuable for their laxative effect. A. R. HAHNER.

Colville, Wash.

Molasses and Chopped Straw.

To the Editor of The Washington Farmer: In regard to feeding wheat and other straw, will say that I am decidedly of the opinion that dairymen and other stockmen who have not con-

…hay and grain to harden them up for work. There are thousands of tons of straw goes to waste in this country every

(Continued on page ten.)

Great Ram Sale

Five Thousand Offered at Salt Lake

By E. J. IDDINGS.

The ram sale at Salt Lake, Utah, recently, with 5000 head of sheep listed for sale, was one of the great live stock events of the year. The sheep were from many states and consisted for the most part of Hampshires, Rambouillets, Lincolns and Cotswolds, though other breeds were also represented well. The consignors and purchasers likewise represented practically every state of the west and many of the Mississippi valley. Among the better-known men from eastern states were Bob Blastock of Walnut Hall, of Kentucky, Professor Coffey of the University of Illinois and Dwight Lincoln, the well-known breeder and auctioneer from Milford Center, Ohio.

The first day's sales of single stud rams and unregistered range rams in groups of 25, a total of approximately 420, brought a little better than $45,000. There was some pessimism prior to the opening of the sale. Many said that the buyers were not there in numbers, that many sheepmen had "cold feet" and would buy rams on a conservative basis only, with emphasis on the word "conservatice" and some visitors thought the Hamps were on the decline and that there would not be the keen demand for the sheep of this great Down breed. The pessimist got little comfort, however, from the results at the ringside and his clouds of gloom soon were wafted away and he went into the fray to get the good ones or make the other fellow pay well for them.

The result was a splendid sale, with keen demand for all the sheep that were really good and that were presented in an attractive way. There were many lessons to be learned if one was at all observing. Not the least impressive lesson taught many was the one just alluded to. The right kind of breeding was demanded, but, regardless of this most important factor, the buyers at Salt Lake demanded special preparation for sales ring display. If the higher prices were paid, the sheep were in every instance well grown out, carried enough flesh to give them shapeliness and make them look thrifty and fit and the fleeces had been given special attention and in many

…wes… …ha… …d with … …f rib, an… …ormation tha… …hout the sacrifice … … demeanor. Stud ram… …e ideals of type mentione… …arted scarcely ever at less tha… …00 and quickly sold at prices fro… $200 upward. Some rams from wel… known flocks east of the Rockies tha… looked good in every respect excep… scale, found little demand and thei… sale, due to sluggish bidding on them… delayed the whole program.

The Salt Lake sale marked a distinc… milestone in the progress of the busi… ness of mutton and wool productio… and demonstrated most clearly that th… sheepmen of the west have the utmos… of faith and confidence in the future o… their business. It further showed … tendency with western flockmaster… that our breeders of other kinds of liv… stock might well imitate with profit… The sheepmen have the utmost of con… fidence in the monetary value of th… best breeding and individuality. Th… great progress that has been made dur… ing the last few years in sheep breed… ing on the range and the high stand… ard of the flocks of the west clearly… and unmistakably demonstrate the cor… rectness of this point of view.

Steer Feeding

Prospect for the Coming Winter

By E. L. POTTER.

The prospect for fattening steers during the coming winter are practically nil. There is no hay to feed them on and if it were obtainable the cost is prohibitive. Unlike hogs, cattle have not increased in price at the same rate as feed.

Normally the farm price of a ton of hay and of 100 pounds of good steer should be about the same, but now the price of the ton of hay is three times the price of the 100 pounds of beef.

Of course every one expects the price of beef to be much higher next spring, and it will have to be or some one will lose a lot of money. Even at that it would take a tremendous increase to offset the price of hay.

A feeder steer costing eight cents a pound in the fall will have to bring 12 cents or better on the farm to break even on $20 hay. That means close to 13 cents in Portland for hay fed cattle. Feeders, of course, may not cost quite eight cents, as the market is not yet open up. They are not worth that much at present.

The indications are therefore that but few steers will be put on feed in the northwest. It is practically impossible to be otherwise.

May Bring in Canned Goods.

Americans returning from Canada may bring free of duty $100 worth of canned goods and other foodstuffs, under a ruling announced by the treasury department.

The Physician's Part in War

By ERNEST C. WHEELER, State Council of Defense

A significant fact unknown to the average citizen is that the fatality among army surgeons, during the present war, has been higher even than that among the "bird men."

The part which the American physician will be called upon to play in the world war is not generally understood. In the wars of the past, pestilence and plague have killed more soldiers than did the attacks of the enemy. With the increased deadliness of modern offensive methods, it is essential that this preventable leak in man power be stopped, and in this connection the physician steps in and becomes one of the vital factors in army organization.

Here are some of the problems having a medical bearing which must be solved by those in charge of the state and national movement. First of all, we must look to the physical and moral surroundings of our mobilized camps. The zone lying about a great military post has not always been the most ideal place in the world, but now the spirit of the times—the spirit which brings America into a war for justice and decency—insists that no element of license shall be permitted to taint the high purpose which dominates us as a nation. The state of Washington has one of the great national camps. It is incumbent upon every citizen to do his or her part to make the surroundings of this camp all that they should be; but upon the physician falls an added burden of responsibility.



Dr. E. C. Wheeler..

As a member of the State Council of Defense, it has been my duty and privilege to look to some of the practical details of this matter. At this time I can state that we have taken steps to insure cleanliness, moral and physical, in the zone surrounding the American Lake camp. The state and the national governments are behind this movement, so that any element which might be tempted to try to introduce undesirable forms of amusement is certain to feel the heavy hand of the law. We mean business.

These things which must be avoided form but the negative side of the question, however. There is a positive side: in the place of the dissipations of the old-time army camp we must find something to offer our soldier. This is unbroken ground, and we will have to solve many problems as we go forward. Moving pictures and good reading matter will help. Other sources of wholesome recreations will be utilized as fast as we discover them.

A significant fact unknown to the average citizen is that the fatality among army surgeons during the present war has been higher even than that among the "birdmen." Ten minutes after the attack is launched the surgeon and his ambulance or stretcher crew are on the ground. Necessarily, working so close to the firing line, the fatality among surgeons has been something terrible to consider.

This has a direct bearing upon the part the American surgeon must play in the great war, for not only must we provide 20,000 physicians for our own army—we now have about 6500—but we must help fill the vacancies left in the French and English ranks. This will not be easy to do. The physician, from the very nature of his work, grows roots into his community. His work is not the kind which can be turned over to a hastily trained substitute. And the financial sacrifice which he is called upon to make is conditioned by the fact that he is paid strictly for his personal services, so that when he closes his office door his income ceases. All of these things are fragments of the big problem which the American physician must solve, as he plays his part in the great war.

England Raises Wheat Price

As Farmer readers were told last week, the maximum prices recently fixed by the British food controller are considerably higher than the guaranteed prices orginally announced by the government last January.

To stimulate wheat-growing the British government told its farmers that it would guarantee them a price of not less than 60 shillings per quarter of 504 pounds, or $1.72 per bushel in American money. Apparently it found that guarantee too low, and to encourage growers it now fixes the starting price at $2.10 a bushel.

But the British government has adopted a different plan from that adopted in the United States. Here the government has set a fixed price for the entire harvest of 1917, regardless of time of delivery. The British plan is a sliding scale—$2.10 a bushel for wheat delivered before December 1, 1917, and increasing gradually to $2.21 for wheat delivered after June 1, 1918.

The food control officials of the United States and Great Britain are working in close cooperation, and apparently the British officials have adopted the policy of paying their growers substantially the same prices that the American government is paying its producers.

But since the British government will have to pay the freight rate on wheat bought by it in the United States, the grain it buys here will cost it just that much more than the grain it buys from its own farmers. It overcomes this inequality by striking an average of all wheat bought and distributing the flour to the public at the average cost.

The first cost of flour will, therefore, be higher in England this year than in the United States, but bread will probably be cheaper there, as the British bakers have to be content with smaller profits than the American bakers receive. Bread now is considerably cheaper in England than in the United States.

Wheat Growers Win Better Prices

(Continued from page one.)

wheat at prices 30 cents below the Chicago basic. It seems entirely just and reasonable then to expect that the $2.05 price will be paid at all points in the Pacific northwest. If Mr. Hoover is right in his former contention that the wheat must go east by rail, Inland Empire grain will have the shorter haul to Chicago, as compared with grain grown west of the Cascade mountains, and growers of the interior should be paid at least $2.05, the price received by Williamette valley farmers.

Exactly what the result of the action of the food commission will be is a mooted question. The action appears to have been taken partially on two grounds: That the northwest does have shipping facilities by water to handle at least a large part of its grain, and that the northwest had actually been discriminated against in comparison to other points distant from Chicago, among them Minneapolis. At these latter points the price has been fixed at the Chicago basic price of $2.20 less about one-half the freight to Chicago, while in the case of the northwest the price had been fixed at the Chicago price less the full (30 cents) freight to Chicago. The new Coast basic price is the Chicago price less about one-half the freight to Chicago, it appears.

Further interpretations of the rulings are expected at once, and until they are actually made the farmers of the northwest will be in doubt as to exactly what prices will be paid for their grain at such points as Pendleton, Athena, Grangeville, Moscow, Colfax, Ritzville and other interior points.

State College Opens Oct. 1.

The state college at Pullman opens for the work of the school year Monday, October 1, according to announcement from Pullman. This date is considerably later than is the custom, owing to the desire of the institution to permit the students to remain out for the harvest work as much as possible.

Water Helps Pumpkins.

W. E. Mullen of Parker has made up his mind that in future he will not stint pumpkins when it comes to irrigating. This year he had a break in an irrigating ditch which caused constant overflow. The pumpkins he had planted in this part of the patch grew to enormous size, while the others, which were irrigated in the normal way, were only fair.

Good Poultry Show.

Under the direction of Harry H. Collier the state fair poultry show held the attention of fanciers at North Yakima throughout fair week. Showings of prize winning birds from all sections of the state were many and the competition in nearly all classes was keen.

Schools Make Progress.

That Washington schools are making great progress in agriculture was evidenced at the state fair by the exhibits of district schools from various sections, particularly the Yakima valley. Besides the fine specimens from field and garden there were many evidences of a well defined war program being carried out. Among the schools represented were the following, in Benton county: Walnut Grove, Finley, Prosser, Hover, Kiona, Benton City, Hanford, Richland, White Bluffs, Kennewick, Valley Heights and Buena Vista. Good agricultural displays were sent by Sunnyside, Pierce county, Kittitas county, Douglas county, North Yakima, Thurston county, Grays Harbor county, Nob Hill and Yakima county. Remarkable in their design and workmanship were products of industrial progress coming from the Selah central school, Pierce county, Kittitas county and Everett.

Live Stock Well Balanced at Yakima

Excellent Display Made at Fair; Nearly All Breeds Shown

By HORACE ADDIS.

One of the most frequent comments on this year's Washington State fair is that it was well balanced. And in no department was this more noticeable than in the live stock. There have been larger stock shows at North Yakima and years in which the Holsteins have made almost the entire show, but this year there was a good show in every class and while, with an extra barn the show did not look large, every visitor must have been impressed with its general high quality. No matter whether horses, dairy cattle, beef cattle, hogs or sheep were viewed, poor stuff was conspicuous by its absence and quality was predominant.

The smallest show in numbers was that of the horses, but in no department was quality higher. Percherons wre represented by only one exhibitor, but not only was there not a poor animal in the 11 head shown by A. R. Hunter of Island City, Ore., but they were all of extra good quality. Kroumir, the first prize and senior and grand champion, is a horse of 2200 pounds weight, with heavy bone, yet he has a perfect Percheron type, great style and grand action. He had already to his credit championship two years ago at the Cascade International, Northwest, Oregon State and Union, Ore., live stock shows. And yet his 2-year-old son was so good the judge took considerable time deciding between the two. The champion mare Snookum, a growthy 2-year-old filly, with much bone and good type, is a daughter of Kroumir.

Clydesdales also had only one exhibitor, I. O. Trice of Grandview, Wash., with five head. And here again quality took the place of numbers. Byron Prince, the champion stallion, was senior champion and reserve grand champion at the Panama-Pacific. He is a horse of great substance, a very typical Cylde, and has fine action. The cham-

(Continued on page sixteen.)

Eight Hundred Farmers Unite

Frazier Valley Milk Producers' Association Controls 90 Per Cent of Milk Production

The Frazier Valley Milk Producers' Association of British Columbia has sprung into notice as one of the most successful of cooperative organizations. In order to ascertain facts first hand The Farmer sent one of its staff representatives across the line and his investigation will be reported in an early issue of this paper. An organization that controls 90 per cent of the milk production in the territory surrounding Vancouver, B. C., and including 800 farmers in its membership, is certainly worth while. Milk is now selling eight quarts for a dollar in Vancouver and the producers are receiving 27 cents per gallon. Watch for this extremely interesting and informative article.

Turn to Page 23 and Read the Farmer's Announcement of Its New Serial Story to Begin Soon.

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The Cost of Hooverizing

There are hundreds of thousands of men and women in America who are willing to make any sacrifice necessary for their country, and the agricultural districts offer no exception to this rule. Families of the farm are offering their lives and their means, gladly and ungrudgingly.

But there is one sacrifice that should not now be asked of members of that great, common class, whose loyalty and patriotism are the nation's anchorage. The majority of people, both in the country and in the city, are living as economically as possible to make their means meet their actual needs of food, clothing and shelter. They can not be asked to make further sacrifices in the form of still higher cost of living.

It is not sufficient, therefore, for the food administration to specify what foods shall be eaten and what shall be saved for the soldiers. It is necessary that the foods to be substituted be made obtainable at prices no higher than those commonly used.

To illustrate, if it is necessary to substitute corn or rye or buckwheat for the wheat foods commonly eaten, it is necessary also that corn and rye and buckwheat be obtainable as cheaply as wheat. The average farmer and the average resident of the city can not pay more for his food than he is already paying, and his patriotism should not be questioned if he feeds his family upon the cheapest nourishing foods obtainable.

If it is necessary to substitute fish and poultry and eggs for beef and bacon and mutton, it is necessary also that fish and poultry and eggs be made obtainable as cheaply as beef and bacon and mutton. It is far from enough for the food administrators to say to the farmer of the northwest, "Eat corn bread, fish, fresh fruits and vegetables and save your wheat and beef and bacon for the soldiers." Results will be obtained, it is true, for the farmers and townspeople will rally patriotically to the call and do their best. But this is not a corn country, nor is fish an easy thing for the farm family to substitute for bacon. Wheat flour at present enormous prices costs about six cents a pound, but it takes about eight cents to buy a pound of corn meal, and if it comes in a sealed package, as in many cases it does, it requires 10 to 15 cents to buy it. The bacon is raised and cured on the farm, but the fish must be brought on, and seldom in any other way than in the can. While such facts as these remain facts, the common citizen of America is powerless to do in full what the food administration is asking him to do. The administration must go one step further and make the foods that it desires to be eaten obtainable, and at prices no greater than those of the foods that it desires to be saved.

Commissioner Hoover and his coworkers have accomplished wonders and will accomplish still greater wonders. The people as a whole have rallied loyally to the country's call to save the staple foods, but they will rally still more loyally and effectively if the food administration makes it economical as well as healthful and patriotic to Hooverize.

Box Men and Fruit Men Get Together

That was an important meeting in Portland which brought together the fruit box manufacturers and the fruit growers, presided over by W. B. Ayer, food administrator for the state of Oregon.

The growers took the floor first; they had ordered boxes and were having difficulty in getting them. Apples are a fair crop; the demand is good; the market is ready; the fruit is ripening; as great an authority as Herbert C. Hoover has pronounced apples a valuable food and important in preserving the health of human beings, so the matter of handling the crop takes on a larger importance than the protection of the orchardists. Apple boxes had gone up and up in price, from 11c to 20c, and even at that price it was almost impossible to get them. Some of the independents hinted at a combine.

On the other hand, the box men and sawmill representatives declared that they were having their troubles, too, and these were great. Strikes and the great difficulty in securing lumber were the chief of them. Lumber had gone up and in some instances it was almost impossible to get enough to meet their needs. New contracts had been offered at advanced prices, but they were letting the lucrative business go and living up to their contracts, in some instances at a loss. The charge that there is collusion between the box manufacturers and commission men was denied.

The Spokane district appears to have a sufficient supply of boxes; the same was reported for the Goldendale district; about two-thirds of the total number needed had been delivered at Hood River; no shortage was reported from Milton, Freewater and Pendleton. White Salmon reported a shortage of 100,000 boxes, and their contracts had been cancelled and a higher price asked; the Grand Ronde district was partly provided for; the Weiser-Payette section is very short, as is most of the fruit section of Idaho.

While no definite action could be taken, it is believed that a better understanding prevails. The box manufacturers realize how necessary it is to save the crop and provide containers, while the growers see more clearly that there is real difficulty in securing material to make the boxes, that the cost has advanced and that mutual forbearance will have to rule.

Give the Boy Some Responsibility

At one of the fairs this fall a boy of some fifteen or sixteen years was seen carefully scrutinizing the young bulls on display. Before the fair was over he had purchased a fine, young animal to take home with him and place it at the head of the farm herd, two hundred miles away.

Comparatively few boys could be relied upon to use mature judgment in a deal of that kind, but there are matters in which every boy is qualified to act upon his own responsibility. At least, every boy can be trained or allowed to train himself to live up to such responsibility.

Nothing so develops the powers of a boy or a man or a girl or a woman like bearing responsibilities, using personal judgment and profiting or losing by it. The best of them, old as well as young, make mistakes, some of them costly. But it can't be avoided. One can not learn to swim without getting into the water. Make small beginnings, but don't wait until your boy has grown up before letting him assume responsibilities.

Community Canning

Some time ago the Port Townsend high school in western Washington put in a pressure cooker of a capacity of 1000 cans per day and fitted the room for canning purposes with the idea that the plant could be used by the people of the community as well as the canning clubs. County Agricultural Agent O. T. McWhorter reports scores of mothers, as well as boys and girls of the clubs, taking advantage of this opportunity. Miss Celia Olsen, a state university graduate in domestic science, has charge of the canning work, and is well pleased with the results. The high school plans to put up 6000 cans of peas, beans and fruits, the boys and girls being paid by the school for the work they do in canning.

Washington Gleanings

Douglas county will have a $7,000,000 wheat crop.

The kelp plant at Port Stanley is being enlarged.

Improvements amounting to $120,000 are proposed for the Kelso highway.

Over $30,000 worth of Arcadia apples were sold recently to eastern buyers.

A starch company, capitalized at $60,000, will begin operations at Beaverton.

A new 15,000-bushel grain storage plant has been completed at Pleasant Valley.

Pacific county is making improvements on National Park highway to the amount of $9300.

The new cold storage plant at Zillah, having a capacity of 700 carloads, is now ready for business.

The South Bend Canning company has opened a new fruit and vegetable plant, the capacity of which is 500 cases daily.

The formation of a cooperative marketing organization and the building of a community warehouse in eastern Lewis county is assured.

Puget island, comprising 5217 fertile acres, in the lower Columbia, opposite the town of Cathlamet, is to be reclaimed by a system of dikes and the entire area utilized for agricultural purposes.

Fred L. Strange, formerly county fruit inspector for Douglas county, Ore., has accepted the position of field manager for Wittenberg, King & Co. of North Yakima, manufacturers of processed fruits.

Two representatives of the Farmers' Nonpartizan league, an organization having its chief field of activity in North Dakota, have arrived to begin a month's campaign in Washington state, to assist in a similar movement here.

W. H. Reeder, a wheat grower of Tacoma, has purchased the T. M. Donahoe farm, west of Chehalis. The price was $37,000, and the farm, which is one of the best in that vicinity, contains 214 acres, 160 of which are under cultivation.

James Berney, a prominent Klickitat sheepman, recently sold to William Chamberlain, a stockman of Quinton, Ore., 100 head of lambs on the summer range near Glenwood in western Klickitat county for $10.25 per head without a cut.

A comparatively new industry in the northwest will be launched by Portland capital at Bellingham, when the final formation of the Cypress Island Goat company will be completed. The company's ranch is located on an island in Puget sound, out from Bellingham, and comprises 6000 acres. It is the purpose of the company to breed goats for milking.

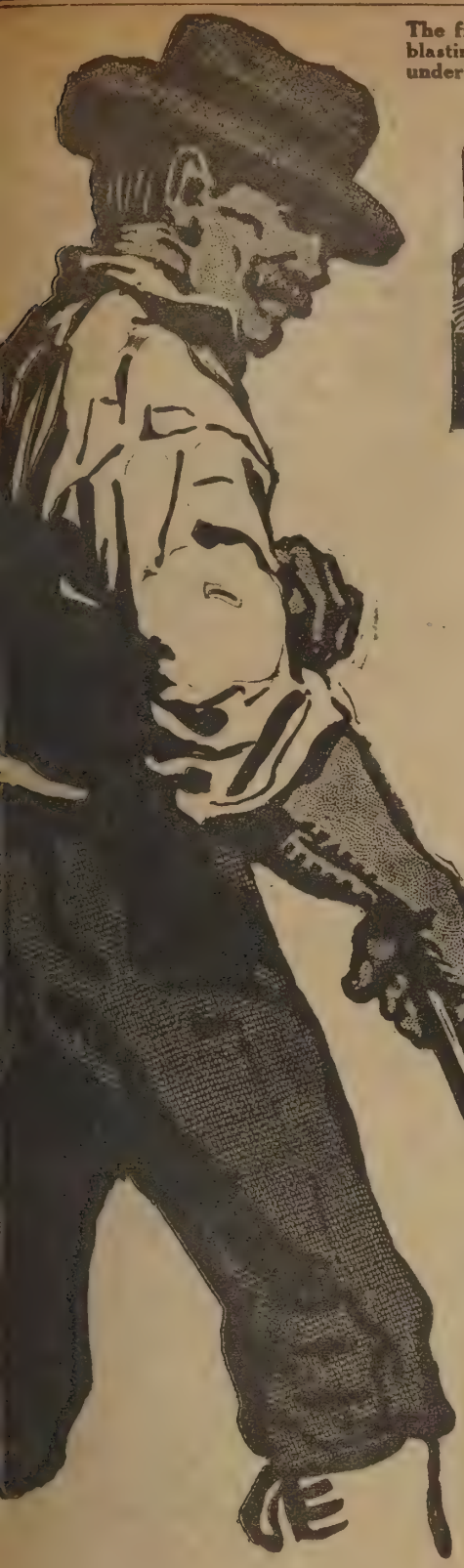
What Others Say

Farmers' Review: We look for live stock production to be put on a more satisfactory and profitable basis in the near future—better than ever before.

Hoard's Dairyman: When the time comes for selecting a new bull his conformation and the records of his ancestors are the chief things to consider.

Rural New Yorker: Make the American farmer believe that he will be fairly paid for his labor and he will produce all the food this world needs.

Iowa Homestead: One peck of potatoes may appear in outward form to be exactly like another peck, but if the one is taken from high yielding hills and the other from low yielding hills there may be a vast difference in the weight of the crop per acre the following year from the two plantings.





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In using a thousand pounds of your Stumping Powder neither I nor any of my men had the least bit of trouble in getting the very best results. I have used practically every powder on the market and find there is more strength in yours. J. L. EIDSON, Silverton, Ore.

Your Stumping Powder shoots the roots and spreads wide in the ground instead of going down. It is the best powder we have used.
G. S. McCARTNEY, Russellville, Ore.

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A. B. NYSTROM, Editorial Contributor

Clallam County Tests 521 Cows.

Tester E. W. Soper's report for the Clallam County (Wash.) Cow Testing association shows 521 cows on test and an average of 30.8 pounds butterfat, according to O. T. McWhorter, county agent of Clallam and Jefferson counties. Thirteen cows made 50 pounds each or better, and there were 85 cows producing between 40 and 50 pounds of butterfat. Tester O. E. Leonard, in the annual report of the Jefferson County Cow Testing association, has the following to say: "Of the 309 cows tested for the entire 12 months 20 produced over 400 pounds of butterfat;; 96, or 31 per cent of the cows, produced over 300 pounds and 176, or 57 per cent, produced over 250 pounds butterfat. The average of all cows tested for 12 months was 6993 pounds of milk, containing 278.5 pounds butterfat. Comparisons of high and low production show clearly the economy of good cows. Ten cows with average of the best herd would produce as much butterfat in a year as 23 cows having the average of the poorest herd. And as for net profit over feed cost it would take 35 cows of the poor herd to make the net profit of 10 cows with the average of the best herd. Owners of both herds compared were selling cream at the same price per pound."

E. W. Soper, the tester for the last year, was strongly urged by the old members to stay with the association for another year, but he has been called in the selective draft. O. E. Leonard, W. S. C., '17, was selected to fill the vacancy.

Another Ayrshire Champion.

Willowmoor Vesta 4th 34150 has just finished her junior 4-year-old advanced registry test for a year, qualifying with a record of 17755 pounds of milk and 753.18 pounds of fat, which entitles her to the junior 4-year-old Ayrshire world championship in her class. She was bred by J. W. Clise, Redmond, Wash., owned and tested by E. B. McFarland, San Mateo, Cal. She is from Mr. Clise's famous Robin Hood strain.

Stubborn Dairy Facts

Finally Are Reduced to Simple Little Figures

James N. Price, the live stock specialist of the extension department of the Washington State college, was in to see me the other day. I am always glad to see Mr. Price, because he is so full of plain, hard sense in his talk and so little given to extravagant claims. While I was talking with him I was reminded of a little instance which occurred two or three years ago when a few of us were waiting to meet with officials of the Spokane Chamber of Commerce. Among those in the party were R. B. Paterson of the Spokane Dry Goods company and A. A. Kelly, the market gardener of East Spokane.

"I don't see how you can manage such a big business concern as falls to your lot," said Mr. Kelly to Mr. Paterson.

"It is only adding to the littles that make a big business," was Mr. Paterson's reply.

In other words, it isn't the tremendous profits on some particular articles which build up a big business, but a multitude of little profits on a multitude of common articles.

When Mr. Price talks of lessening the cost of production by the dairymen he is figuring on these littles. Of course there is a pretty big reduction in the cost when the dairyman sells to the butcher the cow who doesn't pay for her feed, but this cost is only detected by the detail of weighing and testing the milk, a matter of detail. In the matter of feeding itself there is a lot more detail in saving littles. It is up to the dairyman who would pattern after the big Spokane merchant in the principles of business success to find out just how much milk each cow gives, what it tests, and then apportion the feed according to her production. While more dairy cows are underfed than overfed, yet there is a big waste and loss in the aggregate by giving a cow more feed than she converts into milk. Then again, when grain is high it may pay to cut down the amount given to the cow, even if it would result in cutting down a certain percentage from the amount of milk produced

According to Mr. Price, it may make the difference between profit and loss to the dairyman if he can raise the hay and grain for his own herd, even to the extent of having some hay to sell later in the season when it may command a high price. "Better to understock than to overstock a dairy farm" is the way Mr. Price puts it.

In this matter of reducing the cost of production the farmer is his own boss. He is master of the situation. When it comes to selling the milk he gets into a harder job. He finds himself in a position that he must associate himself with other dairymen, must give up some of his individuality, must listen to the other fellow, must join in hiring a manager who will not always do as he himself thinks best. This form of cooperation is practically the only way of influencing selling prices and has worked successfully in the big milk situation in New York and Chicago and is working well now on the Coast in King county.

For a year or more a campaign of education has been going on in Seattle as to the superior food value of dairy products, especially of milk. Day after day, week after wek these matters have been brought through the newspapers to the people. Then for about three months there is carried on a special campaign of education as to the cost of producing them. Facts and figures were given showing the rise in the price of feed and the price of labor on the dairy farm and all other advances in the milk business. So when a jump of two cents a quart was made in the price of milk at Seattle there was no sensational protest on the part of consumers. They accepted this rise as a matter of fact, having been informed as to the reasons why the rise should be made, the distributors of Seattle having a working agreement with the King County Dairy association of producers.

Mr. Price leads me back to the two great essentials in the solving of the milk situation, the two basic facts—the cost of production and the costs of distribution. Traveling over this state talking with dairymen and farmers, taking into account the hay and grain fed and checking up with the cow testing associations Mr. Price found that the cost of feeding the average cow which produces not over 200 pounds of fat in a year is about $60 at prices prevailing previous to January, 1917. At 30 cents for butterfat the 200 pounds of fat will bring $60, the cost of feeding the cow. Increase the production of the cow 100 pounds a year, as has already been done by some of our best dairymen and you have a margin of $20 right there, because the feed cost will not have increased more than $10. The keeping of records through a cow testing association will help the dairyman to make this improvement.

The cost of producing milk has very greatly increased during the last year. The cost of feeds have increased 30 to 50 per cent and labor about the same, and that simply means an increase in the price of milk.

The city consumer of milk, however, seems to think that any attempt to increase the price of market milk is little less than highway robbery.

It is the business of the dairymen to cooperate in putting this matter before the consumer in a way that he will see the necessity for an increase in the price of milk. Dairymen should advertise their product by relative cost and food value of dairy products as compared with meats and other common articles food.

Dairymen should remember, however, that the price of milk should be based on the cost of production with a cow that is a little better than the average and with good care and not with the poor cow and poor care.

It is better to pay the producer of milk a fair profit, it is better for the distributor of milk also to make only a fair profit, than if possible to give a big profit to the producer and allow the distributor to make a big profit. Big profits would bring on an unhealthy promotion of the dairy business with attendant results, one of which would be to lessen the consumption of milk, the extraordinary price, either from necessity or from thrift, cutting down the use of milk of the average family.

The milk problem is not an easy one to solve. It is a big problem and one which should be approached with reason and common sense and good feeling and in an attitude of appreciation of the other fellows's difficulty. The main thing is to get at the facts of the case and be willing to sit down and reason it out together.

E A S

Sweet Clover for Pasture



The above cut shows a scene at a demonstration meeting recently held at Winona ranch, near Grants Pass, Ore., by County Agent C. D. Thompson.

In the summer of 1915 F. R. Steel of Winona ranch slashed off about four acres of brush bench land and burned it over in the early fall. In February following he seeded it to white sweet clover, using five pounds scarified seed per acre. Wherever the ground was burned over there was a good stand. Early in May he began pasturing it with cattle and pastured until late fall. At first the stock did not take kindly to it, but in a short time it was eaten by them just as readily as any pasture.

This year he began pasturing it very early in the season with milk cows, young cattle and horses and it has furnished an abundance of pasture and will continue good throughout the season. His milk cows have kept up a good flow even during the dry months of July and August, with this as their only pasture and a very small grain ration.

The young stock have grown and are looking fine with nothing to eat except this pasture.

The background in this picture shows the nature of the growth of the brush on this piece of land.

Mr. Steel seeded another piece of land adjoining this one last year, except that he used 10 pounds of seed per acre and seeded it in November. He has an excellent stand on this except on spots that were not burned over.

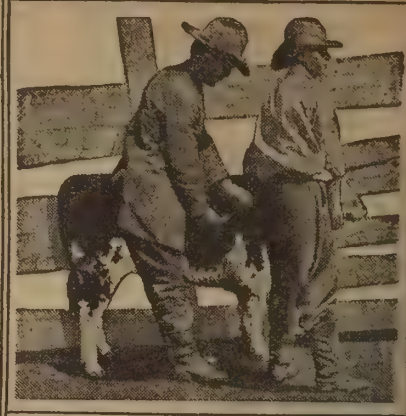
Secures Thoroughbred.

Gleeson Brothers, owners of a fine hay and stock ranch located three miles east of Lawton, Ore., have secured a splendid young Shorthorn Durham bull to head their herd. This animal came from the herd of Frank Brown of Carlton, Ore. The bull, whose sire was awarded grand champion over all breeds, at the Live Stock show at Portland last year, is a yearling, but weights over 800 pounds.

Build More Silos.

More silos have been built in Washington county, Ore., this season than ever before. Among the new converts to the silo are Bud Dilley of Dilley and Bert Doane of the Watts section; also Frank Doane of Oak Hill.

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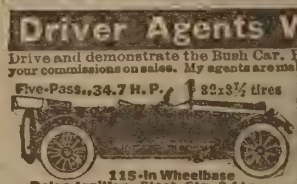
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LIVE STOCK NOTES

Write to the Editor

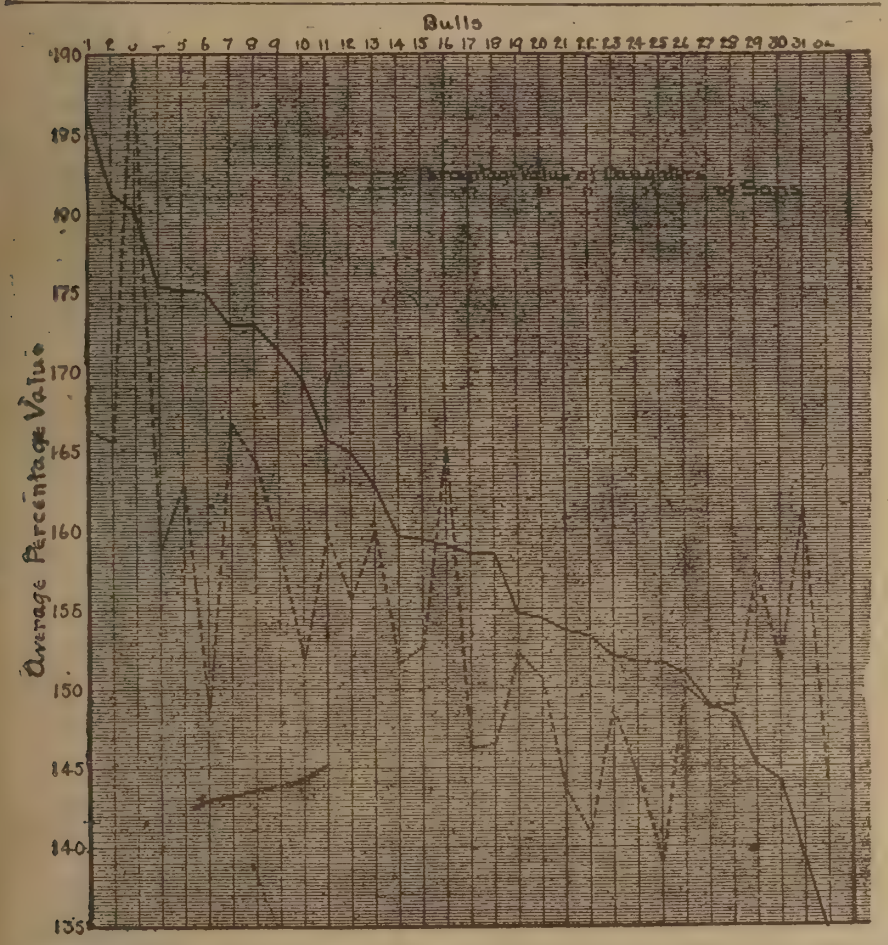
E. J. IDDINGS, Editorial Contributor.

B. C. Altman of Gresham, Ore., whose Jersey dispersal sale last fall realized good prices, promises soon to be actively in the ranks of the breeders again. The heifer calves he saved from the sale will all freshen this fall. He has picked up a few good cows, mostly by the herd bull, La Belle's Oxford Lad, that sold for $350 at the sale. This bull is by Oxford You'll Do Jr. and out of Imp. La Belle Siberius. He has universally sired good heifers, better producers, in fact, than his Jacoba Irene bull. Mr. Altman will put all his heifers and other cows on official test, and no doubt will make some big records.

Mr. Altman is doing some experimenting with corn, having planted four varieties. Two of them are doing poorly and not standing the hot, dry weather, while the other two grow right along and look well, Gold Nugget being the best. His spring oats, sown in May on land rich with a double spreading of cow manure, were looking good when visited, while nearly all fields on land that had been in potatoes and other crops were scarcely worth cutting. H. A.

Selecting Dairy Bulls by Performance

Interesting facts have been brought out by the Utah experiment station in the manner of selecting dairy bulls by performance. One of the features of this bulletin was the endeavor to obtain a measure of the performance of a bull by a performance of his son. To this end, the records of the daughters of the sons of the bulls in question were calculated to a percentage basis, as outlined above, these records being taken as a measure of the son's performance.



Correlation between the average value of bulls and average value of sons of these same bulls as shown by the average percentage values of their daughters.

There were 7632 of these records. The result of the calculation gives the average percentage value of the daughters of the sons of the 32 bulls being studied. These values are given in table VII along with the average value of the bulls as shown by the performance of their daughters.

The close correlation between these two values may be taken by some as evidence that milk production is transmitted through the male line. The writer, however, chooses to regard it merely as greater intensity of breeding, so to speak, on the part of the bulls, due to the more rigid selection toward milk production which they have undergone.

Practical Selection by Performance.

Most practical dairymen now realize the advantage of breeding to a tried bull—one that has proved his power to sire high-producing daughters. Just what performance these daughters must attain before a bull is considered good in practice, is very indefinite. A bull whose daughters are uniformly above the average as producers is the bull which usually, and rightly, attracts attention. Another bull may be the sire of one phenomenal producer and a large number of rather inferior cows. Such a bull is a good one for the average dairyman to shun. There may be a certain temptation to duplicate the extreme production of the one cow, but the odds are too much against this for him to gamble for this end.

The fact immediately arises that at some period even in each good bull's life he was an untested sire. This is very true and some one had to give him a chance to prove himself. There is always a certain risk in breeding to an untried bull. The chance to measure his value is necessarily delayed not only till the particular heifer is born, but till she is in turn bred and comes into milk. Even then, anything but a complete lactation record is not a good standard from which to draw conclusions. All told, then, it takes the better part of four years to measure the value of a bull. In that length of time this bull could have sired five crops of calves, thus completely making over the herd upon which the owner must depend for future profits.

The seriousness and lasting effects of such a move suggest that great caution should be employed. The careful method of testing out a new bull is to breed him only to a few older cows of known breeding capacity, then hold him in reserve, using him only when absolutely necessary, till the results of this first trial are completed. If the majority of these first heifers prove to be satisfactory producers the bull could then safely be used generally in the herd.

This may appear to be a long, rather expensive, and more or less useless precaution; and yet, compared with the disaster of wrecking one's entire herd with a single inferior bull, as is entirely possible if one proceeds blindly, this expense and trouble can not be considered.

Table VII—Average Percentage Value of Daughters and Daughters of Sons.

Place.	Bull No.	Daughters.	Average Percentage Value of Daughters of Sons.
1	13	186.4	166.3
2	14	181.2	165.6
3	31	180.1	189.7
4	16	175.4	158.9
5	24	175.1	162.8
6	29	174.9	148.8
7	27	172.9	166.7
8	3	172.9	164.3
9	6	171.4	158.6
10	32	169.5	151.9
11	10	165.7	159.7
12	11	164.9	155.7
13	26	162.8	159.9
14	12	159.6	151.6
15	9	159.4	152.7
16	4	159.0	165.1
17	15	158.5	146.2
18	20	158.5	146.5
19	30	154.7	152.2
20	7	154.4	150.6
21	21	153.6	143.5
22	6	153.2	140.9
23	17	152.0	148.7
24	23	151.6	144.4
25	22	151.6	139.0
26	18	150.9	149.9
27	1	148.8	148.7
28	2	148.3	149.0
29	25	145.2	157.3
30	8	144.1	151.7
31	20	139.2	161.3
32	19	133.9	144.0

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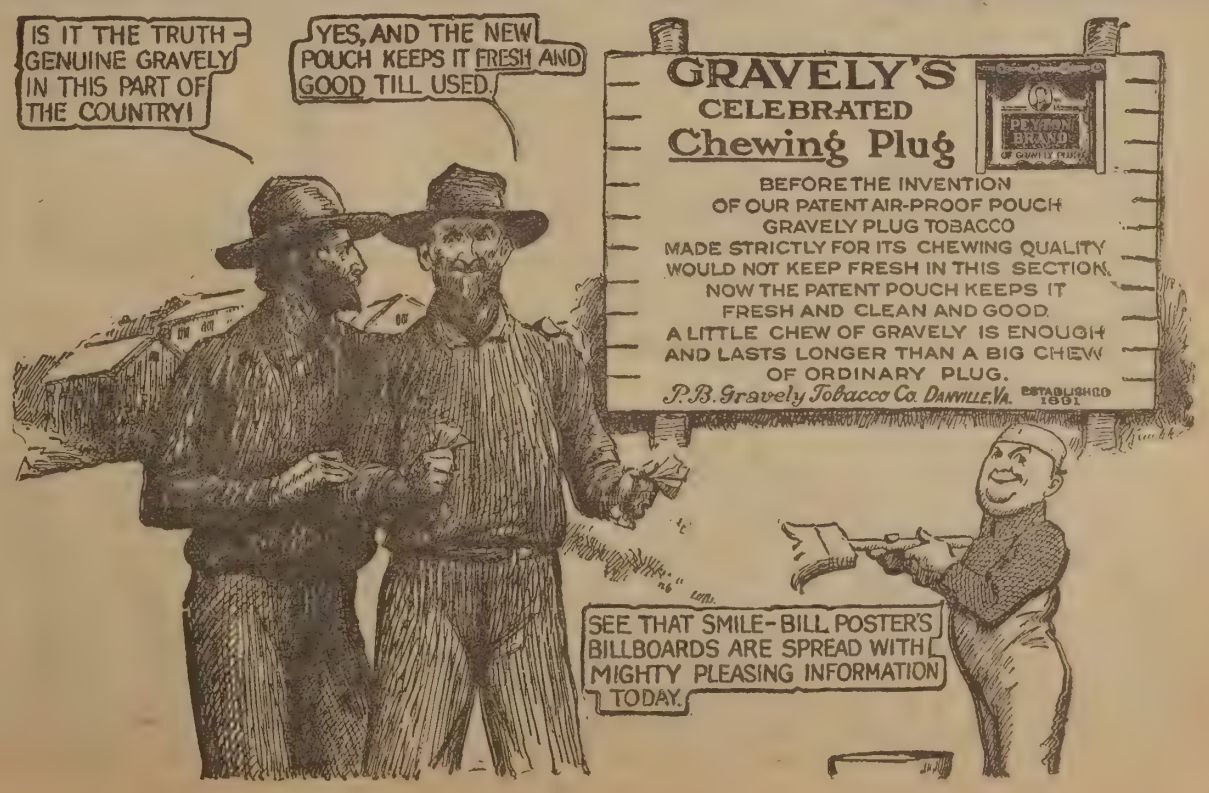
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JAMES DRYDEN
Editorial Contributor

Turkeys Have Worms

To the Editor: Would you kindly advise me what to do about my turkeys. They are looking well, but I find worms in their droppings. Once one of them dropped a ball of nothing but worms. Some of the worms are tiny fellows and others are long, flat, about an eighth of an inch wide and have irregular edges. There are about 200 in the bunch of young ones. I think the old hens are all right. For feed they pick oats of the straw and range on the prairie, also they get a little loose oats at night. They have grit and clean water.—A. E. O., Roy, Wash.

A common remedy frequently recommended for intestinal worms in fowls is heavy feeding of onions or garlic. Powdered pomegranate root bark is an effective remedy. This should be mixed in a soft food at the rate of about a teaspoonful to 20 or 25 turkeys. The turkeys should be fed on clean feeding ground. The usual method of infection is the picking up of feed that has come in contact with infected droppings. It is a good plan to cover the night droppings with poultry netting to prevent the turkeys picking the worms from it. Scatter lime on the feeding grounds.

J. D.

Conservation vs. Production.

In a recent issue of a paper the statement is made that it is easier to increase the food supply by proper conservation than by campaigns to increase production. It is necessary, of course, that attention be directed both to conservation and production, but it may be true that as much is now lost by failure to use proper methods of conservation as we may gain by campaigns to increase production.

There are losses all along the line. There are losses in grain, fruit, milk and butter, and in eggs alone the loss in the United States has been estimated at over $50,000,000 a year. And this is practically all preventable. The eggs are all good when laid, but the broody hen and high temperatures before they reach the consumers cause great deterioration. There are also great quantities that are broken. Think of it! Obliging the railroads to carry more than 10,000 carloads of eggs unfit for consumption in these days of car shortage. That's what it amounts to—the loss on eggs alone by failure to preserve their original good quality.

J. D.

Variety in the Ration

Circular No. 3 of the Idaho experiment station, by Pren Moore, reports an experiment with three different rations, as follows:

Flock No. 1.

Scratch food, 15 parts wheat, 2 parts oats, 2 parts barley; mash, none.

Flock No. 2.

Scratch food, 12 parts wheat, 2 parts peas, 3 parts oats, 2 parts barley, 1 part kaffir corn, 1 1-2 parts millet, 1-2 part sunflower seed, 1 part buckwheat; mash, 2 parts bran, 2 parts shorts, 1 part cornmeal, 1 part wheat meal, 2 parts fish meat meal, 1 per cent charcoal.

Flock No. 3.

Twelve parts wheat, 2 parts corn, 2 parts oats, 1 part barley, 1 part kaffir corn, 1 1-2 parts millet, 1-2 part sunflower seed, 1 part buckheat; mash, 2 parts bran, 2 parts shorts, 1 part cornmeal, 1 part wheat meal, 2 parts fish meat meal, 1 per cent charcoal.

There were 30 White Leghorn pullets in each flock occupying a colony house 8x16 feet, with a yard 50 feet square. The grain was fed in a deep litter of straw, and the mash fed dry in hoppers. The following gives the egg production per hen for the year beginning November:

Flock 1, 24 eggs; flock 2, 116 eggs; flock 3, 131 eggs.

This certainly brings out the importance of feeding a variety and of feeding part of the ration ground. Poultry-keepers should think it over.

J. D.

Straw to Help Out in Feed Shortage

(Continued from page four.)

year, as the stock run in the straw piles and tramp half under their feet. There is no demand for straw here except for bedding in the stable. The price is $1 per load. There has been no straw baled in this part of the county that I know of. If every farmer would save and feed the straw properly there is no question but that it would save 25 per cent of hay and grain during the year. JAY ROCKWELL.

Endicott, Wash.

More Combines Used.

To the Editor of The Washington Farmer: Practically all straw that is used will be picked up from the combines. Some save the chaff only, while some save chaff and straw. There is little stationary threshing done here this year on account of so many combines.

As for baled straw here, there are no balers that we know of anywhere. As to cost, the straw of itself would not be so high, but the cost of hauling picked up after combines with men at $3 to $4 per day and horses 75 cents to $1 a day with board would make expensive baling straw. Grain hay is worth $14 to $18 per ton delivered in Davenport. ALMER M'CURTAIN.

Davenport, Wash.

Other Replies.

Many valuable pointers will be found in other replies which are given below:

F. M. REYNOLDS, Glody, Wash.: Straw is scarce in this locality. It is selling for $4 per ton in stack. There will be enough here to winter what stock there is, but non to spare.

GEORGE DE BOLT, Adarin, Wash.: Stock can be wintered on wheat straw if not worked, but it is best to feed some grain with it. Straw is very scarce in this part of the county and can not be bought for any price, for all farmers need what straw they will raise to winter their own stock.

M. D. DUNCAN, Creston, Wash.: We use straw to winter our horses on wheat farms. They only eat the chaff. It has a value of $2 or $3 a ton in the field, and loose at that.

J. C. FARR, Albion, Wash.: The only remedy for the farmer is to conserve his straw at this time. There is not generally much demand for straw, but $25 per ton for hay will surely make straw valuable. Straw can be used at about one-half value in winter. Straw should be worth about $8 to $10 baled, f. o. b. cars.

L. C. MILLER, Lacrosse, Wash.: We stack straw and it helps to a great extent in wintering the stock, and if we are short of hay we can feed straw during work time by giving a larger ration of chop. We have no baled straw, but it ought to be worth quite a bit for roughage.

HARRY GOLDSWORTHY, Rosalia, Wash.: Stock in this section are practically all wintered on straw. It is poor feed at best and I am inclined to think that on the farm we are getting as much feeding value as it is possible to get from the straw. There is very little demand for straw. Good oat straw, baled, will occasionally find a market at from $4 to $5 per ton.

GEORGE M. REASONER, Pasco, Wash.: If you are in a position to turn cattle directly to the stacks, young stock will go through the winter fairly well on straw alone. If the straw is baled or moved the chaff and shattering, which is the best part of the straw, is lost.

JAMES STROUF, Stratford, Wash.: The farmers in this vicinity do not have any more straw than enough for their own use. There is no straw for sale, therefore no price.

JOHN JANTZ, Ruff, Wash.: Straw will all be needed here, and some is worth about $15 a stack and straw will be very scarce yet, as crops were short. Demand for feed will be great.

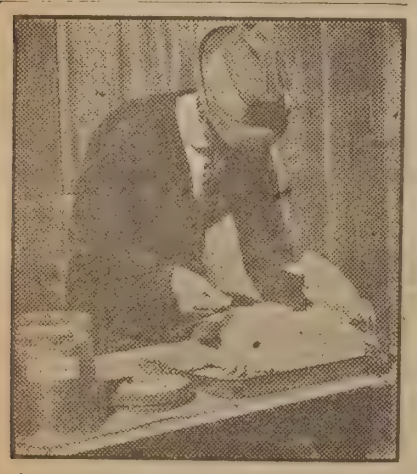
J. S. TRUNKEY, Malden, Wash.: We have plenty of straw and hay in this territory and if there is any demand for same in other places we can furnish it. We have 40 tons baled wheat hay ready for market. As to price I am not posted.

STEPHEN HIGGINS, Hartline, Wash.: There will be a bout enough straw to supply the demand in this community, but none to ship.

WILLIS E. MAHONEY, Tekoa, Wash.: The shortage of feed for stock can be greatly relieved by farmers taking advantage of baled straw. Good wheat and oat straw can be sold for $8 to $10 a ton. The farmers in the Fairfield pea district find a strong market for baled pea straw at all times. Owing to the scarcity of hay and the extremely high prices it would be my advice for the stock raisers to bale all available straw, for with a shortage of hay at this time you can readily imagine the results in the early spring. Montana and southern Idaho are feeling a shortage of hay and the high price of feed is forcing many to dispose of their stock.

Need Dust to Kill Lice

My chickens have lice and I can't get rid of them. I tried powder and also kerosene and lard. Saw in one of your poultry articles about using Sodium Flouride, but haven't been able to obtain it. Have eight May pullets, when should they lay? They are White Leghorns. I feed them lots of milk. —Mrs. A. C. S., Metaline Falls, Wash.



The United States department's specialist. Such pinch can be distribuithe "pinch method" to be entirely effective against all lice. When applying the powder by this method it is placed on a table in an open vessel or pan, and the fowl is held by the legs or wings with one hand, while with the other a small pinch of the chemical is placed among the feathers next to the skin about as follows: One pinch on the head, one on the neck, two on the back, one on the breast, one below the vent, one on the tail, one on either thigh, and one scattered on the underside of each wing when spread. Each pinch can be distributed somewhat by pushing the thumb and fingers among the feathers as the material is released. It is advisable when dusting to hold the chicken over a large shallow pan, as in this way the small amount of material ordinarily lost is recovered.

The natural remedy for the chicken louse is dust. The louse breathes through the pores of the skin and the closing up of these pores with dust kills the louse. If the fowls do not have access to a dusting place in the yard or fields a box of dry earth must be provided. On account of their irritating nature sulphur, pyrethrum or lime added to the dust will make it more effective. Sometimes it may be necessary to dust the fowls by hand, but this is usually considered impracticable by poultrymen who keep large flocks. Sulphur and slaked lime make a good dust powder. A good powder may be made by mixing crude carbolic acid 90 to 95 per cent strength, with enough plaster of paris to make a dry powder that will work thoroughly into and among the feathers.

Sodium Fluoride, referred to in these columns some time ago, is a good powder. The coutntry town druggists do not usually keep it, but it may be obtained from druggists in the larger cities at about 25 cents a pound.

White Leghorn pullets that have had good care throughout the brooding and growing period should lay at from six to seven months of age.

J. D.

Feed Prices.

It will be probably just as well for poultrymen who buy their feed to wait until the new corn crop is harvested in the corn states before laying in their supply of grain. The indications now are that corn will be cheap enough to make it the base of the ration. J. D.



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IN THE ORCHARD

Write to the Editor

GRANVILLE LOWTHER
Editorial Contributor

It has been several years since we had as good prices for fruit as we are getting now, and the tendency of the government to stop speculation in food products is one of the factors. When the farmer can get a fair profit and the consumer can buy at a fair price, it stimulates both production and consumption.

When Delicious apples will sell for $2 per box and Jonathans for $1.40 there is 60 cents difference. That 60 cents is equal, or almost equal, to the cost of production. Then unless there is some good reason for growing the Jonathan instead of the Delicious, it would seem wise to grow the apples that bring the highest prices. When Winesaps will sell for $1.70 per box and Stayman Winesaps sell for $1.40, there is 30 cents difference. So we might compare a good many other varieties. Then why grow the cheaper varieties? The answer with many of us is that we have the cheaper varieties already planted and in bearing, while the others are yet to plant and bring into bearing through years of waiting, cultivation and expense. Of course, there are other reasons, but I think the one given will cover more ground than any other, or perhaps more than all others combined.

G. L.

ORCHARDING AN ART.
Success Requires Real Application

By Granville Lowther.

In a previous article Dr. Lowther called attention to the fact that fruit growing was a real art, a fine art. Here are some of the arts of the business as he sees them, and later he will tell of further arts and draw some interesting conclusions as to the man and the business.—Editor.

Among the things requiring skill in orchard work are irrigating, cultivating, spraying, pruning, thinning, picking, assorting, packing and marketing. All of these require a knowledge more or less technical in its nature, and unless the fruit grower understands them, or at least knows that he does not know and employs some one who does understand, he will not succeeed in the highest degree.

The orchardist if he employes help, should know when that help is doing his work properly. If the men he employs do not know what to do, he should be able to show them. Irrigation is an art, and every year there are held irrigation institutes, the purpose of which is to educate the water users in the best methods of irrigation.

Orchard cultivation is an art requiring a knowledge of soil conditions, the root system of trees at different periods of growth, in order not to injure them in the process of cultivation.

Spraying is an art. The man who does not know how to test the strength of his spray materials, how to mix the different kinds that may be combined, how much to use under different conditions, how to apply them, how to keep the machinery in order, when to spray and what to spray, is not prepared for his work.

Pruning is an art. Different varieties of trees require different rules of pruning. For instance the Winesap that has a spreading top, requires different treatment from that of the Wagener with a vase-shaped top. The Thompkins King, with a heavy foliage, requires different treatment from that of the Spitzenburg or Yellow Newtown of a slower growth. Then there is pruning for a larger fruit crop, and in case of extra heavy bearers, for a smaller crop of fruit and a larger wood growth. In many cases, the same law applies in the cutting off of important branches, as would apply in a hospital in cutting off legs and arms. The difference being that if a mistake is made, the consequences are not so serious.

Thinning is an art. In order to thin successfully, the thinner should have some imagination, and be able to see what the tree will bear, when the crop is developed; whether it will produce three tier apples, four tier, five tier or jumbles. He should be able to judge the relative vitality of the tree and know whether it is able to develop a heavy or light crop into commercial sizes.

Cyanide for Codling Moth.

The question is being asked, "Is cyanide of potassium a good codling moth spray?"

I do not know, but since it is one of the most deadly poisons known, I have no question of its potency in killing anything that eats it. My only question is will the apple hold enough poison in its calyx cup to poison the folks who eat it?

One man has tried cyanide, and has offered one dollar for every moth that can be found in his orchard. The men who applied the spray, wore masks over their faces, so I am told and sponges through which to breathe, so as not to get the poison while spraying.

Now do we want to run the risks of using a poison so dangerous as this? Personally I would not use it until it had been proven that it will not kill the folks who use the apples as well as the apple pests. I think until that time, it should be used with extreme care.

G. L.

Home Storage of Cabbages

Heads of late cabbage may be cut and stored in conical pits in the same manner as beets, says Farmers' Bulletin 879 of the United States department of agriculture. Another common and very satisfactory method is to pull the plants, roots and all, and place them in a long pit with the heads down, as illustrated in figure 1. A few heads may be removed from time to time without disturbing the remainder of the pit. As slight freezing does not injure the cabbage, the covering of the pit need not be as thick as for other vegetables.

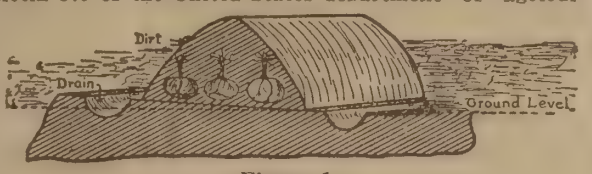


Figure 1.

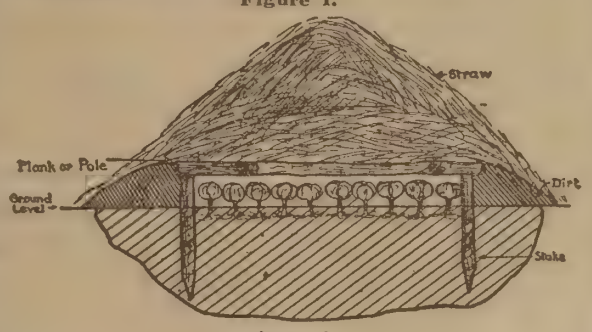


Figure 2.

Another good method of storing cabbage is illustrated in figure 2. The plants are pulled, roots and all, and set side by side with the roots down in a shallow trench, the length of which corresponds to the width of the bed. The bed may be any width up to eight or 10 feet and as long as necessary to hold the number of cabbages to be stored. Cover the roots with earth. Around the bed erect a frame of rails, boards or poles or by driving a row of stakes into the ground so that an inclosure about two feet in height is formed. Bank the outside of this frame with dirt and place poles across the top, covering them with straw, hay or corn fodder. Make provision for removing portions of the stored product from one end of the pit. This type of storage is inexpensive and gives good results. When the heads are cut, leave the roots in position, and in the spring these roots will sprout and supply the family with an abundance of greens. A large percentage of the cababge sprouts found on the market are produced in this way.

FALL CATALOG
of
SMALL FRUITS



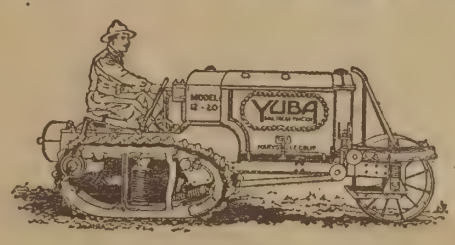
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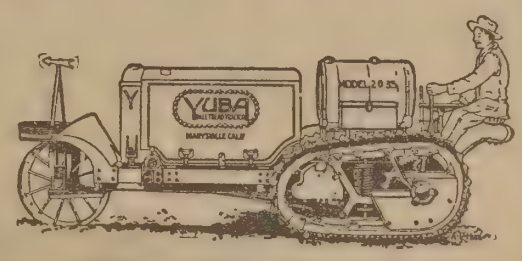
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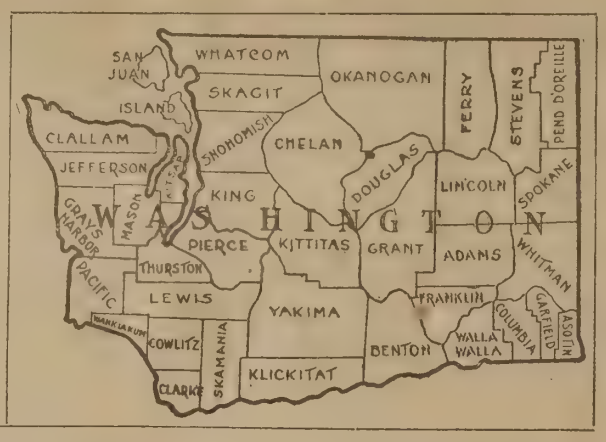
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Also there are the *Yuba Pump Catalog* and the *Tracover Plan Book*—if interested in either, send for it.

Will Mix Beet Syrup and Straw

By-Product of Sugar Beet Is a Possibility in Helping to Solve the Feed Shortage Problem; Much Silage Is Being Made This Fall.



YAKIMA, Yakima County, Wash., Sept. 19.—Winter feed prospects are very good. The price of feed, of course, is high, but feed is very plentiful. The number of silos have been materially increased, while the acreage of corn has been increased about 30 per cent. We have approximately 10,000 acres of corn in Yakima county this year which will yield in the neighborhood of 10 tons ensilage per acre. The sugar beet factory will also have a large quantity of by-products, and, according to Mr. Horn, most of this will be disposed of to feeders in Yakima county. As regards the use of straw, will say that there is a movement on foot among the farmers to use up the straw, stover and beet tops. So far, I do not think that there has been a market established on straw in the valley, although I have heard it quoted outside of the trade about as follows: Wheat straw, $2.50 per ton; barley, straw, $3; oat straw, $3. As you perhaps know there will be quite a quantity of crude syrups from the manufacture of beet sugar. Many of our farmers are planning to use this substance mixed with straw as a winter ration. I have learned from correspondence with other experiment stations and from Mr. Wheelon of the Utah-Idaho Sugar company that the crude syrup has a feeding value equal to oats, pound for pound. The company has agreed to dispose of the crude syrup to our farmers at $10 per ton. I am carrying on a campaign to have this feed thoroughly tested out in the valley during the coming winter. There is 12,000 acres of potatoes in the Yakima valley this year. The crop is about 80 to 85 per cent normal, and I have figured that we will have approximately 4200 cars for export. The 12,000-acre estimate does not include patches smaller than one acre, and I believe there are enough of these in Yakima county to almost supply our local demand. The storage facilities are very satisfactory, there being enough storage to accommodate approximately one-half of the apple and potato crop if it is necessary to store that much. There is considerable active preparation for increasing acreage during the coming year in Yakima county. As you perhaps know there is a bill before congress appropriating $750,000 for extending the irrigation system on the Yakima Indian reservation. If this bill goes through approximately 30,000 acres of new land wil be brought into cultivation. Outside of that there is an additional 8000 acres coming under irrigation by a pumping plant on the present Sunnyside canal. There will also be quite an increase in crop acreage on the Tieton project. The increase in acreage during 1918 will be largely in the following crops: Sugar beets, corn, wheat, alfalfa and beans. The increase or decrease of potato acreage will depend entirely on the price which the farmers receive for the present potato crop.

LEE W. FLUHARTY.

Are Saving the Straw.

OTHELLO, Adams County, Wash., Sept. 18.—The feed problem is demanding and receiving more than usual attention from the farmers. There never has been such a demand for straw. Combined straw is being stacked carefully and all stacks are being topped out. It usually sells by the stack. None is baled here. The price per stack varies from $10 to $15. We were at a sale on Saturday and loose rye hay sold at $13 per ton. It is higher than ever before in this locality. There is not a spear of green vegetation except thistles in the stubbles, but stock is keeping in good shape on them. There will be a full acreage again next year, but no increase over this year. No seeding has been done and none will be until a rain comes. Many farmers are holding their grain on their farms and not storing in warehouses. Some say they will not seed any next year unless they can get a better price this year, but we think when the time comes the land will be seeded, as they can raise nothing else here except wheat. There is a shortage, to some extent, of farm help, but there are cases where the hired man does the work and the boss uses up gasoline, when, if the boss would labor, he could dispense with his man. This is a bitter lesson that many will be forced to learn if our boys don't "can the kaiser" soon.

A. O. LEE.

Second Growth Potatoes.

EPHRATA, Grant County, Wash., Sept. 12.—There is apt to be some shortage of feed in this county. The wheat was a little short this year and consequently the supply of straw will not be as great as in former years. Practically all the straw will be fed on the farms to horses and cattle. Not a great deal of straw has changed hands so far and do not know if there is any price set on it at the present time. None to amount to anything will be baled, practically all will be sold loose where it is sold at all or fed in the field. The potato crop will be light, except on irrigated land, where it is as good as usual. More or less trouble has been experienced this year in second growth potatoes. This was due largely to the extremely hot weather during July. The crops next year will be about as usual. Owing to the limited rainfall in this county it is necessary to summer fallow every other year, so the crops can not be increased a great deal from year to year without reducing the crop following.

H. W. REAUGH.

Late Potatoes Fail.

SOUTH BEND, Pacific County, Wash., Aug. 31.—Winter feed will be here, as elsewhere, a problem. Everyone is trying to conserve all of the stock feed they can. Half the milk routes in Raymond have stopped. Many farmers will feed straw with hay this winter; straw is selling at $6 a ton and alfalfa at $25. The pastures on the uplands have dried up but the tideland pastures are green and do not seem effected by the dry weather. Some crops are beginning to dry up; lots of corn is stunted and the leaves are curled up. Early potatoes were plentiful and large, but the late varieties are a failure. One farmer reported his crop of potatoes as not worth digging. Beans are doing well. There has been a great increase in this crop. The weather was favorable to late hay making.

MRS. WINNIFRED BUCKINGHAM.

Mistake in Selling Young Stock.

KENNEWICK, Benton County, Wash., Aug. 24.—Wheat is the only crop that has suffered from drouth to any extent. All other crops in this section are grown under irrigation. The wheat, however, has not suffered to the extent that it appeared it was going to early in the season. This is especially true where the land was worked early in the season the previous year. It is very noticeable throughout the wheat section that the wheat which was sown on summer fallow which was worked early the previous spring has not suffered to compare with that which was sown on summer fallow which was worked late. This year above all others has shown the folly of not working the ground that is to be summer fallowed early in the spring. The farmers are all beginning to realize now that early work makes a material difference in the amount of moisture saved. The high price of live stock tends, of course, to stimulate production, and to counterbalance this the price of feed is retarding production. In fact, in some places the farmers are getting rid of their stock on account of the price of feed and in spite of the fact that stock is high. Considering a period of two or three years there are many reasons to believe that a farmer is making a serious mistake in disposing of young stock on account of the high price of feed. He will undoubtedly be out of stock to feed at a time when stock is extremely high and when feed can be sold only at a fair price. This is sure to be the condition, as the production of feed can be materially increased in so much less time than can the production of live stock.

LEE M. LAMPSON.

Good Cattle for Sale.

CHEHALIS, Lewis County, Wash., Aug. 23.—Pastures are so very short that dairy cows ought to go on nearly full feed now and stock cattle should have half rations so as to begin winter in a thrifty, vigorous growing condition. They had to be fed extra long last spring. It now costs three times as much to grow a cow here as it used to. Milk is now $2.50 per 100 pounds and ought to be $3.50 to leave a fair living for dairymen and their families. Many good cattle are for sale, but beginning to feed so early will cause much feed to be shipped in. Cutting and threshing are being pushed. Grain is about two-thirds an average crop. It is of fine quality. Straw is quite short and most all will be baled and much of it held. It will probably sell on the start at about $7 a ton on cars, and $4 in stacks. Loose hay is $10 to $12 in the stack now and $20 on cars. A large acreage is in potatoes. A small part will be a fair crop. A much larger acreage will have about a third of a crop. That is if we get rain soon. Probably nearly a quarter of the acreage will scarcely be worth digging. Wages are too high to plan any increase for next year's crop. If food control sets a price below cost, farmers will have to raise plenty for themselves and a small surplus for expenses and let consumers go to the land and do likewise.

L. K. COGSWELL.

Feed Prospects Normal.

LA CROSSE, Whitman County, Wash., Aug. 25.—Winter feed prospects are about normal. Straw will possibly be less than usual as quite a number of combines are used. Potato crop, which for a while, promised a record crop, is at present very poor due to lack of rain and excessive heat. No rain has fallen since June 29, making it one of the longest drouths on record. Threshing is progressing rapidly. General opinion is that crops are from 50 to 60 per cent normal. Some yields of 25 to 30 bushels per acre are reported and will probably average 15 to 16 bushels per acre. From present indications crop area will be increased 25 per cent for next year.

M. E. SCHRECK.

Work on Straw and Grain.

WASHTUCNA, Adams County, Wash., Sept. 2.—We wheat farmers depend on our straw stacks to keep the horses and cattle all winter. The straw itself seems to have little food value, but the chaff is nearly as good roughage as hay. Of course in the stacks there is usually a little shrunken wheat which the threasher has blown over and helps keep up body heat. The custom is becoming more prevalent to feed straw and grain for all early spring work up till plowing time. The horses seem to stand work for a month or so on straw roughage, but begin to fall off after that as the day gets warmer and the work harder. At present there is no market for straw feed.

R. W. SNYDER.

Many Waste Their Land.

FERNDALE, Whatcom County, Wash., Sept. 17.—A heavy rain has hindered harvesting and threshing in this vicinity, but it will be a great help to all root crops and cow-kale. These crops make the best growth in the cool months of the fall and with the present rain a good crop is assured. Although this is not much of a grain-growing district there has been more grain grown the last year than previously, especially oats and wheat for chicken feed. The war gardens are yielding well and the housewives are busy canning and drying the perishable varieties for a good winter's supply. Farmers are realizing that a small patch of corn, properly cared for, provides a good green feed when fed directly from the field, when the pastures commence to get short and before the cow-kale is ready later in the fall. The greatest obstacle in increasing food production in this vicinity is in clearing the land. When the land is once cleared, and common sense farming methods applied, farmers can rest assured of a crop. Of course if all the timber was cut down and the slashings burned good and then seeded down with a good pasture mixture, more pasture would be provided. This would also start the large stumps to rot. The average farmers around here have five, 10 and 15 acres under cultivation and they should not waste any land after working hard to clear it. Nevertheless one can see on many farms a great amount of space wasted, in large barnyards, around buildings, along fences and in many places, division fences that are practically useless are allowed to grow up into a veritable hedge. A number of farmers in this county are growing sugar beets under the direction of the United States department of agriculture. This fall after harvesting a few beets will be sent away to be tested for their sugar contents and if the per cent is high enough it is the intention to try and grow this crop on a commercial scale. At present the beets are growing well.

CARL J. MENZE.

New Silos on Four Farms.

According to County Agriculturist B. W. Cooney of Klickitat county, silos have been constructed on four farms in the Trout Lake valley. These silos are the first being built in the valley. The construction is known as the continuous wood hoop.

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Keeping OUT DUST and RAIN—Keeping IN OIL
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Blasting of Stumps Having Heavy Tap Roots



A. Electric Blasting. B. Fuse Blasting. Note location of charges.

The kind of explosives to use depends on both the nature of the soil and the nature of the roots, says a bulletin from the Arizona experiment station. The heavier and finer the soil, and the less the tendency to send down a long and large tap root, the lower the per cent strength of dynamite to be used. With a clay soil and stumps having no marked tendency to send down a tap root, it is generally desirable to use 20 per cent strength explosive, and under more extreme conditions, possibly a 15 per cent strength powder might be employed. With a sandy soil and deep, heavy tap roots, our experience has led us to favor a 40 per cent strength dynamite, and under some conditions as high as 50 per cent strength. This, also, is a matter which must be left to the judgment of the operator. Most explosives known to the trade as "stumping powders" are about 20 per cent strength, but our experience favors the use of these only in a fine soil, as a quicker and stronger dynamite is more satisfactory in coarser and sandier ground. In blowing very large stumps we are led to favor the firing simultaneously of three or four charges, located at different places under the stump, with an electric blasting machine. Electric blasting caps are used in priming the cartridge virtually the same as blasting caps. A hole is made in the center of the end of a stick of dynamite, in a slanting direction in such a way as to come out at the side a couple of inches from the end. Double the wires, and insert through the hole, looping around the stick as shown in the accompanying illustration. Then punch a hole in the end beside the first, only straight into the stick, and insert the cap. Tighten up the wires, and the cap is held firmly in place. The ends of the wires are connected up in circuit with the blasting machine as shown in the diagram.

Buys Costly Fowls.

One hundred dollars was paid for three White Orpington chickens by Claire Wellman of Lewiston, Idaho, according to reports from that place. Wellman is a boy of 13 years, but is reputed to be an excellent judge of poultry and live stock. He purchased the chickens from the proceeds of the sale of a cow. The birds are a pure-bred cockerel and two pullets, from which he expects to build up an excellent strain of poultry.

You cannot name another trade, calling or profession, which can be so quickly and easily learned, that is so sure to bring a person immediate, pleasant, profitable employment, as the training to be had in

Wilson's Modern Business College
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Portable Drag Saw
WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $140 f. o. b. Spokane and common points. FOR SALE BY

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Statement of Condition
at the close of business
September 11, 1917

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Resources

Cash and Due from Banks	$ 3,259,082.89
Due from U. S. Treasurer	50,000.00
U. S. Bonds	1,111,706.50
Bonds and Warrants	2,086,199.23
Bank Building	722,169.23
Loans and Discounts	11,798,885.18
Overdrafts	537.59
	$19,028,580.62

Liabilities

Deposits	$16,465,548.71
Circulation	970,200.00
Capital	1,200,000.00
Surplus and Undivided Profits	392,831.91
	$19,028,580.62

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The Capital Stock of the Union Trust Company Is Owned by the shareholders of The Old National Bank

Statement of Condition
at the close of business
September 11, 1917

Union Trust Company
of Spokane

Resources

Trust Funds Invested	$5,971,552.69
Trust Funds Uninvested	15,768.98
Loans and Discounts	440,759.97
Bonds and Warrants	163,103.92
Real Estate Owned	73,604.45
Cash and Due from Banks	25,991.11
Accounts Receivable and Due from Clients	39,500.62
	$6,730,281.74

Liabilities

Trust Accounts	$5,987,321.67
Special Deposits	430,993.80
Reserve for Taxes, etc.	15,939.04
Capital	200,000.00
Surplus and Undivided Profits	96,027.23
	$6,730,281.74

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Fair at Puyallup

Western Washington Features

The date for the Western Washington fair, which is to be held at Puyalcup, is rapidly approaching. For 17 successive years this fair has been the great annual fall event for Pierce and King counties and the eighteenth annual exhibition, which is to be held from October 2 to 7, inclusive, is being looked forward to with more than usual anticipation. Owing to war conditions and the great interest which is felt in things military an endeavor is to be made by the management this year to give a military air to the entire exhibition. Troops from the cantonment at American lake, and marines from their station at the university campus at Seattle, are to be featured, parades and maneuvers are to be daily features and flags and bunting are to be lavishly displayed. The fair of 1917 will be a military fair.

The management is at present exercised over the question of providing quarters for the increased numbers of horses, cattle sheep and hogs for which space applications are daily being made. It is believed that the stock exhibit this year will consist of more high class animals than ever before, owing to the fact that the two great fairs of Washington and Oregon immediately preceed the Puyallup exhibition. Cattle breeders and horse owners have signified their intention of showing their stock at the state fair at Yakima from September 17 to 22, then at the Oregon state fair at Salem, September 24 to 30, and then be in Puyallup in time for the Western Washington fair October 2 to 7.

Added to the great stock display will be the large and attractive showing of fruits, vegetables and flowers, never better for show purposes than this year. But all these, no matter what the quantity and quality, do not make a successful fair without attendance, and the fair management is asking the friends of the fair to boost for attendance from now on until fair time. That it will not ask in vain is assured. Every year sees the same happy, fun-loving crowd, coming in swarms through the big gates, massing in front of the concessions, streaming through the various buildings, cheering the track events from the grandstand and at last, tired but happy, hurrying from the ground just in time to catch the last bus or train for home. A day at the Puyallup fair is a day of delight. Let every good fellow boost early and late.

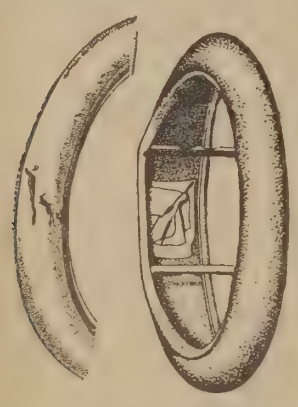
The Motor Car

On the Farm

Blow-Outs.

By W. D. ALBRIGHT.

The illustration herewith is of a tire whose necessary repairs have been neglected. To begin with, the tire was cut entirely through by some sharp object. An inside patch was applied by the owner, but he neglected to have



pulled away from the position it originally held and has been forced through the patch removed and a permanent repair made at the first opportunity. This temporary patch has gradually the break. When inside patches are used an outside emergency band should also be applied, but both removed as quickly as it is possible to make the repair. Don't wait until the tire gives out but look up a repair man it once. Have the tire repaired while the injury is small.

Whole County Can Autoride.

According to John P. Duke, cashier of the Security State bank of Palouse, Whitman county, Washington, has enough automobiles to take every resident of the county for an automobile ride at one time. Mr. Duke cited the wide use of automobiles as indicating the prosperity of the district.

"More than 1000 new machines figured on the assesment rolls this year," he said, "and the number undoubtedly would have been increased 2000 or 3000 had the dealers been able to secure cars for prospective purchasers. The county's population is 35,000. We have enough machines to move every one out of the county, if necessary, in one trip."

Trucks for Hog Hauling.

L. Stubblefield of Hunters, Wash., manager of the Tonasket Live Stock company, uses two motor trucks for hauling live stock to the Spokane stock yards. He says he has found the motor truck much cheaper than shipping by rail. One of the trucks he uses is of large capacity, and he can haul to town in one trip approximately a car load of hogs with his two machines. His haul is about 40 miles.

Kittitas Crops

Make Total of About $6,000,000

The hay crop of the Kittitas valley this year is estimated by hay and grain dealers to be 65,000 tons. Of this, 50,000 has been baled, the balance stacked for home use. Timothy constitutes the larger amount, with the balance alfalfa and timothy and alfalfa mixed. Prices are about $25 for timothy, $21 for alfalfa and $23 for mixed hay, making the value of the crop close to $1,500,000. The acreage and thus the yield of hay was smaller than usual and the acreage of grain probably larger than ever before, though the yield per acre was light. Probably 2,000,000 bushels of grain were raised, the larger portion of which was wheat, with a good share of oats and barley, and worth perhaps $3,000,000. Add to this the fruit, horses, cattle, sheep, wool and the few hogs produced in this valley in 1917 and it makes a total of probably $6,000,000. Ellensburg, the metropolis, is prospering with the valley. H. A.

Field Averages 43 Bushels.

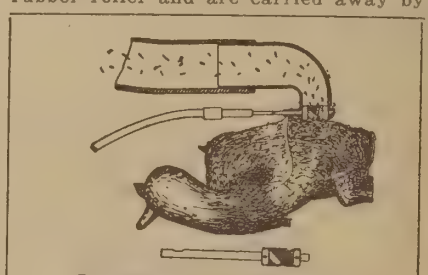
The field of wheat near Waterville that was on a summer fallow demonstration has just been harvested, reports A. M. Richardson, county agriculturist of Douglas county. It has not been hauled yet. But the one or two loads that were hauled weighed 143 pounds per sack. There were 2720 sacks on the 150 acres. The field averaged approximately 43 bushels per acre.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Pin Feather Plucking Machine.

In this machine the pin feathers are plucked between a steel roller and a rubber roller and are carried away by

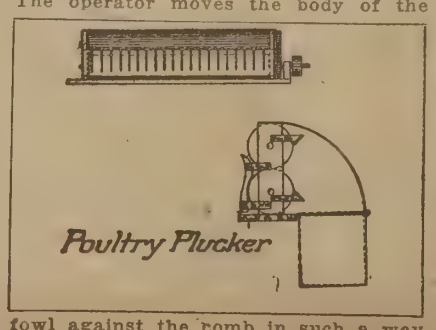


Pin-Feather Plucker

a current of air. The air is drawn through the steel roller, which is made in the form of a hollow spiral for this purpose.

Plucking Machine.

This machine has a broad-toothed comb in front of two revolving rollers. The operator moves the body of the



Poultry Plucker

fowl against the comb in such a way that the feathers pass through and are plucked by the rollers.



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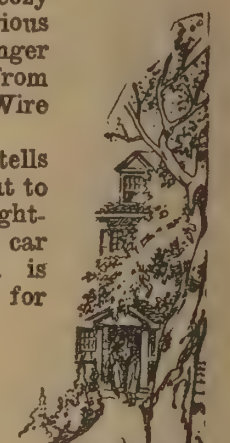
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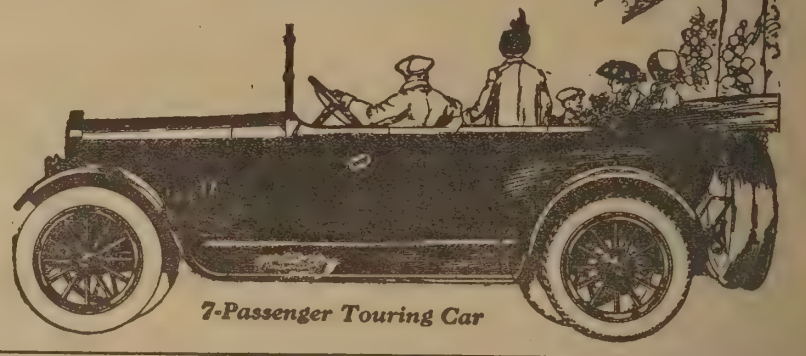
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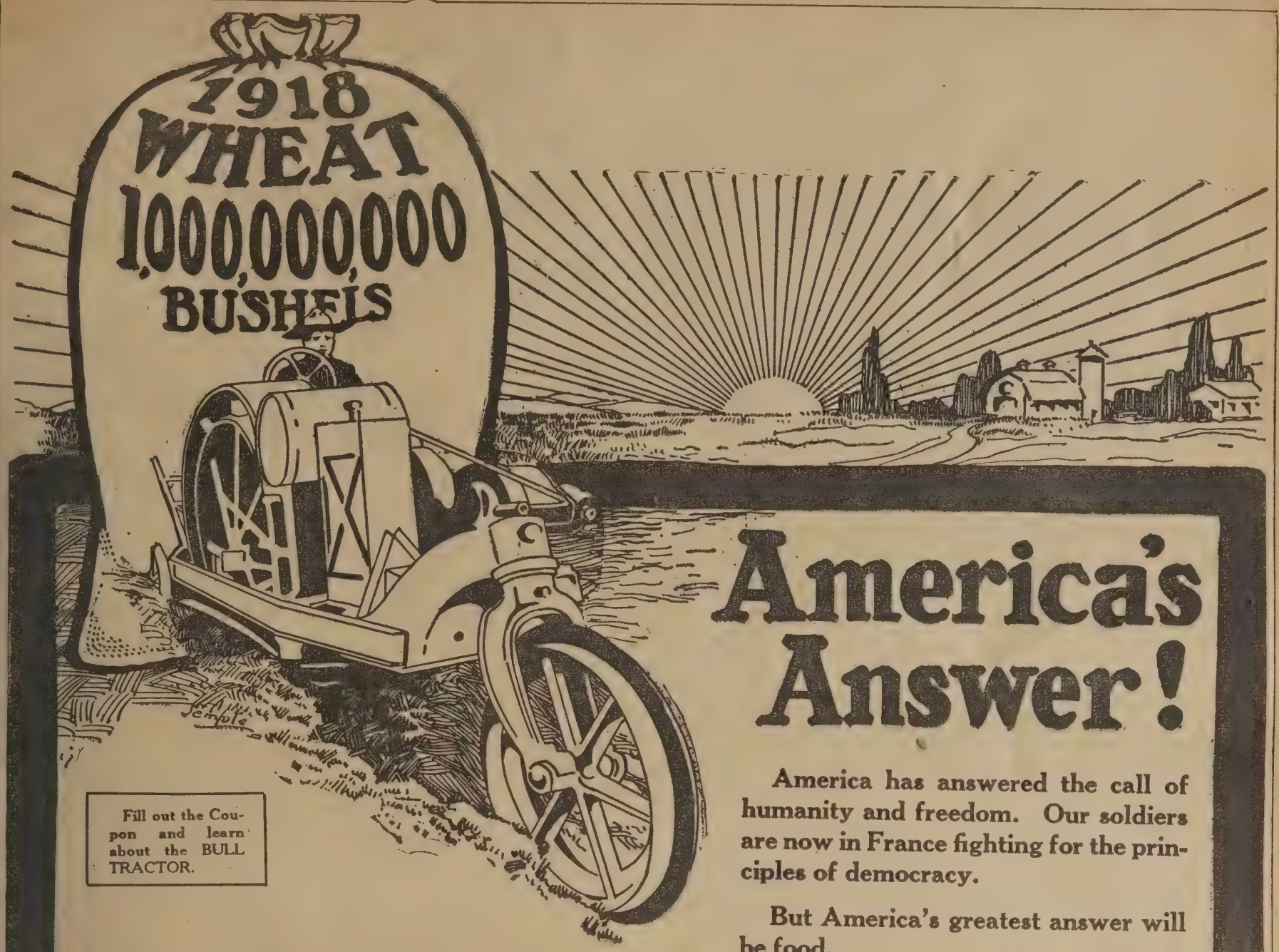
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W. F. 9-27-17.

More Kaiserism Shown

Utter Treachery Is Common Practice

Further evidences of the just grounds back of this country's break with Germany, and further justification of the stupendous war preparations that are now changing the face of American life are daily being revealed. It was not enough that Germany should seize upon an insignificant incident as a ground for launching a world war; that she should hold bona fide treaties as mere scraps of paper and ravish helpless and peace-loving nations; that she should wantonly destroy thousands of neutral and noncombatant lives on land and sea by the most inhuman means yet devised. It remained for the kaiser's hand of treachery to reach into practically every corner of the world, violating without stint all international law and disregarding every neutral right.

German Treachery.

While professing friendship for America the kaiser and his men were plotting secretly to involve America in war with Mexico and Japan, fomenting industrial disorders in America and destroying American factories. While professing friendship for America, the kaiser and his men were financing an organization in this country designed to influence congress in such a way as to handicap President Wilson in his dealings with Germany, and prevent the United States from standing up for its honor and its rights. This is one of the latest disclosures at Washington, D. C. Copies of a telegram sent by Count von Bernstorff, former German ambassador to this country, asking his government at Berlin to advance $50,000 as a fund with which to influence congress, are in the hands of the department of state at Washington. That this was not the only like offense, and that the ambassador had no doubt but that the money would be forthcoming are shown by his reference in the telegram to the influence he wished to exert on congress "as on other occasions," and by his statement that he would proceed on the assumption that the money would be appropriated. This message was sent January 22, significantly just before Germany's announcement of its ruthless submarine campaign.

Likewise, while Germany was professing friendship for Argentina, the only great food-producing nation to hold out long against the German violations, she was sending secret messages from the German embassy in Argentina's capital to Berlin instructing submarine headquarters of the movement of Argentine vessels, that they migfiht be torpedoed and sunk "without leaving a trace." Unfortunately, the Swedish government was involved in the transmission of these messages, though whether wilfully or not has not yet been decided.

Another revelation showing the total lack of humanitarian spirit on the part of the leaders of the German propaganda is that of the discovery in Rumania of hidden cultures of disease microbes which documentary evidence seems to prove were prepared for the sole purpose of infecting the cattle and horses of that country with contagious disease. In like manner, high explosives were secreted for use in destroying Rumanian industry. The treachery shown by these revelations is all the more great in view of the fact that Rumania was at that time a neutral country, though it appears that Germany anticipated that sooner or later the two countries would be at war.

Such a record on the part of Germany certainly explains to the satisfaction of every American patriot and lover of honor and fair dealing between men and nations why the United States is in the war, and why she is appropriating billions of dollars and calling hundreds of thousands, even millions, of her best men to carry it on to a successful conclusion. Certainly it explains why terms of peace, from whatever source they may emanate, can not be considered until they are so drawn as to remove the German kaiser and his blood from the seat of power and enthrone a government in Berlin that will respect human rights and cooperate with the rest of the nations in democratizing the world.

Argentina and Germany.

At this writing a declaration of war by Argentina against Germany has not been made, though the break is still likely to occur. The Argentina congress was preparing to vote on the matter when a note came from Berlin expressing something in the nature of a disapproval of the action of her former minister to Argentina in transmitting the messages to Berlin designed to aid in the destruction of Argentine shipping. Argentina's action is delayed pending a consideration of the note, which is not believed to be satisfactory.

Ship Builders Still Out.

Strikes in the shipbuilding industry on the Pacific coast continue to tie up building operations that are greatly needed to continue by the government. Six thousand men are involved in a strike at Portland, in addition to something like 25,000 at San Francisco and a large number at other coast yards. The government is attempting to effect a settlement of the controversy, which is largely one of desired increase in wages. A truce has been declared in the San Francisco strike, which may result in a return to work some time this week.

Impeach La Follette?

As an immediate result of utterances which many believe were little if any short of treasonable, the Washburn Loyalty league of Washburn, Wis., has requested Senator Bob La Follette to resign his seat. "A long-suffering Wisconsin electorate refuses to be longer disgraced by your acts and words," says the request. A message was also sent to the United States senate asking that impeachment proceedings be brought against the senator. It was at St. Paul that he made his recent public statements claiming that the United States was not justified in being in the war against Germany, and an official investigation has been started by Minnesota authorities looking toward his possible arrest on the charge of seditious utterances. The governor of Minnesota has issued a statement that the senator would not be held immune from arrest if the charges were found to be well grounded.

Germany Wants Peace.

That Germany is anxious to secure peace appears evident in reports that continue to come from Berlin, though as yet nothing in the line of a suggestion that the allies will consider has come forth. Germany has answered Pope Benedict's peace appeal favorably. The United States and her allies, however, have agreed to no further peace talk until such time as it is forced by another appeal or until something reasonably satisfactory comes from Berlin in the form of an offer of negotiations.

Alfalfa

Cures While You Handle the Hay

By CLARENCE VALENTINE, Loomis, Wash.

The Q. S. ranch has about six acres in alfalfa. I cut 22 big loads this season. We have no irrigation and there has been no rain here since June 10. After the last crop is off I use it for pasture. It is good for dairy cows and hogs and a fine feed for chickens. I cut the alfalfa just as soon as the first bloom is in sight, follow up closely with the rake, get it into the windrow, then in the shock, then put it in the barn or stack it. It cures while you handle it. Then spread it around well, tramp it down good, and it is the finest feed in the winter that grows, for cattle, hogs and sheep. I never have had any experience with silage. In preparing ground for alfalfa it should be plowed deep in fall or early spring. Cultivate well before seeding with harrow. Try and sow just before a rain. Harrow it in, then float it. By doing this it comes up before the weeds do. Sow oats for a nurse crop. It makes fine hay after the second season. It wants to be harrowed in the spring as deeply as possible. The more you cultivate alfalfa the better it produces. Hogs will winter on dry alfalfa as well as cattle.

Farmers' Market Successful.

The King County Farmers' Public Market has been in operation for the last few weeks, and is meeting with fair success, reports F. W. Rader, county agriculturist of King county. A number of communities are endeavoring to market their surplus, cooperatively through this new market. A large number of small land owners have signified their intention to plant additional garden truck next year, saying the changes in the city ordinance governing this public market makes it possible for them to dispose of their products at a paying figure.

Live Stock Well Balanced at Yakima

(Continued from page five.)

pion filly, Queen Lucile, is growthy, but has much quality.

Standard breds and Morgans showed together and competition was sharp. The fine-acting, handsome 3-year-old standard-bred, Brooknook Czar, owned by Rev. H. C. Stover of Salem, Ore., won champion honors over H. E. Angel's Morgan, Quesal, though the latter is also a very handsome, show animal. Emily L., one of Mr. Angel's Morgans, a yearling filly, won female champion honors.

Professor C. F. Monroe, county agriculturist of Grays Harbor county, Wash., placed the ribbons.

The following are the horse awards:

Percherons.

Stallion, four years and over—1, A. R. Hunter, Island City, Ore., on Kroumir; 2, W. E. Arnibrook, Goldendale, Wash. All other Percheron awards went to Hunter, as follows: Three-year-old stallion—1, on King; two-year-old—1 and 2, on Donald and Salem; under one year—1, on Dudley Kroumir.

More than four years and over—1 and 2, on Grace and May; two-year-old—1, on Alice Kroumir. Champion stallion—Kroumir. Champion mare—Alice Kroumir.

Clydesdales.

O. I. Trice of Grandview, Wash., the only exhibitor, received the following awards:

Three-year-old stallion — 1, on Byron's Prince; two-year-old—1, on Byron McQueen; under one year—1, on Liberty Bond.

Mare, four years and over—1, on Queen Lucile.

Champions—Byron Prince and Queen Lucile.

Coach Horse.

John Walker was awarded first and championship on the stallion, Raven.

Standard Bred and Morgan.

Stallion, four years and over—1, H. E. Angel, Donald, Wash., on Quesal; 2, B. F. Quesenberry, North Yakima, on Dan of Spokane. (Both Morgan.) Three-year-old—1, H. C. Stover, Salem, Ore., on Brooknook Czar, (standard bred). Two-year-old—1, A. Helmich, North Yakima, on Aberdour. Yearling and under one year—1, Angel, on Texas Morgan and unnamed, (both Morgans).

Mare, four years and over—1, Angel on Bess of Spokane; (Morgan); 2, Stover on Nymphea, (standard bred). Two-year-old—1, Angel on Lassie Golden. Yearling—1, Angel on Emily L. Under one year—1, Angel on May Day. (All three Morgan.)

Get of sire and produce of dam, both won by Angel.

The Cattle Show.

Dairy cattle were represented by three breeds, Holsteins, Jerseys and Guernseys, besides five head or Brown Swiss, in smooth condition, shown by Ed Mycosick of La Grande, Ore.

Carnation stock farm of Seattle and William Bishop of Cimacum, Wash., each showed a full herd of Holsteins, while J. H. Hulbert of Mount Vernon, Wash., showed 13 head and William Todd & Sons of North Yakima four head. These latter were very uniform and typy senior and junior heifer calves, reflecting credit on their sire. But it seemed odd to not have Davis, Marks and Todd all present with full herds.

Carnation Stock Farms were accorded a majority of the blues, and their bull, Hazelwood Sir Ormsby, recently purchased from John L. Smith, won grand championship, defeating their own former champion, Matador Segis Walker, who was placed third, while William Bishop's Canary Paul Loren DeKol stood second. The latter has great size, a strong back and hips and thighs of very satisfactory style. But Hazelwood Sir Ormsby has not only the back and hips needed to make a great bull, but he has a magnificent front and was in a little the better show condition. He has never been defeated except by his sire. For champion cow, while there were a number of great cows, including some that have won champion honors, there was no chance to defeat Bonnie Ormsby Lass, the great cow that William Bishop has so successfully shown at the Panama-Pacific and other stock shows. She holds her quality from head to udder, and shows dry almost as well as fresh. Junior honors went to Carnation's Matador Segis Walker 6th, defeating Mr. Hulbert's La Connor Pontias Howtje, that has won at previous shows, but did not show as well as usual, while Hulbert's very sweet heifer calf, La Connor Pontiac Grant, won female junior championship with credit to herself and Mr. Hulbert's herd sire.

Two herds of Jerseys competed. Clifford Reid of Portland, Ore., secured all championships, after his great show bull, Onota's Cotillion Boy, had been defeated by his own bull, Violet's Noble Fern. But he had no walkover. Emil Erickson of North Yakima had a very smooth herd, throughout. His herd bull, Sutton Star, has long hips, good head, much quality and, while Violet's Nable Fern won, correctly it was very close. So with the 3-year-old cows, on which the decision was again close.

Middledale Farm of Goshen, Wash., had the only herd of Guernseys. They showed cattle in fine condition, displaying Guernsey type and dairy quality to the best advantage. Their herd sire, McDonald Wakefield Prince, a Longwater bull, was made senior champion, but both grand championships went to the juniors, which reflects credit on the sire and on the Middledale method of breeding and developing.

Shorthorns were represented by Day & Rothrock and A. D. Dunn, with splendid, well-fitted herds of mostly young stock. Dunn's great cow, Scottish Jane 2d, and his bull True Boron, were given senior champion honors, while Day & Rothrock's juniors won the grand championship. Their champion heifer, Topsy 4th, has improved even from a year ago, when I considered her one of the sweetest things I had ever seen, and one of the most promising.

Congdon & Battles made the Aberdeen Angus show, with the exception of two entries by the state college, and a great show it was. From the great old bull Eileenmeer, that has won in

(Continued on page twenty-four.)

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For $10 Buys a Pony With an Evil Reputation

The Ups and Downs of a Bunchgrass Boy---No. 28

Part II.

By JOE L. ASHLOCK

Copyright, 1917, Joe L. Ashlock.

After I had ridden Rowdy, my buckskin pony, over the 60-mile stretch of country betwen our home and Waterville, selling White's history of the Spanish American war, winter was on us. So I loaded my books in my one-horse sled, hitched Rover to the sled and started out to make my deliveries.

My first mishap occurred going down into Moses Coulee, where the wagon road was high in the middle and worn deeply into the wheel tracks. Rover, compelled to walk in the high, slippery middle of the road, kept slipping into the deep ruts. I should have had my shafts set out to the side; but this precaution I had overlooked. So we made out the best we could.

By and by a big, angular rock covered with snow and set up in the high middle of the road, stopped my sled with a yank. The jerk pulled the shafts loose. Startled Rover leaped forward. I stayed with the lines and was dragged over the dashboard and out in the snow. Then and there the broncho and I fought our first real battle.

Strong lines and a bit that was cruel when jerked made the odds against the horse. He circled and reared about me for a little while, but the bit was too much for him. So he quieted down. I tied the shafts to the sled, using the halter rope and the "hold back" straps for this purpose; and we proceeded.

A day or two later, while I was delivering books in the settlement between Moses coulee and Waterville, a man noticed that I was driving without hold-backs in my harness. He told me that some day the sled would run onto the cayuse's heels. I would have a runaway then, he warned me; and if I didn't look out I'd get my head kicked off.

I should have taken the warning, but didn't. My way of getting down a hill was to let Rover gallop fast enough to keep out of the way of the sled. Bronco-like, trained to the saddle, galloping in the harness was to him the same as galloping under the saddle. It was the same with running. Also, when I left him tied, if tired he would lie down in the shafts just as if he were saddled instead of being hitched, crossing the shafts over his back and getting all tangled up in the lines. Several times on my trip people saw him lying down in this fashion and came up in a scared way to untagle him, thinking he was choked, or "down" for some other reason. They always looked sheepish when they got near and saw he merely was taking a snooze. When I came up I would slap him on the neck, and tell him to get up, first pulling the sled around or lifting his hind feet so that he would not get up astride of one of the shafts. People standing near often would warn me to "look out." They were alarmed merely because they didn't know Rover. I knew him.

However, I believe no one ever becomes so well acquainted with a bronco cayuse but that sooner or later they touch a spot in the mind or hide of the horse with which they are unacquainted. Grief may follow. This nearly happened to me when Rover, the sled and the sled load of books all started down the long Douglas hill east of Waterville. I forgot about not having the holdbacks. The sled went against Rover's heels; followed, a bang, a crash and a runaway.

In the first hundred yards of that runaway I did some fast thinking and, some fast going. The beginning of the Douglas hill is a slope of a few hundred yards; then you go up a short, steep hill, over the top, and strike the long grade which, after a short, steep plunge, curves around the rocky hill. My chance of getting to the bottom of the hill right side up were about as good as those of a camel to go through "the eye of a needle." I had to stop on the upgrade if I stopped without a wreck.

Now, a horse running at top speed doesn't kick very efficiently. To kick with both hind feet at once the horse must stand on his front feet; and he can not do that and run. For the same reason a swiftly running horse can not kick with one hind foot. Most of you who have observed runaways have noticed, if you noticed anything, that the kicking was done before the runaway commenced or when the horse was slowed down.

This was what happened in my case. The sled went into Rover's heels. He promptly kicked pieces of the dashboard past my ears. I dared not pull the lines hard, for by so doing I would pull the sled any myself under his heels when he was not going so fast but that he could kick.

It was different, however, when he started to run. Taking the risks the act involved I set my heels, wound my hands in the lines and pulled—not jerkily, but with a steady, cutting pull; and every time the horse's head came up I held it there, and pulled harder. I pulled so hard and so cruelly that after the first plunge or two, Rover's head came around and I saw blood starting from the corner's of his mouth.

Pulling the sled into the heels of the runaway was not a good chance to take but it was either that, jump and lose my sled and books, or go over the hill—and in going over the hill there was no chance.

I thought we were going over, but on the very crest of the hill Rover slowed down. Right then I began to climb out of the way of his hind feet for I knew they would be coming. They did, and the rest of the dashboard flew up in the air. We had slowed down sufficiently to enable me to jump out. With one hand I held the lines against the bit which was not one of the "humane" kind and tortured the horse cruelly when pulled hard; with the other I managed to pull the sled back to the end of the tugs, a little out of the way of his kicking hind feet.

But Rover kicked himself loose from the sled, taking the shafts out of their unstable moorings. We fought in a circle, and I think the bit and the strong lines were all that saved the day. Finally he stopped. I used the halter rope and a piece of wire and other odds and ends to piece my outfit together so that we could travel. The excess length of the lines I used for hold back straps to get me down the Douglas hill without another smash.

The frosty, moonlit night was well advanced when I was driving three miles east of Waterville, which town I had determined to reach. We were speeding along the smooth road, thankful that all was well—when in a flash, it wasn't!

One of my runner-irons had been broken in some way. The broken end caught on the angular edge of a solidly anchored stone, and stopped the sled with a bang and a crash.

Rover, trotting steadily along, went right ahead, shafts and all. Hanging to the lines, I followed, yelling whoa. But he didn't whoa worth a cent. It took the bit and the lines to do it, and again his mouth bled. Once more I tied my outfit together; once more I got in the sled, which now had no dashboard, and kept running to one side of the road, and said "Get up!"

We got to Waterville safely. I was headed for Tom East's place at the west end of Main street, meaning to put in there for the night. Rover, the bunchgrass broncho, was a good deal of a country jake. He didn't like electric lights a little bit, and said so with several snorts which must have awakened everybody in our end of town.

Just before we reached the alley entrance from the street to East's barn, in the rear of his house, we passed under a big arc light. The thing sputtered loudly just as we passed under it—had been waiting for us, I think. Rover had already informed the sleeping public of his dislike for electricity—and this was adding insult to injury! He went off like a bomb. Sled, shafts, books and all, blew up in the middle of the street. The arc light, having started a good thing, kept it up and sputtered on.

Leaving the sled untenanted in the middle of the street in the full glare of the sputtering arc, Rover and I made our tumultuous way down the alley to East's corral gate, which was at the end of the alley and open. Rover plunged into the gate, dragging me by the lines. Ahead, I spotted the barn door, which was open, and headed the runaway horse for the door. We missed it three feet, hitting the side of the barn with a bang and a crash. I thought the whole barn was coming down on top of me.

Easts had gone to bed; but Tom—then clerk of Douglas county—heard the racket. He got out of bed, opened an upstairs window, stuck his head out, and called down: "What's up out there?"

I called back that I had had a runaway and landed in his corral. I heard him laughing and saying something to Mrs. East, who had also been awakened. Presently, to me, he said that he reckoned I had landed in a good place. Directly he came out dressed, and helped me put my snorting, prancing broncho into a stall, where we soothed his troubled spirits with some town hay and oats.

The next day, helped by most of the boys in East's end of town, I dragged my sled to a blacksmith shop for repairs. Likewise, I took my harness to a harness shop. Rover was skinned up a bit, and his mouth was sore; but his love for East's oats and hay covered a multitude of sins so far as his persecutors were concerned. His eyes showed a quiet, peaceful brown and no white; so I left him to the joy of a deep manger full of hay and a box half full of oats. My hands ached where the lines had jerked and cut against them. Something, I don't know what, had biffed me in the side, making a black, sore place as big as your hand. But when I counted my books they were all there and uninjured.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University).

What Wrinkles Tell People About Your Disposition



Dr. Hirshberg.

Worries, passions, anger, bitterness, pessimism, blue devils, sorrows, envy, irritability and scandal-mongering are a few of the self-torturing ideas which help to produce wrinkles.

These facts also go far to explain why wrinkles are more common among women than among men. Men generally take a bigger, broader view of their neighbors and the world at large, hence they have fewer wrinkles.

Almost any tense, repeated twist of the muscles of the forehead, face and neck may be looked for, sooner or later, to produce furrows, lines or wrinkles. While an unemotional thought may not cause a crease, as a matter of fact, there is scarcely any thought unaccompanied by feelings and sentiment. It is the emotion continually interwebbed with the memories and thoughts, which stamp themselves indelibly upon your face.

You, as well as doctors, can tell much that goes on in another person's mind by a swift, almost unconscious glance at the faces round about.

The Mean and Kind.

A mean-minded woman or man, one who thinks the world is all wickedness and villainy, has wrinkles about the nose, which seem to pull it upward. You may expect a fanatic who thinks all who believe in some other than her religion to have these lines, or perhaps, a narrow-minded bigot, who considers all others wrong if they do not fully agree with him.

Wrinkles and creases which burst forth like the radiant sun, from the corners of the eyes seem to be coupled with good-humor and optimism.

The physician who notes such a sunburst radiation at once sets the proud possessor in the cheerful, gladsome-hearted class. A sense of humor, a great wit and repartee and a most kindly heart are spelled into this alphabet of spokes.

When you see lines and wrinkles on the forehead, which are parallel like lines of music, from side to side, you may judge justly that elevation of the eye-brows, in mock surprise, is a habit of the owner. If these lines seem to sag a bit in the middle, it means that a pleasant disposition, a tolerant nature, love of peace, readiness to be unselfish in other people's cause and a sacrifice of self for the sake of harmony, are present.

Perplexity, as a habit of thought, soon shows itself in the face by a set of shallow wrinkles situated between th eyebrows. Interrupted and short wrinkles cause the narrowed forehead between th eyes. These same symbolic creases mean narrowness of mind, dogmatic positiveness and a habit of faultfinding and worry.

What about those, however, who have not one line or furrow on their brows? Such wrinkleless, flat, broad foreheads denote vanity, selfishness, overwhelming conceit, coldness of heart, dictatorial positiveness usually wrong and a cold, steel-like heart. An unforgiving temperament is then to be expected.

No Commandeering of Food in the Home

A Washington dispatch says the untraceable rumor that the government intends to take canned and dried foods from homes persists and has spread to such an extent that the department of agriculture today placed an explicit and official denial in the hands of every county agent and representative, with instructions to give it widest publicity.

The government never has contemplated commandeering foods from the homes in any sense.

If people would read the law instead of giving ear to wild rumors much needless alarm would be prevented. It was to protect its readers against such misinformation that the Farmer printed the full text of the food control law.

The government has no authority to seize home stocks of food supplies. Its power to commandeer supplies for the navy, the army and other public uses is limited and defined as follows:

Section 10. That the president is authorized, from time to time, to requisition food, feeds, fuels and other supplies necessary to the support of the army or the maintenance of the navy, or any other public use connected with the common defense, and to requisition or otherwise provide storage facilities for such supplies; and he shall ascertain and pay a just compensation therefor. If the compensation so determined be not satisfactory to the person entitled to receive the same, such person shall be paid 75 per centum of the amount so determined by the president, and shall be entitled to sue the United States to recover such further sum as, added to said 75 per centum, will make up such amount as will be just compensation for such necessaries or storage space, and jurisdiction is hereby conferred on the United States district courts to hear and determine all such controversies.

"Provided, that nothing in this section or in the section that follows shall be construed to require any natural person to furnish to the government any necessaries held by him and reasonably required for consumption or use by himself and dependents, nor shall any person, firm, corporation, or association be required to furnish to the government any seed necessary for the seeding of land owned, leased or cultivated by them."

Under this provision of the law the government could, if it were necessary to secure supplies for the army and the navy, requisition the surplus produce of a farmer. It would have to leave him, however, ample supplies for his family and ample seed stock for his farm, and pay him a fair price for the commandeered supplies. There is, however, no probability that such action will be necessary.

A Wayfaring Man

The Sensation of a Discarded Farm Well

By PAUL E. TRIEM

If we had expected that there would be any decided change in Dr. Brocton's habits or his manner toward us, following his work as nurse and physician during my husband's illness, we were disappointed. As John grew stronger and was able to be about, the physician drew more and more into his old, taciturn avoidance of us. For a while he ate at our table, but I was not deceived as to his purpose in this. He was still keeping his eyes on the convalescent; and as soon as the latter was fully recovered he left us abruptly and went back to his cabin.

And still, there had been a change. It was in his manner toward Lena, whom I often caught him watching curiously, gently, with something of remorse in his deeply sunken eyes. Then he would shake his head and turn away. He avoided me, habitually; indeed, he seemed hardly conscious of my existence.

Late in November he left us, promising to return in time to help with the spring work; and it was the second day of March when we next saw him. He came swinging into the ranch yard, followd by a younger man in a mackinaw coat.

Dr. Brocton strode up to where John and I were standing and spoke vehemently. "I have told this fellow that I wasn't going his way," he said, "but he persisted in following me. I am not responsible for him in any way, however—please understand that!"

The stranger was a mild mannered person, with sandy hair and milky blue eyes. He smiled deprecatingly at Dr. Brocton's vehemence.

"Our friend wasn't going my way, but I was going his," he explained. "So I came with him, and most entertaining company he is, I assure you."

This was our introduction to "the wayfaring man," as he described himself—"A plain wayfaring man, with a faculty for discovering unusual things." He arranged to board with us indefinitely, and at once began wandering about the neighborhood. His name was Sparger.

There was an antipathy between the wayfaring man and Dr. Brocton, and I believed that it was as a direct result of the physician's share in this feeling that he again took to eating with the rest of us. He seemed anxious to watch the newcomer, and punctually three times a day he appeared at the table.

One evening Mr. Sparger came in to supper late. He seemed preoccupied; and when he was half way through his meal he suddenly laid down his fork and addressed my husband.

"What value would you put upon this land of yours?" he demanded.

John stared. "The ranch, do you mean?" he asked.

"Yes. You have a government deed to 160 acres of land. What's it worth? What would you sell for?"

John glanced at me. "I don't think we would care to sell," he replied. "It would be hard to invest the money so that it would bring us the same income we get from it here."

"Everything has its price," the wayfaring man insisted. "There must be a figure at which you would be willing to sell. What would it be?"

There was something oddly persistent in his manner, and I noticed that Dr. Brocton was watching him narrowly.

John, too, was affected by the stranger's earnestness. My husband was a hard working man, with a considerable liking for money. Now his glance grew hard, and his lips tightened. "I would sell for twenty thousand dollars, and not a cent less," he declared.

Mr. Sparger nodded. "I'd like a sixty-day option on your land at that figure," he said. "I'll pay one hundred dollars for the option—"

He was interrupted by a cry from Lena. "You wouldn't sell the ranch, John?" she protested. "Think what it has been to all of us—what is money? It would be a crime!"

Something that was almost a snarl came into Mr. Sparger's voice as he started to reply. "I'm talking business," he declared angrily. "If Mr. Carlson——"

"I'd like to know a little more about this," John interrupted. His eyes glowed, and I saw that his hands were clinched so that the knuckles were white. "What do you want to buy for? You're no rancher."

Mr. Sparger had taken from his pocket a printed form, which he was filling out. "You and your wife sign this," he commented tersely. "Here's your hundred dollars—and I'll tell you all about it directly after you've set your signatures to the paper."

John took the fountain pen which the other offered him and signed his name defiantly. Then he pushed pen and paper over to me. "Sign there," said he.

A moment after Mr. Sparger had examined our signatures and had handed over the hundred dollars in gold, he leaned back with a sigh and looked pleasantly about him. Then he took from a side pocket of his coat a bottle which was half full of dirty, oily looking fluid.

"There's a hole some 40 feet deep up beyond your orchard," he began.

John nodded. "We started to dig a well there after Dr. Brocton had discovered that the spring was unsafe to use," he explained. "Then we found a place where the drainage was better, and left it just after we struck water."

The wayfaring man nodded. "Just so. Well, I told you when I came out here that I had a faculty for discovering curious things. And in that well I found—" he paused and held up the bottle, "I found oil!"

He was smiling triumphantly upon us.

A sort of chalky pallor swept over my husband's wind-burned face. He licked his lips and whispered, "Oil!" Then the color surged back into his cheeks and he laughed bitterly. "So, that's why you were so willing to pay a fancy price for my land! I suppose you've snapped up everything else in the neighborhood?"

Mr. Sparger nodded. "Everything," said he. "But you musn't suppose that I'm the kind to take advantage of you, who have been my host. I had to protect myself, but you'll lose nothing through me."

He launched into details, and for more than an hour held us all fascinated—all except Dr. Brocton, who sat scowling at him. When the wayfaring man had finished Dr. Brocton spoke, for the first time that evening.

"Who's backing you?" he demanded. "It takes money to do these things—and you don't look to me like a capitalist."

Before Mr. Sparger could answer, John spoke. "You'll please not interfere in this matter, Doctor," he said harshly. His eyes were feverish, and I saw that his knuckles were still white with the tension of his clenched hands.

Next morning John and the wayfaring man went out to look at the well. I could see that my husband was shaken through and through by this vision of sudden wealth, and I feared that the effect upon him would not be good. He had joked Lena at the breakfast table, but always there was a gamester's elation upon him.

"No more spraying and packing for us, sis!" he cried. "We'll go to New York and see the sights. We'll eat apples and let other people have the work of raising them."

"I'd rather raise them," Lena said. "There's nothing in money, except the fun of earning it."

Dr. Brocton came into the kitchen while I was getting breakfast and told me that he was going on a hunting trip into the foothills. He took some bacon and corn meal with him, and said he might not return for a week or 10 days.

"There'll be no work done here for a while," he said bitterly. "I'll mind my own business better if I keep out of the way."

I tried to apologize for my husband's rough speech of the night before, but he silenced me by a look. "Madam," said he, as he was taking his leave, "I'm praying for your husband to come through this trial with nothing but the dross burned from character. He's a young man—and he doesn't yet know the curse of unearned money!"

I had always lived in a farming country, where such events as the finding of gold or oil were unthought of; and the rapidity with which the lust for wealth swept through our neighborhood was a revelation. In the years we had lived in La Grange valley we had seen it chang from a wilderness to a prosperous community. There were substantial houses and barns near us, and the orchards and alfalfa fields were making the district famous throughout the northwest. And now men forget their plans and their dearest wishes as if they had been dreams, and began chasing the rainbow.

Our house was the storm center. Men came from all around to see the famous "oil well," and to sniff at the bottle which Mr. Sparger always kept in his possession. He was making a more careful examination of the neighborhood, preparatory to going east for capital to develop his prospects.

"What I don't understand," commented young Bill Schmitz, who had taken up a homestead next to ours, "is how we happened to be such fools as to give him options on all this wealth! It ought to belong to the community—and we've bartered it away. Why don't you talk to him, Carlson, and see if you can't get him to let us in?"

That remark was the spark which touched off the explosive under-current of feeling in the neighborhood. A committee of eager, anxious-eyed men surrounded the prospector and argued with him. Mr. Sparger was pleasantly obstinate. He felt kindly toward the neighborhood, but business wasn't pink tea, and he was in the thing for what he could make. He was paying us all top-notch prices for our land—or would be when he took up the options; and aside from a little good will offering which he felt it his duty to make to his host he believed that he had done his duty by the community.

"We aren't asking you to give us something for nothing!" Emil Schmitz shouted. "Give us a chance to invest—we can form some kind of a company and push this thing, just as well as people back east could!"

Mr. Sparger was evidently impressed by this idea, and his hesitation was the signal for another outburst of pleading. He asked to be allowed to consider, and finally a time was appointed for a public meeting. Mr. Sparger had consented to let the community back him, if any way could be found of turning its wealth of land and timber into money.

We ate supper alone that night—just John and Lena and I—for the first time since the wayfaring man had come among us. Mr. Sparger had gone to stay for a couple of days with a neighbor.

"I wish he had never come here," Lena said bitterly. "I don't see how you can trust him. He is always smiling at some joke no one knows of but himself. He never looks any one in the eye."

I had felt this. "Do you think he is honest, John?" I asked, anxiously.

My husband was the best-tempered man in the world, but the strain of excitement and anxiety was telling on him. He flared up and spoke angrily to us, saying that we had been infected by Dr. Brocton's jealousy of the oil man. Next moment he softened and begged us to forget what he had said.

"It's only you I care for," he insisted, penitently. "It's our one big chance, and you mustn't ask me to do anything to sacrifice it. We'll be millionaires this time next year."

After John had gone to the meeting, which was called for Wednesday afternoon, Lena and I wandered about the house, avoiding each other as much as we could. Neither of us cared to confess to the anxiety we felt. There had been secret conferences betwen my husband and most of the other men in the neighborhood, and a notary had come out from town and put his seal to a bunch of formidable looking documents. One of these John asked me to sign.

"It's a note and mortgage," he explained casually. "I may not need it, but in case we succeed in getting together on this plan it'll be necessary to have everything ready."

I was sitting on the porch, still thinking of this mortgage which John had taken to the meeting with him, when the sound of footsteps on the gravel path reached me, and I looked up to see Dr. Brocton walking swiftly toward the house. The gun which he had carried when he left the ranch was gone, and he seemed worn and haggard.

He came straight to the edge of the porch and spoke. "Where is your husband?" he demanded. I told him that John had gone to a meeting at Mr. Caldwell's house, a mile up the valley. "What kind of meeting was it?" the physician continued, with an expression of fear in his eyes. Then, seeing that I hesitated, "Don't be afraid to tell me," he added. "You'll not be violating any one's confidence, and I must know at once."

In spite of his rather harsh personality there was an honesty and simple integrity in Dr. Brocton's presence which no one could mistake. I told him all that I knew—which was little enough—of the meeting, and of the events leading up to it.

I could see that the physician was mastering his excitement with an iron hand, but he heard me through silently. Then he nodded.

"I may be in time to prevent it," said he.

He turned, but at that moment my husband and the wayfaring man drove into the yard, and the latter jumped hurriedly out.

"Help Mr. Sparger get his things together, Jane," my husband called. "I've got to get him to town in time to catch the evening train."

I glanced at Dr. Brocton, who stroke forward and stood before the oil man.

"I want to ask," said the physician deliberately, "if this man has any papers about him which would give him any authority to dispose of your land, or any one's else land."

A livid band appeared about Mr. Sparger's mouth, and for once his eyes met his antagonist's fully and malignantly. He was about to speak, when my husband intercepted him.

"Get your grip," he commanded. "And you," he added, turning upon the physician, "let me ask you to be less inquisitive and meddlesome!"

Dr. Brocton's gray eyes seemed to be the poles of two high tension wires. They held the prospector motionless before him. "Any man has a right to interfere to prevent a swindler from accomplishing his work," he commented quietly.

John gave a sudden start and sat staring at the physician. "Prove what you say!" he cried. "Your opinion is worth no more than any other man's—prove what you say, or else get out of the path!"

Dr. Brocton nodded and drew from his pocket a sheet of paper, which he unfolded. "When I left here, 10 days ago," he explained, "I took with me a sample of oil from this well which I carried directly to town and forwarded to the state geologist, with a request that he analyze it and tell me whether a prospect which yielded such oil would be worth investigating. Here is his reply, which I received this morning." Dr. Brocton glanced at the wayfaring man, then read the short letter aloud.

"'In reply to your inquiry of the 10th instant would beg to inform you that your find is a highly interesting one. This is the first discovery in all history of a well which yields refined petroleum. In view of the fact that this may not be a hoax on your part let me assure you that oil such as you forwarded for examination is turned out by the refineries, but not by nature—it is not crude petroleum, but high grade lamp oil!

"'ALFRED S. CLEAVER,

"'State Geologist.'

"I appear to have established a bad reputation for myself at the university," Dr. Brocton commented grimly, "but I have had the pleasure of exposing a rascal! I'll trouble you," he added, "to hand over those papers. If you do it and get out of here within five minutes you may escape a coat of pitch and feathers—for I'm going to reassemble your committee of lambs and demonstrate to them that you never intended to take up your original options, that you couldn't have secured a cent of backing in any sane community for this scheme, and that, from the moment when you first loaded your prospect with kerosene you did intend that they should do exactly as they have done: back you with all they had, their homes. And you would have sold them out to unsuspecting third parties, whose claims the law would have had to enforce."

He stood erect and silent until the figure of the promoter had disappeared down the road, four minutes later. Then he turned and spoke gently to my husband.

"My son," he said, "God has been very good to you—for he has removed the scales from your eyes before it was too late. He doesn't do that with all of us."

Next moment he turned and was striding toward his cabin.

A Few Dependents.

Recruiting Officer—How about joining the colors? Have you any one dependent on you?

Motorist—Have I? There are two garage owners, six mechanics, four tire dealers, and every gasoline agent within a radius of 125 miles.—Judge.

Use Much Sugar.

We are now annually consuming more than 86 pounds of sugar a head, more than 430 pounds for every family in the United States, or more than a pound a day the whole year through. In this we are surpassed only by England and Denmark.

Boys If you want to earn some dandy prizes by doing some easy work among your neighbors, write to the **Prize Editor of the Washington Farmer, Review building, Spokane, Wash.**

All the World's a Stage, and All the Men and Women Merely Players

Dies After Long Illness.



Queen Eleanore of Bulgaria died recently at Sofia, Bulgaria. She had been ill for a long time. Since the outbreak of the war the queen had done considerable Red Cross work.

British Troopers Ford a Stream



British official photo.

In the above photograph British troopers are shown crossing the Yser on the western front. The Yser has overflown its banks this season and is more boggy and swampy than usual on account of intense shell fire which has made changes in the landscape. This is a British official photograph.

Foreign Secretary.



Photograph of Baron von Kuhlman, who was recently chosen to succeed Herr von Zimmermann as foreign secretary of the German empire.

Uncle Joe and Champ Clark Parade



Copyright by International.

North and south joined hands in the parade of the drafted men of Washington. The photograph shows "Uncle Joe" Cannon, former speaker of the house, and Champ Clark, present speaker, marching with the drafted men.

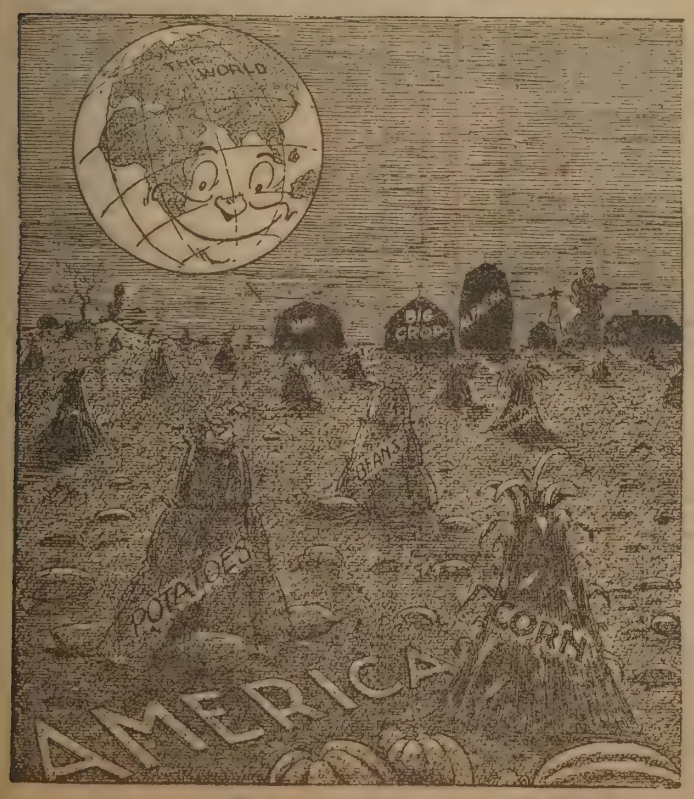
Bluejackets Take Baseball Abroad



Photo by Committee on Public Information.

The above is an interesting photograph just issued by the committee of public information, Washington, D. C., showing how the sailors of the American warships in British waters amuse themselves when they are ashore. The baseball game took place between teams from two of the American destroyers.

The Harvest Moon



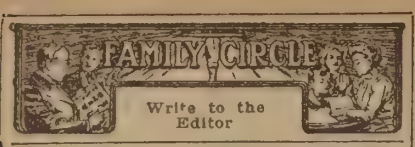
—Oakland Tribune.

Russian Women Troopers Brave



Copyright by International.

Russia's fighting women have enlisted in the ranks from all classes. Each carries a dose of cyanide of potassium to be swallowed in the event of being taken prisoner. Several already have been in action and have proved themselves able and gallant soldiers. They are known as "Battalions of Death."



ALICE W. BARLAND
Editorial Contributor

Where the Gleaners?

Should Revive Old-Time Custom

Harvest time has come again, and the crops in many places are small. Yet, with all our nation's call to save, many thousands of bushels of wheat will go back to Mother Earth ungathered.

Have the years of prosperity raised us above our Bible sisters, our colonial sisters, our pioneer sisters of the west?

Have Ruth and Naomi forever disappeared?

Have we not something in common today with our colonial grandmothers, who gleaned and knit and wove and spun, not for their own needs alone, but for all who were in need. For the men who sacrificed their lives for the liberty we have so long enjoyed.

My mother, who is now 81, was raised by her grandmother, who lived in the days of the revolution. She was taught all the thrift of the colonial times, and, in turn, mother taught them to her children, who came to her in the early days of the west, when everything that was raised must be saved in order that all be provided for.

The grain was cradled by hand, then tied in bundles with some of the straw, knotted by expert hands. The bundles were placed in piles, then hauled to the barnyard and stacked for the threshing, which was often done by hand.

As soon as the grain was placed in piles the gleaners commenced their work.

The daughters of the governors, as well as the daughters of the cobbler, blacksmith and farmer, went to the fields to glean the wheat that was left by the harvesters. Generally the heads were all placed carefully one way, then tied in neat bundles, but often the women would gather handfuls of heads, twict them from the straw and fill their large aprons. Early in the mornings and late in the evenings the fields were dotted with the gleaners, who generally rested during the heat of the day. How delicious was our bowl of bread and milk when we returned with mother after the gleaning hours were over.

The call to save has taken me again to the fields to see if our wonderful harvest machines were leaving anything to be gleaned. And, oh! I thought if such a harvest had been before Ruth and Naomi Boaz would never have had to order his men to leave more behind that they might have plenty to glean.

I made up my mind I would glean at least enough to make one bushel of wheat, if not to send to the Red Cross, to give to the poor in our own country, for it is a fact that before the war commenced there were little children in every city and almost in every town going to school hungry. The high prices are bound to increase the poverty in our midst.

I told my little ones about how we used to glean, and they became anxious to see how it was done. So we went to the fields two hours in the morning and two in the evening and filled our bags with golden heads of wheat. They really enjoyed it for I told them Bible stories of the gleaners and sang them what I could remember of the old song:

"Her Little Blue Apron to Fill."

"Before the bright sun rises over the hill
Poor Mary in the cornfield is seen,
Hard at work, hard at work all the day,
Her little blue apron to fill.
Why don't you grow weary and sit in the shade,
In the shade as the others have done?
'How could I grow weary and sit in the shade
When dear mother at home lies sick in her bed
And my poor little brothers are crying for bread,'
So Mary worked on with a will,
Her little blue apron to fill."

"Sing it again mother," the children cried, and I sang it again and again at their request.

"Call us early in the morning, so we can be gleaning before the sun rises over the hill."

They are working every night and morning now, whether I am able to go with them or not, and they are making great plans for the harvest they are gathering.

We have picked and put up 100 quarts of wild fruit. The children said it seemed like the berries were calling, "Pick us or we will fall off and rot." Their idea came from the fairy story of the good and bad girls.

Every one can not have a vacation in the fields and hills, yet there are few who can not be gleaners. Just gather up something that might be wasted and put it to use.

While in town last week I was making a little dress from a castoff big one, and before it was finished my opportunity came. I had often fed the hungry, for it is a tradition of our family, "if you never turn any one away from your door hungry you will never have to beg for bread." But I had never really clothed the naked, though I had often given clothes. With the little dress in progress I espied two naked children. Immediately I sought the cause, and found they had but one suit to their backs and that their mother was washing them. Quickly I finished the little dress and converted a middy blouse into a shirt, a small pair of pants were at hand, and I had the comfort of clothing the naked.

Join the gleaners old and you. No time to organize, no organizing necessary. Observe one law, "Love one another." Pay your dues by gathering up something good you can bestow upon others, if only kind words.

Where are the gleaners who will come
To help to gather the harvest home?
Who will gather some golden grain
A feeble life to help sustain?

ELLA KOHLHEPP.

American Falls, Idaho.



Look 'round our world; behold the the chain of love
Combining all below and all above;
See plastic nature working to this end,
The single atoms each to other tend,
Attract, attracted to, the next in place,
Formed and impelled its neighbor to embrace,
See matter next, with various life enduced,
Press to one center still, the general good.

—Alexander Pope.

Study Your Family's Tastes.

To the Editor: You must learn the tastes of those you are cooking for and by doing that you are ready to commence saving food. There are so many that never think on that line, hence so much waste. In the second place, never can any but the very best fruit. It is a waste of time and money.

MRS. JACOB FERBY.

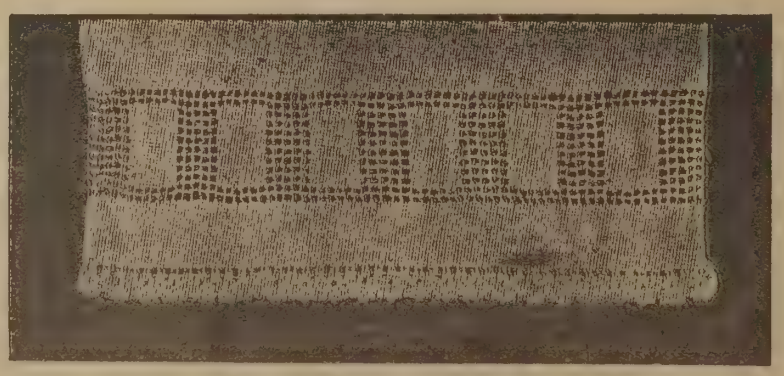
Hartline, Wash.

Crisp Pickles.

First wash pickles of same size and pack in jars without heating. Then to one gallon of vinegar add one cup salt, one-half cup mustard, one cup sugar, one-half teaspoonful of salicylic acid. Bring to a boil, then pour over pickles and seal.

Crochet and Tatting Designs

By WINIFRED WORTH.



Insertion for Bath Towel.

These useful towel motifs are easy to make. Follow the instructions for both the insertion and edging.

For the 12 open meshes chain 36. Make 5 rows of open meshes at the beginning and at the end 6th row leave 2 open meshes, filling the intervening 8 with treble crochet. Make 6 rows, then 5 more rows of open meshes; repeat for desired length. In center of 6 rows of treble make circle of French knots of any color, with lazy daisy stitches from top and bottom of circle. These were made with blue flochet. Two colors (pink and green) are very effective.

Detail of Edge of Bath Towel.

1st Row—Fill entire edge of towel with d. c. for foundation.

2d Row—Chain 5, skip 2, 1 tr., in 3d st., ch. 2, 1 tr. in next st., ch. 2, sk. 2, 1 tr., ch. 2, 1 tr., repeat entire length, turn.

3d Row—Ch. 5, 2 tr, on ch. of 2, ch. 3, 2 tr. on same ch. of 2, repeat.

4th Row—Ch. 3, 12 tr. in ch. of 3, fasten by sl. st. in top of next shell, repeat entire length, 12 tr. in every other shell, turn. Using color used in making French knots in insertion 2 dc., 1 p., 2 dc., 1 p., 2 dc., 1 p., 2 dc., in each scallop the entire length.

Our steam-pressure canning outfits include everything you need to put up fruits and vegetables. Write for free literature. Seattle Can Co., 1263 Utah, Seattle.

A Patriotic Appeal to Every Reader of This Paper

The Young Men's Christian Association is anticipating the GREAT NEED of right environment among our soldier boys, in the cities, in the training camp and at the front in the trenches. Send your "bit" for this work to Y. M. C. A. War Work Secretary, Spokane, Washington.

Help! Help! Help!

Everywhere they are crying for help, not inefficient or untrained, but real help, **help** that **knows.** Every business needs experts. Auto and tractor owners want the kind of help that will save the life of their machines.

ARE YOU READY TO FILL AN AUTOMOBILE EXPERT'S JOB?

My school is equipped from top to bottom with every device and gas engine part necessary to teach you the gas engine business. We have equipment—lots of it—for you to work on, from vulcanizing and welding machines, to twin-six and twelve-cylinder motors. Each student gets personal instruction from men who have been in the business for years. Every part of my course is practical and teaches what you need to know to be an auto or tractor success. Best of all, my charge for this complete instruction is within reach of every man who wants to learn, and my course arranged so you can take it all in seven weeks.

FREE AUTOMOBILE AND TRACTOR BOOK. GET IT

Send me your name today, and get my book, which describes my school, shows actual pictures of equipment, etc. Tells about LIFE SCHOLARSHIP which I give to my students FREE.

IOWA STATE AUTOMOBILE & TRACTOR SCHOOL
F. D. HENNESSY, President and General Manager
342 PEARL STREET SIOUX CITY, IOWA




rib

Mayo is the only medium-priced underwear that's actually knit in the dollar way—10 ribs to the inch instead of 8.


rib

10-Rib Knitting brings to Mayo Underwear added warmth and coziness. Turns men's winters into June. It's plain common sense to see that a closer-knit fabric is bound to be a warmer fabric.


rib

Buy 10-rib Mayo Underwear for ease and comfort. For, truly, never did you feel before such easy stretch and "give" as comes from 10 ribs to the inch instead of 8.

And, yes! Buy 10-rib Mayo Underwear for economy. For 10 rib knitting *does* mean longer wear.

Get 10-rib Mayo Underwear before winter *gets you.*

Mayo
Made from Mayo Yarn
WINTER UNDERWEAR for MEN and BOYS

The only medium-priced underwear that's "actually knit in the dollar way".

Men's winter Shirts and Drawers
Men's winter Union Suits
Boys' winter Union Suits

All dealers either have or can quickly get for you 10-rib Mayo Underwear

THE MAYO MILLS, Mayodan, N. C.

The Northwestern Business College

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M. M. HIGLEY, President.
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In answering advertisements don't fail to mention this paper.

Patterns

2203—A Serviceable Model—Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 6 1-4 yards of 44-inch material, with 3-4 yard of 27-inch material for the cap. The skirt measures about 2 3-8 yards at the foot. Price, 10 cents.

1924—Child's Dress—Cut in 4 sizes: 2, 4, 6 and 8 years. It requires 3 1-8 yards of 44-inch material for a 6-year size. Price, 10 cents.

1929—Ladies' Kimono or Lounging Robe—Cut in 4 sizes: 34, 38, 42 and 46 inches bust measure. It requires 7 1-8 yards of 36-inch material for a 38-inch size. Price, 10 cents.

2209—Girls' Dress—Cut in 5 sizes: 6, 8, 10, 12 and 14 years. Size 12 requires 4 1-2 yards of 44-inch material. Price, 10 cents.

2037-2060—Ladies' Costume—Waist 2037 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 yards of 44-inch material for a 36-inch size. For the skirt of the same width material, 4 3-8 yards will be required. Skirt 2060 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It measures with plaits drawn out, 3 1-2 yards at the foot, two separate patterns, 10 cents for each pattern.

2224—Ladies' Dress—Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires for a 36-inch size, 6 yards of 44-inch material. The skirt measures 2 3-8 yards at the foot. Price, 10 cents.

1864—Girls' Dress—Cut in 4 sizes: 8, 10, 12 and 14 years. It requires 3 1-2 yards of 44-inch material for a 12-year size. Price, 10 cents.

2221—An Ideal Under Garment—Cut in 4 sizes: Small, 32-34 inches bust measure; medium, 36-38; large, 40-42, and extra large, 44-46. Size medium requires 3 3-8 yards of 36-inch material. Price, 10 cents.

2205—Ladies' House Dress—Cut in 4 sizes: Small, 32-34 inches bust measure; medium, 36-38; large, 40-42, and extra large, 44-46. Size medium requires 6 1-8 yards of 36-inch material. Price, 10 cents.

2206—Child's Set of Short Clothes—Cut in 4 sizes: 1, 2, 3 and 4 years. The dress requires 2 1-2 yards of 36-inch material, the slip requires 1 1-2 yards, and the drawers require 1 1-8 yards, for a 3-year size. Price, 10 cents.

2197—Boys' Suit—Cut in 4 sizes: 2, 3, 4 and 5 years. Size 4 will require 3 1-4 yards of 36-inch material. Price, 10 cents.

1980—Night Dress for Ladies and Misses—Cut in 3 sizes: For misses—16, 18 and 20 years, and in 6 sizes for ladies, 36, 38, 40, 42, 44 and 46 inches bust measure. It will require 5 3-8 yards of 36-inch material for an 18-year size, or 5 5-8 yards for a 38-inch size. Price, 10 cents.



Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

Why Not Fix Up the Old Table?

Maybe the old pine table you started housekeeping with has been a grievance for years. Why not give it a coat or two of white enamel and convert it into a 1917 model by covering the top with nickel, which comes for that very purpose in 30x15-inch sheets? It can be tacked on easily by the amateur.

Kindly Deception.

"We have asked her several times to sing, and she has refused each time." "If I were you I'd let it go at that. Some of the strangers may go away thinking they've missed something."—Detroit Free Press.

Simpson's Feather and Button Works

Baste your garments and parcel post to us. We will hemstitch and picot them and make buttons to match. Special attention to mail orders. All work guaranteed.

524 Kuhn Block, Spokane, Wash.



Women's Military-Heel Walking Boots



Sent Postpaid to any address in Washington $6.75 on receipt of price

The vogue for trim, military lines in women's footwear is well exampled in the smart new autumn model pictured, built of

FINE NUT-BROWN RUSSIA CALFSKIN

with blind eyelets, perforated vamp and tip, flexible overweight welt sole and 1⅝-inch military heel. Exceptionally smooth fitting and comfortable. Sizes 3 to 8; widths AA to D. Your money back if not satisfactory.

Copy of Autumn Fashion News, with self-measurement blanks for shoes and garments, sent on request.

Frederick & Nelson
SEATTLE

In answering advertisements don't fail to mention this paper.

The test of to-day is the Pocket Book test

Today home management is on a war, not a peace basis. "How much am I getting in nutriment for what I pay?" is the home manager's problem.

In peace or war Ghirardelli's Ground Chocolate makes good as an economical and appealing food. A blend of pure cocoa and sugar, two of the most nourishing foods known, it supplies energy and resupplies waste tissue at lowest cost. Use it freely as a food and you will practice food conservation.



Ghirardelli's Ground Chocolate

comes in 1-2-lb., 1-lb. and 3-lb. cans. Order from your grocer.

D. GHIRARDELLI COMPANY

Since 1852 San Francisco



Glad You Haven't Fogotten Us.

Dear Aunt Nellie: I guess you think I have forgotten you, but I have read all the cousins' letters. Mother and I just got back from Bellingham. We had a fine time. I wish some of the cousins had been with me to join in with the happiness. We just got home. Everything has grown so since we left. I have corresponded with Mary Bennett, Puget, Wash. She seems to be a very nice girl. She is 10, but now I am 11. I was 11 in August. She is in the sixth grade. This year I will be in the seventh grade. Well, cousins, I wish some more of you would write to me. I would gladly write to you. I haven't any brothers or sisters. My auntie just died. I hope and think everybody else hopes that Aunt Nellie may always live. I see our Corner is nearly two Corners now. I hope it will get much larger. Now, cousins, that haven't joined or written for a long time, get in and make our Corner the largest reading in the paper. They in winning a prize and I think Aunt Nellie would be glad to give you one. If you do not succeed at first try, try again. I am going to try to win one next time.—Grace Humbly, Friday Harbor, Wash.

Call Their Cat Whiskers.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We live on a 74-acre farm. We have 15 cows and are milking 14. We have seven calves. We have about 25 chickens. We did not raise any little chickens. We have one dog and one cat. We got the cat on the Fourth of July. The cat was only about two days old. It is a very playful cat. My sister Mildred is 4 years old. My sister Mabel is 17 years old, sister Edna is 18 years old, sister Mae is 21 years old. I have no brothers. One day, Mildred cut off the kitty's whiskers. Now we call the cat Whiskers. Our dog's name is Gypsy. Our school starts September 4. I will be glad when school starts again. I am in the seventh grade. I am 14 years old. My father takes the Washington Farmer. I read the letters every time. I wish some of the little girls would write to me.—Sophia Mausolf, Enumclaw, Wash.

A Trip to Seattle by Auto.

Dear Aunt Nellie: I have not written to you for a long time. Our school does not begin until September 24 this year. In the country the school does not begin until October 23. I am going to write on the subject of My Vacation. As soon as school was out I went down on our farm and picked cherries. After the cherry season was over I came home for there was nothing to do on the farm. We went to the mountains several times and my brother from Seattle came on a visit. A few days after my brother had gone my aunt came from Illinois. I had never seen her before. She is the only aunt I have ever seen. After the peaches are off we are thinking of taking a trip to Seattle in the automobile. I suppose by that time school will start and so you can see I have had quite a vacation.—Thela Bowen, Route 7, North Yakima, Wash.

Trixie Was Run Over One Night.

Dear Aunt Nellie: This is the second letter to the Children's Corner. I have a new nephew. His name is Richard David. I have three nephews and no nieces. I am going to visit my sister in Seattle. I would like to have some of the cousins write to me. We live in the river bottom land. We have about 40 acres of land which we rent. I had a nice big dog, but some one ran over it with a car one night. His name was Trixy. One of our dogs died last summer. Her name was Nellie. We have a little brown horse named Dolly which we drive to school every day. We have lots of fun with him. My teacher's name is Mr. Albers. One of my brothers got his diploma in May. —Emma Brune, R. F. D. 2, Lynden, Wash.

Vera Goes to Hart Lake School.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it will not be the last time. I am 12 years old and am in the eighth grade. I have light hair and light blue eyes. Have I a twin? If I have I should like very much to hear from her. I go to Hart Lake school.—Vera Allen, R. F. D. 1, box 26, Roy, Wash.

Hill Rougher Than Mollie Thought.

Dear Aunt Nellie: This is the first letter to the Children's Corner that I have written. I am a girl 12 years old. My birthday is the 31st of December, the last day of the year. Have I a twin? My complexion is fair, I have brown eyes, light brown hair. My weight is about 85 1-2 pounds. My height is four feet 11 inches. I have one brother and four sisters. Their names are Kate, Esther, Lucille, Alvina and Flophil. We have four cows and two calves. We have about 100 old chickens and about 200 spring chickens and nine ducks. My subject is "My Worst Day." It was last winter when the snow was on the ground. I took my sled to school and at noon I went out to take sled rides. I went up a hill which I thought didn't look very rough or high. I got on my sled and started down the hill. I had gone about 16 feet when I hit a large bump and the sled upset and I flew off and bumped my nose. Then that old school bell rang, which I thought made my nose hurt worse. When we were in the schoolhouse I didn't get one study well. At evening when I came home I did not say a kind word to my sister.—Mollie Hergert, Penawawa, Wash.

Elzina's Brother Is a Soldier.

Dear Aunt Nellie: This is the third time I have written to the Corner. I like to pick blackberries quite well: I have a brother in the war. I like the country better than the town. I have two uncles in Alaska who are coming home this winter. I like to gather the wild flowers. My birthday is the 4th of April. My brother's birthday, who is in the war, is in September. I will be glad when school starts. Our teacher's name is Mrs. Lena Hartzel. I am 10 years old. Papa is hauling hay today. I do the most of the cooking and I like to cook. Our school starts September 3.—Elzina Rogers, Arlington, Wash., R. F. D. 2.

Help Little Children Get a Start.

Dear Aunt Nellie: My subject is "What I Want to Be." I would like to be a school teacher and help little children to get a start. I taught my little 3-year-old sister her A, B, C's and she can count and say some sounds. A week ago last Wednesday I went down the mountain to the Mount Pleasant store. Then a lot of others and I went in bathing. We haven't much fruit on the farm this year. That is, not as much as we had last year. I had to weed carrots this year. We had 49 rows. I put on overalls and went out to weed. Papa gave me $1 for weeding them.—Lenore Fox, Washougal, Wash.

Ethel Must Write to Us Again.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. Papa got the lower bone broken in his arm. I am 8 years old. I have four sisters. They are Agnes, Hilda, Ercell and Olga. We have about 27 horses and two cows. I have six cats. I will be in the third grade when school starts. I have been reading the Children's Corner and mama said I might write. My favorite books are Jack the Hunchback and Helen's Babies.—Ethel Corvin, Connell, Wash.

Fun With Little Seattle Visitor.

Dear Aunt Nellie: I wrote to the Children's Corner and thought I would write again. We have 84 head of cattle and 22 head of horses, colts and all. We have six sheep. The hay is turning fast now. We are heading. There was a girl came from Seattle. She stayed at one of our neighbor's, Mr. Haines. The girl's name is Helen. We went over to see her quite a few times. We had lots of fun with her. She went back to Seattle July 30.—Reva Lamb, Coulee City, Wash.

Go Swimming Every Day.

Dear Aunt Nellie: I am spending the summer with Mabel 12 miles from Centralia. I live in Aberdeen. My father, mother and little sister Helb are home this summer. Mabel and I go swimming every day when it is warm. We go riding often in the car. There are lots of cherries here. We have picked many. I sent two small boxes full to Helbe. I will watch for my letter in The Washington Farmer and I hope to see it soon.—Viana Salo, Rochester, Wash.

Takes Music Lesson on Wednesday.

Dear Aunt Nellie: This is the third time I have written to the Children's Corner and I am pleased to see my letters always printed. I am 10 years old and in the fifth grade. This summer I started to take music lessons and like it very well. I take my lesson every Wednesday, and when school starts I am going to take them every Saturday. I have a little baby sister 13 months old, and instead of creeping she rolls all over. I saw my cousin's nice little letter printed in The Washington Farmer. I enjoyed reading your letter to the children and thought it a very nice letter and that we should all try and be obedient; help our parents and do the best we can.—Euphemia McPherson, Colby, Wash.

A Nice Letter From Sunnyside.

Dear Aunt Nellie: This is the first time I have written to you. I have enjoyed the other little girls' letters, so I am sending one from Sunnyside as I never saw a letter from here. I am 11 years old. We live on a ranch about three and one-half miles from town. We have two ponies, one big farm horse and a young mule. We have a lot of bunnies and a nice dog. We call him Seal. He got bit by a rattlesnake the other day, but with good care he is getting well. We have 10 baby pigs. They are as fat as butter rolls. I have one big sister. Her name is Fern. My grandpa lives with us, too. Well Aunt Nellie, I think this is all. I hope to see my letter in print. —Eunice Bernia Brown, R. F. D. 2, Sunnyside, Wash.

Royetta Is a City Cousin.

Dear Aunt Nellie: This is the first time I have written to you. I have read the letters in the Children's Corner with a great deal of pleasure. I do not live in the country but live in the beautiful city of Tacoma, of which, I suppose, you have heard. I wonder if I have a twin. I am 12 years old and my birthday is on the 30th of September. I will enter high school this year when school starts, which is the 10th of September.—Royetta Scandrett 2135 South First, Tacoma, Wash.

Eva Lives on a Berry Farm.

Dear Aunt Nellie: My mama takes The Washington Farmer and I like it very much. I like to read the letters from the children. I live on a berry farm. I have a cow and a kitten. I am 9 years old. I have a cousin, one month younger than me. Her name is Virginia DeHart. She lives in Grandview, Washington. As this is the first time I have written to the Corner I will see if you print this and if so will write again some time.—Eva Zortman, Puyallup, Wash.

Tooty, Teddy, Tess, Chess and Nig.

Dear Aunt Nellie: I live on a big stock ranch but am going to move to town this summer. I have dark brown eyes and brown hair. I am 11 years old and in the sixth grade. My teacher's name is Miss Bowman. I like her very much. Our schoolhouse is a mile from where I live. I have five little kittens. Their names are Tooty, Teddy, Tess, Chess and Nig. I have a pet hen. Her name is Biddy.—Clara Jackson, Turner, Wash.

Wants to Care for Wounded Soldiers.

Dear Aunt Nellie: I am 11 years old and I am in the seventh grade. My birthday is the ninth of October. I have chosen the subject of What I Want to Be. I want to be a Red Cross nurse so that I can help care for wounded soldiers. I live on a farm about six miles from town. Have I a twin? I would like to correspond with some of the nieces and nephews.—Mabel Svenson, Cheney, Wash.

Emma Reads the Corner Every Week.

Dear Aunt Nellie: This is my first time to write to the Chilaren's Corner. My father takes The Washington Farmer and I read the Corner every week. We have a dog named Teddy and I have a pet chicken named Speckle and a duck named Dradie. I wrote to Lucile Bowers to ask what Aunt Nellie's address was. I think I will close.—Emma Brune, Route 2, Lynden, Wash.

"The Eyes of the World Will Be Upon You"

To the Soldiers of the National Army:

You are undertaking a great duty. The heart of the whole country is with you. Everything that you do will be watched with the deepest interest and with the deepest solicitude not only by those who are near and dear to you, but the whole nation besides. For this great war draws us all together, makes us all comrades and brothers, as all true Americans felt themselves to be when we first made good our national independence. The eyes of the world will be upon you, because you are in some special sense the soldiers of freedom.

Let it be your pride, therefore, to show all men everywhere not only what good soldiers you are, but also what good men you are, keeping yourselves fit and straight in everything, and pure and clean through and through. Let us set for ourselves a standard so high that it will be a glory to live up to it, and then let us live up to it and add a new laurel to the crown of America. My affectionate confidence goes with you in every battle and every test. God keep and guide you!

The White House, Washington. WOODROW WILSON.

Will not the above message, written by the president of the United States to the great new army of which he is commander in chief, take its place in the library of great utterances besides such words as Lincoln's Gettysburg address and Patrick Henry's liberty or death plea? Will it not become an example of simple and strong English in the schools and colleges of this land? Will its sentiment not inspire Americans on to better patriotism and better living long after the "soldiers of the national army" have returned to the industries of peace from which a world misfortune has drawn them? No American citizen would make a mistake were he to clip this letter and commit it to memory, opening his heart and soul to the sentiment that it contains.

Woodchopper's Bargain

By T. O. GREENE.

This, my story, is a human interest story, and concerns a lowly woodchopper and his benefactor. For obvious reasons the names of the two individuals will be withheld.

The time was the spring of 1916. The place was Central Ridge, in Lewis county, Idaho, between Peck and Steele.

In a deep canyon bordering the ridge lived Woodchopper in a dingy dugout. He had managed to eke out a bare living by cutting cordwood from the pine and fir trees that grew on the precipitous slopes of his canyon and selling the wood to the farmers of Nez Perce prairie.

One bright morning Woodchopper walked over to his neighbor on Central Ridge, which neighbor owned a fine farm of 400 acres, and said: "I understand you have 40 acres of bean ground to rent. How much would you give me of the crop of beans I would raise, you to furnish everything but the labor?" Benefactor replied, "Why, I never heard of such a proposition as that. Let me see. Why, I guess a fellow would have to get half the crop." Woodchopper accepted the terms, and an agreement was entered into upon that basis.

Then Woodchopper said: "I have but $11 between me and the poorhouse, so you will have to furnish me some flour, some spuds, etc."

The necessities of life were forthcoming, as Benefactor had a kind heart, as well as confidence in Woodchopper's honesty.

The ground was put in good condition, seed was secured and the crop was planted in due season and careful cultivation given to it.

Certain busybodies tried to discourage Woodchopper, telling him that his beans would not mature before frost, or that the fall rains would mold and decay. Woodchopper listened to this gossip, and thought the statements might be true. Going to Benefactor, he said: "That team o' mares of yourn, old Mag an' Nance, are worth $300, ain't they?" "I'd sell 'em for that." Benefactor answered. "Tell ye what I'll do: I'll trade you my half of the crop of beans for ol' Mag and Nance, even up. What do you say?" "Why, I don't want to take advantage of you, Woodchopper. I value my half of the beans at $750 or $800." Woodchopper was thus reassured, and his confidence in the value of his crop was restored.

In the meantime the price of beans began to shoot skyward. The crop looked most promising. In due time the beans were harvested, threshed, sacked and hauled to the warehouse. Finally the day came to market their beans.

Woodchopper and Benefactor went to the warehouse together. When the warehouseman figured up the crop he announced: "It foots up just $2375 for the crop, so I will give each of you a check for half that amount. "Give Woodchopper the odd dollar," said Benefactor, and it was done.

Use of Bacon Grease.

To the Editor: The most interesting saving in my home I think is the use of bacon grease. Used in the place of lard and about one-third less in quantity it makes delicious biscuits, is the most satisfactory of anything for frying and with care makes rich, tender pie crust.

We are using bread made of coarse graham flour. It took us a little time to get used to it, but now we prefer it to the fine grained white bread and we think it is keeping us wonderfully fit.

In cake making I have found that the juice of an orange or a teaspoon of lemon juice in a cup, the cup then filled with water, makes a delicious substitute for milk. The cake is more tender, keeps moist longer and the flavor is different.

MRS. G. E. THAYER.

Waluga, Ore.

Roethler Farm Sold.

The Roethler farm, located north of Haines, Ore., has been sold to Messrs. A. E. Rocky and R. A. Angell of Washington. The farm consists of 800 acres and was purchased a few months ago by Mrs. Leonard Taylor and Pete Roethler from the Roethler estate. The consideration is said to be in the neighborhood of $40,000.

Girls What would you like to have as a reward for securing your neighbor as a subscriber? Write the prize editor of the Washington Farmer, Review building, Spokane, Wash.

BEGINNING IN
The October 11th Issue of The Farmer
"THE BARRIER"
By REX BEACH

One of the greatest romances of the wild, lawless days of the Klondike Country ever penned by this gifted author. A big, strong story that will sweep you along on a powerful current of intense interest from chapter to chapter.

NECIA

Her father, John Gale, is the trader at Flambeau. Her mother is a squaw. She has a little half-breed brother and sister. Also she has two lovers—a French Canadian—Puleon Dorat, and Lieutenant Burrell, in charge of the recently established barracks at Flambeau. Burrell is an aristocratic Kentuckian; proud of his family and ancestry. Could he think of marrying Necia — a half-breed Indian girl? There is the great barrier. Poleon Doret, knowing no social barriers, loves Necia with all the ardor of his great, clean soul. Which wins?



NECIA

"She was like some wood sprite—light-footed, slender and dark, with twin braids of hair to her waist, framing an oval face colored by the wind and sun. Her laughter was like the tinkle of silver bells. Every move of her graceful body was unrestrained and flowing with a hint of Indian freedom in it Beaded and trimmed like a native princess, her garments manifested an ornature that spoke of savagery, yet they were neatly cut and hold to the pattern of the whites."

THE BARRIER Is Not a Milk and Water Love Story

Rather it is a broad, sweeping narrative that carries you on the strong current of its action from California to the Alaskan wilderness of the early gold rush. "The Barrier" is a story that, when finished, leaves you the richer, spiritually, for having known these people, working out their ideals and fortunes, their loves, hatreds and misunderstandings, amid surroundings of rough grandeur and the unforgetable charm of the great northland.

The opening chapters of "The Barrier" will appear in the October 11th issue of this paper. A liberal instalment will be given each week thereafter. Tell your friends about it, for it will mean many an hour of keenest enjoyment for all who read this splendid story.

Live Stock Well Balanced at Yakima

(Continued from page sixteen.)

some of the greatest shows in America, and can again, down to the youngest heifer in the herd, was typical, perfectly fitted and a credit to the blocky beef breed.

The Washington State college had an instructive exhibit of fat cattle.

Professor H. H. Kildee of the University farm, St. Paul, Minn., judged dairy cattle and John L. Smith of Spokane the beef breeds.

The following are the cattle awards:

Shorthorns.

Two-year-old bull—1, A. D. Dunn, Wapato, Wash., on True Baron. Senior yearling—1, Washington State college on Village Excelsior. Junior yearling—Dunn on Escana Clipper. Senior bull calf—1 and 3, Dunn on Superb Clarion and Fair Cumberland; 2, Day & Rothrock, Sprague, Wash., on Supreme Chief. Junior bull calf—1 and 2, Day & Rothrock on Hercules Goods and Baron Cumberland; 3, Dunn on Baron; 4, W. S. C. on Achilles.

Cow, 3 years and over—1, Dunn on Scottish Jane 2d. Two-year-old—Dunn on Escana Blossom. Senior yearling—1, Day & Rothrock on Topsy 4th; 2 and 3, Dunn on Sweeter Yet and Sweet as Ever. Junior yearling—1, Day & Rothrock on Village Rose 4th. Senior heifer calf—1 and 2, Day & Rothrock on Perfection's Pearl and Lady Missy 10th; 3, Dunn on Dunn Maid. Junior heifer calf—1 and 3, Day & Rothrock on Hercules Topsy and Golden Light; 2, Dunn on Dew Drop.

Senior champion bull—Dunn on True Baron. Junior and grand champion bull—Dunn on Escana Clipper. Senior champion cow—Dunn on Escana Blossom. Junior and grand champion cow—Day & Rothrock on Topsy 4th.

Graded herd—1, Dunn. Young herd—1, Day & Rothrock; 2, Dunn. Calf herd—1 and 3, Day & Rothrock; 2, Dunn. Produce of cow—1, Washington State college; 2, Day and Rothrock; 3, Dunn.

Aberdeen Angus.

Congdon & Battles, North Yakima, Wash., were the only exhibitors in the bull classes. Their awards were: Aged bull—1, on Eileenmere. Two-year-old—1, on Cherokeer. Senior yearling—1, on Erica's Ito. Junior yearling—1 and 2, on Blackburr of Rosemere and Irenmere. Senior bull calf—1 and 2, on Heatherburr of Rosemere and Yakima Black. Junior calf—1, on Yakima Eric.

Cow, 3 years and over—1, Congdon & Battles on Idessa of Rosemere; 2, Washington State college on Inez of Woodlawn 3d. Two-year-old—1, Congdon & Battles on Heather of Rosemere. Senior yearling—1, Congdon & Battles on Pride of Rosemere 14th. Senior heifer calf—1 and 2, Congdon & Battles on Blackcap of Rosemere 10th and Blackbird of Rosemere 24th; 3, W. S. C. on Jerome's Queen 2d. Junior calf—1, W. S. C. on Pullman Inez 2d; 2, Congdon & Battles on Barbara of Rosemere.

Senior and grand champion bull—Congdon & Battles on Blackburr of Eileenmere. Junior champion bull—Congdon & Battles on Blackburr of Rosemere. Senior and grand champion cow—Congdon & Battles on Idessa of Rosemere. Junior champion cow—W. S. C. on Pullman Inez 2d.

Congdon & Battles were awarded first on graded herd, young herd, calf herd, get of sire and produce of cow.

Fat Cattle.

The Washington State college was the only exhibitor. Their awards were first on two-year-old steer, spayed or Martin heifer, yearling, and under a year and champion fat animal.

Holsteins.

Bull, three years and over—First and third, Carnation Stock farm, Seattle, Wash., on Hazelwood Sir Ormsby and Matador Segis Walker; second, William Bishop, Chimacum, Wash., on Canary Paul Loren DeKol. Two-year-old—First, Carnation, on Mutual Lad Fritomia; second, Bishop, on Segis Burke DeKol Pontiac. Senior yearling—First, Bishop, on Sir Bracelet Metchthilde. Junior yearling—First, J. H. Hulbert, La Conner Flats Stock farm, Mt. Vernon, Wash., on La Conner Pontiac Howtje; second and third, Carnation, on Mutual Lad Tritomia II. and Carnation Ruble Segis. Senior bull calf—First, Hulbert, on La Connor Pontiac Kim; second and third, Carnation, on Hazelwood Bergman Korndyke and Matador Segis Walker Delma. Junior bull calf—First and third, Carnation, on Matador Segis Walker Sixth and Korndyke Segis Klaver; second, Bishop, on Sir Wayne Marie.

Cow, four years and over—First and second, Bishop, on Bonnie Ormsby Lass and Hazelwood Ormsby Pasch Second; third, Carnation, on Nena Newman Cornucopia. Three-year-old — First, Carnation, on Korndyke Model Hartog; second, Bishop, on Riverview Cloe Metchthilde; third, Hulbert, on Mercedes Pontiac DeKol Elbage. Two-year-old—First, Carnation, on Matador Metchthilde Vera; second, Hulbert, on La Connor Pontiac Helene; third, Bishop, on Bonnie Ormsby Lass Third. Senior yearling—First and second, Carnation, on Korndyke Model Hartog and Segis Daisy Fern Second; third, Hulbert, on La Connor Pontiac Beatrice. Junior yearling—First and second, Carnation, on Matador Metchthilde Vera and Carlotta Metchthilde Rooker; third, Hulbert, on La Connor Pontiac Bess. Senior heifer calf—First, Carnation on name not given; second and third, William Todd and Sons, North Yakima, on Cascade Ormsby and Cascade Piebe; fourth, Hulbert, on La Connor Pontiac Lady Netherland. Junior calf—First, Hulbert, on La Connor Pontiac Grant; second, Todd, on Cascade May Korndyke; third and fourth, Carnation, on Abbekirk Segis Pontiac and Queen Tsussie Segis.

Senior and grand champion bull—Carnation, on Hazelwood Sir Ormsby. Junior champion—Carnation, on Matador Segis Walker Sixth. Senior and grand Champion cow—Bishop, on Bonnie Ormsby Lass. Junior champion—Hurlburt, on La Conner Pontiac Grant. Graded herd—1 and 3, Carnation; 2, Bishop. Young herd—1 and 3, Carnation; 2, Hurlburt. Calf herd—1 and 3, Carnation; 2, Hurlburt. Get of sire—1 and 2, Carnation; 3, Hurlburt. Produce of cow—1 and 2, Carnation; 3, Hurlburt.

Jerseys.

Bull, 4 years and over—1 and 2, Clifford Reid, Portland, Ore., on Violet's, Noble Fern and Onota Cotillion Boy.

Two-year-old—1, O. Erickson, North Yakima, on Sultan Star.

Senior yearling—1, Erickson, on Knight's Golden Prince.

Junior yearling—1, Reid, on Fussy's Fern Noble Boy; 2, Erickson on Belinda's Oxford You'll Do, junior; 3, H. T. Cutler, Parker, Wash., on King Rastus.

Senior bull calf—1 and 2, Reid, on Cotillion Boy's Premier and Noble Cotillion of Reid Farm; 3, Erickson, on Favorite's Sultan.

Junior calf—1 and 3, Erickson, on Wild Rose Sultan and Violet's Sultan; 2 and 4, Reid, on Fern's Carnation Fern and Glen Tana Martial.

Cow, four years old and over—1 and 3, Reid, on Lady Lecq and Maitland's Noble Maid; 2, Erickson, on Noble Peer's Violet.

Three-year-old—1 and 3, Reid, on Onota's Lady and Cowslip's Golden Begonia; 2, Erickson, on Raleigh's Sunbeam.

Two-year-old—1 and 3, Reid, on Eminence Wardress and Cowslip's Financial Maid; 2, Erickson, on Lass' Bonnie Sultana.

Senior yearling—1, Erickson, on Raleigh's Beauty of Jersey Home; 2 and 3, Reid, on Fuss' Fern Cowslip and Fuss' Fern Roseleaf.

Junior yearling—1, Erickson, on Sultan's Star Fancy; 2 and 3, Reid, on Fuss's Fern Lucy and Fuss' Fern Beauty.

Senior heifer calf—1 and 3, Reid, on Onota's Eminent Wardress and Goldie's Cotillion Beauty; 2 and 4, Erickson, on Sultan's Raleigh Girl and Sultan's Star Lassie.

Junior calf—1, Erickson, on Sultan's Figgis on Jersey Home; 2 and 3, Reid, on Goldie's Princess and Goldie's Onota.

Graded herd—1 and 2, Reid.

Young herd—1, Erickson; 2 and 3, Reid.

Calf herd—1 and 3, Reid; 2, Erickson.

Get of sire—1 and 3, Reid; 2, Erickson.

Produce of cow—1, Erickson; 2, Reid.

Senior and grand champion bull—Reid, on Violet's Noble Fern.

Junior champion—Reid, on Fusse's Fern Noble Boy.

Senior and grand champion cow—Reid, on Eminent Wardress.

Junior champion—Reid, on Onota's Eminent Wardress.

Guernseys.

Calkins & Riggs, Middledale Farm, Goshen, Ore., the only exhibitors, received rewards as follows: Bull, 3 years and over—1, on McDonald Wakefield's Prince. Junior yearling—1, on Middledale Sir Julian. Senior bull calf—1, on Middledale Idlewise.

Junior calf—1 and 2 on Red Raider and Middledale Little Chief.

Cow, 3 years old—1 on Middledale Mabel.

Two-year-old—Middledale Marian.

Senior yearling—1 and 2, on Middledale Norma and Ugenia D. Junior yearling—1 and 2, on Middledale Queen of the May and Middledale Jewel. Senior heifer calf—1 and 2 on Middledale Jitney and September Morn. Junior calf—1 and 2 on Middledale Rosemond and Golden Maid.

McDonald Wakefield's Prince was made senior champion bull; Middledale Sir Julian, junior and grand champion. Middledale Mabel was made senior champion cow and Middledale Queen of the May junior and grand champion. They were also awarded first on graded herd, young herd, calf herd, get of sire and produce of cow.

Brown Swiss.

Ed Myersick, La Grande, Ore., the only exhibitor, received the awards as follows: Aged cow, 1 on Eleanor; two years old, 1 and 2 on Lydia M. and Ted's Lily; bull calf, 1 on Buckskin Jerry; yearling bull, 1 on Vixen.

Sheep awards were received too late to be published in this issue and will be published next week.

The Hog Show.

In the hog show, as well as elsewhere, quality was prominently shown. Berkshires, that have been a great feature at this show, were not so numerous nor so strongly represented as formerly, but other breeds had about the usual number and certainly the quality was even more than could be expected, this year of high priced feed.

J. M. Fruitts of Joseph, Ore., who has made the reputation for the Hampshires in the northwest equal to any other breed; Ray J. Fox of Lyons, Ore., whose Poland Chinas, with their high fitting and excellent type, have been universal winners, and Robert Nelson, of North Yakima, the young man who won grand champion barrow, all breeds, in the strongest competition two years ago, besides fully his share of awards in the breeding classes of Duroc-Jerseys, all made fine showings for these three popular breeds. There were other breeders, with small exhibits, and the hog sheds were the mecca of about as many visitors as any other barn. Two exhibitors had nearly full herds of Tomworths, and two others showed several animals, making an unusual and pleasing display of the bacon type hogs.

Professor E. B. Krontz, assistant professor of animal husbandry at the Washington State college, placed the ribbons.

Berkshires.

J. A. Simonson of North Yakima received all awards except on senior sow pig, which was won by Glen Chandler of North Yakima. Mr. Simonson's awards were: 1 on senior boar pig, 1 on junior yearling boar, 1 and 2 on junior yearling sow, 1 and 3 on senior sow pig, 1 on aged herd and young herd, get of sire and produce of dam, senior and grand champion boar and sow.

Chester Whites.

Aged boar, 1, Ed Shoel of Tangent, Ore.; senior yearling, 1, Ed Shoel; junior yearling, 1, Archie Conley, Cove, Ore.; 2, Shoel; senior boar pig, 1, Shoel; junior pig, 1 and 3, Shoel; 2, Conley; sow, 2 years and over, 1, Conley; 2 and 3, Shoel; senior yearling, 1 and 2, Shoel; junior yearling, 1, Shoel; 2 and 3, Conley; senior sow pig, 1, Conley; 2 and 3, Shoel.

Senior champion boar, senior champion sow and junior champion boar, Shoel; junior champion sow, Conley on Lena.

Aged herd and aged herd bred by exhibitor, 1 and 2, Shoel; young herd bred by exhibitor, 1, Shoel, and 2, Conley; get of sire and produce of sow, 1 and 3, Shoel; 2, Conley.

Hampshires.

Boar, 2 years and over—1 and 2, J. M. Fruitts, Enterprise, Ore. Senior yearling—1, Fruitts; 2, J. J. Oder, North Yakima, Wash. Junior yearling—1 and 2, Fruitts. Senior boar pig—1, Fruitts. Junior boar pig, 1 and 2, Fruitts; 3, Oder.

Sow, 2 years and over, senior yearling sow and junior yearling sow, 1 and 2, Fruitts. Senior sow pig—1, Fruitts. Junior pig—1 and 3, Fruitts; 2, Oder.

Senior and grand champion boar—Fruitts on Lead Me To It. Senior and grand champion sow—Fruitt on Rancho's Rosie. Junior champion boar and junior champion sow—Fruitts. Aged herd, young herd and herd bred by exhibitor—1 and 2, Fruitts; 3, Oder. Get of sire and produce of sow—1 and 2, Fruitts; 3, Oder. Fat barrow—1 and 2, Fruitts. Pen of barrows—1, Fruitts.

Duroc Jerseys.

Boar, 2 years and over and senior yearling boar—1, Robert Nelson, North Yakima, Wash. Junior yearling boar—1 and 2, Nelson. Senior boar pig—1, Albert Myer, Moxee City, Wash.; 2, Glen Chandler, North Yakima; 3, Nelson. Junior pig—1 and 3, Nelson; 2, I. J. Oder.

Sow, 2 years and over—1 and 3, Nelson; 2, Chandler. Senior yearling sow—1 and 2, Nelson. Junior yearling sow—1 and 2, Nelson; 3, Albert Myer. Senior sow pig—1 and 2, Nelson. Junior pig—1 and 2, Nelson; 3, Chandler. Senior and junior and grand champion boar and sow—Nelson. Aged herd—1 and 2, Nelson. Young herd—1 and 2, Nelson; 3, C. W. Shumate, Tumwater, Wash. Young herd bred by exhibitor—1 and 2, Nelson; 3, Shumate. Get of sire and produce of sow—1 and 2, Nelson; 3, Shumate. Fat barrow—1 and 2, Nelson. Pen of barrows—1, Nelson; 2, Nelson; 3, Shumate. Fat barrow—1 and 2, Nelson. Duroc special for best young herd—E. O. Erickson of North Yakima, Wash.

Poland Chinas.

Boar, 2 years and over—1, Ray J. Fox, Lyons, Ore.; 2, C. W. Shumate. Senior yearling—1 and 2, Fox; 3, Shumate. Junior yearling—1, Fox. Senior boar pig—1 and 2, Fox; 3, Shumate. Junior pig—1 and 2, Fox; 3, Shumate.

Sow, 2 years and over—1 and 3, Fox, 2, Shumate. Senior yearling—1 and 2, Fox; 3, Shumate. Junior yearling and senior sow pig—1 and 2, Fox. Junior pig—1 and 2, Fox; 3, Frank Dennison of Lyons, Ore.

Senior and grand champion boar—Fox on Fox's Model. Junior champion boar—Fox on Ike's Best Bet. Senior and grand champion sow—Fox on Maid of Honor 2d. Junior champion sow—Fox on Miss Ike Fox 1st. Aged herd, young herd, herds bred by exhibitor, get of sire and produce of sow—1 and 2, Fox; 3, Shumate. Fat barrow—1 and 2, Fox. Pen of barrows—1, Fox.

Tamworths.

Boar, 2 years and over—1, C. Starcher, North Yakima, Wash. Senior yearling boar—1, C. Starcher. Junior yearling—1, I. J. Oder. Senior boar pig—1, E. O. Erickson, North Yakima, Wash. Junior pig—1, Oder; 2, Marvin F. Thornton, North Yakima; 3, Earl Storaasli of North Yakima, Wash.

Sow, 2 years and over—1 and 2, Oder. Senior yearling—1, Starcher; 2 and 3, Oder. Junior yearling—1, Thornton; 2, Oder; 3, Starcher. Senior sow pig—1, Oder; 2, Chandler; 3, Erickson; junior pig—1, Starcher; 2, Oder; 3, Fred Fiske.

Senior and grand champion boar—Starcher on Iowa Chief. Junior champion boar—Oder on Jungle Chief. Senior and grand champion sow—Oder on Lady Bacon. Junior champion sow—Oder on Valley Choice. Young herd bred by exhibitor—1, Starcher; 2, Thornton. Get of sire—1, Starcher. Produce of sow—1, Oder; 2, Thornton; 3, Starcher.

The Sheep Show.

For years it has been usually possible to dispose of the sheep show at many of our northwestern fairs in a short paragraph. The one man who has kept up interest and brought out a representative showing of several breeds is J. G. S. Hubbard of Monroe, Ore. Mr. Hubbard was on hand as usual with his earload of Southdowns, Hampshires, Shropshires and Lincolns. But owing to the sheep sale put on by Professor Hislop, animal husbandman of the Washington State college, Hubbard had abundant company. Fine wools, as well as middle and long wools were well represented. Vaughn & Fox, Lyons, Ore., had an exceedingly well fitted flock of Shropshires, and Ed. Scholl of Tangent, Ore., showed both Shrops and Hampshires. C. C. Beers of Lyons, Ore.; George Pryor & Son of North Yakima, Wash., and Mr. Niven of Manhattan, Mont., as well as Mr. Hubbard, showed Hampshires. Lincolns were exhibited by Stanley Coffin, Pryor and Hubbard, and Rambouillets by John Seely of Mt. Pleasant, Utah; Hobbs & Gillett, Buhl, Idaho; Mrs. R. A. Jackson, Dayton, Wash., and Mr. Troub, Winona, Wash. Besides these Stanley Coffin had on exhibition imported Romneys and Lincolns from New Zealand, and a few Corriedales were shown. The show sheep and sale sheep filled two barns and the sheep sale Thursday and Friday was a decided success and is practically sure to be an annual event.

Professor C. E. Howell, assistant professor of animal husbandry, W. S. C., judged all classes.

News for Breeders

The Oregon Agricultural College, through Professor Ovan Nelson, sheep husbandman, has recently purchased a very fine yearling Shropshire ram from Frank Brown. It weighs over 216 pounds, is deep bodied and of true type. The college will not exhibit sheep this year, with the exception of a string of yearling wethers at the Pacific International.

Frank W. Connell is a young man who is making a success of dairying with pure bred Holsteins and believes that any one can do so. He got his first pure bred female about four years ago and now has about 35. He has bought one or more good ones from Charles Eldridge, Monroe, Canfield and Newall, and a richly bred bull from William Bishop. This bull, Chimacum King Segis, is a great grandson of King Segis, his granddam is Johanna DeKol Van Beers, with 40.07 pounds of butter in a week and his dam, Lady Aaggie Artis DeKol, has 21.89 pounds as a four year old. Mr. Connell is in the Washington Cow Testing association with 22 head and has official seven day records on ten, three made before he got them, the others by himself. He will continue official testing from time to time. H. A.

Buys Champion Sow.

George Swales of Johnson, Wash., bought from B. E. Snead the champion Duroc sow at the 1917 Spokane Interstate fair, bred to the well-known champion boar Traveler. Mr. Swales has promised to tell the readers of The Farmer how he proposes to use his summer fallow by raising red clover sown with timothy, field peas, beans and sweet corn for fodder, and to do this in a way to furnish continuous work for his workhorses as well as to furnish pasture and fodder for his stock.

Rutter's Pure Bred Herd.

R. L. Rutter Jr. of Ellensburg, Wash., has recently rented from J. Von Herberg of Seattle, the 27-months old Holstein bull, Colony Zarilda Newman, to use on his purebred herd. This young bull's dam, Zarilda Clothilde 3d DeKol, has an official record of 123.9 pounds of milk in one day and 831 pounds of milk and 28.87 pounds of butter in seven days, as a junior four-year-old. At 5 years of age her record was 855 pounds of milk

Sheep on ... Government Re...

As a 4-year-... pounds of ...'s record for ... the bull's sire ...lewman, a son ...e cow that un... ...rtions, produced ...utter and 895.5 ... seven days, with ... west may in time do ... largest day's rec... ...plying the public da... seven days being ... and wool. Already ... world's record. Aaggie ... producing sma... ...lewman has eight daugh... ...bility of in... ...der full age, with records ... the water ... ...age 103 pounds of milk in a ... ...and they include the world's ... ...mion 2 and 3-year-old seven-day ... ...rds. Mr. Rutter has shown com... ...subje... ...dable wisdom and enterprise in St... ...securing a sire with such wonderful ... ...production inheritance to head his ... herd. H. A.

PURCHASES JERSEYS.

Fred Johnson of McKinley, Ore., recently purchased from Marks Bros. of Roseburg, Ore., six head of Jerseys, all bred to the Marks herd sire, Luckiamute's Eminent Prince. This young bull is by Octavia's Duke, Frank Laughory's herd sire, and out of Eminent's Daisy of Luckiamute, a cow with a record if 467 pounds of butter, as a three year old.

GUERNSEY CATTLE

Young Guernsey Bull

HOPE'S REEDY OF ORCAS ISLAND No. 43738 of advanced registry and imported blood. The best individual we have ever offered.

S. P. DAVIS, Olga, Washington.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79333). Top for size and quality. I have for sale extra good spring pigs. Correspondence solicited.

D. M. ROYSTON EST., C. ROYSTON, MGR. Payette or Fruitland, Idaho.

BIG TYPE POLAND CHINAS

June and July pigs for sale, either sex, eligible to registration, at farmers' prices.

E. B. STREITZ, Richfield, Idaho.

Breeders' Department

SHORTHORN CATTLE

Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN, Wapato, Wash.

Hercules Shorthorns

For particulars write

DAY & ROTHROCK

Exchange Bank Bldg.

Spokane, Washington.

CEDARHURST FARM

SHORTHORNS.

Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

JOE TURNER, Meyers Falls, Wash.

Shorthorn Cattle

SHIRE HORSES.

DR. G. E. NOBLE, Boise, Idaho.

SHEEP

SHROPSHIRE RAMS

Good ones, some from our imported Cooper ewes.

GEO. ARMSTRONG, Corvallis, Ore.

SHROPSHIRE YEARLING RAMS.

Fifteen fine individuals; registration papers if desired.

C. H. DUNNING. Ellensburg, Wash.

HAMPSHIRE SWINE

GREEN GROVE STOCK FARM.

ENTERPRISE, OREGON.

Breeder of HAMPSHIRE SWINE. For immediate sale—Bred from Panama-Pacific Exposition championship herds. 10 head spring males, 15 head gilts, 25 to 200 pounds.

J. M. Fruitts, Prop.

HOLSTEIN CATTLE

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

WAYSIDE RANCH HOLSTEINS.

Am offering 13 heifers for sale, sired by my herd bull Buffalo Duke Doedo, a half brother to the world's champion cow. An opportunity of a life time to the man wanting No. 1 stuff.

H. H. STIVER. Buhl, Idaho.

DOGS

Fox and Wolf Hounds



of the best English strains in America; forty years' experience in breeding these fine hounds for my own sport and protection of sheep, hogs and poultry. Send stamp for catalog.

T. B. HUDSPETH.

Sibley, Jackson County, Missouri.

DUROC-JERSEY SWINE

Hillcrest Duroc Jerseys

For immediate sale:
1 11-mo. gilt, bred to farrow Oct. 3d, $60.
1 10-mo. gilt, to farrow Nov. 8, $50.
3-month pigs, $25.
Extra fine stock, combining the blood of noted show winners.

E. P. Camp, Ione, Wash.

See Us at the Oregon State Fair.

with our high-class Jersey cattle and big type Duroc Jersey hogs.

DOERFLER BROS., Silverton, Ore.

Duroc-Jersey Spring Boars

Sired by Colonel's Lad No. 203791, grand champion of the Minnicassia fair, 1916. Meet me at the Boise state fair; look my herd over and get acquainted.

H. C. POLLY. Burley, Idaho.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE. CABINET, IDAHO, OR

JAMES N. PRICE. Pullman, Wash.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Jersey Sale Called Off

The sale of 42 head of Jersey cows, bulls and young stock of A. J. Johnson, which was announced in these columns last week to occur October 4, 1917, at Corvallis, Ore., will not be held. E. A. Rhoten, sales manager, announces, however, that he has a few choice bulls and heifers for sale. Address:

A. J. Johnson, Owner. Corvallis, Ore.

E. A. Rhoten, Sales Mgr. Salem, Ore.

SCRUB COWS

never were profitable, and as the price of feed advances it becomes more necessary to get the producing kind.

Our Register of Merit JERSEYS

would soon pay for themselves in the added production, to say nothing about laying a foundation for a future profitable herd. It is the PROVEN RECORD THAT COUNTS. Then when you not only have a producing cow, but her dam and her sire's dam were also producers and there are producing parents all the way back, you have a right to also expect that her calves will be producers. The 60 registered Jerseys that we are going to sell at auction are either Register of Merit animals or from R. of M. parents (excepting two heifers whose dam is untested). The offering is the dispersal of the herd of Frank Loughary & Son and a consignment from G. G. Hewitt, and includes Herd Bulls, Cows, Bred Heifers and younger Calves. The sale will be held on the Loughary farm near Luciamute station, about 7 miles southwest from

Monmouth, Oregon, Oct. 15, 1917

Complete catalog will be issued. Send name to either of the proprietors or to E. A. Rhoten, Sale Manager, Salem, Oregon, and one will be mailed when published.

Frank Loughary, G. G. Hewitt, } Proprietors, Monmouth, Oregon.

Col. J. W. Hughes, Auctioneer. Forest Grove, Oregon.

Mail Bids may be sent to Horace Addis, Field Editor The Oregon Farmer, 311 Stock Exchange Bldg., Portland, Ore.

160 Head Registered Holsteins 160

Your Last Invitation to This Great Two Days' Auction Sale

Hazelwood Holsteins

75 head from this great show herd with national reputation will be sold.

Carnation Stock Farms

offer 85 head from their splendid herd.

Sale Takes Place Oct. 3-4, 1917 at Kent, Wash., 10:30 a. m. Each Day

All stock tuberculine tested.

A great sale—a splendid opportunity.

Are you going to attend?

AUCTIONEERS
Geo. A. Gue, Yakima
Harry C. Cranke, Spokane

OWNERS
Hazelwood Farms, Spokane, John L. Smith, Prop.
Carnation Stock Farms, Seattle

Grain and Produce Markets

Chicago Grain.

CHICAGO, Sept. 22.—Only a temporary set-back in the corn market resulted today from peace news and fine weather. Such bearish factors were later offset by week-end evening up of trades and by a revival of misgivings about eleventh hour danger from frost. The close was unsettled at $1.17 7-8 December and $1.15 May—3-8 cents off to 1-8 cent up, as compared with yesterday's finish. Oats declined 1-8 to 3-8@1-2 cent net. The outcome in provisions was an advance that ranged from 5@7 to 105.

The fact that oats for immediate delivery had lost the premium over future options had a depressing effect on the oats market. The trade anticipated more liberal receipts from now on.

Millers' requisitions for wheat continued far in excess of what the food administrator's subordinates here could obtain. Receipts at western centers in general totaled for the week but little more than half of last year's total for the corresponding period.

Scarcity of hogs carried provisions sharply up grade. Government buying was said to be in evidence.

Cash Quotations.

CHICAGO, Sept. 22.—Corn—No. 2 yellow, $2.10; No. 3 yellow, $2.10; No. 4 yellow, nominal.

Oats—No. 3 white, 58 3-4@59 1-4c; standard, 59 3-8@60 1-2c.

Rye—No. 2, $1.89.

Barley—$1.20@1.42.

Hay—Timothy, $6@8; clover, $15@21.

Chicago Futures.

Corn—	Open.	High.	Low.	Close.
December	1.17⅜	1.17⅞	1.16¾	1.17⅞
May	1.14⅛	1.15	1.13	1.15
Oats—				
December	.57¼	.57½	.57	.57⅜
May	.60⅜	.60½	.60	.60⅜
Pork—				
October	43.60	44.00	43.60	44.00
January	44.40	45.30	44.40	45.30
Lard—				
October	23.97	24.07	23.93	24.07
January	23.00	23.10	22.97	23.10
Ribs—				
October	25.45	25.75	25.27	25.77
January	23.05	23.62	23.00	23.62

Pacific Northwest Grain.

PORTLAND, Sept. 22.—Grain futures: October oats, $48.75 bid. Feed barley, $50 bid; brewing barley, $52 bid. Bran, $29.50 bid. Shorts, $30.50 bid.

Eastern corn and oats in bulk: Oats—No. 3 white, September, $43; 38-pound clipped white, September, $44.25. Corn—No. 3 yellow, January, $53; No. 3 mixed, $52. October oats—No. 3, $43.50; clipped, $44.25. February corn—Yellow, $52; corn, mixed, $51.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $2.25 cwt; sweet potatoes, $3.75 cwt.

Apples—New Washington apples, $1.40@1.50 50-lb box; crabapples, $1.25; cooking apples, $1.25 box.

Butter—Blanchard cartons, 48c lb; Medo-Maid, 48c lb; Cascade, 48c lb; Gold Leaf, 48c lb; Better Butter, 48c lb; Attalia, 48c lb; Diadem, 48c lb; Hazelwood, 48c lb; Solid Pack, 47c lb; Jersey Bell 47c lb; Peerless, 44c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 27c lb; Hazelwood Young America, 28c lb; Wisconsin limburger, 29@30c lb; brick cheese, 30c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $13 case; fresh eastern eggs, $13 case.

Live Poultry—Hens, 13c lb; broilers, 20c lb; old roosters, 8c; ducks, 12½c lb; geese, 10c; turkeys, 20@22c.

Dressed Poultry—Hens, 18c lb; broilers, 28c lb; old roosters, 12½c; ducks, 18@20c; geese, 16c; turkeys, 25@30c.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 13c; salted cured, 16c; green bulls and stags, 11c; salted cured, 13c; kip, 15 lbs to 25 lbs, 22c; calf skins up to 15 lbs, 16c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 7 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $1@2 each; dry horse hides, $2.50@4 each.

Portland Wheat.

PORTLAND, Ore., Sept. 22.—With the base wheat price fixed at $2.05 here dealers expect the movement now to begin in earnest. It is understood that all the export surplus will be milled and shipped as flour by water, the shipping board to provide the tonnage. Whether the grain will be bought by the grain corporation or by individual dealers has not yet been announced. Further reductions in flour and feed prices are imminent, but these commodities will naturally not sell as low as was expected before the higher wheat base was named.

There has been a firm market for barley and oats, but not much activity, as holders in both lines have held back.

Live Stock Quotations.

At Chicago.

CHICAGO, Sept. 22.—Hogs—Receipts, 4000; strong, 5 to 10c above yesterday's average. Bulk, $18@18.80; light, $17.50@18.80; mixed, $17.50@18.85; heavy, $17.45@18.85; rough, $17.45@17.65; pigs, $13.75@17.75.

Cattle—Receipts 5000; weak. Native beef cattle, $7.50@17.90; western steers, $6.70@11.75; stockers and feeders, $6.40@11.25; cows and heifers, $5.15@12.90; calves, $11.50@16.

Sheep—Receipts 5000; weak. Wethers, $9@12.60; lambs, $13@18.15.

At Omaha.

OMAHA, Sept. 22.—Hogs—Receipts, 2500; steady, 10@15c higher. Heavy, $17.90@18.35; mixed, $18@18.25; light, $18.25@18.80; pigs, $16@18; bulk of sales, $18@18.25.

Cattle—Receipts 300; market steady. Native steers, $10@17; cows and heifers, $7@11; western steers, $9@14.50; Texas steers, $7@10.50; cows and heifers, $6@9.25; canners, $5.50@6.75; stockers and feeders, $6@12.50; calves, $8@12.15; bulls, stags, etc., $5.50@8.50.

Sheep—Receipts 2400; market steady. Yearlings, $18@18.75; wethers, $11.50@12.75; ewes, $10@11.25; lambs, $17@18.

At Portland.

PORTLAND, Ore., Sept. 22.—Hogs—Steady; receipts 400. Prime light, $17.75@18; prime heavy, $17.65@17.75; pigs, $14@16; bulk of sales, $17.75.

Cattle—Steady; receipts 154. Best beef steers, $9@9.75; good beef steers, $7.50@8.75; best beef cows, $6.75@7.50; ordinary to good cows, $4@6.75; best heifers, $7@8; bulls, $4@6.75; calves, $7@9.50; stockers and feeder steers, $4@7.25.

Sheep—Steady; receipts 547. Western lambs, $13@13.50; valley lambs, $11.75@12.50; yearlings, $10@10.50; wethers, $9.75@10.50; ewes, $8@8.50.

Spokane Stock Yards Saturday.

Hogs—Receipts, 42; market strong. Prime light, $17.85@18; prime heavy, $17.75@17.85; pigs and skips, $15.50@16.50; stockers and feeders, $12@14.

Cattle—Receipts, none; market steady. Best beef steers, $8.50@9; good steers, $7.25@8.25; ordinary to fair, $5.75@6.50; best beef cows, $6.75@7.50; good cows, $5.50@6.50; common cows, $4@5.25; best heifers, $7@8; bulls, $5@6.50; calves, $7.50@8.75; stockers and feeders, $5@6.75.

Sheep—Receipts, none; market strong. Prime lambs, $12.50@13.25; good lambs, $11.25@11.75; prime yearlings, $9.75@10.25; prime wethers, $9.50@10.25; best mutton ewes, $6.50@8.

Seattle Wheat.

SEATTLE, Sept. 22.—Telegraphic advices were received this afternoon from S. C. Armstrong, member of the committee from this state to protest against the Chicago basing price now in Washington for northwest territory that a terminal price of $2.05 bulk had been established for Seattle, Portland and Tacoma, or 5c per bushel over the level formerly fixed by the grain committee. This will cause an advance of 25 cents per barrel for soft wheat flour, and will increase the cost of millfeed. Puget Sound millers said today that final adjudication would now start the wheat crop moving heavily.

Puget Sound millers are keeping strictly to the letter of the law, which forbids storage of more than a 30-day supply, and will take on no more until their bins are scraped. This policy will be adhered to until modification can be secured officially from Washington. There is a risk in disobedience that manufacturers do not care to take. Rulings from Mr. Hoover on other points, wherein evasion was sought, have convinced them that Washington means business, although it will work a severe hardship in many essential points.

The Centennial mills this week took up with Washington the matter of whether it could buy enough grain to run them for a longer period than 30 days. Up to 90 days is urged. It was asked that the wheat be held in the country, and regardless of whether the grain corporation was the holder or otherwise that the millers be allowed to draw on the supply for 90 days or more as a protection for their trade for export to South America, the newly established markets of the southwest and the domestic division. They have undertaken to show Washington that the active part of the milling season is now on, that cars are accumulating in the railroad yards for the expected grain haul, that a shortage may occur at any time and for the grain and milling business to be healthy wheat should be moving. They assert that Washington can not fail but agree with their position, having in mind normal conditions of the industry as near as possible, and that ultimately assent to their program will be given. Asserting that they are willing to do their patriotic duty they are urging speed in the machinery of government. Messrs. Wilcox and Houser, who represent the government at the nearest source of authority, have been unable to decide these questions for the millers.

Seattle Market.

SEATTLE, WASH., Sept. 22.—Investigations through personal representatives in the apple orchards of Wenatchee completed today show that the movement of Jonathans, small sizes predominating, will begin next week, that thousands of boxes have not been sold and that outside cash buying is practically completed. The pick of other varieties will begin and the market congested. Under these circumstances a decline in Jonathans is expected, although quotations for other favorite brands will remain unchanged.

The Jonathan pick is 20 days late this year, causing the fruit to pile up into the season reserved for other brands. The sizes of Jonathans and Winesaps are smaller than produced for several years, there being but few four-tier apples. The fight on prices will come on because of inability of growers and distributors to get a large percentage of Jonathans under cover, due to their small size. The bulk of the better grades, it is reported, has been sold.

It is apparent that Seattle carlot jobbers expect to bear the spud market in order to buy easily for a brisk demand that is certain to come. They have let loose gloomy forecasts of the depreciated demand, inactivity of eastern buyers as compared with last year, and predictions that Washington consumers must eat their own product. Meanwhile Puget sound growers are refusing anything less than $35 f. o. b., even while in the midst of the digging season, and declare that they will pit their crop. It is noticable that there have been no breaks in the spud market. Similar sentiment prevails among growers as to carrots, for which $1.50 per sack is being demanded in the producing valleys.

The Elberta peach season has practically closed, with 65c as the dominating price for the bulk of sales for the year, or normal with a five-year average. Good clings are now being offered at 75c, but the movement is light.

The federal government came on the market today with an order for 500 cases of strictly fresh ranch eggs, and already stiff from insufficient receipts and a brisk demand, quotations may not stand the strain. Prices of 2c higher at 52c are forecasted for Monday, although not yet decided upon by a majority of the dealers.

Storage eggs are not selling. Retailers report that it is with great difficulty that they are moved at all. Consumers apparently will not have them, preferring small pullet eggs that are fresh but considerably under weight compared with the standard size of clean, white shell storage. The demand for storage eggs is lighter this year than ever before, notwithstanding that they are 7@9c cheaper.

Condensaries have been paying higher prices in the country for butterfat this week, reports of up to $2.90 per hundred pounds coming in from the Kent district. Quotations in the northern part of the state are firm at $2.60. Wholesalers are unable to see how butter can remain at its present level under the circumstances. Storage butter is dull, due in a measure to the secondary quality of some of the offerings.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 45c per doezn; pullets, 32@35c dozen.

Poultry—Live hens, fat, over 4 lbs., 20c per lb.; 4 lbs. and under, 16@17c; old roosters, 12c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 10c per lb.; springs, live, 20c per lb.

Butterfat—52c per lb.; dairy butter, 33c.

Beef—Buying prices. Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c; heifers, 6@8c per lb.

Hogs—Light, 15@17c per lb.; do heavy, 12@13c per lb.

Veal—Fancy light, 14@16c per lb.; do heavy, 12@13c per lb.

Hides—Salted, 16c per lb.; salt kip, 16c per lb.; salted calf, 50c per lb.; green hides, 13c per lb.; salted bulls, 14c per lb.; dry hides (short trim), 40c per lb.; bull and dry salts, 4c per lb. less; green bulls, 11c per lb.; dry butcher full wool sheep pelts, 36@38c per lb.; green hides, 13c; green calf, 22c per lb.

Wool—Puget sound, 52c per lb.

SELLING PRICES.

Raspberries—Red, $2.75@3 per crate.

Feed—Scratch feed, $79 per ton; all grain, chop, $66 per ton; oats, $56 per ton; rolled oats, $57 per ton; rolled or ground barley, $56 per ton; clipped barley, $50 per ton; wheat, $75 per ton; bran, $38 per ton; wheat, $75 per ton; bran, $38 per ton; shorts, $41 per ton; soy bean meal, $70 per ton; whole corn, $87 per ton; cracked corn, $88 per ton; alfalfa meal, $35; chick feed, $8 per ton.

Portland Notes.

...g—1, Starcher; 2 and 3, ...yearling—1, Thornton; ...cher. Senior sow pig—1, ...ler; 3, Erickson; junior ...r; 2, Oder; 3, Fred ...

The hop market at all points on ... confirmed reports ... been paid for Yakima ... part of the trading ... was in western ... market is now high ... time since 1911, and ... tation of that year is ... completed and the crop ... mated at 25,000 to 30,000 ... Washington crop is put by ... 20,000 to 22,000 bales. California produced 80,000 bales, which is ... than was expected.

champion boar—Chief. Junior champion sow—Jungle Chief. Senior champion sow—Oder on champion sow—Oder; 2, Starcher; 2, Thornton; pos-

Cheese has firmed up again a ... Tillamooks are quoted half a cent higher, or at the price of a week ago. Butter is also firm with a very slim supply.

Egg receipts are very small, but sufficient at the high price. Poultry and dressed meats rule steady.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $49 per ton.

Mill stuffs—Bran, $37 per ton; shorts $40.

Barley—No. 1 feed, $50; brewing, $52; rolled, $55@57.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch, case counts, 41@42c per dozen; candled, 45@50c.

Poultry—Hens, 17½@18c; ducks, 11@20; turkeys, live, 20@22c; geese, 10@11c.

Butter—City creamery, prints, 48@49c per pound; cubes, extras, 46½c.

Cheese—Tillamook triplets, 25c; Young Americas, 26c.

Dressed meats — Veal, 15 1-2@16c; pork, 21½@22c.

Hops—1916 25@26c; 1917 crop, 40c.

Potatoes—New, 2@2½c per lb.

Wool—Eastern Oregon, fine, 52@61c; coarse, 60c; valley, 58@60c.

Beans — California small white, 15 1-2c; large white, 15c per pound.

Decrease in Hide Prices.

There has been a decline averaging 4 cents in hide prices at Portland. The market is weak and dealers look for a further drop. The reason given for the weakness in the Coast markets is the withdrawal of tanners from the eastern markets. Hide prices have been so high that any unfavorable development quickly affects it. All reports to the local trade indicate a dull leather market at the leading trading centers and furthermore there is known to be a large accumulation of hides in nearly all parts of the country. For these reasons hide dealers doubt whether the hide market has yet reached bottom. Current hide prices here are: Salted hides, 16 cents; green hides, 13 cents; salted bulls, 14 cents; green bulls, 11 cents; green and salted calf, 22 cents; green and salted kip, 18 cents; dry hides, 28 cents; dry calf skins, 30 cents; dry salt hides, 21 cents.

Highest Prices Paid for Hides

Send your hides to us for highest cash market price—check by return mail. References, any bank in Seattle.

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Ballard Station,
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Sheep on Irrigated Farm Lands

Government Representative Gathers Wide-Spread Data

The irrigated farms of the northwest may in time do much toward supplying the public demand for mutton and wool. Already many such farms are producing small flocks, and the possibility of increasing the productivity of the watered districts in this regard is becoming a matter of scientific study.

With a view to gathering data on this subject, O. S. Jayne, formerly of the State College of Washington, but now with the U. S. government, is making a personal investigation of conditions and the experiences those now raising sheep on irrigated farms are having.

He told a representative of The Farmer the other day that he felt that the prospects were bright for the small farm flock as well as for the large flock where range and pasture conditions permitted the industry on a large scale.

Weed Exterminator.

Not only is the sheep a producer of mutton and wool, but he is as well a producer of fertility and clean fields. Mr. Jayne says there are only two common weeds that the sheep will not eat readily, and they are mullein and thistles. He reports having found them willing feeders on Russian thistle, however, and says that in some cases it has been found profitable in small degree to make silage out of the juicy, green weed. Although sheep eat and relish most weeds, a purely weed diet is considered a poor mutton producer. Some of the staple grasses or alfalfa, with a little grain, appear essential for the real growth of the animal.

Silage Is Popular.

Mr. Jayne reports finding the silo coming into popular use as an adjunct of the farm, where sheep are to be raised. He considers silage of some variety excellent as part of the sheep's ration, but does not think that it could be used exclusively for winter feed as has been the case with hay. In some instances that are found, however, large sheepmen are putting up or having put up silage for part of their winter feeding, and it is not impossible that the day will soon come when the flockmaster will contract his silage in the feed-growing district to be fed during the winter the same as he now contracts his hay supply. Both hay and silage should be fed. In some cases a dry feed, such as cured hay or straw, is cut up with the green, succulent feeds and run into the silo, and it is said the results are favorable.

One source of sheep pasture in the irrigated districts is the irrigation ditch or the canal banks. Owing to the presence of water these banks tend to grow up with vegetation of various kinds, frequently noxious weeds, on which the sheep do well for a part of the season.

Sell Purebred Rams.

One source of profit to the small sheep grower, if he is minded to make use of it, is the sale of purebred rams to the big sheep men. This is one of the ways R. Knaack of North Yakima, Wash., makes his little flock pay. He has been keeping sheep for 15 years, and now has about 90 head of purebred Hampshires built up largely from a grade flock foundation. He is fortunate in having 40 acres of brush pasture land in addition to his improved land. He sells his rams to the big sheep men for prices ranging from $15 to $25.

Mr. Jayne has found another interesting custom among sheep growers in the hop-growing districts. John Newenhoff, also of the Yakima valley, runs his sheep part of the time in his or his neighbors' hop yards, allowing them to "strip" the vines, thereby not only securing feed, but also relieving the owners of the necessity of doing the work by hand.

The keeping of sheep in the apple orchards is also being practiced, says Mr. Jayne. The animals will not damage the trees unless the pasture is very short. Alfalfa and orchard grass are made profitable in the orchards by the use of sheep.

One way many farmers have secured their first start in the sheep business is by adopting "bum" lambs from the large flocks as they pass through the country from one range to another. These lambs are sometimes made the basis from which are built up flocks of high grade animals.

Mr. Jayne is now in the midst of his investigations, and probably will prepare a pamphlet or bulletin for publication upon his completion of the work.

Apple Crop Reduced.

Robert Paulus, manager of the Salem (Ore.) Fruit union, estimates the central Willamette valley apple crop at about 40 per cent of normal. Fruit Inspector Constable estimates the prune crop of the valley at about 50 per cent of normal.

Rewards We have some valuable prizes we are offering to our readers as rewards for securing their neighbors as subscribers to our paper. Write the Prize Editor, care of the Washington Farmer, Review building, Spokane, Wash.

Want Ads

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SALESMEN WANTED—OWING TO DRAFT and enlistment we have a few well-worked territories open and will be pleased to hear from interested persons. Applicant must be exempt from draft. McConnon & Company, Dept. J, Winona, Minn.

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SITUATION WANTED—Male 21

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EDUCATIONAL 45

POSITIONS GUARANTEED GRADUATES OF BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog free.

TEACHERS' AGENCIES 46

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MISCELLANEOUS—FOR SALE 60

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Notice advance in prices.
Largest factory in the west selling direct from mill to consumer.
We sell anybody, ship anywhere and guarantee safe delivery.
Send for our large illustrated catalog No. 27, mailed postpaid, without charge, on request.
5 cross panel doors $1.93
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Screen doors, 2-8x6-8, heavy galv. wire $1.50
See our prices on Frames, Moldings, Millwork, Builders' Hardware, Prepared Roofing, Plaster Board, etc.
O. B. WILLIAMS CO.
1943 FIRST AVE. SO., SEATTLE, WN

MILK ROUTE AND IRRIGATED farm for sale; 40 acres; 20 in alfalfa, balance cleared; good water right; new frame house 20x24, one and a half stories; barn 40x40; milkhouse; all fenced; 20 dairy cows; Burrell milking machine, milk team, equipment; route paying $400 monthly. Price $5000 cash. Zell Truman, Shoshone, Idaho.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave. So., Seattle, Wash.

1 RUMELY OIL-PULL TRACTOR.
1 six-gang 14-inch plow outfit.
1 Minneapolis separator.
This outfit is in excellent shape. Price $3600; original cost $5600. Write to Mr. Patterson, 1000 Pike st., Seattle.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

FOR SALE CHEAP—SHARPLES MILKing machine, second hand, in good running order. O. Ingebright, Earlington Gardens. P. O. Box 1021, Renton, Wash.

MISCELLANEOUS WANTED 63

FOR SALE—BEES, WITH UP-TO-DATE equipment and buildings; also extracted honey, two 60-lb. cans, $15. John Ruyts, Buhl, Idaho.

STRAINED HONEY WANTED. WRITE US the quantity you have to offer. Commercial Creamery Co., Spokane, Wn.

MACHINERY—FOR SALE 93

12 H. P. INTERNATIONAL TRACTOR, IN first-class condition, used but very little, and practically as good as new; cost $1225; will sell for $650. W. M. Frost, 410 Chamber of Commerce bldg., Spokane, Wash.

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STOVE REPAIRING 126

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PATENTS 150

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WASH. (D. C.) PAT. ATTY. SEE AD IN Polk's. C. H. Crawford, Spokane.

LIVE STOCK 177

FOR SALE—7 HEAD PUREBRED PERcherons, all black; 6 mares and the best 2-year-old stud colt in the country. Write me. J. S. Graves, Newberg, Ore.

BERKSHIRE BOARS FOR SALE, MARCH farrow; best strain obtainable at $20 each. Andrew Fery, Aumsville, Ore.

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6 REGISTERED JERSEY FEMALES, 1 Foxhall bull. W. F. Lillard, Jefferson, Ore.

PUREBRED KENTUCKY JACK, REGISTered; 1000 lbs. Ross Cogswell, Sharon, Wn.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

JOB PRINTING 372

OUR PRINTING WILL GET RESULTS for you. It will help to sell your goods and earn you profits. Send for samples and price list. G. C. Gallagher, 436 Sacramento st., San Francisco, Cal.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

OPTICIANS 462

EYES EXAMINED; GLASSES FITTED; perfect results guaranteed. Broken glasses repaired by mail. Postage paid. Dr. Sletto, Owl Drug Store, Spokane, Wn.

DR. I. M. RADABAUGH, SPECIALIST IN examining eyes and fitting glasses, 304 Jamieson bldg., Spokane, Wash.

BUSINESS OPPORTUNITIES 516

FOR SALE—WELL-ESTAB. RAWLEIGH business in the famous Puyallup valley. No competitors. W. C. Brown, Puyallup, Wn.

ARCHITECTS 558

BUILDING PLANS AND ESTIMATES. L. L. Rand, The Rookery, Spokane, Wash.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

VETCH, CLOVER AND FIELD SEEDS.

We carry a complete line of grasses, wheat, oats, barley, speltz and other seeds too numerous to mention. Our prices are right, and will be glad to send samples and quote prices.
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15 to 25 miles n. e. of Spokane; rich soil; abundance of soft spring water; good dairy and stock country; above frost; fine fruit; free lumber and use of stump puller. Price $10 and $25 per acre; 10 years' time. Write for book to owner. Consolidated Land Co., Elk, Wash., or call 109 Stevens st., Spokane.

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THE FOLLOWING TRACTS GIVE AN IDEA OF WHAT WE HAVE TO OFFER. IF THEY DON'T SUIT YOU, LET US KNOW WHAT YOU WANT.

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40 acres of raw cut-over land; very productive soil, with an abundance of moisture, as would be indicated by willow bush; in good locality, on public road, close to railroad; on easy terms.

160 ACRES.

25 acres cleared; on county road, rural free delivery, etc.; sandy loam soil; good subirrigation; lies fairly level; in good community. Price right and terms easy.

80 ACRES.

40 acres cleared; on state road and two county roads; very centrally located, in good community; would make an excellent home; would make some improvements for proper party. Small payment and very easy terms.

480 ACRES.

480 acres, within half mile of railroad; cordwood enough to pay for it; in dollar limit of Spokane; good soil; make stock proposition; more land could be had adjoining; $12.50 per acre, easy terms.

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HOG AND DAIRY RANCH, 200 ACRES, 12 miles from Chewelah; 20 acres in cultivation, in alfalfa, barley and potatoes; log and box house, log barn; considerable more can be farmed, balance timber and bunchgrass pasture. $8 per acre; half cash. Some farm tools included at this price. Sparks & Co., 616 Peyton blk., Spokane, Wash.

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We have it—something to suit you—large or small, improved or unimproved—with stock and machinery if you want it—in Wash., Idaho or Mont. Call or write and tell us what you want. HEGE & WATKINS, 717 Paulsen bldg, Spokane, Wn.

BIG LAND OPENING—6000 ACRES A1 farm land in Snohomish county, $25 per acre; 10 yearly payments. Canneries, factories, mills, plenty of labor. Opportunity of your life. Send for literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

$30 AN ACRE WILL BUY A SPLENDID 200-acre farm, 3 miles from railroad town; high school on the land; fenced to four fields; over 100 acres in cultivation; good buildings. Long time on part. No trades. A. Z. Lucas, New Meadows, Idaho.

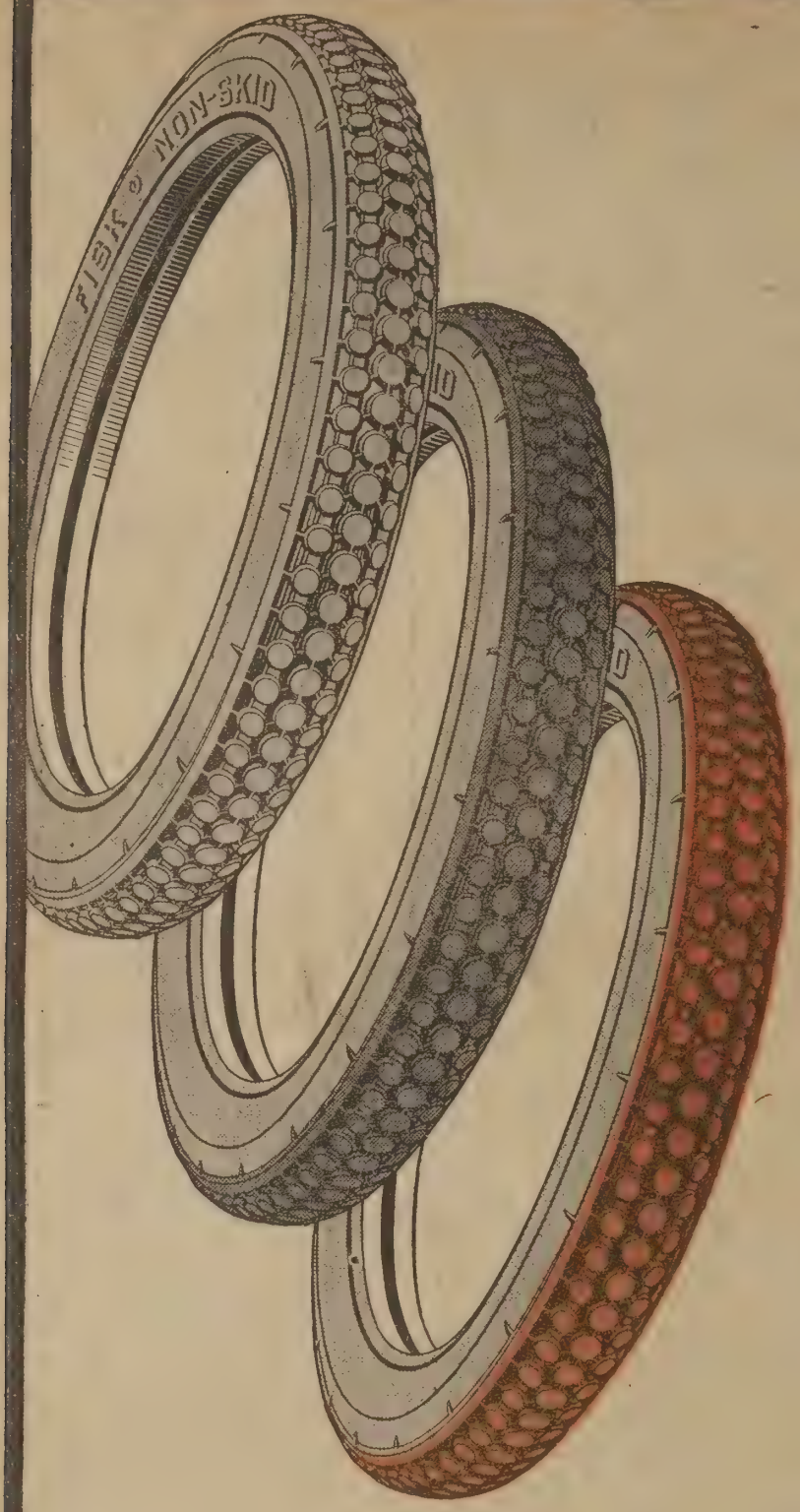
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IRRIGATED FARM LANDS.
ALFALFA LANDS, under government irrigation; abundant water; low altitude; rail and water transportation to coast markets; good schools, good roads; products alfalfa, corn, cream, hogs, honey, fruits, vegetables; long growing season; unimproved land $30 to $60 per acre; improved $100 to $250. Write for further information and literature. Dodd & Knapp, Hermiston, Ore.

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FOR EXCHANGE—2-STORY PRESSED brick building, 50x150; steam heat; good condition; 3 store rooms below, 20 office rooms above; cost $26,000; in Cripple Creek, Col. Exchange for good ranch, plenty water. Address H. J. Chambers, Carson, Ore.



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ADDITIONAL SAFETY against side slipping is supplied by a rib of rubber extending around the whole tread, on both sides. Fisk Non-Skids are the only automobile tires that furnish such complete protection.

This graphic illustration explains Fisk Non-Skid features—protection from every direction.

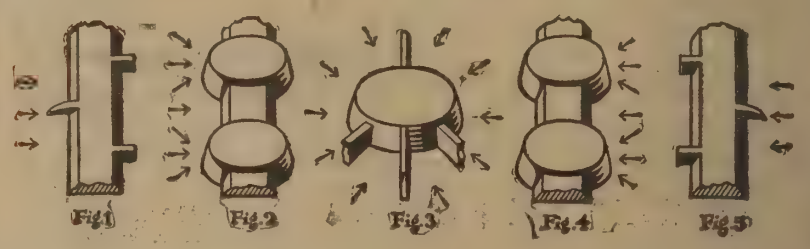


Fig. 1 *is the outside rib that makes an uninterrupted counter against direct side slipping or skidding—* ***Fig. 5*** *is the same protection on the other side of the tread.*

Fig. 2 *is the outside row of buttons connected by a second rib of solid rubber. The buttons, which are slightly higher than the connecting rib, offer perfect resistance against skidding and because they grip the road so firmly, make the pull forward in soft ground ever so much more positive and certain—* ***Fig. 4*** *has these identical qualities, but from the opposite directions.*

Fig. 3 *is the master button around which the Fisk Non-Skid tread is constructed. It supplies resistance against slipping in any direction—no matter which way there is a tendency to skid there is always a flat resisting surface to prevent that skidding, and to assist the sure forward movement of the wheel.*

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FISK Non-Skid TIRES

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 40. OCTOBER 4, 1917. ** WEEKLY.

Mill Wheat at Home

Save Freight and Feed, Urges Officer

A plea for both the milling industry and the dairy industry of the state of Washington was made recently by the Washington state public service commission through its chairman, E. F. Blaine, when he, at the request of western Washington granges, appealed to the national food commission to use its influence to have Washington wheat milled at home rather than shipped out to other milling centers. By so doing, it is argued that the feed by-products necessary for the maintenance of the dairy industry would be kept at home without the necessity of paying a double freight charge. Chairman Blaine's communication to the food commission reads as follows:

"The farmers, milkmen and stockmen of this state are exercised over the proposition that a large amount of the wheat of this state is going to be shipped east for milling purposes. If the wheat of the northwest is to be shipped east for milling we can readily understand that a great injury will be done the northwest and will result to the great disadvantage of the government in the prosecution of the war.

"The state of Washington produces a large amount of condensed milk. Its dairy herds are extensive and of a high order. These must be fed. The proposition of feeding them, however, is at the present time a very grave matter as alfalfa is now bringing $22 a ton f. o. b. cars at point of shipment, and the indications are that it will reach $40 a ton before new alfalfa is produced this coming season. While a large crop of hay has been produced in the western portion of Washington during the present season, it is not a milk-producing feed. The balanced ration in this section has always demanded alfalfa and a certain amount of grain or grain products. Bran is one of the essentials in the production of milk and dairy products. If our wheat is to be milled in the east we will not have the bran for the feeding of our cattle.

"Moreover, it is probably that never in the past has so much inferior wheat been produced in the state of Washington or the northwest as during the season of 1917. This poor wheat should not be shipped abroad, but should be consumed in the various ways at home. It will not produce flour of the quality that should go to the soldiers nor to the populace in general. It, however, has a feed value which in turn will produce elements of a high order for human consumption.

"We trust that this mater will be given your earnest consideration that an unnecessary injury shall not be done to the northwest as well as to the people of the United States in general."

Arthur D. Jones



To succeed R. L. Sparger as president of the Washington State Good Roads association, the convention of the association at Bellingham last week elected Arthur D. Jones of Spokane. Mr. Jones has been prominent in highway promotion, especially in eastern Washington. The following are the other officers elected:

Vice presidents—Frank Terrace, King county; F. W. Shultz, Chelan; Oliver Hall, Whitman; E. M. Gillette, Chelan and F. A. Fontaine, Columbia.

Treasurer—Percy L. Sinclair, Pacific.

Members of the executive committee—John P. Hartman, King county, chairman; Frank W. Guilbert, Spokane; E. C. Burlingame, Walla Walla; Hans Mumm Jr., Snohomish; N. B. Coffman, Lewis; Lee Monohan, King; Torger Peterson, Pierce; J. J. Donovan, Whatcom; Henry Parry, King; James Leslie, Yakima; J. E. Calder, Grays Harbor; F. J. Wilmer, Whitman; F. Wolf, Pend Oreille; J. C. Hubbell, Kittitas; J. G. Kulzer, Stevens; J. T. Cull, Grant, and W. H. Reed, Pierce.

Legislative committee—C. L. Morris, King, chairman; Eli Rockey, Pacific; W. A. Bolinger, Okanogan; L. E. Brown, Spokane; C. L. Mackenzie, Whitman.

Support Government

This Is Pledge of Highway Association

The Washington Good Roads association, at its annual meeting in Bellingham last week, went on record by unanimous vote as favoring the elimination of every activity not making for the successful prosecution of the war; the unquestioning obedience of every citizen at this time of crisis; coordination of all private and public resources. Every form of obstruction to the work the government is doing was severely condemned, while profiteering and strikes were alike classed as treasonable.

By a standing vote, which was enthusiastically unanimous the following patriotic resolutions were adopted as offered by Chairman R. H. Thomson of the resolutions committee:

"Be it resolved by the Washington State Goods Roads association, in 19th annual convention, that, in common with the other nations of the civilized world, the United States faces a danger which threatens her existence as an independent nation of free men.

"This danger menaces from both within and without. Until this menace is removed no other matter deserves our serious consideration. This danger can be met and overcome only by united practice of two things:

"1. All citizens must become obedient to law; and

"2. There must be collective coordination of our community and private forces and resources, together with the forces and resources of the nation.

"There is but one country and one flag, and every one who is not definitely for us is against us. As citizens of this republic, we do solemnly pledge ourselves and all we have to the service of our country, and we denounce as traitorous to country and flag every one, whether rich or poor, who does not stand ready so to serve.

"We brand every attempt to extort money from our country or its citizens, by reason of the opportunity opened by our present necessities, through profiteering or by strikes, as being selfish, dishonest and traitorous. For ourselves we declare all differences at an end and we do again pledge our organization and our individual efforts unsparingly and unselfishly to the service of our country."

President Sparger's address teemed with suggestions of patriotic endeavor by the good roads promoters. Especially was this true with reference to roads of military importance. He declared that there were great distances along the coast of Washington that troops could not travel because of lack of roads, and urged that the building program take into consideration the movement of troops that might before long become necessary.

BEGINNING IN
Next Week's Issue of The Farmer
"THE BARRIER"
By REX BEACH

One of the greatest romances of the wild, lawless days of the Klondike Country ever penned by this gifted author. A big, strong story that will sweep you along on a powerful current of intense interest from chapter to chapter.

NECIA

Her father, John Gale, is the trader at Flambeau. Her mother is a squaw. She has a little half-breed brother and sister. Also she has two lovers—a French Canadian—Puleon Dorat, and Lieutenant Burrell, in charge of the recently established barracks at Flambeau. Burrell is an aristocratic Kentuckian; proud of his family and ancestry. Could he think of marrying Necia — a half-breed Indian girl? There is the great barrier. Poleon Doret, knowing no social barriers, loves Necia with all the ardor of his great, clean soul. Which wins?



NECIA

"She was like some wood sprite—light-footed, slender and dark, with twin braids of hair to her waist, framing an oval face colored by the wind and sun. Her laughter was like the tinkle of silver bells. Every move of her graceful body was unrestrained and flowing with a hint of Indian freedom in it Beaded and trimmed like a native princess, her garments manifested an ornature that spoke of savagery, yet they were neatly cut and hold to the pattern of the whites."

THE BARRIER Is Not a Milk and Water Love Story

Rather it is a broad, sweeping narrative that carries you on the strong current of its action from California to the Alaskan wilderness of the early gold rush. "The Barrier" is a story that, when finished, leaves you the richer, spiritually, for having known these people, working out their ideals and fortunes, their loves, hatreds and misunderstandings, amid surroundings of rough grandeur and the unforgetable charm of the great northland.

The opening chapters of "The Barrier" will appear in next week's issue of this paper. A liberal instalment will be given each week thereafter. Tell your friends about it, for it will mean many an hour of keenest enjoyment for all who read this splendid story.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 40 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF October 4, 1917

Farm Bank Saves Cash to Farmers

Remarkable Progress Is Made in Northwestern District

The federal farm loan bank for the rthwestern states is saving the rmers who have borrowed money rough it more than $200 a day, and as loans which it is making increase, they are doing with remarkable idity, this saving will likewise in- ase.

The bank, the central offices of ich are at Spokane, Wash., has ced in the hands of the farmers of ho, Oregon, Washington and Mon- a a little more than $2,550,000. This ch money, if borrowed from the al sources at 8 per cent, which is a al rate of interest, would cost the rrowers about $204,000 a year in in- est. The farm loan bank lends it at per cent, which costs the farmers ly $127,500 interest, or a saving of ,500 a year, which is in excess of 0 a day.

Greater Is Possible.

The bank has now appraised and ap- oved applications for loans in the r states totaling more than $11,000,- . If this were borrowed by the mers at 8 per cent it would require 0,000 each year to pay the interest. will require $550,000 at the 5 per t rate charged by the federal farm n bank, and will thereby result in a ing of $350,000 a year to the farm- , or nearly $1000 a day. The total lications for loans in the four states e reached more than $23,000,000, l it is apparent that the bank will rove actual loans on these applica- ns of probably $20,000,000, which uld mean a saving in interest rges of $600,000 a year to the bor- vers.

The speed with which the bank is ting its leading business under way the northwest is indicated by the t that it made actual loans during month of September of approxi- tely $1,046,000.

This is the first month that a million lars have been sent out to the farm- , and it is expected by officials that s sum will be increased a little with h succeeding month until winter kes it impossible for the appraisers pass judgment on the lands in some ts of the northwest. How the bank gaining speed is indicated by the t that it took the first four months operation to make loans of about $1,- ,000, but the fifth month saw more n $1,000,000 loaned. This was due several conditions; not only was it essary for all the organization work the bank still to be done when first ated in the northwest, but the farm- themselves had to be educated as the proper way to apply for loans l cooperate with the bank officials securing them. Now the bank is in ellent working order, and the bor- vers are able to place their applica- ns in better shape so as to prevent dless delays.

lustrating the point of the greater vity of the banking machinery and farmers, President O'Shea of the thwest bank cites one instance in ntana where fifteen persons had med an association and applied for ns. The bank's appraiser was sent that district, and while there he ived the applications of 73 persons iring to secure loans.

Business Extending.

The farm loan bank is making every rt to reach the people who desire ns, and if afforded the cooperation he farmers, expects to have a loan ciation in nearly every community the northwest by the end of the ," says President O'Shea.

Montana was the last of the four es to appreciate the advantages would come to the farmers from operation of the land bank, but it is now awakening to the situation, and its applications for September are greater than for the other three states combined."

Of the $23,117,648 applied for by the farmers of the four states, Idaho has asked $2,899,278, Montana, $6,804,591, Oregon $5,475,625 and Washington $7,- 938,154.

Of the loans approved, which total $11,072,395, Idaho has $1,590,615, Mon- tana $2,961,550, Oregon $2,860,865 and Washington $3,659,365.

The loans applied for during the month of September totaled $3,163,335, while the loans appraised and approved for that month totaled $2,331,300. The difference between these applications and the amounts approved does not in- dicate, however, rejection of that amount, but merely that scores of the applications are yet not reached in the regular course of the bank's business.

Up to the present time there have been 10,130 farmers applied for loans. There have been 209 local loan asso- ciations chartered, and 54 applications for charters are now in and being taken up by the bank as rapidly as possible.

Cover Crop

Alfalfa Considered One of Best

By C. H. TICHENAL, Cashmere, Wash.

I have raised less alfalfa since the trees have gotten large. I irrigate 25 acres and have five tons to the acre. There is some increase in acreage this year but it is all in orchards so does not yield as much as if there were no trees. I have two acres as pasture for my milch cows. I feed alfalfa to my horses, cows, pigs and chickens. It is the best hay that grows out of the ground. I consider it one of the best cover crops that can be grown in an orchard where a man has plenty of water for irrigation. I used to cut eight and one-third tons per acre when there were no trees. The crop will be short this season on account of the dry, long, hot spell, as the water will not go as far as usual.

Guernsey Breeders Organize.

The Guernsey breeders of Snohomish county met at Arlington the first of the week and organized the Snohomish County Guernsey Breeders association, reports C. C. Farr, agent for that coun- ty. Fifteen men were present. Mr. Carroll, Mr. Douglas and Mr. Hiliare of Whatcom county were present to as- sist in the organization. E. W. Soper has been secured to take charge of the Snohomish Valley Cow Testing asso- ciation to replace V. B. Riley, whose eyes gave out.

Feeding Problem Critical.

"The dairymen are putting in their supply of hay," says C. B. Sprague, county agriculturist of Kitsap county. "Alfalfa is costing them $26 per ton laid down on the dock at Port Orchard. One man told me he got the same grade hay of on the wharf last year for $14 per ton. The feeding problem is the one problem that seems to be the critical one now."

Are Farmers a Preferred Class?

Commerce Journal Talks Foolishly of Price Regulation

It is difficult to discern what good purpose the New York Journal of Com- merce can expect to achieve by making sneering allusions to "farm patriotism" and printing untrue editorial utter- ances like this:

> "The farmers' combinations are making every effort to get the last possible cent out of the govern- ment and the consumers. These same farmers who are demanding the highest possible speculative price for their product are demand- ing that other people's products shall be sold to them at forced low prices."

And in another column the same newspaper prints approvingly the as- sertion by a Wall stret broker that "the attitude assumed by farmers in some sections of the country is largely due to the government, which has been giv- ing them preferential treatment above all other industries in the country."

The truth is, as every one can see who will take the pains to read the law, that control bears more generally on the farmers than on any other class, with the possible exception of the pro- ducer of coal. In effect, it empowers the government to control and depress the price of wheat, flour, meal, beans and potatoes, and to regulate practi- cally everything the farmer grows.

So far the government has dealt only with wheat, but its power to control the prices of these other farm products is clearly fixed in the law.

A lot of loose thinking and wild statement is abroad in the land. It is often stated that the government was favoring and coddling the farmer when Dr. Garfield's commission recently fixed prices for the wheat harvest of 1917. The truth is that the government fixed the price far below the quotations the farmer would have received if the law had kept hands off the markets and allowed the natural laws of supply and demand to take their course. There is every reason to believe that the farm- er then would have received not less than $3 a bushel for his wheat, and some authorities think it more likely that the price would have gone well above $3.

There is not the least doubt that, if the government had not stepped in and fixed an arbitrary price, the wheat growers of the Inland Empire would have received a dollar a bushel more than they will now get. And we think it takes genuine patriotism for the farmer to accept that loss in loyal spirit, since it means a total sacrifice in the northwest of some $40,000,000.

The farmers will be entirely content if it turns out that the consumers get the benefit of that reduction, for they realize that the country's wage earners are having a hard struggle to make ends meet. We wish that we could be sure that it will turn out that way.

The fact is that it is the jobber and the retailer and not the farmer who has had preferential treatment in the food control law. As The Farmer has already pointed out, and as the Wall Street Journal now admits, the whole retail trade of the country, with the possible exception of the fuel dealers, is immune from regulation and con- trol. Commenting intelligently on that fact the Wall Street authority says:

> "The latter has prospered under war conditions in its own way. Trade fail- ures have dwindled to insignificant size; collections have been good, per- centages of cash sales have gained and there has been of course a correspond- ing diminution of commercial hazard.
>
> "Retail merchants may be as pa- triotic as other business men, but they are not more so. They have made no sacrificial efforts to escape "war prof- its." As commerce originates with the farmer, it ends with the retailer, who places the commodity in the hand and as near to the mouth or back of the consumer as it is humanly and humane- ly possible to do.
>
> "In a universal era of interest, price and wage regulation, and of strict standardization of manufactures, of stringent tests of quality and rules for grading, marking and branding, why should the retailer be a law unto him- self not only as to the window profit, gross and net, on turnover, but the profit concealed in imitations?"

Others are beginning to note a fact already pointed out in these columns, namely, that the government, which lays its hand on wheat and is trying to control the mills, lifts that hand from the product when it is ground into flour. Commenting on that weakness in the law, James R. Stewart of Min- neapolis, president of a large grain company, says:

> "Another weak link in wheat con- trol is at the farthest end from the farm. Fixing wheat prices and milling profits practically fixes flour prices at the mill, but the job- ber and retailer have a free hand."

And the baker has a free hand, too; and evidently, judging from recent utterances of S. F. McDonald, president of the National Association of Bakers, is making ready to charge high prices for bread and lay the blame on the farmer. Speaking before the national convention of the bakers at Chicago the other day, he said:

> "As an artificial stimulant to wheat production congress proposes to guar- antee a minimum price of $2 for the 1918 wheat crop. At the same time congress delegates to the farmer the right to hoard farm products. These are conditions tending to build up ex- cessive bread costs. The farmer, guar- anteed a $2 minimum, may quickly realize that a small crop is easier to handle than a large one. A high mini- mum without a maximum price tends to defeat the thing which the majority of the people are anxious to see, name- ly, a reduction in the high price of wheat. With a reasonable maximum price the farmer would know that he could not raise a short crop and hoard for an abnormal price, but would know that if he wanted a lot of money he would have to raise a lot of wheat to get it."

Think of peddling out that sort of nonsense! Yet there is danger that millions of consumers in the great cities, who do not make a close study of agricultural conditions and the law, will be deceived by it and hold a hard feeling against the farmers. Well in- formed people know that crop restric- tion is entirely beyond the farmer's control, and the farmer who ran his farm on the theory that he would make more money by cutting down his indi- vidual production would end in bank- ruptcy.

If the wheat acreage of 1918 is dis- appointing it will be because the gov- ernment has set the minimum too low to encourage increased seeding of wheat; because the farmer will feel that he can make more money growing other products.

Safety Suit for Aviators.

An Englishman has invented a safety suit for aviators which is covered with parachute-like pockets, by means of which the entire suit can be inflated, so that the force of the aviator's fall may be broken.

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Milk Problem Puzzling

Food Administration Takes Up the Question

Shortage in the milk supply is creating nation-wide concern. The national food administration is asking producers to make only month-to-month contracts with distributors pending a promised reduction in the prices of cattle feeds. Semi-annual contracts are now expiring.

Food administration officials believe that stabilized grain prices and limited profits for millers will cut feed prices before January 1. They look for a general readjustment of contract prices, and are hopeful that distributors may be able to reduce the price of milk to the consumer.

Milo D. Campbell, president of the National Milk Producers' federation, said there was little doubt dairymen would approve the monthly contract plan.

Mr. Campbell made this statement at Washington, where he had gone to confer with Food Administrator Hoover.

Meanwhile representatives of the New York distributors have also appealed to Mr. Hoover. The new schedule fixing higher milk prices recently issued by the dairymen's league will shortly receive attention from Food Administrator Herbert Hoover, according to I. Elkins Nathans, secretary of the New York State Milk Dealers' conference board. Mr. Nathans said:

"Mr. Hoover now has a clear understanding of the whole condition. He is most anxious to do anything he can. His only doubt is regarding his rights in the matter, but he promised the board to take it up with careful consideration. We asked for advice as to the course we should take and received assurances that we would hear from him."

Mr. Nathans also said that what Mr. Hoover could do to relieve the situation would be to inform the dairymen's league that he does not consider, in view of operating costs, that their higher prices are warranted. Such advice from the food administration to the dairymen, Mr. Nathans thought, would have good effect.

Would Start Famine.

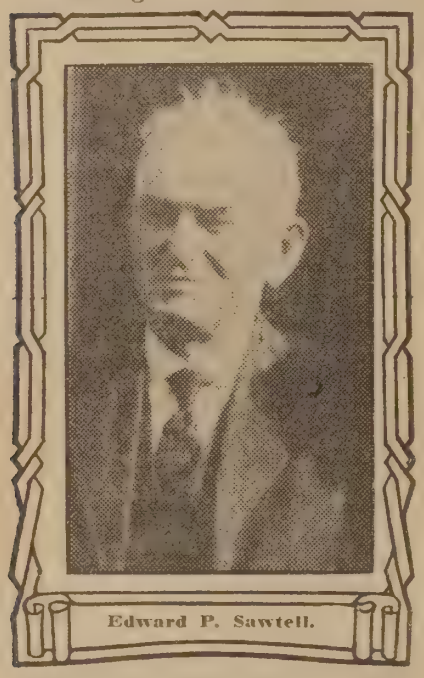
A New York dispatch says that 120 milk dealers in New York and adjoining states plan refusal to renew their contracts with farmers this fall, hoping thereby to start a milk famine to bring the producers to terms. They object to the price of 7 1-2 cents a quart established by farmers and say a strike would compel the government to take drastic action. The dealers criticize the failure of Mr. Hoover to fix the price which farmers may charge for milk.

That reveals an unreasonable attitude on the part of the distributors. In the first place, neither Mr. Hoover nor any one else has the slightest authority of law to fix the price which the farmers may charge for milk. And in the second place, the dairy farmers will be heard from if the government should repeat the injustice against them that it laid on the wheat growers in fixing the price that the farmer must take, while leaving the distributors—the jobbers, the retailers and the bakeries—free to extract any profits they please.

Evidently the big New York distributors want government control of that one-sided kind—a law that would fix the price to the farmer while leaving them free to charge the consumer what they pleased.

The problem extends from coast to coast. Seattle dealers are saying that the retail price of milk will be advanced there to 14 cents a quart. The present price is 10 to 12 cents. Dealers predict 20-cent milk by Christmas. Increase in cost of production to the farmer and in cost of distribution to the dealer are given as the reason for the higher price.

Washington Portraits No. 31



Edward P. Sawtell.

Edward P. Sawtell came to Washington in 1881 from Kansas by wagon, stopping for the winter at Ogden, Utah. He at once settled in Chehalis county, Wash., close to what is now Independence Station on the Milwaukee railroad. The land was railroad land, and Mr. Sawtell had not a cent to pay down, but T. F. McIlroy of Olympia bought the land and gave him a bond for a deed. He was 10 years in paying it off in full, though he could have paid much sooner had Mr. McIlroy hurried him. His purchase included 160 acres and he cleared practically all of it. All but 90 acres has since been sold. He had nine children, six of them girls, all of whom have married and all living but one. Two of the boys are still living. About eight years ago he built a 10-room residence on the farm.

In 1904 he purchased his first registered Holstein and now has a nice little herd, besides having had a good sale of bulls and some females. Most of the herd is the offspring of one cow.

Mr. Sawtell served three years as a director of a cooperative creamery at Centralia. He was a school director when his district was in three counties, but he never liked public office. He is now a stockholder in the Farmers and Merchants' bank of Centralia. Mr. Sawtell is now nearing his three score years, but he still does much farm work.

How to Select Good Eating Apples

By Granville Lowther.

For cooking it makes very little difference whether an apple is approaching what we call the ripening period or whether it is fully mature, and has reached a fair state of development. There seems to be very little difference in the flavor and quality of the apple, even though it be firm and solid before cooking. But for desert or for eating out of hand, it is of prime importance that they should have reached a fair degree of ripeness, and at this point many consumers are disappointed in the fact that the apples are not as good as they expected.

The difference grows out of the fact that different varieties of apples ripen at different periods of time, and one of the very best apples for eating out of hand when it is fully ripe, at another period before it reaches that stage of ripeness is not fit for consumption.

It is difficult for consumers to determine this unless they are fully acquainted with the varieties of apples and the place and conditions under which they are grown. For instance, the Spitzenberg is considered by a majority of people one of the very best apples in its season, but its season is later than that of the Jonathan or the Grimes Golden. The Yellow Newtown is later yet than the Spitzenberg and the Arkansas Black, while not a first class apple at any period, does not reach a degree of ripeness when it is fit for consumption until some time in the spring or early summer.

Apples of the same variety grown in different circumstances ripen at different periods of time, and, therefore, the consumer, unless he is acquainted with this fact, or acquainted with the conditions under which the apples are grown, might be disappointed. For instance, when I was in Texas I found Jonathan apples on the market from the Ozark mountains the first of December, and they seemed to have reached their full period of ripeness when they were fit for consumption. The following February I found Jonathan apples grown in Colorado in as good a state of preservation as those grown in the Ozarks in December. Those grown in Colorado could not have been consumed and furnished the consumer satisfaction in December. Those grown in the Ozarks would not have kept until February.

In the Yakima valley we have the same conditions, only not so marked. For instance, in the lower valley, about Granger and Zillah, the Jonathans are ripe for the market about two weeks earlier than those grown at North Yakima, and at North Yakima they are ten days earlier than those grown in the upper Natchez or on the higher lands nearer the foothills above North Yakima.

The consumers are not supposed to be acquainted with these facts. Therefore, the grower should mark upon the boxes about the time his apples are ready for consumption, and by this means better satisfy the consumer and thereby extend his markets and create a greater demand for his products.

There is considerable agitation now in the northwest states, Washington, Oregon and Idaho, about "Apple Day." The tocsin in Washington is "Buy a Box of Washington Apples"; in Oregon "Buy a Box of Oregon Apples"; in Idaho, "Buy a Box of Idaho Apples." This is all right, and will call attention to the home products and stimulate buying, but if when the buyer purchases what he deems to be a first class variety of apples and pays a first class price, and then discovers that it is not what he expected, he will not feel inclined to buy again, and this disappointment may not be due to the fact that the apple is not a good variety, but that it is not the particular variety or apple for the season in which he bought it and for which it was consumed.

If we are going to get the most possible out of this campaign called "Apple Day," we must guide the buyers as to the best time to purchase for consumption any particular variety grown in any particular locality, for it must be borne in mind, and therefore, I repeat, that the same variety grown in different sections ripen at different periods of time. Therefore there is no general rule that will apply to any particular variety which would guide the consumer and enable him to say that the Jonathan can be consumed in December, for instance, and the Spitzenberg in January, the Newton in February, the Winesap in March and the Arkansas Black in April. While these varieties may come in the order named, yet so much depends upon the elevation and the environment under which they are grown that only the producer can give correct rules.

It Begins Next Week.

The nights are now longer than the days. Very soon there will be long winter evenings, and the chores will have to be done by lantern light. Then—then "The Barrier." Plan to spend one evening a week with it. It is a wonderful story of a wonderful land inhabited by wonderful people. It is a Klondike story, written by Rex Beach. It begins next week in The Farmer, and will run in weekly instalments until its 19 chapters and 310 pages of stirring narrative are finished. Read the first chapter at our suggestion. You'll read the second and third and the rest of them because you can't help it.

CHILD WELFARE

League Is Well Featured at Fair.

An entire building was given over to exhibits placed by the Child Welfare league, under the supervision of Mary A. Grupe, psychologist at the Ellensburg normal school. Displays showing the proper clothing for infants and growing children were in evidence, as well as the right kind of food, books to read, etc. Attention was called to the harm done by patent nostrums, and home-made toys were shown. A day nursery was maintained throughout fair week.

The woman's building at the state fair housed a pretentious showing of art and handiwork. The state fair woman's department has been under the direction of Miss Sue Lombard for many years, and Miss Lombard has made her part of the fair an institution of intense interest and great educational value.

QUALITY EXCELLENT

Districts Show Good Exhibits.

While district representations we few in number at the Washington St fair the quality of the fruit and veg table exhibits was well up to stan ard. In some quarters the consens of opinion was that these showings celled those of previous years in sp of the late growing season and t earlier dates of the fair. This depa ment of the fair was under the sup vision of John J. Miller of North Y ima.

Yakima valley district exhibits w fewer in number than in former ye due largely to the fact that the f came at a season when every prod found it necessary to attend to harvesting and marketing of his crop

Stevens county had an attractive hibit under the direction of W. Hughes of Colville. Grains, grasses a vegetables from this section w shown in profusion, and attested to splendid agricultural development that locality. Mr. Hughes also had noteworthy individual exhibit.

Squashes Volunteer.

C. Starcher of Fairview, Yaki county, exhibited six hybrid squash which, placed end to end, measured feet in length. The squash were v unteers and are the result of the seed the mammoth variety and from Boston marrow having been sown cl together the previous years.

In charge of John E. Hanson, Gra Harbor county sent a a splendid exhi of grains, grasses, celery and oth vegetables. Ripe corn in quantit made up a part of the interesti showing.

A large exhibit of fruit and vegeta products from Benton county was charge of Luke Powell, district h ticultural inspector.

Pierce county's practical showing home-canned and dried fruits and v etables was interesting and instructi as well as its big collection of gene agricultural products.

Grains and grasses were features Clarke county's showing, which was charge of County Agent Fletcher.

The general fruit displays not tered on a competitive basis were ma and served to enhance the general be ty and attractiveness of the hortic tural building.

Garden Truck Shown.

King county's importance as an ag cultural county was demonstrated by especially noteworthy exhibit of tru garden products and an array of fr grains and grasses which would credit to any district in Washingt and in many cases excel it.

Yakima county had its us attractive display of fruit and ve tables, as well as an endless variety other products, attesting to its won ful adaptability to diversified farmi Besides the agricultural displays Yakima county exhibit gave place to interesting exhibit of game fish fr the Yakima trout farm, which annua hatches thousands of fish for the Y ima county game commission.

Commercial representatives from parts of Washington were in charge novel booths, many of an educatio character.

Boys' and Girls' Work.

Work of the second division of t canning clubs of the boys and gir industrial department at the state f proved fully as interesting as that co by the first division earlier in the we Clallam county canned carrots; Ada made crabapple jelly; Thurston cann beef; Klickitat made pear preserve King county canned salmon; Yaki county canned fried and stewed chic en; Whitman canned oranges; Frank canned cauliflower; Grant made pea butter; Snohomish made combinati jelly of prunes, apples and black be ries; Island made watermelon pr serves; Walla Walla made tomato pr serves and Jefferson made plum jel

Construct Silo at Goshen.

With the assistance of J. N. Pri state college of Washington, and H. Carroll Jr., county agent of Whatc county, a 10 by 32 wooden stave si was constructed recently for H. Mize of Goshen. The staves were c at a local mill according to specifi tions. The doors were made of stav as outlined for the continuous do type of silos in Extension Bulletin N 24, state college of Washington.

Live Stock Best Ever Seen at Boise

Idaho Is "Off for a Good Start" on Constructive State Fair Program

By E. J. IDDINGS

A really state-supported state fair has ome to Idaho, and the start made at Boise last week undoubtedly spells nuch for the future.

Exhibitors of Horses.

The exhibitors of horses were as follows:

Thoroughbred—W. A. Jenkins, Boise.

Standard Breds—A. Waite, Boise; Villiam Howell, Boise; Frank S. D. mant, Boise; G. E. Noble, Boise; O. H. Hutchins, Boise; Peter Weber, Boise.

Percherons—P. A. Sorenson, Kuna; V. H. Thompson, Boise; Walters Brothrs, Twin Falls; Frank Taylor, Meridan; C. Matlock, Meridian; Perry D. Hadsall, Middleton; Frank Sullivan, Rupert; N. W. Booth, Meridian; W. F. Howard, Parma.

Belgians—W. H. Thompson, Boise; H. McClanahan, Boise; Frank Sullivan, Rupert.

Shires—G. E. Noble, Boise; Walters Brothers.

Shetlands—Mrs. H. T. Baker, Bench; Perry D. Hadsall, Middleton.

The greatest strength by far was in he Percherons. Nearly all the classes were filled and some with six to ten ntries. One exhibitor alone, Soreno. had 25 head on the grounds. The wo closest contests were in the aged tallion class and in the final contest f championship of the stallions. In ne former a chestnut four-year-old hown by Sullivan was closely pressed y a much older and a popular horse mong mare owners exhibited by Perry adsell. The four-year-old won on his etter lines and evener conformation. he ringside opinion was divided in lacing the championship between the our-year-old mentioned and threeear-old from the Walters string. The hree-year-old was preferred by the udge. Professor C. W. Hickman of the niversity of Idaho, for his outstandng performance when in action and ecause of a nearer approach to the ccepted Percheron type of today. The rst prize aged and champion mare as a big, well-balanced black from the Valters stables. In most of the classes nose who achieved the most courted wards were closely pressed by other nimals of merit.

Beef Cattle Exhibit.

The great strength of the beef cate exhibit was in the reds, whites and oans. A. H. Eagleson & Sons of oise exhibited an Aberdeen Angus erd and met with no competition, and ne highly capable and efficient fair ecretary, O. P. Hendershott, sent some erefords for display but not entered or competition.

The following exhibitors made a total splay of approximately 120 head of northorns:

W. H. Thompson, Boise; Caldwell attle company, Caldwell; G. W. DeLay, ot Lake, Ore.; W. J. Townley, Union, re.; E. H. Gaine, Caldwell; Frank Sulvan, Rupert; Boone Brothers, Rupert; mes Rush, Rupert; P. A. Sorenson, una: University of Idaho, Moscow he latter not entered for competition.)

The Oregon cattle were not only careully selected and typy individuals, but addition were fitted and carried the eat to put them forward to best adntage for the fray. With Townley ading over DeLay, every first went to regon. The Sorenson cattle were editable but thin and took one first. ll championships went to the Oregon erds. The university exhibit consisted f a yearling steer that had won grand hampionship honors at the Interstate ir at Spokane and six head chosen om the varsity's Shorthorn breeding erd. Judging was most competently ne by H. R. Smith, Union Stock Yards, hicago.

There has never been a stronger daho show of Holstein-Friesians. here was a splendid herd from the Indstrial institute at Weiser, formerly he Hulbert herd of Nampa. These cate, particularly the string of five aged ows, huge of barrel and tried and roved producers of great yields of ilk and butterfat, were mighty good to ok at. The institute won the larger hare of the awards, with the Avalon rchard company of Kuna and F. O. Johnson, Meridian, pressing close for their respective shares of the awards. The University of Idaho had on the grounds for display only three especially good looking two-year-old heifers. The three head average better than 1000 pounds of milk per month each for periods of six to eight months and one had produced 8700 pounds of milk in eight months.

Jerseys were represented by a small herd of J. H. McClanahan, Boise, and the yearling herd sire of the university. The Guernseys of Carlton Holt and Waukesha Guernsey Farm, both of Boise, represented the other Channel Island breed. The dairy show as a whole marked a distinct step of progress toward a state fair dairy cattle exhibit entirely worthy of the state's possibilities in milk, butterfat and cheese production.

There were sheep to represent the various breeds and two highly fitted flocks, but the sheep pens did not contain entries fittingly representing the great importance of mutton and wool production in Idaho. From the flocks of Idaho could be picked a state fair exhibit of outstanding merit and one worthy to enter the oldest and best sheep shows of America. Only a comparatively few of the best ones were on the state fair grounds.

Southdowns and crossbred Cotswold —Southdowns all wethers—were shown by the university. Here the state institution was permitted to compete and was awarded championship on fat wether.

The only Shropshire was a single ram by Brown Brothers, Twin Falls. The Hampshire exhibit of Brown Brothers was highly fitted and was deserving of keen competition. The remaining exhibits were in field condition only. While creditable, the lack of special show fitting did not permit the more pleasing outline that might have been presented to the visiting public. Other exhibits were as follows:

Oxfords—K. G. Berry & Sons, Boise; Charles A. Cairns, Meridian.

Cotswolds—J. M. Flack, Meridian.

Lincolns—W. N. Booth, Meridian.

Rambouillets—T. S. Kennedy, Nampa.

The sheep were judged by E. J. Fjeldsted, field animal husbandman of the university.

The Swine Show.

The swine show, including the futurities of the Poland-China and Duroc-Jersey breeds, was one of the strongest features of the entire live stock show. Polands were shown by A. N. Moss, Caldwell; Wilson Brothers, Greenleaf; E. C. Vahlbert & Sons, Emmett; H. S. Randall, Boise; W. F. Howard & Son, Parma; Howard & Royston, Parma; Wilson & Vahlberg, Emmett.

In nearly every class all exhibitors were represented. The fight for highest honors, both in the open classes and futurity, was a three-cornered one between Wilsons, Howard and Royston. Royston and Howard & Royston had the more growthy and more highly finished young stuff and showed heredity in the younger section of the show. Five of the champion ribbons, including both grand champion boar and grand champion sow went to Howard & Royston. Wilson had junior champion boar. It was a showing strong in numbers and in quality. Roy Davis of the American Poland-China Record association looked after record association interests in the futurity.

The Duroc-Jersey show was likewise closely contested and highly creditable. The popular and accepted blood lines of today prevailed in the animals shown. The Richards Live Stock company of Virginia was the principal winner, taking all boar championships and junior champion on sow. Senior and grand champion on sow went to H. S. Fest of Emmett. The grand champion boar was Richard's Defender. Other exhibitors were C. McClelland, Boise; J. A. Wagner, Meridian; H. C. Polly, Burley.

Creditable displays of Tamworths were made by the Round Knoll ranch, Bliss, and a nice lot of Chester Whites were exhibited by the Boise high school. The judge of Poland China and Duroc Jersey open and futurity classes was E. J. Iddings of the University of Idaho. Other swine classes were placed by C. W. Hickman.

On the whole, it may be said that Idaho is "off for a good start" on a constructive program for a really great state fair.

The following are the live stock awards at the Idaho state fair:

BEEF CATTLE.

Shorthorns.

Bull, 3 years, G. W. DeLay, Hot Lake, Ore., first; James Rush, Rupert, second; W. H. Thompson, Boise, third.

Bull, 2 years, W. J. Townley, Union, Ore., first; Caldwell Cattle company, Caldwell, second; P. A. Sorenson, Kuna, third.

Bull, jr. yearling, Townley, first, second; Boone Brotherson, Rupert, third.

Bull, sr. calf, Townley, first; Sorenson, second, third.

Bull, jr. calf, Townley, first; Sorenson, second, third.

Cow, 3 years, Sorenson, first and third; Townley, second.

Heifer, 2 years, Townley, first; DeLay, second, third.

Heifer, sr. yearling, Townley, first.

Heifer, jr. yearling, Townley, first; DeLay, second, third.

Heifer, sr. calf, Townley, first; E. A. Grimm, Caldwell, second.

Heifer, jr. calf, DeLay, first; Sorenson, second, third.

Graded herd, Townley, first; DeLay, second.

Breeders' young herd, Townley, first.

Breeders' calf herd, Townley, first; DeLay, second; Grimm, third.

Get of sire, Townley, first, second.

Produce of one cow, DeLay, first; Townley, second.

Exhibitors' young herd, Townley, first; DeLay, second.

Sr. champion bull, DeLay.

Jr. champion bull, Townley.

Sr. champion cow, Townley.

Jr. champion cow, Townley, first.

Grand champion bull, DeLay.

Grand champion female, Townley.

Aberdeen Angus.

All awards in the Aberdeen Angus were made to A. H. Eagleson & Sons of Boise, who had excellent entries in about every contest offered for this breed.

Herefords.

All Hereford awards went to the Hendershot Land & Live Stock company.

DAIRY CATTLE.

Guernseys.

The Waukersha Guernsey Farm of Boise was given all the awards on Guernseys.

Jerseys.

J. H. McClenahan of Boise received all the Jersey awards.

Holsteins.

Bull, 3 years old or over: Avalon Orchard Tract company, on Hartwood Heilo Hengerveld, first.

Bull, 2 years old and under 3: Intermountain Institute, Weiser, first, on Segis Walker Hartog.

Bull, junor yearling: F. O. Johnson, first, on King Segis Walker Pietertje Vale.

Bull, senior calf: Avalon Orchard Tract company, first, on King Segis Spofford Again; Intermountain Institute, second; Avalon Orchard Tract company, third.

Bull, junior calf: Avalon Orchard Tract company, first; Intermountain Institute, second; Avalon Orchard Tract company, third.

Cow, 3 years old or over: Intermountain Institute, ou Susie DeKol Pauline, first; second on Tiriania Johanna Machtilde. P. O. Johnson, on Viola Shadeland, third; Intermountain Institute, on Buckeye Grace Merley, IL, fourth; Intermountain Institute, on Queen Gerbon Spofford, fifth.

Cow, 2 years: F. O. Johnson, on Viola Dale Netherland DeKol, first; Intermountain Institute, second, on Ivy Colantha; third on Gem II.

Heifer, senior yearling: Intermountain Institute, first and second; Avalon Orchard Tract company Hartwood Pauline Karon II, third.

Heifer, junior yearling: F. O. Johnson, first, on Queene Johanna Hetherland De Kol; Avalon Orchard Tract company, second.

Heifer, senior calf: Intermountain Institute, first and fourth; Avalon Orchard Tract company, second and fifth; F. O. Johnson, third.

Heifer, junior calf: F. O. Johnson, first; Intermountain Institute, fourth, fifth and sixth; Avalon Orchard Tract company, second and third.

Aged herd: Intermountain Institute, first.

Breeders' young herd: F. O. Johnson, 1st; Avalon Orchard Tract company 2d.

Calf herd: Avalon Orchard Tract company, 1st; Intermountain Institute, 2d.

Get of sir: Avalon Orchard Tract company 1st; Intermountain Institute, 2d.

Produce of dam: F. O. Johnson, 1st and 4th; Avalon Orchard Tract company 2d and 3d.

Senior champion bull: Intermountain Institute, 1st on Segis Walker Hartog.

Junior champion bull: F. O. John son on King Segis Walker Pietertje Vale.

Senior champion cow: Intermountain Institute, on Susie De Kol Pauline.

Junior Champion cow: Intermountain Institute, on Fernsdale Alice Mercena.

Grand champion bull: Intermountain Institute, on Segis Walker Hartog.

Grand champion cow: Intermountain Institute, on Susie De Kol Pauline.

Reserve grand champion bull: Avalon Orchard Tract company, on Hartwood Heilo Hengerveld.

Reserve grand champion cow: Intermountain Institute, Tiriania de Kol Johanna Machtilde.

HORSES.

Percherons.

Stallion, 4 years—Frank Sullivan, Rupert, 1st on Roland; Perry D. Hadsall, Middleton, 2d on Leota Jane; P. A. Sorenson, Kuna, 3d on Krepin.

Stallion, 3 years—Walter Brothers, Buhl, 1st on Carsino, 2d on Dijon; P. A. Sorenson, 3d on Cocardis.

Stallion, 2 years—W. F. Howard, Parma, 1st on Brilliant; Walter Brothers, 2d on General Wayne; P. A. Sorenson on Madere.

Stallion, 1 year—P. A. Sorenson, 1st on Grenadian, 2d on Gremaud, 3d on Hebru.

Mare, 4 years—Walter Brothers 1st on Detroit, 2d on Carnona; P. A. Sorenson 3d on Liquation.

Mare, 3 years—P. A. Sorenson 1st on Barodet.

Foal, under 1 year—P. A. Sorenson 1st on Kouperose 2d; Frank N. Taylor, Meridian, 2d; P. A. Sorenson 3d on Kurdas 2d.

Mare with foal—P. A. Sorenson 1st on Liquation, 2d on Kourbelle 3d.

Four animals, get of one sire—P. A. Sorenson 1st and 2d; Frank Taylor 3d.

Draft mares—P. A. Sorenson 1st and 2d; G. W. Noble 3d.

Champion stallion—Walter Brothers on Carsino.

Champion mare—Walter Brothers on Detroit.

Group, stallion with two mares—Walter Brothers 1st on Carsino, Detroit and Carnona; P. A. Sorenson 2d on Krepin, Liquation and Courbelle.

Group, stallion with four mares—P. A. Sorenson 1st.

Percheron Society of America Specials.

Stallion 3 years old or over, bred and owned by exhibitor—P. A. Sorenson, Kuna, 1st on Colardos.

Stallion, under 3, bred and owned by exhibitor—W. F. Howard, Parma, 1st on Brilliant; P. A. Sorenson, Kuna, 2d on Germaud, 3d on Madere.

Champion stallion, bred and owned by exhibitor—W. F. Howard 1st on Brilliant; P. A. Sorenson 2d on Germaud.

Mare, 3 years or over, bred and owned by exhibitor—P. A. Sorenson 1st on Borodette.

Champion mare, bred and owned by exhibitor—P. A. Sorenson 1st on Borodette.

Get of stallion, four colts, either sex—P. A. Sorenson 1st on Corcordos, Borodette, Madere and Rouera; 2d on Grenadian, Gremaud, Hebrau and Houleux.

Produce of mare, two colts, either sex—P. A. Sorenson 1st on Madera and Kouperose 2d; 2d on Kocordas and Houleux.

Five stallions, owned by exhibitor—P. A. Sorenson, Kuna, 1st on Krepin, Corcordas, Madere, Romea and Grenadian.

Best three mares, owned by exhibitor—P. A. Sorenson 1st on Kurdes, Kouperose and Kourbette; 2d on Liquation, Korde and Borodette.

Champion stallion, open class—Walter Brothers 1st on Corsino; reserve champion, W. F. Howard on Brilliant.

Champion mare, open class—Walter Brothers 1st on Detroit; reserve champion, Walter Brothers on Corona.

Belgian.

Stallion, 4 years—J. H. McClanahan, first, on Avenir de B. C.; W. H. Thompson, second, on Max.

Stallion, 3 years—Frank Sullivan, Rupert, first, on Artabon.

Champion stallion—J. H. McClanahan on Avenir de B. C.

Shire.

Stallion, 4 years—G. W. Noble, first, on Birdsall Duchsler.

Stallion, 3 years—Walter Bros., first, on General Logan.

Stallion, 1 year—G. W. Noble, first, on Gold Line; second, on Red Line.

Mares, 4 years—G. W. Noble, first, on Lazella, second on Martha III.

Mare, 2 years—G. W. Noble, first, on Elnora Barta.

Mare with foal—G. W. Noble, first, on Martha III.

Four animals, get of one sire—G. W. Noble, first.

Champion stallion, 3 years—Walter Bros., on General Logan.

Champion mare, 2 years—G. W. Noble, on Elnora Barta.

Stallion, with two mares—G. W. Noble, first.

Stallion with four mares—G. W. Noble, first.

American Shire Association Specials.

Champion stallion, Walter Bros., on General Logan.

Champion mare—G. W. Noble, on Martha III.

Standard Bred.

Stallion, 4 years, G. W. Noble, first; Peter Weber, second; A. Waite, third.

(Continued on page twenty-eight.)

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Stick to the Standard Crops

"The friends thou hast, and their adoption tried, grapple them to thy soul with hoops of steel."

This is what a great poet said a great many years ago. He was not musing for the benefit of the farmers in the production of crops, but the philosophy he uttered is applicable.

"The friends thou hast" are bluestem, little club, turkey red, red Russian, Baart, a few hybrids, blue flower alfalfa, red clover, blue barley, white dent, yellow dent, little flint, netted gems, Burbanks, early rose, late flat Dutch, cow kale, white navy and the like. We can't name them all. They differ in different localities, but every farmer knows what they are in his particular district.

"Grapple them to thy soul with hoops of steel." Don't try something just as good, even though it is recommended as much better. Stick to the standbys. Raise the crops that you know will produce reliably. This is no time to listen to the fellow who has some wonder-working seed to sell, something new that produces enoromous crops. Sometimes these "discoveries" are real. Sometimes they are of something actually worth while. But too often they are pure fiction or suitable for production under certain very particular conditions of soil, climate or moisture. It is a safe rule to avoid anything that looks too good. Get-Rich-Quicks are still in the field looking for folks to get rich quickly on. Stand by your "friends," the standard crops that have produced the wealth of this great northwestern farming district.

Extracting Honey From the Gall

There is a lot of adversity being felt these days on the farms of the northwest. Conditions are puzzlingly abnormal. Neither the grain or fruit farmer nor the stockman knows exactly which way to turn. The cost of production has gone up to a point that requires unusual prices to make it pay to produce at all. The government is doing its best to solve the problem of regulation, of how and what to regulate, but so far the farmer is inclined to doubt the benefit he derives from the early steps taken.

But of one thing there is no doubt. The strenuous times are making a vigorous assault on America's entrenched enemies, wastefulness and inefficiency. We are waking up to the fact that we can not afford to waste either products or the possibilities of production. We are rapidly coming to realize that we can not conduct our farming business successfully in slipshod fashion. We are finding out that quality rather than quantity is the thing greatly to be desired.

And as a result we are going to profit from the adversity of the present period. We are going to emerge as better farmers. We are going to tighten up the screws in our farming machine, and get rid of the methods that don't pay. There is an ill wind blowing our way, but it is going to bring us more good than ill in the long run.

One Word More, Lest We Forget

There is certainly no man or woman in the northwest who, having heard James W. Gerard, former ambassador to Germany, tell in his recent speeches the truth about Germany and her diabolic propaganda against this country and all civilization, can neglect longer to begin to do his or her bit to help win the war. We have been loath to believe the stories of frightfulness concerning Germany; of her utter lack of all the elements of humanity; of her consuming egotism and craving for world domination. But no longer can we ever hope to be convinced that these stories are untrue or even exaggerated. Men like Gerard—men who know from personal experience and whose word is unquestionable—tell us they are true. And, convinced, there remains nothing for us to do but to do our little individual parts toward destroying the Prussianism out of which this world disgrace has grown.

Eat less wheat. That is the first thing each of us can do. Don't do it merely because Hoover and the food administration say so; do it because food for the soldiers is the first essential to winning the war. Eat less meat, fats, sugars. Do it because thousands of men, women and children are dying every day that the war continues, and because insufficient supplies to the forces of the allies means prolonging of the war. There are millions of men facing shrapnel, poisoned gas, disease, bombs and bayonets to save those of us who remain at home from Prussian dominance, with all the horrors that it would mean. A wheatless or meatless meal is a small thing compared to even one day in a wet, cold trench, with shells bursting and guns booming and perhaps rain or sleet driving down. Eat less wheat; eat less meat; help win the war.

Will Hold Pacific International

The decision of the official board of the Pacific International Live Stock association to hold its complete exposition again this year, including the breeding, as well as the fat stock, should be received by stockmen and the food administration with satisfaction. Owing to lack of suitable housing facilities the board had decided to show only fat stock, but pleas from the breeders caused a reconsideration, and indications now are that an unusually fine exposition of live stock will be held.

It would have been a misfortune for the show to have been cancelled this year, above all years. The live stock industry needs stimulating as it seldom has. Anything that tends to reduce the foundation herds and flocks should be met with formidable determination and resistance. The breeders and the business interests, especially the latter of Portland, should rally to the shows this year as never before.

Good Land Is Often Wasted

The northwest is so new and its natural resources so boundless that its citizens have not yet learned to conduct their businesses intensively. This is true in all lines, perhaps, but one example of it is the lack of intensive cultivation of the farms.

A concrete example of this lack of cultivation is found in the waste land that is to be seen on nearly all farms. Sometimes a farmer will spend much money and much wearying labor clearing a few acres of land. He continues to clear, adding to his acreage. Yet in a majority of cases he has good land going to waste on his place. He has more room taken up with farm yard than is necessary, perhaps though plenty of room is a thing greatly to be prized. He has fence corners and division fences grown up to weeds and shrubbery. He has a plot of ground growing, or trying to grow, a crop for which it is not fitted. He has his land improperly cultivated or improperly fertilized, and he doesn't have his rows or hills the proper distance apart.

This is an excellent time to correct these faults where they exist. An extra rod of well cultivated soil would produce enough food stuffs to carry a life a considerable time, and there are lives ebbing away because of lack of food. Let the anti-waste campaign extend to the things that might be grown as well as to the things that are grown.

Washington Gleanings

At least two Walla Walla county farmers have 100,000 bushel wheat crops this year. Henry Vincent has one and George Drumheller the other.

An order was received the other day by J. H. Denge from E. Wagner for a shipment of 15,000 boxes o Jonathans and King Davids to Australia.

A. B. Nystrom, professor of dairy husbandry at the state college, will resign to accept an appointment a county agricultural agent for Lewis county.

Several farmers of northern Kittitas county have associated themselves together under the name of the North Kittitas National Farm Loan association.

County Agriculturist A. M. Richardson of Dougla county has purchased for $32,000 a half section of land near Pullman. His successor has not yet been named.

E. E. Maupin of Lynden has sold his 100-acre ranch on the river bottom, three and one-half miles from Lynden on the Guide Meridian road, to S. P. Ritch of Bellingham for $18,000.

J. W. Bell of Yakima has sold 200 tons of alfalfa hay for $22.50 per ton f. o. b. cars in the lower valley The hay is on his ranch on the Indian reservation. It will be shipped to Montana.

The Lynden farmers received approximately $15,000 for their raspberries at the Lynden cannery this summer, according to a statement made recently by Manager Creamer. Approximately 300,000 pounds of raspberries were handled by the cannery.

"It is my opinion that before many years the Skagit valley will produce annually a million dollar seed crop," were the words of Alfred Christianson, an expert seedsman and a member of the Charles H. Lilly company of Seattle, in Mount Vernon recently.

War conditions are affecting boys' pig clubs in the Inland Empire sections, in that animals that the boys were able to purchase last year for $6 apiece now cost them $15. The Exchange National bank of Spokane is financing a number of boys in the Chattaroy, Freeman and Rockford districts, buying the hogs—mostly pure-bred Duroc Jerseys—from the Waikiki farm and selling them to the boys at cost.

Announcement made in Salt Lake by directors of the Utah-Idaho Sugar company that the company will offer a profit-sharing contract for 1918 crop is expected to result in doubling the beet acreage in the Yakima valley next year. Under the terms of the offer growers will get $7 a ton for beets containing 15 per cent of sugar and share in profits over a certain amount.

hat Others Say

Vidette, Montesano: The cattle industry of the world is in an eclipse and it is our opportunity during the war and a long time thereafter.

Tribune, Pullman: The time is approaching when every possible pound of food products must be provided and it lies with the farmer to say whether or not such necessities will be available.

Gazette, Colfax: We must produce, and produce, and keep producing. In time past this passion of production was based largely on desire; we desired the fruits of our labors for our gratification and pleasure. Now, however, we must produce as a matter of self-preservation. Indeed, the issue of the great European conflict will turn largely upon the producing capacity of the United States.

Herald, Concrete: Farmers would do well to not only establish farm standards, but neighborhood standards as well. Organize your productive plans with a view to systematic and profitable marketing. Get together and decide on the most profitable crops the community is adapted to, and then as to the variety of each. When such an agreement has been reached, much of the difficulty in marketing will have been overcome.

Dairymen Cooperate in British Columbia

Frazer River Valley Association Controls the Market in Its Territory

By PAUL E. TRIEM

Some two or three years ago a number of dairy farmers in Fraser valley, B. C., formed an association. Nothing more happened for some time. The farmers continued to produce milk and to sell it where and how they could. The dealer continued to make the price, as he has been doing since the dawn of agricultural history.

Then, almost imperceptibly at first, a world war began to tighten its hold on producer and consumer alike. Millions of men who a few years ago had been feeding themselves and helping feed the world were withdrawn from creative occupations and were set to destroy, rather than to build up. Soon this distant valley on the western coast of North America knew that the old order was not simply changing, it was going to pieces. The price of mill feed and of hay went up and up and up. Labor became not only tremendously expensive, but almost unobtainable. Feed and labor are the raw materials out of which milk and its products are created, and when these raw materials increase beyond a certain point the producers' habitually narrow margin of profit is wiped out. At this point either the price must be advanced or production will cease.

Becomes Dynamic Order.

And so, to meet a condition created by the gerat war, the Fraser Valley Milk Producers' association changed from a static to a dynamic organization. It is not easy to advance prices in such a way that the producer shall secure a fair share of the advance. Only organized effort on the part of the farmer will ever enable him to secure his proportion of the net profits. The Fraser Valley dairymen discovered this, and the discovery led to concerted and unified action.

Today, after approximately a year's experience in the milk-selling business, the association controls practically 90 per cent of the mild production in the territory surrounding Vancouver. Eight hundred farmers are members, and every one of these dairymen is not only pledged to sell solely through the organization, but has agreed to forfeit $500 as damages to the association in case he violates this pledge. It is this matter of "teeth" in the contract which changes it from a scrap of paper to a working platform, and which has enabled the officers of the association to reverse dairy history by making the retailer consider the producer as a vital element in the business.

By the terms of the contract the milk producer agrees to sell to the association for distribution and sale all the milk and cream produced by him for the period of one year from the date of the agreement. The producer further agrees to deliver the milk or cream in good condition at the farm or nearest shipping station, as may be the custom in the locality where he resides.

On the other hand, the association agrees to receive from the producer all the milk or cream produced by him and to sell the same where it will be most advantageous to all the members of the association and to distribute the proceeds on the basis of market prices obtained for each month, f. o. b. Vancouver, for sour cream, sweet cream or whole milk as the producer may choose to deliver. Market prices are determined by the wholesale price of butter each month in Vancouver.

The association agrees to make payments semi-monthly for all milk and cream purchased on the 10th and 25th of each month.

Tests for butterfat content are made by men holding government certificates of qualification, or in lieu of such government official, by a qualified person employed by the association.

If the milk producer sells any of his milk or cream outside of the association or in any other way fails to carry out the terms of the contract he obliges himself to pay to the association $500 "by way of liquidated damages and not as a penalty."

It is also agreed that all profits made by the association shall be distributed proportionately among the shareholders every three months or other such periods as the directors may agree upon on the basis of butterfat delivered by the producer after providing for a cash dividend of 6 per cent per annum on the paidup capital stock.

All of the affairs of this thriving organization are carried on strictly according to business principles. The first step which the board of directors took in this journey toward selling efficiency was to secure the services of an experienced dairy salesman. Ernest G. Sherwood, the present manager, had for some time been in the dairy business in the city of Vancouver. He knew the intricacies of selling milk and its products and knew just how the farmers would have to go to work to secure for themselves that fair profit which at last they had determined to secure. In addition to this, Mr. Sherwood was one of those natural coordinators who can induce many men to work together with the least possible friction.

Frazer Valley Conditions.

"And the strongest feature in the entire situation," Mr. Sherwood points out, in commenting on the success of the association, "is that we are so situated as to be able to control and organize production here in Frazer valley more thoroughly than this can usually be done. Remember that we are largely surrounded by natural or political boundaries—to the east the mountains, to the west the ocean; south of us the international boundary, with its tariff wall. This means that when we bring into our organization 90 per cent of the Frazer valley dairy farmers we are practically controlling the local field. And without this control no association is able to do much. In a larger territory, very evidently, the task of securing unity in production and marketing would be much more difficult.

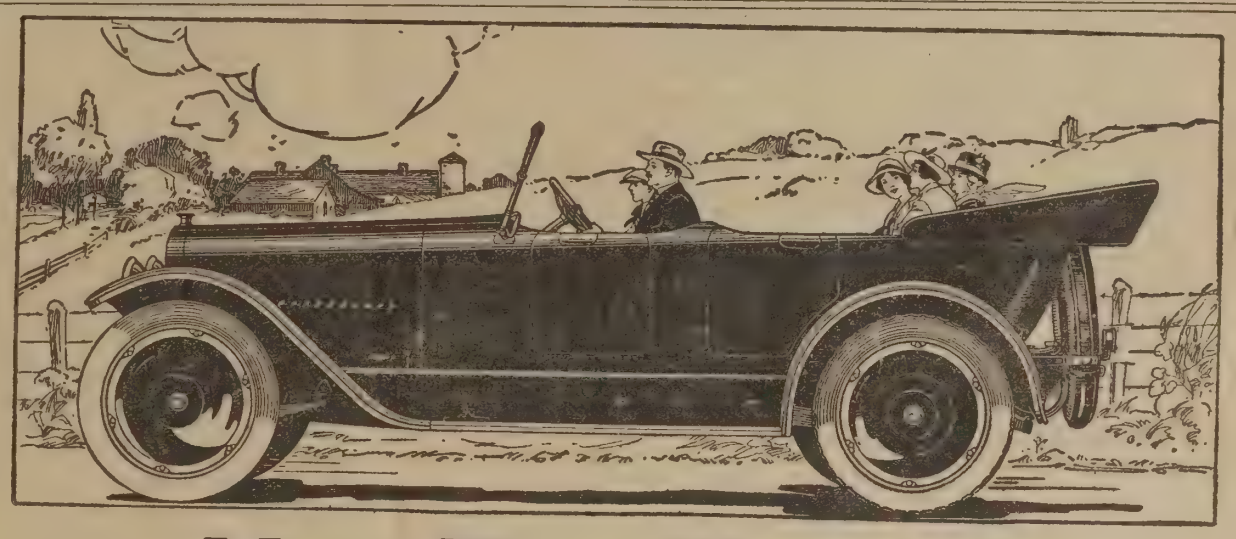
Method of Finance.

"We have no membership dues. We finance our association by requiring a stock subscription of $50 for average shipments of 100 pounds per day. In other words, a member shipping 400 pounds of sweet milk a day, average for the season, would subscribe for $200 worth of our capital stock. In this manner we raise finance necessary to carry on the business, and there is no further charge on our members."

Movement Has Its Dangers.

This matter of bringing the producers into one body, however, has its dangers. The public has been educated to be suspicious of every movement

(Continued on page seventeen.)



More Than You Ask

In a Car—But You Need It

It is evident that Mitchells offer more than buyers ask. Were it not so, all fine cars would need to have these extras.

The usual margin of safety is 50 per cent over-strength. Mitchells are built to the standard of 100 per cent over-strength. That is, each part is twice as strong as need be.

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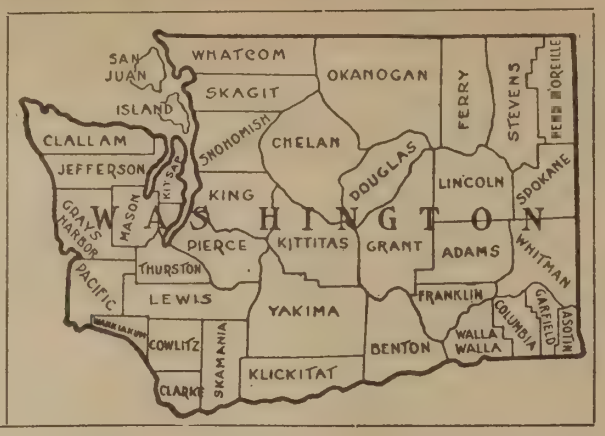
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Club Roadster, $1560
Sedan, $2275—Cabriolet, $1960
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Sixes

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More Per Acre, Not More Acres

Colfax Man Is Convinced an Injury Has Resulted from Cropping Land When It Was Due to Be Given a Rest



COLFAX, Whitman County, Wash., Sept. 24.—Winter feed prospects are not very bright, as farmers did not cut much hay. The usual acreage or more was cut, but the yield was only 50 per cent. Straw is being conserved as never before, but as yet I have heard of no quotations as to price. The potato crop is only fair. Dry weather has reduced the prospective yield considerably. I doubt if there will be an increased acreage in crop next season. Last spring farmers attempted to increase the acreage, and many lost some good hard cash in the effort. Land that should have been summer fallowed was plowed and seeded, with the result that it made only poor pasture. I hardly think farmers will try a third straight crop again next year. If they don't an increased acreage of summer fallow will result, as it will necessitate the fallowing of the land that should have been fallowed this year as well as the land that should be fallowed next summer. I believe the government is making a mistake in urging increased acreage; rather should it urge increased yield per acre and more intense cultivation. An increased acreage availeth little if the yield is sacrificed. E. C. HUNTON.

Fed During Summer.

KELSO, Cowlitz County, Wash., Sept. 21.—The hay and other winter feed prospects have been cut down by the necessity of feeding so much this year during the long dry spell. There is a decided tendency on the part of farmers to sell everything in the way of live stock that will not be producing this winter. That there is some extra feed on hand, however, is indicated by the fact that a few farmers are planning to buy milking stock this fall. The dairy stuff that is being sold to the butcher mostly deserves no better treatment. Baled straw has sold as high as $8 per ton f. o. b. Kelso this fall. Even at that there is much straw not yet taken care of. The potato crop is still more or less "in the air," but the prospects are that the year's increased acreage will only serve to make up for the decreased yield. Last year's shipment of potatoes from Cowlitz county was around 35,000 sacks. Winter wheat and rye are in demand for fall seeding, but as is the case with so many crops this year, the seed is hard to obtain, especially at reasonable prices. LYNN S. KEYER.

Can Make Feed Suffice.

TWISP, Okanogan County, Wash., Sept. 24.—While the yields of most crops are below normal this year, we believe that with care and good management in feeding we have sufficient feed for the local stock. The price of hay has advanced along with other products, and the demand is greater than the supply. Most of the straw will be utilized in some way; but haven't heard of any movement to make any special use of it. It usually sells at about $2 to $3 per ton, loose. Potatoes on dry land are low both in yield and quality. Some farmers that could irrigate raised a good crop. Considerable planning and some plowing is being done in preparation for next season's crop. The high price of butter fat is causing an increased interest in dairying. Two-dollar wheat is sending a wave of enthusiasm to the wheat grower. GEORGE LA RUE.

Cut Corn for Ensliage.

WAPATO, Yakima County, Sept. 22.—There is a heavier acreage of corn than usual and farmers are cutting for ensilage or fodder a great proportion of it. Alfalfa is not a heavy crop and the demand is very strong. It is expected that the less fortunate section will draw heavily on the surplus here. Alfalfa is now selling at $20 to $22 f. o. b., and it is expected that it will reach $30 before spring. There will be very little feed wanted and there is but little straw sold here except baled. Potatoes are not up to expectation and are now selling at $30 a ton. Hogs are very scarce and there are not enough on the reservation to clean up the grain fields after the harvest. There will be, undoubtedly, a heavy acreage planted next spring, but the fact that we have one beet sugar factory in operation here and the promise of another for next season, will possibly curtail the acreage that ordinarily would go into other crops. It can hardly be expected that the new acreage coming under cultivation the coming season will be enough to offset the acreage planted to sugar beets. J. F. M'CURDY.

Everybody Is Careful.

CENTERVILLE, Klickitat County, Wash., Sept. 14.—The winter feed is about normal this year, with the exception that all spring-sown feed was a very short crop, but winter-sown stock feed is good, in fair quantity. Everybody is a little more careful and is preparing to get straw feed under cover as soon as possible. It is getting quite common to cut the corn fodder and where there isn't a silo to just stack rows of bundles of corn and then a layer of straw, which preserves the fodder, even if it is quite damp when put in, producing feed that will be slicked up by the stock. The potato crop here is nearly a complete failure, with a few exceptions, of course. There is an effort being made now to get in as much crop as possible, but the draft on our young men, principally farmers, is a severe job on the extra crop. Also a good many young men here are going to volunteer now instead of waiting for the draft. Straw feed is about $2 per load and alfalfa and wheat hay are high. CLARENCE A. LESTER.

Little Fall Seeding So Far.

METHOW, Okanogan County, Wash., Sept. 21.—The winter prospects for feed are poorer than they have been for years. Hay is now selling here for $20 per ton, delivered. The straw will be all fed up. The potato crop will be as large as the 1916 crop, owing to increased acreage, but the quality will not be as good, owing to them taking second growth. Owing to the dry summer and fall not much has been done for next season's crop. The prospect of getting rain enough to put in fall wheat is very poor. The last two seasons the wheat was put in in the dust and a big per cent of the grain was lost, so I don't think any wheat will be put in this fall, unless it rains before October 1.

CHARLES GRANT.

Feed for Home Use.

MEAD, Spokane County, Wash., Sept. 21.—While there will not be as much hay or feed grain for sale this year as usual there will be no great shortage for home use. There is more demand than usual for straw, which sells at about a 25 per cent advance over past years. As farms here are worked about their capacity, there will be little increase in acreage planted next season. Small additional acreage will be cleared and put to some spring crop on those farms not yet entirely cleared and broken out. Some will be guided in this by what they think they can handle by their own families and in cooperation with their neighbors. They are going to do away with all I. W. W. labor as fast as possible.

GEORGE HINGSTON.

Plenty of Seed Grain.

BICKLETON, Klickitat County, Wash., Sept. 27.—Threshing is about over, and grain hauling is half through. The price discrimination in favor of the east has had a depressing rather than an encouraging effect on grain raisers here. They would have been more eager to put in a large acreage next year if they had given us the same price this year as the eastern farmer. Winter feed conditions are not as good as last year at this time, and very little hay was cut and scarcely any is for sale. There is a fair supply of straw on hand, and every one seems to be making a special effort to save it; loose straw is selling for $3 to $5 a load, against $1 a load last year. The potato crop is about the poorest known for many years, most of them taking a second growth. There is plenty of seed wheat on hand and a fair supply of barley and oats for feed.

BERT H. FAULKNER.

Oat Crop Is Good.

DARRINGTON, Snohomish county, Wash., Sept. 9.—The prospects for the winter's supply of food is about up to normal for men and stock also in this section. The drouth was broken by a few light showers of rain on the seventh of this month. Roots and potatoes have suffered some, and those crops will probably be a trifle below normal. Oats was good, all harvested and a good deal of it is threshed. Yield is about 70 bushels per acre on the average. Stock is looking fine, and pasture will improve now since the rain fell. One silo was erected this summer, the first one in this section. Likely more will be built in the near future. A good many are now burning slashings and clearing up more land for the coming season. Nothing is going to waste around here. The ladies are canning and drying all the fruits and vegetables they possibly can to help their country in time of need. The demand for beef is not as great as it was a year ago, as some camps have not resumed operations yet. Some of them have started with small crews. What apple trees there are here seem to be well loaded down with fruit.

C. B. NEIDERPRUM.

Busy With Fruit.

PROSSER, Benton County, Wash., Sept. 23.—The weather is fine for this time of year, with no frost as yet. The farmers in the valley are busy looking after their fruit crops and the last cutting of alfalfa hay. We have plenty of feed for our stock this winter in the valley. The wheat farmers will be short on feed this winter on account of a short crop of wheat. All of the straw will be fed at home, so will not have any to ship. The potato crop is not as good as it was last year, but there is more ground planted to potatoes, so the crop will be about the same or more than last year. Some of the wheat men are going to summer fallow all of their ground next season, while others will put in all the wheat they can. There will be little or no change in the valley in crops.

G. W. WILGUS.

Peas Instead of Wheat.

FAIRFIELD, Spokane County, Wash., Sept. 25.—Feed will be plentiful here owing to the pea and fall wheat straw. Good hay is scarce and has been selling for from $20 to $22 per ton. There have been rumors of good pea straw selling at $15 per ton baled, but personally I believe that is a little high. The potato crop will be short and of poor quality. Early in the fall, when the prospects were good for $2.50 wheat, farmers were making preparations for an increased acreage, but at the present price the crop will not be increased, and peas will be grown instead. ROY G. ADAMS.

Hoping for Rain.

RITZVILLE, Adams County, Wash., Sept. 19.—Winter feed for stock is very short indeed and not a pound of straw can be bought in this community. The potato crop is also unusually bad. Every available acre will be planted for next year's crops of various kinds. Pastures are also in poor condition and we are hoping for plenty of fall rains which, if they come, will solve the shortage of feed to a great extent.

JACOB HARDER.

Feed High; Cattle Cheap.

GRANDVIEW, Yakima County, Wash., Sept. 21.—There is plenty of hay for all the stock if the farmers don't sell off too close. I think those that have straw will feed it. There are a few new silos being built. The potato crop is only a little over one-half a crop. Some are selling off their cattle because feed is high, and others are buying cattle because they are cheap. E. H. FAULKNER.

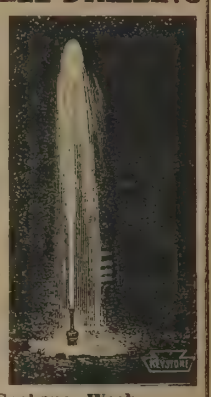
Another Mystery Cleared Up.

One reason for the nonappearance of sharks at the bathing beaches this year is that most of them are now in the business of selling food at war prices.—Seattle Post-Intelligencer.

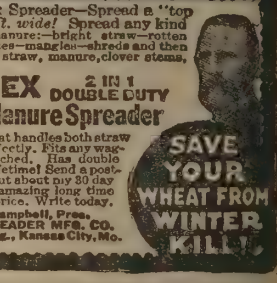
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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Save Food One Week

Food Administration Makes Appeal

Every citizen of the United States is being called upon by Food Commissioner Herbert Hoover to observe food pledge week October 21 to 28. In a statement just issued Mr. Hoover points out that the harvest of this year is less than that of previous years, while the demands this year are far in excess of any previous period in the history of the world's war.

In Europe food conservation is controlled through strict adherence to restricted food supplies, while in this nation it remains with the indivdual to judge for himself how best he can serve his country and aid in winning the present struggle. "This is a duty of necessity, humanity and honor," states Mr. Hoover, "and I appeal to every householder, hotel, restaurant, dealer in foodstuffs, schools, churches, social and civic agencies, and to every individual to join with the administration for food conservation in this work for the fundamental safety of the nation."

More Liberty Bonds.

The second Liberty bond issue, which opened Monday, October 1, assigns as the quota from the Pacific coast district $210,000,000, although this amount will probably be passed by over $100,000,000 as indicated by the record set in the first Liberty loan issue sold last June. The total loan, officials expect to pass the $5,000,000,000 mark with the minimum amount set at $3,000,000,000. The apportionment for this second loan has been based in a general way upon the banking resources, the assessed valuation of property, the income tax collections, and the amount subscribed in the previous loan in the respective districts. Close to two-thirds of the entire amount is expected to be drawn from New York, Boston.

Regulate Coal Prices.

Following recent action on the part of the food and fuel administration fixing the selling prices for coal at the mines, the administration has now issued a ruling governing the profit that the dealers may make. This profit is to be based on the selling price of coal during the early summer of 1915, at which time the price was considerably lower than it has been since. That period was just before the shortage began to manifest itself and the prices to shoot upward. The dealers are required to file with the government a statement of the grounds upon which they have fixed their selling prices to the consumers, and if this statement is not satisfactory to the government supplemental rulings will be made. The government officials declare that the ruling will result in an early reduction of the price of coal, though the price will vary with the different districts owing to mining costs and freight charges.

May Impeach La Follette.

Bitter resentment grows against Senator La Follette of Wisconsin, and more persistent demands are being urged by his constituents that congress take definite action in unseating the senator. Petitions are being circulated in the copper districts of Michigan urging the expulsion from the senate of La Follette on the grounds that he is "traitorously lending aid, assistance and comfort to the enemy." Six communications demanding the expulsion of La Follette have been presented before the senate, including one from the Governor of Minnesota, that from the Wisconsin state public safety commission, and the Washburn Loyalty league of Wisconsin. Senator La Follette was absent from the senate chamber when the communications were presented.

Deal Blow at I. W. W.

A second smashing blow was dealt the I. W. W. order last week by the government when the federal grand jury at Chicago issued indictments against 166 national leaders of the movement, the action of the jury being followed immediately by the arrest by government marshals of more than 100 of them. Practically all of them have now been arrested and will be brought to trial as quickly as possible. They are charged with actions seditious and traitorous under the terms of the new espionage law and the national criminal code. Their opposition to industry, illustrated by their methods of sabotage in which they wilfully destroy property is the basis for the government's action against them.

Among the leaders arrested is William D. Haywood, national secretary-treasurer and perhaps the most rampant of the national I. W. W. officers. He was placed under $25,000 bail; which he had not been able to produce at the time of this writing. Other officers were required to place bail of lesser amounts, many of them $10,000. A large number of them went to jail in default of bail.

Everybody to Pay War Tax.

Under the new war tax bill of $2,700,000,000 under discussion this week in congress appears a list of items to be taxed so inclusive that practically every class will be called upon to share the burden. War excess profits, as provided by the bill at this writing, will meet about one-half of the amount, while the excess profits of corporation, partnerships and individuals, and the income taxes will bear a large proportion of the tax. Reading matter, music, cameras, automobiles, stamps, parcel post packages, amusements, syrups, extracts, soft drinks, playing cards, and hundreds of other items are included.

Will Flour Drop?

Millers are promising reduction in the cost of flour at an early date as the result of the fixing of a definite price of wheat for the northwestern country. There has already been shown a tendency to reduce the price, but no definite reduction has been announced.

Price of Wheat

Is $2.05 Less Freight to Coast

Since the action of the food administration in giving the Pacific northwest a basic wheat price of $2.05 bulk at coast points the wheat market has been practically at a standstill owing to uncertainty as to the meaning of the ruling. It appears now, however, that the point is definitely decided, and that wheat at interior northwest stations will sell for $2.05 a bushel, bulk, less freight to the coast. The $2.05 at the coast is interpreted to be about $2.10 for sacked grain there.

A. A. Elmore, national representative of the Farmers' Union, who was a member of the committee that went from this section to Washington to press this district's claims for a basic price, upon his return gave the above interpretation to the ruling.

"We are much pleased with the results of our conference with the price-fixing committee at Washington, and have really gained a greater victory for farmers of the northwest than we are given credit for," said Mr. Elmore.

"Not only have we gained a set price of $2.05 for wheat delivered at coast points, but we have established a Pacific coast market, and have caused the farmer to gain approximately 10 cents more on each bushel. The set price is for bulk grain, and the farmer, if he chooses to ship in sacks, may either accept four cents more a bushel for his sacks or have them returned to him."

A similar interpretation is placed upon the action by R. Insinger of Spokane, also a member of the committee.

"We are entirely satisfied with the results of our mission," Mr. Insinger said. "We met the officials and went over the situation, and in the end it was decided to establish $2.05 at Coast points as a basic price, just as $2.20 is the basis price at Chicago.

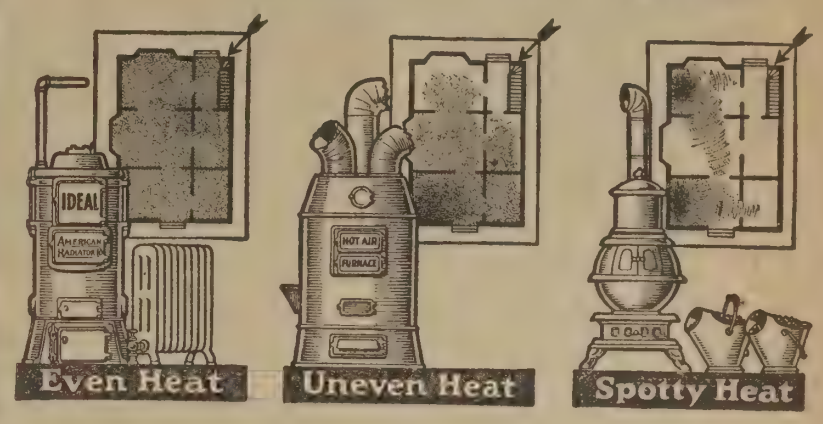
"The price of wheat at interior points will be the basic price at Coast points less the handling charges from that point to the Coast. Sacked grain is considered at a premium, so I suppose that in view of past conditions sacked grain will be rated at $2.10 at Coast points.

"I am not sure, but I doubt whether shipping wheat from the northwest to Chicago would be permitted," he said. "There has been nothing definite on that point so far as I know, but it was intended to arrange things so as to prevent the movement of wheat from one zone to another.

"This plan was decided on largely to encourage the milling of wheat in the territory where it was grown, in order that the feedstuff might be derived from the byproducts. This is a factor that must be taken into consideration and a point which caused considerable discussion."

M. H. Houser of Portland, northwest grain representative for the national food administration, has charge of the market regulations for the northwest.

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A. B. NYSTROM, Editorial Contributor

Apple Pulp Silage

Makes Excellent Dairy Cow Feed

By J. R. SHINN,

County Agriculturist, Spokane County, Washington.

Silage crops are generally short this year and because of this condition attention of dairymen and stockmen should be turned to little used products that they may be converted into profitable silage. Perhaps no other single product offers a better source for silage than apple pomace. A great many apples will be converted into cider during the present fall and winter. Dairymen should make preparations to care for this pomace and thereby greatly reduce the cost of feed this winter.

As far back as 1840, apple pomace when fresh was known to give excellent results when fed to dairy cows. A Massachusetts farmer, who discovered this fact in his herd, found also that pomace could be kept fresh by placing it in a pit under his barn and could then be fed to his cows throughout the winter. The experiment stations of Illinois, Massachusetts and Vermont have proved that apple pomace can be kept in the modern silo without difficulty and that it has a feeding value comparing favorably with corn silage.

Silage Constituents.

The following table gives the constituents of apple pomace silage and of corn silage:

Constituents.	Kind of Silage. Apple Pomace Per Cent.	Corn. Per Cent.
Water	80.2	74.4
Ash	.9	1.5
Protein	1.6	2.2
Fiber	4.5	5.8
Sugars and starches	11.8	15.0
Fat	1.0	1.1
	100.0	100.0

The digestibility has proved to be fully as good as of corn silage.

Several experiments have been conducted to determine the amount of silage which cows can handle to an advantage. A herd of 20 cows at the Vermont station have been fed amounts varying from 10 to 30 pounds of apple pomace silage. At Massachusetts their herd has been fed from 25 to 35 pounds of silage for a period of five months without injuring the quality of milk or butter. In all of these experiments the use of apple pomace silage has resulted in keeping up the flow of milk and at the same time the cows have remained in a thrifty, healthy condition.

Put in Silo While Fresh.

To secure good results in handling apple pomace for silage, it is essential that it be placed in the silo at once when taken from the cider mill. As with any other silage, good results need not be expected after the silage has spoiled before it enters the silo.

Cows should be accustomed to apple pomace silage by feeding them sparingly at first, and the allowance of this material may be increased daily until 25 to 30 pounds of it are allowed each cow per day. My investigations show that corn silage in the non-irrigated sections of Spokane county, Washington, costs in labor from $2.50 to $4 per ton. From this, it will be seen that apple pomace has a value approximating the same figures, since its feeding value is practically the same.

To get the best results in feeding pomace silage, it should be supplemented with alfalfa or clover hay or pea straw and grain feed.

During the last two or three years several of the dairymen in the northwest have used apple pomace for silage. Probably no other man is more enthusiastic over such silage than J. C. Graham, who used this silage last year at Palouse, Wash. He reports very favorably on it and his commendation of it should lead others to try it this fall.

There will be quantities of cider this fall. Sweet cider is in great demand as a beverage and for these reasons cider making will be an important industry. Great quantities of pomace will be wasted unless dairymen and stockmen make provision to silo it for their stock.

Cottage Cheese Campaign.

To make every drop of milk useful to the food supply, the dairy division of the United States department of agriculture will launch an active campaign to promote the making and use of cottage cheese. A corps of cheesemaking specialists will demonstrate the creamery methods of turning their waste skim milk into this valuable product. Milk producers will be encouraged to send as much whole milk as possible to the creameries which undertake to manufacture cottage cheese, and efforts will be made ot induce the public to eat more of that attractive and nutritious food.

To help individual farmers utilize their skim milk, groups of specialists cooperating with state agencies, particularly demonstration workers in home economics, will give practical instruction in cottage cheese making in the home and on the farm. The specialists will demonstrate the process before groups of farm women and in connection with regular short courses, while in certain sections they will give individual instruction.

Cost of Keeping Cow.

At a recent meeting of a committee of dairymen, who were asked to estimate the cost of producing milk to report to the Portland milk investigating commission, Jacob Luscher, W. K. Newell and Thomas Carmichael reported after careful estimates that the total cost of keeping a cow for a year is $195, including interest on investment, upkeep and the like. According to the federal estimates the average cow produces 4200 pounds of milk in a year. The committee allowed more for Oregon cows, however, believing that 6000 pounds is a fair average here. On this basis the cost of producing 100 pounds of milk is $3.25. The dairymen are now receiving $1.80 to $2.50 per hundredweight.

The committee believes that these figures are fair and average, if anything showing the dairymen to be in a better position than they actually are.

H. H. B.

Dairying Arouses Interest.

The dairy buildings at the Washington State fair proved an attractive spot for a large number of persons. Dairying throughout the state has assumed such prominence during the last few years that interest in this exhibit was keen. Excellent samples of cheese and butter were displayed and the dairy division of the state department of agriculture lent its cooperation, placing exhibits to show the proper care of milk and emphasizing the impossibility of turning out good dairy products with dirty and inferior grades of milk. The Selah cheese factory won first prize on American cheese.

The apiary department occupied one end of the dairy building and a large showing of comb and strained honey was in evidence. Bee colonies at work formed an interesting part of the display.

Stillaguamish Cows.

According to Will W. Henry, official tester of the Stillaguamish (Wash.) Cow Testing association, there were 550 cows tested during the 30 days ending August 30. The average pounds of milk per cow was 697.6; average pounds of butterfat, 30.4; average cost of feed, $3.63. In spite of the continued hot weather in August, some of the herds made a very good showing. Max Eitzenberger's herd of 26 cows averaged 41.5 pounds of butterfat. Anthon Kraetz with 14 cows had second high average at 40.5 pounds. Carsten Thomson, King, Grimm and C. Olson had herd averages of 37 pounds. Three cows, owned by Carsten Thomson, Grimm and Eitzenberger made over 60 pounds of butterfat. Six cows produced over 50 pounds of fat. Two were owned by Anthon Kraetz, Eitzenberger, two; Grimm, one, and C. Olsen, one. Seven-two cows produced over 40 pounds of butterfat during the August period. Three members of the association are feeding a small allowance of mill feed to supplement the short pasture. Shorts, bran and oil meal are being used with good results. Seven cows were sold for beef last month.

Excursion Proves Valuable.

O. T. McWhorter, county agent for Clallam and Jefferson counties, reports that four auto loads made the trip from Clallam and Jefferson counties to the western Washington experiment station on the annual excursion date, a distance of 180 miles, for two of the machines. Comments from the farmers indicated that they considered the trip to be of no small value. There was a general feeling among them that Clallam and Jefferson counties offer many advantages to the farmer not to be found in the counties throuhg which they traveled in going to Puyallup.

Visit Experiment Station.

F. W. Rader, county agriculturist of King county, reports that on August 6, 1917, the farmers of that county were invited to join in an excursion to the Western Washington Experiment station at Puyallup, Washington, and made a study of the line of work being carried on. Approximately 400 King county farmers (men and women) took advantage of this opportunity and made good use of the day. The station staff handled the King county delegation in splendid shape and served the 400 with an excellent dinner.

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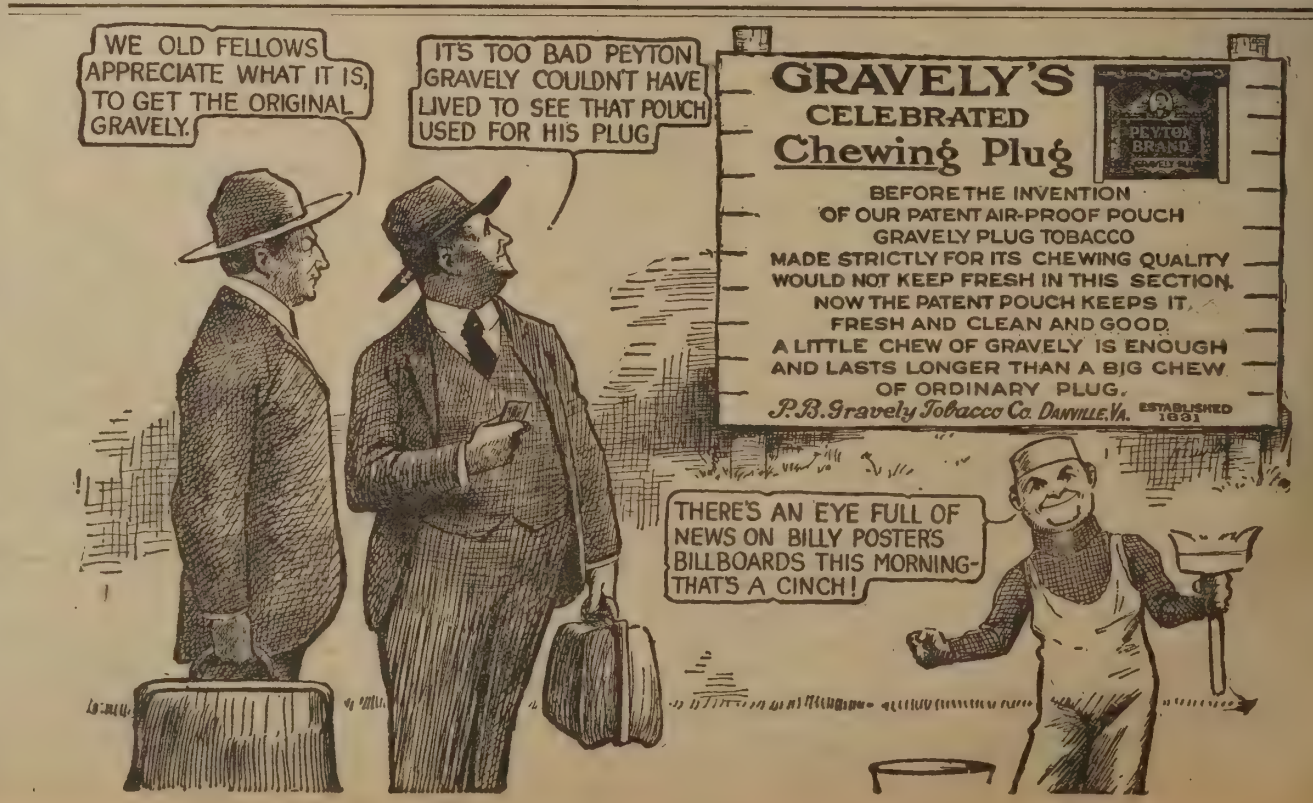
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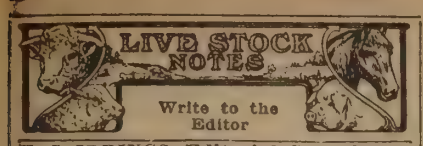
Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

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E. J. IDDINGS, Editorial Contributor.

Hogs or Grain?

It Doesn't Pay to Sell Thin Hogs

By E. L. POTTER.

Many of our farmers are getting scared at the price of feed and are sacrificing their hogs. In some places feeder hogs are being sacrificed at 12 cents a pound because grain is high priced. On the other hand, local butchers are buying these pigs and finishing them off at a big profit. They pay $12 for a 100-pound shoat, put on 100 pounds more meat which, with present high priced grain, costs another $12. When through the finished pig has cost $24 and is worth $32, a profit of $8. The farmer who sacrifices thin pigs is making a big mistake since the price of hogs is just as high as the price of grain. They are as foolish as the dairymen who are trying to save $50 grain by feeding more $25 hay. The present prices of pork should encourage the farmer to finish his pigs in good shape. The thin pig sold for 12 cents a pound will ordinarily lose money, while the fat pig sold for 16 cents a pound will make money.

It should be further remembered that wheat is not the only pig feed. Barley is just as good as wheat and unless used in too large amount shorts, middlings and oats are good.

Conditions are too unsettled to justify many forecasts of the future but just now no one need complain of hog prices, they they have increased fully as much in proportion as grain prices.

Northwest Show

More Entries and Better Quality

Secretary Paul Clagstone of the Northwest Live Stock association makes the announcement that the coming show at Lewiston, Idaho, November 8-15, will far surpass any ever conducted by the organization, both in number of entries and in quality. The show will open on Thursday, November 8, with a big free barbecue at which the six northwestern governors who have accepted invitations will be entertained. The chief executives will then address the assembled farmers and stockmen on the live stock situation in the western states.

Very heavy consignments have already been received for the two great sales to be conducted by the American Hereford Cattle Breeders' association and the National Shorthorn association, the former on November 12, the latter on November 13. For the Hereford sale 104 head of the choicest cattle have been entered by the leading breeders of the west. These two sales, as well as those of dairy cattle, sheep and swine, conducted by the Northwest Live Stock association on November 15 and 15, will furnish an unusual opportunity to farmers and stockmen to obtain the best of foundation stock. The show will be more representative of the entire northwest than ever before, as entries are coming in from extreme southern Idaho and other far away points.

A PROBLEM OF WOOL

Experiment Causes Much Interest.

By R. A. BLANCHARD.

The live stock display at the Morrow county (Ore.) fair at Heppner, while not as large as former years, contained an especially interesting exhibit in sheep. Jack Hynd, the largest exhibitor, showed a cross-bred ewe of exceptional qualities. The animal was of special interest, inasmuch as it represented the typical range problem. The animal was the product of range Merino ewe, and purebred Lincoln, crossed again with Lincoln blood. Mr. Hynd sheared 15 2-3 pounds of wool from the animal, compared with eight to 10 pounds realized from the usual range flock. Just what line of breeding to follow now is the problem, not only of one man, but aptly illustrates the sheepman's quandry, after an individual of superior merit and qualities has been secured, the trick is to retain those characteristics under range conditions. The animal received considerable attention from the visitors and representatives of the agricultural college at Corvallis.

Handling Hogs in Transit.

Every hog that is killed in transit, due to overcrowding or mishandling, means a loss, at present prices, of probably more than $30 to the shipper, as well as a waste of meat needed by the nation. Mortality in transit or after arrival at the central market can be lessened greatly in hot weather by the practice of the following simple precautions on the part of shippers and dealers:

1. When hogs are very hot, during or after a drive, never pour cold water over their backs.

2. Before loading clean out each car and bed it with sand, which, during dry, hot weather should be wetted down thoroughly. Hogs in transit during the night only are not so likely to be lost from overheating as are the animals shipped in the daytime. With day shipments in hot weather it is highly advisable to suspend burlap sacks of ice from the ceiling in various parts of the car in order to reduce the temperature, and incidentally to sprinkle the animals with cool water. The ice sometimes is placed in sacks on the floor, but the animals are likely to pile and crowd around the cakes, so that only those close to the ice are benefited. The ice should be sufficient to last to the destination.

3. Do not overload. Crowding hogs in a car during warm weather is a prolific source of mortality.

4. The feeding of corn, because of its heating effect, before and during shipment in hot weather should be reduced to a minimum. Oats are preferable where a grain is necessary. The maximum maintenance requirements of hogs in transit for 24 hours is one pound of grain a hundredweight, or approximately three bushels of corn to a car. In the past thousands of bushels of corn have been wasted in live stock cars.

Veterinary

Dr. S. B. Nelson

Constipation—I have a three-year-old horse that is subject to constipation when eating dry feed.—W. R. G., Trout Creek, Mont.

Answer—Try giving your horse a tablespoonful of artificial Carlsbad salts in his feed night and morning.

Iron sulphate for worms—How much iron sulphate should be used for sucking colts and grown mares for long white worms, six to eight inches in length? R. N. R., Prosser, Wash.

Answer—Regarding the dose of iron sulphate, 15 grains is a dose for a three or four moaths old colt. Grown mares will take two drachms morning and evening.

Udder Is Swollen—I have a cow that has a swollen udder. The right back side is hard and the milk from that teat is ropy. H. S. O., Deer Park.

Answer—Try giving your cow a pound and a half of Epsom salts in two quarts of water. The next day begin giving her a tablespoonful of fluid extract of phytolacca morning and evening. Give this in a pint of water. Rub the udder after each milking with liniment and two parts of tincture of iodine.

Discharge from nose.—We have a heifer that is very fat, seems perfectly healthy, but she has a bad discharge from the nose and her eyes matter.

J. W. P., Republic, Wash.

Answer.—The condition that you mention of the discharge from the nose may be caused either from catarrh, tumors in the nose or from bad teeth. I am not able to say which it is. You have a very good veterinarian, I believe, at Molson, Wash., and if at any time he should have occasion to go to Republic, he might make a personal examination of the cow and find out which of the three troubles it is.

Clothesline Invention.

A rod to be attached to clotheslines has been invented which increases the carrying capacity of the lines to a considerable degree. It is so arranged that it joins two lines transversely.



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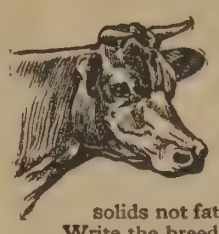
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Jerseys for Net Profits



You're in the dairy business for profit—the *net* profit that your herd has made you at the end of the year will determine the size of your bank account. Jerseys yield the largest returns from every ounce of feed—proved by tests at two great expositions. Jersey milk averages 5.3% butter fat, 9.1% solids not fat—highest of all breeds. Buy a Jersey bull. Write the breeders advertised below for prices, pedigrees, etc.



The American Jersey Cattle Club, 314 West 23rd Street, New York City

Jersey Isle Stock Ranch

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castilian Lady 26628 made 603.3 lbs. fat (715.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.

C. E. LONG, Buhl, Idaho.

Two Choice Bull Calves

From cows with official records of 914 and 663 lbs. butter in a year. Prices in proportion to production and quality.

ED CARY. P. O. Carlton, Oregon. Station, Lafayette, Ore.

Pearl Riga 206648

dropped bull calf July 10, 1917. Her record 458 lbs. butter in 297 days. Sire, Upright's Chief, sire of 6 in R. of M.; half bro. to Golden Glows Chief, sire of 31. Calf's sire, Dominus, out of 817-lb. cow and by bull out of 853-lb. cow. $75 if taken soon.

JOHN B. STUMP & SON, Monmouth, Ore.

1120 Pounds of Butter in a Year

by St. Mawes Poppy is the sixth highest official record of a Jersey cow in the world. She is dam of my herd bull, and his first heifers in milk are heavy producers. Write for prices on young bulls by him out of register of merit dams.

F. E. LYNN. Perrydale, Ore.

Every Cow a Record

Fifty per cent of our cows that have dropped more than one calf have records above 700 lbs. butter, 85 per cent fat. Golden Glow's Chief and Adelaide of Beechlands blood predominates. Special prices on bull calves under 9 months old.

LADD FARM. Oswego, Ore.

Green Meadows Farm Jerseys

Young bull out of dam on official test making good record. Sire a grandson of Goldon Glow's Chief, out of dam with official test of over 700 lbs. butter in a year. Other bull calves from register of merit dams. Also cows and heifers.

HENRY STEWART, Prop., Albany, Ore.

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Young bulls of good individuality, ready for service, sired by Landseer's Tormentor Boy, a strongly bred Tormentor bull, with high-producing cows in his pedigree. Dams of Brown Bessie and Tormentor breeding, with register of merit records. Price reasonable.

J. C. BROWN & SON. Shedd, Ore.

Wynoochee Home Farm

Home of
The Gold Medal Jerseys.

Young stock whose dams or granddams in my herd have won gold medals from the A. J. C. C.

JOHN H. TAYLOR, Montesano, Wash. Box 426.

MAPLE LAWN PLACE, ALBANY, ORE., Home of
Register of Merit Jersey Cattle.

Herd headed by a double grandson of Spermfield Owl—"Moose o' Fernwood" No. 137024, whose dam has an official record of 916 lbs. buttér.

We are offering young stock from this rich butter inheritance whose dams are now on official test.

ROBT. L. BURKHART, Albany, Oregon.

Waikiki Farm

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.
ROUTE 7, SPOKANE, WASH.

Meet Me at the Fair

where I will show a few bull calves from some of my best cows. For 8 months my herd has had highest average in Marion County Cow Testing association. For 8 months the whole herd averaged almost 60 lbs. of fat per month, per cow.

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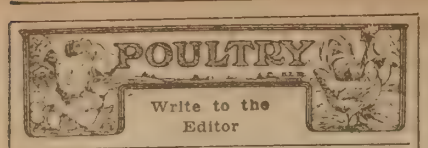
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JAMES DRYDEN
Editorial Contributor

BUTTER AND EGGS UP.
High Prices Predicted at Chicago.

The Chicago butter and egg board has called attention to the fact that the government warehouse report for September shows a decrease of 12,320,000 pounds, as compared with September, 1916, in the butter supply, and that while there is an excess of 418,000 cases of eggs, as compared with last year, the extraordinary demand will quickly absorb that. Compared with two years ago there is a shortage in eggs, says the board's statement.

At the present time there are 71,262,000 pounds of butter in storage, compared with 83,582,000 pounds in September, 1916. There are 3,794,000 cases of eggs, compared with 3,376,000 cases.

"Butter will be higher in price this year than we have known it to be in this country since the civil war," reads the statement.

The poultry situation is serious, the farmers having killed practically all spring chickens for food, while only one-tenth of the usual supply of milk-fed chickens is now available.

There are few live turkeys for market, but there is a supply in cold storage sufficient for Thanksgiving feasts.

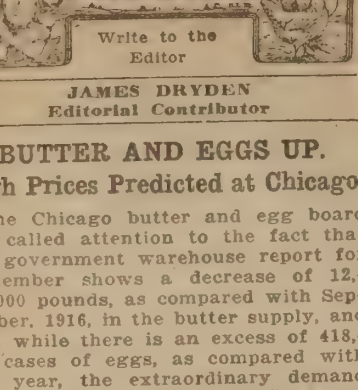
The Motor Car
On the Farm

Money Saving Tire Facts.

By W. D. ALBRIGHT.

Inside Protectors.

The owner of tire at the right in the accompanying illustration had applied an inside protector to a new tire, thereby hoping to lengthen its life. Instead it has reduced the resilience of the tire, added more thickness to it, which created excessive heat, and has finally so weakened the adhesive qualities of the rubber between the plies



of fabric that it became badly blistered and beyond repair. Inside protectors should be used only as a means of prolonging the life of old and practically worn out tires, or in cases of emergency with new ones and then temporarily only.

Clincher Tire on Straight Side Rim.

At the left in the illustration is shown a clincher tire that has been used on a straight side rim. In spite of the fact that such a mistake seems impossible, it happens quite often. The toe of the bead has become flattened and the abnormal strain has resulted in the bead being torn loose, rendering the tire useless and beyond repair.

Lubricating Exposed Parts.

At this season of the year the car owner should devote some attention to the lubrication of exposed parts of the mechanism, which invite the entrance of mud and water during the storms of fall. The various connections from the steering post to the front wheel spindles need lubrication, just as much as other moving parts, and if they are not cleaned periodically and given a good supply of grease, they may fail at the time when they are most needed. Leather boots on the steering drag link ends help somewhat, but even boots do not protect the joints from the entrance of water. The steering connections should be well cleaned and greased. Moreover from this time on through the winter, these exposed parts of the mechanism should have a careful inspection every few hundred miles of running.

A No-Wheat Ration

A satsifactory egg yield may be obtained without the feeding of whole wheat. The egg yield depends more on the proper variety of food than on any one single grain. Owing to the frequent changes in the prices of feed at the present time, it is hard to say what will be the most economical ration to feed during the coming year. At the prices at present oats and barley may be made to take the place of wheat in this state. Corn, as well as wheat, is too high to be used, but when the new crop of corn is available, the prices may be such that corn can be very largely used.

Another method of reducing the cost of the feed bill is to feed heavily on ground grain or mash. The by-products, bran, shorts or middlings, and linseed meal, as well as cottonseed meal are comparatively cheap.

The following is a suggested ration, taking into account present prices of feed.

	Pounds.
Oats	25
Barley	15
Bran	10
Middlings or shorts	8
Ground oats	5
Ground corn	5
Charcoal	4
Linseed meal	5
Buttermilk	45
Meat scraps	5
Kale or other greens	44
Grit	3
Shell	2

These are average amounts of feed for one hen for a year. Should the price of corn get down to $1.50 per bushel or less, as much corn as oats and barley should be fed to advantage.

The whole grain should be fed in a deep litter of straw to make the fowls exercise. In feeding a heavy mash, it is better to feed it in the evening rather than the morning as the fowls will keep busier during the day than they would if they have a heavy feed of mash in the morning. About as much ground grain or mash in the dry state may be fed as of whole grain. The mash should be mixed with skim milk or buttermilk if this is availaable. If not, water should be used. The amounts of whole grain should be regulated so that the fowls will eat enough of the ground grain or mash. It will be best to keep the meat scrap in a hopper or box before the fowls all the time and allow them to use it at will. If it is desirable to feed the mash in a dry state instead of moist, the meat scrap should be added to the mash, using more meat scrap when no milk is fed. About 20 to 25 per cent of the weight of the dry mash should then be meat scrap or fish scrap. J. D.

War Compelling Study

A few days ago I noticed a banner on one of the coaches of a troop train, on the way to the Atlantic coast and later presumably to France, on which was displayed the slogan, "To Make the Kaiser Wiser." We hope the kaiser may be wiser before they get there. It is an astounding cost to pay for knowledge, but the kaiser has made us all wiser. We are seeking knowledge with an intensity never before known. The producer is seeking knowledge as to production and the consumer knowledge as to conservation of food. There is more studying and more figuring than ever before. It is a good sign when men stop to think and study and to take out a pencil and do a little figuring on costs. Necessity is the mother of invention, some one said. The necessity for additional knowledge as to costs and as to food and feeding values and cultivation values has made of the farm a laboratory where university extension work is carried on, the farmer himself testing new theories. Never before has knowledge been so eagerly sought by the producer as to the behavior or plants and animals, or by the consumer as to nutritive values and various substitutes for high priced foods.

No one, of course, would venture to say that this acquisition of knowledge was worth the cost or that it was necessary that we should pay such a price in blood and treasure for the knowledge of how to produce and how to consume. If that were the object of creation there would be justification in the cost.

The poultry industry, like other industries, will no doubt be benefited by the war. When farmers and poultrymen begin to study and to figure on costs of production there is bound to be a lessening of costs and an improvement in production. When a poultry keeper is feeding high priced feed he begins to figure, does it pay? A little figuring will soon show him that he will have to change his methods or get out of business pretty soon. He can not stand it very long. He must get rid of a lot of prejudices as to feeds, as to breeds and as to breeding. He must eliminate some of the feeds and seek cheaper substitutes. He must give more attention to the manner of feeding and he must select better laying stock. He must by all methods known cull out the nonproducers and increase the yield. Out of it all we may be wiser and the poultry industry a better and more profitable industry. J. D.

Number of Fowls on Farm.

How many fowls any given farmer should keep will be governed by the size of his farm and the per cent of the total ration the farm can spply, as well as the personal attitude of the farmer toward chickens, said J. E. Dougherty at the O. A. C. poultry convention. Every farm can handle up to 50 fowls, at least, because this number is sufficiently small so that even with a minimum of care they should be able to pick a good living about the barns and fields and steal enough nests and hatch enough young each year to keep up the flocks and furnish quite a few table fowls. Even though fowls raised in such a way lay largely in spring alone and are not the most profitable to keep, yet they cost the farmer almost nothing in the way of feed and care and they do contribute considerable poultry meat and eggs to the family larder, which represents practically clear profit.

Life in the Northland.

"The Barrier," Rex Beach's wonderful story of Alaska and her people, begins in next week's issue of this paper and runs through its full 19 chapters of 310 pages. Read the first chapter. Then the rest will take care of themselves.



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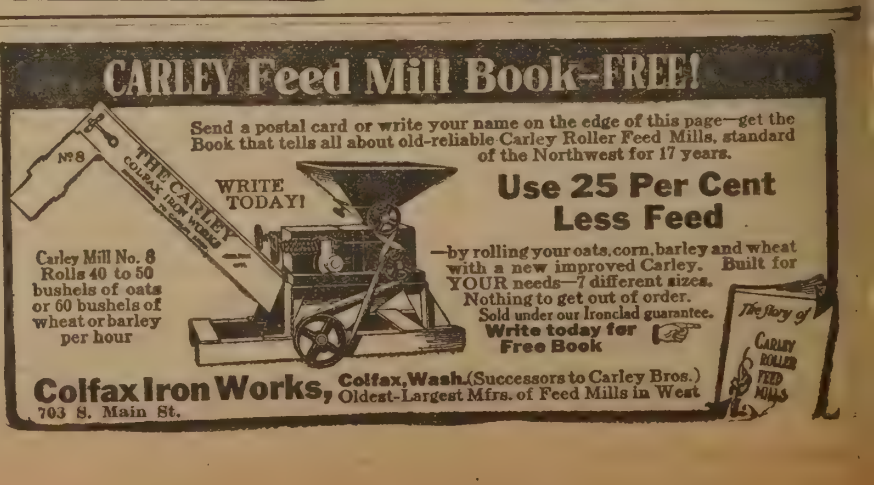
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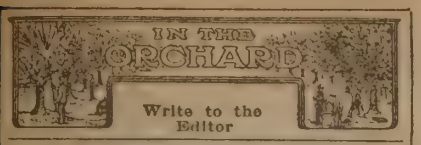
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GRANVILLE LOWTHER
Editorial Contributor

ORCHARDING AN ART.

Success Requires Real Application

By GRANVILLE LOWTHER.

In two brief articles Dr. Lowther has told of th eart of fruit growing. Here he gives further suggestions along the same lines and draws interesting conclusions.—Editor.

Picking fruit is an art. Generally there should be more than one picking. At a certain period of development the ripest, reddest and most highly colored may be picked off, while the smaller, greener specimens are left to grow and take on better color. By this means the orchadist gets a larger per cent of high-grade fruit, and fewer culls. The skin of the apple should not be punctured by pulling out the stems, nail prints, bruises, nor should the fruit spurs be pulled off. We hired two I. W. W.s once without knowing their philosophy. That is, we did not know they belonged to that order. We told them what not to do, and by that means educated them in what to do in order to carry out their general program to "make the labor unprofitable."

Assorting requires a quick motion, a clear vision, a knowledge of grade rules, color, size, form, scale, codling moth, stings, punctures, bruises, rust, water core, etc.

Packing is an art. Some of the finest works of art I have ever seen were carefully packed boxes of highly colored fruits. How to arrange them in reference to shape, size, color blendings, and to make an artistic effect requires artistic taste.

Marketing is a business. I do not know whether it is in any sense an art, but it requires a knowledge of crop conditions, of the supply in all parts of the world, the demand in the different countries, the financial conditions and the probable purchasing power of the masses. The farmer and orchardist have never yet mastered these conditions. They have organized granges, alliances, cooperative associations and unions by hundreds, but the combinations of marketing agencies have always beaten them.

My Conclusions.

First; if a man has a good education to begin with, say a college education, it will require as many years of special and technical study to prepare for a successful orchard career, as it does to prepare to practice law or medicine. He may go into it without this education, but he will pay the penalty in losses of different kinds. I figure I lost $300 on 10 acres one year, by not knowing how to irrigate. It was my first year of orchard work in the northwest, and it was only after the leaves of the trees began to turn yellow in places, that I discovered I was not giving my trees enough water. It takes practice, and no amount of reading is sufficient. As Joseph Cook used to say, it is efficient, but not sufficient.

Second; the folks who have bought orchards and live in some other part of the country, entrusting their orchards to persons who do not know, or who do not care, will fail. There are orchards drying up, dying in every fruit growing section I have visited. I stop and inquire the causes. Nine cases out of ten, the owner lives in Seattle, Portland, St. Paul, Chicago, Alaska, or some where else. There is a hired man or a renter taking care of it.

Third; the average man will not produce the best, and it is left for the intelligent, studious, and industrious who rise above the average to furnish our high grade fruits.

Fruit as Food

There has been considerable discussion, since the war began, as to the value of fruits, especially apples as food. England has discriminated against apples in deciding what food products may be shipped in English vessels to that country, and in recommending the kinds of foods to be brought as necessities.

Did England Make a Mistake?

I will not claim that fruits have the nutritive value of wheat, corn, rye, rice, meats, etc. From that viewpoint England is right. The fact remains, however, that fruit acids furnish chemical qualities necessary to a balanced ration and that without them no person can for a long period of time enjoy normal health. The reason why the loggers, frontiersmen and others who live in camps, eating flesh foods, fats and "flap jacks" crave intoxicating liquors more than the average of men, is that they have not a balanced ration and need acids. If they had been abundantly supplied with fruits, this craving for wine, beer, whisky and other intoxicants would not have existed. I know what I am saying is true, and know it from experience.

Prohibition and Fruit Consumption.

In New York city some 20 years ago fruit was scarce and high priced. Dr. Buckley, one of New York's great thinkers and observers, noted that during that period the consumption of alcoholic liquors was doubled, and crime increased in about the same proportions. The next year, in the United States there was an abundant fruit crop. During that year the consumption of alcoholic liquors was greatly reduced and crime proportionately.

When the state of Georgia voted prohibition and the law began to be enforced, it was observed that the relative consumption of fruits greatly increased. The same fact has been noted in other southern states and has become so well known to fruitmen that almost universally well-informed fruitgrowers favor prohibition as an economic measure, aside from any moral considerations.

Now, if we insist that alcoholic liquors should not be sold to our boys on the front, because the tendency of such a practice is toward demoralization, degeneration and lower efficiency, we should furnish them in the form of fruit acids that which is necessary to their health and will supply that place in food rations which is intended to be supplied by alcoholic liquors.

Composition of Apples.

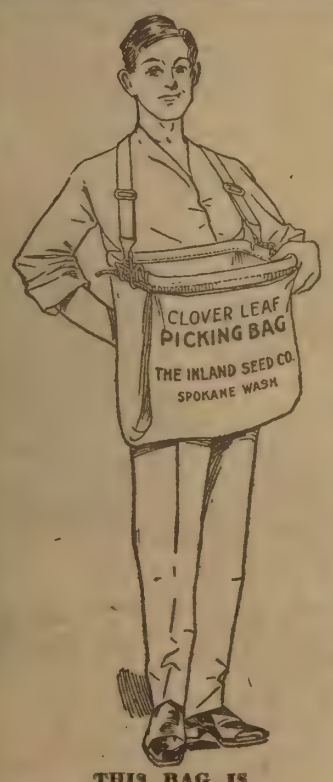
Varieties of apples differ considerably in their chemical composition and food values; but the following is the average as tested by government and agricultural chemists:

Water, 82.5; Carbo-hydrates, 12.5; Proteids, .4; Nitrogens, .4; Fats, .5; Acids, 1; Cellulose, 2.7. G. L.

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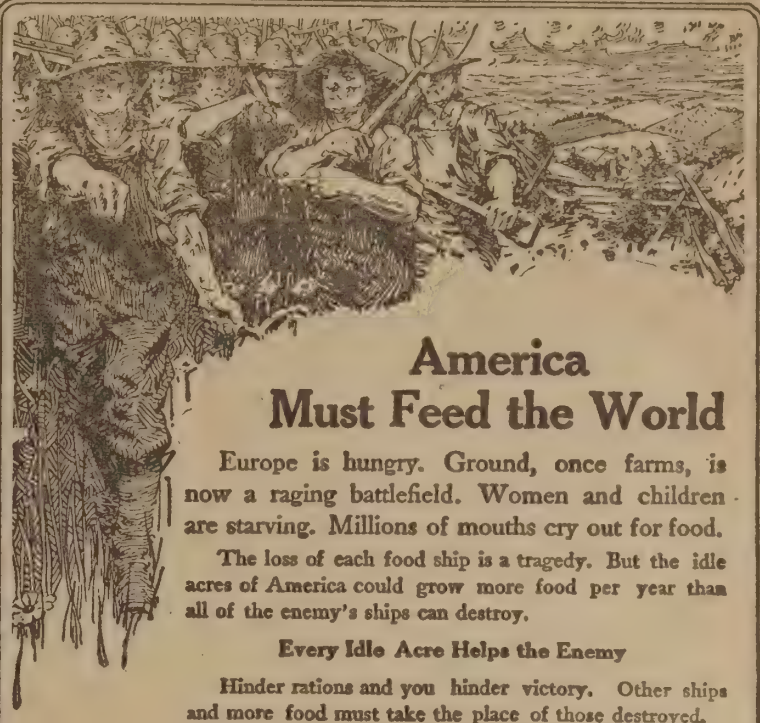
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SPLITDORF SPARK PLUGS

Alfalfa Men Learn by Experience

Many Report Their Methods and Results to Aid Others

In last week's issue of The Farmer the first instalment of letters from alfalfa growers written in response to inquiries designed as a partial survey of the industry was published. Since that time others have been received, presenting interesting and helpful facts and suggestions concerning the value and the methods of culture of alfalfa. The following are excerpts from some of these letters:

CHARLES GRANT, Methow, Wash.—Alfalfa has been a grand success with me. My acreage this year is 32 acres, nonirrigated. The yield was two and a half tons per acre, the lightest yield in 10 years, owing to freezing out and the field being 12 years old. Ten years is the active life of an alfalfa field. I always pasture after the second crop is cut, about the first of August, and find it excellent pasture for milk cows and work horses. With bunch grass or grain stubble to run on, it is good for beef cattle too. As feed for cattle it beats grain hay, but I prefer grain hay for work horses. It is good for hogs as pasture, but I don't find it profitable to feed as hay for sheep. Poultry don't seem to care for it except when very tender. I have had no experience with alfalfa ensilage.

My way of raising alfalfa is as follows: I give the land a good coating of manure the winter previous to plowing. In the spring I disk the land to mix the manure and the soil and bring up the weeds. I plow in June and keep clean of weeds. The next spring I disk the land. This makes a good gauge to sow by. As the average man by hand will sow nine feet, I sow 10 pounds per acre. This is easily gauged by just taking up what seed you can hold between your thumb and two forefingers. I then harrow it once, then clod wash it to make the seed bed firm and smooth to mow. By this plan I have never failed to get a good stand even on sandy south slopes. No inoculation is needed here. Cultivate, disk and harrow every spring. I grow no alfalfa for seed. Dodder is the only pest we have here. We take some old trash and burn it out. When a field of alfalfa gets so thin it has to be plowed up, oats are generally sown and the field reseeded to alfalfa.

G. W. WILGUS, Prosser, Wash.—I had nine acres of alfalfa four years ago and have added two more. I planted the nine acres 13 years ago and I cut about two and a half tons per acre each cutting, making seven and a half tons for the season. But it won't go more than one ton per acre to each cutting, making three tons for the season now. It is running out and must be plowed up. I think 10 years is as long as alfalfa ought to be grown on one piece of ground. Then plow it up and plant it to corn or potatoes for two years, then resew to alfalfa. By this time the ground will be enriched and more alfalfa can be raised.

J. F. SHERWOOD, Valleyford, Wash.—Under the present conditions one crop a year is all we can figure on, but with irrigation could raise two good crops. I tried to pasture hogs on it, but the second year killed it out, so I find about two months in spring—May and June—and about one month, say October or November, is about all we should try to pasture without irrigation. Another thing I find if I pasture through the dry part of the summer, it fills the hogs full of worms. I could guess at a good deal more, but as you want facts I have given it to you as I find it.

JAMES ALEXANDER, Boyds, Wash.—I have about 13 acres in alfalfa and cut about 45 tons of hay. I never baled it out so it is guess work. I had 18 head of stock and sold $157 worth of hay last year. I don't believe in sowing too much seed to the acre, but I believe in doing lots of work on the ground and then a little more work.

IRVING PAGE, Denison, Wash.—My experience in raising alfalfa is limited to narrow strips between the rows of orchard trees on my ten acre tract. I keep about half the tract in alfalfa, plowing up some and seeding other rows nearly every year. It is then fed on the place and nearly keeps two cows, the manure being applied to keep up and build up the soil.

I plant it in rows two feet apart and cultivate, as I find that causes practically no injury to the trees, while broadcasting it dries out the trees unless one uses lots of water. By the above method, using a small quantity of water, I get three good cuttings a year and some pasture in the fall. I notice that where they do not use water they ordinarily get only two cuttings.

A. C. RUBECK, Mica, Wash.—For the past five years I have had very good success in growing alfalfa. I have no trouble in getting a stand where the ground is especially prepared with fall plowing. High ground is preferable to low ground.

E. MAHR, Spangle, Wash.—I had a good stand the first year, but the next spring the frost pulled the most of the alfalfa six inches out of the ground and dried it up, and the next year the same thing happened, until I saw it was no use to trouble with it any more. So I seeded it to timothy. The rest of the alfalfa I had grew up this last spring. After all the care I gave it, I only got one load and that was most dried up before blooming, where I got three big loads last year. So I think alfalfa is not the best crop for this soil here. I have raised it in the Walla Walla country with success, but I can't do it here.

L. P. ZIMMER, Addy, Wash.—The Addy country experienced a heavy fall of snow the fore part of the winter and a January thaw with a sudden freeze formed an ice crust over the alfalfa and smothered the old plants. That was on level land. Poung seeding did not suffer greatly. My acreage was reduced, and again, owing to the very late cold spring, which turned hot and dry, I had a very light crop, not much more than one-third a normal crop. I use alfalfa for pasture, but little except for hogs. I have never had any experience with a silo. I consider alfalfa as a soil builder better than any manure or fertilizer, and can show the goods after three years' cropping. I had wheat and barley this very dry year as good as I ever have seen. For ordinary farm work I consider alfalfa splendid horse feed. I have raised seed one year and harvested it with a stripper designed by the United States agricultural department, with fairly good results.

AUGUST BELHUMEUER, Springdale, Wash.—I have had good success with alfalfa, as I have only a small acreage. But it has done splendidly and is thick. Most any one can have a good crop of alfalfa if they attend to it. Of course, this year has been very dry, and not as good as last year.

GEORGE JORDAN, Winona, Wash.—We are still cutting our alfalfa. It has been the most profitable 10 acres on the ranch. It is subirrigated, though, and I would not advise dry land in this section for alfalfa, as it runs out too quick.

OSCAR NELSON, Granger, Wash.—I am now growing about 10 acres of alfalfa and that we grow bumper crops in this irrigated valley goes without saying.

A. L. VAN TINE, Elberton, Wash.—My alfalfa all winter killed last winter. I have been raising alfalfa for the last 20 years and find it a very profitable crop. The only objection I have to alfalfa raising is the cheat grass. We have to cultivate so heavy that it injures and helps to kill the alfalfa. I have been growing 25 and expect to seed this anew just as soon as possible—15 acres of it next year. Would be very glad if you could give me some information on alfalfa raising, also as to keeping the cheat grass out.

W. W. PECKENPAUGH, Opportunity, Wash.—Our alfalfa was plowed up three years ago. I would consider it a very good crop in our vicinity were the land not so valuable, but when you consider land selling at from $500 to $750 and often as high as $1000 per acre, it is not a consistent money maker. We were getting two good cuttings a season, but the third or last cutting was more or less of no particular food value.

W. F. DE LONG, Wallula, Wash.—I have been growing alfalfa for several years in the Wallula district and can say that with plenty of water for irrigation this district grows more alfalfa than any section of the northwest per acre. By this section I mean all the Columbia river basin for 100 miles. We generally cut four crops. Sunshine and water is all alfalfa needs here. We do not inoculate the soil. We get six to eight tons per acre on well seeded land.

P. HAUSKEN, Freeman, Wash.—I have raised some alfalfa and clover the past eight or nine years with good results. I had from two to three tons per acre the first cutting. Alfalfa never failed to have two crops except this year's second crop which is too light to be mentioned. Nevertheless

(Continued on following page.)



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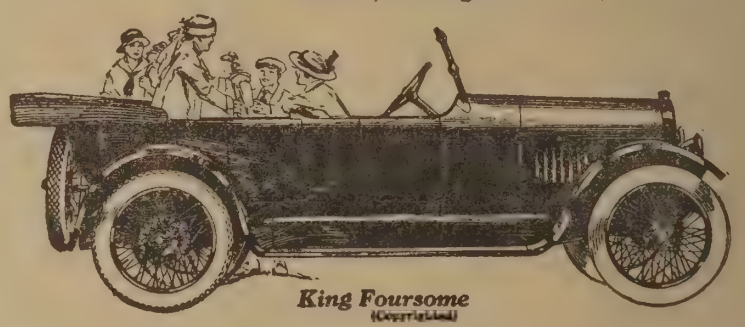
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BE SURE AND MENTION THIS PAPER

Y. M. C. A. Meets the Soldier Boys

Due perhaps to the quietness with which the well oiled machinery of their highly efficient organization runs, few people realize the part being played by the Y. M. C. A. in the nation's hurried preparation for war. Thousands of mothers who spend many anxious moments thinking of the temptations bestrewing the path of her son in the great training camps would be greatly relieved if she knew of the work being done by this organization to safeguard that boy; if she knew that for every temptation to which he is subjected the Y. M. C. A. offers a clean, wholesome sport; that for his every idle moment there is some clean attraction.

"It has occurred to me," said Secretary George Forbes of the Spokane Y. M. C. A., "that The Washington Farmer can do a good work by alleviating the anxiety of mothers and fathers of the northwest who are greatly concerned as to the life being lived by their sons in the army cantonments. A wise government has thrown around its youthful warriors a protective arm and sternly wards off vice so far as possible to do so by this means, but it would doubtless relieve parents still more to know that a great organization with almost unlimited facilities is taking a keen and personal interest in their sons, and with all resources at its command directing him aright.

"The Y. M. C. A. stands as a friend at court for every one of these boys. In every cantonment there is a Y. M. C. A. fully equipped. At American Lake there are six buildings, and we are now arranging a schedule of activities. In addition to a physical director and organized sports, we will conduct there a veritable university. High school students and those preparing for college may continue their studies, while schools for mechanics, salesmen, law students and those preferring other trades and professions will be maintained. There will be hundreds of instructors with class rooms open from reveille to taps, and at the head of this work will be some of the most noted educators of the west, Professor N. F. Coleman of Reed college, directing.

"The Y. M. C. A. buildings are models of convenience. There are comfortable lounging rooms, well stocked libraries, writing rooms, gymnasiums and auditorium for plays and vaudeville, while every evening motion pictures will be shown with accompanying lectures.

"And locals of the Y. M. C. A. are doing their bit. Their doors are always open to the boys from surrounding towns and rural communities. Recently when a contingent came through Spokane en route from American Lake to the bigger training camp in the south, they were marched 328 strong to the Y. M. C. A. and given soap, towel and shower bath. They appreciated that.

"We have letters from men at the front telling of what the Y. M. C. A. means to homesick men over there, of men who become so disheartened and lonesome as to make them worthless as soldiers, being sent by their officers to the Y. M. C. A. to be cheered up, to be given a better opportunity to write back home, and to come away feeling that they are not entirely forsaken, that they have a friend at court.

"Work in the army cantonments is directed by the national headquarters, the locals throughout the country contributing the funds. The Spokane branch contributed $2700 to the fund, and will continue to contribute all we can raise."

Watch Grasshopper Districts.

Persons who were asked by W. A. Holt, county agriculturist of Okanogan county, to watch the developments in the grasshopper districts, report that the hoppers are now breeding and laying the eggs for next year's young. In this connection information will be sent to the farmers of the hopper districts, by Mr. Holt, explaining the life history of the grasshopper and urging all to keep a lookout for the laying grounds of the pest. By locating the areas in which the eggs are laid much can be done toward lessening the damage that will be done next year, for by working the soil in which the eggs are laid, many eggs can be destroyed this fall and winter, as well as next spring.

Women Win Prizes.

Yakima valley women proved their versatility at the state fair. Miss Mary Remy took prizes in floriculture and cooking, as did Mrs. A. H. Heubner and Mrs. Wallis Williams. Mrs. R. R. Peden of Lower Naches, the champion butter maker, was also the champion cooky maker at the fair.

Mushrooms.

A good mushroom, properly cooked, is a luscious morsel and as such is a wholesome addition to the dietary. If you are absolutely sure that the variety that grows on your lawn or in the neighboring fields is of the edible kind, by all means cook it and eat it.

Alfalfa Men Learn by Their Experiences

(Continued from preceding page.)

I believe this will be an excellent alfalfa country in coming years.

AMOS G. CUMMINGS, Walilula, Wash.—Alfalfa culture is a success wherever you can have moisture, either by subirrigation or otherwise. We have river land that produces 3 and 4 crops according to the season, although the crop is poor this year. Hay is very high and scarce.

GEORGE RAND, Irrigon, Ore.—This is a fine place to raise alfalfa. Part of the ground I had in alfalfa four years ago is now in corn, about three acres of which is making a fine showing. One acre in muskmellons last year brought me $350. I have some in now which are beginning to ripen, and am selling them in 100-pound crates at 4 cents a pound. I also have 14 acres of alfalfa, part sowed in the spring of 1917. Barley is doing fine. I only have 23 acres of land and feed all my hay, mostly to dairy cows. We cut four crops of alfalfa, and sometimes five.

P. D. SMITH, Conconully, Wash.—My alfalfa acreage is 80 acres and the yield 400 tons. I use it only for pasture for beef in the fall. I find it is unexcelled for feed. I have had no experience with alfalfa silage. The theory of hard seed bed, I have found to be wrong. No special preparation of the ground is necessary more than for any other crop. I raise alfalfa for hay only.



Making Every Day "Fire-Prevention Day" Piles Up Dollars for Northwestern Mutual Policyholders

Governor Lister patriotically sets October 9 apart as "Fire-Prevention Day" and urges war against the fire waste that each year costs America $250,000,000.

"While conflagrations are serious in normal times, their seriousness is many times enhanced in time of war," declares Governor Lister.

"Fire frequently destroys greatly needed supplies of foodstuffs, lumber and other vital staples. It strikes at the foundation of national wealth. Fire danger is greater this year than ever before."

FIRE PREVENTION PAYS

The 40,000 policyholders of the Northwestern Mutual Fire association observe 365 fire-prevention days a year. These policyholders are all joining hands through the association for the prevention of fire. It is due to this cooperation and fire prevention that the Northwestern Mutual has been able to return to policyholders cash dividends and savings of more than $2,500,000.

Eternal vigilance will conquer the fire demon, for fire is a preventable evil.

Visualize what this means—a pile of silver dollars almost four miles high—it would tower a third higher than Mount Rainier!

Fight fire; observe Fire-Prevention day all through the year—by conserving waste you are helping to win the war. But get the benefits of your efforts through the Northwestern Mutual; convert your energies into cash dividends. Take out your next fire insurance policy in the Northwestern—and then concentrate with the Northwestern. We will show you how it pays YOU.

If your telephone won't reach us a postal will.

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There Is Some Good Live Stock in the Chehalis Valley

By HORACE ADDIS

The Willamette valley in Oregon has by no means all the good Jerseys in the northwest. The Chehalis valley in southwestern Washington rightly lays claim to some of them.

A. Adolphsen of Chehalis, Wash., has with his little herd, completed nine official records.. Three of these are by cows with first calf. St. Mawes of Grassmere began at exactly two years of age. In 328 days she produced 7104.1 pounds of milk and 544.37 pounds of butter in a year, with an average test of 5.86. She is of Ed Cory breeding.

Golden Lactea 3d, purchased from the Ladd farm, produced 94 pounds of fat or 112 pounds of butter in one month. She has been on test eight months and, in spite of the fact that the herd was moved from one farm to another ard pastures have been poor, reducing the production of all the herd she promises a big record.

Diploma's Nellie, a daughter of Diploma, a cow bred in the old Stevens' herd at Ellensburg, began at exactly 2 years old and produced 68 pounds of fat, or 80 pounds of butter in a month. Diploma, the old cow, had 88 pounds of fat in a month.

All these cows were milked only twice a day and Mr. Adolphsen has good reason to believe that even so, but for the moving, Diploma's Nellie would stand among the leaders of the country.

John H. Taylor.

Picture No. 2 in the accompanying layout, snapped by the Farmer camera, shows a Jersey cow, 13 years old, owned by John H. Taylor of Montesano, Wash., whose performance and that of her offspring entitle her to a niche in the hall of fame. She is Gertie's Lily and was bred by A. M. Stevens of Ellensbuhg, Wash., now dead, whose herd made good records with only fair advantages and furnished foundation for a number of good herds. Gertie's Lily was sired by Gertie's Stoke Pogis and out of Diploma's Lily. Beginning at the age of 3 years and 6 months, Mr. Stevens gave her a record of 517.5 pounds of fat, or 608.8 pounds of commercial butter. At 9 years of age, Mr. Taylor gave her a record of 845 pounds of butter, thus entitling her to an A. J. C. C. gold medal.

One of Gertie's Lily's daughters, Gertie's Son's Lass, has given Mr. Taylor a record of 632 pounds 9 ounces of butter at 2 years and 11 months, and Gertie's Son's Bess, 386 pounds of buter, at 1 year 8 months. Mr. Taylor has two more heifers, a yearling and a calf, offspring of this grand old cow. Unfortunately her three bulls have all gone into grade herds.

Golden Massy Polo, Mr. Taylor's other gold medal cow, who produced 877.9 pounds of butter as a 4-year-old —then a world's record—is by the same sire as Gertie's Lily. She has one daughter, Massy Polo's Dimple, with an official record of 436 pounds of butter, begun at the age of one year and 10 months. Another is on test and will make a much larger record.

Mr. Taylor has eight cows with completed tests and 12 more on test. At the Altman sale he purchased Jacoba Irene Prince, a bull with 75 per cent the same blood as the great long distance butter cow, Jacoba Irene, and is using him on most of his herd.

Mr. Taylor had a fine crop of hay this year. His two silos are filled with oats and peas, which make a very satisfactory silage and yield well in the Chehalis valley. He believes in feeding well, but uses his good pastures as much as practical.

John R. Martin.

John R. Martin of Satsop, Wash., has 17 Jerseys in the Montesano Cow Testing association, seven of them pure bred. Mr. Martin had the highest grade cow in the association for June and July, though it was a different cow each month. Each cow produced 68 pounds of fat. The average of the herd was 43 pounds of fat for June, 51 pounds for July and 41 pounds for August.

Mr. Martin is the owner of Amateur Amy, a registered Jersey, that in 1914 made an official record of 698 pounds of butter, as a senior 2-year-old. It was the highest record made that year in her class and is still the state record for senior 2-year-olds.

Mr. Martin has two silos. His plan is to put into them practically anything that is ready when he is ready to fill them. This year he has put in wheat and oats together and rye, vetch and oats mixed. He considers the cost and uncertainty of corn in this region and the greater labor of making the crop prohibitive, or at least not as preferable as the small grains and legumes.

E. L. Brewer.

E. L. Brewer of Satsop, Wash., the man who developed Olympia's Fern and gave her her world's record of 1107 pounds of butter in a year as a 4-year-old, has now 12 Jerseys on official test, besides eight more in the Montesano cow-testing association. Mr. Brewer has been making some remarkable records and for a time it looked as if he might establish two new world records. But he had a severe case of sciatic rheumatism and was away from home nearly a month just when pastures were failing and the result is reflected in decreased yields.

The Owl's Golden Queen freshened February 16. For March, she produced 110.38 pounds of fat or almost 130 pounds of butter. Her April record was 109.71 pounds of fat and her May record, 109.69 pounds; June, 100.68, but for July she was down to about 85 pounds. Lad's Brown Beauty began her test April 22. For May she produced 101.77 pounds of fat, for June 109.54, and for July about 70 pounds. Lad's Juno is a great young cow that produced 80.65 pounds of fat her first month and 307.43 pounds in four months, but she is so nervous she can not be depended upon.

Mr. Brewer, who is the Washington representative of the American Jersey Cattle club, was recently sent on a trip through California and delivered a number of lectures on the subject of feeding and other matters. He reports conditions good and a strong demand for Jerseys down there.

Murphy Brothers.

Pansy, No. 5 in the layout, has a cow-testing association record of 12,324 pounds of milk and 595.4 pounds of fat, or a little over 700 pounds of butter in a year. Pansy is a grade Jersey probably fifteen-sixteenths pure, but still a grade. She is the highest producer in the herd of Murphy Brothers, successful dairymen near Montesano, Wash., who milk about 50 head, all high-grade Jerseys. They bred Pansy themselves, as well as her mother. They use high-class purebred bulls, their present herd sire being a son of Golden Massy Polo, with a record of 877.9 pounds of butter in a year as a 4-year-old.

Murphy Brothers own a place of 270 acres, about 150 of which is in use. They pasture their meadows until about June 10, usually, then cut hay about the middle of July and pasture again until about the first of October. Their meadows are of timothy and clover, pure clover, alsike and rye grass and red clover. During the time pasture is good, from about the middle of April to October, they feed no grain, except a little to some of the heaviest milkers. The herd averages during some of the summer months over $500 profit per month.

These gentlemen, three brothers, belong to the Montesano Cow Testing association. This is their second year, so they know just what the cows are doing. They have many beautiful animals in the herd and others besides Pansy that produce over 500 pounds of fat. Not a mature cow in the herd produces less than 300 pounds of fat and the herd average is over 350 pounds.

The Messrs. Murphy have a 100-ton home-made silo. Last year it was filled one-third with oats and vetch and the balance rye grass and clover. This year for the first time clear clover showed a heavier tonnage than oats and vetch. In the winter season these gentlemen plan to feed one pound of grain a day for every pound of butter fat a cow produces per week. They feed about 30 pounds of silage a day, or 40 pounds of rutabagas, and all the hay a cow will clean up, which is four or five pounds per cow. They milk with a mechanical milker, which they have used for three yars with no injury to the udders. They always strip a cow after using the milker. They do their own milking and most of their farm work, but employ some help in summer.

E. R. Brady.

Admiral Togo is a Guernsey bull dropped in February, 1904, that was brought into southwestern Washington when 1 or 2 years old. He got good calves and headed several different grade herds. Some time ago a cow testing association was formed in Thurston county, Washington, and the tester found that Admiral Togo had sired all the best cows in the association. He also had two or three purebred daughters and they are both high producers and very typy. He communicated this fact to E. R. Brady of Satsop, Washington, and as the bull was then owned by a farmer who had sold his herd and was intending soon to turn Admiral Togo off to the butcher, Judge Brady got him at a very low figure.

Admiral Togo's sire is Glenwood's Reputation, one of the best sons of the great sire Glenwood Mainstay, whose dam is Glenwood Girl, with A. R. record of 593.6 pounds of fat. Admiral Togo's dam, Emilie N,, also has some quite famous Guernseys in her pedigree. As Judge Brady is breeding the bull on all his best purtbred Guernsey cows, and as he is still vigorous, he may yet secure fame before his career is ended.

S. M. Mears.

S. M. Mears, whose father is a wealthy business man of Portland, is farming at Woodland, Wash., and is a real fancier of Poland Chinas. His boar, Snops, has extremely large hams, great long, good feet and good, typical head. He was bred by H. A. Willard and is a son of Herbert Willard's high class sire, Meddler IV. Mr. Mears' sow, Peerless Trixie, would be hard to beat in any show ring. Besides every point of a good hog she has the fancy points of the Poland China breed.

Mr. Mears is a feeder as well as a breeder. He has a fine lot of spring pigs, nearly twice the size of many of the same age and in good growing condition. He uses alfalfa meal as one of his principal rations and likes it for almost any stock. He finds he gets good results from feeding it to chickens, as well as horses, cows or hogs.

J. A. Scollard.

J. A. Scollard of Chehalis, Wash., believes there is money in beef cattle on a highly cultivated farm in the Coast country and especially in the Chehalis valley and is starting out to demonstrate the truth of his belief. Mr. Scollard owns 430 acres of the finest of bottom land on the edge of Chehalis. This year he has 80 acres in barley that was cut when I was there and estimated, by those who should know, to thresh out 80 bushels per acre. He has 360 acres under the plow and the remaining land, woods pasture, is being cleared and put in cultivation. Mr. Scollard has 24 acres in corn and has two silos to receive it. Other silos will be built as needed.

Mr. Scollard has purchased from the famous Congdon and Battles herd of North Yakima, Wash., a herd of seven females and a bull of registered Aberdeen-Angus cattle, paying $2500 for the bull and a total of $5800 for the eight head. He had to wait until this fall's fair circuit and the Chicago International were over before the bull would be delivered, because he is a great show bull. Several of the number were bred in the original Battles herd in Iowa, one of the foremost Angus herds in the United States. Mr. Scollard has a herd of grade Angus cattle now and this very high class sire will be used on them. He will also keep a show herd of pure bred cattle.

Mr. Scollard argues that Chehalis, with two markets, Seattle and Portland, competing is advantageously situated for beef cattle. It is his intention to confine the cattle rather closely and feed not grass but corn silage. This, together with the heavy crops of grain the land produces, will form the principal feed and Mr. Scollard considers the manure no small consideration in reckoning the profit on feeding beef cattle. He has named his farm "Broadmead," which considering the broad, sweeping view it gives from his house or the road, is an appropriate name.

George Bertrand.

The first picture in the accompanying layout shows Gold Mine, a Shorthorn bull dropped April 18, 1916, owned by George Bertrand, Olegna, Wash. Gold Mine is by Chief Goods, a son of the great sire, Golden Goods, and his dam, Cecile, is by Minority's Welcome. He has a broad, straight back, good underline, straight hind leg, is deep and round, has a deep loin and a head showing good breed type. Mr. Bertrand was giving this young bull, his sire and two other yearlings some little preparation for the southwest Washington fair, where, with some of Mr. Bertrand's good females, they proved a big attraction. He will also show at North Portland this winter.

Mr. Bertrand has been breeding purebred Shorthorns only a few years, but he got good cows from Gibson, Cornett and others and is rapidly building up a herd to be proud of.

Mr. Bertrand was formerly a grower of hops, but where the hop field was now feed for the Shorthorns and Berkshires are grown, and Mr. Bertrand finds the Shorthorns give good returns for feed and labor expended.

E. P. Sawtell.

E. P. Sawtell, a pioneer farmer of Independence, Wash., many years ago purchased a registered Holstein bull. He was building up a good grade Holstein herd, but became discouraged because he could not sell the bulls or steers, even for beef. He then got an Angus bull and afterwards a Shorthorn, but they were not what he



(1) Gold Mine, Shorthorn bull owned by George Bertrand of Olegna, Wash. (2) Gertie's Lily, Jersey cow, owned by John H. Taylor. She was 13 years old when the photo was taken. She has an official record of 608.8 pounds of butter at three years and six months and 845 at nine years old. (3) Holstein heifers owned by E. P. Sawtell of Independence, Wash., on hillside pasture. (4) Trixie, a show sow in the Poland China herd of S. M. Mears, Woodland, Wash. (5) Pansy, a grade Jersey owned by Murphy Brothers of Montesano, Wash., has a cow-testing association record of 12,324 pounds of milk and 595.4 pounds of fat in a year.

wanted. Some few years later, a friend in the butcher business agreed to take all the Holsteins he would furnish at the same price as any other beef cattle, and Mr. Sawtell returned to his first love. He got the best Holstein bull he could in 1904, but has always realized that he had lost time and money when he bred away from Holsteins.

Mr. Sawtell purchased his first registered Holstein cow in 1905, but she was bred to a Jersey by the man who sold her without his knowledge and he lost another year, as her first pure bred calf was dropped in February, 1908. Most of his herd is her offspring and, while he bought one cow with an A. R. O. record from Tiffany Brothers of New York, his own stock were so much better he let her go. Lady Belle Washington has milked nine gallons a day for months at a time, with ordinary care. Her only test, made by a creamery, showed 5 per cent fat. Her daughter, Flora Belle Netherland, tests 5.1, but is not as heavy a milker. All but two animals in his herd are related to her. He always buys good bulls and has found a ready sale for his young stock.

Dairymen Cooperate

(Continued from page seven.)

which tends to eliminate competition. It was not long before the newly awakened dairy organization in Fraser valley had reason to know that its work was being watched by curious and perhaps unfriendly eyes. Having nothing to hide, however, the farmers courted the public investigation which was finally determined upon by the city council of Vancouver. The result was, of course, a complete vindication of the farmers. The gist of the report offered by the "special milk committee" was that the price of 6 3-4 cents per quart paid the farmer was far from excessive when the cost of production under the sanitary regulations imposed by the city was considered; and that if the price to the consumer was to be lowered some way of simplifying and cheapening distribution and the handling of the milk subsequent to its descent into the milk pail must be found. A suggestion made by the association that it should sell direct to the consumer, distributing through a single delivery system, was considered by the council and indirectly approved in the following words:

Unit Distribution.

"The Fraser Valley Farmers' Cooperative company, which supplies some 80 per cent of the needs of the city of Vancouver, has written the committee that they are prepared to deliver their pasteurized products to the consumer at 10 cents per quart upon a system of unit distribution. This, your committee understand to mean, that the milk bylaws of the city would have to provide for milk routes in order to do away with overlapping in deliveries. While the direct result would be a reduction in cost to the consumer without lessening the return to the producer, the principle of interference with competition and freedom of trade is of such importance that your committee hesitates to recommend such a course. As the cooperative company which makes the offer controls such a large proportion of the milk supply of the city, it seems reasonable to suppose that a unit distribution arranged by the producing company themselves will work out its own success and the waste in overlapping of deliveries will be reduced to a minimum."

The committee adds that a special investigation into this feature has convinced them that the loss in the city of Vancouver, due to overlapping distribution, is about $80,000 per year—this in a city of 140,000 inhabitants.

Having passed through this acid test so favorably, it can hardly be doubted that the association will go forward more vigorously than before. Every precaution has been taken to make the business mechanism not only as efficient as possible, but also to keep it above reproach in the matter of clarity and openness in its dealing with its members. Checks are issued twice monthly, the first check being based on an estimate, while the second makes settlement in full, on the basis of business actually transacted by each member.

Is a Selling Bureau.

Technically speaking, the association does not buy the milk produced by its members and does not fix a price for the milk it sells. It is simply a thoroughly organized and thoroughly informed selling bureau, which directs the movements of its members. John Jones, for instance, a member in good standing, ships his milk to a buyer specified by the association. The check for this milk goes to the association, not to the individual shipper. In this way the matter of checking up invoices and certifying figures, a detail which the farmer has always neglected, is taken care of by the business office, which in turn pays the producer. The cost of running this head office, including directors' fees and traveling expenses, amounts to a trifle less than 1 cent per pound on the butterfat handled.

As a final element in securing harmonious cooperation among the members of the association may be mentioned the publication of the Fraser Valley Milk Producers' News. The News is a small, but well edited trade paper, mailed to the members of the association with their final pay checks each month. Through the columns of this paper it is possible to keep the members informed of the problems and progress of the organization, and in this way to secure intelligent action toward a single objective on the part of 800 producing farmers.

Wheat Price Fixing and the Farmers

While Everything the Farmer Produces Is Put Under Regulation and Control, How About the Steel Manufacturers and Others?

"Our Landed Aristocracy" is the term sneeringly applied to the American farmers by the New York Journal of Commerce. "The farmer," asserts that journal, which is particularly edited for the commercial classes, "must have high prices guaranteed to him by the government in order to induce him to work his farm, the impression seeming to be that if he were not guaranteed about twice as much as he ever got before he would live on the interest of his investments and allow his farm to return to the wilderness."

It would be difficult to pack more ignorance and class prejudice into a few words.

Let us begin by setting this question straight. The farmer has not asked the government to control the price of wheat. His pocketbook would have been better filled if the government had kept hands off his products and permitted prices to be governed by the usual laws of supply and demand. Under government price-fixing, the wheat growers of this country will receive for this year's short crop prices ranging from $1.75 to $1.85 in the Pacific northwest to $2.30 on the Atlantic coast.

If the government had not set an arbitrary price, the wheat market in all probability would have gone to $3 or $4 a bushel this year. Louis Hill, president of the Great Northern, is confident that the price would have been $4. Certainly it would have been more than the price the government has set.

In a spirit of patriotism the American farmers have accepted this heavy loss almost without a murmur anywhere.

The wheat price guarantee is a war measure, conceived and initiated by the government to stimulate increased production of that cereal, and not solicited or urged by the farmers. The guarantee applies only to that one product. It does not cover oats, barley, rye, potatoes, corn, cotton, hay or any of the scores of other products of the soil. The government, realizing the urgent need of stimulated wheat production, fixed a $2 guarantee for the 1918 wheat crop. It adopted that expedient in order to induce the farmers to grow more wheat—to sow lands to wheat that might be more profitable if put into other crops. The motive was national welfare, not profit-making for the farmers.

The New York newspaper then further clouds the facts by intimating that while the farmers are favored by legislation, the steel manufacturers are wronged by government action. The farmers, it says, "are furious that steel-makers should get higher prices than they did before the war."

Now let us examine the facts of the law. The enabling clause defines the necessaries that may be controlled by the government. They are "foods, feed, fuel, fertilizer and fertilizer ingredients, tools, utensils, implements and machinery, and equipment required for the actual production of foods, feeds and fuel hereafter in this act called necessaries." Apparently steel is exempted from the direct control provisions of the law, but everything the farmer produces is put under regulation and control, because the farmer grows essentially foods and feeds.

The distinct purpose of the law is to hold down the prices of farm products, to interfere with the normal play of the laws of supply and demand. As a partial offset (the government could not in fairness have done less) it also put under control a few of the necessaries that the farmer must have.

To hold down prices the law empowers the president to fix prices and purchase and sell—what? Wheat, flour, meal, beans and potatoes—products of the farm. And what else? Coal and coke. These products and these only.

The other necessaries enumerated in the law can be indirectly controlled by the licensing provisions of section 5; but the machinery is cumbersome and may or may not satisfactorily effect the purpose of the law.

In all of America's wars the farmer has borne loyally his part. It was the "embattled farmers" at Lexington who "fired the shots that were heard around the world." Patriotism is not dead on the farms of America today, and our farmers will do their part loyally and well in this great struggle for world freedom and democracy. They are making high sacrifices in every county in the land. They are giving their sons to the flag, and they are toiling early and late that our people and our allies, our armies and our allies' armies, may be nourished for the great ordeal.

Sheepmen Have Banquet.

On Wednesday evening of state fair week sheep breeders and others interested in the sheep sale gathered in the Commercial hotel at North Yakima, and partook of an enjoyable banquet. Professor William Hislop, who had charge of the sale, introduced State Commissioner of Agriculture E. F. Benson, who acted as toastmaster. Brief addresses were made by A. G. Butterfield of Weiser, Idaho, who emphasized the importance of purebred sires; Mr. Fiske of Spring Valley, H. Stanley Coffin of North Yakima, Mr. Wexler of Pasco, Grover McDougal of Kiona, Mr. Gabbert of Ellensburg, Eugene Hubbard of Monroe, Ore.; O. M. Plummer of the Portland Union stock yards, "Farmer" Smith of the O.-W. R. & N., George Gue, who auctioned the sheep, and Horace Addis of the Washington Farmer. H. A.



WAR TIME SAVING

In these strenuous war times, when the ever thought of saving in every way possible is foremost in each mind, mighty few real opportunities are placed before the farmers of this glorious Pacific Northwest. No real bargains, when any big saving worth while can be made, are offered to the reading public. Right now, when prices of all things are mounting skyward, here comes a bargain offer that should appeal to every one that it reaches. Instead of adding to the increased expense of our readers, we are making them an offer that they can not and should not hesitate to grasp. Read this big bargain offer and see for yourself the saving you are making.

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Feed Supplies and Stock Outlook

Much information is contained with regard to the feed situation in the Inland Empire in letters received in reply to inquiry made by the Spokane Chamber of Commerce:

Better Care of Straw.

William Weatherford, Weatherford-Wallace company, Dayton, Wash.—From my observation and investigation it is my opinion that we will not have one ton of hay that can be spared from this county, in fact I am quite positive that we will not have sufficient hay to carry us through the winter and care for the seeding of the crops and summerfallowing the land for another season. We believe, however, that the most of the grain farmers will take better care of their straw than heretofore and that will be of a great benefit in getting our stock through the winter. I am almost led to believe that the government may have to guarantee a minimum price on beef to keep our people in the business.

Getting Rid of Young Stock.

O. K. Kennedy, Editor The Standard, Fairfield, Wash.—In this section about 25.000 acres of peas were raised. Though the crop was about half normal, account of heat, dry weather, there will be abundance of pea straw, a good roughage when fed with other feeds. Split peas for chickens and pea waste in the fields for pigs will help some. All the same our farmers are getting rid of young stock rapidly. "After us the flood" seems to be the slogan. All the advice and pleading goes for nothing to a man who has a lot of young calves in fine shape for veal. Estimates are hard to get, but I will say that there will be no surplusage of stock feed to ship out of this section except possibly some baled wheat straw and pea straw.

Seeking for Range.

P. A. Gaul, Cottonwood Mercantile company, Cottonwood, Idaho.—I believe Cottonwood and the immediate vicinity will be fairly supplied as to the hay situation for their own use, and what surplus they will have will be taken by the Salmon river cattlemen. The Salmon river country, west of here, is where the cattle industry is suffering mostly; they are selling their stock now, which is not thoroughly prepared for market as it should be, in order to preserve the feed for the cows and younger stock. A number have been trying to get range where they can drive their cattle for the winter, as it is impossible to get hay in this country.

Hog Industry Neglected.

W. H. Miller, State Bank of Connell, Wash.—There is little or no feed raised for live stock aside from wheat hay and the farmers were very reluctant to cut their wheat for hay. I believe that it will be necessary for the farmers in this locality to ship in considerable hay from other districts. Some of the sheep men have prepared to meet the winter months by cutting considerable of wheat hay. However, they too will have to ship in hay from outside. The hog industry has been neglected for the last two years to some extent on account of the prevailing high prices of wheat which is the feed for hogs in this locality. The sheep industry goes on as usual and where it is possible to get grazing a considerable number of cattle is being raised.

Stock Feeding Points.

O. B. Shoemaker, Pasco Flour Mills company, Pasco, Wash.—The writer has made a special effort to get some information on the alfalfa hay situation and taking Attalia, Burbank, Kennewick, Richland and Pasco districts we feel that 250 cars would be a conservative estimate on the amount of hay that would be shipped out of these communities. As Pasco and immediate vicinity is a very favorable winter feeding point and as it is showing some increase from year to year along this line, more of the hay grown in these districts is being consumed at home each year, and with the location of the stockyards at Pasco this feeding feature will be further stimulated, consequently the Pasco district will probably draw more or less hay from the other districts.

Surplus of Hay.

J. F. Sears, State Bank, Prosser, Wash.—At first it appeared that the Yakima valley would have a large surplus of feed at reasonable prices, but the past 30 days hay has been in a very strong demand from Idaho and Montana. We are not in the habit of furnishing much feed to those states, particularly Montana. We, of course, will have considerable hay and some to sell as our crop is normal. There is no outside range as that is all utilized by the sheep men, thousands of head being wintered here each year.

Making a Dairy Country.

C. A. Haskins, Farmers & Merchants State bank, Eureka, Mont.—Regarding the feed and stock proposition in this part of the county, I would say that we will need considerable hay where usually we ship out quite a little. We are trying to make a dairy country of this immediate section and will need alfalfa hay if it is possible to secure it at a reasonable price.

Plenty of Feed.

F. H. Haupt, The First National bank, Ritzville, Wash.—The stockmen in this community have plenty of feed for their own needs, as a usual thing they do not raise for shipment, and therefore will have none for sale.

Alfalfa for Others.

W. A. Harrison, Sunnyside, Wash.—The Yakima Valley has plenty of hay for her own need and for the neighbors also. Alfalfa is one of the principal products here, and shipments are being made daily to your eastern county of that product. The corn crop will be large here from all indications. Alfalfa is selling for from $20 a ton to $23. It has occurred to me that if the stock were shipped to the feed instead of the feed to the stock it might help considerably. Freight rates on alfalfa are high. The price named above is to the farmer for alfalfa.

Feed Will Be Short.

Hy W. Rieke, Odessa Commercial Club, Odessa, Wash.—This being a wheat country, all surplus productions are sold in the shape of grain, threshed, so that no feed in the shape of hay or otherwise is found for export purposes, with the exception of some alfalfa hay, which is grown in the valley. While considerable grain will be sold and shipped out from this point, the feed will be short this year, possibly barely enough to supply local needs.

No Surplus of Feed.

E. C. Davis, Grant County Bank, Ephrata, Wash.—There will be no surplus of feed and hay in this county. Last year considerable hay had to be shipped in to take care of the sheep industry. This winter it is very likely that more hay will be needed. I understand, however, that several of the sheep men who have heretofore wintered in this vicinity, expect to winter in Okanogan county, principally on account of the scarcity of hay.

Alfalfa Producers.

L. E. Johnson, The First National Bank, Kennewick, Wash.—I will state that roughly speaking, 20,000 to 25,000 tons of alfalfa hay are shipped from this point and Richland, nine miles north of here. The price at the present time, ranges from $15 to $18 in the stack and $20 to $22.50 baled, F. O. B. cars, Kennewick. It is a fine climate to winter and quite a number of stock are fed here every year. The present prices are a little higher than usual, although last two years it has been good, ranging from $15 to $20 per ton. There is not very much other feed supply available.

No Sacrifice Sale of Stock.

S. A. Anderson, Grangeville, Idaho.—There will be no feed to ship out from here. Some herds on Salmon River will be cut down, that is beef and some feeders, but no sacrifice sales will be made. Owing to some loss last winter principally in calf crop in this section we will go into winter with somewhat smaller aggregate number than last winter. I cannot now state any exact percentage. The hay and feed supply on the prairie cannot be estimated exactly not knowing yet how much of the spring seeding will make grain and if not what it will make in the way of hay and pasture. Whatever surplus there may be on the prairie will go to care for some Salmon River herds and the situation is gradually adjusting itself so as to preserve equilibrium and support the live stock industry without loss. Isolated cases of rushing unfit stuff on the market and some discrimination of the herds will be the result, but in the main conditions are as satisfactory as could be expected.

Little Hay Cut.

Charles P. Whalen, Genesse Exchange bank, Genessee, Idaho.—In relation to feed for cattle will say there has been a very short spring crop and consequently very little hay cut and very little hay will be for sale for shipment to outside points. In fact, should we have a winter similar to last winter there will be a shortage for home consumption.



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Storing Root Crops

Vegetable crops harvested for storage should be in prime condition. It does not pay to store culls, says J. L. Stahl, horticulturist at the Western Washington experiment station.

Potatoes should be well matured, if stored for table use, and as free from disease and fork injuries as possible. Blighted or cut tubers should be otherwise disposed of at once. Maturity is not so important when storing potatoes for seed, and some growers prefer immature seeds. Boxes or crates are the best containers for moving potatoes from the field, as they are less apt to be injured than when moved in sacks.

Root crops such as beets, carrots and turnips should be harvested when they reach a desirable size and before they become overgrown and lose their quality. The tops should be removed close to the root with all such crops except beets. An inch or two of the leaf stems should be left intact when removing beet tops. Root crops should be firm and free from rot.

Potatoes need moist, cool, well ventilated conditions. For best table quality they must be kept dark. These conditions can usually be met in a cool cellar, cave or well built pit.

While a continuous draft or forced air circulation is not essential, the ventilation should be adequate so that a complete change of air can be had when necessary and the temperature more readily controlled. If it is too warm the tubers are likely to sprout, and if the air is too dry they are apt to wilt.

The best temperature for potatoes in storage is between 33 and 40 degrees. Crates or trays as containers are preferable to sacks or bins, as better air circulation is possible. This is particularly important when storing seed potatoes.

Root crops such as beets, carrots and turnips may be stored under much the same conditions as potatoes, except they are best away from direct contact with circulating air.

If a cellar or other type of room is not possible for storage, it is better to pit potatoes and most root crops rather than leave them in the ground and trust that they are planted too deep to be frozen.

HOW TO CONSERVE
Foodstuffs Told by Pierce County.

Home conservation of agricultural food products and how it may be accomplished at small expense was a feature of the Pierce county exhibit at the fair. Under the direction of Jacob Stelling, William Schulz and District Horticultural Inspector Henry Huff, all of the Puyallup valley, an exhibit showing an excellent array of canned and evaporated fruit and vegetable products was placed. It attracted no small amount of attention from thoughtful and thrifty homekeepers.

The evaporated fruit and vegetable displays were especially interesting when it was learned that Mr. Stelling, with the assistance of his wife, had dried both fruit and vegetables in a home-made drier, operated on a kitchen range.

Mr. Stelling failed to bring his drier along, much to the disappointment of those interested, but he described it as an iron framework, in which were placed 10 trays, 12 inches wide and 24 inches long. The drier is so built that it can be placed on any ordinary kitchen range and used while the remainder of the top is being used for some other purpose. The trays, when all are in use, have a capacity of two crates of berries, and are changed from top to bottom in such a manner that all receive an even temperature and the fruit is uniformly dried. Samples of the dried product were shown, and they proved the practical use to which the home-made contrivance may be put.

"Drug Store" Exhibit.

Carrying out the "do-it-at-home" idea Mr. Stelling showed samples of herbs grown on his place this season as an experiment. He called the display his "drug store."

"My idea in conducting the experiment," said Mr. Stelling, "was to ascertain whether or not I could produce herbs in variety and volume sufficient to make the undertaking a profitable one. The demand has been especially keen since the opening of the war, and there is no doubt but that we can market them in a highly profitable fashion. I am not sure whether the herbs I have produced are of an acceptable character. Many who have seen the samples pronounce them up to standard in every way, but until I learn a little more about the subject and the requirements I am not in a position to say."

As to variety Mr. Stelling seems to have met all requirements. He had on display samples of anice. balm, coriander, spearmint, safron, peppermint, thyme, marjorean, summer savory, wormwood, tansy, dill, florence fennel, catnip, lavender, rue, borage, taragon—all important in the manufacture of drugs and food products. His experiment was conducted on a plot of ground for each variety four by six in dimensions. The plants yielded heavily, and apparently are in first-class condition for marketing purposes.

BENTON COUNTY WINS
Yakima and Thurston Come Close.

Benton county was awarded first prize for its state fair school display, Yakima second and Thurston third. Other competing counties in their ranking order are Grays Harbor, Pierce and Kittitas. The winning exhibitors will pro rata a $100 prize, while awards of $15, $10 and $5, offered for the most artistic displays, were given in the same order as the school county sweepstakes.

Agricultural awards were made Friday. Clarence Starcher of Fairview won first for his display of corn. Mrs. J. H. Spoolman of North Yakima won first for the best 10 ears of corn, and C. F. Monroe of Grays Harbor won first for the finest single ear. E. M. Medaris is the grower of the best 10 stalks of corn exhibited.

Beet Prizes Are New.

Prizes were awarded for the best sugar beets, a new departure of the Washington State fair. Fred Piske of the Yakima valley displayed the prize-winning six beets, with John Olson's display a close second.

Awards for the five-tray exhibits of fruit were made with difficulty. In outline they were: Jonathans, O. S. Hansen; Spitzbenburg, J. H. Spoolman; Yellow Newtown, E. W. Bailey; Arkansas Blacks, C. Starcher; Delicious, E. W. Bailey; Rome Beauty, E. W. Bailey; Winter Banana, E. W. Bailey; most nearly perfect apple, J. A. Webber; most nearly perfect pear, C. Starcher.

In the displays representing the various districts of Yakima county Tieton, a section reclaimed by the United States government reclamation service during late years, scored highest, with 79 points out of a possible 100; Toppenish Commercial club, second; Ahtanum, third.

King county won the prize for the best county display, making a total score of 894 points out of a possible 1000. Pierce county was second with 820 points, while Benton county was third with 798 points.

The judges were E. F. Gaines, C. B. Sprague and J. L. Stahl.

PIG CLUB HOLDS SALE
Boys Sell Twenty-four at $30 Each.

On Wednesday of state fair week the auction sale of the hogs exhibited by the McKinley Registered Poland China club was successfully held. Twenty-four spring pigs were sold, the highest price received being $49 by Hildreth Lawrence of Toppenish, and the lowest $15, the total being $717, or almost $30 each.

McKinley school is four miles from Toppenish, and the club consists of 20 boys, with Professor W. E. Weir, principal of the school, as leader. Some of the pigs were shown in the regular Poland China classes and won some prizes. Three special prizes of $25, $15 and $10 had been offered by the Central bank of Toppenish. First prize was won by Herschel May, second by Oval Coffin and third by Earl Storaash, all of the Toppenish section.

The club is believed to be the largest of its kind in the United States, and Professor Weir justly takes great pride in it. All the pigs owned are registered Poland Chinas, and there are several noted animals, including Royal Lady, that was grand champion at the 1916 state fair and also a first prize gilt.

The school is one that was successful in winning a good library in The Farmer's contest last spring. The club has nine acres in potatoes and 14 in corn. Mrs. Weir had a sewing club at the state fair. She takes the same deep interest in the club work that her husband does, and her girls have won a good number of prizes.

Mixed Blood.

Only a third of South America's population is of pure white blood.

No Redress for Stockholders.

Davenport Tribune: The last act in the tangled events of the Northwest Trading company is being staged in the Spokane city jail. Gale Smith, former president of the company, Stephen T. Knudson, sales agent and president of the Olympic Trading company of Seattle, a subsidiary of the Spokane concern, and Clyde L. Davies, another officer begun serving their sentences pronounced by the federal court after trial by jury last winter. In addition to the jail sentences each man must pay a heavy fine if he has the money, and while they are paying the penalty exacted by law there is no redress for the hundreds of stockholders who lost their money by investing in stock that proved worthless, and cooperative concerns, that should prove beneficial to their members have been given a setback.

Community Church.

Wilbur Register: The congregations of the M. E. and Presbyterian churches voted nearly unanimously, last Sunday, in favor of a federation of the two to be directed by a single pastorate. The federated congregations will worship in the Presbyterian building and will be served by the Rev. Mr. Purdy of the M. E. church. The title of Community church was adopted by the consolidated membership.

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Discovers Cave and Digs for Buried Treasures

The Ups and Downs of a Bunch Grass Boy---No. 29

By JOE L. ASHLOCK

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PART I.

Here is a story I have never written or told before, not even to my mother when in the most confidential moods of boyhood.

It all happened because my chickens ran out of bone one summer and commenced to lay soft-shelled eggs. Bone was a rather difficult part of a hen's ration to obtain in those pioneer days of the eastern Washington bunchgrass. We had to go out on the prairie and hunt for a cow or steer that had died a few years before, gather up the sun and rain bleached bones, bring them home, burn them and, with a hammer, beat up the brittle pieces of bone, so that the hens could eat the small pieces.

On this occasion I scoured the country far and near, but could find no bones. I found a couple of coyote skeletons, and took these home. Unfortunately, the coyotes had not been dead very long, and my mother would not let me eat at the table that evening. Anyway I got a few bones out of the deal, which afforded temporary relief. But I needed a real bone pile with which to relieve the distress of my loved hens, who now laid practically none but soft-shelled eggs. Driven by this necessity, I was led to do a very unprecedented, if not a sacrilegious, thing.

The beginning circumstance of my bone quest was a race after a coyote that had sneaked up in sight of our henyard, with a mouth that itched to grab a hen. I espied the gray, nimble creature, and it chanced that at that very moment I had my pony saddled to hunt up the cows which had strayed away during the night. Instead of going after the cows I went after the coyote as hard as my buckskin cayuse could go.

In the third mile of this contest the coyote began to get the better of the race. Also the animal was leading me into the rocky, scab land west of our place, where the rocks and the badger holes made my pony's footing insecure.

Suddenly, the horse shied violently, sidewise, at a black, circular hole in the rock. The hole was in the central part of a smooth, bare exposure of hard basalt, which was surrounded on all sides by sagebrush and tall bunchgrass. The flying pony had shot out of the bunchgrass with the black hole right in his path, and but for the quickness of his eyes and feet he would have gone into it.

This interruption to the chase gave the coyote decidedly the better of the game, in fact, almost in a flash he had vanished in the tall grass and sage. In was queer, I thought, to find that kind of a hole in that kind of a place. My first notion was that some one had started a well there. I saw at a closer glance that it couldn't be a well, for it was scarcely three feet in diameter. Also, a man who would start to dig a well in the middle of a patch of solid rock would certainly be crazy. I dismounted, tied my panting steed to a sagebrush and inspected this unusual hole. Immediately I became greatly excited, and forgot both the coyote I had been chasing and the cows I was supposed to be bringing home.

My mother, whose folks had moved from Kentucky to Illinois in pioneer days, had told me a good deal of the wonderful caves of Kentucky, particularly of the great Mammoth cave, which was somewhere near our ancestral stamping ground. Also, I had read a good deal of hidden treasures found in caves. These two things instantly ran together in my mind. I doubted not that I had found a cave, and that in the cave was just about such an assortment of wonderful things as I had read of in "The Arabian Nights."

I began my exploration with various precautionary measures against the presence in the cave of possible animals or rattlesnakes. It was an ideal lurking place for both. First, I cast stones into it, and waited there, ready to swing the bone handle of my quirt at anything that came forth. Nothing came.

Then I cast more stones and listened intently for the shell-like, metallic, purring sound which meant that a disturbed rattlesnake was giving me fair warning with the end of his tail. Nothing stirred—not even a mouse.

I then held myself over the hole by reaching out and grasping each rocky side with my hands, and craned my neck as far down into the dark opening as I could, remaining in that position till my eyes became accustomed to the blackness of the hole.

From what I saw it now appeared that the rock patch was in reality a huge, unbroken slab of solid basalt, partly circular and 20 to 30 feet each way. This big slab was two to three feet thick. It lay on a sort of gravel formation, which had settled under it, leaving the big slab serving as a roof over the hole made by the settling of the gravel and stones. The hole, almost exactly in the middle of the slab was circular, less than three feet in diameter, and pierced the slab where it was about two feet thick. I examined the sides of the hole very carefully. I noticed that the sides of this hole were discolored by the weather precisely as was the top of the rock, which indicated to me that the hole had been there about as long as the rock itself. Long and seriously I pondered the problem of how this hole got there and decided that some time, long ago, a meteor must have dropped out of the sky and made the hole. That explanation, as a matter of fact, may be as plausible as any.

Of course, the riches I had my mind set upon were concealed in the gravel under the big slab. Getting them was merely a matter of securing a spade and digging them out, which I decided to do at once.

However, the cows claimed prior attention. So I rode at top speed till I found them, and took them to their home corral at a rate of speed which was not good for their milk, I fear. It was quite late before I had finished milking them, so late that mother reminded me of it, and told me not to be so late again. Other tasks claimed my attention till after the noonday meal, and in the afternoon, when the coast was clear and I was unobserved, I saddled, rested the spade over my shoulder and struck out for the cave at a lively gait. As well as the spade, I had a couple of gunnysacks, the holes in which I had carefully sewed up; and each sack I meant to fill with the treasures of the cave.

Community Cooperation

Trading at Home Town Stores Aids Development

We have frequently heard the statement from folks living near a small town that they did most of their trading in some larger city. They explained that they did this because there wasn't a large enough assortment of goods in the small town stores. Some even said they could "do better" in the matter of prices by trading at the big city stores.

Granting the soundness of both these reasons for not trading with home town merchants isn't there another side to the matter? How can the local merchant expand his business and increase his assortment unless he has the trade support of the community around him? How can he meet the prices of city merchants unless his volume of trade will permit him to buy in larger quantities?

Such a condition makes a sort of deadlock. The local merchant can not offer you a good assortment because he doesn't get enough of your own and your neighbors' trade to permit his investing in a big stock for you to choose from. And because he is handicapped for the want of your cooperation, you continue to build up the business of the city store, thus continuing to hold back the advancement of your own community.

All of us are fundamentally selfish. Our first thought is to promote our own interests. Yet such are the basic laws of our modern civilization that each of us can obtain a greater measure of success by taking active part in community team work than we can working alone.

If you live on a farm you want good roads, schools, churches, telephone service, mail delivery and a convenient market in which to dispose of your products and from which to supply your wants.

If you live in a town you want, in addition to the above, good streets and sidewalks, wholesome amusements—those things that go to make a community worth living in.

These advantages are limited to the growth and condition of your locality, which is in turn dependent upon the extent of local trade activities.

Did you ever see a really good town that did not have good stores? The two go hand in hand.

Bear in mind that home trade is a most vital element in community welfare and progress. Consider carefully the fact that a portion of each dollar spent in local stores finds its way to some essential function for the support and development of the neighborhood, the general prosperity of which you must necessarily share.

Increased local business means the possibility for securing additional modern public conveniences and luxuries, additional trading, educational, religious and social advantages, consequently increased individual wealth and opportunity.

Your local merchants are entitled to your patronage provided they offer you the right kind of merchandise at the right price, and you owe it to yourself and your community to extend it to them.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

What You Ought to Do If You've Frequent Headaches



Dr. Hirshberg

When you begin to realize that you have a forehead or even the back of a head, it means that all is not well along the corporate limits of the human Wabash. Health is as it should be only when there are no ailments and complaints in or about the head and you are scarcely aware that a "dome" surmounts your shoulders.

Two of the most general sources of headache are late hours or loss of sleep and nocturnal eating. Other things being equal, the individual who retires, even if he does not sleep, at 8 or 10 o'clock without a bite to eat, seldom complains of these abominations

Next in the list of causes is constipation. The victim whose stomach and intestines are not emptied once or twice a day, drags a burden of decomposed waste around with him, relatively as heavy as Sinbad's little old man of the sea. A headache comes as a warning symptom, a red-light, to notify you that if help is not obtained, in the slang of the day, "the worst is yet to come."

Various Other Headaches.

Fevers of almost any origin, if they rise much above 99 or 100 degrees, or last more than a short time, may give rise to headaches. Loss of rest, exhaustion and fatigue cause a dull headache. The headache of fever usually throbs very intensely.

The "unbearable" headache is one common to excitable, emotional women, whose overwrought feeling and strenuous, monotonous life give them little sunlight, counter-irritants of relaxation or recreation in the open.

There is also a headache, not by any means rare, due to too much pleasure, excitement and high pressure in the blood channels and in the glands. This appears frequently in the post-Apollo days, namely, after 30 or 40 years of age.

Affections of the nose and its passageway, the sinus or chamber of the forehead bone above the eyebrows and in the cheeks, invite headaches, particularly when there is an obstruction to the outlet of mucous.

Various maladies of the nose, teeth, kidneys, ears and nearby structures, give rise to headaches. If pus and microbes invade any of these places, their poisons and other excess products may be the origin of headaches.

Methods of Cure.

Anemias and deficiencies in the quality of the blood are at times accompanied by headaches. The treatment of the pain calls for rich rations, iron in foods, sunlight, fresh air and sleep in the open.

Ice bags, rest, much sleep, especially out of doors, cold showers or baths, a diminution in the quality of pabulum, with omission of soups, coffee, tea, tobacco and liquors, is a plan, if followed, that will relieve a headache more successfully and with less possible injury to the human anatomy than almost any "ready relief," "headache cure," pill, powder, tablet or drink.

Salt, laxatives and drinks of such natural waters as will cleanse the intestines and stomach of all accumulations, proper illumination for work, reading and study, and eye glasses that will correct any possible error of sight, these are all aids in the treatment of the symptom recognized as a headache.

Vassar Girls

Grow 4000 Bushels of Potatoes

Twelve Vassar college girls have a record in food production this year that may lead opponents of college education for women to change their minds. Vassar is the long-time famous girls' college at Poughkeepsie, N. Y. It has extensive gardens this season, and 12 students cultivated them. Superintendent L. P. Gillespie reports that the produce of their labors will carry the 1100 students, the faculty and live stock over to another harvest. The girls grew 4000 bushels of potatoes, and have six acres of white beans, four acres of soy beans, four greenhouses of lettuce, 600 bushels of tomatoes, eight acres of sweet corn for drying, four acres of asparagus, 10 acres of field corn for meal, and a great hoard of carrots, eggplant, turnips and other garden truck.

The news dispatches omit saying whether the girls employed men laborers, but even if they did, their achievement is most creditable, and will make the girl students in our western agricultural colleges "sit up and take notice.'

Butter Price Doubles in Holland.

That butter has more than doubled in price in the Netherlands since the war began is indicated by the present government order fixing the maximum retail price at 1.30 florins, or 52 cents, a pound. Before the war the price ranged between 20 and 36 cents a pound, according to variety or quality. The prescribed maximum price of 52 cents is also the actual minimum (for sellers in present circumstances will charge the full allowance), and can be compared with the 20 cents of peace days.

Premium on Best Things

For Best Thoughts, Best Crops and Best Stock

Nothing should ever be done to bring the efficient man, the industrious man, the intelligent man and the man who takes the utmost care to produce the best and put it up in the best way, down to a level of the average. Nature puts her premium on the best; it is God expressing his approval of honesty and efficiency.

By GRANVILLE LOWTHER.

The minimum, the average or the best—which?

When we read the government's reports of averages in the fruit business they seem discouraging to the man who is trying to bring his orchard up to the highest standard of production and profit, because they present so many factors necessary to success—so many natural conditions in which there must be proper adaptation. There are so many labor problems, so many marketing conditions, so many transportation problems, so many weather conditions, and at last the financial situation of the world which gives to the masses purchasing power or lack of it. Yet this man striving for the best is the one who will survive and at last succeed where others fail, because he informs himself by means of reading, observation and experience while the minimum man or the average man will not study the conditions under which he is placed, the laws that insure success and become adapted to his environment. "The survival of the fittest," a law announced by Charles Darwin, is eternally true; and no objections on our part, no grumbling, no statute laws, no social organizations, no political movements can repeal it, reverse it or avert the coming of its consequences.

Here is where certain labor organizations are working against natural law, and where they will eventually be beaten at that point; because no man, no organization of men, no nation nor all the nations combined can beat nature. With her an an hill or a nation, an atom or a planet, a combination of nations or systems of worlds are alike in this, that all must keep the laws or die.

Now this is not against organized labor as such; for I believe in labor organizations, farmers' organizations, organizations of capital, trusts, combines, the coordination of small governments with big ones, as steps in the evolution of society toward a more equitable distribution of the profits of labor, steps in the elimination of nonproductive labor, destructive labor, speculators and parasites; so that the road between producers and consumers will not be lined with confidence men, hold-up men and robbers. But when the labor union fixes a standard of efficiency beyond which its members must not go, no matter what his ability, and that standard adapted to the capacity of the minimum man or the average man, they are attempting at their own peril to reverse the engines of the world's progress.

England had this condition to meet when the war broke out; when the strong men wanted to work more than eight hours and were not permitted to do so; when they wanted to do piece work and do more than the average in order to meet the strenuous demands of war conditions; but if they did they were disgraced by their organizations and their lives endangered. At a time when it would seem that patriotic motives would require every one to do his best, the strongest men were not permitted to work up to more than half their labor power, for the standard fixed was a standard rather below than above the average.

An Average in Orcharding.

Now suppose we had an organization of orchardists based upon the idea that no orchardist should exceed a certain quantity of fruit per acre, nor exceed the average in quality, in order that the section not well adapted to fruit growing and the men not intelligent or efficient might put their fruit on the market at a profit. What would be the effect on the fruit industry? In such a case a box of apples is a box of apples. No one is required or even permitted to market better apples than the standard adopted. No one is permitted to grow more per acre nor to sell for a higher price than the average. This might happen if the fruit growers of the country were as well organized as some other industries; bit if it did it would be the end of progress until the rule was revoked.

Pooling Fruits.

There are certain fruit associations, horticultural unions and marketing institutions that have adopted a plan of pooling that is open to the objections I have urged against certain labor organizations. According to the plan adopted the grower loses his identity entirely, and the marketing agency becomes the responsible guarantor for the quality of the fruit. Under this plan the member of the marketing agency who produces fruit that will barely pass and the one who produces fruit that might take a premium at a fruit exposition are sold at the same price, notwithstanding the fact that if the quality of the fruits could be known by the purchaser one would bring in the markets twice as much as the other. The trouble with that system is that it destroys the incentive to the production of better fruits in so far as a money consideration can destroy it, and makes a grower feel that if he is only to receive an average price he will produce only average fruits. In fact, there is an element of injustice in allowing a man to put on the markets an average pack and quality, at the same price as that received for a superior pack and quality, because he is getting more than he deserves; or, if he is not, the other is getting less than he deserves. I know the arguments on the other side and appreciate their force; but I know, too, that they are violating the laws of progress, fighting against a natural law, and that the consequences are destructive in their nature. Nothing should ever be done to bring the efficient man, the industrious man, the intelligent man and the man who takes the utmost care to produce the best and put it up in that way down to a level of the average. Nature puts her premium on the best; it is God expressing his approval of honesty and efficiency.

According to the United States census of 1910, the number of apple trees of bearing age was 151,322,640. The number of bushels reported from those trees was 147,522,318, or less than one bushel per tree. Our orchard that year yielded us about five bushels per tree, and we would be very sorry to have been reduced to the average. The value of those apples was $83,231,318, or a little more than 50 cents per bushel—to us less than the cost of production.

The same year there were reported 94,506,675 peach trees of bearing age, producing 35,470,276 bushels, at a value of $28,781,078, or less than 30 cents per tree. This to us would not pay the cost of pruning, spraying and boxes.

That year the report for the pear crop of the United States was 15,171,524 trees of bearing age, producing 8,803,885 bushels, valued at $7,910,600; or a little more than 50 cents per tree. W. P. Sawyer of Parker, in the Yakima valley, reports that the lowest returns he has ever received from his pear orchard was $148 per acre. Mr. Sawyer says: "For the period of eight years my average returns were $585 per acre, and then for a period of six years I averaged $647 per acre." What shall we do, bring ourselves down to the average, or try to reach the high standard reached by Mr. Sawyer?

A few days ago I saw a man from the Horse Heaven country, and he reported that wheat was burning up on account of drouth. One wheat grower there had 600 acres he would not cut. Last Sunday I rode past a field of about 20 acres that I am sure will yield 80 bushels per acre. It had been irrigated, had grown a large stem—had long, large, well-filled heads of ripened, yellow grain. There is a condition of dry land farming on the one hand and irrigation on the other; but they all go into the averages of production. I am told that there have been grown in the state of Washington 117 bushels of wheat per acre, but the average crop for the United States is 17 bushels per acre.

A farmer in the state of Washington is said to have produced 184 bushels of oats per acre, but the average in the United States is 38 bushels per acre.

The yield of white potatoes in the United States is 96 bushels per acre, covering a period of 10 years. California has produced, according to department figures, 790 bushels, Washington 743 bushels, and one man reports that he saw last year on the Yakima reservation 833 bushels per acre.

Jerry Moore of North Carolina, "the corn king," grew 212 bushels of corn per acre on land that had only produced under ordinary treatment 19 bushels per acre.

Lee Booth of North Yakima made boxes for us last year during the apple-picking season; and one day he made 800 boxes in 10 hours. This is so much above the average that the average man will not believe it; but I can prove it, and that ends it.

What Is All This About?

I am trying to stimulate to greater effort for greater efficiency in all departments of work and to discourage any effort to standardize efficiency, labor power, land production or anything else requiring skill, industry, care, intelligence, etc. I argue that we should pursue a course that will develop all that is best within us rather than discourage its development.

Socialists are charged with trying to reduce all persons and all production to the same level. That may be true with some of them, but not of all. I am somewhat socialistic in my philosophy, believing that the fundamental principles embodied in socialism are the most equitable, just, ethical and Christian of any of the philosophies of government, and that in the process of evolution we are approaching it. But if socialism were the policy of human governments today, and if the "dead level" theory of standardization were adopted, the race of mankind would start on a downward course of degeneration. We must have a premium on the best things; we must read the best books, think the best thoughts, produce the best crops, breed the best stock and attain to the highest possible standards. This is the law of "Eternal Progress."

What Kind of Team Do You Drive?

By PAUL E. TRIEM

When Jim Gardner came home from the city to spend his first vacation he brought with him novel ideas concerning life. Jedro Gardner, the bachelor uncle with whom Jim had lived for months at a time during his boyhood, looked with kindly interest upon these evidences of a changed viewpoint.

"You aren't getting fast, or wild, are you, Jimmy boy?" he asked dubiously. "I don't know—some of these things you talk about don't strike me as being just exactly connected with business, and getting ahead, and all that."

Jim smiled tolerently. "A man can't put in all his time trying to get ahead, Uncle Jed," he explained. "The modern doctrine is that recreation is just as important, in its place, as work. Every man must have a hobby as a sort of corrective or team-mate for his regular business."

Mr. Gardner nodded, apparently convinced, and said nothing more about the matter for the time.

A few days later, when the two men started out on a fishing expedition in Jedro Gardner's buckboard, Jim flicked the whip toward one of the horses.

"A new one, isn't he?" he inquired. "I don't remember your having a strawberry roan before, Uncle."

"Yes, he's a new one. Old Bill had to be retired on a pension, and I bought this fellow from a trader. Ought to have known better, I suppose—hello—look out for your head, Jim!"

Jim ducked without waiting for this warning, for the strawberry roan, without so much as a squeal, had launched a pair of steel-shod hoofs at the dashboard. Next moment, having failed in his purpose of wrecking the rig by a direct attack, he stopped with precipitate suddenness.

"Go on, you sulky beast!" Uncle Jedro roared, slapping the roan with the lines. "Come—move, will you?"

The recalcitrant's ears settled back and he arched his neck.

"Why, he's balked!" Jim said. "Now what are we going to do?"

He followed his uncle out of the buckboard, and together they applied such emergency remedies to the balker as custom suggested. Jim pried his mouth open and threw in a handful of road dust, then tried to stampede the roan into starting while his mind was occupied with this indignity. Mr. Gardner whistled in his car. Then they both tried to pull him forward by main strength. The strawberry roan had planted his hoofs immovably, however, and merely stretched out his long neck as they tugged, puffing, at the strap. Afterward they sat down by the side of the road to await his pleasure.

By the time the roan finally shook himself and began to paw restlessly at the dusty road the time for fishing had passed. Silently the two men climbed into the buckboard and turned back toward home.

"I can't see why you tried to drive that outlaw today," Jim mumbled disgustedly. "You could have hitched one of the other horses in with Mike."

"Well," his uncle replied, "maybe I was thinking of that theory of yours about hitching a good horse in with a bad one to act as a corrective. Yes, Jim, I guess it must have been that!"

Jim stared. "I never said anything about horses," he declared.

"No, I guess not. Of course the team you were talking about was recreation and work, but the principle is the same. I wanted to see how it would work—Mike, here, has always been a good horse, and I thought he might kind of counteract the roan's cussedness."

Through bushy brows his eyes twinkled out upon this companion.

"Jim," he said, "it's too bad to have spoiled your fishing trip, but the same thing happens on a bigger scale sometimes and spoils a man's life. Work isn't just the right sort of horse to drive single, perhaps, but work and dissipation, even if it isn't anything worse than late hours and 'sporty' neckties, is lots worse. To succeed in this world a man has got to make work the big horse in his team; and the light horse has got to be one that pulls in the same direction, too—a man's hobby can be constructive, and must be if he is to drive this team of work and play to the goal of success."

Jim grinned sheepishly.

"And you think my hobbies are strawberry roans?" he commented. "Well, if they are, I guess I'll get rid of them. Life isn't long enough for balkers."

GREAT STORY BEGINS NEXT WEEK

So important is it for a reader of a serial story to begin with the first chapter, The Farmer wishes to call special attention now to the opening next week (October 11) of its great winter story, "The Barrier," by Rex Beach. In order to assist those who miss the beginning, a synopsis will be printed each week for a few chapters. But no reader can afford to miss the actual words of this famous author—the scenes he depicts and the gripping manner in which he depicts them. Plan an evening with "The Barrier" next week. Read one chapter and we'll never have to remind you of its coming the following week. It is a stirring, engrossing narrative of the cold, rigorous northland and the rugged people that braved it.—Editor.

All the World's a Stage, and All the Men and Women Merely Players

Leading Italians to Victory



Copyright by International.

The dominating genius of the armies of Italy, General Cadorna, is here shown pointing toward the Irredenta Trieste. Under this able leader the Italians promise victory on their front if sufficient supplies and ammunitions are forthcoming.

Sweden's Minister to U. S.



Baron Ekengren, the diplomat from Sweden, has had a very delicate part to play in Washington, D. C., since the diplomatic scandal was exposed by the United States a short time ago, involving the Swedish minister to Argentina, in secret communications sent to Berlin by the German ambassador there. The above is a recent photograph of Baron Ekengren.

Gets the Cash in Wall Street



Copyright by International.

Miss Natalia Camp, in Russian military uniform, holds up Wall street brokers and bankers for tidy sums for the Russian ambulance service. When this pleasant apparition approaches with a collection box the men delve for their cash pocket.

Don't Know Where They're Going, but



—Indianapolis News.

It's Time to Go After the Vermin



—Baltimore Sun.

Soldiers Make Use of Y. M. C. A.



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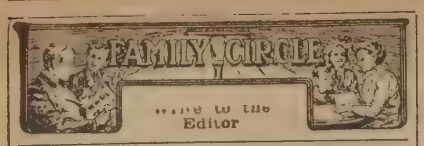
The amusement room in the American Y. M. C. A. at 31 Avenue, Montaigne, Paris.

Millionaire's Son Off to Camp



Copyright by International.

Wearing knickerbockers and jacket, and carrying his personal baggage in a grip, Kingdon Gould, son of George J. Gould of Lakewood, N. J., marched with other less wealthy, but none the less patriotic citizens of New Jersey from Toms river for the national army camp. In the photograph young Gould is shown walking to the train with the drafted men from his district.



ALICE W. BARLAND
Editorial Contributor.

CONSERVE BIRD LIFE.

Exhibit Is Shown to Fair Crowds.

An appeal for the conservation of bird life was made by a most interesting exhibit in charge of Mrs. Granville Ross Pike at the Washington State fair this fall. Still-life birds of every description make a beautiful booth. These, surrounded by evergreen trees and other plant life, bring into vision the wonder and beauty of Washington bird life. The exhibit contained models of garden bird-feeding devices, bird houses and other devices designed to attract and protect the feathered creatures from destruction. Women's hats, made beautiful without the use of bird plummage were shown as well as a large collection of aigrets recently confiscated by federal authorities. Among these was a whole bird of paradise which at one time was worn by a prominent society woman. In this exhibit was a collection of mounted Washington rodents loaned by George G. Cantwell. This proved especially interesting to farmers and a study of their habits and the means of destroying them proved especially profitable.

Besides the still life exhibits under Mrs. Pike's supervision was the fine collection of live game birds from the state game commission.

Our Duty To Do Our Bit.

To the Editor: At the present time we see the need of saving and making the most of everything in general and I will give my way of doing some things on a ranch.

Every one should have a good vegetable garden to supply the table during the summer and also prepare a supply for winter use. I can green peas, beans, corn, tomatoes and rhubarb, also dry all of the same. Those who have never tried drying vegetables would be surprised how easily it can be done and how delicious they are. For drying I prepare them same as I would to cook and serve. Then I pour boiling water over them and let them stand for about one minute at the boiling point. Then I drain them well and place on plates and place about the range where they will be warm, but not hot. When dried put in paper sacks. When preparing them to eat, cook the same as when green, only cook longer. Potatoes can be dried also. Cook, mash and place on plates to dry same as vegetables and this will often help a tired housewife out with a nice bowl of potato soup for supper. I have never tried drying tomatoes, but believe they would be equally as good for soup. Squash and pumpkin, I always dry, and find the pies made from them are always relished during the winter months. The last winter I kept squash until May. I picked out nice ripe ones, with no bruised spots. I put them on shelves in a warm stairway. They will not keep so well in a cellar, but need a warm dry atmosphere.

For a substitute for citron I take the hard part of water melon, cut it up in small pieces, put on plates, sprinkle with sugar, give it all the sugar it will absorb while drying. I dry all kinds of fruit. Where one has no fruit drier they can make frames, tack their cloth over them and hang them above the stove. I use the dried, sweet cherries for raisins. I cook them thoroughly, then drain them, sprinkle with sugar and let them remain in sugar for a time. I use them for every purpose as I would the ones I buy at the store. I never let any vegetables go to waste and I also make the most of every foot of ground. When I plant my radishes I also sow onions in with them and when the radishes are gone the onions have a nice start. Between the rows of lettuce I plant beans and when the lettuce is gone I have my row of beans and with the early potatoes as soon as they are used I replant the ground again. This way I always have the two crops of potatoes from the one piece of ground. The pole beans I plant among sunflowers. Plant the sunflowers so they will get a start before planting the beans. Take off the lower leaves so the beans will not be too shaded from the sunflowers. In this way it saves the sunflower seed for chicken feed and the stalks make good firewood.

Every one should have a good supply of sauerkraut in their cellar. I find some object to it as being hard to digest. I believe that largely is because it is not properly cooked. It should be boiled for two hours at least, seasoned with a little piece of pork. I find no bad results from it when so cooked.

I see no reason why every one should not have plenty and to spare if they but make an effort. Make our homes attractive at the same time with flowers and shrubbery. I receive compliments every day on the beauty of my flowers as well as on my nice garden. Those much younger than I am could certainly do as much. It is a duty to ourselves and others that we all do our "bit."

MRS. S. M. ATKINSON.
R. F. D. 1, Box 6, Kamiah, Idaho.

Grape Juice

By Mrs. H. W. Reaugh.

Grape juice may be made from several varieties of grapes, but the best is made either from the Concord or Warden variety. Wash the grapes thoroughly and remove any spoiled ones. Put in a large pan and mash with a potato masher, then put grapes on the stove and let them heat very gradually until the grapes get to 150 degrees, then do not let them get any hotter. Let them remain at this temperature until the juice is well colored then strain through a jelly bag or lard press. Heat in top of double boiler for 20 minutes, seal in sterilized jars put juice in sterilized jars and heat for 40 minutes in wash boiler. Be careful that the water does not boil, but remains at about 180 degrees. When it is steaming well seal and store in a cool place.

After juice has stood for some time a sediment is found in bottom of jar; the juice can be carefully poured off and reheated and sealed.

The reason for not boiling the juice is that when heated for a longer time at a lower temperature the natural flavor of the grape is retained.



I love to muse o'er meadows newly mown,
Where withering grass perfumes the sultry air;
Where bees search 'round, with sad and weary drone,
In vain, for flowers that bloomed but newly there;
While in the juicy corn the hidden quail
Cries, "Wet my foot"; and hid his thoughts unborn.
The fairy-like and seldom-seen land-rail
Utters "Craik! craik!" like voices underground.
Right glad to meet the evening's dewy veil
And see the light fade into gloom around. —John Clare.

Electric Light in Aquarium.

The old-fashioned aquarium is giving way to pretty shaped tanks, sometimes illuminated with electric lights which change their color automatically.

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The Northwestern Business College

M. M. HIGLEY, President.
8317 Howard St., Spokane, Wash.

A Patriotic Appeal to Every Reader of This Paper



The Young Men's Christian Association is anticipating the GREAT NEED of right environment among our soldier boys, in the cities, in the training camp and at the front in the trenches. Send your "bit" for this work to Y. M. C. A. War Work Secretary, Spokane, Washington.

Be an Auto and Tractor Expert

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Crochet and Tatting Designs

By WINIFRED WORTH



BATH TOWEL

Easy to make and with the edging will make a most beautiful gift. Medallions are of French knots with lazy daisy stitches.

Detail of work. Beginning in center make 5 rings equal distance apart. For these a 25c piece was used. Fill rings very compactly with French knots. Connect rings, and finish each end of towel with lazy daisy stitches. Any color can be used; or two contrasting colors. Also feather stitching can be used instead of lazy daisy.

Detail of Edges on Bath Towel.

It lends completed beauty to this attractive piece of toweling.

1st Row—Fill end of towel with dc. for foundation.

2d Row—Ch. 8, skip 2 dc., 1 tr. in 3d dc., ch. 2, 1 tr. in next 3d dc., repeat length.

3d Row—Ch. 3, 2 tr. over last ch. 2, 1 tr. in top of tr., ch. 2, skip 1 open mesh, fill next mesh and repeat to end.

4th Row—Chain 3, 2 double tr. in first open mesh, ch. 2 double tr. in same mesh, fasten by sl. st. in center of 4 treble in preceding row; repeat to end of work.

5th Row—Using some color, 2 dc. 1 p. 2 dc., 1 p., 2 dc., 1 p. 2dc. in each shell of preceding row.

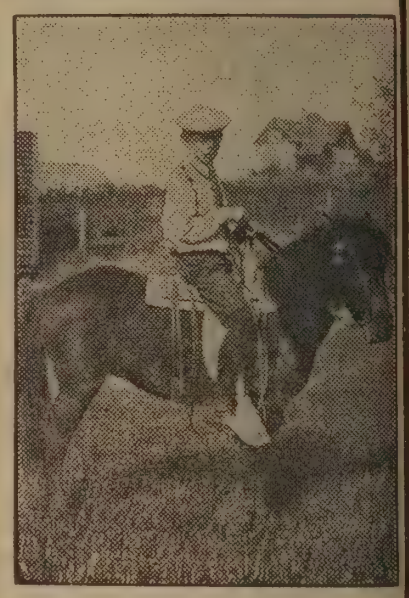
Taking Pictures

is lots of fun if it don't cost too much money. You can begin to take pictures without spending a cent by getting one of our

Premo Junior Cameras

which we are giving away absolutely free if you secure two **yearly** subscriptions to this paper for one year each, at $1.00.

This little camera takes very good pictures and it is manufactured by the Eastman Kodak Co., so it must be good. You will have lots of fun with it and you won't find it expensive to operate. Get one today—it's easy.



Takes picture this size.

The Washington Farmer, Review Building, Spokane, Wash.

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.....1917.

Enclosed find $2.00 for two yearly subscriptions to your paper for one year each.

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..... Postoffice ..... State .....

Patterns

2200—Girls' Dress—Cut in 5 sizes: 4, 6, 8, 10 and 12 years. It requires 3 5-8 yards of 36-inch material for an 8-year size. Price, 10 cents.

2199—A Charming Negligee—Cut in 4 sizes: Small, 32-34 inches bust measure; medium, 36-38; large, 40-42, and extra large, 44-46. Size medium will require 7 1-2 yards of 36-inch material. Price, 10 cents.

2201—Dress for Misses and Small Women—Cut in 4 sizes: 14, 16, 18 and 20 years. It requires for a 16-year size, 5-1-4 yards of 44-inch material. The skirt portion measures 2 1-2 yards at the foot. Price, 10 cents.

2198—Girls' Dress—Cut in 5 sizes: 6, 8, 10, 12 and 14 years. Size 10 will require 4 3-4 yards of 36-inch material. Price, 10 cents.

1860—Girls' Dress—Cut in 4 sizes: 2, 4, 6 and 8 years. It requires 2 3-4 yards of 44-inch material for a 6-year size. Price, 10 cents.

2208-2211—Ladies' Costume—Waist 2208 cut in 3 sizes: 34, 36, 38, 40, 42 and 44 inches waist measure. Skirt 2211 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It will require 6 yards of 36-inch material for a 36-inch size, for the dress as illustrated. The skirt measures 2 3-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2030—Boys' Blouse Suit with or without Shield, and Yoke Facing—Cut in 4 sizes: 3, 4, 5 and 6 years. It requires 2 1-2 yards of 44 inch material for a 3-year size. Price, 10 cents.

2054—Ladies' House Dress—Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 5 3-4 yards of 44-inch material for a 36-inch size. The skirt measures about 2 3-4 yards at the foot. Price, 10 cents.

1985—Ladies' Combination Corset Cover and Drawers—Cut in 4 sizes: 34, 38, 42 and 46 inches bust measure. It requires 3 1-4 yards of 36-inch material for a 38-inch size. Price, 10 cents.

2215—A New Riding Skirt—Cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 5 yards of 44-inch material for a 24-inch size. The skirt measures about 2 3-4 yards at the foot. Price, 10 cents.

2196—Ladies' Apron—Cut in 4 sizes: Small, 32-34 inches bust measure; medium, 36-38; large, 40-42, and extra large, 44-46. Size medium will require 4 1-8 yards of 36-inch material. Price, 10 cents.

1991—Girls' Dress, with Guimpe—Cut in 4 sizes: 8, 10, 12 and 14 years. It requires 1 3-4 yards of 36-inch material for the guimpe, and 3 1-2 yards for the dress, for a 12-year size. Price, 10 cents.



Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

Ham Scraps With Tomatoes.

Ham scraps, four tomatoes, salt, pepper, flour, one cup milk.

Cut into tiny pieces the fat that was removed from a slice of ham, and try out in a frying pan. Remove scraps to a plate, and in the fat saute tomatoes. Tomatoes should be cut in halves, sprinkled with salt and pepper and thoroughly dredged with flour. When heated through, but not too soft, remove to a plate, and to fat in pan add two tablespoons flour. Stir until smooth, add milk, stir until boiling point is reached, season to taste with salt and pepper, and pour into a hot platter. Sprinkle with the reserved ham scraps, and on top arrange slices of tomato. Put in the oven a moment and reheat before serving.

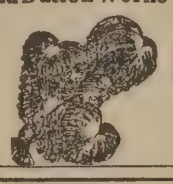
Scorch Stains.

To remove scorch stains wet the scorched place with soap and bleach in the sun.

Sampson's Feather and Button Works

Baste your garments and parcel post to us. We will hemstitch and picot them and make buttons to match. Special attention to mail orders. All work guaranteed.

524 Kuhn Block, Spokane, Wash.



A Match-Lighting Gasoline Lamp!

Here it is—a match-lighting gasoline lamp! No torch needed. Lights with matches like the old time oil lamp—but makes and burns its own gas from common gasoline, giving a remarkably brilliant, steady, white light of

300 CANDLE POWER

more than 20 oil lamps. Far brighter than the brightest electric light and costs less than one-third of a cent per hour. Thirty times cheaper than electricity. Safer than the safest oil lamp. Cheaper than the cheapest candles.



Guaranteed Five Years Will Last a Lifetime

The Coleman Quick-Lite

Safest lamp in the world—Absolutely no danger of fire or explosion. Fuel can't spill—no danger if tipped over. No wicks to trim—No globes to wash. No dirt, grease, smoke or soot.

The Quick-Lite Lantern

—fit companion to the Quick-Lite Lamp. Storm-proof, wind-proof, bug-proof. Absolutely safe. Can't explode. Roll it over in straw—no danger. Most powerful and most convenient light for farm or home use known. Ask your dealer about it.

Get the Genuine

Success invites imitations. Be careful, therefore to get the genuine Coleman Quick-Lite Lamps and Lanterns. If your dealer can't supply you write us direct, addressing nearest office for Catalog No 69.



COLEMAN LAMP CO.
ST. PAUL, WICHITA, TOLEDO, DALLAS, CHICAGO.

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

The modern fireside



Ready at the touch of a match—out just as quickly. No waste. No smoke or odor. Portable.

HEAT WITH PEARL OIL

Standard Oil Company (California)

PERFECTION OIL HEATER



My Dear Corner Children: I want to say just a few words about laughing. I like to hear boys and girls laugh. It sounds cheerful and seems to say they are happy. It is healthful, too. The doctors say that laughing is good for us. But that isn't the reason we laugh. It is because we feel good.

But there is one kind of laugh that I do not like, and that is the laugh that is intended to make fun of somebody—the laugh of ridicule, it is called. Did a little boy slip and fall down in the mud? I have heard children laugh at him, but he did not feel like laughing. If a little girl is embarrassed or hurt, the laughter that others make isn't the right kind of laughter.

Let us laugh a lot, but let us always laugh the kind sort. Write me what you think about it. Your loving
AUNT NELLIE.

Evis' Pet Dog, Ponto.

Dear Aunt Nellie: I have not written for a long time, but will try again. I have written two letters, and both have been printed, for which I am glad, and I hope this one will be put in print, too. We have five milk cows, whose names are Tutsey, Nova, Daisy, Flossy and Beauty. We sold two this summer, whose names were Pansy and June. Our heifers' names are Dell, Lily, Fern and Deena. We have two calves named Jean and Pride. The picture I am sending you is of my dog, Ponto. He can do many tricks, such as open and close a door, walk on two legs, sit on a chair, and cry, creep, sit on his haunches and hold his nose still till we put a piece of bread on it, when he throws it up and catches it, and many other things. We have two cats and five kittens, of which only one is named. We call it Etta Would-Be. The cats' names are Millie and Harriet. I am 11 years old and my birthday is February 22. I am in the seventh grade at school. I have three teachers, whose names are Mr. Stewart, Mr. Jager and Miss Strech. I like Mr. Stewart best. My vacation was not of the very best, as we all took down with measles. I have had them twice.—Evis Erickson, R. R. 2, Box 108, Lynden, Wash. (Aunt Nellie was very much pleased with the picture of your pet dog. Thank you for it, and be sure to write again.)

June, the Faithful, Is Their Cow.

Dear Aunt Nellie: I love to get The Farmer so I can read the letters in the Children's Corner. I am very interested in the letters I read and would love to be one of the writers. I live on a 40-acre farm five miles east of Farmington, Wash. I live in a brown house. I am 13 years old. My birthday was the first of August. I am in the eighth grade. I have one and one-half miles to go to school. My teacher's name is Miss Rawson. I live one-half mile from the tall mountains. I have one cow. Her name is June the Faithful. We call her that because she comes home so faithfully every night. I have one sister. Her name is Clarine and she plays the piano. I have two brothers, one six years old, named Carl, and one brother 10 months old, named Darrel. I have a fair complexion, have blue eyes and brown hair.—Cora Agnes Draper, Route 11, Box 84, Farmington, Wash.

Hazel Likes Outdoor Work.

Dear Aunt Nellie: I am a little girl 12 years old the 26th of February. I am in the sixth grade. I live on a 640-acre farm. We have 15 head of horses and mules and 20 head of cattle. We have thoroughbred Poland China hogs. There is a large lake near our house in which my sisters and I bathe. I can swim a little. I have four sisters. I can do all kinds of housework and field work, too, but I prefer outdoor work. I shocked hay for papa while he ran the binder. I cooked for him and six other men while they were putting up hay. Do any of you want to know how I look? I am tall and thin, have big, blue eyes, brown, curly hair and freckles. I like to dance, ride horseback, read, draw and make playhouses. I have rabbits, a little colt, little calves, cats, chickens and ducks for pets. I would like to hear from any of my cousins.—Hazel Colbert, Lake View Farm, Tonasket, Wash.

There's No Place Like Home.

Dear Aunt Nellie: I have written to the Children's Corner several times before. I am 12 years of age and in the seventh grade. I live on a farm of 840 acres. The subject this time I have chosen is "Home." Some people are dissatisfied and leave home to seek pleasure; but pleasure may be found at home. Some people think of home as just a place to exist, but it is far more than that. Home is father, mother, brothers and sisters, and a place which will always hold fast in our memories. We must enjoy our time while we are at home. Then when we grow older we can look back to our happy childhood days. When we are away from home we get lonesome for our folks and for home. Thus it is as the author John Howard Payne has written, "Mid pleasures and palaces though we may roam, be it ever so humble, there's no place like home! A charm from the sky seems to hallow us there, which, seek through the world, is ne'er met with elsewhere. Home, home, sweet, sweet home!"—Harvey Norris, Goldendale, Wash.

Awfully Glad to See Father Again.

Dear Aunt Nellie: I am a girl 10 years old and will be 11 November 29. I have light brown hair, light blue eyes, light complexion, weigh 120 pounds and am four feet 11 inches in height. I am very big for my age, but not stout. I can not hoe in the garden, so I get out of that. Have I a twin? If I have I should like to hear from her or him, whichever it happens to be. I wish some of the girls and boys of my age in the Corner would write to me, for I like to get letters. I thank Aunt Nellie for trying to help the cousins keep the Children's Corner in The Farmer. I will try to make my letter long this time and have a good one, for I want to earn a prize. One of my little classmates got thrown off a horse in the mountains when hauling wood and got his leg broken. He is the same age as I am. His name is Colby Wilkins of Grangeville, Idaho. I am sure he would be glad if some of the cousins or Aunt Nellie would write to him. My pape is in Spokane, but is coming home tonight. I will be awfully glad to see him.—Eveline Vida Dahl, R. F. D. No. 1, Box 24, Grangeville, Idaho.

Much Fun in the Country.

Dear Aunt Nellie: This is the third time I have written. I think the Children's Corner is the best page in the paper. Our school started the 17th of September. We have two teachers. Mr. Stram has the higher grades and a lady teacher has the lower grades. Our school has 10 windows on the scuth and a folding door to divide the room. I wish I could win a prize. I will try to win. I asked my friends to write, but I do not know whether they will or not. I am going to try to get the kodak if any one will subscribe for The Farmer. Since I wrote to you the last time the thresher came and threshed our wheat. We got 1800 bushels and some sacks. Papa hasn't hauled any wheat yet. He is hauling straw now. I help mama with the cooking and other things. I like to cook. Saturday Elsie, Victor and I picked pears. I have very much fun in the country.—Marie Ganguin, Goldendale, Wash.

You Are Welcome, Eddie.

Dear Aunt Nellie: I have never written to the Children's Corner before, but I think I will be welcome. I have just started reading the Children's Corner recently and am much interested in it. I am 14 years old and am now in high school. My birthday is the 19th of February. Have I a twin? If so, I would enjoy hearing from them. There are 10 acres on our farm. I have 32 rabbits, 35 hens, one dog and one cat. I wish that every little boy and girl would do something for their country. If it wasn't more than raising a small garden it would help. I am proud of the soldier boys of Uncle Sam and we who stay at home should be willing to raise food for those that go to Europe and fight. So next spring let's each one of us raise a garden and do our bit in winning the war.—Eddie Blakeslie, Wauna, Wash.

Vacation at Home on the Farm.

Dear Aunt Nellie: It has been some time since I wrote to the Corner, but have enjoyed reading other children's letters. I haven't noticed but one letter, besides my own, from Waitsburg. School closed May 22. I spent my vacation at home on the farm. I was promoted to the fifth grade. I will be very glad when school starts again, then I can study my new books. I am nine years old. I ride horseback to school. There were four other horses besides my pony. Those two stories that are now being printed in the Farmer are very interesting and I can hardly wait till the day the paper arrives.—Laura E. Hatley, R. F. D. 2, Waitsburg, Wash.

Of Course You May Be a Cousin.

Dear Aunt Nellie: This is my first time to write to the Children's Corner. I am a little girl, nine years old, and in the fifth grade. I have five brothers and two sisters. Their names are Frederick, Anton, Carl, Melvin, Richard, Delma and Eveline. I never have written to the Children's Corner before, but hope I may join and be one of the cousins too. I would like to have all my letters put in The Washington Farmer because we get the Washington Farmer, although we live in Idaho. I live on an 80-acre ranch. We have 30 head of horses and 20 head of cows. I have two calves and one cow. I call my cow Lindy and my youngest calf Spotty and the oldest one I call July. We milk five cows. Their names are Lily, Beauty, Blacky, Buttercup and Lindy. We have four calves.—Violet Dahl, Grangeville, Idaho.

A Picnic at Horseshoe Bend.

Dear Aunt Nellie: I have been visiting my sister-in-law at Roo's Mill and next week I am going to visit my sister in Seattle. Now I am going to tell about our Sunday school picnic at Horseshoe Bend. We started quite early in the morning. We had a large dinner at noon and as much ice cream as we could eat. In the evening we went home at 4. We have three horses. Their names are Prince, Kit and Dolly. Prince and Kit are coal black and Dolly is brown. We are renting this farm with 20 cows. We are milking 24 cows, for we have five of our own. We have about 50 chickens of our own and four ducks. We were trying to raise three turkeys and seven more ducks this year, but they all died. We have 10 calves of our own. Their names are Pansy, Sweetpea, Darling, Blossom, Lily, Bell, Star, Queen, Molly and Fanny. I am going to have two bantam of my neighbor, because I helped her this summer. I have six brothers and five sisters. Two of my brothers are married and one of my sisters. One of my brothers who is married lives at Roo's Mill and one at Seattle. One of my other brothers works in Montana.—Emma Brune, R. R. 2, Lynden, Wash.

Earns Money Selling Onions.

Dear Aunt Nellie: I have been reading the Children's Corner for some time. This is the first time I have written. I hope to see my letter in print. I will now tell you how I earned my spending money. My father has a large onion patch and he told me if I would help weed and thin them I could have all the money I could make selling them. I soon got a regular customer who took 25 cents worth every Saturday, so I got 25 cents a week for spending money. For the last two weeks I have been picking hops, making $10 a week. I start to school next Monday. I am in the seventh grade and am 13 years old the 12th of September. Have I a twin? I would like to correspond with any one of my age. I may write again.—Helen Calkins, R. F. D. 1, Box 136, Sunnyside, Wash.

Lives Near the Lewis River.

Dear Aunt Nellie: I am a girl in the seventh grade. I go to Marble Creek school, which is situated on a hill. There are only nine pupils going to our school this year. My teacher's name is Miss Edna Hammarlund and I like her very much. We live one-half a mile from the Lewis river. I like to go boat riding, but not fishing.—Pearl Waldren, Reno, Wash.

Raymond's Second Corner Letter.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am 8 years old. My birthday is the 7th of March. I am 4 feet and 11 inches tall. I weigh 75 pounds. I have dark hair and blue eyes. I live on a 750-acre farm. I have one brother. His name is William. He is 16 years old. The crops around here are not good.—Raymond Geissler, Odessa, Wash.

Lila Rides Horseback to School.

Dear Aunt Nellie: This is my first time to write to the Children's Corner. I like to read their lettrs very much. I am a little girl 11 years old. I have a brother seven years old and a sister nine. Their names are Wesley and Viola. I live on a farm of 1560 acres. We have 47 head of cattle, 11 calves, 11 horses and 22 pigs. We live two miles from school. I am in the fifth grade. We ride horseback to school. Our teacher's name is Miss Laura Brown. I like her very much.—Lila Muriel Smith, Mold, Wash.

Picnics Up in the Mountains.

Dear Aunt Nellie: I love to read the Children's Corner and I would like to join it awfully well. I am 11 years old. My birthday is in August. I live one and one-half miles from school. My teacher's name is Miss Rawson. I am in the sixth grade. I live on a 40-acre farm. We have two horses. Their names are Queen and Maud. I have 24 chickens. They follow me all around. We have two cows, their names are Cherry and Dinah. I have one sister and three brothers. I have brown eyes and brown curly hair. We have great sport up in the mountains hunting cows and having picnics. The winter months are spent by skeeing and coasting.—Eva Hickman, R. R. 1, Box 68, Farmington, Wash.

Gladys Is a New Cousin.

Dear Aunt Nellie: This is the first time I have ever written to the Corner. I enjoy reading my cousins' letters. I live on a 750-acre farm, eight miles from Waterville. We have a large grain elevator. It was built last summer. I have one brother and two sisters. Their names are Charles, Edna and Ethel. Charles is 7 years old, Edna is 10 years old and Ethel is 5 years old. I will be 13 the 12th of October. I am 5 feet and 3 inches tall. Have I a twin? I like to read the stories that are in The Farmer.—Gladys Slusser, Waterville, Wash.

Which Road Is Yours?



An Earth Road which requires at least a 218-pound pull to each ton

A Concrete Road which requires an average pull of only 27.6 pounds to each ton

IT takes a pull of 218 pounds on your team to get a 1-ton load over the road on the left, when you can get over it at all. In wet weather you can't get over it at all; even in dry weather it is rough and dusty. On the right, where the road has been paved with concrete, it takes a pull of only 28 pounds. It never takes more than that in the worst kind of weather—winter or summer—because it is hard, clean and even.

Which Road Do You Want?

Tests showing how many pounds in pulling power per ton of load is required on various types of road surfaces were made for the Good Roads Bureau of the California State Automobile Association by Prof. J. B. Davidson, Division of Agricultural Engineering of the University of California. They are summarized as follows:

	Pounds
Over a level, unsurfaced concrete road	28
Concrete base, ⅜-inch skin top asphaltic and screenings	49
Waterbound macadam, level, good condition	64
Concrete base, 1½-inch Topeka top, level, good condition	68
Gravel road, good condition, level	78
Earth road, fine dust, level	92
Earth road, stiff mud on top, firm underneath, level	218
Loose gravel, not packed down, new road, level	263

CONCRETE ROADS
Their Advantages
No Mud—No Dust
No Ruts—No Holes
No Slipping
No Skidding
Easy Hauling
Smooth Riding
Long Life Safety
Always Ready for Use
Low Maintenance
Moderate Cost

Big difference, isn't it? You pull on a concrete road, where you pull against an unimproved, rough or boggy surface. Where one wastes power, the other saves. Power costs money, whether you feed a team or buy gasoline. Your saving in power will pay your share of the cost of a concrete road.

Be sure you know what a concrete road is. Concrete is made of portland cement, sand and pebbles or crushed stone, and water. It is hard and durable. Concrete is the material used in dams, factories, bridges, and big engineering works like the Panama Canal requiring great solidity and strength.

While you are thinking this matter over, write us for Bulletin 136. It will help you decide the matter in a way that will cost you less—everything considered—than the old type of road is costing you now.

PORTLAND CEMENT ASSOCIATION
Offices at
ATLANTA CHICAGO DALLAS DENVER INDIANAPOLIS KANSAS CITY MILWAUKEE NEW YORK PITTSBURGH SALT LAKE CITY SAN FRANCISCO SEATTLE WASHINGTON, D. C.

CONCRETE FOR PERMANENCE

Waste of Straw and Stover

Sufficient to Maintain Thousands of Animals

By WILLIAM HISLOP, W. S. C.

Whether one goes east or west, north or south, the most contented and the most progressive farmers are those who have handled some class of live stock continuously year in and year out, utilizing it to convert the grass, hay, straw and some grain into a more concentrated farm product. Happily one notices a growing desire on the part of farmers to feed on the farm the unmarketable roughage which is a necessary adjunct to grain farming. They are beginning to realize the tremendous waste of straw and stover—the by-products of such crops as wheat, peas, oats and corn—which takes place annually throughout the country. Such raw materials are sufficient to maintain thousands of animals in good, thrifty breeding or store flesh. Their real cash value is as yet an unopened book to 95 per cent of farmers. In America milk and meat are produced largely by the use of grain. In Europe, grain has a higher comparative value as a human food, consequently meat and milk are produced largely from cheap, bulky feeds. To students of the economic phases of this grave question, it is very plain that live stock feeding operations will have to be conducted with the minimum of grain and the maximum of roughage because of the ever-soaring trend of grain values.

In the Fairfield district of Washington, where pea growing has been much in vogue, many men have burned the straw when they might well have utilized it in wintering stock cattle, wether lambs or beef breeding cows. The following rations will give a more definite idea of how straw can be used economically:

DAILY RATIONS.

Stock Cattle:

Straw ....8-10 lbs.
Silage ....15-18 lbs.
Cotton seed cake .....1.25 lb.

Beef Breeding Cows.

RATION 1.

Straw ....12 lbs.
Shock corn .....8 lbs.
Cotton seed cake .....1 lb.

RATION 2.

Straw ....20-22 lbs.
Cotton seed cake .....1 lb.

Wether Lambs.

Straw ....4-5 lbs.
Cotton seed cake .....2-3 oz.

Breeding Ewes.

Straw ....6 lbs.
Cotton seed cake .....4 oz.

Farmers with quantities of straw on hand should plan to purchase late-born lambs when they come out of the forest reserves in September and October. Likewise, store cattle can be bought about the same time. The average 2-year-old steer will increase his weight by 300 pounds, provided he is furnished good grass in summer and an abundance of roughage in winter. Oat straw and some of the wheat straws will give equally good returns if fed in the above manner. A great many feeders of fattening cattle make it a practice to keep straw before their steers at all times. Straw has splendid corrective properties and offsets the heating effects of heavy grain feeding, such as is followed by growers of baby beef or prime mutton.

Each fall thousands of sheep are "stubbled" in the Palouse and Big Bend sections of Washington. Why? Because range sheep owners know their great salvaging power. A well-stubbled band of ewes will have a bigger lambing percentage, produce stronger lambs and go into winter quarters in better condition than one that has not grazed the imperfectly harvested grain fields.

Farmers themselves can buy sheep for this purpose and can unquestionably get greater returns than by leasing to flockmasters. A herd of fattening barrows will wax fat on pea or wheat stubble. However, they have had but few opportunities to do so, not because of the farmers' inability to purchase or breed them, but because it is not customary.

Ideal Farmer's Garden.

"While visiting with the county agent A. M. Richardson at Waterville," says J. R. Shinn, county agent of Spekane county," he showed one of the best gardens that I have seen this year, one in which he can justly take pride. He has what I should say is an ideal farmer's garden for the Waterville section, having practically every vegetable growing for which the climatic and soil conditions are suited. Undoubtedly it would be a revelation to many of the people in his section to know what great variety he has introduced into his garden and if some means of keeping and rendering an accurate account of outlay and income from this area were used, I have no doubt but that it would show a much greater net return than any half acre of wheat land in Douglas county. Mr. Richardson owns his own home and has introduced a great variety of plantings of flowers about the place. These have been tasefully arranged and make an excellent pattern for the other residents of Waterville to follow."

Farmers Wide Awake

Garfield County Preparedness

The following extract from the report of Fire Inspector Captain W. A. Groce, who is representing H. O. Fishback, state insurance commissioner, in his capacity as ex-officio state fire marshal, will show the spirit of the farming community of eastern Washington:

"I wish to inform you of the efficiency of the Pomeroy council. The following is what took place at 11 p. m., August 2. I arrived at Pomeroy that night, going to bed about 10:30 p. m., and about 11 p. m. the siren began to whistle, which is a signal of a grain field fire or a disturbance of I. W. W.s. I got into my clothes as fast as possible and got down on the street. By the time I got on the street, automomiles were coming from all directions and men were running from all directions toward the courthouse. In less than five minutes, 60 men with Winchesters and a bag of cartridges to each man were lined up answering roll call. A number of other men were assembled ready with the fire fighting outfits in automobiles. There were enough machines to carry at least 400 people. The chairman informed me that he wanted to find out just how many men he had in his organization that he could depend on in case of an emergency. The following morning, about 9 o'clock, the siren whistled again, but this time for a fire. About the same number of men responded to the call, going to the fire and extinguishing same with very little loss. At this fire the hose reel was tied to the rear end of my machine as I happened to be the nearest one to the fire house. If I had not been there, they would, in all probability, have tied it to the machine any way and taken it to the fire. I wish to state that the Pomeroy organization is the most efficient and best equipped to handle any emergency that may arise of any that I have come in contact with."

Remarkable Yield of Wheat.

H. G. McNeil, R. F. D. 1, one of the Kittitas county commissioners, and an interested state fair visitor this year, told of a remarkable yield of wheat on his place this year. He had 10 acres which he said averaged 75.6 bushels to the acre.

New Corn Champion.

William Starkey of Prosser, last year the champion juvenile corn grower of the Yakima valley, was bested at the state fair this year by Arthur Rosenkrantz of Nob Hill, who won first prize on his exhibit of yellow dent.

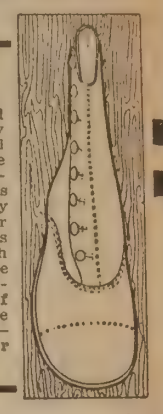
Favors Alfalfa

Makes More Money Than Wheat?

By C. S. West, St. John, Wash.

I have grown five to 15 acres of alfalfa on my place for 10 years. Two years ago I plowed up 12 acres on account of it getting set to cheat and blue grass. It choked the alfalfa out a good deal. It was a piece I could irrigate after the fall rains started. I usually got three cuttings at an average of a ton to the cutting. Five years ago I sowed 10 acres on upland. The next year I cut twice and got a ton and a half of alfalfa to the acre. Last year I cut twice; the first cutting I got one and one-half tons, and the second cutting one-half ton. Last winter a big percent of it froze out—the first I ever had freeze out. There is 12 acres adjoining me that was sown two years ago last spring on hill land. Last year it produced one and one-half tons per acre in one cutting. This year I have it leased. I could only sow once, on account of dry summer. I got 15 tons of hay off the 12 acres, and it was of fine quality. I disked and harrowed the ground good early last spring. At the present prices of grain and hay, taking the yield into consideration, one acre of the alfalfa will make me more clear money than an acre of wheat. I think it would do it one year with another. I don't think all of our land is good alfalfa land, but a big percent of it will grow good alfalfa.

Service Shoes for Children



ACROBAT SHOES give splendid service for play and general wear — made from high-grade leathers with especially tanned leather soles. No tacks or rough seams to chafe feet or stockings. Plenty of room for five growing toes—"great" for comfort.

Sent Postpaid on Moneyback Guarantee

at the following sizes, styles and prices.

Pearl or White Horse leather, sizes 5½ to 8, $3.50; 8½ to 12, $4.00.

Smoked Horse Leather, sizes 5½ to 8, $3.25; 8½ to 11, $3.75.

Black Gunmetal Calf, sizes 6½ to 8, $3.25; 8½ to 12, $3.75.

Patent Leather, patent kid top, sizes 6½ to 8, $3.25; 8½ to 12, $3.00 pair.

Write for

Copy of Autumn Fashion News with self-measurement blanks for shoes and garments MAILED FREE.

Frederick & Nelson
SEATTLE



Can all kinds of fruits, vegetables, meat and fish at home with a steam-pressure outfit. Write for literature. Seattle Can Co., 1263 Utah Ave., Seattle, Wash.



The knife that cuts a Sperry Drifted Snow Flour Loaf *cuts* Table Costs

The average professional man requires food that will produce daily from 2500 to 2700 calories of energy. One pound of

DRIFTED SNOW FLOUR
A SPERRY PRODUCT

has a fuel value of 1580 calories, more than half his daily dietary needs. Think of the economy that follows the use of this high quality flour in your baking and your cooking.

SPERRY FLOUR CO.



News for Breeders

Northwest Herd to Show in Ohio.

Carnation Stock farms of Seattle and Oconomowoc, Wis., whose grand herd of Holsteins has been winning the lion's share of the blue ribbons on the north Pacific fair circuit, have decided to exhibit at the national dairy show at Columbus, Ohio, the week of October 22. Most of the herd is of their own breeding, and practically all the balance were purchased in the northwest and were bred here. The winnings of the herd will be watched with intense interest by the Holstein breeders of the northwest, who are freely predicting that the herd will bring back its full share of the ribbons.

Live Stock Best Ever

(Continued from page five.)

Stallion, 3 years. Frank D'Amant, first.
Mare, 4 years. O. H. Hutchins, first; William Howell, second and third.
Mare, 2 years. William Howell, first; Frank D'Amant, second; G. W. Noble, third.
Mare, 1 year. William Howell, first; G. W. Noble, second.

Thoroughbred.

Stallion, 4 years. W. G. Jenkins, first.
Stallion, 2 years. W. G. Jenkins, first.
Mare, 4 years. W. G. Jenkins, first and second.
Mare, 2 years. W. G. Jenkins, first.

Farm and General.

Single gelding or mare, 4 years. Frank Taylor, first.
Single gelding or mare, 2 years. Frank Taylor, first.
Single gelding or mare, under 1 year. Frank Taylor, first.
Mare with foal at foot, Frank Taylor, first.

Shetland Ponies.

Stallion, 3 years. P. A. Sorenson, first; Perry D. Hadsall, second; G. W. Noble, third.
Stallion, 2 years. P. A. Sorenson, first.
Mare, 3 years. A. H. Eagleson & Sons, first.
Gelding, 3 years. Mrs. H. F. Baker, first.

Jacks and Mules.

Jack, 4 years. Frank Taylor, first.
Jack, 3 years. P. A. Sorenson, first. Frank Taylor, second.

SWINE.

Poland Chinas.

Boar, 2 years or over: Wilson Bros., Greenleaf, first.
Boar, 18 months: Howard & Royston, Parma, first; A. N. Moss, Caldwell, second; Wilson Bros., third.
Boar, 12 months: H. L. Randall, Boise, first.
Boar, 6 months: Wilson Bros., first; E. C. Vahlberg, Emmett, second; Wilson Bros., third, fourth, fifth; Howard & Sons, Parma, sixth.
Boar, under 6 months: Charles Royston, Payette, first, second; Howard & Sons, third, fourth, sixth, seventh, eighth; H. L. Randall, fifth; Wilson Bros., ninth.
Sow, 2 years: E. C. Vahlberg, first; Wilson Bros., second; Charles Royston, third and fourth.
Sow, 18 months: Howard & Royston, first, second and third; Charles Royston, fourth; Wilson Bros., fifth.
Sow, 1 year: E. C. Vahlberg, first; Wilson Bros., second; H. L. Randall, third.
Sow, 6 months: Charles Royston, first; Howard & Sons, second, third and fifth; Charles Royston, fourth; Wilson Bros., sixth, seventh, eighth and ninth.
Sow, under 6 months: Charles Royston, first, second, fourth and seventh; Howard & Sons, third; Wilson Bros., fifth, sixth, eighth and ninth.
Boar and three sows, over 1 year: Howard & Royston, first; Wilson Bros., second and third.
Boar and three sows, under 1 year: Wilson Bros., first and third; Howard & Sons, second.
Boar and three sows, over 1 year, bred by exhibitor: Wilson Bros., first; Howard & Royston, second.
Boar and three sows, under 1 year, bred by exhibitor: Charles Royston, first and second; Howard & Sons, third; Wilson Bros., fourth and fifth.
Four animals, any age, get of boar: Charles Royston, first and second; Wilson Bros., third and sixth; Howard & Sons, fourth and fifth.
Four animals, any age, produce of sow: Charles Royston, first and second; Howard & Sons, third and fourth; Wilson Bros., fifth and sixth.
Senior Champion boar: Charles Royston.
Junior Champion boar: Wilson Bros.
Senior Champion sow: Howard & Royston.
Junior Champion sow: Charles Royston.
Grand Champion boar: Howard & Royston.
Grand Champion sow: Howard & Royston.

Tamworth.

Boar, 2 years—Hull & Falk, first; Bliss.
Boar, 1 year—Hull & Falk, first.
Boar, under 6 months—Hull & Falk, first, second, third.
Sow, 2 years—Hull & Falk, first, second, third.
Sow, 18 months—Hull & Falk, first.
Sow, under 6 months—Hull & Falk, first, second.
Boar and 3 sows, over 1 year—Hull & Falk, first.
Boar and 3 sows, under 1 year—Hull & Falk, first, second.
Boar and 3 sows, under 1 year, bred by exhibitor—Hull & Falk, first and second.
Four animals, get of boar—Hull & Falk, first, second.
Four animals, produce of sow—Hull & Falk, first, second.
Senior champion boar—Hull & Falk.
Junior champion boar—Hull & Falk.
Senior champion sow—Hull & Falk.
Junior champion sow—Hull & Falk.
Grand champion boar—Hull & Falk.
Grand champion sow—Hull & Falk.

Duroc-Jersey Awards.

Prizes in the Duroc-Jersey hog division were awarded as follows:

Aged boars—First prize, Richards Live Stock company.

Boars, junior yearling—First prize, H. C. Polly; second and third, Richards Live Stock company; fourth, J. A. Waggoner.

Boars, senior pigs—J. A. Waggoner, first and second.

Boars, under six months—Richards Live Stock company, first, third, fourth, fifth, sixth, seventh, eighth ninth; H. C. Polly, second.

Sows over 2 years — Richards Live Stock company, first; J. A. Waggoner, second and third.

Sows, senior yearlings—H. L. Fest, first.

Sows, junior yearlings — Richards Live Stock company, first, second and fourth; H. L. Fest, third; C. M. McClelland, fifth.

Sow, senior pig—J. A. Waggoner, first.

Sows, under six months—Richards Live Stock company, first, second, third, fourth, sixth, eighth and ninth; H. C. Polly, fifth; H. L. Fest, seventh.

Boar and three sows over one year—Richards Live Stock company, first.

Boar and three sows under one year—Richards Live Stock company, first and second; H. C. Polly, third; H. L. Fest, fourth; J. A. Waggoner, fifth.

Boar and three sows over one year, bred by exhibitor—Richards Live Stock company, first.

Boar and three sows under one year, bred by exhibitor—Richards Live Stock company, first and second; H. C. Polly, third; H. L. Fest, fourth; J. A. Waggoner, fifth.

Four animals, any age, get of one boar—Richards Live Stock company, first, second, fourth, fifth and seventh; H. L. Fest, third; H. C. Polly, sixth; J. A. Waggoner, eighth; C. M. McClelland, ninth.

Four animals, any age, produce of one sow—Richards Live Stock company, first and second; H. C. Polly, third; H. L. Fest, fourth; J. A. Waggoner, fifth; C. M. McClelland, sixth.

Champion boar over one year—Richards Live Stock company.

Champian boar under one year—Richards Live Stock company.

Champion sow over one year—H. L. Fest.

Champion sow under one year—Richards Live Stock company.

Grand champion boar—Richards Live Stock company, on Richards Defender.

Grand champion sow—H. L. Fest, on Gem Bess II.

The Futurity Awards Were:

Spring boars—Richards Live Stock company, first, third and fourth; H. C. Polly, second; H. L. Fest, fifth.

Spring sows—Richards Live Stock company, first, second and third; H. C. Polly, fourth; H. L. Fest, fifth.

Litter of four—Richards Live Stock company, first and second; H. C. Polly, third; H. L. Fest, fourth; J. A. Waggoner, fifth.

Evening Capital News silver trophy, awarded to exhibitor winning greatest number of points in Duroc futurity, won by Richards Live Stock company.

Poland China Futurity Awards.

Senior boar—Wilson Bros., first; Vahlberg & Son, second; Howard & Son.

Senior boar—Wilson Bros., first, third, fourth and fifth; E. C. Vahlberg & Son, second; Howard & Son, sixth.

Junior boar—Charles Royston, first and second; Howard & Son, third, fourth, sixth and seventh; H. L. Randall, fifth.

Senior sow—Charles Royston, first and fourth; Howard & Son, second, third and fifth; Wilson Bros., sixth.

Junior sow—Charles Royston, first, second, fourth and seventh; Howard & Son ,third; Wilson Bros., fifth, sixth and eighth.

Litter—Charles Royston, first; Wilson Bros., second and fifth; Howard & Son, third and sixth; H. L. Randall, fourth; A. N. Moss, seventh; E. C. Vahlberg & Son, eighth.

Charles Royston won the Idaho Farmer cup on highest number of points in this event.

SHEEP.

Hampshires.

Brown Bros. of Filer, were given all awards in the Hampshire class.

Shropshires.

Brown Bros. were given three awards on a yearling ram, the only representative of the breed shown.

Oxfords.

Ram, 2 years old—J. G. Berry & Son, Boise, first, second.
Ram 1 year—J. G. Berry & Son, first; Charles A. Cairns, Meridian, second, third.
Ram, under 1 year—J. G. Berry & Son, first, third; Charles A. Cairns, second, fourth.
Ewe, 2 years—J. G. Berry & Son, first, third, fifth; Charles A. Cairns, second, fourth.
Ewe, 1 year—J. G. Berry & Son, first, second; Charles A. Cairns, third, fourth.
Ewe, under 1 year—J. G. Berry & Son, first, second; Charles A. Cairns, third, fourth.
Flock—J. G. Berry & Son, first.
Pen—J. G. Berry & Son, first.
Champion ram—J. G. Berry & Son.
Champion ewe—J. G. Berry & Son.
Special: Yearling ram—Charles A. Cairns, first.
Yearling ewe—J. G. Berry & Son, first; Charles A. Cairns, second.
Pen of four lambs — Chairles A. Cairns, first.

Rambouilets.

All Rambouilet awards went to S. L. Kennedy of Nampa, Idaho.

Cotswolds.

J. M. Flack of Meridian, Idaho, won all awards on Cotswolds.

Lincolns.

The few Lincoln awards that were made went to W. N. Booth.

Fat Sheep.

The University of Idaho won all awards on fat sheep.

Purebreds Win in Contest.

A remarkable exhibit at the Washington state fair this year was staged by Professor Donahue of the State agricultural department and Professor N. C. Jamison, field dairyman of the Washington State college. Three daughters of a grade Holstein sire, Duke, were in one group. Their dams were good grade Holsteins, yet two of them were red and the production of butter in a year of seven of his daughters was 2800 pounds, valued at $1120. The other group of three were all daughters of Lakeside Cornucopia, a pure bred Holstein bull, bred by H. C. Davis. Seven of his daughters produced in a year 4056 pounds of butter, valued at $1622.40, or a difference in favor of the daughters of a pure bred sire of $352. The butter boxes necessary to hold each amount of butter were piled alongside the cows. The interest exhibited by fair visitors showed that the lesson contained was being taken home. H. A.

Nothing Uncommon About That.

A Kansas man seeks damages because a tombstone fell on him. Sooner or later a tombstone falls on every man, but it is seldom he has a chance to object.

FOR SALE--Percherons, Shire Stallions and Mares

Jerico 110196, a dark iron gray Percheron stallion, 3 yrs., wt. 1850; sire Jube 81251 by Coco, dam, Bird 81977 by Brilliant Jr. His 1st, 2d and 3d dams are close descendants of Brilliant. Winnings at Northwest Live Stock Show, Lewiston, as suckling colt, first in class and Percheron society gold medal as best stallion under three years owned and bred by exhibitor As 2-yr.-old, 1st in class and champion under 3 years, three Society medals, best under three years owned and bred by exhibitor, grand champion and best stallion owned and bred by exhibitor and in open class reserve grand champion.

Aaron 117566, a 2-yr.-old half-brother, dark bay, wt. 1550. Sire Salvador 51340 by Calypso. Equally good (some say better). He has never been shown.

Callie 88642, a dark gray mare, 6 yrs. old, wt. 1750. Sire Apollon 26130. She is very strong in Brilliant blood; has mare colt by Halicite.

Lady Grace II., 15452, a 3-yr.-old Shire, bay, white face and white hind legs, wt. 1650. Sire Imp. Toga VII. 9283; dam Bay Lily 13577, by Imp. Greenham Champion.

All first class in every respect, mostly our own breeding, reserved for our own special use.

On account of the death of one of the partners, must sell to close estate.

FOLLETT & SCHOOLER. Genesee, Idaho.

BUY JERSEYS

because it will pay YOU. In buying, remember that it is the producers that pay. This is the kind that we are going to sell at public auction on October 15, 1917, on the Luckiamute farm, seven miles southwest of Monmouth—See catalog for directions how to reach farm.

This offering consists of proven producers or their offspring. They have

Register of Merit Records

This is the dispersal of the herd of Frank Loughary & Son and a consignment from the herd of G. G. Hewitt. Both herds have been noted for prize winning (type) and official butter records (production). This sale includes three great proven herd bulls, Register of Merit cows, bred heifers and younger animals, both sexes. Sixty head in all.

Catalog giving full details of the offering is ready to mail. Send name to either proprietor, or to E. A. Rhoten, Salem, Oregon, and one will be mailed.

FRANK LOUGHARY, Monmouth, Ore.
G. G. HEWITT, Monmouth, Ore.
} Proprietors.

COLONEL J. W. HUGHES, Forest Grove, Auctioneer.

C. D. MINTON, Portland, Oregon, Assistant.

Mail bids may be sent to Horace Addis,
Field Editor The Oregon Farmer,
411 Stock Exchange Bldg., Portland, Ore.

Breeders' Department

JERSEY CATTLE

FOR SALE
High-Class Registered Jerseys

I will sell NINE HEIFERS and SIX COWS, the latter soon to FRESHEN. My herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Am selling this CARLOAD for purposes of reducing my HERD.

Correspondence Solicited.

C. E. LONG
BUHL, IDAHO.

Jersey Home Dairy
FOR SALE. BULL READY FOR SERVICE.

Sire Oxford You'll Do Jr. Sire of 4 R. of M. daughters, averaging 415 lbs. 7 os. butter, at 2 yrs. 1 mo. He by Oxford You'll Do, grand champion as best bull with 5 daughters, also sire of grand champion cow in class of (76 entries), at the Royal Show, and is sire of 30 R. of M. daughters, including You'll Do's Favorite, 964 lbs. 13 oz. butter. Dam Creoles Belinda, of the Governor Marigold line of breeding. ERICKSON BROS., North Yakima

MERIDIAN DAIRY AND FRUIT FARM.

Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams.

B. C. CRABTREE, Lynden, Wash.

GUERNSEY CATTLE

Young Guernsey Bull

HOPE'S REEDY OF ORCAS ISLAND No. 43788 of advanced registry and imported blood. The best individual we have ever offered.

S. P. DAVIS, Olga, Washington.

MIDDLEDALE FARMS GUERNSEYS.

Young stock of both sexes by Langwater Emigrant (one of the best bred May Rose bulls) and imp. Ivy's Masterpiece, out of high producing cows.

MIDDLEDALE FARMS, Goshen, Ore.

Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
Redmond, Wash.

ABERDEEN ANGUS

Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the breed.

At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

Congdon & Battles
Otto V. Battles, Mgr.
North Yakima, Wash.

HEREFORD CATTLE

BULL RANCH

Registered Hereford cattle.

CHAS. BULL, Prop. Mabton, Wn.

BROWN SWISS CATTLE

Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

THEO. BRUGGER, Route 3, Gresham, Ore.

HOLSTEIN CATTLE

Established 1887—100 in Herd.
REGISTERED HOLSTEIN CATTLE.

As I wish to reduce my herd I am offering the blood of such bulls as King Segis Pontiac 13th, 30.39 lbs. breeding, 4.25 per cent fat; Iowana Rochdale Korndyke, 26 lb. breeding, and Prince Segis Korndyke De Kol, 31.41 lbs. breeding.

LAKE SIDE STOCK FARM.
P. A. FRAKES, Scappoose, Ore.

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

Waterloo Holstein Farm

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje	King Segius 10th Segius Walker Pietertje 1d

C. F. JENNESS, Meridian, Idaho.

Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.

Holstein Bull Calves

sired by Segis Riverside Pontiac, that sold in the Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days, 118.99 in 30 days and big records all through his pedigree.

ERNEST JOHNSON, Scappoose, Ore.

Young Holstein Bulls

Out of A. R. O. dams and sired by Chimacum King Segis, whose dam and granddam average 30.98 lbs. butter in 7 days. Very reasonable.

FRANK W. CONNELL, Hillsboro, Ore.

LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

J. H. HULBERT, Mt. Vernon, Wash.

YOUNG HOLSTEIN BULLS

Ready for light service; sired by Wapato Bellevewere Colantha Boy and out of heavy milking dams.

E. P. SAWTELL. Independence, Wash.

HOLSTEIN BULL CALVES.

One from 20-lb. cow, another from a 16-lb. jr. 2-yr.-old. Herd headed by Model Fobes of Idaho, whose four nearest dams average 27.25 lbs. butter 7 days.

EARL BEEBE, R. F. D. 2, Rupert, Idaho.

HOLSTEINS

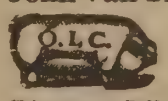
Well bred young bulls for sale.
THOS. CARMICHAEL, Gaston, Ore.

REGISTERED HOLSTEINS

of exceptional breeding. Prize winners Southern Idaho Fair. Prices within reason to farmers. Write for descriptions.
A. A. DAVIS, Buhl, Idaho.

O. I. C. SWINE

John Van Trojen Sr., Breeder



of the famous Ohio Improved Chester White Hog. All stock registered. Write for prices. Orders filed after Oct. 1.

Chimacum, Jefferson County, Washington.

AUCTIONEERS

AUCTIONEER

Special attention given to live stock sales.

BEN T. SUDTELL. Albany, Ore.

SHORTHORN CATTLE

SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods; and Scottish Sunrise 2d.

R. E. BOYCE, Baker, Ore.

Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN, Wapato, Wash.

Hercules Shorthorns

For particulars write
DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

For Sale—Shorthorn Bulls

Fine individuals, sired by Lavender Gord's No. 370358, a bull produced by the blending of the blood of two great families, one headed by Count Lavender, the other by Choice Gords

ANDREW OLSEN, R. 4, Ellensburg, Wash.

CEDARHURST FARM

SHORTHORNS.

Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

JOE TURNER, Meyers Falls, Wash.

H. H. Schildman

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.

Filer, Idaho.

Shorthorn Cattle

SHIRE HORSES.
DR. G. E. NOBLE, Boise, Idaho.

DUROC-JERSEY SWINE

DUROC JERSEY
Gilts and Boars

I am booking orders for fall weanling pigs for October and November delivery. Can furnish them singly or in unrelated pairs or trios. Special prices to members of boys' and girls' pig clubs. An exceptional strain of Durocs, carrying the best blood lines found in the northwest. Have been prize winners wherever shown.

Chas. G. Sprong, Grandview, Wn.

Hillcrest Duroc Jerseys

For immediate sale:
1 11-mo. gilt, bred to farrow Oct. 3d, $60.
1 10-mo. gilt, to farrow Nov. 8, $50.
3-month pigs, $25.
Extra fine stock, combining the blood of noted show winners.

R. P. Camp, Ione, Wash.

Prolific, Profitable Durocs

Pigs from Champion Sow, bred by Exhibitor of the state of Washington, and other blue-ribbon sows, headed by the great 900-lb. boar, Red Dandy, 159453. Choice boars and gilts for sale from these prize-winning sows.

JNO. B. PETERSON, Mountbourne, Wash.

PREMIUM HERD

Spring pigs from champion and first prize sows at Ontario, Ore., and Gem State and Idaho State fairs.

C. H. KIRKPATRICK. Parma, Ida.

OTTO'S DUROC JERSEYS.

Founded on the basis of making Duroc history in Idaho. Won 4 championships and two grand championships at Southern Idaho State Fair.

L. S. OTTO, Filer, Idaho.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE. CABINET, IDAHO, OR
JAMES N. PRICE. Pullman, Wash.

AVONDALE STOCK FARM.

Registered Duroc Jersey hogs. Inspection invited. Correspondence solicited.

H. C. POLLY, Route 3, Burley, Idaho.

HORSES

REGISTERED PERCHERON HORSES.
E. O. WALTER, AUCTIONEER.
Walter Bros.,
Buhl and Filer, Idaho.



Imported and American Bred
Percheron, Shire and Belgian Stallions

They are of the very best breeding obtainable and are guaranteed to be breeders. They will be sold at very reasonable prices.

If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to

WM. T. TRACY, Kennewick, Wash.

POLAND CHINA SWINE

Fruitland Stock Farm

Poland China Hogs.

Herd headed by Idaho Expansion (541305), assisted by Superba Jr. (241305) and Sammy (79833). Top for size and quality. I have for sale extra good spring pigs. Correspondence solicited.

J. M. ROYSTON EST., C. ROYSTON, MGR.
Payette or Fruitland, Idaho.

Locust Lawn Herd

Booking orders for strictly big type Poland China spring boars, sired by Overlook, 1st and senior champion, Idaho State Fair and Gem State Fair, 1916; weight 820 lbs.; out of the 1st, 2d and 4th prize sows at Idaho State Fair, 1916, in strongest competition; satisfaction guaranteed.

W. F. HOWARD & SONS, Parma, Idaho.

QUALITY AND UTILITY OUR HOBBY.
PURE BRED POLAND CHINAS.

Quick growing, easy feeding breeding stock, both spring and fall farrow, for sale.

FRANK NEEDHAM, Eugene, Ore.

Pure-Bred Poland China Fall Gilts

will be shipped c. o. d., subject to your approval. Write to

HERBERT WILLARD. Dayton, Ore.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX. Lyons, Ore.

BIG TYPE POLAND CHINAS

June and July pigs for sale, either sex, eligible to registration, at farmers' prices.

E. E. STREITZ, Richfield, Idaho.

Registered, Big Type

Poland China pigs for sale.

JOHN BUSHAM, R. 2, Anacortes, Wash.

BERKSHIRE SWINE

Kintyre Farm Berkshires

Exceptionally fine breeding stock for sale at reasonable prices.

CLARK BROS., R. F. D. 2, Prosser, Wn.

Early Spring Pigs

Well grown, best quality, sired by a son of the great Laurel Champion and out of prize sows.

GEO. BERTRAND, Olequa, Wash.

RIVERBY ORCHARD BERKSHIRES

won 12 out of 15 first prizes at the Washington State Fair, 1916. A few outstanding boars for sale at reasonable prices.

D. C. BUNN, Prosser, Wash.

HAMPSHIRE SWINE

GREEN GROVE STOCK FARM.
ENTERPRISE, OREGON.

Breeder of HAMPSHIRE SWINE. For immediate sale—Bred from Panama-Pacific Exposition championship herds. 10 head spring males, 15 head gilts, 25 to 200 pounds.

J. M. Fruitts, Prop.

HAMPSHIRE SWINE

Choice stock of all ages at bargain prices.

HIGHLAND FARM, Box 22, Underwood, Wn.

YORKSHIRE SWINE

BROADMEAD Farm

Large Yorkshire Swine.

J. A. SCOLLARD, R. D. 1, Chehalis, Wn.

SHEEP

Registered Sheep

Rams—Hampshire, Shropshire, Lincoln and Cotswold. We deal in pure blood registered rams. Grade ewes, one, two and three years old.

GRANT B. DIMICK, Oregon City, Ore.

20 Oxford Down Rams 20

Yearlings and ram lambs; will make special price on the lot. All stock registered. No ewes for sale.

C. P. Kizer, Harrisburg, Ore.

RAMS

Hampshire and Southdown. Also large Yorkshire pigs. All stock registered.

J. G. S. HUBBARD, Monroe, Ore.

SHROPSHIRE YEARLING RAMS.

Fifteen fine individuals; registration papers if desired.

C. H. DUNNING. Ellensburg, Wash.

In answering advertisements don't fail to mention this paper.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Oct. 1.—Indications that damage by frost last night had been done to the quality of corn rather than quantity led to a reaction today from an advance that first took place in prices. The market closed unsettled at 118 3-4 December and 115 1-4 to 115 3-8 May, 1-2 off to a shade up as compared with Saturday's finish. The outcome in oats was unchanged to 1-8c lower, and for provisions 47 cents down to a rise of five cents.

Assertions current late in the day that a petition was being circulated here to have the maximum price on corn removed were without any substantial basis.

Business in oats was narrow and simply reflected the changes in the corn market.

Provisions, like oats, swayed with corn. A small demand from commission houses was quickly submerged by offerings from stock yard houses.

Cash Quotations.

CHICAGO, Oct. 1.—Corn—No. 2 yellow, $1.96@2; No. 3 and 4 yellow, nominal.

Oats—No. 3 white, 59¼@60c; standard, 59½@60½c.

Rye—No. 2, $1.90@1.90½; No. 3, $1.89.

Barley, $1.20@1.42.

Timothy, $6@7.75.

Clover, $12@22.

Chicago Futures.

Corn—	Open.	High.	Low.	Close.
Dec.	1.19	1.19⅝	1.18⅜	1.18¾
May	1.16⅛	1.16½	1.14⅞	1.15¼
Oats—				
Dec.	.59¼	.58⅝	.57¾	.58
May	.61	.61⅛	.60⅝	.60⅞
Pork—				
Oct.	....	.....	.....	45.00
Jan.	....	47.10	46.80	46.00
Lard—				
Oct.	.24.65	24.67	24.50	24.50
Jan.	.23.90	23.97	23.77	23.82
Ribs—				
Oct.	.26.50	26.52	26.45	26.45
Jan.	.24.95	25.00	24.77	24.85

Pacific Northwest Grain.

PORTLAND, Oct. 1.—Futures bid—November oats, $49.50; feed barley, $49; brewing barley, $51. Eastern oats and corn in bulk: Oats—No. 3 white, October, $43; 38-pound clipped white, $44. Corn—No. 3 yellow January, $53.50; No. 3 mixed, $52. November oats, No. 3, $43.25; clipped, $45. February corn, yellow, $52.75; mixed, $52.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1917-18 and 1916-17 were as follows:

Seattle—	Wheat	Oats	Barley	Hay
1917-18	513	292	39	1476
1916-17	1579	293	71	1031
Portland—	—			
1917-18	766	332	59	383
1916-17	1497	584	41	430
Totals—				
1917-18	1279	624	98	1859
1916-17	3076	887	112	1461

San Francisco Grain.

SAN FRANCISCO, Oct. 1.—Barley—December, $2.50 bid, $2.53 asked.

Minneapolis Grain.

MINNEAPOLIS, Oct. 1.—Wheat—Receipts, 707 cars, compared with 745 a year ago.

Corn—No. 3 yellow, $1.90@1.91.

Oats—No. 3 white, 56 3-4@58 1-2c.

Flax, $3.30 1-2.

Flour unchanged.

Shipments, 71,914 barrels.

Rye, $1.87@1.88.

Barley, $1.14@1.36.

Bran, $30@31.

The Wool Market.

BOSTON, Sept. 28.—The Commercial bulletin will say tomorrow:

"While the past week has probably seen a smaller volume of wool business, there still has been a very fair trade for almost everything and prices have held very firm. In addition to fair purchases for civilian requirements, there also has been a further demand from the government for wools suited to its needs. Some buying of bunch lots in the middle west is reported also at the level of full recent quotations here.

"The goods market is showing a better call for light weight civilian goods and the government is also placing further orders for the army in suitings."

Scoured basis:

Texas: Fine 12 months 165@170; fine 8 months 155@160.

California: Northern 170@175; middle county 145@150; southern 135@140.

Oregon: Eastern No. 1 staple 180; eastern clothing 150@160; valley No. 1, 160@165.

Territory: Fine staple 180@182; half blood combing 170@175; ⅜ blood combing 145@150; fine clothing 160@165; fine medium clothing 155@165.

Complexions Going Out.

Complexions aren't nearly so popular as they were once, or else complexions aren't being worn any more. Anyhow, internal revenue figures for 1917 show Uncle Sam's return on cosmetics has shrunk from four million dollars to $671,968.

Live Stock Quotations.

At Omaha.

OMAHA, Oct. 1.—Hogs—Receipts, 1500; market 10 to 15 cents higher. Heavy, $18.90@19.30; mixed, $19@19.25; light, $19.15@19.50; pigs, $17@18; bulk of sales, $19@19.25.

Cattle—Receipts, 16,500; market strong, 10@15c higher. Native steers, $9@17; cows and heifers, $6.75@10.25; western steers, $8.50@14.50; Texas steers, $7.50@10.50; cows and heifers, $6@?; canners, $5@6; stockers and feeders, $6.50@12.50; calves, $8@12, bulls, stags, etc., $5.50@7.50.

Sheep—Receipts, 40,000; market strong. Yearlings, $12@13.25; wethers, $11@12.50; ewes, $10.50@11.25; lambs, $17.25@17.75.

At Chicago.

CHICAGO, Oct. 1.—Hogs—Receipts, 19,000; weak, 10 cents under Saturday's average. Bulk, $18.65@19.40; light, $18.25@19.40; mixed, $18.25@18.55; heavy, $18.25@19.50; rough, $18.25@18.45; pigs, $14.40@18.20.

Cattle—Receipts, 24,000; steady. Native beef cattle, $7.25@17.75; western steers, $6.40@15.25; stockers and feeders, $6.25@11.25; cows and heifers, $5@11.25; calves, $9.75@15.75.

Sheep—Receipts, 22,000; firm. Wethers, $8.90@12.50; ewes, $8.25@11.75; lambs, $13@18.25.

At Portland.

PORTLAND, Ore., Oct. 1.—Cattle—Steady; receipts, 2126. Best beef steers, $9@9.75; good beef steers, $7.50@8.75; best beef cows, $6.75@7.50; ordinary to good cows, $4@6.75; best heifers, $7@8; bulls, $4@6.75; calves, $7@9.50; stockers and feeders, steers, $4@7.25;

Hogs—Prime light, $18.15@18.25; prime heavy, $18@18.15; pigs, $16@17.25; bulk, $18@18.25.

Sheep—Western lambs, $13.50@14;; valley lambs, $12.75@13.50; yearlings, $11.25@11.50; wethers, $11@11.50; ewes, $8@9.50.

At Salt Lake.

SALT LAKE, Utah, Sept. 27.—Hogs—Receipts, 314; market steady; demand strong. Choice hogs, 175 to 225 lbs., $17.25@18.25; mixed, 160 lbs. and up, $17@17.50; feeders, $14@15.

Cattle—Receipts, 54; market steady. Choice steers, $8.50@9.25; good steers, $7.50@8.50; fair steers, $6@7.25; choice cows to heavy heifers, $6.50@7.25; fair to good cows and heifers, $5.75@6.50; cutters, $5@6.25; canners, $4@5; fat bulls, $6@7; bologna bulls, $5@6; veal calves, $9@11.

Sheep—Receipts, 2420; market steady. Good choice lambs, $15@15.75; ewes, $8.25@9.25; wethers, $10@10.50; yearlings, $10.50@11.

Spokane Stock Yards Monday.

Hogs—Prime light, $18.10@18.25; prime heavy, $17.90@18.10; pigs and skips, $16@17.35; stockers and feeders, $12@14.

Cattle—Receipts, 139; market steady. Best beeef steers, $8.75@9.25; good steers, $7.50@8.50; ordinary to fair, $5.75@6.75; best beef cows, $6.75@7.50; good cows, $5.50@6.50; common cows, $4@5.25; best heifers, $7@8; bulls, $5@6.50; calves, $7.50@8.75; stockers and feeders, $5@6.75.

Sheep—Receipts, none; market steady. Prime lambs, $12.50@13.25; good lambs, $11.25@11.75; prime yearlings, $10@11; prime wethers, $10@10.75; best mutton ewes, $7.25@8.75.

Seattle Wheat.

SEATTLE, Sept. 29.—Grain buyers here are hoping that the confusion regarding the price for wheat fixed by the grain committee to farmers will soon be cleared up so that business of grain moving and milling, long delayed, may be inaugurated.

In place of clarifying the situation the change in the program at Washington to $2.05 tidewater basis has led farmers to believe, as millers of this city are advised, that they will get $2.05 country. Members of the merchants' exchange who assisted in getting the extra money for farmers declare there should be no mystery about it. Nevertheless, growers are advising millers that they will sell no more grain until they are thoroughly satisfied that the last word has been said about the maximum price and officially settled for all time. On the other hand, millers say they can not entertain such a level under any circumstances, due to difficulties that have already arisen in the selling end, and the business is at a standstill.

Manufacturers say there is a tendency among farmers who have not sold to await the outcome of the demand by those who let go on the old price for the extra 5c from those to whom they sold.

Portland Wheat.

PORTLAND, Ore., Sept. 29.—The announcement by M. H. Houser, grain administrator, that the Grain corporation would begin buying wheat at the opening of the week came as a relief to farmers and dealers here. Selling by farmers has become more general and the mills are now getting all the wheat they can carry under the government's 30-day limitation. The Grain corporation will take over all the surplus offerings by farmers and carry the wheat until the mills need it.

Although millers have bought all the wheat they are allowed to hold, deliveries have not kept pace with the buying. The railroads' delay, however, is expected to be remedied soon.

Flour prices have been adjusted to the government wheat price, fixed at $2.05 a bushel at seaboard terminals. Northwestern millers, at a meeting here, announced a quotation of $10.20 on patents to prevail throughout October at least. After that as the carrying charges on wheat increase, this may be added to the flour price. The new price was a 40-cent cut from the old quotation.

The millers also made a $3 reduction in millfeed to $30 for bran and $33 for shorts, net for carload lots. On minimum quantities mills and dealers quote $1 over this. These millfeed prices are not fixed, like the flour price, but the market will be governed by supply and demand. As a great quantity of millfeed is to be turned out by the northwestern mills this winter, lower feed prices seem assured. The north Coast mills have a capacity of about 20,000 tons of feed a month, and as not much is expected to go to California, a large surplus is probably in the northwestern markets.

The oats and barley markets were very dull during the week.

Portland Market.

PORTLAND, Ore., Sept. 29.—Butter production is now at the low point, and as the make is expected to increase very soon, a break from the present high market is anticipated. Creamery men are already shading their prices on prints, as the steep quotations have materially curtailed consumption.

Cheese on the other hand, is tending higher, influenced by advances in the eastern markets.

Eggs, poultry and dressed meats are steady. Receipts in all lines are small, and the demand is not heavy.

Four or five cars of Yakima Elberta peaches have come in and with the market bare of local stock they sold well at 75@90 cents. Salways are due the latter part of the week.

A few cars of potatoes have been shipped to the southwest, but dealers report the demand in that section limited. They are paying the farmers $1.25@1.35. Front street is jobbing potatoes in a small way at $1.50@2.25.

There has been no advance in hops, but the market holds strong. Offerings by growers are very small.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $49 per ton.

Mill stuffs—Bran, $31 per ton; shorts $34.

Barley—No. 1 feed, $50; brewing, $51; rolled, $55@57.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch, case counts, 42c per dozen; candled, 45@50c.

Poultry—Hens, 17@18c; ducks, 13@20c; turkeys, live, 20@22c; geese, 10@11c.

Butter—City creamery, prints, 48@49c per pound; cubes, extras, 47c.

Cheese—Tillamook triplets, 25c; Young Americas, 26c.

Dressed meats — Veal, 15 1-2@16c; pork, 21½@22c.

Hops—1916 25@26c; 1917 crop, 41@42c.

Potatoes—New, 1 1-2@2 1-4c per lb.

Wool—Eastern Oregon, fine, 52@61c; coarse, 60c; valley, 58@60c.

Beans — California small white, 14 1-2c; large white, 14 1-4c per pound.

Spokane Market.

The wholesale prices quoted in the list below are not the prics paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $2 cwt; sweet potatoes, $3.75 cwt.

Apples—Large eating apples, $1.25 box; crabapples, $1.25; cooking apples, $1.50 box.

Butter—Blanchard cartons, 48c lb; Medo-Maid, 48c lb; Cascade, 48c lb; Gold Leaf, 48c lb; Better Butter, 48c lb; Attalia, 48c lb; Diadem, 48c lb; Hazelwood, 48c lb; Solid Pack, 47c lb; Jersey Bell 47c lb; Peerless, 44c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 27c lb; Hazelwood Young America, 28c lb; Wisconsin limburger, 29@30c lb; brick cheese, 30c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $13 case; fresh eastern eggs, $13 case.

Live Poultry—Hens, 13c lb; broilers, 20c lb; old roosters, 8c; ducks, 12½c lb; geese, 10c; turkeys, 20@22c.

Dressed Poultry—Hens, 18c lb; broilers, 28c lb; old roosters, 12½c; ducks, 18@20c; geese, 16c; turkeys, 25@30c.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 13c; salted cured, 16c; green bulls and stags, 11c; salted cured, 13c; kip, 15 lbs to 25 lbs, 22c; calf skins up to 15 lbs, 16c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 7 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $1@2 each; dry horse hides, $2.50@4 each.

Butter and Eggs.

PORTLAND, Sept. 29.—Butter prints, extras, 48@49c; cubes, extras, 47c; prime firsts, 45 1-2c; dairy, 35c.

Butter fat, Portland delivery; No. 1 sour cream, 49c; No. 2, 47c.

CHICAGO, Sept. 29.—Butter unchanged. Eggs lower; receipts, 9963 cases; firsts, 37@37 1-2; ordinary firsts, 36@36 1-2c; at mark, cases included, 35@37 1-2c.

Seattle Market.

SEATTLE, Sept. 29.—Puget Sound Gravensteins, which heretofore have sold at practically the same level as eastern Washington C grades, are moving at as high a level this year as the best fruit from Yakima and Wenatchee at $1.50@2. Gravensteins alone have mounted to the top, or the best price ever known on the Seattle market for local fruit.

Breaks in the potato market are believed to be imminent and buyers are uniformly holding off. Little effort is being made among car lot shippers to get stock pending some kind of predicate for values. On the Mt. Vernon flats, where limited digging has been in progress, growers are demanding $28 f. o. b. Dealers look for a minimum price of $25 or a selling level here of $30 for locals and $35 for eastern Washingtons.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 45@49c per dozen; pullets, 32@35c dozen.

Poultry—Live hens, fat, over 4 lbs., 21c per lb.; 4 lbs. and under, 16@17c; old roosters, 12c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 10c per lb.; springs, live, 21@23c per lb.

Butterfat—53c per lb; dairy butter, 33c.

Beef—Buying prices. Prime beef, steers, 7@8c per lb.; cows, fat, 7@8c; heifers, 6@8c per lb.

Hogs—Light, 15@16c per lb. do heavy, 9@13c per lb.

Veal—Fancy light, 14@16c per lb.; heavy, 12@13c per lb.

Hides—Salted, 16c per lb.; flint-dry hides, 27c per lb.; salt kip, 16c per lb.; green hides, 13c per lb.; green calf, 22c per lb.; dry calf (under 6 lbs.), 25c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 11c per lb.; dry full wool sheep pelts, 36@38c per lb.

Wool—Puget sound, 52c per lb.

San Francisco Produce Market.

SAN FRANCISCO, Sept. 29.—Butter—Prime extra, 44½c; prime firsts, 43½c.

Eggs—Fresh extras, 46½c; extra firsts, 46c; fresh extra pullets, 43c; extra firsts pullets, 42½c.

Cheese—New firsts, 21c; young Americas, 25c.



100,000 Second-Hand Grain and Potato Sacks for Sale

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

Highest Prices Paid for Hides

Send your hides to us for highest cash market price—check by return mail. References, any bank in Seattle.

North Coast Tanning Co.
Ballard Station,
SEATTLE.

F.C. Taylor FUR CO. ST. LOUIS

HELPS YOU TRAP FUR ANIMALS

Trappers will make big money this year. Furs are in demand at high prices—Coon, Mink, Opossum, Skunk, Muskrat and other kinds are plentiful. Many animals are good food. U. S. approved recipes free.

Help Book Free

Tells how to trap; traps and baits to use; how to prepare skins so as to get highest prices, and describes latest trapping devices, including the new SMOKE TORPEDO. Shows pictures of all animals in colors, and supply catalog. ALL FREE—WRITE TODAY.

FUR MONEY for YOU

TRAPS FOR ANIMALS IN CAVES

F.C. Taylor Fur Co 890 Fur Exchange Bldg., St. Louis, Mo.

Seed Wheat

Stories of Untried Varieties

The United States department of agriculture has issued its annual warning to farmers to be on guard against the exaggerated claims of commercial distributors of new and untried varieties of seed wheat.

"Wheat is attracting at the present time greater attention than perhaps ever before, owing to its comparative scarcity and high price and the necessity of sowing a large acreage this fall," says the department statement. "As might be expected, therefore, various persons are offering to the public varieties that they describe as far superior to the kinds now being grown. These varieties are usually given some catchy name and extravagant claims are made for them.

"A favorite scheme employed by those having wheat for sale for which they wish to obtain exorbitant prices is to claim that their variety requires but a small amount of seed per acre. A peck of seed, 20 pounds, and a half bushel per acre are amounts frequently mentioned. Of course, the claims of maximum yields from these small seedings are not substantiated by fact. Only on dry lands or under very special conditions is the seeding of as little as even 45 pounds per acre of wheat advisable. On nearly all of the wheat lands of the country it is more profitable to sow from a bushel to two bushels of seed per acre than to sow less than a bushel."

SHEEP AWARDS.

Go to Owners in Three States.

The following are the awards in the sheep division at the Washington State fair this year:

Rambouillets.

Ram, 2 years and over—1 and 2, Mrs. R. A. Jackson, Dayton, Wash. Yearling—1, Mrs. Jackson; 2 and 3, John H. Seely, Mount Pleasant, Utah. Ram lamb—1 and 2, Mrs. Jackson; 3, H. F. Traub, Revere, Wash.

Ewe, 2 years and over—1 and 2, Mrs. Jackson; 3, Ed Scholl, Tangent, Ore. Yearling—1 and 2, Mrs. Jackson; 3, H. F. Traub. Ewe lamb—1 and 2, Mrs. Jackson.

Champion ram and ewe—Mrs. Jackson. Get of sire—1, Mrs. Jackson; 2, Traub. Pen—1, Mrs. Jackson. Flock—1 and 2, Mrs. Jackson; 3, Ed Scholl.

Fat Sheep, Fine Wools.

Wether lamb—1 and 2, Washington State college; 3, Mrs. Jackson.

Shropshires.

Ram, 2 years and over—1 and 2, Vaughn & Fox, Lyton, Ore.; 3, Francis Kizer, Harrisburg, Ore. Yearling—1, A. J. Knollin, Soda Springs, Idaho; 3, Vaughn & Fox. Ram lamb—1 and 2, Vaughn & Fox; 3, Kizer.

Ewe, 2 years and over—1, Vaughn & Fox; 2 and 3, Felzer Bros. Yearling—1, Fox; 2 and 3, Felzer Bros. Ewe lamb—1 and 2, Fox; 3, Felzer Bros.

Champion ram and ewe—Vaughn & Fox. Get of sire—1 and 2, Vaughn & Fox; 3, Felzer Bros. Pen—1 and 2, Vaughn & Fox; 3, Felzer Bros. Flock—1 and 2, Vaughn & Fox; 3, Felzer Bros.

Shropshire association specials for flock and pen—1 and 2, Vaughn & Fox.

Hampshires.

Ram, 2 years and over—1 and 2, C. C. Beers, Lyons, Ore. Yearling—1 and 2, J. G. S. Hubbard, Monroe, Ore.; 3, William W. Niven, Manhattan, Mont. Ram lamb—1 and 2, Hubbard, 3, Nevin.

Ewe, 2 years and over—1, Hubbard; 2, Scholl; 3, Beers. Yearling—1 and 2, Hubbard; 3, Scholl. Ewe lamb—1 and 2, Hubbard; 3, Scholl.

Champion ram and eye—Hubbard. Get of sire—1 and 2, Hubbard; 3, Scholl. Pen—1 and 2, Hubbard; 3, Scholl. Flock—1 and 2, Hubbard; 3, Scholl.

Hampshire association special on flock—1 and 2, Hubbard.

Oxfords.

Ram, two years and over—1, C. P. Kizer, Harrisburg, Ore.; 2, Niven. Yearling—1 and 2, Kizer; 3, Niven. Ram lamb—1 and 2, Kizer; 3, Nevin.

Ewe, two years and over—1 and 2, Kizer; 3, Niven. Yearling—1, Kizer; 2 and 3, Niven. Ewe lamb—1 and 2, Kizer; 3, Niven.

Champion ram and ewe—Kizer. Get of sire—Kizer; 2, Niven. Pen—1, Kizer; 2, Niven. Flock—1, Kizer; 2, Niven.

Specials by Oxford Down association for ram, ewe and pen—Kizer.

Fat Sheep—Middle Wools.

Yearling wether—1 and 2, Washington State college, 3; Hubbard. Lamb—1, Washington State college; pen—1, Washington State college.

Fat Sheep—Long Wools.

Yearling wether—1, Hubbard. Lamb—1, Pryor. Pen—1, Pryor.

Champion Fat Sheep.

Champion pen of three wethers, any breed—Washington State college.

Lincolns.

Ram, 2 years and over—1 and 2, George and Archie Pryor. Yearling—1 and 3, Hubbard; 2, Pryor.

Champion ram—Pryor. Get of sire—1, Hubbard; 2, Pryor. Pen—1, Hubbard; 2, Pryor.

A Floating Island.

A section of land became detached from the shore at Dexter, Me., during recent severe storms and has become a floating island in Lake Wassoaokeag. The land bears many trees.

Want Ads

HELP WANTED—MALE 3

WANTED—MEN AT ONCE TO LEARN automobile driving and repairing in our shop. Have many jobs for our students. 215 Granite block, Spokane, Wash.

EDUCATIONAL 45

POSITIONS GUARANTEED GRADUATES OF BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog free.

TEACHERS' AGENCIES 46

SCHOOL CLERKS: WIRE OUR EXPENSE. Hazard Teachers' Agcy., Spokane.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
Notice advance in prices.
Largest factory in the west selling direct from mill to consumer.
We sell anybody, ship anywhere and guarantee safe delivery.
Send for our large illustrated catalog No. 27, mailed postpaid, without charge, on request.

5 cross panel doors $1.92
Cottage front glass doors $3.50
Cottage windows; large bottom glass, 40x40; transom glass, 40x16 .....$4.05
Spruce flour bins, 16x26x16 .....$1.50
Screen doors, 2-8x6-8, heavy galv. wire $1.50

See our prices on Frames, Moldings, Millwork, Builders' Hardware, Prepared Roofing, Plaster Board, etc.
O. B. WILLIAMS CO.
1943 FIRST AVE. SO., SEATTLE, WN

MILK ROUTE AND IRRIGATED farm for sale; 40 acres; 20 in alfalfa, balance cleared; good water right; new frame house 20x24, one and a half stories; barn 40x40; milkhouse; all fenced; 20 dairy cows; Burrell milking machine, milk team, equipment; route paying $400 monthly. Price $5000 cash. Zell Truman, Shoshone, Idaho.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave. So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

FOR SALE CHEAP—SHARPLES MILKing machine, second hand, in good running order. O. Ingebright, Earlington Gardens. P. O. Box 1021, Renton, Wash.

MISCELLANEOUS WANTED 63

STRAINED HONEY WANTED. WRITE US the quantity you have to offer. Commercial Creamery Co., Spokane, Wn.

MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES save labor, and are carried in stock by HIGGINS MACHINERY COMPANY, 312 FIRST AVE. SO., SEATTLE. Write for Catalogue.

AUTOMOBILES 114

AUTO TOPS, BUILT TO ORDER, AND repaired. N. Reeder, Dept. F, Spokane, Wn.

AVIATION 115

DENINE AIRCRAFT CO., BOX 2232 SPOkane, Wash. Flying taught, skilled help wanted. Investigate. Splendid opportunity.

STOVE REPAIRING 126

MYER S. RUBENS STOVE & FURNACE REpair Works; welding. W1009 1st., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

WASH. (D. C.) PAT. ATTY. SEE AD IN Polk's. C. H. Crawford, Spokane.

LIVE STOCK 177

FOR SALE—7 HEAD PUREBRED PERcherons, all black; 6 mares and the best 2-year-old stud colt in the country. Write me. J. S. Graves, Newberg, Ore.

A BARGAIN IN SOWS—TWO GOOD DUrocs with young pigs. L. S. Compton, Drain, Ore.

6 REGISTERED JERSEY FEMALES, 1 Foxhall bull. W. F. Lillard, Jefferson, Ore.

COOPERS 213

BARRELS AND KEGS FOR SALE — WE have just received a large shipment of hardwood barrels and kegs from Cal. Write while they last. 50-gal. bbl., $3.50 ea.; half bbl, $2.50. We also handle lard barrels, suitable for kraut, price $1.75 each, f. o. b. Portland. Panama Cooperage Co., 248 Front st., Portland, Ore.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

JOB PRINTING R75

OUR PRINTING WILL GET RESULTS for you. It will help to sell your goods and earn you profits. Send for samples and price list. G. C. Gallagher, 436 Sacramento st., San Francisco, Cal.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

OPTICIANS 462

EYES EXAMINED; GLASSES FITTED; perfect results guaranteed. Broken glasses repaired by mail. Postage paid. Dr. Sletto, Owl Drug Store, Spokane, Wn.

DR. I. M. RADABAUGH, SPECIALIST IN examining eyes and fitting glasses, 304 Jamieson bldg., Spokane, Wash.

ARCHITECTS 558

BUILDING PLANS AND ESTIMATES. L. L. Rand, The Rookery, Spokane, Wash.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 626

VETCH, CLOVER AND FIELD SEEDS.

We carry a complete line of grasses, wheat, oats, barley, spelts and other seeds too numerous to mention. Our prices are right, and will be glad to send samples and quote prices.
CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WHITE WINTER SEED WHEAT. Recleaned seed in new sacks, our own growing, $2.50 per bu., f. o. b. Salem.
RHOTEN FARM, SALEM, OREGON.

VETCH, CLOVER, TIMOTHY. Choice recleaned seeds at direct to you prices.
RHOTEN FARM, Salem, Oregon.

RECLEANED VETCH SEED, 4¼C PER pound, f. o. b. station. Large or small orders appreciated. Oak Ridge Farm, Turner, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

FARM LANDS—FOR SALE 651

320-ACRE WHEAT RANCH, 4½ MILES from R. R.; 17 miles from county seat; 270 acres under cultivation; all fenced; house and barn and plenty of water. Price $26 per acre; $4000 cash, balance easy payments.

200-acre wheat ranch, 14 miles N. W. of Ephrata, Wash.; 120 acres under cultivation; 80 acres pasture; house, barn, chicken house, root cellar and well. Price $12 per acre. Half cash, balance terms to suit purchaser. This is a snap.

30-acre irrigated ranch; 9 acres in orchard; 5 in alfalfa; good pumping plant, capacity 300 gallons per minute; plenty of water. This is a real bargain at the price —$4000; terms $1000 cash, balance easy payments.
If interested in either of these write H. D. McMillen, Ephrata, Wash.

THE FAMOUS WHEAT-GROWING DIStrict, northern Lincoln county; 2600 or 1320 acres, improved wheat or diversified ranch; spring water; dark loam soil, clay subsoil. Price $65 an acre. 390 acres, improved, in Latah Co., Idaho, 6½ miles from Moscow, 1¼ miles from electric station. Price $27,600. Farms of all sizes for sale, or exchanges made.
NORTHERN PACIFIC LAND EXCHANGE,
REALTORS,
ZIEGLER BUILDING,
SPOKANE, WASH.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay. $2000 loan in improvements, or ready-made farms. Loans of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Alan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

DO YOU WANT A GOOD FARM?
We have it—something to suit you—large or small, improved or unimproved—with stock and machinery if you want it—in Wash., Idaho or Mont. Call or write and tell us what you want. HEGE & WATKINS, 717 Paulsen bldg, Spokane, Wn.

BIG LAND OPENING—6000 ACRES A1 farm land in Snohomish county, $25 per acre; 10 yearly payments. Canneries, factories, mills, plenty of labor. Opportunity of your life. Send for literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

$30 AN ACRE WILL BUY A SPLENDID 200-acre farm, 3 miles from railroad town; high school on the land; fenced to four fields; over 100 acres in cultivation; good buildings. Long time on part. No trades. A. Z. Lucas, New Meadows, Idaho.

FARM LANDS—FOR SALE 651

THIS YEAR HAS BEEN EXtremely out of the ordinary in the length of the hot dry weather, but if you will come and look over some of our farms you will find what subirrigation means. Of course you can write and ask us, but that's not like seeing it for yourself.

You know we have improved farms in running shape, and we also have raw cut-over lands, on which we can make arrangements to put up small improvements and add the cost of them to the price of the land on long terms basis at the 6 per cent interest, which gives a chance for an ambitious person of small means to "dig in." Also we need help in clearing more land and if you want to take one of our places and spend part of your time working for us, you can do so—our work is steady and our wages are fair.

Cordwood is worth good money, and we have lands with lots of cordwood on them, like the 480 acres mentioned below, close to railroad and within the "dollar limit" of Spokane.

HERE ARE SOME IMPROVED PLACES:

30 acres, all in cultivation, fenced, some clover, timothy, alfalfa, etc., and balance of land for diversified crops. Nice improvements. Only $2250. We will take FOUR or five hundred dollars down and give ten years on the balance at 6 per cent. You will be close to school, close to good town, have daily R. F. D. This is a nice little home.

50 acres, about 45 in cultivation, all fenced, nice rustic bungalow; this place has its own water system that puts water in the house; nice large barn, chicken runs, etc. This has all community advantages. We will take $3750 for this place and give good terms.

RAW LANDS:

80 acres of willow brush land, volcanic ash soil, on county road, lies fairly level, can be easily cleared, has close neighbors. We will take $2000 for it; $200 cash, balance ten years, 6 per cent, and if you want a little house, we will build it and add the cost of it to the price of the land and give you the advantage of long time.

480 acres of cordwood land, no improvements; close to loading station, in good range; the cordwood should pay for it; $12.50 per acre.

We have most anything you want along this line. Ask for folder.

MILAN FARMS DEVELOPMENT COMPANY.
1322 Old National Bank Bldg.
or
ALLIN REALTY COMPANY.
"REALTORS."
408 West Sprague Ave.
Tel. Main 2750.
Spokane, Washington.

CUT-OVER-LANDS.
15 to 25 miles n. e. of Spokane; rich soil; abundance of soft spring water; good dairy and stock country; above frost; fine fruit; free lumber and use of stump puller. Price $10 and $25 per acre; 10 years' time. Write for book to owner. Consolidated Land Co., Elk, Wash., or call 109 Stevens st., Spokane.

IRRIGATED LANDS—For Sale 663

IRRIGATED FARM LANDS.
ALFALFA LANDS, under government irrigation; abundant water; low altitude; rail and water transportation to coast markets; good schools, good roads; products alfalfa, corn, cream, hogs, honey, fruits, vegetables; long growing season; unimproved land $30 to $60 per acre; improved $100 to $250. Write for further information and literature. Dodd & Knapp, Hermiston, Ore.

TO EXCHANGE—REAL EST. 705

A GOOD TRADE.
88 lots in a live railroad and manufacturing town in the Puget Sound country to trade for improved or unimproved property. The town is a division freight point and handles all freight from the east as well as north and south, being a transfer point. The lots are only a short distance from the center of town and surrounded on all sides by good homes. They are level and city water and electric light are in. Streets have been graded through the property and a paved street runs through the center of it. Owing to other interests the owners are not able to give this property the attention it needs. This is a good opportunity as an investment, as houses can be readily rented. The price is $25,000 with a mortgage of $4000 running three years. The mortgage has a release clause providing for the release of any lot on payment of $70. If you have something to trade that matches this let us hear from you.
A. H. REID & CO.
NEW YORK BLOCK, SEATTLE, WASH.

MAXWELL

Most Miles per Gallon

Most Miles on Tires

All You Can Ask in a Car —the Maxwell

The day's work is done.

The lamps shine cheerily. All is quiet and serene in the home.

Now—let's sit down and talk about that motor car you want to buy.

You are exacting in your ideas about motor cars. You demand mechanical efficiency, economy, and a smart appearance.

That is why we affirm that the Maxwell is *your* car, above all others.

Mechanical efficiency! We are pleased and proud to discuss Maxwell efficiency with you.

The Maxwell builders have only one chassis model, which is never fundamentally changed, but constantly improved and refined.

Four years of concentration by one of the largest organizations in the motor car business has brought the one Maxwell model to the pinnacle of mechanical perfection.

The engine is without a peer. The smooth clutch runs in oil. The perfected transmission is efficient and trouble-proof. The mighty axles laugh at strains of the road.

This mechanical efficiency bears fruit in economy of operation. Thousands of Maxwell owners run their cars at a cost of $6 to $8 a month.

This year we have lengthened the wheelbase six inches and have put in 6-inch instead of 3-inch steel frames.

But we have not added one pound to the lightweight Maxwell.

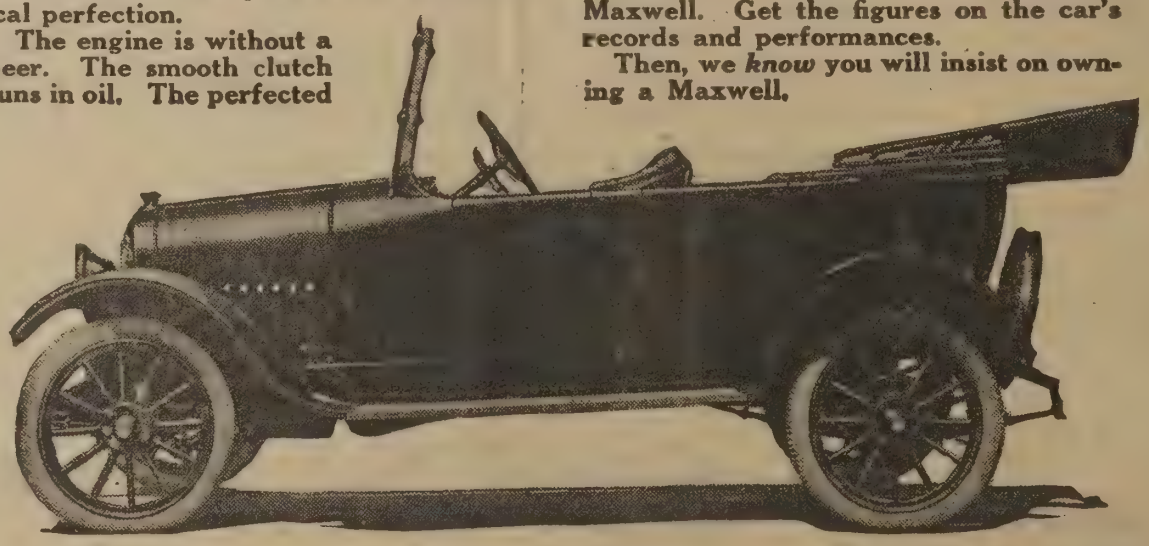
And, having perfected the Maxwell mechanically, we are now enhancing and perfecting its beauty.

This year the windshield is sloped, the body lines more graceful, and the body roomier.

The Maxwell has the same style today as the up-to-date models of the highest priced cars.

Visit your nearest dealer. See the Maxwell. Get the figures on the car's records and performances.

Then, we ***know*** you will insist on owning a Maxwell.



Touring Car $745

Roadster $745
Berline $1095
Sedan $1095

All prices f. o. b. Detroit

Maxwell

Motor Sales Corporation

Write Today for Catalog NW

Detroit Michigan

For a Rattling Good Story, Read "The Barrier"—Page 5

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 41. OCTOBER 11, 1917. ** WEEKLY.

Ready to Buy Wheat

Houser Announces U. S. Buying Plans

M. H. Houser, northwestern agent of the United States food administration, makes the following announcement:

The Food Administration Grain Corporation is now ready to purchase and pay for wheat delivered in approved licensed warehouses, elevators and docks as per schedule listed below:

Astoria—Port of Astoria.

Portland—Albers dock, Albina dock, Globe elevator, Irving dock, Montgomery dock No. 2, Municipal dock No. 1, Municipal dock No. 2, North Bank dock, Pacific Coast Elevator company dock, Mersey dock.

Seattle—Albers dock, Port of Seattle, Smith's Cove elevator, West Seattle elevator.

Tacoma—Balfour dock, Milwaukee dock, Northwestern dock, Northern Grain & Warehouse company.

Note—These may be changed or added to as conditions require.

Wheat Grades Fixed.

"Wheat shall be purchased on basis of federal grades, Nos. 1, 2, and 3 wheat.

"No. 4, No. 5, sample wheat and mixed wheat will be handled by sample on merits.

"We will not buy wheat that has been treated, graded or scoured.

"Will appoint this week an advisory committee to determine the value to be placed on all wheats not covered by 1, 2 or 3 grades.

"Payment will be made here on presentation of separate invoice covering receipt and official weight and grade certificates. Be sure and invoice each car separately.

"Grade certificates must be signed by a licensed federal inspector and graded in accordance with the United States grain standards act.

"An allowance of the 4 1-2 cents per bushel will be made on sacked wheat where sacks are in good condition and with the prevailing allowance for bad order and worthless sacks.

"All docks upon which wheat is stored must maintain a day and night watchman. The premises must be kept reasonably well lighted at night and free from all inflammable, combustible, or hazardous material or merchandise.

"The Food Administration Grain Corporation reserves the right to direct and control the distribution of wheat direct to the mills or to any of the docks, that are now or later designated."

Buy a Liberty Bond

What it would mean to the farms of America if the United States were to submit to the demands of Germany that led to the present war is the argument used forcefully by Secretary William G. McAdoo of the United States treasury department to induce the farmers of the country to subscribe liberally for bonds in the second Liberty loan issue now being offered.

The German demand was that the United States cease shipping foodstuffs to England and France, and Secretary McAdoo says if that demand had been heeded, or if Germany were yet to force this country to cease such exportation, wheat and corn and potatoes and live stock would be drugs on the market.

What It Would Mean to the Farms.

"Should we submit to the kaiser's demand," says the secretary of the treasury, "by one stroke of his pen he would bring about more destruction on our farms and in our factories and mines than all the armies and navies of the German empire could do in 50 years.

"I want the farmers of this country to take a large part of this Liberty loan. They have been benefited by the prosperity of this time, and I thank God they have, because the farmer never has got any too much. But he has derived a proper benefit from the prosperity of the nation. He is as patriotic as any other class of people, but the value of these loans has not been brought to his attention."

Continued on page three

Big Cut in Price to Farmers.

You are naturally interested in saving money; and in helping to add to the available supply of labor in this state. You can do both of these things by acting on the unusual offer outlined in this issue. **See pages 16 and 17.**

Costs Half as Much

To Eat Bread in England as in America

The National Association of Master Bakers held its annual convention September 20 at Chicago, and an address by William C. Edgar, editor of the Northwestern Miller, gave the bakers the sort of talk they wanted—an appeal to class prejudices against the farmer, dressed up to mislead the consumer into the belief that the wheat grower is responsible for the high price of bread.

"It has been asked of the bakers," said this speaker, "that they perform the miracle of producing cheap bread from expensive wheat."

The speaker ridiculed the assertion by Dr. Charles R. Van Hise, president of the University of Wisconsin, that the "workingman of this country is paying more today for his loaf than the English or French workingman."

The Farmer has conclusive proof that Dr. Van Hise was right; that first-class wheat bread, not war mixtures, is selling in Great Britain at just half the price that is charged the American workingman and in some cases at less than half.

The proof consists of the new maximum prices of flour, wholesale and retail, and bread as fixed by the British food controller. We find this news in a London news letter to the New York Journal of Commerce, a daily journal published especially for commercial readers. We quote:

"On and after September 17 wheat meal and flour manufactured in the United Kingdom will be sold wholesale at 44s 3d per sack of 280 pounds at the mill door, subject to a discount of 6d a sack for cash within seven days. Imported flour will be sold at higher prices according to quality. The price of 44s 3d has been fixed with a view to allowing the retailer a reasonable, and not more than a reasonable, profit. If it is found that in practice the profit is unreasonably high or unreasonably low the wholesale price of flour will be varied."

A shilling is approximately 24 cents in American money. The British government wholesale price of 44 shillings 3 pence is therefore $10.62 for 280 pounds of wheat flour, or $7.60 for an American barrel of 200 pounds.

This brings us to the British retail prices:

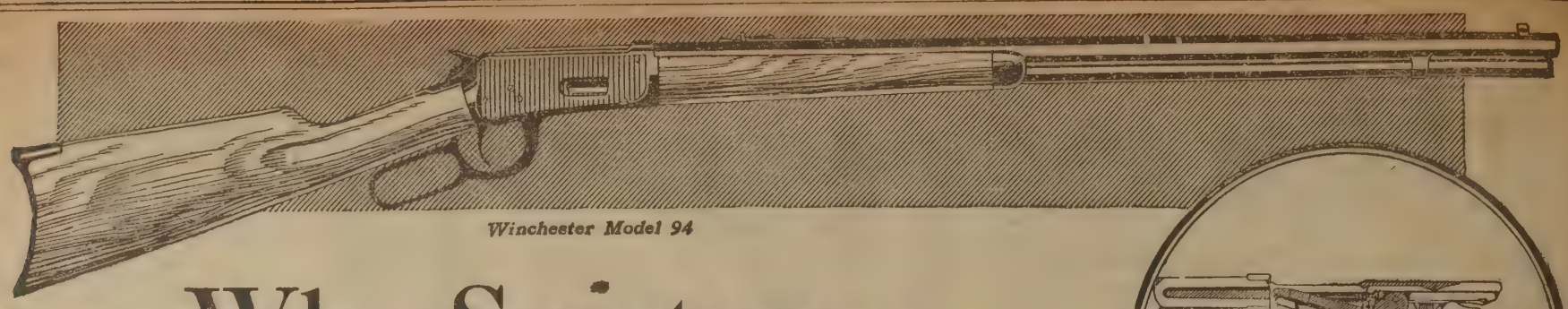
The maximum retail prices for flour are to be:

Sack of 280 pounds or half sack of 140 pounds, 50s per sack (sack charged for extra).

Seven pounds or more, but less than half a sack, 2s 3d per stone of 14 pounds.

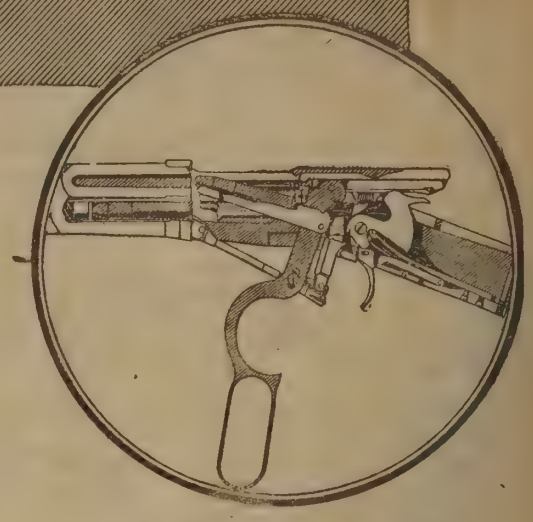
Continued on page eleven

For One of the Big Things in Connection With the Dairying Industry, Read the Article on Page 3 Concerning the Action of the Big Milk Condenseries of the Country



Winchester Model 94

Why Sportsmen choose the "94"



Strong, smooth action, few working parts of the Model 94

The Winchester Model 94 repeating rifle is chosen by more sportsmen than any other because of its wide variety of uses.

The Model 94, as nearly as any rifle on the m rket, is an all-'round rifle.

Deer hunters choose it because it is a sure game-getter within the range that most shots at deer come.

Campers and canoe hunters take it because it is accurate even for birds, makes very little noise, and will stand all sorts of rough handling.

New shooters prefer it because of its lightness and very slight recoil.

Farmers demand it because they can get it in the exact caliber they need, at a low price, and can buy the ammunition for it anywhere that firearms are sold.

Because of this wide adaptability the Winchester Model 94 is the gun for the one-gun hunter; but for the same reason it is also a great favorite with sportsmen who own many guns.

The Winchester Model 94 is furnished in a great variety of styles, in five different popular calibers, (.25-35 and .30 Winchester, .32 Winchester Special, .32-40 and .38-55 cartridges), and in an extra lightweight model (weight about 7½ lbs.). For the high power cartridges this rifle is fitted with a nickel steel barrel.

The barrel *is* the gun

Men who know guns realize that the accuracy and durability of a rifle lie in the barrel. On the quality of the barrel depends the quality of the gun. There is absolutely no difference in the standard of quality of the barrels on the highest and lowest priced Winchester guns. With Winchester the barrel *is* the gun and the s ngle standard of quality has been attained only by the most unremitting attention to the boring, finishing and testing of the barrel.

The Winchester barrel

The barrel of the Winchester Model 94 has been bored to micrometer measurements for the cartridge it is meant to shoot. In rifling the barrel, the exact twist that is necessary to produce the best results with a given cartridge has been mathematically calculated and is verified by exhaustive practical tests before leaving the factory.

A bullet fired from a Winchester barrel spins point on with unerring accuracy to the limit of its range. The Bennett Process, used exclusively by Winchester, gives the Winchester barrel a distinctive blue finish that, with proper care, will last a lifetime.

What (W) means

This mark on the barrel means *Viewed and Proved Winchester.* This stamp stands for Winchester's guarantee of quality, with 50 years of the best gun-making reputation behind it.

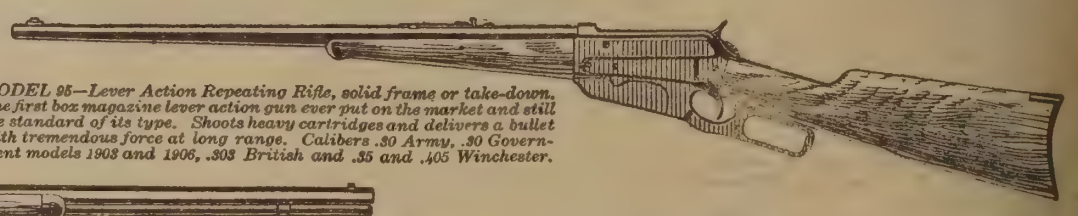
Every rifle that bears the name "Winchester" and that is marked with the Winchester Viewed and Proved stamp has been fired many times for accuracy and smooth action, and with excess loads for strength. At every stage of Winchester manufacture, machine production is supplemented by human craftsmanship. It is a *test and adjustment process.*

It is this thoughtful care in manufacturing that has produced in the Model 94 a rifle of unsurpassed game-getting qualities and that has made it the favorite with hunters the world over.

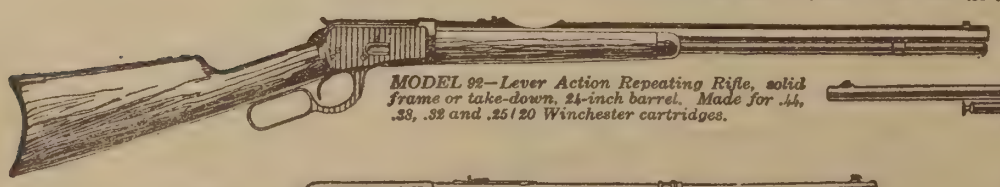
Write for details of Winchester rifles, shotguns and ammunition

The Winchester catalog is an encyclopedia on rifles, shotguns and ammunition. Every hunter should have one. It gives detailed specifications of the Model 94 and describes at length the principles on which every one of the world famous Winchester rifles and shotguns is built. Write today. We will mail you a copy free, postpaid.

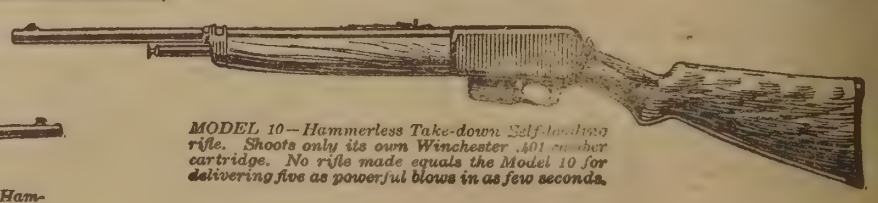
WINCHESTER REPEATING ARMS CO.
Dept. W. T.-2. New Haven, Conn.



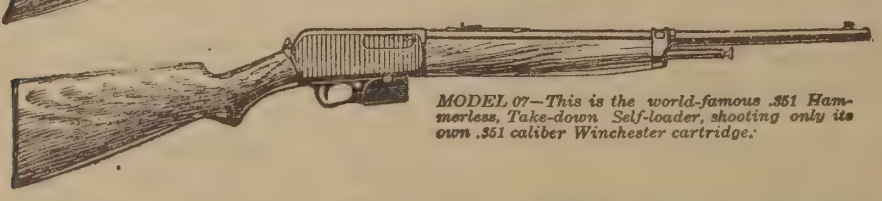
MODEL 95—Lever Action Repeating Rifle, solid frame or take-down. The first box magazine lever action gun ever put on the market and still the standard of its type. Shoots heavy cartridges and delivers a bullet with tremendous force at long range. Calibers .30 Army, .30 Government models 1903 and 1906, .303 British and .35 and .405 Winchester.



MODEL 92—Lever Action Repeating Rifle, solid frame or take-down, 24-inch barrel. Made for .44, .38, .32 and .25/20 Winchester cartridges.



MODEL 10—Hammerless Take-down Self-loading rifle. Shoots only its own Winchester .401 caliber cartridge. No rifle made equals the Model 10 for delivering five as powerful blows in as few seconds.



MODEL 07—This is the world-famous .351 Hammerless, Take-down Self-loader, shooting only its own .351 caliber Winchester cartridge.

WINCHESTER

World Standard Guns and Ammunition

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 41 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF October 11, 1917

Buy a Liberty Bond!

Ten Million People Must Share Big Issue

(Continued from page one.)

A nation-wide campaign to run four weeks is now on for the selling of the second Liberty loan, which is authorized for the further finance of the war against Prussianism. The government has appropriated the amounts each district is to raise and is making a systematic campaign to secure the entire amount before the expiration of the period.

The total is to be not less than $3,000,000,000, with a maximum of $5,000,000,000. The first Liberty loan was for $2,000,000,000, but the people oversubscribed it to such extent that more than $3,000,000,000 was subscribed, and it is expected that the present issue of bonds will far exceed the $3,000,000,000 that has been set as a minimum.

The sale of bonds is to be by federal reserve bank districts, and the San Francisco district, in which the northwest is included, is allotted a minimum of $210,000,000, or a maximum of $350,000,000. In each smaller district the organization is being made effective for reaching into every community and every home of every community where small bonds may be sold. As was the case with the first Liberty loan, bonds are issued as low as $50, so that hundreds of thousands of small investors may play a real part in financing the government in its warfare against inhumanity. It is the government's hope that at least 10,000,000 people will buy bonds. Some of the subscriptions of wealthy individuals are running as high as $10,000,000 each, but it is the desire of the administration that as many small bonds be sold as possible so that the largest number of people possible may become personally a part of the national war machinery.

Makes Speaking Tour.

Secretary McAdoo is now on a nation-wide tour speaking in behalf of the loan. He is now in the west, having been in the northwest this week. His largest audience in the west so far, and probably the largest single audience he will address outside the largest cities, was at American Lake, where he talked to more than 30,000 soldiers of the new national army the other day.

The bonds will bear four per cent interest, payable semi-annually. They run for 25 years unless the government desires to redeem them, or part of them, after 10 years.

Not only is it greatly to be desired that the bonds be quickly subscribed for, but it is one very real way for the masses of American people to help win the war. The eyes of the world are upon this Liberty loan. It should succeed overwhelmingly to convince doubters at home and abroad that America is out to win.

Explains Land Bank

Things It Can and Things It Can Not Do

Leonard G. Robinson, president of the federal land bank at Springfield, Mass., delivered an address before the recent convention of the American Bankers' association at Atlantic City that was a model of candid, constructive, educational discourse. While he frankly criticized the banking interests for their short-sighted opposition to the land bank system, he avoided abuse throughout his entire discourse.

Their open hostility, he declared, not only deprived them of the opportunity of shaping the course of the legislation, but their most reasonable suggestions were impregnated with the taint of suspicion. The banks had thrown themselves out of court in so far as anything pertaining to rural credits was concerned.

While there were exceptions to the rule, bankers generally had opposed this beneficial legislation on the contention that their own facilities adequately supplied our agricultural industry with all the credit that it needed, or at least all that it was entitled to.

As proof that the old banking machinery did not provide sufficient credit for the farmers, President Robinson showed, from reports of the interstate commerce commission, that while the total investment in the railroads of this country is $17,000,000,000, the bonded indebtedness of these roads is $12,000,000,000, or 65 per cent.

On the other hand the physical valuation of the farms of the country is $40,000,000,000, while the total indebtedness on them has been estimated at $6,000,000,000, that is only 19 per cent of their value.

The speaker refuted the persistent assertion that the enactment of the federal farm loan act was class legislation because the government subscribed to the capital stock of the land banks. He reminded his audience that—

"The same provision, it must be remembered, was included in the federal reserve act, the only difference being that the possible maximum subscription in the case of the land banks was $750,000 for each bank, while in the case of the reserve banks it was $4,000,000, or nearly five and a half times as much.

"If the federal farm loan act is class legislation because it was directly de-

(Continued on page twenty-two.)

The War Brought to Every Home

October 21-28 to Be Special Food Conservation Week

Pledge Card for United States Food Administration

If you have already signed, pass this on to a friend.

TO THE FOOD ADMINISTRATOR:

I am glad to join you in the service of food conservation for our nation and I hereby accept membership in the United States Food Administration, pledging myself to carry out the directions and advice of the Food Administrator in my home, in so far as my circumstances permit.

Name .....

City ..... State .....

There are no fees or dues to be paid. The food administration wishes to have as members all of those actually handling food in the home. Any one may have the home card of instruction, but only those signing the pledge are entitled to membership window cards, which will be delivered upon receipt of the signed pledge.

The war will be brought to every home in this country.

"Food will win the war," is the battle cry of the nation for the one week, the slogan in all of the 48 states that are to bear the brunt of the war for democracy.

The message is to be carried direct to every one of the 22,000,000 homes in the United States.

The campaign will put every one of the 22,000,000 homes on the Hoover conservation basis.

Multiply by millions the small amount each individual is asked to save through substitution and avoidance of waste and the whole problem is solved.

The foods to be saved are:

WHEAT,
PORK,
BEEF,
DAIRY PRODUCTS,
SUGAR.

The foods to be used generously are:

FISH,
POULTRY,
VEGETABLES.

Herbert C. Hoover, United States food administrator, in the following rigorous statement inaugurates the food pledge campaign:

"The week of October 21 to 28 has been selected for a nation-wide campaign to complete the enrolment of our forces in conservation of our food supply. The harvest is now in hand and we can measure the world's resources. The available supplies of this harvest are less than last year. The demand upon us is greater than last year, and from the last harvest we exported more than we could really afford. We can only meet the call upon us next year by the savings and by substitution of commodities which can not be transported.

"The allies are our first line of defense. They must be fed and food will win the war. All Europe is on rations or restricted supplies. Only in our country is each one permitted to judge for himself the duty he owes his country in food consumption, although the world depends upon us to guard and provide its food supply. This is a duty of necessity, humanity and honor. As a free people we have

(Continued on page eleven.)

Condenseries Voluntarily Submit to Price Control by Government

The sensational development of the past week was the action of the big canned milk interests of the country in voluntarily putting themselves under the protection of Uncle Sam's price-controlling umbrella.

At the conference and agreeing to the arrangement were the following western manufacturers:

Alpine Evaporated Cream Co., San Francisco.

Carnation Milk Products Co., Seattle.

Colorado Condensed Milk Co.

Federal Condensed Milk Co., Seattle.

Pacific Creamery Co., Phoenix, Ariz.

Scio Condensed Milk Co., Scio, Ore.

Utah Condensed Milk Co.

Western Condensed Milk Co., Newberg, Ore.

Manufacturers of canned milk representing 95 per cent of the entire industry in the United States, in conference with the United States food administration, agreed voluntarily and unanimously to submit their business to the supervision of the food administration during the period of the war and to take no war profits; also to make the profit on their goods sold to the public as same as on goods sold to the army and navy.

Since the first of May they have been furnishing supplies to the army and navy at a price and on a basis of profit determined by the federal trade commission. This they obligated themselves to continue throughout the war, and they further agreed to supply the commission for relief in Belgium and the American Red Cross at the same price as that made to the government.

The milk men expressed their willingness to limit the price to the public so as not to return to the industry a greater profit than was received before the war, during which period a profit of 30 cents a case on evaporated milk and 40 cents a case on condensed milk was considered fair. The manufacturers said they had found difficulties in the increased price of fresh milk and the high cost of tin plate which had forced the increased prices during the last 18 months. The only way in which they can limit the cost to the public is through the limitation of profits, since they can not control the cost of the raw materials upon which they depend.

HOLSTEINS ARE SOLD.

Nearly Sixty Head Go at Yakima.

Fifty-nine head of Holstein cattle were sold at the recent sale of the Yakima Valley Holstein Breeders' association, averaging about $160 each. The sale totaled nearly $10,000.

A heifer calf consigned by E. B. Marks brought the highest price, $500, while $450 was paid for an animal from the herd of Todd & Sons by D. B. McKelheer. S. V. Butchart of Granger bought the five-hundred-dollar animal. Messrs. Gue and Cranke, auctioneers, conducted the sale.

Young Folks Harvesting.

Kennewick Courier-Reporter: The opening enrolment in the high school was only 80 or only half of the enrolment of 160 last year. Enrolment in the two eighth grades is likewise light, buth the seventh is up to the usual opening enrolment. The shortage in the high school and the eighth grade is due to the urgent need for workers in the fruit harvest. In many instances parents of high school pupils have called up to say that their children will be in school just as soon as they can possibly be spared from work in the orchards.

Dairy Show Date Changed.

Announcement has been made of a change in the date of the Pacific National Dairy show at Portland from November 16-23 to November 7-15. This change will permit breeders to appear at both the dairy show and the Pacific International Live Stock show, which will be held the week of November 19-24.

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Is a Model to Any Fair of Its Size

Western Washington Fair Closes One of the Most Successful Exhibitions in Its History

By PAUL E. TRIEM.

The model fair of all western Washington closed its gates October 7, after one of the most successful exhibitions in its history. The Puyallup people have every reason to be proud of this big institution, which for promptness and courtesy and up-to-the-minute service to the public might serve as a model to any fair of its size in the United States.

The date selected for this year's fair, coming practically two weeks later than usual, proved an innovation of merit, in that it enabled a number of people who ordinarily are not able to take in the fair without considerable personal sacrifice to attend one or two days without inconvenience. This class included school children and hop and berry pickers, all of whom are fully occupied earlier in the fall.

The largest and most important single exhibitor, in all probability, was the Washington State college, with its auxiliary organization, the Western Washington experiment station. Professor Linklater's exhibits are always managed in such a way as not only to attract attention, but to reward it with something substantial in the way of useful information. Numerous wall cards displayed boiled-down information on every branch of the farming and gardening business, while various models showed just how some of this information was being applied at the station farm. A model of a potato pit summed up the information on potato storage presented on various wall cards. A cold frame and long rows of vegetable and grain exhibits carried out this plan of practical teaching in other departments. Professor Shoup's poultry department was one of the features of the fair. The comparative egg-preserving tests, showing results secured by the lime water, water glass and grease preservative methods caught the eye of the thrifty housewife and also of her husband, while a model of the Pupallup laying house and a full-size oat sprouter of the type used at the experiment station drew a steady fire of questions from poultrymen and farmers.

The Dairy Extension department maintained, as part of this year's exhibit, one of those "fatal comparisons" which do so much to make practical and convincing the teaching of scientific dairymen. Ranged side by side were a number of productive and non-productive cows, varying from "Bonnie," who produced 446 pounds of butterfat at a cost for feed of $74.45, to "Runt," who consumed $49.56 worth of food and returned 98 pounds of butterfat. In this same display also appeared the record dairy cow for this state for the year 1916, E. L. Brewer's "Emanous Annie West." Her feed bill came to $102.34, and for this she gave Mr. Brewer slightly over 723 pounds of butterfat. This display was completed with a series of wall cards and exhibits bearing on the production of forage and grain food in western Washington. The entire display was not only highly creditable to the extension department, but was of dollars-and-cents value to the spectators.

In the cattle department, the Holstein entries of the Carnation Farms had things all to themselves among the black and whites, while E. L. Brewer's Jerseys and A. L. Gile's Chicona Farm Guernseys did much to impress the public with the merits of the Channel Island breeds. The only showing of beef breeds was made by the state college and by George Bertrand, whose Olequa stock ranch Shorthorns were as sturdy a bunch as is often entered by one man.

The swine barn was filled to capacity. C. W. Shumate of Tumwater made a strong showing with his Berkshires and Poland Chinas, while W. F. Yeck of Edgewood, with O. I. C.s; the Pacific Meat compnay of Seattle, with Durocs and Hampshires; Morrill Delano, Puyallup Boys' Pig club member, and the Olequa stock ranch of Castle Rock, both of the latter with Berkshires, helped round out the show. M. P. Eggers, route 3, Tacoma, entered a few Toggenberg goats and the state college showed two pens of sheep, but it was apparent that western Washington is not at present a wool or mutton producing district, in the broadest sense.

In the horse barn William Tracy of Kennewick, with his Percherons, and the Ruby stock farm of Portland, with Percherons, Shires and Belgians, had things pretty much to themselves. Both breeders put up a good showing of heavy horses, with the Portland entries particularly noticeable both for numbers and quality.

In the poultry department, a tendency toward diversity, which has been growing for the last few seasons, was more than ever in evidence this year. There was a time when a poultry show in western Washington was made up of about 90 per cent White Leghorns. The little white egg machines are still deservedly popular, but they are forced in most modern shows to divide honors with the heavier breeds. Probably Leghorns of various colors were in the majority at Puyallup this year, but there were many entries among the Rocks and particularly among the Wyandottes and Rhode Island Reds.

In fruit and vegetables, especially the former, the Puyallup fair would prove a surprise to many people who do not look upon this side of the state as a really serious contender for honors along these lines. Two displays in particular—those of Alderton and of Puyallup Heights—would rank well among community displays at any fair, while Mr. Howard's apple display was up to his usual high standard.

Among the miscellaneous features on the fair program, the trotting and running races, airplane flights and fine band music, taken in connection with the extra fancy brand of golden sunshine and outdoor weather which President Paulahmus had on tap for his visitors, combined to keep everybody busy and happy. Many of the displays, in conformity with the spirit of the times, took on a military tone, while groups of soldiers, both American and Canadian, were scattered about over the grounds. Both the Canadian and United States government maintained enlistment booths at the fair.



The upper left picture shows one of the prize horses ready to enter the show ring at the Southwest Washington fair. The lower left picture is a section of the Y. M. C. A. booth. The Multiple Egg tester was an exhibit which attracted much attention at the fair.

Dairy Stock Bring $33,000

Three at Washington Sale Bring $1000 Each

Approximately 120 head of registered Holsteins were sold for approximately $33,000 at the combination Carnation-Hazelwood sale, in the Carnation Sales pavilion, Kent, Wash., October 3 and 4. Breeders and farmers from many parts of the northwest attended the sale, one result of which will be a wider distribution of choice breeding animals throughout this part of the country.

Auctioneer George A. Gue, in his opening address to the assembled buyers, declared that never before has the world been so depleted of good registered breeding stock. If the war continues, he said, American farmers will find it difficult to feed their own countrymen and at the same time to furnish their share of food for the men across the water. With the closing of the war, Europe must look to the United States for breeding stock with which to replenish her wasted herds.

One of the big features of the sale came during its closing minutes, when a calf, donated by John L. Smith to the Red Cross, was auctioned off half a dozen times in about as many minutes. G. J. Keda, a Japanese farmer living near Kent, finally secured the calf, having bid it in and donated it back to the Red Cross a couple of times. The total proceeds from this source were $500, which went to the Kent Red Cross.

The record price for the sale went to John L. Smith's "Hazelwood Alban Ormsby," a splendid young cow which brought $1325.00 from E. A. Stuart. Henry Lindley of Seattle was one of the most persistent bidders, and to him were knocked down more than 30 head of Carnation stock. The average price

(Continued on page twenty-nine.)

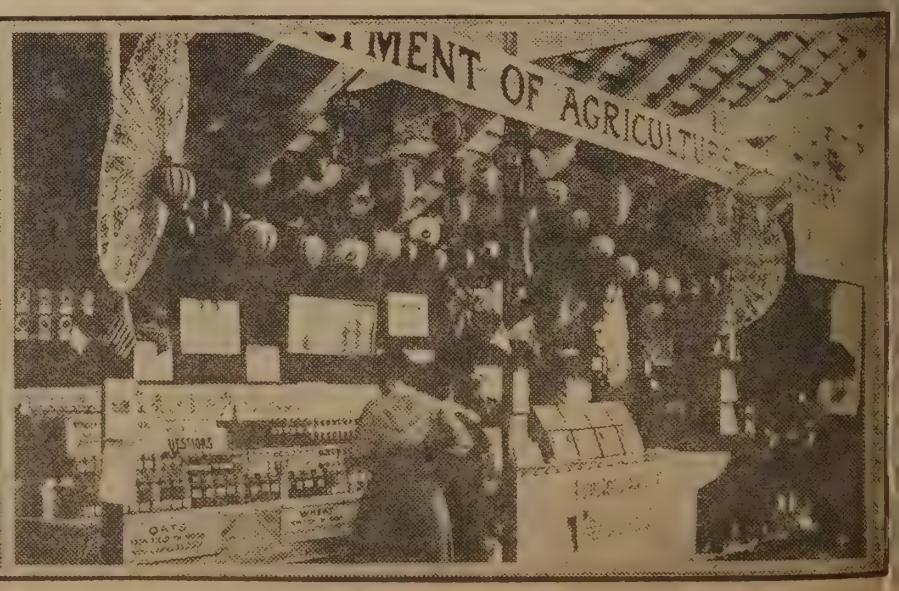
Win Prizes at Palouse.

In the department of farm products at the Palouse Harvest Festival the following persons were given prizes by the judgs, E. F. Gaines, cerealist at W. S. C., and J. H. Stephens, W. S. C. instructor in botany:

R. T. Cox, M. Jacobson, C. J. Dilts, Ray Hanson, J. R. Crow, Dean Ickles, Mrs. Charles Goetz, C. W. Deerkop, James Milton, Wesley Goddard, J. A. Hayton, W. James, Mrs. Ernestine J. Rohlf, Frank Daily, S. T. Cox, I. H. Turnbow, George Ickles Jr., J. W. Shreve, J. W. Johnson, O. E. Randall, Andrew Lynd, W. Wery, E. R. Wilcox, T. J. Farris, A E. Alden, C. A. Hammond, F. E. Cash, O. E. Lynch, O. C. Butterfield, Freeman Cash, T. H. Farnam, Pearl Curtis, Paul Bockmier Jr., Frank Tempero.



President Paulhamus always provides an abundance of clean side shows.



Part of the agricultural department display at the Southwest Washington fair.



THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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CHAPTER I.

The Last Frontier.

MANY men were in debt to the trader at Flambeau, and many counted him as a friend. The latter never reasoned why, except that he had done them favors, and in the north that counts for much. Perhaps they built likewise upon the fact that he was ever the same to all, and that, in days of plenty or in times of famine, his store was open to every man, and all received the same measure. Nor did he raise his prices when the boats were late. They recalled one bleak and blustery autumn when the steamer sank at the lower ramparts, taking with her all their winter's food, how he eked out his scanty stock, dealing to each and every one his portion month by month. They remembered well the bitter winter that followed, when the specter of famine haunted their cabins, and when for endless periods they cinched their belts and cursed and went hungry to sleep, accepting, day by day, the rations doled out to them by the grim, gray man at the log store. Some of them had money belts weighted low with gold washed from the bars at Forty Mile, and there were others who had wandered in from the Koyukuk with the first frosts, foot-sore and dragging, the legs of their skin boots eaten to the ankle, and the taste of dog meat still in their mouths. Broken and dispirited, these had fared as well through that desperate winter as their brothers from up-river, and received pound for pound of musty flour, strip for strip of rusty bacon, lump for lump of precious sugar. Moreover, the price of no single thing had risen throughout the famine.

Some of them to this day owed bills at Old Man Gale's, of which they dared not think; but every fall and every spring they came again and told of their disappointment, and every time they fared back into the hills bearing another outfit, for which he rendered no account, not even when the debts grew year by year, not even to "No Creek" Lee, the most unlucky of them all, who said that a curse lay on him



Necia and Captain Burrell.

so that when a pay-streak heard him coming it got up and moved away and hid itself.

There were some who had purposely shirked a reckoning in years past, but these were few, and their finish had been of a nature to discourage a similar practice on the part of others and of a nature, moreover, to lead good men to care for the trader and for his methods. He mixed in no man's business, he took and paid his dues unfalteringly. He spoke in a level voice, and he smiled but rarely. He gazed at a stranger once and weighed him carefully, thereafter his eyes sought the distances again, as if in search of some visitor whom he knew or hoped or feared would come. Therefore, men judged he had lived as strong men live, and were glad to call him friend.

This day he stood in the door of his post staring up the sunlit river, absorbing the warmth of the Arctic afternoon. The Yukon swept down around the



Necia and Her Foster Father, John Gale.

great bend beneath the high, cut banks and past the little town, disappearing behind the wooded point below, which masked the upcoming steamers till one heard the sighing labor of their stacks before he saw their smoke. It was a muddy, rushing giant, bearing a burden of sand and silt, so that one might hear it hiss and grind by stopping at its edge to listen; but the slanting sun this afternoon made it appear like a boiling flood of molten gold which issued silently out of a land of mystery and vanished into a valley of forgetfulness. At least so the trader fancied, and found himself wishing that it might carry away on its bosom the heavy trouble which weighed him down and bring in its place forgetfulness of all that had gone before. Instead, however, it seemed to hurry with news of those strange doings "up-river," news that every downcoming steamboat verified. For years he had known that some day this think would happen; that some day this isolation would be broken; that some day gerat hordes of men would overrun this unknown land, bringing with them that which he feared to meet, that which had made him what he was. And now that the time had come he was unprepared.

The sound of shouting caused him to turn his head. Down-stream, a thousand yards away, men were raising a flagstaff made from the trunk of a slender fir, from which the bark had been stripped, heaving on their tackle as they sang in unison. They stood well out upon the river's bank before a group of well-made houses, the peeled timbers of which shone yellow in the sun. He noted the symmetrical arrangement of the buildings, noted the space about them that had been smoothed for a drill-ground, and from which the stumps had been removed; noted that the men wore suits of blue, and noted, in particular, the figure of an officer commanding them.

The lines about the trader's mouth deepened, and his heavy brows contracted.

"That means the law," he murmured, half aloud, while in his voice was no trace of pleasure nor of that interest which good men are wont to show at sight of the flag. "The last frontier is gone. The trail ends here!"

He stood so, meditating somberly till the fragment of a song hummed lightly by a girl fell pleasantly on his ears, whereupon the shadows vanished from his face and he turned expectantly, the edges of his teeth showing beneath his mustache, the corners of his eyes wrinkling with pleasure.

The sight was good to him, for the girl approaching down the trail was like some wood sprite, light-footed, slender and dark, with twin braids of hair to her waist framing an oval face colored by the wind and sun. She was very beautiful, and a great fever surged up through the old man's veins till he gripped the boards at his side and bit sharply at the pipe between his teeth.

"The salmon-berries are ripe," she announced, "and the hills back of the village are pink with them. I took Constantine's squaw with me and we picked quarts and quarts. I ate them all!"

Her laughter was like the tinkle of silver bells. Her head, thrown back as she laughed gayly, displayed a throat rounded and full and smooth, and tanned to the hue of her wind-beaten cheeks. Every move of her graceful body was unrestrained and flowing, with a hint of Indian freedom about it. Beaded and trimmed like a native princess, her garments manifested an ornature that spoke of savagery, yet they were neatly cut and held to the pattern of the whites.

"Constantine was drunk again last night, and I had to give him a talking to when we came back. Oh, but I laid him out! He's frightened to death of me when I'm angry."

She furrowed her brow in a scowl—the daintiest, most ridiculous pucker of a brow that ever man saw—and drew her red lips into an angry pout as she recounted her temperance talk till the trader broke in, his voice very soft, his gray-blue eyes as tender as those of a woman:

"It's good to have you home again, Necia. The old sun don't shine as bright when you're away, and when it rains it seems like the moss and the grass and the little trees was crying for you. I recken everything weeps when you're gone, girl, everything except your old dad, and sometimes he feels like he'd have to bust out and join the rest of them."

He seated himself upon the worn spruce-log steps, and the girl settled beside him and snuggled against his knee.

"I missed you dreadfully, daddy," she said. "It seemed as if those days at the Mission would never end. Father Barnum and the others were very kind, and I studied hard, but there wasn't any fun in things without you."

"I reckon you know as much as a priest now, don't you?"

"Oh, lots more," she said, gravely. "You see I am a woman."

He nodded reflectively. "So you are! I keep forgetting that."

Their faces were set toward the west, where the low sun hung over a ragged range of hills topped with everlasting white. The great valley, dark with an untrodden wilderness of birch and



Necia and the Gale Children.

spruce and alder, lay on this side, somber and changeless, like a great, dark-green mat too large for its resting place, its edges turned up towards the line of unmelting snow. Beyond were other ranges thrust skyward in a magnificent confusion, while still to the farther side lay the purple valley of the Koyukuk, a valley that called insistently to restless men, welcoming them

(Continued on page twenty-three.)

Producer Gets 70 Per Cent

British Dairyman's Share of the Consumer's Money

The Farmer has secured a copy of the British food controller's latest order fixing the wholesale and retail prices of milk in Great Britain for the winter period from October 1 to March 31. The wholesale prices are those paid the producers by the distributors; the retail prices are those paid by the consumers.

From these prices we draw some interesting comparisons. For example, under the British system the farmer gets 70 per cent of the price paid by the consumer, while in the United States he seldom gets more than 50 per cent and often not that much.

Under the British order two schedules of retail prices are set—one for rural communities, the other for large towns and cities. We shall take for analysis the higher schedule for city delivery.

The highest winter retail price is 2 shillings 6 pence per imperial gallon (60 cents in American money). But since the imperial gallon is a fifth more than the American gallon the price is equivalent to 50 cents for the latter, or 12 1-2 cents per quart, delivered. Where milk is delivered in bottles, however, the dealer may charge 2 cents additional per quart.

Where milk is sold wholesale by or on behalf of the producer the maximum price chargeable shall be as follows:

(a) For milk delivered during the month of October, 1917, the rate shall be 1s 4d per imperial gallon; for milk delivered during the month of November, 1917, the rate shall be 1s 7 1-2d per imperial gallon, and for milk delivered thereafter until the end of March, 1918, the rate shall be 1s 9d per imperial gallon, together in each case with a sum equal to the net amount of the charges for railway transportation incurred by the seller.

The highest winter wholesale price is, therefore, 1 shilling 9 pence, or 42 cents per gallon. In other words, of the consumer's 60 cents the distributor takes 18 cents and the farmer takes 42 cents.

Under the British system the obvious endeavor of the government is to deal fairly with all three factors in the trade—the producer, the distributor and the consumer.

Perhaps if we had government control of the milk industry in this country there would be a better deal for both the producer and the consumer. There certainly would be if the distributor were held down to a 30 per cent rake-off.

Increased Costs in France.

The increased cost of agricultural production in France has been studied by an agricultural engineer of that country in the department of Seine-et-Oise. This increase, he says, is due to the increased cost of raw machinery and labor. He points out that since 1913 the price of nitrate of soda has risen 113 per cent; coal, which cost 25 francs per ton, now costs 108 francs. An automatic binding machine which could be purchased for 800 francs four years years ago now sells for 1175 francs. The price of lubricating oil has increased 100 per cent. The wages of farm labor is estimated over the country as averaging over 42 per cent more.

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No Wheat From Australia

Mr. Hoover told the delegation that went to Washington to represent the grain growers of the northwest that the food administration feared competition from wheat of Australia, Argentina and India, much of which, he said, could be laid down at San Francisco for 90 cents and $1 a bushel.

The delegation must have found it difficult to repress a broad smile at that.

Australian granaries are bulging with old wheat, but the distance from market is so great and shipping so scarce and high that Great Britain, much as she wants to trade with her own commonwealth, and much as she wants that grain, has been unable to transport it across the wide seas.

It is 12,000 miles from Australia to England —24,000 miles for the round voyage. It is only 3000 miles across the Atlantic—6000 miles for the round voyage. Which means that four times as many ships would be needed to carry grain from Australia as from the United States.

It is ridiculous to talk about dollar wheat from Australia. Mr. Hoover should confer with the authorities of the United States department of agriculture before he makes such statements to men who are well-informed on the subject that carried them to Washington.

World conditions all pointed to unprecedented wheat prices this year. These conditions were illuminatingly reviewed by Charles J. Brand, chief of the bureau of markets of the department of agriculture, in an address last week before the American Academy of Political and Social Science at Philadelphia. Mr. Brand said the allies' wheat supply must come largely from America. The hazards of shipping and the long haul from Australia require too much tonnage to make shipments from that country. For the same reasons considerable quantities of foods from India can not be depended upon. Transportation conditions in Russia are likely to keep crops out of market even though they were otherwise available. The Argentine crop is small and the outlook for the next harvest is not encouraging, and the United States has a short harvest, produced at heavy costs by our wheat growers.

Dollar wheat this year from Australia is a dream, and the farmers of the Pacific northwest will smile at Mr. Hoover's professed concern lest they suffer from that kind of competition. They would like to buy Australian grain at that figure and turn it into pork, poultry and dairy products.

Help the Land Bank Help You

The federal farm loan bank has before it now applications for loans to the farmers of the northwest at five per cent interest totaling more than $23,000,000. It has approved these loans to a total of more than $11,000,000. It has actually sent the money out to the borrowers to a total of more than $2,500,000. More than 10,000 farmers have applied for loans.

The officers and working forces of the bank are rushing the work of making these loans. They have made remarkable progress. Organized less than half a year ago, they have already made more loans than all the state rural credit orgnizations in the country have ever made. They have the machinery working so smoothly and at such speed that more than $1,000,000 was loaned last month. The bank is doing its best to satisfy the wishes of every applicant, but it is manifestly impossible to do it all at once. There is a great mass of work to be done in case of each application before the money can be sent out. The serviceability of the farm loan system depends upon the sale of the bank's bonds, and these bonds can not be sold if there is the slightest doubt of the soundness of the security behind them. The security behind them is the mortgages to the land on which loans are made. Therefore the bank's officers are determined that no loan shall be made until title to the land is absolutely clear, and that no loan shall be made in excess of the amount that the mortgage is unquestionable security for.

The borrower himself can do much to speed up his own loan and that of others. He should never try to borrow more than the value of his land will justify. He should never misrepresent his property in any way. He should state fully and clearly the actual truth in answer to every question asked in the application blank which he fills out. He should follow out carefully and accurately every step required of him by the bank's regulations. He should have the papers to his property in the best possible form, and his title as clear as possible. These things will often save weeks of delay. A misunderstanding or an incorrect answer of an application for an excessive amount is certain to result in letters back and forth or unnecessary visits by the field representative of the bank, while a little care would make it possible for the bank to put the application smoothly through the regular course of appraisal, approval, recording and settlement.

Important Announcement

The two center pages of this issue carry a message which we feel sure will strike a responsive chord in every farm home reached by this paper. The labor shortage has been acute in the harvest fields, orchards, dairies, fruit packing sheds and elsewhere throughout the state. We know that our readers are in full sympathy with the request of the government that employers release as many men as possible for productive labor. We feel sure that our plan to dispense with a big force of agents will appeal to the common sense of our readers, and that all our friends will support it loyally. We hope you will realize that this is a personal call to you as well as to others. Every one must respond if the plan is to prove truly effective. So we urge you to turn to our double page announcement in the center of the paper today, and after reading it to act quickly.

Believes in the Silo

One of the most earnest and steadfast believers in the value of the silo is County Agent C. F. Monroe of Grays Harbor. The latest item of news from Mr. Monroe is that J. P. Fairbanks of Pullman spent an entire week in that county on the construction of a wooden hoop silo as a demonstration, 15 farmers attending. Two wooden hoop silos have just been completed, one of them 12x28, costing $140, including material and all labor except that of the owner, says Mr. Monroe.

Too Many Directors

The Jefferson county cow testing association has been reorganized. Only three directors were elected. The members of the association have come to believe that seven directors are too many to get efficient service, and that the responsibility should be centered upon a less number. County Agent McWhorter reports that the association now has some 300 cows signed up, and will test in conjunction with the Whidby Island association, which has a like number, each association using the man half of the time. Ralph Erskine has been hired to do the testing.

Washington Gleanings

A $13,000 fruit-drying plant is to be built at Wenatchee.

A new fruit evaporator at Zillah will employ 100 women and youths.

Conrad Schmick of Colfax has purchased the J. C. Faires farm of 565 acres near Endicott for $50,000.

T. F. Kennedy of Ethel has just threshed 121 bushels of wheat from one and one-fourth acres of land. This is believed to be a record for Lewis county.

Storage capacity of the Okanogan warehouse has been doubled. It will now hold 50 carloads of boxed apples. Conveyors installed in the packing room eliminate trucking.

A bean crop will alternate with wheat on the Cosgrove ranch at Mayview, and Japanese labor will be secured to grow and harvest this crop, according to Attorney Howard G. Cosgrove.

About 300 pounds of beans to the acre are being harvested on the hills north of Pomeroy. E. C. Cluster, who has 50 acres in beans this year near Pomeroy, will plant from 50 to 100 acres next year.

A bean threshing machine has been bought by Nels Linstrom of Pomeroy, who is raising 160 acres of beans on the farms of Bert Green and Lee Garren. The machine cost $600. It is equipped for threshing beans and peas.

The Tieton irrigation project will return more than $1,000,000 for the 28,000 acres under cultivation, according to a report made to the trustees by Secretary R. H. Hayden. The secretary figures this season's crop worth $1,375,000.

The fruit-drying plant at the state prison, Walla Walla, will be ready for handling the surplus apple crop this fall. When the apples are dried it is probable that potatoes will be evaporated. The plant can handle 20 tons a day.

A shipment of six pure-bred rams has been made through the First National bank of Pullman for the various breeders about Pullman, who have engaged in sheep raising. The animals were splendid types of the Shropshire breed and are all registered. Those who received them are: W. E. Lawson, Mallory, Farley, Christopher Brothers, E. L. Moys and Carson Taylor.

Reports of earnings made by pupils during vacation taken in the North Yakima high school showed the 551 pupils worked a total of 24,358 days and earned $40,045, the average earnings for each pupil, notwithstanding the fact that many worked at home and received no pay, was $72.65. Waldo Kelso, a senior, made the largest sum, earning $300 at farm work, and many others earned above $250 on farms and in orchards.

What Others Say

Herald, Concrete: The weeds and thistles are now going to seed. Unless they are cut and burned at once, a bigger crop next year will be assured.

Monitor, Monroe: It can not be too often repeated that if you think the farmer is making an exorbitant profit, there is plenty of idle land which you can put under cultivation and share in the golden harvest.

Mason County Journal, Shelton: That the Old World stock is practically gone and this county will offer great profits for farmers for years to come in supplying the world, give assurance to the farm investment and development in this country.

Globe-Republican, Auburn: The many farmers i nthis vicinity who put up silos last spring and during the summer are to be congratulated on their foresight, in view of the prevailing—almost prohibitive—prices of feed. They are fortunate, too, in the fact that this has been a season of prolific growth of clover, corn and other profitable silo products. The filling of all these silos will materially reduce the high cost of living for many a dairy herd nereabouts.



There's your weapon!

It's up to you, Mr. Northwest Farmer, to soldier with the Tractor, so that our boys can soldier with the rifle in France on full stomachs. They're in France fighting for humanity and freedom, and they need your backing at home.

Our success in this great war is just as dependent upon the Northwest Farmer, as it is on the men that the Northwest has sent to the front.

More acreage! Bigger crops produced economically, will do more to win this war than anything else. There's where the

BIG BULL TRACTOR

Burns Kerosene or Gasoline

comes in; saves you money in your plowing and saves you money in your harvesting. It is both a patriotic and selfish duty for every progressive farmer to own one.

BULL TRACTOR INCREASES CROP YIELD

Hundreds of Bull Tractor owners will tell you that it has actually increased crop yield 10% to 30%. This is done by the exclusive Sub-Soiling feature—big five-inch lugs of the big Bull wheel running in the furrow plows from two to four inches deeper than you can with horses or other tractors.

SOME THINGS THE BULL TRACTORS CAN BE USED FOR.

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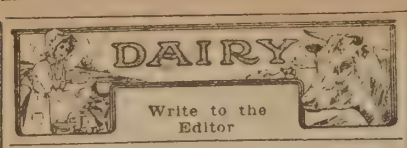
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W. F., 10-11-17.



A. B. NYSTROM, Editorial Contributor

Dairy Exports

Figures showing the extent to which the United States has lately been exporting dairy products to Europe make pre-war records seem insignificant. Here are some facts based on compilations of the U. S. food administration which point out the striking increase in our trade.

Exports of condensed milk which for a three-year period before the war averaged 17,792,579 pounds annually have increased to 259,102,213 pounds. This figure is for the fiscal year ending June 30, 1917. The European allies received 2.27 per cent of the condensed milk exported from this country in the three pre-war years. In 1917 they received 57.2 per cent, or considerably over half of the total.

Cheese exports for the three pre-war years averaged 3,788,065 pounds. For the year ending June 30, 1917, they reached 66,087,213 pounds, a 17-fold increase.

Exports of butter which for the three years previous to the war were 4,457,144 pounds increased in 1917 to 26,835,092, which is more than a six-fold increase.

It is noteworthy that Holland took 84.9 per cent of all the condensed milk shipped by the United States to European neutrals. However, a large proportion of the amount—15,134,084 pounds in all—consigned to neutral countries during the last fiscal year unquestionably reached Germany through indirect channels.

Obviously the enormous increase in our dairy exports calls for a statement on home production and conditions. Two years are required to raise a dairy cow and five years to bring her to maximum yield. Under normal conditions the country was prepared to go on producing milk in proportion to the demand. The number of dairy cows in proportion to the population has varied but little in the last six years. In 1911 the ratio was 22.3 cows per hundred people; this year the ratio is 22.1.

But the ravages of war now call for a prompt increase of dairy cattle in those countries able to raise them. The world's total number of cattle has already decreased more than 28,000,000. In England, France and Germany, the herds are being deliberately sacrificed to supply the immediate necessity for meat. The embargo is keeping fodder from Holland to a degree that will lead to a decrease in her herds.

Judging from all indications, the sacrifice of dairy animals will be even greater as the war continues. And the responsibility of supplying Europe with dairy supplies will rest with increasing gravity on dairymen of this country.

Dairyman Doing His Bit.

W. E. Gross, who operates a hundred and sixty acre dairy farm, seven miles west of Walla Walla, Wash., believes in doing his "bit" in a practical way. In addition to giving two sons to Uncle Sam's army, Mr. Gross has been operating his dairy farm on a war basis since the declaration of war. The large, modern dairy barn, amply housing 32 head of milch cows, is equipped with modern concrete floors, feeding troughs and feed and litter carriers. The milking is quietly and quickly done by a four-unit milking machine driven by a three-horsepower motor. Mr. Gross realizes the merits of corn silage as an economical feed and as a milk producer. He has recently finished the filling of two silos of 100-ton capacity each. The corn was planted with a check-row corn planter and harvested with a corn binder, both of which are labor-saving machines. Mr. Gross is a believer in the improvement of the dairy herd and in addition to possessing several purebred Holsteins he has at the head of his herd Sir Bessie Tritonia Fobes, formerly



Dairy barn and silo of W. E. Gross, Walla Walla, Wash.

owned by David Monroe of Spokane. Mr. Gross is a member of the Walla Walla Valley Cow-testing association and has kept a close tab on the performances of his cows.

Enumclaw Cow Test.

In the Enumclaw Cow Testing association all cows are divided into four groups according to their age. For the month of August, in class A, which consists of cows five years of age and over, F. Nisholas' six-year-old Jersey leads the list with a record of 1023 pounds of milk and 59.33 pounds of butterfat. In class B, consisting of cows over four and under five years of age, Arthur Bull's four-year-old Holstein comes first with 1323.7 pounds of milk and 55.59 pounds of butterfat. Class C consists of three-year-old cows. A. Houston's Holstein-Jersey ranks first in this division with 1463.2 pounds of milk and 59.99 pounds of butterfat. Under class D come cows of two years and under three. A Holstein owned by Arthur Bull made the best record in this division, producing 1134.6 pounds of milk and 45.38 pounds of butterfat. According to H. R. Noble, official tester of the association, there were 409 cows tested during August. The average production per cow was 658 pounds of milk, and 28.79 pounds of butterfat. Three dollars and thirty-eight cents was the average cost of feed per cow.



Considered From Every Angle,

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They produce more milk and butterfat for less feed cost and less labor cost than any other breed. These facts are proven by comparison of statistics available on all purebred breeds. Write for information. It is free.

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For years others have tried to invent something that would equal the link-blade idea. It still holds world-record for close-skimming.

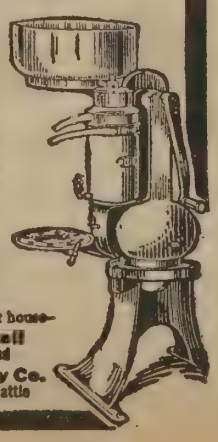
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Live Stock Winners at Oregon State Fair

For the benefit of those who are following the live stock records at the principal fairs of the northwest, the awards at the Oregon state fair are given this week. They were as follows:

Fair Awards.

The following are the detailed awards in the horse and cattle departments at the Oregon State fair:

HORSES.

Percherons.

Stallions: Four years and over, first and third, A. C. Ruby, Portland; second, Charles Russell, McMinnville, Ore.; fourth, A. R. Hunter, Island City, Ore. Three years, first, Hunter; second, Ruby & Bowers, Davis, Cal; third and fourth, Ruby. Two years, first and second, Ruby; third and fourth, Ruby & Bowers. One year, first and second, Ruby; third and fifth, Hunter; fourth, Ruby & Bowers. Under one year, first Hunter; second, Steve J. Schmidt, Gervais, Ore.; third, James Middleton, Dallas, Ore.

Mares: Mare and sucking colt—First, Middleton; second, Hunter; third, Fred W. Spires, Lebanon, Ore.; four, Schmidt. Four years and over—First and fourth, Hunter; second, Ruby; third, D. F. Burge, Albany, Ore.; fifth, Middleton. Three years—First, Mrs. H. E. Evans, Rickreall, Ore.; second, Evan Evans, Rickreall, Ore.; third, G. A. Morse, Talent, Ore. Two years—First and second Ruby; third, Burge; fourth, Hunter; fifth, Spires. One year—First, Burge; second, Middleton; third, Spires. Under one year—First, Spires. Get of sire—First, Hunter; second, Morse. Produce of mare—First, Ruby; second Mrs. Evans; third, Evan Evans. Display of five animals, bred by exhibitor—Ruby.

Senior champion stallion—Ruby on Sir George. Junior champion stallion—Ruby on Halton. Senior champion mare—Mrs. H. E. Evans on Uneretta. Junior champion mare—Ruby on Diana. Grand champion stallion—Halton. Grand champion mare—Diana.

Belgians.

Stallions, first and third, A. C. Ruby, Portland; second, Waldo Hillis Belgian Horse association, Macleay, Ore.; fourth, Ruby & Bowers, Davis, Cal. Three years—Ruby & Bowers. Two years—First and second, Ruby & Bowers; third, Ruby. One year—Ruby. Under 1 year—Ruby.

Mare and suckling colt—Ruby. Mares, four years and over—First, B. M. Turner, Turner, Ore.; second, Ruby & Bowes; third and fourth, Ruby. One year—First, Turner; second, Ruby. Get of sire—First, Ruby; second, Waldo Hills. Produce of mare—First, Ruby & Bowers; second, Ruby; five animals owned by exhibitors—Ruby.

Senior champion stallion—Ruby on Perce Junior. Junior champion stallion—Ruby & Bowers on Brussell. Senior champion mare—Turner on Polka. Junior champion mare—Turner on Yolanda. Grand champion stallion—Perce Junior. Grand champion mare—Yolanda.

Shires.

Stallions, four years and over—First and third, A. C. Ruby, Portland, Ore.; second, Gust Jaeger, Sherwood, Ore.; fourth, Ruby & Bowers, Davis, Cal. Three years—Ruby. Two years—First and third, Ruby; second, Jaeger; fourth, Ruby & Bowers.

Mare, three years—Ruby. Produce of mare—First, Jaeger; second, Ruby. Five animals bred by exhibitor—Ruby.

Senior champion stallion—Ruby on Newton King Oscar. Junior champion stallion—Ruby on Durand. Senior champion mare—Ruby on Gipsy. Junior champion mare—Ruby. Grand champion stallion—Newton King Oscar. Grand champion mare—Gipsy.

Clydesdales.

Stallions, four years or over—First, J. E. Reynolds, LaGrande, Ore.; second, A. T. Jones, McMinnville, Ore.; third, A. T. Moffit, Salem, Ore.; fourth, Carrie Skipton, Salem, Ore. Three years—W. L. Skipton, Salem, Ore. Two years—First, Albert Egan, Gervais, Ore.; second, J. E. Ownbey, Salem, Ore. Under one year—First and third, Ownbey; second, Egan.

Mare and suckling colt—First, Egan; second, W. L. Skipton; third, Ownbey. Four years—First and third, W. L. Skipton; second, Egan. Three years—First, Reynolds; two, Carrie E. Skipton. Two years—Reynolds. One year—Egan. Under one year—First, W. L. Skipton; second and third, L. P. Lardon, Salem, Ore. Produce of mare—Reynolds. Senior champion stallion—Reynolds on Decoration. Senior champion stallion—Egan on Bobby Baby. Senior champion mare—Reynolds on Bonnie. Junior champion mare—Reynolds on Glenellen. Grand champion stallion—Decoration. Grand champion mare—Bonnie.

Thoroughbreds.

C. E. Holtgrieve of Portland was the only exhibitor and won on the only entry—mare four years old and over.

Standard Bred.

Stallions—Four years and over—1, John A. Noblitt, Molalla, Ore.; 2, L. C. Fones, North Yakima, Wash. Three years—John Campbell, Forest Grove, Ore. One year—T. L. Davidson, Salem, Ore.

Mares—Four years and over—1, G. S. Levy, Union, Ore.; 2, Davidson. Three years—Chester Keene, Gervais, Ore. Two years—1, H. C. Stover, Salem, Ore.; 2, Davidson. Produce of mare—Davidson.

Senior champion stallion—Noblitt.

(Continued on following page.)

Abortion In Cattle

High Meat and Milk Prices Make Abortion Control Doubly Necessary

Authorities are alarmed at the increasing losses caused by contagious abortion. Some state it is causing more damage to live stock than tuberculosis.

Careful breeders are realizing that meat and milk products will continue to mean more and more money to them. They are accordingly taking active steps to systematically and efficiently stamp out abortion from their herds.

Research men of the U. S. Government and other institutions assert that there is no absolute abortion "cure," but all authorities agree that abortion can be controlled and the losses stopped.

No serum or vaccine has been found that gives any protection. These authorities all recommend that a thorough system of sanitation be followed on every farm, including treatment of bull, cows, calves and buildings. This is the only certain means of controlling and preventing Abortion—Sterility—Premature Birth—Retained Afterbirth in cows and White Scours in calves. These all seem to be symptoms showing the presence of Abortion germs.

In the case of abortion itself the germs inhabit and develop in the albuminous matter in the tissue lining of the uterus and vagina and here is where the fight for control must be efficiently and systematically waged. The germs produce an acid slime or discharge which eats the lining of the uterus and vagina and prevents healing of the torn, raw membranes.

To correct this condition, B-K, the powerful antiseptic, used as a douche, kills the abortion germs, dissolves the albumin, removes the slime, neutralizes the acid, cleans the tissue and thereby puts the organs in a condition for natural healing.

B-K does not irritate, but is soothing and healing to torn membranes, and does not cause straining. Other substances, such as carbolic acid, cresol, iodine, etc., are more or less irritating, do not dissolve the albumins, but tend to coagulate or thicken them, thereby preventing destruction of the germs and thorough cleansing of the infected tissues.

B-K is a powerful germ killer. Its remarkable germ-killing strength is plainly marked and guaranteed on every package. B-K contains no poison, acid nor oil—it is clear and clean as water and as easy to use. B-K may be used freely in the drinking water, helping to destroy the germs which accumulate in the tanks; may also be used effectively to disinfect the bull and wash calves at birth.

B-K is handy. You have in one jug, all ready for use by simply mixing with water, your treatment for calves, cows and bulls; also the best disinfectant you can possibly have for general use—no special mixing of various ingredients—saves trouble and mistakes—insures promptness, accuracy, convenience and successful results.

Contagious abortion is being successfully controlled in many herds by following our simple plan with B-K. One man writes: "I have been using B-K according to directions and the results have been very gratifying. My cows have every one passed the time for aborting and are calving all right in a natural way. I had lost $1500.00 on my cows and feel that B-K has cleaned up the trouble entirely."

B-K is sold by dairy and farm supply houses, druggists, general stores, etc., everywhere. If your dealer does not have it, send us his name.

Clean and Clear as Water



Write for testimony of users and reasons why B-K is used so successfully in this work. Send for these useful booklets.

Bulletin No. 52
Contagious Abortion—Prevention and Control

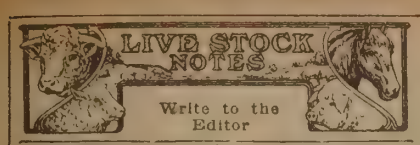
Bulletin No. 136
Calf Scours—How to Save Every Calf

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E. J. IDDINGS, Editorial Contributor.

VALUE OF BEAN STRAW.

Is Better Than Common Oat Straw

By E. L. POTTER.

We are receiving many inquiries concerning the feeding value of bean straw. We are unable to answer these with the degree of definiteness that we would like. The best information obtainable is that the bean straw has a feeding value about half way between clover hay and oat straw. For cattle and sheep it is probably about equal to the poorer grades of wild and meadow hays. This is providing it is well cured and reasonably free from dirt. Present indications are that it will be very dirty and often spoiled this season.

Veterinary

Dr. S. B. Nelson

Bone and Tendon Injured.—I have a six-year-old mare that was kicked on the hind leg just below the hock a year ago. It became swollen and broke, later it healed but the swelling was still there and then the ankle became swollen and stiff so that it would not straighten. J. E. B., Rexburg, Idaho.

Answer.—The bone and the tendon were probably injured when the mare was kicked. The fact that little boils break out constantly would indicate injury of the deep tissues. Also the tendon is probably injured, which is indicated by the fact that the horse kunckles in the ankle. Either put on a high toed shoe or have a veterinarian operate on the tendon by cutting it.

Sweeney Shoulder—I have a horse with sweeney shoulder. He has showed symptoms for the last six months.—J. H. B., Addy, Wash.

Answer.—A sweeney that has stood for six months is pretty hard to handle, I would suggest to you that the best thing for you to do is to get a veterinarian (I thing there is a graduate at Colville) to treat the sweeney for you. In the meantime, the constant pulling of the skin, rubbing it with a rough substance, or even a light blister once a week may be of advantage. A blister which would be of advantage would be a cantharides blister, one part cantharides to two parts of lard, applied with considerable friction. It could be put on Saturday evening and the horse be ready to work Monday morning.

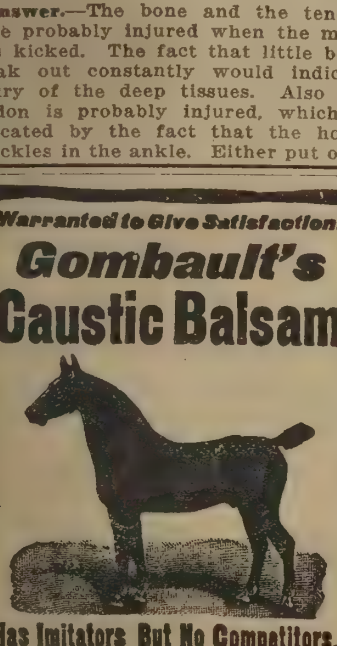
Disease Among Calves—I lost two calves but do not know what the disease is. They ate and drank until the very last, but I saw some blood in their passage and blood running out of their nose. One of them was swollen on the hind leg and on the head and throat. Now I have another one with the same symptoms.—A. A. U., Salado, Ore.

Answer—The disease affecting your calf may be either one of two troubles. First: It may be hemorrhagic septicemia. The symptoms that you give as the blood clot and the bloody lesions of the intestines and the bleeding would rather lead me to infer that the disease is hemorrhagic septicemia. At the present time there is no medicinal treatment for this disease. There has, however, been some experimenting done with a serum. The experimenters have been working toward this for some time and are getting along with it to some extent, but up to the present time it is not yet of practical value that I know of. In a general way, however, I would advise the disinfection of the stables. This should be done most thoroughly. First, wash the stables down with one to one thousand parts of corrosive sublimate in water. This is very poisonous and must be handled carefully. After three or four days whitewash the stables and pens thoroughly. Give a whitewash with 5 per cent of any of the cold tar products, like cresole, creolin and so forth, or crude carbolic acid if it is not too expensive. However, this disease comes and then stops again without our knowledge of the why of it, whether they are in the barnyard or in the pasture.

For the second disease which it might be, I would say that an infection with the contagious abortion might be responsible and this would need entire disinfection of the stables as I mentioned above, and watch carefully when the calves are born. The treatment must be entirely prophylactic. When the calf is born then disinfect the navel, without ever touching the fingers to the part of the body, with one to one thousand parts of solution of corrosive sublimate. Put the solution in a cup and hold the cup over the navel for about 10 minutes. Then dash the navel with a dry powder of one part of acid and one part of boracic acid.

Warranted to Give Satisfaction.

Gombault's Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

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More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk. Prevents scouring and insures the early maturity of sleek, handsome calves. It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Factory, Dept. 58 Waukegan, Ill.

SPOKANE SEED CO.

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SPOKANE, WASH.

Live Stock Winners

(Continued from preceding page.)

Junior champion stallion—Davidson. Senior champion mare—Levy on Lady Babette. Junior champion mare—Stover Grand Champion stallion—Noblitt. Grand champion mare—Levy on Lady Babette

Morgans.

Stallions—Four years and over—1, H. E. Angel, Wapato, Wash.; 2, J. A. McCarthy, La Grande, Ore.; 3, W. I. Bauer, Aurora, Ore. One year—Angel. Under 1 year—Angel.

Mares—Four years and over—Angel. Two years—J. T. Harrah, Wapato, Wash. One year—Angel. Under 1 year—Angel. Mr. Angel also won first on produce of mare, get of sire and all champions and grand champions.

Saddlers.

Stallions—Four years and over—G. S. Levy Union, Ore. Three years—E. Sitton, McMinnville, Ore. Get of sire—Levy. Produce of mare—Levy. Senior champion stallion—Levy on Galloway King 2d. Grand champion stallion—Levy on Galloway King.

Shetland Ponies.

Stallions—Four years and over—M. S. Levy, Union, Ore. Three years—Levy. Two years—Levy. One year—Levy. Under one year—Levy.

Mares—Four years and over—1, A. C. Ruby Jr., Portland; 2 and 3, Levy. Three years—Levy. Two years—Levy. One year—Levy. Under one year—Levy. Get of sire—Levy. Produce of mare—Levy. Senior champion stallion—Levy on Kenilworth. Junior champion stallion—Levy on Nick Longworth. Senior champion mare—Ruby on Inez. Junior champion mare—Levy on Zenette. Grand champion stallion—Levy on Kenilworth. Grand champion mare—Inez.

Shetland in harness—1 Ruby; 2 and 3 Levy. Team in harness—1 and 2, Levy. Tandem—1 and 2, Levy. Four-in-hand—Levy. Under saddle—1 and 3, Levy; 2, Ruby.

French and German Coach.

The only entries were for stallions, 4 years and over. A. C. Ruby of Portland won first and Ruby & Bowers of Davis, Cal., second.

Draft Horses.

Gelding or mares, 4 years and over 1—A. Balch, Salem, Ore.; 2 and 3, Gust Jaeger, Sherwood. 3 years—1, Waldo Hills Belgian Horse association, Macleay, Ore.; 2, Balch. 2 years—1, Waldo. Yearling, either sex—Balch. Pair between 2800 and 3200 pounds—1, L. J. Simpson, North Bend, Ore.; 2, Jaeger; 3, A. C. Ruby, Portland, Ore. Pair over 3200 pounds—1 and 2, Ruby. Four-horse community team over 3200—1, Ruby.

Jacks and Jennets.

F. J. Chalmers, Cornelius, Ore., the only exhibitor, received awards as follows:

First on jack 4 years or over; 3 years; yearling and jennet and foal.

The following are the cattle awards:

CATTLE.

Jerseys.

Bulls, 3 years and over—First and second, Clifford F. Reid, Portland; third and fourth, C. P. Hembree, Monmouth, Ore.; fifth, Stanley A. Riches, Silverton, Ore. Two years, under 3—First and second, Hembree; third, G. H. Dammeier, Portland. One year, under 2—First, Hembree; second and third, Reid; fourth, Pickard Bros., Marion, Ore. Senior calf—First, Dammeier; second and fourth, Reid; third, A. J. Johnson, Corvallis, Ore.; fifth, Frank A. Doerfler, Silverton, Ore. Junior calf—First Doerfler; second, Reid; third, Hembree; fourth, Riches; fifth, Ed Carey, Carlton, Ore.

Cows, 4 years and over—First, Jacob F. Fox, Silverton, Ore.; second, Reid; third, Dammeier; fourth Hembree; fifth, Carey. Three years, under 4—First, Hembree; second, Carey; third and fourth, Reid; fifth Dammeier. Two years, under 3—First, Carey; second, Dammeier; third, Reid; fourth, Riches; fifth, Fox. Senior yearling—First, Dammeier; second, Reid; third, Riches; fourth and fifth, Hembree. Junior yearling—First and third, Reid; second, Dammeier; fourth, Riches; fifth, Hembree. Senior calf—First and fifth, Reid; second, Carey; third and fourth, Johnson. Junior calf—First, Dammeier; second, Reid; third and fifth, Carey; fourth, Doerfler.

Graded herd—First, Reid; second, Hembree; third, Carey. Breeder's young herd—First, Hembree; second, Carey; third Riches. Dairy herd—Get of sire, first, Johnson; second, Dammeier; third, Carey; produce of dam, first, Dammeier; second, Hembree; third, Carey.

Senior champion bull—Reid, on Onota's Cotillion Boy. Junior champion bull—Doerfler, on St. Mawes Figgis. Senior champion cow—Fox, on Chief Engineer's Viola. Junior champion cow—Dammeier, on Golden Fern's Noble Countess. Grand champion bull—Onota's Cotillion Boy. Grand champion cow—Chief Engineer's Viola.

Guernseys.

Bulls, 3 years and over—First, D. H. Looney, Jefferson, Ore.; second, J. L. Batcheller, Hillsboro, Ore.; third, Middledale Farms, Goshen, Ore.; fourth, A. L. Gile, Chinook, Wash.; fifth, W. A. Goodin, Cornelius, Ore. Two years, under 3—First, Gile; second, O. Wohler, Hillsboro, Ore. One year, under 2—First, Gile; second, Middledale; third, Looney; fourth, Frank Hunter, Tillamook, Ore.; fifth, George Williams & Son, Tillamook. Senior calf—First and second, Gile; third, Looney; fourth, Middledale. Junior calf—First and third, Looney; second, Gile; fourth and fifth, Goodin.

Cows, 4 years and over—First and second, Gile; third and fifth, Goodin;

(Continued on page fourteen.)



PROTECT YOUR CATTLE WITH

Blacklegoids

NO DOSE TO MEASURE.
NO LIQUID TO SPILL.
NO STRING TO ROT.

BLACKLEGOIDS are small pills. Each pill is an accurate dose of blackleg vaccine.

BLACKLEGOIDS are easily administered—simply inject them under the skin with a vaccine injector.

TAKE NO CHANCES.

Don't wait until your calves become infected. This means certain loss—there is no *cure* for blackleg. Vaccinate now—before the deadly disease shows itself.

THE COST IS SMALL.

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ORDER THROUGH YOUR VETERINARIAN OR DRUGGIST.

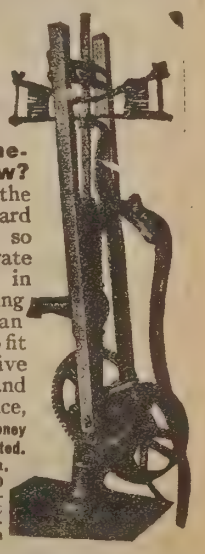
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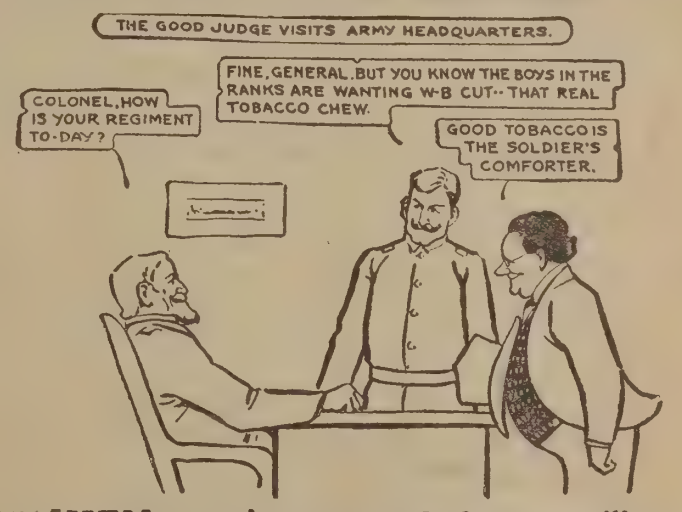


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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

Choosing Egg Layers

A great many persons probably for the first time are considering buying a few fowls, and they are studying the breeds. They are writing to the poultry departments of the experiment stations and they are asking extension lecturers and poultry breeders the question, what is the best breed? Some of them will go to the fall fairs, look over the exhibits and propound the query to the owners of the birds and they will go home with a good deal of information as to the general characteristics of the breeds on exhibit—their shape and size, color, etc. When he sums up the information the seeker after knowledge will find that one breed is white and another black and another brown. One is large and one is small and one medium in size; one has five toes and another four; one has single comb and another rose and another pea. He has definite information on those points, and that is all right. He has learned that a brown hen laid a white egg and a white hen laid a brown egg; he could swear to it because he saw the eggs laid, "but that's all I can swear to," he explained to Mirandy, "unless I swear at the exhibitors, for one said that the black one laid the most eggs in a year, one said the white one laid the most, and one the brown one was the only layer, and so on, a hundred of them. But how they could be all best layers; how those hundred exhibitors of a hundred different kinds of chickens could without batting an eye assert that each and every one of them was the best layer, I couldn't understand. I began to think that they thought I had escaped from the state medical hospital and they were making fun of me, and I sneaked away."

This may be somewhat exaggerated, but it is true that the breed question worries the beginner considerably, and some who are more than beginners are often confused at the mass of conflicting testimony.

In speaking of breeds here I do not make any technical distinction between the term breed and variety. Technically there are not so many breeds, but there are some 121 varieties, the number of breeds being 38, as recognized by the standard of perfection, and there are others not in the standard. For instance, the Plymouth Rock is a breed, but there are eight varieties of Plymouth Rocks, as follows, barred, white, buff, silver penciled, partridge and columbian. They are all the same in shape. If their feathers were all taken off they would look alike. The color makes the variety. It is the same with other breeds. There are eight varieties of Wyandottes.

The beginners, or a large proportion of them, want to begin in the producing business; they want to produce eggs, and they honestly seek the breed or variety that will produce the most eggs, and they don't care much as to color of feather.

The truth is the breed counts for little or nothing. There are good and poor layers in all breeds. It is the breeding that counts.

This needs to be iterated and reiterated. The beginner should go to the man who has been breeding for ggs and buy his stock from him. He should select his stock on the basis of trapnest records rather than show records and fancy points. There are plenty of breeders now who are trapnesting and using as breeding stock only those fowls that have high records. The purchaser should satisfy himself that the breeder he buys from has been following this system of breeding. This is the best way to begin.

Don't be continually changing the breed; change the breeding or the breeder. In other words, choose stock that has been bred to lay rather than bred for color of feather. Keep at it along this line year after year, and if it is not possible to trapnest, purchase males from trapnested high-producing stock. J. D.

All-Northwest Laying Contest.

At the end of August, one and a half months from end of contest, the pen of Leghorns belonging to J. A. Hanson of Corvallis was first. This pen has held first place almost throughout the entire period of the contest. A pen of Leghorns owned by P. W. Harries of Seattle was second and only two eggs behind Hanson's. J. R. McRae's Leghorn pen, which held first place for one month, was third. It is now almost certain that one of these pens will finish the year in first place. It is a close race. No high records, however, will be made, for the contest encountered rather rough sailing. The pens that are now leading are from stock that has been bred specially for heavy egg laying and they would be expected to be high up on the record even in the contest that had not encountered the troubles that this one has.

Another contest will be started at Pullman on November 1. Some changes, we believe, have been made in the conditions, and no doubt the director will experience fewer troubles in the way of diseases in the flocks than in the present contest. J. D.

Colds and Roup.

The cold nights will soon be here. With them will come colds and roup in the poultry flock, unless prompt measures are taken to prevent them. In about nine cases out of 10 these troubles come from a lack of fresh aid in the poultry house or coop. The chickens will not take cold just because the weather is cold. They are more likely to take it when they are too closely crowded together in a small coop with little ventilation. They become overheated at night and when the cold air strikes them in the morning they catch cold. Give them an open shed to roost in and spread the roost perches not less than 18 inches apart. With plenty of fresh air, which is only secured in an open-front house with wide-apart roosts, the flock will suffer little or none from colds and roup. The fresh-air treatment is the only sure preventive or cure. J. D.

Culling the Pullets.

Whether we can pick out the pullets that are the best layers or not is a question, but any poultryman can do a little culling that will eliminate some poor layers. There are always some pullets in every flock at this season of the year which show marked lack of vigor, and they should be mercilessly culled. It does not require an expert to do culling of this kind. Those showing decided lack of development, or the runts as they are called, should be given short shrift. Cull for vigor or apparent vigor. Don't feel high priced feed to the runts. J. D.

Buy a Few Chickens.

It is a patriotic duty to keep a few chickens. In another year there is likely to be a greater shortage of meat foods than of flour. Soldiers can not fight long on bread and potatoes; they must have some meat. The civilian populations also demand meat. Eggs take the place of meat, especially for those who have little or no hard muscular labor to perform, and they constitute the vast majority of the population. Even the muscular laborer can do heavy work with no other animal food than eggs. So it is a good thing for every one who can to keep a few chickens and help relieve the shortage of meat foods that seems inevitable in the next two or three years, war or no war. J. D.

English Pupils Gave Freely.

A statement issued by the education committee of the London county council shows that the total sum collected for the Belgian and Serbian children's clothing fund in the schools amounts to £4270 (about $21,350). The total number of kits supplied to Belgian and Serbian children is about 10,000.

Make more Money
Pull big stumps
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Clear your stump land cheaply—no digging, no expense for teams and powder. One man with a K can rip out any stump that can be pulled with the best inch steel cable.

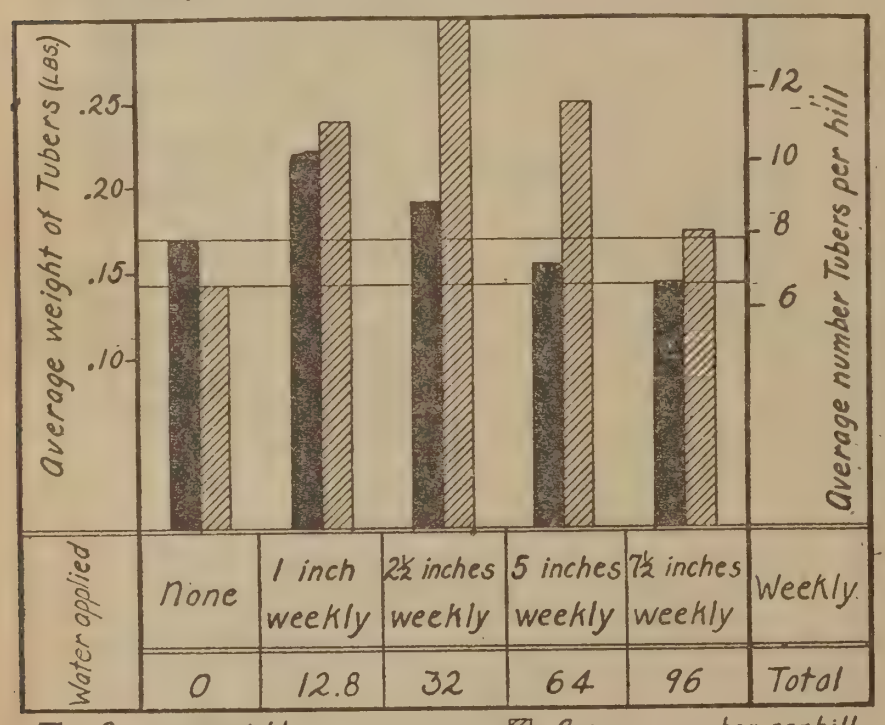
Works by leverage—same principle as a jack. 100 pound pull on the lever gives a 48-ton pull on the stump. Made of the finest steel—guaranteed against breakage. Endorsed by U. S. Government experts.

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Experiments in Irrigating Potatoes



Weight of the average hill and average height of vines on plats receiving different quantities of irrigation water weekly. Results for five years.

Irrigation of potatoes forms the subject of a recent bulletin by the Utah Experiment station. Some of the results obtained by these experiments are given as follows:

The highest yield of potatoes was produced where small regular irrigations were given.

One inch weekly, or a total of 12.8 inches during the season, gave a higher yield than any other treatment.

When as much as 96 inches of water were applied the yield was less than where no water was given.

Watering the land after planting the potatoes and before the plants were up, reduced the yield below that where no irrigation was given.

Where but one irrigation was applied, it gave best results if applied when the potatoes were in full bloom. The second best stage was just as the tubers began to form.

Discontinuing irrigation during the rapid growing season, after it was once begun, decreased the yield.

Excessive moisture, or that applied late in the life of the plant, increased the relative production of vines.

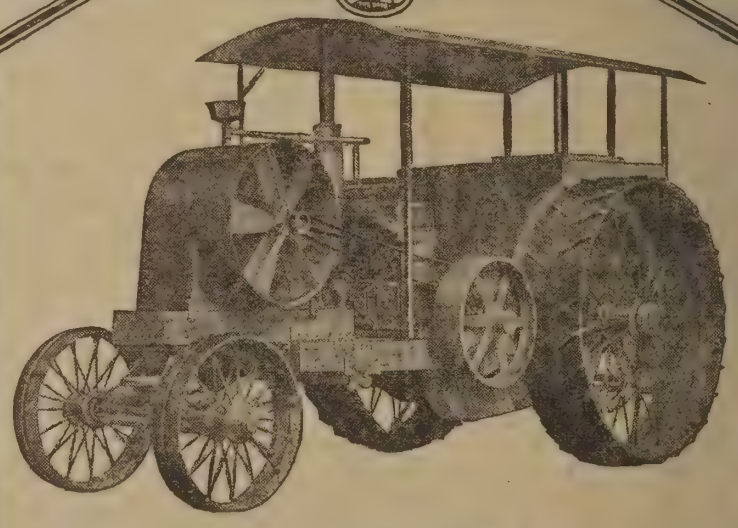
The relative number of tubers per hill was increased by early irrigation where the relative size of the tubers was influenced more by late water.

Height of vines was affected much less by the treatment than yield of tubers.

The experiment brings out the importance of an even supply of soil moisture during the middle portion of the life of the potato after the tubers begin to form, and before they begin to ripen.

The accompanying diagram illustrates one phase of these experiments.

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30-60 H. P. in size, Double Bowl Carburetor.
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Send for full particulars and catalogues of other sizes; also Steam Engines, Threshers, Saw Mills and Supplies.

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Congress Adjourns

Last Hours Are Given to La Follette

Congress adjourned Saturday of last week after one of the most active sessions in the country's history. Never before has that body been faced with the necessity of so many far-reaching bits of legislation, nearly all of which were due to the exigencies of war. The recess will be only for two months, however, regular reassembling being in December. At this time there is seen no probability of a calling of congress in special session by the president prior to that time, though developments in the present world crises might necessitate such calling. The session just ended was a special session called by President Wilson for the pu pose of enacting legislation to meet the crisis brought about by the ruthlessness of Germany and the entrance of this country into the war. Among the stupendous actions taken were the declaration that a state of war existed between this country and Germany; the passage of the national draft law whereby 10,000,000 men have already been enrolled subject to call of the country for army service; the appropriation in one form or another of approximately $20,000,000,000 for the prosecution of the war (these appropriations including the two Liberty loan bond issues); the passage of the espionage act whereby whosesale suppression of foreign spies in this country was made possible; the passage of the food, feed and fuel conrtol bill whereby the government is empowered to regulate in great detail the prices and distribution of the staple necessities; the enactment of a measure providing government insurance for soldiers and sailors, and the passage of a number of acts regulating the country's trade with foreign peoples, including the act empowering the president to place stringent embargo regulations on the shipment of foods and munitions.

La Follette Inquiry Started.

Two days before adojrnment the senate acknowledged a nation-wide protest against Senator La Follette's alleged disloyal utterances by creating a subcommittee of the privileges and elections committee for the purpose of making an inquiry into the charges against the Wisconsin senator. This committee is empowered to inquire only into the actual statements made by the senator in his notorious address at St. Paul two weeks ago and report to the senate at its reconvening as to the accuracy of such statements. Among the statements alleged to have been made is one that W. J. Bryan, former secretary of state, informed President Wilson four days before the sailing of the Lusitania on her ill-fated voyage that she was carrying munitions of war to the allies. This is declared by the former secretary to have been untrue if stated. He is charged with having expressed seditious sentiments in his address, condemning the United States government for being in the war and expressing sympathy with German frightfulness. The senate set aside five hours at the close of its session for a brief hearing of the La Follette case. The senator was given three hours in which to speak, which he used in defending himself on the ground of the national right of free speech. The session adjourned when three senators had replied briefly to his address. The committee appointed to make inquiry will report immediately after congress reconvenes December 3.

English Continue Fighting.

The British armies along the northern battle front of Europe continue their unprecedented attack on the German lines. Progress has been made in nearly every battle during the last 10 days. General Haig, in charge of the campaign, is directing the most ferocious fire in the history of the war, continuing over so long a space of time. Comparatively little activity on the part of either the Germans or the Russians is reported on the eastern front.

Air Raids Increase.

Germany continues to bombard British and French cities from their fleets of airplanes, and for the first time British and French airmen are conducting a retaliatory campaign. Reprisals are under way, deliberate bomb droppings from allied airplanes into German cities being reported.

That the war will yet be won in the air is a growing conviction in many quarters, and this country is making special effort to develop a great fleet of airships and a great army of men to operate them. Included in the acts of the late congress was the appropriation of more than $600,000,000 for the financing of the movement. It is hoped that a great fleet of allied airplanes will permit the effective bombardment of German bases that can not be reached either by land or by water.

American Soldiers Mobilize.

The various units of the new national army are assembling in the many army camps by the tens of thousands, and the recruits are undergoing the most rigorous training ever practiced on a large scale in this country. For strategic reasons the government is giving out no information as to the plans for sending detachments of soldiers abroad, and for like reasons, little information concerning the activities of the soldiers already in France is given publicity. Secretary of War Baker repeatedly asserts, however, that no news concerning American soldiers is good news, since the war department has promised that no disaster or casualty will be withheld from the public.

Presents for the Soldiers.

Postmaster General Burleson has issued a warning to persons who desire to send Christmas presents to American soldiers or sailors now on foreign soil or waters. All packages must be ready for shipment by November 15 in order to be assured delivery on Christmas morning. A formal statement has been issued, reading in part as follows:

"The three essential respects in which the public can aid in securing a happy Christmas at the front are to mail early, address intelligently and pack securely. Every package must bear conspicuously the words 'Christmas mail,' the complete address of persons for whom it is intended and in the upper left-hand corner the name and address of the sender.

"Every parcel must be packed and wrapped so as to admit of easy inspection by the postmaster. No parcel will be dispatched to France which has not the postmaster general's certificate that it contains no prohibited articles.'

The rate of postage is announced at 12 cents per pound.

Cost Half as Much

(Continued from page one.)

Qarrtern (3½ pounds), 8½d.
Half quarten (1¾ pounds), 4¼d.
One pound, 2½d.
Self-raising flour, 3½d a pound.

These prices refer to sales for cash over the counter. A reasonable additional charge may be made by the retailer if he gives credit to his customer or delivers the bread or flour at the customer's house.

Fifty shillings for 280 pounds is $12, or $8.58 for 200 pounds. This flour, it should be remembered, is to be milled from British wheat on which the government has fixed a price substantially the same as that fixed on American wheat by our own government.

We come now to the prices at which the British bakers must sell their bread made from $2.20 wheat:

Four-pound loaf.....	3d	(18c)
Two-pound loaf.....	4½d	(9c)
One-pound loaf.....	2½d	(5c)

If the British baker, starting with $2.20 wheat, can sell a pound loaf for 5 cents, the American baker ought to approximate that price, even though his labor may cost him somewhat more. It is to be borne in mind, however, that labor costs have risen greatly in Great Britain since the war.

Probably the American consumers could also have a 5-cent pound loaf if our government kept its hand on the product all the way from the farmer's granary to the retailer's counter, as the British government is doing. But our government takes its hand off at the mill. It fixes the price the farmer shall make, but leaves the jobber, the retailer and the baker entirely uncontrolled.

The War Brought Home

(Continued from page three.)

elected to discharge this duty, not under autocratic decree, but without other restraint than the guidance of individual conscience.

"On the success of this unprecedented advantage in democracy will largely stake the issue of the war.

"We are asking every householder, every hotel, restaurant and dealer in foodstuff in the nation to become a member of the food administration for the conservation and to pledge themselves to follow, in so far as circumstances permit, the suggestions that will be offered from time to time as to measures of food savings.

"For us there is no threat of privation. We wish only that our people should eat plenty but wisely and without waste. Wisdom in eating is to make possible such adjustments in our food consumption, shipping and war necessities as will allow us to fulfil our duty in exports to our allies.

"I, therefore, appeal to the churches and to the schools for their assistance in this crusade to all the organizations for defense, local and national; to all the agencies commercial, social and civic, that they join the administration in this work for the fundamental safety of the nation."

The state of Washington has been thoroughly organized by Charles Hebberd, federal food administrator, who has opened offices in the Columbia building, Spokane, Wash., and has named his committees that will carry this campaign into every city and every country district of this state.

"The campaign in the state of Washington is to be directed in each county by the County Defense council," said Mr. Hebberd, in outlining his plans for the food drive in the state of Washington. "They will act, however, through the schools, both in the city and country districts.

"The quota set for Washington is 230,000 pledges, that is, a pledge to live up to the Hoover food conservation program from each of the 230,000 homes in the state of Washington. This total is now being apportioned among the counties according to the number of families in each county.

"The plan in each county is to distribute, in the various schools, according to the number of families represented there, a pledge card, a house card of instructions and a home card

(Continued on page twenty-two.)



Destroy Smuts

Cleanse all seed grains with Formaldehyde solution before planting as it positively destroys smuts, of wheat, oats, barley, rye, etc. It prevents scab and black-leg diseases of potatoes, also cucumber and onion rot and cabbage diseases, etc.

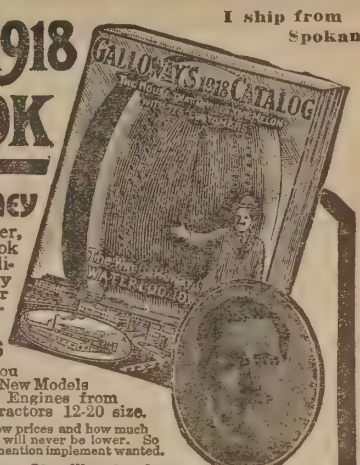
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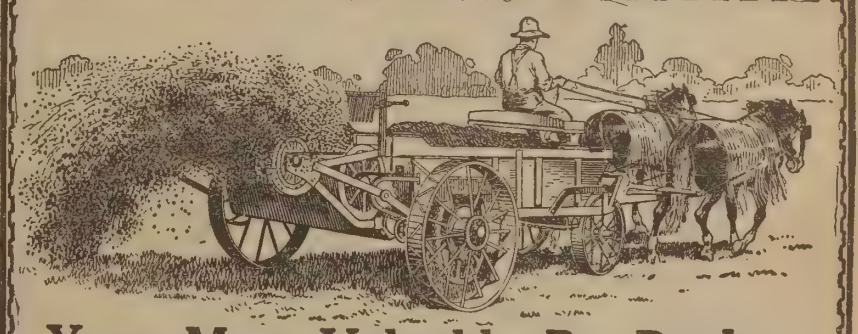
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and the many other implements I sell in this way, and let you keep the saving at home and in your own pocket. My 1918 New Models are ready. Spreaders with 11 exclusive improvements; Engines from 1¾ to 16 H. P.; Separators in four splendid sizes; Tractors 12-20 size.

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The Flying Dutchman Wide-Spread Spreader

Striking advantages are built into this spreader which commend it to farmers above all other spreaders.

Double Beater pulverizes manure thoroughly. Second beater running at high speed makes a wide, even spread—covers the field in less time—makes the load go farther and produces better crop results.

Separate Direct Axle Drive for beater and apron eliminates overstrain on beater mechanism—prevents breakage.

Low down—only 42 inches from ground to top of box at rear—makes it easy to load.

Wide range of adjustment permits spreading thin coat or heavy layer. Reserve speed moves apron at rate of 40 loads to the acre, for clearing out the bed. One lever controls operation.

Exceptionally light draft under heavy load—easily carries 4500 pounds.

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Plows (Steel & Chilled)	Stalk Cutters	Grain Drills	Rice Binders	Spreaders
Harrows	Hay Loaders	Lime Sowers	Grain Binders	Scales
Planters (Corn & Cotton)	Side Del. Rakes	Seeders	Corn Binders	Wagons
Cultivators	Dump Rakes		Mowers	Vehicles
Listers	Potato Diggers		Reapers	Farm Trucks

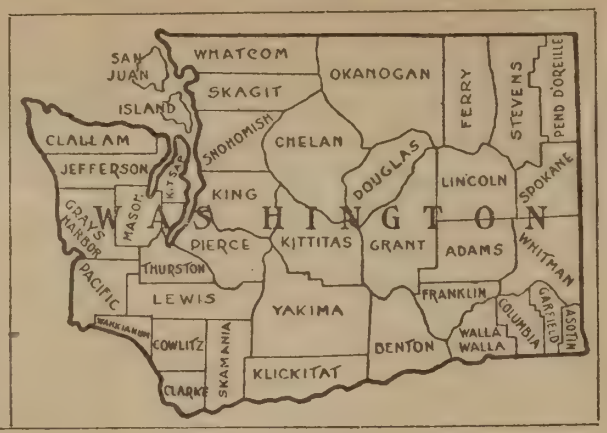
Moline-Universal Tractor *Stephens Six Automobile*

MP

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Waste Avoided by Cutting Roughage

Mixing Feeds Also Reduces Loss and Enables Feeding Some Classes That Might Be Wasted if Fed Alone; Soaking Fodder Helps.



KENNEWICK, Benton County, Wash., Sept. 28.—The prospects for winter feed are favorable. Although feed is very high, nearly every one has made preparations for carrying stock though in good shape. The silos are the largest facors in taking care of the feed problem. The number of silos has increased very materially the last year as in each of the last three years. A number of farmers in the irrigated sections are planning on securing straw from the wheat sections to supplement alfalfa and silage. We are recommending throughout the county that straw be used on every farm possible. Of course straw should not be depended upon for any considerable part of the ration, but if it is put in a rack where stock can run to it, horses and stock cattle and even dairy cows will eat sufficient amount of it that they will do better on less hay and silage than they will without the straw. We are also recommending where farmers have corn fodder, and it is impossible for them to construct a silo this fall, that they chop and soak the corn fodder, as they feed it. A great deal of waste can be made use of in this way. The potato acreage is very large, compared with last year, but the crop is very light. The top growth has been good, but as digging time approaches, we find that the yield of tubers is very light. It is estimated that the increase of acreage will not make up for the decrease in the yield.

There is considerable preparation for increasing the wheat acreage next year. Some more hay land will also be seeded. The yield of hay will be increased to some extent by a method we are recommending, of seeding fall grain into the alfalfa fields. We have found during the last two years that seeding 30 to 50 pounds of fall wheat into the alfalfa fields has increased the yeld as much as a ton of hay to the acre, in many places, and in addition has kept the cheat and other noxious weeds from spreading in the alfalfa fields. There will also be considerable increase of the production of silage, by growing two crops of silage on the same ground. Some of the farmers in Benton county have demonstrated that ground can be sown to fall wheat and put the wheat into the silo in June. If the ground is plowed and planted immediately to corn it will produce a crop of corn silage, with which to fill the silo in the fall. Under this plan the yield of silage can be nearly doubled without requiring any more land on which to grow it. This plan, of course, drains very heavily on the soil, but any farm which has sufficient live stock to consume two crops of silage each year will have an abundance of manure to make the land produce two crops. LEE M. LAMPSON.

Conditions Good on Coast.

SOUTH BEND, Pacific County, Wash., Oct. 2.—Weather conditions have been very favorable to fall planting. The warm, moist condition should give fall sown grain an excellent start. The upland pastures have grown again and can be used for grazing. During August many farmers had to buy hay for their stock because the pastures had dried up. Every one has made more hay this year than last year although the cutting was a little below normal. The apple crop is fine; fruits of all kinds did well this summer. Squashes and pumpkins are not as large as they should have been. A. D. Gile is exhibiting some very fine blooded cattle at the different fairs this fall. On the 18th and 19th of this month the Congregational church of South Bend, with the help of the county agriculturist, George Nelson, will hold a community fair. The business men of the city have taken a great interest in this and are donating all of the prizes. This fair will be in keeping with the times and will give prizes for the best and most economical war breads and varieties of canned products, besides premiums for vegetables and fruit, etc. It is hoped that in time this fair project will benefit the whole county by acting as a stimulus. We need more dairies, more fruit and truck farms as there is land here to be developed.

MRS. WINNIFRED BUCKINGHAM.

Satisfeid and Optimistic.

CHEHALIS, Lewis County, Wash., Oct. 2.—The weather conditions of early fall have been most favorable to the maturing and harvesting of the crops in this locality. Only a few of the farmers failed to get their grain threshed before the fall rains. The rains softened up the land sufficiently so as to make fall plowing easy. Farmers are generally satisfied with this year's result with the probable exception of the potato crop, which is low, due to the drouth. They are very optimistic for next year. Fairly good seed is available for fall sowing.

A. B. NYSTROM.

Good Outlook.

PORT ANGELES, Clallam County, Wash., Sept. 28.—In a general way the crop outlook for the Olympic peninsula for the coming year seems very propitious in so far as we can judge from present conditions of soil and weather. We have recently had a nice rain with beneficial effects on the ground. The farmers generally appear well satisfied with the bulk of the present year's crop in hay and fodder. Potatoes have done exceedingly well and virgin lands will give good returns and will give an impetus for more clearing if prices for dairy products and tubers remain firm.

J. P. CHRISTENSEN.

Heavy Yield of Barley.

PORT ANGELES, Clallam County, Wash., Oct. 1.—The recent rains have hindered the harvesting of field peas and oats in a few cases. Threshing of the grain crops has been slow because of the rains. Grain crops in this section have been in the main satisfactory, and high yields have been reported from part of the county. Melton Horn of Dungeness reports 1038 bushels of barley from 11 acres. More wheat will be planted in the eastern part of Clallam county next year than was seeded in 1916. There has been no report indicating a scarcity of seed in this section.

Farmers report that they have paid $90 for Canadian field peas and $130 per ton for Marrowfats. Farmers report a poor sale for beef animals, locally.

O. T. McWHORTER.

Optimistic in Skamania.

STEVENSON, Skamania County, Wash., Sept. 28.—The weather is beautiful and we have had copious showers, but not enough for plowing. It is still a little too dry for good work. Feed is scarce. Those who had land to produce grass put up hay sufficient for their need, but a majority in this section are obliged to buy the major portion of their forage and are experiencing hardship to secure any. Some cows are being disposed of in consequence. Some are buying straw in place of hay and are glad to get it. Oat hay brings $25 per ton and oat straw $11.50, alfalfa $27.50 and wheat hay $25 per ton, all baled. A small quantity was sold in July and August at $12 and $14 in the field, loose, but there was only a limited amount. The potato crop will average about one-half normal and very small and inferior. While there is no great enthusiasm for a large crop next year, it is my opinion the trend is toward a larger crop, especially of clover and other grasses. In summing up the season's yield of crops I am inclined to believe the crops are pretty generally satisfactory, with the exception of potatoes. Apples are a heavy crop, but a large percentage are damaged on account of too much rainy weather during the spraying season. I believe there is a general feeling of optimism for next year and with a favorable season will greatly discount this year's efforts. There is a firm of promoters organizing an irrigation system for the "Carson" or Wind River valley which, if successful, will be a valuable addition to the resources and productivity of this county. W. T. JACKSON.

Blessing in Disguise.

MONTESANO, Grays Harbor County, Wash., Sept. 29.—All our crops being at least two weeks later than usual, it is not surprising that some of the grain was somewhat damaged by early rains. I will say that at least half the grain has been discolored by rain and some of it started to grow in the shocks. This is another condition that shows the desirability of a silo to take care of crops that would otherwise be damaged seriously. A few scattering fields of grain are not being threshed but the great majority is now either threshed or under shelter. Practically all our crops are yielding a little less than normal owing to the dry summer, unless it would be root crops which are now starting up and making a very good growth. The prices now obtained for practically all farm products are quite encouraging to the farmers of this section. Prices for dairy products are very good where the dairyman can produce the bulk of his feed, he should be able to make some money this year. High price of hay will especially tend to send some cows to the shambles, but if the right ones are chosen this will be a blessing in disguise. C. F. MONROE.

Forecasts Big Wheat Crop.

NEPPEL, Grant County, Wash., Sept. 13.—The winter feed outlook is not as serious as an early view indicated. The sheepmen that usually buy all available feed in this territory have purchased but little, owing to the high-priced alfalfa, of which about 400 tons have been baled for export market from local territory. Everyone is carefully reserving all straw and none will be baled and possibly all will be fed. The average price per ton is about $2 loose at present. There are also numerous stacks of unthreshed headed wheat that were out of the usual route of a thresher. The potato crop is medium to fair in some fields, where growers have been careful, though the acreage is smaller here this year on account of scarce and high-priced seed. The outlook for a low price on potatoes at digging time on account of the large acreage planted in general all over the United States and present price of $2.50 per hundredweight is holding good for local sales, with a prospect of an advance after November first. The preparation for fall seeding has started and considerable acreage will be planted to fall wheat. Early Baart wheat, which is an imported seed, will be planted. The last two years have shown that it is a mortgage lifter. Indications are that next year's wheat crop will be greater than any ever harvested in the Big Bend.

MARTIN PENHALLICK.

Issaquah C. T. A. Organized.

The organization of the Issaquah Cow Testing association was perfected on August 11, 1917, reports F. W. Rader, county agent of King county. W. G. Jones was elected president; Mr. Bush, vice president; W. W. Pickering, secretary-treasurer. The association has 30 members, with 600 cows signed for. This makes the fifth association in King county and, so far as known, breaks the record for number of cow testing associations in any county in the United States.



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IN THE ORCHARD

Write to the Editor

GRANVILLE LOWTHER
Editorial Contributor

Marketing Fruit

By HORACE ADDIS.

J. A. McGee, sales manager for the Oregon Nursery company, expresses the opinion that it would be practical for the fruitgrowers to use the same plans in disposing of their fruit that the nurseries do in disposing of their trees, that is, sell them before the fruit is harvested. He believes sales agencies or paid representatives of the growers should go where the best and nearest markets are and contract the fruit before picking time. Merchants could no doubt be induced to order in advance and they in turn could secure orders from individuals for a supply of several boxes at least of winter apples. In some cases it might even pay to have an agent canvass a town for orders from families. By this means even small towns could often order by the carload, each consignor taking the apples allotted to him and reselling in a uniform price.

There is a market, says Mr. McGee, west of the Rockies, in our cities and those regions that can not grow fruit, for most of the apples raised out here and our best apples should be used to supply that market, instead of sending them on the long haul to the eastern states or across the ocean.

Codling Moth

More Wormy Fruit Than Usual

Some time since we began to discover that we had in our orchard more than the usual percentage of wormy apples. It was a mystery, for we had sprayed the usual number of times, sprayed at the time recommended by the horticultural inspector, sprayed thoroughly; in fact, in order to be sure that we had gotten every branch on every tree we, at two different times, went over the orchard the second time and counted the two sprayings as one, because they were applied at the same spray period. Then to have on our home orchard a percentage of codling moth more than we have ever had, caused us to take notice.

We first discovered that we had at least 40 per cent of wormy apples on certain of our trees. On those same trees in years past, without having sprayed more carefully, we have had less than 5 per cent.

Second, we discovered by investigation that many of our neighbors were in the same fix. One orchard adjoining ours will probably have 90 per cent worms. The orchards in general in our immediate neighborhood will run from 25 to 90 per cent wormy apples.

Third, we found this condition to be largely a local matter, for on two other orchards that we own, and three that we have rented, we have not over 5 per cent worms, and in one case not more than 3 per cent.

I am writing this to call attention to a fact, and to get at the causes in order, if possible, to prevent it occurring again.

It is a favorable indication that inquiries from different sections are coming in as to the causes. I have a suspicion, but not sufficient evidence for belief, that the spray manufacturers of certain brands of spray material put out an article that had not sufficient strength to kill. I will not mention the name or names of the firms at this writing. I would not injure without good evidence the business reputation of a firm, nor would I do damage to the honor of a man. But these spray manufacturers must remember how much damage they do the growers if they put out a lot of cheap stuff, too weak to kill, yet which the growers buy at considerable expense, put on at an additional expense, and after all is done, and all expenses paid, lose their crops of fruit.

If I find after investigation that this is what they have done, some spray manufacturers will get some free advertising. G. L.

The Ross Morris Apple.

This apple, which we call the Ross Morris, because the first specimen we have ever seen came from the orchard of Mr. Ross Morris of Grandview, Wash., seems to be a variation from the Jonathan. It was bought in 1898 with Jonathan stock, from a nursery in Walla Walla, Wash. The tree is inclined to dwarf, being only a little more than half as large as the Spitzenburg, and Jonathans of the same age. The top and limbs are very like those of the Jonathan, but a little more slender. Bark yellowish, leaves much like those of the Jonathan, but not quite so broad; bears at about the age of eight years, or two years later than the Jonathan; but when its bearing period begins, it bears heavily, and requires thinning.

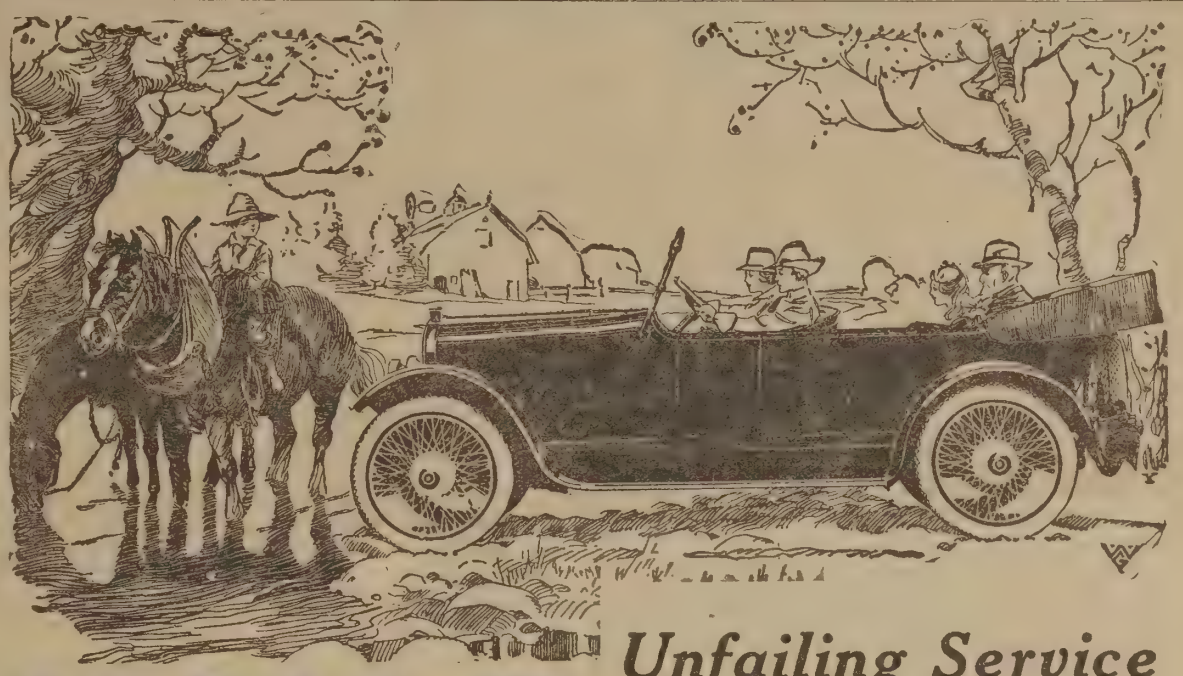
Fruit, medium size, round oblate, red with specks of yellow, and an occasional light colored spot, as if shaded by a leaf. Skin rather tough, flesh tender, juicy, sweet or a very mild sub-acid. It keeps well in common storage, and has been kept out of cold storage in an ordinary cellar, until May or June. Is a good shipper, good for baking, and good for dessert, for persons who like sweet varieties. G. L.

Scientific Fruit Growing.

The era of scientific growing has just begun. In some portions of the country, especially in the middle states, it has not begun. The old methods of luck, neglect, putting any kind of fruit in any kind of soil, pasturing the orchards, letting the stock prune the trees and the worms take the fruit have proved so unprofitable that those who will not adopt better methods will go out of the business. In fact, most of them have gone already by virtue of an economic necessity. They could not compete successfully with those who practiced better methods, and they either have entered or they are entering other fields of industry requiring less education

There is probably no industry requiring more well directed energy than fruit growing, and none that will pay better returns when the scientific conditions are met. Not half of those going into the business will realize their expectations, because not half will pay the price nature puts upon success. Some of us have a little too much of that quality of matter called inertia to pursue any business energetically.

Some have both energy and wisdom and will succeed. The stress of competition will weed out the rest, just as millions of seeds perish because they fall where they are not adapted; or as the strong trees of the forest overshadow the weaklings, absorbing the sunshine and soil substances.



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TOURING—$1650 —With all the advantages of a 120-inch wheel-base, this car has the roominess of a Six of 126 to 128 inches due to compactness of King V-type motor. Has many novel conveniences, and upholstery and finish are of the highest grade. The ideal large-family car. Seats seven. Color: dark green.

SEDAN— $2300—A year 'round car of the most luxurious type, upholstered in highest grade cloth and equipped with divided front seats. Sides completely removable in a few minutes without leaving car, and as easily replaced. A special compartment behind rear seat is provided for storage of side sections. With sides in place this seven-passenger model becomes a perfect closed car, all sections fitting without possibility of rattle and with no appearance of being improvised. Three colors: beaver brown, deep maroon or suburban blue.

ROADSTER—$1585—A very popular model with farmers, physicians and salesmen, because of large storage space. Has two roomy compartments; one behind front seat and the other under rear deck. Comfortable for three. Color: French gray.

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Live Stock Winners

(Continued from page nine.)

fourth, Looney. Three years, under 4—First and third, Goodin; second, Gile; fourth, Looney. Two years, under 3—First, Gile; second, Homer Mason, Tillamook; third, Goodin; fourth, Mrs. W. H. Hoskins; fifth, Middledale. Senior yearling—First, Looney; second, Middledale; third and fifth, Gile; fourth, James Williams, Tillamook. Junior yearling—First, J. B. Yeon, Portland; second, Gile; third, John Morgan, Tillamook; fourth, Looney; fifth, Middledale. Senior calf—First, Goodin; second and third, Gile; fourth, Homer Mason, Tillamook; fifth, George Williams. Junior calf—First and second, Middledale; third and fourth, Looney; fifth, Gile.

Graded herd—First, Gile; second, Looney; third, Goodin. Breeder's young herd — First, Middledale; second, Looney; third, Gile. Breeder's calf herd—First, Gile; second and third, Middledale. Dairy herd—First, Goodin; second, Looney. Get of sire—First, Middledale; second, Looney; third, Goodin. Produce of dam—First, Middledale; second, Gile; third, Goodin.

Senior champion bull—Looney, on Lena's Statesman. Junior champion bull—Gile, on Chicona Director. Senior champion cow—Gile, on Joseph's Pride of Chicona. Junior champion cow—Goodin, on Rosebud of Rose City. Grand champion bull—Lena's Statesman. Grand champion cow—Joseph's Pride of Chicona.

Holsteins.

Bulls, three years and over—First and second, Carnation Stock farms, Monroe, Wash.; third, J. H. Hulbert, Mt. Vernon, Wash.; fourth, L. J. Simpson, North Bend, Ore.; fifth, William Bishop, Chimacum, Wash. Two years, under three—First, Carnation; second, C. S. Magee, McMinnville, Ore.; third, Bishop; fourth, Thomas Carmichael, Gaston, Ore. One year, under two—First and fifth, Carnation; second, Hulbert; third, Carmichael; fourth, L. L. Paget, Gaston, Ore. Senior calf—First and second, Carnation; third, Hulbert; fourth, Carmichael; fifth, Bishop Junior calf—First and second, Carnation; third, Hulbert; fourth, Bishop; fifth, Mt. Angel college, St. Benedict, Ore.

Cows: four years or over—First and third, Bishop; second and fourth, Carnation; fifth, Carmichael. Three years, under four—First, Carnation; second, Magee; third, Paget; fourth, Bishop; fifth, Hulbert. Two years, under three—First and second, Carnation; third, Magee; fourth, Bishop; fifth, D. C. Bunn, Prosser, Wash. Senior heifers—First, Magee; second, Carnation; third, Hulbert; fourth, Carmichael; fifth, Bishop. Junior heifer—First and second, Carnation; third, Carmichael; fourth, Hulbert; fifth, Mt. Angel. Senior calf—First and fifth, Carnation; second, Paget; third and fourth, Hulbert. Junior calf—First, Hulbert; second and third, Carnation; fourth, not given; fifth, Mt. Angel.

Graded herd—First and third, Carnation; second, Magee. Breeder's young herd—First, Carnation; second, Hulbert; third, Magee. Breeder's calf herd—First, Hulbert; second and third, Carnation. Dairy herd—First, Bishop; second, Carnation. Get of sire—First, Carnation; second, Hulbert; third Magee. Produce of dam—First, Carnation; second, Magee; third, Hulbert.

Senior champion bull—Carnation, on Hazelwood Sir Ormsby. Junior champion—Carnation, on Matador Segis Walker Sixth. Senior champion cow—Bishop, on Bonnie Ormsby Lass. Junior champion cow—Hulbert, on LaConner Pontiac Grant. Grand champion Bull—Hazelwood Sir Ormsby. Grand champion cow—Bonnie Ormsby Lass.

Ayrshires.

Bulls· Two years, under three—Walter J. Domes, McCoy, Ore. Junior calf—First, W. J. Domes; second, A. F. Domes.

Cows: Four years or over—First, H. W. Domes; second, W. J. Domes. Two years, under three—W. J. Domes. Senior yearling—W. J. Domes. Junior yearling—W. J. Domes. Senior calf—W. J. Domes. Graded herd—W. J. Domes. Breeder's young herd—W. J. Domes. Get of sire—W. J. Domes. Produce of cow—First and second, A. F. Domes.

Brown Swiss.

Bulls: Three years or over—John Yokam, Coquille, Ore. Two years, under three—Theodore Brugger, Gresham, Ore. One year, under two—Edward Myersick, La Grande, Ore. Junior calf—First, Myersick; second, Brugger.

Cows: Four years or over—First and third, Brugger; second, Myersick. Three years, under four—Brugger. Two years, under three—First and third, Bugger; second, Myersick. Senior yearling—Brugger. Senior calf—Brugger. Junior calf—Brugger. Graded herd—Brugger. Breeder's young herd—Brugger. Breeder's calf herd—Brugger. Get of sire—Brugger. Produce of cow—First, Brugger; second, Myersick.

Senior champion bull—Brugger, on Teel. Junior champion bull — Myersick. Senior champion cow—Brugger, on Ruby. Junior champion cow—Brugger. Grand champion bull—Brugger. Grand champion cow—Brugger.

BEEF CATTLE.

Shorthorns.

Bulls, three years or over—First, A. Chalmers, Forest Grove, Ore. Two years, under three—First, Frank Brown, Carlton, Ore.; second, J. B. Cornett Son, Albany, Ore.; third, Chalmers. Senior yearling—First, State College of Washington, Pullman, Wash.; second, Curtis C. Cole, Scio, Ore.; third, Chalmers; fourth, Schmidt Brothers, Hoff, Ore. Junior yearling—First, E. F. Anderson & Son, Albany, Ore.; second, Schmidt; third, Chalmers; fourth, Cole. Senior calf—First and second, Frank Brown; third, Cornett; fourth and fifth, Oregon Agricultual college, Corvallis, Ore. Junior calf—First, Brown; second and fourth, O. A. C.; third, S. C. of W.; fifth, Cole.

Cows, three years or over—First, Chalmers; second, Brown; third, Schmidt. Two years, under three—First and third, Brown; second, Chalmers. Junior yearling—First, Brown; second and third, Cornett; fourth, Chalmers; fifth, Schmidt. Senior calf—First and third, Brown; second, O. A. C.; fourth and fifth, Chalmers. Junior calf—First, O. A. C.; second, Chalmers; third, Anderson; fourth, Schmidt; fifth, Brown.

Graded herd—First, Brown; second, Chalmers. Breeder's young herd—First, Brown; second, Chalmers. Get of sire—First, Brown; second, Cornett; third, Chalmers. Produce of cow—First, Brown; second, Chalmers; third, S. C. of W.

Senior champion bull—Brown on Diamond Perfection. Junior champion bull—Anderson. Senior champion cow—Brown on Gypsie's Saunders. Junior champion cow—Brown on Bonny Lady. Grand champion bull—Diamond Perfection. Grand champion cow—Bonny Lady.

Herefords.

Oregon Agricultural college showed the only Herefords at the fair, winning awards on junior yearling bull and senior and junior heifer calf.

Galloways.

The State College of Washington exhibited one Galloway yearling bull. No other entries in this class.

Polled Angus.

Bulls, three years or over—Congdon & Battles, North Yakima, Wash. Two years, under three—First, Congdon & Battles; second and third, Mount Angel college, St. Benedict, Ore. Senior yearling—Congdon & Battles. Junior yearling—Congdon & Battles. Senior calf—Congdon & Battles. Junior calf—Condon & Battles. Cows, three years and over—First, Congdon & Battles; second, State College of Washington, Pullman, Wash. Two years, under three—Congdon & Battles. Senior yearling—Congdon & Battles. Junior yearling—Congdon & Battles. Senior calf—First, second and third, Congdon & Battles; fourth, S. C. of W. Junior calf—First, S. C. of W.; second, Congdon & Battles.

Graded herd—Breeder's young herd, breeder's calf herd, get of sire and produce of cow—Congdon & Battles.

Congdon & Battles won all championships. Senior champion bull—Eileenmere. Junior champion bull—Blackburr of Rosemere. Senior champion cow—Idena of Rosemere. Junior champion cow—Blackcap. Grand champion bull—Eileenmere. Grand champion cow—Idena of Rosemere.

Red Polled.

F. H. Porter of Halsey, Ore., wae the only exhibitor and was awarded firsts as follows:

Bulls: Two years, under three; senior calf; junior calf. Cows, four years and over; three years under four; two years, under three—senior yearling; senior calf, junior calf; graded herd, breeder's young herd, breeder's calf herd and get of sire and both championships.

HOGS.

Poland Chinas.

Boars, 2 years and over—First, Ray J. Fox, Dayton, Ore.; second, Herbert Willard, Dayton, Ore. 18 months and under 2 years—first and second, Fox. 1 year and under 18 months, Fox; 6 months and under 1 year—first and fifth, Fox; second, R. W. Hogg, Salem; third, J. R. Cole, Molalla, Ore.; fourth, Willard. Under 6 months—First and second Fox; third, Hogg; fourth, T. B. Clark, Dayton, Ore.; fifth, W. Domison, Lyons, Ore.

Sows, 2 years and over—First and third, Fox; second, Oregon Agricultural college; fourth, Hogg. 18 months and under two years—First and second, Fox; third, O. A. C.; fourth and fifth, Willard. 1 year, and under 18 months—First and fourth, Fox; second and third, Willard. 6 months and under 1 year—First and third, Cole; second, Fox; fourth and fifth, Willard. Under 6 months, First and third, Fox, second and fifth, Hogg; fourth, Cole.

Aged herd—First, Fox; second, O. A. C. Young herd—First and second, Fox; third, Cole. Get of sire—First and second, Fox. Produce of dam—First and second, Fox.

Senior champion boar—Fox, on Ike Knox. Junior champion boar—Fox on Ike Knox III. Senior champion sow—Fox on Maid or Honor II. Junior champion sow—Cole on Lady Wonder. Grand champion boar—Ike Knox. Grand champion sow—Maid of Honor II.

The Poland China Futurity.

Boar pigs, 6 months and under 1 year—1 and 5, Fox, on Ike Knox III., and Ike Knox II.; 2, Hogg, on Oregon Sunshine; 3, Cole, on C. A. Wonder II.; 4, Willard, on Pilot's Model.

Sows, 6 months and under 1 year—1 and 3, Cole, on Lady Wonder and A Lady Wonder; 2, Fox, on Miss Ike Knox I.; 4 and 5, Willard, on Pilot Girl and Lady Pilot; 6, Hogg, on Lady Sunshine.

Boars, under 6 months—1 and 2, Fox, on Ike's Best Bet and Fox's Long Ike; 3, Hogg, on Daisy's Corker; 4 and 7, T. B. Clark, Dayton, Ore., on Charcoal Bill and Charcoal Bob; 5 and 6, Donison, on Black Face and Black Jack; 8, Cole, on A Wonder III.

Spring boars—1 and 5, Hogg, on Daisy II. and Daisy IV.; 2 and 3, Fox, on Long Girl and Long Girl Again; 4, Cole, on Large Princess; 6, Willard on Peerless Pilot; 7 and 8, Clark, on Charcoal Lizzie and Charcoal Mary.

Litters—1, Fox; 2, Hogg; 3 and 7, Cole; 4 and 6, Donison; 5, Clark.

Chester Whites.

Boars: Two years and over—1, Ed Schoel, Tangent, Ore.; 18 months, under 2 years—1, Schoel; 1 year, under 18 months—1, Schoel; 2, Archie Conley, Cove, Ore.; 6 months, under 1 year—1, Schoel; under 6 months—1 and 2, Schoel; 3, R. L. Badger, Oregon City; 4, Conley.

Sows: Two years or over—1 and 2, Schoel; 3, Conley; 18 months, under 2 years—1 and 2, Schoel; 1 year, under 18 months—1 and 4, Conley; 2 and 3, Schoel; 6 months, under 1 year—1 and 2, Schoel; 3 and 4, Conley; under 6 months—1, Ralph Middleton, Dallas, Ore.; 2 and 3, Schoel; 4 and 5, Conley.

Aged herd—1, Schoel. Young herd—1, Schoel; 2, Conley. Get of sire—1, Schoel; 2, Conley. Produce of dam—1, Schoel; 2, Conley.

Senior champion boar—Schoel on Linn Wood. Junior champion boar—Schoel on Pleasant View Pride. Senior champion sow—Schoel on Elmo's Best. Junior champion sow—Schoel on Lottie. Grand champion boar—Lin Wood. Grand champion sow—Elmo's Best.

Fat barrow—Schoel. Pen—Schoel.

Fat Barrows, Open Class.

Fat barrow under 1 year—1, Robert Nelson; 2, J. M. Fruitts.

Pen—1, Fox; 2, F. A. Brush.

Large Yorkshires.

J. C. S. Hubard & Sons of Hubbard, Ore., won all awards, which were as follows: Boars, 18 months and under 2 years; 1 year and under 18 months; 6 months and under 1 year; under 6 months; sows 18 months and under 2

(Continued on page nineteen.)

STEVENS COUNTY
Logged-Off Lands
Low Prices.
Long Terms.
Phoenix Lumber Co.
Spokane, Wash., Dept. A.

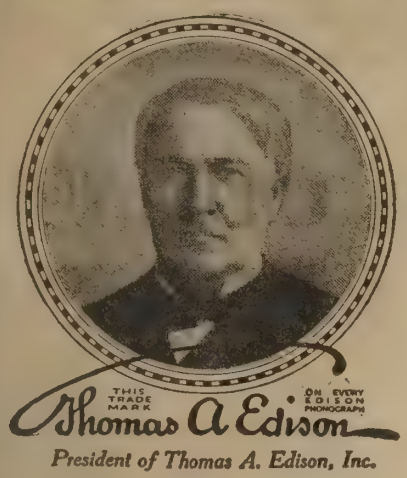
CALIFORNIA EXCURSIONS
In planning trips to the retreats of the southland arrange to be ticketed over
The North Bank Road
between Spokane and Portland, and enjoy the scenic wonderland of the Cascade Mountains and Columbia River.
Two Observation Car Trains Daily
On notice, a representative will be glad to furnish travel information.
SPOKANE TICKET OFFICE
Davenport Hotel.
H. S. Wagner, City Pass. Agt.
SPOKANE PORTLAND SEATTLE



Mr. Edison's New Diamond Amberola
And New Blue Amberol Records
Note the Price
Only $36
Which includes a genuine Diamond Stylus Reproducer, which means no needles to change. Also 12 latest new four-minute records. All for the low price of $36.00.
Special Free Trial
Cut out coupon below and mail it to us today and we will send you our free trial order blank, which will permit you to keep one of these outfits in your home for 10 days and play it to your heart's content. All charges will be prepaid, so there will not be a single penny of expense to you.
If you desire to keep it, then we will arrange so that you can pay for it in small weekly or monthly payments. If you do not want to keep it, return it to us at our expense. Other special offers for $56.00 and $81.00. Send for our new big free catalogue. Act quickly, before this offer expires.
WRITE US TODAY
Spokane, Wash.
Eilers Music House:
Please send me full particulars and catalogue of your special Edison offer in Washington Farmer for $36.
....
....
TALKING MACHINE HEADQUARTERS OF THE WEST
Eilers MUSIC HOUSE
Sprague at Post, Spokane, Wash.

Boyd's TRADE MARK
Sash, Doors, Millwork, Roofing, Hardware, Paints.
Let the Builders' Bargain House save you money on all building materials. Send your building list for Boyd's low estimate or write for our free catalog of a thousand building bargains.
The Frederick Boyd Co. Inc
2210 Westlake Avenue, Seattle

EDISON'S VERY LATEST AMBEROLA!



President of Thomas A. Edison, Inc.

NOT A PENNY DOWN!

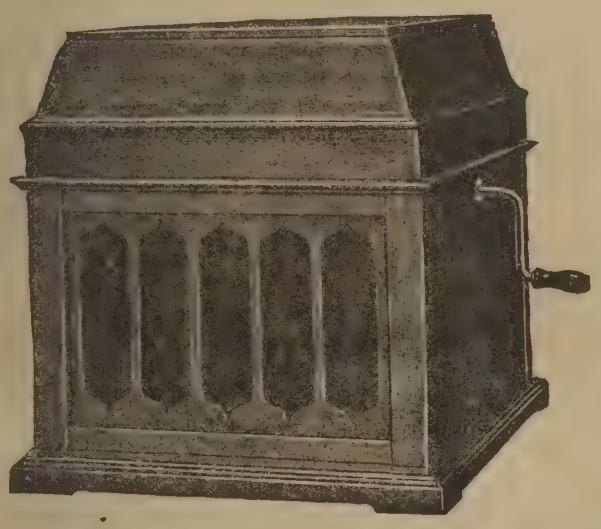
The Wonderful New Phonograph with the Permanent Diamond Point

This is the famous Diamond Amberola, which, in numerous competitive comparisons, has won unanimous verdicts of superiority over well-known talking machines that sell at three and four times the price of the Amberola. These verdicts were rendered by thousands of phonograph experts and were absolutely unprejudiced. The instruments were played behind a curtain and the curtain was not raised until after ballots had been taken. No one knew the names of the instruments. They only voted as to which tone was better, No. 1 or No. 2.

Your Home Needs Good Music

There cannot be too much good music in your home. Every home should have music, and the best music. You would not be without an Edison Diamond Amberola after you heard its wonderful reproduction of the beautiful heart songs, stirring band pieces, war songs, seductive orchestra selections, lively Broadway hits, comic recitations, grand opera arias, and majestic hymns—music which responds to every musical desire. With the Amberola you can make your evenings at home a delight, keep your children contented, entertain your friends and be right up to the minute in musical knowledge. You want the best phonograph you can get for the least amount of money, don't you? Then read our offer below.

SPECIAL FREE TRIAL!



The New Edison Amberola, Model 50.

NOT A PENNY DOWN

We are so sure that you will want to keep this wonderful Diamond Amberola in your home after you have heard it, that we have made special arrangements with a certain number of dealers whereby any one of them will send to any reputable person, on an absolutely free trial, one of these wonderful Edison Diamond Amberola instruments.

These merchants have set aside a number of Edison Diamond Amberolas selling at $30, $50 and $75. These instruments will be sent out on free trials. With them will be sent a program of beautiful music, such music as you have never heard before on any phonograph. Don't wait until this free trial offer has expired.

HOW TO GET THE FREE TRIAL

Look over the list of dealers below and send the coupon to the dealer who is located closest to you. *If there is no Dealer near you, send the coupon to us and we will endeavor to arrange a free trial for you.*

Enjoy this wonderful music for 3 days. Then if you decide to keep the Diamond Amberola you can arrange with the dealer to pay for it on convenient terms, if you do not care to pay cash. That is all. No strings, no cost to you!

SEND FOR OUR BEAUTIFUL AMBEROLA BOOK—IT'S ABSOLUTELY FREE!

EDISON PHONOGRAPHS, LTD., 45 FOURTH ST., PORTLAND, ORE.

Washington Dealers Who Give Free Trials

ANACORTES—H. L. Dodge

HARRINGTON—Harrington Drug Co.

MT. VERNON—S. Berger.

OLYMPIA—A. T. Rabeck.

PULLMAN—A. D. Baum

ROSALIA—H. E. Roberts

SOUTH BEND—T. E. Pearce & Co.

SEATTLE—J. J. Gourlay, 1928 Westlake Ave.

Piper & Taft, 1107 Second Ave.

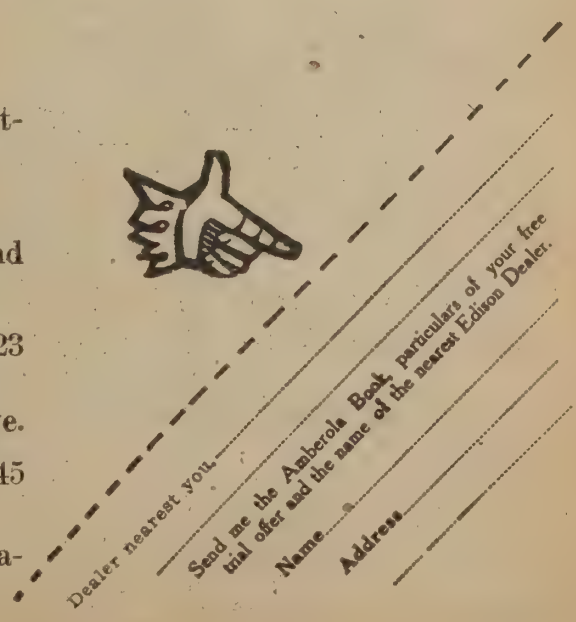
Hopper Kelley Co., Third and University

SPOKANE—Eilers Music House, 723 Sprague.

G. S. Rickert, 221 Riverside Ave.

TACOMA—Hopper Kelley Co., 945 Broadway.

Shaw Supply Co., Inc., 1015 Pacific Ave.



BIG CUT IN PRICE

PLAN TO SAVE OUR FRIE
RELEASE MEN FOR PRO

The government has strongly urged every employer to release as many men as possibl labor in the fields, forests, mines and factories.

We feel that it is the clear duty of every one to assist in this national program as fully

Certainly no one realizes the pinch of the labor shortage more keenly than does the farm dairyman and stock raiser of this state.

The only question which arises is not **"shall I help,"** but **how** can I help?

If conditions were normal **THE WASHINGTON FARMER** would employ a big force o and winter in securing new subscriptions and renewing old ones. And just consider wh men is required to visit the farms, ranches and remote homesteads throughout the lengt **Washington.**

Now, suppose that every reader would send in his or her renewal without urging, and al duce **THE WASHINGTON FARMER** to a few neighbors and friends. What would it that we could release practically every one of our agents for work in producing the ne Hardly any one will question that this should be done.

We think we know our readers; and feel sure that as soon as the situation is fully u each and every one will respond to a request to send in their subscription direct to this p stead of waiting for an agent to call for it.

It seems a small thing for each individual to do, but in the aggregate it will mean a h saving in agents' salaries, automobiles, gasoline, rigs, hotel bills, railroad fares and misce laneous expenses.

In order to try out this plan, we have adopted a schedule of rates aimed to give our readers the full benefit of every dollar saved by eliminating the middleman.

One full year's subscription will be 25 cents; three years will be 50 cents; five years will be $1.

We believe you will recognize the common sense of this offer. You will certainly realize also that it must be withdrawn unless our readers act upon it and act quickly.

Please don't put us to the expense of clerical hire, printing and postage for sending you notifications regarding your subscription. Mail your order today if possible, together with stamps, money order, personal check or cash; and be sure and tell your neighbors about **THE WASHINGTON FARMER plan!**

New Schedule of Subscription Rates to Farmers

The Washington Farmer for one full year 25c

The Washington Farmer for three full years 50c

The Washington Farmer for five full years $1

In Canada—add 50 cents a year for extra postage.

The Success of This
From Ever
and Use

O FARMERS

MONEY AND TIVE LABOR

The Cost of Middlemen Eliminated



We Lower the Price, but We Will Not Lower the Quality

THE WASHINGTON FARMER is the only farm paper which is devoted exclusively to the interests of the farmers, stock raisers, fruitgrowers and dairymen of the state of Washington. We believe that every farm home in the state should be in touch with the great work which THE WASHINGTON FARMER is doing.

At a dollar per year readers have considered that THE WASHINGTON FARMER has given them a big return for their money in the exchange of ideas among practical farmers, helpful articles, wholesome stories, interesting departments and other splendid features.

The new price will not mean a lowering of quality or a lessening in size. THE WASHINGTON FARMER will continue to be published every week, 52 issues per year, and there will be many new and improved features adopted from time to time with a view to strengthening your state farm paper in every way possible.

Remember, the reduction of price for THE WASHINGTON FARMER comes at a time when nearly everything else is soaring in cost.

ın Depends Upon Quick Action eader---Do Your Part Coupon Today

If Readers Do Not Act, This Offer May Be Withdrawn

The Washington Farmer,
Review Bldg.,
Spokane, Wash.

I desire to take advantage of your plan to deal direct with your readers in securing and renewing subscriptions, thus saving the middleman's cost and releasing men for productive labor.

Enclosed is $..... for ..... years subscription.

If you are already paid in advance your subscription will be set forward from the date to which you are paid.

NAME .....

.....

TOWN ..... R. F. D. .....

STATE .....

Our "Want" Ads Are Doubly Profitable

It Pays to Read Them as Well as to Use Them

READ WHAT SOME SAY WHO HAVE USED OUR "WANT" ADS

RESULTS FROM POULTRY AD.

"As to my ad in The Farm Trio, I had splendid results; in fact, more than I could supply."—A. O. Laabs, Coeur d'Alene, Idaho.

17 POLAND CHINAS SOLD IN WEEK.

"It pays to advertise. Sold 17 last week, all registered stock, for breeding purposes. Nothing cheap about my stuff except the price."—F. P. Farrington.

AD SELLS $1000 WORTH OF LIVE STOCK.

"We feel more than pleased with the results secured so far through our advertising in your papers. We have sold to buyers in these states to the amount of $1000 in the last four months, every one having mentioned one or another of your papers."—Pomeroy & Son, Scappoose, Ore.

SELLS HIS SEED CORN.

"I have a great deal of confidence in the Trio as an advertising medium, as I have just had some success in selling some seed corn through the three papers. Enclosed you will find my check for $7.42, covering the ad for January. Please run this ad as per my letter of January 25, through February."—L. F. Pourtales, Oroville, Wash.

BEST FOR SELLING TURKEYS.

"Results from my turkey ad in The Farm Trio: Aside from one local order all shipments have been one, two or three birds in a shipment, going to all parts of Washington, Oregon and Idaho, and some to Montana. We have been carrying ads in six or seven weeklies, and can safely say that 85 per cent of our inquiries come from The Farm Trio."—Mrs. H. J. Cortner, Payette, Idaho.

SELLS FARM AND RAW LANDS.

"No doubt it will please you to know that the classified 'want' ad service of your three state papers has been productive of very good results for us. Your papers are bringing us a constant stream of good, live inquiries from all three states, which shows plainly that a good proportion of your subscribers in all sections of Washington, Oregon and Idaho are always on the lookout for promising real estate investments and that they must watch your 'want' ad pages pretty closely for legitimate snaps in farms, raw lands and city property."—J. Melvin Thomas & Co., Spokane, Wash.

Examples showing cost of different sized "WANT" ads inserted in The Washington Farmer, The Oregon Farmer and The Idaho Farmer.

(2 LINES.)
FOR SALE—43 LINCOLN AND SHROP ewes with lambs. P. C. Jensen, Ilo, Ida.
Cost of 4 insertions, $2.28.

(3 LINES.)
W. S. C. STUDENT WANTS A YEAR'S DIversified farm work beginning June 20. O. A. F., 361 College Station, Pullman, Wash.
Cost of 4 insertions, $3.42.

(4 LINES.)
FOR SALE, OR EXCHANGE FOR SMALLer place—My 552-a. stock and grain ranch, 3 miles to town. Address owner, R. E. Warner, Crawfordsville, Oregon.
Cost of 4 insertions, $4.56.

(5 LINES.)
BABY CHICKS, S. C. WHITE LEGHORNS; they are real mortgage lifters; the kind that lay while mere kiddies. 50,000 left. Valuable catalogue. I. D. Casey & Sons, R. 7, Waitsburg, Wash.
Cost of 4 insertions, $5.70.

(6 LINES.)
BUY ROUTLEDGE'S "HIGHEST QUALity" field, garden and flower seeds. Trees, plants and bulbs. Poultry and bird supplies. Our 144-p 1917 annual free on request.
ROUTLEDGE SEED & FLORAL CO.
145-147 2D ST., PORTLAND, Ore.
Cost of 4 insertions, $6.84.

Every time your ad is printed in this paper it will also appear on the "want" ad page of the two other big state papers of the Pacific northwest, thus bringing you into communication with thousands of prospective buyers or sellers in every section of Washington, Oregon and Idaho.

Send Your Want Ad Orders

The Washington Farmer

Review Bldg., Spokane, Wash.

Live Stock Winners

(Continued from page fourteen.)

years; 1 year and under 18 months and under 1 year; under 6 months; aged herd and young herd; get of sire, produce of sow and all champions and grand chmapions.

Senior and grand champion boar—Riverino Tashean 5th. Junior champion boar—Lonesome Fir King. Senior and grand champion sow—Bessie of Cold Stream. Junior champion sow—Lonesome Fir King.

He also won on fat barrow and pen of same.

Hampshires.

J. M. Fruitts of Joseph, Ore., the man who has popularized the Hampshire hog breed by the samples he has shown at the fairs, was the only exhibitor. But, as usual, he put up a great show and his barrow won second in the open barrow contest. His awards were:

First on boars 2 years old and over: senior yearling; junior yearling, senior and junior boar pigs. Sow, 2 years and over; senior yearling, junior yearling, senior and junior sow pigs. First on both aged and young herd bred by exhibitor, get of sire, produce of sow, fat barrow and pen of fat barrows.

His grand champion boar was Lead Me To It and grand champion sow Rancho's Rosie.

Berkshires.

The Western Berkshire congress show brought a grand lot of Berkshires to the Oregon State fair. Not only were Oregon's best breeders present, but the Rincon farm herd, in charge of C. E. Barrows, a herd that made the principal winnings at the California State fair, was on exhibition. It showed the effect of good fitting as well as the best blood of the breed. And yet, while this herd won all championships, it lost a large share of the blues to Oregon herds. The winning of first by Jack Stump, one of the boys' pig club boys, was a popular decision. The awards were made by Mr. Barker, a noted eastern breeder and judge, who declared our show even better than the California fair.

Boars: 18 months and under 2 years—1, C. E. Barrows; 2, Oregon Agricultural college. 1 year, under 18 months—1 and 4, D. C. Bunn; 2, C. E. Barrows; 3, F. R. Steel, Grants Pass; 5, D. D. Warnock, Dayton, Ore.. 6 months, under 1 year—1 and 5, Barrows; 2, Johnny Stump, Jr., Monmouth, Ore.; 3, G. E. Metcalf; 4, F. R. Steel. Under 6 months—1, Johnny Stump; 2, Steel; 3 and 4, Bunn.

Sows: 2 years or over—1 and 2, Barrows; 3 and 4, O. A. C. 18 months, under 2 years—1 and 2, Barrows; 3, Steel. 1 year, under 18 months—1 and 4, Steel; 2 and 5, Barrows; 3, Warnock. 6 months, under 1 year—1, Bunn; 2, Stump; 3 and 4, Warnock; 5, Metcalf. Under 6 months—1, Barrows; 2 and 3, Bunn; 4, Stump; 5, Metcalf.

Aged herd—1, Steel; 2, Warnock; 3, O. A. C. Young herd—1, Stump; 2, Bunn; 3, Metcalf. Get of sire—1, Stump; 2, Steel; 3, Bunn; 4, Metcalf; 5, Warnock. Produce of dam—1, Stump; 2, Metcalf; 3, Steel; 4, Bunn; 5, Warnock.

All championships went to C. E. Barrows, as follows: Senior champion boar—Mayfield's Champion: Junior and Grand Champion boar—Rincon's Rival; Senior and Grand Champion sow—Rockwood's Lady 100th Junior Champion sow—Mayfield's Laurel XV.

Fat barrows, under 1 year—1 and 2, Barrows; 3, Metcalf. Pen—1 and 2, Barrows.

DUROC JERSEYS.

Boars, 2 years and over—1, E. C. Naftzger, Gervais, Ore.; 2, C. S. Magee, McMinnville, Ore.; 3, M. Overhoff, Lebanon, Ore.; 4 and 5, Robert Nelson, North Yakima, Wash. 18 months, under 2 years—1, Nelson. 1 year, under 18 months—1 and 5, Doerfler Bros.; 2, F. A. Coffin, Monmouth; 3 and 4, Nelson. Six months, under 1 year—1, J. W. Fruit, Brooks, Ore.; 2, C. A. Hoover, Gervais, Ore.; 3, F. A. Coffin, Monmouth; 4, W. L. Sheard, Dayton, Ore.; 5, Doerfler. Under 6 months—1 and 5, J. E. Finnicum, Amity, Ore.; 2, Fruit; 3 and 4, Nelson.

Sows: 2 years and over—1, Nelson; 2 and 5, Doerfler; 3, Fruit; 4, Magee. Eighteen months, under 2 years—1 and 2, Nelson. One year, under 18 months—1 and 3, Nelson; 2 and 4, Coffin; 5, Whalley & Ewalt, Aurora, Ore. Six months, under 1 year—1 and 2, Fruit; 3 and 4, Nelson; 5, Doerfler. Under 6 months—1 and 5, Nelson; 2 and 3, C. A. Hoover, Gervais, Ore.; 4, Finnicum.

Herds: Aged herd—1, Doerfler. Young herd—1, Fruit; 2, Hoover; 3, Doerfler. Get of sire—1, Fruit; 2, Nelson. Produce of dam—1, Fruit; 2, Hoover. Champion senior boar—Naftzger on Elizabeth's Perfection. Junior Champion boar—Fruit on Fruit's Climax. Senior champion sow—Nelson, on R. J.'s Medium. Junior champion sow—Fruit on Lady Lou. Grand champion boar—Elizabeth's Perfection.

Fat barrows under 1 year—1 and 2, Nelson; 3, Naftzger. Pen—1, Nelson.

American Duroc Jersey Special—Hoover.

Get the Duroc Futurity.

Boars—1 and 2, Doerfler brothers, Silverton, Ore., on Pacific Golden Rod 5th and Pacific Golden Rod 6th; 3 and 4, M. Everhoff, Lebanon, Ore., on Buck Golden Rod and Chief Oregon 2d; 5 and 6, J. E. Finnicum, Amity, Ore., on Climax 1st and Climax 42d; 7 and 8, Charles Hoover, Gervais, Ore., on Crimson Orion 2d and Crimson Orion.

Sows—1 and 2, Hoover on Crimson Elizabeth 4th and Crimson Elizabeth 6th; 3 and 7, Finnicum on Rose Prim 1st and Rosalee 1st; 4, Everhoff on Oregon May 1st; 5 and 6, Doerfler brothers, on Golden Rod Queen and Mellow Lawn 13th; 8, W. L. Sheard, Dayton, Ore., on Golden Rose.

Herd—1, Hoover; 2, Everhoff; 3, Finnicum; 4, Sheard; 5, E. C. Naftzger; 6, J. E. Proffitt.

SHEEP.

Shropshire.

Rams: Two years or over, 1 and 3, Fox & Vaughan, Lyons, Ore.; 2, Frank Brown, Carlton, Ore.; 1 year, under 2, 1 and 2, Brown; 3 and 4, Fox & Vaughan; 5, Felzer Bros., Tangent, Ore.; under 1 year, 1 and 2, Brown; 3 and 4, Fox & Vaughan.

Ewes: Two years and over, 1, Brown; 2, Fox & Vaughan; 3 and 4, Felzer Bros.; 1 year, under 2, 1 and 2, Brown; 3, Fox & Vaughan; 4 and 5, Frank Donison, Lyons, Ore. Under 1 year, 1 and 3, Brown; 2 and 4, Fox & Vaughan; 5, Felzer Bros.

Flock: One, Brown; 2, Fox & Vaughan; 3, Felzer Bros.; 4, Francis Kizer, Harrisburg, Ore. Pen, 1, Brown; 2 and 3, Fox & Vaughan; 4, Felzer Bros.; 5, Kizer. Get of sire: 1, Brown; 2 and 3, Fox & Vaughan; 4, Felzer Bros.; 5, Kizer.

Champion ram: Brown. Champion ewe—Brown.

Rams, 2 years and over—1 and 3, Fox & Vaughn, Lyons, Ore.; 2, Frank Brown, Carlton, Ore., 1 year, under 2—1 and 2, Brown; 3 and 4, Fox & Vaughn; 5, Felzer Brothers, Tangent, Ore. Under 1 year—1 and 2, Frank Brown; 3 and 4, Fox & Vaughn. Ewes, 2 years or over—1, Frank Brown; 2, Fox & Vaughn; 3 and 4, Felzer Brothers. 1 year, under 2—1 and 2, Brown; 3, Fox & Vaughn; 4 and 5, Frank Donison, Lyons, Ore. Under 1 year—1 and 3, Brown; 2 and 4, Fox & Vaughn; 3, Felzer Brothers.

Flock—1, Brown; 2, Fox & Vaughn; 3, Felzer Brothers; 4, Francis Kizer, Harrisburg, Ore. Pen—1, Brown; 2 and 3, Fox & Vaughn; 4, Felzer Brothers; 5, Kizer. Get of sire—1, Brown; 2 and 3, Fox & Vaughn; 4, Felzer Brothers; 5, Kizer. Champion ram—Brown. Champion ewe—Brown.

Hampshire.

Rams: One year, under 2—1, Frank Brown, Carlton, Ore.; 2 and 3, J. G. S. Hubbard, Monroe, Ore.; 3, Ed Schoel, Tangent, Ore. Under 1 year—1 and 3, Brown; 2 and 4, Hubbard; 5, Schoel. Ewes: Two years or over—1, Hubbard; 2, Schoel; 3, Brown; 4 and 5, Schmidt Bros., Hoff, Ore. 1 year, under 2—1 and 2, Hubbard; 3 and 4, Brown; 5, Schoel. Under 1 year—1 and 4, Hubbard; 2 and 3, Brown; 5, Schoel.

Flock: 1, Hubbard; 2, Brown; 3, Schoel. Pen—1, Brown; 2 and 3, Hubbard; 4, Schoel. Get of sire—1, Brown; 2 and 3, Hubbard; 4, Schoel.

Champion ram: Brown. Champion ewe: Hubbard.

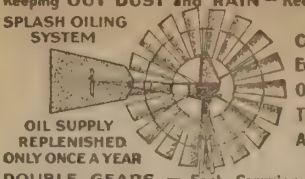
Southdowns.

J. G. S. Hubbard of Monroe, Ore., won all awards in which he entered, as follows:

First on rams, 2 years and over; 1 year and under 2. First and second on ram under 1 year; ewes, 2 years and

(Continued on page twenty-five.)

SELF-OILING WINDMILL
With INCLOSED MOTOR
Keeping OUT DUST and RAIN — Keeping IN OIL



DOUBLE GEARS — Each Carrying Half the Load
Every feature desirable in a windmill in the
AUTO-OILED AERMOTOR
Gasoline Engines — Pumps — Tanks
Water Supply Goods — Steel Frame Saws
WRITE AERMOTOR CO. 2500 12TH ST., CHICAGO

SASH DOORS MILLWORK
Direct From Factory
Get our low manufacturers' prices. Send us your carpenter's lists for prompt freight prepaid estimate and ask for our new millwork catalog—free.
Keystone Lumber Company
347-33 South Sprague St. Tacoma, Wash.

9 CORDS IN 10 HOURS



BY ONE MAN. It's KING OF THE WOODS. Saves money and backache. Send for FREE catalog No. B 64 showing low price and latest improvements. First order gets agency.
Folding Sawing Machine Co., 161 West Harrison St., Chicago, Ill.

In answering advertisements don't fail to mention this paper.



Look for this Label on your Coat

Raynster US

Reg. U. S. Pat. Off.

Raynster

Reg. U. S. Pat. Off.

Raynster is the name of the best storm-coats. To make sure that you get full value when you buy, look for the Raynster label.

You're equipped for the roughest work in the roughest weather when you have a Raynster.

These strong, durable storm-coats keep you dry through the worst of downpours. They bring the protection of your own roof out into the fields.

And mark this: When you buy a Raynster your selection is not *limited.* This word represents a line of storm-coats complete in every style and type of coat.

Every man, woman, boy and girl can find just the coat they most need in the Raynster line. Work-coats, dress-coats and play-coats of all kinds and descriptions, with real service and the best of materials and workmanship, is the real meaning of Raynsters.

Go to your dealer's and select the right Raynster for your needs. Take it home. Then when it rains you're *ready.* Write us for interesting style book. It pictures some of the most popular Raynsters.

US RUBBER SYSTEM — UNITED STATES RUBBER COMPANY AND ASSOCIATED COMPANIES

United States Rubber Company

Clothing Division, New York and Boston

Discovers Cave and Digs for Treasure

The Ups and Downs of a Bunch Grass Boy---Number 29

Part II.

By JOE L. ASHLOCK

Copyright 1917, Joe L. Ashlock.

Arriving at the cave, I made another examination to detect the possible presence of rattlers or animals—and got negative results. So I boldly jumped down in the hole, drew my spade after me, and commenced to dig, confident that my first spadeful would bring up some old coins, or jewelry, or pieces of chains with which prisoners had been bound and cast into the hole.

However, my spade turned up nothing but gravel and stones, which became larger and more difficult to move as I proceeded further into the ground.

My spade presently struck something which was a brownish white, and crumbled. I examined a fragment, and saw that it was not stone of any kind—and judged that I was about to strike oil. Undoubtedly the treasure would be next.

Very carefully I dug now, and presently saw that I was uncovering a dirty white, roundish thing which was caked over with clayey earth so as to be partly concealed from identification. Getting the round thing loose from its moorings, I picked it up with my hands and set it on the rocky edge of the hole which now was about a foot above my head; and drew myself out of the cave to examine my first find.

Very carefully I broke the caked clay away from the thing. Bone began to show up in spots as I did so; and presently I had before me a skull of some kind. It was not a coyote skull; nor a colt, nor a calf, nor a cow. With all these skulls I was familiar; but I never before had seen such a one as this.

The inside of the thing was filled with the same clayey stuff that had surrounded it; so I took a stick and gouged some of the material from the interior by jabbing in through the eye holes. Then I looked at it and pondered—and was conscious of having seen the thing before, somewhere; but I could not tell where for a long time. Then in a flash I had it. In my school hygiene I had seen a picture of this very thing. I recalled very clearly, all at once, the drawing of the human skeleton in this book I had studied; and here before me was a skull, just such as was pictured in this drawing. So the thing I had unearthed was a human skull!

For a second I felt a numb, cold, prickly feeling stealing over me, which feeling was succeeded by a series of hot waves. I gulped two or three times; and then struggled against an overpowering desire to push the skull back into the hole, mount my cayuse and flee like the wind.

I reflected that there was nothing unusual in finding human bones and treasures piled together in one cave. In fact, I had read of just such things, and might have expected this. Anyhow, I must get the treasure. Mother had told me that ghost stories were all bosh—there were no such things as ghosts, though the Mires children said that a ghost sat on the ridge pole of their house and gibbered and chattered the night their aunt died in Missouri. Also, the same night, a pig had squealed in the yard, and they had no pigs. These things they called "hants." Here was a "hant" with a vengeance; but clinging to my mother's assurance that these ghost things and hant-things were only imagined, I revived my courage sufficiently to proceed with the digging; and in the course of the afternoon, I brought the whole skeleton, along with a lot of arrow heads and some larger heads of the same kind, probably spear-heads, to light. By this time I knew what I had found; it was an old Indian grave. The bones crumbled at the touch, and I supposed that they had been there for two or three thousand years. The remoteness of the lifetime of this Indian chief—and I did not imagine that he had been anything less than a chief—made my interference with his bones seem less objectionable. By the time I was through, I feared neither his bones nor his ghost, and was chiefly concerned because the expected treasures had not materialized. Instead, I had some arrow and spear-heads, and some crumbling, yellow bones.

I poked about in the hole some more, but found no treasures, and no more bones. It was getting late, I was tired and aching in every joint, and disappointed. Thoroughly disgusted, I put the arrow-heads and spear-heads in my pockets, and shoveled the bones back into the hole, covering them lightly with gravel and earth. I was late for supper, and when asked for an explanation, said I had been out hunting for bones for my chickens—and with that explanation, offered to conceal my real doings of the afternoon, I felt an electric shock strike me! Surely I had been hunting for bones! And surely I had found some!

But I controlled my sudden excitement. To the folks I explained with indifference that nearly aroused suspicion, that I had found a few old bones "over there"; that in a day or two I might go and get them. Luckily I escaped a cross-examination.

Followed a day or two of serious, mental debating. Was it proper to feed the bones of the Indian chief who had been buried two or three thousand years to my hens? That was the question I was trying to answer.

At the outset, it seemed to smack of cannibalism. My hens would eat the bones. Then they would lay eggs; and we would eat the eggs!

However, this line of reasoning had a law in it. The hens ate bone to make egg-shell, and we did not eat the shells. I could feed the shells to the hens over and over again—in fact, mother always did that. The bones of this Indian chief could be used over and over again.

Even at that, I still hesitated, and scoured the country again for bones. But none could I find. My hens continued to lay soft-shelled eggs, and presently began to droop and die. I doubt if it was the lack of bone that was wholly responsible for their dying; but I thought it was, and in dire straits I wrestled daily and nightly with the great problem. Eventually, I arrived at a decision—and having decided, moved swiftly.

One day I went after the bones, finding them crumbled away almost to dust. Old they were, undoubtedly, how many hundreds of years one can only guess. The climate in our country was dry, the soil seldom being wet down the depth at which the bones were buried. In this dry soil, the bones could easily have lain, I fancy, hundreds of years; and I am sure now that they had been there that long. Then, of course, I supposed that they had been buried thousands of years.

I kindled a fire of sagebrush in the henyard; but it was not necessary, for the bones had crumbled to dust before they reached the fire. One of our neighbors in digging a well, unearthed twenty feet underground, the bones of a large animal, possibly a mammoth, or a mastodon. As nearly as I can recall, the bones I found in the hole and the bones of the prehistoric mammoth were about the same condition.

The hens knew what I was about I think; for they were scratching and rolling and picking in the aches, rich with lime, almost before the ashes were cool. Right away they began to lay eggs so hard that when you cracked two eggs together, they gave off a slightly metallic ring instead of breaking.

I had saved the hens and the eggs; but for days thereafter I brooded silently over this thing. My folks noticed my depressed air, and asked for explanations. I put them off with various subterfuges. Then one day the big crash came.

I read in a paper about some wicked people who had dug into a grave for some purposes or other, and had been jailed. The "law" stood in my eyes as a grim and terrible thing; and now I was, in the eyes of the law, guilty of misdemeanor punishable by fine or imprisonment.

For a long time after that I kept out of sight when I saw strangers coming, fearing that "the law" was sending for me. Also, when I saw a band of Indians coming I hid out in a hurry, for I knew now that the law was on their side. Worrying and fearing so much I began to lose my appetite and was tortured by dreams of a most hideous kind. The leading character of these dreams was a gigantic, frightfully painted and scowling Indian who would chase me with his tomahawk, demanding the return of his bones. It was a long time before I would ride over in the big hollow where the cave was; in fact it was a year or more before I had wholly recovered my equilibrium. I heard mother telling somebody, one day, that I kept out of sight when strangers or other children were around, because I had always had to play alone and did not know how to behave when strangers or other children were on the place; but I knew better.

In the Losing Game

By GRANVILLE LOWTHER.

It has been said that in our orchard districts of the great northwest we waste enough fruit which, if properly utilized in the manufacture of byproducts, would make a reasonable profit. This has been discussed so much that it seems superfluous to refer to it again, and yet as the packing season comes on, and as I have gone out over the country watching the orchardists prepare to market their fruits, I am impressed as never before that we will never permanently succeed until we devise some plan of utilizing that part of our crop which is generally wasted. Of course, we waste in many ways that are not related especially to the fruit business. I believe one of the great wastes of humanity in general is the waste of time, but war conditions are correcting that. The second is the waste of talent, in doing that for which we are not mentally adapted. The third is the waste of money in buying what does not produce permanent good. Few persons are careful about the proper use of hours and moments as they pass.

It is not popular now to utilize child labor, and yet if the ability of the child is taken into consideration and if it is given work to which it is adapted, especially on the farm, child labor is not an evil, but is a positive benefit in its development of the child.

Another waste is in the employment of persons to do things for which they are not adapted. For instance, I know a man who employs from a dozen to 20 persons in handling his fruit. He prides himself on being able to put his fruit into the market at less expense than any other person in his community. How does he do it? He studies his men and studies his work and endeavors to give each and every person employed that work for which they are by strength, nature and intelligence best adapted. By these means he will save not less than 5 cents a box on apples and 2 1-2 cents on peaches that his neighbors will not save because they do not know how to manage their help. The waste of fruit in the orchard is not the only waste; but it is the great waste in orchard work which we must, if we are successful in the future, prevent.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

Dreams the Uncensored Moves of Your Subconscious Self



Dr. Hirshberg

There is at least one narrow difference between a dream and a waking state. In dreams the mental output is less likely to be corrected by rewards and punishments, trials, errors or the guidance of real impressions outside the mind. Reveries are dreams. There is no real difference between them.

Thoughts in the waking state only run riot in those who close their senses to realities, as certain enthusiastic theorists or especially crazy people. In general, the thoughts in the average persons are straightened out soon or later by the hard knocks of the world, commonly called "unkind fate."

Obviously, a dream in a healthy persons is made up in part from realities, which the memory has stored away logically and reasonably, and a complex tissue of wishes, fears, preferences and fancies unchecked and unguided.

Recently a young girl was referred to me with the complaint of intermittent attacks of emotional distress. For three or four years she had exhibited almost daily spells of crying and depression. These would disappear after a few hours only to return again.

She told me she had every reason in the world to be happy. Her home life and her occupation were most pleasant and she had everything that a fond heart could wish.

Her dreams finally gave the clue to her difficulties. She never had the same dream twice, but her dreams partook more or less of the same nature. In them she was lured away and rescued by her brother, or she was dragged away to a dungeon and tortured by criminals.

A Memory Cause.

If the all-too-universal theory of Dr. Sigmund Freud were correct this would mean a psycho-analysis or to be tortured by Ali Baba and his Forty Thieves. Or, perchance, she was afraid that she might suffer some such unhappy realities.

A rigid psycho-analysis of this case brought out the fact that four years ago she had been put through the third degree sweating process by detectives. At that time she was scarcely more than 15 years of age, and was employed by a man who had made off with some money by dispatching the girl to the bank with a package of useless paper and then accusing the poor child of the felony.

Several days of torture and suspicion directed against the girl almost undermined her glandular and emotional as innocent and given many voluble apologies, her mind did what most sane minds do, pressed out of her consciousness all memory of the terrifying experience.

Not so her dreams. There, unbidden and uncontrolled, the hidden fear burst forth like a phantasmagoria of melodramas—almost tragedies. Aroused and thus built-up in a sequence these led to the discovery of the ordeal of four years ago.

Often a Relief.

A repressed pain, mental or emotional, thus stored away in the unconscious recesses of the individual, is like a thorn in the flesh not reachable from the surface. It pricks into the physical and moral fiber of the individual like a deadly sore. Once, however, it is brought to light and on the surface, the discovery and full recognition of its irritant source in a large measure removes the evil. My patient was thus, through her dreams, relieved of mental and emotional distress of several years standing.

Tree Growing From Telephone Pole.

New Orleans has a live oak tree growing out of a cedar telephone pole. The tree, which is probably four years old, is three or four feet long. It is believed that an acorn blew into a hole which had been made in the pole when the limbs were cut off.

All the World's a Stage, and All the Men and Women Merely Players

Washing Dishes at Camp Lewis



After each meal the men at Camp Lewis wash their mess kits, which consist of plate, cup, knife, fork and spoon. Two caldrons of hot water are provided, the first for washing and the second for rinsing. They have their own tea towels for drying the utensils. Captain J. H. Como is camp quartermaster. His department feeds, outfits and subsists the men gathered here to be trained and sent forward to fight for Uncle Sam.

Wash Day in Camp



The above picture gives some idea of wash day in camp, American Lake, where about 45,000 of Uncle Sam's nephews are to be gathered. Night life at Camp Lewis is reported to be very quiet. Most everybody is tired after the day's work. Hundreds of men may be seen every night sitting on the benches and talking, or writing letters at the tables. The candy counter is busy all the time, but even this closes early and the boys trudge across the grounds to barracks, for lights go out at 10 o'clock.

Battle Training Is Intensive



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Section of a French training camp, showing the soldiers at work practicing the throwing of hand grenades and practicing bayonet fighting. The French train their men under conditions as nearly like those of actual war as possible. American troops in France are undergoing similar intensive training.

Major General Greene.



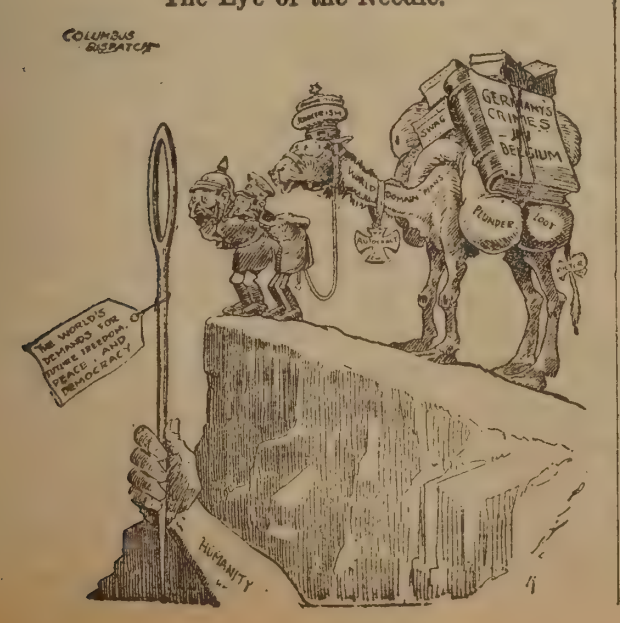
The above is a picture of Major General H. A. Greene, the commanding officer at Camp Lewis. The men see very little of Major General Greene. Three or four brigadier generals create some stir as they move around camp, but a colonel or a major gets only a ripple. Captains are so common as to be hardly noticed, and lieutenants pass unnoticed. There are plenty of sergeants and no one pays any attention unless their top sergeant goes by.

Made Record in Endurance Test

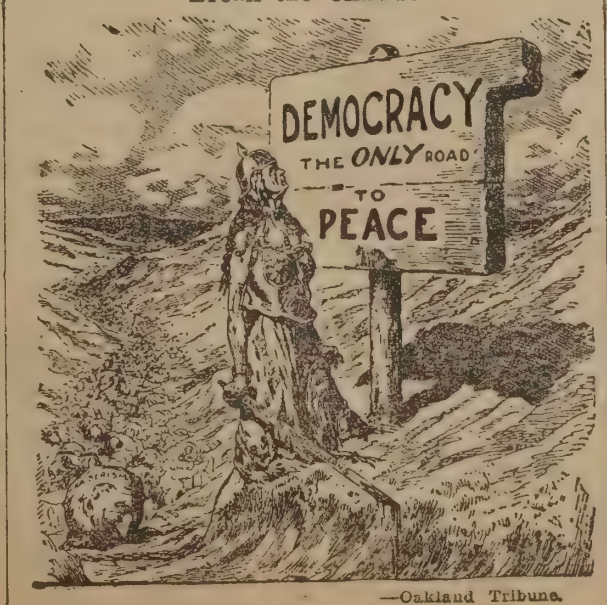


Christian Christiansen, of Swedish origin and retaining many of the old Viking qualities, has just made a new record in a versatile athletic test in California. Christiansen rode a bicycle for a mile, ran a mile, swam a mile, walked a mile and rowed a mile. He made five miles in the five different methods in 54 minutes 46 2-5 seconds.

The Eye of the Needle.



Break the Chains!



—Oakland Tribune.

Coming Out of the Swamp.



—New Orleans Item.

Success of Whatcom County Fair

Exhibits Would Have Done Honor to Any County in U. S.

Two hundred automobiles were lined up in a pouring rain outside the Lynden fairgrounds Thursday of fair week, while their owners took in the races and inspected the various exhibits. This incident is quoted for two reasons: First, to emphasize the fact that Whatcom county farmers look with considerable favor on the automobile as a means of conveyance; and second, that a little thing like rain can't keep them away from the fair.

In any case, the fair of this year, which was held from September 25 to 29, was well worth whatever it cost any individual spectator, either in time, trouble or money. The agricultural and horticultural displays would have done honor to any county in the United States, while the thrifty cattle, hogs and chickens showed that Whatcom county is rapidly becoming a live stock community. The influence of the world war could be traced in many directions—in the talk of the various groups, for one thing, and in the quality and quantity of the vegetables, for another.

Probably potatoes were the dominant note in the horticultural building. They were of all shapes, sizes and varieties, but the gradual growth in favor of the long white potato advocated alike by county agents and by city buyers was quite evident. While a time will never come when potato production will be limited to this one type, in all probability, the Lynden exhibit seemed to indicate a tendency in that direction.

Two other exhibits of unusual value and interest housed in the horticultural building were the display of Washington flax, raised by Dr. Thornton, and an excellent display of field corn, both ears and stalks. This has been an off season for corn in western Washington, but nobody would have believed it, after looking at the bundles of 12 and 15 foot silage corn and the tables of solidly filled and well shaped ears. Dr. Thornton's flax display carried the fiber plant from its crude state to the finished product. Even a spinning wheel was included, to make the exhibit complete.

The poultry building was well filled, White Leghorns as usual taking first place for the number of entries, with Rhode Island Reds, Barred and Buff Rocks, and Orpingtons all well represented. A feature of this year's poultry show was the introduction of utility judging, in addition to the awarding of prizes on show points. Millard Caylor was the utility judge, while Judge Breed placed the ribbons in the show clasess.

The western Washington experiment station maintained an exhibit and as usual Professor Shoupe was surrounded with a good sized crowd from opening to closing time. This year the experiment station is featuring the advantages of eggs preserved by the water glass or lime water methods. Eggs preserved by the different methods were shown in the candler. Three striking points were brought out by this exhibit: First, lime water produces as good results as does the better advertised water glass method; second, fertile eggs kept as well as sterile eggs, when preserved in this way; and third, grease preservatives are distinctly inferior to the lime water or water glass methods.

Further and authoritative particulars of the lime water method of preseving eggs will be given in an early numbe of The Farmer.

Honors as to the numbers of entries in the cow barn were pretty equally divided between the Holsteins and Jerseys. Whatcom county, especially in the Lynden district, runs quite strongly to Jerseys and Guernseys. Among the most noticeable single exhibits in this department were A. E. Smith's "Milkyway Farm" Holsteins and Nels Jacobson's Guernseys. Professor Price of Pullman judged the cattle.

Explains Land Bank

(Continued from page three.)

signed for farmers, then all legislation that ever came out of congress or state legislatures is class legislation. No legislation can equally affect every man, woman and child throughout the country. There seems to be a tendency to look at this act from an entirely different angle than other legislation. Legislation affecting other industries is not class legislation because it is for the benefit of these industries. The fact that those engaged in them are benefited is not considered material. But the federal farm loan act, which was designed to place our basic industry on a sound financial foundation, is class legislation for the sole reason that it benefits the farmer. The weakness in this logic is too patent for argument."

The speaker then turned to criticisms of the law coming largely from farmers:

"Fault is also found with the act in that it does not make provision for short term seasonal credit. The most charitable view of this criticism is that it is due to an ignorance of the principles involved. Land credit, or long term mortgage credit, involves fixed capital It is a problem of investment finance and can be met only through the issuing of long term bonds, based upon fixed security. Short term seasonal credit, on the other hand, involves operating capital. It differs very little in principle from ordinary commercial banking To have attempted to tie up the two forms of credit in one act and to have extended short term credit from funds raised by the sale of bonds would have been the height of financial heresy. Europe, which has made considerable progress in agricultural finance, has drawn a clear line of demarcation between the two types of credit, and in practically no instance are the two covered by one legislative act or handled by one and the same financial institution.

As to Tenant Farmers.

"Still another criticism, which in many respects is deserving of sympathy, is the fact that the act makes no provision for financing the tenant farmer, the landless man, or the insolvent farmer in general. This criticism, too, arises from the failure to distinguish between two distinct problems. Financing the solvent farmer, that is, the farmer who can offer two dollars' worth of security for every dollar he borrows, is a financial problem pure and simple. All the solvent farmer needs is the machinery to place him in a position to compete with other solvent industries for the world's surplus funds. But the tenant farmer, the landless man, or the man who has no readily marketable security to offer for a loan, can not be financed on the same basis. In fact, the insolvent farmer does not present a financial problem at all. His is rather a social and political problem. That there is great need for a system of financing this type of farmer has been brought home to us by the present crisis in our national life. That the problem will eventually be solved I have not the remotest doubt. But what I am trying to impress upon you is that this problem is entirely separate and distinct from the problem which the federal farm loan act has been designed to solve."

President Robinson frankly conceded that the law was not perfect, but said its defects could easily be cured by amendments. The federal reserve act, he reminded the bankers, has been amended a number of times and will continue to be amended as experience and practice may demand.

On the whole, however, he contended, evidence is accumulating that the best opinion—among bankers and farmers alike—has crystalized into the conviction that 'the federal farm loan act is one of the most constructive measures ever passed by congress."

War Brought Home

(Continued from page eleven.)

for placing in the window to advertise the fact that this home is 'Hooverizing.'

"During the week of October 21, acting on instructions from superintendents and teachers, the children will be asked to take home these pledge cards, the pledge card for signing by the parents and to be brought back to the school authorities, the house card of instructions and window card to be left at the home.

"Sunday, October 21, all churches and Sunday schools will be asked to emphasize the necessity of food conservation and the signing of these pledge cards.

"Women's organizations and federated clubs and Boy Scouts will be enlisted for an active part in the final checking up the last few days of the week."

A state executive committee of 30 members has been appointed by Mr. Hebberd to carry through this big week's house to house campaign.

Bay Island Fair.

A good-sized premium list has been issued by the management of the Bay Island fair, which will be held at Picnic Point, Pierce county, September 28-30, inclusive. The board of directors is composed of W. R. Lotz and Mrs. Edith Shaw of Arletta, F. W. Samuelson of Cromwell and R. W. Uhlman, Mrs. A. F. Bailey, T. F. Cowgill and John Frederick of Gig Harbor. This is the first Bay Island fair. The name Bay Island "embraces all the bays and islands in that portion of Pierce county west of the Narrows."

Suits Him Better Than Any

To the Editor: Your paper suits me better than any farm paper I take. I appreciate the market reports and the way you go after grafters and so forth. Yes, and the experiences of so many different farmers in different localities, and many other things.

H. E. YEAGER.
Monroe, Wash.

New Silos in Burley.

C. B. Sprague, county agriculturist of Kitsap county, says that he visited two silos in the course of construction in the Burley district. One was rather a unique venture in silo building. It was a wooden hoop silo, 8x16 feet, built and assembled on the ground while lying down, and then raised up and put in position. Fifteen neighboring men came in to help the raising stunt. The other silo was a tongue-lock design, 10x20, 14 feet of which was up.

Canning Demonstrations.

"We have completed our food conservation demonstrations," says C. A. Cole, county agriculturist of Pierce county. "The canning demonstrations were conducted mostly under the management of the boys' and girls' clubs. Lucian Jones, county club leader, put on most of the work. Demonstrations were held in 20 different localities in the county."

Cut-Over Lands

in the

Upper Columbia Valley

of

Stevens County, Washington

Beginning October 1 we offer for sale several thousand acres of splendid cut-over land in the vicinity of Northport and located on both sides of the Columbia river.

Having unusual transportation facilities and being close to an ample market, these lands offer exceptional opportunities to actual settlers.

We offer these lands in tracts from 40 acres upwards and at very low prices, with easy payments.

Write to us for full information and illustrated booklet.

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"Instant, through copse and heath, arose
Bonnets and spears and bended bows;
* * * * *
As if the yawning hill to heaven
A subterranean host had given."

The whistled summons of Roderick Dhu, the hero of Scott's "Lady of the Lake," caused his Highland warriors literally to spring from the earth. Ere the echo died away, from behind bush and rock emerged the loyal and ready clansmen. In armed silence they awaited their chieftain's bidding and typified his might.

Today the Commander-in-Chief of our nation's armed forces and the resources behind them, can, by lifting the telephone receiver, instantaneously set in motion all the vast machinery of warfare, munitions, transportation and food conservation.

Like the Scottish mountaineers, the American people must stand in loyal readiness to perform any service in furtherance of the nation's high aim. Such a spirit of co-operation and sacrificing of individual interests can alone make certain the accomplishment of the great task to which our country is committed.

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THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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(Continued from page five.)

in the spring and sending them back in the late summer tired and haggard with the hunger of the North. Each year a tithe remained behind, the toll of the trackless places, but the rest went back again and again, and took new brothers with them.

"Did you like the books I sent you with Poleon when he went down to the coast? I borrowed them from Shakespeare George."

The girl laughed. "Of course I did—that is, all but one of them."

"Which one?"

"I think it was called 'The Age of Reason,' or something like that. I didn't get a good look at it, for Father Barnum shrieked when he saw it, then snatched it as if it were afire. He carried it down to the river with the tongs."

"H'm! Now that Ithink of it," said the old man, "Shakespeare grinned when he gave it to me. You see, Poleon ain't much better on the read than Iam, so we never noticed what kind of a book it was.'

"When will Poleon get back, do you suppose?"

"Most any day now, unless the Dawson dance halls are too much for him. It won't take long to sell our skins if what I hear is true."

"What is that?"

"About these Cheechakos. They say there are thousands of tenderfeet up there, and more coming in every day."

"Oh! If I had only been here in time to go with him!" breathed the girl. "I never saw a city. It must be just like Seattle or New York."

Gale shook his head. 'No. There's considerable difference. Some time I'll take you out to the states, and let you see the world—maybe." He uttered the last word in an undertone, as if in self-debate, but the girl was too excited to notice.

"You will take mother, too, and the kiddies, won't you?"

"Of course!"

"Oh! I—I—" The attempt to express what this prospect meant to her was beyond her girlish rapture, but her parted lips and shining eyes told the story to Gale. "And Poleon must go, too. We can't go anywhere without him." The old man smiled down upon her in reassurance. "I wonder what he'll say when he finds the soldiers have come. I wonder if he'll like it."

Gale turned his eyes down stream to the barracks, and noted that the long flag staff had at last been erected. Even as he looked he saw a bundle mounting towards its tip, and then beheld the Stars and Stripes flutter out in the air, while the men below cheered noisily. It was some time before he answered.

"Poleon Doret is like the rest of us men up here in the north. We have taken care of ourselves so far, and I guess we're able to keep it up without the help of a smooth-faced Yankee kid for guardian."

"Lieutenant Burrell isn't a Yankee," said Necia. "He is a blue grass man. He comes from Kentucky."

Her father grunted contemptuously. "I might have known it. Those rebels are a cultus, lazy lot. A regular male man with any ginger in him would shed his coat and go to work, instead of wearing his clothes buttoned up all day. It don't take much 'savvy' to run a handful of thirteen-dollar-a-month soldiers." Necia stirred a bit restlessly, and the trader continued: "It ain't man's work, it's—loafing. If he tries to boss us he'll get quite a surprise."

"He won't try to boss you. He has been sent here to build a military post, and to protect the miners in their own self-government. He won't take any part in their affairs as long as they are conducted peaceably."

Being at a loss for an answer to this unexpected defense, the old man grunted again, with added contempt, while his daughter continued:

"This rush to the upper country has brought in all sorts of people, good, bad—and worse; and the soldiers have been sent to prevent trouble, and to hold things steady till the law can be established. The Canadian Mounted Police are sending all their worst characters down river and our soldiers have been scattered among the American camps for our protection. I think it's fine."

"Where did you learn all this?"

"Lieutenant Burrell told me," she replied; at which her father regarded her keenly. She could not see the curious look in his eyes, nor did she turn when, a moment later, he resumed, in an altered tone:

"I reckon Poleon will bring you something pretty from Dawson, eh?"

"He has never failed to bring me presents, no matter where he came from. Dear old Poleon!" She smiled tenderly. "Do you remember that first day when he drifted, singing, into sight around the bend up yonder? He had paddled his birch-bark from the Chandelar without a thing to eat; hunger and hardship only made him the happier, and the closer he drew his belt the louder he sang."

"He was bound for his 'New Country'!"

"Yes. He didn't know where it lay, but the feet for travel was on him, and so he drifted and sang, as he had drifted and sung from the foot of Lake Le Barge."

"That was four years ago," mused Gale, "and he never found his 'New Country,' did he?"

"No. We tied him down and choked it out of him," Necia laughed. "Dear, funny old Poleon—he loves me like a brother."

The man opened his lips, then closed them, as if on second thought, and rose to his feet, for, coming toward them up the trail from the barracks, he beheld a trim, blue-coated figure. He peered at the approaching officer a moment, set his jaw more firmly, and disappeared into the store.

"Well, we have raised our flag staff," said the lieutenant as he took a seat below Necia. "It's like getting settled to keep house."

"Are you lazy?" inquired the girl.

"I dare say I am," he admitted. "I've never had time to find out. Why?"

"Are you going to boss our people around?" she continued, bent on her own investigation.

"No. Not as long as they behave. In fact, I hardly know what I am to do. Maybe you can tell me." His smile was peculiarly frank and winning. "You see, it's my first command, and my instructions, although comprehensive, are rather vague. I am supposed to see that mining rights are observed, to take any criminals who kindly offer themselves up to be arrested, and to sort of handle things that are too tough for the miners themselves."

"Why, you are a policeman!" said Necia, at which he made a wry face.

"The department, in its wisdom, would have me, a tenderfoot, adjust those things that are too knotty for these men who have spent their lives along the frontier."

"I don't believe you will be very popular with our people," Necia announced, meditatively.

"No. I can see that already. I wasn't met with any brass bands, and I haven't received any engraved silver from the admiring citizens of Flambeau. That leaves nothing but the women to like me, and, as you are the only one in camp, you will have to like me very much to make up for its shortcomings."

She approved of his unusual drawl; it gave him a kind of deliberation which every move of his long, lithe body belied and every glance of his eyes contradicted. Moreover, she liked his youth, so clean and fresh and strange in this land where old men are many and the young ones old with hardship and grave with the silence of the hills. Her life had been spent entirely among men who were her seniors, and, although she had ruled them like a spoiled queen, she knew as little of their sex as they did of hers. Unconsciously the strong, young life within her had clamored for companionship, and it was this that had drawn her to Poleon Doret—who would ever remain a boy—and it was this that drew her to the young Kentuckian; this, and something else in him, that the others lacked.

"Now that I think it over," he continued, "I'd rather have you like me than have the men do so."

"Of course," she nodded. "They do anything I want them to—all but father, and——"

"It isn't that," he interrupted, quickly. "It is because you are the only woman of the place, because you are such a surprise. To think that in the heart of this desolation I should find a girl like you—like you, like the girls I know at home."

"Am I like other girls?" she inquired, eagerly. "I have often wondered."

"You are, and you are not. You are surprisingly conventional for these surroundings, and yet unconventionally surprising—for any place. Who are you? Where did you come from? How did you get here?"

"I am just what you see. I came from the states, and I was carried. That is all I can remember."

"Then you haven't lived here always?"

"Oh, dear, no! We came here while I was very little, but of late I have been away at school."

"Some seminary, eh?"

At this she laughed aloud. "Hardly that, either. I've been at the mission. Father Barnum has been teaching me for five years. I came upriver a day ahead of you."

She asked no questions of him in return, for she had already learned all there was to know the day before from a grizzled corporal in whom was the hunger to talk. She had learned of a family of Burrells whose name was known throughout the south, and that Meade Burrell came from the Frankfort branch, the branch that had raised the soldiers. His father had fought with Lee, and an uncle was now in the service at Washington. On the mother's side the strain was equally militant, but the Meades had sought the sea. The old soldier had told her much more, of which she understood little; told her of the young man's sister, who had come all the way from Kentucky to see her brother off when he sailed from San Francisco; told her of the lieutenant's many friends in Washington, and of his family name and honor. Meade Burrell was undoubtedly a fine young fellow in his corporal's eyes, and destined to reach great heights, as the other Burrells had before him. The old soldier, furthermore, had looked at her keenly and added that the Burrells were known as "divils among the weemen."

Resting thus on the steps of Old Man Gale's store, the two talked on till they were disturbed by the sound of shrill voices approaching, at which the man looked up. Coming down the trail from the town was a squaw and two children. At sight of Necia the little ones shouted gleefully and scampered forward, climbing over her like half-grown puppies. They were boy and girl, both brown as Siwashes, with eyes like jet beads and hair that was straight and coarse and black. At a glance Burrell knew them for "breeds," and evidently the darker half was closer to the surface now, for they choked, gurgled, stuttered and coughed in their Indian tongue, while Necia answered them likewise. At a word from her they turned and saw him, then, abashed at the strange splendor of his uniform, fell silent, pressing close to her. The squaw, also, seemed to resent his presence, for, after a lowering glance, she drew the shawl closer about her head, and, leaving the trail, slunk out of sight around the corner of the store.

Burrell looked up at his companion's clear-cut, delicate face, at the wind-tanned cheeks, against which her long braids lay like the blue-black locks of an Egyptian maid, then at her warm, dark eyes, in which was a hint of the golden light of the afternoon sun. He noted covertly the slender lines of her body and the dainty, firm, brown hands flung protectingly about the shoulders of her little friends, who were peering at him owlishly from their shelter.

The bitter revolt that had burned in him at the prospect of a long exile in this undiscovered spot died out suddenly. What a picture she made! How fresh and flower-like she looked, and yet the wisdom of her! He spoke impulsively:

"I am glad you are here, Miss Necia. I was glad the moment I saw you, and I have been growing gladder ever since, for I never imagined there would be anybody in this place but men and squaws—men who hate the law and squaws who slink about—like that." He nodded in the direction of the Indian woman's disappearance. "Either that, or, at best, a few 'breeds' like these little fellows."

She looked at him quickly.

"Well! What difference would that make?"

"Ugh! Squaws and half-breeds!" His tone conveyed in full his utter contempt.

The tiny hands of the boy and girl slid into her own as she arose. A curiously startled look lay in her eyes, and an inquiring, plaintive wrinkle came between her brows.

"I don't believe you understand," she said. "Lieutenant Burrell, this is my sister, Molly Gale, and this is my little brother John." Both round-eyed elfs made a ducking courtesy and blinked at the soldier, who gained his feet awkwardly, a flush rising into his cheeks.

From the regions at the rear of the store came the voice of an Indian woman calling:

"Necia! Necia!"

"Coming in a moment," the girl called back; then, turning to the young officer, she added, quietly: "Mother needs me now. Good-bye!"

CHAPTER II.

Poleon Doret's Hand Is Quicker Than His Tongue.

The trader's house sat back of the post, farther up on the hill. It was a large, sleepy house, sprawling against the sunny side of the slope, as if it had sought the southern exposure for warmth and had dozed off one sultry afternoon and never waked up from its slumber. It was of great, square-hewn timbers, built in the Russian style, the under side of each log hollowed to fit snugly over its fellow underneath, upon which dried moss had previously been spread, till in effect the foot-thick walls were were tongued and grooved and, through years of seasoning, become so tinder dry that no frosts or heats could penetrate them. Many architects had worked on it as it grew, room by room, through the years, and every man had left behind the mark of his individuality, from Pretty Charlie the pilot, who swung an ax better than any Indian on the river, to Larsen, the ship's carpenter, who worked with an adze and who starved the summer following on the Koyukuk. It had stretched a bit year by year, for the trader's family had been big in the early days when hunters and miners of both breeds came in to trade, to loaf and to swap stories with him. Through the winter days, when the caribou were in the north and the moose were scarce, whole families of natives came and camped there, for Alluna, his squaw, drew to her own blood, and they felt it their due to eat of the bounty of him who ruled them like an overlord; but when the first goose honked they slipped away until, by the time the salmon showed, the house was empty again and silent save for Alluna and the youngsters. In return these people brought him many skins and much fresh meat, for which he paid no price and, with the fall, his cache was filled with fish of which the bulk were dried king salmon as long as a grown man's leg and worth a dollar apiece to any traveler.

These are men whose wits are quick as light and whose muscles have been so tempered and hardened by years of exercise that they are like those of a wild animal. Of such was John Gale; but with all his intelligence he was very slow at reading, hence he chose to spend his evenings with his pipe and his thoughts, rather than with a book, as lonesome men are supposed to do. He did with little sleep and many nights he sat alone till Alluna and Necia would be awakened by his heavy step as he went to his bed. That he was a man who could really think and that his thoughts were engrossing no one doubted who saw him sitting enthralled at such a time, for he neither rocked nor talked nor moved a muscle hour after hour and only his eyes were alive. Tonight the spell was on him again and he sat bulked up in his chair, rocklike and immovable.

From the open door of the next room he could hear Necia and the little ones. She had made them ready for bed and was telling them the tale of the snowbird's spot.

"So when all the other birds had failed," he heard her say, "the little snowbird asked for a chance to try. He flew and flew and just before he came to the edge of the world where the two old women lived he pulled

(Continued on following page.)

"The Barrier" By REX BEACH

(Continued from preceding page.)

out all of his feathers. When he came to them he said:

"'I am very cold. May I warm myself at your fire?'

"They saw how little and naked he was, and how he shivered, so they did not throw sticks at him, but allowed him to creep close. He watched his chance, and when they were not looking he picked up a red-hot coal in his beak and flew back home with it as fast as ever he could—and that is how fire came to the Indian people.

"Of course the coal was hot, and it burned his throat till a drop of blood came through, so ever since that day the snowbird has had a red spot on his throat."

The two children spoke out in their mother's tongue, clamoring for the story of the good beaver who saved the hunter's life, and she began, this time in the language of the Yukon people, while Gale listened to the low music of her voice, muffled and broken by the log partition.

His squaw came in, her arrival unannounced except by the scuff of her moccasins, and seated herself against the wall. She did not use a chair, of which there were several, but crouched upon a bearskin, her knees beneath her chin, her toes a trifle drawn together. She saw thus for a long time, while Necia continued her stories and put the little ones to bed. Soon the girl came to say goodnight.

John Gale had never kissed his daughter, and, as it was not a custom of her mother's race, she never missed the caresses. On rare occasions the old man romped with the little ones and took them in his arms and acted as other fathers act, but he had never done these things with her. When she had gone he spoke without moving.

"She'll never marry Poleon Doret."

"Why?" inquired Alluna.

"He ain't her kind."

"Poleon is a good man."

"None better. But she'll marry some—some white man."

"Poleon is white," the squaw declared.

"He is and he ain't. I mean she'll marry an 'outside' man. He ain't good enough, and—well, he ain't her kind." Alluna's grunt of indignation was a sufficient answer to this, but he resumed, jerking his head in the direction of the barracks. "She's been talking a lot with this—this soldier."

"Him good man, too, I guess," said the wife.

"The hell he is!" cried the trader, fiercely. "He don't mean any good to her."

"Him got a woman, eh"? said the other.

"No, no! I reckon he's single all right, but you don't understand. Hes different from us people. He's—he's—" Gale paused, at a loss for words to convey his meaning. "Well, he ain't the kind that would marry a half-breed."

Alluna pondered this cryptic remark unsuccessfully, and was still seeking its solution when her lord continued:

"If she really got to loving him it would be bad for all of us."

Evidently Alluna read some hidden meaning back of these words, for she spoke quickly, but in her own tongue now, as she was accustomed to do when excited or alarmed.

"Then this thing must cease at once. The risk is too great. Better that you kill him before it is too late."

"Hardly that," said the trader.

"Think of the little ones and of me," the squaw insisted, and, encouraged by his silence, continued: "Why not? Soon the nights will grow dark. The river runs swiftly, and it never gives up its dead. I can do it if you dare not. No one would suspect me."

Gale rose and laid his big hand firmly on her shoulder.

"Don't talk like that. There has been too much blood let already. We'll allow things to run along a bit as they are. There's time enough to worry."

He rose, but instead of going to his room he strode out of the house and walked northward up the trail, passing through the town and out of sight. Alluna sat huddled up in the doorway, her shawl drawn close about her head, and waited for him until the late sun—which at this time of year revolves in a great circle overhead—dipped down below the distant mountain for the midnight hour, then rolled slanting out again a few points farther north, to begin its long journey anew; but he did not return. At last she crept stiffly indoors, like an old and weary woman, the look of fright still staring in her eyes.

About nine o'clock the next morning a faint and long-drawn cry came from the farthest limits of the little camp. An instant later it was echoed closer, and then a dog began to howl. Before its voice had died away another took it up sadly, and within three breaths, from up and down the half-mile of scanty waterfront, came the cry of "Steam-bo-o-a-t!" Cabin doors opened and men came out, glanced up the stream and echoed the call, while from sleepy nooks and sun-warmed roofs wolf-dogs arose, yawning and stretching. Those who had slept late dressed as they hurried towards the landing-place, joining in the plaint, till men and malamutes united in the shrill, slow cry.

Downstream came the faint-sighing "whoof-whoof" of a steamer, and then out from behind the bend she burst, running on the swift spring current with the speed of a deer. She blew hoarsely before the tardy ones had reached the bank, and when abreast of the town her bell clanged, the patter of her great wheel ceased, she reversed her engines and swung gracefully till her bow was up against the current, then plowed back, inching in slowly until with much shouting and the sound of many gongs, she slid her nose quietly into the bank beneath the trading post and was made fast. Her cabin deck was lined with passengers, most of whom were bound for the "outside," although still clad in mackinaw and overalls. They all gazed silently at the hundred men of Flambeau, who stared back at them till the gangplank was placed, when they came ashore to stretch their legs. One of them, however, made sufficient noise to make up for the silence of the others. Before the steamer had grounded he appeared among the Siwash deckhands, his head and shoulders towering above them, his white teeth gleaming from a face as dark as theirs, shouting to his friends ashore and pantomiming his delight to the two Gale children, who had come with Alluna to welcome him.

"Who's dose beeg, tall people w'at stan' 'longside of you, Miz Gale?" he called to her; then, shading his eyes elaborately, he cried, in a great voice: "Wall! wall! I believe dat's M'sieu Jean an' Mam'selle Mollee. Ba Gar! Dey get so beeg w'ile I'm gone I don' know dem no more!"

The youthful Gales wriggled at this delicious flattery and dug their tiny moccasined toes into the sand. Molly courtesied nervously and continuously as she clung to her mother, and the boy showed a gap where two front teeth had been and was now filled by a very pink tongue.

"W'en you goin' stop grow, anyhow, you two, eh?" continued the Frenchman, and then in a tone of sadness: "If I t'ink you ack lak' dis, I don' buy all dese present. Dese t'ing ain' no good for ole folks. I guess I'll t'row dem away." He made as if to heave a bundle that he carried into the river, whereupon the children shrieked at him so shrilly that he laughed long and incontinently at the success of his sally

Lieutenant Burrell had come with the others, for the arrival of a steamboat called for the presence of every soul in camp, and, spying Necia in the outskirts of the crowd, he took his place beside her. He felt constrained, after what had happened on the previous evening, but she seemed to have forgotten the episode, and greeted him with her usual frankness. Even had she remembered it, there was nothing he could say in explanation or in apology. He had lain awake for hours thinking of her, and had fallen asleep with her still in his mind, for the revelation of her blood had come as a shock to him, the full force of which he could not appreciate until he had given himself time to think of it calmly.

He had sprung from a race of slaveholders, from a land where birth and breed are more than any other thing, where a drop of impure blood effects an ineradicable stain; therefore the thought of this girl's ignoble parentage was so repugnant to him that the more he pondered it the more pitiful it seemed, the more monstrous. Lying awake and thinking of her in the stillness of his quarters, it had seemed a very unfortunate and a very terrible thing. During his morning duties the vision of her had been fresh before him again, and his constant contemplation of the matter had wrought a change in his attitude toward the girl, of which he was uncomfortably conscious and which he was glad to see she did not perceive.

"There are some of the lucky men from El Dorado Creek," she informed him, pointing out certain people on the deck. "They are going out to the states to get something to eat. They say that nothing like those mines have ever been heard of in the world. I wish father had gone up last year when the news came."

"Why didn't he?" asked the lieutenant. "Surely he must have been among the first to learn of it."

"Yes. 'Stick' George sent him word a year ago last fall, when he made the first discovery, but for some reason father wouldn't go."

The men were pouring off the boat now, and through the crowd came the tall Frenchman, bearing in the hollow of each arm a child who clasped a bundle to its breast. His eyes grew brighter at sight of Necia, and he broke into a flood of patois; they fairly bombarded each other with quick questions and fragmentary answers till she remembered her companion, who had fallen back a pace and was studying the newcomer, whereupon she turned.

"Oh, I forgot my manners. Lieutenant Burrell this is Napoleon Doret—our Poleon!" she added, with proud emphasis.

Doret checked his volubility and stared at the soldier, whom he appeared to see for the first time. The little brown people in his arms stared likewise, and it seemed to Burrell that a certain distrust was in each of the three pairs of eyes, only in those of the man there was no shyness. Instead, the Canadian looked him over gravely from head to heel, seeming to note each point of the unfamiliar attire; then he inquired, without removing his glance:

"W'ere'bouts you live, eh?"

"I live at the post yonder," said the lieutenant.

"W'at biznesse you work at?"

"I am a soldier."

"W'at for you come 'ere? Dere's nobody fightin' roun' dis place."

"The lieutenant has been stationed here, foolish," said Necia. "Come up to the store quick and tell me what it's like at Dawson." With a farewell nod to Burrell she went off with Doret, whose speech was immediately released again.

In spite of the man's unfriendliness Burrell watched him with admination. There were no heels to his tufted fur boots, and yet he stood a good 6 feet 2, as straight as a pine sapling, and it needed no second glance to tell of what metal he was made. His spirit showed in his whole body, in the set of his head, and, above all, in his dark, warm face, which glowed with eagerness when he talked, and that was ever—when he was not singing.

"I never see so many people since I lef' Quebes," he was saying. "She's jus' lak' beeg city—mus' be t'ree, four t'ousan' people. Every day some more dey come, an' all night dey dance an' sing an' drink w'iskee. Ba gosh, dat's fine place!"

"Are there lots of white women?" asked the girl.

"Yes, two, t'ree hondred. Mos' of dem is work in dancehalls. Dere's one fine gal I see, name' Marie Bourgette. I tell you 'bout her by an' by."

"Oh, Poleon, you're in love!" cried Necia.

"No, siree!" he denied. "Dere's none of dem gal look half so purty lak' you." He would have said more, but spying the trader at the entrance of the store he went to him, straightway launching into the details of their commercial enterprise, which, happily, had been most successful. Before they could finish the crowd from the boat began to drift in, some of them buying drinks at the bar and others making purchases of tobacco and so forth, but for the main part merely idling about curiously.

Among the merchandise of the post there were for sale a scanty assortment of firearms, cheap shotguns and a Winchester or two, displayed in a rack behind the counter in a manner to attract the eye of such native hunters as might need them, and with the rest hung a pair of Colt's revolvers. One of the new arrivals, who had separated from the others at the front, now called to Gale:

"Are those Colts for sale? Mine was stolen the other day." Evidently he was accustomed to Yukon prices, for he showed no surprise at the figure the trader named, but took the guns and tested each of them, whereupon the old man knew that here was no "cheechako," as tenderfeet are known in the north, although the man's garb had deceived him at first glance. The stranger balanced the weapons, one in either hand, then he did the "double roll" neatly, following which he executed a move that Gale had not witnessed for many years. He extended one of the guns, butt foremost, as if surrendering it, the action being free and open, save for the fact that his forefinger was crooked and thrust through the trigger guard; then, with the slightest jerk of the wrist, the gun spun about the handle jumped into his palm and instantly there was a click as his thumb flipped the hammer. It was the old "road agent spin," which Gale as a boy had practiced hours at a time; but that this man was in earnest he showed by glancing upward sharply when the trader laughed.

"This one hangs all right," he said; "give me a box of cartridges."

He emptied his gold sack in payment for the gun and ammunition, then remarked:

"That pretty nearly cleans me. If I had the price I'd take them both.

Gale wondered what need induced this fellow to spend his last few dollars on a firearm, but he said nothing until the man had loosened the bottom buttons of his vest and slipped the weapon inside the band of his trousers, concealing its handle beneath the edge of his waistcoat. Then he inquired:

"Bound for the outside?"

"No. I'm locating here."

The trader darted a quick glance at him. He did not like this man.

"There ain't much doing in this camp; it's a pretty poor place," he said guardedly.

"I'll put in with you, from its looks," agreed the other. "It's got too many soldiers to be worth a damn." He snarled this bitterly, with a peculiar leering lift of his lip, as if his words tasted badly.

"Most of the boys are going up-river," said Gale.

"Well, those hills look as if they had gold in them," said the stranger, pointing vaguely. "I'm going to prospect."

Gale knew instinctively that the fellow was lying, for his hands were not those of a miner; but there was nothing to be said. His judgment was verified, however, when Poleon drew him aside later and said:

"You know dat feller?"

"No."

"He's bad man."

"How do you know?"

"She's leave Dawson damn queeck. Dose mounted police t'row 'im on de boat jus' before we lef'." Then he told a story that he had heard. The man, it seemed, had left Skagway between two suns, upon the disruption of Soapy Smith's band of desperadoes, and had made for the interior, but had been intercepted at the pass by two members of the citizens' committee who came upon him suddenly. Pretending to yield, he had executed some unexpected coup as he delivered his gun, for both men fell, shot through the body. No one knew just what it was he did, nor cared to question him overmuch. The next heard of him was at Lake Bennett, over the line, where the mounted police recognized him and sent him on. They marked him well, however, and passed him on from post to post as they had driven others whose records were known; but he had lost himself in the confusion at Dawson for a few weeks, until the scarlet-coated riders searched him out, disarmed him and forced him sullenly aboard this steamer. The offscourings of the Canadian frontier were drifting back into their native country to settle.

Old Man Gale cared little for this, for he had spent his life among such men, but as he watched the fellow a scheme outlined itself in his head. Evidently the man dared not go farther down the river, for there was nothing save Indian camps and a Mission or two this side of St. Michael's, and at that point there was a court and many soldiers, where one was liable to meet the penalty of past misdeeds, hence he was probably resolved to stop there, and, judging by his record, he was a man of settled convictions. Continued persecution is wont to stir certain natures to such reckless desperation that interference is dangerous, and Gale, recalling his sullen look and ill-concealed contempt for the soldiers, put the stranger down as a man of this type. Furthermore, he had been impressed by the fellow's remarkable dexterity of wrist.

The trader stepped to the door, and, seeing Burrell on the deck of the steamer, went down towards him. It was a long chance, but the stakes were big and worth the risk. He had thought much during the night previous—in fact, for many hours—and the morning had found him still undecided, wherefore he took this course.

"Necia tells me that you aim to keep law and order here," he began, abruptly, having drawn the young man aside.

"Those are my instructions," said Burrell, "but they are so vague—"

"Well! This camp is bigger than it was an hour ago, and it 'ain't improved any in the growth. Yonder goes the new citizen." He pointed to the stranger, who had returned to the steamer for his baggage and was descending the gang-plank beneath them, a valise in each hand. "He's a thief and a murderer, and we don't want him here. Now, it's up to you."

"I don't understand," said the lieutenant, whereupon the trader told him Doret's tale. "You and your men were sent here to keep things peaceable," he concluded, "and I reckon when a man is too tough for the Canuck police he

is tough enough for you to tackle. There ain't a lock and key in the camp, and we ain't had a killing or a stealing in ten years. We'd like to keep it that way."

"Well—you see—I know nothing of that shooting affray, so I doubt if my authority would permit me to interfere," the soldier mused, half to himself.

"I allowed you were to use your own judgment," said the elder man.

"So I am, I suppose. There is one chance, Mr. Gale. If you'll back me up I'll send him on down to St. Michael's. That is the most I can do."

The lieutenant outlined his plan, and as he went on the trader nodded approval.

The young man gazed back at him so squarely, his eyes were so pleasant and friendly, his whole person breathed such straight-up honesty and freshness, that shame arose in the old man, and he had hard shift to keep his glance from wavering. Without forethought he answered, impulsively:

"He's desperate and he's dangerous. I sold him a '45' just now." He was about to tell him where the man wore it, and to add a word concerning his dexterity with the gun, when the very fearless deliberation of the youth deterred him. On second thought, Gale yielded to an impulse to wait and see how Meade Burrell would act under fire. If the soldier emerged scathless, it would give him a line on his character; if he did not—well, that would be even better. The sight of his blue and brass awoke in the elder man dread and cowardice, emotions he had never experienced before. Anyhow, he owed it to himself, to Necia, and to the others to find what kind of man this soldier was.

The crowd was coming back to the steamer, which had discharged her few bundles of freight, and there was no one inside the log post as they entered except Doret and the stranger, who had deposited his baggage at the rear and was talking with the Frenchman at the bar. At sight of the lieutenant he became silent and turned carelessly, although with a distrustful stare. Burrell wasted no time.

"Are you going to locate here?" he began.

"Yes."

"I notice you go "skeleton-rigged," the soldier continued, indicating the man's baggage. "Pretty small outfit for a miner, isn't it?"

"It's plenty for me."

"Have you enough money to buy your season's grub?"

"I guess that's my business."

"Pardon me, it is my business also."

"What is this—a holdup?" The man laughed harshly, at the same time swinging around till he faced his questioner. Gale noted that his right hand now hung directly over the spot where suspenders buttoned on the right side. The trader moved aside and took up a position at some distance.

"My orders are to see that all newcomers either have an outfit or are able to buy one," said Burrell. "Those that are not equipped properly are to be sent down river to St. Michael's, where there is plenty of everything and where they will be taken care of by the government. Mr. Gale has only sufficient provisions to winter the men already in this district."

"I can take care of myself," said the man, angrily, "whether I'm broke or not, and I don't want any of your interference." He shot a quick glance at Poleon Doret, but the Frenchman's face was like wood, and his hand still held the neck of the whisky bottle he had set out for the stranger before the others entered. Gale leaned against the oposite counter, his countenance inert but for the eyes, which were fixed upon the lieutenant.

"Come," said the officer, peremptorily, "I have heard all about you and you are not the kind of citizen we want here, but if you have enough money for an outfit I can't send you away. If you haven't—"

"I'm broke," said the man, but at the note in his voice Poleon Doret's muscles tightened and Burrell, who also read a sinister message in the tone, slid his heavy service revolver from its holster beneath his coat.

He had never done this thing before and it galled him. He had never drawn a weapon on a man and this playing at policeman became suddenly most repugnant, stirring in him the uncomfortable feeling that he was doing a mean thing, and not only a mean thing but one of which he ought to be heartily ashamed. He felt decidedly amateurish, especially when he saw that the man apparently intended no resistance and made no move. However, he was in for it now and must end as he had begun.

"Give me your gun," he said; "I'll unload it and give it back to you at the gangplank."

"All right, you've got the upper hand," said the man through lips that had gone white. Drawing his weapon from beneath his vest, he presented it to the officer, butt foremost, hammer underneath. The cylinder reposed naturally in the palm of his hand and the tip of his finger thrust through the trigger guard.

Burrell lowered the barrel of his revolver and put out his left hand for the other's weapon. Suddenly the man's wrist jerked, the soldier saw a blue flicker of sunlight on the steel as it whirled, saw the arm of Poleon Doret fling itself across the bar with the speed of a striking serpent, heard a smash of breaking glass, felt the shock of a concussion, and the spatter of some liquid in his face. Then he saw the man's revolver on the floor half-way across the room, saw fragments of glass with it, and saw the fellow step backward, snatching at the fingers of his right hand. A smell of powder smoke and rank whisky was in the air.

There are times when a man's hand will act more swiftly than his tongue. Napoleon Doret had seen the manner of the stranger's surrender of his gun, and, realizing too late what it meant, had acted. At the very instant of the fellow's treachery, Doret struck with his bottle just in time to knock the weapon from his hand, but not in time to prevent its discharge. The bullet was lodged in the wall a foot from where Gale stood. As the stranger staggered back the Frenchman vaulted the bar, but, though swift as a cat, the soldier, who had also leaped, was before him. Aiming a sweeping downward blow with his Colt, Burrell clipped the Skagway man just above the ear, and he reeled; then as he fell the officer struck wickedly again at his opponent's skull, but Doret seized him by the arm.

"Ba Gar, don't kill 'im twice!"

Burrell wrenched his arm free and turned on Doret a face that remained long in the Frenchman's memory, a face suffused with fury and convulsed like that of a sprinter at the finish of a race. The two men stared at each other over the fallen figure for a brief moment, until the soldier gained mastery of himself and sheathed his weapon, when Poleon smiled.

"I spoil' a quart of good w'iskee on you. Dat's wort' five dollar."

The lieutenant wiped the liquor from his face.

"Quick work, Doret," he said. "I owe you one."

Gale's face was hidden as he bent over the prostrate man, fingering a long and ragged cup which laid the fellow's scalp open from back of the ear to the temple, but he mumbled something unintelligible.

"Is he hurt badly?"

"No, you chipped him too low," said the trader. "I told you he was bad."

"He's goin' have nice birt'-mark, anyhow," said Doret, going back of the bar for some water. They revived the man, then bound up his injury hastily, and as the steamer cast off they led him to the bank and passed his gripsacks to a roustabout. He said no word as he walked unsteadily up the plank, but turned and stared malignantly at them from the deck; then, as the craft swung outward into the stream, he grinned through the trickle of blood that stole down from beneath his wide hat, if the convulsive grimace he made could be termed a grin, and cried:

"I'd like to introduce myself, for I'm coming back to winter with you, lieutenant! (My name is Runnion." And until the steamer was hidden behind the bend below they saw him standing there gazing back at them fixedly.

As Burrell left the two men at the store he gave his hand frankly to the French-Canadian, and said, while his cheeks flushed:

"I want to thank you for saving me from my own awkwardness."

Doret became even more embarrassed than the lieutenant at this show of gratitude, and grunted churlishly. But when the young man had gone he turned to Gale, who had watched them silently, and said:

"He's nice young feller, ole man. Sapre! W'en he's had his eye got so red lak' my ondershirt."

But the trader made no reply.

(To be continued.)

Live Stock Winners

(Continued from page nineteen.)

over; 1 year, and under 2; under 1 year flock, pen and get of sire.

Oxfords.

C. P. Kizer of Harrisburg, Ore., won all awards in which he entered, as follows:

First on rams, 2 years and over; 1 year and under 2; ewes 2 years and over; flock, pen and get of sire, and first and second on ram under 1 year; ewe, 1 year and under 2, and ewe under 1 year.

Lincolns.

John B. Stump of Monmouth, Ore., won all awards in which he entered, as follows:

First on ram, 2 years and over; ewe under 1 year and get of sire. First and second on ram under 1 year; ewe, 2 years or over, and ewe, 1 year and under 2.

Rambouillet Sheep.

Rams, 2 years and over—1, Mrs. R. A. Jackson, Dayton, Ore.; 1 year and under—1 and 2, Jackson; 3 and 4, Schmidt Brothers, Hoff, Ore. Under 1 year—1 and 2, Jackson; 3, Ed Schoel, Tangent, Ore.; 4 and 5, Schmidt.

Ewes, 2 years and over—1 and 4, Jackson; 2 and 5, Schoel; 3, Schmidt. 1 year, under 2—1 and 2, Jackson; 3 and 5, Schmidt; 4, Schoel. Under 1 year—1, Schoel; 2 and 3, Jackson; 4 and 5, Schmidt.

Flock—1, Jackson; 2, Schoel; 3, Schmidt. Pen—1, Schmidt; 2, Jackson.

Feed Problem Solved.

The acute hay situation has led the members of the Methow Valley Live Stock association to accomplish much through their organization, according to W. A. Holt, county agriculturist of Okanogan county. The membership appointed two committees to handle the feed situation—one cattle committee and one horse committee. The latter has arranged for pasture and straw stacks in the Big Bend, where all horses not needed through the winter will be taken. The cost for each horse will be five cents per day for straw, pasture, plenty of salt, and water. This committee was empowered to judge as to which stock should be taken and which remain in the Methow. The cow committee of three arranged for the purchase of 700 tons of alfalfa, to be distributed to the dairymen in proportion to the amount of cattle they are milking. This move was inaugurated to prevent the dairymen from disposing of their stock because of lack of feed. These farmers stick together.

FALL SEEDS

We offer a complete stock of Grass and Clover Seeds, Fall Vetch, Cheat Seed, Fall Wheat, Fall Oats, Fall Rye, etc.

Buying direct from the farmers, we are in a position to offer the highest grade of seeds at the right price. Send us list of what you want and get our prices.

D. A. White & Sons
Seedsmen.
255 State St., Salem, Ore.

We Want to Buy

100 tons each of turnips, rutabagas, mangels and beets. Small roots preferred.

Write, call or phone.

LILLY'S

Seattle.

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

In answering advertisements don't fail to mention this paper.

Save by Mail!

We are under state supervision, and the law does not permit us to guarantee our rate, but for over 16 years we have never paid less than

6%

Write for Our Free Booklet

It tells you of the MUTUAL PLAN of investing Savings which has made us one of the largest savings institutions in the northwest.

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And that all our earnings, less actual running expenses, are paid to our members twice each year.

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Puget Sound Savings & Loan Association
Third and Pike, Seattle, Wash.
Established 1901.
References: Any Bank in Seattle.

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THE NORTHWESTERN BUSINESS COLLEGE an accredited commercial school. ¶ Diplomas and degrees conferred by state authority and recognized throughout the United States. ¶ Highest standard of efficiency. ¶ Sane business management. ¶ A faculty of specialists. ¶ All energies conserved for day school work. ¶ Specialize in Stenography, Typewriting, Bookkeeping, Penmanship, Banking, Accountancy. Send for Catalog C.

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ALICE W. BARLAND
Editorial Contributor.

How Can We Help?

By MRS. THOMAS CARMICHAEL.

At this time of great national stress, when the peace and liberty, almost the very life of our country is at stake, every conscientious, good woman has the desire to be helpful and patriotic and bear her share of the burden that rests upon this great American nation of ours. In what practical, sane way can we women of the rural communities be most helpful and feel that we are having a part in the great wave of preparedness and patriotism that has swept the country in the defense of right over might.

We do not need to take up the Red Cross work, nor learn to be nurses' aids or ambulance drivers to be patriotic, though no doubt there is a picturesqueness and a sense of adventure about these tasks that makes them seem attractive. Let us leave these to the city women, who, it seems to me are so poor in opportunities for real helpfulness compared to us "tillers of the soil" or to be more exact, the feminine gender behind the man with the hoe.

If, as Gifford Pinchot says: "There never was a time in the history of the world when as large a responsibility rested on any class of people as rests on the American farmer of today," then surely we farm women have our answer to the question in our hearts, "What shall we do to help?"

If we do nothing more than look after the wellbeing of our husbands, sons and brothers, so that they may be 100 per cent efficient as workers in the great army of preparedness along the line of food production, we are doing a good work. But we can and should do more. There are several ways in which we can help our country to win the war. In every way possible, we should increase the food supply and then save every ounce of it by way of the canning, pickling, salting and drying process so that our store rooms will have enough for our own needs with plenty for good measure. If we do not have to call upon the stores for their canned products, it will mean just so much more food that can be sent over to help keep the allied forces in fighting trim. By all combining hard enough we may be a big factor in ending the war.

Save Wheat Supply.

Another thing that we women can do to serve our country is to try in every way possible to save the wheat supply. No one should shirk this responsibility. If every woman unselfishly makes some sacrifice along this line, the wheat question will be taken care of, and we none of us will be sufferers in any way. Herbert Hoover appeals to the American people to conserve the wheat supply by substituting other cereals. He says: "A saving of one pound a week of wheat flour for every person, would go far toward solving the food question."

In our family we find corn bread a very good substitute. I make enough to last two or three days and it seems to be just as good warmed over as fresh. With coffee for breakfast it is delicious and most satisfying and nourishing. Following is my favorite recipe: Two cups yellow corn meal, 1 cup white flour, 2 cups sour cream and milk mixed, or 2 cups buttermilk, 2 tablespoons sugar, 1 teaspoon salt, 1 egg, one teaspoon baking powder sifted in flour, 1-3 teaspoon soda in tablespoon boiling water and then stirred in sour cream. Pour in buttered pans and bake in rather hot oven 30 minutes. Be sure not to use to much soda, and do not have the batter more than an inch deep in the pans.

Hot Corn Bread.

Hot corn bread served with blackberry jam or any jelly, and a cup of hot cocoa, makes a fine supper for children. It is especially nice with apple sauce and a glass of milk, or spread with syrup the children love it and it is a whole meal in itselft almost.

Corn meal pancakes for breakfast made with buttermilk, or sour cream and milk mixed, are delicious, and always more light than when made entirely of white flour. Stir a small teaspoon soda in a pint of the sour milk, then beat in the cornmeal and white flour mixed with little baking powder, sugar and salt, add beaten egg, then pour on buttered iron skillet until brown. They should be thin enough to spread thin quickly.

Another thing which we like very much and which is fine for children between meals, is oat meal crackers. They are easy to make, are very wholesome and economical, and save on wheat flour. Following is my method: One cup sour cream or buttermilk, one small teaspoon soda stirred in hot water and added to the cream; one cup white flour, one level teaspoon baking powder, one teaspoon salt, one tablespoon sugar, and two cups rolled oats put through meat chopper. Mix in a crock with a cake spoon until stiff enough, then knead enough oatmeal in, on bread board until stiff enough to roll out like pie crust. Cut with biscuit cutter, bake in quick oven on buttered tins and leave piled on towel until crisp. My meat grander has several knives and I used the one that looks like a pin wheel, to grind the rolled oats. I am thinking of getting some steel cut oat meal to use for the crackers. We like them better than any you can buy and prefer them to cookies or hermits, and they are without doubt more wholesome for children than cookies. They might be all right made with sweet milk and baking powder and a little butter melted and stirred in, though I have not as yet tried them that way, as I always have sour cream to use for cooking, and I think it makes things light and crisp as well as richer.

A Distinction.

"This is sheer ignorance. Your article is full of erroneous statements."

"It is shear ignorance, then. I clipped the stuff."

Farm Pointers.

Cull potatoes make profitable pork.

Fly a flag on the farm and teach the children what it stands for.

When made into apple butter, even the ugly windfall has a glory of its own.

Use the soft-shelled eggs at home. They ship poorly and may lower the grade of the others.

Fresh air and sunlight combat disease in the stable. Dairy barns should be airy barns. Ventilation is conservation.

Put the farm machinery in first class order during odd times this winter. An hour spent in repair may prevent later on a day of despair.

The licensing of fruit and produce dealers will increase the confidence of producers as well as consumers. It will be an incentive toward greater production.

Kitchen Helps

By GLENTWORTH RUBINS SHUMAKER.

The housekeeper is often annoyed by having foods cook fast to and gradually spoil kettles and pans, particularly when using aluminum or enameled ware. This may be avoided by having false bottoms cut out of tin to fit all vessels used for cooking. The food will adhere to the tin, which can be taken out and scraped and scoured, leaving the vessel itself uninjured.

A New Use for Chard.

Carefully protect the chard bed this fall and in the early spring, while asparagus is still expensive and scarce, cut the brittle, white stems of the chard and add to the asparagus. The cooking gives it the flavor of the asparagus and only the initiated can detect it, and it also makes a bunch of asparagus go much farther.

When Baking Juicy Pies.

When preparing to bake juicy pies mix a spoonful of flour through a cupful of sugar for each pie, then thoroughly stir the mixture through the fruit before putting in the pie. This is especially practicable with fresh fruits or berries and not only keeps the juice from stewing out over the oven but also adds to the richness of the pie.

He Was Soured.

"Have you 'Love Letters of Wise Men'?" she asked timidely.

"No, miss," responded the clerk in the book department.

"And why not?"

"Because wise men never write love letters."

Crochet and Tatting Designs

By WINIFRED WORTH



GUEST TOWEL.

Towel designs are always appreciated and you will not be disappointed in the beauty of this one.

For the 3 open meshes of the filet insertion make chain of 27 sts. Always remember to ch. 5 at the end of row. In one filled mesh there are always 4 tr., in 2 there are 7, in 3 there are 10. Follow design.

Detail of Edge on Towel.

Fill end with dc., ch. 5, turn.

2d Row—Make row of open meshes with 2 chains between each treble.

3d Row—Same as second row.

4th Row—4 dc., in 1st open mesh, 1 p., 4 dc., in next space, 4 dc. in next space, 1 p. repeat to end of work, always making 1 p. over every other tr.

5th Row—Ch. 5, and sl. st. into treble missed by picot. Notice the chain of 5 forms arch over picot made in preceding row. Repeat to end of work, turn.

6th Row—4 dc. in ch. of 5, 1 p., 4 dc., 1 p., 4 dc., repeat to end of work. This edge can be used on dresser scarfs, or can be made by making chain desired length, fill ch. with dc. and proceed from 1st row.



They wear like iron—

Mayer

HONORBILT SCHOOL SHOES

Ask your dealer for Mayer Shoes. Look for the trade-mark on sole.

F. Mayer Boot & Shoe Co.
Milwaukee, Wis.

Western Branch: Washington Shoe Mfg. Co., Seattle, Wash.

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Can Stay at Home and Shop in Seattle With Satisfaction

FREDERICK & NELSON, Seattle, are prepared to supply you promptly with such items in furniture and dry goods as can not be readily obtained from the merchants in your own community.

All such orders received by Frederick & Nelson receive the prompt, personal attention of an expert shopper, and parcel post shipments are sent POSTAGE PAID to any point in Washington.

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DELIVERED FREE!

As a trial proposition, send us 50 cents and we will send you 1½ pounds of Northwest's Best Coffee, and after using it, if you believe it is not honestly the best coffee you ever used, we will refund the purchase price without question.

You take no chances.

This is not a package coffee, but a bulk coffee, freshly roasted and ground for you the way you want, after the order is received.

All good coffee; no tin cans to throw away or premiums you do not need.

Coffee sent whole or ground, as ordered. If you want it ground, state whether coarse, medium, fine, for percolator, or pulverized.

Send stamps, coin or money order. Money back if not satisfied.

Northwest Grocery Company
13th and Commerce Sts.
Tacoma, Wash.

A Patriotic Appeal to Every Reader of This Paper

The Young Men's Christian Association is anticipating the GREAT NEED of right environment among our soldier boys, in the cities, in the training camp and at the front in the trenches. Send your "bit" for this work to Y. M. C. A. War Work Secretary, Spokane, Washington.

In answering advertisements don't fail to mention this paper.

Patterns

2000—Lady's dress, with body lining. Cut in 6 sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. It requires 6 yards of 44-inch material for a 36-inch size. The skirt measures about 2 2-3 yards at the foot. Price, 10 cents.

2213—Lady's waist. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 36 requires 3 yards of 36-inch material. Price, 10 cents.

2219-2202—Lady's coustume. Waist 2219 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure and requires 4 1-8 yards of 36-inch material for a 36-inch size. Skirt 2202 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. Size 24 requires 6 1-2 yards of 36-inch material. The skirt measures about 2 3-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

1903—Child's dress, with or without pocket and belt. Cut in 4 sizes: 2, 4, 6 and 8 years. It requires 2 5-8 yards of 36-inch material for a 4-year size. Price, 10 cents.

2204—Girl's dress. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 8 requires 3 1-2 yards of 44-inch material. Price, 10 cents.

2216—Dress for misses and small women. Cut in 4 sizes: 14, 16, 18 and 20 years. Size 16 requires 6 3-8 yards of 44-inch material. The dress measures about 3 yards at the lower edge. Price, 10 cents.

1875—Girl's coat suit. Cut in 4 sizes. 8, 10, 12 and 14 years, and requires 4 1-4 yards of 44-inch material for a 12-year size. Price, 10 cents.

2214—Junior' dress. Cut in 3 sizes: 12, 14 and 16 years. Size 14 requires 5 1-8 yards of 36-inch material. Price, 10 cents.

1915—Lady's apron. Cut in 3 sizes: Small, medium and large. Medium size requires 4 1-8 yards of 36-inch material. Price, 10 cents.

2223—Child's under garment. Cut in 6 sizes: 1, 2, 4, 6, 8 and 10 years. Size 6 requires 1 5-8 yards of 36-inch material. Price, 10 cents.

2212—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 3 1-2 yards of 44-inch material. Price, 10 cents.

2006—Lady's house dress, with or without chemisette. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 7 1-8 yards of 36-inch material for a 36-inch size. The skirt measures about 2 7-8 yards at the foot. Price, 10 cents.

Back to the Bible.

Owe no man anything, but love one another; for he that loveth another hath fulfilled the law.—Romans 13:8.

Wrath killeth the foolish man, and envy slayeth the silly one.—Job 5:2.



Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No.....

BE SURE TO GIVE NUMBER AND SIZE.

Canadian War Cake.

No recipe has been more popular than the one for Canadian war cake. Many people like this plain cake better than the cakes that call for butter, eggs and milk.

Two cups of brown sugar, 2 cups of hot water, 4 tablespoons of lard, 1 teaspoon of salt, 1 teaspoon of ground cinnamon, 1 teaspoon of ground cloves, 1 cup of raisins.

Boil all these ingredients for 5 minutes after they begin bubbling. When cold add 3 cups of flour and 2 teaspoons of soda dissolved in 1 teaspoon of hot water. Bake in two loaves in a slow oven an hour and a quarter.

To Remove Ink Stains.

Soak ink stains in sour milk. If a dark stain remains rinse in a weak solution of chloride of lime.



Feel the Weight of Fleece-lined Hosiery

Ask your storekeeper for Durable-DURHAM fleece-lined. Notice how much heavier it is than most 25c fleece-lined hosiery. Durable-DURHAM Fleece-lined Hosiery is "full of warmth and full of wear."

DURABLE
DURHAM HOSIERY
FOR MEN, WOMEN AND CHILDREN

Is Made Strongest Where the Wear is Hardest

Besides the fleece-lined there are weights and styles for all seasons of the year, for work, play or dress. Durable-DURHAM Hosiery cuts down darning work and expense. You'll like the way the heels, soles and toes are strongly reinforced; the full-length legs; the wide elastic tops that can't be pulled off or torn by garters; the anti-run stitch; the smooth, seamless and even feet and toes; the ankles that fit snugly without wrinkles; and the way the famous Durham dyes are fast—colors will not fade or turn green from wearing or washing. Quality is uniform throughout. Durable-DURHAM Hosiery is made in all weights for all seasons of the year and sells for 15, 19, 25 and 35 cents. Buy Durable-DURHAM Hosiery for everybody in the family.

Ask your dealer to show you our women's and men's 35c silk-mercerized hosiery with the patented anti-run stitch.

DURABLE DURHAM HOSIERY Trade-Mark

DURHAM HOSIERY MILLS
Durham, N. C.



The FOOD of The HOUR

is the food that proves its economy on a basis of food value—the greatest amount of nutriment at the least cost.

Ghirardelli's Ground Chocolate is an ideal blend of two ideal nutritious foods—cocoa and sugar.

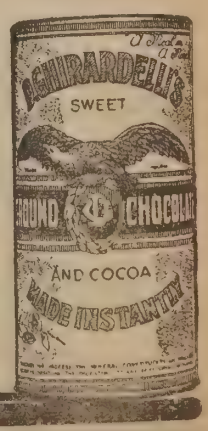
By using Ghirardelli's Ground Chocolate freely and wisely—in place of other less nutritious and more expensive foods—you will save money and aid in food conservation.

Ghirardelli's
Ground Chocolate

Comes in ½ lb., 1 lb. and 3 lb. sealed cans.

D. GHIRARDELLI COMPANY

Since 1852 San Francisco





Dear Corner Children: I suppose by this time you are all hard at work, some at school and some at home helping mother and father. I think most of the nephews and nieces must be busy, for our Corner has not had as many letters as it had a year ago. Many have done good work for our Corner, asking others to write letters and loyally supporting it.

I want to call attention to a letter which was so good that I am going to print it again:

"Dear Aunt Nellie: I have been reading the cousins' letters from the Corner and think it would be nice to all write on the subjects that Aunt Nellie suggests so often and to all write oftener, so our Corner won't get so low as two or three letters; to all write neat and try to spell words correctly would help our section of The Farmer. I think it is the most-read section of The Farmer, for whenever it comes into our home all pages go by 'unread' until I have thoroughly read every letter written by old, young or any one that takes time to write to our welcomed Children's Corner. I think The Farmer is the paper loved and welcomed most by the children, and it is all over the 'sacred' little space that covers a page (the Children's Corner.) I think this space in The Farmer has made more friends for itself than any three or four pages of the paper, don't you?—Myrtle Cox."

My! Such a time as I had judging these letters this time! There were so many good ones and it was so hard not to give a prize to many more than three.

Do you know, I think your teacher would like to have you write to the Corner, for it is a help in spelling, in writing, in grammar and composition. It is a little school, but a funny one. You don't have to come, unless you want to, and you can recite just what you please. And the teacher, Aunt Nellie, only marks the good ones and none of the bad ones. But Aunt Nellie would like a big enrolment this fall and winter in her Corner school and it will be also a "get-acquainted club." Lovingly your

AUNT NELLIE.

The new contest will conclude December 1 and the subjects are:

Helping the Red Cross.

Sunset.

Thanksgiving.

The prize winners for the contest just closed are: Mary Esther Symington, Selleck, Box 97, Selleck P. O., Tall Tree Center, Wash.; Edna A. Tueth, May View, Wash.; Gladys Powell, Bow, Wash.

Roll of Honor—Anna Straube, Pampa; Lenora Fox, Washougal; Marguerite Blankenship, Seattle; Avah Sharp, Alameda; Lucile Turnley, Moxee City; Laura E. Hatley, Waitsburg; Evis Erickson, Lynden; Hilma Anderson, R. 3, Olympia; Catherine Borden, Satsop; Helen Calkins, Sunnyside; Harvey Norris, Goldendale; Walborg Brandt, Mt. Vernon; Stella Dawson, Bow; Hazel Colbert, Tonasket; Marie Houk, White Bluffs; Alexander Weitz, Endicott.

Reba Likes to Play With Her Doll.

Dear Aunt Nellie: This is my first time to try to write to you. I like to read the Children's Corner very much. My father takes the Farmer. I always hunt for the children's page first. I am going to school now and I am in the fifth grade. I am 10 years old and my birthday is January 13. Have I a twin? We have 11 cows, three horses, 14 pigs, three calves and 30 chickens. I help my sister milk her cows. I have one large doll and her name is Josie. My cousin and I have a lot of fun playing with her. Sometimes she brings up her big doll and we have a great time. Her doll's name is Josephine. Hers is bigger than mine. I have one brother younger than myself. His name is Robert. I have seven sisters. Their names are Frankie, Blanche, Myrtle, Nora, Alice, Ida and Nellie. I have one sister and one brother dead. My brother's wife and her little children are coming over to stay all winter with us. They live over the mountains at Lake Chelan. This is not a very good letter.—Reba Watkinson, Route 2, Bow, Wash.

A Mountain Picnic.

Dear Aunt Nellie: I have written before to the Children's Corner and I thought I would write again. I went to the Washington State fair at North Yakima and I had a very good time. I have named the kittens that Lightfoot has Spotty and Muggins. There has been a call for Liberty bonds. I was going to buy one, but I could not get to town just then, but there is going to be another call for them, then I am going to buy one. Our school began the first of October. Mama has made me one dress and is going to finish one this afternoon. Our cow, Smutty, has another black and white calf and he is very cute, too. We went on a picnic up in the mountains. After we had eaten our lunch we made up our minds that we would go up to Rimrock. When we got up there we went for a walk to see where they were going to build the dam. There was what we call a big flume which comes from a place up in the mountains farther. It goes into our big ditch, I think. There is a place up there that the flume opens and a lot of the water spills into the river down below. It is pretty to watch. The roads are good up there now. Rimrock is a pretty place and there are about 600 or 700 people up there. It is quite a place. Next summer I hope we can go up there to stay a few days, but I am kindof afraid we can't. I had a boil on my hand and I can hardly do anything. I can not practice my music. It is on my left thumb joint. I like the letters you write to the Corner and I wish you would write again. I enjoy writing to the Children's Corner very much and will write again.—Helen Mehl, Naches, Wash.

All the Outdoor Sports They Want.

Dear Aunt Nellie: This is the third letter to The Washington Farmer. I like all the letters fine, so I thought I would write. I see that the Children's corner is growing. I am glad it is growing, too. School has started now. My teacher's name is Miss Foxwell. I am in the fifth grade at school. My subject is "Fun on the Farm." In summer we can go swimming and in winter we can go skating. We can have all the outdoor sport that we want. My birthday is August 8. I am 11 years old. Have I a twin? I would like to have her write to me if I have one. I have one sister and one brother. My brother is going to start to school this year. He is 6 years old. My sister will be in the third grade this year.—Hilma Anderson, R. R. 3, box 19, Olympia, Wash.

Rags, Hick and Nero Are Effie's Dogs.

Dear Aunt Nellie: This is the third time I have written to the Corner. Alice in Wonderland, Beautiful Joe, Three Bright Girls and Black Beauty are the books I like best. I have three dogs and their names are Rags, Hick and Nero. I have two old cats and five kittens. The old cats' names are Tabby and Tom, the kittens' names are Pussy, Jackrabbit, Goldie, Whiteneck and little Gray. My schoolmates' names are Evelyn Kellogg, Elizabeth Preston, Mabel Huble, Bessie Allen, Ethel Boyd, Myrtle Boyd and Guicell McCarty. We have lots of fun at school. I would not change with any city girl. I would like to correspond with Joyce Hatch. Our school began September 4. I like to go to school. I guess I will close.—Effie G. Ludditon, Bright, Wash.

We Enjoy Ora's Letters.

Dear Aunt Nellie: This is the fourth time I have written to the Corner. I enjoy it very much and hope all the children will enjoy my letter as I enjoy theirs. We have six cows and one real little calf and three last winter's calves. The cows' names are Buster, Bill and Baby. The real little one's name is Tip. He is red. I found him up in the field. We have five real little kittens, three are Cougar's and two are Lady Gray's. We have three older ones, named Leopard, Black Ned and Grayie. Papa used to work for Joe L. Ashlock's father. I read the "Ups and Downs of a Bunchgrass Boy" and like it.—Ora J. Hayden, Box 25, Mold, Wash.

Been in Washington Just One Year.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My father takes The Washington Farmer and I enjoy reading the letters from the nephews and nieces. We have one calf named June and a pig and some chickens. I passed into the fourth grade. I shall be 10 years old the 28th of September. Have I a twin? I have lived in Washington a little more than a year. I like the climate much better than that of Maine or Canada, where we lived before coming here. I have a little niece whose name is Dorothy and a brother 16 years old.—Eileen Runnals, Puyallup, Wash.

A Healthy and Happy Farm Girl.

Dear Aunt Nellie: I have been a constant reader of the Children's Corner, and so I decided to contribute my letter for the children to read. I am a healthy, happy, hearty and hale young farm girl. I love the farm and like the out-of-doors. I am a member of the national boys' and girls' garden club, and of course did my bit by raising a garden. I am 13 years of age, and am in the first grade of high school. My birthday is the 25th of June. I wish the Corner great success. —Marguerite Blankenship, R. F. D. 5, Box 379, Seattle, Wash.

Have a Little White Spitz Dog.

Dear Aunt Nellie: I am in the third grade and am 7 years old. I live 21 miles from Coulee City. I go to school three miles from home. We have a little white Spitz dog. His name is Shorty. My sisters' names are Mabel, Neva, Gladys, Merl and Bertha. My brothers' names are Clyde, Donald, Norman and Arthur. I like to read the Children's Corner very much.—Mamie Martin, Coulee City, Wash.

Pearl Has a Twin Brother.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but I hope it won't be the last. Lucile Peterson is just two days younger than I am. I am 12 years of age and will be 13 years old the 22d of April. I have dark brown hair and brown eyes. I have five teachers and I am in the sixth grade. Have I a twin? If I have I would like to hear from them. I live on a 10-acre farm. We have two horses and two cows and three pigs. Our horses' names are Jimmy and Daisy. We can ride horseback on Daisy, but we can't on Jim. I have a twin brother. His name is Earl. I would like for some of the cousins to write to me, for I will gladly answer their letters.—Pearl Roberts, R. F. D. 5, Box 379, Seattle, Wash.

Willie Is in the Third Grade.

Dear Aunt Nellie: I enjoy reading the Children's Corner. We live on a 500-acre farm and we milk 120 cows; we have nine horses and two pigs. I will be 9 years old February 20. I go to school and am in the third grade. My teacher's name is Miss Mabel Ross. If I see my letter in print I will write again. Willie Righetti, Monroe, Wash. (You will see your letter in print, Willie. Aunt Nellie always tries to put all the letters she can in the Corner, and she surely wants you to write again. I wonder if many of the cousins can imagine milking 120 cows; what fun this would be. Willie, do you use a milking machine? Write and tell us about it.—Aunt Nellie).

Piggies Are Funny Little Things.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I like to read the letters very much. I was sick last night and better today. School has started. I am in the fourth grade. It really seems to be upstairs to me. I like school very much. My teacher is Stella Hansen. We have a little colt now. We call him Jasper. It's mother's name is Star. We have two big pigs and nine little ones. They are the funniest little things. They are all cream colored but two. I spent three weeks in Horse Heaven not long ago. —Nellie Neil, Kennewick, Wash.

Kitty Is a Perfect Mischief.

Dear Aunt Nellie: In The Farmer in the Children's Corner the little letters I love to read I discovered a letter written by a little girl named Stella. I see she has a big white kitty. I have one, too, but my kitty is black, with large yellow eyes. He is a perfect mischief. I call him Timothy. I am 10 years old. My birthday was on April 12. I am in the fourth grade. I help my mama with dishes and sweep the floor and do many other things that little girls can do. I walk a mile and a quarter to school. I will close for this time. I would love to correspond with some of the cousins.—Stella Dawson, R. D. 2, Bow, Wash.

Tabby and Fluffy Are Marion's Cats.

Dear Aunt Nellie: I am 10 years old and I have three sisters and one brother. This is the first time I have written to the Children's Corner. I live in a depot and my papa is the station agent. School starts Tuesday. There are not many children here to go to school. We have two cats, one of them is Tabby and the other is Fluffy. I am in the fourth grade and my brother is in the fourth grade, too. My sisters and brother and I have a garden of flowers. We have sweet peas and morning glories, climbing beans and roses.—Marion Greene, Benge, Wash.

The Books That Beulah Likes.

Dear Aunt Nellie: This is the second time I have written to the Corner. I am nine years of age. My birthday is the 11th of April. I told all about the farm last time so I will tell about something else. The Girl of the Limberlost, Black Beauty and Flora Garland's Courtship are my favorite books. Have I a twin? If I have I would like to hear from her. I have brown eyes and light hair. I have a little white dog named Teddy. I like to read the letters of the Corner. I will write again when my letter is in print.—Beulah Shaw, Grandview, Wash.

The First Time Merl Has Written.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I live 21 miles north of Coulee City. I have five sisters and four brothers. My youngest brother, who is 5 years old, has had an operation for pneumonia at the Spokane hospital. He was there six weeks, but is home now. We have a Hupmobile car. Mabel, my oldest sister, has graduated from high school. I was 12 years old the 12th of June. I am in the sixth grade.—Merl Martin, Coulee City, Wash.

Marie Belongs to a Garden Club.

Dear Aunt Nellie: I never had time to write before because I have been visiting my sister. My subject is "My Vacation." I am having a fine vacation, playing and working in the garden. I am in a garden club. My garden is growing very fine. I have been picking berries this week and have been very busy. School will start pretty soon, and I will be busy studying. I will be in the fifth grade.—Marie Anderson, R. F. D. No. 1, Box 31, Kalama, Wash.

Velma Has a Little Shetland Pony.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We take the Farmer and I enjoy reading the cousins' letters very much. I am 10 years old. My birthday is July 30. I have three brothers. I have a little Shetland pony. I live in the country five miles from town. —Velma LeMaster, Eatonville, Wash.

Pearl Likes to Pack Peaches.

Dear Aunt Nellie: My papa takes The Farmer and I enjoy reading the Children's Corner very much. I am 12 years old and my birthday is January 27. Our school will start October 15, and I will be in the sixth grade. Papa intends to pick peaches tomorrow and I like to pack peaches. Mama gave me two hens and one of them set and brought off 12 chickens. Some of them died, but I had enough to sell that brought me $4.80. This is my first letter and I hope it isn't too long. I will write again.—Pearl A. Mathis, Selah, Wash.

Brought Grandpa Home With Them.

Dear Aunt Nellie: I thought I would write to you. This is the third time I have written to you. My father takes The Farmer, and I enjoy reading the children's letters. We got back from Seattle two weeks ago. We went over in our Ford. We brought my grandpa back with us. We had a very nice trip. I am 8 years old. My birthday is July 11. Have I a twin? If I have I would like for them to write to me.—Mildred Marks, Wapato, Wash.

Theresa Lives on a Wheat Ranch.

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I am 10 years old. My birthday is the tenth of December. My name is Theresa Jurgensen. Have I a twin? I live on a wheat ranch. We have about 25 or 30 head of horses, one dog and four little pigs.—Theresa Jurgensen, Wilbur, Wash.

Went Swimming This Summer.

Dear Aunt Nellie: I am 10 years old. I am in the fourth grade. I go to Marble Creek school. School started the fourth of September. I went swimming this summer. My name is Alfred Frederickson. I live on the Lewis river.—Alfred Frederickson, Reno, Wash.

Mollie Is the Cow's Name.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have two sisters and one brother. I was 10 years old March 2. We have one cow and a calf. The cow's name is Mollie.—Fern Heuston, Winlock, Wash.

Eat Lunch Down by the River.

Dear Aunt Nellie: I am a little girl 10 years old and I would like to join the Children's Corner. Our school began September 10. There are only three pupils in our school, my two girl cousins and myself. Our teacher's name is Mrs. Duffy. Every nice day we four eat our lunch down by the river, under the trees. We have nice times together. When I grow up I want to be a teacher, so I am learning all I can. When I finish going to school in the country I want to go to high school and then to normal. I think I shall then be ready to teach.—Eula Belle Fletcher, Uva, Wyo.

Hopes We Won't Lose the Corner.

Dear Aunt Nellie: I like the children's Corner just fine and hope we will not lose it. I live on a farm of 333 acres and not quite a quarter of a mile from school. I like to go to school. I have one brother and his name is Glenn. I am 12 years old and my birthday is February 22.—Mollie Rickard, R. D. 4, Box 83, Junction City, Ore.

Remove Those Stains

To give clothes a longer period of service, and to conserve garments or fabrics which may appear to be hopelessly stained, is the object of a new publication just issued by the United States department of agriculture.

One of the first requisites in removing stains, says the bulletin, is to know the kind of fabric which is spotted and, if possible, the nature of the stain. Some stain removers which will give admirable results on cotton or linen may, if applied to woolen or silk, remove pieces of the fabric as well as the stain. Likewise, stain removers which are entirely satisfactory for cleaning silk or woolen materials can not always be used for removing stains from vegetable fibers, such as cotton or linen. Similarly, treatment which will remove some stains immediately will cause those of a different nature to take firmer hold on the fabric.

The second cardinal principle in spot removal is to work while the stain is fresh. Cold or lukewarm water is usually the housewife's best bet for a first step, the bulletin indicates, if the nature of the stain is not known and if the fabric is not injured by water. Hot water should not be used until it is determined that the straining material is such that it will not be "set" by heat. Stains from meat juice, blood, egg, milk, and other materials containing protein are set by hot water.

If stains are of such a nature that they will not yield to laundering or sponging with water or with water and soap, it is necessary to use one or more of a number of chemicals. Besides water and soap the bulletin names as the substance most useful in removing stains, Javelle water, potassium permanganate solution, oxalic acid solutions, ammonia water, carbon tetrachlorid, French chalk, and cream of tartar, each of which may be used successfully, provided the right one is used at the right time. Detailed instructions for treating various stains are contained in the publication.

Dairy Stock Sell Well

(Continued from page four.)

for the entire sale was slightly less than $280.

The sales list follows, the person named being the buyer in each case. Henry Lindley was purchaser of the first 32 head:

Carnation Stock.

Korndyke Rag Apple Milk, No. 163749, born April 5, 1915, $300.

Mutual Clothilde Boelyn Gem 2d, No. 392544, born July 11, 1915, $275.

Daybreak Mercedes Girl, No. 182325, born April 3, 1912, $400.

Pearl Watson Canary, No. 192585, born December 7, 1912, $165.

Model Pauline Segis, No. 209498, born October 4, 1912, $250.

Daybreak Molly Prilly Segis, No. 269500, born October 14, 1914, $325.

Daybreak Prilly Canary, No. 269499, born October 8, 1914, $160.

Hollywood Lilith Colantha, No. 334914, born January 5, 1916, $300.

Hollywood Lilith Shadeland De Kol, No. 297085, born December 6, 1914, $600.

Daisy Johanna Netherland 2d, No. 283439, born June 2, 1915, $250.

Hollywood Midnight Fayne 2d, No. 332430, born July 31, 1915, $200.

Hollywood Bessie De Kol Fayne, No. 334916, born January 31, 1916, $250.

Flore Ella Canary, No. 282287, born January 13, 1911, $325.

Tsussie Mabel 2d, No. 286956, born August 18, 1913, $400.

Tsussie Mabel, No. 286955, born November 3, 1909, $250.

Hengerveld Bessie Corona, No. 289124, born June 3, 1915, $300.

Canary Violetta Mechthilde 2d, No. 282296, born January 31, 1913, $260.

Hazelwood Hengerveld Colantha, No. 183880, born June 22, 1912, $325.

Pietje Canary Rosalie, No. 293108, born May 17, 1915, $250.

Lady De Kol Model, No. 189539, born September 6, 1912, $250.

Princess Lottie of Lulu, No. 282256, born October 26, 1912, $390.

Princess Lottie of Lulu 2d, No. 292542, born April 17, 1915, $350.

Augusta of Lulu 2d, No. 282262, born November 6, 1911, $350.

Nora Canary of Lulu, No. 282218, born September 11, 1913, $425.

Tsussie Belle Maxon, No. 286957, born August 22, 1913, $160.

Lady Thea Canary, No. 318899, born January 11, 1916, $190.

Tsussie Elsie 2d, No. 286962, born September 26, 1913, $200.

Tsussie Rose 2d, No. 296413, born June 6, 1912, $600.

Lorinda Alban Segis, No. 376173, born December 2, 1916, $155.

Daybreak Korndyke Prilly Walker, No. 269502, born January 9, 1915, $425.

Leda Hartog De Kol 3d, No. 272976, born March 8, 1915, $235.

Daybreak Beets Prilly Netherland, No. 269501, born December 28, 1914, $205.

Queen Gretqui Lutske, No. 139406, born April 10, 1907, H. Levtortisky, Hobart, Washington, $300.

Queen Gretqui Luske 2d, No. 250975, born August 13, 1914, A. O. Hamilton, Chehalis, $175.

Governor Colantha Lutske, No. 206402, born March 16, 1917, K. Tsukamoki, Kent, $65.

Mercedes Princess Segis, No. 376195, born September 1, 1916, F. F. Folsom, Kent, $240.

Colantha Cascade Johanna, No. 164829, born August 28, 1915, D. E. Griffith, Auburn, $295.

Countess Butter Belle, No. 282300, born July 17, 1913, Harry Hamilton, Chehalis, $230.

Hollywood Bessie Pearl, No. 295832, born November 24, 1914, Hollywood Stock farm, $350.

Prilly Walker Beauty 2d, No. 286121, born May 31, 1915, R. W. Calliston, Curtis, Wash., $280.

Kakenstein Queen Mercedes, No. 183401, born August 30, 1911, J. A. Scharen, Cresswell, $250.

Rag Apple Korndyke Jane, No. 259375, born December 1, 1913, Joseph Schmitdz, Beaver, $195.

Rag Apple Korndyke Jane Ignaro, No. 376186, born November 3, 1916, F. F. Folsom, Kent, $200.

Carnation Fayne Segis, No. 212323, born April 3, 1917, J. T. Matsoda, Kent, $125.

Mutual Clothilde Boelyn Gem, No. 238328, born July 18, 1913, sold to A. N. Bennett, Chehalis, $300.

Hollywood Clothilde Canary, No. 278101, born May 5, 1914, R. W. Callison, $200.

Hollywood Cora Segis Fayne, No. 216690, born October 29, 1912, Hollywood Stock Farm, $300.

Hollywood Lilith Gelschecola, No. 328718, born June 10, 1915, Hollywood Stock Farm, $525.

Princess Hengerveld Gelsche, No. 301150, born October 17, 1915, N. Evans, Auburn, $250.

Rag Apple Princess, No. 282307, born November 14, 1913, George Lawler, Tacoma, $395.

Ella Korndyke Rag Apple, No. 318748, born December 13, 1915, Henry Lillsjo, Maple Valley, $280.

Tsussie Carlotta 2d, No. 185412, born August 27, 1911, Henry Lillsjo, $125.

Tsussie Jane, No. 296399, born August 31, 1910, Henry Lillsjo, $200.

Debora De Kol Hengerveld, No. 201040, born April 22, 1911, J. T. Leverle, Sedro-Woolley, $320.

Hollywood Houwtje Canary, No. 273598, born March 9, 1914, Hollywood Stock Farm, $615.

Hollywood Lillith Parthenea, No. 303441, born January 20, 1915, C. W. Peters, Hollywood, $280.

Daybreak Cornucopia Beets 2d, No. 284971, born April 12, 1915, G. Satzer, Chehalis, $280.

Pietertje Beets 2d's Netherland 2d, No. 121268, born May 8, 1908, G. Keda, Kent, $160.

Prince Prilly Netherland, No. 178482, born November 30, 1915, Gus Lind, Lawrence, $105.

Canary Violetta Mechtilde, No. 282295, born September 23, 1909, G. Salzer, $530.

Lady Canary Violetta, No. 293109, born May 18, 1915, William Bishop, $440.

G. & B. Wayne Decker Lass, No. 111443, born May 27, 1908, John L. Smith, Spokane, $200.

Piebe Hiawatha Hengerveld De Kol 2d, No. 272975, born March 6, 1915, J. P. Gorman, $335.

Milk and Butter Lulu Princess, No. 282271, born August 15, 1910, G. Salzer, $375.

Pietje Rosalie De Kol, No. 282248, born November 19, 1910, J. A. Scharen, $240.

Lady Annette De Kol Merdy 3d, No. 245,-190, born December 26, 1913, J. Momson, Kent, $215.

Rachel Burke 2d, No. 298628, born July 6, 1915, A. O. Hamilton, Chehalis, $205.

Aneta Pietje, No. 282244, born June 25, 1913, John L. Smith, $410.

Queen Pietje Mechthilde, No. 282242, born January 31, 1913, R. H. Kidd, Clallam Bay, $200.

Concordia Echo Rag Apple, No. 208015, born November 25, 1916, K. Day, $225.

Lady Addie Mechthilde, No. 293107, born June 18, 1915, Henry Lillsjo, $330.

Tsussie Mona, No. 292774, born June 22, 1911, S. Mormos, Kent, $200.

Tsussie Lady Abbekerk, No. 286953, born October 5, 1913, O. Johnson, $370.

Tsussie Lady Maxon, No. 292776, born September 11, 1912, Charles Howard, Christopher, Wash., $250.

Duke Posch Segis, No. 181398, born March 2, 1916, I. Nyeda, Kent, $125.

Lilith Rag Apple Pauline, No. 280627, born December 4, 1914, C. D. Hamilton, Chehalis, $350.

Tsussie Chaperone 2d, No. 286963, born September 3, 1913, W. A. Root, Chehalis, $270.

Bos Lorinda, No. 213143, born March 12, 1913, R. W. Callison, Curtis, $240.

Hazelwood Ormsby Pauline, No. 169222, born August 3, 1911, John L. Smith, $305.

Ollie Segis 2d, No. 283441, born April 26, 1915, E. M. Moses, Chehalis, $390.

Tsussie Chaperone, No. 155134, born Sept. 6, 1909, H. Lillsjo, $235.

Hazelwood Anna Posch, No. 357872, born September 21, 1916, Oscar Johnson, Hobart, Wash., $115.

Hazelwood Alban Korndyke, No. 357879, born October 21, 1916, Roy Batston, Kent, $260.

Hazelwood Lady Bracelet Korndyke, No. 357877, born October 5, 1916, Roy Batston, $200.

Hazelwood Bracelet Gerben De Kol, No. 357869, born June 21, 1916, Roy Batston, $150.

Hazelwood Beauty Posch, No. 357873, born September 24, 1916, Roy Batston, $175.

Hazelwood Butter Girl Korndyke, No. 363766, born October 6, 1916, G. J. Keda, Kent, $180.

Jessie Juliana Queen, No. 302045, born November 22, 1914, Henry Lillsjo, $200.

Johanna Juliana Queen, No. 335698, born March 3, 1915, J. E. Conner and E. J. Rounds, Kent, $155.

Lilly Hazelwood Lady, No. 367751, born October 20, 1914, R. H. Kidd, Clallam Bay, $120.

Oueda Hazelwood Lady, No. 370335, born November 4, 1913, Oscar Johnson, $200.

Pauline Bergsma Hengerveld, No. 370336, born March 5, 1916, G. Salzer, $135.

Nancy Bort Laddy Abbekerk 2d, No. 123,-205, born April 15, 1908, G. Davison, Kent, $125.

Hazelwood Lady Bracelet De Kol, No. 271022, born November 11, 1914, J. F. Leverle, Sedro-Woolley, $255.

Hazelwood Cinderella Butter Girl, No. 110251, born September 24, 1908, Carnation Stock Farms, $1100.

Hazelwood Alban Ormsby, No. (not given), born December 28, 1912, Carnation Stock Farms, $1325.

Hazelwood Aagie Hartog, No. 142306, born October 15, 1910, Carnation Stock Farms, $1200.

Hazelwood Homestead Bracelet, No. 271,-021, born August 20, 1914, George Lawler, $250.

Oakie Doo Doo 2d, No. 258795, born February 27, 1914, G. J. Keda, $300.

Hazelwood Lady Ormsby, No. 363763, born April 7, 1916, O. M. Clay, Arlitta, $260.

Hazelwood Hello Hengerveld, No. 316609, born November 10, 1915, R. H. Ross, Puyallup, $295.

Hazelwood Spofford Ormsby, No. (not given), born October 21, 1915, G. J. Keda, Kent, $225.

Hazelwood Bracelet Butterfly, No. 357868, born May 21, 1916, G. J. Keda, $205.

Hazelwood Butterfly Korndyke, No. 316607, born September 1, 1915, R. W. Callison, $200.

Hazelwood Hengerveld Korndyke, No. 363764, born September 23, 1916, G. J. Keda, $450.

Hazelwood Korndyke Butterfly, No. 357870, born August 22, 1916, D. E. Gufield, $105.

Hazelwood Bracelet Korndyke De Kol, No. 199128, born March 7, 1916, G. J. Keda, $185.

Hazelwood Lyons Korndyke, No. (not given), born April 1, 1917, A. E. Lawson, Portland, $115.

Hazelwood Spofford King, No. (not given), born April 28, 1917, G. J. Keda, $45.

Hazel Lady Abbekerk, born January 25, 1917, Mr. Wackanbarth, $80.

Hazelwood Johanna King, born January 28, 1917, J. B. Mullen, Kent, $195.

Hazelwood De Kol Ormsby, No. 363765, born October 4, 1916, G. J. Keda, $250.

Hazelwood Fobes Tritomia, born June 10, 1917, J. Tamada, Kent, $85.

Irene De Kol Butter Girl, born September 30, 1916, D. E. Griffith, $145.

Highland Meta Veeman 2d, No. 202245, born November 1, 1912, A. Van Worden, Seattle, $205.

Highland Johanna Girl, No. 124993, born December 18, 1908, T. H. Howard, Christopher, $200.

Beauty Veeman Pontiac, No. 291623, born September 24, 1914, W. A. Root, Chehalis, $315.

Johanna Veeman Piettertje, No. 192563, born July 6, 1912, J. F. Leverle, $250.

Lady Bergsma Mechthilde, No. 148764, born October 11, 1910, O. Johnson, $220.

Snowflake Piebe De Kol, born June 10, 1916, A. Wackanbarth, Chehalis, $215.

Korndyke Monk, born August 29, 1916, L. W. Wilson, Obrien, $150.

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Boars and open or bred gilts of excellent breeding.
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JAMES N. PRICE. Pullman, Wash.

THIRD ANNUAL SALE OF
Pure Bred Big Type Poland Chinas
By Greenleaf Stock Ranch

60 head will be offered, including BOARS, SPRING BOARS, FALL BOARS, SPRING GILTS, FALL GILTS and SIX SOWS WITH PIGS AT THEIR SIDES.

One-half of the offerings will be from our IMPORTED SOWS from IOWA of last year.

Offerings will be from such breedings as KING OF ALL, Henry Fesenmeyer's A WONDER, SMOOTH LONG JUMBO, ORANGE BOY, BIG WONDER, BIG BONE EQUAL II., GRAND MASTER, CHOICE JUMBO and several others of the most popular big type blood lines.

SALE WILL BE HELD AT OUR RANCH IN OUR NEW SALE PAVILION, JUST COMPLETED,

WERNESDAY, OCTOBER 31, 1917.
WRITE FOR DESCRIPTIVE CATALOGUE
WILSON BROS.
A. L. WILSON, Manager. GREENLEAF, IDAHO.

Duroc Jersey Swine
Herd Heading Prize Winning Boar

Second prize boar under 1 year, Interstate fair, 1917. His litter mates won first and third in same class. Two of his litter mates won first and second from sows under 1 year in the biggest Duroc Jersey show ever held in the northwest.

His dam's litter mate was junior champion at the 1916 Interstate fair and won over $360 in prizes last year, and her dam's litter mate was first prize winner at the world's fair at San Francisco. The price on this boar is only $87.50. He is bred in the purple and $150 sent east will not duplicate him.

Also a few crackerjack younger boars, fine breeding and fit for service, $35 to $50, and a few extra choice March and April gilts, $35 to $50.

Worthwhile Farm Route 1, Spokane, Wash.
DAVID BROWN

Grain and Produce Markets

Chicago Grain.

CHICAGO, Oct. 6.—Killing frosts which visited large sections of the corn belt last night were regarded by many traders today as more of a benefit to the crop than a harm. The effect was to weaken prices, which, although steady at the close, were 1-8 to 3-4 net lower at $1.18 7-8 for December and $1.15 1-4 to $1.15 3-8 for May. Oats finished 1-8 to 3-8@1-2 down, and provisions 35 to 75.

Slackness of export inquiry left the oats market limp and prices dragged lower with corn.

Active demand for provisions contrasted sharply with the inert aspect of grain. Commission house buying was stimulated as a result of new purchases of meats and lard for Belgium.

Live Stock Quotations.

At Chicago.

CHICAGO, Oct. 6.—Hogs—Receipts 4000; unsettled at yesterday's average. Bulk, $18.25@19.35; light, $17.80@19.30; mixed, $17.90@19.65; heavy, $17.90@19.60; rough, $17.90@18.15; pigs, $14@17.75.

Cattle—Receipts 4000; steady. Native steers, $7.20@17.65; western steers, $6.35@15; stockers and feeders, $6.25@11.50; cows and heifers, $5.15@12.40; calves, $9.50@16.25.

Sheep—Receipts 6000; steady. Wethers, $9.10@13; ewes, $8.65@12; lambs, $13.50@18.60.

At Omaha.

OMAHA, Neb., Oct. 6.—Hogs—Receipts 3000; steady. Heavy, $18.75@19; mixed, $18.90@19; light, $19@19.35; pigs, $17@18; bulk, $18.85@19.

Cattle—Receipts 800; steady. Native steers, $9@17; cows and heifers, $6.50@10.50; western steers, $8.50@13.50; Texas steers, $7.50@10.50; cows and heifers, $6@9; canners, $5@6; stockers and feeders, $6.50@14.50; calves, $8@10; bulls, stags, etc., $5.75@7.25.

Sheep—Receipts 6500; steady. Yearlings, $12@13.25; wethers, $11@12.25; ewes, $10@11; lambs, $17.10@18.10.

At Portland.

PORTLAND, Ore., Oct. 6.—Hogs—Steady; receipts 430. Prime light, $17.65@17.75; prime heavy, $17.50@17.65; pigs, $15.50@17; bulk, $17.50@17.75.

Cattle—Steady; receipts 105. Best beef steers, $9@9.75; good beef steers, $7.50@8.75; best beef cows, $6.75@7.50; ordinary to good cows, $4@6.75; best heifers, $7@8; bulls, $4@6.50; calves, $7@9.50; stockers and feeder steers, $4@7.25.

Sheep—Steady; receipts 2. Western lambs, $13.50@14; valley lambs, $12.75@13.50; yearlings, $11.25@11.50; wethers, $11@11.50; ewes, $8@9.50.

At Salt Lake.

SALT LAKE CITY, Oct. 4.—Cattle—Receipts, fair; market 10 cents higher; demand especially strong for good fat steers. Choice steers, $8.75@9.25; good steers, $7.50@8.50; choice cows and heavy heifers, $6.75@7.50; fair to good cows and heifers, $6@6.75; cutters, $5@6.25; canners, $4@5; fat bulls, $6@7; bologna bulls, $5@6; veal calves, $9@11.50.

Hogs—Market 50 cents per cwt. higher. Tops this week reached $19 per cwt., weighed with a fill, the highest price ever paid in intermountain section. While receipts were more liberal they were not sufficient to supply the demand. We advise our friends to come in with finished stock weighing 175 to 225 pounds. Choice hogs, 175 to 225 pounds, $18.50@19; mixed hogs, 160 pounds and up, $18@18.50.

Sheep—Receipts fair; market 50 to 75 cents higher on lambs. Good choice lambs, $15.50@16.50; ewes, $8.50@9.50; wethers, $10@10.50; yearlings, $10.50@11.

Spokane Stock Yards, Saturday.

Hogs—Receipts 226; market steady. Prime light, $18.35@18.50; prime heavy, $18.25@18.35; pigs and skips, $16.25@17.50; stockers and feeders, $12@14.50; bulk of sales, $18.35.

Cattle—Receipts 158; market weak. Best beef steers, $8.75@9.25; good steers, $7@8; best beef cows, $6.25@7; good cows, $5@6; common cows, $3.50@4.50; best heifers, $6.75@7.50; bulls, $5@6.25; calves, $7.50@8.25; stockers and feeder steers, $5@6.75.

Sheep — Receipts none; market steady. Prime lambs, $12.75@13.50; good lambs, $11.50@12; prime yearlings, $10.25@11.25; prime wethers, $10.25@11; best mutton ewes, $7.75@9.

San Francisco Produce Market.

SAN FRANCISCO, Oct. 5.—Butter—Fresh extra, 46c; prime firsts, 45c.

Eggs—Fresh extras, 50c; fresh firsts, 49c; fresh extra pullets, 42½c; extra first pullets, 42½c.

Poultry—Hens, 28@31c; fryers and broilers, 28@31c; roosters, 16@17c; squabs, $2@2.50; pigeons, $1.50; geese, 18@20c; ducks, 15@17c.

Hay—Wheat and wheat-and-oat, $20@22; tame oat, $20@22; barley, $15, $17@19; barley straw, 50@90c; alfalfa, $17@20.

Mill feed—Cracked corn and feed corn meal, $83@84; alfalfa meal, $28@30; cocoanut meal, $35@35.50.

Flour—$11.20 per barrel.

Receipts—Flour, 1640 quarters; barley, 3190 centals; beans, 2553 sacks; potatoes, 3355 sacks; onions, 7845 sacks; hay, 387 tons; hides, 510; wine, 13,600 gallons.

Seattle Wheat.

SEATTLE, Wash., Oct. 6.—Misunderstandings between grain buyers and farmers as to dockage and warehouse charges has resulted in holding up the movement of wheat to tidewater, already well started. So far little red Russian has been offered, but considerable forty-fold has been moved. Early bart is running heavier than bluestem, samples of this grade showing 60 pounds to the bushel having been offered on the Seattle market during the week. Growers are getting a premium of 4c per bushel on 60-pound early bart, or $2 country in sacks and $2.05 bulk Puget sound.

There has been much confusion as to brokerage and commissions charged. Millers have got into trouble by valuing sacks at 4c. They claim that farmers have been endeavoring to compel the man who handles the wheat to pay the broker a cent. These are only a few of the things put up to M. H. Houser, agent of the food commission of the Federal Grain corporation, as a means to getting the wheat started to tidewater. Mr. Houser has confessed his inability to solve the problems and has referred a bunch of questions to Washington, urging the need of haste.

Portland Market.

PORTLAND, Ore., Oct. 6.—The butter market is weakening. Dealers are offering country creamery cubes at 46 cents, but there is no satisfactory outlet. The local make is gradually increasing and to supplies here have been added a car of eastern butter and a car from Los Angeles. Print prices for the present hold steady.

The firmness of the cheese market has resulted in a 1-cent advance on the Tillamook product.

Eggs are also firm with light receipts. Poultry is steady, except small hens, which have sold as low as 15 cents. Heavy hens are taken readily at 17@18 cents. Dressed meats are unchanged.

Salway peaches are beginning to arrive from The Dalles and similar points and are bringing 85c@$1. The market is firmer on late receipts of storage Elbertas from Yakima, the best going at 90 cents.

Wool trading has been resumed here, but particulars as to the deals are not made public. It is known, however, there has been no weakening of the market.

Hops are still inactive. There is an easier market east and this is causing some apprehension among growers.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $50 per ton.

Millstuffs—Bran, $30 per ton; shorts, $33.

Barley—No. 1 feed, $50; brewing, $52.50; rolled, $55@57.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch, case counts, 44@45c per dozen; candled, 47@50c.

Poultry—Hens, 15@18c; ducks, 18@20c; turkeys, live, 20@22c; geese, 10@11c.

Butter—City creamery, prints, 48@49c per pound; cubes, extras, 46c.

Cheese — Tillamook triplets, 26c; Young Americas, 27c.

Dressed meats — Veal, 15 1-2@16c; pork, 21½@22c.

Hops—1916, 25@26c; 1917 crop, 41c.

Potatoes—New, 1 1-2@2 1-4c per lb.

Wool—Eastern Oregon, fine, 52@61c; coarse, 60c; valley, 58@60c.

Beans — California small white, 14 1-2c; large white, 14 1-4c per pound.

Spokane Market.

The wholesale prices quoted in the list below are not the prics paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $2 cwt; sweet potatoes, $3.50 cwt.

Apples—Large eating apples, $1.25 box; crabapples, $1.25; cooking apples, $1.50 box.

Butter—Blanchard cartons, 48c lb; Medo-Maid, 48c lb; Cascade, 48c lb; Gold Leaf, 48c lb; Better Butter, 48c lb; Attalia, 48c lb; Diadem, 48c lb; Hazelwood, 48c lb; Solid Pack, 47c lb; Jersey Bell 47c lb; Peerless, 44c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 28c; triplets, 25c; Hazelwood full cream, triplets, 27c lb; Hazelwood Young America, 28c lb; Wisconsin limburger, 29@30c lb; brick cheese, 30c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $13 case; fresh eastern eggs, $13 case.

Live Poultry—Hens, 13c lb; broilers, 20c lb; old roosters, 8c; ducks, 12½c lb; geese, 10c; turkeys, 20@22c.

Dressed Poultry—Hens, 18c lb; broilers, 28c lb; old roosters, 12½c; ducks, 18@20c; geese, 16c; turkeys, 25@30c.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 13c; salted cured, 16c; green bulls and stags, 11c; salted cured, 13c; kip, 15 lbs to 25 lbs, 22c; calf skins up to 15 lbs, 16c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 7 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $1@2 each; dry horse hides, $2.50@4 each.

Seattle Market.

SEATTLE, Wash., Oct. 6.—Seattle operators are throwing their entire weight on the side of the bears in the potato market, confident that growers' quotations are too high in view of the demand, the large crop over the country and the prospects for fall and winter consumption. While there have been no breaks this week, neither have there been any cash purchases of importance.

Concessions to a uniformly firm price for apples for the remainder of the season are being generally made. Some weak spots have shown in the market for Jonathans, due to the preponderance of small sizes and the cessatcn of eastern buying, but this is the only exception.

The egg market has an easier aspect for the week-end and indications are now for steady prices for an indefinite time. The market has reached such an altitude that California eggs of the white shell variety can be brought in at a profit and first delivery is now being made. This will prevent any more fancy values in the local product. Statistics in the hands of dealers show that the peak of the market here is reached by October 15, and with an abundant supply of Petalumas to check the upward tendency no higher levels are looked for.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 50@55c per dozen; pullets, 33@38c dozen.

Poultry—Live hens, fat, over 4 lbs., 21c per lb.; 4 lbs. and under, 16@19c; old roosters, 12c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 12c per lb.; springs, live, 23c per lb.

Butterfat—54c per lb.; dairy butter, 33c.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb; heifers, 6@8c per lb.

Hogs—Light, 15@16c per lb.; heavy, 12@13c per lb.

Veal—Fancy light, 14@16c per lb.; heavy, 12@13c per lb.

Hides—Salted, 16c per lb.; flint-dry hides, 27c per lb.; salt kip, 16c per lb.; green hides, 13c per lb.; green calf, 22c per lb.; dry calf (under 6 lbs.), 25c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 11c per lb.; dry full wool sheep pelts, 36@38c per lb.

Wool—Puget sound, 52c per lb.

The Wool Market.

BOSTON, Oct. 5.—The Commercial Bulletin will say tomorrow:

"The demand for wool continues steadily through the trade and the volume of business accomplished during the week has been as large doubtless as that in the weeks immediately preceding, while prices have kept very strong. Low scoured wools advanced about 5 cents a pound in the last fortnight, although greasy wools showed hardly any rise. Manufacturers are getting further orders from the government and apparently are having a fair trade in light weight goods. Some further buying from the west at fully last week's price for country "bunch lots."

Scoured basis:

Texas—Fine 12 months, $1.68@1.72; fine eight months, $1.55@1.60.

California—Northern, $1.70@1.75; middle county, $1.45@1.50; southern, $1.35@1.40.

Oregon—Eastern No. 1 staple, $1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.60@1.65.

Territory—Fine staple, $1.80@1.82; halfblood combing, $1.70@1.75; three-eighths blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled—Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

Portland Wheat.

PORTLAND, Ore., Oct. 8.—Wheat is reaching Portland in a steadily increasing volume, the receipts last week amounting to 486,200 bushels, as compared with 250,000 bushels in the same week last year. Mr. Houser, agent of the grain corporation, announces that tenders by farmers to the corporation have as yet been light, but he expects a big week.

The government has purchased between 300,000 and 400,000 barrels of flour in the northwest for October shipment and it will be forwarded as soon as shipping instructions are received. It is understood the flour is for Europe. It will be shipped by rail east, as no ocean tonnage is available now. Orders for flour for later months' deliveries have not been placed yet.

There is a fair domestic movement in flour. Millfeed is easing off. Spot bran is quoted at the mills at $30, but there have been sales at the exchange at $27 for later delivery, and November shorts have been sold at $28.

Butter and Eggs.

PORTLAND, Ore., Oct. 6.—Butter—Weaker. The presence here of a car of California and one of eastern butter has resulted in city creameries refusing to buy Oregon cubes at any price. Quotations are really only nominal.

Butter—Weaker. City creamery prints, 48c; cartons, 49c; buying price butter fat, 47@49c, Portland; cube extras, 46c; prime firsts, 44c; firsts, 40c; dairy, 34c.

FURS

WE CHARGE NO COMMISSION

Highest prices paid—prompt returns, correct grading—45 years of fair dealing means more money for you. Before shipping any one get our reliable prices, supply catalog and shipping tags.

SIMON SUMMERFIELD & CO. ST. LOUIS, MO. U.S.A.

Dept. 334 "One Reliable Fur House" Write Today

BIG MONEY

RAW FURS WOLVES

Highest price paid in history.

FOXES, MARTEN, RATS, LYNX, LYNX CATS.

Send for my special inducements and price list, if trapper or dealer.

J. Henry STICHT 358 Seventh Ave., New York City.

Highest Prices Paid for Hides

Send your hides to us for highest cash market price—check by return mail. References, any bank in Seattle.

North Coast Tanning Co.

Ballard Station, SEATTLE.



100,000 Second-Hand Grain and Potato Sacks for Sale

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

TRAPPERS



A trial shipment will convince you that we pay the highest prices for Furs, Hides, Pelts, etc. We remit you the day your shipment is received and charge no commission.

Write today for free Trapper's Guide No. 20, catalog of trappers' supplies and price list

NORTHWESTERN HIDE & FUR CO.
Minneapolis, Minn. Est. 1890.

HIDES

WOOL, PELTS, MOHAIR, CASCARA BARK

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

THE H. F. NORTON CO.

53-55 No. Front St., PORTLAND, ORE.
206 3d Ave. So., SEATTLE, WASH.

HIDES
WOOL · PELTS
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SHIP TO US
NO CARTAGE - NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS - HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC.
SEATTLE
BE SURE AND MENTION THIS PAPER

The Motor Car
On the Farm

Waterproofing the Top.

Double-boiled linseed oil may be used to waterproof the top. The oil should be spread evenly over the fabric with a fine brush. Naturally two coats of the linseed will give better results than one.

Lighting Troubles.

Owners of cars wired by the single-wire method should examine the ground connections at frequent intervals. A loose or corroded ground will often cause dim burning and sometimes it may even eliminate all flow of current.

Testing Levels.

When testing the oil level by opening the level cocks in the crankcase it is essential to run a wire through the cock before concluding that the level is low. It frequently happens that sediment settles over the level cocks and prevents the flow of oil in spite of the fact that there is plenty in the reservoir.

Terminal Corrosion.

If trouble develops in the battery, which upon examination is found to be up to normal and yet is not delivering enough current to furnish lights nor spark enough to ignite the fuel, the basic fault will very possibly be found in corrosion of the terminals. When the terminals are covered with a hard green deposit, no current can flow. Sometimes this deposit is so hard that it takes a chisel to remove it.

To Prevent Skidding.

Unequally adjusted rear wheel brakes are a potent cause of skidding and it is wise to make frequent tests of the parts for incorrect adjustment. It is necessary to have some one with you to watch the wheels. Drive the car along a dry road, accelerate quickly and then suddenly apply the brakes. If one wheel slides while the other is revolving, it may be taken for granted that the brakes are not holding with equal effectiveness.

Want Ads

HELP WANTED—MALE 3

I HAVE A FIRST-CLASS PLOWING OUTfit, capable of plowing 10 to 12 acres per day, and am looking for a contract for that work. H. R. Morgan, 410 Chamber of Commerce bldg., Spokane, Wash.

WANTED—MEN AT ONCE TO LEARN automobile driving and repairing in our shop. Have many jobs for our students. 215 Granite block, Spokane, Wash.

CAPABLE, RELIABLE BOY FOR BOARD, $10 mo.; 4 cows to milk; drive 3 miles to school. W. C. Atherton, Cusick, Wash.

AGENTS—WANTED 9

MAN TO WEAR FINE SUIT, ACT AS agent; big pay; easy work. Banner Tailoring Co., Dept. 738, Chicago.

SITUATION WANTED—General 24

MARRIED MAN WITH SMALL FAMILY, age 40, wants position on dairy or dairy farm; man fancy butter maker, good milker and first-class all-round dairy man. Wife can assist or cook for the help. Can furnish references. State wages and particulars in first letter; can come at once. Address Richard Mus, care of John Monley, 822 West Copper st., Butte, Mont.

EDUCATIONAL 45

POSITIONS GUARANTEED GRADUATES OF BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog free.

TEACHERS' AGENCIES 46

SCHOOL CLERKS: WIRE OUR EXPENSE. Hazard Teachers' Agcy., Spokane.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Notice advance in prices.

Largest factory in the west selling direct from mill to consumer.

We sell anybody, ship anywhere and guarantee safe delivery.

Send for our large illustrated catalog No. 27, mailed postpaid, without charge, on request.

5 cross panel doors $1.92
Cottage front glass doors $3.50
Cottage windows; large bottom glass, 40x40; transom glass. 40x16 ..... $4.05
Spruce flour bins, 16x26x16 ..... $1.50
Screen doors, 2-8x6-8, heavy galv. wire $1.50

See our prices on Frames, Moldings, Millwork, Builders' Hardware, Prepared Roofing, Plaster Board, etc.

O. B. WILLIAMS CO.
1943 FIRST AVE. SO., SEATTLE, WN

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave. So., Seattle, Wash.

MISCELLANEOUS—FOR SALE 60 Continued.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS WANTED 63

STRAINED HONEY WANTED. WRITE US the quantity you have to offer. Commercial Creamery Co., Spokane, Wn.

MACHINERY—FOR SALE 93

FOR FARM LUMBERING USE "AMERICAN" PORTABLE SAWMILLS, Carried in Stock by HIGGINS MACHINERY COMPANY, 312 1st Ave. So., Seattle. Write for Catalog.

EXCELLENT GASOLINE PLOWING OUTfit, including 12 h. p. tractor and 3-bottom plow, practically new, at less than half price. W. M. Frost, 410 Chamber of Commerce bldg., Spokane, Wash.

AUTOMOBILES 114

AUTO TOPS, BUILT TO ORDER, AND repaired. N. Reeder, Dept. F, Spokane, Wn.

AVIATION 115

DENINE AIRCRAFT CO., BOX 2232 SPOkane, Wash. Flying taught, skilled help wanted. Investigate. Splendid opportunity.

STOVE REPAIRING 126

MYER S. RUBENS STOVE & FURNACE REpair Works; welding. W1009 1st., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

WASH. (D. C.) PAT. ATTY. SEE AD IN Polk's. C. H. Crawford, Spokane.

LIVE STOCK 177

FOR SALE—7 HEAD PUREBRED PERcherons, all black; 6 mares and the best 2-year-old stud colt in the country. Write me. J. S. Graves, Newberg, Ore.

A BARGAIN IN SOWS—TWO GOOD DUrocs with young pigs. L. S. Compton, Drain, Ore.

6 REGISTERED JERSEY FEMALES, 1 Foxhall bull. W. F. Lillard, Jefferson, Ore.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

JOB PRINTING 372

OUR PRINTING WILL GET RESULTS for you. It will help to sell your goods and earn you profits. Send for samples and price list. G. C. Gallagher, 436 Sacramento st., San Francisco, Cal.

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FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

OPTICIANS 462

EYES EXAMINED; GLASSES FITTED; perfect results guaranteed. Broken glasses repaired by mail. Postage paid. Dr. Sletto, Owl Drug Store, Spokane, Wn.

DR. I. M. RADABAUGH, SPECIALIST IN examining eyes and fitting glasses, 304 Jamieson bldg., Spokane, Wash.

ARCHITECTS 558

BUILDING PLANS AND ESTIMATES. L. L. Rand, The Rookery, Spokane, Wash.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

VETCH, CLOVER AND FIELD SEEDS.

We carry a complete line of grasses, wheat, oats, barley, speltz and other seeds too numerous to mention. Our prices are right, and will be glad to send samples and quote prices.

CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
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RECLEANED VETCH SEED, 4¼C PER pound, f. o. b. station. Large or small orders appreciated. Oak Ridge Farm, Turner, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

HOMEST'DS, RELINQ'M'TS 642

FOR SALE — HOMESTEAD LOCATION, Stevens county, near store, school, state road; cabin and other improvements; partly irrigable from trout stream on place; adjoining relinquishments recently sold for twice amount asked. You can enter now and move on next spring. Robinson, S1112 Walnut; Main 4683. Spokane, Wash.

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SOMETHING DIFFERENT.

160 acres in Spokane county for only $50 per acre; improved to provide a nice home; a good living and 10 per cent annually on your investment. Bedford Brown, 314 Lindelle blk., Spokane, Wash.

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Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

FARM LANDS—FOR SALE 651 Continued.

THIS YEAR HAS BEEN EXtremely out of the ordinary in the length of the hot dry weather, but if you will come and look over some of our farms you will find what subirrigation means. Of course you can write and ask us, but that's not like seeing it for yourself.

You know we have improved farms in running shape, and we also have raw cut-over lands, on which we can make arrangements to put up small improvements and add the cost of them to the price of the land on long terms basis at the 6 per cent interest, which gives a chance for an ambitious person of small means to "dig in." Also we need help in clearing more land and if you want to take one of our places and spend part of your time working for us, you can do so—our work is steady and our wages are fair.

Cordwood is worth good money, and we have lands with lots of cordwood on them, like the 480 acres mentioned below, close to railroad and within the "dollar limit" of Spokane.

HERE ARE SOME IMPROVED PLACES:

30 acres, all in cultivation, fenced, some clover, timothy, alfalfa, etc., and balance of land for diversified crops. Nice improvements. Only $2250. We will take FOUR or five hundred dollars down and give ten years on the balance at 6 per cent. You will be close to school, close to good town, have daily R. F. D. This is a nice little home.

50 acres, about 45 in cultivation, all fenced, nice rustic bungalow; this place has its own water system that puts water in the house; nice large barn, chicken runs, etc. This has all community advantages. We will take $3750 for this place and give good terms.

RAW LANDS:

80 acres of willow brush land, volcanic ash soil, on county road, lies fairly level, can be easily cleared, has close neighbors. We will take $2000 for it; $200 cash, balance ten years, 6 per cent, and if you want a little house, we will build it and add the cost of it to the price of the land and give you the advantage of long time.

480 acres of cordwood land, no improvements; close to loading station, in good range; the cordwood should pay for it; $12.50 per acre.

We have most anything you want along this line. Ask for folder.

MILAN FARMS DEVELOPMENT COMPANY.
1322 Old National Bank Bldg.
or
ALLIN REALTY COMPANY.
"REALTORS."
408 West Sprague Ave.
Tel. Main 2750.
Spokane, Washington.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay. $2000 loan in improvements, or ready-made farms. Loans of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Alan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

THE FAMOUS WHEAT-GROWING DIStrict, northern Lincoln county; 2600 or 1320 acres, improved wheat or diversified ranch; spring water; dark loam soil, clay subsoil. Price $65 an acre. 390 acres, improved, in Latah Co., Idaho, 6½ miles from Moscow, 1¼ miles from electric station. Price $27,600. Farms of all sizes for sale, or exchanges made.
NORTHERN PACIFIC LAND EXCHANGE.
ZIEGLER BUILDING,
SPOKANE, WASH.

WHEAT LAND BARGAIN—640 ACRES, all under cultivation; one-half summerfallowed, ready for crop; all fenced; good well, small house, barn for 20 horses, wheat granaries and other outbuildings. Price $25 per acre. Terms $4500 cash, balance $1280 per year, 6 per cent. Owner called to war, is reason for selling. Write H. D. McMillen, Ephrata, Wash.

BIG LAND OPENING—6000 ACRES A1 farm land in Snohomish county, $25 per acre; 10 yearly payments. Canneries, factories, mills, plenty of labor. Opportunity of your life. Send for literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

$30 AN ACRE WILL BUY A SPLENDID 200-acre farm, 3 miles from railroad town; high school on the land; fenced to four fields; over 100 acres in cultivation; good buildings. Long time on part. No trades. A. Z. Lucas, New Meadows, Idaho.

GOVERNMENT LAND IN CAL. FREE book. Joseph Clark, Sacramento, Cal.

FARM LANDS—FOR SALE 651 Continued.

ONE OF THE SHOW RANCHES OF THE NORTHWEST is now offered for sale. 560 acres, 55 miles from Spokane and 2 miles from railroad station; 540 acres of the choicest farm land, with 300 acres in TIMOTHY AND CLOVER, none of which is over 3 years old; present owners have cut $10,000 worth of hay in the last two crops; buildings consist of a comfortable 7-room house; fine hay barn 30x110, with feed racks; stock barn 30x100 feet, stable room for 30 head; machinery building and grain bins; blacksmith shop with complete equipment; spring water piped to house, barn and lot; with place go 3 head of good cattle, 3 wagons, 2 mowers, binder, 2 buggies, hack, 2 disks, manure spreader, drill, racks and harness, gang plow, 14 h. p. Russell engine and complete set of small tools. Price $40,000; $25,000 cash will handle. No trade considered. Now, Mr. Buyer, if you are wanting the cream of the northwest in a stock, hay or diversified farm, don't fail to get more details on this ranch. Write or see Mr. Tipton. HEGE & WATKINS CO., 717 Paulsen bldg., Spokane, Wn.

DO YOU WANT A GOOD FARM? We have it—something to suit you—large or small, improved or unimproved—with stock and machinery if you want it—in Wash., Idaho or Mont. Call or write and tell us what you want. HEGE & WATKINS, 717 Paulsen bldg, Spokane. Wn.

7 ACRES AND 4-ROOM BUNGALOW, mile south city. Price $1800. Terms. Write for particulars. F. S. Mathias, R. D. No. 2, Chehalis, Lewis Co., Wn.

FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

FARM LANDS—Wanted to Rent 660

I HAVE A RESPONSIBLE CLIENT DEsiring to rent a good farm, either on shares or for cash. W. M. Frost & Co., 410 Chamber of Commerce bldg., Spokane, Wn.

IRRIGATED LANDS—For Sale 663

IRRIGATED FARM LANDS.

ALFALFA LANDS, under government irrigation; abundant water; low altitude; rail and water transportation to coast markets; good schools, good roads; products alfalfa, corn, cream, hogs, honey, fruits, vegetables; long growing season; unimproved land $30 to $60 per acre; improved $100 to $260. Write for further information and literature. Dodd & Knapp, Hermiston, Ore.

TO EXCHANGE—REAL EST. 705

$20,000 WORTH OF CLOSE-IN FIRST-class Spokane property to exchange for a good farm. W. M. Frost, 410 Chamber of Commerce bldg., Spokane, Wash.

STATEMENT OF THE OWNERSHIP, management, circulation, etc., required by the act of congress of August 24, 1912, of The Washington Farmer, published weekly at Spokane, Washington, for October 1, 1917.

State of Washington, county of Spokane, ss.

Before me, a notary public in and for the state and county aforesaid, personally appeared J. F. Young, who, having been duly sworn according to law, deposes and says that he is the vice president of The Washington Farmer, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Publisher, Cowles Publishing Company, Spokane, Washington; editor, ——; managing editor, Edwin A. Smith, Spokane, Washington; business managers, none.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.)

W. H. Cowles, Spokane, Washington; J. F. Young, Spokane, Washington; F. J. Whaley, Spokane, Washington; Cowles Publishing Co. (a corporation), Spokane, Washington.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages or other securities are: (If there are none, so state.)

None.

4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association or corporation has any interest, direct or indirect, in the said stock, bonds or other securities than as so stated by him.

COWLES PUBLISHING COMPANY,
By J. F. YOUNG, Vice Pres.

Sworn to and subscribed before me this 29th day of September, 1917.

(Seal) F. J. WHALEY.
(My commission expires Oct. 17, 1919.)

GIANT POWDERS
Lift them out



It will pay you to test Giant Farm Powders in competition with any other stumping powder.

In the last year more than 2,000,000 pounds of these Giant Powders were used for stump blasting in Washington and Oregon alone. The users included farmers in every county in both states, the largest lumber and development companies, and the United States Government. They use the Giant brands because they have found that

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

always give satisfaction and do their work at the lowest possible cost and in the most thorough manner.

In the Pacific Coast states the farmers require explosives that will disrupt, crack, split and heave the stumps and at the same time lift and loosen the roots for easy handling. Giant Farm Powders do this because they are made especially to suit western conditions. Because of their wider-spread force, they remove the stumps more economically than powders or dynamites that merely shatter and pulverize.

Test one case. Compare it with any explosive that you have ever used for stump blasting. After you have blasted a dozen stumps you will understand why farmers who have once used them always continue to use the Giant Farm Powders. Fill out and mail the coupon at the right, and we shall arrange with our nearest distributor to supply you promptly at the lowest market price.

There are two Giant Farm Powders—Giant Stumping Powder, used for blasting in wet soil, and Eureka Stumping Powder (which costs a little less) for blasting in dry soil. Both resist cold to a remarkable extent, seven days' exposure to a temperature of 32 degrees failing to freeze them. Ask your dealer for these brands.

THE GIANT POWDER CO., CONSOLIDATED — HOME OFFICE: SAN FRANCISCO — ESTABLISHED 1868

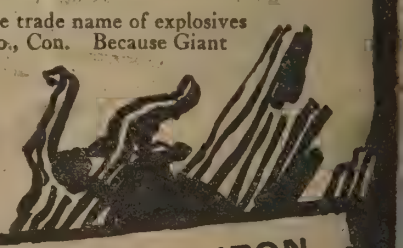
"Everything for Blasting"

BRANCH OFFICES: Seattle, Spokane, Portland, Salt Lake City, Denver

Have You Our Stump Book?

It is the most helpful and interesting book ever issued on Stump Blasting. It tells and shows how to save money and make land-clearing easier. It is written by Western men, from the Western viewpoint, and is full of pictures showing latest methods of blasting. Mark and mail the coupon and get it free. Other books—on boulder blasting, tree planting, ditching and subsoiling with explosives—also free on request. Mail the coupon *now*, before you lay this aside.

Warning. Giant Powder is the trade name of explosives manufactured by the Giant Powder Co., Con. Because Giant Powders are best known everywhere, many have assumed that all high explosives are Giant Powders. Insist upon having the genuine, made only by the Giant Powder Co., Con. If your dealer has only ordinary dynamite, write us and we will see that you get the genuine.



FREE BOOK COUPON

The Giant Powder Co., Con.
San Francisco.

Send me your illustrated books on the subjects which I have marked X.

☐ Stump Blasting ☐ Tree Planting
☐ Boulder Blasting ☐ Ditch Blasting
☐ Subsoil Blasting 203

Trial Order Blank

(Kindly fill out if ready to purchase)
Have your nearest distributor supply me with

.....lbs. Giant Stumping Powder
.....lbs. Eureka Stumping Powder

NAME .....
ADDRESS .....
Write below your dealer's name.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH · PACIFIC DAIRYMAN · HORN AND HOOF

VOL. XL. NO. 42 · OCTOBER 18, 1917. · ** · WEEKLY.

Should Enlist Money

Liberty Loan Bonds May Win the War

"Shall we be more tender with our dollars than with the lives of our sons?"

This question Secretary William G. McAdoo of the United States treasury department pointedly asks the American people. Thousands of homes are giving up their sons to help right the wrongs of the world and drive inhumanity into external exile. Millions of men and women who can not play their part on the field of battle have before them the opportunity of playing as real a part in civilization's stupendous task. The second Liberty loan!

America is the great financial power of the world, and upon her has devolved the plain duty of giving freely of her wealth to finance the war against Prussianism. Through various appropriations, taxes and bond issues she has undertaken to raise a total of $20,000,000,000, the most gigantic sum for any single purpose in the world's history. One item of this sum is that of the second Liberty loan, which the government hopes will reach $5,000,000,000.

The bonds are for sale in denominations of $50 to $10,000. Many of the wealthy individuals and corporations of the country have subscribed for large blocks of them, in some instances running as high as several million dollars. But the success of the loan, and hence the success of the war in a large measure, rests upon the shoulders of the common people of the nation—the farmers, merchants, working men, women—and the war department is hoping that 10,000,000 citizens, one-tenth of the country's entire population, will buy small bonds.

When the first Liberty bond issue of $2,000,000,000 was placed on sale last June the first part of the campaign was disappointing. The same was true of the early stages of the four weeks' campaign for the sale of the second issue. The first issue was oversubscribed when the final

Continued on page 3

LIBERTY BOND FACTS.

A Liberty bond is a mortgage on the honor of the American people.

It bears 4 per cent interest.

It is exempt from regular taxation.

If a later bond issue is sold to bear higher interest, a Liberty bond may be converted into a bond of the higher rate.

It matures in 25 years, but may be redeemed after 10 years if the government wishes to so redeem it.

It is transferable and is almost legal tender, being the finest collateral for loans in the world.

It may be bought on the instalment plan, 2 per cent down, 18 per cent November 15, 40 per cent December 15 and the remaining 40 per cent January 15.

Any bank or postmaster can give complete information as to the way to secure a Liberty loan bond.

Control Food Prices

Government Announces Sweeping Plan

The prices of the necessary foods are to be regulated by the government. This was assured when President Wilson issued a formal proclamation requiring all big importers, manufacturers, storers, dealers and distributors to take out a government license to do business. The license must be taken out not later than November 1, or such concern will not be permitted to continue in business.

The price control will be exercised over such staples as wheat, corn, rye, oats, milk, butter, beans, peas, fish, eggs, sugar, fruits, and all the various products manufactured from them.

The provisions of the licenses were not ready to be announced at the time of the issuance of the proclamation, but they are planned to be such as to prohibit absolutely all undue profit from the buying, storing, transportation or selling of the things that the American people must have to eat.

Failure to take out the required license, or failure to live up to its provisions after it is taken out, will subject the guilty person to a fine of $5000 or imprisonment for two years.

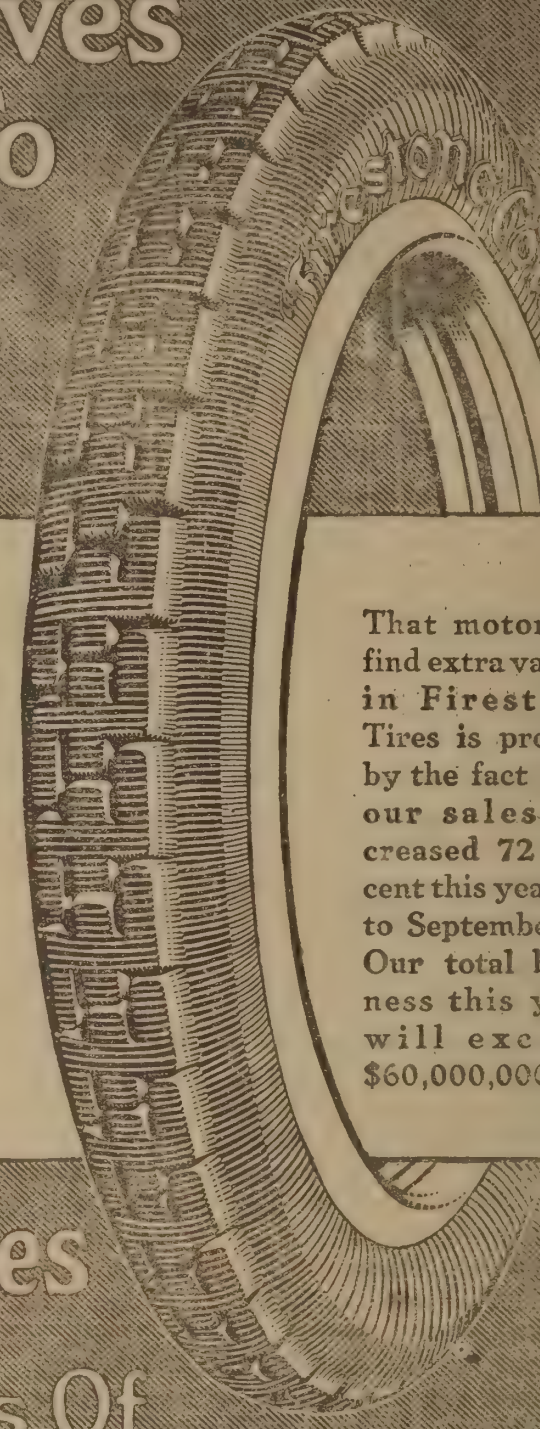
Accompanying this article is the complete list of foods to be controlled as given in the president's proclamation, and a study of the list will indicate how far-reaching is the order, and what the possibilities of price relief to the consuming public are. Absolute prohibition of food profiteering is the intent of the president's action, which is taken under the provisions of the food control bill of August.

The following are the concerns over which the regulation will be placed: All persons, firms, corporations and associations engaged in the business of either (1) operating cold storage warehouses (a cold storage warehouse being defined as any place artificially or mechanically cooled to or below a temperature of forty-five degrees in

Continued on page 5

First Read; Then Act! Are you willing to support a plan which aims to eliminate the middleman?—a plan which is in harmony with the government's program to release workers from non-productive lines so as to utilize their brain and brawn in producing necessaries?—a plan which means money saved right from the start? If this plan is to succeed it must have the loyal backing of readers everywhere; see details on pages 18 and 19.

Actual Service Gives Leadership To Firestone SUPER CORD TIRES



WITH numerous makes of cord tires contesting, the past year has witnessed the sharpest rivalry for Tire Supremacy that motordom has ever known.

In this contest the Firestone Super Cord rightly came into its acknowledged leadership, rightly because of the construction which is designed to produce strength, durability and flexible action.

The body of the Firestone Super Cord Tire is built of walls of stout cord, each cord imbedded in pure gum, no two cords ever touching to cause friction. The cushion (which is under the tread to absorb shocks and protect the inner body) is a thick layer of pure gum; the tread is tough and thick. The beads which hold the tire in the rim are specially reinforced. The sidewall is also reinforced, giving extra strength against rim-cut and raising the bending point of the tire safely high. More mileage at less cost. Users of Firestone Cord Tires are getting the highest average mileage enjoyed by car owners.

That motorists find extra values in Firestone Tires is proved by the fact that our sales increased 72 per cent this year up to September 1. Our total business this year will exceed $60,000,000.

New Fabric Tire Features Suggested By Success Of Cord Construction



Firestone FABRIC TIRES

have benefited by every feature of cord tire construction which can be used to advantage. THICK, TOUGH TREAD gives longer surface wear. MORE RUBBER BETWEEN LAYERS. Added protection against internal friction and greater resiliency. THICK CUSHION STOCK. Still more resiliency, protection against tread separation and stone bruise. REINFORCEMENT IN SIDE WALL. Greater strength at the bead. Firestone dealers will show you a cross section of the newest output of FIRESTONE FABRIC TIRES, explaining the features that add more miles to Most Miles per Dollar.

FIRESTONE TIRE AND RUBBER COMPANY
Akron, Ohio — Branches and Dealers Everywhere

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 42 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF October 18, 1917

Pledge Week Postponed

Will Make National Food Drive Oct. 28 to Nov. 4

At the request of President Wilson, the food conservation drive has been postponed from the week of October 21 to 28, inclusive, to the following week, October 28 to November 4, inclusive.

This change is made in order to allow the centralization of all public effort on the second Liberty bond campaign. The week originally announced for the nationwide signing of the food-saving campaign is the final week in the great drive for the sale of the second Liberty loan bonds, and the government is so vitally concerned that the Liberty loan succeed that the postponement of the food campaign seemed necessary to the president.

Enlist 20,000,000 Homes.

It is the aim of the food administration during the week from October 28 to November 4 to secure the signed pledges of 20,000,000 homes in America that they will follow out the recommendations of the administration as fully as possible in the saving of the staple foods for the use of the soldiers of this country and the allies. These recommendations urge the using of less wheat, less beef, pork and mutton, and less sugar and fats. They urge, on the other hand, the use of larger amounts of vegetables, corn bread, fish, poultry, eggs and the like, which are not suitable for use in the battlefield camps.

The following is a message directed by President Wilson to Food Commissioner Herbert C. Hoover, and by Mr. Hoover transmitted to the state food commissioners throughout the nation:

The White House, Oct. 10.—Mr. Hoover: The exigencies of the treasury have required setting the final week of the Liberty loan campaign during the period of October 21 to 28. This, I understand, brings it into the same week as the food conservation pledge campaign. It seems to me undesirable in the interests of both these capital matters that this should occur. In all the circumstances, therefore, I should be glad if the pledge campaign could be deferred one week, that is, until October 28 to November 4.

In asking this alteration of the plans of yourself and your association I shoud like to take this occasion to impress upon them that I in no way underrate the importance of their efforts. If we are to supply our allies with the necessary food, and are to preserve our own sources of foodstuff during the coming winter it can only be accomplished by the utmost self-denial and service on the part of all our people through the elimination of waste and by rigid economy in the use of food. Therefore, I would be glad if you would convey to all of your staff throughout the country my feelings of the prime importance of their plans and their work. I wish particularly to express my great appreciation of the service which this additional tax on their time will impose upon the many thousand volunteers who have already deferred their own concern to public interest in this important work.

I ask them not to allow this alteration in the program to dampen their fine enthusiasm, but rather to redouble their energies in their very great branch of national service. Cordially and sincerely yours,

WOODROW WILSON.

National Apple Show Prize

Will Pay $50 for a Hoover Dinner for One Person

The National Apple show, to be held in Spokane November 19-24, will pay $50 for a dinner for one person, provided that dinner best carries out the Hoover idea of food conservation and also has as a basic feature the use of apples in the makeup of the various dishes.

Fifty dollars for one dinner is a pretty good prize, but the apple show trustees are seeking to interest women all over the country in a most unique and original plan of food conservation along the lines indicated by Food Administrator Herbert Hoover. The administrator has given the apple a foremost place as a food necessity during the war period.

The "Hoover Special" dinner prize is open to any woman in the Inland Empire and requires no entrance fee nor is there any age limit or experience requirement.

The $50 award will be given to what is considered by the judges to be the best, well balanced meal for one person, the elements to consist of from five to 10 dishes, all of them made wholly or in part from apples, and best embodying the idea of food conservation. The judges will make their award on a basis of 100 points total, allowing 30 points for food value; 35 points for conservation or economy; 20 points on palatability; 10 points on attractiveness and 5 points on the variety of food units.

It is required that the weight of each article used in the composition of each dish must be given at the time entries are made, also the formula used. The exhibitor must furnish all table appointments. The exhibits will remain on display at the apple show throughout the entire week.

It is the intention of the trustees to present to the National Council of Food Administration all particulars on the prize-winning dinner with the object of securing its adoption throughout the nation as a war food measure.

Instead of giving second and third prizes the judges will select the four dinners which rank next in order to the first prize-winner, and will give a $10 prize to each of the four.

Helen Howe, Chamber of Commerce building, Spokane, who is in charge of the women's department of the apple show, will receive entries and make arrangements to accommodate all women who desire to participate in the contest.

Keep Feed at Home

This Is Food Administration Aim

"It is part of the fundamental plan of the food administration that sufficient grain shall be retained locally for consumption and manufacturing purposes."

This is a statement made by the secretary of the national grain buying corporation of the federal food administration. The statement came as a result of inquiry from the state public service commission of Washington. The tendency to ship northwestern grain to eastern points for manufacture into flour and feed was such as to greatly reduce the supply of mill feed in the northwest and increase the price of that which was available, said the commission, but a message was received immediately from Washington, D. C., that there was no need to worry on that point, as the policy of the food administration was that indicated above.

Should Enlist Money

Liberty Loan Bonds May Defeat the Kaiser

(Continued from page one.)

count was taken, however, by over $1,000,000,000. Civilization is hoping that the second issue will likewise be oversubscribed. The sum of $3,000,000,000 has been named as the minimum that must be raised through the sale of the bonds. The hope of the administration at Washington is that it will actually reach $5,000,000,000.

The failure of the bonds would have a two-fold adverse effect on the progress of the war from this country's viewpoint. It would leave the allies actually in need of funds, and it would convince the adversaries of the United States and her allies that the American people were not putting their shoulders patriotically behind the wheel to win the war.

The second Liberty loan must not, and will not fail.

President Sets Aside October 24.

What should be one of America's greatest patriotic days has been named by President Wilson in his setting aside of October 24 as Liberty day for the purpose of popular Liberty loan subscriptions. The president urges public gatherings in every city and village in the United States on that day. It is probable that the day will virtually be made a holiday throughout the entire country, and it is hoped that on that occasion the second Liberty loan will be oversubscribed by hundreds of thousands of dollars. The following is the official proclamation:

"The second Liberty loan gives the people of the United States an opportunity to lend their funds to their government to sustain their country at war. The might of the United States is being mobilized and organized to strike a mortal blow at autocracy in defense of outraged American rights and of the cause of Liberty. Billions of dollars are required to arm, feed and clothe the brave men who are going forth to fight our country's battles and to assist the nations with whom we are making common cause against a common foe. To subscribe to the Liberty loan is to perform a service of patriotism.

"Now, therefore, I, Woodrow Wilson, president of the United States of America, do appoint Wednesday, the 24th of October, as Liberty day, and urge and advise the people to assemble in their respective communities and pledge to one another and to the government that represents them the fullest measure of financial support. On the afternoon of that day I request that patriotic meetings be held in every city, town and hamlet throughout the land, under the general direction of the secretary of the treasury and the immediate direction of the Liberty loan committees which have been organized by the federal reserve banks. The people responded nobly to the call of the first Liberty loan with an oversubscription of more than 50 per cent. Let the response to the second loan be even greater and let the amount be so large that it will serve as an assurance of unequaled support to hearten the men who are to face the fire of battle for us. Let the result be so impressive and emphatic that it will echo throughout the empire of our enemy as an index of what America intends to do to bring this war to a victorious conclusion.

"For the purpose of participating in Liberty day celebrations all employes of the federal government throughout the country whose services can be spared may be excused at 12 o'clock Wednesday, the 24th of October."

Creameries Exhibit.

The dairy and creamery exhibits were smaller in numbers than usual at the Washington state fair this year. Selah creamery won first on cheese, score 91.5; Harwood creamery second, 91; Cowiche third, 90.5 On creamery butter Winlock Cooperative creamery won first, Fairfield creamery second, Lewis county cooperative creamery third.

On dairy butter Mrs. R. R. Peden of North Yakima won first for best 110 pounds and first on unsalted butter, with the Cascade creamery second.

On ornamental display Mrs. Thornton was first, Mrs. Peden second. Granulated butter, Mrs. Peden first; Cascade creamery second.

A. D. Fish of Seattle was in charge of the exhibit and Professor Frevert of Salt Lake did the judging. H. A.

Helps Construct Three Silos.

C. F. Monroe, county agent of Grays Harbor county, reports that he recently assisted in the construction of three silos and in the filling of two. It is hard now to find any one in Grays Harbor county that talks against the use of silos.

Banker-Farmer Meet

Conference at Pullman Nov. 9

Announcement has been made by State Bank Examiner W. E. Hanson of the annual bankers' convention at Pullman, November 9-10 this year, at which time special attention will be given to the problems of farm finance. It is urged by Examiner Hanson that the meeting be made a conference between farmers and bankers, that they may thresh out their problems together. The program announced includes the following subjects:

"The problem of encouraging the maximum production of foodstuffs and the ways in which the financial interests of the state can aid in this production.

"Problems of distribution of the products of the farm with the least loss of transportation and least waste of products.

"Conservation of waste products of the farm.

"Most judicious consumption of products.

"The service of the banker in the purchase of live stock from centers of surplus, and redistribution of same where needed for consumption of by-products.

"Financing the wholesale purchase of good seed for distribution where a scarcity now exists."

PINCHOT IS COMING.

Address Stockmen at Lewiston.

Announcement has been made that Gifford Pinchot, chairman of the live stock branch of the national food administration, will be present one day at the Northwest Live Stock show at Lewiston next month and will deliver a public address to the stockmen and others who may attend. Pinchot was formerly prominent in the nationwide conservation movement.

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Mason County Shows Big Change

Tendencies of County Well Expressed at Annual Fair

By Alvara P. Williams.

The eighth annual fair of Mason county, held September 27-29, shows a marked improvement in quantity and quality of exhibits. Last year was a surprise to many from outside the county, who had not realized that Mason county was rapidly changing from a logging county to an agricultural district. This year was even more of a surprise to many old timers, who had summed up weather conditions, the late date of the fair, the scarcity of labor, and decided that the fair wouldn't be up to standard. With very few exceptions, the exhibits were far better than ever before; especially was this true of the fruit, vegetable and grain exhibits.

A new arrangement this year left the main floor of the main building clear for dancing, and for several lectures. Fruits, vegetables and grains were displayed in a tent which has the foundations for a permanent building. The quarters for the live stock were not entirely filled, but the showing was excellent as far as it went. It will be some years before much of the best live stock in Mason county can be brought to Shelton for exhibit, owing to the great distance, over poor roads, from a few directions.

One who understands Mason county well will find the tendencies of the county well expressed in the attractions of this fair. It is a region which does its bit, and more, so quietly that an outsider does not realize the undercurrent of patriotic feeling. There is little publicity for this county, which raised three times its allotment of voluntary Red Cross subscriptions several months ago, and which has over a thousand members of the Red Cross society at present. There is little news of war gardens in the local newspaper, but these same gardens were a large factor of the exhibits at the fair. No one realizes the strength of the 49 school districts in the county, until a program by the school children of the entire county is presented.

The most striking feature of the entire fair, as far as the future of the county is concerned, was the parade and program given by the school children of Mason county, on Saturday. Practically every school district of the county was represented, forming by schools and marching to the fair grounds, with their school banners flying. A portable platform was used for their program, which included songs, drills and marches and brought nearly every school in the county in closer touch with the others.

Another feature of the fair, which was carried on so quietly at the end of the last day that few realized its significance was the sale of donated exhibits, the proceeds going to the Red Cross fund. Over $50 was realized from this sale, not such a large amount in itself, but characteristic of the people of the county and their patriotism.

Live stock was a small exhibit, except for cattle. Some good registered stock was shown, with surprisingly few grades exhibited. The poultry exhibit was small, but included nearly all varieties. B. E. Williams of Oakville, who placed the awards, claimed that the quality of the entire live stock exhibit was better than at several larger fairs he had attended in this state and Oregon.

An attempt was made last winter to standardize potatoes in Mason county, with the result that larger premiums were offered for a dozen varieties this year and the competition was keen on the varieties selected, especially on Beauty of Hebron, Green Mountain, Early Rose, Pride of Multnomah, White Star.

The display of corn was excellent. First prize went to an exhibit 14 feet high. Many specialties were shown, and all were of practical value. There was very little of the old-time "freak" idea in exhibits this year. New varieties of pole beans, stock beans, field peas, exhibits of hulless oats, soy beans, a variety of field peas with 23 pods to a vine, instead of the usual seven or eight pods—these show what the farmers are doing in a practical experimental way.

Perhaps as a result of the war gardens the premiums this year were much better distributed than in former years. There was close competition in many classes where formerly one or two exhibitors won a string of premiums year after year.

The programs included several patriotic speakers. There were also two lectures by Professor Blanchard of Western Washington experiment station at Puyallup. Jitney dancing on two evenings helped out on the expense account of the fair association.

Awards on live stock were made as follows:

Horses—Hambletonian, team in harness, Mell Saegar; draft team, Paul Hunter; mare, Axel Anderson. Belgian colt, C. H. Wivell.

Sheep—Shropshires, William Cooke; Lincolnshire, Mell Saegar. William Cooke; Cotswold, C. H. Wivell.

Hogs—Chester White boar, 1, Waldo Insel; boar under 1 year, 1, W. A. Hunter; sow, 1, Jay Needham. Duroc Jersey, sow and pigs, Arnold Rex; barrow, A. M. Johnson.

Cattle—Registered Shorthorn, bull, 1, Ed Taylor. Grade Shorthorn, cow, 1, Will Tucker. Registered Jersey, bull, 1, Waldo Insel; cow, 1, Axel Anderson; heifer, 1, C. H. Wivell; heifer, 1, C. H. Wivell. Grade Jersey, cow, 1, J. T. Butts; cow, 1, A. M. Johnson; heifer, 1, G. T. Booth. Guernsey Registered, bull, 1, William Cooke; cow, 1, Buster Leslie; cow, 1, Buster Leslie. Grade Guernsey, heifer, 1, David Getty; heifer, 1, G. C. Angle. Registered Holstein, bull, 1, William Cooke; cow, 1, Harry Winsor; cow, 1, G. C. Angle.

Poultry—Barred Plymouth Rock, cock, 1, Mrs. Mary Insel; cockerel, 1, Mrs. Mary Insel; pullet 1, Mrs. Mary Insel; old pen, 1, Mrs. Mary Insel; young pen, 1, C. A. Wiss; White P. R., Mrs. Mary Insel; White Wyandotte, Mrs. W. G. Rex; White and Buff Orpingtons, H. E. Loop; R. C. R. I. Reds, C. A. Wiss; S. C. R. I. Reds, cockerel, William Banks; hen, Edward Burnett; pullet, C. A. Wiss; Buff Leghorns, Mrs. McKay; White Leghorns, Arthur Wingert, all premiums except old pen; C. K. Fossum, young pen, J. H. Haskell; Ancons, Mrs. Mary Insel; Black Cochin, cock, Mrs. F. H. Jones; hen, Mrs. L. Kendall; ducks, Mrs. Mary Insel; geese, Mrs. Levi Shelton.

Three grange exhibits from Shelton, Skokomish and Agate granges were uniformly good. The diploma went to Skokomish, which had exhibits that would have been winners if exhibited separately. The entire exhibit was marked in enormous size of specimens, fruit well colored, and a most representative display of all farm products.

The prize for best farm exhibit was awarded to Lakeview Farm, Waldo Insel.

Premiums on fruit, vegetables and grain were placed by C. H. Bergstrom, county agent of Thurston county.

Potatoes, firsts as follows:

Beauty of Hebron, Harry Shelton; Green Mountain, H. L. Alden; Up to Date, Robert Johnson; Early York, R. R. Williams; Carman, Robert Johnson; American Wonder, Mrs. Mary Insel; Irish Cobbler, J. F. Moody; Early Rose, Mrs. Mary Insel; Banner, William Banks; Late Rose, Mrs. Ottermatt; Mayflower, William Banks; Gold Coin, Robert Johnson; Rural New-Yorker, Henry Mente; White Star, C. H. Wivell; Goodrich, William Banks; Netted Gem, L. G. Shelton; Early Fortune, William Banks; Pride of Colorado, M. W. Logan; Pride of Multnomah, Robert Johnson; Million Dollar, W. J. Becker.

Premiums on shelled grain were won by C. H. Wivell. Sheaves of grain were awarded to the following:

Spring wheat, William Rediske; black oats, C. S. Holman; timothy, C. S. Holman; beardless barley, Henry Mente; Siberian millet, R. R. Williams; millet, R. R. Williams; oats and vetch, W. J. Becker; red clover, W. J. Becker; sweet clover, W. B. Eaton; wheat and vetch, W. G. Rex; field peas, R. R. Williams; rye, W. J. Becker; vetch, C. A. Wiss; alfalfa, A. L. Bell; Swede pole beans, John Ahl.

Display of corn—Mrs. Frank Fredson; sweet corn, J. F. Moody; amber corn, J. Wingert; corn, William Malpass; field corn, W. G. Rex; flint corn, William Malpass; sweet corn, Hans Bergeson; Essex Rape, R. R. Williams; three-eared corn, William Banks.

Specialties—Pole bean, Mark Shelton; China potatoes, William Rediske; soy bean, R. R. Williams; hulless oats, C. A. Wiss; field peas, 23 pods to vine, L. G. Shelton; stock bean, Hans Bergeson.

W. G. Rex won 20 firsts on apples, taking about all except on Lady, Olympia Baldwin and Paragon, which were won by C. H. Wivell. Pears, with an enormous display, especially of Bartletts, were divided between W. G. Rex and J. Wingert of Harstine.

Very few plums and prunes were shown. An excellent display of grapes by Ed Wilson of Harstine took all firsts.



Part of the vegetable exhibit at the Mason county fair.



Mason county school children gathered at the fair at Shelton.

Community Cooperation

Good, Clean, Live Town Helps the Farmer

Living cost on the farm is increasing just as well as the living cost among the people in the town.

Taking this fact into consideration there is greater need than ever of community cooperation. Working together the farmer and the townspeople of all rural communities can do more for each other in the way of reducing the cost of living than each can do for himself. The right kind of cooperation between the farmer and the local merchants in the town will bring about this lessoned cost, but just as long as farmers send to the cities for merchandise, just so long it will be out of the question for country merchants to keep stocks in quantity and quality and to sell them at prices to advantage both to the farmer and to the merchant.

It is up to every progressive farmer to compare prices of city merchants with those of their country store, and if by cooperation you can buy the same quality for the same price of your home merchant, it is up to the spirit of cooperation and mutual benefit to give that trade to the country merchant.

It is up to the farmer to keep a record of prices in the larger cities as well as the country towns, including the delivery costs to his home. Compare these prices and the quality of the purchases for the same merchandise carried by the local trader. Then they will know who is giving them the most for their money. They can not afford to ignore the country merchant if the prices of the average of all they buy is as low as the prices furnished by the larger cities, nor can they afford to let the local trading center go by default just because in some instances they can buy cheaper from the big cities.

Of course every farmer has the right to buy where he can buy the cheapest, but in arriving at where he can buy the cheapest, is it not wise to total the prices for a year?

It still remains true that a good thriving, healthy, up-to-date town with good churches, good stores, good social privileges, is a valuable asset to the farming community surrounding such a town. Farmers simply can not have such an up-to-date town as their trading center unless they coperate with the townspeople. It is just as much up to the farmer as to the trader or the preacher or the public spirited townsmen to make a good, clean, live, hustling town.

Think this over and if this reasoning is not sound, write to the Farmer and tell why.

First Farmers' Marketing Association

Organized Under the Direction of the State Office of Farm Markets

By ASHER HOBSON
Director Office of Farm Markets

The Eastern Lewis County Farmers' exchange is the first farmers' marketing association to be organized under the direction of the state office of farm markets. Since organization work is one of the projects of the newly created office and since the methods of carrying on this work are not generally understood, a detailed description of the formation of this cooperative selling agency will not be amiss.

First, let it be understood that the office of farm markets does not stand for indiscriminate or wholesale organization. It does not look favorably upon cooperative movements which are not based upon conservative economic principles. Experience teaches that cooperation founded upon hopes, sentiment or enthusiasm is likely to fail. If the history of cooperation were written in detail its failures would occupy many more pages than would its successes. Consequently, if there is not a great preponderance of evidence from an economic standpoint in favor of organization such a movement should not be undertaken. Because of a lack of such evidence this office finds it necessary to discourage as many organizations as it encourages.

Furthermore, this office believes that growers' selling organizations have greater chances for success than have growers' buying organizations. This statement requires an explanation.

In the first place, a producer is primarily a seller and not a buyer; that is, he sells more products than he buys. A great part of his expense of production is purchased in the form of taxes, interest on investment and labor. These are things which can not well be purchased cooperatively. Hence 5 cents saved on the dollar of the material things he buys will net him much less than 5 cents on the dollar of the commodities he sells.

Secondly: The classes of commodities which he has to sell are generally fewer in number and offered in much larger quantities than those which he wishes to buy. Fewer classes of commodities offered in larger quantities simplifies the nature of the transaction, which, in turn, lowers the overhead charges of the usual selling organizations as compared to the transactions and overhead charges of the usual buying organizations.

On the whole, it is not well for producers to form themselves into associations performing work of a highly technical or of a complex nature. The successful management of such an association requires so much attention on the part of the grower that he has little time for attending to his own business—that of farming.

To be sure, a capable manager may be hired to conduct a farmers' cooperative manufacturing plant or a mercantile store, but little chance has such an undertaking of succeeding unless the board of directors, who are composed of farmers, have a keen insight into the details of the business, in order that they may successfully dictate the policies of that business.

The writer does not wish to infer that all farmers' cooperative stores are failures. Such is far from being the case. The point to be brought out is that it requires more favorable economic conditions and more skillful management to insure success than does a selling organization doing an equal amount of business under like circumstances.

On the other hand, a selling agency may do buying of a certain sort for its members which will often result in a saving without endangering its chances of success.

Bulky, nonperishable commodities of a staple variety, such as flour, feed, coal and machinery, may well be handled by a farmers' marketing company. These commodities can be purchased in car lots and can often be delivered to the members of the association direct from the car without the intervention of a warehouse. This sort of buying should be encouraged. It can profitably be carried on to some extent in nearly every farmers' commercial organization.

To return to the question of the methods of organization, quite often the task of an organizer is the collection of sufficient data and the analyzing of that data, in order to determine the feasibility of an undertaking. Consequently, when the farmers of eastern Lewis county made application to the office of farm markets for assistance in perfecting a marketing association the first step was a survey of the field.

What were the commodities to be handled by the proposed company and their probable amount; present system of marketing those commodities and the approximate cost; improvements expected from proposed organization, capital required, anticipated running expenses, number of prospective members and extent of territory covered? These and many other influencing factors were considered.

For the most part, the desired information concerning local conditions was obtained through the county agricultural agent.

It is the established custom of this office to do its extension work through the county agent, providing the community is represented by one. Because of his intimate knowledge of local conditions the information supplied by him is the determining factor in most cases in deciding the question as to whether the people of a community are ready for cooperation; and, if so, the kind of an organization that will best suit their conditions.

Since the results of the survey pointed toward what were taken to be favorable conditions for the promotion of a cooperative selling organization, the director of the office of farm markets and the county agent met with a committee of seven representative farmers from eastern Lewis county. At this meeting tentative constitution and by-

(Continued on page twenty-one.)

GRASP THIS OPPORTUNITY

On pages 18 and 19 of this issue you will find details of a plan which means money saved for you and men released for service in agricultural and industrial lines.



Will Control Prices

Government Announces Sweeping Food Plan

(Continued from page one.)

which food products are placed, and held for 30 days or more); (2) operating elevators, warehouses or other places for storage of corn, oats, barley, beans, rice, cottonseed cake, cottonseed meal or peanut meal, or (3) importing, manufacturing (including milling, mixing or packing), or distributing (including buying or selling) any of the commodities in the accompanying list.

Farmers are excepted from the license requirements. There are many other exceptions, al lof which are designed to be only of those persons or corporations whose business is normally conducted upon a just and equitable basis, or whose business will be regulated automatically through the regulation of the big concerns. The following is the complete list of exemptions as given in the president's proclamation:

"Operators of all elevators or warehouses handling wheat or rye, and manufacturers of the derivative products of wheat or rye, who have already been licensed.

"Importers, manufacturers and refiners of sugar and manufacturers of sugar syrups and molasses, who have already been licensed.

"Retailers whose gross sales of food commodities do not exceed $100,000 per annum.

"Common carriers.

"Farmers, gardeners, cooperative associations of farmers or gardeners, including live stock farmers and other persons with respect to the products of any farm, garden or other land owned, leased or cultivated by them.

"Fishermen whose businesses do not extend beyond primary consignment.

"Those dealing in any of the above commodities on any exchange, board of trade or similar institutions, as defined by section 13 of the act of August 10, 1917 (the food control bill), to the extent of their dealings on such exchange or boards of trade.

"Millers of corn, oats, barley, wheat, rye or rice, operating only plants of a daily capacity of less than 75 barrels.

"Canners of peas, dried beans, corn, tomatoes, salmon or sardines, whose gross production does not exceed 5000 cases per annum.

"Persons slaughtering, packing, distributing fresh, canned or corned beef, pork or mutton, whose gross sales of such commodities do not exceed $100,000 per annum.

"Operators of poultry or egg packing plants, whose gross sales do not exceed $50,000 per annum.

"Manufacturers of maple syrup, maple sugar and maple compound."

"Ginners, buyers, agents, dealers or other handlers of cottonseed who handle yearly, between September and August 31 less than 150 tons of cottonseed.

CONTROL NECESSITIES.

The following is the complete list of foods to be regulated under the president's proclamation:

Wheat, wheat flour.
Rye, rye flour.
Barley, barley flour.
Oats, oatmeal, rolled oats.
Corn, corn grits, cornmeal, hominy, cornflour, starch from corn, corn oil, corn syrup.
Rice, rice flour.
Dried beans.
Pea seed, dried peas.
Cottonseed, cottonseed oil, cottonseed meal.
Peanut oil, peanut meal.
Soy bean oil, soy bean meal, palm oil, copra oil.
Oleomargarine, lard, lard substitutes, oleo oils, cooking fats.
Milk, butter, cheese.
Condensed, powdered, evaporated milk.
Fresh, canned or cured beef, pork or mutton.
Poultry, eggs.
Fresh or frozen fish.
Fresh fruits or vegetables.
Canned peas, dried beans, tomatoes, corn, salmon, sardines.
Dried prunes, apples, peaches, raisins.
Sugar, syrups, molasses.

"Kitchen's Joker" in Tax Bill.

The country is waking up to "Kitchen's joker" in the revenue bill imposing the tax of eight per cent on earned incomes exceeding $6000. The joker consists in exempting the incomes of senators and representatives and other governmental officials whose salaries exceed $6000, as well as exempting those whose income from money invested in stocks, bonds, real estate, etc., exceeds $6000. A professional man is obliged to pay an eight per cent tax on all that he earns from his profession above $6000, in addition to the regular income tax, while another man whose income from investments bring him in over $6000 a year has to pay an income tax but is exempted from this eight per cent tax. This eight per cent tax was not in the revenue bill when it passed the house nor was it in as the bill passed the senate, but was forced into the bill by Representative Kitchen in secret session of the conference committee on the threat, it is alleged, of holding up the entire bill unless his demands were met.

Yakima Potatoes

Federal and Local Standards

By RAY W. FELTON.

No. 1 Washington potatoes will weigh not less than three ounces and No. 2's, not less than two ounces, if the recommendation of the potato grading committee, appointed at the state fair, is adopted by Commissioner of Agriculture E. F. Benson. Meeting with representative potato growers of the Yakima valley, Tuesday, October 8, at Toppenish, members of the committee decided upon the above recommendations as to size. In other requirements the grade as suggested by the federal department of agriculture will be recommended. Thirty days after the committee's recommendation is approved by the state agricultural commissioners, the grades become fixed and all shipments will be made according to that standard if sold under grade.

The Toppenish meeting was well attended and of intense interest to potato growers throuhout the state. Among those present were: Asher Hobson, director of state farm markets; M. L. Dean, state commissioner of horticulture, and John Gourley, of the Potato Dealers association. Mr. Hobson urged the Yakima growers to adopt the federal standard if they graded their product at all. Considerable opposition developed, many growers contending that if Yakima potatoes were sold on the same standard as other Washington spuds, they would lose their individual quality reputation. The meeting decided however to adopt the federal standard for the general shipment, but to retain the association minimum of four ounces for all potatoes shipped under the name of the Yakima Valley Potato Growers' association. The discussion was heated at times and the conference lasted all day.

President Benz, of the association, who recently returned from the principal potato-growing sections of the east and middle west, told the growers not to grow anxious about the potato market. A normal crop has been produced he said and the demand will be great.

"Uncle Sam is a pretty good business man," said Mr. Benz. "He certainly realizes the value of spuds this year when he says: 'Put your spuds in storage and I'll loan you money on them.'"

Digging in the Yakima valley has just been started. It is not general as yet. Buyers are plentiful, but growers are inclined to hold. Some storage facilities have been provided and growers declare they will hold all winter before selling at present bearish quotations.

National Dairy Show.

Secretary of Agriculture Houston and Food Adminstrator Herbert C. Hoover are scheduled for addresses on food conservation at the national dairy show which begins at Columbus, Ohio, today, October 18, and will continue until October 27. Many conventions will be held and a variety of demonstrations during the continuance of the show. Among these will be cattle demonstrations and demonstrations of manufacturing various dairy products by the United States department of agriculture and the agricultural colleges. Students' judging contests will be a feature. The conventions will include those of the National Milk Dealers' association, American Dairy Farmers' association, and horse fairs and cattle parades are scheduled for the evenings.

Not One Mouthful Wasted.

To the Editor: We like The Farmer very much, have been much interested in articles on what woman can do to aid our country in her time of need. I should be glad to sign a pledge to conserve our food supply and prepare for winter use everything we have. In fact we are doing all those things and have been ever since the declaration of war. I assure you not one mouthful of food goes to waste on this farm.

CLARA F. HYERSTAY.
Woodland, Wash.

Avoid Sheep Sorrel.

Sheep sorrel is not often eaten by live stock owing to its sour taste, but it is well not to pasture horses or sheep on sorrel as the weed is somewhat poisonous to these animals.

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Free Speech May Become Treason

Written into the national constitution of the United States is a guarantee that the right of free speech shall not be denied the American citizen. But there is also written there a guarantee that treason shall not go unpunished. What if free speech and treason become bedfellows? Free speech and something dangerously near treason are abroad in this country, traveling together. Occasionally some one whom many have admired appears under the protecting wing of the right of free speech and gives comfort and aid to the enemy, which is what the constitution defines treason to be.

It is rendering invaluable aid to Germany for an American citizen to declare that this country has no cause for entering the war; that the sinking of the Lusitania with her load of helpless men, women and children traveling on missions of peace was justified; that peaceful, neutral people have no right to travel on the sea during the war; and inferentially that Germany has a right to instigate industrial disturbances in this country, sink our ships without warning or succor to their crews, induce Mexico and Japan to make war on the United States and spend thousands of dollars to "influence" our congress to tie the president's hands so he can not retaliate against German viciousness.

There are citizens making declarations like these. May Heaven forbid that any American be influenced by such utterances to believe that liberty-loving, humanitarian America has no ground for being in this war, when Prussian autocracy has violated every law of liberty and humanity. May the people of this country rise one hundred million strong to denounce such treason, and may their denunciation take form in union of life and resources until the unspeakable outrages that Germany has inflicted upon an otherwise civilized world are righted and their repetition rendered impossible.

Train a Boy for Next Year

Every farmer should begin now, if he hasn't already, to train a boy as an efficient helper for 1918. The war has taken much farm help both directly and indirectly. There is much work to be done. The boys are capable of being splendid helpers if they are trained.

But how are they to be trained? Not by harsh measures. Not by compulsion, even though it might be possible to compel them to work. Treat the boy as a junior partner, whether he is your own or another's son. Try to explain to him the importance of what he is to do, how he can help both you and himself, as well as his nation. Pay him honest wages for what he does. Give him a show and he will respond. He deserves patience and care in training; of course, he will make mistakes, but you never expect a colt to do the work of a sober old farm horse.

Germany and the I. W. W.

Sweeping action is being taken by the federal government against the I. W. W. National leaders to the number of something like 150 have been arrested, following indictment by a federal grand jury in Chicago, the charges against them being that they and their organization are carrying out un-American propaganda, violating a number of specific provisions of law. Not only is it charged that they have violated law, but it is charged that they are working with German aid to hamper this country as greatly as possible during the present crisis. The following extract from a letter written by James Rowan, one of the leaders in the northwest, to William D. Haywood, national secretary, indicates the validity of that latter charge:

"We have the good will of the German people here (in the northwest) and feel that they are in sympathy with our cause. We do not call them Germans, however, but refer to them the same as others, the fellow workers."

That is quite plausible. The aim of the I. W. W. is to utterly destroy the efficiency of the government, and Germany is certainly in sympathy with any move in that direction in the United States. The purpose of the I. W. W. is one of destruction from first to last, and the Germans are "fellow workers" indeed to that end.

It is high time that the government should take the steps it is taking. There is no room in America now for any person who is in sympathy with the cause of Germany, be that person an I. W. W. member, a pacifist, a former citizen of Germany or a United States senator. All such persons must be suppressed, and the government is justified in inflicting the full penalty provided by the constitution for the crime of treason against the United States when any such person is proved guilty of actions which lend aid and comfort to the enemy.

Sweeping Order on Food Control

On another page we give the news of the government's sweeping order licensing manufacturers and wholesalers dealing in a wide range of food products of the soil. The farmers will cry "amen" to the food administration's declaration that it will apply and enforce the law, to the end that—

"The producer must have a free outlet and a ready market.

"There must be no manipulation or speculation in foods.

"There must be no hoarding of foods.

"Unfair or unreasonable profits must be eliminated.

"Discriminatory and deceptive or wasteful practices which in any way restrict supply or distribution must be stopped."

The law clearly confers these powers and duties on the president. It empowers him to require all manufacturers and jobbers, and all retailers doing a business in excess of $100,000 a year, to take out licenses obligating them to charge only reasonable profits, charges and commissions. Licensed dealers violating these restrictions are made liable to a fine not exceeding $5000, or to imprisonment for not more than two years, or both.

The licensing provision of the law properly exempts "farmers, gardeners, cooperative associations of farmers or gardeners, including live stock farmers, or other persons with respect to the products of any farm, garden or other land owned, leased or cultivated by him."

The evils of combination and excessive profit-taking against which the law is aimed do not sprout or take root on the farm. The farmer must sell his produce against the open competition of the world.

It is also the theory of the law that keen competition in retail lines will be a sufficient protection against excessive profits there. That expectation seems reasonable, but if it should fail of realization, the temper of the country will demand quick amendment of the law.

Washington Gleanings

Sales amounting to $30,000 were made at North Yakima in the opening of the state fair sheep sale.

Mackey Brothers of Clarkston recently sold 1536 sheep for $18,800 to C. C. Clark of Arlington, Ore.

Apple picking has been started at both Deer Park and Denison. At Denison 13 Indians, in charge of their big Chief Jim, are industriously picking aples.

Spokane County Farm Expert J. R. Shinn, who is conferring with farmers to aid them in conserving food, has a new slogan: "Hooverize the pea straw by baling it."

The Puyallup and Sumner Fruit Growers' association has received a check from Uncle Sam for $10,764. Berry jam has been ordered from the company that will bring $212,160 more.

Never in the history of Lewis county has the wild evergreen blackberry crop been so large as this season, and never before has there been so many pickers engaged in gathering the fruit.

Recently the Thurston County Dairy and Farm Products association was awarded the privilege of furnishing ice cream to the army at American Lake, the privilege carrying exclusive rights.

Tom Lease of Neppel, from 2400 ewes, has sold $28,000 worth of meat and wool. Last year he estimated his investment of 2400 ewes at $24,000 and this year his returns so far have been $28,000.

The Wenatchee city schools, of which G. W. Bohannon is superintendent, started school early in August so that the children might have a month's vacation later in order to help harvest the fruit crop.

Waterville companies one day recently paid out about $500,000 for grain. The largest check was paid by the Waterville Union Grain company to the Hinderer Brothers for $35,998, which represented about half of their crop.

Districts in the East Side national forests, from which the state will seeure about 250,000 acres of government land in exchange for the school lands locked up in the forest reserves, were approved by the state land board recently.

Gilmore & Rae, horse buyers of Spokane, recently brought to Spokane a long carload of 28 horses from Ferry and Okanogan counties. The animals were received by a board of government inspectors in Spokane and sent to American Lake.

The amalgamation of all of the farmers' unions of the three states of Washington, Oregon and Idaho into one big pool for the purpose of handling the grain crop of the northwest is the plan that is now being outlined by the leaders in the farmers' movement.

About one-half of the former Spokane Indian reservation was swept by fire this year. In many places thousands of dollars' worth of benefits resulted from the fires by clearing away underbrush and putting the lands in shape for cultivation with much less labor.

A constitution and bylaws for the Thurston County Farm and Dairy Produce association have been adopted by more than 150 farmers and dairymen of the county. The association recently received the exclusive concession to market vegetables, milk and eggs at Camp Lewis.

The Moxee National Farm Loan association has received its charter from the federal land bank of Spokane, making this association the first in Yakima county to perfect its organization. Loans aggregating between $55,000 and $40,000 have been allowed and are in process of closing.

What Others Say

Herald, Concrete: Last spring we had a great campaign to stimulate production; now the crops have been produced and the great need is to prevent waste.

Independent, Chewelah: The speculator and the producer have compelled the food controllers of the government to lower the price and at the same time force a higher standard of patriotism.

Independent, Port Orchard: Hogs are now near the $20 per hundred mark. But that does not mean an increased profit for the hog producer. Feed for hogs has increased in price faster than the price of pork.

Mason County Journal, Shelton: It is the patriotic duty of every established farmer to hold to his live stock as long as possible, and it is the patriotic duty of every other citizen to give his second thought to encouraging the small farmer in every way possible—his first thought being, of course, to direct war movements.

$1525

Mitchell—a roomy 7-passenger Six, with 127-inch wheelbase and a highly developed 48-horsepower motor.

Three-Passenger Roadster, $1490
Club Roadster, $1560
Sedan, - - $2275 Cabriolet, - $1960
Coupe, - - $2135 Club Sedan, $2185

Also Town Car and Limousine.

TWO SIZES

Mitchell

SIXES

$1250

Mitchell Junior—a 2 or 5-passenger Six on similar lines, with 120-inch wheelbase and a 40-horsepower motor. ½-inch smaller bore.

Club Roadster, $1280
Sedan, - - $1950 Coupe, - - $1850

All Prices f. o. b. Racine.

Double Margins of Safety Mean

Lifelong Service—Less Repair Costs

Three years ago, after 11 years of car building, we decided to double the usual margins of safety.

We adopted the standard of 100 per cent over-strength. We based our requirements on the careful watching of many thousand cars. Then we devised radical tests to prove that parts had twice the needed strength.

It meant some added weight. It meant oversize parts. It meant higher grades of steel. The Mitchell of today has a wealth of Chrome-Vanadium. It has 440 parts made of toughened steel. It has gears which are tested for 50,000 pounds per tooth. It has rear springs which have never yet been broken.

$100,000 For Inspection

We spend $100,000 yearly for testing and inspecting parts and cars. Our steels are made to formula. They are proved in a crushing machine of 200,000 pounds capacity. We have our own speedway for testing the finished cars.

The result of these standards, apparently, is a lifetime car. Two Mitchells that we know of have already been run over 200,000 miles each. That is 40 years of ordinary service. Repair cost has been lessened by some 75 per cent.

Mitchell endurance has become world-famous. Under the hardest road conditions—in Russia, Australia and South America—it has won a great reputation. It is known in America as "The Engineers' Car"—so many noted engineers have bought it. The demand for the Mitchell has quadrupled since this standard was adopted.

Many Extra Attractions

The Mitchell is also a most complete car. It has 31 wanted features which nearly all cars omit. These include a power tire pump, reversible headlights, a dashboard engine primer and shock-absorbing springs.

It is also an extra-luxurious car. It has a deep, enduring finish, fixed by electric heat. It has extra-grade leather, deep upholstery, a light in the tonneau, a locked compartment, etc.

Before designing these Mitchells, our experts examined 257 show models. So all the known attractions are combined in these new cars.

A Bate-Built Factory

With all these added values, Mitchell prices are far below other cars in this class.

The reason lies in factory savings, in minimized labor cost. This mammoth plant was built and equipped under John W. Bate, the efficiency expert. Every building, every machine was designed to build this one type economically.

Here we build the whole car—chassis and body—under Bate efficiency methods. The yearly saving amounts to millions of dollars. Under no other conditions could cars like these be built at Mitchell prices.

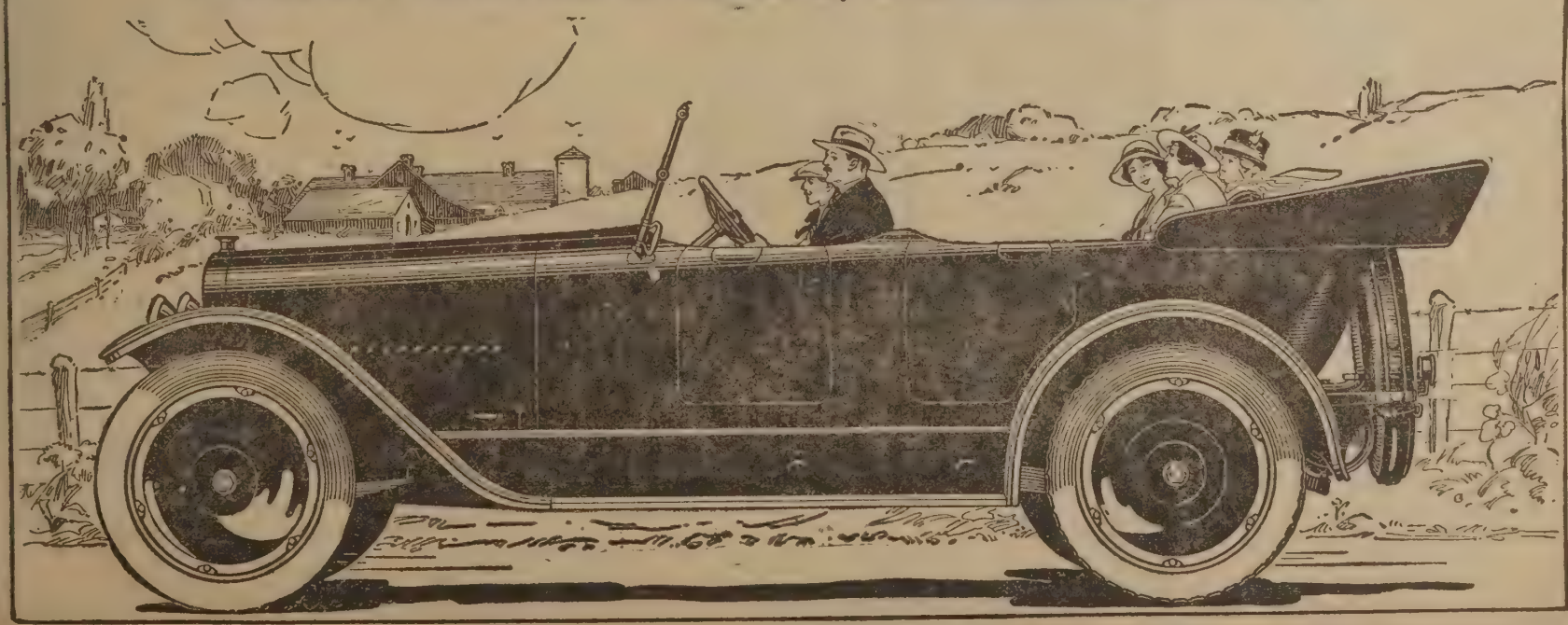
The Mitchell comes in two sizes, at two basic prices. The smaller Six—at $1250—has a 120-inch wheelbase and a 40-horsepower motor.

When you buy a fine car and a car to keep, you will want a car like this. It means low upkeep, small repairs, and a car to be proud of. See the latest models. If you do not know our nearest dealer, ask us for his name.

Mitchell Lewis & Staver Co., Pacific Northwest Distributors

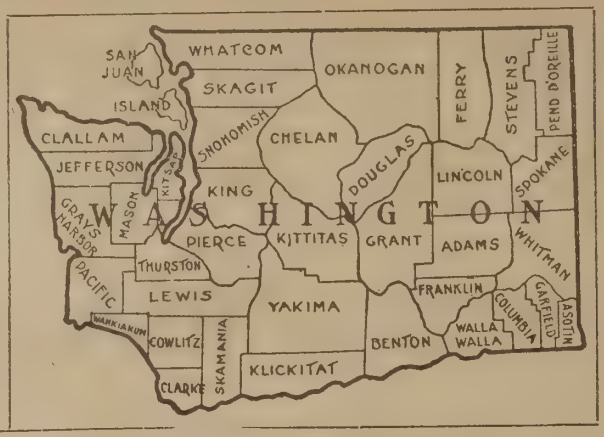
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MITCHELL MOTORS COMPANY, Inc., Racine, Wis., U. S. A.



Must Depend on Farm for Income

Practice of Leaving the Farm to Work Outside for Wages Has a Bad Influence on General Prosperity.



GIGHARBOR, Pierce County, Wash., Oct. 9.—Except for the harvesting of late beans and like crops that require continued dry weather, the weather has been ideal for the farmer in this section of the state. The rains and warm weather have given a tremendous growth to fall feeds during the last 30 days, and have put the ground into fine shape for plowing. Much of this is now being done, and a considerable amount of fall seeding in rye, vetch and grasses is being done. The results of the past season's operations are fairly satisfactory, nearly everything being salable at a good price. Many of our small ranchers still adhere to the old practice of working outside for wages, while the weaker members of the family carry on the small ranches in a half-hearted sort of way. Outside service is particularly attractive this year owing to high wages, and much demand for labor at the cantonment and elsewhere. We can not hope for great development of farming interests while this practice of leaning on outside incomes is followed. The prospects for the next year are good and it may be fairly said that our farmers are in an optimistic mood. While good seed for fall crops is not plentiful, it is generally obtained, although at very high prices. We have just closed a very successful Bay Island fair at Picnic Point, a beautiful spot on the waterfront of Wollochett Bay. Beside the main hall we had two wooden buildings and four large tents well filled with exhibits.
W. D. BOYNTON.

Fall Planting in Order.

CHEHALIS, Lewis County, Wash., Oct. 1.—Crops were a little late maturing, but most of the grain in Lewis county was threshed before the rainy spell in September and all of it has since been cleaned up, little damage having been done by the rain. At present rain is threatening, but as some ground is still too dry to plow easily a good rain would do no harm and considerable good. Manure spreading, plowing and seeding fall crops of vetch and wheat are in order this month, and undoubtedly the crop of fall feed for soiling and for the silos will be large. Farmers with dairy herds have had better prices than ever before, and in spite of the scarcity of labor and high wages have come through in good shape and are preparing to do their best for next season. There is no trouble in securing seed for fall planting, although the home grown vetch seed is not cleaned as well as it should be, owing to lack of proper machinery.
J. C. BUSH.

Lose Hay and Grain.

SHELTON, Mason County, Wash., Oct. 6.—Weather conditions have been exceedingly unfavorable for harvesting since September 1, resulting in loss of grain and hay. There was, however, a favorable result in the growth of grass and other pasture plants, which will furnish good fall and winter grazing for stock in the open. Summer dryness cut short very largely the supply of hay for the winter, and has forced many stock raisers, even dairymen, to sell stock for beef, and young cattle which otherwise would have been kept. The fall growth of grass will relieve to some degree. Soil has been in prime condition for early plowing and seeding, and farmers generally have taken advantage of such conditions; fall-sown crops are in much earlier than usual. Farmers in Mason county are generally disappointed as to crop results for 1917. Especially have forage and potato crops been below normal, and in some localities fruit of various kinds has been a failure or short of the yearly average. Corn has been an unusually successful crop, and resulted in a fine showing at the late county fair. The fair won the credit of being the best ever held in the county. Patriotism as well as good stock, fine vegetables and evidences of strong domestic activities were a marked feature of the three days of the annual coming together of our people. SCOTT HAYES.

Farmers Are Cooperating.

BELLINGHAM, Whatcom County, Wash., Oct. 6.—The winter feed prospects in this county are very gratifying. The weather this year during haying was very favorable and both cuttings were put up with practically no waste due to rain. This office of county agriculturist has been successful in getting many farmers to cooperate in the growing of alfalfa, and to date many are raising this crop on lands that they thought were not suited for this purpose. We are also growing more legumes and less timothy for dairy feeds. A mixture of Alsike clover, red top, white clover and Italian rye grass has given good results, both as a hay and pasture crop. The farmers are also cooperating, and have bought many carload lots of hay and grain, which has resulted in the saving of many hundreds of dollars to them. This work was a result of a cow-testing association. Several farmers are mixing third cutting clover and straw together by putting them through a hay chopper. Others are baling their straw to sell and also for their own use. Baled straw has sold for $6.70 f. o. b. track. Loose straw has been bringing $2 per load. Most farmers appreciate the value of their straw and have had it blown into barns at threshing time. This is very essential because of the heavy rains from now on.

The numbers of silos has increased considerably this year and they will all be filled to capacity with oats and vetch, wheat and vetch, corn, clover and Canadian thistles. The silage for the most part is keeping nicely and will solve the problem of expensive dairy rations this winter. The potato crop is nothing to speak of this season, due to the excessive long spell of dry weather. The potatoes set well, but they lack size; however, the quality is there. Considerable work will be done this fall and winter along lines of potato grading. We are advocating increased production of crops for next season and with that idea in mind this office has the cooperation of many farmers that want to plant rye and winter wheat. Much land has been cleaned up this summer that will come under cultivation for the first time this fall. H. B. CARROLL JR.

Straw Is $12 a Ton.

OMAK, Okanogan County, Wash., Oct. 2.—Feed for stock will be scarce this winter. Many farmers are selling all spare cattle to save feed. Hay is around $20 a ton and straw is about $12. In most places potatoes are good, but a light crop. There will be a considerable increase in crop acreage next season. J. O. WOODS.

Whitman County Needs Rain.

LACROSSE, Whitman County, Wash., Oct. 5.—Weather conditions have been most ideal for finishing up late harvest, but lack of rain has almost completely stopped all field work, nearly all farmers not caring to chance seeding in dry soil, preferring to wait until sufficient rain has fallen to germinate weeds before seeding if possible. Taken on an average, farmers haven't made farming very profitable this year and most of the yields are light and the quality very poor. Feed is not overplentiful and is high, for which there is no room for complaint, as the farmer should not allow himself to get short of feed, no matter how light the wheat crop, as straw is scarcely ever short. Should timely rains fall to insure fall wheat acreage, prospects for the coming year should be better than the average. M. E. SCHRECK.

Mix Cut Roughage.

BOSSBURG, Stevens County, Wash., Oct. 3.—Feed for winter will be pretty scarce here, but most all the farmers will have enough to carry their stock through by utilizing everything in the feed line. All straw has been put up in good shape and none will go to waste this year. Most of the straw will be cut and mixed with alfalfa or other hay and some farmers will mix cut straw and alfalfa hay with bran

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That is the aim of a plan, details of which you will find on pages 18 and 19 of this issue. By cutting out the middleman, money is saved and men are released for producing necessaries. Read the details.





Always the greatest value at the price

Styleplus Clothes $17 (black label) always excel at that price
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Progressive merchants from coast to coast are this week featuring Styleplus suits and overcoats—the only clothes in America sold on a known price basis—all wool and guaranteed.

This policy has made a hit with the men of America. It means that whenever and wherever they buy Styleplus, they know the quality and the price.

We developed the known price idea in clothing. It enables us to concentrate our volume, lower our costs, give exceptional all-wool fabrics, style and tailoring at moderate price.

For three years we have maintained Styleplus Clothes $17 in the face of war conditions, because we could buy in advance and operate on an increasingly larger scale.

When the United States entered the war, the fabric market underwent violent changes. To meet these new conditions we added a $21 grade, thus insuring the wide selection of fabrics and models and enabling Styleplus Clothes to meet every individual demand as usual.

Each grade the greatest possible value at the price. See for yourself at the Styleplus store. Write us (Dept. S) for free copy of "The Styleplus Book."

Style plus all-wool fabrics + perfect fit + expert workmanship + guaranteed wear.

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and shorts for cows. There has been but little straw sold here, but some at $3 to $5 per ton, loose. Potatoes are a short crop here, except a few fields and very moist land, which has turned out quite well. There is more activity among the farmers than usual. Fall plowing and clearing up new land is being done and there will be more fall seeding if we get rain soon. There is quite a lot of land ready to seed to wheat, but the ground is too dry yet. There will probably be more wheat seeded this fall and next spring than ever before, but the alfalfa acreage will be increased also. Threshing has been finished and although a very light crop, none of our farmers seem to be discouraged.

W. W. PALMER.

Skagit County Fair

High Quality of All Exhibits

The Skagit county fair was held at the Burlington fairgrounds, October 1 to 6. Although entries in some classes were not as numerous as last year, the high quality of all exhibits made this one of the most successful sessions ever held.

Among the general entertainment features, probably first honors went to the Philip Pelz Russian band. Mr. Pelz and his talented orchestra were heard by large crowds at the western Washington fair, and the Land Products show last year, and the directors of the Skagit County Fair association showed good judgment in securing them as the leading attraction for this year. Trotting and running races and a clean line of side shows and carnival features filled out the program for the visitor uninterested in the strictly agricultural features.

Among the latter, the cattle, swine and poultry divisions spoke eloquently of the progress Skagit county is making in animal husbandry. The old days when the broad, fertile valley was known solely for the wonderful oat crops it produced are gone forever, and now general farming at its very best is found throughout the county.

The growth in favor of the Guernseys was made very apparent by the entries in the cattle barn, where nearly 50 per cent of the animals shown were of that breed. J. M. Miller's Burlington Guernsey farm, Fisher Brook farm Guernseys and A. J. Sinnis' Fairview farm Guernseys all maintained a high level of excellence. Among the Holstein entries were those of the Milky Way farm, Achison & Co., Lockhart & Sons and J. H. Hurbert. Nels Anderson entered eight head of roan Durhams, all of them attractive specimens of dual-purpose cattle. Mr. Anderson has been handling milking Shorthorns for five years, and looks upon them as the coming breed in this country.

In the hog barn, John B. Peterson's Durocs made a splendid showing, in spite of the fact that they had been on exhibition at the Snohomish county fair the previous week and had been handicapped by the railroad journey to Burlington between the two shows. Mr. Peterson has the honor of having individuals of his breeding stock scattered among 50 different Skagit county breeders, and, in fact, at the present time there is hardly a herd in the county which is not related to his. Other Duroc exhibitors were H. S. Ruley, whose Duroc-Jersey hogs and Jersey cattle both made an excellent showing for quality, and F. D. Helm of Utopia. Fisher Brook farm had several pens of Berkshires.

In the poultry department, the heavier breeds had it all over the Leghorns. The explanation of this rather unusual condition, according to a local poultry authority, is that most of the Leghorns in this part of the state are utility stock and that "you can't scare a utility man out to any kind of a show." There was a good showing of Rocks, Wyandottes and Rhode Island Reds, with the latter very much in the lead for numbers.

Passing from animal to vegetable husbandry, the wonderful fertility of the local fields and gardens became at once apparent. In spite of the fact that this has been an "off" year for corn, the silage and ear corn entries of Edson Bassett of Sterling, W. W. Swank of Burlington and J. B. Hall of Avon gave no indication of having suffered from unfavorable weather conditions. Corn planted May 21 by Mr. Bassett showed large, well-formed ears, with the grains already well dented and quite firm.

Among table crops, potatoes, of course, came first in importance and in number and excellence of entries. Some growers report that this year's crop is not as large as vine growth led many to expect, but that the set is unusually even in size and quality. Onions, pumpkins and squashes were also strongly represented.

P. E. T.



WE BUILT THIS CAR FOR YOU

WE take it that the average American buys his motor car to *use* —for himself and his family to enjoy, at a cost within reason.

We have built this new Oakland Sensible Six to this idea, and we believe it more faithfully expresses it than any other car on the market.

It is not a racing car, in the sense that comfort is sacrificed to speed, nor is it a show car, in the sense that efficiency is sacrificed to size.

It is simply a very well-made, competent and comfortable automobile—a *sensible* car.

The overhead-valve motor in this new Oakland is simple and compact; it delivers at 2600 r. p. m., 44 horsepower, or one full working horsepower for every 48 pounds of car weight.

It is exceedingly economical of fuel, and in relation to the weight of the car is perhaps the strongest in the world.

The body of the car is very roomy and of exceptionally solid construction; it is swung on specially graded springs of great comfort, and is upholstered in genuine leather.

We know that the present market cannot equal Oakland value except at a considerable advance in cost.

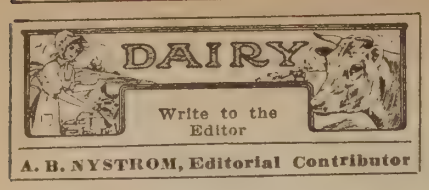
The light weight and even power of the Oakland Sensible Six makes it extremely easy on tires

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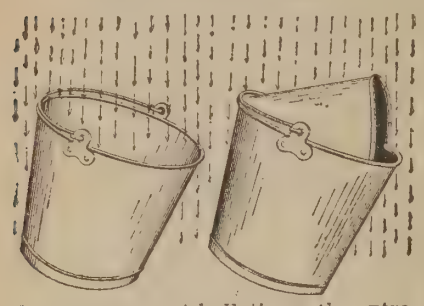
A. B. NYSTROM, Editorial Contributor

Prepares For Winter

By LYNN S. KEYES, Kelso, Wash.

F. S. James of Kelso, Wash., is preparing for winter by building a covered yard for his dairy cows, providing plenty of straw for bedding, and for the construction of a silo. This covered yard system of wintering cows has given splendid satisfaction on the west side of this state and is being used by many of the most successful dairymen. Mr. James ran his straw through a cutter and intends to feed much of it. This is not a general practice here.

Hooded Milk Pail.



In a government bulletin on the extra cost of producing clean milk is found the above illustrations of the open and hooded milk pail. It will be easily seen from the picture how a hooded pail will keep much dirt out of the milk. If the hoded pail is not found in stock it is said that the hood can be put on by any competent tinsmith for a small price.

Snohomish Valley Association.

The Snohomish Valley (Wash.) Cow-Testing association had 345 cows on test during the month of August, according to V. B. Riley, official tester. They averaged 423 pounds of milk, 29.2 pounds of butterfat at a cost of $4.02 uer cow per per month. The cows dropped off considerably during the month due to dry pastures. Quite a few cows were sold for beef during August and more are being prepared for the block. V. W. Haselton has just purchased a registered Ayrshire bull calf, Peter Pan 73d, sired by the famous Peter Pan of Willomoor farm. The high cow for the month, Spot, a grade Holstein, age five years, owned by Koorstra and Dykstra, produced 1789 pounds of milk, testing 4.1 per cent, making 73.3 pounds of butterfat. The second high cow, Violet Blossom, a registered Holstein, age 9 years, owned by E. A. Holcomb, produced 2108 pounds of milk, testing 3.25 per cent, making 68.5 pounds of butterfat. The third high cow, Everett De Kol Plum, a registered Holstein, age eight years, owned by Koorstra and Dykstra, produced 2306 pounds of milk, testing 2.9 per cent, making 66.9 pounds of butterfat.

Eradicating Tuberculosis.

At the last annual meeting of the Holstein-Friesian Association of America held at Worcester, Mass., Fred F. Field made an address embodying the methods for eradicating tuberculosis in cattle successfully in use for several years at his Dutchland Farms at Brockton, Mass. This has been printed for distribution by the association, according to announcement made by Secretary F. L. Houghton of Brattleboro, Vt. Mr. Field began his address by saying: "You must be honest with yourself. That is, take it for granted that there are some animals in your herd that have tuberculosis; that you desire to know which ones they are; that you will not sell them except as tubercular; that you want to protect your animals from the spread of the disease; that you want to raise a healthy young herd, and, finally, that you want to do everything you can to accomplish these ends."

Cleanliness, plenty of sunlight and fresh air, taking the calf away from the mother at once, pasteurizing all the milk given the calf, never allowing the calf to mingle with any reacting animals, keeping the new herd separated from the old by a double line of fence in the pasture are some of the methods discussed by Mr. Field.

The pamphlet is well worth careful reading by those desiring to clean up their herds from tuberculosis, "while at the same time you have preserved your tubercular breeding herd without any material loss."

These last quoted words are from Mr. Field's address, and they put forth a claim which even he himself says can be made good only by exacting adherence to the details of his "Method of Eradicating Tuberculosis in Cattle."

Make Good Records.

The total production of 10 Jersey cows on the Oak Ridge Jersey farm at Albany, Ore., S. J. Hulbert & Son, proprietors, for one year was 82,736.4 pounds of milk, 4362.45 pounds of fat and 5025.17 pounds of butter.

Ogla's Pomela (344 days), aged four years and four months, produced 8923.9 pounds of milk, 527.01 pounds of fat and 620.01 pounds of butter; Frosty's Trilby (365 days), seven years and six months old, produced 9604.1 pounds of milk, 508.10 pounds of fat, 598.12 pounds of butter; Lady Mollie Moore (365 days), aged seven years and two months, produced 8296.6 pounds of milk, 454.28 pounds of fat and 534.44 pounds of butter, and Frosty's Bessie, two years and eight months old, produced in 365 days 7735.7 pounds of milk, 446.33 pounds of fat and 525.09 pounds of butter.

This Jersey herd has just been officially testing a little over one year and their records speak for themselves. The cows were not fed and blanketed like many other cows, but just pastured along with the rest of the herd and on the same kind of feeds.

Information Bureau

The Farmer will be glad to answer questions of general interest, as well as those of a practical nature, relating to the farm or farm home. There will be no charge for this service. Questions must be signed with your name and postoffice address and will be answered either by personal letter or by publication when of general interest.

Address Farmers' Information Bureau, Room 35 Review building, Spokane, Wash.

Somewhere I have read of a mystical word supposed to be an antidote against fever. This word to be written and worn suspended by a thread around the neck. A. N.

Answer—"Abracadabra" is probably the word you have seen. This is a mystical word, constructed out of certain letters of the alphabet, and supposed to be an antidote against ague and fevers. The word was generally arranged in the form of an equilateral triangle inverted, each line being shorter than the preceding one by the omission of the final letter, and the letter a alone remaining as the apex. It was written on parchment and suspended around the neck by a linen thread. It was worn as an amulet for nine days; and was finally thrown backward, before sunrise, into a stream running towards the east. The following arrangement of the letters is the one generally seen:

```
a b r a c a d a b r a
  a b r a c a d a b r
    a b r a c a d a b
      a b r a c a d a
        a b r a c a d
          a b r a c a
            a b r a c
              a b r a
                a b r
                  a b
                    a
```

What is the rank of an earl in the aristocracy of Great Britain? P. W.

Answer — In the nobility of England the title of earl is third in rank, being next below that of marquis and next above that of viscount. It is the representative of the Norman title of count. Originally the earls, like the counts, had jurisdiction over a certain district or shire. The title is now wholly unconnected with any territorial jurisdiction. The earl's coronet consists of a richly chased circle of gold, having on the upper edge eight strawberry leaves, between each pair of which is a pearl on a spire rising above the leaves.



Earl's Coronet.

One Cow's Record.

To the Editor: A three-year-old Jersey heifer belonging to W. A. Gray of Leahy, Wash., began giving without previous milking from three to five quarts of milk daily in June. This milk was fed to the bottle baby of the family until September first when the cow was found with a young calf by her side. The baby was taken off her milk for a few days, when he was put on it again. He weighs 18 pounds at six months of age, and the calf is fine for its age. Who can beat that for an accommodating cow?

MRS. W. A. GRAY.

Leahy, Wash.

CUTTER'S
BLACKLEG PILLS
"California's Favorite" for nearly 20 years
For the Prevention of Blackleg in calves and young cattle

Their superiority is due to nearly 20 years of specializing in "Vaccines and Serums only."

Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.

Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

Prices:
10 dose pkge. Single pills $1.00
50 dose pkge. Single pills 4.00
10 dose pkge. Double Pills 1.50
50 dose pkge. Double Pills 6.00
Cutter's Pill Injector.... 1.50

Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

The Cutter Laboratory, Berkeley, Calif.

The Cutter Laboratory of Illinois, Chicago
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Don't throw away that old stiff harness. Eureka Harness Oil will give it new life - takes the place of the natural oils that have dried out. Your harness is then ready for months, perhaps years more of faithful service. Eureka keeps harness jet black.

Eureka Harness Oil

Standard Oil Company
(California)

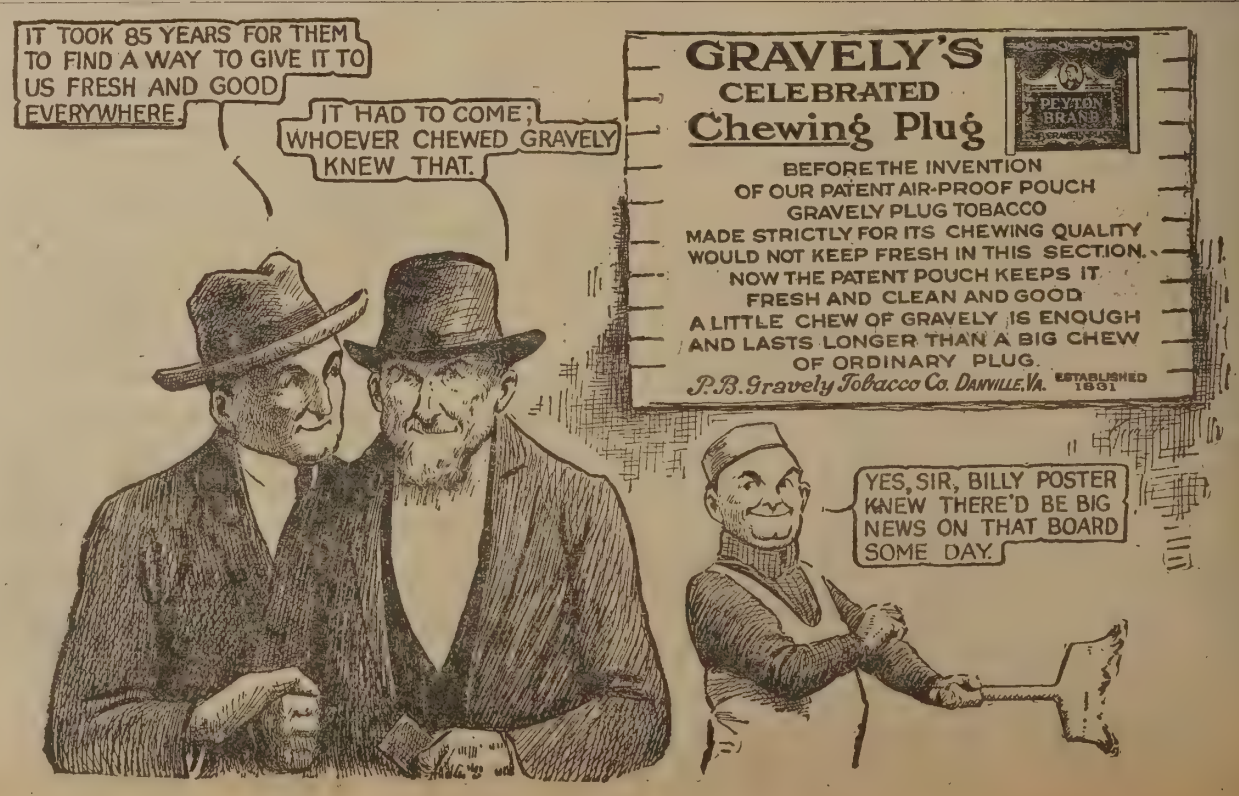
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A Shoe Boil, Capped Hock or Bursitis
FOR
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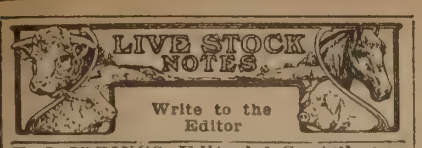


will reduce them and leave no blemishes. Stops lameness promptly. Does not blister or remove the hair, and horse can be worked. $2 a bottle delivered. Book 6 M free.

ABSORBINE, JR., for mankind, the antiseptic liniment for Boils, Bruises, Sores, Swellings, Varicose Veins, Allays Pain and Inflammation. Price $1 and $2 a bottle at druggists or delivered. Will tell you more if you write.

W. F. YOUNG, P.D.F., 371 Temple St., Springfield, Mass.





E. J. IDDINGS, Editorial Contributor.

CONSIDER RYE FIELD.

Offers Possibility for Pasture.

The need of spring pasture arouses in the minds of many the possibilities of sowing a crop of rye this fall on a part of the place that is perhaps less desirable for other crops. Rye has several possibilities to its credit. For instance, it comes on rapidly in the spring and makes excellent pasture for hogs or sheep or calves or even older stock. If it is desired to put it up for hay it may be pastured a short time until there is plenty of other feed and then left to mature for cutting. Rye yields abundantly, and if cut at just the proper stage makes a good feed for cattle and sheep.

Another possibility is not yet fully recognized. Rye is an excellent fertilizer crop. Some reports of excellent success have been made in sowing stubble land to rye in the fall after harvest, allowing it to come for spring pasture and then allowing it to grow a foot or more high to be plowed under. This is said to be an excellent way to secure additional fertility in the soil that is to be summerfallowed, and has the apparent double advantage of affording a little forage as well.

MILKING SHORTHORNS.

Their Popularity Is Increasing.

The war apparently is resulting in something of a victory for the milking Shorthorn. This leader of the dual-purpose cow is a producer of both meat and milk. Her calf makes a baby beef that is more than worth keeping over until a year or more old, whereas there is always difficulty in making a profit out of the calf of the dairy breed.

The urgent need of the present day for maximum production of both milk and meat has caused much thought to be put on the dual-purpose animal, says the American Shorthorn Record, and it is readily understood why.

Veterinary

Dr. S. B. Nelson

Mountain Fever.—I have a four-year-old horse that has been worked for a year. While working him through harvest I noticed he went with his nose stuck out and was rather dull. Is this mountain fever? There have been four horses lost near here with that disease this summer. His gums are swollen like lampers and his lips, tongue and mouth are nearly white and seem to be sore. A. F., Polson, Mont.

Answer.—Two different diseases are known by the general term of mountain fever. The one is influenza or pink eye or epizootic in horses. This disease shows so many different forms that I cannot give you treatment for them all, but for the simple cases good quarters, light, easily digested feed and a teaspoonful of potassium nitrate in the drinking water once daily frequently give very good results. For the other cases you would have to get specific treatment. The other disease, which is known as mountain fever, is pernicious anemia. This disease is nearly always fatal. Ninety to ninety-five per cent of the horses affected die with it. Up to the present time there is no treatment for it. The first disease is contagious and the second one is probably carried by a host.

Calf Loses Hair—I have a Holstein calf that was taken from its mother when five days old and given Jersey milk from cows that had been fresh about six months. It never had scours, is four weeks old and has been fed twice a day on new milk. The hair is all off of its legs and is now coming off of its back and neck.—J. L. L., Sedro-Woolley, Wash.

Answer—I am not able to tell whether the disease affecting your calf is one due to indigestion or whether it is due to external parasite. It would take a personal examination to determine this. Of course, if it is from indigestion the calf's feed should be regulated by cutting it in two, giving a little feed like linseed meal and possibly a few spoonfuls of artificial carlsbad salts in a little water every other day or such a matter. If it is an external parasite, then possibly washing with a weak solution of liquor cresolis compositus, about one or two per cent or three per cent, depending upon the age of the calf. I think, however, it might be well for you to consult your local veterinarian, and let him determine which of the two diseases it is and let him give you treatment.

Calves Die—Lately I lost three calves. They mope around one day before they die and do not eat much. There apparently seems to be nothing wrong until a day before they die. Their eyes seem to be swollen a little. They are about six months old and were fed milk until the middle of Auguts. They had been kept in a field where we cut oat and clover hay—J. N. P., Denzer, Ore.

Answer—As you do not give any symptoms except that the calves mope, do not eat, and the eyes seem slightly swollen, I can not make a diagnosis of the trouble with the calves from such few symptoms. See the article to A. A. U. regarding disease in calves, and see if that meets what you have in your calves. As serious as the trouble seems to be in Oregon I wonder if it would not be wise for you to write a personal letter to the state veterinarian, at Salem, Oregon, and get his advice or even see if he can see some of your dead calves, make a post mortem, and determine what the trouble is and give you advice.

WITHIN REACH

An opportunity to save money and help release men for productive labor. For details see pages 18 and 19 of this issue.



This Cow Is a Factor Toward Beating the Kaiser

Here is the photograph of a Hereford cow that is doing her bit to help win the war. Both calves are her very own, and they are the kind that it pays to raise beyond the veal stage, though they will make excellent "baby beef." They are on the C. C. Bull farm of purebred Herefords near Mabton, Wash.



Jerseys for Net Profits



You're in the dairy business for profit—the *net* profit that your herd has made you at the end of the year will determine the size of your bank account. Jerseys yield the largest returns from every ounce of feed—proved by tests at two great expositions. Jersey milk averages 5.3% butter fat, 9.1% solids not fat—highest of all breeds. Buy a Jersey bull. Write the breeders advertised below for prices, pedigrees, etc.



The American Jersey Cattle Club, 314 West 23rd Street, New York City

Jersey Isle Stock Ranch

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castilian Lady 26628 made 603.3 lbs. fat (715.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.

C. E. LONG, Buhl, Idaho.

Two Choice Bull Calves

From cows with official records of 914 and 663 lbs. butter in a year. Prices in proportion to production and quality.

ED CARY. P. O. Carlton, Oregon. Station, Lafayette, Ore.

Pearl Riga 206648

dropped bull calf July 10, 1917. Her record 458 lbs. butter in 297 days. Sire, Upright's Chief, sire of 6 in R. of M.; half bro. to Golden Glows Chief, sire of 31. Calf's sire, Dominus, out of 817-lb. cow and by bull out of 853-lb. cow. $75 if taken soon.

JOHN B. STUMP & SON, Monmouth, Ore.

1120 Pounds of Butter in a Year

by St. Mawes Poppy is the sixth highest official record of a Jersey cow in the world. She is dam of my herd bull, and his first heifers in milk are heavy producers. Write for prices on young bulls by him out of register of merit dams.

F. E. LYNN. Perrydale, Ore.

Every Cow a Record

Fifty per cent of our cows that have dropped more than one calf have records above 700 lbs. butter, 85 per cent fat. Golden Glow's Chief and Adelaide of Beechlands blood predominates. Special prices on bull calves under 9 months old.

LADD FARM. Oswego, Ore.

Green Meadows Farm Jerseys

Young bull out of dam on official test making good record. Sire a grandson of Goldon Glow's Chief, out of dam with official test of over 700 lbs. butter in a year. Other bull calves from register of merit dams. Also cows and heifers.

HENRY STEWART, Prop., Albany, Ore.

Fit for Herd Headers

Young bulls of good individuality, ready for service, sired by Landseer's Tormentor Boy, a strongly bred Tormentor bull, with high-producing cows in his pedigree. Dams of Brown Bessie and Tormentor breeding, with register of merit records. Price reasonable.

J. C. BROWN & SON. Shedd, Ore.

Wynoochee Home Farm

Home of
The Gold Medal Jerseys.

Young stock whose dams or granddams in my herd have won gold medals from the A. J. C. C.

JOHN H. TAYLOR, Montesano, Wash. Box 426.

MAPLE LAWN PLACE, ALBANY, ORE.,
Home of
Register of Merit Jersey Cattle.

Herd headed by a double grandson of Spermfield Owl—"Moose o' Fernwood" No. 137024, whose dam has an official record of 916 lbs. butter.

We are offering young stock from this rich butter inheritance whose dams are now on official test.

ROBT. L. BURKHART, Albany, Oregon.

Waikiki Farm

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.
ROUTE 7, SPOKANE, WASH.

Look Up My Winnings on Jerseys

at Oregon State Fair. Junior championship and other prizes; only five shown. For nine months my herd has had highest record in Marion County Cow Testing Ass'n. Lowest records since June, 470 lbs. butter as senior yearling in 10 months. Other two lowest, over 600 as 2-year-olds.

F. A. DOERFLER, Silverton, Ore.

$100 to $250

Young Jersey bulls, ready for service, sired by St. Mawes Golden Poppy, whose dam has official record of 1120 lbs. butter in a year. Some out of Register of Merit dams, priced according to quality of dam.

M. H. JONES, Perrydale, Ore.

Register of Merit Jerseys

A few REGISTER of MERIT cows and their offspring FOR SALE.

H. T. THIESSEN & SON,
Milwaukie, Ore.

Bull From Gold Medal Dam

Out of Brown Bessie Alphena's Gem, 827 lbs. butter in year. Sire, Engineer's Bluster, whose dam, Mabel's Bluster, once held world's record for 3-year-old production. His first daughter on test, in this herd, beginning under 2 years old, will make over 500 lbs. butter. Other bulls from Register of Merit dams.

N. H. SMITH, R. D. 2, Oregon City, Ore.

ASHBURN FARM
Register of Merit Jerseys

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.

J. M. DICKSON & SON, Shedd, Ore.

Oak Ridge Jersey Farm
Register of Merit Cattle

Twenty-nine years breeding Jersey cattle. Write us for prices and pedigrees. For information address

RILEY E. HULBURT, Albany, Ore.

Ashwood Farm Jerseys

FOR SALE—BULL CALVES; sired by ST. MAWES OF ASHWOOD and out of daughters of HOLGER now making creditable Register of Merit records.

McARTHUR & STAUFF, Rickreall, Ore.

A Bit of Courtesy

When writing to any of the Jersey breeders advertising in these columns, you will confer a favor to the breeder and to the American Jersey Cattle Club by mentioning this paper, as they want to be able to trace the exact source of their inquiries. Will you do this, please?

HIDES
WOOL · PELTS
FURS · TALLOW

SHIP TO US
NO CARTAGE - NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS - HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC.
SEATTLE
BE SURE AND MENTION THIS PAPER

When you write to advertisers, be sure to say that you saw their advertisement in this paper.

POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

Waste in Stubble Field

Speaking about conservation, there are about 25 pounds of eggs, in the raw state, going to waste on the average acre of grain stubble. There are probably a hundred pounds of grain left on an acre. That would produce about 25 pounds of eggs, worth at the present prices about eight dollars.

With a few cheap colony houses or sheds on skids, it is an easy matter to haul them into the fields. With the waste grain and weed seeds, the grasshoppers and other bugs, the chickens will do well, in fact better than if they were kept cooped up in the average chicken yard. In the nice fall weather it is not even necessary to have houses for them, unless to protect them from vermin. If the weather is warm they should have some shade. Roost perches may be built under the trees for them to roost on at night. Poles will do for perches, but they should be kept at least two feet apart.

Until bad weather comes the fowls will do well in this way, better than crowded together in small coops. After a month on stubble fields the chickens will be in good shape for market if they are cockerels, or for laying, if pullets. If there are grasshoppers and grit and green stuff in the fields they will need no other feed, but water will need to be provided unless there is a running stream near. If there are no grasshoppers it will pay then to keep a hopper of meat scrap or fish scrap in the field where they can help themselves at will. If colony houses are used they should be moved on to fresh ground about twice a week or after they have cleaned up the grain as far as they range. In some sections coyotes may defeat this plan. J. D.

Food Values and Eggs

Farmers are figuring earnestly these days on the economy of feeding high priced feed to animals. The question is, can the feed be converted into ham and eggs and beefsteak at a profit? His investigations lead the farmer to consider which is the most efficient producer—the cow, the hog, the sheep, the beef animal, the hen. In other words, which animal produces the most human food for every pound of feed eaten?

If we take the total product, the cow will of course produce more food than any other animal. The product of the milk cow is measured by several thousand pounds in a year. But a pound of milk can not be compared with a pound of meat or of eggs either in food value or in market value. The reason is that the cow is thrifty and adds considerable water to the milk. In 100 pounds of milk there are only 14 pounds of solids. There is more or less water or moisture in all animal products. In eggs for instance there is some 66 per cent of moisture and in meats there is considerable moisture. The total product therefore is not a good basis on which to figure. The solids in the food, or that which remains after the moisture is extracted, is a better basis.

Dr. Jordan, director of the New York experiment station, in comparing a Leghorn hen, weighing 3½ pounds and laying 200 eggs in a year, with a Jersey cow that weighs 1000 pounds and produces 7000 pounds of milk, says:

"If you take the dry matter of the hen and compare it with the dry matter of the eggs she lays in a year, there will be 5½ times as much dry matter in the eggs as in her whole body. The weight of the dry matter in a cow's body will be to the weight of the dry matter in the milk as 1 to 2.9. In other words, based upon the dry matter, the hen does twice as well as the cow. I suspect that the hen is the most efficient transformer of raw material into the finished product that there is on the farm. Her physiological activity is something remarkable, so in that particular the hen stands in a class by herself."

It is another question of course as to what kind of live stock or fowls eat the most feed to produce a given amount of product. This varies with different classes of stock and also with different individuals of the same kind of stock. A flock of fowls at the Oregon station produced in a year an average of 180 eggs per hen weighing 22 pounds. In this case it required four pounds of feed to produce a pound of eggs, not counting the green feed. This means, roughly, that a pound of feed costing about 3½ cents, produced five cents worth of eggs, with eggs at 30 cents a dozen.

Good laying hens therefore are efficient and profitable transformers of raw material into finished food product, and they should be given every consideration when the question of supplying foods to meet the war emergency is being discussed.

As to the relative value of different kinds of food, the campaign literature is not always to the point. Many writers and speakers refer to calories and compare different foods on the basis of heat units. That is one function of foods, to produce heat in the body. But foods must furnish materials for building and repairing bodily tissue. They must furnish bone and flesh to cover the bone. The material for building up and keeping up the body is more important than the material for furnishing the heat, because it is more costly. The heat-producing elements, which are the starches, come from such cheap foods as corn, which has a high percentage of heat-producing elements. The flesh-forming elements are not so abundant. They comprise only about 10 per cent of the corn while there is some 80 per cent of the heat-prpoducing compounds. The feeder must purchase meat foods and other high priced foods that are rich in protein or flesh-formers to make the balanced ration.

So it is not a question altogether or primarily of heat units or calories; it is more a question of protein and protein compounds and also of mineral matter. If we want heat units we eat corn and fats; if we want flesh-formers we eat lean meat and eggs.

There are many things in foods that chemistry does not tell us about. They tell us, for instance, that there is a certain amount of protein in certain foods, but then what is protein? It is made up of other compounds the functions of which have not been clearly defined. Why, for instance, does protein from grains give a certain result, and the protein from meat give another result in egg production? When the chemists can tell us all about the different compounds of protein and their functions in human food we will be better able to decide on the comparative merits of different kinds of food.

Meantime the high nutritive value of the egg is properly appreciated. The wounded soldiers must have eggs. They constitute the only nourishment in certain hospital cases, and the egg has not a high caloric value. It nourishes the body; the heat units can be secured from cheaper foods. J. D.

Earth's Temperature.

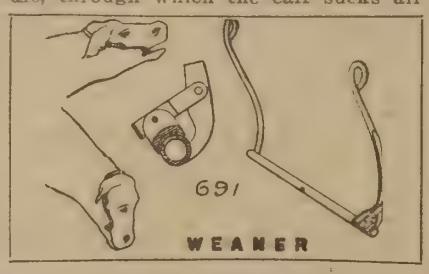
The temperature of the earth appears to increase from the outer surface downward at the rae of one degree Fahrenheit for every 50 or 60 feet and at the relatively short distance of a few miles the temperature must be exceedingly high.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Can Drink But Not Suck.

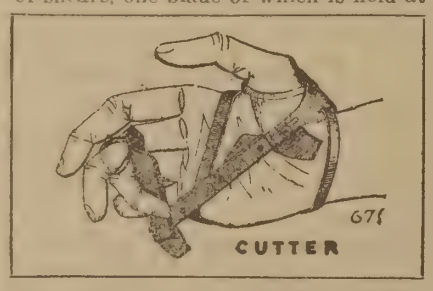
This weaning bit is a piece of piping with a number of holes near the middle, through which the calf sucks air



when it tries to suck its mother. The new feature is the valve at one end which opens by gravity, when the calf raises its head, and prevents sucking; but it closes when the calf lowers its head, and permits drinking.

Maize Cutter.

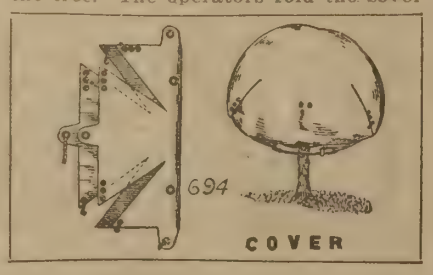
This cutter is in the form of a pair of shears, one blade of which is held at



rest by a metal place bearing against the palm, while the other blade is moved in and out by the fingers.

Protects the Budding Fruit.

The special feature of this cover is that it has two pairs of eyes which are used only when it is placed over the tree. The operators fold the cover



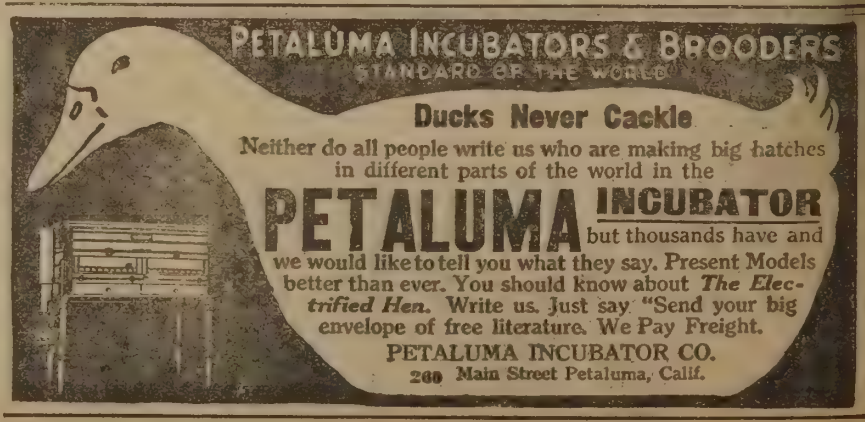
until the eyes are together and then insert two poles in the eyes and place the cover far enough over the tree for the fold to fall into place. The cover protects budding trees from frost.

Wonderful Egg Producer

Any poultry raiser can easily double his profits by doubling the egg production of his hens. A scientific tonic has been discovered that revitalizes the flock and makes hens work all the time. The tonic is called "More Eggs." Give your hens a few cents' worth of "More Eggs" and you will be amazed and delighted with the results. A dollar's worth of "More Eggs" will double this year's production of eggs, so if you wish to try this great profit maker, write E. J. Reefer, poultry expert, 4667 Reefer bldg., Kansas City, Mo., who will send you a season's supply of "More Eggs" tonic for $1.00 (prepaid.) So confident is Mr. Reefer of the results that a million dollar bank guarantees if you are not absolutely satisfied your dollar will be returned on request and the "More Eggs" cost you nothing. Send a dollar today, or ask Mr. Reefer for his free poultry book that tells the experience of a man who has made a fortune out of poultry.



Dr. Hess Instant Louse Killer Kills Lice



Mutiny Hits Germany

Discontent Found in Kaiser's Navy

What the state departments of the allies consider one of the most hopeful signs of the failure of Germany to hold out much longer against the attacks of the allied armies, the embargoes that are shutting off her food supplies and the internal dissatisfaction with the conduct of the war was noted last week when what appears to be reliable information reached the public of mutiny aboard German naval vessels.

It is stated that the discontent in the navy began to manifest itself as much as eight months ago, but that it was suppressed until recently when the crews of four battleships openly mutinied. In one case, that of the battleship Westfalen, the captain was thrown overboard and drowned. The crews deserted their ship and landed. Apparently in sympathy with the mutineers, the marines refused to fire upon them when ordered to do so, and soldiers of the army were called upon to arrest them. Later a few of the leaders were executed for insubordination.

Another significant incident of the mutiny was that aboard the warship Nurnburg, the crew of which seized the officers and headed the ship toward a port in Norway, with the evident intention of having the ship interned for the period of the war, thereby escaping further participation in the war. The vessel was followed by torpedo boat destroyers, however, and compelled to surrender before reaching the neutral port.

It is stated that evidence of insubordination has been seen in the actions of the armies on certain parts of the western fronts, and many are watching the developments with the firm conviction that the fall of the kaiser is indicated in the opposition of the sailors and soldiers.

That the reports are true is virtually guaranteed by the open admissions of Chancellor Michaelis in the German reichstag. Because of this admission, together with certain criticisms that he made, there is a strong feeling for the dismissal of the chancellor finding expression in Berlin. It is predicted that he will be discharged or voluntarily retire within a few weeks at the most.

Allies Still Gaining.

Reports from the battle front indicate that the vigor of the attack of the English and French armies is not abating as it had been feared it would. Gains are still reported, with the German armies unable to withstand the terrific onslaught of the allies.

What looks like an attempt to make a march on the Russian capital, Petrograd, is being made by the Germans on the northeast. The navy is playing the leading part so far, silencing Russian fortresses while soldiers make landings near Riga.

U. S. Army Is Growing.

It is officially announced by the war department that the number of men in the new national army has now reached over 431,000. The department's statement also says that more than 13,000,000 pieces of clothing or bedding have been distributed among the soldiers in the 16 army camps.

Camp Funston, in Kansas, has the greatest quota of men of any of the camps, its number being 39,533. Camp Lewis, in Washington state, is second with 39,171, and Camp Devens, Massachusetts, third with 33,098. Camp Custer, Michigan, has the smallest number, 16,193.

The number of men at or ordered to the other camps follows: Camp Dix, New Jersey, 19,363; Camp Dodge, Iowa, 20,324; Camp Gordon, Georgia, 22,507; Camp Grant, Illinois, 25,502; Camp Lee, Virginia, 27,601; Camp Meade, Maryland, 20,300; Camp Pike, Arkansas, 24,639; Camp Taylor, Kentucky, 27,462; Camp Travis, Texas, 29,249; Camp Sherman, Ohio, 32,886; Camp Upton, New York, 29,555.

Articles sent to cantonments for the new men include 1,402,390 blankets, 422,346 bed sacks, 436,749 cotton breeches, 259,805 woolen breeches, 267,579 cotton coats, 204,728 woolen coats, 289,713 overcoats, 4,002,856 pieces of underclothing and 937,734 pairs of shoes.

More Intrigues Discovered.

The state department at Washington has given publicity to further documentary evidence showing the scheming of Count von Bernstorff and other German representatives while Bernstorff was ambassador in this country. That many thousands of dollars were spent in the campaign to cripple this country while she was still neutral is proven by messages discovered. Also, plots were laid, and in some cases executed, against the Canadian government under the leadership of the German embassy at Washington. Among the plots uncovered was one whereby it was intended to destroy important stretches of the Canadian Pacific railway, thus completely tying up the transportation facilities of Canada. This scheme was nipped in the bud through the work of secret service men, and the calamity prevented.

The Revenue Bill.

The new government revenue bill is the largest tax producing measure in the world's history, it is claimed. It will raise more than $7,000,000,000. Probably the most important item in the bill is the increased income tax provision, by which it is planned to make excessive incomes pay the larger part of the tax. The tax increases rapidly with the increase of income, as indicated by the following figures:

Income.	Income tax.
$1,000	None
2,000	None
3,000	20
4,000	40
5,000	80
7,500	205
10,000	355
12,500	530
15,000	730
20,000	1,180
40,000	3,580
60,000	6,780
80,000	10,980
100,000	16,180
150,000	31,680
200,000	49,180
250,000	69,680
300,000	92,680
500,000	192,680
750,000	327,680
1,000,000	475,180
1,500,000	800,180
2,000,000	1,130,180
4,000,000	2,470,180

However, the item of the bill that will touch the largest number of individuals is the postage item, whereby postage is increased one cent above what it has been. That is, a letter requiring two cents in the past, will require (after November 2) three cents, a postal card that has required one cent will require two cents, and so on.

Raise Plenty of Money.

Champ Clark, speaker of the house of representatives, says that congress will raise enough money to carry on the war successfully, whether the second Liberty loan succeeds or not. He says it will be merely a case of higher taxes or subscriptions to the Liberty loan.

To Protect From Rain.

Folding vestibules for automobile doors have been invented to protect persons entering or leaving them from rain.

ONE MILLION DOZEN EGGS SHIPPED TO EUROPE

—Reports State Department of Agriculture. And George L. Dillingham, past master of the New Jersey state grange, predicts eggs will go to $1.00 a dozen.

Cash in on your hens. You can increase laying and improve the health of your layers with Sloan's Liniment, discreetly mixed with food. Write us for full directions and convincing testimonials of the effectiveness of this remedy in epidemics of roup, bumble foot and other poultry ailments. Instructions Free.

At all dealers. 25c, 50c, $1.00.

Dr. Earl S. Sloan, Inc.
113 W. 18th Street
New York City



Sloan's Liniment

Finding Workers for the Job

Maryland Proposes That No Man Shall Escape Work

By GRANVILLE LOWTHER.

For 24 years, or ever since the hard times of 1893, when there were said to be 3,000,000 of idle men in the United States looking for jobs—not professional tramps, but real men, some of them good citizens—I have advocated government employment agencies for the purpose of finding employment for the unemployed. This implies, of course, that the government must have industries, such as irrigating projects, good roads, canals and other industries on which persons can be profitably employed.

Things are changed now, and the problem is to find workers to do all the work that is necessary to be done. It is a war emergency, and if we win this war—as we will—we must push every department of industry. In this emergency I am in favor of government agencies to properly adapt men to places and guide them in finding the work to which they are best suited.

Many of the states are modifying their laws so as to provide for these emergencies. Perhaps Maryland has the most drastic and progressive legislation on this subject. Most of the states have "vagrancy laws," and a man who has no visible means of support, especially if he becomes obnoxious to the community, may be arrested as a vagrant, fined and set to work on the roads, streets or some other public institution. This, however, implies that the person so treated is a criminal and under sentence.

The Maryland law does not presuppose that the man is a criminal simply because he is without work. It presupposes that every man has a right to a place to work and desires to exercise that right. In case he is not employed it undertakes to find him a place. Then, in case he does not care to exercise that right, he is forced to do so whether he desires it or not.

It presumes that when he does not want work that the habitual idler is an habitual criminal or parasite, or both, and probably both. Therefore, society is being damaged to the extent that it furnishes him what he does not earn. Reports from that state show that the enforcement of this law is having a most beneficial effect, and that the saloon loafers, negroes whose wives and mothers supported them and the professional tramp is being eliminated. I believe this law should become national.

Recognize Club Work

Boys' and girls' club work was given its first recognition by the Clallam county fair this year. The Clover Canning club of the Fairview grange made a display exhibit of 74 varieties of canned meats, fish, fruits and vegetables and won first prize on the exhibit.

Ben N. Philips, cashier of the Port Angeles Trust and Savings bank, provided a booth for the boys and girls who entered the potato-growing contest inaugurated by that bank last spring. Forty dollars in prizes were awarded to country and city boys through prizes offered by that institution. Gordon Vert of Ramapoo was awarded the first prize for the best potatoes exhibited by club members, and also second prize for the best lot of potatoes exhibited at the fair.

The showing made by the boys and girls occasioned considerable comment favoring such work by the people visiting the fair. Secretary-Manager Pollock of the Clallam county fair, in his recommendations for next year, says: "More attention should be given to boys' and girls' club work and agriculture should be taught in the country and city schools of Clallam county."

The idea of a neighborhood or community exhibit which was started by the Fairview community last year was a feature of the recent Clallam county fair. Four communities made exhibits of farm and garden products, canned and dried fruits and vegetables, fancy work, and culinary art. The competition was spirited and close. When F. W. Rader, county agricultural agent of King county, who was acting as judge, made his decision giving the Fairview community first and elwha second, he stated that there was only four points difference between the first and second places, Fairview having a total score of 132 and Elwha 128.

The Merchants' association of Port Angeles offered a silver cup valued at $35 for the best community exhibit, the same to be won three times before becoming the permanent property of that community.

ELIMINATE THE MIDDLEMAN

That is the object of a plan described on pages 18 and 19 of this issue. It means money saved for you.



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Beginning October 1 we offer for sale several thousand acres of splendid cut-over land in the vicinity of Northport and located on both sides of the Columbia river.

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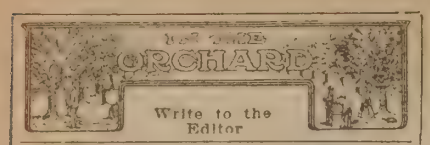
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GRANVILLE LOWTHER
Editorial Contributor

One of the teachings of the grange was "he who makes two blades of grass grow where only one grew before is a benefactor." How much greater then he who makes two splendid fruit trees grow where none grew before? Or, better still, to make an orchard grow where sagebrush grew before?

The soil is a laboratory in which millions of microscopic forms of life and energy are at work during the portions of the year when the ground is not frozen. They are at work breaking down the organic matter and converting it into forms in which it becomes available again for plant food. The farmer would become poor in a short time were it not that every year a crop of these invisible creatures prepares the soil for the crop on which he lives and makes his money.

Is nature cruel? It must seem so to those who are crushed, but to the philosopher it seems like a mode of improving the species. Our sympathies have always been with the failures; we have often felt like quarreling with the nature of things; but it does no good. It has been demonstrated in cyclones that nature will destroy a city with as little mercy as she will destroy a bird's nest; and in the floods, whole valley of inhabitants have been ruined as surely as the ant hill in the same pace. Nature is beneficent if we keep her laws; but ruinous if we violate them.

Apple Tree's Big Yield

By E. F. STEVENS, Nampa, Idaho.

Twenty-two boxes of apples from a 7-year-old tree were picked the other day in the Stephens orchards. This illustrates the surprising fertility of the Idaho soil that could grow a tree large enough in seven years to safely carry a half ton of apples. This incident also illustrates the fact that orchards during the first five years of their growth cultivated 24 times a year grow to a larger size and form than trees receiving average care. Time is saved and early production hastened by seeding to clover the sixth season, which tends to throw the tree into early fruitfulness. Some 250 acres of the Stephens orchards are now in standing clover. Instead of taking off this clover for hay, the mowing machine is run four times in a season, cutting growth secured, and allowing it to lie on the surface to act as a mulch. This lessens the loss of water from evaporation and increases the amount of nitrogen and humus. Handled in this way the trees have already attained a breadth of 18 feet of branches, 16 feet in height and have developed such early bearing qualities as to develop the above noted crop of 22 boxes on a single tree with three additional boxes on the ground under the branches.

Mark Ripening Period

I have two or three times called attention to the importance to growers of marking on the boxes the ripening period of apples. I do not think that it has had much effect, because nearly every one continues to do as he has done in the past and as the folks about him are doing. Such is the force of habit and of environment. I, too, am a slave to custom in some degree at least and, while in some important particulars I have broken away, there are others I follow, knowing that they subject me to considerable inconvenience. For instance, why should a man wear a stiff linen collar, white shirt and cuffs, when a soft collar, colored shirt and wrist bands are so much cheaper and better? It is because of custom and I am as much addicted to it as a toper to his cups.

Now if a fruit grower can be made to see that to change is financially to his benefit, gradually the change will come. Some of the reasons why the period of ripening should be marked on the box are that the consuming public do not as a rule know when the different varieties are ready for use. They are just as likely to buy an Arkansas Black for use in December as they are to buy a Jonathan. But the Arkansas Black should be used in April, May and June. Suppose the boxes were labeled about as follows: King of Tompkins County, ripe in November. Grimes Golden, ripe in December. Jonathan, ripe in December. Esopus Spitzenburg, ripe in January. Yellow Newtown, ripe in February and March. Winesap, ripe in February and March. Arkansas Black, ripe in April, May and June.

Names Not Sufficient Guide.

The names of the different varieties are not sufficient guide, because climatic conditions change the ripening period. For instance, a Spitzenburg, grown in the lower Yakima valley, will ripen from one to four weeks earlier than the same variety grown in the Upper Naches, Upper Ahtanum or at Ellensburg. The same is true in a greater or lesser degree with all the other varieties. The Delicious is a late keeper, when grown in the higher altitudes or upper valleys, but should be used in November or December if grown in the lower altitudes.

What Is the Ripening Process?

The ripening process in apples is one in which the starch turns to sugar. This process is the beginning of decay, but is a period when the fruit is good for eating without cooking. The next period is one in which the sugar turns to alcohol, and then to vinegar. In other words, the last period is one in which the apple is rotten.

If the growers would extend the demand for their products, they must teach the people when these products are fit for use, so that when the consumers buy a sample or quantity, they will want more. No one who buys an Arkansas Black for eating in December, will prefer another as compared with an orange; but that variety has its period and is exceedingly nutritious.

Causes of Change in Organisms.

Specific characters (that is characters that belong to species) are more variable than generic.

The following causes affect them.

1. Quality of food.
2. Quantity of food.
3. Water.
4. Air.
5. Light.
6. Climate.
7. Changes of treatment such as cultivation or neglect.
8. Chemical changes in sap as poison from insects, bruising the bark and consequent exposure to air.

The above causes of change in organisms was given by Charles Darwin over 50 years ago. About 30 years ago, I first read it and in so far as it concerns forms or material changes, I have not seen since a better description. The farmer, especially the orchardist, will find much in it to guide him in improving the quality of his crops.

G. L.

Eyeglasses for a Diver.

A new eyeglass has been patented for the use of submarine divers. It is well known that the human eye does not function properly under water, objects appearing badly blurred and distorted. This is due to the fact that the speed of light in water is different from the speed of light in air, and hence the light rays enter the eye with a different angle of refraction. The eye, being designed for focusing rays coming through the air, is unable to focus rays coming through the water.

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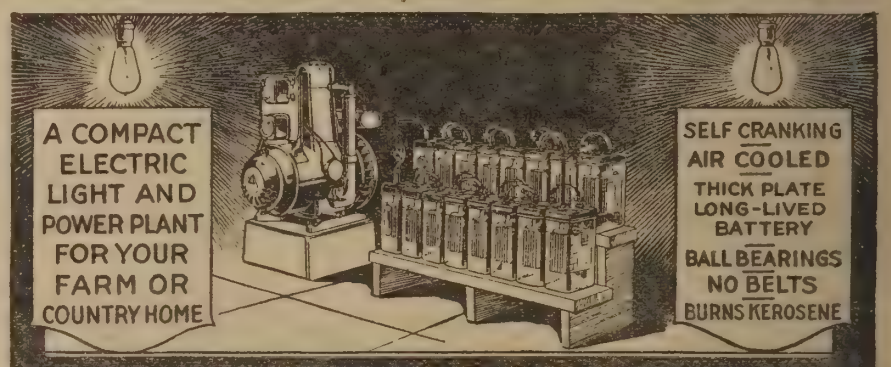
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W. F. 10-18-17.

One of the Many Dairies on the West Side

A herd of 36 pure-bred Holsteins, owned by A. H. Buck and Ed Hoem, Glenwood farm, Monroe, furnishes milk for part of the certified trade of Everett, Washington. Messrs. Buck and Hoem started their herd with stock from the Carnation farm, and have since been building it up by careful purchases in various directions. The cows are entered in the local cow testing association.



Some of the dairy buildings, Glenwood farm, Monroe, Wash., and Prince Aralia De Kol Burke, No. 142092, owned by A. H. Buck and Ed Hoem, Glenwood herd, Monroe, Wash.

Alfalfa Pointers

Here are a few more interesting pointers from alfalfa growers in the state of Washington:

J. A. LOCKHART of St. John, Wash., says that upland in his vicinity will raise one fair crop a year of alfalfa, but that the sub-irrigated bottom lands seem better adapted to the crop.

JAMES C. FARR of Albion, Wash., has no alfalfa now but expects to raise some when the price of wheat drops. He finds that the weeds seem to take the stand, especially when pastured. Another objection is the difficulty in plowing up the alfalfa.

NAGLE BROTHERS of Ringold, Wash., have about 100 acres in alfalfa and report about an average yield. The land is irrigated. They are not increasing their crop.

P. C. NISSEN of Ritzville, Wash., has about 10 acres in alfalfa. He declares he should have about 50. The reason why he has not 50 acres of alfalfa is given in his own words: "Prohibition. I will say, to force the farmer down to the eight-hour law, and prohibition, is simply against the law of this great nature we are living in. Too many retired farmers is proof of it. The farmer should finish up on the farm and not in town."

W. C. SEAGLE of Elberton, Wash., is well satisfied with his alfalfa results and is thinking of increasing his acreage.

PETER HANSON of Boyds, Wash., is the only alfalfa growers in his vicinity, having 12 acres. He reports that this year's first crop was better than ever, but the second crop was yielding yet better. He figures on irrigating his alfalfa in the future.

A Grand Champion.



The above photo shows the gray two-year-old Percheron stallion, Kyrube, owned by L. P. Schumacher of Chehalis, Wash. While Kyrube was not on his good behavior and would not pose as was desired for The Farmer camera, he is a young horse of much quality and fine Percheron type and was awarded grand championship at the Southwest Washington fair the week of August 24. H. A.

Guernsey Breeders Organize.

The Guernsey breeders of Snohomish county organized a breeders' club at a meeting held at Arlington September 4, the object of which is to promote the breeding and improvement of high-grade purebred Guernsey cattle in Snohomish county, to aid its members in buying, breeding and selling first-class animals, and to establish a good reputation for Snohomish county as a Guernsey center.

The following officers were elected until the annual meeting, which will be held at Snohomish September 29, 1917: John Wrage, Arlington, president; Albert Westover, Marysville, vice president; E. Lenfest, Snohomish, secretary; N. N. Nelson, Three Lakes, treasurer.

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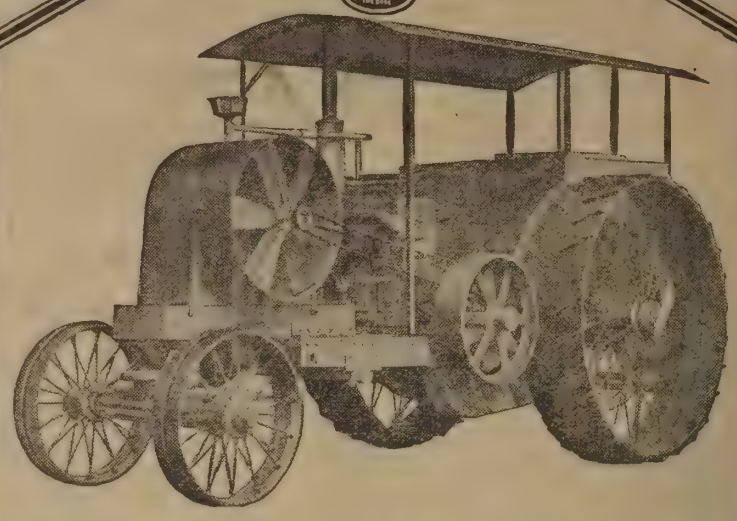
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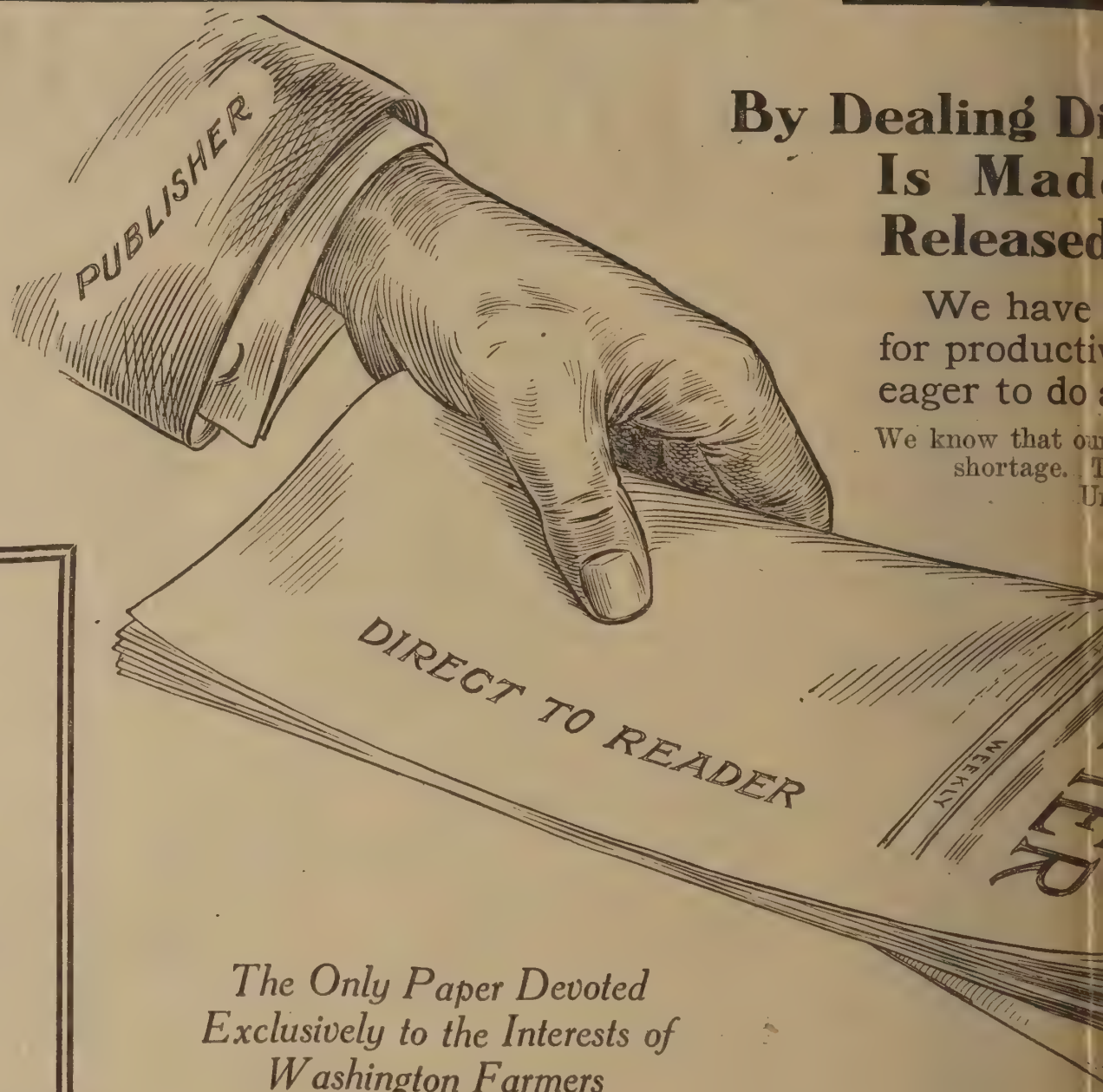
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If instead of waiting for an agent to call, each and every one of our readers would send in his or her subscription direct to this paper, just think what it would mean! It would enable us to release practically every one of those scores of agents for work in producing the necessaries of life.

We think you will agree that it is a small thing for each subscriber to do—to mail his subscription direct to us; but in the aggregate it will mean an enormous saving in agents' salaries, automobiles, gasoline, rigs, hotel bills, railway fares, and miscellaneous expenses.

In order to give the plan a thorough tryout, we have adopted a schedule of rates designed to give our readers the benefit of every dollar saved through the elimination of the middleman —25 cents for one year's subscription, 50 cents for three years and $1 for five years.

Of course, you realize that unless our readers act upon this offer, and act quickly, it must be withdrawn. But we think we know our readers. We are confident they will see the common sense of this plan and will send in their subscriptions without urging and without delay. Do your part. Mail your order today together with stamps, money order, personal check or silver figured on the new rate. And be sure and tell your neighbors about this plan.





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Oct. 18.

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COMING

IN THE NOVEMBER FIRST ISSUE of this paper we shall give our subscribers a very interesting summing up of what has been done along the lines of ***Live Stock Breeding in the Pacific Northwest*** during the past year. Also a forecast of the constructive plans of successful Live Stock Breeders and Live Stock Organizations in our own and adjoining states for the future.

A great many of the most prominent and successful live stock men of the Pacific Northwest will use this issue to offer surplus stock they have for sale. Our November 1st issue will therefore prove a very valuable buying guide for all subscribers who are intending to make the right start with live stock of the best blood and type.

Subscribers having good animals to sell will find this big live stock issue a particularly good one in which to advertise. Our advertising rates will be sent promptly on request.

First Farmers' Marketing Association

(Continued from page five.)

laws were discussed and the plan for financing the company was decided upon. The committee also arranged a series of five meetings to be held in different sections of the community. These meetings were for the purpose of explaining to the growers the expected benefits to be derived from cooperative efforts, the proposed plans of organization and methods of raising necessary funds.

Each meeting was addressed by a local representative, the county agricultural agent and the director of the office of farm markets.

Briefly, the purposes of organizing, as set forth at these meetings, were as follows:

1. In order that a warehouse might be maintained at a railroad point which would enable the growers to haul their produce and place it in storage while the roads were good—before the fall rains set in—and to market it on short notice, at such times as they deem advisable.

2. A warehouse would permit the pooling of the products of several farmers into car lots for shipment. Car lot shipments result in a saving on freight rates. It also opens new outlets for the produce inasmuch as car lot shipments can travel wider distances than can smaller sales. Furthermore, some highly desirable markets require more than car lots—army and navy orders—on some classes of produce. Individual farmers can not take advantage of this sort of a demand. Collectively they can do so.

3. The principle advantage to be derived from such an organization, and the one most emphasized, was that of standardization. Through an organization the growers can employ a manager whose business it is to find out what the market demands and grade the produce according to those demands. This sort of an arrangements results in putting a commodity on the market in a form that will enable it to hold its own in competition with other commodities that are graded to suit market demands. It saves freight charges by keeping the low-grade products, which have no market value, at home where they can be utilized to the greatest advantage.

The suggested constitution and bylaws were discussed in full at these preliminary meetings, and detailed explanations were made as to moral and financial obligations of members.

Some of the more important points set forth in the constitution and bylaws may be worthy of consideration. The purposes of the organization, as defined in the bylaws, are:

To encourage better and more economical methods of production.

To secure better results in grading, packing, advertising and marketing farm products.

To buy supplies in a cooperative way.

To rent, buy, build, own, sell and control real and personal property as may be needed.

To cultivate the cooperative spirit in the community and to perform any other work which may tend to the betterment of the members and the uplift of the community.

Any producer of farm and horticultural products is eligible for membership. This stipulation makes it solely a farmers' affair.

Since there were six different communities interested, each elects a representative to serve as one of the board of directors and all the communities elect a representative at large. Hence seven members compose the board of directors that manages the association.

The office of farm markets favors the organization of cooperative companies without capital stock, for the reason that the benefits one derives from such an association should come through patronage and not through the ownership of stock. To explain: If A buys or sells ten times as much as B, then A should benefit ten times as much as B regardless of the amount of stock owned. If there is no stock no one who is not a farmer who wishes to buy or sell will have any desire to join the company because of the profits he can make from the patronage of some one who does buy or sell.

Furthermore, the recent Clayton amendment of the Sherman anti-trust law (section 6) exempts farmers' companies having no capital stock from the provisions of the anti-trust law.

It is an admitted fact that nearly every farmers' commercial organization of any considerable size or importance does restrain trade at some time. That is one of the reasons for organizing. But before the Clayton amendment such organizations could be prosecuted for so doing. Congress, however, realized the benefits to be derived from farmers' cooperative efforts and exempted them from the Sherman anti-trust laws, providing they do not make a profit or have capital stock. True cooperation does not make a profit. It affects a saving—a saving in proportion to the amount bought and sold. Hence, why capital stock?

Unfortunately, our state cooperative law specifies capital stock. It is hoped that the next legislature will see fit to amend our present law or to enact another permitting our incorporated cooperative companies to take advantage of the privileges granted by the federal law.

In order to conform to the provisions of the state law concerning capital stock, the Eastern Lewis County Farmers' exchange asked each member to buy one share of stock at $10. These shares are non-transferable, and the board of directors propose that they shall be nondividend-paying. These provisions make the shares of stock in reality membership fees—evidences of good faith—so to speak. It is not expected that the sale of stock will furnish sufficient capital for financing the company. So, in addition to buying one share of stock, each member is asked to give a noninterest-bearing collateral note to the amount of $25. This note is deposited in the bank by the association as security for the association note when it wishes to borrow money. These collateral notes do not draw interest, since they are merely held as security to the association's note which draws interest. The interest on the association's note is counted as part of the running expense of the business and paid out of the proceeds of the business.

The board of directors contemplate building up a sinking fund that will retire these notes within three years, when they may be returned to their signers. Hence all the Eastern Lewis County Farmers' exchange is asking from a member is that he give $10 for a share of stock, which is merely a manifestation of interest in the organization and to lend his credit to the amount of $25 for a term of three years. Farmers can hardly expect to cooperate commercially with smaller financial obligations.

In brief, the above topics were the ones presented and discussed at the five preliminary meetings.

Two weeks were allowed to elapse before the final organization meeting was held. This gave those interested time to discuss the proposition among themselves, also it afforded them an opportunity for informing themselves on points and questions which were not entirely clear.

At the end of two weeks' time 70 farmers had signified their desire to become members of the proposed organization. These met in Morton on September 4th and adopted a constitution and bylaws and elected a board of directors. Hence, September 4th marks the completion of the first farmers' association organized under the direction of the office of farm markets.

Since this is one of the regular functions of the office of farm markets it will gladly confer with and advise any group of farmers who are thinking of forming a cooperative enterprise. If local conditions are thought to be favorable for such an enterprise the office will personally assist in forming an organization.

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AS armored car and war ambulance this pioneer Eight is now serving the Nation. The qualities which won it high favor among owners all over America and in fifty-two foreign lands, brought it through the Government's rigid tests with a completeness and dash that astonished the most critical officials.

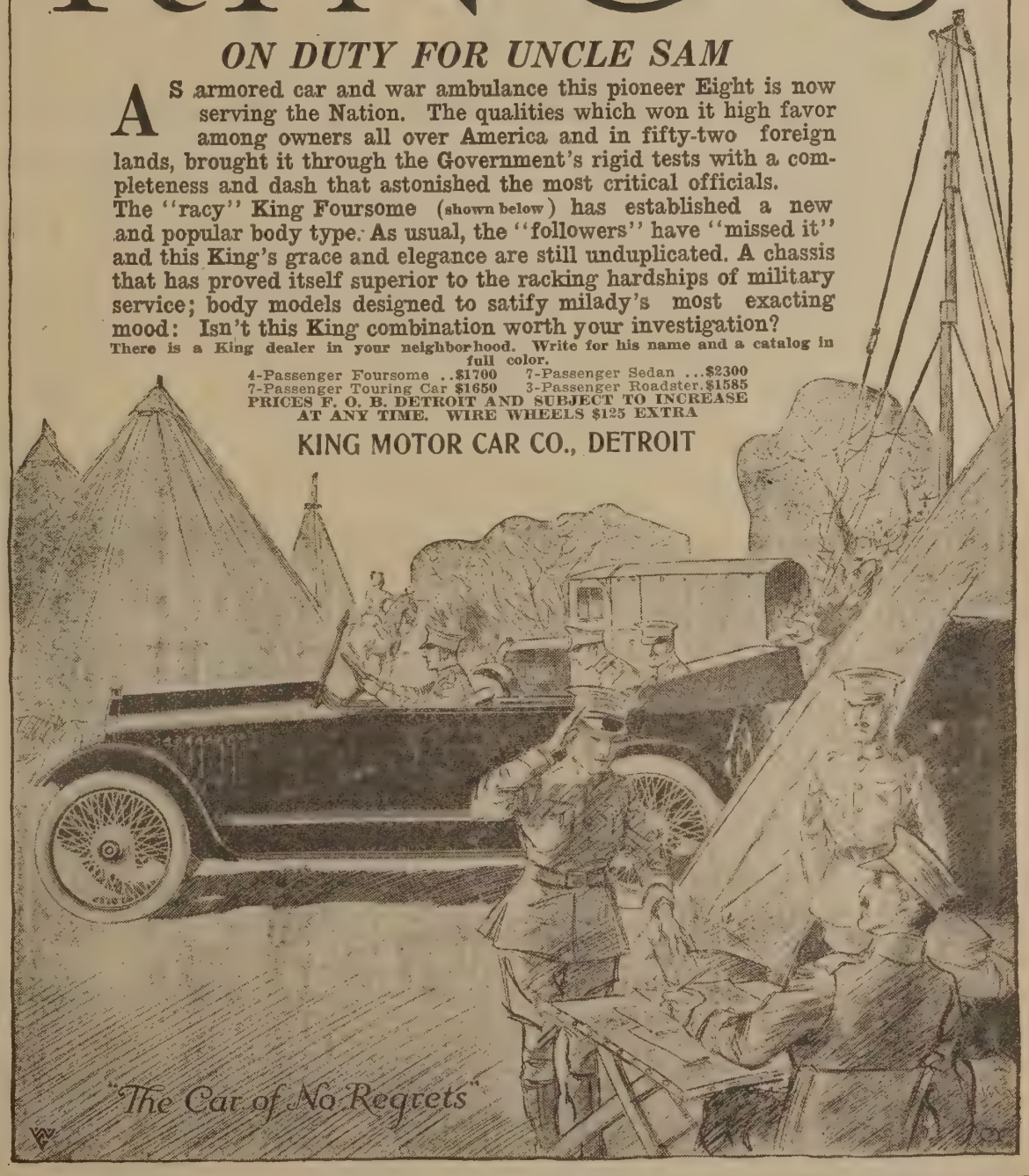
The "racy" King Foursome (shown below) has established a new and popular body type. As usual, the "followers" have "missed it" and this King's grace and elegance are still unduplicated. A chassis that has proved itself superior to the racking hardships of military service; body models designed to satify milady's most exacting mood: Isn't this King combination worth your investigation?

There is a King dealer in your neighborhood. Write for his name and a catalog in full color.

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New York Dairymen's League

Grows Within a Year From 14,000 to 44,000 Members

The Dairymen's league in the region that supplies New York city's milk has grown within a year in membership from 14,000 to 44,000, and is now fighting to maintain its organization. District Attorney Walrath of Syracuse, working in cooperation with District Attorney Swann of New York, has started an official inquiry into charges that the producers' league is engaged in a criminal conspiracy under the laws of New York state. When questioned regarding the specific information which he had received, Mr. Swann pointed to a circular of the Dairymen's league dated September 22, 1917, and containing the following:

"The great test of our organization has come, and local dealers will receive notice of and when dealers can sign contracts. Stand fast. Failing to receive notice, farmers and manufacturers are to take care of their milk and continue until we make sale thereof. The dealers are determined to destroy the league."

District Attorney Swann declares his purpose of taking this problem before the grand jury.

Support of the dairy farmer's demand for better prices comes from an unexpected quarter, the Wall Street Journal. It is our guess that the writer of the following leading editorial from that publication was either brought up as a boy on a dairy farm, or that he has tried his hand at "scientific dairying" and gathered in his experiments a great deal of costly first-hand information. He writes:

"It is said that Mr. Hoover is about to investigate the milk problem and determine the cost of milk.

"If Mr. Hoover once attempts the solution of this problem and gets so far as to set down the figures on paper, we are sure of one thing: He will never dare to publish them.

"Milk and eggs are produced by unpaid farm family labor. It is all right for eggs, because chickens can be fed from table scraps and surplus eggs sent into market without danger to the public health. But milk, produced by unpaid family farm labor and sold as a surplus or refuse product from the farm, has long been a danger to the public health.

"Yet, certified milk is only natural milk, as the calf gets it, safeguarded by about 80 rules as laid down by the medical milk commissions to insure surgical cleanliness in production and delivery. One-half the cows in the northern states are known to be infected, more or less, with tuberculosis, yet the authorities do not dare to stamp out the disease. They are content with its arrest by killing off a certain number of cows as they approach the dangerous stage.

"Now, when Mr. Hoover approaches the problem of milk cost, where will he find his standard of cleanliness? Where is the cost sheet that can guide him in determining the expense? He must first value the labor of the farmer, and of the farmer's wife in the milk room, assisted by the daughter, and also value the labor of the farmer's boy who gets the cows in and out of the pasture, or feeds them irregularly in the barn.

"Will Mr. Hoover determine the cost of producing milk within 10 feet of a barn carrying manure piles six feet high or will he determine the cost of milk where barn yards are kept clean and grassed over and the barn refuse carted a mile away twice daily? Will he determine the cost of keeping cows' udders and flanks washed and clipped; also the cost of clean hands, cost of ice and icing, bottle washing and sterilizing? Will Mr. Hoover determine the value of a cow giving 2500 quarts of milk a year, and the average cow gives less than this, or the value of a cow giving 5000 quarts of milk a year, and some valuable cows give more?

"Next, will Mr. Hoover, with his engineering talent, tell the life of that cow and what should be the size of the cow family entitled to be fed—bulls, calves, yearlings and 2-year-olds—that the producing cows may be promptly replenished?

"Here is where the poor farmer—poor in many more senses than the world knows and richer in freedom and possibilities of good living than he himself knows—needs engineering and accounting talent.

"Let Mr. Hoover begin with his lead pencil. We know where he will come out if he pursues his task. Hoover will find that milk is produced below real cost and, like chickens and eggs, always will be.

"But the world will probably persist in paying hundreds of millions for common sense answers to every day questions."

Commenting on the foregoing editorial a dairy farmer said:

"From my 34 years in dairying, I know every word you say in your editorial is true, but you do not go even far enough. The average age of a dairy cow is between seven and eight years, and from my experience the dairymen of this country have for many years been producing clean milk at a loss. For myself, with a herd of 125 animals, my loss at the present time, even at an advance in prices of milk, will average $1500 monthly; while small farmers with no capital will not be able to stand it much longer without they receive at least an advance of 50 per cent in prices. So in many instances I do not think they will be able to hold out. I have increased my prices lately 16 per cent, while the price of labor, grains, feeds and other things pertaining to the dairy business will show an average increase of over 90 per cent. I believe that the dairymen will cease shipping to the cities and use their product on calves, hogs and chickens in preference to shipping as usual. This will cause great suffering in the cities to many children."

The Motor Car
On the Farm

Graphite the Rims.

This is a good time to apply some graphite to the rims so that they will not rust. A good graphite grease or plain graphite may be used for this purpose.

Spare Tire Destruction.

One of the factors making for deterioration of the spare tire is the exhaust. The heat and corroding gases issuing from the exhaust, right near the spare when it is carried in the rear, tend to impair the rubber and shorten the life of the tire, even more than if it had been in active service on the road.

Dash Illumination.

The substitution of a blue bulb for the ordinary clear one, which illuminates the dash, has certain advantages. The blue light is brilliant enough to afford ready reading of the various instruments and yet all back glare is eliminated. Moreover, the blue light rather improves the appearance of the compartment at night.

Driving the New Car.

Many owners in driving their first cars make the mistake of keeping the spark advanced all the time, even on grades, provided no knocking is heard. This practice is likely to cause premature wearing of motor bearings. When an engine is new the piston-to-cylinder clearance is very slight and a slight knock resulting from the spark s being too far advanced, may not be audible. This means bearing stresses, however, and when the motor has worn in, the noise will be distinctly heard. Merely because the knocking is not audible is not reason for keeping the spark unduly advanced. The new car owner should assume that there is a knocking even though he does not hear it and should retard the spark on a heavy pull.

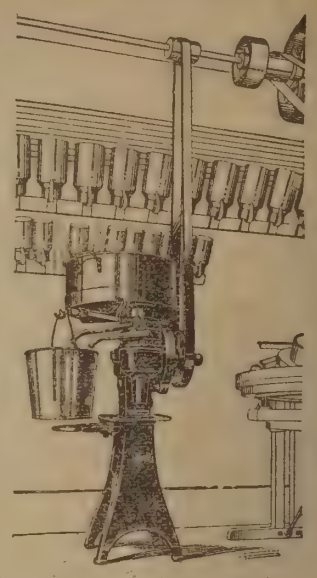
Farming Day and Night.

Great Britain has decided to carry on farming operations for 24 hours a day by means of hundreds of American gasoline tractor plows, searchlights, expert chauffeurs and taxicab drivers, and a civilian army of night plowmen and plowwomen. Great estates which have lain fallow for countless generations are to be broken up, and soon moors and vast parkland expanses which have been the delight of the British sportsmen will hear the strange clatter of the gasoline tractor.

Potash in Banana Stalks.

Banana stalks may help to solve the fertilizer problem of this country. Experiments indicated that a ton of stalks yielded 188 pounds of dry matter, containing 13.7 per cent potash, or about two-thirds as much as is yielded by the dried kelp of our Pacific coast. An examination of banana skins showed a total potash content of 1.05 per cent, the dry matter containing 9.03 per cent potash.

Pick a Lily or a Primrose—You Can't Lose



CREAM is the fruit of the dairy farm. The land, the equipment, the herd, and the labor of the farm hands find themselves justified chiefly at separating time.

That is why it pays to be very careful in picking a cream-saving, money-making machine. That is why thousands of prospering farmers have built up their herds around **Lily** and **Primrose** cream separators.

Lily and **Primrose** separators have become famous by living up to the slogan "Save all the cream, down to the last drop in each gallon of skim milk." And behind that fact are the other prime qualities that go to make up the satisfactory cream separator. **Lilys** and **Primroses** are of very simple, lasting design, easy to clean around and under, and they can be washed and thoroughly cleaned in a few minutes. When you buy them they are completely adjusted for everyday use except for the one adjustment regulating bowl height—and this one is very easily made on outside of frame. The splendid spray oiling system, the phosphor bronze bushings, the one-piece spindle, the quick-grip quick-releasing clutch, etc., etc., all have their reasons for being built into the **Lily** and **Primrose**.

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Truth of Food Situation in France

Way to Arouse Nation Is to Lay the Facts Fully Before the People

ARTICLE I.

By FRED B. PITNEY

Telling the truth about the food situation in France is an extremely difficult thing to do, for one comes immediately into contact with so many counter currents of opinion. There is no question in the mind of any one conversant with the facts that it is not only with Germany, but with the allies as well, that the food situation is serious and needs prompt and effective treatment. But in the endeavor to deal with this question one finds constantly in the official mind an attempt to reconcile two irreconcilable positions.

Governments Alone Can Not Win War

On the one hand, there is the open and full recognition of the seriousness of the situation, of the demand for prompt, full and efficacious cooperation and coordination of effort among all the nations warring against Germany, in order that each many be able to sustain its striking power at the point of highest efficiency. This opinion recognizes that governments alone can not win the war. It must be a war of the allied peoples against Germany. And this opinion sees the necessity of laying the situation fully and fairly before the people, so that they will voluntarily adopt the conservation methods necessary to victory.

On the other hand, confused in the same minds with this opinion there is an idea that if the people are told too much they will become frightened and will weaken. That is a bald statement, very plainly put, but that is what it boils down to. The statesmen and politicians have a peculiar idea that they are the only men who are farsighted enough and strong enough to face the whole truth and go on fighting. So they try at the same time to arouse the people and to reassure them.

We find a fine example of this in the submarine. On the one side we are told that our efforts to overcome the submarine must be redoubled, while on the other side we are told the submarine is a failure and it is to laugh at the German threats. In regard to food we are told that the allies must guard their every resource and immediately on top of that we are told they have reserve stocks for the next three years. We are told that it is vitally necessary for America to put a great army in the field at once and in the same breath we hear that the allied preponderance in man power over Germany is increasing every day.

Whole Truth Must Be Known.

How can one expect to arouse a nation to war with such a stream of contradictory statements? My own opinion is that the peoples of all the allied nations are strong enough to know the whole truth and that knowing it will only make them more determined and fight harder, while at the same time their collective action will be much more intelligent. I do not believe in any government trying to win this war. I believe that only an aroused nation will be victorious. And I believe that the way to arouse the nation is to lay every shred of fact fully and completely before the people.

In France, however, one meets with a third phase of official opinion that further complicates the situation. France has borne the brunt of the fighting on the side of the allies for three years. Her resources in men and material have been strained to the uttermost, and every one realizes that France can not go on bearing the brunt of the fighting for another three years. Yet, French statesmen are so afraid of the possible effect at time of the peace conference of an admission that France needs assistance now that immediately the idea is suggested there comes an official denial in one form or another. French statesmen, perhaps with reason, are obsessed with the idea that France will get an extremely short end of the stick at the peace conference, if there is a suspicion that she does not go into it stronger than she went into the war and able to fight on for another million years. But how is she going to get anything at the peace conference if the allies are not the victors? And how are the allies to be the victors unless the people of America know the full truth about the task imposed on them?

This complicated situation makes it extremely difficult, however, to tell the truth about food conditions in the face of the imminent probabilities of thereby injuring susceptible official feelings.

As It Affects the Individual.

As I have kept house in Paris during the war I can speak from experience on the food situation in France as it affects the individual. And let me remark in passing that one learns a great deal when keeping house of which one gets no inkling when living in a hotel and eating in restaurants. One can always go to a restaurant and order a meal and get it. I have heard many visiting Americans who lived in France in that way pooh-pooh the idea that there was a food shortage in the country. If those same persons had had to search the markets before they had their meals they would have gained a very different idea of the food situation.

Sugar offers an excellent concrete example. In a restaurant one is fairly certain of sugar for one's coffee. Three lumps to a person is the rule. Formerly the sugar was put on the table in a bowl, and one helped one's self. Now the ration is served to each person separately. Still one is fairly sure of one's sugar in a restaurant.

But if one is keeping house one finds that one must have a "sugar card," permitting him to buy a stipulated amount of sugar in a month. The allowance is 1 1-2 pounds of sugar a month if three meals a day are taken at home, 1 pound if two meals are taken at home, and 1-2 pound if only one meal is taken at home. This means for the person who takes three meals a day at home 18 pounds of sugar a year. The annual sugar consumption per person in America is 85 pounds.

One would not be likely to find this out, if one were living in restaurants in France, but one finds it out very soon if one is keeping house.

It is soon learned, also, that the "sugar card" does not mean that one can demand a pound and a half of sugar a month, but only that one is permitted to buy that much, provided a dealer can be found who has it to sell. A dealer who has sugar will not sell it to anyone who comes in. He sells only to his own regular customers.

We paid last winter in Paris 11 cents apiece for eggs and $2 a pound for butter and there was frequently neither butter nor eggs nor milk to be had. Private families were allowed to buy one-eighth of a pound of flour at a time. The grocers could not sell flour, only the bakers. The flour mills could not choose their own customers, nor could the bakers and restaurants choose the mills they would buy from. Lists were made out, telling each miller to whom he could sell. This was in order that one section should not be able to eat up the stock of flour belonging to another section, or one baker deprive the customers of another, when all were short.

Wheat Situation in France.

Let me give you the official figures on the wheat situation in France, so that there can be no question.

It is estimated that there will be a deficit of approximately 5,000,000 tons of wheat in France over the period from September 1, 1917, to September 1, 1918.

The normal annual consumption of wheat in France is from 9,200,000 tons to 9,400,000 tons. France has always been an importer of wheat, her average production for several years before the war being 9,000,000 tons, or slightly less than the consumption. Since the beginning of the war her production has fallen off radically. In 1914 it was 7,700,000 tons, in 1915 6,065,000 tons and in 1916 5,840,000 tons, while for this year the crop is estimated at 4,000,000 tons, with a possibility of rising to 4,500,000 tons, leaving for the period from September, 1917, to September, 1918, a deficit of nearly 5,000,000 tons, which must be made up by imports.

Wheat Must Come From America.

Where can those imports come from except from America? Italy by reason of her position in the Mediterranean takes the first toll from the wheat of the far east, while England, of whom the far eastern wheat producing countries are colonies, takes the remainder. France can get a little from South Africa. Argentina has stopped the exportation of wheat. This country is the only resource left to France.

I have spoken of the scarcity of flour, resulting from the shortage in wheat. Let us try to see what this means to France. In the first place, it must be realized that there bread is the staple article of food. It is the base of all meals, especially among the working population. Breakfast consists of coffee or chocolate and bread. Luncheon is bread, soup, coffee and often, though not always, some meat or fish and a vegetable. The big dish is bread. Bread is again the base of dinner or supper, however the meal may be called. Bread and cheese will make an entire meal for a French peasant, with a glass of wine to wash it down.

Bread Allowance and "Bread Cards."

The French soldier's allowance of bread was a trifle over a pound and a half a day. On account of the shortage of wheat it has been necessary to cut this ration to a pound and a third a day. And it is not necessary to say that only dire necessity will countenance the cutting of the soldier's ration.

Another thing that has happened is "bread cards" in some localities. There is no national "bread card" in France, as there is a "sugar card," but in some parts of the country it has been necessary to restrict the use of bread by local regulations. I have in mind several letters from my friends among the peasants of Brittany, telling of the privations they were enduring because their bread was cut down so much. Remember that bread is the chief article of diet among those people.

France Suffers in Silence.

Oo not think they complained. There is no finer souled, stronger or greater people in the world than the French peasants. They are heroes among a nation of heroes. No trial that justice and right could demand could wring a complaint from Josephine Herve, one of the grandest women among a grand race. That simple peasant woman can neither read nor write, but without a word of bitterness she gave her husband to her country, and she is schooling her five sons and raising them for her country. The oldest goes to the army with the next class that is called out. When little Charlot, next to the youngest of her boys, writes for her and tells what they are enduring, there is no complaint, no bitterness. It is a simple statement of facts in plain and homely language, the story of a peasant cottage told to the child she nursed and loved.

And one can not help her. One can send her money, but it is not money she needs, but bread.

The second article by Mr. Pitney, which will be published in the Farmer next week, points out who and why the French army receives better food than the civilian population; also some of the methods used to stretch the rapidly disappearing supplies of grain and meat. The agricultural machinery in France is also in bad condition as the result of a shortage of mechanics to keep it in repair, and to the cessation of imports of new machinery from the United States.

He Did as He Was Told.

The class was seated, ready for recitation, when a young student rushed in and dropped a great pile of books on the floor. The nervous professor jumped and then said angrily:

"Young man, go down to the president's office and drop those books just like that!"

The youth departed, returning in a few moments and calmly taking his seat in class.

"Did you do as I told you to?" demanded the irate professor.

"Yes, sir."

"What did the president say?"

"Nothing," coolly returned the student. "He wasn't there."—Ladies' Home Journal.

Civil War's Cost.

The civil war cost the United States $3,000,000,000.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

Your Expression an Index to Your Physical Condition



Dr. Hirshberg

Your conversation, "line of talk" and "gift of gab," as slang expresses it, is more than an index to your mind. It may be a symbol of your physical as well as your mental health.

While physiology is not supposed generally to have much or anything to do with correct speech and vocal expression, as a matter of fact, the production and character of the voice depends to a gargantuan degree upon various physiological states within and without.

You may split hairs as some students do and call muscular sensation and muscular motion, perception and imagination psychologic and not physiologic activities of the human fabric. That is the difference between Tweedledum and Tweedledee.

Until there is a correct adjustment between parts of the anatomy and parts of speech, speaking and singing will continue to be merely a hap-hazard pot-pourri of defects and incapacity.

The quality of the speaking voice is dependent upon the internal inspiration, the outside physical impulses and the creative and imaginative qualities of the mind.

When you speak, you should not appear or feel sarcastic or superior to others. If you sniff disdainfully or contemptuously as you speak; if you think the whole world and most of the people in it evil or beneath you in one way or another, your facial expression and your voice will partake of that mean character.

A Smile's Aid.

When you speak, you should nearly always smile. A slight smile at once relaxes the lips and allows them a full, free play of words. Since the lips and the tongue must form most words, there occurs then enough elasticity to make your expressions melodious, sweet and appropriate to any occasion.

It is utterly impossible for most people to speak well, if they are mentally depressed, annoyed, worried or absent-minded. Nay, physical disorders, pain, fever or other actual disturbances interfere with facility of speech as well as its timeliness and agreeableness.

Helps the Voice.

Your muscles must all be toned up to the qui vive and under your absolute control, if you would be a natural and intelligent talker. Moreover, unless you can bring smiles into action, although you are not in such a happy mood as to assume it spontaneously, your voice will lack some of its resonant, musical quality.

If this is all true in talking, it is much more applicable to singing. The singer whose mouth is wreathed in a gentle smile, has her throat and windpipe nicely arranged for the emission of sweet, clear tones.

The lips are nature's first assistant. They shape, shade and moduate the voice. If you are able perfectly to relax your jaws and control your lips and tongue, you should be able to fascinate others with your voice. The mouth of a melodious talker or singer ought always to look pleasant. A crooked and distorted mouth does more than create a bad impression; it makes a poor, raspy, slovenly and unmusical voice.

A pretty, smiling mouth induces a charming, resonant, conquering voice, one hard to resist, lighting up speech and song like Promethean fire.

Government Crop Report for October

A summary of the October crop report for the states of Oregon, Washington, Idaho and Montana, and for the United States, as compiled by the bureau of crop estimates (and transmitted through the weather bureau), United States department of agriculture, is as follows:

Crops.	Oregon.	Washington.	Idaho.	Montana.	United States.
All wheat, bu., preliminary estimate	13,000,000	29,200,000	13,800,000	18,000,000	660,000,000
Production last year, December estimate	19,550,000	37,635,000	15,071,000	28,665,000	639,886,000
Oats, bu., preliminary estimate	11,100,000	11,200,000	13,000,000	13,600,000	1,580,000,000
Production last year, December estimate	17,280,000	14,300 000	13,330,000	25,080,000	1,251,992,000
Barley, bu., preliminary estimate	5,280,000	4,930,000	5,820,000	1,350,000	202,000,000
Production last year, December estimate	5,390,000	6,814,000	7,410,000	2,660,000	180,927,000
Potatoes, bu., October 1 forecast	7,670,000	9,680,000	6,450,000	5,880,000	453,000,000
Production last year, December estimate	8,250,000	9,900,000	4,050,000	4,875,000	285,437,000
All hay, tons, preliminary estimate	1,809,000	1,813,000	2,337,000	1,465,000	92,000,000
Production last year, December estimate	2,175,000	2,048,000	1,946,000	1,983,000	109,786,000
Apples, agricultural crop, bbls. of 3 bu., Oct. 1 forecast	1,160,000	4,553,000	705,000	322,000	58,900,000
Production last year, December estimate	1,285,000	4,608,000	147,000	256,000	67,415,000
Apples, commercial crop, bbls., October 1 forecast	.....	3,660,000	.....	.....	.....
Production last year, December estimate	.....	3,467,000	.....	.....	.....

PRICES.

The first price given below is the average on October 1 this year and the second the average on October 1 last year.

Crops.	Oregon.	Washington.	Idaho.	Montana.	United States.
Wheat, cents per bushel	190 and 118	189 and 120	184 and 119	191 and 137	200.6 and 136.3
Corn, cents per bushel	150 and 43	157 and 100	150 and 90	140 and ...	175.1 and 82.3
Oats, cents per bushel	91 and 40	74 and 43	68 and 44	78 and 35	62.3 and 44.5
Potatoes, cents per bushel	138 and 71	113 and 63	105 and 77	144 and 78	122.1 and 112.0
Hay, dollars per ton	15.50 and 9.70	18.90 and 12.20	17.00 and 9.90	19.00 and 9.10	14.29 and 10.36
Cotton, cents per pound	.....	.....	.....	.....	23.3 and 15.5
Eggs, cents per dozen	39 and 31	43 and 32	41 and 30	41 and 30	37.4 and 28.1

Scare of Australian Wheat

Clumsy Effort to Frighten Our Own Growers

At a meeting in Portland of about 50 local grain dealers, T. B. Wilcox, chairman of the Pacific coast milling division of the food administration, said that he had been assured that a quantity of Australian wheat was coming here. This wheat may be milled in the Coast cities and in that event it might be necessary to ship a portion of the domestic crop to the east. The Australian wheat, Mr. Wilcox declared later, should not be brought here. At any rate, the larger part of the northwestern crop should be milled first.

Wheat growers and others with whom the Farmer has discussed this covert threat of dumping Australian grain into the Pacific northwest look upon it as a clumsy effort to frighten our own growers and cause them to market their crop without further delay. They consider as highly remote the possibility of the government bringing in Australian wheat, saying that the natural course for that product, if ships can be had to move it at all, will be to transport it direct from Australia to Europe through the Panama canal.

That would mean but two handlings —from the Australian docks to the ships, and from the ships to the docks in Great Britain and France, while to mill it in transit at Portland and Seattle, and then move it across continent to ships at New York, would mean half a dozen handlings.

Australia has at least 100,000,000 bushels of surplus wheat, the accumulation of three successive harvests, which it has been unable to ship to Europe for lack of ships. William A. Holman, prime minister of New South Wales, one of the states of the Australian commonwealth, was in New York the other day, returning from the European front. He said that Australia has plenty of foodstuffs and other supplies which she was ready to send to England and the other allies as soon as she obtained the necessary ships. These vessels, he added, were now being built through a friendly agreement with American yards.

"We have the surplusage of three wheat crops on hand ready to ship in addition to having plenty for our own needs," the Australian premier explained.

"The total amount of wheat we can spare, I should judge, is between 3,000,000 and 4,000,000 tons. Our farmers have all this potential wealth in the form of grain and are unable to move it toward its best and most natural market on account of the lack of vessels. But the bankers are lending the farmers all the money they need on an equitable basis, with the grain as collateral, and so conditions are prosperous."

Quite aside from this menace, or threat, or bluff, or whatever you want to call it, from the coast millers to bring in Australian wheat, the consensus of opinion among large growers in the Inland Empire is that nothing further could be gained by our growers holding their wheat. It is generally thought that the prices and marketing conditions have been definitely established by the government for this year, and that any change, one way or the other, is highly improbable.

Alfalfa Hay

Is Best for All-Round Purposes

By GEORGE HINGSTON, Mead, Wash.

I usually have about 25 to 30 acres in alfalfa. I only have six acres this year, having broken up the rest for the purpose of reseeding next spring. We do not irrigate. I find a field which has been in potatoes the previous year one of the very best in which to sow alfalfa. Cabbage ground is also very good. Disk early and harrow well every 10 days till time to seed. We usually cut twice, getting about three tons per acre. Then pasture balance of the season. It should never be pastured close and should be left alone a short time before killing frosts. Care should be taken not to let cattle on it when frozen, or wet from rain or dew, especially if young and tender. No pasture equals it for hogs. As a hay it is the very best for all round purposes. We have kept working horses in good shape all summer on it without grain of any kind. Of course, the time of cutting and success in curing has much to do with its quality and value as a feed. I prefer first cutting for horses and second for cows and hogs. We have never made silage of it or grown it for seed. It has been entirely free from pests with us. There is no better ground for potatoes than an old alfalfa field. On upland in this part of the country it should be reseeded about every five or six years. It is the best paying crop outside of apples that we grow. It is apt to winter kill on lowlands once in a while.

Milking Contest Staged.

In the milking contest at the Washington State fair this year Carnation Stock Farm had the only entries. They entered five cows, and all made good records in the two days' milkings, but as the values are computed on the basis of only 30 cents a pound for butter fat and 25 cents a hundred for whole milk the figures do not indicate the real value of the produce.

Two-year-olds—Matador Metchthilde Vera, $1696; Segis DeKil Flower, $1488. Three-year-old—Korndyke Model Hartog, $1347. Four years and over—Canary Violetta Metchthilde, $2218; Nena Newman Cornucopia, $1649. H. A.

Glass Scarce in Britain.

The scarcity of glass in Great Brittain has led to the adoption of drastic measures by chemists and doctors. A charge of 6 cents usually is made on an 8-ounce bottle. A doctor says he has had to go round in his car collecting bottles "like a rag and bone merchant." Merchants have to get permission from the ministry of munitions for large deliveries of glass bottles. In the beer, wine and spirit trade the shortage of bottles has not been so great owing to restricted consumption.

Ship Many Lambs.

Already something like 40,000 spring lambs have been shipped from the Yakima valley for the Chicago markets, where they have brought an average of about $9 net to the growers. It is estimated that the total shipments for the season will approximate 200,000 head of lambs.

State Officers Attend Fair.

State Officials at the fair were a busy lot. Besides the presence of Governor Lister Thursday representatives of the department of agriculture were present all week to assist Secretary Frank Meredith. Their cooperation has been a big factor in the success of the new state fair.

Why a Good Job of Cleaning?

'Clipper' Seed and Grain Cleaners



This Year of all Years

get the light, shriveled grains from your seed stock.

"Clipper" Cleaners are used by 90 per cent of the seed dealers. Why? **Grain** and **seed must pass through a vertical air blast.** It makes a separation by **weight** that can be made by no other mill.

Send a card for particulars.

State kind of stock to be cleaned.

Spokane Seed Co.

Factory Representatives,
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SPOKANE

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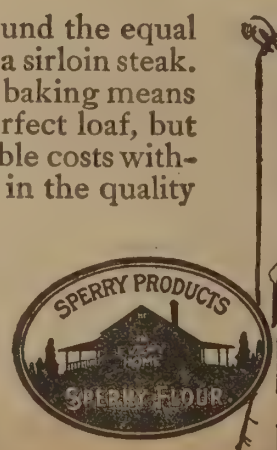


Every home manager has her problems these days, and good bread is helping her to solve them. Bread made from

DRIFTED SNOW FLOUR
A SPERRY PRODUCT

is pound for pound the equal in food value to a sirloin steak. Its use in home baking means not only the perfect loaf, but a lowering of table costs without a reduction in the quality of living.

Buy Sperry Quality Cereals. They come in red packages





SPERRY FLOUR CO.

12

All the World's a Stage, and All the Men and Women Merely Players

On Watch in the Clouds



Copyright by International.

High up in the snow-capped Alps, circling above the rocky Dente de Pasubio, the lone Italian airplane is a veritable sky sentinel. In this picture the Italian-Nieuport Machi, at the left, is chasing away an Austrian aviatik, who attempted to make a raid on the Italian position on the mountain top. The Austrian system of frequent and simultaneous raids cause the Italians no little worry and yield a considerable number of prisoners. There is only one Italian offensive worthy of note, that directed against the Austrian position in the Venetian Alps, on the eastern border of the Trentino.

Fighting American Flier.



Lieutenant Raoul Lufberry, a young American who has brought down 10 of the enemy airplanes.

Do Heavy Work Same as Men



Many of the English railroads have engaged large numbers of women. In the Somertown freight station women do all porter work. Everything from a box of berries to bulky piano cases must be shifted around and installed in cars or on trucks. The women are doing everything that a year ago was done by men. As to the "woman problem" after the war, there will be plenty of work for the returned soldiers and those women who may wish to remain in positions into which war conditions have drawn them. Many of them, however, will be only too glad to return to the domestic life from which patriotic motives have led them.

Englishmen at Capital



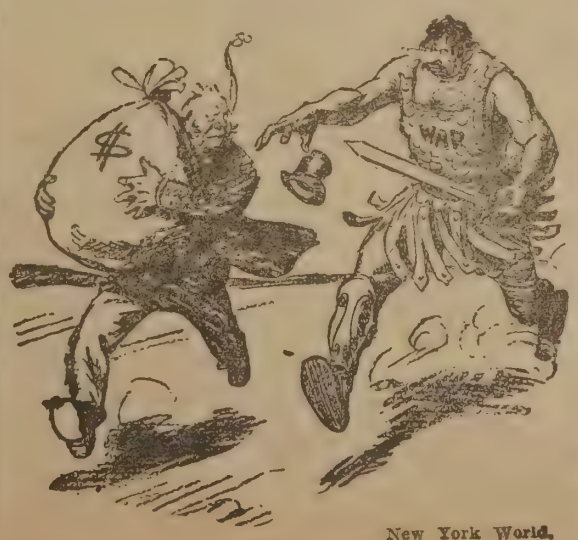
Lord Reading, Great Britain's financial representative to the United States, and Colonel E. D. Swinton, secretary of the British war cabinet. Lord Reading heads a special mission in behalf of the British war cabinet and also came to discuss financial affairs and arrange for important details of cooperation in the war. Colonel E. D. Swinton is colonel of the Royal Engineers and has won worldwide fame as "father" and promoter of the British "tank."

Getting Weaker!



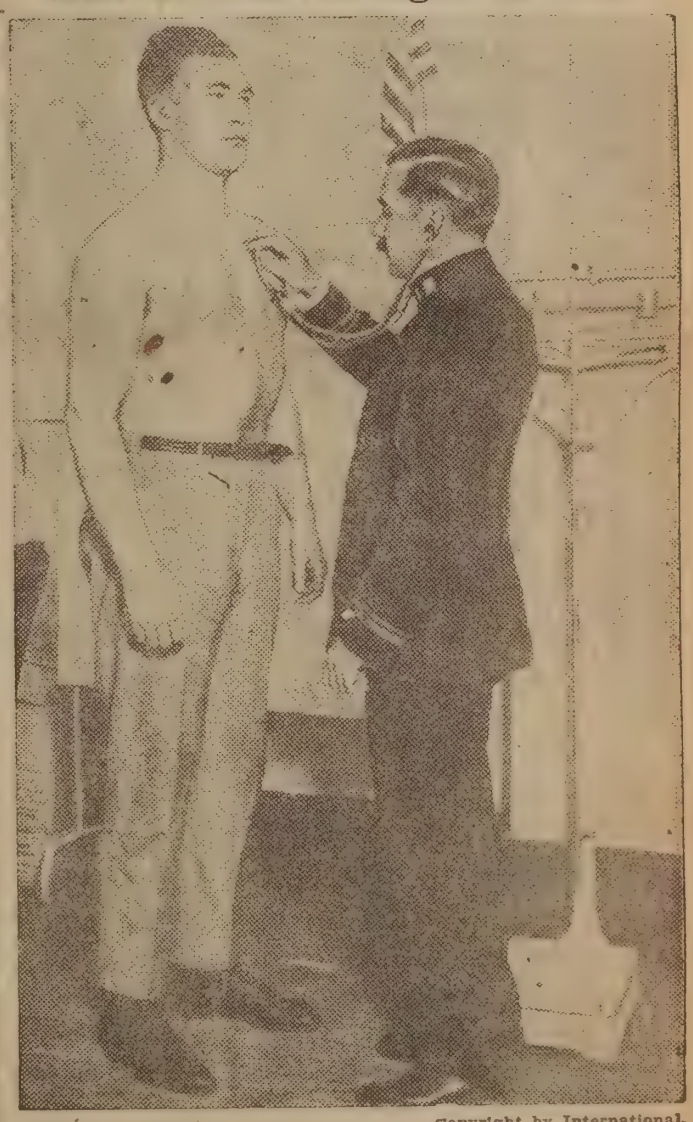
From the Passing Show, London.

Running Him Down



New York World.

Man Mountain to Fight for U. S.



Copyright by International.

Joe Cox, the man mountain, who is credited with knocking out Jess Willard in five rounds, is at last in a United States uniform with the naval coast reserve. Before Joe won his fight for enlistment he had been turned down four distinct times because he was too big.



THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

Copyright, 1908, by Harper & Brothers.

SYNOPSIS.

Old man Gale, the trader of Flambeau, a frontier on the Yukon, is a man weighted down by some great trouble. He has always been a friend of the settlers. For years he has known that some day his isolation would be broken and civilization would come to Flambeau, and he anticipates it with a strange dread. And so, to this place, where the only law is man's own will and the only court, his inborn conscience, there comes one day, Lieutenant Burrell, a Kentuckian, with all the Kentuckian's ideas of birth, blood and family, to preserve law and order in the camp. That same morning Necia, Gale's beautiful daughter, returns from a mission, where she has been studying under Father Barnum. Burrell is surprised to find a girl of her refinement and education in this country and tells her so. As they are talking in front of Gale's store a squaw and two little, gurgling, half-breed children appear. Burrell speaks of them contemptuously and Necia informs him that the children are her little brother and sister and that the slinking squaw is her mother. The next day Poleon Doret, six feet two, and with a spirit as great, returns from Dawson, and on the same boat, Runnion, a desperado. Gale, who distrusts Burrell, tells him that since he has come to preserve law and order he must get Runnion out of Flambeau immediately. In attempting to do so Burrell is shot at by Runnion and only the quick wit and ready hand of Poleon saves him from death. Runnion departs with the threat that he will visit them again before the winter ends.

CHAPTER III.

Without Benefit of Clergy.

When the steamer had gone Napoleon Doret went to look for Necia, and found her playing with the younger Gales, who reveled in the gifts he had brought. Never had there been such a surprise. Never had there been such gorgeous presents for little folks. This was a land in which there were no toys, a country too young for babes; and any one whose youth had been like that of other children would have seen a pathos in the joy of these two. Poleon had been hard put to it to find anything suitable for his little friends, for although there was all manner of merchandise coming into Dawson, none of it was designed for tiny people, not even clothes.

It was evident that he had pleased them, for when he appeared they ran at his legs like twin cubs, incoherent and noisy, the pleasure within them too turbulent for expression. They had never played with a toy that Poleon had not built for them, nor worn a garment that Alluna had not made. This, then, was a day of revelations, for the first thing they beheld upon opening their packs was a pair of rubber boots for each. They were ladies' knee boots, the smallest size in stock, but the Gales entered them bodily, so to speak, moccasins and all, clear up to their hips, like the waders that duck hunters use. When they ran they fell down, for were not these like the boots that Poleon wore, and not of Indian make, with foolish beads on them? Next, the youthful heir had found a straw hat of strange and wondrous fashion, with a brim like a board and band of blue, which Poleon had bought from a college man who had retained this emblem of his past to the final moment. Like the boots, it was much too large for little John, and hard to master, but it made a brave display, as did the red cravat, which covered his front like a baseball catcher's harness. Molly had also two sets of side combs, gorgeously ornamented with glass diamonds, and a silver-handled toothbrush with which she scrubbed the lame puppy. This puppy had three legs and the mange, and he was her particular pride.

There were certain other things, the use of which they did not understand, like queer-smelling, soft, yellow balls which Necia said were oranges and good to eat, although the skins were leathery and very bitter, nor were they nearly so pleasant to the nose as the toilet soap, which Necia would not allow them even to taste. Then there was a box of chocolate candies such as the superintendent at St. Michael's sent them every spring, and an atomizer which Necia had filled with Florida water. This worked on the puppy even better than the toothbrush.

The elder girl laughed gladly as Poleon entered, though her eyes were wet with the pity of it.

"You seem to bring sunshine wherever you go," she said. "They have never had things to play with like other children, and it makes me cry to watch them."

"Ho, ho!" he chuckled, "dis ain' no time for cryin'. Ba gosh! I guess you don' have so much present w'en you was li'l' gal you'se'f, w'at? Mabbe you t'ink I forget you. Wal, I didn't."

He began to undo the fastenings of a parcel he carried in his arms, for Napoleon Doret had brought other things from Dawson besides his gifts to the children. Necia snatched at the package.

"Dont you dare open it! Why, thats half the fun." She was a child herself now, her face flushed and her hands-a-tremble. Taking the package to the table, she hurriedly untied the knots while he stood watching her, his teeth showing white against his dark face, and his eyes half shut as if dazzled by the sight of her.

"Oh, why didnt you tie more knots in it?" she breather as she undid the last, and then, opening the wrappings slowly, she gasped in astonishment. She shook it out gently, reverently—a clinging black lace gown of Paris make. Next she opened a box and took from it a picture hat, with long jet plumes, which she stroked and pressed fondly against her face. There were other garments also—a silken petticoat, silk stockings, and a pair of high-heeled shoes to match, with certain other delicate and dainty things which she modestly forbore to inspect before the Frenchman, who said no word, but only gazed at her, and for whom she had no eyes as yet. Finally she laid her presents aside, and, turning to him, said, in a hushed, awe-stricken voice:



Poleon pleases the children.

"Its all there, everything complete! Oh, Poleon—you dear, dear Poleon!" She took his two big hands by the thumbs, as had been her custom ever since she was a child, and looked up at him, her eyes wet with emotion. But she could not keep away from the dress for long, and returned to feast her eyes upon it, the two children standing beside her, sprouting out of their rubber boots, with eyes and mouths round and protruding.

"You lak it, eh?" pressed Poleon, hungry for more demonstrative expression.

"Oh-h," she sighed, "can't you see? Where on earth did you get it?" Then suddenly realizing its value, she cried, "Why, it must have cost a fortune!" A quick reproach leaped into her face, but he only laughed again.

"Wan night I gamble in beeg saloon. Yes, sir! I gamble good dat night, too. For w'ile I play roulette, den I dance, den I play some more, an by-an'-by I see a new dance gal. She's Franche gal, from Montreal. Dat's de one I tol' you 'bout. Ba Gar! She's swell dress, too. She's name' Marie Bourgette."

"Oh, I've heard about her," said Necia. "She owns a claim on Bonanza creek."

"Sure, she's frien's wit' Charlie McCormack, dat riche feller, but I don' know it dis tam', so I ask her for dance wit' me. Den we drink a bottle of champagne—twenty dollar.

"'Mamselle,' I say, 'how much you charge for sell me dat dress.'

"'For w'y shall I sell im', she say; 'I don' wear 'im before till tonight, an' I don' get no more dress lak' dis for t'ousan' dollar.'"

Necia exclaimed excitedly.

"'For w'y you sell 'im?' I say. 'Biccause I'll tak' 'im down to Flambeau for Necia Gale, w'at never had no dress lak' dat in all her life.' Wal, sir, dat Marie Bourgette, she's hear of you before, an' your dad, too—mos' all dose Cheechakos know 'bout Old Man Gale—so she say:

"'W'at lookin' kind of gal is dis Necia?' An' I tell her all 'bout you. W'en I'm t'rough she say:

"'But maybe your little frien' is more bigger as I am. Maybe de dress won't fit.'

"'Ha! You don' know me, mamselle,' I say. 'I can guess de weight of a caribou to five poun'. She'll be same size la'kin' one inch 'round' de wais'.'

"'Poleon Doret,' she say, 'you ain' no Franchemans to talk lak' dat. Look here! I can sell dis dress for t'ousan' dollar tonight, or I can trade 'im for gol-mine on El Dorado creek to some dose Swede w'at want to catch a gal, but I'm goin' sell 'im to you for t'ree hondred dollar, jus' w'at I pay for 'im. You wait here till I come back.'

"'No, no, Mamselle Marie, I'll go 'long, too, for so you don' change you' min',' I say; an' I stan' outside he' door till she pass me de whole dam works.

"'Don' forget de little shoes,' I say—an' dat's how it come!"

"And you paid three hundred dollars for it!" Necia said, aghast. The Canadian shrugged.

"Only for de good heart of Marie Bourgette I pay wan 'tousan,'" said he. "I mak' seven hondred dollar clean profit!"

"It was very nice of both of you, but — can't wear it. I've never seen a dress like it, except in pictures, and I couldnt—" She saw his face fall, and said, impulsively:

"I'll wear it once, anyhow, Poleon, just for you. Go away quick, now, and let me put it on."

"Dat's good," he nodded, as he moved away. "I bet you mak' dose dance-hall women look lak' sucker."

No man may understand the girl's feelings as she set about clothing herself in her first fine dress. Time and again she had studied pictures from the "outside" showing women arrayed in the newest styles, and had closed her eyes to fancy herself dressed in like manner. She had always had an instinctive feeling that some day she would leave the North and see the wonderful world of which men spoke so much, and mingle with the fine ladies of her picture-books, but she never dreamed to possess an evening gown while she lived in Alaska. And now, even while she recognized the grotesqueness of the situation, she burned to wear it and see herself in the garb of other women. So, with the morning sun streaming brightly into her room, lighting up the moss-chinked walls, the rough barbarism of fur and head trophy, she donned the beautiful garments.

Poleon's eye had been amazingly correct, for it fitted her neatly, save at the waist, which was even more than an inch to large, notwithstanding the fact that she had never worn such a corset as the well-formed Marie Bourgette was accustomed to.

She pondered long and hesitated modestly when she saw its low cut, which exposed her neck and shoulders in a totally unaccustomed manner, for it struck her as amazingly indecent until she scurried through her magazines again and saw that its construction, as compared with others, was most conservative. Even so she shrank at sight of serself below the line of sunburn, for she was ringed about like a blue-winged teal, the demarcation being more pronounced because of the natural whiteness of her skin. The year previous Doret had brought her from the coast a Spanish shawl, which a salt-water sailor had sold him, and which had lain folded away ever since. She brought it forth now and arranged it about her shoulders, but in spite of this covering the fair flesh beneath peeped through its wide interstices most brazenly. She had never paid marked attention to the fairness of her skin till now, and all at once the difference between herself and her litle brother and sister struck her. She had been a mother to them ever since they came, and had often laughed when she saw how brown their little bodies were, rejoicing in blushing quietude at her own whiteness, but today she neither laughed nor felt any joy, rather a dim wonder. She sat down, dress and all, in the thick softness of a great brown bear-skin and thought it over.

How odd it was, now that she considered it, that she needed no aid with these alien garments, that she knew instinctively their every feature, that there was no intricacy to cause her more than an instant's trouble. This knowledge must be a piece with the intuitive wit that had been the wonder of Father Barnum and had enabled her to absorb his teachings as fast as he gave them forth.

She was interrupted in her reverie by the passing of a shadow across her window and the stamp of a man's feet on the planks at the door. Of course, it was Poleon, who had come back to see her; so she rose hastily, gave one quick glance at the mirror above her washstand, choosing the side that distorted her image the least, and, hearing him still stamping, perfunctorily called:

"Come in! I'll be right out."

She kicked the train into place behind her, looped the shawl carelessly about her in a way to veil her modesty effectively, and, with an expectant smile at his extravagance of admiration, swept out into the big room, very self-conscious and very pleasing to the eye. She crossed proudly to the reading-table to give him a fair view of her splendor, and was into the middle of the room before she looked up. Taken aback, she uttered a little strangled cry and made a quick movement of retreat, only to check herself and stand with her chin high in the air, while wave after wave of color swept over her face.

"Great lovely dove!" ejaculated Burrell fervently, staring at her.

"Oh, I—I thought you were Poleon. He——" In spite of herself she glanced toward her room as if to flee; she writhed at the utter absurdity of her appearance, and knew the lieutenant must be laughing at her. But flight would only make it worse, so she stood as she was, having drawn back as far as she could, till the table checked her. Burrell, however, was not laughing, nor smiling even, for his embarrassment rivaled hers.

"I was looking for your father," he said, wondering if this glorious thing could be the quaint halfbreed girl of yesterday. There was nothing of the native about her now, for her lithe young figure was drawn up to its height and her head, upon which the long black braids were coiled, was tipped back in a haughty poise. She had flung her hands out to grasp the table edge behind her, forgetful of her shawl, which drooped traitorously and showed such rounded lines as her ordinary dress scarce hinted at. This was no Indian maid, the soldier vowed; no blood but the purest could pulse in such veins, no spirit save the highest could flash in such eyes as these. A jealous rancor irked him at the thought of this beauty intended for the Frenchman's eyes.

"Can't you show yourself to me as well as to Poleon?" he said.

"Certainly not!" she declared. "He bought this dress for me, and I put it on to please him." Now she was herself again, for some note in the lieutenant's voice gave her dominance over him. "After he sees it I will take it off, and——"

"Don't—don't take it off—ever," said Burrell. "I thought you were beautiful before, because of your quaintness and simplicity, but now——" his chest swelled ——"why, this is a breath from home. You're like my sister and the girls back in Kentucky, only more wonderful."

"Am I?" she cried, eagerly. "Am I like other girls? Do I really look as if I'd always worn clothes like these?"

"Born to them," he said.

A smile broke over her grave face, assuming a hundred different shades of pleasure and making a child of her on the instant; all her reserve and hauteur vanished. Her warmth and unaffected frankness suffused him, as she

stood out, turning to show the beauties of her gown, her brown hands fluttering tremulously as she talked.

"It's my first party dress, you know, and I'm as proud of it as Milly is of her rubber boots. It's too big in here and too small right here; that girl must have had a bad chest; but otherwise it fits me as if it had been made for me, doesn't it? And the shoes! Aren't they the dearest things? See." She held her skirts back, showing her two feet side by side, her dainty ankles slim and shapely in their silk.

"They won't shed water," he said.

"I know; and look at the heels. I couldn't walk a mile to save my life."

"And they will come off if they get wet."

"But they make me very tall."

"They don't wear as well as moccasins," Both laughed delightedly till he broke in, impulsively:

"Oh, girl, don't you know how beautiful you are?"

"Of course, I do!" she cried, imitating his change of voice; then added, naively, "That's why I hate to take it off."

"Where did you learn to wear things like that?" he questioned. "Where did you get that—well—that air?"

"It seems to me I've always known. There's nothing strange about it. The buttons and the hooks and the eyes are all where they belong. It's instinct, I suppose, from my father's side——"

"Probably. I dare say I should understand the mechanism of a dress uit, even if I'd never seen one."

"I've always had visions of women dressed in this kind of clothing, white women—never natives—not dressed like this exactly, but in dainty, soft things, not at all like the ones I wear. I seem to have a memory, although it's hardly that either—it's more like a dream—as if I were somebody else. Father says it is from reading too much."

"A memory of what?"

"It's too vague and tantalizing to tell what it is, except that I should be called Merridy."

"Merridy? Why that?"

"I'll show you. See?" She slipped her hand inside the shawl and drew from her breast a thin gold chain on which was strung a band ring. "It was grandmother's—that's where I got the fancy for the name of Merridy, I suppose."

"May I look?"

"Of course. But I daren't take it off. I haven't had it off my neck since I was a baby." She held it out for him to examine, and, although it brought his head close to hers, there was no trace of coquetry in the invitation. He read the inscription, "From Dan to Merridy," but had no realization of what it meant, for he glimpsed the milk-white flesh almost at his lips, and felt her breath stirring his hair, while the delicate scent of her person seemed to lose every strong emotion in him. She was so dainty and yet so virile, so innocent and yet so wise, so cold and yet so pulsating.

"It is very pretty," he said, inanely.

At the look in his eyes as he raised his head her own widened, and she withdrew from him imperceptibly, dismissing him with a mere inflection.

"I wish you would send Poleon here. It's time he saw his present.'"

As Burrell walked out into the air he shut his jaws grimly and muttered: "Hold tight, young man. She's not your kind—she's not your kind."

Inside the store he found Doret and the trader in conversation with a man he had not met before, a ragged nondescript, whose overalls were blue and faded and patched, particularly on the front of the legs above the knees, where a shovel handle wears hardest; whose coat was of yellow mackinaw, the sleeves worn thin below the elbows, where they had rubbed against his legs in his work. As the soldier entered the man turned on him a small, shrewd, weather-beaten face with one eye, while he went on talking to Gale.

"It ain't nuthin' to get excited over, but it's wuth follerin'. If I wasn't so cussed unlucky I'd know there was a pay streak som'ere close by."

"Your luck is bound to change, Lee," said the trader, who helped him to roll up a pack of provisions.

"Mebbe so. Who's the dressmaker?" He jerked his bushy head towards Burrell, who had stopped at the front door with Poleon to examine some yellow grains in a folded paper.

"He's the boss soldier."

"Purty, ain't he?"

"If you ain't good he'll get you," said Gale, a trifle cynically, at which Lee chuckled.

"I reckon there's several of us in camp that ain't been a whole lot too

(Continued on page thirty.)

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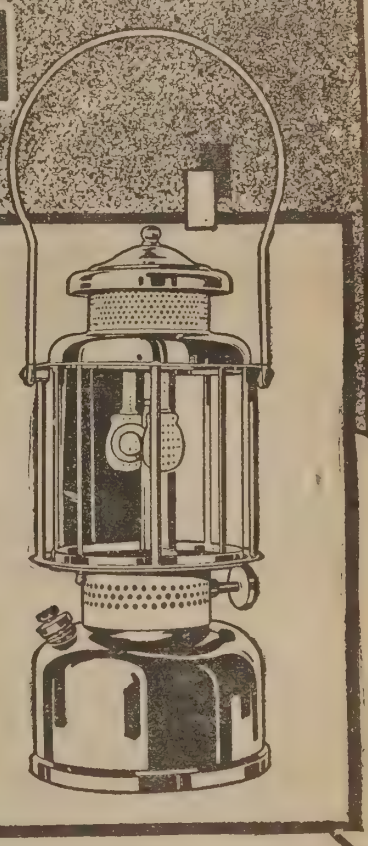
Costs a fraction of a cent per hour while burning. Much brighter than the brightest electric light, safer than the safest oil lamp, cheaper than candles.

The **Coleman Quick-Lite** is a beautiful lamp—beautiful in design, made of nickeled brass and handsomely finished. Provided with universal shade holder which fits any shade you prefer.

Absolutely Safe

In the "Quick-Lite" you have a lamp perfectly safe among all the family, old or young. Fuel can't spill—can't explode. No danger even if tipped over. Nothing to get out of order. No wicks to trim, no globes to wash. Absolute freedom from dirt, grease, smoke, smell or soot.

The wonderful success of the Coleman Quick-Lite has naturally induced imitation. But you need not take an imitation—if your dealer does not handle, write us direct and we will fill your order promptly.



Coleman Lamps and Lanterns were awarded the Gold Medal at San Francisco Panama Exposition. Every Coleman Quick-Lite Lamp and Lantern is guaranteed against any defect in material or workmanship for five years. With ordinary use the lamp or lantern will last a lifetime.

The Coleman Quick-Lite Lantern

With reflector—Operates on same principle as the Quick-Lite Lamp. More powerful than 20 ordinary oil lanterns, and only a tenth the cost of kerosene lighting. Gives most brilliant light of any lantern made. Nothing so good ever offered before for farm use or for where a dependable lantern is needed. Lights with a match. A "fool-proof" light. Can't be filled while burning. Can't spill, can't explode. Won't blow out in the wildest storm. You can light it right out in the wind. Roll it over in straw—no danger. Strongly built of heavy nickeled brass, durably finished. Weight only 3½ pounds. Mica globe. Carries, hangs or stands anywhere. Guaranteed five years. Will last a lifetime.

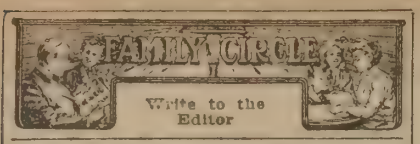
Hundreds of dealers sell the Coleman Quick-Lites. If yours can't supply you write direct for Catalog No. 69. We will give your order immediate attention.

COLEMAN LAMP CO. St. Paul, Wichita, Toledo, Dallas, Chicago.

Dealers

We want live dealers in every town to handle Quick-Lite Lamps and Lanterns. Ask for Catalog No. 69.

In answering advertisements please mention this paper.



ALICE W. BARLAND
Editorial Contributor.

Learn to Save

Dear Readers of the Family Circle: Whenever I am impressed by the wise or foolish things I notice people doing, I always think of you, and how you might be helped, as I frequently am, by knowing about them. This letter is prompted by recent knowledge of the calamity of poverty which has overtaken a couple, known to me for many years. The couple have no children, have never had much sickness. The man has always had either a good business or a fine salary and yet, at the age of almost 70 years, he faces downright poverty, and the fact that he is past the age when he can command any kind of a living salary.

In the 30 or more years since I have known these people their income has never been less than from $150 to $200 a month, and many times it has been more.

The man did not gamble away his money nor drink it up, he just simply did not have any kind of system about saving, but used every dollar from month to month. Finally he used more than he had, borrowed all he could on his life insurance policy and is face to face with a poverty stricken old age.

I knew another couple with but one child, a son. He was not given to study, and no money was used on his education. The head of the house had no bad habits whereby he would waste money. He was a corporation lawyer in New York and made thousands of dollars for many years. He and his wife were fond of beautiful things and they had a fine home filled with choice paintings, rare books, silver, linen, every thing beautiful. Year followed year, money was spent as if it would never cease to come their way. But there came a time when the tide of fortune turned and the beautiful things were sold for debt.

For years, these old people, who lived to be nearly 80, were a burden to their friends and finally were buried by charity, the old man was actually buried in the potters' field.

In contrast to these two cases let me tell you of an old woman who was employed in my family for years to do our washing and house cleaning. She bought a few acres of land with a small house upon it for $800, and earned every cent of it by working around at 50 cents a day. It took her years to do it, but she got a great deal of pleasure in looking forward to the time when she would have it all paid for.

Supposing the first man of whom I told you, who seldom earned less than $150 a month had begun 30 years ago to save some definite amount every month, say $75. At the present time he would have the nice sum of $27,000 even if he had just laid the money away and never received a cent of interest on his savings. Now after 30 years, when he finds his earning years are past, he could have loaned out his money at 6 per cent interest and enjoyed the comfortable income of $135 a month and live on that indefinitely, never having to draw from his principal of $27,000. But he could have had very much more than that had he saved and taken the interest which banks pay, about 4½ per cent.

It will be good practice for the young folks in the Family Circle to compute the interest and find out whether or not it pays to put money out at interest. Just to give you a start I will say that interest being paid twice a year as it usually is, our man would have started out on his second year with the comfortable sum of $941.41 even at 4½ per cent. It is so easy to drift along from day to day taking the good things as they come, using a little money, for this, that and the other thing which we could get along without.

I do not advocate miserliness. I dispise that trait in any one, but I do believe every person should cultivate the habit of saving something. Some definite amount can be set aside if one is earning a salary and many of the young people of the Family Circle are, or sometime will be.

Farmers frequently put their surplus earnings into stock or better buildings and that is just as good as money in bank and often better. I particularly want to impress upon the minds of young people the importance of forming the habit of saving. The first $100 comes the hardest, everyone who has experience agrees. After that it is pretty easy.

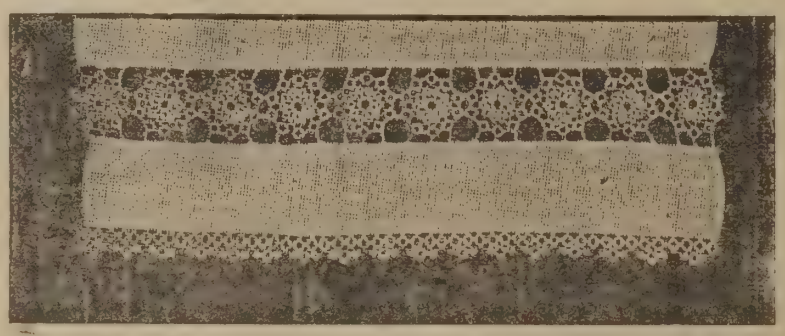
This is a good time to commence to practice thinking twice before we spend our cash. The whole world is saving, making a business of it.

Let us get into the procession, even on the band wagon and see what we can do before another 12 months rolls around.

A. W. B.

Crochet and Tatting Designs

By WINIFRED WORTH



TATTING TOWEL.

A novel towel motif which brings into use the quaint art of tatting Makes up attractively.

Detail of medallion:

1st Row—Make ring 20 st. and 10 picots, close ring and fasten thread.

2d Row—Make ring 2 st., 1 p., 2 st., fasten to p. of ring first made, 2 st., 1 p., 2 st., close ring and turn.

3d Row—Make ring of 4 st., 1 p., 4 st., 1 p., 4 st., 1 p., 4 st., close ring and repeat from 2d row.

Detail of Edging of Tatting Towel.

Make ring 4 st., 1 p., 4 st., 1 p., 4 st., close ring and fasten thread. Turn. make ring 2 st., 1 p., 2 st., 1 p., 2 st., 1 p., 2 st., close ring, fasten thread. Turn, make ring like first and fasten to last p., made on first ring. Close ring and turn again. Make ring, 3 st., fasten to last p. on small ring, 3 st., 1 p., 1 st., 1 p., 1 st., 1 p., 3 st., 1 p., 3 st. Close ring and fasten thread—turn work—repeat 1 st., ring, turn. Make small ring, turn. Make 1 st., ring. This completes the first festoon—continue, always having 4 large rings on one side, 2 small and 1 large on the other. This patterns made of linen finish crochet thread is very handsome on scrim curtains.

To Make Fruit Butters

Pear butter is made like the apple butter without cider. The pears should be ripe enough to cook up well. After being peeled they are cored and sliced, put in a preserving kettle with a little water and cooked slowly until soft. The sugar is then added, one cup to one quart of sliced pears, and cooking is continued very slowly, with frequent stirring for one and one-half to two hours. The butter should then be smooth and of the consistency of thick apple sauce. A little lemon juice, with ginger, cinnamon or other spices to taste, should be well stirred into the hot butter. Pack while hot in hot sterilized containers and sterilize with steam as directed for apple butter.

If a grape flavor is desired in apple butter it may be obtained by the use of grape juice. To each gallon of peeled and sliced apples, cooked into sauce and strained, one pint of grape juice, one cup of brown sugar and one-quarter of a teaspoonful of salt should be added. These should cook slowly and be stirred often for two hours or until of the desired thickness, then stir in one teaspoonful of cinnamon and pack hot in hot containers and sterilize as directed for other apple butter.

Patriotic Place Cards.

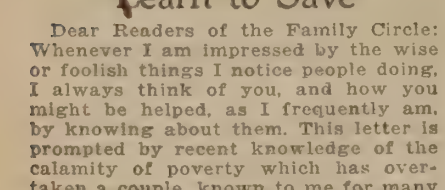
It is the successful hostess who recognizes the artistic and conversational possibility of the place card. As a means of stimulating table talk really novel place cards will do it as nothing else will, says the Washington Post. Designing and making ones' own place cards is good sport. Cunning little things can be made from bits of khaki, navy wool and white duck. Wee soldiers and sailors might be cut out of cardboard, mounted on stands and dressed in their respective "stuffs." A bit of glue is quite the only thing necessary for the dressing. The little hat, suit and even the leggings can be made realistic.

Other realistically patriotic cards can be made from plain white bristol board by "tacking" on wee tin sabers, wooden guns, miniature tents and even a whole company of tin soldiers standing upright. Then, too, little silk flags might be dropped on the cards with artistic effect.

Another charming thing to do with place cards is to press flowers and paste somewhere on the card. Now that goldenrod is so plentiful, a huge flat bowl of it might be used for a centerpiece, with oblong cards, each bearing a single sheaf of the pressed flower.

India's Sunday Schools.

The first Sunday school in India, established in 1803 at Serampore, has increased to 16,936 schools, with 636,614 pupils and teachers, who speak forty-five dialects.



1 1-2 Lbs. by parcel post, prepaid, to any point in 1st, 2d or 3d zone 50c

3 Lbs. by parcel post, prepaid, to any point in 1st, 2d or 3d zones $1.00

DELIVERED FREE!

As a trial proposition, send us 50 cents and we will send you 1½ pounds of Northwest's Best Coffee, and after using it, if you believe it is not honestly the best coffee you ever used, we will refund the purchase price without question.

You take no chances.

This is not a package coffee, but a bulk coffee, freshly roasted and ground for you the way you want, after the order is received.

All good coffee; no tin cans to throw away or premiums you do not need.

Coffee sent whole or ground, as ordered. If you want it ground, state whether coarse, medium, fine, for percolator, or pulverized.

Send stamps, coin or money order. Money back if not satisfied

Northwest Grocery Company

11th and Commerce Sts.
Tacoma, Wash.

Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

36 Review Bldg., Spokane, Wash.

Enclosed find ..... cents, for which send me the following patterns:

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

WOMEN

Can Stay at Home and Shop in Seattle With Satisfaction

FREDERICK & NELSON, Seattle, are prepared to supply you promptly with such items in furniture and dry goods as can not be readily obtained from the merchants in your own community.

All such orders received by Frederick & Nelson receive the prompt, personal attention of an expert shopper, and parcel post shipments are sent POSTAGE PAID to any point in Washington.

Inquiries should be addressed to

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SEATTLE.



From Net to You!

comes our delicious salted and smoked fish. All prepared by the good, old Norwegian method and far superior to any that you can obtain in inland stores. We sell all kinds of salt, smoked, kippered and canned fish.

FISH

DIRECT TO THE CONSUMER on a POSITIVE MONEY-BACK GUARANTEE. We save you money and give you better fish.

Herring	Smoked Salmon
Codfish	Kippered Salmon
Mackerel	Blefish
New Salted Salmon	Domestic and Imported
Salmon Bellies	Canned Fish
Kippered and	

WRITE FOR PRICE LIST, MAILED FREE

Norway Fish Co.

1908 Pike Place, Seattle, Wash.

A Patriotic Appeal to Every Reader of This Paper



The Young Men's Christian Association is anticipating the GREAT NEED of right environment among our soldier boys, in the cities, in the training camp and at the front in the trenches. Send your "bit" for this work to Y. M. C. A. War Work Secretary, Spokane, Washington.

Sunshine Lamp 300 Candle Power FREE

To Try In Your Own Home

Turns night into day. Gives better light than gas, electricity or 18 ordinary lamps at one-tenth the cost. For Homes, Stores, Halls, Churches. A child can carry it. Makes its light from common gasoline. No wick. No chimney. Absolutely SAFE.



COSTS 1 CENT A NIGHT

We want one person in each locality to whom we can refer new customers. Take advantage of our SPECIAL FREE TRIAL OFFER. Write today. AGENTS WANTED.

SUNSHINE SAFETY LAMP CO.
156 Factory Bldg., Kansas City, Mo.

Patterns

2014—Over blouse dress for misses' and small women. Cut in three sizes: 16, 18 and 20 years. It requires 2 yards of 36-inch material for the guimpe and 3 5-8 yards for the dress, for a 16-year size. The dress measures about 2 1-2 yards at its lower edge. Price, 10 cents.

1802—Girls' coat. Cut in five sizes: 6, 8, 10, 12 and 14 years. It requires 4 1-4 yards of 44-inch material for a 12-year size. Price, 10 cents.

2256—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 36 requires 7 1-4 yards of 36-inch material. The dress measures about 2 1-2 yards at the foot. Price, 10 cents.

2244-2243—Ladies' costume. Waist, 2244, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 2 5-8 yards of 44-inch material. Skirt, 2243, cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 3 3-8 yards of 44-inch material. Skirt measures 2 1-4 yards at the foot. Two separate patterns, 10 cents for each pattern.

2248—Ladies' house gown or lounging robe. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires seven yards of 26-inch material. Price, 10 cents.

1840—Boys' suit. Cut in four sizes: 4, 5, 6 and 8 years, and requires three yards of 44-inch material for a 5-year size. Price 10 cents.

1975—Ladies' dressing sack. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 3 1-2 yards of 44-inch material for a 36-inch size. Price, 10 cents.

2253—One-piece dress for juniors. Cut in three sizes: 12, 14 and 16 years. Size 14 requires 4 1-2 yards of 36-inch material. Price, 10 cents.

1549—Girls' one-piece dress. Cut in four sizes: 4, 6, 8 and 10 years. It requires 3 1-2 yards of 36-inch material for an 8-year size. Price, 10 cents.

2245—Ladies' slip. Cut in four sizes: Small, 32-34 inches bust measure; medium, 36-38; large, 40-42, and extra large, 44-46. Size medium requires 4 1-2 yards of 36-inch material. Price, 10 cents.

1805—Ladies' apron. Cut in three sizes: Small, medium and large. It requires 3 1-4 yards of 36-inch material for a medium size. Price, 10 cents.

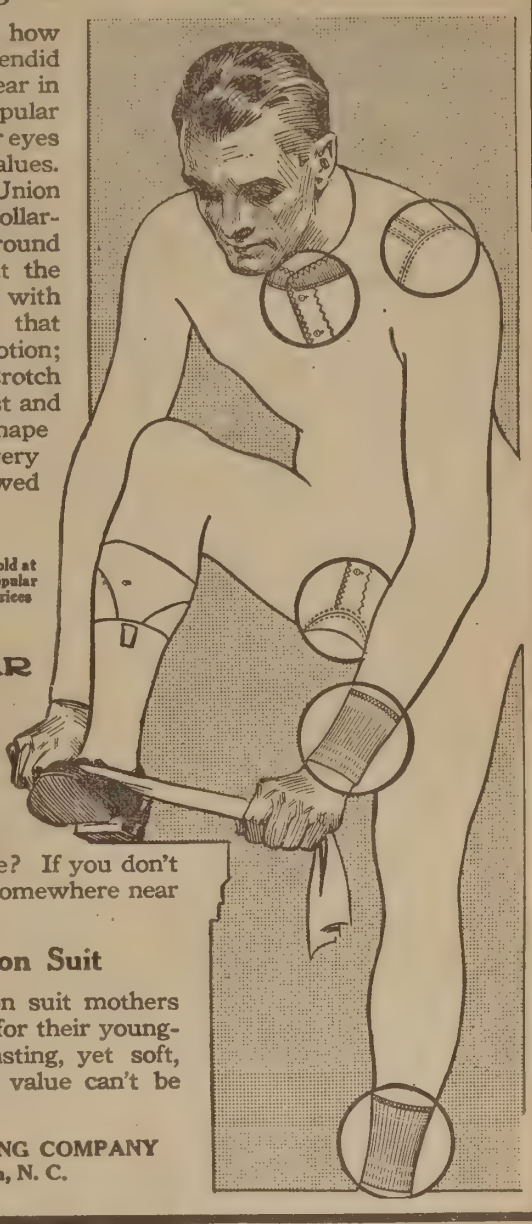
2255—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. Size 6 requires 1 1-4 yards for the guimpe and 3 3-4 yards for the dress, of 27-inch material. Price, 10 cents.

The coupon for ordering these patterns will be found on the preceding page.



The Most Amazing Underwear Bargain in America

People don't just see how we can make this splendid winter-weight underwear in war times to sell at a popular price. It sure opens your eyes to see all the extra values. Just get this: Hanes Union Suits have a tailored Collarette which snuggles around the neck and keeps out the cold; Elastic Shoulders with Improved Lap Seams that "give" with every motion; Comfortable Closed Crotch that stays closed; Wrist and Ankle Cuffs that hold shape and keep out winds. Every button is good pearl, sewed on for keeps.



Greatest Winter Underwear **HANES** Sold at Popular Prices

ELASTIC KNIT UNDERWEAR

Is it any sort of wonder that all these suits are sold mighty early every year? And isn't that a mighty big hint for you to lay in your stock before it's too late? If you don't know a Hanes dealer somewhere near you, write us.

A Boy's Union Suit

Here it is—the union suit mothers have always wanted for their youngsters. Strong, long-lasting, yet soft, cozy and warm—its value can't be duplicated.

P. H. HANES KNITTING COMPANY
Winston-Salem, N. C.

RED CROWN GASOLINE

"The gasoline of quality"---real gasoline---has a continuous chain of boiling points.

Standard Oil Company (California)

real gasoline



EXCHANGE NATIONAL BANK SECOND ANNUAL CORN SHOW

Spokane, Washington

40 PRIZES WILL BE AWARDED, consisting of corn machinery.

Nov. 19-24

"A valuable booklet, "How to Grow an Acre of Corn," will be sent free on request.



Best of All Was the Merry-Go-Round.

Dear Aunt Nellie: This is the first time I have written to the Corner. I don't believe it will be the last time either. I am 12 years old and I will be 13 years old the 16th of October. I like to live on a farm better than to live in the city. In the city you can not raise anything, but in the country you can. I go to the Clearbrook school. I like school better this year than I did last year. The name of my teacher is Miss Swanson. There are four other teachers, too. I am in the seventh grade. I have six brothers and two sisters. My brothers' names are Ernest, John Gustav, Sten, Evert and Malcolm and my sisters' names are Agnes and Ruth. Gustav, Sten and Ruth go to school also. Gustav is in the same grade as I am, and Ruth is in the fifth grade. Sten is in the third. At 6 o'clock now I milk two cows. I like to milk. Our cows' names are Esther, Emma, Aster, Vesta, Karin, Lilly, Rose and Nigger. The cows I milk are Emma and Esther. My sister Agnes is not home now. She is in Seattle working. I have written letters to her very often and so has my sister Ruth. My father writes her often, too. I went to the Lynden fair last year. The best part was to ride on the big merry-go-round. I nearly fell off the first time I rode, but I took hold of the horses' ears and so wouldn't fall. Have I a twin? I was born in Sweden and came over here in May of 1910.—Jennie Loreen, Route No. 3, Everson, Wash.

Mamie Knows How to Crochet.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have one sister and one brother. My sister is 3 and by brother is 1, and I am 8 years old. My sister's name is Phoebe and my brother's name is Robert. My name is Mamie. We have eight cows and three calves. We have a big pig and six little pigs. We live in a tent. I know how to crochet. My grandma and grandpa live in Eatonville. My uncle came over here. We live on a ranch in a coulee. The baby just woke up from a nap. Not very long ago my sister and I were awful sick, and now the baby is sick.—Mamie Lien, Coulee City, Wash.

Has Gladys a Twin Cousin?

Dear Aunt Nellie: I have been reading the letters in the Children's Corner. I am going to school and am in the third grade. We do not go to school now, for the city waterworks are broken down and we do not know when we will have school. I hope we will soon have school, for I like to go to school while it is cool. I have two sisters in high school. One brother is in the eighth grade and a brother and sister in the primary room. I am 9 years old and have light blue eyes. I will be 10 the 20th of May. Have I a twin?. If so, will they please write to me?—Gladys Brummund, Box 757, Connell, Wash.

Glad to Go to School Again.

Dear Aunt Nellie: I am glad to go to school again, and like my teacher fine. I am 14 years old and in the fifth grade. We are going to school in a cart, and have lots of fun. Paul is in the third grade and Rudolf is in the first grade. We had a nice Scotch collie dog and her name was Lady. One day she took sick and died. But we are raising a pup of hers and his name is Rover. We have three cats, nine hogs and 14 head of cattle. We have 50 chickens, big and little, but we do not raise many of them, because they are so hard on the garden.—Anna Straube, La Crosse, Wash.

Writes to Some of the Cousins.

Dear Aunt Nellie: I am going to write to the Corner again. I am going to school now. Our school started September 24. I like to go to school and also like my teacher. His name is Mr. Stevens. He taught our school last year. There are 21 pupils going to our school this year. I am writing to some of the girls of the Corner, and I like to write to them. I am writing to Anna McLean. She is about two months older than I am, but we are the same in height. I saw my other letters in print and also would like to see this one in print. I will be 15 years old the 15th of next May. I am going to write again if I see this letter out in the Corner.—Viola Augst, R. F. D. 1, Box 30, Beebe, Wash.

Guy Herded Sheep All Summer.

Dear Aunt Nellie: This is the first I have ever written to the Corner. Willie, my brother, and I herded sheep all summer and we never came home for dinner. We had some lunch with us. We had to herd the sheep from the grain field, and one of our sheep has got a broken leg. We do not know how it happened to get broken. Last spring we were herding sheep in a different pasture. We herded the cows and horses, too, and the horses would try to get around us every way. We go to school now. We take our lunch to school. I am 11 years old and am in the fifth grade and study arithmetic, language, history, physiology, geography, reading and spelling. We have two pet colts. One is black and one is bay. The black colt is mean to feed. The bay colt's name is Pet and the black colt is named Suse. We turn them out in the pasture every day. We have all our hay stacked and put in the barn.—Guy Smurthwaite, White Bird, Idaho.

Used to Live in Washington.

Dear Aunt Nellie: I have never written to the Corner before. I hope I see this in print. I am 12 years old and will be 13 the 17th of December. Have I a twin? f so, will be very glad to hear from them. We live on a rented grain ranch. I do not like it here at all. I always lived in Sultan, Wash., till last March. If any of my friends in Sultan see this I wish they would write and tell me. I am going to school now. I am in the fifth grade. The school children all came to our place yesterday and we had lots of fun. I have five brothers and one sister. Their names are Henry, Frank, Ivan, Carl, Oren and Ada. I forgot to say that my brother Ivan takes the Farmer and we all like it very much.—Leonora Beatrice Chaffee, Conrad, Mont.

A Little White Dog Named Buster.

Dear Aunt Nellie: I am a little girl 10 years old the 21st of October this year. I never wrote to the Corner before so thought I would try for a prize. I am in the third grade in school. There are 15 scholars. I have two big brothers in Sultan, Wash. I have three brothers here in Montana. Carl goes to high school in Conrad. Ivan is driving a header wagon. Oren and my only sister go to school with me. We have some chickens, one turkey and a little white dog. His name is Buster. We have a dove, too.—Ada Graves Chaffee, Conrad, Mont.

Jack Worked Hard This Year.

Dear Aunt Nellie: I thought I would write to the Children's Corner. This is the first time I have written to it. I live about five miles east of White Bird. I am 13 years old and I am in the seventh grade. Last summer I hoed beans and helped cultivate them. I helped herd the sheep out of the grain field. I harrowed last spring. I broke a horse to ride. I raked hay and helped haul it. I helped stack the hay. I hope to see my letter in print. —Jack Smurthwaite, White Bird, Idaho.

Sold Fluffy, the Dog.

Dear Aunt Nellie: I have written to the Corner several times. I like to read the letters very much. I will tell how I earned my first money. I sold my dog and his name was Fluffy. He would catch our chickens. I am taking music lessons, and my teacher's name is Mrs. Hyde. I like her fine. I like to go to school. My school started the third of September. I was anxious for school to start. My teacher's name is Mrs. Cramer.—Neal McKinley, Cottonwood, Idaho.

A Pony to Ride to School.

Dear Aunt Nellie: I have never written to the Children's Corner before. I am 9 years old. We have one mile and a quarter to go to school. I have a pony. Last winter we had to walk to school and we had boots to wade snow. We had to wade water. We have been riding to school this year. I am in the second reader. We had many dances. We have six horses to feed in the winter time.—Ariel Fuller, White Bird, Idaho.

Found 11 Little Baby Chicks.

Dear Aunt Nellie: I have not written to the Corner for a long time. I have a surprise for you. Just think, I found 11 little baby chicks. We did not set the eggs for them. A hen laid them and then sat on them. I claim them, but papa jokes me and says: "You should have gathered the eggs closer." I am 9 years old, born on the 27th of December. Have I a twin? I have a very good friend. Her name is Faye Huber. She is 9 years old, too, and sits right in front of me in school. The fifth grade and the sixth grade are together this year. Yesterday our teacher gave the fifth grade and sixth grade an arithmetic match and the fifth grade beat. I hope to get a prize. Well, I will take the whole Corner.—Dorothy Jones, R. F. D. 1, Florence, Col.

Vega Tells About School.

Dear Aunt Nellie: I saw my last letter in print. I want to tell you about school. My teacher is Miss Aymie. The other teacher is Miss Jewell. I am in the seventh grade and I like school fine. I will tell you once more what I look like because some of the cousins never saw it the first time. I am some over five feet tall. I have light hair, a fair complexion with the exception of freckles. I weigh about 100 pounds. Now if any of the cousins wish to write to me and learn about this part of the country I will answer any letters. My birthday was September the 16th. I was 13 years old. I had a big boil on my left arm. It is healing up now. I wish all cousins and Aunt Nellie good luck.—Vega Danielson, age 13, Emida, Idaho.

Can Beans for Grandpa.

Dear Aunt Nellie: I will now write my second letter to the Corner and you. I have been so lame for a week or two I haven't gone to school. My favorite studies are reading, history and geography. My sister Hazel is very sick; she has an awful cold. My papa is a carpenter and is away from home now. He is only home on Sundays. To amuse myself I will take care of the little children. Next week mama is going to cull shell beans, and I am going to can 12 quarts for grandpa. There are so many of us that play all kinds of games. We have a pretty nice garden. My sister Alice milks the cows. My letter is getting so long I will close for this time.—Lilla Floy Rice, Marshfield, Ore. (Aunt Nellie hopes that you are better by this time, Lilla, and able to go to school. Write me again. I am sure all the cousins will enjoy your letters as they do this one. I hope that Hazel is better, too.)

Helping With the Apple Harvest.

Dear Aunt Nellie: This is the first time I am writing to the Children's Corner. I enjoy reading the letters that the other children write for the corner and I hope to see my letter in print. I am 12 years old and in the seventh grade at school. My teacher's name is Mr. Dykstra. He is a very nice teacher. Our school has stopped for a few weeks so that the children can help with the apple harvest. We live in a valley noted for apples. People in Hood River valley are busy harvesting apples this month and will be busy with apples next month, too. We live on a farm and have a large apple orchard. I have seven brothers and one sister. Her name is Irma. We have great fun playing in our playhouse or with the dolls. I will write some more letters for the Corner if Aunt Nellie wishes it.—Hilja Annala, Hood River, Ore. (Aunt Nellie does want you to write again, for she enjoyed your letter and is sure that the cousins will also. Write just as often as you can, and your letters will be printed gladly.)

Holland's Soap Production.

Holland has 100 soap factories, producing about 10,000,000 pounds of soap

Muggins "Does His Bit."



This handsome silver Spitz, known as "Muggins," is four years old and owned by Mrs. G. Woodward, Victoria, British Columbia.

His present mission in life is collecting for the "Flower Guild" in that city, and the proceeds of the flower sales are divided between three funds, namely, returned soldiers, Red Cross and Blue Cross, says Our Dumb Animals.

On "Tag" days arranged for the assistance of other patriotic funds Muggins follows the usual custom and devotes his energies to "tagging." He is a constant visitor to incoming boats, particularly the Empress of Asia and the Empress of Russia.

Muggins contributed $300 to the different patriotic funds in five months.

FOR LESS MONEY

There are few chances in these days to get an article for less money than you are accustomed to pay. You will find one such opportunity described on pages 18 and 19 of this issue.



"The Barrier" By REX BEACH

(Continued from page twenty-seven.)

good," said he. "Has he tried to git anybody yet?"

"No, but he's liable to. What would happen if he did? Suppose, for instance, he went after you—or me?"

The one-eyed man snorted derisively. "It ain't wuth considerin'!"

"Why not?" insisted Gale, guardedly. "Maybe I've got a record—you don't know."

"If you have, don't tell me nothin' about it,'" hastily observed Lee. "I'm a God-fearin' citizen myself, leanin' ever towards peace and quietudes, but what's past is dead and gone, and I'd hate to see a lispin' child like that blue-and-yeller party try to reezureck it."

"He's got the American army to back him up—at least five of them."

"Five agin a hundred. He aims to overaew us, don't he?" snickered the unregenerate Lee, but his wrinkles changed and deepened as he leaned across the counter confidentially.

"You say the word, John, and I'll take some feller along with me, and we'll transfer this military post. There's plenty that would like the job if you give the wink."

"Pshaw! I'm just supposing," said the trader. "As long as they play around and drill and toot that horn, and don't bother anybody, I allow they're not in the way."

"All right! It's up to you. However, if I happen to leap down on this pay streak before it sees me comin', I'm goin' to put my friends in first and foremost, and shut out these dressmakers complete. So long!" He thrust his arms beneath the legs of a new pair of blue overalls that formed his pack-straps, wriggled the burden comfortably into place between his shoulders, and slouched out past Doret; to whom he nodded, ignoring the "dressmaker."

Having given Necia's message to Poleon, the Lieutenant took up his business with the trader. It concerned the purchase of certain supplies that had been omitted from the military outfit, and when this was concluded he referred to the encounter of that morning.

"I don't want you to think I bungle everything in that manner," he said, "for I don't. I want to work with you, and I want to be friends with you."

"I'm willing," said Gale.

"Nobody dislikes playing policeman more than I do, but it's a part of my duty, and I'll have to do it," continued the young man.

"I reckon you simply aim to keep peace, eh? You ain't lookin' for nobody in particular?"

"Of course not—outside of certain notorious criminals who have escaped justice and worked north."

"Then there is a few that you want, eh?"

"Yes, certain old-timers. The officers at every post have descriptions of a few such, and if they show up we will take them in and hold them till courts are established."

"If you've got their names and descriptions, mebbe I could help you," said the trader, carelessly.

"Thank you, I'll bring up the list and we'll go over it together. You must have been here a good while."

"About ten years."

"Then Miss Necia was born out in the States?"

Gale shot a startled glance at the soldier before he answered in the affirmative, but Burrell was studying a pattern of sunlight on the floor and did not observe him. A moment later he inquired, hesitatingly:

"Is this your first marriage, Mr. Gale?" When the other did not answer he looked up and quickly added:

"I beg your pardon, sir. What led me to ask was Miss Necia—she is so—well—she is such a remarkable girl."

Gale's face had undergone a change, but he answered, quietly:

"I 'ain't never been married."

"What?"

"When I took Alluna it wasn't the style, and neither one of us has thought much about it since."

"Oh, I see," exclaimed Burrell, hurriedly. "I'll bring that list with me the first time I think about it," and, nodding amiably, he sauntered out.

"Gale likewise left the store and went into his house, the odd look still strong in his eyes, to find Necia posing in her new regalia for Poleon's benefit. At sight of her he fell into a strange and unexpected humor, and to their amazement commanded her roughly to take the things off. His voice and manner were harsh and at utter variance with any mood he had ever displayed before; nor would he explain his unreasoning fury, but strode out again, leaving her in tears and the Frenchman staring.

(To be continued.)

Snohomish County Fair

The ninth annual exhibition of the Snohomish County Fair association was held at Snohomish from September 25th to 29th. Weather conditions considered, the attendance was unusually good. Evidently the advertising given to the business of food production by the various public discussions of the last year or two is serving to educate the public to the importance of the farmer's work.

The various educational institution exhibits attracted much attention. Basket work and weaving from the Tulalip Indian reservation, the canning achievements of the various schools, and the remarkable carpentry turned out by the manual training department of the Snohomish schools all came in for commendation, while Garden City grange, Monroe grange, Tualco and French Creek entered displays which showed that the grange is not lagging behind in this matter of production.

Probably the floral department caught and held the eyes of as many visitors as any exhibition on the grounds. There were approximately 2000 entries of dahlias alone, with roses, carnations and sweet peas in smaller, but very attractive displays.

If the comparative excellence of this year's vegetable entries is to be taken as a criterion, there is little danger of a food shortage as far as these staples are concerned. Potatoes, onions, cabbage, mangels and squash and pumpkins, together with large quantities of dried vegetables offered eloquent testimony as to the productiveness of the Sound country. The state reformatory, of Monroe, put in an especially attractive display along this line.

Cattle, swine and poultry were creditably represented by the displays of Snohomish county farmers. Holstein cattle and Duroc Jersey hogs seemed to have the upper hand as to numbers.

Among the exhibitors were the following:

Mrs. G. C. Howard, Snohomish, and Mrs. John St. Peter, Everett, both won awards on roses; Miss Julia Moehring, Snohomish, carnations; Mrs. Frank Tucker, Monroe, and Mrs. E. M. Mathewson, Everett, won on cactus dahlias, and Mrs. Gordon Hutchinson of Monroe on pompoms; Mrs. George Lawler, Tacoma, gladioli; Miss Cora Henry, Snohomish, and Mrs. Thomas Reid, Snohomish, cut flowers; Mrs. F. A. Kneipp, Snohomish, and Mrs. T. O. Lian, Snohomish, house plants.

In the poultry building, displays were placed by Arthur Wade, Marysville, brown Leghorns and Rhode Island Reds; Peter Formoe, Snohomish, Leghorns; J. J. Zimmerla, several breeds; J. A. Middleton, Snohomish, white Leghorns; E. H. Curtis, Seattle, Bantams. Carrol Stevens, Fred Lecog and A. Memitz of the Snohomish schools, also entered displays of poultry.

In the Holstein department, entries were placed by Herman Steffen, Monroe; Treosti and Velle, Snohomish; E. A. Holcomb, Snohomish; G. B. Shadinger, Snohomish; D. F. Sexton, Snohomish.

Exhibitors of swine were John B. Peterson, Mountborne, Duroc Jerseys; W. L. Cochran, Snohomish, Duroc Jerseys; L. F. Krassin, Snohomish, Berkshires.

W. M. Coates of Vancouver, B. C., placed the ribbons in the poultry show, while Professor W. A. Linklater of Puyallup, judged the stock.

Big Bargains for You

Many publishers have been compelled to double their subscription rates on account of the increased cost of production. Here are some extraordinary combination bargain offers. Save money by taking advantage of them today.

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Alfalfa on New Land

By S. P. FLOWER, Mabton, Wash.

I am rotating and have plowed up most of the old alfalfa. I have always contended that there is only one way to farm and that is diversified farming. All new land under irrigation should be seeded to alfalfa. After several years it will be in fine condition for corn, spuds, or beans. All of our crops are good this year. Our alfalfa is under irrigation. There is an increase in acreage of about 3500 acres in this vicinity. We only pasture hogs. Alfalfa pasture is not safe for cattle or sheep as they bloat too easily. We tried raising a few cattle. It did not pay. We keep horses for work only and cows for our own use. Hogs only pay when hay and corn are a drug on the market. The prices seldom profit. For all round feed there is nothing better than alfalfa. I have had no experience with alfalfa silage. In preparing the seed bed, level the land and wet it up good, redisk or plow, sow the alfalfa then drill wheat or barley. It always pays to harrow or disk alfalfa particularly in the spring. I am a firm believer in putting something back on the land, a few sheep are very profitable to keep weeds down, and they eat up all refuse hay as well as stubble and cornstalks.

Here are a few more interesting pointers from alfalfa growers in the state of Washington:

W. FRENCH of Conconully, Wash., has about 120 acres under irrigation, mostly in alfalfa and timothy and clover. He has a crop of about 350 tons this year. He says that alfalfa makes a fine pasture, although he does not use it extensively for that purpose. He finds it a great feed for any kind of live stock when cut and cured in good shape. He adds: "To secure a good stand of alfalfa we must be particular to have a well cultivated seed bed, the same as if you were going to sow onions. I have been troubled somewhat with gophers, the only trouble I have had.

GROVER CHADBOURNE of Deer Park, Wash., tried out sowing alfalfa in rows, but says it is a good way to start the plant, but after it is once started he can not see any advantage over broadcasting. He has been growing alfalfa for some years. The first field he sowed was on weedy ground and did not do quite as well as a field he sowed later.

Start With Wheat

To the Editor: I came here 13 years ago with the expectation of seeing this locality change its methods of farming to a considerable extent before this time. But, while I could show you a farmer here and there who has added some kind of good stock as a side line, it has been more than outdone by the wheat raisers adding to their areas by buying out their neighbors and thereby depopulating our county. Personally I have, in addition to my grain crops, raised colts from my work mares each year, kept a few brood sows; but my main stock business has been in handling a flock of sheep, and have found them each year fully as profitable cash bringers as wheat, as well as being very desirable tenants in raiser," and to add any additional lines it takes more capital, and the additional help needs to be of a more intelligent class than can be used solely as wheat help. Under existing conditions I can not blame the young man for becoming a wheat raiser for a start, but wish that he might soon add something else in a small way and by so doing grow into a better farmer than he would otherwise become.

JULIUS M. FISK.

Spring Valley, Wash.

Power Machinery Shown.

The general use of power machinery on Washington farms was made manifest by the large showing of power-driven trucks, auto attachments, spray pumps, ensilage cutters, tractors, and the like, at the Washington state fair this year. The number and variety of farm implements far exceeded that of any previous state fair, it is claimed. This also was true of automobiles, and interest in each and every one of these showings was great. The increased purchasing power of the general run of northwest farmers has served as a splendid impetus to the automobile and its allied industries this season. While interest was general in automobiles, more attention was paid to practical labor-saving devices being demonstrated in the open spaces on the grounds. Implement dealers wore broad smiles at the close of the week's activities.

New Dryer at Goldendale.

Goldendale Sentinel: A motor-driven automatic peeling and paring machine will be installed, and sufficient help will be secured to handle the run as received. The dryer is a practical standard equipment for this purpose, and is decidedly an advantageous enterprise for Goldendale, and this part of Klickitat county.

CALIFORNIA EXCURSIONS

In planning trips to the retreats of the southland arrange to be ticketed over

The North Bank Road

between Spokane and Portland, and enjoy the scenic wonderland of the Cascade Mountains and Columbia River.

Two Observation Car Trains Daily

On notice, a representative will be glad to furnish travel information.

SPOKANE TICKET OFFICE
Davenport Hotel.
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FALL SEEDS

We offer a complete stock of Grass and Clover Seeds, Fall Vetch, Cheat Seed, Fall Wheat, Fall Oats, Fall Rye, etc.

Buying direct from the farmers, we are in a position to offer the highest grade of seeds at the right price. Send us list of what you want and get our prices.

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Be an Auto and Tractor Expert

The demand for trained men in all branches of the Auto and Traction Engine Business is greater than ever before.

MY GRADUATES are filling responsible positions in large factories and assembling plants, also as GARAGE OWNERS. They are making big money as experts.

THE HAWTHORNE AUTO SCHOOL'S $30,000 equipment gives you the actual PRACTICE, TRAINING and EXPERIENCE on REAL AUTOS, TRUCKS and GAS ENGINES. We occupy 10,000 square feet of FLOOR SPACE. Write for particulars at once.

HAWTHORNE AUTO SCHOOL
462 Hawthorne Ave., Portland, Ore.
Oldest, best equipped and most practical Auto School on the Coast. Established 1907.

The surface of any spindle shows rough through the microscope. This causes friction. But the powdered mica in Mica Axle Grease fills up this roughness—makes a smoother bearing. The grease works better and lasts twice as long.

STANDARD OIL COMPANY
(California)

MICA AXLE GREASE

News for Breeders

A fine gold watch, offered by the Berkshire World to the Berkshire herdsman keeping his alleys and pens in the best condition during the Berkshire Congress show at the Oregon State fair, was awarded to C. E. Barrows, in charge of the Brush herd from Santa Rosa, Cal. Mr. Barrows, who was formerly an Oregon Berkshire breeder, was heartily greeted by his old Oregon friends and congratulated on his winning. He took the herd on to the National Swine show at Omaha, in an express car, at the cost of $1000.

William T. Tracy, who for the last 20 years has been connected with the great horse breeding and importing firm of Dunhams, Wayne, Ill., has located in Kennewick, Wash., and has purchased 160 acres of land, which will be improved and made a great breeding ranch. During Mr. Tracy's connection with the Dunhams he made three trips to France, three to England, two to Germany and two to Belgium. For the last four years Mr. Tracy has operated on the Coast region. He has a reputation for handling first-class horses and has sold a majority of the sweepstakes Percherons in the last few years.

For the last year Mr. Tracy has been doing business for himself. He knows horses and horse conditions. He says Europe is badly depleted of horses, that the United States is short and that there is a great future for the horse breeders, of purebred and ordinary work horses of large size and proper conformation. Kennewick is to be congratulated on securing Mr. Tracy's horse breeding and importing operations. H. A.

Cattle Raisers Hold Meetings.

The executive committee of the Oregon Cattle and Horse Raisers association closed a series of very successful meetings in central Oregon at Prineville Tuesday, October 2. Starting from Baker with 13 members in the party, the first meeting was held in Canyon City, where a big dinner was served, then a banquet at night and, for breakfast next morning, half a venison brought in by John Muldrich. The next meeting, September 24, was at Burns, with another big attendance. Free lunch was served on the arrival of the party. The meeting began at 2 p. m. and closed at 6. William Hanley, "the sage of Harney," better known as "Bill" Hanley, then took them to his home ranch, where the swellest ranch dinner eaten in many a day was served.

After early breakfast in Burns a start was made for Lakeview and at 9:30 the O'Donnell ranch, another of the Bill Hanley places, was reached and a hearty "second breakfast" was served. Lunch was eaten on Warner prairie and Lakeview was reached at night, where a smoker was held, and next day the surrounding country was visited and a meeting held.

A part of the day's program was a visit to Fairport, Cal., where a dinner for 80 plates was served. Bly was reached at 10 the next morning, where luncheon was served at noon, and Klamath Falls reached at night, where lodging was found at the White Pelican. The following day, the 29th, a meeting was held at Fort Klamath at 1 p. m. and before night Crater lake was visited and the party spent the night there. Sunday Prineville was reached, the party royally entertained and the meeting was held at 10 a. m. Tuesday.

Secretary Carrell says the great encouraging feature of the trip is that where there has been some coolness before, this year they were received with open arms and stockmen were anxious to see and hear them.

H. A.

To Be Great Shorthorn Show.

"We expect the greatest Shorthorn show ever held on the Coast at the Pacific International at North Portland this year," said Frank Brown of Carlton, Ore. "We are looking for 250 purebfed Shorthorns there, and I have every assurance that that number will be shown. Herds are coming from all parts of the northwest, and California will send a big delegation, according to their expectations.

"There will be a big Shorthorn sale at the Lewiston show, too, with probably 75 head offered from such breeders as Minor, Dunn, McCroskey, Day & Rothrock and myself, as well as others whose names I have not secured certainly. A like number will be sold at North Portland November 22."

Mr. Brown, who is manager for the sales, expects catalogues for the sales to be ready for distribution about October 27.

Unusual Holiday.

On the day of his baptism, a Japanese manufacturer, a recent Christian convert, gave a holiday with full pay to all his employes.

O. I. C. SWINE

John Van Trojen Sr., Breede



of the famous Ohio Improved Chester Whi Hog. All stock re listered. Write for price Orders filed after Oct. 1.

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Special attention given to live stock sale

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TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.

Herd headed by Knoll Slope Colonel, a sisted by Jolly Lad IV. Correspondence s licited.

Bliss, Idaho.

The department editors of thi paper are anxious to be of servic to you. Do not fail to write t us if they can be of help to yo

THIRD ANNUAL SALE OF
Pure Bred Big Type Poland Chinas
By Greenleaf Stock Ranch

60 head will be offered, including BOARS, SPRING BOARS, FALL BOARS, SPRING GILTS, FALL GILTS and SIX SOWS WITH PIGS AT THEIR SIDES.

One-half of the offerings will be from our IMPORTED SOWS from IOWA of last year.

Offerings will be from such breedings as KING OF ALL, Henry Fesenmeyer's A WONDER, SMOOTH LONG JUMBO, ORANGE BOY, BIG WONDER, BIG TONE EQUAL II., GRAND MASTER, CHOICE JUMBO and several others of the most popular big type blood lines.

SALE WILL BE HELD AT OUR RANCH IN OUR NEW SALE PAVILION, JUST COMPLETED,

WEDNESDAY, OCTOBER 31, 1917.

WRITE FOR DESCRIPTIVE CATALOGUE

WILSON BROS.

A. L. WILSON, Manager. GREENLEAF, IDAHO.

Feeding Cotton Seed Cake to Sheep

By R. A. WARD, Agriculturist Crook and Deschutes Counties, Ore.

Cotton seed nut cake is now used very extensively on the western ranges for wintering stock sheep. It is only within the last 40 or 50 years that the value of cotton seed has been appreciated. Previous to that time it was thrown away as useless. Today it is regarded as the source of one of the best concentrated feeds on the market. In sheep feeding cotton seed cake (nut size) can be economically fed in conjunction with alfalfa or other hay, or to supplement winter pasture. Ewes fed in this manner come through the winter in excellent shape, and tests show the percentage of lambs is higher, and the losses much lower than when wintered on hay alone. The following ration has been entirely satisfactroy. It will be noted there is a great saving in hay.

Alfalfa hay, 2 to 3 pounds.

Cottonseed cake (nut size), 2 to 3 ounces.

H. C. Wood of Spencer, Idaho, has successfully wintered his sheep for a number of years on a ration containing cotton seed cake. He starts feeding about 1 1-2 ounces per ewe about breeding time, and continues to feed until the range is green in the spring. As the weather gets severe, he increases the cotton seed cake until each sheep is receiving from two to three ounces daily. After the first snow each sheep received 2 pounds of hay in addition to the cotton seed cake. These sheep came out in the spring stronger than they went in in the fall. They also sheared two pounds more wool apiece than those fed hay alone.

Cotton seed cake for range feeding gives better satisfaction and less waste when fed in the nut size, than in meal or pea size. If scattered on the ground, the sheep will find it. Many of our sheep men feed it in connection with hay in muddy weather and the sheep will follow the nut cake down into the mud with practically no waste. It has been found better to feed it on bare ground than in the sage brush. When sheep are fed cotton seed cake they must have plenty of moisture. Sheep fed cotton seed cake on range where the snow was blown off lost weight. Sheep will cease feeding on the cotton seed cake naturally in the spring, with the coming of the warm weather and green grass. Two lots of range ewes, one fed straight hay at the rate of five pounds per sheep and the other lot fed two pounds of hay and 1 1-2 ounces of cotton seed nut cake, showed the followed interesting results: The ewes fed the cotton seed cake and hay ration sheared 2 pounds more wool apiece and produced 8 per cent more lambs than those fed the hay straight.

Calf Scours

This Treatment Is Saving Many Calves

Scouring calves indicate a germ infection that is likely to run through your entire herd with serious losses.

The loss of one calf is bad enough, but nothing compared to your loss when the infection spreads, as it will unless checked. Then your year's work in building up your herd is wasted and your profits lost.

Our method of handling calves will promptly stop scours and finally banish it from the premises. One good calf saved will repay the expense of protecting your stock for a long time against the disease. This plan is simple and practical.

Our germicide and disinfectant is especially adapted to this work. It is called Bacili-Kil (B-K for short). The remarkable germ-killing strength of B-K is plainly marked and guaranteed on every package. B-K contains no poison, acid or oil. When used internally it destroys germs, heals inflamed membranes, relieves irritation, restores healthy action. B-K may be given freely in the milk and drinking water.

B-K is convenient. Just add water as directed, and you have your treatment for calves, bulls and cows and also your disinfectant for general use.

B-K is used so successfully by leading breeders that it is now sold over the entire world and the demand for it has increased five hundred per cent in three years. A well-known breeder of registered stock says:

"We found vaccines of no value is stopping calf scours, but the prompt, efficient treatment with B-K checked the trouble quickly and saved us the loss of many valuable calves."

Clean and clear as water.



Awarded Gold Medal Pan.-Pac. Expo.

B-K is sold by dairy and farm supply houses, druggists, general stores, etc., everywhere. Dealers wanted in every town.

Write us for more evidence from users and for our bulletin No. 136, "How to Save Every Calf."

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Hornet an Ancient Insect.

The hornet is a well-known insect even now in Palestine. Many of the Canaanites, as described in the Bible in Exodus 23:28; Deuteronomy 7:20; Joshua 24-12, were driven out before Israel by means of this insect.

Book of Esther.

The book of Esther is read through by the Jews in their synagogues at the feast of Purim. It has often been remarked as a peculiarity of the book that the name of God does not occur in it.

The Pacific Northwest Shorthorn Breeders' Association

Annual Fall Sales

At Portland Union Stock Yards

November 22, 1917

During the Pacific International Show 40 head of high class **females** and 30 choice **bulls** have been selected for this sale from the leading Shorthorn breeders of the Northwest.

At Lewiston, Idaho, November 13, 1917

During the Northwest Live Stock Show 30 head of choice young **females** and 30 head of grand young rugged bulls have been selected for this sale. Particulars of the different consignments will be given in the following issues.

For Catalogues apply

FRANK BROWN, Carlton, Oregon

Sales Manager

Breeders' Department

JERSEY CATTLE

FOR SALE
High-Class Registered Jerseys

I will sell NINE HEIFERS and SIX COWS, the latter soon to FRESHEN. My herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Am selling this CARLOAD for purposes of reducing my HERD.

Correspondence Solicited.

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Jersey Home Dairy
FOR SALE. BULL READY FOR SERVICE.

Sire Oxford You'll Do Jr. Sire of 4 R. of M. daughters, averaging 415 lbs. 7 oz. butter, at 2 yrs. 1 mo. He by Oxford You'll Do, grand champion as best bull with 5 daughters, also sire of grand champion cow in class of (76 entries), at the Royal Show, and is sire of 30 R. of M. daughters, including You'll Do's Favorite, 964 lbs. 13 oz. butter. Dam Creoles Belinda, of the Governor Marigold line of breeding. ERICKSON BROS., North Yakima

MERIDIAN DAIRY AND FRUIT FARM.

Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams.

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Young Guernsey Bull

HOPE'S REEDY OF ORCAS ISLAND No. 43788 of advanced registry and imported blood. The best individual we have ever offered.

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Young stock of both sexes by Langwater Emigrant (one of the best bred May Rose bulls) and imp. Ivy's Masterpiece, out of high producing cows.

MIDDLEDALE FARMS, Goshen, Ore.

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Dr. Park Weed Willis, Owner.

Redmond, Wash.

FAIRVIEW FARM.

Breeders of high class registered and grade Guernseys.

A. J. SINNES.

Route 5. Mt. Vernon, Wash.

ABERDEEN ANGUS

Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the breed.

At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

Congdon & Battles
Otto V. Battles, Mgr.
North Yakima, Wash.

STOCK FOR SALE.
We breed highest type Aberdeen Angus.
A. H. EAGLESON & SONS.
Boise, Idaho.

HOLSTEIN CATTLE

Established 1887—100 in Herd.
REGISTERED HOLSTEIN CATTLE.

As I wish to reduce my herd I am offering the blood of such bulls as King Segis Pontiac 13th, 30.39 lbs. breeding, 4.25 per cent fat; Iowana Rochdale Korndyke, 26 lb. breeding, and Prince Segis Korndyke De Kol, 31.41 lbs. breeding.

LAKE SIDE STOCK FARM.
P. A. FRAKES, Scappoose, Ore.

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

Waterloo Holstein Farm

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje	King Segius 10th Segius Walker Pietertje 2d

C. F. JENNESS, Meridian, Idaho.

Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.

Young Holstein Bulls

Out of A. R. O. dams and sired by Chimacum King Segis, whose dam and granddam average 30.98 lbs. butter in 7 days. Very reasonable.

FRANK W. CONNELL, Hillsboro, Ore.

LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

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YOUNG HOLSTEIN BULLS

Ready for light service; sired by Wapato Bellevewere Colantha Boy and out of heavy milking dams.

E. P. SAWTELL. Independence, Wash.

REGISTERED HOLSTEINS

Bull calves for sale with good A. R. O. backing.

BEEBE BROS., R. F. D. 2, Rupert, Idaho.

HOLSTEINS

Well bred young bulls for sale.
THOS. CARMICHAEL, Gaston, Ore.

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of exceptional breeding. Prize winners Southern Idaho Fair. Prices within reason to farmers. Write for descriptions.
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BULL RANCH

Registered Hereford cattle.
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Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

THEO. BRUGGER, Route 3, Gresham, Ore.

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REGISTERED PERCHERON HORSES.

E. O. WALTER, AUCTIONEER.

Walter Bros.,
Buhl and Filer, Idaho.



Imported and American Bred
Percheron, Shire and Belgian Stallions

They are of the very best breeding obtainable and are guaranteed to be breeders. They will be sold at very reasonable prices.

If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to

WM. T. TRACY, Kennewick, Wash.

When you write to advertisers, be sure to say that you saw their advertisement in this paper.

SHORTHORN CATTLE

SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

R. E. BOYCE, Baker, Ore.

Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN, Wapato, Wash.

Hercules Shorthorns

For particulars write
DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

CEDARHURST FARM

SHORTHORNS.

Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

JOE TURNER, Meyers Falls, Wash.

H. H. Schildman

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.

Filer, Idaho.

Shorthorn Cattle

SHIRE HORSES.
DR. G. E. NOBLE, Boise, Idaho.

DUROC-JERSEY SWINE

DUROC JERSEY
Gilts and Boars

I am booking orders for fall weanling pigs for October and November delivery. Can furnish them singly or in unrelated pairs or trios. Special prices to members of boys' and girls' pig clubs. An exceptional strain of Durocs, carrying the best blood lines found in the northwest. Have been prize winners wherever shown.

Chas. G. Sprong, Grandview, Wn.

Hillcrest Duroc Jerseys

For immediate sale:
1 11-mo. gilt, bred to farrow Oct. 3d, $60.
1 10-mo. gilt, to farrow Nov. 8, $50.
3-month pigs, $25.
Extra fine stock, combining the blood of noted show winners.

R. P. Camp, Ione, Wash.

Prolific, Profitable Durocs

Pigs from Champion Sow, bred by Exhibitor of the state of Washington, and other blue-ribbon sows, headed by the great 900-lb. boar, Red Dandy, 159453. Choice boars and gilts for sale from these prize-winning sows.

JNO. B. PETERSON, Mountbourne, Wash.

Young Duroc Boars

Several fine 10-week-old boars out of registered sire and dam, farrowed in large litter; 80 per cent raised. $20.00 each.

M. A. REESE. Bellevue, Wash.

Golden Rod Won Again

With this great boar's offspring we were among the largest money winners on Duroc-Jerseys of any exhibitors at Oregon State Fair, 1917. Breeding stock of both sexes for sale.

DOERFLER BROS., SILVERTON, ORE.

PREMIUM HERD

Spring pigs from champion and first prize sows at Ontario, Ore., and Gem State and Idaho State fairs.

C. H. KIRKPATRICK. Parma, Ida.

OTTO'S DUROC JERSEYS.

Founded on the basis of making Duroc history in Idaho. Won 4 championships and two grand championships at Southern Idaho State Fair.

L. S. OTTO, Filer, Idaho.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Pullman, Wash.

AVONDALE STOCK FARM.

Registered Duroc Jersey hogs. Inspection invited. Correspondence solicited.

H. C. POLLY, Route 3, Burley, Idaho.

DUROC-JERSEY SWINE

IDAHO CHAMPION DUROCS—At state fair of Idaho our Durocs won more prizes than all other exhibitors combined. Stock of all ages for sale.
Richards Live Stock Co., Virginia, Idaho.

POLAND CHINA SWINE

Locust Lawn Herd

Booking orders for strictly big type Poland China spring boars, sired by Overlook, 1st and senior champion, Idaho State Fair and Gem State Fair, 1916; weight 820 lbs.; out of the 1st, 2d and 4th prize sows at Idaho State Fair, 1916, in strongest competition; satisfaction guaranteed.

W. F. HOWARD & SONS, Parma, Idaho.

QUALITY AND UTILITY OUR HOBBY.
PURE BRED POLAND CHINAS.

Quick growing, easy feeding breeding stock, both spring and fall farrow, for sale.
FRANK NEEDHAM, Eugene, Ore.

Pure-Bred Poland China Fall Gilts

will be shipped c. o. d., subject to your approval. Write to
HERBERT WILLARD. Dayton, Ore.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.
RAY J. FOX. Lyons, Ore.

Registered, Big Type

Poland China pigs for sale.

JOHN BUSHAW, R. 2, Anacortes, Wash.

BIG TYPE POLAND CHINAS

Herd headed by Sammy (79,833). Correspondence Solicited.
Fruitland Stock Farm, C. Royston, Mgr.
Payette or Fruitland, Idaho.

GREENLEAF STOCK RANCH.

Big type Poland Chinas, either sex, for sale at all times.
Wilson Bros., A. L. Wilson, Mgr.
Greenleaf, Idaho.

BERKSHIRE SWINE

Kintyre Farm Berkshires

Exceptionally fine breeding stock for sale at reasonable prices.

CLARK BROS., R. F. D. 2, Prosser, Wn.

Early Spring Pigs

Well grown, best quality, sired by a son of the great Laurel Champion and out of prize sows.

GEO. BERTRAND, Olequa, Wash.

FOR SALE.

2 Berkshire boars, age 6 mo., $25 each.
2 Berkshire gilts, age 6 mo., $25 each.
1 Holstein bull calf, age 5 mo., $100.
2 Shropshire lamb bucks, age 7 mo., $25 each. Every animal eligible for registry.
G. Z. ICKES SR., R. F. D. 1, Palouse, Wash.

RIVERBY ORCHARD BERKSHIRES

won 12 out of 15 first prizes at the Washington State Fair, 1916. A few outstanding boars for sale at reasonable prices.
D. C. BUNN, Prosser, Wash.

HAMPSHIRE SWINE

HAMPSHIRE SWINE

Choice stock of all ages at bargain prices.
HIGHLAND FARM, Box 22, Underwood, Wn.

YORKSHIRE SWINE

BROADMEAD Farm

Large Yorkshire Swine.

J. A. SCOLLARD, R. D. 1., Chehalis, Wn.

SHEEP

Registered Sheep

Rams—Hampshire, Shropshire, Lincoln and Cotswold. We deal in pure blood registered rams. Grade ewes, one, two and three years old.

GRANT B. DIMICK, Oregon City, Ore.

20 Oxford Down Rams 20

Yearlings and ram lambs; will make special price on the lot. All stock registered. No ewes for sale.

C. P. Kizer, Harrisburg, Ore.

RAMS

Hampshire and Southdown. Also large Yorkshire pigs. All stock registered.
J. G. S. HUBBARD, Monroe, Ore.

When you write to advertisers be sure to state that you saw their advertisement in this paper.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Oct. 15.—Conditions just right for drying out the corn crop had a bearish influence today on the corn market. Prices closed nervous, 1-8 to 1c net lower, with December $1.12 5-8 to $1.12 3-4, and May $1.08 1-4 @1.08 3-8 to $1.08 1-2. Oats finished 1-4 to 1-2c down. Provisions gained 15 to 57c.

Oats gave way with corn after it seemed evident a lull had developed in export business.

Packers' buying lifted provisions. Much reduced stocks in warehouses were looked upon as certain to be disclosed by the semi-monthly statement this afternoon, and the belief was later justified. Lower quotations on hogs failed to attract notice.

Cash Quotations.

CHICAGO, Oct. 15.—Corn—No. 2 yellow, $1.94½; No. 3 yellow, $1.94; No. 4 yellow, nominal.

Oats—No. 3 white, 59¼@60¼c; standard, 59½@60½c.

Rye—No. 2, $1.79@1.80.

Barley, $1.20@1.35.

Timothy, nominal. Clover, $17@23.

Chicago Futures—Close.

Corn—December, $1.12⅝; May, $1.08¼.

Oats—December, 58¼c; May, 59⅜c.

Pork—October, $42; January, $40.50.

Lard—November, $23.37; January, $21.30.

Ribs—October, $27.12; January, $21.50.

Pacific Northwest Grain.

PORTLAND, Ore., Oct. 15.—Grain futures, bids: November oats, $48.50; feed barley, $48.50; brewing barley, $50. Eastern oats and corn in bulk, bids: Oats—No. 3 white October, $48; No. 3 clipped, $43. Corn—No. 3 yellow, January, $50; No. 3 mixed, $39. Oats—No. 3 November, $42; clipped, 43. Corn—Yellow, February, $49.50; mixed $48.50.

Minneapolis Grain.

MINNEAPOLIS, Oct. 15.—Wheat—Receipts, 640 cars, compared with 854 a year ago.

Corn—No. 3 yellow, $1.87@1.88.

Oats—No. 3 white, 57¼@58¼c.

Flax, $3.01½.

Flour—Unchanged. Shipments, 77,626 barrels.

Rye, $1.77@1.78½.

Barley, $1.11@1.32.

Bran $29.50@30.

San Francisco Grain.

SAN FRANCISCO, Oct. 15.—Barley—December, $2.39⅜; May, $2.39½ bid, $2.42⅞ asked.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1, up to Saturday night, for 1917-18 and 1916-17, were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1917-18	1138	410	91	1664
1916-17	1865	406	106	1171
Portland—				
1917-18	1566	423	68	510
1916-17	1879	708	52	487
Total—				
1917-18	2704	833	159	2174
1916-17	3744	1114	158	1658

Live Stock Quotations.

At Omaha.

OMAHA, Oct. 15.—Hogs—Receipts, 3000. Market, 25c lower. Heavy, $17.20@17.40; mixed, $17.25@17.35; light, 17.40@17.75; pigs, $16@17; bulk of sales, $17.25@17.35.

Cattle—Receipts, 14,000; steady. Native steers, $10.50@16.50; cows and heifers, $6.50@10; western steers, $8.50@13.50; Texas steers, $7.50@10.50; cows and heifers, $6@8.75; canners, $5@6; stockers and feeders, $6.50@13.50; calves, $8@12.50; bulks, stags, etc., $6.75@7.75.

Sheep—Receipts, 30,000; steady to lower. Yearlings, $12@13.50; wethers, $11@12 50; ewes, $10@11.50; lambs, $17.50@17.75.

At Portland.

PORTLAND, Ore., Oct. 15.—Cattle—Steers higher; rest steady. Receipts, 1882. Best beef steers, $9.50@10.25; good beef steers, $8@9.25; best beef cows, $7@7.75; ordinary to good cows, $4@6 75; best heifers, $7@8; bulls, $4@6.75; calves, $7@9.50; stockers and feeder steers, $4@7.25.

Hogs steady, but indications are for a 25-cent decline. Receipts, 2107. Prime light, $17.25@17.50; prime heavy, $17.10@17.25; pigs, $14.75@15.75; bulk, $17.25@17.50.

Sheep steady; receipts, 906. Western lambs $13.50@14; valley lambs, $12.75@13 50; yearlings, $11.75@12.25; wethers, $11.50@12.25; ewes, $8.50@10.50.

Spokane Stock Yards Monday.

Hogs—Receipts 216, market 50 cents lower. Prime light, $17.60@17.75; prime heavy, $17.60@17.75; pigs, $15.50@16.75; stockers and feeders, $12@14.50; bulk of sales, $17.65@17.75.

Cattle—Receipts 137, steady. Best beef steers, $9@9.50; good steers, $7.25@8 25; best cows, $6.50@7.25; good cows, $5.25@6.25; common cows, $3.50@5; best heifers, $7@7.75; bulls, $5@6.25; calves, $7@8.25; stocker and feeder steers, $5@7.25.

Sheep—Receipts 243, market steady. Prime lambs, $13.25@14; good lambs, $12@12.50; prime yearlings, $11.50@12.50; prime wethers, $11.25@12.25; best mutton ewes, $8.50@10.

At Chicago.

CHICAGO, Oct. 15.—Hogs—Receipts, 24,000; slow, 10c to 15c under Saturday's average. Bulk, $17.20@18.35; slight, $18.35@18.40; mixed, $16.75@18.50; heavy, $16.50@18.50; rough, $16.65@16.85; pigs, $11.75@15.75.

Cattle—Receipts, 43,000. Weak. Native steers, $7@17.40; western steers, $6.15@14.25; stockers and feeders, $6.20@11.50; cows and heifers, $5@12.15; calves, $9.50@16.

Sheep—Receipts, 33,000; slow. Wethers, $9@12.80; lambs, $12.75@17.90.

Seattle Wheat.

SEATTLE, Oct. 13.—If the government will make one more concession to the wheat interests of Puget Sound it will have done much toward easing the movement of grain to market and in preventing a threatened congestion at tide water terminals on Puget Sound. Grain dealers here feel that they will be compelled to ask the government to modify its order for recognizing wheat only at Puget Sound terminals and honor warehouse receipts in the country. As this would involve complications in inspection and force the employment of a horde of inspectors, it is not yet clearly seen how the plan can be inaugurated.

Food Administrator M. H. Houser yesterday advised A. H. Hankerson, Seattle representative of the food administration corporation regarding sacking and cleaning, as follows: "Advise all concerned that where sacked wheat has been run in there and bulked that we will take it as bulk wheat only, bags, if necessary being for the account of the seller; also, the cost of bulking it. In other words, we will not take it on the sack basis and be responsible for the bags where it has been bulked. We will not buy wheat where the grade has been altered by cleaning. We want wheat just as it comes from the country, and not otherwise. We may need some graded at a later time."

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New focal potatoes, $1.75@2 cwt; sweet potatoes, $3.50 cwt.

Apples—Large eating apples, $1.25 box; cooking apples, $1.50 box.

Butter—Blanchard cartons, 49c lb; Medo-Maid, 49c lb; Cascade, 49c lb; Gold Leaf, 49c lb; Better Butter, 49c lb; Attalia, 49c lb; Diadem, 49c lb; Hazelwood, 49c lb; Solid Pack, 48@49c lb; Jersey Belle, 47c lb; Peerless, 45@46c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 27c lb; Hazelwood Young America, 28c lb; Wisconsin limburger, 29@30c lb; brick cheese, 33c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—Fresh local ranch eggs, $13 case; fresh eastern eggs, $13 case.

Live Poultry—Hens, 13c lb; broilers, 20c lb; old roosters, 8c; ducks, 12½c lb; geese, 10c; turkeys, 20@22c.

Dressed Poultry—Hens, 18c lb; broilers, 28c lb; old roosters, 12½c; ducks, 18@20c; geese, 16c; turkeys, 25@30c.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 13c; salted cured, 16c; green bulls and stags, 11c; salted cured, 13c; kip, 15 lbs. to 25 lbs, 22c; calf skins up to 15 lbs, 16c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 7 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $1@2 each; dry horse hides, $2.50@4 each.

The Wool Market.

BOSTON, Oct. 12.—The Commercial Bulletin will say tomorrow:

"While less activity was noted in the Boston market during the last week, there was a fair volume of business involving practically everything in the shape of wool, at very firm prices.

"With the announcement officially made that part of the 45,000 bales promised for America out of Australia has been shipped and the balance is about to be shipped, it will be interesting to watch the course of the future market, especially in view of the 225,000 bales additional that have been recently promised. Manufacturers are still receiving government orders and civilian demand is reported only fair."

Scoured basis:

Texas—Fine 12 months, $1.68@1.72; fine eight months, $1.55@1.60.

California—Northern, $1.70@1.75; middle county, $1.45@1.50; southern, $1.35@1.40.

Territory—Fine staple, $1.80@1.82; halfblood combing, $1.70@1.75; three-eighths blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled, extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

Butter and Eggs.

PORTLAND, Oct. 13.—Butter weak. City creamery prints, 48c; cartons, 49c.

ELGIN, Ill., Oct. 13.—Butter, 25 tubs sold today at 43 1-2c per pound. No other offers received.

SAN FRANCISCO, Oct. 13.—Eggs—Fresh extras, 52c; first pullets, 43c.

Portland Market.

PORTLAND, Ore., Oct. 15.—The wool movement is assuming larger proportions. In the last week upwards of 1,500,000 pounds that were stored in Portland warehouses were sold to local and eastern buyers. Prices ranged from 40 to 65 cents with the bulk of sales at 55 to 57 cents, or on a scoured basis of $1.65@1.78. The wools ran mainly to half blood, fine medium and fine, little of it being lower than half blood. Wool men estimate its shrinkage at 65 to 78 per cent. Sellers appear to have come to the conclusion that wool will go no higher this season. They have been influenced by the fact that the government is taking over wool on the basis of $1.40@1.65 clean, and also because the movement of Australian wool to the United States has started.

The local butter market is in a peculiar condition. Although the supply is increasing the city creameries have boosted the price of butter fat from 49 up to 53 cents. At the same time they have refused to buy country creamery cubes, getting eastern butter in place of them. With the country creamery cubes piling up, the agents of the latter have secured the mayor's permission to use the municipal retail store, where they will retail the butter at cost. This has made it impossible for the Portland creamery men to raise the price of prints, which they evidently intended to do, yet they are voluntarily paying an excessive price for fat.

Egg receipts are now at the minimum and an increased quantity of storage stock is being used.

The local demand for poultry is poor and only limited quantities can now be shipped to Seattle and other northern markets. Dressed meats are steady, but jobbers look for lower pork prices in the near future.

There is no trade in hops at the present time. Eastern buyers are not interested, nor are growers here offering to sell. Unsold stocks in Oregon and Washington are estimated at only 5200 bales.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $49 per ton.

Millstuffs—Bran, $30 per ton; shorts, $33.

Barley—No. 1 feed, $49.50; brewing, $51; rolled, $55@57.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch, case counts, 48@49c per dozen; candled, 52@55.

Poultry — Hens, 15@18c; ducks, 18@20c; turkeys, live, 20@22c; geese, 10@11c.

Butter—City creamery, prints, 48@49c per pound; cubes, extras, 45 1-2c.

Cheese — Tillamook triplets, 26c; Young Americas, 27c.

Dressed meats — Veal, 15 1-2@16c; pork, 21½@22c.

Hops—1916, 25c; 1917 crop, 40c.

Potatoes—New, 1 1-2@2c per lb.

Wool—Eastern Oregon, 40@65c; valley, 58@60c.

Beans — California small white, 14 1-2c; large white, 14 1-4c per pound.

Seattle Market.

SEATTLE, Oct. 15.—Inactivity in the potato market is due to fears of large operators that the government will fix prices, and that all who have bought heavily for future trading would be caught for some vigorous losses. There is a reasonably fair local demand for both eastern Washington bakers and Puget Sound stock, and the feeling is that the market should decline $5 per ton to fit in with the sentiment of retailers, but growers have shown no sign of yielding.

Poultry prices will remain unchanged for next week, with the exception of heavy springs, which will sell off a cent.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 55@57c per dozen; pullets, 42c dozen.

Poultry—Live hens, fat, over 4 lbs., 21c per lb.; 4 lbs. and under, 16@19c; old roosters, 12c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 12c per lb.; springs, live, 23c per lb.

Butterfat—54c per lb.; dairy butter, 35c.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb; heifers, 6@8c per lb.

Hogs—Light, 15@16c per lb.; heavy, 12@13c per lb.

Veal—Fancy light, 14@16c per lb.; heavy, 12@13c per lb.

Hides—Salted, 17c per lb.; flint-dry hides, 27c per lb.; salt kip, 18c per lb.; green hides, 14c per lb.; green calf, 25c per lb.; dry calf (under 6 lbs.), 27c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 11c per lb.; dry full wool sheep pelts, 36@38c per lb.; salt bulls, 14c per lb.

Wool—Puget sound, 52c per lb.

BILL ADAMS



of Fremont Nebraska pays the

Highest Prices for Raw Furs

Get your name on Bill's mailing list and you will receive market reports throughout the season. This means $ to you.

Write for Price List No. 107.

Bill Adams - The Fur Man

Fremont, Neb.

F. C. Taylor FUR CO. ST. LOUIS

HELPS YOU TRAP FUR ANIMALS

Trappers will make big money this year. Furs are in demand at high prices—Coon, Mink, Opossum, Skunk, Muskrat and other kinds are plentiful. Many animals are good food. U. S. approved recipes free.



FUR MONEY for YOU



Help Book Free

Tells how to trap; traps and baits to use; how to prepare skins so as to get highest prices, and describes latest trapping devices, including the new SMOKE TORPEDO. Shows pictures of all animals in colors, and supply catalog. ALL FREE—WRITE TODAY.

F. C. Taylor Fur Co 890 Fur Exchange Bldg., St. Louis, Mo.



100,000 Second-Hand Grain and Potato Sacks for Sale

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

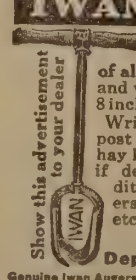


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Get what they are worth this year! Deal with a Home-Western House, that Grades Liberally, Remits Quickly, and has Ample Capital. (Ask your bank). Try us. Valuable Illustrated Price-List and Tags for the asking. Get your name on our Season's Mailing List. Trappers' Guide on request. Big money trapping this year. Money-saving Tanning Catalogue sent free. Harness Leather exchanged for Hides. This is the House you've been looking for. Write

Lincoln Hide & Fur Co. 1038 Q St., Lincoln, Neb.

IWAN POST & WELL AUGER



Show this advertisement to your dealer

has sharp blades of the best steel. Fastest of all augers. For post holes and wells. Sizes 3 to 16 inches; 8 inch $2.25, freight extra.

Write for booklet about Iwan post hole diggers, sickle edge hay knives ($1.75 prepaid P.P. if dealer will not sell you), ditching spades, drain cleaners, tile hooks, chimney tops, etc.

IWAN BROS.
Dept. G, South Bend, Ind.

With Straight Edge

Genuine Iwan Augers and hay knives wholesaled by: Whiton Hdw. Co., Seattle; Morse Hdw. Co., Bellingham; Hunt & Mottet Co., Tacoma; Holley-Mason Hdw. Co., Spokane, Wash.

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

Marketing Crops---a Warning

By A. B. HALLOWAY.

Now that there is a prospect for the farmer to realize a competence for his crops and so rise from the dead level which has held him for years because of low prices, there is a fatal error he may still commit, that in getting the cash. The country is as full of beats who come to buy of the farmer as it is in any other craft. Speaking from bitter experience, I can now say there is one safe way to be safe, if you have the goods to sell. That way is to demand the cash before you release the car, or if in smaller lots, the goods. I warn you to make no exception.

The Way to Do It.

Say to the buyer right out and out: Now, I must treat you buyers all alike. I can sell you the goods if you can pay for them. When I am loading these potatoes or oats or wheat or what not, I want you, Mr. buyer, to have your inspector—remember I say inspector—here to pass upon the grades and to accept the goods before I release them, and I want the money.

This game of getting the goods before payment, cost the writer several hundred dollars, a few months back. Other farmers were warned and two cars were saved grain by the warning.

How They Work It.

The ordinary "gag," if I may call it that, is for the skinning buyer to get possession of the farmers' hard earned crop, take it to the city, then regrade it and kick on the grade, go broke on the sale by speculation, or run behind by high living and become compelled to skin patrons.

Now, no two graders grade exactly alike. So there is no hope in trusting any one of them. Lawsuits are of no avail. You may as well give away the crop outright. Not one in a dozen speculators have any soul for the farmer. One ranch in Grays Harbor county lost two cars of hay not many months ago by the gag game. One of the buyers went broke, the other claimed the hay was wet, damaged, etc. Another lost two cars of potatoes and went to financial ruin. The story can not be given space for print, but the way is

To Demand Cash!

and you will weed out the green-booted, unsound produce companies for they have not the money and they borrow on the farmers' car as soon as they get it into the city. There they fatten upon the product while the farmer and his poor wife and children wait a sad wait till they find the dregs of an experience. Again, I say, demand the cash. This will not hurt a sound buyer, and the unsound produce faker, located in his little terantula hut, is the one all of us want to get rid of. The rascal generally pays more—agrees to pay more—than the sound man because he often steals more or less of the crop. He can afford to pay any price agreed to, so that he will not raise suspicion, and fail to get the goods. One farmer lost potatoes because he thought an ignorant buyer was honest because he was ignorant. It proved that the buyer was dishonest because of that very fact. Cities like Chicago turn out a bunch of fakers every year who come to the Sound cities and are despised by legitimate buyers there, but nothing can be done. These eastern crooks take it for granted that they are not known and that the farmers here are not up to caution in sales as they are east.

Recently, in April, two cars of potatoes were loaded, even under this inspector plan and came near being a goner. The terms were cash!

Cash, f. o. b. station, and pay at the bank the next morning before the cars left the station. To the bank the inspector went with the farmer. But the banker said he did not know the buyer and that he could not accept the freight receipt for a car of potatoes because the security was not sufficient, etc, etc. "Well, well, this will be all right," says the inspector to the farmer. "We can send you a draft from our Sound bank just as well, you know, etc, etc., just as soon as I get into the city." (Right here it is up to you, Mr. Farmer. Speak right out. And this farmer did.) He said: "Well, I think it not best that I release the cars until you settle with me." This farmer had not allowed the buyer to bill out the cars in his own name, but in any case the cars could have been held, and they were held. "Oh, well, oh, well," said the buyer, "we will let them stand and I will send you the draft at once when I get in." What happened? Those cars were not moved for some 10 days and the buyer paid $116 demurrage. The potatoes were shipped east and the money for them, it is guessed, had to come from some eastern point to pay for them. But one farmer got his money and something like $75 per ton for his potaotes. This was the highest price any farmer got in the county for a car of potatoes last year, notwithstanding the noise that farmers were getting $100 per ton for this crop.

Settling Disputes

Between the Buyers and Sellers

Word comes from Asher Hobson, Washington state director of the office of farm markets, that a movement is on foot to facilitate the settlement of disputes between buyers and sellers of farm products. Mr. Hobson says:

"It is the duty of the office of farm markets to investigate disputes which arise between buyers and sellers of farm produce. In most cases the point of issue between buyers and sellers is that of price. The reasonableness or unreasonableness of a price can not be determined unless the quality of the product be known. Since the complaints reach the office of farm markets long after the products in question have been disposed of, it is a difficult task to definitely determine the quality of the commodity or commodities at the time they reached the market.

"In view of this fact, the office of farm markets has made cooperative arrangements with the state department of agriculture, whereby horticultural inspectors will inspect shipments of farm products upon their arrival at any market in the state of Washington. Inspection will be made only upon request of the buyer or seller of the produce in question. Upon inspection a certificate of quality will be furnished each of the contracting parties. Then should a dispute arise, the office of farm markets, with quality known, is better able to determine the question of a reasonable price. This service should be of advantage to both the shipper and receiver.

"Application blanks with directions for their use may be secured from any state horticultural inspector, or from the office of farm markets, direct. There will be no charge for this inspection service except in case travelling expenses are incurred by inspector. In case travelling expenses are incurred by an inspector carrying on the work, the expenses must be borne by the applicant. It must be remembered that the applicant for inspection should not wait until a disagreement arises before having his goods inspected."

Want Ads

HELP WANTED—MALE 3

WANTED—MEN AT ONCE TO LEARN automobile driving and repairing in our shop. Have many jobs for our students. 215 Granite block, Spokane, Wash.

CAPABLE, RELIABLE BOY FOR BOARD, $10 mo.; 4 cows to milk; drive 3 miles to school. W. C. Atherton, Cusick, Wash.

EDUCATIONAL 45

POSITIONS GUARANTEED GRADUATES OF BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog free.

QUALIFY FOR ONE OF THE THOUsands of civil service and government positions now open. Write for literature. Creekmur's Business College, Moscow, Idaho.

TEACHERS' AGENCIES 46

SCHOOL CLERKS: WIRE OUR EXPENSE. Hazard Teachers' Agcy., Spokane.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Notice advance in prices.

Largest factory in the west selling direct from mill to consumer.

We sell anybody, ship anywhere and guarantee safe delivery.

Send for our large illustrated catalog No. 27, mailed postpaid, without charge, on request.

5 cross panel doors $1.92
Cottage front glass doors $3.50
Cottage windows; large bottom glass, 40x40; transom glass. 40x16 ..... $4.05
Spruce flour bins, 16x26x16 ..... $1.50
Screen doors, 2-8x6-8, heavy galv. wire $1.50

See our prices on Frames, Moldings, Millwork, Builders' Hardware, Prepared Roofing, Plaster Board, etc.

O. B. WILLIAMS CO.
1943 FIRST AVE. SO., SEATTLE, WN

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave. So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all serts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS WANTED 63

STRAINED HONEY WANTED. WRITE US the quantity you have to offer. Commercial Creamery Co., Spokane, Wn.

AUCTIONEERS 75

N. W. CAIRNS, PULLMAN, WASH. AN honest auctioneer. Investigate me.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES save labor, and are carried in stock by HIGGINS MACHINERY COMPANY, 312 FIRST AVE. S., SEATTLE. Write for Catalogue.

AVIATION 115

DENINE AIRCRAFT CO., BOX 2232 SPOkane, Wash. Flying taught, skilled help wanted. Investigate. Splendid opportunity.

STOVE REPAIRING 126

MYER S. RUBENS STOVE & FURNACE REpair Works; welding. W1009 1st., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

WASH. (D. C.) PAT. ATTY. SEE AD IN Polk's. C. H. Crawford, Spokane.

LIVE STOCK 177

FOR SALE—7 HEAD PUREBRED PERcherons, all black; 6 mares and the best 2-year-old stud colt in the country. Write me. J. S. Graves, Newberg, Ore.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

JOB PRINTING 372

OUR PRINTING WILL GET RESULTS for you. It will help to sell your goods and earn you profits. Send for samples and price list. G. C. Gallagher, 436 Sacramento st., San Francisco, Cal.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

OPTICIANS 462

EYES EXAMINED; GLASSES FITTED; perfect results guaranteed. Broken glasses repaired by mail. Postage paid. Dr. Sletto, Owl Drug Store, Spokane, Wn.

MONUMENTS 510

GET MY PRICES ON MONUMENTS BEfore placing your order. I can save you money. Geo. H. Moody, Moscow, Idaho.

ARCHITECTS 558

BUILDING PLANS AND ESTIMATES. L. L. Rand, The Rookery, Spokane, Wash.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

VETCH, CLOVER AND FIELD SEEDS.

We carry a complete line of grasses, wheat, oats, barley, speltz and other seeds too numerous to mention. Our prices are right, and will be glad to send samples and quote prices.

CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.

BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

RECLEANED VETCH SEED, 4¼C PER pound, f. o. b. station. Large or small orders appreciated. Oak Ridge Farm, Turner, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

HOMEST'DS, RELINQ'M'TS 642

FOR SALE — HOMESTEAD LOCATION, Stevens county, near store, school, state road; cabin and other improvements; partly irrigable from trout stream on place; adjoining relinquishments recently sold for twice amount asked. You can enter now and move on next spring. Robinson, S1112 Walnut; Main 4683. Spokane, Wash.

FARM LANDS—FOR SALE 651

WHEAT LAND BARGAIN—640 ACRES, all under cultivation; one-half summerfallowed, ready for crop; all fenced; good well, small house, barn for 20 horses, wheat granaries and other outbuildings. Price $25 per acre. Terms $4500 cash, balance $1280 per year, 6 per cent. Owner called to war, is reason for selling. Write H. D. McMillen, Ephrata, Wash.

$30 AN ACRE WILL BUY A SPLENDID 200-acre farm, 3 miles from railroad town; high school on the land; fenced to four fields; over 100 acres in cultivation; good buildings. Long time on part. No trades. A. Z. Lucas, New Meadows, Idaho.

FOR LANDS IN HEART OF THE PAlouse write H. A. Malsed, Palouse, Wash.

GOVERNMENT LAND IN CAL. FREE book. Joseph Clark, Sacramento, Cal.

FARM LANDS—FOR SALE 651 Continued.

WHAT DO YOU WANT?

Perhaps you are desirous of changing your location from any one of a dozen various reasons. If so, it will pay you to investigate our section of country. Upon request we will mail you copy of our folder giving general information and if you desire information regarding special places, we will be glad to give it.

Our holdings are large and if you let us know what you want, more than likely we can show you something interesting, varying from raw cut-over lands, cordwood lands close to loading stations, to improved, running ranches.

Cordwood lands in most any sized tracts you want, varying in price from $12.50 per acre to $25 per acre, according to physical condition of land, class of soil and size of tract.

Cut-over lands from 40 acres up, on county roads, in good settlement, near schools, R. F. D., etc., from $15 to $30 per acre. Partially cleared from $20 to $40 per acre.

Running ranches from $50 to $75 per acre.

MILAN FARMS DEVELOPMENT CO.
1322 Old National Bank Bldg.,
or
ALLIN REALTY CO.
REALTORS.
403 W. Sprague Ave.
Phone Main 2750.
Spokane, Washington.

MONTANA DIVERSIFIED FARM, FULLY EQUIPPED.

800 acres in the very best part of the famous Shields River Valley of Montana; nearly all tillable land and about three-fourths in cultivation; fair set of buildings; 200 acres sowed to winter wheat, which is up in nice shape; about 50 acres in alfalfa; 50 inches of water sufficient to irrigate 50 acres of land; improvements consist of a 6-room house and fairly good barn; fine stream through the place and good spring. This place is fully equipped with stock, implements and machinery as follows: 12 head of good mares with foal and 4 sucking colts, 4 yearlings, about 20 head of cattle, lot of hogs, chickens, good tractor, binders, mowers, rake, hay equipment, etc. Personal property worth about $10,000. Is extra good land for raising winter wheat and can't be beat for stock and would not be offered for sale except for the reason that it is owned by three young men of draft age. One of them expects to be called in the very near future. Price for immediate action $55 per acre—$15,000 cash required.

HEGE & WATKINS CO.
715-16-17 PAULSEN BLDG., SPOKANE.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay. $2000 loan in improvements, or ready-made farms. Loans of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Alan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

THE FAMOUS WHEAT-GROWING DIStrict, northern Lincoln county; 2600 or 1320 acres, improved wheat or diversified ranch; spring water; dark loam soil, clay subsoil. Price $65 an acre. 390 acres, improved, in Latah county, Idaho, 6¼ miles from Moscow, 1¼ miles from electric station. Price $27,600. Farms of all sizes for sale, or exchanges made.
NORTHERN PACIFIC LAND EXCHANGE,
REALTORS.
ZIEGLER BUILDING,
SPOKANE, WASH.

DO YOU WANT A GOOD FARM?
We have it—something to suit you—large or small, improved or unimproved—with stock and machinery if you want it—in Wash., Idaho or Mont. Call or write and tell us what you want. HEGE & WATKINS, 717 Paulsen bldg. Spokane, Wn.

BIG LAND OPENING—6000 ACRES A1 farm land in Snohomish county, $25 per acre; 10 yearly payments. Canneries, factories, mills, plenty of labor. Opportunity of your life. Send for literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

J. A. PERKINS & CO., WHITMAN COUNty lands, Colfax, Wash.

FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

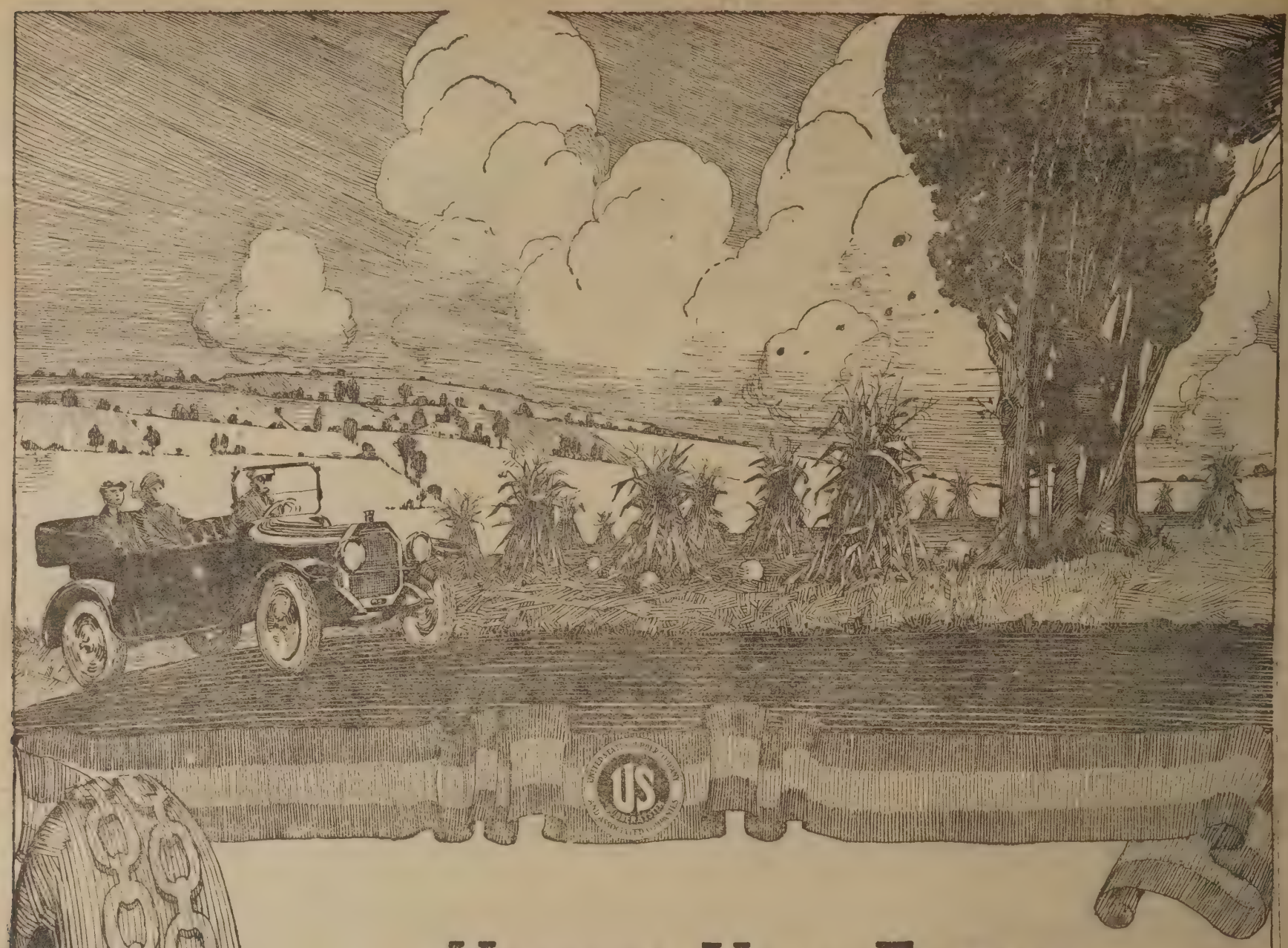
IRRIGATED LANDS—For Sale 663

IRRIGATED FARM LANDS.

ALFALFA LANDS, under government irrigation; abundant water; low altitude; rail and water transportation to coast markets; good schools, good roads; products alfalfa, corn, cream, hogs, honey, fruits, vegetables; long growing season; unimproved land $30 to $60 per acre; improved $100 to $250. Write for further information and literature. Dodd & Knapp, Hermiston, Ore.

TO EXCHANGE—REAL EST. 705

$20,000 WORTH OF CLOSE-IN FIRSTclass Spokane property to exchange for a good farm. W. M. Frost, 410 Chamber of Commerce bldg., Spokane, Wash.



Harvest Your Energy

as well as your crops! Your country's pressing needs demand that you soldiers of the soil guard your health. So, store up vitality for tomorrow's work. Get out the car—take the wife and youngsters out for a spin in the keen Autumn evening air. There's nothing like it for rest and recreation—nothing that will give you so much of that "get up and get at it" feeling when you wake up in the morning.

But you naturally want to get the greatest comfort and pleasure with the least tire trouble, don't you? Then, of course, you will equip your car with the famous *United States 'Chain' Tread Tires*—or the equally popular *'Usco' Tread.*

Either one is the tire of maximum quality, resiliency, long-life and anti-skid efficiency at minimum cost.

When you ride on *United States 'Chain'* or *'Usco' Treads*, you ride in comfort with economy one of the party.

United States Tires

Are Good Tires

'Nobby' 'Chain' 'Usco' 'Royal Cord' 'Plain'
A Tire for every need of price and use

United States Tire Company

1790 BROADWAY, NEW YORK

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 43. OCTOBER 25, 1917. WEEKLY.

Hoover Predicts Lower Prices for Food

Government Regulation Is Showing Good Results, but the Retailer Needs More Patriotism

"The food administration considers that, subject to cooperation of the farmers and retailers, the corner now has been turned in high prices and that most of the essential commodities should, one after another, continue to show reductions between now and the end of the year," says Herbert C. Hoover, national food administrator, in a formal statement just issued reviewing the food situation. He takes up several of the staple foods, showing the tendencies of prices under the regulations that are being promulgated by the food administration. Lack of patriotic cooperation on the part of the retail dealer is suggested as one of the principal reasons why greater reductions in the cost of necessities have not been made. His statement continues:

"The current prices at which flour is being sold at the mill door in jute bags vary somewhat with the locality and freight charges on wheat. Toledo showing the lowest prices at $10 for first patent and $9.70 for second patent; Minneapolis being $10.60 for first patent and $10.46 for second patent. This shows a large reduction under August prices.

Still Too High.

"The regulations on the distribution of wheat and the manufacture of flour were put into force the middle of September.

"The average retail price on first patents in 796 cities on October 13 was $13.77, or from $1.50 to $2 per barrel higher than is warranted by the price being made by the millers. In other words, the retail price has not wholly responded to the reductions made by the millers.

"The bean harvest this year is estimated by the department of agriculture at approximately 7,000,000 bushels in excess of last year or nearly double last year. Growers' associations in prominent bean producing states are holding beans for from 13 1-2 to 15 cents per pound, as against an average price realized by the grower last year of 8 cents per pound. There has been 100 per cent increase in the Manchurian bean crop, and it is now estimated at 2,000,000 tons. Owing to shipping shortage, practically the only outlet is to the United States, and these beans will flow into the American market from December on much below the prices now being demanded for American beans.

"The corn harvest this year is 600,000,000 to 700,000,000 bushels more than last year, and generally will be available about the end of November. The price of corn rose to $2.30 per bushel in July, and now stands at $1.90 per bushel in Chicago. New corn is quoted in Chicago at $1.13 per bushel for December, and indicates nearly a 40 per cent drop in the price of cornmeal when the new corn is generally available.

"The very large corn supplies from the new harvest, together with the larger supplies of barley, velvet beans, cottonseed, peanut and soy bean meal, all promise much cheaper cattle, hog and poultry feed, and will enable the production of beef, pork, poultry and dairy products at much lower level of cost to the farmer than today, and his earnings can be maintained with lower prices of products. The packing, cold storage and other manufacturing and wholesale distributors in these trades are in course of regulation.

Retailer Stubborn.

"Beef already shows some tendency toward reduction in wholesale prices, but these have not been so far reflected in the prices quoted by the retailer. The price of beef at the packer's door is 14 1-2 cents per pound, as compared with 16 cents in July, while the average retail prices of round steak in the cities is 31 cents per pound, against 27 cents per pound in July, thus showing that retail prices have increased while wholesale prices have decreased.

"We have a potato harvest of 59 per cent in excess of the crop of last year. The price at loading points varies from $1.50 to $2.80 per hundred pounds. The price, which is somewhat higher than at this period last year, is due to a tendency on the part of producers to hold the potatoes for higher prices than last year, despite the greatly increased crop and the temporary inability of railroads to furnish equipment sufficient to move the quantity available at this time. The average price of potatoes delivered in the markets has closely followed the price which the producer has received, plus the cost of distribution, to the market.

"The larger supply of cars and the large harvest warrant lower prices later in the fall.

Sugar at 9 Cents.

"Beet sugar prices are being controlled by the manufacturers upon a basis that should reach the retailer from 8 to 8 1-2 cents per pound, depending upon the locality. Sugar to confectioners from beet factories now is being restricted and a temporary shortage in the northeastern states gives no warranty for the advances by retailers to over 9 cents per pound. For this allows fair margin upon the prices paid by them for cane sugar they are now selling. In any event the rise in retail prices of sugar during the last three days in the eastern states is solely due to the advancement of these prices by the retail dealers in the face of a short supply and does not bear any relation to the prices at which these sugars have been purchased.

"The new Cuban, Porto Rican and Hawaiian harvest in December will maintain the beet price as soon as it is available. The beet level is one and three-quarters below August prices and without concerted action of beet manufacturers and the refiners of cane sugar, prices would now be up to 15 cents owing to the short supply during the next few weeks.

Importing Fats.

"In order to provide equally good substitute for lard and cooking fats, the food administration is arranging for the import of larger supplies of cocoanut, palms, nut and soy bean oils. This should also affect the prices of soap.

Continued on page three

Next Week Is Win-the-War Week

In common with the other states of the nation Washington is organizing thoroughly for next week's great food conservation drive, during which the national food administration hopes to enlist practically all of America's 20,000,000 homes in the food-saving campaign. During the week every family will have an opportunity to sign a definite pledge to save food insofar as possible along the lines suggested by the food administration, and every home that makes the pledge will be given a colored window card to show membership in the administration.

"Let us remember," says the food administration, "that every flag that flies opposite the German one is by proxy the American flag, and that the armies fighting in our defense under these flags can not be maintained through the winter unless there is food enough for them and for their women and children at home. There can only be food enough if America provides it. And America can only provide it by the personal service and patriotic cooperation of us all."

In this state Charles Hebberd, federal administrator for Washington, has appointed an executive committee to work with him in carrying out the week's state-wide campaign. In turn a county committee is organized with a chairman in each county. Still further, this county committee organizes each precinct in the county, so that there will be

Continued on page three

Buy a Liberty Bond. It Is a Safe Investment. It Pays Interest. It Will Beat the Kaiser

Are Baling Pea Straw for Winter

Shortage of Feed Results in Prevention of Waste That Has Been Practiced Heretofore; Value of Pea Straw Is Recognized



The spirit of optimism is growing throughout the farming districts of the northwest. This is clearly manifest in reports received of general conditions throughout the four states. During the summer there was a tendency to feel blue, but in general conditions have been better than expected, and the fall has been such as to make the coming season look hopeful.

The following are letters received by the Washington Farmer, and in nearly all of them optimism is expressed:

FAIRFIELD, Spokane County, Wash., Oct. 13.—Harvesting was a short job this year and weather conditions were ideal. Just now many hay balers are running, baling pea straw which is commanding good prices for feed. Formerly the pea straw has been mostly wasted, but owing to the scarcity and high price of hay the pea straw will be used. The continued dry spell is causing the farmers much concern owing to the fact that the fall sown wheat is not coming. That which has managed to grow is very scattered and patchy. On the pea sown land the wheat has not even started and many predict a failure and the work and seed wasted. Seed grain has been plentiful. ROY G. ADAMS.

Wheat Coming Up Poorly.

SPOKANE, Spokane County, Wash., Oct. 11.—Weather conditions have been very good for the maturing of late-growing crops this season in Spokane county. But owing to the extreme drouth, it has been very unfavorable for the preparation for next year's crop. In many places where the wheat has been sown, it is coming up very spindling, and in other places, it is only coming up in spots. The dry weather is even killing some that has already started to grow. Generally speaking, farmers have been very much disappointed from the results of their season's work, and this disappointment is intensified because of the continued drouth, this fall. However, they are looking forward to next year's crop with much optimism. There is plenty of seed available in this county for crops next year. J. R. SHINN.

Feed Skim Milk at Home.

CASTLEROCK, Cowlitz County, Wash., Oct. 11.—Prospects for a good yield of potatoes in this county are better than a month ago as the rains set in and picked up the late planted crop and seemed to put life into those planted earlier in the season. Blight did not do any serious damage, although in a few fields the wilt is quite noticeable and will cut down the percentage considerably. The fall weather has been ideal for gathering and harvesting the grain crop. Some have covers on the straw stacks to keep out the rain; others are drawing them into the barns as the prospects for all the fodder this winter at a big price is bright. The big price of butter fat, 54 cents, paid by the Mutual Creamery company, has given the farmers encouragement to conserve all their surplus for the dairy stock this winter. Several farmers have been down in Oregon and bought cows ranging in price from $100 to $250 each of the Jersey strain. Silos are filling up fast with corn and late clover crop. The town citizens are getting anxious for their winter's wood supply, which is furnished mostly by the farmers at prcies from $4 to $6 per cord. The farm help problem has been practically eliminated by the farmers taking turns of helping each other. Women and children are picking blackberries, which grow wild in the logged land and along the old fences; they are making from $2 to $5 per day.

Tons of blackberries have been shipped out of the county to the Challis Canning company, which pay 3 1-2 cents per pound at the shipping point. It is paying $15 per ton for pears which is better than other years when they rotted on the ground. Hay is selling for $25 per ton, eggs 40 cents a dozen and old hens and roosters are all cleaned up. Wheat is $65 per ton and oats are selling for $52 per ton. No barley to sell. There seems to be a scarcity of pigs for home raising. Farmers are scouring the country for winter stock to take care of the skim milk. Fruit is about normal; apples, pears and prunes are being gathered. Several driers are working and they pay 1 cent per pound in the picking state. Veal calves are selling readily at a good price. As a rule the farmers are fully satisfied with the crops and they are very optimistic for next year's crop. They are sending away for seed oats, wheat and rye for fall sowing. Plowing is nearly all done. Wheat is selling in small lots from $2.10 to $2.50 per bushel. Potatoes are selling at $1.75 per hundred and prospects of them going lower as the digging progresses. Dairying is the prime factor in the county. The practical farmer and the one that is getting ahead is the one that feeds his produce at home. Good roads and the city markets make farming a little easier to plan out to make both ends meet.

C. C. BROWN.

Baart Wheat Is Favorite.

EPHRATA, Grant County, Wash., Oct. 11.—The fall is exceptionally dry. We have had no rain yet. The roads are in bad condition where wheat hauling is being done. There would be considerable acreage of fall wheat planted in this county if it would rain. Some few are planting anyway, but most people have discontinued planting fall wheat unless there are rains to bring it up. Some plowing is being done even though it is so dry. The crops this year were very light, but the prices have been good, so there is not a great deal of complaint on the returns.

Baart wheat is far better than the bluestem. In every case it will test from two to three more pounds per bushel and the yield will also be greater. In all probabilities 90 per cent of the wheat next year will be planted to the Baart variety. There is plenty of good seed in this county of every variety and believe that the acreage planted next year will be fully as great as this year. H. W. REAUGH.

Feed Prospects Good.

FORT ORCHARD, Kitsap County, Wash., Oct. 8.—The winter feed prospects in this county are good. A big hay crop was successfully harvested and put away in good shape. However, much hay is being bought and brought in here. Some of the farmers are planning on feeding straw to their cows as outlined in the monthly bulletin of the western Washington experiment station. There is very little straw in the county, so it will have to be shipped in. The cost price per bale, as delivered here, I am not able to estimate just at this time. The potato crop looks very promising for a large yield. Digging is not yet well under way. Late varieties are still growing and the vines are green. No frosts have appeared to this date. There are active preparations and plans being made for an increased acreage for the next season in practically all the crops as grown here.

C. B. SPRAGUE.

Roads in Bad Condition.

MABTON, Yakima County, Wash., Oct. 11.—This section is experiencing an unusually long period of dry weather. Hardly a trace of moisture has fallen all summer and fall. Roads are consequently in a poor condition. The apple picking has just begun and will continue for several weeks. The yield is good. The last cutting of alfalfa is in the stack. The raising of beans has become an important industry in this locality and the harvesting of the same is crowding out other work. Help is scarce and many women and children are from necessity being urged to help out in the orchards and packing houses. Wheat is also beginning to move although farmers have been undecided whether to sell or not. The dry weather has prevented much fall sowing of wheat so far. Sugar beets are new in this locality. The harvesting has not yet begun so it is not yet known what the success of this crop will be. No prices have yet been established on beans and potatoes.

E. F. HUTEGRENN.

Rain Damages Grain.

CHIMACUM, Jefferson County, Wash., Sept. 28.—We have had considerable rains the last two weeks, which was a little late for the pastures, but think if we do not have any frost during October there will be plenty of fall grass. Some of the grain was damaged by the rains, but the root crop, such as carrots and mangels, are looking fine. Threshing is under way, also the silos are being rapidly filled by oats and peas and vetch, which are yielding heavy crops. Most people are satisfied with the crops with the exception of the potato crop, of which a large acreage is in the ground, but the yield is not expected to be large. Fall plowing has not yet started, as we have had a backward year.

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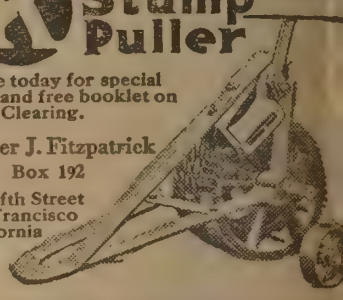


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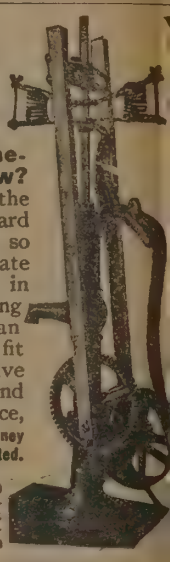


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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 43 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF October 25, 1917

Liberty Loan Will Win

People Rally to Finance War Against Kaiser

The American people have rallied during the last few days with a patriotism that, at this writing, seems to assure the success of the second Liberty loan. The pessimism that persisted the first two weeks of the campaign for the $3,000,000,000 loan, owing to the slowness with which subscriptions came in, gave way during the third week to a feeling of pronounced optimism. The fourth week opened with a feeling that a grand, nationwide effort at the close of the campaign would insure the desired total of subscriptions. This week, however, is seeing no cessation of the effort, and everybody is urged to make a subscription of whatever amount is possible.

"Every dollar you lend your country now will mean a saving of American blood," declared a member of the national campaign committee. "You can not stop the war. Our soldiers will go to the trenches—and more will go, and still more—until the decisive day. Hence, the better you help now the harder we strike. And the harder we strike the sooner the end of the bloodshed."

The second Liberty loan bears 4 per cent interest from November 15, 1917; the bonds due November 15, 1942; are redeemable at the option of the United States, with accrued interest, on or after November 15, 1927. Interest is payable May 15 and November 15 of each year.

You can have your choice of coupon or registered bonds in denominations of $50, $100, $500, $1000, $5000, $10,000. The $50,000 and the $100,000 are registered bonds only.

On a registered bond your name is inscribed; it is a receipt made out direct to you, and it can be signed over to some other party only by you and only before certain authorized authorities. The interest on a registered bond is mailed to you by the government when due without any action on your part.

On a coupon bond little tickets like small street car transfers are stamped on the side. One ticket is cut off each half year when the interest is due, and you cash the ticket at any bank as you would a check or money order. Each bond has its own special number thereon, and each coupon has thereon the same number as that bond. Then a record of all the numbers issued is kept in the vaults of the treasury at Washington.

Some Bond Facts.

Here are some pertinent facts about the Liberty bonds:

1. **A loan**—You lend your money at interest; you do not give it.

2. **Easy payments**—A few dollars down buys a bond. Bankers and employers everywhere arrange payment of balance out of savings.

3. **Superlative safety**—The promise to give you your money back, a promise signed by all our 110,000,000 people, including the signature of every multimillionaire in America. Your bond is like a mortgage on the whole United States.

4. **Safe keeping**—Absolutely safe in any honest banker's vault; safer anywhere than currency, for it is plainly a receipt for money you deposited in the treasury of the United States.

5. **Tax free**—Bonds up to $5000 in amount are exempt from taxation.

6. **Market value**—You can sell your bond or borrow on it on a moment's notice.

Which Shall It Be?

The United States is in this war to win.

She will finance it by Liberty bonds or by taxation.

A Liberty bond pays 4 per cent untaxed interest, and after a while the principal comes back in full.

Taxes are money gone forever—no interest, no principal returned.

Which Shall It Be?

A Liberty bond, safe, certain, patriotic, good business, or additional war taxes?

Win-the-War Week

(Continued from page one.)

during the week an army of workers running up into the thousands, who will see to it that every person having to do with the management of a kitchen is given a chance to sign the pledge.

On page 4 of this issue of the Farmer will be found a graphic statement of the aims of the national food administration, showing exactly what it is desired each person shall do in the great food-saving movement.

The following are leaders in the various counties who will play big parts in the week's campaign:

Governor Ernest Lister, Olympia.
Henry Suzzallo, Seattle.
Mrs. W. R. Smith, Seattle.
Mrs. Ruth Karr McKee, Hoquiam.
W. A. Linklater, Puyallup.
Mrs. J. F. Manning, Everett.
E. O. Holland, Pullman.
Miss Gertrude L. Huntington, Spokane.
Mrs. Henry McCleary, McCleary.
Mrs. J. C. Todd, Tacoma.
J. F. Sears, Prosser.
Miss Mary Rausch, U. of W., Seattle.
Mrs. Josephine Preston, Olympia.
W. H. Paulhamus, Puyallup.
Miss Agnes Houston Craig, Pullman.
W. S. Thornber, Pullman.
Erastus Brainerd, Seattle.
Mrs. N. S. McCready, Snohomish.
C. B. Kegley, Spokane.
Miss Lulie Nettleton, 1419 Sixth Ave. W., Seattle.
E. F. Benson, Olympia.
R. Insinger, Spokane.
F. W. Shultz, Wenatchee.
W. A. Peters, Seattle.
E. M. Stephens, Monroe.
A. E. Larson, Yakima.
John Langdon, Walla Walla.
George Severance, Pullman.
Sidney W. Rogers, Newport.

Hoover Predicts Cheaper Foods

Results of Government Regulation Already Being Felt

(Continued from page one.)

"Since the food administration came into existence August 10, a great deal of exertion has been required to remedy food situations growing out of the over-export and short supplies of he 1916 harvest. There were no reserve stocks in practically all of the main staples with which to enter the new harvest year, and, in fact, in some of the principal staples the exports had proceeded to such lengths that there was an absolute under supply of our own necessities during the last two months.

"On the top of this situation some factors have interfered with the earlier arrival of the new harvest. The farmer, in preparing for a 30 per cent increase of winter wheat acreage in the face of the shortage in agricultural labor, has prevented the free marketing of many commodities and in addition to these difficulties there exists through the country, owing to the large coal and munitions shipments, a considerable car shortage.

Meets Big Problems.

"Resulting from these causes there have been periodic shortages in one commodity after another, in one locality in the United States after another, and a large part of the energies of the food administrations has been absorbed in securing a distribution and a redistribution of existing supplies in such a manner as to keep the country generally supplied with foodstuffs and but for the cooperation of the railroads in one emergency after another we should have had local famines in one commodity after another in a great many sections.

"Furthermore the authority of the food administration does not extend over combinations of growers and producers at one end of the chain, nor does it extend over the great majority of retailers at the other end. The distant chain lying between, that is, the warehouse, wholesalers, commission men and manufacturers of prime commodities has required a great deal of study and development for its proper regulation, and these regulations are now coming into force."

Birds Build Bowers.

Australian bower birds construct galleries under hanging branches, which they adorn with highly-colored feathers, rags, shells, bones, etc. These bowers are used for mating in the breeding season.

Demonstrational Meetings on Cow Diseases



This picture is of one of the 20 meetings held recently on farms in Snohomish county for demonstrational work in the control of diseases affecting the dairy cow.

Dr. J. W. Kalkus from the state college of Washington veterinary department had charge of the demonstration work, in which he explained how to treat the udder for chronic and acute garget by the hot-pack-massage method for the acute, and the boric acid solution for the chronic type; how to remove warts, stop leaky teats, remedy hard milkers and treat milk fever.

In many cases Dr. Kalkus assisted individual farmers by outlining disinfection methods for the treatment of contagious abortion, which is one of the worst diseases among our dairy cattle.

He reported that there is no known positive cure for red water at the present time and advised in all cases that the animal be immediately fattended and sold for beef, as the disease does not injure the meat for food.

The arrangements for these meetings were made by the county agent and through the Snohomish county agricultural council, which is an organization composed of one representative from each farmers' organization in the county.

The farms visited were those of A. W. Everton, Edmonds; Hunter Bros., Cedar Valley; J. D. Kalanquin, Twin Valley; Thomas Bowen, Snohomish; Gilbert Jones, Machias; Chris Nelson, Granite Falls; Carl Westlund, Getchell; R. B. Messenger, Sunnyside; S. Shoultes, Marysville; S. Hanson, Lakewood; K. O. Rod, Arlington; F. O. Coe, Trafton; Ole Larson, Silvana; John Lee, Norman; Frank Peterson, Cedarhome.

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Field of Oats and Vetch.



The above picture of a field of oats and vetch was taken on the Alderson farm, located one and a half miles south of Ferndale, on the Nooksack river. The soil is very sandy and until Mr. Alderson bought the place about four years ago was considered almost too poor to cultivate, but by the persistent efforts of its present owner and the use of much fertilizer in the form of barnyard manure, the result is almost unbelievable. The J. C. Peterson home is in the background. Mr. Peterson is another farmer of the sort that is a credit to the community in which he lives.

Liberty Wheat and Liberty Bacon

Are as Important in the War as Liberty Bonds or Liberty Ships

Liberty wheat and Liberty bacon and Liberty sugar are just as much needed as Liberty bonds. Money can not buy more wheat or more bacon or more sugar than the world produces. In some respects it is well that the two campaigns of the Liberty loan and of food conservation should blend the one into the other.

Of wheat Europe normally produces 591 million bushels, thus requiring a normal importation of

383,000,000 bushels.

The probable wheat production of Europe for this year, 1917, is put at 394 million bushels, which is a shortage from normal of

197,000,000 bushels.

Adding the shortage of 197 million bushels to the normal import requirements of 381 million bushels will give a total wheat import demand of Europe of

578,000,000 bushels.

How shall this be met? Mainly from two sources.

1. By European retrenchment in the use of wheat.

2. By importation, chiefly from the United States and Canada.

Chiefly through substitution of other cereals in her war bread Europe may be able to cut down her consumption of wheat 25 per cent or 241,000,000 bushels. This leaves a needed importation of 337,000,000 bushels.

The latest estimate of the wheat crop of the United States this year is 660,000,000 bushels; home consumption, 495,000,000 bushels; seed requirements, 87,000,000 bushels; leaving a surplus of

78,000,000 bushels.

Add to this an estimated Canadian surplus of 120,000,000 bushels and it gives a surplus from North America of

198,000,000 bushels.

Again, taking this North American surplus of 198,000,000 bushels from 337,000,000 bushels needed by Europe leaves

139,000,000 bushels.

To help meet this war demand of 139,000,000 bushels, Herbert Hoover, United States food administrator, asks that one pound of wheat per person be saved weekly, which will give an additional surplus of

117,000,000 bushels

for export and only leave 22,000,000 bushels to be supplied from more distant markets in order to make up the amount required by the allies.

Other Cereals.

In the other cereals used in Europe, mostly for animal feed, the import necessities of the allies on normal consumption basis are about 674 million bushels against the North American surplus of 950 million bushels.

In this connection it is interesting to note that wheat consumption of Europe, 974 million bushels, is 44 per cent of the total consumption of cereal, 2,214,000,000 bushels; that of oats, Europe consumes 683 million bushels, or 31 per cent of

(Continued on page eight.)

SHOULD FEED STRAW.

Farmers Tell Facts Concerning It.

The farmer as a business man must increase his operations to the point of conserving the farm by-products because they promise a rich return. There is no excuse for the $103,000,000 annual loss through the wasting of straws and corn stover, not to mention the value of shattered grain that vanishes in the long stubble.

In answer to an inquiry sent out by The Washington Farmer, as to the extent that the shortage of feed for stock can be supplied by straw, many replies have been received:

To the Editor of The Washington Farmer: There is a scant supply of straw as fed in this country. It is worth from $1 to $3 per load. There is none baled here, it is all loose.
T. W. McCORD, Wilbur, Wash.

To the Editor of The Washington Farmer: Feed is very scarce around here and farmers are stacking their straw for winter feed of their stock. Any one who has more wheat straw than he needs for his own use can find a ready market at $10 per ton loose.
D. A. LENOCKER, Schragg, Wash.

To the Editor of The Washington Farmer: There is but very little straw to sell. There is just about one-fourth as much as is needed to supply the demand. The price per ton will be about $5 loose.
W. J. BLANCHETT, Quincy, Wash.

To the Editor of The Washington Farmer: I believe that from what I hear over the country that to a large extent the shortage of feed for stock can be supplied by feeding straw, especially oats, barley and fortyfold varieties. There is a big demand for baled straw and last winter the price was good, but I can not say exactly how much. A. G. COX, Palouse, Wash.

To the Editor of The Washington Farmer: Our crop of straw is very short this season and will all be fed up to our local stock. There is no straw offered for sale either baled or loose. I think, speaking of the straw situation, that our people will have just about enough for their own use. There has never been any straw baled in this locality.
GEORGE M'DONALD, Coulee City, Wash.

To the Editor of The Washington Farmer: Will say that wheat straw in this locality would be used for feed with the bunch grass to constitute all the feed that is needed for stock. As a general thing it would constitute two-thirds of the feed. We can not get wheat straw or any other grain straws in any quantity, what is selling is sold for $10 a ton loose. This is wheat straw, bluestem.
CHARLES E. KLINE, Burke, Wash.

To the Editor of The Washington Farmer: I am glad to know you are interested in the feeding of straw. I regard wheat straw as fully one-half ration for stock. In this locality, this year, a great deal of the wheat straw was green in color, but dry before there was any grain to amount to anything, especially the bluestem. There was quite a demand for straw last year at $2 per load, none baled. It will be from $3 to $5 per load this year and possibly more. I think there could be a great deal of valuable information given out on the feeding of straw.
J. H. SMITH, Ephrata, Wash.

To the Editor of The Washington Farmer: You failed to state what you mean under feed—grain or hay or both. As a rule every farmer in this district uses and needs 75 per cent of his straw to winter his stock. A certain amount is or has been used in the past for road improvement. None has been baled or shipped so far. Not much sale for it either, except from farmer to farmer and occasionally to team owners in the small towns. However this year the farmers will save all straw as they will need it all to winter stock and use it to some extent next year for spring feed in connection with either barley or oats for their work horses.
D. W. KREHBEIL, Lind, Wash.

Fair Dates.

Lewiston, N. W. Lvst.—Nov. 16-23.
Portland, Pac. Nat. Dairy—Nov. 16-23.
Portland, Pac. Int. Lvst.—Nov. 19-24.

Holy Land's Only River.

Jordan, the one river of the Holy Land, has a course of little more than 200 miles from the roots of Anti-Lebanon to the head of the Dead sea. Not a single city ever crowned the banks of this river.

HOOVER PROGRAM IN A NUTSHELL

One Wheatless Meal a Day

Breakfast as an example: Serve either

Oatmeal
Corn Cakes
Buckwheat
Fried Corn Mush

* * *

Beef, Pork or Mutton Once a Day

For the other meals substitute:

Fish, Poultry
Eggs, Milk
Cream, Cheese

and eat vegetables more freely.

* * *

Eat Sparingly of Butter and Sugar

THE REASON: Our allies and our own soldier boys must have meats, wheat, fats and sugar to win the war.

There is a world scarcity of these foods.

Whitman County Fair

A big crowd was on hand at the Whitman county fair at Colfax last week. The chief features were the booths containing the exhibits of the boys and girls' clubs. There were 250 exhibitors, ranging in age from 7 to 17 years. Every pen for chickens and rabbits was filled. State Commissioner of Agriculture E. F. Benson was present and made a stirring address.

Featuring the live stock division were 16 Percheron, Clydesdale and shire horses, including the grand champion exhibit at the Interstate fair at Spokane and owned by M. E. Metz of Colfax. They were judged by 16 University of Idaho students and later by the stock judging class of the Washington State college.

Among the visitors was Mrs. Josephine Preston, state superintendent of public instruction.

Truth of Food Situation in France

"I Would Rather Have Our Bread at the Front Than Your Bread in Paris"

ARTICLE II.

By FRED B. PITNEY

How many times I have heard soldiers on leave from the front say, "I would rather have our bread at the front than your bread here in Paris." The same thing was true of coffee. Soldiers would say, "What do you call this stuff? We get real coffee at the front."

At the rear the civilians drank a compound from chicory, for the coffee supply was short, while the real coffee was reserved for the army. In like manner, the soldiers get a purer wheat flour than do the civilians. The wheat supply being so much curtailed two measures have been necessary to try to increase the amount of flour.

A law has been passed requiring the mixture of 30 per cent of other grains with wheat in making flour, while another law raised the percentage of extraction permitted in the manufacture of flour. Before the war this percentage was 70; it has been raised successively to 74, 77, 80 and 85. Seventy-seven is the extreme limit of nutritive extraction. After that the flour becomes permeated with particles indigestible for human beings.

The result of mixing grains and high extraction has been a flour that is often not only unpalatable but indigestible and it has caused not a little sickness, particularly gastric troubles among the children. Adults frequently throw away the soft inside of the bread and eat only the hard-baked crust. Very often I have found this "war bread" an unpleasant dark brown in color, with a soggy, glutinous inside. It is no one's fault. It is the best that can be done under the circumstances.

Shortage of All Cereals.

Another problem enters with the authorization to mix other grains with wheat in making flour. It is the shortage of the other grains. For it is not only wheat that is short in France, but all cereals. We can have recourse once more to the official figures.

The annual consumption of barley in France before the war equaled approximately 1,250,000 tons, of which about 15 per cent was imported. The production has fallen off to such an extent that nearly one-third of the barley had to be imported last year. This year, owing to special reasons, the production will be slightly higher, but there will still be a deficit far above the normal. Furthermore, the deficit in barley must be considered not only in relation to the normal consumption but with regard to the fact that it must be used very largely to supplement and replace wheat.

With rye the normal consumption was about the same as for barley, with imports of about 8 per cent of the requirements. In 1915 the production was about 400,000 tons under the normal consumption and in 1916 it was about 350,000 tons under the consumption, while in both of those years there were practically no imports. Thus there was less rye than was needed and rye could only help out wheat by reducing still further the amount given to its normal uses.

The annual consumption of corn averaged 1,150,000 tons, about one-half being imported. The proportion of imports in 1916 had risen to two-thirds.

The annual consumption of oats before the war was 5,500,000 tons, of which 500,000 tons were imported. In 1916 the imports rose to over 1,000,000 tons and the stock was still short 500,000 tons.

Agricultural Labor Shortage.

When one travels over France one speedily learns the reason for the shortage in the grain crops. It is because there is not the labor to do the farm work. Cultivation has to be left to the old men, the women and the children. All others have been taken for the armies and the defense of the country.

In crossing and recrossing the French agricultural regions it has been a continual source of wonder to me how the few workers in the fields have

(Continued on page twenty.)

Free Shipments of Breeding Stock

Sweeping Order Put Into Effect by Canadian Government

What the live stock associations of the Pacific northwest have been trying unsuccessfully for years to secure—a reduced freight rate on breeding cattle and sheep—the Canadian government has granted its live stock interests by a stroke of the pen.

The Canadian order goes far beyond that. It launches a remarkable cooperative plan to check the depletion of live stock and is based on an agreement between the Canadian department of agriculture and the railroads. It comprises:

Fifty per cent rebate of the freight rate on carload shipments of feeding cattle from Winnipeg to country points in the eastern provinces.

Free shipments of carloads of breeding sheep and lambs from Toronto and Montreal to the west.

In a statement describing the plan, Martin Burrell, the minister of agriculture, says:

"The Canadian railways have agreed to issue a special tariff in connection with the transportation of car loads of breeding cattle and of breeding sheep. Under this tariff the railways will rebate 25 per cent of the regular freight rate, while the minister, on behalf of the government, has agreed to pay the remaining 75 per cent. The tariff will be applicable in both eastern and western Canada, but not between eastern and western Canada in connection with the return of car loads of breeding stock from the central stock yards to country points.

'The shipper will be required to make a declaration that he is a bona fide farmer, and that the stock so returned is for his own use or that of his neighbors and is for breeding purposes only.

"In view of the fact that feed conditions in eastern Canada are so satisfactory, and the demand for feeding cattle so general, the minister has agreed to pay 50 per cent of the freight rate in connection with the shipment of car loads of feeding cattle from the Winnipeg stock yards consigned to country points in the eastern provinces.

"An arrangement has been effected between the department and the Canadian railways as a result of which carloads of breeding sheep and lambs from the Toronto and Montreal stock yards will be shipped to western Canada freight free.

"The car-lot policy which has been operating in western Canada for the last year will be continued. Under its conditions bona fide farmers or their agents desiring to obtain car loads of feeding and breeding cattle or sheep at the three western stock yards will be entitled to collect from the department their reasonable personal and traveling expenses incurred in connection with the journey between their homes and the yards.

We commend this liberal action of the Canadian government to those narrow critics who are making the untrue and ridiculous assertion that the government of the United States is making a pet and favorite of the American farmer. For 20 years it has been the consistent policy of the Canadian government to foster agriculture and encourage the live stock industry, and it was that liberal policy that drew thousands of American farmers across the line into Canada.

Make All Cut Thistles

To the Editor of The Washington Farmer: I would like to say just a few words about Canadian thistles. It seems as if we have an awfully one-sided and unjust law on Canadian thistles. The law compels the farmer to cut his thistles, or the county can cut them and charge it on the taxes, but the timberman and logged-off land speculator are not obliged to cut theirs.

It is a heart-sickening sight to see some of the farms and our river bottoms, also some of our roads, and as our county officials see the unjustness of the law they do not compel the farmer to cut. If the farmer is shiftless and doesn't cut his he gives his neighbor work for years to come, for one seed makes a good-sized patch. In this community there is hardly a 40-acre tract that has not a patch of thistles.

I think that every farm society and grange should take up the matter with their representative and have that law rectified, so that the timberman and the logged-off land speculator be compelled to cut thistles before this country is completely ruined for agricultural purposes. Many people do not realize what a noxious weed the Canadian thistle is. I hope that you will help us fight this pest and get just laws for the farmers.

F. H. LINDOERFER.
Sequim, Wash.

The Teachers' Cottage Solves Problems

By CARL J. MENZE, Ferndale, Wash.

Many rural school boards are noting the practicability of building teachers' cottages near the school homes so that the teachers will have no trouble in finding suitable boarding places and so the district can have all school affairs and school property under the



constant supervision of the teachers. It is usually difficult for teachers to find vacant houses in the rural districts. Teachers' cottages, therefore, are very attractive to teachers with families and will often keep a good teacher in the district from year to year. They also help make the schoolhouses the center of all social and community affairs, thus becoming a continuously operative plan for better citizenship.

In Washington state, at the present time, there are 144 teachers' cottages that serve as the homes for teachers during the school term and sometimes the entire year. There are also a considerable number under construction and will be ready for the school term this year. These cottages, from the one-room lean-to, for one teacher, costing about $50, to the large ones containing several rooms and for several teachers, are usually supplied with the furniture by the school districts, the teachers supplying the necessary bedding, dishes, carpets and what other supplies they think they will need.

The photographs shown here are of two Whatcom county cottages. That at the left is the North Star cottage built to accommodate two teachers. That at the right is the Grand View cottage for one teacher.



Approaching $5,000,000 in Loans

Land Bank Is Doing Big Business for Northwest Farms

Before Christmas bells ring, the federal farm loan bank of Spokane will have loaned to the farmers of the four northwestern states more than $5,000,000 at five per cent interest.

This is the statement of President D. G. O'Shea, who announces that the loans already are nearly $3,500,000. Loans are now averaging more than $100,000 a week, and the bank is rushing its working force to close up the loans asked by the more than 10,000 farmers already members of loan associations.

Train Farmers

Boys and Girls Must Be Prepared

"The trained farmer is going to run the earth or the city fellow will run it and you will be his renters," Professor Frank O. Kreager of Washington State college told boys and girls assembled at the Washington State fair at North Yakima this year. He was addressing more than 200 county champions of industrial work performed by Washington members of the Achievement Club of America and sent to the fair as a reward for their proficiency.

"Your only hope of earning a farm is to train yourself in efficiency," continued Professor Kreager. "Things are different now than in former years. Many farmers have placed themselves in comfortable circumstances because the land they settled on years ago has advanced in value so fast they couldn't help make money. The land was so fertile that almost any kind of farm would produce sufficient to take care of the then small population.

"Some people scoff at the idea of training men and women to be better farmers. We wouldn't be establishing military training camps over the length and breadth of this land if we would enter the war with Germany with the hope of winning it without trained men. Alexander the Great knew the value of trained soldiers and attributed his succes to the fact that his men knew exactly what they were to do and how they were to do it when they got into action.

"Training counts for just as much in the producing army of which you are an important part as it does in Uncle Sam's big fighting force. Some folks say they had rather have experience than training. Experience is fine—it matures and rounds us out—but there is plenty of room to learn by experience after you have had the best training in the world. Make your producing army just as efficient as you hope our army in France will be."

Form Purchasing Association.

To the Editor of The Washington Farmer: There is a movement started among the various granges around Ferndale to form a purchasing association for the purpose of reducing the high cost of living. A local merchant is to act as purchasing agent and only members of the grange can have the privilege of ordering through this association. It is the opinion of leaders in this movement that a great saving can be affected in the purchasing of staple groceries and feed.

CARL J. MINZE.
Ferndale, Wash.

Shoes With Turned Down Cuffs.

A patent has been granted for men's shoes with cuffs turned down at the top to enable them to be pulled on easily.

Attributes His Success on His Farm in the Palouse Country to This Ten-Mule Team



The above is a picture of R. W. McKown's 10-mule team, to which he attributes his success as a farmer. Mr. McKown's farm also demands a gasoline engine for heavy work and a light one to run the washer, etc., in the house. Mr. McKown brought from the Dayton country, his former home, a large combined harvester. Finding it satisfactory on the Palouse hills, he last year bought a new one, like the old, and this year has cut over 700 acres.

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The Draft and Farm Labor

At a recent meeting of the Spokane county council of defense, Mrs. F. A. Noteware, member for women's work and long an active worker in the grange, brought up a problem of vital and growing interest to farmers—the drain on farm labor by the draft.

George Hingston, another member of the grange, said that the last youth on his prairie was working for him, and he, too, would soon have to go under the draft.

After discussion the county council advised that Mrs. Noteware and Mr. Hingston take up this question with their Pomona grange and have a committee appointed to confer with W. W. Tolman, chairman of the district exemption board for this region.

This problem is engaging widespread interest. In New Jersey permission to use the draft machinery to mobilize for farm work such men in the remainder of New Jersey's quota as wish temporary employment pending the preparation of cantonments to receive them has been asked of Provost Marshal General Crowder, at Washington, by Governor Edge. There are about 8000 yet to be called into service, but the governor has been informed that quarters at Camp Dix will not be ready to receive them all for some time.

"Many men selected for that section of the chosen army scheduled to leave for camp October 3 have given up their positions," Governor Edge said. "For them to remain idle a month or more is not only a personal hardship in many cases, for of course while idle most of them are receiving no pay, but it is also an appalling waste of man power, so essential just now to the country and its industries. The farmer is short of help. His work is as vital to the prosecution of the war as the mobilization of troops. Why not, therefore, create the opportunity for these men to volunteer service on the farm at the usual wage, benefiting themselves, the farmer and the country?"

Waste in Manure

While we are studying the subject of waste, we come across some things which open our eyes to losses which have been going on for years, unnecessarily.

One of these is the waste of manure values. The assistant secretary of agriculture has estimated that there is an annual loss of manure amounting in value to more than a billion dollars. Such a sum is almost beyond comprehension, but we all know that much is wasted on even the best regulated farms which might be turned to good account and increase yields of crops.

In many sections not more than 15% of the manure is saved and returned to the soil. Even in the dairying sections, where its value is appreciated and it is used generally, the loss is reported to be at least 25%.

It takes some work to save manure, but it is cheaper than buying fertilizer at market prices. Wherever it is available it should be saved carefully and put back into the soil.

Buy a Bond and Beat the Kaiser

If everybody waited for others to buy the Liberty bonds, they would never be sold. If everybody bought at once just what he could afford, the entire amount would be subscribed.

Too many have waited on the other fellow. The campaign is almost over. There is but a little time left for those who have delayed to get their names on the record against the kaiser and his violation of human right and decency.

The government must have the money necessary to carry on the war to a successful conclusion. The United States is in the war, and honor and civilization demand that it be prosecuted with power and vigor until the world is indeed "made safe for democracy." There can be no half-way course. There can be no stopping until the kaiser is thoroughly beaten and until kaiserism is wiped forever from the face of the earth.

The assessed valuation of the property in the United States is stupendous—not less than $300,000,000,000. The money asked for this Liberty bond issue is $5,000,000,000, a gigantic sum in itself, but only 1 2-3 per cent of the total valuation. The national debt is large, but small compared to the larger figures. Hence, the Liberty loan is merely a borrowing of $5,000,000,000 on a valuation some 60 times the loan. Private money-lending concerns will lend half the face value on clear property. Uncle Sam is asking the people of the United States for a loan of one-sixtieth of the unencumbered property value of the United States. What could be safer? Where could a better investment be made? Four per cent interest; practically nontaxable; absolutely safe; patriotic; convertible almost as readily as greenbacks. The man with $50 of idle money will make no mistake if he buys with it a $50 Liberty bond. The man with $50 that he can reasonably withdraw from his business for a while will make no mistake if he withdraw it and buy a bond. If he can multiply it by two or 10 or 100, so much the better.

The Basis of Profit

It is a common thing in town to hear people intimate that the farmer is getting rich. They do not think seriously when they say so. Because prices have advanced for farm products they conclude that more profit comes to the man who produces.

And yet these same people would be indignant if they were charged with undue gain because they draw larger salaries than they did a few years ago. They realize that it costs more to live nowadays.

And the same is true of the farmer. These are not normal times. The crops that bring a larger price cost much more to grow and harvest. Farm laborers demand and get higher wages than they ever got before, and even at that, there is a scarcity. The cost of seed, the cost of feed, the cost of farm machinery, the cost of operation, all have gone up fully as much in proportion as the farm produce.

Let us estimate profits, whether they be of the farmer or the city merchant, on the basis of cost, and we will come near to knowing something about them.

Help the Boys

Some claim that the understanding of live stock has to be born in one. However, we imagine that everybody has the powers unformed and some develop them, but most do not. Everybody can learn something of profitable farm animals, and the sooner they begin, the more they have to learn. Boyhod is the period when these things are learned most rapidly.

Take the boy out with you and point out to him the desirable and undesirable points of the live stock. Call attention to this or that fault, this or that merit.

It is surprising how quickly he will grow interested and grasp the points of value. The ten-year-old boy will be found old enough to catch the idea and make logical comparisons.

A Valuable Year

Isn't it surprising, when you come to think of it, how much we have learned this year?

We have learned something about how to save foods. We have not learned it all, but we have started in earnest, and when we start in earnest we accomplish something.

We have learned something about how to economize on labor, and that is a great lesson and worth much money to us in these times of scarcity of help.

We have learned something of how to get bigger yields off the same amount of ground, and we have learned that it pays to do it.

"It is an ill wind that blows nobody good," and even war has its lessons of worth.

Washington Gleanings

Charles Alexander of Oakesdale recently shipped a car of 69 head of hogs and three steers to Spokane and received for the lot a check for $2828. His hogs brought 18 cents per pound.

John Romaine sold 1300 acres to Ben Dickinson at $100 an acre recently. The farm is about eight miles north of Dayton and has been the home of Mr. Romaine and family for 35 years.

Patrick Hughes, a pioneer farmer of Walla Walla county, has bought from Matt Ennis, 1889 acres just north of Walla Walla for a price reported to be around $275,000, or more than $145 an acre.

Grain men have been shipping daily from Rosalia about 40,000 bushels, which is going to the Coast. Most of the grain is going on consignment and will be subject to federal weights and grades.

Nearly 500 dairymen and breeders of registered stock attended the sale of Carnation and Hazelwood registered Holsteins at Kent recently. Most of the animals went to practical men to build up herds.

E. F. Benson, state commissioner of agriculture, has outlined in a letter to be read before the national convention at Washington, D. C., his plan for enlisting the school children of the state in the food cultivation campaign.

Sixteen thousand acres of land in Kittitas county, which was withdrawn from homestead entry in 1905 in connection with government plans for the Kittitas reclamation project, have been restored. Only 3120 acres, however, are open to entry.

Instruction in sugar beet culture will be made a feature of the program at the sixth annual farmers' institute, to be held at North Yakima late in January, according to W. S. Thronber, director of the extension service for Washington State college.

The Thurston County Dairy and Farm Products association, which has a contract with Camp Lewis to supply farm products used at the camp, is worried about the lack of farmers coming into the association. So far only half enough men have signed up.

According to estimates, 70 per cent of the apple crop of the Wenatchee valley has been sold. Of the 7000 cars, which is the estimate for this year's crop, about 5000 cars have been contracted for. The amount of money represented thus far in the purchases is $3,627,500.

What Others Say

Journal, Kent: It costs no more to feed, house and care for a good cow than it does a poor one.

Tribune, Pullman: It is a sad fact that farm life is not as enjoyable as it should be on account of the reluctance of farmers to spend a few thousand dollars to make life worth while.

East Washingtonian, Pomeroy: This is the time in which to prepare for winter. Some years cold weather begins in the early part of November. Put the farm machinery under cover, get the barns and other outbuildings in shape for winter use.

Herald, Concrete: The shortage in the supply of the iron and steel, which this country must have in increasing amounts if the war is to be won, has developed a new source of income for the farmer. The farmer who turns in his junk while the present prices prevail is likely not only to make a clear profit over the cost of hauling and freight, but through increasing the iron and steel supply, he is contributing to the successful prosecution of the war.

Working Under Heavy Stubble or Straw

By George Severance, Pullman, Wash.

The injurious results so frequently experienced from working under heavy stubble or straw results from making no effort to break down the straw or stubble and partially incorporate into the soil before plowing under. We, therefore, practice and advocate fall discing prior to plowing. A great mass of untouched stubble or straw plowed under in May, when it is thoroughly dry produces the best possible conditions for drying out the furrow and the soil underneath. I believe that in the dry regions it is a good plan to top-dress the wheat very lightly with straw, applying the straw perhaps in early winter to catch and hold any snow, and to be beaten down and softened by same.

The State Fair Talks to Me

I Will Tell You Some of the Things It Told Me

By Granville Lowther.

Everything we see or hear ought to furnish some lesson and enlarge our fund of knowledge. The state fair is no exception.

I learned that automobile races will attract much larger crowds than horse races. This is a steam and lightning age and people like speed. If an automobile will make a given distance in less than half the time a horse can make it, people like the machine.

I learned that the freezing process is being resorted to for the preservation of certain foods, especially fruits, because of the high price of cans. It is said by food experts that foods can be kept more perfectly and at less expense by the freezing process than by canning.

I learned that a farmer out of touch with city life where electric lights are not available from the central power plants can for $500 install electric motors, with all necessary machinery, and not only light the home, but pump water, wash, churn and many other things not requiring more than half a horsepower. This will give to the farmer a waterworks system if he desires it and many other modern conveniences.

I learned that for $38 you can buy an attachment to your automobile that will run at the rate of six to 12 horsepower, and that by this means the automobile motor will do the work of a motor that will ordinarily cost more than $100 in sawing wood, running machinery about the farm, etc.

I learned that the children are being taught now, as never before, in the department of home economics, and the next generation of women will be better cooks and housekeepers than their mothers have been.

I learned that the state food department is vigorously prosecuting a firm in Seattle for selling old, rotten, canned salmon and other canned foods that are actually full of poisonous bacteria and fit only for fertilizers.

I learned that the old belief that corn could not be successfully grown in this state has been proven false. In fact, I have known that for several years, but have never seen it so fully demonstrated as it has been this year.

Well, I learned a good many things, but what is the use of telling all you know? If we told all we know about ourselves I presume our neighbors would not speak to us; but if they knew all the causes everything would be excused.

Hairy Vetch

Is Well Adapted to Timber Lands

By J. R. SHINN, County Agriculturist.

One crop that demands a great deal of attention especially in the northern section of Spokane county on lighter soils is hairy vetch. This crop has done remarkably well during the last year and wherever it has been tried, the farmers are very enthusiastic over it. I would not recommend it for the richer wheat lands of the Palouse country, but is remarkably adapted to timber lands and sandy soils. This crop is like peas, in that it needs to be inoculated, and for this purpose, soil from about the roots of peas which have grown successfully in the garden, may be used to inoculate vetch.

Inoculating Vetch.

First of all, the seed is moistened and then the soil is dusted over the moistened seed until each seed is coated with dirt. After this, it is drilled into the ground usually with wheat or rye, using 10 to 15 pounds of vetch seed per acre with the usual amount of grain. This variety of vetch is seeded in the fall, though early spring seeding has given good results in some instances.

Potato Crop Diseased.

The potato harvest this season has been more or less of a disappointment especially to those parties who failed to treat their seed. As a result of lack of treatment with corrosive sublimate there is more or less common scab and rhizoctonia or little potato in most fields.

Another disease that is quite common is fusarium wilt. The last two diseases mentioned are apparent in the fields and may be located by the appearance of the dead vines which mature far in advance of the general crop. These kinds of potaoes should be marketed at once and above all things, not saved for seed. It would be a paying thing for most potato growers to dig their seed at this time and taking only the late growing, healthy vines to furnish their seed for next season's crop. In some instances, these may have second growth, but the good potatoes of healthy hills should be kept even though few have made second growth.

Seed for Irrigated Sections.

Some of our growers have some excellent Netted Gem seed which are in demand throughout the irrigated potato growing sections, and they have been encouraged to harvest these potatoes for seed purposes, selecting only the disease-free plants for furnishing such seed stock.

Carrier Pigeons.

French scientists believe that carrier pigeons are influenced by magnetism and that, with the spread of wireless telegraphy much less dependence can be placed in them.

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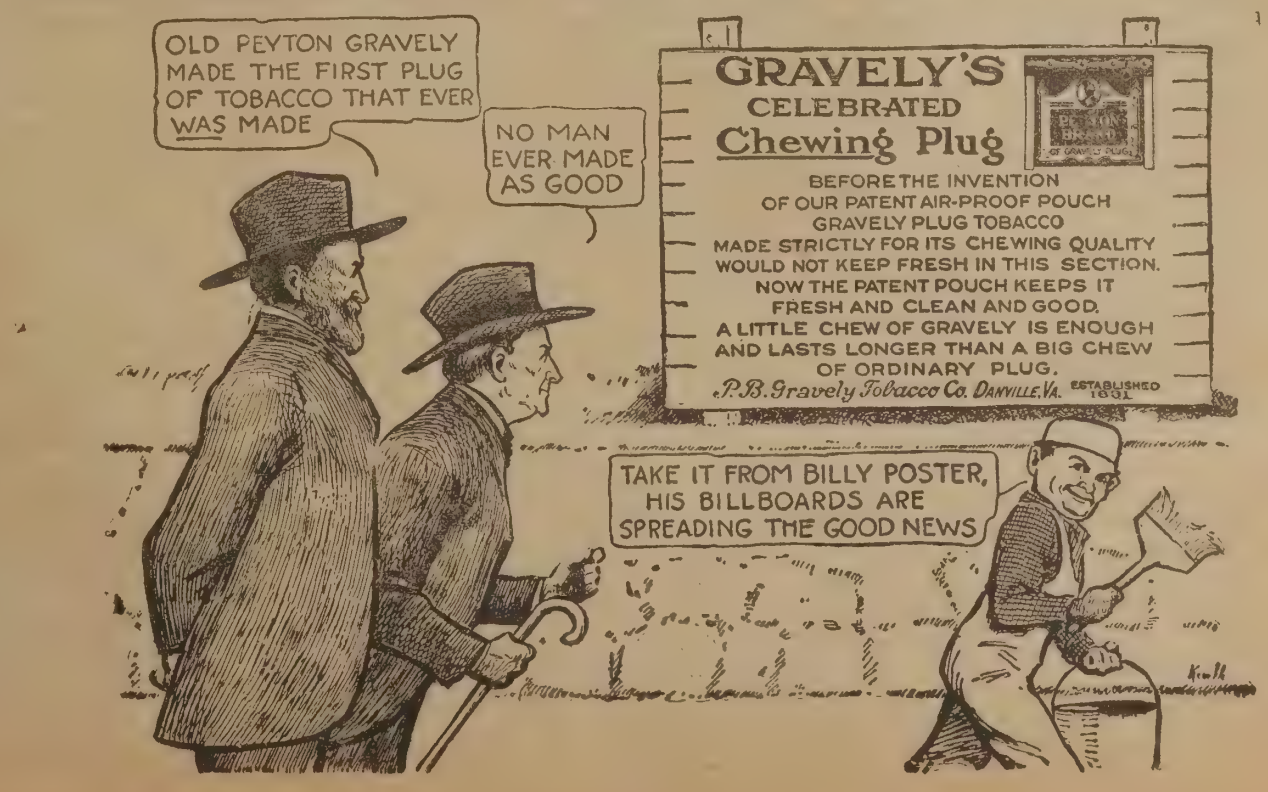
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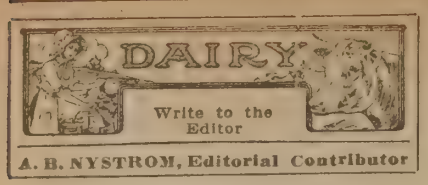
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A. B. NYSTROM, Editorial Contributor

Would Chop and Soak Hay.

To the Editor: In the issue of September 20th, E. L. Potter writes an article: "Shall We Chop Hay?" My answer is yes, chop the hay and some more. Soak the hay in a tank using a molasses liquid. By so doing one can double the value of his hay. A valuable feed can be made for the dairyman by cutting and soaking the straw mixed with a light grain ration.

C. K. SPURR.

Ferndale, Wash.

Trouble With Separators.

During the months of August and September O. N. Hoppes, in charge of the Junction City cow testing association, has made tests of the cream separators on the farms on the members and finds that some of the separators are not doing efficient work.

Mr. Hoppes states that an efficient separator should not leave more than three-one hundredths of 1 per cent butterfat in the milk. If there is a higher per cent there is direct loss to the owners.

Five separators were found in the association, composed of 18 members, that left over eight-one hundredths of 1 per cent butterfat in the skim milk. When the test was as high as 110 one-hundredths it meant a loss of one pound of butterfat in every 1000 pounds of milk. On some of the farms this would mean a loss of a pound or more of butter fat a day.

This work seemed to interest the members a great deal. Three have purchased new separators after learning the results of the test on their machines.

Mr. Hoppes states that in practically every instance the largest losses occurred from old machines or those of the cheaper makes.

One of the separators doing the best work was the one owned by Mr. Holcomb of Junction City. This machine is three years old and has separated the milk from 20 to 30 cows continually during this period.



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Test 519 Cows During Month.

According to the report of Will W Henry, official tester of the Stillaguamish (Wash.) Cow Testing association, there were 519 cows tested during the month of September. The average pounds of milk per cow was 609.3 pounds; average pounds of butterfat, 28.12 pounds; average cost of feed, $4.16.

The three herds with the highest average butterfat production are being fed an allowance of "mill feed" to supplement the pasture. At this time of the year it is hard to keep the herd production up even though they may have good pasture, says Mr. Henry. It is a significant fact that the men who are feeding a reasonable allowance of concentartes have the highest herd production, and at the same time are making a greater profit above the cost of feed, than those men who are not feeding.

The highest average herd production for the month was that of W. G. Grimm, 27 cows averaged 40.73 pounds of butterfat. There were eight cows in the 50-pound class. Four of these belong to W. G. Grimm, one owned by M. Linkquist, one by Max Eitzenberger, one by John Ness, and one by C. Olsen.

Two unprofitable cows were sold for beef during the month.

In Tillamook County.

Seven hundred and thirty-eight cows were on test in the Tillamook (Ore.) Cow Testing association for the month of August. Of this number 112 produced over 40 pounds butterfat and 44 qualified for the honor roll of 45-pound cows.

The high herd fat average for the month is held by Cary and O'Brien with four cows producing an average of 798.25 pounds milk and 44.33 pounds fat. The highest milk average goes to Charles Kunze with a 965.24 pounds average for 34 cows. The lowest herd made an average of 499.9 pounds milk and 22.68 pounds fat.

The high cow for the month is a grand Guernsey owned by Mike Abplanalp, producing 1596 pounds milk containing 68.65 pounds fat.

Liberty Wheat-Bacon

(Continued from page four.)

the total cereals, while the 200 million bushels of corn consumed is only 12 per cent of the cereals.

During the last three years of war there has been a greatly increased demand for meat food in Europe. The men in the armies, the men engaged in the shops and the millions of women forced to physical labor need meat twice daily when before the war meat twice a week was a luxury. Even before the war there was a growing world demand for meat products; the meat supply not keeping pace with the growing population.

The exports of animal products and fats of the United States jumped from 500,000,000 pounds before the war to 1,500,000,000 pounds in 1916-17.

The food animals of the allies have decreased

33,000,000 head

since the war began. Not only is there a decrease in the actual numbers of food animals in Europe, but there has been a noticeable decrease in the average weight and the annual output of dairy products per animal.

One of the big causes for the decrease in the European meat output has been the lessened feed supply caused by making soldiers of the farmers, as well as by decreased imports of feed caused by the shortage in shipping.

All European countries have reduced the consumption of meat and clothing among the nonwar workers to the point that would seem impossible to the American people. Despite this the war has increased the actual meat, fat, wool and leather consumption in the allied countries.

The world shortage of meat and dairy products, animal fats, industrial fats, wool and hides, bids fair to reach far into the future.

Butter and Milk.

The decreasing herds and the lack of fodder mean a steady falling off in the dairy products of our allies. They have been asking for larger and larger exports from us. Last year we sent them three times as much butter and almost ten times as much condensed milk as we used to send them before the war. Yet we must not only keep up to this level, but do still better.

As to Sugar.

Before the war France, Italy and Belgium produced as much sugar as they used, while England drew most of its supply from what are now enemy countries. France and Italy are producing less than they need, while England is cut off from the source of 70 per cent of her usual imports. These three allied countries must now draw 1,500,000 tons more of sugar than they did before the war from the same sources from which we draw our supplies. We must divide with them. We can do it by economizing. The usual American consumption per person is just double that of France.

Let Us Remember.

Let us remember that every flag that flies opposite the German one is by proxy the American flag, and that the armies fighting in our defense under these flags can not be maintained through this winter unless there is food enough for them and for their women and children at home. There can only be food enough if America provides it. And America can only provide it by the personal service and patriotic cooperation of all of us.

The small daily service in substitution can be done by all; the saving in waste by the majority, and the lessening of food consumed by many. This individual daily service in 20,000,000 kitchens and on 20,000,000 tables multiplied by 100,000,000, which is the sum of all of us, will make that total quantity which is the solution of the problem.

Compact Folding Table.

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Jacob White of Cold Water, Miss. writes:—*"My horse is well. I had her on the race track and she didn't lame a bit. You are the best doctor I ever saw. The best doctors in Tate County said she would not get well; she had the worst splint in the world, but now she is sound again. I can ride her a mile in two minutes and it does not bother her a bit."*

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HEREFORD SALE DAY NOVEMBER 12TH.

One and One-Third Round Trip Fare On All Railways

LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor.

Alfalfa Experiments

Even F. Benz, the potato king of the Yakima valley, is not so carried away with his farm specialty that he altogether forgets all-around farming. For instance, he writes the Farmer, in response to an inquiry that he had 70 acres of irrigated alfalfa this year, yielding about four tons per acre. He adds that he does not use alfalfa for pasture, but finds it good feed for horses, cattle, dairy cows, hogs, sheep and poultry. There has been no increase in alfalfa acreage in his vicinity. He adds that inoculation is not necessary in his section for the successful growing of alfalfa.

"Alfalfa grows like a weed for us and we think it is fine," writes Jessie B. Grey of Adna, Lewis county. "We raise three acres of alfalfa that is not under irrigation. We pasture the third crop. We think alfalfa great feed for dairy cows, but have not fed it to other stock.

Mrs. L. Chappell of Winona, Whitman county, tells of her experience with alfalfa: "I have 25 acres of alfalfa, 13 acres is an old bed. It did well this year. It is good along the river bank. This piece is sub-irrigated and is 15 years old. In 1916 it was disked thoroughly. Last spring there was nothing done to it. We disked once around and it looked so near dead we quit. My new bed of 12 acres we disked and ruined it. Got one short crop and some fall feed. Will have to reseed in the spring. It hurts it to pasture it very close in the fall. I can work my horses hard on alfalfa alone and keep them fat and slick. My dairy cows do better on alfaufa than anything I have for them and I never buy millfeed while the alfalfa lasts. My hogs enjoy it equally as well, never have a sick hog when so fed. Brood sows may be wintered cheaply. My chickens lay all winter and enjoy a bucket of alfalfa leaves ever morning."

Wahkiakum Testing Association.

In his September report R. M. Turner finds that 13 cows in the Wahkiakum, Wash., association, produced over 50 pounds of butterfat for the month. Faith, the 3-year-old grade Jersey in the William Dawson herd, again leads the association with a butterfat yield of 61.6 pounds. J. R. Burch had the high herd with an average butterfat yield per cow of 40.3 pounds.

Whidby Island Report.

In the Whidby Island (Washington) Cow Testing association during the month of September there were 242 cows tested, averaging 462 pounds of milk and 23.36 pounds of butterfat. The average cost of food was $3.12.

Veterinary

Dr. S. B. Nelson

Cow Holds Up Milk—I have a cow that is in the habit of nursing herself. Is there a cure for this? I also have some cows that hold up about helf of their milk.

N. H. B., Rupert, Idaho.

It is most difficult to prevent a cow from self-nursing. There are many things recommended, but they all of them fail in some cases. I was told about the following a short time ago, and that may be of value:

The owner had a bull ring flattened on the lower side, and over this flat surface of the bull ring he had a piece of heavy tin folded. The tin was approximately 4 by 6 inches large, with a little extra edge to go over the flat side of the bull ring. Now he put in the ring, just as if he was going to ring a bull, and then put the tin over and folded it so as to form a cover over the mouth which would hang from the nose down over the mouth, and which she could not flop up to try and nurse herself. He said that in this case after he had tried many others this stopped the trouble.

I would be of the opinion that your cows hold up their milk because of nervousness. I would suggest to you that before you milk the cows you wash the udder with hot water. Wash them gently for a minute or so and then gently rub them dry and begin to milk, milking fairly rapidly, but not with much action in the arm or pulling of the teats if possible. This washing with hot water will tend to allay the nervous condition and make the cow forget she is being milked. You see the reason the cow holds up the milk is because she becomes self-conscious and takes control over the nerves which control the size of the blood vessels in the udder.

Milk Fever—What is the cause of milk fever in dairy stock? Is it caused by milking too soon after calving? SUBSCRIBER, Oreana, Idaho.

The specific cause of milk fever in milch cows is not known. It is found, however, that certain treatments tend to prevent it. It is always found in heavy milkers. It has been recommended that a heavy milker should not be milked for 12 to 24 hours, and then not milked dry. For several years I have recommended that for two weeks prior to calving the cow should be fed only the driest of feed, and not very much of that. To keep her from becoming constipated she should be given from a quarter to a half a pound of Epsom salts daily. The Epsom salts should be given in a quart of water. Immediately after calving the food can be gradually changed so as to become laxative in character, and after the first day or two she can be put on to a moderately full feed and gradually be brought up to her complete standard of feeding. This system of treatment has given good results in many cases where the cows were formerly affected with milk fever.

Warts on Head and Neck—What can be done to cure warts on a calf's head and neck?—F. S. P., Bremer, Wash.

Apply castor oil to the warts morning and evening. Keeping the air away from them in this way frequently causes the wart to disappear.

Back to the Bible.

I even I, am he that comforteth you. Who art thou that thou shouldst be afraid of a man that shall die, and of the son of man which shall be made as grass?—Is. 51:12.

He that hath no rule over his own spirit is like a city that is broken down and without walls.—Proverbs, 25:28.

Retained Afterbirths

Cows can be made to clean easily without using force

When cows do not clean properly after calving, it indicates a germ infection which is likely to run through the entire herd and result in abortion and barrenness.

Our Government and other authorities assert that retained after-birth, premature calving, sterility and calf scours are all the result of infection by the abortion germ, and retained after-birth is one of the first symptoms.

The after-birth should be removed at once without force and the cow treated with a powerful antiseptic to prevent her becoming an aborter or sterile. Authorities state that while there is no absolute cure for abortion and sterility, nevertheless the infection can be controlled by prompt treatment and the animal saved for successful breeding.

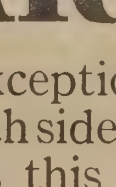
B-K is scientifically correct for this work. Used as a douche for the uterus, it quickly brings the after-birth, dissolves the slimy albuminous matter, kills the germs, stops discharges and controls the infection. B-K does not cause straining, but is soothing and heals the tissues.

Other germicides such as carbolic acid, cresol, Lugol's solution, iodine, etc., tend to irritate, do not dissolve the slimy albumins, but tend to coagulate or thicken them, thereby preventing destruction of the germs and cleansing of the tissues.

B-K is convenient. Just add water as directed, and you have your treatment for calves, bulls and cows and also your disinfectant for general use.

B-K is used so successfully by leading breeders that it is now sold over the entire world and the demand for it has increased five hundred per cent in three years. A well known breeder of registered stock says:

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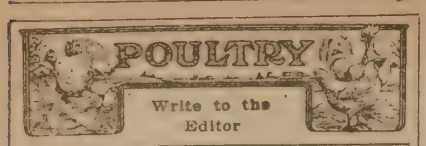
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Remember the Date, November 23



JAMES DRYDEN
Editorial Contributor

Sugar Beets for Fowls

To the Editor: Can you advise me whether or not sugar beets will make good winter feed for chickens and, if so, how to preserve them and prepare them for feeding? O. J. C.
Outlook, Wash.

Sugar beets are a very good green or succulent feed for chickens. I have frequently fed them. They may be hung up where the fowls can pick them at will. A good plan is to stick them on a nail on the wall. At first they should be cut in two and the fowls will then sooner learn to eat them. When they once learn to eat them it will not be necessary to cut them. It is not necessary to cook them nor to cut them up fine, though it might pay for two or three days to do this in order to get them started. Fowls are a little shy of new dishes and need training. If given all the fresh sugar beets they will eat they will need no other green food. It will be noticed if they have no other green feed nor yellow corn that the eggs they lay will have pale colored yolks. If the eggs should be too pale, and a little alfalfa, kale, cabbage or other green stuff. Sugar beets may be preserved in pits or cellars, the same as other vegetables. J. D.

To Exterminate Mites

To the Editor: Will you please tell me what to do to clear my henhouse of chicken mites? G. E. M.
Union, Ore.

If the house is badly infested and mites are found on the walls as well as perches and nests, spray the house thoroughly twice with coal oil or strong kerosene emulsion, the second time a week or ten days after the first, and paint the roost perches with Kreso dip and coal oil, one part of the former to three of coal oil. This may be put on with a paint brush. All sides of the perch should be thoroughly treated. Crude petroleum or creosote may also be used. The painting and spraying should be done in the morning, so as to give the paint a chance to dry before the fowls go to roost at night. J. D.

Hens Get Lame.

To the Editor: Can you tell me what is the matter with my hens? They seem to be in the best of health, but all at once they get lame in their legs. About two weeks of this and they die. What gives hens liver trouble and how can you tell when they have it? How does tuberculosis affect hens and how could one tell when they had it? E. H. H.
New Meadows, Idaho.

Lameness in chickens is sometimes a symptom of tuberculosis, but they are sometimes lame from other causes. Usually they lose flesh, but not always. A surer way to tell if it is tuberculosis is to dissect one of the fowls and examine the liver especially. It is frequently enlarged and nearly always shows yellowish spots on it. The intestines very often are infected. Many small growths will be seen on the intestines varying in size from a pinhead to a peo and often larger. These are the growths caused by the tubercle bacilli, germs that can only be seen with the aid of a microscope. But the symptoms are unmistakable.

There is no known cure for the disease, and if the flock is badly infected the quickest way to get rid of the disease is to kill off all the fowls and start new on fresh ground with healthy fowls. J. D.

Poultryman and Patriotism.

The poultry products in the United States are about large enough to pay for the support of a million soldiers, but the soldiers can not live on money; they must have bread. They need bread more than money. The poultry keepers have it in their power to furnish the allies millions of bushels of wheat without turning a furrow or doing any labor. All that they need to do is to study a little—to use the head a little. By studying rations and food values they will be able to feed their fowls as profitably as though they continue to feed millions of bushels of wheat. Poultry keepers have a great opportunity to show patriotism. Feed the fowls corn, oats and barley and save the wheat. It can be done, and should be done. From fifty to a hundred millions of bushels of wheat would be available for bread-making if poultry keepers would do this. In Oregon, Washington and Idaho, two or three millions of bushels could be saved if the poultry keepers would eliminate wheat from the rations. With bran and shorts and middlings, and corn and oats and barley the wheat is not essential. J. D.

Get Together.

Poultry keepers should get together in every community and buy feed by the ton or carload. If necessary they can import corn from the corn states by the carload. But by getting together and buying in quantity they should be able to get satisfactory prices from the responsible grain dealers. The new corn crop will be coming in before very long, and plans should now be made to get it at the right price. J. D.

Sidelights

He Gets It Both Ways.

The Bachelor—A man must have a lot of trouble keeping a wife properly gowned these days!

The Married One—Not nearly as much as he'd have it he didn't.—Life.

Had to Obey Orders.

An old colored uncle was found by the preacher prowling in his barnyard late one night.

"Uncle Calhoun," said the preacher, sternly, "it can't be good for your rheumatism to be prowling round here in tht rain and cold."

"Doctor's orders, sah," the old man answered.

"Doctor's orders?" said the preacher. "Did he tell you to go prowling round all night?"

"No, sah, not exactly, sah," said Uncle Cal; "but he done ordered me chicken broth."—Sacramento Bee.

Sight and Unseen.

Ebenezer Holcombe had a 1200-pound hog, which he had exhibited in a tent at the fairs for three years, charging 10 cents admission.

One day a traveling man who was passing through the town in which Mr. Holcombe lived called at the house and asked if he might see the hog of which he had heard so much. Ebenezer proudly led the way to the hoghouse, but at the door he turned.

"Cost you 10 cents," he drawled.

The visitor took a dime from his pocket, passed it to the farmer and turned back.

"Why, you ain't seen the prize hog!" called Ebenezer.

"Yes, I have," retorted the traveling man. "I've seen him," and continued his walk back to the country store.—Harper's Magazine.

Proof.

It was the rush hour in one of those quick lunch places where you help yourself and use the arm of your chair as a table. A man called for a piece of pie, and chose a chair; then, remembering that he wanted coffee, he dashed over to the service counter. When he returned with his coffee his chair was occupied by another hurry-up diner.

"Excuse me," said the first man, "but that is my chair.'

"How do you know it is your chair?" demanded the ococupant, in a surly fone.

"Because I can prove it," stated the first man.

"How can you prove it?" asked the occupant.

"By your trousers," was the reply. "You are sitting on my pipe."—Pickings.





When you write to advertisers, be sure to say that you saw their advertisement in this paper.



IN THE ORCHARD

Write to the Editor

GRANVILLE LOWTHER
Editorial Contributor

The Fruit Packers

There has been so much said and written recently about the conflict between the employer and employe that I concluded to make some personal investigations and determine if I could what are some of the real causes for dissatisfaction on the part of the wage worker and of complaint on the part of the employer. I visited a number of orchards, but in this article can only give the experience of one orchardist who employs about 30 persons, divided into two groups, under two superintendents in two different orchards.

I first talked with the employer and told him what I wanted. He gave me all the information available, and began by saying: "We have some old pickers and packers who have been with us for years; they are reliable; we like them, and can always depend upon them. The trouble begins when we undertake to make up the remainder of our crews from persons we do not know. This year there have been an unusual number of families seeking employment as a whole or group, and one would not work unless all could be employed. A man and his wife and perhaps two or three children want to work together. There is generally one or more in the group that could be employed profitably, but generally women are not adapted to fruit picking. Especially is this true where the trees are large, and long, heavy ladders have to be moved from one tree to another, in order to reach the topmost limbs. Children are not good pickers; they tire to easily and work by spurts. In one case we have done well in employing a man and his wife, for the man is a fair worker and his wife is a dandy."

"You mean a peach," I suggested. "Is not the word dandy rather too masculine for a woman?"

"Yes," said he, "but the word peach is too low in the order of nature, if you insist on being technical about it."

"I do not insist," I said, "but I am pleased to have you go on with your story."

"Well," said he, "in another case, I employed a man, his wife and daughter. They are all good, have a home over on the west side, a little tract of land mostly in berries; but their fruit is all harvested before our fruit season comes on.

"I have one man employed who has a homestead and who wants to make money enough to make some improvements on his land. Men of that class are generally reliable because they have some incentive besides temporary daily needs. They are building for the future. The men you can not trust, as a rule, are those without families, without homes, no fixed purposes either to marry, acquire property or save money. They will work a day or two if they have not money enough to pay for the next meal, then they will do some mean trick to damage you about as much as their work was worth and skip out. Yesterday morning I took one man out in my machine, set him to work at 7 o'clock in the morning on a contract to pay him three dollars a day if he made good and if he made good and stayed with me through the season I would give him 25 cents a day extra; making three dollars and a quarter per day for the season. Just before noon I went out and he was up in the top of the tree shaking the apples off onto the ground. I gave him a check for one dollar and forty cents, expressed my appreciation of him in language that would not do to print and told him to get off the place and do it quickly."

"There are this year an unusual number of persons with tents and small camping outfits. We always encourage that, giving them good places for pitching their tents, help them in other ways and often furnish them with extra equipment. These persons generally have the saving habit and will do better than the average of those who room in town or who carry their beds on their backs."

"Do you not think," I said, "that those rooming in town get better accommodations than those who live in tents?"

"No," he said, "and they pay too high for the poor accommodations they do get. Besides when they get into town, they meet up with a lot of professional loafers and 'I won't workers' and get the loafing habit and the microbe of discontent."

"Last week," continued our informant, I put an ad in the paper for fruit pickers. In response to that ad I had 18 calls over the phone. Nearly all of the 18 had to have all the conditions explained, of course, and of the number seven said they would come and go to work. Of the seven who promised, only two showed up and one of them was no good, so I let him go at the end of the day. However, the other man is a good worker and it paid to advertise in order to get him. My wife is of a contrary opinion, for she had to answer most of the phone calls, and spent most of the day at it."

"Have you had much trouble with the I. W. W.s lately?" I asked. "No; at the beginning of the season it looked as if we would have trouble, but the United States troops and a few arrests have had a salutary effect so they they can not in a large way work their program."

"Yesterday evening," continued my informant, "four men called up and wanted work. I engaged them over the phone, they were to meet me at a certain point in town, where I was to take them in my machine to the orchard for work. This morning not one of them was present at the time and place. You see under the circumstances how difficult it is to keep a packing crew going? The packers, of course, are working by the box, making good money and are irritated if they are not kept supplied. The sorters are working by the day, and their time goes on whether they work or not, so they are not fretting. Had it not been that I anticipated trouble this year and built a storage house with capacity for about four carloads, I would be all balled up, but I had more pickers than I needed for a few days and had several hundred boxes ahead."

Such are some of the woes of the employer. Later I want to treat the other side of the question, and tell some of the difficulties under which the wage worker labors. G. L.

LID PRESS



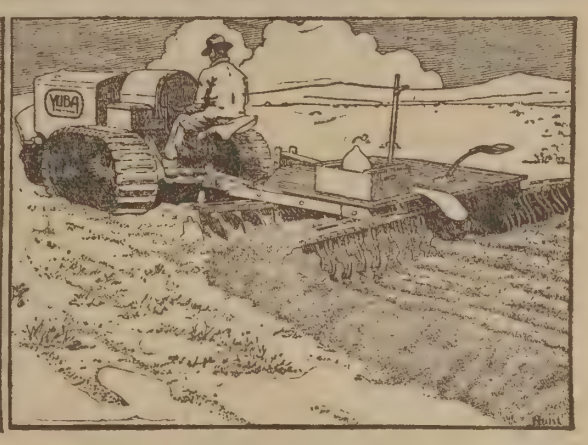
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no limitation of ground

Whatever the condition of the soil, the YUBA Ball Tread Tractor is the master.

Here's the tough adobe land requiring deep plowing to turn up for the air to penetrate and disintegrate. The strength of your best teams is worn out, and the soil is not plowed deep enough.

The powerful YUBA forces its way through it like a tug boat hauling a great ship to sea. It is built for this hard job and does its work successfully.

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Have you soft, sandy soil, where the broad tread of the YUBA will not sink—where the time is valuable and one man could cultivate forty acres a day?

Have you soil where horses sink deep and make slow progress—where the evenly balanced weight of the YUBA Ball Tread would not pack the ground—where the perfect mechanism, the accurate machining, and the high-grade materials used in the construction will save break-downs and stopping for repairs?

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433 California St., San Francisco, California
Gentlemen: Kindly send me catalog and prices on the Yuba Ball Tread Tractor.
I am interested in Model 12-20____ Model 20-35____
Name_____
Town_____ State_____
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[Check main crop raised]
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If interested in Pumps, send for the Pump Catalog.

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U. S. Transport Sunk

First Sea Disaster for This Country

This country's first sea disaster in her war with Germany was recorded last week when a torpedo sent the U. S. transport Antilles to the bottom. The tragedy was comparatively insignificant when viewed alongside the great disasters of the war, however. Approximately 70 men were killed. The vessel was returning from a trip to Europe, where she had delivered a cargo of soldiers, it is understood. The war department gave out the statement of the loss of the ship as soon as it was officially reported, keeping faith thereby with the people in its promise when the war began that disaster to any American interests would be published.

Survivors of the sinking report that neither the submarine nor the torpedo were seen by the persons aboard, but that the explosion was so terrific that the vessel sank within five minutes.

Germany Sinks 11 Ships.

Report has been made of the sinking of 11 ships in a merchant squadron in the European waters by German war vessels. Two British convoying vessels and nine freighters were included in the list of losses. The vessels were Scandinavian, but carrying allied commerce. England lost some 135 men in her convoys, and it is thought lives were lost on the merchant ships also.

Increased Postage.

All postoffices throughout the country have been notified by the postal department at Washington that on November 2 the new postal rates under the war tax bill will go into effect. On and after that day it will take one cent more per ounce or fraction of an ounce to carry first class mail matter. That is, a letter will require 3 cents and a postal card 2 cents. Letters weighing two ounces will require 6 cents, where heretofore they have cost only 4 cents. On parcel post matter an additional cent will be charged on every package that has heretofore required 25 cents postage or fraction of 25 cents postage.

Day of Prayer Proclaimed.

President Wilson has issued a proclamation setting aside next Sunday, October 28, as a day for prayer throughout the entire nation for the success of this country and her allies in war. The proclamation is issued at the request of congress, made in a resolution just before adjournment two weeks ago.

Patriotic Day.

Yesterday, October 24, was a day that will go down in the history of the United States as one of its great patriotic days. It was Liberty day, so proclaimed some time ago by President Wilson for the purpose of arousing patriotism in favor of the great second Liberty loan. The occasion was generally observed throughout the country, parades, speeches and subscribing for Liberty bonds marking the day in thousands of small and largs towns and cities.

Shipyards Strike Over.

After nearly a month's absence from work, owing to their strike, the workers in the shipyards of Seattle and Portland have returned to work and are now busy turning out ships to handle the unusually heavy sea traffic of the war.

What Food Costs.

A comparison of food costs of the principal cities of the United States made public by the health department shows that the cheapest wholesome dietary for a family of five consisting of man, wife and three children, costs $9.89 a week in Chicago, which is more than any other city in the country. The same standard dietary costs $9.67 a week in New York city, $9.25 in New Orleans, $9.14 in Boston and $9.12 in San Francisco. The average for 24 cities and towns in the United States was $9.43.

Roosevelt Blind?

According to a newspaper report, Theodore Roosevelt has the sight of only one eye. The former president is quoted as having told a group of newspaper reporters that while he was president several years ago, he was having a friendly boxing bout in the White House gymnasium when his opponent landed a right swing on his left eye. "The punch broke some of the blood vessels, and I have not seen from that eye since," Colonel Roosevelt is quoted as saying.

Dry and Cold.

An unusual fall condition prevails throughout the greater part of North America. Reports of the weather bureau indicate that there is a general lack of rain, and that temperatures have in many districts fallen quite low. In the northwest, many districts are suffering for lack of rain to give the fall grain a start, and low temperatures have done some damage to late crops that are still unharvested. Generally, however, the fall has been ideal for harvesting.

Will Report to Congress.

The committee appointed by congress just before adjournment to investigate the charges of treasonable actions on the part of Senator La Follette of Wisconsin will make no report of their findings until congress reconvenes in December. The investigation may occupy most of the time before the assembling of the senators and representatives. Senator La Follette has been granted the privilege of appearing before the committee to defend himself, and W. J. Bryan, former secretary of state, is one of the leading witnesses against him.

German Navy Disturbed.

Censored reports of the mutinies in the German and Austrian navies continue to reach the public, giving foundation for the belief that a situation little short of serious exists. According to statements that appear to have reliable sources, thousands of the men of the two navies have revolted, charging inhuman treatment by officers, together with bad food. It is believed in some quarters that the German attack in the gulf of Riga is inspired partially by the hope of the German leaders that the discontent can be wiped out by giving the navy something to do except lie idly by guarding ports. Heretofore the only opportunity naval men have had to participate in the war in an active way was through the submarines, and many of them disliked this class of fighting, it seems.

Increase Freight Rates?

Eastern railroads are preparing to place before the interstate commerce commission a program to provide general relief from what they claim to be serious financial difficulties. Executives of the roads so notified the commission when they appeared in connection with proposed increased rates on a long list of commodities not included in the raise granted in the 15 per cent rate advance case last June.

What form the railroads' program will take was not disclosed, although it was broadly intimated that the commission would be asked to authorize a general rate advance.

Fitzsimmons Is Dead.

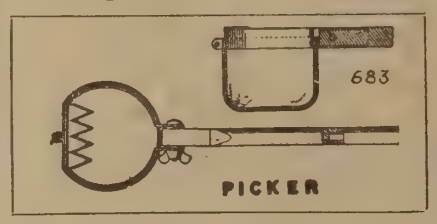
Bob Fitzsimmons, one time champion heavyweight pugilist of the world, is dead. Pneumonia took his life at Chicago Sunday, after a hard fight put up by the former champion for five days. Fitzsimmons had been on the vaudeville stage for some time, but more recently had joined his wife in an evangelistic campaign, having declared himself a reformed man.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Fruit Picker.

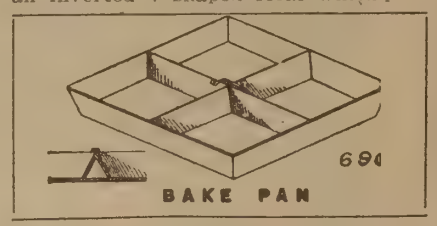
The frame and jaws of this picker are made of stout wire and the pouch of netting or cloth. It is used to gath-



er the fruit from the high branches. A handy boy could make it, and use it.

Crusts on All Sides.

The partitions of this bake pan have an inverted V-shaped form which permits the heat to reach the inner edges of the dough and produce loaves with crusts on all sides.



Potato Field Offers of U. S. Bureau of Markets at North Yakima, Wash.

Robert L. Ringer of the bureau of markets, United States department of Agriculture, has been in Aroostook county, Maine, the great potato growing section of that state, during the last summer, in the work of organizing potato market information. Mr. Ringer will take up this work for the Pacific northwest, with headquarters at North Yakima. On his way from the east, The Washington Farmer was glad to obtain from him the following information:

The United States bureau of markets will open a field office at North Yakima, Wash., October 29 for distributing information on the potato crop to all growers and shippers of the Pacific northwest. It will issue a daily bulletin, giving such information as the prices being paid the growers in Idaho, Colorado, Minnesota, Wisconsin, Michigan and Maine, together with the wholesale prices in the large cities of the northwest and middle west. This information will be coupled with other data on the shipment and destination of cars, to enable the shippers of this section to know where they can market their goods to the best advantage.

Similar work is being done in other parts of the country, supplying growers of the various perishable products with the daily news they need.

This information is for free distribution to any who will apply for it.

To secure this bulletin fill out the application below and mail to the Bureau of Markets, North Yakima, Wash.

BUREAU OF MARKETS:

Please send me the daily bulletin on the potato markets.

Name ....

P. O. Address..... .....

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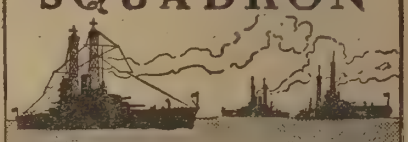
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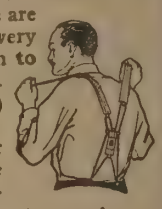
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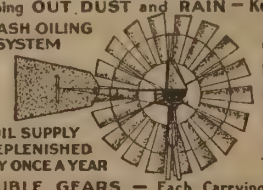
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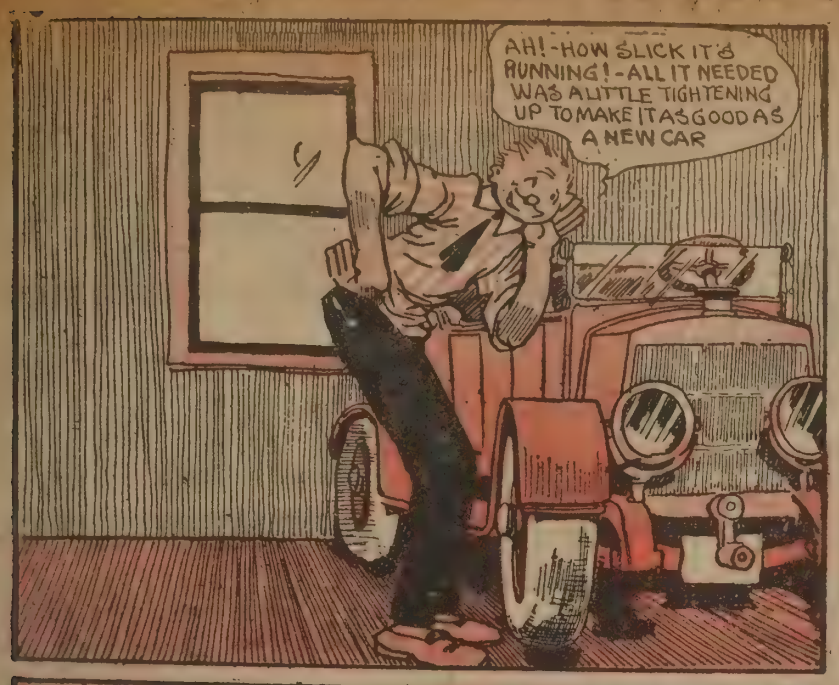


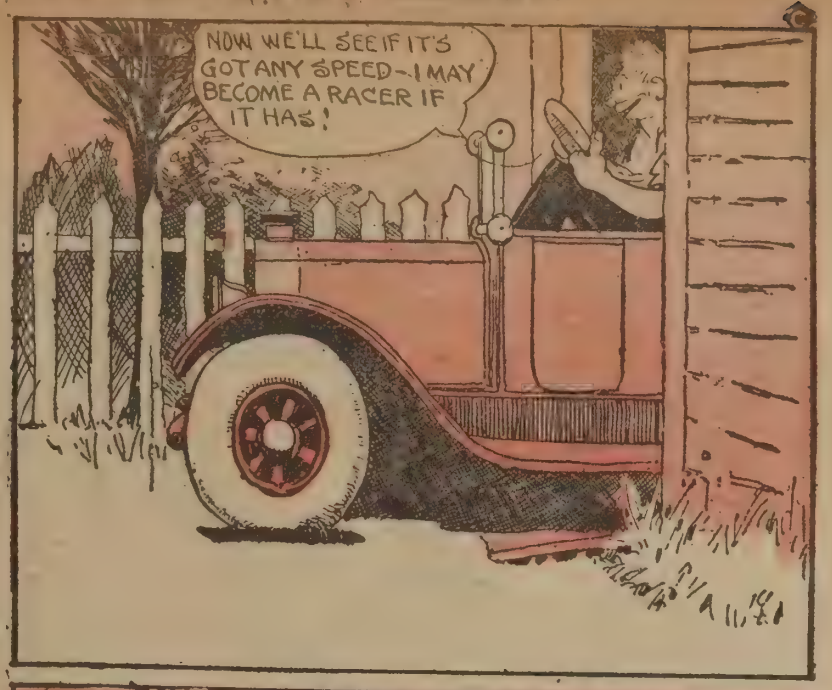
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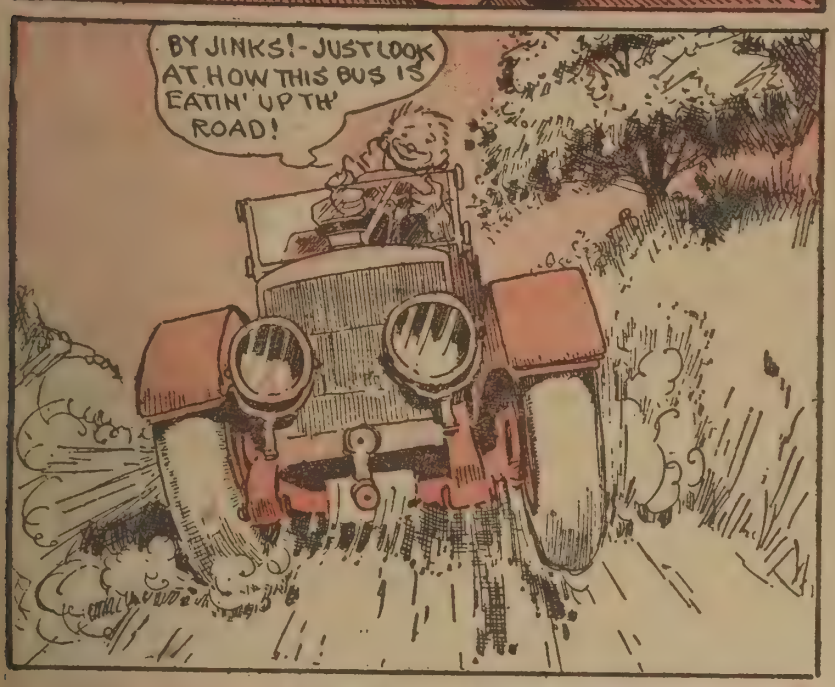


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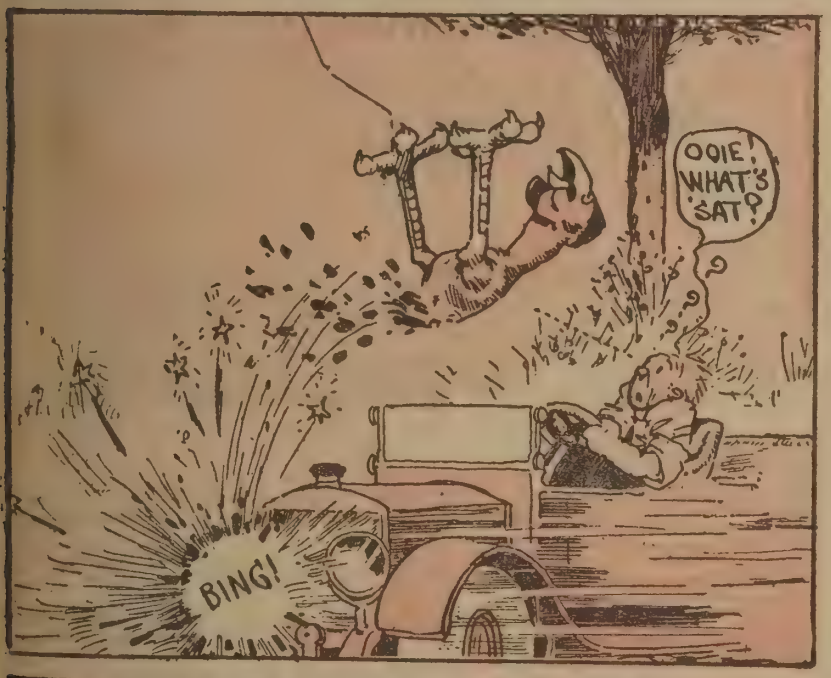
GASOLINE GUS LEARNS A LITTLE ROAD LESSON

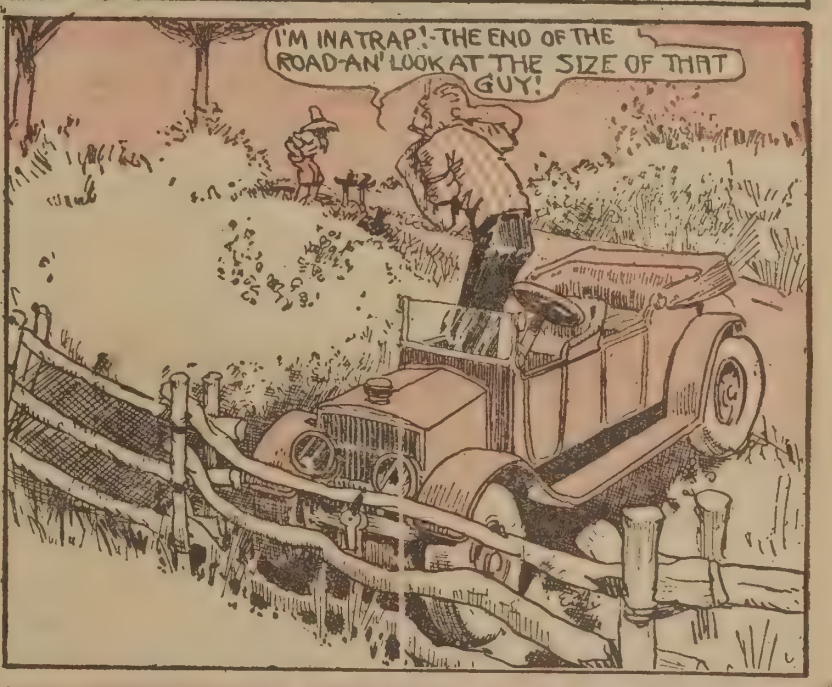


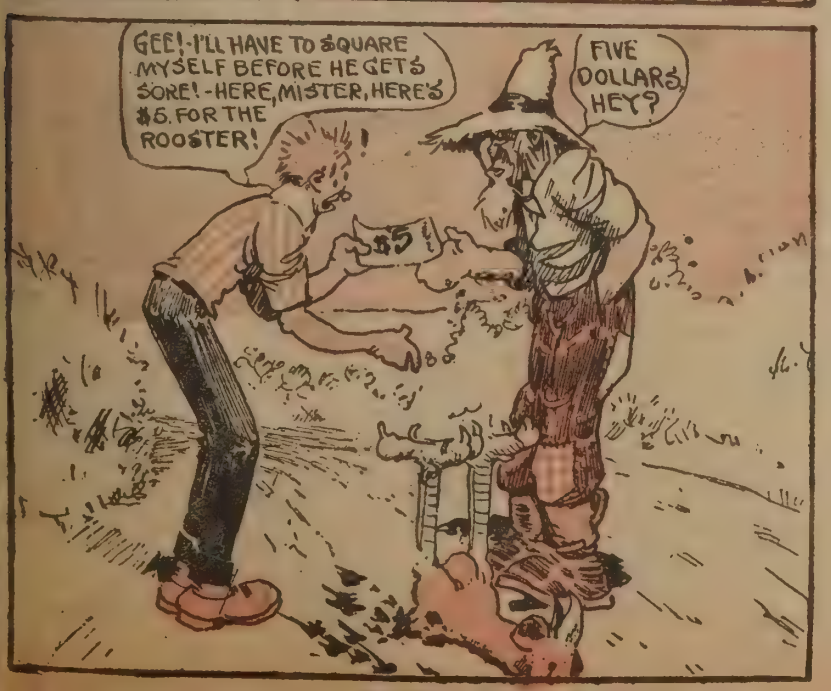


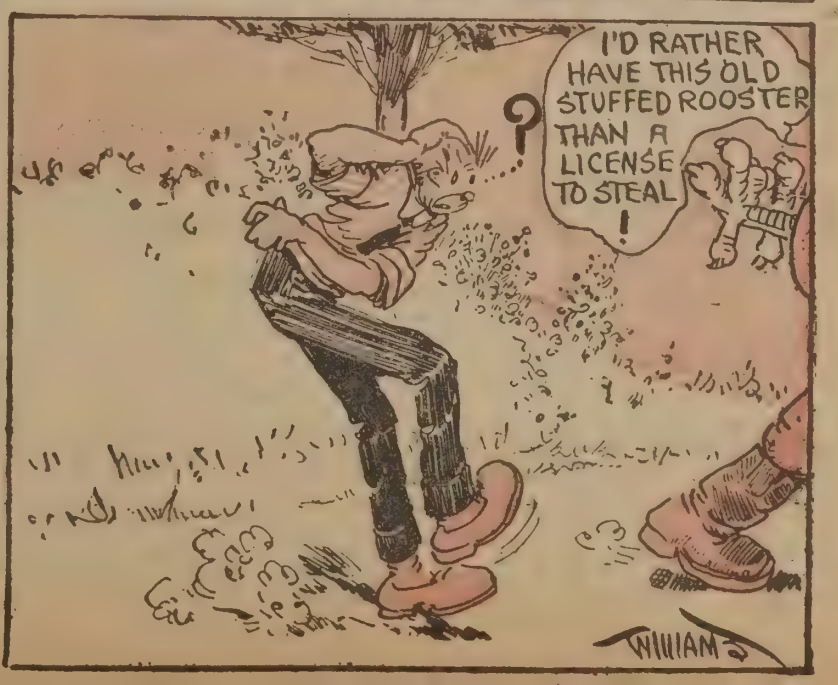


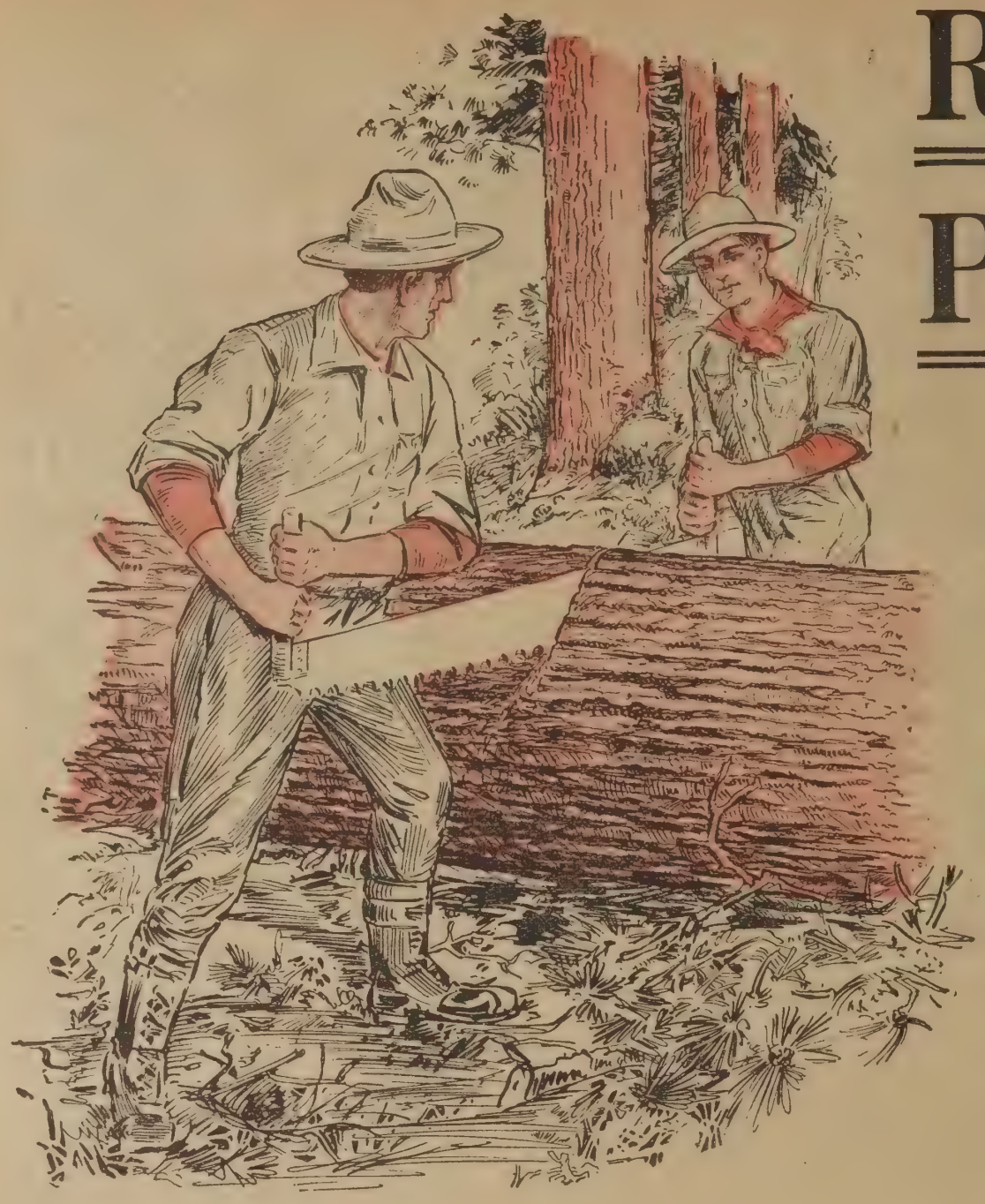












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UNCLE STUMP FINDS OUT THAT IT MAKES A DIFFERENCE

RUFF & REDDY'S FORT

UNK! IF SOMEONE DROPPED SUMTHIN' ON THE FLOOR AN' BROKE IT, WOULD YA BE MAD ?

THAT DEPENDS UPON WHAT 'TIS!

IF IT WAS YOUR TOBACCO JAR, WOULD YA BE MAD ?

I SHOULD SAY I WOULD GRR-R!

WOULD YA SPANK THE PERSON WHO DID IT ?

THAT'S JUST WHAT I'M GONA DO! WHERE IS HE?

WE'LL SHOW YA!

THAT'S SHE!

AIN'T CHA GONA SPANK HER, UNK?

"A WISE MAN CHANGES HIS MIND - A FOOL NEVER!

NOT NOW! I AIN'T GOT TIME!

Jerseys Are Sold

Mommouth Man Sells Forty-Six

The dispersion sale of C. P. Hembree's Jerseys from Monmouth, Ore., at Orland, Cal., October 10, was a decided success. The 46 head averaged $164.50. Imported Brilliant Spray, the cow that was grand champion at the California state fair this fall, was bought by Dr. W. H. Hand of Orland for $735. Her yearling daughter went to the same man for $270. Rochelle's Noble Duke, the grand champion bull at the California fair, was sold to W. B. Morteci of Petaluma for $335. Noble Peer's Jewel, a daughter of Noble Peer, a fine show cow, went to Mrs. Forteni of Orland for $450—next to the top price. Imported Fontaine's Golden Lily brough $400, Charles A. Whittesette of Orland being the buyer. Mr. Whittesette also got Glorious Jaunette for $290, and Mrs. Forteni, Croyden's Estelle Fox, for $285. Trill's Buttercup went to A. Standifer of Orland for $260; and Clover Blossom's Noble Boy went to George A. McDermott of Maxwell for $205.

Many of Mr. Hembree's friends advised him against taking a chance on the sale so far from home, but the California people had seen his cattle, knew of their winnings, wanted Jerseys and he feels well satisfied.

H. A.

Milk Situation

Reviewing the milk situation in New York, the Rural New Yorker says:

Last week we got word a few moments before going to press that the milk dealers had surrendered and agreed to league prices and terms. Later developments show some confusion. The dealers assert that they made no contract and no agreement. They say they accepted the ultimatum to pay the prices for the present for the amount of milk they can sell, and that they will refuse to accept any excess or surplus of their immediate needs. They have shut down over 100 plants.

The complaints of consumers and the complaints in the press have called the attention of the district attorney of New York and the attorney general of the state to the matters. Dealers have entered complaints and indictments are threatened by the district attorney. The mayor of the city has also named a committee to investigate. Four investigations in all are promised, and the officers of the league are likely to spend most of their time for a while responding to subpenaes of investigators. The fact that dealers have been in close combination for years seems to have escaped official attention, but they promptly discovered the farm organization as soon as it was able to do any effective service for members.

Good Field Methods

To the Editor of The Washington Farmer: What is the most profitable cow feed that can be grown on spring-plowed sod in an orchard, that will also be most profitable to the orchard? I have thought of soy beans, if they are good. I wish to know when and how to plant and cultivate them, and also how to harvest them; whether to let them ripen and thresh and grind, or feed green, or make hay.

What seeds should I sow and how much to improve an old pasture where there is mostly alsike clover, some red clover and a little timothy? Would harrowing with a spike-tooth (not adjustable) harrow after sowing be good?

Will plow some oat stubble and seed in grass. What grain is best to sow with it for hay? And how many pounds of the grain to an acre, when a good stand of the grass is wanted?

Would you think it profitable to sow carrots very early and harvest them early enough to grow another crop of carrots for soiling? M. I. H.

Stanwood, Wash.

The above questions have been answered by E. G. Schafer, professor of farm crops, Washington State college as follows:

A legume crop planted in an orchard would be more valuable for soil improvement than some other crop. The soy bean however is a warm weather crop and does not do well in Washington, except at some of the lower altitudes. It is not resistant to frost and does not thrive where the nights are cool. When soy beans are planted in the same location that corn is used the soy beans are usually planted after the corn is planted and make their best development during the warm part of the season. They may be planted in rows three to three and one-half feet apart, drilled in a row.

Soy beans may be left in the field until they are mature, in which case they can be harvested with a bean harvester, or with a mower. They may then be threshed and used for feed. In this case the straw would be practically useless as a feed. Soy beans may also be cut green, when the pods are well formed, but when the seed is in the dough stage they may be cured as hay and fed in this manner.

In general, field peas make a much better annual legume crop for Washington and the northwest. They are adapted for growing where the climate is comparatively cool and should be planted as early in the spring as it is possible to get upon the land. They are not injured by frost except at the time of blooming. They may be planted with the ordinary grain drill at the rate of 60 or 90 pounds per acre. They may be utilized as hay or hogged off. The proper time of harvesting for hay is when the pods are well formed and when the seed is in the dough stage. The crop may also be harvested for seed. The seed of field peas makes excellent feed for live stock. The straw may be utilized as feed for sheep to an advantage.

There are four general methods of improving pasture land. First is by cultivation; second, by reseeding; third, by fertilizing, and fourth, by mowing in case of weeds being present. It is often more desirable to seed down a new field for pasture, after which the old pasture may be plowed up and used for some other crop. If it is desirable to retain the old pasture, cultivation with a disk early in the spring may be desirable. I do not believe a spike-tooth cultivator would have much beneficial effect. If the stand of grass, clover, timothy, etc., is poor the vacant places should be disked thoroughly and reseeded. In many cases it has not been profitable to reseed old pastures. This is especially true where they have become infested with weeds.

Whether or not to seed a nurse crop depends largely upon the condition of the soil and amount of moisture available. When there is plenty of moisture a larger yield may be obtained the first year with little detrimental effect on the grass crop. It is advisable, however, to seed the nurse crop lightly, 20-30 pounds generally being sufficient for oats or barley. Barley is one of the best crops to use as a nurse crop as it matures earlier than wheat or oats. It is often desirable to cut a nurse crop for hay rather than let it mature seed. If the barley is used it should be beardless variety.

Carrots are fairly resistant to cool weather and can be planted quite early. However, they usually require a fairly long season to mature. I do not believe it would be feasible to attempt to grow a second crop the same year on land which is planted to carrots.

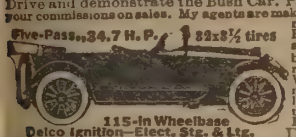
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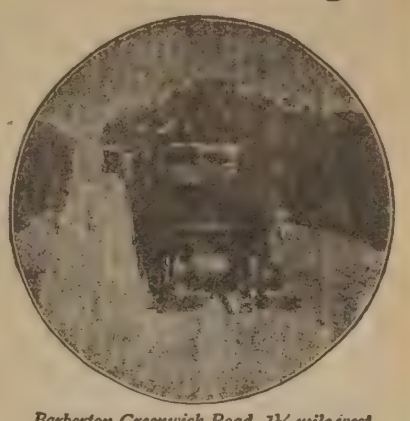
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COMING

IN THE NOVEMBER FIRST ISSUE of this paper we shall give our subscribers interesting surveys by recognized authorities on the live stock breeding situation in the Pacific northwest, and constructive suggestions for live stock breeders and organizations in our own and adjoining states. The issue will be filled with live stock information of practical value to all producers.

A great many of the most prominent and successful live stock men of the Pacific Northwest will use this issue to offer surplus stock they have for sale. Our November 1st issue will therefore prove a very valuable buying guide for all subscribers who are intending to make the right start with live stock of the best blood and type. It will be a decidedly worth while number to keep in some handy place where you can refer to it, because, in a way, it will serve as a directory of reliable live stock breeders in our own section of the country.

Subscribers will find this big live stock number a particularly interesting one in many ways. Watch for it, read it, and then keep it in some convenient place for reference.



THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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SYNOPSIS.

Gale, the trader of Flambeau, a frontier on the Yukon, has known for years that some day civilization would come and he anticipates it with a strange dread. Lieutenant Burrell, a Kentuckian, with all the Kentuckian's ideas of birth and blood, is sent to this post by the United States government to preserve order. The day he arrives, Necia, Gale's daughter, returns from a mission where she has been studying under Father Barnum. Burrell is surprised to find a girl of her refinement in this country. As they are talking together, a squaw and two gurgling halfbreed children appear. Burrell speaks of them contemptuously and Necia informs him that the children are her little brother and sister, and the squaw is her mother. The next day Poleon Doret, a Frenchman, returns from Dawson, and on the same boat, Runnion, a desperado. In attempting to make Runnion leave Flambeau, Burrell is shot by him and only the ready wit of Poleon saves the lieutenant's life. Poleon brings with him from Dawson an evening gown for Necia. As she, arrayed in this unaccustomed finery, is waiting for him to come to inspect his gift, Meade Burrell happens in. The ease and naturalness with which the girl wears the dress and the extreme fairness of her skin amazes the lieutenant. Necia shows him a ring, inscribed "From Dan to Merridy," which she has always worn on a chain around her neck. She also confesses to a feeling that she, Necia, should be called Merridy. Later Burrell asks Gale if this isn't his second marriage, to which Gale gives the startling reply that he has never been married.

CHAPTER IV.

The Soldier Finds an Untrodden Valley.

During the weeks that followed Meade Burrell saw much of Necia. At first he had leaned on the excuse that he wanted to study the curious freak of heredity she presented; but that wore out quickly, and he let himself drift, content with the pleasure of her company and happy in the music of her laughter. Her quick wit and keen humor delighted him, and the mystery of her dark eyes seemed to hold the poetry and beauty of all the red races that lay behind her on the maternal side. At times he thought of her as he had seen her that morning in the dance-girl's dress, and remembered the purity of neck and breast it had displayed, but he attributed that to the same prank of heritage that had endowed her with other traits alien to her mother's race.

He had experienced a profound sense of pity for her upon learning her father's relation to Alluna, but this also largely vanished when he found that the girl was entirely oblivious to its significance. He had tried her in many subtle ways, and found that she regarded the matter innocently, as customary, and therefore in the light of an accepted convention; nor did she seem to see anything in her blood or station to render her inferior to other women. She questioned him tirelessly about his sister, and he was glad of this, for it placed no constraint between them. So that, as he explored her many quaint beliefs and pagan superstitions the delight of being with her grew, and he ceased to reason whither it might lead him.

As for her, each day brought a keener delight. She unfolded before the Kentuckian like some beautiful woodland flower, and through innumerable, unnoticed familiarities took him into her innermost confidence, sharing with him those girlish hopes and beliefs and aspirations she had never voiced till now.

A month of this went by, and then Runnion returned. He came on an upgoing steamer which panted in for a rest from its thousand-mile climb, and for breath to continue its fight against the never-tiring sweep of waters. The manner of his coming was bold, for he stood fairly upon the ship's deck, staring at the growing picture of the town, as he had watched it recede a month before, and his smile was evil now, as it had been then. With him was a stranger. When the boat was at rest Runnion sauntered down the gang-plank and up to the Lieutenant, who stood above the landing-place, and who noted that the scar, close up against his hat-band, was scarce healed. He accosted the officer with an insolent assurance.

"Well, I'm back again, you see, and I'm back to stay."

"Very well, Runnion; did you bring an outfit with you?" The young man addressed him civilly, although he felt that the fellow's presence was a menace and would lead to trouble.

"Yes, and I'm pretty fat besides." He shook a well-laden gold-sack at the officer. "I reckon I can rustle thirteen dollars a month most anywhere, if I'm left alone."

"What do you want in this place, anyhow?" demanded Burrell, curiously.

"None of your damned business," the man answered, grinning.

"Be sure it isn't," retorted the lieutenant, "because it would please me right down to the ground if it were. I'd like to get you."

"I'm glad we understand each other," Runnion said, and turned to oversee the unloading of his freight, falling into conversation with the stranger, who had been surveying the town without leaving the boat. Evidently this man had a voice in Runnion's affairs, for he not only gave him instructions, but bossed the crew who handled his merchandise, and Meade Burrell concluded that he must be some incoming tenderfoot who had grub-staked the desperado to prospect in the hills back of Flambeau. As the two came up past him he saw that he was mistaken—this man was no more of a tenderfoot than Runnion; on the contrary, he had the bearing of one to whom new countries are old, who had trod the edge of things all his life. There was a hint of the meat-eating animal about him; his nose was keen and hawklike, his walk and movements those of the predatory beast, and as he passed by, Burrell observed that his eyes were of a peculiar cruelty that went well with his thin lips. He was older by far than Runnion, but, while the latter was mean-visaged and swaggering, the stranger's manner was noticeable for its repression.

Impelled by an irresistable desire to learn something about the man, the Lieutenant loitered after Runnion and his companion, and entered the store in time to see the latter greet "No Creek" Lee, the prospector, who had come into town for more food. Both men spoke with quiet restraint.

"Nine years since I saw you, Stark," said the miner. "Where you bound?"

"The diggings," replied Stark, as Lee addressed the stranger.

"Mining now?"

"No, same old thing, but I'm grubstaking a few men, as usual. One of them stays here. I may open a house in Dawson if the camp is as good as they say it is."

"This here's a good place for you."

Stark laughed noiselessly and without mirth. "Fine! There must be a hundred people living here."

"Never mind, you take it from me," said the miner, positively, "and get in now on the quiet. There's something doing." His one sharp eye detected the Lieutenant close by, so he drew his friend aside and began talking to him earnestly and with such evident effect as to alter Stark's plans on the moment; for when Runnion entered the store shortly Stark spoke to him quickly, following which they both hurried back to the steamer and saw to the unloading of much additional freight and baggage. From the volume and variety of this merchandise, it was evident that Mr. Stark would in no wise be a burden to the community.

Burrell was not sufficiently versed in the ways of mining-camps to know exactly what this abrupt change of policy meant, but that there was something in the air he knew from the mysterious manner of "No Creek" Lee and from the suppressed excitement of Doret and the trader. His curiosity got the better of him finally, and he fell back into talk with Lee, inquiring about the stranger by way of an opening.

"That's Ben Stark. I knew him back in the Cassiar country," said Lee.

"Is he a mining man?"

"Well, summat. He's made and lost a bank-roll that a greyhound couldn't leap over in the mining business, but it ain't his reg'lar graft. He run one of the biggest places in the Northwest for years."

"Saloon, eh?"

"Saloon and variety house—seven bartenders, that's all. He's the feller that killed the gold-commissioner. Of course, that put him on the hike again."

"How do you mean?"

"Well, he had a record as long as a sick man's drug bill before he went into that country, and when he put the commissioner away them Canadian officials went after him like they was killin' snakes, and it cost him all he had made to get clear. If it had happened across the line, the coroner's jury would have freed him, 'cause the commissioner was drunk and started the row; but it happened right in Stark's saloon, and you know Canucks is stronger than vitriol for law and order. Not bein' his first offence, it went hard with him."

"He looks like a killer," said Burrell.

"Yes, but he ain't the common kind. He always lets the other man begin, and therefore he ain't never done time."

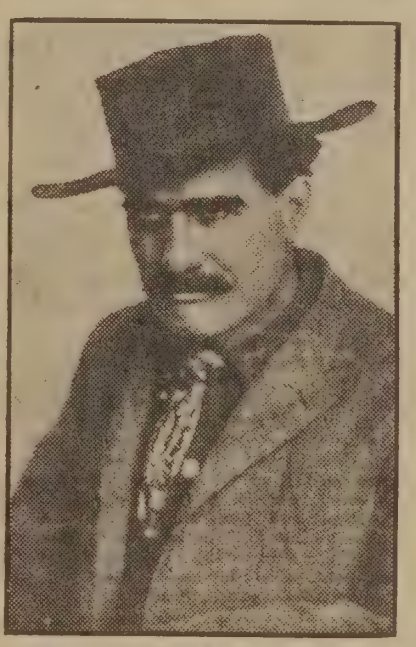
"Come, now," argued the Lieutenant, "if it were the other man who invariably shot first, Stark would have been killed long ago."

"I don't care what would have happened, it ain't happened, and he's got notches on his gun till it looks like a cub bear had chawed it. If you was a Western man you'd know what they say about him. 'The bullet ain't been run to kill him.' That's the sayin'. You needn't grin, there's many a better man than you believes it.'

"Who is it that the bullet hasn't been run to kill?" said the trader's deep voice behind them. He had finished with his duties and now sauntered forward.

"Ben Stark," said Lee, turning. "You know him, John?"

"No, I never saw him, but I know



Runnion.

who he is—used to hear of him in the Coeur d'Alenes."

"That's him I was talking to," said the miner. "He's an old friend of mine, and he's going to locate here."

Burrell thought he saw Lee wink at the trader, but he was not sure, for at that moment the man of whom they were speaking reentered. Lee introduced him, and the three men shook hands. While the soldier fell into easy conversation with the new-comer, Gale gazed at him narrowly, studying him as he studied all men who came as strangers. As he was doing so Alluna entered, followed by Johnny and Molly. She had come for sugar, and asked for it in her native tongue. Upon her exit Stark broke off talking to the Lieutenant and turned to the trader.

"Your squaw, Mr. Gale?"

The old man nodded.

"Pah-Ute, eh?"

"Yes. Why, do you savvy the talk?"

"Some. I lived in California once."

"Where?" The question came like a shot.

"Oh, here and there; I followed the Mother Lode for a spell."

"I don't recall the name," said the trader, after a bit.

"Possibly. Where were you located?"

"I never lit on any one place long enough to call it home."

It seemed to Burrell that both men were sparring cautiously in an indirect, impersonal manner.

"Those your kids, too, eh?" Stark continued.

"Yes, and I got another one besides—older. A girl."

"She's a 'pip,' too," said "No Creek" Lee fervently. "She's plum beautiful."

"All of them halfbreeds?" questioned Stark.

"Sure." The trader's answer was short, and when the other showed no intention of pressing the subject further he sauntered away; but no sooner was he out of hearing than Stark said: "Humph!! They're all alike."

"Who?"

"Squawmen."

"This one ain't," Lee declared. "He's different; ain't he, lieutenant?"

"He certainly is," agreed Burrell. This was the first criticism he had heard of Necia's father, and although Stark volunteered no argument it was plain that his opinion remained unaffected.

The old man went through the store at the rear and straightway sought Alluna. Speaking to her with unwonted severity in the Pah-Ute language, he said:

"I have told you never to use your native tongue before strangers. That man in the store understands."

"I only asked for sugar to cook the berries with," she replied.

"True, but another time you might say more, therefore the less you speak it the better. He is the kind who sees much and talks little. Address me in siwash or in English unless we are alone."

"I do not like that man," said the woman. "His eyes are bad, like a fish eagle's, and he has no heart."

Suddenly she dropped her work and came close up to him. "Can be he the one?"

"I don't know. Stark is not the name, but he might have changed it; he had reasons enough."

"Who is this man Stark?"

"I don't know that, either. I used to hear of him when I was in British Columbia."

"But surely you must know if he is the same—she must have told you how he looked—others must have told you——"

Gale shook his head. "Very little. I could not ask her, and others knew him so well they never doubted that I had seen him; but this much I do know, he was dark——"

"This man is dark——"

"——and his spirit was like that of a mad horse——"

"This mans temper is black——"

"——and his eyes were cruel."

"This man has evil eyes."

"He lacked five years of my age," said the trader.

"This man is 40 years old. It must be he," said the squaw.

Even Necia would have marveled had she heard this revelation of her father's age, for his hair and brows were grizzled and his face had the look of a man of 60, while only those who knew him well, like Doret, were aware of his great strength and the endurance that belied his appearance.

"We will send Necia down to the mission tonight and let Father Barnum keep her there till this man goes," said the squaw after some deliberation.

"No, she must stay here," Gale replied, with decision. "The man has come here to live, so it won't do any good to send her away, and, after all, what is to be will be. But she must never be seen in that dance girl's dress again, at least, not till I learn more about this Stark. It makes no difference whether this one is the man or not; he will come and I shall know him. For a year I have felt that the time was growing short, and now I know it."

"No, no!" Alluna cried; "we have no strangers here. No white men except the soldiers and this one have come in a year. This is but a little trading post."

"It was yesterday, but it isn't today. Lee has made a strike—like the one George Carmack made on the Klondike. He came to tell me and Poleon, and we are going back with him tonight, but you must say nothing or it will start a stampede."

"Other men will come—a great many of them?" interrogated Alluna, fearfully, ignoring utterly the momentous news.

"Yes, Flambeau will be another Dawson if this find is what Lee thinks it is. I stayed away from the Upper country because I knew crowds of men would come from the states, and I feared that he might be among them; but it's no use hiding any longer, there's no other place for us to go. If Lee has got a mine I'll have the one next to it, for we will be the first ones on the ground. What happens after that won't matter much, you four will be provided for. We are to leave in an hour, one at a time, to avoid comment."

"But why did this man stop here?"

(Continued on following page.)

Magazine Department of The Washington Farmer

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

Horse Serum the Latest Treatment for Severe Burns



Dr. R...

Fourteen years devoted to researches, experimental work and observations upon burns ought to be almost enough to learn something about their treatment. As a matter of fact, most discoveries are made after plans and indefatigable effort, seldom by sudden and unexpected accidents, as generally suppose.

Dr. Eward Percy Robinson of New York is the investigator and surgeon who proposes a new remedy for burns. In a recent issue of the Annals of Surgery he explains how he used the serum from horses, the same as that employed in antitoxin treatments, the treatment of bleeders, of hemorrhages of the new-born, after operations and for loss of blood generally, whether from oozing surfaces of wounds or from large veins.

"For some 14 years," says Dr. Robinson, "I have been interested in special lines of work depending on the artificial stimulation of cell proliferation. My success lies in including growth of cellular tissues in cases of atrophy due to the imperfect nutrition, and long suggested the possibility of promoting through analogous processes the repair of tissues destroyed by burns due to fire, hot water or traumatism. In a practice limited to narrowly specialized lines no opportunity occurred for a practical application of these notions until a recent accident to a relative presented conditions difficult or even impossible of treatment by ordinary methods.

"The patient, a woman 45 years old, severely scalded herself with boiling water. The surface area of devitalized skin exceeded one-third of the entire surface of the body. The burns were about equally of first and second degree in extent.

"Within a half hour of the accident the patient was taken to a hospital, where first a temporary dressing of carron oil was applied. On the following day the burns were dressed with an antiseptic ointment. An acute nephritis developed within 24 hours after the accident, but rapidly subsided.

Reasons for Experiments.

"With so extensive a loss of skin it was evidently impossible to bring about satisfactory new skin through skin grafting, owing to the insurmountable difficulty of obtaining a sufficient number of persons willing to part with the large area of skin necessary. Then there had to be taken into account what failures of grafts to take might be expected in treating vast second degree burns, some of which were 10 inches in diameter.

"While I had always believed from my long experience in artificially promoting tissue growth that burns could be successfully treated without skin grafting by supply the cells surviving on the wound's edges nourishment calculated to accelerate proliferation, the opportunity to try out my ideas found me not altogether prepared as to what cell food would produce most satisfactry results.

"Horse serum, heretofore employed in haemophilia, post-operative hemorrhage, etc., and as an application to the oozing surfaces of wounds, occurred to my mind as a possible resort. However, a search for information in current medical literature where this serum could be obtained afforded no light regarding its availability as a local application in cases of burns. So the experiment had to be made without supporting precedents.

Some Extraordinary Results.

"The tests of the horse serum were first made on the 10th day after admission to the hospital, and several large burns of the second degree were selected. Two of these were six to eight inches in length. Normal horse serum containing a small percentage of tricresol was sprayed on the marginal skin fabric, and the parts thus treated were covered with rubber tissue.

"At this point it may not be out of place to mention that with tubes containing only enough serum for a single application, the tricresol acting as a preservative may be safely omitted, thus preventing a certain amount of painful smarting during the spraying process and possibly accelerating cell proliferation.

"The repetition of this treatment several times a day for 10 days resulted in a complete recovery without complications, such as the formation of pus or of proud flesh. The marginal cells thus threw out new cells, not condemned to die of starvation in the devitalized areas, but nurtured by the plasma obtained from animal blood. Instead of requiring four or five months of treatment, as is usual in grafting operations, the patient was discharged from the hospital in 21 days after admission."

"The Barrier" By REX BEACH

(Continued from preceding page.)

insisted the woman. "Why did he not stay on the steamboat and go to Dawson?"

"He's a friend of Lee's. He is going with us." Then he added, almost in a whisper. "Before we returin I shall know."

Alluna seized his arm. "Promise to come back, John! Promise that you will come back even if this should be the man."

"I promise. Don't worry, little woman; I'm not ready for a reckoning yet."

He gave her certain instructions about the store, charging her in particular to observe the utmost secrecy regarding the strike, else she might precipitate a premature excitement which would go far towards ruining his and Poleon's chances. All of which she noted; then, as he turned away, she laid her hand on his arm and said:

"If you do not know him he will not know you. Is it not so?"

"Yes."

"Then the rest is easy—"

But he only shook his head doubtfully and answered, "Perhaps—I am not sure," and went inside, where he made up a light pack of bacon, flour and tea, a pail or two, a coffee pot and a frying pan, which he rolled inside a robe of rabbit skin and bound about in turn with a light tarpaulin. It did not weight 30 pounds in all. Selecting a new pair of water boots he stuffed dry grass inside them, oiled up his six-shooter, then slipped out the back way, and in five minutes was hidden in the thickets. Half an hour later, having completed a detour of the town, he struck the trail to the interior, where he found Polton Doret, equipped in a similar manner, resting beside a stream, singing the songs of his people.

When Burrell returned to his quarters he tried to mitigate the feeling of lonesomeness that oppressed him by tackling his neglected correspondence. Somehow, today, the sense of his isolation had come over him stronger than ever. His rank forbade any intimacy with his miserable handful of men, who had already fallen into the monotony of routine, while every friendly overture he made toward the citizens of Flambeau was met with distrust and coldness, his stripes of office seeming to erect a barrier and induce an ostracism stronger and more complete than if they had been emblems of the penitentiary. He began to resent it keenly. Even Doret and the trader seemed to share the general feeling, hence the thought of the long, lonesome winter approaching reduced the lieutenant to a state of black despondency, deepened by the knowledge that he now had an open enemy in camp in the person of Runnion. Then, too, he had taken a morbid dislike to the new man, Stark. So that, all in all, the youth felt he had good reason to be in the dumps this afternoon. There was nothing desirable in this place—everything undesirable—except Necia. Her presence in Flambeau went far towards making his humdrum existence bearable, but of late he had found himself dwelling with growing seriousness on the unhappy circumstances of her birth, and had almost made up his mind that it would be wise not to see her any more. The tempting vision of her in the ball-dress remained vividly in his imagination, causing him hours of sweet torment. There was a sparkle, a fineness, a gentleness about her that seemed to make the few women he had known well dull and commonplace, and even his sister, whom till now he had held as the perfection of all things feminine, suffered by comparison with this maiden of the frontier.

He was steeped in this sweet, grave melancholy, when a knock came at his door, and he arose to find Necia herself there, excited and radiant. She came in without sign of embarrassment or slightest consciousness of the possible impropriety of her act.

"The most wonderful thing has happened," she began at once, when she found they were alone. "You'll faint for joy."

"What is it?"

"Nobody knows except father and Poleon and the two new men——"

"What is it?"

"I teased the news out of mother, and then came right here."

He laughed. "But what—may I ask——"

"Lee has made a strike—a wonderful strike—richer than the Klondike."

"So? The old man's luck has changed. I'm right glad of that," said the soldier.

"I came as fast as I could, because tomorrow everybody will know about it, and it will be too late."

"Too late for what?"

"For us to get in on it, of course. Oh, but won't there be a stampede! Why, all the people bound for Dawson on the next boat will pile off here, then the news will go upriver and downriver, and thousands of others will come pouring in from everywhere, and this will be a city. Then we will stake our town lots and sell them for ever so much money, and go around with our noses in the air, and they will say to each other:

"'Who is that beautiful lady with the fine clothes?' and somebody will answer:

"'Why, that is Miss Necia Gale, the mine owner. And then you will come along, and they will say:

"'That is Lieutenant Burrell, the millionaire, and—'"

"Hold on! hold on!" said the soldier, stopping her breathless patter. "Tell me all about this."

"Well, 'No Creek' came in this morning to tell dad and Poleon. Then the boat arrived with an old friend of Lee's, a Mr. Stark, so Lee told him, too, and now they've all gone back to his creek to stake more claims. They slipped away quietly to prevent suspicion, but I knew there was something up from the way Poleon acted, so I made Alluna tell me all about it. They haven't more than two hours start of us, and we can overtake them easily."

"We! Why, we are not going?"

"Yes, we are," she insisted, impatiently—"you and I. That's why I came, so you can get a mine for yourself and be a rich man, and you can help me get one. I know the way. Hurry up!"

"No," said he, in as firm a tone as he could command. "In the first place, these men don't like me, and they don't want me to share in this."

"What do you care?"

"In the second place, I'm not a miner. I don't know how to proceed."

"Never mind; I do. I've heard nothing but mining all my life."

"In the third place, I don't think I have the right, for I'm a soldier. I'm working for Uncle Sam, and I don't believe I ought to take up mining claims. I'm not sure there is anything to prevent it, but neither am I sure it would be quite the square thing—are you?"

"Why, of course, it's all right," said Necia; her eager face clouding with the look of a hurt child. "If you don't do it, somebody else will."

But the Lieutenant shook his head. "Maybe I'm foolish, but I can't see my way clear, much as I would like to."

"Oh, dear! Oh, dear!" she exclaimed, brokenly. "I do so want to go. I want you to be rich, and I want to be rich myself. I want to be a fine lady, and go outside and live like other girls. It's—the only chance—I ever had—and I'll never have another. Oh, it means so much to me; it means life, future, everything! Why, it means heaven to a girl like me!" Her eyes were wet with the sudden dashing of her hopes, and her chin quivered in a sweet, girlish way that made the youth almost surrender on the instant. But she turned to the window and gazed out over the river, continuing, after a moment's pause: "Please don't—mind me—but you can't understand what a difference this would make to me."

"We couldn't possibly overtake them if we tried," he said, as if willing to treat with his conscience.

"No, but we could beat them in. I

(Continued on page twenty-four.)

Truth About Food Situation in France

(Continued from page four.)

been able to produce the crops they have achieved. One sees plows with the handles held by women and the horses led by small boys, women stooping among the long rows of corn, cultivating the ground, groups of women slowly crossing the fields, creeping on their knees, painfully tending the newly-planted crops. Occasionally one sees a white bearded patriarch among the women. I should say that the proportion is roughly one man to six women. This, however, is by no means an official figure. It is only my own rough guess. There is no wonder that with this tremendous shortage in labor fields are left bare, while those that can be cultivated produce less than the normal amount per acre. What would our western farmers think of turning the land in the spring with long-bladed hoes? Yet I have seen this very thing being done in many parts of France because of the dearth of agricultural machinery.

Farm Implement Shortage.

Most of the farm implements of France before the war were of American make. One saw the American mark on the plows, harrows, the rakes and reapers and binders and threshers all over France. Since the war much of this machinery has deteriorated sadly and a great part of it is entirely unfit for use, because there are not the mechanics to keep it in repair, and there has not been the importation of new machines and parts to replace the old and worn-out pieces.

France is a country at war, very really and terribly at war. The invader is on her soil. Her mines and furnaces and factories are in German hands. Her richest manufacturing provinces are held by the enemy. Her men must go to the trenches to defend their country and drive back the hordes from across the Rhine. And those men of the armies must be fed and have the means to fight. Above all, they must have arms and munitions, big guns and shells.

Resources Have Suffered.

Every thought of France for three long years of a bloody and sacrificial war has been given to "les braves" at the front. Little has remained for the civilians at the rear, who have borne their trials in stoic calm for the sake of the soldiers in the trenches. And in those years the resources of France have suffered, especially the farm resources, for imports have had to be directed to the army. The steel brought in has been for shells, the machinery to make more shells and guns. The plowshare has been beaten into a sword, while the reaper has rotted idle in the fields with only the hands of women and children to tend it.

Now, France needs grain. She must have grain to make bread both for soldiers and civilians. And only America can supply it. The burden of victory lies as heavily on our western farmers as on the soldiers on the battle fields of France.

In his third and last article, which will appear in the Farmer next week, Mr. Pitney points out that the French people are very much like Americans to the extent that they prize their independence and resent efforts of the government to dictate methods of eating and living. They have also been liberal in feeding refugees without thought of their own future welfare. Hence they now face a dire shortage which official figures clearly prove. Farmers in America have a wonderful opportunity in helping to restore the agriculture of France by furnishing live stock, both now and after the war.

All the World's a Stage, and All the Men and Women Merely Players

Trying to Put a Little Fight in Them



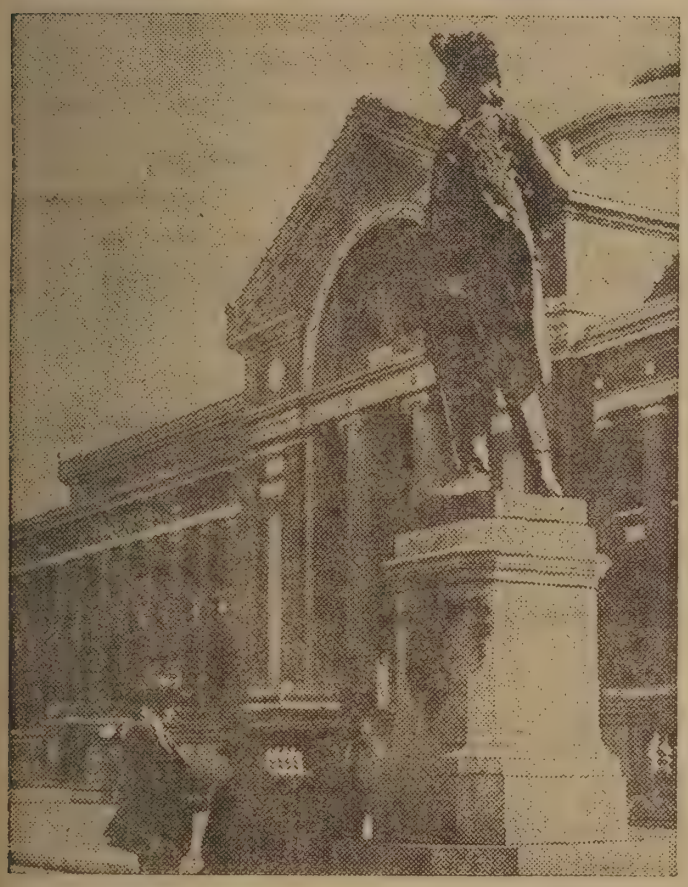
In their recent flight before the oncoming German forces, much of the retreating was done when the Russian soldiers were in no immediate danger. They turned their backs on the foe deliberately and in a panic. The above picture is a photograph of a lone British officer's vain efforts to stem the tide of disaster by checking the retreat of transports.

Keep Dry Feet in the Front Line



L. E. Harris, an employe in the census office of Washington, D. C., has offered to the United States government a new style of shoe to keep feet dry in the trenches. The shoe is light and watertight. Mr. Harris uses these shoes to work about his garden.

Prussian Monument Distasteful



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Congress is trying to get rid of the statue of Frederick the Great in Washington, given to the United States by Kaiser Wilhelm.

Supplying Shells for Big Guns on the Marne



French Official Photo.

Indo-Chinese from French Indo-China are shown unloading ammunition from trucks in the Marne district. It was near here that the famous battle of the Marne was fought in the first days of the war away back in September of the year 1914, in which battle General Joffre's strategy turned Von Kluck's advance only after days of death grapple almost at the wall of Paris.

Discouraging



—Chicago Daily News.

What Is in Between?



—New York Evening Mail.

FAMILY CIRCLE

Editor.

ALICE W. BARLAND
Editorial Contributor.

This Is Potato Week

Three purposes will be accomplished by a nation-wide potato week in which every one will make a special effort to eat potatoes during the week from October 22 to 27, according to the United States department of agriculture. The first of these purposes is to encourage the eating of the tubers, because at that time it is expected that potatoes will be the most available and economical starchy food; the second is to save wheat during this period; and the third is to encourage the general use of potatoes as a wheat substitute by the American householder.

POTATO DISH FOR EACH DAY.

It is said that potatoes may be cooked in more ways than any other vegetable, and a score or more varieties are within the knowledge of any good hotel chef. Seven ways—one for each day in the week, beginning with Monday's, Tuesday's and Wednesday's dinners, through Thursday's lunch, Friday's dinner, Saturday's lunch and Sunday's supper—are here given.

Stuffed potatoes: (Monday.) Cut baked potatoes in half, remove the pulp, mash it, add enough milk for the usual consistency of mashed potatoes, and season with butter, salt and pepper. Fill the baked skins with this mixture, dot the tops with butter and bake for eight or 10 minutes in a hot oven. To vary this add to the mashed potatoes, before the skins are filled, any one of the following: Beaten white of egg (1 egg to 3 medium-sized potatoes); grated cheese (1-2 cupful to 3 medium-sized potatoes); chopped meat (1-2 cupful to 3 medium-sized potatoes); chopped parsley (1 tablespoonful to 3 medium-sized potatoes).

Scalloped potatoes: (Tuesday.) Use raw, thinly sliced potatoes in layers, each layer to be sprinkled with flour, butter, pepper, salt; lastly, pour in just enough milk to be seen through the top layer, and then bake for about an hour, or until the potatoes are tender. This may be varied by adding, in layers, hard-boiled egg, sliced; grated cheese, or minced ham.

Boiled potatoes: (Wednesday.) Select potatoes of uniform size; wash them with a brush, and plunge them into boiling salted water (1 teaspoonful salt to 1 quart water). Cook them with the cover of kettle ajar, until tender, from 20 to 30 minutes. Drain the potatoes; remove the skins; dress the potatoes with butter if desired, and serve them immediately. If it is necessary for the potatoes to stand a few minutes before being served, cover them with a cloth, not a lid, in order that the steam as it condenses may be absorbed by the cloth and not returned to the potatoes to make them soggy. This is the reason for serving potatoes in an uncovered dish. The potatoes may be sprinkled with chopped parsley.

Potato Salad: (Thursday—from Wednesday's left-overs.) Six cold boiled potatoes, four tablespoonfuls salad oil or melted butter, two tablespoonfuls vinegar, one-half tablespoonful salt, cayenne pepper, two tablespoonfuls chopped parsley, few drops onion juice.

Cut the potatoes in one-half inch cubes. Make a dressing by mixing thoroughly the other ingredients. Pour this dressing over the potatoes, and allow them to stand for 15 minutes. Drain off any dressing that may not have been absorbed by the potatoes. Garnish the salad with sprigs of parsley and serve with cream dressing or mayonnaise. To the salad may be added any of the following: One cupful chopped celery, two cucumbers, chopped; or two hard-boiled eggs, chopped or, as a garnish, sliced.

Mashed Potatoes: (Friday.) Thoroughly mash cooked potatoes. Add four tablespoons of hot milk, one tablespoonful of butter, and a little salt and pepper, to each pint of potatoes. Beat the mixture with a fork until light and pile it lightly in a hot serving dish.

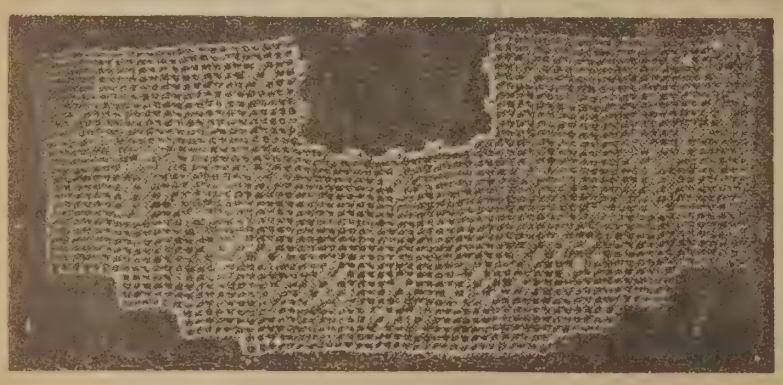
Potato Soup: (Saturday, from Friday's leftovers.) Two cupfuls hot riced or mashed potatoes, one quart milk, two slices onion, three tablespoonfuls butter, two tablespoonfuls flour, one and a half teaspoonfuls salt, celery salt, pepper, cayenne, one teaspoonful chopped parsley.

Scald the milk with the onion; remove the onion, add the milk slowly to the potatoes. Melt the butter; add to it the dry ingredients; stir the mixture until it is well blended. Add this to the liquid mixture, stirring constantly, and boil the soup for one minute.

Potato biscuit: (Sunday, from Friday's or Saturday's leftovers.) One cupful mashed potatoes, 1 cupful flour, four teaspoonfuls baking powder, half teaspoonful salt, one tablespoonful butter, one tablespoonful lard, milk about half cupful.

Sift the dry ingredients. Add these to the potatoes, mixing with a knife. Work the fat into this mixture lightly, a soft dough. Toss the dough onto a floured board, pat and roll it lightly to one-half inch in thickness. Cut it into shapes with a biscuit cutter. Place the biscuits on greased pans and bake 12 to 15 minutes in a hot oven.

Crochet and Tatting Designs
By Winifred Worth



YOKE FOR INFANT'S DRESS.

Filet cluster of forget-me-nots.

Use one ball No. 60 Cordonnet. If you use a finer sized cotton the yoke will be smaller; if a coarser size, the yoke will be larger; 25 mesh.

Follow pattern to 7th row, add 4 mesh.

At end of 13th row add 2 mesh. Continue following pattern until opposite side is reached, then leave off 2 mesh and so on to end of design. Finish off lower with dc.

For neck, 10 dc., 4 t. Continue around neck, being careful not to pull the corners.

In filet crochet always remember to ch. 5 at the end of row and that in one block (or solid mesh) there are always 4 t., in two there are 7, and in three there are 10.

Sew this yoke into garment and trim sleeves with the edging below:



Filet Crochet Edge for Infant's Dress.

Use same size thread as for infant's dress yoke; 48 mesh.

1st Row—1 block, 7 mesh, 1 block, 7 mesh, repeat until you have 7 blocks.

2d Row—Ch. 3 block over block, 5 m., 1 b., 1 m., 1 b., 5 m., repeat to end, turn.

3d Row—1 b., dc., in 3 m., ch. 5, sk. 1 m., dc. in 2 m., and 1 b., 1 b. dc. over b. and 2 m., ch 5, repeat to end.

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Patterns

2232—Girl's one-piece dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 5 yards of 44-inch material. Price, 10 cents.

2347—Lady's one-piece dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 5 3-4 yards of 44-inch material. The skirt measures about 2 3-8 yards at the foot. Price, 10 cents.

1973—Dress for misses and small women. Cut in 3 sizes: 16, 18 and 20 years. It requires 5 3-8 yards of 44-inch material for an 18-year size. The skirt portion measures 2 3-4 yards at the lower edge. Price, 10 cents.

2236—Girl's blouse dress. Cut in 4 sizes: 8, 10, 12 and 14 years. It requires 4 1-2 yards of 44-inch material for a 12-year size. Price, 10 cents.

2252-2251 — A smart gown. Waist 2252 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 2251 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. A medium size will require 5 yards of 44-inch material for the skirt and bolero, and 2 3-4 yards for the waist. Skirt measures about 1 3-4 yards at its lower edge. Two separate patterns, 10 cents for each pattern.

2021—Lady's sport blouse. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 3 1-2 yards of 36-inch material for a 36-inch size. Price, 10 cents.

2234—Lady's apron. Cut in 4 sizes Small (32-34), medium (36-38), large, (40-42), and extra large (44-46). Size medium requires 4 3-4 yards of 36-inch material. Price, 10 cents.

2254—Girl's dress. Cut in 5 sizes: 2, 3, 4, 5 and 6 years. Size 4 requires 3 1-8 yards of 36-inch material. Price, 10 cents.

1974—Child's outdoor set. Cut in 4 sizes: 2, 3, 4 and 5 years. It requires 3 1-4 yards of 44-inch material for a 4-year size. Price, 10 cents.

1908—Lady's night gown. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 1-8 yards of 36-inch material for a 36-inch size. Price, 10 cents.

2257—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 10 requires 5 1-4 yards of 44-inch material. Price 10 cents.

2241—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure, Size 36 requires 5 5-8 yards of 44-inch material. The skirt measures about 2 5-8 yards at the foot. Price, 10 cents.

Fill in this coupon and mail to Pattern Dept.

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Patterns No. ..... Size .....

Patterns No. ..... Size .....

Name .....

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Postoffice .....

State .....

R. F. D. or St. No.....

BE SURE TO GIVE NUMBER AND SIZE.

Cans Her Sausage.

In fall when we kill hogs I always fry sausage in cakes just the size we use on the table, put them in glass jars, cover with melted lard, screw up tight, and it is ready for use at any time, says a writer in Farm and Fireside. I have kept it this way as long as a year. There has always been one drawback—it takes so much lard to cover the cakes, and while it was never entirely lost, it was never so nice to use again. Last year I tried a new scheme. I used only the grease that fried out of the cakes as they were cooking, two or three tablespoonfuls to each jar of sausage; after screwing tight I turned the jar upside down to cool. Of course, the jar was perfectly air-tight when the lard cooled and my sausage kept perfectly. I left the jars standing on the tops, as in the warm weather the lard might melt away, and the sausage would spoil.





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Men's winter Union Suits
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Greeting From President

To the School Children of the United States:

The president of the United States is also president of the American Red Cross. It is from these offices joined in one that I write you a card of greeting at this time when so many of you are beginning the school year.

The American Red Cross has just prepared a junior membership with school activities, in which every pupil in the United States can find a chance to serve our country. The school is the natural center of your life. Through it you can best work in the great cause of freedom to which we have all pledged ourselves.

Our Junior Red Cross will bring to you opportunities of service to your community and to other communities all over the world, and guide your service with high and religious ideals. It will teach you how to save in order that suffering children elsewhere may have a chance to live. It will teach you how to prepare some of the supplies which wounded soldiers and homeless families lack.

It will send to you through the Red Cross bulletins the thrilling stories of relief and rescue. And, best of all, more perfectly than through any of your other school lessons, you will learn by doing these kinds things, under your teachers' directions. to be future good citizens of this great country which we all love.

And I commend to all school teachers in the country the simple plan which the American Red Cross has worked out to provide for your cooperation, knowing as I do that school children will give their best service under the direct guidance and instruction of their teacher. Is not this perhaps the chance for which you have been looking to give your time and efforts in some measure to meet our national needs?

WOODROW WILSON, President.

My Dear Boys and Girls:

Please take this message from our president to your teacher and schoolmates. I know that you will all be glad to help raise money for this noble cause. Write me your plans, and we will exchange them in our Corner, and perhaps many will have suggestions to offer. I shall look forward with pleasure to your interest in this work. Your loving AUNT NELLIE.

The Best Twin to Be Found.

Dear Aunt Nellie: I hope that all the children are as interested in the letters as I am. I am going to write to you for the first time and see if I can join the Corner. Can I? If I can I will be very glad. I am very light in complexion and short. For my twin I think I have the very best one there ever could be found. And she goes to the very same school as I do. Her name is Elvera Peterson. She is just four days older than I am. Her birthday is on the 22d of October and mine is on the 26th. But if I have any more I would very much like to hear from him or her. I am 12 years of age. Now I will describe our school. It contains two rooms and there are 35 children. I am in the eighth grade, but I have only five subjects to study. They are geography, history, grammar, arithmetitc and civil government. They all seem so hard. I like my teacher so well that if I pass this year I wish she would teach me when I go to high school. I go to Mount Vernon to Sunday school, about three miles from our place. Now I will describe the scenery around here. There are hills in sight everywhere and farms all over, with a town ever so far in the distance. There is a railroad running about a quarter of a mile away from our house. There is a river about a mile away named the Skagit river. I will tell you what I do. I wash and wipe dishes, sweep the floor, carry in wood, pump water at the house, dust the furniture, make cake, put the cows in the barn in the evening and feed them, pump water for them, and numerous other small things, so that I always have something to do. I take music lessons on Saturdays. I am in the third grade of music. We have an organ. Now I must tell you about my vacation. Part of the summer I watched the cows and went visiting and then I went to Belleville to stay for a while at one of my friend's house, whose name is Adelia Westlund. We had great fun, especially going in swimming in a large ditch by their place. One day my friend's mother went to town and she and I, my sister and her sister had to get dinner for four men. My friend's mother told us how we should prepare the food and then we forgot how to cook tomatoes and had to go and ask the neighbors. I have also been to Seattle this summer and had great fun. We went visiting every day. I have also been to the fair, which all school children attended, or nearly all. They had exhibits of all kinds there. We all went and took our grandmother with us. I love to read the letters you write in the Farmer and hope that all children will try to obey and follow them. The one you wrote on laughing was a very good one. I have noticed so many people and children laugh when they should not. I guess this will be all I can tell for this time. I will write again.—Elsa Mattson, R. R. 5, Box 32, Mount Vernon, Wash. (Yes, Elsa, you may be a cousin and we are glad to have you in the Corner. Aunt Nellie wants it to be bigger and better and letters like yours make it so. What a busy, happy girl you must be. Write again and ofter.)

Kept Busy Saying "Hello."

Dear Aunt Nellie: This is the first time I have written to the Corner and I enjoy reading the letters very much. The Corner is growing a little. I have just been reading what you have said about laughing. I would like to see my letter in print, too. I live on a 17-acre farm three miles below Mt. Vernon. We have nine cows and about 25 chickens. I feed them every night. We have two black horses and we also have four cats. One cat is with me almost all the time. Her name is Tutsie and she is all gray. We have a dog. His name is Major. He got run over by a car this summer. One Sunday my mothers' cousin took out his motorcycle, and Major happened to follow him, and a Ford car came and ran over him. His left hind leg got bruised, and mama gave him two lumps of sugar, but he did not eat them, and she also gave him a piece of cake, but he did not eat it. The chickens did, though. We have also got a Ford. We got it the 26th of September this year. We have gone about 86 miles with it. My father is the only one that can drive it. I go to Lincoln school. I am in the seventh grade. My teacher's name is Mrs. Carl Anderson. She lives on the Pacific highway, too. I am 11 years old and will be 12 January the 15th. Have I a twin? If I have I wish she or he would write to me. I have not taken very many music lessons yet, but I will. I have been taking music lessons from my school teacher, but I guess I will take lessons from Miss Loveless in Mt. Vernon. I have two sisters whose names are Elsa and Edna. Elsa is the oldest, then Edna. It is soon time to cut the corn. We have about three acres of corn this year. We have a silo. We got it about three years ago and this will be the fourth year. We have had Alfred Johnson fill it all these three times, and I suppose we will have him fill it this time, too. We were to the county fair Friday and I saw a lot of friends that I knew. All the time I had to keep on saying "Hello," "Hello," "Hello." We went there about 10 and came home at 4 o'clock.—Elna Mattson, R. F. D. No. 5, Box 32, Mt. Vernon, Wash.

A Family of Seven Kittens.

Dear Aunt Nellie: I have never written to the Children's Corner. I am 10 years old and will be 11 January 20. I live on a 40-acre farm and we have seven kittens. They are always right under our feet when we go downstairs. They made my brother fall down. He had a bucket of water and spilled it all over himself. My sister has two cats and my brother has two and I have three. My sister Fyrne has one with a pink nose, with a black spot on it. They all are very pretty cats. Our mother cat has had one other bunch of cats before these. There were five before and seven this time. They are very funny colors. Maybe my sister will take my picture with her kodak and I will send you my picture. I hope some girls my age will write me a letter.—Helen Schoenberg, Prosser, Wash.

Eugenia Likes Outdoor Life.

Dear Aunt Nellie: I have been reading the Children's Corner. I have never written before. I would like to join and be a cousin. We take The Farmer. I am 12 years old and in the sixth grade. I go to a country school. There are three grades in my room, fourth, fifth and sixth. There are 36 pupils in my room. I like outdoor life. I like to dance, play football, baseball, basket ball and tennis. I am going to tell you how I look. I have dark brown hair and blue eyes. I am tall. I weight 85 pounds.—Eugenia Huggins, Box 64, Bremerton, Wash.

Will Go to High School Next.

Dear Aunt Nellie: This is the second letter I have written to the Corner. I am in the eighth grade this year. My teacher's name is Leone Robertson. She is very good. I hope I pass the eighth grade because next year I want to go to high school. My birthday is August 25. I am 13 years old. Have I a twin? I have one twin, but she has not written to me lately. Her name is Louise Lemon.—Ellen Purcell, Pomeroy, Wash.

Glad to Hear From Joyce Again.

Dear Aunt Nellie: I think I will write a few lines to say I am still alive. We aren't going to have any school next week because it is the teachers' institute. Today we cleaned the schoolhouse and yard. We washed the windows and picked up the boards in the yard. The teacher got a football for us.—Joyce Hatch, Route 2, Goldendale, Wash.

THE BARRIER

(Continued from page twenty.)

know where Lee is working, for I went up last winter with Constantine and his dog team, over a short cut by way of Black Bear creek. We took it coming back, and I could find it again, but Lee doesn't know that route, so he will follow the summer trail, which is 15 miles farther. You see, his creek makes a great bend to the southward, and heads back towards the river, so by crossing the divide at the source of Black Bear you drop into it a few miles above his cabin."

While she made this appeal Burrell fought with himself. There were reasons why he longed to take this trip, more than he had longed for anything since boyhood. These men of Blambeau had disregarded him, and insisted on treating him with contemptuous distrust, despite his repeated friendly overtures; wherefore he was hungry to beat them at their own game, hungry to thrust himself ahead of them and compel them to reckon with him as an equal, preferring a state of open enmity, if necessary, to this condition of indifferent toleration. Moreover, he knew that Necia was coveted by half of them, and if he spent a night in the woods alone with her it would stir them up a bit, he fancied. By heaven! That would make them sit up and notice him! But then—it might work a wrong upon her; and yet, would it? He was not so sure that it would. She had come to him; she was old enough to know her mind, and she was but a half-breed girl, after all, who doubtless was not so simple as she seemed. Other men had no such scruples in this or any other land, and yet the young man hesitated until, encouraged by his silence, the girl came forward and spoke again, implsively:

"Don't be silly, Mr. Burrell. Come!

She took him by the edges of his coat and drew him to her coaxingly. It may have been partly the spirit of revolt that had been growing in him all day, or it may have been wholly the sense of her there beside him, warm and pleading, but something caused a great wave to surge up through his veins, caused him to take her in his arms, fiercely kissing her upturned face again and again, crying softly, deep down in his throat:

"Yes! Yes! Yes! You little witch! I'll go anywhere with you! Anywhere! Anywhere!" The impulse was blind and ungovernable, and it grew as his lips met hers, while, strangely enough, she made no resistance, yielding herself quietly, till he found her arms would softly about his neck and her face nestling close to his. Neither of them knew how long they stood thus blended together, but soon he grew conscious of the beating of her heart against his breast, as she lay there like a little fluttering bird, and felt the throbbing of his own heart swaying him. Her arms, her lips, and her whole body clung to his in a sweet surrender, and yet there was nothing immodest or unmaidenly about it, for his strength and ardor had lifted her and drawn her to him as on the sweep of a great wave.

She drew her face free and hid it against his neck, breathing softly and with shy timidity, as if the sound of the words she whispered half frightened her.

"I love you. I love you, Meade."

It may happen that a man will spend months in friendly and charming intimacy with a woman and never feel the violence or tenderness of passion till there comes a psychic moment or a physical touch that suddenly enwraps them like a flame. So it was with Burrell. The sweet burden of this girl in his arms, the sense of her yielding lips, the warmth of her caressing hands, momentarily unleashed a leaping pack of mad desires, and it was she who finally drew herself away to remind him smilingly that he was wasting time.

"My lips will be here when those mines are worked out," she said. "No, no'" and she held him off as he came toward her again, insisting that if they were going they must be off at once, and that he could have no more kisses for the present. "But, of course, it is a long trip, and we will have to sit down now and then to rest," she added shyly; at which he vowed that he was far from strong, and could not walk but a little way at a time, yet even so, he declared, the trail would be too short, even though it led to Canada.

"Then get your pack made up," she ordered, "for we must be well up towards the head of Black Bear Creek before it grows dark enough to camp."

Swiftly he made his preparations; a madness was upon him now, and he took no pains to check or analyze the reasons for his decision. The thought of her loveliness in his arms once more, far up among the perfumed wooded heights, as the silent darkness stole upon them, stirred in him such a fret to be gone that it was like a fever. He slipped away to the barracks with instructions for his corporal but was back again in a moment. Finally he took up his burden of blanket and food, then said to her:

"Well, are you ready, little one?"

"Yes, Meade," she answered, simply.

"And you are sure you won't regret it?"

"Not while you love me."

He kissed her again before they stepped out on the river trail that wound along the bank.

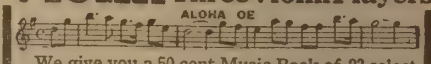
Two hours later they paused where the foaming waters of Black Bear Creek rioted down across a gravelled bar and into the silent, sweeping river, standing at the entrance to a wooded, grass-grown valley, with rolling hills and domes displayed at its head, while back of them lay the town, six miles away, its low, squat buildings tiny and toylike, but distinctly silhouetted against the evening sky.

"Is it not time to rest?" said the soldier, laughingly, yet with a look of yearning in his misty eyes as he took the girlish figure in his arms. But she only smiled up at him and, releasing his hold, led the way into the forest.

He turned for a moment and shook his first at the village and those in it, laughing loudly as if from the feel of the blood that leaped within him. Then he joined his companion, and, hand-in-hand, they left the broad reaches of the greater stream behind them and plunged into the untrodden valley.

(To Be Continued.)

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SPOKANE PORTLAND SEATTLE

News for Breeders

The development association of Michigan, Minnesota and Wisconsin has offered to the sheepmen of the middle west 3,000,000 acres of free range in those states as an aid to the sheep industry. No charge will be made except the taxes on the land, under the present plan.

J. M. Dickson & Son of Shedd, Ore., report the sale of five heifer calves, two going to B. W. Powers & Sons of Palouse, Wash., and three to J. J. Van Kleek of Beaverton, Ore. Both these gentlemen came to Ashburn Farm and made personal selections, which they intend to use in founding a Register of Merit herd of their own. Both are cow testing association members and are realizing the value of good blood. The Messrs. Dickson report numerous other inquiries for heifers.

Breeding of Hogs.

A lot of informative matter is given in a pamphlet for free distribution, published by the National Duroc-Jersey Record association at Peria, Ill. Enthusiasts of the red animal will readily assert that the pamphlet is rightly named "Duroc-Jersey Hogs Are Profitable."

To show that the book is by no means given t othe laudation of the single breed, we make the following extract.

Fortunately the breeding of hogs can be readily and quickly enlarged by any enterprising farmer. Expensive buildings are not necessary. One does not need to make extensive purchases. In the space of a very few years one can increase his herd by breeding; at the same time he grows into an understanding of the larger business which safeguards its operation. It does not require plunging nor borrowed capital, but gradual growth. It is said one profits in a business according to the size of the business and the size of the business depends entirely upon the man who is conducting it. The man with a small farm can enlarge his business without buying more land; he can add to his business a herd of good hogs, arrange his cropping system accordingly, and it is with little or no difference that he can double his business without changing his acreage. This system calls for a good plan of management. This big business on a small farm is economical since it requires but a small fixed capital in land. It does, however, call for more head work than a little business on a big farm. Eventually it leads to increased profits, to a better farm, to a modern home, and to remodeled equipment in the way of barns and outbuildings. This reward in the way of a better home through the use of better blood is something in the nature of a reward for the man who appreciates the use of better blood.

Consignments to Lewiston Show.

Among those making consignments to the Hereford sale at the Northwest Live Stock show at Lewiston, Idaho, November 12, are the following:

Henry Thiessen, Sweetwater, Idaho; A. B. Cook, Townsend, Mont.; George Chandler, Baker, Ore.; J. D. Miles, Livingston, Mont.; Platt Bros., Genesee, Idaho: A. O. Huntley, Cuprum, Idaho; Hastings & Hover, Phillipsburg, Mont.; L. L. Young, Nampa, Idaho; John Mortenson, Burley, Idaho.

Central Oregon Association.

An organization that may mean much to the breeders of central Oregon was given birth at a meeting in the parlor of the Prineville Hotel, Prineville, Ore., Oct. 3, when the Central Oregon Pure Bred Stock association was organized. The prime object is to issue a catalogue giving the names and addresses of all members and the breed of stock they are raising. Other matters of interest to the breeders will be considered from time to time. There was a good attendance and much interest was shown. A number of breeders who could not be present sent word they were heartily in with the project and would join. There are 44 breeders of pure bred stock of various kinds in Crook county and the two counties that have lately been detached from it and it is believed everyone will come into the association.

The following oficers were elected: President, M. R. Biggs, Shorthorns, Prineville; vice-president, Henry McCall, Jerseys and Holsteins, Prineville; secretary-treasurer, R. A. Ward, county agriculturist, Redmond; directors, S. S. Stearns, Herefords, Prineville; G. H. Berkley, sheep, Hay Creek; John Kemmling, Jerseys, Prineville; E. C. Park, Jerseys, Redmond; Sam Woods, hogs and Percherons, Redmond; C. W. Elkins, sheep, Prineville. H. A.

Fame-Making Holsteins.

The world's record heifer, Glen Alax Queen de Kol is doing nicely in her new home at the Hollywood farm in western Washington. This is the animal for which the reported price of $18,000 was paid at the Worcester sale last June. There are at the Hollywood farm also three daughters of the noted sire Sir Vreman Hengerveld, who has more 30-pound daughters to his credit than any other sire of the Holstein breed. The young sire, Judge Segis, son of King Segis, is also on this farm, who, though at the head of a small herd has to his credit now, at the age of 6 years, 25 A. R. O. daughters. One of these daughters produced, at the age of 1 year 11 months, over 21 pounds of butterfat in seven days and then came back within 11 months, and produced 28.55 pounds of butter in seven days. He also bas a 33-pound daughter.

Hollywood farm has been in business for seven years and has sold very few females, as they have been keeping them to build up their own herd. Having reached the maximum, hereafter, they will sell females, as well as males, holding a sale at Portland, Ore., November 23.

National Hereford Association.

Dr. T. F. DeWitte of Parshall,, Col., was elected president of the National Hereford Breeders' association at the meeting to succeed W. A. Dallmeyer. H. O. Mexley was elected vice president. The following directors whose terms expired were reelected: W. A. Dallmeyer of Jefferson City, Cyrus A. Tow of Norway, Iowa, A. B. Cook of Helena, Mont. The directors were authorized to appropriate $60,000 for Hereford prizes for state fairs and national Hereford shows this year. Records for the last year show 70,292 animals registered and 70,369 transferred, the first time in the history of the organization that the transfers have exceeded the records. The increase in registers for the year was 10,999 and of transfers 18,418. The organization gained 1300 members in the year, bringing the total up to 8000.

Powerful Locomotives.

A Swiss railroad has installed electric locomotives powerful enough to haul 340-ton trains up steep grades.

SHEEP

20 Oxford Down Rams 20

Yearlings and ram lambs; will make special price on the lot. All stock registered. No ewes for sale.

C. P. Kizer, Harrisburg, Ore.

THIRD ANNUAL SALE OF
Pure Bred Big Type Poland Chinas
By Greenleaf Stock Ranch

60 head will be offered, including BOARS, SPRING BOARS, FALL BOARS, SPRING GILTS, FALL GILTS and SIX SOWS WITH PIGS AT THEIR SIDES.

One-half of the offerings will be from our IMPORTED SOWS from IOWA of last year.

Offerings will be from such breedings as KING OF ALL, Henry Fesenmeyer's A WONDER, SMOOTH LONG JUMBO, ORANGE BOY, BIG WONDER, BIG BONE EQUAL II., GRAND MASTER, CHOICE JUMBO and several others of the most popular big type blood lines.

SALE WILL BE HELD AT OUR RANCH IN OUR NEW SALE PAVILION, JUST COMPLETED,

WERNESDAY, OCTOBER 31, 1917.

WRITE FOR DESCRIPTIVE CATALOGUE

WILSON BROS.

A. L. WILSON, Manager. GREENLEAF, IDAHO.

Breeders' Department

SHORTHORN CATTLE

Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN, Wapato, Wash.

Hercules Shorthorns

For particulars write

DAY & ROTHROCK

Exchange Bank Bldg.

Spokane, Washington.

CEDARHURST FARM

SHORTHORNS.

Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

JOE TURNER, Meyers Falls, Wash.

Shorthorn Cattle

SHIRE HORSES.

DR. G. E. NOBLE, Boise, Idaho.

DUROC-JERSEY SWINE

Hillcrest Duroc Jerseys

For immediate sale:
1 11-mo. gilt, bred to farrow Oct. 3d, $60.
1 10-mo. gilt, to farrow Nov. 8, $50.
3-month pigs, $25.
Extra fine stock, combining the blood of noted show winners.

R. P. Camp, Ione, Wash.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Pullman, Wash.

HOLSTEIN CATTLE

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

GUERNSEY CATTLE

Young Guernsey Bull

HOPE'S REEDY OF ORCAS ISLAND No. 43788 of advanced registry and imported blood. The best individual we have ever offered.

S. P. DAVIS, Olga, Washington.

JERSEY CATTLE

Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.

WAIKIKI FARM, R. 7, Spokane, Wash.

ABERDEEN ANGUS

FOR SALE

Ten reg. Aberdeen Angus cows and heifers; fresh in from 2 to 4 months. One 3-year reg. A. Angus bull to exchange for another reg. one.

L. C. ROBERTS, Bend, Ore.

BERKSHIRE SWINE

FOR SALE.

2 Berkshire boars, age 6 mo., $25 each.
2 Berkshire gilts, age 6 mo., $25 each.
1 Holstein bull calf, age 5 mo., $100.
2 Shropshire lamb bucks, age 7 mo., $25 each. Every animal eligible for registry.

G. Z. ICKES SR., R. F. D. 1, Palouse, Wash.

SIXTH SEMI-ANNUAL SALE

WESTERN WASHINGTON HOLSTEIN BREEDERS' ASSOCIATION

OCTOBER 31, 1917

On the Snohomish County Fair Grounds
SNOHOMISH, WASHINGTON

A BREEDERS' SALE:
Seventy-five head of the
"Best in the West" will be offered

For this sale the Western Holstein Breeders' Association have purchased of Wm. Bishop, the splendidly bred heifer, Chimacum Nettie Wayne Boon 375264, and will sell her to the highest bidder, the entire proceeds to be donated to the Red Cross. For catalog and particulars address

A. B. WINTER, 1515 Hewit Ave., Everett, Wash.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Oct. 22.—A decided upshoot which took place in corn prices today resulted largely from the fact that the amount of corn on hand in Chicago had been reduced to the smallest total in many years. The market closed strong, 1 to 2 1-2c net higher, with December $1.16 3-4@1.16 7-8 and May $1.10 1-8@1.10 1-4 to $1.10 1-4@1.10 3-8. Oats advanced 1-4@3-8c to 1-2c and provisions 20c to $1.50. Oats derived strength almost wholly from the bulge in the corn market.

Cash Quotations.

CHICAGO, Oct. 22.—Corn—No. 2 yellow, $1.99@2; No. 3 yellow, $1.98@1.99; No. 4 yellow, nominal.

Oats—No. 3 white, 60@60⅝c; standard, 60¼@61c.

Rye—No. 2, $1.81@1.82.

Barley, $1.15@1.37.

Timothy, $6@8.50; clover, $18@24.

Chicago Futures.

	Open.	High.	Low.	Close.
Corn—				
Dec.	1.14⅛	1.16⅞	1.14¼	1.16¾
May	1.08¾	1.10⅝	1.08¾	1.10⅛
Oats—				
Dec.	.58¼	.58¾	.58¼	.58⅝
May	.58¾	.60¼	.59⅜	.60⅛
Pork—				
Jan.	38.10	39.50	37.80	39.50
Lard—				
Nov.	23.70	23.75	23.50	23.70
Jan.	21.25	21.65	21.10	21.65
Ribs—				
Oct.	.....	.....	.....	27.70
Jan.	20.85	21.32	20.50	21.27

Pacific Northwest Grain.

PORTLAND, Ore., Oct. 22.—Grain futures: November oats, $49 bid; feed barley, $49; brewing barley, $51. Eastern corn and oats in bulk bid: Oats—No. 3 white October, $43.75; No. 38 clipped white, $45; corn No. 3 yellow January, $50.50; corn No. 3 mixed, $50; November oats No. 3, $43.75; oats clipped, $45; February corn yellow, $50; corn mixed, $49.50.

Pacific Northwest Grain.

PORTLAND, Ore., Oct. 20.—Grain futures: November oats, $49 bid. Feed barley, $49 bid; brew barley, $50 bid.

Eastern corn and oats in bulk: Oats—No. 3 white, $43 bid; No. 38 clipped, white, $44 bid. Corn—No. 3 yellow, January, $50.50 bid; No. 3 mixed, $50 bid. Oats—No. 3, November, $43 bid; clipped, November, $44.50 bid. Corn—Yellow, February, $50 bid; mixed, $49.25 bid.

San Francisco.

SAN FRANCISCO, Oct. 22.—Barley—December, $2.37 1-2 bid, $2.41 asked.

Minneapolis Grain.

MINNEAPOLIS, Oct. 2.—Wheat—Receipts, 700 cars compared with 705 a year ago.

Corn—No. 3 yellow, $1.93@1.94.

Oats—No. 3 white, 58@59½c.

Flax, $3.13.

Flour—Unchanged. Shipments, 46,177 barrels.

Rye, $1.80½@1.81½.

Barley, $1.08@1.30.

Bran, $30@30.50.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1, up to Saturday night, for 1917-18 and 1916-17, were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1917-18	1400	463	93	1731
1916-17	2053	471	125	1282
Portland—				
1917-18	1958	452	70	666
1916-17	2027	764	66	552
Total—				
1917-18	3358	915	163	2397
1916-17	4080	1235	181	1834

San Francisco Produce Market.

SAN FRANCISCO, Oct. 20.—Butter—Fresh extras, 44½c, prime firsts, 44c.

Eggs—Fresh extras, 53½c; fresh firsts, 53c; fresh extra pullets, 43½c; extra firsts, pullets, 42c.

Cheese—New firsts, 21c; Young Americas, 25c.

Poultry—Hens, 28@30c; fryers, 26@27c; broilers, 27@29c; squabs, $2@2.50; pigeons, $1.50; geese, 18@20c; ducks, 15@17c; turkeys, young, 30c per pound.

Hay—Wheat and wheat oat, $21@22; alfalfa, $18@21; tame oat, $22@23; barley, $18@21; barley straw, 50@80c.

Potatoes—$1.75@2.25.

Butter and Eggs.

PORTLAND, Ore., Oct. 20.—Butter—Weak. City creamery, prints, 48c; cartons, 49c; buying price butter fat, 52c and 54c, Portland; cube extras, 45c; prime firsts, 44c; firsts, 40c; dairy, 34c.

SAN FRANCISCO, Oct. 20.—Butter—Fresh extra, 44½c; prime firsts, 44c.

Eggs—Fresh extra pullets, 42½c; extra firsts, pullets, 42c.

ELGIN, Ill., Oct. 20.—Butter—42c, a drop of 1½c, was bid for butter on the Elgin board of trade. There was no sale.

CHICAGO, Oct. 20.—Butter—Easy; creamery, 38@42c.

Live Stock Quotations.

At Omaha.

OMAHA, Oct. 22.—Hogs—Receipts, 2100; steady. Heavy, $15.60@15.90; mixed, $15.65@15.85; light, $15.80@16; pigs, $13@15; bulk of sales, $15.65@15.85.

Cattle—Receipts, 12,500; steady to strong. Native steers, $9@16; cows and heifers, $6.50@9; western steers, $8.50@13; Texas steers, $7.50@10.50; cows and heifers, $6@8.50; canners, $5@6; stockers and feeders, $6.50@11.50; calves, $9.50@12.50; bulls, stags, etc., $5.50@7.50.

Sheep—Receipts, 2300; slow to 25 cents lower. Yearlings, $12@13; wethers, $11@12; ewes, $9.50@10.50; lambs, $16.50@17.25.

At Chicago.

CHICAGO, Oct. 22.—Hogs—Receipts, 28,000; weak, 15 to 20 cents under Saturday's average. Bulk, $14.80@16.15; light, $14.30@16.15; mixed, $14.60@16.60; heavy, $14.50@16.55; rough, $14.50@14.80; pigs, $10.25@14.

Cattle—Receipts, 24,000; firm. Native steers, $6.85@17; western steers, $5.90@13.65; stockers and feeders, $6@11.40; cows and heifers, $4.75@11.80; calves, $9@16.

Sheep — Receipts, 37,000; weak. Wethers, $8.80@12.75; ewes, $8.10@11.50; lambs, $12.50@17.75.

At Salt Lake.

SALT LAKE CITY, Oct. 18.—Cattle—Receipts, fair; market, somewhat higher and good demand for fat steers, also for canners and bulls. Choice steers, $9@9.50; good steers, $7.75@8.75; fair steers, $6@7.50; choice cows and heavy heifers, $6.75@7.50; fair to good cows and heifers, $5.75@6.50; cutters, $5@6.25; canners, $4@5; grass bulls, $6@7; veal calves, $9@11.

Hogs—While hog run still continues only fair and considerably below packers' demands, market has followed eastern markets in declining. Choice fat hogs, 175 to 225 pounds, $17@17.50; mixed hogs, 160 pounds and up, $16.75@17.25.

Sheep—Past week has seen heaviest sheep run in history of yards and considerable breeder and feeder stock changed hands. Market, 25c lower than last week on top lambs. Good choice lambs, $15.75@16.25; ewes, $8.25@9.25; wethers, $10@10.50; yearlings, $10.50@11.50.

At Portland.

PORTLAND, Ore., Oct. 22.—Cattle steady; receipts, 1653. Best beef steers, $9.50@10.25; good beef steers, $8@9.25; best beef cows, $7.25@8; ordinary to good cows, $4@8; best heifers, $7@8; bulls, $4@6.75; calves, $7@9.50; stocker and feeder steers, $4@7.25.

Hogs—Market 50 cents lower; receipts, 2352. Prime light, $15.85@16; prime heavy, $15.75@15.85; pigs, $14@14.50.

Sheep—Market 50 cents higher; receipts, 1580. Western lambs, $14@14.50; valley lambs, $13.50@14; yearlings, $12.50@13; wethers, $12.25@13; ewes, $8.50@10.50.

Spokane Stock Yards Monday.

Hogs—Receipts, 22; weak to lower. Prime light, $15.90@16; prime heavy, $15.75@16; pigs, $14@15.25; stockers and feeders, $11@13; bulk of sales, $16.

Cattle—Receipts, 42; market steady. Best beef steers, $8.50@9; good steers, $7@7.75; best beef cows, $6.50@7.25; good cows, $5.25@6.25; common cows, $3@5; best heifers, $6.50@7.25; bulls, $5@6.25; calves, $6.50@8; stocker and feeder steers, $5@7.25.

Sheep — Receipts, 1200; market steady. Prime lambs, $13.25@14; good lambs, $12@12.50; prime yearlings, $11.50@12.50; prime wethers, $11.25@12.25; best muttons ewes, $8.50@10.

Portland Wheat.

PORTLAND, Ore., Oct. 20. — The wheat movement to this part is again increasing. Last week Portland received 510,900 bushels as compared with 192,400 bushels in the same week last year. For the season to date receipts have been 2,545,400 bushels, or within 89,700 bushels of the quantity received on this date last year. Arrivals are being handled better and there is less talk now of congestion at the mills.

The mill feed market is strong with a keen spot demand. The output is growing, but is not yet up to requirements, and it is hard to say when the promised reduction in prices will take place.

There was but little trading during the week in oats or barley and prices at the close were about steady.

Seattle Market.

SEATTLE, Oct. 20.—Seattle jobbers who have gone into the potato situation from the growers' standpoint have discovered that farmers are not refusing to sell so much from the position of waiting higher futures as because of a shortage of labor. Working the best they can without sufficient help, these farmers are pitting their spuds, to run them when a better opportunity presents itself.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 55@57c per dozen; pullets, 42c dozen.

Poultry—Live hens, fat, over 4 lbs., 21c per lb.; 4 lbs. and under, 16@19c; old roosters, 12c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 12c per lb.; springs, live, 21c per lb.

Butterfat—54c per lb.; dairy butter, 35c.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.; heifers, 6@8c per lb.

Hogs—Light, 15@16c per lb.; heavy, 12@13c per lb.

Veal—Fancy light, 14@16c per lb.; heavy, 12@13c per lb.

Hides—Salted, 17c per lb.; flint-dry hides, 27c per lb.; salt kip, 18c per lb.; green hides, 14c per lb.; green calf, 25c per lb.; dry calf (under 6 lbs.), 27c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 1c per lb.; dry full wool sheep pelts, 36@38c per lb.; salt bulls, 14c per lb.

Portland Market.

PORTLAND, Ore., Oct. 20.—Butter was easy at the end of the week, following reports of slumps at San Francisco and Elgin. The country creamery situation has not improved, as the city creameries still refuse to buy the make of the outside plants. A part of the surplus is being worked off at the municipal store, but there is no shipping outlet as yet for the remainder.

There is a good shipping demand for potatoes, but the car shortage tends to restrict the movement. Shippers are paying $1.25@1.50 at country points. The jobbing market on the street is slow at $1.50@1.75. Onions continue firm, with association sellers asking $2.35.

Grain dealers and bag men are interested in the report from the east that the food administration intends to regulate and fix prices on burlap, sisal, binder twine and that line of goods.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $49 per ton.

Millstuffs—Bran, $30 per ton; shorts, $33.

Barley—No. 1 feed, $49; brewing, $50; rolled, $55@57.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch, case counts, 50@52c per dozen; candled, 55@60c.

Poultry — Hens, 16@19c; ducks, 18@20c; turkeys, live, 20@22c; geese, 10@11c.

Butter—City creamery, prints, 48@49c per pound; cubes, extras, 46c.

Cheese — Tillamook triplets, 26c; Young Americas, 27c.

Dressed meats — Veal, 15 1-2@16c; pork, 21@21 1-2c.

Hops — 1916, 20@24c; 1917 crop, 35c.

Potatoes—New, 1½@1¾c per lb.

Wool—Eastern Oregon, 40@65c; valley, 58@60c.

Beans — California small white, 14 1-2c; large white, 14 1-4c per pound.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes — New local potatoes, $1.75@2 cwt; sweet potatoes, $3.50 cwt.

Apples—Large eating apples, $1.25 box; cooking apples, $1.50 box; Delicious, $1.75@2.50; Red Macintosh, $1.50@1.75 box.

Butter—Blanchard cartons, 49c lb; Medo-Maid, 49c lb; Cascade, 49c lb; Gold Leaf, 49c lb; Better Butter, 49c lb; Attalia, 49c lb; Diadem, 49c lb; Hazelwood, 49c lb; Solid Pack, 48@49c lb; Jersey Belle, 47c lb; Peerless, 45@46c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 27c lb; Hazelwood Young America, 28c lb; Wisconsin limburger, 29@30c lb; brick cheese, 33c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—White filler, guaranteed, $13.25 case; selected storage, $12.50.

Live Poultry—Hens, 13c lb; broilers, 20c lb; old roosters, 8c; ducks, 12½c lb; geese, 10c; turkeys, 20@22c.

Dressed Poultry—Hens, 18c lb; broilers, 28c lb; old roosters, 12½c; ducks, 18@20c; geese, 16c; turkeys, 25@30c.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 13c; salted cured, 16c; green bulls and stags, 11c; salted cured, 13c; kip, 15 lbs to 25 lbs, 22c; calf skins up to 15 lbs, 16c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 7 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $1@2 each; dry horse hides, $2.50@4 each.

The Wool Market.

BOSTON, Oct. 19.—The Commercial Bulletin will say tomorrow:

"Less business was accomplished in the wool market this week than for several weeks, although there appeared to be a better interest. Prices were very firm and medium wools a bit stronger.

"The committee on wool supply of the council of national defense, which will handle the 200,000 bales promised for government use from Australia, will not receive offerings from the American trade after October 27.

"Manufacturers are well engaged, machinery occupation on October 1 being slightly better than the month before."

Scoured basis:

Texas—Fine 12 months, $1.68@1.72; fine 9 months, $1.55@1.60.

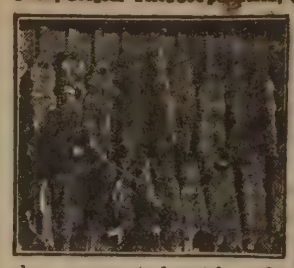
California—Northern, $1.70@1.75; middle county, $1.45@1.50; southern, $1.35@1.40.

Oregon—Eastern No 1 staple, $1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.60@1.65.

Territory—Fine staple, $1.80@1.82; half blood combing, $1.70@1.75; three-eighths blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled—Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

RESULTS of Using our Sure Death Capsules by U. S. Forest Ranger, Charles F. Grooms Ukiah, Oregon. Price 35c per dozen; $2.25 per hundred, express prepaid on 4 dozen or more.



They contain the most deadly combination of poisons known to science. Kills Wolves, Foxes and Sheep-killing Dogs almost instantly and in no way injures the fur. Indorsed and recommended by the U. S. Government. Order today. Full particulars furnished free on request, also catalogue of trappers' supplies and hide and fur price list No. 53.

Northwestern Hide & Fur Co. Minneapolis, Minnesota



100,000 Second-Hand Grain and Potato Sacks for Sale

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

HIDES

Send hides to us for highest cash market price. Check by return mail.

References, any bank in Seattle.

North Coast Tanning Co.

Ballard Station, Seattle.



FURS & HIDES ARE HIGH!

Get what they are worth this year! Deal with a Home-Western House, that Grades Liberally, Remits Quickly, and has Ample Capital. (Ask your bank). Try us. Valuable Illustrated Price-List and Tags for the asking. Get your name on our Season's Mailing List. Trappers' Guide on request. Big money trapping this year. Money-saving Tanning Catalogue sent free. Harness Leather exchanged for Hides. This is the House you've been looking for. Write

Lincoln Hide & Fur Co. 1038 Q St., Lincoln, Neb.

FURS

WE CHARGE NO COMMISSION

Highest prices paid—prompt returns, correct grading—45 years of fair dealing means more money for you. Before shipping any one get our reliable prices, supply catalog and shipping tags.

SIMON SUMMERFIELD & CO. ST. LOUIS, MO. U.S.A.
Dept. 334 "One Reliable Fur House" Write Today

RAW FURS WANTED

Wolves and Muskrats wanted at the very highest market prices. Ship at once. Get my price list. Free guide to shippers.

GEO. I. FOX.
Fur Merchant,
165-167 W. 25th St., New York.

C. A. SOPER
TAXIDERMIST.

Fur rugs a specialty. Mounting of game birds. Raw furs to finished garments. China pheasant season opens Nov. 1 in Nez Perce Co., Idaho.

LEWISTON, IDAHO.



Modern Efficiency Standards Set

PURE BRED HOLSTEINS

Above All Other Breeds

Official tests have proven purebred Holsteins give more milk and butterfat at a lower cost of production, with less "overhead" than any other breed. Write for the facts about the profitable breed—free.

THE HOLSTEIN-FRIESIAN ASS'N OF AMERICA, Bx. 205, Brattleboro, Vt.

Not a Square Deal

Cheaper Wheat and Less Bread

T. Hanson, Massachusetts commissioner of weights and measures, must be a man of unusual moral courage. The New England Master Bakers' association held their annual convention at Springfield, last week, and put Mr. Hanson on the program for an address. He addressed them all right, but gave them a line of talk they were not expecting. He told them they were not giving the public a square deal; that while the price of wheat had been lowered by the government, the consumer was getting less bread for his money than he got three months ago.

Government investigations confirm the charge. Reports on bread prices made by consumers to the United States Food administration from 52 points in all sections of the country for the four weeks ending September 22, show a wide difference for the same size loaf and emphasize the need for bread standardization.

In Pleasantville, N. J., for the week ending September 1, a 16-ounce loaf of bread was selling for 6 cents. This was the lowest price record reported for the United States. For the same week a 16-ounce loaf was reported selling for 15 cents in Rock Falls, Ill., Eastport, Me., Red Bank, N. C., Miami, Okla., Gallitzin, Pa., Nashville, Tenn., Laramie, Wyo., and Newport, Conn. But the high price record went to Paragould, Ark., where, in the week ending September 8, 20 cents was being charged for a 16-ounce loaf.

In Eagle Pass, Texas, a 16-ounce loaf sold for 7 1-2 cents. It sold for 8 cents in Lansing, Mich., Houston, Texas, and Chippewa Falls, Wis., and for 15 cents in Grinnell, Iowa, West Point, Miss., and Lowell, Mass.

A 14-ounce loaf sold for 6 cents in Lock Haven, Pa., and Nashville, Tenn., for 7 cents in Winfield, Kan., Grafton, W. Va., Evansville, Ind., and Ann Arbor, Mich.; for 10 cents in Jefferson, Iowa; West Point, Miss., and Corvallis, Ore.; and for 15 cents in Paragould, Ark., Ridgewood, N. J., and Abington, Mass.

A 12-ounce loaf sold for 5 cents in Rock Falls, Ill., Brownsville, Texas, and Douglas, Ariz.; for 6 cents in Santa Monica, Cal., Annapolis, Md., Westminster, Md., Camden, N. J., and Renovo, Pa.; for 10 cents in Paragould, Ark., Ridgewood, N. J., Gloversville, N. Y., Lock Haven, Pa., Herrin, Ill., Peru, Ind., Monongahela, Pa., and Nashville, Tenn.; and for 12 cents in Laramie, Wyo.

Unfortunately and unjustly the farmers suffer for the sins of those bakers who are charging excessive prices for bread. When the consumers in the cities complain, the bakers have a habit of blaming the farmer. The farmers, they tell the wage-earners in the great cities, are a greedy lot, rolling in wealth and merciless on the poor bakers and consumers, and that thought takes root in millions of ignorant minds.

It is to Mr. Hoover's credit that he is doing all he can to combat that falsehood and fix the blame where it ought to rest. Reliable figures like those above tell the whole story and prove absolutely that it is the middlemen and the bakers who are responsible for the high price of bread, and not the farmers who grow the wheat and sell it at the government-fixed price.

Producers Raise Milk Price.

Nearly 75 members of the Inland Empire Dairy association met at Spokane October 13 and advanced the wholesale price of milk to distributors at approximately 30 cents a gallon, compared with the former price of 24 cents a gallon, the rise to take effect November 1. It is probable the price of milk will be based on the estimated standard of hundredweight instead of by the gallon. The association levied an assessment of 10 cents of milk-producing cows each month to defray expenses.

The standard of milk test will be continued at 3.6 per cent and per hundred will be added to the regular scale for each one-tenth of 1 per cent above the standard test figure, and the same amount deducted for milk dropping below the test.

Texas Women's Regiment.

A regiment of 1500 women in Texas and Oklahoma formed for service in France has been offered the war department. The majority are young women whose husbands are in the national army and the national guard. While doubting the war department will accept women or fighting forces like the Russian battalion of death, the Texas women suggest they could do scouting or guard work or guard prison camps.

APPLE PIE CONTEST.

For Domestic Science Students.

Domestic science students are encouraged to enter the apple pie contest arranged for the National Apple show, to be held in Spokane November 19-24.

Any student who has begun a course in domestic science at any high school, college, university, extension school or normal school in the Inland Empire may enter this contest. The territory embraced is all of Washington, Oregon, Idaho and Montana. No entrance fee is required. Each pie must be made under the supervision of the instructor in domestic science at the institution and a certified slip with the teacher's name attached must accompany each entry in the contest. The pies must be made from fresh apples.

All of the pies must be delivered by 12 o'clock noon, November 24. Judging will commence at 3 p. m. on that date. A first prize of $5, a second of $3 and a third of $2 is offered.

Helen Howe, superintendent of the women's department of the National Apple show, will have personal supervision of the apple pie contest.

Male Wasps Not Hardy.

There isn't a male wasp in existence when winter ends. Late the preceding fall the wasps mate. The coming cold weather kills every worker and male, while Mrs. Wasp hies herself to a convenient place and hibernates, ready to come forth in the spring and lay eggs to replenish the race.

Want Ads

HELP WANTED—FEMALE 1

WANTED—COMPETENT GIRL FOR GENeral housework, family of three. Transportation furnished. Address, giving references. Mrs. W. C. Sloan, Pasco, Wash.

HELP WANTED—MALE 3

WANTED—MEN AT ONCE TO LEARN automobile driving and repairing in our shop. Have many jobs for our students. 215 Granite block, Spokane, Wash.

MAN OF FAMILY TO WORK ON DAIRY farm of 24 cows; experienced in feeding and planning farming operations. Snohomish Land Co., Snohomish, Wash.

CAPABLE, RELIABLE BOY FOR BOARD, $10 mo.; 4 cows to milk; drive 3 miles to school. W. C. Atherton, Cusick, Wash.

AGENTS—WANTED 9

MAN TO WEAR FINE SUIT, ACT AS agent; big pay; easy work. Banner Tailoring Co., Dept. 738, Chicago.

EDUCATIONAL 45

POSITIONS GUARANTEED GRADUATES OF BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog free.

QUALIFY FOR ONE OF THE THOUsands of civil service and government positions now open. Write for literature. Creekmur's Business College, Moscow, Idaho.

EDUCATIONAL 45

PERSONAL HELP TO EACH STUDENT— Shorthand, bookkeeping, telegraphy, direct wires. Catalog free. Lewiston Business College, Lewiston, Idaho.

TEACHERS' AGENCIES 46

SCHOOL CLERKS: WIRE OUR EXPENSE. Hazard Teachers' Agcy., Spokane.

MISCELLANEOUS 57

RAZOR BLADES SHARPENED. Mail us three safety razor blades and we will re-edge them free and return in our handy mailing box, with "Facts About the Resharpening Business." Quick Service Sharpening Company, Mt. Vernon, Wash.

HIGH-GRADE ROBES FROM YOUR horse and cow hides. Send for catalogue. John T. Little Hdw. Co., Spokane, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
Notice advance in prices.
Largest factory in the west selling direct from mill to consumer.
We sell anybody, ship anywhere and guarantee safe delivery.
Send for our large illustrated catalog No. 27, mailed postpaid, without charge, on request.

5 cross panel doors $1.92
Cottage front glass doors $3.50
Cottage windows; large bottom glass, 40x40; transom glass, 40x16 ..... $4.05
Spruce flour bins, 16x26x16 ..... $1.50
Screen doors, 2-8x6-8, heavy galv. wire $1.50

See our prices on Frames, Moldings, Millwork, Builders' Hardware, Prepared Roofing, Plaster Board, etc.
O. B. WILLIAMS CO.
1943 FIRST AVE. SO., SEATTLE, WN

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave. So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS WANTED 63

STRAINED HONEY WANTED. WRITE US the quantity you have to offer. Commercial Creamery Co., Spokane, Wn.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

AUCTIONEERS 75

N. W. CAIRNS, PULLMAN, WASH. AN honest auctioneer. Investigate me.

N. R. SHEPHERD, FARM AND LIVE stock auctioneer, Troy, Idaho.

MACHINERY—FOR SALE 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS,
Carried in Stock by
HIGGINS MACHINERY COMPANY,
312 1st Ave. So., Seattle. Write for Catalog.

AVIATION 115

DENINE AIRCRAFT CO., BOX 2232 SPOkane, Wash. Flying taught, skilled help wanted. Investigate. Splendid opportunity.

STOVE REPAIRING 126

MYER S. RUBENS STOVE & FURNACE REpair Works; welding. W1009 1st., Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

WASH. (D. C.) PAT. ATTY. SEE AD IN Polk's. C. H. Crawford, Spokane.

LIVE STOCK 177

RED CLOVER BIG TYPE POLANDS— Mouw, Fesenmeyer, Miller and Herring strains—spring pigs, both sexes, with quality, for sale. Never before could you raise or buy grain and make as much money feeding good hogs as now. Write your wants. Inspection solicited. H. J. Howser, Stites, Idaho.

FOR SALE.
50 good breeding ewes at $10 per head.
C. B. STEWART, WINLOCK, WASH.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

JOB PRINTING 372

OUR PRINTING WILL GET RESULTS for you. It will help to sell your goods and earn you profits. Send for samples and price list. G. C. Gallagher, 436 Sacramento st., San Francisco, Cal.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

OPTICIANS 462

EYES EXAMINED; GLASSES FITTED; perfect results guaranteed. Broken glasses repaired by mail. Postage paid. Dr. Sletto, Owl Drug Store, Spokane, Wn.

MONUMENTS 510

GET MY PRICES ON MONUMENTS BEfore placing your order. I can save you money. Geo. H. Moody, Moscow, Idaho.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

VETCH, CLOVER AND FIELD SEEDS.

We carry a complete line of grasses, wheat, oats, barley, speltz and other seeds too numerous to mention. Our prices are right, and will be glad to send samples and quote prices.
CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

RECLEANED VETCH SEED, 4¼C PER pound, f. o. b. station. Large or small orders appreciated. Oak Ridge Farm, Turner, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

FARM LANDS—FOR SALE 651

300-ACRE DIVERSIFIED FARM; FAIR buildings; private irrigation system; 2 miles from good town in Kootenay valley; lies level; black soil; ½ under cultivation; some timber; $35 per acre; one to 10 years' time. W. M. Frost, 410 Chamber of Commerce bldg., Spokane, Wash.

BIG LAND OPENING—6000 ACRES A1 farm land in Snohomish county, $25 per acre; 10 yearly payments. Canneries, factories, mills, plenty of labor. Opportunity of your life. Send for literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

GENUINE SACRIFICE AT $7.50 PER acre—880 acres wheat land near Kennewick, Wash.; fenced; two wells; some buildings; 240 acres in new irrigation district; $5600 cash required. Keystone Lumber Company, Tacoma, Washington.

FOR LANDS IN HEART OF THE PAlouse write H. A. Malsed, Palouse, Wash.

GOVERNMENT LAND IN CAL. FREE book. Joseph Clark, Sacramento, Cal.

FARM LANDS—FOR SALE 651 Continued.

GOOD CROPS, SOME STILL green, and no frost. Let us show them and our cut-over lands to you now while the weather is still dry but subirrigation still good. Improved and unimproved cut-over and grain and meadow lands. One farm now shows some 50 varieties of crops—grain, hay, truck and fruit of all kinds. Will make improvements and sell on 10 years' time, 6 per cent interest. Want several good workers at good wages in various kinds of work and apply part of wages on land purchase if desired. Also have good lands near station, with cordwood enough to pay for them. Come, let us show you, or write for particulars about these places.

30 acres, all in cultivation, fenced, some clover, timothy, alfalfa, etc., and balance of land for diversified crops. Nice improvements. Only $2250; $500 down and 10 years on the balance at 6 per cent; close to school, good town, R. F. D. This is a nice little home.

50 acres, about 45 in cultivation; all fenced; nice rustic bungalow; has its own water system; water in the house; nice, large barn, chicken runs, etc. All community advantages. $3750 for this place and give good terms.

RAW LANDS.

80 acres of willow brush land, volcanic ash soil, on county road, lies fairly level; can be easily cleared; close neighbors. $2000 for it; $200 cash, balance 10 years, 6 per cent. Will build and give you the advantage of long time.

480 acres of cordwood land, no improvements; close to loading station, in good range; the cordwood should pay for it. $12.50 per acre.

We have most anything you want along this line. Ask for folder.

MILAN FARMS DEVELOPMENT COMPANY.
1322 Old National Bank Bldg.
or
ALLEN REALTY COMPANY.
"REALTORS."
408 West Sprague Ave.
Tel. Main 2750.
Spokane, Washington.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay. $2000 loan in improvements, or ready-made farms. Loans of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Alan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

THE FAMOUS WHEAT-GROWING DISTrict, northern Lincoln county; 2600 or 1320 acres, improved wheat or diversified ranch; spring water; dark loam soil, clay subsoil. Price $65 an acre. 390 acres, improved, in Latah county, Idaho, 6½ miles from Moscow, 1¼ miles from electric station. Price $27,600. Farms of all sizes for sale, or exchanges made.
NORTHERN PACIFIC LAND EXCHANGE.
REALTORS.
ZIEGLER BUILDING,
SPOKANE, WASH.

FINE HOME NEAR HARRINGTON.
820 acres with 600 acres under cultivation; 200 acres summer-fallowed; splendid 7-room house; hot and cold water, bath, furnace heat and lights; fair barn and outbuildings; fine spring and running water; no better location in Lincoln county. Snap at $45,000; half cash will handle. See Mr. Tipton.
HEGE & WATKINS CO.
715-17 PAULSEN BLDG. SPOKANE, WN.

CUT-OVER BARGAIN.
300 acres of good land, only 2 miles from station; running water; very easily cleared, as it is only small second growth; country around this being rapidly developed; good for small grain, clover, etc. If sold this month only $15 per acre; easy terms. See this. Hege & Watkins Co., 715-16-17 Paulsen Bldg., Spokane, Wash.

DO YOU WANT A GOOD FARM?
We have it—something to suit you—large or small, improved or unimproved—with stock and machinery if you want it—in Wash., Idaho or Mont. Call or write and tell us what you want. HEGE & WATKINS, 717 Paulsen bldg, Spokane, Wn.

STOCK AND GRAIN RANCH TO LEASE for 5 years; stock and equipment for sale. Ben Knox, Box 218, Prosser, Wash.

J. A. PERKINS & CO., WHITMAN COUNty lands, Colfax, Wash.

IRRIGATED LANDS—For Sale 663

IRRIGATED FARM LANDS.
ALFALFA LANDS, under government irrigation; abundant water; low altitude; rail and water transportation to coast markets; good schools, good roads; products alfalfa, corn, cream, hogs, honey, fruits, vegetables; long growing season; unimproved land $30 to $60 per acre; improved $100 to $250. Write for further information and literature. Dodd & Knapp, Hermiston, Ore.

Five Books Free

DO YOU want to save money on your stump blasting? Do you want to get the stumps out cleaner—split them up better—and cut down the quantity of powder required? Our Stump book, "Better Stump Removing," tells and shows how to do it.

OR do you want your fruit trees to grow faster, yield sooner and bear bigger crops. Our Tree book, "Better Orchard Tillage," shows how you can secure these results by blasting when planting.

IF you want to save fertilizer and grow bigger crops, send for our Crop book, "Better Farm Tillage." It tells how blasting will make the subsoil mellow several feet deep and release new plant food for your crops.

ARE there rocks on your farm? Our folder, "Better Boulder Breaking," shows how a few minutes' work will get them out of your way forever.

DOES your farm need draining? Our Ditch book shows how to blast clean, smooth ditches of any size—the easiest, quickest way of making them.

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

Here are some of the reasons why you should insist upon Giant Farm Powders for all farm blasting.

1. They are made especially to suit Western farm conditions, by a Western company with 50 years' experience.
2. They are the *genuine* Giant Powders—the product of the manufacturers who originated the name. The fact that other explosives are often called "giant powders" indicates the high quality of the genuine.
3. They go further than ordinary dynamites. They exert their strength over a wide area, cracking, splitting and heaving out stumps, roots and all, rather than shattering and throwing them high in the air.
4. They will not freeze at ordinary temperatures, standing 32° for days without requiring thawing.
5. They are being used by thousands of farmers, scores of whom state that the Giant brands "give better results"—"save money"—"have wider breaking power"—"shoot the roots"—and "are always uniform in strength and action."

There are two of the Giant Farm Powders: Giant Stumping Powder, for wet work, and Eureka Stumping Powder, for dry work. Eureka costs less and many careful blasters use it for wet work, too.

Ask Your Dealer

Your local dealer probably has Eureka and Giant Stumping Powders and other Giant blasting supplies. If he does not have them, write us. We will see that you are supplied promptly through the local dealer with whom you prefer to trade, through a dealer in a nearby town who has a magazine, or direct from our nearest distributing point.

The Giant Powder Co. Hom Office **San Francisco**
CONSOLIDATED *"Everything for Blasting"* ESTABLISHED 1866
Branch Offices: Seattle, Spokane, Portland, Salt Lake City, Denver

Make This Test

Get a 25 or 50 pound case of either of the Giant Farm Powders. Get at the same time a case of any other dynamite or stumping powder.

Blast with each. Keep track of the quantities used. Figure the cost. You will find—as farmers everywhere have found—that the Giant Farm Powders save farmers time, work and money.

To make it easy for you to secure Giant Farm Powders we print a trial order form in the coupon at the right. Fill it out and we will have our nearest distributor supply you with a trial case at the lowest market price.



Mail the coupon below or a post card and get one or all of the Giant books. You will find them valuable. They contain illustrations of the most economical ways of doing farm work with Giant Farm Powders.

FREE BOOK COUPON
The Giant Powder Co., Con., San Francisco.
Send me your illustrated books on the subjects which I have marked **X.**

☐ Stump Blasting ☐ Tree Planting
☐ Boulder Blasting ☐ Ditch Blasting
☐ Subsoil Blasting 203

Trial Order Blank
(Kindly fill out if ready to purchase)
Have your nearest distributor supply me with

.....lbs. Giant Stumping Powder
.....lbs. Eureka Stumping Powder

NAME .....
ADDRESS .....
Write below your dealer's name.

Special Number Devoted to the Live Stock Industry

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 44. NOVEMBER 1, 1917. ** WEEKLY.

Meat One of the Greatest Needs

Hoover Pleads for More Fats and Promises Profit to Producer











In his latest talk with the American people Herbert Hoover, national food commissioner, says that his studies of the present situation, both in Europe and in the United States, lead him at once to say that he regards the problem of food animals with even more concern than the problem of grain foods. Why?

Because Europe finds it takes more shipping to import feed for food animals than it does to import equal amounts of animal products themselves;

Because the production of fodder grains in Europe displaces to a considerable extent their possible production of bread grains;

Because the diversion of millions of men from production to war and the decrease in fertilizers all contribute to a reduction in the production of animal foods throughout the world.

Mr. Hoover concludes:

"Altogether from the viewpoint of our allies who observe the constant shortening of shipping, their most likely policy is to eat their animals and thus have room to produce more bread grains at home and to increase their imports of meat products from abroad. By so doing, they can make better use of their shipping facilities.

"We need to increase every type of our principal food animals—our cattle, our hogs and our sheep.

"The American farmers as a whole are in a position to do this, because the United States has one of the largest corn crops in its history. It also has abundant crops of oats, barley, kaffir corn, soy beans, velvet beans, cottonseed and peanut meal and will have a larger supply of mill feed than normal.



"If we aggregate all of the feeding stuffs and if we subtract the amount of fodder grains which we can expect to export we will reach the astounding fact that we have today about 1,000,000,000 bushels of feeds more than last year. This is an increase of nearly 25 per cent—for which we have no corresponding number of animals to feed. Therefore, if the farmers, taking the country as a whole, are to find markets for feed it must be to a great extent to an increase in the production of animals.

"Our sheep have been diminishing steadily since the war began.

"We produced in 1916 only 35 per cent of the wool that we used. In providing uniforms for millions and millions of men the world is using more wool than ever before in its history. We have never seen such a price of wool as exists today. There is practically famine

Continued on page thirty-one.





VON HEIM WINIFRED COLANTHA
No. 329334. Born April 8, 1915.
29.625 lbs. butter from 444.5 lbs. milk., av. fat 5.33 (7 days).
117.806 lbs. butter from 1925.3 lbs. milk. av. fat 4.89 (30 days).
World's Record Junior 2-Year-Old—June, 1917.

VON HEIM HERD
HOLSTEIN-FRIESIANS

The Von Heim herd ranks among the first in the country in the three essentials—conformity to type, blue blooded ancestry and high productivity. Every individual sire and dam has been chosen on his or her merits. The blood of champions flows through the veins of every animal on the place, while our herd sire is out of the world's champion long distance heifer, Finderne Mutual Fayne, who, as a junior 2-year-old, produced over 1200 lbs. of butter in 1 year, a world's record, with almost 37 lbs. of butter in 7 days as a 3-year-old. Sired by King Valdessa, son of the first 40-lb. cow, Valdessa Scott 2d, who has 5 A. R. O. daughters, one over 38 lbs. It has been frequently stated by live stock authorities that there is not a better bred bull in the country than Finderne Mutual Fayne Valdessa.

A Herd Backed by Pedigree and Performance

Blood lines are not the only thing considered at Lodge Von Heim. Having secured the finest breeding stock to be obtained in America, every precaution has been taken to keep the herd up to the maximum of rugged vitality. Never for a moment are the requirements for skilful handling and scientific management forgotten.

We have for sale a few exceptionally well bred young bulls, also a few females. Priced for quick sale far below their real value. Pedigrees, photos and other information very cheerfully given. Write

VON HEIM FARM

J. von Herberg, Owner. KENT, WASH. M. Walthers, Supt.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 44 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF November 1, 1917

Problem of Saving the Live Stock

Must Use Feeds That Have Been Largely Wasted in Former Years

By E. J. IDDINGS

Even though one may naturally incline to live stock production, it requires foresight, skill and courage to turn into animal flesh grains and forages at the prices that prevail today.

Live stock conservation is one of the present-day perplexing problems of the nation. From the Atlantic to the Pacific and from the Canadian border to the Gulf, the permanency of our flocks and herds is a question of anxious moment. The call of the nation is for grains. Not only does the farmer desire to produce these as a patriotic duty, but the high prices that have prevailed for months loom large as compared with the conservative profits that have been made in the last years from live stock breeding and feeding operations.

The farmers of the east and middle west are in a state of uncertainty and this is true to an even greater degree in the west. Here we have had less experience with some kinds of live stock, especially hogs, and we have had less experience in the fleshing of swine, lambs and steers for market. Furthermore, we are much further removed from the great central markets and are not close by any means, to the Inland and Coast markets of the west. We, on the whole then, know comparatively more about selling farm products for cash and less about disposing of the same through highly finished animals.

There are many other factors to be considered. There was great loss of live stock in the intermountain region last winter and feed supplies in many districts were almost entirely exhausted. Although grain rose rapidly in price, about a year after the beginning of the war, hog prices remained low until almost a year later. Feed is scarce in some sections and the stockman does not feel that he can take the risk of going long distances and paying high prices for alfalfa and other feeds. In some districts pasture has been short for weeks. Those who own live stock would gladly buy hay to supplement the little pasture that remains, but those who hold the hay, in many cases, either do not care to sell or hold for prices that seem somewhat out of proportion measured with the prices that prevail for live stock.

What is the result then of all the influences mentioned above? These results are only what might naturally be expected. The live stock man is planning to reduce and hold over a comparatively small herd. In some districts where cattle pasture is gone, the cattle are being sent to market, even if thin. Those who are without considerable experience and are timid let the live stock go at a moderate price only and plan to join the ranks of those who are growing grain and hay for sale at the remunerative prices that now prevail.

The whole movement, therefore, becomes an unhealthy one and one that will throw out of balance, the farming system of the nation.

Horses are being sold that will be badly needed for work in the spring.

Thousands of cattle are going to market that are in far from marketable condition. In one week recently at Kansas City over one hundred thousand head of cattle were received, which breaks all American records.

(Continued on page twenty-eight.)

Why Eat Less Wheat?

Grain Figures Talk Much Louder Than Words

Statistics just issued by the United States department of agriculture emphasize the importance of the Hoover program for conservation of wheat. The department closely estimates this year's yield at 659,797,000 bushels.

If the United States should consume wheat this year as freely as in normal times and under normal prices, practically all of the yield would be needed at home for bread and seed. But consumption last year was about 10 per cent below normal, and the department calculates that consumption the coming year will also be at least 10 per cent under normal.

Taking this reduced basis, it estimates that we shall have only 77,696,000 bushels to send to our allies, unless the people, through the Hoover campaign, can be induced to eat less wheat than they ate last year. But our allies are in pressing need of three or four times 77,000,000 bushels.

The following table shows the important part the Pacific northwest will play in feeding the allies across the sea:

	Total Requirements.	Production.	Surplus.
Mont.	5,494,000	17,963,000	12,469,000
Idaho	3,446,000	13,844,000	10,398,000
Wash.	11,261,000	29,218,000	17,957,000
Ore.	6,256,000	12,963,000	6,707,000
	26,457,000	73,988,000	47,531,000

The four states of Montana, Idaho, Washington and Oregon are counted upon to provide 47,000,000 bushels of the 77,000,000 bushels theoretically available for export this year.

Several great regions of the United States grow less wheat than they require for their own needs. For example, the north Atlantic states of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey and Pennsylvania grew this year only 34,635,000 bushels, but will need 145,169,000 bushels—a deficiency of more than 110,000,000 bushels.

The south Atlantic states have a deficiency of 10,472,000 bushels.

The big surplus comes from the group of states comprising Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska and Kansas. These seven states will produce this year 280,350,000 bushels, and will have 170,416,000 bushels of surplus.

The far western group of states, comprising Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Idaho, Washington, Oregon and California, have an estimated yield of 109,739,000 bushels, and a surplus of 50,803,000.

Sign the Pledge

All Can Enlist for War This Week

The most far-reaching food saving campagn in the world's history is on in the United States this week and every home in every state is urged to play a part.

Under the leadership of the national food administration a campagn is under way in every community, village, town and city to have every family sign the pledge to save wheat, meat, fats and sugar in order that the soldiers in France or soon to be there may have enough staple food to maintan them in physical condition to carry on the trench warfare.

The pledge is a promise to eat one wheatless meal a day, to eat beef, mutton or pork not more than once a day and to use as little butter, lard, other animal fats and sugar as possible consistent with maintaning good health and reasonable comfort.



Sign of the Liberty Food Campaign—See to it that this is seen hanging in the front window of your home.

Every family that signs this pledge will be given a membership card in the national food administration, which they are asked to hang in the window as a reminder to neighbors who have not signed. Already hundreds of thousands of homes have signed the pledge, but it is hoped this week to complete the signing by enrolling all of the 20,000,000 homes in America.

Twenty million loaves of wheat bread saved daily through a wheatless meal is nearly 20,000,000 pounds, or 10,000 tons of bread saved. In a year this would amount to 3,650,000 tons, a saving that would practically insure bread for the soldiers. Like savings of meat, fats and sugar will assure the winning of the war.

Land Bank Frowns on Big Salaries

Some Loan Associations Too Liberal With Their Money

President D. G. D'Shea announces that the Spokane branch of the federal farm loan bank has denied a few local loan associations their charters until such time as they would reduce the compensation of their officers, or some of them, to amounts that were more reasonable.

The central loan bank conducts its business of organization and operation at an expense not to exceed one-half of one per cent of the total money handled. Upon this basis the bank pays 4 1-2 per cent interest on its bonds and charges 5 per cent interest on its loans to the farmers, leaving the one-half per cent for costs of doing business.

But the charters of some of the local associations provide that the secretary-treasurer alone shall receive a compensation of one per cent of the money handled. This means that if such association borrowed $100,000 the secretary-treasurer would receive a compensation of $1000, and that the general expenses of organization and operation would have still to be paid. What these latter expenses amount to would depend largely upon the business methods followed, but should they reach an additional one per cent it would make the borrower pay the equivalent of 7 per cent interest on his money, instead of the 5 per cent which the government intended he should pay.

"Such compensation to officers of the local loan associations is not reasonable," says President O'Shea. "The bank will not approve charters that allow so much, for it would be simply destroying much of the benefit that the bank is intended to bring to the farmers who borrow money."

A New Regulation.

Announcement has been made of a new ruling by the land bank board at Washington, D. C. Under the ruling a farmer and his wife may each borrow as much as $10,000 if each owns enough farm property in his or her own name to justify a loan of that amount. Heretofore a man and wife were allowed no more than $10,000 regardless of the separate ownership of their property.

In all cases, however, the separate ownership must be bonafide. Transfers of property merely for the purpose of obtaning the double loan will not be tolerated by the farm loan bank.

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Creamery Plant Burns.

L. M. Lampson, agriculturist of Benton county, reports that the plant of the Prosser cooperative creamery, which the agricultural office assisted in organizing was destroyed by fire this week. The plant did not belong to the farmers' cooperative organization. However, the burning of the plant practically broke up the organization, because the farmers were only organized sufficiently well to lease and operate the plant.

Finishing Hogs on Hooverized Basis

Barley, Corn or Field Peas Require a Supplementary Protein Feed

By WILLIAM HISLOP

State College of Washington

A few days ago I was greatly interested in a published interview given by the manager of the Spokane branch of Carsten's Packing company. This interview stated that, owing to the great scarcity of fat hogs in the northwest, it would be necessary for his company to ship hog products from Missouri river points for consumption in this territory.

In other words, we are retrogressing instead of progressing, from a swine producing standpoint. However, we must accept the situation as it is and try to make amends for our misgivings in the wholesale disposal of our breeding stock. What hogs there are left must be sent to market in a highly finished condition. Each feeder should attempt to market as many pounds of pork and lard on four feet as is compatible with economy. In other words, no hogs should be marketed today that weigh less than 200 pounds and possess a high degree of finish and quality.

Within the last few weeks every stockyard in the northwest has experienced a very strong call for feeder pigs. A feeder is usually a pig weighing from 80 to 125 pounds. These pigs are now gleaning our stubblefields, particularly in the wheat growing sections. In our corn growing valleys they are either hogging-off corn or barley or are gleaning the stray ears of corn remaining after husking. In this way they develop a strong framework of bone, ample lean meat tissues and a capacious, vigorous digestive tract, all of which lead up to the final fattening period in the dry lot.

Usually a stubble hog will gain 25 pounds in 40 to 50 days. This is a cheap gain and makes up for the more expensive gains that are to be made later on when in the feed lot proper. When pigs come off the stubblefields they are usually in a thrifty condition. Generally speaking, it takes about 60 to 75 days on full feed to produce the desired finish. During that time a good thrifty hog will gain from 90 to 100 pounds of live weight. Fattening is best accomplished by restricting the exercise, reducing the allowance of bulky feed, and supplying the maximum amount of palatable, starchy, carbonaceous feeds, properly supplemented with protein rich feeds, which balance the ration. At the present time it is distinctly inadvisable to use wheat for fattening hogs. Wheat can be used to better advantage for other purposes. Furthermore, barley is almost as efficient as wheat, and with the big corn crop that is now assured there is no excuse for feeding wheat.

Our experiments here with feeding barley as compared with wheat have shown barley to be about 90 per cent as efficient as wheat, when both were fed in the ground form and properly supplemented with 60 per cent digested tankage. At the present time we are finishing a load of spring barrows that now weigh 185 pounds. Since being placed in the fattening pen they have been receiving a ration of nine parts by weight of rolled barley and one part by weight of tankage. In addition, they have received skimmed milk once daily to the extent of about five pounds per head. Their 100 pounds of gain have been made on 485 pounds of rolled barley and tankage combined.

The early part of the fattening period was spent in hogging off a field of barley. During the grazing period they stretched out wonderfully and were in excellent position to make dry lot gains. They have also received a mineral mixture which has helped to keep them rid of worms and assisted in the development of strong bone, which is so essential to economical pork making. Their quarters have been dry, well bedded and well watered. In addition, they have been self fed; in other words, they have chosen the amount which they wanted, and were able to get it at all times. When pigs weigh more than 125 pounds it is more economical to use the self-feeder than it is to hand feed them. If they weigh less than that then the hand-fed method seems to be the better.

These pigs will be marketed at an early date. They should dress from 83 to 85 per cent, because they will carry a high finish, be devoid of wrinkles and seams, and be strictly grain fed, as compared with grass fed hogs, which are so common at the present moment. They now run in age from 5 1-2 months to 6 months. I question if wheat would have made those hogs marketable at an earlier date or at a less cost.

Another excellent crop for the finishing of hogs at the present moment is Canada field peas. The seconds of the pea crop were fed to a carload of hogs at the state college during the winter of 1916. They were compared with barley, and both feeds were supplemented with tankage. The Canada field pea lot made the cheaper, the greater and the more rapid gain, and the finished product was pronounced by Mr. Stanton of Spokane to be superior.

At the present time no farmer can afford to feed barley, corn or field peas unless he uses a supplementary protein-rich feed. These grains are all too deficient in proteins and mineral matter to be in themselves balanced feeds. Hence the need for tankage or skimmed milk. Soy bean meal and linseed oil meal have been used as protein supplements to these grains for fattening hogs, but have not proved nearly so efficient. The hogs tire of the latter and soon begin to go back instead of forward. Some farmers prefer to feed whole grain to fattening pigs. Ear corn is pronounced by many central western experiment stations as the most economical form in which to feed it. They say that the hogs should do the work of grinding, and they are correct. However, they admit that when hogs weigh more than 175 pounds that it is more economical to grind the feed. In the case of barley, Canada field peas or wheat they should be ground for the most efficient gain.

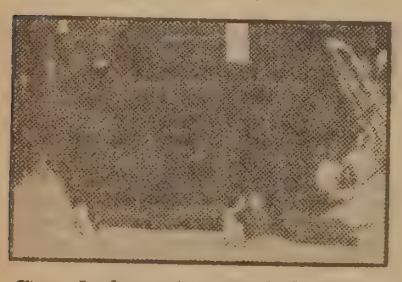
In conclusion, I wish to say that the best method of Hooverizing in connection with fattening pigs at this moment is to supply the proper feed in the proper proportion, provide dry, warm, roomy, well-watered quarters, and carry the hogs until they weigh at least 200 pounds and carry a smooth, even covering of fat.

The Two Are Snapped Looking at the Camera



Margaret Dammeier, 7-year-old daughter of Mr. and Mrs. G. H. Dammeier, and Golden Fern's Noble Countess, junior champion Jersey heifer at Oregon State fair, 1917.

Berkshire Sow



Grand champion Berkshire sow, owned by Mr. Brush, Santa Rosa, California, and shown by C. E. Barrows.

New York Dairy Producers' League

Organized to Save Themselves from Bankruptcy and Industrial Destruction

We seriously doubt if the district attorney at New York will uncover any evidence that would justify a jury convicting the leaders of the Dairymen's league in that and adjacent states.

When asked if he thought there were any chance of the Dairymen's league being indicted as a result of the milk investigation, R. D. Cooper, president of that organization said:

"I do not know just what evidence has been furnished Mr. Swann or who has presented it. Possibly he has received some complaints from members of the Milk Dealers' Conference board. In case we are indicted, I do not think there would be any evidence of a nature to convict presented."

Mr. Cooper also stated that he wanted to correct a statement he had seen in some of the papers to the effect that the league controlled 90 per cent of the milk produced in New York state. He said there were 1,351,572 cows in the state, of which 436,033, or 32 per cent, were owned by members of his organization.

The truth is that the dairymen organized to save themselves from bankruptcy and the industry from destruction. In the broader aspects of the problem they have rendered genuine service to the public by saving the industry from such impairment as would have led to a disastrous milk famine.

When President Cooper was before the mayor's investigating committee the other day he testified with apparent frankness and seemingly tried to conceal nothing from the public.

Mr. Cooper said that for his services he received $5200 a year and expenses, while the secretary received $3000 and expenses, and the treasurer $2000 and expenses. The members of the executive committee, he added, received $10 a day while sitting.

Mr. Cooper said the capital stock of the league was 40,000 shares of a par value of $2.50 and that the shares are divided into one-tenth shares at a value of 25 cents.

These one-tenth shares are the mipimum that can be owned. And an actual milk producer with one cow can own one of them, but not more. If he owns 10 cows he can buy a whole share of the stock, and so on, the quantity he may own being based on one share for every 10 cows owned.

The farmers owning shares or part shares in the league agreed to have the league act as agent in marketing milk and to pay into the treasury of the league one cent for each 100 pounds of milk sold.

He said the capital stock of the league has been oversubscribed and that there are on hand applications for about 13,000 shares, representing owners of 130,000 cows, from farmers whose number he did not know.

The manner in which the higher price was reached was then explained by Mr. Cooper. He said that, in addition to the suggestions of various members, the basis for the raise was figures furnished by Professor George F. Warren of the New York State Agricultural college at Ithaca.

The professor estimated that the cost of producing 6000 pounds of raw milk was the combined cost of the following items: One ton of grain, four tons of ensilage, one ton of hay, 165 hours of labor, together with the addition of 25 per cent of the whole for overhead charges.

The mayor's committee then called Professor Warren before it, and he promptly corroborated President Cooper's statement. That the farms whose average cost of producing milk formed the basis of the figures he presented to President Cooper were managed better than the usual run of farms, and, in fact, represented the only farms making any profit on the sale of milk, even at the present price, was the substance of his testimony.

The mayor's committee also questioned George W. Bush, chief organizer of the Dairymen's league, and from his testimony the New York Sun prints a table showing what happened when the farmers' prices were advanced after September, 1916:

Month.	Wholesale.	Retail.
October, 1916	4.46	10
December, 1916	4.67	11
July, 1917	4.46	11½
August, 1917	5.42	12½
October, 1917	6.59	14

It is therefore seen that while the producer got an increase of a little more than 2 cents a quart between October, 1916, and October, 1917, the consumer is made to pay an increase of 4 cents.

The practice of passing along the increase demanded by the producers, and also adding an additional increase for themselves seems widespread on the part of the distributors of the United States.

When the milk producers were paid around 5 cents a quart a year or so ago the Spokane distributors sold the bottled product at 10 cents. They received, therefore, 5 cents a quart for their work of handling the product.

"If milk goes up to 30 cents a gallon to the producer, how much will you distributors charge?" asked a member of the joint committee representing the three interested parties in conference Saturday—the producers, the distributors and the consumers.

"Fifteen cents a quart," replied the manager of the Pine Creek company, and other distributors seemed tacitly to assent. On that basis the distributors would receive 7½ cents a quart for their service, an increase of 50 per cent over the toll taken a year or so ago.

The question before the Spokane joint committee and the public here is whether the distributors are justified in asking so large an increase.

Back to the Bible.

Behold, how good and how pleasant it is for brethren to dwell together in unity!—Ps. 133:1.

The life is more than meat, and the body more than raiment.—Luke 12:23.

Chester White Sow



Elmo's Best, grand champion Chester White sow, Oregon State fair, 1917, owned by Ed Schools, Tangent, Ore.

Must Cut Out Cancer of Uncleanness

Social Evil Is Grave Menace to the Nation's Military Efficiency

"Today as never before American manhood must be clean. We must have fitness! America stands in need of every ounce of strength. We must cut out the cancer if we would live."

"Sir William Coler places these infectious diseases at the top as a menace in war and in peace. The time has come to realize that this subtlest foe of humanity must be conquered, and it can not be conquered by denying its existence, saying it is a necessary evil or applying palliatives. It is deadlier than smallpox or cancer or tuberculosis. A Canadian authority says: 'Its ravages today are more terrible for Britain and Canada than Vimy ridge, the Somme and Lens.'

"The remedy? There is but one—continuance. It must be preached in the home, in the school, in the marts of trade, in the pulpit and in military camps and among shipmates afloat. The eradication of the evil effects must be thorough, but the teacher who will be heard and heeded when the teachings of all others will fall on deaf ears is the word of authority from the medical profession."

In this manner, dealing frankly and boldly with the social evil as a menace to the nation's military efficiency, Secretary Daniels of the navy, in an address at Chicago before the Clinical Congress of Surgeons of North America, appealed to the medical profession "to end the false double standard that decreases military effectiveness." The profession, he declared, must share its part of the blame for the "unpardonable prudery that endured a festering evil rather than have it exposed and eradicated."

"There is not an army in the field whose effectiveness is not reduced by reason of immoral disease," said Secre-

(Continued on page forty-two.)

The Pacific International

Promise of Breaking All Records in Cattle

"We look for the largest stock show we have had in some lines," said L. R. Medee, secretary of the seventh annual Pacific international live stock exposition. "We open Monday, November 19, and run for the week. Our entries close on November 9 for breeding classes and November 19 for fat classes. This rule will be strictly adhered to this year as in the past.

"I do not know what we are going to have in hogs this year. So far we have no line on what we shall have. I imagine it may be light in some breeds. Sheep I look to be light. Of course, I can not tell, and they may come in in larger quantities than I expect.

"But when it comes to horses we look for a big show. Half a dozen of the best breeders of the northwest are going to be on hand and we look for the best draft and heavy horse classes we have ever had.

"But when it comes to cattle we are going to break all previous records. We are going to have a Shorthorn show that will beat anything ever held here or anywhere in the northwest. We look for about 300 animals. The Royal at Kansas City, one of the big Shorthorn shows, had no such numbers. And as far as quality is concerned, we know what we are going to get—the cream of the finest herds of the northwest.

"Such men as Frank Brown, A. D. Dunn, Day & Rothrock, Alex Chalmers, McCroskey & Son, J. B. Cornett and other well known breeders are coming with the best quality they have ever had."

The Shorthorn show and sale indeed promises to be a remarkable Shorthorn occasion. One excellent judge of the red, the white and the roan, says that the stuff to be shown here will be of high quality, and that the winners here would make the Chicago international pay attention. The Shorthorns draw down $6250 in prize money.

The twelfth consignment sale of Shorthorns at the show is also attracting a great deal of attention, as many of the animals on exhibit will be offered at this sale. A. D. Dunn is consigning all his show herd with the single exception of one bull, and Frank Brown is disposing of many animals which are of the very highest quality he has produced. A. Chalmers, one of the constructive Shorthorn breeders, has made a large consignment for the Portland show. Day & Rothrock, J. B. Cornett and that famous old Shorthorn man, W. O. Minor, will have some fine stuff in the ring. Joe Turner of Myers Falls has consigned some strong stuff. H. M. Elberg, who now has the Gibson Estate Shorthorns of Woodland, Cal., is one of the heavy consignors of splendid stuff. Among others who have consigned are E. F. Anderson & Son, Albany, Ore.; Schmidt Bros., Oregon City, Ore.; Chiles & Anceny, Helena, Mont.; H. L. Somers, Bozeman, Mont.; W. J. Townley, Union, Ore.; G. W. De Lay, Hot Lake, Ore.; Hawkins & Son, Hollister, Cal.; Alexander & Kellogg, Suisan, Cal.; Corruthers farm, Mayfield, Cal.; George Bertrand, Olequa, Wash.; T. T. Miller, Los Angeles; H. G. Keyt, Perrydale, Ore.; Dick Kiger, Corvallis, Ore.; Thomas Harrison, Glen Ellen, Cal.; W. B. Ayer, Carlton, Ore.; Alec Morrison, Valley, Wash.; the O. A. C., W. S. C., Idaho university and University of California; A. M. Haraden, Calton, Ore.; Perry Smith, Namhill, Ore., and E. H. Halloway, Albany, Ore.

The Herefords are going to stage one of their best shows, too. The consigners to the sale of Herefords, who will all show, are as follows: A. B. Cook, Townsend, Mont.; Henry Thiessen, Sweetwater, Idaho; George Chandler & Son, Baker, Ore.; W. P. Emery, Macleay, Ore.; J. D. Miles, Livingston, Mont.; W. O. Huntley, Ontario, Ore.; L. L. Young, Nampa, Idaho, and four agricultural colleges of Oregon, Washington, Idaho and California. Prizes aggregating $3000 will be offered for Herefords.

The Angus cattle are not to be left behind, either. Congden & Battles of Yakima, George Dickson of Prineville, E. H. Eagleson of Boise and the W. S. C. and U. of I. will be represented—one of the best Angus shows staged.

The Holstein show will be very large, too, and a big sale will be held. A fine Guernsey show is promised, too, but Jerseys will be light.

It is likely that nearly if not quite a thousand head of cattle will be at the great North Portland show.

Percherons in Northwest

Favorable Climate, Good Water, Best of Feed

By WAYNE DINSMORE,
Secretary Percheron Society of America.

Washington, Oregon and Idaho, the trinity of states in the extreme northwestern part of the United States, have never adequately measured up to their opportunities in horse production. There is every reason why this territory should be producing a large surplus of the best class of horses. Climatic conditions are favorable; good water is available; the range grasses are particularly adapted to the growth of draft horses, and alfalfa hay and good grains are available in every section. A better combination can not be found.

Yet, despite these facts, the 1910 census of the United States shows that in that year Idaho had only 197,772 horses, of which 22,449 were yearlings; Washington had 280,572 horses, of which 27,272 were yearlings; Oregon had 271,708 horses, of which 30,154 were yearlings. Mules are almost negligible, as there were only 4036 mules in Idaho, of which 237 were yearlings; Washington had 12,185 mules, of which 563 were yearlings; and Oregon had 9927 head, of which 437 were yearlings. In the seven years since elapsed there has been but very slight increase in the number of horses and mules in these three states, the latest figures showing approximately 850,000 head for the three states, while the three states have a combined area of 245,797 square miles. To put the matter in another way, there are only a little over three horses per square mile for these three states.

What Kind of Horses Should Be Raised?

Automobiles and light delivery trucks have displaced nearly all driving and delivery horses. There is no longer a general market for surplus horses under 1200 pounds weight. Those that will not do for military work sell very low, ranging from $65 to $115, and are hard to dispose of at that. Horses from 1200 to 1500 pounds are still used to a very limited extent in the cities, and are a popular kind for use on farms. They also have a wide outlet for artillery purposes, but the supply of these, especially those under 1400 pounds, is more than equal to the demand.

Draft horses, however, if over 1600 pounds, in working flesh, give every promise of holding present prices, with the probability of some advances.

The supply of heavy horses is limited. The best informed men estimate that of our 21,000,000 head, less than a million are real draft horses, weighing over 1600 pounds.

Sixty-eight per cent of 277 selected correspondents of the Percheron Society of America reporting from all parts of the United States report very few surplus horses good enough for sale for war or other purposes, on hand in their localities. Horses ranging from 1000 to 1200 pounds are reported to be selling from $90 to $125 average; horses from 1200 to 1500 pounds at from $140 to $175 average; and horses over 1500 pounds at from $200 to $250 average.

One reason why so few heavy draft

(Continued on page seventeen.)

Liberty Bonds Win

People Subscribe for Five Billion

The second Liberty loan has been greatly oversubscribed, according to figures at this writing. The subscriptions have reached $5,000,000,000, it is estimated by the treasury officials, and it is likewise estimated that between 8,000,000 and 10,000,000 people have taken bonds ranging in size from $50 to $100,000. While hundreds of thousands of the common people took bonds of the lower denominations many banks and business firms throughout the country took large bonds totaling in some instances as much as a million dollars.

The minimum hoped for by the government in the subscription for the second Liberty loan was $3,000,000,000. This amount was passed toward the last of the week and Friday and Saturday saw additional subscriptions come into the banks all over the country in such a flood that clerks and registrars were swamped with the duty of receiving them.

In the northwest every state exceeded the minimum subscriptions required of it. Idaho was allotted $9,000,000 and raised about $10,500,000. Montana's minimum was to be $15,000,000; it subscribed for more than $20,000,000. Oregon was asked for $18,000,000 and gave $25,000,000. Washington was called upon for $32,000,000 and incomplete figures indicate that she subscribed for about $40,000,000.

Loans Reported by Districts.

Boston	$ 500,000,000
New York	1,500,000,000
Philadelphia	425,000,000
Cleveland	450,000,000
Richmond	180,000,000
Atlanta	100,000,000
Chicago	550,000,000
St. Louis	200,000,000
Minneapolis	130,000,000
Kansas City	160,000,000
Dallas	85,000,000
San Francisco	275,000,000

Death of C. B. Kegley, Grange Master

C. B. Kegley, master of the Washington state grange for the last 13 consecutive years and appraiser for the Spokane Federal Farm Loan bank since last May, died of pneumonia



C. B. Kegley.

Monday, October 29, at the Deaconess hospital in Spokane. He was ill one week and was admitted to the hospital last Saturday.

He was born in Ames, Iowa, 62 years ago and came to the Palouse in 1891. He lived for a time at Pullman and then removed to Palouse, where he made his home until his appointment to the position with the federal farm loan bank, when he purchased a home at E510 Twenty-third avenue.

During all of his residence in Washington he was a leader in the affairs of the state grange and was elected year after year its delegate to the national conventions of the organization.

He was an enthusiastic Roosevelt man and was prominent in the councils of the progressive party. For many years he attended sessions of the state legislature, where he worked for measures indorsed by the grange and of interest to farmers.

He is survived by his widow, two daughters, Mrs. H. E. Richter of Spokane and Mrs. L. G. Gilder of Harvard, Idaho; a son, L. E. Kegley of Palouse; two sisters in Colorado, a brother in Olympia and four brothers in the east.

On account of the great variation in local climatic conditions, moisture, soil, etc., it is up to the readers of The Washington Farmer always to remember that methods which prove successful in one locality may not work out in others. It is our aim to gather the experiences of farmers in every section of this state and pass these experiences on to our readers, that they may try out or adopt such as may be applicable to their locality and conditions.

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Don't Misjudge Your Neighbor

There is no room in America for any un-American citizen at the present time, be he native born or naturalized. Wherever such is found, he should be suppressed—lawfully, but vigorously. But every one should be careful not to misjudge.

With many there is a tendency today to look with at least some degree of suspicion on American citizens of German birth. This is not unnatural, but it is a case where great care should be exercised that injustice be not done.

It is a natural and commendable thing for the former citizen of Germany to carry in his heart a partiality for the land that gave him being. It was a commendable thing for him to require full evidence before he was convinced that his fatherland had disgraced civilization. It is this same spirit of steadfastness and loyalty that has made, and still makes, the former German a valuable and dependable citizen of America.

Occasionally, the United States citizen of German birth is found on the side of Germany in this world conflict. He should be rigorously suppressed But a thousand times more rigorously should the native American be condemned when found upholding, directly or indirectly, the hands of the kaiser.

Just as the whole American race is not to be looked upon with suspicion because a few traitors manifest themselves occasionally, just so should confidence be felt toward that great mass of honest, thrifty citizens who came to this country from the fatherland and became loyal Americans.

To Go the Whole Hog

This is our live stock edition. We believe it contains many features not only of interest, but of permanent value.

It is not necessarily the longest item that will be of most value to you. Perhaps a single sentence or a single paragraph will far more than pay you for searching through the whole edition. In order that many live stock breeders, and that many farmers interested in one branch or another of live stock production may find something of special interest each for himself, it is necessary to publish much information along various live stock lines and let each one pick out what is of peculiar value to himself.

There is a live stock phrase that is essentially apropriate in these days—"to go the whole hog." If you have decided upon the Red Duroc swine as your specialty, go the whole hog on that breed. Do everything you can to make a success of it; neglect no little part; put your whole soul into it. In just the same way, if you are a Holstein or a Jersey, or a Guernsey, or an Ayrshire dairy breed producer. No need to diminish any of your enthusiasm if you are a producer of the milking Shorthorns or the Red Polls. The same thought appeals to any and every branch of live stock production.

The phrase books say that "to go the whole hog" is an American expression meaning unmixed democratical principles. It is used in England to signify a "thorough-goer" of any kind. In Virginia the dealer asks the retail butcher if "he means to go the whole hog, or to take on a certain joint," and he regulates the price accordingly.

It is certainly a time in the history of the world when America should go the whole hog. America must go the whole hog in producing munitions, in furnishing millions of men for the army, in furnishing millions of pounds of meat and millions of bushels of wheat.

Surely to go the whole hog is timely now, and it is peculiarly timely for the live stock breeder who may well look to the future when there will necessarily be a pressing demand along the lines of live stock production the world over.

Age at Which to Market Pigs

J. E. R. writes: "About how old should a hog be when he weighs 200 pounds? Does it pay to crowd them as fast as you can?"

By crowding pigs can be made to weight 200 pounds at six months. Of course individuals can be made larger than this, but entire lots handled for pork require crowding to reach market weight at this age. Ordinarily seven months is about the right age.

The most economical results are almost always obtained by crowding pigs from the time they are born until after they are weaned and then again from the time they weigh 100 pounds until they are fat. Before weaning the gains are made so cheaply that it pays to put on as much weight as possible at that time. During fattening the feed can not be skimped or the pigs will not be fat at 200 pounds and it does not pay to carry them much beyond that weight.

Between weaning and fattening, however, is a period when under many conditions the pigs can be grown most profitably on rations containing a good deal of pasture and other cheap feeds and less grain. The amount of grain needed depends upon the amount and quality of these cheaper feeds available.

It practically never pays to give a pig no grain at all. It is also not practical to skimp the grain where the pig is getting nothing else; that is, the only reason for a light grain ration at any time is to induce the pigs to eat more of some cheaper feed.

Saving Scrub Calves

One thing is always calculated to rouse the unthinking to a high pitch of indignation, and that is that the farmers send their calves to the butcher.

It is the very place to send some calves. What the object in keeping scrub calves is is hard to figure out. They will not produce more butterfat than their dams; they will not pay a profit at maturity.

The sooner the scrubs go to the block, the better. What we are hoping for, however, is a realization of the possibility of improving the herd by the use of good sires. No farmer will sell calves that are going to make him money. But to pass laws to forbid the slaughter of calves, no matter what kind of calves they may be, would be as destructive as forbidding the thinning of fruit in the orchard.

Show and Production

In the breed magazines we are surprised to see long articles on the relative merits of show type and producing type. We can not understand the shortsighted policy which would stick to a show type which is not fixed by production.

No breed of animals can have wide popularity unless it has production; it is beautiful only through those marks which distinguish it as a producer. The hog whose body is full where meat is highest in price is beautiful in that particular. The beef cow has beauty where the same conformation on a dairy animal would be faulty and ugly.

The sooner we get down to the basis of production as a standard, the faster the purebred animals will be taken by the public and the more firmly fixed will breeds become.

Washington Gleanings

A total of 42,714 pounds of blackberries were picked near Toledo and shipped this season. The pickers received $1597.50 for their work.

According to the government's bureau of crop estimates, Washington's apple crop will exceed that of last year by more than half a million bushels.

F. E. DeSellem, horticultural inspector, estimates that the Yakima valley will lose 1000 cars of apples this year as a result of the work of the codling moth.

The value of the prune crop in Clarke county is estimated will exceed $500,000. Some of the growers received as high as 10 cents a pound for the fruit this year.

Sixty carloads of sheep have been shipped from Pateros this year and 133 cars have been ordered for that point within 20 days for sheep and cattle shipments.

That Grant county will harvest a crop of approximately 150 acres of apples and that much of the crop is unsold is the report of District Horticulturist P. S. Darlington.

The board of regents of the state college has recommended the Prosser district as the site for the irrigation experiment station recommended by the last legislature.

P. D. Smith of Okanogan has sold his Mineral Hill ranch to P. F. Munsell of Alderdale, Wash., for $29,000. It consists of 370 acres, of which 90 acres are in irrigated alfalfa.

Arrangements have been made by County Agent A. B. Nystrom of Lewis county to establish an experimental farm on a part of R. R. Somerville's land near the Southwest Washington fairgrounds, Chehalis.

F. Benz, president of the Potato Growers' association of the Yakima valley, recently stated that Yakima valley potatoes were finding a ready sale at $30 to $35 per ton f. o. b. Toppenish, as the result of the demand on the part of eastern and southern buyers.

Plans are being formulated by County Agriculturist A. B. Nystrom of Lewis county to hold a farmers' institute at Winlock November 5, 6 and 7. The programs will include prominent speakers, and the agricultural and live stock work will be given special attention.

Yakima reservation sugar beets have established a new world's record for tonnage yield, according to the official reports which the harvesters made to Manager T. R. Horne of the Utah-Idaho Sugar company. Thirty tons of sugar beets to the acre are being harvested at several places, whereas 25 tons is considered a record yield in any other beet-growing district.

What Others Say

East Washingtonian, Pomeroy: It now looks as if the fertile lands here will be cropped every year instead of every second year as heretofore, and that, too, without detracting from the fertility of the soil or lessening the production of grain.

Republic, North Yakima: Successful corn growing is but one contribution to Yakima prosperity, but an important one; it is an example of the transformation of the district during the last five or six years from a one-crop country to one of diversified crops and interests.

Tribune, Snohomish: The government declares that the ending of the present war will not bring to an end the demand for pork at present fancy prices; on the contrary it is expected that the demand for our pork abroad will be so great that it will be impossible for the American farmer to meet it.

Journal, Kent: The demand for gasoline, coal oil and fuel oil has become so insistent and these products bring such fancy prices, that any method of turning the waste products of the farm or mill into the best and safest motor fuel and lighting liquid known to science, should now be received and gladly acted upon. Why not give this cause a boost?

THE HOME OF THE CELEBRATED YAKIMA HERD

PURE BRED ABERDEEN-ANGUS REGISTERED CATTLE

IN THE FAMOUS VALLEY OF THE YAKIMA



THE Yakima herd of pure-bred Aberdeen-Angus is the largest herd west of the Missouri river, and one of the foremost in America from standpoint of breeding. Representatives of the YAKIMA HERD won more FIRST PRIZES at the 1916 International Live Stock Exposition, Chicago, than those of any individual breeder, and were awarded the honor of the

World's Championship Herd. Aberdeen-Angus Best Utility Breed

A review of the awards at the 1916 International Live Stock Exposition, Chicago, the supreme test of all beef breeds, shows that wherever the Aberdeen-Angus breed was pitted against the other breeds it won more prizes that ALL OTHER BREEDS COMBINED. In addition to this remarkable record the Aberdeen-Angus won Grand Championship honors at Ft. Worth, Texas, 1916, the greatest Fat Stock Show of the Southwest, and Grand Championship honors at Northwest Live Stock Show, Lewiston, Idaho. At the 1917 Western Live Stock Show, Denver, Colo., Aberdeen Angus feeders won Grand Champion honors in feeder competition with all breeds, selling for the record price of $14.50 per cwt.



MERAMAN OF TIERRA ALTA,
First prize 2-year-old bull at Iowa State fair, 1917.

Records Show Superiority

In the range of sales at the Chicago International prices paid for Aberdeen-Angus topped those of competing breeds, establishing records unapproached by any other breeds

Summary of 1916 Fat Carload Lot Prices.

10 loads Aberdeen-Angus steers averaged	$18.58
10 loads Shorthorn steers avrgd.	15.93
10 loads Hereford steers, avrgd..	15.75

The Aberdeen-Angus sold for an average of $2.65 per cwt. more than the Shorthorns and $2.83 more than the Herefords.

Comparative Average Prices Fat Carload Lots at Auction.

	1916.	1900-1916 (15 yrs.)
Aberdeen-Angus	$16.73	$9.34
Shorthorn	15.73	8.73
Hereford	14.94	8.38

For 15 years the Aberdeen-Angus have made an average of 96 cents per cwt. more than the Herefords and 61 cents more than the Shorthorns.

THE NORTHWEST'S GREATEST BREED

IN selecting a breed of the most general utility to benefit the farmers of the northwest, J. J. Hill, the great empire builder, as far back as 1883, chose the Aberdeen-Angus over all other breeds. By nature and environment the Aberdeen-Angus is best adapted to the northwest and records established by this breed in this section of the country are unapproached by any other breed. Never before in the history of the breed in America has there been such a great activity in the trade over such a wide territory, due in part at least to the phenomenal records made at the Chicago International during the last 15 years.

GRAND CHAMPION FAT CARLOAD LOT AWARDS.

Year.	Breed.	Per Cwt.
1916	Aberdeen-Angus	$28.00
1913	Aberdeen-Angus	13.25
1912	Aberdeen-Angus	14.00
1911	Aberdeen-Angus	15.75
1910	Aberdeen Angus	13.50
1909	Shorthorn	15.00
1908	Aberdeen-Angus	11.00
1907	Aberdeen-Angus	8.00
1906	Aberdeen-Angus	17.00
1905	Aberdeen-Angus	8.65
1904	Aberdeen-Angus	10.00
1903	Hereford	8.35
1902	Aberdeen-Angus	14.50
1901	Hereford	12.00
1900	Aberdeen-Angus	15.50

GRAND CHAMPION SINGLE STEER AWARDS.

Year.	Breed	Per lb.
1900	Aberdeen—Angus	$1.50
1901	Hereford	.50
1902	Aberdeen-Angus	.56
1903	Mixed Hereford-Angus	.26
1904	Aberdeen-Angus	.36
1905	Aberdeen-Angus	.25
1906	Hereford	Not sold
1907	Shorthorn	.24
1908	Aberdeen-Angus	.26½
1909	Aberdeen-Angus	.18
1910	Aberdeen-Angus	.60
1911	Aberdeen-Angus	.90
1912	Aberdeen-Angus	.50
1913	Aberdeen-Angus	Not sold
1916	Hereford-Shorthorn	1.75

WE have breeding stock to suit all demands. The blood lines in our herd trace back to the very best in the breed and we have the largest herd to select from west of the Missouri river. High class herd headers, range stock, or anything desired from the best in the Aberdeen-Angus breed. We make a specialty of furnishing bulls to range men in carload lots, at very reasonable prices. Call or address

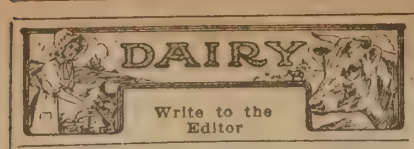


QUEEN OF ROSEMERE.

CONGDON & BATTLES

O. V. BATTLES, MANAGER

NORTH YAKIMA - - - - - - - - - - - - - - - WASHINGTON



A. B. NYSTROM, Editorial Contributor

Buhl Association.

Although there are a number of fresh cows in nearly every herd in the Buhl, Idaho, Pioneer Cow-Testing association, only 378 cows have been on test for the full month of September, five less than in August, according to the report of R. E. Snell, official tester. These cows produced 242,612 pounds of milk testing 3.8 per cent, or 9548.1 pounds of fat, giving association averages of 641.8 pounds of milk and 25.02 pounds of fat, the latter being 3.5 pounds lower than for September of 1916. Not enough cows freshened in August to bring about the increase in association averages, which should soon occur.

Only six of the 26 herds belonging to the association in September have averages of over 30 pounds of fat, but 14 have averages above the association average of 25.02 pounds. Thirty-one cows produced over 40 pounds of fat each for the month, 19 over 45 pounds.

H. H. Stiyer's herd of purebred Holsteins is the honor herd for the month with an average of 32.58 pounds fat, H. H. Payne's herd again being second with 32.20 pounds.

A. A. Stauffacher's grade Holstein Blondie, fresh August 24, is the high cow for the month, with a production of 1947 pounds milk and 64.2 pounds fat. H. H. Stiyer's Alban Mercedes Calmia De Kol is second with 62.4 pounds fat, and his Baroness Homestead II. is third with 62.1 pounds in 24 days.

Eleven cows have been sold for beef in the last month, and D. D. Doll has disposed of his mixed herd of 20 cows.

Drying Off the Cow.

Two of the essentials in reducing the milk flow are: milking less frequently and supplying less feed, says a bulletin of the Illinois experiment station. If the feed supply is decreased and the cow is milked as usual, since the act of milking is a stimulus to milk secretion, she will draw upon the surplus energy stored in her body in order to produce a normal amount of milk. Therefore, if the feed is reduced the milkings should be less frequent. When cows are giving a large amount of milk the drying-off process may be begun by leaving part of the milk in the udder at the regular milking period. After a few days one of the daily milkings may be omitted entirely. As the milk flow decreases, the milking may be done once in two days and then once in three days until the amount has been reduced to three or four pounds daily, when the cow need not be milked further. It is important that the drying-off process take place gradually in order to prevent injury to the udder.

Fifty-Pound Cows.

There were 331 cows in the Jefferson county (Wash.) association tested during the month of September, averaging 560 pounds of milk and 23.15 pounds of butterfat, according to the report of Ralph Erskine, tester. The average cost of feed was $5.90.

The following gives the names and records of the cows in the association having produced more than 50 pounds of butterfat for the month:

Glendale Creamery's "Chiquena" produced 1377 pounds of 5.2 per cent milk or 71.40 pounds of butterfat; Glendale Creamery company's "Brooketta" producer 1107 pounds of 4.8 per cent milk or 53.13 pounds of butterfat; Ed Nailor's "Rose III" produced 1044 pounds of 4.8 per cent milk or 50.11 pounds of butterfat; Sam Irwin's "No. 34" produced 1140 pounds of 5.3 per cent milk or 60.42 pounds of butterfat.

The Ayrshire

Logical Way to Choose a Breed

By PAUL E. TRIEM.

What is the logical way in which to choose a breed of cattle for a particular farm?

"Choose the one you like best," is the common advice. "Every breed is good if you handle it right, and you are more apt to do this with the type you fancy."

Sounds convincing, doesn't it? But now listen to the other side of the case, as advanced by J. W. Clise, the Ayrshire man of Seattle.

"If you will follow any given breed back to its home across the sea," says Mr. Clise, "you will find it living there under conditions of climate, food and handling which, in the course of generations, have made it just what it is.

"The Ayrshire cow is a Scottish product, and it is easy to trace now in her conformation and characteristics indications of the forces which have molded her, generation after generation. In the first place, you will find that for uniformity to type the Ayrshire is not excelled. In my stable, for instance, I can show you something which probably no other breed can equal—look down the line of cows, and you will find there back lines as level and uniform as anything can be. There are great individual difference between one Jersey and another, and between one Holstein and the cow of the same breed in the next stall, but the Ayrshire runs true to type. In addition to this matter of uniform appearance, she is a uniform producer; years before our modern system of testing was heard of, the Scotch breeders were bringing their national thrift to bear upon their herds, with the result that the cow that ate too much and produced too little was butchered. Today productivity at the milk pail is a fixed characteristic. And this Ayrshire milk averages 4 per cent butterfat, which the experts tell us is the ideal in this respect.

"Here, then, is the way I sum up the



Willomoor Mayflower, belonging to J. W. Clise, Redmond, Wash.

case for the Ayrshire—and remember I am an Ayrshire man only because extensive and patient investigation into the merits of all the dairy breeds has convinced me these Scotch cattle are the best in the world for our conditions. The Ayrshire cow is hardy, a good rustler, she produces more milk of a high quality in proportion to her consumption of feed than any of her competitors, she runs true to type, and her udder is compact and carried well up, thus fitting her to graze in safety on our brush pastures."

All of which brings us back to our starting point: before choosing a breed of cattle for your farm, take time to learn the fixed characteristics of each breed. And in doing this, you will be greatly aided if you can familiarize yourself with the environmental influences, back in Europe, which in the course of generations of breeding have produced these characteristics.

Beans From Brazil.

It is officially stated that the exports of beans from Brazil to the United States and allied countries of Europe will this year exceed 12,000,000 bags of 60 kilos each (app. 132 lbs.).

CARNATION HOLSTEINS WIN SILVER CUP

At the Oregon state fair, Salem, 1917, our Carnation Bull, Matador Segis Walker Delma, not only won first prize, but won the silver cup presented by the "Oregon Farmer" for the best Holstein bull, bred by exhibitor, over 1 year and under 2 years of age.

This was only one of the many prizes won by the 11 prize Holstein bulls, and 19 prize Holstein cows in the show string of Carnation stock farms, which took the majority of first prizes at Chehalis, Spokane, North Yakima, Puyallup, Western Washington fair, and the Oregon State fair. Most of the animals were bred and raised on the Carnation Stock farm in the Snoqualmie valley, King county, near Seattle.



Cup Given by Oregon Farmer for Best Bred Holstein Bull, Over 1 and Under 2 Years.

SILVER CUPS, Blue Ribbons and Milk Records Prove the Quality of CARNATION HOLSTEINS

Study the Pedigrees of Carnation Herd Sires

The pedigrees of the Carnation herd sires are pretty hard to equal on the Pacific coast. Only a short description can be given in this limited space

Johanna McKinley Segis—The son of the famous King Segis and the 40-lb. dam. His own dam made world's butter record for all periods of time from 31 days to 120 days. He now has 48 ARO daughters. One of his sons sired the first 30-lb. 2-year-old. One of his brothers sired the only 50-lb. cow in the world.

Matador Segis Walker—Grandson of the famous King Segis, through King Segis 10th and Matador Twisk Minnette 4th with 33.54 lbs butter at 4 years. "Matador" has a good record on the show circuit, and his son, Matador Segis Walker 6th, won first prize at all the fairs where exhibited.

BULLS
From Good Cows

If you are in the market for bulls of any age, you should see the Carnation Holstein Bulls before purchasing. On account of having the largest herd of registered Holsteins in the northwest your selection could be made with greater accuracy. Prices from $100 up.

Carnation Stock Farms

Visitors Invited — Correspondence Solicited.
CARNATION STOCK FARMS.
1192 Stuart Bldg., Seattle.

"Health Guaranty"

Breeders should remember, in buying new stock for their herds, that health is most important. Tuberculosis has been entirely weeded out at the Carnation Stock Farm, on account of contract with the U. S. Bureau of Animal Industry for regular inspection of all animals. Health certificate with each animal sold.



Raising the Dairy Calf

Big Problem Where Whole Milk Is Marketed

By M. O. MAUGHAN,
Division of Dairying, Washington State College.

The farmer must determine some method of feeding that will be cheap enough to induce him to keep all the heifer calves which are born, unless he knows some definite reason why such an animal should be discarded. While it has been possible in many cases to buy calves when grown and about to calve or to buy young cows in milk this will not be so easy to do in the future, and when such animals are found one can rest assured that he will have to pay a price high enough to pay the other breeder for doing the feeding while the animals were but calves.

One method on the dairy farm which sells whole milk is to feed but a small quantity each day of whole milk, making the ration consist of as much grain and hay as the young calves will consume. Calves should be given free access to a good grain combination at all times until they begin to consume more than three to four pounds per day each. When milk costs $3 per 100 pounds one pound of protein costs 75c from this source. By feeding grain, protein can be supplied at a much reduced figure. For example, linseed oil meal at $3.50 per 100 pounds would cost but 11c per pound protein. A good grain ration for the calf is one consisting of the following:

Corn meal, 2 parts by weight.
Ground oats, 2 parts by weight.
Linseed oil meal, 1 part by weight.

This grain should be fed immediately after the milk is consumed. The calves should be locked in stanchions when fed their milk so as to avoid the sucking of each others ears and other parts of the body immediately after finishing drinking their milk.

Milk substitutes have, in some instances, proved fairly successful.

A home made calf meal was prepared by the Indiana experiment station and given careful trials and proved to be fairly successful, and one which is worthy of mention. It consisted of equal parts by weight of the following:

Hominy feed.
Linseed oil meal.
Red dog flour.
Dried blood.

These were mixed with 7 parts of water and fed as a meal. The calves were started on whole milk, and when one week old the calf meal was added in small amounts and the milk was gradually decreased until at the end of five weeks the animals were receiving 18-20 ounces per head per day of meal and no milk. They were fed this until 6 months of age, at which time they were receiving 24 ounces of meal each per day. Besides receiving this meal the calves had access to ground oats and corn, equal parts, and a fine quality of alfalfa hay, together with some silage when 3 to 4 months old. The calves made good gains and looked thrifty.

Start the calf off on whole milk from some of the low-testing cows, and gradually substitute a home made calf meal if the various feeds can be obtained.

Provide plenty of grain and hay at all times. Silage can be provided after 3 to 4 months old.

At all times watch the young, growing calf carefully and avoid indigestion or scours, as it is generally called. Extreme care should be exercised in keeping the calf buckets and all other utensils from which their feed comes in a perfectly clean condition.

If it is found undesirable to feed a home made calf meal invest in a good separator, separate some whole milk and save the cream and use it to some advantage if possible, probably the making of farm butter.

King of the Pontiacs

Here is the opportunity to get some of this, greatest of all, Holstein blood. We will accept a few approved cows for service by our new herd bull,

KING PONTIAC SEGIS OF BROOKSIDE, 195818

Sired by King of the Pontiacs, Dam Queen Segis of Brookside, a 27-pound Daughter of Old Pontiac Clothile De Kol 2nd, with record of 37.21 lbs. butter in 7 days. The grandest old cow of the breed. He is also grandson of Prince Segis Korndyke, the sire of high priced bulls, and out of A. & G. Inka McKinley, the dam of King Segis.

There is more 30-pound cows and high priced sires in the breeding of this young bull than any other Holstein bull in the Pacific northwest. Write for illustrated pedigree and terms.

Also Breeders of Milking Shorthorns

With milk records behind them. One or two high class bull calves for sale. Backed up with large milk production.

A. V. Bradrick & Son

PALOUSE, WASH.

When you write to advertisers be sure to say that you saw their advertisement in this paper.

At Portland, November 23



HOLLYWOOD FARM

will offer fresh heifers with ARO records and of exceptional breeding, and two young sires with yearly records on both sides, all to be had at your price. Can you afford to pass this opportunity up? Money-makers from the start

Remember the Date, November 23

Food Situation in France

Meat, Meat, and Again Meat, Is Pressing Need

By FRED B. PITNEY

ARTICLE III.

France must have more meat. Her herds are disappearing rapidly. Soon they will have to be reconstructed entirely. Meat, meat, and again meat is a pressing need for France.

The French army requires 36,000 tons of meat a month, or 432,000 tons a year, 1,428,000 tons for her civilian population and another 356,000 tons for some millions of Belgians and French refugees, making a total of 2,000,000 tons of meat demanded by France.

As compared with her meat animals at the beginning of the war, the cattle of France are cut down more than 20 per cent, hogs 50 per cent and sheep 37 per cent. Cattle feed is short in France, and cattle poor and under weight. A total of approximately 2,500,000 cattle, sheep and hogs from the French herds was seized by Germany in the invaded provinces.

England undertook to supply France with 250,000 tons of meat a year, and this supply was kept up at the rate of about 20,000 tons a month until February of this year, when it was stopped, England having all she could do to feed her own people on reduced rations.

The French government is very bureaucratic, but the French people do not like to be overgoverned. They object seriously to anything that savors to them of meddling in a man's private affairs. For this reason it has become extremely difficult to get a workable income tax law in France. The people immediately rose against the proposal to give the government the right to examine their books and find out if they told the truth about their incomes if they failed to make a return. So a scheme was figured out for taxing a man on seven times his rent if he made no income tax return, or one the government thought too low.

Saying how much or what a man shall eat is also getting pretty close to private affairs, and therefore the French government, knowing intimately the people it has to deal with, is slow—s-l-o-w—in coming to such measures, even in face of the only too evident food shortage in the country. There have been efforts at price fixing, but they have not worked satisfactorily, one reason being that they have not been national, but local. Paris, for example, has tried fixing the price of butter, but it has been found that the result has been to drive butter away from Paris to localities where it could be sold for what the market would pay.

To Try National Price Fixing.

A scheme of national price fixing is to be tried now with beans and potatoes. Both of these crops are far below the requirements of the country. I have seen many days when potatoes could not be bought in Paris, and it was a common thing last winter to have to run half over the city to find a market where green vegetables could be bought. The national price-fixing scheme for beans and potatoes will divide the country into districts, and fix the price for each district, with a penalty for sending either commodity out of the district without permission.

So far, meat has withstood all efforts to control its consumption—there has been no attempt to control its price—and yet it is vitally necessary either to control the consumption of meat in France or to increase the supply. Otherwise, the end of the war will see the country so reduced in its herds that it will take many years to bring them back again to the point where France will be once more self-sustaining.

Supply Must Be Increased.

Of course, the thing to do is to increase the supply. When a country has had its breadstuffs cut down to the extent to which France has suffered the people naturally fall back on meat. One might think they would fall back on vegetables, but the same reasons that have deprived them of grains have deprived them of vegetables. There have not been the hands to cultivate the ground. They could not raise more vegetables than wheat. And they have fallen back on beef, mutton and pork. The herds existed, and they have been eaten up.. The people had to have something to eat.

To what extent the herds have disappeared is shown by the cutting down of the meat ration of the soldiers at the front. At the beginning of the war they were allowed one pound of meat a day. Twenty per cent has now been cut from that allowance. And I will point out again that only dire necessity will countenance reducing the food allowance of soldiers at the front.

Meat Shortage Serious.

Civilians, naturally, were the first to suffer when meat became scarce. The price went soaring. Retail prices to consumers doubled and trebled. The poor cut down in quantity, one understands, and the very poor went without entirely. But those who could pay could have meat if they were willing to give the price.

The time came, however, when there had to be an attempt to control the consumption. The army requires 36,000 tons of meat a month, or 432,000 tons a year. France's herds suffered enormously at the very beginning of the war. A total of approximately 2,500,000 cattle, sheep and hogs from the French herds were seized by Germany in the invaded provinces. Coming immediately on top of this loss France found herself compelled to find food for some millions of Belgian and French refugees. This had to be done at once, and the herds remaining had to be slaughtered without stopping to ask questions about the future. One does not say to a starving man, "What will I do tomorrow if I give you this crust of bread today?"

England, therefore, undertook to supply France with 250,000 tons of meat a year, and this supply was kept up at the rate of about 20,000 tons a month until February of this year. At that time the English supply stopped. England was having then all she could do to feed her own people on reduced rations.

Thus, since February France has had to supply from her own resources 432,000 tons of meat a year to her armies,

CUTTER'S

BLACKLEG PILLS

"California's Favorite" for nearly 20 years

For the Prevention of Blackleg in calves and young cattle

Their superiority is due to nearly 20 years of specializing in "Vaccines and Serums only."

Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.

Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

Prices:

10 dose pkge. Single pills	$1.00
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Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

The Cutter Laboratory, Berkeley, Calif.

The Cutter Laboratory of Illinois, Chicago
Eastern Agent

Individuality Breeding Production

Puget Sound Herd HOLSTEINS

for the year ending May 1, 1917, won more prize money in the long time tests than any other herd in the United States.

Thirty-five yearly records have been made. Eight have made records from 925 to 1176 lbs. butter in 1 year. Twelve have made milk records from 20,572.9 to 31,246.9 lbs. in one year.

Our consignment to the Pacific International sale to be held in Portland November 23 consists of 11 head.

One cow with a yearly butter record of over 1000 lbs.

One three-year-old with a 29-lb. record. She made 572 lbs. butter in a year as a 2-year-old.

One four-year-old with two yearly records.

One well bred son of the noted cow "Cascade Marie."

Five daughters of the proven sire, "Quirinus Cornucopia."

Two daughters of "Chimacum King Korndyke Sadie Vale," Patience, constant watchfulness, accurate record keeping mated to combine the greatest possible production, combined with beauty and form. Such is the Puget Sound herd definition of breeding. But it produces the animal that will deliver the goods into the purchaser's hands.

WM. BISHOP, Prop.

Chimacum, Wash.

1,428,000 tons for the civilian population and another 350,000 tons for refugees, making a total of 2,000,000 tons of meat a year demanded by France.

Herds Depleted.

What are the herds she has to do this with? At the beginning of 1914 her cattle herds comprised 14,737,710 head; sheep 16,131,390 and hogs 7,035,850. By the end of 1914, after five months of war, her cattle were reduced to 12,668,243, her sheep to 14,038,361 and hogs to 5,925,291. Today her cattle herds are cut down more than 20 per cent, while her sheep number no more than 10,000,000 and her hogs 4,000,000—a loss of nearly 50 per cent of her hogs and three-eighths of her sheep on top of the loss of 20 per cent of her cattle.

Cattle feed is short in France and the cattle are poor and underweight. More of them have to be killed in proportion to supply the needed quantity of meat. Milch cows have been killed and the shortage of proper feed has reduced both the quantity and quality of milk. Why, I have seen the time when it has been next to impossible to get milk for my little baby in Paris. I have gone from store to store, begging some one to sell me as little as 2 cents' worth of milk for my baby.

Crying Need for Meat.

The government is trying to conserve the meat supply and save the herds now by limiting the use of meat to one meal a day. The endeavor is made to accomplish this purpose by forbidding the sale of meat after 1 p. m., and ordering the butcher shops closed at that hour, while hotels and restaurants can serve meat only with the noonday meal. But this measure has had little effect on the use of meat, as it serves only against the restaurants. Housekeepers can buy all the meat they want before 1 o'clock, and they do it, as there is no restriction in the amount that can be bought. Moreover, in the restaurants one can eat all the meat one wants at midday, and thus make up for having none at night, and this, also, is the practice.

There is only one real solution of the problem. France must have more meat. Her herds are disappearing rapidly. They are today far below the danger point. Soon they will have to be reconstituted entirely. Meat, meat, meat and again meat is a pressing need for France.

Feed and Maturity

Well Fed and Light Fed Heifers

The Ayrshire quarterly quotes Dr. C. H. Eckles of the Missouri university as saying that well fed heifers usually reach maturity at an earlier age than light fed ones.

His experiments brought out the fact that heavy fed Jerseys became sexually mature 76 days earlier than light fed animals of the same breed, while heavy fed Holsteins matured 112 days earlier than light fed. Further experiments demonstrated that variations in milk-giving qualities were due more to heredity than to feding.

Professor Eckles says that the age at which heifers should be bred depends largely on the breed and the manner in which the individual has been developed. Generally speaking, Jerseys and Gernseys should be bred to freshen at from 24 to 28 months of age, while Holsteins and Ayrshires should be bred to freshen at from 28 to 30 months.

Feeding influences growth and development. The age of first calving seems to influence the deveopment of the milking functions. Early calving retards development while delayed breeding sometimes proved troublesome. A happy medium is suggested. Dr. C. H. Eckles is today the most prominent of our dairy scientists.

South African Corn.

The union house of assembly of South Africa has decided to take over the surplus crop of corn at 14 shillings 3 pence ($3.42) per bag of 200 pounds. This price was considered reasonable in view of quotations in other parts of the world.

World's Wheat Crop.

According to the International Institute of Agriculture, the production of wheat this year in Spain, France, united kingdom, Switzerland, Canada, United States, India, Japan and Algeria is estimated at 208 million quarters, or 3.3 per cent more than the production of these counties in 1916.

Milking Shorthorns

How to Get a Foundation Herd

By A. V. BRADRICK.

We are often asked how to get a start for a foundation herd of milking shorthorns.

Our reply to that is to buy a bull of the very best milking strain you can, and use him on the most likely cows you can obtain of the beef breeds, giving preference to the Bates line of breeding. Heifers or cows from dams with milk records behind them come quite high for the beginner and they are really not to be had. Those that are desirable specimens, or have the right kind of merit individually. To illustrate what I mean by this, will say that I visited every breeder, last April, in Minnesota, Wisconsin and Iowa that had any stock with milk records behind them, two or three herds in Ohio and some in Pennsylvania. I was only able to buy six females, and secured those on account of being able to persuade the breeders that in so doing it would promote the interests of the breed out here in the northwest. I might have bought a few more, but was not looking for the culls of the herd; too expensive to ship so far.

We also attended the sale of L. D. May in Pennsylvania, and might have purchased some good stock there had we not been so timid about prices, but their pace was too swift for us; the 40 head sold, including both bull and heifer calves, for over a $1000 average, so will leave it to you to judge our backwardness as a beginner.

We might add, just as a matter of information, as to how prices run, that we did get our courage up to pay as high as $800 for what we did get, and yet we only got our mouth open once at the May sale. The middle west breeders advised us they were buyers of females and not sellers, and, owing to this situation, we advise breeding up in the manner indicated.

We believe the ideal dual-purpose cow is one that will milk 10,000 to 12,000 pounds. We have seen a number of this kind of cows; have seen them for three generations showing their ability to breed them true to their dual-purpose form. Have seen some fine milk producers, the result of first cross with a good dairy bull on beef-bred cows of only very ordinary milk production themselves. "Missourians" are now beginning to realize that we have a dual-purpose cow and are breeding them so we in Washington had better look around, and if we do, we believe that we will find that this is the best breed of cattle possible for our section of the country, and especially to the man that is close to outside range or does not desire to milk his herd all the time. Take the average farmer with a herd of these kind of cows—he is not at the mercy of the milk distributor, for if he can not obtain a satisfactory price for his milk he can turn his herd into beef production without any sacrifice.

La CONNER FLATS STOCK FARM

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams: butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

J. H. HULBERT

Mt. Vernon, Wash.

THE STATE COLLEGE OF WASHINGTON

IS OFFERING FOR SALE A FEW

DAIRY ANIMALS of MERIT

Combining Both Type and Production

1. Lawn's Palouse Duke—132342
   A Jersey bull of excellent type and carrying good blood lines. His dam as a 4-year-old produced 7474 pounds of milk and 464 pounds of butter. Age 3 years.
2. Marigold's Palouse Prince—153513
   A Jersey bull of excellent lines, long, deep and typy in every respect. His dam, as a 2-year-old, has a record of 5879 pounds of milk and 354 pounds of butter. His sire is the present herd sire at the State College of Washington and one of excellent breeding and type and one of great promise.
3. Several pure bred young bulls of the Ayrshire, Jersey and Holstein breeds.
4. A few pure bred Ayrshire cows with yearly records.

Further information will be sent upon request. Address

Dairy Department---State College of Washington

PULLMAN, WASH.

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WOOL · PELTS
FURS · TALLOW

SHIP TO US
NO CARTAGE - NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS - HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
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BE SURE AND MENTION THIS PAPER

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ROUTE NO. 1, SPOKANE, WASH.

Holstein Friesians

We Were Never Better Able to Fill Your Demand for CHOICE BULL CALVES Than at the Present Time

Practically all of the best females we ever owned are still in the herd, which will be proven by their yearly records now starting.

John L. Smith, *Prop.* J. E. Munroe, *Mgr.*

Two Profits

Use of Brood Mares on the Farm

A brood mare on the farm is a source of two profits. It is not uncommon to hear of some remarkable mare on a particular farm that, besides doing her share of the farm work, has raised many hundreds of dollars worth of colts. It is seldom that there is more than one such mare mentioned. To obtain the greatest returns, nearly all the work animals maintained on the farm should be mares of this character, says a new farmers' bulletin of the United States department of agriculture.

"Horses always are needed to do farm work," says the bulletin, "and generally they can be raised from farm mares more cheaply than they can be purchased, while the surplus, if of proper breeding and liberally fed on suitable balanced rations, will find ready sale at good prices because they will have the characteristics that suggest the ability to do work satisfactorily and profitably."

It is pointed out that breeding working mares places double duty on them, consequently they must be robust individuals properly conformed, and must be given good care and treatment. With two sources of profit from one animal, farmers can well afford to pay more for such stock, feed it more heavily, and give it special attention. The small farmer is most likely to get the best results from such a plan because he usually works his own teams or is in a position to watch them closely and see that they are not ill treated.

The two outstanding requirements in profitable farm mares are that they be breeders and workers, says the bulletin. Any mare that is not at least of high grade should not be considered. The particular breed or grade would depend largely on local markets. In a locality where there is a local horse market it is generally advisable to breed the prevailing type, since by so doing, sales are more easily made and the services of high-class stallions are practically assured.

The bulletin already mentioned, Farmers' Bulletin 803, entitled, "Horse Breeding Suggestions for Farmers," contains practical information for the breeding and management of mares, also the care and feeding of foals. Special directions are also given for the feeding and management of young horses. This bulletin may be obtained free upon application to the department of agriculture, Washington, D. C., as long as the department's supply lasts.

Shropshire Ram.



Champion Shropshire yearling ram, Oregon State fair, 1917, owned by Frank Brown, Carlton, Ore., and shown and cared for by Frank Brown Jr., shown in the photo.

Medal-Winning Jerseys for 1916.

The Jersey medal awards for the year 1916 showed an increase in the average production of milk and butter fat for the cows on register of merit test.

The average production of 1636 cows and heifers, all ages, is 7931.9 pounds of milk and 427.26 pounds of butter fat, while the average percentage of fat in the 1636 tests was 5.39 per cent. A comparison of these figures with those of the year previous shows an increase of 146 pounds of milk and 11 pounds of butter fat in the production of all Jerseys on test.

The grand championship for the year went to The Seer's Alberta 2d, owned by E. T. Bedford, Greens Farms, Conn. This cow, in addition to qualifying for Class AA by carrying a living calf 185 days of her test, produced 16,872.7 pounds of milk, and 881.66 pounds of butter fat, equivalent to 1037.25 pounds of 85 per cent butter. St. Mawes Poppy, owned by Ed Cary of Carlton, Ore., was designated champion cow of the year, having produced 15,782.4 pounds of milk and 952.28 pounds of butter fat, equal to 1120.32 pounds of 85 per cent butter.

Holsteins

Of Greatest Value After 10 Years

The Holsteins speak for themselves and need no defense from anybody, but one can forgive the Holstein enthusiasts for making comparisons now and then. For instance, Harold McAlister of California declares:

The record of such Holstein cows as Hark and others, up to 19 years of age, show a production at a greater age than has been attained by the cows of any other breed. The average life of a dairy cow is computed to be only seven years, yet Holstein cows have shown a productive capacity of over two and a half times the normal length. Depreciation is one of the greatest losess suffered in dairying and in the case of a $200 cow, it amounts to over $27 per year. Now, when a Holstein cow has aproximately twice the length of profitable production, as compared with other breeds, it will readily be seen that this enormous expense of depreciation is but half for the cows of that breed. This cost is still further reduced, if it is considered that when a Holstein cow becomes too old to be profitable any more, she will bring almost twice the price for beef that a Jersey or Guernsey would. Instead of showing a decline in production after the fifth or sixth year, like most other breeds, the Holstein, according to the Connecticut Experiment station reports, shows an increase in production till past 10 years of age, as proven by the summary of their official records.

	Lbs. Fat.	Lbs. Milk.	Pct. Fat.
10-11 yrs.	15.40	445.2	3.46
9-10 yrs.	14.97	433.2	3.45
8-9 yrs.	15.17	441.6	3.44
7-8 yrs.	14.71	438.2	3.36
6-7 yrs.	15.05	441.9	3.41
5-6 yrs.	14.72	432.7	3.41
4-5 yrs.	13.96	416.5	3.52
3-4 yrs.	12.39	368.6	3.62
2-3 yrs.	9.96	300.9	3.31
1-2 yrs.	8.76	267.3	3.27

Thus, the average Holstein cow does not reach her full capacity, in either milk or butter production, until almost 11 years old.

Not only official records, but the lists of the prize winning animals in the show ring, prove that the average Holstein does not attain her full greatness until at an age at which the average cow of other breeds is fit only for the shambles. The greatest prize winning Holstein cow that, probably, the breed has ever known, Aconeth Lady, did not win her greatest prizes until almost 17 years of age. It is almost invariably the case that the prizes in the mature Holstein classes are won by animals that are past 10 or 12 years old.

Percheron Stallion.



Kroumir, senior and grand champion Percheron stallion, Washington State fair, 1917, owned by A. R. Hunter, Island City, Ore.

National Shorthorn Congress.

The big event in Shorthorn circles will be the national Shorthorn congress show and sale to occur at Chicago the third week in February next. It will embrace the entire country in its scope and is designed to furnish a convenient outlet to breeders of high-class Shorthorns.

The program is arranged to include shows each forenoon and as an added inducement to the exhibitors the American Shorthorn Breeders' association will offer cash prizes approximating $8000. The show entries will be limited to the cattle to be offered in the sales—a fact that will insure to the buyers an offering of outstanding individual strength. In order that the small breeder may have an equal chance with the owners of large herds, the entries will be limited to 15 head from any one breeding establishment.

Herefords.

In the united kingdom the principal districts for the breeding of Herefords are the West Midland counties and the Welsh counties that border onto them. There are also a fair number bred in certain parts of Ireland.

A Choice Supply of Well Grown Breeding Stock

HERCULES SHORTHORNS

Herd Headed by
Gainsford Perfection and Imported Doune Radiance

Stock of the Highest Quality for the Breeder and Farmer

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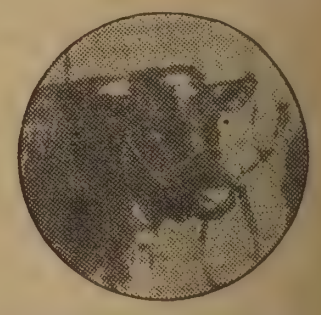


Undefeated Grand Champion of Canada 1914-1915



IMPORTED DOUNE RADIANCE

Topsy IV. 472564



Grand Champion of Spokane Interstate Fair 1917

Visitors Welcome

Your inspection of our herd is always invited.

HERCULES STOCK FARM

Sprague, Wash.

Owned and Operated by

DAY & ROTHROCK

205 Exchange National Bank Bldg.
Spokane, Wash.

Hercules Shorthorns are all that the name implies—

QUALITY, SIZE
STRENGTH
DEPENDABILITY

MEADOW LAKE STOCK FARMS

Jas. H. McCroskey & Sons

SHORTHORNS OF MERIT



COTTONWOOD SULTAN, Champion 2-year-old and Grand Champion at Interstate Fair, Spokane, 1917.

BULLS

for the Farmer and Breeder Outstanding Show Bulls Among Them

Young

Females

in Lots to Suit Bred to the Best Bulls the Breed Affords

Our Prices Are Always the Most Reasonable

Write or wire when coming.

JAS. H. McCROSKEY & SONS

Sprague, Wash.

SHORTHORNS SHORTHORNS SHORTHORNS

Annual Fall Sales

The Pacific Northwest Shorthorn Breeders' Association

At Lewiston, Idaho

November 13, 1917

During the Northwest Live Stock Show

30 choice young females, 30 grand young bulls have been selected for this sale.

Col. Geo. A. Gue, North Yakima
Col. Harry Cranke, Nez Perce, Ida.
Auctioneers

At Portland Union Stock Yards

NOVEMBER 22, 1917

During the Pacific International Show

40 high class females, 30 choice bulls have been selected for this sale from the leading Shorthorn herds of the northwest.

Col. N. G. Kraschel
Auctioneer

For Catalog Apply to

FRANK BROWN, CARLTON, OREGON

Sales Manager

SHORTHORNS SHORTHORNS SHORTHORNS

Northwest Live Stock Show

Will Feature Two Great Sales of Cattle

Among the most important features of the Northwest Live Stock show at Lewiston, Idaho, November 8 to 15 inclusive will be the two great sales of cattle that will be conducted, one under the auspices of the American Hereford Cattle Breeders' association, the other by the Pacific Northwest Shorthorn association.

National Secretaries R. J. Kinzer, Kansas City, of the Hereford association; Wayne Dinsmore, Chicago, of the Percheron association, and E. W. Evans, Chicago, of the Duroc-Jersey association, will be in attendance throughout the show and will address the members of the Northwest Live Stock association.

Much interest is being shown in the



Champion Percheron stallion Carsino at the 1917 state fair of Idaho, owned by Walter Borthers of Buhl and Filer, Idaho. This animal also captured some honors at southern Idaho fair at Filer, Idaho, this year.

student and young people's judging contests this year, and there are many entries. Meat saving demonstrations will be conducted for the benefit of women visitors throughout the exhibition by the extension department of the University of Idaho.

As usual, there will be many elaborate parades.

Of even more interest than the show itself will be the addresses that will be delivered by men of national reputation from all over the country, including one by Honorable Gifford Pinchot, chairman of the national food administration's live stock committee. Large delegations are coming from Chicago, Kansas City, Denver, Salt Lake, Portland and Spokane meat distributing interests and stock yards.

The show will be opened with a monster barbecue in honor of the visiting governors of Nevada, Idaho, Oregon, Washington and Montana. One and one third round trip rates have been granted by all railways.

Secretary Paul Clagstone announces that judging from present entries the coming annual show at Lewiston, Idaho, November 8-15 inclusive promises to beat all records for the country west of the Rockies. Entries of Hereford and Shorthorns number over three times as many as at any previous show held in the northwest, and the other departments are proportionally large. In addition to the numerous and extensive buildings which have housed the exhibits in the past, the management has been obliged to rent nine large tents to take care of the increased entries this season.

Hereford exhibitors include the following: Henry Thiessen, Sweetwater, Idaho; George Chandler, Baker, Ore.; A. B. Cook, Townsend, Mont.; J. D. Miles, Livingston, Mont.; A. O. Huntley, Cuprum, Idaho; Hastings & Hover, Phillipsburg, Mont.; L. L. Young, Nampa, Idaho; Platt Brothers, Genesee, Idaho; John Mortenson, Burley, Idaho.

Among Shorthorn exhibitors are: Childs & Anceney, Helena, Mont.; Frank Brown, Carlton, Ore.; James H. McCroskey, Fishtrap, Wash.; Day & Rothrock, Sprague, Wash.; Duncan Dunn, Wapato, Wash.; Harry Summers, Bozeman, Mont.; W. J. Townley, Union, Ore.; William DeLay, Union, Ore.; William Leonard, Pomeroy, Wash.; I. H. Jorgens, Nez Perce, Idaho.

Those showing horses include M. E. Metz, Colfax, Wash.; A. C. Ruby, Portland, Ore.; A. H. Riddell, Addy, Wash.;

ABERDEEN-ANGUS CATTLE



ARE THE PREMIER BEEF BREED OF THE WORLD



Their show record, in direct competition with other breeds, prove their superior merit conclusively.

Record at International Live Stock Exposition, Chicago

Competition open to Pure-Breds, Grades and Cross-Breds.

Out of fifteen possible Grand Championships and fifteen possible reserves, Aberdeen-Angus have won ten Grand Championships and nine reserves.

Out of fifteen possible Grand Championships for Carloads, Aberdeen-Angus have won twelve times.

Out of fifteen possible Grand Championships for Carcass Contest, Aberdeen-Angus have won fourteen times.

The above prizes, together with many other prizes too numerous to mention, which the Aberdeen-Angus have won in direct competition, should convince every one of the superior merits of the breed.

Aberdeen-Angus have also proved their superiority in Feeder Competition at all the leading shows and stock yards of the country by winning Grand Championships and selling at record prices.

Summary of 1916 Fat Carload Prices at International Exposition, Chicago

10 loads of Aberdeen-Angus averaged	$18.58
10 loads of Herefords averaged	15.75
10 loads of Shorthorns averaged	15.93

These figures show that the Aberdeen-Angus sold for an average of $2.65 per hundred pounds more than the Shorthorns and $2.83 more than the Herefords. These figures are practical, because they were obtained where the same number of loads of the best of each breed were assembled. These figures further show very clearly the degree in which the Aberdeen-Angus breed leads all other breeds in establishing top market prices.

For free illustrated literature, including history of the breed, show records in detail, and a list of members of the AMERICAN ABERDEEN-ANGUS BREEDERS' ASSOCIATION, address

CHARLES GRAY, Secretary,
817 Exchange Ave., Union Stock Yards, Chicago, Illinois.

When you write to advertisers be sure to say that you saw their adverisement in this paper.

Waikiki Farm Jerseys

"Home of the Pilot Family"

Herd founded in 1912. The largest Jersey herd in the Pacific northwest. Type and production are both considered in our breeding program.

Herd Bulls—Golden Winnie's Count 105989—A line-bred Golden Fern Lad bull, at the head of the herd for five years, has now yielded his place to two of his sons:

Count's Foxy Lad of Waikiki, 142808. (See description under cut.)

Model's Pilot of Waikiki, 152038. Junor champion Spokane, 1917. (See cut and description of dam below.)



COUNT'S FOXY LAD OF WAIKIKI

A grandson of Pilot. Grand Champion bull of the northwest, 1917. His dam, Eminent's Foxy Belle, is now on R. of M. test and in 7 months and 9 days has given 9627 pounds milk, 514.7 pounds butterfat.



PILOT'S MODEL

Champion Senior 2-year-old Jersey of the West. Record with first calf—12,639 pounds milk, 618.2 pounds butterfat. With second calf she has milked 65 pounds per day.

Our Cows Are Making Excellent Register of Merit Records:

	Age: Yrs.	Mos.	Lbs. Milk.	Lbs. Fat.	Days on Test.
Princess Coleman, 292061	6	5	12,873	828.44	365
Fancy Iron Duchess, 290962	4	7	13,643	739.06	365
Pilot's Model, 314765	2	9	12,639	618.29	365
Lady Trilby Du Val, 266605	6	8	11,275	546.54	365
xGenesta's Duchess, 266615	7	1	9,750	541.19	212
xMeysie's Fern Lassie, 290819	4	5	11,666	584.82	258
xEminent's Coquette Girl, 300648	6	0	10,671	500.43	286
xEminent's Foxy Belle, 304982	3	11	9,627	514.70	223

xYear's test not completed.

Wren & Greenough, Fenn, Idaho; Follett & Schooler, Genesee, Idaho.; Warren Browning, Moscow, Idaho; Charles Sawyer, Palouse, Wash.; Brown & Mood, Moscow, Idaho; Jacob Busher, Genesee, Idaho; I. H. Lowry, Winchester, Idaho; S. Metz & Sons, Pendleton, Ore.; Julius Giese, Juliaetta, Idaho; H. Rilley, White Sulphur Springs, Mont.

Swine exhibitors include: Silver Birch Farm, Newport, Idaho; Sam Taylor, Palouse, Wash.; Edward Schoel, Suver, Ore.; Wilson Brothers, Greenleaf, Idaho; Hugh Walter, Townsend, Mont.; J. M. Royston, Payette, Idaho; P. L. Sain, Oakesdale, Wash.; B. L. Maricle, Lewiston, Idaho; Robert Nelson, North Yakima, Wash.; Vahlberg & Sons, Caldwell, Idaho; Howard Brothers, Parma, Idaho.

Dairy exhibits will largely exceed those of last year, as will those of sheep.

There will be some fine displays in the carload classes of fat cattle, swine and sheep.

Judges will be as follows: Shorthorn and Aberdeen Angus, H. R. Smith, Chicago Union Stock yards; Herefords, Dr. T. W. DeWitt, Denver, Col.; dairy cattle, C. V. Ellington, Salt Lake City, Utah; horses, C. N. Arnett, Bozeman, Mont.; swine, M. H. Mumford, Urbana, Ill.; sheep, J. E. Nordby, Idaho Agricultural college, Moscow, Idaho, and C. E. Howell, Washington State college, Pullman, Wash. Representatives of the packing houses will judge the fat stock.

Oregon Jack.



Mohawk Chief, first prize 3-year-old and champion jack, Oregon State fair, 1917, owned by F. J. Chalmers, Cornelius, Ore.

Argentine Harvest

Surplus of Wheat, Oats, Linseed

In its issue of October 2 George Broomhall's Corn Trade News says:

The near approach of the Argentine harvest season reminds us that the sun, metaphorically speaking, never sets on the wheat fields which supply Great Britain with her breadstuff; last week we were writing of the concluding stages of the harvest in this country and Canada. In a few weeks we shall be discussing the Australian and shortly afterward the New Zealand, and subsequently the Indian harvest prospects. On Saturday our agent at Buenos Aires cabled that the crop prospects in the Argentine are excellent and that it is anticipated if present conditions are maintained there will be a record yield of wheat and oats. The exportable surplus of wheat may very likely exceed 4,000,000 tons (18,000,000 quarters). This would indeed be a welcome addition to the food supply of the allies, and one is left wondering what effect such a surplus of grain for export will have upon the international grain market next January or even sooner. As we have said before in these reviews, storage accommodation in the Argentine is quite insufficient to take proper care of abundant cereal crops. If next December there should be safely harvested 10,000,000 tons of wheat, oats and linseed, of which 7,000,000 tons will have to seek a market abroad, we may be sure the markets of Buenos Aires and Rosario will be in a seriously congested state. It is true that harvest has not yet commenced even in the earliest districts, nor are the crops absolutely assured, but they are in many districts so far advanced that we may now reasonably hope that the coming harvest will be a bumper one. In the earlier districts wheat cutting should commence in six weeks' time, and the harvest should be finished before the end of December.

Winter Bird Feeding.

In order that birds may be helped safely through the winter, when snow will cover many of their usual sources of food, the bureau of the biological survey of the United States department of agriculture is urging city park officials to make bird feeding an activity in the city pleasure grounds.

Productive Jerseys

BIG caliber, high producing cows are essential to the BIG success attained by a few dairymen and breeders. The man or woman who is contemplating entering this most noble, patriotic and scientific occupation must be reasonably sure that the animals used for a foundation of the future herd are of a producing strain.

The cow testing association and official test work has proven this to our entire satisfaction. Every cow in our herd has been and is being tested showing a herd average production of around 50 pounds fat per cow each month for many succeeding months, setting a pace surpassed by few, if any herd in the northwest. We are making a specialty of THE CARY BREEDING, many of the animals carrying this blood.

Herd sire, Gertie's Poppy's St. Mawes, also several daughters of Foxhall's Fern Lad.

The herd sire is over 50% of the herd from the standpoint of breeding. We are sold down to three bull calves under 6 months of age, including the CHAMPION JUNIOR, state fair 1917.

We are not unreasonable in price.

Mellow Lawn Farm

F. A. DOERFLER, Proprietor.

Marion County. Silverton, Oregon.

A Slice a Day

Our Allies need Wheat.

We Americans have wheat—lots of it.

We can share with our Allies and have sufficient for ourselves if we choose.

If each of us here in the United States chooses to save a single thin slice of bread a day, our Government can send an additional 4000 ton ship, loaded with wheat, to our Allies EACH DAY.

4000 tons is a lot of wheat. It will provide enough flour for more than 9 million people for a day; people who must have it; who are fighting for us across the sea.

Remember too, that SAVE does NOT mean GO WITHOUT. Eat a piece of corn pone or rye bread in place of that SLICE A DAY.

JOIN THE FOOD CONSERVATION ARMY

Swine Decrease in all Countries

Selling a brood sow at this time, according to the United States department of agriculture, is like killing the goose that laid the golden eggs.

When pork is selling at 18 cents or more a pound on the hoof, the hog breeder may be tempted to turn into cash all that he can sell; yet the department points out that the value of a brood sow which will produce such high-priced offspring is proportionately increased and she should be kept as the source of further and future profits.

Since the beginning of the war the number of swine in all countries has decreased and the decrease has been marked in some of the belligerent countries. In France, for example, in the three years just before January 1, 1917, the number of swine decreased 38.12 per cent; during 1915 the number in Germany decreased 31.47 per cent.

Breeding stocks are being depleted, and the department says that the situation is already critical and threatens to become very serious if the country continues to be drained of its meats. Hogs furnish meat more quickly and cheaply than other stock can; the meat shortage, therefore, can most readily be met by swine production.

Coal Production.

Coal production records were smashed in 1916, when the output was around 597,500,000 tons, compared with 570,000,000 tons, the previous high record established in 1913. The quantity of bituminous coal mined was 509,000,000 tons, an increase compared with 1915 of 66,500,000 tons, or 15 per cent.

Silver Cliff Jerseys

HIGH REGISTER OF MERIT RECORDS.
Home of the

Grand Champion Cow

Oregon State Fair, 1917.



Chief Engineer's Viola, Grand Champion Jersey Cow, Oregon State Fair, 1917

SOME OF OUR RECORDS ARE AS FOLLOWS:

CHIEF ENGINEER'S VIOLA, a double granddaughter of Golden Glow's Chief, 8,559.9 pounds milk and 571.4 pounds butter, as a 3-year-old. This is the grand champion cow above.

PEER'S PEARL OF SILVER CLIFF, 7,468.7 pounds milk and 541.1 pounds of butter, as a 2-year-old.

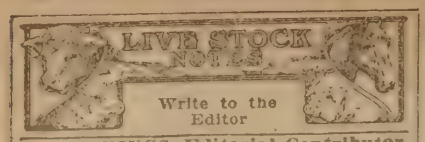
PRINCESS NANCY V. 2d will finish November 5 with over 11,000 pounds milk and 565 pounds butter.

FOXHALL'S FERN LAD, our herd bull, has four Register of Merit daughters, one a 2-year-old with over 600 pounds butter.

A few Choice Young Bulls from Register of Merit dams.

Will also sell a few Register of Merit Cows.

FOX BROS., F. J. & Roy M. Silverton, Oregon



E. J. IDDINGS, Editorial Contributor.

Boar Management

Deserves the Best of Attention

The management of the boar is a very important part in the raising of strong, healthy pigs, and one which is sometimes neglected, says Farmers' Bulletin 874 of the department of agriculture. He should be the most valuable animal in the whole herd, and as such deserves the best of attention. The boar should be purchased from a breeder of purebred hogs when between 8 months and 1 year of age. Many breeders, however, purchase a boar when a weanling pig, but to be successful in this choice requires a wide experience and sound judgment. Aged boars which have proved their worth can sometimes be purchased at a reasonable price. It is much safer for an inexperienced breeder to buy an old, active boar than a young untried boar. If possible, the farmer should visit the herd where the boar was raised and note the conditions under which he was bred. At any rate, it is always possible to obtain from the breeder notes on the health and the kind and amount of feeds used, so as to serve as an index to his subsequent treatment.

Upon arriving at the farm the boar should be unloaded as soon as possible and placed in quarantine to guard against the introduction of disease into the herd. If he is lousy it is well to treat this condition at once. His feed should be a continuation of that to which he has been accustomed, feeding rather lightly the first few days until he recovers from the strain of shipping and becomes accustomed to his new surroundings. If it is not feasible to continue feeding as previously indicated, the change to a more convenient ration should be made very gradually in order not to disturb the appetite or health of the animal. As a rule, a pig 8 to 12 months old will be in proper breeding condition when received unless he has been very heavily overfed. In purchasing an older boar, particularly one which has been in the show circuit, it is often necessary to reduce his condition before attempting to breed. With some animals the breeding power is permanently impaired by too high condition at some time in their life. The boar should be well fed, but not fat, as a too-high condition makes him inactive, a slow breeder, and a rather uncertain sire.

Value of Bran

Is Cheapest Feed on the Market

By E. L. Potter.

Relatively speaking, bran is today the cheapest feed on the market, and its use will, doubtless, broaden materially if the present scale of prices continues for any length of time. Bran is a popular feed, and, on this account, commonly so high priced that the best feeders try to avoid its use as much as possible. This year, however, conditions are reversed, and economical feeding demands as much use of bran as possible. On the basis of the actual nutrients contained bran is worth approximately 75 per cent as much as wheat, barley or corn. The price is now only about 60 per cent of that of the cheapest of these grains, so the economy of its use is apparent.

Bran contains more fiber than the common cereals, and this, combined with less total nutrients, makes it a bulky feed, but little adapted to fattening stock, and of especially small value for fattening pigs. On the other hand, bulky feeds of this nature are very safe and seldom cause colic or other digestive disorders. Even unskilled feeders will seldom hurt a horse or cow with bran, whereas corn and barley must be handled with care, while wheat for horses or cows is exceedingly dangerous unless properly fed.

Bran contains a large quantity of certain phosphorous compounds which have a mild laxative effect. This effect is somewhat increased by soaking the bran in hot water before feeding.

Bran also contains more protein than the cereals and may be used to balance up a ration that is deficient in this nutrient.

With these points in mind, it will not be difficult to determine where bran can be used advantageously.

Dairy cows do their best on a grain ration that is not too bulky, that is rather high in protein, and that is somewhat laxative in its effect. Bran meets these requirements exactly, and, in addition, there is nothing that a cow likes better than bran.

Breeding ewes that must be fed a little grain during the winter do well on bran, especially on a mixture of bran and oats. We usually like a mixture of two parts oats to one part bran, but this winter the proportions may be reversel. Bran alone is also good.

Brood sows that are merely being carried through the winter will do their very best on bran. Pig experts have always liked bran for this purpose, but have seldom been able to get it at a price that will justify its use. For fattening hogs bran is too bulky, and shorts or middlings are better for this purpose, and even they should be mixed with barley or corn.

Limited amounts of bran are always used by the best horse feeders. The usual method of feeding is to use just enough bran with the oats to keep the bowels in condition. Now the feeders are going a little beyond this, and are using just as much bran as they can without making the horses' bowels too loose. Growing colts, brood mares and idle horses can be fed almost exclusively on bran.

Veterinary

Dr. S. B. Nelson

Feeding Wild Hay—Do you consider wild hay a safe or good winter feed for horses? There are two varieties of rushes, one the smooth, small rush, the other the jointed feathery variety, and also considerable wild carrot in a part of it, along with the fine and large leafed grasses. One horse fed this hay has a very rough and dry looking coat, his appetite is good and he seems perfectly well, but does not put on flesh. He fell off fully 100 pounds this summer while on pasture. I am feeding plenty of hay, grain and carrots.

D. D. B., Metaline Falls, Wash.

I would judge from your letter that your horse is possibly getting, or has gotten, quite a large quantity of the rush. The rushes in large amounts are sometimes poisonous to horses, causing a considerable intestinal disturbance, resulting oftentimes in inflammation. I would suggest for you to stop feeding hay that contains large quantities of the rushes. Otherwise I believe that wild hay is a splendid hay to feed to horses. Supposing that you try changing the feed of your horse and giving him one-half ounce of Fowler's solution of arsenic on his grain ration morning and evening for two to four weeks.

PURCHASE PERCHERONS



Because Percherons Pay



Percherons constitute two-thirds of all the pure-bred draft horses in the United States. 68 per cent of all the pure bred draft stallions in ten leading horse-producing states are Percherons.

The chief reason for such overwhelming popularity is that the get of Percheron stallions, whether out of large or small mares, are compact, shapely, durable, salable horses, whether large or of medium size.

Half blood or three-quarter blood horses out of western mares make the finest artillery horses in the world. British officers, prejudiced against the breed, testify that they have an overwhelming advantage over any other horses the British army has been able to buy throughout the world for artillery service.

There is no general market for small horses weighing under 1200 pounds. Reports from 277 selected correspondents show that those horses weighing under 1200 pounds range in price from $90 to $125; those from 1200 to 1500 pounds range in price from $140 to $175; and horses over 1500 pounds range from $200 to $250. Two crosses or three crosses of Percheron blood will put your horses out of the $125 class and make them worth $200 to $250 apiece.

Of the 21,000,000 horses on farms and ranches in the United States less than 1,000,000 are horses that will weigh over 1600 pounds.

PURCHASE PERCHERONS. IMPROVE YOUR STOCK. PERCHERON BLOOD PAYS.

For further information and lists of all breeders in the United States address WAYNE DINSMORE, Secretary

Percheron Society of America

Exchange Avenue, Union Stock Yards Chicago, Ill.

PUBLIC AUCTION

Palouse, Washington, Dec. 5, 1917.

18 Head Registered Percherons

20 stallions, 4 stallion colts, 12 mares and fillies, 12-year-old Shetland stallion, 1 full blood Reg. (7081) Mammoth Jack, 1 imported Spanish Jack. For pedigrees write for sale catalog.

C. F. Sawyer and Sons, Owners, R. F. D. 3, Palouse, Wash.

Major Strubel, Auctioneer.

When you write to advertisers, be sure to say that you saw their advertisement in this paper.

CRANKE-McKENZIE CO. Inc.

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UNION STOCK YARDS.
Spokane, Washington.
Phone High. 31.



Sheep Get Results

Farm Flock Shows Record of Profit

How a small flock of sheep on the grain farm can be made profitable is illustrated by the experience of August Reinbold and Andrew Reinbold in eastern Washington, near Davenport.

Two years ago they bought a flock of 105 grade ewes, later buying a pure-bred ram. They turned them onto their grain land, of which they have about a section. The result of the last year is interesting.

Having disposed of seven head of the ewes, the other 98 were bred and produced 99 lambs, of which 57 were ewes. About half of these ewe lambs were recently sold for $10 each, and the others kept, though they had many opportunities to sell them. The 42 wether lambs were recently sold at the Spokane Union stock yards at 14 cents a pound, averaging about 93 pounds each. The mothers last spring sheared an average of 10 1-2 pounds of wool, which sold at a little better than 50 cents a pound.

The approximate income, then, for the year was:

Ewe lambs	$ 570
Wether lambs	546
Wool	515
Total	$1631

The owners estimate the cost of feed for the year at not to exceed $100, as little feed was actually given the sheep. They were pastured on summerfallow, stubble and a small pine land pasture.

The ewes were originally purchased at a cost of $5.25 each, but would of course cost a great deal more than that at this time.

Out of the profit from the sheep experiment, which was entirely new to the Reinbold brothers, they have fenced their farm sheep tight. They built their fence out of woven wire, with one barbed wire below and two above, thus protecting their sheep from coyotes or other predatory animals.

Shorthorn Cow.



Topsy 4th, junior and grand champion Shorthorn female, Washington State fair, 1917, owned by Day & Rothrock, Sprague, Wash.

Percherons in Norhwest

(Continued from page five.)

horses are raised in this territory is found in a shortage of pure bred draft stallions. Records compiled by the Percheron Society of America show that in Idaho there is but one pure bred draft stallion to each 545 horses owned in the state; that in Washington there is but one to very 631 horses owned in the state; and that in Oregon there is but one pure bred draft stallion to every 519 horses owned in the state. The correct proportion where any considerable number of good draft horses are to be raised should be approximately as in Iowa, where there is one pure bred draft stallion to every 295 horses owned within the state. Where the number of pure bred draft stallions is low in proportion to the total number of horses, many farmers or ranchmen are unable to breed to the right kind of sires, and this handicaps horse production by making it impossible for the average man to breed to a really first class sire.

Rapid Increases.

Encouragement is to be found in the fact that the breeding of pure bred Percheron horses is rapidly increasing in Oregon, Washington and Idaho. The records of the Percheron Society of America disclose that in the fiscal year



First prize Percheron mare and foal at Iowa State college.

ending October 31, 1916, a total of 48 Percherons were registered by breeders in the state of Washington; 56 Percherons by breeders in the state of Oregon; and 68 by breeders in the state of Idaho., Inasmuch as no published statement has ever been issued relative to the breeders in these three states, a complete list of the breeders, showing the number registered by each during the year ending October 31, 1916, is given as follows:

Name and Address.	Number Recorded.
Daniel A. Scott, Ritzville	1
T. J. Starks, Washtucna	1
W. S. Hiatt, Jerry	2
Robert E. Lee, Starbuck	2
L. O. Dart, Republic	2
Sylvester Egan, Kent	3
W. W. Robinson, Seattle	13
E. B. Coppeck, Ellensburg	3
J. J. Baeder, Waukon	1
B. F. Richardson, Wilbur	2
J. H. Arrasmith, Colfax	1
P. W. Cox & Sons, Hay	11
Mayer Brothers, Uniontown	1
George M. Miller & Sons, Albion	1
J. A. Adams & Son, North Yakima	1
H. N. Paul, Mabton	1
T. C. Williams, Sunnyside	2
OREGON.	
Palmer & Denham, Baker	4
Claude Buchanan, Corvallis	2
Ore. Agrl. College, Corvalis	1
Egidio Tortora, Corvallis	1
M. C. Conlon, Redmond	1
Parman Brothers, Condon	3
D. F. Burge, Albany	1
Bruce A. Jones, Salem	1
A. C. Ruby, Portland	3
Mrs. H. E. Evans, Rickreall	1
John and James Middleton, Dallas	1
John B. Stump, Monmouth	5
B. E. Anderson, Adams	3
W. G. Hunter Estate, Island City	1
Willis Moss, La Grande	1
James S. Peach, La Grande	1
W. C. Eads, Enterprise	2
C. A. Hunter, Wallowa	1
L. J. Jordan, Enterprise	1
H. C. Laird & Sons, Enterprise	1
Sam Wade & Son, Evans	9
Joseph Boyer, The Dalles	2
Charles Bernard, The Dalles	4
James Edson, Carlton	3
L. D. Mulkey, McMinnville	1
W. W. and C. A. Parrett, Newberg	2
IDAHO.	
Clint Matlock, Meridian	4
J. Putman, Kuna	1
J. E. Scrivner, Eagle	1
P. A. Sorensen, Meridian	17
J. J. Plumer, Hafley	3
H. M. Bolitho, Garden Valley	2
John Hansen, Idaho Falls	1
Henry Beck, Caldwell	3
J. W. Brandt, Nampa	1
W. F. Howard & Sons, Parma	5
O. V. Jacobs, Nampa	3
Martin O'Malla, Parma	1
William E. Whittington, St. Anthony	3
Albert Iray, Grangeville	1
William Mulhall, Tharp	4
E. S. Sweet, Grangeville	1
Julius Giese, Juliaetta	2
Loyle Sales, Ho	1
C. G. Ward, Rexberg	3
Ott Hopt, Rupert	1
Henry Grimm, Heyburn	2
D. L. and A. D. Sullivan, Rupert	1
Howard L. Gillette, Lewiston	1
E. J. Showell, Stone	1
Frank C. Boone, Twin Falls	1
Claud Brown, Buhl	1
W. E. McMaster, Kimberly	1
Joseph Madison, Cambridge	2

The marked difference in prices paid for small horses as compared with the prices paid for good grade draft horses weighing 1600 pounds or over will undoubtedly accelerate the breeding of draft horses in these states. Horses weighing over 1500 pounds, if sound and right are bringing approximately $100 per head more than those under 1200 pounds, and are averaging $225 or better.

The annual meeting of the stockholders of the Percheron Society of America will be held at 8 p. m., Monday, December 3, 1917, in the Florentine room, Congress hotel, Chicago, Ill. We hope you will be present in person. Percheron judging at the International Exposition begins the following morning. There will be an extremely strong show.



ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.

will reduce inflamed, swollen Joints, Sprains, Bruises, Soft Bunches; Heals Boils, Poll Evil, Quittor, Fistula and infected sores quickly as it is a positive antiseptic and germicide. Pleasant to use; does not blister or remove the hair, and you can work the horse. $2.00 per bottle, delivered. Book 7 M free.

ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful, Swollen Veins, Wens, Strains, Bruises; stops pain and inflammation. Price $1.00 per bottle at dealers or delivered. Will tell you more if you write. Liberal Trial Bottle for 10c in stamps.

W. F. YOUNG, P.D.F., 371 Temple St., Springfield, Mass.

Colfax Blue Ribbon Stud

Colfax, Washington

36 HEAD

Imported and American Bred

Percheron, Shire, Belgian and Clydesdale Stallions and Mares

From **yearlings** up to **5-year-old**, ton horses with **veterinary** certificates for health and soundness.

In **Percherons** we have the strains of the great **Etudiant, Brilliant** and **Besigue** blood.

In Shires we have the blood of the Great Conqueror XIX., Cottered Prince, Buscot Rival and the celebrated Dewstow Forest King II. In point of bulk, burly masculinity and prepotency, wealth and strength of muscle, great bone, length of stride, unending endurance and unflinching courage, the Shire has no equal.

CLYDESDALES ARE UNIVERSALLY REFERRED TO AS THE GLASSY CLYDESDALES. By reason of their uniform conformation, which is not equaled in any other draft breed; their **easy,** graceful action at either the walk or trotting gait, and their **superior draft power,** united with their **matchless refinement,** are regarded by discriminating judges as representing the nobility of the **equine drafter.**

Hopes Pride, who has never met defeat in his 2 and 3 year old form and having been **champion** of the **Illinois** and **Iowa state** fairs and **champion** of the breed at the **Panama Pacific.**

His stable mate, **Victor Favorite,** who, in his turn, has been **first** and **champion,** and declared by his admirers to be the **greatest** living exponent of his breed together with a stable full of the blood of **Scotland's greatest sire BARON'S PRIDE.**

BELGIANS—I have some very good Belgians that I can supply any one wanting that breed.

The present high prices of **draft horses** are sure to continue. The demand for this class of stock far exceeds the supply. **The market demands draft horses.**

No class of stock can be produced by you, of such **handsome profits as the draft horse.** You ought to get this profit and you can do so, without additional cost or labor—the way we sell them.

Provide yourself and neighborhood with a big draft stallion and the results will be marvelous.

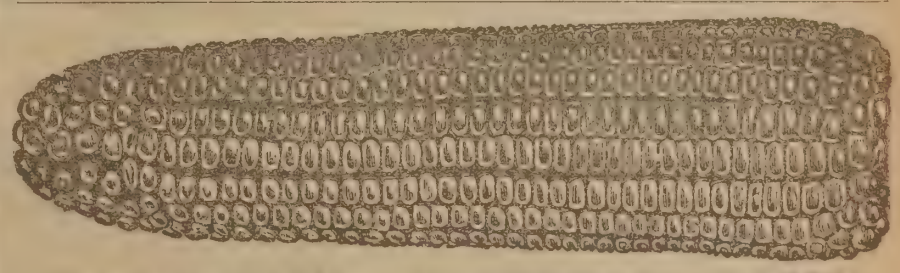
Liberal Terms and Prices That Defy Competition

If you or your community needs a stallion, write to us your wants or better still, call and see us.

Address All Correspondence to

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COLFAX, WASHINGTON.



EXCHANGE NATIONAL BANK SECOND ANNUAL CORN SHOW

Spokane, Washington

40 PRIZES WILL BE AWARDED, consisting of corn machinery.

Nov. 19-24

A valuable booket, "How to Grow an Acre of Corn," will be sent free on request.

When you write to advertisers be sure to say that you saw their advertisement in this paper.

U. S. Men in Trenches

American Soldiers Begin Real Fighting

Official announcement has been made by the war department that at least a part of the American army detachment now in Europe has begun actual trench warfare against the German armies. The American soldiers marched into the first trenches, took their place beside the French soldiers and exchanged actual shots with the soldiers of the kaiser. The action is looked upon as but a final lesson in the great war game before the Americans throw their strength unreservedly into the battles alongside their allies.

How many Americans are in France has never been revealed by the war department. Neither has any plan of the campaign against German positions been remotely suggested. Only one definite statement has been made by the war department, and that is that all disasters or losses of life among the American soldiers would be reported to the press of this country, so that the relatives and friends of soldiers who have crossed the Atlantic need never fear that losses have occurred, but been kept secret. That the American soldiers can not take part in the war without losses of life is a fact to which the American people are necessarily resigned and lists of injuries are likely to be reported as soon as unrestricted participation in the fighting is begun.

Classify Registered Men.

Though no official announcement has been made by the war department, an official classification of the 10,000,000 men registered under the selective draft law has become public, showing every man the order in which he is liable to call into the service. The classes will be called in the order of their number. The classifications are as follows:

Class 1.

1—Single men without dependent relatives.
2—Married man (or widower with children), who habitually fails to support his family.
3—Married man dependent on wife for support.
4—Married man (or widower with children) not usefully engaged, family supported by income independent of his labor.
5—Man not included in any other description in this or other classes.
6—Unskilled laborer.

Class 2.

1—Married man or father of motherless children, usefully engaged, but family has sufficient income apart from his daily labor to afford reasonably adequate support during his absence.
2—Married man, no children, wife can support herself decently and without hardship.
3—Skilled industrial laborer engaged in necessary industrial enterprise.
4—Skilled farm laborer engaged in necessary agricultural enterprise.

Class 3.

1—Man with foster children dependent on daily labor for support.
2—Man with aged, infirm or invalid parents or grandparents dependent on daily labor for support.
3—Man with brothers or sisters incompetent to support themselves, dependent on daily labor for support.
4—County or municipal officer.
5—Fireman or policeman.
6—Necessary artificers or workmen in arsenals, armories and navy yards.
7—Necessary custom house clerks.
8—Persons necessary in transmission of mails.
9—Necessary employes in service of the United States.
10—Highly specialized administrative experts.
11—Technical or mechanical experts in industrial enterprise.
12—Highly specialized agricultural expert in agricultural bureau of state or nation.
13—Assistant or associate manager of necessary industrial enterprise.
14—Assistant or associate manager of necessary agricultural enterprise.

Class 4.

1—Married man with wife (and) or children (or widower with children) dependent on daily labor for support and no other reasonably adequate support available.
2—Mariners in sea service of merchants or citizens in United States.
3—Heads of necessary industrial enterprises.
4—Heads of necessary agricultural enterprises.

Class 5.

1—Officers of states or the United States.
2—Regularly or duly ordained ministers.
3—Students of divinity.
4—Persons in military or naval service.
5—Aliens.
6—Allen enemies.
7—Persons morally unfit.
8—Persons physically, permanently or mentally unfit.
9—Licensed pilots.

Get Wheat From Canada.

The national food administration has announced a plan for the importation of hard wheat from Canada to be used in American mills for the manufacture of flour. James F. Bell, chairman of the milling division of the food administration, issued a formal statement on the subject, of which the following is a part:

"The amount of hard wheat thus to be supplied will materially relieve the shortage of hard wheat and enable mills in the eastern and central states to increase their flour output materially.

"This arrangement will remove whatever apprehension has existed in regard to the inability of mills to supply sufficient hard wheat flour for winter consumption in the eastern section of the country. It makes liquid supplies of hard wheat in the United States, which should enable the present restrictions on the grinding of this kind of wheat to be greatly relieved.

"It is to be understood that these supplies of wheat do not, in any way, augment the amount of grain available in the United States, where there is ample to meet all requirements, since the food administration undertakes in return to export to the allies in the form of flour an equivalent of all Canadian wheat shipped to the United States for grinding in American mills. The arrangement will, however, operate greatly to relieve the present demand, which is principally for flour of the hard wheat variety."

Warn Against Vandalism.

State officials and state food commissioners have been warned by Herbert Hoover, national food commissioner, of what he believes to be well organized plots for the destruction of live stock and grain throughout the United States. The plots are understood to be of German origin and stronger guards for stock yards and grain storage houses are urged. Mr. Hoover's message in part reads:

"I am informed of a widespread conspiracy on the part of the enemy to destroy animals in stockyards and grain supplies. In view of the tremendous loss of food sustained by the recent fire in the Kansas City stockyards, I urge that you get in touch immediately with all stock yards commanies in the state.

"Emphasize the vital importance of largely augmented watch service and other fire protection. I also believe the governors of all states should have the principal stock yards patrolled by trustworthy home guards. This warning also applies to grain elevators. The serious loss of wheat in the recent Brooklyn fire must not occur again."

Threaten Exchanges.

Food Commissioner Hoover has threatened alleged speculators in corn, oats and other grains that President Wilson will close the exchanges altogether if such speculators attempt to profiteer or influence the market for these grains. So far the administration has not placed rigid regulations on the marketing of corn and oats, but only on wheat.

Increased Postage.

Tomorrow, November 2, the new postage regulations under the new war revenue bill become effective. All letters mailed on or after November 2 will require at least 3 cents to carry them. The regulations provide that first-class mail shall require 1 cent per ounce or fraction of an ounce more postage than is now required, and that parcel post matter shall require 1 cent more on every package where the postage is now 25 cents. Postal cards will require 2 cents where they have required only 1 cent in the past.

Brazil Declares War.

Brazil has joined the allies in their war against Germany. She is the eighteenth nation to formerly declare war on Germany. The Brazilian lower house of congress voted 149 to one for the declaration of war. The senate voted unanimously.

Germany Not Weakening.

Dr. W. T. Foster, president of Reed college, Portland, Ore., has just returned from Europe, where he went as a representative of the Red Cross. Dr. Foster declares that Germany is not weakening; that her citizenry is not rebelling; that she is not starved or near-starved; that she is putting forth every effort to deceive the population as to American strength and activity, but is not anywhere near exhaustion, and can fight on until such time as this country and its allies have force enough to crush her.

A food pledge card in the window is the sign of a patriotic home.

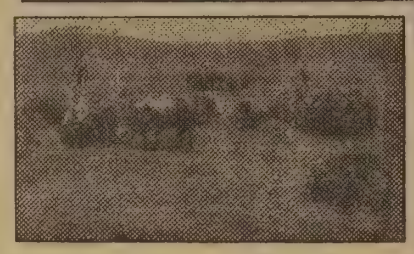
Grain Hay Stock Fruit

LANDS

Prices Right Easy Terms



Dairying Is Profitable.



Haying Scene on Milan Farms.

WE have lands to suit you no matter what your requirements, from 40 acres up, suitable for grain, hay, stock raising, dairying or fruit growing. Good state road and railroad. Good schools and churches.

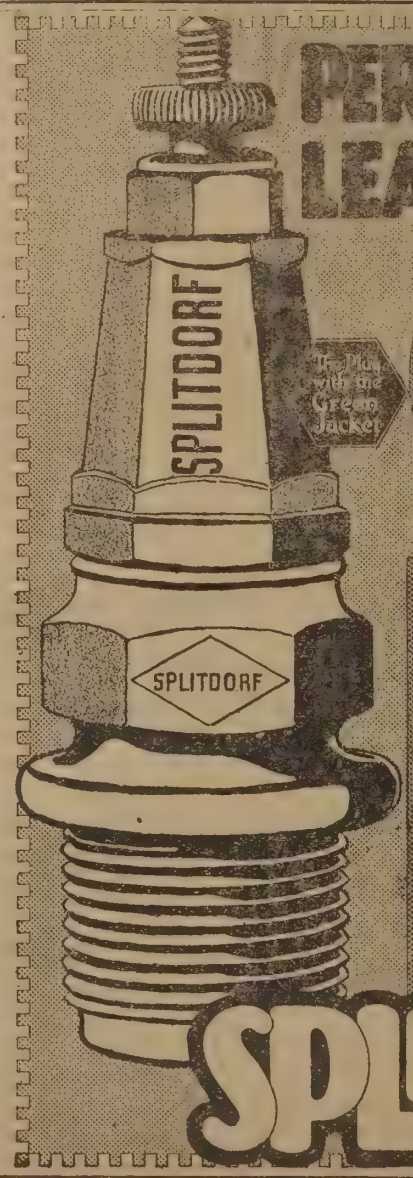
CUT-OVER LANDS CHEAPEST MOST PRODUCTIVE

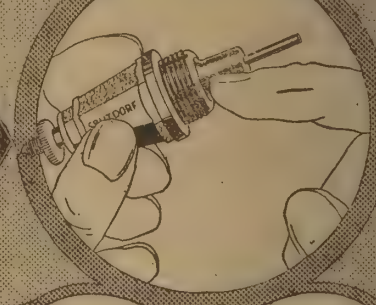
MILAN FARM LANDS can be acquired in any stage of development—from crude stumpage to that perfectly clear, suitable for any purpose—at prices and terms to suit the requirements of any purchaser. We can show you records of production and profits on this land that will convince you of its merits. Come and see it or write for particulars and folder with pictures.

Milan Farms Development Co.

1322 Old Nat. Bank Bldg., SPOKANE, WASH.

PERMANENTLY LEAKPROOF





The SPLITDORF Plug is different from all porcelain plugs in this—the insulation is made of imported India ruby mica, which will not chip or crack like porcelain. This removes frequent cause of scored cylinders and also makes the SPLITDORF Plug practically indestructible.

Make Your Engine Easy to Start

The SUMTER Plugoscillator on medium and large size stationary and marine engines or the SUMTER Starter-Coupling on trucks, tractors, marine and heavy-duty engines will make starting sure and easy. Your manufacturer will give you the equipment if you INSIST.

Splitdorf Electrical Co.

NEWARK, N. J.

SPLITDORF SPARK PLUGS

In answering advertisements please mention this paper.

Finance Live Stock

Special Line of Banking Needed

While the federal farm loan bank has done much for the farming industry of the northwest, including the live stock business, and will continue to do with increasing effectiveness, there yet remains much to be done before the financing of the live stock industry is developed to the point that it should be. The help given by the land bank is indirect only, since short time loans are impossible under the farm loan act. But short time loans are greatly needed by the stock producer.

Take the country over, there is a noticeable tendency toward the improvement of live stock financing. This is observed especially in the action of the government reserve banking system, which has recently classed loans on live stock and general agricultural development as more advantageous to banks than any other class of loans.

Local banks have in a number of instances also taken special action looking toward better financing of the live stock industry. One such action is that taken by the Exchange National bank of Spokane, which has organized and has in operation the Spokane Cattle Loan company, of which William Huntley is president, Edwin T. Coman is vice president, O. M. Green is acting secretary, and W. H. Kaye is treasurer. These officers, together with E. E. Flood and C. E. McBroom, compose the board of directors. "The company is capitalized for $100,000, and operates by rediscounting notes with other banks given by cattle and sheep men, secured by their flocks and herds throughout the northwest," says Mr. Flood. "The banks are able to rediscount with the federal reserve bank such notes taken for a time less than six months.

"The company loans money to sheep men to enlarge their flocks or to buy hay or pasture to carry him over until such time as his wool can be sold on the market, which is usually six months from the present date. If the sheep man shows a successful season, and the individual is warranted, the loan is again taken for another six months, until the sheep man may dispose of his lambs.

"With the cattle man it is the policy of the company to loan money at the same rate, eight per cent, for a term of six months or less upon such cattle as the stockman anticipates putting in the feed lot in the fall to sell upon the spring market, and in turn renew the loan upon such cattle as may be turned on pasture to be marketed in the fall.

"With a member bank's endorsement the federal reserve bank through any of its branches will advance funds or credit at the rate of 4 1-2 per cent per annum for paper bearing not longer than six months maturity or 4 per cent on notes maturing within 90 days. To many this margin may seem a large one, yet it must be understood that the company in most cases disposes of this paper on a 6 per cent basis to the banks through the northwest allowing 2 per cent to the company for operation, expenses and loses.

"At the present time the outlook is such that the company may loan upon stock steers or cows with safety on account of the shortage of live stock generally through the world. It is not the policy however, of the company to loan to the speculator who has little or no responsibility, or loan to the man who is a novice in the business, unless he may have such collateral as to warrant the loan. However, in many instances where an experienced stockman has the feed and pasture the company loans the full price of the cattle."

Clydesdale Stallion.



A blue ribbon champion Clyde, owned by M. E. Metz of Colfax. This animal will be at the Lewiston show.

Another Illustration.

Another illustration of the interest banks are taking in the development of the live stock industry is that of the Bank of Commerce of Oregon City, Ore. Under the direction of John R. Humphries, it now appears in the role of developing the dairy industry in that country. The bank has set aside $11,000 for the purpose of purchasing 35 head of Guernsey cows, to be distributed to the farmers surrounding Oregon City. Professor Westover of Corvallis, and Dr. J. T. Whaley, have been secured to make a trip into the Guernsey center of Wisconsin.

Mr. Humphries is following the plan proposed by the department of agriculture, and is offering these animals at a special rate of 6 per cent. Farmers will draw by lot for their cow. The Clackamas County Guernsey club, with Mr. Retchie as president, has already been organized for the purpose of taking over the animals.



THREE GOOD REASONS FOR BUYING A VELIE TRUCK

1. The Velie is made by a firm that thoroughly understands the requirements of truck service, especially the requirements of the farm.
2. The Velie costs as little as a good truck can be sold for.
3. The Velie has a four-speed, internal sliding gear drive—a strong, sturdy frame and just about every feature you can ask for in a truck for doing its work readily, certainly, cheaply and for many a long year of steady, dependable service.

Think what Velie's long years of manufacturing experience mean to you. Think what a reputation untarnished throughout all this time means to your future satisfaction and profit. Think what an establishment with resources as solid as the Rock of Gibraltar means to you as long as your motor truck continues to do its daily tasks. A mile of Velie factory and an organization world wide in its scope of endeavor is behind the Velie guarantee of service and satisfaction.

"THE NAME INSURES THE QUALITY"

Send for special Velie facts before you buy any other truck.

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1109 Pine St., Seattle, Wash.
Velie Agents for
Western Washington.

Producing Cheap Feed

Inland Empire as a Stock Raising District

By J. R. SHINN.

I am becoming thoroughly convinced that the Inland Empire is bound to be one of the large stock raising districts of the country. The reasons for my belief in this future for our country out here is the fact that we are learning to produce cheaper feed each season on our farms. Back in the middle west corn constitutes the grain ration for all stock feeding and if we as a country must compete with the middle-west farmers in the stock producing business we must use a grain comparable with corn not only in results secured, but also in the yields which we get from the land. It goes without saying that from the experience of our farmers we must not look to corn as the grain for this purpose.

Regardless of our great interest in corn as a grain there are so many sections in which this crop can not be grown at a profit, at least with the present varieties which we have in this country that I do not believe it will ever become universally used as a grain crop. We have found, in Spokane county, at least, that there is another crop which can be grown as successfully as the corn crop of the middle west. This crop is peas.

The practice of feeding peas to stock is coming into common use more and more each season. It is remarkable to observe the results that have been secured with this class of feed. The farmer who has grown his pigs on peas needs to rely on some such feed as ground barley to finish them in good shape, and this latter crop is one that is coming into favor more and more. It has been found that barley is more profitable than oats on the ranches in the Inland Empire. It is a feed that can be relied upon to put the finish to all kinds of live stock the same as corn in the middle west. The more experience that we have in using peas and barley as a grain ration for our stock the greater we find that we must depend upon them in the future.

No stock country was ever developed without the using of pasture or crops that would replace pasture. In the dairy, beef or sheep business it becomes primarily essential that we provide this class of feed in the Inland Empire before these classes of live stock can be profitable. Two different sources for this pasture problem have been worked out in Spokane county. First of all, our farmers are using the silo more and more. They have found by experience that small grains such as wheat, oats, oats and peas, and barley when properly handled make excellent silage. Moreover, some of our farmers are working out definite combinations with sweet clover and the small grains as a silage crop which seem to be very promising. The use of these crops have therefore opened up an enormous field for the future development of the cattle and sheep business in the Inland Empire.



Shorthorn and Jersey cattle pasturing on sweet clover on the farm of T. E. Woodward, near Duncan, Spokane county.

The second factor which enters into the field as an aid in the pasture proposition is the sweet clover crop. This crop has proven itself of great merit not only because of the abundance of pasture produced by it, but also because of its persistence during the dry season. No other crop in Spokane county will remain green throughout July, August and September. Furthermore, it has been demonstrated that when sweet clover is used for pasture very little danger from bloat has been experienced.

The legume hay problem, of course, remains to be satisfied before profitable results may be experienced from this country as a stock raising section. Each year it has been found that more clover fields are being added to our farms. Oats and peas are used to an advantage as a hay crop, and upon these the farmers in the Inland Empire will largely depend for their future crops. Furthermore, as a by-product of the pea growing industry that is becoming so thoroughly established here, we are finding that the pea threshings or pea straw make excellent roughage for stock cattle and sheep during the winter months. If small grain silage and pea threshins are used we can confidently depend upon such to provide cheap and excellent feed for cattle and sheep. Of course in many places alfalfa is proving very successful as a hay crop.

In conclusion, it is because the Inland Empire can grow cheap grain rations, can provide excellent silage, has found a persistent pasture crop, and can produce cheap roughage in the shape of legume hay that I believe that this section is bound to be one of the large stock raising districts of the country.

CHOICE STOCK RANCH

320 acres deeded land, and 5-year lease on 160 acres state land, which produces about 100 tons of wild hay. 130 acres of bottom land in timothy and clover, in excellent condition, well ditched and tiled, practically new seeding. 80 acres fine bench land, which has been slashed and burned and would be ready for the plow with little more work. 4-room house, large barn, hay barn in meadow, other outbuildings. Lots of adjoining open range. 40 head cattle, 3 teams fine work horses, saddle pony, enough hay for winter, and $1200 worth of implements and machinery go with the place. Within 50 miles of Spokane. Price, $15,500. $7500 cash. We have just inspected this place, and if you want a real stock ranch you should see this one.

The Fred B. Grinnell Company

Established 1887.

815 Old National Bank Building.
Spokane, Wash.

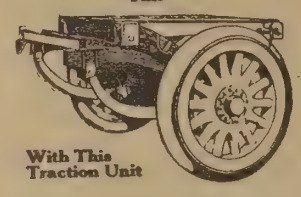
Knox

2 ton $390
3 ton $570
5 ton $750

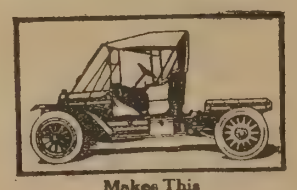
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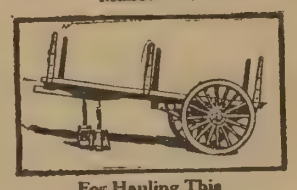
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With This Traction Unit



Makes This

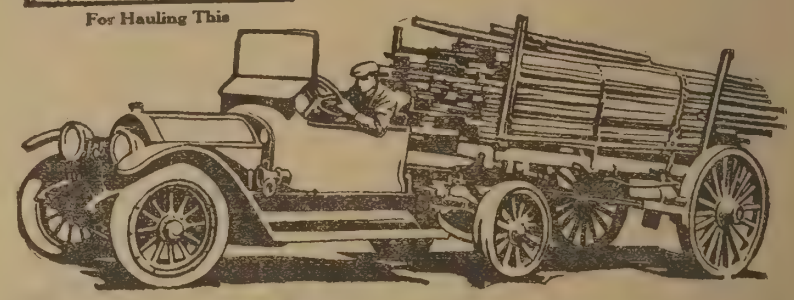


For Hauling This

A SIMPLE problem in first-grade arithmetic:

That old car of yours—
rear axle and springs
+ a Knox Tractor Unit
+ an old horse-drawn dray or load carrier
= a 2-, 3- or 5-ton hauling outfit in performance the equivalent of a $2,000 to $5,000 machine.

Are you "from Missouri?"



Eastman Motor Car Company
1319 Second Ave. Spokane, Washington



FOR HORSES
Albers Percheron Horse Feed.

NOW'S THE TIME

to increase your products—
to insure the health of your stock—
to cut your cost of feeding—

and make possible the nation's aim for more production at lower costs, and thus increasing your profits.



FOR COWS
Albers Carnation Dairy Feed.

Albers Molasses Feeds

will do all this for you and more. **Albers Molasses Feeds** are very palatable, and easy digestible. These feeds analyze high in fat and protein, being a milk producer for cows; an economical feed for hogs, analyzing higher than Indian corn; a strength producer for sheep and a sustaining ration for horses. Write for folder fully describing the value there is for you in Albers Molasses Feeds over the other feeds you have been using. Your dealer can supply you. If you are a carload buyer write us direct.

FOR HOGS
Albers Berkshire Hog Feed.

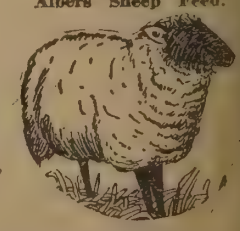


Ask the farmer that uses Albers Molasses Feeds.

ALBERS BROS. MILLING CO.

Seattle, Tacoma, Portland, Spokane, San Francisco, Bellingham, Oakland, Los Angeles.

FOR SHEEP
Albers Sheep Feed.



When you write to advertisers, be sure to say that you saw their advertisement in this paper.

Increase of Cattle Receipts

Falling Off in Hogs and Sheep at Stock Yards

A record of receipts of cattle, hogs and sheep at the stockyards of the country shows that there has been an increase in the number of cattle that have come to market in the first eight months of 1917, as compared with receipts for a similar period of 1916. Receipts of hogs and sheep show a decrease for the same period.

Shipments for the month of August in both years reflect a like tendency. Figures gathered by the bureau of markets, United States department of agriculture, from the 46 principal stockyard cities show that 1,705,812 cattle were received in August, 1917, as against 1,527,069 in the same month a year ago. The August shipments of hogs, on the other hand, were only 1,717,655 head for this year, while they were 2,593,537 last year. Equivalent figures for sheep were 1,453,176 and 1,864,815. For the first seven months of each of the two years the figures were as follows, the 1917 receipts being given first in each case: Cattle, 10,679,987 and 8,191,618; hogs, 22,532,927, and 24,408,981; sheep, 7,980,539 and 8,535,535.

Causes of Cattle Increase.

Officials of the bureau of markets say that a number of causes have a bearing on the increase in the receipts of cattle and decrease for hogs and sheep. The increase in cattle shipments is in part due to an effort to market the animals because of the high prices that have been obtained for them coupled with the greatly increased prices of feeds, and the several drouths that have prevailed in the southwestern section. Some dairy animals have undoubtedly come to market from these causes, coupled with a desire on the part of dairymen to keep only high-producing stock and to get rid of cattle that will not be profitable as milk producers.

Last year an unusually large number of hogs and sheep came to market in response to high prices, and the receipts at the stockyards so far this year are believed to represent rather a return to the normal movement than a distinct falling off in the supply.

Shifts in Hog Receipts.

In the north central part of the country the receipts of hogs at most of the packing centers have shown no falling off, and in some cases an increase. Ohio points, and some in Indiana, Illinois and Iowa, show slight increases in hog movements, but many of the larger centers, such as Chicago, Kansas City and St. Paul, show decreases almost everywhere, but a few places in the far west, notably Denver, and in the southwest, especially in Texas, have shown decided increases. These increases, therefore, represent range-raised rather than farm-raised sheep.

Breeder's Quandary

Serious Problem Confronts Him

A prominent Jersey breeder, who has requested the withholding of his name, has brought up the serious problem which confronts not only himself, but practically every breeder in the state. He said:

"The breeder has spent many years in gathering a foundation herd, not for production alone, but for the supplying of others with the best stock that he is capable of producing. He has done it because he loves his work; it is his contribution to the wealth of the country; he does not spend years of study and hard work in the face of loss merely to make money, but because he believes his share of knowledge may be used by others for the good of all. I know of no class of men more public spirited in their views.

"Today he is met by a condition which has never existed before and which is dangerous not only to himself but to the entire country. I breed dairy cows, but the same thing in some phase stands before the breeder of any purebred live stock. The wages of foremen, milkers—of all the people he hires—have gone up. In my own case it has doubled in some instances, and may go higher—probably will. And at the new figures, it is difficult to keep my men. Some of them enlist; some of them are lured away by the high wages paid in other occupations. Others are subject to draft and may be taken. Add to this the high prices for feed, some of them almost prohibitive.

"These things mean first the culling of herds. This is wise in many instances, particularly among the men who have not purebred live stock and who are producing merely for the market. With the skilled breeder there are not many culls. The entire herds are kept for some economic reason. Where can we cull? Can we operate without a profit? Nobody can for any great length of time. And what follows? Why, the dispersion of herds on which the dairyman, in my particular line, depends for filling in his herds. These are the animals he looks to to increase production while he weeds out his lower producers.

"How can he lower cost and increase production without the breeder of producing stock? What is the breeder to do? Is he to send his herd to the butcher's? They are of no great value as beef, but they are valuable for the production of milk and milk products.

"Possibly we can dispose of our animals, here a few, there a few, and so our labor of years will not be lost altogether. Still it seems to me that men who have proved themselves capable of developing such animals should be encouraged to keep on, for from the experts we depend on for still better animals, and we can not produce better ones without these foundations which we have developed so carefully.

"The federal government is doing its best, but some times it seems that they overlook these things. This is not a thing for the present alone, but for the future. I believe that expert help should be retained on the breeding farms and that their services there will be far greater than on the firing line, and that here they should be recognized as doing a patriotic work not second to any.

"This is something you newspaper men should tell about, for we have reached a place where irreparable loss may be done in a very short time—a loss that can not be made good and damage which will take many years to repair. The breeder's work is not the work of one life even, but of many lives, all patiently striving for types which shall produce a maximum of milk, or meat at the lowest cost. The destruction of this work will be a blow to us as a nation."



N. W. CAIRNS,
LIVE STOCK AUCTIONEER.
Pullman, Wash.

Australian Wheat Price.

The commonwealth governments of Australia, in connection with the various state governments, have guaranteed 96 cents per bushel f. o. b., as a minimum price to farmers for the next two years. Commenting on this, a correspondent of Broomhall's writes that he is sorry they did not make it a little larger for the farmers because with the increased cost for labor and material wheat growing in Australia now is not profitable unless they get $1.08 or $1.20 per bushel f. o. b. Sidney. Machinery which before the war cost $200 or $250 now costs $350 or $400. Bags are dearer and everything connected with the industry has gone up and especially labor.

Outsells Great Britain.

The United States in 1916 for the first time outsold Great Britain in competition for Argentine foreign trade. The totals for each country were close to $45,000,000, according to Uncle Sam's figures.

Belgian's Potato Dole.

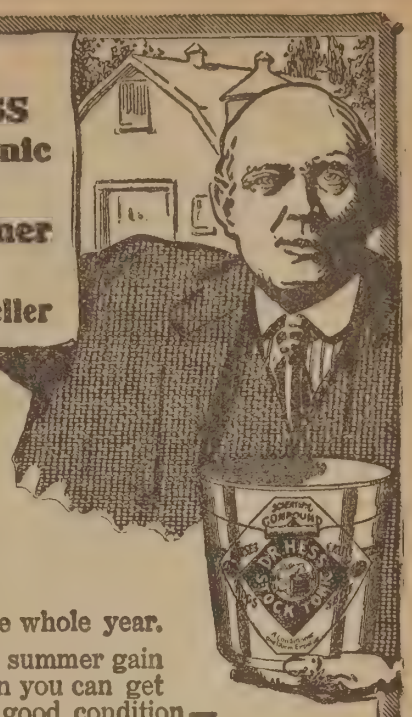
The German authorities have seized the Belgian potato crop, and fixed a daily ration of 190 grammes (6.7 ounces) per head for the people.

My Stock Tonic is never peddled.

25-lb. Pail, $2.25; 100-lb. Drum, $7.00.

Why Pay the Peddler Twice My Price?

Dr. HESS Stock Tonic is a Conditioner and Worm Expeller



Keep Your Animals in Condition

Now is when your stock need special attention because the change from pasture to dry feed is one of the most critical periods of the whole year.

You can lose more pounds of summer gain through November neglect than you can get back all winter. Keep up the good condition—keep up the summer thrift—keep out the worms.

Dr. Hess Stock Tonic

Drives Out the Worms. Makes Stock Healthy

Keep the animals' systems right and you need have little fear of disease. Stock Tonic tones the stomach and the digestive organs, gives better action to the bowels, improves the blood, purges of worms, and gives real life and vigor. The *Nux Vomica* in it aids digestion. *Quassia* is a true tonic and a worm expeller. The *Sulphate of Iron* is a blood builder and worm expeller. There is *Epsom Salts* for a laxative, and *Nitrate of Potash* to act on the kidneys.



Why Pay the Peddler Twice My Price?

You buy Dr. Hess Stock Tonic at an honest price from a responsible dealer in your town.

25-lb. Pail, $2.25; 100-lb. Drum, $7.00

Smaller packages in proportion

Dr. Hess & Clark, Ashland, Ohio

Dr. Hess Poultry Pan-a-ce-a
Will Start Your Pullets and Moulted Hens to Laying

Dr. Hess Instant Louse Killer Kills Lice

Greatest Show

of the

Northwest Livestock Association

LEWISTON, IDAHO, NOV. 8-15, INCLUSIVE.

Congress of Stockraisers, Northwestern Governors, and Leaders of the Highest National Reputation.

Big Free Barbecue

On Opening Day,

THURSDAY, NOV. 8TH.

Great Livestock Sales

By National Record Associations.

ONE AND ONE-THIRD ROUND TRIP RATES ON ALL RAILWAYS.

Remarkable Record

Made by Oregon Holstein Cow

By HORACE ADDIS.

The most remarkable record made by a Holstein cow in Oregon is not in the Willamette valley, as might be supposed, nor in any of our developed dairy regions. It is in the Des Chutes valley, and, to be more specific, is in the Crooked river bottom, on the farm of Henry McCall, midway between Prineville and Redmond.

Florence Idella Sharp, the remarkable cow shown herewith, recently completed a year's record on Mr. McCall's place of 24,667.4 pounds of milk and 821.4 pounds of fat, or 1026.77 pounds of butter. She freshened for this test at exactly four years, so this is a junior four-year-old record. She has now been fresh 16 months, her grain ration has been cut down to four pounds a day, yet she produced 52 pounds of fat in September. Florence has no ancestry close up with any remarkable records, yet she goes back 10 times to DeKol II. and has Rosa Bonheur and several other notable animals in her pedigree.

There are a number of very creditable seven-day records made in Oregon, but I am not cognizant of any other year's official records. I only know of two larger year's records in the northwest. Both of these were made by the William Bishop Holsteins at Chimacum, Wash., and I am not sure about one of them being larger, though it is over 1000 pounds of butter. Florence was not specially fitted and is capable of a still greater record.

Another year's record on Mr. McCall's place was made by Fairview Pearl Johanna Korndyke, beginning at three years and five months. She produced over 20,450 pounds of milk and about 640 pounds of fat, or 800 pounds of butter.



Florence Idella Sharp.

Miss DeKol Pieterje Sharp, a daughter of Florence Idella Sharp, began at two years and one day old and produced 542 pounds of butter. She is on test again, and looks good for 20,000 pounds of milk and close to 800 pounds of butter. She is 500 pounds of milk ahead of her first month's production last year.

Mr. McCall gives each of his Holsteins a seven-day record because the Holstein rules require it, but he does not care for them and makes no special effort for large ones. He puts all his cows on yearly test whether their production is large or small.

While Mr. McCall is a Holstein fancier he also owns a very fine little herd of Jerseys, the foundation of both herds having been sent to him by his father-in-law, Tom Lawson. The Jerseys are of the blood of Champion Flying Fox and Figgis Fox and of Martha's Duke, the latter by Spermfield's Owl and out of Mertha's Duchess, a good register of merit cow.

Mr. McCall's Jerseys are all show stock, but he also has some very fair official records, one by a heifer bred on the place. The largest was made by Mertha's Belle as a junior 3-year-old. She produced 13,283 pounds of milk and 756.35 pounds of butter.

Mr. McCall has a very fine farm of over 500 acres in the rich Crooked river bottom. He grows great crops of alfalfa and grain and will grow corn. He has no silo and the above records have all been made without silage. But the alfalfa in that region is of exceptionally fine quality and a great "milk maker." In addition to dairying and hog raising Mr. McCall feeds beef steers, and as market prospects look good to him will feed several carloads this winter.

Mr. McCall is a son-in-law of the redoubtable Tom Lawson or "frenzied finance" fame. He is also the son of ex-Congressman McCall of Massachusetts, one of the state's financiers and most prominent politicians. His family connections are considerable of a handicap, as people expect to find him aristocratic and exclusive. But nothing could be farther from the facts. He has the true western spirit and takes a deep interest in all the civic affairs of Prineville and affairs in general of the county. He is president of the Interstate Fair association at Prineville and devotes much time to it. He is a member of the Prineville baseball team that won the championship in central Oregon the last summer. He puts all his energy into the games and plays good ball. In the $25,000 residence on his farm Mr. McCall and his family live in democratic simplicity. There is probably in Portland no residence more conveniently arranged nor with more complete modern appointments. Mrs. McCall is very fond of kodaking. She has a small kodak with the finest of lenses, and with it has taken photos of the place as it was, in sagebrush, only six years ago, and of its development through various stages. The beautiful picture of Florence Idella Sharp was taken by Mrs. McCall. Mr. McCall's dairy barn is one of the best in the state, and he has other good improvements, fine horses and other stock.

Mr. McCall will soon sell off all his Jerseys and devote his efforts to developing a great producing herd of Holsteins. He has started right by giving them full year official records. He is young, ambitious and has capital, and I predict that the McCall ranch will yet make the Des Chutes valley famous and have a prominent part in making Holstein history in the northwest.

Purebred Sires

Figured With Pencil and Paper

There are perhaps some cases where the value of the purebred sire is overlooked because time has not been taken with pencil and paper to figure the real value, says N. C. Jamison of the Washington State college. An example of this has been brought to our attention. A dairyman, with a herd of 30 cows, had used purebred sires for several years, but began to use grade sires when increased local demand for purebred animals caused the price of purebred bulls to advance $50 or so. He defended the practice by saying that the daughters of the grade sire produced within seven or eight pounds per day as much as did those of the purebred and it therefore did not pay to put $50 to $100 additional into a better-bred animal. Evidently he had not stopped to figure. At seven pounds per day, in 300 days the daughters of the purebred sire would produce 2100 pounds more milk per head than would the daughters of the grade animal. This amount of milk, valued at $1.75 per hundred, the price he receives, would be worth $36.75, from which deduct $20 for possible increased cost of feeding the larger producer and we have left a net profit per year of $16.75 in favor of the daughter of the purebred. From the 30 cows at least eight heifers are saved per year or in three years, the life of the bull, 24 of his daughters would be saved. The amount lost, then, in one year's production of these 24 daughters, due to using a grade sire, would be $402, or for six lactation periods for each, the amount lost would be $2412.

PEA STRAW INNOCENT.

Experts Find It Valuable as Feed.

Reports from the pea growing district of northern Idaho recently that cattle were dying as a result of being fed on pea straw have been carefully investigated by experts with the following results:

Very few cattle were sick.

Those that were sick were sick because of improper feeding, and not because of any harmful nature of the pea straw.

The investigation was made by Harry E. Luce of the University of Idaho, and S. B. Nelson of the State college of Washington, both expert veterinarians. Dr. Nelson made the following statement following the inquiry:

"We found the stories about the sick and dead animals greatly exaggerated. We found only two cases of illness. One of the animals became ill from being suddenly changed to a full diet of pea straw. In the other case the animal was given more of the feed than it coud digest. We have concluded that the straw is not directly responsible for reported trouble, but rather the method of feeding.

"We would suggest that this valuable by-product feed be used in moderation in connection with alfalfa, silage of any kind and roots. The animals should be given a considerable amount of salt in order that they will drink a sufficient amount of water."

Fruit Stains.

To remove fruit stains stretch the fabric over the mouth of a basin and pour boiling water on the stain.

The Old Red Sow Pays Her Way

Raise DUROCS and Make Money

Duroc-Jerseys are the right hog for the great empire of the northwest.

They have been tried and found true to their name—"Mortgage Lifters."

Send for literature about the breed and "Success With Swine" to

Robt. J. Evans, Sec'y.

AMERICAN DUROC ASSOCIATION

Union Stock Yards Chicago, Ill.

No hot boxes—no lost time—even with big loads, when you use Mica Axle Grease. The powdered mica forms a slippery, wear-resisting film, twice as effective as ordinary grease.

STANDARD OIL COMPANY (California)

MICA AXLE GREASE



Richest Substitute for Milk

100 lbs. makes 100 gallons

Constantly gaining favor with dairymen on account of the results it produces.

Send for booklet giving full feeding directions.

The Inland Seed Co.

Spokane Washington

Are You in the Poultry Business?

If so ADVERTISE your surplus stock and eggs in the Pacific Northwest Farm Trio, comprising The Washington Farmer, The Oregon Farmer and The Idaho Farmer and reach more than 50,000 prospective buyers of poultry and hatching eggs in these three states. Special rates for one month or more in our classified columns. Write us for particulars.

Pacific Northwest Farm Trio 36 Review Building Spokane, Wash.

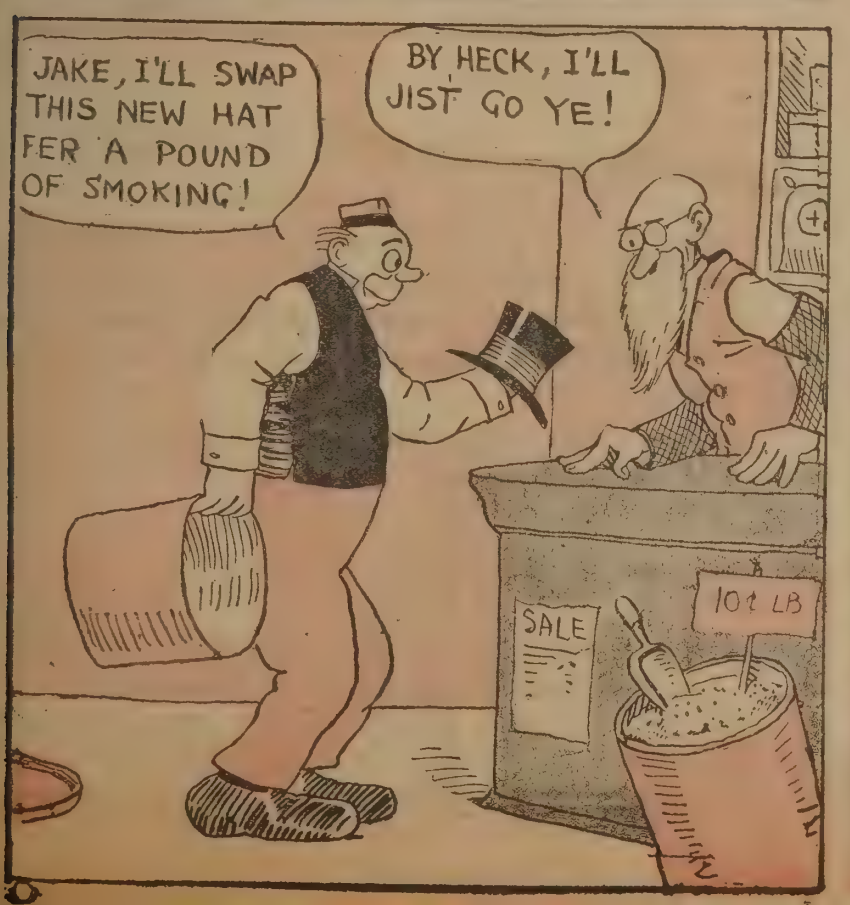
UNLUCKY LOOIE HAS A LITTLE LUCK AT LAST







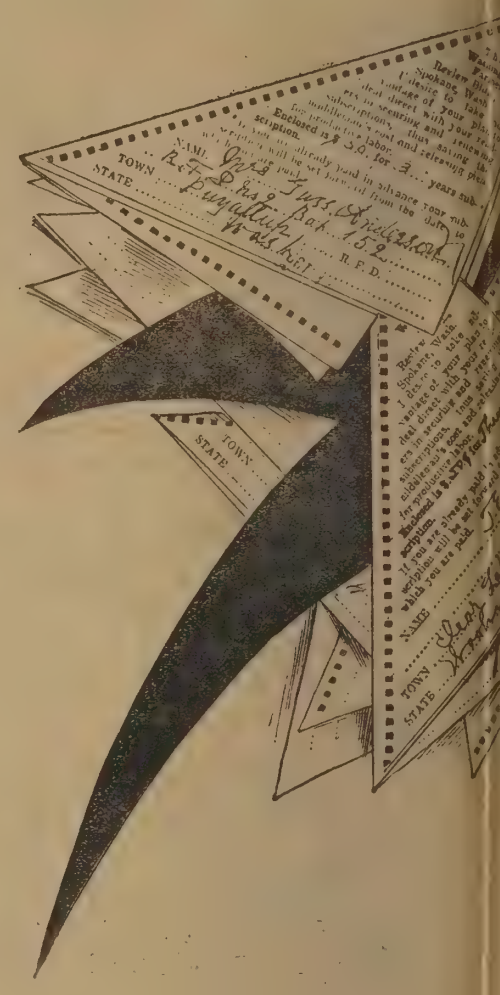






FARMERS END

Scores of Coupons Pouring in From All Parts of the State Prove That Readers Are Loyally Supporting New System for Securing Subscriptions---Cost of the Middlemen Is Eliminated and Our Friends Are Given Benefit of Dollars Saved



Our request that readers send in their subscriptions to this paper direct and thus save the labor and cost of agents has met with a strong response from loyal subscribers in all parts of the state. Every mail has brought a new flood of coupons.

Hundreds of readers have shown that they are squarely back of us in our war emergency inate our force of agents and thus release men for productive labor in the fields, orchards, and factories.

As explained before, THE WASHINGTON FARMER under normal conditions employs of agents in securing new subscriptions and renewing old ones.

The war has brought on a labor shortage—as every one of our readers knows full well; an ment has urged every one to release as many men as possible for productive labor.

By dealing direct with subscribers instead of through agents we can dispense with the sm men needed to visit every farm, ranch and remote homestead throughout the length an Washington.

The only question is will every subscriber do his part? We felt sure they would and the already received strengthens us in this conviction.

In order to make the new arrangement a success, every send in his or her subscription without urging and without have made it easy for every one to act by adopting a schedu signed to give our readers the benefit of every dollar saved ing the middleman.

We earnestly urge every one of our big family of readers already sent in his order to do so at once.

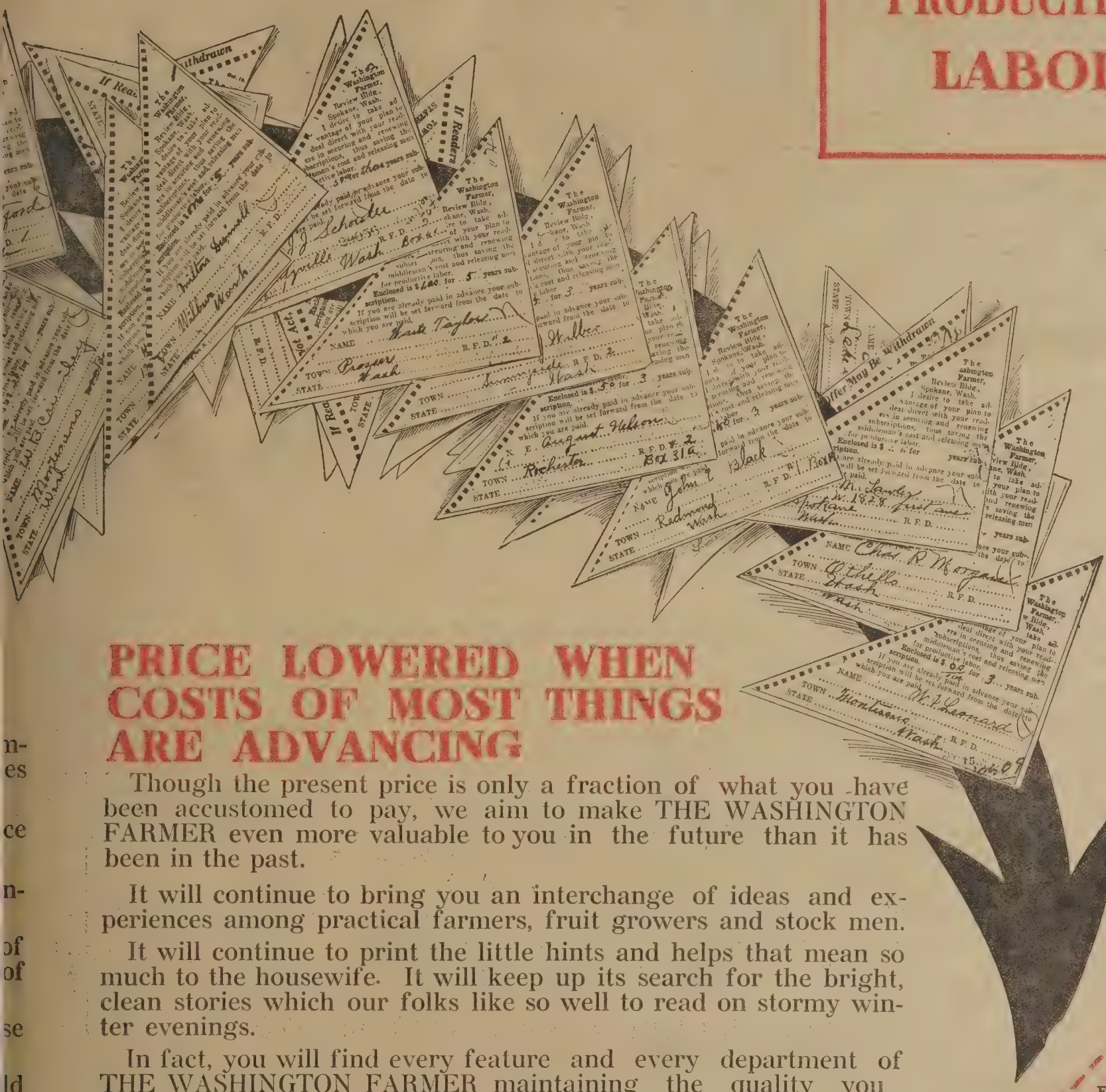
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The Washington Farmer, one year, 52 issues	25c
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PRICE LOWERED WHEN COSTS OF MOST THINGS ARE ADVANCING

Though the present price is only a fraction of what you have been accustomed to pay, we aim to make THE WASHINGTON FARMER even more valuable to you in the future than it has been in the past.

It will continue to bring you an interchange of ideas and experiences among practical farmers, fruit growers and stock men.

It will continue to print the little hints and helps that mean so much to the housewife. It will keep up its search for the bright, clean stories which our folks like so well to read on stormy winter evenings.

In fact, you will find every feature and every department of THE WASHINGTON FARMER maintaining the quality you have learned to expect and improving where improvement is possible.

We feel especially glad to offer a saving on the price of THE WASHINGTON FARMER because we know that our friends have to pay more instead of less for nearly everything else they buy.

EVERY ONE IS NECESSARY OUR USE. SEND IT TODAY

The Washington Farmer,
Review Bldg.,
Spokane, Wash.

I desire to take advantage of your plan to deal direct with your readers in securing and renewing subscriptions, thus saving the middleman's cost and releasing men for productive labor.

Enclosed is $..... for ..... years subscription.

If you are already paid in advance your subscription will be set forward from the date to which you are paid.

NAME .....

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TOWN ..... R. F. D. .....

STATE .....

MUGGSY RESCUES A SMALL BOY FROM A WATERY GRAVE



PUP GETS BOOT A DISHONORABLE DISCHARGE



Hereford Features

British Committee Named Them

As to the features that are looked for in the modern typical Herefords, the following report of a sub-committee of the English Hereford Herd Bood society, appointed to draw up a "standard of merit" for the breed, which was submitted and adopted at a meeting of the council in 1904, will be of interest. The report was drawn up by J. W. Smith, A. P. Turner and W. E. Britten. The following is the report:

"We find it impossible to establish a standard of merit for Hereford cattle indicated by points, as breeders differ so much in the value they attach to certain features of the breed. For instance, a bull breeder would place a very high value upon the head of the sire he intended to use in his herd, while a man who wished to raise steers for market would make that point a secondary consideration. It is a common saying that 'beef does not grow on the horns,' yet a breeder who aims to produce fine breeding-stock would fail in his purpose if he neglected to place full value upon the shape and color of the horns."

The committee, however, gave the following description:

"The bull should have a moderately short head, broad forehead, and horns nearly resembling the color of wax, springing straight out from the side of the forehead and slightly drooping —those with black tips or turning upwards are not regarded with favor. The eye should be full and prominent; the nose should be broad and clear—a black nose is objectionable; the body should be massive and cylindrical, on short legs, the outline straight, chest full and deep, shoulder sloping, but lying well open at the top between the blades; neck thick and reaching from the head to the shoulders; ribs well spring; flank deep; buttocks broad and well let down to the hocks; the tail neatly set and evenly filled between the settings of the tail and the hip bones, which should not be prominent; the whole carcase should be evenly covered with soft curly hair of a red color, but the face, top of neck, and underparts of the body should be white.

"The same description would apply to the cow, excepting that she should be grown upon more feminine and refined lines, the head and neck being less massive, and the eyes should show a quiet disposition. The Hereford cow, under the system of management usually pursued in Herefordshire, on the North American ranch, and on the South American estancia—that is, allowing each cow to raise her own calf, both running together in the pastures—does not develop the milking properties, but there are many instances of Hereford cows brought up to the pail making excellent dairy cattle, the milk being very rich.

"The Hereford is essentially a beef breed, and reaches maturity at an earlier age and at less cost than any other breed. The steers readily fatten at 2 years old on grass alone, and in the summer months they command the top price in the London market."

A Promising Jersey

John Kemmling of Prineville, Ore., who was the principal exhibitor of Jerseys at the interstate fair at Prineville last January, purchased two very fine heifers from Ed Cary, both by Rosaire Olga Lad. One of them, shown above, now has a fine heifer calf by Susie's St. Mawes, which Mr. Kemmling has named St. Mawes Cary. This heifer milks heavily and tests about 5.5



in the Oregon Cow Testing association. She was made grand champion Jersey at the fair.

Before he purchased purebred Jerseys Mr. Kemmling had a good grade herd with La Creole's Bank, a son of Souci King and an Eminent dam, purchased from W. O. Morrow, at its head. The bull has thrown a universally good lot of heifers. One has produced 426 pounds of fat, or 501 pounds of butter, as a 3-yeyar-old; another 349 pounds of fat as a 2-year-old, and other heavy milkers. Mr. Kemmling now has Pedro's Gray Fox Duke, a very handsome young bull he purchased from Henry McCall of Prineville, who has some of the famous Jersey herd of Thomas Lawson. With such a start, he is well on the waf of successful breeding.

Mr. Kemmling's principal feed in winter is alfalfa hay. Last winter he fed, in addition, a mixture of two parts oats to one part wheat, chopped. In summer he uses a mixed pasture and alfalfa hay. Mr. Kemmling came to Crook county 14 years ago. He has been dairying most of the time, finds it profitable and expects to see more of it. He owns a farm of 520 acres, about 50 of which is irrigated. He expects to put up a silo next season and fill it with oats and peas. H. A.

Beef Cattle

Figures on Cost of Production

In the winter of 1913-14 a committee of well known investigators, familiar with agricultural conditions, was appointed by the secretary of agriculture to consider the economics of the meat situation. The investigations were conducted during the summer of 1914 and the conclusions presented therefore apply primarily to conditions in 1914 compared with conditions prior to 1914.

One of the reports made as to results of this investigation contains a summary of the cost of production of beef cattle in the 11 western range states of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming.

In arriving at cost of production, market value was charged for all feeds used, and a liberal charge was allowed for cost of handling the stock, in order to take care of the items of cost for money invested in land, water, improvement, and equipment used in connection with the production of live stock.

Liberal charges were allowed also for bull service, depreciation of cows, loss of cows at market value, and other natural losses. A charge for taxes at the average rate for the state was included.

On this basis the cost arrived at for the production of yearlings in Arizona from average figures given is $19.45, and from data furnished by one large outfit, $15.43; for California, $27.51; for Colorado, $30.47; for Idaho, $31.37; for Montana, $32.89 in the main feeding sections and $26.40 in the range section of eastern Montana; for Nevada, $31.25; for New Mexico, $18.30; for Oregon, $31.13; for Utah, $31.46 in the feeding sections and $19.08 for the range section of southern Utah; for Washington, $33.45; for Wyoming, $31.88, average figures, and from special figures furnished by one large outfit, $25.75.

The cost arrived at for the production of a 2-year-old in Arizona is $25.25 from average figures and $20.30 from special data furnished by one large outfit; for California, $40; for Colorado, $43.31; for Idaho, $45.12; for Montana, $47.90, from average figures, and $35.10 for the range section in eastern Montana; for Nevada, $44.46; for New Mexico, $25.85; for Oregon, $45.70; for Utah, $44.68 for the feeding sections, $24.35 for southern Utah; for Washington, $50,54; for Wyoming, average $46.18, and from a special report of a large outfit, $35.29.

These figures may appear too high, but it should be remembered that they include reasonable profit on farm or ranch products used, reasonable compensation to the owner for looking after his stock, and liberal allowance for loss, depreciation, bull service and taxes. The net balance between cost of production and sale price represents net interest-profit on money invested in the breeding stock. Granting that the costs given are conservatively high, it is believed that for sections of the west where winter feeding is practiced the man who contemplates substituting live stock for other forms of agriculture should figure on a cost of approximately $30 for the production of a good yearling and $45 for the production of a good long 2-year-old—this cost to include labor, market value of feeds, taxes, loss, bull service and any depreciation of breeding stock. In sections of these same states where only a part of the stock is fed in winter the cost of producing a yearling may be set at approximately $25, and of a 2-year-old at $35. In the range sections of the southwest the cost of producing a yearling may be set at $15 to $19, varying greatly with the number of calves per 100 cows, and the cost of producing a long 2-year-old at about $20 to $25.

The average weight given for a 2-year-old steer in the feeding section is 960 pounds. At $45 as the cost of production, the cost per pound is about 4.6 cents. For Arizona and New Mexico the average weight of a 2-year-old steer is given as 775 pounds. At $25 for production the cost per pound is a little over 3.2 cents. For the southwest, hazard due to the exceptional loss in time of prolonged drouth is not fully covered in the above costs.

Jerseys for Net Profits



You're in the dairy business for profit—the *net* profit that your herd has made you at the end of the year will determine the size of your bank account. Jerseys yield the largest returns from every ounce of feed—proved by tests at two great expositions. Jersey milk averages 5.3% butter fat, 9.1% solids not fat—highest of all breeds. Buy a Jersey bull. Write the breeders advertised below for prices, pedigrees, etc.



The American Jersey Cattle Club, 314 West 23rd Street, New York City

Jersey Isle Stock Ranch
Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castilian Lady 26628 made 603.3 lbs. fat (718.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.
C. E. LONG, Buhl, Idaho.

Two Choice Bull Calves
From cows with official records of 914 and 663 lbs. butter in a year. Prices in proportion to production and quality.
ED CARY. P. O. Carlton, Oregon. Station, Lafayette, Ore.

724 Pounds Butter
and 11,076 pounds milk is the record the dam of a bull calf dropped Sept. 1, 1917. The sire, Dominus, is out of an 817-lb. cow and sired by a bull out of an 853-lb. cow. PRICE $125 for quick sale.
J. B. STUMP & SON, Monmouth, Ore.

1120 Pounds of Butter in a Year
by St. Mawes Poppy is the sixth highest official record of a Jersey cow in the world. She is dam of my herd bull, and his first heifers in milk are heavy producers. Write for prices on young bulls by him out of register of merit dams.
F. E. LYNN. Perrydale, Ore.

Every Cow a Record
Fifty per cent of our cows that have dropped more than one calf have records above 700 lbs. butter, 85 per cent fat. Golden Glow's Chief and Adelaide of Beechlands blood predominates. Special prices on bull calves under 9 months old.
LADD FARM. Oswego, Ore.

Green Meadows Farm Jerseys
Young bull out of dam on official test making good record. Sire a grandson of Golden Glow's Chief, out of dam with official test of over 700 lbs. butter in a year. Other bull calves from register of merit dams. Also cows and heifers.
HENRY STEWART, Prop., Albany, Ore.

Wynoochee Home Farm
Home of
The Gold Medal Jerseys.
Young stock whose dams or granddams in my herd have won gold medals from the A. J. C. C.
JOHN H. TAYLOR, Montesano, Wash. Box 426.

MAPLE LAWN PLACE, ALBANY, ORE., Home of
Register of Merit Jersey Cattle.
Herd headed by a double grandson of Spermfield Owl—"Moose o' Fernwood" No. 137024, whose dam has an official record of 916 lbs. butter.
We are offering young stock from this rich butter inheritance whose dams are now on official test.
ROBT. L. BURKHART, Albany, Oregon.

Waikiki Farm
Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.
IRA P. WHITNEY, Manager.
ROUTE 7, SPOKANE, WASH.

Look Up My Winnings on Jerseys
at Oregon State Fair. Junior championship and other prizes; only five shown. For nine months my herd has had highest record in Marion County Cow Testing Ass'n. Lowest records since June, 479 lbs. butter as senior yearling in 10 months. Other two lowest, over 600 as 2-year-olds.
F. A. DOERFLER, Silverton, Ore.

$100 to $250
Young Jersey bulls, ready for service, sired by St. Mawes Golden Poppy, whose dam has official record of 1120 lbs. butter in a year. Some out of Register of Merit dams, priced according to quality of dam.
M. H. JONES, Perrydale, Ore.

Register of Merit Jerseys
A few REGISTER of MERIT cows and their offspring FOR SALE.
H. T. THIESSEN & SON,
Milwaukie, Ore.

Bull From Gold Medal Dam
Out of Brown Bessie Alphena's Gem, 827 lbs. butter in year. Sire, Engineer's Bluster, whose dam, Mabel's Bluster, once held world's record for 3-year-old production. His first daughter on test, in this herd, beginning under 2 years old, will make over 500 lbs. butter. Other bulls from Register of Merit dams.
N. H. SMITH, R. D. 2, Oregon City, Ore.

ASHBURN FARM
Register of Merit Jerseys
In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.
J. M. DICKSON & SON, Shedd, Ore.

Oak Ridge Jersey Farm
Register of Merit Cattle
Twenty-nine years breeding Jersey cattle. Write us for prices and pedigrees. For information address
RILEY E. HULBURT, Albany, Ore.

Ashwood Farm Jerseys
FOR SALE—BULL CALVES; sired by ST. MAWES OF ASHWOOD and out of daughters of HOLGER now making creditable Register of Merit records.
McARTHUR & STAUFF, Rickreall, Ore.

Red Crown's continuous chain of boiling points insures maximum power and mileage.

Standard Oil Company (California)

The Gasoline of Quality

RED CROWN GASOLINE

POWER

The Problem of Saving the Live Stock

(Continued from page three.)

Dairy cows are being sold for slaughter that will be much needed by the nation before the conclusion of the war.

The hog has become an unfamiliar object in many sections of the west.

Fortunately, due largely to highly satisfactory prices, mutton and wool production have so far suffered little from the forces mentioned above.

The heavy cattle movement means plentiful beef in the coolers and low proces to the producers.

One of these days it will mean excessively high prices for both producer and consumer.

The fact that reserve supplies of animal food products have been piling up in the packing houses and storage centers, in spite of a world-wide call for American food products, clearly indicates an abnormal rush of live stock to market. The figures comparing storage holdings on September 1, 1917, and on the same date a year ago are as follows:

	Per Cent Increase
Frozen beef	73.3
Cured beef	61.5
Lamb and mutton	8.6
Frozen pork	5
Dry salt pork	4.3
Lard	9.2

The view prevailed in some quarters that live stock herds have been increasing and that the present liberal marketing is only the process of releasing a surplus. The most accurate figures that can be obtained indicate the reverse. Horses have shown a slight increase in numbers in recent years, but this increase is far from commensurate with the increase in population. The same is true of dairy cattle. The beef cattle supply of America has fallen from 51,000,000 head in 1907 to a little more than 40,000,000 in 1915, a decrease of one-fifth in eight years. While the American farm and range flocks of sheep have increased from 22,000,000 head in 1850 to 51,000,000 head in 1910, this number has fallen to 48,000,000 for 1917. The per capita supply of sheep, with a comparatively increasing demand for and popularity of mutton, has fallen from .93 head per capita in 1850 to less than one-half sheep per capita today.

The census figures and the statistical experts have not been able to keep pace with the sensational changes in hog growing. In parts of the northwest there is only now and then a few pigs, where were large herds three years ago. The bureau of statistics estimates a loss of 60 per cent of our swine during the last year. One large irrigation district it is shown has but one-third the swine today as compared with a year ago. Thousands of men have quit the business entirely, due in a large part, to the reasons cited above. Reports from the great swine producing centers of the corn belt indicate a similar movement, but one less radical in its extent and influence on the industry as a whole. The manager of a large western packing house stated publicly a few days ago that the hog killing department of his plant was running at 10 per cent capacity only.

All of this indicates a live stock problem of serious proportion, especially in the west. It does not necessarily spell disaster, but certainly does mean serious concern.

Coupled with the American situation is the live stock status of continental Europe and Great Britain. Any one at all familiar with events on the continent must know that the live stock herds are fast disappearing. First, because of wastage of horses and usage of cattle, sheep and swine, and second, because the shortage of fodder necessitates the use of live stock as an alternative to their starvation and resulting total loss as a resource to the nations at war. One live stock man of experience and high standing asserts that the decrease of live stock in Europe is as follows: Sheep, 54,000,000; cattle, 38,000,000, and swine 32,000,000. In other words, to supply the European void would take, approximately speaking, two-thirds of the swine and practically all the beef cattle and sheep of America.

It is our purpose not to dwell at length on the problem and its serious aspect, but to first show that the problem is with us and is serious, and then to suggest means and ways of improvement. The first has been comparatively easy. The latter duty is now in hand.

Cash Crop Basis.

The first duty, in a constructive way, is to recall to those who are fast going to a cash crop basis that this has not been, is not now, and can never be the permanently successful system of agriculture for the northwest.

It is only a policy of good judgment, therefore, to retain as much of our foundation herds as possible. Furthermore, one who has watched the fluctuation of live stock prices must know that those who pass through this period and are able to come into the spring and summer with productive herds, in all probability will be well rewarded financially.

It is only natural that following this period of high feed prices and disposal of live stock, will come an era of lower feed prices and highly remunerative prices for farm animals.

There must be sold this year, as in former years, a certain surplus from our flocks and herds. In choosing this live stock for sale there should be an effort to retain in the herd, uniformly thrifty animals of excellent individuality. There are many who, due to the feed situation, may need to dispose of more than usual quota. Here again the elimination should be such that the herds the less in numbers are of higher standard than before. In the dairy herds the reduction and elimination may be made to result in the sale of unprofitable cows and the herd may yet yield as much net profit as before.

There has never been a better time than the present to turn entirely to the purebred male and to get rid of scrub and grade stallions, bulls, boars and rams.

Grade and scrub sires are all too common. It is estimated by an official of the Minnesota Stallion Registration Board that Minnesota farmers annually lose $700,000 by the use of grade stallions. The grade and scrub sires of all kinds result in loss and are to be avoided in normal times. At this time, when the best possible returns must be had from pastures, hays, grains and live stock, grade and scrub herd headers should be entirely eliminated.

The feed supply must be increased this year by use of feeds that have, in former years, been largely wasted.

A dairyman in one of our irrigated districts reports that his cows take readily to bean straw and that he was surprised to find how high is the feeding value of this material, which is frequently wasted. In districts where large acreages of peas have been grown this year, use is already being made of the straw. Where the peas were not allowed to get entirely ripe before cutting, this straw makes an excellent feed.

In past years, hundreds of tons of oat straw have been burned. It should be utilized this year for feed. In the sugar beet producing districts this straw can be cut and mixed with cut alfalfa and molasses. The mixture becomes not only a valuable feed in maintaining the breeding herd, but is effective in fleshing live stock, especially steers for market.

Beet pulp, roots and silage should be used as never before. When succulent feeds are used in winter, breeding animals are retained in better thrift and expensive concentrates and much roughage that is not costly, can be saved for other purposes.

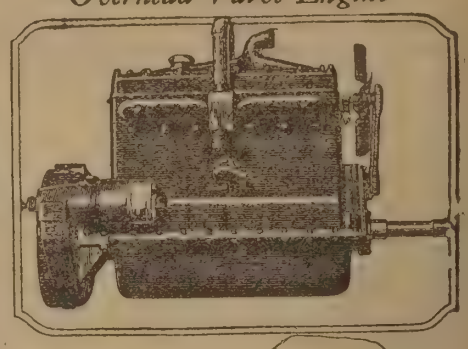
The various crops, such as hay, pea straw, bean straw, and fodders of all kinds should be gotten under shelter even if necessary to materially reduce the bulk by baling. Some of this material may be stored in the silo and made into succulent winter feed. In the Mississippi valley states, corn fodder has been taken dry from the shock and after chopping and moistening has been made into valuable silage. On the university farm at Moscow, Idaho, this fall, a silo has been filled with a mixture of dry pea straw and green corn. The pea straw and corn were fed into the cutter at the same time with water added to make a moist mixture of

(Continued on page forty-four.)

STEPHENS *Salient Six*

With the Perfected Overhead-Valve Engine

BEAUTIFUL—ECONOMICAL



The Stephens Salient Six engine is an energy conserver.

Its manifold in the cylinder head surrounded by heat; its large valves; its perfect combustion chamber; in fact, its really phenomenal ability to handle very low-grade fuel, particularly distinguish the Stephens Salient Six.

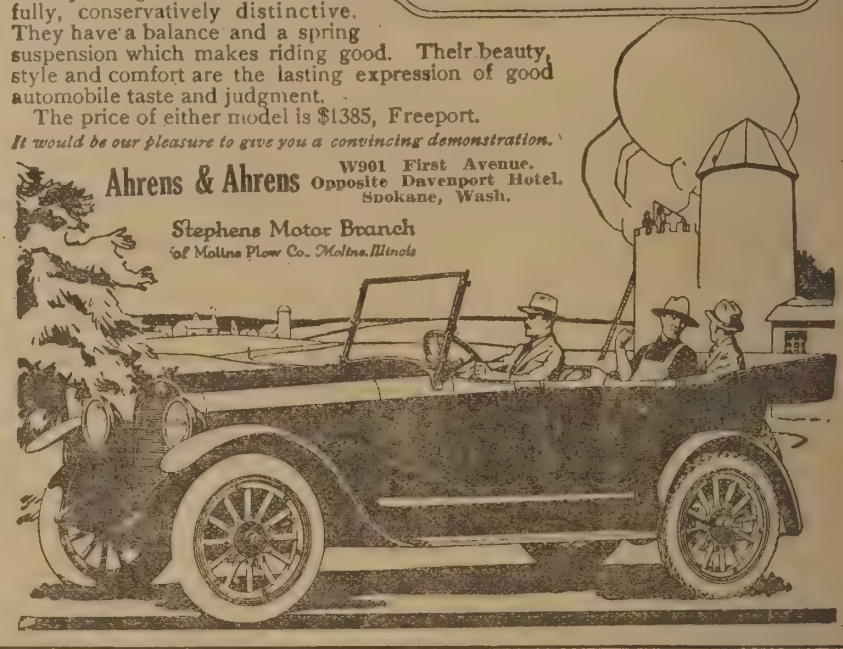
The body designs of the Stephens five-passenger touring car and three-passenger roadster are beautifully, conservatively distinctive. They have a balance and a spring suspension which makes riding good. Their beauty, style and comfort are the lasting expression of good automobile taste and judgment.

The price of either model is $1385, Freeport.

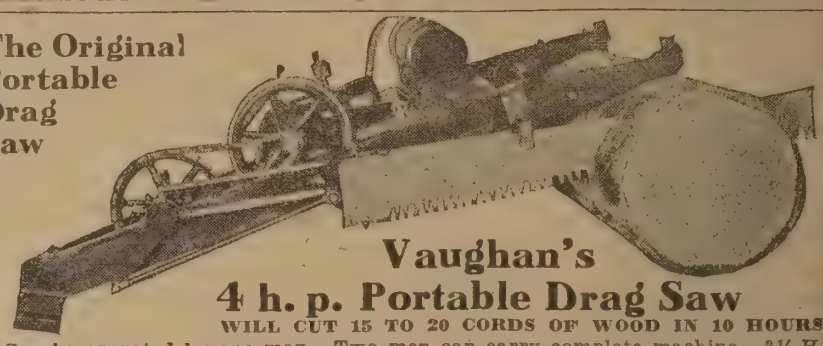
It would be our pleasure to give you a convincing demonstration.

Ahrens & Ahrens W901 First Avenue. Opposite Davenport Hotel. Spokane, Wash.

Stephens Motor Branch of Moline Plow Co. *Moline, Illinois*



The Original Portable Drag Saw



Vaughan's 4 h. p. Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 3½ H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $150 f. o. b. Spokane and common points. FOR SALE BY

Washington Machinery & Supply Company

S122 Monroe. SPOKANE, WASHINGTON.

Be an Auto and Tractor Expert

The demand for trained men in all branches of the Auto and Traction Engine Business is greater than ever before.

MY GRADUATES are filling responsible positions in large factories and assembling plants, also as GARAGE OWNERS. They are making big money as experts.

THE HAWTHORNE AUTO SCHOOL'S $30,000 equipment gives you the actual PRACTICE, TRAINING and EXPERIENCE on REAL AUTOS, TRUCKS and GAS ENGINES. We occupy 10,000 square feet of FLOOR SPACE. Write for particulars at once.

HAWTHORNE AUTO SCHOOL

462 Hawthorne Ave., Portland, Ore.

Oldest, best equipped and most practical Auto School on the Coast. Established 1907.

FOR SALE
Young Bull 11 Months Old Nov. 2

Sire—"Raleigh's Jolly Nobleman"; grand sire, "Raleigh's Noble," sold for $510 at 1 mo. and when 3 yrs. sold for $2225. Dam—"Golden Jolly Buttercup," private record 506.486 lbs. 85 per cent butter, 1 yr. on small rations. We consider him the best we ever raised; fully guaranteed. Valuable herd sire. Write for price and further particulars.

Edgewater Farm EMERY T. SMITH, Breeders of Jersey Cattle, Myrtle Creek, Ore.

In answering advertisements please mention this paper.

Commnuity Cooperation

A Word as to Big Stores and Little Stores

Did you ever check up your home town merchant on the price of something you were half inclined to buy somewhere else?

The writer has, and quite frequently it pays. This past summer I talked with a friend on this subject and I'm going to pass on his experience.

He wanted to buy some wire fencing for a couple of lots he was fixing up for a summer home on a lake front. He went to a nearby city (where he lives) and went to one of the largest hardware stores which sells fencing. He stated the amount and kind he wished and asked for the price. The quotation was given him along with the assurance that he was being given the wholesale price. It seemed a bit high to him and he took the matter under consideration. A few days later he happened to be in a small town near the lake and, dropping into the little hardware and implement store of the place, asked for a figure on the same kind and amount of fencing.

The merchant didn't have it in stock but said he would get a figure and phone it over to my friend's lake cottage. In a couple of days the phone message came through. The quotation on the fencing was $34, delivered on the very lots at the lake where it was to be used. The "wholesale" quotation was $56, delivered at the railroad office in the city.

But the nub of the story is this: The country merchant who sold this fencing and delivered it at the lake had ordered it of the same store in the city where the $56 "wholesale" price had been quoted. The small town merchant paid the freight from the city, paid for delivery by auto express to the lake and still sold the fencing for $22 less than my friend could have bought it at the big city store.

Give your home town storekeeper a chance. Trade with him. The more trade a small town merchant has the bigger orders he can place. And the more advantageously he can buy, the more cheaply can he sell to you and your neighbors. You gain, he gains, better stocks of merchandise are available, the town improves—and incidentally you are helping enhance the value of your own place by adding to it the advantage of "being near a good town."

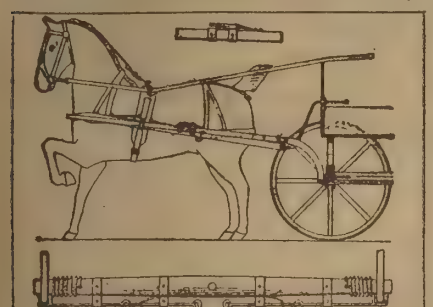
C. V. R.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

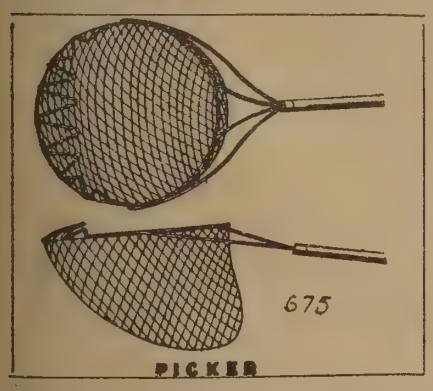
Releases a Runaway Horse.

When the driver of this carriage pulls the handle inside the dashboard he raises the end levers on the whiffletree and the coiled springs release the traces. The horse then pulls clear easily because the shaft pockets are large and the breeching strap is held by spring clips.



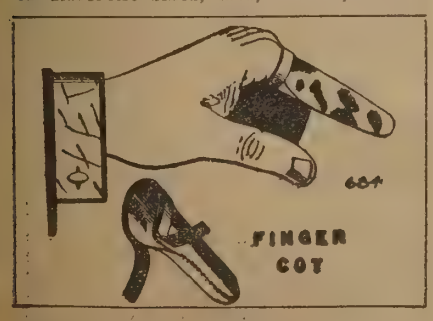
Sack Filler and Grain Pickler.

When this scoop is used as a sack filler, the bag is attached to the discharge end and filled in the usual way; when it is used as a grain pickler, the discharge end is fitted with a sieve and the scoop, filled with grain, is dipped into the solution and drained.



Finger Cot.

The new points about this cot are, first, that it is left unsewed near the top so that it can be fitted to fingers of different sizes, and, second, it has a strip of adhesive plaster around the top which holds it securely to the finger. Make a few for future use, and pack them with oiled paper between the tapes.



Fall Plowing

Western Washington Conditions

To have a well-prepared seed bed for most crops is very important. That means the soil should be in good physical condition, says E. B. Stookey, agronomist at the Western Washington Experiment station. Fall plowing opens up the soil so the air and water can get in, thus making it more friable, and gives the organic matter a chance to rot and become available for next year's crop. The plowing may be deeper in the fall than in the spring, because the raw soil that is turned to the surface will be in good condition by spring after the air and water have acted on it during the winter and there is not the danger from drying out. The physical condition is not only improved but the plant food is made more readily available and the moisture capacity is increased. Taken altogether, fall plowing upland soil is very desirable, unless it is so situated that there is considerable washing. Early seeding is desirable from two standpoints, namely, a larger yield is secured and the crop matures at a time when it can be properly saved. Early seeding is so essential that every reasonable effort should be made to put the land in shape so it can be seeded early.

British Rifle Boer War Product.

The British rifle is the outcome of the South African war. It holds 10 cartridges and is sighted from 200 to 2800 yards.

One Man Alone Pulls Biggest STUMPS



Kirstin

A Kirstin One-Man Stump Puller instantly gives you a GIANT'S POWER—makes you master of any stump! Many Kirstin owners pull stubbornest stumps in 4 to 10 minutes!—AS CHEAP as 5 CENTS per stump! $50 and Up

Just a few pounds on the handle means tons on the stump. When stump starts, throw machine into high speed and out comes the biggest stump, roots and all. Positively no other machine like it. Has special, patented features. Recommended by leading Agricultural Schools and Forestry Bureaus.

Why have stumps when you can now pull them so easily, quickly and cheaply?

Amazing Offer To prove these claims, we will ship you any size or style Kirstin on THIRTY DAYS' FREE TRIAL—not one penny in advance. Return it if not pleased. If pleased pay low price in small monthly payments. Kirstin Pullers as low as $50 One-man style or HORSE POWER—all sizes Three year guarantee with each machine

Write! Don't endure stumps any longer. Send postal now for most valuable Stump Puller Book ever published—pictures—prices—terms—letters from Kirstin users and all about our Special Agent's Proposition—all Free Write!

Ticknor & Co. 332 East Morrison St. Portland, Ore.

In answering advertisements don't fail to mention this paper.

This picture was taken at Tenino, Wash. Doesn't it suggest great possibilities for your farm?



More Than Half a Carload of Wheat and Flour Hauled at One Time!

That is the accomplishment pictured above. Forget about railroad car shortage; get your products to market quickly and at trifling cost. DOUBLE AND TRIPLE THE CAPACITY of your motor truck. SAVE TIME, LABOR COST, and obtain THE FULL POWER OUT OF YOUR FUEL by using a

Universal Trailer

Which can be coupled to *any* Standard Motor Truck

The Universal Trailer has Twin Bunks, which carry the load in balance upon the axle independent of the reach. This trailer is guided through the reach to the axle, perfectly braced so there is no side stress. Pulls directly from the axle.

The springs and suspension permit limited movement of frame and load independent of axle to take care of obstructions and holes.

Built in several sizes by

PACIFIC CAR AND FOUNDRY CO.

Alaska Bldg., Seattle, U. S. A.

Universal Trailer can be backed up without uncoupling within short radius.

Leaves only 5% of load on steering wheels of truck and thus you can haul a great deal larger load with same power.

This trailer is indispensable for hauling grain, flour, hay, wool, hops, cattle, sheep, milk, fruits and all sorts of heavy products.

Write at once for further details. Clip this coupon.

Pacific Car & Foundry Co., Seattle:
Please send me your illustrative booklet No. 53 describing Universal Trailer.

Name .....

Address .....

Good Things Coming

The season for reading and study is at hand and we are endeavoring to give readers of this paper just the kind of articles and features which will mean a maximum of interest, helpfulness and wholesome entertainment. Below are mentioned a few of the things you can look forward to:

Community Organization

An informative article will be printed soon on how community organization has helped out the apple harvest situation in the Wenatchee district, notwithstanding the fact that Wenatchee has contributed hundreds of men to the national army. The team and wagon join the cayuse of yesterday, while the lighter and heavier motor truck takes its place in hauling the fruit to market.

Artificial Light for the Hens

The profits of an artificial lighting system for the poultry house explained by Mr. and Mrs. George R. Shoup of the western experiment station, who are among the first users of this device. This article will be printed soon and will be of especial interest right now when the price of eggs is steadily advancing.

The Quack Grass Danger

Those who have come from the farms of the middle west are familiar with the stubborn fight—and often the losing fight—which has been made against quack grass. An article has been prepared pointing out the dangers of the spread of this pest in the Northwest and sounding a rallying cry for cooperation in stamping it out.. Coming in an early issue.

Our Special Departments

Our department editors are keyed up to a high pitch to secure the most helpful matter they can find. These departments provide space for an exchange of ideas and experiences among those who are actually making their living from orchards, dairies, stock ranches and general farms.

Features for Entire Family

Everybody enjoys a good story. Every housewife likes to experiment with the tested recipes. In every home there is a demand for patterns of attractive clothes. In the future, as in the past, you will find that the "Farmer" brings you a generous store of good fiction, recipes, household hints and designs for patterns.

This Is More Than a State Farm Paper—It Is a Publication Which Aims to Give Every Member of the Family Something Interesting and Worth While to Read

Meat One of World's Greatest Needs

Hoover Pleads for More Fats to Meet Growing Demands

(Continued from page one.)

in wool at the present moment.

"The pork problem is one of deepest concern.

"The human body must have a certain amount of daily intake of fat. Whether this fat is by means of dairy products, by vegetable oil or by pork products is a secondary question in these war days.

"Increased production in pork fats can be made much more rapidly than increased production of dairy products and on a much wider scale.

"An increase in pork fats also can be made more rapidly than an increase in vegetable fats.

"Europeans have always relied to a considerable degree upon the United States for pork products, and if they slaughtered the larger portion of their hogs they could still not supply their demands for fats.

Hence, Mr. Hoover adds:

"It appears to me, therefore, that we must concentrate on the increased production of hogs if we are to answer the world's craving for fats.

"I realize that under certain conditions a lack of confidence in the stability of market prices may act as a deterrent. And further that this may sometimes come from a failure to glimpse an opportunity before one.

"I therefore wish to make this positive statement: That, so far as the United States food administration is able, through its influence on the purchase of pork and its products for exportation, it will do all within its power to see that prices of pork are maintained in a ratio to feed prices that will cover not only costs of production, but proper remuneration to the producer.

"By a system of license control of manufactures and distributors the food administration will further help the producers. This system will tend toward the abolition of speculation, the punishment of profiteering, and the assurance that the consumer receives the product at a fair ratio of the producer's price, and that, vice versa, the producer receives a fair interpretation of the consumer's payment. All of these measures, I believe, offer a new hope for agriculture.

"While we give these important assurances, I do not believe that they are, in fact, necessary in the stimulation of our production to that point which is now fundamentally necessary for our national preservation.

"The American farmer has too often demonstrated his courage and resolution in national service to admit any charge that democracy breeds a materialism that requires money guarantees to secure his patriotism. He wants a square deal in giving his services, and, with every power we have, we intend to see that he gets it.

"From two and a half years of contact with the German army I have come out of this horror with the complete conviction that autocracy is a political faith and a system that directly endangers and jeopardizes the future of our race—that threatens our very independence. It has, however, been able to command a complete inspiration of devotion and self-sacrifice in its people to the interest of their nation. The German farmer, in the name of the fatherland, supports a nation two-thirds as large as ours and threatens to subject the world from an area as large as Texas.

"I am convinced that we will find this same devotion a direct reply to the German farmer—by the voluntary service of the American producer. This is democracy, and will be its answer to autocracy.

"There is a human side to all of this. I have spent two and a half years in Europe in intimate contact with the backwash of war. During this time I have been faced with the responsibility of furnishing daily the food of 7,000,000 women and children among a population of 10,000,000, and the food of these is today solely assured by the American farmer.

"During this time, however, the gradual diversion and destruction of men and ships amongst our other allies from the support of another 100,000,000 women and children has thrown them wholly a state of the dependency upon the American farmer for their daily food. Their husbands, brothers, and fathers are defending our liberty as surely as our own boys in France.

"The production of more fats is today a critical necessity for the preservation of these people and the maintenance of their constancy in the war. Every pound of fat is as sure of service as every bullet, and every hog is of greater value to the winning of this war than a shell.

"My vision of war is not of an academic problem to be solved by discussion and guaranties of profits; to me it is a vision of brave, dying men and suffering women and children for service on whose behalf the greater exertion of the American farmer comes as a direct necessity and a direct plea. The American farmer who sees war as I see it needs no inducement and no inspiration but the thought that every spade full of earth turned and every animal reared is lessening human suffering and guaranteeing the liberty of the world."

An Open Field

By FRANK D. TOMSON.

Any one who has made a study of the fairs and live stock shows of the present season can not fail to note two conspicuous features, one the dominating numbers and the excellence of the Shorthorn entries, and the other the conspicuous winnings of new and hitherto inexperienced breeders.

In spite of high feed costs the entries at the season's shows were well conditioned with very few exceptions and it was a matter of general comment among fair goers that the uniformity and superior merit of the entries particularly among the younger cattle, surpassed former years.

The fact that various new exhibitors entered the contests and claimed a generous share of the prizes added interest to the season's shows. A number of champion awards were captured by young men on cattle of their own breeding, who had never heretofore entered the contests.

The lesson drawn from the awards is this: That ownership or long experience in breeding and showing cattle are not considered in the placing of the awards. It is a matter of the fittest. Judges may err in their conclusions, but the boy from the back woods township has an equal chance with the veteran from the best known breeding establishment in the country, provided the individuals the two lead into the ring compare in individual merit.

It is an open field and many a man has risen from comparative obscurity into an acquaintance country-wide in its scope because he was able to produce animals of a standard that claimed expert recognition in the show rings.

Hog Nets Owner $66

By E. L. SACHTLER.

That there is money in raising hogs is evidenced by the check for $731.06 which Everett E. Edmonds of Ridgefield, received recently for a truck load of hogs which he disposed of at the North Portland stock yards. There were 16 hogs in the load, weighing 4039 pounds, the price being $18.10 a hundred weight. The hogs were of the Chester White breed, and less than a year old. One hog brought the raiser $66. Mr. Edmonds is an ex-school teacher.

Live Stock Future of Klickitat.

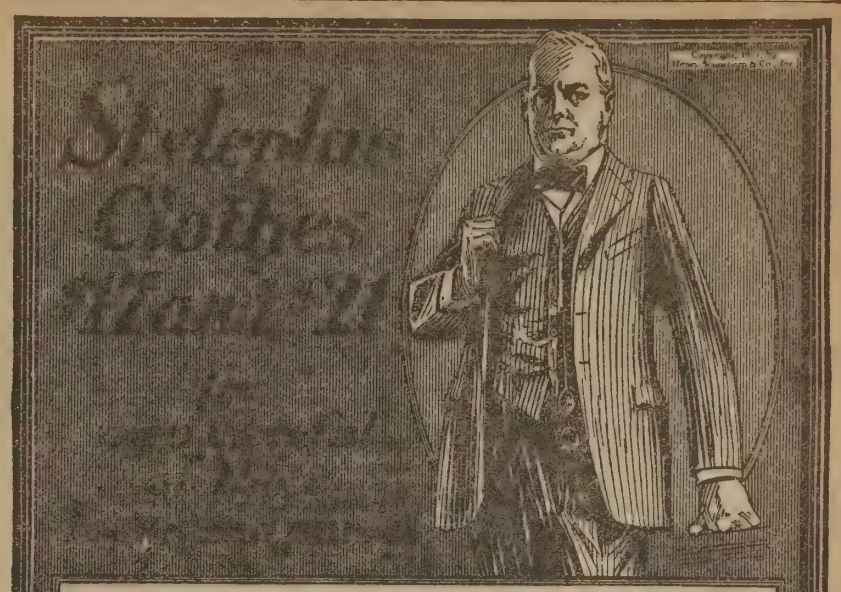
In a recent trip to attend the county fair at Goldendale, R. A. Blanchard, agriculturist of the Live Stock State bank of North Portland was much impressed by the live stock prospects of Klickitat county. "Before live stock can be kept, food must be produced," he said, "and Klickitat valley is on the increase in forage production."

Three years ago there were but 3000 acres in alfalfa, and today there are 10,000 acres with a rapid movement toward 100,000 acres in the near future.

In spite of the dry season, three and one-half tons were produced per acre this year. Records show that about one-eighth of the rural wealth is in live stock, which bids fair to assume will become one-half of the county's total production in but a very few years.

Whitman County Union to Meet.

The Whitman County Farmers' union will meet at Colfax Thursday, November 8, at 10:30 a. m. A. A. Elmore will be present.



We developed the known-price idea in clothes. We concentrate our volume, lower our costs, give exceptional all-wool fabrics, style and tailoring at moderate price. The popularity of Styleplus Clothes throughout the nation has proved the soundness of our method. Even though Uncle Sam has already required 200,000,000 lbs. of wool for the soldiers, we are able to supply the American public with guaranteed all-wool stylish clothes at known moderate prices. Styleplus Clothes $17 (black label) excel at that price. Styleplus Clothes $21 (green label) excel at that price. Style plus all-wool fabrics + perfect fit + expert workmanship + guaranteed wear. Write us (Dept. 8) for free copy of "The Styleplus Book."

HENRY SONNEBORN & CO., INC. Founded 1849 Baltimore, Md.

Styleplus Clothes

The same price the nation over.

The same price the nation over

ATKINS



SILVER STEEL SAWS

This Drag Saw Runs Faster

The Atkins Drag Saw is designed for fast work. It is made from SILVER STEEL. This steel was formulated by us and is unequalled for edge holding and freedom from constant fitting.

The best drag saw—the famous Atkins—is not expensive. Why try to "get along" with any other kind? An Atkins will quickly pay for itself and pay you a steady profit besides. All good dealers sell Atkins Saws.

Take It Home and Try It At Our Risk

Test an Atkins on your own work at home. Compare it with your old saw. If it doesn't prove a time-and-money saver, your dealer will refund your money. The genuine ALWAYS has our name on the blade.

E. C. Atkins & Co., Inc., Indianapolis
Makers of Silver Steel Saws and Tools

The Famous Atkins Cross-Cut Saw

The Atkins Cross-Cut is *Segment Ground* (Atkins Patent). It tapers from the tooth-edge to the back and from the ends to the middle. Other saws have wide set teeth, but that isn't the same thing. Atkins teeth *cut*, they don't chew. Every stroke brings out a clean, thin ribbon of wood.

HIDES

WOOL, PELTS, MOHAIR, CASCARA BARK

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

THE H. F. NORTON CO.

53-55 No. Front St., PORTLAND, ORE.
206 3d Ave. So., SEATTLE, WASH.

THE GOODS YOU SEE ADVERTISED IN THESE COLUMNS ARE RELIABLE

We accept advertising only from firms or individuals whose goods we are convinced are exactly as represented. In writing advertisers please mention this paper.

POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

Saving Feed

It Is Poor Policy to Starve Hens

I am told by commission merchants in Portland that the poultry coming to market is thin or poor in flesh this year. In ordinary years the proportion of bones to meat on the average chicken is very large, but this year the percentage of bone is unduly high. This is no doubt a direct result of the high price of feed, which prompts the poultry-keeper to save on the feed. With wheat at two dollars a bushel and patriotism demanding its conservation for human food, with other feed high in like proportion, one can understand the tendency to save the feed.

Saving the feed, however, does not save the profits. Nothing is more certain than that underfeeding loses the profits. A certain amount of feed is necessary to maintain the body. If less than that is fed the fowl will draw upon the food already stored up in the body in the form of fats, flesh, etc., to maintain life. A considerable portion of the feed consumed is used for the purpose of furnishing heat for the body. This is the starches and fats, which are found in all feeds to a greater or less extent. If the fowls do not get enough fats in the feed to furnish the necessary heat the fats already stored in the body are drawn upon. Likewise if they do not get a constant and sufficient supply of protein the supply already in the body is drawn upon to repair the wastage that is continually going on.

Insufficient nourishment, therefore, means a waste of feed. Keep up the feed supply or quit the business.

The same thing happens in the case of egg production. The hen can not lay eggs unless she gets more feed than is necessary just to maintain her body. She takes care of her body first. After that she is willing to lay eggs to care for the body of the human. A hen will lose 25 per cent of her weight in a very few days if starved. There will be no eggs laid so long as the starving continues.

There is no saving so wasteful as underfeeding.

There is another point that poultrymen should bear in mind when underfeeding. That is, the sending to market of poultry poor in flesh reduces consumption and as the demand is decreased prices fall. Nothing will keep up prices better than to see that no poultry is sent to market that is not in good condition. If this were done, if every chicken exposed for sale in the markets were in prime condition, the demand for chicken meat would soon be doubled. No farmer thinks of sending a steer to market that has not been fattened. And a chicken can be fattened in two weeks, while it requires months to fatten a steer. It is not necessary to feed high priced wheat. Bran, shorts, middlings, corn, barley and oats will fatten them. We will discuss fattening rations later. Let us have a little better quality in the chickens that are sent to market. J. D.

Feather Test for Laying.

If the culling of the old hens has not been completed, it should be done now. The importance of the feather test, or the molting test, has already been mentioned in these columns. Without a knowledge of the fact that the late molters are the best layers the farmer or poultryman is very likely to keep the nice looking hens with a new coat of feathers and discard those with the old, ragged, soiled plumage. The hen that has not yet completed the molt and that shows considerably the worse for wear is the one that has continued to lay late and that will continue to lay well in the following year. If you want good layers, kill off the nice, slick hens with a new coat of feathers and yellow legs and keep those that have continued to lay late and are more or less ragged in appearance. The hen that lays late into the fall and is not in a hurry to adopt the new fall styles is the hen that has laid well throughout the year and will be a good layer next year. J. D.

Hens Get Lame.

To the Editor: Will you please tell me what is the trouble and the remedy for my chickens? They are Barred Rocks. Quite often a hen which looks perfectly well will get lame in one leg. Will hop around and usually begin to droop after a week or 10 days and finally die. They are well fed and the house is kept clean.
SUBSCRIBER.

Roy, Idaho.

Lameness may result from several causes. As one of the symptoms of tuberculosis it has already been mentioned in articles on this disease in The Farmer. If you will make a post-mortem examination you will usually find, if the disease is tuberculosis, that the liver is covered with yellowish spots and the intestines covered with tubercles. If lameness is accompanied with these symptoms you may know that the flock is infected. The fowl also loses flesh and becomes very thin before death, though this is not always the case. If you are unable to identify the disease, it would be well to send one of the fowls to your state experiment station. J. D.

To Save Cattle

From Drouth-Stricken Texas

Trainloads of cattle are being shipped from the drought-stricken portions of Texas to other points in the south just as fast as railroad facilities will permit, according to a statement of the bureau of animal industry, United States department of agriculture, which has been working to relieve the situation of the Texas cattlemen.

Since July 1 there have been moved from Texas to points in the southeastern states more than 13,000 head of cattle, and the department expects that by the end of September fully 25,000 head will be so moved. This movement was made necessary because of the drouth and other conditions in certain parts of Texas, which threatened the loss of valuable breeding stock. Most of the cattle now being moved are females; practically all were bought outright by farmers and land owners in the new territory. The expense of the work of supervising shipments of these cattle, to the end of September, will not exceed $4000, which makes the cost incurred by the department for moving the cattle only about 30 cents a head.

The Motor Car

On the Farm

Growth in Motor Cars.

From the October number of the Northwestern Motorist we take some very interesting figures concerning the rapid increase in the number of motor cars in the Pacific northwest during the last seven years. Below is the table of comparative figures showing increase in the number of cars in Washington, Oregon and Idaho.

Year	Wash.	Ore.	Idaho.
1910	6,013	5,061	
1911	10,316	8,428	
1912	14,482	10,165	
1913		13,957	2,094
1914	30,254	16,347	3,346
1915	46,000	23,585	7,074
1916	70,032	33,917	13,000
1917	90,114	45,000	25,000

In the articles from which we quote, Captain I. M. Howell, secretary of state of Washington, speaking of the increase of motor cars in Washington, points out that after the new state registration law became effective in 1915 registrations took a big jump upward. There were 30,254 cars registered in 1914; in 1915 there were 46,000. The year 1916 showed 70,032 cars in Washington, while up to September 21, 1917, registrations had climbed to 90,114, which, Mr. Howell points out, "indicates a probable total registration in Washington of 100,000 cars for the present year."

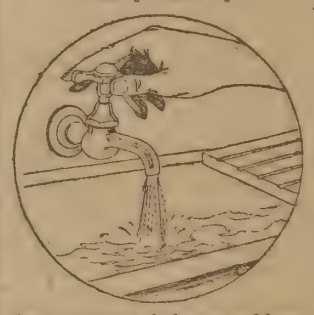
Oregon, on an estimated population of 800,000, has a car for every 18 persons. Ben W. Oclott, secretary of state of Oregon, in giving the above figure adds: "If the same ratio of increase in registration continues in the next few years that has prevailed in the past, Oregon, by 1920, will have a car for every 10 people."

In Idaho no registration records were kept prior to 1913. In the four years since then registrations have climbed rapidly from 2094 automobiles that were registered in 1913 to 25,000 up to October of this year—an increase of nearly 6000 cars a year for the last four years. The state of Idaho, in conjunction with its various counties, has arranged to supply the state highway commission of Idaho with $5,000,000 to be expended on the building and maintenance of good roads in Idaho during the next two years. W. F. Dougherty, secretary of state of Idaho, says: "We find that with the building of state highways automobile sales are increasing by leaps and bounds."

Western Electric
Farm Light and Power Plant



For easier work and more butter fat, drive your separator by electricity.



Running water in house and barn is easily possible with electricity.



Don't be a slave to the tub. The Western Electric way is quick and easy.



makes farm work easier

It's the pesky little chores that waste your time and energy. But somebody has got to do them, and reliable help of every kind is scarce. What's the answer?

ELECTRICITY

An electric motor will turn your grindstone, feed cutter, fanning mill, churn and your separator; and will furnish your barn and your house with a supply of running water. An electric motor will clean the house, wash the clothes and keep the home cool during hot spells.

Electricity will do all this in addition to lighting your place with the safest, cleanest, brightest light that's made.

Intelligent farmers are buying Western Electric plants because they are backed by 40 years of electrical experience.

Make your whole outfit a Western Electric—the plant itself, the lamps, motors, pump, cream separator, washing machine, vacuum cleaner, electric iron—in fact, everything electrical for the farm and the home.

WESTERN ELECTRIC COMPANY
INCORPORATED

84 Marion Street, Seattle, Wash.
Portland, Oregon.
41-43 Broadway, Salt Lake City.

Some Unassigned Territory Still Open to Agents

WESTERN ELECTRIC COMPANY:
Please send me illustrated booklet, No. W.F.13 "Brightening Up the Farm."

Name _____
P.O.Address _____
State _____ County _____

Rats and mice won't gnaw harness oiled with Eureka Harness Oil. There's no animal oil in Eureka and rodents dislike it. Eureka keeps your harness strong, flexible and jet black.

Eureka Harness Oil

Standard Oil Company
(California)



PETALUMA INCUBATORS & BROODERS
STANDARD OF THE WORLD

Ducks Never Cackle

Neither do all people write us who are making big hatches in different parts of the world in the

PETALUMA INCUBATOR

but thousands have and we would like to tell you what they say. Present Models better than ever. You should know about *The Electrified Hen.* Write us. Just say "Send your big envelope of free literature. We Pay Freight.

PETALUMA INCUBATOR CO.
200 Main Street Petaluma, Calif.

IN THE ORCHARD

Write to the Editor

GRANVILLE LOWTHER
Editorial Contributor

Orchard Values

I am often asked what it costs to grow an orchard and, when grown, how much it adds to the value of land.

The questions are separate and the answers must, therefore, be separate.

First, the Cost of Growing an Orchard.

I will not include the cost of clearing, leveling and otherwise preparing land, for this is so varied under the different conditions and the cost for orchard is not much different from what it would be to grow any other farm crop.

Cost of trees would vary with the number of trees per acre, but in general I would say that $15 to $20 per acre would cover the cost of trees.

Setting trees would cost from $7 to $10 per acre.

Loss of trees planted vary with the conditions and the manner of setting them. Several years ago we planted 80 acres to 3500 trees and only lost 33 out of the whole number. Again, we planted 20 acres and lost 3 per cent. I have known orchards planted where 25 per cent of the trees died, but that was because they were not properly watered.

Put the cost of trees at $20 per acre and the cost of setting at 10 per acre and you have a maximum cost of $30 per acre.

Then to prune, cultivate and irrigate young trees until they come into bearing will cost generally $25 per acre per annum. This for six years will cost $150 per acre. If then we add the cost of trees we have $180 per acre. During that six years there is a loss of interest on an investment from which there is no income, unless there is "cropping between the trees."

How Much Will It Add to Land Values?

I do not know, because that depends on so many factors.

First, it depends on the man as to how he works his orchard.

Second, it depends on the varieties planted, as to whether they bring the best prices in the markets or the poorest.

Third, it depends on the location as to whether the orchard is situated near a good market center or several miles off the railroad.

Ordinarily I would say that an orchard should yield a good interest on an investment of $600 per acre, and some will do much better. I have known orchards to yield a good interest on an investment of $2000 per acre, but it will not do that in a period of years, say a 10-year average.

G. L.

Income Tax and Bookkeeping.

For years there has been considerable agitation at our horticultural conventions and through the press, urging our fruit growers to keep books. The importance of it is acknowledged by every one, but the difficulties are so great and the process so involved that the average fruit grower finds it too great a task and neglects it. It is so much easier to do as did the young married woman whose husband gave her a check book, an account book and agreed to give her $100 per month with which to pay all family expenses. The rest of his income they were to put into a home, and both he and she were to keep a strict account of expenditures. She took the check for $100, and entered on one page of her book, "Received of husband, $100." At the beginning of the next month she wrote on the opposite page of her book, "Spent it all." Now that is the easiest way to keep books, and the way many farmers keep them. However, a new law is passed and every one who is married and has an income, I mean a net income, of over $2000 must pay 2 per cent. As the income grows larger the percentage increases and the statement of income must be made under oath. That means that the farmers must keep books. It will, in many cases, be difficult and annoying and the figures reached more or less inaccurate, but the discipline will be helpful.

G. L.

Corn Silage

Compared With Alfalfa as Feed

By S. E. PRICE, Professor Animal Husbandry, Idaho Technical Institute, Pocatello.

A patron writes in, asking: Would it pay to buy average corn silage at $5 per ton where first-class alfalfa hay can be bought for an average of $12.50 per ton for feeding lambs? Inference, that the lambs are to be marketed about Christmast time.

According to the average analysis of corn silage and alfalfa hay, the corn silage would furnish energy at the rate of 2.1 cents per therm and the alfalfa hay would furnish it at 1.8 cents per therm; or, when silage costs $5 per ton the alfalfa hay is worth $14.64 a ton, as far as the nutrient values are concerned.

The question arises, Would the silage be needed as a succulent food? If the alfalfa is well cured, no; the hay itself is succulent enough. It would be well, however, to feed some concentrate with the alfalfa. The lambs will be unable to eat enough of such bulky food as hay or silage to properly prepare them for market. Oats would be adding more protein, the requirements of which are amply cared for by the alfalfa. Wheat and corn are out of the question at the present priees. Chopped or rolled barley, then, would be the only present available concentrate in his market. It at $2 per cwt. supplies energy at the rate of 2.1 cents per therm. This is a little higher than the alfalfa, but would be the only means of preparing the lambs for the butchers' market.

Sensational Hereford Sale.

One of the noted Hereford sales of recent years was that of O. Harris & Sons of Harris, Mo., in March, 1916, when the firm sold 61 Herefords from its Model herd for $76,025, establishing the sensational average of $1246. The 28 bulls averaged $1628 and the 33 females $922.

Business Proposition.

A little lad came in the grocery store for a five-cent head of lettuce. The clerk was removing the withered leaves and told the boy they cost 10 cents, whereupon he remarked, "Can't you take off a few leaves and make it five cents?"

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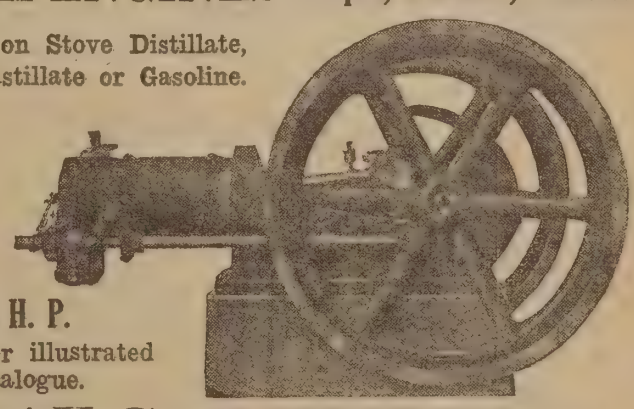
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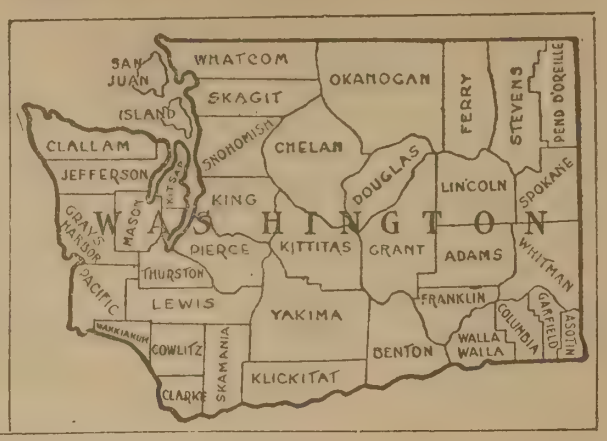
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may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

Good for Apples---Not for Wheat

Ideal Harvest Conditions Are Aid to Farms This Season, But Make It a Hard Thing to Get Next Season's Crops Under Way.



GRANDVIEW, Yakima County, Wash., Oct. 18.—Weather is the best we have ever had for fall work. The first frost was October 17, but all the farm work is well along with the exception of apple packing. Help is scarce, but if the weather keeps up for two weeks more the great bulk of picking will be done. The weather is not favorable for fall seeding of wheat on dry land. I think that farmers are generally well satisfied, for prices are good. I think there will be seed enough for fall sowing.

E. H. FAULKNER.

Dairying Is Optimistic.

CATHLAMET, Wahkiakum County, Wash., Oct. 17.—The weather conditions in this section this fall have been ideal for the maturing and harvesting of crops. Excessive yields were not found anywhere because of the long drouth. Some farmers are making preparations for next season's crops and are having excellent weather for their work. This fall the farmers have been fortunate in having their pastures yield an abundance of rich grass, and the cows have held up their milk flow very well. Feeds for the winter which have to be shipped in are causing considerable worry on the part of many. The high price of the feed will materially decrease the amount purchased this year over previous years, regardless of the high price of butterfat. Generally we find considerable optimism over the general agricultural outlook as far as dairying is concerned in this locality. A. T. FLAGG.

Will Seed Next Spring.

TWISP, Okanogan County,, Wash. Oct. 22.—The weather has been very favorable for maturing and harvesting most crops, but is too dry where irrigation is not practiced for much preparation for next season's crops. Considering the conditions, most farmers of this section are satisfied with this year's results. Farmers are patiently waiting for rain so they can do some fall plowing and are planning on big crops and high prices for next year. On account of dry weather very little seeding will be done this fall, but seed is available and an increased acreage will be seeded next spring. Apple picking and packing are progressing nicely. Stock men are beginning to bring their cattle in from the summer range and most of them are in good condition. GEORGE LA RUE.

No Scarcity of Seed.

OMAK, Okanogan County, Wash., Oct. 20.—Weather conditions have been very good so far for the harvesting of crops. We have had no rain and it is too dry for plowing and preparing ground. The fruit crop is very good and so far has proven satisfactory. Apples especially have a fine color and are a large per cent extra fancy. The wheat crop was very light. Hay is scarce and is selling at $20 a ton. Conditions so far are not good for next year's crop. The bean crop yielded well. There seems to be no scarcity of seed.

J. O. WOODS.

Farmers Optimistic.

WALLA, WALLA, Walla Walla County, Wash., Oct. 15.—Weather conditions are favorable for maturing and harvesting, but it is too dry to seed wheat although many are now seeding. The farmers are generally satisfied with this year's results, and are optimistic for next year. Wheat shriveled in a good many cases this year. Some will ship in fall wheat for seed.

H. H. BOONE.

Feels Feed Shortage.

COLVILLE, Stevens County, Wash., Oct. 20.—The weather conditions have been very favorable for the maturing and harvesting of crops this season. Lack of rain and the delay of killing frosts have made ideal harvesting conditions. While summerfallowed and cultivated lands have been seeded to fall grains and the stand appears fairly good in most cases, the lack of rain has prevented the plowing and seeding of stubble lands. There has been no trouble in securing seed for this fall crops. The shortage of feeds of all kinds with its attendant high prices tends to discourage some of the live stock breeders. Some feed has been secured from th outside, and most of the live stock men will weather this season in good shape.

A. R. HAHNER.

Many Short of Feed.

CORVALLIS, Benton County, Ore., Oct. 20.—Weather conditions in Benton county have been very favorable for maturing and harvesting most of the fall crops. On account of the nonuniformity in ripening some beans were lost by being frosted, but by far the largest part of the crop has been safely taken care of. Some potatoes are being dug, but most farmers are waiting to give the skins a chance to toughen before the crop is harvested. The ground is too dry at present for easy plowing. Some farmers, however, are busy with disk plows, both horse-drawn and power-operated, preparing the ground for fall seeding Quite a little fall grain is already up and looking fine. Generally speaking, the farmers are none too well pleased with this year's results. Many are short of feed and quite a few barns and silos which ordinarily are full at this season are empty. There is no great shortage of seed for fall planting, although not many of the farmers seem to have seed grain for sale. Nearly every one has saved enough for his own use and neighbors are buying from each other. At recent sales, dairy cows have been bringing a very fair price. Not many animals are being offered for sale and there is a demand for good cows. This would indicate that the farmers are becoming more optimistic over the feed situation and are not all being frightened out of the dairy business. Prospects for next year generally are good. GEORGE W. KABLE.

Scarcity of Good Seed.

GRANTS PASS, Josephine County, Ore., Oct. 20.—Weather conditions this fall are very favorable to the harvesting of corn, beets and last cutting of alfalfa and clover, but unfavorable to preparation of ground for next year's crop. Farmers who have had irrigation this season are well satisfied with crops; those who have not had irrigation have no crops to be satisfied with. Same distinction applies to next year's prospects. Seed that is good is very scarce.

F. R. STEEL.

Wheat Doing Well.

LEWISTOWN, Fergus County, Mont., Oct. 17.—Weather conditions have never been better for the growth of fall wheat than they are at the present time. All of the early sown wheat is coming along in splendid shape and farmers are busily engaged in seeding and preparing land for spring crops. While the crops were not as large as in the years past, with the fair price received conditions are more favorable than was anticipated earlier. Everything points to a record-breaking crop next year, the germinating quality of the same being exceptionally good.

CARL H. PETERSON.

Harvst Was Light.

GREYCLIFF, Sweet Grass County, Mont., Sept. 29.—We are having fine weather now, with a couple of good rains for fall plowing. Threshing is in full swing and will soon be finished. The crops are not large, as lots of it burned out. Even some of the winter wheat acreage will not be as large the coming season because the ground could not be plowed for it. This year's grain crop is only about one-third to one-half in comparison to last year's crop. The grain farmers are in general not satisfied with the yield and price of same, as the running expense is more than one-third larger than last year. Good seed wheat is scarce. Alfalfa hay is selling at from $15 to $20 in the stack and timothy is from $20 to $25.

JOHN FORSTER.

Dry and Hot; Dry and Cold.

AMERICAN FALLS, Power County, Idaho, Oct. 18.—Feed is ample for the stock here this winter. The hay was unusually good and the straw of all kinds is being stacked up for winter use and very little if any will be wasted. Hay is selling for $15 per ton in the stack, but very little is being sold. Straw is being sold at about $2 per ton. None is baled and it is doubtful if it could be baled and transferred to any distance with profit. The wheat farmers rely on straw almost entirely for winter feed. The potato crop is the best ever in the county with a large acreage to harvest. At present wheat will receive more attntion for next year than any other crop, as this crop seems to offer the greatest inducement. The conditions for fall seeding of wheat is the most unfavorable for many years. The last three weeks have been dry and hot while at present it is dry and extremely cold. Seeding is mostly done, but none is up yet.

P. M. MORRIS.

Cattle in Good Condition.

HARVARD, Latah County, Idaho, Oct. 11.—Weather conditions in this locality this fall have been the best in years for maturing and harvesting of all crops. Harvesting with the exception of the potato and root crop is all done and in good shape, though the grain crop is lighter than usual on account of the dry summer. But little fall plowing has been done as yet, there not being enough moisture in the ground. Not much fall wheat will be planted. Fall pastures are excellent, the weather being warm, and with but little frost for this time of the year. Cattle will be in good shape for the winter. nJ. F. JOHNSON.

Next Year Looks Better.

WEIPPE, Clearwater County, Idaho, Oct. 11.—We have had the finest kind of weather for harvesting all our crops this year and the ground is in very good condition for plowing. The price has been good for everything grown on the farms but the crops are very short. Fat cattle are a fair price but stock cattle has no sale; hogs are high. We think we will do better next year. We can get very good seed at a high price, but we don't sow any fall crops.

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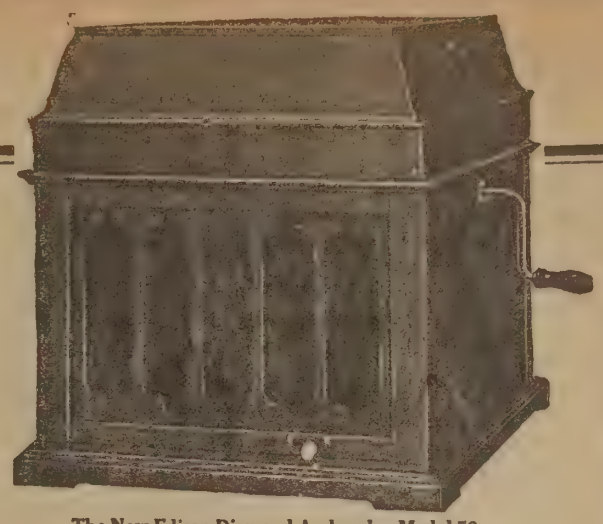
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Crossing the Bar
Glory Song
I Love to Tell the Story
Dreams of Galilee

BALLADS

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Silver Threads Among the Gold
I'll Take You Home Again, Kathleen
Take This Letter to My Mother
Only to See Her Face Again
When You and I Were Young, Maggie

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Heart of America March
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My Country, 'Tis of Thee (America)
We're Tenting To-Night
American Fantasie
Yankee Doodle

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Dominion of Canada March
Boys of the Old Brigade March
Ben Hur Chariot Race March
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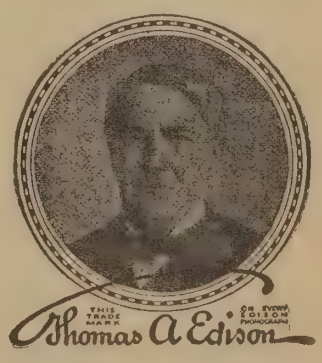
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Magazine Department of The Washington Farmer

Another Bunch Grasser

By IDA C. YOUNG, Bend, Ore.

The Bunch Grass Boy has arrived; his tale is extremely interesting; it is also true. I know because I lived within a few miles of his home. His people and his incidents are true to life.

His idea of the dust and the dust-storms is absolutely correct. I presume to this day the farmers start out from their homes with a load of wheat and drive from two to 10 miles into town without being able to see more than an occasional glimpse of their teams all along the way. Four, six and eight horse teams pass each other without recognition, though they may be neighbors. There's only the rattle of the wagons, an occasional glimpse of part of a horse, a wheel or the driver, sometimes only the whip stalk waving aloft in a little rift in the cloud. Usually there is a friendly warning call as "they speak each other in passing." Then darkness again and silence. Ships that pass in the night have nothing on these wheat schooners of the Big Bend country, and the never-ending dust.

The Bunch Grass Bay's tribute to the pioneers is true and worthy. Mrs. Susie Hill certainly understood the science of giving. If the rest of the world understood it as well there would be little loneliness or little poverty. Grandpa Utt is well described as the patriarch of Sunday schools. D. E. Reeves, the first storekeeper in the small wheat station of Hartline; John R. Lewis, the Kirklands, even Bob Pugh, are all faithfully remembered.

Also I have a perfectly clear picture of some of his school days, having been his teacher for three successive terms. I can still see Jimmie Paullus and his smile, the most expansive smile that was ever my good fortune to meet. When Jimmie smiled his ears moved up, his scalp moved forward, and that smile spread and spread until even his freckles were lost to view. One day when I had gone to great pains to develop the idea of spring and well water I thought I had worked up very faithfully to the point of the lesson. Then, turning to Jimmie, I said: "Now, Jimmie, when people settle in a dry country very far from lakes and rivers and streams what will they do for water?" I wasn't long in doubt. Jimmie waited a little, giving his smile time to develop, and answered quite readily, "Haul it."

Tommy East remains clear in my mind because of his twinkling eyes. When anything was on foot I had only to look at Tommy, and while the rest of his face and body were in perfect repose his eyes fairly shouted joy and mirth. I hope he still has that power of enjoyment.

The Bunch Grass Boy himself was the boy whose report card always averaged up in the nineties, especially so in composition work. I wish I could remember what finally became of that portion of the coyote story that he speaks of. It was written on manila wrapping paper, yards and yards of it, and it did give promise of the talent that has since come to light. But somewhere in my travels it has disappeared. I'm sorry, because I think he himself would enjoy going over it again, as well as the rest of us, who knew him then.

His childhood experiences are of interest to me chiefly, I think, because they differed so greatly from my own. Whereas he gives one such a sensation of loneliness in that period of his life, my memories of the corresponding period in my own days are filled with events that fairly seethe with excitement and interest.

In 1883, in June, we drove over the unbroken bunch grass and camped beside a spring some 10 miles distant from the place where Hartline now stands. Only a few weeks went by, and seven other families followed our wagon track and camped beside the same spring. There were the Rusheaus, Anthony and Frank, with their respective families; the Days, with six boys; John Henry Smith, with five children; E. O. Whitney, with two; Mr. and Mrs. F. H. Bosworth, with their grown son, and the McCanns finished the camp. Loneliness was certainly an unknown term to us children, or any one else, all that summer, and though by cold weather all the families had located in the neighborhood and we were alone beside the spring, there was no lack of interest and entertainment.

My brother came home one day with a small yellow pup, not much bigger than a bar of soap. Raising that pup was almost more than the three of us could accomplish, and it took most of our spare time. Then we had the only grindstone and the only organ in eastern Douglas county. Badger mountain, on the western side, had been settled just two months ahead of our settlement, and I believe there was an organ or piano among those settlers, also, I suppose, a grindstone. However, these two articles kept us from lack of company. We lived beside the road that lead to the canyons where grew the firewood for much of eastern Douglas county; people had to grind their axes. News and companionship was freely given in exchange for use of the grindstone. Our little cottage organ was an attraction peculiar to itself. Mother understood just enough of music to make it effective. I wish I had time and space to describe the practice meets that took place about that organ, when people rode distances of 15 miles and more to prepare a program.

These first few years formed a period of beginnings. There were the first regular religious services in Douglas county held by my grandfather, alternately at his home and at ours. There was the establishment of Lincoln postoffice, with F. H. Bosworth as postmaster. The first political election took place the second fall. That fall also saw the formation of school district No. 1. I still have in my possession my enrolment card with the printed statement, "A member of Douglas county's first school. C. C. Ladd, teacher."

The school house was the little log shack of a young bachelor, who was away out on the coast of Oregon somewhere earning enough to supply him with bacon and beans for the winter. What a time we had with our pencils and pens.

There were a row of us along the back of the shack, sitting on a bench. In front of us was a 12-inch board, fastened to stakes driven into the floor. Here we kept our books and paraphernalia. Later, there was a log school house, built with two whole windows on each side, a fairly good floor and large tables, around which the children sat on benches.

It was in this school house that mother did her pioneer teaching. It must have taken some effort to get up, look after breakfast, chickens, milk and butter, and see that we were on our way to school in time; but we all took a hand, and I don't remember that we had any special difficulty in being on time, although there was one occasion when doubts were present.

There was only one horse that morning, the 2-year-old filly Florrie that mother and little sister rode. The little buckskin that brother and I rode was hunting cattle that day with brother, so I was on foot. A yearling colt of Anthony Rusheau's had been hanging about the place and tagged along behind us to school, and when it came time to go home I remembered that I had seen the Rusheau girls ride that colt. They rode anything from a ridge pole to a yearling steer.

However, the colt was fairly gentle. I got close enough to hop on, and rode home, straggling along every which way. We met Dan Paul, an old-time cattleman (afterward senator), and to the time of his death, long years afterward, he never met me without some reference to the time when, as a little girl, I rode the colt without so much as a shoestring to hold on by.

There was another occasion that did not work out so smoothly, though we came home safe. We were all on our way home from school, traveling slowly and peacefully, when, I suppose, something frightened the horses. There was a short period of tremendous activity and confusion, and all four of us found ourselves sitting far apart in the bunch grass, with dinner pails, blankets and wraps sprinkled round, likewise far apart. The two horses stood at a safe distance, heads together, watching us curiously. I don't understand yet why they didn't go away and leave us, but they didn't. We finally caught them, loaded up and came home.

I should add here that we rode without saddles, so it was a simple matter to fall off.

To go back to this period of beginnings, I wish I could tell you of our first Fourth of July celebration; of the first occasion of votes for women, when they rode for 20 or 30 miles to cast their ballots; in the days when Washington was still a territory. I would like to go into details concerning our first surprise parties, Christmas tree and spelling schools; our first and last Indian scare; our experience with prairie fires. And, above all, I should like to impress you with the fact that there is a wonderful amount of pleasure and satisfaction in pioneering. While there is always much absence of the conveniences of a settled country there is also freedom from the cares and corruptions that creep into thickly settled communities. And, in some unexplainable way, there comes to the brave and persistent soul with high ideals and unwavering purpose a fulfilment of the highest and best desires in the wilderness just as much as in the opulent cities, as the Bunch Grass Boy himself has proved.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

"Blepharitis" the Reason Some Eyelids Stick Together

The eyelids are the portieres or curtains of your soul. As your temperament and nature shine forth through the glory of your eyes the expression and character are shaped and influenced more or less by your eyelids. Any deformity or disability which mars the appearance or control of the eyelids exerts an unpleasant effect upon the observer. Indeed, the power of the eyelids is such that you may by them determine what has been taking place.



Dr. Hirshberg

There is an inflammatory condition at the edge of the eyelids called "blepharitis," which is a blood brother to scaly dandruff, or seborrhea, as dermatological pundits like to call it.

Schorrhea, or dandruff, may be the origin of either an oily exudation or a dry, bran-like scurf. The former is called seborrhea oleosa and the latter seborrhea pityriasis from a Greek word, "pityron," which means bran.

In seborrhea, according to Dr. Douglas W. Montgomery of San Francisco, who has devoted some study to that malady, the skin becomes thick, dull and heavy in appearance.

Disorder of Fats.

This disorder really has much to do with the fatty constituents of the skin, and "as the skin is above all things a fatty organ," the significance of any check to its fat production can be appreciated. Beneath the healthy man's skin are "acres" of fat. The waxy "sebaceous" glands manufacture oils, fats and chloesterol, a fatty matter impervious to fermentation or bacterial attack.

If, however, a fermentable fat instead of a nonfermentable one is excreted by the fat and sweat glands, bacteria begin to thrive upon both and various disorders are initiated.

If the edges of the eyelids become mixed up in this condition, the oily excretions of the wax glands of the eyelids—the meibomian glands—in lieu of a lubricant, become hard, brittle and crystal, much like barley sugar.

It is this substance that sticks to the eyelashes and in the morning "gums up" the lids so unpleasantly that they may be stuck together.

Treatment Not Difficult.

Sties, crusts, scales and gummy matter may all become part of the bacterial invasion of the gummed-up in "blepharitis." It is a common ailment of the senile, because of the loss of fat in the tissues of the aged.

The treatment of sties, eyelid seborrhea and various infections of the eyelids is not difficult. The crusts and scales should be washed away with boric acid water. Then apply one part of ammoniated mercury ointment to four parts of white vaseline to the eyelids at night. Eight grains of yellow oxide of mercury to the ounce of vaseline is also used on the margin of the eyelids in this condition.

Sidelights

The Doctor Wasn't Called.

A boy developed a sudden pain about 8:15 Monday morning. His mother, naturally solicitous, asked, "Where do you feel sick, dear?" He considered a moment; then replied, "I feel sick in school."—C. T.

Mixed Up Relationship.

Due to the fact that two brothers married a mother and daughter in Stockton, Cal., one brother became stepfather to his brother. Also, one bride is her daughter's sister-in-law and stepmother to her brother-in-law.—New York Sun.

Unnecessary.

The town council of a small Scotch community met to inspect a site for a new hall. They assembled at a chapel, and as it was a warm day a member suggested that they should leave their coats there.

"Some one can stay behind and watch them," suggested another.

"What for?" demanded a third. "If we are going out together, what need is there for any one to watch the clothes?"—Tit-Bits.

First Aid.

She took a course of first aid to the injured, and, after long and anxiously waiting, the street accident she had earnestly wished for took place.

It was a bicycle accident, the man had broken his leg; she confiscated the walking stick of a passerby and broke it in three pices for splints; she blushingly took off her underskirt for bandages and she was enthusiastically cheered by the crowd. When all was completed she summoned a cab and took her patient to the hospital.

"Who bandaged this limb so creditably?" inquired the surgeon.

"I did," she blushingly replied.

"Well, it is most beautifully done," said the surgeon, "but you have, I see, made one little mistake."

She felt terribly self-conscious.

"You have bandaged the wrong leg," he said quietly.—Baltimore Sun.

Prayer of the Red Cross Nurse.

Dear Lord, if I can smooth a brow,
Or smooth a fevered brain,
Or stanch the life blood of a heart,
I serve and not in vain.

Oh, but my need for help and strength
Is as the need of ten;
I pray thee, pour thy grace on me—
Not for myself, but them!

When sunken eyes look into mine,
They must find courage there;
I must give hope, e'en when my heart
Of hope is stripped and bare.

I know no country, creed or race,
But o'er life's little span,
'Tis mine to steady wounded feet,
To serve thee, Lord—and man

And so I life my hands to thee;
Lord, fill them for my task,
That they may overflow to them—
Lord, this is what I ask.

—Marion Seymour Kirkland, in Everywoman's World.

All the World's a Stage, and All the Men and Women Merely Players

Brought to Earth in France



French Official Photo.

The German machine and its pilot were brought to earth inside the French lines by clever firing on the part of French gunners and their anti-aircraft guns.

Department Store Demonstration



U. S. Food Administration.

The department store food conservation demonstration under the auspices of the women's municipal league of Boston, Mass. Every wide-awake American woman is today looking about for some way in which she may serve her country. In connection with this, Woodrow Wilson says: "In no direction can the women of America so greatly assist as by enlisting in the service of the food administration and cheerfully accepting its direction and advice. By so doing they will increase the surplus of food available for our own army and for export to the allies."

U. S. Men in Trenches Overseas



French Official Photo.

The photo was taken during the progress of a sham battle between French veterans and "Our Boys," who are rapidly learning all that their French instructors can teach them and are eager to get to the front and do their "bit."

Wins Canning Contest.



U. S. Food Administration.

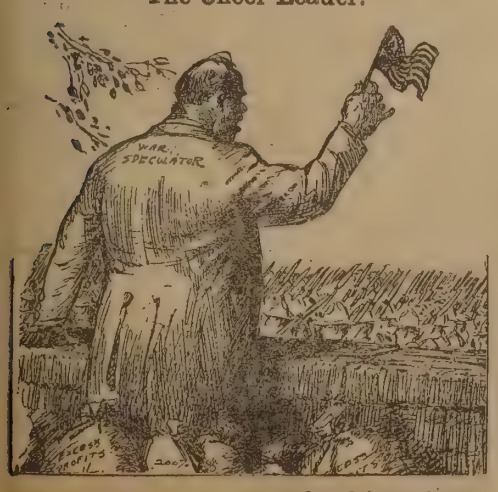
The above photograph shows Miss Helen Tew of Washington, D. C., who has been awarded check No. 1 for $5 in the nation-wide contest conducted by the national emergency food garden commission for the best canned vegetables grown in war gardens. The picture shows her in the uniform of the United States food administration. The commission, of which Charles Lathrop Pack, the president of the American Forestry association, is the head, is giving $5000 in prizes apportioned to the various states, to promote food conservation, and hundreds of war garden exhibits all over the country are applying for this nation-wide recognition of their work.

Congressman to War.



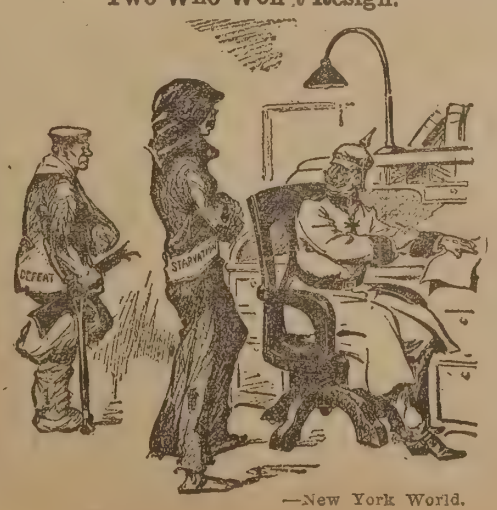
The above is the photograph of Captain Heintz of Cincinnatti. This Ohioan recently resigned from congress to take active part in Uncle Sam's war on Germany. He is captain in the First Ohio infantry, and is adjutant of the regiment. He is now at Camp Sheridan, Montgomery, Ala., to which post he brought some 900 soldiers. This is the only photograph taken of the popular congressman and officer in military garb and shows him at camp.

The Cheer Leader.



—New Orleans Item.

Two Who Won't Resign.



—New York World.



THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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SYNOPSIS.

Gale is trader of Flambeau, a frontier on the Yukon. Lieutenant Burrell is sent to this camp to preserve order. The day of his arrival Necia, Gale's daughter, returns from a mission school. As she and Burrell are talking, two halfbreed children and a squaw appear, and Necia, noting the lieutenant's look of disgust, informs him that they are her mother, brother and sister. Poleon Doret, a Frenchman, returns from Dawson, and on the same boat comes Runnion, a desperado. In attempting to make Runnion leave Flambeau, Burrell is shot by him and only the quick hand of Poleon saves him.

As Necia is arrayed in a ball gown, which Poleon brought her from Dawson, Burrell happens in. He is amazed at the ease with which she wears the dress and at the fairness of her skin. She confesses to a feeling that she, Necia, should be called "Merridy."

"No Creek" Lee, a prospector, after years of hard luck, makes a big strike. Runnion returns, and with him Stark, who has come to grubstake the miners and open a saloon. Stark causes Gale and the Squaw Alluna, great uneasiness. The men of the camp leave for Lee's claim, Necia, longing for riches so she may become like other girls, begs Burrell to follow them with her. Burrell knows that Necia is coveted by half the men in the camp and that it would cause a great uproar should he spend a night alone with her in the woods. This would be an easy way to compel them to an open state of enmity, which would be preferable to the indifferent toleration which he has met among them. This together with her entreaties and the confession that she loves him, sweeps aside all discretion and together they start on the journey.

CHAPTER V.

A Story Is Begun.

"It's fonny t'ing how two brown eye
Was changin' everyt'ing—
De cloud she's no more on de sky,
An' winter's jus' lak' spring.
Dey mak' my pack so very light,
De trail, she's not so long—
I'd walk it t'orty mile tonight
For hear her sing wan song.
But now I'm busy mak' fortune
For marry on dat girl,
An' if she's tole me yass, dat's soon,
Bonheur! I'm own de worl'!"

Poleon Doret sang gayly as the trader came towards him through the open grove of birch, for he was happy this afternoon, and, being much of a dreamer this fresh enterprise awoke in him a boyish pleasure. Then Necia had teased him as he came away, and begged him, as was always her custom, to take her with him, no matter whence or whither, so long as there was adventure afoot. Well, it would not be long now before he could say yes, and he would take her on a journey far longer than either of them had yet taken—a journey that would never end. Had not the gods looked with favor, at last, upon his long novitiate, and been pleased with the faith he had kept? Had not this discovery of "No Creek" Lee's been providentially arranged for his own especial benefit? A fool could see that this was a mark of celestial approbation, and none but a fool would question the wisdom of the gods. Had he not watched the girl grow from a slip of 13 and spoken never a word of his love? Had he not served and guarded her with all the gentle chivalry of an olden knight? Of course! And here was his reward, a gift of wealth to crown his service, all for her. Now that she was a woman, and had seen him tried, and knew he was a man, he would bring his burden of prosperity and lay it at her feet, saying:

"Here is another offering, my Necia, and with it go the laughter and the music and the heart of Poleon Doret."

Sacre! It would not take her long to wake up after that! The world was very bright indeed this afternoon, and he burst again into song in company with the voices of the forest people:

"Chante, rossignol, chante:
Toi qui a le coeur gai;
Tu as le coeur a rire
Mai j' l' ai-t-a pleurer.
Il y a longtemps que j' t' aime
Jamais je ne t'oublieral."

"Whew!" said Gale, slipping out of his pack-straps, "the skeeters is bad."

"Sing, little bird, oh, sing away!
You with the voice so light and gay!
Yours is a heart that laughter cheers,
Mine is a heart that's full of tears.
Long have I loved, I love her yet;
Leave her I can, but not forget."

"You bet your gum boots," said Poleon. "Dey're mos' so t'ick as de summer dey kill Johnnie Platt on de Porcupine." Both men wore gauntleted gloves of caribou skin and head harnesses of mosquito netting stretched over globe-like frames of thin steel bands, which they slipped on over their hats after the manner of divers' helmets, for without protection of some kind the insects would have made travel impossible once the Yukon breezes were left behind or once the trail dipped from the high divides where there was no moss.

"Let's see. It was you that found him, wasn't it?" said Gale.

"Sure t'ing! I'm comin' down for grub in my canoe, w'en I see dis feller on de bank, walkin' lak' he's in beeg horry. 'Ba Gar!' I say, 'dere's man goin' so fast he'll meet hese'f comin' home!' Den he turn roun' an' go tearin' back, wavin' hees arms lak' he's callin' me, till he fall down. W'en I paddle close up, I don' know 'im no more dan stranger, an' me an' Johnnie Platt is trap togeder wan winter. W'at you t'ink of dat?"

"I saw a fellow killed that way at Holy Cross," interpolated the trader.

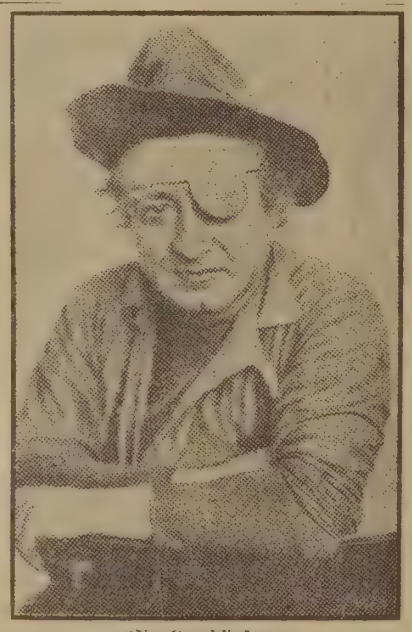
"'Hello,' I say, 'wat's de matter?' An' den I see somet'ink 'bout 'im dat look familiar. Hees face she's all swell' up an' bleedin' lak' raw meat." The Frenchman curled his upper lip back from his teeth and shook his head at the remembrance.

"Jesu, dat's horrible sight! Dem fly is drive 'im crazee. Hees nose an' ears is look lak' holes in beeg red sponge, 'an hees eye are close up tight."

didn't he?"

"Yes. He was good man, too. Some tam' if I ever have bad enemy w'at I like to see catch hell I'm goin' turn 'im loose 'mong dose skeeter-bug."

"Holy mackinaw!" ejaculated Gale. "Who'd ever think of that? Why,



"No Creek" Lee.

that's worse than dropping water on his skull till he goes crazy, like them Chinamen do."

The Frenchman nodded. "It's the wors' t'ing I know. Dat's w'y I lak' to geeve it to my enemy.'

"Imagine fightin' the little devils till they stung you crazy and pizened your eyes shut!"

Gale fell to considering this, while Poleon filled his pipe, and, raising his veil, undertook to smoke. The pests proved too numerous, however, and forced him to give it up.

"Ba gosh! Dey're hongry!"

"It will be all right when we get out of the woods," said the elder man.

"I guess you been purty glad for havin' Necia home again, eh?" ventured the other after a while, unable to avoid any longer the subject uppermost in his mind.

"Yes, I'm glad she's through with her schooling."

"She's gettin' purty beeg gal now."

"That's right."

"By an' by shes' goin' marry on some feller—w'at?"

"I suppose so. She ain't the kind to stay single."

"Ha! Dat's right, too. Mebbe you don' care if she does get marry, eh?'

"Not if she gets a man that will treat her right."

"Wal! Wal! Dere's no trouble 'bout dat," exclaimed Doret, fervently. "No man w'at's livin' could treat her bad. She's too good an' too purty for have bad husban'."

"She is, is she?" Gale turned on him with a strange glare in his eyes. "Them's the kind that get the hedevils. There's something about a good girl that attracts a bad man, particularly if she's pretty; and it goes double, too—the good men get the hellions.

"Necia wouldn't marry no bad man," said Doret, positively.

"No?" said Gale. "Let me tell you what I saw with my own eyes. I knew a girl once that was just as good and pure as Necia, and just as pretty, too—yes, and a thousand times prettier."

"Ho, ho!" laughed Doret, skeptically.

"She was an eastern girl, and she come west where men were different to what she'd been used to. Those were early days, and it was a new country, where a person didn't know much about his neighbor's past and cared less; and, although there were a heap of girls thereabouts, they were the kind you'll always find in such communities, while this one was plumb different. Man! Man! But she was different. She was a woman! Two fellows fell in love with her. One of them lived in the same camp as her, and he was a good man, leastways everybody said he was, but he wasn't wise to all the fancy tricks that pretty women hanker after; and, it being his first affair, he was right down buffaloed at the very thought of her, so he just hung around and slept late so that he might dream about her and feel like he was her equal or that she loved back at him. You know! The other fellow came from a neighboring town, and he wasn't the same kind, for he'd knocked around more, and was a better liar, but he wasn't right. No, sir! He was sure a wrong guy, as it came out, but he was handsome and younger, and the very purity and innocence of the girl drew him, I reckon, being a change from what he had ever mixed up with."

"W'y don' dis good man tak' a shot at him, asked Poleon, hotly.

"First, he didn't realize what was going on, being too tied up with dreaming, I reckon; and, second, neither man didn't know the other by sight, living as they did in different parts; third, he was an ordinary sort of fellow, and hadn't ever had any trouble, man to man, at that time. Anyhow, the girl up and took the bad one."

"W'at does de good man do, eh?"

"Well, he was all tore up about it, but he went away like a sick quail hides out."

"Dat's too bad."

"He heard about them now and then, and what he heard tore him up worse than the other had, for the girl's husband couldn't wear the harness long, and, having taken away what good there was in her, he made up in deviltry for the time he had lost. She stood it pretty well, and never whimpered, even when her eyes were open and she saw what a prize package she had drawn. The fact that she was game enough to stand for him and yet keep herself clean without complaint made the man worse. He tried to break her spirit in a thousand ways, tried to make her the same as he was, tried to make her a bad woman, like the others he had known. It appeared like the one pleasure he got was to torture her."

"W'y don' she quit 'im?" said Doret. "Dat ain' wrong for quit a man lak' him."

"She couldn't quit on account of the kid. They had a youngster. Then, too, she had ideas of her own; so she stood it for three years, living worse than a dog, till she saw it wasn't any use—till she saw that he would make a bad woman of her as sure as he would make one of the kid—till he got rough—"

"No! No! You don' mean dat? No man don' hurt no woman," interjected Doret.

"By God! That's just what I mean," the trader answered, while his face had grown so gray as to match his brows. "He beat her."

Poleon broke into French words that accorded well with the trader's harsh voice.

"The woman sent for the other man after that, for he had been living lonely, loving her all the time, and you'd better believe he went."

"Ha! Dat's fine! Dat's dam' fine!" said the other. "I'll bet dere's hell to pay den—w'at?

"Yes, there was a kind of reckoning.' The old man lapsed into moody silence, the younger one waiting eagerly for him to continue, but there came the sound of voices down the trail, and they looked up.

"Here comes Lee," said Gale.

"W'at happen' den I'm got great interes' 'bout dis woman," insisted Poleon.

"It's a long story, and I just told you this much to show what I said was true about a good girl and a bad man, and to show why I want Necia to get a good one. The sooner it happens the better it will suit me."

Neither man had ever spoken thus openly to the other about Necia before, and although their language was indirect, each knew the other's thought. But there was no time for further talk now, for the others were close upon them. As they came into view, Gale exclaimed:

"Well, if he hasn't brought Runnion along."

"Humph!" grunted Doret. "I don't t'ink much of dat feller. W'at de matter wit' 'No Creek,' anyhow?"

The three new arrivals dropped down upon the moss to rest, for the up-trail was heavy and the air sultry inside the forest. Lee was the first to speak.

"Did you get away without bein' seen?" he asked.

"Sure," answered Gale. "Poleon has been here two hours."

"That's good; I don't want nobody taggin' along.'

"We came right through the town boldly,' announced Stark, "but if they had seen you two they would have suspected something, sure."

Runnion volunteered nothing except oaths at the mosquitoes and at his pack-straps, which were new and cut





him already. As no explanation of his presence was offered, neither the trader nor Doret made any comment then, but it came out later, when the old miner dropped far enough behind the others to render conversation possible.

"You decided to take in another one, eh?" Gale asked Lee.

"It wasn't exactly my doin's," replied the miner. "Stark asked me to let Runnion come 'long, bein' as he had grub-staked him, and he seemed so set on it that I ackeressed. You see, it's the first chance I ever had to pay him back for a favor he done me in the Cassiar country. There's plenty of land to go around."

It was Lee's affair, thought the trader, and he might tell whom he liked, so he said no more, but fell to studying the back of the man next in front, who happened to be Stark, observing every move and trick of him, and, during the frequent pauses, making a point of listening and watching him guardedly.

All through the afternoon the five men wound up the valley, following one another's footsteps, emerging from somber thickets of fir to flounder across wide pastures of "nigger-heads," that wobbled and wriggled and bowed beneath their feet, until at cost of much effort and profanity they gained the firmer footing of the forest. Occasionally they came upon the stream, and found easier going along its gravel bars, till a bend threw them again into the meadows and mesas on either hand. Their course led them far up the big valley to another stream that entered from the right, bearing backward in a great bow toward the Yukon, and always there were dense clouds of mosquitoes above their heads. At one point Stark, hot and irritable, remarked:

"There must be a shorter cut than this, Lee?"

"I reckon there is," the miner replied, "but I've always had a pack to carry, so I chose the level ground ruther than climb the divides."

"S'pose dose people at camp hear 'bout dis strike an' beat us in?" suggested Poleon.

"It wouldn't be easy going for them after they got there," Stark said, sourly. "I, for one, wouldn't stand for it."

"Nor I," agreed Runnion.

"I don't see how you'd help yourself," the trader remarked. "One man's got as good a right as another."

"I guess I'd help myself, all right," Stark laughed, significantly, as did Runnion, who added:

"Lee is entitled to put in anybody he wants on his own discovery, and if anybody tries to get ahead of us there's liable to be trouble."

"I reckon if I don't know no short-cut, nobody else does," Lee remarked, whereupon Doret spoke up reassuringly:

"Dere's no use gettin' scare' lak dat, biccause nobody knows w'ere Lee's creek she's locate' but John an' me, an' dere's nobody w'at knows he mak' de strike but us four."

"Thats right," said Gale; "the only other way across is by Black Bear creek, and there ain't a half dozen men ever been up to the head of that stream, much less over the divide, so I don't allow there's any use to fret ourselves."

They went on their way, traveling leisurely until late evening, when they camped at the mouth of the valley up which the miner's cabin lay. They chose a long gravel bar, that curved like a scimitar, and made down upon its outer tip where the breeze tended to thin the plague of insects. They were all old-stagers in the ways of camplife, so there was no lost motion or bickering as to their respective duties. Their preparations were simple. First they built a circle of smudges out of wet driftwood, and inside this Lee kindled a camp-fire of dry sticks, upon which he cooked, protected by the smoke of the others, while Gale went back to the edge of the forest and felled a dozen small firs, the branches of which he clipped. These Poleon and Runnion bore down to the end of the spit for bedding, while Stark chopped a pile of dry wood for the night. Gale noted that the new man swung an axe with the free dexterity of one to whom its feel was familiar, also that he never made a slip nor dulled it on the gravel of the bar, displaying an all-round completeness anda knack of doing things efficiently that won reluctant approval from the trader despite the unreasoning dislike he had taken to him.

Lee was ready for them by the time they had finished their tasks and, fanned by the breeze that sucked up the stream and lulled by the waters, they ate their scanty supper. Their one-eyed guide had lived so long among mosquitoes and had become so inoculated with their poison that he was in a measure impervious to their sting, hence the insects gathered on his wrinkled, hair-grown hide only to give up in melancholy disgust and fly to other and fuller-blooded feeding grounds. Camp had been made early, at Gale's suggestion, instead of pushing on a few miles farther, as Lee had intended; and now, when the cool evening fell and the draught quickened, it became possible to lay off gloves and headgear, so they sat about the fire, talking, smoking and rubbing their tired feet.

It is at such hours and in the smoke of such fires that men hark backward and bring forth the sacred, time-worn memories they have treasured, to turn them over fondly by the glow of dying embers. It is at such times that men's garrulity asserts itself, for the barriers of caution are let down, as are the gates of remembrance, and it is then that friends and enemies are made, for there are those who can not listen and others who can not understand.

"No Creek" Lee, the one-eyed miner who had made this lucky strike, told in simple words of his long and solitary quest, when ill luck had risen with him at the dawn and misfortune had stalked beside him as he drifted and drank from camp to camp, while the gloom of a settled pessimism soured him, and men began to shun him because of the evil that seemed to follow in his steps.

"I've been rainbow chasin' 40 years," he said, "and never caught nothin' but cramps and epidemics and inflammations. I'm the only miner in Alaska that never made a discovery of gold and never had a creek named after him."

"Is that how you got your name?" asked Runnion.

"It is. I never was no good to myself nor nobody else. I just occupied space. I've been the vermifuge appendix of the body politic; yes, worse'n that—I've been an appendix with a seed in it. I made myself sore and everybody around me, but I'm at the bat now and don't you never let that fact escape you."

"How are you going to spend your money? inquired Stark.

"I'm going to eat it up! I've fed on dried and desiccated and other disastrous and dissatisfactory diets till I'm all shriveled up inside like a dead puffball; now It's me for the big feed and the long drink. I'm goin' to Frisco and get full of wasteful and exorbitant grup of one kind and another, like tomatters and French vicious water."

Poleon Doret laughed with the others; he was bubbling with the spirits of a boy whose life is clean, for whom there are no eyes in the black dark that lies beyond a campfire, and for whom there are no unforgettable faces in its smoke. When Lee fell silent the trader and Stark resumed their talk, which was mainly of California, it seemed to the Frenchman, who also noted that it was his friend who subtly shaped the topics. In time their stories revived his memory of the conversation in the birch grove that morning, and when there occurred a lapse in the talk he said:

(Continued on page 42.)

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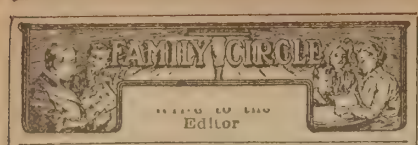
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ALICE W. BARLAND
Editorial Contributor.

Chemicals for Stains

In removing stains chemicals should not be used until water or laundering has been tried for they attack the fibers of the cloth as well as the stain, according to a bulletin issued by the United States department of agriculture, on the removal of stains from Clothing and other textiles.

There are a few common chemicals which are necessary in removing some stains and these should be kept in every household. As some of these chemicals are poisonous they should not be kept in the family medicine cabinet or pantry. Chemicals most commonly used in removing stains are Javelle water, potassium permanganate (solution), oxalic acid, ammonia water, carbon tetrachlorid, French chalk and cream of tartar. With these chemicals should be kept some of the utensils used in applying them; such as a medium-sized bowl, a medicine dropper, a glass rod with rounded ends, several pads of cheese cloth or old muslin, and a small sponge.

If the effect of the stain remover upon the fiber or color is not known try it by applying a little to a sample or to an unexposed portion of the goods. Sometimes it is best to remove the stain even if some of the color is removed also, for the color often may be restored by careful tinting.

Work rapidly when using chemicals to remove stains so as to give them as little time as possible to act on the textile fibers. Stretch the stained portion of the garment over a bowl of clean water and apply the chemical with a medicine dropper. The chemicals may be rinsed out quickly by dipping in the clean water. Another method is to place the stained portion over a pad of folded cloth and apply the chemical with a glass rod. The rinsing or neutralizing always must be thorough.

Save Late Vegetables

By RUTH GIPSON PLOWHEAD.

Many of us have been canning and preserving and pickling, trying to do our "bit," until we wonder what we can save next. Two things which will help out next winter's table are tomato paste and soup mixture. Surplus tomatoes may be washed, boiled with the skins on, until part of the water is evaporated from them. They are then run through a sieve to remove skins and seeds, packed in jars or bottles, and boiled 30 minutes, in boilers, according to the cold pack method. Any odd bottles may be used for canning this tomato paste, for when one does much canning the matter of fruit jars often looms large. If canned in bottles they should be corked and the top of the bottle dipped in melted paraffin. If one cares to make the mixture already seasoned for soup, add one large grated onion, one teaspoonful celery seed, one tablespoonful of sugar, one teaspoonful of salt, pepper and other spices to taste to each quart of pulp, when tomatoes are first put on to boil.

A Good Soup Mixture.

While one may make soup from the winter vegetables, it is not always that we have the variety necessary for a good vegetable soup. Any favorite vegetables may be used, but the following is a good mixture:

One quart chopped onions.
One quart chopped turnips.
One pint chopped carrots.
I quart chopped celery.
One pint cabbage.
One quart string beans.
One quart tender corn.

All these vegetables should be freshly picked, blanched about 10 minutes cold dipped and prepared at once. The mixture may be packed in the jars, boiling water added, and a teaspoonful of salt to each quart, or the soup stock may be poured over the half-filled jar of vegetables. However, if one has the jar of vegetables the stock may be often made in the winter from ends of meat.

This mixture must be boiled according to cold pack method for three hours if boiler is used, and the jars completely submerged in water. It seems to me there is no better way of using the surplus vegetables, especially if there is but a small amount of each variety, so small that it does not pay to store it for winter, or if one has no good storage cellar.

Any family vegetables may be used as a soup mixture. In our family the above vegetables, together with finely diced potatoes, rice and barley make a soup which seems to exactly "hit the spot," especially in cold weather.

Substitutes for Sugar.

Herbert Hoover has sent out a call for the saving of sugar, and many of us are wondering in what manner we may save. Aside from cutting down the amount of candies, and with desserts, there is another thing we may do—substitute. Sorghum, honey or molasses may each be used in cooking, and there are a number of ways that each may be made to take the part of sugar. Either sorghum or molasses may be used in gingerbread. If I use sorghum I put caramel in to give the gingerbread the darker color we are used to. A good recipe for gingerbread is as follows:

A half cup sugar, 1 cup molasses, 1-2 cup melted lard, 1 teaspoonful each of cinnamon, ginger, cloves; teaspoonful soda, dissolved in a cup boiling water; 2 1-2 cups flour, 1-2 teaspoonful salt, 1 well-beaten egg.

Practically each cook has her own recipe for ginger cookies which are very good to put in the dinner pail, and which may be made with no sugar at all. Honey cookies are delicious, many bakers finding them good sellers. A rule for honey cookies found in a "honey book" is:

One cup honey, 1 cup brown sugar, 2 eggs, teaspoonful soda dissolved in 3 tablespoonsful of vinegar, pinch of salt, flour to stiffen. Mix at night and bake in the morning.

Honey candy is good, too. When the youngsters are hungry for candy try boiling honey candy as you would molasses candy until it forms a very hard ball in cold water. It should be pulled and cut in any sized pieces desired.

R. G. P.

Crochet and Tatting Designs

By WINIFRED WORTH



NOVEL BOUDOIR CAP.

Caps of this description are always popular, as they offer a variety of work to the diligent crochet worker.

Ch. 33.

First raw—1 t. in 4th ch. 28 t. turn.

Second row—Ch. 3 (ch. 3 at end of each row and count it, as 1 t.) 29 t.

Third to ninth row—Same as 1st.

Tenth row—9 t 5 ch. 1 dt. between 15 and 16 st. 5 ch. 9 t. turn.

Eleventh row—7 t. 5 ch. 3 dc. (1 over ch. 1 in dt. and 1 over t.) 5 ch. 7 t. turn.

Twelfth row—5 t. 5 ch. 5 dc. 5 ch. 5 t. turn.

Thirteenth row—7 t 5 ch. 3 dc. 5 ch. 7 t. turn.

Fourteenth row—9 t. 5 ch. 1 dt. 5 ch. 9 t. turn.

Repeat until 20 motifs are made. Repeat first nine rows.

Turn back ends to form little ears.

The crown is made of loops and finished with a small rose. Line with net.

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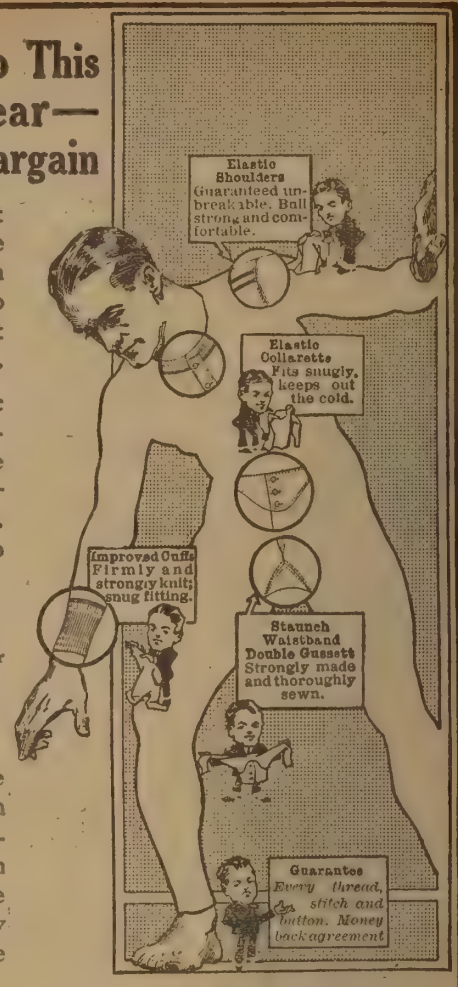
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Patterns

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1979—Lady's shirt waist. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 2 3-4 yards of 36-inch material for a 36-inch size. Price, 10 cents.

2015—Girl's one-piece dress. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. It requires 4 1-4 yards of 44-inch material for a 10-year size. Price, 10 cents.

2238—Dress for misses and small women. Cut in 3 sizes: 16, 18 and 20 years. Size 18 requires 6 1-4 yards for skirt and bolero and 2 5-8 yards for the waist, of 24-inch material. The skirt measures about 2 3-8 yards at the foot. Price, 10 cents.

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2229-2228—Dress for business or home wear. Waist 2229 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2228 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. A medium size will require 6 7-8 yards of one material, 36 inches wide. The skirt measures 2 1-2 yards at the foot. Two separate patterns, 10 cents for each pattern.

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2233—Boy's suit. Cut in 4 sizes: 3, 4, 5 and 6 years. Size 4 requires 2 3-4 yards of 36-inch material. Price, 10 cents.

2227—Lady's dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 5 5-8 yards of 36-inch material. The skirt measures about 2 1-3 yards at the lower edge. Price, 10 cents.

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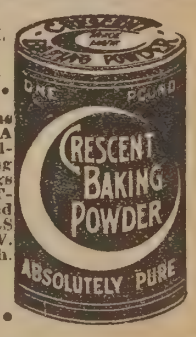
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Dear Aunt Nellie: It has been a long time since I wrote to you and the cousins, so I will write a short letter. My subject is Helping the Red Cross. The school at Joyce has a schoolhouse and 17 pupils go to it and one more is to come. We had a Red Cross meeting at the school. We sang songs and read and said pieces. I read the "Star Spangled Banner." Tonight I saw a sunset that was so beautiful that I thought I would mention it. It was all the colors of the rainbow. They were all mixed up so pretty. Thanksgiving is coming soon again. Every Thanksgiving we have a turkey or a young hen fried or if we have a turkey we roast it. We have eight little pigs. We had 12 but four of them died. They are growing so fast they will soon be grown. I am 9 years old. My birthday was August 17. I have six brothers and I am the only girl in the family.—Grace Miller, Joyce, Wash.

Out in the Country With Her Aunt.

Dear Aunt Nellie: This is the first time I have ever written to the Corner I am 11 years of age and in the fifth A grade at school. My teacher's name is Miss Ford, and she is a nice teacher. My home is in Olympia, Wash. I am out in the country with my aunt. Aunt Nellie can you tell me of some little girl who is sick or unhappy, for I will be very pleased to write to her? Our school is going to have a Hallowe'en dialogue. I hope all the children will have a good time on Hallowe'en. The first thing I do when the Farmer comes home is to look at the Children's Corner. If there is any little girl who is lonesome she can write to the Corner or read the letters of the Corner.—Gladys Jacobsen, box 155, Quincy, Wash.

Clara Loves to Ride Horseback.

Dear Aunt Nellie: This is the first letter I have written to the Children's Corner and I hope it will not be the last. I am 13 years old. My birthday is April 23. Have I a twin? If so I would like to hear from her. I live on a 160-acre farm 12 miles from town, but we are going to move to town in a few days. We have six horses, two yearling calves, one cow and a little baby calf. We have 50 chickens and five geese. I have five sisters and three brothers. My oldest sister is 15 years old and my youngest sister is 16 months old. I did have four brothers, but my oldest brother died last winter with the measles. He was 18 years old. His name was Maurice. We all had the measles. I have brown hair and blue eyes. I am five feet high and weigh 90 pounds. I love to ride horseback. My oldest sister takes The Farmer and as soon as the paper comes I turn to the Children's Corner and I enjoy reading the cousins' letter very much. I am trying to see how long a letetr I can write to dear Aunt Nellie. I hope she will like my letter. My uncle, Lorén Hudson, and my oldest sister, Lillian, and I, went to the Spokane fair last fall. We took in two circuses, too. We surely had a fine time. We were gone three weeks.—Clara Belle Walker, R. F. D. No. 2, Box 48, Republic, Wash.

The Work of the Red Cross.

Dear Aunt Nellie: I have been reading the letters in the Children's Corner for a long time and I think them very interesting. This is the first time I have written. I am 10 years old. My birthday was October 5. I am in the fifth grade. Have I a twin? The subject I will write on is The Red Cross. The subject of the Red Cross is more important now than it ever was before, because of the war that is now in progress. The Red Cross workers in France have faced the terrible fire of the Germans with the utmost bravery. They have saved the lives of hundreds of thousands of boys, who, otherwise would have lain on the field to die in the worst pains imaginable—burns from the liquid fire, from holes torn in them by shrapnel shells, and by hunger and starvation. In America real Red Cross work has only begun. Although many American women have lost their lives already in their effort of mercy to the French soldiers, a far greater number may yet lose their lives. With the departing of our soldiers to France, there will be a far greater need of Red Cross workers and of money to buy materials. The people who remain at home should be liberal with their money.—Henry Giles, Sunset, Wash.

Who Is Edith's Twin?

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am 11 years old and my birthday is the 12th of September. Have I a twin? If I have I wish she would write to me. I go to school and am in the sixth grade. My teacher's name is Mr. Waldren. I have a little pet kitten. It is black and white. Its name is Spotty. I can crochet and tat. I have read many books, but the best book is "Alice in Wonderland." We have lots of fruit such as apples, pears, prunes and cherries, and a few kinds of berries and vegetables. I have one sister whose name is Agnes. She is 17 years old. Her birthday is the eighth of July. She would be very glad if some one of her age would write to her, too. I have two dolls and a toy kitten. It will meow if you hit it. I help on the farm and do housework. I wash and wipe dishes, sweep the floor and make beds.—Edith Holm, Box 5, Olalla, Wash.

Nellie's Chickens Won First Prize.

Dear Aunt Nellie:— This is the first time I have written to the Children's Corner. I like to read the letters of the Corner. I live on a 12-acre farm. Papa has a chicken ranch. We live two miles north of Marysville. We have two cows. Their names are Queen and Cherry. We have between 1000 and 1500 chickens. I have three sisters. Their names are Hazel, Alice and Ethel. I am 10 years old. My birthday is August 10. I have two brothers. Their names are Lyle and Roy. There was a school fair at Marysville. Hazel took peas, beans, carrots and a bushel of potatoes. Lyle and Roy each took a pumpkin, but they never got a prize. I took two pens of chickens. I got first prize on one pen. The prize was a setting of eggs from Mr. Darling. I ride in a truck to school. My teacher's name is Miss Facklam. I like her very well. I am in the fifth grade. I go to sewing every Friday. I like to go to school. I hope to see my letter printed in the Corner.—Nellie Wade, Marysville, Wash.

Takes the Sheep to Pasture.

Dear Aunt Nellie: My subject is about our farm. We live on a 20-acre irrigated farm. We have a large barn with a round roof. We milk eight cows and their names are Fannie, Lucy, Daisy, Mary, Topsy, Goldie, Rosy and Nellie. I have a pet cat and his name is Tom. We have a dog. His name is Toots. We have three horses and a colt and the colt's name is Babe. We also have 19 sheep. I have two little sisters, Mildred and Gladys. We like to take the sheep to pasture and bring them home at night. Papa is putting his third cutting of hay in the barn. Our school is having vacation now so us girls can have fun watching papa put the hay in the mow.—Frances Johnson, Prosser, Wash.

Soft Purple Clouds in the Evening.

Dear Aunt Nellie: We have a very fine view of the sun as it sets in the evening. Some evenings the clouds are soft purple and then again a dark red, pink, blue and many other colors combined. The dark purple clouds that twist almost half way around the sky look very much like huge fishes. Some evenings I sit out on the porch and watch the clouds form many shapes. It is very interesting to get out your paint box and try to paint the beautiful colors, but it is impossible to get the colors as beautiful as they really are painted by Nature.—Lenore Fox, Route 1, Washougal, Wash.

Margaret Is a New Cousin.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and am in the sixth grade. We have four cows and two horses. The cows' names are Pansy, Bess, Josey and Brindle. The horses' names are Charley and Al. I hope to see my letter in the Children's Corner.—Margaret King, Matlock, Wash.

THE BARRIER

(Continued from page 39.)

"Say, John, w'at happen' to dat gal we was talkin' 'bout dis mornin'?"

Gale shook his head and turned again to this companion, but the young mans mind was bent on its quest, and he continued:

"Dat was strange tale, for sure."

"What was it?" questioned Runnion.

"John was tell 'bout a feller he knowed w'at marry a good gal jus' to mak' her bad lak' hese'f."

"How's that?" inquired Stark, turning curiously upon the old man; but Gale knocked the ashes from his pipe and replied:

"Oh, it's a long story—happened when I was in Washington state."

Poleon was about to correct him—it was California, he had said—when Gale arose, remarking sleepily that it was time to turn in if they wished to get any rest before the mosquitoes got bad again, then sauntered away from the fire and spread his blanket. The rest followed and made down their beds; then, drawing on gloves and hatnets, and rolling themselves up in their coverings, fell to snoring. All except the trader, who lay for hours on his back staring up at the stars, as if trying to solve some riddle that baffled him.

They awoke early, and in half an hour had eaten, remade their packs, and were ready to resume their march. As they were about to start Gale said:

"I reckon we'd better settle right now who has the choice of locations when we get up yonder. I've been on stampedes where it saved a heap of hard feeling."

"I'm agreeable," said Stark. "Then there won't be any misunderstanding."

The others, being likewise old at the game, acquiesced. They knew that in such cases grave trouble has often occurred when two men have cast eyes on the same claim, and have felt the miner's causeless "hunch" that gold lies here or there, or that the ground one of them covets is wanted by the other.

"I'll hold the straws," said Lee, "and every feller will have an even break." Turning his back on the others he cut four splinters of varying lengths, and, arranging them so that the ends peeped evenly from his big hand he held them out.

"The longest one has the first choice, and so on," he said, presenting them to Gale, who promptly drew the longest of the four. He turned to Doret, but the Frenchman waved him courteously to Stark, and, when both he and Runnion had made their choice Lee handed him the remaining one, which was next in length to that of the trader. Stark and Runnion qualified in the order they drew, the latter cursing his evil luck.

"Never min', ole man," laughed Poleon, "de las' shot she's de sure wan."

They took up their burdens again, and filed towards the narrow valley that stretched away into the hazy distances.

(To Be Continued.)

Must Cut Out Cancer of Uncleanness

(Continued from page five.)

tary Daniels. "The navy suffers likewise, and business halts because venereal diseases destroy the manhood of workmen and fighters. During the last statistical year men of the American navy lost 141,378 days' sickness from a small group of absolutely preventable diseases, or rather diseases contracted by sin.

"In the navy in 1915 there were admitted for treatment for venereal diseases 122 persons in every 1000, and in the army 84 for every 1000, the number in the army having decreased from 145 to the 1000 after passage of an act stopping the pay of all soldiers admitted for treatment for venereal disease. The new navy law stops the pay of men so afflicted and will probably reduce the number to the army ratio.

"In civil life the number is quite as large proportionately as in the military service. It has been printed that Hecht of Vienna stated that at one time the equivalent of three entire Austrian divisions of 60,000 men was under treatment for venereal diseases. Canadian and Australian officers have deplored the ravages of this disease. The latest figures from the British army gave 78,000 cases, and all other countries have also been weakened.

"Young men expect ministers of the gospel to call them to clean living. The preacher seeks to save their souls, and too many youths hardly realize they have a soul. But they know they have bodies, and the doctor is the man to whom they trust the treatment of their bodies. When he preaches continence as the only rule of life to young men and points out the dire penalty for lapses his words have a weight no other admonition possesses.

"You, gentlemen of the medical profession, deal with life and death. You bring the bodies into the world and you close the eyes of the dead. Yours is the ministering function, the intimate touch, and out of such relation you can enjoy an amazing power of suggestion. It is this power that America calls upon you to use. Tell our youths the truth. It is a duty laid upon you, not by the moral law alone, but by the self-preservation that operates in nations as well as individuals. That duty is imperative upon you as never before. If you perform it and your young soldiers and sailors heed your wise council—and many of them will follow your teaching with lasting gratitude—you will contribute more to the winning of the war than manufacturers of shells.

"Continence is no longer a matter of morals, though it must be enforced as the cardinal doctrine of morals. It has come to be seen as having its base in the great law of nature. New truths must take the place of ancient lies. We know now by the testimony of science that there is no foundation for a double standard for the sexes. To preach it is to preach immorality and a lowering of manhood. The lie that has lived so long must be driven out by the truth.

"Only God will ever know the toll in blood and tears that this lie has taken from the heart of the world—the price that the health of the race has been made to pay for its submission to a historic falsehood, young lives ruined, futures cheated of promise, children called upon to suffer for the sins of the fathers, innocent women robbed of the right to happy motherhood and the virility of a nation sapped at its very foundations."

New Cigaret Holder.

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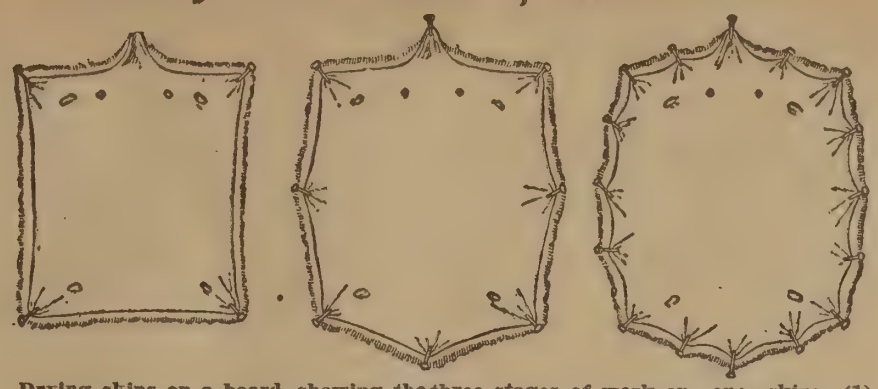
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Pretty Fur Pieces of Mole Skin



Drying skins on a board, showing the three stages of work on one skin: (1) Four pins are first used, one in each corner; (2) four intermediate pins are then inserted, the skin being slightly stretched; (3) finally eight more pins are tacked in, one between each two of those alreay in place. A light tackhammer will serve for driving the pins.

The best grades of skins are not always dyed and very pretty fur pieces may be made up at home or by a local furrier without any blending, provided one has skins enough from which to make satisfactory selection, says Farmers' bulletin 832 of the United States department of agriculture. From a dozen to 20 skins of the common mole of the northwest coast are sufficient to make an average-sized neckpiece for ladies' wear. Twenty skins will make a muff of average size, and 30 skins a large one. At least double these numbers of skins of eastern moles will be required for the same purpose. The moleskin cloaks displayed in shop windows usually contain 400 to 600 pelts of the European mole, depending upon the length of the garment. Not more than two-thirds as many skins of the Townsend mole would be needed for such cloaks.

His Hunting Story

Had a Desire to Hunt for a Bear

As each hunting season came around a young man by the name of Bob Griggs and I, were sure to have a great desire to try for a bear; October was here in all its autumnal glory, and a little snow to the depth of three inches had fallen during the night, making the tracking good. So the writer called on his friend Bob, who was sure to be ready for anything so exciting as a bear hunt.

There happened to be a young friend staying with Bob (Sam Rigby), so of course he was invited to go along, and he accepted.

Horses driven in, saddled up, and lunch put up, we were off up the grand old Teton canyon; where we were reasonably sure of finding signs of Mr. Bruin.

We were riding along the road not more than two miles above Bob's ranch, when we were surprised at finding the tracks of a good-sized bear where he had crossed the road and the Teton creek. A council of was was held and it was decided to tie horses here and to follow him on foot, as he was headed for the rough country.

Two hours of tracking up the side of the mountain and through a rock strewn basin brought us to where his tracks told us he had gone into a cave. Another council was held and it was decided to set a gun so as to shoot him when he came out, for we could not thing he had gone in for the winter as it was the first snow, and rather too early in the season.

The writer crawled down into the entrance of the cave to see if a suitable place to set the gun could be found, the boys on top having been instructed to haul me back by the heels at a given signal. You may be sure this was done when the bear made a circle of the cave and came so near that a good hold could have been taken in his long brown hair.

With sore knees and elbows, for the rocks over which they dragged me were sharp, I decided, after getting their permission to go down again with gun in hand and execute that "Bar."

With a request that they draw me back with a little more care, I went down again. The opening of the cave was just large enough for a man or a bear to enter on all fours, and being dark inside it was some minutes before his lordship could be located, and then only his eyes could be seen.

After making this known to the boys above, and asking them to be ready to haul me out, I raised the 30-40, took good aim and pulled the trigger. Well I was out on top again in a jiffy. And my clothes looked as though the bear had just finished mauling me. And the boys were almost as white as the snow.

About the first thing that Bob said was, "George, you would make Putnam ashamed of himself."

After going down again and giving him a finishing shot, the question of getting him out was discussed. Having nothing with which to drag him out but our belts, we tied these together around his neck. And then we learned that he was a good sized one for we could not budge it until we had thrown snow under him, and then we had some time in getting him out. He weighed as near as we could judge, about 300 pounds.

We skinned him there, leaving the fat all on the skin, and I tell you it was heavy—all one man could stand up under.

I did not experience any fright until the thing had been done, then wondered how I had gotten up sufficient courage to get into such close quarters with an animal that could have crushed my life out in a few minutes had he felt so disposed.

He was very fat, and we learned that he had been hit near the left eye with the first and in the neck with the second shot.—G. W. Gee of Wyoming in Hunter Trader Trapper.

Trappers' Facts.

First post yourself thoroughly on the local game and trapping laws.

When you buy new traps, it is best to boil them in the bark of a maple or oak tree, to take off the newness and varnish.

The trapper soon learns that all wild animals have a very keen scent, and that the only way to entirely destroy the human scent which may be left on the trap is by making water sets.

Place a few twigs or leaves on the ground for your traps to set on, as these prevent the trap from freezing to the ground.

When covering traps, always use material which is inconspicuous and is commonly found near by. In the woods, for example, use leaves; in the open use grass, and near streams use moss or small water-plants such as cress.—Farm and Fireside.

Christmas Parcels for Soldiers.

The postoffice department urges early shopping and mailing for Christmas.

No date is too early for mailing Christmas parcels marked for Christmas delivery.

Parcels for our soldiers abroad must be mailed not later than November 15 to insure delivery on Christmas morning. Try not to exceed 10 pounds in each parcel for soldiers abroad.

Portugal's Wheat Requirements.

The Portuguese government is in the market for 30,000 tons of wheat for early delivery. It is estimated that the total requirement before the new crop next year will be a minimum of 55,000 tons. The native wheat was below the average yield this year and will not supply the demand later than January 1, 1918.

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NEWS FOR BREEDERS

R. A. Ward, county agriculturist of Crook and Des Chutes counties, Oregon, has orders for two carloads of cottonseed cake, nut size. The sheepmen of this region are using it for the first time, but it has been used in the Lakeview region and is recommended by those who use it. Mr. Ward attempted to secure the cake direct from the mills where the cotton is ground, but found prices to be practically the same as at jobbing headquarters at San Francisco or Portland. The cake used is grown in the Imperial valley, California.

On page 28 of The Farmer of October 18 Mr. Ward had an article detailing the advantages of feeding cottonseed cake, especially nut size. He says two ounces of cake, fed with two and a half pounds of hay, is better than five pounds of hay alone. It is a good supplemental feed to early range. But sheep eating the cake must have plenty of water.

Pacific Coast Berkshires.

The First National Swin show was held at Omaha, Neb., the first week in October, 1916, and a great effort was made last year to bring out the best Berkshire herds for the first national show, and that show attracted national attention. Great as it was, the 1917 show far outclassed it, says the Berkshire World.

Last year we had Berkshire herds from Rhode Island to Washington. This year we had herds from Massachusetts to California, and the quality of this year's show was equal, if not superior, to the St. Louis world's fair, although the St. Louis event outnumbered this year's National Swine Show in entries and number of animals exhibited. The judging was done by W. E. Spicer, the St. Louis world's fair judge, and his work speaks for itself. California won grand champion boar and grand champion sow, a record that Frank A. Brush, Santa Rosa, Cal., the owner, has reason to be proud of, and all other Berkshire breeders in California and other Pacific slope states should also rejoice with Mr. Brush.

Is a Prize Winner.



Bismarck, the 7-year-old black Belgian stallion which won first prize at the Yakima Valley Horse Breeders' association fair, recently held at Toppenish.

Prices of Cattle in Holland.

The price of a cow not giving milk and sold for slaughter in Holland is now from $50 to $115; of a calf, for veal, from $18 to $35. A good milch cow sells for about $125. This is a decline of $40 or $50 in comparison with prices a few weeks ago, on account of the scarcity of fodder. There is serious talk of slaughtering or exporting several hundred thousand cattle because of inability to feed them sufficiently.

SHEEP

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TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.

Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

Bliss, Idaho.

Breaking World's Record.

Viva La France, the Jersey cow shown above, owned by Pickard Brothers, Marion, Ore., on October 20 finished a year's official test as junior 3-year-old, breaking the world's record for Jerseys of that age by about 70 pounds of butter. As her test has just been finished final official figures are not yet obtainable, but the official figures from the American Jersey Cattle club have given up to July, the balance being the estimates of Mr. Pickard and the O. A. C., so the figures below will not vary more than a few pounds, if any.

Viva La France in her year produced 12,744.9 pounds of miuk and 892 pounds of fat, or 1047.05 pounds of butter, computed by the Jersey standard. The former world's record was held by Sopha's Bertha, bred by Hood farm, in Massachusetts, and owned in Maine. Her official record was 14,952.2 pounds of milk and 975.1 pounds of butter.



Viva La France.

Prior to Sophia's Bertha completing this record, less than a year ago, the Jersey junior 3-year-old record was held by an Oregon cow, Goldie's Nehalem Beauty, owned by Clifford Reid, with 882.9 pounds of butter, while St. Mawes Beauty, owned by Ed Carey, was only three pounds behind, with 879.9 pounds of butter. So Vica La France, a daughter of Golden Glow's Chief, has brought the world's record back to Oregon and it is likely now to stay here for some time. H. A.

Drop in Irish Live Stock.

Whatever satisfaction may be derived from the increase in arable cultivations in Ireland, revealed in the abstract of the agricultural statistics for that country, can not be otherwise than largely discounted by the decrease in the numbers of every description of farm live stock as compared with last year, says the London Live Stock Journal. Except in the case of cattle and goats, the whole of the increase shown in the years 1907-16 has been wiped out, while the losses as compared with 1914, the last pre-war year, are extremely heavy in those directions that more particularly affect the annual husbandry of the sister isle.

In the case of cattle we are told that the number of milch cows, including heifers in calf, is 1,591,725, a decrease of 19,972 compared with 1916. As regards other cattle there is a decrease of 994 in calves, of 18,221 in cattle 1 year old and under 2 years, and of 23,788 in cattle (including bulls) 2 years old and upward.

The figures give the situation at a glance and are certainly worth considering:

There is very little in the cropping returns that indicate any reason for the drop in the numbers of live stock.

Looking at the whole situation, so far as it is revealed in these statistics, it looks very much as though the high prices have tempted Irish farmers to sell a larger proportion of their stock than is either justifiable or for the good of the country.

Home-Grown Kale Seed.

Showing the advisability of using home grown seed, E. B. Stookey of the western Washington experiment station, says:

Kale is a standard feed crop for many dairymen and poultrymen of western Washington, yet the crop has not become standardized to the extent that there is any certainty as to what will be grown from commercial kale seed. Out of 146 packages of kale seed of different varieties and from different sources sent to this station by the United States department of agriculture, only one or two were of the thousand-headed kale type and none were as good as the kale being grown here at the station.

Kale seed from selected plants has been produced at this station for the last 10 years. The best plants are saved each year, from which seed is produced the year following. In this way improvement has been made from year to year until at the present time we have a type that produces a high percentage of well-branched plants having broad, succulent leaves.

Hog Cholera Losses.

The federal bureau of animal industry gives some interesting hog cholera figures in a new bulletin (No. 834) entitled "Hog Cholera: Prevention and Treatment." According to this bulletin, our total losses from hog cholera were 6,964,470 in 1913, 6,304,820 in 1914, 5,541,971 in 1915, 4,057,884 in 1916 and 2,959,322 in 1917. Losses are figured in each instance for the year ending March 31, so the 1917 figure applies to a year's time extending from April 1, 1916, to March 31, 1917, and does not cover this summer's losses, which, as is well known, were light. The total number of hogs in the country varies from year to year and losses are better visualized in percentages, which are: 1913, 9.9 per cent; 1914, 10.6 per cent; 1915, 8.5 per cent; 1916, 5.9 per cent; and 1917, 4.3 per cent.

Pure Bred Swine Sale.

The second annual sale of purebred swine will be held at the Pacific International Stock show at North Portland on Tuesday, November 20. R. W. Hogg, who had charge of the sale last year and has again this year, announces that 40 head have been entered for the sale. The consignments are made up of Poland Chinas, Durocs and O. I. C.'s from the best herds in the northwest. Only choice stock of each breed is allowed in the sale and all entries must be satisfactory to a committee appointed to pass on its qualifications, so intending purchasers may go there assured of finding only worthy animals, guaranteed to be as represented. H. A.

The Problem of Saving the Live Stock

(Continued from page twenty-eight.)

three to four parts of pea straw to one part of corn. The corn assists in making a moist mixture that will readily pack and furnishes carbohydrate material that assists in the fermentation process necessary to the development of the mild acid condition which is characteristic of good silage.

The question arises in regard to the grains that should be used this year. Many live stock men are planning to save grain and concentrates by using silage, root crops and alfalfa. Alfalfa may save much grain in wintering hogs.

In some sections figures are at hand indicating the possibility of bringing in Mississippi valley corn to replace a portion of the barley and oats used in former years.

Cottonseed meal, oil meal, soy bean meal and cocoanut meal, nitrogenous concentrates, will be used in some sections to supplement and make more effective some of the forages and fodders mentioned above. Comparative prices of corn, barley, oats, mill feeds, cottonseed meal, soy bean meal, together with information as to relative feeding values of the same will be determining factors in choice of concentrates for feed under northwest conditions. When alfalfa hay, clover or other legumes are used, it is not necessary to look for a highly nitrogenous grain to feed in connection. Even with alfalfa, however, such feeds as oil meal and others in small amounts may effect a saving in the daily cost of feeding.

We need, therefore, to save all the good live stock that is possible. Remember that there is, in all probability, ample profits for him who successfully weathers the present situation; seek to establish higher standards; cut out scrub sires; make greatest possible use of all farm forage; use succulent feeds as far as possible the coming winter; purchase grains and other concentrates on a basis of relative price and feeding value, depending on forage crops fed along with the concentrates.

Will Be Going Some.

If we can both bust up the kaiser and the I. W. W. at the game time we'll have done something.—Detroit Free Press.



Also New Barn Plan Book

Over 75 suggestive plans; instruction for cement flooring, ventilation, doors, etc., etc. It is full of information for the prospective barn builder.

Spokane Seed Co.

(Dairy Supply Dept.)
Inland Empire Distributors.
SPOKANE.

Flush Cows After Calving

Protects Against Abortion and Barrenness

Barrenness or Sterility, like Abortion, Retention of Afterbirth and Premature Birth, is nearly always caused by infection of the reproductive organs by the germs of Contagious Abortion. Unless this infection is promptly overcome by the use of a powerful but safe antiseptic, it may permanently affect the reproductive organs so that the cow will continually fail to stick.

Every time a cow drops a calf—whether alive or dead—by premature birth or aborting, whether the afterbirth is retained or not, her reproductive organs should be flushed out, because that is where the infection is developing.

B-K, the powerful nonpoisonous antiseptic, is scientifically correct for this work. Used as a douche for the uterus, it quickly brings the afterbirth, dissolves the slimy albuminous matter, kills the germs, stops discharges and controls the infection. B-K does not cause straining, but is soothing and heals the tissues.

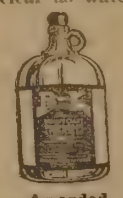
Other germicides, such as carbolic acid, cresol, Lugol's solution, iodine, etc., tend to irritate, do not dissolve the slimy albumins, but tend to coagulate or thicken them, thereby preventing destruction of the germs and cleansing of the tissues.

The remarkable germ-killing strength of B-K is plainly marked and guaranteed on every package. B-K contains no poison, acid nor oil. It is safe and clean and easy to use. B-K may be used freely in the drinking water.

B-K is convenient. Just add water as directed, and you have your treatment for calves, bulls and cows, and also your disinfectant for general use.

B-K is used so successfully by leading breeders that it is now sold over the entire world and the demand for it has increased 500 per cent in three years. A well-known breeder of registered stock says:

Clean and clear as water.



Awarded Gold Medal Pan.-Pac. Expo.

"I want B-K, for I know it is doing good. Cows that have been barren for more than a year are getting with calf."

B-K is sold by dairy and farm supply houses, druggists, general stores, etc., everywhere. Dealers wanted in every town.

Write us for more evidence from users and for our bulletin No. 52, "Contagious Abortion," and No. 136, "Calf Scours."

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Breeders' Department

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DUROC JERSEY
Gilts and Boars

I am booking orders for fall weanling pigs for October and November delivery. Can furnish them singly or in unrelated pairs or trios. Special prices to members of boys' and girls' pig clubs. An exceptional strain of Durocs, carrying the best blood lines found in the northwest. Have been prize winners wherever shown.

Chas. G. Sprong, Grandview, Wn.

Duroc Jersey Hogs

champion stock. Weanlings, $35. Advance orders now being taken.

RIVER BEND FARM,
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PRIMROSE DUROCS

Bred sows and gilts, the first prize herd Oregon State Fair, 1917, including junior champion sow. All are bred to a son of Burk's Good Enuff, grand champion Illinois State Fair. Also choice pigs of both sexes, farrowed July 2.

J. W. FRUIT. Brooks, Ore.

At Pacific International

Stock Show, N. Portland, Nov. 19-24, see some of our Big Type Durocs, offspring of the great breeding boar, Golden Rod, and other best Duroc strains.

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Hillcrest Duroc Jerseys

For immediate sale:
1 11-mo. gilt, bred to farrow Oct. 3d, $60.
1 10-mo. gilt, to farrow Nov. 2, $50.
3-month pigs, $25.
Extra fine stock, combining the blood of noted show winners.

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FOR SALE.

Choice registered Duroc Jersey pigs from "Richard's Defender and Pathfinder" boars and blue ribbon sows. "Defender" is Grand Champion boar of Idaho and Utah. My Junior yearling boar "Victor's Defender," recently won 2nd prize at Boise and Salt Lake City.

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Spring pigs from champion and first prize sows at Ontario, Ore., and Gem State and Idaho State fairs.

C. H. KIRKPATRICK, Parma, Idaho.

OTTO'S DUROC JERSEYS.

Founded on the basis of making Duroc history in Idaho. Won 4 championships and two grand championships at Southern Idaho State Fair.

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IDAHO CHAMPION DUROCS—At state fair of Idaho our Durocs won more prizes than all other exhibitors combined. Stock of all ages for sale.

Richards Live Stock Co., Virginia, Idaho.

DUROCS.

Boars and open or bred gilts of excellent breeding.

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JAMES N. PRICE, Pullman, Wash.

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Registered Duroc Jersey hogs. Inspection invited. Correspondence solicited.

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Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

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North Yakima, Wash.

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Established 1887—100 in Herd.
REGISTERED HOLSTEIN CATTLE.

As I wish to reduce my herd I am offering the blood of such bulls as King Segis Pontiac, 13th, 30.39 lbs. breeding, 4.25 per cent fat; Iowana Rochdale Korndyke, 26 lb. breeding, and Prince Segis Korndyke De Kol, 31.41 lbs. breeding.

LAKE SIDE STOCK FARM.
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Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

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Waterloo Holstein Farm

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje	King Segius 10th Segius Walker Pietertje 2d

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World's Record Holsteins

Herd headed by Ononis Cornucopia Johanna Newman, the best bred son of the world's record cow, Margie Newman, with more 100-lb. records in his pedigree than any other bull in the world.

Home of the world's champion junior 2-year-old and junior 3-year-old producers. Write for records and prices on young bulls.

CHAS. ELDRIDGE, Chimacum, Wash.

Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.

Young Holstein Bulls

Out of A. R. O. dams and sired by Chimacum King Segis, whose dam and granddam average 30.98 lbs. butter in 7 days. Very reasonable.

FRANK W. CONNELL, Hillsboro, Ore.

REGISTERED HOLSTEINS

Bull calves for sale with good A. R. O. backing.

BEEBE BROS., R. F. D. 2, Rupert, Idaho.

HOLSTEINS

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

REGISTERED HOLSTEINS

of exceptional breeding. Prize winners Southern Idaho Fair. Prices within reason to farmers. Write for descriptions.

A. A. DAVIS, Buhl, Idaho.

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Registered Hereford cattle.

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Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

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Special attention given to live stock sales.

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A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

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Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

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Hercules Shorthorns

For particulars write

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Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

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breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.

Filer, Idaho.

Shorthorn Cattle

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Young Guernsey Bull

HOPE'S REEDY OF ORCAS ISLAND No. 43788 of advanced registry and imported blood. The best individual we have ever offered.

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Breeders of high class registered and grade Guernseys.

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Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the breed.

At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

Congdon & Battles

Otto V. Battles, Mgr.
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STOCK FOR SALE.

We breed highest type Aberdeen Angus.

A. H. EAGLESON & SONS.
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POLAND CHINA SWINE

Locust Lawn Herd

Booking orders for strictly big type Poland China spring boars, sired by Overlook, 1st and senior champion, Idaho State Fair and Gem State Fair, 1916; weight 820 lbs.; out of the 1st, 2d and 4th prize sows at Idaho State Fair, 1916, in strongest competition; satisfaction guaranteed.

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Pure-Bred Poland China Fall Gilts

will be shipped c. o. d., subject to your approval. Write to

HERBERT WILLARD. Dayton, Ore.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX. Lyons, Ore.

POLAND CHINAS

Service Boars. Bred Sows and Gilts, Brunk's Kind.
THOS. W. BRUNK, rt. 2. Salem, Ore.

BIG TYPE POLAND CHINAS
Herd headed by Sammy (79,833).
Correspondence Solicited.
Fruitland Stock Farm, C. Royston, Mgr.
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GREENLEAF STOCK RANCH.
Big type Poland Chinas, either sex, for sale at all times.
Wilson Bros., A. L. Wilson, Mgr.
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Kintyre Farm Berkshires

Exceptionally fine breeding stock for sale at reasonable prices.

CLARK BROS., R. F. D. 2, Prosser, Wn.

Early Spring Pigs

Well grown, best quality, sired by a son of the great Laurel Champion and out of prize sows.

GEO. BERTRAND, Olequa, Wash.

FOR SALE.
2 Berkshire boars, age 6 mo., $25 each.
2 Berkshire gilts, age 6 mo., $25 each.
1 Holstein bull calf, age 5 mo., $100.
2 Shropshire lamb bucks, age 7 mo., $25 each. Every animal eligible for registry.

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Choice stock of all ages at bargain prices.

HIGHLAND FARM, Box 22, Underwood, Wn.

YORKSHIRE SWINE

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Large Yorkshire Swine.

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Breeders of
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Not the most but the good kind in the rough.
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The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

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E. O. WALTER, AUCTIONEER.
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The grand champion bull, General Hampton 390583, at the head of the herd. Young bulls fit to head the best pure bred herds and others that will make impressive improvements on range herds. Priced according to quality.

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Percheron, Shire and Belgian Stallions

They are of the very best breeding obtainable and are guaranteed to be breeders. They will be sold at very reasonable prices.

If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to

WM. T. TRACY, Kennewick, Wash.

When you write to advertisers, be sure to say that you saw their advertisement in this paper.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Oct. 29.—Persistent rains that appeared to be rendering much corn unfit for food lifted the corn market today, although some temporary weakness resulted from the German invasion of the north Italians plains.

At first corn traders did not seem disposed to attach any market significance to the vicissitudes of the Italian armies. Wet-weather delays to the movement of the new crop formed the initial dominating influence, and brought about a moderate advance of values. Later, however, the fact that the Italian retreat had bearishly affected the New York stock market led to some increase in selling pressure on corn.

Oats merely duplicated the action of corn.

Advances in the hog market, together with enlarged exports of bacon, gave some strength to provisions.

Pacific Northwest Grain.

PORTLAND, Ore., Oct. 29.—Grain futures: November oats, $48.50 bid; feed barley, $49 bid; feed barley, $50.50 bid.

Eastern oats and corn in bulk: Oats, No. 3 white, October, $44 bid; No. 38 clipped white, $45 bid; corn, No. 3 yellow, January, $52 bid; No. 3 mixed, $51 bid; oats, November, No. 3, $44 bid; clipped, $45 bid; corn, February, yellow, $51 bid; mixed, $50 bid.

San Francisco Grain.

SAN FRANCISCO, Oct. 29.—Barley—December, $2.39 asked; May, $2.37 bid.

Cash Quotations.

CHICAGO, Oct. 29.—Corn—No. 2 yellow, $2.08@2.10; No. 3 yellow, $2.07; No. 4 yellow, $2.05.

Oats—No. 3 white, 59½@60c; standard, 59¾@60¼c.

Rye—No. 3, $1.78@1.79.

Barley, $1.10@1.34.

Timothy, $6.50@8; clover, $18@24.

Minneapolis Grain.

MINNEAPOLIS, Oct. 29.—Wheat receipts 729 cars, compared with 818 cars a year ago.

Oats—No. 3 white, 57 1-8@58 5-8c.

Flax—$3.16@3.18.

Flour—Unchanged; in carload lots, fancy patents $10.50, wood; first clears, $9.75, jute; second clears, $5.75, jute. Shipments, 81,020 barrels.

Rye—$1.76@1.77.

Barley—$1.07@1.30.

Bran—$30.50@31.50.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., Oct. 29.—Hogs—Receipts 2200; market 15 to 25c higher; heavy, $15.90@16.20; mixed, $16.10@16.25; light, $16.15@16.30; pigs, $14@17; bulk of sales, $16.10@16.25.

Cattle—Receipts 12,000; steady to stronger; native steers, $9@16.50; cows and heifers, $6.50@10.50; western steers, $8@13.50; Texas steers, $7@10.50; cows and heifers, $6@9.10; canners, $5@6; stockers and feeders, $6.50@12.50; calves, $9.50@12.50; bulls, stags, etc., $5.50@7.50.

Sheep—Receipts, 15,000; strong to 25c higher. Yearlings, $11.50@12.85; wethers, $11@12.85; wethers, $11@12; ewes, $9.50@10.50; lambs, $16.50@17.

At Chicago.

CHICAGO, Oct. 29.—Hogs—Receipts 25,000; tomorrow 17,000. Strong, 15c above Saturday's average. Bulk, $15.20@16.60; light, $14.50@16.65; mixed, $14.95@16.75; heavy, $14.85@16.75; rough, $14.90@15.10; pigs, $10.50@14.

Cattle—Receipts, 35,000; weak. Native steers, $6.75@16.90; western steers, $6.20@13.80; stockers and feeders, $6@11.50; cows and heifers, $5@12.10; calves, $8@15.25.

Sheep—Receipts 26,000; steady. Wethers, $8.75@12.75; lambs, $12.25@17.75.

At Salt Lake.

NORTH SALT LAKE, Utah, Oct. 27.—Cattle—Steady. Choice steers, $9@9.50; good steers, $7.75@8.75; choice cows and heifers, $6.75@7.50; fair to good, $5.50@6.50.

Hogs—Higher. Choice fat hogs, $15.50@16; mixed, $15.25@15.75.

Sheep—Steady. Choice fat lambs, $15.75@16.50; yearlings, $10.50@11.50; ewes, $8.25@9.50.

At Portland.

PORTLAND, Ore., Oct. 29.—Cattle—Steers strong; cows 30 to 50c lower, rest steady. Receipts, 1704. Best beef steers, $9.75@10; good beef steers, $7.75@9; best beef cows, $7@7.50; ordinary to good cows, $4@6; best heifers, $7@8; bulls, $4@6.75; calves, $7@9.50; stocker and feeder steers, $4@7.25.

Hogs—Higher; receipts, 2076. Prime light, $15.75@15.85; prime heavy, $15.60@15.75; pigs, $13.50@14; bulk, $15.25@15.50.

Sheep—Steady. Receipts 885. Western lambs, $14@14.50; valley lambs, $13.50@14; yearlings, $12.50@13; wethers, $12@13; ewes, $8.50@10.50.

Spokane Stock Yards, Monday.

Hogs—Receipts 17, market steady. Prime light, $15.10@15.25; prime heavy, $15@15.25; pigs, $13@14.25; stockers and feeders, $11@13; bulk of sales, $15.25.

Cattle—Receipts 154; steady. Best beef steers, $8.50@9; good steers, $7@7.75; best beef cows, $6.75@7.50; good cows, $5.50@6.50; common cows, $3@5; best heifers, $6.75@7.50; bulls, $5@6.75; calves, $6.50@8; stocker and feeder steers, $5@7.25.

Sheep—Receipts 698; steady. Prime lambs, $13.25@14; good lambs, $12@12.50; prime yearlings, $11.50@12.50; prime wethers, $11.25@12.25; best mutton ewes, $8.50@10.

Seattle Market.

SEATTLE, Oct. 27.—The first week of the jumble pack of Jonathan apples on this market since the state grading and municipal weights and measures laws went into effect has been characterized by generous buying on the part of the public. The demand has been so wide that one of the jobbing houses cleaned up practically a car a day for the three last days of the week.

The fruit is in lug boxes, fancy and extra fancy orchard run, and sell at 3 cents per pound. The weights run unevenly and no attempt is made to move the fruit on the box basis. Next week commission houses will start moving the fruit into this market in baskets. Jobbers claim that consumers will save from 25 to 50 cents per box on their apples. In assisting to clean up the surplus of small Jonathans, jobbers are urging growers to ship good fruit, as some of the arrivals this week were disappointing. Consumers have become accustomed to the loose pack without regard to sizes or paper wrapping and it is believed one of the most phenomenal weeks of buying in the history of the city will be on, beginning Monday.

The potato market was thrown off its balance by the embargo issued by the Great Northern against furnishing cars in this state for loading potatoes. The embargo will be bullish in one sense and bearish in another, as it will temporarily shut off the eastern movement, while throwing an oversupply of locals into service. The embargo will not affect the visible supply here, as potatoes from Mt. Vernon can be brought in by boat and from the White river valley by auto truck.

Onions are very firm, with Walla Wallas and Oregons at $3.25@3.50. All growers, according to reports of brokers who are endeavoring to supply an urgent demand, are holding.

The local cranberry market is firm and higher. Prices promise to advance next week to $4.50 per box, due to scarcity. So far the easterns have been no match for the locals, as the outside fruit is short lived.

Local cauliflower and head lettuce are very scarce. There have been no shipments to eastern markets this week. Root vegetables are dull.

There are few operators on Western avenue who believe that the fresh ranch egg market will go any higher. There has been a better demand for pullets, which are arriving plentifully, and for storage stock as offsets to any greater strain on the market for standard sizes. The storage egg market is none too strong, jobbers viewing with some misgivings their large stocks, and the short season in which to clean up. Extreme cold weather would, it is believed, ease the situation and bring a heavier movement.

Butter is firm and the daily creamery make short, wholesalers filling in with storage and the best country creamery offerings that can be obtained. Particular buyers are in the majority and are demanding the city creamery extra pack, while second quality butter is running to a surplus. If buyers would shift their demand to this stock dealers declare that prices would ease considerably. The market, according to demand and supply alone, long ago should have advanced, but the operator who is willing to take the first step to increase prices has not yet come forward.

Poultry prices will remain unchanged for next week. There is a fair demand for turkeys which is being supplied with cooler stock. Dealers are discouraging producers in marketing fresh stock, as the crop is late and development poor.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed up a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 60c per dozen; pullets, 42c dozen.

Poultry—Live hens, fat, over 4 lbs., 20@21c per lb.; 4 lbs. and under, 16@18c; old roosters, 13c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 12c per lb.; springs, live, 21c per lb.

Butterfat—54c per lb.; dairy butte, 35c.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.; heifers, 6@8c per lb.

Hogs—Light, 15@16c per lb.; heavy, 12@13c per lb.

Veal—Fancy light, 14@16½c per lb.; heavy, 9@13c per lb.

Hides—Salted, 18c per lb.; flint-dry hides, 27c per lb.; salt kip, 18c per lb.; green hides, 15c per lb.; green calf, 25c per lb.; dry calf (under 6 lbs.), 30c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry full wool sheep pelts, 26@38c per lb.; salt bulls, 14c per lb.

SELLING PRICES.

Feed—Scratch feed, $78 per ton; all grain chop, $64 per ton; oats, $56 per ton; rolled oats, $57 per ton; wheat, $74 per ton; bran, $32 per ton; shorts, $35 per ton; soy bean meal, $65 per ton; whole corn, $84 ton; cracked corn, $85 per ton; alfalfa meal, $35; chick feed, $80 per ton.

Hay—Eastern Washington timothy, $32 per ton; alfalfa, $27 per ton; double compressed, $35 per ton; wheat hay, $25 per ton; Puget sound, $25 per ton; straw, $12.

Butter—Washington creamery extras, cubes, 48c per lb.; do bricks, 49c per lb.

Eggs—Fresh ranch, 63c per doz.

Potatoes—Puget sound, $38@40 per ton; eastern Washington, $40@45 per ton.

Portland Market.

PORTLAND, Ore., Oct. 29.—The butter market is weak and it is not likely that present print prices can be maintained for more than a few days. Some of the city creameries are already cutting on the quiet. The disturbing factor in the market is the municipal butter store which is selling country creamery at almost cost.

Cheese is tending lower. The demand has been seriously curtailed by the high prices asked and the shipping outlet is not as good as it was. The Coos Bay association reduced its price three-fourths of a cent to 24 cents for triplets on Saturday, and a decline at Tillamook is expected at any time.

Egg receipts are very small and this fact is keeping the market steady at the prevailing high quotations.

Dressed pork has declined in line with the break in live hog prices at the stock yards, but veal continues steady. There has been but little change in poultry prices in the last week.

Only very small lots of wool have been sold since the buying flurry of a month ago. The Portland warehouses are still holding 12,000,000 pounds or more. The prospect of heavy imports from Australia are credited by dealers with having caused the check in trading operations. Prices, however, have not been changed.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $48.50 per ton.

Millstuffs—Bran, $30 per ton; shorts, $33.

Barley—No. 1 feed, $49.50; brewing, $51; rolled, $55@57.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch, case counts, 52c per dozen; candled, 55@60c.

Poultry — Hens, 17@19c; ducks, 18@20c; turkeys, live, 20@25c; geese, 10@11c.

Butter—City creamery, prints, 48@49c per pound; cubes, extras, 45c.

Cheese — Tillamook triplets, 26c; Young Americas, 27c.

Dressed meats — Veal, 15 1-2@16c; pork, 18 1-2@19c.

Hops—1916, 17@20c; 1917 crop, 25@27c.

Potatoes—New, 1½@1¾c per lb.

Wool—Eastern Oregon, 40@65c; valley, 58@60c.

Beans — California small white, 14 1-2c; large white, 14 1-4c per pound.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $1.75 cwt.; sweet potatoes, $3.75 cwt.

Apples—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, $2.50; Red Macintosh, $1.50@1.75 box; Winter Bananas, $2.25 box; Jonathans, $1.25 box; Wageners, $1.25 box; Rome Beauties, $1.25 box.

Butter—Blanchard cartons, 49c lb; Medo-Maid, 49c lb; Cascade, 49c lb; Gold Leaf, 49c lb; Better Butter, 49c lb; Attalia, 49c lb; Diadem, 49c lb; Hazelwood, 49c lb; Solid Pack, 48@49c lb; Jersey Belle, 47c lb; Peerless, 45@46c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 27c lb; Hazelwood Young America, 28c lb; Wisconsin limburger, 29@30c lb; brick cheese, 33c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—White filler, guaranteed, $13.25 case; selected storage, $12.50.

Live Poultry—Hens, 13c lb; broilers, 20c lb; old roosters, 8c; ducks, 12½c lb; geese, 10c; turkeys, 20@22c.

Dressed Poultry—Hens, 18c lb; broilers, 28c lb; old roosters, 12½c; ducks, 18@20c; geese, 16c; turkeys, 25@30c.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 13c; salted cured, 16c; green bulls and stags, 11c; salted cured, 13c; kip, 15 lbs to 25 lbs, 22c; calf skins up to 15 lbs, 16c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 7 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $1@2 each; dry horse hides, $2.50@4 each.

Butter and Eggs.

PORTLAND, Ore., Oct. 27.—Butter—Prints, extras, 48@49c; cubes, extras, 45c; prime firsts, 44c; dairy, 32½@34c. Butter fat, Portland delivery, No. 1 sour cream, 51@52c.

SAN FRANCISCO, Oct. 27.—Eggs—Fresh extras, 56c; fresh extra pullets, 47c.

Cheese—New firsts, 23½c.

Seattle Wheat.

SEATTLE, Oct. 27.—Millers this week have been plentifully supplied with wheat, but to prevent congestion at terminals vigorous efforts are being made to induce the grain corporation to modify its rules and hold wheat in the country.

The question has arisen as to how the government will handle the order for 10,000,000 bushels of wheat just released from Washington, Oregon and Idaho for the Minneapolis milling territory. Conceding that eastern hard wheat millers can carry out the suggestion from the food department that more soft wheat be used in the manufacture of hard wheat flour, Puget Sound millers are endeavoring to ascertain where the soft wheat is to come from. Obviously the government can not buy the grain at country stations since seaboard terminals only are recognized in these purchases. The haul of wheat to Minneapolis or Chicago at 30c per bushel plus the haul of 10c to Seattle, Tacoma or Portland must be added to arrive at the actual freight charges which Minneapolis millers will have to pay. This, Puget Sound millers point out, entails an actual waste of 10c per bushel in the back haul. In plain terms, it means that 10c per bushel would be saved if the government would so modify its order that the grain could be bought on country warehouse receipts.

Puget Sound grain buyers have suggested to M. H. Houser, agent of the food committee of the grain corporation for this district, that several important country stations such as Spokane, Pendleton and Walla Walla be selected where inspection can be made and warehouse receipts honored as a means of overcoming the back haul of 10c per bushel.

The installation of the federal grading rules, new in details, and the generally inferior quality of wheat raised, together with the terminal warehouse regulations, have staggered the inspection department of the state. Men are being overworked at small pay and there is great need of more men for grading. Had the crop of the state gone to No. 1 and No. 2 the difficulties would have been simplified. Dockage and smut, a continually sliding scale of grades with 56-pound wheat predominating has caused an apparently endless waste of time and trouble for the department.

The Wool Market.

BOSTON, Oct. 26.—The Commercial Bulletin will say tomorrow:

"Business in wool this week has been somewhat irregular, but on the whole a fair volume of trade is reported, principally in domestic territory and South American medium to low wools. For the latter prices are a bit stronger. Otherwise the market is steady.

"Further business in military goods is being reflected in the yarns, tops and wool market and prices for these items are strengthening. Civilian trade is reported still rather slow."

Scoured basis:

Texas—Fine 12 months, $1.68@1.72; fine 8 months, $1.55@1.60.

Oregon—Eastern No. 1 staple, $1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.60@1.65; territory fine staple, $1.80@1.82! half-blood combing, $1.70@1.75; 3-8 blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

Meat Producers Better Paid.

WASHINGTON, Oct. 28.—Prices received by producers for cattle, sheep and hogs have gained 52.7 per cent in the general average from 1916 to 1917. Latest reports compiled at the department of agriculture show these advances:

Beef cattle per 100 pounds, live weight, from $6.55 to $8.40; veal calves from $8.77 to $11.08; sheep from $6.25 to $10.05; lambs from $8.22 to $13.06; hogs from $9.22 to $15.69, and chickens from 14.3 to 18.1 cents per pound.

The highest price at the farm reached during the 12 months was $8.70 for beef cattle in May, $11.08 for veal calves in September, $10.15 for sheep in May, $13.06 for lambs in September, $15.69 for hogs in September, and 18.1 cents a pound for chickens October 1 of this year.

Portland Wheat.

PORTLAND, Ore., Oct. 29.—Wheat receipts last week were the largest of the season, ammounting to 562 cars. Since the first of the month 1755 cars have arrived here. The yards are again becoming congested, but as shippers report fewer cars to be had at loading points, the local situation is expected to clear this week. Most of the cars brought in last week consisted of wheat that had been held up at intermediate points.

There is but little interest in the coarse grain markets and prices of oats and barley are holding steady, as but small lots are being offered by farmers.

Mill feed is still quoted at the old price, and no predictions are made by millers as to when quotations will be reduced.

HOPS.

NEW YORK, Oct. 26.—Hops easy; state, medium to choice 1917, 76@83c; 1916, nominal; Pacific coast 1917, 35@38c; 1916, 20@25c.

Bobtail Sheep Dog

The name of this useful, sagacious and quaint-appearing dog exactly explains his ancestry and occupation, although, strictly speaking, the Bobtail sheep dog is as much a cattle dog as a sheep dog. There are varieties of these rough and heavy coated sheep dogs in other European and Asiatic countries than England, which, however, have long tails. It is one of the oldest breeds of dogs.

In general appearance the Bobtail is a strong, compact-looking dog of great symmetry, absolutely free from legginess or weaselness, profusely coated all over, very elastic in his gallop, but in walking or trotting he has a characteristic ambling or pacing movement. His bark should be loud, with plenty of "ring" in it. He is a thick-set, muscular, able-bodied dog, with a most intelligent expression, free from all poodle and deerhound character. While a fast-enough dog for the wildest of sheep, he is not hard on them; and his great sense or sagacity makes him more of a human companion than simply a dog-aid.



A great characteristic of the Bobtail is his ruggedness. Because of the density of his coat he can put up with most severe climates. The best Bobtails have very heavy coats, there being an undercoat on the body with a long, harsh and almost wire-like overcoat of the texture of the mane of a horse. The undercoat keeps the dog warm and his skin protected from wet and rain, while moisture will roll off the outer coat. Great points in the breed are the all-round feathered fore legs and the general massiveness and squareness of the hind quarters.

Meat Packing in Brazil.

An American company's policy of introducing into Brazil a certain number of cattle of blooded stock and of a type best suited to the meat-packing business, together with the Brazilian governments' intended founding of zootechnic posts, should in a relatively short time result in a notable improvement in the Brazilian herds, says Consult General Alfred L. Moreau Gottschalk, Rio de Janeiro. From the economic point of view a matter of this kind is very vital to Brazil at present, as there seems to be little doubt left that the future holds in store for this republic a prominent place in the meat industry of the world.

In this connection it may be of interest to note that a well-known French banking and credit institution is now going over the whole of this region for the second time, in the hope of obtaining concessions and has purchased two large blocks of land and all the cattle thereon at Maranao.

Cattle From Canada.

The export of cattle from the Sarnia consular district appears to be on the increase. During the calendar year 1915 the Sarnia consulate issued invoices covering shipments of cattle to the United States aggregating in value $895,381, while during 1916 invoices were issued aggregating $1,093,070. For the quarter ended September 30, 1917, the invoices totaled $530,849. At the same time the Canadian customs report shows a decrease, giving the exports for the fiscal year ended March 31, 1916, $12,002,555, and for the fiscal year ended March 31, 1917, as $7,883,842, but gives the quarter ended September 30, 1917, as $5,181,786. From these figures it would appear that about one-tenth of the cattle shipped out of all Canada are exported from the Sarnia consular district, comprising a little more than two counties.

Unearth Clay Pipes.

While plowing in a field near Charleston, Mo., men unearthed a number of clay pipes of peculiar construction. The pipes were richly ornamented in figures and flowers. All appear to have been used in smoking and are highly colored. It is supposed that they are relics of the ancient mound builders.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

HELP WANTED—MALE 3

CAPABLE, RELIABLE BOY FOR BOARD, $10 mo.; 4 cows to milk; drive 3 miles to school. W. C. Atherton, Cusick, Wash.

EDUCATIONAL 45

POSITIONS GUARANTEED GRADUATES OF BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog free.

QUALIFY FOR ONE OF THE THOUsands of civil service and government positions now open. Write for literature. Creekmur's Business College, Moscow, Idaho.

EDUCATIONAL 45

GRADUATES OF THIS SCHOOL NOW hold excellent positions in Washington, D. C., and other cities. Stenography, bookkeeping, etc. Whitney College of Commerce, Coeur d'Alene, Idaho.

PERSONAL HELP TO EACH STUDENT— Shorthand, bookkeeping, telegraphy, direct wires. Catalog free. Lewiston Business College, Lewiston, Idaho.

THIS AD IS WORTH $1 AT THE MISsoula Business and Normal College, Missoula, Montana. School fully accredited. Write for particulars.

TEACHERS' AGENCIES 46

SCHOOL CLERKS: WIRE OUR EXPENSE. Hazard Teachers' Agcy., Spokane.

HIGH-GRADE ROBES FROM YOUR horse and cow hides. Send for catalogue. John T. Little Hdw. Co., Spokane, Wash.

MISCELLANEOUS 57

MOONCULTURE

Plant and work by the moon signs. Raise bigger corps; make better living. Write Box 700, Missoula, Mont.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Kitchen cupboards, 4 ft. 6 in. wide, 7 ft. high; two glass doors and three long adjustable shelves in the upper part; three drawers, one flour bin, one sugar bin, mixing board, and a cupboard for pots and pans, with panel door in lower part; price $35 set up, or $25 knock down.

6 cross panel doors	$1.92
Cottage front doors	3.50
Two light windows	1.24
Spruce flour bins	1.75
Prepared roofing	1.35

Our large illustrated catalog, No. ——, sent, postpaid, without charge, on request. Sell any one, ship anywhere, and guarantee safe delivery.

The largest factory in the west selling direct to consumer.

O. B. WILLIAMS CO.
1943 FIRST AVE., SO. SEATTLE, WASH.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave. So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

MISCELLANEOUS WANTED 63

STRAINED HONEY WANTED. WRITE US the quantity you have to offer. Commercial Creamery Co., Spokane, Wn.

AUCTIONEERS 75

N. W. CAIRNS, PULLMAN, WASH. AN honest auctioneer. Investigate me.

N. R. SHEPHERD, FARM AND LIVE stock auctioneer, Troy, Idaho.

MACHINERY FOR SALE. 93

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. S., SEATTLE.
Write for Catalogue.

AVIATION 115

DENINE AIRCRAFT CO., BOX 2232 SPOkane, Wash. Flying taught, skilled help wanted. Investigate. Splendid opportunity.

STOVE REPAIRING 126

STOVE AND FURNACE REPAIRS. Welding. M. S. Rubens, W1009 1st, Spokane.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

WASH. (D. C.) PAT. ATTY. SEE AD IN Polk's. C. H. Crawford, Spokane.

LIVE STOCK 177

GARFIELD STADACONA KING,

First prize boar under six months, champion boar under one year at Spokane Fair this fall. His litter mates and half brothers, big, husky 20-lb. March pigs, for $45 each if taken soon. Your money and express cheerfully refunded if they don't please you. GET THE KING'S BLOOD WHERE THE KING LIVES.

Garfield Stock Farm.
Duroc Swine, Holstein Cattle,
Garfield, Wash.

FOR SALE—REGISTERED BERKSHIRE boar; farrowed Mar. 17; grandson Laurel Champion. J. Morrill Delano, Puyallup, Wn.

LIVE STOCK 177
Continued.

RED CLOVER BIG TYPE POLANDS— Mouw, Fesenmeyer, Miller and Herring strains—spring pigs, both sexes, with quality, for sale. Never before could you raise or buy grain and make as much money feeding good hogs as now. Write your wants. Inspection solicited. H. J. Howser, Stites, Idaho.

FOR SALE.
50 good breeding ewes at $10 per head.
C. B. STEWART, WINLOCK, WASH.

GUERNSEY BULL FOR SALE.
Governor of Fernwood No. 23316. Anicich Bros., Enumclaw, Wash.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 426

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, S2 Bernard, Spokane.

MONUMENTS 510

GET MY PRICES ON MONUMENTS BEfore placing your order. I can save you money. Geo. H. Moody, Moscow, Idaho.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

LIVE STOCK INSURANCE. 610

T. H. ROGNSTAD & SON.
HARTFORD LIVESTOCK INSURANCE.
PHONE 584. CLARKSTON, WASH.

DOWNAN'S INSURANCE AGENCY, PULLman, Wash., sell Hartford live stock insurance. The safest that can be bought.

SEEDS 620

VETCH, CLOVER AND FIELD SEEDS.

We carry a complete line of grasses, wheat, oats, barley, speltz and other seeds too numerous to mention. Our prices are right, and will be glad to send samples and quote prices.

CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

FARM LANDS—FOR SALE 651

LOOK HERE LIVE STOCK MEN.

Cattle and sheep are very fond of buck brush and like shrubbery and they keep fat on it. Wish you could see some of the stock running on open range near our lands. We have several places of very fine character for stock purposes, that have splendid moisture and raise fine timothy and clover, which makes fine winter feed for stock. We have meadows of natural grass. Our winters are easy and mostly open, and you can get good tillable lands very close to good range. Write for our folder.

83 acres, 35 acres cleared, small house, good sized barn, chicken house, etc.; good well 16 feet deep, good creek; about 20 acres now in timothy and clover. This may be just what you want. Ask about it.

40 acres, about 25 acres now natural meadow; 20 head of stock; don't seem to be able to keep the grass down, and there's a school just across the road. You could cut this grass for winter feed and let your cattle run on the range.

80 acres of raw land, that grows willow brush and buck brush; in a good community; close to railroad; R. F. D. passes by it; none of it now in cultivation, though it could be easily cleared.

40 acres; 3-room house; 2½ acres cleared; well, small barn, etc.; on state road; close to range; close to school (½) mile; R. F. D. 6 times a week. Only $1500. $300 down, balance 10 yr. payments, 6 per cent interest.

500-1000 acres. We can give you any quantity of land desired from forty acres up.

MILAN FARMS DEVELOPMENT CO.
1322 Old National Bank Bldg.,
or
ALLIN REALTY CO.
REALTORS.
408 W. Sprague Ave.
Phone Main 2750.
Spokane, Washington.

BIG CUT IN PRICE OF FARM LANDS in the best agricultural part of Snohomish county. $25 to $35 per acre; 10 yearly payments; railways, mills, factories, plenty of labor. The best proposition on the market for the man who wants a farm. Send for illustrated literature. Brownell Land Co., 904 Third ave., Seattle, Wash.

GENUINE SACRIFICE AT $7.50 PER acre—880 acres wheat land near Kennewick, Wash.; fenced; two wells; some buildings; 240 acres in new irrigation district; $5600 cash required. Keystone Lumber Company, Tacoma, Washington.

STOCK AND GRAIN RANCH TO LEASE for 5 years; stock and equipment for sale. Ben Knox, Box 218, Prosser, Wash.

FOR LANDS IN HEART OF THE PAlouse write H. A. Malsed, Palouse, Wash.

GOVERNMENT LAND IN CAL. FREE book. Joseph Clark, Sacramento, Cal.

FARM LANDS—FOR SALE 651
Continued.

CALIFORNIA FARM LANDS AT FARM LAND PRICES.

TO SETTLE AN ESTATE WE are offering a portion of the famous old Capay Rancho for sale in tracts of 40 acres and up.

THIS TRACT IS IN CALIfornia's early fruit district, where fortunes are being made in prunes and nuts. Alfalfa yields an average of about seven tons per acre. Absolutely no alkali or hardpan, and adequate water.

PRICE OF THIS LAND, INCLUDing the water, is $150 per acre while it lasts.

TERMS: ONE-THIRD CASH, 10 years' time for the balance, at 6 per cent.

IN THE HANDS OF THE small farmer, this land should be worth from $500 to $1000 per acre in five years.

SEE OUR BIG DISPLAY AD IN Sunday's Spokesman-Review.

FOR FULL PARTICULARS AND illustrated booklet call or write

CALIFORNIA FARMS CO.
BRANCH OFFICE.
PHONE MAIN 5045.
905 OLD NAT'L BANK BLDG.
SPOKANE, WASH.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay. $2000 loan in improvements, or ready-made farms. Loans of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Alan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

$35—STOCK RANCH—$35.

350-acre hay and stock ranch; good bldgs.; private irrigation system; 50 acres tame hay; 100 acres grain; 10 acres orchard; some timber; all good, level land, excepting 20 acres; spring water for domestic use; black loam soil; unlimited outside range; town 1½ miles. Photos and description on request. 10 years' time if wanted. Price $35 per acre. W. M. Frost & Co., 410 Cham. of Com. bldg., Spokane, Wash.

160 ACRES—CORN, BEAN, GRAIN LAND, improved; school and climate A1; only $12,000.

180 a.; 100 under plow; well watered; A1 soil; grow anything; close to town; $7500.

600 a. stock ranch; close to town and transportation; plenty farm land; best in Nez Perce Co.; price $18,000.

P. R. BEIRS, LEWISTON, IDAHO.

WHEN VISITING THE 1917 LIVESTOCK show it is to your interest to investigate the Lewiston-Clarkston valley. Fertility of soil and climate unsurpassed.

LEWISTON-CLARKSTON IMPROVEMENT CO.
CLARKSTON, WASH.

IDEAL STOCK FARM.

Write for full description of 800-acre stock farm; water; fenced and cross-fenced; fine buildings; situated near 3 railroads, from 4 to 7 miles distant; a wonderful opportunity as a stock farm. $10,000 will handle.

ATWOOD & GRIDLEY.
208 WRIGHT-STONESTREET BLDG.
COEUR D'ALENE, IDAHO.

FOR QUICK SALE.

320 acres; grain and stock ranch; lots of free range; fully equipped; good terms. Address K. L. Kirkhart, Missoula, Mont.

J. A. PERKINS & CO., WHITMAN COUNty lands, Colfax, Wash.

IRRIGATED LANDS—For Sale 663

IRRIGATED FARM LANDS.

ALFALFA LANDS, under government irrigation; abundant water; low altitude; rail and water transportation to coast markets; good schools, good roads; products alfalfa, corn, cream, hogs, honey, fruits, vegetables; long growing season; unimproved land $30 to $60 per acre; improved $100 to $250. Write for further information and literature. Dodd & Knapp, Hermiston, Ore.

IRRIGATED LANDS—WANTED 666

FOR SALE VERY CHEAP—13-ACRE IRRIgated orchard tract, 4 miles from Caldwell, Idaho. About 7 acres commercial bearing trees. Will take Liberty bonds. Call or write G. H. Summers, 121 South Lincoln st., Spokane, Wash.

TO EXCHANGE—REAL EST. 705

WHY NOT TRADE?

$6000 takes 140 acres near big lake; spring water; good house, barn and shed; orchard; 20 acres cultivated; about 100 acres tillable when cleared; cordwood and some saw timber; good clover and timothy land. Owner wants equity in Spokane home.

HALF SECTION, CUT OVER.

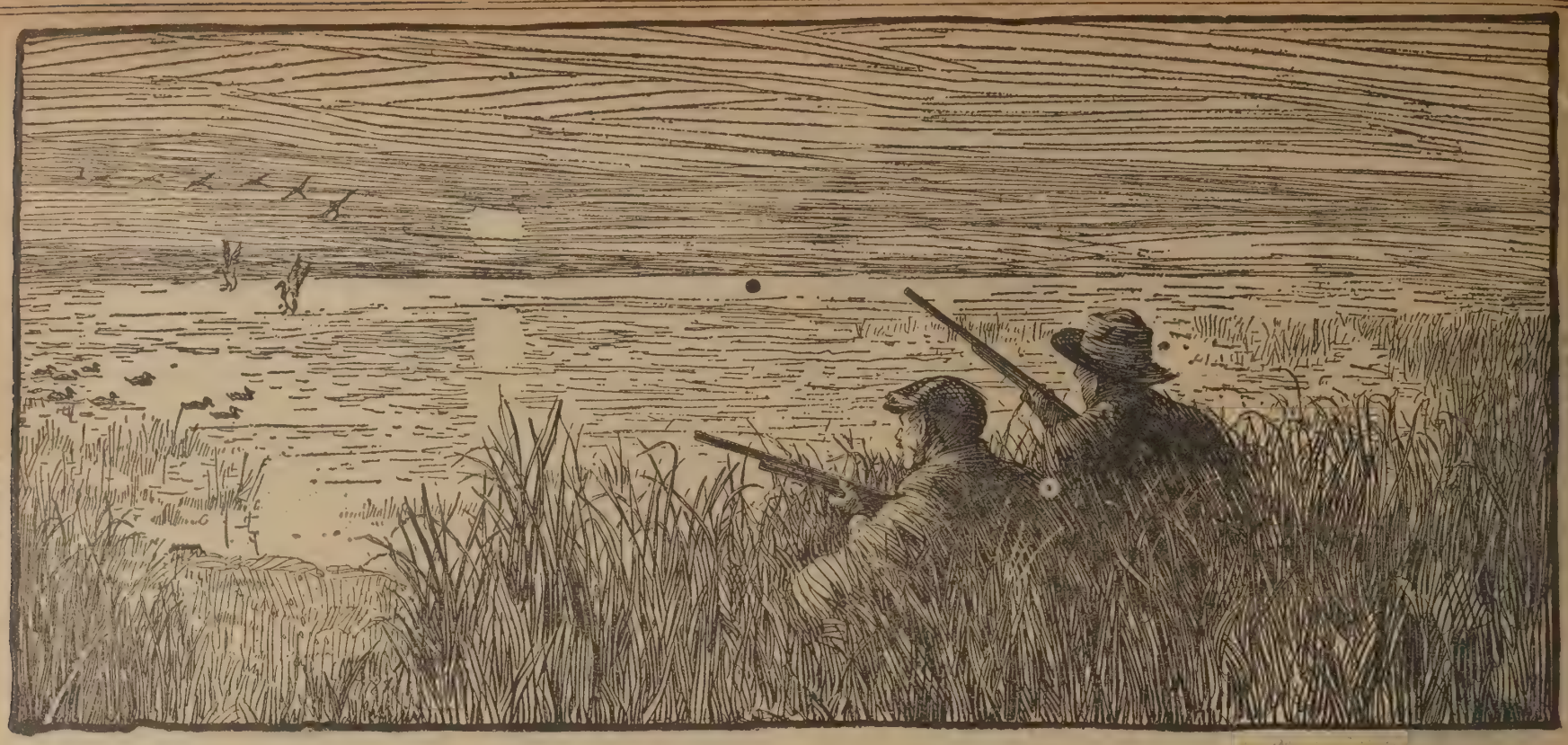
Has running water; practically no waste land; 2 miles from station, 40 miles from Spokane; good auto road. Will take vacant lots or house. Price $20 per acre.

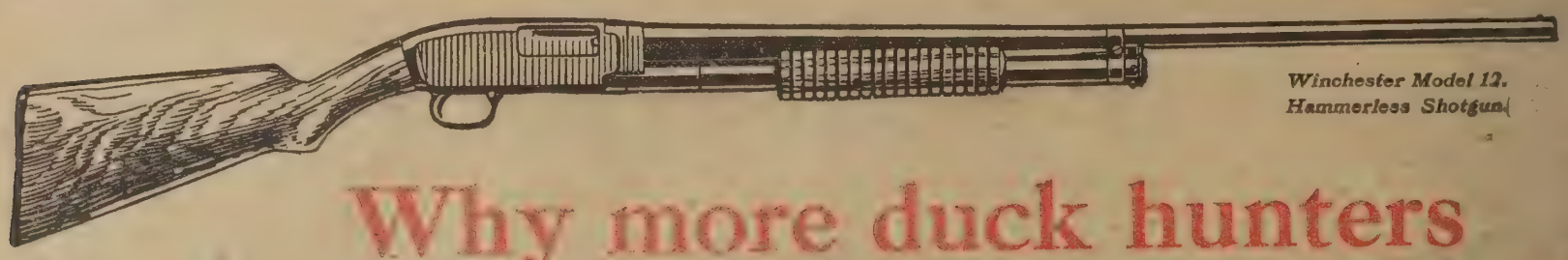
MONTANA—200 ACRES.

Clear of encumbrance; very little waste land; only $25 per acre. Will take equity in ranch in Washington or Idaho.

HEGE & WATKINS CO.
715-16-17 Paulsen Bldg., Spokane, Wash.

WHAT WILL YOU TRADE FOR 640 acres wheat land in Douglas county, near Waterville? Consider trades for smaller farm, 5 to 40 acres in western Wash.; also lease on 160 acres school land. Modern 9-room house, barn for 32 head stock, several outbuildings, plenty water, farm implements. Valuation with stock and implements $40,000; without, $25,000. Write John Schillereff Sr., Douglas, Wash.





Winchester Model 12. Hammerless Shotgun

Why more duck hunters choose this model than any other

If there's ever a place where you need a gun that's a hundred per cent reliable, it's when you're down in the damp salt marshes after duck.

Whatever gun you may start with, if you keep on long enough, you will come around to the Winchester No. 12 Repeater. It is the favorite in the long run with old duck shooters.

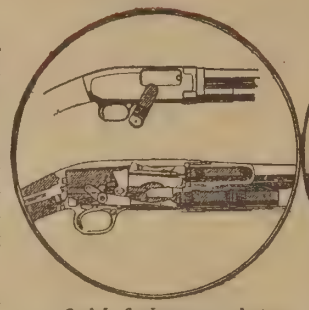
In the damp salt air of the seashore and swamps this gun never "gums." Under the most severe conditions it is a sure-fire, sure-to-work Repeater. It will not jam, catch, or fail to extract the empty shell. It "feels" right, "comes up" right, and *is* right. It works smoothly in whatever position it is held.

At the distance at which you get most chances at ducks, this gun shoots an effective uniform pattern of great game-getting penetration.

The pattern that brings down the game

The remarkable game-getting pattern of the Winchester Model 12 (or the Model 97 for those who prefer a hammer gun) shooting its own standard ammunition, is the result of infinite care taken in boring the barrel.

The right amount of choke for different loads has been worked out after exhaustive experiment. Result: a pattern that spreads out evenly — neither too scattered nor too bunched—and lands with lots of steam behind it.



Quick feeder, sure ejector. Throws empty shell to the side, out of your way.



Even spread, maximum penetration, Winchester shot pattern brings down the game.

The barrel *is* the gun

Men who know guns realize that the accuracy and durability of a gun lie in the barrel. On the quality of the barrel depends the quality of the gun. There is absolutely no difference in the standard of quality of the barrel on the highest and lowest priced Winchester guns. With Winchester the barrel *is* the gun and the single standard of quality has been attained only by the most unremitting attention to the boring, finishing and testing of the barrel.

The Winchester barrel

The barrel of the Winchester Model 12 has been bored to micrometer measurements for the pattern it is meant to make. The degree of choke exactly offsets the tendency of the shot to spread. Until its pattern proves up to Winchester standard, the gun cannot leave the factory. The Nickel Steel construction preserves the original accuracy forever. The Bennett Process, used exclusively by Winchester, gives the Winchester barrel a distinctive blue finish that, with proper care, will last a lifetime.

For those who prefer a hammer action shotgun, we have made the Model 97. It is built on similar lines to the Model 12, but with hammer action.

What (W) means

This mark on the barrel means *Viewed and Proved Winchester.* This stamp stands for Winchester's guarantee of quality, with fifty years of the best gun-making reputation behind it.

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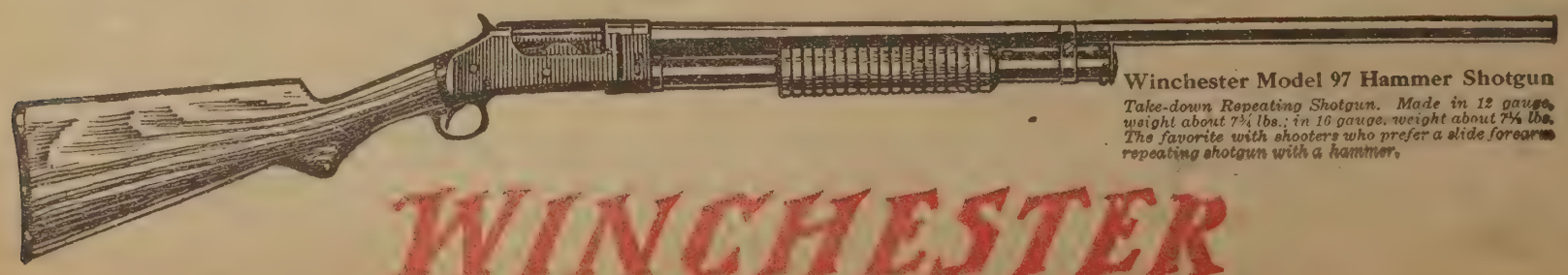
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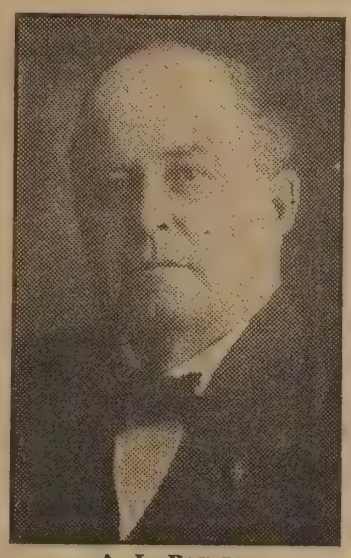
SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 45. NOVEMBER 8, 1917. ** WEEKLY.

Can't Mobilize Boys on Four-Minute Plan

So Says A. L. Rogers of State Defense Council in Reply to Query on Next Year's Labor

J. H. Piper, Boy Scout executive at Seattle, has submitted a proposition to the state council of defense to mobilize training camps next year in order to get city boys in condition to do real work on the farm. The executive secretary of the state council, M. P. Goodner, sent this proposition to A. L. Rogers of Waterville, one of the state council of defense, asking him for "your frank ideas and your concrete suggestions on the whole subject." Those who know Al Rogers through years of fellowship could not conceive of a more direct appeal than to ask him for "frank ideas" and "concrete suggestions." The Washington Farmer is fortunate in received from Mr. Rogers himself a copy of his reply to Mr. Goodner. which follows in full:



A. L. Rogers.

October 29, 1917.

Mr. M. P. Goodner, Executive Secretary, State Council of Defense, Olympia, Washington.

Dear Mr. Goodner: Your letter of the 29th inst. regarding the Boy Scout executive, Mr. J. H. Piper, and his ambition of gathering the boys of his organization into mobilized training camps so as to prepare the city boys and get them in condition to do real farm work received. I feel at the present time that we should not discourage any worthy ambition of that nature. We should work over their plan and adopt the best features and coordinate them with the main or general plan of the farm labor problems for the coming year.

You must not forget that our boys and girls are the greatest asset of our state and nation, and can be of wonderful help in this crisis if we handle them properly. As fruit pickers they can be trained by short courses of instruction and become a most valuable asset to orchardists, where great strength, hardened muscles and long experience are not required. They are light, nimble and quick and can climb ladders. They are short in the back and close to the ground, and as berry pickers they can do this work easier and better than older people. All that is required is proper instructions how to handle the different class of products so as not to damage the tree, plants and fruit. This class may be termed emergency workers, and it is vitally important that we have a large supply for next season, especially so in the Wenatchee fruit districts, where they specialize in only one product, the big red apple. Here the peak of the labor problems come at harvest time, and the length of time of employment is only about a month or six weeks.

The state board of education must take very liberal views on vacation periods in school work so that all children can do their bit. Even in normal times we must break away from the old fanatical ideals of giving our children a million dollar finish and only a ten-cent earning capacity. Life's work is not a question of how much you know, but the spirit that is behind the little that you do know, is what makes for success.

A few lectures on trees, vines and fruit culture, also the picking and packing of same, can be given in the grade and high schools in the cities and towns of our state. This will prepare the children for their work and create enthusiasm to do their part. To protect the growers, wages and pay should be governed by piece work, that is, so much per box, and penalties for any damage and poor work. Each school can have a group of workers who will be under the guardianship of some man or woman, that will look after the moral, social and business conditions and make all arrangements with the harvesters' league at different points in the fruit districts. This represents collective bargaining, will insure permanent work and standardized wages and good living conditions, morally, mentally and physically. If these conditions can be guaranteed, sensible fathers and mothers will allow their boys and girls to go forth and enter into the spirit of this helpful, healthful and remunerative work. On the other hand the cities, towns and orchardists that expect the aid of this high class help must express their appreciation by giving attention to their needs and requirements, and stabilize satisfactory conditions by having clean tents with wooden floors, plenty of pure water, private and separate comfort stations for men and women (if it is only four stakes driven in the ground and tarpaulin stretched around them). I would suggest community cook and dining tents be placed in easy access to several orchards and operated on community cost plan and charges for meals on cost basis. This will relieve the tired housewives of the added duties of boarding hired help. The whole equipment is not expensive. The foundation and floors for tents can be of a permanent nature and be used year after year. The tents should be taken down in the fall and laid away for the next season's work. Rough tables with smooth tops, so as to be scrubbed and washed each day, benches for seats, a cook stove and cooking utensils, tin plates and cups, iron knives and forks, tin spoons, and your outfit is complete. Young city folks will be delighted with the privilege of camping out in tented shelters. They will not have epicurean appetites when they pick 80, 90 or 100 boxes of apples per day, but will crave the luscious fruit, crisp vegetables, plenty of fresh milk, pork and beans, corn bread, hot biscuits and honey, and plenty of it, once in a while a good chicken dinner, all raised on the farms they are working on. (It makes one's mouth water to think about it.)

Then again a little healthy, wholesome and moral entertainment should be extended by the community to these young people. They are not only your helpers but they should be considered as your guests and welcomed as such. On Saturday evenings a street dance with music by the band should be the city's part in this movement. On Sunday the boys and girls should not be expected to go to church unless they so desire, for they will have on their rough working clothes, but churchmen and their members should go out among the people in the orchards and give them the glad hand. Don't talk or preach on hell and repentance, but tell stories, sing signs, extend greetings, look into their temporal welfare and see if they are getting the treatment you would like your boys and girls to have when among strangers. That is the way to elevate rural life and

Continued on page fourteen.

Is the Farmer Disloyal? Read Article This Week, Page 19, Answering This Question

ACT NOW

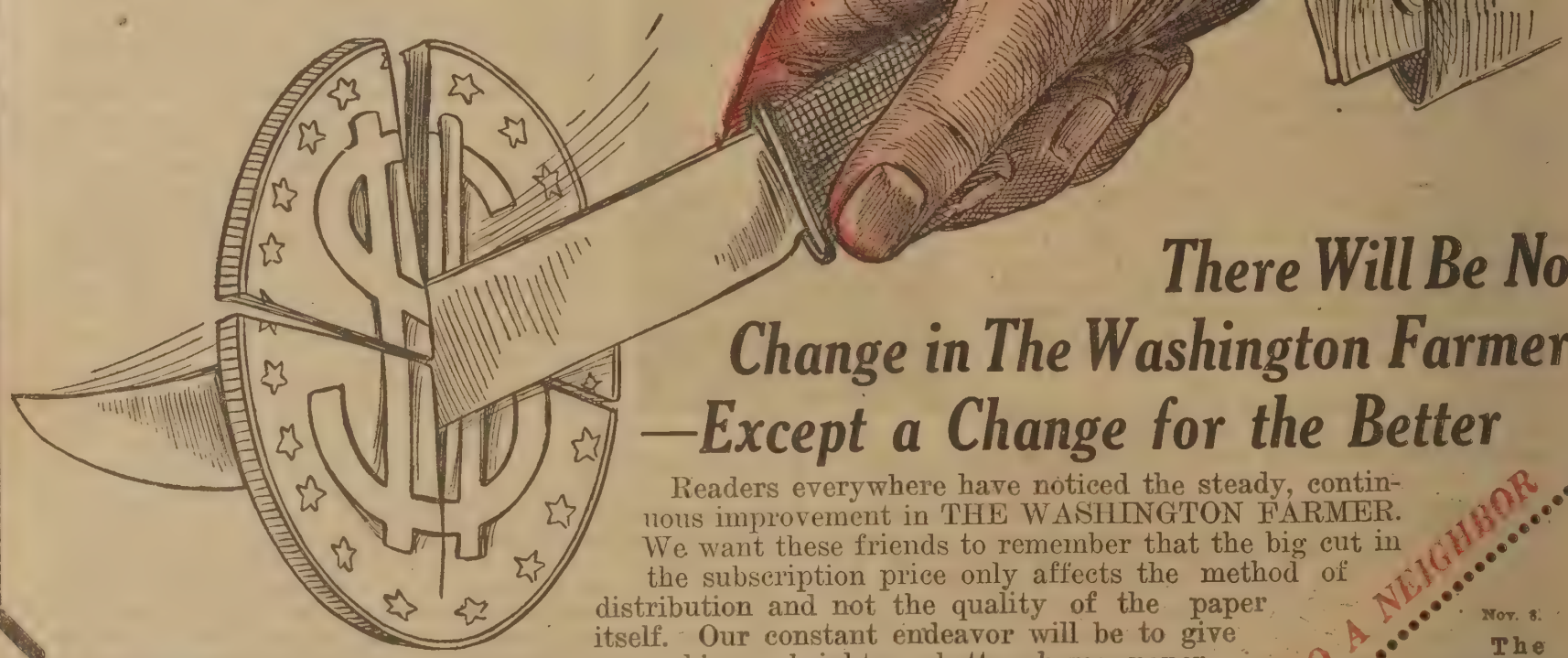
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The response already received to our appeal has been splendid; but there are still a great many who need another gentle reminder to act even though they are in hearty sympathy with our plan. We have put a schedule of rates into effect designed to give the subscriber the benefit of every dollar saved though dealing direct with the paper. We want every one of our friends to get the benefit of the substantial saving offered. To those who have not yet written us we therefore urge prompt action. Use the coupon today. It is obvious that the continuation of this unusual offer depends entirely on our readers.



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Nov. 8.

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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 45 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF November 8, 1917

Fix the Minimum Price for Hogs

About $15.50 Per Hundredweight for Average on Chicago Market

The following special telegram to the Farmer from Charles W. Holman of the United States food administration, gives more definite information regarding the fixing of a minimum price for hogs at $15.50 a hundred pounds, than was carried by the Associated Press in the daily papers.

At the close of the conference in Chicago between the representatives of the United States food administration and representatives of the principal live stock exchanges of the country, it was also understood that minimum prices on other live stock will be announced soon, followed by a maximum wholesale price, and possibly a retail price.

This action of the food administration was anticipated in an article published in the Farmer last week in which Herbert Hoover, national food administrator, declared that his studies of the present situation, both in Europe and in the United States, led him at once to say that he regarded the problem of food animals with even more concern than the problem of grain foods. After giving his reasons in coming to this conclusion Mr. Hoover adds: "It appears to me, therefore, that we must concentrate on the increased production of hogs if we are to answer the world's craving for fats."

In this connection it is incidentally interesting to note that a telegram dated at Chicago, November 1 says:

The biggest packing trust ever known came into being today when Joseph P. Cotton, hitherto a New York lawyer, took charge of every meat-packing plant in the country as food administration licensor. He is working on price reductions and has full cooperation of the meat men.

One of the most important paragraphs in the following telegram from Mr. Holman is his explanation of the methods by which the food administration expects to keep the minimum price for hogs up to the stated figure:

Fair Price for Producer.

CHICAGO, Nov. 3.—Joseph P. Cotton, chief of the food administration meat division, today issued the following statement relative to the prices of hogs.

The main purposes of the food administration as to hogs are four:

1. To see that the producer at all times can count on a fair price for his hogs so that it will be profitable to him:

2. That the farmer increases the number of hogs bred.

3. To limit the profit of the packer and the middleman.

4. To eliminate speculation.

All these purposes are necessary because we must have more hogs, so that the ultimate consumer shall at all times get an adequate supply of hogs at the lowest feasible price.

We shall establish rigid control of the packer.

Fair prices to the farmer for his hogs, we believe, will be brought about by the full control which the food administration has over the buying of the allies, our army and navy, the Red Cross, the Belgian relief and the neutrals, which together constitute a considerable factor in the market.

The first step is to stop the sudden break in prices paid for hogs at the central markets. Those prices must become stable so that the farmer knows where he stands, and will feel justified in increasing hogs for next winter.

The prices so far as we can affect them will not go below a minimum of about $15.50 per hundredweight for the average of the packers' droves on the Chicago market until further notice.

We have had, and shall have, the advice of a board composed of practical hog growers and experts. That board advises that the best yardstick to measure the cost of production of the hog is the cost of corn.

That board further advises that the ratio of corn price to hog price on the average over a series of years has been about twelve to one (or a little less). In the past, when the ratio has gone lower than twelve to one, the stock of hogs in the country has decreased. When it was higher than twelve, the hogs have increased.

That board has given its judgment that to bring the stock of hogs back to normal under present conditions the ratio should be about thirteen. Therefore, as to the hogs farrowed next spring, we will try to stabilize the price so that the price the farmer can count on getting for each 100 pounds of hog ready for market will be thirteen times the average cost per bushel of the corn fed into the hogs.

Let there be no misunderstanding of this statement.

It is not a guarantee backed by money. It is not a promise by the packers; it is a statement of the intention and policy of the food administration, which means to do justice to the farmer. CHAS. W. HOLMAN.

Retail Dealer Must Be Reasonable

Government Will Deny Supplies to Those Who Profiteer

The government has told the farmers what they shall receive for their wheat.

The government has told the millers what profit they shall be allowed to make on the grain that they convert into flour and feed.

Now comes the government to tell the dealers what they shall charge for the flour and bread and feed that they receive from the miller or baker and sell to the ultimate consumer.

This latter step in the regulation of the price of staple necessities is one that many feared would not be taken effectively by the government, for it was a conspicuous fact that the food bill did not provide for the licensing of the retail dealer, though it did enable the president to require the wholesaler to operate his business under license regulations.

On November 1 the food administration placed 100,000 food handling concerns under federal license. This number included all the large manufacturers and wholesalers, and all retailers whose annual sales total $100,000 or more.

But the most significant part of the regulations announced is that these large concerns will be denied the right to sell foodstuffs to any retail store that charges an unreasonable price for it. Any wholesale house that sells to such retail store after the food administration has issued an order prohibiting such sale will be denied a license to do business at all.

While the government has not fixed definite prices on the staple food articles the provision just referred to is designed to curb all profiteers, and the food administration has an organization in every state and county capable of enforcing the regulations to the letter.

The foods that hereafter must be handled under license regulations are beef, pork, mutton, fish, poultry, eggs, milk, butter, cheese, flour, sugar, cereals, lard, beans, peas, fruits, vegetables and several varieties of canned foods.

The purpose of the licensing system is outlined by the food administration as follows:

"(1) To limit the prices charged by every licensee to a reasonable amount over expenses, and forbid the acquisitions of speculative profits from a rising market.

"(2) To keep all food commodities moving in as direct a line and with as little delay as practicable to the consumer.

"(3) To limit as far as possible contracts for future delivery and dealing in future contracts."

Relative to its plan of revoking the license of any wholesaler who sells to a retailer after such retailer has been stamped as a profiteer, the administration says:

"The small retailers of food, of whom there are several hundred thousand in the country, while exempt from the licensing provisions, are nevertheless subject to other provisions of the food control act. Every retailer, as well as every other handler of food, is forbidden under the law to make any unreasonable charge, to hoard, to monopolize, waste or destroy food, or to conspire with any one to restrict the production, distribution or supply, or exact excessive prices on any necessities. There are no penalties provided, but the food administration hopes that the arrangement of restricting supplies to violators of the law will be of some effect, for the retailer will find himself unable to buy goods from any wholesaler or manufacturer.

"With few exceptions those engaged in the handling of food have shown the utmost patriotism and a desire to go even beyond the requirements of the law itself in supplying the public with necessities at moderate prices," says the food administrator. "The exceptions are being noted and vigorous use will be made in these cases of the powers conferred by congress.

"For the most part, however, the administration anticipates the full cooperation and voluntary support of all licensees without resort to compulsion."

REMEMBER!

Increased rate of postage —letters **three cents** an ounce. If you send a larger coin than a 25-cent piece be sure to ask your postmaster how much additional postage will be required.

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C. B. Kegley

Services at Albion Cemetery

C. B. Kegley, master of the Washington State Grange, who recently died in Spokane, was buried in the Albion cemetery Saturday, November 3, beside his daughters, Ruth and Henrietta.

Owing to a high wind and storm the service at the grave was short, but very impressive, being conducted by state officials and members of the Palouse, Ewertsville, Seats and Albion grange. Beautiful floral offerings representing emblems of the order were contributed by the King County Pomona, Washington State and the Oregon State granges. Besides these there was a mass of beautiful flowers presented by friends and neighbors of the deceased.

Among the notable people present were F. W. Lewis, state secretary; the Rev. Mr. Powell of Ferndale; L. L. Snow, state lecturer; J. J. Compton and Mr. Chase of the executive committee, J. C. Lawrence of Spokane, J. G. Elliott of Colfax, D. G. O'Shea and George Jewett, president and secretary of the Federal Loan bank of Spokane; Ed Bryne of Garfield, J. S. and J. M. Klemgard, and Fred Hodge from Ewertsville; Price Black and wife from Seats.

Mr. Kegley was well known in and around Albion, having owned a farm two miles north of Albion, later locating on another farm near Ewertsville, from there to a farm near Palouse City, where his only son, Lewis, now resides.

BANKER-FARMER MEET

Gathering at Pullman This Week.

The meeting of the banker-farmer convention at Pullman, Wash., this weeks holds unusual promise, in that a greater number of vital problems will be considered than ever before at a like meeting. The war situation has developed an unprecedented complexity of farm finance problems, and these are to be the central theme of the convention. It is the hope of the committee in charge that a large attendance of farmers and bankers will be present to get acquainted with each other and develop a more cooperative spirit than has ever been manifested. The meeting is November 8 and 9 at the State College of Washington.

St. Paul's Playgrounds.

St. Paul maintains 14 public playgrounds and recreation centers.

Farmers Build Irrigation System Without Expert Assistance

By PAUL E. TRIEM

Twenty years ago last May a group of Clallam county farmers opened the first irrigation ditch in the Sequim district. Since that time other ditches have been built by farmers without the supervision of an engineer, and have been operated for farmers, by farmers. There in a nutshell you have the secret of the phenomenal success of irrigation at Sequim: the ability to mind their own business effectively has given these Clallam county co-operators the cheapest irrigation in the world.

The source of water supply is the Dungeness river, lying west of the district served. About 1100 acres of cultivated land are now under irrigation, while, with the completion of the new high line ditch, 15,000 acres altogether will be available for irrigation farming. The high line ditch will serve about 3700 acres, and it differs from its predecessors in that it is being built by a private company, and under the direction of an engineer. When completed it will be about seven miles in length, and the total cost will be close to $25,000. In addition to these ditches serving the country directly around Sequim, there are two ditches west of the river.

Used No Experts.

The least remarkable part of this whole story, however, is this fact of the farmers having built their own irrigation system without expert advice or assistance. It is a comparatively easy thing to do the rough surveying necessary to bring water from an abundant supply to farm lands lying well below this source. The task that is most difficult, and the successful accomplishment of which speaks most eloquently for the community spirit of the Sequim country, is to keep such an irrigation system in successful operation, year after year, without high salaried executives. Disputes and differences of opinion are bound to arise, and many a neighborhood has gone to pieces on this rock of selfish interests. Yet here is a community which for 20 years has been practicing a difficult form of social adjustment, and has been doing so without the intervention of any paid expert. How has it been done?

One of the best informed citizens of Sequim explains it in this way:

"When a man wants to kick, why, we just let him kick till he gets through," he comments. "If an irrigator with a grievance comes to me, for instance, I listen to him and remind him, 'Oh, well, things can't be expected to be perfect in this world, you know. Better take it easy.' And he usually does.

"Of course, there have been times when trouble has appeared pretty close to the surface," he continued musingly. "There were two neighbors who got into a dispute about their respective ditch rights, at one time. One of them would put in a board at the head of his ditch to divert part of the water, and the other would come along and kick the board out. One day they both reached the ditch at the same time, and the man who was in the habit of kicking out the obstruction had a gun.

"'If you put that board in again I'll send you to the hot place in less than a minute!' he shouted.

"'Well,' said the other as he stooped down to adjust the board at the head of his ditch, 'I might as well be in hell as in Sequim without water! Go ahead and shoot!'

Get Both Points of View.

"And that was all there was to it," the narrator concluded. "There was just enough humor in the situation to enable the man with the gun to get the other fellow's point of view—and that's a pretty sure cure for any quarrel."

There is a general agreement around Sequim that water is an absolute essential, and not merely one of the luxuries of local farming. The soil is very light, practically a gravel in most places. The brown loam surface soil is only a few inches deep even where it exists at all. Over a large area the entire working soil is gravel, running down to a mixture of gravel and cement at a depth of about three feet. Very evidently in such a formation as this the rains of winter can not be depended upon to furnish soil moisture throughout the growing season. Thad Wagner, manager of the Dungeness Cooperative creamery located at Sequim, says that he remembers the country before the time of general irrigation as a parched and desolate area upon which nothing thrived except such wild growths as sprung up early in the spring, only to disappear under the withering rays of the July sun.

Irrigation Works Wonders.

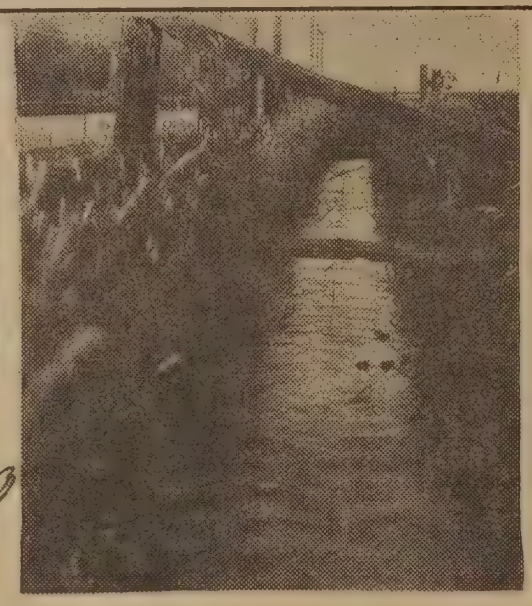
But irrigation has changed all this. Every sort of forage plant does well on this light soil with an abundance of water. Five tons of clover hay to the acre, and silage corn, wheat, oats and potatoes in proportion can be depended upon. It is a natural forage country, and for this reason is inevitably a dairy country. Scarcely a farm can be found without its silo, or its group of silos. Some trouble has been experienced in getting corn silage to keep, so that oats and peas, wheat and vetch, etc., are usually chosen for ensilage.

Up to the present time, condenseries and cheese factories are conspicuous by their absence, so that the main dairy product is butter. As a direct result of this, the Jersey is the big favorite among cows, with Guernseys and Holsteins distinctly second and third.

The Clallam County Cow Testing association has been formed by the local dairymen to keep tab on the productiveness of the herds.

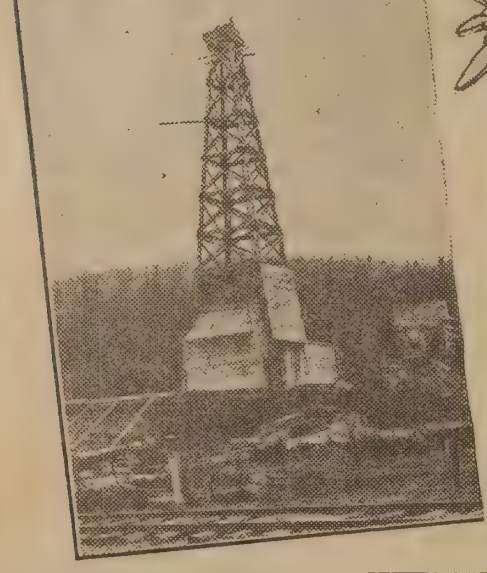
There is some difference of opinion as to the average selling price of Sequim farm lands. For one thing, there is no great volume of improved land offered for sale. And, naturally, the price of any particular farm will depend largely on its distance from market and its improvements. Probably $275.00 per acre represents the top price for irrigated and cultivated farm land, exclusive of buildings. But, as has just been intimated, there is no artificially fostered "boom," no pressure to sell, on in the farm land market around Sequim.













The top left hand picture shows the barn, silo and part of the kitchen garden on the Thomas Miller farm at Sequim. Next to it is seen one of the Sequim ditches, strictly practical with no unnecessary expense.

The Dungeness Cooperative Creamery company, whose plant is shown above, buys feed in large quantities and resells to its 200 patrons. This creamery turns out about 1700 pounds of butter daily, most of which is sold for fancy city trade. Below this picture are the barn and silos on the E. F. Gierin ranch. Wheat and vetch are used for silage.

The lower left picture shows one of the oil wells. Sequim has hopes of striking oil in paying quantities. At the right is one of Sequim's irrigated orchards, planted to potatoes.



Diversifies His Crops.

A. R. McAnally is farming 76 acres under the Tieton project in Yakima county and finds his best success comes from diversified farming. He has 20 acres in bearing orchard. "Each year I try to diversify my crops in such a manner that should one fail or bring a very low price I would still have enough to carry me through on the other crops," said Mr. McAnally to a representative of the Farmer.

Less Trouble With Codling Moth.

"I have succeeded in eliminating a lot of trouble with codling moth by the use of burlap around the base of my apple trees," said C. H. Renz, well known fruit grower, west of North Yakima. "I have destroyed thousands of worms this year by catching them in the sacks. The burlap is fastened securely around the base of the tree and when the worm hunts a place to make his nest the sack affords an inviting place. We go around every two or three days, removing the sacks and destroying the worms before they have a echanc to go into cacoons and lay the eggs for the next generation. Yes, I spray, of course, but there are a large number of growers in the valley this year who have sprayed religiously five or six times and still have a large percentage of wormy apples. My fruit is comparatively free."

Careful Selection of Seed.

Arthur Rabie of the Moxee valley, Yakima county, is one of the more successful growers of that locality and he attributes his success in large measure to a careful selection of seed. "I would rather be able to buy graded seed potatoes than to grade my market spuds in so many classes," said Mr. Rabie. "If we are careful as to the selection of seed we will produce a more uniform type of potatoes and there will not be so much necessity for a great lot of grading work at marketing time."

Potatoes in Two Grades.

Speaking of the proposal to adopt federal standards for Yakima valley potatoes, T. A. Wayenberg of the Moxee valley, Washington, expressed the opinion that two grades would be sufficient. He also said he feared Yakima valley growers would not be able to successfully market their crop of spuds in the east. "We may be able to sell them all right," said Mr. Wayenberg to a representative of the Farmer, "but I do not see just how we can pay the $15 freight charge to St. Paul and still make money."

Finds Beans Profitable.

W. K. Berklie of the Tieton project, Yakima county, harvested 10 acres of beans this year. He finds the bean crop a profitable one. Mr. Berklie is farming 20 acres and, like many other farmers, finds success comes through constant application of good common sense.

R. W. F.

Wheat Market Is Tangled Maze

Growers Are in Serious Predicament; Wheat Lies at Interior Points

Instead of relief from the tangled and confused condition of the wheat market at the present time the farmer who still has possession of his 1917 crop finds only denser fog settling about his problems. To the large grower who does not need to "cash in" on his crop the situation presents no serious difficulties, for the government will, in the course of time, get its regulatory system into smooth operation and clarify the situation. But to the small grower, who needs the returns from his few hundred or one or two thousand bushels in order to be financially able to proceed with his next season's business or to buy winter feed and provisions the situation is little short of grave.

Terminals Are Glutted.

For the present, shipment of grain from interior northwestern stations to coast terminals (Portland, Astoria, Tacoma and Seattle) is prohibited by Max H. Houser, representative of the federal grain corporation in this territory. The reasons seem to be: (1) That the terminal warehouses are full to overflowing, and (2) that there are insufficient cars to handle the crop that is now lying in wait in interior warehouses. The terminals are full because, under the far-reaching regulation scheme of the government, the fundamental purpose of which is to get the greatest food-making results possible out of the grain in the United States, sales and manufacture have been retarded to prevent possible losses or waste through various channels.

Wheat is being used for two purposes: (1) Making flour for local consumption; (2) exportation to England and France by the official buyer for the allied governments. No opportunity is being given by the government for a loss of any grain or any shipping facility where it can possibly be avoided, and this policy is undoubtedly responsible for the fact that there is practically "nothing doing" in the wheat market at the present time.

Make Flour Locally.

The food administration is bending every effort to have wheat manufactured into food with the least transportation possible. That is, it wants local mills to manufacture local wheat for local consumption, thus leaving cars and boats free to handle other pressing commerce.

Mr. Houser has recommended to the mills of the northwest that they increase their storage facilities, and is urging the interior warehouses to study the needs of their local mills and to hold sufficient grain to supply these needs throughout the coming season.

What It May Mean.

In a letter written by Mr. Houser to an interior inquirer, Mr. Houser makes the following significant statement:

"This (meaning the suggestions to the mills and warehouses above referred to) necessitates the grading of all the wheat, and will leave two courses open, either for the interior dealer to make settlement on basis of agreement between him and the farmer on his grade, or leave a small balance until the final grading has been passed, but in the meantime pay the farmer up very closely so that there will be little if any held back."

Information received from a number of sources is to the effect that small growers in some cases are making personal agreement under which they sell to private buyers at prices offered by these buyers, and that in other cases they are accepting advances of part payment for their grain, upon which advances they pay interest until such time as the market awakens and the grain is graded by the government, when the buyer will collect his interest and pay to the seller whatever remainder is due (the difference between the amount of cash advanced and the full price of the wheat as fixed by the government for the grade which it proves to be).

A Serious Dilemma?

It seems not amiss, therefore, to inquire if this does not put the man who has to have money on his wheat in a serious predicament. Either he must sell at private sale, or virtually borrow money on his wheat and pay interest on it for a time. In the former case it is safe to assume that the buyer is going to take no chances of paying more than the ungraded wheat will prove to be worth after reaching a point of inspection to be graded under the government regulations.

A. A. Elmore, northwestern national representative of the farmers' union, estimates that not more than 30 to 35 per cent of the wheat in the northwest has been sold by the farmers up to this time. He says that as a rule the farmers are greatly disappointed with the market tie-up. He says what the government buying corporation should do is to send inspectors throughout the wheat growing districts to inspect and grade wheat so the farmers could sell outright without waiting until their wheat reaches terminals, where the only federal grading inspectors are now located. He says that if the farmers are going to have to hold their wheat indefinitely, the government should make arrangements to pay the cost of the carrying of it, and not allow the grower to suffer losses through the control being exercised by the government.

Who Has Blundered?

In the hope that relief may be secured for the Inland Empire farmers, who are forced by government regulations to hold their wheat until the mills are ready to buy it, R. Insinger, chairman of the Spokane committee of the chamber of commerce, is taking up the situation with Max H. Houser, federal grain buyer at Portland.

The Coast mills are not buying more than their present needs, realizing that present prices will continue throughout the winter, and the interior mills are not stocking up with wheat for the same reason. The farmers, it is estimated, are carrying as a result $40,000,000 worth of wheat, when they need the proceeds of wheat sales to liquidate their indebtedness. General business also is suffering because virtually no wreat is moving. The farmer, in other words, is made to carry the interest charge on the value of the wheat until the mills or the government takes it over.

J. K. McCormick reported to the committee that Mr. Houser had assured him early in the season that the government contemplated some arrangement to carry this interest charge for the farmers, but, so far as is known nothing has been done.

Farmers stand ready now, and have so stood for several weeks, to turn over their wheat to the buyers. But someone has blundered, and it is up to M. H. Houser, the federal agent at Portland, to give an explanation and lift the blockade.

Another Corn Show.

Undaunted by the dry season which has been recorded in the northwest this year, the Exchange National bank of Spokane has announced its second annual corn show. The show will open on November 19 and run throughout the week. This is the same week as the National Apple show, and thousands of persons will take in both. Entries promise a first class show, and one that undoubtedly will be something of an inspiration for corn production in this territory. The bank is anxious to lend aid to those desiring starts of good corn seed.

Western Washington Holstein Breeders' Sale

By PAUL E. TRIEM

In William Bishop's opening remarks before the buyers assembled at the sixth semi-annual sale held by the Western Washington Holstein Breeders' association in Snohomish October 31, the widely known Chimacum breeder warned his hearers not to go east for breeding stock.

"Go into any man's barn out here," he declared, "and you can throw your hat through the cracks. That means fresh air. In the eastern barns, on the other hand, there is not so much as a knot hole left for ventilation and the consequence is that eastern stock is far inferior to ours in point of vitality and freedom from tuberculosis. You can not find anywhere in the world better cattle than will be sold on this platform today, and the beginner who does not take advantage of the present opportunity to buy breeding stock will live to regret his short-sightedness."



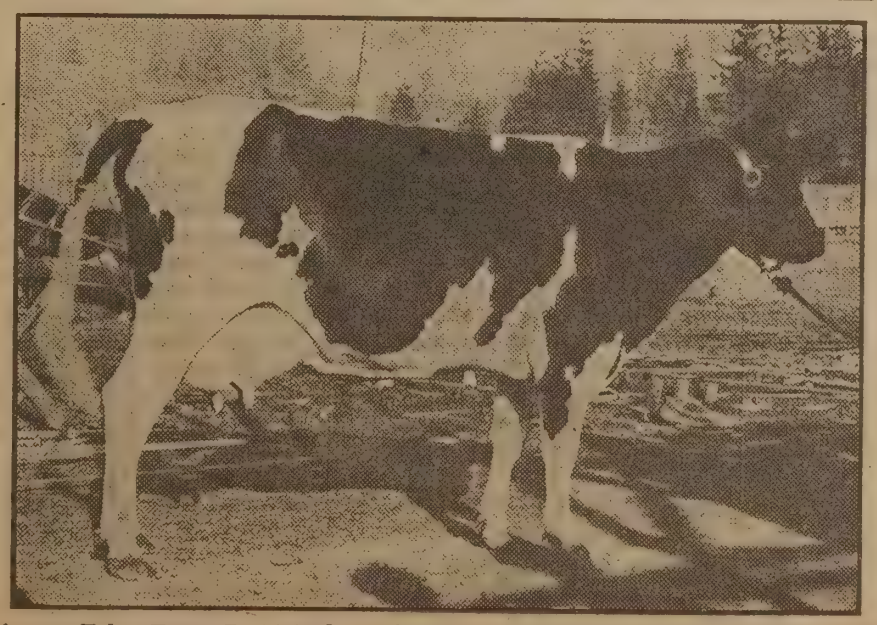
William Bishop, at readers' left; Colonel Gue at right. Two live wires in Holstein circles.

Colonel George A. Gue declared that the time has come for the man who has been buying grades to buy purebreds, and he added that even with present high prices for feed and labor cows of this sort will pay a profit to their owner.

"During a recent visit to the north Portland yards," he added, "I found that scrub cows which in the aggregate have been producing thousands of pounds of butter, are being sold. The yards are full of them at the very time when good feeders and pure bred dairy cattle are becoming harder and harder to buy. The fact is that the scrub cow can no longer be handled at a profit and she is being turned into the only thing she is fit for—sausage!"

In spite of the uncertainty interjected into the dairy situation by the rising costs of feed and labor some 46 head of pure breds were readily disposed of at this sale. The average price received was $238. A. E. Smith's "Aurora Fobes Fayne De Kol 2d" topped the sale, bringing $1000 from the Carnation stock farms. The "Red Cross heifer," Katherine De Kol of Tarboo, brought a total of $430, all of which goes to the Red Cross.

In closing, it is only far to speak a word for Colonel George A. Gue, his able assistant, Harry C. Cranke, and William Bishop, a trio of live wires whose enthusiasm and patience seem without limit. It is safe to assert that without the tireless activities of these men Holstein breeders in western Washington would not be in the position they hold today. The sales follow:



Aurora Fobes Fayne De Kol 2d, consigned by A. E. Smith and sold to Carnation Stock farms for $1000. This fine animal topped the sale.

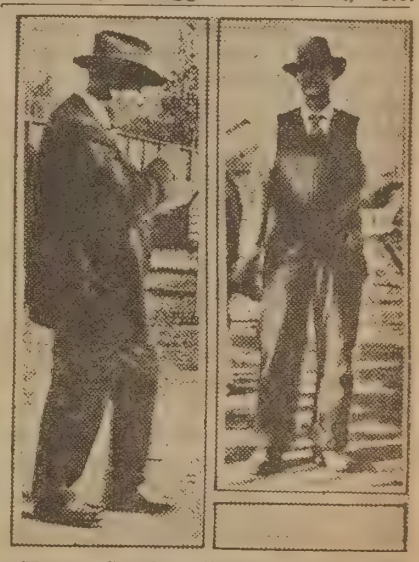
Sales.

Canary Oak De Kol 2d, No. 218987, born April 21, 1913, Carl W. Cook, Bothel, $190.

Greenbank's Canary Pontiac, No. 153351, born January 7, 1915, George A. Gue, North Yakima, $300.

Aurora Fobes Fayne De Kol, No. 262373, born June 23, 1913, Carnation stock farm, $1000.

Pietertje Aaggie Oakhurst, No. 271760, born November 27, 1914, P. S. Govan, Sequim, $175.



Harry Cranke, Colonel Gue's able assistant, at readers' left. Thomas Yarr of Chimacum, a prominent breeder of black and whites, at the right.

Pauline Korndyke Hartog, No. 350314, born July 26, 1916, P. S. Govan, $150.

Canary Queen Korndyke, No. 344593, born April 5, 1916, M. Treosti, Snohomish, $175.

Paul Aaggie Canary, No. 199815, born January 13, 1917, Conrad Shefer, Tolt, $130.

Canary Jacoba De Kol II., No. 266983, born September 23, 1914, Carnation stock farm, $250.

Selah Johnson, No. 206621, born May 12, 1912, A. E. Smith, Sumas, $300.

Stacy Phyllis De Kol II., No. 180281, born February 8, 1912, William Bishop, Chimacum, $400.

Violet Pauline, No. 233770, born April 2, 1914, A. J. Schold, Silverdale, $285.

Sadie Vale Cornucopia Mercedes, born May 6, 1917, George A. Gue, $100

Center Lilly, No. 149243, born June 3, 1910, A. M. Bailey, $310.

C. K. K. S. V. Bonnie Wayne, born May 2, 1917, Jule Snider, Lyman, $200.

Skykomish Minita, No. 333684, born September 20, 1915, J. W. Burrese, Lyman, $185.

Skykomish Korndyke, No. 333685, born October 7, 1915, A. E. Smith, $225.

Hillvale Colantha Ormsby, No. 152905, born February 12, 1910, A. E. Smith, $230.

Jewel of Sultan, No. 362352, born October 13, 1915, Guy MacL. Richards, Bothell, $175.

Monroe Korndyke De Kol, No. 218235, born July 10, 1913, A. E. Smith, $300.

Model Pauline De Kol, No. 146473,

(Continued on page fifteen.)

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Entered as second-class matter January 13, 1916, at the postoffice at Spokane, Washington, under the act of March 3, 1879

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Maybe So, But We Doubt It

A newspaper article has just come to the attention of The Farmer stating that Mr. So-and-So "promises to revolutionize the wheat industry." Some time ago, says the article, he secured a pound of wheat of a foreign kind, planted it, harvested an enormous crop and is now ready to begin this revolutionary business in the wheat growing industry.

"The great advantage of this wheat," the article continues, "is that it will yield about 120 bushels to the acre. It is a hard wheat and makes as good flour as any wheat grown."

Now, that's fine! That is just the kind of wheat the farmers of the United States, enthusiastically backed by Food Administrator Hoover, are looking for. One hundred and twenty bushels of wheat to the acre is more than four times the average crop produced by the old-fashioned varieties, such as Bluestem, Jones Fife, Red Russian, Little Club, White Hybrid, Turkey Red, Gold Coin and so on. Wouldn't that increase the output of 1918! We would no longer have to eat corn and rye to save wheat for the soldiers.

But The Farmer is just disloyal enough to recommend that farmers stick to the old-fashioned kinds of wheat until this war is won. We have recollections of other "revolutions" that have been promised through the discovery of seed of some kind that produced huge crops of unprecedented quality. Some way, we have more faith in the United States department of agriculture and state college experiment stations than we have in luck, and these official institutions have been working untiringly to improve the varieties of grain to be grown. They have done great good. They have given much sound advice to the farmers of America, and their unanimous advice at this time is that producers stick to the tried and true varieties.

Consider the Pea for Next Year

Pea growing in the northwest was much less successful this season than it has been in the past and there is a pronounced tendency on the part of many to look upon the crop for the future with suspicion.

This is distinctly unfair to the pea. Wheat was also a much less successful crop this year than it has been in the past, but there are few farmers who will refuse to sow it for 1918 for that reason.

Peas have proved a remarkably valuable crop in several districts of the four northwestern states, and in addition have proved to be a great soil builder. This year the straw promises to do much to make up for the feed deficiency that is menacing the live stock interests in many localities.

It is not well to go too heavily into pea growing, for the time has not yet come when they can be safely classed as one of the major crops. But it is equally unwise for farmers to count them out of his diversified scheme merely because they proved a poor money-maker this unusual year.

Grade Before You Sell

"The successful business man buys everything he can at wholesale, and sells at retail. The farmer, however, reverses this and buys at retail, while he sells his finished product at wholesale."

This is the explanation which T. J. Newbill, former Washington state club leader, gives of part of the farm marketing problem. The farmer, as an unorganized unit, has been forced into an impossible position; he is trying to do something which can't be done. And the remedy, according to the same authority, is first of all to learn to produce a "quality" article to sell.

"The big thing in the marketing game," he explains, "is quality, and when you have secured that, you will find that your selling will largely take care of itself."

Quality is partially a matter of appearance, and one of the first steps in securing uniformity in this respect is proper grading. To illustrate this point, Professor Newbill quotes the experience of a Tacoma wholesaler who received an order for 40 carloads of potatoes, to be shipped to California. Buying orders specified that the tubers must be smooth, free from disease, and graded. The Tacoma man started out, and after covering his territory he had just three carloads.

"I could have found 150 carloads if I had had the time to grade them myself," he commented, "and I could have sold them at a profit. But in that case, who do you suppose would have paid me for my work? Why, the farmer, of course!"

An Essential Duty

It was Napoleon who said that "an enemy marches on its stomach." The finest physical trim, the greatest efficiency and the best guns and ammunition in the world will avail nothing if there is not enough food.

Nothing will destroy discipline more quickly; nothing will end a war as quickly as hunger.

While the boys who march by with guns on their shoulders are picturesque and important in time of war, fully as vital and necessary is the man who tills the soil and produces the food that feeds both the soldier and also his wife and children. The man who grows much good, wholesome food this year is a true patriot.

Profiteering Always Unjust

There is never a time when profiteering is anything short of morally criminal. It is doubly criminal at the present time, but at all times it is in strict violation of the commandment, "Thou shalt not steal."

It makes no difference what form the practice takes. We usually think of the big business concern which gets a corner on some needful commodity, but the person who takes any advantage of any other person to take from him more than a reasonable profit is profiteering just as truly as the hoarder of millions of dollars' worth of foodstuffs. The laborer who idles on the job because he can without losing his place is a profiteer. So is the landlord who raises the rent on his tenant above the point of a reasonable income from his investment.

Government regulation is doing much toward relieving the injustice of profiteering on a large scale, but legislation never can destroy it completely. Profiteering is a disease of the American mind; it is an affliction of the American conscience, and until conscience is educated to be content with fair returns it will continue one of the menaces of America's national and personal life.

Blue Sky Laws

The blue sky laws, passed in many states, are intended to keep people from being caught by wildcat companies with stock to sell. Before stock can be sold, when these laws are in effect, a statement of the business and other guarantees must be given state officers.

These laws were attacked, and it was claimed that they were not constitutional, but the United States supreme court has held them to be sound.

Thousands of dollars have been taken from every state in the union, we suppose, by the promoters of crooked companies by means of the sale of stocks.

Washington Gleanings

W. J. Olwell of Davenport has bought from B. R. Williams 480 acres south of Sprague for $36,000.

Monroe Hately has purchased 240 acres four miles from Colton from Coolidge and Davis, paying $18,840.

Fruit shippers of North Yakima are using boxcars to forward crops to market as there are not enough refrigerator cars to meet demands.

Seed growers of Yelm Prairie are planning to secure about 2000 acres which will be used for the raising of selected vegetable and other seed next year.

Tired of waiting for rain, farmers near Walla Walla have been going ahead with seeding. Many are waiting until spring, believing it too late to do anything.

The question of marketing farm produce to good advantage will be made a feature of the second annual convention of bankers and farmers to be held at the state college November 9 and 10.

Seventeen acres of Pine creek land in Okanogan county has been sold by Thomas Jones, pioneer of that region, to Thomas Leese, prominent sheep owner of Ephrata. The price was $25,000.

The annual apples grade conference will be held at Spokane November 23. The meeting will recommend to the state department of agriculture the rules to be established for shipments in 1918.

The Selah evaporator plant has begun operations. The plant has a minimum capacity of 15 tons daily and a maximum capacity of 25 tons daily. It is devoted exclusively to the evaporation of apples.

According to E. F. Benson, president of the Washington Irrigation Institute and state commissioner of agriculture, it is probable that this year's session of the irrigation body will be held at Wenatchee some time in December.

M. J. Newhouse, county agriculturist of Pend Oreille county, has been transferred to Skamania and Clark counties, where he will have two assistants in the work. Mr. Cowen will succeed Mr. Newhouse in Pend Oreille county.

Eastern Washington counties produced 29,076,000 bushels of wheat this year, according to estimates prepared by E. T. Marchettie, field agent of the United States department of agriculture, bureau of crop estimates, with headquarters in Spokane.

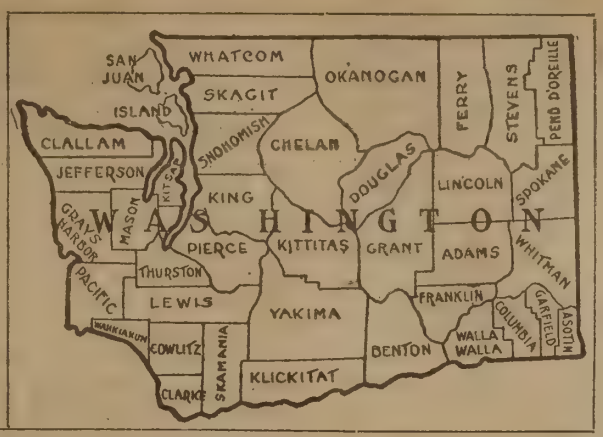
A county council of the farmers of Klickitat county which is designed to assist H. B. Carroll, county agriculturist, has been indorsed by resolution by Pomona grange. One purpose of the council will be to keep the farmers of the county informed on the suitability of soils for certain crops in the different sections of that district.

What Others Say

Farmers' Review: Criticism of dairymen in the Chicago milk district has been as severe as it has been unfair. Never before have we seen upright, loyal, patriotic citizens of a free country subjected to such a fire of caustic condemnation and conscienceless misrepresentation as has been the lot of fair-minded milk producers who have asked only for a "living wage." Abusing in no way the power that was and is theirs, but asking for their milk only a reasonable price based on cost of production, they were subjected immediately to investigations by officials and forced into court to answer all manner of charges, while some, if not all, of the city newspapers stretched the truth and strained the imagination in vilification of these "enemies of the American people." * * * * If persecution and prosecution of dairymen, and milk boycotts, are pressed there can be but one result—general selling of cows, and milk higher than ever before because of its scarcity, a boomerang officials and city editors may not have anticipated. For the resources of the dairy farmer are limited. His business, like any other, must pay or cease.

Not Feeding Much Wheat to Hogs

High Prices and Hooverism Cause Many to Find Other Feedstuffs to Produce Pork; Potatoes, Rye and Barley Are Utilized



CHEHALIS, Lewis County, Wash., Oct. 27.—The fall work in this county is well under way and nearly completed. The fall grains are practically all in. Most of the potatoes are dug and stored. The potato crop was very short, as was expected, due to the dry weather, but still in some sections, notably the "Big Bottom" country, the potatoes yielded from seven to eight tons to the acre. The late summer rains made a somewhat nobby potato in a few fields. Corn has done fairly well in this county in spite of the late seeding and cold spring. Killing frost did not occur until most of the corn was in the dough stage. Better corn for silage would have resulted had the frost held off another week, but those who had silage corn growing are very well pleased with the crop as it stands. No wheat is being fed to hogs. All has been sold for milling purposes, or for seed. The farmers of this county are doing their share toward saving the feedstuffs and foods. The Bluebell pea did well in the county this year.

A. B. NYSTROM.

Unusually Good Fall.

RAINIER, Thurston County, Wash., Oct. 22.—This has been as fine a fall as I have ever seen in this section of the country, and I have been here 17 years. We had rain enough about a month ago for plowing and starting the seed. Early sown grain is looking well, although a good, warm rain would do it good. We had no frost until the middle of October. We have excellent fall pasture. All the root crops and late gardens made good growth until frost came. A warm fall also matured corn for the silos, which helps out the feed supply. The late fall has been fine for new seeding of clover and grasses. As a rule the farmers are somewhat behind with their work on account of the scarcity of help and high price of labor. The farmers are doing most of their work within their own families. By November 10 the work will be caught up pretty well if the weather continues good. Most of the potatoes have not been dug as yet and there is lots of plowing and seeding to be done. The apple crop is good. Plenty of good seed is available for seeding, but it is high priced. Many farmers have bought automobiles this season, which must mean the country is prosperous. The prospects for next year are fully as good as this. Cattle will go into the winter in good shape. Farmers are keeping all the cows they can.

L. F. DAVIS.

No Frost Losses.

PORT ORCHARD, Kitsap County, Wash., Oct. 25.—Fall work in this county I think is up to normal and if anything a little above. What little land there is to seed is pretty well all seeded and it was put in in very good shape. There has been practically no losses from frosts this fall. Some very late corn was frosted, but the majority of the crop was put into the silos before the frosts came. Farmers are all "Hooverizing" to the extent of planning to get through with just as little outlay of money as possible. The dairymen have planned to put everything in their silos that they can and some are planning on the feeding of cut straw as recommended by the Western Washington Experiment station. Not many hogs are fed in this county.

C. B. SPRAGUE.

Feed Conditions Good.

MOUNT VERNON, Skagit County, Wash., Oct. 26.—Fall work is progressing in good shape. Most of the silo filling is done and the corn crop was unusually good. Some of it was caught by the first frost of the season a week ago. Winter feed conditions are good. Little hay has been fed yet, while the last two years, dairymen had fed large quantities by this time. Most dairymen have either raised or purchased their winter's supply of hay. The number of silos were materially increased this year. Milk prices are $2.75 per hundred pounds. It is commonly agreed that if one had to buy hay and grain at current prices, milk production would be unprofitable, even at this high price. Oats are selling at about $47 or $48 per ton and hay from $20 to $22. Oat raising has proven most profitable this year. Considerable fall seeding has been done for early spring pasture.

C. S. PHILLIPS.

Dry as an Ash Heap.

METHOW, Okanogan County, Wash., Oct. 22.—The weather has been alright for maturing crops, but not favorable for the preparation of next season's crops owing to the long continued drouth. No rain since June 14 has left the soil as dry as an ash heap. The farmers are not satisfied with this year's results. A good many of them who bought wheat last spring at $3 a bushel did not much more than get their seed back and furthermore the government has bought no wheat yet at Pateros our shipping point, so the farmers can't tell what the results will be. The only crop which did well was early planted corn, which seemed to wave defiance to drouth, and averaged 20 to 30 bushels to the acre. It had no rain from the time it came up until maturity. It seems almost unbelieveable, but it is a fact. The farmers are optimistic if that hoodoo of 10 cent hogs could be killed. No fall crops to amount to anything will be planted, as working this volcanic ash soil dry makes it run together.

CHARLES GRANT.

Sow Barley and Rye.

PORT ANGELES, Clallam County, Wash., Oct. 27.—Fall work and seeding is up to normal average in this county and so far there has been no losses from cold weather; the fall has been excellent. Farmers here apparently have caught the spirit of Hooverizing and are adapting themselves to war conditons. They use no wheat for hog feeding, but we find them using potatoes which they have culled from the crop and every little available corner of the clearing is sowed in barey and rye.

J. P. CHRISTENSEN.

Drouth Does Damage.

RITZVILLE, Adams County, Wash., Oct. 22.—An early fall with plenty of rain is essential to raise a good crop and prepare the seed bed, but the lasting drouth is very much dreaded as it bars all labor on land and is very bad on pastures as the grasses are getting sunburned and brittle. Live stock is going down in spite of fresh pastures. The farmers admit a poor crop with a limited price, but seem willing to go at it again for next year. Seed for fall sowing is very scarce.

JACOB HARDER.

Beginning to Hooverize.

CHEHALIS, Lewis County, Wash., Oct. 26.—I have never seen a better fall in western Washington for fall work and this has made up to a great extent for the shortness of labor. We had a good rain in early September that started the fall pastures in good shape and since then there has been practically no rain. There was no frost until a week ago since which time the filling of the silos has been rushed and potato digging has come into full swing. As to the potato crop I would say that the yield per acre is lighter than usual but that the acreage is heavier so we should have as large or a larger crop than last season. Farmers are offered $27 per ton f. o. b. cars today for potatoes. Some are selling but many are holding for prices ranging from $30 to $40 per ton. Apparently there has been more than the usual crop of fall grain sown and it is up and looking well. I think some among the farmers are beginning to "Hooverize," but most of them do not as yet grasp the idea of the possibility of a shortage of food in the United States. Such ideas must have time to take root and grow. The second Liberty loan has many more subscribers among the farmers than the first had because the people are talking about it now in their homes and beginning to grasp the idea that this is not an investment for the rich man alone, but an opportunity for all to do their "bit."

J. C. BUSH.

Barley and Oats for Hogs.

CHIMACUM, Jefferson County, Wash., Oct. 26.—Fall work is behind this year; the chief cause is shortage of help, but we are having very good weather for threshing, which will soon be finished for this locality. It seems as if there will be very good yields of oats and spring wheat. I do not think any wheat feed has been fed to hogs. The chief feed for hogs is barley and oat feed. The farmers and farm hands are buying Liberty bonds to help win the great war.

JOHN VAN TROJEN JR.

Forsuque.

An heiress who lived in Dubuque
Was courted and won by a duque.
But the guy ran away
With her trinkets one day,
And she had to go out as a cuque.

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For Fall Planting

BEST FOR THE WEST

To lose a crop or part of a crop these days of food shortage is a calamity. Do not take chances with inferior cheap seed or seeds not acclimated.

We test our seeds not in a general way but specifically for climate, soil, germination and pedigree. LILLY'S tested seeds, northern grown, are good seed—by which we mean clean, pure, strong seeds, capable of producing the maximum crop of superior quality.

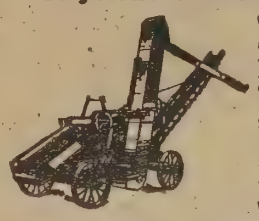
Write for Fall Catalog LILLY'S Seattle, Wash.

Established 1885

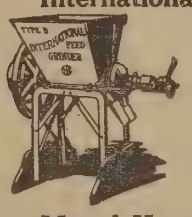
Three Useful Machines

THREE International machines that will pay their way on any farm where there is corn to market or livestock to feed are:

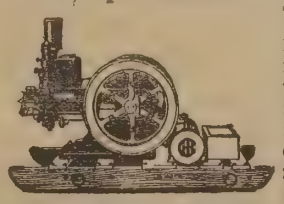
Keystone Shellers, adaptable to large or small ears, shell hard or soft corn clean without cracking the kernels or crushing the cobs. There are eight styles in 1, 2, 4, and 6-hole sizes, with capacities from a few ears shelled by hand, up to 4,000 bushels per day.



International Feed Grinders, for grinding small grain, corn on the cob, or corn in the husk, come in three styles with regular or special plates, 6", 8", and 10" in diameter. Capacities from 5 to 30 bushels per hour take care of all ordinary requirements.



Mogul Kerosene Engines furnish steady, economical power for these and other farm machines. They are simple, reliable, satisfactory; operating on the fuel that is cheapest or most convenient to buy. Mogul kerosene mixers; built-in magnetos that make batteries unnecessary; enclosed crank cases; full equipment, ready to run; are features of all Mogul engines, from 1 to 50-H. P.

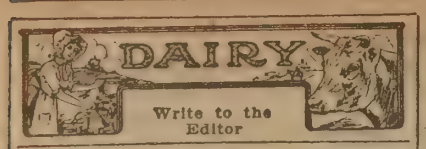


Equip your farm with a set of these three useful machines. See the local dealer or write the address below for complete information.

International Harvester Company of America

(Incorporated)

Crawford, Neb. Denver, Colo. Helena, Mont. Los Angeles, Cal.
Portland, Ore. San Francisco, Cal. Spokane, Wash. Salt Lake City, Utah



A. B. NYSTROM, Editorial Contributor

Holding Up Milk

Answered by S. B. NELSON.

Holds Up Milk—We have a cow with a 4-months-old calf. We can not make her give her milk down freely.

A. C. S., Metaline, Falls, Wash.

It is sometimes a difficult matter to treat a cow so that she will let down her milk. Supposing that you try the following treatment: Put the calf in front of the cow, where she can see it, then you go and sit down as to milk the cow, take along a pail full of warm water and a soft cloth. Bathe the udder for some little time, a minute or two, with the hot water. Then take a soft cloth and dry gently. When the udder is nearly dry rub the udded with the hands in a gentle massage, above the udder and gradually down to the teats, beginning to milk the cow easily. This treatment has allayed the nervousness of the cow and resulted in self-control of the cow so that she would let down her milk. You see, the reason that cows do not let down their milk is because they are on a nervous tension and they take personal control of the nerves controlling the blood supply to the udder. As soon as they forget this and the personal control is taken away from the nerves then the milk will come down.

Waste in Making Butter.

To send our allies as much food as possible of the most concentrated nutritive value in the least shipping space is our problem this winter. Among these concentrated foodstuffs is butter.

In the past much butter was spoiled, or its quality seriously affected by the manner in which it was handled after it had been gathered in the churn. The butter maker's greatest skill is called for in removing it and working it into salable form without destroying its firmness, texture and flavor.

The old rule that the buttermilk should be drawn when the butter granules are the size of wheat grains is a good one. The most successful buttermakers never add wash water until the buttermilk is drawn away. Then pure, cold water equivalent to the amount of buttermilk is added and the churn revolved a few times.

The butter may be worked vigorously until it begins to adhere in large lumps if the water is cold enough. The water is then drawn off, and, if a large power churn is used, the butter is salted in the churn. In home butter making in small quantities, however, better salting can be done on the worker.

After a light working place the butter in a cool room so as to allow the salt to dissolve and the whole mass to cool so it will not become oily when put in prints or tubs.

Walla Walla Association.

The report of the Walla Walla valley cow testing association for the month of September, 1917, shows a number of points in which the association has been valuable to its members.

Despite the dry pasture season and an increase of 75 per cent in feed over last year, the average milk production per cow for September, 1917, was 74 pounds greater than for the same month last year. This increase is the result of the culling out of the "slackers" as shown by the association records.

Much interest has been shown in the quality of sires used to perpetuate the herd. Several members have recently purchased purebred sires to head their herds, while others will do so this fall. One member has about closed a deal with an eastern breeder for the purchase of a purebred Holstein sire costing close to $2000.

As a result of weeding out the poorer producers during the last 11 months members of the association have sold 78 unprofitable cows to the butcher for beef. Forty-four cows were sold as milk cows on the merits of their records in the cow testing association.

Of the 485 cows tested during the month 154 were daughters of purebred sires, testifying to the efforts of the members to build up the Walla Walla valley dairy herds.

Seventeen members of the association, owning 26 silos with a total capacity of 2593 tons, are filling the silos with corn silage this fall. The average capacity per silo is practically 100 tons.

The high cow this month is a purebred Holstein belonging to E. S. McKinney, with a record of 97.5 pounds of butterfat and 2034 pounds of milk for the month. Since the beginning of the association year, last November, Dora, the purebred Holstein cow belonging to Walla Walla college, has made 638.9 pounds of butterfat.

Honor List of Cows.

The following men had cows producing over 40 pounds of butterfat during the month of September, and the animals are on the honor list of the Snohomish Valley (Wash.) Cow Testing association:

Edward J. Stevens, Herman Steffen, G. A. Holcomb, Kooistra & Dykstra, Thomas Bowen, D. Metz and D. H. St. John.

The total number of cows tested was 312, average milk 634 pounds, average fat 25.4 pounds and average cost of feed $4.07. The first impression of the Snohomish valley association, says E. W. Soner, official tester, imprints the fact that the dairymen of the valley follow the most approved methods of farming, although there is a natural tendency to carry more stock than the farms can adequately maintain.

Cover Cost of Production.

If the consumer desires the farmer to produce milk he must be willing to pay him a price sufficient to cover the cost of production, says Hoard's Dairyman. Milk at 13 cents a quart, which will be the retail price in many of the large cities, is the cheapest animal food on the market. It is cheaper than beef, pork, mutton or fowl. Two quarts of milk furnish more nutriment than a pound of meat. The reasonable consumer can not expect the milk producer to furnish him foods far below the cost of other food products.

Warm Water Saves Feed.

Warm drinking water for the dairy stock will save feed and also benefit the milk flow. It saves feed because it does not draw on the vitality of the cow as does cold water. It benefits the milk flow because a cow will not reach her maximum production unless she drinks water abundantly. This she will not do if it is ice cold.

Marketing Cottage Cheese.

The utilization of skimmed milk by making it into cottage cheese and using the cheese as a substitute for meat has been urged jointly by the United States food administration and the department of agriculture. Ordinary pasteboard oyster pails make serviceable containers for marketing cottage cheese locally in small retail quantities.

Form the Buttermilk Habit.

"Drink buttermilk freely," says the United States food administration in its effort to encourage the use of dairy by-products. The use of buttermilk is largely a matter of habit. Southern cities consume almost as much buttermilk as sweet milk. The difficulty of keeping milk sweet has been largely responsible for the popularity of buttermilk as a beverage.

Heather.

One always associates heather with Scotland, and it is one of the chief glories of that land of colors; but heather, or ling, is an evergreen shrub which grows all over northern Europe, certain species even being found in Africa, where it reaches the height of large bushes.



Raise Your Calves on
Blatchford's Calf Meal
and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.

Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Co., Dept. 58 Waukegan, Ill.

SPOKANE SEED CO.
Distributors.
SPOKANE, WASH.



Richest Substitute for Milk

100 lbs. makes 100 gallons

Constantly gaining favor with dairymen on account of the results it produces.

Send for booklet giving full feeding directions.

The Inland Seed Co.
Spokane Washington

B-K B-K B-K B-K B-K B-K B-K B-K B-K B-K B-K B-K B-K B-K B-K B-K



Awarded Gold Medal Pan-Pac. Exposition.

Why Use Dirty Coal-Tars or Dangerous Carbolic Acid

When you see those words what sort of a product do you think of? Probably a dirty, vile-smelling, oily coal-tar or dangerous carbolic acid.

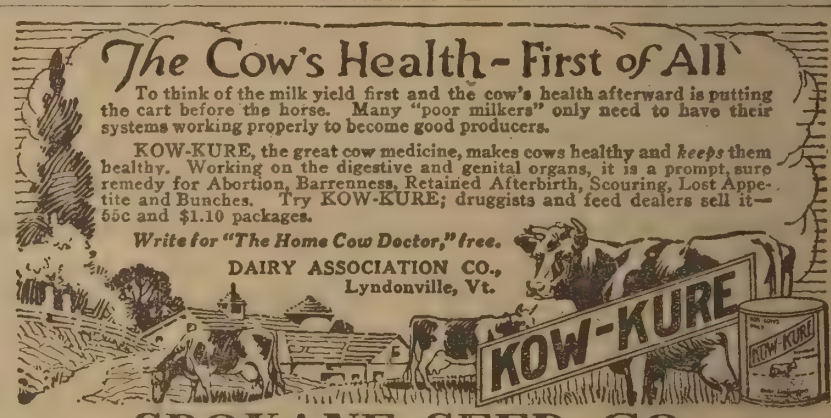
Then you will quickly see the remarkable advantage of using B-K, the POWERFUL disinfectant with ten times the germ-killing strength of undiluted carbolic acid, as B-K is not a poison—contains no acid to sting, or dangerous drugs to poison—no oil to gather filth on stock. B-K is clear and clean as water, and as easy to use. You should use B-K regularly for spraying barns and stock—hog pens and poultry houses—for dipping the birds and stock as well as for mixing in the drinking water. If your dealer does not have B-K, send us his name.

FREE BULLETINS—Ask for complete information—"trial offer" and bulletins on Farm Disinfecting—Contagious Abortion, Calf Scours, Hog Sanitation or Poultry Raising. Dealers wanted in every town.

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Madison, Wis., U. S. A.

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SPOKANE SEED CO.
Distributors Spokane, Wash.



SPOKANE SEED CO.
Distributors Spokane, Wash.

HIDES
WOOL · PELTS
FURS · TALLOW

SHIP TO US
NO CARTAGE · NO COMMISSION
HIGHEST CASH PRICES PAID
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WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC
SEATTLE
BE SURE AND MENTION THIS PAPER

Power Drag Saw does the Work of 10 Men



One man can move machine from cut to cut on log. Two men can carry it. Cuts through 3½ foot log in three minutes. Approximately 25 cords a day. 4 H. P. gasoline engine warranted. Steel wheel cart $10.00 Send for catalogue. MANUFACTURED BY

REIERSON MACHINERY CO.
1292 HOOD STREET, PORTLAND, OREGON

MONEY MAKING OPPORTUNITIES

Turn to the "want ad" columns of this paper and read them through. You will find them filled with interesting items and with opportunities for making money. There are chances for investment, if you wish to buy, and the "want ad" columns afford splendid opportunities for making money if you have anything to sell. Want ads appearing in this paper also appear in two other farm papers, and thus reach into every farm section of the great Pacific northwest. Write us and let us know what you wish to advertise, and we will be pleased to tell you the cost.

THE PACIFIC NORTHWEST FARM TRIO
SPOKANE, WASH.

LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor.

Good Meat Wasted on Hides.

According to reports received by the meat marketing specialists of the bureau of markets, United States department of agriculture, a Washington, D. C., dealer states that nine steer hides purchased by him carried 79 pounds of waste meat. A Detroit dealer reports that an average of six pounds of waste meat was found on 40 cow and steer hides received at his plant, and that in 10 days his men scraped 2177 pounds of waste meat from hides, or enough to supply low-grade meat to about 5000 people for one day. Faulty butchering in addition to causing a loss of the food value of the meat which is wasted results in a considerable loss of edible fats which remain on the hides.

Packs All Products in Silo.

George J. Dickson, the prominent stockman of Prineville, Ore., is reported to have one of the largest silos west of the Mississippi river, and the only cattle feeder in central Oregon using silage. The silo holds 385 tons and is filled with vetch, grain, alfalfa and clover. "I pack everything grown on the farm into that silo," Mr. Dickson declared.

Veterinary

Dr. S. B. Nelson

Operation Necessary—I have a mare that had a sore on her left lower jaw which had an offensive odor and she appeared run down. The veterinarian said the trouble was caused by a bad tooth, but that the tooth had come out and the sore would heal. The sore is still open. I am feeding her well and not working her very much. What weight of ear corn should one feed to a 1300-pound horse when not working? F. H. D., Hermiston, Ore.

Your horse needs an operation. It has a foreign offending substance in the jaw which must be removed before the jaw will heal. Whether it is a small piece of tooth that is left or a piece of broken bone or some decayed bone in the would, of course I am not able to say, but she will have to be operated on before she will heal completely. Regarding your question as to the amount of feed to give a horse I would suggest that you write to the Animal Husbandry Department, Professor Potter, at the Oregon Agricultural college. He can give you the specific ration which horses should have.

No Milk From Front Teat—I have a 4-year-old Jersey that I purchased which never has given milk out of one front teat. J. A. C., Somers, Mont.

I know of no treatment that would cause the cow to start to give milk out of the one teat. Without any description of what the trouble is I could give no advice regarding it. I would say, however, that the trouble might be a sealing of the end of the teat, or a sealing at the top of the teat, or it may be that the milk producing tissue of the udder does not function. If it is the latter there is no remedy. If it is the first or second then operative measures are necessary and if you possibly could you should get the services of a competent veterinarian. If you can not do that you have little hope of success in the future.

Mare Badly Foundered.—I have a mare that was badly foundered last May and has scarcely been able to hobble all summer. She lays down flat on the ground most of the time and has open sores on hip bones and front legs since last June. Her hoofs on the front feet are coming off and in between the new hoof and the old ones there seems to be a rotting condition. Her appetite is good, but she is getting thinner all the time. Will she be fit for ranch work if she gets well or had I better shoot her now? W. G. P., Lakebay, Wash.

I am of the opinion that the old hoofs should be trimmed off entirely so as to give the new hoofs underneath an opportunity to grow. Sometimes foundered animals get into fairly good condition after they recover, but of course, at times they do not. Treat the growing hoof with the following ointment:

Lard, one part; pine tar, one part. Heat and mix thoroughly, let cool and apply morning and evening at the hoof line.

At the price of feed, you will have to be the judge as to whether it will pay you to keep her. If the bones are going through the bottom of the sole, it may be better to shoot her now. If not, she might recover for you. For the open wounds use the following:

Zinc sulphate, one part; lead acetate, one part; water, 16 parts, mixed. Apply two or three times daily.

Epidemic of Anthrax.

It is reported that a severe epidemic of anthrax has broken out among the cattle of Merced county, California. A rigid quarantine is said to have been fixed and every effort is being made to stamp out the outbreak.

Scrub Bull Kaiser's Ally.

Put the scrub bull into bologna. In your herd he's an ally of the kaiser.

Canadian Wheat Crop.

It continues to be reported that the yields of the wheat crop are satisfactory, and as there is a tendency to increase estimates of the total outturn it would appear that the quantities obtained from the threshers are exceeding expectations. The latest private estimate of the crop is 270,000,000 bushels, against the government figure of 249,000,000, says Broomhall's Corn Trade News. Wheat is now arriving freely at Winnipeg, the quantities are running well over those received at this time last year, and the magnificent grading recently reported is being well maintained. Visible stocks, according to the "official" compilation, have increased 2,400,000 bushels; a year ago there was a decrease of 1,000,000 bushels.

National Dairy Show.

The show herd of 27 registered Holsteins belonging to the Carnation Stock Farms of Seattle, and which have won the majority of blue ribbons at the Chehalis, Spokane, Yakima, Puyallup, Wash., and Salem, Ore., fairs, are this week at the National Dairy show in Columbus, Ohio.

Largest Naval Gun.

The largest naval gun is the 15-inch English gun on the famous superdreadnoughts, and the largest land gun is the German howitzer. Of the two the naval gun fires a shell weighing more than half a ton, while the other fires a projectile a ton in weight.

Warranted to Give Satisfaction.

Gombault's Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.

MAKE PROSPERITY PERMANENT



Start now to build up a herd of money-making, mortgage-lifting, purebred

HOLSTEINS

A Holstein herd is a paying, profitable investment. Purebred Holsteins give the largest yields of milk and butterfat of any breed. They are persistent producers, vigorous and hardy. Write for free information.

THE HOLSTEIN-FRIESIAN ASS'N OF AMERICA, Bx. 205, Brattleboro, Vt.

In answering advertisements don't fail to mention this paper.



Judge Segis

The new importation to Hollywood. A proven son of the great King Segis. Only 6 years old and has 24 ARO daughters. A few samples of his product follow:

Vanderkamp Segis DeKol at 4 yrs., 33.85 lbs.; ave. test 6.27% fat.
Vanderkamp Segis DeKol at 3 yrs., 30.59 lbs.; ave. test 5.9% fat.
Vanderkamp Segis DeKol at 2 yrs., 20.58 lbs.; ave. test 5.0% fat.
Vanderkamp Segis Florie at 4 yrs., 28.72 lbs.; ave. test 4.85% fat.
Vanderkamp Segis Florie at 3 yrs., 26.32 lbs.; ave. test 4.2% fat.
Vanderkamp Segis Eva at 2 1-2 yrs., 28.55 lbs.; ave. test 4.9% fat.
Vanderkamp Segis Eva at 23 mos., 21.46 lbs.; ave. test 6.3% fat.
Vanderkamp Segis Girl at 4 yrs., 26.58 lbs.; ave. test 5.49% fat.
Vanderkamp Segis Girl at 3 yrs., 24.12 lbs.; ave. test 5.0% fat.
Vanderkamp Segis Girl at 2 yrs., 18.17 lbs.; ave, test 4.6% fat.
Vanderkamp Segis Clara at 4 yrs., 25.67 lbs.; ave, test 4.15% fat.
Vanderkamp Segis Clara at 3 yrs., 24.56 lbs.; ave. test 4.5% fat.
Vanderkamp Segis Belle at 3 yrs., 25.32 lbs.; ave. test 3.9% fat.
Three others above 20 lbs. as junior 2-year-olds, and more to follow.

The Two Hollywood Farm Herd Sires

whose sons and daughters are for sale. They have both proven that they are good ones by the record sheet. Look at the records their offspring have produced.



Hollywood Lilith Palmyra

A proven son of the famous King Segis blood, being a grandson of King Fayne Segis, the sire of the 50-pound cow. He is 4 years old and has 5 ARO daughters with more than 35 more to hear from. Look at their records. Can you beat them?

Having a sire with 25 ARO daughters and backed by such as the above, and having a dam with a 32.47-lb. 7-day record and 1077-lb. yearly record made from over 26,000 lbs. milk, you can readily see that he has every right to have as good calves as they are now proving to be. His heifers are just beginning to come fresh. Look at these that are just now tested:

Hollywood Lilith Mercena, 3 years, 33.44 lbs., 5%.
Hollywood Lilith, 2 years, 19.76 lbs., 4%.
Hollywood Lilith Bonheur, 2 years 3 months, 24.19 lbs., 3.9%.
Hollywood Lilith Gelschecola, 2 years 2 months, 20.98 lbs., 4.4%.

More than 35 more of these same kind to hear from.

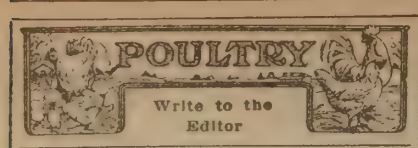
We believe in having good sires from which to get this kind of cows. There is always demand for them.

A few of the sons of Hollywood Lilith Palmyra left to choose from for your next herd sire. They are hard to beat.

We believe in having good sires from which to get this kind of females and two of this sire's sons with yearly records that are good on both sides. If in need of a herd sire, come and get one of these as they are right and come from the right kind. They will make good for you as they have for us, and you see what they have done for us.

HOLLYWOOD FARM HOLLYWOOD, WASH.

NEAR SEATTLE



JAMES DRYDEN
Editorial Contributor

Poultry and Eggs

Licensing Commercial Handlers

At the invitation of the United States food administrator, representative members of the poultry and egg industry convened in Washington recently to discuss the proposed government license plan and to formulate means of reducing waste and encouraging production.

In addressing the conference, Mr. Hoover pointed out the necessity for eliminating speculation and for making the course of food products from producer to consumer as direct as possible. Attractive prices to the producer, he explained, are necessary to secure large production, and yet the price-level of food products to the consumer must be kept as low as war conditions will permit.

Licensing commercial handlers of poultry and eggs, as explained by food administration officials, is a plan of registration compelling the man who would otherwise indulge in doubtful practices to do the thing to which the honest man gladly subscribes. It places a limitation on profits and also enables the government to keep an accurate check on stocks of food in all parts of the country.

Delegates to the conference agreed, after informal discussion, that stocks of poultry, especially young stock, on farms are somewhat below normal due largely to the period of cold, wet weather during the brooding season last spring.

In the opinion of federal authorities there will be a ready market for all poultry products next year and probably for several years to come.

The high price of other meats has increased the consumption of poultry and eggs on farms to the extent that the reduction in poultry receipts this fall has been apparent at nearly all receiving centers.

Migratory Birds

Changes in Open Seasons

The Untied States department of agriculture announces the promulgation of amendments of the migratory bird regulations, to be effective on and after October 15, 1917.

One of the changes permits migratory game birds to be hunted from half an hour before sunrise to sunet during the open season, subject, however, to the provisions of state laws restricting shooting during that time.

Other changes in the open seasons are as follows:

In the states now having an open season from September 7 to December 20—among them being Montana and Idaho—the open season is changed to September 16 to December 31, both days inclusive. These states recently amended their laws by opening the season on September 16 or later and closing it on December 31 or earlier.

The open season in eastern Oregon and Washington is also September 16 to December 31. The open season, October 1 to January 15, is unchanged in that portion of Oregon and Washington lying west of the summit of the Cascade mountains.

In response to numerous inquiries the department announces that the migratory bird regulations are not to be construed to authorize the hunting of migratory birds at a time when it is unlawful to hunt them under state laws.

Alfalfa Hay

Finds It Best All-around Feed

By A. G. HANCOCK, Touchet, Wash.

I have been raising alfalfa for 11 years and consider it to be the best all round feed I ever raised. I have a pair of horses that I have worked 10 or 11 years and I do not suppose they have consumed a ton of grain in that time—just good, clean alfalfa hay. They are fat all the year round and some of the time they are really too fat. I see that the manger has hay in it at all times, so they eat when they feel like it. As to hogs, it is also an almost complete feed for growing hogs, say 6 months old and over, but young pigs require some millfeed with the alfalfa to do well. I find it the very best feed for milch cows if the quality is good. It seems to me that the big dairy men should come over to Gardena and learn something to their interest about alfalfa hay and the difference in the different cuttings of hay. We cut four times and I consider the first and fourth cuttings far superior economically to the second or third cutting. The fact is if I were buying I would make the difference about one-fourth. You see, the first cut straw is hollow and most of the fourth cutting, therefore this hay is soft and stock eat it clean, while the second and third is more solid and hard as sticks. There is an increase in production here.

WANTED—A GOAT.

Somebody Can do Soldiers a Turn

There is only one piece of equipment that the U. S. naval training camp at Seattle needs right now that it doesn't possess, and that is somebody's goat. The "somebody's goat" is not figurative language. An actual goat (one with whiskers) is wanted, and Commander Miller Freeman joins in the appeal of the men that somebody subscribe him.

The world over the goat is recognized as the mascot of all mascots for the navy, and the training camp at Seattle wants a modern mascot. And what is more, he is wanted in time to be properly trained for the army-navy football game on Thanksgiving day.

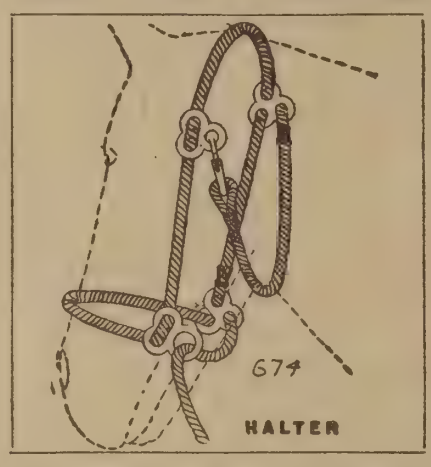
Anybody with a goat that he is willing to dedicate to the cause of Uncle Sam's men can turn the trick by addressing the Welfare office, U. S. Naval Training camp, Seattle, Wash.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Halter.

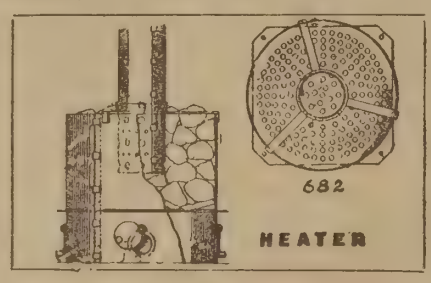
The special features of this halter are: First, that the neck latch can be adjusted to heads of different sizes



by moving the cheek plates up or down, and second, that the leading rope tightens about the jaw automatically when the horse struggles.

Orchard Heater.

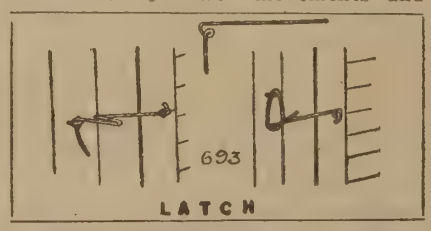
The advantage claimed for this heater is that it can be stored, as flat sheets, in a small space. The grate is



a flat punched metal plate and the body and chimney are metal sheets which are rolled into cylinders for use, but are unrolled for storage.

Simple Gate or Door Latch.

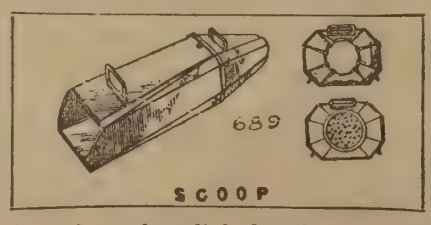
This hook latch is made of stout wire bent in two places at right angles. It is hooked by two movements and



therefore can not be opened by animals. A handy man could make one in a few minutes.

Fruit Picker.

This picker has sharp cutting teeth to sever the stem, and a metal pouch, lined with cloth, to catch the fruit. It



is used on a long light handle to gather fruit from the high branches.

Potato Storing Don'ts

Don't store potatoes while they are moist.

Don't bank potatoes without providing a ventilator.

Don't expose potatoes to injury by frost after digging.

Dont store in a light room. Light lowers the quality.

Don't let the wind dry out the potatoes. A bitter taste will result.

Don't forget to sort out the decayed potatoes before the trouble spreads.

Dont store without first sorting into table grade and culls for feed.

Don't forget to watch the thermometer. The ideal temperature is from 35 to 40 degrees Fahrenheit.

Don't forget to serve freely every day. This will help to keep the storage supply up to table grade.

Don't cover potatoes with damp earth when storing in a hot cellar. They will start to sprout if you do.

Your Country Is Calling For More Products

The most important factor in this war is the raising of record crops and bringing new lands into cultivation. The high prices for all products makes this patriotic appeal also of personal advantage to you. Do your bit.

Your Opportunity to Serve Your Country Is in Stevens County.

Although prices for all products have increased our low prices and easy terms for logged-off lands near Springdale, Washington, have remained the same.

We will be glad to have you examine the property and talk to the neighboring farmers. Drop us a line when you will be at Springdale, Washington, and our man will be at your disposal.

Phoenix Lumber Co.

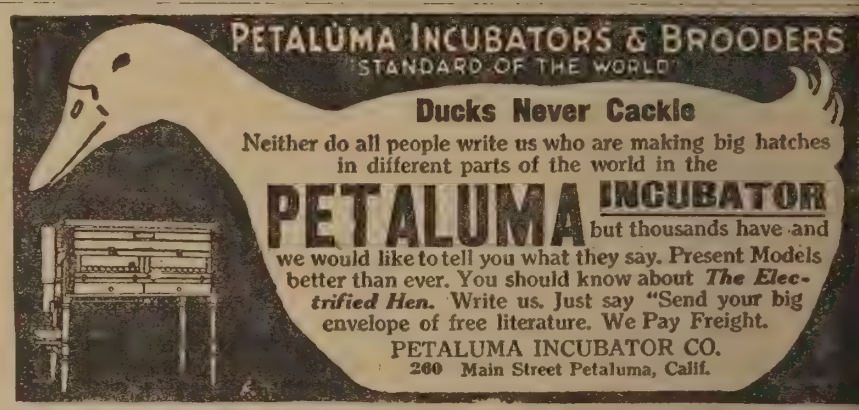
Dept. D.

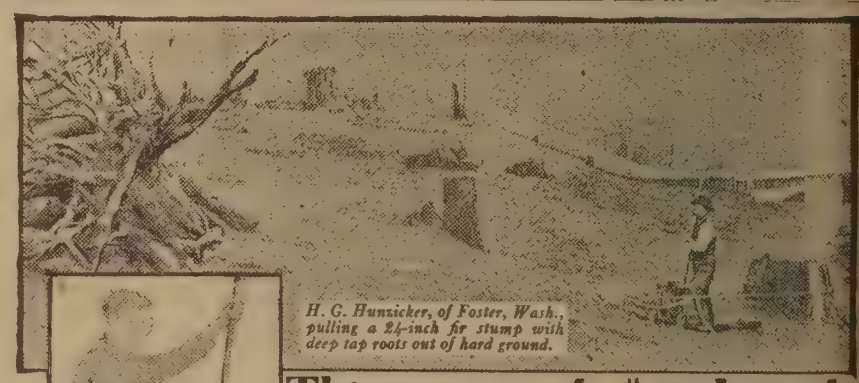
Spokane, Washington.

Please send me your folder on Stevens county logged-off land.

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Address .....





This man made $35 Land Worth $200 an acre Pulling Big stumps by hand

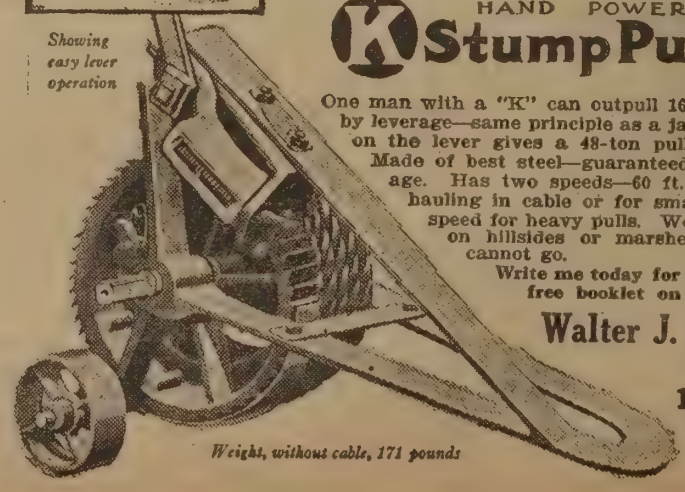
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IN THE ORCHARD

Write to the Editor

GRANVILLE LOWTHER
Editorial Contributor

The Life Cycle

Apple Trees and Humans Similar

By GRANVILLE LOWTHER.

Everything in nature seems to have a cycle of germination, growth, fruitage and decay. A man is supposed normally to spend one-third of his life in reaching a normal development, one-third in production and reproduction, and one-third in the gradual decline of his powers. This is not an infallible rule, for many do not reach maturity, many more do not reach the period of gradual decline, but are snatched away by accident, sickness or other circumstances, and others live far beyond the period of expectancy. So it is with all the forms of life, and so it is with trees.

I have been asked recently by investors, "What is the reasonable period of expectancy for an apple orchard?" Men who are accustomed to calculate in terms that cover long periods; periods that include their children or the coming generation, will not highly regard an investment in property that costs two to four times the price of the land without the orchard and yet which will not yield profitable returns for more than 10, 20 or 30 years.

In answer to the question I would say that I could point to orchards that have scarcely reached the bearing period, yet they are dying. They are dying for lack of food and the proper care. In many cases they were planted on soil that was underlaid with rock, or hardpan and the root system can not develop. If it is only a foot to two feet from the surface to a substratum that the roots can not penetrate the trees are bound to be shortlived.

Again I know of orchards where it is only about two to three feet to rock or hardpan. These orchards will live longer, perhaps bear profitably for 10 or 15 years, and then die.

On the other hand there are orchards in the United States that are more than 100 years old and still in profitable bearing. A few years ago I visited the orchard of Mr. Hitchings, about 12 miles from Syracuse, N. Y., and saw a few trees set out by Mr. Hitchings' grandfather, or great-grandfather, I have forgotten which, but these trees were at that time 100 years old. They were healthy, vigorous and in profitable bearing, except that the fruit was not of the best varieties.

The trees had been set in a deep, porous soil, at the foot of a hillside, where the seepage from the hill kept the tree roots always moist, yet where the water could not stand because the porous nature of the soil permitted it to sink away. There was, therefore, naturally perfect underdrainage. Secondly there was an abundant supply of plant food because every year there was more or less wash of the surface soil from the hillside. This surface soil was rich in humus.

Very few orchards are planted where the natural conditions are as favorable as this represents; but the orchardists of the northwest can greatly prolong the lives of their trees ordinarily by opening up the subsoil with tile drainage and by hauling abundant supplies of barnyard manure, or by growing cover crops. Tile drainage is generally meant to carry off surplus water, but it does more than that, it aerates the soil, makes it porous and while it carries off surplus water it also makes less water necessary. If I had to grow an orchard with less than the average amount of water I would tile it. This lets the water down to greater depth, and the tree roots follow it. Then by growing an occasional crop of alfalfa I would feel that my trees would live to an old age and bear profitably.

There is an old apple tree, planted at Fort Vancouver, Wash., in 1825, or thereabouts, and until within the last few years has not had special care. It is still in bearing and is approximately 92 years old.

There is an orchard near White Swan on the Yakima Indian reservation, the property of Klickitat Peter, and five years ago fruit from that orchard was in competition with other fruits at the Washington state fair.

There are occasional orchards, planted by the first settlers in the Yakima valley, about 40 years ago, that are healthy, vigorous, bear heavily and if the fruit were of good commercial varieties, would still be exceedingly profitable. These orchards were generally planted in rich alluvial soils, along the streams, where the roots penetrated the moist subsoil and grew without irrigation.

Proper drainage with plenty of food and water will make the orchards profitable for the next generation.

Apple By-Products

Catsup, Pickles and Apple Honey

Apple conservation so strongly urged by the national board of food administration will be given special emphasis at the National Apple show in Spokane during the week of November 19-24 in competitions arranged under the head of "home made byproducts."

In order to make the competition cover as much ground as possible, the apple show trustees have arranged 33 separate contests, embracing apple byproducts in every form, with apple marmalade, apple catsup, crabapple pickles and apple honey as samples. In every contest on preserved apples and similar products packages are limited to two quarts and in jellies and similar products one quart is the limit. The recipe must accompany each entry.

In each of the 33 contests a first prize of $3, a second of $2 and a third of $1 is offered. There are no restrictions as to the number of contests any girl or woman may enter.

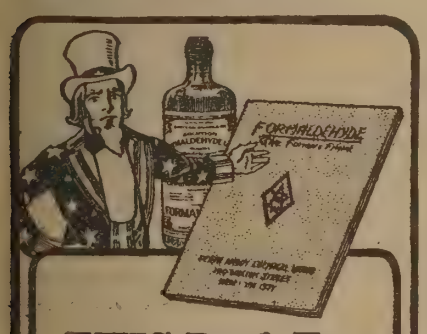
A novelty feature in connection with the byproducts contest will be the "Core and Skin Special." This competition will be held on Wednesday, November 21, and the exhibits must consist of jelly or other products made from apple cores and skins in combination. The purpose in holding this contest is to emphasize the fact that every portion of the apple is available for food in some form.

Attractiveness will be a strong feature in guiding the judges, who will also consider food value, taste and number of varieties entered, table decorations and appearance of containers.

This contest is open to any girl or woman in the world. A first prize of $10 is offered and two second prizes of $5 each.

A Tall Man.

Ralph Madsen, aged 18, of Creighton, Neb., who has gone to Omaha in search of a job, is 86 inches tall, weighs 196 pounds and a six-foot man can stand under his outstretched arm without bowing his head. All of Madsen's brothers and his father are more than six feet, but his mother is short.



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The Fate of the Unprepared

Among the remarkable events of this war no fact stands out more startlingly than the tragic sacrifice of Russia's unequipped soldiers.

The army has been victimized by intrigue and treachery. Guns were sent to the front without ammunition and ammunition without guns. Supplies were provided that when unpacked proved to be rubbish. Left stranded by communications that broke down under slight pressure the brave Russian troops hurled themselves again and again against foes perfectly prepared.

From the very verge of victory they doggedly fell back fighting with stones and clubs and iron bars, resisting heroically but ineffectively.

No thought can be more abhorrent to Americans than that of our boys ruthlessly slaughtered because of lack of equipment or support which it is the first business of us at home to supply.

Our Government, never before so powerful, is working prodigiously in the preparation of armies and means of warfare. Throughout the nation there is a unity of purpose that is piling on the altar of liberty every personal ambition and corporate gain.

Mines, factories, farms, shipyards, the counting houses and shops of every industry are laboring day and night to supply the sinews of war.

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Washington Game Laws for 1917

The following are the game laws for the state of Washington for 1917:

Open Season.

West of Cascades—Deer (exceptions: Deer in Island and San Juan counties, January 1, 1921; does in Skagit, Snohomish and Whatcom counties, no open season). Goat, October 1-November 1; bear, September 1-May 1; quail (exceptions: Quail in Clallam, Clarke, Jefferson, San Juan, Skagit, Skamania, snohomish and Whatcom, October 1, 1919); ruffed grouse, native pheasants, Chinese pheasants (exception: Chinese pheasants in Clallam, Kitsap and Skamania counties, no open season); blue grouse, ptarmigan, October 1-October 15; duck, goose, brant, coot, October 1-January 15.

East of Cascades——Deer, October 1-November 15; bear, September 1-May 1; ruffed grouse (native pheasant), blue grouse (see exceptions), September 1-November 15.

Exceptions.

In Asotin (in precincts of Clarkston, South Clarkston and West Clarkston, no open season), Garfield and Walla Walla, August 15-October 1. Ruffed grouse in Kittitas and Yakima counties, no open season. Blue grouse in Spokane county, October 1, 1919.

Quail in counties of Asotin (in precincts of Clarkston, South Clarkston and West Clarkston, no open season) and Garfield, October 1-October 10; prairie chicken in Stevens county, September 15-October 1; sharp-tailed grouse in Ferry and Okanogan counties, September 15-November 1; sage hens, Hungarian partridges, male Chinese pheasant in Kittitas county, October 1-October 10; bobwhite quail in Spokane county, October 1-November 1; Hungarian partridge in Lincoln, Spokane and Stevens counties, October 1-November 15; Chinese pheasants in Benton, Stevens and Yakima counties, October 1-October 15; duck, goose, brant, coot, October 1-December 31 (see footnote below).

State Seasons.

Black-bellied and golden plovers, Wilson snipe or jacksnipe, yellowlegs, October 1-December 15; rail, September 16-November 30.

No Open Season.

Moose, elk (1925); fawn, caribou, mountain sheep, squirrels (gray, black, fox), quail, prairie chicken, sage hens, introduced birds (except as above), turkey and dove.

Hunting and Fishing Licenses.

Nonresident: General, $10; fishing, $2. Resident: State, $5; county, $1. Issued by county auditors. No license required of honorably discharged union soldiers of civil war to hunt or fish, or of women and persons under 16 to fish, if residents.

Bag Limits.

One deer in counties east of Cascades. Two deer (one buck in Skagit, Snohomish and Whatcom), one goat in counties west of Cascades. Five in all of partridge, grouse, prairie chickens, Hungarian partridge, Chinese or English pheasants a day or in possession; 10 quail a day; 10 upland birds, but in no event to exceed five if quail are included in bag, and 25 in all a week. In Kittitas county two male Chinese or English pheasants in bag of five upland birds; 20 ducks, geese, brant, golden plover, yellowlegs, Wilson snipe a week (week ends at midnight Saturday), 30 ducks, geese, brant in possession. Possession during close season permitted under permit.

Sale.

Sale prohibited of all protected game.

Export.

Export prohibited of all protected game.

No open season on waterfowl on Columbia or Snake rivers or within one-quarter of a mile of their shores in counties of Benton, Columbia, Douglas, Franklin, Garfield, Grant, Kittitas, Klickitat, Walla Walla, Whitman and Yakima.

Wheat Consumption

England Makes a Cut of One-half

The food administration issues the following:

Under the new regulations of war rationing England has taken upon herself the task of reducing wheat consumption for the forthcoming year to less than half the normal consumption before war began.

Before the war normal consumption of flour in England amounted to 57,678,571 barrels, or 238 pounds per capita per annum. This flour was 71 per cent extract, which means that 71 per cent of the wheat was extracted for the flour and the rest went into by-products, used principally for stock food.

On February 2, 1917, the first war rationing went into effect. This was followed by others and on September 1 the milling regulations were so changed as to provide 81 per cent flour extraction and the compulsory admixture of other grains of 20 per cent. The consumption under this regulation is estimated at only 26,382,857 barrels, or less than 119 pounds per capita, and less than half the normal wheat flour consumption in peace times.

Commencing on September 17 the British government fixed the standard price of flour at $7.38 per barrel and the uniform price for bread at 18 cents for a four-pound loaf, with a one-pound loaf at 5 cents.

Visible Wheat Supply.

The combined aggregate wheat visible supply statistics in bushels, as completed by Bradstreet's since June 30 is as follows:

1917. Week ended	U. S., east of Rockies.	U. S., Pacific coast.	Total U. S.
July 7	16,330,000	2,072,000	18,402,000
July 14	13,408,000	1,741,000	15,149,000
July 21	13,269,000	1,717,000	14,986,000
July 28	10,532,000	1,760,000	12,292,000
Aug. 4	10,162,000	1,530,000	12,692,000
Aug. 11	9,830,000	1,115,000	10,045,000
Aug. 18	9,603,000	952,000	10,555,000
Aug. 25	9,190,000	969,000	10,159,000
Sept. 1	9,614,000	701,000	16,615,000
Sept. 8	10,445,000	694,000	11,139,000
Sept. 15	10,642,000	740,000	11,382,000
Sept. 22	11,529,000	623,000	12,152,000
Sept. 29	12,428,000	644,000	13,072,000
Oct. 6	12,697,000	1,096,000	13,793,000

Sidelights

Fallen Greatness.

"Lizzie does put on such airs. She says the young man she's engaged to is at work in the trenches."

"I know that's strictly true. He's employed by a gas company."—Baltimore American.

Remember.

Son—Father, I'm thinking of taking the political economy course at college.

Alderman Clancy—All right, me son; but remimber this: Ye can't niver depind awn a vote ye buy cheap.—Life.

A Discreet Spender.

Old Lady (who has given tramp a nickel)—Now, how are you going to spend it?

Tramp—Well, ye see, lady, if I buys a tourin car there aint enough left to hire a shofur, so I guess I'll get a schooner; I kin handle that meself.—Boston Transcript.

Nothing Exasperated Intended.

Mrs. Key was visiting home friends, and left the following card to her next-door neighbors:

"Dear Mrs. Garrison—Would you please put out a little food for the cat I have been feeding this winter? It will eat almost anything, but do not put yourself out."—Dallas News.

Alert for the Future.

"You've got a lot of weeds in your garden."

"Pretty fine weeds, too, don't you think?" rejoined Mr. Crosslots.

"Surely you are not nursing them along!"

"Yes, sir. I've been finding out that so many new things are edible that I'm holding out to see whether science don't discover some way of frying the jimson or stewing the burdock."—Washington Star.

A Tongue Twister.

"She stood at the door of the fish sauce shop welcoming him in." How fast can you say that?

Here is another about the famous duel between Shott and Knott. It reads as follows: "Shott shot the first shot, and the shot Shott shot shot not Knott. The shot Knott shot shot not Shott, so Shott shot again, and once more the shot Shott shot shot not Knott. but the shot Knott shot shot Shott, so Knott won notwithstanding."

As She Is Spoke in Siam.

"The king of Siam," said a diplomat, "who is the latest power to declare war on Germany, prides himself upon his English.

"When the king last visited London he met the late Lord Kitchener, whose Egyptian triumphs were still fresh.

"Desirous of telling Lord Kitchener that he was born to command, the Siamese monarch said:

"'Brave lord, you was made to order.'"—Philadelphia Bulletin.

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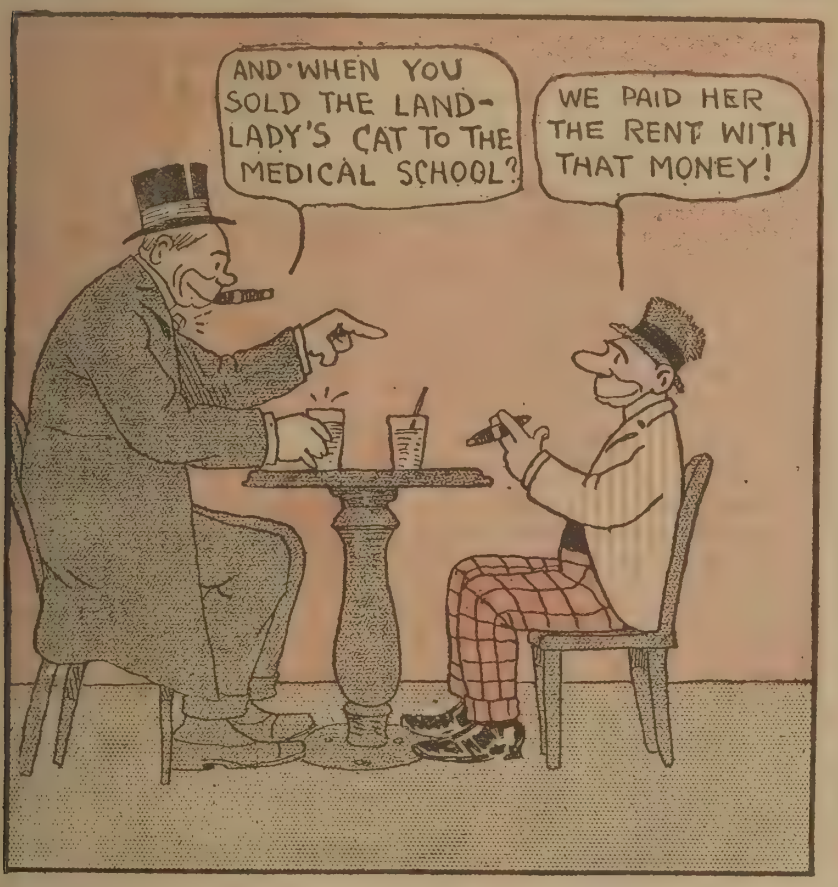
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First U. S. Casualties

Three American Soldiers Are Killed

Official report has been received from General John J. Pershing, who is in charge of the United States expeditionary forces in Frances, that a small party of American soldiers have been vigorously and suddenly attacked by a German detachment and that three Americans are killed, five captured and 12 missing. This is the first official report of any loss of American life on the field of battle. Identification of the dead has not been announced at this writing, nor is it made public who the five men captured and the 12 missing are.

It appears that the incident was planned by the German military authorities for the sole purpose of spilling American blood and effecting American capture, as there is considered no military advantage gained through the action.

The report from General Pershing says that the American soldiers put up a great fight against the odds rushed against them unexpectedly, and that they captured one German soldier. It is presumed other Germans lost their lives in the battle.

Italy Suffers Reverses.

The last week has witnessed one of the greatest single reverses yet suffered by one of the allied nations. Italy, after making gains for weeks, was suddenly faced by a counter attack which was so effective in certain quarters that the Italian army was forced to retreat rapidly in order to avoid wholesale destruction. The retreat was made successfully, though with a loss of probably 100,000 men in killed, captured and wounded. At the present time, however, the Italian forces are making what appears to be a successful stand on the Italian side of the river Tagliamento. While the retreat caused the loss of territory that it had taken Italy months of hard fighting to gain, the reverse was not as severe as it looked at first, when it appeared that Germany and Austria were determined to put Italy out of the war at one fell blow, much as Russia has been put out by a series of blows and by internal disorders. England and France and the United States are rushing aid of very real kind to Italy and it is hoped that out of the near-disaster will grow a unity of purpose in Italy that will ultimately make her a stronger factor in the conflict than she has heretofore been.

Strikes Help the Kaiser.

That the strikes of laboring men in this country are a real factor in aiding Germany is shown by an official report of the Pacific coast district federal reserve bank, which shows that the output of the lumber mills for the month of October was not to exceed three-fourths of a normal output. Largely due to the need of timber for shipbuilding and aeroplane building, the need for the operation of the lumbering industry at maximum capacity is especially great. In like manner it is shown that the shipbuilding industry has been greatly handicapped by the strikes of workmen, thus delaying to considerable extent the construction of ships, without which the country is virtually helpless in her war with Germany.

Telephone Strike Threatened.

Pacific coast cities and rural communities have been threatened with disruption of telephone service as a result of strikes of telephone employes during the past 10 days. Higher wages have been demanded. All effort to reach an agreement between the employing company and the employes appear to have failed, but the government's mediator is at this writing striving to effect a settlement through government regulation. In the meantime, the strike is held in abeyance.

Railroads Do Big Business.

Western railroads are shown by statistics to be doing an unusually large business. The months of May, June and July this year showed an increase in freight handled of about 21 per cent over that of the same months last year. The western lines carried the equivalent of one ton of freigrt 19,000,000,000 miles during those three months as against the equivalent of 15,000,000,000 tons in the same months last year. How greater efficiency in handling freight has been affected is shown by the fact that the actual miles traveled by trains has increased only 15.5 per cent, while the actual mile-tons of freight carried has increased over 21 per cent. This improvement is due in some part to the interest of the farmers and other shippers in loading cars to more nearly full capacity.

In July, 1916, 21.6 tons of freight were loaded into an average car. Better loading had brought this up to 23.8 tons in 1917. Last year the freight trains hauled 608 tons each; this year, 638 tons.

England Wins on Sea.

A week ago announcement came of a German victory in the North Sea in which the allies lost a considerable portion of a freighting fleet of half a score of small vessels. This week comes a similar report showing the destruction by the English navy of a German cruiser and 10 patrol boats which were operating as a patrolling fleet.

Japan in War to Stay.

Japan's full cooperation with the United States in the war until Germany is crushed was pledged by Dr. T. Masao, chairman of the Japanese parliamentary mission to America.

"The Japanese are determined to cooperate with the United States until the last," Dr. Masao said, "and will not stop until our monster enemy, Germany, the pirate of the seas, the assassin of the air and violator of all decencies on land, has been completely crushed. When this monster enemy of ours has been thoroughly beaten down, then and then only shall we have lasting peace."

In explaining that the purpose of the mission's visit to this country was to enable the Japanese to get better acquainted with the United States, he said:

"There is no reason why there should ever by any lack of mutual knowledge, mutual confidence and respect between Americans and Japanese. Let us hope that our association and fellowship in this war will produce so perfect a confidence in each other that the Americans and the Japanese shall always be allies—after the war as well as during the war."

Few Aviation Accidents.

The government committee on public information has issued the following concerning the accidents in training aviators:

There have been to date, in the six and a half months since the beginning of the war, a total of seven accidents, resulting in eight fatalities in connection with the whole training program for America's air army. Of these fatalities, two were caused by men on the ground being struck by the propeller of a machine. The aviation section has been gratified that the fatalities have not been more numerous, especially in view of the hundreds of absolutely new and inexperienced pilots who have been taking the air.

In the selection of aviators especial attention is given to responsibility of character and to general athletic suppleness. The system of training is designed to prevent the occurrence of accidents through inexperience or carelessness. Eight weeks are spent in the preliminary ground training in the theories of flight. Before the men take the air at all they are given careful instruction in running machines along the ground to accustom them to the various controls. Their early flights are made under close supervision with an instructor; and later, when they first fly alone, they are under strict rules for safety.

Can't Mobilize Boys on Four-Minute Plan

(Continued from page one.)

charm the city dwellers with its presence. In fact make it a workable, enjoyable festival time, and when they return to their homes they will surely count the days until they can return again to this happy vacation period. This is also the surest method of eliminating the undesirable help of the I. W. W. and irresponsible misfits that have overrun the horticultural districts of the state.

Now let us analyze the working value of Professor Piper's city boy when turned out of his mobilized training camps for real farm work as he expresses it. I am afraid the very statement of facts proves that Brother Piper is not a farmer, and that he does not realize that it takes a greater amount of traditional experience to run a farm successfully, or to be even an efficient hired man, than in any other occupation. It is a very easy matter to get four minute city men that can grab a few facts and talk to the public in a general way, but that kind of knowledge and preparation has no value in training for successful farm work. Nay, nay, Brother Piper, city bred boys trained in mobilization camps will never have any value as emergency hired men in general farm work. Any kid ten years old raised on a farm, be they boy or girl, would have them skinned a whole mile when it comes to knowing what to do, and how to do it.

For the surplus boy power in our cities we must devise some practical plan to get it occupied in useful and productive employment, by placing the boys where they can best serve, even though the city boy be compelled to go directly to the farm for his employment. The farmer will have to accept him if he can get no other help.

If the war continues, each year that we take large forces of men from productive labor and ship them to the front, labor problems are bound to become more and more acute and we may be forced to utilize the help of women and girls as well as the boys. So we should all plan and work together to the end that the production and conservation of foods may not slacken.

The eastern Washington wheat growers in the dry farming districts are fast stabilizing labor by the introduction of up-to-date cutting and threshing machinery. The small combines will make it possible for the same number of helpers that cultivate and plant the crops in the spring to harvest them in the fall, thereby doing away with the transient harvest laborer.

In these days everybody must work and do their bit. The great labor problem is to distribute this help, so that each individual may do his part where he can best serve.

I am afraid Mr. Piper's mobilization scheme for city boys to become farm helpers on a four-minute plan is too academic for practical results.

Yours very truly,

A. L. ROGERS.

Waterville, Wash.

Overcharged.

"Did I understand you to say that the dentist overcharged you?"

"I should say he did. He gave me enough gas to inflate a balloon."—Boston Transcript.



Half A Bottle Cured Baldy

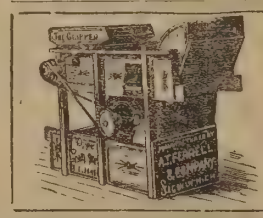
Miss Bernice Silva, of Ukiah, Cal., writes:—I received your free book and found it very convincing. Used half a bottle of Save-The-Horse on my horse Baldy; he had been very lame for a long time. I am very thankful for the cure."

SAVE-The-HORSE
(Trade Mark, Registered)

—the great remedy of horse owners and breeders for over 22 years—every year it cures thousands of old and so-called incurable cases of Ringbone, Thoropin, SPAVIN and diseases of Shoulder, Knee, Ankle, Hoof or Tendon. Sold with a signed Guarantee to cure or your money refunded. Write today for FREE Save-The-Horse BOOK, telling how to diagnose and treat 58 kinds of lameness; also expert veterinary advice and sample of Guarantee—All FREE. Keep a bottle of Save-The-Horse ready for emergencies.

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Druggists everywhere sell Save-The-Horse with Signed Guarantee, or we send it direct by Parcel Post Prepaid.



Grade Your Seed Wheat by Weight

The Clipper seed cleaner cleans and grades the grain by weight of kernel. Send for a catalog. The mill used by 90 per cent of the seed dealers.

Spokane Seed Co.
SPOKANE.



Northwest Live Stock Show Begins

Great Interest in Industry Proved by Entry Lists

The Northwest Live Stock show opens its gates this morning, November 8, at Lewiston, for a week of education along live stock problems. As the final entries were made and the animals assembled at Lewiston indications pointed to probably the greatest show in the history of the organization.

While the exhibition of live stock this year will surpass all records the meeting this year has taken on an unusual character because of the many men of national reputation who will address the stockmen at Lewiston, says Secretary Paul Clagstone. Governors Alexander of Idaho, Stewart of Montana, Lister of Washington, Withycombe of Oregon and Boyle of Nevada are booked as guests at least part of the week. A number of visiting experts from the east, including Secretaries Wayne Dinsmore of the American Percheron society and Evans of the Duroc Jersey association will be heard on Friday. Saturday, November 10, will be stockyards days, and representative delegations are coming from distributing centers at Chicago, Kansas City, Denver, Salt Lake City, Portland and Spokane. In the evening the big annual stockmen's banquet will be held. Monday, November 12, will be an important day, for besides the great Hereford sale, Gifford Pinchot, representing the national food administration at Washington, in the evening will deliver an address covering the whole present live stock situation and future outlook.

Apple Conference Program Announced

In connection with the National Apple show at Spokane, Wash., which begins its tenth annual exposition November 19, an excellent program for the annual fruit growers' conference has been prepared. The conference will be held in the Spokane Chamber of Commerce building beginning Tuesday, November 20, and continuing until Friday afternoon. The following is the list of subjects and speakers, and a general discussion will follow each number on the program:

Tuesday Morning: "Orchard Costs and Economics"—Professor W. S. Thornber, Washington State college, Pullman, Wash.; Leslie L. Palmer, Daniel Hazen Co., Twin Falls, Idaho; R. C. Stockdale, Dufur Orchard Co., The Dalles, Ore.; Professor A. G. Craig, Deer Park, Wash.

"The Labor Problem"—A. L. Rogers, member state council of defense in charge of farm labor; Major E. A. Smith, editor Twice-a-Week Spokesman-Review.

Tuesday Afternoon: "Intercropping, or Using Certain Revenue-Producing Practices in Connection With the Orchard"—Professor C. I. Lewis, Oregon Agricultural college, Corvallis, Ore.

"Live Stock and the Orchard"—Professor E. J. Iddings, University of Idaho, Moscow, Idaho; L. F. Russell, Washougal, Wash.

"Apple Sizes; How to Improve the Size and Grade of Our Northwestern Apples"—Professor O. M. Morris, Washington State college, Pullman, Wash.; Earl Barnhill, Omak, Wash.; J. L. Dumas, Waitsburg, Wash.

"Pruning for Size"—Professor V. R. Gardner, Oregon State college, Corvallis, Ore.

Wednesday Morning: "By-Products of the Apple; Progress Made in the Northwest in the Development of the By-Product Industry"—S. B. Coon, manager Spokane branch, Puyallup and Sumner Fruit Growers & Canning company.

"Evaporators, Progress and Needs; Fruit Susceptible to Evaporation"—Professor C. C. Vincent, University of Idaho, Moscow, Idaho; C. C. Michener, Portland, Ore.; Robert C. Paulus, Salem Fruit Growers' union, Salem, Ore.; F. M. Martin, Yakima, Wash.

"The Obligation of the Grower to Support the By-Products Plant"—Dr. I. D. Cardiff, manager Washington Evaporated Food company, Yakima, Wash.; H. T. Olive, Cashmere, Wash.

"The Community or Home Cannery"—J. O. Ellsworth, county agent, Gooding, Idaho; Mrs. Elizabeth Jones, supervisor Boys and Girls' club, Washington State college, Pullman, Wash.

Wednesday Afternoon: "Packing House and Equipment"—Fred Eberle, manager Yakima County Horticultural union, Yakima, Wash.; Ira Cleveland, Entiat, Wash.; A. W. Stone, manager Hood River Apple Growers' association, Hood River, Ore.; C. W. White, Cashmere, Wash.

"Business Essentials for Fruit Shipping Organizations"—G. A. Nahstoll, United States department of agriculture, Washington, D. C.

"Federal Standardization of Apple Grades; the Proposed National Apple Standard Law"—Led by S. H. Boddinghouse, investigator in marketing, department of agriculture; Wilmer Sieg, Earl Fruit company, Spokane; L. J. Blot, Spokane Fruit Growers' company; C. W. McCullough, Hood River, Ore.; C. A. Malboeuf, Western Oregon Fruit Distributors, Portland, Ore.; M. L. Dean, chief, division of horticulture, state of Washington; F. E. Sickels, manager North Pacific Fruit Distributors, Spokane, Wash.

Thursday Morning: "Pest Control"—Dr. A. L. Melander, Washington State college, Pullman, Wash.; Professor A. C. Burrill, University of Idaho, Moscow, Idaho; D. F. Fisher, U. S. bureau of plant industry, Wenatchee, Wash.

"Actual Experiences in the Yakima Valley"—H. T. Waterbury, North Yakima, Wash.

"Actual Experiences in the Wenatchee District"—F. E. Darlington, Wenatchee, Wash.

"Actual Experiences in the Hood River District"—Leroy Childs, Oregon experiment station.

"Actual Experiences in the Spokane Valley"—Edward Pierce, Opportunity, Wash.

"Actual Experiences in British Columbia"—M. S. Middleton, provincial horticulturist, Victoria, B. C.

Thursday Afternoon: "Practical Use of a War Slogan for Selling Apples"—Colonel E. E. Faville, owner and editor Western Farmer. (The National Apple show is conducting a contest to secure a war slogan for the apple. The 10 best slogans will be submitted to the conference for the decision of the growers themselves during this discussion.)

"Adjusting the Apple Industry to War Conditions"—Charles Hebberd, federal food commissioner, state of Washington, Spokane, Wash.; N. W. Durham, chairman Spokane county council of defense, Spokane, Wash.

"What the Return to Peace Conditions Means to the Apple Industry"—Gordon C. Corbaley, executive secretary Seattle Chamber of Commerce, Seattle, Wash.

Friday: "State Grade and Pack Conference, Beginning at 10 a. m."—Called by and under direction of M. L. Dean, chief, division of horticulture, state of Washington.

Holstein Breeders' Sale

(Continued from page five.)

born June 17, 1910, William Bishop, $280.

Chiketa of Greenbank, No. 246932, born October 7, 1913, Mrs. E. R. Sampson, $300.

Fanny Pledge Clothilde Urmason, 3d, No. 147736, born November 5, 1909, Herman Steffen, Monroe, $200.

Susa Mercedes Pontiac, No. 346089, born October 22, 1915, Guy M. Richards, $150.

Chimacum Bonnie Bess, No. 250329, Guy M. Richards, $370.

Chimacum Wayne Pride, born February 8, 1917, A. E. Smith, $145.

Chimacum Inka Hartog, No. 328335, born November 10, 1915, Seymour Shoultes, Marysville, $185.

Katherine De Kol of Tarboo, born October 5, 1916, bid in by the Western Washington Holstein Breeders' association at $270, given back to the Red Cross and sold to Hugh Nisbet for $160.

Laura Homestead Pontiac, born April 5, 1917, J. H. Hulbert, Mt. Vernon, $150.

Queen Segis De Kol Burke, born May 2, 1917, J. H. Hulbert, $150.

Melbrook Segis Pontiac, No. 360514, born April 2, 1916, J. E. Austin, Seattle, $155.

Belle Butterfly of Melbrook, No. 36951, born April 15, 1916, C. H. Nelson, Stillwater, $150.

Maldeta Mercedes, No. 147449, born September 25, 1910, J. C. Paulsen, Stillwater, $250.

Riverview Netherland Pearl, No. 256309, born April 19, 1914, G. M. Richards, $195.

Chimacum Glassa 2d., born April 2, 1913, Guy M. Richards, $400.

Requisite Netherland, No. 216087, born June 13, 1912, Beach View Farm, Oak Harbor, $180.

Cherry Valley Pledge, No. 174849, born November 30, 1911, Beach View Farm, $175.

Chimacum Daniel Boon, No. 147941, born June 29, 1914, George A. Gue, $325.

Sequim Aaggie Boon, No. 363537, born April 7, 1916, William Bishop, $160.

Sequim Boon Sena De Kol, No. 363536, born February 13, 1916, A. M. Bailey, $185.

Sequim Boon Korndyke, No. 363538, born May 31, 1916, M. Treosti, $180.

Schillard Pledge, No. 154579, born January 1, 1911, A. E. Smith, $250.

Laura Colantha of Donnybrook, No. 392164, born November 21, 1916, William Bishop, $145.

Donnybrook Prilly McKinley, born February 12, 1917, William Bishop, $165.

Hollywood Bernardo Canary, No. 262533, born February 8, 1914, William Bishop, $295.

The Highland Jonge Pride, No. 121914, born February 20, 1909, Guy M. Richards, $225.

Art in America.

The first school of painting to establish itself on American soil was that of Spain, following in the train of viceroys and prelates after the Indian commonwealths had been subjected and Spanish towns had been built. To the present day there exists in the city of Mexico the oldest academy of the fine arts in the western world—the Academy of San Carlos. It is nearly as old as the Royal academy, London.



Look for this Label on your Coat

Raynster US

Reg. U. S. Pat. Off.

Raynster

Reg. U. S. Pat. Off.

The hustle and bustle of farm and freight station never stop for rain. Men must be outdoors in the worst of weather.

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This new word "Raynster" is the name of the United States Rubber Company's entire line of weatherproof clothing. And to make sure that you *get* a Raynster when you buy, each coat is labeled.

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These practical storm-coats are made with ample room to work. They're made strong and durable. They're made to fit every purpose and person.

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Send a postal today for interesting book of styles. It shows Raynsters for men, women and children.

United States Rubber Company

Clothing Division, New York and Boston

PAPA GETS IN THE WAY OF WILLIE'S LATEST







DEAR TOMMY: I made a slider for Johnny Jones, who is the best batter on our ball team, but runs like an ice wagon. When Johnny tried it first, he jumped too strong and hurdled right on top of Papa. Then Papa made me resign as manager of the club!

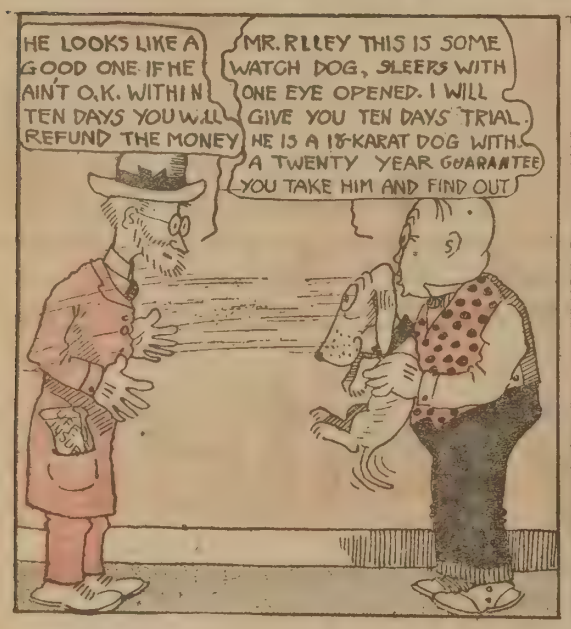
Yours, etc., WILLIE.

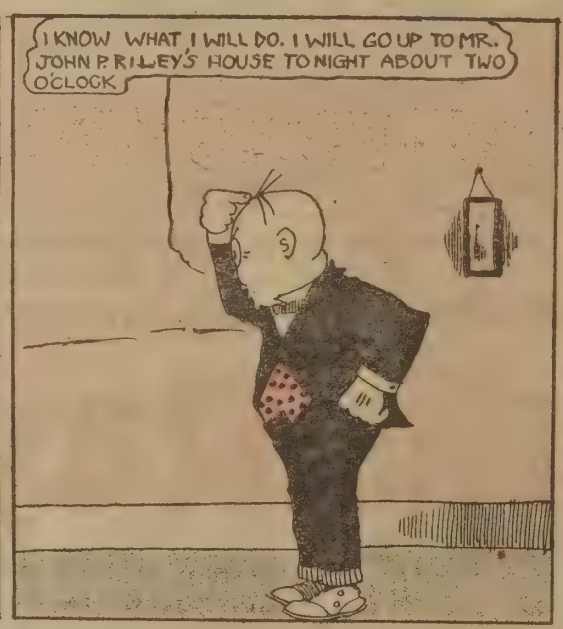




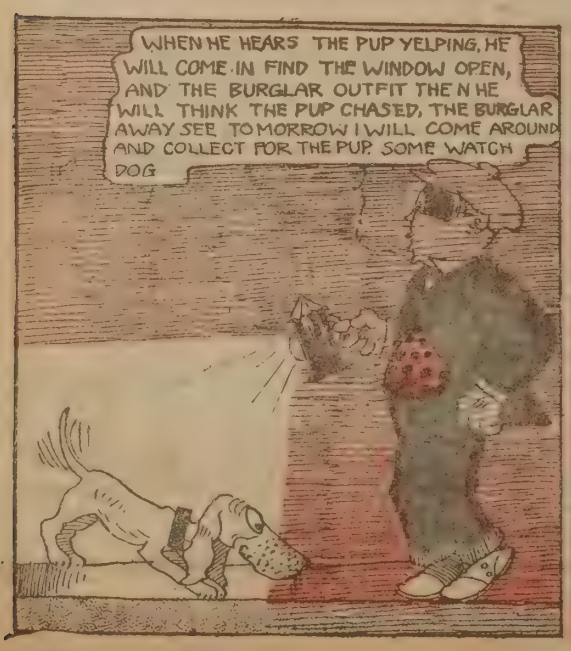


PUP PROVES THAT HE IS SOME WATCHDOG

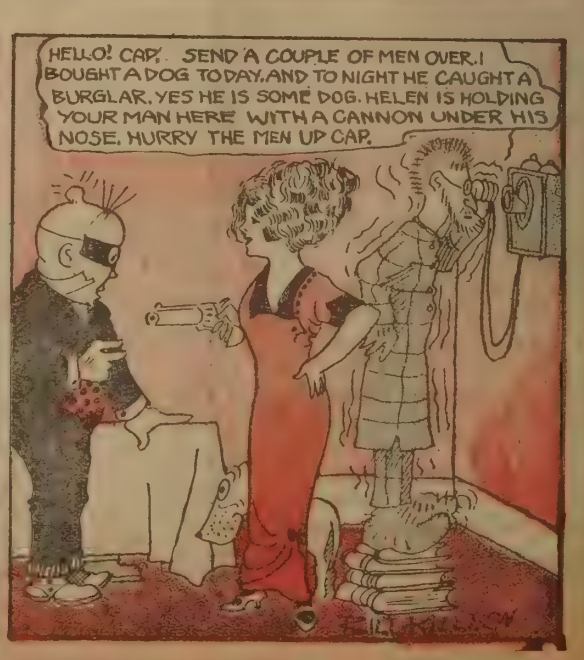












Snohomish Dairy Problems

Association Reports Serious Labor Situation

By PAUL E. TRIEM.

The Snohomish County Dairymen's association held its first annual meeting in Everett, October 2. A large number of representative dairymen attended this meeting, and steps were taken to tighten the heretofore rather loosely organized association into a closely organized business institution. Among the features of the day's program were the detailed explanation of the terms of the contract between the association and its members, given by an attorney; a Liberty loan oration, delivered by a member of the Everett Liberty loan committee; an explanation of the distributor's side of the cost-to-consumer question; a discussion of the various practical details of production and marketing, from the farmer's view point; and the election of a board of five directors.

This board consists of John Lee, representing the Stanwood-Norman district; Ed Holcomb, from the Snohomish district; W. G. Grimm, Arlington district; Gilbert Quale, Island county; and I. S. Thomle.

Among the points brought out during the discussion of the legal side of the contract were several which have caused considerable argument among dubious members up to this time. For instance, in regard to the important matter of a member's ability to get out of the association, once he has signed up, it was explained that any dairyman desiring to go out of the business, either through the sale or lease of his farm; would be perfectly free to do so, but that, on the other hand, the disloyal member who desired to remain in the producing business but to sever his connection with the association for selfish reasons, would find great difficulty in breaking his contract. Financial liability is limited to the authorized capitalization of the association, which is incorporated under the state laws.

The speaker for the Liberty loan committee, who was given an opportunity to address the association directly after the noon hour, told his audience some of the ugly truths about the present war situation which are too often glossed over. Declaring that the people of this country had utterly failed to grasp the significance of the prewar days, he asked whether it was not possible that we are just as blind to the real meaning of what is happening today. After three years of war, during which not one foreign soldier has set foot upon German soil except as a prisoner, the speaker declared:

"Gradually we are awakening to the fact that the nations of the world are facing the greatest military power in history—an organization compared with which that of Napoleon was as that of a corporal's guard! The time for this country to fight," he added, "is while the war is three thousand miles away, rather than at our very doors!"

President John Lee, in an informal address during the afternoon session, brought out the fact that the association had not been formed, as was commonly stated by disaffected interests, primarily to fight the condenseries, or any other organization.

"Our sole purpose in organizing is to attend to our business," President Lee declared. "We are not fighting the condenseries or any other concern, but a time has come when we must look after our own affairs as other business people do. This means organization."

The speaker also called attention to the fact that, according to apparently reliable information in the hands of the dairymen, the federal food commission had agreed upon a price of $5.12 a case, for condensed milk, to be charged by the condenseries on the condition that the latter paid the farmer $3.00 per hundred for his raw milk, during September.

"Did any of you get this price?" President Lee demanded.

In conclusion President Lee brought up the subject of the city milk trade, and requested H. Menzel, a local retailer, to explain why it was that the farmer received but a little over 5 cents a quart to produce the milk, while the distributor received close to 7 cents a quart for his part of the transaction.

Mr. Menzel was ready with his figures. He began with the basic price of from $2.75 to $2.90 per hundred pounds, paid for the milk at the farm. This makes one gallon cost about 24 cents, at this stage of the transaction. Next comes transportation to the city, 2 cents a gallon; 2 cents a gallon loss in handling, due to evaporation, spilling, etc.; 3 cents a gallon for milk bottles, this being worked out on the basis of each bottle making from eight to nine trips; a delivery cost, including wages to driver, team cost, etc., of 10 cents a gallon; pasteurizing and bottling cost, 3 to 4 cents a gallon; making the total cost to the dealer, delivered, about 44 cents for each gallon of retail milk. Some of these figures were questioned by the dairymen, but on the whole the estimate seemed fair. Farther questioning as to the possibilities of saving by eliminating overlapping delivery systems brought out many suggestive ideas, but nothing that could be considered definite information.

The final discussion on the program was perhaps the most important of the day, for it took up the all important matter of labor. Various dairymen expressed the firm conviction that if something is not done to solve this problem, the dairy industry as a whole will have to go under.

"It is no longer a mere question of wages," one of the speakers declared. "We need men to help dig spuds and to help with the cows, and no men are to be obtained at any price."

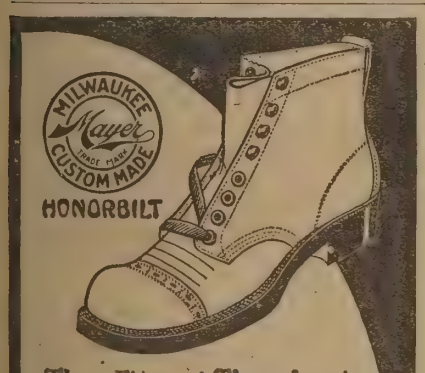
Another speaker told of one of his neighbors who has been trying for two weeks to secure a milker, but is still unprovided.

"And if we are having this experience at the time of year when labor is usually abundant, what will happen to us during the rush of the next harvest season?" he added.

By unanimous vote, a resolution was passed requesting the board of directors to prepare and send to the federal food commission a resolution requesting aid in this vital matter of adequate farm help. The concensus of opinion was that at a time when so much depends upon food production, it is calamitous for the government to take trained men from the farms, when these same men will have to be replaced in the near future with workers who know nothing about the tasks which confront them.

To Warm the Hands.

For warming the hands there has been invented an asbestos pad within which is a wick to be soaked in benzine and lighted.



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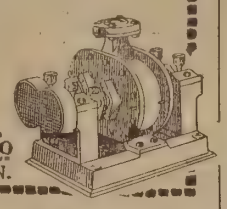
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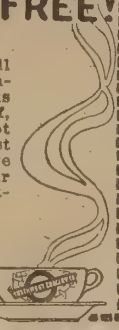


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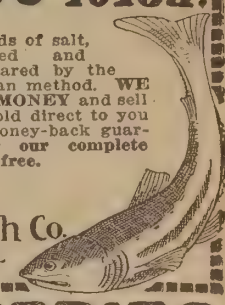
Send us 50c and we will send you a 1½ of northwest's best coffee. This is a trial proposition. If, after using it, you do not agree that it is the best coffee you ever used, we will gladly refund your money. We pay the postage. Write today.



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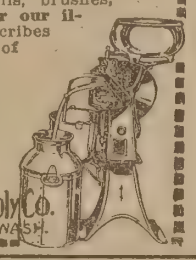
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Woolen army shirts, regulation shoes, blankets, khaki pants, etc. Full line of big values at low prices.

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All branches of engineering, gas engine, farm tractor, automobile courses; electrical engineering, mechanical drawing, etc. Write for complete catalog.



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We employ no agents or solicitors. We charge no fines or withdrawal fees.

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Your funds left here are invested only in first mortgages on improved real estate, U. S., state and city bonds, under the terms of a very strict state law. All the net earnings are paid to you twice each year.

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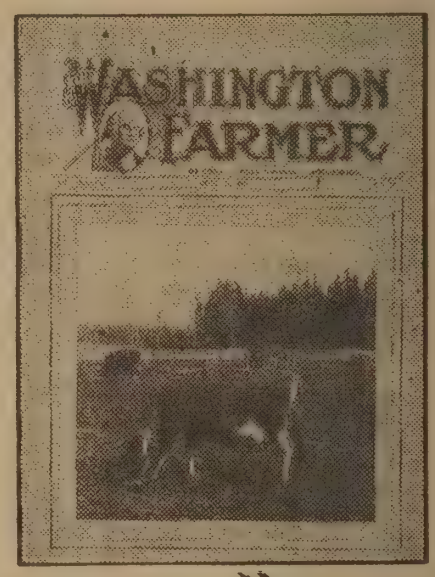
IT WILL PAY YOU TO INSERT "WANT" ADS IN THESE STATE FARM PAPERS

RATES ARE LOW

You Reach the Farmers







WHEN our readers send us a "want" ad it is printed in three state papers:

THE WASHINGTON FARMER
THE OREGON FARMER
THE IDAHO FARMER

The "want" ad is a method of communication which will prove helpful at various times to all of our farm folks.

Do you desire to get in touch with a reliable, experienced hired man? The "want" ad brings your need to the attention of competent workers throughout three states.

Do you wish to turn used machinery into cash? The "want" ad reaches farmers in other districts who have use for your discarded implements, and who will probably be glad to make the saving you will be able to offer them.

Have you farm products to sell, such as live stock, poultry, seeds or dried fruits? Once more, the "want" ad in the three state farm papers offers a solution for the difficulty. It reaches the very class of homes where there is a constant demand for these things.

Have you a piece of land for which you are eager to find a buyer? The "want" ad in The Washington Farmer, The Oregon Farmer and The Idaho Farmer affords a splendid method for making a sale; inasmuch as these three papers are read by tens of thousands of farm owners and farm renters, a goodly proportion of whom are considering the purchase of farms or orchards in other sections.

To sum up, our "want" ads enable you to reach the people who have what you want or who want what you have. They are easy to insert. They are low in cost. Even if there is nothing you care to advertise at this time, you will always find interesting, profitable reading in our "want" ad columns.

Rates are printed at the top of these columns in every issue. Don't miss the "want" ad page today!

Send Orders and Inquiries Regarding "Want" Ads to The Washington Farmer, 617 Central Bldg., Seattle, Wash.

American Farmer Is Loyal

Spokane Lawyer's Sheer Ignorance of the Facts

For sheer ignorance of facts the following communication from a Spokane lawyer beats anything that has yet come under the Farmer's eye. We do not believe that it would be possible to pack more falsehoods into an equal amount of space:

To the Editor: If the American people by their contribution of blood and treasure succeed in destroying the greatest world menace, the most diabolical blood-thirsty savages, the best organized aggregation of inhuman monsters that have ever been permitted by the supreme power of the universe to encumber the earth, no thanks will be due to the farmers of the Inland Empire in subscribing to the Liberty loans of the government. The disinterested apathy exhibited by them is a disgrace and an insult to the American flag.

Under existing law the farmer is made exempt from military service. He is required to pay practically none of the numerous species of war taxes. A price for his wheat of $2 a bushel has been fixed by law for a two-year period, when it only costs him 50c a bushel to raise it. On account of the war everything the farmer sells has been boosted in price 200 per cent, causing the extreme high cost of living now prevailing, which must be paid by the laboring men and all other who are not farmers.

Nevertheless, the people living in the cities and towns have nearly all subscribed liberally to the Liberty loans, even though a great many were compelled to borrow money to do so, and in face of conditions in the cost of living which produced an enormous strain on their incomes. Even crippled newsboys, blind popcorn vendors, widows, orphans and unfortunate persons in almost destitute circumstances have subscribed their "widow's mite." But the farmer, who in most instances was given his land by the government, and who has become extremely prosperous, sits back in his easy chair, smokes his pipe, his grain warehouses bursting with $2 wheat, his 18c-a-pound hogs trying to break out of the pen, his trees laden with apples worth $3 a box, and refuses to do "his bit," or any part of it, to protect the people of his country from the threatened ravages of the most despicable, ingenious, blood-thirsty, inhuman aggregation of autocratic monsters the world has ever produced.

Mr. Farmer, you are a "slacker." You have no right to be called Americans while you permit others to protect you and you refuse to do your bit.

This accusation does not apply to all farmers, as we know some of them have subscribed liberally to the Liberty bonds, but is intended to apply to that great army of farmers in the country who are real "slackers," and there are thousands of them in eastern Washington. W. H. PLUMMER.

Falsehood 1, that the farmers of this region are not helping to win the war.—Unless the consumers heed Mr. Hoover's appeal, the United States will have only 70,000,000 bushels of wheat this year to send to its allies. In spite of the most adverse weather conditions in the history of the country, the farmers of Washington, Oregon, Idaho and Montana will supply 30,000,000 bushels of that 70,000,000—nearly one half.

Falsehood 2, that the farmer is exempt from military service.—He is not exempt, either in law or in practice. Young men from the farms have enlisted in great numbers. Young men on the farms have been drafted and have gone to the training camps. More of them have been taken than can well be spared if the farmers are to meet the government's crop expectations next year.

Falsehood 3, that the "farmer is required to pay practically none of the numerous species of war taxes."—He is required to pay his part all along the line. There may be some farmer shirkers on the income tax, as there are shirkers in all other lines. If Mr. Plummer knows of such cases it is his duty to report the facts to the collector of internal revenue.

Falsehood 4, that the farmers of the Inland Empire are paid $2 a bushel for wheat that cost them but 50 cents to produce.—The government has cut the price of wheat. Under its regulations the farmers of this region will receive about $1.75 a bushel for a very short yield, for the maximum price of $2.05 is for No. 1 hard wheat delivered at the Coast, and out of that the government will deduct freight charges, discount for soft wheats, and further discount for lower grades than No. 1.

If the government had not intervened, wheat would have gone to $3 a bushel and possibly more. But the farmers would loyally have taken $2, the price they were led to expect from the wording of the law.

It is ridiculous to talk about wheat costs this year of 50 cents a bushel. There was a time when wheat could be grown here for that figure, but that was many years ago. Thousands of farmers in the Pacific northwest will not meet expenses this year.

When the final returns are in the farmers will be found as a class to have bought liberally of Liberty bonds. There are good reasons why they have not bought more. Large numbers of them will make no profits this year. Others in large number will suffer actual loss. The farmers, from the very nature of their isolated lives, can not be reached as quickly by solicitation as the people of the cities. It is physically impossible to organize the country as readily as the town may be organized.

This is no time to engender class hatreds and make class attacks. The farmer could retort that the lawyers are not doing their full part, or the merchants, or the doctors, or the bankers; but that line of recrimination would not help win the war.

We know that the American farmer is as loyal and patriotic as any other class of American citizens. We know that when the history of the war is written it will give him just credit as it should, as it gives him just credit for the great part he has borne in other wars.

Saves Milker's Tempter.

A wire clip to hold a cow's tail against one leg when she is being milked has won a patent for a Michigan inventor.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

What Psychology Really Is and How You Often Use It



Dr. Hirshberg

Strange as it may strike you, psychology is not what many unscientific, but popular writers would have you believe. Actually it is a science which has to do with the business of human activity and conduct.

By means of the carefully checked and controlled observations of many unbiased and just men, who are not influenced by statements, romances or preconceived opinions, and by experiments easily repeated by others, principles, laws and rules are discovered which enable you to tell with some degree of accuracy how an individual or a group of individuals act and adjust themselves to the various situations of everyday life as well as to emergencies.

Professor John B. Watson, head of the department of psychology at John Hopkins university, will say in his next book, to be called "Human Psychology":

"It must be understood at the outset, though, that psychology at present has little to do with the setting of social standards of action, and nothing to do with moral standards. It does lie within its province to tell whether the individual can act in accordance with such standards, and how we may control and lead him to act in harmony with them."

Some Surprising Examples.

Every one employs psychology more or less all his life without knowing it as such. When you fail and learn from failures, it is a problem of psychology. When, after years of unpleasantness, you acquire a knack of working in harness, of getting along with your colleagues and associates, you have mastered a psychological situation.

Whether by skill or bungling you hoe your row or teach your children, you have put psychology to use.

Hit-and-miss methods may be roundabout psychology, but it is practical psychology just the same. Ballyhoo men, barkers and catchers and medicine vendors all use a naive psychology to lure. The "fire sale" and "bargain day" are all "ancient and honorable" schemes of psychological endeavor.

The "Scrouge" who will not devote a "jitney" to true charity can be made to gamble away $10 at a bazar by means of paddles, pocket marbles, grab-bags and other devices.

To apply the art of psychology to a given situation and to predict as to the future, the past activities and behavior of the individual must be known.

The reason you can map out almost as a prophecy what an animal may certainly do in a given variety of situations is because experiments and observations built upon experience and acquaintance indicate almost unerringly what they will again do in like situations.

Creatures of Habit.

With so complex an individual as well trained and thoughtful as man the predictions of future actions are not usually so easy. It is sometimes simple, however, for most men and women, because they are so often slaves to their habits, beliefs and occupations.

Heredity, family traits, occupations, the limits of schooling, temperament, health, sleep, digestion, muscles, neat, amount of food, cold, habits and prospects all come under consideration and lead to a comparatively easy way of prophesying what impends.

The reason a dream is often a truthful and correct psychological summary of what is about to happen is due to the fact that a number of events and situations perceived unconsciously and subtly by the mind are brought to a logical deduction by the untrammelled and uncontaminated fancies of the intellect, undisturbed by the noise and hubbub of the wakeful, workaday physical world.

Natural Gas on Riggs Farm

Furnishes Soft, Clear, Penetrating Light

That one farm home in the Pacific northwest is lighted by natural gas, that rises right on the farm, is probably known to very few people. Yet such is the case. Cass Riggs, nine miles from Dallas, Ore., and a mile and a half from Crowley Station, has every room in his house so lighted with gas that makes a soft, clear and very penetrating light. And the gas well is within 100 feet of the house.



Farm home of Cass Riggs, near Dallas, Ore.

Mr. Riggs is an Oregon pioneer who came across the plains with his parents when a small boy, over 50 years ago. Twenty-six years ago, while digging for water, he struck the first blossom of gas at about 50 feet, after going through a narrow stratum containing salt water. Some 16 or 18 years ago Mr. Riggs had the well sunk to 165 feet and at 150 feet he struck his third and strongest stream of gas. Below the 100 foot level all the water seemed to be salt. Sixteen years ago a pump was put in and ever since then water has been pumped for stock and some for irrigating the garden. The stock do not like the salt water as they do fresh water, of which there is a good well at the house, but they drink it fairly well. The salt is pure and of high grade and an evaporating plant could be cheaply installed.

At intervals gas has been burned at the well and a few years ago a jet was put in which, after water had been pumped awhile, would burn with a great flame. It was only two years ago that Mr. Riggs put in a thoroughly modern plant, with automatic cut-off and had his house piped. When pumping begins, gas comes first, showing that it is constantly rising. Then water and gas are pumped together. In addition to a light in every room a two-burner gas plate has been put in for cooking. The gas burns with a clear blue flame, gives off great heat and is very satisfactory for cooking, but the ladies of the family prefer not to give up their good wood range and it is still used for baking. The gas is odorless and is nonpoisonous. In this it differs from most gases, both natural and manufactured. Mr. Riggs has had many offers of leases, but so far they have been from promoters and he is not going to tie up his place to any one unless positive evidence of real development is in sight. He is not indifferent to the great boon to the Willamette valley or the financial advantage to himself of proof of gas or oil in commercial quantities. But he has a good farm, a happy family and a comfortable living and now he is enjoying the use of natural gas, even if nothing more is ever done.

It is worth stating, however, that there are salt springs in several places in that part of the Willamette valley and that gas has actually been struck in several wells. One of these is a 360-foot well on the Newman place, a few miles from Amity. Gas was also struck in a well being bored for city water, right in the city of McMinnville. Joseph Dubois, proprietor of the Yamhill hotel at McMinnville, and a few others in the valley, are enthusiasts about the prospect for gas and oil. They have reports from two men of national reputation and Professor Smith of the Oregon university recently went over the various prospects, including the Riggs place. All these gentlemen report that the formations are very indicative of both gas and oil; that the salt water is found only in the deposits of the Miocene age and that this is the only age in which deposits that result in gas and oil were made.

Congressman C. N. McArthur, on his last trip home, had his attention called to the gas on the Riggs place and has requested the authorities at Washington to send a scientist who will make an exhaustive report. I believe his request has already been granted. Perhaps the time is near when the Willamette valley will welcome a great oil region as a part of California did a few years ago. If so, it will no doubt cause an era of great development and the farmers will share in the accruing prosperity. But whether so or not, the valley will continue to be productive and prosperous and Mr. Riggs at least will continue to have the advantages of burning his own natural gas. H. A.



THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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SYNOPSIS.

Gale is trader of Flambeau, a frontier on the Yukon. Lieutenant Burrell is sent to this camp to preserve order. The day of his arrival Necia, Gale's daughter, returns from a mission school. As she and Burrell are talking, two halfbreed children and a squaw appear, and Necia, noting the lieutenant's look of disgust, informs him that they are her mother, brother and sister. Poleon Doret, a Frenchman, returns from Dawson, and on the same boat comes Runnion, a desperado. In attempting to make Runnion leave Flambeau, Burrell is shot by him and only the quick hand of Poleon saves him.

As Necia is arrayed in a ball gown, which Poleon brought her from Dawson, Burrell happens in. He is amazed at the ease with which she wears the dress and at the fairness of her skin. She confesses to a feeling that she, Necia, should be called "Merridy."

"No Creek" Lee, a prospector, after years of hard luck, makes a big strike. Runnion returns, and with him Stark, who has come to grubstake the miners and open a saloon. Stark causes Gale and the Squaw Alluna, great uneasiness. The men of the camp leave for Lee's claim, Necia, longing for riches so she may become like other girls, begs Burrell to follow them with her. Burrell knows that Necia is coveted by half the men in the camp and that it would cause a great uproar should he spend a night alone with her in the woods. This would be an easy way to compel them to an open state of enmity, which would be preferable to the indifferent toleration which he has met among them. This together with her entreaties and the confession that she loves him, sweeps aside all discretion and together they start on the journey.

Poleon Doret sang gaily as he set out for the claim with Gale. Here was a gift of wealth for him to lay at the feet of Necia with his laughter, his music and his heart. On the way Gale tells him the story of a good girl, loved by two men, a good man and a bad man, and how the he-devil had won in the game of love. That night the party camps in the woods, Stark, Runnion, Lee, Poleon and Gale. In the morning they draw straws to see who will have first choice of claims, Gale and Poleon receiving the lucky ones.

CHAPTER VI.

The Burrell Code.

Not until his dying day will Burrell lose the memory of that march with Necia through the untrodden valley, and yet its incidents were never clear-cut nor distinct when he loked back upon them, but blended into one dreamlike procession, as if he wandered through some calenture where every image was delightfully distorted and each act deliciously unreal, yet all the sweeter from its fleeting unreality. They talked and laughed and sang with a rush of spirits as untamed as the waters in the course they followed. They wandered, hand-in-hand, into a land of illusions, where there was nothing real but love and nothing tangible but joy. The touch of their lips had waked that delight which comes but once in a lifetime and then to but few; it was like the moon-madness of the tropics or the dementia of the forest folk in spring. A gentle frenzy possessed them, rendering them insensible to fatigue and causing them to hurry the more breathlessly that they might sooner rest and sit beside each other. At times they fell into sweet silences where the waters laughed with them and the trees whispered their secret, bowing and nodding in joyous surprise at this invasion; or, again, the breezes romped with them, withdrawing now and then to rush out and greet them at the bends in boisterous pleasure.

They held to the bed of the stream, for its volume was low and enabled them to ford it from bar to bar. Necia had been raised in the open, with the wild places for her playground, and her muscles were like those of a boy, hence the two swung merrily onward, as if in playful contest, while the youth had never occasion to wait for her or to moderate his gait. Indeed, her footing was more sure than his, as he found when she ventured out unhesitatngily upon felled logs that lay across swift, brawling depths. The wilderness had no mystery for her, and no terrors, so she was ever at his side, or in advance, while her eyes, schooled in the tints of the forest, and more active than those of a bird, saw every moving thing, from the flash of a camprobber's wing thorugh some hidden glade to the inquisitive nodding of a fool hen where it perched high up against the bole of a spruce. They surprised a marten fishing in a drift-wood dam, but she would not let the soldier shoot, and made him pass it by, where it sat amazed till it realized that these were lovers and resumed its fishing. Gradually the stream diminished, and its bowldered bed became more difficult to traverse, until, assuming the airs of a leader, the girl commanded him to lay off his pack, at which he pretended to obey mutinously, though thrilling with the keenest delight at his own submission.

"What are you going to do?" he inquired.

"Mind your own business, sir," she commanded, sternly.

From her belt she drew a little hunting-knife, with which she cut and trimmed a slender birch the thickness of his thumb, whereupon he pretended great fright, and said:

"Please! please! What have I done?"

"A great deal! You are a most bold and stubborn creature."

"All pack animals are stubborn," he declared. "It's the only privilege they have."

"You are much too presumptuous, also, as I discovered in your quarters."

"My only presumption is in loving you."

"That was not presumption," she smiled; "it was preemption. You must be punished."

"I shall run away," he threatened. "I shall gallop right off through the wood and—begin to eat grass. I am very wild."

As she talked she drew from her pocket a spool of line, and took a fly hook from her hat; then, in a trice, she had rigged a fishing rod, and, creeping out upon a ledge, she whipped the pool below for a half dozen rainbow trout, which she thrust into his coat while they were still wriggling. Then she as quickly put up her gear, and they resumed their journey, climbing more steeply now, until, when the sun was low, they quit the streambed and made through the forest towards the shoulder of an untimbered ridge that ran down into the valley. And there, high up on the edge of the spruce, they selected a mossy shelf and pitched their camp.

They had become so intimate by now as to fall into a whimsical mode of speech, and Necia reverted to a childish habit in her talk that brought many a smile to the youth's face. It had been her fancy as a little girl to speak in adjectives, ignoring many of her nouns, and its quaintness had so amused her father that on rare occasions, when the humor was on him, he also took it up. She now addressed herself to Burrell in the same manner.

"I think we are very smarts to come so far," she said.

"You travel like a deer," he declared, admiringly. "Why, you have tired me down." Removing his pack, he stretched his arms and shook out the ache in his shoulders.

"Which way does our course lie, now, Pathfinder?"

"Right up the side of this big, and then along the ridge. In two hours we come to a gully running so"—sne indicated an imaginary direction—"which we go down till it joins another stream so, and right there we'll find old 'No Creek's' cabin, so! Won't they be surprised to see us! I think we're very cunning to beat them in, don't you?" She laughed a glad little bubbling laugh, and he cried:

"Oh, girl! How wonderful you are!"

"It's getting very dark and fierce," she chided, "and all the housework must be done."

So he built a fire, then fetched a bucket of water from a rill that trickled down among the rocks near by. He made as if to prepare their meal, but she would have none of it.

"Bigs should never cook," she declared. "That work belong to littles," then forced him to vacate her domain and turn himself to the manlier duties of chopping wood and boughs.

First, however, she showed him how to place two green foot-logs upon which the teapot and the frying pan would sit without upsetting, and how long she wished the sticks of cooking wood. Then she banished him, as it were, and he built a wickiup of spruce tops, under the shelter of which he piled thick, fragrant billows of "Yukon feathers."

Once while he was busy at his task he paused to revel in the colors that lay against hill and valley, and to drink in the splendid isolation of it all. Below lay the bed of Black Bear creek, silent and sombre in the creeping twilight; beyond, away beyond, across the westward brim of the Yukon basin, the peaks were blue and ivory and gold in the last rays of the sun; while the open slopes behind and all about wore a carpet of fragrant short-lived flowers, nodding as if toward sleep, and over all was the hush of the lonely hills. A gust blew a whiff of the camp smoke toward him, and he turned back to watch Necia kneeling beside the fire like some graceful virgin at her altar rites, while the peculiar acrid outdoor odor of burning spruce was like an incense in his nostrils.

He filled his chest deeply and leaned on his axe, for he found himself shaking as if under the spell of some great expectancy.

"Your supper is getting cold," she called to him.

He took his seat beside her on a pile of boughs where the smoke was least troublesome; he had chosen a spot that was sheltered by a lichen-covered ledge, and this low wall behind, with the wickiup joining it, formed an enclosure that lent them a certain air of privacy. They ate ravenously, and drank deep cupfuls of the unflavored tea. By the time they were finished the night had fallen and the air was just cool enough to make the fire agreeable. Burrell heaped on more wood and stretched out beside her.

"This day has been so wonderful," said the girl, "that I shall never go to sleep. I can't bear to end it."

"But you must be weary, little maid," he said, gently; "I am."

"Wait, let me see." She stretched her limbs and moved slightly to try her muscles. "Yes, I am a very tired, but not the kind of tired that makes you want to go to bed. I want to talk, talk, talk, and not about curselves either, but about sensibles. Tell me about your people—your sister."

He had expected her to ask this, for the subject seemed to have an inexhaustible charm for her. She would sit rapt and motionless as long as he cared to talk of his sister, in her wide, meditative eyes the shadow of a great unvoiced longing. It always seemed to make her grave and thoughtful, he had noticed, so he had tried lately to avoid the topic, and tonight in particular he wanted to do so, for this was on time for melancholy. He had not even allowed himself to think, as yet, and there were reasons why he did not wish to do so; thought and realization and a readjustment of their relations would come after tonight, but this was the hour of illusion, and it must not be broken; therefore he began to tell her of other people and of his youth, making his tales as fanciful as possible, choosing deliberately to foster the merry humor in which they had been all day. He told her of his father, the crochety old soldier, whose absurd sense of duty and whose elaborate southern courtesy had become a byword in the south. He told her household tales that were prized like pieces of the Burrell plate, beautiful heirlooms of sentiment that mark the honor of high-blooded houses; following which there was much to recount of the Meades, from the admiral who fought as a boy in the Bay of Tripoli down to the cousin who was at Annapolis; the while his listener hung upon his words hungrily, her mind so quick in pursuit of his that it spurred him unconsciously, her great, dark eyes half closed in silent laughter or wide with wonder, and in them always the warmth of the leaping firelight blended with the trust of a new-born virginal love.

Without realizing it, the young man drifted further than he had intended, and further than he had ever allowed himself to go before, for in him was a clean and honest pride of birth, like his mother's glory in her forebears, the expression of which he had learned to repress, inasmuch as it was a Dixie land conceit and had been misunderstood when he went north to the academy. In some this would have seemed bigoted and feminine, this immoderate admiration for his own blood, this exaggerated appreciation of his family honor, but in this southern youth it was merely the unconscious commendation of an upright manliness for an upright code. When he had finished, the girl remarked, with honest approval:

"What a fine you are. Those people of yours have all been good men and women, haven't they?"

"Most of them," he admitted, "and I think the reason is that we've been soldiers. The army discipline is good for a man. It narrows a fellow, I suppose, but it keeps him straight."

Then he began to laugh silently.

"What is it?" she said curiously.

"Oh, nothing! I was just wondering what my straight-laced ancestors would say if they could see me now."

"What do you mean?" the girl asked, in open-eyed wonderment.

"I don't care," he went on, unheeding her question. "They did worse things in their time, from what I hear." He leaned forward to draw her to him.

"Worse things? But we are doing nothing bad," said Necia, holding him off. "There's no wrong in loving."

"Of course not," he assured her.

"I am proud of it," she declared. "It is the finest thing, the greatest thing that has ever come into my life. Why, I simply can't hold it; I want to sing it to the stars and cry it out to the whole world. Don't you?"

"I hardly think we'd better advertise," he said, dryly.

"Why not?"

"Well, I shouldn't care to publish the tale of this excursion of ours, would you?"

"I don't see any reason against it. I have often taken trips with Poleon, and been gone with him for days and days at a time."

"But you were not a woman, then," he said, softly.

"No, not until today, that's true. Dear, dear! How I did grow all of a sudden! And yet I'm just the same as I was yesterday, and I'll always be the same, just a wild little. Please don't ever let me be a big tame. I don't want to be commonplace and ordinary. I want to be natural—and good."

"You couldn't be like other women," he declared, and there was more tenderness than hunger in his tone now, as she looked up at him trustingly from the shelter of his arms. "It would spoil you to grow up."

"It is so good to be alive and to love you like this!" she continued, dreamily, staring into the fire. "I seem to have come out of a gloomy house into the glory of a warm spring day, for

(Continued on page twenty-four.)

Many new subscribers, becoming interested in our serial story, "The Barrier," have expressed a desire for previous chapters which would give them a better review of the story than is possible in the short synopsis of previous chapters running with each instalment.

As the issues of The Farmer containing these chapters have been exhausted, we have decided to print next week a very full and comprehensive synopsis of the previous chapters of the story. With this extended synopsis any reader will get a satisfactory and intelligent review of the previous chapters of "The Barrier" so that he will be practically at home with the remaining instalments of this most striking serial.

All subscriptions beginning with next week's issue will contain this extended review of the previous chapters.

All the World's a Stage, and All the Men and Women Merely Players

Mrs. Teddy Jr. in France.



This is the photograph of Mrs. Theodore Roosevelt Jr., the daughter-in-law of the colonel. She is wearing the smart looking uniform of the Young Men's Christian association workers in France. The photograph was made in a street of Paris.

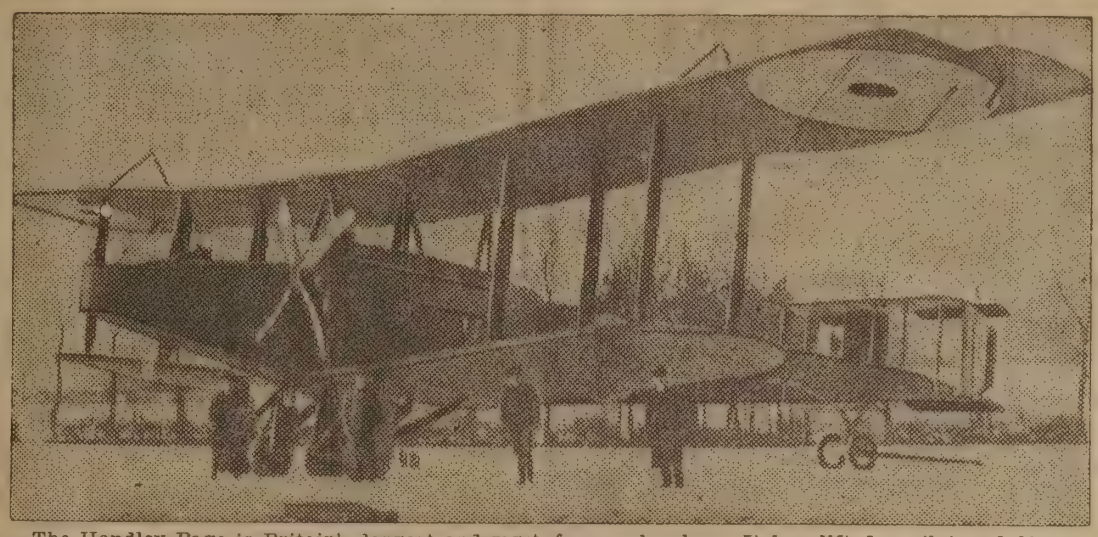
Commands Blue and Gray.



Copyright by International.

The brigadier-general is acting commander of the "blue and gray division," officially known as the 20th division, U. S. A. This photo of General Rafferty was taken at Camp McClellan, Anniston, Ala., where the boys from along the Mason-Dixon line are training.

Lifts Pilot and 20 Men 7000 Feet



The Handley-Page is Britain's largest and most famous bomber. It has lifted a pilot and 20 passengers to 7000 feet during a test flight. The Germans captured one of these machines last year and gave its size as 98 feet span, 65 feet length of fuselage, having two 280-horsepower Rolls-Royce engines. It is a magnificent machine, larger, faster and in many ways far superior to the Gothas.

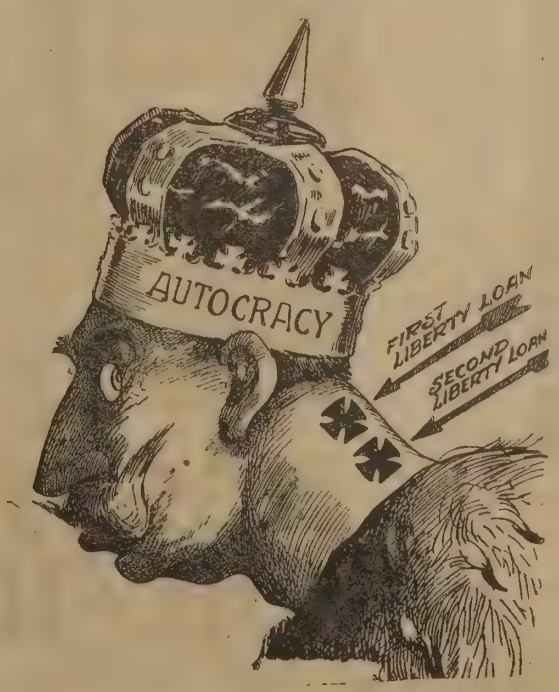
College Girls Till the Soil



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Vassar college girls, who for some time past have been learning agriculture at the institution's experimental farm, have shown by results that they can farm with the best of men. They demonstrated their skill as farm laborers at the Eastern States exposition and dairy show, which opened recently at Springfield, Mass.

Twice in the Same Place



—San Francisco Examiner.

Is There Nobody Home?



—New York World.

From Italy to England.



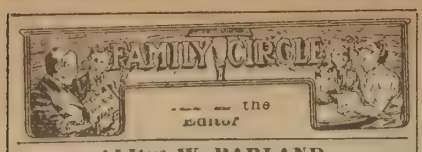
Captain Marquess Giulio Laureati, the Italian aviator, is the first man to make a non-stop flight from Italy to England. Captain Laureati flew from Turin to Hounslow, 687 miles, in seven hours and 12 minutes.

Kaiser's Troops Lack Food



Copyright by International.

That the German troops are not getting enough to eat is being proven by the features of the German soldiers who are taken prisoners by the British and the French. This is the photograph of two soldiers who were captured by the French. Their hollow cheeks indicate that the army of the kaiser is short on rations.



ALICE W. BARLAND
Editorial Contributor.

To Remove Scorch

Scorch upon cotton and linen sometimes can be removed if the fibers are not actually burned. Wool and silk are disintegrated at a lower temperature than cotton and linen and can not be restored to their original condition after being scorched, says a bulletin on the removal of stains from clothing and other textiles, issued by the United States department of agriculture. For removing slight scorch stains from cotton and linen use one of the following agents:

1. Water and Sunlight—Wet the spot with water (or soap and water) and expose to the sun for a day, or longer if necessary. The scorch disappears much more slowly if the material is not moistened before exposure.

2. Bread Crust—Very slight scorch on the surface of materials which are not especially delicate sometimes can be rubbed away with a bread crust.

Wheat Substitutes

Upon us, as a nation, has devolved the duty of providing food materials for a great number of people, at a time when certain staple crops are not sufficient to meet the demand, says Nell McConnell, professor of home economics, Idaho Technical institute. Our supply of wheat can not do what it has formerly done—that of furnishing 31 per cent of the total fuel value of the American diet, and leave any for our neighbors—therefore, we must substitute.

Most housewives are somewhat familiar with the use of cornmeal and whole wheat and graham flours. However, whole wheat and graham flours are not really substitutes, and most of us tire of cornmeal easily, so why not look about and see what we have at our disposal? We have belonging to the class of cereal grains—all of which are very similar in composition and food value to wheat—rye, barley, buckwheat and oats. Rye flour, as it is prepared for the market, is more nearly like wheat than any of the others. Consequently it is possible to substitute it for white flour in most of our recipes, getting practically the same texture, but a little difference in flavor and color. For instance, biscuits may be made very satisfactorily using all rye or half rye flour. Follow your usual method of making yeast bread and substitute rye flour for from one-half to two-thirds the amount of flour used. Try it in muffins, and even in spice cake or gingerbread, and you will probably decide that you can "do your bit" in saving wheat at not a very great sacrifice after all.

Muffins and bread made from rolled oats are very popular with people familiar with them. I would suggest these recipes:

Quaker Muffins.

Rolled oats, one cup.
Flour, one cup.
Sugar, three tablespoons.
Baking powder, four teaspoons.
Salt, one-half teaspoon.
Milk, one cup.
One egg.
Fat, one tablespoon.

Scald milk, pour on rolled oats, and let stand one-half hour before mixing. Mix and sift dry ingredients and add to the rolled oats and milk mixture. Add egg slightly beaten and melted fat. Beat well and bake in greased muffin tins one-half hour in a moderately hot oven.

Oatmeal Bread.

Rolled oats, two cups.
Boiling water, two cups.
Molasses, one-half cup.
Yeast, one cake.
Lukewarm water, one cup.
Salt, one teaspoon.
Fat (melted), one tablespoon.
Bread flour, seven cups.

Scald the rolled oats with the boiling water and let stand until cold. Soften the yeast in the lukewarm water and add to the first mixture when cool. Add the molasses, salt and melted fat. Stir in the bread flour. Turn on a floured board and knead. Return to bowl and let rise until double in bulk. Cut down, shape in loaves and let rise until double again. Bake in a moderate oven 45 to 60 minutes. This makes three loaves. Fleischmann's or compressed yeast is used in the original recipe. If dry yeast is used start it as for any other bread.

War Bread.

Rye flour, one and one-quarter cups.
Whole wheat flour, three cups.
White flour, 12 cups.
Lukewarm water, five cups.
Salt, one and a half tablespoons.
Yeast, two cakes.

Note—All measurements in recipes given are level.

Savory Potato Dishes

When all the family gathers around the comfortable supper table every housekeeper takes pride in the substantial hot dishes she places before them. Nowadays an all-meat dish is out of the question, but a combination with potatoes will stretch the meat flavor and make an equally satisfactory offering.

Here are some potato combinations that will please a hungry supper crowd:

Potato Pie.

To one quart of hot boiled potatoes add enough hot milk to moisten. Season with butter and salt. Mash in kettle in which they were boiled and beat with a fork until light. Stir in half a cup of minced ham. Have ready four hard boiled eggs and half a cup of stock or gravy. Arrange potatoes and sliced eggs in dish in alternate layers, with potatoes forming top and bottom layers. Moisten with the gravy. Brush over the top with milk or egg and brown in hot oven.

This dish can be arranged in three layers, with the middle layer some kind of meat hash bound together with egg or thickened gravy.

Family Potatoes.

Use six cold or freshly boiled potatoes. Cut into quarters and put in saucepan with a pint of gravy or soup stock. Add one chopped onion, salt and a little red pepper. Simmer on back of stove half an hour before serving.

Potato Roll.

Heat one pint of mashed potatoes and half a cup of milk in saucepan. Add one tablespoon of chopped parsley, salt and a little red pepper or paprika. Stir in four well beaten eggs and mix thoroughly. Remove from fire and beat until light. Heat one tablespoon of fat in frying pan and spread the potato mixture evenly over the pan. Cook until golden brown. Roll like an omelet and serve smoking hot.

Red pepper or paprika is preferable to black pepper in these potato dishes.

Soap making at home is not to be despised in these days of advancing thrift, so it is not surprising to receive the request from one of our subscribers for some of our women readers to give their experience in making soap from the waste fats in the kitchen.

Can Spring Chicken.

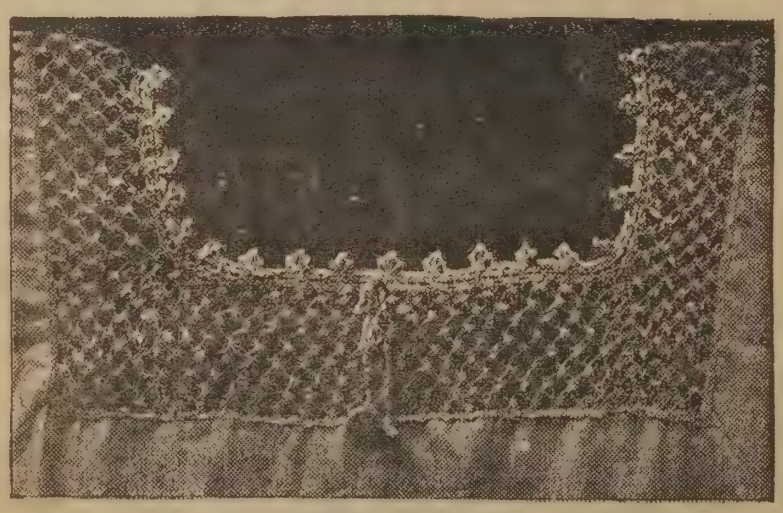
A good way to have spring chicken at any time of the year is to can them. Season and fry as though preparing for serving directly on the table. Fry until the meat is about three-fourths done, then pack at once into hot jars, pour liquid from the griddle over the chicken, partially seal, then place jars on a rack in a vessel with enough water to cover jar one inch and boil for one and one-half hours, then seal the cans tight. Be sure to use good new rubbers. A good rubber should regain its shape after being tretched and should stand bending without breaking.

Eat More Poultry.

There's no law against eating turkey before and after Thanksgiving, as well as on the national holiday. The more poultry Americans eat at home the more red meat we can spare the boys in France and our allies.

Crochet and Tatting Designs

By WINIFRED WORTH



LOVERS' KNOT YOKE.

Crochet workers always appreciate yoke designs. This one of many novel motifs is especially chic and attractive.

Two balls No. 60 Cordonnet.

Begin with 5 knot st. and continue until desired size is made.

For Edge. 1st Row—Ch. 5, 1 t. in top of knot st. Ch. 2, 1 t. in next t. st. Continue around neck, join.

2d Row—Ch. 5, 1 t., ch. 3. To make p.: 2 ch., 1 dt., 1 p., 2 ch., 1 t., 1 p. All in 1 sp. Ch. 2., 6 dc., in next 2s. Repeat until end and join.

To make cord or draw strong: Take two lengths of thread and ch. one and one-half yards for cord. Medallion ch. 3. Join to cord, fill in with 16 t., join.



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ATTENTION!
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It is a momentous document and will go down in history as being "one great masterpiece" equal to, if not greater, than the Declaration of Independence.

Every home should have a copy framed and kept where you may look upon it with the respect and reverence it deserves.

"A Most Patriotic Christmas Gift."

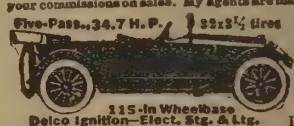
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Patterns

2067—Ladies' one-piece dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires for a 36-inch size 6 yards of 44-inch material. The dress measures about 3 yards at the foot. Price, 10 cents.

2230—A simple but stylish dress. Cut in 3 sizes: 16, 18 and 20 years. Size 16 will require 6 1-4 yards of 36-inch material. The skirt measures about 2 1-2 yards at the foot. Price, 10 cents.

2239-2235—A popular model. Waist 2239 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 2235 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. Size 36 bust measure will require 7 1-8 yards of 44-inch material. The skirt measures about 3 yards at the foot. Two separate patterns, 10 cents for each pattern.

1614—Child's set, comprising a yoke dress, a slip, and one-piece drawers. Cut in 4 sizes: 1, 2, 4 and 5 years. The dress requires 2 1-2 yards, the slip 2 yards, and the drawers 3-4 yard of 36-inch material, for a 2-year size. Price, 10 cents.

1521—Boys' suit. Cut in 4 sizes: 3, 4, 5 and 6 years. It requires 2 3-8 yards of 36-inch material for a 4-year size. Price, 10 cents.

2242—Girls' one-piece plaited dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 4 3-8 yards of 44-inch material. Price, 10 cents.

1859—Attractive cap styles. Cut in 3 sizes: 3 to 8 years (children's); 10 to 14 years (girl's), and 16 to 20 years (ladies'). Girl's size requires 7-8 yard of 27-inch material for cap No. 1 and 3-4 yard for No. 2, with 5-8 yard of canvas and 1-8 yard of buckram for interlining. Price, 10 cents.

2240—Girl's dress. Cut in 4 sizes: 4, 6, 8 and 10 years. Size 6 requires 2 3-8 yards of 44-inch material. Price, 10 cents.

2246—Ladies' dressing sack. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 3 3-4 yards of 36-inch material. Price, 10 cents.

2237—A popular model. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 5 1-2 yards of 44-inch material. The lower edge measures about 2 5-8 yards. Price, 10 cents.

1984—Ladies' house dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 6 3-4 yards of 36-inch material for a 36-inch size. The dress measures about 2 3-4 yards at its lower edge. Price, 10 cents.

2048—Ladies' camisole. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 1 3-8 yards of 36-inch material for a 38-inch size. Price, 10 cents.



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BE SURE TO GIVE NUMBER AND SIZE.

Baked Apple Butter.

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Violin Music for Names of Three Violin Players

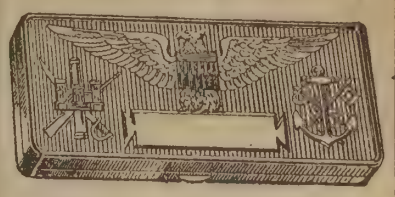
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Dear Boys and Girls: I heard a speaker say the other day that all our friends across the sea and all our soldiers would have plenty to eat if only we—all of us—would help a little. It is hard to help a little; it is hard to remember. It is not easy to know that we can help by doing without just a little. We think—

"Well, just one more slice of bread and butter won't make much difference."

"Just a little more jam or sugar won't make much difference."

One teaspoonful of sugar less for all the people in the United States will make a lot of sugar every day. Somebody told me that it would make 200 tons of sugar. What a lot it is, and how many people it would help!

We can not send our teaspoonfuls of sugar to the soldiers and the poor, starving people, but if we save our little, we won't have to use so much, and there will be more in the world.

Le us do our little bit every day; let us try to remember every day to take a little less. We will be helping every time we save.

I would not want my little nieces and nephews to go hungry as so many poor little children have to do in Europe, but let's not waste a thing that we do not need. I should like to have you write me about it—how you save and what you are doing each day.

Loving, AUNT NELLIE.

Named Uncle's Calf Clover.

Dear Aunt Nellie: This is my third letter to the Cousins' Corner. Our school started the first of October. We have a nice teacher. We have lots of fun at school. There are only 10 children in our schol. One of my uncle's cows had a calf, and they let me name it. I named it Clover. Mama and two of my brothers and I were picking blackberries today. We couldn't find one of our cows. She was gone two days and one night before we found her. Her name is Darling. The new horse I told you that we were going to get is a nice horse, but I don't like to ride him. His name is Jim. I do not like that name. I like Pride, Dave and Billie for horses' names. I am writing to three of the cousins. Their names are Lillian Deerpop, Laura Lee and Viola Augst. I haven't heard from Viola yet. I got a picture from Lillian Deerpop. She is a nice looking girl and writes a nice letter, and so does Laura Lee. They both seem very nice. I can ride horseback and do other work outside. I would like for some of the cousins to write to me and I surely would answer them. Aunt Nellie, I will write again.—Iris Chevalier, Prevost, Wash.

Esther Reads the Corner Every Time.

Dear Aunt Nellie: This is the first time I have written to the Corner. I read it every time. I try to get it first. I am 10 years old. I am in the sixth grade. My teacher's name is Miss Harrold. I like her very much. I like to go to school, too. I like arithmetic, spelling and reading the best of my studies. We have two horses. Their names are Ben and Nigar. Ben is brown and Nigar is black. When the sun is hot they shine and look very pretty. We have one cow. Her name is Daisy. She is red and white. We have one cat. Its name is Patrick. It is black. We have one dog. Its name is Pedro. It is white. I have six sisters. One is married. I have one brother. I would like to hear from some of the cousins soon. I like to read letters and get them but I can not write a good one. I think I will close for this time and hope to write again. —Esther Dorn, Box 46, Naches, Wash.

Muggins Does Many Cute Tricks.

Dear Aunt Nellie: The first money I ever earned I carried wood and did errands for a neighbor and helped my mama. This summer I sold papers and Collier's; this fall I earned $4 in five days picking cranberries. I have the cutest maltese kitten named Queenie and a white and tan puppie named Muggins. It is not much larger than Queenie and it carries little sticks of kindling and puts them in the woodbox, but jumps in the box, too, every time, and carries a small roll of paper, too, and does so many cute tricks it would take too much space to tell them. If any boy or girl will write me I will tell them how I train my dog. Enclose stamp for reply. I was 10 years old the 22d of last August. Have I a twin?—Charles W. Colvin, Longbeach, Wash.

An Enthusiastic Corner Booster.

Dear Aunt Nellie: I was very much surprised when I saw my name in the prize list of our Corner and I felt glad, too. I received the pretty prize which were the lovely bulbs, and thought them magnificent. I could not express my many thanks to you for them, but I hope you realize I fully appreciate them. I am going to begin at once growing my bulbs, and I hope that I can watch each step in their growth. I am going to take care of them myself. My, I do hope that our Corner may increase, since it encourages us to write to it, and the beautiful prizes it offers would entice any one to write. I am going to ask my chums to write, and that will help it to increase until it will get so large the editor of The Farmer will allow us another extra page for our Corner. Now, Aunt Nellie, don't you think if all the cousins felt as enthusiastic about this as I that we should have more space for our letters? I know there are more letters coming in each day, and each one wants their letter published, so each one get right in and dig, and I think we will win our other space for our letters. I do not think the editor will be hard to coax letting us have another page for the Corner. I will close saying, "Hurrah for Aunt Nellie and long live the Corner!"—Gladys Powell, Box 76, Edison, Wash.

Not So Much Fun in the City.

Dear Aunt Nellie: This is the first time I have written to the Corner. I enjoy reading the cousins' letters. I am 8 years old and I will be 9 years old the 12th of March. I live on a farm. I like to live on a farm better than in a city. For in the city you can not roam about and have so much fun. I go to Howard school. In summer we walk and in winter we drive. I like my teacher fine. Her name is Miss Thompson. We have four sheep, five calves and eight horses. One of the horses is a riding pony. I like to ride her. I ride her after the cows. She is dark brown in color and her name is Fly.—Jimmie Prince, Sunset, Wash.

To Have a Play Shed at School.

Dear Aunt Nellie: This is the first time I have written to the Corner, but I hope it won't be the last. My father takes The Farmer and I enjoy reading the Corner letters. I live on a five-acre farm. We have a 62-acre ranch in North Yakima. My father has gone back to help pick apples this fall. I am 12 years old and my birthday is the second of February. I am in the sixth grade. My teacher's name is Mrs. Hatfield. The school board is going to build a play shed, for the children to play in when it is rainy. Bars, rings and other things will be put in. They are also going to build a windmill, so there will be better water. I have one brother and one sister. Their names are Theodore and Fronie. My sister is the oldest and she is a dressmaker.—Ethel Friend, Box 75, Langley, Wash.

We Hope Clair Writes Again.

Dear Aunt Nellie: This is my first letter to the Children's corner. I go to the Windy Hill school. I am in the fifth grade. I am 9 years old and my birthday is the 6th of March. Have I a twin? My father is a farmer. We have five horses. Their names are Dickey, Dick, Nell, Toots and Browny. We have five cows and eight pigs. We have a little dog named Buster. He can do a lot of tricks. Well, I will write again.—Clair Greely, Okanogan, Wash.

Hazel Is a New Cousin.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old. I like to read the Children's Corner. I have two sisters and one brother. We have two pigs and two dogs. We have an auto, too. My papa works in an electric light plant. We have 10 rabbits, 12 chickens and two horses.—Hazel Moore, Box 5, R. 2, Republic, Wash.

Beautiful Sunsets in Curlew.

Dear Aunt Nellie: We have very beautiful susets here. There are golden, crimson and orange shades in the sky. When the sun drops over the mountains it sends up the different colored arms against the white clouds all around them.—Lillian A. Strong, Curlew, Wash.

"The Barrier" By REX BEACH

(Continued from page twenty.)

my eyes are blinded and I can't see half the beautifuls I want to, there are so many about me."

"Those are my arms," interjected the soldier, lightly, in an effort to ward off her growing seriousness.

"I've never been afraid of anything, and yet I feel so safe inside them. Isn't it queer?"

The young man became conscious of a vague discomfort, and realised dimly that for hours now he had been smothering with words and caresses a something that had striven with him to be heard, a something that instead of dying grew stronger the more utterly this innocent maid yielded to him. It was as if he had ridden impulse with rough spurs in a fierce desire to distance certain voices, and in the first mad gallop had lost them, but now far back heard them calling again more strongly every moment. A man's honor, if old, may travel feebly, but its pursuit is persistent. It was the talk about his people that had raised this damned uneasiness and indecision, he thought. Why had he ever started it?

"The marvelous part of it all," continued the girl, "is that it will never end. I know I shall love you always. Do you suppose I am really different from other girls?"

"Everything is different tonight—the whole world," he declared impatiently. "I thought I knew myself, but suddenly I seem strange in my own eyes."

"I've had a big handicap," she said, "but you must help me to overcome it. I want to be like your sister."

He rose and piled more wood upon the fire. What possessed the girl? It was as if she knew each cunning joint of his armor, as if she had realized her peril and had set about awakening his conscience, deliberately and with a cautious wisdom beyond her years. Well, she had done it—and he swore to himself. Then he melted at the sight of her, crouched there against the shadows, following his every movement with her soul in her eyes, the tenderest trace of a smile upon her lips. He vowed he was a reprobate to wrong her so; it was her white soul and her woman's love that spoke.

When she beheld him gazing at her she tilted her head sidewise daintily, like a little bird.

'Oh, my! What a fierce you are all at once!"

Her smile flashed up as if illumined by the leaping blaze, and he crossed quickly, kneeling beside her.

"Dear, wonderful girl," he said, "it is going to be my heart's work to see that you never change and that you remain just what you are. You can't understand what this means to me, for I, too, was blinded, but the darkness of the night has restored my vision. Now you must go to sleep; the hours are short and we must be going early."

He piled up a great, sweet-scented couch of springy boughs and fashioned her a pillow out of a bundle of smaller ones, around which he wrapped his khaki coat; then he removed her high-laced boots, and, taking her tiny feet, one in the palm of either hand, bowed his head over them and kissed them with a sense of her gracious purity and his own unworthiness. He spread one of the big gray blankets over her and tucked her in, while she sighed in delightful languor, looking up at him all the time.

'I'll sit here beside you for a while," he said. "I want to smoke a bit."

She stole a slim brown hand out from beneath the cover and snuggled it in his, and he leaned forward, closing her lids down with his lips. Her utter weariness was manifst, for she fell asleep almost instantly, her fingers twined about his in a childlike grip.

At times a great desire to feel her in his arms, to have her on his breast, surged over him, for he had lived long apart from women, and the solitude of the night seemed to mock him. He was a strong man, and in his veins ran the blood of wayward forebears who were wont to possess that which they conquered in the lists of love, mingled with which was the blood of spirited southern women who had on occasion loved not wisely, according to Kentucky rumor, but only too well. Nevertheless, they were honest men and women, if over-sentimental, and had transmitted to him a heritage of chivalry and a high sense of honor and courage. Strange to say, this little, simple half-breed girl had revived this honor and courage, even when he tried most stubbornly to smother it. If only her love was like her blood, he might have had no scruples; or if her blood were as pure as her love—even then it would be easier; but, as it was, he must give her up tonight, and for all time. Her love had placed a barrier between them greater and more insurmountable than her blood.

He sat for a long time with the dwindling firelight playing about him, his manhood and his desires locked in a grim struggle, wondering at the hold this forest elf had gained upon him, wondering how it was that she had stolen into his heart and head and taken such utter possession of him. It would be no easy task to shut her out of his mind and put her away from him. And she * * * ?

He gently withdrew his fingers from her grasp, and, seeking the other side of the wickiup, covered himself over without disturbing her, and fell asleep.

It was early dawn when Necia crept to him.

"I dreamed you had gone away," she said, shivering violently and drawing close. 'Oh, it was a terrible awakening——".

"I was too tired to dream," he said.

"So I had to come and see if you were really here."

He quickly rekindled the fire, and they made a hasty breakfast. Before the warmth of the rising sun had penetrated the cold air they had climbed the ridge and obtained a wondrous view of broken country, the hills alight with the morning rays, the valleys misty and mystical. They made good progress on the summit, which was paved with barren rock and sparsely carpeted with short moss, while there was never a hint of insects to annoy them. Merrily they swung along, buoyed up by an unnatural exaltation; yet now and then, as they drew near their destination, the young man had a chilling premonition of evil to come, and wondered if he had not been foolhardy to undertake this rash enterprise.

"I wish Stark was not one of Lee's party," he said once. "He may misunderstand our being together this way."

"But when he learns that we love each other, that will explain everything."

"I'm not so sure. He doesn't know you as Lee and Poleon and your father do. I think we had better say nothing at all about—you and me—to any one."

"But why?" questioned the girl, stopping abruptly. "They will know it, anyhow, when they see us. I can't conceal it."

"I am wiser in this than you are," the soldier insisted, "and we mustn't act like lovers; trust this to me."

"Oh, I won't play that!" cried Necia, petulantly. "If all this is going to end when we get to Lee's cabin, we'll stay right here forever."

He was not sure of all the logic he advanced in convincing her, but she yielded finally, saying:

"Well, I suppose you know best, and, anyhow, littles should always mind."

They clung to the divide for several hours, then descended into the bed of a stream, which they followed until it joined a larger one a couple of miles below, and there, sheltered in a grove of whispering firs, they found Lee's cabin nestling in a narrow, forked valley. Evidently the miner had selected a point on the main creek just below the confluence of the feeders as a place in which to prospect, and Burrell fell to wondering which one of these smaller streams supplied the run of gold.

"There's no one here," said Necia, gleefully. "We've beat them in! We've beat them in!"

They had been walking rapidly since dawn, and, although Burrell's watch showed 2 o'clock, she refused to halt for lunch, declaring that the others might arrive at any moment; so down they went to the lower end of "No Creek" Lee's location, where Burrell blazed a smooth spot on the downstream side of a tree and wrote thereon at Necia's dictation. When he had finished, she signed her name, and he witnessed it, then paced off 440 steps, where he squared a spruce tree, which she marked: "Lower center end stake of No. 1 below discovery. Necia Gale, locator." She was vastly excited and immensely elated at her good fortune in acquiring the claim next to Lee's, and chattered like a magpie, filling the glades with resounding echoes and dancing about in the bright sunlight that filtered through the branches.

"Now you stake the one below mine," she said. "It's just as good, and maybe better—nobody can tell." But he shook his head.

"I'm not going to stake anything," said he.

"You must!" she cried, quickly, the sparkle dying from her eyes. "You said you would, or I never would have brought you."

"I merely said I would come with you," he corrected. "I did not promise to take up a claim, for I don't think I ought to do so. If I were a civilian, it would be different, but this is government land, and I am a part of the government, as it were. Then, too, in addition to the question of my right to do it, there would be the certainty of making enemies of your people, old "No Creek" and the rest, and I can't afford that now. With you it is different, for you are entitled to this ground. After Lee's friends have shared in his discovery I may change my mind."

All arguments and pleadings were in vain; he remained obdurate and insisted on her locating two other claims for herself, one on each of the smaller creeks where they came together above the house.

"But nobody ever stakes more than one claim on a gulch," objected the girl. "It's a custom of the miners."

"Then we'll call each one of these branches a different and separate creek," he said. "The gold was carried down one of those smaller streams, and we won't take any chances on which one it was. When a fellow plays a big game he should play to win, and, as this means such a great deal to you, we won't overlook any bets."

Necia consented, and when her three claims had been properly located the couple returned to the cabin to get lunch and to await with some foreboding the coming of the others and what of good or ill it might bring.

(To be continued.)

News for Breeders

At the Oregon State fair, Professor E. L. Potter, head of the animal husbandry department of the O. A. C., purchased from Doerfler Brothers of Silverton, Ore., the first prize under 6 months Duroc Jersey boar pig, paying $100 for him. The pig is a very typy Duroc, with good, strong back, feet and legs, good body and excellent head.

J. E. Fjelsted, recently field animal husbandman for the extension department of the University of Idaho, has accepted the place made vacant by the resignation of Professor George R. Samson, assistant professor of animal husbandry at the O. A. C., specializing on swine. Professor Samson has taken charge of his farm near Alpine, Ore., and will give play to his preference for hog raising as well as general farming. Professor Fjelsted's experience in the Idaho field as well as his college training, well fit him for his work.

J. O. Skirving, near Redmond, Ore., is not only a good breeder of Duroc Jersy swine, but he is certain that good market hogs can be made profitable at present prices of feed and of hogs. Four of Mr. Skirving's gilts last spring farrowed 41 pigs, of which he saved 34. While they were small he sold all but nine to neighbors, without pedigrees, receiving a total of $175. He expects to make market hogs of most of the nine, though he may sell some bred gilts. These are well-bred Durocs and Mr. Skirving will, with some of these, get rightly into the breeding game. He has had sows of the J. W. Fruit breeding, also from Meadow Brook farm. He has one litter from Chief Top Notcher, a famous boar brought out by Tom Lawson. He is now using Good E Nuff Jack, a grandson of Burk's Good E Nuff. While this boar has a rather coarse head, he is a great breeder and his pigs have quality.

Mr. Skirving uses chopped alfalfa hay as a winter ration and alfalfa pasture in the summer, but he is rather a heavy grain feeder and believes in crowding a pig to early maturity.

H. A.

Second Annual Combination

40 Pure Bred Swine Sale 40

North Portland, Oregon, Tuesday, Nov. 20, 1917

During the Pacific International Live Stock show.

The same rules will govern this sale that were used last year. The swine will be passed on by competent judges and only No. 1 stock will be allowed to enter the sale ring.

If in the market for service boars, bred or open sows or gilts of Poland China, Duroc or O. I. C. swine, come to this sale or write for catalogue to

R. W. HOGG, Rt. 2, Salem, Ore.

HORSES

WILL SELL MY BELGIAN HORSES.

All thoroughbreds and registered. Three mares, one imported stallion, two yearlings, mare and stud. Sacrifice price.

ANDREW NIELSON, Mondovi, Wash.

POULTRY

Rhode Island Reds and Whites

Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Now is the time to buy for next year's breeding, from blue ribbon stock. Sale of pedigreed Rufus Red Belgian hares, bargains at $3 each. Registered Airdale bitch at a bargain if taken at once.

HIGHLAND FRUIT AND POULTRY RANCH.
J. NONNENMACHER,
R. F. D. 3. NORTH YAKIMA, WASH

Oregon Shares Credit.

To the Editor: I note in issue of October 18, page 26, under "Honor for Oregon Jerseys" at California State fair, you mention the young bull Jolly Senator Raleigh, that won junior and reserve championship for Messrs. Thorp, Lockford, Cal. Oregon also shares in this honor, as he was bred at Edgewater farm, and we sold him to J. E. Thorp when 8 months old. He was taken from Sacramento to Nevada State fair and won the grand championship for bulls at that fair. We also bred and raised the dam of this calf, and he was sired by our herd bull Raleigh's Jolly Nobleman.

EMERY T. SMITH.

Edgewater Farm, Myrtle Creek, Ore.

The above letter is self-explanatory, and The Farmer is glad to add this grand young bull to Oregon's credit. Mr. Smith, whose business keeps him away from home nearly all the time, is a Jersey enthusiast, who keep a very small herd. But he has decided views as to the blood lines he prefers and has paid fancy prices for the animals of his choice. He has both the sire and dam of this young bull and has one full brother to him. The bull is sired by Raleigh's Jolly Nobleman, pronounced by an authoritative judge connected with the O. A. C. to be one of the best bulls in the state. He traces 21 times to Golden Lad 1242, the great bull that all Jersey breeders like to show in extended pedigrees, and 54 times to old Sultan P. His sire was imported in dam by T. S. Cooper & Sons, and they have featured him much in their advertising. They sold him when only 1 month old to the late Dr. Emery of Nashville, Tenn., for $510. When 3 years old, with 14 of his daughters in the sale ring, he sold for $2225.

The dam of the young bull is Golden Jolly Buttercup, out of the imported cow, Samel's Jolly Buttercup. Her private record is 506.48 pounds of butter, and I personally know Mr. Smith then had no silo nor such feed provisions as a cow should have. So it will be seen this Oregon-bred bull had license to win and should be a sire of producers.

H. A.

Melba Perfection.



Melba Perfection, first in her class and grand champion female at the Oregon State fair this year is to be entered in the sale at the Pacific International. She is owned by Frank Brown.

Jersey Breeders Organize.

Chester C. Farr, Snohomish county (Wash.) agricultural agent, reports the organization of 10 prominent Jersey breeders, the organization to be known as the Snohomish County Jersey club, which has for its object the popularizing of the Jersey cow. The following officers were elected for the ensuing year: W. G. Grim, president; Jeffrey Hilton, vice president; H. Coy, secretary-treasurer; D. F. Sexton and D. McRae, trustees.

H. L. Brewer of Satsop was present at the meeting.

Valuable Cow Dies.

William Bishop of Chimacum, Wash., has announced the loss of the well-known cow, Lutscke Vale Cornucopia. This animal is claimed to have made the world's record in milk production last year, when she produced 31,246 pounds. This record was made after she had given birth to twin calves. Since that time she has brought a second pair of twins.

The loss of the cow was due to a 10-penny nail which she ate in her feed.

Wishes to Drain Silver Lake.

Former Attorney General Crawford appeared before the Oregon state land board recently and asked that permission be given to E. D. Lutz of Lake county to drain Silver lake. There are 8160 acres of land in the lake and the plan is to divert the water and use it for irrigation purposes. The board took the matter under advisement.

Breeders' Department

HOLSTEIN CATTLE

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

JERSEY CATTLE

Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.

WAIKIKI FARM, R. 7. Spokane, Wash.

DUROC-JERSEY SWINE

At Pacific International

Stock Show, N. Portland, Nov. 19-24, see some of our Big Type Durocs, offspring of the great breeding boar, Golden Rod, and other best Duroc strains.

DOERFLER BROS. Silverton, Ore.

POLAND CHINA SWINE

POLAND CHINAS

Service Boars, Bred Sows and Gilts, Brunk's Kind.

THOS. W. BRUNK, rt. 2. Salem, Ore.

BERKSHIRE SWINE

FOR SALE.

2 Berkshire boars, age 6 mo., $25 each.
2 Berkshire gilts, age 6 mo., $25 each.
1 Holstein bull calf, age 5 mo., $100.
2 Shropshire lamb bucks, age 7 mo., $25 each. Every animal eligible for registry.

G. Z. ICKES SR., R. F. D. 1, Palouse, Wash.

SHORTHORN CATTLE

Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN, Wapato, Wash.

Hercules Shorthorns

For particulars write

DAY & ROTHROCK

Exchange Bank Bldg.

Spokane, Washington.

CEDARHURST FARM

SHORTHORNS.

Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

JOE TURNER, Meyers Falls, Wash.

Shorthorn Cattle

SHIRE HORSES.

DR. G. E. NOBLE, Boise, Idaho.

GUERNSEY CATTLE

Young Guernsey Bull

HOPE'S REEDY OF ORCAS ISLAND No. 43788 of advanced registry and imported blood. The best individual we have ever offered.

S. P. DAVIS, Olga, Washington.

SHEEP

20 Oxford Down Rams 20

Yearlings and ram lambs; will make special price on the lot. All stock registered. No ewes for sale.

C. P. Kizer, Harrisburg, Ore.

The Pacific Northwest Shorthorn Breeders' Association

Annual Fall Sales

At Portland Union Stock Yards

November 22, 1917

During the Pacific International Show 40 head of high class **females** and 30 choice **bulls** have been selected for this sale from the leading Shorthorn breeders of the Northwest.

At Lewiston, Idaho, November 13, 1917

During the Northwest Live Stock Show 30 head of choice young **females** and 30 head of grand young rugged bulls have been selected for this sale. Particulars of the different consignments will be given in the following issues.

For Catalogues apply

FRANK BROWN, Carlton, Oregon
Sales Manager

Grain and Produce Markets

Chicago Grain.

CHICAGO, No. 5.—Corn ran up in value today stimulated by federal announcements virtually establishing $15.50 a hundredweight as a minimum price on hogs. The market closed strong 1⅜c to 2⅜c net higher with December $1.17¼ and May $1.12¼ to $1.12⅜. Oats gained ½@⅝c to ⅝@¾c and provisions 30 to 50 cents.

Oats went upward with corn and on buying which indicated better domestic demand.

Provisions as well as grain jumped as the result of the government recommendation of a $15.50 hog price minimum. It was said this standard was materially above what packers generally had expected.

Pacific Northwest Grain.

PORTLAND, Ore., Nov. 5.—Grain futures: November oats, $48 bid; feed barley, $51 bid; brew barley, $51 bid.

Eastern oats and corn in bulk: Oats, No. 3 white, November, $43 asked; No. 38 clipped, white, $44.50 bid; corn, No. 3 yellow, January, $52.50 bid; No. 3 mixed, $51.50 bid; oats, No. 3 December, $43.50 bid; clipped, $44.50 bid; corn, yellow, February, $52 bid; mixed, $50.50 bid.

San Francisco Grain.

SAN FRANCISCO, Nov. 5.—Barley—December, $2.39@2.41; May, $2.40@2.42½.

Minneapolis Grain.

MINNEAPOLIS, Nov. 5.—Wheat—Receipts, 764 cars, compared with 968 a year ago.

Corn—No. 3 yellow, $2.10@2.12.

Oats—No. 3 white, 57¼@58¾c.

Flax, $3.28@3.30.

Flour—Unchanged. In carload lots, fancy patents, $10.50, wood; first clears, $9.75, jute; second clears, $6, jute. Shipments, 75,390 barrels.

Rye, $1.73½@1.74½.

Barley, 98c@$1.28.

Bran, $31.50@32.

Cash Quotations.

CHICAGO, Nov. 5.—Corn—No. 2 yellow, $2.17; No. 3 yellow, nominal; No. 4 yellow, $2.16.

Oats—No. 3 white, 60@60½c; standard, 60¼@60½c.

Rye—No. 2, $1.76½.

Barley, $1.10@1.34.

Timothy, $6@7.75.

Clover, $18@24.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1, up to Saturday night for 1917-18 and 1916-17 were as follows:

Seattle—	Wheat	Oats	Barley	Hay
1917-18 1813	518	98	1795	
1916-17 2383	549	151	1459	
Portland—				
1917-18 ... .3057	553	88	732	
1916-17 2478	904	66	635	
Total—				
1917-18 ... .4870	1071	186	2527	
1916-17 ... .4861	1453	217	2094	

Live Stock Quotations.

At Omaha.

OMAHA, Nov. 5.—Hogs—Receipts, 3800. Market, 25c to 35c lower; heavy, $16.40@16.75; mixed, $16.50@16.70; light, $16.15@16.90; pigs, $14@18; bulk of sales, $16.50@16.70.

Cattle—Receipts, 1300. Slow to steady; native steers, $9.50@16.75; cows and heifers, $6.50@9.75; western steers, $8.50@13.50; Texas steers, $7@10.50; cows and heifers, $5@9.30; canners, $5@6; stockers and feeders, $6@12.50; calves, $9.50@12.50; bulls, stags, etc., $5.75@7.50.

Sheep—Receipts, 30,000; steady to lower; yearlings, $11.50@13; wethers, $11@12.50; ewes, $10@11; lambs, $16.25@17.25.

At Chicago.

CHICAGO, Nov. 5.—Hogs, 39,000; weak. Bulk, $16.30@17.05; light, $15.50@17; mixed, $15.90@17.20; heavy, $15.90@17.25; rough, $15.90@16.10; pigs, $11.75@15.

Cattle, 37,000; weak. Native steers, $6.75@17.25; western steers, $6.15@13.50; stockers and feeders, $6@11.60; cows and heifers, $4.75@11.90; calves, $7@13.50.

Sheep, 27,000; weak. Wethers, $8.70@12.85; ewes, $7.50@11.25; lambs, $12@16.75.

At Portland.

PORTLAND, Ore., Nov. 3.—Cattle—Steady; receipts, 36. Best beef steers, $9@9.50; good beef steers, $7@9; best beef cows, $6@7; ordinary to good cows, $4@5; best heifers, $6.50@7.50; bulls, $4.50@6.75; calves, $7@9.50; stocker and feeder steers, $4@7.25.

Hogs—Steady; receipts, 56. Prime light, $15.75@15.85; prime heavy, $15.60@15.75; pigs, $13.50@14; bulk, $15.25@15.50.

Sheep—Steady; receipts, 26. Western lambs, $14@14.50; valley lambs, $13.50@14; yearlings, $12.50@13; wethers, $12@13; ewes, $8.50@10.50.

At Salt Lake.

CITY, Nov. 3.—Cattle—Receipts past week have been better, [illegible] steers and canner stuff is still below packers' demands. Strong demand for fat steers. Market higher than last week. Choice steers, $9@10; good steers, $8@9; fair steers, $6@7.50; choice cows and heavy heifers, $7@7.50; fair to good cows and heifers, $6.50@7; cutters, $5@6.25; canners, $4@5; grass bulls, $6@7; veal calves, $9@11.

Hogs—Hog run a little heavier; market somewhat stronger than last week; demand still exceptionally good for fat hogs. Choice fat hogs, 175 to 225 pounds, $15.75@16.25; mixed hogs, 160 pounds and up, $15.25@15.75.

Sheep—Receipts during past week continue heavy. Considerable feeder stock has changed hands. Market continues steady. Strong demand for fat yearling wethers and fat ewes. Good choice lambs, $15.75@16.50; ewes, $8.25@9.50; wethers, $10@10.50; yearlings, $10.50@11.50.

Spokane Union Stock Yards.

Hogs—Receipts 158, market strong. Prime light, $15.50@15.60; prime heavy, $15.40@15.60; pigs, $13.25@14.50; stockers and feeders, $11@13.25; bulk of sales, $15.60.

Cattle—Receipts 350, market steady. Best beef steers, $8.50@9; good steers, $7@7.75; best beef cows, $6.75@7.50; good cows, $5.50@6.50; common cows, $3@5; best heifers, $6.75@7.50; bulls, $5@6.75; calves, $6.50@8; stocker and feeder steers, $5@7.25.

Sheep—Receipts none, market steady. Prime lambs, $13.25@14; good lambs, $12@12.50; prime yearlings, $11.50@12.50; prime wethers, $11.25@12.25; best mutton ewes, $8.50@10.

Portland Market.

PORTLAND, Ore., Nov. 5.—Barley and oats are holding steady, but dealings are limited strictly to actual wants of mills and feeders. Mill feed closed at former prices. The market is firm in spite of the increased production and lower prices are not looked for this month.

Owing to the accumulation of wheat here and at other Coast terminals, the Food Administration Grain corporation has served notice on grain men to ship no more wheat to the Coast for account of the corporation until further notice.

A sharp decline of 3 cents in cheese prices was announced from Tillamook at the close of the week. Lower markets in the east and a slow movement here made the cut necessary.

Butter is also weak with indications of a decline in print prices in the near future.

Receipts of Oregon ranch eggs have increased slightly, but not enough to affect prices. Storage eggs are weak and likely to be reduced in price sharply, as consumption is not up to expectations.

The demand for poultry is very good, especially for hens, receipts of which have fallen off. The country dressed meat market is steady.

Potato prices are unchanged, but dealers say the market is weaker. There is a good demand for onions with farmers slow sellers.

The cranberry crop in Clatsop county, Oregon, and Pacific county, Washington, has been harvested and amounts to about 4500 barrels as against 2000 barrels last year. Prices are higher because of the big advance in the eastern market. Coast berries are quoted on the street at $4.50@5.50 for boxes.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $48.50 per ton.

Millstuffs—Bran, $30 per ton; shorts, $33.

Barley—No. 1 feed, $50; brewing, $51; rolled, $55@57.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch, case counts, 52c per dozen candled, 55@60c.

Poultry—Hens, 17½@20c; ducks, 18@20c; turkeys, live, 20@25c; geese, 10@11c.

Butter—City creamery, prints, 48@49c per pound; cubes, extras, 44@44½c.

Cheese—Tillamook triplets, 23c; Young Americas, 24c.

Dressed meats—Veal, 15@15½c; pork, 18½@19c.

Hops—1916, 17@20c; 1917 crop, 25@27c.

Potatoes—Oregons, buying price, $1.25@1.50 per hundred.

Wool—Eastern Oregon, 40@65c; valley, 58@60c.

Beans—California small white, 14½c; large white, 14¼c per pound.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $1.75 cwt.; sweet potatoes, $3.75 cwt.

Apples—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, $2.50; Red Macintosh, $1.50@1.75 box; Winter Bananas, $2 box; Jonathans, $1.25@1.35 box; Wageners, $1.25@1.35 box; Rome Beauties, $1.25@1.35 box.

Butter—Blanchard cartons, 49c lb; Medo-Maid, 49c lb; Cascade, 49c lb; Gold Leaf, 49c lb; Better Butter, 49c lb; Attalia, 49c lb; Diadem, 49c lb; Hazelwood, 49c lb; Solid Pack, 48@49c lb; Jersey Belle, 47c lb; Peerless, 45@46c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 27c lb; Hazelwood Young America, 28c lb; Wisconsin limburger, 29@30c lb; brick cheese, 33c lb; domestic Swiss, 33c lb; Young Americas, 26c lb.

Eggs—White filler, guaranteed, $13.25 case; selected storage, $12.50.

Live Poultry—Hens, 13c lb; broilers, 20c lb; old roosters, 8c; ducks, 12½c lb; geese, 10c; turkeys, 20@22c.

Dressed Poultry—Hens, 18c lb; broilers, 28c lb; old roosters, 12½c; ducks, 18@20c; geese, 16c; turkeys, 25@30c.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 13c; salted cured, 16c; green bulls and stags, 11c; salted cured, 13c; kip, 15 lbs to 25 lbs, 22c; calf skins up to 15 lbs, 16c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 7 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $1@2 each; dry horse hides, $2.50@4 each.

Potato Market Summary.

According to the newly established field office for markets at North Yakima, in charge of Robert L. Ringer, field assistant, potato shipments decreased 1000 cars during the week of October 26-November 1. Shipments for the seven days totaled 4025 cars in comparison with 5026 the previous week. State of Washington shipped 72 cars and Montana 30 cars. Minnesota and Wisconsin were in the lead in shipments. According to the bureau of crop estimates report of October 1, New York and Pennsylvania each had a crop maturing greater than the combined prospects of Oregon, Washington, Montana and Idaho. The estimate figures for the four states of the Pacific northwest are:

	Per Cent of Normal.	1916 Total Crop in Bushels	Estimated Crop of 1917
Washington ...	70	9,900,000	9,687,000
Oregon	70	8,250,000	7,766,000
Idaho	87	4,050,000	6,477,000
Montana	60	4,875,000	5,882,000

The prices in the producing section have held remarkably steady during the last week and the prices in the cities have held just as firm.

Minnesota and Wisconsin Round Whites are selling from $2@2.10 per cwt. Washington Netted Gems topped the Chicago market Wednesday at $2.40 per cwt. In Minneapolis Round Whites are holding steady at $2.10, while in Kansas City, Nebraska, Early Ohios held the stage at $2.40. In Fort Worth, Texas, the California output has the best of the market, going at $2.25 per bushel, against Colorado and Idahos at $1.75.

Seattle Wheat.

SEATTLE, Nov. 3.—There is plenty of wheat at all storage elevators here for present requirements. Considerable of the poorer grades of wheat is being sold for chicken feed. Protests against this sort of thing have been entered by the food committee, but millers are urging the needs of poultry and livestock for feed are acute. In various portions of the state millers have reports that farmers are offering their milch cows for sale, due to the high price of feed and the unfavorable weather for grazing, and millers are becoming apprehensive that the livestock industry may be dealt a fatal blow if high prices persist.

There is a heavy demand for mill feed, but the trade is insisting upon shorts exclusively.

The matter of the embargo against receiving wheat at North Coast terminals is adjusting itself without the united action asked of the railways last month against delivering any more cars for the shipment of grain for this port. The Union Pacific has embargoed one Oregon port, but farther than this no action has been taken by any of the lines.

A. H. Hankerson, Mr. Houser's local representative on the federal food committee of the grain corporation, said today that friction and confusion regarding the grading and handling of grain was gradually being eliminated, and that before the end of the month business would be at normal.

The Wool Market.

BOSTON, Nov. 2.—The Commercial Bulletin will say tomorrow:

The demand for wool the last week has not been heavy, but it has been sufficient to keep everything very firm. The call has been principally for wools suited for military needs, although there has been some business in almost every grade of wool.

The situation at the mills is hardly changed, some new business being available constantly on government account, although the civilian trade is still rather slow.

Scoured basis:

Texas fine 12 months, $1.68@1.72; fine 8 months, $1.55@1.60.

California northern, $1.70@1.75; middle county, $1.45@1.50; southern, $1.35@1.40.

Oregon eastern No. 1 staple, $1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.60@1.65.

Territory, fine staple, $1.80@1.82; halfblood combing, $1.70@1.75; ⅜ blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled: Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

Hide Prices Announced.

SEATTLE, Nov. 1.—This morning Seattle wholesale hide dealers announced an advance of 3 cents per pound on the buying price of light calf and dry hides. New buying price of calf: Up to 15 pounds, 28 cents; dry hides, 30 cents, and salted horse hides, $2 to $4.50 each. No. 1 tallow is higher at 10 to 12½ cents per pound.

Seattle Market.

SEATTLE, Nov. 3.—The demand for jumble pack apples has been one of the features of the week. Some of the individual houses have sold two and three carloads of the fruit at 2@3c per pound. Fortunately for this trade, the fruit has generally been well colored. Lug boxes moved rapidly, but the basket pack lacked freedom. Coloring was not good. The result of the rush of cheap fruit drew attention from the better selections and these were dull. Owing to the value of larger sizes and keeping qualities, however, no fears are expressed as to the ability of the street to clean up later. Lug boxes of Jonathans are being stored.

Poultry will be steady next week, demand and supply presenting a rather normal aspect.

The movement of potatoes on this market has been light, with eastern Washingtons very dull. Eastern Washington growers are quoting at $33@36, and the market there is firm. Puget sound growers ask $30@34.

SELLING PRICES.

Feed—Scratch feed, $78 per ton; all grain chop, $64 per ton; oats, $56 per ton; rolled oats, $57 per ton; wheat, $74 per ton; bran, $32 per ton; shorts, $35 per ton; soy bean meal, $65 per ton; whole corn, $84 per ton; cracked corn, $85 per ton; alfalfa meal, $35; chick feed, $80 per ton.

Hay—Eastern Washington timothy, $32 per ton; alfalfa, $27 per ton; double compressed, $35 per ton; wheat hay, $25 per ton; Puget sound, $25 per ton; straw, $12.

Butter—Washington creamery extras, cubes, 48c per lb.; do bricks, 49c per lb.

Eggs—Fresh ranch, 62c per doz.

Onions—Yakima, $3.25 per cwt.; Oregon, $3.50@3.75 per cwt.

Potatoes—Puget sound, $1.85@2 per cwt.; eastern Washington, $2@2.25 per cwt.

Butter and Eggs.

PORTLAND, Ore., Nov. 3.—Butter prints extras, $48; cubes extras, $44@44.50; prime first, $43@43.50.

Butter fat, Portland deliver, No. 1 sour cream, 52c.

SAN FRANCISCO, Nov. 3.—Butter—Fresh extra, 43c; prime firsts, 42 1-2.

Eggs—Fresh extras, 56 1-2c; fresh firsts, 56c; fresh extra pullets, 46 1-2.

CHICAGO, Nov. 3.—Butter—Receipts, 4777 tubs. Unchanged.

Eggs higher; receipts, 3881 cases; firsts, 38 1-2@39 1-2; ordinary firsts, 36@37c; at mark, cases included, 38c.

SAVE MONEY ON ENGINES
Buy direct from my factories, where I build a powerful, economical, reliable, perfectly designed Galloway Masterpiece Engine from the highest quality materials and sell to you at lowest manufacturers' price. Tens of thousands in satisfactory use. All sizes from 1¾ to 16 h.p. portable, stationary, saw rigs, pumping outfits. They operate on
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With INCLOSED MOTOR
Keeping OUT DUST and RAIN—Keeping IN OIL
SPLASH OILING SYSTEM
OIL SUPPLY REPLENISHED ONLY ONCE A YEAR
Constantly Flooding Every Bearing With Oil, Makes It Pumpin The Lightest Breeze And Prevents Wear
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Every feature desirable in a windmill in the AUTO-OILED AERMOTOR
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It tells you how you can have running water anywhere in your farm home, barn, stables or yards. It tells you how to save the hard work and time—loss of pumping and carrying. The
MILWAUKEE AIR POWER WATER SYSTEM
brings water "Direct From the Well"—absolutely fresh. Gives you Tons of Water by merely turning a faucet. The best investment any farmer can make. Puts hot or cold, hard or soft water anywhere you want it for bathroom, kitchen, watering the stock, and other uses.
Write me for this FREE Catalog. It tells the whole story.
THOS. J. ROSS
PACIFIC NORTHWEST DISTRIBUTOR
304 PINE ST., PORTLAND, ORE.

Straw as Feed

Some Rations for Wintering Stock

To the Editor of The Washington Farmer: Very little straw should be fed to horses at hard work, and it forms too bulky a ration for growing colts. Horses during the winter have ample time for chewing and digesting their feed and may often be profitably wintered largely on clean, bright straw. It should not form the whole ration of the farm horses, because it will not be sufficient to put them in condition for the hard work in the spring.

Stock will not fatten on straw, and one should not expect to secure a large milk flow from its use. Straw from the legumes is more easily digested than that from the cereals. Field-pea straw is finer, and is more valuable than the coarse straw of field beans or soy beans.

The following rations are recommended by the United States department of agriculture. These rations will give excellent results when supplemented by whatever small quantities of grain that may be necessary for the health and thrift of the animals.

Wintering Beef Breeding Herd.

1. Straw, 16 pounds; silage, 20 pounds; cotton seed or linseed meal, 1 pound.

2. Straw, 20 pounds; cotton seed or oil cake, 2 pounds.

3 Corn-stover, 35 pounds; cotton seed or linseed oil meal, 1 pound.

Rations for Wintering Farm Flock.

1. Oat straw, 2 pounds; legume hay, 2 pounds.

2. Oat straw or corn stover, 1 pound; silage, 1 1-2 pounds; legume hay, 2 pounds.

Rations for Wintering Horses.

1. Daily ration for 1250-pound horse at light work: Barley straw, 5 pounds; alfalfa hay, 6 pounds; rolled barley, 8 pounds.

2. Daily ration for 1500-pound idle horse: Corn fodder (with ears), 18 pounds; alfalfa, 5 pounds.

3, Daily ration for 1000-pound horse at severe work: Oat straw, 6 pounds; alfalfa, 10 pounds; whole oats, 6 pounds; rolled barley, 6 pounds.

4. Maintenance ration for 1000-pound horse: Oat straw, 8 pounds; alfalfa, 4 pounds; oats or barley, 5 pounds. C. E. HOWELL.
Pullman, Wash.

Additional information regarding the use of straw as feed will be found in the following suggestions received in answer to a request from the Farmer:

CONRAD SCHMICK, Endicott, Wash.: We have lots of wheat straw to sell and the rest of our neighbors have straw to sell, too. We do not know the price for straw this year. Our straw is not baled. It is all loose. Any one wanting it could come and bale it themselves or take it loose.

CHARLES KLUNDT, Page, Wash.: Wheat straw is not worth much in this country. Stock is turned on to stacks. No straw is being baled around here.

T. R. BOOKER, Othello, Wash.: Wheat straw is used to some extent for winter feed. This year it is nearly all filled with weeds (Russian thistle). All straw fed here is fed loose. The demand for straw is good here. I think farmers would be better off if they did not feed straw. You can't expect stock to winter entirely on wheat straw.

OTIS ROBINSON, Lantz, Wash.: The straw is used mostly by the farmers to feed their stock. Each farmer has stock to eat his straw. I do not know what it would be worth by the ton. We used to sell for $1 per load.

PETER HANSEN, Withrow, Wash.: We will have plenty of straw in this neighborhood for the stock.

J. R. HEARLE, Lacrosse, Wash.: There is no great shortage of feed in this vicinity. There is no demand for wheat straw for feed, except where a man can put his stock right to the strawstacks in the winter time. Baled straw is unknown here and loose straw is about $1 a load and sometimes nothing at all.

F. A. HART, Connell, Wash.: Wheat straw is the only straw we have here. I use it for nothing except to turn stock into when not at work, and they do fairly well on it when they are not working. As feed when working I do not consider it of any value whatever. Stock can not hold up on straw and grain and do the amount of work they should, considering the high price of labor.

ED TIEDT, Soap Lake, Wash.: As a rule the straw is all used for feed around here. There is no straw sold here by the ton or baled. If sold it is by the stack and the price is from $10 to $20 a stack. This year every one is saving the straw for feed for his own stock. There is some demand, but no one is selling.

MERVIN M'DONALD, Waterville, Wash.: Twenty pounds of wheat straw with the addition of 10 pounds of oats will take the place of 30 pounds of wheat hay, when the horses are not working, and in the winter time. There is a demand for wheat straw for feed and the average price is one dollar per ton loose at the stack. Very little straw is baled in this locality.

FRANK GILDERSLEVE, Hooper, Wash.: There is a good demand for all kinds of straw. They are not baling any in this part of the country. They sell it in the stack at different prices. The straw is extra good this year. It makes good feed for cattle and horses.

F. M. LYLE, Hatton, Wash.: We winter our stock on our straw. Some seasons there is a demand for straw. Since I have been in this country I have sold straw for $20 per stack off of 40 acres. Last year there was not much demand as all the farmers had a pretty good crop. This fall straw will be in demand as there is a short crop. There has been nothing in having it baled here before. We would have to have about $10 per ton in order to make anything out of it if we baled it.

GROW MORE BEETS.

Food Administration Makes Plea.

The national food administration, forecasting the difficulty of producing sufficient sugar for the world's needs during the coming few years, has isued a call to farmers in beet-growing districts to increase their acreage of beets as well as a well-balanced crop will permit. Administrator Hoover considers the sugar problem one of the vital problems confronting the people of the United States at this time.

English Apple Crop.

The English apple crop is now being gathered. Until recently apples were practically unobtainable, owing to restricted imports, and prices were up to a shilling (24 cents) a pound wholesale. Owing to the lack of men in the heavy orchard districts, and the consequent insufficient spraying of the trees, there is said to be a serious shortage in the crop.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

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PERSONAL HELP TO EACH STUDENT—Shorthand, bookkeeping, telegraphy, direct wires. Catalog free. Lewiston Business College, Lewiston, Idaho.

THIS AD IS WORTH $1 AT THE MISsoula Business and Normal College, Missoula, Montana. School fully accredited. Write for particulars.

MISCELLANEOUS 57

MOONCULTURE

Plant and work by the moon signs. Raise bigger corps; make better living. Write Box 700, Missoula, Mont.

SENT FOR CATALOG B, SHOWING OUR complete line of holiday bargains. E. S. Burgan & Son, Spokane, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Kitchen cupboards, 4 ft. 6 in. wide, 7 ft. high; two glass doors and three long adjustable shelves in the upper part; three drawers, one flour bin, one sugar bin, mixing board, and a cupboard for pots and pans, with panel door in lower part; price $35 set up, or $25 knock down.

5 cross panel doors	$1.92
Cottage front doors	3.50
Two light windows	1.24
Spruce flour bins	1.75
Prepared roofing	1.35

Our large illustrated catalog, No. —, sent, postpaid, without charge, on request. Sell any one, ship anywhere, and guarantee safe delivery.

The largest factory in the west selling direct to consumer.
O. B. WILLIAMS CO.
1943 FIRST AVE., SO. SEATTLE, WASH.

SALT FISH.

We sell it by the carload or in a pail. Fish is about the cheapest and best food you can get. Buy it now. Write for price list.

SUPERIOR FISH CO.,
SEATTLE, WASH.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave. So., Seattle, Wash.

MISCELLANEOUS—FOR SALE 60 Continued.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

10-LB. PAIL SALTED BLACK COD BELlies, the best part of the fish. Within 300 miles of Seattle, $1.50 by parcel post.
SUPERIOR FISH CO.,
SEATTLE, WASH.

MISCELLANEOUS WANTED 63

POULTRY WANTED.

We want live poultry, dressed meats, hides and potatoes. We solicit your cream shipments. Write for prices. Commercial Creamery Company, Spokane, Wash.

STRAINED HONEY WANTED. WRITE US the quantity you have to offer. Commercial Creamery Co., Spokane, Wn.

AUCTIONEERS 75

N. W. CAIRNS, PULLMAN, WASH. AN honest auctioneer. Investigate me.

N. R. SHEPHERD, FARM AND LIVE stock auctioneer, Troy, Idaho.

MACHINERY FOR SALE. 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS,
Carried in Stock by

HIGGINS MACHINERY COMPANY.
312 1st Ave. So., Seattle. Write for Catalog.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174

TURKEYS—MIXED WILD STOCK; HARDier than tame, yet as gentle. Favors before holidays. For prices address Mrs. Mary Eagle, Nampa, Idaho.

S. C. W. LEGHORNS AND R. I. RED COCKerels, hens and pullets; heavy-laying strains. Mrs. H. Y. Rominger, Underwood, Wash.

WANTED—ROSE COMB WHITE MINORca chickens; setting eggs or chicks. Address B. G. Banton, London, Ore.

LIVE STOCK 177

RED CLOVER BIG TYPE POLANDS—Mouw, Fesenmeyer, Miller and Herring strains—spring pigs, both sexes, with quality, for sale. Never before could you raise or buy grain and make as much money feeding good hogs as now. Write your wants. Inspection solicited. H. J. Howser, Stites, Idaho.

FOR SALE.
50 good breeding ewes at $10 per head.
C. B. STEWART, WINLOCK, WASH.

GUERNSEY BULL FOR SALE.
Governor of Fernwood No. 23316. Anicich Bros., Enumclaw, Wash.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TANNERS 425

HIGH-GRADE ROBES FROM YOUR horse and cow hides. Send for catalogue. John T. Little Hdw. Co., Spokane, Wash.

TAXIDERMISTS 435

MOUNTING OF HEADS, ANIMALS, BIRDS, fish. Skins tanned, made into rugs and furs. Mohr, 82 Bernard, Spokane.

MONUMENTS 510

GET MY PRICES ON MONUMENTS BEfore placing your order. I can save you money. Geo. H. Moody, Moscow, Idaho.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

VETCH, CLOVER AND FIELD SEEDS.

We carry a complete line of grasses, wheat, oats, barley, spelts and other seeds too numerous to mention. Our prices are right, and will be glad to send samples and quote prices.
CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.
Portland, Oregon.

WRITE FOR CATALOGUE AND FREE samples of timothy, alfalfa, clover and field seeds. Mark Means & Co., Lewiston, Ida.

NURSERY STOCK 621

BERRY PLANTS AT WHOLESALE prices. Blackberries, loganberries, strawberries, raspberries, currants, gooseberries, dewberries, grapes, rhubarb and asparagus roots. Write for price list. Rosecroft Nursery & Fruit Farms, Sumner, Wash.

FARM LANDS—FOR SALE 651

40 ACRES DAIRYING OR GARDENING land, adjoining the famous Thurston county ten-acre tracts. Only 10 minutes' walk from depot, 20 to 30 trains stopping daily. A few miles from American Lake cantonment, where 50,000 soldiers are to be fed, and the Thurston County Farm association has the contract to furnish eggs and vegetables. Land partly fenced and easily cleared. All adjoining land sold for $75 per acre; our price $65 per acre; half cash. Don't fail to investigate at once. Send for our free illustrated folder of Thurston county acreage.
A. H. REID & CO.
314 NEW YORK BLK., SEATTLE, WASH.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay. $2000 loan in improvements, or ready-made farms. Loans of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Alan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

DO YOU WANT A GOOD FARM?
We have it—Something to suit you, large or small; improved or unimproved; with stock and machinery or without it, in Washington, Idaho or Montana. Some fine suburban homes close to Spokane at reasonable prices. Call or write and tell us what you want. Hege & Watkins Co., 715-17 Paulsen bldg., Spokane, Wash.

BIG CUT IN PRICE OF FARM LANDS in the best agricultural part of Snohomish county. $25 to $35 per acre; 10 yearly payments; railways, mills, factories, plenty of labor. The best proposition on the market for the man who wants a farm. Send for illustrated literature. Brownell Land Co., 904 Third ave., Seattle, Wash.

238 ACRES OF FINE RIVER BOTTOM land; 16 acres under cultivation, balance timber pasture. The timber consists of maple, vine maple and some fir saw timber, no buildings; price $50 per acre; $3500 cash. Would consider up to $4000 trade, balance time at 6 per cent. Address S. R. Tandy, Jefferson, Ore.

GENUINE SACRIFICE AT $7.50 PER acre—880 acres wheat land near Kennewick, Wash.; fenced; two wells; some buildings; 240 acres in new irrigation district; $5600 cash required. Keystone Lumber Company, Tacoma, Washington.

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GOVERNMENT LAND IN CAL. FREE book. Joseph Clark, Sacramento, Cal.

J. A. PERKINS & CO., WHITMAN COUNty lands, Colfax, Wash.

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239-ACRE VINEYARD AND alfalfa farm on Columbia river, close to Kennewick and Pasco; 89 acres in bearing vineyard, all 1st-class European varieties; 2 acres in alfalfa, 40 acres all ready to seed; 2 1st-class electrical pumping plants on property for above acreage, operated at low cost; remainder of land, 108 acres, is good pasture, all capable of cultivation by putting in additional water plant; improvements consist of five-room house, barn, 20x50, packing house, 20x50. Will sell personal property and equipment on place at reasonable price if desired. Will lease for three or five years on crop basis. This is a grand opportunity for the right man. Owners will require best of references as to parties' integrity and ability to care for vineyard. Address

THE FRED B. GRINNELL COMPANY.
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IRRIGATED LANDS—For Sale 663

IRRIGATED FARM LANDS.

ALFALFA LANDS, under government irrigation; abundant water; low altitude; rail and water transportation to coast markets; good schools, good roads; products alfalfa, corn, cream, hogs, honey, fruits, vegetables; long growing season; unimproved land $30 to $60 per acre; improved $100 to $250. Write for further information and literature. Dodd & Knapp, Hermiston, Ore.

IRRIGATED LANDS—WANTED 666

FOR SALE VERY CHEAP—13-ACRE IRRIgated orchard tract, 4 miles from Caldwell, Idaho. About 7 acres commercial bearing trees. Will take Liberty bonds. Call or write G. H. Summers, 121 South Lincoln st., Spokane, Wash.

TO EXCHANGE—REAL EST. 705

WHAT WILL YOU TRADE FOR 640 acres wheat land in Douglas county, near Waterville? Consider trades for smaller farm, 5 to 40 acres in western Wash.; also lease on 160 acres school land. Modern 9-room house, barn for 32 head stock, several outbuildings, plenty water, farm implements. Valuation with stock and implements $40,000; without, $25,000. Write John Schillereff Sr., Douglas, Wash.

In answering advertisements don't fail to mention this paper.

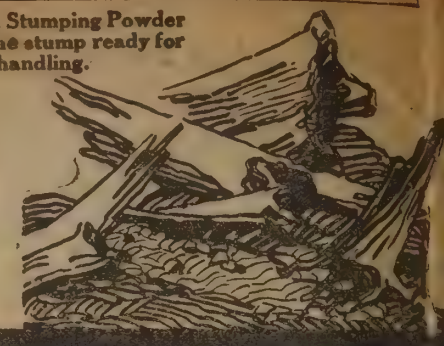




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Giant Stumping Powder left the stump ready for easy handling.

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The explosives that get stumps out cleanest and cheapest are those that have a heaving and lifting effect, shattering the stumps just enough to break them up. Then you can handle them easily.

"The farmer," says an Experiment Station, "should use an explosive prepared especially for his work; one that stands all ordinary shocks of handling and transportation and does not easily freeze. He does not need and should not use the expensive nitroglycerine explosives." Thousands of farmers have taken this advice and have found that

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

always save them money because they go further than any other stumping powders. Also, because they are made especially to suit *western* farm conditions and because they are always uniform in composition and action.

Giant Farm Powders—the product of the oldest manufacturer of high explosives in the United States—are the only genuine "giant powders" for agricultural use. They are made in two brands—Giant Stumping Powder and Eureka Stumping Powder.

Giant Stumping Powder is the ideal explosive for blasting stumps in wet ground. It keeps perfectly for months, resists water and chilling, and gets the stumps out economically.

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I bought five boxes of your Stumping Powder and now I want to sell a lot of other powder that I have.
RUDOLPH STADELI, Silverton, Ore.

Your Stumping Powder has a wide breaking power and less fumes to contend with after being exploded than any other on the market.
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In using a thousand pounds of your Stumping Powder neither I nor any of my men had the least bit of trouble in getting the very best results. I have used practically every powder on the market and find there is more strength in yours. J. L. EIDSON, Silverton, Ore.

Your Stumping Powder shoots the roots and spreads wide in the ground instead of going down. It is the best powder we have used.
G. S. McCARTNEY, Russellville, Ore.

I find your Stumping Powder all you claim for it. ELI CLINKER, Camas, Wash.

I am a large user of powder in stump blasting as well as in grading roads, breaking boulders and making ditches. I get good results from the Giant brands all the time.
MICHAEL HARVEY, Charleston, Wash.

Giant Stumping Powder gives good results when all other means of removing stumps have failed.
ROBERT CHABOT, Moclips, Wash.

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THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 46. NOVEMBER 15, 1917. ** WEEKLY.

Bankers May Create Student Loan Fund

Financial Stress With Those Studying Agriculture Would Be Relieved by Small Loans

One result of the farmer-bank convention at Pullman last week probably will be the establishment of a new fund of several thousand dollars from which agricultural students at the state college may borrow small sums to tide them over periods of financial difficulty in securing their education. Members of the Washington State Bankers' association, including President J. A. Swalwell, expressed themselves strongly in favor of the move, and the association will take the matter up at its next meeting. President Swalwell promised that the association would consider the proposition if the officers were authorized by the convention to take it up, and the authorization was unhesitatingly given.

The movement received its first big impetus when President Thomas Brewer of the Fidelity National bank of Spokane offered to start subscriptions to a students' loan fund with $100 from the bank that he represented. Upon President Swalwell's suggestion that it would be better to have the movement carried on by the state association, thus enlisting the cooperation of all the banks throughout the state. Mr. Brewer withdrew his offer and joined in the plan to have the fund raised by the banks of the state as a whole, as represented by the association.

President E. O. Holland of the state college told of many worthy farm boys who, for lack of sums as small as $50, were prevented from getting an education of the kind that they could take back to the home farm and use to double and quadruple its production.

In the course of the discussion which followed his statement the fact was brought out that many of the land grant agricultural colleges and universities are provided with a loan fund maintained by organizations of bankers, farmers and other public-spirited business groups, which the president of the college lends to worthy students. The fact that the University of Montana has a fund of nearly $7500 loaned by Chancellor Elliot in this way was mentioned.



Thomas H. Brewer.

President Brewer of the Fidelity National of Spokane said that he knew of a young man who had received agricultural training and gone back to his home farm in a part of central Washington in which this year the wheat crop, owing to unusual adversities, had been nearly a failure. The wheat crop put in by this young man and safeguarded by methods of seed selection, sowing and farm management in general, had, in the same region, alongside of other wheat fields which had suffered greatly, yielded over 40 bushels per acre.

Mr. Brewer stated that if this matter were viewed as a business proposition only it would be good policy for the bankers of the state to maintain at the state college a fund from which the college authorities could lend to worthy students in this way, helping them get an education which later would be used to the advantage of their home community. It has been the experience of educators that nowhere can so little a sum of money do so much good as when wisely bestowed upon a young man or young woman who is at a crisis in an educational career.

How Long Will Germany Fight?

At the banker-farmer convention meeting at the state college at Pullman last week a large part of the discussion bore upon the part that bankers and farmers could unitedly do to strengthen the country for the war. It was R. C. McCroskey, banker and farmer of Garfield, for many years a regent of the state college, who put the war problem before the convention of bankers and farmers in terms so graphic that the profoundest attention was paid to his words.

"I served in the civil war—on the confederate side," said Senator McCroskey. "At the beginning of the war the seceding states were offered virtually anything if they would return to the Union. They were assured the privilege of returning with rights unimpaired. Most attentively did the north court the south, trying by every reasonable proffer to induce the states to come back; and we in the south were left virtually nothing to fight for but state's rights, which was, when all is said, but a dream.

"Yet we fought on for four years, and the bitterness of the struggle is a matter of history. I say to you now, gentlemen, if we of the south would fight for four years in the face of the reasonable things proffered us by the north, fighting only for a dream—if we would do this, how long will Germany fight, believing, as her 65,000,000 people do, that defeat means the quartering of the German empire and the extinguishing of the German nationality? Answer that question, will you? It is my opinion that we are liable to be raising wheat for wartime purposes for several years. We are in for a struggle that will reach every sinew of the nation and take the best we have if we win—and win we must!"

Cooking Hog Feed Aids Hoover

With Grain So High and Need of Conserving It So Great, a Careful Study of Feed Problems Is Fast Becoming Real Necessity



GIG HARBOR, Pierce County, Wash., Nov. 1.—Hereabouts fall work, including seeding, is not only up to the normal standard, but I think I may safely say that it is considerably above the average. This is partly owing to the fine, warm fall weather with just rain enough to permit plowing and working the land, and partly, I hope and think, to increased zeal and hopefulness on the part of the farmer. Losses from frost or early rainfall are so slight when weighed against the benefits derived as to seem almost negligible. High prices of feeds have forced farmers to become careful thinkers and figures. In the feeding of hogs corn is almost out of the question; wheat also. The cooking of such feeds as barley, peas, shorts, bran and potatoes seems to have been settled upon as the most economical system under present circumstances. To this, of course, is added all the skim-milk that can be had without robbing the veal calves. In my own work with poultry I think I will never again feed so much whole wheat as I formerly did, even though the price may come down to normal. About the time moulting set in, I commenced feeding wet mashes twice a day. I used large quantities of potatoes, mangels, beets, carrots and other roots, well cooked, chopped fine and while hot mixed with bran and a little corn meal, 12 quarts to 100 hens. At night a good, solid feed of whole grains mixed for scratch feed. The pullets fared a little better in the way of a light extra grain feed at noon. Two or three handsful of oil meal are also added to these mashes when corn is not at hand.

W. D. BOYNTON.

Pig Club Holds Fair.

SOUTH BEND, Pacific County, Wash., Oct. 31.—The fall seeding is progressing nicely. There have been only two killing frosts this month. The boys' pig club of Menlo held a little fair there at the lodge hall. The older people had an exhibit of fruit and vegetables in connection with it. The residents along the Nasel river had a fair in the schoolhouse. The county superintendent of schools and the agriculturist gave addresses. This has been the driest fall we have had for many years, less than two inches of rain falling during the month. However, the ground is in good condition for fall plowing. Indications point to an open winter. The evergreen blackberries proved to be a more profitable crop to those that raised products for the local cannery than pole beans. The first blackberry canes were brought to this county by Mrs. W. W. Tilly, of Menlo, who planted them in pioneer days. This climate and soil was so suitable that there are now quantities of bushes all over the county. Some of the farmers raised shell beans for their own use. They do well if planted early enough.

MRS. WINNIFRED BUCKINGHAM.

Barley Is Only Substitute.

LA CROSSE, Whitman County, Wash., Nov. 1.—Lack of rain has retarded field work. Prospects for fall seeding, thus far, are not very promising and, no doubt, a large acreage will wait for spring seeding. A few are seeding in the dust and occasionally one is seen dry plowing. October was the driest since 1884. The only possible substitute for hog feeding is barley, but it is scarce and high. No doubt the most profitable hog feed is hogging off the small patches of wheat.

M. E. SCHRECK.

Young Men Join Army.

SHELTON, Mason County, Wash., Oct. 29.—Fall work and seeding is much ahead of normal. Weather conditions have been most favorable and have been taken advantage of by every enterprising farmer. Fall seeding is not finished, but is proceeding as fast as labor conditions will permit. The weather continues most favorable, but in many cases the farmers' helpful sons have been absorbed into the great preparedness work going on at Camp Lewis. Forty-seven young men have answered the call for military service from Mason county and on good authority it is claimed more than half of these are farmer boys, a large per cent of whom are our native sons. Fathers and mothers and sisters have taken to the fields and the work proceeds with a will to make it successful. "More food and better food" is the slogan for this county and "Hooverizing" is the rapidly developing method. So far as is known wheat is not and never has been used in this county as food for hogs. Its use as chicken feed is common and much of the wheat used is shipped into the county. Our county agriculturist is making himself known and very useful by organizing our apple products, grading, packing and finding a good market.

SCOTT HAYES.

Cowlitz in Good Condition.

CASTLE ROCK, Cowlitz County, Wash., Oct. 29.—Farm work is progressing very slowly in the county, owing to the shortage of farm help, but, thanks to the potato digger, with which, with a little extra work in preparing the potato row for clean digging, the grower is able to throw the tubers on top of the ground ready for the pickers, potato harvesting is well under way. The prevailing price is from $1 to $1.75 per hundredweight. Seeding has been above normal this fall and crop losses due to frost or cold weather have been small in this district. Those having prunes have gathered a good crop and dried them, storing for the winter price. Apples are a short crop and the canneries are making a price of $15 per ton and taking any kind that will peel. This proves that the country at large is awake to the fact that we can get along with things nowdays that were considered worthless before the farmer and his family had started to Hooverize. The farmers, as a rule, are economical and work from early morning until late at night, and they need all the protein and encouragement that can be given them. Bran and shorts are the principal cow feed in the grain line. Those having silos use the short system. There has been no substitute for hog feeding. There has been considerable agitation over the prospects of forming what is called logged land districts and asking the state to help in the development work, but nothing definite has been accomplished. It is anticipated that when the members of the farm loan association get their money from the farm loan bank at Spokane they will get busy and clear up some of the outlying spots of the logs and stumps ready for next year's crop, the members are progressive and it is believed that a great number of acres now lying in waste will be put into a high state of productiveness in a few years. Considerable trouble has been reported from the moles digging among the potatoes and other crops, so arrangements have been made for a mole expert to spend a few weeks in the country campaigning for the suppression of the pest. It is said that the hides are valuable for decorations. Apple are being used in the place of canned fruits and in some cases large driers are going to be used. Road work is going on as fast as possible, but is handicapped by shortage of teams. Men and teams have been offered $7.50 per day. This has been a splendid fall for farm work, no rains to speak of and just frost enough to flatten down the rank growth of potato vines. Several tons of cabbage have been shipped to the Seattle market and brought good returns. Milch cows are changing hands among the farmers, shifting around where the feed can be had. The butterfat market keeps very regular and prices are about the same. Veal calves are selling for 17 cents, dressed; hogs from 20 to 22 cents, eggs 55 cents per dozen and hay $25 per ton. Straw, heretofore wasted, brings $7 per ton. On the whole the district is in a better shape to combat the high prices than ever before. Grain is high. Skim milk does fine for hogs, if the other feeds are given to keep the hog from having constipation, which has caused much sickness and, in a few instances, death to the hog.

C. C. BROWN.

No Seed Shortage.

NEWPORT, Pend Oreille County, Wash., Oct. 27.—I would say that weather conditions of early fall were generally favorable for the maturing and harvesting of crops, but they have not been favorable for preparation for next season's crops. Farmers generally are far from being satisfied with the results obtained this year. It is too late now for fall planting, but I have have not heard of any shortage of good seed for the area that has been planted to fall wheat.

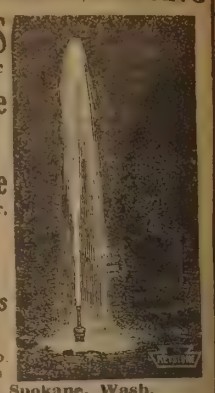
CHARLES N. TALMADGE.

Farmers Economize.

MONTBORNE, Skagit County, Wash., Oct. 29.—No fall seeding has been done in this locality. The crops were all harvested and in good condition before the frost came. Farmers are economizing or Hooverizing as much as possible. The by-products of wheat are not being substituted on account of high prices of other grains.

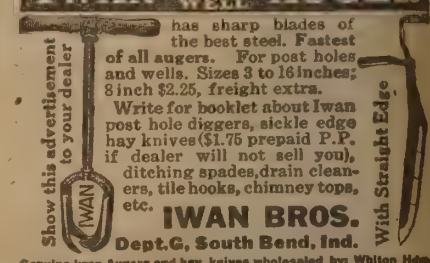
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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 46 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF November 15, 1917

Rate Increase Is Sought Again

Railroads Seek Added Toll From Farmers and Consumers of the West

Once again the farmers and other producers of the northwest as well as the consumers of both western and eastern products, must arouse themselves for defense against an invasion of their just rights by the railroads. The already famous "15 per cent increase" rate case is to be reopened. On December 17, just one month from Saturday of this week, the interstate commerce commission will sit in open session to hear the petition of the railroads for the enormous increase in rates on produce and manufactures handled by the western rail lines.

A year or more ago the railroad employes asked an increase in pay and shorter hours. In order to avert a strike congress, at the request of President Wilson, enacted the Adamson law, which awarded to these employes practically what they asked. The railroad companies appealed to the supreme court of the United States on the ground that the Adamson law was unconstitutional, but gracefully withdrew its appeal at the last moment and agreed to accept the terms of the law.

What It Really Meant.

At that time The Farmer warned its readers that there was probably "a nigger in the woodpile." That "nigger" showed himself later when the interstate commerce commission issued an order giving the eastern railroads a flat blanket increase in freight rates of 15 per cent, effective on June 1, 1917, unless the protests of shippers convinced the commission prior to that time that the increase was unjust. The protest was made with considerable success. On June 29, after a continuation of the case, the commission granted certain minor increases in rates to western lines, but denied the application for the increase as a whole.

Now comes the western railroads with a plea for reopening of the case, and the commission has granted the request and set December 17 as the day on which it shall begin.

As it did last spring The Farmer issues the call for grain growers, live stock men, orchardists and all other producers and consumers in the northwest to make themselves heard on this vital matter. How much the proposed increase would take out of the pockets of the farmers of the northwest is somewhat problematical but it would take millions.

Authoritative figures indicate that the railroads of the country made earnings of approximately $2,500,000,000 during the last fiscal year. A 15 per cent increase on this gigantic total would mean an increase of $375,000,000—another considerable "war tax" on the producers and consumers of the country. Exactly what proportion of this would come from the western producers and consumers as contemplated by the railroads in their present petition to the interstate commerce commission can not be accurately figured, but it is evident that it would be a large amount.

Have Earnings Decreased?

The new application of the railroads is based on their plea that the increased cost of labor, coal and the materials out of which their equipment is manufactured has greatly reduced their net incomes.

In a published statement on the general subject Clifford Thorne, representing the National Council of Farmers' Cooperative associations and oil men, totaling something like 1,000,000 producers all together, denies that the net earnings of the roads have decreased.

"It is true that the cost of labor and railroad supplies has gone up," says Mr. Thorne, "but it is also true that there has been such a remarkable increase in traffic that over and above all these added expenses American railroads, as a whole, during the fiscal year ended June 30, 1917, earned net more than in any other year, with one exception, in their entire history.

Every farmer in every western state should protest and do it with vigor. A flood of personal protests to the interstate commerce commission might be impracticable and of little avail, but a flood of protests by live stock organizations, farmers' cooperative societies, granges, farmers' unions, dairy associations, farm bureaus and every organized group of producers would give the commission food for thought, and probably save the producers of the west a few million dollars.

Education Is Keynote at Lewiston

Excellent Display of Animals Marks Live Stock Show

By HORACE ADDIS.

Again the educational feature is the one most emphasized at the seventh annual Northwest Live Stock show held at Lewiston, Idaho, November 8-15. Some old faces remain and some new ones come on the scene, with new entries of live stock each year. But so long as the educational features are kept to the front and education is made the basic principle of the show, so long will it prove its right to existence, and so long may we expect increased attendance and great success.

The opening day featured a great meeting in the horse show tent, at which Governor Withycombe of Oregon, Governor Stewart of Montana and Governor Alexander of Idaho delivered addresses. The big tent was beautifully decorated with flags and bunting. Every seat was taken and many stood through the meeting.

Patriotism Is Keynote.

Each of the governors was lavish in his praise of the fine stock on exhibition, but the keynote of each address was patriotism. That we must win the war, and that it may cost many lives and much treasure, which should be freely given, was urged over and over again, and each time met with hearty responsive cheers. Governor Lister of Washington was unavoidably delayed, but he addressed fully as large a crowd the second afternoon. He also urged that we must in every way help the boys in the trenches to win this war, and he met with the same hearty response.

A parade of fine horses and cattle, with brief lectures on the different breeds and their uses by Professors E. L. Potter of O. A. C. and E. J. Iddings of the University of Idaho closed the meeting.

In a smaller tent each day was held demonstrations by the University of Idaho extension department, with Miss Fenton, assistant to Miss Amy Kelly, state leader, and Miss Dorothy Taylor, emergency home demonstration agent, in charge. They demonstrated the use of dairy products in place of meat, of butter substitutes and other means of household economies. Miss Taylor's district is Lewis, Nez Perce, Idaho, Clearwater and Latah counties, with headquarters at Moscow, and she will answer calls for demonstrations and lectures throughout the district.

A great live stock parade was one of the show's prominent features.

That the finances of the 1918 show are such as to insure the continuation of exposition on a high standard is indicated by the subscription at the annual banquet of nearly $4000. Together with the aid given under the law by the state, and the support of Lewiston business men, next year's finances seem secure.

Each night, downtown, were held the meetings of the association, beginning with the opening night, at which President Thomas Fenn delivered his annual address, dealing with the progress of the association and the show. A number of short speeches were made by others, the principal address of the evening by Governor Lister, whose theme —a theme that ran through all the proceedings of the week—was patriotic support of the war.

Tuesday evening, after several interesting and inspiring addresses, five members of the board of directors were elected. H. R. Smith, now live stock commissioner of the live stock exchange, Chicago, and formerly professor of animal husbandry of the College of Minnesota, and who judged beef cattle, spoke encouragingly of the general live stock situation, and made some very practical suggestions. Professor Arnett, animal husbandman of the Montana Agricultural college, who judged horses, spoke in a similar vein, especially with regard to the horse. And Dr. H. G. Bodle, Idaho, state veterinarian and head of the live stock sanitary department, told of the work done by his department and the need of coopera-

(Continued on page thirty.)

Producers May Deliver Own Milk

Inland Empire Dairymen Declare War on Distrubitors

What may prove to be war to the death by the producers of milk in eastern Washington on the Spokane milk distributors is declared in the announcement of the Inland Empire Dairymen's association that it is going to incorporate and prepare to sell milk in Spokane direct to the consumers.

Milk in Spokane is now selling at 14 cents a quart bottled and delivered, a compromise price recently agreed upon by the distributors and producers, the producers at first demanding 30 cents a gallon to the distributors and the latter fixing their figure to the consumers at 15 cents on that cost basis. The producers declare that they believe they can deliver milk much cheaper than 14 cents and yet receive more for their product themselves.

"We feel that we are not getting what we should for our product and that the consumer is paying too much," President H. S. Findley said. "It is our belief that we can remedy this situation, and this is the purpose of our action. We have received encouragement from some people with capital in Spokane, and I think there will be no difficulty as to finances. I believe, also, that we shall meet with public support. The members of the consumers' committee appointed by Mayor Fleming have said we should have a better price for our milk. The mayor was inclined to be caustic about our request, but I think he saw things in a different light after he had considered things.

"Our plans are immature at present. We will incorporate, and for this purpose must state our intentions. The articles will likely give us authority to establish a plant and distribute milk. We now figure on handling milk in bulk; but, of course, if we go ahead we will probably come to the bottling and distributing. Probably we can find enough stores and restaurants to take our output. If so, the problem will be simplified. Our course will depend on developments.

"I believe we can sell milk to the retail trade at 10 to 11 cents a quart in bulk, at least, and at 30 to 32 cents a gallon in 10-gallon cans to the larger customers.

"Our articles will authorize us to buy and sell feed for the benefit of our members, and also to sell eggs and probably other things we produce. By such a combination our success would be more assured."

Butter Record Broken.

Announcement has been made by the cow tester of the University of California, that Aagie Acme, of Riverside Second, a Holstein cow, owned in Woodland, Cal., has broken the world record for butter production with a year's product of 1331 pounds. The announcement says that the cow yielded 1331.41 pounds of butter in 365 days, 1167.96 pounds of butter in 305 days and 2426.51 pounds of butter in two years. The records displace those established by Keystone Beauty Plum Johanna, a Holstein owned in Pennsylvania, it was claimed.

Aagie Acme's milk production for the 305-day test was 22,092.8 pounds and 24,682.7 for the 365-day test.

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All Past Chapters of "The Barrier," By Rex Beach, Are Reprinted in Brief In This Issue. Turn to Page 22 and Begin Now to Read This Great Story

New Enemy of Pacific Northwest Farms

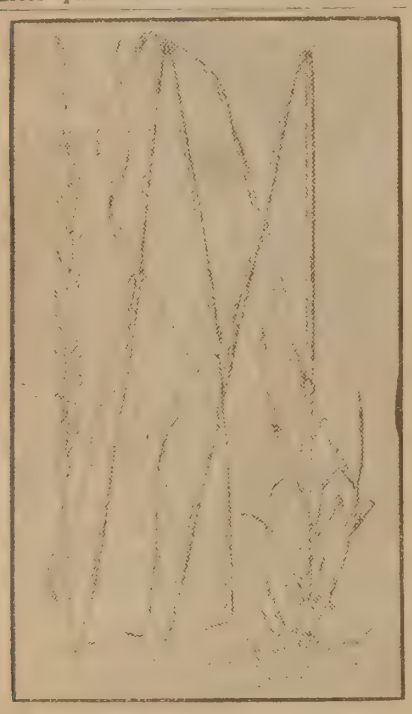
One Careless Farmer Can Keep His Neighbors Fighting Quack Grass

By F. L. PICKETT
Washington State College

In the Pacific northwest states there now are thousands of acres of ground infested with quackgrass, and a serious thing about it is that one careless farmer in a neighborhood can keep all of his neighbors fighting this pest. Carelessness in keeping down roadside weeds will bring upon farmers of he adjacent countryside the same trouble.

Quackgrass or "couchgrass" as it is sometimes called, is comparatively new in the northwest, but it already threatens to compel the abandonment of many fertile fields. In middle western states this same question arose some years ago. Farms were abandoned. Finally, the situation grew so serious that the farmers were willing to go to the expense of clearing their land of this pest, and began to cooperate with one another.

Out here, we may as well begin now. Within the last few years, all but the drier parts of the Pacific northwest



Quackgrass, a new enemy of the Pacific northwestern farms.

have been invaded by quackgrass, and it is spreading—and, worst of all, it exists and is spreading on scores of farms where it is not recognized as a weed at all, the farmers thinking it is useful on account of its deceptive appearance.

Quackgrass resembles bunch grass, to which it is so closely related. It is a rapid grower, is perennial, and spreads both by seeds and by underground stems or rootstocks. It is the production of rapidly-growing underground stems, which are entirely hardy in this climate, that makes the plant a serious pest. One plant if undisturbed, will, in two seasons, spread over a square yard of ground. If the ground be plowed and carelessly tilled the spread of the weed is much more rapid, for each part of the rootstock broken by the plow and carried to other parts of the field starts a new plant, which, in turn becomes the center of a spreading patch.

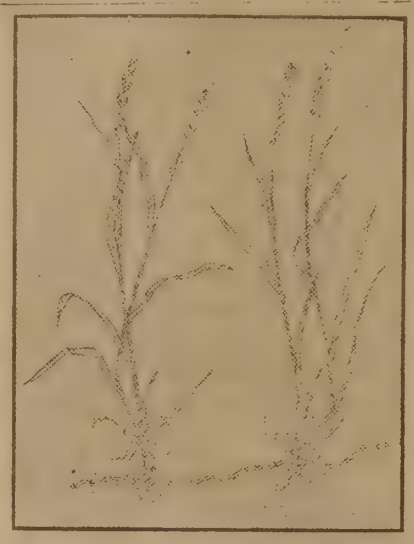
Any broad-bladed grass which tends to spread rapidly should be viewed with suspicion. When the young plants of quackgrass are pulled up, they are connected by the jointed rootstock with small scale leaves at the joints and long, sharp-pointed buds at the ends. In the summer the heads, resembling the bunch grass, make the identity of the plant certain. Every farmer who suspects any grass patch on his premises should send specimens large enough for certain identification to the county agricultural agent or to the state college so he may know certainly whether or not he is going to have to deal with this weed pest. This will not only bring certain information to the farmer, but will be of great value to the county agent and to the men at the state college in making their record of the spread of the grass more complete.

Quackgrass may be brought into a locality by the seeds in wheat, oats or larger grass seed on the market. Much of the hay from infested areas contain quackgrass seeds mature enough to grow, and a considerable percent of these seeds grow even after the hay has been used as food by cattle and horses. The seeds are not infrequently found in coarse ground feed and are not all destroyed by grinding and by the chewing of cattle. The appearance of new bunches of this grass along railroad right-of-ways should be noted at once and steps taken to kill the plants. All patches growing on waste ground serve as seeding-points from which the pest may be scattered to fields near and far.

In considering the means to be employed and the cost of ridding a patch of ground of quackgrass the thought of be kept constantly in mind is that failure means nearly or quite total loss of the use and value of the soil. In soil subject to very careful cultivation through the seeding to hoed crops, the eradication of the grass is not difficult. If the formation of green leaves can be prevented through a full growing season, the plants will usually be weakened too far to recover. The underground stems store up food material formed by the green leaves or blades. This food is used by the new shoots in their growth, and the prevention of the development of new green leaves means that the reserve will in time all be used up and the plant will die. That careful cultivation will get rid of the pest has been proven in both eastern and western Washington by actual experience of gardeners and orchardists.

Because its general appearance is so much like other forage grasses, quack grass often is widely spread over fields not subject to clean cultivation through the growing season before its presence or nature is noticed. Once thoroughly established its growth is such that the production of paying crops of wheat or other small grains is impossible. In such cases the most vigorous action is necessary to prevent the entire loss of the use of the soil. In the drier parts of the states where the pest is found it may be destroyed in summerfallow by continuous working of the soil with the disk and leveller. The soil should be moved often enough to prevent the growth of green blades. This will require thorough working six to ten times through the summer. In parts of the state with greater rainfall the best means of eradication is to throw the land into hoed crops for two or three seasons, or until the soil is free from the grass.

Taken early, quackgrass seedlings are as easily killed as those of any other grass. Much may be done in the careful preparation of seed beds to prevent the growth of seedlings. Valuable work can be done in midsummer in the prevention of seed formation by cutting the grass in waste areas just as soon as



Quackgrass, showing the entire plant system, both above and below the ground.

the first heads appear. The old, well-established patches must be given very vigorous treatment.

Hogs Fed Naturally.

R. D. Lewis, who is farming 40 acres under the Tieton project, Yakima county, attributes his success with Duroc Jersey hogs to the fact that he makes it possible for them to feed naturally. He uses hoppers for nearly all kinds of feed and the results he has obtained have been most gratifying. "It is far cheaper for me to feed a hog all he will eat for a short time than it is for me to starve or half-feed him over a long period," said Mr. Lewis. "My hogs pay even with the high prices of feed now prevailing, because I try to produce pork in the very shortest time possible."

Porpoise and Whale.

Whales and porpoises are mammals, like cattle and sheep, and their flesh is "meat," not "fish." In texture and appearance it resembles beef, though the color is darker red, and the flavor is closer to that meat than to any other. It is devoid of all fishy taste.

Grange Visiting Day at Newspaper Office



The above is a photograph of the grange visiting day at the Woodland (Wash.) Chronicle office, when grangers got out the paper. The following are the names of those in the picture:

Top row from left to right—Mrs. Harry Warden and son, Mrs. E. H. Tartar and daughter Jewel, Mary-Lyle Tartar, Mrs. Ben Barr, Mrs. Cloid Early and baby, Mrs. E. W. Robinson, Mrs. Robert Barr, Mrs. Godfrey Ehman, Mrs. Hogan Pirtle, Mrs. Gus Simpson, Mrs. R. E. McNeal.

Lower row (sitting, left to right—Mrs. E. E. Glover, R. E. McNeal, E. W. Robinson and daughter, Gus Simpson and son, Hogal Pirtle, Godfrey Ehman, Jessie Jake Guilds.

Information Bureau

The Farmer will be glad to answer questions of general interest, as well as those of a practical nature, relating to the farm or farm home. There will be no charge for this service. Questions must be signed with your name and postoffice address and will be answered either by personal letter or by publication when of general interest.

Address Farmers' Information Bureau, Room 35 Review building, Spokane, Wash.

The Order of the Thistle.

Is the Order of the Thistle and the Order of St. Andrew one and the same thing?

Answer—The Order of the Thistle is a Scottish order of knighthood, sometimes called the Order of St. Andrew. It was instituted by James VII. (James II. of England) in 1687, when eight knights were nominated. It fell into abeyance during the reign of William and Mary, and was revived by Queen Anne in 1703. As at present constituted, the Order consists of the British sovereign and knights to the number of 16. The insignia consists of a collar, badge, jewel, star and ribbon. The collar is composed of golden thistles and leaves connected by crossed sprigs of rue, enameled. The badge is a golden eight-pointed star, whereon is an enameled figure of St. Andrew, bearing in front of him his cross in silver; it is worn attached to the collar. The jewel is worn round the neck with the ribbon. The star is of four points, with a St. Andrew's cross embroidered in silver upon it. In the center is a green and gold thistle within a circle of green, bearing the motto in golden letters. Ribbon, dark green. Motto: Nemo me impune lacessit. Besides the knights ordinary, there are extra knights (princes) and a dean, a secretary, the lyon-king-at-arms, and the gentleman usher of the green rod.



Order of Thistle.

What "Income" Really Means.

Question: If I pay $200 for box shooks and $30 for paper and nails, and then sell my apples, including boxes, paper and nails to the amount of $1120, do I have to pay an income tax on the said income? F. F.

To this inquiry The Farmer replied in part as follows:

You do not have to pay an income tax on your business as you outline it to us. Personal income taxes are paid on net income only. That is, since the expenses you enumerate total $230 and your gross income amounts to $1120, your net income is only $890, which is too small an income to require the payment of a tax under the present law.

The lowest net income requiring the payment of a tax is $1000. A single man having a net income of $1000 must pay a tax on it, but a married man need pay no tax unless his net income is $2000 or more.

By net income is meant the total receipts from business or salary less the actual expenses incurred in the conduct of the business or the earning of the salary. That is, no personal expenses, like the cost of living, may be educated from the gross receipts in figuring the net income.

Stores and Income Tax.

Question: We have a cooperative farmers' store. Our business was incorporated in July of the present year. Our gross sales for the quarter ending October 1 were less than $2500. After paying our manager, the net income will probably be not more than $500 per annum. Would we be taxed under this law (the income tax law)? C. H. B.

To this question The Farmer replied in part as follows:

All store companies are required to file a statement of their business with the internal revenue department. The fact that yours is a cooperative store does not exempt it, nor does it make any difference whether it is making a profit or losing money. The statement to the revenue department is required, and upon the showing of profit that department will determine whether or not an income tax will have to be paid

The Otter's Wanderlust.

Of all the beasts in the world, the otter, that fierce outlaw, is the greatest wanderer.

It is as if he were afflicted with a curse that forbids him to be still, that forces him ever to push on—on—on! Rest as rest he knows not. Three days will see the end of his longest inaction, and the amount of miles he covers in a fortnight would amaze some folk.—Outing.

Women and Girls in Orchards

Pick or Pack Fruit Beside Their Fathers, Brothers and Husbands

By PAUL E. TRIEM

Twenty or twenty-five years ago, the enterprising traveler, passing through Wenatchee, paused just long enough to brush the dust from his shoes and to note with disapproval the flat and unpromising valley, covered with sage brush. There was but one orchard in that part of the state of Washington in those days, according to most accounts, and that was on the Phil Miller place. Today the entire valley, farther than the eye can reach, is filled with apple and pear trees. A prosperous city has grown up on the spot where formerly the Siwash pitched his lodge. Automobiles innumerable have taken the place of the buckboard and the buckskin cayuse, which long ago clattered away over the dusty trail toward the land of yesterday.

In many unusual respects, the Wenatchee district may be looked upon as a model which other parts of the country will do well to follow. In the first place, the balance between city and country interests and activities is perfectly maintained. This district is not a city or a country, in fact, but a community. The high commercial value of apples and lands upon which apples could be raised is largely responsible for this fortunate condition, for this commercial high pressure has induced the city people to become not only owners but operators of orchards and has also extended the area of bearing trees into the city itself. In this way there has been insured a community interest usually lacking where the city man and the farmer are engaged in entirely different lines of activity. The practical bearing of this factor is well illustrated by the present labor situation in Wenatchee. Farm labor is scarce this season throughout the country. There is always some labor scarcity in a one-crop country at harvest time. But in spite of these facts and the added circumstances that this apple community beside the Columbia has given or will shortly have given nearly 800 of its young men to the national army, thus robbing it of much potential man power, the apples are being picked without more than the usual need for careful management. What makes this possible? The answer can be given in two words: community organization. Long before picking time came on, the Wenatchee Commercial club had gotten into touch with the federal employment department and the state harvesters' league, so that in case of emergency, labor reenforcements could be rushed to the district at any time. And perhaps even more effective than this was that constant and habitual good understanding between town and country, which makes it the most natural thing in the world that in times of stress the women and girls go out into the orchard and pick or pack beside their fathers and brothers and husbands. Certainly there is no better place in the world for the young people of the community to be. The crisp air and the golden sunshine of October, a glimpse of distant snow capped foothills and mountains through the dark green foliage of the apple trees, and perhaps the silent, blue-black current of a nearby irrigating ditch, all lend an atmosphere of enchantment to the prosaic work.

It is in these irrigating ditches that the real life blood of the valley flows. Without water, the soil becomes almost powder dry during the summer. It is for this reason that the real awakening of the Wenatchee country dates back to the year 1903, when a high-line canal was constructed by a company headed by W. T. Clark. The Wenatchee river, which is the source of the various canals of today, takes its rise high up in the foot hills, in the region of perpetual snow. Because of this potential source of almost unlimited irrigating water, the development of the orchard lands has been rapid.

The soil of the Wenatchee country is a volcanic ash, tremendously rich in these essentials of plant growth apt to be lacking. Potash and nitrogen in particular are found in abundance. Probably it was this native richness in plant food which led early orchardists into an error in the method of handling the soil which in recent years is being corrected. For many years it was supposed that soil so well supplied with all the elements, particularly nitrogen, needed no ammendments or additions to keep it up to the maximum of productivity. Now alfalfa is being grown in many orchards for the sake of the humus it will add. Without this practice, it was found that gradually the soil was becoming too compact, as the fiber or humus was exhausted. What used to be enthusiastically spoken of as "clean cultivation" is no longer regarded as the summum bonum in orchard management.

During this year of 1917 as never before, perhaps, the absolute dependence of a community on transportation, both internal and external, has been forced upon the growers. More and more the light team and ranch hack or lumber wagon are being replaced with the light or heavy motor truck, for hauling the apples from orchard to warehouse or shipping point. Soon, probably, there will be nothing but trucks, and the team and wagon will have gone to join the cayuse of yesterday. The problem of moving the fruit after it reaches the railroad station has become increasingly difficult of solution each year, until with the advent of the present season many growers are crying out for relief from what some of them regard as the mismanagement of the railroads. The crop of apples for this year will probably total about 7500 cars in the Wenatchee district. To move this tremendous tonnage, it has been found necessary to splice out the insufficient supply of "reefers," or refrigerator cars, with cars of various other types never designed for the conveyance of perishable commodities.



Local transportation is one of the problems of the orchardists in the Wenatchee district. The upper picture shows six and a half tons boxed apples on a motor truck. Trucks are coming more and more into favor among the growers.



Clean cultivation is no longer practiced by many growers as it tends to deplete the humus in the soil.

In conclusion, it may be interesting to note the growth in orchard area and in fruit trees during the last four decades. In 1873 the first orchard was set out by Miller brothers, the nursery stock having been obtained from Dr. Jewett of White Salmon. For 30 years, little more was done toward developing what was eventually to be the community's "money crop." With the completion of the high-line canal, in 1903, the present orcharding era really began, and by 1915, when the government took a tree consus, about 42,000 acres were in cultivation in the Wenatchee-North Central Washington district, with apple trees numbering 855,687 and 135,000 pear trees.

Supply of Hay

That the shortage of hay is not a condition which is so serious as might be expected appears from a recent trip taken by R. A. Blanchard, agriculturist of the Live Stock State bank of North Portland, to Washington points. Mr. Blanchard traveled through the Kittitas, Yakima and Columbia valleys. He said: "Alfalfa stacks were in prominence everywhere. I asked townspeople and bankers regarding the hay shortage and they assured me that from one-half to one-third of the hay had not been sold and a great number of the farmers were holding for higher prices."

Mr. Blanchard stated that about 70,000 tons were being shipped from Kittitas county over to the coast, the government being the largest buyer for the cantonment camps. While prices were soaring there seemed to be no real danger of a hay shortage, as the trouble appeared to be largely on account of the prices the farmers were asking.

Big Cattle Show

Entries at Portland High Class

In Shorthorn classes alone, 32 western herds will be shown at the Pacific International Live Stock show at Portland during the week of November 19, and a comparison of this number with the 38 herds shown at the Chicago International gives an idea of the size and importance of the Pacific International next month. Among the Shorthorn exhibitors are the following well known herds:

Oregon—Frank Brown, Carlton; W. O. Minor, Heppner; A. Chalmers, Forest Grove; J. B. Cornett & Son, Shedd; E. F. Anderson, Albany; W. J. Townley, Union; G. W. DeLay, Hot Lake; Richard Kiger, Corvallis; W. B. Ayer, Carlton; A. M. Harradon, Carlton; Perry Smith, Yamhill; E. H. Holloway, Albany; Oregon Agricultural college, Corvallis.

Washington—A. D. Dunn, Wapato; Day & Rothrock, Sprague; J. H. McCroskey & Son, Fishtrap; Joseph Turner, Meyers Falls; Alex Morrison, Valley; George Bertrand, Olequah; Washington State college, Pullman.

California—Hawkins & Son, Hollister; Alexander & Kellogg, Suisan; Carruthers Farm, Mayfield; H. M. Elberg, Woodland; T. J. Miller, Los Angeles; Thomas Harrison, Glen Ellen; University of California, Davis.

Montana—Childs & Anceny, Helena; H. L. Sommers, Bozeman.

Idaho—University of Idaho, Moscow.

Herefords.

The Hereford exhibit will be made up of eleven of the best herds in the west, among them being herds that have competed against the best in the United States and come out winner. These breeders have spared neither time nor money in building their herds to such a high standard that they win in the fastest competition and a rare treat is in store for the admirers of the "whitefaces." The following herds are entered:

Oregon—George Chandler & Son, Baker; W. P. Emery, Macleay; W. O. Huntley, Ontario; Oregon Agricultural college, Corvallis.

Idaho—L. L. Young, Nampa; Henry Thiessen, Sweetwater; University of Idaho.

Montana—A. B. Cook, Townsend; J. D. Miles, Livingston.

Washington—Washington State college.

Oregon, Washington and Idaho will have their best herds of Aberdeen Angus on display. Congdon & Battles will bring from their far-famed Yakima farm a herd that has won premier honors in all shows of the United States. A. H. Eagleson & Sons of Boise, Idaho, are sending a show lot that comes from one of the oldest established herds in the state. George Dickson, one of the foremost beef producers of Oregon, will also show a string of the "Doddies" from central Oregon.

Home Made of Dirt

By Ray W. Felton.

Patience and perseverance will accomplishe wonders. In the case of C. W. McCormick and his son Henry McCormick, of the Naches valley, these two virtues provided them with a splendid home, one of the most substantial in all the valleys of the Yakima. Years ago, when the McCormicks first settled in the Naches, sawed lumber was very scarce and consequently very expensive. The McCormicks wanted a house better than that which they were living in, so Mr. McCormick decided to use the material most plentiful and most easy of access. That happened to be dirt. Yakima valley dirt had not acquired the value in those days which it now possesses. Mr. McCormick was an old time brick maker and he found by testing that the soil on their farm would bake readily and that an excellent grade of building brick could be produced. He secured a small mould and by making three bricks at a time managed to produce, with the assistance of his son Henry, 100,000 brick during the summer, enough to build the eight room dwelling which forms the center of the very attractive grounds on the McCormick ranch.

Henry McCormick, prominent in grange circles of Washington, recalled the brickmaking experience the other day. He was the "offbearer."

"It was a back-breaking summer," remarked the younger McCormick. "We tried to get several of the neighbor boys to help, but they didn't stick, so it fell to father and me to mould and burn those bricks, three at a time until we had enough to build the house."

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Have You Well Seasoned Plans?

What are your well seasoned plans? What has your farming experience taught you? What have you learned from others that you have found useful in your own conditions? How much of what you have read have you tried out, holding fast to that which is good?

Haphazard farming is no better than haphazard teaching in the schools or the haphazard practicing of law in the courts or the haphazard trading in the stores. All this haphazard work may result in fool's luck now and then, but is no sure foundation of prosperous farming year in and year out.

What are your seasoned plans for the coming year of our Lord 1918?

It is well to try experiments on a small scale, to listen to all sorts of advice, and on the same small scale adopt any fragments of that advice which seems the most likely to succeed, but your enduring success as a farmer, like enduring success of men in other vocations, depends upon plans which have been tried and not found wanting, methods which have proved themselves valuable through years of experience.

These seasoned plans you should cherish as the most valuable of all your farm knowledge.

Two Hogs on Every Farm

A food production slogan has been started: "Two hogs on every farm."

There is great need for the production of more pork and bacon and lard, and the farmers should make genuine attempts to increase the number of hogs in the country. To assure an increase, the food administration has taken official action committing the government to the policy of guaranteeing about $15.50 a hundred pounds for pork on the basis of the Chicago market. Owing to different classes of hogs and different localities where they are produced with reference to their reaching the consumer, it is difficult to establish an ironclad price for them. But the government has definitely declared that it will assure fair play to the farmer who will endeavor to help win the war by growing hogs.

Whether the slogan of two hogs on every farm is a good one is questionable. But the slogan of "More hogs" on the farms certainly is warranted. The farmer should use good judgment. Perhaps he should not try to raise even one porker, or perhaps he should raise twenty. It depends on his farm conditions. It might mean actual loss if he tried pork production instead of something for which his farm and his own knowledge were more suited. In hog raising, like everything else he should study conditions and act on well-thought-out plans. But in comparatively few cases should wholesale hog raising be tried out on the farms today. Only a few farms are prepared for hog raising on a large scale. Only a few farmers are educated along hog raising lines sufficiently to jump suddenly into the business. Most farmers should be content with one breed sow and her litter. Some should be content with only one pig to eat the waste.

Relief to Apple Growers

The distress among apple growers due to shortage of cars in which to ship their fruit may soon be relieved. The government has taken cognizance of the situation and has promised cars as rapidly as they can be secured and hauled into the northwest, without handicapping even more vital transportation. The announcement indicates refrigerator cars will be requisitioned from other traffic where the produce or manufactured goods is less perishable than apples. At all times the government has made it clear that the apple crop was, in its opinion, a vital food essential, and that no losses should be allowed to occur that could reasonably be prevented. With the government forced into channels of regulation and paternalistic activities that have heretofore been unheard of in this country, it is gratifying that it should make this special effort in behalf of the apple industry. And, while it is vitally essential that the crop be protected from losses wherever possible, the producers should refrain from impatience with the government. It is doing its utmost to handle a maze of difficult situations, of which the apple transportation problem is only one.

Corn for Stock Feeding Needs

When, several weeks ago, the desirability of shipping in corn for stock feeding needs in the Inland Empire was pointed out by the Farmer at an agricultural meeting held in Spokane, the suggestion was made light of in some quarters. "Why corn is selling for more than wheat," said one objector, "and it is ridiculous to think that it can be profitably shipped to the Pacific northwest."

But it was further pointed out that while that was true of old corn, a very different situation would appear with the harvesting of the new crop—the greatest in the history of the country.

One can now contract at Missouri river points for all the corn he wants at around $1.15 a bushel, December delivery; and contracts can be had for even cheaper corn for May delivery. The freight rate from Missouri river points is 28 cents a bushel, and even if we add five cents a bushel for handling charges, corn could be laid down here for $1.48 a bushel.

The Farmer is reliably informed that the Equity association in Montana, a cooperative farmers' organization, has already contracted for large supplies of Missouri river valley corn, which it will bring out in December and distribute to its members at cost.

The Spokane Chronicle reports:

> A considerable movement of shelled corn from the corn belt to the Pacific northwest is planned to overcome the shortage of grain in this territory for feed for live stock, according to Professor G. R. Hyslop of the Oregon Agricultural college.
>
> It will be shipped in bulk, and will carry considerable moisture, especially that delivered in December and early January. It will be standardized under the federal grades, most of the western receipts being that known as No. 3 mixed.

There will be a double advantage in feeding corn. It can be had at a price considerably below that of wheat, and it will save the wheat for shipment to our allies in Europe.

The Farmer renews its advice that granges, farmers' unions and other cooperative bodies take prompt steps to investigate the large possibilities of this movement. No step should be omitted that will tend to foster the endangered live stock industry in the Pacific northwest.

A Little Disappointing

The national food administration admits that it is a little disappointed that about half the families of the United States refused or neglected to sign the food saving cards during the recent food pledge week. "We hope to have so many of these window cars displayed in the homes of the land that the absence of one rather than its presence will be noticeable." said one state food administrator. "It ought to be that the lack of one of these window cards would be taken almost as a sign of disloyalty to country."

Many families did not sign the cards pledging themselves to "Hooverize" because they had no opportunity to do so. Many signed them who are not making any added attempt to save wheat, meat, fats and sugar. Many who did not sign them are really saving in accordance with the desires of the food administration. It is not always the signer who saves. But in this case, the entire nation should display a united front. Every name in America should be on the food conservation roll. Every home should have a card displayed to say to the world, both friend and foe: "We are enlisted in the service of our country. We can't fight in the trenches, but we can feed those who can fight. We are living well, but we are saving the foods the soldiers must have."

Washington Gleanings

Yakima's $1,000,000 sugar factory began operations recently.

John Tuhill, who put in 30 acres of beans on Mr. Dunning's place near Dayton, raised a $1900 crop, which is over $60 per acre.

The Yakima valley potato crop is estimated at 85 per cent of normal by County Agriculturist Price. Twelve thousand acres are in potatoes.

The total oats yield for Skagit county this year approximates 600,000 sacks or 1,800,000 bushels. Skagit county farmers will receive about $1,500,000 for this season's crop.

Land Commissioner Clark V. Savidge announces that the next sale of state lands will be on the first Tuesday in February, 1918, and that it promises to be a record-breaker.

The business men of Leavenworth closed up their offices and stores one day recently and everybody went to the orchards in the vicinity of Peshastin where they helped to harvest the apple crop.

The Thurston County Poultry and Pet Stock association will hold its annual show this year in Olympia from November 20 to 24. The show will consist of two departments, one for poultry and one for rabbits and hares.

The Wenatchee valley exchange recently shipped a car of Acme brand Winesap apples to Shanghai and one to Hongkong, China, from its Cashmere warehouse, and one from its Dryden plant to Manila, of Acme brand Winesaps.

Dates for the annual irrigation institute, at which the irrigationists of the state meet to discuss their common problems, have been fixed for December 10 and 11. The session may be held in North Yakima instead of Wenatchee.

What Others Say

National Stockman and Farmer: There may be some who will believe that a dealer can ignore cleaning and sterilizing and still deliver sweet milk, but we are not among them.

Dakota Farmer: Oleomargarine is making desperate efforts to get in as butter—a plain fraud. Let it be sold in its natural color and on its own merits and not be palmed off as butter.

Rural New Yorker: There will be greater demands than ever for gardens next year, and good seed represents both promise and performance. The early bird this year stands the best chance of catching the seed.

Farmer and Stockman: The trouble all too many city folks make is in not explaining the needs plainly enough to the men and women of the country whose aid they wish. They seem to think that all they have to do is to ask for charity and it will be forthcoming. This is a grevous mistake. We have systematized our charitable work nowadays, eliminating the unworthy and the unscrupulous. An appeal which can not be explained and its merit proved, so that all will understand, is not worth heeding. But whenever a worthy cause is made plain to the folks of the country the response is immediate and generous to the limit of ability.

Training of the Live Stock Judge

First Essential in Acquiring Skill Is in the Learning to See

By E. J. IDDINGS

Apprenticeship was the old system of training for a profession. The lawyer, the physician, the mechanic worked for a certain number of years under men of acknowledged ability and in time came to be recognized for ability and skill in that particular line.

A somewhat similar process was necessary to make the expert judge of live stock. After years of experience and some success in caring for, breeding and developing farm animals, there came, by common consent, the well deserved

Recognition of Judge.

There are hundreds today who do not have, and who do not seem to be able to secure the advantages of live stock apprenticeship. Some of these people are youngsters; others are quite a bit past the age of youth. They hope, however, to secure information concerning market and various breed standards and requirements and wish to acquire skill in accurately estimating the comparative merits of farm animals. Such are the students of animal husbandry in our colleges, the regular attendants upon agricultural short courses and the earnest readers of information upon live stock judging found in the agricultural press.

The first essential in acquiring skill in live stock judging is in learning to see the amateur and superficial examiner of an animal perceives only the dim outlines of animal form. His final opinion depends largely as to whether or not his hasty "looking over," which often means "overlooking" both points of merit and defects, has or has not left on him a pleasant impression. The impulsive and the inaccurate judge is hasty as a rule, not dependable.

In passing accurate judgment there must be examination not only of the general form or outline, but of details of structure as well. In the horse, for example, the width of the forehead, eye, throat latch, set of shoulder, muscles of the back, loin, croup, forearm and gaskin, set of knees, pasterns, hocks, feet and possible unsoundnesses of many kinds. These, with many more, must receive attention if the final opinion or judgment is to have value. To acquire proficiency in making accurate estimates of animals requires:

Time.
Long practice.
Systematic and careful examination.
Exercise of level headedness in balancing various points of excellence, as well as defects, in passing final judgment.

In calling attention to the many details that enter into the complete make-up of the animal, to show something of the relative importance of the various points and to show the necessity of detailed examination is the function of the score card as used in the first instruction in stock judging.

After one has details of animal form well in mind it becomes natural for him to examine every farmer, even the most minute, and such examination is quickly made by the expert and experienced judge. In the passing of a horse or a cow before groups of people the capable and experienced judge of live stock will see numerous things that others do not see because "the others" do not know where to look or what to look for.

Score-Card Judging.

The study and practice of score-card judging gives the inexperienced a proper understanding of the importance of close and detailed examination and an idea of the relative weights and importance to be ascribed to the various parts of the animal makeup. Once this is understood the score card is no longer used in practice. The capable judge carries an ideal of type for the fat hog, the steer, the Percheron horse, the Shorthorn, the Cotswold, etc., through all the various market classes and grades of animals and the large number of widely differing breed types. With this ideal animal the judge unconsciously measures or compares each animal upon which he passes judgment. After initial work of the kind mentioned all judging, therefore, becomes a comparative rating of animals. In

(Continued on following page.)



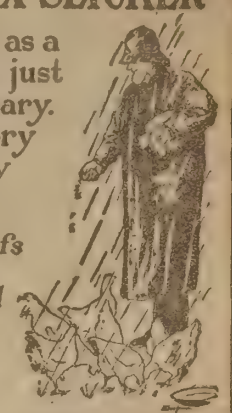
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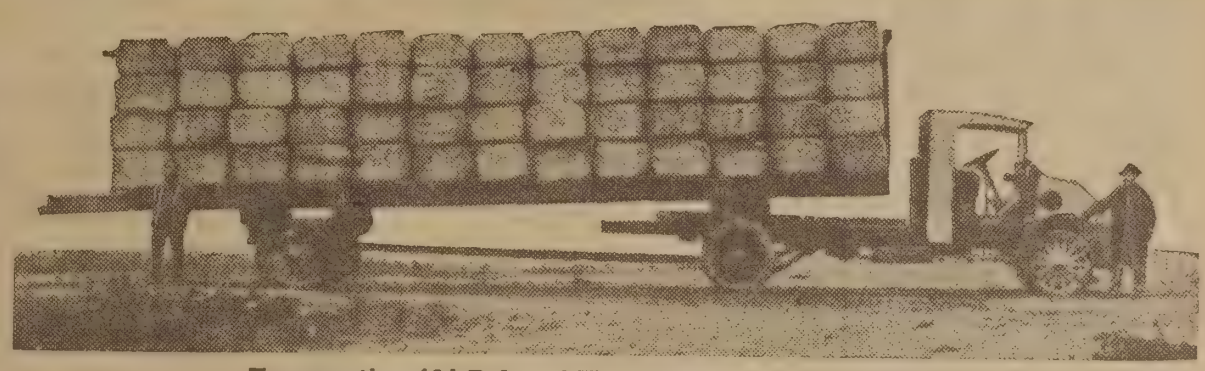
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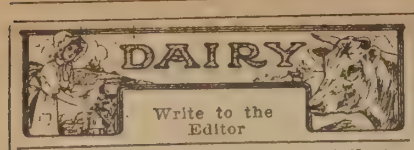
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A. B. NYSTROM, Editorial Contributor

WATERING THE COWS.
Warm Water Conserves Energy.

Almost any dairyman knows that his milch cows must have warm quarters in which to eat and sleep and chew their cuds and digest their food. Frequently, however, failure of cows to produce a profit on their keep is due to failure on the part of the owner to provide such comfortable quarters.

Another very common failure on the part of the dairyman, according to some good authorities, is in the matter of watering. Cows are heavy drinkers—if they are good milkers. They consume at one drinking some times several gallons of water. On a winter day it is no uncommon thing to see a sensitive dairy cow stand and shiver after drinking her fill of cold water from a trough that perhaps has ice around the edges.

There can be no gainsaying that this results in a very real loss of energy; of energy that should go to the production of milk and butter. Hence, those who argue in favor of warming the water that the cows drink appear to have good ground for their claims.

It is generally advocated that water be not below 70 degrees in temperature for the milking cow, and it is claimed that they readily learn to appreciate the warm water and drink freely of it. There is declared also to be less danger from the effects of chill. Especially is this true of cows that for any reason are delicate in health. It is urged that cows that are just about to come fresh, or that have recently freshened, should never be allowed to drink heavily of cold water. There is less danger if warm water is given them to assure them against the injurious effects of sudden drop in temperature which would result if their bodies were required to warm a few gallons of water from near the freezing point.

Training the Stock Judge

(Continued from preceding page.)

passing upon a single animal this animal is compared with the "right kind" the judge has in his mind as his ideal. In passing upon a group of animals the top or first is picked in comparison with the "right sort" mentioned above and all others are rated accordingly.

In passing it may be remarked that except as an ideal kept in mind the animal exactly right in every way has not existed, does not now exist and in all probability never will exist. Nature and man working together in animal breeding get the animal only approximately near to an ideal standard. Long years and patient, intelligent effort by master minds among animal breeders have brought our pure-bred animals of today and made them a vast improvement, so far as adaptation to man's needs is concerned, over the forms from which they have been developed.

The Best Judges.

Careful reading of literature on types and breeds and judging and study of animals in connection; obtaining of help from experienced live stock men; attendance upon animal husbandry short courses and other live stock extension work; attendance at shows and study of the animals exhibited there and of the work of the official judge; years of live stock apprenticeship with good herds; attendance at an agricultural college, thereby getting systematic training and some valuable experience; by one or several of these means a man may acquire skill in live stock judging. Our best judges of today have been produced by live stock apprenticeship and practical experience in working with and managing herds, by college training or by a combination of both.

One may be a judge of but one kind of animal, as fat hogs, steers, Hereford cattle, or any one of numerous other breeds and types. Some judges are recognized as capable to pass judgment upon several different breeds or kinds. As a rule a judge who is more generally trained has a specialty of one or two kinds of animals in passing upon which he is at his best.

If the several other means here mentioned are not available for the many there is the comparatively inexpensive college or winter short course training in live stock judging, recognized today as effective, with capable men as instructors and excellent herds upon which to practice.

Certainly it is a very great satisfaction to know even the rudiments of live stock judging and one really desirous of acquiring training and experience can certainly have his desires gratified by one or more of the methods suggested. More capable judges of live stock in Idaho and contiguous states will mean for more good live stock and greater progress in upbuilding the flocks and herds of the northwest.

Food Questions

The two following questions were answered by the Oregon Agricultural college experts:

Where can beet pulp, as well as molasses for feeding, be obtained, and especially what is the value of molasses for feed?

There is a sugar beet factory at Grants Pass, but their entire output is taken up by the growers. There are several other plants in the northwest with limited outputs of pulp. The largest company selling pulp is in California, and reports are that the supply is short. Molasses for feed can be secured in drums or barrels in Portland. It will make clover straw more palatable, but such a combination calls for some other feeds high in protein for dairy cows. The common way to add the molasses to the straw is to dilute the molasses to the ratio of a pint of the molasses to a pail of water and pour it over the straw. Animals should become used to the molasses gradually.

Is soy bean meal better than oil meal for feed, and what are the relative values of shorts, barley, beet pulp and turnips?

Soy bean meal is slightly higher in digestible nutriments than is oil meal. When fed in large quantities soy bean meal has a tendency to make soft butter. Cocoanut meal or cottonseed meal have a tendency to harden butter. Oil meal is slightly laxative and cooling. A large variety of feeds is recommended.

Shorts are heavy and should be fed in combination with bulkier feeds. Shorts have a slightly higher feed value than bran, but are less palatable.

Barley is ranked next to oats as a feed for dairy cows. It should be rolled, as should oats.

Beet pulp makes a very good substitute for silage where the latter is not available. From a feeding value the cost must be considered in preparing a ration.

Turnips make a good, succulent feed but taint the milk, so it is advisable to feed turnips immediately after milking.

Clallam County Report.

During the month of September a total of 498 Clallam county (Washington) cows were tested. These cows averaged for the month 594 pounds of milk and 27.89 pounds of butterfat. One hundred and eighty-five cows produced over 30 pounds of fat for the month, according to the report of E. O. Leonard, official tester.

The high herd honors for the month go to Fred Edgington. His herd of 14 cows averaged 706 pounds of milk and 35.54 pounds of butterfat for the 30 days. Jim Belfield's herd of 31 cows average 677 pounds of milk with 34.69 pounds of butterfat. Ed Pettit's herd of 12 cows averaged 606 pounds of milk and 43.35 pounds of butterfat. Fred Willis' herd of eight cows averaged 541 pounds of milk and 33.24 pounds of butterfat. Ben Emerson's herd of four cows averaged 765 pounds of milk and 32.96 pounds of butterfat.

Results of Test.

Hollywood farm has reported the following records to Superintendent Gardner in the last few days:

Hollywood Lilith Mercena, No. 278,-103, a junior 3-year-old daughter of Hollywood Lilith Palmyra, No. 118,678, and Hollywood Mercena, a 28.44 pounds Hollywood heifer, has just completed a 33.44 pounds seven-day record from 5331.6 pounds milk showing a 5.032 per cent butterfat test. This record places her fifth highest in her class, according to volume No. 26 of the Advanced Registry.

Second Annual Combination
40 Pure Bred Swine Sale 40
North Portland, Oregon, Tuesday, Nov. 20, 1917

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If in the market for service boars, bred or open sows or gilts of Poland China, Duroc or O. I. C. swine, come to this sale or write for catalogue to

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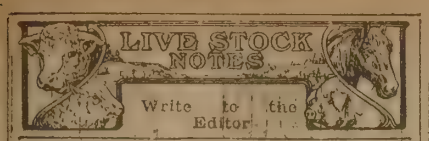
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E. J. IDDINGS, Editorial Contributor.

Frozen, Moldy Straw

By R. A. BLANCHARD.

With the shortage of hay comes an increased use of straw and feeders will do well to be cautioned on troubles that are likely to arise from poisoning of stock. Already one case has come to notice and more will perhaps develop as the cold weather advances. The cause of the disease is from a fungus which appears to be most prevalent in hay that has become frozen or moldy. The writer has seen 10 head killed outright in Montana by eating the little clumps of frozen and moldy straw and apparently had developed an appetite for it. There is no definite cure and stock men who are apprised of the danger will do well to prevent the occurrence of this by fencing the stack and feeding it out or by removing all decayed, frozen or moldy portions.

Dr. Luce of the Idaho experiment station recommends giving a purgative to all the animals regardless of whether they show symptoms or not; of those animals attacked, refuse feed for 24 hours. This is to be followed by giving either one quart of raw linseed oil or one ounce powdered aloies or any reliable aloine cathartic ball. This can be repeated every day if there is no action. Like all other maladies affecting stock the prevention is by far the cheapest.

World Live Stock Conditions.

The University of Oregon school of commerce is making a study of live stock conditions in all parts of the world, with a view of determining the probable status of this industry after the war.

Official figures have just been received from the Netherlands showing that while the number of cattle and sheep have increased, the number of swine has decreased. When the last census was taken in March and April of this year the number of cattle of all kinds and ages was 2,205,132. In 1910 it was 2,026,943, a gain of 13.5 per cent.

The number of sheep this year was 520,235; in 1915, 482,022, a gain of 7.7 per cent.

The number of swine this year was 1,185,438, compared to 1,259,844 in 1910, a loss of 9.9 per cent.

The price of a cow not giving milk and sold for slaughter in Holland is now from $50 to $115; of a calf for veal, from $13 to $35. A good milk cow sells for about $125. The latter figure is a decline of $40 or $50 in comparison with the prices prevailing a few months ago and is due to the scarcity of fodder. There is serious talk of slaughtering or exporting several hundred thousand cattle because of inability to feed them sufficiently.

Veterinary

Dr. S. B. Nelson

Ringbone.—I bought a 10-year old pony this spring. She was all right at that time, but now shows signs of ringbone. I do not know how long she has had it. Also is it true that the government is going to put the price of hogs down to 10 cents? A. O. A.

Your pony with the ringbone may be helped by only two things: First, blister it thoroughly. Second is to fire and blister both. The latter is the better treatment. If there is any chance for her to recover she will recover under the latter treatment. You should have the services of a veterinarian for this operation. I am not advised regarding the government action regarding the price of hogs. I hardly think so, as there is quite a shortage in hogs, and we need the food.

Wound Does Not Heal—Two weeks ago one of my cows bloated badly on alfalfa and I was obliged to use a trocar to save her life. The opening I made shows no signs of healing yet, and when she moves about the gas or air blows back and forth through the hole and keeps the edges of the wound dry. There also seems to be a lot of air between her hide and her body. She does not eat very well, and seems to be very stiff in her movements.

G. H. L., Omak, Wash.

Judging from the above letter I would be of the opinion that the portion of the contents of the rumen went down between the stomach and the abdominal wall, and is forming an abscess that will come to a head at the lower part of the abdomen somewhere near the udder. I would suggest to you that you take a knife and scrape the edge of the wound that you made with the trocar and bring the wound together with a stitch, using possibly the boiled very heavy silk for this purpose. That may give it a chance to heal. In order that the load may be lightened, cut down her feed considerably. If, as I suppose it will, this forms an abscess at the lower part of the body that will have to be treated specifically. First, it will have to be opened by a good free incision and then the abscess washed out with a 2 per cent solution of any coal-tar disinfectant that you may happen to have. After this, it should be washed out daily so as to allow it to heal from the top.

Fail in Breeding—We have a free range law here, but some of the people have no fences and when the cattle come their way they are beaten and driven away. I have several cows that I can not get with calf. Is this the cause?

F. H. W., Harmony, Wash.

Constant abuse of animals may, of course, cause them to fail in breeding. That is a well-known condition. I doubt, however, where animals run free on the range that they can be subjected to a sufficient abuse which would cause the trouble that you mention. I am rather of the opinion that there is some internal specific reason for the same. There are three or four things that would cause this trouble. Some of these can only be remedied by the services of a man especially trained to recognize them and to perform the operation necessary for the treatment. The others sometimes yield to medical treatment, and for that reason I am going to suggest two treatments for you to try. You can try one first, and then the other if the first one fails.

The first is the easiest treatment. Put a cake of yeast in a quart of lukewarm water and place this on the back of the stove an allow it to ferment. Use this as a vaginal injection the first and second day prior to breeding.

The second treatment is known as the sodium bicarbonate treatment. Put a teaspoonful of sodium bicarbonate into a quart of lukewarm water, or rather warmer than luke warm, and wash out the vagina with this solution two or three days prior to breeding the animals.

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From cows with official records of 914 and 663 lbs. butter in a year. Prices in proportion to production and quality.

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724 Pounds Butter

and 11,076 pounds milk is the record the dam of a bull calf dropped Sept. 1, 1917. The sire, Dominus, is out of an 817-lb. cow and sired by a bull out of an 853-lb. cow. PRICE $125 for quick sale.

J. B. STUMP & SON, Monmouth, Ore.

Two Bulls Ready for Service

Sired by St. Mawes Golden Poppy, whose dam has official record of 1120 lbs. butter in a year. Good individuals. Only $100 Each.

F. E. LYNN. Perrydale.

Every Cow a Record

Fifty per cent of our cows that have dropped more than one calf have records above 700 lbs. butter, 85 per cent fat. Golden Glow's Chief and Adelaide of Beechlands blood predominates. Special prices on bull calves under 9 months old.

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Green Meadows Farm Jerseys

Young bull out of dam on official test making good record. Sire a grandson of Goldon Glow's Chief, out of dam with official test of over 700 lbs. butter in a year. Other bull calves from register of merit dams. Also cows and heifers.

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Young stock whose dams or granddams in my herd have won gold medals from the A. J. C. C.

JOHN H. TAYLOR, Montesano, Wash. Box 426.

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Young stock of both sexes from dams on official test.

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at Oregon State Fair. Junior championship and other prizes; only five shown. For nine months my herd has had highest record in Marion County Cow Testing Ass'n. Lowest records since June, 470 lbs. butter as senior yearling in 10 months. Other two lowest, over 600 as 2-year-olds.

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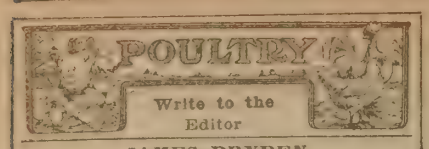
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JAMES DRYDEN
Editorial Contributor

Meat Breeds Wanted

The war is forcing greater attention to the meat qualities of the fowls. The Plymouth Rock and breeds of that size are to be more in demand as long as the meat shortage exists, and that will likely be for a number of years to come. One result of the food campaign and the high prices will be that the consumer will study the chicken a little more when purchasing. When paying 25 and 30 cents a pound she will buy the one that has a large proportion of meat and a relatively small proportion of bone and waste. That is food conservation. This will be a blow to the Leghorn. As the price of meat rises and the premium on the meat chicken increases the tendency will be for farmers and many poultry keepers to keep a larger chicken.

The markets are now discriminating against the Leghorn. In the Portland markets a five or six pound hen sells for two cents a pound more than a three-pound Leghorn. That means that the Plymouth Rock is worth 50 or 60 cents more than the Leghorn. The Wyandottes and Rhode Island Reds are in the same class as the Rocks, and when I speak of the Leghorn I mean that they represent many small breeds which need not be mentioned.

In deciding on a breed, therefore, if in doubt, choose the larger breed, at least during the continuation of the meat shortage. It will be in the line of patriotism. If careful in the selection, the larger breed may lay as well as the smaller. At present prices of feed and meat it will not pay to use the very large breeds. The farmer will do well to keep close to the general purpose type in chickens. There is no discounting the Leghorn for egg production, but in the present emergency they hardly fill the bill. Poultrymen, however, who have good flocks of Leghorns should not dispose of them, for more eggs are needed and there is profit in them. J. D.

Save the Poultry

Americans are not all conducting their business wholly for their own private gain in these strenuous days. Many industries are being federalized or put under some federal supervision. And there is no complaint. The people understand that in times like these the necessities of the nation are supreme.

The poultryman can serve the nation by keeping poultry, probably as much as by buying a Liberty bond. And he should not shirk the possibility of a slight loss for a time, if need be, because the nation and the soldiers need poultry meat and eggs. There is no danger, however, of a loss if the poultryman will study methods and keep a flock of good layers. A flock of good layers will make more money now than before the war. I said good layers. Poor layers will make a greater loss now than before the war. If it should happen that there will be little or no profit, the poultryman should not send his flock to the market forthwith, for two reasons, first the country needs more eggs and poultry, and it is every man's patriotic duty to help the country in the hour of need; and second, the profit will be better later on.

Potatoes and beans will not take the place of meat foods for the soldiers, or for the civilians, and farmers must produce meat to win the war just as much as buy Liberty bonds.

The farmer really has a tremendous responsibility, and he is not going to show his patriotism by the per cent profit he can make on his labor.

If the profit on keeping poultry at the present time is small, and it is not small under proper methods, later on when the war is over there is likely to be more prosperity for the poultrykeeper than he has ever before seen. The price of feed will take an immediate slump, but the prices of poultry and eggs will keep at a high figure for several years after because of the smaller number of poultry on the farms. It will take two or three years to replenish the stock. Poultry keeping has been wiped out in some of the European countries and greatly reduced in others, and there should be a great export demand for eggs across the water. There is considerable export demand now, but on account of a lack of shipping space, the exports are not heavy. That is the only thing that is keeping the price of eggs below $1 a dozen.

No good laying hens should be marketed. It is almost criminal to send good laying pullets to market. The slackers should be killed off—those old hens that have lost their teeth, and those others that stopped laying early in the summer to molt. Keep for another year those that continue to lay late in the fall. How to select was explained in a former article. If the hens don't lay, don't kill them off before you know whether they have been fed right. It is some times the fault of the feeder.

The country wants more eggs and poultry meat. J. D.

Eggs at $1 a Dozen.

Eggs will be selling for $1 a dozen in Newfoundland this year, according to information just received by the University of Oregon's school of commerce. This price prediction was made at the recent special meeting of the Newfoundland Poultry association, and is based on the advance of the cost of feed. Members of the association point out that feed which sold last year at $2 a sack is now bringing from $4 to $5 a sack. Most of the eggs consumed in Newfoundland are imported from Canada and the United States, and the supply at present is limited. They are retailing now at 65 cents a dozen. Imported poultry dressed is selling at 45 cents a pound, and the local product, which lacks the weight and flavor of the imported, at a few cents less.

Sidelights

The Only Way.

Food Administrator Hoover said in Washington during the filibuster against the food-control bill:

"We must control food or flour will rise to $20 a barrel and meat to 50 cents a pound.

"Why, look at prices already!

"I said to a haggard family man the other day:

"'See here, Jones, you'll ruin your health if you work all day on your books in the city and then go out and do night work on other men's books all the evening. My boy, you're burning the candle at both ends.'

"'I got to, Mr. Hoover,' said Jones. 'It's the only way to make both ends meet.'"—Philadelphia Bulletin.

Efficiency in Embryo.

The acumen of Julius Rosenwald, who subscribed $2,000,000 to the Liberty loan, led a Chicagoan to say:

"It was impossible to overreach Rosenwald, even when he was a boy.

"One summer day, when a boy, he delivered some eggs to a druggist for egg phosphate and such like drinks. The druggist counted the eggs, and there was one egg over. Julius demanded it back, but the druggist said:

"'No, I'll keep it, and you can have a drink at the fountain.'

"'All right,' said the boy.

"'Now, then,' said the druggist, 'what'll you have?'

"'Egg phosphate,' said Julius."—Philadelphia Bulletin.

Surf Coasting.

The sport of surf coasting reached this country from Hawaii and promises in a few years to become a popular sport. In California it was much practiced this past summer, while a few surf boards might be seen on the New York beaches. American manufacturers have put on the market a special surf board which is a considerable improvement over the plank used by the Hawaiians, having an air chamber at one end. All we lack now is the Hawaiian skill in riding the big breakers standing up.—Exchange.

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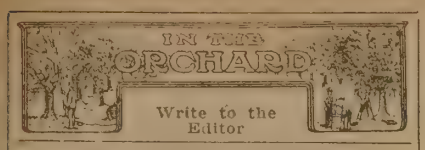
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GRANVILLE LOWTHER
Editorial Contributor

The Speculators

It is clear to any one who thinks, that the tendency is now to give the producer a fair profit for his labor, cut out the gambler and speculator, and reduce the cost of food to the consumer. There is a class of gentlemen, who never produce a dollar in values, yet manage to get hold of the necessities of life in such quantities as to control prices and the consuming public is robbed of millions that go annually into the pockets of these parasites. These gamblers in human labor, toil, sweat and destiny, generally find ways to bear the markets during the harvest periods and to bull them after they have gotten possession of the commodities. This is the bear period for apples. The farmers, many of them have no storage, cannot hold the crop and must sell. When the crop is all out of the hands of these producers, and into the hands of the speculators, then the prices are boosted. The producer has not benefitted, and the consumer is robbed.

The war is teaching us the lessons we have needed and shown us the folly of supporting in luxury an army of men and their families, who are non-producers, never add a dollar to commercial or productive values, and yet live in a luxury some of the kings and queens of Europe would be proud of. We are cutting out the liquor business as a war necessity, because we think we can not afford to manufacture a billion dollars of food values annually into alcohol. We must now abolish all needless and unproductive toil, and dispose of the classes that do not toil.

G. L.

Diseases of Roses

I have received a letter from Mrs. John Garver, Oakley, Idaho, which reads in part, as follows: "Will you tell me what to do for my roses, 'Baby Ramblers?' They have a white mold or mildew on all the leaves, and then curl up and do not grow."

In reply, I would say that it is a little hazardous to diagnose a case without seeing it. Even then some times doctors make mistakes so I am told. However, according to your description, I am almost certain the disease is powdery mildew.

Powdery mildew attacks a great many varieties of plants, and is especially prominent on apples and roses. It usually attacks the tips of actively growing branches, but may occur in spots on the under side of mature leaves.

The disease is a fungus, a very small vegetable, feeding on other organisms and destitute of chlorophyl, or green coloring matter. It develops mainly as a covering on the surface of the growing twigs and leaves and sends feeding threads, which, in larger plants would be called roots, into the outside cells, and from these cells extract their food, much as a larger plant extracts its food from the earth. The leaves present a wilted appearance and are smaller than the normal, because the food is being absorbed and the leaves injured by th emold.

The fungus hibernates and is carried over winter on the affected twigs.

Remedy.

Just before the buds open in the spring, spray with atomic sulphur, 7 pounds to 50 gallons of water. Spray thoroughly.

G. L.

Codling Moth Again

I have received a letter from Mrs. O. L. Pickett, Palouse, Wash., in regard to the large percentage of codling moth this year. Mrs. Pickett writes a very appreciative letter and since I have made it a rule to publish all the unfavorable criticisms, except from one writer whose language would not do to print, I may be excused if I print the favorable criticisms.

Mrs. Pickett says: "I am glad to see in a recently published number of the Farmer, a contribution on the unusual number of codling moths affecting the apples this season. You are in a position to investigate the matttr, while we are not. A third or more of the crop of 1917 was ruined by worms, especially Jonathans and Baldwins. We sprayed three times and the same kind of spray was used on our's as on our neighbors. All the same, one of them suffered as we did and that one has mostly Winesaps and Spitzenburgs.

"I think you can do no better service for the orchard industry than to sift this matter to the very bottom. I thank you for the very excellent things I have learned from your department.

"MRS. O. L. PICKETT."

The best we can do through life is to learn all the helpful things we can, practice them and pass them on to others. Any thing I may learn in this department I will gladly publish, and it is a pleasure to know they are appreciated.

G. L.

Orchard Mites

How the Pest Practices Thrift

An orchard mite that practices thrift by isolating its food source with an enveloping web that it spins about the entire trees, has appeared in three Oregon and one Washington districts. Afterward it falls upon the leaves which, under its attack, turn yellow and fall to the ground. It lives in an active state through the winter, wrapped in a protective covering of web. The lime-sulphur spray, two applications at a 1-12 strength just after the leaves drop and again just before they break out in the spring, will control it, says A. L. Lovett, the Oregon agricultural college entomologist.

British Columbia Contest.

The final report of the sixth international egg-laying contest, held under the auspices of the provincial department of agriculture at Victoria, October 6, 1916, to October 4, 1917, shows the following prize-winners in the two classes:

Class 1—Light Weights.

J. O. M. Thackeray, Chilliwack, B. C., White Leghorns, 1193 eggs, first prize $100.

Horace Dryden, Corvallis, Ore., White Leghorns, 1064 eggs, second prize $50.

G. O. Pooley, Duncan, B. C., White Leghorns, 1061 eggs, third prize $25.

Graves & McCulloch, Saturna island, B. C., White Leghorns, 1046 eggs, fourth prize $10.

Class II—Heavy Weights.

Dean Bros., Keating, B. C., White Wyandottes, 1188 eggs, first prize $100.

E. D. Read, Duncan, B. C., White Wyandottes, 1174 eggs, second prize $50.

F. W. Frederick, Phoenix, B. C., Rhode Island Whites, 1095 eggs, third prize $25.

G. D. Adams, Victoria, B. C., White Wyandottes, 1087 eggs, fourth prize $10.

The Perfect Bull Terrier.

The modern bull terrier is the result of very careful and intensive breeding. It is now a well-defined type and has lost almost all the characteristics of its ancestor, the bulldog. It must be pure white, except for the nose and eyes, which must be black. Any other marks, while they do not disqualify in the show ring, are considered undesirable.

Disposing of Culls.

This year there has been a market for cull fruits at prices larger than I have ever known for stock of that grade. Canneries, evaporators and vinegar factories are taking about all that class of stuff and paying from $6 to $8 a ton. This is not profitable, if the whole crop had to be disposed of at those prices, but it is better than to allow it to waste, because it is a profit above what it costs to load it and haul it to market. The evaporators are making a good profit, because they have large contracts from the government. The vinegar factories say they are disposing of all their stock at profitable prices and the canneries are doing a good business. This as compared with former years is "food conservation," for ordinarily most of this stuff is wasted.

G. L.

Admit Women Students.

The Harvard university medical school opens its doors to women.

Using More Potato Flour.

Use of potato flour in England is growing more general, according to reports received by the University of Oregon school of commerce. The successful substitution of potato flour in place of flour made from cereals, has caused a general investigation of the possibilities of making similar substitutions in this country. The British food controller recently authorized the addition of one pound of potatoes for every seven pounds of flour in the manufacture of bread. Obviously this will release one-eighth of the cereal flour that otherwise would be necessary.

A new market for potatoes may be opened up if the demand for potato meal as a substitute continues.

The Bait.

"I wonder what they bait with to catch swordfish."

"Army worms, I suppose." — Boston Transcript.

Your Country Is Calling For More Products

The most important factor in this war is the raising of record crops and bringing new lands into cultivation. The high prices for all products makes this patriotic appeal also of personal advantage to you. Do your bit.

Your Opportunity to Serve Your Country is in Stevens County

Although prices for all products have increased our low prices and easy terms for logged-off lands near Springdale, Washington, have remained the same.

We will be glad to have you examine the property and talk to the neighboring farmers. Drop us a line when you will be at Springdale, Washington, and our man will be at your disposal.

Phoenix Lumber Co.

Dept. D.

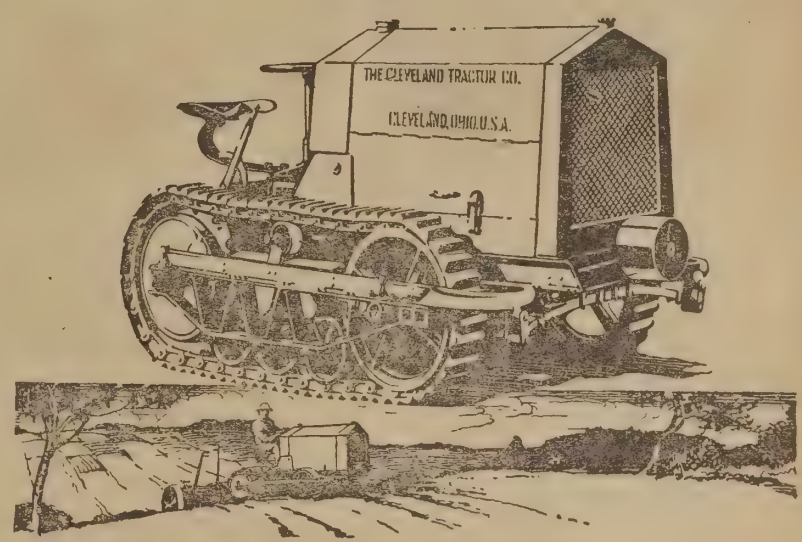
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Forget the old routine. Adopt improved methods. That's the only way to solve your labor problems and boost production in 1918.

Munition plants and factories in general are working at top speed. They have steadily drained farm labor from the fields. Now the draft has taken many more men.

You must cut down on labor requirements. That is exactly what the Cleveland Tractor, the country over, is helping wide-awake farmers to do.

This wonderful little machine will do your work *better, faster, and at much less cost* than you can possibly do it with horses and men.

Hauling two 14-inch bottoms, it plows 3½ miles an hour—8 to 10 acres a day. That is more than you can do with three good 3-horse teams and 3 farm hands. And at this high speed the Cleveland Tractor turns over the prettiest job of plowing you ever saw.

Figure up the saving—not only in labor—but in time and good, hard cash.

In addition, the Cleveland enables you to plow when you need it and where you need it. Because it *crawls on its own tracks*, it can go over almost any soil at any time. That is something you can't do with horses and men. *Think of the extra yield that means.*

Moreover, the Cleveland does not pack your seedbed. It is light—only 2750 pounds—and has 600 square inches of continuous traction surface. No other tractor built exerts so small a pressure.

The Cleveland gives you 20 h. p. at the pulley and 12 h. p. at the bar—economical, dependable power to do your hauling and stationary engine work.

Rollin H. White builds the Cleveland Tractor with all the scrupulous care he put into the manufacture of motor trucks. He uses only the best materials—only the finest motor truck parts and gears. He has protected all gears with dirtproof, dustproof casings.

He has so designed the Cleveland Tractor that it *steers by the power of its engine.* Just a light turn of the wheel and the motor does the rest. Anyone can drive it. It will actually *turn in a 12-foot circle*—less than it takes to turn a team.

These are real advantages—too big and too important to be overlooked. There are others just as big. Combined, they make the Cleveland the biggest labor-saving, time-saving, money-making implement introduced into modern farming.

Prepare now for bigger, better crops next spring. Decide now to make the Cleveland earn money for you, as it is doing for hundreds of others.

We are so crowded with orders that we cannot promise delivery of new orders before January 1st. So it is necessary that you order now for delivery early in 1918.

Write to us today for full particulars and name of the nearest Cleveland dealer. Use the coupon or address Dept BK

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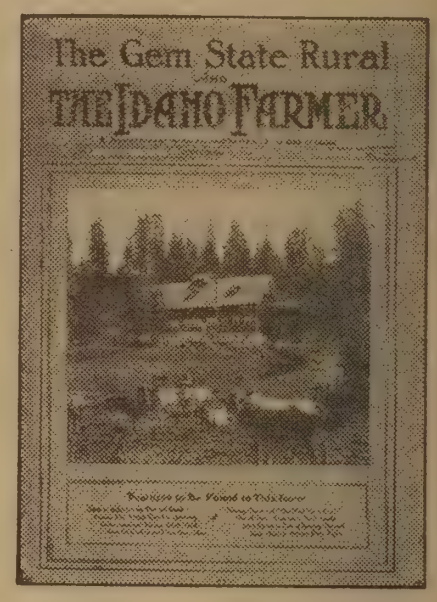
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"Want" Ads in These Papers Are Economical and Effective







Take Advantage of the Low Combination Rate for Insertion of "Want" Ads in These State Farm Papers

The "want" ad is a method of communication which will prove helpful at various times to all of our farm folks.

Do you desire to get in touch with a reliable, experienced hired man? The "want" ad brings your need to the attention of competent workers throughout three states.

Do you wish to turn used machinery into cash? The "want" ad reaches farmers in other districts who have use for your discarded implements, and who will probably be glad to make the saving you will be able to offer them.

Have you farm products to sell, such as live stock, poultry, seeds or dried fruits? Once more, the "want" ad in the three state farm papers offers a solution for the difficulty. It reaches the very class of homes where there is a constant demand for these things.

Have you a piece of land for which you are eager to find a buyer? The "want" ad in The Washington Farmer, The Oregon Farmer and The Idaho Farmer affords a splendid method for making a sale; inasmuch as these three papers are read by tens of thousands of farm owners and farm renters, a goodly proportion of whom are considering the purchase of farms or orchards in other sections.

To sum up, our "want" ads enable you to reach the people who have what you want or who want what you have. They are easy to insert. They are low in cost. Even if there is nothing you care to advertise at this time, you will always find interesting, profitable reading in our "want" ad columns.

Rates are printed at the top of these columns in every issue. Don't miss the "want" ad page today!

Send Orders and Inquiries Regarding "Want" Ads to The Washington Farmer, 617 Central Bldg., Seattle, Wash.

Dumb Animals Humanize Mankind

Typical Men Congregate at Northwest Live Stock Show

Reaching Lewiston Wednesday afternoon, I met Jim McCroskey at the Bollinger hotel. It seemed like old times. The present Northwest Live Stock association is the outcome of many smaller live stock associations, holding their meetings here and there—now the Inland Empire Breeders' association, meeting alternately at Pullman and Moscow with Professor E. E. Elliott and Professor H. T. French, respectively, throwing the live stock departments of the two state institutions open to stockmen—now as the Washington State Live Stock association, holding one of its most enthusiastic meetings in Spokane, having as its chairman E. F. Benson, the present head of the state department of agriculture of Washington. Now it was a finely fitted steer put on exhibition by Klemgard & Metzger, now another fat animal which was the idol of Jack Foster of the college farm at Pullman. Those were the days of the Whitefaces of Paul Clagstone and those were the days of Jack Splawn of the Yakima valley and of B. T. Byrnes of Latah county, etc., etc.

Then came the era of organizing auxiliary live stock associations in the different counties, one of the most successful developing into the vigorous and progressive Stevens County Live Stock association.

You can not down Jim McCroskey. He is not just the man he was a year ago, nor will he be ever just the same again. His son Don, as a lad and as he was growing into young manhood had become a part of the later live stock meetings and shows. Now that Don has left us it is seen more clearly than ever how he was becoming a part of the live stock industry centering around the Northwest Live Stock show. More and more the memory of Don will become a source of subdued inspiration to his father as the days and the months wear away the deadening shock of his untimely departure from a most promising career.

While I was talking with Jim McCroskey, Governor Withycombe of Oregon came to us, and I was heartily glad to shake his hand again. It did not take long for the governor and Jim to become acquainted. Each had known of the other and both at heart are stockmen. I have always contended that a child was humanized by a brute animal and often brutalized by human animals; that it takes a pet animal to subdue the careless and selfish youngster. Becoming attached to a pet dog, or calf, or lamb does much to create a sense of responsibility and kindness in the boy or the girl. It is worth while to observe the humanities as they are developed in stockmen as a class.

I asked Governor Withycombe as to his son Robert, who has been doing real work as head of the state experiment station in Union county, Oregon, and there was an excusable pride as he told me of the arrival of a fine boy in Robert Withycombe's home, the governor's first and only granchild. Here again the father and son are visited by the peculiar comradeship which you find existing between the lovers of good animals.

Soon President Penrose of Whitman college joined our little circle and found easy acquaintanceship with Jim McCroskey. Many a time as a boy Jim had taken care of Father Eells' pony as the pioneer missionary made his headquarters at the McCroskey home. I rather believe that there is no single recollection more gratifying to president Penrose than that of having the privilege of having known Father Eells. What the venerable missionary stood for during the 55 years of his journeyings up and down the Inland Empire, that President Penrose has stood for during 27 years since he came to the Oregon country with that historic band of young missionaries of these later days.

To my mind there is no other gathering of persons that so breathes the spirit of the Pacific northwest as do these meetings of the stockmen of the Northwest Live Stock association. E.A.S

Night and Day

Together Until the War Is Over

In his address before the annual convention of the American Federation of Labor at Buffalo, N. Y., November 12, President Wilson made the following points:

"The war was started by Germany. Her authorities deny that they started it. But I am willing to let the statement I have just made await the verdict of history.

"I believe the spirit of freedom can get into the hearts of Germans and find as fine a welcome there as it can find in any other hearts.

"Power can not be used with concentrated force against free people if it is used by free people.

"Germany is determined that the political power of the world shall belong to her. There have been such ambitions. They have in part been realized. But never before have these ambitions been based upon so exact and precise and scientific a plan of domination.

"We must stand together night and day until the war is over. While we are fighting for freedom, we must ensure the freedom of labor."

Hadn't Kissed the Kittens.

Jean, age 3, was visiting at her grandfather's farm. She tired of the new kittens and puppies and went in search of her mother. When that lady was found she help up her face for the usual kiss. "I'd kss you if I thought you hadn't been kissing those kitties," mother said. "I haven't," Jean said. And when she had the kiss she smiled adorably and said: "But I's been kissin' those little puppies."

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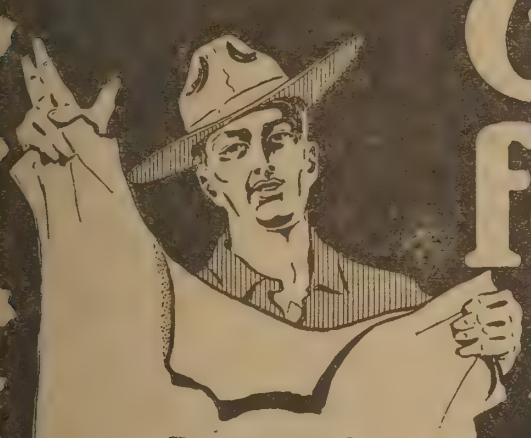
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Washington First in Apples

By GRANVILLE LOWTHER.

I have just received a report from the U. S. bureau of crop estimates to the effect that "The 1917 apple crop for Washington takes the position of the largest of any state in the United States. Dry weather and the late season will reduce the size of the apples below normal, and the injury from worms is reported high; otherwise of good quality. Commercial production for the entire state chiefly from Wenatchee and Yakima will show 6 per cent over last year. The estimated number of cars 17,500."

It should be noted that in 1899 Washington ranked 25th in the order of importance in the number of bushels. In 1909, or 10 years late, she ranked 14th. In the same year in the value of her fruits she ranked 10th.

This year, 1917, she will rank first in the number of bushels and in value. From now on New York is our only rival for the first place and while the uncertainties of a full crop in any particular section may throw us behind occasionally, I have no question that we will in a 10-year average hold the place that New York has held for so many years.

According to the census of 1910 Washington stood 15th in the estimated number of bearing trees as compared with other states. The states that had larger numbers, were in the order of their importance as follows: Missouri, New York, Illinois, Pennsylvania, Arkansas, Michigan, Virginia, Kansas, Iowa, Indiana, Kensucky, Tennessee, West Virginia, Maine, Washington.

The states that produced a larger number of bushels of apples in 1899 were in the order of their importance as follows: New York, Pennsylvania, Ohio, Virginia, Illinois, Michigan, Indiana, West Virginia, Missouri, Kentucky, Tennessee, North Carolina, New Jersey, Connecticut, California, Kansas, Maryland, Iowa, Massachusetts, Arkansas, New Hampshire, Maine, Nebraska, Vermont, Oregon. The estimate places Washington as the 25th state in the order of importance in the number of bushels produced that year.

In relation to the products in bushels in 1909 the states in the order of their importance are as follows:

New York, Michigan, Pennsylvania, Missouri, Kentucky, Iowa, California, Virginia, Maine, Colorado, Nebraska, Illinois, Indiana, Washington. This leaves Washington 14th in the list of states. In relation to the value in dollars for the same year, the states are as follows: New York, Michigan, Pennsylvania, Missouri, Iowa, Colorado, Virginia, Kentucky, Ohio, Washington. This estimate makes Washington 10th in the value of its fruits while ranking 14th in the amount produced.

Growing Corn

Secret Is in the Cultivation

There are still a great many people in the world like the man who is said to have viewed the hippopotamus in the circus and passed on with the remark that "there ain't no such animal." Several of these people looked at J. W. Hall's corn on his farm at Avon in Skagit county, Washington, and passed on with the remark "corn like that can't be raised in Washington—anyway it can't be raised in an unfavorable season."

The fact remains, however, that Mr. Hall has been growing this corn for several years.

The specimens shown in the accompanying picture were 17 feet high with good leaves and well formed and perfectly developed ears. This corn is a cross between Minnesota No. 13 and Reid's Yellow Dent. This is the third year's breeding and with the crop produced under the poor conditions of the last season Mr. Hall feels safe in saying that it will produce a paying crop every year.

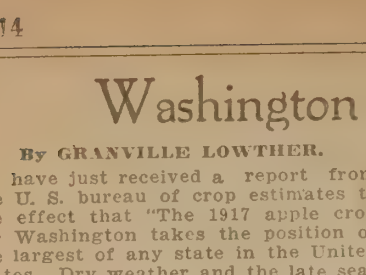


J. W. Hall and his family with a sample of the Hall corn grown on his farm near Avon, Skagit county.

"Why do they think they can't raise corn here?" Mr. Hall was asked.

"Well," he said, "most of them never tried to raise corn and those who did never knew how to handle it. In my opinion the secret of growing a successful crop of corn is in the cultivation, providing of course the proper attention has been given to the selection of the seed. You must cultivate, and cultivate, and keep on cultivating. Too many people do not know how to cultivate. They run too far away from the plant through a mistaken idea that close cultivation might injure it. They should cultivate close, and, starting early, keep on as long as the cultivator can get through."

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TROOPER
FRONT 2 ¾ in. BACK 1 ¾ in.
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SLIDEWELL
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it is made with the two "nationally asked for" collar features—the Patented Tie-Protecting Shield and the Graduated Tie-Slide Space—exclusive Slidewell features.

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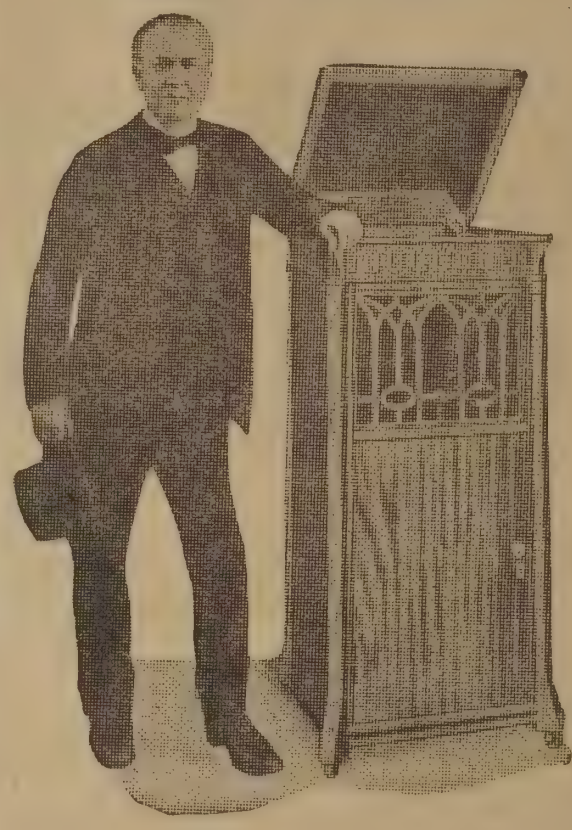
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4 h. p. Portable Drag Saw
WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

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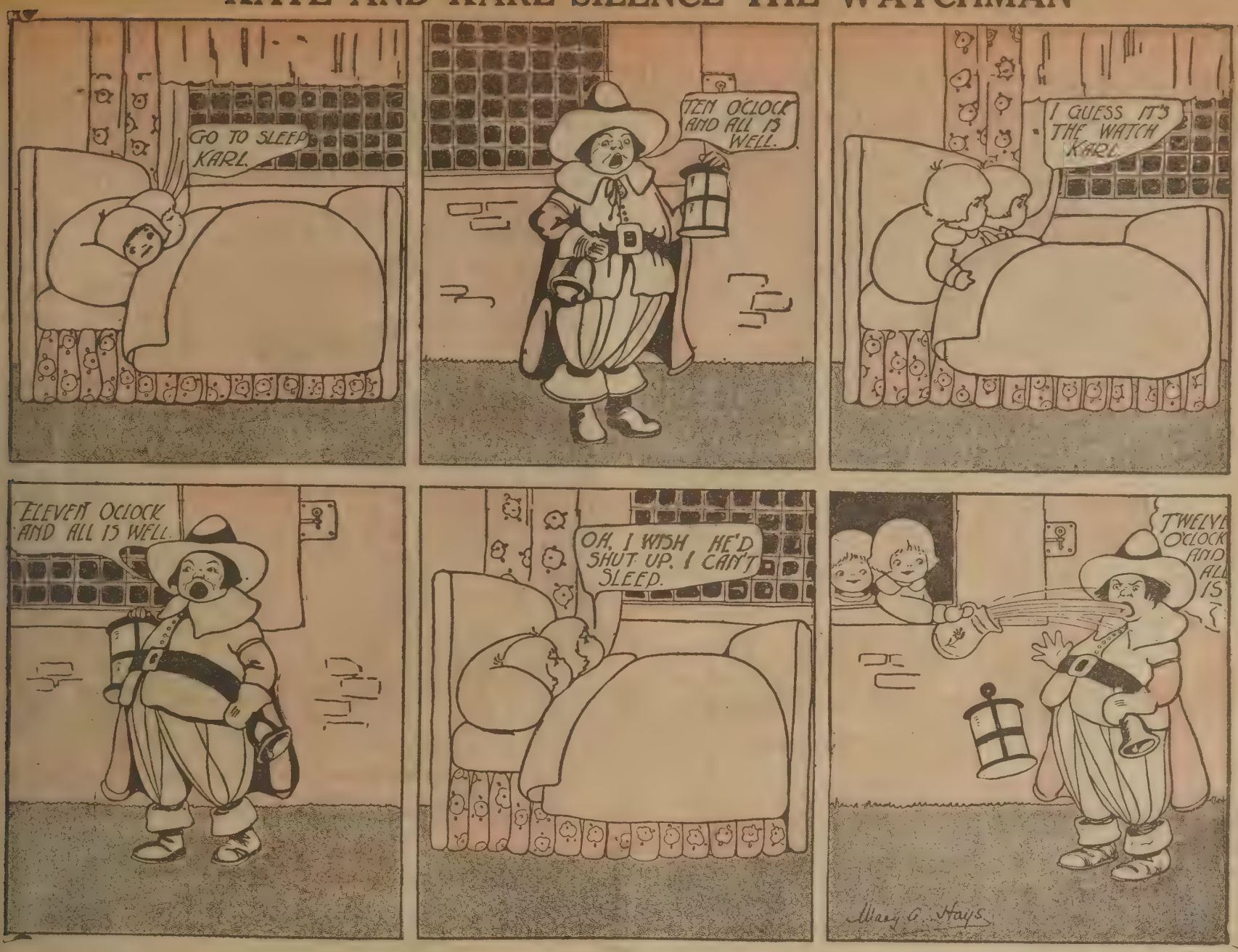
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PAPA HAS HARD LUCK WITH WILLIE'S LATEST



DEAR TOMMY: I fixed up this chair for Papa, who has his annual attack of gout. He got along nicely with it, riding around the grounds overseeing the men at work, until he got rattled and bumped into a basket of laundry that Susan was putting out to bleach!

Yours, etc., WILLIE.

Russia Talks Peace

Radical Rebels Oust Conservatives

The rebels in Russia under the leadership of Nikolai Lenine have ousted the conservative government under the leadership of Premier Kerensky and have taken full control in Petrograd. Kerensky fled from the capital to certain quarters of the army that remained loyal to him and reports at this writing indicate that the soldiers are sufficiently loyal to insure an attempt on his part to regain the capital.

The rebels who have taken the advantage for the present are of the strongest socialistic and pacifist type. They have announced the institution of a complete rule of the land by the peasant class and reports indicate that they will at once take up measures looking forward to a possible reestablishment of peace. Reports sifting through unofficial channels from the Russian centers indicate that an armistice of perhaps three months will be asked, during which peace negotiations could be entered into.

Whatever the immediate result of the success of the rebel element may be, it seems practically certain that Russia can no longer be any considerable factor in the war. The internal strife between the conservative and the radical factions is so strong that neither side can rule with any power of certainty. The revolutionary nature of the situation is in considerable degree the result of German activities, apparently, and it is to be assumed that Germany and Austria will do all in their power to continue the internal dissension. It is probable that increased German strength on the western battle lines will be noted now as a result of the elimination of the Russian forces. On the other hand, Germany may try to press her advantage and march upon Petrograd, the way to which was practically opened by the capture of strategic points in and adjacent to the gulf of Riga.

Italy Greatly Menaced.

No less interesting than the Russian situation is that in Italy, where the German allies have been striking terrific blows for the last two weeks, making great inroads into Italian territory. After gain of much territory by Italy following a long, costly campaign, Germany and her Austrian allies suddenly presented reenforcements and made an attack that necessitated rapid Italian retreat to prevent the complete destruction of the latter's army. The English and French armies are rushing what aid is possible to the Italians and this country is lending material aid to strengthen the morale of the Italian forces. At this writing the retreating army is coming to a stand on the Piave river and the world is watching the outcome of the impending battle with tense interest. The sudden attack on Italy is looked upon as a great strategic move designed to eliminate that country from the war in a manner equal to the way Russia has been virtually eliminated.

Should this result be effected, it would relieve the German and Austrian armies of pressure from the east and the south and permit them to concentrate their entire power against the French and English and American forces in the west.

Again, rumors have been reported that the Teutonic allies were formulating new peace terms to offer to the entente allies, and if Italy is crushed or nearly so the advantage may be utilized as an influence on England and France and this country to listen to the peace terms. However, the strength of these three nations is felt to be such that nothing short of the original peace terms of America and her allies will be considered.

Bury American Soldiers.

The three American soldiers first to fall in battle on European soil have been buried in France. Military formalities marked the burial, honors being shown by the French. The official representative of the French government at the services asked that the bodies be allowed to remain in French soil, symbolizing forever the unity of spirit and purpose and character of the French and American governments.

Will Call More Drafted Men.

Probably in February, the war department will make another call on men registered in the great new national army. President Wilson and Provost Marshal General Crowder have issued statements indicating the call, and summarizing the results of the selective draft program to this date.

The regulations themselves and the questionaires, which more than 9,000,000 registrants will be required to fill out, are being forwarded to local boards, but have not yet been made public.

War department officials estimate that the whole process can be completed within 60 days. This means that no second call will be made upon the draft forces before the middle of next February, as the period of classification will not begin until December 15.

American Soldiers Active.

The American contingent in France is reported to be rapidly getting in line for actual fighting. So far, the only casualties reported are those that occurred in the first skirmish, when three soldiers were killed and a score or so captured or wounded.

War Council in France.

The United States has joined in a great war conference in France between all the allies now facing Germany and Austria. This country's representatives are headed by Colonel E. M. House. It is hoped that out of the conference will grow a greater centralization of the allied plans of operation against the enemy.

France Controls All Corn.

All the corn in France will be requisitioned soon, Maurice Long, minister of provisions, announced in the chamber of deputies. Grinding mills will be put under government control to standardize the bread prices throughout France.

New York Women Can Vote.

By a majority vote of about 60,000 the people of New York voted in favor of woman suffrage last week. The vote marks one of the most notable victories for suffrage in the history of the movement. It is announced that with New York in the suffrage column women workers will urge upon President Wilson that he indorse a constitutional amendment for national suffrage during the next session of congress.

Another Disastrous Fire.

Another serious fire has been reported from the New York waterfront. This time a large factory of the Washburn Wire company, which has large orders from the government, was destroyed with a loss estimated at $2,000,000. Indications were that the fire was incendiary, and it is believed that German propagandists are responsible for this and other recent destructive fires.

Queen "Lil" Is Dead.

The famous and picturesque character, former Queen Liliuokalani of Hawaii, is dead.

Turks Slay a Million.

Henry Morgenthau, former United States ambassador to Turkey, states that the Turks have wantonly slain in the most cruel manner approximately 1,000,000 Armenians since the opening of the war. The entire Armenian race faces extinction, due to the sword and starvation at the hands of the ruthless Turks.

Troop Train Wrecked.

A train carrying about 200 American soldiers en route to an eastern camp was derailed near Minneapolis Sunday. A defective rail is supposed to have caused the derailment. None of the soldiers was hurt.

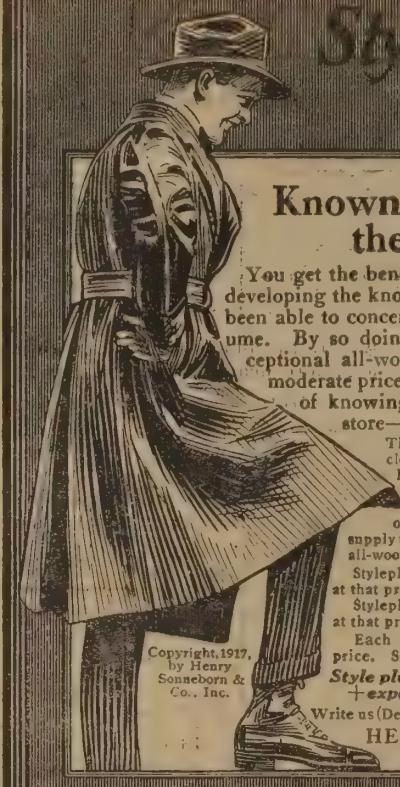
Enemy Supplies Taken.

That the German government has large stores of supplies held in this country under what is intended to be thought private ownership, to be rushed to Germany immediately after the war is over to rehabilitate German industry, is the opinion of the United States government. Recently secret service agents uncovered stores totaling nearly $75,000,000 that had not been reported under the requirements of the food control bill. Considerable portions of these are believed to be held by individuals for the German government. Steps to seize such stores are understood to be planned.

Controls Flour Exports.

The national food administration has announced that it will exercise complete control over the exportation of flour from this country to Europe from this time forth. This action has been taken with a view to centralizing the handling of flour in order to prevent every possible loss either of actual food value of transportation facility. It is intended also to insure the shipment to the allies of such quantities of flour as are needed, removing the danger of shortage or a surplus.

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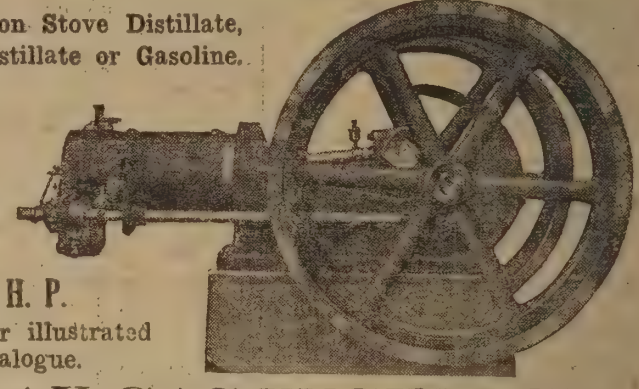
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Highest prices paid—prompt returns, correct grading—45 years of fair dealing means more money for you. Before shipping any one get our reliable prices, supply catalog and shipping tags.

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Dept. 234 "One Reliable Fur House" Write Today

Bread Must Be Cheaper

Government Promises to Curb the Bakers

Farmers will applaud the announcement from Washington that the food administration will reduce the price of bread by putting every baker in the country under federal license.

Extensive investigations by federal, state and city committees have proved that present bread prices are generally in excess of prices warranted by $2 wheat. In some towns and cities they are more nearly a $4 price for wheat.

Profit Must Be Reasonable.

These investigations have convinced the government that the bakers can make a reasonable profit selling a 20-ounce loaf at 10 cents and a 10-ounce loaf at 5 cents. While the government will require the making of bread in these standard weights, it is not its immediate intention to fix prices outright. The regulation will prescribe that only reasonable prices may be charged, but "reasonable" will mean reasonable. Mr. Hoover is well advised that the indicated prices are reasonable.

Tre law clearly authorizes the government to put bakers under license regulation. It exempts retailers, but bakers are manufacturers and wholesalers.

No Longer the "Goat."

The farmer has more than a passing interest in this action; he wants a square deal for himself and he also wants a square deal for the consumer of his products. He does not intend to be made the "goat" for extortionate prices. He does not wish the false assertion dinned into the ears of the consumers that he is to blame for excessively high prices of bread, milk and other necessaries.

Relatively high prices the consumer must expect to pay, for world conditions have put cheap living out of the running. Production costs have mounted steadily against the farmers and they can not throw off the high prices laid upon them by world conditions.

But it is obvious that before the government took a hand in price regulation a great many middlemen were capitalizing high prices in order to make excessive profits. When consumers complained, they met the stereotyped explanation that the farmers were to blame and were getting rich beyond the dream of avarice. Mr. Hoover is puncturing that falsity.

Mole Pelts

Twenty-Two Boys Receive $156

County Agent D. C. Howard of Columbia county, Ore., has just received a check for $156 from a fur company of New York in return for the 609 mole pelts sent them a few days ago, giving an average of 26 cents per pelt. This amount, together with the 10 cent bounty paid by the county, should make mole trapping a good business for the boys. The 600 moles were trapped by 22 boys and of this number 168 pelts sold at 40 cents, 309 at 25 cents and 117 at 10 cents each. One boy received an average of 32 1-2 cents for his lot of pelts. Three others received over 30 cents. Still another boy received only 15.4 cents and another 17.8 cents for their lots. The difference was due to the manner in which the skins had been cared for. It is no more trouble to handle them right than wrong.

The county has paid bounty on 1096 moles and several hundred were sold earlier in the season without securing the bounty. Besides the value of the skins and the bounty, it is safe to say that hundreds of dollars damage to the farmers' crops and meadows has been prevented.

We hope that every farmer's boy will obtain some of the "out of sight" traps and get some of this good money, says Mr. Howard. It will help to grow more and better crops for our country. Therefore it is patriotic to trap moles.

Jackrabbit Hides.

Five years ago County Agent R. A. Ward of Crook county, Ore., sent two test bales of rabbit furs to manufacturers and received an offer of less than 1 cent apiece for them. Last winter Mr. Ward sent a community shipment of about 3000 skins, which netted the shippers 5 cents each. Now he has received an order for 50,000 jackrabbit hides at 8 cents a skin for prime skins and 5 cents each for seconds. Last year Mr. Ward maintained an assistant at an experiment station at Fort Rock, Lake county, who was able to skin and stretch eight rabbits an hour. Skins from poisoned rabbits are, if anything, better than those from shot, bruised or trapped rabbits, so homesteaders can poison several hundred, pile them up frozen like cordwood until they have enough to spend a few days skinning. Skins should be taken off flat, not "cased," and care should be used not to tear them. Torn, bloody or mutilated skins will not be accepted. In order to concentrate this first shipment east to central points, Mr. Ward has requested those having hides for sale to send them to his office at Redmond.

REMEMBER!

Increased rate of postage —letters **three cents** an ounce. If you send a larger coin than a 25-cent piece be sure to ask your postmaster how much additional postage will be required.

The Motor Car

On the Farm

Speed of Motoring.

An interesting illustration of the value of automobile trucks is taken from the experiences of a fruit growing company in Virginia, says Dun's Review. The speed of delivery, the heavy loads, the great number of trips possible each day over a long distance, and the reduced cost of labor and maintenance could hardly be more strikingly set forth than in the case of this concern. In the fruit business speed of marketing is essential. Peaches can not be kept more than a few days and will then decrease in value very rapidly. The fruit-growing company referred to has a young growing orchard which this year was expected to mature about 65 carloads of peaches, but, on account of the fact that the railroad station where the peaches could be loaded into refrigerator cars was five miles distant over an unimproved mountainous road, the transportation problem was no easy one.

In previous years six-horse teams had been used. They required a driver and an extra man to work the brakes on the down grades. They could not handle more then 75 crates at a single load and, owing to the five-mile haul, could make but two trips per day. The Maximum load of peaches for any one day was six cars—about 2640 crates, while the average load was three cars a day—about 1320 crates. To deliver the season's crop required from eight to 17 six-horse teams.

Thought for the Morning.

In the morning, when thou art sluggish at rousing thee, let this thought be present: "I am rising to do a man's work."—Marcus Aurelius.

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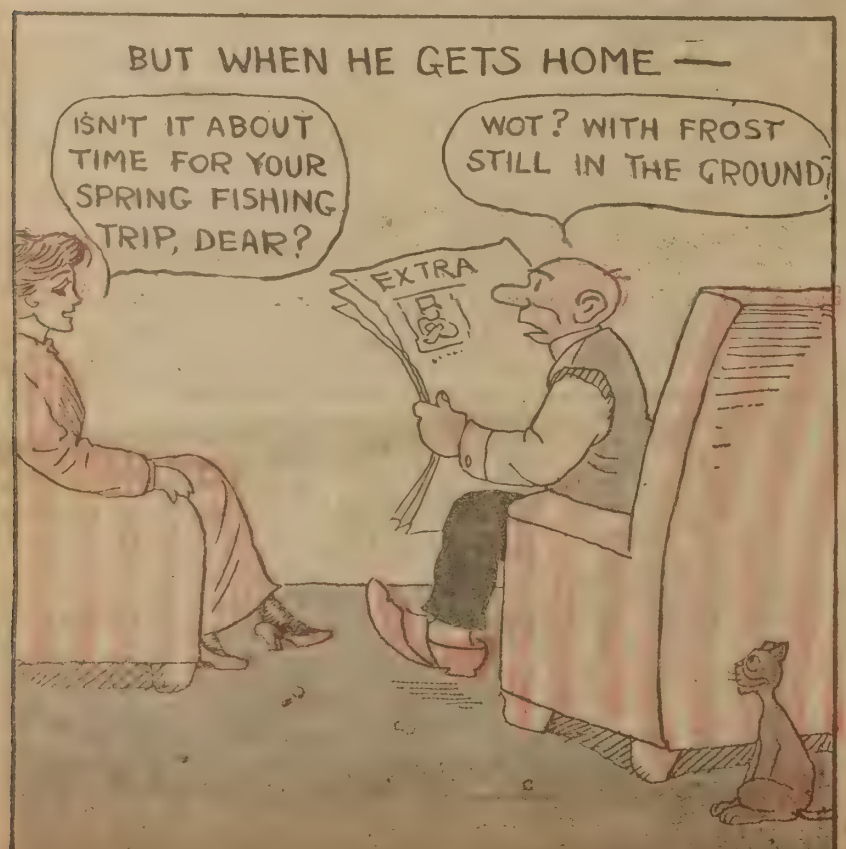
FOR HE'S A JOLLY GOOD FELLOW—UNTIL HE GETS HOME













Economic Interest in Botany

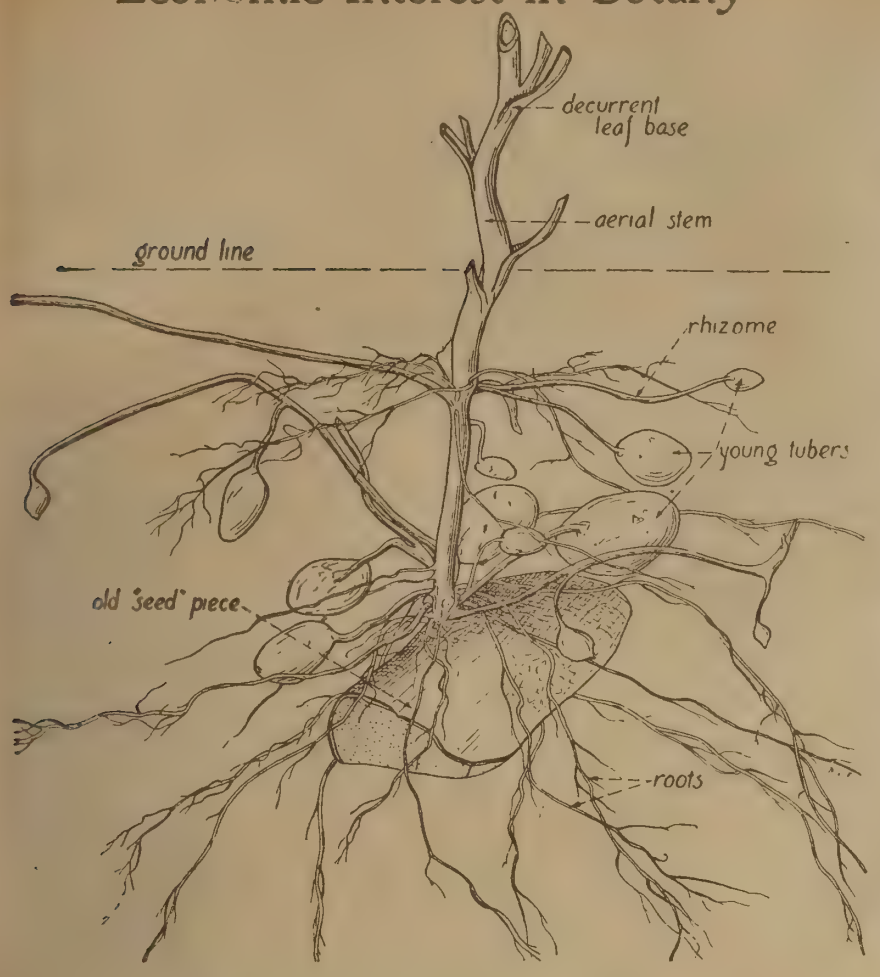


Figure 12—Portion of a sprouting potato tuber

Here is one of the illustrations in a new book just published by P. Blakiston's Sons & Co. of Philadelphia, entitled "Botany of Crop Plants," by Wilfred W. Robbins, Ph. D., professor of botany at the Colorado Agricultural college. The author says that the book has grown out of a course of instruction extending over a number of successive years. In the preparation of the book the writer says he has had in mind non-agricultural as well as agricultural schools, "for it can not escape notice that there is a growing tendency wherever botany is taught to tie it up more closely with economic interests an to draw more and more upon economic plants in citing examples and in choosing subjects of study in the laboratory." A noticeable feature of the book is the direct method adopted of labeling drawings. For instance, in the accompanying illustration it will be noticed that the drawing is labeled "portion of a sprouting potato tuber." Speaking of this illustration, the book says: "Although the potato, ordinarily, would not be considered a stem, still if we follow through its development and examine its structure, we are convinced that it is stem (Fig. 12). When we plant a slice of potato, "sprouts" are soon sent out from the "eyes." These sprouts, with their nodes, and internodes, and their scale leaves, are quite obviously horizontal underground stems (rhizomes). Soon, the tip of a rhizome begins to enlarge, and a potato is formed; hence, the potato is seen to be a simple enlargement of the tip of an underground stem. Furthermore, examination of the tuber reveals the presence of a terminal bud ("seed end" of the potato), and lateral buds along the sides. The buds are the so-called "eyes." In an elongated potato we may be able to detect the spiral arrangement of the buds. Lenticles may also be observed on the corky layer (skin) of the bark of the potato.

Shorthorn Progress.

At the recent meeting of the board of directors of the American Shorthorn Breeders' association at Kansas City several items of general interest were acted upon.

It was voted to accept entries for the National Shorthorn Congress, Show and Sale to be held in Chicago the third week in February next in the regular Shorthorn classes up to a maximum of 325 head and in the milking Shorthorn classes up to a maximum of 75 head. The amount of money appropriated for prizes for this occasion will approximate $8000. This will unquestionably be the most important even within Shorthorn circles that has ever been staged in this country. In order that the small breeder may have an equal chance with the large breeder the entries from individual herds will be limited to 15 head. With the purpose to assure the patrons of the sales a superior class of cattle, all of the show entries will be offered. In fact no animals will be permitted to show that are not included in the sale offering.

It was decided that a gold medal would be given by the association to the student in the college judging teams who scored the highest number of points in judging Shorthorn cattle in the forthcoming International Live Stock exposition.

In an effort to further serve the interests of the milking Shorthorn breeders it was arranged for the association's representative, L. J. McMartin, to spend several weeks in New England and eastern territory among the breeders and make a study of the needs and prospects of the milking Shorthorn interests there.

Liberal appropriations were voted to the California Land and Live Stock show; also the live stock show held at Fort Worth in March.

The association's investment in Liberty bonds was increased from $10,000 to $20,000.

Woodpeckers.

There is a variety of woodpeckers living in California whose main article of diet is acorns. They store away their provender in a peculiar fashion, boring holes in the bark of the white oak or other wood trees just large enough to fit the kernels, and tapping them in, small end first, with their bills.

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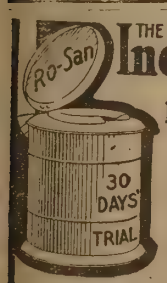
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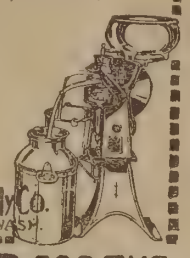
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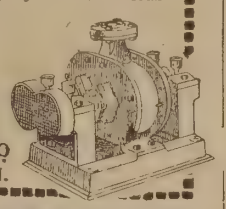
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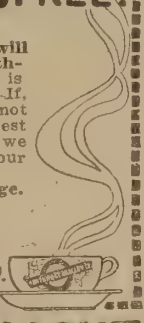
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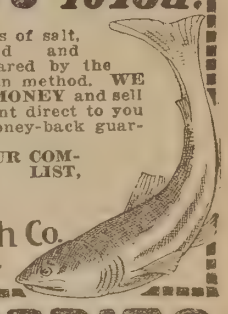


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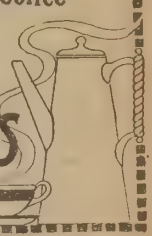
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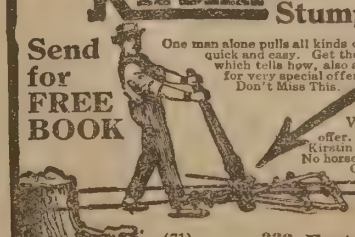
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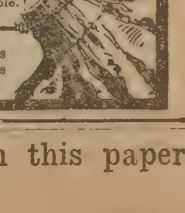
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COMMUNITY ROAD-BUILDING

Farmers and Townspeople Solve the Problem

By P. G. HOLDEN.

Community clubs play an important part in the development of civilization. They present the greatest of opportunities for the cooperation of town and country to the lasting benefit of each. They enable the residents of the town and those of the rural districts to get together and do things for the welfare of all that otherwise would not be done.

This arousing of common interest in common interests brings the members of the community closer together, socially, industrially and economically.

In movements of this character every small town should feel vitally interested, for it can extend its trade territory many miles by uniting with the farmers in community welfare work. This work may take one form, or it may take another, but the life of any community organization depends upon having something to do that is worth while.

By the assistance of farmers, the town of Brighton, Ill., a village of only 600 people, has worked wonders in the way of community road building.

For 10 years the people of Brighton have been joining hands with their rural neighbors in cooperative work that not only has bettered the whole community, but has given the town a commercial and educational standing equal to that of many cities 10 times its size.

The community organization, which has thus united town and country, bears the unique title of "The Betsy Ann Association." It has given the community 27 miles of excellent roads, a $15,000 accredited high school, a $5000 community building and a neighborhood spirit which knows no township line or corporate boundary.

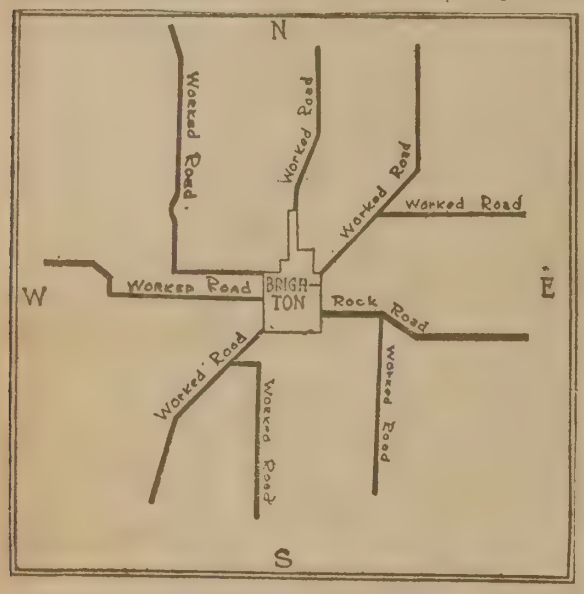
The Betsey Ann association is incorporated but not for profit. It has 165 members, divided about equally between town and country, and its membership fee is only 25 cents. The executive committee consists of nine members of which not more than five can be residents of the town.

The first improvement inaugurated by the association was the purchase of a fire bell. This bell was christened by a telephone operator, Miss Nell Flanagan. She gave it the name of Betsey Ann, which title has since passed to the association.

During the second week of August, each year, the associatoin holds a two-day picnic in a large tent. Concerts, dramas and other forms of entertainment are given by local people from both town and country. These picnics are always attended by 2500 or 3000 people. All concessions are run by the association and all the profit goes into the treasury. About $500 is realized each year. This money is spent in road improvement.

One year the association built a mile of rock road, extending eastward from the town limits. Each year a contract for dragging, at frequent intervals, nine different roads, for a distance of three miles from town, is awarded. Each member of the executive committee has charge of a three-mile strip. An appropriation of $400 is annually made for this purpose.

These 27 miles of good roads are the visible results of the Betsey Ann association. They make it possible for Brighton to visit and to entertain her neighbors. They connect the town with the farm and make the interests of one the interests of the other. They have made possible the community building. They have made a reality a high school, for both town and country children, from which graduates are admitted to any college.



Twenty-seven miles of road improvement around Brighton, Ill., work of the Betsey Ann Community association.

Bunch Grass Boy and His Teacher

There is no wonder at all that the recollections of Ida C. Young, prompted by the Bunch Grass Boy story which has been running in The Farmer, should call forth more memories of those old days on the part of Joe Ashlock. The Farmer has been privileged to read the reply of Mr. Ashlock to Miss Young's article in a recent issue and takes the liberty of taking the following extracts:

Your comments started in the mind of me a train of recollections that reach from where I am sitting to Blue lake, south of that alkali bitten burg which Mayor McIntee referred to as "Cowley Satie," and which now exists on the map as Coulee City.

Howevér lonesome my bunch grass days were, the days since I left the grass country have been eventful. I used to get hungry for the grass. There was near Pullman town a small area of scab land that had never been spoiled by the plow. I used to sneak out to this grassy place when it was raining and I was homesick, just so that I could smell the grass. There was a scrubby bit of sage in the grass, and I felt like pinning a wet sprig of this in my buttonhole, so that I could carry the fragrance of the grass land back to my student's room in the dormitory.

My arrival in the college town of Pullman was not heralded by any blare of trumpets or waving of banners. It was raining pitchforks and darkies, and the mud all over Pullman streets was knee deep—a sort of medieval effect, in keeping with the study of ancient history, which I at once took up. I had in my possession one suit of clothes, a pink necktie, with a green leaf worked in it, a cardboard suitcase and a fiddle. The fiddle box had a hole sawed in the side of it, and I had filled this hole by stuffing in a yellow sock, which was half of the one extra pair of socks I had. I recall that when I mounted the mile grade up college hill the next day the yellow sock hung out of the hole and I had to stop to stuff it back in. I recall also that I lifted my hat to every girl I met, not knowing that you weren't supposed to speak to girls in town unless you knew them.

I recall also what went with the yellow socks. I was in a civics class awhile after that. Bill Moss, the "orneriest" fellow in the class, from my point of view, squinted down at the socks and said in an audible whisper:

"Hey, rook, where'd y'u git them yeller socks?"

After that I was called "hey, rook" and "yeller socks" till I left the socks in the janitor's waste basket one night and bought some red ones, appearing in class the next day with my trousers turned up at the bottom.

Nothing much happened to me in those early days. My teacher of English was H. C. Sampson, later president of the Cheney normal, still later manager of the Western Union Life Insurance company and now a capitalist somewhere. Sampson called for a theme one day, subject optional. I had to hunt a dictionary and find out what "theme" meant; also I had to look up the meaning of the word "optional." Sticking my two definitions together, I figured that Mr. Sampson wanted me to write an essay about something and that I could choose my own subject.

I wrote a story about artificial eggs. I was prompted to do this because at our dormitory table we had not seen an egg for weeks and weeks, and I was a lover of eggs. I told how "French scientists' had figured out how a hen made eggs and were making eggs themselves now, in a factory by the Seine (which I discovered on a map of France), and how the eggs outclassed anything any hen had made. I began with the inside of the egg and worked my way out carefully, describing each step minutely. Then I handed my "theme" in.

Well, when class met the next day Sampson addressed the class thus:

"I have in my possession a theme of a most unusual kind—it shows striking

(Continued on page twenty-five.)

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

Your Face a Book Men Read—Your Thoughts Its Story



Dr. Hirshberg

One of the popular writers of yesteryear said that "emotion is as wearing to the face of a woman as it is to the tail of the dog." There was never a truer scientific word spoken. The man who has a face like a bendiction or the woman of whom it may be said, "there is virtue in her face," give you an insight into the soul behind the complexion.

A beautiful face is a silent commendation, so it behooves a man or a woman to regulate the though and the emotions so as to mould the skin and flesh with virtues and honors.

Until a very short time ago the theory of Desparto held sway, that emotions do not directly, but only indirectly, influence the muscles and the flesh. It was Professor William James of Harvard, Lange of Copenhagen and Watson of Johns Hopkins university, who developed facts to show that muscle and structural actions really form integral parts of your emotions.

When your muscles tremble with fear or the heart palpitates with emotion, these bodily movements are part and parcel of the emotions in a correct scientific as well as colloquial sense. They are, in brief, inseparable from feelings, and if prevented or controlled by the will, the corresponding emotion is crushed out of being.

The feeling of pathos which sweeps over you, accompanied by certain sensations of swallowing and relaxation, are inseparable from the emotions that make them.

The drawn face, which thwarted desires and disappointed efforts bring forth, are as much a part of the feelings as anything. When the overactive glands, whether thyroid, adrenals or other glands, exhibit themselves with lowered or elevated blood pressure, profuse perspiration, nausea, rapid respirations or any of the other physical signs of emotions are in evidence, it is all tommyrot to speak of "mind over matter." As a matter of fact, the emotions are not the mind, but are a distinctly material portion of the anatomy.

The moral of all this is plain. Physics and chemistry make a definite potpourri for the emotions. When a person has a "sweet, grave aspect," it will be found that the chemistry and physics of his cosmos are in harmony with this appearance.

Thoughts' Molding Methods.

If you feel cheery and benevolent, your face will necessarily reflect it. If you are a hypocrite, consciously or unconsciously, the contention between your pretenses and the realities beneath will soon or late be asserten on your face and a smug Get-Rich-Quick-Wallingford-like countenance will be the unpleasant result.

Much so-called character reading and mind reading is based upon a careful observation of faces. Even some phrenologists, bump-hunters and palmists trick gullible mortals by a seeming study of the skull or the hands, all the while reading the open book of the face.

Obviously, if you would have a face that is frank, honest, pretty or powerful, there must be feelings and thoughts equivalent to play the role of a sculptor of the flesh. Lady Macbeth recognized the importance of this when she upbraided Macbeth in the words: "Your face, my Thane, is a book, where men may read strange matters."

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All the World's a Stage, and All the Men and Women Merely Players

Lieutenant Hans Berg.



Hans Berg, who brought the British liner Appam into Hampton Roads as a prize after her capture off the Azores by the German raider Moewe nearly two years ago, was one of the 10 prisoners who escaped from the alien detention camp at Fort McPherson.

American Troops on Fifteenth Century Bridge



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Modern history harked back to the 15th century for a setting when troops of the Pershing expedition crossed this famous old bridge on their way to the front in northern France, the other day. The bridge became famous when the victorious troops of Charles the Fearless crossed it in their pursuit of the retreating army of Louis XI. Now it gets a new lease of fame.

Mentioned for a Throne.



The above is the photograph of Count Tarnow Von Tarnowski, formerly an ambassador to the United States, who has recently been mentioned as possible king of Poland.

Use Machine to Pour in Fortifications



An anomaly indeed is a building machine in the trenches. This one, a concrete mixer, is used to turn out trench lining and gun placements. The British annexed it from the Boches in a recent capture and it now merrily grinds out complacently its cud of wet concrete—it is neutral.

Honor American Women.



This is the photograph of Anne Morgan, who, with her co-worker, Mrs. Anne Dike, of the American fund for French wounded, has been decorated by the French minister of agriculture in recognition of her services for the people of devastated France. The Morgan-Dike unit has been engaged in rebuilding some ruined villages.

Frenchmen to Teach U. S. Troops



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Eighty officers of the French army have arrived in the United States to teach our boys the art of modern warfare. Colonel Clouden (seated) is in command, and Captain Coutiron, standing at his right, is assisting him.

The Blow Almost Killed Father.



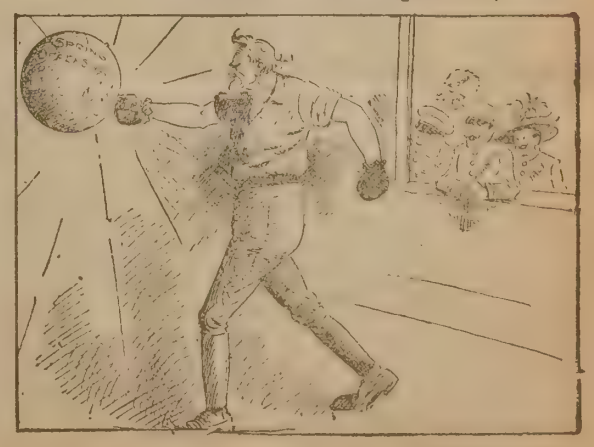
—Washington Evening Star.

"Nobody Home."



—Cleveland Plain Dealer.

The Allies White Hope.



—Baltimore Sun.



THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

Copyright, 1908, by Harper & Brothers.

Below is printed the first six chapters of "The Barrier" in condensed form. This is for the benefit of the many new readers of the Farmer who have expressed their desire for the opening chapters and who were greatly disappointed to learn that the supply of these back numbers has been exhausted. Read this full and comprehensive synopsis of what has gone before and then read chapter VII., also in this issue, and you will not want to miss the rest of this thrilling story of the north and west during the days of the gold rush.

Chapter I.

Many people were in debt to the trader of Flambeau and many counted him as their friend. Gale was ever the same to all, in days of plenty or in times of famine, his store was open to every man, and all received the same measure. He spoke in a level voice and he smiled but rarely. He gazed at a stranger once and weighed him carefully, thereafter his eyes sought the distances again, as if in search of some visitor, whom he knew or hoped or feared would come.

Today as the old man looked out on the mighty Yukon he wished, as he had often before, that it could sweep away the heavy trouble which weighed him down. Ever as he did this he feared that some day his isolation would be broken and that people and the law would come to Flambeau bringing with them the thing which he feared to meet. And now that the time had come he was unprepared.

Down-stream, a thousand yards away, men were raising a flagstaff. He noted the symmetrical arrangement of the buildings, noted the space that had been smoothed for a drill ground, noted that the men wore suits of blue, and noted, in particular, the figure of an officer commanding them. Half-aloud he murmured, "That means the law. The last frontier is gone. The trail ends here."

Necia, the daughter of Gale, had just returned from a mission school. Like some wood-sprite, dark, slender, light-footed, and with laughter like the tinkle of silver bells, Necia was worshipped by the people of Flambeau and adored by her father.

Lieutenant Burrell, a Kentuckian, had been sent to establish a military post and to protect the miners of Flambeau in their own self-government. The people regarded him with distrust, thinking he had come to "run" the camp. Only Necia, captivated by drawl, his clean, fresh manliness, and most of all by his youth, met him with any degree of friendliness. And Burrell, surprised to find in this wilderness, a girl like the girls at home and yet so unlike them, entirely new in her sweet simplicity and dewy, flower-like freshness, was frankly delighted with Necia.

As the two were talking one afternoon a slinking squaw and two children approached. The jetty, beady eyes of the youngsters, their coarse black hair and swarthy skin evidenced that they were breeds with the Indian blood nearest the surface. Burrell showed his contempt and Necia informed him that the little boy and girl were her brother and sister, John and Molly Gale, and that the squaw was her mother.

Chapter II.

John Gale was an intelligent man, but instead of spending his evenings over a book he would sit motionless, hour after hour, his pipe in his mouth, enthralled in thought. Tonight the mood was upon him again. Alluna, his squaw, was crouched upon a bearskin.

Soon Necia came to say good night. John Gale had never kissed his daughter. On rare occasions he would take the little ones in his arms and romp with them, but he had never done these things with her. When she went out, Gale spoke:

"She will never marry Poleon. He is not her kind. She has been talking a lot about this soldier, but he would not marry a half-breed. If she really got to loving him it would be bad for all of us."

Evidently Alluna read some hidden meaning in the words, for she spoke quickly:

"Better that you kill him before it is too late. Soon the nights will be dark. The river never gives up its dead. I can do it if you dare not. No one would suspect me."

Rising, Gale put his hand firmly on her shoulder: "Don't talk like that; there has been too much blood let already," and with that he strode out of the house.

The next morning the steamboat arrived and all of Flambeau went down to meet it. Burrell was there and Necia. The lieutenant had spent long hours the night before pondering over the revelation of Necia's blood. He had come from a family of slave-holders, to whom a drop of impure blood meant more than any other thing. The knowledge of the girl's parentage had brought a change in his attitude toward her which he was glad she did not perceive.

Down through the crowd came a tall Frenchman, with a laughing, chattering Gale youngster under each arm. At sight of Necia, his face lighted up and she introduced him to Burrell proudly as "Napoleon Doret—our Poleon. The man stood a good six feet two, straight as a pine sapling, with his spirit showing in his whole body, and in the set of his head, in his dark, warm face, which glowed with eagerness when he talked, and that was ever — except when he was singing.

On the same boat came Runnion, who had been thrown on the steamboat at Dawson by the town officials. Before he had been in camp an hour he bought a gun and cartridges from Gale. As the trader watched the fellow practice a treacherous trick with the gun a plan outlined itself in his mind. There was no doubt that the stranger was dangerous. Had not Burrell come to preserve law and order? Gale had a desire to see how the soldier would act under fire. If he emerged scatheless, it would give him a line on his character; if he did not—well—that would be so much the better. So he told Burrell that it was up to him to get Runnion out of Flambeau immediately. The lieutenant had never drawn fire on a man and the job was distasteful to him, but he told Runnion that unless he had money enough to last him through the winter he must leave and demanded his gun till he had gotten on the boat. Drawing his weapon from beneath his vest, Runnion presented it to the officer, butt foremost, hammer underneath, the tip of his forefinger thrust through the trigger guard.

Then as Burrell reached for it with his left hand, suddenly the stranger's wrist jerked, the soldier saw a blue flicker of sunlight on the steel as it whirled, saw the arm of Poleon Doret flung across the bar with the speed of a striking serpent, heard a smash of breaking glass, felt the shock of a concussion and the spatter of some liquid in his face. Then he saw the man's revolver on the floor half way across the room, saw fragments of glass with it, and saw the fellow step backward, snatching at the fingers of his right hand.

Napoleon had seen the manner of the stranger's surrender of the gun, and realizing what it meant, had struck with his bottle just in time to knock the weapon from his hand, but not in time to prevent its discharge. As the stranger staggered back, Burrell clipped him just above the ear with a swift downward blow of his Colt.

They revived the man, bound up his injury hastily, and as the steamer cast off Runnion walked unsteadily up the gangplank, turning to cry back to the lieutenant: "I'm coming back to winter with you."

As Burrell left the two men at the store he gave his hand frankly to the French-Canadian and said: "I want to thank you for saving me from my own awkwardness."

Chapter III.

The Gale children fairly reveled in the gifts Poleon brought them from Dawson. Necia watched their delight with tear wet eyes. As she opened her own package her hands trembled and her cheeks flushed. When the last knot was untied she gasped in astonishment. She took the things out gently, reverently—a clinging black lace gown of Paris make, a picture hat with long, jet plumes, and other dainty garments. Finally she laid her present aside and, turning to Poleon, said in a hushed, awed voice:

"It's all there, everything complete. Oh, Poleon—you dear, dear Poleon." She took his two big hands by the thumbs and looked up at him, her eyes wet with emotion. "It was very nice of you, but—I can't wear it. I have never seen a dress like it except in pictures, and I couldn't." She saw his face fall, and added impulsively: "I'll wear it once, anyhow, Poleon, just for you. Go away, quick, now, and let me put it on."

So, with the sun streaming brightly into her room, lighting up the moss-chinked walls, the rough barbarism of fur and head and trophy, Necia donned the beautiful garments. She hesitated modestly when she saw the low cut which exposed her neck and shoulders, then she brought forth a Spanish shawl and draped it about her. Never before today had she paid any marked attention to the fairness of her skin. It was odd, too, that she knew instinctively every feature of these alien garments, and that they caused her not an instant's trouble.

Just then a shadow crossed her window and thinking, of course, it was Poleon, she swept out into the big room, very self-conscious and very pleasing to the eye. She was in the middle of the room before she looked up and encountered, instead of Poleon, the embarrassed eyes of the lieutenant. She would have fled but that would have made things worse, so she stood silently, her lithe young figure drawn up to its height—and her head, upon which the long black braids were coiled, was tipped back to a haughty poise. This was no Indian maid, the soldier vowed, no blood but the purest could pulse in such veins, no spirit save the highest could flash in such eyes.

"Where did you learn to wear things like that?" he questioned. "where did you get that—well—that air?"

"It seems to me I have always known. It's instinct, I suppose. I've always had visions of women—white women—dressed in dainty, soft things. I seem to have a memory, although it is hardly that either—it's too vague and tantalizing to tell what it is except that I should be called Merridy."

"Merridy? Why that?"

Necia drew from her breast a thin gold chain, on which was strung a band ring inscribed "From Dan to Merridy." "It was grandmother's, that's where I got the fancy for the name, I suppose. I haven't had it off my neck since I was a baby." She held it out for him to examine, and he glimpsed the milk-white flesh of her neck.

Going out, he found the trader in the store. In the course of their conversation, Burrell inquired hesitatingly:

"Is this your first marriage, Mr. Gale? What leads me to ask is Necia—she is—well—she is such a remarkable girl."

Gale's face underwent a change, but he answered quietly:

"I ain't never been married. When I took Alluna it wasn't the style and neither of us has thought much about it since."

Soon after Gale went in the house to find Necia posing in her new regalia for Poleon's benefit. In a strange and unexpected fury, he commanded her to take the things off and went out, leaving Necia in tears.

Chapter IV.

During the weeks that followed, Meade Burrell saw much of Necia, content with the pleasure of her company and happy in the music of her laughter. Necia, who did not seem to see anything in her blood or station to make her inferior to other women, unfolded before Burrell like some beautiful woodland flower and, little by little, she shared with him all her girlish beliefs, hopes and aspirations.

A month later, Runnion returned, with an evil glint in his eye, gold in his pocket, and ample provisions for the winter with him, shouting to Burrell insolently that this time he had come to stay. With him was a stranger, Ben Stark. He had the appearance of one who had trod the edge of things all his life and his eyes were of a peculiar cruelty. Evidently he had some connection with Runnion's affairs for he bossed the unloading of the provisions.

Burrell was unused to the ways of mining camps, but by the mysterious manner of "No Creek" Lee, who had come to town for provisions, and from the suppressed excitement of Doret and Gale, he knew that something was in the air.

It seemed that Stark had a record as long as a sick man's drug bill. He had run the biggest saloon and variety house in the northwest at one time and was known as a "killer."

While the men were in the store, Alluna entered and asked for sugar in her native tongue, the Pat-Ute language. Stark recognized it at once and asked Gale if that was his squaw. He had been in California himself for a while, he said.

The old man went through the store at the rear and spoke to Alluna with unwonted severity, "I have told you never to use your native tongue before strangers. That man in the store understands."

The squaw dropped her work and came up close to Gale. "Can he be the one?"

Gale shook his head. "I don't know.

"Great lovely dove!" ejaculated Burrell, fervently—wondering if this glorious thing could be the quaint half-breed girl of yesterday.

THE BARRIER Chapter VII

The Magic of Ben Stark.

Before the party came in sight the sound of their voices reached the cabin, and Burrell rose nervously and sauntered to the door. Uncertain how this affair might terminate he chose to get first look at his enemies, if they should prove to be such, realizing the advantage that goes to a man who stands squarely on both feet.

The trail came through the brush at the rear, and he heard Lee say:

"This here's the place, boys—the shack ain't 50 yards away."

"Likely looking gulch," Gale was heard to reply, in his deep tones—there was a crackle of dead brush, a sound as of a man tripping and falling heavily, then oaths in a voice that made the lieutenant start.

"Ha, ha!" laughed Doret. "You mus' be tried, Meestaire R-r-unnion. Better you pick up your feet. Dat's t'ree tam' you've—"

They emerged into the open behind the house to pause in line back of Lee, who was staring at the stovepipe of his cabin, from which came a wisp of smoke. It seemed to Burrell that they held their position for a long time. Then he heard Lee say:

"Well, I'll be damned! Somebody's here ahead of us."

"We've been beaten," growled Stark, angrily, pushing past him and coming round the corner, an ugly look in his eyes.

Burrell was standing at ease in the door, smoking, one forearm resting on the jamb, his wide shoulders nearly filling the entrance.

"Good afternoon," he nodded, pleasantly.

Lee answered him unintelligibly; Stark said nothing, but Runnion's exclamation was plain.

"It's that damned blue-belly!"

"When did you get here?" said Stark, after a pause.

"A few hours ago."

"How did you come?" asked Lee.

"Black Bear Creek," said the soldier, curtly, at which Runnion broke into profanity.

"Better hush," Burrell admonished him; "there's a lady inside," and at that instant Necia showed her laughing face under his arm, while the trader uttered her name in amazement.

"Lunch is ready," she said. "We've been expecting you for quite a while.

"Ba Gar! Dat's fonny t'ing for sure," said Poleon. "Who tol' you 'bout dis strike—eh?"

"Mother; I made her," the girl answered.

"Take off your packs and come in," Burrell invited, but Stark strode forward.

"Hold on a minute. This don't look good to me. You say your mother told you. I suppose you're Old Man Gale's other daughter—eh!"

Necia nodded.

"What time of day was it when you learned about this?"

"Cut that out," roughly interjected Gale. "Do you think I double-crossed you?"

The other turned upon him.

"It looks that way, and I intend to find out. You said yesterday you hadn't told anybody——"

"I didn't think about the woman," said the trader, a trifle disconcerted, whereupon Runnion gave vent to an ironical sneer.

"But here's your girl and this man ahead of us. I suppose there's others on the way, too."

"Nonsense!" Burrell cut in. "Don't quarrel about this. Miss Gale got wind of your secret, and beat you at your own game, so that ends it; but there's plenty of ground left for all of you, and no harm done. Nobody knows of this strike from us, I can assure you."

"I call it dam' sleeck work," chuckled the Canadian, slipping out of his straps. "De nex' tam' I go stampedin' I tak' you 'long, Necia."

"Me, too," said Lee, "An' now I'm goin' to tear into some of them beans I smell a bilin' in yonder."

The others followed, although Stark and Runnion looked black and had little to say. It was an uncomfortable meal—every one was ill at ease; Gale, in particular, was quiet, and ate less than any of them. His eyes sought Stark's face frequently, and once the blood left his cheeks and his eyes blazed as he observed the gambler eyeing Necia, gazing at her with the same boldness he would have used in scanning a horse.

"You are a mighty good-looking girl for a 'blood,'" remarked Stark, at last.

"Thank you," she replied, simply, and the soldier's vague dislike of the man crystallized into hate on the instant. There was a tone back of his words that seemed aimed at the trader, Meade thought, but Gale showed no sign of it, so the meal was finished in silence, after which the five belated prospectors went out to make their locations, for the fear of interruption was upon them now.

First they went downstream, and, according to their agreement, the trader staked first, followed by Poleon



Poleon resents an insult to Necia.

and Stark, thus throwing Runnion's claim more than a mile distant from Lee's discovery. From here they went up the creek to find the girl's other locations, one on each branch, at which Stark sneeringly remarked that she had preempted enough ground for a full-grown white woman.

Runnion's displeasure was even more open, and he fell into foul-mouthed mutterings, addressing himself to Poleon and Stark while the trader was out of earshot.

"This affair don't smell right, and I still think it's a frameup."

"Bah!" exclaimed Doret.

"The old man sent the girl on ahead of us to blanket all the good ground. That's what he did!"

"Dat's fool talk," declared the Frenchman.

"I'm not so sure," Stark broke in. "You remember he hung back and wanted to go slow from the start; and didn't he ask us to camp early last night? Looks now as if he did it just to give her time to get in first. He admitted that he knew the Black Bear trail, and if he lied about keeping his mouth shut to the squaw, he'd lie about other——"

"Wait wan minnit," interrupted Poleon, his voice as soft as a woman's. "I tol' you dat I know all 'bout dis Black Bear Creek, too—you 'member, eh? Wal, mebbe you t'ink I'm traitor, too. W'at? W'y don' you spik out?"

The three of them were alone, and only the sound of Gale's ax came to them; but at the light in the Cana-

(Continued on page twenty-seven.)

Stark is not the name, but he had reason enough to change it. It makes no difference whether this one is the man or not. He will come and I shall know him. For a year I have felt that the time was short and now I know it. Flambeau is a trading post no longer. Lee has made a strike. Poleon and I are going back with him tonight, but we must say nothing or it will start a stampede. Stark is going too. Before we return, I shall know." A half hour later, equipped with provisions, Gale struck the trail to the interior where he found Poleon Doret waiting.

Somehow today the sense of his isolation came over Burrell stronger than ever. His stripes of office seemed to erect a barrier more complete than had they been the emblems of the penitentiary. Besides, he had taken a deep dislike to Stark, and in Runnion he knew he had an enemy.

The only redeeming feature of the place was Necia. Her sweetness, fineness and sparkle placed her on a higher plane than any woman he had ever met. But on account of the unhappy circumstances of her birth, he had almost decided it would be wiser not to see her again. While Burrell was thinking of these things, Necia knocked at his door and came in perfectly unconscious of there being any impropriety in her act. She began at once to tell eagerly of the strike that Lee had made. Tomorrow would be too late. There would be plenty of time to start this afternon and she knew a short cut.

At first Burrell objected. The men did not like him, he knew nothing of mining and, being a soldier, he did not know that he had the right to take up claims. All the while he fought with himself, for there were reasons why he longed to take this trip. He was hungry to beat the men at their own game. Even open enmity was better than indifferent toleration. More than that he knew that Necia was coveted by half of them. A night spent in the woods alone with her would stir them up a bit, make them sit up and notice him. He was not so sure either that it would be wrong to her. She had come to him, and after all she was but a halfbreed girl.

The chances of riches meant much to Necia, the chance to live like other girls, future, heaven, evenything to her. Her eyes were wet with the sudden dashing of her hopes and her chin quivered in a sweet, girlish way.

And then, he did not know just why, something caused him to take the pleading girl in his arms, fiercely kissing her upturned face, over and over, promising to go with her anywhere. Necia made no resistance, but clung to him in sweet surrender, and yet there was nothing unmaidenly about it. Then she hid her face in his neck, whispering shyly, "I love you, I love you, Meade."

Finally she drew serself away, telling him smilingly that he was wasting time. He made his preparations to go swiftly, a madness was upon him and he took no pains to analyze the reasons for his decision. Taking up his burden of blanket and food, he said to Necia:

"Are you sure you won't regret it?"

"Not while you love me," she answered, and together they stepped out to the trail.

Two hours later, pausing for a moment beside Black Bear creek, Burrell turned and shook his fist at the village, six miles away, then joined his companion, and hand-in-hand, they plunged into the untrodden valley.

Chapter V.

Poleon Doret was singing gaily as the trader joined him that morning for he was very happy. It seemed that this strike of Lee's had been arranged providentially for his own especial benefit. Had he not watched Necia grow from a slip of 13 and spoken never a word of his love?

Now that she was a woman he could bring his burden of prosperity and lay it at her feet, saying: "Here is another offering, my Necia, and with it go the laughter and the music and the heart of Poleon Doret."

Finally, unable to avoid any longer the subject uppermost in his mind, Poleon spoke to the trader: "Necia gettin' beeg gal' now, by and by she's goin' marry on some feller—w'at?"

"I don't mind if she gets a man that will treat her right."

"Necia wouldn't marry no bad man. She's too good and to purty for have bad husban'," broke in Poleon.

"She is, is she?". Gale turned on him with a strange glare in his eyes. "Them's the kind that get the he-devils. There's something about a good girl that attracts a bad man, particularly if she is pretty. Let me tell you what I saw with my own eyes.

"There was an eastern girl who came west, a girl just as good and pure as Necia and just as pretty too—yes, and a thousand times prettier. Two fellows fell in love with her. One was a good man who had never been in love before and so was not up to all the fancy tricks that pretty girls hanker after. The other fellow came from a neighboring town, he had knocked around a good deal and was a better liar, but he was not straight. He was handsomer and younger and the very purity and innocence of the gorl drew him, being a change from what he was used to. The other man, tied up as he was in his dreaming, did not realize what was going on and the two men did not know each other by sight. The end of it was that the girl married the bad one. The other man was all torn up about it. The girl's husband tried to break her spirit in a thousand ways, tried to make her a bad woman like the others he had known. She couldn't leave him on account of the youngster—they had a child—so she stood it for three years till she saw that he would make a bad woman of her as sure as he would make one of the kid—till he got rough—then the woman sent for the other man. He had been loving her all the time and you'd better believe he went."

"W'at happen den?" insisted Poleon.

"It's a long story and I just told you this much to show what I said was true about a good girl and a bad man, and to show why I want Necia to get a good one."

At this point, Lee, Stark and Runnion joined them. All that afternoon the five men wound up the valley following one another's footsteps and always there were dense clouds of mosquitoes above their heads. There was a shorter cut, but Lee had chosen the level ground rather than climbing the divides, loaded as they were. There was a slight chance that the people of the camp would hear of the strike and beat them in. Stark swore if they did they would have no easy time.

As the men were gathered around the campfire that evening, Lee, the one-eyed miner who had made this lucky strike, told of his long and solitary quest, when ill luck had risen with him at the dawn and followed him from camp to camp. Now that fortune had at last smiled upon him it was him for the big feed and the long drink. Then Stark talked of his life in California. In time the stories reminded the Frenchman of the conversation that morning and he said: "Say, John, w'at happen to dat girl we was talkin' about? John was tell about a feller he knowed w'at marry a good gal' jus' to mak' her bad lak' hese'f.'

"How's that?" inquired Stark, turning curiously upon the old man.

Gale had risen and remarked sleepily that it was time to turn in. The story, he explained, was a long one and had happened when he was in Washington. Hours after the others were asleep, Gale lay, staring up at the stars, and trying to solve some riddle which baffled him.

The next morning, before they resumed their march, the men, at Gale's suggestion drew straws to see who would have the choice of locations. Lee held the straws so every one would have an even chance. Gale drew the longest, which meant first choice, and Doret's was next in length to that of the trader.

Taking up their burdens again, they filed toward the narrow valley.

Chapter VI.

Not until his dying day will Burrell lose the memory of that march with Necia through the untrodden valley. They wandered hand in hand into a land of illusions, where nothing was real but love, and nothing was tangible but joy. When the sun was low they selected a mossy shelf high up on the edge of the spruce and pitched their camp.

"This day has been so wonderful," said the girl. "Tell me about your people, your sister."

He had expected her to ask for this, for the subject held an inexhaustible charm for her. Tomorrow would come readjustment of relations, but this hour of illusion must not be broken, and so he began to tell her tales of other people and his youth. He drifted farther than he intended, for to Burrell this exaggerated appreciaion of his family honor was an unconscious commendation of an upright code.

When he had finished, Necia remarked: "Those people of yours have all been good men and women, haven't they?"

Burrell began to laugh silently. "I was just wondering what some of my strait-laced ancestors would say if they could see me now."

"There is no wrong in loving. I want to sing it to the stars and cry it to the whole world. Don't you?" asked Necia.

"Well, I shouldn't care to publish this tale of our excursion, would you?"

"I have often taken trips with Poleon and been gone for days and days at a time."

"But you were not a woman then," he said softly.

"No, not till today, that's true. I don't want to ever be commonplace and ordinary. I want to be always natural and good. I've never been afraid of anything and yet I feel so safe inside your arms. Isn't it queer?" she continued dreamily.

The young man became conscious of a vague discomfort. He realized dimly that for hours he had been smothering with words and caresses a something that instead of dying, grew stronger the more utterly this innocent maid yielded to him. A man's honor, if old, may travel feebly, but its pursuit is persistent. It was as if the girl knew each cunning joint of his armor, as if she realized her peril and had set about the awakening of his conscience, with a cautious wisdom beyond her years. He vowed he was a reprobate to wrong her so; it was her white soul and woman's live that spoke.

"Dear, wonderful girl," he said, "it is going to be my heart's work to see that you never change and that you remain just what you are. You can't understand what this means to me. I was blinded, but the darkness of the night has restored my viison."

He piled up a sweet scented couch of boughs, covered her with a blanket and tucked her in.

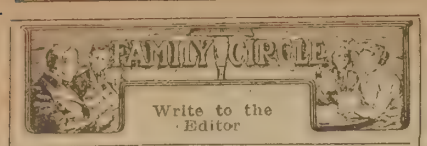
"I'll sit here beside you for a while," he said. "I want to smoke a bit."

She stole a slim, brown hand out from beneath the covers and snuggled it in his, falling alsleep almost instantly, her fingers twined about his in a childlike grip.

At times a great desire to feel her in his arms, to have her on his breast, surged over him, but the simple, little half-breed girl had revived his honor and courage. If only her love was like her blood, he might have had no scruples; or if her blood were as pure as her love—even then it would be easier, but as it was, he must give her up tonight and for all time. He sat for a long time with the dwindling firelight playing about him, his manhood and his desires locked in a grim struggle and then seeking the other side of the wickiup, covered himself, without disturbing her, and fell asleep.

At dawn they started out again, reaching Lee's cabin before the rest. At the lower end of "No Creek," Lee's location, Burrell blazed a smooth spot on the tree and wrote thereon at Necia's dictation. Four hundred and forty steps away, Necia marked on another spruce tree, "Lower center end stake of No. 1 below discovery. Necia Gale, locator." No amount of pleading would persuade Burrell to stake a claim for himself, so after Necia had located two more on the forks of the creek, the couple waited the coming of the others and what of good or ill it might bring.

This is the end of the synopsis of Chapters I. to VI. Chapter VII. given in full, beginning on this page.



ALICE W. BARLAND
Editorial Contributor

Where Are Your Children?

By ELIZABETH QUAKER.

"Mothers, know where your children are, especially your girls." is the good advice given by a dear old lady at a meeting recently.

At first it might seem unnecessary to remind country mothers of this responsibility, but when one sees little children two miles from home at nightfall without their parents' knowledge of their exact whereabouts; or coming home from school at any time they choose. On time tonight; an hour or so later tomorrow night. Really looks as though country mothers have grown somewhat careless.

Nearly all parents are anxious to have their children at school on time in the morning and the children are taught to avoid "tardy marks." Be as much concerned about the time of their return at night.

Then the aimless visiting and Sunday afternoon wandering allowed some youngsters just entering their "teens." Having no work to do they are restless and start out to find "something going on." Something to satisfy the craving for excitement and amusement.

This should be an opportunity to strengthen their characters by teaching them to quiet that uneasiness for themselves.

Here is where the country mother has more means at hand than the city parent. When daughter comes downstairs all "togged up" and vaguely says, "I'm going for a walk," sanction, but direct it: "Alright, put Happy in his gocart while I smooth my hair a bit, and we will go to call on Mrs. Jones, and, Mary, let's take a bunch of lilacs; she likes them so well."

Or take all the family on a ramble through the fields. Gather every conceivable interesting thing from flowers and branches to pebbles and snailshells. Interest them in a hobby of some sort and respect any collecting tendencies they may have.

Be a "chum" and companion.

The exacting of strict obedience is very important, but not the only factor entering into the successful rearing of a family of children

Little Jars Work Wonders.

To the Editor: I call to mind many things to save that I have learned as a pioneer's wife. The greatest help to me is the preserving of meats and vegetables, etc., by canning. On the farm beef is much cheaper when one buys it in winter by the quarter. Can your chickens in the fall. Save bushels of feed. Then at hog killing time, enough sausage, backbones and spare ribs are canned to use the remainder of the year. Vegetables and fruit in their season, can be saved. Perhaps I find it more practicable on the farm, but if I was a city resident I surely would watch the market for all such things. Buy when cheapest if fresh, and can. I have a homemade steam cooker made with a wash boiler that Miss Sutherland of Pullman gave me directions for and I find it one of the most saving articles I have in my home. I use it to do all my canning in and seldom have a failure. The wonderful use the energetic housewife can work with her little glass jars. The best butter I ever used was packed in brine and sealed in Mason fruit jars.

MRS. W. C. BOWMAN.

Mondovi, Wash.

Old Sweaters

Do Not Throw Any Part Away

By Mrs. S. Hayes, Mount Idaho, Idaho.

When sweaters are worn out at elbows and across back and chest they are discarded, but there is no need of throwing them in the ragbag, as a skein of yarn to harmonize and a little bit of dye will do wonders with the remains, especially if there are children in the family, or if you know of friends who would appreciate a little help in that line.

Stylish toques can be made of the upper part of the sleeve of large sweaters and they will fit children up to 12 years of age. Cut the sleeve from the shoulder, cut straight across and above elbow also; gather one end into a bunch (on wrong side) to close it, and try on person to be made for to get the length, then trim off, right depth. From the other sleeve, cut off a band, four or more inches wide and sew to the bottom of the above toque, wrong side out, with the seam outside, so when the band is rolled up on the toque it will be right side out. With the skein of yarn feather stitch the raw edge of rolled band, or nicer still, crochet a plain scallop around it and make a ball or pom-pom for the top by wrapping yarn around three fingers of the hand 50 times (the coarser the yarn the less it takes) tie in the center and cut both ends and trim in ball shape, sew securely over place where toque was gathered into a bunch and "there you are." A glance at toques in catalogues will help in their construction.

If there is more than one sweater to work on, each of different color, two-colored toques can be made by using sleeve of one for toque and band of sleeve of the other for facing, having skein of yarn to match facing for pom-pom. By cutting off a sleeve of a white sweater and dyeing it green, old rose or violet, and using it as rolled band on the white makes as nice a "head gear" as one could wish, with a large pom-pom of harmonizing color on each. White "lazy daisy" worked in yarn around colored brim makes it loveliet still. If the sweaters were of good wool yarn enough can be raveled to take the place of a skein of yarn.

A nice child's muff to match toque can be made of a large sweater sleeve. It is made on the same principal as the toque and both ends are banded, drawing in slightly and the muff is lined with two or more thicknesses of the same sweater. Toque, scarf and muff are quite nobby made like this. To make the scarf take a long strip of the lower part of a sweater, cut off eight or 10 inches wide and crochet around the edge.

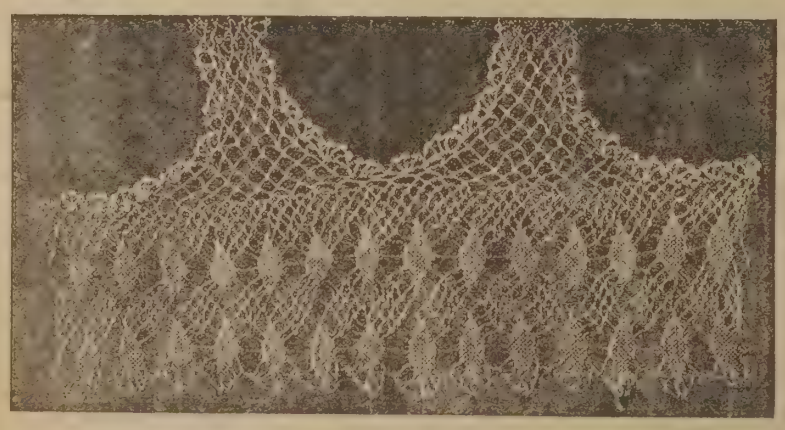
The good part of the sleeve of small sweaters make fine mittens for children. A simple way is to cut a mitten, thumb and all, allow for large seam and put in a diamond-shaped piece in the hollow where thumb joins the palm. They are also excellent lining for denim mittens for doing chores. An old mitten will do for a pattern.

Small sleeves also make good moccasins for the bedroom or to wear inside of boots, after fall rains "set in." Cut length ways of sleeve over a stocking foot pattern and use the band, down front of sweater, as a cuff at the ankle to keep it snug.

The "tail" part of sweaters make fine petticoats for little girls. If the edge is frayed a plain scallop crocheted around it remedies that, as well as improving the looks. The fine Jersey sweater tails, by goring slightly, make warm yokes for ladies wool petticoats and are smoother fitting. A long strip of the lower part cut off eight or 10 inches wide and crocheted around the edge makes a warm scarf.

Crochet and Tatting Designs

By WINIFRED WORTH



TORCHON YOKE.

This novel and chic pattern will be much appreciated by every ambitious crochet worker.

Two balls of No. 60 Cordonnet.

1st Row—Ch. 61 turn. Sk. 11 st. 1 tt. (over three times) in next ch. 7, sk. 6. 1 dc. in next (ch. 5 sk. 4, 1 dc. in next) 3 times, ch. 7, sk. 6 1 tt. in next ch. 7 sk. 6. 1 dc. in next (ch. 5 sk. 4 1 dc. in next) 3 times, turn.

2d Row—Ch. 6 1 dc. in 5 ch. of last row (ch. 5 1 dc. in next) twice, ch. 7, 3 dc. over 7 ch. of 9 dc. as before, ch. 6, t. in 6th st. of 9 ch. turn.

3d Row—Ch. 9, 11 dc., over 7 dc. (Making always dc. in dc. and 2 under-chain each side when increasing the diamond). Ch. 7, 1 dc. ch. 5 1 dc., ch. 7, 11 dc. over 7 dc. ch. 7, 1 dc. in ch. of 5 (ch. 5, 1 dc.) twice, turn.

4th Row—Ch. 6, 1 dc., 5 1 dc., ch. 7, 15 dc., ch. 7, 1 dc., in ch. of 5, 15 dc., ch. 6, 1 t. in 6th. st., of 9 ch., turn.

5th Row—Ch. 11, 19 dc., over 15 dc. ch. 7, 19 dc. ch. 7. 1 dc., ch. 5. 1 dc., turn 1 st. half of pattern decrease dc., and add loops to correspond with first half.

Time—Money

Every day of delay in beginning a business education is a loss of money.

November is at hand. Begin now.

Stenography, Typewriting, Bookkeeping, Penmanship, Banking—these are all money earners.

Begin your winter's work.

Northwestern Business College

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2263—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. Size 18 requires five and one-fourth yards of 44-inch material. The skirt measures about two yards at the foot. Price, 10 cents.

2264—House coat for men. Cut in seven sizes: 32, 34, 36, 38, 40, 42 and 44 inches breast measure. Size 38 requires three and one-eighth yards of 36-inch material. Price, 10 cents.

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The Bunchgrass Boy

(Continued from page twenty.)

originality on the part of the writer, who will please step to my desk after class." Then he gave enough of a hint as to the particular theme he was referring to to enable me to know that he was talking about me. I went to the desk with knees knocking.

Sampson asked me bluntly what magazine article I had copied my "theme" out of. I told him none. He began to get red in the eyes, but I guess perceived by and by that I was in a stammering, stuttering, trembling way telling the truth when I insisted that the "egg theme" was a fabrication of the imagination. From that time on I felt myself a failure at the theme-writing game.

Later, I was directed to write an "optional theme," and this time I remembered my definitions. I described a cougar playing with a calf's head, cuffing it about just as a cat does a mouse. This theme was introduced to the class in a public reading, and my drooping spirits revived somewhat.

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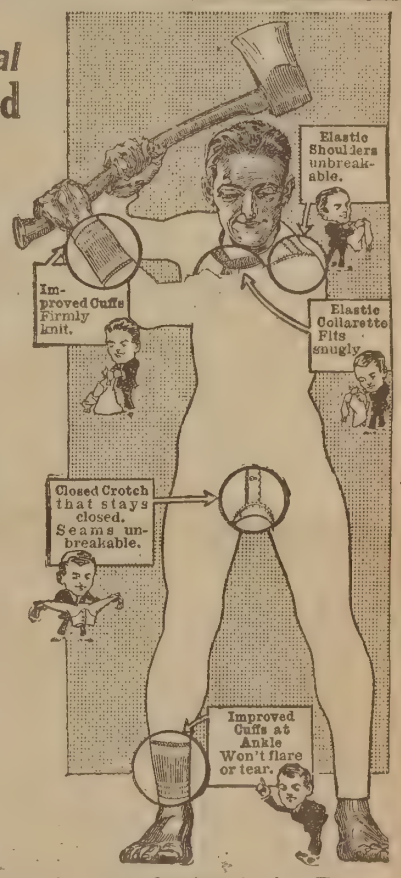
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ELASTIC KNIT **UNDERWEAR**

is made of the finest long-fibre cotton in the Southland, silky-smooth and fleecy warm. Naturally elastic and comfortable, but made a whole lot more so. You'll sure be happy to slip in this unusually fine underwear and laugh at the cold.

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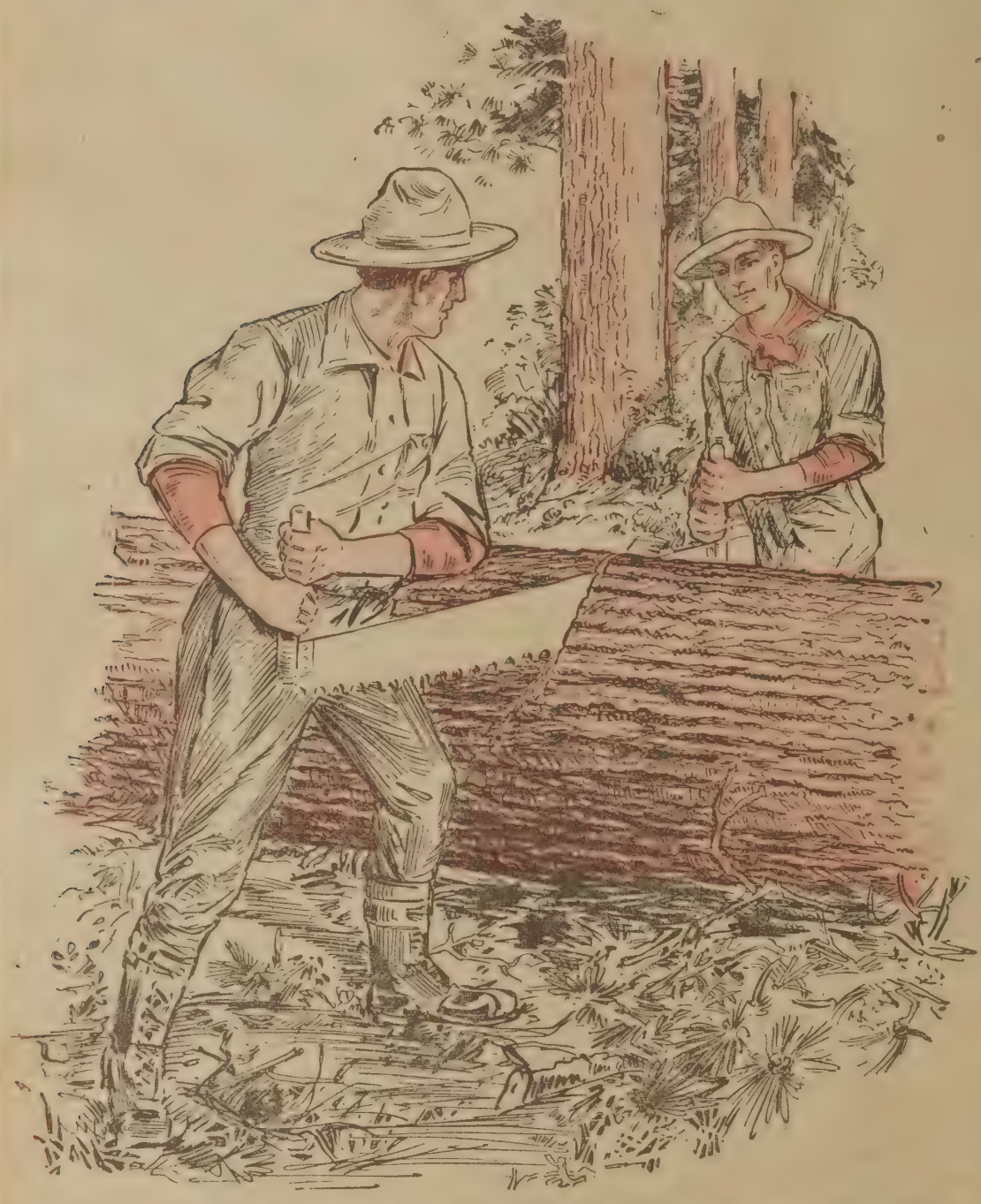
We've got the boys' union suit that you and every parent have wanted. A high-quality, long-wearing, economical union suit. You'll like it because you can see the extra value. Your boys will like it because it's warm, comfortable and cozy. Its value can't be duplicated.

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By sending subscriptions direct to this paper and thus eliminating cost of middlemen, the following rates are obtained:

25c for one year's subscription to The Washington Farmer.

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We will be able to keep the above rates in effect if our readers send their subscription orders direct to this paper, and so make it possible for us to dispense with the big force of agents we are accustomed to employ.

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Consider these points about the new subscription plan which we ask our readers to act upon. It is in accord with the government's request to release as many men as possible for productive labor. It is in keeping with the principle of cooperation for which we have all been working. It means that our friends on the farms of this state get the benefit of every dollar which would ordinarily go for agents' salaries, railway fares, hotel bills, automobiles and miscellaneous expenses. You can do your part in making the new plan an unqualified success by sending in your subscription order promptly; and by asking your neighbors to do the same.

We have been highly gratified by the loyal response already received from all parts of the state; and earnestly urge those who have not acted already to do so at once.

Remember, only the method of handling subscriptions is changed; the quality of the paper will be maintained and improved wherever and whenever possible.

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Your remittance may be in any form most convenient--silver, stamps, personal check, postal money order, express money order, or bank draft.

Nov. 15

The Washington Farmer,
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I desire to take advantage of your plan to deal direct with your readers in securing and renewing subscriptions, thus saving the middleman's cost and releasing men for productive labor.

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Junior Red Cross Society.

Dear Aunt Nellie: I am going to write a letter to the Children's Corner after so long a time. I am going to the Krupp public school. I am 12 years old and am in the seventh grade. I have a very good teacher. His name is Mr. McCarthy. We drive four miles to school, but are going to move to town in a few weeks. The girls at school have organized a Junior Red Cross. We are going to knit for the soldiers. The first thing we are going to do is to give an entertainment to get money for the Red Cross to buy yarn. My grandmother came from far away Virginia to see us. She stayed about six weeks with us. I was very glad to see her come. I am going to tell you about our farm and what we did this summer. We have 22 head of horses and five cows and calves. We own 160 acres of land, but are farming 640 acres. This summer I stayed at home and helped my mother around the house, doing little things. I helped cook for the harvest hands. I made nearly all the cakes. There are also some clubs around in the country, among them being the Pig club, and Garden and Canning clubs. I didn't join any of them, but my brother joined the Pig club. One day he turned his pigs out and I didn't believe they were his pigs they had grown so since I saw them last. Our garden did very well till there was a large dust storm come up and killed most everything, although we had quite a few beans, some corn and all kinds of peas, radishes, turnips and different things. We did some irrigating. We raised over 200 chickens this year, for the last month or so we have been eating chickens nearly every day. I would rather live on a farm, where you can have so many things. We have canned over 200 quarts of fruit and have made five and one-half gallons of apple butter. I have been to two basket socials this fall. I had a good time at both. I took music lessons all summer on an organ. This fall my music teacher gave a recital and I played. My fingers were sore, but I played anyway. The dust is blowing as usual. We have been having lots of dust storms this fall and summer. —Edith James, Box 114. Krupp, Wash.

A Member of the Red Cross.

Dear Aunt Nellie: I received my prize which I thought lovely. Could the cousins guess what it was? It was some bulbs containing iris, dahlias, narcissus, tulips and hyacinth. I am going to select nice beds for them. I thank Aunt Nellie and think the gift is lovely. This time I am going to write on three subjects so now I will start. Helping the Red Cross is my first subject. I am a member of the Red Cross. You have to pay $1.25 to join. The ladies make scarfs, sweaters, washrags and sponges. They make many other things, too. I can crochet and sew. I can embroider a little, too, but I cannot knit. I am going to learn to knit. I wonder if any of the cousins belong to the Red Cross. I hope they do for it is very patriotic to belong to it. It is for a good cause. Thanksgiving comes in November. The snow falls fast. The boys go out with their sleds. The girls also go out. On Thanksgiving we crack nuts and have a good deal of fun. Thanksgiving dinner is a big and enjoyable one. We are always filled up by the time we are ready to go to bed—Mary Esther Symington, Selleck P. O., Box 97, Kangley, Wash.

Make Slippers for Soldiers.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 13 years old and in the seventh grade. I live on a 40-acre farm. We have two cows, one horse, one colt, one dog, two puppies, one cat and one kitten. We have 175 chickens. I will take for my subject "Helping the Red Cross." We have a Red Cross meeting the first and third Thursday of each month. We then sew things for soldiers. We bring old pieces of wool and cotton and sew it into chamber slippers. If I were old enough I would be a Red Cross nurse. I will close now with love to Aunt Nellie.—Anna Becker, R. F. D. 1, Box 56B, Clinton, Wash.

Glad to Hear from Vera Again.

Dear Aunt Nellie: This is my second letter to the Corner. I hope many other children will write to you, as I like to read the letters, and I am sure many other children do, too. We have four hundred acres of land, but it is all logged-off land, except about 80 acres, which is creek bottom. We have eight cows and six heifers. We send about five gallons of cream to town every other day. I have one sister and one brother. My sister's name is May and my brother's name is Joe. I am 12 years old and in the eighth grade. If I have a twin I should like to hear from her.—Vera Allen, Box [illegible], Roy, Wash.

Enjoyed Visit to Seattle.

Dear Aunt Nellie: I have not written to you for a long time, as I have been in Seattle visiting my sister and brother. I certainly had a fine time. We left Bellingham at 10 o'clock and arrived in Seattle at 4. We went to a big park called Woodland park. Everything was nice and green and flowers were blooming. There was quite a large animal there in the park called gnu. Its head was like that of a cow and had horns like a cow. Its body was like a horse's and its feet were like a cow's. The bears, lions, tigers and buffaloes were there, too, and also birds. One of the buffaloes was so ferocious it had to be shot. We went to town most every day and saw many nice things. One building is 42 stories high, called the Smith building. One store, called the Bon Marche, is a block long. I go to school and am in the eighth grade. My teacher's name is Mr. Gilmore. He is a very nice teacher. I am quite short, have blond hair and gray eyes. I am 14 years old. The name of our school is Riverside. —Emma Brune, R. F. D. 2, Lynden, Wash.

Milking 120 Cows Now.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My name is Evelyn Righetti and I am in the third grade and I am 7 years old. My teacher's name is Miss Isabel Ross. We have 500 acres of land and 200 cows. We only milk 120 cows now. We have eight horses and two little colts. The name of the colts are Bell and Maude. My oldest brother has a Ford car and two of my sisters and my brother go to high school every morning.—Evelyn Righetti, Monroe, Wash.

Goes to School With Brother.

Dear Aunt Nellie: I am 9 years old. I go seven miles to school with my brother in the car. I take music lessons and am learning to play the piano. I have a pony and a pet sheep called Bug. Bug is a very nice pet. She will eat bread and sugar out of my hand. She likes to drink out of a cup. My pony's name is Ky. She is quite small and has a white face. She is sorrell. We live on a ranch. We have 31 sheep and nine horses and five cows.—Carolyn Montanye, Colville, Wash.

Forest's Birthday Comes in July.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but I do not think it shall be the last. I am 10 years old and am in the fourth grade at school. My birthday is the 7th of July. I am the third to the best in my class out of six pupils. I have also two brothers younger than myself. The youngest of us is three years old and the second is seven years old. We live on a five-acre farm seven miles from Mt. Vernon.—Forest Eisen, Mt. Vernon, Wash.

A Dog Named Lion.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I was 7 years old the sixth of April and am in the second grade. I have a sister and a brother. Their names are Florence and Jerold. My sister will be 12 years old. We have 13 head of horses and 45 head of hogs. We have one dog named Lion. We live on a farm.—Lola Ferrell, Silcott, Wash.

"Filax," the Life-Saver.



Braving the dangers of that shell-torn area known as "No Man's Land," times without number and credited with saving the lives of 100 French soldiers is the record of "Filax," German sheep dog and Red Cross worker, who visited this country a few months ago on furlough, says Our Dumb Animals.

This is just one example of his faithfulness and intelligence:

A French lieutenant fell into a German trap and was wounded so badly that he was unable to get back to his own trenches. When he fell his helmet rolled off and was lodged under his doubled-up body. He would have died if Filax had not found him. Not being able to locate the helmet, the dog squatted down on his haunches and slowly licked the face of the unconscious soldier. This acted as a restorative and presently the man opened his eyes, pulled his helmet from under his body and gave it to Filax. Shortly after a rescue party headed by the faithful Filax found him and brought him in.

THE BARRIER

(Continued from page twenty-three.)

dian's face Runnion hastily disclaimed any such thought on his part and Stark shrugged his denial.

"I don' know you feller' at all," continued Poleon, "but Ole Man Gale, he's my frien', so I guess you don' better talk no more lak' dat."

"Don't get sore," said Stark. "I simply say it looks bad." But the other had turned his back and was walking on.

There are men quite devoid of the ability to read the human face, and Runnion was of this species. Moreover, malice was so bitter in his mouth that he must have it out, so when they paused to blaze the next stake he addressed himself to Stark loud enough for Poleon to hear.

'That lieutenant is more of a man than I thought he was."

"How so?" inquired the older man.

"Well, it takes nerve to steal a girl for one night and then face the father, but the old man don't seem to mind it any more than she does. I guess he knows what it means, all right."

Stark laughed raucously. "I thought of that myself," he said.

"That's probably how Gale got his squaw," concluded Runnion, with a sneer.

It seemed a full minute before the Frenchman gave sign that he had heard, then a strange cry broke from his throat and he began to tremble as if with cold. He was no longer the singer of songs or the man who was forever a boy; the mocking anger of a moment ago was gone; in its place was a consuming fury that sucked the blood from beneath his tan, leaving him the pallor of ashes, while his mouth twitched and his head rolled slightly from side to side like a palsied old man's. The red of his lips was blanched, leaving two white streaks against a faded, muddy background through which came strange and frightful oaths in a bastard tongue. Runnion drew back, fearful, and the older man ceased chopping and let his ax hang loosely in his hand. But evidently Poleon meant no violence, for he allowed the passion to run from him freely until it had spent its vigor, then said to Runnion:

"M'sieu, eider you are brave man or dam fool."

"What do you mean, Frenchy?" said the man addressed, uneasily.

"Somebody goin' die for w'at you say jus' now. Mebbe it's goin' be you, m'sieu; mebbe it's goin' be him. I can't tell yet, but I'm hope an' pray it's goin' be you, because I t'ink w'at you say is a lie, an' nobody can spik dose kin' of lie 'bout Necia Gale."

He went crashing blindly through the underbrush, his head wagging, his shoulders slumped loosely forward like those of a drunken man, his lips framing words they could not understand.

When he had disappeared Runnion drew a deep breath.

"I guess I've framed something for Mister Burrell this time."

"You go about it queer," said Stark. "I'd rather tackle a gang-saw than a man like Poleon Doret. Your frame-up may work double."

"Huh! No chance. The soldier was out all night alone with that half breed girl, and anybody can see she's crazy about him. What's the answer?"

"Well, she's mighty pretty," agreed the other, "most too pretty for a mixed blood, but you can't make the Frenchman believe she's wrong."

"Why, he believes it now," chuckled Runnion, "or at least he's jealous, and that's just as good. Those two will have trouble before dark. I wish they would—then I'd have a chance."

"Have you got your eye on her, too?"

"Sure! Do you blame me?"

"No, but she's too good for you."

"Then she's too good for them. I think I'll enter the running."

"Better stay out," the gambler advised, "you'll have sore feet before you finish. As a matter of fact, I don't like her father any better than you like her lovers—"

"Well, it's mutual. I can see Gale hates you like poison."

"—and I don't intend to see him and his tribe hog all the best ground hereabouts."

"They've already done it. You can't stop them."

Before answering, Stark listened for the trader, but evidently Gale had finished his task and returned to the shack, for there was neither sign nor sound of him.

"Yes, I can stop them," said Stark. "I want the ground that girl has staked, and I'm going to get it. It lies next to Lee's, and it's sure to be rich; ours is so far away it may not be worth the recorder's fees. This creek may be as spotted as a coach dog, so I don't intend to take any chances."

"She made her locations legally," said Runnion.

"You leave that to me. When will the other boys be here?"

"Tomorrow morning. I told them to follow about four hours behind, and not to run in on us till we had finished. They'll camp a few miles down the creek, and be in early."

"You couldn't get but three, eh?"

"That's all I could find who would agree to give up half."

'Can we count on them?"

"Huh!" the other grunted. "They worked with me and Soapy on the Skagway trail."

"Good. Five against three, not counting the girl and the lieutenant," Stark mused. "Well, that will do it." He outlined his plan, then the two returned to the cabin to find Lee cooking supper. Poleon was there with the others, but, except for his silence, he showed no sign of what had taken place that afternoon.

Stark developed a loquacious mood after supper, devoting himself entirely to Necia, in whom he seemed to take great interest. He was an engaging talker, with a peculiar knack of suggestion in story telling—an unconscious halting and elusiveness that told more than words could express—and, knowing his west so well, he fascinated the girl, who hung upon his tales with flattering eagerness.

Poleon had finished several pipes, and now sat in the shadows in the open doorway, apparently tired and dejected, though his eyes shone like diamonds and roved from one to the other. Half unconsciously he heard Stark saying:

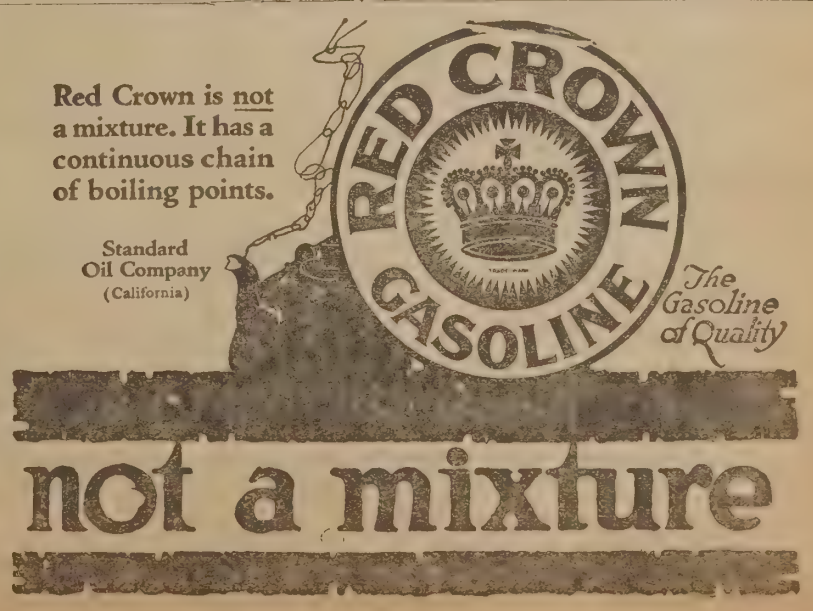
"This girl was about your size, but not so dark. However, you remind me of her in some ways—that's why it puts her in my mind, I suppose. She was about your age at the time—19."

"Oh, I'm not 18 yet," said Necia.

"Well, she was a fine woman, anyhow, the best that ever set foot in Chandon, and there was a great deal of talk when she chose young Bennett over the Gaylord man, for Bennett had been running second best from the start and everybody thought it was settled between her and the other one. However, they were married quietly."

The story did not interest the Canadian; his mind was in too great agitation to care for dead tales; his heart burned within him too fiercely and he felt too great a desire to put his hands to work. As he watched Burrell

(Continued on page thirty-one.)



News for Breeders

W. A. Smiley, near Gardner, in Douglas county, Ore., recently purchased two of the good cows and one heifer from J. M. Dickson & Son of Shedd, Ore. This included Ruth Viola, a granddaughter of Golden Glow's Chief, with an official record of 543 pounds of fat or over 637 pounds of butter, and Clara Marea, also a Register of Merit cow and a great breeder. The heifer is by the Dickson herd bull, Valentine's Ashburn Baronet. Mr. Smiley, who is prominent in cow-testing association work, has a good grade herd of Jerseys, but there are his first purebred and he has started well.

At the "Paramount Stud" sale of William Crownover's Belgians at Hudson, Ia., Oct. 16, the great stallion Forceur, generally conceded to be the greatest breeding stallion in America and one of the best of the entire breed, sold for the record price of $47,500. He was purchased by C. G. Good of Ogden, Ia., with Henry Lefebure & Son of Fairfax, Ia., as the active competitors for him. The latter firm later in the sale took one of Forceur's weanling colts at $1825. The 53 head sold totaled $98,775, an average of $1864. The stallions, including Forceur, brought an average of $3297 and the mares and fillies $1127 each. Most of the animals remain in Iowa, the one sold farthest west going to Montana. H. A.

Raleigh's Sunbeam.



The above photo shows Raleigh's Sunbeam, a 3-year-old Jersey cow, shown by E. O. Erickson of North Yakima at the Washington state fair. She is a very handsome type Jersey, as the picture shows, and won second in her class. But it is for her splendid milking qualities and the good calves she brings that Mr. Erickson prizes her most.—H. A.

Swartz Sells Heifers.

One of the striking results of advertising is revealed in a letter to The Farmer from C. A. Swartz of Springfield, Ore. Mr. Swartz writes that McArthur & Stauff, the Rickreall, Oregon, Jersey breeders, purchased the heifers advertised by him a short time since.

Congressman McArthur, who is a regular reader of The Farmer, saw the ad while in Washington. He wrote Mr. Stauff to go and see them, resulting in the purchase. Both the gentlemen are greatly pleased with their buy, says Mr. Swartz. The breeding is partly along the same line as the McArthur & Stauff herd and some are closely related to N. H. Smith's 800-pound cow, Picabo. Mr. McArthur realized the value of the breeding more quickly than others.

Colony Segis Newman.

J. von Herberg reports the sale of Colony Segis Newman, who goes to Kittle Bros., owners of the famous Fairhurst herd at Holland, Ohio. He believes that this is the first time in the history of the breed that a bull, born and bred on the Pacific coast, has been sent east to head a great herd. This animal is indeed worth sending to the Coast for.

He is sired by Aaggie Cornucopia Newman, sire of the world's champion junior 2-year-old, and world's champion 3-year-old for milk production. He has eight daughters under full age that average 103 pounds of milk in a day, two of which are 30 pounds.

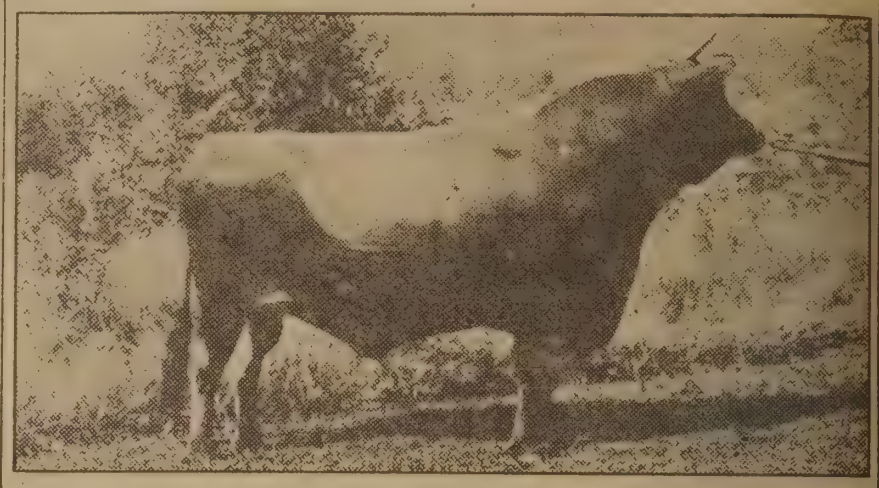
The price of the animal runs in the four figures.

Increase in Naval Tonnage.

It is said on reliable authority that 10,000 sailors in our navy have made a total gain in weight amounting to 75 tons. This is by no means to be regarded as the least important item in reckoning the increase of our naval tonnage.—Providence Bulletin.

Waikiki Farm Jerseys

"Home of the Pilot Family"



COUNT'S FOXY LAD OF WAIKIKI.

A grandson of Pilot. Grand Champion bull of the northwest, 1917. His dam, Eminent's Foxy Belle, is now on R. of M. test and in 7 months and 9 days has given 9627 pounds milk. 514.7 pounds butterfat.

Herd Sires: Count's Foxy Lad of Waikiki 142808 (see description under cut).

Model's Pilot of Waikiki 152038, Junior Champion, Spokane, 1917. Sire, Golden Winner's Count 105789. Dam, Pilot's Model, Champion Senior 2-year-old Jersey of the west. Register of Merit record with first calf, 12,639 pounds milk, 618.2 pounds butterfat.

Our foundation cows are equal to the best in America. Register of Merit records up to 828.4 pounds of butterfat in one year.

Write for illustrated booklet. Several young bulls of excellent breeding for sale.

Jay P. GRAVES, Owner

IRA P. WHITNEY, Manager, Route 7, Spokane, Wash.

At Portland, November 23



HOLLYWOOD FARM

will offer fresh heifers with ARO records and of exceptional breeding, and two young sires with yearly records of 1031 lbs. and 984 lbs. butter, respectively, all to be had at your price. Can you afford to pass this opportunity up? Money-makers from the start

Remember the Date, November 23

Breeders' Department

POLAND CHINA SWINE

Locust Lawn Herd

Booking orders for strictly big type Poland China spring boars, sired by Overlook, 1st and senior champion, Idaho State Fair and Gem State Fair, 1916; weight 820 lbs.; out of the 1st, 2d and 4th prize sows at Idaho State Fair, 1916, in strongest competition; satisfaction guaranteed.

W. F. HOWARD & SONS, Parma, Idaho.

Pure-Bred Poland China Fall Gilts

will be shipped c. o. d., subject to your approval. Write to

HERBERT WILLARD, Dayton, Ore.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX, Lyons, Ore.

POLAND CHINAS

Service Boars, Bred Sows and Gilts, Brunk's Kind.

THOS. W. BRUNK, rt. 2. Salem, Ore.

BIG TYPE POLAND CHINAS
Herd headed by Sammy (79,833).
Correspondence Solicited.
Fruitland Stock Farm, C. Royston, Mgr.
Payette or Fruitland, Idaho.

GREENLEAF STOCK RANCH.
Big type Poland Chinas, either sex, for sale at all times.
Wilson Bros., A. L. Wilson, Mgr.
Greenleaf, Idaho.

BERKSHIRE SWINE

Kintyre Farm Berkshires

Exceptionally fine breeding stock for sale at reasonable prices.

CLARK BROS., R. F. D. 2, Prosser, Wn.

Early Spring Pigs

Well grown, best quality, sired by a son of the great Laurel Champion and out of prize sows.

GEO. BERTRAND, Olequa, Wash.

HAMPSHIRE SWINE

HAMPSHIRE SWINE

Choice stock of all ages at bargain prices.

HIGHLAND FARM, Box 22, Underwood, Wn.

YORKSHIRE SWINE

BROADMEAD Farm

Large Yorkshire Swine.

J. A. SCOLLARD, R. D. 1., Chehalis, Wn.

TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.

Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

Bliss, Idaho.

ABERDEEN ANGUS

Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the breed.

At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

Congdon & Battles

Otto V. Battles, Mgr.
North Yakima, Wash.

STOCK FOR SALE.

We breed highest type Aberdeen Angus.

A. H. EAGLESON & SONS.
Boise, Idaho.

HOLSTEIN CATTLE

Established 1887—100 in Herd.
REGISTERED HOLSTEIN CATTLE.

As I wish to reduce my herd I am offering the blood of such bulls as King Segis Pontiac, 13th, 30.39 lbs. breeding, 4.25 per cent fat; Iowana Rochdale Korndyke, 26 lb. breeding, and Prince Segis Korndyke De Kol, 31.41 lbs. breeding.

LAKE SIDE STOCK FARM.
P. A. FRAKES, Scappoose, Ore.

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

Waterloo Holstein Farm

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje	King Segius 10th Segius Walker Pietertje 2d

C. F. JENNESS, Meridian, Idaho.

World's Record Holsteins

Herd headed by Ononis Cornucopia Johanna Newman, the best bred son of the world's record cow, Margie Newman, with more 100-lb. records in his pedigree than any other bull in the world.

Home of the world's champion junior 2-year-old and junior 3-year-old producers. Write for records and prices on young bulls.

CHAS. ELDRIDGE, Chimacum, Wash.

Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.

Young Holstein Bulls

Out of A. R. O. dams and sired by Chimacum King Segis, whose dam and granddam average 30.98 lbs. butter in 7 days. Very reasonable.

FRANK W. CONNELL, Hillsboro, Ore.

REGISTERED HOLSTEINS

Bull calves for sale with good A. R. O. backing.

BEEBE BROS., R. F. D. 2, Rupert, Idaho.

HOLSTEINS

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

REGISTERED HOLSTEINS

of exceptional breeding. Prize winners Southern Idaho Fair. Prices within reason to farmers. Write for descriptions.

A. A. DAVIS, Buhl, Idaho.

SHEEP

20 Oxford Down Rams 20

Yearlings and ram lambs; will make special price on the lot. All stock registered. No ewes for sale.

C. P. Kizer, Harrisburg, Ore.

HORSES

Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

A. R. HUNTER, Island City, Ore.

WILL SELL MY BELGIAN HORSES.
All thoroughbreds and registered. Three mares, one imported stallion, two yearlings, mare and stud. Sacrifice price.
ANDREW NIELSON, Mondovi, Wash.

REGISTERED PERCHERON HORSES.
E. O. WALTER, AUCTIONEER.
Walter Bros.,
Buhl and Filer, Idaho.

SHORTHORN CATTLE

SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

R. E. BOYCE, Baker, Ore.

Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN, Wapato, Wash.

Hercules Shorthorns

For particulars write

DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

CEDARHURST FARM

SHORTHORNS.

Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

JOE TURNER, Meyers Falls, Wash.

H. H. Schildman

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.

Filer, Idaho.

Shorthorn Cattle

SHIRE HORSES.
DR. G. E. NOBLE, Boise, Idaho.

GUERNSEY CATTLE

LENA'S STATESMAN
No. 24,744 FOR SALE

He was Grand Champion at the Oregon State Fair, 1917, with seven aged bulls in the show ring. His sire is Golden Prince of Oregon, No. 11912, Grand Champion bull at the Alaska-Yukon Exposition at Seattle, and never defeated in all his long show ring career, but was always an outstanding winner.

LENA'S STATESMAN'S dam and granddam milk from 45 to 52 lbs. a day, testing 5 per cent and over. They are both heavy producers and show ring winners.

LENA'S STATESMAN was five years old Oct. 4. He is a proven, impressive sire on both pure and grade cows, and is as remarkable for his dairy quality as his breed type. For further particulars and price address

D. H. LOONEY. Jefferson, Ore.

Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.

Redmond, Wash.

FAIRVIEW FARM.

Breeders of high class registered and grade Guernseys.

A. J. SINNES.
Route 5. Mt. Vernon, Wash.

POULTRY

Rhode Island Reds and Whites

Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Now is the time to buy for next year's breeding, from blue ribbon stock. Sale of pedigreed Rufus Red Belgian hares, bargains at $3 each. Registered Airdale bitch at a bargain if taken at once.

HIGHLAND FRUIT AND POULTRY RANCH.
J. NONNENMACHER.
R. F. D. 3. NORTH YAKIMA, WASH

When you write to advertisers be sure to state that you saw their advertisement in this paper.

DUROC-JERSEY SWINE

DUROC JERSEY

Gilts and Boars

I am booking orders for fall weanling pigs for October and November delivery. Can furnish them singly or in unrelated pairs or trios. Special prices to members of boys' and girls' pig clubs. An exceptional strain of Durocs, carrying the best blood lines found in the northwest. Have been prize winners wherever shown.

Chas. G. Sprong, Grandview, Wn.

At Pacific International

Stock Show, N. Portland, Nov. 19-24, see some of our Big Type Durocs, offspring of the great breeding boar, Golden Rod, and other best Duroc strains.

DOERFLER BROS. Silverton, Ore.

Five Choice March Boars

Of the Finnicum quality.
Also a few choice gilts to be bred in November.

J. E. FINNICUM, AMITY, ORE.

FOUR MAY BOARS

By King or Oregon, Golden Rod's best son; dam, the great breeding sow, Miss Critic. Also a few gilts bred to a son of the great sire, Pathfinder.

W. L. SHEARD, DAYTON, WASH.

Young Boars and Gilts

Sired by Elizabeth's Perfection, grand champion Oregon State fair, 1917, and Orion's Top Col.

E. C. NAFTZGER. GERVAIS, ORE.

PREMIUM HERD

Spring pigs from champion and first prize sows at Ontario, Ore., and Gem State and Idaho State fairs.

C. H. KIRKPATRICK, Parma, Idaho.

OTTO'S DUROC JERSEYS.

Founded on the basis of making Duroc history in Idaho. Won 4 championships and two grand championships at Southern Idaho State Fair.

L. S. OTTO, Filer, Idaho.

IDAHO CHAMPION DUROCS—At state fair of Idaho our Durocs won more prizes than all other exhibitors combined. Stock of all ages for sale.

Richards Live Stock Co., Virginia, Idaho.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Pullman, Wash.

AVONDALE STOCK FARM.

Registered Duroc Jersey hogs. Inspection invited. Correspondence solicited.

H. C. POLLY, Route 3, Burley, Idaho.

JERSEY CATTLE

Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

Erickson Bros. Prop.
North Yakima, Wash.

HEREFORD CATTLE

BULL RANCH

Registered Hereford cattle.

CHAS. BULL, Prop. Mabton, Wn.

BROWN SWISS CATTLE

Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.
THEO. BRUGGER, Route 3, Gresham, Ore.

AUCTIONEERS

AUCTIONEER

Special attention given to live stock sales.
BEN T. SUDTELL, Albany, Ore.



Imported and American Bred
Percheron, Shire and Belgian Stallions

They are of the very best breeding obtainable and are guaranteed to be breeders. They will be sold at very reasonable prices.

If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to

WM. T. TRACY, Kennewick, Wash.

Valley Junction Shorthorns

The grand champion bull, General Hampton 390583, at the head of the herd. Young bulls fit to head the best pure bred herds and others that will make impressive improvements on range herds. Priced according to quality.

W. W. GREEN & SONS, Union, Ore.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Nov. 12.—Both in activity and strength oats today led corn. Scarcity of cars available for the movement of oats proved the dominating factor. Oats finished 2c to 2⅝c net higher. Corn gained 1½c to 2⅛c, closing unsettled, with December $1.20½ and May $1.15¾. Provisions advanced 2½c to 50c.

Corn rose mainly as a result of upturns in the oats market and in Wall street quotations.

Provisions swung upward with grain.

Cash Quotations.

CHICAGO, Nov. 12.—Corn—No. 2 yellow, $2.25½; No. 3 yellow, $2.22; No. 4 yellow, nominal.

Oats—No. 3 white, 63@64¾c; standard, 63¼@64¾c.

Rye—No. 2, $1.77@1.77½.

Barley, $1@1.33.

Timothy, $6@7.50.

Clover, $18@24.

Pacific Northwest Grain.

PORTLAND, Ore., Nov. 12.—Grain future bids: December oats, $50.25; feed barley, $52.50; brewing barley, $53.

Eastern oats and corn in bulk bids: Oats, No. 3 white, November, $45.50; 38-pound clipped, $46. Corn, No. 3 yellow, January, $55; No. 3 mixed, $55. December oats, No. 3, $45.50; oats, clipped, $46.50. February corn, yellow, $54; corn, mixed, $52.50.

San Francisco Grain.

SAN FRANCISCO, Nov. 12.—Barley; December, $2.43½ bid, $2.45 asked. May, $2.45½ bid, $2.47½ asked.

Minneapolis Grain.

MINNEAPOLIS, Nov. 12.—Wheat receipts, 671 cars, compared with 565 a year ago.

Corn—No. 3 yellow, $2.20@2.25.

Oats—No. 3 white, 61¾@62¾c.

Flax—$3.39@3.47.

Flour in carload lots, fancy patents, 20 cents lower, quoted at $10.30 wood; first clears, 10 cents lower, quoted at $9.65 jute. Other grades unchanged. Shipments, 89,897 barrels.

Rye—$1.76@1.77.

Barley—98c@$1.27.

Bran—$31.50@32.

Live Stock Quotations.

At Omaha.

OMAHA, Nov. 12.—Hogs—Receipts, 4300; market 10c to 20c lower. Heavy, $16.70@17; mixed, $16.85@17; light, $16.90@17.25; pigs, $19@19; bulk of sales, $16.80@17.

Cattle—Receipts, 20,000; steady to lower. Native steers, $9@16; cows and heifers, $6.75@9.75; western steers, $8.50@13.50; Texas steers, $7.50@10.75; cows and heifers, $6.50@9.25; canners, $5.25@6.25; stockers and feeders, $6.50@8.75; calves, $9.50@12.50; stags, etc., $5.75@8.

Sheep—Receipts, 7300; strong to 25c higher. Yearlings, $10.75@13; wethers, $11@12.50; ewes, $9.25@10.75; lambs, $16@16.75.

At Chicago.

CHICAGO, Nov. 12.—Hogs—Receipts, 40,000; strong. Bulk, $17.10@17.50; light, $16.65@17.50; mixed, $16.70@17.60; heavy, $16.70@17.60; rough, $16.70@16.90; pigs, $13.25@16.75.

Cattle—Receipts, 23,000; firm. Native steers, $6.75@16.80; western steers, $5.85@13.40; stockers and feeders, $5.65@11.50; cows and heifers, $4.50@11.75; calves, $6.75@13.

Sheep—Receipts, 20,000; firm. Wethers, $8.70@12.85; ewes, $7.50@11.25; lambs, $12@16.65.

At Portland.

PORTLAND, Ore., Nov. 12.—Cattle—Steady; receipts, 931. Best beef steers, $9@9.50; good beef steers, $7@9; best beef cows, $6@7; ordinary to good cows, $4@5; best heifers, $6.50@7.50; bulls, $4.50@6.75; calves, $7@9.50; stocker and feeder, steers, $4@7.25.

Hogs—Higher; receipts, 1327; Prime light, $16.20@16.40; prime heavy, $16@16.20; pigs, $14@14.50; bulk, $16@16.25.

Sheep—Steady; receipts, 925. Western lambs, $14@14.50; valley lambs, $13.50@14; yearlings, $12.50@13; wethers, $12@13; ewes, $8.50@10.50.

Spokane Stock Yards, Monday.

Hogs—Receipts none; market strong; prospects higher. Prime light, $15.80@15.90; prime heavy, $15.70@15.90; pigs, $13.75@14.75; stockers and feeders, $12@13.25.

Cattle—Receipts, 392; market steady. Best beef steers, $8.50@9; good steers, $7@7.75; best beef cows, $6.75@7.25; good cows, $5.50@6.50; common cows, $3@5; best heifers, $6.75@7.50; bulls, $5@6.50; calves, $6.50@8; stocker and feeder steers, $5@7.25.

Sheep—Receipts, none; market steady. Prime lambs, $13.25@14; good lambs, $12@12.50; prime yearlings, $11.50@12.50; prime wethers, $11.25@12.25; best mutton ewes, $8.50@10.

Butter and Eggs.

PORTLAND, Nov. 10.—Butter—Prints, extras, 45@49c; cubes, extras, 43c; prime firsts, 42c; dairy, 31c.

Butter fat, Portland delivery, No. 1 sour cream, 51c.

SAN FRANCISCO, Nov. 10.—Eggs—Fresh extras, 58½c; fresh firsts, 58c; fresh extra pullets, 52c.

Seattle Market.

SEATTLE, Nov. 10.—The spud market is firm in all quarters, Yakima growers quoting $33@34 and Puget sound producers holding at $30@31. Jobbers complain constantly of the quality. Little regard is held for former grading rules, and quotations are based on mixed grades. There has been some improvement since the food committee announced that it would hold inferior spuds mixed with good stock to be waste. Only a small percentage of Yakima Gems are in demand here, buyers being satisfied with the Puget sound offerings.

The apple trade of the week has been brisk, but it has run almost exclusively to jumble packs. Practically every house on the street is dabbling more or less in lug boxes of apples, with prices all the way from 75c per box to 2 and 3c per pound. Delicious, Winter Bananas, Spitzenburgs and Jonathans have been selling in this way.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed on a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 54@56c per dozen; pullets, 45c dozen.

Poultry—Live hens, fat, over 4 lbs., 21@22c per lb.; 4 lbs. and under, 17@19c; old roosters, 14c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 15s per lb.; springs, live, 21c per lb.; hens and young tom turkeys, 28@29c per lb.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.; heifers, 6@8c per lb.

Hogs—Light, 15@16c per lb.; heavy, 12@13c per lb.

Veal—Fancy light, 14@16½c per lb.; heavy, 9@13c per lb.

Hides—Salted, 18c per lb.; flint-dry hides, 32@33c per lb.; salt kip, 13c per lb.; green hides, 15c per lb.; green calf, 28c per lb.; dry calf (under 5 lbs.), 34c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry full wool sheep pelts, 36@38c per lb.; salt bulls, 14c per lb.

Portland Market.

PORTLAND, Ore., Nov. 12.—Although the butter market is very weak and much shading of print prices is indulged in, a few of the city creameries have seen fit to raise the buying price of butterfat a cent to 53 cents delivered here. This works a great hardship on the country creameries which must meet the competition for butterfat and at the same time can not get over 43 cents for their surplus butter. They believe the market is being manipulated against them by the big city creameries.

Cheese is slow in spite of the recent 3-cent reduction in price and another cut will be necessary to work off the big stock accumulated here.

The arrival of several cars of eastern eggs has weakened the local market, in spite of the extreme scarcity of fresh Oregon ranch. The latter are hard to move at 59 cents, case count, as fresh eastern are being offered generally at 45 cents. Storage eggs drag at 36@40 cents.

The demand for poultry is good and the large arrivals clean up readily at firm prices. Dressed veal and pork are selling at a lower level.

The potato market continues easy with good offerings by nearby farmers. There is a moderate shipping demand, but cars continue scarce.

The hop market rules slow with buyers quoting Oregons and Washingtons around 23 to 25 1-2 cents, but there is practically no eastern demand.

Wool is also quiet, with no recent selling out of local stocks reported. The hide market is strong at unchanged quotations.

There has been some trading in 1917 Oregon beans at 11 to 12 1-2 cents to the grower. Jobbers' purchases are light, as they are not permitted by law to carry beyond a 60-days' supply, so speculating this season is out of the question, unless it be by the farmers.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $49 per ton.

Millstuffs—Bran, $30 per ton; shorts, $33.

Barley—No. 1 feed, $50.50; brewing, $52.50; rolled, $55@57.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch, case counts, 50c per dozen; candled, 55@58c.

Poultry—Hens, 17 1-2@19c; ducks, 18@20c; turkeys, live, 20@25c; geese, 10@11c.

Butter—City creamery, prints, 45@49c per pound; cubes, extras, 43c.

Cheese—Tillamook triplets, 23c; Young Americas, 24c.

Dressed meats—Veal, 14 1-2@15c; pork, 19@19 1-2c.

Hops—1916, 16c; 1917 crop, 25@25 1-2c.

Potatoes—Oregons, buying price, $1.25@1.50 per hundred.

Wool—Eastern Oregon, 40@65c; valley, 58@60c.

Beans—California small white, 14½c; large white, 14¼c per pound.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $1.75 cwt.; sweet potatoes, $3.75 cwt.

Apples—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, $1.75@$2.50; Red Macintosh, $1.50@1.75 box; Winter Bananas, $2 box; Jonathans, $1.25@1.35 box; Wageners, $1.25@1.35 box; Rome Beauties, $1.25@1.35 box; Spitzenbergs, $2.50 box; King Davids, $1.25@1.35 box.

Butter—Blanchard cartons, 49c lb; Medo-Maid, 49c lb; Cascade, 49c lb; Gold Leaf, 49c lb; Better Butter, 49c lb; Attalia, 49c lb; Diadem, 49c lb; Hazelwood, 49c lb; Solid Pack, 48@49c lb; Jersey Belle, 47c lb; Peerless, 45@46c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 27c lb; Hazelwood Young America, 28c lb; Wisconsin limburger, 32@33c lb; brick cheese, 34c lb; domestic Swiss, 38c lb; Young Americas, 26c lb.

Eggs—White filler, guaranteed, $13.25 case; selected storage, $12.50.

Live Poultry—Hens, 13c lb; broilers, 20c lb; old roosters, 8c; ducks, 12½c lb; geese, 10c; turkeys, 20@22c.

Dressed Poultry—Hens, 18c lb; broilers, 28c lb; old roosters, 12½c; ducks, 18@20c; geese, 16c; turkeys, 25@30c.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 13c; salted cured, 16c; green bulls and stags, 11c; salted cured, 13c; kip, 15 lbs to 25 lbs, 22c; calf skins up to 15 lbs, 16c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 7 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $1@2 each; dry horse hides, $2.50@4 each.

The Wool Market.

BOSTON, Nov. 9.—The Commercial Bulletin tomorrow will say:

"Another week of moderate but steady trading is reported through the wool trade here, with prices uniformly firm and on medium and low grade wools showing a tendency higher. The situation at the mills shows little change, machinery being well occupied, with additional government orders being placed from time to time."

Scoured basis:

California: Northern, $1.70@1.75, middle county, $1.50@1.55; southern, $1.35@1.40.

Oregon: Eastern No. 1 staples, $1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.60@1.65.

Territory: Fine staple, $1.80@1.82; half-blood combing, $1.70@1.75; three-eighths blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60; pulled extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

Portland Wheat.

PORTLAND, Ore., Nov. 12.—Wheat receipts have dwindled to a few cars daily. As stocks on hand are sufficient to last the mills for a considerable time, it is not expected the embargo on shipments to tide water will be raised soon. The trade, as well as farmers, are anxiously awaiting word from Chicago as to the plan by which growers may realize on their crops without sending the grain to Coast terminals.

There is a moderate trade in oats and barley and some movement in eastern corn to arrive, all at reasonably firm prices. Hay continues steady and millfeed is firm with the demand equal to the enlarged production. Present mill feed prices are likely to continue at least until the first of the month.

Seattle Wheat.

SEATTLE, Nov. 10.—Grain buyers here expect that the visit of M. H. Houser, representative of the Federal Grain Corporation to Washington will have an important bearing on holding wheat in the country in view of the embargo against shipment to tidewater terminals. The plan has been advocated all along by millers as the only solution of proper distribution, but some of the local grain dealers fought the proposition. Attempts were made to get the local car service commission of the committee of national defense to furnish cars at country stations for wheat until the congestion could be cleaned up, but no action was taken.

Education Is Keynote

(Continued from page three.)

tion to save needless loss from preventable diseases.

Directors Are Elected.

The directors elected are: J. D. Farrell, president of the O.-W. R. & N. railway, and Harry L. Somers, Bozeman, Montana (superseding John L. Smith and F. R. Steele); James H. McCrosky, Fishtrap, Wash.; John McGregor, Hooper, Wash., and W. J. Jordan, Lewiston, Idaho, were reelected.

The Exhibitors.

Percheron exhibitors were: A. R. Hunter, 11; S. Metz & Sons, 6; A. B. Riddell, 2; Mayer Brothers, 3; Wren & Greenough, 8; Brown & Mood, 6; Loyal Sales, 2; Julius Giese, 4; Taminy Horse company, 1; Follett & Schooler, 1; John Swank, 1.

Shires—Mayer Brothers, 3; G. A. Draper, 3; J. O. Cooper, 7; A. B. Riddell, 1; Metz & Son, 3; Brown & Mood, 1.

Clydesdales—I. H. Lowery, 7; Metz & Son, 1; A. B. Riddell, 1.

Belgians—A. B. Riddell, 6; Metz & Son, 1; John Swank, 1.

Hackney—Brown & Mood, 1.

Clyde Leachman showed a very classy black four-horse team and George Chambers grades.

Of cattle the Shorthorns were out in decidedly the largest numbers, yet they could scarcely be said to show any greater quality than the magnificent lot of Herefords shown. Here again Champion sometimes met champion, and some one had to go down to defeat, always with the best good nature. And the show was so strong that in either breed it was no dishonor to take second place. The Aberdeen Angus, while represented by only one breeder, had a herd that measured up in quality and worth to that of any on the ground.

Shorthorn exhibitors were J. H. McCrosky, with 19; Day & Rothrock, 20; A. D. Dunn, 19; Childs & Anceny, 12; W. J. Townly, 9; Joe Turner, 15; Harry L. Summers, 12; G. W. DeLay, 6; J. B. Cornett, 4; Henry Keyt, 3; J. R. Wyatt & Son, 2; William H. Leonard, 15. Mr. Leonard's were all for sale and not to show; quite a number of those shown are in the sale, and probably 20 others of those tested are for sale only.

Hereford exhibitors were A. B. Cook, 26; A. O. Huntley, 30, half of which were for sale only; George Chandler, 14; Henry Thiessen, 21; J. D. Miles, 13; Platt Brothers, 11.

The Idaho university showed bulls, heifers and fat steers, Shorthorns, Herefords and Angus being represented.

Poland Chinas Lead.

Poland Chinas led in numbers as well as quality in the hog division, though Duroc Jerseys made a show of very high quality and considerable numbers.

One breeder made a splendid show of Chester Whites. There were just two Berkshires—both good ones—on the ground and five nice Hampshires.

Poland China exhibitors were J. M. Royston estate, 16; W. H. Howard, 14; Howard & Royston, 4; Wilson Brothers, 7; P. L. Sain, 13; Hugh Walter, 21; J. W. Miller, 8 and a litter.

Duroc Jerseys—Robert Nelson, 35; G. A. Draper, 10; H. L. Summers, 1.

Chester Whites—Ed Schoel, 21; Mrs. J. C. Jansen, 1.

Berkshires—Berkoda Farm, 2.

Hampshires—G. R. Sullivan, 5.

Nearly all the middle wools and one or two each of both long and fine wool breeds of sheep were on exhibition, in large or small numbers. From the blocky little Southdowns to the rangy Rambouillets they were in first-class or at least, fair condition, and made up a sheep show of excellent quality.

Shropshire exhibitors were W. H. Zumwalt, 7; Brown Brothers, 8; Francis Kizer, 4; E. S. Sweet, 12.

Hampshires—J. G. Hubbard & Sons, 13; Mrs. R. A. Jackson, 2; Brown Brothers, 12.

Rambouillets—Mrs. R. A. Jackson, 12; Stanley Coffin, 2.

Southdowns—J. G. S. Hubbard & Sons, 14.

Oxfords—Fisk Farm, 10; C. P. Kizer, 11.

Lincolns—J. G. S. Hubbard & Sons, 5.

Fat sheep—Madden children, one pen lambs, one pen yearlings; Robert Anderson, 1 pen lambs; Vernon Chapman, pen lambs; University of Idaho, three crossbred wethers and six purebred Southdowns; Brown Brothers, two Shropshire wethers, and J. G. S. Hubbard & Sons, two.

Besides all the above there were four cars of hogs, two of sheep and four of five of cattle. It was a great show in every department. The attendance was made up to a very large degree of people who could and did appreciate what they saw. And the success of the 1917 show assures still greater things for the shows to come.

THE BARRIER

(Continued from page twenty-seven.)

and Runnion bend over the table looking at a little can of gold dust that Lee had taken from under his bunk his eyes grew red and bloodshot beneath his hat brim. Which one of the two would it be, he wondered. From the corner of his eye he saw Gale rise from Lee's bed, where he had stretched himself to smoke, and take his six-shooter from his belt, then remove the knotted bandanna from his neck and begin to clean the gun, his head bowed over it earnestly, his face in the shadow: He had ever been a careful and methodical man, reflected Poleon, and evidently would not go to sleep with his firearm in bad condition.

"Nobody imagined that Gaylord would cause trouble," Stark was saying, "for he didn't seem to be a jealous sort, just stupid and kind of heavy witted; but one night he took advantage of Bennett's absence and sneaked up to the house." The story teller paused, and Necia, who was under the spell of his recital, urged him on:

"Yes, yes. What happened then? Go on." But Stark stared gloomily at his hands and held his silence for a full minute, the tale appearing to have awakened more than a fleeting interest in him.

"It was one of the worst killings that ever happened in those parts," he continued. "Bennett came back to find his wife murdered and the kid gone."

"Oh!" said the girl, in a shocked voice.

"Yes, there was the deuce of a time. The town rose up in a body, and we—you see, I happened to be there—we followed the man for weeks. We trailed him and the kid clear over the Nevada desert, where we lost them."

"Poor man!"

"Poor man?" the story teller raised his eyes and laughed sinisterly. "I don't see where that comes in."

"And you never caught him?"

"No. Not yet."

"He died of thirst in the desert, maybe, he and the little one."

"That's what we thought at the time, but I don't believe it now."

"How so?"

"Well, I've crossed his trail since then. No. Gaylord is alive today, and so is the girl. Some time we'll meet ——" His voice gave out and he stared again at the floor.

"Couldn't the little girl be traced?" said Necia. "What was her name?"

Stark made to speak, but the word was never uttered, for there came a deafening roar that caused Lee's candle to leap and flicker and the air inside the cabin to strike the occupants like a blow. Instantly there was confusion and each man sprang to his feet crying out afrightedly, for the noise had come with utter unexpectedness.

"My God, I've killed him!" cried Gale, and with one jump he cleared half the room and was beside Stark, with his revolver on the floor, where he had been sitting.

"What is it?" exclaimed Burrell; but there was no need to ask, for powder-smoke was beginning to fill the room and the trader's face gave answer. It was whiter than that of his daughter, who had crouched fearfully against the wall, and he shook like a man with ague. But Stark stood unhurt, and more composed than any of them; following the first bound from his chair, he had relapsed into his customary quiet. There had blazed up one momentary flash of suspicion and anger, but it died straightway, for no man could have beheld the trader and not felt contrition. His condition was pitiable, and the sight of a strong man overcome is not pleasant; when it was seen that no harm had been done the others strove to make light of the accident.

"Get together, al' of you! It's nothing to be excited over," said Stark.

"How did it happen?" Runnion finally asked Gale, who had sunk limply upon the edge of the bunk; but when the old man undertook to answer his words were unintelligible, and he shook his head helplessly.

Stark laid his finger on the hole that the bullet had bored in the log close to where he was sitting, and laughed.

"Never mind, old man, it missed me by six inches. You know there never was a bullet that could kill me. I'm six-shooter proof."

"Wha'd I tell you?" triumphantly ejaculated Lee, turning his one eye upon the lieutenant. "You laughed at me, didn't you?"

"I'm begining to believe it myself," declared the soldier.

"It's a cinch," said Stark, positively. Doret, of all in the cabin, had said nothing. Seated apart from the others, he had seen the affair from a distance, as it were, and now stepped to the bed to lay his hand on Gale's shoulder.

"Brace up, John! Sacre bleu! Your face look lak flour. Come outside an' get li'l' air."

"It will do you good, father," urged Necia.

The trader silently rose, picked up his hat, and shambled out into the night behind the Frenchman.

"The old man takes it hard," said Lee, shaking his head, and Burrell remarked:

"I've seen things like that in army quarters, and the fellow who accidentally discharges his gun invariably gets a greater shock than his companion."

"I call it damned careless, begging your pardon, Miss Necia," said Runnion.

Poleon led his friend down the trail for half a mile without speaking, till Gale had regained a grip of himself and muttered, finally:

"I never did such a thing before, Poleon, never in all my life."

The young man turned squarely and faced him, the starlight illumining their faces dimly.

"Why?" said Doret.

"Why?" echoed Gale, with a start. "Well, because I'm careful, I suppose."

"Why?" insisted the Frenchman.

"I—I—I— What do you mean?"

"Don' lie wit' me, John. I'm happen to be watch you underneat' my hat w'en you turn roun' for see if anybody lookin'."

"You saw?"

"Yes."

"I thought you were asleep," said Gale.

(To Be Continued).

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MISCELLANEOUS WANTED 63

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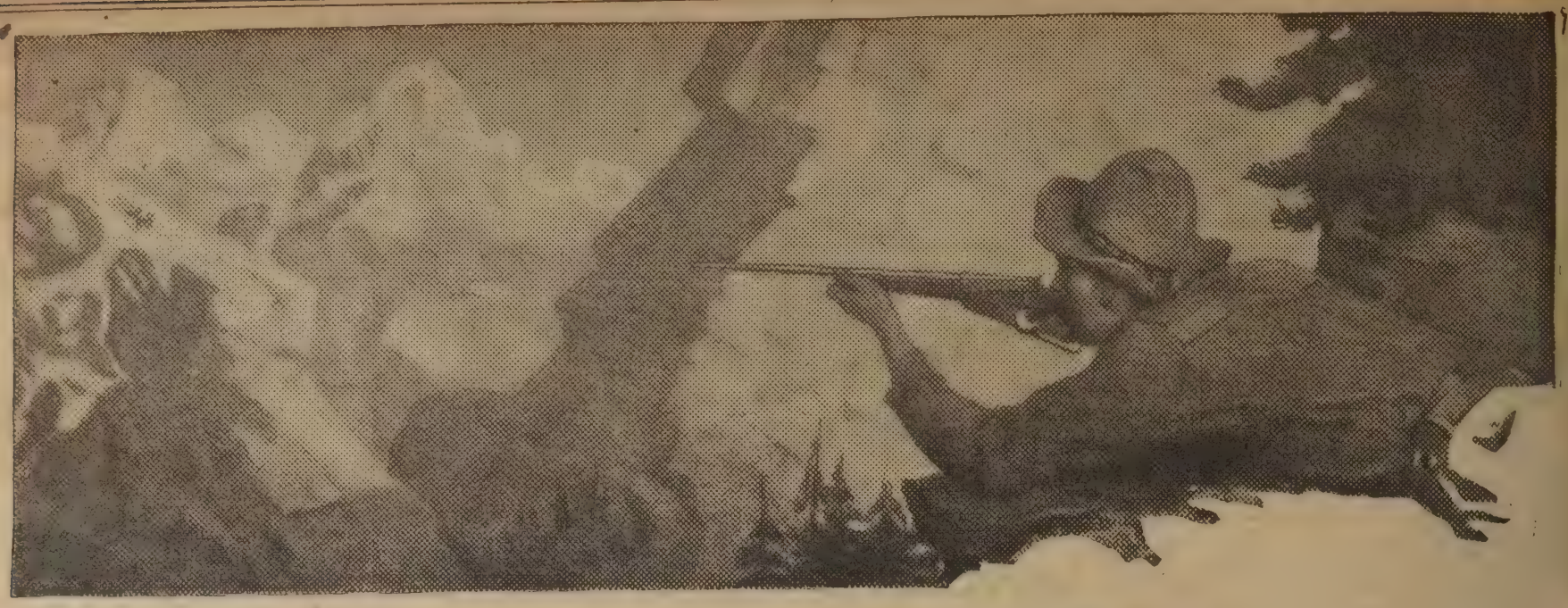
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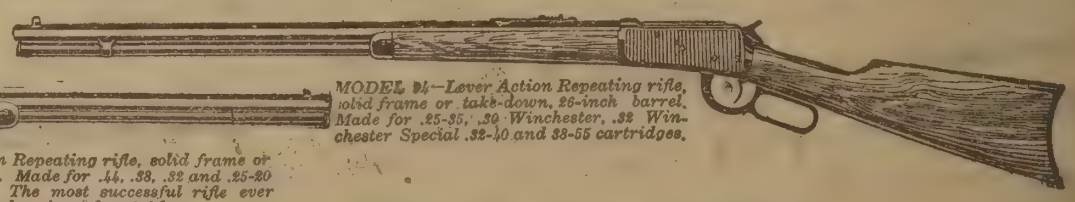
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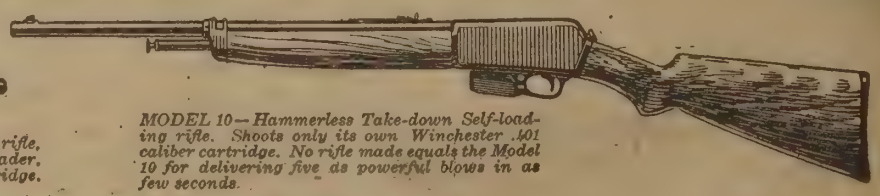
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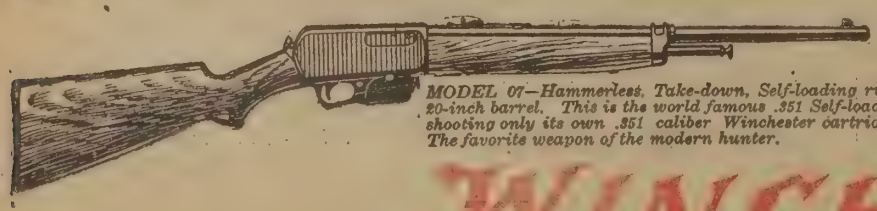
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VOL. XL, NO. 47. NOVEMBER 22, 1917. ** WEEKLY.

"Render Thanks to God, the Ruler of Nations"

By the President of the United States of America. A Proclamation.

IT has long been the honored custom of our people to turn in the fruitful autumn of the year in praise and thanksgiving to Almighty God for his many blessings and mercies to us as a nation. That custom we can follow now, even in the midst of the tragedy of a world shaken by war and immeasurable disaster, in the midst of sorrow and great peril, because even amidst the darkness that has gathered about us we can see the great blessings God has bestowed upon us, blessings that are better than mere peace of mind and prosperity of enterprises.

We have been given the opportunity to serve mankind as we once served ourselves in the great day of our Declaration of Independence, by taking up arms against a tyranny that threatened to master and debase men everywhere and joining with other free peoples in demanding for all the nations of the world what we then demanded and obtained for ourselves. In this day of the revelation of our duty, not only to defend our own rights as a nation, but to also defend the rights of free men throughout the world, there has been vouchsafed us in full and inspiring measure the resolution and spirit of united action.

We have been brought to one mind and purpose. A new vigor of common counsel and common action has been revealed in us. We should especially thank God





To the Boys Over There:

We have joined in the service of food conservation, and pledge ourselves to save meat, wheat, fats and sugar that you may ever be strong for the tasks set before you.

that in such circumstances, in the midst of the greatest enterprise the spirits of men have ever entered upon, we have, if we but observe a reasonable and practicable economy, abundance with which to supply the needs of those associated with us, as well as our own. A new light shines about us. The great duties of a day awaken a new and greater national spirit in us. We shall never again be divided or wonder what stuff we are made of.

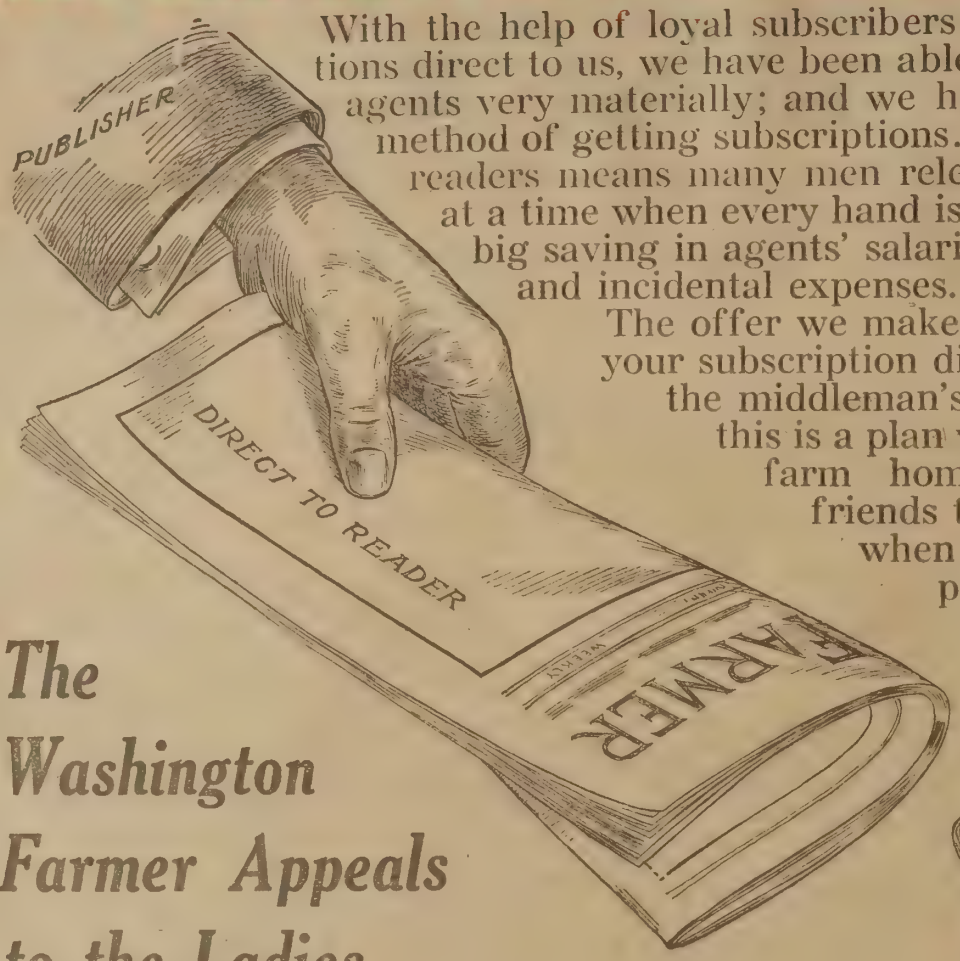
And while we render thanks for these things, let us pray Almighty God that in all humbleness of spirit we may look always to him for guidance; that we may be kept constant in the spirit and purpose of service; that by his grace our minds may be directed and our hands strengthened; and that in his good time liberty and security and peace and the comradeship of a common justice may be vouchsafed all the nations of the earth.

Wherefore, I, Woodrow Wilson, president of the United States of America, do hereby designate Thursday, the 29th day of November next, as a day of Thanksgiving and prayer and invite the people throughout the land to cease upon that day from their ordinary occupations and in their several homes and places of worship to render thanks to God, the great ruler of nations.

WOODROW WILSON.

By the president:
Robert Lansing, Secretary of State.

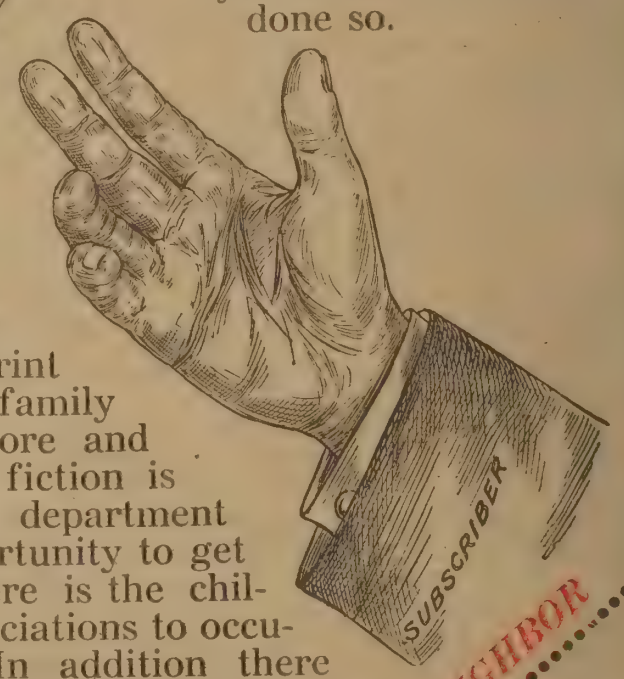
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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 47 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF November 22, 1917

City and Country Unite on Problems

Yakima Valley People Stage Valuable "Let's-Talk-It-Over" Meeting

By RAY W. FELTON

Keen interest in growing and marketing problems and a sincere desire to assist in solving them was manifested by North Yakima business men at a "let's-talk-it-over" meeting, held Monday evening, November 5, at the Yakima Commercial club rooms. The agricultural development of the Yakima valley, the part the valley is to play in helping win the war, and an appeal for more real cooperation and a better understanding between country and town people, were features of the discussions in which President E. O. Holland of the State College of Washington, County Agriculturist J. N. Price, Asher Hobson, director of farm markets, and Thomas B. Hill, editor of the Yakima Morning Herald and chairman of the commercial club's agricultural committee, participated. Governor Lister was to have been present, but was detained at the last moment and wired his regrets.

Farmers, fruit growers, stockmen and scores of others interested in agriculture, representative of all sections of the Yakima valley, were present, and the gathering was pronounced one of the most beneficial of its kind ever held in North Yakima. Yakima business men showed a real understanding of the rural situation as it exists in the valley, and a thorough appreciation of what community cooperation means in the development and prosperity of all interests.

Chairman Hill aroused his hearers when he gave $25,000,000 as a conservative estimate of the crop value of Yakima county this year, and County Agriculturist Price held the attention of the audience when he enumerated the crop output in detail. An interesting statement was that the Yakima valley, until recently considered impossible for the profitable production of corn, had this year grown 840,000 bushels from 14,000 acres. Other crop statistics for this year were given as follows by Mr. Price:

Crop.	Acreage.	Tonnage.
Fruit	46,000	10,000 cars
Alfalfa	100,000	500,000 tons
Wheat	15,000	450,000 bu.
Corn	14,000	840,000 bu.
Barley	6,000	360,000 bu.
Oats	8,000	480,000 bu.
Potatoes	12,000	84,000 tons
Sugar beets	6,400	96,000 tons
Beans	2,400	600 tons

Dry land about 15,000 acres of wheat at 10 bus., 150,000 bu.

Dairy products.	Amount.	Value.
Milk, gals.	133,000	$ 39,000
Cream, gals.	14,000	19,000
Butter, lbs.	1,400,000	490,000
Cheese, lbs.	500,000	125,000
Total value		$673,000

Live stock—Sheep, 117,000; milch cows, 12,000; other cattle, 27,000; horses, 15,000.

Chairman Hill, speaking of the development of the business of farming in the Yakima country, said he had heard persons express a desire that Yakima might share in the war prosperity experienced by the manufacturing districts of the east.

"Here we have a perpetual manufacturing district," said Mr. Hill. "There is no place that can be compared with it. Every farm is a factory. This year we have produced over $9,000,000 in excess of what we derived from our crops last year. Our farms constitute an aggregate factory employing some 60,000 persons. When the war is over even the manufacturing districts will experience their setbacks. Here we are on a sound, permanent basis. We have learned to diversify. We are in a position now where we will prosper no matter what comes, because if one crop fails or the market is at low ebb we still have many others on which we may fall back."

In introducing Mr. Hobson, Mr. Hill declared the proper marketing of our crops is what we must accomplish. It is, he stated, as important as producing them.

Must Have Standards.

Mr. Hobson declared we will not solve the problem of marketing our perishable and semi-perishable crops until fixed standards have been established and grades maintained.

"The prices we receive for our produce," said Mr. Hobson, "often are unsatisfactory because of the uncertain value of the commodity offered. The buyer doesn't know what he is going to get until he gets it, and the result is the breach between producer and buyer widens as the business increases."

Mr. Hobson cited instances of where consistent quality and a means of guaranteeing it had paid much larger returns in the long run than irregular grades, although the latter percentages might at times be higher than the known grade which always maintained the same standard and established a reputation as a result thereof.

"I am sorry to say that it has been the experience of some marketing associations that standard products offered by them have for a time failed to bring any more than those less desirable offerings," continued Mr. Hobson. "However, the fact remains that once we establish ourselves along those lines our markets and our prices are assured. It is just as hard to lose a good reputation as it is to get it. I venture to say that if anything should happen which would cause Yakima and Wenatchee to stop growing apples there would be Yakima and Wenatchee apples on the New York market for the next 15 years. When the market for all lines of farm produce is brisk most anything sells, but when it isn't you can rest assured that the standard article of known quality will move first."

What College Is Doing.

Dr. Holland spoke briefly of the work the state college is accomplishing, and dwelt at some length on America's task in the world conflict. Dr. Holland emphasized the necessity of providing trained leadership in all vocations, particularly agriculture. He cited Mr. Hobson as an example of trained leadership in the business of marketing crops.

"Two things we are trying to do at Pullman," said Dr. Holland. "One is, we are trying to teach boys and girls to stand on their own feet. Second, we are trying to teach them to live. Proper living is just as important as the business of making a living. We are doing a cooperative work that leads to a life of efficiency, harmony and happiness."

Dr. Holland explained the work of the various experiment stations, and announced that arrangements were nearing completion for another station near Prosser, appropriation for which was made by the last legislature.

Speaking of the war Dr. Holland said: "One thing I want to remind you of. There is no strike on the battle line. There they have to work not eight hours a day, but 24. This war is going to be won by democracy, but we've got to stay on the job here at home for the sake of the thousands of our boys who are on the job for us at the front."

Porker Goes "Over the Top"

Sales Indicate That Good Old Days Are Back

By B. E. SMEAD,
U. S. Agent in Animal Husbandry.

That swine production has gone "over the top" was made very evident by sales of purebred swine at the recent Northwest Live Stock show at Lewiston. For three years past there has been absolutely no demand for this class of stock and all breeders were practically sold out in the early part of the show.

The sale of older stock can mean only one thing, that swine raisers appreciate the wonderful opportunity that is now before them to throw out hogs at a profit, and have bought aged stock as the quickest means of increasing their herds.

To the older breeders it seems like the good old days of the past have returned, when yearling sows readily sell for $125 or better, and 6-months-old boars and gilts bring $60 to $80 a head. The price of $15.50 recently announced by the food administration, no doubt has been responsible for the optimism now displayed by hog men.

Government reports show that swine production in the past two years has decreased throughout every state in the nation, while local consumption and pork demand has increased enormously. Our army and the armies of our allies must have pork and the government intends to see that the swine grower will be assured of such a profit as to induce him to go into swine raising on an enlarged scale.

There is another factor that will make towards large profits for those people wise enough to keep all possible sows over the winter and raise as large a number of pigs next spring as their means will allow. The government control of wheat means a fixed price for mill feeds and because of the fact that the mills are grinding to capacity this year, there should be a good sized surplus of these feeds as soon as country dealers have replenished their stock. The writer has been given to understand that bran will sell for about $30 a ton, red shorts $33, white shorts or middlings, $45 per ton.

The writer has determined during five years of feeding purebred swine for breeding purposes, that red shorts for growing and breeding stock, especially when a small percentage (5 per cent) of tankage is added, makes a feed that keeps hogs thrifty and produces pork at less than 15 cents a pound on a basis of $33 shorts.

Those men who have the ability to size up food conditions are getting hold of every brood sow that they possibly can find. If they have no wastes on the farm they can well afford to carry these sows and their spring litters up to the time that stubble is available, on mill feed and then finish them on the stubble fields next fall, making in all a total profit far greater than can our middle west farmers, who must feed a grain ration from birth to maturity.

The tide has turned in the swine industry and the wise man will lost no time in preparing to share the profits of those already in the business.

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Pass It On.

When you have finished reading this paper please hand it to a neighbor who may be interested in the saving in subscription price resulting from the elimination of the middleman.

Wheat Growers Win

Wheat Tangle Is Being Cleared

The injustice unintentionally done the wheat farmers of the northwest by the national grain buying corporation is about to be righted, according to announcement by M. H. Houser, northwest representative of the government's corporation.

Recently, The Farmer pointed out the injustice, showing that the producer was forced to hold his wheat indefinitely at his own expense, accept an arbitrary price fixed by an independent buyer or sell under the government plan and pay interest on a partial payment until such time as the wheat could reach a terminal and be graded and bought by the government.

Mr. Houser attended a conference at Chicago last week, and returned with the announcement that the government had made arrangements to absorb the holding costs, and through this arrangement to advance money on the wheat without interest. Either the grain will be graded and paid for in full at the interior points, or money will be advanced on it without interest and full payment made after it later reaches terminals and is there graded. This is the general interpretation of the government's new plan.

Farmers Buy Tractors.

New tractors have been delivered to George and John Gunnary, farmers in the diked district west of Kelso, Wash., who also purchased three bottom gang plows for use with the tractors. There are now eight tractors in Diking district No. 1, where two years ago there were none. A. Reinikka has purchased a power double disc plow for use with his caterpillar tractor. An improved large-sized power separator was added to his farm equipment by T. D. Dungan, Coweeman valley dairyman.

Crowds Learning and Having Fun.

The annual National Apple show is on this week at Spokane, Wash., and the crowds are both learning practical things and having undiluted enjoyment. More than ever is the spirit of education manifest. There are apple packing and grading demonstrations, cooking demonstrations, Hooverizing demonstrations and all manner of "schools," and an unusual interest is being manifested in them.

Judges Have Hard Work at Lewiston

Northwest Live Stock Show Brings Out Great Animals

By HORACE ADDIS.

With the exception of Shorthorn cattle and Poland China hogs, it is probable that every department of the Northwest Live Stock show, at Lewiston, Idaho, has been larger in some one of its past six exhibitions than this year's show, November 8-15. But it is the universal opinion of exhibitors and visitors that this show had fewer poor animals and a more even, high-class lot than ever before. Never was the task of the judges more trying, for never were they confronted with classes that called for more careful discrimination. A review of the many animals that presented more than ordinary merit would take too much space. But a slight description of the champion animals, many of which won by the closest margin, will give an idea of the character of the show.

The Horse Show.

With the largest numbers the Percheron show gave an exceedingly large number of close competitions. But the decisions of Professor Arnett, animal husbandman of the Montana Agricultural college, were universally satisfactory.

The entire list of judges was of the highest order and the management of the show deserves much credit for securing men of such ability.

Kroumir, Albert Hunter's grand champion Percheron stallion, is notable for his great bone, his size and his fine breed type. Mr. Hunter also won junior championship on the two-year-old Grace Kroumir, a daughter of the horse, bred by Mr. Hunter. She, like her sire, has size, quality and bone combined.

The junior champion stallion, Hindenburg, is a growthy, massive colt, with good bone and good action. As if to show how little there is in color, he is a dark bay. Metz & Son, the owners, say they will change his name. The senior champion mare, Gracieuse, owned by Mayer Brothers, although 13 years old, still shows wonderful quality. She is dam of the filly Harrietta, that defeated the celebrated Maud Carnot, at the Nebraska state fair in 1912.

The junior and grand champion Shire stallion, Hingest, owned by Mayer Brothers, won first in the futurity at the Chicago International. He is a two-year-old with a remarkably good front on him, a head to stop and look at, great size, deep body and fine action. The colt he defeated in class, bred by Mayer Brothers themselves, is a great colt. A. B. Riddell's senior champion, Rock's Golden Conqueror, is a very breedy type, has flat, flinty bone, good body, good heart and good action. He was junior champion at the Iowa State fair last year. Jolly B. the senior and grand champion mare, owned by Mayer Brothers, has been grand champion for the last five years. She is large; of best Shire type, flat bone, good action, and looks able to win again.

While ring side talent was divided on the placing of the grand champion Clydesdale, it is agreed that Metz & Sons' Dick Wentworth, is a great colt, with much finish. He had to be to win over the senior champion, Lowery's Heather Duke, that has been grand champion three times. He might carry a little more flesh, but is about as nearly a perfect Clyde as it is possible to find. Lowery's junior champion, Amaryllis, a yearling, promises to make a great mare. She is daughter of the great show mare, Graceful Lady. The senior and grand champion, Palmerston's Favorite, owned by A. B. Riddell, is half sister to a mare that won grand championship at San Francisco last year. She has true type and great quality.

Metz' champion Belgian stallion, Advance, is so good it is a pity he did not have competition. Riddell's champion mare is good all over. She has size, breed type, body and head and moves like a Hackney.

Percherons.

Stallian, four years and over—A. R. Hunter, first, on Kroumir; Brown & Mood, second, on Duke; Wren & Greenough, third, on Julep. Three year old—Brown & Mood, first, on Chub; A. R. Hunter, second, on King; Follett & Schooler, third, on Jerico. Two year old—S. Metz & Son, first and third, on Hindenburg and Chub; second, Brown & Mood, on Loubre. Yearling—A. R. Hunter, first and second, on Liberty Bond and Donald. Under one year—Mayer Brothers, first; A. R. Hunter, second, on Dudley Kroumir.

Mare four years and over—Mayer Brothers, first, on Gacieuse; Wren & Greenough, second and third, on Maude and Picture. Three year old—A. R. Hunter, first, on Albertina Third; Wren & Greenough, second, on Queen. Two year old—A. R. Hunter, first, on Grace Kroumir; Julius Giese, second, on Queen. Yearling—A. R. Hunter, first, on Folette. Under one year—A. R. Hunter, first, on Sister Kroumir.

Get of Sire—A. R. Hunter, first. Produce of Dam—Wren & Greenough, first; Mayer Brothers, second; Julius Giese, third.

Senior Champion Stallion—A. R. Hunter, on Kroumir. Junior Champion Stallion—S. Metz & Son, on Hindenburg. Grand Champion Stallion, Kroumir. Senior Champion Mare—Mayer Brothers, on Gracieuse. Junior Champion Mare—A. R. Hunter, on Grace Kroumir. Grand Champion Mare—Grace Kroumir.

Shires.

Stallion, 4 years and over—Bob McKissick first, on Jim Corbett; S. Metz & Sons second, on March Alma; G. A. Draper third, on William Crownover. Three-year-old—A. H. Riddell first, on Rock's Golden Conqueror; J. C. Cooper second, on Better Sort. Two-year-old—Mayer Brothers, first and second, on Logan Hingset and Mull Surveyor II. Yearling—S. Metz & Son, first and second, on Meddlesome Mettle and Kendel's Albert.

Mares—4 years and over—Mayer Brothers, first on Jolly B.; J. O. Cooper, second and third, on Highland Beauty and Pansy Blossom. Three-year-old—J. O. Cooper first and second, on Bonnie Duchess and Lady Diamond. Two-year-old—G. A. Draper first, on Flora Arbutus.

Get of sire—J. O. Cooper, first; G. A. Draper, second. Produce of dam—G. A. Draper, first.

Senior champion stallion—A. B. Riddell on Rock's Golden Conqueror. Junior champion stallion—Mayer Brothers on Logan Hingest. Grand champion stallion—Logan Hingest.

Senior champion mare—Mayer Brothers on Jolly B. Junior champion mare—G. A. Draper on Flora Arbutus. Grand champion mare—Jolly B.

Clydesdales.

Stallion 4 years and over—I. H. Lowery, first, on Heather Duke. Two-year-old—S. Metz & Sons, first, on Dick Wentworth. Yearling—I. H. Lowery, first and second, on Panfair and Trumpeter. Under one year—I. H. Lowery, first, on Marquis II.

Mare four years and over—A. B. Ryddell, first, on Palmerston's Favorite; I. H. Lowery, second, on Potlatch Queen. Three-year-old—I. H. Lowery, first and second, on Lady of Glencairn and Rose of Glencairn. Two-year-old—I. H. Lowery, first, on Bonnie Mae Queen. Yearling—I. H. Lowery, first, on Amaryllis.

Get of sire—I. H. Lowery, first. Produce of dam—First and second.

Senior champion stallion—I. H. Lowery on Heather Duke. Junior champion stallion—S. Metz & Sons on Dick Wentworth. Grand champion stallion, Dick Wentworth. Senior champion mare—A. B. Ryddell on Palmerston's Favorite. Junior Champion mare—I. H. Lowery on Amaryllis. Grand champion mare—Amaryllis.

Belgians.

Stallion 2 years and under 3—S. Metz & Sons, first, on Advance.

Mare 4 years and over—A. B. Riddell first, second and third, on Princess d'Uyt, Susanna and Sarah. Three-year-old—A. B. Ryddell first, on Juliet.

Junior and grand champion stallion—S. Metz & Sons on Advance. Senior and grand champion mare—A. B. Riddell on Princess d'Uyt.

Thoroughbred.

Mare 3 years and over—J. P. Hays, first.

Grade Horses.

Mare or gelding, 1700 pounds or over—Clyde Leachman, first. Mare or gelding, 1400 and under 1700 pounds—Clyde Leachman, first, second and third.

Pair mares or geldings in harness, 3400 pounds and over—Clyde Leachman, first. Pair mares or geldings in harness, 2800 and under 3400 pounds—Clyde Leachman, first.

THE CATTLE SHOW.

Animals that had won before generally won the purple ribbons in the Shorthorn classes. McCroskey & Sons' senior and grand champion bull, Cottonwood Sultan, is thick fleshed, has length and a deep, wide front. The junior champion, Escana Clipper, owned by A. D. Dunn, is a most promising calf. Topsy 4th, Day & Rothrock's grand champion, has kept on improving. She was first in class last year, but this year her smoother, thick covering, her sweet head and square body has been invincible wherever shown. Dunn's senior champion, Escana Blossom, is a great young cow and first prize winners, like Donald Gale's Ringleader's Ruly and others, made up a wonderful show.

Herefords have quality all down the line from Henry Theissen's grand champion bull, Prince Rupert 80th, that beat the senior champion, another Prince Rupert, owned by George Chandler, that had a little better head and front. But the wonderful quarters and good size of Theissen's younger bull won. A. B. Cook won both female championships, with new individuals that beat his own former champions. And in nearly every class the competition was the closest.

Only one herd of Aberdeen Angus was shown. But few herds in the United States can show equal quality. The old champion bull, Eileenmere, is still invincible. But the judge preferred the wonderfully sweet, typy calf, Yakima's Pride, to the grand old cow, Idessa of Rosemere, for highest championship honors. This with Professor L. H. Smith, live stock commissioner at the Chicago stock yards, judging.

Shorthorns.

Bull, 3 years and over—H. L. Summers, first, on Excelsior; 2-year old, J. H. McCroskey, first, on Cottonwood Sultan; Child & Ankeney, second, on Greanmeadow Master; A. D. Dunn, third, on True Baron; W. J. Townley, fourth, on Good Prospect. Senior yearling bull—Child & Ankeney, first, on Maxwalton Master; William Leonard, second, on Rightaway. Junior yearling—A. D. Dunn, first, on Escana Clipper; J. H. McCroskey, second, on Rare Count; Child & Ankeney, third, on King Mysie; Day & Rothrock, fourth, on Rusper Sultan Second. Senior bull calf—A. D. Dunn, first and third, on Supreme Chief and March Onward; Day & Rothrock, second and fourth, on Superb Clarion and Fair Cumberland. Junior calf—J. H. McCroskey, first, on Canadian; Child & Ankeney, second, on Royal King; Day & Rothroch, third, on Hercules Duke; A. D. Dunn, fourth, on Baron.

Cow, 3 years and over with calf at foot—H. L. Summers, first and third, on Mayflower 2d and Helen Cumberland; A. D. Dunn, second, on Lady Jane II. Two-year-old—A. D. Dunn, first, on Escana Blossom; Child & Ankeney, third, on Farmer's Beauty; G. W. DeLay, fourth, on Scottish Jane 3d. Senior yearling heifer—Day & Rothrock, first, on Topsy 4th; A. D. Dunn, second and third, on Sweeter Yet and Sweetest Ever; Child & Ankeney, fourth, on Daisie Green. Junior yearling—W. J. Townley, first, on Ringleader's Ruby; Day & Rothrock, second, on Village Rose 4th; Child & Ankeney, third and fourth, on Zora 32d, and Rose Ring. Senior heifer calf—Day & Rothrock, first and third, on Lady Missie 15th and Perfection's Pearl. J. H. McCroskey, second, on Dale's Lady; A. D. Dunn, fourth, on May Flower. Junior calf—Day & Rothrock, first and fourth, on Hercules Topsy and Golden Light; A. D. Dunn, second, on Dew Drop; G. W. DeLay, third, on Scottish Jane 4th.

Aged herd—J. H. McClokey & Sons, first; A. D. Dunn, second. Young herd—Day & Rothrock, first; A. D. Dunn, second; Child & Ankeny, third; J. H. McCloskey & Sons, fourth. Calf herd—A. D. Dunn, first; Day & Rothrock, second; Child & Ankeny, third; J. H. McCroskey & Sons, fourth. Senior Champion bull—J. H. McCroskey & Sons, on Cottonwood Sultan. Junior Champion bull—A. D. Dunn, on Escana Clipper. Senior Champion cow—A. D. Dunn, on Escana Blossom. Junior Champion cow—Day & Rothrock, on Topsy IV. Grand Champion cow—Topsy IV. Get of sire—Childs & Ankeny, first; Day & Rothrock, second. Produce of Cow—Day & Rothrock, first; Child & Ankeny, second.

Herefords.

Bull, 3 years and over—George Chandler, first, on Prince Rupert 60th; A. C. Huntley, second and third, on Grabriel, 38th, and Woodrow. Two-year-old—J. D. Miles, first and fourth, on Gray Field and Young Standard; A. B. Cook, second, on Sir Beau Donald 5th; George Chandler, third, on Council Grove. Senior yearling bull—Henry Thiessen, first, on Prince Rupert 80th; A. B. Cook, second, on Beau Banner 6th, J. D. Miles, third, on Gay Carlos 11th. Junior yearling—A. B. Cook, first, on Panama 37th; Henry Thiessen, third and fourth, on Truman and Tarkio Lad. Senior bull calf—A. B. Cook, first and second, on Panama 48th and Montana Fairfax 22d; Henry Thiessen, third, on Royal Perfect; George Chandler, fourth, on Lord-Generous. Junior calf—Henry Thiessen, first and fourth, on Lord Perfection and Perfection Rex; A. B. Cook, second, on Panama 49th; George Chandler, third, on Prince Donald.

Cow, 3 years and over—A. B. Cook first and fourth, on Lady Panama 7th and Princess R 2d; J. D. Miles second, on Prairie Queen; George Chandler third, on Vernette Prince 10th. Two-year-old—A. B. Cook first, on Lady Perfection 3d; George Chandler second, on New Lass; J. D. Miles third, on Ima Genuine; A. O. Huntley fourth, on Minnie Woodrow. Senior yearling heifer—Henry Thiessen first, on Rose Donald; A. B. Cook second, on Lady Kitchner 4th; J. D. Miles third, on Gray Field

(Continued on page twenty-five.)

This Good Colt Decided the Contest



The two animals here shown won first prize and silver cup for best grade mare and colt at the Sherman County fair at Moro, Ore., this fall. The mare was not the largest nor best mare shown, but the prize was for mare and colt and the remarkably good colt decided the contest in their favor. A. H. Barnum, the owner, is the man holding the colt. H. A.

Low Heading or High Heading

Short Lift Easier Than Long One in Apple Trees

By GRANVILLE LOWTHER.

An article has been going the rounds of some of the agricultural and horticulture journals recommending "high heading," in order to promote longevity, size and a long period of profitable bearing of apple trees. It may be remembered by some of the readers of this paper, that I have strongly advocated low heading. The conflict of opinions has led to some correspondence on the subject, and I have been asked to state my reasons.

Argument for High Heading.

It is never wise to undervalue the position of your opponent. In fact the old Greek proverb was correct: "We arrive at truth, by means of conflicting opinions." There is another fact, and that is that where two or more intelligent persons disagree on a subject about which they are both familiar, there is truth on both sides, and the problem is to discover a law of nature that includes them both. I therefore want to state, first of all, the position of the advocates of high heading, and give to their arguments due consideration:

1. It is argued that "The custom of the old apple growers in the United States was to head the trees from four to six feet from the ground, and hundreds of these old trees, planted more than a century ago, are still vigorous and prolific.

2. "The elimination of the trunk will prevent the full development of the top, restrict its growth, and the top will never attain its full development.

Arguments for Low Heading.

1. The trees are healthier.
2. The fruit is more easily gathered.
3. The tops are not so easily swayed by the wind, causing a leaning of the trunk.
4. The fruit is less liable to be injured by winds, storms, etc.
5. The cost of spraying is less.

High Heading Considered.

I grant that "the custom of the apple

(Continued on page eleven.)

Women and Young Folks Make Good

Labor Problem Is Practically Solved by Their Willingness and Ability

Civilization's war may be won by women and children. Certainly it will be won by the American farmer, and it is becoming evident that women and boys and girls are playing an unusually large part in the conduct of the business of the American farm. Letters given below are proof of it. Recently the Farmer sent out the following inquir yto representative citizens of the state:

In your community what have women and young folks done more than usual to relieve the shortage of labor?

To what extent has this unusual labor of women and young folks proved a success?

Is the quality of their work equal to that of men, and to what line of work are they best adapted?

What other means have been employed, either through additional use of machinery or exchange of work among farmers, to supply a shortage of farm labor?

Interesting Replies Received.

To these queries significant replies were received. The following are extracts from the letters:

JAMES N. PRICE, county agricultural agent, Yakima—The principal line of work in which the women and children assist in handling of the crops in Yakima county is largely in the fruit. A large number of women work in the picking and packing of apples every year, but we had a larger number this year than usual. This was due not only to the demand for labor, but also to the wages paid. In some districts where there was a threatened shortage of labor, during the fruit season and potato digging season, the schools were closed for a period of two weeks to allow the pupils to go into the orchards and fields and assist with the harvest. So far as the work of picking and packing of fruit is concerned, I think it is safe to say that this class of labor is practically as satisfactory as men, and if anything it is probably a little more dependable than some of our transient laborers. In handling the labor situation in Yakima county this year a county labor bureau was organized. This bureau had a representative in each of 10 districts in the county. It was the business of these committeemen to receive requests for labor in their community and to aid in the distribution of labor that was sent into the district. The office of county agriculturist worked in cooperation with these committeemen, supplying them with blanks for making requests for laborers, and these blanks were turned over to the United States labor agent at Yakima. We thought it was a better plan to handle all labor through the government labor bureau than to attempt to establish a separate office. This plan of the county labor bureau proved extremely successful in Yakima county and we were able to handle the harvesting of crops this year with very little labor shortage in any of the districts.

W. D. BOYNTON, Gig Harbor—In this section, running as it does to small ranches, where mixed farming of the lighter kinds is carried on, the women and children have always been helpful. Even in this year of extreme shortage of labor in all industries I can not say that it has struck me that our women people have been more active in the outdoor work of our farms than in former years. Where accustomed to the work, women are most excellent hands to care for small herds and flocks. Many of the women hereabouts get fine returns in a small way from two or three cows, or from a hundred or two of chickens. As I have before mentioned in these columns, many of the men and boys on these small ranches are away from home half the time or more working in the lumber camps, mills and elsewhere. The women folk on such ranches soon acquire an aptitude for carrying on the small ranch duties and are often more efficient and successful than the men, who grow to look at the ranch work as pretty small doings after their work in larger affairs outside. In the handling of the berry patches the women and children take a prominent part very much to the satisfaction and relief of the men folk, who do not take kindly to such activities. The much absent men folk usually try to get back for the heavier harvesting of the hay and grain that may be grown. Much of this cutting and hauling is done by exchange of labor between neighboring ranchers so that the necessity for hiring outside labor is almost entirely avoided. Here and there a farmer is found with a good team, mower and other tools. By an exchange of labor such are usually induced to do the cutting on small ranches not so well equipped.

CHARLES GRANT, Methow: The women and young folks have buckled right in and helped especially in the apple harvest. This never happened before. The labor of the women in picking apples has proved fairly successful. They can pick from the ground all right, but when it comes to standing on a ladder and picking a boxful of apples, as their picking bags hold, it is too much for the average woman. But they are more reliable than the men for staying with the job. The only experience I have had in labor shortage is that I am building a house, and it is simply impossible to hire men. The apple harvest has got to be attended to, and it is simply a case of helping the fellow who needs help most. Ten young men have left this small community for the war, and it surely tells. What next year will be is a puzzle.

BERT H. FAULKNER, Bickleton: The shortage of hired hands has not been acute enough for women to try to take their places in the harvest fields this season. In other lines some farm women here have been a great help in watering stock, going to town for repairs for machinery and in some cases even digging potatoes and helping haul hay. Young boys, from 12 to 16, have been a great help in the fields and on threshing rigs, according to their strength. There is lots of exchange work done among farmers, in fact we depend on this to a great extent, and it is a more reliable source of help than transients. In my opinion, the greatest labor-saving device in this country is the combine. There is a 12-horse combine put out that requires only two men to operate and seems to be the best solution to the labor problem that has yet struck this vicinity. About 25 were purchased this season here and in most cases gave satisfaction. If they continue to be a success, it is easy to see that the large threshing machines with a crew of 18 to 25 men and a drove of horses to eat up the farmer's grain, will soon be a thing of the past. The few big machines that ran this season charged 25 cents a sack for threshing and in many cases did poor work, blowing lots of grain in the straw stack. This condition is going to force nearly every farmer to own his own combine or small threshing outfit, so he can save his grain and get rid of the enormous expense of running such a large outfit.

E. E. SOULE, Winchester: This is an irrigated orchard country and the trees are not in bearing as yet, so we do not need any outside help. However, those who were not needed at home are spending the fall in the Wenatchee district helping with the picking, etc., and reports are, that they, both men and women, have proved themselves very capable workers.

JOHN DAHLEN, Hover: Women have helped to harvest and pack fruit, but not more this year than other years. Farmers exchange work for haying or filling silos, but have always done so. There is no real shortage of labor at present. In certain lines of work, women are of equal value to men. If work is properly done, it matters little what sex the worker is.

E. H. FAULKNER, Grandview: Women have done good work in the orchards. Many of them do as well as men. The women and high school young folks have done a great work in saving the apple crop. The strike of the loggers and millmen has helped farm work very much and in the orchards and packing houses. The apple crop is not nearly picked, but some are through, and that will relieve the shortage of men. There have been some pretty cold nights, but very little damage has been done.

C. B. SPRAGUE, County Agricultural Agent, Portland: I believe the women and young folks have done much in the county to relieve the labor shortage. I was out to a farm where the silo was being filled and found the women and children in the silo tramping and packing the ensilage, and it is needless to say that they were doing good work. The shortage of labor was most felt in the silo-filling work, and in this case the farmers exchanged labor and progressed with the work as best they could, in many cases taking double the time to do the same work as of former years. In two or more instances that I happen to know of women are managing the farms this season while their husbands are at work in the mills and the results are good where they can get competent help. During the potato harvest both women and children helped to good advantage. Earlier in the season, during the berry-picking season, girls and women were almost exclusively employed, and several growers expressed their preference for this kind of help, stating that they were more careful with the berries and could pick more rapidly.

MRS. WINNIFRED BUCKINGHAM, South Bend: The women and boys have helped out a great deal in the towns in offices, mills and stores. In harvesting some farmers called upon the boys and found them willing and energetic, but it many instances it took two boys to do the work of one man. For picking berries and other fruit, the women and boys proved equal to any man. The women have been very busy in their gardens, raising and canning their products. Jars are at a premium. A carload was shipped into Raymond and sold in a short time. The boys have taken up rabbit raising. In the valley, the children are interested in pigs.

A. R. HAHNER, county agricultural agent, Colville—With us there has not been such a serious shortage of labor this season as to require any unusual efforts on the part of women or children. Exchange of work among the farmers was common, though I am informed it has been so in the past. The shortage of crops partially solved the labor problem this season.

J. W. ALEXANDER, La Conner—In this community, while there has been labor shortage, the women have not been called upon to get out and do the farm work. It appears that the young folks have turned out in larger numbers than heretofore. In fact, the high schools in this county were not opened when the rest of the grades were, at least those in the farming districts were not, so that the boys might help take care of the crops. The shortage of labor has been keen and felt in every section and no doubt the fall work was hindered to a certain extent.

GEORGE HINGSTON, Mead: There has been no unusual amount of work done by the women and children of this vicinity this season. There has been more than the usual amount of exchange work among the people, and if the present labor condition continues more of this will be done next year.

LTE M. LAMPSON, County Agricultural Agent, Kennewick: The women and young folks have handled a great deal more of the fruit this year than usual. In many of the orchards most of the help has been women and children. This labor for fruit harvesting has been highly satisfactory. In fact, this class of labor usually handles the fruit carefully and is much more dependable than the men who drift from one locality to another. In harvesting tree fruits the women and children are able to do better at packing, sorting, etc. It is usually preferable to have men do the picking on account of its being much heavier work. In harvesting all crops the farmers have exchanged work and depended on each other a good deal more than usual. In some localities the schools have been dismissed for a few weeks and in others the business men were organ-

(Continued on page eighteen.)



Here are three women who "farmed it" this summer. They are daughters of George Alteneder of Orifino, Idaho. Thousands of others like them donned overalls and performed real toil on the northwestern farms.

Poultry Winners at Lewiston.

The following were winners in the poultry show held in connection with the Northwest Live Stock show at Lewiston:

Lewiston—R. G. Bailey, Oscar Nelson, C. E. Hershberger, Dr. M. S. Fite, James Manning, H. H. S. Rowell, Fred S. Jeffrey, Mrs. Foley, Junior Church, Claire Wellman, F. B. Gearhart, Mrs. Grace Bartlett.

Spokane—James G. Dickson, Fred Voss, Forest E. Lamb, Rolla Reynolds, T. J. Culbert, Jack Smith, J. N. Weldy, Mrs. H. A. Morenberg.

Boise—Mrs. Belle Silversmith.

Kendrick—B. E. Callison, Mrs. Frank Roberts.

Butte—C. S. Roberts.

Clarkston—G. Oren Baker.

Walla Walla—Mrs. W. S. Cotton.

Asotin—Lowell Berry.

Newberg—O. R. Winters.

Juliaetta—George W. Richards.

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A Wrong Rectified

M. H. Houser, northwestern agent of the food administration grain corporation, telegraphs from Chicago that "carrying arrangements have been fixed so that settlement on advances can be made farmers without interest."

This is tardy rectification of a wrong that never should have been permitted. The case is not at all debatable. In the interest of the consumers and for the public welfare the government took from the wheat grower his natural markets and compels him to sell his product exclusively through governmental agencies. It urged him to grow wheat, it urged him to sell it promptly, and then, through somebody's negligence or lack of sense of justice, the farmer found himself deprived of any market whatsoever.

It declared that he could not sell his grain until it had been inspected by government inspectors. It further declared that inspection must be made at the Pacific coast terminals, and then it laid an embargo on shipments of wheat from the interior to the terminals.

When complaint was properly raised against this impossible requirement the government's agents said they would make partial advances on wheat in the interior, but laid upon the grower the burden of interest on money thus advanced. Justly the growers objected to that inequitable requirement, and now the government agents have tardily and with seeming reluctance acknowledged their error.

The growers felt all the more keenly the injustice thus suffered because they had been unfairly accused of holding back their wheat from the nation and its allies.

It is earnestly hoped that henceforth the government's agents will act with greater efficiency and be guided by a higher spirit of fair dealing.

The Milk Delivery Problem

The new angle that has developed in the dairy problem in the Spokane, Wash., district is interesting, and will be watched closely by dairymen and consumers of dairy products throughout the northwest. The Inland Empire Dairy association is threatening to take the delivery of their product out of the hands of the regular distributors and do it themselves.

"We feel that we are not getting what we should for our product, and that the consumer is paying too much," says President H. S. Findley of the association.

Most students of the milk situation will agree with President Findley. The costs of production have gone up to such a degree that the producer of milk and cream and butter must have more and more for his product. And the cost of living has gone up to such a high place that the consumer can pay no more than is absolutely necessary. The producer must get more for his product or quit producing. The product must go no higher or the consumer will have to cease consuming. Both ends, it seems, must play against the middle—the middleman, the distributor.

Speaking of the milk service in the city of Spokane, President Findley says:

"I believe we can sell milk to the retail trade at 10 to 11 cents a quart in bulk, at least, and at 30 to 32 cents a gallon in 10-gallon cans to the larger customers."

Milk is now selling in bottles in Spokane grocery stores at 12 to 14 cents a quart. Practically none is sold in bulk at any price. It is selling, delivered by the distributors, at 14 cents a quart, bottled. In no case is it delivered in bulk.

The Inland Empire association is forming itself into a corporation for the purpose of controlling the milk situation in Spokane, and its success or failure will prove a step forward or a step backward in the struggle with the vital problem.

False Attacks on Farmers

A Baltimore stock brokerage company has issued a circular full of false attacks on the farmers of the United States, and a New York daily newspaper prints it with apparent approval. In part this libelous attack says:

> "They can form any combination, can hoard and withhold their products and fix any prices for them they choose. The government through the farm land banks will help them to do these things and will lend them money on their stock and crops, and even obligates itself to buy their wheat crop next year at $2 per bushel, war or no war, demand or no demand.
>
> "What do you, Mr. Hoover, think of the farmers refusing to sell their wheat—wheat which they do not need but are hoarding and holding for higher prices? Are you going to let them continue this unpatriotic practice, or are you going to commandeer this wheat and buy it for the government from the farmers at $2.20 a bushel? This is surely what should be done."

While it is true that a farmer can not be fined or imprisoned for holding his own produce, the food control law empowers the government to commandeer any and all foods and feeds held by any person in excess of his own valid requirements.

The growers can not "fix any prices for them they choose." The government fixes the prices for all commandeered products. The producer has a right to appeal to the courts against prices by him deemed unfair, but the judgment of the court (and the courts are the government) is final.

The farm loan banks lend money only on improved real estate, not on live stock and crops.

The farmers did not ask the government to obligate itself to buy their wheat crop next year at $2 per bushel. Congress took that action on its own volition, to stimulate increased production for the welfare of the nation, and as a slight measure of compensation for the government's arbitrary action in fixing this year's wheat prices below the prices the farmers would have surely received if the government had not fixed lower prices for the benefit of the consumers. The farmers would have been only too glad to have the government keep its hand entirely off wheat prices and let them take their chances with the law of supply and demand.

There is a lot of loose thinking and false talking about this matter. The truth is, the food control law was not enacted in the interest of the farmers. Its prime and avowed purpose is to hold down the prices of farm products and reduce the high cost of living in the towns and cities.

And as to the farmers "refusing to sell their wheat," and the appeal to Mr. Hoover to seize it, the food administrator will find it hard to resist a smile, knowing the facts as he knows them. Our farmers in the Pacific northwest would be delighted to have Mr. Hoover "commandeer this wheat and buy it for the government from the farmers at $2.20 a bushel."

They stand ready to deliver their wheat at the government quotations, which in this district run from $1.75 to $1.90, and are only complaining because the government is holding back on buying and throwing on the farmer the burden of carrying the crop until it suits the pleasure of its agents to make a market.

These are the facts, and any one who may doubt them has only to read the law and ask Mr. Hoover for their verification.

Washington Gleanings

J. B. Adams will have from 7000 to 8000 boxes of apples in his orchard at Leavenworth this season.

Grade Holstein cows sold for $160, $165, $175 and $177 at the public sale of Gerrit Noteboom of Lynden recently.

A. O. White, pioneer farmer of the Walla Walla district, disposed of 680 acres just east of Johnson to John Hoffman of Walla Walla at a purchase price of $80,000.

Charles and Frank Goetz of Viola marketed three loads of hogs in Colfax recently, which brought them close to $1000. Two of the porkers weighed almost 900 pounds.

Joseph Rosman has bought from Arthur B. French, 1049 acres a mile southwest of Creston, for a reported consideration of $81,500. The land is all in cultivation and planted to wheat.

The total seed crop of 1917 is estimated to have brought the growers of Skagit county $125,000, of which cabbage brought about $100,000. Spinach was next, bringing in $8400.

Lynden fruit growers received approximately $2000 for their prunes this year at the Lynden cannery. The pear crop, mainly the Bartletts, was small, amounting to about $500.

For the 1917 apple crop Washington takes the position of the largest commercial apple-producing state in the United States, according to an official federal government report this season.

Announcement has been made by Manager Horne of the Utah-Idaho Sugar company in the Yakima district, that the company will build two new factories for the 1918 season, one at Toppenish and the other at Sunnyside.

The Wishkah water project fund of $400,000, which will supply water to Aberdeen, has only $26,000 left, but the project is so near completion that this will be sufficient. The cost of construction is still $41,700 under the estimate.

Some of the largest and finest stock beets ever grown in the Walla Walla valley are being harvested at the state penitentiary, where about 12 acres of the roots are being taken in. The crop is running as high as 40 tons of beets per acre.

Fruitvale claims the blue ribbon for producing more apples to the acre than any other district in the Yakima valley. Joseph Feser harvested 15,000 boxes from 20 acres, the crop being worth $26,000. Gross receipts from this ranch of 22 acres were $1220 an acre.

School children of all districts of the state will aid in the collection, between December 1 and December 10, of detailed data concerning the crops of food raised in 1917 and the outlook for food production in 1918, together with a census for the purpose of determining how many brood sows and breeding ewes have been kept.

What Others Say

Register, Wilbur: If the farmers could screen their wheat, retaining that which they sack and haul to market without return of any kind, they could realize a good return after feeding it to hogs.

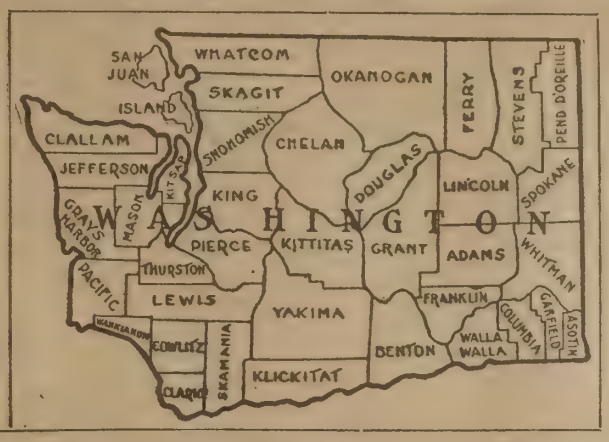
Herald, Everett: The war has given a great stimulus to the seed industry, the great bulk of the product having previously come from Europe. The market for seed is assured; in fact this product is all contracted for before it is grown.

Enterprise, Washtucna: Successful corn growing is but one contribution to Yakima prosperity, but an important one. It is an example of the transformation of the district during the last five or six years from a one-crop country to one of diversified crops and interests.

Journal, Kent: Field peas are making quite a success east of the mountains and we believe they would here. Why not plant to try an acre or so for the coming year? A good plan is to fence a small piece of ground hog tight, plant to peas and when nearly ripe let the hogs harvest them.

Are Fall Fallowing Wheat Land

Little Seeding Is Being Done But Land Is Being Put in Shape for a Crop in the Spring; Experiment Is Being Tried Out



EPHRATA, Grant County, Wash., Nov. 8.—The plowing this fall has not been so great as it would have been had there been rain earlier in the season, however, in certan siections of the county considerable fall plowing is being done in place of summer fallowing next year. This land will be cultivated next summer to keep off the weeds. This method has given very good results and seems to be gaining in usage. There has been no fall seeding to amount to anything in this county. Considerable rye has been seeded in the southern part of the county, but as the moisture was too deep in the summer fallow no seeding has been done for fall wheat. No crop losses have occurred, owing to cold weather. Where the farmers have hogs the most of them use them to pick up the scattering heads that fall in the harvest so it is really a profit that would otherwise be lost, when they are gleaning the fields. Some of the farmers are fanning their lighter weight wheats which gives them a very cheap feed and also raises the grade of their wheat so that they get more from the wheat they sell than they would otherwise and are not docked on the cracked wheat. Some of the elevators are giving back to the farmers their cleanings from each lot. This seems to be an excellent plan and is meeting with the approval of a good many farmers. H. W. REAUGH.

Work at a Standstill.

FAIRFIELD, Spokane County, Wash., Nov. 13.—Fall work has been almost at a standstill owing to the very dry weather. Those that have tried plowing have given it up as a very bad job and are doing nothing but choring around. A small acreage of fall wheat was sown but has not done well. The pea land sown to wheat hasn't started at all. Some apples were lost by a hard freeze in October. Farmers, generally, are Hooverizing to some extent, but owing to the high cost of cornmeal and fish, they feel they can't afford very much of those luxuries. Hogs for the most part are making their own living in the stubble fields and are not being fed anything yet.

ROY G. ADAMS.

No Rain; No Seeding.

RITZVILLE, Adams County, Wash., Nov. 13.—No rain this fall and consequently no fall seeding; this is the third fall in succession that has been too dry to seed and winter wheat will have to be imported for seed another year. A number of farmers are right-lapping or double disking their stubble ground. Farmers are feeding their light wheat to what hogs are being fed. D. A. SCOTT.

Preacher Picks Apples.

NEPPEL, Grant County, Wash., Oct. 31.—The weather has been quite warm this fall, with no rain to permit of any fall seeding, though every one around here was prepared to seed a large acreage to fall wheat, and now will have to do all the spring sowing. Everything has matured well here and the alfalfa and apple crops have been safely gathered, in the face of a great shortage of extra labor. In fact, we ourselves have hauled the last load of alfalfa today and just succeeded in getting our minister. Rev H. M. Course, to gather our apples in time to escape the frost. Our potato crop of six acres was below normal, about 55 to 60 per cent, and they were saved only by the most strenuous efforts, as help was so scarce. Several here are preparing land to seed to alfalfa next spring where irrigation is possible. The crop here, as a whole, was fairly satisfactory and prices are good, but no more profit is made than in other years. The farmers are anxious over the outlook for labor, as all seeding must be done in the spring, and from the present appearance the next year's crop is liable to suffer for lack of help at a critical time in February and March. There is plenty of good spring seed wheat, early Baart and other varieties, so the situation, on the whole, appears favorable to the farmers, with the exception of the labor situation.

MARTIN PENHALLICK.

Farmers Not Discouraged.

BOSSBURG, Stevens County, Wash., Oct. 30.—The weather has been ideal for harvesting fall crops and farmers have about all the potatoes and root crops put up in good shape. We had a fair crop of potatoes on the high lands, but rather a short crop on the lower and sandy soil along the river. It has been too dry for fall plowing and seeding, but there has been quite a lot of plowing done though too dry to do good work. Conditions have not discouraged our farmers, as spring grain does as well as fall seeding here. There will be a larger crop put in next spring than ever before. Although this has been the lightest crop ever grown here the farmers are satisfied as prices are good and a market for all farm produce, and all feel sure of good prices for next year's crops. There is plenty of good seed in the country except oats and corn. Our oats were very light this year and will not be first class seed, but we expect to be able to get seed from the Colville valley. There has been some good corn grown along the Columbia river below Kettle Falls.

W. W. PALMER.

Farmers Do Own Work.

STEVENSON, Skamania County, Wash., Oct. 30.—Fall work is well up and the weather has been ideal for everything but plowing and seeding. It has been a very dry season. Some seeding has been done, but complaint is made as to it not sprouting or coming up, while some think reseeding will be necessary. Everything in this locality seems to be moving along in the same old way. The feed question causes considerable anxiety, as it is scarce and high and some are troubled about getting hay for cows. The labor situation remains in "status quo." There has been no very serious shortage, as the mills and lumbering industy has been able to go on as usual with no serious hindrance. As there is no heavy farming done in this county the labor shortage has not been a serious handicap. Some of the orchardists have been employing some female workers in gathering the crops and with fairly good results. Many small farmers have resolved to do their work themselves and do not employ outside help.

W. T. JACKSON.

Culling Their Herds.

DARRINGTON, Snohomish County, Wash., Oct. 30.—The crops are nearly all harvested. The potato crop was a trifle below normal on the average and the roots, carrots and mangels also, but owing to more ground being planted it will more than bring those crops up to normal. There are quite a number of beef cattle to be disposed of, as the market is not what it has been in previous years. Some of the farmers around here are culling out their herds, owing to the high price of hay and mill feds. Local hay is now selling at $25 per ton and oats straw at $10 and $12. All the straw in this section is taken care of and will be fed to the stock this winter. Eggs are selling at 55 cents per dozen. What potatoes have been sold for so far brought from $1.75 to $2 per 100 pounds. Indications are that there will be a drop in the price.

C. B. NEIDERPRUM.

No Damage From Frost.

PROSSER, Benton County, Wash., Oct. 21.—The weather conditions of this fall are favorable to the maturing and harvesting of most crops in this locality and the first killing frost was October 17, but all the crops were out of danger at that time. There are lots of apples to be packed yet. There is no rain this fall and there will be but little wheat put in on account of no moisture in the ground. We have plenty of good seed for fall crops if we had rain to sow them. Some of the farmers are satisfied and some are not with the prices they are getting. Most of the fruit men do not know what they are going to get for their fruit yet, as they are shipping on consignment. It will take all of two weeks yet to get all of the fruit picked Some potatoes have not been dug yet. The threshing is finished and the wheat men are bringing in their wheat.

G. W. WILGUS.

Won't Feed Wheat.

LA CONNER, Skagit County, Wash., Nov. 1.—In some cases the fall work has been delayed on account of the heavy fogs and many showery spells; just enough of the latter to keep the threshing behind. There has been little fall seeding in this section and indications are that there will be very little done. Fall plowing is progressing very satisfactorily in many parts of the country. There has been little loss in any of the crops except straw, which amounts to very little. Most of the straw is baled when the grain is threshed, and the only loss has been that which has been wet in the stack. Most of the farmers have not begun to "Hooverize" on the food for the hog and the hogs are still feeding on the stubble and pastures. There is little chance for sustitution, for all grains are high priced, but I can not find any one who has planned to feed wheat this winter.

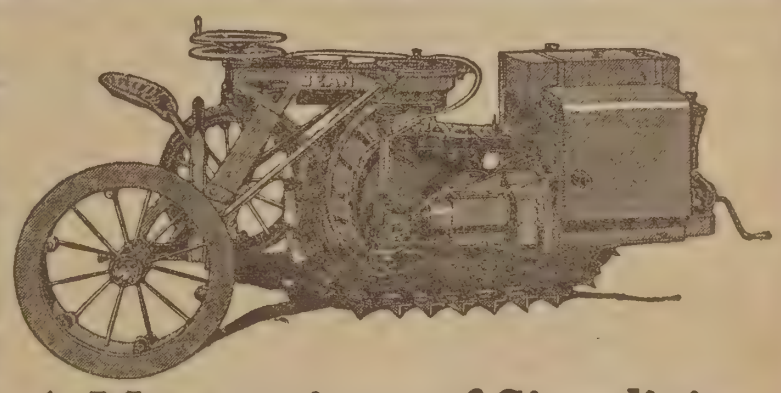
I. W. ALEXANDER.

Getting Ready for Winter.

FERNDALE, Whatcom County, Wash., Nov. 5.—Potato harvesting is almost finished here. In some districts, and especially on certain farms, the tubers have been seriously affected with the blight, especially those fields which were planted late and where the tops were green late in the fall. As the busiest season on the farm is soon over, and the nights are getting long, the attendance of the various granges is increasing and parent-teachers' associations are being organized in the different school districts.

CARL J. MENZE.

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For Fall Planting
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A. B. NYSTROM, Editorial Contributor

Good Mixed Ration

To the Editor: I have some barley and oats now. What other feeds would it pay me to get to mix a good ration for my cows? I have a few mangles, but not enough to carry me through, and no silo. I am feeding Puget sound hay. Shorts is now $32, bran $30, oil meal $3.40 per hundred, beet pulp $45.

K. S.

Silvana, Wash.

Answer.

By Puget sound hay I suppose you mean timothy hay or possibly a mixture of clover and timothy. Timothy alone is not a desirable hay for cows. It is better when clover is mixed with it, but clover alone is still better. Feed all of the hay that the cow will clean up without wasting any. Since you will not have sufficient mangles to carry you through the winter it would be well to feed very lightly of the mangles, figuring on having a little all the time rather than none a part of the time. For a grain ration to supplement this I would suggest that you mix 200 pounds bran, 100 pounds ground barley, 100 pounds ground oats and 50 pounds oil meal. This grain ration should be fed in the proportion of one pound grain for each three and one-half pounds of milk produced. If you run out of barley and oats feed the bran straight or a mixture of 200 pounds bran to 25 pounds of oil meal. Plan for a silo next year. A. B. N.

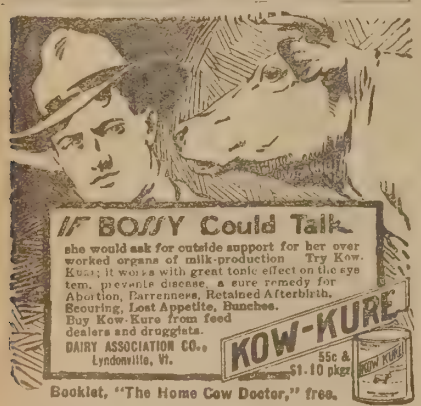


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Clallam County Association.

During the past month 440 cows were tested in the Clallam County (Wash.) Cow Testing association. The average production per cow for the 31 days was 548 pounds of milk and 27 pounds of butterfat, according to the report of E. O. Leonard, tester. Considering that many of the cows were on the last few days of their lactation period the average may be said to be good. One hundred fifty-two cows produced 30 pounds or more butterfat during the month. E. C. Blake had the herd which averaged the highest with a production of 67 pounds of milk and 35.4 pounds of butterfat.

A total of 44 cows produced over 40 pounds of butterfat for the month distributed among the association members as follows:

Albert Fasola, 8; E. F. Gierin, 7; E. C. Blake, 6; Ben Ridgway, 3; W. S. Brown, 3; Orin Babcock, 2; Bert Simdars, 2; Otto Simdars, 2; William Ward, 2; Albert Ecrett, 1; P. S. Govan, 1; Jack Ryser, 1; Price and Noble, 1; Jim Belfield, 1; A. A. Evans, 1; Ed. Pettit, 1; R. J. Dickensen, 1; Sam Kilby, 1.

Increased Cost of Feed.

The month of October shows another marked increase in the cost of feeding the dairy cow. The average feed cost was $9.31, or $1.45 more than for September, according to the report of Robert Cowan, official tester in the White River Valley (Wash.) Cow Testing association. Every dairyman except one was feeding both grain and roughage other than pasture. The average milk production per cow was 741 lbs. and the average butterfat was 27.83 lbs. This makes the average test approximately 3.57.

Of the 579 cows tested 114 gave over 1000 lbs. of milk, 82 gave over 40 lbs. of butterfat; 29 gave over 58 lbs. and 13 gave over 55 lbs. of butterfat.

Practically all calves are being sold for veal. Dairymen do not feel that they can afford to raise them when milk and feeds are so high. The high prices paid for veal is another inducement to sell the calves. If this practice continues very long, good dairy cows are going to sell at premium in the near future.

The silo is being appreciated more this year than ever before by dairymen.

Information Bureau

The Farmer will be glad to answer questions of general interest, as well as those of a practical nature, relating to the farm or farm home. There will be no charge for this service. Questions must be signed with your name and postoffice address and will be answered either by personal letter or by publication when of general interest.

Address Farmers' Information Bureau, Room 35 Review building, Spokane, Wash.

How to Measure Hay Stacks.

Question—Will you kindly tell me how to find the amount of hay in a stack when you have the width, length and distance over the stack? C. H. S.

To this inquiry the Farmer replied in part as follows:

It should be remembered that absolute accuracy can not be secured by any stack measurement rule. No two stacks are built just alike; no two kinds of hay weigh just alike; no two persons measure just exactly alike. Therefore, in considering the two rules given below, remember that the shape of a stack makes a great deal of difference, as well as do accurate measurement, kinds of hay, weather conditions and the time the stacks have had to settle.

Rule No. 1—Add the width to the over; divide by four; multiply the result by itself; multiply this result by the length; divide this result by the number of cubic feet in a ton of the kind of hay being measured.

(For grain and other hay comparatively heavy, 512 cubic feet are usually considered to make a ton. This assumes that the hay has stood in the stack long enough to have settled fairly well, 30 days being the shortest time that should elapse before taking a measurement. The Colorado Agricultural college is authority for the statement that for alfalfa hay 560 cubic feet should be allowed after 30 days' settling in the stack, 540 feet after 60 days, 512 after 90 days and 485 after 120 days.)

Illustration of rule: Say the stack measures 12 feet wide, 30 feet over and 40 feet long. Add the 12 to the 30, divide by 4, multiply this result by itself, multiply this result by the 40 and divide by 512. This shows the stack to contain 8.61 tons.

Rule No. 2—Subtract the width from the over; divide by two; multiply this result by the width and this result by the length; divide by the number of cubic feet in a ton. This gives the volume of the stack as 8.44 tons.

It will be noted that these two rules bring different results by approximately one-fifth of a ton in this particular stack.

In comparing these rules, the United States department of agriculture shows that the first is best adapted to measuring stacks of the medium-full type, while the second is best adapted to the narrower stack.

The department of agriculture has worked out a complex system of hay measurement. It can be obtained by addressing the office of the secretary at Washington, D. C., and asking for circular No. 67, entitled "Measuring Hay in Ricks or Stacks."

Question—What is the origin and significance of the Egyptian obelisks? J. R.

The monuments originated in Egypt. They were placed at the entrance of temples and palaces, both for decorative effect and as a record of royal deeds and victories. They were the Egyptian symbol of the supreme god. Their sides were generally covered with hieroglyphic inscriptions deeply cut into the granite. The first mentioned in history was that of Rameses, king of Egypt about 1485 B. C. The Arabians called them Pharoah's needles and the Egyptian priests the fingers of the sun. Many were made merely to extol the virtues of the king or prince to whom they were dedicated.

The obelisk in Central Park, New York, is one of two obelisks erected at Heliopolis by Thothmes III., about 1600 B. C. and removed to Alexandria by Augustus about 23 B. C., or, as some authorities say, by Rameses II. Nineteen centuries later the two were separated and one sent to London, the other to New York. These two are the most famous obelisks.

Esthetic Instinct Dates Far Back.

It would be interesting to know, if we could, when the first primitive manifestation of the esthetic instinct came to man. Certainly farther back than the written narrative of history or those anterior traditions that form his earliest myth and fable and religion go; farther, even, than his monuments of stone and prearchaic burial mounds, and almost farther than the geologic records of his presence tell.—Exchange.

Great Pyramids.

The largest pyramid in the world is that of Cholula, in Mexico, which covers 50 acres of ground. The largest in Egypt is that of Cheops, near Cairn, which covers 13 acres. It contains 90,000,000 cubic feet of stone and could not be built nowadays for less than $150,000,000.

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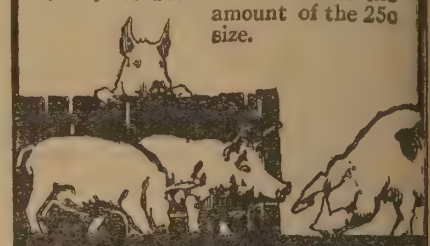
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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor.

Sheep Experiments

Shropshire and Delaine Merinos

During a period of five and a half years, from December 1, 1911, to July 1, 1917, the state experiment station of Pennsylvania carried on an investigation which had for its object a comparison of ewes of Shropshire breeding as representative of mutton sheep and smooth-bodied Delaine Merinos as representative of wool types. In detail the experiment has sought to discover the cost of maintaning breeding flocks of these two types of sheep, the value of wool and mutton produced and to study the breed characteristics of the two breeds as related to sheep raising in Pennsylvania.

The summary of the results of this investigation follows:

1. Shropshire ewes produce a higher percentage of lambs.

2. Shropshire lambs are heavier and make more rapid growth.

3. Shropshire lambs mature earlier and command 50 cents to $1 more a hundred weight on the market.

4. In the hands of experienced sheep men who can save a high proportion of lambs, Shropshires are slightly more profitable.

5. Delaine Merinos can be kept in larger numbers in pens and on pasture.

6. Delaine Merinos thrive better on pasture and especially during drouths, without extra supplementary feeds.

7. Delaine Merinos require less grain during the winter months.

8. Delaine Merino ewes require less careful attention at lambing time because ewes and lambs are hardier and thus a higher proportion of lambs is saved.

9. Delaine Merinos breed more regularly, earlier and in a shorter period of time.

10. Delaine Merinos are longer lived by one or two years as breeding animals.

11. Delaine Merinos are able to withstand hot, rainy and cold weather with smaller losses.

12. Delaine Merinos are less subject to parasitic infestation.

13. Delaine Merinos, due to their dense fleeces, have less chaff and burrs in their wool.

14. Delaine Merinos in Lot IV, during 1912 and 1913, and Lot II, Shropshires, similarly fed, showed an annual maintenance cost of $5.32 and $6.74 per ewe respectively. During 1914, 1915 and 1916, the annual cost of maintenance was $6.99 for a Delaine Merino ewe and $7.59 for a Shropshire ewe, Delaine Merinos, therefore, cost less for maintenance than Shropshires.

15. With a proportion of 100 lambs to 100 ewes, the Delaine Merinos were more profitable than Shropshires in 1914, 1915 and 1916.

16. For 1912 and 1913 the value of mutton produced was 41.9 per cent greater for the Shropshires of Lot II than for the Delaine Merinos of Lot IV, while the wool was 39.5 per cent heavier and 30.9 per cent more valuable for the Delaine Merinos than for the Shropshires during the same years.

17. Delaine Merino ewes require less exercise in winter quarters to warrant vigorous lambs than Shropshire ewes.

Ship Out Stock to Prevent Loss.

The unusual situation of having to transport stock to prevent their loss from lack of feed is reported from certain sections of western Texas. Cattle growers in that region have wired to Washington urging the government to send railroad cars immediately to ship stock to localities where feed can be obtained. The long continued drouth has so reduced the quantity of available feed that it is declared that stock can not profitably be wintered. The government is also asked to purchase some 1500 carloads each of cotton seed cake and hay to ship into western Texas to tide over the animals which can not be moved.

Must Raise Small Flocks.

Chancellor E. C. Elliott of the University of Montana and a member of the food conservation committee of the Montana state council of defense, has gone strongly on record in favor of the small flock of sheep, the two or three head of cattle and the pig or two program for every farm. In discussing the matter with the council of defense Mr. Elliott said:

"The surest and quickest way to increase the meat supply is to get over the notion that large flocks are necessary. If we can get the farmers to raise sheep and cattle we shall soon be in a position to supply more meat. We must carry on a campaign of education to show our farmers that each can raise a limited amount of stock."

CULL APPLES VALUABLE

Possibility as Stock Food Shown.

Interesting experiments and calculations relative to the value of apples as stock food have been made by J. F. Stephens of the Nampa (Idaho) district. The experiments are reported to have shown that cider from a number of varieties of apples yield as high as 15 to 16 per cent of sugar. It is also shown that 150 gallons of cider is frequently taken from a ton of such apples. It means that each ton of apples will produce from 150 to 175 pounds of sugar. Including the sugar left in the apple pulp it does not seem an excessive etsimate, if these figures are reliable, to calculate 20 pounds of sugar per ton of apples. Figuring the food value of sugar for live stock is a somewhat complex undertaking, but Mr. Stephens is reported to have figured that apples at $6 per ton make a cheaper stock food for stock that eat them than does barley at $50 per ton.

Veterinary

Dr. S. B. Nelson

Sores From Warts—I have a cow that had warts on her teats about two months ago. Since then the warts were pulled off while milking and have turned into sores which will not heal.
R. G. M.

Deer Island, Ore.

I think that you will find the following prescription of value: Chloral Hydrate dram 1 1-2, Acetic Acid absolute dram 1 1-2, Salicylic Acid dram 1, Spirit of ether dram 1, Collodion dram 4. Apply to the warts on the teats morning and evening after milking.

Pigs Get Lame.—I have some pigs that are getting lame in their hind legs, some in one and some in both. They do not eat good for a week, then they commence to get better.—L. A. L., Claytonia, Idaho.

It may be possible that your pigs are affected with rheumatism. This trouble simply occurs from the animals sleeping in a draft. I would recommend first that you provide sleeping quarters that are sufficiently protected that the animals are not in a draft. Second, as to the medicinal treatment, give each pig one ounce of castor oil in the feed. If they weigh 150 pounds give them two ounces. Divide them into bunches of about three in each bunch while you are giving this medicinal treatment. The next day or 24 hours later begin giving in the feed from 10 to 15 grains of potassium iodide, the dose depending upon the size of the pigs.

A New Wrinkle.

Mrs. McCarthy—Don't you stay in the room when your daughter has company, any more?

Mrs. Murphy—No. I'm trying the honor system.

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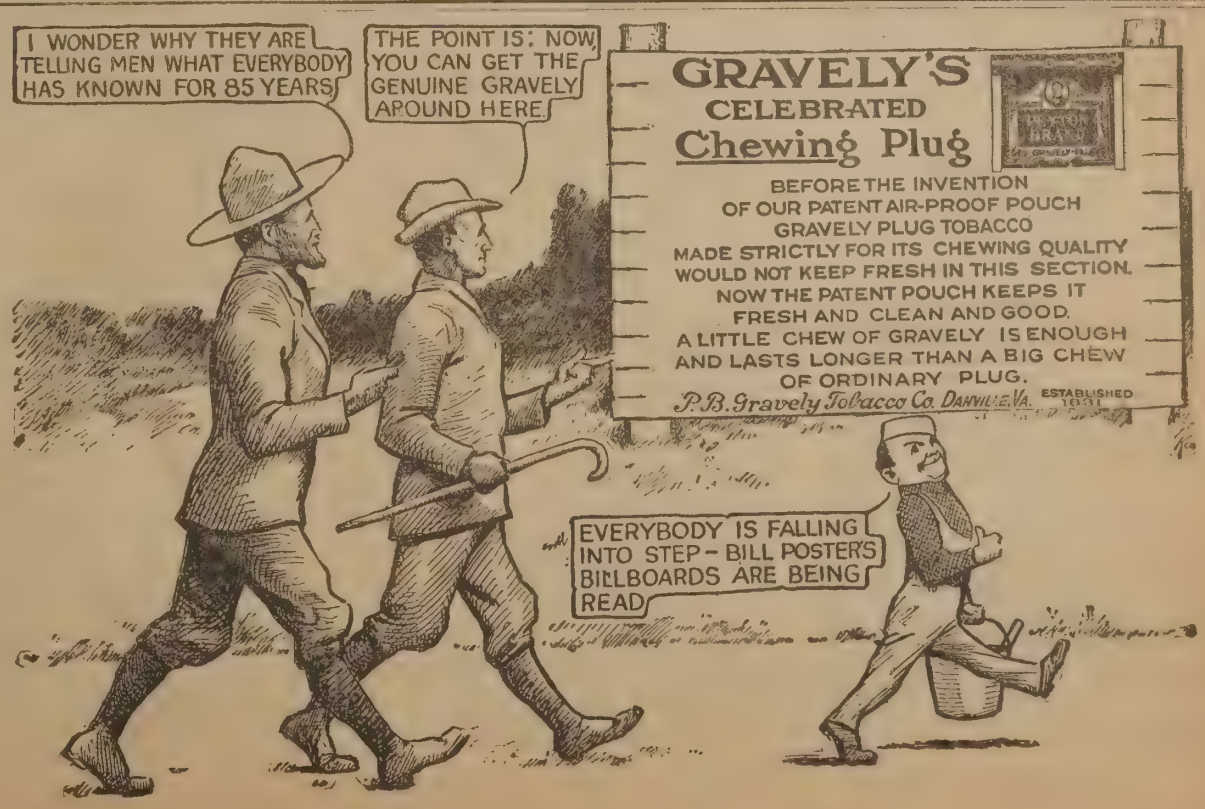
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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

Egg Prices and Feed

A year ago October 15 eggs were wholesaling in Portland at 42 cents, this year at 60 cents for the same grade. This is about 43 per cent increase. Throughout the summer and fall, however, the percentage increase has not been as much as this. Feed prices are about 75 per cent higher now than last year.

Such statements are frequently made and the poultryman feels that he can not afford to keep chickens and the chickens are sold. Good laying hens are marketed and good pullets are marketed because the feed is increasing in price faster than the eggs increase in price.

It doesn't follow that the price of eggs must increase in the same way, or show the same percentage increase as the feed in order to make the same profit. It will take about 75 pounds of grain to produce 12 dozens of eggs. If last year the grain cost $1.50 and this year 100 per cent more, or $3, and last year the eggs sold for 42 cents a dozen or $5.04, and this year for 60 cents a dozen or $7.20 for the 12 dozen, it is seen that a 43 per cent increase in egg prices more than offsets a 100 per cent increase in feed prices. The feed cost doubled, or an increase of $1 50, while the increase in value of eggs was $2.14. So that we actually make more profit on the eggs where the feed increased 100 per cent and the eggs only 43 per cent. We can not balance our books by percentages. The simpler method of addition and substraction is safer.

But we must not stop here in our calculations. A third factor must be taken into account. The first factor is the cost of feed, the second is the value of eggs and the third is the rate of production. If a hen laid only a dozen eggs instead of 12 dozen and eggs were selling at 42 cents a dozen, a 43 per cent increase in eggs would amount to only 18 cents, while the increase in the food was $1.50, asuming that the poor layer ate the same amount of food as the good layer, which would hardly be the case. The profit depends upon production as much as upon cost of feed or value of eggs. In other words, a good laying flock, one that averages say 150 eggs a year a hen, will make more profit this year with eggs selling at 60 cents than it would last year with eggs selling at 42 cents, even though the feed increased from $1.50 to $3 a hen, which is more than the cost at the present time.

At such prices of eggs and feed the hen would have to lay 100 eggs to make the increased value of eggs balance the increase in feed.

A poultryman of any pretensions can make his flock lay more than 100 eggs a hen. If he does that he is making as much profit as he made last year at this time. But a good flock with good care should average 150, and at that rate of production he is making more profit than he did last year at this time. If he is a good poultryman and has a good bred to lay flock he should get a production of 175 eggs. Then he will be making good money.

The price of eggs varies from month to month. The increase this year over last is not always as much as it is this month and if we want to know how we stand we have to figure up cost and profits every month. The only stable factor is the appetite or consumption of the hen. The war does not affect that. The consumption of food for a hen has been found to approximate 70 to 75 pounds of grain in a year.

The moral is that we should not get cold feet and kill off the hens because some one who figures in percentages says that feed prices have risen more than egg prices. J. D.

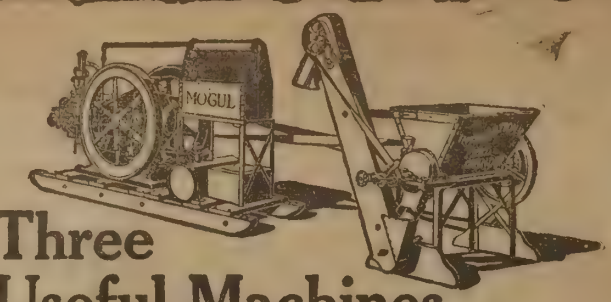
Idea That Turkeys Are Hard to Raise



Turkeys on the Sanders farm.

If you entertain the popular idea that turkeys are hard to raise, a visit to E. Y. Sanders' poultry farm at Roy, will convince you that either there isn't much in the old idea, or else that Mr. Sanders knows more about turkeys than most people. Probably you will be correct either way, or both ways. The fact remains that the 300 lively young turkeys on Mr. Sanders' place have been raised without much trouble and at a very low expense. It is generally supposed that little turkeys do not know enough to "go in out of the rain," but Mr. Sanders has no trouble from this source. His hens are confined in coops in a large yard and the little birds are allowed to run from the time the brood is put out. He has had practically no loss on young stock.

Mr. Sanders keeps about 50 breeders every year, bringing in a little wild blood of the native American turkey each year. His books show that each hen is earning an income of $5 a year in eggs sold for hatching, after keeping on the place eggs enough to produce the flock of 300 or more that Mr. Sanders raises each year.



Three Useful Machines

THREE International machines that will pay their way on any farm where there is corn to market or livestock to feed are:

An International Feed Grinder
A Keystone Corn Sheller
A Mogul Kerosene Engine

International Feed Grinders, for grinding small grain, corn on the cob, or corn in the husk, come in three styles with regular or special plates, 6", 8", and 10" in diameter. Capacities from 5 to 30 bushels per hour.



Keystone Shellers, adaptable to large or small ears, shell hard or soft corn clean without cracking the kernels or crushing the cobs. There are eight styles in 1, 2, 4, and 6-hole sizes, with capacities from a few ears shelled by hand, up to 4,000 bushels per day.

Mogul Kerosene Engines furnish steady, economical power for these and other farm machines. They operate on the cheapest fuels. Mogul kerosene mixers; built-in magnetos that make batteries unnecessary; enclosed crank cases; full equipment, ready to run; are features of all Mogul engines, from 1 to 50-H. P.

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There is now an extra demand for farm laborers to replace the many young men who have volunteered for service in war. The government is urging farmers to put extra acreage into grain. Write for literature and particulars as to reduced railway rates to Supt. of Immigration, Ottawa, Canada, or

J. N. GRIEVE,
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Canadian Govt. Agt.

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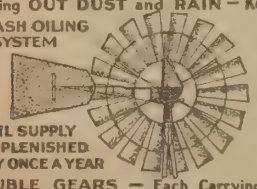
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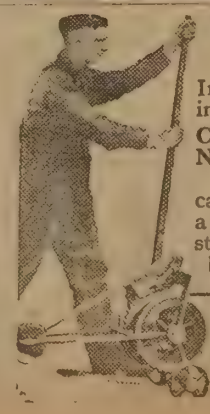
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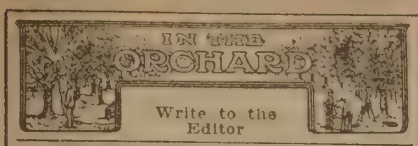
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GRANVILLE LOWTHER
Editorial Contributor

A Comparison

Of Two Years of Fruit Growing

A comparison of last year with this in the fruit industry is revealing some interesting facts. Generally it is presumed that the profits this year in fruit are much larger than those of last year. These conclusions are premature because the returns for this year are not in; but on the basis of sales made and money received some kind of estimate can be made. However, I have generally found that growers have not sufficiently reckoned the greater cost of this year as compared with last. Take the following items as illustrative. Labor cost per day, last year averaged $2.75, this year $3.50. Cost of boxes last year averaged .09, this year .16. Cost of paper last year averaged .04 1-4, this year .09.

It will be seen from this that labor was more than 25 per cent higher than last year, that boxes were nearly twice what they were last year and that paper was more than twice.

Now in addition to this it must be reckoned that spray materials, nails and everything bought or used was at a greater cost this year than last year. Further, labor was at least 25 per cent less efficient than last year. In some orchards it was 50 per cent less efficient. There seemed no reason for it except the general agitation, unrest and tendency to boost prices. In fact, I do not believe that the laborer could save more at the prices paid than he could save last year, but neither can the grower make more, unless he gets more for his fruit. It has cost at least 30 per cent more to grow fruit than it cost last year. Will the grower get 30 per cent advance in the price above that of last year? My answer is that the sales made up to the present time do not indicate that he will.

The government estimates of the cost of growing fruit covering a period of years in the Wenatchee, Hood River and Colorado orchard sections show that the average cost was then 76 cents per box. This included interest on land, water duty and all other costs. Now suppose we add to that 30 per cent we have 98.9c as the cost. This lacks only a little more than one cent of $1 per box.

The sales with which I am familiar do not justify a belief that the growers when all the grades are averaged, will get much above $1. Unless they do the farmer is working for nothing, except that he has a job which pays him fair wages.

Of course we are hoping for better prices; something like the profits other farmers are receiving, but will we get them?

G. L.

Heading of Trees

Short Lift Easier Than Long One

(Continued from page four.)

growers a century ago was to head the trees four to six feet from the ground, and that hundreds of these old trees are still vigorous and prolific."

I do not grant that the reason they are vigorous and prolific is that they were headed high. I do not grant it because, after having visited the great apple growing sections in the United States in order to study conditions, I find other and what seems to me better reasons. For instance, I visited my old home, where I was born and brought up, in West Virginia. I visited our old orchard, the orchard of my grandfather, and those of our neighbors. At the time I made that visit the orchard of my grandfather should have been about 60 years old. There was not a tree standing where that orchard had been. I mean not a tree that was growing when we left that country 40 years before. Yet those trees had all been headed according to the custom of that age.

When I visited my father's orchard I was even more surprised.

We had a small orchard, planted about tho time I was borne, one facing the sun, as we called it "a south slope." We had another on the "north slope" and another on the hill some 300 feet above the house that stood on the bottom land. On neither slope of the hill sides, nor on the hill top, was there a tree standing, that was there 40 years before, yet, these trees are all headed high.

There were trees found in various orchards, 50 to 65 years old, but they were on the bottoms, in alluvial soil, generally near the foot of the hill, where they got the drainage and the wash from the hillsides.

I found the same things true in Albemarl county, Virginia, in Pennsylvania and New York, although my observations there were in orchards I had never seen before and my information received from the owners. I conclude therefore that the longevity of the trees was not on account of the method of heading, but on account of being located in a rich soil, where there was plenty of water and good drainage.

The second argument for high heading is "the elimination of the trunk will prevent the full development of the top, restrict its growth and the top will never attain its full development."

On this point I can not speak with quite so much confidence, but I do not believe it. I do not believe it for the following reasons:

1. In our own orchard we have trees planted 24 years ago. When we bought the orchard 13 years ago we found that there were certain trees more vigorous than the others, larger tops, bore more fruit than the others in about the proportion that the tops were larger and that these trees were headed at the ground, or but few inches above it.

This difference could not have been caused by a difference in location, for the difference was very marked in trees standing side by side. I made inquiry of a neighbor who had formerly owned the orchard and found that after one or two seasons growth after planting, some of the trees had been peeled by rabbits. He had to decide between cutting them off at the ground or digging them up. He concluded to cut them off. That year they put out new shoots, strong and vigorous and now the difference is so great, that I have had them photographed with the adjoining trees to show the difference in favor of low heading.

Why Is It True?

1. "The roots that gather the food and the leaves that manufacture it into protoplasm that builds the trunk, branches, bark, leaves, and fruit, are nearer together. From the place of collecting the food to the place of manufacture in a low-headed tree is a 'short haul.' In the high-headed tree from the place of collecting the raw materials to the place of manufacture is a long haul. That is why the tips of the branches die first, when there is 'general debility.' That is the trouble in 'apple rosette,' the root system cannot supply the food substances and the top limbs are affected first.

2. "There is force in all plant life called "capillarity.' It has been called the law of 'capillary attraction.' I made several tests with wood, cardboard and by irrigation. In the wood tests, I put parts of box shooks with one end immersed in water to a depth of one inch. 'Capillary attraction would in a given time raise the water another inch, so that the wood an inch above the line if immersion would be damp. To wet the next inch would require about twice to three times the time required to wet the second. The difference depending somewhat on the texture of the wood. Then there was a point above which the water could not be raised by capillarity. Now, when it is noted that plants take their food in solution, it will readily be seen how important this force is in raising food from the ground to the top of the tree. It is what hydraulic eningeers call 'a short lift.'

The same test I made with cardboard and with the same results, except that the cardboard raised water more rapidly than wood.

The test I made in irrigation was to make an earth basin about the roots of a tree, fill it with water and let it stand. The next day, the outer bark would be wet several inches above the water.

There is something similar to this law of capillarity in what is called "osmotic action;" which is a pressure of the substances akin to the pressure of gases.

There is also the law of the sun's attraction, that sucks the juices from the leaves, branches and exposed tissues, much in the same manner as it lifts the waters from earth and ocean, by the process of evaporation.

These are forces that lift, draw, mix the substances, manufacture these substances into protoplasm, distribute them to the various parts, etc. My theory is that a short lift is easier than a long one, a short haul is easier than a long one, and that there is no use of building a tall trunk if the tree is properly pruned for the building of a top system.



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Hides Legal Tender.

Like most other things that used to be worth nominal prices, hides have gone up until they are nearly legal tender for the payment of debts. Receipts for large hides have been reported so high that they read almost fabulous. But they are real. Here is a recent market quotation for hides at Portland, Ore., illustrating their value:

Salted hides, 25 lbs. and up, 16c; salted stags, 50 lbs. and up, 14c; salted and green kip, 15 to 25 lbs., 16c; salted and green calf, 10 to 15 lbs., 22c; green hides, 25 lbs. and up, 13c; green stags, 50 lbs. and up, 11c; dry flint hides, 28c; dry flint calf, up to 7 lbs., 30c; dry salt hides, 23c; dry horse hides, $1.50@2.50; salted horse hides, $3@4.

Good Grounds.

Bait—On what grounds did Blinkley get his divorce?

Nibble—Claimed his wife made such poor coffee he couldn't drink it.

Bait—Coffee grounds, eh?

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References, any bank in Seattle.

North Coast Tanning Co.

Ballard Station, Seattle.

For High War Prices Look to 1861

Old Grocer's Invoice Shows Higher Prices Than 1917

On June 22, 1864, S. Hamill & Co., wholesale grocers of Keokuk, Iowa, sold a bill of goods to a country grocer. That old invoice, yellowed by time, has been resurrected and is a convincing proof that people who complain about present-day high cost of living are not yet fully acquainted with "war prices."

The general average of civil war prices as recorded in this old bill is 129 per cent higher than present-day wholesale prices in Iowa. Merchandise that cost the retail grocer $644 in civil war times can be bought now for $281. Yet wages are much higher now than then.

Believing that its readers, both old and young, will be interested in the prices paid by the American people when Lincoln was president and the boys in blue and the boys in gray were fighting under Grant and Lee, the Farmer herewith gives this old-time grocery bill in full:

	Lbs.	Prices —1864—		Prices —Sept. 18, '17—	
½ bbl. (55c) rice	117	$0.13	15.65	$0.09	$10.50
1 keg B. C. sodas	112	.10	11.20	.03½	3.92
1 box (25c) Dwight soda	60	.10	6.27	3.40	3.40
½ chest No. 25 Y. H. tea	54	1.88	101.52	.35	18.90
⅛ bbl. Imperial tea	60	1.75	105.00	.35	21.00
½ bbl (35) crushed sugar	83	.26	22.35	.10¾	8.92
½ bbl. (35) "Try Me" tobacco	37	.26	9.98	.34	12.58
½ doz. handled shoe brushes	½	2.50	1.25	2.25	1.13
1 doz. dom. shoe brushes	1	2.00	2.00	2.00	2.00
1 box (25) alum	29	.07	2.28	.04	1.16
1 box (25) copperas	30	.04¾	1.60	.02	.60
5 boxes matches	5	1.00	5.00	1.50	7.50
1 doz. long white cords (clothes lines)	1	3.50	3.50	2.50	2.50
1 coil 3-3-in. Ma. rope	39½	.25	9.88	.31	12.25
1 doz. 2-hoop pails	1	3.40	3.40	2.10	2.10
1 doz. 3-hoop pails	1	3.75	3.75	2.35	2.35
1 box (20) whiting	10	.05	.70	.06	.60
1 bladder putty	12	.07½	.90	.06	.72
1 box 9x12 city glass	1	5.75	5.75	4.50	4.50
½ bbl. No. 1 mackerel (100 lbs.)	½	10.75	10.75	15.65	15.65
7 bunches cotton yarn, 2-7, 3-8, 2-9	7	6.50	45.50	1.50	10.50
104 lbs codfish	104	.08½	8.85	.11	11.44
1 bbl. (45) sugar, yellow C	251	.17¾	44.35	8.55	21.46
1 bbl. (45) sugar, stand. A	281	.20½	58.05	8.85	24.87
1 can XX lard oil	10	1.15	11.50	1.50	15.00
1 box Star tins tobacco	20½	.85	17.45	.48	9.84
1 box Gold Cake tobacco	17	.80	13.60	.43	7.31
1 box Ne Plus tobacco	20	.65	13.00	.30	6.00
1 bag dry peaches	53½	.17	9.09	.12½	6.69
1 box W. R. raisins	20	5.50	5.50	5.00	5.00
1 box firecrackers, 40 pkgs.	..	4.50	4.50	1.10	1.10
9 bbls. bgs. paper, 3-80, 3-100, 3-125, 500 ea.	..	9.15	9.15	7.00	7.00
1 bb pint flasks	..	4.00	4.00	4.00	4.00
Drayage	..	..	.50	....	...
			$567.78		
1 bag prime coffee (green Rio)	166	.46	76.36	.11½	19.09
			$644.14		$281.61

It is noticeable that there are container charges for rice, Dwight soda, crushed sugar, "Try Me" tobacco, alum, copperas and whiting; barrel charges for yellow C and standard A sugar; also cartage charge for the entire bill.

The foregoing prices, it is true, were for the greenback dollar, and the gold dollar in 1864 would have purchased substantially as much as it will purchase today. But apart from the Pacific coast, no one ever saw a gold dollar then. The nation in general did business with the greenback. The farmer sold his produce for paper money. The wage-earner was paid in greenbacks.

Gold was scarce throughout the world in 1864, and by reason of its scarcity had high purchasing power. Gold is abundant now and its purchasing power has declined. The world's gold production in the last quarter of a century just about equals the previous production from the discovery of America by Columbus.

It is a little difficult to keep the mind clear on this. We are apt to think of the gold dollar as a thing of fixed value, whereas in fact it is subject to wide and sometimes violent fluctations. We are deceived by a false appearance, just as the eye of the man rising in a balloon is deceived by the false appearance of the earth falling away from him. He seems to be stationary, just as the gold dollar seems stationary, when in actual fact he himself is rising in one instance and the gold dollar is falling in the other.

GET THE COYOTES.

Should Allow None to Escape.

There are two good reasons for attacking the coyote now. This is the season when his fur is worth taking, and anything in the line of fur is valuable these days, even down to the rabbit and the mole.

Not only is this the season when the fur is good, but it is the season before the denning season, and the old adage that an ounce of prevention is worth a pound of cure applies in the eradication of the coyote. An ounce of prevention is worth anywhere from five to 12 ounces of cure, for every old coyote killed now means one less litter of from five to 12 pups in the spring.

Even in the thickly settled sections of the farming country of the northwest there are coyotes and they do real damage every year. They are especially harmful in the sheep-growing districts, and one coyote can do much damage to the farm flock, even though he actually fail to touch a single sheep. Sheep can't endure fright. One good scare from a coyote will actually cause a loss of several days' grain in a sheep. Sheep are really "scared out of a year's growth" if too many coyotes are allowed to visit him in the pasture.

Expert coyote hunters claim that winter is not the best time to trap coyotes, but they can be captured in traps at any season of the year, and the winter time is excellent for poisoning.

Mournful Numbers.

Clarice—The widow is awfully selfish about taking the men's attention. She is always looking out for Number One.

Beatrice—No, dear; she is merely looking out for Number Two.—Life.

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To Sell War Stamps

Everybody Can Buy Without Hardship

A new and practical method of securing funds for the conduct of the war and at the same time of developing the thrift and saving habit in the lives of the American people has been announced by the United States treasury department. It is as simple as buying postage stamps. It has the unqalified indorsement of President Wilson and the government hopes that within a year $2,000,000,000, almost as much as the first Liberty loan, will be raised by the sale of stamps ranging in value from 25 cents to $4.12 each. The stamps will pay 4 per cent interest to the buyer, and will be payable by the government in five years. They may be bought during December and thereafter at postoffices, banks and most railroad stations. No person may purchase at one time more than $100 worth or hold at the time more than $1000 worth of these certificates.

These obligations of the United States will be evidenced by stamps of two demoninations—a war saving stamp costing from $4.12 to $4.23, according to the month in which purchased, and having a maturity value of $5 and a thrift stamp costing 25 cents.

Will Mature In 1923.

During December, 1917, and January, 1918, war savings stamps will be sold for $4.12 each. At the beginning of each of the succeeding months of 1918, starting February 1, the cost of a stamp will increase 1 cent a month. All war savings stamps issued during 1918 will mature on January 1, 1923, when they will be redeemed at $5 each.

The difference between the purchase price paid at any time during 1918 and $5 represents the interest the government will pay the holder.

With the first war saving stamp bought the purchaser will be given a war savings certificate containing spaces for 20 such stamps. If the 20 spaces are filled before February 1, 1918, the cost will have been $82.40 for the filled certificate and on January 1, 1923, the government will redeem the certificate at $100.

Will Sell Thrift Stamps.

Thrift stamps, costing 25 cents each, are to be affixed to thrift cards, which will be supplied without cost. The card when filled, at a cost of $4, may be exchanged for a war savings stamp bearing interest at 4 per cent, compounded quarterly, merely by turning the card in at the postoffice, bank or other sales agency and paying the difference between $4 and the current price of a war savings stamp. The thrift stamp feature of the plan will afford an unparalleled opportunity for the small investor to place money at interest with absolute safety. The privilege of surrendering a certificate to the government and receiving the cost thereof plus interest has been provided for those who may later find themselves in need of their money.

Italy Fights Hard.

At the end of a terrible week in the history of the Italian army, the soldiers and the people of Italy appear to have regained much of their confidence. After a successful, though costly, retreat from their advanced battle front to the Piave river, they made a stand that at this writing looks like it would bring the advance of the German-Austrian forces to a halt. The latter have fought desperately to gain a crossing of the river, but have failed, the Italians having stationed themselves on the home side for the defense of their native land.

Russia Still in Turmoil.

The Russian situation remains in great turmoil. Authentic reports of the condition in Petrograd are lacking. The contesting factions appear to be swinging back and forth, now one with the advantage, now the other. That there is no great change in so far as the power of Russia in the war against Germany is concerned is evident. While the conservative and radical elements strive with each other in civil war Germany has little to fear, and is free to divert her eastern front army largely to the western front. Germany's greatest offensive against Russia now is of a political nature—a constant stirring up of internal strife and discontent. In like manner, Germany has been working against Italy, but with comparatively little success. Whatever success of this nature is accomplished in either Russia or Italy will have to be borne by the soldiers of England, France and the United States on the western front, where Germany's increased military strength will be thrown.

Is the Submarine Solved?

The submarine has shown comparatively little effectiveness against allied shipping for the last few days, and hope is springing up that the battle against it has almost been won. For the week ended November 10 only six British ships were sunk, of which only one was of 1600 tons carrying capacity. It has been common for the week's toll to include from 10 to 20 vessels of this size. The four weeks last reported show the following British losses:

	Over 1600 Tons.	Under 1600 Tons.
Week ended Oct. 20 ..	17	8
Week ended Oct. 27 ..	14	4
Week ended Nov. 3...	8	4
Week ended Nov. 10 ..	1	5

For fear the ship building program and the efforts against the submarines will relax the government is warning the people against discrediting the further power of the submarine. It remains a great menace, says the government officials, and the construction of ships must be carried on with the maximum speed.

More Sweaters Needed.

The American Red Cross has issued an urgent appeal to the women of the country to knit more sweaters for the soldiers. More socks and wristlets are also needed. The need with the coming of winter is beyond the capacity of the organization to furnish without the aid of the women throughout the country. All knitting should be done under the direction of local Red Cross organizations, which are located in nearly every town in the country.

Self-Sacrifice Needed.

The greatest need of America at the present time is the spirit of self-sacrifice, says Secretary Wilson of the United States department of labor. So great a part of the world population is suffering so keenly that it becomes little less than criminal for those with plenty to live in ease and comfort when a little sacrifice would ease the suffering of others and save the lives of thousands who would otherwise die of want or exposure. In addition to this, says Secretary Wilson, there is the possibility that because of human selfishness the war will actually be lost for humanity, and Prussian frightfulness actually dominate the world.

Closer Cooperation.

At the recent national convention of the American Federation of Labor a movement was noted looking toward a closer relationship between the farming class and the labor organizations. A. C. Townley of the National Nonpartizan league urged that the affiliation of the farmer with organized labor was advisable. No action was taken on the matter in a formal way.

Y. M. C. A. Secures Funds.

After the country had risen to two huge Liberty loan issues, had subscribed loyally to the Red Cross and to the Armenian and Belgian relief funds, the Y. M. C. A. recently asked for $35,000,000 and got it. The Y. M. C. A. is doing a wonderful work in behalf of the soldiers in the army camps and on the battlefields, and the people of the nation during the last 10 days have responded loyally to its appeal for funds.

Mexico Still Amuck.

With the world so involved in the European struggle, it has been virtually overlooked that Mexico is still in the throes of civil war. Villa is now again in open warfare against Carranza, head of the government in Mexico. He is organizing his old forces as thoroughly as possible, and has captured certain towns in northern Mexico, where he has set up his headquarters.

Railroads Want Loans.

The possibility that the railroads of the country will ask the government for loans of money with which to increase equipment and transportation efficiency has been sounded in a statement by Samuel Rea of the Pennsylvania railroad. Mr. Rea said that it was extremely difficult for the roads to sell their own bonds at this time because of the gigantic number of government bonds of various classes recently placed on the market.

Railroad Strike Threatened

The four national brotherhoods of railway trainmen have again brought forward the possibility of a nation-wide strike to obtain higher wages or better working conditions. President Wilson has intervened by calling a conference of the brotherhood leaders for today, November 22, at which time he will urge upon them the settlement of their difficulties without recourse to strike.

"It is inconceivable to me that patriotic men should now for a moment contemplate the interruption of the transportation which is so absolutely necessary to the safety of the nation," says the president.

Organizes Pig Clubs

U. S. Agent Boosts Meat Growing

For the purpose of stimulating the growing of swine throughout the state of Washington the United States government through the state college at Pullman is conducting a pig club program. B. E. Smead, with the title of U. S. agent in animal husbandry and state pig club leader, is in charge of the work. He is now devoting his entire time to the organization of clubs among the boys and girls of the state.

Mr. Smead has had actual experience in producing hogs, having conducted a hog farm for five years at Opportunity, near Spokane. While he made a specialty in the production of Duroc Jerseys, his familiarity with the business extends to other breeds.

Mr. Smead reports increasing interest in the club work, several having been organized and others now in process of organization. His office is at the college at Pullman, where he can be reached by those wishing to undertake the production of pork by the pig club plan. Nearly all the time, however, he spends on the farms assisting in organizing clubs.

Great Show Is Now On

From Portland comes word that the Pacific International is this year outclassing former years in a number of respects. Animals from at least five states are entered.

Cattle.

Shorthorns—E. F. Anderson & Son, Albany, Ore.; E. H. Holloway, Albany, Ore.; R. E. Boyce, Baker, Ore.; Frank Brown, Carlton, Ore.; Oregon Agricultural College, Corvallis, Ore.; A. Chalmers, Forest Grove, Ore.; W. O. Minor, Heppner, Ore.; Schmidt Bros., Hoff, Ore.; G. W. DeLay, Hot Lake, Ore.; J. B. Cernett & Son, Shedd, Ore.; Felzer Bros., Tangent, Ore.; W. J. Townley, Union Ore.; Perry Smith, Yamhill, Ore.; G. L. Tarbell, Yankton, Ore.; Thomas T. Miller, Los Angeles, Cal.; Pacheco Cattle company, Hollister Cal.; T. B. Gibson estate, Woodland, Cal.; University of Idaho, Moscow, Idaho; H. L. Summers, Bozeman, Mont.; Wyatt & Sons, Bozeman, Mont.; Child & Anceny, Helena, Mont.; Joe Turner, Meyers Falls, Wash.; George Bertrand, Olequah, Wash.; State College of Washington, Pullman, Wash.; N. C. Hall, Ridgefield, Wash.; Day & Rothrock, Sprague, Wash.; J. H. McCroskey & Sons, Sprague, Wash.; A. D. Dunn, Wapato, Wash.

Herefords—A. O. Huntley, Cuprum, Idaho; Henry Thiessen, Sweetwater, Idaho; University of Idaho, Moscow, Idaho; J. D. Miles, Livingston, Mont.; A. B. Cook, Townsend, Mont.; George Chandler, Baker, Ore.; Oregon Agricultural College, Corvallis, Ore.; W. C. Dorrance, Enterprise, Ore.; William P. Emery, Macleay, Ore.

Aberdeen-Angus—State College of Washington, Pullman, Wash.; Congdon & Battles, Yakima, Wash.

Red Polls—F. H. Porter, Halsey, Ore.

Holsteins—Elton Webb, New Plymouth, Idaho; William Bishop, Chimacum, Wash.; J. H. Hulbert Jr., Mount Vernon, Wash.; E. B. Marks, North Yakima, Wash.; David McKeown, Gresham, Ore.; William McKeown, Gresham, Ore.; W. E. Boner, Joseph, Ore.; Fred A. Ballin, route 2, Linnton, Ore.; C. S. Magee, McMinnville, Ore.; C. H. Marsh, Molalla, Ore; John Strucken, Portland, Ore.; P. A. Frakes, Scappoose, Ore.

Jerseys—Ed Carey, Carlton, Ore.; G. H. Dammeler, Portland.

Milking Shorthorns—W. B. Ayer, Carlton, Ore.; Alexander Morrison, Valley, Wash.

Guernseys—Harry W. Bateman, route 2, Bellingham, Wash.; Albion L. Gile, Chinook, Wash.

Sheep.

Cotswolds—David J. Kirby, McMinnville, Ore.; F. A. Koser, Rickreall, Ore.

Hampshire Sheep—J. G. S. Hubbard & Sons, Monroe, Ore.; Ed Schoel, Suver, Ore.

Shropshires—J. G. S. Hubbard & Sons, Monroe, Ore.; State College of Washington, Pullman, Wash.

Dorsets—W. H. Cleveland, Gresham, Ore.; J. E. Tucker, 659 Hoyt street, Portland.

Oxfords—A. D. Gribble, Aurora, Ore.; C. P. Kizer, Harrisburg, Ore.; William P. Emery, Macleay, Ore.

Southdowns—J. G. S. Hubbard & Sons, Monroe, Ore.

Lincolns—J. G. S. Hubbard & Sons, Monroe, Ore.

Rambouillets—Baldwin Sheep Company, Hay Creek, Ore.; Ed Schoel, Suver, Ore.

Hogs.

Berkshires—Earl Wood, Silverton, Ore.; George Bertrand, Olequah, Wash.

Poland Chinas—W. H. Howard, Parma, Idaho; Wilson Bros., Greenleaf, Idaho; Charles C. Royston, Payette, Idaho; J. M. Royston estate, Payette, Idaho; Herbert Willard, Dayton, Ore.; Frank Donison, Lyons, Ore.; Ray J. Fox, Lyons, Ore.; R. W. Hogg, Salem, Ore.

Duroc-Jerseys—H. L. Summers, Bozeman, Mont.; C. A. Hoover, Gervais, Ore.; E. C. Naftzger, Gervais, Ore.; C. S. Magee, McMinnville, Ore.; F. A. Coffin, Monmouth, Ore.; Doerfler Bros., Silverton, Ore.; Robert Nelson, R. F. D. No. 2, North Yakima, Wash.

Chester Whites—C. L. Badger, Oregon City, Ore.; Ed Schoel, Suver, Ore.; T. Brown, Yankton, Ore.

Hampshire Swine—J. M. Fruitts, Enterprise, Ore.

Horses.

Percherons—Ruby & Bowers, Davis, Cal.; A. P. Hunter, Island City, Ore.; S. Metz & Sons, Pendleton, Ore.; A. C. Ruby, Portland; Mrs. H. E. Evans, Rickreall, Ore.; A. B. Riddell, Addy, Wash.; Mayer Bros., Uniontown, Wash.

Belgians—S. Metz & Sons, Pendleton, Ore.; A. C. Ruby, Portland; A. B. Riddell, Addy, Wash.

Clydesdales—S. Metz & Sons, Pendleton, Ore.; A. B. Riddell, Addy, Wash.

Shires—Ruby & Bowers, Davis, Cal.; Mrs. Lydia Brakeman, Crane, Ore.; D. A. Brakeman, Crane, Ore.; S. Metz & Sons, Pendleton, Ore.; A. C. Ruby, Portland; A. B. Riddell, Addy, Wash.; Mayer Bros., Uniontown, Wash.

Your Country Is Calling For More Products

The most important factor in this war is the raising of record crops and bringing new lands into cultivation. The high prices for all products makes this patriotic appeal also of personal advantage to you. Do your bit.

Your Opportunity to Serve Your Country is in Stevens County

Although prices for all products have increased our low prices and easy terms for logged-off lands near Springdale, Washington, have remained the same.

We will be glad to have you examine the property and talk to the neighboring farmers. Drop us a line when you will be at Springdale, Washington, and our man will be at your disposal.

Phoenix Lumber Co.

Dept. D.

Spokane, Washington.

Please send me your folder on Stevens county logged-off land.

Name .....

Address .....



Should Guard Food Supplies

Menace Calls Forth Proclamation by President

While the farmers are being urged to grow more food and the housewives of the country appealed to to prevent waste, the government has been amazingly negligent in its long failure to take proper steps to guard the nation's food supplies. Enemy aliens have applied the torch and enormous losses have been suffered.

Spurred to action by increasing criticism, the cabinet discussed this menace last week, and now the president has issued a proclamation prohibiting enemy aliens approaching within 100 yards of waterfronts, docks, railroad terminals or storage houses.

Unfortunately this proclamation applies only to German aliens, as technically we are at war only with Germany. In reality, as every one can see, we are also at war with Germany's allies—Austria-Hungary, Bulgaria and Turkey—but since no declaration of war has been made against those countries there is no authority of law to interfere with the movements of their subjects.

But even if the proclamation applied to them something more would be needed to protect the country's food supplies. Waterfronts, warehouses and food depots should be guarded, but the amazing and alarming fact remains that very little patrol service has been provided.

The truth came out with alarming candor at the convention in New Orleans, last week, of the Fire Marshals' Association of North America. Franklin H. Wentworth of Boston, secretary of the National Fire Protection association, assailed the complacency of the country in the face of fire hazard conditions generally known to be deplorable.

As is well known, New York is the great shipping point for the food supplies, munitions and other commodities we are sending to our soldiers in Europe and our allies. The long waterfront there is congested with these valuable supplies, and they were found to be practically unguarded.

To test conditions Mr. Wentworth sent a man along the waterfront. Without pass or permit this man visited the entire waterfront from Brooklyn bridge to Coney island, driving and walking about warehouses and piers overflowing with merchandise, foodstuffs and supplies intended for our allies and soldiers in Europe.

He was not stopped or questioned as to his business or why he was there. He found two soldiers on duty at the Erie basin, but even these did not question him.

These incidents, as Mr. Wentworth forcibly told the fire marshals, "show what amazing irresponsibilities and stupendous risks may stalk through the present gaps between local, state and national control of the fire hazard. What price may we not yet pay for lack of organization in the face of these great dangers as the war drags out its dreadful course into worse bitterness and hatreds?"

Presidential proclamations will not guard these unguarded food supplies and munitions. It takes men to do that—men with rifles and instructions to challenge every passer, to arrest suspicious characters and to shoot any one who may resist.

Will Unify Work

County Agriculturists Lay Plans

With a view to coordinating their work, all following out the same line of endeavor, the county agriculturists of the state have held four sectional meetings recently. One meeting was of southwest Washington agents, one of northwest, one of southeast and one of northeast.

The action is taken at this time especially with a view of making the work as efficient as possible in increasing production of foodstuffs. From time to time the agents of each district will meet for discussions and exchange of experiences. Occasionally a joint meeting will be held at the state college at Pullman, from which the work will radiate under the general government and college supervision.

Two prominent proposals have grown out of the meetings—the holding in the various localities of short schools for the benefit of the farmers on subjects vital in the production of increased crops and the organization of agricultural councils of farmers in the various counties of the state. A number of movements of this kind are expected to grow out of the movement of coordination.

REMEMBER!

Increased rate of postage —letters THREE CENTS an ounce. In sending silver coin by mail be sure and ask your postmaster how much postage is required for your letter.

Reports Prosperity

Industry Humming, Wages Good

To the Editor of The Washington Farmer: I never write anything for publication, but your course about doing away with traveling agents appeals so strongly to my way of thinking and doing that I am writing to heartily approve of it. Let me also say that I approve in the highest degree your exposure and running down of such scoundrels as the Northwest Trading company and other similar concerns.

While I am at it, will say that Lewis and surrounding counties were never better prepared than now to buy less and live better than ever before. There are more fruits and vegetables canned and preserved and the farming and dairying people are better off financially and otherwise than ever before. While there is a great scarcity of poultry, a great many have a pig or two to tide them a while when slaughtering time comes. Destroying young calves has almost stopped, as they are selling at from $2 to $3. Some fall plowing has been done, but not as much as should have been. Every industry throughout the country is humming and wages are good. If one could do away with food and feed speculators the people could lay away some money for a rainy day and all be contented.

A. R. KNOWLES.

Adna, Wash.

MAKE CORN MEAL

Home Process Shown at Corn Show.

The second annual corn show staged by the Exchange National bank of Spokane, Wash., is this week putting on a unique and valuable feature under the direction of extension department of the Washington State college. It is a demonstration of how to make and cook corn foods. The idea was worked out by George A. Olson, chemist of the state college, and is being illustrated by Misses Grace Coulter and Anna Walter of the extension department.

The process consists of soaking the whole corn in water of ordinary room temperature for 10 or more hours. It is then run through a meat chopper or other coarse grinder. When necessary it is run through two or three times to get it to the right fineness. The product of this operation is ready then for the making of corn bread, corn mush, corn muffins or other corn foods.

The corn show as a whole is highly satisfactory. The lobby of the bank is well filled with good displays.

Gourd Family Is Important.

The gourd family furnishes the human families with many edible fruits and it is believed that pumpkins and squashes are of American origin, though in nowise certain. On the other hand, it is known that watermelons, muskmelons, cucumbers and all that branch of the family are of Asiatic origin. Yet all countries have native species of this great family.

Wedding Custom From France.

The custom of wearing orange blossoms at weddings is of comparatively recent date in this country. It came to us, like most other fashions in dress, from the French, who in their turn derived it from Spain. In the latter country it had long obtained, and is said to have been of Moorish origin.

ATKINS SAWS

SILVER STEEL

The Choice of Expert Woodsmen

The time that you, and maybe a hired man, waste with a poor saw runs into dollars. It only takes a part of this waste to buy the best saw made—the famous ATKINS. It will do your work 25 per cent. faster than any other saw —will run easier and stay sharp longer.

Quicker—Cheaper—We'll Prove It

The Atkins Cross-Cut is *Segment Ground* (Atkins Patent). It tapers from the tooth-edge to the back and from the ends to the middle. Other saws have wide set teeth, but that isn't the same thing. Atkins teeth *cut*, they don't chew. Every stroke brings out a clean, thin ribbon of wood.

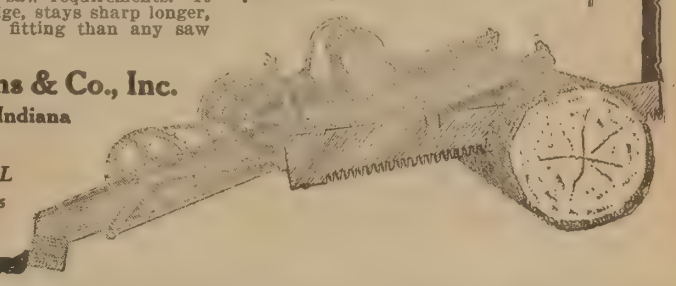
The Finest Steel.—Atkins Silver Steel, used in all our best saws, is the finest formulated for saw requirements. It takes a keen edge, stays sharp longer, and needs less fitting than any saw made.

Take an Atkins Saw home and try it. If it doesn't prove itself a timesaver and all we claim, your dealer will refund your money. The genuine ALWAYS has our name on the blade. All good dealers sell Atkins Saws and Tools.

Atkins Drag Saws

Why pay for a good machine and use anything but the best saw with it? Try Atkins Saws once and you will never try to "get along" with any other.

E. C. Atkins & Co., Inc.
Indianapolis, Indiana
Makers of
SILVER STEEL
Saws and Tools



XMAS MONEY!

Ladies and children can earn their Xmas spending money by taking subscriptions for The Washington Farmer.

We have released our force of road men for other productive labor. We want a woman or child in every locality to introduce our new subscription rates to their neighbors and friends.

You can earn the money you need for Xmas gifts by devoting an hour or two a day introducing our new prices to the people of your community.

Write Today for Necessary Supplies

Use This Coupon

The Washington Farmer,

Spokane, Wash., ...,1917.

Gentlemen:

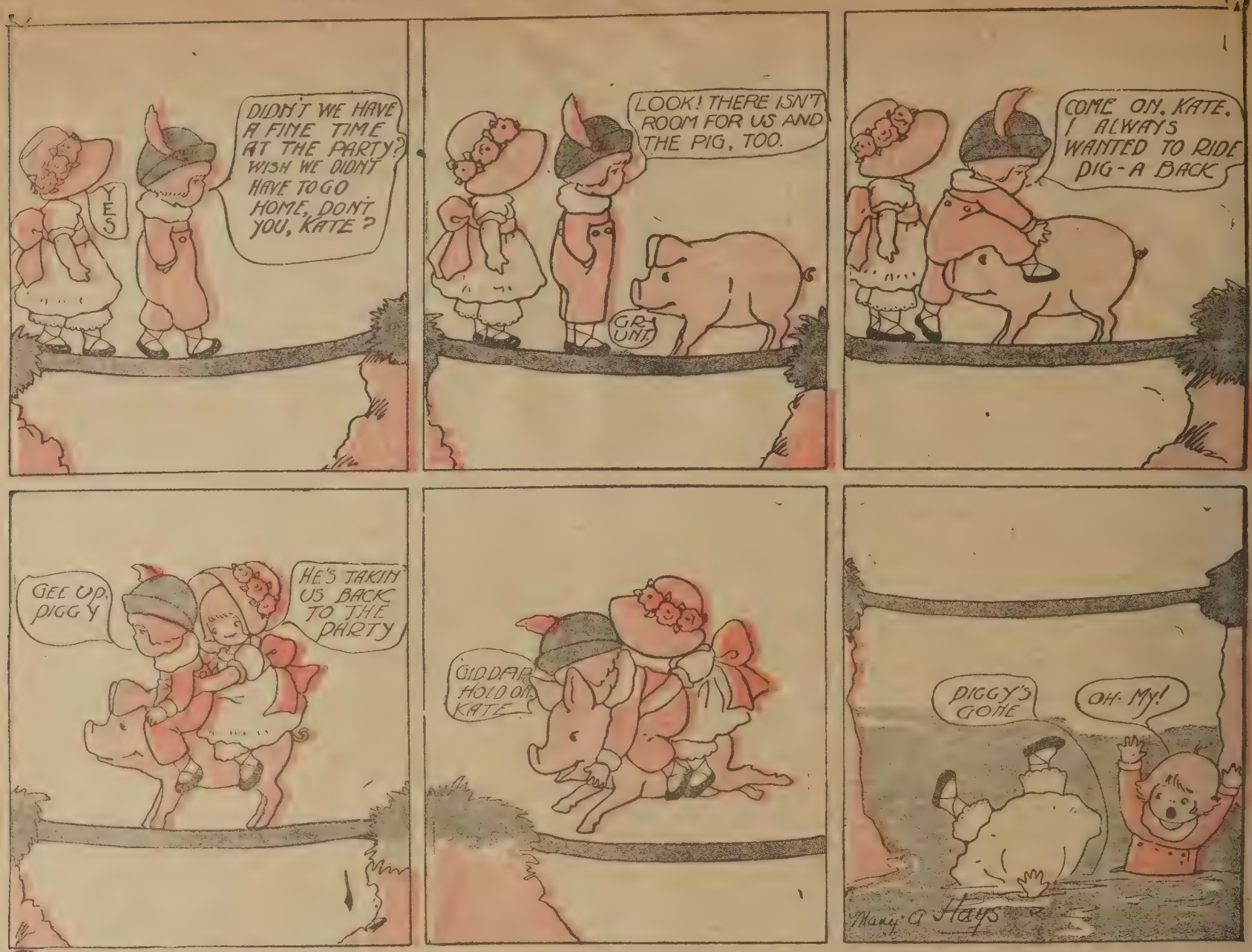
Please send me the necessary supplies for introducing your new subscription rates in my locality.

Signed .....

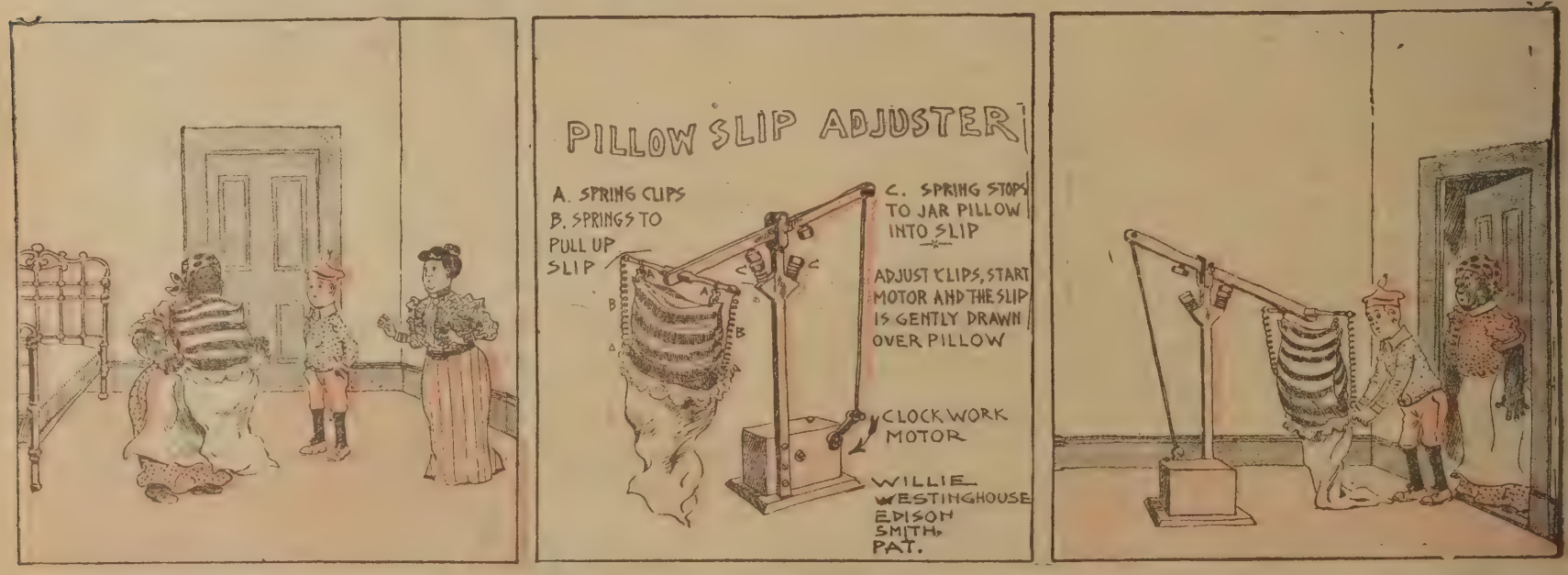
R. F. D. Box ..... Postoffice .....

State .....

KATE AND KARL RIDE PIG-A-BACK

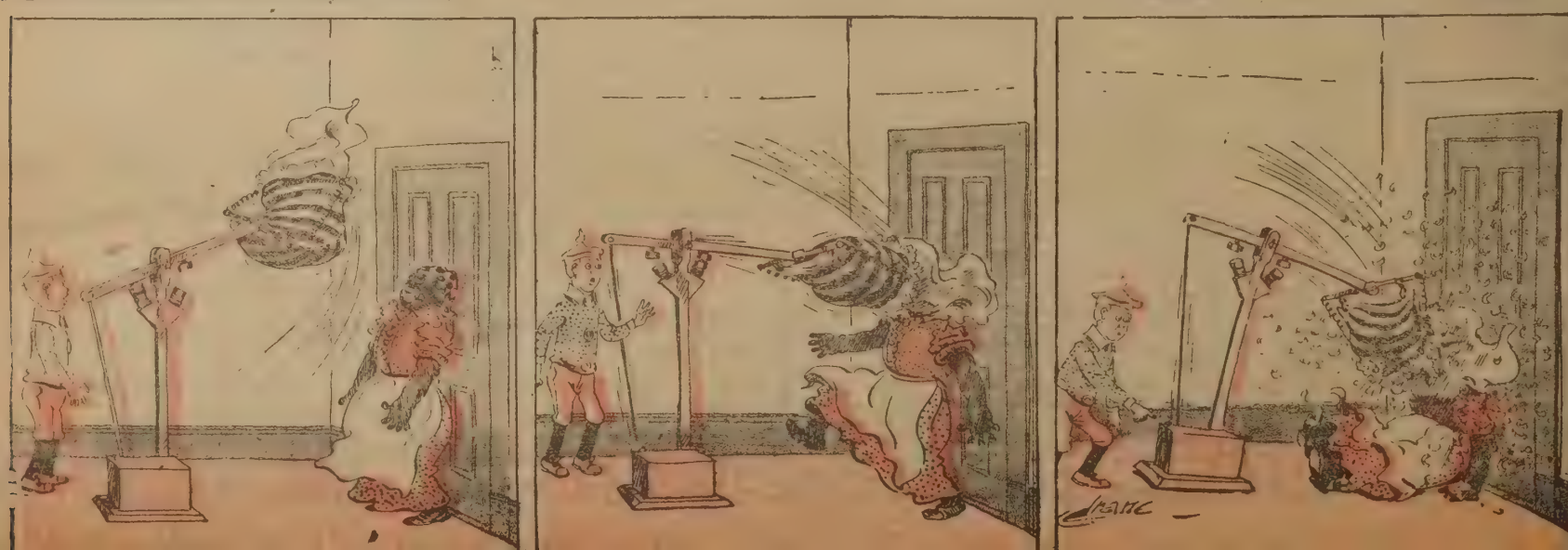


ONE OF WILLIE'S INVENTIONS THAT DIDN'T WORK



DEAR TOMMY: I made this adjuster so that Susan wouldn't have to hold our pillows in her teeth, which makes Mamma angry. It didn't work just right and banged a pillow over Susan's head until the feathers all came out. Maybe I can fix it!

Yours, etc.,
WILLIE



Is Belgian Hare to Have Its Day?

Valuable Source of Food Supply in Europe for Many Generations

The rabbit family have proved to be a very valuable source of food supply in Europe for many generations, and more especially during the war, which has been an impetus for the food experts of the United States department of agriculture to advocate the breeding and raising of the Belgian hare to reduce the cost of our meat supply. About a decade ago or more our government began the campaign and followed it up by issuing several farmers' bulletins on the care and raising of this very prolific and palatable animal. This and the newspaper agitation of the economical question of the production of this food supply, has caused the Belgian hare craze to extend from time to time among the farmers and townspeople throughout the land.

The head of the family down to the toddling youngster have sought to raise the toothsome bunny, to reduce the meat bill. A very few, some by mere chance were successful, but nearly all met disaster, by the simple process of feeding the young with too large a ration of green feed. Beginning at weaning time, and until half grown the youngsters were attacked with a bowel complaint, which is very contagious, and fatal as the cholera, usually killing the entire hutch, and the breeders wondered why. The government experts have admitted that this disorder is a disastrous feature of the industry, and that it was an unsolved problem; offering no remedy. A successful ration, and a sure preventive of this fatality among the young, is clean hay and some grain, but little green food until half grown.

In my 20 years' experience in raising and breeding rabbits, I have lost but a few of the young with this trouble. Three years ago I raised more than 400 hares, and lost quite a number of the youngsters that season, due to the fact that my quarters were overstocked, and I let several of my breeding does run loose in a large protected enclosure. They burrowed into the ground, as nature intended in bringing forth its young, and the little fellows had access to nothing but green feed with the surplus stock in the enclosure. I lost the entire litters of five does about weaning time, the result of the experiment.

The Belgian hare breeds very rapidly, the period of gestation being 28 days. The doe will produce 12 litters of from 5 to 10 rabbits annually; but it is not advisable to let her raise more than four litters. The Belgian hare and the Flemish giant rabbit are recommended for meat production, as these breeds are large and develop rapidly. I have found it profitable to cross the two breeds on that account and for vigorous stock. Inbreeding reduces the size, causes slow development and frail stock. With sanitary and varmint proof hutches the rabbit can be raised successfully in the basement, outbuildings, or out in the weather; they abhor filth, and are of very clean and thrifty habits.

The cost of production is less than any other meat, not excepting poultry. The supply can be quickly increased, without requiring space that may be required for the production of crops. They begin to breed at four months old; well fed the young reach a marketable size of from five to six pounds live weight at from three to five months old.

There is hardly a family in the land that can not keep one or two does, and raise rabbits from the waste of the houhehold, such as vegetable and fruit peelings, and vegetable tops for rough feed. Scraps of bread, left over mush, rice and meals take the place of the high-priced grains. If fortunate enough to have a garden, the rabbit-food problem is solved throughout the year, and the breeding stock can successfully be increased to from four to six does. For winter plant several rows of carrots, turnips or kale in the garden; the balance of the year your hutches will thrive upon the weeds and refuse that the garden will produce. After you have picked your peas, beans, and corn, pull the stocks up, wash or shake the soil from the roots; it is all food for thrifty bunny. When you do your pruning in the fall or spring, give bunny a chance to strip the limbs of the fruit tree or berry vine of its bark and twigs. At fruit canning time save all the pulp from the fruit and berries after you have extracted the juice; bunny relishes the salts, sweets, and acids you are casting away. There are many obnoxious weeds, such as the peppery dogfennel that bunny dearly loves; there is but one thing in the garden that grows you must not feed bunny—the parsnip which kills the bovine is also fatal to our little economic friend.

Of the many hundreds of the Belgian and Flemish giants that I have raised, we have used them all to reduce the meat bill, having sold none for market purposes, only a few for breeding purposes. Many has been the guest at our home, who abhor and refuse to eat bunny, who on leaving the table called the attention of the housewife to the well-browned fried chicken just served.

Bunny is also a useful machine; it is a lawn-mower at our house. Frames of various sizes covered with wire netting, also on the bottom to prevent bunny from burrowing, may be seen sitting on our lawns, or the clover growing between the fruit trees. Nice rich-green clover, too, the ground being renewed each time the grass is mown.

When killing a rabbit for use, never try to skin and dress it while warm. A small blow on the head makes it senseless; then with a sharp blade sever it head, and hang it up by its hind legs in a cool place until rigor mortis sets in, before skinning. When cool it is odorless and skins easily. In skinning make an incision on the back, and with each hand pull the skin each way down on the limbs and sever with your chopping ax at the lower joints of the limb, it is only a moment's work.



The Belgian hare probably originated in Belgium or northern France. It was quite generally known in the northern part of continental Europe before the attention of English fanciers was directed to it. As their first stock came from Belgium, that country was credited with having originated the breed, which was exploited in England and elsewhere as being a cross between the rabbit and the wild hare. This claim seems to have been fully disproved by many unsuccessful efforts to produce the same cross. The chief known reason for calling the animal a hare lies in its color resemblance to the wild hare.

Camphor Trees Profitable.

The camphor tree is one of the many plant importations from China that promise much in the United States. The trees grow well in hedges 15 feet apart in the south and the average of eight tons of clippings per acre yields on distillation about 200 pounds of camphor. This means a present profit of more than $150.

Lord God of Hosts, Be With Us Yet, Lest We Forget, Lest We Forget

One week from today nearly 20,000,000 American families will gather around the Thanksgiving table. Across the sea, "somewhere in France," American soldiers, to what number we know not, will be taking turns in little trench groups about their mess, while perhaps enemy shells are bursting about them. What will the menu be here? What will it be there?

This year the American soldiers in France will have plenty, though it will not be of the turkey-and-pumpkin-pie kind. This year, as usual, the average American home will not suffer deprivation. America has plenty of food. But what of next Thanksgiving? What of the twelve months intervening? What if the war continues over a second or even a third year? The mess tables of the allied soldiers of humanity may be bare of absolute necessities if we forget that our wheat and meat and fats and sugar must be conserved. Germany is not forgetting. The home folks are on rations in Germany, and more than that, they are working double shifts to produce and transport the necessities of life to the soldiers who are fighting America and England and France and all civilizatioin. If Germany wins, it will be because her people at home made sacrifices that the army might be fed and clothed and armed. If Germany loses, it will be because the American people sacrificed that the soldiers of humanity might be fed and clothed and armed for power and efficiency.

As we plan and eat our Thanksgiving dinners "over here," let us remember that the soldiers "over there" are dependent upon us for necessities, the necessities of victory over Prussian brutality and terrorism. "Lord God of Hosts, be with us yet, lest we forget, lest we forget."

First Liberty Bonds

Convert Now and Secure the 4 Per Cent Rate

The first Liberty bonds bear 3 1-2 per cent interest; the second issue 4 per cent.

Holders of first issue bonds, however, have the privilege of converting them into 4 per cents, provided they make application before May 15, 1918.

The Farmer advises its readers to make such application immediately, before December 15, 1917, in order to secure the 4 per cent rate from that date, when the first semi-annual interest payment falls due on the 3 1-2 per cents.

It is suggested that those who desire to convert have their own banks handle the matter for them with the reserve bank through which the securities were purchased in the first instance. In this way the owner of the bond may be sure that his conversion privilege will not be shackled with trifling but harassing mistakes, and at the same time have the satisfaction of knowing that the amount of detail labor assumed by the federal government will be thereby lessened, inasmuch as many of the banks undoubtedly will handle a volume of this business in an omnibus transaction.

While the loss of interest would be trifling to a holder of a 3 1-2 per cent bond who failed to make his application for conversion before December 15, this year, but prior to May 15, 1918, the transaction would be complicated.

For illustration, suppose that you did not make your application until after December 15. In the case of bonds which may be presented for conversion after December 15 and prior to the period when the right to convert expires—May 15, 1918—in addition to surrendering their coupon bonds, the holders thereof must pay to the government the difference between interest at 3 1-2 per cent and interest at 4 per cent from December 15, 1917, to the date of conversion, the sum of such interest payment to be figured, of course, on the amount of the bonds in accordance with an interest table supplied by the treasury.

The better and simpler way will be for you to take up this matter before December 15, with the bank through which you made your subscription. The bank will do the rest for you.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

Cheerfulness a Virtue That May be Cultivated With Care



Dr. Hirshberg

He that is of a merry heart hath a continual feast. The man who is cheerful about his yesterdays is apt to confident of his tomorrows. A sunny mood brings forth the best efforts of the flesh as well as of the spirit. The choleric, depressed, phlegmatic or blue-spirited person may be so because of some peculiar structural defect in his glands by inheritance or from disease. The investigation by research workers of 89 families show that in many instances the reappearance of similar temperaments and moods is distinctly hereditary.

The pattern of a temperament, whether moody, "dumpy" or cheerful, is laid in general outlines to inheritance. This does not mean that your hereditary temperament and passion can not be changed, but that if no special effort at discipline, association, control or training is attempted, it will have a trend of the majority of the family.

The melancholic character gives up easily, says this or that cannot be done or the other is impossible. He worries, weakens at simple difficulties and finds life more or less of a burden, with tears or complaints as a solace.

If such temperaments are taken in time; if in families where one of the four ordinary types of temperament prevails, the individual is made to associate with and is educated by those of a more cheerful, optimistic nature, no matter how strong the inherited traits are, the hammering and drilling of the outside influences soon counteract the less pleasant and less useful tendencies and change them to your great advantage.

Nonchalance, indifference, phlegmatic insensitiveness, blue devils, a worrisome flesh, pessimism or any other destructive, anti-earning weakness of nature, whether inherited ever so firmly and from the plagues of both houses, can be thoroughly overcome, if the victim or those near and dear to him have the will, the determination and the good sense patiently and persistently to try.

Women and Young Folks Make Good

(Continued from page five.)

ized into squads and taken to the orchards to harvest fruit. It is not a little encouraging to note, at the end of the season, that the additional effort of women and school boys and girls, the exchange of labor and the assistance of the business men has resulted in saving practically all of every crop. There has been a considerable shortage of labor during most of the season, yet, in spite of that fact, the waste this year has been almost inconsiderable compared with any previous year since I have been in Benton county.

H. H. BOONE, County Agricultural Agent, Walla Walla: The two fruit evaporators here are using women almost exclusively in the preparation of their products and the quality of their work for this purpose is better than man labor. One evaporator is paying but 20 cents per hour and the women are working the usual eight hours as the law requires. The third evaporator at the state "pen" started this week and of course will use convict labor in the operation of their plant. All the large apple packing plants in the county use women sorters and packers to a large extent and they do just as good work as the men. Last Sunday at the Baker Boyer 600-acre orchard, was staged what was called apple conservation day, a crowd of over a thousand men, women and children picked 50,000 boxes of apples and were payed at the rate of 30 cents per hour. During the last two or three weeks the schools at Waitsburg and Touchet have been dismissed in order to use the child labor on the farms in saving the fruit and potato crop. This sort of labor is all right when properly supervised, but the old saying that one boy is a boy; two boys are a half boy and three boys are no boys at all, applies where children are turned loose in an orchard to pick fruit, without somebody to oversee the job. Around Touchet and Gardena the hay growers have been exchanging labor in the harvesting and baling of their crops for some time, while around Walla Walla the dairymen have been doing the same thing when it comes to filling their silos. Last year nine neighbors went in together and filled their silos for 65 cents per ton. Around Wailtsburg and Prescott several wheat farmers have purchased 12-horse combines and will be independent of the transient labor feature for next year, one man will drive and the neighbor sew sacks. This is a little slower than the header or large combine method, but it is a whole lot surer. In addition to this feature they are not feeding a small army of men on high priced "grub" nor are they forced to feed a bunch of horses. Among the drawbacks to this method might be mentioned the chance of grain shattering if the acreage is large and the large amount of unthreshed grain that will result where the machine is not equipped with a motor or the number of horses is not sufficient to keep up motion when going up hill. In traveling about the county I have seen several women in overalls helping with the various farm operations. This is especially true in the irrigated sections.

GEORGE LA RUE, Twisp: The women and young folks of this community seem to be willing workers, and are anxious to help where their services are needed. One farmer hired two young women to help stack his alfalfa. Another made a threshing crew of his boys and girls. Farm help has been a little short, but it hasn't been necessary for women and children to do much hard drudgery farm work yet. There has been no complaint as to the quality of their work, but they shouldn't be expected to do as much hard work as a man. They are best adapted to light work that requires care and patience. The farmers did more exchange of work while threshing than usual. Farmers in this locality haven't been hit very hard yet by the labor shortage problem, but should be figuring on the question for next season. There is no doubt about there being a prize in store for every one that succeeds with farm crops or live stock next year.

F. P. CLARK, Sunnyside: Everybody has worked to relieve the labor shortage. Women and children have picked fruit and potatoes, shocked hay, and some of the stronger women have helped stack. If they had done as usual there would have been a great loss of food products in Yakima valley. In fact they are far superior to the "jungle stiff" so common in our country. Women and young people are good fruit pickers, especially the farmer class. Young and old seemed to realize that they must help harvest this crop if it was to be harvested. It is about all in now. Some potato men are using improved diggers that put the potatoes in boxes. The neighbors exchange work. One man has hay, another fruit, another potatoes or beets, so it works fine. Some men have gone as far as three miles to help in filling silos. That is one job women and children can not do. I depended entirely on our neighbors for help in the fruit harvest and got along very well, in fact better than previous years with transient help.

D. D. BIRKS, Ione: I do not know to what extent women or children have helped out in the labor shortage. I have no doubt, though, that the majority of the women are more dependable than the average of our men laborers. There has been some exchange of labor among the settlers, but most of us have done what we could ourselves and let the rest go.

One experience with labor this year was sufficient for me. I was unlucky enough to meet an I. W. W. who pretended he wanted to work. I supplied him with tools and went good for about $28 worth of provisions for him. After two or three days' work and the wasting of some good timber he skipped out with the provisions and tools, and I had the pleasure of buying back my own tools. I then decided to do what I could myself and let the rest of the work go.

R. H. HOLCOMBE, Kennewick—The work of picking and packing fruit has been done by high school scholars and women more this year than usual, and we have found the women equal to men in picking fruit except where the ladder is needed. In cutting asparagus we have hired girls that are quicker than men, but we have to have a man to pick it up and carry it to the packing house. In spraying some men have changed work to overcome shortage of help.

J. O. WOODS, Omak—In this section, mostly given to fruit raising, women and girls are used to a large extent in picking and packing, and in most cases give satisfaction, being careful and painstaking. Help has been very scarce this season, and there is danger of much loss if the weather turns cold soon. Car shortage is very serious, and if relief does not come soon there will be a great loss of fruit.

J. F. McCURDY, Wapato—From the commencement of the fruit season there has been a willingness shown on the part of the women and high school students to assist in the production and harvesting of the crops. The value of the effort varied with each individual, ranging from excellent to futile attempt to perform labor to which they were not qualified. The season here, owing to the extreme heat during the harvest, would not be a correct criterion by which to judge the quality or the amount of work that the women could perform. Not being used to outdoor work the average woman could not compare with the men. Women are depended upon to do practically all the fruit packing here, and there has not been many who have done work in the orchards. The fruit pickers generally were better than least season, owing, I think, to the vigorous measures used by the government to keep down labor agitation and holding the disorderly element in subjection.

J. P. CHRISTENSEN, Port Angeles—While farming in this county is not the paramount source of labor, conditions in this phase of our life is felt to a considerable extent. We find that women and girls are gradually assuming a share of the work. The local condition can best be illustrated by one of our farmer's expressions, as he said to the writer: "While there is much to be wished for, as regards the result of women's work, it is better than the class of work I get from the men I can pick up nowadays." He referred to the milkers in the dairy work.

O. C. GLEICHMAN, Kennewick—The women and young folks have responded readily to the call of fruit growers for help in harvesting our fruit. They had a great deal to do

(Continued on page twenty-seven.)

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THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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CHAPTER VIII.

The Knife.

In every community, be it never so small, there are undesirable citizens; and while the little party was still at breakfast on the following morning three such members of society came around the cabin and let fall their packs, greeting the occupants boisterously.

"Well, well!" said Lee, coming to the door. "You're travelin' kind of early, ain't you?"

"Yes—early and late," one of them laughed, while the other two sprawled about as if to rest.

"How far are you goin'?"

"Not far," the spokesman answered.

Now, in the north there is one formality that must be observed with friend or enemy, and, though Lee knew these men for what they were, he said:

"Better have some breakfast, anyhow."

"We just ate." There was an uncomfortable pause, then the speaker continued: "Look here. It's no use to flush around. We want a piece of this creek."

"What are you goin' to do with it?"

"Cut that out, Lee. We're on."

"Who wised you up to this?" inquired the miner, angrily, for he had other friends besides those present whom he wished to profit by this strike, and he had hoped to keep out this scum.

"Never mind who put us Jerry. We're here, ain't we"

Stark spoke up. "You can't keep news of a gold strike when the wind blows, Lee. It travels on the breeze."

The harm was done, and there was no use in concealment, so Lee reluctantly told them of his discovery and warned them of the stakes already placed.

"And see here, you fellers," he concluded, "I've been 40 years at this game and never had a creek named after me, but this one is goin' to be called 'No Creek" Lee Creek' or I fight. Does it go?"

"Sure' that's a good name, and we'll vote for it."

"Then go as far as you like," said the miner, dismissing them curtly.

"I'll step along with the boys and show them where our upper stakes are," volunteered Stark, and Runnion offered to do the same, adding that it were best to make sure of no conflict so early in the game. The five disappeared into the woods, leaving the others at the cabin to make preparations for the homeward trip.

"That man who did the talking is a tinhorn gambler who drifted in a month ago, the same as Runnion, and the others ain't much better," said Gale, when they had gone. "Seems like the crooks always beat the straight men in."

"Never knowed it to fail," Lee agreed. "There's a dozen good men in camp I'd like to see in on this find, but it'll be too late 'gin we get back."

"Dose bum an' saloon feller got all de bes' claims at Klondike," said Poleon. "I guess it's goin' be de same here."

"I don't like the look of this," observed the lieutenant, thoughtfully. "I'm afraid there's some kind of a job on foot."

"There's nothing they can do," Gale answered.

"We've got our ground staked out and it's up to them to choose what's left."

They were nearly ready to set out for Flambeau when the five men returned.

"Before you go," said Stark, "I think we'd better organize our mining district. There are enough present to do it."

"We can make the kind of laws we want before the gang comes along," Runnion chimed in, "and elect a recorder who will give us a square deal."

"I'll agree if we give Lee the job," said Gale. "It's coming to him as the discoverer, and I reckon the money will be handy, seeing the hard luck he's played in."

"That's agreeable to me," Stark replied, and proceeded forthwith to call a miners' meeting, being himself straightaway nominated as chairman by one of the strangers. There was no objection, so he went in, as did Lee, who was made secretary, with instructions to write out the business of the meeting, together with the by-laws as they were passed.

The group assembled in the cleared space before the cabin to make rules and regulations governing the district, for it is a custom in all mining sections removed from authority for the property holders thus to make local laws governing the size of claims, the amount of assessment work, the size of the recorder's fees, the character of those who may hold mines and such other questions as arise to affect their personal or property interests. In the days prior to the establishment of courts and the adoption of a code of laws for Alaska, the entire country was governed in this way, even to the adjudication of criminal actions. It was the primitive majority rule that prevails in every new land, and the courts later recognized and approved the laws so made and administered, even when they differed in every district, and even when these statutes were often grotesque and ridiculous. As a whole, however, they were direct in their effect and worked no hardship; in fact, government by miners' meeting is looked upon to this day by those who lived under it as vastly superior to the complicated machinery which later took its place.

The law permits six or more people to organize a mining district and adopt articles of government, so this instance was quite ordinary and proper.

Lee had come by his learning slowly and he wrote after the fashion of a schoolboy, who gives his characters from every angle and follows their intricacies with corresponding movements of the tongue, hence the business of the meeting progressed slowly.

It was of wondrous interest to Necia to be an integral part of such important matters, and she took pride in voting on every question; but Burrell, who observed the proceedings from neutral ground, could not shake off the notion that all was not right. Things moved too smoothly. It looked as if there had been a rehearsal. Poleon and the trader, however, seemed not to notice it, and Lee was wallowing to the waist in his own troubles, so the young man kept his eyes open and waited.

The surprise came when they had completed the organization of the district and had nearly finished by adopting bylaws. It was so boldly attempted and so crude in its working out that it seemed almost laughable to the soldier, until he saw these men were in deadly earnest and animated by the cruelest of motives. Moreover, it showed the first glimpse of Stark's spite against the trader, which the lieutenant had divined.

Runnion moved the adoption of a rule that no woman be allowed to locate mining claims, and one of the strangers seconded it.

"What's that?" said Lee, raising his one eye from the note book in which he was transcribing.

"It isn't right to let women in on a man's game," said Runnion.

"That's my idea," echoed the seconder.

"I s'pose this is aimed at my girl," said Gale, springing to his feet. "I might have known you bums were up to some crooked work."

Poleon likewise rose and ranged himself with the trader.

"Ba Gar! I don' stan' for dat," said he, excitedly. "You want for jump Necia's claims, eh?"

"As long as I'm chairman we'll have no rough work," declared Stark, glaring at them. "If you want trouble, you two, I reckon you can have it, but, whether you do or not, the majority is going to rule, and we'll make what laws we want to."

He took no pains now to mask his dislike of Gale, who began to move towards him in his dogged, resolute way. Necia, observing them, hastened to her father's side, for that which she sensed in the bearing of both men quite overcame her indignation at this blow against herself.

"No, no, don't have any trouble," she pleaded, as she clung to the trader. "For my sake, daddy, sit down." Then she whispered fiercely into his ear: "Can't you see he's trying to make you fight? There's too many of them. Wait! Wait!"

Burrell attempted to speak, but Stark, who was presiding, turned upon him fiercely:

"Now this is one time when you can't butt in, Mr. Soldier Man. This is our business. Is that plain?"

The lieutenant realized that he had no place in this discussion, and yet their move was so openly brazen that he could restrain himself with difficulty. A moment later he saw the futility of interference, when Stark continued, addressing the trader:

"This isn't aimed at you in particular, Gale, nor at your girl, for a motion to disqualify her isn't necessary. She isn't old enough to hold mining property."

"She's 18," declared the trader.

"Not according to her story."

"Well, I can keep her claims for her till she gets of age."

"We've just fixed it so you can't," grinned Runnion, cunningly. "No man can hold more than one claim on a creek. You voted for that yourself."

Too late, Gale saw the trick by which Stark had used him to rob his own daughter. If he and his two friends had declined to be a part of this meeting, the others could not have held it, and before another assembly could have been called the creek would have been staked from end to end, from rim to rim, by honest men, over whom no such action could pass, but, as it was, his own votes had been used to sew him up in a mesh of motions and resolutions.

"No Creek" Lee had the name of a man slow in speech and action, and one who roused himself to anger deliberately, much as a serpent stings itself into a painful fury; but now it was apparent that he was boiling over, for he stammered and halted and blurted explosively.

"You're a bunch of rascals, all of you, tryin' to down a pore girl and get her ground; but who put ye wise to this thing, in the first place? Who found this gold? Just because there's enough of you to vote that motion through, that don't make it legal, not by a damned sight, and it won't hold, because I won't write it in the book. You—you" He glared at them malevolently, searching his mind for an epithet sufficiently vile, and, finding it, spat it out—"dressmakers!"

So this was why both Stark and Runnion had gone up the creek with the three new men, thought Burrell. No doubt they had deliberately arranged the whole thing so that the new arrivals could immediately relocate each of Necia's claims—the pick of all the ground outside Lee's discovery, and the surest to be valuable—and that Stark would share in the robbery. He or Runnion, or both of them, had broken Lee's oath of secrecy even before leaving camp, which accounted for the presence of these thugs; and now, as he revolved the situation rapidly in his mind, the soldier looked up at a sudden thought. Poleon had begun to speak, and from his appearance it seemed possible that he might not cease with words; moreover, it was further evident that they were all intent on the excited Frenchman and had no eyes for the lieutenant. Carefully slipping around the corner of the cabin, and keeping the house between him and the others, Burrell broke into a swift run, making the utmost possible speed for fear they should miss him and guess his purpose, or, worse yet, finish their discussion and adjourn before he could complete his task. He was a light man on his feet, and he dodged through the forest, running more carelessly the farther he went, visiting first the upper claims, then, making a wide detour of the cabin, he came back to the initial stake of Necia's lower claim, staggering from his exertions, his lungs bursting from the strain. He had covered nearly a mile, but even so, he laughed grimly as he walked back toward the cabin, for it was a game worth playing, and he was glad to take a hand on the side of the trader and the girl. Coming within earshot, he heard the meeting vote to adjourn. It could not have terminated more opportunely had he held a stopwatch on it.

From the look of triumph on Runnion's face, the lieutenant needed no glance at Gale or Poleon or Necia to know that the will of the majority had prevailed, and that the girl's importunities had restrained her advocates from a resort to violence. She looked very forlorn, like a little child just robbed and deceived, with the shock of its first great disillusionment still fresh in its eyes.

Runnion addressed the other conspirators loudly.

"Well, boys, there are three good claims open for relocation. I'm sorry I can't stake one of them."

"They won't lie open long," said one of the undesirable citizens, starting to turn downstream while his two companions made for the opposite direction. But Burrell stopped them.

"Too late, boys. Your little game went wrong. Now! Now! Don't get excited. Whew! I had quite a run."

Gale paused in his tracks and looked at the young man queerly.

"What do you mean?"

"I've jumped those claims myself."

"You jumped them!" cried Necia.

"Sure! I changed my mind about staking."

"It's a lie!" cried Runnion, at which Burrell whirled on him.

"I've been waiting for this, Runnion—ever since you came back. Now—"

"I mean you haven't had time,"—the other temporized, hurriedly.

"Oh, that sounds better! If you don't believe me take a look for yourself; you'll find my notice just beneath Miss Gale's." Then to "No Creek" Lee he continued, "Kindly record them for me so there will be no question of priority."

"I'll be damned if I do!" said the belligerent recorder. "You're worse'n these crooks. That ground belongs to Necia Gale."

Up to this time Stark had remained silent, his impassive face betraying not a shadow of chagrin, for he was a good loser; but now he spoke at large.

"Anybody who thinks the American army is asleep is crazy." Then to Burrell, "You certainly are a nice young man to double-cross your friends like that."

"You're no friend of mine," Meade retorted.

"I? What you you mean?"

"I double-crossed you, Stark, nobody else."

The Kentuckian glared at him with a look like that which Runnion had seen in his face on that first day at the trading post. The thought of these five men banded together to rob this little maid had caused a giddiness to rise up in him, and his passions were beginning to whirl and dance.

"There's no use mouthing words about it," said he. "These thugs are your tools, and you tried to steal that ground because it's sure to be rich."

Stark exclaimed angrily, but the other gave him no time to break in.

"Now, don't get rough, because that is my game, and I'd be pleased enough to take you back a prisoner."

Then turning to Lee he said: "Don't make me force you to record my locations. I staked those claims for Miss Gale, and I'll deed them to her when she turns 18."

Poleon Doret called to Runnion: 'M'sieu, you 'member w'at I tol' you yestidday? I'm begin for t'ink it's goin' be you."

The man paled in his anger, but said nothing. Necia clapped her hands gleefully.

Seeing that the game had gone against him, Stark got his feelings under control quickly, and shrugged his shoulders as he turned away.

"You're in the wrong, lieutenant," he remarked; "but I don't want any trouble. You've got the law with you." Then to Runnion and the others he said, "Well, I'm ready to hit the trail."

When they had shouldered their packs and disappeared down the valley, Gale held out his hand to the soldier. "Young man, I reckon you and I will be friends."

"Thank you," said Burrell, taking the offer of friendship which he knew was genuine at last.

"I'm in on that!" said "No Creek" Lee; "you're all right!"

Poleon had been watching Stark's party disappear, but now he turned and addressed the young soldier.

"You mak' some enemies today, M'sieu."

"That's right," agreed Lee. "Ben Stark will never let up on you now."

"Very well, that is his privilege."

"You don't savvy what it means to get him down on you," insisted Lee. "He'll frame things up to suit himself, then pick a row with you. He's the quickest man on a trigger in the west, but he won't never make no open

(Continued on following page.)

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"The Barrier" By REX BEACH

(Continued from preceding page.)

play, only just devil the life out of you with little things till you flare up, then he'll down you. That's how he killed the gold commissioner back in British Columbia.

Necia had said little so far, but the look in her eyes repaid the soldier for his undertaking in her behalf, and for any mischief that might ensue from it. She came forward and laid her hand upon his.

"Promise that you won't have trouble with him," she begged anxiously, "for it's all my fault, and I'd—I'd always blame myself if any hurt came to you. Promise! Won't you?"

"Don't worry, daughter," reassured Gale. "There's nothing Stark can do, and whatever happens we're with the lieutenant. He's our kind of people."

Burrell liked this grizzled old fellow with the watchful eyes, and was glad now that he could grip his hand and face him squarely with no guilt upon his conscience.

By this time Doret had finished with their blankets and the four set out for town, but instead of following the others they accepted Necia as guide and chose the trail to Black Bear creek. They had not gone far before she took occasion to lag behind with the lieutenant.

"I couldn't thank you before all those people—they would have read our secret—but you know how I feel, don't you, Meade?"

"Why! It was a simple thing——"

"It was splendid when you defied them. My, what a fierce you are! Oh, boy! What if something should happen to you over this?"

"But there's no chance. It's all done, and you'll have your fine dresses and be able to hold your nose just as high as you want."

"Whatever I get I will owe to you. I—I've been thinking. Suppose—well, suppose you keep two of those claims; they are sure to be rich——"

"Why, Necia!" he exclaimed.

"They're yours, and I have no right to them under the law. Of course it would be very handsome of you to give me one—the poorest."

"You ought to have your ears boxed," he laughed at her.

"I don't see why. You—you—may be very poor, for all I know.

"I am," he declared, "but not poor enough to take payment for a favor."

"Well, then, if they are really mine to do with as I please, I'll sell one to you——"

"Thanks. I couldn't avail myself of the offer," he said, with mock hauteur.

"If you were a business man instead of a fighting person you would listen to my proposition before you declined it. I'll make the price right, and you may pay me when we get behind yonder clump of bushes." She pouted her lips invitingly, but he declared she was a minor and as such her bargain would not hold.

It was evidently her mood to reenter the land of whims and travel again, as they had on the way from town, but he knew that for him such a thing could not be, for his eyes had cleared since then. He knew that he could never again wander through the happy valley, for he vowed this maid should be no plaything for him or for any other man, and as there could be no honorable end to this affair it must terminate at once. Just how this was to be consummated he had not determined as yet, nor did he like to set about its solution, it hurt him so to think of losing her. However, she was very young, only a child, and in time would come to count him but a memory, no doubt, while as for himself, it would be hard to forget her, but he could and would. He reasoned glibly that this was the only honest course, and his reasoning convinced him; then, all of a sudden the pressure of her warm lips came upon him and the remembrance upset every premise and process of his logic. Nevertheless, he was honest in his stubborn determination to conclude the affair, and finally decided to let time show him the way.

She seemed to be very happy, her mood being in marked contrast to that of Poleon and the trader, both of whom had fallen silent and gloomy, and in whom the hours wrought no change. The latter had tacitly acknowledged his treachery towards Stark on the previous night, but beyond that he would not go, offering no motive, excuse, or explanation, choosing to stand in the eyes of his friend as an intended murderer, notwithstanding which Poleon let the matter drop—for was not his friend a good man? Had he not been tried in a hundred ways? The young Frenchman knew there must have been strong reason for Gale's outburst, and was content to trust him without puzzling his mind to discover the cause of it.

Now, a secret must either grow or die—there is no fallow age for it—and this one had lived with Gale for 15 years, until it had made an old man of him. It weighed him down until the desire to be rid of it almost became overpowering at times; but his caution was ingrained and powerful, and so it was that he resisted the temptation to confide in his partner, although the effort left him tired and inert. The only one to whom he could talk was Alluna; she understood, and though she might not help, the sound of his own voice at least always afforded him some relief.

As to Poleon, no one had ever seen him thus. Never in all his life of dream and song and romance had he known a heavy heart until now, for if at times he had wept like a girl, it was at the hurts of others. He had loved a bit and gambled much, with equal misfortune, and the next day he had forgotten. He had lived the free, clean life of a man who wins joyously or goes down with defiance in his throat, but this venomous thing that Runnion had planted in him had seeped and circulated through his being until every fiber was penetrated with a bitter poison. Most of his troubles could be grappled with bare hands, but here was one against which force would not avail, hence he was unhappy.

The party reached Flambeau on the following day, sufficiently ahead of Stark and his men for Lee to make known his find to his friends, and by sunset the place was depopulated, while a line of men could be seen creeping slowly up the valleys.

Gale found Alluna in charge of the store, but no opportunity of talking alone with her occurred until late in the evening, after Necia had put the two little ones to bed and had followed them wearily. Then he told his squaw. She took the news better than he expected, and showed no emotion such as other women would have displayed, even when he told her of the gunshot. Instead, she inquired:

"Why did you try it there before all those others?"

"Well, when I heard him talking, the wish to kill him was more than I could stand, and it came on me all at once, so that I was mad, I suppose. I never did the like before." He half shuddered at the memory.

"I am sorry," she said.

"Yes! So am I."

"Sorry that you failed, for you will never have as good a chance again. What was the matter with your aim? I have seen you hit a knot-hole, shooting from the hip."

"The man is charmed," declared Gale. "He's bullet-proof."

"There are people," she agreed, "that a gunshot will not injure. There was a man like that among my people—my father's enemy—but he was not proof against steel."

"Your old man knifed him, eh?"

She nodded.

"Ugh!" the man shivered. "I couldn't do that. A gun is a straight man's friend, but a knife is the weapon of traitors. I couldn't drive it home."

"Does this man suspect?"

"No."

"Then it is child's play. We will lay a trap."

"No, by God!" Gale interrupted her hotly. "I tried that kind of work, and it won't do. I'm no murderer."

"Those are only words," said the woman, quietly. "To kill your enemy is the law."

The only light in the room came from the stove, a great iron cylinder made from a coal-oil tank that lay on a rectangular bed of sand held inside of four timbers, with a door in one end to take whole lengths of cordwood, and which, being open, lit the space in front, throwing the sides and corners of the place into blacker mystery.

When he made no answer the squaw slipped out into the shadows, leaving him staring into the flames, to return a moment later bearing something in her hands, which she placed in his. It was a knife in a scabbard, old and worn.

"There is no magic that can turn bright steel,' she said, then squatted again in the dimness outside of the firelight. Gale slid the case from the long blade and held it in his palm, letting the firelight flicker on it. He balanced it and tested the feel of its handle against his palm, then tried the

(Continued on page twenty-four.)

men!



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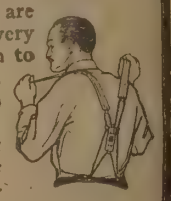
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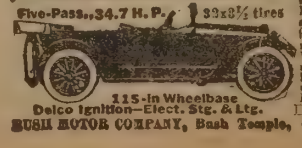


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Used in London's Air Defenses



This remarkable photo was obtained when the naval crew was practicing with this very useful gun. It will be remembered that it was near the Coast that some of the most effective shooting by anti-aircraft guns has been done during air raids on London and England. The rapidity with which these crews keep their guns firing is remarkable.

Walloped the President.



Colonel Daniel T. Moore, now commander of the 310th field artillery, who as a "husky young captain of artillery" walloped Colonel Roosevelt when the latter was president, causing him to lose the sight of his left eye. The captain was aide to President Roosevelt and frequently engaged his chief in boxing bouts. An unusually sharp counter landed, injuring blood vessels in the eye. Captain Moore never knew that he had blinded the former president until the colonel disclosed that fact recently.

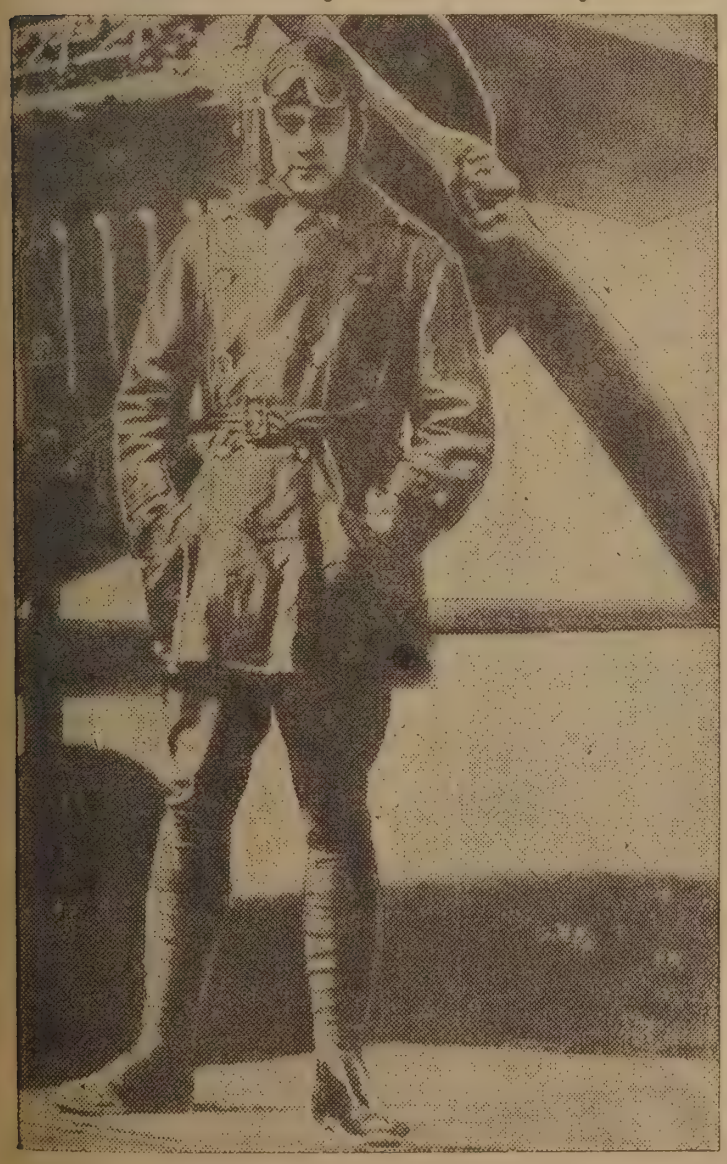
Wilson Annoyers in Workhouse Garb



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Some of the White House pickets posed in the garb in which they appear in the workhouse, where they were sentenced. The uniform consists of underwear made of ticking, thick cotton socks, man's size shoes with thick soles, and a wrapper and apron made of gingham. A string tied about the waist serves as corset. In the pocket of the apron were carried comb and tooth brush.

He Will Fly for the Navy



Franklin K. Lane Jr., son of the secretary of the interior, has resigned from a commission in the aviation section of the signal corps of the army and has accepted a commission as a navy flier with the same rank. Lieutenant Lane is one of the youngest commissioned officers in the American service, being only 19 years of age. He is already a full-fledged flier. No reason has been given for young Lane's shift except a preference for the naval branch of the air service.

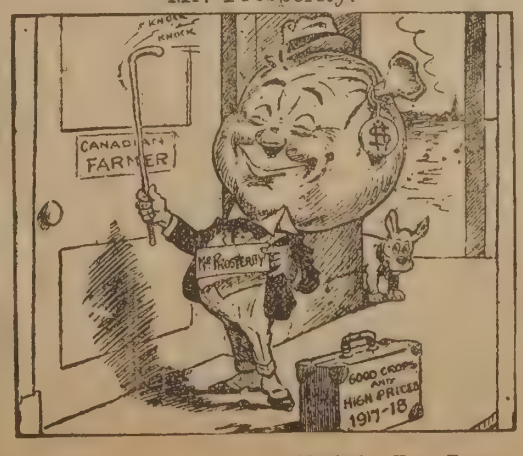
Famous Chef Instructs Jackies



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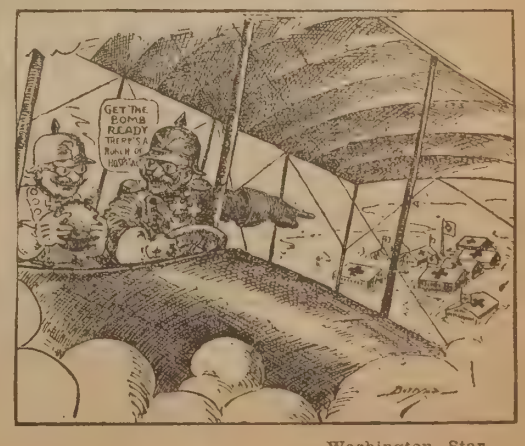
The jackie chefs are now learning to turn out tempting and appetizing dishes under the direction of Edward Panchard, the famous French chef of the Hotel McAlpin, New York.

Mr. Prosperity.

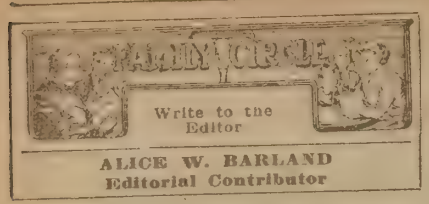


—Manitoba Free Press.

Compaign of Culture.



—Washington Star.



ALICE W. BARLAND
Editorial Contributor

Vetch for Food

By N. S. ROBB, County Agriculturist, Lane County, Ore.

Vetch, when cooked correctly, will surpass some of the peas and colored beans, according to J. W. Hocaday of Irving, Ore.

Mrs. Hocaday has tried cooking vetch, and their family like it fine as a food.

Mrs. Hocaday states that it is cooked very similar to peas. The seed should be soaked and parboiled and seasoned with butter. It is cooked similar to dried beans or peas.

A small, hard, seeded vetch occurs occasionally in vetch. After one learns to distinguish this, the seed can be sorted out before cooking, and this difficulty remedied.

It has the flavor resembling the old black-eyed pea. It is mealy and is similar to butter beans. They have been using vetch right along lately, and plan on keeping enough on hand for a supply this winter.

Water Spots in Wool and Silk.

Some silks and wools are spotted by water. This probably dissolves some of the finishing or weighting down substances present and on evaporating these substances are deposited irregularly or in rings. A satisfactory method for removing such spots, says a bulletin on the Removal of Stains From Clothing and Other Textiles, issued by the United States department of agriculture, is to dampen the entire material evenly and press it while still damp. Either sponge the material carefully with clean water or shake it in the steam from a briskly boiling teakettle until it is thoroughly damp, then press it.

Coat of Red Chenille.



One of the best of the new red shades is shown in this coat of pigeon blood red chenille cloth, with nutria trimming the odd shaped cuffs, the flying side panels, and forming the luxurious high collar, says the Kansas City Star. Besides all this there are fur buttons and unobtrusive slot pockets.

Stains in Wool and Silk.

Wool and silk, being more delicate than cotton and linen require more careful treatment in removing stains from them, according to a bulletin on "The Removal of Stains From Clothing and Other Textiles," issued by the United States department of agriculture. The use of very hot water must be avoided since it turns both wool and silk yellow, shrinks wool and weakens silk and injures its finish. The silk materials are too delicate to stand much rubbing without breaking or separating the fibers and felts together the wool fibers and results in a shrinkage or thickening of the material. Both wool and silk are dissolved by alkalis and are injured even by washing soda or strongly alkaline soap. Acids, with the exception of nitric, which weakens and turns the fibers yellow, do not attack the wool and silk readily.

Ways to Cook Carrots

To the Editor: I think the children and adults too can be encouraged to eat more of the perishable vegetables and use less of wheat and meat if each cook will try to invent new ways of cooking them, or use the different ways, if she knows them. The homely carrot, for instance, some people think it is only fit for cow feed, others will try a "mess or two" during the winter and of course there are others who use them very often and no doubt know much more about them than I do. The carrot can be baked like parsnips, fried like potatoes, steamed and mashed and seasoned, boiled in meat stock and thickening added, diced cold boiled for salad and used with potatoes in vegetable hash. One of the best soups is carrot soup. Carrot spiced pickles (steam whole and pare and cut length ways before adding hot spice vinegar) are relished. Carrot preserves are fine and are made the same as green tomato pickles, using lemon and ginger. Carrot pie made like squash pie is good also. Some use carrot juice in cream to color butter or to tint and flavor colorless apple jelly, and a matured carrot keeps well all winter in a common frost proof cellar. The carrots that did not ripen are very tender and are very easily canned, as the Farmer canning chart in some back copy shows. Other vegetables have each a number of uses if put to a test. Owing to almost a 100-day dry spell here we will need to buy vegetables but they are cheaper, go farther and are more healthful than meat and I intend to have a variety of dishes from each kind.

MRS. SAM HAYES.
Mount Idaho, Idaho.

A Fad.

"Preparedness is a fad with her."
"That so?"
"Yes, she even sets the breakfast table the night before."—Detroit Free Press.

Crochet and Tatting Designs

By WINIFRED WORTH



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Use 2 balls No. 5.
Ch. 7, join in ring.
1st Row—24 dt. in ring, join
2d Row—Ch. 5, sk. 3 (repeat 7 times) sl. st. to top of 1 ch.
3d Row—Ch. 8, 1 dc. in ch. of 5, repeat around, always sl. st. to top of preceding row. This will not be explained again.
4th Row—Ch. 10, 8 times sl. st.
5th Row—Ch. 15, 8 times sl. st.
6th Row—Ch. 20, 8 times sl. st.
7th Row—15 t. 5 ch. 15 t. in each 20 ch. sl. st.
8th Row—Ch. 25, 9 t. in ch. of 5, repeat.
9th Row—20 t. 9 t. over 9 t. 20 t. ch.
10th Row—Ch. 6, sk. 6 t. ch. 6 repeat.
11th Row—Ch. 6, 6 t. over 6 chs. (ch. 6) 3 times. 6 t. over 4th 6 ch. of last row. Repeat 11th row 3 times, putting shell over ch. each row. Finish with a p.

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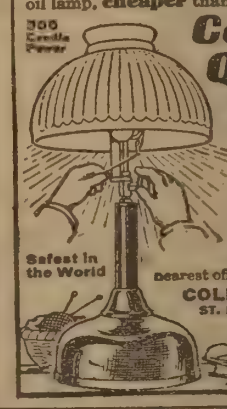
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2283-2282—A stylish costume. Waist 2283 cut in 7 sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2282 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. The skirt measures about 3 yards at the foot with plaits drawn out. To make this costume in a medium size will require 8 yards of 44-inch material. Two separate patterns, 10 cents for each pattern.

2284—Set of neck accessories. The styles here illustrated are cut in 3 sizes: Small, 12 inches; medium, 14 inches, and large, 16 inches neck measure. Size medium requires for No. 1, 5-8 yard of 36-inch material; for No. 2, 3-4 yard of 27-inch material; for No. 3, 5-8 yard of 36-inch material; for No. 4, 7-8 yard of 36-inch material. Price, 10 cents.



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BE SURE TO GIVE NUMBER AND SIZE.

To Clean Corsets.

A corset is one of the things that may be easily cleaned, although the average woman seems not to understand this fact, says the Kansas City Star. None of the steels or other fixings of the corset need be removed for the cleaning process, but the corset must be dried very quickly after washing, so that the steels won't rust. Soap the corsets with a good soap, lay on a flat surface and scrub with a brush. Then rinse several times in hot water to which has been added a tablespoonful or two of ammonia, and dry quickly.

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Alice Has a Little White Puppy.

Dear Aunt Nellie: I have written to the Corner before. I have a white puppy. It is a cute little fellow. We have some red pullets. They are beauties. I have lots of friends. I go to the Kennydale school. I am 8 years of age and am in the third grade. There are 15 pupils in my grade.—Alice A. Brown, Route 2, Box 10J, Renton, Wash.

Likes Horseback Riding.

Dear Aunt Nellie: I wrote to the Corner once before and saw my letter in print, so thought I would write again. By writing to the Corner I have gained two more friends, Anna McLean and Obera Prouty. I wish some more of the cousins would write to me. I am 15 years old and Arna is 14, but I am not much older than she is. My sister and I are going horseback riding this afternoon. I like horseback riding better than anything else.—May Prouty, R. F. D. 1, Outlook, Wash.

A Big Apple Orchard.

Dear Aunt Nellie: This is the first time I have written to the Corner. I like to read the letters very much. I am 10 years old on the 9th of May. Have I a twin? I live on a 20-acre apple orchard. We had 13 carloads of apples this year. I go to the Nob Hill school. I am in the fifth grade. My teacher's name is Miss Mabry. I have a mile and a half to go to school every day. I have two sisters, Gladys is 14 and Frances is 4 on Christmas. If this letter is printed I will write again. Donald Wimer, R. F. D. 4, North Yakima, Wash.

Beulah Loves the Letters.

Dear Aunt Nellie: This is the third time I have written to the Children's Corner. I have got so that I love the letters. I like Aunt Nellie's letters so much I read every one of them. I also read every one of the cousins'. I wish the cousins would write to me. If they are not my age I would like them just as well. I would like to do something to help our country. I want to be a Red Cross nurse. There is a girl in the same town I am that is three days younger than I am. We play every day at school. I am 9 years old. My birthday is April 11.—Beulah Shaw, Grandview, Wash.

The Red Cross Is Just the Thing.

Dear Aunt Nellie: I have written to you before, but I see the Corner is getting low in letters. We had a meeting the other night at our schoolhouse and had speeches on food conservation, also talks on buying Liberty bonds. In our town they have Red Cross meetings. They are knitting scarfs, sox, comfort kits, helmets, sweaters and mittens for the soldiers. Three young men of our neighborhood have gone to the training camps. All the teachers around here are having meetings in the schools. Our teacher hasn't started clubs yet, but I think she will. All the children like our teacher fine. I think the Red Cross meetings are just the thing to help the poor home boys in the trenches.—Cora Draper, R. F. D. 1, Farmington, Wash

Cooking Lessons Twice a Week.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I think it is getting quite big. I was going to write a long time ago, but I did not know what your address was. I am 11 years old. My birthday is July 2. I am in the sixth grade in school. I have five sisters and three brothers. I have a little baby sister. She is 4 months old. Her name is Mildred. I live in the country three miles from Mount Vernon. I go to the Meadow school. It is one-half mile to our schol. One of my sisters is in the fourth grade. In our school we have all kinds of games. The girls play basket ball and the boys play football. My teacher's name is Mr. Bentze. He has been teaching two years before and this will be his third year. I like him very well. My sister is in the little room. Her teacher's name is Miss Sponheim. We have manual training and domestic science in our school. Last year the girls only had sewing, but this year they have cooking, too. They have us take it twice a week. We have electric lights, so we do not have to burn kerosene. It is so much safer and brighter than the lamps. We live on a 20-acre farm. We have eight cows and 10 calves and three horses. We have 36 ducks and several hundred chickens. Twenty of the ducks are mine. I set the eggs and raised them to be big ducks. They are ready to sell, and it is time now, but I don't have time to sell them. We had the silo fillers Sunday forenoon and Saturday afternoon. We had to do so many dishes that I got tired of them.—Selma Lillquist, R. F. D. No. 5, Box 89, Mount Vernon, Wash.

Hilda's Second Corner Letter.

Dear Aunt Nellie: This will be the second time I have written to the Children's Corner, and I hope to see my letter in print. I enjoy reading The Farmer very much. I will be 11 years old on the 14th of November. Have I a twin? If I have I would like to have them write to me, and I will gladly answer. I am in the sixth grade. My teacher's name is Mr. Robertson. He is a good teacher. There are 26 children in our school. I like to go to school. There are three scholars in the sixth grade. We had a school picnic not very long ago. I have two sisters older than I. Their names are Lempi and Snelma. I have two younger sisters. Their names are Esther and Sylvia. I have a lot of fun with them when I do not go to school. Now, I will tell about the farm. I live on a 20-acre farm. We have six cows. Their names are Daisy, Bossie, Beauty, Bessie, Rosie and Busly. We have two yearlings and one calf, whose names are May, Lilly and Jennie. We have two horses, too. Their names are Molly and Billy, and we also have two pigs, two cats and one little dog.—Hilda Kuki, R. F. D. No. 1, Box 66, Buckley, Wash.

Goes to School on a Stage.

Dear Aunt Nellie: This is the first time I have written. I am 12 years old the first day of May. Have I a twin? If so I wish she or he would write. I have been reading the Children's Corner for a short time and I think the letters are very interesting. We live on a 10-acre farm in Ferndale. My teacher's name is Miss Nichols and I like her well. We have other teachers. Their names are Miss Brown and Miss Van Liew. Miss Brown is the principal. Miss Van Liew is the primary teacher. We have two dogs. Their names are King and Towser. We have two horses. One is bay and the other one is white. I have two brothers and one sister. Their names are Carl, Roy and Clara. We have a Ford and we go to Bellingham in it. I go to school on the stage. I have a mile and a quarter to go to school.—Nora Zimmer, R. R. 2, Ferndale, Wash. (Of course you belong to the Corner now, Nora, and we are all glad to have you for a cousin. You must write often.)

To Graduate in January.

Dear Aunt Nellie: I wish to thank you for the interesting book entitled Heidi which you sent to me as a prize. I took it to school for the teacher to read aloud and the school children enjoyed it as much as I did. I was very much surprised to find that my letter got a prize because when I wrote it I did not think about getting one. I live on Twin Oaks farm, near Roy. I have three brothers all younger than myself. I go to the Oak Knoll school and am in the eighth A grade. I expect to graduate this January. I am 13 years old. I have found my twin. Her name is Marcia Mossman and she lives near Raymond. I enjoy reading the other cousins' letters and I hope they like to read mine.—Esther M. Bower, Roy, Wash.

When a Feller Needs a Friend.



THE BARRIER

(Continued from page twenty.)

edge of it with his thumb-nail, and found it honed like a razor.

"A child could kill with it," said Alluna. "Both edges of the blade are so thin that a finger's weight will bury it. One should hold the wrist firmly till it pierces through the coat, that is all—after that the flesh takes it easily, like butter."

The glancing, glinting light flashing from the deadly thing seemed to fascinate the man, for he held it a long while silently. Then he spoke.

"For 15 years I've been a haunted man, with a soul like a dark and dismal garret peopled with bats and varmints that flap and flutter all the time. I used to figger that if I killed this man I'd kill that memory, too, and those flitting, noiseless things would leave me, but the thought of doing it made me afraid every time, so I ran away, which never did no good—you can't outfoot a memory—and I knew all the while that we'd meet sooner or later. Now that the day is here at last, I'm not ready for it. I'd like to run away again if there was any place to run to, but I've followed frontiers till I've seen them disappear one by one; I've retreated till my back is against the circle, and there isn't any further land to go to. All the time I've prayed and planned for this meting, and yet—I'm undecided."

"Kill him!" said Alluna.

"God knows I've always hated trouble, whereas it's what he lives on. I've always wanted to die in bed, while he's been a killer all his life and the smoke hangs forever in his eyes. Only for an accident we might have lived here all our days and never had a 'run-in,' which makes me wonder if I hadn't better let things go on as they are."

"Kill him! it is the law," repeated Alluna, stubbornly, but he put her aside with a slow shake of the head and arose as if very tired.

"No! I don't think I can do it—not in cold blood, anyhow. Good night! I'm going to sleep on it." He crossed to the door of his room, but as he went she noted that he slipped the knife and scabbard inside the bosom of his shirt.

(To Be Continued).

A Thanksgiving Task

You have all read the story of the first Thanksgiving in these United States in 1621, when the Pilgrims, in the tiny settlement of Plymouth, after gathering their first harvest, felt that they ought to set apart a day in which to express their gratitude, says the New York Tribune. You are quite sure to remember from your history lessons the names of some of the people who took part in the first Thanksgiving day.

There were Governor Bradford and Captain Miles Standish and John Alden and his Priscilla. One account says that Massasoit and his chiefs were invited to share in the rejoicings and that they remained three days.

Today you will learn how to make a miniature John Alden, just to remind you of that first Tranksgiving. If you follow directions quite closely you will have a little figure that might pass for a typical Pilgrim of that early day.

Mark the head of a clothespin with a serious expression, such as John Alden probably had. Stick two pieces of thick paper to the sides to form the arms and build up a body out of another piece of the same heavy paper, pasting it against the front and back and leaving it a little loose at the sides.

Knee breeches and jacket should be made from Quaker gray colored tissue paper, fitted around the neck. The hat is made from stiff paper of the same shade as the jacket. The rim of the hat is a circular piece with a hole in the middle which fits over the round crown. The hat can be either stuck to the clothespin or fastened on with a pin inside the hat crown.



John Alden.



Rydes Pig Meal

The high price of pork is known to all. Increase your profits by feeding Rydes pig meal.

25-lb. bag, **$1.50**; 50-lb. bag, **$2.85**; 100-lb. bag, **$5.50**.

Inland Seed Co.

Spokane, Wash.

We Solicit Shipment of TURKEYS

and all kinds of dressed poultry for the Thanksgiving and Christmas trade.

We deal direct with restaurants, hotels and merchants, which gives us a direct outlet and enables us to obtain the very highest prices, and the premiums which are usually paid for fancy stock.

Our Churns Operate Every Day in the Year

If you are not shipping your cream to Seattle you should do so because it will pay you. We pay the highest price for butterfat. Ship direct or deliver to our cash buying stations.

Mutual Creamery Company

Seattle, U. S. A.

News for Breeders

S. M. Mears, the Woodland, Wash., Poland China breeder, has recently purchased the herd boar Superba Jr. from the Royston estate at Payette, Idaho. Superba Jr. is reported to weigh 900 pounds. He is strictly big type and is a proven breeder of high-class stock. Mr. Mears has a fine lot of medium type sows of Willard breeding, and the product of the mating should be a high class lot of pigs.

N. P. Paulson of Madras, Ore., who is breeding Hampshire swine, has used Billy Sunday, a very fine boar from the J. M. Fruitts herd at Enterprise, Ore. This boar grew very large and his offspring were universally good. When the hog market went to pieces over two years ago Mr. Paulson cut down his herd and still keeps only a few, selling most of his stock to neighbors while quite young. But he has the best of Hampshire breeding and will build up his herd again when feed prices show a good prospect of dropping.

Mr. Dobson, banker of Redmond, Ore., will this winter try feeding silage to sheep. With G. W. Beaver, on his place near town, he will carry about 150 sheep through the winter. The 84-ton silo was filled about two-thirds full from seven acres of corn. The sheep will be fed cut oats straw with the silage and a little alfalfa hay. This will be the first feeding of silage to sheep in this locality. It will be watched with interest and the Farmer will try to report the result next spring.

Judges Have Hard Work

(Continued from page four.)

Queen; A. O. Huntley fourth, on Princess Perfection. Junior yearling—A. B. Cook first, on Miss Joy; Henry Thiessen second, on Lady Rex 29th; George Chandler third, on Lady Princeps. Senior heifer calf—George Chandler first, on Jennie Generous; A. B. Cook second, on Lady Panama 49th; Henry Thiessen third, on Buda 2d; Platt Brothers fourth. Junior calf—George Chandler first, on Lady Generous; J. D. Miles second and third, on Gray Feld Bonnie and Maude Doncaster 3d; A. B. Cook fourth, on Lady Joy.

Aged herd—A. B. Cook, first; George Chandler, second; J. D. Miles, third. Young herd—A. B. Cook, first; Henry Thiessen, second; George Chandler, third; J. D. Miles, fourth. Calf herd—A. B. Cook, first; George Chandler, second; J. D. Miles, third; Henry Thiessen, fourth. Get of sire—A. B. Cook, first; George Chandler, second; J. D. Miles, third; Henry Thiessen, fourth. Produce of cow—A. B. Cook, first and second; Henry Thiessen, third; George Chandler, fourth.

Senior champion bull—George Chandler, on Prince Rupert 60th. Junior champion bull—Henry Thiessen, on Prince Rupert 80th. Grand champion bull—Prince Rupert 80th. Senior champion cow—A. B. Cook, on Lady Perfection 3d. Junior champion cow—A. B. Cook, on Miss Joy. Grand champion cow—Lady Perfection 3d.

Aberdeen-Angus.

Congdon & Battles, the only exhibitors, filled all classes and were awarded first and second in each class. Their senior champion bull was Eileenmer; their junior champion Irenmere; grand champion bull Islanadmere. Their senior champion cow was Idessa or Rosemere; their junior champion, Yakima Pride, a junior calf. She was also made grand champion.

Red Polled.

G. A. Draper had one aged bull and four yearling heifers for exhibition purposes only, as no class was made for them.

THE SHEEP SHOW.

In Shropshires, Hampshires and Oxfords, competition was keen and in all the breeds quality was prominent. The sheep were judged by Professor C. E. Howell of the Washington State College.

Shropshires.

Ram, two years and over—Brown Brothers, first; W. H. Zumwalt, second; E. S. Sweet, third and fourth. Ram lamb—Brown Brothers, first; Francis Kizer, second and third.

Ewe, two years and over—W. H. Zumwalt, first; Brown Brothers second and fourth; E. S. Sweet, third. Yearling—E. S. Sweet, first; W. H. Zumwalt, second. Ewe lamb—Brown Brothers, first and second; E. S. Sweet, third; Francis Kizer, fourth.

Flock—E. S. Sweet, first; W. H. Zumwalt, second. Four lambs bred by exhibitor—E. S. Sweet, first; Francis Kizer, second.

Champion Ram—Brown Brothers. Champion Ewe—W. H. Zumwalt.

Hampshires

Ram, two years and over—Brown Brothers, first. Yearling—J. G. S. Hubbard Sons, first. Ram lamb—Brown Brothers, first and second; Hubbard & Sons, third and fourth.

Ewe, two years and over—Brown Brothers, first and fourth; Hubbard & Sons, second and third. Yearling—Brown Brothers, first and fourth; Hubard & Sons, second and third. Ewe lamb—Brown Brothers, first, second and fourth; Hubbard & Sons, third.

Flock—Brown Brothers, first; Hubbard ⅞ Sons, second. Four lambs bred by exhibitor—Brown Brothers, first; Hubbard & Sons, second and third.

Champion Ram—Brown Brothers. Champion Ewe—Brown Brothers.

Oxfords.

Ram 2 years and over—C. P. Kizer, first; Fisk Farm, second. Yearling—C. P. Kizer, first. Ram lamb—Fisk Farm, first; C. P. Kizer, second and third.

Ewe 2 years and over—C. P. Kizer first. Yearling—Fisk Farm, first and second; C. P. Kizer, third and fourth. Ewe lamb—C. P. Kizer, first and second; Fisk Farm, third and fourth.

Flock—C. P. Kizer, first; Fisk Farm, second. Four lambs bred by exhibitor—C. P. Kizer, first.

Champion ram—Hubbard & Sons. Champion ewe—Hubbard & Sons.

Southdowns.

J. G. S. Hubbard & Sons, the only exhibitors, filled all classes. They were awarded first and second in each class; first on flock and four lambs bred by exhibitor; champion ram and champion ewe.

Lincolns.

J. G. S. Hubbard & Sons were the only exhibitors with four lambs bred by exhibitor, on which they were awarded first.

Ramboulets.

Ram, 2 years and over—Mrs. R. A. Jackson first and second. Yearling—Mrs. Jackson first and second; Stanley Coffin third and fourth. Ram lamb—Mrs. Jackson first and second; Ed Schoel third.

Ewe, 2 years and over—Mrs. Jackson first and second; Ed Schoel third. Yearling—Mrs. Jackson first and second; Ed Schoel third. Ewe lamb—Mrs. Jackson first and second; Ed Scoel third and fourth.

Flock—Mrs. Jackson first. Four lambs bred by exhibitor—Mrs. Jackson first; Ed Schoel second.

Champion ram—Mrs. Jackson. Champion ewe—Mrs. Jackson.

Fat Sheep.

Middle wool wether, 1 year and under 2—Brown Brothers first and second; J. G. S. Hubbard & Sons third. Pen of three yearling wethers—Madden Children first. Pen of three wether lambs—Robert Anderson first; Madden Children second. Champion wether in above class—Brown Brothers.

Long wool yearling wether—Hubbard & Sons first.

Carload fat lambs—E. S. Sweet first.

Carload fat ewes—G. D. Riggs first; E. S. Sweet second; Brown Brothers third.

Champion carload—G. D. Riggs first.

THE HOG SHOW.

The hog awards were published last week, but it may be said that especially in Poland Chinas few shows in the northwest have equaled it for all-round quality or for outstanding animals. The Durocs were good and two herds made strong competition. And while only one herd of Chester Whites were shown, the breed was well represented.

SHEEP

Hampshire Ewes

For Sale

500 yearlings, 300 two to five; 200 ewe lambs. Will sell in any number.

BROWN SHEEP CO., Twin Falls, Ida.

20 Oxford Down Rams 20

Yearlings and ram lambs; will make special price on the lot. All stock registered. No ewes for sale.

C. P. Kizer, Harrisburg, Ore.

OXFORD RAMS

Thirty choice Oxford ram lambs for sale. Prices reasonable.

HISK FARM, Spring Valley, Wash.

POULTRY

Rhode Island Reds and Whites

Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Now is the time to buy for next year's breeding, from blue ribbon stock. Sale of pedigreed Rufus Red Belgian hares, bargains at $3 each. Registered Airdale bitch at a bargain if taken at once.

HIGHLAND FRUIT AND POULTRY RANCH.
J. NONNENMACHER.
R. F. D. 3. NORTH YAKIMA, WASH

Breeders' Department

JERSEY CATTLE

Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.

WAIKIKI FARM, R. 7, Spokane, Wash.

JERSEY BULL FOR SALE.
Year old, good individual, priced reasonable. Dam gave 45 to 50 lbs. of milk a day, test 4.8. Sire, Island bred.
MRS. J. F. PEFFER, Dayton, Ore.

HOLSTEIN CATTLE

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

POLAND CHINA SWINE

POLAND CHINAS

Service Boars, Bred Sows and Gilts, Brunk's Kind.

THOS. W. BRUNK, rt. 2. Salem, Ore.

YORKSHIRE SWINE

Spring Boars and Gilts

Gilts, bred or open, boars ready for service. Also weanling pigs. Best of breeding.

WM. NEUENSCHWANDER, Gaston, Ore.

HORSES

WILL SELL MY BELGIAN HORSES.
All thoroughbreds and registered. Three mares, one imported stallion, two yearlings, mare and stud. Sacrifice price.
ANDREW NIELSON, Mondovi, Wash.

SHORTHORN CATTLE

Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN, Wapato, Wash.

Hercules Shorthorns

For particulars write

DAY & ROTHROCK

Exchange Bank Bldg.
Spokane, Washington.

CEDARHURST FARM

SHORTHORNS.

Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

JOE TURNER, Meyers Falls, Wash.

Shorthorn Cattle

SHIRE HORSES.

DR. G. E. NOBLE, Boise, Idaho.

DUROC-JERSEY SWINE

Ioka Farm Durocs

The big type, with quality. The kind that wins in the show ring. Offspring of the great sire Golden Rod and other best Duroc strains.

DOERFLER BROS, Silverton, Ore.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Pullman, Wash.

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THIRD ANNUAL SALE
OF REGISTERED

HEREFORD CATTLE

AT

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SATURDAY, NOV. 24, 1917

CONSIGNORS:
A. B. COOK, Townsend, Montana.
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These breeders are offering the best lot of cattle that have been sold in the west. You can solve your herd bull problems here or you can buy the very best range bulls, and a few females that will start you right.

If you are looking for the very best in Herefords, don't fail to attend the Portland Sale.

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BAKER, OREGON.

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Grain and Produce Markets

Chicago Grain.

CHICAGO, Nov. 19.—Enlargement of supplies, together with improvement in the quality of arrivals, had a bearish effect today on the corn market. Prices although steady at the close, were 1-4c to 7-8c net lower with January $1.16 3-8 to $1.16 1-2 and May $1.15 1-4 to $1.15 3-8. Oats finished unchanged to 1-4c higher and provisions up 2 1-2 to 10 cents.

Receipts of corn here showed a liberal total for the first time in a long while, the aggregate being 417 carloads of which 270 were new corn. A decided handicap to the bulls lay in a special government report which seemed to imply that the latest federal crop estimate, 3,191,000,000 bushels, did not include the worst damaged corn and therefore meant a larger percentage of good corn than traders generally had figured on.

Provision prices were swayed by changes in the value of hogs. Most of the buying came from shorts.

Chicago Futures.

	Open.	High.	Low.	Close.
Corn—				
Jan.	1.17	1.17	1.16⅛	1.16⅝
May	1.15⅝	1.15⅛	1.14⅞	1.15¼
Oats—				
Dec.	.64½	.64¾	.64	.64¾
May	.64½	.64⅝	.64	.64⅛
Pork—				
Jan.	45.00	45.07	44.77	45.07
Lard—				
Jan.	24.27	24.40	24.27	24.40
May	....	23.70	23.67	23.70
Ribs—				
Jan.	24.00	24.12	23.92	24.12
May	23.55	23.65	23.55	23.65

Cash Quotations.

CHICAGO, Nov. 19.—Corn—No. 2 yellow, $2.30@2.35; No. 3 yellow, $2.32½; No. 4 yellow, nominal.

Oats—No. 3 white, 66@66¾c; standard, 66½@67c.

Rye—No. 2, $1.79@1.80.

Barley, $1.10@1.35.

Timothy, $5@7.50. Clover, $20@26.

Pacific Northwest Grain.

PORTLAND, Ore., Nov. 19.—Grain futures: December oats, $51.25 bid; feed barley, $52.75 bid; brewing barley, $54 bid. Eastern oats and corn, in bulk bids: Oats, November, No. 3 white, $46.50; 38-pound clipped white, $47.50; January corn, No. 3 yellow, $56.50; No. 3 mixed, $56; December oats, No. 3, $47; oats, clipped, $48.25; February corn, yellow, $55; corn, mixed, $54.

San Francisco Grain.

SAN FRANCISCO, Nov. 19.—Barley—December, $2.49 bid, $2.50 asked; May, $2.50 bid, $2.54 asked.

Minneapolis Grain.

MINNEAPOLIS, Nov. 19.—Wheat—Receipts, 609 cars compared with 831 a year ago. Corn—No. 3 yellow, $2@2.10.

Oats—No. 3 white, 53⅜@54¾c.

Flax, $3.22½@3.25½c.

Flour—Unchanged. Shipments, 63,088 barrels.

Barley, $1.05@1.30.

Rye, $1.78@1.79.

Bran, $33@33.50.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1, up to Saturday night, for 1917-18 and 1916-17, were as follows:

Seattle—	Wheat.	Oats.	Barley.	Hay.
1917-18	2328	575	107	1882
1916-17	2656	599	172	1609
Portland—				
1917-18	3329	630	92	799
1916-17	2740	970	73	724
Total—				
1917-18	5657	1205	199	2681
1916-17	5396	1569	245	2333

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $1.75 cwt.; sweet potatoes, $3.25 cwt.

Apples—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, $1.75@$2.50; Red Macintosh, $1.50@1.75 box; Winter Bananas, $2 box; Jonathans, $1.25@1.35 box; Wageners, $1.25@1.35 box; Rome Beauties, $1.25@1.35 box; Spitzenbergs, $2.50 box; King Davids, $1.25@1.35 box.

Butter—Blanchard cartons, 49c lb; Medo-Maid, 49c lb; Cascade, 49c lb; Gold Leaf, 49c lb; Better Butter, 49c lb; Attalia, 49c lb; Diadem, 49c lb; Hazelwood, 49c lb; Solid Pack, 48@49c lb; Jersey Belle, 47c lb; Peerless, 45@46c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 32@33c lb; brick cheese, 34c lb; domestic Swiss, 38c lb; Young Americas, 26c lb.

Eggs—White filler, guaranteed, $13.25 case; selected storage, $12.50.

Live Poulary—Hens, 13@16c lb; broilers, 20c lb; old roosters, 9c lb; ducks, 15c lb; geese, 9c lb; turkeys, 22@25c lb.

Dressed Poultry—Hens, 18c lb; broilers, 22c lb; old roosters, 11c lb; ducks, 17c lb; geese, 11c lb; turkeys, 27c lb.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 13c; salted cured, 16c; green bulls and stags, 11c; salted cured, 13c; kip, 15 lbs to 25 lbs, 22c; calf skins up to 15 lbs, 16c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 7 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $1@2 each; dry horse hides, $2.50@4 each.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., Nov. 19.—Hogs—Receipts, 6000; market 5c lower. Heavy, $16.20@16.50; mixed, $16.25@16.40; light, $16.30@16.50; pigs, $14@20; bulk of sales, $16.25@16.40.

Cattle—Receipts, 18,000; steady. Native steers, $9@16; cows and heifers, $6.75@9.75; western steers, $8@13; Texas steers, $7@10.50; cows and heifers, $6.50@9.75; canners, $5.25@6.25; stockers and feeders, $6.50@12.50; calves, $9.50@12.50; bulls, stags, etc., $5.75@8.

Sheep—Receipts, 5000; steady to stronger. Yearlings, $11.50@13.25; wethers, $11@12.50; ewes, $9.25@11.50; lambs, $16@17.50.

At Chicago.

CHICAGO, Nov. 19.—Hogs—Receipts, 48,000. Slow. Bulk, $17.35@17.70; light, $17@17.60; mixed, $17.15@17.75; heavy, $17.10@17.75; rough, $17.10@17.30; pigs, $14@17.15.

Cattle—Receipts, 27,000; firm. Native steers, $7.15@16.25; western steers, $6@13.65; stockers and feeders, $5.75@11.50; cows and heifers, $4.70@11.85; calves, $7@13.50.

Sheep—Receipts, 17,000; firm. Wethers, $8.75@12.90; lambs, $12.50@17.10.

At Portland.

PORTLAND, Ore., Nov. 19.—Cattle—Steady; receipts, 1362. Medium to choice steers, $9@9.50; good to medium steers, $8.25@9; common to good steers, $6.75@8.25; choice cows and heifers, $6.75@7.15; common to good cows and heifers, $5@6.75; canners, $4@5; bulls, $4.50@6.75; calves, $7@9.50; stocker and feeder steers, $4@7.25.

Hogs—Steady; receipts, 4396. Prime light, $16.20@16.40; prime heavy, $16@16.20; pigs, $13.50@14.24; bulk, $16.

Sheep—Steady; receipts, 920. Western lambs, $13.50@14; valley lambs, $13@13.50; yearlings, $12@12.50; wethers, $11.75@12.25; ewes, $8@10.

Portland market on shorn sheep, 21-2c to 3c under quotation.

Spokane Stock Yards Monday.

Hogs—Receipts, 52; market steady to strong. Prime light, $16@16.25; prime heavy, $15.90@16; pigs, $14.50@15.25; stockers and feeders, $12@13.25; bulk, $16.

Cattle—Receipts, 330; market steady to strong. Best beef steers, $8.50@9; good steers, $7.25@8; best beef cows, $6@7; ordinary to good, $4.50@5.75; canners, $3@4.25; best heifers, $6.50@7.25; bulls, $5@6.50; calves, $6@8; stocker and feeder steers, $5@7.25.

Sheep—Receipts, none; market steady. Prime lambs, $13.25@14; good lambs, $12@12.50; yearlings, $11.60@12.50; wethers, $11.25@12.25; best mutton ewes, $8.50@10.

Three Billions of Corn.

A corn crop larger by more than 66,000,000 bushels than ever grown in the history of American agriculture is the production of the farmers of the United States this year. The department of agriculture, in its preliminary estimate of the crop, places the quantity at 3,191,083,000 bushels. Conditions since the October forecast caused a reduction of about 19,700,000 bushels in the indicated output.

Preliminary estimates of other crops follows:

	Bushels.
Buckwheat	16,813,000
Potatoes	439,686,000
Sweet potatoes	84,727,000
Tobacco (pounds)	1,185,478,000
Flax seed	9,648,000
Pears	11,419,000
Apples	177,733,000
Apples (commercial crop bbls.).	21,461,000
Sugar beets (tons)	7,621,000
Kafirs	73,380,000
Cranberries (barrels)	240,000
Beans	15,957,000
Broom corn (tons)	50,000
Sorghum syrup (gallons)	17,486,000

Portland Wheat.

PORTLAND, Ore., Nov. 19.—Wheat buying in the northwest, which has been held in check since November 5 by the embargo put on shipments to Coast terminals, will be resumed this week. M. H. Houser, agent of the Food Administration Grain corporation, who returned from the east Saturday, announced that arrangements have been perfected to reimburse all dealers and warehousemen for the wheat they have been carrying so they in turn can now settle with the farmers in full whenever they can agree on the grades of wheat. Where they can not agree they can pay practically in full and final settlement will be made when the wheat is passed upon by licensed inspectors. The Grain corporation, however, will only pay for wheat when it reaches terminals or at such other points where it can be inspected. It is not likely, in the opinion of Mr. Houser, that there will be further delay in marketing the crop.

The mill feed market is firm at the recent advance of $1 a ton, as the demand continues in excess of the output. Because of the feed advance, millers were enabled to reduce the price of flour 20 cents a barrel to the $10 basis for patents.

Portland Market.

PORTLAND, Ore., Nov. 17.—There is much speculation among poultry dealers as to the probable price of Thanksgiving turkeys. It is the general opinion that the market will settle around 30 cents. Shippers are looking for a higher price, but the trade here believes that this quotation, which means a 35-cent market at retail, is as much as consumers will stand.

Live poultry of all descriptions cleans up readily in the face of larger receipts. Dressed meats are also firmer.

The egg market continues sluggish with the supply of fresh stock, though small, fully up to requirements at present prices. Storage eggs are slow and weak.

There was a better demand for cube butter at the close of the week and extras were scarce. Prints were unchanged.

Cheese is firm for the best grade and may advance because of higher markets east, but much poor cheese is offering here for which there are no buyers.

There was a fair demand from California for potatoes at the close of the week, with buyers offering $1.35@1.50 for fancy and $1.25 for choice stock. The car shortage restricts shipments.

There is very little trading in the Oregon bean market. Farmers are offering liberally, but because of the government restrictions on speculation buyers are only filling their immediate needs. The leading buyers quote to the farmer 9 cents for choice navy, 9 1-2@10 cents for fancy navy, 9 cents for Lady Washington and 8@8 1-2 cents for colored beans.

Hide prices were lifted 1@3 cents at the close of the week because of strong and higher markets in the east.

Inquiries for wool are coming in daily, but buyers and sellers can not get together on prices. The government census, recently completed, shows Portland to rank third in the United States in point of stocks of wool in warehouses.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $50.25 per ton.

Millstuffs—Bran, $31 per ton; shorts, $34.

Barley—No. 1 feed, $52; brewing, $53; rolled, $55@57.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50@24; grain, $20.

Eggs—Oregon ranch, case counts, 50@51c per dozen; candled, 55@58c.

Poultry—Hens, 17 1-2@20c; ducks, 18@20c; turkeys, live, 23@24c; geese, 13@14c.

Butter—City creamery, prints, 45@49c per pound; cubes, extras, 43 1-2c.

Cheese—Tillamook triplets, 23c; Young Americas, 24c.

Dressed meats—Veal, 14 1-2@15c; pork, 19 1-2@20c.

Hops—1916, 16c; 1917 crop, 25@25 1-2c.

Potatoes—Oregons, buying price, $1.25@1.50 per hundred.

Wool—Eastern Oregon, 40@65c; valley, 58@60c.

Beans—Buying prices: Oregon navy, 9@10c; Lady Washington, 9c; colored, 8@8 1-2c.

The Wool Market.

BOSTON, Nov. 16.—The Commercial Bulletin will say tomorrow:

"The market for wool has been but moderately active during the past week, interest here being confined very largely to the medium and the low grade scoured wools suitable for military requirements. Prices are exceedingly firm. Manufacturers are well occupied on old orders, but find new business on civilian account rather slow. New government contracts continued to be placed more or less steadily."

Scoured basis—Texas: Fine 12 months, $1.68@1.72; fine eight months, $1.55@1.60.

California: Northern, $1.70@1.75; middle county, $1.50@1.55; southern, $1.35@1.40.

Oregon: Eastern No. 1 staple, $1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.60@1.65.

Territory: Fine staple, $1.80@1.85; half-blood combing, $1.75@1.80; 3-8-blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled: Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

BUTTER AND EGGS.

PORTLAND, Ore., Nov. 17.—Butter prices—Prints, extras, 45@49c; cubes, extras, 43 1-2c; prime firsts, 43c; dairy, 33@35c.

Butter fat, Portland delivery—No. 1 sour cream, 52c.

SAN FRANCISCO, Nov. 17.—Butter—Fresh extra, 40c.

Eggs—Fresh extras, 55 1-2c; fresh extra pullets, 53 1-2c; extra firsts pullets, 52c.

Laurel as National Flower.

England is fighting now with the rose as her national flower. The United States has no national flower, recognized as such, but the mountain laurel comes nearer to being the right candidate for the honor than any other bloom particularly characteristic of the United States.

The mountain laurel is not found in other lands. It is hardy, permanent, beautiful and widespread in its distribution. The great artist Henry Turner Bailey finds in it all the symbolism necessary to make it Uncle Sam's flower.

New Wheat Order

Can Be Bought in the Country

SEATTLE, Nov. 17.—Puget sound millers, grain buyers and farmers secured what is regarded as an important concession from the food administration this week, according to telegrams received from Max Houser, representative for this district, now in Washington, that the government had consented to a modification of its buying rule so that the grain will be stored and bought in the country in place of at seaboard.

It is believed that Seattle millers were first to advocate this plan as the only feasible one, predictions being made at the time that it was the only one that would work satisfactorily in cleaning up the crop, turning it into cash for the growers, who would weary of long holding, and avoid the dangers of the acts of alien enemies in starting fires at terminals. The Baltimore fire was recalled as an instance of great centralization of foodstuffs in time of war. It will also nullify the effect of the advance of wheat storage charges scheduled by the Seattle port commission, to take effect November 25. Controversies between grain buyers, millers and shippers over the necessity for a car embargo to prevent congestion at tidewater terminals will now end. The new order will greatly conserve the car supply.

The embargo placed against the shipment of wheat to Puget sound terminals two weeks ago automatically checked down arrivals. Farmers were holding in the country, while at the same time the rule of the grain corporation prevented the government from buying excepting where the grain was in storage at tidewater. Growers were in need of cash and were anxious to save carrying charges and clean up.

The effect of the new order simply stated will be that grain dealers in the country will list their wheat with the federal grain corporation, and on approval 2 cents per bushel for carrying charges will follow the wheat absorbed by the corporation. It practically turns over the unsold portion of the crop to the corporation. When millers want wheat they will advise the corporation, buying as close to point of manufacture, as in the case of country mills, as possible. The wheat, inspected as shipped out, will obviate the necessity of a multiplicity of inspectors.

Mill feed this week advanced $1 per ton and automatically soft wheat flour declined 20 cents per barrel. Millers assert this week that they could get $5 per ton above the market price for 10,000 tons spot delivery if they had it.

Seattle Market.

SEATTLE, Wash., Nov. 17.—Due to the disregard of grading rules in spuds that have been coming on a cash basis to Western avenue dealers, the services of Fred N. Rhodes, district state horticultural inspector, has been called in, and he is inspecting all cars and returning a report of his findings. If the report is adverse, dealers will reject the spuds and hold them to the disposal of shippers.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed on a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 56c per dozen; pullets, 45c dozen.

Poultry—Live hens, fat, over 4 lbs., 21@22c per lb.; 4 lbs. and under, 17@19c; old roosters, 14c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 15c per lb.; springs, live, 21c per lb.; hens and young tom turkeys, 28@29c per lb.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.; heifers, 6@8c per lb.

Hogs—Light, 16@18c per lb.; heavy, 12@13c per lb.

Veal—Fancy light, 14@15c per lb.; heavy, 9@13c per lb.

Hides—Salted, 18c per lb.; flint-dry hides, 32@33c per lb.; salt kip, 18c per lb.; green hides, 15c per lb.; green calf, 28c per lb.; dry calf (under 5 lbs.), 34c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry full wool sheep pelts, 36@38c per lb.; salt bulls, 14c per lb.

Advances in Meat Animals.

WASHINGTON, Nov. 16.—Prices of meat animals—hogs, cattle, sheep and chickens—were 62.2 per cent higher on October 15 than a year ago, 87.3 per cent higher than two years ago and 88.1 per cent higher than the average of the last seven years on that date, the department of agriculture announced today.

Prices increased 1.9 per cent from September 15 to October 15 compared with an increase of 1.4 per cent increase in the same period in the last seven years.

Choice Poland Chinas

Weaned pigs, $10; 60 lbs., $15, and the best bronze turkeys in the state. Magnibest bronze turkeys in the state. Magnificent markings. Pearl guineas, Toulous

E. A. KRUSE, Roseburg, Oregon.

Women and Young Folks Make Good

(Continued from page eighteen.)

in relieving the labor shortage. Their labor has been a success in only certain ways. Neither young folks or women are strong enough to pick fruit all day without slacking up a great deal in the afternoon. They can not keep up this work all day. Therefore, if we growers pay them 30 cents per hour we get only full value during half the day, and they commanded that wage. I must say that women and girls are very apt at sorting and packing fruit. They can do as well at sorting and almost as well at packing as men. In our packing plant we have only two men packers, while the rest of the packers and sorters are all girls and and women. We have adopted carrier belts, gravity rollers and all modern machinery which eliminates man power, and must say that man power is five times as expensive as any other power, namely gasoline or electricity. This year has been a most trying one in regard to labor, for two reasons. The I. W. W. for one and so many of our boys going to the call of the "colors." I was very fortunate in harvesting my crop of 6000 boxes of apples, as I have eight professional pickers who come here every year and pick my crop. I pay them by the box, therefore, each man earns according to his ability. Some make as much as $6 per day.

F. J. O'BRIEN, Richland—The women and young girls have been a great factor in relieving the labor shortage in this district. In fact they were employed to a large extent in the packing and picking of the fruit crop. About 75 per cent of our fruit this year was packed by women and girls, and in a general way they have proved very efficient and more dependable than the transient male workers, who are usually employed in this class of work. The farmers generally are cooperating one with another, thereby relieving the labor shortage and doing away with the necessity of employing outside help, and if the labor situation does not become any more acute than at the present time we do not anticipate any trouble in this district.

JOHN VAN TROJEN JR., Chimacum.—In our community the shortage of labor has not been such as to call the women to unaccustomed farm work, but boys under 16 have done their share. The boys especially helped out in haying and harvesting. We have used all the machinery we were able to get in meeting this shortage of labor.

E. E. STARKEY, Prosser.—Young folks and women have done more farm work than usual in harvesting and picking fruit and potatoes. The school was dismissed for a time to aid in this work, which has been the means of saving many products that would otherwise have been lost. Most of the work they have done has been equal to that of the men, but the children do not equal the women.

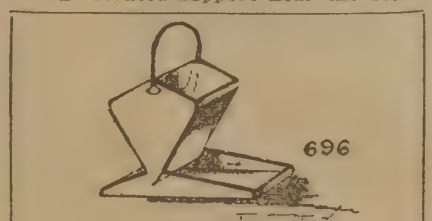
A resident of Okanogan county, not wishing his name used in print, yet gives some facts of interest in this discussion on the part played by women and boys in supplying labor shortage during these war times. He says: The utilizing of women as a substitute for farm labor will not meet with the success it does in Europe for two reasons—the precedent already established as to the work they are fitted for, and the acceptance of the slogan "Like wages for like work." For instance, any healthy woman is physically able to drive a mower or rake, etc., and yet I would feel like a brute in hiring a woman for that work; in other words, we are not brought up to work our women in the major activities that are a part of farm life, and we would have to pay nearly if not as much for women as for men helpers, which would be a real financial burden. So, if our women are to be used on the farm I believe they must be used in work that precedent has decreed as properly their sphere and where they can sucessfully compete with men. These requirements narrow the field very materially, but I believe any attempt to ignore these premises will meet with failure. In my locality there is a decided shortage of help to pick and pack apples. In this work a woman can do as much as a man, thus releasing a large number of men for other work. Economically speaking, every man working in this field when there is shortage of labor elsewhere is an absolute loss which can be turned into the profit column by utilizing woman labor. Regarding young people, those in the upper grades of school, I believe, during the war, with its deletion of labor power, that the schools or upper grades at least should be closed during harvest, if in an apple country for a few weeks preceding frost; if in a wheat country, for the threshing season, etc. This would be a tremendous factor in the labor situation, and, while it would shorten the school term, might be offset from an educational standpoint by adopting some plan to encourage thrift and patriotism by fostering competition between different classes and schools, in the purchase of bonds, and Red Cross work, with money earned. Roughly estimating, 80 per cent of our present farm labor as absolutely necessary to carry on our farm work. I believe 20 per cent could be done, with no real loss in efficiency, by women and young people of school age, if this class of labor could be drawn on at certain periods when needed most and in particular lines in which they are fitted.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

It Saves Labor.

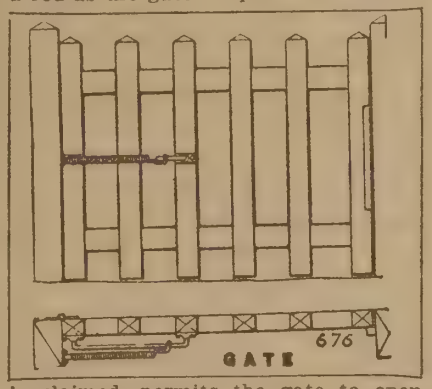
The advantage claimed for this hod is that it can be placed on the stove or on an elevated support near the stove



where the coal can be obtained without stooping and without the labor of lifting a heavy scuttle.

Gate or Door Closer.

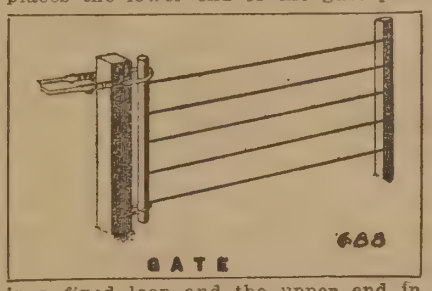
One end of the spring here slides on a rod as the gate is opened and this, it



is claimed, permits the gate to open smoothly, because the tension is uniform in all positions.

Wire-Gate Fastener.

In using this fastener, the operator places the lower end of the gate post



in a fixed loop and the upper end in the yoke; he then tightens the gate by swinging the handle up and out.

Want Ads

EDUCATIONAL 45

GRADUATES OF THIS SCHOOL NOW hold excellent positions in Washington, D. C., and other cities. Stenography, bookkeeping, etc. Whitney College of Commerce, Coeur d'Alene, Idaho.

POSITIONS GUARANTEED GRADUATES OF BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog free.

THIS AD IS WORTH $1 AT THE Missoula Business and Normal College, Missoula, Montana. School fully accredited. Write for particulars.

MISCELLANEOUS 57

MOONCULTURE

Plant and work by the moon signs. Raise bigger crops make better living. Write Box 700, Missoula, Mont.

SEND FOR CATALOG B, SHOWING OUR complete line of holiday bargains. E. S. Burgan & Son, Spokane, Wash.

MISCELLANEOUS—FOR SALE 60

SALT FISH.

We sell it by the carload or in a pail. Fish is about the cheapest and best food you can get. Buy it now. Write for price list.

SUPERIOR FISH CO.,
SEATTLE, WASH.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MISCELLANEOUS—FOR SALE 60 Continued.

SASH AND DOORS.

Kitchen cupboards, 4 ft. 6 in. wide, 7 ft. high; two glass doors and three long adjustable shelves in the upper part; three drawers, one flour bin, one sugar bin, mixing board, and a cupboard for pots and pans, with panel door in lower part; price $35 set up, or $25 knock down.

5 cross panel doors	$1.92
Cottage front doors	3.50
Two light windows	1.24
Spruce flour bins	1.75
Prepared roofing	1.35

Our large illustrated catalog No. 27, sent, postpaid, without charge, on request. Sell any one, ship anywhere, and guarantee safe delivery.

The largest factory in the west selling direct to consumer.

O. B. WILLIAMS CO.
1943 FIRST AVE., SO. SEATTLE, WASH.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave. So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

10-LB. PAIL SALTED BLACK COD BELLIES, the best part of the fish. Within 300 miles of Seattle, $1.50 by parcel post.
SUPERIOR FISH CO.,
SEATTLE, WASH.

TRAP COYOTES—IF YOU WANT TO learn of a sure system for trapping coyotes write me for information. I have it. C. L. Willis, Dillard, Ore.

MISCELLANEOUS WANTED 63

POULTRY WANTED.

We want live poultry, dressed meats, hides and potatoes. We solicit your cream shipments. Write for prices. Commercial Creamery Company, Spokane, Wash.

AUCTIONEERS 75

N. R. SHEPHERD, FARM AND LIVE stock auctioneer, Troy, Idaho.

MACHINERY FOR SALE. 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS,
Carried in Stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave. So., Seattle. Write for Catalog.

MACHINERY—WANTED 96

WANTED—TRACTOR AND HAY BALER, second-hand caterpillar or track layer engine; also self-feed hay baler. Green Meadow Ranch, Route No. 3, Boise, Ida.

STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174

TURKEYS—MIXED WILD STOCK; HARDier than tame, yet as gentle. Favors before holidays. For prices address Mrs. Mary Eagle, Nampa, Idaho.

S. C. W. LEGHORNS AND R. I. RED COCKerels, hens and pullets; heavy-laying strains. Mrs. Rominger, Underwood, Wash.

FOR SOMETHING GOOD IN SILVER Wyandottes, S. S. Hamburgs or Golden Campines write G. G. Wherry, Payette, Ida.

LIVE STOCK 177

RED CLOVER BIG TYPE POLANDS—Mouw, Fesenmeyer, Miller and Herring strains—spring pigs, both sexes, with quality, for sale. Never before could you raise or buy grain and make as much money feeding good hogs as now. Write your wants. Inspection solicited. H. J. Howser, Stites, Idaho.

FOR SALE—REGISTERED PERCHERON mares and stallions. Green Meadow ranch, Route No. 3, Boise, Idaho.

FOR SALE—FINE JERSEY BULL CALF; none better; $30; pedigree on request. S. W. Hensel, Wenatchee, Wash.

IMPROVED CHESTERS; PRIZE WINning strains; either sex. Fred H. Hoffman, Albion, Wash.

FOR SALE—1000 CATTLE, 5000 SHEEP in lots to suit. Coffin Bros., North Yakima, Wash.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TANNERS 425

HIGH-GRADE ROBES FROM YOUR horse and cow hides. Send for catalogue. John T. Little Hdw. Co., Spokane, Wash.

TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

MONUMENTS 510

GET MY PRICES ON MONUMENTS BEfore placing your order. I can save you money. Geo. H. Moody, Moscow, Idaho.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

NURSERY STOCK 621

BERRY PLANTS AT WHOLESALE prices. Blackberries, loganberries, strawberries, raspberries, currants, gooseberries, dewberries, grapes, rhubarb and asparagus roots. Write for price list. Rosecroft Nursery & Fruit Farms, Sumner, Wash.

FARM LANDS—FOR SALE 651

300-ACRE FARM, $6500.

With 75 tons hay, crops,

4 horses, 20 cows and

heifers, 2 bulls, 2 colts, 7 calves, 16 sheep, 8 hogs, 150 poultry, turkeys, mowers, horse rake, plows, harrows, cultivators, new manure spreader, corn planter, horse hoe, wagons, cart, carriage, sleighs, 5 sets harnesses, 100 bu. potatoes, 100 bu. apples, oats, corn, beans, vegetables, dry wood and cream separator. Nearby creamery buys cream, skim milk fed hogs. Estimated 1000 cords wood, 500,000 ft. spruce and pine, 5000 sugar maples, 500 apple trees. Good 10-room residence, tenant house, barns, 75-ton silo. Aged owner includes everything for $6500. On easy terms if taken soon. For details see page 9, Strout's catalogue of 321 bargains in a dozen states. Copy mailed free. E. A. Strout Farm Agency, Dept. 15, New York.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay. $2000 loan in improvements, or ready-made farms. Loans of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Alan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

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C. H. SKINNER, Hermiston, Ore.

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736 ACRES, IMPROVED, NEAR CALgary, Alberta; 500 cult.; 200 summerfallow; on river; coal and some timber; house, 4 granaries, well, windmill; good crop this year. Price only $15 per; third cash, bal. easy, 6 per cent. Box 277, Ashland, Ore.

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320 acres; grain and stock ranch; lots of free range; fully equipped; good terms. Address K. L. Kirkhart, Missoula, Mont.

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FOR LANDS IN HEART OF THE Palouse write H. A. Malsed, Palouse, Wash.

GOVERNMENT LAND IN CAL. FREE book. Joseph Clark, Sacramento, Cal.

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FOR SALE VERY CHEAP—13-ACRE IRRIgated orchard tract, 4 miles from Caldwell, Idaho. About 7 acres commercial bearing trees. Will take Liberty bonds. Call or write G. H. Summers, 121 South Lincoln st., Spokane, Wash.

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It will pay you to test Giant Farm Powders in competition with any other stumping powder.

In the last year more than 2,000,000 pounds of these Giant Powders were used for stump blasting in Washington and Oregon alone. The users included farmers in every county in both states, the largest lumber and development companies, and the United States Government. They use the Giant brands because they have found that

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

always give satisfaction and do their work at the lowest possible cost and in the most thorough manner.

In the Pacific Coast states the farmers require explosives that will disrupt, crack, split and heave the stumps and at the same time lift and loosen the roots for easy handling. Giant Farm Powders do this because they are made especially to suit western conditions. Because of their wider-spread force, they remove the stumps more economically than powders or dynamites that merely shatter and pulverize.

Test one case. Compare it with any explosive that you have ever used for stump blasting. After you have blasted a dozen stumps you will understand why farmers who have once used them always continue to use the Giant Farm Powders. Fill out and mail the coupon at the right, and we shall arrange with our nearest distributor to supply you promptly at the lowest market price.

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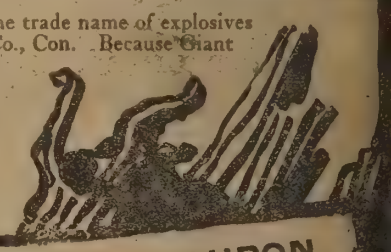
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Warning. Giant Powder is the trade name of explosives manufactured by the Giant Powder Co., Con. Because Giant Powders are best known everywhere, many have assumed that all high explosives are Giant Powders. Insist upon having the genuine, made only by the Giant Powder Co., Con. If your dealer has only ordinary dynamite, write us and we will see that you get the genuine.



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(Kindly fill out if ready to purchase)
Have your nearest distributor supply me with

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ADDRESS .....

Write below your dealer's name.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 48. NOVEMBER 29, 1917. ** WEEKLY.

Spillman Is Coming

To Be Dean of Agriculture at W. S. C.

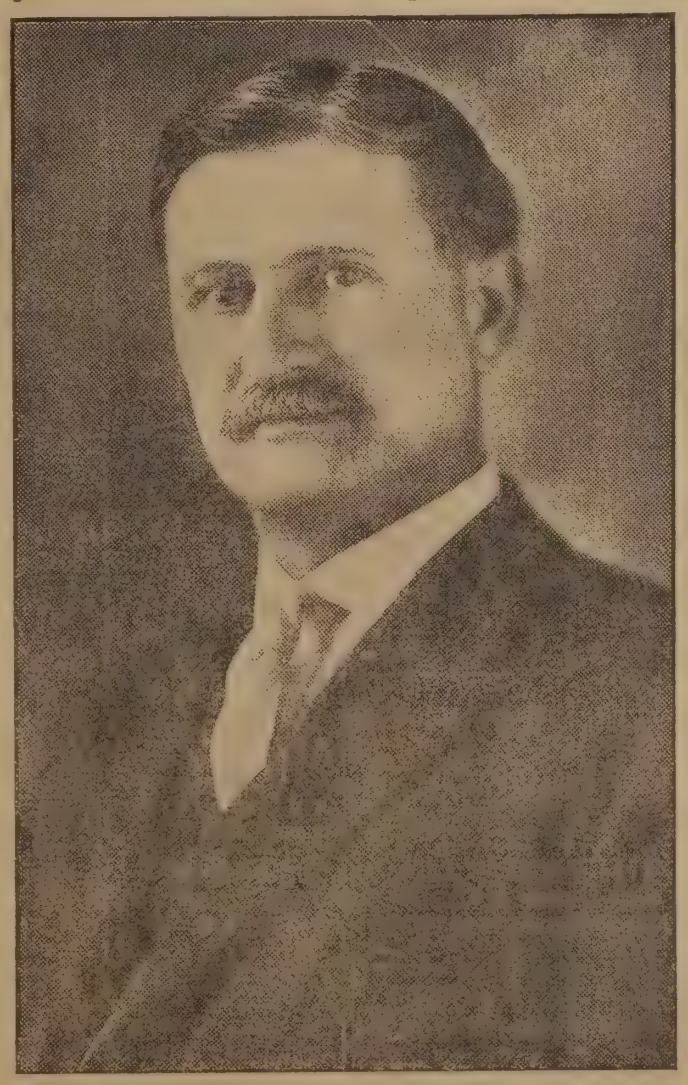
Official announcement has been made by President Ernest O. Holland of the Washington State college at Pullman that W. J. Spillman, now head of the United States department of farm management at Washington, D. C., has accepted the position of dean of the college of agriculture of the state college. This is one of the most important announcements from the standpoint of the farming interests of the state of Washington that has been made in recent years, as Professor Spillman is recognized as one of the foremost promoters of agriculture in America. The government has assigned him the task of making a nationwide survey of the farm labor situation, which task he must complete before assuming his new duties in this state. It may be April before he reaches Pullman.

Last June the regents of the state college reorganized the departments of that institution so that the college of agriculture now includes the agricultural experiment station, the department of agriculture, the department of horticulture and the department of forestry.

Professor Spillman will have general direction of all these departments. Since the resignation last spring of Ira D. Cardiff as director of the college experiment station, Professor George Severance has been serving in the double capacity of acting director of the experiment station and acting head of entire college of agriculture.

It is of special interest to note that Professor Spillman was formerly a member of the state college faculty, having been one of the chief organizers of the department of agriculture with President E. A. Bryan in the early days of the college. He is thoroughly familiar with Washington farm conditions

Continued on page five.



—Harris & Ewing, Washington, D. C.

Above is shown Professor W. J. Spillman, whose acceptance of the deanship of the college of agriculture of the State College of Washington has been announced.

Farm Loans Popular

Farmers Ask Hundred Ninety Millions

All doubt regarding the popularity of the federal farm loan system is now swept away by the record. Up to November 1 the 12 farm loan banks had received applications for loans aggregating the stupendous total of $193,250,945.

This represents the applications only of the 3000 organized farm loan associations, of which about 1500 have actually been chartered, and the remaining 1500 yet awaiting the decision of the farm loan board on their applications for charters.

In addition to the 3000 associations now organized, the federal land banks estimate that there are approximately 2000 other farm loan associations being organized in the United States.

Up to November 1 the 12 federal land banks had paid over to farmers in 5 per cent loans a total of $21,040,138. One-third of that total was paid out in October. In the same month the 12 banks received applications for loans amounting to $27,416,463, and approved loans amounting to $20,119,240. Evidently it will be some time before the banks will catch up with the volume of business rolling in upon them.

A report issued by the federal farm loan board indicates that up to November 1 farm loan bonds to the amount of $21,500,000 had been disposed of to investors of the United States. Of this amount $18,850,000 of bonds were distributed through bond houses and $2,650,000 were sold direct by the 12 federal land banks to investors.

These bonds bear 4 1-2 per cent interest and are entirely tax free. They are sold at 101 1-8 and are secured by the first mortgages taken in exchange for loans made to the farmers by the 12 federal land banks and they

Continued on page five.

"Hard Work and Little Sporting"

Farmers Are "Hooverizing" by Hard Work and Sacrifice of Much That Is Often Considered to Be Necessary in City Circles.



RITZVILLE, Adams County, Wash., Nov. 14.—There is but little work and no seeding done on account of the continued dry weather. No crops damaged by the cold weather. In my estimation we are all Hooverizing by hard work and little sporting. Hogs are very scarce, and fabulous prices are being paid for stock hogs. We feed them wheat, as corn is fully as expensive. Everybody is short on feed for stock and we hope that the winter will be mild. Nothing new is going on in this locality.

JACOB HARDER.

More Than Hoover Asks.

RAINIER, Thurston County, Wash., Nov. 10.—October was a fine month for farm work with scarcely any rain. More rain would have been better for fall seeding and pasture. November opened up with warm rains. There is some potato digging to be done yet. Potatoes are good in quality and size, but not as heavy a yield as last year. Grain sown about October 1 is looking well. It has been found that winter sown vetch and wheat make a good crop the next season. I think, in spite of the late, fine fall that a good many farmers find themselves behind with their work, because of having to do the work themselves, as labor was so high. Lumber mills take the best help at high wages. The farmers and people in general are Hooverizing somewhat and to a greater extent than asked by Mr. Hoover. We do well if we get meat two days a week, with bacon at 45 to 50 cents a pound, and are advised to eat fish, which is mighty scarce here. Peanut butter is a good substitute for high-priced butter and helps out on the meat question. Hogs are a scarce article. About 150 farmers of Thurston county have organized a cooperative association for the purpose of selling milk and farm products. I notice the farmers are putting up good wood piles for winter. L. F. DAVIS.

No Hay; Sell Cows.

MT. VERNON, Skagit Couty, Wash., Nov. 10.—Weather conditions in the Coast country have been well near ideal for fall work, potato digging especially. It has been a little too dry for fall sown crops such as wheat and rye. Little hay has been fed up to the present and feed conditions have been good. Feeds are high but most of the farmers have most if not all of their hay for the winter. Those who did not have hay have sold their cows. Cows sell high this fall. From $150 to $200 is not uncommon, while from $100 to $150 might be considered an average price for good cows. Farm labor has been scarce, yet there has been no very serious shortage. We see women replacing men in some clerical positions but otherwise we see few women doing strictly men's work.

C. S. PHILLIPS.

Some Rye Is Seeded.

OTHELLO, Adams County, Wash., Nov. 12.—Fall work in this part of the Big Bend usually consists principally of seeding grain, and as this is another year of no rain there has been no seeding; only a few isolated cases of small acreage of rye. The writer has 120 acres seeded to rye, the largest of any in this vicinity. A good deal of building is being done, especially on farms. The hog crop is down very low. The farmers are using mill feed to put through what hogs there are. There is a movement on foot to gravel seven miles of road east of here. If this is completed it will be a great step in the right way to help transportation. There does not seem to be any special effort made by the women and young folks to relieve the labor shortage. We have not experienced any grievance in that line to speak of. If another contingent of soldiers is taken from this county we will notice a labor shortage by another year, and then some of the girls will have to don the coveralls and help in the fields. The ladies of Othello are doing much work for the Red Cross. I often wonder why the girls don't take deeper interest in this great work. The girls of the west have not as yet awakened to a sense of their duty like those of the middle and eastern states.

A. O. LEE.

Reservation Is Prosperous.

TOPPENISH, Yakima County, Wash., Nov. 11.—Potato digging is more than half done, the yield is not as heavy this year as last, but the acreage is heavier. While the general yield is not up to the average, there are a few fields that have made the heaviest yields in the history of the reservation. There was some loss from freezing after being dug, but in general the weather has been fine. It has been necessary to pit most of the crops, as cars could not be had and storage was not available. The demand is good if cars could be secured, but there is not sufficient available cars to establish a market. Apples are not quite all picked and of those that are picked many are not yet graded and packed. The same trouble in getting cars for apples has been experienced as for spuds. There is very little hay moving. In fact, it seems an impossibility to get cars for any kind of shipment. Much difficulty is had in getting in fuel and other articles of merchandise. There have been a larger number than usual of public sales of live stock and implements this fall. Many dairy herds have been sold. But they have all been bought by local men, so that practically no cows have left the community. There has been a strong tendency to weed out the poorer cows. Hogs have been in good demand, but horses have attracted very few bidders. The corn crop, while very late, is well matured, owing to the late continued mild weather. The yield is better than an average and the quality is good. Perhaps 75 per cent of the sugar beets are harvested and the yield is good. The yield on the reservation is about four tons heavier than anywhere else in the valley and the growers are getting good returns. The later apples are of a good quality and are much freer from worms than the earlier varieties. The establishment of a large cannery in the valley has stimulated the planting of cling peaches, cherries, apricots and other soft fruits. The cannery is offering 15-year contracts on many soft fruits. The extraordinary uniform profits on prunes for the last seven years has induced many to plant prunes, mostly Italian and Tragedy. In a good many instances they are pulling out undesirable varieties of apples and replacing them with prunes, cherries or apricots. The returns from bees were the best this year in the history of the valley. The honey production was good and the prices were the best ever realized in the west. There has been considerable immigration to the Yakima valley this summer, coming mostly from Montana, Wyoming and California and from the Sound country. Every house in every town and village is occupied and there is demand for more. There has been employment for all at a good price. In most instances ordinary laborers have been paid $3 for both men and women. Potato pickers have earned from $4 to $8 per day; fruit packers about the same. Fruit pickers, where doing piece work, earned about $4; by the day they were paid $3. Beet toppers were able to earn from $4 to $5, while the demand for teams for hauling is good. The stress of work will be over in three weeks and the total loss of crops will be light if reasonable care is taken to protect them from frost. The merchants have had a profitable fall and summer and are expecting a good winter trade. In spite of the extreme high prices of hay and silage there is a large number of cattle and sheep being fattened in the valley. The number of hogs has decreased a small per cent and a great number of poultry raisers have entirely quit the business, being driven out by the high prices of feed. The slogan, "raise poultry and help feed the army," has no meaning when it takes twice the value of wheat or corn to raise it that it is worth. Many lovers of corn bread who would gladly have many wheatless days wonder why corn meal is much higher than flour when corn is much cheaper and the cost of manufacture is only about half what it is for flour. Corn meal as sold here costs the consumer $7.30 per hundred while flour costs only $6. If Mr. Hoover will stop that leak he can save millions of pounds of flour for the soldiers and allies.

C. A. WYCKOFF.

No Rain Since May.

BICKLETON, Klickitat County, Wash., Nov. 2.—The long dry spell still continues. We have had no rain since May. Conditions are unfavorable for fall grain. Part of the farmers are seeding in the dust, others are waiting for a rain. We have had several frosts but as most crops are taken care of no damage resulted. The farmers are not very well satisfied with conditions this year. It is almost impossible to sell wheat at our local shipping points; the warehouse men are lending the farmer $1.50 per bushel on his wheat and charging him 6 per cent interest on his own money until they can get a chance to ship it to Portland and get the price and test down there. This makes it very disagreeable for the farmers who want to turn their crop into money so they can settle their obligations. As the terminals are congested with unloaded cars of wheat, it is hard to tell how long the farmer will be paying the grain buyer's interest for letting him use a little of his own money. The farmers in general are very cautious about buying anything on time as the general opinion is that while the war lasts the farmers will not be able to make anything more than a living and expenses. As a consequence real estate is not changing hands, and land is being bought, only in a few cases, on a cash basis.

BERT F. FAULKNER.

Seed Is Plentiful.

KENNEWICK, Benton County, Wash., Nov. 7.—The weather conditions have been very favorable for the harvestng of crops. The grain was all harvested in first class condition and practically all fruit has been saved. Even with the shortage of labor almost nothing has gone to waste this year. The weather has not been favorable for fall seeding of grain, consequently most of the farmers are preparing for spring seeding. A very large acreage will be seeded. Probably the chief limiting factor will be labor to do the seeding and harvesting of next year's crop. The farmers generally are very optimistic over farming prospects for next year. Seed of most kinds is available in sufficient quantities. Securing seed potatoes of the right varieties is probably the most perplexing problem in connection with seed for next year's crops. Growers are just now harvesting the last of their apple crop and results are highly satisfactory, both in regard to yield and price.

LEE M. LAMPSON.

Trouble Selling Wheat.

CENTERVILLE, Klickitat County, Wash., Nov. 17.—The weather conditions have been very favorable for the harvesting of all fall crops but not favorable to germination of the sown grain, and there is quite an opinion going around that next year's prospect is very slim for a crop of fall sown grain. There is a great deal of dissatisfaction through this part of the country with regard mostly to the selling of our grain as the elevators will hardly take the grains for storage, so it makes it almost impossible to realize any money on the crop. Probably this will be remitted in time. The hog crop here will soon be at a finish as the crop is very short even with the price on the decline. It will be impossible to get and keep a stock of hogs on hand. This part of the country will go out of the hog business and into sheep raising to a great extent. The seed is in good stock for both fall sowing and spring sowing here.

C. A. LESTER.

Demand for Farm Land.

MEAD, Spokane County, Wash., Nov. 10.—There has been but little fall plowing done yet on account of the exceedingly dry condition of the soil. With the exception of a very few potatoes there has been no crop losses this fall by freezing, and no losses of any kind from wet. "Hooverizing" among the farmers seems to run largely to putting up extra quantities of fruits and vegetables. There will be less meat than ordinarily used by those who buy their meats, but little change among those who raise their own. There is, somewhat, more mill feed used for hogs and less wheat than usual. There being so few hogs in this district now the saving of wheat by feeding other feeds will be small. Farm lands in this vicinity seem to be growing in demand and a number of sales have been made lately at $60 to $150 an acre. GEORGE HINGSTON.

Women Work in the Fields.

PROSSER, Benton County, Wash., Oct. 31.—The school board closed school the last of September to relieve the labor shortage here and that gave us plenty of help for the fruit season. Most of the young people, as well as the women, put on overalls and went into the fields and orchards and made good. They earned from 25 cents to 35 cents per hour for picking and grading. School began again October 29 as most of the fruit is picked now. The packing houses will run from four to six weeks yet and in some of the packing houses they are using grading machinery which saves labor. Women are equal to, if not better, than men, as packers. The farmers exchanged work in haying. All of the women that are able to go in the fields and orchards work in this community.

G. W. WILGUS.

Yakima Products

Figures on Potatoes and Corn

Erwin T. Marchetti, U. S. field agent for the bureau of crop estimates, has just issued his preliminary report on the crop outlook for the state of Washington for 1917.

Every county in the state produced potatoes, Yakima county having 11,260 acres, the largest acreage in the state, with Clarke having 4350 acres, the second largest in the state.

Figures on the corn acreage are given on 34 of the 39 counties, the largest yield is in Yakima county, 598,900 bushels. Thine Marchetti report of the acreage of potatoes by counties follows:

Adams, 1109 acres; Asotin, 185; Benton, 510; Chelan, 1236; Clallam, 673; Clarke, 4356; Columbia, 627; Cowlitz, 1647; Douglas, 2100; Ferry, 330; Franklin, 300; Garfield, 198; Grant, 639; Grays Harbor, 1300; Island, 1228; Jefferson, 231; King, 5167; Kitsap, 554; Kittitas, 1795; Klickitat, 1385; Lewis, 2455; Lincoln, 1821; Mason, 435; Okanogan, 1294; Pacific, 396.

Pend Oreille, 450; Pierce, 3960; San Juan, 317; Skagit, 1980; Skamania, 277; Snohomish, 2130; Spokane, 12,900; Stevens, 2050; Thurston, 1655; Wahkiakum, 110; Walla Walla, 1560; Whatcom, 2640; Whitman, 2640; Yakima, 11,260.

The following table shows Marchetti's estimate on the potato and corn crop of the state given in bushels:

	Corn.	Potatoes.
Adams	11,500	49,900
Asotin	16,900	17,500
Benton	168,000	71,400
Chelan	79,000	132,960
Clallam	.....	132,369
Clarke	6,000	410,940
Columbia	98,000	61,700
Cowlitz	2,000	196,940
Douglas	55,000	94,500
Ferry	5,500	23,100
Franklin	6,000	15,000
Garfield	38,000	19,800
Grant	13,500	41,740
Grays Harbor	.....	195,000
Island	.....	224,952
Jefferson	.....	43,890
King	.....	877,700
Kitsap	.....	77,560
Kittitas	9,500	296,730
Klickitat	8,500	110,840
Lewis	1,000	330,425
Lincoln	26,000	80,124
Mason	.....	60,900
Okanogan	89,000	118,850
Pacific	.....	71,280
Pend Oreille	2,500	36,000
Pierce	.....	694,000
San Juan	.....	47,000
Skagit	1,700	388,000
Skamania	.....	27,700
Snohomish	.....	390,000
Spokane	49,000	772,000
Stevens	58,500	164,000
Thurston	.....	260,000
Wahkiakum	.....	20,600
Walla Walla	91,000	274,300
Whatcom	.....	490,000
Whitman	85,000	401,000
Yakima	598,900	2,159,300
Totals	1,520,600	9,880,000

Marvelous Banyan Tree.

The giant banyan under which Alexander is said to have camped with 7000 men, now measures nearly 1000 feet across the head, contains about 3000 trunks and forms a dense canopy through which the sunshine never penetrates. Several other species also propagate in like manner.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 48 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF November 29, 1917

Government Studies Milk

Federal Commissions Will Investigate Industry

Through commissions to be appointed by the United States food administration the federal government hopes to bring about a satisfactory settlement of the long-standing controversy between milk producers, distributors and consumers.

The following commissioners for the territory supplying the city of New York were appointed last week:

Joan Mitchell, New York state food commission; Dr. L. P. Brown, New York city board of health; Dr. W. H. [illegible] director New York agricultural experiment station; John T. Galvin, New York city board of water commissioners; Jacob H. Schiff, New York; Miss Mabel Kittredge, New York; Eugene Schoen, New York city; [illegible]es M. Dow, Jamestown, N. Y.; [illegible] Utica, N. Y.; C. S. Shed[illegible] federal food administrator for New York city.

[illegible]missions will soon be appointed for other districts. The Farmer has not yet advised whether the government will name a commission for the pacific northwest, but there can be little doubt that it would take that action if urged to do so by the producers and consumers.

These commissions are empowered to determine, after hearing, the reasonable prices of milk to be paid by the distributors to the producers and by the consumers to the distributors, such prices to be based upon the cost of production and distribution, with a reasonable profit added.

While they will have only advisory powers Mr. Hoover believes that the high character of their members, the fact that their findings will be disinterested and the patriotic appeal made by the war situation will bring about harmonious relations between the three parties in interest.

It is an encouraging beginning that the distributors and producers in the New York district have agreed that no increase in milk prices to consumers will be made while the commission is conducting the inquiry.

The New York commission hopes to report not later than January 1, 1918.

Should the Government Take Over the Meat Packing Industry and Commandeer Feedstuff?

[illegible] Pinchot, whose long and [illegible]nt fight for conservation of [illegible]l resources has endeared him [illegible]lions of people, has resigned [illegible] the national food administration [illegible]ganization. E. C. Lassater, [illegible] cattle grower, has also re[illegible]ey were serving with[illegible].

[illegible]n headquarters in Wash[illegible]t they resigned because [illegible]red with Mr. Hoover over



Gifford Pinchot.

the handling of the meat problem. Both contended that the packing industry should be taken over and operated by the government, and that the cotton seed crop be commandeered so that cotton seed meal cake could be sold to cattle growers at low prices.

The difference arose over a question of policy, not of law, for the food control law empowers the president, in his discretion, to take over and operate the packing plants. Section 12 provides:

"That whenever the president shall find it necessary to secure an adequate supply of necessaries for the support of the army or the maintenance of the navy, or for any other public use connected with the common defense, he is authorized to requisition and take over for use or operation by the government any factory, packing house, oil pipe lines, mine or other plant, or any part thereof, in or through which any necessaries are or may be manufactured, produced, prepared or mined, and to operate the same."

The president and Mr. Hoover believe that this drastic action should not be taken until an effort has been made to try milder means. Mr. Pinchot is convinced that milder remedies will not cure the evil and that valuable time would be saved by immediate application of the severer provisions of the law.

Apple Rules Stand

Grading Problem Is Complicated

So complicated are the conditions surrounding the problem of grading and packing apples that the apple conference at the National Apple show at Spokane last week threw up its hands and voted in favor of a two-pack system, instead of a three-pack, but declined to insist on having the two-pack system put into effect the coming season. The vote was taken by Washington apple men only, though the establishment of a new system of grading would influence the other states of the northwest to considerable extent.

The present rules in Washington provide for three grades of apples: The extra fancy, the fancy and the C grade. The objection is made to the C grade that it permits inferior fruit to be packed under that grade and shipped out of the state or otherwise placed on the market as good fruit, thus injuring the state's reputation as a producer of excellent apples.

Commissioner E. F. Benson of the Washington state department of agriculture said that the rules governing next season's packing would have to be promulgated next month, and that that made it virtually impossible to put a new set into effect, even if the growers were all of one mind as to the rules desired.

The conference voted 25 to 21 that it was the consensus of opinion among the growers present that a two-grade system was preferable to the present three-grade system, and that the federal government set the machinery in motion to put such new system into practice throughout the country as soon as possible. It was argued that a uniform system of rules for the entire country, at least the northwestern states, was greatly to be desired.

During the four days of the fruit growers' conference many subjects of vital import to the growers were taken up and discussions of them entered into. Such problems as pruning, intercropping, live stock for the orchard farm, thinning, packing, hauling and marketing were considered.

Buildings for Big Show Are Assured

The greatly needed stadium to house the Pacific International Live Stock show at Portland seemed assured after the annual banquet at the Portland hotel last Thursday night, when voluntary subscriptions were totaled, and it was found that $33,000, a purebred Shorthorn bull, two purebred pigs, a lease on the necessary grounds and other material contributions had been pledged. To complete the funds necessary a committee of leading Portland business men has been appointed to take further subscriptions. The largest single subscription reported at this time is that of the Portland Cattle Loan company of $5000. Several subscriptions of $1000 were made, and a large number of from $100 to $500.

Just the Paper.

To The Washington Farmer: We have taken The Washington Farmer about one year and would not be without it. Just the paper for Washington farmers.

P. J. ZWASCHKA.
Everson, Wash.

Prepare to Guard Food.

The city council of Spokane has passed an ordinance declaring that mills, warehouses, stores, packing plants and so on, in which cereals, flour, meats or other food products are kept or stored, when the value of such shall amount to $50,000 or upwards, shall maintain and keep a special watchman to guard such place during the night time and on Sundays, holidays and all other times when such place is not otherwise guarded. The city proposes to exercise strict supervision over the special officers, and Mayor Fleming states that he will detail a regular police officer to have supervision of the force of privately employed special officers.

Standardize Boxes

Apple Show Closes With Success

At a special conference of apple growers, shippers and box manufacturers in Spokane the last day of the National Apple show agreement was reached for the use of a standard box for all apples next season. The conference was called by Charles Hebbard, Washington state food commissioner under the national food administration, and the purpose was to eliminate the danger of a box shortage next year and to reduce the loss of efficiency in the manufacture as much as possible. The dimensions agreed upon are as follows:

Two ends, 11½ by 10½ by 11-15 inches; the ends may be in two pieces, with three corrugated staples at each [illegible]

Sides (two pieces), 19½ by 10½ by ¼ inches, solid.

Tops and bottoms (4 pieces), 19½ by 5¼ by 3-16 inches.

Cleats (4 pieces), 11½ by 11-16 by [illegible] in two or three [illegible]

Not more than 50 per cent of the sides may be tongued and grooved if 19½ by 10½.

Two-piece tops may be 19½ by 5¼ by 3-16 inches.

Three-piece tops may be 19½ by 3¾

The following exceptions will be permitted in cases of emergency:

Saturday brought the apple show to a close, and the record left is one of general success. The total attendance was slightly under that of a year ago, but the finances are expected to be shown in good condition when accounts [illegible]'s completed.

Excellent apples were on display, and those having them had no trouble in finding a market for them. A food conservation cooking school and the usual grading and packing demonstrations marked the show.

Dissolve Partnership.

The poultry firm of Westergaard & Saeman of Zenith, Wash., has been dissolved, Mr. Saeman taking over all of Mr. Westergaard's interests. Mr. Saeman was running the plant three years before he became associated



with Mr. Westergaard, having trapnested four years consistently. Since dissolving partnership, Mr. Saeman is enlarging his plant, one of the features being a new laying house 20 by 120 feet, which is shown in the accompanying cut. He is selling off his Barred Rocks and will confine himself to White Leghorns.

Naming Hindu Babies.

Hindu babies are named when they are 12 days old, and usually by the mother.

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Miles of Meat Seen at Portland

Pacific Internaional Takes Place Among Greatest Shows of America

If the live stock at the seventh annual exposition of the Pacific International, held at Portland last week, were led in one single-file parade and allowed 10 feet per animal, the line would stretch nearly four miles. There were 2000 head of beef cattle, dairy cattle, sheep, hogs and horses, and this number and their quality place the Pacific International along side the Chicago International and the other greatest American shows.

It is fine to go to a show where there is neither gate keeper nor gate, and where everybody is welcome to come and see without money and without price; but it is impossible in such a case to say how many people came nor to form more than a rough estimate of the crowds as they compare with those of previous years. However, it is the confident statement of those who have attended the past shows that the crowds surpassed any of former times.

It was the first plan of the Portland Union Stock Yards company, under whose auspices the show is held, to show only fat stock and omit breeding classes. This aroused so much feeling that determined and successful efforts were made to show the purebred classes as well.

As a result the show was larger than that of any previous year. Perhaps the dairy divisions were lighter, taken as a whole, but the beef sections have never been so large nor has more quality been shown. The Shorthorns were a show by themselves and the other beef breeds were little behind. The hog show was all quality and the sheep, which it was feared might be light, were there in numbers and of quality representative of the importance of this branch of the industry and the excellence of the products of the northwest. The horse show was a feature by itself and attracted much comment.

Indicating the interest in live stock and their value as meat, the sales recorded excellent prices. Both breeding stock and fat animals sold well. Prices in the fat stock sold were as follows: Steers, 12 to 16.75 cents; wethers, 14 to 17 cents; hogs, 19 to 21 cents.

Special sales recorded higher prices, the steer donated to the Red Cross bringing 80 cents a pound, and the grand champion wether of the show, exhibited by the University of Idaho, bringing 35 cents.

While the Pacific International is primarily a beef cattle show, at which Shorthorns predominate and probably always will, it is also strong in other lines. It is a big hog and sheep show and its dairy department is by no means insignificant.

The Dairy Cattle Show.

This has been an exceptionally hard year for dairy breeders to get the help necessary on their farms, much less to fit cattle for showing, yet this show had one good herd each of Guernseys and Jerseys and no less than eight exhibitors showed Holsteins, though most of them had only small members on exhibition. Besides this the milking Shorthorns were represented with two nice herds and the Red Polled with one.

G. H. Dammeier, of Gresham, Ore., was the Jersey exhibitor. He showed mainly the same animals with which he won in a number of classes at the State fair. Noble Emperor, a son of Golden Fern's Noble, was showing in fine form and was made grand champion bull. Golden Fern's Noble Countess was preferred by the judge for grand champion over some excellent older cows.

The A. L. Gile herd of Guernseys was in good bloom and was a nice even herd throughout. Lucile of Chicona, a cow of very fine dairy type as well as a typical Guernsey, was given the honor of grand champion.

W. B. Ayer's Foothills farm showed a full herd of milking Shorthorns, and Alex Morrison a few. Mr. Morrison won junior championship on Little Bopeep, a very sweet senior heifer calf, carrying considerable flesh. The Ayer entry in that class was a little more leggy, but seemed more of a dairy type. Both herds showed in nice condition.

F. H. Porter's famous herd of Red Polled were the other dual purpose representatives. His good old cow, Pansy, that shows more dairy than beef type, and is a heavy milker, was made female champion as usual.

In the Holstein division competition was sharp in many classes. J. H. Hulbert's La Conner flats herd was in the best bloom and was the only full herd. His old bull, Segis Pontiac Acme, lost championship to C. S. Magee's two-year-old, Sir Nida Yamhill Wayne, but his offspring won both junior championships and the sweet heifer, La Conner Pontiac Grant, was given the grand champion honors. The Magee bull has a splendid front, with deep heart girth and good head, a straight top line, and promises to get still better as he grows older. Hulbert's champion cow had to be good to win over several that were shown, but opinion was well nigh unanimous that she was rightly placed.

DAIRY CATTLE.

The following are the awards in the dairy cattle division at the Pacific International:

Jerseys.

G. H. Dammeier, Gresham, Ore., the only exhibitor, received awards as follows: Bull, three years or over—first on Noble Emperor; senior bull calf—First on Viola's Jolly Jr.

Cow four years old or over—First on Noble Countess of Oakland; three-year-old—First on Oregon Martha Washington; two-year-old—First on Pear's Maid; senior yearing heifer—First and second on Golden Fern's Noble Countess and Seal Lad's Western Princess; junior yearling—First on Oregon Agatha; senior heifer calf—First on Dolly Turner; junior calf—First and second on Martha Tina and Duke's Noble Countess.

Senior and grand champion bull—Noble Emperor; junior champion bull—Viola's Jolly, Jr.; senior champion cow—Noble Countess of Oakland; junior and grand champion cow—Golden Fern's Noble Countess.

Exhibitor's young herd, breeder's young herd and calf herd—First on each. Produce of cow—First.

Guernseys.

A. L. Gile, Chinook, Wash., the only exhibitor, received awards as follows:

Bull, two years and under three—First on Eagle Bird of Edgemoor; yearling—First on Langwater Traveler; senior bull calf—First on Challenge of Edgemoor; junior calf—First and second on Chicona Ambassador and Chicona Beltemere.

Cow four years and over—First on Lucilla of Chicona; three-year-old—First on Algoma of Chicona; two-year-old—First and second on Daisy Bell of Chicona and Kulshan Hayes May Rose; senior yearling heifer—First and second on Lily of Chicona and Sunny Girl of Chicona; junior yearling—First on Merle of Chicona; senior heifer calf—First and second on Sylvia of Chicona and Rosemary of Chicona; junior calf—First and second on Blossom of Chicona and Linda of Chicona.

Senior champion bull—Eagle Bird of Edgemoor; junior and grand champion—Langwater Traveler. Senior and grand champion cow—Lucilla of Chicona; junior champion heifer—Sylvia of Chicona.

Aged herd, young herd and calf herd—First on each. Produce of cow and get of sire—First and second on each.

Holsteins.

Bull, 3 years or over—First, J. H. Hulbert, Mount Vernon, Wash., on Segis Pontiac Acme; second, E. Webb, New Plymouth, Idaho, on Woodrow Wilson Cornucopia; third, W. E. Boner, Joseph, Ore., on Calamity Nonesuch De Kol; fourth, C. H. Marsh, Molalla, Ore., on Pacific Prince DeKol; fifth, Fred A. Ballin, Linnton, Ore., on Sir Bessie Corona. Two-year-old—First, C. S. Magee, McMinnville, Ore., on Sir Nida Yamhill Wayne; second, J. H. Hulbert on Laconner Pontiac King. Yearling—First, J. H. Hulbert on Laconner Pontiac Hartog Lad; second, John Strucken, Portland, Ore., on Sir Bessie Aaggie Tuka. Senior bull calf—First, J. H. Hulbert on Laconner Pontiac Kimx. Junior calf—First, David McKeown, Gresham, Ore., on King Segis Lilith Walker; second and third, J. H. Hulbert on Laconner Pontiac Segis and Laconner Pontiac Sir Hartog; fourth, John Strucken on Sir Bessie Aaggie Fayne.

Cow, 4 years or over—First, David McKeown on Laura Netherland Jobanna. Three-year-old—First, C. S. Magee on Queen Nida Jewel Wayne; second, J. H. Hulbert on Mercedes Pontiac DeKol Elbadje; third, John Strucken on Aaggie Burke Quoque. Two-year-old—First, J. H. Hulbert on Laconner Pontiac Helene; second and fourth, C. S. Magee on Salem White Lady and Pauline DeSanders 3d; third, William McKeown, Gresham, Ore., on Belle Veeman Pauline Paul; fifth, John Strucken on Quoque Aaggie Tuka. Senior yearling heifer—First, J. H. Hulbert on Laconner Pontiac Beatrice; second and third, David McKeown on Countess Cantrillia Yukon and Blossom Veeman Lillith DeKol; fourth, C. S. Magee on Little Sadie Jewel. Junior yearling—First, J. H. Hulbert on Laconner Pontiac Bess; second, C. S. Magee on Nida Jewel Beryl Wayne; third, David McKeown on Lady Dora Johanna 2d. Senior heifer calf—First and second, J. H. Hulbert on Laconner Pontiac Winnie and Laconner Pontiac Netherland Girl; third, David McKeown on Beulah Veeman Segis Walker; fourth, C. S. Magee on Evaline Johanna Wayne DeKol; fifth, William McKeown on Segis Veeman Pauline Walker. Junior calf—First and third, J. H. Hulbert on Laconner Pontiac Grant and Laconner Pontiac Albina Gird; second, David McKeown on Dora Johanna Walker Matador.

Aged herd—First, J. H. Hulbert; second, C. S. Magee. Young herd—First, J. H. Hulbert; second, David McKeown. Calf herd—First, J. H. Hulbert. Produce of cow—First, C. S. Magee; second, J. H. Hulbert; third, David McKeown; fourth and fifth, John Strucken. Get of sire—First and second, J. H. Hulbert; third, C. S. Magee; fourth and fifth, David McKeown.

Senior champion bull—C. S. Magee on Cir Nida Yamhill Wayne. Junior champion bull—J. H. Hulbert on Laconner Pontiac Kim. Grand champion bull—Sir Nida Yamhill Wayne. Senior champion cow—J. H. Hulbert on Laconner Pontiac Helene. Junior champion heifer—J. H. Hulbert on Laconner Pontiac Grant. Grand champion female—Laconner Pontiac Grant.

Milking Shorthorns.

Bull, 3 years or over—First, W. B. Ayer, Foothills Farm, Carlton, Ore., on Imperial's Lad. Yearling—First and third, W. B. Ayer on Foothill Corporal and Foothill's Favorite; second, Alex Morrison, Valley, Wash., on Red Star. Senior bull calf—First and second, W. B. Ayer on Foothill's Conqueror and Foothill's Jester. Junior calf—First and second, W. B. Ayer, on Foothill's Archer and Foothill's Defender.

Cow, 4 years or over—First and second, W. B. Ayer, on Floretta Clay and Miss Audo. Three-year-old—First, W. B. Ayer on Silver Lassie. Two-year-old—First and second, W. B. Ayer on Glenside Rose and Glenside Daphne. Senior yearling heifer — First and second, W. B. Ayer, on Foothill's Daphne and Foothills Laura. Junior yearling—First, W. B. Ayer on Foothill's Mary. Senior heifer calf—First and second, Alex Morrison on Little Bopeep and Louise Folsom; third and fourth, W. B. Ayer on Foothill's Buttercup and Foothill's Jasmine. Junior calf—First and second, W. B. Ayer on Diamond Matrix and Foothill's Cyclamen.

Aged herd and calf herd—W. B. Ayer, first on each. Get of sire and produce of cow—W. B. Ayer, first on each.

Senior champion bull—W. B. Ayer on Imperial Lad, Junior champion bull—W. B. Ayer on Foothills Corporal. Grand champion bull—Imperial Lad. Senior champion cow—W. B. Ayer on Floretta Clay. Junior champion heifer—Alex. Morrison on Little Bopeep. Grand champion cow—Floretta Clay.

Red Polled.

F. H. Porter of Halsey, Ore., the only exhibitor, took awards as follows:

Bull, 2 years and under 3—First on Teddy's Cremo. Senior bull calf—First on Yakima Prince.

Cow, 3 years or over—First on Pansy. Cow, 2 years and under 3—First and second on Tacoma and Hortenetta. Senior yearling heifer—First on Helena. Junior yearling heifer—First on Julia. Senior heifer calf—First and second on Roseleaf and Lydia D. 7th. Junior heifer calf—First on Helena 2d.

Senior champion bull—Teddy's Cremo. Junior champion bull—Yakima Prince. Grand champion bull—Teddy's Cremo. Senior champion cow—Pansy. Junior champon cow—Helena. Grand champion cow—Pansy.

Aged herd, young herd and calf herd—First. Produce of cow—First and second. Get of sire—First and second.

THE HOG SHOW.

Decidedly the best hog show this exposition has ever had greeted the visitors. The hogs and sheep together occupied a tent but very little smaller than the immense stretch of canvas that housed the cattle. Poland Chinas were out in the largest numbers of both hogs and exhibitors, but competition was keen in the Duroc and Chester White breeds, with one partial herd of high quality Berkshires, and the one herd of Hampshires that has made the breed famous in the northwest.

For the first time Idaho met Oregon in Poland China competition, and Idaho's sons gave a good account of themselves. Never was better quality shown here. Howard and Royston, part of their hogs shown in partnership and part separately, were the heaviest winners. It was my desire to see their great boar Sammy meet Ray Fox's Ike Know, that has had two seasons of grand championship winnings, while the Idaho boar has been champion of five shows this year, but Ike Know was not there, and Sammy's place at the top was easy. A. L. Wilson, another Idaho exhibitor, won grand championship on sow. R. W. Hogg won junior champion honors on boar and Royston on sow, while awards were well divided, with Fox and Herbert Willard each winning a good share.

Durocs did not have so many exhibitors, but the show was of very high quality. Robert Nelson of North Yakima, Wash., was the largest exhibitor and heaviest winner, although the Coffin herd, with G. J. Harvey as manager, won junior championship, and, with not many shown, took several blues, and Doerfler brothers and C. S. Magee each got a share.

The Chester Whites also furnished strong competition. Ed Schoel was the largest exhibitor, but the Badger farm and E. E. Brown each had a creditable exhibit, and divided the awards.

Earl Wood was the sole Berkshire exhibitor. His hogs were well fitted, and showed much of quality.

J. M. Fruitt s Hampshires with their odd markings, but with quality equal to the best of any breed, completed this great hog show, and did its full part to make the show great.

The following are the hog awards:

Poland China.

Boar, 2 years old—First, Herbert Willard, Dayton, Ore., on Sky Pilot; second, Frank E. Wray, Silverton, Ore., on Dixie's Jack. Senior yearling boar—First, Howard & Royston, Parma, Idaho, on Sammy; second, Ray J. Fox, Lyons, Ore., on Fox's Model. Junior yearling boar—First, Wilson Bros., Greenleaf, Idaho, on A. Wonder Jr. Senior boar pig—First, Wilson Bros., on Big Bone Wonder; second, Herbert Willard, on Pilot's Model. Junior boar pig—First and second, R. W. Hogg, Salem, Ore., on Silky's Rose and Meddler Rose; third, Frank Denison, Lyons, Ore., on Black Face; fourth and fifth, J. M. Royston estate, on Hobo Sam and Ramblin' Sam.

Sow, 2 years or over—First, Wilson Bros., on Belle Beauty; second, Herbert Willard, on Black Butterfly; third and fourth, R. W. Hogg, on F. M.'s Darkness and Miss H. C. Perfection. Senior yearling sow—First, second and third, Royston estate, on Silver Bell, Lady Roswell and Payette Maid; fourth, Howard & Royston, on Hannah Big Mollie. Junior yearling sow—First, Herbert Willard on Pomona. Senior sow pig—First, Royston estate, on Lady Wonder; second, Herbert Willard, on Pilot Girl; third, R. W. Hogg, on Lily Sunshine; fourth, Ray J. Fox, on Miss Ike Fox; fifth, W. F. Howard, Parma, Idaho, on Clover Blossom. Junior sow pig—First, R. W. Hogg, on Daisy; second, Herbert Willard, on Pilot's Gem; third, fourth and fifth, Royston estate, on Josie, Perfect Belle and Josie 2d.

Senior champion boar—Howard & Royston, on Sammy. Junior champion boar—R. W. Hogg, on Silky's Rose. Grand champion boar—Sammy. Senior champion sow—Wilson Bros., on Belle Beauty. Junior champion sow—Roy-

(Continued on page twenty-seven.)

Question of Drainage

By CARL J. MENZE.

In comparing different farms in the same neighborhood, drained and undrained, from planting to harvesting time, one can note remarkable results on the value of proper drainage of farm lands in localities where there is a heavy rainfall.

It is evident that soils that are drained can be worked earlier in the spring, thus getting the soil in proper shape and the crop planted in time. If the soil is drained there is not much danger of the crop drowning out if there is a wet period after planting time. There were many poor crops caused by this last spring. During the summer time drained soils that have been properly worked outherwise can better withstand a drouth. Soils that are not drained are sour, and sometimes the water stagnates on them in the winter time. They can not be worked so early, are cold and wet, and the soil seems dead. In the summer time they bake and the ground is full of large cracks, and when it is cultivated it breaks into large clods thus preventing capillary attraction.

If the soil is not drained, and it is rolling or hilly, after a heavy rain the water will wash away valuable fertility elements, and after a few heavy rains the top of the hills will be barren.

Observations show conclusively that good drainage is a subject that should be given much attention in successful farm management.

Violets.

Violets are natives to nearly all lands and thrive very generally everywhere, the greater number in the shade, but some in the sun.

Live Stock Needed on Fruit Farm

Will Add to Rather Than Detract From Stability of Fruit Industry

Dairy cows, pigs and poultry have a place on the fruit farms of the northwest. The Farmer is glad to publish the accompanying address on the subject of "Live Stock and the Orchard" at the fruit growers' conference during the National Apple show at Spokane this week.—Editor.

By E. J. IDDINGS

There has been in western agricultural practice a strong tendency for several years toward specialization. In so far as this has meant for more intensive methods and for greater intelligence and skill devoted to the production of special crops or special farm products the movement has been worthy of high commendation. Weaknesses have been found in the system, however, and the trend of today is away from extreme specialization and toward diversification in the handling of the western agricultural farm holdings.

A fundamental difficulty for the man of limited means in any plan of high specialization is that he does not, and probably can not, afford to prepare himself for a season of loss. It is not always entirely well with a specialty. Whether it is with the cereals, or the forage crops of the field, or the crops of the orchard, there comes a season when conditions are unfavorable and the income is small. With the fruit grower, furthermore, there may be the problem of the orchard not yet in bearing, and diversification offers at least part solution for the problem of maintaining the family until the orchard is of bearing age. Diversification, therefore, does not run counter to the best interests of the fruit grower, but, on the other hand, assists in increasing his income and in staving over certain periods when the orchard is young, or when for some reason it does not yield in abundance. A modern slogan that is now quite popular in the agricultural field is the warning not to put all the eggs in one basket.

There are four direct reasons why the orchardist should be able to find a use for live stock in connection with his main business, which is that of fruit production. In the first place the live stock furnishes an additional source of income by furnishing animal products for home consumption. Second, live stock may be made to furnish a market for many of the crops grown by the orchardist between the rows of trees. Some of the crops, such as legumes, corn, grains of various kinds, can, as a rule, be most profitably marketed through live stock. Third, the orchardist needs live stock for the purpose of maintaining soil fertility. We find that more and more fruit men are giving consideration to the question of fertilization, and we all recognize that one of the cheapest and most efficient means of maintaining the soil in the best possible physical condition for maximum production is through the use of farm manures secured through live stock keeping. There is a fourth reason why the orchardist should at this particular time think seriously of live stock production. This is because the leaders of the American government today are calling for more animals and more animal products. The larger share by far of the needs of the nation in this direction will, of course, be taken care of on the ranges and on the farms. The fruit grower, however, can aid materially in this direction, and if a few head of live stock were kept on the average fruit farm of the west the sum total would be of real assistance in meeting the present day needs of America.

Granted that live stock keeping is feasible we may immediately consider the kinds of live stock that are best adapted to the fruit farm. A few horses will always be kept, but many orchardists question the advisability of trying to breed horses in connection wth an orchard plant. Beef cattle are produced most successfully and profitably where there is ample room and cheap grass. In a similar way sheep have in past years been regarded as better adapted to cheaper lands that are devoted largely to grazing purposes. In the last two or three years, however, hundreds of small flocks of sheep have been bought by the farmer, and it will only be a short time, if the present tendency prevails, when sheep on the western farms will be as common as they have been for years on the farms of Ohio and Indiana. There is a possibility of using a small band of sheep in connection with the orchard. For the average man engaged in fruit growing, however, the dairy cow and the brood sow lend themselves better to his needs. These two classes of animals fit well together on the farm, and make a splendid combination for use in connection with the orchard.

Those who are keeping in touch with dairy conditions of today feel that the time is not far distant when dairymen are to be paid well for their work in producing milk and butter fat. Prices have not been adequate, and the dairyman has been losing money for months. The result has been the selling of a large number of dairy cattle, and we will unquestionably soon be face to face with a condition in regard to milk and butter fat production that will mean one of two things—the dairyman will be well paid or the consumer will do without dairy products. I am familiar with one of the well-known irrigated districts of the west where many of the farmers have made a specialty of dairying. Two of the very best herds of that tract that have been tested and have a wide reputation for high production are now offered for sale. When the best dairymen are thinking of quitting the business it is well for us to think seriously of the future. It is my opinion, confirmed by many experienced men with whom I have talked, that now is a mighty good time to get into the dairy business. Good cattle are being sold in many sections at quite reasonable prices, and, as before indicated, there can be no other outcome than such prices for dairy products of all kinds as will enable the dairyman to meet all costs of keeping the herd and have a reasonable profit for his efforts.

In the orchard may be produced corn, peas and oats, and other crops for silage. The production of legume hays such as clover and alfalfa fit in well with the fertilization of the orchard, and give the orchard dairyman the very best roughages for milk production. If the silo is not advisable, root crops can be grown between the tree rows to wonderful advantage. Grains may be purchased or may be grown in connection with the orchard. The combination of legume hay for roughage, of either silage or root crop for succulence, and of our western grown grains for concentrates gives exactly the right kind of ration for heavy milk and butter fat production. The grains that are needed are barley and oats, in addition to bran, which is now one of the relatively cheapest feeds that can be bought in the market.

The dairy cow, therefore, fits in with the orchard plan for between-the-row crops, and not only furnishes the family with highly nutritious foodstuffs, but, in addition, gives the fruit grower a week by week or month by month cash income to supplement the income from fruit production.

Swine fit in well with dairy cattle because one of the best of all feeds for growing pigs is the skimmed milk, which on many farms is a byproduct of the dary business. Fundamentals in successful swine production are pasture for the brood sow and pigs; by-products such as from the dairy for supplementing other rations and for keeping down cost of production, and concentrates for finishing swine for market. All of these feeds, to a limited extent at least, can be produced in connection with the fruit farm. The pasture could be legume pasture, either alfalfa or clover. In addition special between the row crops, such as peas and oats, rape, kale and other crops of a similar nature, can be seeded for hog pasture. Skimmed milk, unsalable fruit and wastes from the household may be used in connection with swine feeding. In addition, there will be needed concentrates for fleshing swine for market. At present prices of feed stuffs, shorts and barley are probably the most economical feed to use in swine feeding. A nitrogenous supplement should be fed in addition, and tankage, skimmed milk or alfalfa hay are feeds valuable in this connection.

There are a large number of questions of breeding, feeding and management that should be considered in connection with dairy cattle and swine for the orchard. Time, however, does not permit extensive treatment of these problems. It is not only true that dairy cattle and swine are best fitted of the farm animals for use in connection with the orchard, but, in addition, it is peculiarly appropriate that these animals be bred at this particular time, since of all the animals of the farm, the dairy cow is most efficient, in that she provides more human food from 100 pounds of feed, through her milk, than can be obtained through the means of any other animal product. Swine rank second in efficiency to the dairy cow.

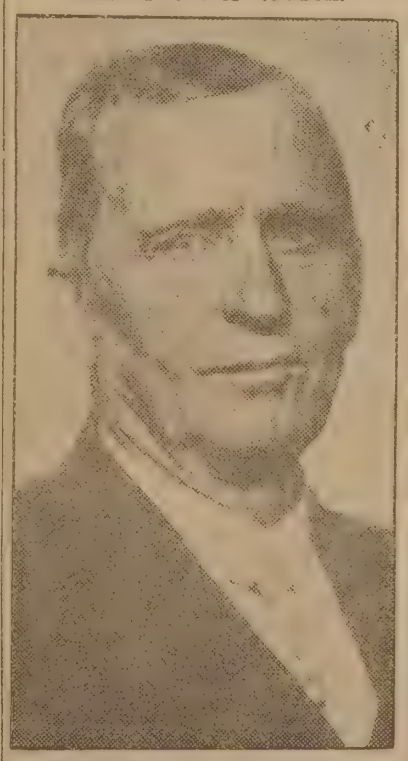
There is one other branch of the live stock industry that should be mentioned at this time. It will not be dwelt upon at length, since, in all probability, special consideration will be given during this week to this, one of the greatest industries of the American farmer. I refer to poultry raising. Poultry should not only be part of the general plan on the fruit farm, but, in addition, should be kept on every American farm. It is rather unfortunate that we find grain farmers as well as fruit growers going to the butcher or the groceryman for poultry that ought to be produced at home. Poultry on the fruit farm will not only furnish the family with foodstuffs among the most nutritious of all that are available for human consumption, but, in addition, if properly handled, can be made to yield during the year no inconsiderable income.

The great fruit industry of the northwest will lose nothing of its importance as a highly organized specialty, but, on the other hand, will be strengthened and rendered more stable and permanent by the adoption of diversification to the extent of live stock keeping along the lines suggested above.

Pass It On.

When you have finished reading this paper please hand it to a neighbor who may be interested in the saving in subscription price resulting from the elimination of the middleman.

Master Oliver Wilson.



Oliver Wilson of Peoria, Ill., whose photograph is shown above, was reelected master of the National Grange, Patrons of Husbandry, at the national convention at St. Louis last week.

Spillman Is Coming

To BeW.S.C. Dean of Agriculture

(Continued from page one.)

and problems. In 1902 he was called into the service of the federal department of agriculture, and there created the branch known as the department of farm management. He was one of the first agricultural experts to recommend the county agricultural agent plan and is sometimes called the father of that system. He is also well known as one of the three rediscoverers of Mendel's law of heredity, which is the basis for practically all the wonderful development of live stock breeding in recent years. The original discoverer of this law died without having given expression to it. Three scientists, one of England, one of Holland and Professor Spillman the other, rediscovered and worked it out almost simultaneously, but without the knowledge of the others.

Already the state college has done great things for the agricultural industry of Washington, and the coming of Professor Spillman promises a new era of development for the farms of the state.

The American Wheat Situation in Brief

We raised this year 1,000,000,000 bushels more of grain and foodstuffs than we raised last year.

Last year we had nearly 1,400,000,000 bushels less grain than we had the year before.

This year's wheat yield is 150,000,000 bushels less than the average yield of last five years.

It is 88,000,000 bushels short of the yield of 1901, or 16 years ago, when we had 25,000,000 or 30,000,000 people less than we have today.

We Have 15,000,000 fewer sheep than we had 14 years ago. We have 8,500,000 fewer head of beef cattle than we had in 1900.

Department of agriculture reported a few weeks ago that there was a decline in the last 12 months of 5,400,000 in the number of hogs.

Aggregate production of wheat and corn for 1916 and 1917, 490,000,000 bushels short of the aggregate production of the two preceding years.

Farm Loans Popular

Farmers Ask for Stupendous Sum

(Continued from page one.)

are further secured by all of the assets of all of the twelve federal land banks. These bonds are being offered to the public at the rate of approximately $3,000,000 per week. The money derived from their sale is loaned to farmers at 5 per cent, the margin of one-half per cent being employed to pay the expenses of the federal land banks.

The volume of business up to November 1 divided by federal land bank districts is as follows:

Federal land bank.	Applications.	Loans closed.
Springfield	$ 4,646,188	$ 304,065
Baltimore	7,567,918	1,193,950
Columbia	19,768,800	629,280
Louisville	12,697,477	1,391,900
New Orleans	13,753,037	1,121,516
St. Louis	8,969,980	882,515
St. Paul	20,364,000	2,726,200
Omaha	14,947,360	1,093,790
Wichita	23,394,049	5,869,700
Houston	19,167,223	729,433
Berkeley	19,210,139	1,248,200
Spokane	28,764,774	3,849,590

The business of the Spokane bank was distributed as follows:

	Applications.	Loans closed.
Idaho	$ 3,718,188	$ 549,595
Montana	9,660,919	1,158,270
Oregon	6,340,778	882,650
Washington	9,044,889	1,259,075

Coming Events.

Washington Irrigation Institute, North Yakima, Dec. 10-11.

Washington State Grain Growers', Shippers' and Millers' association, Pullman, Jan. 3-5.

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Entered as second-class matter January 13, 1916, at the postoffice at Spokane, Washington, under the act of March 3, 1879

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Work, But Not All the Time

There is no place in any legitimate industry for much idleness. On the farm there is perhaps less room for it than in any other line of business, and it is a fact no well informed person will attempt to deny that farmers are the hardest working people on earth.

But too much of anything is too much. Farmers should work, but not all the time. One of the greatest needs in farm life is recreation, and the farmer is not a genuine success who does not secure a reasonable amount of it, even though he accumulates rich acres and good buildings and a good bank account.

The hours of farm work should be shortened except in special seasons, such as seed time and harvest. Eight hours a day in the city is recognized as enough. Perhaps it isn't, but 16 hours a day is too much. In 12 hours any man can use up as much energy as he can recreate in the other 12 of the day. Some men can do more work in six hours than some others can, or will do, in twice that many. When we speak of shortening hours of labor, it should always be with the man in mind who works while he works. Any intelligent man knows when he has done a day's work, and when he has, except in cases of something little short of an emergency, he should declare his day done and allow his mind and body to rest. That rest may be total relaxation, or another form of exercise, but it is essential if the best is to be obtained from life.

Harvest Festival in Church

The Rev. H. E. Greening, pastor of the Methodist church at Kelso, has been studying the community problem in his field for some time. This fall he decided to try to connect the church with the community through a harvest home festival. With the able assistance of County Agriculturist Keyes he secured a number of splendid speakers, and established an excellent display of products from the people in and around Kelso. The potatoes shown were particularly fine.

The festival opened the evening of November 7, and closed Sunday evening, November 11. During that time Hon. Clark V. Savidge, state land commissioner; H. L. Blanchard, assistant superintendent of the western Washington experiment station at Puyallup; Professor Theodore H. Scheffer of the United States biological survey and other prominent men addressed the gatherings at the church.

"It has long been my belief that the scope of the work of the church has been too limited," said Mr. Greening. "The work of the church in a community is the work of every man and woman in the community. Better business, cleaner amusements, more efficiency everywhere, better schools, better farming, more poultry, a higher citizenship—these are problems of the community and the problems which the church must help solve."

Mr. Greening is much encouraged over the response to his efforts.

The Keynote in the Dairy Problem

Commissioner John J. Dillon of the New York state department of foods and markets struck the keynote in the dairy problem when he declared the other day that too much attention is paid by the public to suggestions to reduce the price paid farmers for milk, and not enough to the question of reducing the cost of distribution.

> "You can pay the farmer the price he is asking for milk for the month of November and deliver it, pasteurized, in bottles to families in this city through the stores at 15c a quart for grade 'B' and 13c a quart for grade 'A.' The strange thing about it is that no one engaged in the numerous conferences which are being held in this city suggests that the big milk dealers supply this necessary to the stores and secure the distribution of it to the people at these prices. The only suggestion that seems to emanate from these conferences is to reduce the price paid to the farmer. There is no suggestion to reduce the excessive and extravagant cost of distribution."

Yet all authoritative and distinterested testimony is substantially agreed that the milk producers of the United States have long been underpaid, and the industry has only been maintained by the producers and their families working overtime, by night and by day, on Sundays and holidays, for scanty wages and often for no wages at all.

If the dairy industry were conducted as other industries are run—that is, with an eight or ten hour day, and fair wages for all engaged—the consumers would have to pay a good deal more than they are now paying for milk.

The big distributors found out that fact long ago, and to save themselves got out of the producing end of the business and confined themselves to the more lucrative business of distributing the product.

What a Spectacle!

Trust the average congressman to look out for No. 1.

The new income tax law imposes a special 8 per cent tax on salary and professional incomes in excess of $6000 per year. This bears especially on doctors, lawyers, architects and all salaried men earning more than $6000.

For example, if a doctor earns $7000 per year, he will pay, in addition to the regular income tax, an extra 8 per cent on the $1000 that his $7000 salary runs in excess of $6000.

The Farmer has no objection to that provision of the law. In fact, it thinks the tax is just.

What it does object to is the exemption of congressional salaries from the provisions of this special tax. Senators and representatives are paid a salary of $7500 per year. They are given an outrageous traveling allowance of 20 cents per mile, and have other "perquisites," like an unnecessarily excessive allowance for stationery. In one way and another the congressmen from the Pacific coast draw about $10,000 annually out of the government.

But they voted themselves an exemption from the 8 per cent income tax.

And what is their "explanation"? It will make you smile. Here it is, as expounded by Claude Kitchin, chairman of the ways and means committee of the house:

That there is a difference in principle in levying an excess profits tax on the business, trade, profession or occupation organized or carried on for private profits from levying such a tax on the salary of an office established and conducted for government purposes—the service going to the benefit of the government, of the public.

As to whether these services are beneficial in all cases to the public there is wide room for doubt. But there can be no question that the salary in every instance is for the benefit of the senator or congressman, and it is the salary, not the services, that is freed from the tax. The member, not the public, receives all the benefits there.

What a spectacle of high official tax-dodging, and what a shifty, tricky, gauzy excuse!

Washington Gleanings

Pupils of the Wenatchee schools earned $28,766 in cash helping with the apple harvest during the four weeks vacation granted for the purpose.

Dairy husbandry is the latest course to be added to the correspondence course curriculum of the extension service of Washington State college.

M. L. Dean, state commissioner of horticulture, advises apple growers to secure storage for their fruit and hold it as apples are certain to bring good prices throughout the coming year.

A third sugar-beet factory for the Yakima valley to be built in Sunnyside is almost a certainty. The first near North Yakima has been turning out from 1000 to 1500 bags daily for three weeks.

J. H. Blane sold a 28-acre tract just west of Palouse known as the Swanson place, to A. Diebel for $4400. Mr. Blane in turn bought the W. A. Linn farm of 93 acres two miles northwest of Palouse for $9000.

Superintendent C. E. Beach of Olympia city schools says that the children and teachers are enthusiastic over the plan to dry fruit for the allies, and some people outside the schools have offered fruit for the purpose.

During the quarter ending September 30, according to the reports filed with C. W. Clausen, state auditor, no less than 890 wild animals were killed in the various counties on which bounties amounting to $2217 were paid.

According to figures given out by the state commissioner of agriculture the North Yakima state fair fund has a balance on hand of $25,358 out of the appropriation of $28,880 made by the last legislature for the biennium.

John R. Holmes of Seattle has purchased the Fischer Brothers alfalfa ranch on the north side of the Columbia above Wahluke. The ranch consists of 120 acres, about 40 acres of which is seeded to alfalfa. The consideration was $20,000.

The Carnation Milk Products company of Seattle has been notified that its herd of purebred Holsteins sent to the National Dairy show at Columbus, Ohio, had taken ribbons in every class in which there had been entries. In all, the herd captured 22 ribbons.

Field Manager B. F. Brown of the Associated Fruit and Vegetable Growers estimates Walla Walla's 1917 apple crop at 650 cars. This will make 1917 the heaviest year for apple production that the valley has seen, being 50 per cent larger than last season.

Smut will be discussed by the farmers of Whitman, Spokane, Asotin and Lincoln counties in community meetings to be arranged by the division of plant pathology of the United States department of agriculture, in cooperation with the State College of Washington.

What Others Say

Monitor, Monroe: In classic days it was the cakling of a flock of geese that saved Rome; who can tell that a drove of squealing hogs will not save the allies?

Review, Toppenish: Altogether the coming of the sugar beet bids fair to prove of the utmost benefit to the valley farmers. A new industry has been added to the list of income producers, and the fact that a staple and inexhaustible market is provided for the crop is a consideration of utmost importance.

News, Bremerton: The boy or girl who raises a pig, in the backyard, if necessary, on table refuse and other odds and ends of the place, and sends that pig to soldiers on the front line of democracy's defense, or provides it for home consumption, is in a very adequate way taking the place of a man on the battlefield.

Mason County Courier, Shelton: There is only one immediate solution to our short supply of meat for export, pending the increase in our herds and flocks, which will take years. During the course of the war, we can, just as with cereals, reduce the consumption and eliminate the waste, particularly among those classes which can best afford it. In the meantime, in order to protect all of our people, we must carefully control our meat exports in order that the people shall not be denied this prime necessity of life.

Meat Packers Should Be Curbed

Farmers Would Respond With Increased Production of Meat Animals

There is much reason and justice in this letter from Joe Shelby of Colfax:

"The government has set a minimum of 15½ cents on hogs. The packers were paying 17 cents at the time, but immediately hogs dropped to 15 cents here. But meat still sells at 38 to 50 cents per pound. I can't see where it will stimulate production to see yourself losing money and the other fellow reaping a harvest. When feed was $20 to $25 per ton and hogs were 7 to 10 cents, you got some return for your effort, but with feed two and one-half times as high and hogs only ½ cent higher, it does not look stimulating to me. When hogs were 10 cents there was a difference of 17 cents between the hog and the raised product, but now there is a difference of 30 cents. The middlemen claim an advance of one-third in their expenses. We will concede that, but the same with the farmer, and their feed is two and one-half times higher. But they proceed to name the farmer a price only one-half of the extra cost, while the other fellow's price is two times the extra cost."

Unless the government holds the packers down to moderate profits great dissatisfaction will develop in the minds of producers and consumers. But the government promises to curb the packers and there is every reason to believe that it is in earnest.

Joseph P. Cotton of Chicago, meat and packing house controller for Mr. Hoover, is convinced that the present profits of the packing houses can be cut a possible 50 per cent without material damage to their business, and bases that belief on information gained by his experts, who have been going over the books of the big Chicago packers for more than a month.

We think the spirit of the producers generally is well expressed in these remarks from the report of the commission appointed by Food Administrator Hoover to determine the cost of hog production, in terms of bushels of corn, and to advise the government as to what is needed to stimulate hog raising in the United States:

"We believe that the sentiment of the swine producer is overwhelmingly opposed to any unjust profiteering arrangement that will be hurtful to the great rank and file of consuming interests. And, further, that all the producer asks is a sensibly sound, economic arrangement that he may secure for his efforts expended in the production of pork simply the cost of production plus a fair profit. In other words, a price for his hogs that shall meet our president's definition of a just price."

The report of this able commission continues:

"There is a big tendency to market potential breeding stock—breeding stock that is essential to further increase. The feeling of unrest and uncertainty on the part of the producer is greatly accentuated by the recent marked drop in price of live hogs. First and above all, confidence should be instilled so that producers will feel that when their hogs are finished for market they will sell at a fair price—at least sufficient to cover the actual cost of production and a fair profi.

"While hog production for the 10 years ended with 1916 has been maintained on a ratio of 11.67 bushels of corn to 100 pounds of hog, we believe, when all the losses are taken in account, that it is doubtful whether there has been a profit on the business with this ratio on the average.

"The normal number of hogs in the United States is approximately 65,000,000, as contrasted with the present supply of not more than 60,000,000. To bring swine production back to normal the commission believes that it will require a stimulative market which will pay at least the equivalent value of 13.3 bushels of corn for 100 pounds of average hog.

"We further believe that the equivalent value of at least 14.2 bushels of corn must be paid for 100 pounds of average hog in order that production may be stimulated 15 per cent above the normal.

"The best emergency method of stabilizing the market and preventing the premature marketing of light, unfinished pigs and breeding stock, we firmly believe, is to establish immediately a minimum price for good to select butcher hogs of $16 per hundred pounds on the Chicago market. For the purpose of immediately stimulating production of swine for the next year we recommend that a ratio be immediately established and announced at once, to go into effect February 1, 1918.

"Steps should also be taken to prevent, as far as possible, any large or sudden change in prices when they go from the minimum basis to the ratio basis. This minimum price should also apply to other markets and to other classes of market hogs with the usual or normal differentials.

"We recommend that the question of price range between the various market classes and grades of hogs should be determined by a suitable committee of representative packers, live stock commission men and representatives of this commission, the same to be appointed by Mr. Hoover."

Community Fair Held at Church

First One South Bend Has Had for Nineteen Years

By MRS. WINNIFRED BUCKINGHAM.

The community fair at the Congregational church of South Bend, Wash., was a complete success. The weather was ideal and the attendance large and enthusiastic. This has been the first agricultural fair in this city since 1898. The idea was put into shape by the county agriculturist, George C. Nelson. The premium list was divided into three classes, agriculture, home economics and manual training, and poultry and rabbits. In the agricultural class there were displays of vegetables, fruit and flowers. The youngest exhibitor was a boy 9 years old, who raised a pumpkin, and the oldest was a man, 93, who raised the best cabbage.

The judges were Mrs. Egbert, Misses Deach and Phail, and Messrs. W. E. Edwards, R. E. Schenk and I. A. Johnson, all of South Bend, and E. W. Lilly of Mento, who awarded prizes and ribbons to the following:

Agricultural Class.

E. A. Seaborg, Frank Nettleton, Kenneth Eichener, William Amlaw, John Walters, Mrs. Anna Gant, Mrs. Loveless, L. W. Homan, E. N. Somers, Mrs. E. N. Somers, Mrs. A. C. Ackley, Fred Eichner.

Domestic Science; Manual Training.

Mrs. Otto Roessler, Mrs. John Ackley, Mrs. E. N. Somers, Mrs. Comfort, Mrs. Gibbs, Mrs. Cundall, Mrs. Palmer, Mrs. Edward Buckingham, Mrs. Colwell, Mrs. Elbert Pedersen, Mrs. G. A. Tripp, Mrs. Hawkins, Marion Ackley, Mrs. Douglas, Frances Ackley, Effie Nelson, Kenneth Everett, Elroy Gibbs.

Poultry and Rabbits.

Kenneth Eichner, J. H. Rickert, Rev. Joseph Weiss, Fred Eichner, D. Rickert, Kenneth Everett, Ben Gibbs, Melvin Raybell, Rev. H. W. Michener, Elizabeth Laveless, Ercell Leach, Clara Weatherwax, Elizabeth Weiss, Eddie Pederson, Arthur McAminch, and Russel Bond.

The wonderful display of canned fruit, vegetables and meats, including fish, showed that the women of the place have been doing their bit in conserving food. One exhibit comprised 20 different varieties of vegetables. On one long table were the war breads, economy cakes, doughnuts, cookies, white breads and candy. For the benefit of the readers who might wish to try the prize-winning recipes, they are printed below:

War Bread.

Three cupfuls rolled oats in one quart of boiling water. When lukewarm add one cake compressed yeast, one tablespoonful each of salt and sugar, a little lard, and make into a stiff mass with white flour. When light, make into loaves. When these are light, bake. This bread contains one-third oats and two-thirds wheat, the proportion allowed in using wheat flour.

Economy Chocolate Cake.

Two squares of chocolate in one cupful of hot milk, one cupful of sugar, one tablespoonful crisco, one egg, one tablespoonful soda, one and one-half cupfuls of flour, flavor.

The display of fancy work was beautiful and would have filled a large room.

The poultry and rabbits in division three were housed outside of the church basement in a series of suitable coops under canvass. There were some fine birds from egg laying strains. The numerous pens of rabbits showed that the boys as well as some of the older people are raising rabbits for meat.

The merchants of the city very generously donated all of the prizes which were well worth working for.

E. W. Lilly of Menlo judged the first division exhibits, Mrs. M. D. Egbert judged the flowers, W. E. Edwards awarded the blue ribbons in the manual training department, Miss Deach and Miss Phail, two domestic science teachers, acted as judges in the home economics display, while R. E. Short and I. A. Johnson acted in like capacity in the third division.

T. E. Pearce, the Edison dealer, loaned a fine Edison and records to furnish music for the occasion.

Ice cream and cookies were served,



William Amlaw, 93 years old, who won the prize for raising the best cabbage exhibited at the Community fair at South Bend.

also sandwiches and coffee to those wishing a lunch.

The fair lasted for two days, and although the object was not financial, the church made $30 after all bills had been paid. The entrance fees were 10 and 15 cents. The church families that made thi sa success were Weisses, Nettletons, Eichners, Ackleys, Raybells, Somers, McAninches, Browns, Sarlesses and Buckinghams. Everybody is planning for a bigger, better fair next year.

Tractor for Small Farm



In answer to the question as to how small a tractor can be used in farm work, N. W. Roberts of Fulton, N. Y., writes that he has only nine acres of muck land upon which he raises celery, onions and lettuce. Last spring he bought a 5-10 H. P. tractor. Here are his own words:

"I have used this tractor to do all my plowing and fitting the ground, and I am so well pleased with it am wondering why I did not get it before now. It's cheaper to me than a team of horses for the reason its first cost is less than the upkeep. I used kerosene and eight or nine gallons a day was all it would use. I am using the tractor now to haul my crops to the road and loading on my truck to take to the car to ship. So you can see I have no horses to feed. I think there is a tractor for every size farm a man has. This nine acres I have is very soft ground, very much different than upland, but with the extra rims can get on to work as soon as if I had a team."

Ruff Community Fair

At the Ruff Community fair in Grant county, held October 30, prizes were awarded to Mrs. Mueller on loaf of bread; Clarence Aherin, Jacob Schmidt and Jacob Oster, potatoes; Andrew Jantz, apples; Fred Schmauder, wheat; Louise Becker, pie; Thelma Griggs, cake; Katie E. Kagele, jelly and fruit; Mrs. Jacob Jantz, canned fruit; Leona Borgens, child's needlework; Mrs. J. T. Swigart, fancy quilt; Helena Ewert, sofa pillows; Mrs. J. R. Wolford, embroidery; Miss Katie Goede, Hardanger embroidery; Mrs. Roy Swigert, crocheting; Mary Oswald, map of state of Washington; Margaret Zickler, drawing; Lydia Schell, free hand drawing in second and third grades; Bennie Schell, drawing in first grade; Mark Davis, child's toy exhibits.

Prizes on best school exhibits went to Districts No. 17 and No. 35, Lizzie Loeffelbein took the prize on basketry in District No. 35 and Mary Oswald in District 31; Robert Ramm, on map of Grant county.

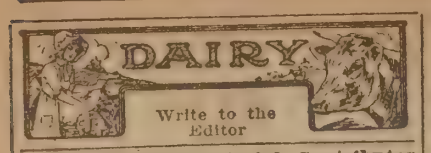
The prizes for the tallest man went to William Agte and the tallest lady, Mrs. Jacob Ruff; the largest family, Mrs. Louise Mueller; best baby girl, Leora Keller; best baby boy, Edwin Beck.

Washington Irrigation Institute.

The tentative program for the meeting of the Washington Irrigation institute to be held at North Yakima December 10-11 has been announced by E. F. Benson, state commissioner of agriculture. Martin Chase, state hydraulic engineer, will deliver an important address on the water code and its administration. President Henry Suzzalo of the state university, Dr. D. T. Widtsoe, president of the University of Utah, and Professors J. S. Caldwell and O. L. Waller, of the State College of Washington will be among other speakers.

What the Other Fellow Does.

"One of the things I like about the Washington Farmer," said R. P. Farris of Harwood, Yakima county, "is the information it gives us concerning what the 'other fellow' is doing. If I know something of the amount of produce grown in the northwest, especially in competitive sections, how the growers are handling it and the best field methods they have employed, I will use my own judgment as to what is good and what is not for my condition here."



A. B. NYSTROM, Editorial Contributor

FLOORS ARE NEEDED.

Cold and Wet Should Be Avoided.

One of the things that should always be considered when a barn for any kind of live stock is being planned is the drainage. A muddy, sloppy barnyard is one of the things that drives farm boys to the city, and that reduces the profit from stock. This is especially true of a dairy barn.

Dairy cows must of necessity be given considerable time in the open. It is inadvisable to keep them in the barn closely, even though barn space and feed is plentiful. But they should not be allowed to stand or lie in mud or filth or on the cold ground. Energy that is used in warming up the ground that a cow lies on is taken away from milk production.

Both a roof and a floor are required to keep the cow's resting place dry, and it will always pay to provide both. Even with animals kept solely for meat production, a shed with some kind of floor to keep a comfortable resting place for them will pay dividends in winter weather. And in addition to the floor, a little use of waste roughage for bedding, and a little use of the dung fork in keeping it clean, will increase the profit from the herd.

Jefferson County Cows.

During the month of October, there were 285 cows tested in the Jefferson County (Ore.) Cow Testing association, according to the report of Ralph Erskine, the official tester. The average pounds of milk was 668, average pounds of butterfat, 33.62, and the average cost of feed $4.27. There were only a few of the members who had begun a heavy grain ration. This is due to the fact that there is considerable green feed, such as corn and maybe tops as well as other root crops being fed. Only two have begun on silage. H. L. Hansen is the owner of the Eunice, the purebred Holstein, which produced 83.92 pounds of butterfat during the month.

Holger Heifers Make Big Records.

McArthur & Stauff are now testing six 2-year-old daughters of their great Jersey sire, Holger, senior herd bull on their farm at Rickreall, Ore., all of which promise to make good records. They believe fully in register and merit testing and every heifer is put on official test after dropping her first calf. In addition to those in their own herd, a number of Holger's daughters in other herds have finished or are making good records and the gentlemen are naturally gratified over the records being made, as they expect over 15 of his daughters to be in the register of merit before the end of another year. The following are the cows referred to, in other herds:

Olalla, a cow owned by Thomas Williams of Forest Grove, Ore., has just completed her register of merit test as a junior 3-year-old with a record of 10,510.7 pounds of milk and 766.58 pounds of butter; average test, 6.18 per cent. Mr. Williams has two other daughters of the same bull that are about to finish their tests as 3-year-olds with records of approximately 675 pounds and 625 pounds of butter respectively. All three of these heifers were purchased at the John F. Forbis sale in 1914.

D. G. Lilly of Forest Grove also purchased two daughters of Holger at this sale and has just put them through their first official tests. Jersey Compass, the elder of these heifers, made 452 pounds butter as a junior 3-year-old, while Queen Bodoura finished her test with 409 pounds as a junior 2-year-old.

Veterinary

Dr. S. B. Nelson

Red Water in Cattle—Is there any cure for red water in cattle? Would it be advisable to try to raise a heifer calf six months old that has it?

T. N., Mount Vernon, Wash.

At the present time there is no specific cure for red water in cattle. Dr. J. W. Kalkus, veterinarian at the experiment station at Pullman, Wash., has been working with this disease for a number of years. To the present time he has not published any cure for the disease. I personally doubt the advisability for you to raise a heifer calf 6 months old that has the disease. I do not believe she will outgrow it. You better fatten her and sell her for veal. The meat is unsaleable for beef.

May Be Catarrah—I have a 12-year-old mare that raised a colt this summer. She is poor and has no ambition. She has had good pasture, hay and oats since she foaled. She scratches her tail a good deal.

W. E. I., Toledo, Wash.

It may be that your mare is suffering from a catarrhal condition of the intestines. I would recommend that you place the mare on half feed for a cuple of weeks. Then gradually increase the feed if you find it necessary. This applies both to the grain and the hay. At the same time give her the following powder, composed of iron sulphate, two ounces; powdered gentian, four ounces; powdered ginger, two ounces; artificial Carlsbad salts, eight ounces. Mix into a powder and give one heaping tablespoonful on feed morning and evening.

Mare Troubled With Worms—I have a sucking colt and also a mare that are troubled with long white worms.

J. M. K., Stevensville, Mont.

I would recommend that you cut down the mare's feed about one-third, then give from two to three drachms of iron sulphate on her grain feed night and morning for a week. The next morning give her one quart of raw linseed oil into which an ounce and a half of turpentine has been thoroughly shaken. The sucking colt may be better treated by giving every three or four days a couple of ounces of raw linseed oil in which a teaspoonful of turpentine has been thoroughly stirred.

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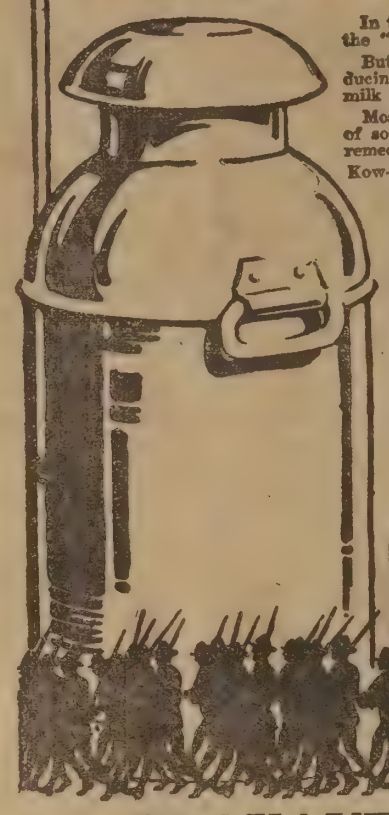
Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

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MILK and WAR TIME



In these days of high prices for dairy products, the "poor milker" is more than ever a liability.

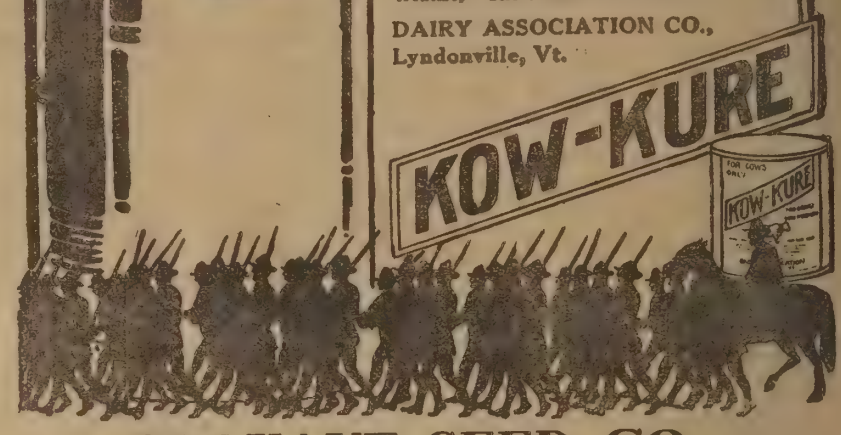
But before you sell the cow that is not producing well, try to improve her condition. Her milk value is much greater than her meat value.

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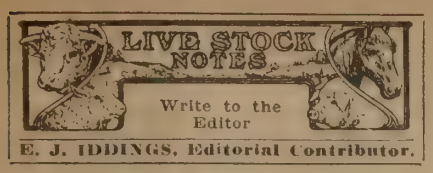
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E. J. IDDINGS, Editorial Contributor.

Meat Headquarters

Opened Under Food Control Act

With the licensing of packers November 1 under the Food Control act, the meat division of the United States food administration opened headquarters at Chicago. J. P. Cotton, of New York city, has been appointed head of this division. Among his assistants is Dana Durand, a statistical and accounting expert of the University of Minnesota. Other expert assistants are to be appointed. These men will work in cooperation with Harry A. Wheeler, federal food administrator of Illinois.

Several advisory committees are being selected to represent the various branches of the meat-producing industry and also the consuming public.

The committee on hogs is composed of H. C. Wallace, Des Moines, E. Z. Russell, Omaha; W. M. McFadden, Chicago; John M. Evvard, Iowa Agricultural college, Ames; and Wyman Lovejoy, Roscoe, Ill.

The committee on cattle includes E. L. Burke, Omaha; Dwight B. Heard, Phoenix, Arizona; Alfred S. Gage, San Antonio, Texas; Warren T. McCray, Kentland, Indiana; W. R. Stubbs, Lawrence, Kansas, and W. A. Cochell, Kansas State Agricultural college, Manhattan.

Another committee, appointed to study the cost of producing swine and methods for stimulating their production, includes John M. Evvard: J. H. Skinner, Purdue university, Lafayette, Indiana; N. H. Gentry, Sedalia, Missouri; Dr. Tait Butler, Birmingham, Alabama; L. W. Funk, Bloomington, Illinois; E. M. Burdick, Herman, Nebraska, and W. A. Williams, Marlow, Oklahoma.

All packing and slaughter houses in the United States doing an annual business of more than $100,000 went under license control November 1. Protecting the welfare of the grower and consumer, together with providing only a fair profit for the packer, are among the objects aimed at in the new governmental regulations.

It is not the intention of the food administration to fix prices for which farmers shall sell their stock. Through the direction of export purchases of beef and pork products, however, it will use its influences to stabilize meat prices and to support remunerative prices to the farmer.

Where Hundreds of Beef Cattle Are Fed



The above photograph gives a faint idea of the big Warren, Dixon and McDowell ranch, near Prineville, Ore., where many hundreds of beef cattle are fed every winter on the succulent alfalfa raised on the ranch. The silo, looming up over the big barn, holds 300 tons and is believed to be decidedly the largest silo in the state. H. A.

Herefords Are Sold

Purebred Stock Go to Many Points

The Herefore sale at the Northwest Live Stock show at Lewiston, Idaho, Nov. 12, resulted in fair values being received and buyers getting the worth of their money. Some of the offerings were not particularly well fitted, but they were generally in good condition, good individuals and of excellent breeding. Fifty-two head went through the ring for a total of $13,930. The females averaged higher than the bulls, although the two high animals were bulls. Gray Field Prince, a classy, well-bred consignment of J. D. Miles, topped the sale, going to the Spokane Union Stock Yards for $630. Debonair 68th, a Chandler consignment, carrying a lot of Beau Brummel blood, went to George Finney of Woodland, Idaho, for $550, and the other Miles consignment went to the Madden estate at Lewiston for $510.

No one buyer took any large number and the offerings were well distributed over Idaho, Washington, Montana and Oregon, the larger number remaining in the home state. Colonel Earl F. Gartin of Burley made his initial bow to the northwest on the auction block. He made a very favorable impression doing work and getting every cent possible. Harry Cranke worked in the ring in his usual inimitable efficient manner. The following is a complete report of animals sold, buyers and prices paid:

Bull consigned by A. B. Cook, Townsend, Montana:
Montana Fairfax 5th, born April 5, 1915, sold to Ben Reeves, Forest, Idaho ... $175
Females consigned by A. B. Cook:
Beau Banner 7th, born Sept. 17, 1916, G. D. Riggs, Lewiston, Idaho ... 200
Lady French, born April 4, 1915, Curtis J. Miller, Nez Perce, Idaho ... $330
Eleanor Fairfax, born March 21, 1915, C. A. Hunter, Wallowa, Ore. ... 450
Lady Perfection 14th, born Dec. 20, 1915, Curtis J. Miller ... 300
Lady Perfection 6th, born Jan. 15, 1915, C. A. Hunter ... 340
Bulls consigned by George Chandler, Baker, Ore.
Debonair 63d, born March 29, 1916, J. E. Baxter, Joseph, Ore. ... 325
Debonair 68th, born April 9, 1916, George Finney, Woodland, Idaho. ... 550
Debonair 71st, born April 27, 1916, J. E. Baxter ... 305
Debonair 76th, born May 9, 1916, George Behean, Whitebird, Idaho ... 340
Females consigned by George Chandler:
Menona, born April 27, 1916, Arthur P. Mundt, Winona, Idaho ... 205
Lily Debonair 3d, born May 9, 1916, Austin Garsuch, Winona, Idaho ... 280
Lady Hesiod, born November 3, 1915, George Finney ... 250
Blue Girl, born October 23, 1915, George Finney ... 250
Bright Girl, born October 15, 1915, George Finney ... 210
Bulls consigned by Hastings & Hover, Phillipsburg, Montana:
Camas Prince 7th, born May 20, 1916, J. E. Baxter ... 190
Camas Prince 8th, born April 15, 1917, R. J. Favor, Jerry, Wash. ... 155
Camas Prince 9th, born April 10, 1917, J. S. Madden, Lewiston, Idaho ... 155
Camas Prince 10th, born April 13, 1917, J. J. Sharp, Ellensburg, Wash. ... 165
Bulls consigned by A. O. Huntley, Cuprum, Idaho:
Woodrow, born March 4, 1913, Herbert Chandler, Baker, Ore. ... 280
Laddie Mode, born April 19, 1915, Charles Warren, Bear, Idaho ... 350
Woodrow Floss, Born November 9, 1916, P. H. Adams, Ellensburg, Wash. ... 230
Woodrow Blossom, born June 5, 1916, E. S. Sweet, Grangeville, Idaho ... 160
Bonnie Walker, Born May 20, 1916, J. J. Sharp ... 150
Bonnie Malheur, born March 20, 1916, T. S. Tippett, Enterprise, Ore. ... 185
Females consigned by A. O. Huntley:
Racine Wood, born May 20, 1916, Rimrock Stock Farm, Uniontown, Wash.. 175
Excell Wood, born April 14, 1916, Rimrock Stock Farm ... 200
Succession Wood, born April 18, 1916, G. F. Reinhardt, Nez Perce, Idaho .. 180
Kasan Heritage, born October 16, 1915, Rimrock Stock Farm ... 180
Kitty Wood, born March 3, 1916, Rimrock Stock Farm ... 235
Minneha Wood, born April 17, 1916, George F. Reinhardt ... 220
Caress Wood, born March 22, 1916, George F. Reinhardt ... 300
Vinette, born July 28, 1910, and calf, P. Chamberlain, Boles, Idaho ... 440
Molly, born March 29, 1915, P. Chamberlain ... 300
Lou Woodrow, born July 9, 1915, Curtis J. Miller ... 315
Joy Heritage, born October 20, 1915, P. Chamberlain ... 300
Bulls consigned by J. D. Miles, Livingston, Mont.
Gray Field Prince, born January 10, 1916, Spokane Union Stock Yards ... 630
Gray Field Ladd, born September 21, 1915, Madden Estate, Lewiston, Idaho 510
Consigned by Platt Brothers, Genesee, Idaho:
Spellbinder 8th, born May 29, 1916, Seth Jones, Grangeville, Idaho ... 275
Bonnie Fairfax, born June 27, 1916, Arthur P. Mundt ... 275
Bull consigned by Henry Thiessen, Sweetwater, Idaho:
Rex Donald 43d, born May 9, 1916, J. A. Danielson, Waitsburg, Wash. ... 300
Female consigned by University of Idaho:
Elvina, born October 22, 1914, and calf, M. E. Sewell, Lucile, Idaho ... 400
Bulls consigned by L. L. Young, Nampa, Idaho:
Commander, born July 2, 1916, C. E. Maynard, Colton, Wash. ... 200
Winslow, born June 20, 1916, J. D. Miles, Livingston, Mont ... 205
Sir Good, born July 3, 1916, A. D. Carr, Orofino, Idaho ... 160
John, born June 16, 1916, James S. Madden ... 250
Highland Ladd, born April 17, 1916, A. W. Rhett, Lucile, Idaho ... 205
Sir Goodfellow, born July 3, 1916, George Behean ... 335
Beau Meadow, born August 19, 1916, Edgar G. Fry, Ferdinand, Idaho ... 225
Beau E, born August 22, 1916, J. A. Barkley, Lewiston, Idaho ... 195
Beau Light, born May 11, 1916, J. E. Baxter ... 230
Beau L. E. J. Howard, Gifford, Idaho.. 160
Thirty bulls sold for $7320, average .$244.00
Twenty-two cows sold for $6610, average ... 300.45
Fifty-two animals sold for $13,930, average ... 267.88

Land Bank Does Big Business.

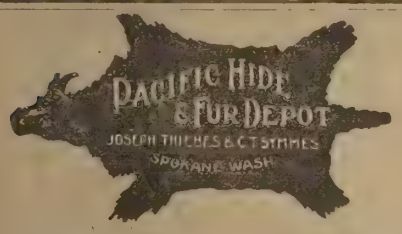
A report issued by the federal farm loan board indicates that up to November 1 farm loan bonds to the amount of $21,500,000 had been disposed of to investors of the United States.

These bonds bear 4½ per cent interest and are entirely tax free. They are secured by the first mortgages which the farmers give to secure loans made to them by the 12 federal land banks, and they are further secured by all of the assets of all of the 12 federal land banks. These bonds are being offered to the public at the rate of approximately $2,000,000 per week. The money derived from their sale is loaned to farmers at 5 per cent, the margin of one-half per cent being employed to pay the expenses of the federal land banks.



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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

All Northwest Contest

The final report of the all-northwest laying contest has been received. The contest began October 15, 1916, and ended October 14, 1917. There were 200 pens of five fowls in the contest. The 20 pens making the highest records for the 12 months were as follows:

	Eggs.
J. A. Hanson, Corvallis, W. Leghorns..	971
P. W. Harries, Seattle, W. Leghorns...	952
J. R. McRae, Miuwaukie, Ore., W. Leghorns	937
A. Unsworth, Sardis, B. C., W. Leghorns	908
Valley Farm, Texas, W. Leghorns....	856
J. D. Balmat, Spokane, W. Leghorns...	859
C. O. Engel, Seattle, W. Leghorns.....	820
L. F. Solly, Westholme, B. C., W. Leghorns	824
Charles Hudson, Escondido, Cal., W. Leghorns	809
Bliss & Bliss, Southworth, Wn., B. Rocks	807
Mrs. T. M. Dennis, Wenatchee, Wn., Salmon Faverolles	790
W. C. Thurlow, Fairview, Ore., W. Leghorns	789
C. Daniels & Sons, Hoquiam, Wn., W. Rocks	786
H. S. Leighty, Seattle, Barred Rocks...	772
C. D. Coolidge, La Grande, Ore., W. Leghorns	766
J. H. Haskell, Harstine, Wn., W. Leghorns	765
W. J. Loveland, Roy, Wn., W. Leghorns	763
K. Hammerbacker, Grants Pass, Ore., W. Leghorns	751
Oregon Agricultural college, B. Rocks.	748
J. H. Kingsbury, Twin Falls, Idaho, R. I. Whites	747
Ill-A-Hee, Grants Pass, Ore., B. Rocks.	741

These records are not very high, though they are the highest 20 out of the 200. An epidemic of colds and chickenpox seriously interfered with the success of the contest and caused a high mortality among the fowls.

The first three or four made fairly creditable records. Mr. Hanson's pen, with one or two exceptions, has been in the lead every month of the contest. It has been a rather close race between the first three.

In individual records hen 270 of the pen of P. W. Harries was first with 237 eggs, Auburn Poultry farm, Auburn, Wash., second with 233 eggs, P. B. Towne, Tekoa, Wash., third with 230. J. A. Hanson fourth with 224 and J. R. McRae fifth with 221. In all there were 16 200-egg hens in the lot.

J. D.

The Storrs Contest

The sixth annual egg laying contest at the Storrs (Conn.) Agricultural college ended October 31. A pen of Barred Plymouth Rocks owned by the Applecock farm of New Hampshire was the winner. This pen laid 2119 eggs, an average of 211.9 per hen. A pen of White Leghorns won second, with an average of 209 eggs. Last year Wyandottes won first and second and Oregons third. None of the pens this year equaled the record made by the pen of Oregons last year, the record of the latter being 212.2 eggs. Professionally it is to be regretted that the records did not show an increase this year over last year, but privately we feel like congratulating the Oregons that they would have won first place if they had been in the contest this year.

The average of all the pens in the contest, 1000 in number, was 163.38 eggs a hen. The lowest record was 93.7 per hen. Last year the average of all the pens was 162.

The English breeder, Tom Barron, is low down in the list this year. Barron usually figures among the winners. He has been in all the contests and has won more than any other breeder. His stock has made a wonderful record. He can not always expect to win. Winning egg layers are not made, they are born, and the best expert can not always tell which is the born heavy layer or the poor layer. There is an element of chance involved. Good laying qualities are inherited, and the good layers usually come from good layers, but not always.

J. D.

The Hen Wardrobe

This is the time of the year, and this year of all years, when the keeper of poultry is apt to get cold feet. The year-old and older hens are molting and taking their annual rest. This vacation business has not been bred out of the hen. She needs her rest period or her shopping period when she furnishes herself with her annual supply of clothes. The rooster does not buy the dress ready made for the spouse; she must make her own dress, and make it out of the material that at other seasons she makes into eggs. She can not hire a dressmaker; she must replenish her own wardrobe. It was probably the same with humans, or with the human progenitors, if it is true that humans came from the ape, for the ape at that time, or before time was, certainly did not get her styles from Paris, and did not have a husband who could trade off a city lot for a new fall dress or a Liberty bond for a pair of high-heel shoes. The human progenitor, if we are correctly informed as to the species, undoubtedly provided her own wardrobe, her own dresses, out of the meat of her own body, like the hen of today. Possibly in the far distant future, in the course of evolution, the hen may become so civilized, so evolved, that it will not be necessary for her to draw upon the substance of her body to make clothes for herself, but will be able to draw upon the pocketbook of her husband rooster, who will be glad to have the change of dress made over night and to keep her decently clad every day in the year. That would eliminate the molting season, and with it the cold feet of the poultry keeper.

J. D.

Removable Rubber Heel.

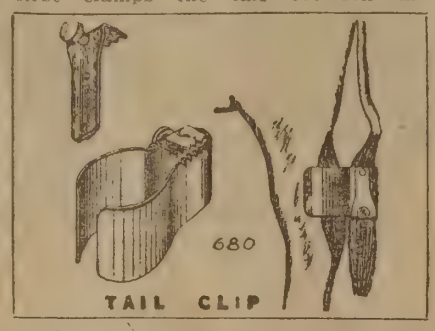
A rubber heel has been invented that can be slipped over the high heel of a woman's shoe.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Tail Holder.

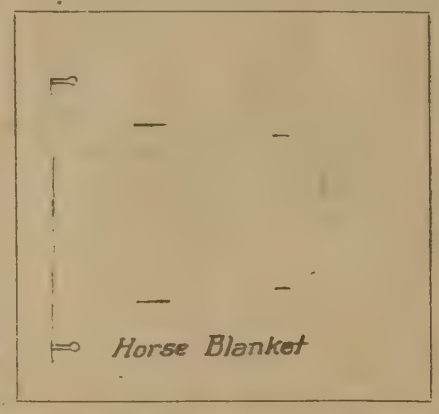
In applying this device, the operator first clamps the tail between the



toothed jaws and then springs the whole clip over the cow's leg. It holds the tail during the milking time.

Horse Blanket.

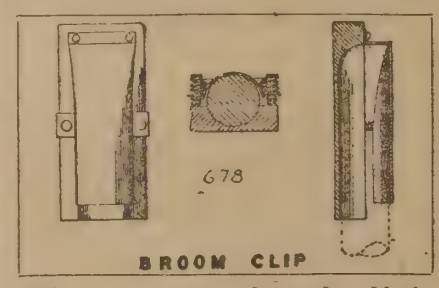
The new feature of this blanket is that slits are provided for the thills



and also for the hold-back straps. These keep the blanket in place and prevent the thills from making holes.

Broom Holder.

The holder shown here consists of a grooved metal plate attached by two



springs to a grooved wooden block. The handle, when shoved between them, is held by the tension of the springs.

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BECAUSE we can pay you more dollars, for them. We are old established, and right here, close to you, with ample capital, and a tremendous demand. We grade liberally. Ship us once, you'll do so always. Send for illustrated Price List, Tags, Trappers Guide and Tanning Catalogue. We'll keep you posted on prices. Our Tanning Department will save you money. We exchange Harness Leather for Hides. Ask your bank about us. Write today.

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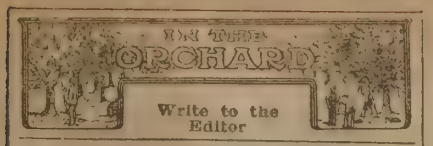
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GRANVILLE LOWTHER
Editorial Contributor

Five Acres

A Living on Small Piece of Land

A few days ago I met Mr. Pierce, a resident in an orchard district near North Yakima, and knowing he had a small orchard I asked him how many acres he had and what was the average yield. He replied: "I have five acres of land, all in orchard. It is situated on the car line about two and one-half miles out from town. I can ride to town for a neckel, and I would rather live there than in town. My income for five years has ranged from $1300 to $2700 per annum. I do most of the work myself, of course, except during the harvest season, when I have to hire; but I figure that I am making a very comfortable living for a small family."

Now, the fact is Mr. Pierce was brought up in the city of Chicago and prefers a rather retired country life to a salaried position in the city. He is getting what he likes, living in comfort, has enough work to keep him healthy and does not find it necessary to overwork. I do not see where a man could do better, provided he likes that kind of life. Now I know there are men who will not succeed in that way. It depends on the man.

A number of men now express the wish that instead of fruit they had land for the growing of sugar beets, potatoes, carrots, etc. This again depends much on the man.

The beet sugar men are claiming that the maximum yield of beets per acre this year in the Yakima valley was 31 tons at $7.50 per ton. This gives a gross income of $232.50 per acre. The estimated cost of production is approximately $50 per acre, which leaves a net profit of $182.50 per acre.

E. M. Long of the Wenas valley is reported to have grown 126 tons of No. 1 potatoes on six acres. He sold them for $30 per ton, making a gross income of $3780 on six acres, or $630 per acre.

Amos Ross, on Tieton drive, Yakima, grew 27.5 tons of carrots on one and three-quarter acres. He sold his carrots for $18 per ton, or $495.

Turnips are now selling for $24 per ton, are heavy producers and easily grown. Besides they can be grown on land from which an early crop like wheat, rye or early vegetables has been grown, making two crops the same year on the same land.

I will grant that as prices are now that if I did not have my orchard I would not plant it, and would grow vegetables or root crops instead, inasmuch as they will yield better net profits than fruits with a given investment and a given amount of labor. But the prices of these crops are higher than we have ever known, and these prices are not likely to continue. I think it will pay to keep the orchard, care for it, learn it in all its details and when the equilibrium of prices has been restored it will be found that this was the wiser course. G. L.

A Winter Garden

"Conserve," save, produce, utilize all your energy, use all your time not needed for rest, feed yourself, feed those dependent upon you, grow a surplus for the army and the "allies," invent methods of making a given amount of labor more efficient, "feed or fight." These are among the advices given, the lessons we are learning, and out of them grows the question of "How to Grow a Winter Garden."

In order to grow a winter garden successfully in most parts of the Pacific northwest it must be connected with a cellar or heating plant. In other words, the temperature must not be allowed to fall very far below the freezing point. There are hardy vegetables, like cabbages, endive, leeks, onions, lettuce, rhubarb and asparagus, that will stand a rather cold temperature. However, it probably will not pay to plant cabbages, because they occupy considerable ground, and because they can be kept so easily by burying in trenches for winter use when grown in summer or fall gardens.

There are certain vegetables that require very little sunlight and very little space, and these may be grown in a cellar. Among this class of vegetables are celery, rhubarb, asparagus and lettuce. Then, too, tomato vines may be transplanted to the cellar and tomatoes gathered until January. I am of the opinion that the florists, with hot houses, make more money on winter lettuce than on any other vegetable. G. L.

Information Bureau

The Farmer will be glad to answer questions of general interest, as well as those of a practical nature, relating to the farm or farm home. There will be no charge for this service. Questions must be signed with your name and postoffice address and will be answered either by personal letter or by publication when of general interest.

Address Farmers' Information Bureau, Room 35 Review building, Spokane, Wash.

The Maximum Farm Loan.

Can you tell me what the largest amount of money one farmer can borrow from the federal farm loan bank is? A. R. H.

One farmer can borrow $10,000. But it must be remembered in calculating what you wish to borrow that the farm loan bank lends not more than 50 per cent of the appraised value of your land. That is, if your farm is appraised by the bank's representative at, say $8000, you will be entitled to borrow $4000. If it is appraised at $20,000, you will be entitled to borrow $10,000. If it is appraised any sum higher than $20,000, you will be entitled to a loan of only $10,000, since that is the maximum allowed to any farmer under the provisions of the land bank law.

However, a recent ruling has been made which is of interest in this connection. Originally the regulations permitted a man and wife to borrow no more than $10,000 together, just as if they were one individual. Recently this regulation was amended by the land bank board at Washington, D. C., to allow them to borrow as high as $10,000 each, provided that they own enough land in their separate names for each to be entitled to a maximum loan. To illustrate: If the husband owns farm property appraised at $20,000 or more, and the wife owns property separately in her own name appraised at $20,000 or more, each can borrow $10,000 from the farm loan bank, whereas under the former provision they could borrow only $10,000 together.

In announcing this new regulation the land bank made it emphatic that the separate ownership must be bona fide, and not the result of mere transfers in order to secure the increased loans.

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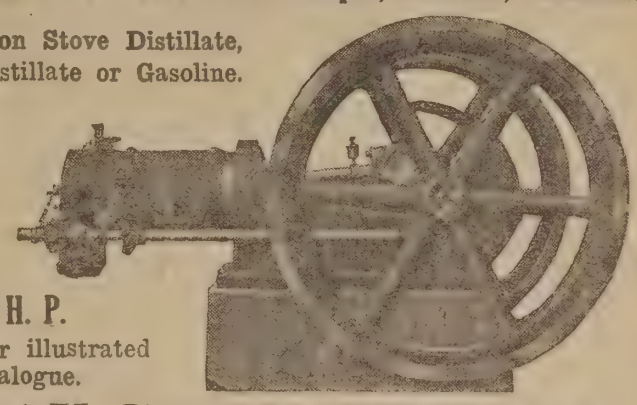
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This machine is simple, inexpensive and insures clean, smutless seed. Let us tell you what it is doing for others in the Pacific Northwest. Write for full details.

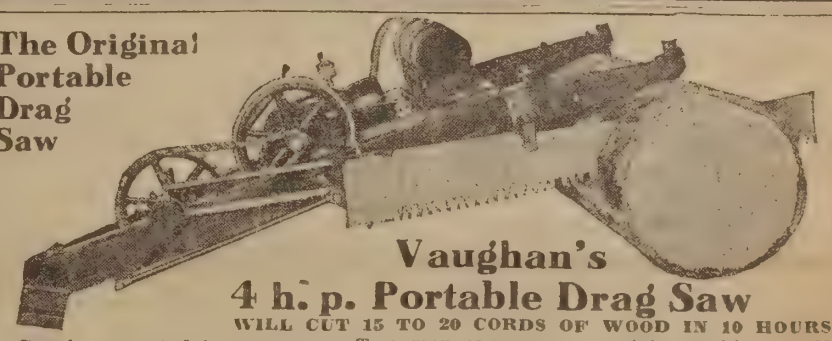
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Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.
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Because of its continuous chain of boiling points, Red Crown gives you more miles to the dollar.
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The Gasoline of Quality

Will Pool Railroads

Seek Maximum Efficiency for War

A revolutionary step in the system of railroad operation is being taken by the national railroad war board at Washington, D. C. Under the plan just announced all the railroads east of Chicago will be pooled into one centralized system and operated under the direction of the war board. Every item of equipment, including all engines, cars, fuels and tracks, will be under the central control. It is designed by this method to eliminate all cross hauls and all duplications of every kind, so that the maximum efficiency of the railroad hauling power may be brought into the service of the country in the transportation of commerce affecting the war. The operation program calls for the following:

Diversions of locomotives, employes and machine tools from western to eastern railroads.

Utilization of repair shops on western lines for repairing eastern equipment.

Pooling of all tracks and equipment in the east wherever practicable.

Pro-rata distribution among eastern roads of open top cars on a basis of tonnage-carrying capacity of the equipment in the pool.

Diversion from congested lines of all freight that can be handled by any open route.

Packers Regulated.

As predicted in an article elsewhere in this issue, word has just been received that the national food administration through its meat division has taken definite steps for the regulation of the meat packer with a view to establishing justice as between the producer and the consumer of meats. The regulative steps taken are still of a general nature, details having not yet been agreed upon for formal announcement. It is proposed, however, that the five large packing companies of the United States (Armour & Co., Cudahy & Co., Morris & Co., and Wilson & Co.) shall be allowed to make not more than 9 per cent net profit on the capital that they have invested. The regulations govern slaughtering animals, packing and curing meats and manufacturing foods essentially of animal origin.

English Smash Germans.

One of the most notable battles of the war was fought last week by the English and Germans on the northern French front, resulting in a smashing victory for the English. The attack was by the English suddenly along a 32-mile front, the central part of which was directly in front of Cambrai, a strategic railroad junction point. Gains were made along this entire front, ranging from one to over five miles.

Congress Next Week.

After a recess of something like two months, congress will meet again next Monday. It is expected that it will be well into next summer or fall before another adjournment can be taken owing to the great amount of war legislation likely to be needed. Among the matters likely to occupy some of the attention of congress this session will be the following: Further financial legislation for the conduct of the war and further war preparations; enlarging the powers vested by the espionage act in the president and the department of state; relations with Germany's allies—Austria, Turkey and Bulgaria—against whom this country has not yet declared war; possible amendments to the selective draft law, designed to make it more completely effective and possibly to include additional ages or additional registration.

Italians Hold.

At this writing the German and Austrian armies on the Italian front appear to be failing in their violent attempt to break through the Italian lines in the mountains and on the river Piave, where they took their stand after their remarkable retreat some two weeks ago. It is thought that one of the considerations back of the English attack in the Cambrai region was the desire to induce the Germans to recall some of their forces from the Italian front so that the pressure on the Italians would be lessened.

Russia Wants Peace.

Though declaring that Russia wants no separate peace with Germany, the Bolsheviki government in Petrograd is making strong efforts to bring about an armistice that would without doubt result in a great advantage over the allies in favor of Germany. If the allies refuse to join in the movement for an armistice it is not improbable that the rebel government now in control in Russia will let its desire for peace, however dishonorable, take the form of making separate terms with Germany. However, there is nothing coming out of stricken Russia to indicate that that country will long remain in the control of Lenine and his associates in rebellion. Russia can not make peace now, for there is no Russia. The country is without government.

U-Boats Still Active.

That the warning of war authorities against relaxation of the warfare against the submarines because of the recent great reduction of shipping losses from torpedoes was warranted is indicated by the fact that the reported losses for the week ending November 17 reached a large total. Seventeen British vessels, of which 10 were of 1600 or more tons carrying capacity, were destroyed. Several vessels of other countries were destroyed also. Sensational reports of submarines operating in South American waters were published during the past week, but their reliability has not been ascertained.

Bomb American Cities?

Will a fleet of German airships cross the Atlantic and drop bombs on American cities? Admiral Peary warns the people to expect this at a very early date. Should this occur, it would probably arouse the American people to support of the war in every possible way as nothing else short of loss of life on European battlefront could do.

Gompers Again Elected.

After having served the American Federation of Labor as president for 35 years, Samuel Gompers was reelected last week at the national convention at Buffalo, N. Y., and will serve another term.

Well Men Win Battles

Disease and Vice Is Now a Big Army Problem

"Social diseases in the army have become more than a question of morals and pity; they have become also a question of winning battles," Bishop Lawrence of the Massachusetts Episcopal diocese declared in a frank address before the Episcopal club of Boston Monday night of this week.

Speaking on "Making an American Soldier" he said that the meeting of vice conditions in Europe was among the most baffling problems with which the military and sanitary authorities had to deal and that they needed the strong and intelligent support of the whole people.

"The loose-living swashbuckler as an effective soldier has gone by the board," he said. "I believe that the time has come when the people should know the facts, not in sensational headlines, but as plain facts."

Quoting figures from the surgeon general's office of conditions in the army from 191 1to 1913, he said, one recruit out of every six was diseased and that this average was rather better than that of the young male population from which the army was recruited.

"The great body of our soldiers and sailors of our new army and navy are straight and clean," said Bishop Lawrence. "On the other hand there are in our communities a certain number of professionally loose women, and an appallingly large number of girls from 14 to 20 years of age who, attracted by the uniform and the romance, and emotionally stirred by the unwonted excitement, either yield to or throw themselves at the young men.

"This is war and it is one of the dangers and sometimes one of the horrors of war that emotions, both bad and good, are pitched to a high power. The greatest danger is with this last great class, the girls of our villages, towns and cities."

"It is only a question of time," he went on, "before they are contaminated by loose men and loose women, and follows the horror of the most wasteful diseases going into tne innocent homes of the country. It is the duty of the medical profession to give the facts; until they do, others must speak. Secrecy always breeds suspicion and exaggeration."

La Crosse Road

One of the best pieces of road built recently is that known as the La Crosse road in western Whitman county. The Whitman County Tax Payers league protested strongly against the building of this road last summer and secured photographs showing how bad it is or was, and these were published in a Spokane daily paper and aroused much unfavorable comment. Since the road has been completed and has been used it is admittedly one of the best pieces of road in the Inland Empire. The road is made of dirt and covered with gravel. It is well graded and follows a good grade. A. J. Shobe, one of the most prominent citizens of western Whitman county, said:

"The new road has developed into one of the best roads in this section. The gravel has worked into the soil and become cemented until it is almost as hard as cement. Since the heavy travel has gone over the road it has packed and become a model which should be followed by builders of roads wherever this kind of gravel can be found."

Mr. Shobe's statement is supported by that of many farmers and others who have traveled over the road and who pronounce it a splendid piece of road building.—J. E. N.

State Grows More Corn.

An increase in the corn crop, and a slight decrease in the potato crop, for Washington state is indicated by the official estimates of the United States department of agriculture, issued for November. Corn this year amounted to 1,520,000 bushels, E. T. Marchetti, field agent, finds. Last year it was 1,406,000 bushels.

Potatoes this year will yield 9,880,000 bushels, against 9,900,000 bushels, last year. The acreage put into tubers was greater this year, amounting to 79,000 acres.

Yakima county raised more than one-third of all the corn, its yield being 598,000 bushels, and it also produced 2,159,000 bushels of potatoes. Spokane county showed the next highest potato yield, 772,000 bushels, but was low in corn, producing only 49,000 bushels. Next to Yakima, Benton proved the best corn county, its output being 168,000. Chelan county had 79,000 bushels of corn; Okanogan, 89,000 bushels; Lincoln, 26,000 bushels; Columbia, 98,000; Walla Walla, 91,000; Stevens, 58,000, and Garfield, 38,000.

Shorthorns Go Well

Fifty Animals Average Over $300

Shorthorn enthusiasm and a fair range of prices marked the Shorthorn sale at the Northwest Live Stock show at Lewiston, Idaho, November 13, when 54 animals went through the ring for a total of $16,440. Nearly all the offerings were in good sale condition; they were generally of good breeding and were the best lot of cattle ever sold at Lewiston, so that the average of $306.40, while satisfactory, was still not above if up to their full value. A few animals failed to bring quite all they were worth but the buyers were generally discriminating and paid good prices for the better stuff.

No sensational prices were paid, $610 being the top, for an uncatalogued calf substituted by Joe Turner. It was a grand individual and the breeding was guaranteed. One of the Minor consignments was also sold on a guarantee without even the name being given and throughout the sale the utmost confidence was shown in the breeders. Turner's bull went to J. E. Baxter of Joseph, Ore. The states of Oregon, Washington and Idaho took offerings, Idaho and Washington taking nearly an equal number. Carl Grief of Uniontown, Wash., paid top price for female, paying $515 for Maple's Pansy, one of the good ones in the Minor consignment.

Colonel George Gue was on the block and Harry Cranke in the ring and did their usual good work.

The following is a complete list of animals sold, buyers and prices:

Females consigned by W. O. Minor, Heppner, Oregon:

Maple's Pansy, born April 24, 1915, sold to Carl Grief, Uniontown, Wash.	$515
Golden Pride 2nd, born February 20, 1911, Walter Hoover, Nez Perce, Idaho	420
Golden Marble, born May 13, 1911, Walter Hoover	500
Choice Bud 4th, born March 17, 1908, Howard Gillette, Lewiston, Idaho	350
Margie, born April, 1916, Joe McDonald, Fenn, Idaho	340
Golden Lady, born March 23, 1915, Carl Grief	415

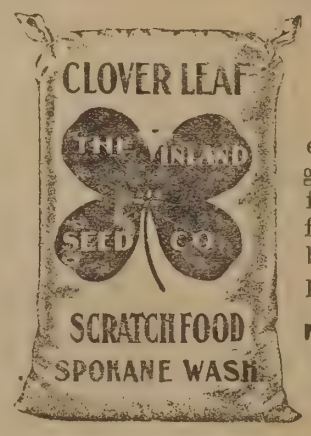
Bulls consigned by W. O. Minor:

Choice Lad 3rd, born September 11, 1916, Theo. Dufour, Cul de Sac, Ida.	300
Lord Plainview 2d, born March 26, 1916, Phil Adams, Ellensburg, Wash.	300
Golden Victor, born June 9, 1916, Phil Adams	260
Red Belt 3d, born April 2, 1916, Henry Zillerhoff, Colton, Wash.	250
Ear Tag 804, S. A. Blevins, Joseph, Ore.	375
Jolly, born June 24, 1916, T. A. Long, Grangeville, Idaho	250

Females consigned by W. H. Leonard, Pomeroy, Wash:

Dorothy, born June 8, 1906, Worthly Bros., Hunters, Wash.	225
Lady Gay, born August 21, 1908, E. S. Sweet, Grangeville, Idaho	230
Susan, born August 22, 1916, W. E.	

(Continued on page seventeen.)



EGGS

The high price of eggs should stimulate egg production. Egg production can be greatly increased by proper care and correct feeding. Our Clover Leaf Scratch is the ideal feed for egg production and is generally used by our most progressive poultrymen. Samples and price on application.

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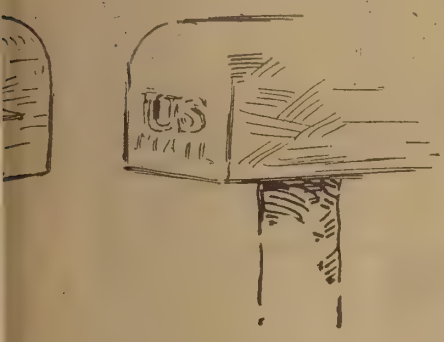
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That our offer is heartily appreciated is shown by fact that a flood of subscriptions from every part of the state has been pouring in to the paper ever since the plan was announced.

In order to dispense altogether with our force of agents, we need the help of all our friends both in sending in their own renewals promptly and in introducing the paper to neighbors. That is why we ask you to give your copy of this paper to some other household when through with it.

If possible we want every farmer, fruit grower and stock breeder in the state to see this announcement. Pass the word along that by eliminating the middleman $1.00 will buy five times as much reading matter as when the old system was in force.

Incidentally, the new arrangement serves a double purpose, for in dispensing with our force of agents a large number of men are released for service in the many industries that are short-handed on account of the war.

Only the method of handling subscriptions is changed. This makes no difference in the quality of the paper. The comics, stories, helpful departments and all other popular features will be continued and the paper improved wherever and whenever possible.

Your Remittance May Be in Any Form Most Convenient---Silver, Stamps, Personal Check, Postal Money Order, Express Money Order or Bank Draft

Nov. 29

The Washington Farmer,
Review Bldg.,
Spokane, Wash.

I desire to take advantage of your plan to deal direct with your readers in securing and renewing subscriptions, thus saving the middleman's cost and releasing men for productive labor.

Enclosed is $..... for ..... years subscription.

If you are already paid in advance your subscription will be set forward from the date to which you are paid.

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TOWN ..... R. F. D. .....

STATE .....

FLORA FLIRT AT THE CIRCUS



Flora Flirt, on pleasure bent,
Gayly to the circus went.



How her eyes with pleasure dance
When she sees the elephants!



She spies a youth with a cigarette,
And smiles at him—their eyes have met.



Flora flirts with all her might—
He drops his cigarette alight.



An elephant for nuts exploring
Burns his trunk—with pain he's roaring.



Trunk full of water the beast is squirting,
Drenching both—and ends their flirting.
The Moral—Those who flirt are oft dejected,
Baffled by the unexpected.

Shorthorns Go Well

(Continued from page twelve.)

Bryan, Grangeville, Idaho 245
Mayflower, born July 7, 1916, J. W. Whittaker, Clarkston, Wash. 200
Lucile, born April 24, 1916, L. M. Englehorn, Asotin, Wash. 200
May, born June 12, 1916, L. M. Englehorn 175
Bulls consigned by W. H. Leonard:
Gay Lad, born February 20, 1916, Phil Adams 320
Redman, born May 22, 1916, Jesse Barthwell, Agatha, Idaho 305
Ring Tooter, born July 11, 1916, Mrs. Wallace L. Whitmore, Pomeroy, Wn. 205
Rossmore, born May 14, 1916, Mrs. Whitmore 250
White Rock, born January 23, 1916, A. D. Dunn, Wapato, Wash. 300
Rightaway, born November 18, 1915, Nat Bryant, Pullman, Wash. 435
Snow White, born June 3, 1916, G. B. Cook, Ellensburg, Wash. 210
Females consigned by Frank Brown, Carlton, Oregon:
Snowflake 6th, born April 4, 1916, Harvey Wester, Nez Perce, Idaho 300
White Bloom, born April 20, 1912, Harvey Wester 500
Canace, born May 15, 1916, Howard Gillette 200
Minor, born August 28, 1916, G. B. Cook 210
Bulls consigned by Frank Brown:
Village Lord, born March 21, 1916, William Hurst, Clarkston, Wash. ... 350
Golden Rule, born September 5, 1916, Mrs. Whitmore 215
Female consigned by Day & Rothrock, Spokane, Wash.
Lorene, born March 9, 1915, Harvey Webster 300
Bull consigned by Day & Rothrock:
Golden Knight, born September 2, 1916, Frank Gargill, Nez Perce, Idaho 410
Females consigned by A. D. Dunn, Wapato, Wash.:
Lady's Maid, born September 3, 1916, Phil Adams 410
Bulls consigned by A. D. Dunn:
Violet's Chief, born August 19, 1916, T. S. Gooch, Uniontown, Wash. 280
Red Royal, born September 22, 1916, O. P. Pring, Lewiston, Idaho 240
Females consigned by W. J. Townley, Union, Ore.:
The Mound's Baroness, born April 8, 1916, Theodore Dufour 430
Bull consigned by W. J. Townley:
King Wallace 2nd, born April 9, 1916, O. P. Pring 325
Bulls consigned by Joe Turner, Meyers Falls, Wash.:
Vigilant, born November 9, 1916, Howard Gillette 285
Joe, born May 31, 1916, Phil Adams .. 240
Uncatalogued calf, J. E. Baxter, Joseph, Oregon 610
Rubicon, born September 17, 1916, E. O. Albright, Jerry, Wash. 285
Cicero, born September 12, 1916, James Sangster, Anatone, Wash. 280
Bulls consigned by James H. McCroskey & Sons, Fishtrap, Wash.
Ury's Goods, born November 8, 1916, C. E. Maynard, Colton, Wash. 310
Silver King, born April 17, 1916, S. A. Blevans, Joseph, Ore. 400
Bulls consigned by J. B. Cornett & Sons, Shedd, Ore.:
Red Robin, born August 19, 1916, James McPherson, Clearwater, Idaho 200
King Bee, born October 18, 1916, N. P. Bowman, Jerry, Wash. 195
Beauty's King, born December 28, 1916, J. W. Whittaker 180
Hannah's King, born August 19, 1916, George Height, Davenport, Wash. 200
Bull consigned by Rush F. Parsons, Cloverland, Wash.:
Lord Nelson, born November 3, 1916, J. P. McCann, Lewiston, Idaho 250
Females consigned by H. G. Keyt, Perrydale, Ore.:
Silver Lady's Beauty, born February 3, 1916, Carl Grief 290
Mary Frances, born January 11, 1916, J. C. Roberts, Walla Walla, Wash... 315
Mary Lucile, born August 15, 1913, Parker Bros., Colton, Wash. 330
Female consigned by University of Idaho:
Red Mysie, born March 22, 1916, Theodore Dufour 325
Twenty-four females sold for $7750; average, $322.91.
Thirty bulls sold for $8890; average, $296.33.
Fifty-four animals sold for $16,440; average, $306.40.
The University of Idaho sold one uncatalogued calf to J. N. Jacks, Gifford, Idaho, for $205.
Uncatalogued consignment of two bulls by E. S Sweet, Grangeville, Idaho:
Beauty and The Beast, born March 18, 1916, M. E. Lewis, Moscow, Idaho.... 200
Hero of Leonato, born September 23, 1916, H. D. Benedict, Asotin, Wn. 190

Government to Buy Sugar.

Food Administrator Hoover's plan to take a large quantity of sugar held in this country for foreign account and pay for it with government funds has been approved as legal by the comptroller of the treasury.

Live Stock Conference at Spokane

The annual live stock conference at Spokane will be held February 22-23. It is also announced that the annual Shorthorn sale will be held in Spokane concurrently with the live stock conference, and will be made a feature of its program.

A Good Combine.

To The Washington Farmer: Every one in this neighborhood takes The Twice-a-Week Review and The Washington Farmer. We could not do without them.

F. S. M'ATEE.
Ellensburg, Wash.

Order-by-Mail Page

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20c—"I'm All Bound Round," "Whose Little Heart Are You Breaking?" "In San Domingo."
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Describes our complete line of articles you use every day. Lowest net prices and prompt shipment guaranteed.
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1½ lbs., 1st, 2d, 3d zones 50c
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Send us 50c and we will send you 1½ lbs. of northwest's best coffee. This is a trial proposition. If, after using it, you do not agree that it is the best coffee you ever used, we will gladly refund your money. Write today.
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We are under state supervision and for over 16 years we have never paid less than 6%
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It Costs Only a Postal Card to Send for a Catalog
on anything advertised in this paper in which you are interested. Keep a supply of postal cards handy so that when you find something you want to learn more about you can write a card for free literature about it.

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"Want" Ads in These Papers Are Economical ánd Effective







Take Advantage of the Low Combination Rate for Insertion of "Want" Ads in These State Farm Papers

The "want" ad is a method of communication which will prove helpful at various times to all of our farm folks.

Do you desire to get in touch with a reliable, experienced hired man? The "want" ad brings your need to the attention of competent workers throughout three states.

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Have you a piece of land for which you are eager to find a buyer? The "want" ad in The Washington Farmer, The Oregon Farmer and The Idaho Farmer affords a splendid method for making a sale; inasmuch as these three papers are read by tens of thousands of farm owners and farm renters, a goodly proportion of whom are considering the purchase of farms or orchards in other sections.

To sum up, our "want" ads enable you to reach the people who have what you want or who want what you have. They are easy to insert. They are low in cost. Even if there is nothing you care to advertise at this time, you will always find interesting, profitable reading in our "want" ad columns.

Rates are printed at the top of these columns in every issue. Don't miss the "want" ad page today!

Send Orders and Inquiries Regarding "Want" Ads to The Washington Farmer, 617 Central Bldg., Seattle, Wash.



THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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CHAPTER IX.

The Awakening.

Early the next morning Corporal Thomas came into the store and found Necia tending it while Gale was out. Ever since the day she had questioned him about Burrell this old man had taken every occasion to talk with the girl, and when he asked her this morning about the reports concerning Lee's strike she told him of her trip, and all that had occurred.

"You see, I'm a mine owner now," she concluded. "If it hadn't been a secret I would have told you before I went, so you could have been one of the first."

"I'm goin', anyhow," he said, "if the lieutenant will let me and if it's not too late."

Then she told him of the trail by Black Bear creek, which would save him several hours.

"So that's how you and he made it?" he observed, gazing at her shrewdly. "I supposed you went with your father."

"Oh, no! We beat him in," she said, and fell to musing at the memory of those hours passed alone with Meade, while her eyes shone and her cheeks glowed. The corporal saw the look, and it bore out a theory he had formed during the past month, so, as he lingered, he set about a task that had lain in his mind for some time. As a rule he was not a careful man in his speech, and the delicacy of this maneuver taxed his ingenuity to the utmost, for he loved the girl and feared to say too much.

"The lieutenant is a smart young fellow," he began; "and it was slick work jumpin' all those claims. It's just like him to befriend a girl like you—I've seen him do it before——"

"What!" exclaimed Necia, "befriend other girls?"

"Or things just like it. He's always doing favors that get him into trouble."

"This couldn't cause him trouble, could it, outside of Starks and Runnion's grudge?"

"No, I reckon not," assented the corporal, groping blindly for some way of expressing what he wished to say. "Except, of course, it might cause a lot of talk at headquarters when it's known what he's done for you and how he done it. I heard something about it down the street this morning, so I'm afraid it will get to St. Michael's, and then to his folks." He realized that he was not getting on well, for the task was harder than he had imagined.

"I don't understand," said Necia. "He hasn't done anything that any man wouldn't do under the same circumstances."

"No man't got a right to make folks talk about a nice girl," said the corporal; "and the feller that told me about it said he reckoned you two was in love." He hurried along now without offering her a chance to speak. "Of course, that had to be caught up quick; you're too fine a girl for that."

"Too fine?" Necia laughed.

"I mean you're too fine and good to let him put you in wrong, just as he's too fine a fellow and got too much ahead of him to make what his people would call a messy-alliance."

"Would his people object to—to such a thing?" questioned the girl. They were alone in the store, and so they could talk freely. "I'm just supposing, you know."

"Oh Lord! Would they object?" Corporal Thomas laughed in a highly artificial manner that made Necia bridle and draw herself up indignantly.

"Why should they, I'd like to know? I'm just as pretty as other girls, and I'm just as good. I know just as much as they do, too, except—about certain things."

"You sure are all of that and more, too," the corporal declared, heartily, "but if you knowed more about things outside you'd understand why it ain't possible. I can't tell you without hurtin' your feelin's, and I like you too much for that, Miss Necia. Seems as if I'm almost a daddy to you, and I've only knowed you for a few weeks——"

"Go ahead and tell me; I won't be offended," insisted the girl. "You must. I don't know much about such things, for I've lived all my life with men like father and Poleon, and the priests at the mission, who treat me just like one of themselves. But somebody will want to marry me some day, I suppose, so I ought to know what is wrong with me." She flushed up darkly under her brown cheeks.

The feeling came over Corporal Thomas that he had hurt a helpless animal of some gentle kind; that he was bungling his work, and that he was not of the caliber to go into the social amenities. He began to perspire uncomfortably, but went on, doggedly:

"I'm goin' to tell you a story, not because it applies to Lieutenant Burrell, or because he's in love with you, which of course he ain't any more than you be with him——"

"Of course," said the girl.

"—but just to show you what I mean. It was a good long spell ago, when I was at Fort Supply, which was the frontier in them days like this is now. We freighted in from Dodge City with bull teams, and it was sure the fringe of the frontier; no women—no society—nothin' much except a fort a lot of Injuns, and a few officials with their wives and families. Now them kind of places is all right for married men, but they're tough sleddin 'for single ones, and after a while a feller gets awful careless about himself; he seems to go backward and run down mighty quick when he gets away from civilization and his people and restaurants and such things; he gets plumb reckless and forgetful of what's what. Well, there was a captain with us, a young feller that looked like the lieutenant here, and a good deal the same sort—high-tempered and chivalrous and all that sort of thing; a West Pointer, too, good family and all that, and, what's more, a captain at 25. Now, our head freighter was married to a squaw, or leastways he had been, but in them days nobody thought much of it any more than they do up here now, and particularly because he'd had a government contract for a long while, ran a big gang of men and critters, and had made a lot of money. Likewise he had a girl, who lived at the fort, and was mighty nice to look at, and restful to the eye after a year or so of cactus trees and mesquite and buffalo grass. She was twice as nice and twice as pretty as the women at the post, and as for money—well, her dad could have bought and sold all the officers in a lump; but they and their wives looked down on her, and she didn't mix with them none whatever. To make it short, the captain married her. Seemed like he got disregardful of everything, and the hunger to have a woman just overpowered him. She'd been courted by every single man for 400 miles around. She was pretty and full of fire, and they was both of an age to love hard, so Jefferson swore he'd make the other women take her; but soldiern' is a heap different from any other profession, and the army has got its own traditions. The plan wouldn't work. By-and-by the captain got tired of trying, and gave up the attempt—just devoted himself to her—and then we was transferred, all but him. We shifted to a better post, but Captain Jefferson was changed to another company and had to stay at Supply. Gee! it was a rotten hole! Influence had been used, and there he stuck, while the new officers cut him out com-

(Continued on following page.)

Soldier Boys Signing the "War Roll"

Captain Stanley Borleske of Portland, Ore., an officer at Camp Greene, Charlotte, N. C., was a member of the Michigan university football and track teams in 1914, and was picked as a member of the all-star western intercollegiate mythical team that year. "When I came into this camp," he told Arthur E. Bagley, the "Y" camp physical director, "I wondered how I was going to keep in physical condition. I saw no opportunity or place to do any training. You Y. M. C. A. fellows have sort of made opportunities for me to recreate and exercise, for since I have been here I have averaged three evenings each week out with my company football teams."

In the same camp was another young soldier who listened to an address given one evening in the "Y" auditorium by Dr. George R. Stair on "The Potter's Clay." After the sermon and after the invitation had been given and the men were singing the "War Roll" and were being presented with the customary pocket Testaments given to soldiers, one young man approached by Bagley upon the question of making a decision, responded affirmatively at once. When the Testament was handed to him he said: "I'm doing something for you that I refused to do for my mother. When I left my home in Idaho a month ago she asked me to take a pocket Testament with me, but I thought it was no part of a soldier's kit. This old Y. M. C. A. has made me change my mind. I am going to sit down and write her not to worry any more. I have my Testament, and I am going to read it. Thanks, mister, the Y. M. C. A. is sure good to us fellows." On the same evening in this camp 161 war roll cards were signed and over 250 men made public requests for prayer.

It is to keep up this sort of work in the camps of the soldiers and sailors in America, and to follow them across the seas when they go France, as well as to extend the same service to the armies of our allies, that the Y. M. C. A. war work council is raising. The sum of $35,000,000 is needed to carry on this service to July 1, 1918.

Handicraft Series

A series of handicraft articles for boys and girls, by the most widely known writers on this subject, will begin in the Farmer of next week. They will be illustrated and will tell just how to make many useful things. The initial article will be for the benefit of the girls, especially as Christmas is approaching, and will tell how to make:

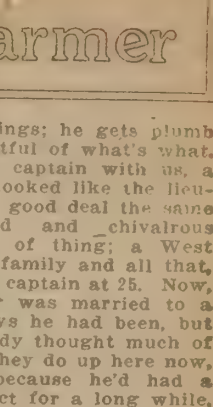
A waste basket.
A shirtwaist box.
A shoe blacking case.

All in cretonne. Nothing better of the kind is published anywhere in America.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

How the Body Pores Breathe and Regulate Temperature



Dr. Hirshberg

Breathes there a skin with lungs so dead that never to its pores has said, "You are my own, my very life"? The communion, the mutual usefulness and the compensatory interchange of action between the lungs and the skin are well illustrated by the time-honored instance of the child who, to be made to represent Cupid in a startling way, was coated all over with gold leaf and who in consequence nearly suffocated to death.

The myriads of pores, canals, ducts and channels, microscopic in size, which pave the surface area of the human skin from tip to toe have almost as much to do with the regulation of the vapor, the air and the temperature of the human structure as have the comparatively huge lungs. The physiological duties of the skin are many and various. Not the least of these is the absorption of air and moisture which comes in confidential contact with its huge expanse.

The gargantuan extent of the skin you may begin to realize when you consider the story of Queen Dido and the cow's hide. Within the confines of its sliced spread arose a city.

Much of the help obtained by the lungs and the human fabric generally from the dermal appendage depends upon the state of the individual's health and the thickness of the outer cuticle. If the latter be thoroughly developed, no gases nor liquids will be permitted to penetrate its bulwarks.

Its Absorptive Powers.

On the other hand, if the cuticle or epidermis is thinned too much by ill health, thick garments, an indoor life, or by other enervating influences, plain soap and water and other foreign particles may inflame and irritate, and may damage the deeper dermal fabric.

The skin ordinarily must have sunlight, fresh air and water. While it does not automatically, in an elastic contractible or expensive fashion, breathe as the lungs do, yet it absorbs much from its surroundings.

Its Elimination Values.

Water vapor and other fluids are poured out from the skin. Oils, fats, carbonic acid gas—the same as expired from the lungs—other gases, certain mineral salts and fats are expelled from the lymph and blood via the multitude of skin pores. This exudation may be invisible, as distilled, evaporated spirits or in the form of profuse perspiration. The outer atmosphere and the temperature partly regulate this.

Blood heat, the ordinary tissue temperature of the human structure, is 98.4 deg. Fahrenheit. The activity and combustion within due to the combination of the breathed-in oxygen with the digested food manufactures heat just as if coal and oxygen were afire. This heat must be dissipated and the tissue regulated so the human temperature shall remain constantly at 98.4 deg. It is largely "up to" the skin to perform this task.

Perhaps you may now begin to suspect why the the complexions of some persons are florid with red blotches on cheeks and chin and nose. It is often gluttony or eating too much of the sort of food which heats up "the inner man" and thus inflames the skin.

The skin by expiration and by the excretion of sweat, which often evaporates unseen, makes a stanch effort to dissipate any excess of heat. There are two cooling influences at work, the evaporation and exhalation of the skin and the outside cool atmosphere.

When much heat is involved, as also occurs in violent physical efforts either of work or of play, the blood afterward rushes into the skin and the latter seizes the overproduction to expel it in the form of vapor, carbonic acid gas and perspiration.

The cooled blood then leaves the skin, rushes through the marrow, heart and lungs, and you may, if you are not adapted to such taxations, "feel chilled to the marrow." If you are accustomed to baths, to cold, to exposure, to sudden changes you are chilled only for a moment, and no ill effects ensue.

"The Barrier" By REX BEACH

(Continued from preceding page.)

pletely, just like the others had done, so I was told, and it drifted on that way for a long time, him forever makin' an uphill fight to get his wife reco'nized and always quittin' loser. His folks back east was scandalized and froze him cold, callin' him a squaw-man; and the story went all through the army, till his brother officers had to treat him cold in order to keep enough warmth at home to live by, one thing leading to another till he finally resented it openly. After that he didn't last long. They made it so unpleasant that he quit the service—crowded him out, that's all. He was a born soldier, too, and didn't know nothing else nor care for nothing else; as fine a man as I ever served under, but it soured him so that a rattlesnake couldn't have lived with him. He tried to go into some kind of business after he quit the army, but he wasn't cut out for it, and never made good as long as I knew him. The last time I seen him was down on the border and he had sure grown cultus. He had quit the squaw who was livin' with a greaser in Tucson——"

"And do you think I'm like that woman?" said Necia, in a queer, strained voice. She had listened intently to the corporal's story, but he had purposely avoided her eyes and could not tell how she was taking it.

"No! You're different, but the army is just the same. I told you this to show you how it is out in the states. It don't apply to you, of course—"

"Of course!" agreed Necia again. "But what would happen to Lieutenant Burrell if—if—well, if he should do something like that? There are many half-breed girls, I dare say, like this other girl, or—like me."

She did not flush now as before; instead, her cheeks were pale.

"It would go a heap worse with him than it did with Captain Jefferson," said the corporal, "for he's got more ahead of him and he comes from better stock. Why, his family is way up! They're all soldiers, and they're strong at headquarters; they're mighty proud, too, and they wouldn't stand for his doing such a thing, even if he wanted to. But he wouldn't try; he's got too much sense, and loves the army too well for that. No, sir! He'll go a long ways, that boy will, if he's let alone."

"I never thought of myself as an Indian," said Necia, dully. "In this country it's a person's heart that counts."

"That's how it ought to be," said the corporal, heartily; "and I'm mighty sorry if I've hurt you, little girl. I'm a rough old rooster, and I never thought but what you understood all this. Up here folks look at it right, but outside it's mighty different; even yet you don't half understand."

"I'm glad I'm what I am!" cried the girl. "There's nothing in my blood to be ashamed of, and I'm white in here!" She struck her bosom fiercely. "If a man loves me he'll take me no matter what it means to him."

"Right for you," assented the other; "and if I was younger myself, I'd sure have a lot of nice things to say to you. If I'd 'a' had somebody like you I'd 'a' let liquor alone, maybe, and amounted to something, but all I'm good for now is to give advice and draw my pay." He slid down from the counter where he had been sitting. "I'm going' to hunt up the lieutenant and get him to let me off. Mebbe I can stake a claim and sell it."

The moment he was gone the girl's composure vanished and she gave vent to her feelings.

"It's a lie! It's a lie!" she cried, aloud, and with her fists she beat the boards in front of her. "He loves me! I know he does!" Then she began to tremble, and sobbed: "I'm just like other girls."

She was still wrestling with herself when Gale returned, and he started at the look in her face as she approached him.

"Why did you marry my mother?" she asked. "Why? Why did you do it?"

He saw that she was in a rage, and answered, bluntly, "I didn't."

She shrank at this: "Then why didn't you? Shame! Shame! That makes me worse than I thought I was. Oh, why did you ever turn squaw-man? Why did you make me a breed?"

"Look here! What ails you?" said the trader.

"What ails me?" she mocked. "Why, I'm neither white nor red; I'm not even a decent Indian. I'm a—a—" She shuddered. "You made me what I am. You didn't do me the justice even to marry my mother."

"Somebody's been saying things about you," said Gale, quietly, taking her by the shoulders. "Who is it? Tell me who it is."

"No, no! It's not that! Nobody has said anything to my face; they're afraid of you, I suppose, but God knows what they think and say to my back."

"I'll—" began the trader, but she interrupted him.

"I've just begun to realize what I am. I'm not respectable. I'm not like other women, and never can be. I'm a squaw—a squaw!"

"You're not!" he cried.

"It's a nice word, isn't it?"

"What's wrong with it?

"No honest man can marry me. I'm a vagabond! The best I can get is my bed and board, like my mother."

"By God! Who offered you that?" Gale's face was whiter than hers now, but she disregarded him and abandoned herself to the tempest of emotion that swept her along.

"He can play with me, but nothing more, and when he is gone another one can have me, and then another and another and another—as long as I can cook and wash and work. In time my man will beat me, just like any other squaw, I suppose, but I can't marry; I can't be a wife to a decent man."

She was in the clutch of an hysteria that made her writhe beneath Gale's hand, choking and sobbing, until he loosed her; then she leaned exhausted against a post and wiped her eyes, for the tears were coming now.

"That's all damned rot," he said. "There's 50 good men in this camp would marry you tomorrow."

"Bah! I mean real men, not miners. I want to be a lady. I don't want to pull a hand sled and wear moccasins all my life, and raise children for men with whiskers. I want to be loved—I want to be loved! I want to marry a gentleman."

"Burrell!" said Gale.

"No!" she flared up.—"Not him nor anybody in particular, but somebody like him, some man with clean fingernails."

He found nothing humorous or grotesque in her measure of a gentleman, for he realized that she was strung to a high pitch of unreason and unnatural excitement, and that she was in terrible earnest.

"Daughter," he said, "I'm mighty sorry this knowledge has come to you, and I see it's my fault, but things are different now to what they were when I met Alluna. It wasn't the style to marry squaws where we came from, and neither of us ever thought about it much. We were happy with each other, and we've been man and wife to each other just as truly as if a priest had mumbled over us."

"But why didn't you marry her when I came? Surely you must have known what it would mean to me. It was bad enough without that."

The old man hesitated. "I'll own I was wrong," he said, finally, staring out into the sunshine with an odd expression. "It was thoughtless and wrong; dead wrong; but I've loved you better than any daughter was ever loved in this wide world, and I've worked and starved and froze and saved, and so has Alluna, so that you might have something to live on when I'm gone, and be different to us. It won't be long now, I guess. I've given you the best schooling of any girl on the river, and I'd have sent you out to the convent in the States, but I couldn't let you go so far away—God! I loved you too much for that—I couldn't do it, girl. I've tried, but you're all I've got, and I'm a selfish man, I reckon."

"No, no! You're not," his daughter cried, impulsively. "You're everything that's good and dear, but you've lived a different life from other men and you see things differently. It was mean of me to talk as I did." She put her arms around his neck and hugged him. "But I'm very unhappy, dad."

"Don't you aim to tell what started this?" he said, gently, caressing her with his great, hard hand as softly as a mother. But she shook her head, and he continued, "I'll take the first boat down to the Mission and marry your ma, if you want me to."

"That wouldn't do any good," said she. "We'd better leave things as they are." Then she drew away and smiled at him bravely from the door. "I'm a very bad to act this way. S'cuses?"

He nodded and she went out, but he gazed after her for a long minute, then sighed.

"Poor little girl!"

Necia was in a restless mood, and, remembering that Alluna and the children had gone berrying on the slopes behind the Indian village, she turned her way thither. All at once a fear of seeing Meade Burrell came upon her. She wanted to think this out, to find where she stood, before he had word with her. She had been led to observe herself from a strange angle, and must verify her vision, as it were. As yet she could not fully understand. What if he had changed, now that he was alone, and had had time to think? It would kill her if she saw any difference in him, and she knew she would be able to read it in his eyes.

As she went through the main street of the camp she saw Stark occupied near the water-front, where he had bought a building lot. He spoke to her as she was about to pass.

"Good-morning, Miss. Are you rested from your trip?"

She answered that she was, and would have continued on her way, but he stopped her.

"I don't want you to think that mining matter was my doing," he said. "I've got nothing against you. Your old man hasn't wasted any affection on me, and I can get along without him, all right, but I don't make trouble for girls if I can help it."

The girl believed that he meant what he said; his words rang true, and he spoke seriously. Moreover, Stark was known already in the camp as a man who did not go out of his way to make friends or to render an accounting of his deeds, so it was natural that when he made her a show of kindness Necia should treat him with less coldness than might have been expected. The man had exercised an occult influence upon her from the time she first saw him at Lee's cabin, but it was too vague for definite feeling, and she had been too strongly swayed by Poleon and her father in their attitude toward him to be conscious of it. Finding him now, however, in a gentle humor, she was drawn to him unwittingly, and felt an overweening desire to talk with him, even at the hazard of offending her own people. The encounter fitted in with her rebellious mood, for there were things she wished to know, things she must find out from some one who knew the world and would not be afraid to answer her questions candidly.

"I'm going to build a big dance hall and saloon here," said Stark, showing her the stakes that he had driven. "As soon as the rush to the creek is over I'll hire a gang of men to get out a lot of house logs. I'll finish it in a week and be open for the stampede."

"Do you think this will be a big town?" she asked.

"Nobody can tell, but I'll take a chance. If it proves to be a false alarm I'll move on—I've done it before."

"You've been in a great many camps, I suppose."

He said that he had, that for 20 years he had been on the frontier, and knew it from West Texas to the circle.

"And are they all alike?"

"Very much. The land lies different, but the people are the same."

"I've never known anything except this." She swept the points of the compass with her arm. "And there is so much beyond that I want to know about—oh, I feel so ignorant! There is something now that perhaps you could tell me, you have traveled so much."

"Let's have it," said he, smiling at her seriousness.

She hesitated, at a loss for words, finally blurting out what was in her mind.

"My father is a squaw-man. Mr. Stark, and I've been raised to think that such things are customary."

"They are, in all new countries," he assured her.

"But how are they regarded when civilization comes along?"

"Well, they aren't regarded, as a rule. Squaw-men are pretty shiftless, and people don't pay much attention to them. I guess if they weren't they wouldn't be squaw-men."

"My father isn't shiftless," she challenged, at which he remained silent, refusing to go on record. "Isn't a half-breed just as good as a white?"

"Look here," said he. "What are you driving at?"

"I'm a 'blood,'" she declared, recklessly, "and I want to know what people think of me. The men around here have never made me feel conscious of it, but—"

"You're afraid of these new people who are coming, eh? Well, don't worry about that, Miss. It wouldn't make any difference to me or to any of your friends whether you were red, white, black or yellow."

"But it would make a difference with some people?" insisted the girl.

"Oh, I reckon it would with eastern people. They look at things kind of funny, but we're not in the east."

"That's what I wanted to know. Nice people back there wouldn't tolerate a girl like me for a moment, would they? They wouldn't consider me good enough to associate with them?"

He shrugged his shoulders. "I guess you'd have a hard time breaking in among the 'bon-tonners.' But what's the use of thinking about it. This is your country and these are your people."

A morbid desire was upon her to track down this intangible racial distinction, but she saw Runnion, whom she could not bear, coming towards them, so thanked Stark hurriedly and went on her way.

"Been making friends with that squaw, eh?" remarked Runnion, casually.

"Yes," replied Stark. "She's a nice little girl and I like her. I told her I didn't have any part in that miners' meeting affair."

"Huh! What's the matter with you? It was all your doing."

"I know it was, but I didn't aim it at her. I wanted that ground next to Lee's, and I wanted to throw a jolt into old man Gale. I couldn't let the girl stand in my way, but now that it's over I'm willing to be friends with her."

"Me, too," said Runnion, looking after Necia as her figure diminished up the street. "By heaven! She's as graceful as a fawn; she's white, too. Nobody would ever know she was a breed."

"She's a good girl," said Stark, mu-

(Continued on page twenty-four.)

We Promised to "Grub-Stake" Our Allies; We Must Not Break That Sacred Promise

"I wish that every thoughtful patriotic man and woman in the Pacific northwest would read the following earnest and eloquent appeal which we have just received from the United States food administration," says N. W. Durham, chairman of the Spokane county (Washington) council of defense:

Uncle Sam is mighty big and strong, but he is not so big and strong that he can afford to break a promise. There is not a real American in this country who would not fight to make good one of Uncle Sam's promises. When Uncle Sam says anything, that means that all his loyal sons and daughters have said it. The honor and the interest of this nation are in the keeping of our splendid citizenry.

Here is the proposition: We have promised to "grubstake" the allies. We said "You need not farm—you fight."

They did not farm, but how they did fight.

Winter is coming on. There are few for the sowing and there are fewer now for the harvest. The pinch has come. In France they are looking across the sea and saying:

"How about that grubstake, Uncle Sam; how about that grubstake?"

They are not whispering, the Frenchmen, they are not that kind, but they are hungry, and if we fail them with our grubstake they will starve. Thousands of them—men, women and children.

Gnawing at a mere empty promise will not help them. Nothing will help them but food.

It is food that will win the war.

How are we going to get it?

We are going to save it—save it to save our pals, because that's what the allies are in this fight.

We are going to make good on Uncle Sam's promise that he would furnish the grubstake for this war.

The allies need more wheat, more meat, more fats, more sugar. It is either wheatless and meatless days for us or wheatless and meatless months for them.

And we are going to help—every one of us. There is no mistake about that. We will make good on the grubstake promise for the sake of the folks who trusted us and for the sake of our soldiers as well. Just remember that they are bound for France—the land where we are sending the grubstake.

We want no regrets after this war. We have had ample warning of the condition which awaits us, unless every American citizen responds to the call of duty. You and I want to feel, when the regiments of our boys return from the battlefields of Europe, some of them possibly broken, but all victorious, that we have done our part, even to the last detail, and we may not have to lay upon our own consciences the loss, through our neglect, of a single American.

REMEMBER!

Increased rate of postage —letters THREE CENTS an ounce. In sending silver coin by mail be sure and ask your postmaster how much postage is required for your letter.

All the World's a Stage, and All the Men and Women Merely Players

Principals in De Saulles Case



The social preminence of the principals of the De Saulles tragedy, in which Mrs. Blanca De Saulles is on trial for the murder of her husband, Jack De Saulles, has resulted in many requests for seats in the courtroom at Mineola, Long Island, by men and women of high social standing.

Whole Family Wiped Out by Germans



A whole family, mother and seven children, were murdered by a bomb dropped by a German air raider. This terrible deed happened in the London area. The bomb fell on the home in which the family lived. The building was wrecked and all the inmates killed.

Palace Defended by Women



The illustration shows the Winter Palace, Petrograd. The women's death battalion fought for four hours against the troops of the maximalists and defended the capital for that period but were compelled to surrender in the latest revolt in the Russian capital. Because of their predominance in Petrograd, the seat of government, the influence of the maximalists, the most extreme class of the Russian revolutionary socialists, upon Russia's policy has been marked. It was this sinister influence that prompted the recent proposal by the Kerensky government to remove the capital to Moscow.

Gets Honor Cross.



The French government has conferred the Legion of Honor cross on Mrs. Edmund L. Baylies of New York in recognition of her relief work on behalf of France. Both Mrs. Baylies and her husband, Edmund L. Baylies, who is a member of the firm of Carter, Ledyard & Hastings, attorneys, have been actively interested in war work. Mrs. Baylies has specially interested herself in training in suitable trades the French soldiers who have been maimed while at the front.

Baseball Man Is Cattle Breeder



Copyright by International

George Stallings, manager of the Boston Braves, and one of his fine exhibits which captured a prize ribbon at the southeastern fair at Atlanta, Georgia.

Awakening the Giant.



—St. Louis Globe-Democrat.

To Be a Short-Lived Friendship.



—Kansas City Star.

FAMILY CIRCLE

Write to the Editor

ALICE W. BARLAND
Editorial Contributor

Ways to Save Money

By MRS. SAM HAYES.

Use peanut butter instead of lard or cow's butter in the next batch of cookies you make and note the fine taste and economy on shortening.

Good sewing aprons can be made from the lower part of men's worn, black sateen shirts, using upper part of the arm for bib, pockets, etc., and by feather-stitching edges in canary yellow or pink, etc., are very pretty. Serviceable dust caps can be made from the same also.

Lounging pillow covers made of the above goods and worked with bright colored floss are nice and serviceable and do not need washing as often as lighter colored goods. That white dimity or muslin dress with the flowers that faded can be ripped up and bleached and with the use of a few yards of narrow edging, bought or hand made, can be remodeled into lovely tea aprons, corset covers, etc., or protecting aprons for the school lass.

Good drawers and leggings combination for a small child can be made by splitting adult's stocking legs down from the top, the required distances and putting a diamond shape piece of stocking in the crotch and elastic at the waist and under the foot. Right size an be ascertained by trying on the stocking legs as they are cut. Stocking legs cut off and gathered at lower end make a fine skull cap for the men or boys to wear under their caps or hats as temple and ear protectors. Heavy wool stocking legs, split lengthways and sewed together and shaped at top make comfortable chest and back protectors for any one in the family. If properly made they resemble the sleeveless army sweater, edges can be hemmed, bound or crocheted. A number sewed together and covered make excellent pads for a child's crib.

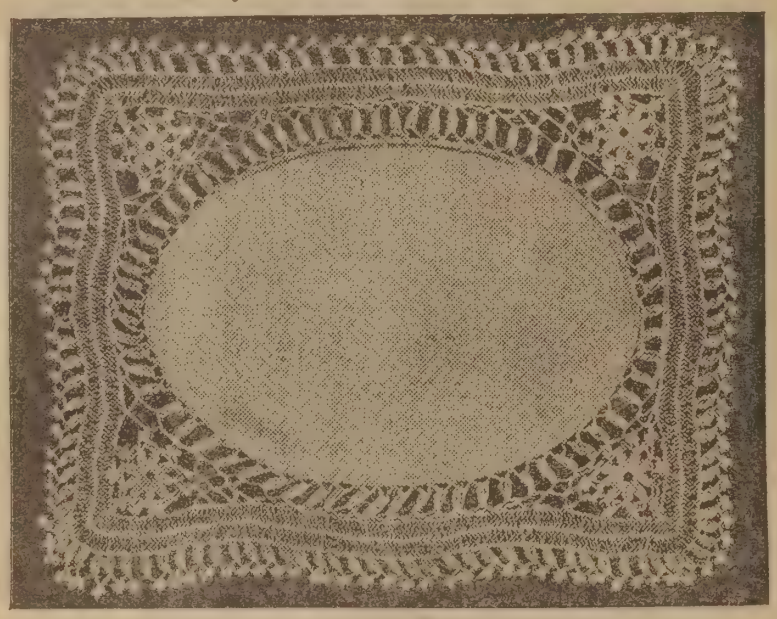
The plain old-fashioned tight skirt, if it was made of close woven goods makes an excellent suit protector by sewing up the placket and at the top and putting fasteners across the bottom. If it contained a pocket it can be used to hold accessories to the suit or dress.

Ordinary Laundering.

Ordinary laundering, mentioned frequently as a method for removing stains, should be done as follows, says a bulletin issued by the United States department of agriculture on removal of stains from clothing and other textiles. First, soak the stained portion in cold or lukewarm water, rubbing the stain with a neutral soap if necessary. Follow this by thoroughly rinsing in clean water, after which the article may be laundered as usual. Use this method only for cotton and linen (white or fast colors) and the so-called wash silks and washable woolens.

Crochet and Tatting Designs

By WINIFRED WORTH



PIN CUSHION TOP OR CENTER PIECE.

Used either as a cushion top or center piece, this beautiful crochet design will appeal to every housewife.

Use one ball No. 20 Cordonnet or silk. Dc. all around oval piece of linen and join.

1st Row—Ch. 5, sk. 4, repeat, turn and join.

2d Row—1 cluster, ch. 5, rp. to end of row.

Place medallions, and use one row of Maltese crochet for band on outer edge.

Last row is 1 c., 1 p. (4 ch. 3 p. at top of c.) ch. 4. Repeat to end. Care must be taken to keep the outer edge square.

Dressing table scarf or small center piece may be made as above by increasing or decreasing to desired size.

Initials may be embroidered in center of linen.



Star Medallion.

This popular medallion is used in many designs in this series of crochet lesson instalments. You will find it in one of the boudoir caps and other articles.

Ch. 9. Join to form ring.

1st Row—Ch. 5, 1 c., ch. 5, 1 c. Repeat 7 times, join.

2d Row—Ch. 5, 1 t. over ch. of 5, 1 p., ch. 5, 1 dc. in top of c., repeat to end of row.

Vegetable Marmalades

Vegetable marmalades or jams are made less expensively than fruit marmalades, because a less proportion of sugar is used and because the vegetables may be procured more cheaply. The extension department of the United States department of agriculture, cooperating with state agricultural colleges in the north and west, presents several suggested recipes for vegetable marmalades or jams, to be used the same as fruit products. The ingredients for some of these are shown below. In each case the mixture should be cooked slowly until it is thick and the ingredients are tender, and then packed in hot jars and sterilized.

Carrot marmalade—Two cups of ground carrot, 1 1-2 cups of sugar, 2 sliced lemons and 2 teaspoonfuls of ground ginger root.

Carrot and orange marmalade—Two cups of ground carrot, the juice of 2 lemons, the juice and grated rind of 1 orange, 1 cup sugar.

Carrot and pineapple mamalade—One cup of ground carrot, 1 cup of shredded pineapple, 1 cup of sugar, 1 sliced lemon.

Pumpkin and pineapple marmalade—One cup of pumpkin peeled and ground, 1 cup of shredded pineapple, 2 cups of sugar, 1 teaspoonful of ginger; this to stand over night in a granite pan or for several hours until the juice is extracted. Add the juice and rind of 1 lemon and cook as heretofore stated.

Ripe tomato marmalade—Twelve medium-sized tomatoes peeled and thinly sliced, 1 1-2 lemons sliced, 1 3-4 cups of sugar; to be placed in stew kettle in layers, cooked in covered vessel until tender, and then to simmer until of right consistency.

Green tomato marmalade—Two pounds of green tomatoes cut in cubes, 2 teaspoonfuls of bruised ginger root in cheesecloth bag, 2 cups of sugar, 2 sliced lemons.

Increase in Supply of Rye.

The visible supply of rye in the United States on October 20, 1917, was 3,454,000 bushels, an increase of more than 90 per cent over last year.

Fresh Air Good for Face.

It is a mistaken idea that bundling up to the eyes and covering the face with thick veils protects the skin in the winter. The more the face is exposed to the fresh air the better it will be for the complexion, and there is nothing more invigorating and beneficial than a brisk walk during a snow flurry. Never carry an umbrella when it is snowing. The best kind of water to wash your face in is soft rain water, and as snow is only frozen rain water there is surely no reason why it should be injurious to the skin.

Do not wash your face before going out into the open air, but if cleansing is necessary, apply cold cream and rub it well into the pores, afterward wiping the face with a soft towel. Cleanse the face with cold cream and a good massage cream at least once a week, and apply a lotion to the face, hands, and lips every night before retiring. The lips are more susceptible to cold and chap more easily than any other part of the face.

To Protest the Patient.

A physician said this is one of the best aids to a speedy recovery from pneumonia. Make a tight-fitting jacket of cheesecloth, sleeveless, and interline with two thicknesses of sheet cotton. Line with the cheesecloth. Fasten in front with snaps; it is worn next the skin. It is best to have two of these little coats. They protect the patient from any chance draft when changing the clothes or bedding.

Active Volcanoes.

More than a quarter of the active volcanoes of the world are on United States soil. There are about 60 volcanoes in Alaska and in the Aleutian islands, just off the coast. In the western United Staets, in the Philippines and in the Hawaiian islands there are nearly as many more. There are but 417 throughout the globe.

More Than Mere Right.

Singleton—"But even a married man has a right to his opinion." Henpeck—"My dear fellow, it isn't a question of right; it's a question of courage."—Boston Transcript.



Why Not Save That Extra on Underwear?

It's really a startling eye-opener to see just what amazing value you can get when you buy Hanes Underwear. Read about the extra features over there in the illustration. Add 'em all up—then get this:

Hanes Winter Weight Underwear is made of fine, long-fibre cotton, snug-fitting, sightly and strongly made. Every seam is guaranteed unbreakable where the wear is greatest. It is springy and comfortable, warm and cozy.

Greatest Winter Underwear **HANES** Sold at Popular Prices

ELASTIC KNIT UNDERWEAR

Where can you get anything to touch that for downright value? Don't pay a high price just because you're used to paying it. Hanes is just the right price for everybody and the underwear everyone should wear.

Here's the Big Specialty for 1917

A boy's union suit that combines the best features of the men's suits with a downy softness and cozy warmness just right for youngsters. Its value can't be duplicated anywhere.

Ask the Hanes dealer to let you see these two big underwear values. If you don't know him, write us. Don't let this chance slip by, but stock up against the cold weather by buying a half dozen suits before your dealer is sold out.

GUARANTEE

We guarantee Hanes Underwear absolutely—every thread, stitch and button. We guarantee to return your money or give you a new garment if any seam breaks on Hanes Underwear.

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Winston-Salem, N. C.

Warning to the Trade—Any garment offered as Hanes is a substitute unless it bears the "Hanes" label.

This Label on Every Garment

HANES

Buy None Without It

Patterns

1857 — Ladies' corset cover and drawers. Cut in three sizes: Small, medium and large. It requires three and three-quarter yards of 36-inch material for a medium size. Price, 10 cents.

2001—Ladies' house dress, with or without back yoke. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires six and three-eighth yards of 36-inch material for a 36-inch size. The skirt measures about three yards at the foot. Price, 10 cents.

2004—Junior dress. Cut in three sizes: 12, 14 and 16 years. It requires five and a quarter yards of 36-inch material for a 14-year size. Price, 10 cents.

2012—Girls' one-piece yoke dress. Cut in four sizes: 4, 6, 8 and 10 years. It requires three and three-quarter yards of 36-inch material for an 8-year size. Price, 10 cents.

2059—A charming negligee. Cut in four sizes: Small, medium, large and extra large. The medium size will require six and a half yards of 36-inch material. Price, 10 cents.

2259—Boys' suit. Cut in four sizes: 4, 6, 8 and 10 years. Size 8 requires three and a half yards of 44-inch material. Price, 10 cents.

2140—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 36 requires seven yards of 36-inch material. The skirt measures about two and a half yards at the foot. Price, 10 cents.

2258—Ladies' waist. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 36 will require three and three-eighth yards of 27-inch material. Price, 10 cents.

2260—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 8 requires three and five-eighth yards of 36-inch material. Price, 10 cents.

2268—Ladies' apron. Cut in four sizes: Small, 32-34; medium, 36-38; large, 44-46 inches bust measure. Size medium will require four and a quarter yards of 36-inch material. Price, 10 cents.

2275—A new dress and hat for Miss Dolly. Cut in six sizes: For dolls, 16, 18, 20, 22, 24 and 26 inches in length. Size 24 will require one and a half yards of 27-inch material for the dress, and five-eighths yard for the hat. Price, 10 cents.

2286-2280—A pretty gown. Waist 2286 cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 2280 cut in six sizes: 22, 24, 26(28, 30 and 32 inches waist measure. The skirt measures about two and a quarter yards at the foot. To make this dress as illustrated will require eight and three-quarter yards of 44-inch material. Two separate patterns, 10 cents for each pattern.



Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

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Enclosed find .....

cents, for which send me the following patterns:

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Patterns No. ..... Size .....

Patterns No. ..... Size .....

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BE SURE TO GIVE NUMBER AND SIZE.

Plain Food Assures Health.

To the Editor: The women of America are surely able to do a great deal in the conservation of food. In this great Inland Empire where we have such bountiful gardens, and the age of glass jars, we can do much toward feeding our families, in winter, from garden stuffs of all kinds, which would otherwise be wasted.

Our sisters here who do not want to feed their chickens during winter can them in the fall, for winter use, making a splendid dish.

Our government bulletins on canning will give all the details for canning the various things. If only a jar or two of surplus is canned each time it soon gives a variety.

Not only in the canning way can we help, but in watching and checking the waste of the kitchen and in fact of the whole house. By cooking and serving plain, wholesome food our health is assured and years added to life.

What woman is not encouraged by the thought that less food material will be made into alcoholic drinks. God hasten the day when not an ounce will be used for such purpose.

MRS. ALICE G. FARR.

Albion, Was.

Palestine's Deep Valley.

The deepest valley is believed to be in Palestine; it is at least 1300 feet blow the level of the sea.

Trim Your Own Hair
Save Time and Money



For Your Own Use

For mothers to use on children. The **KLEEN-KUT HAIR TRIMMER** makes it possible and practical for a man to trim his own hair—No more barber shop waits, expense or inconvenience.

It requires no experience to secure desired results—it is as easy to trim your hair as it is to comb, and it is impossible to "cat-step" if the few simple directions are followed.

The KLEEN-KUT Hair Trimmer is not a clipper. It is an attachment for a special comb which we furnish complete.

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Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.



PERFECTION OIL HEATER



A Week's Vacation This Month.

Dear Aunt Nellie This is the first time I have written to the Corner. I hope that every member enjoys reading the letters as much as I do. May I join the Corner? If so, please let me know. My complexion is tan. I have brown eyes and dark brown hair. I am 10 years old. My birthday is the 18th of May. Have I a twin? I would like to see my letter in print. I am in the fifth grade. My teacher's name is Mrs. Bernice Anderson. I like my teacher. She is very good to me. I take music lessons from Miss Loveless. I am in the first grade of music. I think some of my lessons are very easy. I like Miss Loveless very much. I go to Sunday school to a little church about three-quarters of a mile from our place. My sister is the teacher in my class. There are 11 girls in my class when they are all there. There is one class for the little girls and one for the little boys, one for the big boys and girls. I am going to tell you what I do when not in school. I study my music lessons. Sometimes I wipe the dishes and carry in wood for my mother and run errands. We are going to have a week's vacation this month because teacher is going to the institute Thanksgiving week. I live on a 45-acre farm. I have three cats and also had some kittens, but they died. I have a dog whose name is Togo. Every time he is going to eat I tell him to speak and he will bark. When I tell him to shake hands he will put up his right foot. When any one comes around he always barks. Next time I write I will tell you about my summer vacation.—Violet Johnson, R. F. D. No. 5, Box 33, Mount Vernon, Wash.

(Yes, Violet, you are a cousin now and we are all going to enjoy your letters. Write often, won't you? Aunt Nellie.)

Hilma's Bit Is Drying Apples.

Dear Aunt Nellie: This is my fourth letter to the Farmer. It is quite a long time since I wrote last. But I like the letters so that I thought that I would write again. All the children are improving in their letters. Now I will tell you something about our farm. It is only 13 acres, but we have lots of hay in our barn and many potatoes in our cellar. It is getting colder now and rains oftener than it does in summer. It is raining a little bit now. It is getting pretty close to Thanksgiving. I like school fine now and I like my teacher, too. Her name is Miss Foxwell. I got a letter from a girl who writes to the Children's Corner, too. Her name is Edith Holm. I have gotten many good letters from her and ar glad to say I have answered all of them. I am still writing to her. For Thanksgiving dinner we have everything nice to eat, turkey, chicken, potatoes, pumpkin pie and many things that I can not mention because it would take too long. We play many games on Thanksgiving, too. On Thanksgiving we ought to think of the soldiers, too, who are in France fighting so hard for us while we can stay home and have everything nice. I suppose every school child in the United States is doing his bit. My sister and I are drying apples and I think it is a very good plan. Our teacher told us to do it. My birthday is August 8. I am 11 years old and in the fifth grade at school. I will write again.—Hilma Anderson, R. R. 3, Box 19, Olympia, Wash.

Jennie's Brother Has Enlisted.

Dear Aunt Nellie: It is quite a time since I have written to the Corner. This is my second letter to it. I am 14 years old. My birthday is April 25. I am in the eighth grade. If I have a twin I'd like to hear from her or any of the other cousins. I would like to have Aunt Nellie explain about The Roll of Honor and the prizes. I go to the Ebenezer Christian school. My teacher may have to go to the training camp before long. My brother enlisted in the aviation corps as a mechanic. He will go to Texas to be trained. He's in Fort Lawton now. I am corresponding with two of the cousins, both are aged 14. They are Edward Blakeslee and Luella Faulkner. I would like to see the Corner enlarge. I enjoy reading the letters. They are very interesting. A few new cousins of this school are writing to the Corner. I am writing this letter in school. I should be studying civics.—Jennie Van Wyke, Box 89, R. R. 1, Lynden, Wash.

Colored Reflections on the River.

Dear Aunt Nellie: This is the third time I have written to you. I enjoy the Corner very much. I have found a twin. Her name is Hazel Slinkard. She is just one day older than I am. I wish she would write to me. I will tell you about sunset. I do not think there are any prettier things than nature's own. One evening Gilbert, my brother, and I came home, and there was no one at home so I made a lunch for we were very hungry. Then we went down to the river to eat our lunch, but I found a better place, a nice levee we found, so we ate our lunch down there. While we were eating the sun set. The reflection on the river was pink, blue and red. Acrass the river the sumach was red as the baby rambler. There were some green shrubs there, too. When we were bringing the cows home from the pasture the sky was white in the middle, red and blue on each side. It loked like some one had stretched Old Glory over the sky. I think that one was right who said, "There is no place like home." My teacher and we girls help the Red Cross. I think the Red Cross is a great thing to help the wounded soldiers. I will tell you about a Hallowe'en party I went to. We girls dressed up as ghosts. We played Hallowe'en games. The men and boys formed a circle, one of us grils or women was to be their partner for supper. Then we drew our fortunes. I am a girl of 11. My birthday is on the 19th of September. I have brown hair. I weigh 62 pounds. I am in the fifth grade at school.—Maple Schleif, Box 33, Molson, Wash.

Five Miles to Go to School.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 14 years old. My birthday is the 23d of February. I go to school and I am in the sixth grade. We have to go five miles to school and it is nearly all up hill. We walk most of the time in winter because we get so cold riding horseback. The place we live on has two large berry patches, one is a loganberry and the other is dewberry. We can lots and sell as much as we can. We have five horses and one colt, two cows, seven pigs, lots of chickens and four guineas. We have one hound. He keeps the coyotes away from the chickens. We did have two hounds, but something happened to one of them and we don't know where she is. One time they were after a coyote and they ran him in the river, then one of the dogs ran in the river and fought it, but I do not know if he killed it or not. We live on the banks of the Snake river. In summer we have lots of fun fishing. I have three brothers and two sisters. My brothers' names are Isaac, Tommie and Arthur. My sisters' names are Olive and Myrtle. Myrtle is married and has a nice little baby boy. He is three weeks old. Our teacher is teaching us children music at school. I would like for some of the cousins to write to me.—Elva Green, Penawawa, Wash.

Viola Joins the Corner.

Dear Aunt Nellie: My subject is to tell about our stock and school. We have nine head of cattle. The cows' names are Bell, Beulah and Lily. Lily is just a yearling. We have three other yearlings named Buster, Spot and Billy. We have three calves. Their names are Frossie, Dick and Benny. We have three horses, Charley, Nellie and Tommy. I am nine years old and in the fourth grade at school. I have a brother 13 years old. He is in the seventh grade. We go to a country school and I would not trade with any city girl. I forgot to tell you my brother's name. His name is Carl. Our teacher's name is Rose Gute. This is the first time I have written and I hope it will not be the last. Maybe my letter will be longer the next time.—Viola Thornbrue, Cloverland, Wash.

Welcome, Verna, to the Corner.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the other children's letters. I go to school and am in the fifth grade. I study grammar, spelling, geography, reading, music, arithmetic and hygiene. I am taking writing, drawing and sewing also. My teacher's name is Miss Dunn. There are only five scholars in our school. May I join the Children's Corner? I am 10 years old. Have I a twin? If I have, will they please write to me?—Verna L. Huffman, Elk, Wash.

Wener Writes to the Corner.

Dear Aunt Nellie: I have never written any before and so I thought I would try. I am 11 years old and live on a 14-acre tract. I have one sister and two brothers and their names are Theodore, Leander and Vera. We have one horse and one cow and 35 chickens. I have a dog and his name is Jack and he will play with us. I am in the sixth grade. I would like to see my letter in print.—Wener Carlson, R. F. D. 1, Box 8, Shelton, Wash.

Making Christmas Presents.

Dear Aunt Nellie: These are what I think are the answers to Kathryn's riddle: Patch upon patch and a hole in the middle—A stovepipe. As I was walking down the street I met little Dick Redcap, with a stick in his hand and a stone in his throat—The stone was a cherry pit. Upon a hill there is a mill; around the mill there is a walk; under the walk there is a key—Milwaukee. Upon a hill there is an iron horse, all saddled, all bridled, all ready to ride. I've told you his name three times in a row—All. In marble walls as white as milk, lined with a curtain soft as silk, within a crystal fountain clear a golden apple doth appear; no doors are there to this stronghold, but thieves break in and steal the gold—An egg. I have been making Christmas presents. Aunt Nellie I wish you were here to eat Thanksgiving dinner with me.—Maggie McClay, Elkton, Ore.

Help Mary Can the Kaiser.

Dear Aunt Nellie: I guess you think I am very slow to write, but I have been going to school and have been too busy. And now, concerning the Junior Red Cross. I would like to organize one at Walterville, about a mile and a half from my home. We don't get our mail there because a rural route comes right past our house. I wish all the other cousins would try to organize a Junior Red Cross. I have some plans to exchange. I think it would be nice to give a little play, after we get the Red Cross started, don't you? And charge about 5 cents admittance. I am going to can about a dozen cans of apples for mamma. I should like to know how many of the cousins can can apples. I do. And how many of the girls ever made a cake all by themselves. I have, and baked bread, too. I should like to know how many of the cousins would like to help me can the kaiser.—Mary King, Route 2, Springfield, Ore.

Hopes We Won't Lose the Corner.

Dear Aunt Nellie: I have never written to the Corner before, but I have read the letters and enjoyed them very much. I have two sisters and one brother. Their names are Roberta and Elizabeth and my brother's name is Donald. I am 9 years old and in the fourth grade. I hope we won't lose our Corner. My letter is getting long. I will close for this time.—Eloise Evans, Prairie, Idaho.

THE BARRIER

(Continued from page twenty.)

singly, in a gentle tone that Runnion had never heard before.

"Getting kind of mushy, ain't you? I thought you had passed that stage, old man."

"No, I don't like her in that way."

"Well, I do, and I'm dead sore on that soldier."

"She's not your kind," said Stark. "A bad man can't hold a good woman; he can win one easy enough, but he can't keep her. I know."

"Nobody but a fool would want to keep one," Runion replied, 'specially a squaw."

"She's just woke up to the fact that she is a squaw and isn't as good as white. She's worried."

"I'll lay you a little eight to five that Burrell has thrown her down," chuckled Runnion.

"I never thought of that. You may be right."

"If it's true I'll shuffle up a hand for that soldier."

"If I were you I wouldn't deal it to him," said the gambler, dryly. "He may not cut to your break."

Manwhile Necia had passed on out of the town and through the Indian village at the mouth of the creek, until high up on the slopes she saw Alluna and the little ones. She climbed up to them and seated herself where she could look far out over the westward valley, with the great stream flowing half a mile beneath her. She stayed there all the morning, and although the day was bright and the bushes bending with their burden of blue, she picked no berries, but fought resolutely through a dozen varying moods that mirrored themselves in her delicate face. It was her first soul struggle, but in time the buoyancy of youth and the almighty optimism of early love prevailed; she comforted herself with the fond illusion that this man was different from all others, that his regard was equal to her own, and that his love would rise above such accidental things as blood or breed or birth. And so she was in a happier frame of mind when the little company made their descent at mid-day.

As they approached the town they heard the familiar cry of "Steam-boo-o-at," and by the time they had reached home the little camp was noisy with the plaint of wolf dogs. There were few men to join in the welcome today, every able-bodied inhabitant having disappeared into the hills, but the animals came trooping lazily to the bank and sat down on their haunches watching the approaching steamer, in their soft eyes the sadness of a canine race of slaves. Behind them limped a sick man or two, a soldier from the barracks, and in the rear a fellow who had drifted in the week before with scurvy. It was a pitiful review that lined up to greet the tide of tenderfeet crowding toward their El Dorado, and unusual also, for as yet the sight of new faces was strange in the north.

The deserted aspect of the town puzzled the captain of the steamer, and upon landing he made his way at once to John Gale's store, where he learned from the trader of the strike and of the stampede that had resulted. Before the recital was finished a man approached and spoke excitedly.

"Captain, my ticket reads to Dawson, but I'm getting off here. Won't you have my outfit put ashore?" He was followed by a group of fellow-passengers who made a similar request.

"This place is good enough for me," one of them said.

"Me, too," another volunteered. "This strike is new, and we've hit her just in time."

Outside a dozen men had crowded "No Creek" Lee against the wall of the store and were clamoring to hear about his find. Before the tardy ones had cleared the gangplank the news had flashed from shore to ship, and a swarm came up the bank and into the post, firing questions and answers at each other eagerly, elbowing and fighting for a place within earshot of the trader or the ragged man outside.

The frenzy of a gold stampede is like the rush from a burning building, and equally easy to arouse. No statement is too wild to lack believers, no rumor too exaggerated to find takers. Within an hour the crew of the steamer was busy unloading countless tons of merchandise and baggage billed to Dawson, and tents began to show their snowy whiteness here and there. As a man saw his outfit appear he would pounce upon it, a bundle at a time, and pile it by itself, which resulted in endless disputes and much confusion; but a spirit of youth and expectancy permeated all and prevented more than angry words. Every hour the heaps of baggage grew larger and the tents more numerous.

Stark wasted no time. With money in his hands he secured a dozen men who were willing to work for hire, for there are always those who prefer the surety of ten coined dollars to the hope of a hundred. He swooped down with these helpers on his pile of merchandise that had lain beneath tarpaulins on the river bank since the day he and Runnion landed, and by mid-afternoon a great tent had been stretched over a framework of peeled poles built on the lot where he and Necia had stood earlier in the day. Before dark his saloon was running. To be sure, there was no floor, and his polished fixtures looked strangely new and incongruous, but the town at large had assumed a similar air of incompleteness and crude immaturity, and little wonder, for it had grown threefold in a day. Stark swiftly unpacked his gambling implements, keen to scent every advantage, and out of the handful of pale-faced jackals who follow at the heels of a healthy herd he hired men to run them and to deal. By night Flambeau was a mining camp.

Late in the evening the boat swung out into the river, and disclosed a strange scene of transformation to the puzzled captain of a few hours ago. The river bank was lined with canvas shelters, illumined dully by the tent lights within till they looked like a rest of glowworms in deep grass. A long, hoarse blast of good wishes rose from the steamer, then she sighed her way around the point above, bearing forth the message that a new camp had been born.

(To Be Continued.)

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You have practically the same facilities for selecting merchandise as enjoyed by our resident customers if you will use

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We prepay shipments on dry goods by parcel post to any point in the state.

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Seattle, Washington.

News for Breeders

William Neuenschwander of Gaston, Ore., is one of the few men in western Oregon breeding large Yorkshire swine. His Yorkshires are typical of the breed, having long bodies, good backs and the Yorkshire head. His foundation sow, Rose of Coldstream, was bred in California, but goes back to noted ancestors in Canada and Minnesota.

During the Northwest Live Stock show at Lewiston, Idaho, W. G. Cordiner of Walla Walla, Wash., purchased the first, second and fourth prize Duroc Jersey sow pigs from Robert Nelson of North Yakima. Mr. Cordiner, who has leased his big ranch and purchased 160 acres near Walla Walla, will raise a few purebred Duroc swine, Shropshire sheep and probably beef cattle.

H. D. Fuller of Dayton, Ore., has for his Jersey herd sire a half brother to McArthur and Stauff's well-known bull, Holger, and G. G. Hewitt, Rinda Lad. He is pronounced by good judges to be even a better individual than either of the others and at any rate he has the blood of the famous Gertie Lad, that seems so prepotent. Mr. Fuller has a small herd of Jersey cows of the St. Lambert strain, the foundation for which he brought from Iowa with him.

During the Oregon state fair F. M. Kiger of Portland purchased from J. W. Fruit of Brooks, Ore., the junior champion Duroc Jersey boar, Fruit's Climax, paying $150 for him. Mr. Fruit, who bred, developed and showed the hog, also won junior championship last year and sold last year's boar to go to California for $150. Fruit's Climax has length, depth of body, a very neat head, short neck and about everything that makes a good Duroc. Mr. Fruit, who has been very successful in the show ring, won first on young herd in 1913, 1914, 1916 and 1917. In 1915 he did not show hogs to fill the class. During the fair Mr. Fruit also sold a fine young gilt to Nathan Hamilton, a Chehalis, Wash., Holstein breeder, one to H. E. Mullen and neighbor, Crabtreet, Ore., one to John Minto, Clackamas, Ore., and one to O. L. Dunlop of Salem. Some of these were out of Lucy Wonder, a sow for which Mr. Fruit paid $250 in the east. H. A.

A Champion Winner.



The above photo shows the Baldwin Sheep company Rambouillet ram No. 2643, bred at their home ranch at Hay Creek, Ore. The photo was taken at the Prineville, Ore., fair, where the ram won grand championship. The grandparents on the dam's side and the great-grandparents on the sire's side were imported, and on the sire's side, especially, some of the most noted animals of the breed show in the pedigree.—H. A.

Wilson Sale of Poland Chinas.

The sale of purebred Poland China hogs, recently held by Wilson Bros., of Greenleaf, a few miles west of Caldwell, Idaho, was successful and satisfactory in every way. Some 50 purebred animals of their own breeding were sold by the firm, and a considerable number of them were shipped to Oregon and Washington points. Wilson Brothers hold a regular annual sale of purebred swine, in which they catalog stock of excellent breeding, and the event is looked forward to with interest by swine raisers.

A. L. Wilson, manager of the firm, is a recognized authority on swine and a breeder of extended experience. He was the superintendent of the swine department of the Northwest Live Stock show this year.

Choice Poland Chinas

Weaned pigs, $10; 60 lbs., $15, and the best bronze turkeys in the state. Magnificent markings. Pearl guineas. Toulouse geese.

E. A. KRUSE. Roseburg, Oregon.

See Fine Stock

Parades of Horses and Cattle

By HORACE ADDIS.

The many parades of the horses and cattle during the Northwest Live Stock show at Lewiston, both in the big horse tent and in front of the grandstand, gave the visitors an excellent opportunity to see the stock to the best advantage. Both owners and herdsmen were very accommodating, bringing the stock out without grumbling on all occasions.

The annual banquet on Monday night was largely attended, as usual, and, besides the felicitous addresses and musical program, the pledging of nearly $5000 for next year's show proved the practicability of the banquet. This show has come up through many trials and hardships to where it is now. It has state aid and is so firmly established there is no question of its continuance.

Day & Rothrock of Sprague, Wash., won grand championship on fat steers. The winner is a purebred Shorthorn and he defeated a Hereford shown by the University of Idaho, the two having won championships for their breeds. There was much good natured rivalry between the herdsmen of the two breeds and they say it has got to be done all over again at the Portland show.

Secretary Paul Clagstone, whose efficient work did so much to make the Northwest Live Stock show at Lewiston a success, has been sent to Chicago to attend the International Live Stock show and to attend a number of meetings of breed associations which are expected to add special prizes or extra money to next year's premiums.

The horse show Monday night was not only a grand showing of magnificent horses, but it had a patriotic flavor. Patriotic airs by the band and patriotic songs were the order and when the song, "America, Here's My Boy," was rendered by a local celebrity riding a beautiful stallion decorated with the national colors, the enthusiasm knew no bounds. George Wilson delivered a short, practical talk on the utility of the horse. The prize cattle were paraded and talks on the different breeds were made by A. D. Dunn, Harry Summers and others.

The sheepmen exhibiting at the Northwest Live Stock show took the initiative in the organization of a sheepmen's association, one of the objects being to hold a sheep sale at the show next year.

The handsome silver cup given by the Farmer for the premier herd of Shorthorn or Hereford cattle—that is, the herd having the greatest number of points, based on their awards, was won by the A. B. Cook herd of Townsend, Mont.

The Lewiston Poultry show was held inside the stock show grounds. About 500 birds were on exhibition. Rhode Island Reds having by far the largest number of any breed shown. But practically all the utility breeds and a few of those classed as fancy were represented. The show was a decided success and had a stream of visitors at all times.

The herdsmen presented Auctioneer Harry Cranke with a gold pin and a card case. This was in recognition of their gratitude for the banquet Harry gave them the early part of the show.

The Poland China breeders petitioned their record association to authorize a "roundup" futurity at the Northwest Live Stock show next year. Idaho, Oregon and Montana already have Poland China futurities and the idea is to round up the best young stock—the prize winners from the three states at the great show. It is a fine idea and ought to have recognition.

The price of 20 cents a pound for the champion carload of fat hogs at the Lewiston Stock show is the highest price ever paid for hogs in the Pacific northwest. E. S. Sweet of Grangeville, Idaho, showed the first prize car of heavy hogs and Robert Nelson of North Yakima, Wash., the first prize car of light hogs. Mr. Sweet's load won the championship. But under present conditoins 20 cents is only a little above the market. Will the champion car at the Portland show beat it?

The Poland China and Duroc Jersey men all report good sales of stock, running up into many hundreds of dollars.

The directors at their annual meeting, during the show, reelected Mr. Wren, president; R. C. Beach, treasurer, and Paul Clagstone, secretary. Dean Iddings of the University of Idaho was elected vice president, in place of D. S. Wallace, who refused to stand for reelection. Mr. Wallace was presented with a handsome gold watch by the exhibitors and others connected with the show.

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Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

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REGISTERED HOLSTEINS

Bull calves for sale with good A. R. O. backing.

BEEBE BROS., R. F. D. 2, Rupert, Idaho.

REGISTERED HOLSTEINS

of exceptional breeding. Prize winners Southern Idaho Fair. Prices within reason to farmers. Write for descriptions.

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Waikiki Farm Jerseys

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JERSEY BULL FOR SALE.

Year old, good individual, priced reasonable. Dam gave 45 to 50 lbs. of milk a day, test 4.8. Sire, Island bred.

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Gilts, bred or open, boars ready for service. Also weanling pigs. Best of breeding.

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Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

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For Sale

500 yearlings, 300 two to five; 200 ewe lambs. Will sell in any number.

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20 Oxford Down Rams 20

Yearlings and ram lambs; will make special price on the lot. All stock registered. No ewes for sale.

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Thirty choice Oxford ram lambs for sale. Prices reasonable.

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Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Now is the time to buy for next year's breeding, from blue ribbon stock. Sale of pedigreed Rufus Red Belgian hares, bargains at $3 each. Registered Airdale bitch at a bargain if taken at once.

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Buhl and Filer, Idaho.

BATTEN'S S. C. REDS

I have 50 of the best cockerels that I have ever seen in one yard that I am offering at low prices, quality considered, in order to move them quickly to make room for younger stock. Prices range from $5 to $15 and can give you good selection if you will write me your wants. Can spare a few good pullets at $2.50 each. Let me hear from you.

E. F. BATTEN, HOOD RIVER, ORE.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Nov. 26.—Increasing supplies had a bearish effect today on corn, but talk of big export sales of oats formed something of a counterpoise. Corn finished unsettled, 121¾ January and 119⅝ May with the close as a whole ranging from ¾ decline to ⅝ advance compared with Saturday's latest figures. Oats gained 1 to 1½ net. The outcome in provisions varied from a setback of 12 to a rise of 27.

Chicago Futures.

	Open.	High.	Low.	Close
Corn—				
Jan.	1.20⅞	1.22⅛	1.20⅝	1.21¾
May	1.18½	1.19⅞	1.18⅜	1.19⅝
Oats—				
Dec.	.69¾	.71⅝	.69¾	.71⅝
May	.68⅞	.70⅝	.68⅞	.70⅝
Pork—				
Jan.	46.45	46.77	46.33	46.72
Lard—				
Jan.	24.70	24.90	24.65	24.87
May	24.55	24.70	24.32	24.70
Ribs—				
Jan.	24.75	25.10	24.75	25.10
May	24.60	24.92	24.60	24.92

Cash Quotations.

CHICAGO, Nov. 26.—Corn—No. 2 yellow, nominal; No. 3 yellow, $1.93; No. 4 yellow, $1.75@1.80.

Oats—No. 3 white, 72¼@73¼c; standard, 72¾@72½c.

Rye—No. 2, $1.79.

Barley, $1.10@1.41.

Timothy, $5@7.75.

Clover, $20@26.

Pacific Northwest Grain.

PORTLAND, Ore., Nov. 26.—Grain futures bids: December oats, $53.50; feed barley, $52.50; brewing barley, $54. Eastern oats and corn in bulk bid: [illegible] 3 white, November, $49.50; 38-pound clipped white, $50; corn, No. 3 yellow, January, $59; No. 3 mixed, [illegible]ber oats, No 3, $51.50; oats [illegible] February corn, yellow, [illegible] c.d. $58.50.

[illegible], Nov. 26.—Yesterday's car [illegible] flour, 12, wheat, 133; oats, [illegible]

[illegible]ncisco Grain.

SAN [illegible] 26.—Barley—December, [illegible]

Flour, $10.30 per barrel; wheat, gov[illegible]ed, $2.65 2.52½; corn, [illegible]

[illegible] Minn., Nov. 26.—[illegible] cars compared [illegible] carload lots, [illegible]

Live Stock Quotations.

At Omaha.

[illegible]ov. 26.—[illegible]lb to 20c l[illegible]

[illegible] 16,000; [illegible]@15.50; [illegible]

[illegible] $17.35 [illegible] rough, [illegible]

Cattle—Receipts, [illegible] weak. Native steers, $7.35@14.85; western steers, $6.15@13.65; stockers and feeders, $6@[illegible] cows and heifers, $5@11.75; [illegible] $[illegible]

Sheep—Receipts, 27,000; unsettled. Wethers, $8.75@12.90; ewes, $7.60@11.40; lambs, $12.25@17.10.

At Portland.

PORTLAND, Ore., Nov. 26.—Cattle—Active; receipts, 948. Medium to [illegible] good to me[illegible] common to good steers, [illegible] choice cows and heifers, $5.25@7; canners, $3@5.25; bulls, $4.50@6.75; calves, $7@9.50; stocker and feeder steers, $4@7.50.

Hogs—Higher; receipts, 2198. Prime light, $16.50@16.65; prime heavy, $16.25@16.50; pigs, $14@15.50; bulk, $16.25@16.50.

Sheep, steady; receipts, 35. Western lambs, $13.50@14; valley lambs, $13@13.50; yearlings, $12@12.50; wethers, $11.75@12.25; ewes, $8@10.

The Portland market on shorn sheep is 2½c to 3c under quotations.

Spokane Union Stockyards.

Hogs—Receipts, 100; market steady to strong. Prime light, $16@16.25; prime heavy, $16@16.25; pigs, $14.50@15.25; stockers and feeders, $12@13.25. Bulk of sales, $16.

Cattle—Receipts, 30; market steady. Best beef steers, $8.75@9.25; good steers, $7.75@8.50; best beef cows, $6.25@7; ordinary to good, $4.75@6; Canners, $3@4.50; best heifers, $6.50@7.25; bulls, $5@6.50; calves, $6@8; stockers and feeders, $5@7.25.

Sheep—Receipts, 23; market steady. Prime lambs, $13.25@14; good lambs, $12@12.50; prime yearlings, $11.50@12.50; prime wethers, $11.25@12.25; best mutton ewes, $8.50@10.

Portland Market.

PORTLAND, Ore., Nov. 26.—Thanksgiving turkeys were firm at 30 cents for No. 1 at the close of the week. Arrivals were quite large, but everything of good quality cleaned up well on shipping orders, mostly for Seattle. The trade here expects this price to be maintained up to the close. A good many cull birds are coming in, showing that farmers are willing to take a chance at marketing their turkeys rather than feed them at the present price of grain. Retailers says the retail price will not go over 35 cents.

Live poultry has sold well at firm prices, except live turkeys, but not many of these have come in.

Country dressed meats were fairly steady at the close.

There is a small shipping demand for eggs for the first time in weeks. Fresh ranch receipts are light, but storage is freely offered.

A sample shipment of Australian butter was received from San Francisco and pronounced by experts to be good notwithstanding the long time in transit. Country creamery butter was scarce and with a better demand sold up to 44 1-2 cents at the close of the week. Prints were unchanged and can hardly go higher, despite the strength of cubes, owing to price cutting in the retail trade.

The cheese market is firm for the best grade, but much poor cheese is offering here for which there is no demand.

Potato shipments have practically ceased, owing to the car shortage, though a few cars of red seed potatoes are being dispatched to California. The shipping movement in onions has also stopped.

Beans are weaker and about a cent lower. The trade is buying only for its immediate needs.

Although hide markets in the east have slumped, dealers say northwestern buying prices will hold until the first of the month.

The hop market is entirely neglected and quotations are nominal and lower.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

[illegible]—No. 1, $53 per ton.

[illegible] per ton; shorts, [illegible]

[illegible]o. 1 feed, $52.50; brewing, [illegible]

[illegible]ying prices: Timothy, eastern, $27; alfalfa, $22.50@24;

[illegible]gon ranch, case counts, [illegible]; candled, 55@[illegible]

[illegible]ens, 17 1-2@20c; ducks, 18 [illegible]eese, live, 22c; geese, 13@[illegible]

[illegible] prints, 45@[illegible] extras, 41@[illegible]

[illegible] triplets, 23c; [illegible]

[illegible] 15@15 1-2c; [illegible]

[illegible] 1917 crop, 20c. [illegible]gon, buying price, [illegible]

[illegible]— Eastern Oregon, 40@65c; [illegible] 50@60c.

Buying prices: Oregon navy, [illegible] Washington, 9c; colored, 8c.

Seattle Market.

SEATTLE, Nov. 24.—Seattle jobbers have been advised today that many of the sacks of spuds shipped in here and believed to be field run have actually been graded to No. 1 and No. 2 and it is stated on good authority that were all the Yakima spuds to be scaled to No. 1 there would not be 25 per cent of a crop. This situation, which has been disclosed after careful investigation, explains in a measure the abnormally high prices of stock in eastern Washington.

Nevertheless current quotations can not prevail for long, and growers themselves are becoming reconciled to the fact. Quotations of $25@28 f. o. b. shipping point are now in the hands of Seattle merchants. The car shortage, however, is constantly getting in the way of delivery. Shippers say it is practically impossible to secure rolling stock in which to move stock to this market. Blighted and scabby spuds are quoted at $20, Yakima shipping points. Puget Sound growers stand firm at their quotations of 30 days ago, or $30 f. o. b. The week has closed without any appreciable change in price conditions and a sharply constricted local movement.

Turkeys are arriving in increasing volume from Idaho shipping points, and the market is steady at 20c country price, Idaho, and 28@30c delivered Seattle. Jobbers continue to quote 35c to the trade.

The crop is believed to be heavy, but the condition of the birds will not be as good as for the holiday trade.

The egg market is weak. There is no commodity so erratic today as fresh ranch eggs, which is governed solely by the daily supply and demand. Occasional bids over the market are made by packers and by local jobbers in getting stock hurriedly for the Alaska trade. Some of the jobbers are able to get all the stock required at 54c, while others are paying 2 cents more. There is a growing conviction that Chinese eggs, due to begin arriving next month, will exert considerable influence this year in the domestic trade. Information has reached Western avenue that the egg industry in China has been readjusted, and that the feed supplied to the birds is principally rice. Influence of Americans in the production of Chinese eggs at work for three years has resulted in what is regarded as a vast improvement in sanitary methods of production.

The butter market is slightly firmer for the week-end. The local demand has increased. Storage butter is enjoying a brisk movement.

[illegible] PRICES.

Unless otherwise stated, the following prices are fixed on a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

[illegible]gs—Local, 56c per dozen, pullets, 45c dozen.

Poultry—Live hens, fat, over 4 lbs., 21@22c per lb.; 4 lbs. and under, 17@19c; old roosters, 14c per lb.; squabs, large, $3.50 per dozen; geeze, fat, live, 15c per lb.; springs, live, fat, 21c per lb.; hens and young tom turkeys, 28@29c per lb.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.; heifers, 6@8c per lb.

Hogs—Light, 16@18c per lb.; heavy, 12@13c per lb.

Veal—Fancy light, 14@16c per lb.; heavy, 9@13c per lb.

Hides—Salted, 18c per lb.; flint-dry hides, 32@33c per lb.; salt kip, 18c per lb.; green hides, 15c per lb.; green calf, 28c per lb.; dry calf (under 5 lbs.), 34c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry full wool sheep pelts, 36@38c per lb.; salt bulls, 14c per lb.

Spokane Market.

High grade turkeys raised in the Inland Empire for the Thanksgiving table will sell at 35 cents a pound, the same as last year.

The dealers say that some sound birds not quite up to first grade will be retailed at 32 cents or even a little less.

Inquiry failed to discover the fate of the 8000 pounds of turkey which was reported to be in cold storage in this city and which must be disposed of before January by order of the food commissioner.

The prices of other poultry suitable for the season are: Capon, 33 cents a pound; geese, 23 to 25 cents a pound; ducks, 25 to 28 cents; roasting hens, 23 to 25 cents, and broilers, 30 cents a pound.

Except for turkeys the prices are somewhat tentative and may undergo some changes in the week. The prices are a little higher than last year.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices paid to the producer.

Potatoes—New local potatoes, $1.75 cwt.; sweet potatoes, $3.25@3.50 cwt.

Apples—Local cating apples, $1.75@1.50; cooking apples, $1 box; Delicious, $1.75@2.50; Red Macintosh, $1.50@1.75 box; Winter Bananas, $2 box; Jonathans $1.25@1.35 box; Wagners, $1.25@1.35 box; Rome Beauties,, $1.25@1.35 box; Spitzenbergs, $2@2.25 box; King Davids, $1.25@1.35 box.

Butter—Blanchard cartons, 49c lb; Medo-Maid, 49c lb; Cascade, 49c lb; Gold Leaf, 49c lb; Better Butter, 49c lb; Attalia, 49c lb; Diadem, 49c lb; Hazelwood, 49c lb; Solid Pack, 48@49c lb; Jersey Belle, 47c lb; Peerless, 45@46c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, [illegible] lb; Wisconsin limburger, 32@33c lb; brick cheese, 34c lb; domestic Swiss, 35c lb; Young Americas, 26c lb.

Eggs—White filler, guaranteed, $13.25 case; selected storage, $[illegible].50.

Live Poultry—Hens, 13@[illegible] lb. broilers, 20c lb; old roosters, 9c lb; [illegible] lb; geese, 9c lb; turkeys, 22@25c lb.

Dressed Poultry—Hens, [illegible] lb. broilers, 22c lb; old roosters, 11c lb; [illegible] lb; geese, 11c lb; turkeys, 27c lb.

Hide Quotations.

Green Cows and Steers—25 lbs. and up, 13c; salted cured, 16c; [illegible] bulls and stags, 11c; salted cured, 13c; [illegible] 15 lbs to 25 lbs, 22c; calf skins up [illegible]; dry flint hides, 30c; d[illegible], 30c; dry calf skins, under 7 lbs, 3[illegible] pelts, 35@40c; dry shearlings, 10c; [illegible] horse hides, $1@2 each; [illegible], $2.50@4 each.

The Wool Market.

BOSTON, Nov. 23.—[illegible] Bulletin will say tomorrow:

"Trading in the local wool market has been within restricted limits this week, although almost [illegible] of wool has been in request. [illegible] very firm throughout the week.

"Manufacturers report [illegible] percentage of machinery [illegible] engaged on military contracts. [illegible] wools are being [illegible] southwest at prices [illegible] to 54c."

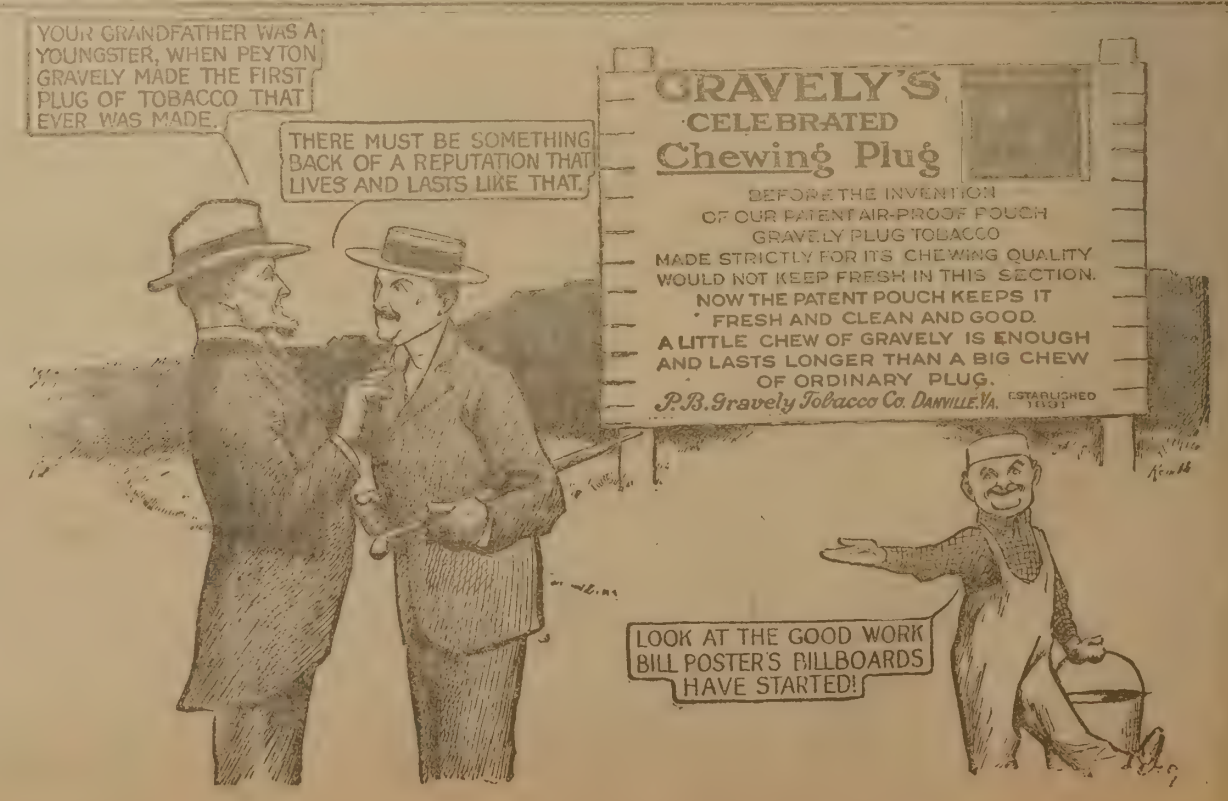
Soured basis:

California [illegible]; middle county, [illegible]

Oregon: Eastern [illegible], eastern clothing, $1 [illegible] 1, $1.60@1.65.

Territory, fine [illegible] 1-2 blood combing, [illegible] blood combing, $1.45@[illegible]ing, $1.60@1.65; fine [illegible] $1.55@1.60.

Pulled extra, $1.80@[illegible] 1.80; A supers, $1.60@1.[illegible]



Miles of Meat Are Seen at Portland

(Continued from page four.)

ston estate, on Silver Bell. Grand champion sow—Silver Bell.

Duroc Jerseys.

Boar, 1 year or over—First, C. S. Magee, McMinnville, Ore., on Ridgeview Colonel; second and third, Robert Nelson, Yakima, Wash., on Golden Komiac and Mont's Golden Model. Senior yearling boar—First, Robert Nelson, on Highland Chief. Junior yearling boar—First, Robert Nelson, on C. R.'s Wonder; second, Doerfler Bros., Silverton, Ore., on Critic's King; third, F. A. Coffin, Monmouth, Ore., on Golden Colonel. Senior boar pig—First, F. A. Coffin, on Golden King. Junior boar pig—First and second, F. A. Coffin, on King Monarch and Colonel Golden Rod; third and fourth, Robert Nelson, on Bob's Golden Model and Wonder Boy.

Sow, 2 years or over—First, Doerfler Bros., on Golden Rod's Queen; second, C. S. Magee, on Critic Beauty; third, Robert Nelson, on R. J. O. Medium; fourth, F. A. Coffin, on Golden Primrose. Senior yearling sow—Robert Nelson, on Choice Beauty. Junior yearling sow—First and third, Robert Nelson, Queen and Queen 2d; second and fourth, F. A. Coffin, on Oregon Red Bird and Monarch's Bell. Senior sow pig—First and second, Robert Nelson, on Lady White and Crimson Wonder's Choice; third and fourth, F. A. Coffin, on Advance's Golden and Valley Special. Junior sow pig—First and third, Robert Nelson, on Worth While Again and Then Some Lady; second and fifth, Doerfler Bros., on Mellow Lawn's Queen and Mellow Lawn's; fourth, F. A. Coffin, on King's Rose.

Senior champion boar—Robert Nelson, on Highland Chief. Junior champion boar—F. A. Coffin, on Golden King. Grand champion boar—Highland Chief. Senior champion sow—Robert Nelson, on Queen. Junior champion sow—Robert Nelson, on Lady White. Grand champion sow—Queen.

Senior herd—First, Robert Nelson; second, F. A. Coffin. Junior herd—First, F. A. Coffin; second, Robert Nelson. Junior herd bred by exhibitor—First, Robert Nelson. Get of sire—First and third, F. A. Coffin; second and fourth—Robert Nelson. Produce of sow—First, F. A. Coffin; second, Robert Nelson.

Chester Whites.

Boar, 2 years or over—First, Edward Schoel, Suver, Ore., on Gem Albright. Junior yearling boar—First, T. Brown, Yankton, Ore., on Woodrow of B. F.; second, Edward Schoel, on Linn Wood; third, R. L. Badger, Oregon City, Ore., on Willamette Valley King. Junior boar pig—First and second, T. Brown, on Woodrow Sequel and Daisy's Master; third and fourth Edward Schoel, on Dick and Bob; fifth, R. L. Badger, on Lily's King.

Sow, 2 years or over—First and second, Edward Schoel, on Elmo's Bess and Miss Linn. Senior yearling sow—First and second, Edward Schoel, on Baby Linn and Ruby Linn. Junior yearling sow—First and third, R. L. Badger, on Lily of B. F. and Lula's Gem; second and fourth, on Midge Linn and Ella Linn. Senior sow pig—First, Edward Schoel, on Lily. Junior sow pig—First, R. L. Badger, on Lily's Beauty; second and third, Edward Schoel, on Dot and Daisy.

Senior champion boar—T. Brown, on Woodrow of B. F. Junior champion boar—T. Brown, on Woodrow Sequel. Grand champion boar—Woodrow of B. F. Senior champion sow—Edward Schoel, on Elmo's Bess. Junior champion sow—Edward Schoel, on Lily. Grand champion sow, Elmo's Bess.

Aged herd—First and second, Edward Schoel; third, R. L. Badger. Young herd—First, Edward Schoel; second, R. L. Badger. Young herd bred by exhibitor—First, Edward Schoel; second, R. L. Badger. Get of sire—First and third, Edward Schoel; second, T. Brown; fourth, R. L. Badger. Produce of sow—First and third, Edward Schoel; second, T. Brown; fourth, R. L. Badger.

Berkshires.

Junior boar pig—First, Earl Wood, Silverton, Ore.; second, George Bertrand, Castle Rock, Wash.

Junior yearling sow—First and second, Earl Wood, on Riverview Lady and Riverview Lady 2d. Senior sow pig—Earl Wood, on Bonnie Black Bess and Bonnie Black Bess 2d. Junior sow pig—First, Earl Wood, on Winona Lass.

Junior champion and grand champion boar—Earl Wood, on Homewood Champion. Senior champion sow—Earl Wood, on Riverview Lady. Junior champion sow—Earl Wood, on Winona Lass. Grand champion sow—Riverview Lady.

SHEEP.

The following are the awards in the sheep division at the Pacific International:

Rambouillet.

Ram, 2 years or over—First, Baldwin Sheep company, Hay Creek, Ore.; second and third, Mrs. R. A. Jackson, Turner, Wash. Ram, 1 year and under 2—First and second, Mrs. R. A. Jackson. Ram, under 1 year—First and fourth, Baldwin Sheep company; second and third, Mrs. R. A. Jackson; fifth, Ed Schoel, Suver, Ore.

Ewe, 2 years or over—First and third, Baldwin Sheep company; second and fourth, Mrs. R. A. Jackson; fifth, Ed Schoel. Ewe, 1 year and under 2—First and third, Mrs. R. A. Jackson; second and fourth, Baldwin Sheep company; fifth, Ed Schoel. Ewe lamb, under 1 year—First and third, Mrs. R. A. Jackson; second and fifth, Baldwin Sheep company; fourth, Ed Schoel.

Champion ram—Mrs. R. A. Jackson. Champion ewe—Baldwin Sheep company.

Flock—First, Mrs. R. A. Jackson; second, Baldwin Sheep company; third, Ed Schoel. Pen bred by exhibitor—First, Mrs. R. A. Jackson; second, Baldwin Sheep company; third, Ed Schoel. Get of sire—First, Mrs. R. A. Jackson; second, Ed Schoel.

Hampshire.

Ram, 2 years or over—First, Brown Bros., Twin Falls, Idaho. Ram lamb, under 1 year—First and third, Brown Bros.; second and fifth, J. G. S. Hubbard, Monroe, Ore.; fourth, Ed Schoel, Suver, Ore.

Ewe, 2 years and over—First and third, Brown Bros.; second and fourth, J. G. S. Hubbard; fifth, Ed Schoel. Ewe, 1 year and under 2—First and second, J. G. S. Hubbard; third and fourth, Brown Bros.; fifth, Ed Schoel. Ewe lamb, under 1 year—First and fourth, J. G. S. Hubbard; second and third, Brown Bros.

Champion ram—Brown Bros. Champion ewe—J. G. S. Hubbard.

Flock—First, Brown Bros.; second and third, J. G. S. Hubbard; fourth, Ed Schoel. Pen bred by exhibitor—First and third, J. G. S. Hubbard; second, Brown Bros.; fourth, Ed Schoel. Get of sire—First and second, J. G. S. Hubbard; third, Ed Schoel.

Oxfords.

Ram, 2 years or over—First, C. P. Kizer, Harrisburg, Ore.; second, William P. Emery, Macleay, Ore. Ram, 1 year and under 2—First, William P. Emery; second, C. P. Kizer. Ram lamb under year—First and third, William P. Emery; second and fourth, C. P. Kizer.

Ewe, 2 years old or over—First and third, William P. Emery; second, C. P. Kizer; fourth and fifth, A. D. Gribble, Aurora, Ore. Ewe, 1 year, under 2—First and third, William P. Emery; second and fourth, C. P. Kizer; fifth, A. D. Gribble. Ewe lamb under year—First and fourth, William P. Emery; second and third, C. P. Kizer; fifth, A. D. Gribble.

Champion ram and champion ewe—William P. Emery.

Flock—First, C. P. Kizer; second, William P. Emery. Pen bred by exhibitor—First, William P. Emery; second, C. P. Kizer. Get of sire—First, William P. Emery; second, C. P. Kizer.

Dorsets.

W. H. Cleveland of Gresham, Ore., the only exhibitor, won awards as follows:

Ram, 2 years and over—First. Ram lamb under year—First and second.

Ewe, 2 years and over—First and second. Ewe, 1 year and under two—First and second. Ewe lamb under year—First and second.

Champion ram and champion ewe.

Flock—First and second. Pen bred by exhibitor—First. Get of sire—First.

Southdowns.

J. G. S. Hubbard of Monroe, Ore., the only exhibitor, won awards as follows:

Ram, 2 years and over—First. Ram, 1 year and under 2—First. Ram lamb, under 1 year—First and second.

Ewe, 2 years and over—First and second. Ewe, 1 year and under 2—First and second. Ewe lamb, under 1 year—First and second.

Champion ram and champion ewe.

Flock—First and second. Pen, bred by exhibitor—First and second. Get of sire—First and second.

Cotswolds.

Ram, 1 year and under 2.—First, D. J. Kirby, McMinnville, Ore. Ram lamb, under 1 year—First and second, F. A. Koser, Rickreall, Ore. Third and fourth—D. J. Kirby.

Ewe, 2 years or over—First and second, D. J. Kirby. Ewe, 1 year and under 2—First and second, D. J. Kirby. Ewe lamb, under 1 year—First and second—F. A. Koser; third and fourth, D. J. Kirby.

Champion ram—F. A. Koser. Champion ewe—D. J. Kirby.

Flock—First, D. J. Kirby. Pen, bred by exhibitor—First and second, F. A. Koser; third and fourth, D. J. Kirby. Get of sire—First and second, F. A. Koser; third and fourth, D. J. Kirby.

Lincolns.

J. G. S. Hubbard of Monroe, Ore., the only exhibitor, won awards as follows:

Pen, bred by exhibitor—First. Get of sire—First.

Shropshires.

Pen of lambs—First, J. G. S. Hubbard & Sons, Monroe, Ore.

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Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

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MISCELLANEOUS—FOR SALE 60

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Spruce flour bins	1.75
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SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

10-LB. PAIL SALTED BLACK COD BELLies, the best part of the fish. Within 300 miles of Seattle, $1.50 by parcel post.

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SEATTLE, WASH.

TRAP COYOTES—IF YOU WANT TO learn of a sure system for trapping coyotes write me for information. I have it. C. L. Willis, Dillard, Ore.

MISCELLANEOUS WANTED 63

POULTRY WANTED.

We want live poultry, dressed meats, hides and potatoes. We solicit your cream shipments. Write for prices. Commercial Creamery Company, Spokane, Wash.

AUCTIONEERS 75

N. R. SHEPHERD, FARM AND LIVE stock auctioneer, Troy, Idaho.

MACHINERY FOR SALE. 93

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. S., SEATTLE.
Write for Catalogue.

MACHINERY—WANTED 96

WANTED—TRACTOR AND HAY BALER, second-hand caterpillar or track layer engine; also self-feed hay baler. Green Meadow Ranch, Route No. 3, Boise, Ida.

STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174

PEDIGREED POULTRY.

Tom Barron strain of English Leghorns; every bird pedigreed; 257-egg hens, cock's dam 275 eggs. These are real egg producers. A limited amount of choice stock for sale. Satisfaction guaranteed or no sale. Prices very reasonable. Asael H. Dixon, Oakley, Idaho.

S. C. W. LEGHORNS AND R. I. RED COCKerels, hens and pullets; heavy-laying strains. Mrs. Rominger, Underwood, Wash.

FOR SOMETHING GOOD IN SILVER Wyandottes, S. S. Hamburgs or Golden Campines write G. G. Wherry, Payette, Ida.

LIVE STOCK 177

RED CLOVER BIG TYPE POLANDS—Mouw, Fesenmeyer, Miller and Herring strains—spring pigs, both sexes, with quality, for sale. Never before could you raise or buy grain and make as much money feeding good hogs as now. Write your wants. Inspection solicited. H. J. Howser, Stites, Idaho.

YOUNG BERKSHIRE BOARS FOR SALE. Fall pigs from prize winners; rich in blood of Laurel Champion. Also a few gilts for sale.
ROY D. LA RUE, ROBERTS IDAHO.

FOR SALE—REGISTERED PERCHERON mares and stallions. Green Meadow ranch, Route No. 3, Boise, Idaho.

IMPROVED CHESTERS; PRIZE WINning strains; either sex. Fred H. Hoffman, Albion, Wash.

FOR SALE—1000 CATTLE, 5000 SHEEP in lots to suit. Coffin Bros., North Yakima, Wash.

POLAND CHINA HOGS FROM PRIZEwinner stock. Chas. Yockey, Troy, Idaho.

LIVE STOCK 177 Continued.

FOR SALE—A PUREBRED IMPORTED SHIRE stallion, 7 years old; descendant of the famous Forest King. Stephen Evans, Hartline, Wash.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TANNERS 425

HIGH-GRADE ROBES FROM YOUR horse and cow hides. Send for catalogue. John T. Little Hdw. Co., Spokane, Wash.

TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, S2 Bernard, Spokane.

MONUMENTS 510

GET MY PRICES ON MONUMENTS BEfore placing your order. I can save you money. Geo. H. Moody, Moscow, Idaho.

PLUMBING—STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

NURSERY STOCK 621

BERRY PLANTS AT WHOLESALE prices. Blackberries, loganberries, strawberries, raspberries, currants, gooseberries, dewberries, grapes, rhubarb and asparagus roots. Write for price list. Rosecroft Nursery & Fruit Farms, Sumner, Wash.

FARM LANDS—FOR SALE 651

FOR SALE—WHEAT RANCH.

560 acres; eastern Washington; all in cultivation; level or gently rolling; 320 a. summer fallow crop; wheat coming season; 2 mi., two towns, elevators, warehouses; water, windmill, cisterns. Terms, ⅓ cash, 10 years time on balance; 6 per cent interest. Also:

30 a. choice land in heart of the Willamette valley; in high state of cultivation; beautiful home site; grows wheat, oats, corn, vetch, clover, garden, fruit; oiled and graveled roads to Albany, Ore.; 6½ mi. to Corvallis; 6 mi. home of O. A. college; 1 mi. to station electric and steam; store, hall, social clubs, grammar school, high and branch state normal training school. Rural mail, phones, creamery route; up to date and progressive community. Terms: One-third cash, 10 years balance, 6 per cent interest.
J. W. DODGE, R. 1, Corvallis, Ore.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence. Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; 20 years to pay. $2000 loan in improvements, or ready-made farms. Loans of live stock; taxes average under 20c an acre; no taxes on improvements, personal property or live stock. Good markets, churches, schools, roads, telephones; excellent climate; crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Alan Cameron, Gen'l Supt. Land Branch, Canadian Pacific Ry., 93 Ninth ave., Calgary, Alberta.

IMPROVED ALFALFA RANCH FOR SALE cheap—67 acres under gov. irrigation project; 35 a. in alfalfa; 5 a. bearing apple orchard; good set of buildings, consisting of 7-room house, large barn, silo, shed and other outbuildings. A snap at $10,000; some terms. Write
C. H. SKINNER, Hermiston, Ore.

BIG CUT IN PRICE OF FARM LANDS in the best agricultural part of Snohomish county. $25 to $35 per acre; 10 yearly payments; railways, mills, factories, plenty of labor. The best proposition on the market for the man who wants a farm. Send for illustrated literature. Brownell Land Co., 904 Third ave., Seattle, Wash.

736 ACRES, IMPROVED, NEAR CALgary, Alberta; 500 cult.; 200 summerfallow; on river; coal and some timber; house, 4 granaries, well, windmill; good crop this year. Price only $15 per; third cash, bal. easy, 6 per cent. Box 277, Ashland, Ore.

LANDS THAT WILL PROFITABLY GROW alfalfa, wheat, corn, barley, oats, potatoes, sugar beets, beans, live stock. Burianek & Co., North Yakima, Wash.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Luna Land Co., North Yakima, Wash.

A REAL STOCK RANCH; FINE LAY land; buildings, springs and outside range. J. R. White, Enterprise, Ore.

FOR LANDS IN HEART OF THE Palouse write H. A. Maised, Palouse, Wash.

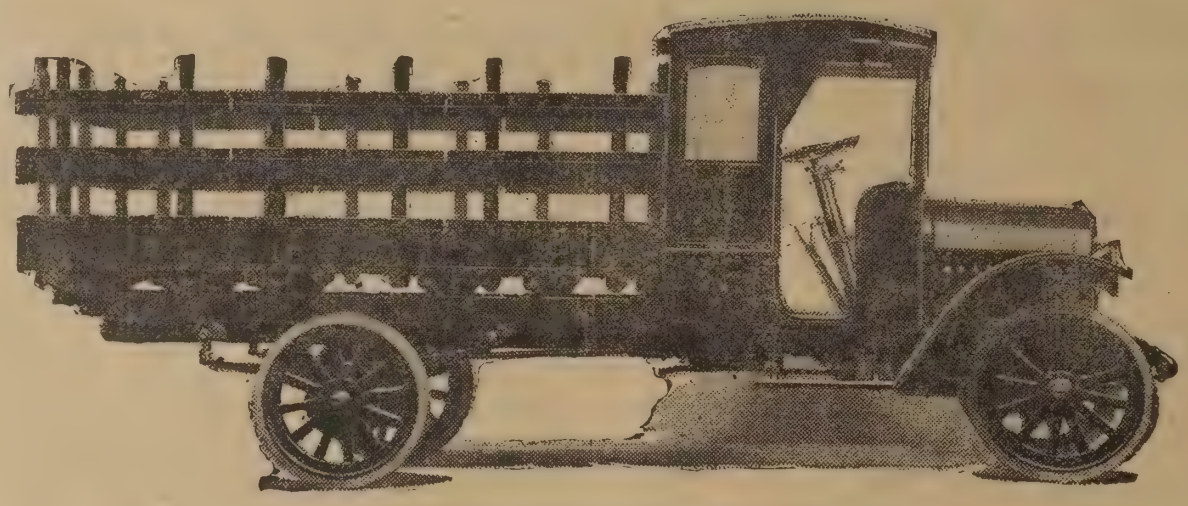
GOVERNMENT LAND IN CAL. FREE book. Joseph Clark, Sacramento, Cal.

IRRIGATED LANDS—WANTED 666

FOR SALE VERY CHEAP—13-ACRE IRRIgated orchard tract, 4 miles from Caldwell, Idaho. About 7 acres commercial bearing trees. Will take Liberty bonds. Call or write G. H. Summers, 121 South Lincoln st., Spokane, Wash.

MAXWELL

Most Miles per Gallon **Most Miles on Tires**



A Great Farm Tool —the Maxwell Truck

Mechanical devices to take the place of human hands and muscles—these are vital necessities on the farm today.

The farmer is a manufacturer—a manufacturer of food products.

American farmers, too, are business men, applying efficiency methods.

The world is crying for the products of our fields.

The yield MUST be multiplied.

And human labor is becoming more than ever difficult to get.

The efficient, economical, durable Maxwell one-ton truck is doing a splendid part in meeting this emergency.

It is bringing goods from the field—from the barns—from the granaries—to market at a speed our fathers, with their slow horse-drawn wagons, never dreamed of.

A Maxwell truck covers, in one day, twice the mileage of TWO TEAMS with their two drivers—and does it at the cost of one team.

A Maxwell truck saves TIME—LABOR—MONEY.

It increases the yield of a farm—and increases, too, the NET PROFITS of that farm.

And it is sold at a price that can't be touched by any other motor truck of anything like its mechanical efficiency and economy of operation.

The specifications and measurements of the Maxwell truck equal or surpass any truck sold for $1,500.

Be sure to inform yourself about the construction of this great vehicle before buying any truck.

No progressive farmer-business man can AFFORD to be without a Maxwell truck today.

Maxwell one-ton chassis $865; Chassis with cab and windshield $900
Chassis with cab, windshield, and stake gate body $950
All prices f. o. b. factory

Write Today for Catalog N. W.

Maxwell Motor Sales Corporation
Detroit Michigan

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 49. DECEMBER 6, 1917. ** WEEKLY.

Red Cross Starts Great Membership Campaign

Governor Lister Joins in The Washington Farmer's Appeal to Aid Humanity's Cause

"YOU can not make too strong an appeal to your readers in behalf of the Red Cross. I gladly join The Washington Farmer in urging every citizen, old and young alike, to accept his or her share of responsibility in this great work."

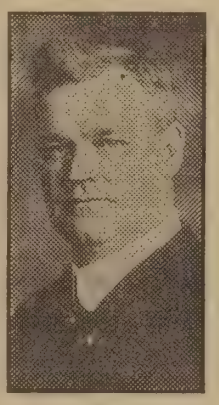
These are the words of Governor Ernest Lister in discussing that organization's world-wide activities with a representative of The Washington Farmer. By reason of his office, Governor Lister is head of the Red Cross in this state in the same manner that President Wilson is for the nation as a whole. Enthusiastic in the cause to which the association is dedicated, he continued:

"The Red Cross is the one great, humanitarian factor in alleviating the suffering caused by the present world war, and to whatever extent an individual lends his aid, to that extent is he or she helping to alleviate that suffering.

"It is peculiarly an American institution—the American Red Cross. But it is no respector of persons either in giving or receiving. It ministers to the sufferer without asking his name, nationality or creed, though, of course, the greater part of its work is now for the wounded or sick soldiers of the United States or of her allies. It makes its appeal for support in the same universal way. It is entirely non-sectarian and undenominational. It receives no financial support from the government, though the president and other officials give of their means and time to it. Its only source of money with which to carry on its work of humanity is the private citizen, and all over this land today men and women and boys and girls are rallying to it with membership dues, special contributions and time and labor.

"There is right now, just at the approach of the Christmas season, a nation-wide movement for increased membership that should result in the addition of thousands of names to the roll of members in this state. There is great need for funds to meet the responsibilities that the organization has assumed, and there is the ever-increasing need for workers in every city and village and country community, workers to prepare bandages and hospital supplies and to knit woolen socks and sweaters for American soldiers who are rapidly being called to the trenches of Europe.

"You can not make too strong an appeal to your readers in behalf of the Red Cross. I gladly join The Washington Farmer in urging every citizen, old and young alike, to accept his or her share of responsibility in this great work. In the cities it is not difficult to present an appeal like this, but in the farming districts where homes are scattered, there is need of special means and special effort. Where the Red Cross gospel has gone, city and country residents alike have responded unhesitatingly, and I know that those to whom you present the appeal will respond loyally and effectively."



Gov. Lister.

The nation-wide campaign for membership in the Red Cross begins December 15 and continues until Christmas eve, by which date it is the hope of leaders that the membership may be increased by nearly 10,000,000. Everybody is eligible to membership. The appeal is made to no class. The only credential required is a willingness to be of service in the great work of relieving suffering and minimizing to some extent the horrors of war for the soldiers of America now abroad or about to be called abroad to fight for human rights.

It is the hope of the state headquarters of the Red Cross to have a great organization in every large city and a little band of workers in every village and country community in Washington. With a view to assisting in carrying out that aim, The Washington Farmer is offering its readers, and urging upon their attention, an opportunity to ally themselves

Continued on page three.

The Red Cross Needs Your Aid

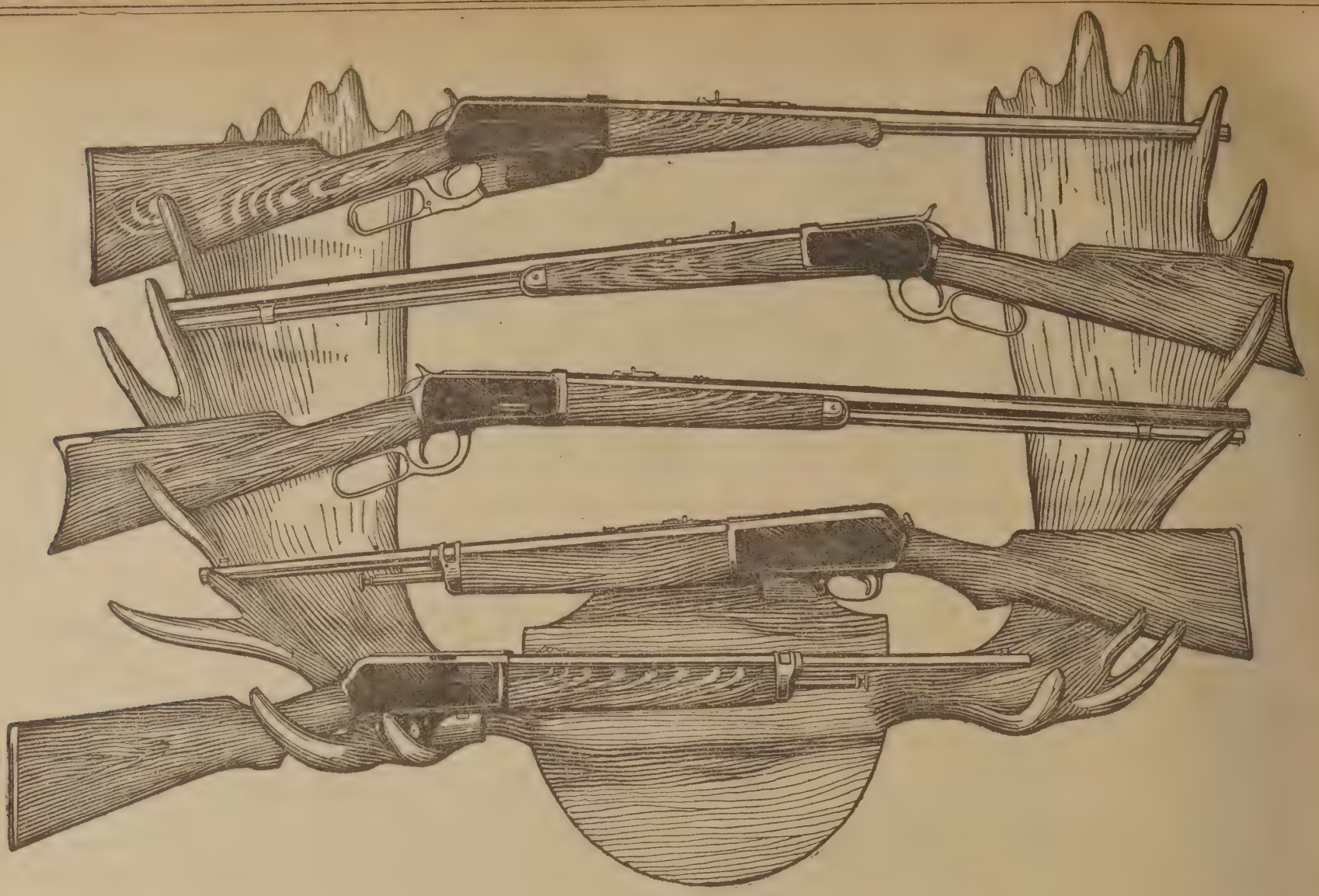
I am glad to express my patriotism at this time by pledging myself to render whatever special service I can to my country, and will you tell me especially about Red Cross work and the different ways in which I may be able to aid in that work?

Name .....

Postoffice .....

It is up to every reader of this paper—man, woman, boy or girl—to take this pledge.

Fill out the above coupon and mail it to the Editor of The Washington Farmer, Spokane, Wash. Upon receiving this coupon The Farmer will be glad to send you the desired information regarding Red Cross work, and in recognition of your pledge of patriotism to your country, will enroll you as a member of the Patriotic League of The Washington Farmer.



Five famous models of the world's greatest rifle makers

Here are five Winchester models, famous alike among old pioneers and sportsmen and the hunters today. These are the outcome of the old Winchester rifles that "built the West."

As the need grew, Winchester originated a model and a caliber for every purpose. Today Winchester makes a greater variety of rifles and shotguns than any other small-arms manufacturer. But the five particular models shown on this page continue to be the standard all over the country.

In the *Model 95* (at the top) the sportsman finds his most powerful weapon. This lever-action, box-magazine, repeating rifle shoots the heaviest army cartridges. Made for .30 Army, .30 Gov't Models 1903 and 1906, .303 British, and .35 and .405 Winchester Cartridges. Its high velocity and flat trajectory develop tremendous killing power at long range. Every sort of wild beast in the world has been instantly killed by this powerful sporting rifle. Nickel steel barrel.

The *Model 92*, second from the top, is a lever-action repeating rifle, made solid frame or take-down. It embodies the principles of construction of the famous rifle that was Winchester's contribution to the winning of the West. This rifle shoots standard types of ammunition that can be purchased wherever firearms are sold. Made for .44, .38, .32, and .25-20 W. C. F. Cartridges.

The next is the famous *Model 94*, the all-'round lever-action repeating rifle. It is the most popular with sportsmen and farmers because it shoots the famous .30 Winchester high-power smokeless cartridge, light in weight, but with high stopping power, and easily obtained. It is also made to handle the .25-.35, .32 Winchester Special, .32-.40 and .38-.55 cartridges. Made with nickel steel barrel to handle the high-power cartridges.

The *Model 10*, next shown, is a hammerless, take-down, self-loader. Shoots only its own Winchester .401 Self-loading cartridges. Hits a harder blow than any other self-loader made. Every working part made of nickel steel. Shoots five knockdown shots as fast as the trigger can be pulled and will down any beast found in North America.

At the bottom is the *Model 07*, the "little brother" to the Model 10. Shoots only its Winchester .351 Self-loading cartridges. The best self-loader for deer hunting and for all except the very biggest game.

The barrel *is* the gun

Men who know guns realize that the accuracy and durability of a rifle lie in the barrel. On the quality of the barrel depends the quality of the gun. There is absolutely no difference in the standard of quality of the barrels on the highest and lowest priced Winchester guns. With Winchester the barrel *is* the gun and the single standard of quality has been attained only by the most unremitting attention to the boring, finishing and testing of the barrel.

The Winchester barrel

The barrel of every Winchester rifle has been bored to micrometer measurements for the cartridge it is meant to shoot. In rifling the barrel the exact twist that is necessary to produce the best results with every cartridge has been mathematieally calculated and is verified by exhaustive practical tests before leaving the factory.

A bullet fired from a Winchester barrel spins point on with unerring accuracy the limit of its range.

The Bennett Process, used exclusively by Winchester, gives the Winchester barrel a distinctive blue finish that, with proper care, will last a lifetime.

What (P W) means

This mark on the barrel means *Viewed and Proved Winchester.* This stamp stands for Winchester's guarantee of quality, with 50 years of gun-making reputation behind it.

Every rifle that bears the name "Winchester" and that is marked with the Winchester Viewed and Proved stamp has been fired many times for smooth action and accuracy, and with excess loads for strength. At every stage of Winchester manufacture, machine production is supplemented by human craftsmanship. It is a *test and adjustment process.*

Write for details of Winchester rifles, shotguns and ammunition

The Winchester catalog is an encyclopedia on rifles, shotguns and ammunition. It gives detailed specifications of these five famous models shown here and describes at length the principles on which every one of the world-renowned Winchester rifles and shotguns is built. Write today. We will mail you a copy free, postpaid.

WINCHESTER REPEATING ARMS CO.
Dept. WT5 NEW HAVEN, CONN.

HOME DEFENSE LEAGUES!

We have a Winchester for County and Home Defense Leagues which is meeting with Universal approval. Many Home Defense Leagues throughout the United States have already been equipped with this gun.

WINCHESTER

World Standard Guns and Ammunition

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 49 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF December 6, 1917

Thrift Savings Easy and Safe

Small Investor May Help Himself and U. S.

Let us all climb aboard Uncle Sam's thrift and war savings wagon. He is making it as easy as the purchase of postage stamps and the investment will be as safe as the holding of gold pieces, and more profitable, for it is nontaxable and will bear 4 per cent interest. And you can always get your money back on demand.

The campaign starts this week, and a quarter of a dollar will start you in the game.

This opportunity is for the small investors of the land—the class, whether living in the city or the country, that has been plundered too often by all sorts of get-rich-quick concerns. It is what the farmers, and their wives, sons and daughters have been wanting all these years.

Any person may invest amounts as small as 25 cents at a time at postoffices, banks or trust companies, at most railroad stations, stores and factories and at many other public places where accredited persons will act as authorized selling agents. At the average 1918 selling price such certificates will yield 4 per cent interest, compounded quarterly. The certificates will be dated January 2, 1918, and will mature January 1, 1923. The entire wealth and security of the United States is behind them.

No person may purchase at one time more than $100 worth or hold at the time more than $1000 worth of these certificates.

These obligations of the United States will be evidenced by stamps of two denominations—a war saving stamp costing from $4.12 to $4.23, according to the month in which purchased, and having a maturity value of $5, and a thrift stamp costing 25 cents.

During December, 1917, and January, 1918, war savings stamps will be sold for $4.12 each. At the beginning of each of the succeeding months of 1918, starting February 1, the cost of a stamp will increase 1 cent a month. All war savings stamps issued during 1918 will mature on January 1, 1923, when they will be redeemed at $5 each.

With the first war saving stamp bought the purchaser will be given a war savings certificate containing spaces for 20 such stamps. If the 20 spaces are filled before February 1, 1918, the cost will have been $82.40 for the filled certificate and on January 1, 1923, the government will redeem the certificate at $100.

Will Sell Thrift Stamps.

Thrift stamps, costing 25 cents each, are to be affixed to thrift cards, which will be supplied without cost. The card when filled, at a cost of $4, may be exchanged for a war savings stamp bearing interest at 4 per cent, compounded quarterly merely by turning the card in at the postoffice, bank or other sales agency and paying the difference between $4 and the current price of a war savings stamp. The privilege of surrendering a certificate to the government and receiving the cost thereof plus interest has been provided for those who may later find themselves in need of their money.

Upon 10 days' written notice after January 1 1918, postmasters will pay off certificates at their cost to purchasers plus an increase of 1 cent a month on each war savings stamp on the certificate surrendered, as shown by a table of value appearing on the certificate. Under this plan it will be impossible for a certificate or the stamps to depreciate in value, nor can there ever be any question that it is worth the price shown thereon.

President Wilson has given this plan his cordial approval and has appointed a national war savings committee to manage it, with Frank A. Vanderlip, who is serving the country without salary to manage it.

The president also has appointed state directors in all the states of the Union. Directors for the Pacific northwest are:

Montana—H. W. Turner, Butte.
Idaho—James H. Hawley, Boise.
Oregon—C. H. Jackson, Portland.
Washington—Daniel Jelleher, Seattle.

An intensive campaign will be conducted in every state and the government hopes to reap loans totaling $2,000,000,000 within a year. The campaign opened formally December 3.

It is expected that the people of Washington will buy $31,000,000 worth of these stamps. The apportionment, based on population figures given by the census bureau for July 1, 1917, for the various counties of the state is as follows:

Counties—	Est. Pop.	Min. Sales.
Adams	15,359	$ 307,180
Asotin	7,631	152,620
Benton	7,937	158,740
Chehalis		
Chelan	23,261	465,220
Clallam	7,596	151,900
Clarke	35,384	707,660
Columbia	7,042	140,840
Cowlitz	15,980	319,600
Douglas	9,227	184,540
Ferry	4,974	99,480
Franklin	8,559	171,180
Garfield	4,403	88,066
Grant	8,698	173,960
Grays Harbor	50,530	1,010,600
Island	6,774	135,480
Jefferson	10,253	205,060
King	412,077	8,241,540
Kitsap	25,589	511,780
Kittitas	25,027	500,540
Klickitat	10,180	203,600
Lewis	44,514	890,280
Lincoln	21,606	432,120
Mason	6,137	122,740
Okanogan	18,871	377,420
Pacific	17,312	346,240
Pend Oreille	7,655	153,100
Pierce	168,476	3,369,520
San Juan	4,095	81,900
Skagit	40,168	803,360
Skamania	3,761	75,220
Snohomish	84,946	1,698,920
Spokane	199,160	3,983,200
Stevens	28,412	568,240
Thurston	23,168	463,360
Wahkiakum	3,625	72,500
Walla Walla	41,604	832,080
Whatcom	68,048	1,360,960
Whitman	39,062	781,240
Yakima	41,709	834,180
Totals	1,558,808	$31,176,160

New Income Tax Explained

What the Law Says You Yourself Must Do

The new income tax law will reach more than 7,000,000 persons who have never before paid a federal income tax. Hundreds of thousands of farmers who were exempt before will have to pay taxes now.

In brief, the law requires that every unmarried person who had a net income in 1917 of more than $1000, and every married person whose net income was more than 2000, must make a return to the collector of internal revenue for his district. He can not wait for the collector to call on him or send him a notice. He must voluntarily apply to the collector for the income tax form and make his sworn return on or before the first day of March each year. Severe penalties are provided for failure to make such returns. Section 18 of the law says:

"That if any individual liable to make the return or pay the tax aforesaid shall refuse or neglect to make such return at the time or times hereinbefore specified in each year, he shall be liable to a penalty of not less than $20 nor more than $1000."

The penalty for making a false return is a fine not exceeding $2000, or imprisonment not exceeding one year, or both, in the discretion of the court, with the costs of prosecution.

The following table shows the amount of federal income tax on various net incomes under the law of 1916, and after the passage of the federal war revenue law of 1917:

Income of married person, no children under 18	Amount of tax under 1916 law.	Total tax after passage of 1917 law.
$ 2,500	No tax	$ 10
3,000	No tax	20
3,500	No tax	30
4,000	No tax	40
4,500	$ 10	60
5,000	20	80
6,000	40	130
7,500	70	205
8,000	80	235
9,000	100	295
10,000	120	355

For each dependent child under 18 an additional $200 exemption is allowed in computing the so-called normal tax under each of the above laws.

If single the computation would be based on a $1000 exemption instead of $2000.

In determining your net income you are permitted to make the following deductions from your gross income:

First—The necessary expenses actually paid in carrying on any business or trade, not including personal, living or family expenses.

Second—All interest paid within the year on your indebtedness.

Third—Taxes paid within the year imposed by the authority of the United States, or its territories or possessions, or any foreign country, or under the authority of any state, county, school district or municipality, or other taxing subdivision of any state, not including those assessed against local benefits.

Fourth—Losses actually sustained during the year, incurred in your business or trade, or arising from fires, storms, shipwreck or other casualty, or from theft, when such losses are not compensated for by insurance or otherwise.

Fifth—Losses sustained in transactions entered into for profit, but not connected with your business or trade.

Sixth—Debts due to the taxpayer actually ascertained to be worthless and charged off within the year.

Seventh—A reasonable allowance for the exhaustion, wear and tear of property arising out of its use or employment in the business or trade.

Red Cross Starts a Great Campaign

(Continued from page one.)

with the movement. Not only does it strongly recommend that every one possible become a member of the Red Cross, but it assumes the responsibility, as indicated in the pledge card accompanying this article, of seeing that every reader desiring it is supplied with definite information as to how best to render service to that organization, and through it to those who are accepting the far greater responsibility of defending right and liberty on foreign soil.

Welcome Sounds.

There was not a sound in the house except the ticking of the clock. Mary was sitting on the floor, disconsolately playing with her doll. Suddenly there was a vigorous stamping of small feet on the porch. "Oh," exclaimed Mary, with a sigh of relief, "it makes me so delightful to hear Bob's foot-tracks."

Hog Prices to Determine Yield

Farmers Hold Back for a Reasonable Profit

Ira P. Whitney, J. R. Shinn and Ralph Cohen were named a special committee of the agricultural committee of the Spokane Chamber of Commerce Monday to take up the matter of hog prices for 1918 which the food administration is now considering. Members feel that the price likely to prevail should be named at an early date, as farmers are reluctant to purchase brood sows and go into hog raising until assured of a price that will yield a reasonable profit.

W. T. Day, F. W. Anderson and J. R. Shinn were named another special committee to investigate the drafting of young farmers for military service that would work against the increased food production campaign for 1918 if carried out to any appreciable extent. The committee is not attempting to interfere with the work of the exemption boards in any way and hopes to cooperate with them in the patriotic service of putting men where they are most useful. Some agricultural sections fear an acute labor shortage next spring if the ordinarily available farm labor is pressed into military service. This committee will make a report to the trustees at the meeting on Friday.

GRAIN MEN TO MEET.

Pullman Will Be Convention City.

Announcement has been made of the twelfth annual convention of the Washington State Grain Growers, Millers and Shippers' association. It will be held at Pullman January 3 to 5, practically the same dates as last year. The program has not been announced, but it is the plan of President R. J. Stephens of Spokane to secure representation from the federal department of agriculture to discuss the grading system with the farmers and others interested in the subject.

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Four Hundred Beef Cattle Shown

This Division at Portland Was a Display of Superlative Excellence

By E. L. POTTER

The beef cattle division of the Pacific International was not only the largest and most attractive portion of the show but was in all respects a show of superlative excellence. A list of approximately four hundred entries besides the car lots made the biggest beef show ever held west of the Rocky mountains. In quality as well as numbers it was also the best of the west and the prize winners were all worthy of exhibition in the best shows of the world. Furthermore the show was most representative of the western country. All of the best herds west of the Rocky mountains were represented and for once not a single visitor dared to claim to "have better ones at home." Some few exhibitors of other classes of stock have been inclined to think that the management favored the beef section, but we do not agree with this for a moment although we would consider it only human if they did since the beef men have not only brought their herds from far and near, but have boosted the show in season and out and have spent days and weeks of hard work for the success of the show as a whole.

The Shorthorns.

In numbers the Shorthorns easily led the procession as more than half of the entire beef show were red, white or roan. In quality we could make no comparisons since the best of all three breeds were just as good as they grow, and furthermore there were mighty few tail-enders anywhere. From the standpoint of interest, however, the Shorthorns held the center of the stage since practically every district of the west was represented by animals whose admirers were expecting to win but which had previously come in competition with few or none of the other entries. The Washington and Montana herds had met at Lewiston the week before but these had not come together with the Oregon delegation nor with the crack herds which had just come up from California for the first time. It was at no time a one-man show. T. T. Miller of Los Angeles, The Pacheco Cattle company of Hollister, Cal.; Frank Brown of Carlton, Ore.; A. D. Dunn of Wapato, Wash.; Day & Rothrock of Sprague, Wash.; J. H. McCroskey & Sons of Sprague, Wash., and Childs & Anceny of Helena, Mont., all came in strong for firsts and seconds, while the fancy colored ribbons were scattered all over the map. William Hartnett of the Shorthorn Exporting company, Chicago, did the judging to the satisfaction of all. We failed to hear a single suggestion that the awards migh have been placed differently. The facts are that the competition was so keen that when the exhibitors saw the line-up they were most thankful to be even among the "also rans."

The bull classes were good all through, but as a rule the older bulls did not show the same finish as the younger ones. The two-year-olds brought out the grand champion in Diamond Perfection, a bull so thick and massive that he was a popular candidate for that honor. The quality of this class is indicated by the fact the only two-year-old prize winner sold in the Thursday auction was sixth place and brought $1200. The senior yearlings were another good lot, but the junior yearlings were the real show with 20 entries. The head of the class, Escana Clipper, was later made junior champion. He is a Canadian bred bull recently brought out by A. D. Dunn.

The aged females were headed by the sensational imported cow, Imp. Brandsty's Jinny 18th that T. T. Miller bought at the Carpenter & Ross sale last spring for $3100. This cow is a beautiful, smooth, massive cow with lots of quality and above all with that femininity and refinement so necessary in a good breeding cow. She showed with a splendid calf by her side. The two-year-olds brought out the thick roan cow, Escana Blossom, that later sold for $1625. But the sensation of the show was found in the senior yearling, Topsy 4th. Topsy was finally put through to junior and then grand champion, defeating the senior champion, Brandsty's Jinny 18th. Topsy is ideal from the beef man's standpoint. She carries wonderful width and depth and a great covering, all with the great size and bone so admired by the western beef producers. She is strictly a western product, her sire being bred by Alex Chalmers of Forest Grove, and her dam by W. O. Minor of Heppner. She also has the honor of being the first northwestern bred animal to be exported to Argentine. Both Topsy and Escana Blossom will be taken by Mr. Hartnett to Chicago and then exported to South America. Topsy brought the top price of the sale, $1775. The Shorthorn people also took a good deal of pride in the fact that the grand champion steer of the show was a Shorthorn shown by the University of California and a half brother of the Chicago champion of 1916. The California people report that the dam of these two wonders now has by her side a third calf that promises to outrank them all. It is a common saying that one good animal will "make" a breeder.

The Angus.

The Angus exhibit consisted of a full herd, including two entries for each class from the farm of Congdon & Battles of Yakima, Wash., and two head from the Washington State college. In spite of the limited competition the animals were of the very best type and were shown in first class condition. This is the second year that Congdon & Battles have exhibited in the northwest and their cattle have created a big interest in the Angus breed. Several small breeding herds are being established and many beef producers are giving the Angus a trial on the range. The Angus exhibited in Portland this year compared very favorably with the best of the Herefords and Shorthorns. The grand champion bull, Eileenmere, was sold some time ago to J. A. Scollard of Chehalis, Wash., for $2500, with the understanding that he was to be delivered after showing at the expositions.

The Herefords.

The Hereford show was the largest ever held west of the Rocky mountains and the quality was never better. Tops were largely the same animals that were shown at Lewiston. Most of these cattle have met many times before, which tends to rob the judging of some of its interest, but it did not detract in the least from the quality of the exhibits. Montana and Oregon put up most of the display, as the California people did not appear. A. B. Cook won the heavier share of the money, but lost the grand championship in the males to Henry Theissen's Prince Rupert 80th, a great yearling that has not been defeated since he was brought west something over a year ago. Cook's junior yearling, Panama 37th, was the smoothest, meatiest, straightest lined bull in the show, but he did not have the scale and bone of the Theissen bull.

The female classes were good from top to bottom. The grand champion, Lady Perfection 3d, is a cow of perfectly straight lines and of enormous width, depth, and thickness of flesh. She is not however, as smooth as the aged cow, Princess R. Princess R. has been shown about six years and is still about the smoothest thing on the grounds. Chandler's senior heifer calf, Jennie Generous, is a sweet heifer and an all around good one. She is by the old bull, Generous, which made such a record in the Tow herd in Iowa before being bought by the Chandlers.

The Car Lots.

The car lot exhibit was light this year. High-priced feed and low-priced cattle together do not promote extensive exhibits. Ed Coles of Haines, Ore., had the grand champion load, as he has had for several years past, and they were good cattle. They sold for $16.75, which is about what they could bring on the open market in Chicago. The other loads brought from $10.25 to $15, which was at best no more than Chicago market prices. They were good commercial cattle but not show cattle. The feeder cattle went for from $9 to $9.75. The production of fancy cattle in the northwest is not a paying proposition unless a fancy price and a liberal prize is received, but until the show is in a better financial position than it is, liberal prizes in the car lots will hardly be possible, and in the mean time we will probably have to content ourselves with show cattle carrying considerably less than show finish.

BEEF CATTLE AWARDS.

The following are the awards in the beef cattle division:

Shorthorns.

Bull, 3 years old or over—First, Thomas T. Miller, Los Angeles, Cal., on Diamond Choice; second, H. L. Summers, Bozeman, Mont., on Master Avondale; third, George Bertrand, Castle Rock, Wash., on Chief Goods; fourth, Felzer Bros., Tangent, Ore., on Barrington Gold; fifth, J. R. Wyatt & Son, Bozeman, Mont., on Excelsior; sixth, A. Chalmers, Forest Grove, Ore., on King George; seventh, E. H. Holloway, Albany, Ore., on Golden Favorite. Two years old—First, Frank Brown, Carlton, Ore., on Diamond Perfection; second, Child & Anceny, Helena, Mont., on Green Meadow Master; third, Pacheco Cattle Co., Hollister, Cal., on Pacheco Lad 58th; fourth, J. H. McCroskey & Son, Sprague, Wash., on Cottonwood Sultan; fifth, J. B. Cornett & Son, Shedd, Ore., on Golden Minority; sixth, A. D. Dunn, Wapato, Wash., on True Baron; seventh, W. J. Townley, Union, Ore., on Good Prospect; eighth, A. Chalmers, on Prince Violet Pacific. Senior yearling—First, Thomas T. Miller, on Greendale Sultan; second, Child & Anceny, on Maxwelton Master; third, Washington State college, Pullman, Wash., on Village Excelsior; fourth, Schmidt Bros., Hoff, Ore., on Village Victor; fifth, A. Chalmers, on Prince Imperial. Junior yearling—First, A. D. Dunn, on Escana Clipper; second and sixth, J. H. McCroskey & Son, on Rare Count and Golden Dale; third, E. F. Anderson & Son, Albany, Ore., on Ring Glory; fourth, T. B. Gibson Estate, Woodland, Cal., on Ringleader's King; fifth, Day & Rothrock, Sprague, Wash., on Rusper Sultan 2d; seventh, Child & Anceny, on King Mysie; eighth, George Bertrand, on Chief's Golden Mine; ninth, W. O. Minor, Heppner, Ore., on Victor's Chief; tenth, Felzer Bros., Tangent, Ore., on Barrington Famous. Senior calf—Pacheco Cattle Co., on Pacheco Lad 100th; second and sixth, Frank Brown, on Brigadier General and Diamond's Choice; third and eighth, A. D. Dunn, on Supreme Chief and March Onward; fourth and seventh, Day & Rothrock, on Superb Clarion and Fair Cumberland; fifth, J. B. Cornett & Son, on Silver King; ninth, J. H. McCroskey & Son, on Ury Marshall; tenth, Perry Smith, Yamhill, Ore., on Roan Champion. Junior calf—First, J. H. McCroskey & Son, on Canadian; second, Child & Anceny, on Royal King; third, University of Idaho, Moscow, Idaho, on University Prince; fourth, Pacheco Cattle Co., on Pacheco Lad 109th; fifth and sixth, Day & Rothrock, on Hercules Stamp and Hercules Good; seventh, Frank Brown, on Roan Diamond; eighth, Gibson Estate, on Ringleader's King 2d; ninth, H. L. Summers, on Goldendale 2d; tenth, W. J. Townley, on Royal David.

Cow, 3 years or over—First, Thomas T. Miller, on Improved Bradsty's Jinny 18th; second and fifth, H. L. Summers, on Mayflower 2d and Helen Cumberland; third, A. D. Dunn, on Scottish Jane 2d; fourth, Felzer Bros., on Maples Violet; sixth, A. Chalmers, on Fork Branch Mildred; seventh and eighth, George Bertrand, on Roselawn Daisy 2d and Roan Welcome 80th. Two years old—First, A. D. Dunn, on Escana Blossom; second, J. H. McCroskey & Son, on Canadian Lassie; third, Thomas T. Miller, on Golden Queen; fourth, Frank Brown, on Mildred Saunders; fifth, Pachaco Cattle company, on Pacheco Lass 80th; sixth, Child & Anceny, on Farmers' Beauty; seventh, G. W. DeLay, Hot Lake, Ore., on Scottish Jane 3d; eighth, J. R. Wyatt & Son, on Red Queen; ninth, A. Chalmers, on Violet's Bough; tenth, H. L. Summers, on Roan Princess. Senior yearling heifer—First, Day & Rothrock, on Topsy 4th; second, Child & Anceny, on Daisie Green; third and sixth, A. D. Dunn, on Sweet As Ever and Sweeter Yet; fourth, Thomas T. Miller, on Sultana of Linwood 2d; fifth, J. H. McCroskey & Son, on Fancy Mine 2d; seventh, Pacheco Cattle company, on Pacheco Lass 81st; eighth, H. L. Summers, on Cicely of Avon; ninth, W. O. Minor, on Meadow Lawn 2d. Junior yearling heifer—First and fifth, Frank Brown, on Roan Princess and Grandifame; second, W. J. Townley, on Ringleader's Ruby; third, Day & Rothrock, on Village Rose 4th; sixth, Child & Anceny, on Zona 3d; seventh and tenth, Gibson Estate, on Roselawn Bloom and June Elberg; eighth, A. D. Dunn, on Bonnie Queen; ninth, J. B. Cornett & Son, on Marigold. Senior heifer calf—First, Thomas T. Miller, on White Mayflower; second and seventh, Pacheco Cattle company, on Pacheco Lass and Pacheco Lass 111th; third and sixth, Day & Rothrock, on Lady Missie 10th and Perfection's Pearl; fourth and eighth, Frank Brown, on Melba Perfection and Bonnie Gem; fifth, J. H. McCroskey & Sons, on Dale's Lady; ninth, A. Chalmers, on Seaforth Queen; tenth, H. L. Summers, on Mayflower 3d. Junior heifer calf—First and third, Day & Rothrock, on Hercules Topsy and Golden Light; second, A. D. Dunn, on Dewdrop; fourth, Pacheco Cattle company, on Pacheco Lass 118th; fifth and seventh, J. H. McCroskey & Sons, on Escana Laura and Mary Lady; sixth, E. F. Anderson, on Golden Sophonie; eighth, Frank Brown, on Grandiflora; ninth, Gibson Estate, on Roselawn Blossom; tenth, G. W. DeLay, on Scottish Jane 4th.

Senior champion bull—Frank Brown, on Diamond Perfection. Junior champion bull—A. D. Dunn, on Escana Clipper. Grand champion bull—Diamond Perfection. Senior champion cow—Thomas T. Miller, on Improved Bradsty's Jinny 18th. Junior champion cow—Day & Rothrock, on Topsy 4th. Grand champion cow—Topsy 4th.

Aged herd—First, Frank Brown; second, Thomas T. Miller; third, A. D. Dunn; fourth, J. H. McCroskey & Sons; fifth, Pacheco Cattle company; sixth, Child & Anceny; seventh, H. L. Summers; eighth, A. Chalmers. Young herd—First, Day & Rothrock; second, A. D. Dunn; third, J. H. McCroskey & Sons; fourth, Frank Brown; fifth, Child & Anceny; sixth, H. L. Summers; seventh, A. Chalmers. Calf herd—First, Pacheco Cattle company; second, Day & Rothrock; third, A. D. Dunn; fourth, Frank Brown; fifth, J. H. McCroskey & Sons; sixth, Child & Anceny; seventh, Gibson Estate; eighth, H. L. Summers. Produce of cow—First, Day & Rothrock; second, Child & Anceny; third and fourth, Pacheco Cattle company; fifth, Gibson Estate; sixth, Washington State college; seventh, Frank Brown; eighth, A. Chalmers. Get of sire—First, Pacheco Cattle company; second, Child & Anceny; third, Day & Rothrock; fourth, Frank Brown; fifth, J. B. Cornett & Son; sixth, H. L. Summers; seventh, A. Chalmers.

(Continued on page twenty-eight.)

Community Cooperation

What Are Advantages of Trading at Home?

How many farm folks and small town residents fully appreciate what a spirit of community cooperation may be made to mean to them? Not alone can this be weighed in the scales of sentiment and civic pride. There is also something of a dollars and cents value in boosting one's home town if we study the matter from the mercenary side.

In a community that is "financially sick" it is a very uncommon thing to find the individual prosperous. This is because the individuals who make up a community shape the trend of a community up or down.

All of you have heard people living in or near a smaller town say: Our little town can't grow it is too near the city. So, with this belief planted in the mind one goes on spending a lot of the money that is produced locally in the stores of nearby larger towns and cities.

You go on failing to patronize your home town merchants. They can't make a "go of it" and as a trading center the home town falls lower and lower in the scale.

Local merchants become afraid to stock up with high grade merchandise after a time and it isn't long before your home town stores carry only the lower grades of goods.

Don't pay your local dealer two prices for a good article; but do give him a chance to buy in sufficient quantities so that he can supply you at the same price as the same article can be bought for elsewhere. Encourage him with your trade so that he is not afraid to carry well-known brands of goods with a standardized quality. A standard article represents the same value no matter where you buy it.

Once the merchant of your home town knows the trade of their community is back of them, they will not hesitate to carry standard products of known quality for you to select from. You have the opportunity to help make your community improve. For, with better stores, comes a better town and a good town means inhanced values for any property you own in it or near it.

Farm Loans Popular

Farmers Ask Hundred Ninety Millions

All doubt regarding the popularity of the federal farm loan system is now swept away by the record. Up to November 1 the 12 farm loan banks had received applications for loans aggregating the stupendous total of $193,250,945.

This represents the applications only of the 3000 organized farm loan associations, of which about 1500 have actually been chartered, and the remaining 1500 yet awaiting the decision of the farm loan board on their applications for charters.

In addition to the 3000 associations now organized, the federal land banks estimate that there are approximately 2000 other farm loan associations being organized in the United States.

Up to November 1 the 12 federal land banks had paid over to farmers in 5 per cent loans a total of $21,040,138. One-third of that total was paid out in October. In the same month the 12 banks received applications for loans amounting to $27,416,463, and approved loans amounting to $20,119,240. Evidently it will be some time before the banks will catch up with the volume of business rolling in upon them.

A report issued by the federal farm loan board indicates that up to November 1 farm loan bonds to the amount of $21,500,000 had been disposed of to investors of the United States. Of this amount $18,850,000 of bonds were distributed through bond houses and $2,650,000 were sold direct by the 12 federal land banks to investors.

These bonds bear 4 1-2 per cent interest and are entirely tax free. They are sold at 101 1-8 and are secured by the first mortgages taken in exchange for loans made to the farmers by the 12 federal land banks and they are further secured by all of the assets of all of the twelve federal land banks. These bonds are being offered to the public at the rate of approximately $3,000,000 per week. The money derived from their sale is loaned to farmers at 5 per cent, the margin of one-half per cent being employed to pay the expenses of the federal land banks.

The volume of business up to November 1 divided by federal land bank districts is as follows:

Federal land bank.	Applications.	Loans closed.
Springfield	$ 4,646,188	$ 304,065
Baltimore	7,567,918	1,193,950
Columbia	19,768,800	629,280
Louisville	12,697,477	1,391,900
New Orleans	13,753,037	1,121,516
St. Louis	8,969,980	382,515
St. Paul	20,364,000	2,726,200
Omaha	14,947,360	1,093,790
Wichita	23,394,049	5,869,700
Houston	19,167,223	729,433
Berkeley	19,210,139	1,248,200
Spokane	28,764,774	3,849,590

The business of the Spokane bank was distributed as follows:

	Applications.	Loans closed.
Idaho	$ 3,718,188	$ [illegible]
Montana	9,660,919	1,1[illegible]
Oregon	6,340,778	[illegible]
Washington	9,044,889	[illegible]

That Hog Price

What Are Purposes Back of It?

The aims of the government in specifying the recently announced price of $15.50 a hundred pounds for hogs have been clearly set forth by Joseph P. Cotton, chief of the meat division of the national food administration. A recent statement by Mr. Cotton reads as follows:

"The main purposes of the food administration as to hogs are four: To see that the producer at all times can count on a fair price for his hogs so that they will be profitable to him; to see that the farmer increases the number of hogs bred; to limit the profit of the packer and the middleman and to eliminate speculation.

"All these purposes are necessary because we must have more hogs, so that the ultimate consumer shall at all times get an adequate supply of hogs at the lowest feasible price.

"We shall establish rigid control of the packer. Fair prices to the farmer for his hogs, we believe, will be brought about by the full control which the food administration has over the buying for the allies, our army and navy, the Red Cross, the Belgian relief and the neutrals, which together constitute a considerable factor in the market.

"The first step is to stop the sudden break in prices paid for hogs at the central markets. These prices must become stable, so that the farmer knows where he stands and will feel justified in increasing hogs for next winter. The prices so far as we can affect them will not go below a minimum of $15.50 per hundredweight for the average of the packers' droves on the Chicago market until further notice.

"We have had and shall have the advice of a board composed of practical hog growers and experts. That board advises that the best yardstick to measure the cost of production of the hog is the cost of corn. That board further advises that the ratio of corn price to hog price on the average over a series of years has been about 12 to one (or a little less). In the past, when the ratio has gone lower than 12 to one, the stock of hogs in the country has decreased. When it was higher than 12, the hogs have increased. That board has given its judgment that to bring the stock of hogs back to normal under present conditions the ratio should be about 13.

"Let there be no misunderstanding of this statement. It is not a guarantee backed by money. It is not a promise by the packers. It is a statement of the intention and policy of the food administration, which means to do justice to the farmer."

Lack of Rain Greatly Hampers Crops

Parts of Inland Empire Have Discouraging Outlook

By J. E. NESSLY.

Crop conditions throughout the Palouse country are the most unfavorable in its history. No rain has fallen since June 24, with the exception of 15-100 of an inch in two showers in September, and a little moisture —noted by the weather observer at "a trace" a short time ago—when we had a few days of fog, with slight precipitation. Less than half of the summer fallowed land in Whitman county has been planted to wheat, because the ground is so dry it would not sprout, and farmers feared to waste the seed by planting now. As a result a large per cent of the summer fallowed ground will be held for early spring planting, and Marquis and Early Baart wheat will be planted.

The writer has driven more than 1000 miles by automobile through the grain belt of eastern Washington, western Idaho and northeastern Oregon recently and has noted crop conditions carefully. Pioneers of the Palouse country say they have never experienced such a long drouth, more than five months passing with less than half an inch of rainfall, and much of that time being in the growing season.

J. S. Klemgard of Pullman said: "I have been here more than 30 years, and never saw anything like it. I have planted 1000 acres in fall wheat, but doubt if any of it will come up, and I may have to reseed it in the spring. My crop this year was not bad. I had nearly 25 bushels per acre, which would be a small crop ordinarily, but is good for 1917. But one thing that is causing uneasiness is the scarcity of feed. We have no green feed at all and are feeding our cattle straw now, and straw stacks are in demand at $25 each. Many farmers will have to sell off their cattle for lack of feed. There is positively no green feed of any kind in the country now."

Roy Jones, representative in the legislature from Whitman county and a prominent farmer and stockman, said: "I have never seen anything like this season. We have no green feed at all and are going to sell off our cattle because we can not feed them. I am afraid to sow wheat in the dry ground, for I do not believe it will come up. The outlook is indeed discouraging."

Roy S. Irvine, editor of the La Crosse Clipper, said: "Our average rainfall is 17 inches, and we have had less than 11 inches of rain in 1917. Little fall wheat has been planted, for there has been no moisture, and the ground is so dry it will not sprout if planted. Western Whitman county had a fair crop for this bad season, but the outlook for next year is not encouraging unless we get plenty of rain, when a large acreage of spring wheat will be planted."

In the southern part of Whitman county there was some rain in September, and a fairly good acreage of winter wheat was planted and much of this is up and growing. This is true of the country between Colton and Uniontown and Lewiston, where enough rain fell to sprout the grain and give it a good start.

South of Snake river, in Asotin county, conditions are much better. A heavy rain fell there in September and an average acreage of fall wheat was planted and much spring plowing has been done on Anatone flat, where the crop was fairly good last season.

Across the Grande Ronde river, in Wallowa county, Ore., four inches of rain fell in September and an unusually large acreage of fall wheat was planted early, and it is up several inches high now, and some fields are being pastured. Grass is green and stock of all kinds on the range is fat. Fall wheat conditions have never been as good there as now, and many of the farmers have their spring plowing done ready to sow to wheat early next spring.

The same conditions apply west of the Joseph Mountains, in Union county, Ore., where a heavy rain in September gave the farmers an opportunity to plant a big acreage of fall grain and bright, warm weather since has given the grain a splendid growth.

Dairymen

State Association at Sequim

The Washington State Dairymen's association will meet at Sequim, Clallam county, December 13 and 14. Sending out the program Fred J. Mess, the president of the association, declares that "at this meeting subjects of vital importance will be under discussion—subjects that should interest every farmer as well as the dairymen and creamerymen—in fact every citizen interested in the vital question of milk production should attend this meeting."

Thursday, December 13, the address of welcome will be given by the mayor of Sequim and the response by William Bishop of Chimacum. This will be followed by the annual address of President Mess.

There will also be a joint meeting of creamerymen, dairymen and inspectors on Thursday with the following program: "The Condensery," P. G. Kinzer, Seattle; "The Creamery," S. Menzel, Everett; "The Dairyman," Dr. Mac L. Richards, Bothell; "The Inspector," A. D. Fish, state dairy and creamery inspector, Seattle; "Feeds and Feeding Conditions," W. O. Maughn, state college, Pullman.

Friday's program is as follows: Report on organization work, W. H. Tierney, state organizer, Silvana; "The Labor and Feed Problem," E. F. Benson, commissioner of agriculture, Olympia; 'Conservation as Applied to Dairying," William T. McDonald, live stock commissioner, Victoria, B. C.; "Organization and the Labor Question," A. J. M. Mossum, Seattle; "Seattle Milk Supply," Dr. F. E. Smith, chief veterinarian, Seattle; "Conditions in the East in Dairy Lines," A. N. Henderson, Seattle; "East of the Mountains," E. E. Flood, Spokane; "The Department of Agriculture," Dr. R. J. Donohue, dairy and live stock division, Olympia; "Report of Secretary, Minutes of 1916 Meeting," A. B. Miller, secretary.

Ceramery Operators.

A meeting of the Washington Creamery Operators and Buttermakers' association will be held at Seattle December 11 and 12 at the Frye hotel. The program for Tuesday includes the following: Address of welcome by Secretary of chamber of commerce, Seattle; response by H. J. Keithahn, Everett; annual address by President H. Menzel; "Needed Legislation," Dr. R. J. Donohue; "Conservation From the Buttermaker's Standpoint," S. S. Morse, Montesano; "Lack of Uniformity of Butter, From the Broker's Standpoint," W. E. Turner, Seattle; "Lack of Uniformity of Butter From the Producer's Standpoint," F. R. Klumb; "Utilization of the Byproducts in Creameries," Professor C. D. Turnbow, state college, Pullman; The scoring of butter and a banquet will follow.

For Wednesday the following program has been prepared: "Review of Past Year's Work in the Creameries," A. D. Fish, state dairy and creamery inspector, Seattle; "Benefits of Pasteurization," S. J. Simonson, Seattle; "How to Meet Competition of Condensaries and the Manufacturers of Oleomargarine," N. P. Sorenson, Bellingham; "The Department of Agriculture," E. F. Benson; "The Dairyman and His Problems," Fred Mess, Orillia; "British Columbia Creamery Operators and Buttermakers," William T. McDonald; "How We Arrive at Market Quotations," representative Daily Produce News, Seattle.

Dairy Buyers Timid

Scarcity of Feed and Labor Felt

The general conditions of high-priced feed and scarce labor were reflected in the Holstein sale November 23, at the Pacific International Stock show. The high range of prices of some previous sales was not reached and there were no exceptionally high-priced animals sold, but the sale left a satisfied lot of buyers, who will come back for more. The bidders generally wanted good average working cows and a few show and high-record animals did not bring all their worth. But, when conditions are considered, the sale must be called a success. Strange to say, the nine bulls averaged higher than the 50 cows. They sold for $2310, an average of $257.33, while the cows brought $9740, or an average of $194.50, making a total of 59 animals for $12,050, or an average of $204.23.

Colonel George Gue officiated on the block in his usual able manner, strongly assisted by Colonels J. W. Hughes and Harry Cranke. The following is a complete list of animals sold, buyers and prices paid:

Consigned by Hollywood farm, Hollywood, Wash.:

Females:

Hollywood Genevieve Fayne 2d, calved July 25, 1915; sold to Pomeroy & Son, Scappoose, Ore.	$260
Bos Ives Maples, calved August 1, 1913; G. D. Shafer, Vancouver, Wash.	300
Hollywood Spring Brook Bessie, calved December 13, 1914; G. D. Shafer	280
Hollywood Mutual Model, calved December 30, 1915; W. E. Hornbrook, Goldendale, Wash.	250
Hollywood Bessie Pontiac, calved October 1, 1915; Harry W. Bateman, Bellingham, Wash.	170
Hollywood Spring Brook Lorinda, calved November 25, 1915; Fred Davey, Vancouver, Wash.	250
Hollywood Bessie Posch, calved May 28, 1916; C. V. Martin, Forest Grove, Ore.	130
Hollywood Pietertje Johanna, calved April 12, 1916; Oscar P. Dunlap, Junction City, Ore.	145
Hollywood Cassiopa Bessie, calved May 11, 1915; Blaine Turner, Portland, Ore.	200
Hollywood Bessie Lorinda Fayne, calved May 4, 1916; A. P. Johansen, Parkdale, Ore.	150
Grace Juliana Queen, calved February 15, 1915; C. A. Svenson, Tillamook, Ore.	230

Bulls consigned by Hollywood farm:

Hollywood Lilith Korndyke, calved March 1, 1916; Pomeroy & Son	405
Hollywood Adverturess Palmyra, calved August 31, 1915; Earl G. Barnes, Silver Lake, Wash.	300

Females consigned by P. A. Frakes, Scappoose, Ore:

Lake Farm Friesland, calved April 27, 1916; C. E. Fisher, Kent, Wash.	105
Inka Netherlands Segis Wayne, calved July 21, 1913; Lloyd G. Whipple, Vancouver, Wash.	130
Oregon Belle Hergerveld, calved July, 25, 1914; C. E. Fisher	185
Calamity Pontiac Jane, calved May 26, 1916; G. Eugene Whipple, Vancouver, Wash.	105
Oregon Darkness, calved January 5, 1913; John Farr, Warren, Ore.	225
Daisy Perfection, calved November 7, 1916; William Bishop, Chimacum, Wash.	240

Bull consigned by P. A. Frakes:

Sir Madolyn Korndyke, calved September 7, 1915; E. S. Tillinghurst, superintendent state school for the deaf, Salem, Ore.	205

Females consigned by David McKeown, Gresham, Ore.:

Laura Netherland Johanna, calved November 8, 1911; H. W. Lynch, Gresham, Ore.	535
Jewel Veeman De Kol 2d, calved January 23, 1916; A. W. Burns, Gresham, Ore.	215
Countess Cantrilla Yukon, calved October 20, 1915; A. Grant, Gresham, Ore.	255
Phoebe Veeman Pontiac Beryl, calved January 20, 1916; S. M. Ross, Richland, Wash.	205
Cantrilla Veeman Lilith De Kol, calved April 3, 1916; A. A. Yager, Tillamook, Ore.	140
Pyrrha Wayne Fleeta De Kol, calved November 14, 1916; A. Grant	145

Bull consigned by David McKeown:

(Continued on page eight.)

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Entered as second-class matter January 13, 1916, at the postoffice at Spokane, Washington, under the act of March 3, 1879

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Commerce of the Pacific

No matter how absorbed people may be in war matters, leaders in business and finance are looking forward toward meeting conditions after the war. Even in Germany business is reported to be getting ready for the new era. American exporters want a board acting under government authority to plan for trade development abroad as soon as peace is restored. England has a minister without portfolio looking after the matters of trade development. A consular report from The Hague speaks of a heavy demand for captial to build up new industries in the Dutch East Indies.

What are we doing in the Pacific Northwest along these lines? What plans are being made for the far reaching development of our agricultural, fishing, timber and mining resources? The Pacific Northwest is in a strategic position to take advantage of commerce of the Pacific which bids fair, in time, to outrival the commerce of the Atlantic. There must be unity of action on the part of the four states if we are to reap the largest measure of success. Who is thinking about these things? Why should we not look to the thoughtful farmer as well as to the thoughtful lumberman or the thoughtful miner in laying the foundation for this new commercial development of the Pacific Northwest?

Food Control of Retail Traders

When the food control law was passed by congress the Farmer drew attention to the fact that practically no restrictions were put upon the retail trade, and there was danger that all the government might save by putting down the price of wheat and placing the mills and wholesale houses under license control might be appropriated away from the consumer by the retailers shoving up their profits.

Mr. Hoover is doing what he can to check that danger by exerting pressure on the retailers through the licensed wholesalers, but a belief is growing at Washington that this curb will not suffice, and that additional legislation will be needed.

Complaints, official and unofficial, are being made to the Washington authorities of specific instances of price-kiting that are taken as more than sufficient indication that hundreds of retailers are not doing their part toward lowering the food costs.

At present the retailer is in a position to reap all the profits that have just been taken away from the brokers and middlemen by regulation. He is not bound by any agreements. Numerous instances are continually being reported to the authorities of seemingly unwarrantable increase of prices.

Efforts will be made to put through congress a bill that will permit a sliding scale of profits reckoned by the transportation and distribution problems affecting the various localities. The scale of profits will be proportionate to those considered reasonable for any class of big or little business.

The Science of Giving

Every once in a while we hear somebody complaining because he is asked to give to the many needs which have appeared on account of the war. "First it was the Liberty loan," growled one, "and then it was the Red Cross, and then it was another Liberty loan, and now it is the Y. M. C. A. What do they think a man's made of? Hasn't he anything to do but dig down into his pocket and give all the time?"

We are not sure whether such men are really ignorant of the true need of these various calls on him, or whether they are merely exercising their inalienable and God-given privilege of "roaring."

The Liberty loans are not gifts, but investments at a good rate of interest in as safe a security as exists in the United States. Why call such a thing a gift?

If the wounded soldiers from the battle fronts could be laid before us on our streets, and if we could see their ghastly wounds and hear their moans and cries of agony, we would not hesitate to reach clear down to the bottom of our pockets and give generously, liberally.

If we could see the unwholesome and harmful surroundings of our soldier boys, and realize that the Y. M. C. A. is seeking to give what they really need in the way of religious gathering places, good amusements, places to read and write, we would not hesitate to give bountifully.

"Out of sight, out of mind," appears to apply to most of us.

We have made a science of business and have studied out methods of gathering money. Have we thought of scientific, efficient ways of giving? Isn't giving just as important to us as human beings as taking? Why should we not devote careful, earnest thought to ways of giving?

Topping the Market

One of the most successful general farmers we have met says that he has never received the top price in all his life on market crops. He has "sprung the market" on live stock occasionally.

The point he makes is that he prefers a fair and legitimate profit on his stuff to the risk run in trying to get the very highest possible price. Speaking of the wheat market of last year, he says:

"No, I didn't get as much as some of the boys, but I got $1.45, and that is a big price and a profitable one. Suppose I had got a little more; why should I want more than a stiff price? The people who wait till the last minute for the highest price lose as many times as they win. I am satisfied with a fair price and I win more in the long run than the top of the market fellows."

The Silo for Preserving Feed

We look for the coming spring to be one of silo building on farms. The silo is a method of preserving green feed. No man with dairy cows can afford to be without one. Times past, the dairy farmer may have succeeded in making money without a silo. We imagine those good old days have gone by, and the time has come for conservation—a conservation of wastes which may mean all the difference between profit and loss.

After all, it is a good thing. Lavish plenty is a glorious thing, but the man who by his own skill and foresight wrests success out of stubborn soils and difficult conditions has more right to take pride in his achievement.

We ask every farmer who milks cows to consider seriously the silo question. There are many on the market: there are home made silos, too. "Any silo is better than none at all."

Washington Gleanings

Plans are being made in Rosalia now for the organization of a boys' pig club.

The South Bend vegetable cannery has finished its pack for this year. The value of the pack is estimated to be close to $25,000.

There are approximately 600 cows on test in the Yakima Valley Cow Testing association and many more are on the waiting list.

It is practically assured that there will be 550 cars of normal size (630 boxes to the car) apples shipped from the Omak station this fall.

A farmers' institute run by farmers is the feature planned for the meeting scheduled to be held in North Yakima, January 21 to 25, inclusive.

North Yakima's display at the Tenth National Apple show held at Spokane, was adjudged winner of the first prize for general district displays.

W. H. Eaton has purchased the Palouse Country Improvement company farm of 800 acres seven miles west of Pullman on Union flat, paying $62,000.

Cull apples, which in former years have had a limited market, are in keen demand this season at the evaporation and canning plants near Spokane.

Owing to the growing importance of pathological work in agriculture, the division of plant pathology of the department of botany has been made an independent department and an integral part of the state college of Washington.

P. S. Darlington, district horticulturist, estimates the apple crop in the north central Washington district at 5,264,800 boxes. Last year it was 4,804,800 boxes. At $1.15 a box as an average, the gross receipts will be $6,054,520.

A movement has been started to effect the organization of a County Council of Agriculture in Okanogan county, which will help to unify the efforts of the existing agricultural organizations and to strengthen the work which they are doing.

Efforts to secure about 600 acres for planting to sugar beets as an experiment is being made by the Walla Walla commercial club. If the beets prove satisfactory the club will try to secure contracts for 6000 acres in order to get a beet sugar factory.

William Peck, who farms the Mood estate of 640 acres, west of Palouse, has shipped 79 hogs recently, receiving from the lot, $2930. Mr. Peck states that he has more hogs to market and that his profits from the hogs will pay his cash rent of $3000 for the year.

Herschel May, a Toppenish boy, who joined the McKinley Pig club organized by the extension department of the state college at Pullman in the fall of 1916, began business with a sow on January 13, 1917, and since then has accumulated net profits of $288.95.

John E. Tate, whose farming operations in the Palouse country, in connection with those of his sons, have been extensive for the last several years, has purchased from Dolph Coolidge of Colfax, 398 acres on Fourmile, southwest of Palouse. The consideration was $80 an acre, or $31,840.

A move of much importance to the live stock industry of the northwest has just taken place in Spokane with the reorganization of the Spokane Cattle Loan company which now is backed by the Old National bank, the Spokane & Eastern Trust company, the Exchange National bank, and the Armour interests.

What Others Say

Hoard's Dairyman: Milk prices this winter may make the cow which produces 3500 pounds of milk containing 150 pounds of fat return a profit, and we believe under present conditions such a cow should pay, but under normal times farmers can not hope to make a profit from such cows.

National Stockman and Farmer: Whether the country's needs will call for the conscription of labor for agriculture and other vital industries remains to be seen, but the idea of turning labor from the production of luxuries to the production of necessities should be considered now instead of next spring, when it will be too late.

Farmers' Review: Increased food production is imperative. The time is past when we can afford to stop and count profits. Every ounce of our energy must be turned toward providing the sinews of war. Farmers must begin now to make their plans for next season's crops. They may be tired of being urged to produce more, but if France or England fail because of lack of food—let us not think of it.

New High Average

Shorthorns Bring Good Prices

The Shorthorn sale, November 21, at the Pacific International stock show, set a new record for average prices of all animals sold and for both bulls and females. Besides this for the first time in the history of the northwest Shorthorns were purchased at auction to be exported to South America. William Hartnett, of the Shorthorn Exporting company of Chicago, who judged the Shorthorns and who has spent much time in the Argentine republic, purchased the senior champion cow, Escana Blossom, shown by A. D. Dunn, for $1625 and the junior and grand champion heifer, Topsy 4th, shown by Day & Rothrock, for $1775. Both these prices are higher than ever before paid at this sale and mark an epoch in Pacific coast Shorthorn breeding. Especially is it notable that the Rothrock champion heifer is out of a cow bred by W. O. Minor and by a bull of Alex Chalmers' breeding, making her strictly a northwest product.

Seven animals brought $1000 or more. Prinne Prince, consigned by H. G. Keyt, was purchased by R. E. Boyce of Baker, Ore., for $1200, exactly the price Mr. Keyt paid a year ago, and he is cheap at that figure. Roan Princess, a sweet heifer of the Frank Brown consignment, was taken by the Washington State college at $1225. Sweeter Yet, a splendid yearling of the A. D. Dunn consignment, went to W. F. Howard of Parma, Idaho, for $1060 and Sweet as Ever, of the same herd, to G. L. Tarbell, Yankton, Ore., for $1050, while D. E. Higgins of Boise, Idaho, paid $1200 for the two-year-old bull, True Baron. A number of foundation herds were purchased and the bidding was spirited throughout the sale.

Colonel Kroschel of Carrol, Iowa, officiated on the block in his usual able manner. The following is a complete list of consignors, animals sold, prices and buyers:

Females consigned by A. D. Dunn, Wapato, Wash.:
Villager's Maid, calved Oct. 20, 1915—Sold to W. J. Townley, Union, Ore. ..... $ 700
Escana Blossom, calved Feb. 19, 1915—Shorthorn Exporting Co., Chicago 1625
Sweet As Ever, calved Sept. 20, 1915—G. L. Tarbell, Yankton, Ore. 1050
Sweeter Yet, calved Oct. 1, 1915—W. F. Howard, Parma, Idaho. 1060
Bulls consigned by A. D. Dunn:
March Onward, calved Sept. 10, 1916 — Portland Union Stock Yards Co. ..... $ 325
True Baron, calved Nov. 27, 1914—D. E. Kiggins, Boise, Idaho.... 1200
Supreme Chief, calved Sept. 6, 1916—Wm. Byram, Canyon City, Ore. 410
Females consigned by Day & Rothrock, Sprague, Wash.:
Village Rose 4th, calved June 13, 1916—W. J. Townley..... $ 440
Perfection's Pearl, calved Oct. 26, 1916—Washington State College, Pullman, Wash. 355
Topsy 4th, calved Oct. 2, 1915—Shorthorn Exporting Co. 1775
Bonnie Mary 2d, calved April 19, 1916—Curtis C. Cole, Scio, Ore. 260
Bulls consigned by Day & Rothrock:
Rusper Sultan 2d, calved Aug. 9, 1916—J. B. Cornett & Son, Shedd, Ore. ..... $ 475
Superb Clarion, calved Sept. 2, 1916—C. C. Olson, Haines, Ore. 550
Fair Cumberland, calved Oct. 15, 1916—E. S. Terwilliger, Merrill, Ore. 400
Females consigned by Frank Brown, Carlton, Ore.:
Grandifame, calved March 4, 1916—W. A. Hall, Caldwell, Idaho. $ 415
Melba Perfection, calved Nov. 10, 1916—F. Z. Sams, Milton, Ore.. 415
Roan Princess, calved Feb. 22, 1916—Washington State College 1225
Roan Gem, calved June 23, 1913—Geo. Garner, Centerville, Ore... 330
Valley Pride, calved Nov. 28, 1915—W. F. Howard..... 330
Bulls consigned by Frank Brown:
Diamond's Choice, calved Oct. 5, 1916—S. G. Tucker, Parma, Idaho ..... $ 540
Diamond Gloster, calved March 20, 1916—Thos. Smith, Yakima, Wash 250
Females consigned by Jas. H. McCroskey & Sons, Sprague, Wash.:
Louana 2d, calved Aug. 29, 1916—Portland Union Stock Yards Co. ..... $ 400
Dale's Lady, calved Sept. 11, 1916—Mrs. E. F. Anderson, Albany, Ore. 345
Patience, calved Dec. 18, 1916—M. J. Devin, Heppner, Ore..... 230
Merry Lady, calved Jan. 30, 1917—D. A. McDonald, Wapato, Wash. 225
Bulls consigned by Jas. H. McCroskey & Sons:
Ury Marshall, calved Oct. 29, 1916—C. O. Pool, Trout Lake, Wash. $ 375
Golden Dale, calved Aug. 18, 1916—Tom Smith, Yakima, Wash. 470
Females consigned by A. Chalmers, Forest Grove, Ore.:
Golden Queen, calved Oct. 3, 1916—C. Gagnon, Walla Walla, Wash. 245
Violet Rose, calved Jan. 2, 1916—C. Gagnon 260
Silver Bough 2d, calved Feb. 27, 1913—W. F. Howard 420
Violet's Blossom, calved Aug. 21, 1916—C. Gagnon 290
Violet's Bough, calved April 16, 1915—C. A. Buckley, Grass Valley, Ore. 315
White Rose, calved July 12, 1913—Geo. Garner 250
Bull consigned by A. Chalmers:
Scottish Prince, calved April 2, 1916—J. G. Perry, Trout Lake, Wash. 200
Females consigned by W. O. Minor, Heppner, Ore.:
Maple 2d, calved June 4, 1916—W. A. Hall 205
Maple's Violet 2d, calved March 31, 1916—A. H. Tarbell, Warren, Ore. 275
Miss Meadowlawn, calved Oct. 11, 1915—Geo. Garner 330
Golden Maple, calved Jan. 27, 1913—Elton Webb, New Plymouth, Idaho 400
Bulls consigned by W. O. Minor.
Victor's Pride, calved May 28, 1916—Portland Union Stock Yards Co. 230
Victor's Chief, calved May 4, 1916—Nelson Bros., Olympia, Wn. 350
Sir Victor, calved May 22, 1916—J. W. Davis, Ridgefield, Wash. 200
Females consigned by H. M. Elberg, Woodland, Cal:
Ringleader's Lily, calved September 2, 1916—C. A. Buckley.....$ 310
June Elber, calved June 4, 1916—M. J. Devin..... 330
Roselawn Bloom, calved February 7, 1916—W. A. Hall..... 410
New Year's Morn, calved January 1, 1917—W. J. Townley..... 225
Bulls consigned by H. M. Elberg:
Ringleader's King, calved February 12, 1916—D. J. Shollery, Prineville, Ore. 475
Ringleader's King 2d, calved Jan-

(Continued on page twenty.)

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A. B. NYSTROM, Editorial Contributor

Feeding of Silage

There is a tendency among the farmers to postpone the feeding of silage and concentrates in the fall until the cows have dropped off materially in production, says Will W. Henry, official tester of the Stillaquamish Cow Testing association in his October report. This is a big mistake as it is hard to get them back to the normal flow of milk, and as a result many cows in the valley are not producing what they are capable of, provided they get the extra feed at the proper time.

How are you to tell when to begin feeding? The most successful dairymen in the association have solved the problem by weighing the milk from each cow daily. If there is a general drop they change pasture or provide the necessary extra feed. By weighing the milk of each cow one is able to feed the cows according to their individual needs. It is not fair to feed them all alike, as one may deserve nothing but hay (and in that case she should be sold to the butcher) while another may deserve a great deal more than she is getting.

One of the members of the Stillaquamish association sold 15 head of tested cows at auction last month. Does it pay to belong to a cow testing association? There are some men who say they can tell what a cow is by looking at her. At the above mentioned auction sale it was significant that the poorest cows brought the highest prices.

Gerhard Weerda of Florence purchased a new herd sire from the Hollywood Farm. He has good records back of him. His two nearest dams tested 4.3 per cent B. F., which is good for Holsteins. His dam has a 7-day record of 485.6 pounds of milk and 24.64 pounds of butter. His grandam on the sire's side has a year record of 26,135.9 pounds of milk and 1077.21 pounds of butter.

Six cows were sold for beef last month.

Four cows made over 50 pounds of butter fat for the month. Gerhard Weerda owned the one making the highest mark at 56.9 pounds. The other three were owned by Max Eitzenberger, Zenas Farrington and W. G. Grimm respectively. W. G. Grimm had the highest herd average for the month at 35.39 per cent butter fat.

Dairy Buyers Timid

(Continued from page five.)

King Segis Lilith Walker, calved February 10, 1917; J. C. Fowler, Wamic, Ore. 200
Females consigned by William Bishop, Chimacum, Wash.:
Lucy Quirinus Hengerveld, calved April 8, 1914; J. Luscher, Fairview, Ore. 220
Chimacum Bonnie Bess Nelson, calved May 2, 1916; Oscar L. Dunlap 130
Chimacum Mollie Pietertje, calved May 2, 1916; Oscar L. Dunlap.... 125
Chimacum Violet calved October 27, 1915; J. Luscher 305
Chimacum Sadie Vale Loma, calved May 20, 1916; A. P. Johansen.... 140
Chimacum Korndyke Clothilde, calved August 1, 1916; George Gue, Yakima, Wash. 125
Sena J. 2d Paul De Kol, calved October 5, 1908; John Farr 525
Bulls consigned by William Bishop:
Sir Wayne Marie, calved April 3, 1917; C. A. Svenson 300
Sir Chimacum Wayne Boone, calved December 16, 1916; Gerhardt Gaetze, Cornelius, Ore..... 250
Females consigned by Charles E. Bernard, Beaverton, Ore.:
Heifer calf, calved March 21, 1917; Mrs. C. Bernard, Oregon City, Ore. 85
Heifer calf, calved March 9, 1917; Mrs. C. Bernard 90
Females: Consigned by E. B. Marks, Yakima, Wash.:
Model Bonne DeKol, calved September 25, 1910—John Heffron, Yakima, Wash. 425
Heifer Calf, calved June 2, 1916—F. H. Reith, Astoria, Ore..... 155
Miss Edna Segis, calved April 12, 1911—G. D. Shafer 250
Riverview Bracelet Beets, calved January 10, 1915—W. J. Peterson, Tillamook, Ore..... 255
Arbutus DeKol Model, calved—J. W. Tilden, McMinnville, Ore.... 225
Jess DeKol Ormsby, calved July 10, 1912—C. G. Millard, Milwaukie, Ore..... 165
Marie Fobes Tritomia, calved October 10, 1916—H. G. Mullenhoff, Gresham, Ore..... 160
Annie Marie, calved October 14, 1916—Frank McKennon, Alicel, Ore..... 145
Heifer Calf, calved September 29, 1916—E. E. Wefling, Portland, Ore. 150
Bonnie Grace Wayne Jewel, calved February 15, 1916—J. W. Tilden.. 165
Edna Beauty II., calved November 14, 1911—Fred Davey 195
Bull consigned by E. B. Marks:
DeKol Artis Forbes, calved October 23, 1916—W. J. Peterson..... 315
Females: Consigned by Ballinhurst farm, Linnton, Ore.:
Lady Belle Wayne, calved September 18, 1910—Sven Svenson, Westport, Ore..... 115
Daybreak Trilly Hengerveld Queen, calved February 11, 1914—W. J. Peterson 130
Daybreak Walker Hengerveld Queen, calved April 17, 1914—C. E. Fisher 175
Bulls: Consigned by Ballinhurst farm:
Sir Bessie Corona, calved November 30, 1912—Arthur Langguth, Portland, Ore..... 160
Females: Consigned by John Heffron, Yakima, Wash.:
Myrtle Jewel Cornucopia Tritomia, calved February 7, 1917—E. B. Marks, Yakima, Wash..... 105
Edith Piebe DeKol Hengerveld, calved June 15, 1916—S. M. Rice, Rainier, Ore..... 125
Oaksdale Colantha Jewel Wayne, calved February 23, 1917—Frank McKennon 105
Colantha Princess Jewel, calved April 8, 1917—George A. Gue ... 100
Consigned by C. H. Marsh, Molalla, Ore.:
Uncatalogued bull—E. Werner, Aurora, Ore..... 175

H. A.

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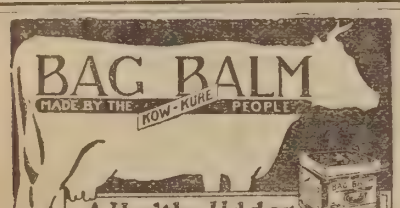
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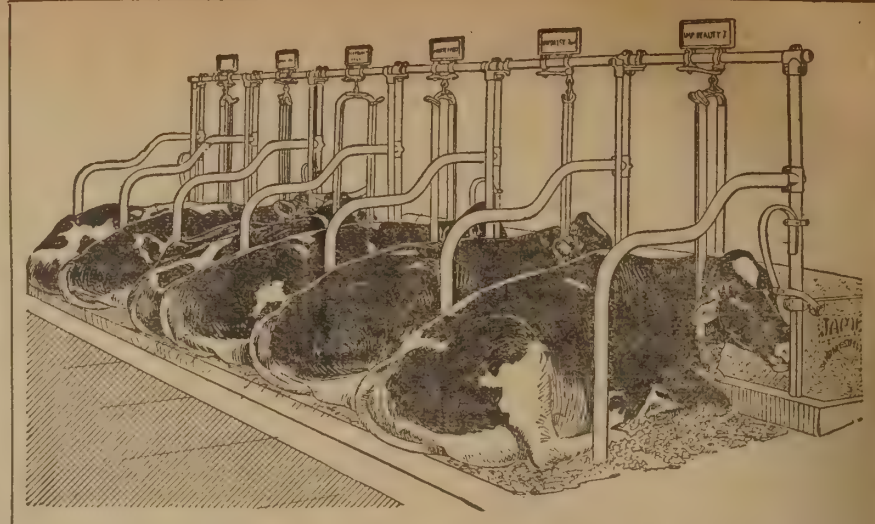
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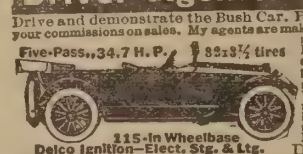
Bull Staffs, Steel Stalls, Pens, Ventilators, Individual Water Buckets.

James Barn Book Free—Shows details of all equipment; design of barns; scores of barn pictures; 316 pages. Send for it.

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61 BEALE STREET. SAN FRANCISCO, CAL.

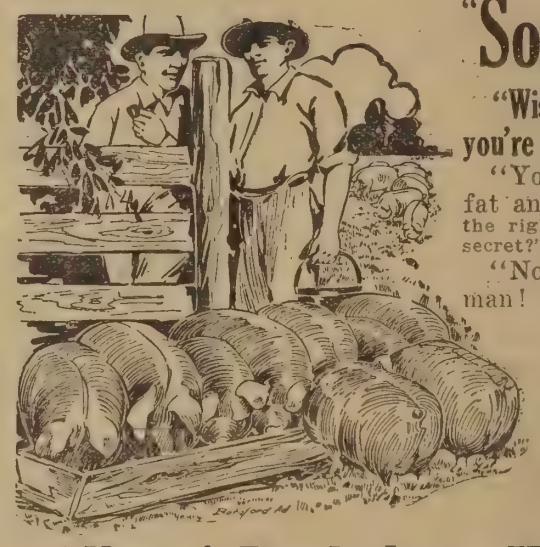
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FIRST-CLASS CAFE.
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J. V. SWEETMAN, Manager.



"Some Hogs"

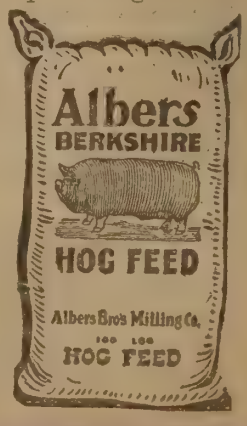
"Wish I had the success you're having, Jim.

"Your hogs are always fat and ready to ship at the right time. What's your secret?"

"No secret to it, old man! I feed them Alber's Berkshire Hog Feed. It's the balanced ration, that makes them vigorous and healthy and permits them to 'top' the market. I have found it to be the best hog feed on the market."

Albers' Berkshire Hog Feed

is a molasses grain feed, containing a high percentage of fat and protein. For "topping-off" hogs it is rated equal to the feeding value of corn and $15 to $20 a ton cheaper. Alber's-fed hogs are toppers, and top hogs pay dividends. You have but to use Alber's Berkshire Hog Feed to be a successful hog raiser. Your dealer can supply you. If a carload buyer, write us direct.



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Seattle Tacoma Spokane Bellingham
Portland San Francisco Los Angeles

LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor.

Range Sheep and Lambs

Reviewing the range sheep and lamb trade for the current season Clay Robinson & Co. in their live stock report for November 1 declared: "Startling supply shrinkage and phenomenal prices have been the outstanding features of the 1917 range sheep and lamb market." It is further noted that the movement of sheep and lambs in Chicago from the northwestern range country opened this year on July 9, at least a fortnight later than usual, and by the close of October the run was practically over, the first time in many years. The total of the July, August and September run of lambs at Chicago has fallen short of the one and one-quarter million mark. The total for the four months was 1,316,507 as compared with 1,725,315 last year and 2,594,922 in 1910. The July run of range stock in Chicago totaled about 155 double decks, a little over one-fourth as many as arrived there from that source in July, 1916. Most of the fat range lambs reaching the July market sold at $15.25 to $15.75, the top being $15.85, while feeders sold from $15 to $15.50. The first week of October found sheep and yearlings selling at new record prices for the season.

The Purebred Sire

(For obvious reasons, the name of the writer of the following letter is not published.)

To the Editor: In your issue of November 1 I notice your article on purebred Percheron stock, an article very ably and well written, giving farmers and breeders some good, sound advice, which, if followed up, will surely produce good results. I notice you give an estimate of how many purebred stallions there are in comparison to the number of horses in the states of Oregon, Washington and Idaho. There is one thing that must be brought to the attention of the farmer and the breeder, to wit, that as long as they are using anything as a sire short of a purebred sire they can not improve their stock.

The writer has always been an advocate of the purebred sire and has bought and bred some good ones, and has found it very hard to convince a great many farmers that it is cheaper to use a purebred sire at $20 than a common grade one at any price. I have in mind an instance of a farmer who had two good grade mares. I bought a purebred sire and advised him to use my horse, which he did at $20 each for service, the result being two fine fillies that weighed about 1450 each at 4 years old. At that time I had disposed of my first horse and bought another one, some bigger. Among those who came to look over the new horse was my friend who owned the two fillies. Of course, he was well pleased with the horse and asked about service fees. I stated that as I had to pay more for the horse than the colt did one cost me, I naturally expected a little advance for service, which I told him would be $25 for a living colt. "Oh," he said, "I cant stand that. So-and-So over here has a big grade colt he is standing for $12.50 service, and I think," he said, "I will breed to him. I can't stand your price." He bred to the grade horse. What was the result? At 4 years of age he sold his two colts for $212.50, while colts the same age from my horse were selling for from $450 to $600 per span. So you see as long as farmers look at the wrong side of things they will never improve their stock. I say farmers and breeders will have to get such ideas out of their heads, that they can get as good results from a cheap grade sire as they can from a purebred sire.

I notice that is one reason why so many are not willing to invest in good purebred sires, because the other fellow can come on the stand with an inferior horse and give his services cheaper than the one with the good purebred horse can afford to.

I may be a little bit radical, but, for my part, I would like to see an act passed in every state that would make it a felony to offer anything for service but a purebred sire that conforms in every way with our present inspection law. Then, and then only, will you get good horses, and people who take an interest will not be afraid to invest in a good purebred sire; then you would not have to come in competition with the fellow who has a cheap grade on the stand for half price, but you would be compelled to come into competition with first-class horses. Then, in a few years, farmers and breeders would begin to get results and good prices as well.

A SUBSCRIBER.

Veterinary

Dr. S. B. Nelson

Tooth May Be Diseased.—I wish to purchase a splendid horse. At present it seems to be afflicted in some way; he chews his food very fine but can not swallow it, and he spits it out. His teeth were filed, but it did not seem to help his trouble. F. J. S., Libby, Mont.

I would judge by the description that you give of the afflicted horse that he has a diseased tooth or a split tooth. A very carefull examination of the mouth will reveal one of these two troubles, and it will necessitate the offending tooth being extracted by a competent person.

Lumpy Jaw—I have a 3-year-old cow which has a lump the size of a gooze egg just under her right ear, which has a pus-appearing discharge. The lump was hard when lanced two months ago and lancing was of no benefit. J. B. K., Sixprong, Wash.

It is quite possible that your cow is affected with lumpy jaw. Write to the commissioner of agriculture at Olympia, Wash., requesting him to send a deputy to investigate the trouble and see if that is the disease affecting your animal. If it is it is an infectious disease and in many cases it is wise that the animal should be quarantined or even destroyed so as not to spread the disease.

Mrs. Deland to Aid in France.

Mrs. Margaret Deland, the authoress, is going to France to engage in the canteen service.

Sale Bills, Live Stock Catalogues

Arranging and printing of all kinds for the Breeder, Rancher and Fruit man our specialty—Submit your wants to

PETERSON & ROSS.

Printers. Spokane, Wash.

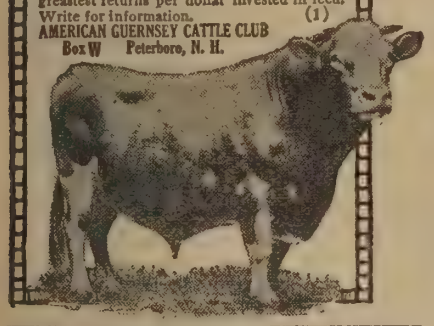
Use A Guernsey Bull A grade Guernsey produced in one year 16,288 lbs. milk and 844 lbs. of butter fat, or 985 lbs. of butter.

130% More Butter Fat

A Guernsey bull in Iowa sired daughters that are producing 130% more milk and butter fat than their scrub dams.

Don't sell your scrub cows for beef. Breed them to a pure bred Guernsey bull. The resulting heifers will produce fron 25% to 100% more than their dams. Guernseys give greastest returns per dollar invested in feed. Write for information. (1)

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Pronounced Incurable—Save-The-Horse Did The Trick

"Last May", writes Fred C. Nichols of Jefferson, N. Y., "my horse had a bad ankle, a large wind puff, and it had been hurt and turned hard. Save-The-Horse has taken it all off. I was told it was incurable. Have used several treatments but Save-The-Horse is the best ever."

SAVE-The-HORSE
(Trade Mark, Registered)

was made for the stubborn, so-called incurable cases of Ringbone, Thoropin, SPAVIN—or Disease of Shoulder, Knee, Ankle, Hoof or Tendon—when all other remedies have failed; and is sold under signed Guarantee to cure or return money. Always keep a bottle ready for any emergency. Send today for FREE 96-page Save-The-Horse BOOK on diagnosing and treating all lameness—result of over 22 years of success; also write for sample of contract and expert veterinary advice. All FREE.

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18 State Street, Binghamton, N. Y.

Druggists everywhere sell Save-The-Horse with Signed Guarantee, or we send it direct by Parcel Post Prepaid.

A "365" Day Liniment

YOU ARE SAYING TO YOURSELF—"If I only knew of something to stop that Backache—help my Rheumatism—cure my Neuralgia, I would send and get it at once."

Get It. Relief. Gombault's Caustic Balsam will give you immediate A Marvelous Human Flesh-Healer and a never failing remedy for every known pain that can be relieved or cured by external applications. Thousands testify to the wonderful healing and curing powers of this great French Remedy. A Liniment that will soothe, heal and cure your every day pains, wounds and bruises.

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It Helps Nature to Heal and Cure. Penetrates, acts quickly, yet is perfectly harmless. Kills all Germs and prevents Blood Poison. Nothing so good known as an application for Sores, Wounds, Felons, Exterior Cancers, Burns, Carbuncles and Swellings.

"I had a bad hand with four running sores on it. The more I doctored the worse it got. I used Caustic Balsam and never needed a doctor after that." —Ed. Rosenburg, St. Ansgat, Ia.

Mrs. James McKenzie, Edina, Mo., says: "Just ten applications of Caustic Balsam relieved me of goitre. My husband also cured eczema with it, and we use it for corns, bunions, colds, sore throat and pain in the chest."

A Safe, Reliable Remedy for Sore Throat, Chest Cold, Backache, Neuralgia, Sprains, Rheumatism and Stiff Joints. Whenever and wherever a Liniment is needed Caustic Balsam has no Equal.

Dr. Higley, Whitewater, Wis., writes: "I have been using Caustic Balsam for ten years for different ailments. It has never failed me yet."

A liniment that not only heals and cures Human Flesh, but for years the accepted Standard Veterinary remedy of the world.

Price, $1.50 per bottle at all Druggists or sent by us express prepaid. Write for Free Booklet and read what others say.

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WAR NEWS

114,000,000 Animals Killed

The United States Department of Agriculture collected the information that since the outbreak of the great war Europe's herds of meat-producing animals have decreased by 114,000,000 head. The statistics show—

That the loss in cattle amounts to	28,000,000
That the loss in sheep amounts to	54,000,000
That the loss in hogs amounts to	32,000,000
Total loss	114,000,000

AMERICA MUST REPLACE EUROPE'S BROKEN HERDS

This causes the big demand for live stock today. B. H. Heide, secretary of the International Live Stock exposition, states in the Country Gentleman: "I am finding as I travel over the country and visit the producers that there is a general belief that prices will **continue high for many years** and that **we shall never see the day of low prices for beef again.**"

PROFIT AND PATRIOTISM GO HAND IN HAND

All men that are engaged in the business of raising more live stock are fulfilling their duty toward their country—and the world. But more than that, they are engaged in the business that holds a sure promise for profit to themselves for many years to come.

WHERE IS YOUR PROFIT?

Unless you are raising stock none of this profit will come to you. Stevens county offers the opportunity. Our logged-off lands are sold at the same low prices and on 10 years' terms. It will pay you to go over the lands and have our neighbors show you what they are doing. If you want more information, we will gladly forward our free booklet. Write today and the folders will be sent by return mail.

Phoenix Lumber Company

Department D, Spokane, Wash.

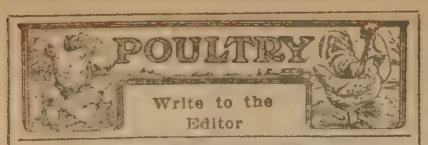
Owners of Stevens County Logged-off Lands "Where Stockraising and Dairying Pay."

Mail this coupon today.

Please send me your folder on Stevens County logged-off land.

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JAMES DRYDEN
Editorial Contributor

Tuberculosis In Chicks

To the Editor: Would you please tell me what is the matter with my chickens? Some of them droop around and lose weight, and finally die. Some of them that I have opened had hard white spots on their liver and intestines. They are not all that way, but occasionally one gets sick and dies after drooping around for a month or six weeks. What can I do to rid my flock of this trouble? I feed my chickens whole wheat and warm bran mash with meat scraps about once a week.

H. K.

Nez Perce, Idaho.

This letter describes the symptoms of tuberculosis very accurately. The only certain way, however, to determine this is to have a microscopical examination made by some one who can identify the germ, and I would suggest that the specimen be sent to the state experiment station for examination.

There is no known cure for this disease. Fowls that show the symptoms should be killed and burned.

Fowls that are known to be infected should not be sold for market purposes. It is not likely that all the flock will be infected, and some of them only slightly. It will be perfectly safe to use these for eating. They are usually infected only in the liver and intestines, besides cooking will kill the germs. Those in advanced stages should be killed and burned. None should be sent to market, because they may be infected often badly, though the symptoms may not be apparent.

If one had a large or valuable flock it would pay him to have them tested by what is known as the Van Es test. This test is made by injecting a little avain tuberculin into the comb or wattles, just underneath the surface. If the fowl is infected there will be a swelling and discoloration inside of 24 or 36 hours. If desired I will be glad to give a full description of this test.

J. D.

The Roupy Season

Chickens are very susceptible to colds, and colds in the flock cause a great shrinkage in the poultry receipts just when receipts count for something. This is the roupy season. Prevention is worth a great deal more than cure and the whole secret of prevention is fresh air and dry quarters. More trouble is caused by closing up the poultry house in the fall with the purpose of making the chickens warmer than from any other cause. They must have fresh air if they are to withstand the cold. Crowding together in the house at night causes overheating and impure air and then doctoring for roup or colds. Keep the perches 18 inches apart or more and leave one side of the house open and there will be little trouble from colds. If you have more chickens this year than last do not crowd the perches closer together in order to get them into the house. Better build a new house or let some of them roost outside.

J. D.

Sells for $1800

Herefords Sell Well at Portland

To Klamath county, Oregon, goes the honor of paying top price at the Hereford sale, November 24, at the Pacific International stock show. The amount bid by D. W. Snyder of Swan, Ore., for the wonderfully perfect 2-year-old heifer Rose Donald, consigned by Henry Thiessen of Sweetwater, Idaho, was $1800. Tarkio Lad, a grand young bull, also a Thiessen consignment, went to Benton Bowers of Ashland, Ore., for $1000. No other animals reached that figure.

W. H. Daughtrey, president of the Portland union stock yards, was the heaviest buyer, taking 10 bulls for a total of $3625. Dixon & McDowell of Prineville, Ore., got six for $2365, and J. Frank Adams of Klamath Falls took home a choice consignment from the O. A. C. at $700.

A. L. Stevenson of Corvallis did hard and effective work on the block, assisted in the ring by Harry Cranke, who seemed a necessity at all the sales. The following is a complete list of animals sold, buyers and prices paid:

Bulls consigned by Henry Thiessen, Sweetwater, Idaho.

Truman, calved February 21, 1916, sold to Dixon & McDowell, Prineville, Ore.	$ 705
Tarkio Lad, calved July 22, 1916, —Benton Bowers, Ashland, Ore.	1000
Discretion 5th, calved December 2, 1916—Dixon & McDowell	375
Discretion 7th, calved January 1, 1917—Walter Grover, Halfway, Ore.	400
Beau Dewey, calved November 2, 1916—Baldwin Sheep Co., Hay Creek, Ore.	450
Idaho, calved September 16, 1916—P. W. Foster, Prineville, Ore.	500
Beau Quality, calved September 2, 1916—R. B. Dement, Myrtle Point, Ore	575
Beau Monitor, calved September 26, 1916—E. S. Dement, Myrtle Point, Ore.	410
Discretion 3d, calved September 4, 1916—Grover C. Avery, Corvallis, Ore.	550

Females consigned by Henry Thiessen:

Buda 2d, calved September 5, 1916 —Thomas Copeland, Walla Walla, Wash.	$ 610
Rose Donald, calved September 22, 1915—D. W. Snyder, Swan, Ore.	1800

Bulls consigned by George Chandler, Baker, Ore.:

Debonair 70th, calved April 20, 1916—Mat Hickey, Wenatchee, Wash.	$ 375
Debonair 75th, calved April 29, 1916,—Walter Grover	400
Debon, calved April 23, 1916—W. H. Daughtery, Portland, Ore.	300
Debonair 77th, calved September 21, 1916—W. H. Daughtery	310
New Man, calved April 21, 1916—W. H. Daughtery	375
Gambo, calved April 25, 1916—Walter Grover	575
Lyman Generous, calved September 27, 1916—Walter Grover	500
Woodrow, calved March 4, 1913—Dixon & McDowell	405

Female consigned by George Chandler:

Viola Generous, calved January 8 1917—Thomas Campbell	$ 360

Bulls consigned by A. B. Cook, Townsend, Mont.:

General French 5th, calved April 8, 1915—Dixon & McDowell	300
General French 1st, calved March 27, 1915—William Ledford, Prineville, Ore	$ 380
Prefer 37th, calved September 25, 1915—W. H. Daughtrey	330

Females consigned by A. B. Cook:

Lady Kitchener, calved April 10, 1915—Campbell & Young, Medford, Ore.	$ 205
Jessie P. 3d, calved March 30, 1915 —W. H. Daughtrey, Portland	300
Lady French 7th, calved September 7, 1915—W. P. Emery, Macleay, Ore.	330

Bulls consigned by W. P. Emory, Macleay, Ore.:

Maplethorpe 2d, calved November 4, 1916—W. H. Daughtrey	$ 305
H. Fairfax 9th, Calved June 20, 1916—Dixon & McDowell	355
H. Fairfax 8th, calved June 12, 1916—Mike Henley, Medford, Ore.	400
Handsome Fairfax 6th, 2 years old —Dixon & McDowell	225

Bulls consigned by Oregon Agricultural college, Corvallis, Ore.:

Gladiator, calved March 12, 1916—George Dement, Myrtle Point, Ore.	$ 600
Mohammed, calved April 2, 1916—W. H. Daughtrey	430
Petronius, calved March 2, 1916, —H. D. Dunham, Post, Ore.	525
Chic Beau, calved January 6, 1916, —J. Frank Adams, Klamath Falls, Ore.	700

Bulls consigned by Platt Bros., Genesee, Idaho:

Paul, calved June 6, 1916—W. H. Daughtrey	$ 400
Spellbinder, calved May 20, 1916—William Ledford	365
Prospect, calved May 31, 1916—H. D. Dunham	340
Woodrow, calved June 18, 1916—William Ledford	400
Excelsior, calved June 14, 1916—William Ledford	300

Bulls consigned by J. D. Miles, Livingston, Mont.:

Gray Field Prince, calved January 10, 1916—W. H. Daughtrey	$ 675
Winslow, calved June 20, 1916—W. H. Daughtrey	400

Bulls consigned by J. W. McKinney, Salem, Ore.:

Mischief, calved May 28, 1916—A. Ladigen, Trout Lake, Ore.	$ 280
Laurence, calved September 20, 1915—William Daugherty	225



EGGS

The high price of eggs should stimulate egg production. Egg production can be greatly increased by proper care and correct feeding. Our Clover Leaf Scratch is the ideal feed for egg production and is generally used by our most progressive poultrymen. Samples and price on application.

The Inland Seed Co.

Spokane, Wash.



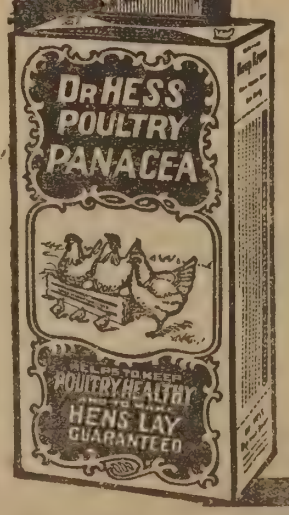
Speed Up Your Laying Hens

Eggs are selling at way-up prices. This is your egg harvest time. Put your hens in laying trim by feeding

DR. HESS POULTRY PAN-A-CE-A

Feed your hens and pullets Pan-a-ce-a to help them turn the greatest possible amount of their feed into eggs. Feed Pan-a-ce-a to liven up the dormant egg organs and make them active. Feed Pan-a-ce-a to all your poultry to improve the appetite and digestion, to enrich the blood, to make them healthy.

There is a dealer in your town that will supply you with Dr. Hess Poultry Pan-a-ce-a. If it does not make your hens lay, he will refund your money. Packages, 25c, 50c and $1.00; 25-lb. pail, $3.00; 100-lb. drum, $11.00.



Dr. Hess & Clark, Ashland, Ohio

DR. HESS STOCK TONIC
A Conditioner and Worm Expeller

Dr. Hess Instant Louse Killer Kills Lice

$200 to $300 Extra Money Easy
Find Out How—Send No Money—Write Today

The poultry business is now more profitable than ever. Over $700,000,000 was paid Farmers, Farmers' Wives and Poultrymen last year for eggs and poultry. A bigger business this year. War has boomed the poultry business tremendously. An excessive demand for chickens—a short supply. It's a patriotic duty to help fill it. Prices for poultry and eggs are soaring too. Get in a big, sure paying business like this, **now.** Don't experiment. Get in **right.** Sure Hatch Incubators have made big, sure money for people for 20 years. Over 300,000 well pleased owners. **Sure Hatch** is safe, so simple a child can operate it. Lasts for years. Hatches strong, sturdy, healthy chicks. Often pays for itself 10 times over the first year. We have the proof.

ALL EXTRAS INCLUDED

FREIGHT PAID ANYWHERE



SURE HATCH

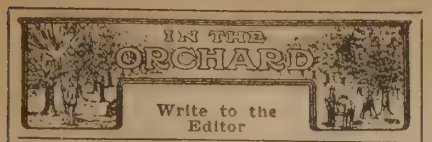
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Get Poultry Feed Cheap—Learn How

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SURE HATCH INCUBATOR CO., Box 60 **FREMONT, NEBR.**



GRANVILLE LOWTHER
Editorial Contributor

Evolution of Marketing.

We are solving the marketing question by the process of evolution. Marketing began as a system of barter, in which one commodity was exchanged for another. The whites bartered with the Indians, giving tobacco, whisky, beads and trinkets, for fur skins and other valuables. The pioneers bartered among themselves, exchanging corn for bacon, bacon for wheat, wheat for labor and labor for other commodities. As labor came to be more specialized, they paid the carpenter, the blacksmith, the shoemaker, the storekeeper and the preacher, mostly in the things produced on the farm.

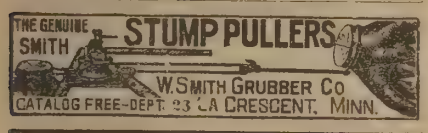
It was a step forward when the "storekeeper" became the "middleman' to exchange dry goods, groceries and other manufactured articles for farm products. He was a central agent through whom the people might buy, or of whom they might inquire, instead of every one finding his own markets. He was a germ of the board of trade.

The next period was marked by the discovery of steam; the almost universal use of money as a measure of values; the building of railroads; the connecting of continents with steamship lines and cable lines; a world commerce and world markets; the organization of trusts and combines to meet the new conditions; an international money standard and an international exchange of credits.

The last period named developed anti-trust organizations, anti-trust laws, farmers' organizations, fruit marketing agencies, etc., all of which have been educational, but can not, in my judgment, compete successfully with the organized commercial agencies.

Forego Fraternity Dances.

Co-eds of the University of Chicago have decided to forego their fraternity dances this winter and give the money thus saved to war relief work.



WALNUTS

can be grown on a great many farms in the northwest. If you had planted grafted walnut trees a few years ago you could be selling the world's finest nuts today for from 25c to 30c per lb. Will you have any to sell a few years from now? Our grafted Franquettes are the best on the market and are sold as low as many seedlings.

6 to 10 ft. trees, each	$1.25
Dozen lots, each	1.15
Hundred lots, each	1.00
Thousand lots, each	.90

Special prices to the trade.

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HOGS SELL AT PORTLAND.

Interest in Hogs Is Returning.

The combination hog sale at the Pacific International stock show at North Portland November 20, resulted in a range of prices that at least show a returning interest in hog raising. Thirty-four hogs went through the ring for a total of $2010, or an average of $59.12. Most of the consignments were Poland Chinas, and they sold best, except the three very fine Berkshire sows. The Durocs and Chester Whites were young stock and the latter reduced the average a little.

Top price of $160 was paid for Belle's Beauty, a magnificent Poland China sow consigned by A. L. Wilson of Greenleaf, Idaho. She went to S. M. Mears Jr. of Woodland, Wash., who is building up a herd sure to be heard from. Colonel J. W. Hughes did good work on the block.

The following is a complete list of animals sold, buyers and prices paid:

Poland Chinas.

Consigned by Ray J. Fox, Lyons, Ore.:

Big Silk, gilt, farrowed March 28, 1917—Sold to William Schulmerich Hillsboro, Ore.	$62.50
Substitute, gilt—George Burkheller, Hillsboro, Ore.	70.00
Delight's Black, sow, farrowed March 6, 1917—J. V. Kuhn, Suplee, Ore.	35.00
Long White Face, farrowed March 28, 1917—William Schulmerich	57.50
Unnamed littermate to above—J. Erma Pattee, Condon, Ore.	42.50
Black Face, boar, farrowed March 6, 1917—B. W. Nelson, Carlton, Ore.	42.50

Consigned by R. W. Hogg, Salem, Ore.:

Daisy, 4th, gilt, farrowed March 11, 1917—William Schulmerich.	80.00
Daisy 1st, litter mate to above—J. D. Whitten, Dufur, Ore.	70.00
Lily Sunshine, gilt, farrowed September 1, 1916—Frank R. Lew, Baker, Ore.	55.00
Miss H. C. Perfection, sow, farrowed March 8, 1915—A. R. Benson, North Portland	57.50
Meddler Rose, boar, farrowed June 4, 1917—C. R. Belshee, Moro, Ore.	30.00

Consigned by Herbert Willard, Dayton, Ore.:

Unnamed gilt, farrowed February 9, 1917—Frank McKennon, Alicel, Ore.	$80.00
Substitute sow—Mrs. J. V. Kuhn, Suplee, Ore.	52.50
Pilot's Girl, gilt, farrowed September 21, 1916—C. M. Mears Jr., Woodland, Wash.	65.00
Pomona, sow, farrowed August 30, 1916—E. E. Brown, Canby, Ore.	60.00
Pilot's Model, boar, farrowed September 1, 1916—R. W. Hogg, Salem, Ore.	50.00
Unnamed boar, farrowed February 9, 1917—A. R. Benson.	40.00

Consigned by Wilson Brothers, Greenleaf, Idaho:

Unnamed gilt, farrowed March 18, 1917—A. L. Swaggart, Athena, Ore.	$80.00
Unnamed gilt, littermate to above—A. B. Benson	47.50
Belle's Beauty, sow, farrowed April 13, 1914—S. M. Mears Jr.	160.00
Big Bone Queen, gilt, farrowed March 18, 1917—Robert E. Lee, Pomeroy, Wash.	50.00
A. Wonder Jr., boar, farrowed February 21, 1916—J. B. Kuhn.	60.00
Big Bone Wonder, boar, farrowed October 20, 1916—S. G. Tucker, Notus, Idaho	65.00

Consigned by Frank Denison, Lyons, Ore.:

Carrie's Choice, gilt, farrowed March 6, 1917—Frank McKennon	62.50

Consigned by Frank E. Wray, Silverton, Ore.:

Dixie Jack, boar, farrowed August 14, 1915—Frank McKennon	67.50

Duroc Jerseys.

Consigned by Doorfler Bros., Silverton, Ore.:

Mellow Lawn's 13th, gilt, farrowed May 16, 1917—H. H. Sullivan, Montigue, Cal.	60.00
Substitute gilt, littermate to above—A. R. Benson	37.50

Chester Whites.

Consigned by T. Brown, Yankton, Ore.:

Woodrow's Sequel, boar, farrowed June 12, 1917—Charles Haughton, Woodland, Wash.	35.00
Woodrow's Chief, boar, littermate to above—W. Curry, North Portland	32.50
Daisy's Master, boar, littermate to above—Ed School, Tangent, Ore	25.00
Daisy's Prince, boar, littermate to above—Ed School	25.00

Berkshires.

Consigned by Earl Wood, Silverton, Ore.:

Riverview Lady 27th, uncatalogued sow—T. R. Decker, Silverton, Ore.	82.50
Uncatalogued sow—T. B. Decker	75.00
Uncatalogued sow—T. B. Decker.	95.00

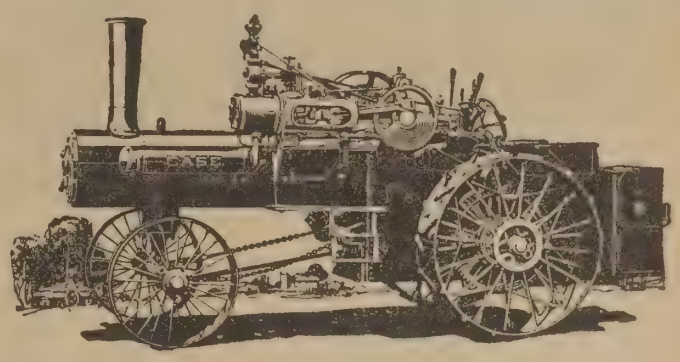
Coming Events.

Washington Irrigation Institute, North Yakima, Dec.

Washington State Grain Growers', Shippers' and Millers' association, Pullman, Jan. 3-5.

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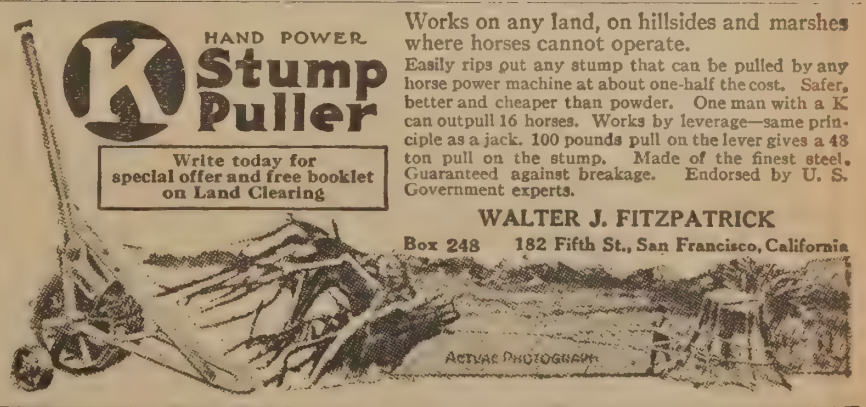
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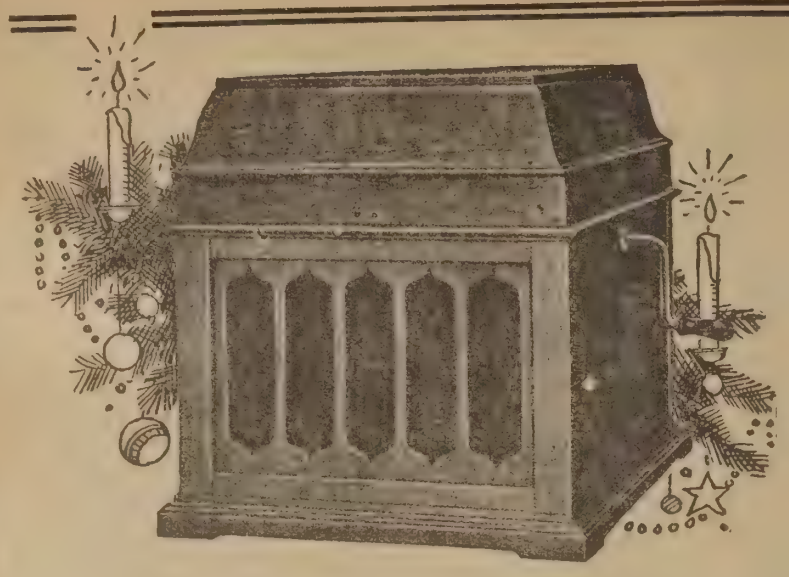
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Have you ever stopped to realize that all voices, and all musical instruments, excepting one, have their limitations? As wonderful as a piano is, it can give you only piano music; as beautiful as an organ is, it can give you only organ music; as marvelous as the human voice is, it can only sing. It is the same with the violin, the cornet, the accordion or any other instrument which you might have in your home or might consider purchasing. These are excellent in their way, but we are sure you will agree that none of them is completely satisfying.

It is different with the New Edison Diamond Amberola. It has no musical limitations, for it is all voices and all instruments in one and it brings into the home all kinds and classes of music, from the greatest of operatic numbers sung by the most famous of singers to the simplest of popular and comic songs sung by the cleverest performers in their line; from the performances of great military bands and symphony orchestras to the snappy music of the ever popular banjo.

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Music was never more welcome in the American home than it is today. Home has never meant more to Americans than it does today. With some of our boys at the front and many preparing to go, the tenderest and deepest emotions surge through our souls. It is then that nothing is more appropriate than good music as the companion of our leisure hours. Whatever your tastes, whatever your mood, there are many selections in the Blue Amberol Record Catalog to suit—beautiful old hymns that seem to just lift you out of your immediate surroundings to a higher plane where the spirit is free and unfettered by the irksomeness of the daily routine—thrilling band records that just make you feel like getting up and marching around the room—noble patriotic numbers that would stir the heart of a traitor—tender old and new songs and ballads that go straight to your heart—majestic grand opera that appeals to the deepest of human emotions—lively dance pieces, ragtime and funny records—entertainment of all kinds for young and old.

So that you may have an idea of the many wonderful selections to be found in the Blue Amberol Record Catalog, we have picked a few here and there and they're printed below. Look them over. You are sure to find many of your favorites.

FOR CHRISTMAS

Angels from the Realms of Glory
Bells of Christmas
Birthday of a King
Hail! Hail! Day of Days
Hark! Hark! My Soul
It Came Upon the Midnight Clear
Night Before Christmas
Old Jim's Christmas Hymn
O Little Town of Bethlehem
Once in Royal David's City
Ring Out the Bells for Christmas
Star of Bethlehem
Sweet Christmas Bells
When Christmas Bells are Ringing

SACRED

Ave Maria
Beautiful Isle of Somewhere
My Ain Countrie
Rock of Ages
Face to Face

QUARTETS

The Bridge
Come Where My Love Lies Dreaming
Darling Nellie Gray
Maple Leaf Forever
Massa's in de Cold, Cold Ground
Laughing Song
The Rosary

HAWAIIAN

Aloha Oe (Farewell to Thee)
Kamehameha March
Medley of Hawaiian Airs
Moani Ke Ala
Waialae (Waltz Song)

BANDS

At the Mill March
Battle of the Marne—Descriptive
Glowworm
Humpty Dumpty Rag
In the Clock Store—Descriptive Fantasia
Jolly Coppersmith—with Anvil, Singing and Whistling
My Old Kentucky Home Fantasia

INSTRUMENTAL SOLOS

I Hope I Don't Intrude, Bells
King of Air March, Xylophone
Kiss Waltz, Saxophone
Medley of Southern Airs, Banjo
Old Black Joe, Piano

DANCE

Carnival One-Step
Destiny Waltz
Good-Night Waltz
Money Musk Medley Virginia Reel
Oh, You Silv'ry Bells Medley Two-Step
Stop! Look! Listen! Fox Trot
Leg of Mutton One Step

GRAND OPERA

Faust—Air des Bijoux
Pagliacci—Prologue
Rigoletto—Caro nome
Trio from Faust
Bridal Chorus from Lohengrin

VOCAL DUETS

All Aboard for Blanket Bay
As We Parted at the Gate
Auf Wiedersehen—The Blue Paradise
Barcarolle (Oh, Lovely Night)—Tales of Hoffman
Every Little Movement—Madame Sherry
Good-Bye, Good Luck, God Bless You
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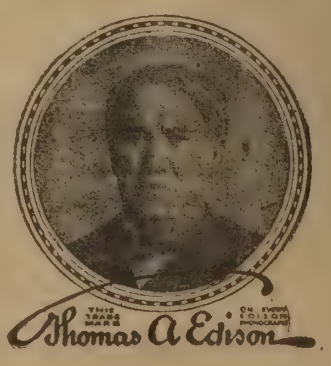
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More Liberty Bonds

Other Issues to Come Next Spring

Semi-official information coming from Washington, D. C., indicates that the government is going to need about $3,500,000,000 more money for war purposes by July 1 of next year. How to raise this amount is a problem that the treasury department and congress will have to deal with. It is a foregone conclusion that at least a large share of it will be raised by another Liberty bond issue, though it may be that much of it will be raised by taxation of some kind. It is reported that a wide difference of opinion as to the method of raising it exists in congress. Many are opposed to another bond issue at this time, but many more are opposed to increased taxes and further argue that it is impossible to create the machinery for collecting the taxes that would have to be levied. No taxes will likely be levied and no bond issue authorized before early spring, however.

Congress Reassembles.

Congress has reconvened at Washington. The gathering after recess took place Monday, and plans for the business of the session are already under way. In his message, President Wilson made it clear that he desired the attention of the lawmakers to be kept centered on necessary war legislation, allowing other matters to come in only when of very vital importance.

Heavy Fighting Continues.

There have been no great victories for either side in the war for the past several days, though fighting of considerable violence has been in progress. The Italians have succeeded up to this writing in holding the Germans in check, and British and French reenforcements have reached them and given aid. In the north, where the British made such gains week before last, the Germans made violent counter attacks last week that regained some of the trenches lost, though the advantage still remains with the allies. On the east, Russia is still well nigh inert, though enough of the Russian army remains loyal to the allies to hold a considerable portion of the German army in the east.

Want Pay Increased.

The organizations of railway trainmen and railway conductors have formally petitioned their employers for increases in wages amounting to an average of practically 40 per cent of what they are now getting. They have allowed the railroads until December 31 to consider the petition before making a reply. Recently a strike was threatened, but President Wilson called a conference of the workmen and laid before them argument for conciliation without a strike at this crucial time in the life of the country. It is not believed that any tie-up of rail operations will result from the movement for increased wages.

Seattle in Furore.

Not primarily because Major General Greene, in charge of the great army training camp at American Lake, Wash., where some 40,000 soldiers are stationed, ordered none of those soldiers to visit Seattle, but because Mayor Hiram C. Gill and his police force refused to drive vice and immorality out of the city, the people of Seattle are up in arms and are demanding the impeachment of Gill. General Greene first warned the city administration that unless what he claimed to be a great vice ring was driven out of the city he would forbid his soldiers visiting the city. The warning was unheeded. Then he placed the prohibition on his soldiers. Immediately Seattle was in ferment, and last week a massmeeting of more than 5000 citizens voted without a dissenting voice in favor of impeaching the mayor. Gill was formerly mayor of Seattle, but was recalled under charges of winking at vice conditions. He was again elected, however. New recall actions against him are now probable.

Have Huge Incomes.

Two hundred and six men with millionaire incomes, 10 of them with annual incomes of more than $5,000,000 and 196 with incomes ranging from $1,000,000 to $5,000,000, are shown in the income tax figures of the internal revenue bureau for the fiscal year 1917.

Remove "Oleo" Tax?

A recommendation for the removal of the internal revenue tax of 10 cents a pound on oleomargarine has been made by W. H. Osborn of the revenue department of the government. The removal of the tax is urged on the ground that it would stimulate the production of the oleo as a fat during the war, when fats are greatly needed. It is expected that the dairy interests will wage a vigorous fight against the proposal of free oleomargarine.

Russia Asks Armistice.

The Bolsheviki government in Russia has formally presented an offer of an armistice to Germany and Austria, and both these countries have accepted the offer. A meeting of representatives of the governments was held Sunday and the opening of negotiations made. It is generally predicted that the negotiations will be as long drawn out as it is possible for Germany to make them, as that country's aim seems to be to keep Russia inert as long as possible if no separate peace is actually obtainable at this time.

American's Fall in France.

Reports coming from the battle front where the British and Germans have been fighting so vigorously for the last month tell of the activities there of a number of American railroad engineers who were assisting in railroad construction work during the hottest battles. It is reported that some of these Americans became trapped between the two battle lines, that they lay low in shell pits until the British lines had advanced far enough to permit them to dash into the British lines under fire, and that they then seized rifles and joined in the fighting bravely. British officers praised the manner in which the Americans acted, when it was no part of their program to take part in actual gun warfare, but in construction work only.

Bolsheviki and I. W. W.

Almost Identical in Their Fundamental Ideas

The Bolsheviki in Russia and the I. W. W. in the United States are almost identical in their fundamental ideas about government. The I. W. W.'s do not accept the principles of the constitution of the United States and the laws made pursuant thereto. Only when the laws are enforced against their misdeeds do they cry out about their constitutional rights.

The common creed of Bolsheviki and I. W. W. is that the constitution of society under a regime which recognizes private property in land and the instruments of production is wrong, and that any government founded on that doctrine ought to be overthrown. But all civilized governments have been founded on that doctrine.

The doctrine of property and property rights is more fundamental than any constitution or laws. Private property has not been created by law; it is the discovery of the human race, and laws have merely recognized and systematized the arrangements which the race automatically discovered as necessary to its perpetuity and welfare. In origin it is very like the family unit and lies deeper than law and constitution.

Rightly is it said that peace in the Bolsheviki terms means the overthrow of every government—all law. It would but end in the primal struggle of man with man for existence, the impoverishment of the race, the overthrow of civilization. The idylic dreams of the Bolsheviki dreamers will prove to be only nightmares.

Russian nihilism and American I. W. W.'ism are of a class. They alike aim at a reconstruction of society on an artificial basis, unsupported by successful historical experiences, unadapted to human nature, certain to result in universal poverty unless it were successful in reducing the race to slavery to an autocratic bureau.

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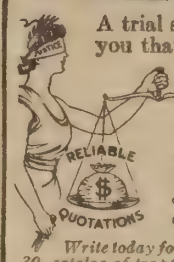
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Farmers Are Preventing Wastes

Canning Has Resulted in a Saving of a Large Amount of Vegetables and Fruit of a Perishable Variety This Season



KENNEWICK, Benton County, Wash., Nov. 23.—Fall work is up to normal with the exception of grain seeding. Usually the bulk of our acreage is seeded to fall grain, but this fall there has been almost no fall seeding done. Nearly all the wheat farmers will sow in the spring and the early Baart variety will almost replace the bluestem. The last few years have demonstrated that it is far superior to bluestem in the region of light rainfall. The Baart matures earlier and yields heavier. There has been no crop losses because of unfavorable weather conditions, in fact the weather has been especially favorable for harvesting of all crops. The farmers are "Hooverizing to a remarkable degree, so far as saving fruit and vegetables which ordinarily go to waste. A saving of waste especially by canning has been remarkable this year. Many of the dealers have sold more than 10 times the usual number of containers. Corn, middlings and shorts are being used to some extent in place of wheat for hogs, but the fact that corn has been held very much higher than wheat has materially prevented the substitutions that should have been made. The water users in the Kennewick district are planning the organization of an irrigation district with a view to purchasing the irrigation system and enlarging it. This will result in maximum production in the entire district next year. As there is almost no opposition to the organization of the district and the plans for development, there seems little doubt that this will be accomplished before next season's crops are planted.

LEE M. LAMPSON

Feed Situation Trying.

SPOKANE, Spokane County, Wash., Nov. 23.—The feed situation in Spokane county, is somewhat trying at the present time. This is especially true when it comes to the feeding of grain or grain substitutes, owing to the fact that wheat is needed for human consumption to such an extent that our farmers are endeavoring to sell their wheat in every instance, rather than to feed it to stock. There is a special demand for mill products to feed the hogs and cattle. The mills are unable to provide middlings, red shorts, or bran and shorts in sufifcient quantity to meet the demand, although they are running to their full capacity, at the present time. There seems to be little relief from the present situation unless we can import corn from the middle west, to supplement the by-products of the mill. J. R. SHINN.

Little Wheat Sown.

GRANDVIEW, Yakima County, Wash., Nov. 24.—Wheat raisers tell me that almost no wheat has been sown this fall, but they will sow in the spring. Fall work in the valley is about as usual. Most of the potatoes are dug, but not much corn husked yet. The hogs that are raised here have been fed largely on alfalfa and waste fruit and there are not many for sale. I don't know of any farmers that have wheatless days. Some of the farmers are having meatless days, on account of high-priced meat. Some are renting their farms and are going to try a trade of some kind.

E. H. FAULKNER.

Plow Without Moisture.

COLVILLE, Stevens County, Wash., Nov. 24.—Even with the lack of moisture there has been a large amount of fall ploying, the weather conditions otherwise being very favorable. The dry conditions have prevented fall seeding to some extent. In favored districts the seeding is about normal and the stand looks good. In most districts, however, seeding is below normal and the grain is but little more than sprouted. The weather has been favorable for harvesting, and the losses from frost are but slight. The question of "Hoverizing" is so much of a personal question that it is hard to apply to any class of people. The great majority of people either fail to see the necessity of "Hooverizing" or are unable to purchase substitutes economically. The present low price of beef, especially that offered the farmer, makes it impossible to secure an economical substitute. Many farmers are using shorts very extensively in the growing ration and are substituting barley for wheat in the fattening ration.

A. R. HAHNER.

Are Making Cheese.

PROSSER, Benton County, Wash., Nov. 24.—The weather is dry and cool, with no rain yet to speak of. Plowing and seeding are not up to the normal this fall in this district on account of the dry weather. No crop losses in this district due to cold or other causes. The farmers are Hooverizing in some ways. Most of the farmers don't use meat at all; some of the farmers sell their hogs and butcher the steer calves. For substitutes for wheat they use shorts and some use small hand mills to grind their own corn. In the valley the farmers are feeding their hogs squash and corn and in the upland or wheat country they feed wheat mostly, for it is the cheapest feed they can get. The most interesting experiment in this community is making cheese from skimmed milk. Most of the farmers' wives are trying their hand at cheesemaking. A good slogan is "get a hand mill and make your own corn meal."

G. W. WILGUS.

Should Use Sulphur.

MEDFORD, Jackson County, Ore., Nov. 23.—The work in relation to fall crops has been very backward. We have not had rainfall enough to make plowing possible and only a slight amount of seeding has been done. A few farmers have seeded wheat on corn land and in some places on potato land. We have no crop losses due to cold weather. Our farmers are doing everything possible to economize in the way of feeding live stock, and one of our large stock raisers has advertised that he will pay one cent per pound for acorns, and the small boys all over the community have been gathering acorns for some time and disposing of them to this farmer. Farmers are feeding more straw than usual. Beet tops and cuttings are being utilized more than ever before. Farmers are buying more land plaster for alfalfa since our demonstrations and experiments have proved that we can greatly increase our tonnage from the use of land plaster or pure sulphur. Our experiments proved that the sulphur in the land plaster is doing the business. Where sulphur is supplied we recommend it to be used in the fall of the year so that it will have plenty of time to combine with the lime in the soil, and thereby form calcium sulphate, which is readily taken up by the plant. We have as high as 2000 per cent increase on alfalfa by the use of sulphur, or, in other words have secured two tons and better at a cutting against practically nothing where fertilizer was not used.

CLAUDE C. CATE.

Some Frost Losses.

HELENA, Lewis and Clark County, Mont., Nov. 8.—Seeding and fall plowing are progressing favorably. There was some loss of potatoes and apples from the cold of October 18 and later.

W. A. MITCHELL.

Mill Feed in England.

Mill feed is still reported very scarce in England, though a little improvement is visible. There is not sufficient output yet to soften prices in the least, coarse middlings and bran easily making around $63 to $72 per ton, respectively, those figures being the official maximum in each case.

Wheat Comes From Canada.

Since April of this year wheat and wheat flour have been imported in greatly increased quantities from Canada. This is attributed principally to the fact that on April 16 Canada removed the duty on wheat imported into that country, which action automatically admitted Canadian wheat free of duty into the United States under the provisions of the tariff law of 1913.

For the nine months ended with September of this year we imported wheat from Canada to the extent of 21,490,269 bushels, over 14,000,000 bushels of which came in free after April 16. The imports of wheat flour during these nine months totaled 403,270 barrels, of which 297,695 barrels came in free of duty. For the corresponding nine months in 1916 the total imports were 157,289 barrels, and in 1915 only 90,499 barrels.

World's Food Situation.

W. J. Hanna, food controller of Canada, has been a recent visitor to the offices of the United States food administration in Washington. Mr. Hanna says that recent developments in Europe, official correspondence and the latest crop estimates make it plain that the world food situation today is serious beyond anything that we could see a few months ago. Mr. Hanna and Mr. Hoover are working in close cooperation.

Southworth's Centennial.

Plans are under discussion for an appropriate observance next year of the centennial anniversary of the birth of Mrs. E. D. N. Southworth, the popular novelist.



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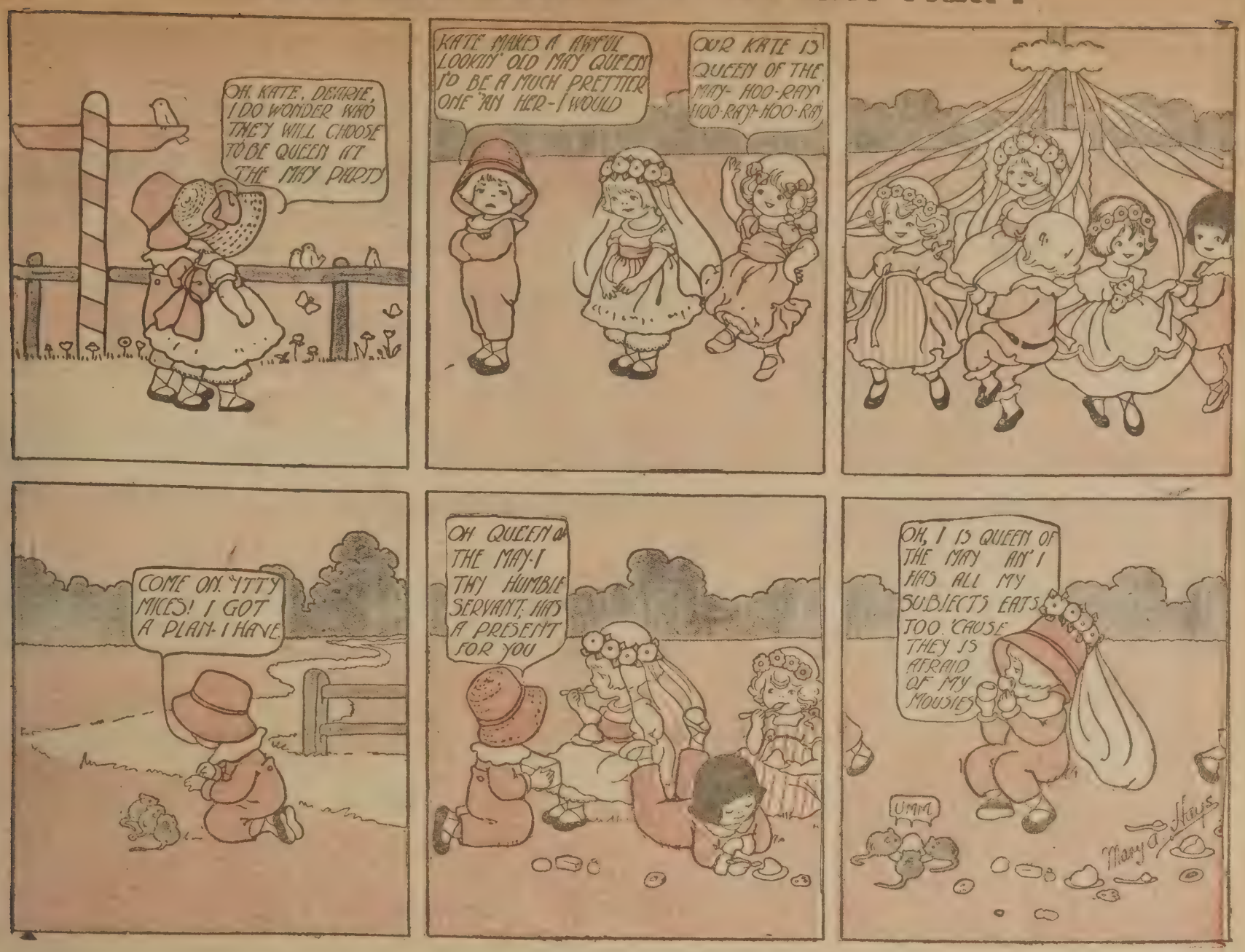
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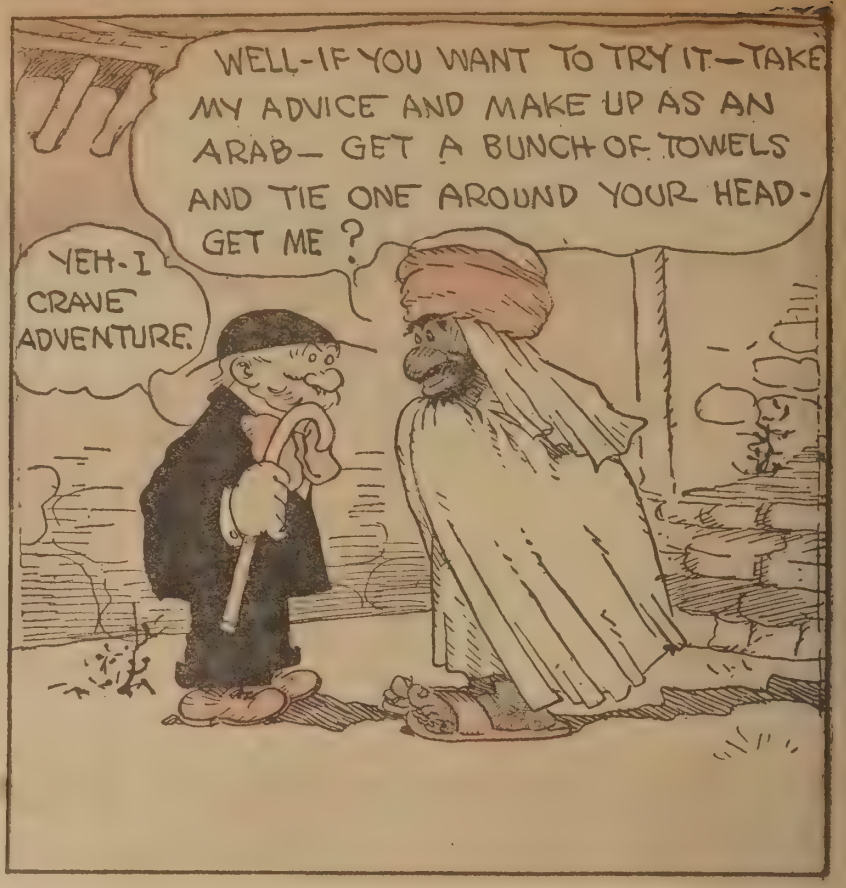
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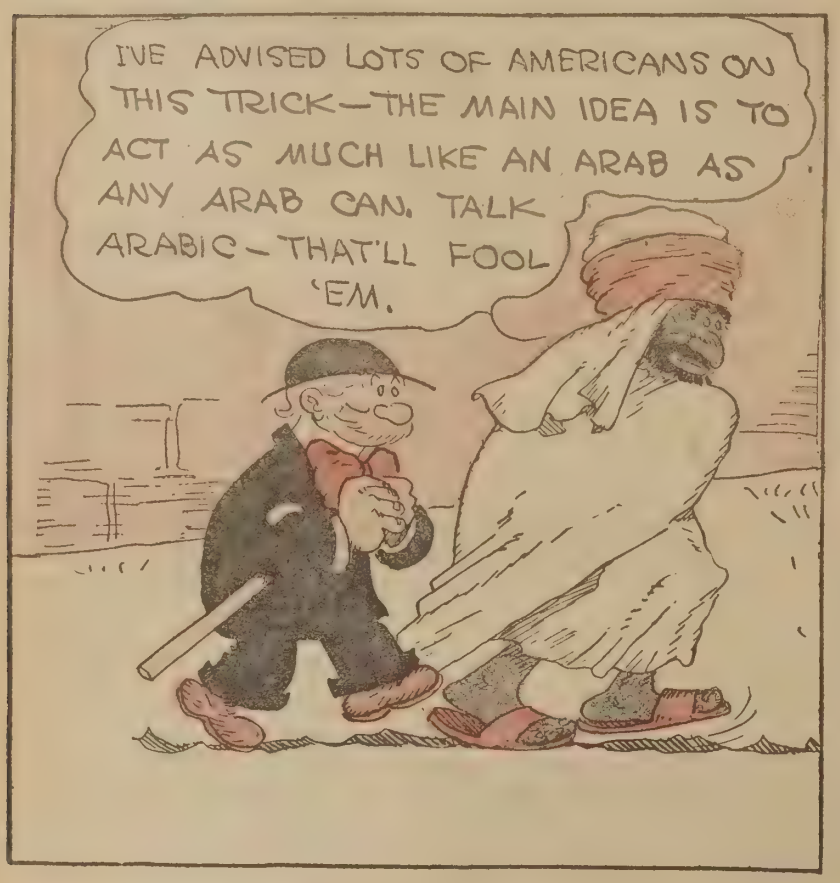
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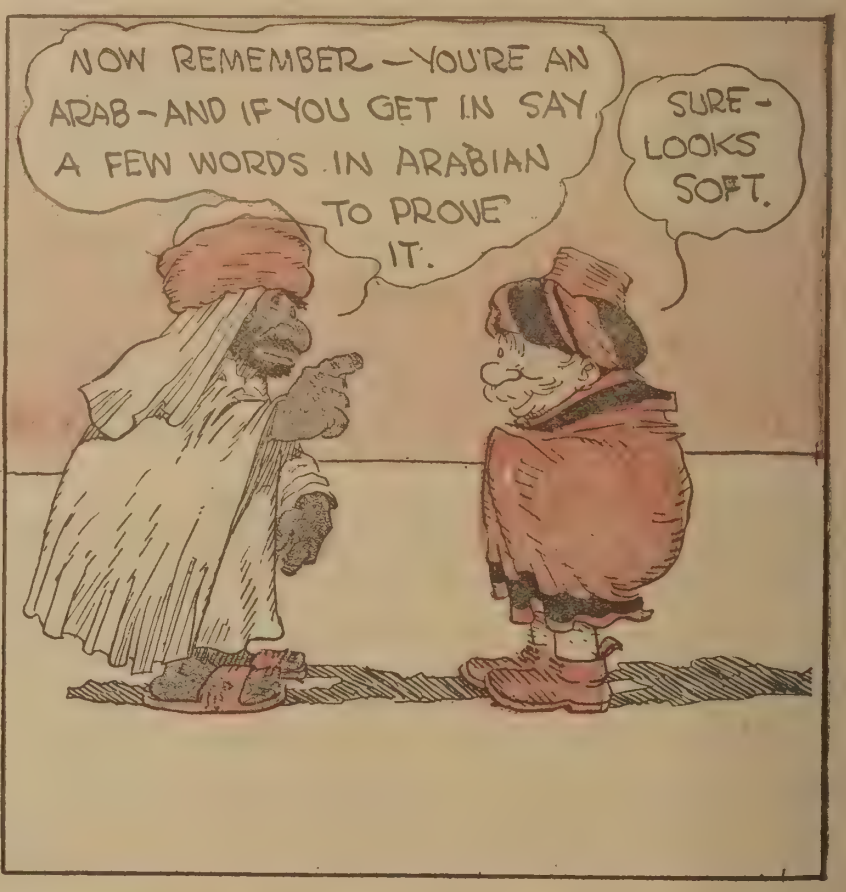
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JERRY MACJUNK LEARNS SOMETHING OF HAREMS















THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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SYNOPSIS.

Gale is trader of Flambeau, a frontier on the Yukon. Lieutenant Burrell is sent to this camp to preserve order. The day of his arrival Necia, Gale's daughter, returns from a mission school. As she and Burrell are talking, two halfbreed children and a squaw appear, and Necia, noting the lieutenant's look of disgust, informs him that they are her mother, brother and sister. Poleon Doret, a Frenchman, returns from Dawson, and on the same boat comes Runnion, a desperado. In attempting to make Runnion leave Flambeau, Burrell is shot by him and only the quick hand of Poleon saves him.

As Necia is arrayed in a ball gown, which Poleon brought her from Dawson, Burrell happens in. He is amazed at the ease with which she wears the dress and at the fairness of her skin. She confesses to a feeling that she, Necia, should be called "Merridy."

"No Creek" Lee, a prospector, after years of hard luck, makes a big strike. Runnion returns, and with him Stark, who has come to grubstake the miners and open a saloon. Stark causes Gale and the Squaw Alluna, great uneasiness. The men of the camp leave for Lee's claim, Necia, longing for riches so she may become like other girls, begs Burrell to follow them with her. Burrell knows that Necia is coveted by half the men in the camp and that it would cause a great uproar should he spend a night alone with her in the woods. This would be an easy way to compel them to an open state of enmity, which would be preferable to the indifferent toleration which he has met among them. This together with her entreaties and the confession that she loves him, sweeps aside all discretion and together they start on the journey.

Poleon Doret sang gaily as he set out for the claim with Gale. Here was a gift of wealth for him to lay at the feet of Necia with his laughter, his music and his heart. On the way Gale tells him the story of a good girl, loved by two men, a good man and a bad man, and how the he-devil had won in the game of love. That night the party camps in the woods, Stark, Runnion, Lee, Poleon and Gale. In the morning they draw straws to see who will have first choice of claims, Gale and Poleon receiving the lucky ones.

Sitting by the campfire when night had fallen, Necia begs for stories of Burrell's home life and of his sister. The girl apparently realizing her peril, wisely chooses this means of awakening in the lieutenant his slumbering conscience. She succeeds, for Burrell's honor is old and persistent. The next morning the two resume their journey, reaching Lee's cabin before the other party. Necia locates three claims for herself, but no amount of pleading will induce Burrell to stake one.

A few hours later Lee and the others arrive. That afternoon as Runnion, Stark and Poleon are locating some distance from the camp, Runnion makes some insinuations about Necia and Burrell which throws Poleon into a frenzy of anger and he vows that either Burrell or Runion will pay for them with his life.

After supper, Stark devotes himself to Necia, telling her the story of a girl about her own age who had chosen a young Bennett over another lover, Gaylord, and had married him. Then how Bennett came back one night to find his wife murdered and the kid gone. Of how they had chased Gaylord for months, but had finally lost track of him. Stark is about to tell the name of the little girl, but at this point a shot rings out and Gale jumps half way across the room crying: "My God, I've killed him." But the bullet hisses Stark by six inches and lies buried in a log.

With all the treachery and cunning conceivable, Stark and Runnion have systematically schemed to best Gale and Poleon out of their claims. They dispose of Necia's rights by saying that, as she has not yet reached 18, she has no legal authority to hold mining claims. As they are wrangling, Burrell slips out and restakes Necia's claims for himself, telling Necia afterward that they are hers as soon as she becomes of age.

Once home, Gale tells Alluna how Stark has proven himself to be bullet-proof. Alluna gives the trader a knife and tells him to kill Stark. As Gale goes out, he says that he can not do it in cold blood, but he slips the knife and scabbard inside the bosom of his shirt.

Corporal Thomas, guessing Necia's love for Burrell, tells her the story of another soldier who had loved a half-breed girl and how it had lost him position, honor and all that was worth while in life. Afterward Necia seeks her father in a rage and asks him why he married her mother and made her different from other girls. Then, for the first time, she learns that her father has never married Alluna. Necia tries to comfort herself with the thought that Meade's love reaches beyond blood and station and that he will marry her in spite of these things.

The steamboat comes that day, loaded with men. Stark's saloon is running, and by night Flambeau is a mining camp.

CHAPTER X.

Meade Burrell Finds a Path in the Moonlight.

"No Creek" Lee had come into his own at last, and was a hero, for the story of his long ill-luck was common gossip now, and men praised him for his courage. He had never been praised for anything before and was uncertain just how to take it.

"Say, are these people kiddin' me?" he inquired, confidentially, of Poleon.

"W'y? W'at you mean?"

"Well, there's a feller makin' a speech about me down by the landing."

"W'at he say?"

"It ain't nothin' to fight over. He says I'm another Dan'l Boom, leadin' the march of empire westward."

"Dat's nice, for sure."

"Certainly sounds good, but is it on the level?"

"Wal, I guess so," admitted Poleon.

The prospector swelled with indignation. "Then, why in hell didn't you fellers tell me long ago?"

The scanty ounce or two of gold from his claim lay in the scales at the post, where every new-comer might examine it, and realizing that he was a never-ending source of information, they fawned on him for his tips, bribing him with newspapers, worth a dollar each, or with cigars, which he wraped up carefully and placed in his mackinaw till every pocket of the rusty garment bulged so that he could not sit without losing them. They dwelt upon his lightest word, and stood him up beside the bar where they filled him with proofs of friendliness until he shed tears from his one good eye.

He had formed a habit of parsimony born of his years of poverty, and was so widely known as a tight man by the hundreds who had lent to him that his creditors never at any time hoped for

(Continued on page twenty-two.)

You can begin "The Barrier" this week and become intensely interested in the story by reading the synopsis at the beginning of this page.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B. M. A., M. D. (Johns Hopkins University.)

Why You Should Consult Your Doctor When Long Unhappy



Dr. Hirshberg

Look around among your friends: How few know their own good, or, knowing it, pursue it! If you are well, have a roof over your head and your share of loved relatives, good books to read, good food and comfortable clothing, you have the means to the end, but your happiness will also depend upon pursuing it.

True happiness rests upon more than mere contentment and comfort. To say that certain "darkies" are happy people, because they laugh and sing, yet know not what a day may bring forth, is not the real article. The negro who heard the whistle blow and remarked, "It's dinner time for some folks, but it's just 12 o'clock for me," is nearer an appreciation of true happiness than many a rich man unable to digest his food.

The ways to bliss are not always on beds of down. "He that has no cross deserves no crown." Happiness is the end and aim, and ease, content, goodness and pleasure may be means to securing it.

Little Troubles Vanish.

We are rarely so happy, or so unhappy, as we suppose ourselves to be. When you have some unpleasantness, a quarrel or misunderstanding with your best girl, if your business has been bad or a note must be met the next day, your night's rest and sleep may be made miserable by the wrought-up feelings of unhappiness you have conjured.

Yet, in reality, these are mere petty, temporary, evanescent disappointments, which 20 fair hours generally dissipate. "That something still which prompts the eternal for which we bear to live, or dare to die," makes us yearn all the more for the happiness which often appears to recede at our approach.

Founded on Health.

With good health, man is the artificer of his own happiness. Health and mirth are not in themselves happiness, which is sometimes possible—as with Tiny Tim—when strength and power are absent. Nevertheless, they contribute largely to the ultimate reality of this "good hour" or "bon heur," as the French call it.

The first trench to be raided for a victorious happiness is that of your whole physiology. If you are moody, miserable and unhappy, your blood, thyroid glands, intestines, liver or spleen may not be in order. Whichsoever it may be can not be "supposed" or "guessed." An honest survey with hospital apparatus, blood tests, Abderhalden gland tests, X-ray photographs of the lungs, liver, intestines and heart may give a clear insight into the cause of and a way to remove the source of your unhappiness.

Merry, mirthful individuals with quips and jests and a right hearty wit are not always the happiest. Joys are bubble-like. What makes them bursts them, too. Happiness is a permanent, all-pervading substance of glowing solidity and health. It is hard to achieve, but, once built up, it is not easily torn down.



MAKE THE FARM HOME MODERN

By PROFESSOR P. G. HOLDEN.

Why should a farmer's wife be compelled to carry water from a distance when running water and drainage may be installed in or adjacent to the kitchen at small expense?

Storage tanks, which furnish running water throughout the house, are coming into general use. They are inexpensive and easy to install. On any farm where power is used there is no reason why a good water supply may not be provided for the household.

The housewife can plan the arrangement of her kitchen in such a manner as to save her many steps. The kitchen is her work shop, and her husband should see that she is provided with the same conveniences which he demands in his work.



This is the daily task of thousands of women who live on the farms—wasted time and energy—which can be saved by the expenditure of a little time and money.

There are but few who can not afford to substitute a dover egg beater for a fork, a long-handled soup ladle for a cup, a food grinder for a meat chopper. A can opener will save time and labor; sharp knives for carving and slicing are necessities. These are all cheap and add to the efficiency of housework. A bread mixer, a fireless cooker and vacuum cleaner are within the reach of many.

Have a box built for the wood or coal. Put it on castors, fill it near the door and wheel it near the stove. This will prove a great convenience and will keep much dirt out of the kitchen.

The proper arrangement of cooking utensils will lighten the work. Kettles which are used daily should be placed where they can be reached without stooping and without moving other utensils. The potato masher is used at the stove. Hang it on a hook near by. A wire frame for covers near the range will be convenient. A shelf for salt, pepper and matches within reach as the housekeeper works at the stove will save countless steps. The dishpan should be hung near the places for washing dishes. Some housewives insist upon putting them out of sight. In most cases this means many extra steps every time they are needed.

A good paring knife which fits the hand may make the peeling of potatoes a restful rather than a tiresome task. The farmer has a scoop shovel, a spade, a long-handled and a short-handled shovel, because each is adapted to a certain kind of work. It seems unfair that his wife should be compelled to use one poor butcher knife for all processes where knives are needed.

The sink is usually placed with the long side against the wall, but this is not always the best plan. Some modern houses have the sink near the middle of the kitchen so that it may be used from both sides.

Insist upon having a drainboard upon each side of your sink, one for dirty dishes, the other for draining. For the average family this means the saving of time in dish washing.

Grange Behind Nation and President

Those were unmistakable words which Oliver Wilson, master of the national grange delivered in his annual address at St. Louis recently. Here are two or three extracts from that address:

"The history of the grange, from its very inception, is a continuous and unbroken record of devotion to the principles of peace to the championship of justice, fairness and fraternity, and a repeated avowal of its faith in arbitration as a means of settling all differences between individuals and between nations. All its declarations, upon every issue, and every organized act of the grange, have been thoroughly consistent with this fundamental teaching of the order; hence, without prejudice, and with a breadth of vision born of long and consistent action, the grange is now qualified to state its position with the fullest freedom and with the certainty that such a statement of purpose will be as widely listened to, and perhaps fraught with as influential consequences, as was that other Declaration of Purposes, proclaimed and unanimously adopted in this very city more than four decades ago. It is our opinion that the national grange should here and now declare to the world its unqualified consecration to the great world task now facing civilization—of driving forever from existence the greatest world outlaw that history has ever recorded, an empire that has prostituted itself in the worship of brute force, that has hurled to the winds all the ideals of honor, morality and decency, that has stooped to acts of murderous lust and wanton destruction unparalleled in all the annals of human affairs, and that constitutes, until destroyed, a menace to every principle of civilization and even of Christianity itself.

"This is no time for the mincing of words, we may as well face facts as they are, and we must reckon with the full magnitude of the task which we have undertaken. It is the mildest sentence that can be pronounced upon the German empire to assert that we look upon that nation with feeling akin to those with which we might contemplate an insane man running amuck in a peaceful community; but with the same inherent sense of self-preservation no effort will be left undone to check his destructive course and to restore the safety of a threatened community. I, therefore, believe that this national grange in annual session assembled, as the most representative body of tillers of the soil in the country, should put itself squarely and unreservedly on record in support of the American nation, of the American president, of the American soldier and a speedy and thorough finish of the job upon which the United States has entered. To this end let us pledge to that nation, to our president and to those soldiers the utmost limit of our energies—backed by our acres and their productiveness; by our labor and its skill; by all our resources, that those soldiers may be well clothed and fed, and that the awful burden and sacrifice they have been called to make be lightened so far as possible.

"The cost of the present struggle, in treasure and in blood, represents the most frightful price humanity has ever paid to secure an ideal. Thus in the midst of the darkest hour in humanity's history, we catch a glimpse of the dawning of a new day, even the triumph of the very peace towards which grange energies and grange hopes have unceasingly been directed, and to whose complete attainment by the only possible means now available, we here and now highly resolve to rededicate all that we have and all that we are. Thus shall real and lasting world's peace be attained and the opportunities of freedom and liberty be guaranteed to every people."

New High Average

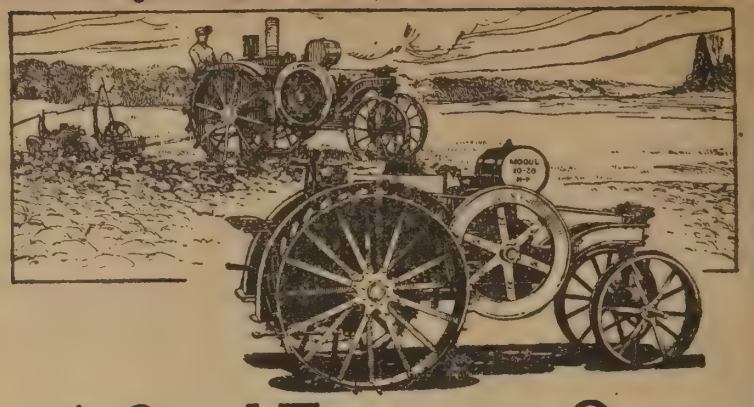
(Continued from page seven.)

uary 16, 1917—Thomas Smith.. 425
Females consigned by Joe Turner, Meyers Falls, Wash.:
Victoria M., calved April 22, 1916, —W. J. Townley 300
Barmaid, calved September 5, 1916 —G. W. DeLay, Union, Ore.... 190
Volumnia Countess, calved May 1, 1916—J. B. Cornett & Son..... 240
Bulls consigned by Joe Turner:
Star of Hope, calved October 1, 1916—J. V. Kuhn, Suplee, Ore.. 210
Western Ideal, calved September 19, 1916—Thomas Smith..... 325
Females consigned by J. B. Cornett & Sons, Shedd, Ore.:
Silver Blossom, calved March 28, 1916—Curtis C. Cole..... 225
Bulls consigned by J. B. Cornett & Son:
Silver King, calved October 10, 1916—W. F. Bartlett, Camas, Wash. 275
Clifton Boy, calved October 16, 1916—Thomas Smith 200
Females consigned by Mrs. E. F. Anderson & Son, Albany, Ore.:
Golden Roanoke, calved December 24, 1916—A. H. Tarbell 235
Golden Sophronie, calved February 12, 1917—G. A. McDonald 250
Bull consigned by Mrs. E. F. Anderson & Son:
Ring Glory, calved April 1, 1916—M. J. Devin 425
Females consigned by George Bertrand, Castlerock, Wash.:
Buttercup, calved March 20, 1914, —Mr. Ayres, Eugene, Ore..... 315
Lady Linden, calved June 28, 1916—W. Al Jones, Gervais, Ore. 200
Bull consigned by George Bertrand:
Chief's Golden Goods, calved April 18, 1916—W. A. Hall..... 375
Females consigned by H. G. Keyt, Perrydale, Ore.:
Lilydale, calved September 5, 1912 —Mrs. E. F. Anderson 575
Mary Clifton, calved October 1, 1914—George McDonald 400
Bull consigned by H. G. Keyt:
Prime Prince, calved October 7, 1913—R. E. Boyce, Baker, Ore. 1200
Female consigned by W. J. Townley, Union, Ore.: The Mound's Trixie, calved September 3, 1916 —S. G. Tucker..... 225
Female consigned by Dick Kiger, Corvallis, Ore. Aileen Marie, calved April 18, 1912—W. F. Howard 250
Female consigned by Schmidt Bros., Hoff, Ore. Vera, calved September 4, 1916—George Garner 250
Bull consigned by Schmidt Bros. Vilage Victor, calved October 11, 1915—J. A. Baldridge, Oak Point, Wash 280
Bull consigned by Oregon Agricultural college. Snow Wing, calved April 6, 1916—K. D. Huston, Prinevilel, Ore. 210
Bull consigned by A. M. Haradon, Carlton, Ore. Roan Gloster, calved January 2, 1916—Baldwin Sheep company, Hay Creek, Ore. 200
Bull consigned by Perry Smith, Yamhill, Ore. Roan Champion, calved October 26, 1916—E. S. Terwilliger 230
Bull consigned by E. H. Holloway, Albany, Ore. Golden Favorite, calved September 26, 1913—A. T. Cutting, Molalla, Ore. 280
Bull consigned by University of Idaho, Moscow, Idaho, Scotch Pride, calved September 1, 1916 —I. S. Davis, Montague, Cal. .. 335
Bull consigned by G. W. DeLay, Hot Lake, Ore. Clay Baron, calved October 19, 1916—Elton, Webb 200
44 females sold $19,300; average $488.41
30 bulls sold for $11,500; average 383.33
74 animals sold for $30,800; average 416.21
Uncatalogued bulls consigned by R. E. Boyce, Baker Ore.:
Butler's Goods, calved March 6, 1916—F. L. Pope, Merrill, Ore. $ 250
Gold Finder, calved March 15, 1916—J. S. Davis, Montigue, Cal. 250

H. A.

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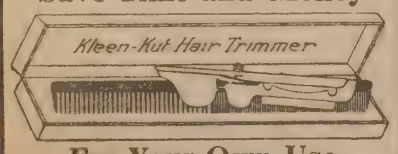
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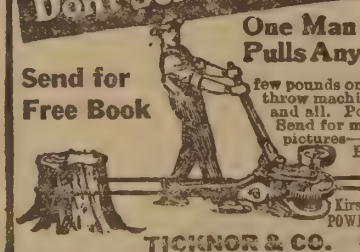
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All the World's a Stage, and All the Men and Women Merely Players

"Book Doctor."



In the above photograph is shown Miss Rose Murray of New York city. This young woman is "book doctor" for the New York public library. She mends all of the old books. Some of them are so old and the dust so thick in them that she has to use the "gas mask" outfit in which she was photographed.

U. S. Mission in Europe for War Conference



Principal members of the American mission now in Europe for the great allied war conference to take place in Paris. This will be the first "round table" of the allies at which Uncle Sam has been represented. The object of the conference is the coordinating of all allied fighting forces against the common enemy. Colonel E. M. House, personal adviser to President Wilson, is the recognized head of the mission.

Quits Job for War.



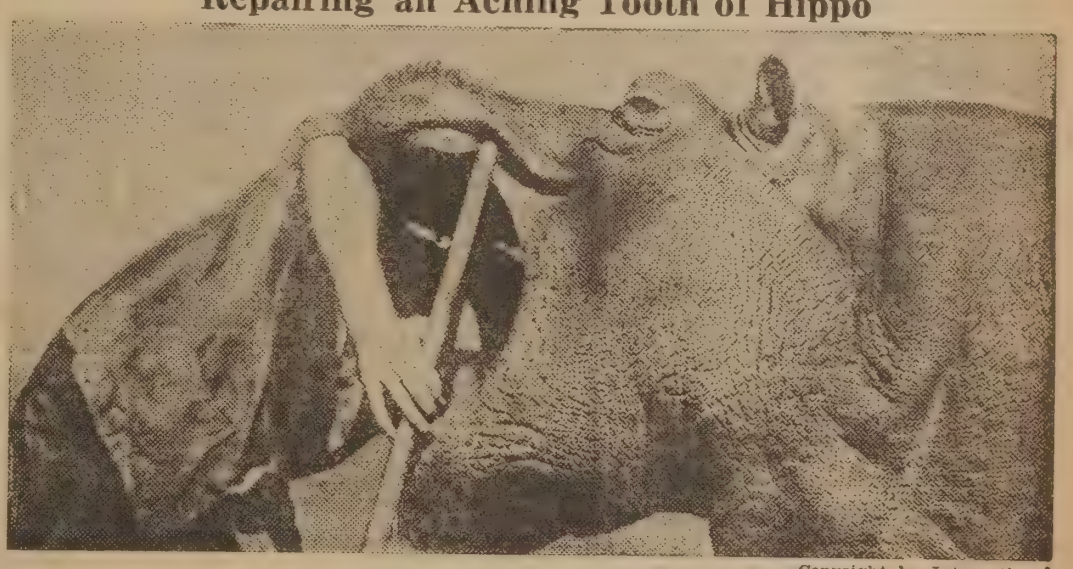
Miss Jessie L. Simpson, the secretary to the senate foreign relations committee, has resigned in order to "go to the front." She has accepted a position as clerk to the auditor of the Pershing expedition in France. Miss Simpson was the first woman to be appointed in this responsible committee position in the United States senate.

Victims in First Clash With Germans



Private Daniel B. Gallagher of West Blockton, Ala. (left), and Private Homer Givens of Cloverdale, Ala., are two American boys mentioned in the first roll of honor dispatched from Pershing's headquarters in France. Young Gallagher was one of the most youthful in his outfit. Givens, only 18 years old, joined in October, 1916, and was in France only two months. The former is mentioned as being among the missing or captured; the latter was wounded.

Repairing an Aching Tooth of Hippo



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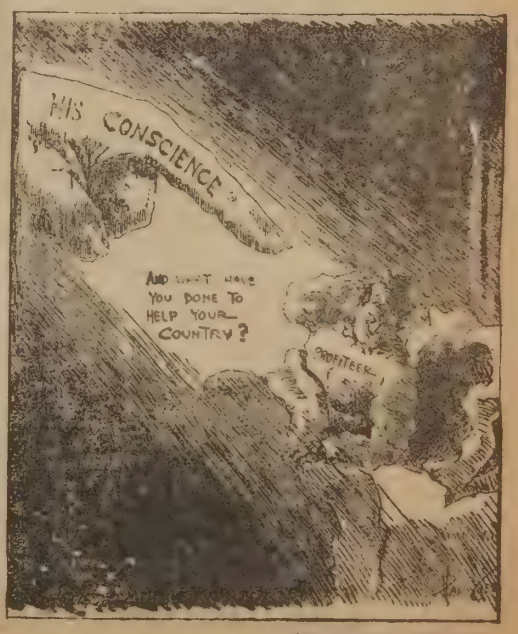
The above photo shows an animal dentist of the New York zoological gardens endeavoring to fill the aching molar of the zoo's hippo, Miss Murphy.

Stars and Stripes in Europe.



—San Francisco Chronicle.

The Voice in the Night.



—Minneapolis Tribune.

"The Barrier" By REX BEACH

(Continued from page nineteen.)

a reckoning. And he never offered one; on the contrary, he had invariably flown onto a rage when dunned, and exhibited such resentment as to discourage the practice. Now, however, the surly humor of the man began to mellow, and in gradual stages he unloosened, the process being attended by a disproportionate growth of the trader's cash receipts. Cautiously, at first he let out his wit, which was logy from long disuse, and as heavy on its feet as the Jumping Frog of Calaveras, but when they laughed at its labored leaps and sallies his confidence grew. With the regularity of a clock he planted cigars and ordered "a little more hard stuff," while his roving eye rejoiced in lachrymose profusion, its over-burden losing itself in the tangle of his careless beard. By-and-by he wandered through the town, trailed by a troop of tenderfeet, till the women marked him, whereupon he fled back to the post and hugged the bar, for he was a bashful man. When Stark's new place opened it offered him another retreat of which he availed himself for some time. But late in the evening he reappeared at Old Man Gale's store, walking a bit unsteadily, and he mounted the flight of logs to the door he stepped once too often.

"What's become of that fourth step?" he demanded, sharply, of Poleon.

"Dere she is,' said the Frenchman.

"I'm damned if it is. You moved it since I was here."

"I'll have 'im put back," laughed the other.

"Say! It's a grand thing to be rich, ain't it?"

"I don' know, I ain' never try it."

"Well, it is; and now that I've arrived, I'm goin' to change my ways complete. No more extravagance in mine—I'll never lend another cent."

"W'at's dat?" ejaculated Doret, in amazement.

"No more hard-luck stories and 'hurry-ups' for mine. I'm the stony-hearted jailer, I am, from now henceforth, world 'thout end, amen! No busted miners need apply. I've been a good thing, but tonight I turn on the timelock."

"Ba gosh! You're fonny feller," laughed Poleon, who had lent the one-eyed man much money in the past and, like others, regarded him not merely as a bad risk but as a total loss. "Mebbe you t'ink you've been a spen'-t'rif' all dese year."

"I've certainly blowed a lot of money on my friends," Lee acknowledged, "and they're welcome to what they've got so far, but I'm goin' to chop all them prodigal habits and put on the tin vest. I'll run the solderin-iron up my seams so they can't get to me without a can opener. I'm air-tight for life, I am." He fumbled in his pockets and unwrapped a gift cigar, then felt for a match. Poleon tossed one on the bar, and he reached for it twice, missing it each time.

"I guess dose new frien' of yours is mak' you purty full, M'sieu' Tin Vest."

"Nothin' of the sort. I've got a bad dose of indigestion."

"Dat's 'orrible disease! Dere's plaintee riche man die on dat seeckness. You better lie down."

Doret took the hero of the day by the arm and led him to the rear of the store, where he bedded him on a pile of flour sacks, but he had hardly returned to the bar when Lee came veering out of the dimness, making for the light like a ship tacking toward a beacon.

"What kind of flour is that?" he spluttered.

"Dat's just plain w'eat flour."

"Not on your life," said the miner, with the firmness of a great conviction. "It's full of yeast powders. Why, it's r'arin' and risin' like a buckin' hoss. I'm plumb seasick. He laid a zigzag course for the door.

"W'ere you goin'?" asked Poleon.

"I'm goin' to get somethin' for this stomach trouble. It's fierce." He descended into the darkness boldly, and stepped off with confidence—this time too soon. Poleon heard him floundering about, his indignant voice raised irascibly, albeit with a note of triumph.

"Wha'd I tell you? You put it back while I was ashleep." Then, whistling blithely, if somewhat out of tune, he steered for the new saloon to get something for his "stomach trouble."

At Stark's he found a large crowd of the new men, who welcomed him heartily, plying him with countless questions and harking to his maudlin tales of this new country which to him was old. He had followed the muddy river from Crater lake to the delta, searching the bars and creek beds in a tireless quest till he knew each stream and tributary, for he had been one of the hardy band that used to venture forth from Juneau on the spring snows, disappearing into the uncharted valley of the Yukon, to return when the river clogged and grew sluggish, and, like Gale, he had lived these many years ahead of the law, where each man was his own court of appeals and where crime was unknown. He had helped to build camps like Forty Mile and Circle; he knew by heart the bylaws and rules that governed every town and mining district in the country; he knew every man and child by name, but, while many of his friends had prospered, unceasing ill luck had dogged him. Yet he had held to honesty and hard work, measuring a man by his ability to swing an ax or a shovel, and, despite his impecuniosity, regarding theft as the one crime deserving capital punishment.

"Oh, there's lots of countries worse'n this," he declared. "We may not be very han'some to the naked eye, and we may not wear our handk'chiefs in our shirt cuffs, but there ain't no widders and orphans doin' our washin', and a man can walk away from his house, stay a month, and find it there when he comes back."

"Those days are past," said Stark, who had joined in the discussion. "There's too many new people coming in for all of them to be honest."

"They'd better be," said Lee, aggressively. "We ain't got no room for stealers. Why, I had a hand in makin' the by-laws of this camp myself, long with John Gale, and they stip'lates that any person caught robbin' a cache is to be publicly whipped in front of the tradin' post, then, if it's winter time, he's to be turned loose on the ice barefooted, or, if it's summer, he's to be set adrift on a log with his shirt off."

"Either one would mean certain death," said a stranger. "Frost in winter, mosquitoes in summer!"

"That's all right," another bystander declared. "A man's life depends on his grub up here, and I'd be in favor of enforcing that punishment to the letter if we caught any one thieving."

"All the same, I take no chances," said Stark. "There's too many strangers here. Just to show you how I stand, I've put Runnion on guard over my pile of stuff, and I'll be glad when it's under cover. It isn't the severity of punishment that keeps a man from going wrong, it's the certainty of it."

"Well, he'd sure get it, and get it proper in this camp," declared Lee; and at that moment, as if his words had been a challenge, the flaps of the great tent were thrust aside, and Runnion half led, half threw a man into the open space before the bar.

"Let's have a look at you," he panted. "Well, if it ain't a nigger!"

"What's up?" cried tme men, crowding about the prisoner, who crouched, terror-stricken, in the trampled mud and moss, while those playing roulette and "bank" left the tables, followed by the dealers.

"He's a thief," said Runnion, mopping the sweat from his brow. "I caught him after your grub pile, Stark."

"In my cache?"

"Yes. He dropped a crate of hams when I came up on him, and tried to run, but I dropped him." He held his Colt in his right hand, and a trickle of blood from the negro's head showed how he has been felled.

"Why didn't you shoot?" growled Stark, angrily, at which the negro half arose and broke into excited denials of his guilt. Runnion kicked him savagely, and cursed him, while the crowd murmured approval.

"Le' me see him," said Lee, elbowing his way through the others. Fixing his one eye upon the wretch, he spoke impressively.

"You're the first downright thief I ever seen. Was you hungry?"

"No, he's got plenty," answered one of the tenderfeet, who had evidently arrived on the boat with the darky.

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"He's got a bigger outfit than I have."

The prisoner drew himself up against the bar, facing his enemies sullenly.

"Then I reckon it's a divine manifestation," said "No Creek" Lee, tearfully. "This black party is goin' to furnish an example as will elevate the moral tone of our community for a year."

"Let me take him outside," cried Stark, reaching under the bar for a weapon. His eyes were cruel, and he had the angry pallor of a dangerous man. "I'll save you a lot of trouble."

"Why not do it legal?" expostulated Lee. "It's just as certain."

"Yes! Lee is right," echoed the crowd, bent on a Roman holiday.

"What y'all aim to do?" whined the thief.

"We're goin' to try you," announced the one-eyed miner, "and if you're found guilty, as you certainly are goin' to be, you'll be flogged. After which predicament you'll have a nice ride downstream on a sawlog without your laundry."

"But the mosquitoes—"

"Too bad you didn't think of them before. Let's get at this, boys, and have it over with."

In far countries, where men's lives depend upon the safety of their food supply, a side of bacon may mean more than a bag of gold; therefore, protection is a strenuous necessity. And though any one of those present would have gladly fed the negro had he been needy, each of them likewise knew that unless an example were made of him no tent or cabin would be safe. The north being a gameless, forbidding country, has ever been cruel to thieves, and now it was heedless of the black man's growing terror as it set about to try him. A miners' meeting was called on the spot, and a messenger sent hurrying to the post for the book in which was recorded the laws of the men who had made the camp. The crowd was determined that this should be done legally and as prescribed by ancient custom up and down the river. So, to make itself doubly sure, it gave Runnion's evidence a hearing; then, taking lanterns, went down to the big tarpaulin-covered pile beside the river, where it found the crate of hams and the negro's tracks. There was no defense for the culprit and he offered none, being too scared by now to do more than plead. The proceedings were simple and quiet and grim, and were well nigh over when Lieutenant Burrell walked into the tent saloon. He had been in his quarters all day, fighting a fight with himself, and in the late evening, rebelling against his cramped conditions and the war with his conscience, he had sallied out, and, drawn by the crowd in Stark's place, had entered.

A man replied to his whispered question, giving him the story, for the meeting was under Lee's domination, and the miners maintained an orderly and businesslike procedure. The chairman's indigestion had vanished with his sudden assumption of responsibility, and he showed no trace of drink in his bearing. Beneath a lamp one was binding four-foot lengths of cotton tentrope to a broomstick for a knout, while others, whom Lee had appointed, were drawing lots to see upon whom would devolve the unpleasant duty of flogging the captive. The matter of fact, relentless expedition of the affair shocked Burrell inexpressibly and seeing Poleon and Gale nearby, he edged toward them, thinking that they surely could not be in sympathy with this barbarous procedure.

"You don't understand, Lieutenant," said Gale, in a low voice. "This nigger is a thief!"

"You can't kill a man for stealing a few hams."

"It ain't so much what he stole; it's the idea, and it's the custom of the country."

"Whipping is enough, without the other."

"Dis stealin' she's bad biznesse," declared Poleon. "Mebbe dose ham is save some poor feller's life."

"It's mob law," said the Lieutenant, indignantly, "and I won't stand for it."

Gale turned a look of curiosity upon the officer. "How are you going to help yourself?' said he; but the young man did not wait to reply. Quickly he elbowed his way toward the center of the scene with that air of authority and determination before which a crowd melts and men stand aside. Gale whispered to his companion:

"Keep your eye open, lad. There's going to be trouble.' They stood on tiptoe, and watched eagerly.

"Gentlemen," announced Burrell, standing near the ashen-gray wretch, and facing the tentful of men, "this man is a thief, but you can't kill him!"

Stark leaned across the bar, his eyes blazing, and touched the Lieutenant on the shoulder.

"Do you mean to take a hand in all of my affairs?"

"This isn't your affair; it's mine," said the officer. "This is what I was sent here for, and it's my particular business. You seem to have overlooked that important fact."

"He stole my stuff, and he'll take his medicine."

"I say he won't!"

For the second time in their brief acquaintance these two men looked fair into each other's eyes. Few men had dared to look to Stark thus and live; for when a man has once shed the blood of his fellow, a mania obsesses him, a disease obtains that is incurable. There is an excitation of every sense when a hunter stands up before big game; it causes a thrill and flutter of undiscovered nerves, which nothing else can conjure up, and which once lived leaves an incessant hunger. But the biggest game of all is man, and the fiercest sensation is hate. Stark had been a killer, and his brain had been seared with the flame till the scar was ineradicable. He had lived those lurid seconds when a man gambles his life against his enemy's, and, having felt the great sensation, it could never die; yet with it all he was a cautious man, given more to brooding on his injuries and building up a quarrel than to reckless paroxysms of passion, and experience had taught him the value of a well-handled temper as well as the wisdom of knowing when to use it and put it in action. He knew intuitively that his hour with Burrell had not yet come.

The two men battled with their eyes for an opening. Lee and the others mastered their surprise at the interruption, and then began to babble until Burrell turned from the gambler and threw up his arm for silence.

"There's no use arguing," he told the mob. "You can't do it. I'll hold him till the next boat comes, then I'll send him down-river to St. Michael's."

He laid his hand upon the negro and made for the door, with face set and eyes watchful and alert, knowing that a hair's weight might shift the balance and cause these men to rive him like wolves.

Lee's indignation at this miscarriage of justice had him so by the throat as to strangle expostulation for a moment, till he saw the soldier actually bearing off his quarry. Then he broke into a flood of investive.

"Stop that!" he bellowed. "To hell with your law—we're goin' accordin' to our own." An ominous echo arose, and in the midst of it the miner, in his blind fury forgetting his exalted position, took a step too near the edge of the bar, and fell off into the body of the meeting. With him fell the dignity of the assemblage. Some one laughed; another took it up; the nervous tension broke, and a man cried:

"The soldier is right. You can't blame a dinge for stealing," and another: "Sure! Hogs and chickens are legitimate prey."

Lee was helped back to his stand, and called for order; but the crowd poked fun at him, and began moving about restlessly till some one shouted a motion to adjourn, and there arose a chorus of seconders. A few dissenting voices opposed them, but in the meantime Burrell was gone, and with him the cause of the tumult; so the meeting broke up of its own weight a moment later.

As Poleon and Gale walked home, the Frenchman said, "Dat was nervy t'ing to do."

The trader made no answer, and the other continued, "Stark is goin' for kill 'im, sure."

"It's a cinch," agreed Gale, "unless somebody gets Stark first."

When they were come to his door the trader paused and, looking back over the glowing tents and up at the star-sprinkled heavens, remarked, as if concluding some train of thought, "If that boy has got the nerve to take a nigger thief out of a miners' meeting and hold him against this whole town, he would not hesitate much at taking a white man, would he?"

"Wal," hesitated the other, "mebbe dat would depen' on de crime."

"Suppose it was—murder?"

"Ha! We ain't got no men lak' dat in Flambeau."

They said goodnight and the old man entered his house to find Alluna waiting for him, a look of worry on her stolid face.

"What's wrong?" he inquired.

"All night Necia has been weeping."

"Is she sick?" He started for the girl's door but Alluna stopped him.

"No! It is not that kind of weeping; this comes from the heart. It is there she is sick. I went to her, but she grew angry, and said I had a black skin and could not understand; then she went outdoors and has not returned."

Gale sat down dejectedly. "Yes, she is sick in her heart, all right, and so am I, Alluna. When did she go out?"

"An hour ago."

"Where is she?"

"Out by the river bank—I followed

her in the shadows. It is best for her to stay there till she is calm."

"I know what ails her," said the father. "She's found that she's not like other girls. She's found that a white soul doesn't count with white people; they never go below the skin." Then he told her of the scene that morning in the store, adding that he believed she loved Lieutenant Burrell.

"Did she say so?"

"No, she denied it, now that she knows she hasn't got his kind of blood in her."

"Blood makes no difference," said the woman, stubbornly. "If he loves her he will take her; if he does not—that is all."

Gale looked up at her, and was about to explain, when the utter impossibility of her comprehending him made him desist, and he fell moody again. At last he said, "I've got to tell her, Alluna."

"No, no!" cried the woman, aghast. "Don't tell her the truth! Nothing could be worse than that!"

But he continued, deliberately: "Love is the biggest thing in the world; it's the only thing worth while, and she has got to have a fair show at it. This has been on my mind for weeks, and I've put it away, hoping I wouldn't have to do it; but today I came face to face with it again, and it's up to me. She'll have to know some time, so the sooner the better."

"She would not believe you," said the woman, at which he started.

"I never thought of that. I wonder if she would doubt! I couldn't stand that."

"There is no proof, and it would mean your life. A good man's life is a great price to pay for the happiness of one girl—"

"I gave it once before," said Gale, a trifle bitterly, "and now that the game is started, I've got to play the string out; but—I wonder if she would doubt—" He paused for a long moment. "Well, I'll have to risk it. However, I've got a lot of things to do first—you and the youngsters must be taken care of."

"And Stark?" said Alluna.

"Yes, and Stark."

Burrell took his prisoner to the barracks, where he placed him under guard, giving instructions to hold him at any cost, not knowing what wild and reckless humor the new citizens of Flambeau might develop during the night, for it is men who have always lived with the halter of the law tight upon their necks who run wildest when it is removed. Men grown old on the frontier adhere more closely to a rigid code than to tenderfeet who feel for the first time the liberty and license of utter unrestraint, and it was these strangers whom the soldier feared rather than men like Gale and "No Creek" Lee, who would recognize the mercy of his intervention and let the matter drop.

After he had taken every precaution he went out into the night again, and fought with himself as he had fought all that day and all the night before; in fact, ever since old Thomas had come to him after leaving Necia, and had so cunningly shaped his talk that Burrell never suspected his object until he perceived his position in such a clear light that the young man looked back upon his work with startled eyes. The Corporal had spoken garrulously of his officer's family; of their pride, and of their love for his profession; had dwelt enthusiastically upon the Lieutenant's future and the length he was sure to go, and finally drifted into the same story he had told Necia. Burrell at last sensed the meaning of the crafty old soldier's strategy and dismissed him, but not before his work had been accomplished. If a coarse-fibered, calloused old campaigner like Corporal Thomas could recognize the impossibility of a union between Necia and himself, then the young man must have been blind indeed not to have seen it for himself. The Kentuckian was a man of strong and virile passions, but he was also well balanced, and had ever followed his head rather than his heart, holding, as he did, deep-seated contempt for weak men who laid their course otherwise. The generations of discipline back of him spoke to his conscience. He had allowed himself to become attached to this girl until—yes, he knew now he loved her. If only he had not awakened her and himself with that first hot kiss; if only—But there was no going back now, no use for regrets, only the greater necessity of mapping out a course that would cause her least unhappiness. If he could have run away he would have done so gladly, but he was bound here to this camp, with no possibility of avoiding her.

When he drove his reason with firm hands he saw but one course to follow; but when his mind went slack for a moment the old desire to have her returned more strongly than ever and he heard voices arguing, pleading, persuading—she was the equal of any woman in the world, they said, in mind, in purity and in innocence. He hated himself for hesitating; he railed at his own indecision; and then, when he had justified his love and persuaded himself that he was right in seeking this union there would rise again the picture of his people, their chagrin and what would result from such a marriage. He knew how they would take it; he knew what his friends would say, and how he would be treated as the husband of a half-breed Indian; for in his country one drop of colored blood made a negro, and his people saw but little difference between the red and the black. It would mean his social ostracism; he would be shunned by his brother officers, and his career would be at an end. He swore aloud in the darkness that this was too great a price to pay for love, that he owed it to himself and to his dear ones at home to give up this dark-eyed maid who had bewitched him.

He had wandered far during this debate, clear past the town, and out through the Indian village; but now that he believed he had come to an understanding with himself he turned back toward his quarters. He knew it would be hard to give her up; but he had irrevocably decided, and his path began to unfold itself so clear and straight that he marvelled how he could have failed to see it. He was glad he had conquered, although the pain was still sharp. He felt a better man for it, and, wrapped in this complacent optimism he passed close by the front of the trader's store, where Necia had crept to be alone with her misery.

The high moon cast a deep, wide shadow upon the store steps where the girl sat huddled, staring out into the unreal world, waiting for the night wind to blow away the fears and forebodings that would not let her sleep. It was late, and the hush of a summer midnight lay upon the distant hills. Burrell had almost passed her when he was startled by the sound of his name breathed softly; then, to his amazement, he saw her come forth like a spirit into the silver sheen.

"Necia!" he cried, "what are you doing here at this hour?" She looked up at him sadly; he saw that her cheeks were wet and something inside him snapped and broke. Without a word he took her in his arms, meeting her lips in a long kiss, while she, trembling with the joy of his strong embrace, drew closer and closer and rested her body wearily against his.

"Little girl! little girl!" he whispered over and over, his tone conveying every shade of sympathy, love and understanding she had craved. He knew what had made her sad, and she knew that he knew. There was no need for words; the anguish of this long day had whetted the edge of their desire, and they were too deeply, too utterly lost in the ecstacy of meeting to care for speech.

As she lay cradled in his arms, which alternately held her with the soft tenderness of a mother and crushed her with the firce ardor of a lover, she lost herself in the bliss of a woman's surrender and forgot all her terrifying doubts and fears. What were questions of breed of birth or color now, when she knew he loved her? Mere vapors that vanished with the first flutter of warm wings.

Nor did Meade Burrell recall his recent self-conquest or pause to reason why he should not love this little wisp of the wilderness. The barriers he had built went down in the sight and touch of his love and disappeared; his hesitation and infirmity seemed childish now—yes, more than that, cowardly. He realized all in a moment that he had been supremely selfish, that his love was a covenant, a compact, which he had entered into with her and had no right to dissolve without her consent, and, strangely enough, now that he acknowledged the bond to himself, it became very sweet and satisfying.

"Your lips cling so that I can't get free," sighed the girl, at last.

"You never shall," he whispered. But when she smiled up at him piteously, her eyes swimming, and said, "I must," he wrenched himself away and let her go.

As he went lightly toward the barracks through the far-stretching shadows, for the moon was yellow now, Meade Burrell sighed gladly to himself. Again his course ran clear and straight before him, though wholly at variance with the one he had decided upon so recently. But he knew that his vision was obscured and that the moon madness was upon him.

(To Be Continued.)

Wheat Through Soo Canal.

During October there passed through the Soo canal 34,715,000 bushels of wheat, against 18,445,000 a year ago. Canadian shipments made the large total.

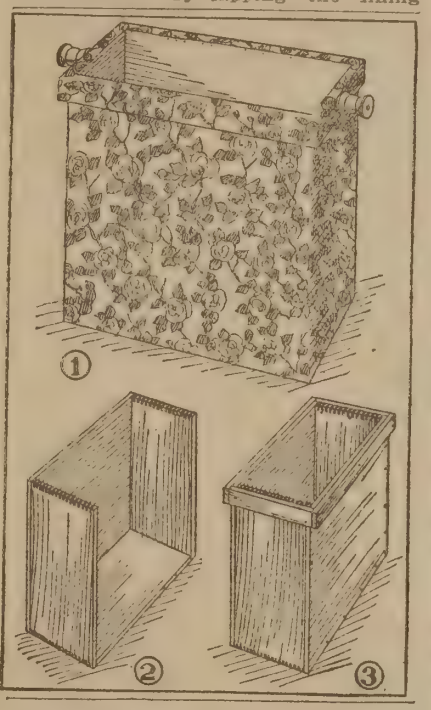
Handicraft For Girls

By Dorothy Perkins.

On account of the simplicity of the construction of cretonne covered furniture, there are all sorts of things which a girl can make for her own room, and for mother's. The work does not require the skill of a mechanic because almost every imperfection in the woodwork will be concealed by the cretone. Also because of the covering, it is possible to use boxes, and since such a variety of shapes and sizes are to be had, many articles can be assembled without altering the boxes in any way. Father or brother can be asked to help with any of the carpentry which you do not feel equal to.

Waste Basket.

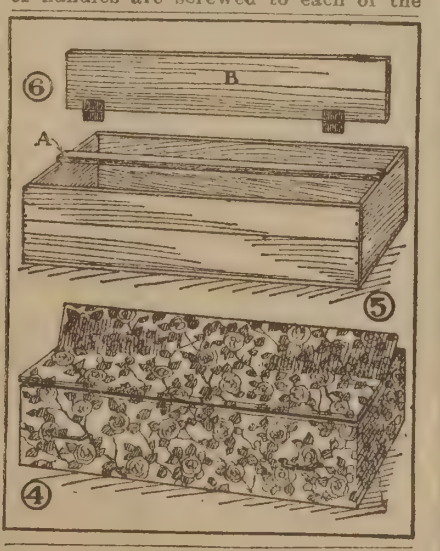
The waste basket in Fig. 1 is made out of a soap box.. Remove one end of the box, as shown in Fig. 2, for the open top of the basket, and nail the cover board in place to enclose the side (Fig. 3). The next step is to cut several strips about an inch and one-half wide, and nail them around the top edges as a finishing band. Tack the outside cretonne on first, then the inside lining. Lap the cretonne over the top edge, and cut it so that about an inch will turn down all around. Then conceal the edge of the cretonne by lapping the lining



over it. The lining may be of a plain colored cambric. The spool on each end forms a handle.

Shirtwaist Box.

The shirtwaist box shown in Fig. 4 is made of a box of the right height to slide underneath a bed, and a pair of handles are screwed to each of the

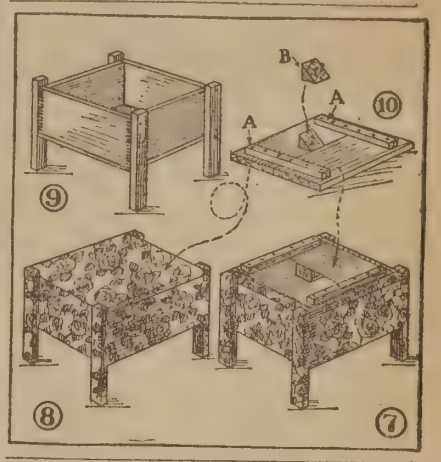


two long sides, so it may be pulled out from either side of the bed. Castors on the bottom make it push under the bed easily, and the double-hinged cover arrangement makes it possible to pull out the box halfway and open it.

Because the shirtwaist box must be shallow, it is well to make it long. Having procured the box, it is only necessary to fasten a strip two inches wide along the center of the open top, from end to end, for the hinge-strip A (Fig. 5), and hinge a board each side of it for the covers (B, Fig. 6). That completes the carpentry. It will be easiest to cover the box before the hinge-strip and covers have been put on, and to tack the cretonne on the hinge-strip and covers before fastening them in place.. The handles and the castors go on last.

Shoe Blacking Case.

Have you a shoe blacking case in your room? Very few girls do own one, yet it is an article of great importance to the girl who is particular



about keeping her shoes tidy. Fig. 7 shows a practical little blacking case. By making the top removable, the inside of the case may be used as a receptable for cans and bottles of polish, brushes and rags; and by padding the under side and covering it with cretonne, the top may be inverted after use, and the blacking case thus converted into the attractive footstool shown in Fig. 8.

Fig. 9 shows how four short legs should be nailed to the corners of a square soap box, with the tops projecting just enough to allow for the thickness of the cover, and Fig. 10 shows how the cover boards should be fastened together with the cross strips A, and how a triangular block B should be nailed to it for a rest to push the shoe against.

In covering the blacking case, it is best to omit the inside lining.

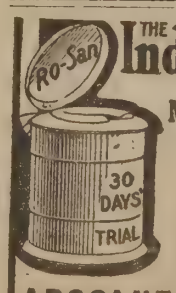
(Copyrighted, 1915, by A. Neely Hall.)

Pass It On.

When you have finished reading this paper please hand it to a neighbor who may be interested in the saving in subscription price resulting from the elimination of the middleman.

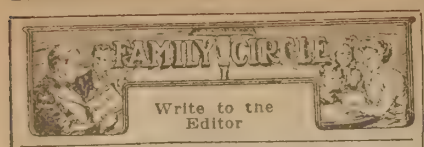
Remove Stains by Sponging.

Sponging is applicable to all fabrics, but especially to delicate materials or colors which ordinary laundering might injure in removing stains, says the bulletin issued by the United States department of agriculture, on the "Removal of Stains From Clothing and Other Textiles, Spread the stained article on a flat surface in a good light, and beneath the stain put a cloth folded into several thicknesses, or clean white blotting paper, to absorb the superfluous liquid. Change the pad for a fresh one as soon as it becomes soiled. Sponge with a clean, soft, lintless cloth (preferably of the same material as that stained) and renew it as frequently as may be necessary. Lay the stained material with the wrong side up and apply the water to the back, so that the foreign substances can be washed from the fibers onto the pad without having to pass through the material.



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ALICE W. BARLAND
Editorial Contributor

Avoid Mistakes

Profit by Experience of Others

By Alice W. Barland.

Dear Friends of the Family Circle: I have often remarked that one should live out a lifetime or two just to learn how. When I think over my own mistakes concerniug my own career, if just plain humdrum day by day life can be called a career, I feel moved to write to my young people and all readers of our paper what is in my mind.

To the young folk I would say as a first principle, strive to become good listeners and keen observers. Why is it I wonder we none of us profit very much by the experience of those who have gone before. I am reminded as I write how many times we used to allow our vegetables to remain out in the field, when we could as well as not have stored them in the cellar before frost came to injure them. In the state where I lived we nearly always had a good hard frost about September 15 and yet we would let the squashes and tomatoes stay in the field till warned by a sudden turn in the weather and we knew we must get them in or lose them and all hands would be called upon and rush around in one grand commotion.

Rushing to get the storm windows up is another habit. It would be much more comfortable to have them washed some nice warm day in the late fall and quietly and calmly put them up, for we always know the cold weather is sure to arrive.

Most of us women have had the unpleasant experience of having some pretty gingham or other wash goods shrink so it was practically useless or at least uncomfortable and we have vowed we would never again make up cotton goods without first shrinking it. Then we get careless and do the same thing over again. I remember so well the advice my father used to give me when I first began as a little girl to do housework. It was something like this: "Always start in plenty of time to get your meals. It takes just so long to boil your potatoes every time. You always have to have hot water to make them cook so put your kettle on first." This was just a plain simple way of saying that it is best to "get ready before we commence."

I am sure we could all get very much useful knowledge by observing the mistakes of others and avoiding those mistakes. I heard of a man who was sent to the legislature in his state term after term. He was once complimented by one of his associates on his habit of always voting the right way on bills as they came before the house. The member replied that he deserved no praise whatever because of his votes since he had a method which worked out fine. He said the member who occupied the seat just ahead of him was about the most contemptible person he had ever known and so he always watched how this man voted and then voted just opposite and thereby got on to the right side of most bills that came before the house.

I took this story with limitations as to truth, but there is a lesson in it for us. If we would hold ourselves at "attention" when people worth listening to speak, if we would study the methods of successful people and not be so rooted and grounded in our own ways we might avoid making many mistakes.

I am convinced that we do not take sufficient time for reflection. I happen to have a young niece who is a rather uncommonly "level-headed" young person. Many times I have found her sitting by herself and have said, "What are you doing?" Her answer is always the same, "Just thinking things out." If more of us would take time to "think things out" many less mistakes would be recorded against us. It is foolish and worse than idle to sit down and repine over mistakes made, that is not what I mean. Having made a mistake the thing to do is to remember it only long enough to be sufficiently impressed so as to avoid making the same mistake again.

We are living in sober, serious times. We do not know what will befall from day to day. The wisest men in the country are studying the great problems which confront the nations and giving us the very best advice they can arrive at. Let us "stand at attention" like good soldiers, let us heed the warnings, not thrusting forward our little petty opinions and stubbornly following our own desires. When we are told to conserve food let us do it; when to save on flour, sugar and fats of all kinds, let's do it. There is nothing to wait for now since our own dear American boys are in the trenches. It is right down now to where we save that our own may be fed.

A Few Good Recipes

By Ruth Gipson Plowhead.

Our family is more than satisfied to follow out the meatless day and the wheatless day. They promise not to mutiny at anything set before them, as long as they are not asked to observe "eatless day."

Split peas, lentils, beans and macaroni and cheese form some of our meatless day standbys, and a number have asked about cooking these. Split peas and lentils may be cooked practically the same as dry beans. We soak them over night and boil them until noon. Sometimes a slice of bacon and salt form the sole seasoning, but they are usually liked better if to this a half cup of tomato pulp and a grated onion are added. Split pea soup is made by running the cooked peas through a sieve and adding two cups of milk to each cup of the pea pulp, seasoning with salt, pepper and butter to taste. The ordinary potato soup is improved and made more nourishing by adding a cupful of mashed split peas.

A Splendid Squash Pie.

We think a thick, brown squash pie is hard to beat, and the following is a pie which most people think especially good. The pie is not exactly a "war time" pie, but contains enough nourishment to be of real food value, and may supplement a lighter meal. Line a very deep pie pan with rather thin crust. For the filling use:

One heaping cup of squash cooked dry.
Three-fourths cup of sugar.
One tablespoonful dark molasses.
One tablespoonful caramel (to give a darker color to pie).
One teaspoonful of cinnamon, nutmeg and ginger.
One-half teaspoonful salt.
One and one-half cupfuls milk.
Two well beaten eggs.
One tablespoonful melted butter.

Bake slowly until a rich brown. This recipe makes one large pie.

Economical Fruit Cake.

A fruit cake which is good and not too rich and extravagant to use oftener than special holidays is made by substituting dried apples and prunes for some of the more expensive fruits.

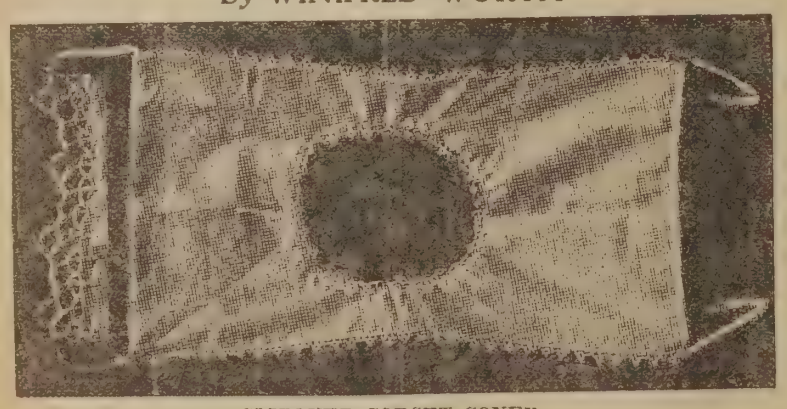
Cream 1½ cups of sugar with ½ cup of lard and ½ cup of butter. Add 1 cup sour milk, 4 eggs, 5 cups flour and 1 teaspoonful baking-powder. Fruit as follows: One box raisins, 1 cup dried prunes cut in small pieces and 2 cups of dried apples prepared as follows: Soak the dried apples in water over night, then drain, chop fine and boil two hours in 1½ cups of dark molasses, 1 teaspoonful soda dissolved in ⅛ cup of water, 1 teaspoonful vanilla and 1 teaspoonful each of nutmeg, cinnamon, cloves and grated lemon rind, ¼ pound of citron and 1 or 2 cups of nut meats are a good, but not a necessary, addition.

Most Powerful of Snakes.

One of the most difficult reptiles to capture is the regal python, a native of India, that giant snake that measures as long as 30 feet in extreme cases. This immense constrictor had in its wonderful coils the strength to crush an ox. A 10-foot python could shoot its head forward, strike a bag man in the chest, fell him and crush him bone from bone—and the pythons caught by the snake man are twice and sometimes three times as long.

Crochet and Tatting Designs

By WINIFRED WORTH



SLIPOVER CORSET COVER.

Here is a new idea in a corset cover which is becoming very popular.

Use one-half yard of lingerie batiste, or sheer lawn, 36 inches wide.

Cut circle for neck, 12 inches in diameter. Hem neck and sides, turn up ½-inch hem at both ends for ribbon drawstrings. It is a good idea to have your cloth in front a little wider than in back, and shape in toward neck.

The folowing details are for the crochet work used on this model (see enlarged picture at bottom of cut).

For edge on sides of corset cover: Ch. 7, skip space, 1 dc. in material. Ch. 7, 1 dc. in material, and repeat to end. Turn.

Nine dc. in first ch. of 7, 9 dc. in next, 4 dc. in next, ch. 9. Take out hook, put in 5 dc. of second shell. Draw ch. through 7 dc. 1 p. 7 dc. on ch. of 9. Five dc. in ch. of 7 of first row. This completes one point. Repeat until you have the desired number of points to complete each side.

For edge in neck: Five ch. all around neck, 2 rows of lacet to form beading as shown in enlarged illustration. Finish with edge, same as described for side trimming.

You might even add to the beauty of this corset cover by embroidering a dainty design on the front.

Still another suggestion for this cover is to use crepe de chine material and do the crochet work with silk thread.

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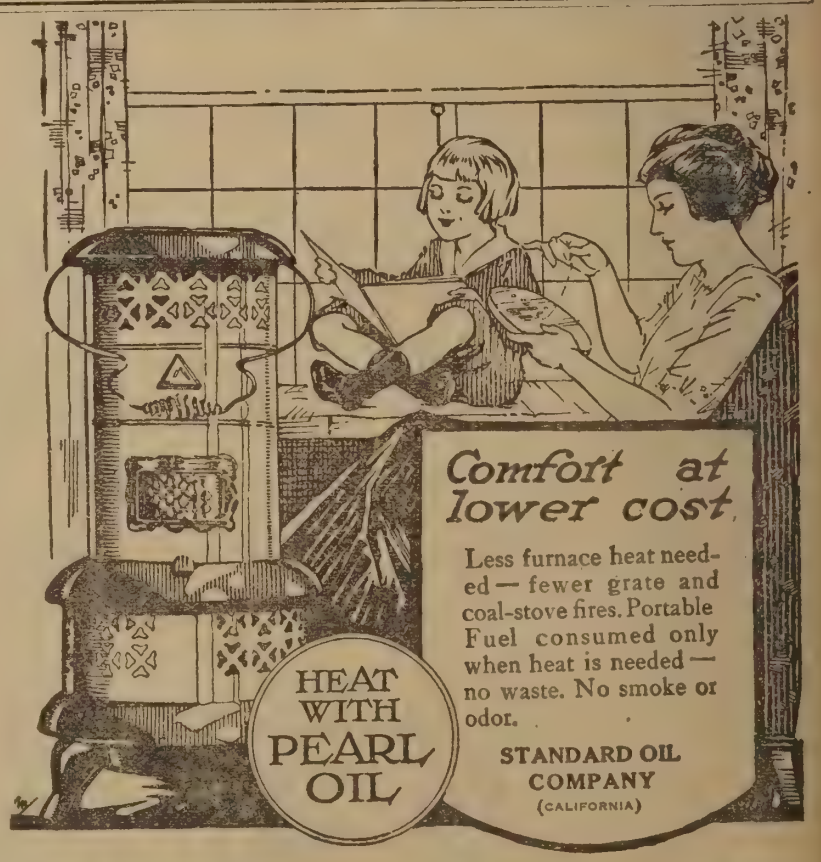
Write for booklet about Iwan post hole diggers, sickle edge hay knives ($1.75 prepaid P.P. if dealer will not sell you), ditching spades, drain cleaners, tile hooks, chimney tops, etc.

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1964—Girls' one-piece dress. Cut in four sizes: 8, 10, 12 and 14 years. It requires 4 yards of 44-inch material for a 12-year size. Price, 10 cents.

2008-2010—A smart and serviceable dress. Waist 2008 and skirt 2010 are both cut in three sizes: 16, 18 and 20 years. It will require 6 3-4 yards of 36-inch material to make skirt and waist of one material in a 16-year size. Two separate patterns, 10 cents for each pattern.

2035-2020—Ladies' costume. Waist 2035, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2020, cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. The skirt measures about 3 1-3 yards at the foot, and will require 4 yards of 44-inch material for a 24-inch size. The waist requires 2 1-2 yards of 44-inch material for a 36-inch size. Two separate patterns, 10 cents for each pattern.

2132—Ladies' "cover all" apron. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. It requires 4 7-8 yards of 36-inch material for a medium size. Price, 10 cents.

2135-2131—Ladies' costume. Waist 2135, cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure, and requires 2 7-8 yards of 44-inch material for a 38-inch size. Skirt 2131, cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 5 yards of 44-inch material for a 24-inch size, and measures 3 yards at the foot with plaits drawn out. Two separate patterns, 10 cents for each pattern.

2265—Girls' dress. Cut in four sizes: 2, 3, 4 and 5 years. Size 4 requires 2 3-4 yards of 36-inch material. Price 10 cents.

2266-2267—A good business dress. Waist 2266, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 3 1-8 yards of 36-inch material. The skirt pattern, 2267, is cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure, and will require 3 1-8 yards of 44-inch material for a 24-inch size. It measures 2 3-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2274—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 10 requires 3 1-2 yards of 44-inch material. Price, 10 cents.

2281—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 1-2 yards of 44-inch material. The skirt portions measure about 2 3-8 yards at the foot. Price, 10 cents.

2287—Child's night drawers. Cut in five sizes: 4, 6, 8, 10 and 12 years. It requires 3 yards of 36-inch material for a 6-year size. Price, 10 cents.

2298—A pleasing set of nursery toys. The patterns are cut in one size only. It will require 1 yard of brown flannel for the monkey and half yard of red flannel for his suit. The elephant requires 1 yard. The rabbit half yard. Price, 10 cents.

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Where Miss Addams Is Right.

Were it not irreverent we would call Miss Jane Addams "a good sport." Miss Addams' views on war are well known, and we entirely disagree with them. But instead of sitting down with them in silent resentment in Hull House Miss Addams is going about the country speaking to women in favor of Hoover's plan of food conservation. Again she is an example to the rest of us.—Chicago Post.

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Boy Question

Depends a Good Deal on Farmer

More letters have been received from Washington with reference to an inquiry as to the part women and young folks are taking in supplying the shortage of farm labor, as well as the greater use of machinery on the farms:

J. C. BUSH, Chehalis: The past season has been a trying one with many farmers in this community because of the shortage of labor, but the weather was so favorable during haying and in fact all fall that a great deal more work has been done by the farmers than would have been possible in many seasons. In the early spring when everybody was talking about the shortness of farm labor there was considerable effort made in the towns to get town people to go out and help during the rush season on the farms, but not much help was secured in this way. The fact is the average business or professional man would not be worth much on a farm without some seasoning. School boys, especially those who were country raised, have proven the most satisfactory extra help that could be obtained. I had one farmer boy of 18 whom I considered the superior of nine out of 10 farm hands. He knew how, he was on the job early and did not complain if the work occasionally kept him late, he was aggressive and worked his brains as well as his hands, he went after results. Of course, this boy will not be a hired man long. He saves his money and next year I believe goes to Pullman. Would there were many more like him. I think the boy question depends a good deal on the farmer. If the latter knows how to handle boys he can get a great deal of work out of them. The secret is to get their interest and hold it. Of course, you must first find the boy, which is not always easy to do in these times. Women have not worked very extensively on farms in this section, although there have been some, and I know of a furniture factory which is using a lot of girls this winter at jobs formerly held by old men and boys. One farmer's wife was fortunate enough to secure a perfect treasure of a girl from a neighboring family, who liked to do housework. She not only cooked the meals and did the washing and ordinary housework just as though the place were her own, but she hunted up socks to darn and patching to do. With such help in the kitchen the farmer's wife went out into the field and was of much help to her husband, who was unable to secure needed assistance. She could drive the team to the disk, or the roller or the haying machinery or walk part of a day behind a drag harrow as well as any man. She could drive up and stable the cows and help milk or work in the garden and the temporary change in occupation was a great pleasure to her as well as a great relief to the better half, who could not find hours enough in a day to plant his crops or harvest them. Most women, however, are not so fortunate with their kitchen help, as a majority of the girls who work out like to get to town and shun a job in the country even when the wages are tempting. In this community there are no big farms or orchards like those of eastern Washington and the farmers, by standing together and helping each other, have been able to get through in some way. The larger farms are rapidly coming to the use of gas tractors. As long as the farmer can handle this class of machinery himself or has thoroughly dependable help he is all right, but when he must depend on "expert" assistance it might sometimes be better to have the reliable old team back on the job.

ROY G. ADAMS, Fairfield: There have been two conditions here this harvest and fall to help in the labor problem. The first was the very light crop of all spring sown crops and the second has been the unusually dry fall, which has prevented the farmers from doing any fall plowing. So it hasn't been necessary for the women to do any outdoor work out of the ordinary season's work.

JACOB HARDER, Ritzville: Women and young folks have to do the chores since labor got so scarce that we can not get anybody and the farmer himself simply has to work double shift. Women are not adapted to farm labor out in the field. There are few exceptions. My experience with labor for the last 30 years shows that they are getting every year a little more careless and where this will end is hard to say. Our younger generation are talking nothing but machinery, and I hold that armstrong labor is hard to beat.

L. F. DAVIS, Rainier: Many of the farmers here are in the dairy business and are shipping milk to the condenser.

(Continued on the following page.)

Order-by-Mail Page

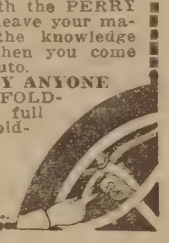
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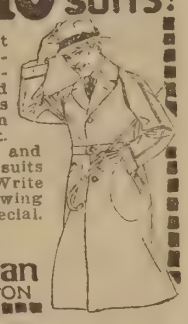
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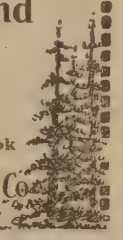
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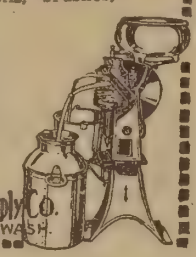
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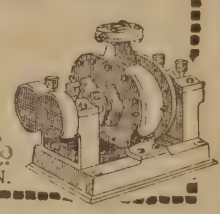
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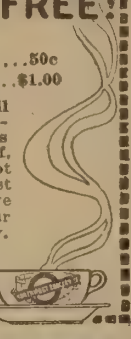


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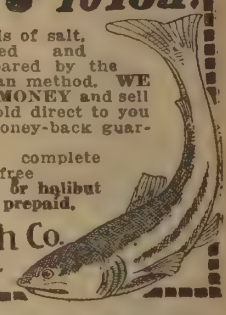
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The Pet Canary Sings.

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. Is any one my twin? I have a light complexion, blue eyes and light hair. I am five feet two inches tall. I am 13 years old and in the eighth grade. I have one sister and two brothers. My sister's name is Anna, my oldest brother's name is Marius and my youngest brother's name is Rendit. We have nine cows and three horses and seven calves, three pigs, about 150 chickens, four cats and one dog. Our horse names are Flora, Queen, and our pony's name is Fred. My teacher's name is Mr. Albers. He has to go to the training camp, but I do not know when. I go to a country school, which is two miles off. There are 10 pupils in our class. We have two rooms in our school. Miss Zweegeman teaches the first four grades. We have a little pet canary. It sometimes sings a little, because it is quite young. We live four miles from town. I hope to see my letter in print soon and that some of the cousins will soon write to me.—Garetta Adriana De Boer, R. F. D. 1, Box 79, Lynden, Wash.

Play Ball in the Gymnasium.

Dear Aunt Nellie: This is my second letter to the Children's Corner. I enjoy reading the letters. Some are very interesting. I am 12 years old. I will be 13 years old the 21st of December. Have I a twin? I have to walk nearly two miles to school. Sometimes when it is raining I ride. We have a new gymnasium at our school. It is 75 feet by 40 feet. We have lots of fun playing basket ball in it. I am in the girls' basket ball team. My brothers have four little puppies. One of them is white and the rest are black and white. They are just getting playful and are very cute. I have lots of fun playing with them. My father has a new Dodge machine. I have lots of fun learning to run it. I would like to have some of the cousins write to me. I will close for this time and will write again soon.—Clara Lybeck, Box 6, R. F. D. 2, Kent, Wash.

Girls Should Help Win the War.

Dear Aunt Nellie: I am going to write about our Red Cross society. The girls of our school make candles, slippers, face cloths and anything we can. We are also going to make a quilt. I think if all the girls of the United States will help the Red Cross they will be helping to win the war. We can do Red Cross work instead of crocheting and tatting. I am going to learn how to knit soon. Our school is trying to raise $30 for the Y. M. C. A., which is about the same as the Red Cross. I had a sewing machine, which I loaned to the Red Cross society. All of us must do lots of Red Cross work, because it will soon be winter and the soldiers will need things. I read the president's letter which was in one of the papers, and I thought it was good. I am 14 years old and in the eighth grade.—Nellie Smith, Box 46, Albion, Wash.

Feed Our Allies This Winter.

Dear Aunt Nellie: This is the first time I have written to the Corner, but I hope it won't be the last. My subject is conservation of food. Our problem is to feed our allies this winter by saving as much food as we can. That doesn't mean to starve ourselves, but to eat more of the things we can't send the allies. There are lots of people who do not realize that we are at war. Two of my uncles were drafted, so it is pretty near home to the people around here. I am 10 years old. I will be 11 the 13th of February. Have I a twin? I wish some of the cousins would write to me. I read the letters sometimes. I like the Farmer. It is a very good paper. I have some pets. I have a dog named Bruce and a horse named Bell. My name is Elizabeth Hamilton.—Elizabeth Hamilton, Soap Lake, Wash.

Lucy Has a Little Baby Sister.

Dear Aunt Nellie: I am 7 years old and in the third grade. I have a brother and he 9 years old. He is in the fourth grade. We have a baby a month and seven days old today. Aunt Nellie, this is the first time I have written to the Children's Corner. My sister is 4 years old. She knows her A. B. C.'s and can count to 10. My birthday is the 23d of December. My brother's name is Lee and my two sisters' names are Opal and Rosie. Mamma, Lee and I are digging beets and onions, carrots, turnips and rutabages. Mamma is holding the baby now. Papa found a hill of potatoes that had 26 potatoes in it.—Lucy Smith, Route 2, Oroville, Wash.

Our First Letter From Louise.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I will be 12 years old the 24th of November and am in the fifth grade. I started to school when I was 7 years old. I have a brother and a sister younger than myself. My sister is 15 months old and her name is Margaret and my brother will be 8 years old the 23d of December and his name is Francis. I live on a 30-acre farm and have one horse and five cows and about 50 chickens. My father has been gone for about three months, but will be home again soon. If I have a twin I should like to hear from her.—Louise Weber, Box 133, Langley, Wash.

Lamb Dances and Plays Tag.

Dear Aunt Nellie: This is my first letter to the Children's Corner. I am a little girl eight years old. I have two sisters and two brothers. Their names are Arthur, Woodrow, Helen and Virginia. We live two miles from school. A big truck carries us to and from our school. I am in the fourth grade. I live on a farm of 450 acres. We have five horses, one colt, seven cows and five calves. We also have 70 sheep. We have a dear little pet lamb. His name is Pete. He can dance and play tag. Mama and I enjoy the children's letters very much and I like Aunt Nellie, too.—Ida Jones, Box 17, Tumwater, Wash.

Likes to Go After the Cows.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We live on a 160-acre farm. We have seven cows and six heifers and one calf. I like to go after the cows. I am in the fourth grade. I am 9 years old. We only have five children in school. I like to go to school. We are going to have an entertainment. I have a long piece. We had a good garden. My cow's name is Cherry. I hope my letter will be in the Farmer.—Leslie Peck, Republic, Wash.

Vera Likes to Go to School.

Dear Aunt Nellie: I have a cow named Nell. My cat's name is Muff. My name is Vera Dale Peck. I am in the second grade. I am 6 years old. I like to go to school. Our baby's name is Carrol Eugene. Leslie is writing tonight. I have three brothers, Leslie, Carrol and Vernon. I haven't any sister.—Vera Dale Peck, Republic, Wash.

Have Named Baby Sister, Ella Lucile.

Dear Aunt Nellie: This is the third time I have written to the Children's Corner and I hope it will not be the last. I have a little baby sister. She was born October 20. We have named her Ella Lucile. I have found two twins. Their names are Anna Straube and Effie Stayman.—Vera Allen, Box 26, Roy, Wash.

Lee Rides Five Miles to School.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and in the fourth grade. My teacher's name is Miss Parsons. I ride five miles to school. I have three sisters.—Lee Smith, Route 2, Oroville, Wash.

Eveline Writes to Us.

Dear Aunt Nellie: Mama, papa and my two little brothers went to the Lewiston stock show, so they have not got home yet. I will be very glad to see them. I am 10 years old. I will be 11 the 29th of November. Have I a twin? I would like to correspond with anybody who would write to me, big or little, young or old. We have 35 children in our school. I have five brothers and two sisters. My brothers' names are Anton, Freddy, Carl, Melvin and Richard. My sisters' names are Violet and Delma. Dear Aunt Nellie, I hope we are able to keep our Corner a long time.—Eveline Vida Dahl, Grangeville, Idaho.

Save Food For the Soldiers.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I saw my letter in the Corner when I wrote. I have had no time to write until now. I love to read the Children's Corner. My subject is that we should save. I think we should save food for the soldiers. They are working hard every day. I am willing to do my part. I wish some little girl would write to me. I will be 11 the 20th of January. Have I a twin? If I have I wish they would write to me.—Helen Schoenberg, Prosser, Wash.

Boy Question

(Continued from the preceding page.)

I notice that a number of the farmers' wives and daughters are delivering the milk either with automobile or horses. I shall have to give to some extent my personal experience, which I think will apply to a number of others in a more or less degree. My wife has helped what she could in haying. It was very hard to hire any one to help hay this year. I was in town one day and asked three or four men about helping me, but they had many excuses and none wanted work. "Let the crops rot." Wages were not taken into consideration. It was help I wanted and I would have paid the price rather than have had my wife in the hay field, as she was not strong enough. This fall I had a job of carpenter work to make over a cow stable. My wife let her housework go as much as she could and worked at carpenter work with me five days and we got the job done. By the way, when we came onto this ranch 17 years ago, where stumps, logs and brush were everywhere, she and I built the house, barn and outbuildings and did not hire a person. She now helps milk, work she has not done before in years, and many other women are doing the same. Farmers are buying more machinery to help out in the labor situation. Women are good milkers and they take an interest in their work to make it go.

J. E. SHANNON, North Yakima: Due to the agitation and price paid for labor, more women offered their services than usual. Their work was generally performed with the aspect of an honest effort, although in most cases work was quite expensive, with but few individual exceptions. In most work the cost of producing and harvesting the crop would consume all profit. The place of most efficiency was found in the packing house, and even here men have to be supplied to wait on them, increasing the cost of operation. However, their efforts did relieve the labor situation and was of much assistance in taking care of the crops, for we found that efficient labor was very difficult to get on account of the best young men having been called to service in the army and those that were not called would not render decent service under any condition. Would say that our best labor was given by men of middle, and over age, who haven't in past felt the necessity of working, hence were not available. Question very much if exchange of work was in excess of past seasons, and owing to the amount of work that must be done within a definite time, cannot be carried on effectively to any great extent. Would add that farming is unlike many other industries in that it can easily be crippled by lack of efficiency.

Germans and Boxer Campaign.

It is a long time since the Boxer campaign, but the war department has no trouble in reaching into pigeonhole 23 and pulling out General Chaffee's manly protest to Field Marshal Waldersee concerning the looting of the Chinese observatory by German troops. Teutonic methods have changed since then only for the the worse.—New York World.

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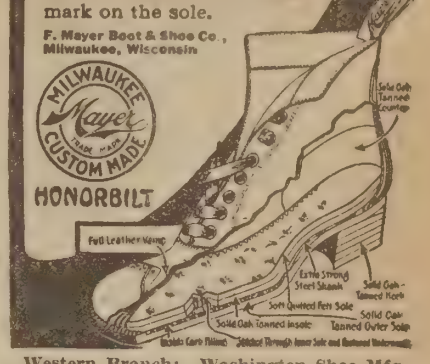
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News for Breeders

Four Hundred Beef

(Continued from page four.)

Herefords.

Bull, 3 years or over—George Chandler, Baker, Ore., on Prince Rupert 60th. Bull, 2 years and under 3—First, A. B. Cook, Townsend, Mont., on Sir Beau Donald 5th; second, George Chandler on Council Grove; third and fourth, J. D. Miles, Livingston, Mont., on Young Standard 20th and Gray Field. Senior yearling bull—First, Henry Thiesson, Sweetwater, Idaho, on Prince Rupert 80th; second, A. B. Cook on Beau Banner 6th; third, J. D. Miles on Gay Carlos 11th. Junior yearling bull—First, A. B. Cook on Panama 37th; second and fifth, Henry Thiessen on Tarkio Lad and Truman; third, George Chandler on Debonair 66th; fourth and sixth, J. D. Miles on Dale Defender and Gray Field Knight; seventh and ninth, Oregon Agricultural college on Gladiator and Chic Beau; eighth, W. C. Dorrance, Enterprise, Ore., on Alfonso; 10th, William P. Emery, Macleay, Ore., on Handsome Fairfax 8th. Senior bull calf—First and second, A. B. Cook on Panama 48th and Montana Fairfax 22d; third and fifth, Henry Thiessen on Beau Quality and Royal Perfect; fourth, George Chandler on Lord Generous; sixth, William P. Emery on Maplethorpe 2d. Junior bull calf—First and fifth, Henry Thiessen on Lord Perfection and Idaho Perfection; second, A. B. Cook on Panama 49th; third, George Chandler on Prince Donald; fourth, J. D. Miles on Gray Field B.

Cow, 3 years or over—First and second, A. B. Cook on Princess R. 2d and Lady Panama 7th; third, J. D. Miles on Prairie Queen; fourth, George Chandler on Vernet Princess 10th. Cow or heifer, 2 years and under 3—First, A. B. Cook on Lady Perfection 3d; second, George Chandler on New Lass; third, J. D. Miles on Ima Genuine. Senior yearling heifer—First, A. B. Cook on Lady Kitchener 4th; second, Henry Thiessen on Rose Donald; third, J. D. Miles on Gray Field Queen. Junior yearling heifer—First, A. B. Cook on Miss Joy; second, Henry Thiessen on Lady Rex 29th; third and fourth, George Chandler on Lady Princess 2d and Lady Don 2d; fifth, J. D. Miles on Selim Princess 4th; sixth, W. C. Dorrance on Salome. Senior heifer calf—First and fourth, George Chandler on Jennie Generous and Winnie Generous; second, A. B. Cook on Lady Panama 49th; third, Henry Thiessen on Buda 2d. Junior heifer calf—First and third, A. B. Cook on Lady Joy and Perfect Maid; second, George Chandler on Lady Generous; fourth and fifth, J. D. Miles on Gray Field Bonnie and Maud Doncaster 3d; sixth, Henry Thiessen on Vanity Belle.

Senior champion bull—A. B. Cook on Sir Beau Donald 5th. Junior champion bull—Henry Thiessen on Prince Rupert 80th. Grand champion bull—Prince Rupert 80th.

Senior champion cow—A. B. Cook on Lady Perfection 3d. Junior champion cow—A. B. Cook on Miss Joy. Grand champion cow—Lady Perfection 3d.

Aged herd—First, A.B. Cook; second, George Chandler; third, J. D. Miles. Young herd—First, A. B. Cook; second, Henry Thiessen; third, George Chandler; fourth, J. D. Miles. Calf herd—First, A. B. Cook; second. George Chandler; third, J. D. Miles; fourth, Henry Thiessen. Produce of cow—First and third, A. B. Cook; second, Henry Thiessen; fourth, George Chandler; fifth and sixth, J. D. Miles. Get of sire—First, A. B. Cook; second, George Chandler; third, Henry Thiessen; fourth, J. D. Miles.

Aberdeen Angus.

Bull, three years and over—First and second, Congdon & Battles, Yakima, Wash., on Eileenmere and Laddie of Rosemere. Bull, two years old and under three—First, Congdon & Battles on Eric E. 12th. Junior yearling bull—First and second, Congdon & Battles on Irenmere 2d and Blackburr of Rosemere. Senior bull calf—First and second, Congdon & Battles on Heatherburr of Yakima and Yakima Black. Junior bull calf—First, Congdon & Battles on Yakima Eric.

Cow, three years or over—First, Congdon & Battles on Idessa of Rosemere; second, Washington State college, Pullman, Wash on Inez of Woodlawn 3d. Cow or heifer, two years and under three—First, Congdon & Battles on Heather of Rosemere. Senior yearling heifer—First, Congdon & Battles on Erica Ellen 24th. Junior yearling heifer—First and second, Congdon & Battles on Novice of Rosemere and Pride of Rosemere 14th. Senior heifer calf—First and second, Congdon & Battles on Blackosp of Rosemere 10th and Blackbird of Rosemere; third, Washington State college on Enright's Queen. Junior heifer calf—First and third, Congdon & Battles on Yakima Pride and Yakima Pride 2d; second, Washington State college on Pullman Inez 2d.

Senior champion bull—Congdon & Battles on Eileenmere. Junior grand champion bull—Congdon & Battles on Iremere 2d. Grand champion bull—Eileenmere. Senior champion cow—Congdon & Battles on Idessa of Rosemere. Junior champion cow—Congdon & Battles on Yakima Pride. Grand champion heifer—Yakima Pride.

Aged herd, young herd, calf herd, produce of cow and get of sire—First and second, Congdon & Battles.

Shorthorn Banquet

Eaters Should Work, Says Benson

"Our government has regulated the price of wheat and the price of bread and contemplates the regulation of other foodstuffs. It regulates many things, and with that we have nothing to say; the next and logical step to take is the regulation of labor," said Commissioner of Agriculture Benson of Washington, at the Shorthorn banquet at the Pacific International.

He went on to say that the demands of the army had taken comparatively few of our young men, if we considered the population of the United States, and yet there was an acute shortage of labor on the farms already. There were plenty left in the small towns. We saw them, doing nothing. He believed the time would come and come speedily when the old law that if a man would not work, neither should he eat, would rule. We must have work done, and he saw no reason why we should tolerate idleness.

On the other hand we must not neglect the laborer's side of the matter. They must receive good wages, and he was disposed to grant them many of their demands in the way of comforts.

He related some of his personal experiences on his sheep ranch, where he could not secure help though it was plentiful in the nearest towns. Great loss threatened and so far no laws would fit the case. He was heartily applauded by the 200 Shorthorn men and their friends and allies who were present.

Professor E. L. Potter of the Oregon Agricultural college spoke of the firm foundation the beef cattle industry had reached and the sureness with which the beef sire brought profits. A quantity of Mexican cattle without beef blood in them brought $48 a head for beef in the San Francisco market recently; in Chicago a bunch of Shorthorn grades brought $240 a head in the same week.

Frank Brown touched on the advantages derived from shows and the success of the sales.

Alex Chalmers closed his remarks by saying: "I wish I were younger. I wish I were young and had wings. I'd fly over Germany and drop a bull on the kaiser."

Alex Macdonald explained how he had fitted his prize-winning steers in California.

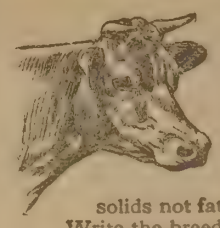
Professor Iddings paid a glowing tribute to the California college people who were good losers and generous winners.

Other speakers filled the evening with good things. The gathering was the largest and most enthusiastic gathering of Shorthorn men ever held in Portland, and came as a fitting finale to the great Shorthorn show at the Pacific International, and the splendid sale staged during the week.

The Lapps.

The Lapps, who have been settled for centuries past in the northern parts of the Scandinavian peninsula and Russia, were originally nomads subsisting on their reindeer herds, but they are now settling among the inhabitants of the country and becoming "solid citizens."

Jerseys for Net Profits



You're in the dairy business for profit—the *net* profit that your herd has made you at the end of the year will determine the size of your bank account. Jerseys yield the largest returns from every ounce of feed—proved by tests at two great expositions. Jersey milk averages 5.3% butter fat, 9.1% solids not fat—highest of all breeds. Buy a Jersey bull. Write the breeders advertised below for prices, pedigrees, etc.



The American Jersey Cattle Club, 314 West 23rd Street, New York City

Jersey Isle Stock Ranch

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castillian Lady 26628 made 603.3 lbs. fat (713.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.

C. E. LONG. Buhl, Idaho.

724 Pounds Butter

and 11,076 pounds milk is the record the dam of a bull calf dropped Sept. 1, 1917. The sire, Dominus, is out of an 817-lb. cow and sired by a bull out of an 853-lb. cow. PRICE $125 for quick sale.

J. B. STUMP & SON, Monmouth, Ore.

Every Cow a Record

Fifty per cent of our cows that have dropped more than one calf have records above 700 lbs. butter, 85 per cent fat. Golden Glow's Chief and Adelaide of Beechlands blood predominates. Special prices on bull calves under 9 months old.

LADD FARM. Oswego, Ore.

Green Meadows Farm Jerseys

Young bull out of dam on official test making good record. Sire a grandson of Goldon Glow's Chief, out of dam with official test of over 700 lbs. butter in a year. Other bull calves from register of merit dams. Also cows and heifers.

HENRY STEWART, Prop., Albany, Ore.

Ashwood Farm Jerseys

FOR SALE—BULL CALVES; sired by ST. MAWES OF ASHWOOD and out of daughters of HOLGER now making creditable Register of Merit records.

McARTHUR & STAUFF, Rickreall, Ore.

A Bit of Courtesy

When writing to any of the Jersey breeders advertising in these columns, you will confer a favor to the breeder and to the American Jersey Cattle club by mentioning this paper, as they want to be able to trace the exact source of their inquiries. Will you do this, please?

Waikiki Farm

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.
ROUTE 7, SPOKANE, WASH.

Mellow Lawn Jerseys

are promising to make a year's herd average of 700 lbs. butter, including every head from two to sixteen years old. Since June, 1916, none went under 612 lbs. butter. Junior champion bull calf at Oregon state fair, 1917, is our oldest male left for sale. Sired by our herd bull, Gertie's Poppy's St. Mawes.

F. A. DOERFLER. Silverton, Ore.

Register of Merit Jerseys

A few REGISTER of MERIT cows and their offspring FOR SALE.

H. T. THIESSEN & SON,
Milwaukie, Ore.

Who Wants This Bull?

18 months old, out of Kadia F., with world's 4-year-old milk record and 797 lbs. butter. By Engineer's Bluster, whose first daughter, Pride of Cedar Hill, made, on test, a record of 600 lbs. of butter as a senior yearling.

N. H. SMITH, R. F. D. 2,
Oregon City, Ore.

ASHBURN FARM
Register of Merit Jerseys

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.

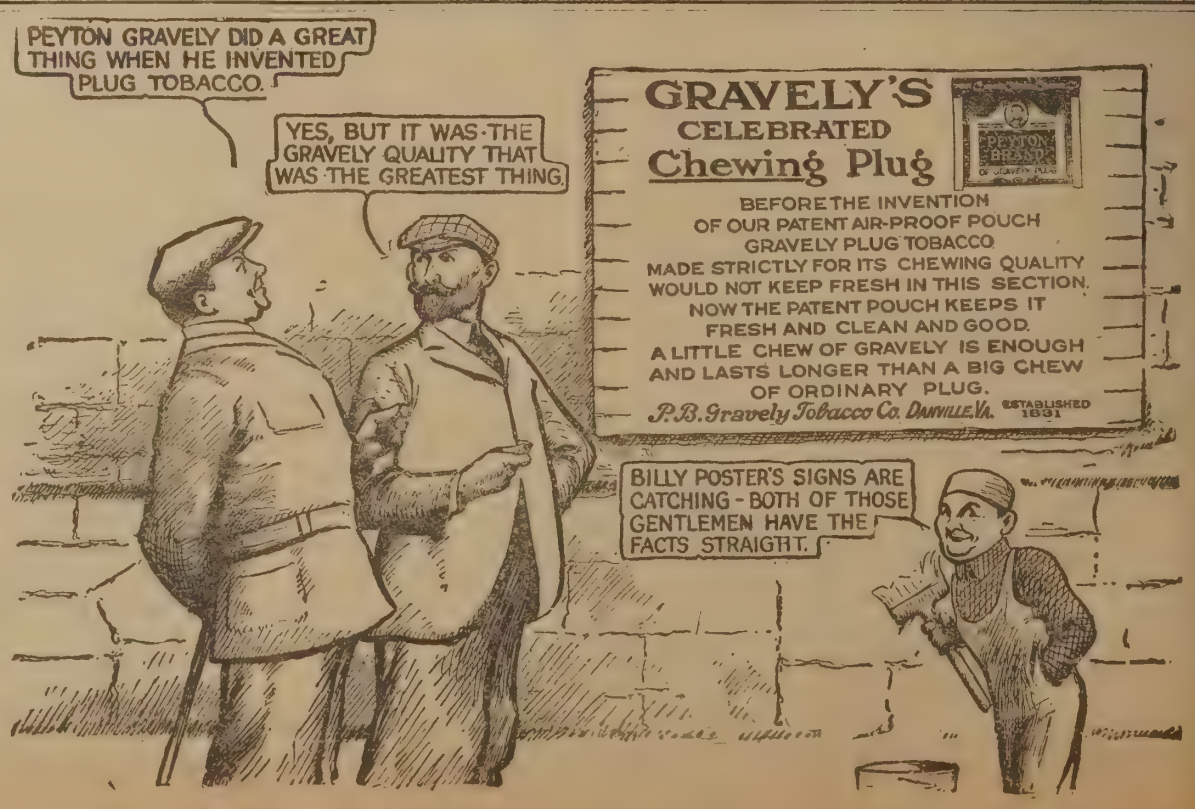
J. M. DICKSON & SON, Shedd, Ore.

Oak Ridge Jersey Farm
Register of Merit Cattle

Twenty-nine years breeding Jersey cattle. Write us for prices and pedigrees. For information address

RILEY E. HULBURT, Albany, Ore.

In answering advertisements please mention this paper.



Breeders' Department

DUROC-JERSEY SWINE

DUROC JERSEY
Gilts and Boars

I am booking orders for fall weanling pigs for October and November delivery. Can furnish them singly or in unrelated pairs or trios. Special prices to members of boys' and girls' pig clubs. An exceptional strain of Durocs, carrying the best blood lines found in the northwest. Have been prize winners wherever shown.

Chas. G. Sprong, Grandview, Wn.

DUROC GILTS

of May farrow. Sire and dam 1st prize winners. Priced right and satisfaction guaranteed.

CRESCENT STOCK FARM.
G. O. Swales. Johnson, Wash.

Ioka Farm Durocs

The big type, with quality. The kind that wins in the show ring. Offspring of the great sire Golden Rod and other best Duroc strains.

DOERFLER BROS, Silverton, Ore.

Five Choice March Boars

Of the Finnicum quality.
Also a few choice gilts to be bred in November.

J. E. FINNICUM, AMITY, ORE.

FOUR MAY BOARS

By King or Oregon, Golden Rod's best son; dam, the great breeding sow, Miss Critic. Also a few gilts bred to a son of the great sire, Pathfinder.

W. L. SHEARD, DAYTON, WASH.

Young Boars and Gilts

Sired by Elizabeth's Perfection, grand champion Oregon State fair, 1917, and Orion's Top Col.

E. C. NAFTZGER, GERVAIS, ORE.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. YAKIMA, WASH.

JERSEY CATTLE

Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

Erickson Bros. Prop.
North Yakima, Wash.

JERSEY BULL FOR SALE.
Year old, good individual, priced reasonable. Dam gave 45 to 50 lbs. of milk a day, test 4.8. Sire, Island bred.
MRS. J. F. PEFFER, Dayton, Ore.

ABERDEEN ANGUS

Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the breed.

At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

Congdon & Battles
Otto V. Battles, Mgr.
North Yakima, Wash.

HEREFORD CATTLE

BULL RANCH

Registered Hereford cattle.

CHAS. BULL, Prop. Mabton, Wn.

BROWN SWISS CATTLE

Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.
THEO. BRUGGER, Route 3, Gresham, Ore.

When you write to advertisers be sure to state that you saw their advertisement in this paper.

HOLSTEIN CATTLE

Established 1887—100 in Herd.
REGISTERED HOLSTEIN CATTLE.
As I wish to reduce my herd I am offering the blood of such bulls as King Segis Pontiac, 13th, 30.39 lbs. breeding, 4.25 per cent fat; Iowana Rochdale Korndyke, 26 lb. breeding, and Prince Segis Korndyke De Kol, 31.41 lbs. breeding.
LAKE SIDE STOCK FARM.
P. A. FRAKES, Scappoose, Ore.

365-Day Holsteins

24,667 lbs. milk—1026 lbs. butter—is the a. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.
THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH.
Prineville, Ore.

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to
H. B. BOOMER, New Plymouth, Idaho.

Waterloo Holstein Farm

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje	King Segius 10th Segius Walker Pietertje 2d

C. F. JENNESS, Meridian, Idaho.

World's Record Holsteins

Herd headed by Ononis Cornucopia Johanna Newman, the best bred son of the world's record cow, Margie Newman, with more 100-lb. records in his pedigree than any other bull in the world.
Home of the world's champion junior 2-year-old and junior 3-year-old producers. Write for records and prices on young bulls.
CHAS. ELDRIDGE, Chimacum, Wash.

LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.
J. H. HULBERT, Mt. Vernon, Wash.

Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.
ERNEST WERNER, AURORA, ORE.

Young Holstein Bulls

Out of A. R. O. dams and sired by Chimacum King Segis, whose dam and granddam average 30.98 lbs. butter in 7 days. Very reasonable.
FRANK W. CONNELL, Hillsboro, Ore.

Holsteins and O. I. C. Hogs

For sale—Bulls and cows, good breeding, from tested dams. May gilts and boars ready for service, from show ancestors. Priced to sell.
E. C. SCHUMACHER, R. 1, Granger, Wash.

HOLSTEINS

Well bred young bulls for sale.
THOS. CARMICHAEL, Gaston, Ore.

In answering advertisements don't fail to mention this paper.

SHORTHORN CATTLE

SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

R. E. BOYCE, Baker, Ore.

Hercules Shorthorns

For particulars write
DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

CEDARHURST FARM

SHORTHORNS.
Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write
JOE TURNER, Meyers Falls, Wash.

H. H. Schildman

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.
Filer, Idaho.

Shorthorn Cattle

SHIRE HORSES.
DR. G. E. NOBLE, Boise, Idaho.

GUERNSEY CATTLE

Six Registered Guernsey Heifers

from two months to one year old. Sires, Langwater Emigrant and imp. Masterpiece. Price $150 to $200. Also one four-year-old bull and one 20 months' old bull.
MIDDLEDALE FARMS, Creswell, Ore.

Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
Redmond, Wash.

FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.
A. J. SINNES.
Route 5. Mt. Vernon, Wash.

SHEEP

20 Oxford Down Rams 20

Yearlings and ram lambs; will make special price on the lot. All stock registered. No ewes for sale.

C. P. Kizer, Harrisburg, Ore.

What Is the A. B. C.?

Audit Bureau of Circulations.

This is an association, nation-wide in its scope, not conducted for profit. Every publisher having membership in this organization pledges himself to sell circulation as a commodity, both as to quality and quantity. Advertisers using our columns are safguarded. They know that we give all the circulation we offer.

Valley Junction Shorthorns

The grand champion bull, General Hampton 390583, at the head of the herd. Young bulls fit to head the best pure bred herds and others that will make impressive improvements on range herds. Priced according to quality.
W. W. GREEN & SONS, Union, Ore.



Imported and American Bred
Percheron, Shire and Belgian Stallions

They are of the very best breeding obtainable and are guaranteed to be breeders. They will be sold at very reasonable prices.
If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to
WM. T. TRACY, Kennewick, Wash.

POLAND CHINA SWINE

Locust Lawn Herd

Big Type Poland Chinas.
W. F. HOWARD & SONS, Parma, Idaho.

Choice Poland Chinas

Weaned pigs, $10; 60 lbs., $15, and the best bronze turkeys in the state. Magnificent markings. Pearl guineas. Toulouse geese.
E. A. KRUSE. Roseburg, Oregon.

POLAND CHINAS

Service Boars, Bred Sows and Gilts, Brunk's Kind.
THOS. W. BRUNK, rt. 2. Salem, Ore.

Pure-Bred Poland China Fall Gilts

will be shipped c. o. d., subject to your approval. Write to
HERBERT WILLARD. Dayton, Ore.

QUALITY HERD.
If you want to improve your herd, try stock from my winners at the Oregon state fair.
RAY J. FOX. Lyons, Ore.

BERKSHIRE SWINE

Kintyre Farm Berkshires

Exceptionally fine breeding stock for sale at reasonable prices.
CLARK BROS., R. F. D. 2, Prosser, Wn.

BERKSHIRE HOGS

Gilts of any age, bred or open; can also furnish young boars, from the best of strains and prize winning parentage.
EARL WOOD, Silverton, Ore.

RIVERBY ORCHARD BERKSHIRES won 12 out of 15 first prizes at the Washington State Fair, 1916. A few outstanding boars for sale at reasonable prices.
D. C. BUNN. Prosser, Wash.

HAMPSHIRE SWINE

Hampshire Boars and Gilts

2 young boars, also 2 gilts, either bred or open, at bargain prices to make room. Best bred line in northwest. Herd boar ready for sale about Jan. 1.
F. E. KINGSBURY, Malaga, Wash.

HAMPSHIRE SWINE

Choice stock of all ages at bargain prices.
HIGHLAND FARM, Box 22, Underwood, Wn.

YORKSHIRE SWINE

Spring Boars and Gilts

Gilts, bred or open, boars ready for service. Also weanling pigs. Best of breeding.
WM. NEUENSCHWANDER, Gaston, Ore.

CHESTER WHITE SWINE

BLUE RIBBON STOCK FARM
Prize winning Chester White hogs and Jersey cattle. Young stock for sale.
ED SCHOEL, Suver, Ore.

POULTRY

Rhode Island Reds and Whites

Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Now is the time to buy for next year's breeding, from blue ribbon stock. Sale of pedigreed Rufus Red Belgian hares, bargains at $3 each. Registered Airdale bitch at a bargain if taken at once.
HIGHLAND FRUIT AND POULTRY RANCH.
J. NONNENMACHER.
R. F. D. 3. NORTH YAKIMA, WASH

HORSES

Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.
A. R. HUNTER, Island City, Ore.

When you write to advertisers be sure to state that you saw their advertisement in this paper.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Dec. 3.—Bulls in corn had an advantage today, owing largely to acceptance of opinions that for the present the likelihood of enlarged receipts had been discounted more than enough.

Prices closed nervous, 3-4 to 1 1-2 cents net higher with January $1.20 3-8 to $1.20 1-2 and May $1.18 7-8 to $1.19. Oats gained 1 5-8 to 2 1-8 cents. The finish in provisions ranged from 10 cents decline to a rise of 2 1-2 cents.

Notwithstanding that rural advices told of heavier shipments coming and despite the fact that the trade continued to export much more liberal arrivals in the near future, the fact that receipts of corn today were of only moderate volume had an evident tendency to make sellers cautious. Offerings were scarce throughout the session and it was noticeable that predictions of excellent weather failed to bring about any change in pit sentiment. One reason was that strength of oats acted as an offset for all bearish developments.

Provisions averaged higher with hogs and grain. Realizing sales, however, weakened the market during the last half hour. Exports for the week showed a decided falling off, compared with last year.

Chicago Futures.

	Open.	High.	Low.	Close.
Corn—				
Jan.	1.19¼	1.20⅜	1.19¼	1.20⅜
May	1.17⅝	1.19	1.17⅝	1.18⅞
Oats—				
Dec.	.70	.72¾	.70	.72¼
May	.68½	.70¼	.68½	.70¼
Pork—				
Jan.	46.95	47.05	46.90	46.90
Lard—				
Jan.	24.55	24.60	24.35	24.35
May	24.32	24.45	24.27	24.27
Ribs—				
Jan.		25.40	25.15	25.15
May		25.35	25.12	25.12

Pacific Northwest Grain.

PORTLAND, Dec. 3.—Grain futures: January oats, $55 bid; feed barley, $54.50; brewing barley, $56. Eastern oats and corn in bulk: Oats, No. 3 white, December, $51 bid; 38-pound clipped, $52.50. Corn, No. 3 yellow, January, $58; No. 3 mixed, $57. January oats, No. 3, $51.50; oats, clipped, $53.75; February corn, yellow, $58; corn, mixed, $57.

Today's car receipts: Wheat 76, barley 5, flour 4, oats 2, hay 10.

SEATTLE, Dec. 3.—Yesterday's car receipts: Flour 10, wheat 99, oats 31.

Cash Quotations.

CHICAGO, Dec. 3.—Corn—No. 2 yellow, $2.15; No. 3 yellow, nominal; No. 4 yellow, $1.60@1.69.

Oats—No. 3 white, 72¾@73¾c; standard, 73@74c.

Rye—No. 2, $1.70@1.79½.

Barley, $1.10@1.42.

Timothy, $5@7.50.

Clover, $20@26.

Pork, nominal.

Lard, $25.60

Ribs, $27.50.

San Francisco Grain.

SAN FRANCISCO, Dec. 3.—Barley—December, $2.51 bid, $2.52½ asked; May, $2.57 asked.

Minneapolis Grain.

MINNEAPOLIS, Dec. 3.—Flour—Unchanged; shipments, 77,700 barrels.

Barley, $1.11@1.28.

Rye, $1.78@1.80.

Bran, $36.50@37.

Wheat—Receipts, 471 cars, compared with 880 a year ago.

Corn—No. 3 yellow, $1.90@1.95.

Oats—No. 3 white, 72@73c.

Flax—$3.26½@3.28½.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1917-18 and 1916-17 were as follows:

Seattle	Wheat	Oats	Barley	Hay
1917-18	2869	613	138	2022
1916-17	2896	649	204	1857
Portland—				
1917-18	3453	659	105	852
1916-17	2895	1047	91	836
Total—				
1917-18	6322	1272	243	2874
1916-17	5791	1696	295	2693

The Wool Market.

BOSTON, Nov. 30.—The Commercial Bulletin will say tomorrow: "Except in a few instances, Boston wool merchants report a quiet market during the week. Values keep very firm for all grades, and especially so for wools adapted to military needs. The situation at the mills has changed very little, new business being exceedingly moderate."

Scoured basis:

Texas—Fine 12 months, $1.68@1.72; fine 8-month, $1.55@1.60.

California—Northern, $1.70@1.75; middle county, $1.55@1.60; southern, $1.45@1.50.

Oregon—Eastern No. 1 staple, $1.80; eastern clothing, $1.50@1.60; valley No. 1, $1.60@1.65; territory fine staple, $1.80@1.85; half-blood combing, $1.75@1.80; three-eighths blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled—Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

Seattle Market.

SEATTLE, Wash., Dec. 1.—Wholesale jobbing and commission houses were notified today by the railway companies that all cars of foodstuffs must be unloaded within 24 hours after cars are spotted beginning Monday. As there is little available cold storage space this will reduce the volume of perishable foodstuffs arriving, stop price cutting that results from frequent oversupply, and strengthen prices.

Graded Yakima Gems are quoted at $36 to $37 per ton, with Puget sound stock at $33 to $34. F. o. b. prices have sharply declined and Seattle buyers have offers of $25@28 for locals and are playing for an $18 market. Jobbers are gradually rearranging their purchases on the no-grading basis, as demands for culled out stock have met with flat refusals. The stock is being graded here at a cost of $4 to $5 per ton and will be sold at that level.

The week comes to a close with one of the most singular features in the poultry trade ever known on Western avenue. All turkeys, geese and ducks were cleaned up and nothing in the way of a surplus was placed in the coolers.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed on a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 56c per dozen, pullets, 48@50c dozen.

Poultry—Live hens, fat, over 4 lbs., 21@22c per lb.; 4 lbs. and under, 18@19c; old roosters, 15c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 15c per lb.; springs, live, fat, 20c per lb.; hens and young tom turkeys, 28@29c per lb.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.; heifers, 6@8c per lb.

Hogs—Light, 16@18c per lb.; heavy, 12@13c per lb.

Veal—Fancy light, 14@16c per lb.; heavy, 9@13c per lb.

Hides—Salted, 18c per lb.; flint-dry hides, 32@33c per lb.; salt kip, 18c per lb.; green hides, 15c per lb.; green calf, 28c per lb.; dry calf (under 5 lbs.), 34c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry full wool sheep pelts, 36@38c per lb.; salt bulls, 14c per lb.

Live Stock Quotations.

At Omaha.

OMAHA, Dec. 3.—Hogs—Receipts, 9300. Market, 10 to 15c lower; heavy, $16.90@17.25; mixed, $17@17.10; light, $17@17.25; pigs, $12@19; bulk of sales, $17@17.10.

Cattle—Receipts, 16,000; market steady, 10 to 15c lower. Native steers, $9@15; cows and heifers, $6.50@10.25; western steers, $8@13; Texas sters, $7@10.30; cows and heifers, $6@9.25; canners, $5.25@6; stockers and feeders, $6 12; calves, $9@12.50; bulls, stags, etc., $5.75@8.

Sheep—Receipts, 22,000; market steady, lower. Yearlings, $11.50@13; wethers, $11@12.50; ewes, $9@11.50; lambs, $11.75@17.75.

At Chicago.

CHICAGO, Dec. 3.—Hogs—Receipts, 47,000. Strong, bulk, $16.75@17.15; light, $16.20@17.05; mixed, $16.50@17.25; heavy, $16.50@17.25; rough, $16.50@16.70; pigs, $12.25@15.

Cattle—Receipts, 29,000; weak. Native steers, $7@14.75; western steers, $6.10@13.40; stockers and feeders, $6@10.80; cows and heifers, $5@11.30; calves, $7@13.25.

Sheep—Receipts, 22,000; weak. Wethers, $8.70@12.80; lambs, $12.40@16.80.

At Portland.

PORTLAND, Ore., Dec. 3.—Cattle—Steady to firm; receipts, 841. Medium to choice steers, $9.50@10; good to medium steers, $8.75@9.50; common to good steers, $7.25@8.25; choice cows and heifers, $7@8; common to good cows and heifers, $5.50@7.25; canners, $3@5.25; bulls, $4.50@6.75; calves, $7@9.50; stockers and feeder steers, $4@7.50.

Hogs—Lower; receipts, 3008. Prime light, $15.85@16; prime heavy, $15.90@16.10; pigs, $13.50@15; bulk, $15.85@16.

Sheep—Weak. Receipts, 785. Western lambs, $13.50@14; valley lambs, $13@13.50; yearlings, $12@12.50; wethers, $11.75@12.25; ewes, $8@10.

Portland market on shorn sheep 2½ to 3c under quotations.

Spokane Stockyards, Monday.

Hogs—Receipts 26, market steady. Prime light, $16.20@16.35; prime heavy, $16.15@16.35; pigs, $14.50@15.25; stockers and feeders, $12@13.50.

Cattle—Receipts 42, market steady to strong. Best beef steers, $8.75@9.25; good steers, $7.75@8.50; best beef cows, $6.25@7; ordinary to good, $4.75@6; canners, $3@4.50; best heifers, $6.50@7.25; bulls, $5@6.50; calves, $6@8.50; stocker and feeder steers, $5@7.25.

Sheep—Receipts none, market steady. Prime lambs, $13.25@14; good lambs, $12@12.50; prime yearlings, $11.50@12.50; prime weathers, $11.25@12.25; best mutton ewes, $8@10.

Portland Market.

PORTLAND, Ore., Dec. 1.—The country produce markets have been quiet since Thanksgiving. A large stock of live poultry accumulated over the holiday and this was worked off later by shading prices. Country dealers sent in a good many turkeys they had left over and these were cleaned up at 27@28 cents.

Eggs are tending downward as usual at the beginning of December. There has not been much of an increase in receipts, except of pullet eggs, but the supply is more than ample. The showness of the storage egg trade is also a weakening factor.

Butter continues scarce and prices are holding fairly steady. The trade expects the downturn at San Francisco to affect this market soon.

According to reports from the coast stocks of cheese there are heavy and a break in the market would occasion no surprise as the movement is far from good.

There is a very slow movement of potatoes and the market is on a weak basis. There is hardly any buying for shipment owing to the car scarcity. A nominal price in the country is $1.25. On Front street Oregons are quoted by jobbers at $1.40@1.75, and Yakima Netted Gems at $1.75@1.85. Onions are dull with $3 the top quotation on the street.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $53.50 per ton.

Millstuffs—Bran, $32 per ton; shorts, $35.

Barley—No. 1 feed, $54; brewing, $54.50; rolled, $57@59.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $24; grain $24.

Eggs—Oregon ranch, case counts, 48@50c per dozen; candled, 53@57c.

Poultry—Hens, 17@19c; ducks, 18@20c; turkeys, live, 20c; geese, 13@14c.

Butter—City creamery, prints, 45@49c per pound; cubes, extras, 44@44 1-2c.

Cheese—Tillamook triplets, 23c; Young Americas, 24c.

Dressed meats—Veal, 15@15 1-2c; pork, 19@19 1-2c.

Hops—1916, 14@15c; 1917 crop, 15@20c.

Potatoes—Oregon, buying price, $1.25 per hundred.

Wool—Eastern Oregon, 40@65c; valley, 58@60c.

Beans—Buying prices: Oregon navy, 9c; Lady Washington, 9c; colored, 8c.

Seattle Wheat.

SEATTLE, Wash., Dec. 1.—Considerable grain, a part of 1,000,000 bushels to go from the Idaho territory to the Minneapolis milling section, has been moved this week, according to reports received by local grain and milling authorities. The sale of Idaho wheat in preference to Coast terminal holdings was made possible through the differential in freight of about 15 cents per bushel.

There have been numerous inquiries through the week for Washington, Oregon and Idaho wheat by millers of Montana and as far east as Tennessee. Extension of the mixing of soft with hard wheats to a wider extent is expected by hard wheat millers of the east, and these inquiries are regarded as a natural sequence of this condition.

Portland Wheat.

PORTLAND, Ore., Dec. 1.—Business in the grain market is slack these days. There is an occasional sale of oats or corn at the exchange, but on the whole the dealers have little to do, and they are marking time awaiting developments. Prices move within a narrow range, influenced by changes in the eastern markets.

About the only activity is in the millfeed division. Most of the millers are sold ahead and some can not catch up on their orders for several weeks. The demand far exceeds the supply, but prices are maintained at $32 for bran and $35 for shorts on the advice of the food administration. The heavy demand is due to the fact that the feed grains are much higher in price than millfeed.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $1.50 cwt.; sweet potatoes, $3.25@3.50 cwt.

Apples—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, $1.85@$2.25; Winter Bananas, $2 box; Jonathans, $1.25@1.75 box; Wageners, $1.35@1.65 box; Rome Beauties, $1.25@1.60 box; Spitzenburgs, $2@2..25 box; King Davids, $1.25@1.35 box.

Butter—Blanchard cartons, 49c lb; Medo-Maid, 49c lb; Cascade, 49c lb; Gold Leaf, 49c lb; Better Butter, 49c lb; Attalia, 49c lb; Diadem, 49c lb; Hazelwood, 49c lb; Solid Pack, 48@49c lb; Jersey Belle, 47c lb; Peerless, 45@46c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 32@33c lb; brick cheese, 34c lb; domestic Swiss, 38c lb; Young Americas, 27c lb.

Eggs—White filler, guaranteed, $13.25 case; selected storage, $12.50.

Live Poultry—Hens, 13@16c lb; broilers, 18c lb; old roosters, 9c lb; ducks, 15c lb; geese, 12c lb; turkeys, 22@25c lb.

Dressed Poultry—Hens, 18c lb; broilers, 20@21c lb; old roosters, 11c lb; ducks, 17c lb; geese, 14c lb; turkeys, 27c lb.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 15c; salted cured, 17c; green bulls and stags, 12c; salted cured, 15c; kip, 15 lbs. to 25 lbs., 20c; calf skins up to 15 lbs, 28c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 7 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

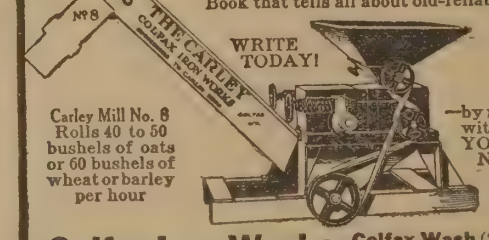
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SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 50. DECEMBER 13, 1917. ** WEEKLY.

ANNUAL POULTRY ISSUE

FOR some time the poultry industry has been approaching a major crisis. There has never been a period when it was not easy to lose money in chicken farming, as many a town man, with visions of a life of ease and opulence attained by the simple process of coaxing a few hens to shell out golden eggs, has discovered. With the increased financial and economic tension of the last two years, however, the ease with which even a poultry-wise man can be parted from his savings in the poultry business has increased amazingly.

This is a good time to face the actualities of the case. Feed is high, and there is no immediate prospect of its becoming much lower. By the irony of fate, the lowly hen is put into competition with the fighting men of all nations, who, like herself, must be fed largely on wheat. Labor is high, and it will be many a day before it becomes cheaper. Again the hen is competing for a prime necessity in the great world conflict: men who can do things efficiently. So far, the very fundamentals of the situation look black for producers of eggs and chickens.

Turning from the negative to the positive side of the case, there are certain very definite things which can and must be done. Labor must be conserved in every possible manner, whether it is the labor of the farmer and his family, or of hired assistants. This means that labor-saving equipment of every practical sort must be installed, and that the work of tending to the flock must be systematized as efficiently as the work in a big packing plant is systematized. Houses, runs and feed storage facilities must be built or rebuilt with this labor-saving ideal in mind.

The item of feeding must be supervised, keeping constantly in view the fact that wheat must go first of all to feed the human population of the world, and that other grains must be substituted as fully as possible in all the rations of animal husbandry. The department of agriculture and the state agricultural schools and experiment stations have realized this need, and are prepared to tell the open-minded poultrymen just how to substitute various other foodstuffs for wheat, in a large measure. Home grown feed must be utilized as far as possible, to save transportation.

A final adjustment which the poultry industry must make is in its relations to the consuming public. This is no time for bickering or misunderstanding. Poultry foods have increased 60 per cent in price in the last year, while eggs have advanced only three per cent.

Continued on page nineteen.

Winners Unconscious of Honors Due Them



Here are the five hens that won first in the All-Northwest laying contest held at Pullman, Wash., during the year 1916-17. The contest was held under the auspices of the poultry department of the State College of Washington. There were some 200 entries. The five birds shown here laid 971 eggs during the year, an average of 194.2 eggs per hen. They are owned by J. A. Hanson of Corvallis, Ore.

Pays to Bacon the Hogs?

Writer Says That Prices Paid by the Dealers Are Unsatisfactory; Believes More Is Made by Butchering on the Farm



DARRINGTON, Snohomish County, Wash., Nov. 26.—Weather conditions have been most favorable for clearing land and fall plowing in this part—almost everybody cleared more or less land and is still at it and more plowing has been done than usual, which will help a good deal toward getting crops in earlier in the spring. Not any of the crops were damaged to any extent by frosts this fall; everything was gathered in the best of condition. Some complaint is heard of potatoes rotting in the roothouse, owing to the blight, but only on a couple of farms. In my opinion, this was caused by carelessness in selecting the seed last spring. My experience has taught me not to plant any tubers that are in any way affected or damaged. Cattle are in good condition and pastures are still green, so, therefore, cattle can still browse around and save considerable feed. Farmers around here are not greatly elated over the net receipts they get when shipping beef and pork to Seattle. Some of us will cure and smoke our pork and then sell—we can afford to sell pork 15 cents per pound less than market price and then make more money than if we sent hogs to the commission man.

C. B. NEIDERPRUM.

Farmers See Many Changes.

CASTLE ROCK, Cowlitz County, Wash., Nov. 30.—Things have come to the farmer with such changes in the last few months that they have not fully decided whether it is the best thing to have the government take charge of the price regulation or not. To most of us it seems that if price regulation by the government is to be done at all, it should be carried through to the letter and not to touch it in spots. Public opinion is heartily in favor of more government regulation, having the prizes fixed on all farm produce sold to the consumer. We are told that there is plenty for all, but when we come to pay double, and, in some cases three times, as much for articles than we did a year ago, it looks like the government is not meeting the end that it intended to do.

The mildness of the weather has given some of the farmers a breathing spell as the grass has freshened up, making feeding slight with the exception of grain. In some places the stock was sold off, anticipating an early winter. Hay and grain being high, this precaution has lightened up and hay, especially, has not been any higher in price than it was a month ago. The stock held are amply provided for during the winter. To those having hay to sell, $20 to $25 per ton will give a good substantial profit for their trouble as the high price of labor does not last many days while harvesting, and with the aid of machinery the cost does not make very much difference on a ton of hay. Those paying $20 or $25 per ton for feeding cattle or sheep can make a profit even at these prices, if he uses judgment in feeding; that is, making the stock eat up the most of it before wallowing the hay under their feet. Some have a cutter and mix shorts with it after wetting. This has a tendency to stimulate the desire for a careful cleaning up of the scattered forksful of hay. There has been some radical changes among the farmers' homes since the draft took away from Cowlitz county over 50 of the boys who worked on the farms. Some were drafted, others enlisted, and it acted the same as though taking one of the teams in each home. In some cases they were the mainstay of the home and naturally the load shifted onto other shoulders. Some had to let the plans to put in more crops, milk more cows and clear more land drop. A man invested some money in farm machinery to make up for the boy who had done his share of the farm work and the small tractors have, in a few instances, done the work in the field. But another regulation is needed. Farmers should be helped by the government to put in their crops, market them, guard them against the small merchants who buy their eggs in trade and sell them sugar in small lots at a big profit, as well as shorts, flour, bran, and other staple articles.

C. C. BROWN.

Labor Hurts Next Year.

LACROSSE, Whitman County, Wash., Dec. 6.—We all submit to government rule almost without exception. Do doubt farmers are disappointed about the slowness and more so the uncertainty of the way the grain is marketed. They feel it very keenly and lots of complaint is made, but nothing unpatriotic. The uncertainty of farm labor for next year is cutting short much acreage for 1918 as farmers are already strained to more than capacity with the present labor situation.

M. E. SCHRECK.

Abandoning Silage?

PORT ANGELES, Clallam County, Wash., Dec. 1.—From a farmer's viewpoint of the government's regulation of prices on his products and purchases there is a divergence of views, but an observer would say that the majority of opinions favors government regulation. The exceptional mildness of the fall and early winter decidedly favors this section of the country for there is considerable more out-of-door feed for the stock, which is very acceptable in face of high prices. There is no export of hay and the quantity of hay shipped in has been lessened to some extent by root crops. Barley and potatoes have been used with excellent results for the hogs. Silage is on the decrease around the Dungeness country, where a dozen or more of our successful farmers have abandoned them. The army draft has probably taken about 20 farmers' sons from the county of Clallam and it works a hardship on the small farmer as the hired help is hard to get and this class of help balk at long hours. The prevailing wage for a potato digger is from $3 to $4 per day and board.

J. P. CHRISTENSEN.

Flour Mill Will Help.

TWISP, Okanogan County, Wash., Nov. 26.—The fall work is including very little seeding and most of the fall plowing has been done since November 1 in this district. We have had no crop losses due to cold or wet weather. All seem to be Hooverizing in this vicinity. There is a sharp demany for honey, that there might be some economizing in the use of sugar. A great many are consuming more potatoes and fruit and less flour and meat than usual. Barley is being used instead of wheat by some for hog feed and if properly prepared gives equally as good results. Some of our grain farmers are growing impatinet waiting for the government to establish its unit for handling wheat. A flour mill is being built and is nearing completion at Twisp that will eliminate some of our trouble. The seasons have all been late this year, and stock raisers that are short on feed are hoping for a different schedule for the seasons for 1918.

GEORE LA RUE.

Expect Labor Shortage.

CHIMACUM, Jefferson County, Wash., Nov. 30.—We do not seem to notice the effect much yet of the government reglating the prices on farm products bought and sold in this community, and public opinion seems, so far to favor it or anything to help this great war. We are having such a mild fall and stock and milch cows are on pasture yet and have not been in the barns at night yet, which is six weeks later than the average year. Very little or none of the hay has been fed yet, which is going to help out the farmers who are short of hay out. At the prices of hay now I do not think that there can be a profit made on it by feeding to stock. This coming winter most of the straw that is of the best will be used for feeding young stock. Many of the farmers' sons have gone into the army and navy; also many of the experienced farm hands, such as milkers and creamery men, which has made farm work a little backward, but fall plowing is under way at present and all lands fit to plow will be worked up this fall so as to have it ready for spring work, as the farmers expect a shortage of labor in the spring and are going to be prepared for it as much as possible.

JOHN VAN TROJEN JR.

Shorts Saves Money.

HUNTERS, Stevens County, Wash., Dec. 3.—Because of continued good weather there has been an unusual amount of fall plowing done. Stock has run on stubble fields through November and a saving has thus been made on the winter feed. Farmers are quite generally falling in line in the matter of "Hooverizing." Hog feeders have this season made use of shorts in fattening and this mill product has thus, to a larger extent, taken the place of ground wheat. Shorts are used in the fattening pens at the start and a little ground wheat fed at the finishing. In this section ground wheat has been the main fattening ration for hogs. The use of the shorts reduces the cost of the fattening.

ELIAS NELSON.

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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 50 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF December 13, 1917

Red Cross Seeks Ten Million New Members

Greatest Campaign in the History of the Organization Marks the Approach of Christmas

THE addition of 10,000,000 members to its roll is the aim of the American Red Cross in the most gigantic membership campaign in its history, now in progress. Though membership is now being added in ever-increasing numbers, and though the books never close to those who wish to join in the great humanitarian movement, the great drive will feature the week before Christmas, culminating on Christmas eve, December 24. On that evening it is hoped that in the windows of several millions of American homes that never before took interest in the organization the red cross on a white square, bordered by a line of blue, lighted by a candle from behind, will shine for the declaration that that home is enrolled in the greatest propaganda of mercy that the world has ever known. These window signs are provided by the Red Cross workers. Each home where a person is a member will receive a sign with the large cross in the center. For each additional member of the family who joins an additional, but smaller, cross will be given to be pasted onto the window sign.

The campaign is a nationwide one. Every city, every town, every country precinct will be invaded by the campaigners. While membership dues in the organization are one dollar a year, the present campaign is not being made primarily, or even secondarily, for additions to the funds. "It isn't your dollars, but your membership we want," says the message sent out from national headquarters. As was the case in the Liberty bond campaigns, it is the desire that as many individuals as possible take part in the great movement.

In the state of Washington little is being said about the number of members the national association has announced as the state's share in the grand total of 10,000,000 new members. The aim has a far greater goal. The slogan being repeated everywhere is, "Every man, woman and child a member," and it is the intention of the leaders to make the total number approach that goal as nearly as possible. Everywhere the workers are striving to increase the number allotted to their given districts, and it need not be surprising if, when Christmas day dawns, the total membership in the state will have reached several hundreds of thousands and the grand total for the nation have been "oversubscribed" far above the 10,000,000 goal, just as the two Liberty loans were oversubscribed by the loyal citizenry of the land.



R. R. Fox of Seattle is campaign manager for this state, working with a corps of other officers and volunteer workers. For the three northwestern states and Alaska Harvey Lindley of Seattle is the Red Cross chairman. Speaking of the campaign recently, he said:

"This is a highly important service, and one in which every citizen can join. It means so much to the boys in the trenches and to the thousands of others soon to be in active battle, that I can not imagine any citizen refusing to join.

"We are not after money, but after members, entailing a cost of $1 each for the year—mighty small when measured by the benefits of our soldiers. This money is necessary, but of far more importance is it to have a compact body of citizens at home joined together to carry out the loftiest patriotic aims and ideals. We intend to make it possible not only for citizens to join in this movement, but to take memberships in the Red Cross for the boys in the trenches. When the Oregon list is exhausted there will be memberships for other soldiers."

The people of the country are awakening to the great need of the services rendered by the Red Cross. Never was that need so great as it is at the present time, and it will be yet greater when more American soldiers reach the battle fronts of Europe during the present winter and the coming spring and summer. The object of the Red Cross is the relieving of suffering and the saving of life. It goes onto the battlefields with nurses and ambulances and medical and surgical appliances, rescuing wounded soldiers, comforting them during their dying hours or saving them from death or hopeless invalidism.

The great scope of the work of the Red Cross is indicated by a statement recently issued from national headquarters, showing the effects being made. The following paragraphs are extracts from that statement:

The principal purposes of the work of the American Red Cross abroad may be summarized thus:

1. To do everything possible to assist our army and navy in insuring the health and comfort of American soldiers and sailors abroad, and

2. To relieve suffering among the armies and destitution among the civilian populations among our allies.

Work for the American army is the first and most important part of the Red Cross program in France. More than 12 base hospitals organized by the Red Cross and now mustered into the army medical corps, are in service in France.

Fourteen thousand Red Cross nurses have been enrolled for duty, and approximately 3000 have already been called into active nursing service, of whom 2000 are working abroad.

Relief of refugees throughout the devastated zone has been undertaken by the Red Cross. Relief warehouses have been placed at strategic points behind the lines, from which food, clothing, household goods, agricultural implements and tools are being distributed to the returning refugees. Foodstuffs to the value of $2,870,300 have already been bought in France or shipped there for military and civilian relief.

The commission to Italy used an appropriation of $200,000 for immediate relief in that country. The Red Cross acted promptly when the Italians were forced to retreat, pledging its aid through Ambassador Page and placing a special relief fund of $250,000 at its disposal. This was later raised to $750,000.

Commissions are at work in Rumania and Serbia. A commission and deputy commission have been assigned to England, and a special department has been set up for Belgium.

In Belgium the work of the Red Cross, which is confined to the part of the country still held by the allies, is chiefly in cooperation with the relief interests of the king and queen. The Red Cross is assisting Belgian hospitals and children's refugees, aiding Belgian villagers to reestablish themselves in the devastated zone left by the retreating Germans, and helping to care for Belgian children, both in Belgium and in France and Switzerland.

Forty-nine army base hospital units and five for the navy have been recruited, organized and equipped by the Red Cross. More than 12 of the army units and two of the navy units have now been mustered into their respective medical corps and are seeing service. These units can care for a 500-bed

(Continued on page seven.)

Wheatless Wednesday

More beef, mutton and pork and more wheat must be saved to relieve a critical situation in the national food supply. The situation in the state of Washington is more acute than the people of the state have been led to believe, according to Charles Hebberd, federal food administrator for Washington.

"In addition to the one wheatless and two meatless meals each day, I request that every family observe a wheatless Wednesday," says Mr. Hebberd. "At no time was it contemplated that the hotel and restaurant program of wheatless and meatless days should cancel the one wheatless and two meatless meals each day requested of every family. Beginning November 21, every family in the state should observe a strictly wheatless Wednesday in addition to one wheatless and two meatless meals each day."

Herbert Hoover of the national food administration has advised Mr. Hebberd that all combination sales of food commodities are forbidden, except that a dealer may sell sugar in combination with cornmeal at the rate of one pound of sugar to two pounds of cornmeal.

"The sale of one or more food commodities upon condition that the purchaser shall buy one or more other food commodities from the seller is regarded as a combination sale within the meaning of the ruling," says Mr. Hoover.

Wants Schoolless Days.

Bobby had often heard his parents talking of wheatless days. Having been to a party with them the other night, and having arrived home late, he was pretty tired. In the morning when his mother called to him to get up and get ready for school, he said: "Aw, gee, ma, when is schoolless day?"

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Farmers in Session

Large Problems Under Discussion

As The Farmer is going to press there is a meeting in Spokane, Wash., the annual convention of the farmers' union of northern Idaho and Washington state. Problems of vital interest to the farms and to the country as a whole are being discussed and actions taken concerning them.

Probably the two outstanding questions are those of farm labor and the grading and marketing of grain under the government regulation. There is a strong feeling that the government should devise some plan to permit experienced farm help to remain on the farm and not be drafted into the army. Many reports of serious handicap to individual farms are made among the delegates due to loss of young men who have enlisted or have been drafted into the service.

Much dissatisfaction is also being expressed with the situation in the grading and marketing of wheat. The farmers of the northwest feel that they are the victims of an inequitable system under the government regulations as they are being worked out in the northwest. One of the features of the week of the convention is the conference with a federal representative of the grain department with a view to solving to some degree the question of grades and grading methods.

Next week's issue of The Farmer will contain comprehensive reports of the farmers' convention and the grain deliberations.

One of the most enthusiastic farmers' union conventions in the history of the country was that held at Pendleton, Ore., last week, the annual convention of the Oregon-Southern Idaho union. Patriotism was the dominant

(Continued on page nine.)

War Makes Meat Breeds of Poultry Popular

The Old Plymouth Rocks, "Made in America," Are Still the Dual Purpose Breed

By JAMES DRYDEN

While the Leghorns have a deserved popularity on the special poultry farms, the Plymouth Rocks are equally popular on the general farms. The average farmer takes very kindly to the barred Plymouth Rock. It is a general-purpose breed, and the farmer wants meat as well as eggs. In the present war emergency there is an additional reason why the farmer should prefer the general-purpose breed; that is the shortage of meat in the world. There are a number of varieties of Rocks, the only difference in varieties being a difference in color of plumage. The varieties are the Barred, White, Buff, Partridge, Silver Pencilled, Columbian. The first two are the most popular and most desirable as general utility fowls. The Rocks are good sitters, lay brown or tinted eggs and have yellow skin and shanks. They make a very desirable combination of meat and eggs when properly bred.



The picture shows a good type of Barred Plymouth Rock male. It has the characteristic shape. It is a 10-pound male, bred at the O. A. C. station from a 214-egg hen. He is rather large, however, for a strictly egg-laying strain, and is rather large for a general-purpose fowl.



The photo above represents a better type to select for breeding good egg layers. He is finer in bone and not so large as the first one. He is a good type of Rock, but lacks some of the color points for a show birds. He was bred at the Oregon station from heavy laying strain. Notice his alert, vigorous appearance.

The picture at the top of next column shows a Barred Plymouth Rock with exhibition barring. The bars are distinct and close.

The Barred Plymouth Rock was the first breed of chickens "made in America," and it is still, after more than half a century, the most popular of American breeds.

Light Brahmas.

The light Brahma is the largest breed of domestic fowls. It is a native of Asia, but the type has been considerably changed by breeders in this country. It is the slow-going breed, which accounts in part for its activity in the meat-producing line and for its reputation as a slacker in the egg line. It frequently attains a size of 12 pounds in the male. There are good layers among them, but on the average we can no more expect the most profitable egg production from Brahmas



than we would expect the highest milk production from the Hereford. The Brahmas have a special field to fill in furnishing the demand for large roasting chickens, and good prices are paid for them. It is a meat tyye of chicken strictly. A Brahma picture is seen in center of column four.

The Wyandottes.

The Wyandotte is a general-purpose breed, made in America. It is a very attractive fowl when bred to the standard. The hen shown in photograph



here is a typical exhibition specimen, with small rose comb, blocky in shape and fluffy in feather. Good layers, however, are usually more closely featured and have a little more comb and a little more range. In the laying contests the Wyandottes have given a good account of themselves. The winning pens, however, have usually been of the English type, a type that would get small consideration in our poultry shows. If the Wyandotte is to be bred strictly for eggs regardless of show standards, it will soon lose its distinctive type. The general-purpose breeds must maintain their general-purpose characteristics at the sacrifice, if need be, of some egg-laying qualities. There are eight varieties of Wyandotte, the differences being of color only. The Whites are the most popular breed. At the foot of the last column is a typical White Wyandotte cock.



White Leghorns.



Above is shown the first prize cockerel at the Panama-Pacific exposition, owned by Mrs. E. B. Martin, Downey, Cal. Below is the first prize pullet at the same show, owned also by Mrs. Martin. These photographs do not show the relative sizes, the pullet being taken larger than the cockerel. They are splendid specimens of the exhibition White Leghorn. It will be noticed that the male carries his tail rather low. A low tail is required by the standard. The comb is rather small, with five distinct points, the rear of the comb preserving a horizontal position instead of following the curve of the head. These are also show points that the judge pays particular attention to in the show room. These points, however, are not important from an egg-laying standpoint.



Good layers are just as likely to be found with a high tail and a large comb. The Leghorn is a sprightly, active bird, built on trim lines. Females weigh from three to three and a half pounds. The Leghorn is the popular breed on the special poultry farms. Their early-maturing qualities and small consumption of food are largely responsible for their reputation as egg producers. They lay a white egg and have yellow skin and shanks.

The Rhode Island Red, possibly next to the Plymouth Rock, is the farmer's



general-purpose fowl. It is pretty much of the same type, though somewhat smaller, bred to the standard. In Rhode Island and other New England states there are sections where it is more numerous than all other breeds together. It is a good utility fowl when bred along utility lines.



A Light Brahma Cock.

Washington Hens Lead at Storrs.

A pen of White Leghorns entered by the Hollywood farm, Hollywood, Wash., at the Storrs laying contest, is leading all other pens for the first two weeks of the contest. This is a good beginning, and a good begining in an egg-laying contest is a pretty good indication of a pretty good ending. The eggs laid by this pen in the two weeks numbered 74, while the average of all the pens was 17.32 eggs. J. D.

To mend a thimble drop a small quantity of sealing wax inside, dip the middle finger in cold water and press the thimble on. When this is finished polish the thimble up with a piece of chamois and you have a new silver thimble set with coral.

You Cannot Judge Layers by Their Appearance



The trap nest is revolutionizing the poultry industry. It has shown that the poultry breeder is going it blind in judging of egg laying qualities by external appearances. It has shown also that no breed has a monopoly of



heavy layers, nor of poor layers. Here are two good looking Barred Plymouth Rock hens of about the same shape or type. One laid seven eggs in a year, the other with the same care laid 220. Can any one pick out the best and give a satisfactory reason for the selection?

California's Land Settlement Board

To Give People With Small Means a Working Chance for a Home

By RAY W. FELTON

What California is doing and what the nation as a whole may do to assist worthy land settlers, overcome the farm labor problem, keep boys and girls on the farm and thereby insure the permanency of American agriculture, formed the subject of an address by Dr. Elwood Mead of the University of California at the fifth annual meeting of the Washington Irrigation institute at North Yakima, Tuesday, December 4.

Dr. Mead's remarks impressed his hearers in no uncertain manner. They seemed sound, practical and worthy of most careful consideration and the message he brought to Washington is of more than ordinary interest because we are confronted at this time by problems just such as he described and which California is attempting to solve much after the manner in which they were handled by Australia, a country which has undergone during the last six years a change in rural life which gives promise of an everlasting state of democracy and a peace of mind for its people hardly dreamed of under the old system of huge estates and tenant farmers.

Dr. Mead prefaced his talk by declaring nothing desirable nor worth while can come by chance. The artist must have the vision before he paints his picture. To the extent that he plans his work is the final result determined. The same is true of our state and national plan of rural development. We must fix upon a definite plan of procedure and then pursue it with utmost care and diligence.

"When the free land disappeared in this country nothing was provided to take its place," said Dr. Mead. "Even now with the overpowering need of increased agricultural production we still find the drift toward the city. It is for the purpose of making rural life possible and attractive for the man of small means that California has undertaken to solve the settlement problem."

California, Dr. Mead explained, has passed a law establishing a land settlement board which has authority to buy 10,000 acres and settle it with people with small means, and a working chance to provide homes for themselves and to complete their payments with the revenue derived from the land. Two hundred thousand acres have been submitted for the consideration of the board. The state soils expert is now examining the various tracts proffered. When the land is purchased the board will have it subdivided. Then it will be sold to applicants at 5 per cent down with 56 years to complete payment. Interest at the rate of 5 per cent will be charged and 1 per cent will be paid each year on the principal. The state of California will use the federal farm loan plan to secure money with which to finance the scheme.

The state will prepare the land for irrigation. Architects throughout the commonwealth are donating their services in order that desirable plans for dwellings and outbuildings may be furnished settlers when they come. The state will erect the buildings and the occupants will be required to pay one-third of their cost and one-third of the cost of preparing the land for irrigation. Applicants will be required to have capital of at least $1500 to give them a working chance to make good. This may bar a number of worthy settlers, but it will be remembered that many failures on western homesteads have resulted because the settlers attempted to go on the land and settle up without what is popularly known as a "grubstake." Such a system really is no kindness to the settler.

"We are figuring on encouraging a kind of agriculture that will maintain soil fertility so that it can be handed down to posterity in as good shape as it was found," said Dr. Mead. "Live stock will be encouraged and purebred stock will be insisted upon in so far as it is practical. We know the value of sheep and we will see to it that they have a place in this colony."

Farms of different sizes are planned in order that individual needs may be provided for.

"We feel we have formulated a plan which will be of real service to our people and one which, while it may appear socialistic at first, has now received the indorsement of nearly every one who originally was opposed to it," said Dr. Mead. "It works no hardship on the taxpayer as all the money the state advances will be repaid with interest.

"One of the greatest fields for work of this kind is under the reclamation project here in the west. When the reclamation act became law it was entirely an emergency measure. The social and economic side of farm life was entirely overlooked. It contained provision for getting water on the land, but that is not enough. We need a change which will take care of those conditions and give us intelligent supervision and management of projects which will insure to the settler all the best there is in country life.

"Australia has so changed its conditions that it is no longer a country of great estates. After six years of the new order of things it is a country of home owners and happy people. The government has so arranged things that I have seen families travel 12,000 miles and be on their land making a living 30 days after their arrival.

"The old way was to compel the people to pay the productive value of the land before there was any production. High interest rates and short periods of payment have resulted in a condition that only the speculator profited by.

"Our public lands have been thrown open under the homestead act which did nothing to ascertain the character nor the adaptability of the prospective settler. Nothing has been done to keep out the speculator. Lands have not been classified. The settler, inexperienced and often unfitted for the business, has been left to work out his own salvation. We haven't thought this thing out as we should have. We need to begin to plan that we may realize the results hoped for. It is just as necessary to get the lands ready to farm and the houses up as it is to get the water on. Much time has been lost and with such a system somebody's going to lose always—sometimes it's the settler and sometimes it's the government.

"In Australia they discovered that farm labor—desirable farm labor—was as necessary as the farm itself. They realized they must have appealing conditions to attract desirable laborers. So they built homes for the laborer and his family and provided each with a two-acre block of land on which they could do light farming sufficient to produce necessities for their household and give them a place to live where they might be happy and contented. In the state of Victoria 8800 acres have been given over to the farm help and they are given an opportunity to pay for their acreage.

"Before this system was established Australia experienced the same labor troubles we are having. The average farm laborer had no idea of thrift nor of home responsibility. Go to Australia today and you will see what this system has done. It has given the country a thrifty set of farm hands, happy and contented because they are surrounded by their families and are being given a chance to acquire something of their own and live decent, respectable lives. Only 15 per cent of this class have been unable to pay for their homes during the six years the system has been in existence. This two-acre tract for farm help is a part of the California plan.

"There are 32 countries in the world where the government has taken actual charge of farm settlement. America is one of the few that has done nothing. Australia has just appropriated $100,000,000 to extend this work in spite of having to send 350,000 troops to war from a population of only 5,000,000.

"If we are going to create more desirable conditions affecting rural life we must take action similar to what I have had occasion to investigate in Australia. Farm tenantry in America is growing. It is now nearly 40 per cent. If we are going to save our country from being over-ridden with an undesirable lot of outsiders accustomed to sordid conditions, but willing to pay the highest rent for our lands, we must act now and make our rural life fit to live by our own people."

Must Dig Down in Pocket to Pay Loss



By PAUL E. TRIEM.

J. P. Johnson of Silverdale, Wash., is one of the old settlers in the valley. Some 33 years ago Mr. Johnson homesteaded his original farm in this locality. During the last 15 years he has been a poultryman, and has succeeded in building up a productive flock.

Mr. Johnson looks back with considerable longing to a time when poultry feed could be bought for $14 a ton, and when, as a direct consequence, eggs could be sold profitably for nine cents a dozen. There was a moderate amount of money to be made in those days.

'It's a different matter, this year," he comments. "With wheat and other grain feeds where they are, it is almost impossible to come out square with the game. Our poultry plant, for instance, represents an investment of at least $3000. We get up at 4 in the morning and work till 8 at night. We feed carefully. We have the association cooperative store, through which to do our buying, at a big saving. And with it all, we have to dig down in our pockets every month and make up the deficit. Appreciating to the full, as we do, the necessity of doing our part to feed the country, and desiring whole heartedly to help to the extent of our ability, the fact remains that many of us face the alternatives of selling our chickens or of paying for their board out of our pockets."

In connection with the suggestion that wheat be eliminated from the ration and roots and kale put in its place, Mr. Johnson calls attention to the disastrous result of adopting this policy in Europe. The drop in production is reported to average 90 per cent.

Likes the Farmer.

To The Washington Farmer: Herewith I enclose 50c (fifty cents), for which please send me The Washington Farmer according to your rates, three years for fifty cents. We like the Farmer very much.

JOHN BYERS.
Clarkston, Wash.

To Form Council

Will Work With County Agent

A movement has been started to effect the organization of a county council of agriculture in Okanogan county. It will help to unify the efforts of the existing organizations and to strengthen the work they are doing. It is a nonpartisan, nonsectarian, nonsecret organization representing the whole farming population, men and women alike, and acts as a clearing house for every other association interested in work with rural people.

The purposes of the organization are:

1. To bring to the county agent the counsel and advice of the best farmers in the county as to what ought to be done and how to do it.

2. To provide an organization for quickly and easily reaching every community in the county with information of value to that community or to the county as a whole.

3. To provide a plan for organized self-help, enlisting the cooperation of all farmers interested in carrying out a county agricultural program of work.

Letters have been sent to every group of organized farmers in the county, setting forth the aims of the plan and asking that each organization select a representative to be present at the first annual meeting of the council and to represent the organization and district from which he comes.

Detailed plans for the first annual meeting will be published later, but they will include lectures by farm specialists, stereopticon views of special agricultural operations, business sessions to work out plans for the coming year's work in addition to entertaining features. The farming public will be invited to attend the entire session.

Walter A. Holt is agricultural agent for Okanogan county.

WANT MORE HOGS

Demanded by War Necessities

J. R. Shinn, county agriculturist for Spokane county, in conference with Charles Hebberd, federal food administrator for Washington, and the agricultural committee of the Spokane Chamber of Commerce proposes a working plan for a greater production of hogs in the Inland Empire.

Every farmer who has been drafted but not called, according to Mr. Shinn, should do his bit by raising sows. The Spokane county agriculturist declared such a plan to be workable. The chamber of commerce hopes to accomplish at once something to prevent the wholesale slaughter of hogs, and looked with favor upon Mr. Shinn's suggestion.

The vital necessity of more hogs on the farm immediately was urged by Mr. Hebberd.

"Patriotic citizens are carefully saving every little bit of bacon in their desire to help win the war by conserving food for our allies," says Mr. Hebberd. "That is a splendid movement on their part. Yet we are failing to produce the hogs we should. One brood sow on the farm will mean more in winning the war than the pork saving of 100 people. It is vitally important that hog production be increased at once. We are facing an emergency."

B. E. Smead, working in conjunction with Washington State college and the Spokane Chamber of Commerce, has been named to work in the country districts in organizing boys and girls' pig clubs.

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The Call to the Poultryman

The poultryman, like the man in almost every other productive industry, faces problems hard to solve. He is urged by the government to increase his output of meat and eggs to help feed the hungry world in a time when so much of the world is in the business of destruction instead of production. Yet the costs of poultry production have gone up in recent months far above the proportionate increase in the selling prices of poultry products.

Wheat is not only the staff of life for man, but it is the staff of life for hens as well. Yet it is so high in price that the poultryman can barely afford to feed it, and the allies need it so badly that the government urges him to substitute other feeds wherever possible. Both patriotism and necessity impel the producer to eliminate a large percentage of his wheat ration, and the great danger follows that he will be unable to maintain a profitable standard of production while making the experimental changes to other feeds. Furthermore, other feeds are no less expensive.

There is no specific remedy for the trouble. Would that there were. It is another case where personal judgment will have to be relied upon. The poultryman must save wheat when he can; he must use it where good results require it; he must buy as cheaply as possible and market with ever increasing study and care.

Keeping a Good Reputation

In a recent address a speaker said: "It is just as hard to lose a good reputation as it is to get it."

That is a higher concept of man's confidence in his fellows than most of us have. It ought to be just as hard to lose a good reputation as to get it, but is it? Do not people work long years to establish themselves in the confidence of their fellow men and then suddenly, by one careless or thoughtless or unfortunate act, bring everlasting suspicion upon themselves? If a neighbor has lived beside you for a decade and established himself in your opinion as honest and truthful, how long does it take you to become suspicious of him if he tells you one small lie, and how long does it take to remove the suspicions from your mind? If the store that has treated you squarely ever since you located in the community suddenly dumps a shoddy bill of goods on you when you expected your usual fair treatment, do you look at your purchases a little more carefully thereafter?

No, unfortunately for mankind, there is too little tendency in the human heart to believe its fellows; there is too great tendency to distrust. One lie, one cheating, one misrepresentation, even one bit of circumstantial evidence sometimes destroyes the work of a lifetime of reputation building. And a good reputation once lost is as difficult of reestablishing as is the drop of water that vanishes into vapor.

Eternal vigilance is the price of trust and confidence. How vital it is that the honest man be always honest and avoid all appearance of dishonesty! And how good it would be if neighbors and friends and acquaintances and patrons would strive to develop in their hearts more willingness to overlook small faults and see instead the record of honesty and trustworthiness in those with whom they come in contact.

Load Cars to Full Capacity

Comparatively few farmers order any considerable number of cars during a year to ship their produce. Many, however, do. Every such farmer and every warehouse or storage company, every cooperative association, every grange, every shipper of any kind or degree, should ship cars loaded to full capacity whenever it is at all practicable.

When a car is hauled in a freight train with only half a load, nearly half the transportation value of that car and a part of the engine power are wasted. It is a very real and serious waste, for every day producers and consumers are losing real value because of inability to send or receive produce.

There is real loss occurring at this time because of insufficient cars to handle the produce, manufactures, fuel and munitions in this country. Yet it is the exception rather than the rule for cars to be loaded with all they will safely carry.

Of course, the farmer with half a car of hay or stock or potatoes, or the like, can not fill a whole car, but somebody else in the community probably has something to ship that could be put in the same car, or the shipment could be so billed that a neighboring station could complete the car. Every effort should be made to eliminate this waste of carrying capacity while the whole world cries for transportation facilities.

Worth a Name

Years ago the writer knew a young lady whose name was "Babe." That was all the name she had. Her parents had been unable to decide on any name suitable for her, and so she had drifted along through childhood and young womanhood without any other title. To her acquaintances custom had dulled the absurdity of it. To strangers it seemed like a monument to the silliness of her father and mother.

Think of traveling through life without a name! We are tempted to sympathize with the prisoner who is designated by a number only; but he is better off than the person who hasn't anything to distinguish him from those about him.

Is your farm unworthy of any distinguishing name? Is it just like everybody's farm? Hasn't it anything that makes it stand out by itself? Isn't it better than other farms in some way? If you have anything good to sell, do you not think it would be fine to give the farm and the people of the farm the credit?

The name establishes the product as of a certain quality and value. A good name is worth money, and if you should sell out, the name would figure in the price, or ought to.

Apples a Necessity of Diet

Food Administrator Hoover, from the depths of actual experience, insists that the apple crop must move and that the apple is a real food. While helping starving people in Belgium he discovered that one cause of severe suffering was lack of fruit. Apples contain some vital and important principle of nutriment.

The great apple districts of the northwest will feel that renewed confidence that comes to those who realize that their worth is recognized and their virtues are not to be slighted by ignorance.

Washington Gleanings

M. J. Newhouse has taken up his duties as county agriculturist of Clarke county.

R. D. Williams of Pomeroy has received for wheat and barley sold off of his place this year, $15,993.23.

The school children of Olympia are making good progress with the fruit drying for the allies in Europe.

Products of the vine, tree and soil will pay people of Walla Walla valley approximately $14,000,000 this year.

One thousand tons of sauerkraut are being manufactured by the Interstate Products company at Vancouver.

Farm women of the North river country are giving 1000 quarts of canned fruits and vegetables to the Aberdeen Red Cross.

The report of the bureau of crop estimates of the United States department of agriculture places this state's potato crop at 9,880,000 bushels and amounting to more than $11,000,000.

Forty thousand pounds of hops to be grown by Andrew Slavin of North Yakima were sold to G. N. Grafton to be delivered during 1918, 1919, and 1920. The price next year is to be 16 cents, and for the following years is 15 cents.

The Yakima Fruit Products company has accepted a second contract to furnish cider vinegar to the government, this one calling for delivery during February of 30,000 gallons. This is in addition to 20,000 gallons sold already to the federal authorities.

Yakima valley crops for 1917 are expected to come close to $20,000,000. It is estimated that the present fruit crop will bring $500,000 more than last year, that fruit products will add $900,000, hops $50,000, hay $50,000, sugar beets $1,000,000 and wool $400,000.

It is the belief of officials of the Wenatchee Orchard Land company of Moses coulee, and also of coal experts who have visited the property, that enough coal underlies the holdings of the company in the coulee to supply all north central Washington with a high-grade product.

S. S. Kennedy of Chehalis has started to take out a large quantity of mint roots, which will be planted on a large acreage two miles east of Lakeview, for the North Pacific bank of Tacoma. The demand for mint roots is much greater than the present supply, according to Mr. Kennedy.

In a bulletin just issued by the department of agriculture it is shown that up to date 31,962 carloads of apples have been rolled over the country, of which 6369 were shipped from Washington alone. It is the largest amount from any one state, surpassing its nearest competitor, Illinois, by 1389 carloads.

Carl Greif, a farmer of the Uniontown district, purchased four head of purebred Shorthorns at the Lewiston stock show as a foundation for a purebred herd. He paid $600 for a bull from the Harry Sommers herd, of Bozeman, Mont., and $515 for one heifer from W. O. Minor's herd, paying the top price at the female sale.

E. M. Long of the Wenas raised 126 tons of No. 1 potatoes on his six-acre patch. They were sold at $30 a ton, making a return of $3780, or $630 an acre. Amos Ross of Tleton Drive, another root crop farmer, on his one and three-quarter acre tract, grew 27.5 tons of carrots, which he sold for $495, the price of $18 a ton.

What Others Say

Review, Toppenish: The sugar beet grower need not take a back seat for the grain grower when it comes to a question of patriotic service. Sugar is almost as important to the soldiers in the trenches as flour.

Banner, Buckley: Humanity, christianity and civilization, to say nothing of the great need of saving domestic animals for meat, leather and wool supplies, ought to prevent a single animal from dying by cruel neglect.

The Daily Hub, Centralia: The matter of a good rural credit system is only partially understood in the west, and any movement which will tend to get the banks and the farmers on a firm basis of understanding will be of benefit to the community.

Advocate News, Sumas: All Europe is short by many millions of hogs, as well as in other live stock, and it is estimated that it will require several years, even after the war is over, for those countries to get back to their normal production. That means high prices for pork for several years to come.

More Land Needs Water

Irrigation Institute Digs into Problems

By RAY W. FELTON.

If the food production of the United States is to play the all-important part in winning the war then the United States as a government should lose no time in getting every available foot of land under cultivation. Such was the substance of a resolution adopted by the Washington Irrigation Institute at its fifth annual session held at North Yakima December 4 and 5.

Uncertainty as to the government's policy of pushing to completion large irrigation projects in the northwest has prevailed for some time. The resolution adopted at the irrigation institute expresses the conviction that failure of the government to complete such projects without delay will be a serious detriment to the food situation and the department of the interior is appealed to in the hope that proposed projects may be speedily carried forward.

Want Long Time to Pay.

Having a bearing also on the war situation and what our farmer boys are to do when they return from the front was a resolution asking congress to amend a bill by Senator Chamberlain of Oregon proposing a method for the raising of funds for the reclamation of arid lands so as to provide for long-time payments for land purchased from the United States. This is hoped for because the institute believes such a plan will give the man who actually will live on the land an opportunity to acquire a home. The resolution refers to "our home-coming soldiers," urging that opportunities be opened to them to find a vocation and to make homes and firesides for themselves which will in part repay the great debt the nation will owe to them.

Resolutions were adopted asking the legislature to provide a measure which will prevent the contamination of streams from which water is taken for drinking purposes; requesting a law requiring state lands to pay assessments for benefits derived by reclamation work; assuring the support of the institute to the efforts of the state labor commissioner in his effort to improve housing, sanitary and social conditions for those engaged in regular seasonal farm work, and requesting the reclamation service to send its experts to the annual sessions of the institute in order that those present may have the benefit of their knowledge and their assistance in spreading the gospel of better farming.

Officers Are Elected.

Officers were elected for the ensuing year as follows: President, E. M. Chandler, Yakima; first vice president, E. F. Benson, commissioner of agriculture; second vice president, Walter N. Granger, Zillah; directors, Professor O. L. Waller, Washington State college; H. M. Gilbert, North Yakima.

The untiring efforts of the retiring president, Commissioner Benson, were recognized in a vote of thanks extended him and in various addresses delivered by members of the institute. The session closed with a banquet and a good fellowship meeting, after being pronounced one of the most successful meetings of the organization.

Mrs. Wallis Williams of Yakima, a representative in the last legislature, described some of the efforts she and her colleagues had put forth to get the water code "over the top." Senator D. V. Mortland discussed irrigation district and drainage laws. Attorney Ralph Williamson of the reclamation service told of legislation which had been secured to make the water code conform to existing local reclamation projects.

The address of Dr. Elwood Mead, of the University of California, on California's plan for rural development, occupied much of the time Tuesday afternoon and proved highly interesting and decidedly beneficial.

In the absence of R. H. Thompson of Seattle Captain Doane discussed the state's interest in the development of its water resources. S. J. Harrison of Benton City described his experiences in securing aid from the reclamation service for arid lands. Eck Baughn told of successful small pumping plants for irrigation purposes.

O. M. P. Goss of Seattle told of the uses of woodstave pipe for irrigation purposes and illustrated his talk with lantern slides. The development of the fruit byproducts industry was a most interesting topic handled by Ira D. Cardiff, until recently director of the state experiment station, but now head of a large fruit and vegetable evaporating plant in North Yakima.

Dr. T. D. Tuttle, state commissioner of health, opened the Wednesday morning session by talking on the use of irrigation canals as a domestic water supply.

Sheep on irrigated farms was a topic in which there was more than ordinary interest. It was ably presented by I. D. O'Donnell, the well-known farmer of Billings, Mont., who was given an ovation when he appeared. Discussion of Mr. O'Donnell's methods and the profits to be derived during these war times continued throughout the afternoon, and the topic was reentered for discussion whenever opportunity presented itself. Roy P. Bean, agriculturist for the Tieton project, took an important part in the sheep discussion.

Professor I. A. Balmer of Cle Elum related experiences with fertilizers.

C. H. Swigart read a paper by Engineer R. K. Tiffany of the reclamation service, giving data as to the amount of land under water in the Yakima valley and describing future projects. The paper stated that 202,000 of the 403,000 acres for which irrigation plans had been made were under cultivation in 1917.

Vaughan Morrill of the American Wood Pipe company, Tacoma, and George Royer of the Coast Culvert and Flume company, Portland, addressed the meeting Wednesday afternoon.

At the banquet I. D. O'Donnell presided as toastmaster, and toasts were responded to by C. J. Smith of the Union Pacific system; Howard A. Hanson, representing the Seattle Chamber of Commerce; J. H. Allen, state highway commissioner; R. M. Coglon, state leader of county agricultural agents; Lee M. Lampson, agriculturist for Benton county; Victor J. Garber of the Utah-Idaho Sugar company; Professor O. L. Waller, State College of Washington; Joseph T. Hinkle, president Oregon Irrigation congress; E. C. Burlingame, Walla Walla; Attorney Ralph Williamson, North Yakima; President-elect E. M. Chandler of the irrigation institute; the Rev. Dr. Bragon, Grandview; Attorney L. O. Meigs, North Yakima; Attorney John P. Hartman, Seattle, and Miss S. I. Anthon of the Yakima Republic.

Among those present at the convention were the following:

North Yakima—Eck Baughn, Mrs. J. R. Vincent, J. E. Forman, R. D. Rovig, J. G. Terry, W. L. Flagg, J. B. Fink, C. E. Hewitt, W. D. Wrighter, T. A. Noble, F. E. Maxley, A. B. Weed, R. S. Calland, R. I. Burrill, John Borgeson, J. O. Greenway, M. F. Thornton, J. N. Price, H. P. Vermilye, C. L. Darling, J. D. Storrs, W. L. Wright, C. M. Hauser, F. E. Ross, J. V. Ellis, Thomas Hope, L. O. Humphrey, W. L. Huxtable, G. W. Welkel, R. H. Hayden, E. P. Sanford, H. W. Hallowell, O. G. Steward, Mrs. Ina Williams, W. H. Johnson, D. V. Morthland, A. B. Cline, A. C. Volenback, H. S. Coffin, C. R. Villaume, N. C. Richards, H. Nelson, A. G. Pollock, R. F. Brindley, Frank Huston, R. H. Warnick, A. E. Larson, A. L. Strong, C. F. Vandewater, W. R. Rowe, O. E. Brashears, C. H. Hinman.

Sunnyside—C. E. Edwards, G. D. Hall, O. D. Lindgren, J. G. Heinz, W. B. Bridgman, W. R. Tuttle, C. E. Johnson, Bert Robbins.

Wapato—J. E. Childs, W. P. Sawyer, F. P. Lea, Ben Forman, P. E. Wise.

Zillah—J. W. Fitts, William Clark, J. A. Cheyne, W. H. Alsbury, K. A. Olsen, A. C. Lewis.

Grandview—Farwell Morris, M. R. Foisy, E. J. Brand, C. A. Christenson.

Kennewick—R. M. Freeman, J. J. Rudkin, L. M. Lampson, John Starhand, H. H. Davis.

Selah—Milo Erlandson, F. H. Walters, J. N. Dean.

Pullman—F. J. Seivers.

Beverly—F. W. Kellogg.

Seattle—O. P. M. Goss, E. J. Bartells, C. W. Nessley.

Okanogan—Calvin Casteel.

Tieton—M. E. Guptail.

Mabton—F. C. Story, W. A. Kelso, P. P. Maddocks.

Outlook—P. J. Quesinberry.

Portland—W. E. Douglas.

Toppenish—F. A. Wiggins, W. B. Meyers.

Naches—J. S. Moore, G. E. Mehl, T. E. Forsythe, E. Y. Robinson, O. Kail.

Benton City—L. L. Todd.

Prosser—S. W. Fristed, Luke Powell, J. C. Mathews, H. L. McClain, F. R. Schoenberg, B. B. Sherman.

Two Rivers—G. W. Chute.

Rimrock—T. I. Thoman, C. F. Gleason.

Granger—R. I. Mayer, Oscar Nelson.

Attalia—A. H. Hawkins.

Outlook—S. A. Shockley.

Kiona—W. A. Kelso.

Yellum—C. M. Mudd.

Billings, Mont.—I. D. O'Donnell.

NOTES OF THE INSTITUTE

Mrs. Ina Williams, Washington's only woman representative in the last legislature, created merriment at a session of the irrigation institute when she grew reminiscent and recalled some of the pioneer gatherings in the Yakima valley. It followed a recital of her experience at the last legislative session. "They (the pioneers) used to tell of the wonderful progress the county had made since their arrival in the valley," said Mrs. Williams. They told of the enormous waste places that had been turned into veritable Gardens of Eden, and so on and so on—the homes they had built and the children they had reared; but not one word about their wives. You would have thought they did it all themselves—even to the children. They told of the wonderful achievements of the late Jack Splawn and of the splendid work of Ben Snipes. It was all fine and interesting, but I used to wonder what Mrs. Jack Splawn and Mrs. Ben Snipes and all the other pioneer women had been doing all this time. But I finally came to the conclusion that, after all, we pioneer women must be very wonderful women to be the wives of these very wonderful men."

Lee M. Lampson, agriculturist for Benton county, started a lively discussion at the session of the Washington Irrigation institute by asking Farmer O'Donnell what he had done to overcome bloat in sheep and cattle. O'Donnell had been telling of the excellent results obtained by pasturing sheep on alfalfa. Lampson said this was one of their troubles in Benton county. O'Donnell said he had experienced little trouble. Roy P. Bean, agriculturist for the Tieton project, got into the fireworks in the afternoon. Bean is an acknowledged authority on animal husbandry. O'Donnell says Bean has him "skinned to death." Well, Bean's remedy for bloat, both in sheep and in cattle, is to keep them off the green alfalfa. E. C. Burlingame of Walla Walla and others told of stockmen who made a practice, like O'Donnell, of running sheep and cattle on green alfalfa without bad effects. Burlingame declared it was largely up to the man and the way he handles the situation.

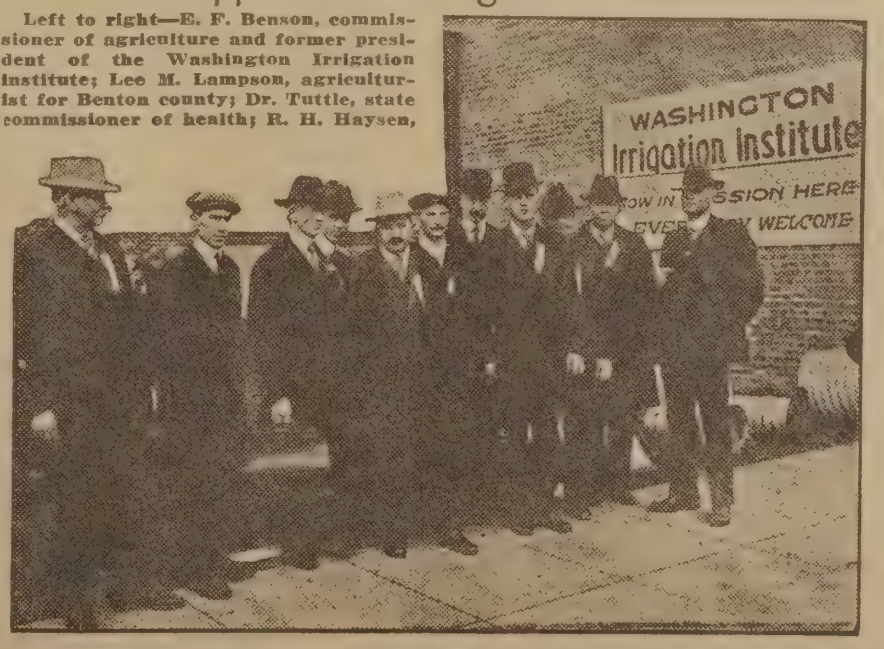
The labor problem has been especially acute this year in Northwest districts where sugar beets have been raised. I. D. O'Donnell was asked at the recent session of the Washington Irrigation institute what they had done in his state (Montana) to overcome the trouble of getting reliable help to stick to the sugar beets. He said the Russian had been found to be the best labor. "He is thrifty and he will bring his whole family and stay with you the year 'round if you need him," said Mr. O'Donnell. "I have several Russian families on my farm and they have proved highly satisfactory. They are much better than either the Mexicans or the Japanese, and they know the sugar business."

Speaking of conserving what ordinarily are farm waste products, I. D. O'Donnell, the Billings farmer, says he makes more off the waste products of his farm than the entire crop of the average North Dakota farm. Waste products, he says, can be made to produce from $7.50 to $15 per acre. During these high prices most any farmer can make money, O'Donnell asserts, but in ordinary times money is not so easily made, and the real "velvet" comes from utilizing what ordinarily is thrown away or left to decay. Mr. O'Donnell says they make excellent "maple" syrup on his place out of a combination of sugar beets and corn cobs.

Discussing the paper read by R. K. Tiffany, manager of the reclamation service in Yakima, F. A. Wiggins of Toppenish, at the irrigation institute, made an eloquent appeal for extension of all irrigation projects, but referring especially to the idle land on the Yakima Indian reservation. Mr. Wiggins declared the nation's war debt must be paid by the soil, but the soil can't pay it unless a lot of the land now idle but capable of big production, is placed under cultivation.

Snapped at the Irrigation Institute

Left to right—E. F. Benson, commissioner of agriculture and former president of the Washington Irrigation institute; Lee M. Lampson, agriculturist for Benton county; Dr. Tuttle, state commissioner of health; R. H. Haysen,



secretary of the Washington Irrigation institute; Marvin Chase, state hydraulic engineer; I. D. O'Donnell, well-known Montana farmer; F. F. Morris, Grandview; F. W. Kellogg, J. G. Heinz, Manager T. R. Horne of the Utah-Idaho Sugar company, W. W. Robertson of the Yakima Daily Republic.

Red Cross Seeks Ten Million New Members

(Continued from page three.)

hospital each, and some of them have been reenforced to enable them to take over larger hospitals.

The Red Cross has also organized 45 ambulance companies, with a total personnel of 5580, all of which have been taken into the army medical corps, some for service abroad, others for the camps and cantonments. A general hospital for the use of the navy has been established at Philadelphia. Convalescent homes have been built.

Through its sanitary service the Red Cross is cooperating with local health authorities in maintaining the best possible sanitary conditions in the zone just outside military jurisdiction at the training camps and cantonments. Twenty sanitary units have been organized for this purpose.

The Red Cross has placed field directors of camp service at 38 camps, cantonments and naval stations. The purpose of the camp service is to cooperate with all the agencies that are advancing the welfare of the enlisted men.

My Experience With Poultry

By J. M. SIGNOR, Buckeye, Wash.

The Farmer is a welcome visitor at my house every week and I find many helpful ideas and much valuable information in its various departments. Ideas worked out into real experiences make interesting reading and are much more valuable than just theories. As I have had some experience this past year in chicken raising I pass on a few things which may help some reader of the poultry page. In my article last spring telling of my progress in reducing tall timber land into a working poultry and hog ranch, I mentioned a poultry house in process of construction and I have it nearly finished now.

It is 86 feet by 16 feet, 5 feet high in front and 4 feet high at the rear. It is constructed with a jog in the roof and there are seven windows in that jog in the drop front facing the south. There are also seven other windows on the front fitted up with curtains and screens for the purpose of letting in fresh air.

There are windows along the rear of the building also which let in light under the dropping board. This allows about double space for scratching. The fresh air space and the number of windows required for most satisfactory results was figured out and arranged by the poultry department at the state college at Pullman, Wash. There are windows enough to furnish all the light needed when there is any daylight, but during the short days when darkness come on so early and the days are short, too much of the time of the hens is spent on the roosts and that is just the time when eggs are high and we want the hens to keep strictly onto their job. That any self-respecting hen is perfectly willing to do that has been proven beyond a doubt by those who have furnished hens artificial light. Therefore acting upon this experiment, my poultry house is fitted up with lanterns which will furnish light during the short days and during that period the artificial lighting will have to begin about 4 o'clock p. m., and I shall not turn it off till about 8 o'clock in the evening. I don't happen to live on an electric line; any one who does could have the poultry house wired, which would make less work.

I have just finished my poultry house and as my laying stock of fowls are all very young I have no great results to report as yet, but I am planning to get results which will be worth while. Even now my flock of young pullets are worth mentioning. I raised 300 White Leghorn single combs, Wycoff strain. My first hatch came off April 15 and my second hatch May 15. They commenced to lay at the age of six and a half months. Of course they are not yet up to their best by a good deal, especially the second batch, but even so I am getting from the young flock of 250 from 50 to 60 eggs a day. I will give the daily ration and cost:

Sprouted oats before wetting	15 lbs. cost 26c
Potatoes, carrots and mangels boiled	15 lbs. cost 23c
Mixed with the above vegetables	
Egg mash	5 lbs. cost 20c
Bran	5 lbs. cost 20c
Cracked corn	15 lbs. cost 40c
Wheat	10 lbs. cost 28c
Oyster shells	cost 10c

This makes the daily cost for feed....$1.47

For 31 days, the expense will be $45.57, and as the price of eggs is now so high that I am getting 55 cents cash, even though my flock is only producing five dozen a day my profit, over the price of the feed, amounts to $39.68. This is not so bad for a beginner in the poultry business. Of course I expect to get more eggs when the whole flock of pullets get started at laying. I have not a very wide field of experience in raising chicks, but I learned some things this last spring that are worth mentioning.

I have an oil heater in my brooder house and I learned in handling my young chicks that they require a temperature not less than 84 degrees within 10 inches of the floor, where they hover at all times of the day and night. They need this degree of heat to keep them from piling up and preventing the under ones getting sufficient fresh air. They also need this amount of heat to keep them contented and lively so they will scratch and keep busy and healthy. Another thing I learned by experience is how to keep their bowels regulated. First and always the house must be kept dry all the time. There is nothing worse than dampness for young chicks. Don't get a mistaken idea that they should run out on to cold, damp ground even though the sun shines. Keep them dry, but see that they have fresh air inside the house.

I watched the droppings carefully and found I could keep their bowels regulated by careful feeding of the prepared chick feed. My trouble was to avoid feeding too much. I found that a low pan of fine grit was very essential to their health and when their bowels showed signs of becoming too loose, I added more charcoal to the chick feed. There is nothing better for either hens or chicks. I watched my young chicks closely, looking them over twice a day, and if any were ailing I took them to the house where I had a little hospital. If they were bound up in their bowels, I gave them a couple of drops of sweet oil and a little bran till they came out all right, when I took them back to the flock.

I noticed if the chicks ate feathers they stopped as soon as I gave them plenty of bone meal. This is worth taking note of as when chicks take to eating feathers they will pick each other and I have known a whole flock to literally be eaten alive, the stronger ones getting away with the weaker ones.

The demand for eggs and the price which holds up from year to year keeps interest keen in best poultry methods. I have been engaged in about all kinds of farm business and am free to say that poultry raising seems to me to be the most interesting.

Quicksands are not caused by water constantly flowing over sand. It is only where there is an upward current that they are found. Imagine, for instance, a bucket filled with sand. Water poured on that sand does not make it "quick." If, however, the bucket had a hole in its bottom and water was forced through the hole quicksands would be formed.

Artificial and Natural Incubation and Brooding

Have everything ready beforehand and start your hatching operations early in the year, says Harry M. Lamon, of the United States department of agriculture in Farmers' bulletin 528.

A well-ventilated cellar is the best place to operate the incubator.

The machine should be operated according to the manufacturer's directions.

See that the incubator is running steadily at the desired temperature before filling it with eggs. Do not add eggs to a machine during incubation.

Turn the eggs twice daily after the second and through the eighteenth day. Cool the eggs once daily according to the weather, from the seventh through the eighteenth day.

Turn the eggs before caring for the lamp.

Attend to the machine carefully at regular hours.

Keep the lamp and wick clean.

Test the eggs on the seventh and fourteenth days.

Do not open the machine after the eighteenth day until the chickens are hatched.

Eggs saved for hatching purposes should not be subjected to high or low temperatures.

In cold weather place from 10 to 13 eggs under the hen; in warm weather from 13 to 15.

Always test the hen on china or nest eggs before setting.

Given proper care and attention, the hen is the most valuable incubator for the farmer.

Use insect powder freely to exterminate lice when necessary.

February, March and April are the best months for hatching.

If several hens are set in one room, it is desirable to confine them in good nests.

Straw and hay make good nesting material.

Broody hens should be moved to the permanent sitting nest at night.

Whole corn is a good feed for sitting hens. Water, grit, and dust baths should also be provided.

All eggs should be tested by the seventh day, which often makes it possible to reset some of the hens.

Toe-mark the chicks as soon as they are hatched. This enables one to tell their ages later.

Powder the chicks occasionally during the first eight weeks.

Start the brooder a day or two before putting in the chicks to see that the heating apparatus is working properly.

Brooder lamps should be cleaned every day.

A record should be kept of each hatch, showing the date set, number and kind of eggs, number tested out, and the chickens hatched.

Chicks should not receive feed until they are 36 hours old.

In cool weather 10 to 13 chicks are sufficient for one hen, while in warmer weather 15 to 20 can be cared for successfully.

Never mix chicks of different ages.

Confine the hen until the chicks are weaned.

The coop for hen and chicks should be well ventilated, easy to clean, and of sufficient proportions to insure comfort.

The early hatched pullet is the one that begins to lay early in the fall, when eggs are high in price.

The cockerel that can be marketed as a broiler in March or April brings more money than the one marketed in June.

Tough meat or fowl should not be fried or roasted unless parboiled first.



184 Chicks From 187 Fertile Eggs

Mrs. Adolph Denis of Brainerd, Minn., has achieved that success with an X-Ray Incubator. And the 1918 X-Ray Incubator is better than ever. Possesses 20 exclusive features—including X-Ray Gas Arrestor that prevents lamp fumes entering egg-chamber; X-Ray Nursery Tray that assures sanitation—protects chicks; X-Ray Egg Tester, most perfect, handy tester ever conceived; Handy Height; Quick Cooling Egg Tray. All features that make poultry success surer.



1918 X-RAY INCUBATOR

Needs to be filled only once during the entire hatch. Has X-Ray Automatic Trip that regulates flame and prevents both chilled eggs and overheated sides.

Express Prepaid

Shipped Express Prepaid to Practically all Points.

1918 X-RAY BROODERS

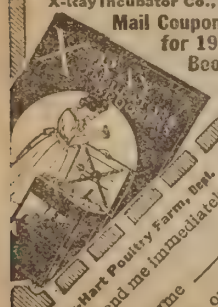


Express Prepaid

Built now with famous X-Ray Duplex Heater, insuring uniform and properly distributed heat. Canopy top that protects chicks against draughts and excessive sunlight.

Address BAKER-HART POULTRY FARM Dept. 24, Beaverton, Ore. *Northwestern Distributors*
X-Ray Incubator Co., Des Moines, Ia.

Mail Coupon Today for 1918 Book



Baker-Hart Poultry Farm, Dept. 24, Beaverton, Ore., *Northwestern Distributors*
Send me immediately your free 1918 X-Ray Catalog.

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Somewhere in America

Laying submarine cable, hundreds of miles of it, to scores of isolated lighthouses is one of the telephone tasks made necessary by the war. The Bell System has also built lines connecting some two hundred coast guard stations.

It has built complete telephone systems for fifteen National Army cantonments and fifteen National Guard camps, each a city in size, and also at many naval, officer's reserve, mobilization and embarkation camps and at army and navy stations.

It has provided an enormous increase in long distance facilities throughout the country, that satisfactory service may be maintained between cantonments, training camps, guard outposts, military supply stations, war industries, the National Capital and other centers of Government activity.

The Government facilities at the National Capital have already been increased three-fold and there has been a tremendous increase in local and toll facilities.

Fifteen thousand miles of telephone wire have been taken from other use for the exclusive service of the Government and some 20,000 miles of telegraph facilities also provided.

Meanwhile the Bell System has given generously of its man power, until over seven thousand men are in service or recruited for military duty.

Members of the Bell System whether they have already gone to France or whether they have stayed at their posts to help mobilize the country for victory, are equally in the service of the Nation.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
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One Policy One System Universal Service

Halifax Destroyed

Munitions Cargo Is Exploded

It is estimated that something like 4000 persons lost their lives in Halifax, Nova Scotia, last week, when a large freight steamer, Mont Blanc, loaded with a cargo of munitions and other explosives, blew up in the harbor. The explosion was caused by an accident in which a smaller vessel collided with the munitions ship. The shock was so great that all the buildings and shipping within a radius of two miles were either totally destroyed or badly damaged. The property loss alone will run into many millions of dollars. Following the destructive explosion fires began burning in scores of places and much of the loss of life was due to them. A large percentage of the loss was due to the stunning violence of the shock. To add to the horrors of the situation a severe blizzard swept the stricken city and surrounding country following the disaster. Aid has been rushed from all directions. The American Red Cross was among the first to respond, supplies, medicines and nurses and doctors being rushed to the city by special train as quickly as possible. Owing to the enormity of the disaster the progress of rescuing injured persons and the bodies of the killed has been slow and it will probably be several days before the exact number of victims will be known. Many were injured, some fatally and some only temporarily. It is reported that the explosion was caused by fire aboard the munitions ship resulting from the collision. It is said that the explosion did not occur until 15 minutes or more after the collisions. In the meantime the crews of the ship in large part retreated to places of greater safety, but many of them lost their lives in like manner as did the residents of the city.

U. S. Vessel Destroyed.

A German submarine last week did the first serious damage yet reported to the United States navy when it torpedoed and sank a U. S. torpedo boat destroyer, the Jacob Jones. It is reported that about 70 lives were lost in the sinking.

The Jacob Jones, one of the largest and newest American submarine chasers of her type operating in the Atlantic, was the first American warship to fall a victim to a German submarine, but was the second American destroyer to be lost in foreign waters. The Chauncey sank with her commander, two other officers and 18 enlisted men, after being cut in two by the transport Rose early on the morning of November 20.

Work Eight Hours.

The Western Pine Manufacturers' association, one of the greatest lumbering organizations in the west, has agreed voluntarily to put into effect in their plants an eight-hour day. This is said to be the first action of this kind ever taken by a lumbering concern in the United States, and follows a movement by the United States department of labor and the council of national defense started with a view to solving in so far as possible the laboring problems affecting the industry. Secretary of Labor William B. Wilson is now in the west, and when the association took the action it did he telegraphed President Wilson, who immediately wired an expression of his appreciation of the agreement. The association has organized within itself what it terms an association for labor efficiency.

The association for labor efficiency, with 16 of the largest lumber companies of western Montana, Idaho and eastern Washington and Oregon as its members, will have at its head an "employing manager expert."

The members of the Western Pine Manufacturers' association, which has its headquarters in Spokane, carry an annual payroll between 25,000 and 30,000 men, according to Secretary A. W. Cooper. Its production is 1,250,000,000 board feet a year, which is slightly less than 3 per cent of the entire output of the nation.

War on Austria.

In another part of this paper is given the address of President Wilson to congress when that body met last week. In that message the president recommended that this country declare war on Austria, the principal ally of Germany. Following that advice, congress, with but one dissenting vote, that of the lone socialist member in the senate, voted that this country should declare a state of war to exist between the two countries. The action was specially recommended by President Wilson in order to permit the vigorous control of Austrians in this country, who will, by the declaration of war, become alien enemies, and can therefore be controlled under military authority.

Can Italy Stand?

The eyes of the world are still on Italy and the gigantic struggle she is making to withstand the invasion of the German armies. It is believed that the Germans are massing their troops on the Italian front with a view to undertaking one of the greatest offensives of the war with a view of crushing that country if possible. As a result, Italy is preparing her utmost for defense, and the allies are rushing what aid is possible to her without weakening other battle lines dangerously.

Farmers in Session

(Continued from page three.)

note, but there was also the note of determination on the part of the farmers to prepare to maintain what advantage war legislation gave them, and to press to a "successful conclusion" the age-long fight for equitable treatment.

Indorsing by unanimous vote the action of the national convention in Arkansas last month, the convention at Pendleton adopted a resolution pledging their loyalty in the following words:

"Resolved, That we pledge the support of our union; we pledge our property, our lives and dedicate our sons to the support of President Wilson for the successful prosecution of the war."

This loyalty extends not only to the giving up of sons to the service of the army and the navy, but to the putting forth of the utmost effort for increased food crop production. There was manifest at the meeting, however, a pronounced sentiment favoring federal ruling whereby labor for the farms of the country might be insured without handicapping the recruiting of the military forces. A resolution was presented urging the exemption of farm laborers, but this aroused opposition on the ground that it would appear unpatriotic on the part of the farmers, and at the same time establish something in the nature of a favored class for exemption. The resolution was finally framed so as to provide not for exemption, but for draft of farm labor to be placed on the farms under government orders instead of being sent into the army.

To Solve the Sack Problem.

The war promises to do what the farmers have been trying to accomplish for many years—solve the sack problem. The demand for grain bags for defense work in the trench fighting in Europe, promises to take the entire supply and leave none for the farmers and they will be forced to handle grain in bulk next year. This is the opinion of men well posted on conditions as they now exist and the prospect for the future. Dr. H. McIntosh of Oregon Agricultural college, sounded a warning to the farmers on Thursday afternoon when he announced that some of the leading importers of grain bags are not handling sacks and will not take contracts for future delivery. Mr. McIntosh stated that what few contracts have been made are at the rate of 19 cents for sacks in 50,000 lots at Portland, for March delivery.

Dr. McPherson gave same interesting statistics on the bulk grain situation in Washington, Oregon and Idaho. He said: "Oregon produces in round numbers, 35,000,000 bushels of wheat, oats and barley and we have 17 elevators with capacity for only 1,250,000 bushels. Idaho has 125 elevators, but I have not their capacity. Washington has 79 elevators. Oregon is far behind and must act quickly in order to handle the crop of 1918."

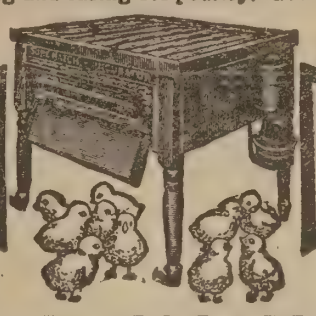
G. B. Hebgardt, engineer of the port of Portland, also advised farmers to prepare at once to handle their grain in bulk next year. He said the government has already commandeered 60,000,000 sacks for trench building in Europe and it will be next to impossible to secure sacks for grain next year. The price of sacks will be so high that farmers can not afford to buy them, he said, even if they were certain of getting them at any price. Mr. Hebgardt said that the government is cooperating with the farmers in order to help them handle their grain in bulk and had allowed the steel for the new $3,000,000 elevator at Portland to be rushed through to the exclusion of other freight, in order that it may be built in time to handle the crop.

Wives—Here's Your Chance To Make Money Easily

Every married woman who reads this should send for our big catalogue and poultry book **Today**. There are big profits raising poultry, bigger profits than ever, because of war prices for chickens. This book tells you how **you** can make money sure. How to secure valuable poultry feed **cheap**. It's no trouble to raise chickens or ducks or turkeys when you have a **Sure Hatch**. Safe and durable. Lasts for years. Hatches sound, sturdy chicks. Makes big, sure profits. Thousands of wives are getting big independent profits every year with Sure Hatch.

Here is what Mrs. Thomas Tucker of Illinois, says:—"I write you a few words in regard to the Sure Hatch I purchased from you nine years ago. It certainly has been a sure hatch for me and I don't think I can farm without it. I have always had good hatches." We have hundreds of letters like this. Read them in our big catalogue. See how others have made big profits with **Sure Hatch**. You can do as well or better. The big poultry book tells you how. Lots of valuable money making information, all about raising and caring for poultry. Get this book today—sure.

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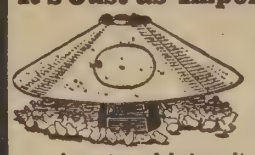
Strong, Sturdy Chicks Make Money

Nearly $700,000,000 was paid last year to Farmers, Farmers' Wives and Poultry Raisers for Poultry and Eggs. What share of this year's greater amount are you going to get? Get in this big, profitable business **now**. Get in **right**. War is bringing bigger profits in poultry **now** than ever before. Chicken meat must replace all the beef and pork that is being exported. There is a shortage now. Help supply the demand.

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Don't waste time and money experimenting. Sure Hatch chicks make money sure because they are strong, sturdy and healthy. The hen herself can't raise better nor anywhere near as many. **Sure Hatch** is easy to operate. The children can take care of it—it's so safe and simple. Will last for years. It will pay for itself many times over in a year. Some wives have made 1000% profit the first year—over ten times the cost of the incubator.

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The *Sure Hatch Fresh Air Colony Brooder* raise all Sure Hatch chicks hatched. Self-feeding, self-regulating, simple, safe, enduring. Costs less than 6 cents a day to operate. Saves little chicks from cold, smothering, etc. Raises all Sure Hatch chicks.

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A post card brings it to you promptly. You can see then what others have done—what you can do. Learn how to prepare and secure cheap poultry feed. The Sure Hatch comes to you complete, fully equipped. No extra charges, no freight to pay. Write for the book **today**. It means money for you. It's Free. Mail a post card today.

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Trap-Nested Barred Rocks Why?

A low fence holds them.
Their combs do not freeze.
In cold weather less colds and roup and more eggs than small birds.

Our breeding hens have trap-nest records of 160 to 264 eggs in 12 months, averaging 177. At 1917 prices that is over $5 per hen. When the hen is marketed the average price for meat is over $1.

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This Booklet "The Electrified Hen" tells of successful hatching and raising of big strong chicks. You of course want to know how. Some report "Chicks three weeks old, not one lost". "Chicks as big at four weeks as at five weeks by any other plan". Endorsed by Experiment Stations, Poultry Papers, and all others who have used them. No lamps to bother with, no danger, no worry, perfect control of temperature, big healthy chicks, good profits, satisfied customers. Write to nearest address.

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Chase and Snowflake strains. My birds won 17 prizes at Spokane Interstate fair, 1917. Cocks, ckls., eggs, chicks. A few pairs of Golden Seabright Bantams.

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I have 50 of the best cockerels that I have ever seen in one yard that I am offering at low prices, quality considered, in order to move them quickly to make room for younger stock. Prices range from $5 to $15 and can give you good selection if you will write me your wants. Can spare a few good pullets at $2.50 each. Let me hear from you.

E. F. BATTEN, HOOD RIVER, ORE.



A. B. NYSTROM, Editorial Contributor

Succulence

Most Important for Dairy Cows

As winter draws nearer our dairy feeding problems become harder. A good thing to remember at this time is never to get out of green feed. A good dairy cow can make good use of the dry hays and concentrates she is given, but she can make better use of them if she is given some succulent feed in addition.

Such crops as roots, kale, silage, etc., should not be relied upon to furnish all the nutriment the cow needs. The cow can not make much milk on such feed alone because they are too high in water content. But when this sort of feed is given in addition to the regular ration of hay and grain the cow will produce her maximum.

Figure out the number of tons of succulence you will have available between this time and the time your new pasture is ready in the spring. Then calculate how many individual rations of succulence you must supply, by multiplying the number of cows by the number of days you will need to feed, and then apportion the green feed accordingly.

As an example of the above suppose we have 10 cows in the herd and we must feed from December 1 to May 1 approximately 150 days. This requires 1500 daily feeds. Now suppose again that we have only 18 tons of succulence available until our new supply is ready in the spring. The 18 tons is equivalent to 36,000 pounds, and by dividing this by 1500, giving us 24 pounds which is the average daily allowance we should give our cows. This amount is to be varied to suit the individual need of each cow.

The point I wish to make is that it is better to provide a little green feed all the time than to give large portions a part of the time and none at all part of the time. The cow can not do her best work unless she is given this feed of a high water content. Giving her dry hay and then a bucket of water will not answer the purpose. She likes to have the water in its original state.

The cow needs roughage, concentrates, and succulence, and the most important of these is succulence.

A. B. N.

Cow Testing

First Association in Michigan

The first cow-testing association was organized in Newayge county, Michigane, January, 1906, is still in existence and now has 30 herds with a total of 304 cows. The following year three new associations were organized in that state. In 1908 three were organized in Maine and one in New York. The next year five other states entered the list.

Wisconsin now leads in the number of associations, 81 being in operation in that state. Other leading states are Vermont with 47, New York with 43, Iowa and Ohio with 30 each, Minnesota with 26 and Pennsylvania with 24. During the year ended June 30, 1917, 95 new organizations were established.

Yamhill County Records.

Following is the honor roll of Register of Merit cows making 50 pounds or more of fat in the Yamhill County Test association for October:

Poppy's Twin Maiden, owned by Ed Carey, 64.8 lbs.; St. Mawes' Susy, owned by Ed Carey, 63.2 lbs.; Guendola Olga Chimes, owned by Del Perkins, 62.7 lbs.; Goldie's Nehalem Beauty, owned by Reid Stock farm, 56.9 lbs.; St. Mawes Rose, owned by Ed Carey, 54.8 lbs.; Boise Queen, owned by Ed Carey, 54.7 lbs.; Beauty Olga, owned by Del Perkins, 54.1 lbs.; Silver Chimes Rua, owned by Del Perkins, 53.8 lbs.; St. Mawe's Beauty, owned by Ed Carey, 53.8 lbs.; Belle, owned by R. E. Martin, 53 lbs.; Susy's Twin Maiden, owned by Ed Carey, 52.5 lbs.; Lucy of Pleasant View, owned by Ed Carey, 52.2 lbs.; Miss Inez, owned by W. A. Forrest, 50.6 lbs.; Dufrana's Jessie, owned by F. E. Lynn, 50.1 lbs.

Ed Carey and Del Perkins had the two highest producing Register of Merit herds.

There are 28 silos owned by 20 members of the association, only three members being without silos. Only one herd is without a registered sire.

October Milk Prices.

Percy A. Smith, secretary of the Oregon Dairymen's league, has secured from boards of health in several cities the October prices on milk which he says proves that Portland then got better milk for a smaller price than elsewhere. The Portland price is quoted as 10 to 11 cents a quart to consumers. It has since been raised to 12½ cents a quart.

City—	Consumer's Price. Cents.	Butter Fat. Pct.
Spokane	13	3.8
San Francisco	12	3.4
Denver	12	3.3
Seattle	12½	3.7
Detroit	13	3.4
New York	14	3.6
Boston	13	3.3
New Orleans	14	3.6
Cleveland	12	3.4
St. Louis	13	3.5
Pittsburg	13	4.0
Washington, D. C.	14	3.8
Portland	10 to 11	4.0

Stillaquamish Cows.

According to the report of Will W. Henry, official tester of the Stillaquamish Cow Testing association, 469 cows were tested during the month of November with an average of 519.7 pounds of milk per cow and 25.66 pounds of butter fat. The average cost of feed per cow was $5.96. Five cows produced over 50 pounds of butter fat for the month. The highest average was made by a cow owned by Carsten Thomsen, which produced 59.1 pounds. Nine cows were sold for beef last month.

Mr. Henry adds: "The herds where succulent feed is not supplied at this time of the year are practically dry. The only two available succulent feeds are root crops and silage. Most farmers consider it too much work to raise root crops for cow feed, so the only alternative is to build a silo.

Report of Ferndale Association.

Three hundred and ninety-one cows in the Ferndale (Wash.) Cow Testing association were tested during October with the following averages per cow: Milk 681.6 pounds; butterfat 27.63 pounds; feed cost $4.11. Fifty-eight cows gave 1000 pounds of milk or over, 54 cows produced more than 40 pounds of fat and of these, those tested below gave more than 50 pounds of butterfat, according to Victor Morgan, official tester. George Steiner's registered Holstein, Bos Gerber De Kol 2nd, was the highest producing cow for the month. At the time of the association test she had been fresh two and a half months and was giving a daily flow of 95.9 pounds of milk.

Snohomish Cows.

The following cows in the Snohomish Valley (Wash.) Cow Testing association produced over 59 pounds of butterfat during the month of October, according to the report of E. W. Soper, official tester:

Owner of Cow.	Name of Cow.	Lbs. B. F.
G. B. Shadinger	Beauty	56.6
D. Metz	Mary	68.8
D. H. St. John	Julia	58.1
D. H. St. John	Susie	50.4
Herman Steffens	Miss Lyons 2d	51.2
Herman Steffens	Hills Dales	
Herman Steffens	Colantha Ormsby	55.7

Uses of Scrap Leather.

Scrap leather is used for various purposes, including manure, the manufacture of heels, glue, dolls, children's shoes, washers, etc. Sometimes the greases and tanning materials contained in the leather are extracted to be used again. Burnt leather is a material much in demand for use in the "hardening" of metals.



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The ATKINS Cross-Cut will make you money because it cuts quicker, more accurately and easier than other cross-cut saws. It will save your time—and the valuable time of your hired hands. Furthermore, an Atkins stays sharper and requires less fitting than other saws.

Buy the BEST cross-cut you can get—an ATKINS—and accomplish more and better work on your timber land or farm.

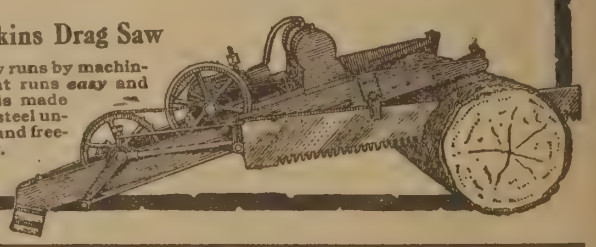
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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor.

Live Stock

American National Association

I. T. Pryor, president, and T. W. Tomlinson, secretary, have issued the call for the 21st annual convention of the American National Live Stock association, to be held at Salt Lake City January 14-16, 1918. The executive committee has extended a cordial invitation to all stockmen to attend this convention. Among the many subjects for consideration are:

Efforts of our government to stimulate the production of live stock, and what live stock producers should do.

Policy of the United States food administration toward the protection of producers.

Effect of the war on the live stock industry.

Better utilization of animal feeds, so as to produce meat animals at a lower cost.

Terms of the federal license of meat packers.

Investigation of the meat industry now being conducted by the federal trade commission.

Work of the bureau of markets in distribution of live stock and meat statistics.

Live stock conditions in foreign countries.

Necessity for an accurate federal census of live stock.

Effect of the drouth in Texas and the southwest.

The cottonseed meal combine, and what steps should be taken by the federal government to regulate the supply and price of cottonseed cake and meal.

Land designations under the 640-acre stock raising homestead bill.

Reservation of driveways and water holes.

Classification and disposition or control of the remaining public land not designated as applicable to filing under the 640-acre law.

Some proposed changes in the grazing regulations on the national forests.

Extermination of predatory wild animals.

Poisonous plants.

Work of the bureau of animal industry in the eradication of ticks.

Inspection of meat, hides and wool from foreign countries.

Importation of live stock from countries where contagious diseases exist.

Protection of live stock owners and ranchmen in Mexico.

Meat inspection laws.

Financing live stock loans.

Proposed advance in railroad rates.

General investigation by the interstate commerce commission of all railroad rates, rules and practices involved in the transportation of live stock, known as docket No. 8436.

Service of railroads.

Shortage of cars.

Report of market committee.

Reports of other standing committees.

The 54th annual convention of the National Wool Growers' association meets in Salt Lake City, Utah, January 17, 18 and 19, 1918, immediately following our convention.

The National Western Stock show will be held in Denver, January 20, to 26, inclusive.

The railroads are arranging to publish for the Salt Lake conventions one and one-third fare for the round trip from practically all points in the west. From Idaho, Nevada, Oregon, Washington, California, points in Utah west of Salt Lake City, and points in Montana routing via Salt Lake City, a fare and one-third has been granted to Salt Lake City.

Veterinary

Dr. S. B. Nelson

Blind Teats—I have two sows that have "blind" teats. I noticed one when quite young. The teats did not seem to develop like the others and the ends close up so they will never give milk. The other I bought from a neighbor. A hard ring forms about her teat, then it undergoes a change and closes up. What is the cuse of this?—W. L. S., Dayton, Ore.

There are two causes of blind or imperforated teats in animals. The one is when the trouble is congelical, when the animal is born with it. The other is due to one of many different types of injury. It depends entirely upon the condition of the teats as to what the treatment may be. Secondly the openings of the teats ascetic conditions and keeping the opening of the teats open for a period of time will overcome the trouble. The only thing that has to be looked after is that the infection is not introduced into the teat, because if it is it will destroy the udder. In the sow I do not believe it is worth trying to remedy. It is too much trouble.

Chronic Metritis.—I have a cow which I have been unable to get with calf. Her last calf is about 20 months old. About 15 months ago the cow ate hay containing weeds which caused her to lose her calf at two or three months. She has a frequent discharge of a thick, white mattery substance.

C. D. M., Oakley, Idaho.

Judging from the sypmtoms that you give, especially the length of time since she lost her previous calf and the fact that she has purulent discharge of the genitive organs I am of the opinion that she has chronic metritis or inflammation of the womb. I do not know if she will yield to treatment or not, but you might try the following: Wash her daily for a few days with a normal salt solution containing one teaspoonful of common salt in one quart of boiling water, and allowed to cool. It will take a number of gallons of this solution in the proportion given to wash her out as she sould be. Then later do this every other day, and between these two days when you use this solution wash her out with a 2 per cent solution of lysol. Later treat her once every three days, and then twice a week, and then possibly once a week until the discharge stops. Let ner go over two periods of heat and watch if the discharge reappears. If not, breed her in the third period of heat.

Pigs Cough—I have some 3-months-old pigs that have a bad cough. I have been feeding milk and shorts and it seems to choke them. They have good, dry straw to sleep in.

B. O., Prosser, Wash.

Stop feeding shorts and use a little bran instead, and then if the pigs are large enough feed them dry rolled grain, either wheat or oats. Give them in their feed about a half teaspoonful to a teaspoonful of castor oil per pig. If you have a number of them divide them into small groups. You may give the castor oil once daily for three or four days.

No Place to Go.

Madge—"Why didn't you go into the conservatory with Jack?"

Marjorie—"That's no place to go during the mistletoe season. The acoustic properties are such that there is a dreadful echo."—The People's Home Journal.

HOG MARKET FACTS.

Pays to Study Feed and Fitting.

One of the most instructive and interesting exhibits shown at the International at North Portland was found in a tent devoted to the runovers for swine and horses. It was prepared by the Oregon Agricultural college, the Portland Union Stockyards company and the Union Meat company, and consisted of 14 pens of hogs.

First came three lots of nine pigs each, shapely animals which had been fed on different rations for 40 days. The following table was prepared from the placards and tells the story of the three pens:

	Total Feed, Lbs.	Combined Weight, Lbs.	Gain, Lbs.
Lot 1—			
Barley	1268	....	...
Middlings	634	1200	397
Lot 2—			
Barley	1388	....	...
Middlings	694	1350	538
Buttermilk (gals.)	148½	....	...
Lot 3—			
Barley	1196	....	...
Middlings	539	1275	506
Garbage (Gals.)	323½	....	...

All the pigs were good in shape and healthy, even animals. A knowledge of the cost of feed in any locality would make this data of particular value.

The rest of the pens in the exhibit were devoted to different grades of marketable hogs. The three lots were composed of Durocs, but the rest were made up of all breeds and in the lower classes of some of doubtful ancestry. Each pen illustrated the grades of hogs coming to market in the yards, their weight individually for the classes, their estimated percentage of dressing and the prices each day of the week of the show. It was easy to see the difference in quality, going from pen to pen, and the whole was a splendid object lesson in the worth of fitting hogs for the demands of trade. Following are the legends over each pen in the order in which they were arranged:

(1) Good feeder hogs; weight, 124 pounds; estimated to dress out 65 per cent; Monday's price, $14.50 per hundred.

(2) Skips; weight, 60 pounds; estimated to dress out 69 per cent; Monday's price, $13.

(3) Common pigs; weight, 126 pounds; estimated to dress out 71 per cent; Monday's price, $14.

(4) Good pigs; weight, 146 pounds; estimated to dress out 74 per cent; Monday's price, $14.50.

(5) Rough heavy; weight 410 pounds; estimated to dress out 76 per cent; Monday's price, $15.25.

(6) Common light; weight, 180 pounds; estimated to dress out 72 per cent; Monday's price, $16.

(7) Good light; weight, 193 pounds; estimated to dress out 75 per cent; Monday's price, $16.25.

(8) Prime light; weight 233 pounds; estimated to dress out 78 per cent; Monday's price, $16.50.

(9) Common heavy; weight, 277 pounds; estimated to dress out 76 per cent; Monday's price, $16.25.

(10) Good heavy; weight, 313 pounds; estimated to dress out 77 per cent; Monday's price, $16.40.

(11) Prime heavy; weight, 316 pounds; estimated to dress out 80 per cent; Monday's price, $16.60.

While prices varied and the top demanded on different sorts varied slightly during the week, these figures showed the need of studying the markets closely and also to value of careful fitting and feeding preparatory to marketing.



The LINK BLADE does it!

For years others have tried to invent something that would equal the link-blade idea. It still holds world-record for close-skimming.

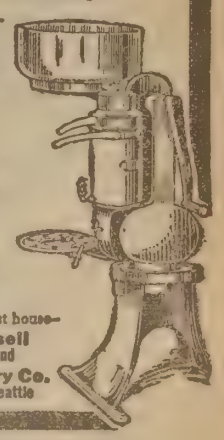
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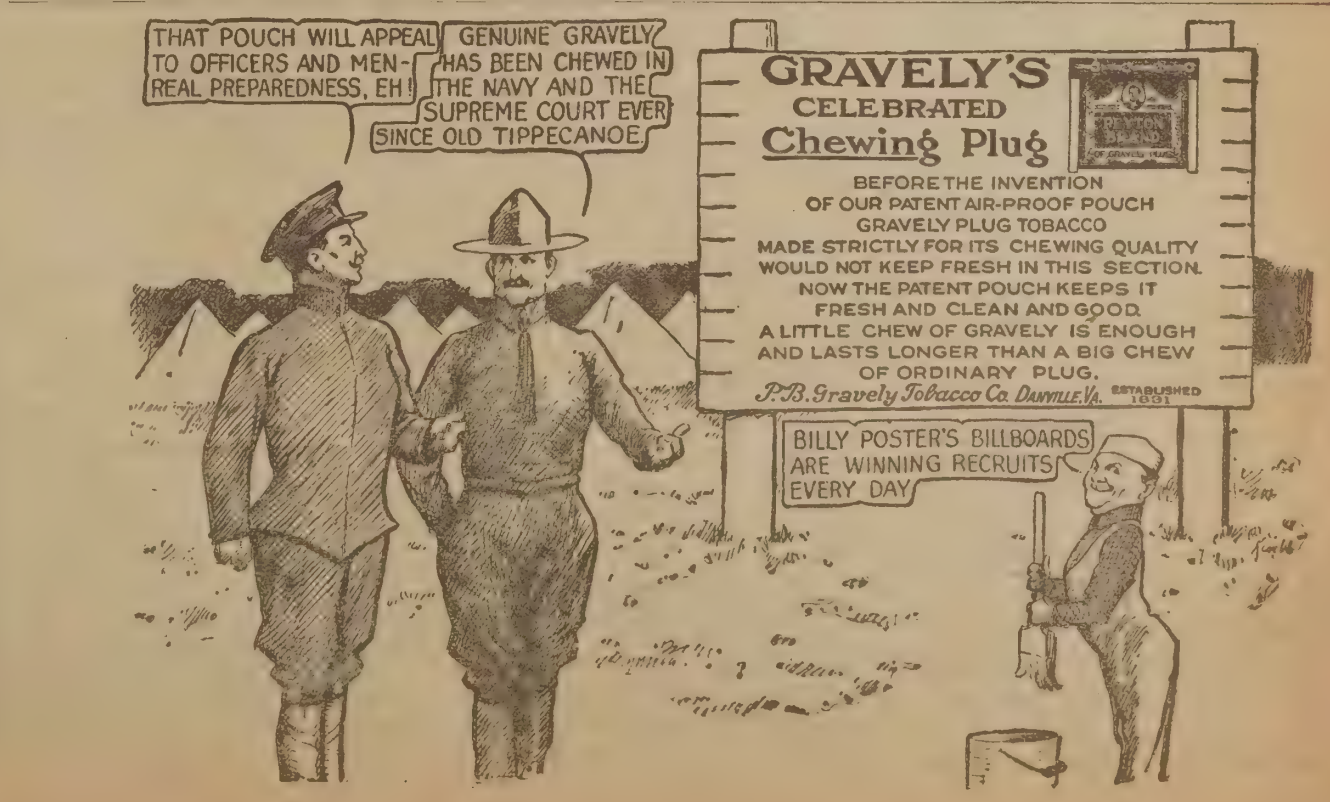


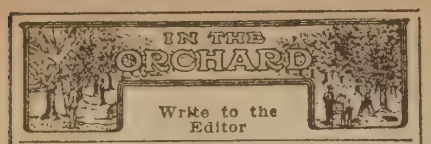
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GRANVILLE LOWTHER
Editorial Contributor

Shortage of Cars

We have "Hooverized," economized, studied the best plans for producing the greatest amount of food with the least amount of labor, in order to have enough for ourselves, our boys in the trenches and our allies. Now, after all this is done, if the process should break down at the point of transportation, it would be a calamity that would greatly discourage the farmers in the effort to produce large crops next year. I do not wish to complain. I believe if the men who are at the heads of departments in our government know the facts, they will do everything possible to relieve the situation. The fact is there are several thousand cars of apples stored in warehouses in this northwest country that can not be moved. The farmers need the money. The same thing is true in regard to other farm products.

We have been suddenly confronted with unusual conditions, and we were not prepared to meet them. The railroad companies seem to be doing all they can. In some cases we have been held up by bad labor conditions. We have a class of persons in this country who will not work, nor if they can prevent it, will they allow others to work. The government will have to take the management of affairs with a strong hand. It will have to impress idlers into the ranks of workers. It will have to punish food destroyers as never before. It will have to clear the tracks of all obstructions and obstructors. We will have to produce more, and when it is produced it must be shipped.

G. L.

OLDER ORCHARD

Do You Feed or Starve the Trees?

The older orchardists of the northwest are facing the proposition of feeding or starving their trees, in the fact that many orchards are producing small fruit, whereas they formerly produced large, beautiful, highly profitable grades. The remedy is heavy feeding. Of course pruning has its place, but feeding is the principal, because the difficulty originates in lack of proper plant food.

A few years ago Professor Hopkins of the University of Illinois engaged in a controversy with the government soil specialists on the question of the productivity of the soil of Illinois. The government specialists claimed that there were chemical qualities in the soils of that state, sufficient to produce a good crop of corn each and every year for 100 to 300 years.

Professor Hopkins claimed that as a matter of experience the best soils of the state would not without fertilization of the soil or a rotation of crops produce a profiable corn yeald for more than 20 years.

A Natural Law.

It is a law that runs through all nature that you can not continuously take from, without adding to, unless you exhaust the substance or thing from which you are subtracting. The woman who wrote an essay to be read before a woman's club on "How to Make a Husband Happy," and embodied it in the three words "Feed the Brute," had the right philosophy. No dairyman would think of a profitable yield of milk from his cows without feeding them. Yet some of us are not feeding our orchards, and wonder why they ahe producing small fruit. In this we are like the old man in Kansas of whom the story is told that, during the hard times of 1893, gathered around a stove, with some of his neighbors, in a grocery store of the little town in which they lived, and discussed how they would get through the winter. This man had it all figured out. He said he had a Jersey cow that gave an abundance of very rich milk. He thought that after using what he and his family needed that they could sell milk enough to the neighbors to buy meal, flour and other necessaries of life. Some one ventured to say, "But where will you get feed for the cow?" "Oh," said he "that cow sucks herself." Now, that is exactly what we are expecting our orchards to do; that is, we expect them to supply from their own resources the fruit necessary to supply us, to enable us to sell to the markets enough to buy the other things we need, and at the same time to supply themselves with the necessary food from which to manufacture what we consume.

The Surplus Supply.

Of course it is true that there is a surplsu supply in all organisms, more than is needed for immediate use. The animal has stored enough to tide it over for several days without food. The plant has enough, in some cases, to enable it to survive for a longer period. The earth is a storage reservoir of greater capacity, but in each and every case the same law prevails. It is by observing the laws under which we are placed that we can succeed, whereas failing to observe them spells failure.

G. L.

Apples in Storage

This year there has been an unusual effort to get the apples off the trees, out of the orchards and into the warehouses before the cold weather began. The experiences of last year, when so many apples were frozen taught us the necessity of some kind of storage as a protection from the freezing of late fall and early winter Hundreds of farmers prepared storage plants for the protection of small amounts of fruits, and finding that there was car shortage, and that the buyers and commission companies had stored all they had capacity to store, they have overcrowded their cellars, and have not sufficiently ventilated them. There is, therefore, danger of a rapid process of ripening, and the beginnings of decay at a period when the apples are passing through what is called "the sweat." We had Winesaps in common storage last year, that before we put them away, were frozen through. We used the last of them in July and they seemed to have kept as well as some we had stored under like conditions, but had not been frozen.

G. L.

Codling Moth in Buildings.

Every observant orchardist knows that codling moths are more difficult to control in the more thickly populated portions of the country than in the more sparsely settled sections. It was formerly supposed by many persons that certain sections were immune from its ravages, but this theory is now exploded, and it is generally known that the moth destroys annually in the larger fruit growing sections anywhere from 1 per cent to 60 per cent of the apples. The per cent depends largely upon the manner of spraying. Some of our neighbors in the Yakima valley, in tearing down old buildings, have discovered hundreds of codling moth larva in which form they pass the winter, protected in the cracks, crevices and wherever they could hide away. Others have discovered them in their dwellings, barns, sheds, outhouses, etc.

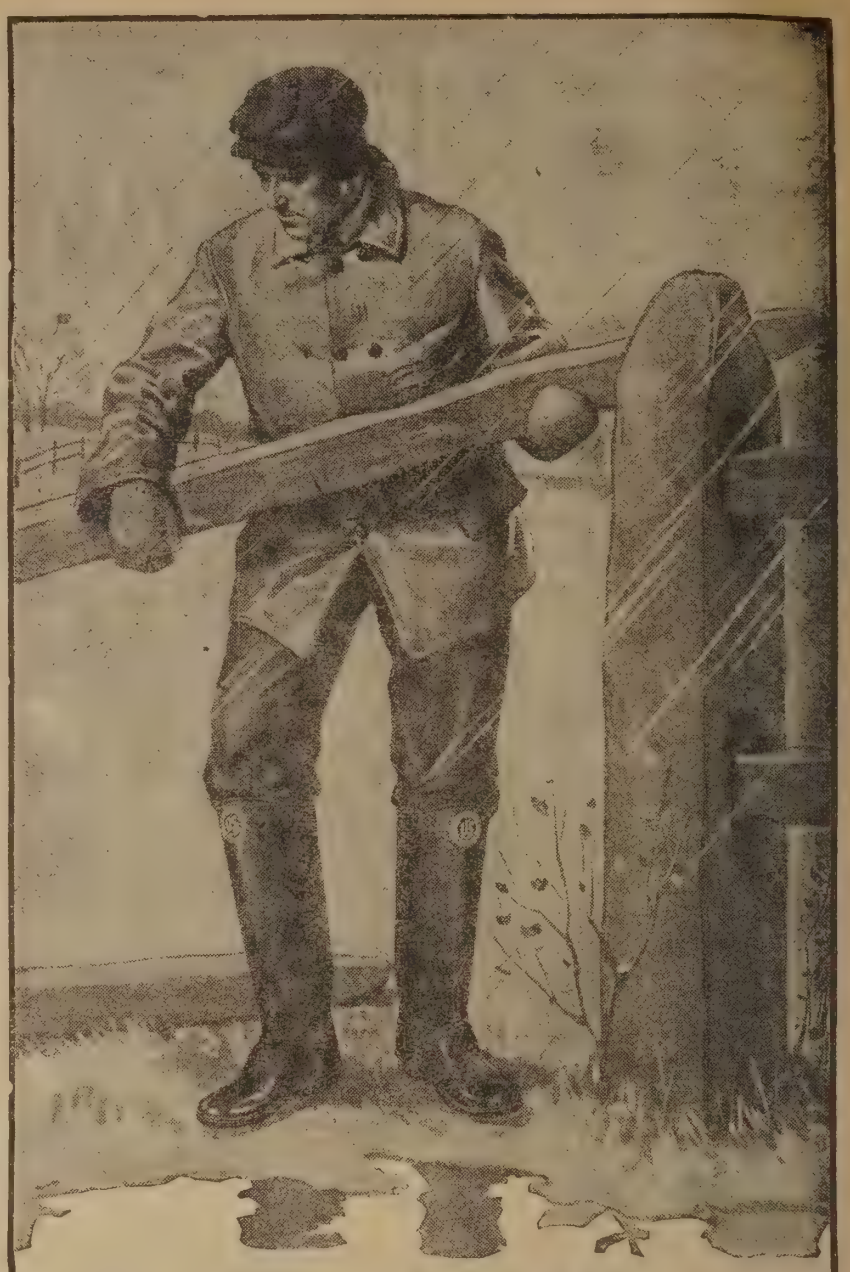
It is evident, then, that the more thickly an orchard section is populated the more hiding places the moth will find, and that in these sections the fight for control will be the hardest. I do not mean to suggest that there are difficulties here that can not be overcome, but that in overcoming them we will have to give the matter due attention and spray with more care.

G. L.

SAVE MONEY ON ENGINES
Buy direct from my factories, where I build a powerful, economical, reliable, perfectly designed Galloway Masterpiece Engine from the highest quality materials and sell to you at lowest manufacturers' price. Tens of thousands in satisfactory use. All sizes from 1½ to 16 h.p. portable, stationary, saw rigs, pumping outfits. They operate on
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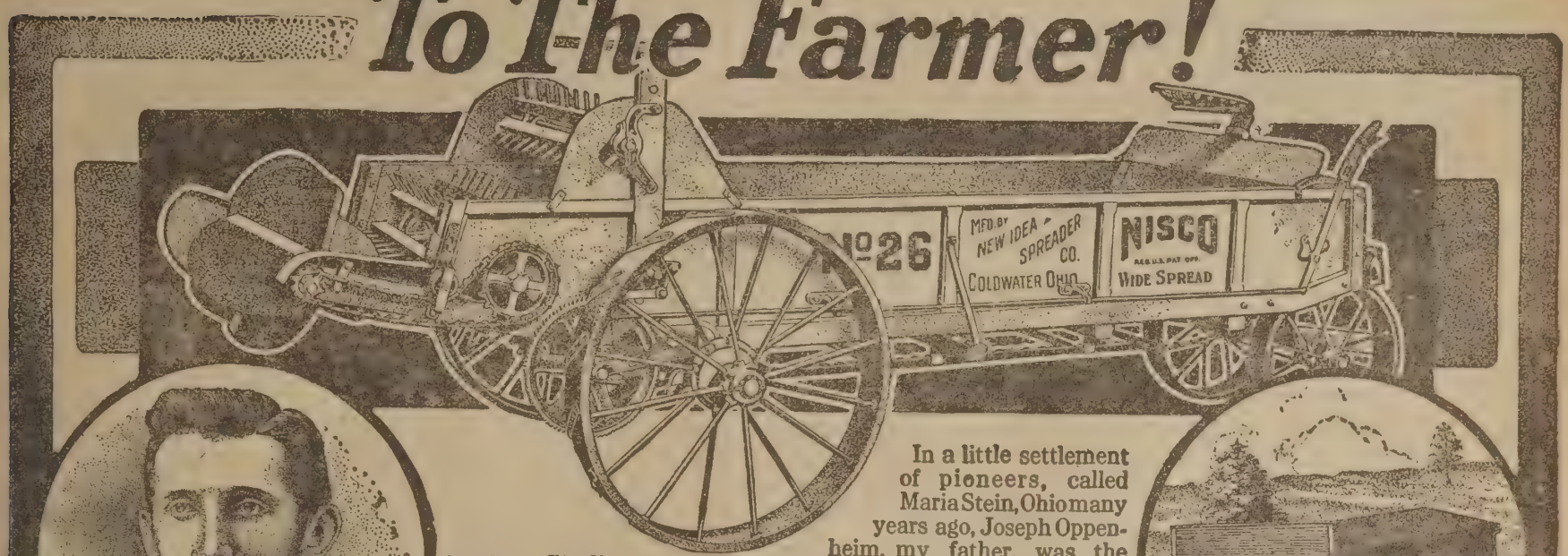
The U. S. Seal is placed on every pair. This trade mark of the largest rubber manufacturer in the world is your protection. Look for it and make sure of it.

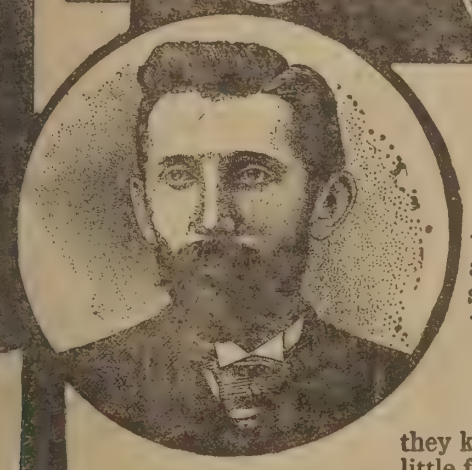
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New York

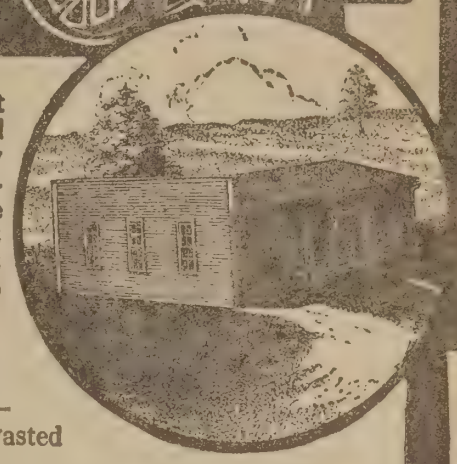
U. S. Rubber Footwear

My Father's Help To The Farmer!





In a little settlement of pioneers, called Maria Stein, Ohio many years ago, Joseph Oppenheim, my father, was the teacher. Studious and quiet, he yet had a personality that appealed, for he was helpful to all. Farming then wasn't so profitable as now, and the women and children had to work in the fields.



The Settlers who came to this country generations back were frugal people. They had to be. Yet they were far-sighted, too. They knew that land could be exhausted—they knew it must be fed if it was to continue feeding them. So they wasted little fertilizer. Barnyard manure was their reliance—as it is yet.

Hence it was scattered on the fields with great care. My father made a hand in this labor occasionally. The children from his school bent weary backs over the task. Their drudgery appealed to his heart. He knew what it meant in aching muscles, neglected schooling and dwarfed opportunity. He knew that such machines as were available neither shredded the manure nor spread it fine and wide.

So he set out to build a machine that would do this and save the hard work. It wasn't easy. Money was scarcer than this generation understands. In his little school house he worked out the idea he had — to make a machine that would help keep his boys and girls in school, and ease the labor of their parents.

It's a long story of how the village teacher saved a nickel here and a dime there, worked early mornings and late nights and eventually built a spreader that carried the principles that make the Nisco the leader today.

So much better was it than the old method of wagon tail distribution that the sturdy farmers called it "Oppenheim's New Idea." After a while, when the work had been brought to a practical stage, we called ourselves the New Idea Spreader Company and from this we get "Nisco."

Working out this idea to perfection in the midst of poverty cost great sacrifice and much toil, but ever uppermost in the mind of the inventor was the need of his people. The small shed shown above was built and work started on six machines. They were so practical that he protected the child of his brain by patents, patents that have revolutionized the spreader industry.

How this small plant has grown until ten acres are covered by the present plant, which sold over two million dollars' worth of spreaders last year, is a story my father could hardly believe if he were alive today to hear it.

But his big heart would swell with pride that he had made so great a contribution to American agriculture — that his efforts had brought prosperity and ease not only to his little circle of friends, but to many thousands more.

He lived only to see the business begun. At his death it fell to me — a boy of fifteen — to carry out his plans. My mother put every cent of her little insurance into making it go — and the Nisco was so valuable to the farmer that today he recognizes the Nisco Spreader as the greatest aid to permanent fertility of his fields.

Because this business is an inheritance of the brave effort of my father to contribute something worth while, it is equally dear to me. And because of his ideal, this machine never will be less than the best we can build.

Our catalog tells of its superiority better than we can here and our free book "Helping Mother Nature" gives some new and valuable information on the use of manure. Send the coupon for them today and see how Joseph Oppenheim made the most notable contribution of his generation to the American farmer. See the machine at the Nisco dealer's in your vicinity. If you don't know him we'll send you his name.

B. C. OPPENHEIM, Mgr.

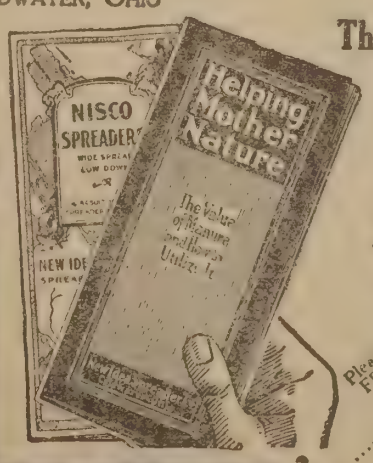
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MAIN OFFICE AND FACTORY:—COLDWATER, OHIO

The following jobbers handle our spreaders in the northwest: WALLACE CORCORAN & CO., Portland, Ore. POLSON IMPLEMENT CO., Seattle, Wash.





These Books FREE

NEW IDEA SPREADER CO., Box 201 Coldwater, Ohio

Please send me without obligation your Nisco Catalog and FREE BOOK—"Helping Mother Nature."

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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Share Your Christmas With Our Soldiers Through the Red Cross

Washington's boys in khaki are now in France fighting for democracy and humanity. The next few months will see thousands more standing side by side with them in the trenches.

Now that we have sent our boys to France we must take care of them by sending our dollars to give them the life-saving aid of the Red Cross.

Realizing the tremendous relief work that must follow the advance of our armies, our great president, Woodrow Wilson, head of the National Red Cross, has asked that ten million new members be added before Christmas.

This Means That Every Man, Woman and Child in the State of Washington Must Join the Red Cross Before Xmas Day

It is impossible for the patriotic men and women who are devoting their time to this work to reach every home in this state in this limited time. America's wounded soldiers must have bandages and medical aid. Help send it to them through the Red Cross.

Don't Wait to Be Asked—Ask Yourself

You men and women of the farms must do your part. Don't wait till some one asks you. Send in your dollars today—one dollar for each member of your family.

Sign this Coupon Today—Save Our Boys

Fill out the coupon below and send it today with a dollar for each member of your family. The money that you send will be credited to the chapter of the Red Cross nearest you.

Washington State Campaign Committee American Red Cross

Send Your Dollars Today

Help Save Our Boys

....., Wash., Dec. ..., 1917.

Washington State Campaign Committee.
310 White Building, Seattle, Wash.

I want to do my part for the boys in khaki. Enclosed please find ..... dollars for membership for each member of my family in the American Red Cross at $1 each.

Name	Name .....
Address	Address .....
Name	Name .....
Address	Address .....
Name	Name .....
Address	Address .....
Name	Name .....
Address	Address .....

Signed .....

Address .....

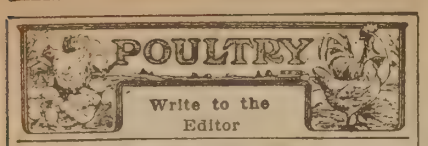
(This advertisement donated by Sears-Roebuck & Co., Seattle.)

MACJUNK IS INSTRUCTED TO BECOME A MOTORMAN



MUGGSY GETS A FIVE-SPOT FOR PLAYING SNAP-THE-WHIP





JAMES DRYDEN
Editorial Contributor

Fight the bad Hun with the good hen.

The slacker hen is an ally of the Hun.

Do not feed high priced grain to slacker hens.

The poultry will help win the war if given good care.

Lameness in Chickens

A correspondent, referring to a former article in The Farmer, in which lameness in chickens was under discussion, writes:

"This interested me very much, as I have asked myself the same question many times over when I had that trouble with hens. I tried many things, but nothing helped, so I finally decided to try carbolic acid, 'kill or cure,' and it cured them. Since then I have tried it many times and have not had a single hen die with that trouble. I took a piece of bread, the size of a hazel nut, made a pill and put one drop of carbolic acid on that, then made her swallow it. When they are very bad I would give that pill morning and evening for two days, the third day once, which usually did the work. Now I would like very much for this Idaho party to try this and all I ask in return is to let me know whether this helped his hens."

There is nothing in poultry literature that I know of that would corroborate this treatment. That may not prove, of course, that the treatment is not effective, because poultry literature, and especially poultry doctor books, do not tell us everything. Lameness, however, may result from various causes. Tuberculosis of the joints, rheumatism and bumble foot cause lameness and the same treatment would hardly cure them all, if indeed it would cure any one of them. We wonder if the cure reported by this correspondent was not a coincidence rather than a rtsult of the carbolic acid treatment?

J. D.

WHITE, BUFF AND BLUE ORPINGTONS
(Capt. De Bathe Strain.)
Speckled Sussex and Anconas
All Single Comb
Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised.
A few choice Rhode Island Red cockerels.
IRA N. DeLINE, Olympia, Wash.

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We are manufacturer's or "Diamond Quality"
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A Safe, Heated Drinking Fountain
Just the thing for cold weather.
Write for particulars.
SPOKANE SEED Co.
SPOKANE, WASHINGTON

Individuality in Birds.

In selecting a pen of fowls for egg and meat production, there are several points to be considered, outside of the question of breed, says Professor James Dryden in a bulletin issued by the O. A. C. The most important is the health and vitality of the fowls. The greatest problem in poultry raising is to keep up the strength and vigor of the stock. Some of the principal things that produce weakness in the fowls are inbreeding, breeding from fowls that lack in health and vitality; improper incubation and brooding; unsuitable housing; too close confinement; unclean houses and yards; lack of proper food. Constitutional weakness is shown in various ways. Small size, lack of breadth and depth of body, thin, wabbly legs and knock-knees and shallow breast usually indicate lack of vigor. As to size it is a safe plan not to use any pure-breds that do not come up to standard weights. A chicken may be pure-bred and lack in some of these things. It doesn't necessarily follow that because a chicken is pure-bred it is profitable to keep. In purchasing be careful to select fowls having vigor, alertness and size.



Good and poor types of chickens. The one on the right lacks vigor and market qualities as well as beauty.

The Supply of Poultry

Speaking of the market for storage poultry, a report from the Canadian government poultry division says: "It is evident now that considerable stock will have to be carried over to next year." It says further: "Holders of storage poultry in the states are still holding out hope that the government will take large stocks for army services, but this is questionable, and it looks now as if a large block will be carried over to next year."

The amount of poultry in cold storage has been unusually large. Storage operators anticipated a great demand for poultry, but they apparently overshot the mark and prices have not been satisfactory to them. The trouble has probably been that there has been little or no export demand on account of lack of shipping space.

The food administration is advising the eating of more chickens and the saving of red meat—beef, pork, mutton. This has resulted in an unusual demand for poultry and but for the large storage stocks prices would be no doubt considerably higher than they now are. This is the season in normal times of lowest prices for poultry, but the prices are abnormally high this fall in fact, as high as they were in the spring, the normal season of high prices.

It will be recalled that broilers sold in the spring at a lower price than for several years before, and it looked as though the poultry market had gone to pieces. Instead of going lower in the summer and fall the prices have kept up and farmers are able to sell any chickens that they have kept over at a higher price than in any previous year.

There is no use in prophesying what the prices will be during winter and spring. We do not know what the war or the food administration will bring forth, but following natural causes we would expect the prices to be unprecedentedly high in the coming winter and spring. J. D.

Poultry Business or War

A subscriber writes that he would like to engage in the chicken business. He has a piece of land especially adapted to the business, but if he should start in on the scale that he thinks would make him a living, and he should be drafted into the army, he would lose his home He is of the draft age, and asks if we would advise him to go on with his plans.

That is a question that no poultryman can answer. He should study the new regulations as to draft. The new regulations provide, I understand, that a married man whose wife or family is dependent upon him for support will be exempt, at least in the first draft. The chances are he would not be called upon very soon. The fact that he was engaged in the poultry business might not have much weight with the exemption board since he started in it only recently. Under the circumstances it would be the safe plan not to make any large investment so long as he is subject to draft. J. D.

Water Dogs and Hawk Pests.

To the Editor: Would like to know if you could give me some advice against having chickens killed by eating water dogs. Today one of my chickens was very lame when I found it and it soon started to have convulsions almost like fits and I saw it would die anyhow so I killed it. Upon examining it I found the lizard or water dog in its gizzard. Would it be dangerous to eat it when it is killed as soon as noticed? Would also like to know if you can kill hawks by feeding small chicks poison like Nux Vomica? Do you think it would be effective? Would the poison not hurt the chicks or hens? E. T. S.

Yoncalla, Ore.

A considerable number of chickens are killed by water dogs, otherwise known as lizzards, in western Oregon where they are numerous. They are usually found in the timber and along the creeks. I know of no way to prevent the chickens eating them nor any cure for the chicken eating them. I have found that where fowls were put on to new ground where the lizzards were plentiful there was quite a large mortality. After two or three years there were practically no losses from this cause, there being two or three hundred chickens per acre of ground. The reason there were no further losses was probably because the chickens had cleaned up the water dogs or those of large size and any small ones would not cause death. Large Plymouth Rock roosters were often killed and the death was probably due to strangulation, the bird being unable to swallow it. The lizzard excretes a poison, and it is possible that this poison may cause death, but there are no authoritative data on this point.

It should not be dangerous to eat the fowl if killed when the first symptoms were noticed.

The killing of hawks by eating small chickens that had been fed poison in small quantities is an idea that I have not seen tried. To kill the hawk I would imagine that the chick itself would have to swallow a fatal amount of poison. That is another suggestion for an experiment. It might pay to have a "poison squad" of chickens where hawks are bad. The poultryman could afford to sacrifice one chicken for a hawk.

Has any one had any experience in poisoning hawks? If so, let our readers have the benefit of it. J. D.

S. C. Blue Andalusians
of national reputation. Stock and eggs at reasonable prices.
MRS. C. W. ARMSTRONG, Freewater, Ore.

Baby Chix White Leghorns
Exactly the same in every particular of breeding as our pen at the ALL northwest egg-laying contest, hatched on the farm that hatched the first baby chicks ever shipped by express in the state.
March and April chicks—**$12.50** per 100. May, **$10** per 100.
Order early to get the early ones.
The Lakeside Poultry Farm
W. J. Loveland.
ROY. WASH.

Rhode Island Reds and Whites
Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Now is the time to buy for next year's breeding, from blue ribbon stock. Sale of pedigreed Rufus Red Belgian hares. Bucks at $3 each. Registered Airdale bitch at a bargain if taken at once.
HIGHLAND FRUIT AND POULTRY RANCH.
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R. F. D. 3. NORTH YAKIMA, WASH

Fancy Barred Rock Cockerels
Their sire was 1st cockerel, pullet mated, at Seattle, 1916, and 1st at Interstate Fair at Spokane, 1917.
My hens won in 1916, 1st at Spokane, Hillyard and Palouse. Also won all blue ribbons on hens and pullets at Interstate Fair, 1917.
I give an absolute money-back satisfaction guarantee.
Write me your wants and let me tell you what I've got.
J. E. HORTON, 2408 Altamont Boulevard, Spokane, Wash.

Walnut Crest Farm
Large White Leghorns, large white eggs, heavy laying strain. Fine selected cocks and cockerels at reasonable prices.
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TRAPNESTING 600 W. LEGHORNS
Pen of 30 (records 200 to 280 eggs) mated to cockerels from 275-egg hen.
Reserve Hatching Eggs Now.
10 dandy B. Rock cockerels.
C. C. SAEMAN, ZENITH, Wash.
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Strong, Vigorous White Leghorns
TOM BARRON STRAIN, SINGLE COMB
Individual records from 200 to 257 eggs per year. Cock's dam 275 eggs per year.
Years of careful breeding are behind these birds. All are pedigreed.
Eggs in Season
ASAEL H. DIXON, Oakley, Idaho.

The Real Test
Not gravity, but boiling points, is the real test for gasoline. Red Crown has the correct boiling points in a continuous chain.
Standard Oil Company (California)
RED CROWN GASOLINE
The Gasoline of Quality



FARM WOMEN WELCOME OUR SUBSCRIPTION PROPOSITION

OUR plan for saving money for our readers by handling subscription orders, so far as possible, without the aid of agents has met with the hearty approval of our lady friends on the farms of this state.

The women as well as the men appreciate a good bargain; and this new subscription plan certainly puts an extraordinary bargain within reach of every one.

With the help of our readers we have been able to reduce our force of agents materially. This means marked economies in items like salaries, railroad fares, hotel bills and incidental expenses; and subscribers are given the benefit of every dollar saved. The result is a subscription offer of 25 cents for one year; 50 cents for three years; $1 for five years.

In making the plan a success we are depending on the cooperation of our readers. Let your neighbors know how much you enjoy reading your state farm paper and how cheaply they can secure it under the present plan. Our lady friends can help this cooperative arrangement immensely by passing along an occasional copy of the paper and by mentioning the reduced rates.

The "Farmer" is edited for the women as much as for the men, proof of which will readily be found in such features as the pattern department, crochet designs, stories, household hints, recipes, etc.

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25c for one year's subscription to THE WASHINGTON FARMER.

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Dec. 13.

The Washington Farmer,
Review Bldg.,
Spokane, Wash.

I desire to take advantage of your plan to deal direct with your readers in securing and renewing subscriptions, thus saving the middleman's cost and releasing men for productive labor.

Enclosed is $..... for .....years subscription.

If you are already paid in advance your subscription will be set forward from the date to which you are paid.

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UNLUCKY LOOIE HAS ANOTHER PAYDAY













Handicraft For Girls

By Dorothy Perkins.

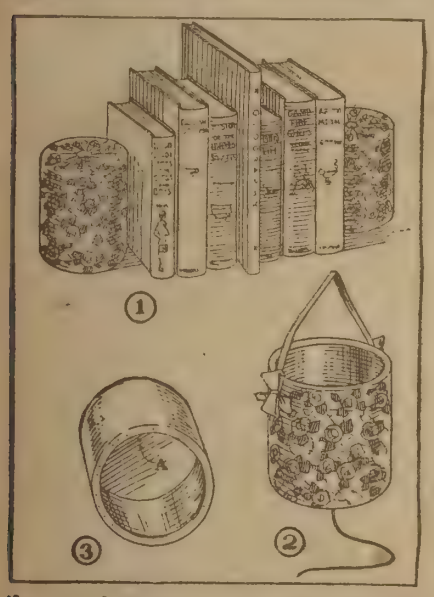
Dainty gifts covered in cretonne are certain to find a welcome in any household, and such a variety of things can be made that you will have no difficulty in filling a want of each one whom you wish to remember on Christmas day.

Book Ends, Twine Holder.

The unique pair of book ends in Fig. 1 are made of sirup cans. The secret of making satisfactory book ends is to properly weigh them so they will not upset, and the book ends illustrated are weighted by filling the cans with sand.

Cretonne with small patterns is the most desirable for small articles, and patterns with dark backgrounds are preferable for articles such as the book ends, which are likely to soil through much handling. Sew a piece of cretonne around the sides of each can, then by means of a gathering string gather the cloth as indicated in Fig. 1. Sew a fancy button, or a cretonne covered button, to the center of the top.

Fig. 2 shows a handy twine holder made of a sirup can. A hole must be pierced through the exact center of

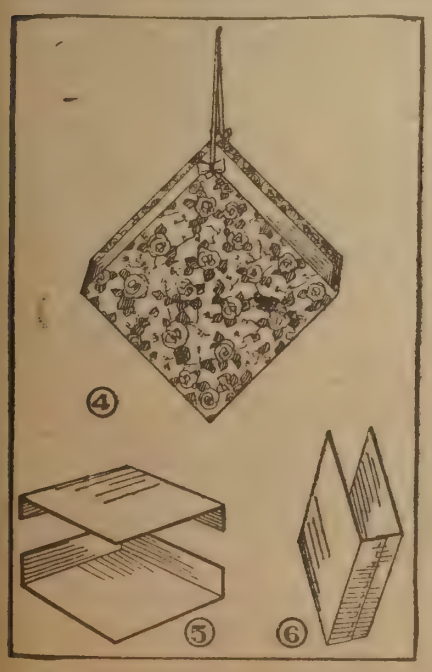


the can bottom as an outlet for the string (A, Fig. 3), and holes one-half inch apart must be pierced through the top rim to provide a means of fastening the top edge of the cretonne. The holes can be perforated by means of a nail and hammer. Gather the cretonne on the bottom, and turn the top edge over the rim and sew through the perforations in the rim.

Make a hanger for the twine holder out of cretonne or ribbon.

Hanging Workbox.

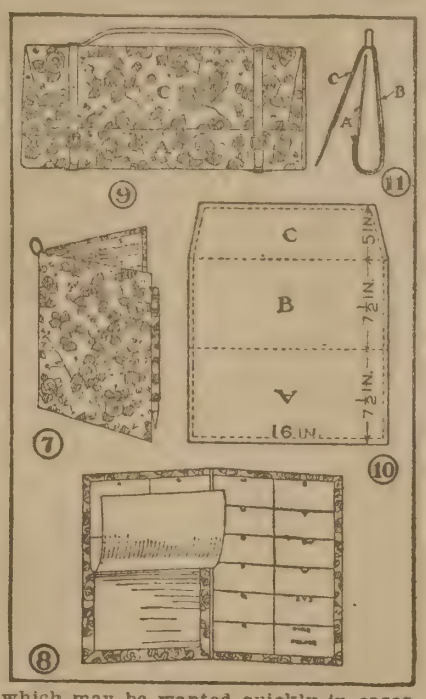
The hanging workbox in Fig. 4 requires a square cardboard box. Remove two adjacent sides of both the box and cover (Fig. 5), then stitch



the cover to the box (Fig. 6). The cretonne may either be stitched over the open edges of the box, or be glued to the cardboard. Sew a double strip of cretonne, or a ribbon, to the open corners for a hanger.

Telephone Book and Music Case.

The dainty telephone book in Fig. 7 provides a handy directory for numbers used frequently, and numbers



which may be wanted quickly in cases of emergency. The covers are of cardboard 6 inches wide and 8 inches long, and are hinged together by the cretonne covering. Lap the cretonne over the edges as indicated in Fig. 8, and glue it to the cardboard, and make a pocket on one edge, to hold a pencil. Cut sheets of writing paper of the right size to extend a trifle over the lapped edges of the cretonne, and glue them in place; then divide the paper into spaces ,and index the spaces (Fig. 8). A fancy work ring provides a hanger.

The music case in Fig. 9 has a canvas foundation cut of the dimensions shown in Fig. 10. The dotted lines around the edges of this diagram indicate how the edges of the cretonne covering turn over, and the dotted lines each side of the portion marked B indicate where portion A turns up and portion C turns down, to close the case (Figs. 9 and 11). A pair of buckles, with cretonne straps to pass around the case, and a cretonne handle, will complete the music case.

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The Poultry Industry

(Continued from page one.)

Probably there must be further advances in the price of all poultry products, but these advances must be prepared for. It is not enough that the poultryman knows the justice of his position. He must tell those who consume his wares what he knows. That vague creature, the "public," is short sighted but not intrinsically selfish. Public opinion, when properly enlightened by knowledge, may be unfalteringly trusted to back the cause of justice, even at a personal sacrifice. If every poultry producing community in the country were to send a committee to all the available newspaper offices, and through this medium were to put the case squarely before the editors, with the offer to furnish figures and facts for a straightforward educational campaign, the ultimate effect would be tremendous. The average editor knows nothing about the cost of producing food. He simply knows that it costs him twice as much to live as it did a few years ago, and perhaps he is human enough to throw the blame for the condition on the only party who has nothing to say for himself, the producer. It is up to the producer to state his own case.

Here, then, are three things which can be done: First, save labor; second, save wheat; third, help educate the buyers of your goods. And, finally, remember that all things and conditions have an end, and that a time is inevitably coming when the relative value of feed and farm animals will be reversed; when the only profitable way to sell grain will again be as a finished product. When that time comes, the man who stayed with the business through its darkest hours and who has thereby kept his flock intact, will begin to profit by his grit and resourcefulness.

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President Wilson Pleads Humanity's Cause

Great Address Is Delivered to Congress, Setting Forth the Aims of This Country in the War

A definite statement to the world of America's war aims and of the basis upon which peace will be considered was made on Tuesday by President Wilson in his address to congress, in which he urged an immediate declaration of a state of war between the United States and Austria-Hungary.

Speaking for the American people, President Wilson emphasized two points: First, that this intolerable thing of which the masters of Germany have shown us the ugly face, this menace of combined intrigue and force which we now see so clearly as the German power, a thing without conscience or honor or capacity for covenanted peace, must be crushed, and if it be not utterly brought to an end, at least shut out from the friendly intercourse of the nations; and, second, that when this thing and its power are indeed defeated and the time comes that we can discuss peace—when the German people have spokesmen whose word we can believe and when those spokesmen are ready in the name of their people to accept the common judgment of the nations as to what shall henceforth be the bases of law and of covenant for the life of the world—we shall be willing and glad to pay the full price for peace, and pay it ungrudgingly.

We know what that price will be. It will be full, impartial justice—justice done at every point and to every nation the final settlement must affect, our enemies as well as our friends.

Victory Without Spoils.

You catch, with me, the voices of humanity that are in the air. They grow daily more audible, more articulate, more persuasive, and they come from the hearts of men everywhere.

They insist that the war shall not end in vindictive action of any kind; that no nation or people shall be robbed or punished because the irresponsible rulers of a single country have themselves done deep and abominable wrong.

It is this thought that has been expressed in the formula, "no annexation, no contributions, no punitive indemnities." Just because this crude formula expresses the instinctive judgment as to right of plain men everywhere it has been made diligent use of by the masters of German intrigue to lead the people of Russia astray and the people of every other country their agents could reach in order that a premature peace might be brought about before autocracy has been taught its final and convincing lesson and the people of the world put in control of their own destinies.

But the fact that a wrong use has been made of a just idea is no reason why a right use should not be made of it. It ought to be brought under the patronage of its real friends. Let it be said again that autocracy must first be shown the utter futility of its claims to power or leadership in the modern world.

Justice Demands Victory.

It is impossible to apply any standard of justice so long as such forces are unchecked and undefeated as the present masters of Germany command. Not until that has been done can right be set up as arbiter and peacemaker among the nations.

But when that has been done—as, God willing, it assuredly will be—we shall at last be free to do an unprecedented thing and this is the time to avow our purposes to do it. We shall be free to base peace on generosity and justice, to the exclusion of all selfish claims to advantage even on the part of the victors.

Let there be no misunderstanding. Our present and immediate task is to win the war and nothing shall turn us aside from it until it is accomplished. Every power and resource we possess, whether of men, of money or of materials, is being devoted and will continue to be devoted to that purpose until it is achieved.

Those who desire to bring peace about before that purpose is achieved, I counsel to carry their advice elsewhere. We will not entertain it.

Germans Must Admit Wrongs.

We shall regard the war as won only when the German people say to us, through properly accredited representatives, that they are ready to agree to a settlement based upon justice and the reparation of the wrongs their rulers have done.

They have done a wrong to Belgium which must be repaired. They have established a power over other lands and peoples than their own—over the great empire of Austria-Hungary, over hitherto free Balkan states, over Turkey and within Asia—which must be relinquished.

Germany's success by skill, by industry, by knowledge, by enterprise, we did not grudge or oppose, but admired rather. She had built up for herself a real empire of trade and influence, secured by the peace of the world.

We were content to abide the rivalries of men, science and commerce that were involved for us in her success and stand or fall as we had or did not have the brains and the initiative to surpass her. But at the moment when she had conspicuously won her triumphs of peace she threw them away to establish in their stead what the world will no longer permit to be established, military and political domination by arms, by which to oust where she could not excel the rivals she most feared and hated.

The peace we make must remedy that wrong. It must deliver the once fair lands and happy peoples of Belgium and northern France from the Prussian conquest and the Prussian menace, but it must also deliver the peoples of Austria-Hungary, the peoples of the Balkans and the people of Turkey, alike in Europe and in Asia, from the impudent and alien domination of the Prussian military and commercial autocracy.

Will Not Dictate to Nations.

We owe it, however, to ourselves to say that we do not wish in any way to impair or to rearrange the Austro-Hungarian empire. It is no affair of ours what they do with their own life, either industrially or politically.

We do not purpose or desire to dictate to them in any way. We only desire to see that their affairs are left in their own hands, in all matters, great or small.

We shall hope to secure for the peoples of the Balkan peninsula and for the people of the Turkish empire the right and opportunity to make their own lives safe, their own fortunes secure against oppression or injustice and from the dictation of foreign courts or parties.

And our attitude and purpose with regard to Germany herself are of a like kind. We intend no wrong against the German empire, no interference with her internal affairs. We should deem either the one or the other absolutely unjustifiable, absolutely contrary to the principles we have professed to live by and to hold most sacred throughout our life as a nation.

War of Emancipation.

The people of Germany are being told by the men whom they now permit to deceive them and to act as their masters, that they are fighting for the very life and existence of their empire, a war of desperate self-defense against deliberate aggression. Nothing could be more grossly or wantonly false, and we must seek by the utmost openness and candor as to our real aims to convince them of its falseness.

We are in fact fighting for their emancipation from fear, along with our own, from the fear as well as from the fact of unjust attack by neighbors or rivals or schemers after world empire. No one is threatening the existence or the independence or the peaceful enterprise of the German empire.

Other important topics treated in the address of the president were:

The wrongs, the very deep wrongs, committed in this war will have to be righted. That, of course. But they can not and must not be righted by the commission of similar wrongs against Germany and her allies.

The thought of the plain people here and everywhere throughout the world, the people who enjoy no privilege and have very simple and unsophisticated standards of right and wrong, is the air all governments must henceforth breathe if they would live. It is in the full disclosing light of that thought that all policies must be conceived and executed in this midday hour of the world's life.

German rulers have been able to upset the peace of the world only because the German people were not suffered under their tutelage to seek the comradeship of the other peoples of the world, either in thought or in purpose. They were allowed to have no opinion of their own which might be set up as a rule of conduct for those who exercised authority over them. But the congress that concludes this war will feel the full strength of the tides that run now in the hearts and consciences of free men everywhere. Its conclusions will run with those tides.

The Russian people have been poisoned by the very same falsehoods that have kept the German people in the dark and the poison has been administered by the very same hands.

The only possible antidote is the truth. It can not be uttered too plainly or too often.

From every point of view, therefore, it has seemed to be my duty to speak these declarations of purpose, to add these specific interpretations to what I took the liberty of saying to the senate in January.

Must Be Permanent Peace.

Our entrance into the war has not altered our attitude toward the settlement that must come when it is over. When I said in January that the nations of the world were entitled not only to free pathways upon the sea, but also to assured and unmolested access to those pathways, I was thinking, and I am thinking now, not of the smaller and weaker nations alone, which need our countenance and support, but also of the great and powerful nations, and of our present enemies as well as our present associates in the war.

I was thinking, and am thinking now of Austria herself among the rest, as well as of Serbia and of Poland. Justice and equality of rights can be had only at a great price. We are seeking permanent, not temporary, foundation sfor the peace of the world and must seek them candidly and fearlessly, as always the right will prove to be the expedient.

What shall we do, then, to push this great war of freedom and justice to its righteous conclusion? We must clear away with a thorough hand all impediments to success and we must make every adjustment of law that will facilitate the full and free use of our whole capacity and force as a fighting unit.

Should War on Austria.

One very embarrassing obstacle that stands in our way is that we are at war with Germany, but not with her allies. I therefore very earnestly recommend that the congress immediately declare the United States in a state of war with Austria-Hungary.

Austria-Hungary is for the time being not her own mistress, but simply the vassal of the German government.

We must face the facts as they are and act upon them without sentiment in this stern business.

The government of Austria-Hungary is not acting upon its own initiative or in response to the wishes and feelings of its own peoples, but as the instrument of another nation. We must meet its force with our own and regard the central powers as but one. The war can be successfully conducted in no other way.

The same logic would lead also to a declaration of war against Turkey and Bulgaria. They are also the tools of Germany. But they are mere tools and do not yet stand in the direct path of our necessary action. We shall go wherever the necessities of this war carry us, but it seems to me that we should go only where immediate and practical considerations lead us and not heed any others.

It will be necessary to extend in certain particulars the legislation of the last session with regard to alien enemies; and also necessary, I believe, to create a very definite and particular control over the entrance and departure of all persons into and from the United States.

Legislation should be enacted defining as a criminal offense every wilful violation of the presidential proclamations relating to alien enemies promulgated under section 4067 of the revised statutes and providing appropriate punishments; and women as well as men should be included under the terms of the acts placing restraints upon alien enemies.

Must Regulate Prices.

Recent experience has convinced me that the congress must go further in authorizing the government to set limits to prices. The law of supply and demand, I am sorry to say, has been replaced by the law of unrestrained self-

(Continued on page thirty-one.)

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

Boils and Furnuncles---What You May Do to Cure Them



Dr. Hirshberg.

Furuncles, carbuncles and boils may be said to be grown up pimples or "hickies." They are abominations that weary even the patience of a Job. The black plague may be worse as a summary visitation of death, but is not their equal as a Torquemada torment and a personal nuisance.

While the little bacteria called staphylococci are the conspicuously guilty associates of these pests, the mere invasion of a healthy hair bulb, sweat canal or wax skin gland is not all-sufficient to initiate this malicious animal infection.

More than germs and open flesh are generally concerned. Overloaded white blood corpuscles—the consequences of gluttony or a diet of rich, sweet, hot or starchy victuals—seem also needed to prepare for the boils and their bacteria.

After all, a boil is a battle ground on which is waged a fight between the lymph, tissue juices, blood corpuscles and tissue units on the one side, and the invading microbes and their poisons on the other.

Before matter and pus are formed the result is in doubt and the battle is about equal. Redness, swelling and severe pain mark the days or hours of this preliminary "unripe" onslaught.

Finally, as the living, defensive forces begin to vanquish the bacterial Huns, the dead, dying and wounded are mixed macerated debris called pus, matter or prurient fluid. If this is quickly evacuated by the helpful incision of a surgeon's sterillized lancet or by the spontaneous digestion of the tense injured, overlying skin, it isn't long before the conquering heroes of human life rout out the remnants of the treacherous vandals. They are destroyed then faster than they can breed.

The time dishonored home treatment to use a warm, moise, dusty mess of some cereal such as flaxseed in poultice form to help hastening "the ripening" of the boil is a fine plan to spread the boil bacteria to a new point or to several spots. Those bacteria flourish like green bay trees upon such vegetative poultices, yet some still persist in the perpetuation of such an error.

The full and detailed destruction of the bacteria left in the boil is a much saner and, of course, more modern treatment. Whether the boil is soon open or not the contents should be disinfected by carbolic acid, hot ammoniated mercury ointment, the "thermocautery," the insertion of phenol or naphthol into the pustube, and the use of the new dictloramin—T, or Dukin's solution, into the opening.

Then a simple diet, and later the preventive vaccine should fulfil your ardent wish to be free.

All the World's a Stage, and All the Men and Women Merely Players

Earns High Honor.



Frederick R. Harris, the youngest bureau chief and the youngest admiral in the navy, has been selected as general manager of the emergency fleet corporation. He is 42 years old, is at present chief of the bureau of yards and docks, and came from civilian life into the navy in 1903. In 1910 he built a drydock in the Brooklyn navy yard, through quicksand, by sinking caissons down to bedrock. Last year the president made him a rear admiral for life.

Pleasure Route Now Path of the Fleeing



The Grand canal, shown in the picture above, is given over to gondolas and other craft carrying people evacuating the city of Venice. To protect as much as possible the relics and valuables all precautionary measures have been taken. It has been reported that the famous Palace of the Doges has been covered with sandbags and the delicate-arched facade has been shored with heavy timbers. The Campanile has sandbags for 40 feet around the base. After gain of much territory by Italy following a long, costly campaign, Germany and her Austrian allies suddenly presented reenforcements and made an attack that necessiated rapid Italian retreat to prevent the complete destruction of the latter's army.

Victim of Bolsheviki.



General Dukhonin, removed by the Bolsheviki because he refused to undertake peace negotiations with Germany.

Sure of Victory.



The above is Major General Charles G. Treat of the United States army, photographed recently upon his return from the western front. Treat holds that we are sure of victory in the conflict with Germany. He said that the mud, cold and rain are the worst enemies that our American soldier boys have to battle with over there. He added: "We are going to take our time about getting in this fight, but when we get in, we will clean up."

Prepare to Fight on Warships



Russian women are now organizing themselves as sailors to take the place of men who have deserted their posts under the influence of socialistic propaganda. Here are shown some of the Amazons who are preparing to join the fleet in the Baltic.

Git!



—St. Louis Republic.

The Fat Juggler From Hades.



—New York Herald.

Young Flier Makes Good.



In the above photograph is shown Joseph C. Stehlin of New York city, 19 years of age, who is the youngest American aviator in France. He has already made good as a flier in France. He was refused the right to enlist in the American and British flying corps, but was accepted by the French. Young Stehlin has now been transferred to General Pershing's forces as an instructor.

What Is Advertising?

A Big Force in the World Today

What is advertising? One expert defines the word as meaning "something to tell about something to sell."

Elbert Hubbard, the writer, said: "Advertising is the education of the public as to who you are, where you are and what you have to offer in the way of skill, talent or commodity. The only man who should not advertise is the one who has nothing to offer in the way of service, or one who can not make good."

But, however we define the word, it is certain that advertising is one of the great forces in the world today.

It is through advertising that tens of thousands of people have learned of the combined harvester, the sewing machine, the cream separator, the telephone, the silo and scores of other important inventions.

The advertisements in each week's issue of this paper are well worth reading. They contain up to date information regarding the output of many of the country's biggest and most progressive manufacturers and dealers.

It will surely interest you to read what these manufacturers have to say in their advertisements. And why not send to them for further information? By doing so you can obtain interesting and informative booklets, catalogs, and circulars free of charge.

And when you do write, kindly mention the fact that you read the advertisement in this paper.

Make More Days; Get More Eggs

Electricity Is Taking Part in Production of Poultry

A short time ago the only known incubator was a hen. Then came the crude bit of hen-house furniture with the lamp to warm it. Still the old hen maintained the lead as the chicken hatcher. But the crudity of the wooden incubator gave way before invention, the lamp gave way before a better lamp, and now the better lamp is giving way before a—a still better lamp? Many who have tried the electric incubator will tell you without hesitating that electricity is a better lamp. In fact, electricity appears to be fast becoming the preferred means of warming the incubators, and the brooders of some of the most successful poultrymen are similarly warmed.

It is claimed by advocates of the electric system of hatching that it is possible to maintain a more even degree of heat for the entire 24 hours of the day than with any other heating appliance. It is also claimed, but without positive proofs as yet, that the escape of static electricity from the wires and appliances conveys to the embryonic and hatching chick a vigor that the oil hatched chick does not possess. In addition to this, the claim is made that there is actually an injurious effect to the chicks from the gases created by the oil burner.

What it costs to hatch a chick by the "juice" plan, depends largely upon the conditions met with. In some localities, and under favorable housing and incubating conditions, it is claimed that the entire process of incubating and hatching can be completed at a cost of two-fifths of a cent per chick. This is two-fifths "straight," however, not three for a nickel.

Can the Hen Be Fooled?

There are limits to which the electric method may be applied successfully, but these limits are much wider than they were even a few years ago. Maybe they will become yet more extended. Maybe the philosophy of the little boy who placed an ostrich egg before his hen and hung up a sign, "Keep your eye on this and do your darnedest," may yet be applied electrically. Why not?

It is the custom of good hens to lay an egg a day—some days. Now suppose that through the use of electricity, artificial days should be made so that a week might be divided into, say eight instead of seven periods of successive light and darkness. Wouldn't old Biddy go right on laying an egg a day and produce seven instead of six eggs a week? (Hens should rest on Sunday the same as other folks, of course).

Going too far? Perhaps so, but in the winter months properly adjusted electric lights could induce the hens to get up earlier in the morning for a good warm feed and an early start on the day's work of egg production. This is no dream. Some of the best poultrymen in the country have their houses lighted by electricity and can show results.

FUR IN DEMAND.

Unusually High Prices Are Paid.

In spite of or due in part to the war, the demand for furs of all kinds is greatly increasing. This is evidenced by the tremendous sales made the first day of the St. Louis fur auction, which reached $500,000. Representatives of foreign firms bid in exciting competition with American buyers.

The prices ranged the highest in the history of the fur trade. A lot of 500 silver fox pelts brought $120,000, while single sets were bid at $860. Wildcat skins went at unusually high figures. Skunk, muskrat, mink, red fox and ermine commanded higher prices than last year.

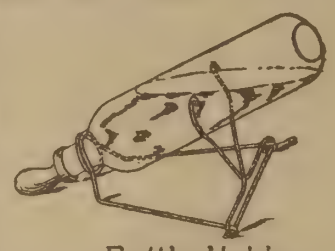
This condition is due in part to scarcity of pelts, caused by the government draft law, which has taken many trappers into the army service and reduced the number of skins available. It affords one of the money-making opportunities always created by world events for the young men of the farms and country generally to go into the trapping business. With fewer trappers, the fur-bearing animals ought to be plentiful and easy to catch.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Bottle Holder.

Each week we describe at least one invention of interest to women. In this



Bottle Holder

case it is a bottle holder made from two strips of wire bent as shown. You could make one in a few minutes.

Head Covering.

This covering is used while drying the hair in the sun after a shampoo. It is a piece of cloth approximately 18

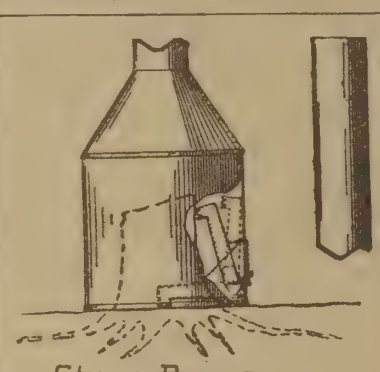


Hair Drier

inches wide by 24 inches long, with a piece of tape sewed along one 18-inch end. The eye shade is attached by two glove fasteners.

Stumps Burned Into Ground.

This sheet-metal burner differs from others in that it has a draft tube which sinks and applies the draft directly to



Stump Burner

the stump until it is burned into the ground. The burner is rolled from one stump to the next.

The temperature of the earth appears to increase from the outer surface downward at the rate of one degree Fahrenheit for every 50 or 60 feet, and at the relatively short distance of a few miles the temperature must be exceedingly high.

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PLAY SAFE WITH YOUR SHIPMENTS

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THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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SYNOPSIS.

Gale is trader of Flambeau, a frontier on the Yukon. Lieutenant Burrell is sent to this camp to preserve order. The day of his arrival Necia, Gale's daughter, returns from a mission school. As she and Burrell are talking, two halfbreed children and a squaw appear, and Necia, noting the lieutenant's look of disgust, informs him that they are her mother, brother and sister. Poleon Doret, a Frenchman, returns from Dawson, and on the same boat comes Runnion, a desperado. In attempting to make Runnion leave Flambeau, Burrell is shot by him and only the quick hand of Poleon saves him.

As Necia is arrayed in a ball gown, which Poleon brought her from Dawson, Burrell happens in. He is amazed at the ease with which she wears the dress and at the fairness of her skin. She confesses to a feeling that she, Necia, should be called "Merridy."

"No Creek" Lee, a prospector, after years of hard luck, makes a big strike. Runnion returns, and with him Stark, who has come to grubstake the miners and open a saloon. Stark causes Gale and the Squaw Alluna, great uneasiness. The men of the camp leave for Lee's claim, Necia, longing for riches so she may become like other girls, begs Burrell to follow them with her. Burrell knows that Necia is coveted by half the men in the camp and that it would cause a great uproar should he spend a night alone with her in the woods. This would be an easy way to compel them to an open state of enmity, which would be preferable to the indifferent toleration which he has met among them. This together with her entreaties and the confession that she loves him, sweeps aside all discretion and together they start on the journey.

Poleon Doret sang gaily as he set out for the claim with Gale. Here was a gift of wealth for him to lay at the feet of Necia with his laughter, his music and his heart. On the way Gale tells him the story of a good girl, loved by two men, a good man and a bad man, and how the he-devil had won in the game of love. That night the party camps in the woods, Stark, Runnion, Lee, Poleon and Gale. In the morning they draw straws to see who will have first choice of claims, Gale and Poleon receiving the lucky ones.

Sitting by the campfire when night had fallen, Necia begs for stories of Burrell's home life and of his sister. The girl apparently realizing her peril, wisely chooses this means of awakening in the lieutenant his slumbering conscience. She succeeds, for Burrell's honor is old and persistent. The next morning the two resume their journey, reaching Lee's cabin before the other party. Necia locates three claims for herself, but no amount of pleading will induce Burrell to stake one.

A few hours later Lee and the others arrive. That afternoon as Runnion, Stark and Poleon are locating some distance from the camp, Runnion makes some insinuations about Necia and Burrell which throws Poleon into a frenzy of anger and he vows that either Burrell or Runion will pay for them with his life.

After supper, Stark devotes himself to Necia, telling her the story of a girl about her own age who had chosen a young Bennett over another lover, Gaylord, and had married him. Then how Bennett came back one night to find his wife murdered and the kid gone. Of how they had chased Gaylord for months, but had finally lost track of him. Stark is about to tell the name of the little girl, but at this point a shot rings out and Gale jumps half way across the room crying: "My God, I've killed him." But the bullet hisses Stark by six inches and lies buried in a log.

With all the treachery and cunning conceivable, Stark and Runnion have systematically schemed to best Gale and Poleon out of their claims. They dispose of Necia's rights by saying that, as she has not yet reached 18, she has no legal authority to hold mining claims. As they are wrangling, Burrell slips out and restakes Necia's claims for himself, telling Necia afterward that they are hers as soon as she becomes of age.

Once home, Gale tells Alluna how Stark has proven himself to be bullet-proof. Alluna gives the trader a knife and tells him to kill Stark. As Gale goes out, he says that he can not do it in cold blood, but he slips the knife and scabbard inside the bosom of his shirt.

Corporal Thomas, guessing Necia's love for Burrell, tells her the story of another soldier who had loved a half-breed girl and how it had lost him position, honor and all that was worth while in life. Afterward Necia seeks her father in a rage and asks him why he married her mother and made her different from other girls. Then, for the first time, she learns that her father has never married Alluna. Necia tries to comfort herself with the thought that Meade's love reaches beyond blood and station and that he will marry her in spite of these things.

The steamboat comes that day, loaded with men. Stark's saloon is running, and by night Flambeau is a mining camp.

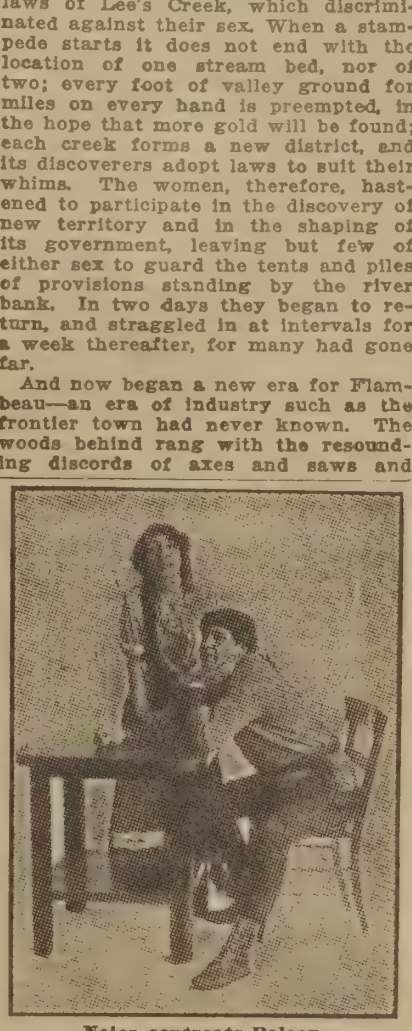
That night the miners in Stark's saloon are about to kill a negro for theft when Burrell intervenes. Gale tells Alluna the cause of Necia's grief and that she must be told the truth no matter if it does mean his life. All day Burrell has been fighting with himself. Out in the moonlight of the summer midnight he again faces the whole question of what marriage with Necia would mean to him and decides that, however hard it may be, he must put the girl out of his life forever. Just as he has conquered himself, he meets Necia, who has crept out to be alone with her misery. The sight of her tear-wet cheeks is too much for him, and without a word he takes her in his arms, quieting with his love and tenderness all her doubts and fears. The barriers Meade has built disappear and once more his course lies straight before him, but he does not know that the moon madness is upon him.

CHAPTER XI.

Where the Path Led.

By daylight next morning every man and most of the women among the new arrivals had disappeared into the hills—the women in spite of the by-laws of Lee's Creek, which discriminated against their sex. When a stampede starts it does not end with the location of one stream bed, nor of two; every foot of valley ground for miles on every hand is preempted, in the hope that more gold will be found; each creek forms a new district, and its discoverers adopt laws to suit their whims. The women, therefore, hastened to participate in the discovery of new territory and in the shaping of its government, leaving but few of either sex to guard the tents and piles of provisions standing by the river bank. In two days they began to return, and straggled in at intervals for a week thereafter, for many had gone far.

And now began a new era for Flambeau—an era of industry such as the frontier town had never known. The woods behind rang with the resounding discords of axes and saws and



Necia entreats Poleon.

crashing timber, and new cabins appeared on every hand, rising in a day. The sluggish air was noisy with voices, and the edge of the forest receded gradually before the busy pioneers, replacing the tall timbers with little, high banked homes of spruce and white-papered birch. From dawn till dark arose the rhythmic rasp of men whip-sawing floor lumber to the tune of two hundred dollars per thousand; and with the second steamer came a little steam saw mill, which raised its shrill complaint within a week, punctuating the busy day with its piping whistle.

The trail along the Flambeau was dotted continuously with toiling human beasts of burden, that floundered laboriously beneath great packs of provisions and tools and other baggage, winding like an endless stream of ants through the hills to "No Creek" Lee Creek, where they reenacted the scenes that were occurring in the town. Tents and cabins were scattered throughout the length of the valley, lumber was sawed for sluice-boxes, and the virginal breezes that had sucked through this seam in the mountains since days primeval came to smell of spruce fires and echo with the sounds of life.

A dozen tents were pitched on Lee's discovery claim, for the owner had been besieged by men who clamored to lease a part of his ground, and, yielding finally, he had allotted to each of them a hundred feet. Forthwith they set about opening their portions, for the ground was shallow, and the gold so near the surface that winter would interfere with its extraction; wherefore they made haste. The owner oversaw them all, complacent in the certainty of a steady royalty accruing from the working of his allotments.

Every day there came into Flambeau exaggerated reports of new strikes in other spots, of strong indications and of rich prospects elsewhere. Stories grew out of nothing, until the camp took an hysterical pleasure in exciting itself and of deceiving every stranger who came from north or south, for the wine of discovery was in them all, and it pleased them to distort and enlarge upon every rumor that came their way, such being the temper of new gold-fields. They knew they were lying, and that all other men were lying also, and yet they hearkened to each tale and almost deceived themselves.

Burrell sought Necia at an early day and, in presence of her father, told her that he had been approached by men who wished to lease the claims he held for her. It would prove an inexpensive way to develop her holdings, he said, and she would run no risk; moreover, it would be rapid, and insure a quick return, for a lease so near to proven territory was in great demand. After some discussion this was arranged, and Meade, as trustee, allotted her ground in tracts, as Lee had done. Poleon followed suit; but the trader chose to prospect his own claims, and to that end called in a train of stiff-backed Indian packers, moved a substantial outfit to the creek, and thereafter spent much of his time in the hills, leaving the store to Doret. He seemed anxious to get away from the camp and hide himself in the woods. Stark was almost constantly occupied at his saloon, for it was a mint, and ran day and night. Runnion was busy with the erection of a substantial structure of squared logs, larger than the trading post, destined as a dance-hall, theater and gambling house. Flambeau, the slumbrous, had indeed aroused itself, stretched its limbs, and sprung into vigorous, virile, feverish being, and the wise prophets were predicting another Dawson for it, notwithstanding that many blank spots had been found as the creek of Lee's finding bared its bedrock to the miners. These but enhanced the value of the rich finds, however, for a single stroke of good fortune will more than offset a dozen disappointments. The truth is, the stream was very spotted, and Lee had by chance hit upon one of the bars where the metal had lodged, while others above and below uncovered a bedrock as barren as a clean-swept floor. In places they crosscut from rim to rim, drove tunnels and drains and drifts, sunk shafts and opened trenches without finding a color that would ring when dropped in the pan; but that was an old, old story, and they were used to it.

During these stirring weeks of unsleeping activity Burrell saw little of Necia, for he had many things to occupy him, and she was detained much in the store, now that her father was away. When they met for a moment they were sure to be interrupted, while in and around the house Alluna seemed to be always near her. Even so, she was very happy, for she was sustained by the constant hectic excitement that was in the air and by her brief moments with Meade, which served to gladden her and make of the days one long, delicious, hopeful procession of undisturbed dreams and fancies. He was the same fond lover as on that adventurous journey up Black Bear creek, and wooed her with a reckless fire that set her aglow. And so she hummed and laughed and dreamed the days away, her happiness matching the peace and gladness of the season.

With Burrell, on the contrary, it was a season of penance and flagellations of spirit, lightened only by the moments when he was with her, and when she made him forget all else. This damnable indecision goaded him to self-contempt; he despised himself for his weakness; his social instincts and training, his sense of duty, and the amenities of life that proud men hold dear tugged steadily, untiringly at his reason, while the little imp of impulse sat grinning wickedly, ready to pop out and upset all his high resolutions. It raised such a tumult in his ears that he could not hear the other voices; it stirred his blood till it leaped and pounded, and then ran off with him to find this tiny brown and beaming witch who was at the bottom of it all.

No months in any clime can compare with an Arctic summer when nature is kind, for she crowds into this short epoch all the warmth and brightness and splendor that is spread over longer periods in other lands, and every growing thing rejoices riotously in scent and color and profusion. It was on one of these heavenly days, spiced with the faintest hint of autumn, that Necia received the news of her good fortune. One of her leasers came into the post to show her and Poleon a bag of dust. He and his partner had found the pay streak finally, and he had come to notify her that it gave promise of being very rich, and now that its location was demonstrated, no doubt the other "laymen" would have it within a fortnight. As all of them were ready to begin sluicing as soon as the ground could be stripped, undoubtedly they would be able to take out a substantial stake before winter settled and the first frost closed them down.

She took the news quietly, but with shining eyes, though her pleasure was no greater or more genuine than Poleon's, who grasped both her hands in his and shouted, gleefully:

"Bien! I'm glad! You'll be riche gal for sure now, an' wear plaintee fine dress lak' I fetch you. Jus' t'ink, you fin' gol' on your place more queecker dan your fader, an' he's good miner, too. Ha! Dat's bully!"

"Oh, Poleon! I'll be a fine lady, after all," she cried— just as I've dreamed about! Wasn't it beautiful, that pile of yellow grains and nuggets? Dear, dear! And part of it is mine. You know I've never had money. I wonder what it is like to be rich?"

"How I'm goin' tell you dat?"

"Oh well, they will find it on your claims very soon."

He shook his head. "You better knock wood w'en you say dat. Mebbe I draw de blank again; nobody can't tell. I've do de sam' t'ing before, an' dose men w'at been workin' my groun' dey're getting' purty blue."

"It's impossible. You're sure to strike it, if you don't, you can half of what I make—I'll be too wealthy, anyhow, so you might as well."

He laughed again, at which she suddenly remembered that he had not laughed very much of late, or else she had been too deeply absorbed in her own happiness to mark the lack of his songs and merriment.

"When you do become a Flambeau king," she continued, "what will you do with yourself? Surely you won't continue that search for your far country. It could never be so beautiful as this." She pointed to the river that never changed, and yet was never the same, and to the forests, slightly tinged with the signs of the coming season. "Just look at the mountains," she mused, in a hushed voice; "see the haze that hangs over them—the veil that God uses to cover up his treasures." She drew a deep breath. "The breeze fairly tastes with clean things, doesn't it? Do you know, I've often wanted to be an animal, to have my senses sharpened—one of those wild things with a funny, sharp, cold nose. I'd like to live in the trees and run along the branches like a squirrel, and drink in the perfume that comes on the wind, and eat the tender, growing things. The sun is bright enough and the world is good enough, but I can't feel enough. I'm incomplete."

"It's very fined," agreed the Canadian. "I don' see w'y anybody would care for livin' on dem cities w'en dere's so much nice place outside."

"Oh, but the cities must be fine also," said she, "though, of course, they can't be as lovely as this. Won't I be glad to see them!"

"Are you goin' away?" he inquired, quickly.

"Of course." Then glimpsing his downcast face, she hastened to add, "That is, when my caims turn out rich enough to afford it."

"Oh," he said, with relief. "Dat's different. I s'pose it mus' be purty dull on dem beeg town; now'ere to go, not'in' to see 'cept lot of houses."

"Yes," said Necia, "I've no doubt one would get tired of it soon, and long for something to do and something really worth while, but I should like to try it once, and I shall as soon as I'm rich enough. Won't you come along?"

"I don't know," he said, thoughtfully; "mebbe so I stay here, mebbe so I tak' my canoe an' go away. For long tam' I t'ink dis Flambeau she's de promis' ian' I hear callin' to me, but I don' know yet for w'ile."

"What kind of place is that land of yours, Poleon?"

"Ha! I never see 'im, but she's been cryin' to me ever since I'm little boy.

(Continued on the following page.)

THE BARRIER

(Continued from the preceding page.)

It's a place w'ere I don' get too hot on de summer an' too col' on de winter; it's a place w'ere birds sing an' flowers blossom an' de sun shine, an w'ere I can sleep widout dreamin' 'bout it all de tam'."

"Why, it's the land of content—you'll never discover it by travel. I'll tell you a secret, Poleon. I've found it—yes, I have. It lies here." She laid her hand on her breast. "Father Barnum told me the story of your people, and how it lives in your blood—that hunger to find the far places; it's what drove the voyageurs and coureur du bois from Quebec to Vancouver, and from the Mississippi to Hudson's Bay. The wanderlust was their heritage, and they pushed on and on without rest, like the salmon in the spring, but they were different in this: that they never came back to die."

"Dat's me! I never see no place yet w'at I care for die on, an' I never see no place yet w'at I care for see again 'cept dis Flambeau. I lak' it, dis one, purty good so far, but I ain' know w'en I'm goin' get tire'. Dat depen's." There was a look of great tenderness in his eyes as he bent toward her and searched her face, but she was not thinking of him, and at length he continued:

"Fader Barnum, he's goin' be here nex' Sonday for cheer up dem Injun. Constantine she's got de letter."

"Why, that's the day after tomorrow!" cried Necia. "Oh, won't I be glad to see him!"

"You don' get dem kin' of mans on de beeg cities," said Poleon. "I ain' never care for preachin' much, an' dese feller w'at all de tam' pray an' sing t'rough de nose, dey mak' me seeck. But Fader Barnum— Ba Gar! She's the swell man."

"Do you know," said Necia, wistfully, "I've always wanted him to marry me."

"You t'inkin' 'bout marry on some feller, eh?" said the other, with an odd grin. "Wal! w'y not? He'll be here all day an' night. S'pose you do it. Mos' anybody w'at ain' got some wife already will be glad for marry on you—an' mebbe some feller w'at has got wife, too! If you don' lak' dem, an' if you're goin' marry on somebody, you can be wife to me."

Necia laughed lightly. "I believe you would marry me if I wanted you to; you've done everything else I ever asked. But you needn't be afraid; I won't take you up." In all her life this man had never spoken of love to her, and she had no hint of the dream he cherished. He had sung his songs to her and told her stories till his frank and boyish mind was like an open page to her; she knew the romance that was the very fiber of him, and loved his exaggerated chivalry, for it minded her of old tales she had read; but that he could care for her save as a friend, as a brother—such a thought had never dawned upon her.

While they were talking a boat had drawn inshore and made fast to the bank in front of them. An Indian landed and, approaching, entered into talk with the Frenchman.

By-and-by Poleon turned to the girl, and said:

"Dere's 'hondred marten-skins come in; you min' de store w'ile I ma' trade wit' dis man."

Together the two went down to the boat, leaving Necia behind, and not long after Runnion sauntered up to the store and addressed her familiarly.

"Hello, Necia! I just heard about the strike on your claim. That's fine and dandy."

She acknowledged his congratulations curtly, for although it was customary for most of the old-timers to call her Christian name, she resented it from this man. She chose to let it pass, however.

"I had some good news last night myself," he continued. "One of my men hit some good dirt, and we'll know what it means in a day or so. I'll gamble we're into the money big, though, for I always was a lucky cuss. Say, where's your father?"

"He's out at the mine."

"We've used up all of our bar sugar at the saloon and I want to buy what you've got."

"Very well, I'll get it for you."

He followed her inside, watching her graceful movements and attempting, with his free-and-easy insolence, to make friendly advances, but, seeing that she refused to notice him, he became piqued and grew bolder.

"Look here, Necia, you're a mighty pretty girl. I've had my eye on you ever since I landed and the more I see of you the better I like you."

"It isn't necessary to tell me that,"

(Continued on page twenty-six.)

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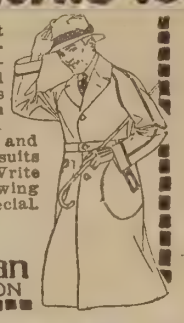
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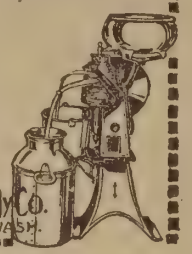
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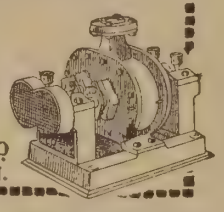
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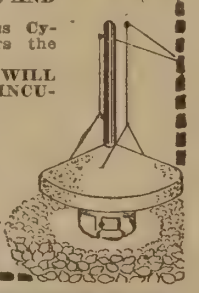
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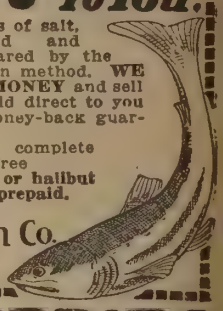


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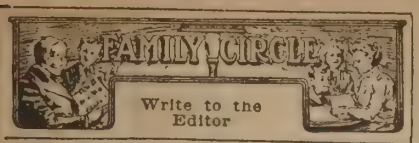
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ALICE W. BARLAND
Editorial Contributor

Winter Blooms

Time to Pot Bulbs for Easter

By Ruth Gipson Plowhead.

As a child I remember often visiting at a home where large pots of yellow oxalis blossomed freely through the winter months. The pots were on brackets on either side of the window, and impressed me as nothing else about the furnishings did. This is such a sunny little flower and so easily grown that it should brighten more flower loving homes. The bulbs cost but a few cents, and should be potted and rooted in a cool light place. As with most bulbs, too much head blights the buds and prevents blooming.

Thinking of bulbs, it is a splendid time to pot them this month for Easter blooming. Easter lilies are a favorite with many and it is wonderfully interesting to watch the unfolding, from the first tiny green shoot to the fragrant flowers. The bulbs may be had for from 15 to 50 cents, according to the number of flower buds they are supposed to have, but the amateur is usually advised to try the smaller bulbs, or, if in a light room, should have the top of the pot protected with moss until the bulbs are well rooted. At no time should they be kept too warm.

The asparagus sprengori is probably one of the most popular of the "green" plants for house culture. Not many people realize that this plant may be so easily started from seed. The seeds are hard and take some time to germinate, but if planted in a fern dish or small pot suitable for table decorations the little seedlings germinate within several months and form a feathery mass which makes a very pretty table decoration. The seedlings may be left in these seed pans for several months.

Keep Fruit Jars Working.

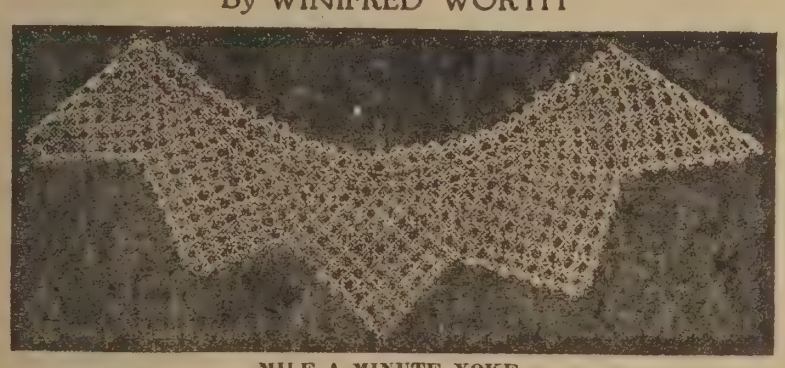
Many of us breathed a sigh of relief when our last jar was filled and placed in the cellar. But as we open these jars there are a number of things with which we can refill them, and so save some foods for the late spring use. Apples are so plentiful this year that we out west often have more than we can use. Did you ever think that next year may be a fruit failure? Even if it is not there are several months when fruit is scarce, during May and June, especially, and if when cooking apple sauce for the day's use one cans a jar or two the late spring will find your otherwise empty jars filled with enough sauce to tide over a number of otherwise fruitless meals.

We have more squash than we can use and are canning it. Though canning it especially for squash pies, it will doubtless be used as a vegetable, too. To can squash, which some people find difficult, cut the squash into small pieces with an ax, pare, throw into boiling water and let it boil 10 minutes. Then dip in cold water, drain, and pack at once in warm jars. Boil, with the water over the tops of the jars for full two hours. It is always better to allow a little time over the directions than to run the risk of undercooking. Seal and store for use.

Carrots, which are so tender when freshly dug become more pithy and wrinkled toward spring, as do turnips. These may be canned from time to time if the family care for them. Some people we know are canning chickens and turkeys, having more than they care to carry over winter, and prefer to can them to selling.

Crochet and Tatting Designs

By WINIFRED WORTH



MILE-A-MINUTE YOKE.

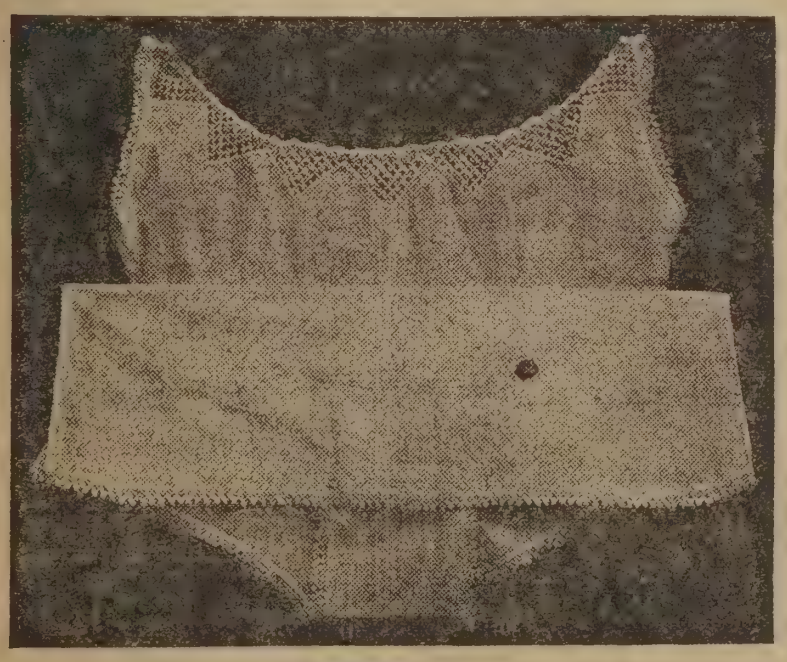
Use No. 40 Cordonnet.

1st Row—Ch. 20 catch in 9 st. ch. 5 1 t. in next. Ch. 3, 1 t. in same st., ch. 5 (1 t. 3 ch. 1 t.) in 6 st. turn.

2d Row—Ch. 4. 1 t. in 1st L. 3 ch. 1 t. 3 ch. 1 t. 3 dc. 1 t. in same loop. Repeat to end of row. In last L. add one extra 3 ch. t., making 4 L. in last of row, turn.

3d Row—Ch. 6 (1 t. in 2d l. 3 ch. 1 t.) ch. 5 (1 t. 3 ch. 1 t.) in 4th l. Repeat to end of row. Continue to increase every other row until there are 9 loops or shells in last row. Repeat pattern until 14 points are made, join. Finish with a shell of loops.

For edging of garment use same edge as edge of yoke.



Envelope Chemise.

This shows the Mile-a-Minute yoke in an envelope chemise. This yoke may be used very nicely in gowns, corset covers or negligees, or in matched sets. This can be worked into any number of points, but it is better to work an even number of same, and have one point in exact center of yoke. The yoke in this garment contains 14 points.

Amusing the Children

By ELIZABETH QUAKER.

Food, shelter and clothing are the three essentials to the human family, but every mother knows amusement holds a very important place. Mothers often express themselves as dreading the winter months, which shut the little ones indoors. "I can never keep my house in order and their noise drives me nearly frantic."

Yes, I know, but do not dwell upon that side of the question, rather consider it a time teeming with golden opportunities. Say "This is my chance." These little minds are getting many high ideals and much education through their play. How important then that we should direct that play into helpful channels.

At times when mother is "just too busy to bother" a "treasure box" comes in very handy for the "wee little folks." High, in a remote corner, on the top of the shelf of my pantry, is a large shoe box into which little fingers are forbidden to pry. (No, that's not where I keep my raisins.) Its contents resemble what many would term trash. A lot of odds and ends which I can arrange, quickly, into entertainment for the little ones. A wide-mouthed bottle half filled with kernels of corn or beans, with a cork that fits, will amuse a child of 2 or 3 years for an hour if given a small tin like a jelly glass cover into which to pour the corn. They will call the corn feed for imaginary stock or perhaps sheep or pigs will be breaking from an imagirary pen. At least, mother will gain a quiet time for that bit of work she was anxious to finish.

A box with a few toothpicks and assorted sized buttons, a short shoe lace and some shoe buttons to string in another small box, beads to string, an envelope with a bright picture cut into irregular pieces, for them to fit together again, will amuse an older child. There is no end to the little things I drop into my "treasure box."

Another form of home amusement which is a most potent factor toward good, whose educational value can hardly be overestimated, is story-telling.

Beginning with the nursery jingles for the little tots, proceeding with all the familiar fairy tales, biblical stories, incidents concerning famous historical characters and family traditions, on through childhood. Is there anything the children enjoy more generally than stories?

The mother who announces "I have a new story to tell tonight," never needs "slipper aid" to get the youngsters into their nighties.

At our house father is a good story-teller, too. Oftentimes the children gather around the fire with him to hear of some interesting incident of his boyhood or of a thrilling bear hunt about which he has been reading.

An occasional evening at games, in which the parents join, is time well spent. Such old standbys as dominoes, checkers, authors and the like should be familiar to every child.

Games, stories and music, with popcorn and apples, strong cords to help form a lover's knot to hold the children at home.

Scrapple

Good, Economical Winter Food

Scrapple—a meat and cornmeal mush, greatly relished by many—puts to good use such meat as hog heads, hearts and livers, and is a good use for corn meal also. The United States department of agriculture gives the following directions for preparing this dish, excellent for breakfast, luncheon or dinner.

Ingredients.

Whole hog heads, 10 pounds.
Hog livers and hearts, 2½ pounds.
(A small quantity of beef can be used also if desired.)
Corn meal (yellow or mixed), 6 pounds.
Buckwheat or rye flour, ½ pound.
Spices as marjoran, sage, thyme and pepper in proportion as desired, or omit those not desired, 3 ounces.
Salt, ½ pound.
Liquid in which meat is boiled; use a quantity equal to the total weight of the combined solids.
The proportion of the various ingredients may be varied to suit individual taste.

Directions for Preparing.

Clean the hog heads thoroughly, removing the eyes and ear tubes. Split the head lengthwise and remove the teeth and the soft bones in and near the nasal cavities. Place the hog heads and other meat into a large kettle or caldron with a liberal quantiy of water and cook until the meat falls off the bones. Remove all of the meat and soft tissues from the bones and chop the meat by passing it through a meat grinder. Strain the cooking liquid to remove any small pieces of bone. Place the liquid back into the kettle. Heat to boiling point, at which time slowly add the meal and flour, and stir constantly to prevent the meal from forming into lumps and also to avoid scorching. Boil and stir until the mass becomes thick, and then add the salt, spices and chopped meat. Boil ten minutes and while still hot pour the product into deep wet molds—bread pans will do. Pour 2 to 4 large spoonfuls of melted lard over the product in the pans. As soon as the product has cooled it is ready for use.

The usual way of serving scrapple is to cut it into slices about one-half inch thick, dust the slices with flour or cracker dust, or dry corn meal and fry until the outside is somewhat crisp. Serve while hot. Fried apples are good with fried scrapple.



"The Barrier" By REX BEACH

(From page twenty-four.)

she replied. "The price of the sugar will be just the same."

"Yes, and you're bright, too," he declared. "That's what I like in a woman—good looks and brains. I believe in strong methods and straight talk, too; none of this serenading and moonlight mush for me. When I see a girl I like I go and get her. That's me. I make love like a man ought to—"

"Are you making love to me?" she inquired, curiously.

"It's a little bit sudden, I know, but a man has to begin some time. I think you'd just about suit me. We'll both have money before long and I'll be good to you."

The girl laughted derisively in his face.

"Now don't get sore. I mean business. I don't wear a blue coat and use a lot of fancy words, and then throw you down when I've had my fun, and I don't hang around and spoil your chances with other men, either."

"What do you mean?"

"Well, I'm no soft-talking southerner with gold buttons and highfalutin' ways. I don't care if you are a squaw, I'll take you—"

"Don't talk to me" she cried, in disgust, her voice hot with anger and resentment.

But he continued, unheeding: "Now, cut out these airs and get down to cases. I mean what I say. I know you've been casting sheep's eyes at Burrell, but, Lord, he wouldn't have you, no matter how rich you get. Of course, you acted careless in going off alone with him, but I don't mind what they're saying around camp, for I've made little slips like that myself, and we'd get along—"

"I'll have you killed," she hissed, through her clinched teeth, while her whole body vibrated with passion. "I'll call Poleon and have him shoot you." She pointed to the river bank a hundred yards away, where the Canadian was busy assorting skins.

But he only laughed at her show of temper, and shrugged his shoulders as he answered her, roughly:

"Understand me, I'm on the square. So think it over, and don't go up in the air like a skyrocket."

She cried out at him to "Go—go—go" and finally he took up his bundle, saying, as he stepped out slowly:

"All right. But I'm coming back, and you'll have to listen to me. I don't mind being called a squawman. You're pretty near white, and you're good enough for me. I'll treat you right—why, I'll even marry you if you're dead set on it. Sure."

She could scarcely breathe, but checked her first inclination to call Poleon, knowing that it needed only a word from her to set that nut-brown savage at Runnion's throat. Other thoughts began to crowd her brain and to stifle her. The fellow's words had stabbed her consciousness and done something for her that gentler means would not have accomplished; they had opened her eyes to a thing that she had forgotten—a hideous thing that had reared its fangs once before to strike, but which her dreams of happiness had driven out of her Eden. All at once she saw the wrong that had been done her, and realized from this brute's insult that those early fears had been well grounded. It suddenly occurred to her that in all the hours she had spent with her lover, there had never been one word of marriage. He had looked into her eyes and vowed he could not live without her, and yet he had never said the words he should have said, the words that would bind her to him. His arms and his lips had comforted her and stilled her fears, but after all he had merely made love. A cold fear crept over the girl. She recalled the old corporal's words of a few weeks ago, and her conversation with Stark came back to her. What if it were true—that which Runnion implied? What if he did not intend to ask her, after all? What if he had only been amusing himself? She cried out sharply at this, and when Doret staggered in beneath a great load of skins he found her in a strange excitement. When he had finished his accounting with the Indian and dismissed him, she turned an agitated face to the Frenchman.

"Poleon," she said, "I'm in trouble. Oh, I'm in such awful trouble!"

"It's dat Runnion! I seen 'im pass on de store w'ile I'm down below." His brows knit in a black scowl, and his voice slid off a pitch in tone. "W'at he say, eh?"

"No, no, it's not that. He paid me a great compliment." She laughed harshly. "Why, he asked me to marry him."

The man beside her cursed at this, but she continued: "Don't blame him for liking me—I'm the only woman for 500 miles around—or I was until this crowd came—so how could he help himself? No, he merely showed me what a fool I've been.

"I guess you better tell me all 'bout dis t'ing," said Poleon, gravely. "You know I'm all tam' ready for help you, Necia. W'en you was little feller an' got bust your finger you run to me queeck, an' I feex it."

"Yes, I know, dear Poleon," she assented, gratefully. "You've been a brother to me, and I need you now more than I ever needed you before. I can't go to father; he wouldn't understand, or else he would understand too much, and spoil it all, his temper is so quick."

"I'm not w'at you call easy-goin' mese'f," the Canadian said, darkly, and it was plain that he was deeply agitated, which added to the girl's distress; but she began to speak rapidly, incoherently, her impulsiveness giving significance to her words, so that the man had no difficulty in following her drift. With quick insight he caught her meaning, and punctuated her broken sentences with a series of grave nods, assuring her that he knew and understood. He had always known, he had always understood, it seemed.

"Don't think I'm unwomanly, Poleon, for I'm not. I may be foolish and faithful and too trusting, but I'm not—unmaidenly. You see, I've never been like other girls—and he was so fine, so different, he made me love him—it's part of a soldier's training, I suppose. It was so sweet to be near him, and to hear him tell of himself and all the world he knows—I just let myself drift. I'm afraid—I'm afraid I listened too well, and my ears heard more than he said—my head is so full of books, you know."

"He should have know' dat, too," said Poleon.

"Yes," she flared up. "He knew I was only an Indian girl.

The only color in Doret's face lay now in his cheeks, where the sun had put it; but he smiled at her—his warm, engaging smile—and laid his great brown hand upon her shoulder softly.

"I've look' in hees eye and' I'm always t'ink he's good man. I don' never t'ink he'll mak' fun of poor little gal."

"But he has, Poleon; that's just what he has done." She came near to breaking down, and finished, pathetically, "They're telling the story on the street, so Runnion says."

"Dat's easy t'ing for feex," he said. "Runnion, she don' spread no more story lak' dat."

"I don't care what they say. I want the truth. I want to know what he means, what his intentions are. He swears he loves me, and yet he has never asked me to marry him. He has gone too far; he has made a fool of me to amuse himself, and—and I couldn't see it until today. He's laughing at me, Poleon, he's laughing at me now! Oh, I can't bear it!"

The Frenchman took up his wide hat from the counter and placed it carefully upon his head, but she stopped him as he moved toward the door, for she read the meaning of the glare in his eyes.

"Wait till you understand—wait, I say! He hasn't done anything yet."

"Dat's de trouble. I'm goin' mak' 'im do semet'ing."

"No, no! It isn't that; it's these doubts that are killing me—I'm not sure——"

"I hear plaintee," he said. "Dere's no tam' for monkey roun'."

"I tell you he may be honest," she declared. "He may mean to marry me, but I've got to know. That's why I came to you; that's what you must find out for me."

"I'm good trader, Necia," said the Canadian, after a moment. "I'll mak' bargain with' you now. If he say yes he'll marry you, I don' ask no more; but if he say no, you geeve 'im to me. Is it go?"

She hesitated, while he continued, musingly, "I don' see how no man on al dis worl' could lef' you go." Then to her, "Wal, is it bargain?"

"Yes," she said, the Indian blood speaking now; "but you must learn the truth, there must be no mistake—that would be terrible."

"Dere ain' goin' be no mistak'."

"If he should refuse, I—I'll marry some one, quick. I won't be laughed at by this camp. I won't be a joke. Oh, Poleon! I've given myself to him just as truly as if—well, he—he has taken my first kiss."

Doret smote his hands together at this and began to roll his head backward from side to side, as if in some great pain, but his lips were dry and silent. After a moment the spell left him, the fire died down, leaving only a dumb agony in its place. She came closer and continued:

"I'll never let them point at me and say, 'There goes the squaw that—he threw away.'"

"You mak' dis very hard t'ing for me," he said, wearily.

"Listen," she went on, lashing herself with pity and scorn. "You say Father Barnum will be her on Sunday. Well—I'll marry some one, I don't care who!" Then, with a sudden inspiration, she cried, "I'll marry you—you said I could be a wife to you."

He uttered a sharp cry. "You mean dat, Necia?"

"Yes," she declared. "Why not? You'll do it for my sake, won't you?"

"Would you stan' up wit' me 'longside of de pries', lovin' dat oder feller all de tam?" he asked, queerly.

"Yes, yes! I'd rather it was you than anybody, but married I'll be on Sunday. I'll never let them laugh at me."

Doret held his silence for a moment, then he looked up and said, in level tones:

"It's easy t'ing for go an' ask 'im, but you mus' hear hees answer wit' your own ears—den you can't t'ink I'm lyin'. I'll fetch 'im 'ere on dis place if you feex it for hide you'se'f behin' dese post." He indicated a bundle of furs that were suspended against a pillar, and which offered ample room for concealment.

"Dere's goin' be no lies today."

He pulled himself together and went out, with the tired gait of an old man, his great shock head bowed low. A few moments later he returned.

"I've sent li'l' Jean for 'im. You get in der out of sight—an' wait."

(To be continued.)

Water for Chicks.

Perhaps one can scarcely overestimate the value of a constant supply of fresh clean water to the growth of the chick, says Helen Dow Whitaker, head of the poultry department of the Washington State college. By actual analysis water makes up a little over one-half of the body of the chick. Moreover, it serves the following purposes in the chick's ration:

1. To soften the food in the crop.
2. To dilate concentrated food.
3. To carry nourishment throughout the body.
4. To aid in digestion and assimilation of food.
5. To carry waste out of the system.
6. To regulate the temperature of the body.

Underfeeding stunts less than lack of water in warm weather. Dirty, stale or stagnant water makes an ideal and speedy carrier of disease germs and poisons throughout the entre system of the chick. In view of these facts, and in view of the price of water, can one afford to stint the supply?

The Evolution of Flour.

The conversion of wheat into flour was one of the earliest developments of civilization, and even the primitive races in the dawn of history submitted the grain to a coarse pounding between stones. Perhaps the oldest flour "mills" in existence are the rude stones found among the remains of the ancient lake dwellings in Switzerland. By a mortar and pestle arrangement the wheat was reduced to a coarse meal. Crude as this method was, it contained the germ of the modern flour mill. For countless centuries the preparation of meal and flour was a purely domestic process.

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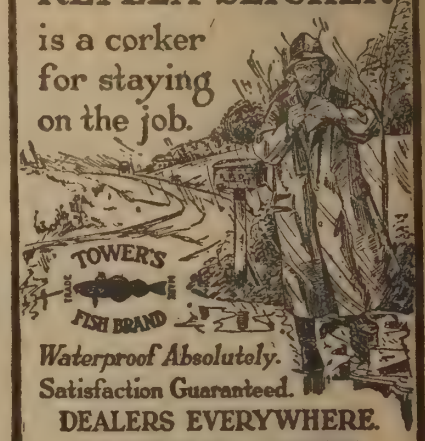
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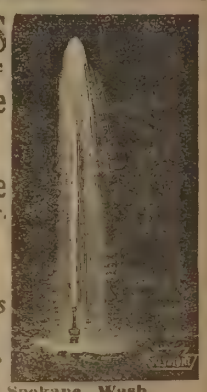
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2285—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 10 requires 3 1-2 yards of 44-inch material. Price, 10 cents.

2288—Ladies' negligee. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 7 1-4 yards of 36-inch material. Price, 10 cents.

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2300—An attractive set of toy animals. The patterns are cut in one size only. It will require half yard of flannel for the sheep, three-quarters yard for the dog and three-eighths yard for the pig. Price, 10 cents.

She Will Learn.

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Mrs. Newlywed—Oh, no, you didn't. It was on the duck. I saw it when you wrapped up the parcel.—Judge.



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New Eats.

There are many new things to eat, and many new ways of preparing familiar foods. The American housekeeper must now become an adept in that knowledge of food that is the common heritage of the European housewife. They have never known the red meat diet of America, yet hardy sons of countries across the waters have built our railways and dug our subways. Food prejudice should not be allowed to stand in the way. Our great source of waste is the influence of custom. People are afraid to try new methods and new ideas. The housekeeper will find profit and knowledge in getting her recipes down to fighting trim.

The Secretary Bird.

The secretary birds gets its name from the tufts of feathers which grow exactly like a bunch of pens stuck behind a clerk's ear. The bird has long legs and large wings, with which it can ascend to a great height. It builds a strong nest in a tree, and lives in it year after year, subsisting on small animals and tiny snakes.



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Fleece-lined hosiery, to be comfortable, must be heavy. That's why Mother always buys Durable-DURHAM Fleece-lined Hosiery for everybody in the family. It has the substantial weight to protect in the coldest weather, the fleece is soft and silky and the cost is but 25 cents a pair.

DURABLE
DURHAM HOSIERY
FOR MEN, WOMEN AND CHILDREN
Is Made Strongest Where the Wear is Hardest

Not only is Durable-DURHAM made in fleece-lined, but also for all occasions and all seasons. It gives better wear, feels better and looks better. That's because of the strongly reinforced heels, soles and toes; the full-length legs; the wide elastic top that can't be pulled off or torn by garters; the smooth, seamless and even feet and toes; the correctly marked sizes, and the way the famous Durham dyes are fast—colors will not fade or turn green from wearing or washing; quality is uniform throughout.

Durable-DURHAM Hosiery is made in all weights for all seasons of the year and sells for 15, 19, 25 and 35c.

Ask your dealer to show you our women's 35c and men's 25c silk-mercerized hosiery with the patented anti-run stitch.

DURABLE DURHAM HOSIERY Trade-Mark

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The FOOD of The HOUR

is the food that proves its economy on a basis of food value—the greatest amount of nutriment at the least cost.

Ghirardelli's Ground Chocolate is an ideal blend of two ideal nutritious foods—cocoa and sugar.

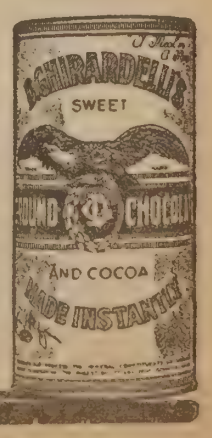
By using Ghirardelli's Ground Chocolate freely and wisely—in place of other less nutritious and more expensive foods—you will save money and aid in food conservation.

Ghirardelli's
Ground Chocolate

Comes in 1-2 lb., 1 lb. and 3 lb. cans.

D. GHIRARDELLI COMPANY

Since 1852 San Francisco





Dear Cousins: This is the close of our last contest for this year and many nice letters were received. The subjects given as an aid in helping to select a topic to write on, inspired many to write about our country, war, things to be thankful for, letters of sympathy and telling of their assistance in this great time of unrest and war.

I am glad so many of our girls are Red Cross helpers; the older girls can assist in knitting and making hospital garments for our soldiers. I hope that many of the cousins will show some kindness to the poor, lonely ones this Christmas. To make others happy does not mean spending money, but loving sympathy and kind deeds.

One of our girls mentioned a crochet and tatting contest. What do you think of it? Let Aunt Nellie know and if you want one, we will try to arrange it.

Many letters came from our "old" cousins as they noticed our little Corner growing smaller. We all want to keep it. To keep it we must all write letters—letters of real interest, if not on the subjects given, letters of what you do and how you do it; perhaps it may help some one who does not know and wants to know. Come to Aunt Nellie; she will help you all she can.

As I said, this closes our last contest for the year; letters that come in December and after this will be entered in our contest for January and February. So many nice letters were received! Such an improvement in writing and in every way—good expression, very few misspelled words.

In order to assist you in the next contest the following subjects are given:

Prize Winners.

Basil Millam, Menlo, Wash.
Vera Dale Peck, Republic, Wash.
Thusnelda Kilian, 2106 Ninth avenue, West, Seattle, Wash.

Roll of Honor.

Emma Aldrick, Selah, Wash.; Elna Mattson, R. 5, Box 32, Mt. Vernon, Wash.; Alfred Venneberg, Manson, Wash.; Edith James, box 114, Krupp, Wash.; Selma Lillquist, R. 5, box 89, Mt. Vernon, Wash.; Elva Green, Penawawa, Wash.; Violet Johnson, R. 5, box 33, Mt. Vernon, Wash.; Hilma Anderson, R. 3, box 19, Olympia, Wash.; Elizabeth Hamilton, Soap Lake, Wash.; Garretta Adriana DeBoer, R. 1, box 79, Lynden, Wash.; Jerome Gottwals, Gowan, Wash.; Nellie Smith, box 46, Albion, Wash.; Rosa May Millam, Menlo, Wash.; Harry Wegele, Wilson Creek, Wash.; Maple Schlief, box 33, Molson, Wash.; Ralph Stewart, R. 6, box 232, Vancouver, Wash.; Elsa Mattson, R. 5, box 32, Mt. Vernon, Wash.

A Letter From Cousin Harry.

Dear Aunt Nellie: This is the second letter I have written to the Corner and I enjoy reading the letters very much. We live on a 640-acre farm. We have seven cows and their names are Freckles, Dina, Nettie, Niff, Topsy, Cora and Lucy. We have 15 horses. We have two cats and one dog. The cats' names are Tommy and Teddy and the dog's name is Shep. I have six sisters and their names are Anna, Mollie, Lydia, Hattie, Margaret and Helen. I have one brother and his name is Edward. I am 8 years old and my birthda yis the 14th of September. I go to school. I like school very much. I like my teacher very much. Her name is Miss Hamilton. I have to go a mile and a quarter to school.—Harry Wegele, Wilson Creek, Wash.

Erma Aldrich Is a Cousin.

Dear Aunt Nellie: I have never written to the Corner before. I have two sisters and one brother. I am 9 years old. I will be 10 the 16th of December. Have I a twin? If I have I would like to hear from her. I am in the fourth grade. We have two cows and a little calf. It will be 4 weeks old soon. I like to ride horseback real well. We have a little rabbit. Almost every time we go by its pen it runs down its hole. Our teacher's name is Miss Newguard. We like her real well. We had a Thanksgiving program. My brother spoke a piece.—Erma Aldrich, Selah, Wash.

Dressed Their Dolls Like Pilgrims.

Dear Aunt Nellie: Hello! How are you? I am fine and dandy. Some of the girls have fine letters. I am 9 years old. My birthday is October 22. It will come every year. I guess every one's birthday comes every year. Doesn't yours? This time I have a good subject. It is Sewing at School. I like to sew. We are sewing some dresses for our dolls now at school. Our teacher said we could bring some dolls if we wanted to make Pilgrims of them. So I brought a doll. It is only a little doll. The teacher said it was all right. My sister did not want me to bring her doll. Now we are sewing some dresses for the dolls. I am sewing an apron for a doll. The apron that I am sewing is blue. I have finished my apron. Now I have to stop writing or else I won't get to go to bed.—Helen Anderson, R. R. 3, Box 19, Olympia, Wash.

Maybell Is a Real Twin.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope to see my letter in print. My name is Mabell and my sister's name is Annabell Van Hoy. We are 9 years old. I weigh 108 pounds and my sister weighs 107 pounds. We walk a mile to school. Our teacher's name is Miss Botford. We are in the third grade. My brother is in the sixth grade. There are eight scholars in our school. We have a dog. Her name is Topsy. We have three pigs and two cows and two calves. We have four horses and a colt. We live on an alfalfa farm along the Columbia river. If this doesn't find the waste basket, I hope I see it in print.—May Van Hoy, Hanford, Wash.

Gets Supper and Breakfast Ready.

Dear Aunt Nellie: I have written to the Children's Corner before, but I have never seen the last two in print. I suppose you never got them at all. We had a program at our school last Friday. I go to the public school. We ride to school in a bus. There was a girl wrote to the Children's Corner and she lived in Quincy. She said her teacher's name was Miss Ford and her teacher used to be mine. I wish she would write to me. I have to get supper every night and breakfast every morning for mama and papa while they milk the cows. We have closed Sunday school for the winter and we chose sides for a contest to work on all winter and I am the head of one side, which is the blues. The side that gets the most points gets a reward.—Lilly Wotton, Friday, Harbor, Wash.

Mary Is Eight Years Old.

Dear Aunt Nellie: I am eight years old. My birthday is the 19th of June. I am in the third grade. We have five horses, one colt, 13 cows, three pigs, five sheep, two dogs and four cats. Papa was driving cattle the other day horseback and the horse fell down with him and papa broke his arm in several places between his wrist and elbow.—Mary Thompson, Glenwood, Wash.

Nice to Live on a Farm.

Dear Aunt Nellie: This is the first time I have written to the Corner. I will be 9 years old the 4th of December. Have I a twin? I like my teacher. Her name is Miss Lee. I am in the third grade. I have two brothers, but no sisters. I have a little niece. Her name is Cleo. We have three horses and one colt. We have 16 cows and a pet dog. His name is Prince. I have lived on a farm all my life and think it very nice. —Alice Velma Clark, Bow, Wash.

A Fine Place to Play in the Sand.

Dear Aunt Nellie: I am writing to the Children's Corner for the first time. I am 7 years old. I have two sisters, Verda and Lucile. Verda is 9 and Lucile is 5. We live on a 240-acre farm. We have 23 cows, five horses and 50 hogs. Mama raises ducks and chickens. I go to the Hunters school. I am in the second grade. We live near the Columbia river. It is a fine place to play in the sand. Papa reads the Farmer. I hope he sees my letter in the Children's Corner.—Marion Moffat, Hunters, Wash.

Eva Is Making Christmas Presents.

Dear Aunt Nellie: I am in the fifth grade at school. Our teacher's name is Miss Hudson. We have 16 scholars. There are five boys and the rest are girls. Lots of the cousins have written to me. I am making quite a few Christmas presents. My subject is My Pets. I have a pet hen and her name is Petsy. I have three cats named Kitty Tom, Kitty Gordon, and Clove. Kitty Tom is black. Kitty Gordon is black and white, and Clove is black, and there is a spot of white under his neck. All of us have a pony. We drive her single in the buggy. Her name is Topsy. She is very small and very gentle. My brother and I can catch her. We live on a 100-acre farm. I like to write to the Farmer. I can not think of much to say. I wish some one would correspond with me.—Eva Boud, R. R. 1, Valley, Wash.

Ora Has Six Rabbits.

Dear Aunt Nellie: I have never written to the Corner before. I am 10 years old and will be 11, April 23. I am in the fifth grade. Have I a twin? I have a brother and a sister. Their names are Herbert and Helen. Herbert has a sow and seven litle pigs. I have six rabbits. I like to go to school. My teacher's name is Miss Dinsmore. We do not have a football at school. I live on a 40-acre farm. We have a 12-acre orchard. We have three cows and two horses. I walk one mile and a half to school. Our teacher is going to give a pair of skates away Christmas to the boy or girl who gains the most in arithmetic between now and Christmas.—Ora Baird, Sunnyside, Wash.

Enjoys Horseback Riding.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but think it will not be the last time. I am nine years old and in the fourth grade at school. My name is Eugenia Irene Tucker. I live on a 320-acre ranch near Almira. I am visiting my neighbors, Mr. and Mrs. W. C. Buxton, who live about a mile from our house. I have two sisters, June and Frances, and three half brothers. One will soon go to France. His name is Delbert Rice. Theodore and Roy Rice have gone to visit him at American Lake. How many of the little cousins enjoy horseback riding? I do, for one.—Eugenia Tucker, Almira, Wash.

Have a Nice Sunday School.

Dear Aunt Nellie. This is the first time I have written to the Children's Corner. I was 9 years old the 22d of November. I have two sisters, Marion and Lucile. Marion is 7 and Lucile is 5. We live on a 240-acre farm, one mile from the Columbia river. Papa has five horses, 50 hogs and 23 cows. We sell cream to the Hazelwood company. I like to read the Children's Corner. I am in the third grade at school. We have a nice Sunday school. I hope to see my letter in the Children's Corner. If I do I will write again.—Verda Moffat, Hunters, Wash.

Helps Mother and Daddy.

Dear Aunt Nellie: This is the first time I have written to the Corner. I am nine years old and in the fourth grade. We live on a 240-acre farm. I chop the wood for mother and pile it all in the woodshed for mother and some times I take the horses over to the spring for daddy. We have 11 head of cattle, 22 horses and one dog and one cat. I have a mile and a half to go to school. Sometimes I ride.—Jerome Gottwals, Govan, Wash.

Go to a Country School Now.

Dear Aunt Nellie: I will write again to see how the cousins are. I have been very much interested in reading the letters of my cousins. Every time we get the Farmer I am most always the first one to read anything in it. I like the funny pictures in the funny paper. We went riding today in the car. We went to the top of the mountains, that is we did not go to the top of the highest peak, but we went over north. Then we went to Joseph and on up to the lake at Joseph. The lake is three miles long and one mile wide. We saw some men out on the lake on a skid going down the lake. We also saw a creek running up a steep hill. That is the first time I ever saw water running up hill. Mama just learned how to run the car today and she came awfully near running us into the barbed wire fence. I am going to learn to run it after a while. We go to the country school now. It is lots more fun. We girls seemed to get healthier since we left the town school and started in at the country school.—Mary and Hazel Young, Box 58, Enterprise, Ore.

Went to the State Fair.

Dear Aunt Nellie: This is the first time I ever wrote to the Children's Corner. I am 10 years old and my birthday is January 3. I am going to school with my two brothers and one sister. My brothers' names are Birdeen and Carlton and my sister's name is Alice. Have I a twin? If I have I would like to hear from her. I am going to school and we drive a one-horse rig. We live three miles from school. I am in the fifth grade. My teacher's name is Miss Stephens. She is a good teacher. I have joined the boys' and girls' club work and went to the state fair last year. I had a good time. There are 21 pupils in our school. We have a very small schoolhouse. It has only one room. I live on a farm of 180 acres. We have one dog, one cat, one colt, three pigs, three calves and two cows.—Elizabeth Brown, Box 111, Heppner, Ore.

Keeping the Boy on the Farm



By Ray W. Felton.

If you ever have occasion to correspond with F. Benz, the Yakima valley potato king, address your letter "F. Benz & Sons," because that is the way they run thing at the Benz farm near Toppenish. Mr. Benz has solved the problem of keeping the boy on the farm by giving his sons—seven in all—a real, monetary interest in everything he owns. Incidentally, Mr. Benz's seven grown sons are given credit for a large share of the success he has enjoyed since going to the Yakima valley six years ago. All the boys are at home, and have no thought of leaving it. Every one of them seems to find a real pleasure in the day's grind, and all intend to make farming their lifetime occupation.

Benz & Sons are farming approximately 300 acres, and next year they will have two more eighties. Their acreage is devoted to potatoes, alfalfa, sugar beets and wheat.

Mr. Benz's title of "potato king" comes largely as a result of the organization work he has done among the growers. He is president of the Yakima Valley Potato Growers' association, which has accomplished much in producing a superior grade of potatoes, finding a profitable market for them, and providing suitable storage facilities.

The accompanying picture shows Mr. Benz and five of his boys at the noon hour in front of a large, new warehouse on their farm. The building is a concrete frame structure, 60x100 feet, with a capacity of 600 tons of potatoes, 10,000 bushels of wheat and 300 tons of hay.

ILLUSTRATED DIRECTIONS FOR KNITTING.

Many of our women readers, who are looking for a chance to "do their bit," will be glad to learn that next week's issue of The Farmer will contain illustrated directions for making the knitted articles most needed by our soldiers at this time. These directions are taken from a pamphlet published by the American Red Cross Woman's Bureau at Washington, D. C., and so may be depended upon.

HOLSTEIN BREEDERS, ATTENTION

To prevent inbreeding, we must sell our wonderful herd sire, SIR BESSIE CORONA 122581, born Nov. 30, 1912.

Average of dam and grand-dam, 31.95 lbs of butter in 7 days.
Average of 11 nearest female relatives, 30.32 lbs. butter in 7 days.
Average per cent fat, 4.54.

A Grandson of the famous "Jessie Fobes Bessie Homestead," the first cow to make three 33-lb. records. His dam with the following three records for 7 days: 28.93 lbs.; 28.31 lbs. at 3 years. 6 mo. 25.01 lbs.

For sale at a reasonable price. Will exchange for a young junior herd sire if pedigree suits. Ballinghurst Farm, R.F.D. No. 2, Linnton, Ore., H. A. BALLIN, Mgr.

News for Breeders

Hercules, the pure bred Shorthorn steer owned by Day & Rothrock, Sprague, Wash., that won first honors in his own breed and grand championship in all breeds at the Northwest Live Stock show at Lewiston, Idaho, was entered at the Chicago International to try conclusions with the eastern entries. Jack Napier, Day & Rothrock's competent herdsman accompanied him.

Wayne Dinsmore, secretary of the American Percheron society, was an interested visitor at the Northwest Live Stock show at Lewiston, Idaho. Mr. Dinsmore watched the judging of the Percherons. He afterwards said the northwest had as good horses as any other region of the country, but that breeders had some things to learn about showing horses. He spoke in the big tent Saturday afternoon and, reviewing horse conditions caused by the war, showed that in war as in nearly all industries the horse is an absolute necessity and that no machinery can take his place in some lines. He told how Belgium is almost depleted of horses and how they will be short in all Europe when the war ends, and predicted a successful future and good prices for American draft horse breeders.

Crimson Monarch 2d, the grand champion Duroc Jersey boar at the California State fair this year is a full brother to Elizabeth's Perfection, grand champion at the Oregon State fair, owned and shown by E. F. Naftzger, Gervais, Ore. Referring to Crimson Monarch 2d the Duroc Bulletin says: "He is a boar of great stretch, with perfect top and body, standing on nine-inch bone." Mr. Naftzger, who has used Elizabeth's Perfection as herd sire for two years, is naturally proud of the fact that his champion hog is in such good company, and Charles Hoover of Gervais, who bred both hogs, gets much satisfaction from the winnings. Mr. Hoover sold Crimson Monarch 2d during the Panama Pacific Stock show. He showed his mother, Crimson Elizabeth, and won grand championship at that show with her. Two other Durocs bred by Mr. Hoover were winners at the California fair, Bondholder 13th winning first and Orion Golden Col second in the senior yearling class.

J. C. Brown & Sons, Jersey breeders of Shedd, Ore., filled a 100-ton silo from 12 1-2 acres of corn this fall. This is the corn referred to in the Farmer some time ago as planted on the 12th of June and promising a good crop with no rain whatever. A nice little rain did come on the 15th of September, which helped considerably in making good-sized, well-filled ears. The corn was cut October 12, just four months from the day it was planted. Mr. Brown had already saved his seed corn from it and it was mature enough for good seed. Most of the corn was Oregon-raised Minnesota No. 13, with a few acres of Golden Glow. Eleven acres on well-manured clover sod yielded far heavier than six acres not manured which followed a cultivated crop. None of it was heavy of stalk or fodder, as the tonnage indicates, but all was well-eared, especially that on manured land, and has made excellent silage. All of which helps to show the adaptability of a corn crop in the Willamette valley, especially in dry years. H. A.

Carload of Guernseys.

Fourteen members of the Clackamas County Guernsey Cattle club in Oregon signed up for a carload of stock which has been selected in Wisconsin by E. L. Westover, dairy husbandman of the Oregon agricultural college and by J. T. Whalley of Portland, who was sent east by the club. Writing of the purchase of eight head of purebred heifers from one breeder in Whitewater, Wis., Mr. Westover says: "They are all daughters of one bull." Adding, "The breeder from whom we purchased these animals has 35 of this bull's daughters on test that are going at the rate of 450 to 700 pounds butterfat at two and three years old. This bull's dame has a record of 645 pounds of fat as a 2-year-old."

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IT HAS NO EQUAL

For the Human Body —It is penetrating, soothing and healing, and for all Old Sores, Bruises, or Wounds, Felons, Exterior Cancers, Boils Corns and Bunions, CAUSTIC BALSAM has no equal as a Liniment.

We would say to all who buy it that it does not contain a particle of poisonous substance and therefore no harm can result from its external use. Persistent, thorough use will cure many old or chronic ailments and it can be used on any case that requires an outward application with perfect safety.

A Perfectly Safe and Reliable Remedy for Sore Throat, Chest Cold, Backache, Neuralgia, Sprains, Strains, Lumbago, Diphtheria, Sore Lungs, Rheumatism and all Stiff Joints

REMOVES THE SORENESS--STRENGTHENS MUSCLES

Cornhill, Tex.—"One bottle Caustic Balsam did my rheumatism more good than $120.00 paid in doctor's bills." OTTO A. BEYER.

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The LAWRENCE-WILLIAMS COMPANY, Cleveland, O.

CUTTER'S

BLACKLEG PILLS

"California's Favorite" for nearly 20 years

For the Prevention of Blackleg in calves and young cattle

Their superiority is due to nearly 20 years of specializing in "Vaccines and Serums only."

Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.

Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

Prices:

10 dose pkge. Single pills	$1.00
50 dose pkge. Single pills	4.00
10 dose pkge. Double Pills	1.50
50 dose pkge. Double Pills	6.00
Cutter's Pill Injector....	1.50

Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

The Cutter Laboratory, Berkeley, Calif.

The Cutter Laboratory of Illinois, Chicago
Eastern Agent

BETTER CATTLE

Get full service from your cattle. Lameness, scouring, sore udders and kindred ailments reduce their usefulness and fruitfulness.

Use Sloan's Liniment; easily applied and quickly effective. It penetrates at once.

You will find many uses for this fine remedy in the home as well as in the barnyard. Always have it handy.

Buy it at your druggists. 25c 50c $1.00

The 18 oz. $1.00 bottle contains six times the 25c size.



Sloan's Liniment

Breeders' Department

HOLSTEIN CATTLE

365-Day Holsteins

24,667 lbs. milk—1026 lbs. butter—is the a. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.

WESTERNWOLD RANCH.
Prineville, Ore.

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

REGISTERED HOLSTEINS

Bull calves for sale with good A. R. O. backing.

BEEBE BROS., R. F. D. 2, Rupert, Idaho.

SHORTHORN CATTLE

Hercules Shorthorns

For particulars write

DAY & ROTHROCK
Exchange Bank Bldg.
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SHORTHORNS.

Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

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JERSEY CATTLE

Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.

WAIKIKI FARM, R. 7, Spokane, Wash.

JERSEY BULL FOR SALE.

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ABERDEEN ANGUS

Aberdeen Angus Cattle

A. H. EAGLESON & SONS.
Boise, Idaho.

SHEEP

20 Oxford Down Rams 20

Yearlings and ram lambs; will make special price on the lot. All stock registered. No ewes for sale.

C. P. Kizer, Harrisburg, Ore.

OXFORD RAMS

Thirty choice Oxford ram lambs for sale. Prices reasonable.

FISK FARM, Spring Valley, Wash.

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REGISTERED PERCHERON HORSES.

E. O. WALTER, AUCTIONEER.
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Ioka Farm Durocs

The big type, with quality. The kind that wins in the show ring. Offspring of the great sire Golden Rod and other best Duroc strains.

DOERFLER BROS, Silverton, Ore.

AVONDALE STOCK FARM.

Colonel's Lad, the big type Duroc-Jersey boar that won first at Idaho state and four county fairs now for sale. Priced right.

H. C. POLLY, Route 3, Burley, Idaho.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. YAKIMA, WASH.

OTTO'S DUROC JERSEYS.

Founded on the basis of making Duroc history in Idaho. Won 4 championships and two grand championships at Southern Idaho State Fair.

L. S. OTTO, Filer, Idaho.

IDAHO CHAMPION DUROCS—At state fair of Idaho our Durocs won more prizes than all other exhibitors combined. Stock of all ages for sale.

Richards Live Stock Co., Virginia, Idaho.

POLAND CHINA SWINE

GREENLEAF STOCK RANCH.

Big type Poland Chinas, either sex, for sale at all times.

Wilson Bros., A. L. Wilson, Mgr.
Greenleaf, Idaho.

BIG TYPE POLAND CHINAS

Herd headed by Sammy (79,833). Correspondence Solicited.

Fruitland Stock Farm, C. Royston, Mgr.
Payette or Fruitland, Idaho.

HAMPSHIRE SWINE

Hampshire Boars and Gilts

2 young boars, also 2 gilts, either bred or open, at bargain prices to make room. Best bred line in northwest. Herd boar ready for sale about Jan. 1.

F. E. KINGSBURY, Malaga, Wash.

YORKSHIRE SWINE

Spring Boars and Gilts

Gilts, bred or open, boars ready for service. Also weanling pigs. Best of breeding.

WM. NEUENSCHWANDER, Gaston, Ore.

BERKSHIRE SWINE

BERKSHIRE HOGS

Gilts of any age, bred or open; can also furnish young boars, from the best of strains and prize winning parentage.

EARL WOOD, Silverton, Ore.

TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.

Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

Bliss, Idaho.

AYRSHIRE CATTLE

Bargain in Ayrshires

Six heifers, ranging in age from three months to a year old, and one bull, no relation, old enough for service; all from good producers. $500 if taken at once. One other bull.

LATHROP BROS., Grants Pass, Ore.

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C. P. NEIBERT, Stayton, Ore.

When you write to advertisers, be sure to say that you saw their advertisement in this paper.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Dec. 10.—Severe cold that hampered teaming from farms and also handicapped the railways tended today to make the corn market average higher. Prices closed unsettled, January $1.20⅝ to $1.20¾ and May $1.19, with the range as a whole varying from ¼c off to ⅞c advance, compared with Saturday's finish. Oats gained 1⅛c to 1⅜c and provisions 30c to 50c.

Corn traders gave first attention to the outlook that continued low temperatures meant considerable slowing up of the crop movement and furthermore implied an increase of feeding demand. On the resulting bulge in prices, however, buying was not of an aggressive character, and it was pointed out that the prevailing cold weather was fine for the conditioning of corn. Something of a setback followed, owing in part to prospects that the embargo on shipments to the east would lead in the near future to a rapid accumulation of stocks here. The fact, though, that offerings were readily absorbed in the late dealings evoked a fresh rally as the session came to an end.

Oats paralleled the action of corn. The visible supply total showed a decided falling off on account of large reductions at seaboard points.

Cash Quotations.

CHICAGO, Dec. 10.—Corn—No. 2 and 3 yellow, nominal; No. 4 yellow, $1.45@1.60.

Oats—No. 3 white, 72@73c; standard, 72½@73c.

Rye—No. 2, nominal.

Barley, $1.20@1.50.

Timothy, $5@7.50; clover, $20@26.

Pork—Nominal. Lard, $25.50@25.75. Ribs, $25.25.

San Francisco Grain.

SAN FRANCISCO, Dec. 10.—Barley—December, $2.56 bid; May, $2.60.

Minneapolis Grain.

MINEAPOLIS, Dec. 10.—Wheat—Receipts 290 cars, compared with 837 a year ago.

Corn—No. 3 yellow, $1.75@1.80.

Oats—No. 3 white, 71½@72½c.

Flax, $3.34½@3.36½.

Flour unchanged. In carload lots: Fancy patents, $9.90 (wood); first clears, $9.30 (jute); second clears, $6 (jute). Shipments, 63,777 barrels.

Barley, $1.15@1.48.

Rye, $1.81@1.82.

Bran, I39.50@40.

Pacific Northwest Grain.

PORTLAND, Dec. 8.—Grain futures bids: Oats—January, $56; barley—January feed, $54.50; brewing, $55.

Eastern oats and corn in bulk bids: Oats—No. 3 white, December, $53; No. 3 clipped $53.50; corn—No. 3 yellow January, $59; No. 3 mixed, $57. Oats—No. 3 January, $53.25; clipped, $53.50. Corn—February, $58; mixed, $56.

Car Receipts at Coast Points.

Receipts of grain and hay in carload lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1917-18 and 1916-17 were as follows.

Seattle—	Wheat	Oats	Barley	Hay
1917-18 ..	2897	360	138	2043
1916-17 ...	...3066	681	222	2043
Portland—				
1917-18 ..	...3478	682	120	931
1916-17 ..	2978	1108	96	898
Total—				
1917-18 ..	...6375	1042	258	2974
1916-17 ..	...6044	1989	318	2941

Live Stock Quotations

At Omaha.

OMAHA, Dec. 10.—Hogs—Receipts 8500. Market 10c higher. Heavy $17.15@17.40; Mixed $17.25@17.35; light $17.10@$17.40; pigs $10.00@18.00; bulk of sales $17.25@17.35.

Cattle—Receipts 8000. Market steady. Native steers, $9@14; cows and heifers $6.50@10.00; western steers $8.00@12.50; Texas steers $7.00@10.50; cows and heifers $6.00@9.00; canners $5.25@6.00; stockers and feeders, $6.00@11.50; calves $9.50@12.50; bulls, stags, etc., $5.75@8.25.

Sheep—Receipts 2200; market steady; yearlings $11.50@13.25; wethers $11.00@12.50; ewes $9.75@11.25; lambs $15.00@16.00.

At Portland.

PORTLAND, Ore., Dec. 10.—Cattle steady; receipts 485. Medium to choice steers, $9 00@9.65; good to medium steers, $8.25@9.15; common to good steers, $6.75@7.90; choice cows and heifers, $6.75@7.50; common to good cows and heifers, $5.15@7.00; canners $3.00@5.25; bulls $4.50@6.75; calves $7.00@9.50; stocker and feeder steers, $4.25@7.85.

Hogs steady; receipts, 636. Prime light, $15.85@16.00; prime heavy $15.85@16.00; pigs $13.75@15.00; bulk $15.85@16 00.

Sheep steady; receipts three. Western lambs $13.00@13.50; valley lambs $12.50@13.00; yearlings $12.00@12.50; wethers $11.75@12.25; ewes $8.00@10.00.

At Chicago.

CHICAGO, Dec. 10.—Hogs—Receipts 37,000. Strong. Bulk $17.10@17.50; light $16.60@17.45; mixed $16.90@17.60; heavy, $16.85@17.60; rough, $16.85@17.05; pigs $12.75@15.75.

Cattle—Receipts 28,000; weak. Native steers $7.30@15.50; western steers $16.30@17.20; stockers and feeders, $6.10@11.00; cows and heifers $5.10@@11.40; calves $8.00@15.00.

Sheep—Receipts 20,000; weak. Wethers $8.80@12.90; lambs $12.50@16.75.

Spokane Stock Yards Saturday.

HOGS—Receipts, 96; steady. Prime light, $15.85@16; prime heavy, $15.85@16; pigs, $14@15; stockers and feeders, $12@13.50; bulk of sales, $16.

CATTLE—Receipts, 54; market strong to higher. Part car of choice steers bringing record-breaking price of $10.25. Best beef steers, $9.50@10.25; good steers, $8.50@9.25; best beef cows, $8@9; good cows, $7@7.75; ordinary to good, $5@6; canners, $3@4.75; best heifers, $8@9; bulls, $5@6.75; calves, $6.50@8.50; stocker and feeder steers, $5@7.50.

SHEEP—Receipts, none; market steady. Prime lambs, $13@13.50; good lambs, $12@12.50; prime yearlings, $11.25@12; prime wethers, $11@12; best mutton ewes, $8@10.

Seattle Market.

SEATTLE, Dec. 8.—There has been some increased inquiry for spuds, due to the easier market conditions and jobbers have hopes that activity from eastern buyers may start a brisk movement toward the end of the month.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed on a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle;

Eggs—Local, 48@50c per dozen; pullets, 40c dozen.

Poultry—Live hens, fat, over 4 lbs., 21@22c per lb.; 4 lbs. and under, 18@19c; old roosters, 15c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 15c per lb.; springs, live, fat, 20c per lb.; hens and young tom turkeys, dressed, 28@29c per lb.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.; heifers, 6@8c per lb.

Hogs—Light, 16@18c per lb.; heavy, 12@13c per lb.

Veal—Fancy, light, 14@16c per lb.; heavy, 9@13c per lb.

Hides—Salted, 18c per lb.; flint-dry hides, 32@33c per lb.; salt kip, 18c per lb.; green hides, 15c per lb.; green calf, 28c per lb.; dry calf (under 5 lbs.), 34c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 12c per lb.; dry full wool sheep pelts, 36@38c per lb.; salt bulls, 14c per lb.

Seattle Wheat.

SEATTLE, Dec. 8.—The government is not buying any wheat in this market, but its representatives in this territory have advised millers that it is preferable for them to consume what was placed in storage before the embargo against further arrivals was put on rather than to draw on the supply in the country. The request is regarded as a command. A little grain is moving from the country on the government's purchases for eastern account, but the volume is not heavy.

Receipts of wheat by water at San Francisco for November from Washington were 16,430 centals, and by rail from Oregon 28,600 centals.

Seattle millers, after considerable investigation in the county report that there will be very little winter wheat in the northern Washington districts. A little has been planted in the Walla Walla grain belt, and with this exception the wheat crop of the state will be an all-spring proposition this season. Successive dry falls, wherein farmers have been sowing $2 seed wheat in the dry dust, has discouraged for the time being all efforts to get a crop.

Portland Wheat.

PORTLAND, Ore., Dec. 10.—The feed grain markets eased off somewhat at the close of the week in response to the declines in the east, and bids were few in number. Barley is expected to continue steady, however, owing to the larger use of the cereal in bread making.

The mill feed market continues in a strong position with prices inclined to go higher rather than lower. The mills do not expect to catch up on their orders before the close of the month.

BUTTER AND EGGS.

PORTLAND, Ore., Dec. 10.—Butter—Prints, extras, 45@49c, cubes, extras, 45@45½c; prime firsts, 43½c; dairy, 33c; butterfat, No. 1, 52@53c.

SAN FRANCISCO, Dec. 10.—Butter—Fresh extra, 45c.

Eggs—Fresh extras, 49c; fresh extra pullets, 40c.

Cheese—New firsts, 21½c; young Americas, 25c.

CHICAGO, Dec. 10.—Butter—Higher; creamery, 36@47½c.

Eggs—Higher receipts, 30,769 cases. Firsts, 47@50c; ordinary firsts, 43@46½c; at mark, cases included, 43@49c.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $1.50 cwt.; sweet potatoes, $3.25@3.50 cwt.

Apples—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, $1.85@$2.25; Winter Bananas, $2 box; Jonathans, $1.25@1.75; Wageners, $1.35@1.65 box; Rome Beauties, $1.25@1.60 box; Spitzenburgs, $2 box; King Davids, $1.25@1.35 box; Grimes Golden, $1.35@1.65 box; Staymen Winesaps, $1.75@2 box.

Butter—Blanchard cartons, 49c lb; Medo-Maid, 49c lb; Cascade, 49c lb; Gold Leaf, 49c lb; Better Butter, 49c lb; Attalia, 49c lb; Diadem, 49c lb; Hazelwood, 49c lb; Solid Pack, 48@49c lb; Jersey Belle, 47c lb; Peerless, 45@46c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 32@33c lb; brick cheese, 34c lb; domestic Swiss, 38c lb; Young Americas, 27c lb.

Eggs—White filler, guaranteed, $13.25 case; selected storage, $12.50.

Live Poultry—Hens, 13@16c lb; broilers, 18c lb; old roosters, 9c lb; ducks, 15c lb; geese, 12c lb; turkeys, 22@25c lb; local turkeys to retailer, 32c lb.

Dressed Poultry—Hens, 18c lb; broilers, 20@21c lb; old roosters, 11c lb; ducks, 17c lb; geese, 14c lb; turkeys, 27c lb.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 15c; salted cured, 17c; green bulls and stags, 12c; salted cured, 15c; kip, 15 lbs. to 25 lbs., 20c; calf skins up to 15 lbs, 28c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 1 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

The Wool Market.

BOSTON, Dec. 7.—The Commercial Bulletin will say tomorrow:

"The formation of the new war board in Washington, with the consequent resignation of the committee on wool supply of the council of national defense, has had a tendency to slacken trade in the local wool market, although prices are very firmly maintained, especially on medium and low sorts.

Scoured basis:

Texas: Fine 12 months, $1.68 to $1.72; fine eight months, $1.55 to $1.60.

California: Northern, $1.70 to $1.75; middle county, $1.55 to $1.60; southern, $1.45@1.50.

Oregon: Western No. 1 staple, $1.80 to $1.82; eastern clothing, $1.50 to $1.60; valley No. 1, $1.60 to $1.65.

Territory fine staple, $1.80 to $1.85; half-blood combing, $1.75 to $1.80; three-eighths-blood combing, $1.45 to $1.50; quarter-blood combing, $1.30 to $1.35; common and braid, $1.03@1.07; fine clothing, $1.60 to $1.65.

Pulled: Extra, $1.80 to $1.85; AA, $1.70 to $1.80; A supers, $1.60 to $1.65.

Portland Market.

PORTLAND, Ore., Dec. 8.—Orders for dressed turkeys for shipment to Alaska made their appearance at the close of the week, buyers offering 28@29 cents. The orders will hold open throughout this week. Live poultry has become firmer with a better demand and limited receipts. Dressed pork continues weak, but veal is stronger.

The egg market is in a most unsatisfactory condition. The gain in receipts has not been large, but the demand has fallen off sharply and prices are on the down grade, with a few sales of fresh ranch as low as 46 cents. Storage eggs are being pressed for sale and 5 cents is an outside quotation, with few buyers at that price.

Butter is still scarce and firm. Cheese men talk of a probable advance soon, but it is known that stocks at primary points are heavy.

The potato market has in no way improved. Shippers are generally offering $1 at country points and do not want many at that. On the street last week's prices are still quoted, but the movement is light.

Hop men believe that the decline in prices has been checked and that the market will begin to advance about the first of the year. There are only a few thousand bales left in the northwest and the short sellers are beginning to worry. The new regulations of the food administration, cutting down the alcohol content of beer to 3 per cent, are believed to mean a much larger necessary use of hops as a preservative to the beer. The output, according to the Washington authorities, will be normal and there are not enough hops to go around, according to the accepted statistics.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $55.50 per ton.

Millstuffs—Bran, $38 per ton; shorts, $36.

Barley—No. 1 feed, $54; brewing, $55; rolled, $58@60.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $24; grain $24.

Eggs—Oregon ranch, case counts, 46@48c per dozen; candled, 50@55c.

Poultry—Hens, 17@20c; ducks, 18@20c; turkeys, live, 20c; geese, 13@14c.

Butter—City creamery, prints, 45@49c per pound; cubes, extras, 45c. 44 1-2c.

Cheese — Tillamook triplets, 23c; Young Americas, 24c.

Dressed meats—Veal, 15 1-2@16c; pork, 18@18 1-2c.

Hops—1916, 14@15c; 1917 crop, 16@20c.

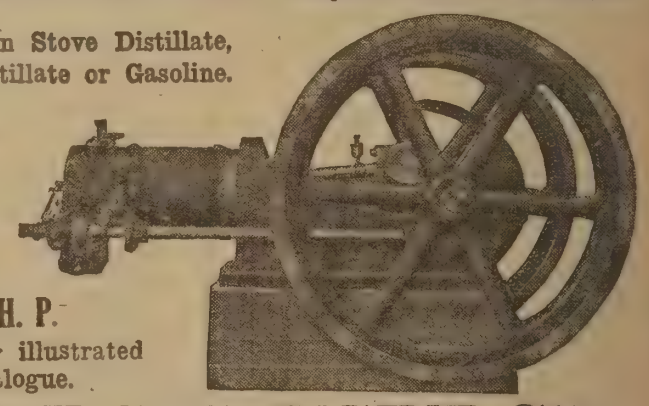
Potatoes—Oregon, buying price, $1@1.25 per hundred.

Wool—Eastern Oregon, 50@60c; valley, 55@60c.

Beans—Buying prices: Oregon white, 8@9c; colored, 7@8c.

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Operate on Stove Distillate, No. 1 Distillate or Gasoline.



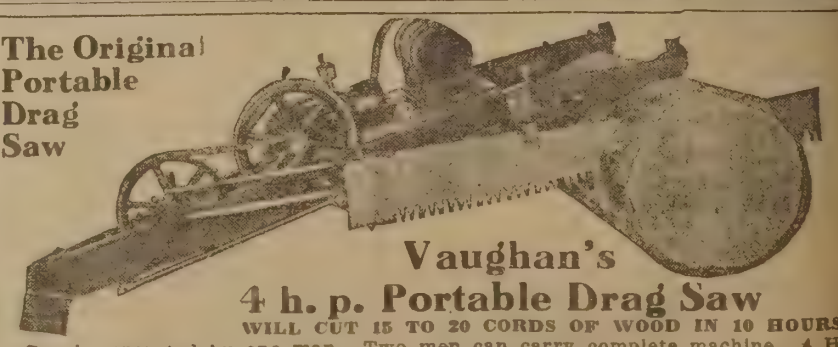
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The Original Portable Drag Saw



Vaughan's 4 h. p. Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $150 f. o. b. Spokane and common points. FOR SALE BY

Washington Machinery & Supply Company

8122 Monroe. SPOKANE, WASHINGTON.

President Pleads Humanity's Cause

(Continued from page twenty.)

ishness. While we have eliminated profiteering in several branches of industry, it still runs impudently rampant in others. The farmers, for example, complain, with a great deal of justice, that, while the regulation of food prices restricts their incomes, no restraints are placed upon the prices of most of the things they must themselves purchase; and similar inequities obtain on all sides.

Additional legislation may also become necessary before the present congress adjourns in order to effect the most efficient coordination and operation of the railway and other transportation systems of the country; but to that I shall, if circumstances should demand, call the attention of congress upon another occasion.

The World United.

It is because it is for us a war of high, disinterested purpose, in which all the free peoples of the world are banded together for the vindication of right, a war for the preservation of our nation and all that it has held dear of principle and of purpose, that we feel ourselves doubly constrained to propose for its outcome only that which is righteous and of irreproachable intention, for our foes as well as for our friends. The cause being just and holy, the settlement must be of like motive and quality. For this we can fight, but for nothing less noble or less worthy of our traditions. For this cause we entered the war and for this cause will we battle until the last gun is fired.

I have spoken plainly because this seems to me the time when it is most necessary to speak plainly, in order that all the world may know that even in the heart and ardor of the struggle, and when our whole thought is of carrying the war through to its end, we have not forgotten any ideal or principle for which the name of America has been held in honor among the nations, and for which it has been our glory to contend in the great generations that went before us. A supreme moment of history has come. The eyes of the people have been opened and they see. The hand of God is laid upon the nations. He will show them favor, I devoutly believe, only if they rise to the clear heights of his own justice and mercy.

The congress of Vienna, to which President Wilson referred in his message, was held from September, 1814, to June, 1815, for the purpose of settling the affairs of Europe at the close of the Napoleonic wars. It was attended by the monarchs of Russia, Prussia, Austria, Denmark and Bavaria and smaller German states, and by representatives of England, France and Belgium.

Among its chief stipulations were:

The retention by France of the boundaries existing at the outbreak of the French revolution, the restoration of the Austrian monarch without Belgium, Breisgau and West Galicia, but with the addition of Venetia and Dalmatia; the formation of the German confederation under the hegemony of Austria; the creation of a new Poland under the Russian dynasty; the establishment of a kingdom of The Netherlands, including Holland and Belgium; the retention of Norway by Sweden; the retention of Finland by Russia and the reconstruction of the Swiss confederacy with enlarged limits. Under these stipulations many cases were brought under the sovereignty of rulers of a different nationality.

Saving Eggs for Incubator.

To produce good eggs for hatching, the flock should not be forced by a stimulating ration, but should be fed abundantly and encouraged to take plenty of exercise, according to J. G. Halpin and J. B. Hayes of the Wisconsin Agricultural Experiment station. The eggs should be carefully handled to keep them from deteriorating before they are placed in the machine. Unfavorable temperatures should be avoided and while incubating, the conditions should be kept as near ideal as is possible.

When an incubator is used, it is customary to keep eggs for hatching until enough have accumulated to fill the machine. Eggs that are held in a cool room at a temperature of about 50 degrees can be kept for ten days or two weeks without serious injury. The fresher the eggs, the quicker they hatch, and the larger the chicks produced. For these reasons, keep the eggs only as long as is necessary. Many people would have better results if they would use two small incubators that could be filled with fresh eggs, or in some cases three small machines and start one each week. A large machine can be operated successfully when only partly filled, but unfortunately the average person will not start an incubator until he has eggs enough to fill it. When keeping eggs for hatching it is usually better to keep them on an egg tray or padded table top and to turn all of the eggs each day. Where hens are used for hatching, it is not usually necessary to hold eggs long except in cases of definite breeding work.

Choice Game Section.

British Columbia, Oregon and Washington have long been known to a limited number as one of the choicest spots in America in which to bring down the bear, the deer and the mountain sheep, to say nothing of the smaller game, including geese, ducks, grouse, quail and the wonderful Chinese pheasants. Hundreds of sportsmen aim to hunt each year for a period of from two weeks to one month in British Columbia, Oregon and Washington.

Only recently F. A. Soller and G. A. Gloyd, two residents of Thurston county, Washington, while riding in their automobile to a favorite hunting place in the Bald Hills, found themselves but a short distance away from a feeding ground where were assembled a small herd of deer. A fine 200-pound buck stood erect on a knoll, giving the landscape the once over. Soller lowered the windshield of the car while Gloyd reached for his gun in the rear of the car. The buck very accommodatingly waited, and Gloyd brought him down with the first shot.

Swedish Potato Crop Normal.

The potato crop of Sweden for this year is estimated at 1,800,000 metric tons, or about the average of that of the last five years. A press report on the crop stated that 80,000 tons should go to the starch factories, 60,000 tons for evaporation, 280,000 tons for seeding, 860,000 tons for human food, 340,000 tons for cattle feed, and 180,000 tons calculated to be lost through rotting.

Qualified.

Teacher (to the Sunday school class): "Children, can any of you tell me what Ananias did?"

Little John Henry (thinking that she referred to the gentleman's occupation): "He wrote the weather reports!"—Harper's Monthly.

Want Ads

HELP WANTED—MALE 3

WANTED—DAIRYMAN; MUST BE EXperienced in feeding and milking test cows, milked three times daily; must be clean with separator and barn and give good recommendations; wages $75 per mo. and board. F. A. Doerfler, Silverton, Ore.

SOLICITORS—WANTED 12

SALESMEN WANTED. OWING TO CONditions brought about by the war, we have a few well-worked territories open and will be pleased to hear from interested persons. Applicant must be exempt from draft. McConnon & Company, Key Dept. J, Winona, Minn.

SALESMEN WANTED—OWING TO CONditions brought about by the war, we have a few well-worked territories open and will be pleased to hear from interested persons. Applicant must be exempt from draft. McConnon & Company, Dept. J. Winona, Minn.

SITUATION WANTED—Male 21

WANTED—STEADY EMPLOYMENT, BY agricultural graduate with experience as irrigation and development engineer. Am 35, single, temperate and energetic. Will consider only responsible positions that pay a bonus for results and have future promise. Box 123, Boise, Idaho.

EDUCATIONAL 45

POSITIONS GUARANTEED GRADUATES Of BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog Free.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Kitchen cupboards, 4 ft. 6 in. wide, 7 ft. high; two glass doors and three long adjustable shelves in the upper part; three drawers, one flour bin, one sugar bin, mixing board, and a cupboard for pots and pans, with panel door in lower part; price $35 set up, or $25 knock down.

5 cross panel doors	$1.92
Cottage front doors	3.50
Two light windows	1.24
Spruce flour bins	1.75
Prepared roofing	1.35

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SALT FISH.

We sell it by the carload or in a pail. Fish is about the cheapest and best food you can get. Buy it now. Write for price list.

SUPERIOR FISH CO.,
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Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

Send for card giving lower rates for ads running one month or longer.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MISCELLANEOUS—FOR SALE 60 Continued.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

10-LB. PAIL SALTED BLACK COD BELlies, the best part of the fish. Within 300 miles of Seattle, $1.50 by parcel post.
SUPERIOR FISH CO.,
SEATTLE, WASH.

TRAP COYOTES—IF YOU WANT TO learn of a sure system for trapping coyotes write me for information. I have it. C. L. Willis, Dillard, Ore.

MISCELLANEOUS WANTED 63

POULTRY WANTED.
We want live poultry, dressed meats, hides and potatoes. We solicit your cream shipments. Write for prices. Commercial Creamery Company, Spokane, Wash.

AUCTIONEERS 75

N. R. SHEPHERD, FARM AND LIVE stock auctioneer, Troy, Idaho.

MACHINERY FOR SALE. 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS,
Carried in Stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave. So., Seattle. Write for Catalog.

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
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MACHINERY—WANTED 96

WANTED—TRACTOR AND HAY BALER, second-hand caterpillar or track layer engine; also self-feed hay baler. Green Meadow Ranch, Route No. 3, Boise, Ida.

STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

PATENTS 150

PATENTS—WRITE FOR HOW TO OBtain a patent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174

BOUGHT JOB LOT OF ESSEX INCUBAtors cheap; are using large ones in our hatchery, but will sell small ones at less than cost. 70-egg size, $5; 120-egg size, $7.50; 200-egg size, $10; 175-egg size, hard wood and fully guaranteed, $15. Deposit $2.50 on any one of these and pay balance by March 1. Catalog for famous Queen incubator and brooder stoves and day old chix free. Send for one. Queen Hatchery, 89 Pike st., Seattle, Wash.

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Tom Barron strain of English Leghorns; every bird pedigreed; 257-egg hens, cock's dam 275 eggs. These are real egg producers. A limited amount of choice stock for sale. Satisfaction guaranteed or no sale. Prices very reasonable. Asael H. Dixon, Oakley, Idaho.

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RED CLOVER BIG TYPE POLANDS—Mouw, Fesenmeyer, Miller and Herring strains—spring pigs, both sexes, with quality, for sale. Never before could you raise or buy grain and make as much money feeding good hogs as now. Write your wants. Inspection solicited. H. J. Howser, Stites, Idaho.

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WANTED—200 TO 500 GOOD YOUNG ewes and wethers. Chas. A. Harlin, Wenatchee, Wash.

FOR SALE—1000 CATTLE, 5000 SHEEP in lots to suit. Coffin Bros., North Yakima, Wash.

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FOR SALE—A PUREBRED IMPORTED SHIRE stallion, 7 years old; descendant of the famous Forest King. Stephen Evans, Hartline, Wash.

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FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

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TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

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GET MY PRICES ON MONUMENTS BEfore placing your order. I can save you money. Geo. H. Moody, Moscow, Idaho.

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PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

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The soil is red clay loam and black beaver bottom of exceptional fertility; will produce big crops of all grains, grasses, vegetables and fruits common to this mild climate. Excellent hog raising, fruit and truck gardening district.

The advantages include daily rural mail delivery, free bus service for school children; good daily train service, with station almost on the land; good roads; running stream crossing many tracts, and fine fresh water lake nearby.

Write at once for particulars; number of tracts is limited.

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C. H. SKINNER, Hermiston, Ore.

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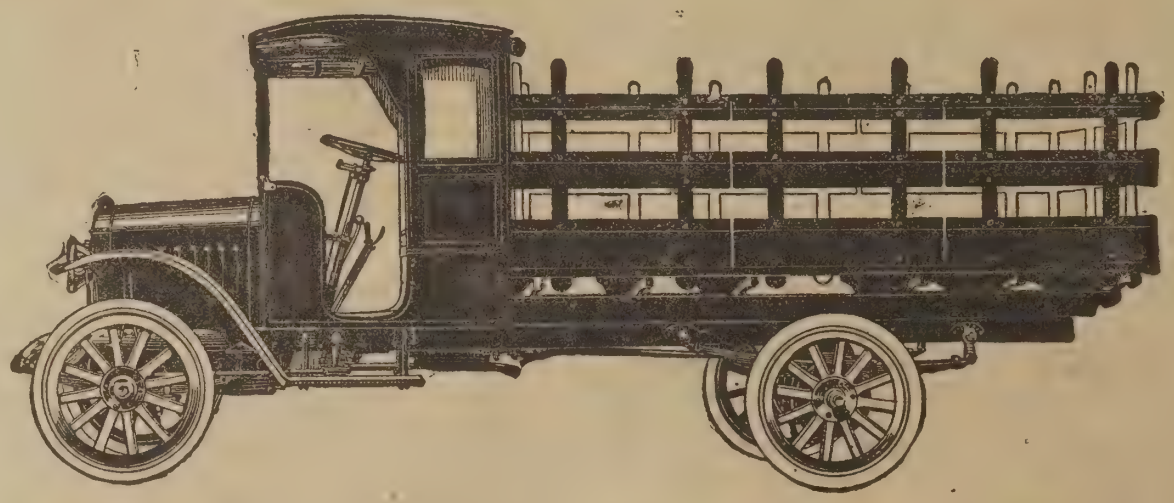
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MAXWELL

Most Miles per Gallon

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Seven 18-Mile Trips to Town by Motor Truck in One Day

That is what Mr. Walter Faber did with his Maxwell one-ton truck during the last season.

Mr. Faber is a successful farmer living nine miles out of Wayne, Nebraska.

He believes in applying business methods—efficiency methods—to agriculture.

So last spring he bought a Maxwell one-ton truck.

In that truck he hauled to market EVERY-THING his farm produced. Said Mr. Faber:

"I made seven trips into Wayne and back each day with my Maxwell truck—just five more than I could possibly have made with horses."

Among the crops truck-marketed by Mr. Faber were corn, oats, wheat, hay, potatoes, etc.

He hauled 10,000 bushels of shelled corn—55 bushels, that is, 3080 pounds, to the load.

That was more than 50 per cent overload.

Mr. Faber's truck cost no more to keep going than one team of horses.

Now most of his neighbors are planning to buy Maxwell trucks.

What are you going to do? Continue using slow, expensive horses? Or buy a low-priced, economical and swift Maxwell Truck?

Your nearest Maxwell dealer has the trucks. See him.

One-ton truck chassis, $985; Chassis with cab and windshield, $1025; Chassis with box body, $1035; Box body with windshield, $1075; Express canopy body, $1095; Chassis with stake gate body, $1080
All prices f. o. b. factory

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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 51. DECEMBER 20, 1917. WEEKLY.

LEST WE FORGET

AND it came to pass in those days, that there went out a decree from Cesar Augustus, that all the world should be taxed.

(And this taxing was first made when Cyrenius was governor of Syria.)

And all went to be taxed, every one into his own city.

And Joseph also went up from Galilee, out of the city of Nazareth, into Judea, unto the city of David, which is called Bethlehem, (because he was of the house and lineage of David,)

To be taxed with Mary his espoused wife, being great with child.

And so it was, that, while they were there, the days were accomplished that she should be delivered.

And she brought forth her firstborn son, and wrapped him in swaddling clothes, and laid him in a manger; because there was no room for them in the inn.

AND there were in the same country shepherds abiding in the field, keeping watch over their flock by night.

And, lo, the angel of the Lord came upon them, and the glory of the Lord shone round about them; and they were sore afraid.

And the angel said unto them, Fear not: for, behold, I bring you good tidings of great joy, which shall be to all people.

For unto you is born this day in the city of David a Saviour, which is Christ the Lord.

And this shall be a sign unto you: Ye shall find the babe wrapped in swaddling clothes, lying in a manger.

And suddenly there was with the angel a multitude of the heavenly host praising God, and saying,

Glory to God in the highest, and on earth peace, good will toward men.

AND it came to pass, as the angels were gone away from them into heaven, the shepherds said one to another, Let us now go even unto Bethlehem, and see this thing which is come to pass, which the Lord hath made known unto us.

And they came with haste, and found Mary and Joseph, and the babe lying in a manger.

And when they had seen it, they made known abroad the saying which was told them concerning this child.

And all they that heard it wondered at those things which were told them by the shepherds.

But Mary kept all these things, and pondered them in her heart.

And the shepherds returned, glorifying and praising God for all the things that they had heard and seen, as it was told unto them.

Are You a Christmas Member of the Red Cross?

Girls Take Places Left Vacant

Three Sisters Do the Chores When the Call of War Takes Their Brother to the Training Camp; Also Do Their Share of Field Work



MARIETTA, Whatcom County, Wash., Dec. 6.—Price regulation has not made much material change in this immediate vicinity. The setback of [illegible] price has reduced the prices of [illegible] some. I do not think [illegible] on all commodities, [illegible] no reduction in the price of feed, and the supply seems to be ample to carry over. In this immediate neighborhood young stock have had pasture up to the first snow, of a few days ago. Farmers can make a reasonable profit on hay at $12 per ton, but dairymen are the only ones who can afford to buy it at that price and make a profit by it. A few farmers in this community have purchased hay cutters and are cutting hay and straw up fine and mixing it with grain for stock feed. As yet I have heard no reports on the results of the venture. In this immediate neighborhood five farmers' sons have been called into service. In one case the farmer has sold his horses, cows and wagons, and in other cases help had to be hired. In one family the only son was called, and his three sisters have to do the chores and the milking. They were all on the inside of the silo doing the tramping down at filling time.

S. B. MAYHEW.

Can't Sell Wheat.

METHOW, Okanogan County, Wash., Nov. 26.—Fall work is up to the normal of the last three years, as they have all been too dry to seed or plow. No crop losses here. The farmers are "Hooverizing" because they can not help it. They did as the government asked them to do, raise all the wheat possible, and turned it over to the government as buyer. That was over 60 days ago. There are 4000 tons of it at Pateros and the farmers can not get a cent on it. They argue on the scarcity of wheat, then why don't they move it? There is no other substitute for wheat for hog feeding but corn, which is selling for two cents a pound. As the warehouse refuses to receive any more wheat until the government moves some of it, the wheat will be fed to hogs as they will bring the money to pay the bills. No experiments or community developments have taken place that I know of here.

CHARLES GRANT.

Can't Buy Feed Profitably.

RAINIER, Thurstday County, Wash., Dec. 8.—I have not heard of any particular complaint on the price-fixing of the government. The check put on the high speculative price of wheat and its products has met with favorable comments and has saved many a small flock of chickens and helped out on the dairy feed. If prices are fixed on all the products of the farm, the farmer should have a guaranteed market for his products, if not the following year there is likely to be a shortage in production. As to date I do not know of a single buyer or offer to buy potatoes in this locality this season. Potatoes here are in small lots from two to 15 tons. There may be a good demand for them toward spring. Last winter buyers were in here buying by the car lots. Wheat can be kept from year to year, while potatoes can not. The mild winter, so far, has had a good effect on the feed proposition. Today I turned in young stock from the pastre that had not been fed extra feed and the yearlings were in good condition. I think a large part of the farmers will have enough hay and feed to take them through the winter. I do not think, with the common run of cows, that a man can buy all his feed at present market prices and make any profit out of it over and above his labor. That is, with the regular amount of cattle he has to keep, including fresh cows, cows long in lactation, dry cows, heifers, calves and bull. But the farmer must try and raise all the feed he can. I, for one, am planning for a silo next year. I keep a financial record with my cows, both as to expense and receipts, but have not kept an account of the labor and cost of raising the feed for them. Many of the farmers raise roots, turnips and kale to feed with the hay for green feed, as that is usually gone by the middle of winter, then it is just hay until grass in the spring. I think silage would come the nearest to filling the bill for succulent feed all winter and help keep up the milk flow. There are six or more farmers that have gone from this locality into the army or navy. These boys were of age and doing for themselves, and the parents were proud of the fact that their boys could serve their country. The weather is mild, with a modest amount of rain.

L. F. DAVIS.

Pruning Next in Order.

OMAK, Okanogan County, Wash., Dec. 10.—Owing to a late, dry fall, seeding is very backward. Most all other fall work is completed. Pruning will start in about four or five weeks. No crop losses have come to my knowledge. Farmers are doing all they can to save for the aid of the war. Alfalfa hay is being used for hog feed, but some grain is given along with it.

J. O. WOODS.

Mountain Seems Spiked.

PACHUCA, Mexico.—There is a mountain near Pachuca which has the appearance of being covered with spikes. They are natural formations of rock, the origin of which is involved in mystery.

Community Cooperation

Each for All Is Community's Best Motto

Just what is community cooperation anyhow? Who does it benefit? How does it help the individual?

Let us see. Any community whose residents band together and through the strength of their combined effort accomplish things from which all are benefited is practicing community cooperation. If this community spirit—this working of each for the good of all—is continued harmoniously the result in the long run is bound to be good for all.

Villages, towns and communities are rated as "live" or "dead" according to the rate of development they show. One man or one family can not make a community progressive. It takes a majority. You can not take the attitude of indifference if you wish to see your home town classed as a live town. The harder you and all your neighbors fight for progress the surer you are to reap the good that progressive teamwork brings. A good, wide-awake town is a sure sign of public-spirited, wide-awake citizens living in it and around it.

The spirit of "let well enough alone" never accomplished anything. The spirit of "let's make things better" is a sovereign remedy against retrogression.

One way of bettering your home town is open always and to all. This is it: Keep your trade as nearly as may be in your own town. As we have pointed out before, a good portion of every dollar spent in your local stores helps in the support and development of your own neighborhood. Increased local business makes possible more public conveniences, more educational, religious and social advantages, and, as a natural consequence, increases individual opportunity and wealth.

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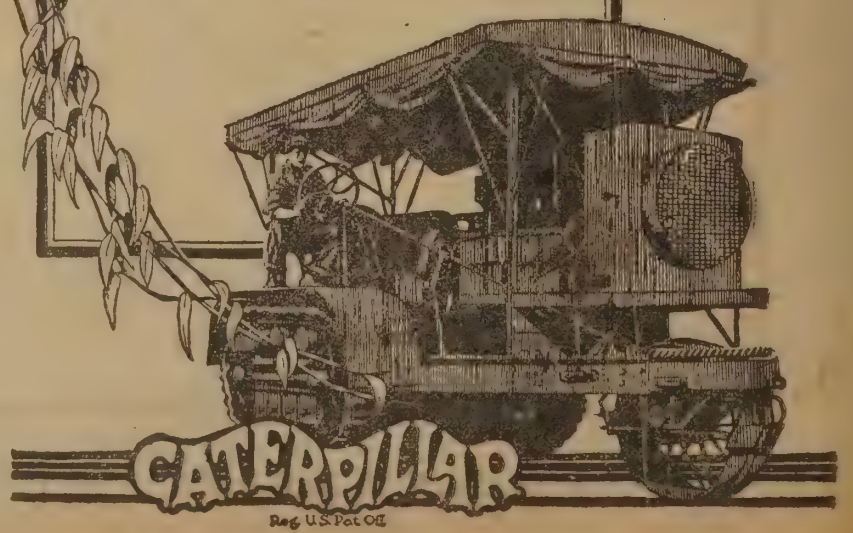
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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 51 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF December 20, 1917

Red Cross Is Winning

Every Man, Woman and Child Should Join It

The people of America are rallying at this Christmas season to the call of the Red Cross. The nation-wide campaign for 10,000,000 new members by Christmas eve promises to win. Thousands in this state are becoming members, but the goal has not yet been reached. The slogan is: "Every man, woman and child should be a member."

Leaders in every walk of life have indorsed the movement for an unprecedented increase in members during this campaign and are working with the campaigners. Governors everywhere have urged the taking out of memberships.

Governor Lister of Washington says: "The Red Cross is the one great humanitarian factor in alleviating the suffering caused by the present world war, and to whatever extent an individual lends his aid to that extent is he or she helping to alleviate that suffering."

Governor Withycombe of Oregon says: "There is hardly any surer or quicker means of sending comfort and cheer to the boys 'over there' than through the humane agency of the Red Cross."

Governor Alexander of Idaho says: "Our people have responded heroically to every call made by the nation, and we can go forward with the assurance that there will be no slackers in so worthy a cause as the Red Cross."

The Washington Farmer is joining in the campaign and urges its readers to do their bits in this great work. Fill out the coupon herewith and mail it to the Editor of The Washington Farmer, Spokane, Wash. Upon receiving this coupon The Farmer will be glad to send you the desired information regarding Red Cross work, and in recognition of your pledge of patriotism to your country will enroll you as a member of the Patriotic League of the Washington Farmer.

I am glad to express my patriotism at this time by pledging myself to render whatever special service I can to my country, and will you tell me especially about Red Cross work and the different ways in which I may be able to aid in that work?

Name ..... Postoffice .....

Land Bank Raises Rate

Loans Will Bear Five and One-Half Per Cent

Official announcement was made recently by the federal farm loan board at Washington, D. C., that on and after December 6, loans made by the land bank would bear 5 1-2 per cent interest instead of 5 per cent as has been the case. At the same time comes an unofficial announcement that the board is asking congress for an appropriation of some $50,000,000 with which to establish a fund for the purchase of land bank bonds when necessary to stabilize the bond market.

It is probable that in this latter announcement lies to considerable extent the explanation of the increase in interest rate. Under the land bank law the money to make loans comes through the sale of bonds. These bonds are secured by the mortgages given by borrowers to secure their loans. Hence, if, for any reason the market for the bank bonds becomes unstable, the power of the bank to lend money to the farmers becomes likewise unstable.

Certain it is that there is an unprecedented financial condition existing in the world today. The United States has just floated Liberty bonds to a total of nearly $6,000,000,000, a stupendous amount of money.

Whatever the exact conditions may be that have caused the farm loan board to increase the rate of interest and consider establishing a big fund with which to purchase bonds, it is certain that both actions are for the purpose of insuring the success of the farm loan system, regardless of what unusual conditions may arise in the financial world.

That the bank is a success in unqualified terms is indicated by the fact that the northwestern branch, located at Spokane, Wash., has actually placed in the hands of the farmers more than $6,000,000. President D. G. O'Shea says that by Christmas more than $7,000,000 will have been loaned.

"If the farm land bank never loaned another dollar; if it went out of business right today, it would have more than justified its creation," says President O'Shea.

Regarding the change in interest rate, President O'Shea says that all loans approved by the bank, and duly accepted by the borrower will be closed at the old rate of 5 per cent. All loans approved on and after December 6 will bear 5 1-2 per cent interest, the new rate.

The land bank law provides that under no conditions shall the rate of interest be greater than 6 per cent.

"The farm loan board can be depended upon to reduce the interest rate to the lowest point that can be charged, dependent on the bond market and the cost of operation," says President O'Shea. "Payments will be on the amortization plan, the same as under the old rate, and the added amount will be very little on each semi-annual payment.

"Any borrower can refund his loan any time after five years. Under this system the borrower can not be asked to pay, but he is the one who determines whether to pay or not, and can pay and ask for a new deal at any time after the loan is out five years."

Food Survey

Will Be Started at Early Date

The United States department of agriculture announced on Monday morning that the war emergency food survey provided for by congress will be started within the next few days when the first batch of more than three-fourths of the millions of questionnaires will be placed in the mails. This survey will touch every dealer in food and food material, every food manufacturer and every holder of substantial quantities of food in the country, except the families, requiring them to report stock which they have on hand December 31, 1917. The questionnaires include blanks for answers in regard to 26 items covering more than 100 different foods. The bureau of markets has charge of the survey and the act provides a fine not exceeding $1000 or imprisonment not exceeding one year, or both, as punishment for any individual or concern who wilfully fails to make reports when requested or wilfully reports incorrectly.

Whatcom County Council.

The Whatcom county agricultural council, which was organized during October, consists of delegates from each agricultural organization in the county. The membership of the council now numbers 38 and is divided into committees for the purpose of assisting the county agricultural agent and for the betterment of agricultural conditions in the county.

The next meeting of the county council will be held Saturday, December 29, at the office of the county agricultural agent; at this time the work for the coming year will be taken up.

Demonstration Schools.

Beginning the first week in February a series of demonstration schools will be held in Whatcom county, under the direction of the county agent. The extension workers will be secured from the extension department, State College of Washington, Pullman, and the western Washington experiment station at Puyallup.

Jersey Breeders Organize.

An organization of the Jersey cattle breeders of Whatcom county has just been perfected. The membership, though not complete at present, consists of 30 breeders of purebred Jerseys. The officers are as follows: President, Cyrus Gates; vice president, Dr. L. G. Beebe; secretary treasurer, E. F. G. Carlyon.

Inspectors of Weights.

The secretary of state has named Bert F. Snyder, deputy superintendent of the weights and measures division, and a corps of eight inspectors to work with Charles Hebberd, federal food administrator for Washington, and the latter has designated these men from Mr. Howell's office as field agents in his department.

The War Program in a Few Words

HERE is the war-winning program. It is the official food regulations as sent by Charles Hebberd, state food commissioner, to each county council of defense chairman:

FAMILIES—One wheatless meal each day; two meatless meals each day; meatless Tuesday; wheatless Wednesday; porkless Saturday.

HOTELS and Restaurants—Meatless Tuesday; wheatless Wednesday; porkless Saturday; individual sugar service of two medium lumps; individual bread service of two ounces.

EVERY ONE—Use less wheat; use less sugar; use less fats; use less meat; use less bacon.

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Wheat Convention

Program at Pullman January 3-5

The following is a copy of the program for the coming wheat convention at the state college at Pullman, which will be held January 3, 4 and 5, 1918. Professor E. G. Schafer, who sends the program, writes that it might be somewhat rearranged, but for the most part it will appear as herewith indicated:

Program.

President's annual address, R. J. Stephens, Spokane, Wash.

Address of welcome, E. O. Holland, Pullman, Wash.

"Method of Handling Grain by the Federal Government," Max Houser, Portland, Ore.

"Substitution of Grains Other Than Wheat for Bread Making," William T. Harshman, Spokane, Wash.

"Tillage Methods for Summer Fallow," A. M. Richardson, Pullman, Wash.

"Value of Alfalfa and Clover to Wheat Growers," R. C. McCroskey, Garfield, Wash.

"The Propagation of Wheat," M. Harshman, Reardan, Wash.

"Comparative Smut Resistance of Washington Wheats," E. F. Gaines, Pullman, Wash.

"The Most Effective Methods of Controlling Smut," F. D. Heald, Pullman, Wash.

"Conserving Food Supplies," Charles Hebberd, Spokane, Wash.

"The Effect of Different Test Weights per Bushel on Milling Value." R. T. Lord, Spokane, Wash.

"The War, Shipping and the Railroads," Charles S. Albert, Spokane, Wash.

"The Federal Grain Grades," representative federal bureau markets.

"The Relation of the Wheat Grower of the Northwest to Other Grain Producing Territories and Allied Nations," Robert Insinger, Spokane, Wash.

"The Tractor and Wheat Production," representative Holt Manufacturing company.

"Methods of Cropping to Maintain Wheat Yields in the Northwest," representative International Harvester company.

"Live Stock Profits in Connection With Wheat Growing," Alex Morrison, Valley, Wash.

"Live Stock in the Northwest," John H. Roberts, Spokane, Wash.

A Queer Duck.

C. M. Brocks, a hunter of Prairie du Chien, Wis., shot a queer duck in the wild rice of Mississippi. The bird is pure white from head to tip of tail and has red eyes.

Would Change Standards for Grain

Farmers Contend for Federal Inspection at the Interior Points

Government officials invited grain growers, millers and warehousemen to a hearing on the federal standards for grain at the Spokane Chamber of Commerce Monday, December 10. The meeting was presided over by George Livingston, in charge of federal grain supervision work. E. G. Boerner, supervisor in charge of appeals and disputes, was present as was L. M. Jeffers, supervisor in charge of the Portland office. Several hundred farmers packed the chamber of commerce assembly room, assailed many points of the federal grain standards and asked many changes in the rules and regulations affecting standards for grain.

It was brought out more than once during the hearings which continued throughout the morning and the afternoon that some of the things complained of are under the jurisdiction of the federal food administration, over which the bureau of standards have no control. The meetings were held to hear suggestions and no action was announced.

Members of the farmers' union were present with a well organized program. Millers and grain buyers also took a hand, and there are frequent clashes. Near the close of the day a heated argument took place when J. C. Lawrence attacked the federal food board's policy of allowing interested buyers, as he claimed, to sit on the committee which fixes prices at Coast terminals. R. J. Stephens defended the committee, saying they did not know whose grain they were passing on. Chairman Livingston expressed surprise, saying it was the first word of criticism he had heard concerning such committees.

The liveliest point during the whole day was the plan to have federal inspection of grain at interior points instead of at the Coast entirely. The farmers were unmistakably in favor of such plan, and many suggestions were made concerning how to do it.

Dockage Is Sore Point.

Another lively discussed point was that of dockage, many claiming they were docked for other matter in their wheat, which had a value, and they not only got nothing for the dockage but were charged for the cleaning.

A proposal to make No. 2 wheat the basis for price was suggested by buyers and hotly contested by some farmers. In this connection Professor George A. Olson of Washington State college predicted the time would soon come when wheat would be bought on the basis of gluten content.

The first point taken up was a regulation regarding the samplers who secure the grain from shipments on which inspectors at terminals establish the grade of the grain. It seemed to be the opinion of the meeting that these samplers should be under federal license so they could be held responsible.

Discounts for Off-Grade Grain.

The question of light weight grain came up early. Mr. Jeffers asked if there had been any more discount than usual this year on account of off-grade grain and a dozen men shouted "yes!" One man asked Mr. Jeffers if he thought 59-pound wheat was worth 3 cents a bushel less than 60-pound wheat.

"I asked you to keep away from food administration rules," was the sharp response.

W. W. Harrah of Pendleton said the shipper doesn't get the full benefit of federal inspection because he can not hold the sampler responsible, not being under federal control.

The question of time for appeal from federal inspection was taken up and C. W. Nelson said 48 hours only was allowed, which was too short. The time is set to get action before the identity of the grain is lost, it was said, but Mr. Nelson declared the identity was lost often before the grade was placed on it by the inspector, as he works by the sample only. J. C. Lawrence demanded a change in the law, saying that if the sampler were under federal license then the grade would be made on the sample and not on the entire car, as the sampler would be responsible.

Shows Spirit of Protest.

"This big meeting of farmers here shows the spirit of protest at the law," he declared.

Mr. Mertens of Mansfield said they have 2,000,000 bushels of wheat to ship from there every year and demanded that the government place an inspector there. He said the manager of their warehouse is competent to inspect the grain, but Mr. Jeffers told him the law would have to be changed, as it now provided that the inspector should have no interest in the grain. Mr. Nelson favored making local managers of warehouses inspectors. Mr. Potter of Benge and A. C. Whisler of Garfield favored interior inspection.

Would Require Two Inspections.

J. L. Neil of Spokane asked if interior inspection would be final or another would be required on the Coast. The opinion was that two would be necessary. William Kirkman of Walla Walla said local buyers would be likely to grade down if they were inspectors.

"Keep on this wrangling and you'll have the government stepping in to handle all the grain," declared Mr. Walker of Waukon. "That is just what we want," returned Kirkman.

Mr. Trimble of Whitman county asserted that the inspectors, or some one on the Coast, took out the other grain in wheat and did not pay for it.

Must Grade at Warehouse.

Almer McCurtain of Davenport said the warehouseman had to grade all the wheat that came in anyway, and had to satisfy the farmer as well as the buyer on the Coast. He thought the local man could do better than an outsider. He declared the proper method would be to license the local man as an inspector.

"If you want a change as to inspection," Mr. Jeffers said, "you must change the federal standards law itself, and it may be necessary to get a ruling of the supreme court to do it. I should like to have you name a committee to put your ideas into proper form."

It was agreed this should be done.

Handle Grain in Bulk Next Year.

Here Mr. McCurtain was called to the chair and outlined the need for a convention to plan bulk grain handling next year. He called on G. L. Hurd of Portland, who said:

"Our government will requisition 60,00,000 bags for war purposes next year. Canada is taking all they can get. In the Argentine republic they are short on bags and are taking steps to handle the situation. There they are delaying threshing and storing grain in bulk on farms. The government is arranging to loan money on it. Great Britain will requisition 900,000,000 bags, and has prohibited the export of all jute and all jute bags from India. Even if there were no embargo on export from India there are no ships to carry them here. The national council of defense of this country is now urging the conservation of bags. It takes five months to complete an elevator, and we must get quick action to be able to handle the grain."

Another suggestion was that the elevators put up now be standardized. Mr. Kirkman moved that a bulk handling convention be called, and it carried.

Says $2 Was Guaranteed.

At the afternoon session J. C. Lawrence read portions of the law guaranteeing a price of $2 for wheat in 1918, and called attention to the expression "principal interior primary markets." He said this meant the markets where the farmer sold his wheat, and that President Wilson had said he signed the bill with the understanding the farmer was to get $2 for his grain. Mr. Livingston ruled this out of order, saying the grain standards bureau had nothing to do with it. Mr. Lawrence responded:

"If under the present law grading of grain has nothing to do with dockage and prices, then we should implore congress to change it."

Points in the grading law were then taken up in detail. One rule provides that if wheat contains more than 6 per cent of grain other than wheat it shall not be classified as wheat. J. M. Moulton of Wilbur said the farmers would change this, allowing up to 50 per cent of other grain and still call it wheat, but designate the other grain in the shipment. R. J Stephens, for the buyers, said they favored about the same thing. E. G. Boerner said the reason 6 per cent was designated was to make it conform to the federal food and drugs act. G. I. Toevs, Spokane miller, said after the other grain got above 6 per cent it would not make flour properly.

Standards Suit Millers.

On the regulation as to mixed wheat A. C. Whisler said the farmers would not cut the discount below the lower grade of wheat in the mixture. Mr. Stephens would vary somewhat from the farmers' contentions, and Mr. Toevs said the present standards on this point suited the millers.

Professor Olson said he had tested five samples ranging from 2 to 10 per cent of red wheat in white varieties, and had found practically no difference in the milling quality. The red wheat had not lowered the nitrogen content, and the gluten content was about the same in all the samples.

Smutty wheat brought much discussion. The farmers recommended that the definitions and grades of smutty wheat in paragraph "B" of the grain laws of Washington be dropped, but paragraph "A" remains in effect. Mr. Livingston said in the east the farmers wanted it just the reverse.

When to Take Test Weight.

Mr. Livingston said they ought to determine whether the test weight for grade in smutty wheat should be taken before or after cleaning and smutting. Another split came here, when R. T. Lord said it ought to be secured before smutting, but after cleaning. Mr. McCurtain said the weight ought to be taken after cleaning and smutting.

Regarding "treated" wheat Mr. Stephens said the grain buyers had nothing to suggest. Mr. McCurtain, for the farmers, said they would not change the grade on account of it if there were less than 50 per cent in a shipment. He said "treated" wheat could not be kept apart from other kind in the interior elevators. Mr. Toevs said 10 per cent is all that ought to be allowed. He said wheat has to be ground as soon as it is washed, but several contradicted him on this.

Farmers Propose Weights.

D. W. Tomlinson handled "factors in grades" for the farmers. He said they decided on the weights as follows: Fifty-eight pounds to the bushel for classes 4, 5 and 6 for No. 1; 60 pounds for class 3, and on class 1 and 2 they took no action. The latter two do not affect this territory.

Mr. Stephens advocated 59 pounds for No. 1 Red Walla, 58 pounds for No. 2 and 55 pounds for No. 3. It was here Mr. Stephens sprung his proposition to buy on the basis of No. 2 wheat, as is now done in the east, he said, and created much discussion.

Farmers seemed to think they would not get as much for their high class wheat under such a system. Mr. Lord took up the discussion from a miller's point of view, and said it made no difference to them because they bought the wheat for its milling value. He submitted figures on the basis of $1 a bushel for wheat, and said he took off 2 cents a bushel every time the grade dropped. At $2 this would simply double. It didn't make any difference whether they started with No. 1 or No. 2. On a $2 basis one mill he knew of made a "spread" between 58 and 52 pound wheat of 22 cents a bushel.

The government asked:

"Shall the maximum limitations for total damage, heat damage, total inseparable foreign material and special limitations for inseparable foreign material be changed, and if so, what changes are asked?"

Mr. Moulton replied they were all about one class too high. Mr. Jeffers submitted figures to show that only nine out of 844 samples had been graded off on account of damaged kernels. Mr. Nye, a shipper, of Pullman, said he had had more than that himself. The farmers submitted the following:

"That of total damaged kernels No. 1 wheat could carry 4 per cent; No. 2, 7 per cent; No. 3, 10 per cent; No. 4, 15 per cent, and No. 5, 20 per cent."

After hearing the suggestions Mr. Livingston said it was evident no change was needed. Mr. Harrah asserted that they got no pay for cracked wheat taken out as dockage, but Mr. Livingston said if such was the case it was not the fault of the standards, but of the application of them. Mr. Lord asserted that only the small and useless particles were not paid for.

Commenting again on the wide "spread" of 3 cents a bushel between 58 and 60 pound wheat, Professor Olson suggested a sliding scale, so a man who had 59½-pound wheat would not be cut to No. 2 prices.

The last subject considered was the "split" certificate. This is where several farmers ship in the same car, or where there are several varieties or grades in the same shipment. This is the understanding here, but in the east it is different. G. L. Neil favored issuance of such certificates when requested, saying they were a necessity in the Palouse.

Mr. Kirkman closed the meeting with an appeal to the government to treat the wheat grower fairly, saying it was necessary to encourage the production of wheat as much as possible.

Release Experienced Farmers

By Training Two Million Youths, 19-21 Years

A. J. Macker, county farm adviser in Lehigh county, Pa., declared the other day that at least 1000 men must be released from the draft if that county is to produce anything like normal crops next year. Mr. Hacker says farms are being abandoned because of the inability of the farmers to secure help.

Not only is farm labor being drawn away by the draft, but in many sections it is lured away by the offer of higher wages in the munitions factories and other wartime industries.

T. S. Cooper, owner of a large Jersey cattle-breeding farm at Coopersburg, Pa., said the rising price of milk is due to well-defined economic causes. "A farmer receiving 12 cents a quart for milk can afford to pay help $2 a day, but he can not get the help at that price when munition plants are paying more than doube that amount. The result has been a deplorable slaughter of cattle."

Mr. Cooper expressed the opinion that it will require six years to breed enough cattle to make milk cheaper.

If necessity drove the nation to this sacrifice something could be said for it. But, as Lieutenant General Young and other high military authorities have shown the president and congress, the method is both unnecessary and militarily unsound. Instead of drawing away skilled workers in wartime industries, taking them from highly productive service and putting them in training where they not only cease to be productive, but become for a long period a positive burden on the country, we should start immediately the training of 2,000,000 available youths of the ages of 19, 20 and 21 years, now exempt from call under the present draft law.

There are about 3,000,000 young men in these three classes, and military authorities estimate that nearly 2,000,000 of them could pass the physical, mental and moral examination. As a class they are without dependent obligations, and where employed in business or industry hold places of slight responsibility. They are at the athletic period of life, and the period when military training is most readily taken.

It is not proposed that any of these youths shall be put on the firing line before they are 21, but that their necessary training shall be started now, so that they will be ready for service at 21 or 22.

This is one of the most important acts of legislation now before congress concerning the farmer, the manufacturer and the whole nation as well. For unless provision is made to put these younger men under the draft, the tendency will constantly increase to take older skilled labor and married men from the factories and the farms.

The reasons for the proposed amendment were stated in a few words by Secretary of War Baker the other day:

"I have believed all along," said Mr. Baker, "that boys of 19 at least should be subject to draft. At that age they are physically developed enough to make good soldiers and they have not assumed any of those responsibilities which made the drafting of older men a disturbance economically throughout the nation."

The civil war was fought by youths under 21. We are drafting our armies now from men ranging from 21 to 30, and taking volunteers of yet older ages. The country ran to one extreme in the civil war, an extreme The Farmer would not for a moment approve; but it is apparent that we are swinging now to another extreme that threatens the productive powers of the nation, and which, if continued, might lose the war.

Harmony and Work Mark Farm Convention

Probably the Greatest Convention in History of the Farmers' Union Is Held in Spokane

The ninth annual convention of the Farmers' Educational and Cooperative Union of America, division of Washington and northern Idaho, was the most enthusiastic, determined and altogether successful session in the history of the division. This is the unanimous verdict of those attending. Not only was the attendance larger than usual, but the interest was greater, the spirit of concord more evident and the problems faced and acted upon were even more vital than those that have been faced by other conventions. More than 300 farmers were in attendance at least part of the convention days. The convention assembled in Spokane Tuesday, December 11, and adjourned on Thursday, December 13. As a prelude to the convention proper some 300 farmers, millers, dealers and shippers of grain met with representatives of the United States department of agriculture, markets division, on Monday and for seven hours threshed out problems pertaining to the grading of grain under the new federal grain standards act.

Why Is Feed So High?

The farmers of this district, though distinctly loyal to every movement for the increase of governmental efficiency at this critical time in the country's history, are flat-footedly inquiring why certain things are so, and are demanding that they be righted. For instance, the convention at Spokane wanted to know if the food administration is actually limiting the profit that millers may make on the manufacture of flour and feed? why feed is soaring to price heights that make the feeding of it to stock almost prohibitive? They propose to find out, as indicated in the following resolution, which was adopted:

Whereas, The government food commission has announced the policy of limiting the flour mills to a 25-cent profit per barrel of flour and a 50-cent profit per ton on mill feeds, and

Whereas, Four and one-half bushels of wheat produce approximately 70 pounds of mill feed and one barrel of flour, yet, nevertheless, the price of mill feed has been advanced to a point that threatens to destroy the stock-feeding industry; and,

Whereas, The government food commissioner has urged the increase of the production of live stock as a war necessity:

Therefore, be it resolved, That the secretary of this convention be instructed to address a letter of inquiry as to the cause of such advance in the prices to H. C. Hoover, national food administrator, and to T. B. Wilcox, Coast representative of the food commission; and

Be it further resolved, That the secretary of this convention transmit such information as he may receive to the several local secretaries under this jurisdiction.

The Labor Situation.

Though there was at no time any unpatriotic criticism of the mobilizing of farm laborers, including the boys and young men from the farms, for the ranks of the army and navy, the problem of avoiding serious handicap to the farming industry as a result of such mobilization was a theme much discussed.

As a result a resolution was adopted urging that the government parole or grant leaves of absence to soldiers still in this country at seed time and harvest time next year, such concessions to be made with the explicit understanding that such soldiers should report at once to the farms to insure the planting and harvesting of the large crops which the government is anxious to have produced.

The exemption of farmers, farmers' sons or farm laborers from military duty was not favored by any considerable number of delegates, owing to the fact that it would appear as an unpatriotic sentiment, and would, if put into effect, constitute the exemption of a certain class of men, which would be an undemocratic action.

So far from sounding a note of disgruntlement, the convention went vigorously on record as solidly behind the president and the government in the conduct of the war to a successful conclusion. A part of the resolution on this matter reads:

"We pledge the support of our organization in the matter of conducting the war, not only by stimulating the patriotism and loyalty of those who are related to us and are of proper age to join the colors, but by making every possible effort to increase the production of the farm for the support of our army and the allied armies of Europe."

Fix Machinery Price, Too.

The government has fixed the price of wheat, whether the grower in the northwest gets the full price agreed upon or not. Why, ask the farmers, should not the price of the things which the farmer has to buy be fixed also? The high prices of machinery with which to produce the increased crops that the nation needs inspired the convention to adopt the following resolution:

Whereas, The government has fixed the price of wheat, be it resolved, that we ask the government to fix a reasonable price on farm machinery and all other things necessary to produce farm crops.

No Grain for Liquor.

The farmers, true to their well recognized convictions that the liquor traffic has no place in a nation where efficiency is desired, took the following vigorous action on the manufacture of intoxicants from the grain that they produce:

Realizing the seriousness of the conditions and the importance of conserving all the grain possible to feed our own army and that of our allies,

Therefore, be it resolved, That we ask our national president and the food administration to withhold all grains and sugar from being used in the manufacture of any beverage containing alcohol."

Plain Facts Should Be Known.

Another resolution adopted urges upon the food administration the advisability of securing reliable information relative to the conditions affected before establishing regulations governing the northwestern states. In order to secure this information it is urged that the food commission send a personal representative to the northwest "for the purpose of making a thorough investigation among the people actually engaged in farming operations." The resolution charges that much misinformation has been placed in the hands of the food commission regarding the yields and cost of production on the farm lands of the northwest, especially of the lighter soils. It expresses the belief that "if present conditions are not remedied a considerable shortage in the number of acres devoted to wheat production will result in 1919."

Would Unite More Closely.

Throughout the entire convention there was a prominent sentiment finding expression in favor of a more close union between the local organizations and the state organization and between the various state organizations of the northwest. This sentiment found expression officially in the following two resolutions:

"Whereas, The great need of getting our organization on a more substantial footing, and realizing that if we are to succeed in any form of reorganization or amalgamation, this state organization must have the most hearty and loyal support from our individual locals,

"Therefore, be it resolved, That this convention go on record as pledging ourselves to a program that might be worked out to bring about this reorganization by our state boards of Washington and Oregon, together with our terminal board.

"Whereas, Our sister state of Oregon and south Idaho have made such a far-reaching study of our conditions in the entire northwest,

"Whereas, By resolution passed at their state convention held at Pendleton, Ore., on December 7 they have extended to us the right hand of fellowship and of true cooperation in bringing about a re-

(Continued on page sixteen.)



Above are shown the new officers of the farmers' union of the Washington and northern Idaho division. From left to right they are: Front row—B. F. Brewer, Walla Walla, Wash., vice president; A. A. Elmore, Spokane, Wash., president; E. D. Knight, Wapato, Wash., member of executive committee, and H. J. Herman, Genesee, Idaho, member executive committee. Back row—A. D. Cross, Spokane, Wash., secretary-treasurer; Almer McCurtain, Davenport, Wash., member board of directors fire insurance company and fraternal delegate to the federation of labor; R. H. McMillan, Sandpoint, Idaho, and G. M. Thompson, Dayton, Wash., members board of directors fire insurance company.

Organize for the Future, Says President Elmore

President-elect A. A. Elmore of the farmers' union of Washington and northern Idaho, predicts great changes in national life following the conclusion of the war, and urges preparation on the part of the farmers to meet the conditions that he foresees. The following is a statement by President Elmore to the readers of the Farmer, made following the adjournment of the big convention in Spokane:

"We would be pleased if we could have the general public understand what the farmers' union is trying to do, for the reason that public opinion has a great deal to do with shaping and controlling, not only our institutions, but all other public institutions.

First, I would like to tell you what our farmers' union is not trying to do. We are not trying to tear down or uproot any legitimate organizations or institutions in the community. We are not trying to oppose our government in the successful prosecution of this war, but on the other hand we are trying to assist and cooperate with our government which to my mind is the greatest government there is in all this world.

"We are trying to encourage and assist legitimate business. We are trying to teach our farmers the principle of organized and scientific marketing. To do this we necessarily had to get into a very important piece of business, one that naturally tramped on somebody's toes, namely, the grain business.

"It is useless for me to say to you that we have succeeded; the results speak for themselves, but I would like to stress the importance of the farmers being thoroughly together and organized from another standpoint.

"It is almost universally agreed that at the close of this war there will come about drastic readjustments and radical changes from the former system of doing business. No one can tell just at this time what form these changes will take, but I feel absolutely sure that our economical life is going to be entirely changed and different from what it has been in former years. To this end I would like to impress on every farmer the value of organization.

"The action the farmer takes at the close of this war will have such a far-reaching effect on future generations that no one can estimate its value. You certainly can understand the tremendous forces that will be organized and brought into action for their own selfish interests, that will be present in the readjustment and the reshaping of the new basis of trade which must necessarily come, and that the unorganized farmers will be at such a disadvantage that his interests will be entirely lost to sight.

"I maintain the congress of the United States did one of the greatest things for the farmers of this country that has ever been done when they said there should be no more gambling and speculation in the wheat pit for the season of 1917 and 1918. I believe the farmers will have the greatest opportunity of their lives through organized effort to help figure out a new basis for trade, which will be fair both to the producers and the consumers of this country. For the farmers to fail at this time is tantamount to saying we do not care for future generations."

OFFICERS ELECTED.

President—A. A. Elmore, Spokane, Wash.

Vice president—B. F. Brewer, Walla Walla, Wash.

Secretary - treasurer — A. D. Cross, Spokane, Wash.

Executive committee—H. J. Herman, Genesee, Idaho, and E. D. Knight, Wapato, Wash. (to serve two years).

Directors of Farmers' Union Mutual Fire Insurance company—H. J. Herman, Genesee, Idaho; E. D. Knight, Wapato, Wash. (both for two years); Almer McCurtain, Davenport, Wash.; R. H. McMillan, Sandpoint, Idaho, and G. M. Thompson, Dayton, Wash.

Delegate to national convention—C. W. Boothe of Nez Perce, Idaho; L. C. Crow, Pullman, Wash., alternate.

Fraternal delegate to state federation of labor—Almer McCurtain, Davenport, Wash.

Fraternal delegate to state grange—L. C. Crow, Pullman, Wash.

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Something New In Swindling

National and state governments are making it increasingly difficult and dangerous for swindlers to ply their nefarious arts with the investing public. However, something new in the swindling world is reported from San Francisco, and it is gratifying to report that the officials got quick action and suppression.

For falsely advertising and demonstrating a device called a "butter merger" at the San Francisco land show, the demonstrator was convicted and sentenced to pay a fine of $250 or spend 250 days in the city jail.

The man who was selling this device claimed that it would make two pounds of butter from one pound of butter and one pint of milk. Professor E. J. Lea, director of the state food and drug laboratory, testified that he had visited the booth conducted by the defendant and observed numerous women completely deceived by the statements of the demonstrators. He said that pure food standards require 80 per cent butterfat, but the product made by the "butter merger" contained less than 50 per cent butter.

It would be thought that the fallacy of a scheme to make two pounds of butter by mixing a pound of fat and a pint of milk would have been apparent to any person of even ordinary intelligence. The scheme could not have been much more preposterous if it had purported to make a quart of milk by "merging" a pint of water with a pint of real milk.

It is not likely that any farmers were caught by this coarse bait. It is more likely that the victims were city women of the poorer classes eager to bite at anything that offered a means of reducing the high cost of living.

Fixes Price of Sisal Fiber

When the news came the other day that Mr. Hoover had fixed the price of sisal fiber at 19 cents a pound at gulf ports, and authorized the purchase and distribution of 100,000 bales, no doubt many city readers wondered what connection existed between the sisal fiber industry in the Mexican state of Yucatan and the work of the United States food administration.

But the farmers, particularly the wheat growers, understood the connection. They knew that binder twine is manufactured from sisal, and that the price of binder twine, which is one of the factors that determine the cost of growing wheat, enters into the cost of living in the United States.

One half of this purchase of 100,000 bales has been allotted to the American Harvester company, which manufactures more than 60 per cent of the binder twine used in the United States.

The sisal production of Yucatan is controlled by a cooperative association of growers that is fostered by the government of that state. It is marketed by the Comision Reguladora, a Yucatan government body, and the natural and most profitable market is in the United States.

In view of the fact that this monopoly had been under indictment in the United States courts, and had put itself at the mercy of the food administration by rushing more than 200,000 bales into gulf ports while ships were available for its transportation, Mr. Hoover has dealt with it on a basis of fairness and liberality.

The law empowers the president to control imports, exports and storage not only of foodstuffs and fuel, but of "equipment required for the actual production of foods." The 200,000 bales and more of this sisal were practically under government control, and Mr. Hoover was in a position to name almost any price that the owners must take. The agents of the Yucatan government seem to have convinced him that 19 cents was a reasonable price.

On the other hand, if it had not been for the enactment of the food and fuel control law, the Yucatan government, acting for its sisal growers and having a monopoly of the product, could have extorted a much higher price.

This transaction illustrates the far sweeping effects of the control law. Directly or indirectly the government can lay the hand of control on distant industries and distant people.

Save Your Receipts

One of the easiest things to secure is a receipt for money when it is paid. Nobody objects to giving one. It costs nothing and calls for no difficult performance. It is customary to give them. Nobody refuses to give receipts. They do not take up much space.

We could relate dozens of true stories of men who have lost considerable money because they took no receipts when they paid cash, or who threw the ones they did receive away. We could tell as many of money saved by those who had the receipts filed and could produce them.

It is not always the dishonest man who asks for money which has been paid already. Bookkeeping may be a science in theory, but many mistakes are made in it and an account which has been settled may have no credit. These are errors which are likely to happen to anybody, for they have happened to a great many in the past.

Does it seem foolish and unnecessary to sound this warning? Our readers would be amazed if they knew the proportion of people, city and country, who have failed to protect themselves when protection was offered to them.

Old Things Pass Away

It is not a reflection on our grandfathers and grandmothers that we do things differently. Times have changed. If grandfather were alive and farming today, if he were a good farmer he certainly would use improved methods, for grandfather was a man who took the best available and worked as skillfully as he knew how. It was not his fault that farm machinery was not developed; he did not use a sickle or a cradle in harvesting because he liked those crude instruments, but because they were the best he had; he did not select his seed because nobody had suggested it.

And the same with grandma. Her cooking in the fireplace was done because it was the best available way. How gladly she would have welcomed the big range, the fireless cooker and other improvements which are making their appearance in our modern kitchens.

And we, their grandchildren, are not worthy of them if we do not make the best possible use of all the advantages around us.

The Retired Farmer

A good deal of complaint arises from farmers who have been experimenting with unskilled labor. Some of them say the labor which rushed from the city to the farm is more trouble than it is worth. A good many people who were willing enough know nothing of farm conditions and farm work.

There is a class of men which could be of immense assistance right now. We refer to the retired farmer, many of whom are just in their prime, but who have accumulated enough of this world's goods to make it possible for them to stop working. They are good farmers, fully able to make splendid crops.

Will they come back? We think a great many of them will respond to the call of their country and form a corps of experts in the trenches at home.

Washington Gleanings

Omak has shipped 291 cars of apples this fall, which averaged close to 1000 boxes to the car, and orchardists have received $144,000 in return.

North Yakima will have a municipal pig farm and fatten several hundred porkers on garbage if the new city council indorses a plan proposed by C. B. Kemble, sanitary inspector.

The sheepmen of Washington, in convention at Seattle recently, guaranteed their support in the building of a railroad 65 miles long in the Methow valley, from Pateros to Winthrop.

Beet sugar produced in the state of Washington is not to be shipped to other states for the present, at least, according to the latest order of the United States food administration.

Authorities say that not to exceed 1500 cars of apples remain in the Wenatchee valley. There is ample storage for the apples still on hand, so that no fear of zero weather is entertained.

After an agitation lasting several years the county commissioners of Franklin county have entered into contract with the state agricultural college whereby the farmers of the county will have an experienced agriculturist.

The newly organized Grays Harbor County Agricultural council, which is made up of representatives from nearly all of the farmers' organizations in the county, have voted to recommend the specialization on one or two particular varieties of potatoes.

With a representative of each of the various farmers' organizations in the county in attendance, the first annual meeting of the Cowlitz County Agricultural council was held at Kelso recently. The improvement of various conditions in the farm world came up for discussion.

Development of a 60-acre tract of logged-off land into a truck garden tract and also for the production of flowers and hothouse vegetables has been started by James Goman and his son of Aberdeen, who were interested in the line of work in England before they came to the United States three years ago.

Farmers in the Four Mile neighborhood near Colfax wanted their road improved and 12 of them, with an engine and 18 head of horses, went after it. The work was done under the direction of a foreman furnished by Supervisor E. C. Taylor. The only cost to the county was the foreman and the oil used in the engine.

What Others Say

Farm and Home: The farmer's best friend is a lead pencil, persistently employed in making black entries on the white pages of an account book.

Breeders' Gazette: Cleaning the barn is a suitable rainy-day job. Less dust flies on a damp day, and when it rains the time can be spared from field work.

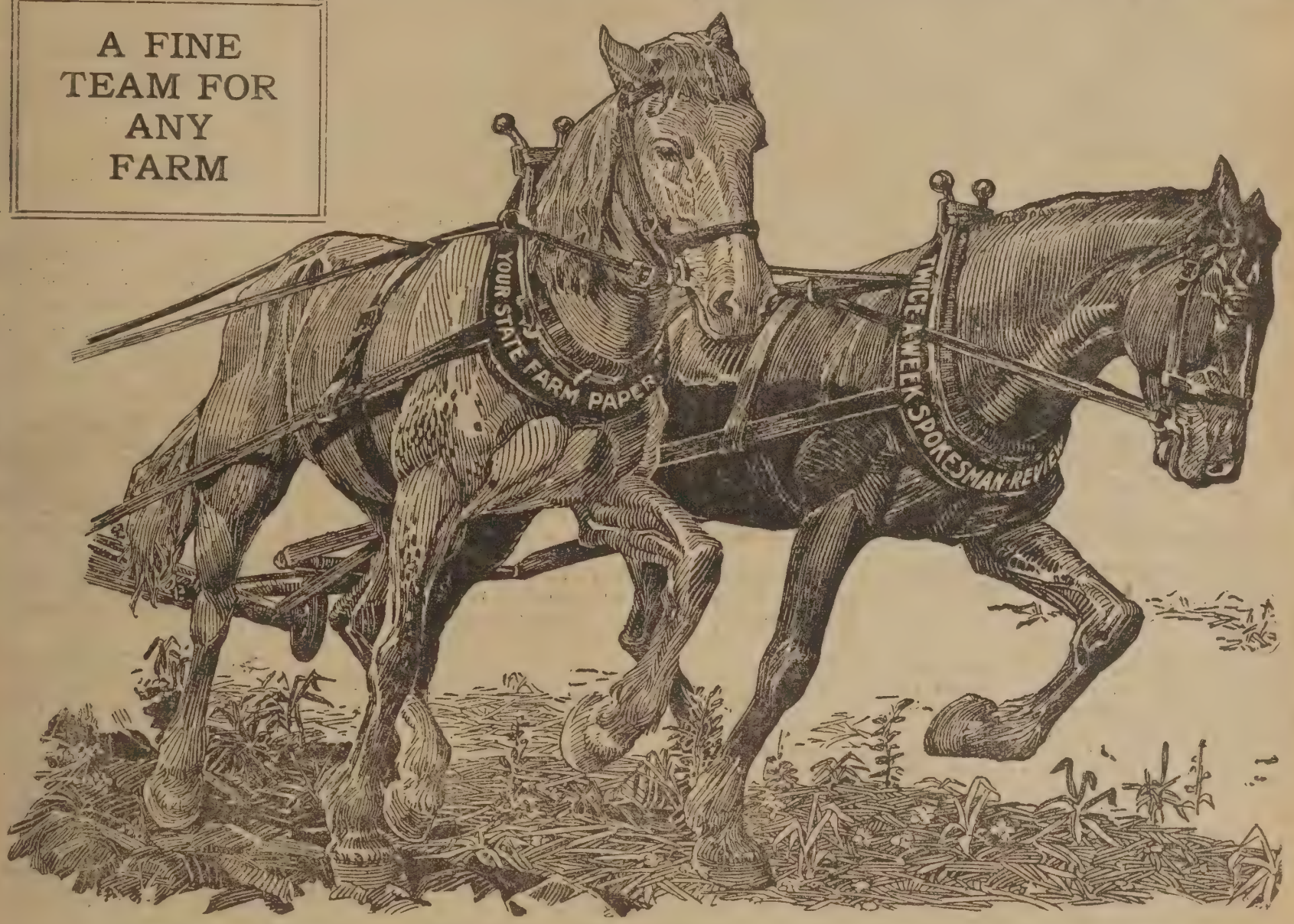
Prairie Farmer: The lives and the comfort of millions of people, perhaps even the decision of the great war itself, depends upon the efforts of the American farmer. Let us not be found wanting. Let us show our patriotism in our bumper crops.

Hoard's Dairyman: Everywhere we can see that just in proportion as the dairy farmer has grown to a better understanding of how to produce clean, sanitary dairy products, has the consumption of those products increased and the business of dairying been made more profitable.

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DAIRY

Write to the Editor

A. B. NYSTROM, Editorial Contributor

Why Test Cows?

Association Helps in Many Ways

By M. O. MAUGHAN, State College of Washington.

Recent years have shown a material growth in the development and organization of cow testing associations throughout the United States. They were first established in 1905 when a group of progressive dairymen in the state of Michigan organized into an association to promote their dairy interests and make their herds pay bigger dividends. The results were so surprising and valuable that the farmers became highly enthusiastic. Cows which they had insisted were their best ones were shown up to be their poorer ones and on the other hand cows which were looked upon as being good ones to sell were found to be the better ones.

Cow test association work therefore grew from the very first and today there are hundreds of associations throughout the country, with Wisconsin leading, having about 60 associations. Washington has nearly 20.

Following is a list setting forth some of the objects of cow testing association work:

1. To weigh the milk from each cow.
2. To test the milk from each cow separately.
3. To determine the butter fat production of each cow.
4. To determine the income from each cow.
5. To determine the cost of feed on each cow.
6. To determine the profit or loss on each cow.
7. To balance feed rations and advise on economical feeding.
8. To test separator milk and check on separatory efficiency.
9. To advise on calf feeding.
10. To help on feed buying when it is possible.
11. To substitute facts for guesswork and thereby put dairying on a better paying basis, which will require the elimination of the poor cows and better feeding of the better ones.
12. To help win the war.

The cow tester should be a man of experience and one who knows the dairy business and can advise on various things pertaining to the development of the dairy herd.

No man can afford not to belong to a cow test association who expects to make a success of his business.

PEA STRAW VALUABLE

Has Real Worth in Dairy Ration.

What is the composition of pea vine straw and do you recommend it for feeding dairy cows? I have heard it is dangerous to feed it.

This question was answered by M. O. Maughan of W. S. C.:

Pea vine straw ranks high in feeding value among the various straws. It is superior to cow pea straw, having 53.6 per cent digestible nutrients compared with 44.1 per cent total digestible nutrients for cow pea straw. It has 5.9 per cent digestible protein against 3.4 per cent for cow pea straw. Oat straw has but 1.3 per cent digestible protein. While pea vine straw has total digestible nturients equal to alfalfa hay it contains but one-half as much digestible protein, and therefore is not nearly so valuable as alfalfa hay, but is a very valuable straw and one to be recommended.

Results do not show it to be dangerous. A few cases have been reported of animals becoming sick by being fed this straw, but this was due to feeding a large amount suddenly and before the animals had become accustomed to it.

Farmers' Council Elects.

The Grant County, Wash., Agricultural council, composed of farmers' organizations over the county, has elected officers as follows: J. H. Smith, Ephrata, president; N. Johnson, Quincy, vice president; H. W. Reaugh, secretary.

Uses of Potatoes in Sweden.

Uses made of Swedish potato crop, officially estimated this year at 84,244,820 bushels, will be interesting to people of the United States. Of the entire crop, 37.1 per cent is used for direct human consumption; 32.7 per cent is fed to animals, and 6.5 per cent is used in flour making. The loss in storage is 11.9 per cent and 11.8 per cent is retained for seed.

World's Record Dairy Cows to Date

One of our correspondents wants to know the fat production of the world's champion Guernsey and Holstein cows, and the pounds of milk each produced. Doubtless many of our readers would likewise want to know the world's record fat production of the four principal dairy breeds. The following are the records to date.

Name	Breed	Lbs. Fat.	Lbs. Milk.	Test
Duchess Skylark Ormsby	Holstein	1205.09	27,761.7	4.34
Murne Cowan	Guernsey	1098.18	24,008.0	4.57
Sophie 19th of Hood Farm	Jersey	999.00	17,557.0	5.69
Auchenbrain Brown Kate 4th	Ayrshire	917.60	23,022.0	3.98

Records which show the amount of feed eaten by the cows while on record are not available, but the following statement by W. H. Caldwell, secretary of the American Guernsey Cattle club, with reference to the feeding of Murne Cowan, is very interesting. (Taken from Hoard's Dairyman, Vol. 52, p. 760.)

"She was milked four times a day and fed every four hours. The feed was weighed each time she was fed, and when an increase was made it was done by tenths of a pound. She was in perfect health throughout the year except in October when she was down for a few days with spinal meningitis. She consumed a daily average of 15.3 pounds of grain that cost $28.00 per ton. She was allowed all the alfalfa hay she wanted and in addition received daily 3.5 pounds of beet pulp, 1.3 pounds molasses, 16 pounds of beets and 38.0 pounds of silage. Besides this she was given about 4 pounds of sweet corn and 5 pound of green alfalfa. She was charged 40 cents per day for care and $65.00 for the rent of her box stall for the year, bringing the total cost up to $196.73 to produce 24,008 pounds of milk and 1098 pounds of fat. Her milk sold with that of the herd for 10 cents per quart."

A. B. N.

Dairy Labor Shortage

First of All, Get Rid of Unprofitable Cows

By A. B. NYSTROM.

The year 1918 will be a most serious one for the dairymen from the standpoint of labor shortage. A large percentage of our men whom we have depended upon in the past to look after our cows have joined the colors. Others have been attracted by the greater wages paid in the factories, the shipyards and lumbering camps. What will the dairymen do?

There may be several ways out of the difficulty. In the first place let us get rid of the unprofitable cows. There is no question but that in most herds from 10 to 25 per cent of the cows are not making any profit to the owner, and in addition are cutting down the profits made by the better cows. Why not weed out the poor producers thus cutting down the amount of labor necessary, and then give better care to those that remain? When profits are low no one can afford to pay good wages. But if a dairyman is making good money on a few cows he can afford to take care of them himself or pay wages sufficient to keep good help from leaving him.

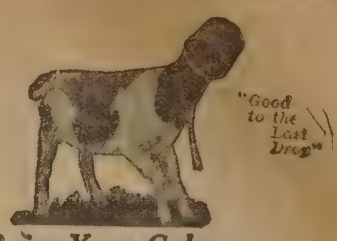
We should also make it attractive at home for the dairyman's sons. Not long ago the writer was asked by a widow where she could get a steady man to run her 60-acre dairy farm, and what she would have to pay. Her son, 21 years of age, was with her. The writer replied, "Why not let the boy run the farm for the same wages you would have to pay an outsider and give him an interest in it?" She replied that he wants to go to the logging camps because he is not interested in farming. But when it was learned that no hired help could be obtained for less than $50 per month and board, the boy changed his attitude toward the probability of working in the logging camps. Too often we expect the sons to work for board and spending money, when we find it necessary to pay a comparatively high wage to some one to take his place. We can't blame the boy for wanting better wages. It is natural that he should be looking out for the future. If you need him at home, pay him enough to hold him and give him a financial interest and a responsibility, and some of the labor problems will be solved.

Another way to meet the labor shortage is to buy a good milking machine and learn to run it properly. If you are milking 15 cows or more you can well afford to have a machine. If the owner of the cows, or any one who is financially interested, will run the machine according to directions, there is no doubt about its giving satisfaction. To be sure, there are a few machines of all makes that have gotten out of adjustment and do poor work, but where particular care has been given to the mechanical parts of the machine to see that they are working perfectly it has proved a success. The machine is not perfect by any means, but it serves a good purpose in a short-handed dairy, so many of which we will have the coming year.

A Word About Catalogues

"It may sound queer to you," said a friend of mine recently, "but I figure that the postage I use every year in sending for catalogues and booklets is one of the best paying investments I make. I know that I get information from catalogues that I couldn't get any other way, and at practically no expense. When I want to buy anything, from a tractor to a can of paint—anything, in fact, in the way of supplies or equipment for the farm or the house or the barn—I make it a point to send for a number of descriptive catalogues of different makes or brands. I read these carefully. Then when I get ready to buy I know pretty well in my own mind why I prefer a certain make or brand over others. And, as I say, I have found that it pays, because the more you know about the various makes of goods the more intelligently you can buy when you go to the dealer.

"And I make it a point, when I send for a catalogue, to tell the manufacturer in what paper I saw his goods advertised. Sometimes I advertise live stock or my wife advertises poultry in two or three papers at the same time and, of course, we are interested in knowing what papers bring us the most inquiries. So we're always glad to have those who answer our own ads mention the paper they saw our ad in, and we never fail to do this when we answer other people's ads. It's a matter of business courtesy that many people neglect. So, when I write for a catalogue or circular or when I answer an ad for any reason whatever, I always say: 'I notice your ad in (naming the paper) and will be pleased if you will send me your catalogue, etc.'"



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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor.

Good Money in Hogs

By J. E. NESSLY.

I just witnessed a number of incidents at the Northwest Live Stock show at Lewiston, Idaho, that convinced me there is still good money in raising hogs if it is done judiciously, with a minimum price of 15 1-2 cents, live weight, for hogs, fixed by the government (a price never dreamed of until this war) there ought to be a liberal profit in raising hogs.

E. S. Sweet of Grangeville, one of the most successful stock men of the west and an extensive feeder and shipper of hogs, has not given up the hog business because of high priced feed, but is still buying and feeding hogs and making a profit on them. If he can buy and feed at a profit it seems reasonable that any ordinary farmer can raise and feed hogs and make a profit, for he can produce a pig weighing anywhere between 50 and 100 pounds at almost no cost at all if he does not try to keep too many.

Mr. Sweet shipped the prize-winning carload of fat hogs to the live stock show. He had 58 head in the car. In these prize contests but 50 hogs are required for a carload. Mr. Sweet had 50 crossbred Poland China and Berkshire hogs that averaged 294 pounds each, and sold for 20 cents a pound. In order to make the carload uniform he "cut out" eight head of Duroc Jersey hogs, all of one litter and less than one year old. These averaged just the same as the black hogs, 294 pounds each, and sold, in the open market, for 15 1-2 cents, live weight.

Here was one litter, less than one year old, and they brought the magnificent sum of $386.56 for a single litter of pigs. You can not possibly figure that these pigs ate $200 worth of feed even at the high price of grain now. They only brought the market price and they were no better pigs than can be raised by hundreds of farmers throughout the northwest. These pigs were raised by a Grangeville boy whose name Mr. Sweet could not remember, but he is only 16 years old.

Feeding Carrots

To the Editor: In these days of strenuous conservation any item that will reduce the consumption of wheat and other grains should be of vital importance. Therefore, I am pleased to submit to the public an experiment in feeding carrots on a small scale.

For several years we have produced pork enough for our own use without using more grain than two sacks of chopped barley each year, and this is how we do it:

As early as possible in the spring we buy two small pigs. These are put into a small hog lot not more than a quarter acre, well rooted to alfalfa. The milk from two cows is evenly divided between these pigs and our chickens until the cows dry up during the winter. This milk, the slop from the house and the alfalfa are all the pigs feed on until some time in September when the carrots have grown to good size.

From now on until they are six or seven months old they are fed liberally with carrots, perhaps along the last receiving 50 pounds a day. Near Christmas we add a ration of chopped barley reducing somewhat the carrots. We never feed more than two sacks of barley. From the way our pigs look now they should dress about 175 pounds by Christmas at seven months.

I realize that is a little short of the expected average in corn-fed hogs which I believe is 200 pounds, but considering the shortage of grain and the enormous yields of carrots in our section the latter should yield more profit.

Last year our carrots failed us. We had a few loads of well-matured wheat hay and father substituted that for the carrots. We bought lard and substitutes the whole year, even having to put grease in the pan to fry the ham and bacon.

This year we returned to our system of carrots, and expect to have our customary results with that method of feeding. IDA C. YOUNG.

Bend, Ore.



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RATIONS FOR SOWS

Pea Straw or Alfalfa Are Good

By J. R. SHINN.

It may be stated that with middlings at $45 a ton, according to data furnished by the experiment stations, pork may be produced very profitably at present prices. Reliance should not be placed too much upon feeding grain entirely to brood sows.

Inasmuch as alfalfa hay or pea straw may be placed in the ration, the following rations are suggested:

	Young Sows before	Aged Sows before
Alfalfa hay or pea straw	10 parts	20 parts
Ground barley	6 parts	6 parts
Shorts	3 parts	3 parts
Tankage	1 part	1 part
Ground wheat		

Live Stock in Canada.

Canadian live stock figures for 1917 show a decided increase over the previous year, ranging roughly from 4 per cent for hogs to 47 per cent for horses. Milch cows increased about 13 per cent; sheep, 17 per cent; cattle other than milch cows, 25 per cent. The number of all kinds of live stock is also greater than the prewar average as well as greater than in 1914, when the war began. American farmers must consider, however, that Canada's live stock industry is much smaller than that of the United States.

Useless Dogs

Will Begin Campaign to Destroy

By J. E. NESSLY.

A campaign to destroy useless dogs and save the food they eat is one of the latest schemes for food conservation advocated by J. M. (Roe) Martin, a pioneer and wealthy farmer of Colfax. He has started the campaign and is urging that farmers and townspeople take it up. Mr. Martin has been gathering statistics and finds there are more dogs than sheep in several states, Kansas being one with this unfavorable distinction. To the reporter for The Washington Farmer, Mr. Martin said:

"Your paper has a chance to do a world of good by advocating the destruction of worthless dogs. We are being urged to eat less and conserve the food for our soldiers and our allies. Yet we are feeding a horde of dogs that are worse than useless. Nearly every farmer has one or more dogs and many families in town are keeping dogs for which they have absolutely no use. If the food consumed by these dogs were given to pigs or chickens it would mean a vast increase in production of food animals and the food would not be wasted.

"Another important item, and one that probably outweighs the question of food, is the saving of sheep. It is a well-known fact that tens of thousands of sheep are destroyed every year by dogs. Thus we lose the sheep and the wool—food and clothing—that should go to the soldiers and our allies. Hundreds of farmers would keep a few sheep on their farms and they would produce mutton and wool and destroy weeds, but the danger of the sheep being killed by dogs is too great for the farmers to take the risk, and the sheep are not kept where they could be kept profitable and do a world of good on the farms in keeping them clean.

"I am trying to start a campaign to destroy all dogs that are not of real value, not merely as 'companion' or for sentimental reasons are kept where they can do no good, and I am advocating a heavy license of $10 or even $50 for every dog kept. I advocate the law requiring the owners of all dogs to show and prove that they are valuable and, if the neighbors say the dog is not of real value he should be destroyed, regardless of whether the tax is paid or not. If the farmer will take this matter up and the farmers will cooperate, we can have a great decrease in the number of dogs and an increase in wool and mutton production and a big saving in food."

Veterinary

Dr. S. B. Nelson

Wind Puffs—I have a heavy colt, about 1400 pounds, coming 5 years old, which has wind puffs on both hind legs, one larger than the other. The colt has been broken to farm work, but I wish to work him in logging this winter. Will heavy pulling make him lame? Do horses with wind puffs doing ordinary farm work ever go lame? Is there a cure for it?

C. M., Ford, Idaho.

Wind puffs are the indication that there is a slight irritation along the tendon where it passes through the synovial sheath. There is no established remedy to overcome them. There is only one treatment which will in any way relieve the condition, and that is to raise the heels so that the tendons will be shortened and give them a rest. This condition comes from either hard traveling or hard work. You might try an alleviating measure, rubbing into the hair once daily a small quantity of iodine ointment.

Leaking of Milk—I have a cow that got a teat hurt on a wire fence this summer, and while she got well, we had to use a tube when milking, but now she is leaking nearly all the milk in that teat.

R. G., Olalla, Wash.

To stop the leaking of milk from the cow's udder it is necessary to cause an irritation and a swelling of the tissues about the lower opening of the teat. This is most difficult to do. I have found some good results to be obtained from bandaging the lower end of the cow's teat with a piece of adhesive tape about half or three-quarters of an inch wide. Do not bandage too tightly, but just enough to stop the flow of the milk. This may cause the muscular tissues to regain their strength, so as to keep closed after the treatment has been used for some time.

Young Pigs Cough—I have six pigs that are four weeks old. They began to cough when one week old, and the sow pigs have a white discharge after they urinate. They have a dry place to sleep in. G. W. W., Bow, Wash.

I would suggest giving the pigs a few drops of turpentine in their feed. Just five or 10 drops in each feed morning, noon and night. This will stimulate the membranes and possibly overcome the trouble.

Both Should Be Read.

To The Washington Farmer: Enclosed find $1, for which you will please send me The Washington Farmer for three years and The Twice-a-Week Spokesman-Review for one year, as per your "cut price" offer. Both papers should be read by every farmer.

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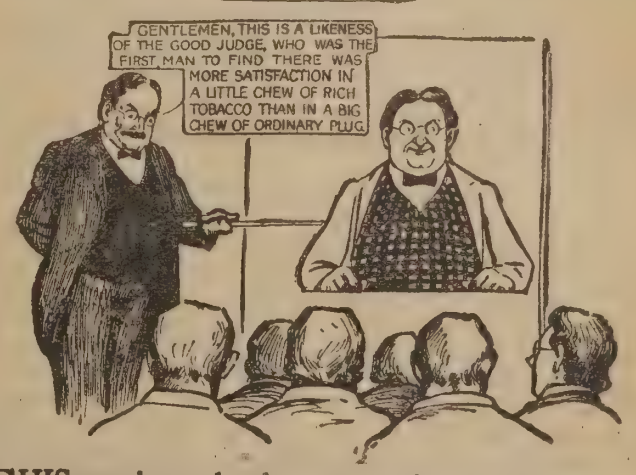
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POULTRY

Write to the Editor

JAMES DRYDEN
Editorial Contributor

Canker or Catarrh

To the Editor: Am writing to find out what is the trouble with my turkeys. Between the corner of the eye and the bill is a swelling. Sometimes their eyes are almost swelled shut. Would like to know what to do for them. They do not seem to lose their appetite at all. They make a kind of sneezing noise most of the time. I have tried roup cures, but they don't seem to help. They have roosted out all summer and fall in an open pen on high perches. F. P.
Okanogan, Wash.

The turkeys have either canker or catarrh, judging from the description. If there is a discharge from the nostril or if it seems clogged up, the trouble is catarrh or roup. Try the coal oil treatment. Inject a little oil up the nostril and apply it to the swelling, then, with a feather dipped in the oil, swab out the mouth and throat. Repeat this treatment following day. Painting the swelling with iodine might be advisable. If the coal oil treatment is too commonplace use a 2 per cent solution of permanganate of potash and hold the head of the fowl in it just long enough so as not to strangle it. J. D.

Colds and Catarrh.

To the Editor: Will you please tell me what ails my turkeys? Their heads swell up on the right side and it seems hard for them to breathe. I have two that way. I have penned them up away from the flock and give them one-half teaspoon of sulphur every day. They eat well. W. H. H.
Coulee City, Wash.

This is no doubt a case of colds or catarrh. Discontinue the sulphur. That will make them more susceptible to colds. For treatment apply coal oil to the swelling and inject a little up the nostrils. Also swab out the throat with a feather dipped in the oil. Another remedy is to dip the head of the fowl in a 2 per cent solution of permanganate of potash and hold it just long enough so as not to strangle it. If the turkeys all drink out of the same vessel it would be well to put a little permanganate into it, just as much as will lie on a dime in a gallon of water. This may serve to prevent other turkeys becoming affected in case it may be contagious roup.

The best treatment, however, is prevention. If the turkeys are shut in close, ill-ventilated houses, treatment will do little good. Let them roost in the open air as much as possible, but protect them from cold drafts through small cracks in the walls. One whole side of the house may be open and the other three walls draft-proof. J. D.

The Egg Market.

It looks as though the dollar-a-dozen eggs will not materialize this year. Eggs are, at this writing, in November, selling for a trifle less than in October. Normally eggs are higher in November than in October. In fact, November is usually the high price month for eggs. The reason they are not higher is because there is little or no export business done on account of lack of shipping space. The prophets who predicted dollar eggs did not count upon the effect of food control, nor upon the curtailing of exports to the allies. The prices, however, will be good and poultrymen with a flock of good layers will be able to make a good profit. The average hen of the country, on the other hand, is likely to return a loss.
J. D.

The New Jersey Contest.

The first New Jersey contest, called the Vineland contest, held at the Jersey experiment station, showed an average egg production of 161.83 eggs per hen for the year. This is a little lower average than the Storrs contest, but the winning pens at New Jersey show better records than the Storrs. The highest record was made by a pen of White Leghorns which averaged 221.2 eggs. The Leghorns also won second, third and fourth places. The lowest pen record was 89.7 eggs per hen. It was noticeable that during the winter months the New Jersey contest showed the best egg laying, but during the summer and fall the Storrs contest pulled ahead. J. D.

Honey and Syrups.

Honey and syrups instead of sugar will make victory just as sweet—and bring it much sooner.

Feeds and Feeding

Profit in the Poultry Business

By PAUL E. TRIEM.

In answer to the question, "Is there any profit in the poultry business at the present time?" the unwary information seeker can obtain almost as many different kinds of answers as there are authorities to consult. There are a few men in the northwest, however, who by long experience with chickens, during favorable and unfavorable years, are qualified to express an authoritative opinion. Among these, one of the foremost is D. Tancred of Kent, Wash. Mr. and Mrs. Tancred have been in the business for years and have built up a flock of trapnested White Leghorns famous throughout this part of the country.

"There is no question but that poultrymen must figure closer than they have been doing during more favorable seasons," Mr. Tancred admits, in answer to the above query. "Poultry products are not selling as high as they should, measured either from the standpoint of the cost of production or food value compared with other farm products. I have heard that prime quality pork chops are selling at 48 cents a pound in New York. measured solely on the basis of actual food value, eggs would have to sell at $1.75 per dozen to be on a financial par with pork chops at this price. You can imagine what would happen if eggs were to go to such unheard-of figures, when steak or chops go up and up, the housewife may complain, but she doesn't boycott the butcher. There can be no argument to the proposition that the egg farmer is not getting as much for his product as he should.

"All this aside, however, the fact remains that eggs can be produced at a profit, even in present circumstances, provided the poultryman has the right type of chickens. The day of the hundred-egg hen is over. She must go to join the robber cow and the unthrifty hog. Remember that while a 200-egg hen will eat more feed than a 50-egg hen, she will not eat more in proportion to her added productiveness. The boarder hen must feed her body, just the same as must the high producer. Nor is there any truth in the statement, frequently repeated by those who should know better, that the extra care required by high-producing hens makes them unprofitable to keep. My chickens do not receive better care than any commercial flock should receive, yet among the 1400 pullets we trap-nested last year 19 per cent were 200-egg chickens and 65 of these laid 240 eggs. The average for the entire bunch was 180 eggs. Cleanliness, dry quarters, balanced rations, etc., any flock is entitled to. Beyond this the high producer makes no demands in the line of care, and in return she will shell out eggs at a rate which makes her a good investment. For instance, I have just received a letter from a man down in Oregon who made a gross income on his flock last year of $5.25 per hen, with a feeding cost per hen of $2.75. One of the most profitable flocks in the northwest is located near Spokane. The owner clears $1.75 per hen above all expense, but his are high producers."

Mr. Tancred believes that the present tendency to specialization, which leaves the business of producing young birds to professional breeders and hatchers, while the egg farmer takes the day-old chick or the three-months-old pullet and confines his attention to the egg end of the business, is bound to increase. Trap nesting is the only sure basis for picking out the paying layers. The breeder must trapnest, but for the egg farmer to do so is almost impossible. He has his hands full with the other details of his business. Moreover, if the laying houses are filled to capacity and the workers on the egg ranch are given all they can do through the laying season, hatching time will see the work doubled and the plant swamped. In California the day-old chick is already being superseded by the three-months-old pullet.

In the matter of feeding, Mr. Tancred does not believe that wheat can profitably be reduced below the 20 per cent mark in the poultry bill of fare. Corn is a very poor substitute for wheat in this part of the country, where the winters are apt to be mild, while oats probably come second to wheat in value. Their main drawback is the woody hull, which renders them somewhat unpalatable to the chickens. Sprouted oats and steamed oats are much better in this respect; but in preparing the former the sprouts should not be allowed to grow more than a quarter of an inch in length before feeding. Sprouted oats with three or four inch sprouts are little better than tough grass. On the Tancred farm other green food in the form of roots is raised, as well as oats and rape, seeded in the runs in September, and cut and fed up to freezing time.

As to the poultryman's opportunities in the average year, Mr. Tancred is very optimistic.

"If the poultry fraternity as a whole had practised during favorable years the strict economy they are obliged to practise now, most of them would have doubled their profits," he comments. "With a good sized flock of high-producing chickens, say 1000 or not more than 1200 if one man has to care for them, the average family need worry little about grocery bills and other necessities and even luxuries in moderation, provided the man who looks after the chickens is willing to do his part. He must be on the job pretty constantly, of course, but he would have to do that in any other occupation worth calling by that name. Present conditions are rapidly eliminating the back yard flock, against whose unfair competition we have had to make way as best we could in times past. This competition was unfair for one very good reason: the back yard flock was fed largely from the table scraps, with such feed as was bought forgotten rather than being charged against the cost of producing eggs. The labor was not charged for, nor the up-keep of the plant. The professional poultryman, on the other hand, must keep rigid track of all these items, for egg production is a matter of business rather than of sentiment with him. The back yard flock as an institution was certainly not good for the poultry industry, and I do not believe it was good for the country. In the long run, poultry and eggs must be produced by men who make this a business, and these men must be paid a legitimate profit if they are to live.

"And so, with the present need for strictly economical production of food materials forcing the hit-or-miss flock and the low producing flock out of business, I think the poultry man who stays in the game and plays it right need not fear to face the future. Year in and year out the fact remains that only four per cent of the egg is shell, and that there is no waste to the rest of it, whether you boil it or fry it or however you cook it. The world can't get along without eggs."

Substitute for Coal.

Idaho State Fuel Commissioner Gooding is out with another warning relative to the scarcity of fuel in the state and asking the people of the state to use all care possible in conserving the supply.

Wherever it is possible to get wood it is requested that wood be burned instead of coal. Forest reserve officials have made it possible to draw on the supply of down and dead timber wherever it can be had.

Railroads are to sell old ties and bridge timbers at a nominal cost for fuel purposes.

College Grange Elects.

E. F. Gaines, instructor in farm crops and assistant cerealist in the State college of Washington, has been elected master of the State college grange. Other officers named were as follows: Overseer, Professor R. Barnett; lecturer, Miss Agnes Craig; steward, B. F. Dana; assistant steward, E. D. Alvord; chaplain, Mrs. Leonard Hegnauer; treasurer, Miss Saide Swenson; secretary, C. E. Howell; gatekeeper, J. P. Fairbanks; Ceres, Miss Edna Walker; Pamona, Mrs. George Severance; Flora, Miss Doris Schumaker; lady assistant steward, Mrs. James Emert.

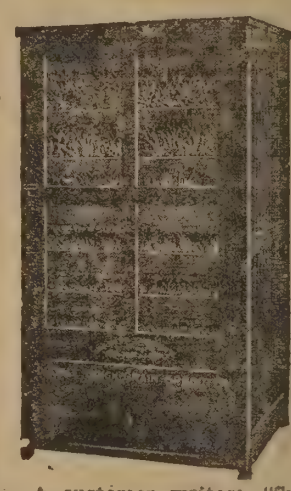
The college grange has been successful in aiding its members in the cooperative buying of fuel, practically every member having secured his winter's supply of coal through the medium of the grange at a material reduction in cost.

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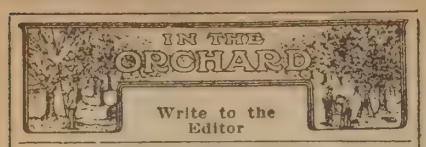
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GRANVILLE LOWTHER
Editorial Contributor

The Fruit Packers

In a previous article I treated this subject from the viewpoint of the employer. I now give some observations, gathered by talking with the employe.

First of all the wage worker claims that the wages of farm labor has not kept pace with the advance in wages in other industries. While the factories and mines are paying from $4 to $6 a day farmers are only paying from $3 to $4.

One of the men, Mr. Rodney, with whom I talked was educated, intelligent, had been a member of the legislature of one of the middle states and by reading kept himself informed about industrial and political movements. I suggested to him that the farmers could not pay what the manufacturing industries paid without facing bankruptcy.

"I agree with you," said he, "but neither can we live on what the farmer would be willing to pay us." "I mean," he continued, "that a wage-worker at farm wages can not live and keep a family."

"Mr. Rodney," I said, "will you tell me why you can not live on $3 a day and keep a family, provided that family is of average size, and provided the other members of the family who are able to work, do so?"

"Well," said he, "I suppose a family of three children is not too large. At any rate some of our statisticians have said that considering the number of deaths, and considering that it takes two to start a family, the population would decrease if less than four children on the average were born in the average home. Half the children born die before they marry and reproduce themselves. This leaves the other half to perpetuate the race. But in my home we have three, and with myself and wife, we make a family of five. Now what does it cost us to live? It takes my wife's time to cook the meals, keep the house and care for her children. Not one of the children is a wage earner. Our oldest is a girl 8 years old and in school. The youngest is a baby and needs its mother's care. My wife can not take in washing, sewing, baking, or anything else to supplement our earnings. I must make the money on which we all live. First of all we pay $15 a month rent, and the landlord thinks he is doing us a favor to let us have it at that. We are fairly comfortable, but the house is not modern, and not in a good part of town. The rent, however, costs us 50 cents a day. This leaves us $2.50 a day for all other expenses, provided I worke devery day in the year, Sundays and all. Our grocery bill will average $30 per month, and that does not include meat. For groceries therefore $1 a day. Add that to the rent and half of the wages is gone, provided I worked every day in the year, Sundays Our meat bill is 50 cents a day, and considering the prices we have to pay for meat, we are not at all extravagant." "Now you see," said Mr. Rodney, "that we have just $1 a day left for fuel, clothing, shoes, replacing broken dishes, furniture, carpets, beds, books, paper, street car fare, lodge dues, and a hundred and one things that require a little extra expenditure of money. Do you think that is too much?"

"No," I said, "it is not too much, but how can the farmer afford to pay more than he is now paying?"

"I will answer that question later," said Mr. Rodney, "but before I do that I want to impress upon you that our calculations were based upon the supposition that I was to work every day in the year, Sundays and all. Now, do you think that from an economic, social or physiological viewpoint a man should work every day?"

"No," I said; "I think it is conceded that in a period of months a man will do more work in six days, resting one, than in seven. From a sociological point of view, a man should have some time, say one day every week, to recreate, wash himself up, put on clean clothes, associate with his family or whatever he chooses."

"Admitting that to be true," said Mr. Rodney, "that takes off over 14 per cent of the income on which we based our calculations. Further, we do not always have jobs. Suppose I stay with you until the fruit is all picked, which will be about the first of November, then where do I go? The Lord only knows, but it is reasonably certain that when you pay me off in the evening of the day your work is completed, that I can not get up the next morning with a job yawning to receive me. I must get out and look for work. Perhaps the first man I meet will hire me to work at something to which I am adapted, and at wages as good as I could expect. But the probabilities are that I will spend several days before I find the right work under right conditions."

"Now, Mr. Rodney you must remember that I promised if you staid with me through the season and made good I would give you more." "I know you did, but you have men whose needs are as great as mine, but who are not able to do as much work and the price to them is $3."

"You know we agreed that with the present prices of fruit the orchardists could not afford to pay more?"

"I know we did, but that is the fault of the farmers themselves."

"How are we to blame for that?"

"You farmers as a class are the largest, most powerful single class of voters in this country. You have allowed legislators and lawmakers to be influenced by the manufacturing interests, mining interests and other industries, so that you have not a word to say about the prices of anything you buy or any thing you sell. For instance the Standard Oil company has always paid good prices for labor; but it always fixes the prices of its products and you may rest assured they are high enough to cover the high prices of labor. Henry Ford is regarded as a great philanthropist because he has so greatly improved the labor conditions about his factory. But Henry Ford fixes the prices of automobiles; and while it is conceded that his machine is the best for the price on the market, yet it is also conceded that he is making on every machine a net profit of $200 and that he turns out a machine every three minutes. But you orchardists buy boxes and ask the seller what he will take. You sell apples and ask the buyer what he will give; provided you do not give them to a commission man, to give to a commission man in St. Paul, to give to commission man in New York, to send you back what he professes to believe is due you, "less his commission," less the St. Paul commission man's commission, less the commission at this end, less the freight, etc."

"Well what would you have us do?"

"Why, get together into one big national organization and show the politicians that they are your agents to protect the producers instead of the

(Continued on page twenty.)

Fur Is Prime

To Trap Weasels, Skunk and Mink

By GEORGE LARUE, Twisp, Wash.

The fur is prime now and prices are soaring high. The weasel, skunk, mink and coyote that were catching those ducks, turks and chickens last summer and fall are in condition to pay for part or all the damages now if you will get hold of them and make them do it.

I am going to tell you how I got many of them. The weasel is easy. You can catch him without experience when you know how. I use No. 1 jump trap for the weasel. Tie part of a mouse on the pan of the trap and set the trap under a flume or log or the edge of a rock and fasten the chain to something so the weasel or a larger animal can not drag the trap away and lose it. I have caught skunk in traps set for weasel. The trap doesn't need to be hid for weasel, but should be properly baited with mouse, chicken, bird or squirrel.

Skunk can be most successfully trapped at the entrance of their den, but can often be caught far from their den. The same bait that is good for weasel is good for skunk, but it isn't necessary to bait when trapping at their den. Fasten the trap to the end of a pole from 12 to 20 feet long, so you can pull his skunkship from the den without danger of being hit by one of his volleys of skunk gas.

A skunk will not emit his offensive odor until he is disturbed, and they can be killed and skinned without that awful smell if the trapper understands his busines. A hard stroke with a stick across their back, or get behind the skunk and shoot him in the center of the neck with a 22-caliber rifle. One must paralyze, or severely injure their spine to prevent them scenting things up when being killed. A place should be scraped out and the trap covered with leaves or loose dirt when sets are made for skunk.

The mink is more wary, and the fellow that can get every one that comes near his set is a skilful trapper. They are usually caught near the edge of streams or lakes. At the entrance of a hole in the bank or under a log or drift near the water is an ideal place and the trap should be baited with fish, bird, mouse, muskrat or chicken. The trap should be hid and things should be made to look as natural as possible.

The coyote is the most plentiful, is the most destructive, and is about as wise a guy as the trapper has to contend with. There are many ways of attracting them and catching one now and then, where they are plentiful, but it requires much experience to become an expert coyote trapper. Near the carcass of a horse or cow that they are feeding on is the easiest place to catch them. After they have been feeding on the carcass for several days the traps should be set in the trails from five to 50 yards from the carcass. A No. 3 or 4 should be used and should be fastened securely, and the traps and chains covered, and all signs brushed out.

In or Out.

Hindenburg still claims Germany was forced into the war. Well, let him have it that way if he will. The real point of interest is that she is now going to be forced out.—Minneapolis Evening Tribune.

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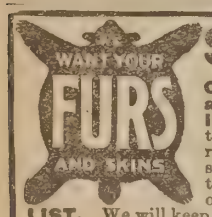
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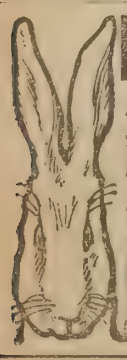
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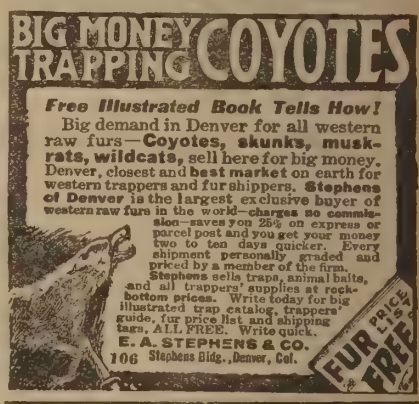
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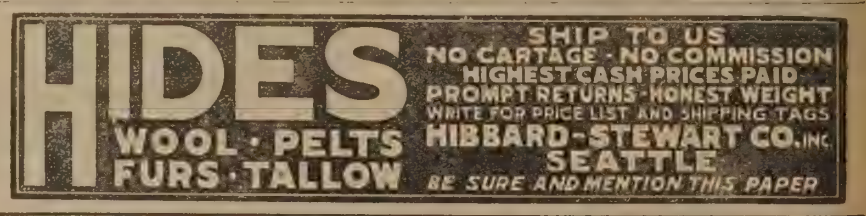


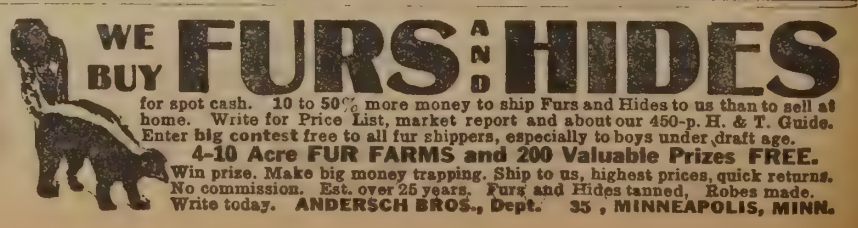












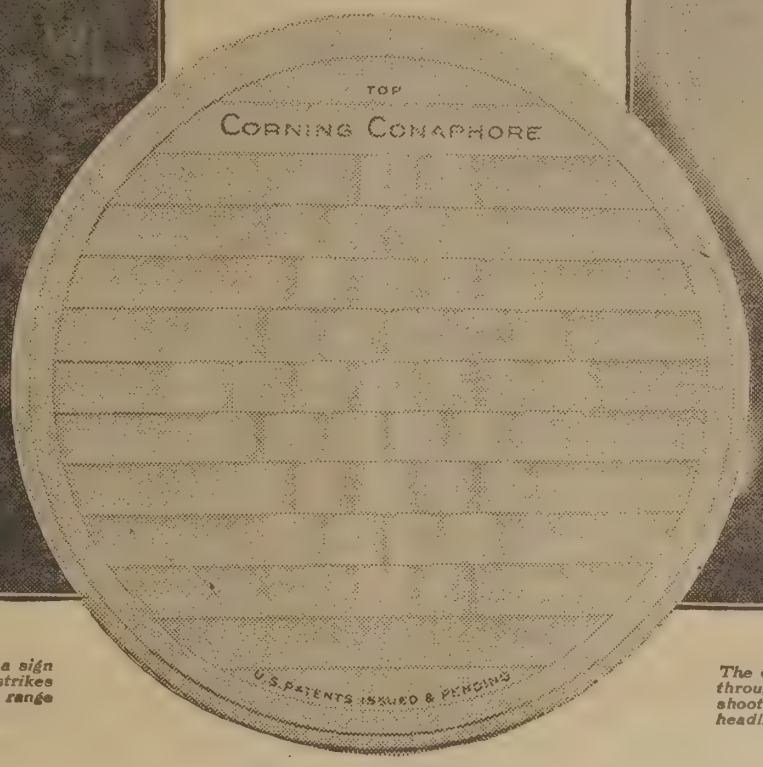


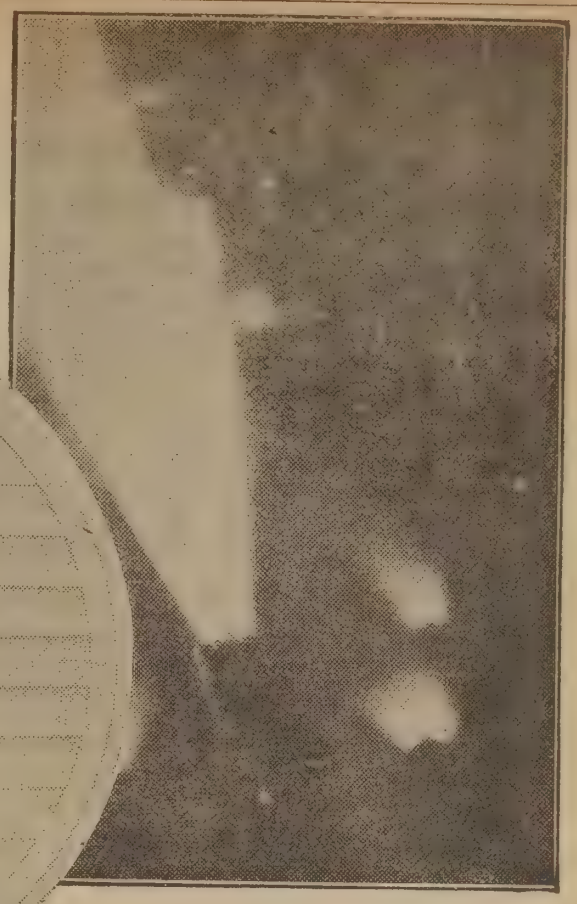
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Throws the longest beam, without glare

The Conaphore is the scientific solution of the automobile headlight problem. It gives range of full 500 feet, *yet kills all glare.* Gives ample side-light, too.

The patented horizontal corrugations on the inner surface bend down the light rays and direct them along the road, not more than 42 inches high. At the same time cylinders in the corrugations spread the beam sidewise. By projecting most of the light far ahead of the car, instead of diffusing it or dumping it directly in front and close to the car, the longest possible range is secured.

Thus the Conaphore meets the strictest requirements of law and courtesy.

Pierces fog, dust and snow flurries

The Conaphore is made of Noviol Glass (*patented*). This yellowish-tint glass causes light to pierce fog, dust and snow flurries, and eliminates dangerous "back-glare." This is because it *absorbs* the blue and violet light rays so easily diffused by fine particles in the air. No other headlight device has this advantage.

The Conaphore is also made in clear glass for those who prefer. Clear glass Conaphores control the beam within legal limits and project the light at long range, but they do not possess the unique advantages of Noviol.

Easy to install

You will find Conaphores easy to install. Simply take out the glass now in your headlight and put the Conaphore in its place. It is wise to see that your headlight bulbs are properly focused at the same time. Sizes made to fit all cars. In ordering give name, model and year of your car and diameter of present headlight glass. All progressive dealers now sell Conaphores. Put a pair on your car today.

Notice to accessory and hardware dealers

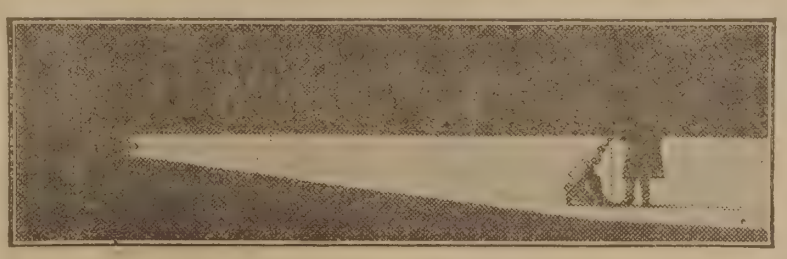
If you are not among the dealers handling Conaphores, get in touch with any of these jobbers. They can fix you up in no time:

Auto Supply Co., Tacoma.
Chanslor & Lyons Co., Seattle.
Holley - Mason Hardware Co., Spokane.
Marshall-Wells Hardware Co., Spokane.

RETAIL PRICE LIST (per pair)	Noviol Glass	Clear Glass
5 to 6⅞ inches incl.	$2.40	$1.60
7 to 8¾ inches incl.	3.50	2.50
8⅞ to 10 inches incl.	4.50	3.00
10⅛ to 11½ inches incl.	6.00	4.00

Prices 25 cents more per pair west of Rocky Mountains.

Sizes vary by steps of ⅛ inch above 6¼ inch size.



The above test proves that the height of the Conaphore beams is not more than 42 inches, 75 feet ahead of the car.

CONAPHORE SALES DIVISION
EDWARD A. CASSIDY CO. Inc., Managers
Madison Ave. and 40th St., New York City
CORNING GLASS WORKS

NO GLARE
RANGE 500 FT.

CONAPHORE

PIERCES FOG
AND DUST

Tent Revivals in Cattle Thieving

Life Was Real in the Old Bunchgrass Days in the Big Bend Country

By JOE L. ASHLOCK.

I read the other day that Penny was dead. His passing I marked with sorrow, which brought in its mournful train memories running back over two decades into the eastern Washington bunchgrass, where Penny was prosecuting attorney of the county, and I was a barelegged youngster who knew something about some cattle thieves.

I thought for a long time that Penny thought I was a cattle thief. Maybe he did. Anyway, he said some things about me which I resented in a silent boy's way. Penny made a mistake. Into the deep well of a boy's heart he dropped a stone. The boy remembered the stone during many later years, while Penny, in his righteous quest of horse thieves and other breakers of the law, many of whom he sent to "the pen," was becoming lined with care and gray.

The boy was growing during these years, and as he grew he thought less as a child, spoke less as a child, and put away childish things—and the stone! But Penny was dead then.

Maybe I commenced this story wrong. Perhaps I should have begun by telling about Henry Blank's wife, who weighed several hundred pounds—two or more—and thought the bunchgrass was a good field for missionary work. Before I proceed let me give her credit for a world of good intentions, but, as my grandfather used to say, and as his grandfather said before him, "Hell is paved with good intentions."

She wanted to preach, and preach she did. In the homes of settlers she gathered a few of the sinful folk about her, and told them the constituent parts of human virtue, with emphasis on the parts that failed in their make-up.

She would get away with her discourse in fairly good shape till she became so burdened with the weight of the sins of the world that she would weep, wail and howl—and tears would flow like melting snows from a mountain top!

It was embarrassing. No one in her audience knew just what to say to comfort her. So they all sat silent and troubled while her paroxysms of grief shook her with the power of earthquakes, finally calming down with the comforting strains of the Doxology and a sobbing benediction pronounced upon our sinful heads. She would be fairly calm when the meeting was over, and would beg everybody to come to the next meeting, and, fearing to excite another outburst of grief, almost everybody who failed to escape before she buttonholed them would promise.

We had a few tent revivals in those days. The white tent was called "the tabernacle." Old and young flocked to the tabernacle. Mrs. Henry Blank fairly doted on the tabernacle. She would hardly step outside of it during the two or three or four weeks it was in town.

Henry Blank, however, didn't care very much about the tabernacle. In fact, I think some of his comments about it would hardly be printable. While his wife attended the tabernacle meetings and heroically launched her boat in the breakers to pull sinking human souls upon the solid rocks, Henry ran a bachelor's camp at home, that is, while she sang at the tabernacle "in sweet accord, he ate what the pantry chose to afford."

Like another erring husband who has been immortalized by the poets, Henry smoked and chewed and

"Never would pray with an honest vim,
Nor go to church, nor join in a hymn."

He was unredeemed and beyond redemption, part of the jetsam and flotsam of humanity which his wife saw sinking in waves of sin, and wept at the sorrowful spectacle.

By this time it is gathered, I presume, that Henry's married life was not very happy, nor was he well fed. Mrs. Henry Blank had never heard the axiom, "Reach for a man's stomach and find his heart!" Instead, she reached for Henry's soul and found a plug of chewing tobacco, and an indisposition to mount the bench of repentance in the tabernacle. She wept—indeed, she could weep but not cook; at least, she wouldn't cook when a tabernacle was around.

Well, it came to pass, as sometimes comes to pass in families whose domestic economy has been supplanted by the extreme article in ecclesiasticism, that Mrs. Henry Blank went "east to see her folks." Around the neighborhood it was darkly rumored that she might never come back. It was also said that Henry had sold their only cow to get the money to buy her eastward ticket, and that he was left "strapped," without money, wife, crop and with only a little chewing tobacco.

About that time my hunt for a cow took me past Henry Blank's place. It was a couple of hour's past meal time when I stopped at Henry's to see if he had seen our cow. He hadn't, and he was eating dinner. His dinner consisted of a dipper of cold water and several slices of bread, buttered with white, oily lard in lieu of butter, and on the lard was sprinkled some sugar.

Henry ate this while I sat on his doorstep and sized things up unabashed. He was unshaved; he look worried, and said he had had the headache all day, attributing this fact to the lack of chewing tobacco. He had been so darned busy that he hadn't time to go to town to buy either tobacco or groceries. He had gotten a roll of butter a while before. It had been so darned strong that he had thrown it out and was using lard instead. Had I ever eaten bread and lard and sugar? No, I hadn't. He urged me to try some. I would be surprised, for it was fine. Thus he talked; but in my boy's mind was a lurking suspicion.

Well, while Henry was eating the lard and bread which he liked so well, he could look out at his open door and see many grass-covered hills in the distance, and on these grass-covered hills were grazing many grass-fattened cattle owned by a stockman of that country whom people called Uncle Dan.

Henry fell from grace one day. According to his own confession, he and another fellow went out and laid hands on four of Uncle Dan's grass-fattened calves. From what was later said about this deed it was plain that Henry was thinking about winter's meat when he did this.

However, penitence followed the first meal in which Henry substituted Uncle Dan's juicy veal for the lard on his bread. Being penitent he began to tell all his neighbors what he had done. Had a tabernacle been around I think likely he would have gone to the penitent's bench and loudly proclaimed his sin. "Honest confession is good for the soul!" Anyway, an honest soul usually confesses, and Henry Blank was an honest soul, in spite of his chewing tobacco and dislike of tabernacles.

By and by the things that Henry was saying about himself reached Uncle Dan. He was made of generous clay, was Uncle Dan; but in this instance his indignation was righteous, and he swore. He met with Henry one day and the following conversation ensued:

Dan—Henry, hev you been a-stealin my calves?

Henry—I reckon that's right, Dan; but I'll make it good with the first money I——

Dan—The hell you will! Henry, you're regular out-and-out damfool! If ye hevn't no more sense than to steal calves you ought to hev sense enough to keep your mouth shut about it!

Henry—But, Dan, I——

Dan—Shet up! If ye keep on talkin' about them damned calves ye'll get yourself in jail!

But Henry kept on talking, and finally got himself in jail.

Penny appeared on the scene about this time—and Penny wanted to get the other fellow! Penny said that since Henry wanted to he supposed he would have to go over the road for a little while; but he wanted the other fellow.

I met up with Penny in his quest for evidence that would enable the hands of the law to reach Henry's alleged partner in the transaction. Henry, it appears, had let it out that he had had a partner in the deal. The partner he alleged vociferated to the contrary. No one knew what the exact facts in the case were. Penny wanted to know.

In his quest for evidence Penny got wind of certain rumors that reached to me. He had heard that I knew something. I had been hunting a cow down in that country the day Henry and his partner laid hands on Uncle Dan's calves. In fact, it was alleged that I had ridden up to the wagon, boxed high on all sides, that contained the calves; had looked at the calves, noted that one was red and white, in large spots; another was red with a bald face; another was a roan with horns out less than an inch, and the other was black and white. I had noticed, also, that the calves had Uncle Dan's brand. I had wondered what Uncle Dan meant by selling calves before they were 2-year-olds, and had asked Henry what Uncle Dan was selling calves like that for.

Henry had looked at me rather blackly and told me it was none of my blanked business. Angered at being so rudely addressed, I had "sassed" Henry, telling him presently that he also could go to the torrid place to which, with such black looks, he had but a moment before consigned me. Then, on my buckskin pony, I had departed, with several backward glances, a rising suspicion and the utterance of disrespectful things.

I have never told anybody how much or how little of this neighborhood gossip was true. Penny picked it up, but he picked it up second-hand. He hunted me up ahead of the trial, and his purpose in doing this was to ascertain how much of this I would tell under oath. In a word, he desired to convert rumor into evidence and wanted my help.

Penny and another lawyer hunted me up in the bunchgrass one day, weeks before the trial. He, the great prosecuting attorney of our county, did this thing. He stopped at our home and asked mother where I was. Over in the scabland hunting cows, mother said. Penny may have thought that I was hunting somebody else's cows, but didn't say so. Mother told him the direction in which I had departed, and the same by which I likely would return. So Penny and his friend rode out in my direction on the chance of meeting me, which they did.

Over in the scabland they found me, a bit out of temper, perhaps, because of my fruitless endeavors to cut a stray, bad-tempered bull from our tame milch herd. My cayuse couldn't turn quickly enough to head off the range bull. And then the bull would outrun me back to the herd. Also, he was getting mad and was showing fight. Also he had long horns.

While my troubles were at this crisis Penny and his friend rode up quite comfortably, and viewed my struggles for awhile in a disinterested but amused way.

If Penny or his friend had been full-blooded rangemen one or both would nave tightened up their saddle-cinches and helped me chase the wild bull back to his own wild herd, a half mile away. But they did nothing of the sort. They looked at me, my cows and my enemy in a cool, disinterested way, and when the wild bull whirled on me and pawed the dirt for a charge, compelling me to retreat temporarily, Penny merely said, "Look out!" His "look out"

(Continued on page nineteen.)

You Do Three Helpful Things

Every Time You Buy a War Savings Stamp

The government will sell these thrift stamps at post-offices, banks and other places. Ask your banker, postmaster or mail carrier for further information.

Every time you buy a war savings stamp you do three helpful things:

First, you help yourself by saving that $4.12. You are practicing thrift and forming your character for future benefits in after years.

You are helping to win the war by lending your country money it must have to carry on the war.

And you are helping your country in yet another way. The money you save you do not spend. To that extent you release labor for the government's needs, for no one ever spends anything without making some one else work for him.

If you have not immediately at hand the $4.12 needed to buy your first war savings certificate stamp, you can make a start with 25 cents. For that small sum you can buy a thrift stamp and the government will supply you with a thrift card. When you have attached enough 25 cent thrift stamps to your thrift card you can exchange it for a war savings certificate stamp.

Say you are a farmer boy or a farmer girl, and in some helpful way have earned a few dollars that you do not have to spend on real necessaries of life. Under ordinary circumstances you would be inclined to spend it on some article of wearing apparel that you could do without, or perhaps for a bicycle or motorcycle, or possibly an automobile; or on a trip to the city; or at a circus or the moving picture shows.

Now when we spend money in that way we are requiring some one, or several people to work for us, and that is all well enough in ordinary times when there is plenty of labor and to spare. But these are not ordinary times. They are the most extraordinary times that the world has ever known. We are in a gigantic war for world safety and freedom, and we can not carry on industry and business as usual and win this most unusual war.

Ordinarily the business men and bankers want to see business go on as usual, but they are coming to understand that business and industry must be readjusted. A big New York banker, of the firm of J. P. Morgan & Co., was explaining the new situation the other day to an audience of other bankers and bond men, and his remarks were so directly to the point and so clear that we are glad to give them space:

"The business of the United States government is war. The business of the United States government until we have succeeded will be war; and if the government is to get the goods and the services that it needs some one must be without those goods and services. And it is the purpose of this war saving campaign to bring that fact home to all the people of the country.

"Now, what has happened in England? When they started this campaign men laughed at the idea that you could take a proposition in economics and make it clear to a whole people. But they did take that proposition in economics and they did make it clear to the people of England. Look what is happening in England today! Talk about a usual business! Why, there are 5,000,000 men in the army out of a population of less than 50,000,000. England is in the same position as we would be in if we had 11,000,000 men in the army, and yet England is producing more than it ever produced before.

"Now the war savings movement means that all over this country that doctrine is going to be preached. It is the doctrine of releasing services for the government; it is the doctrine of releasing man power for the government. And in this war savings campaign if men and women do without goods and services now by lending $4.12 to their government and getting a bond that pays them $5 five years from now, they are obviously deferring the command of goods and services until a future time when with the proceeds of that bond they will again command goods and services. The important thing is that they will at that time be commanding goods and services for which their government is not in such acute competition with them. It is all summed up in that one expression, that no man ever spends anything without making some one else work for him."

MUGGSY BOXES UP A STOLEN DOG



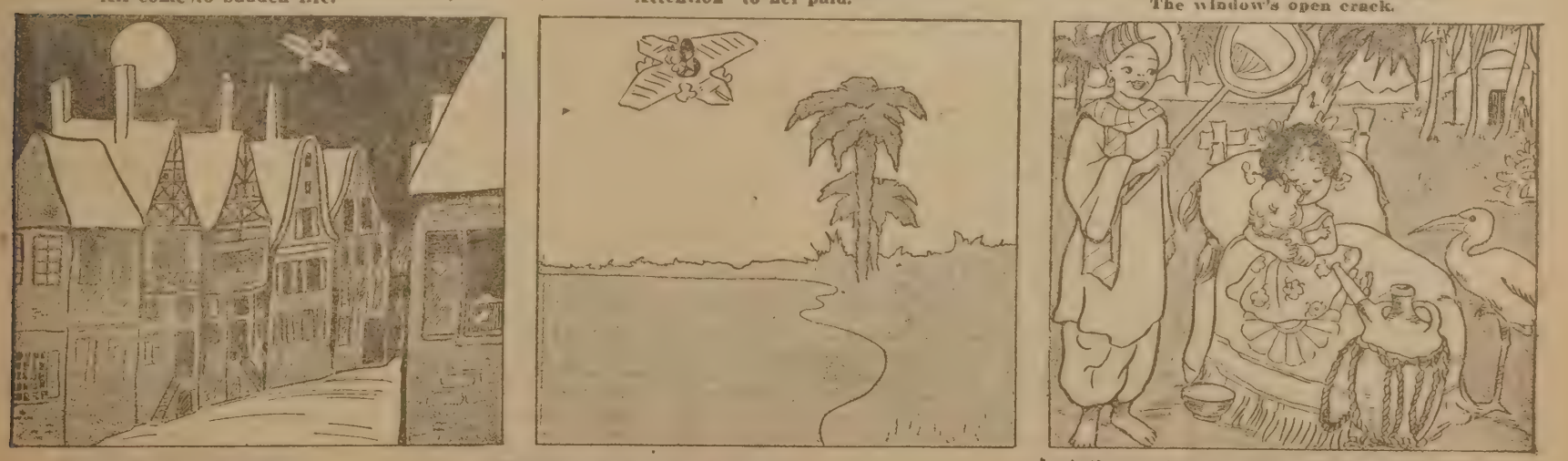
IT'S AN ILL WIND THAT BLOWS NO GOOD



When every one was fast asleep,
The nursery quiet and dark,
The toys would play; the carpet green
Was velvet lawn and park.
Bobby's gay tin regiment
Would march to drum and fife,
Dollies gay, of rag and paste,
All come to sudden life.

Doll Rosabelle was made of wax;
Her eyes were round and blue—
The prettiest, rosiest dolly dear;
She'd many lovers, too.
Jack-in-the-Box popped every night
Unto this beauteous maid.
The wooden sailor, Davy Jones,
"Attention" to her paid.

One night in Dicky's aeroplane
Doll Rosabelle did fly
With Captain Tin, of the regiment,
Unto the ceiling high.
Her other lovers, kneeling,
All begged her to come back.
She laughed, and never noticed
The window's open crack.



Suddenly a gust of wind
Seized the fragile craft.
Out of the open window
'Twas carried by the draught.
Over the sleeping houses,
Under the big round moon,
Dicky's new aeroplane bore far away
Doll Rosabelle in a swoon.

Over the hills and far away,
Till they reached a tropical isle,
Where the mighty brown chief's little daughter lay,
Too ill even to smile.
"She soon will be dead,
Unless we can cheer her,"
The med'cine man said.
"She cries—listen—just hear her."

Just then Doll Rosabelle fell down—
It seemed from the bright blue skies.
She dropped on the bed of the little girl brown.
Who opened her big black eyes.
Don't you think it was a pretty nice wind
Blew Doll Rosabelle that way?
For the sick little girl of that tropical chief
Was cured by her right away.

MARGARET C. HAYS

"Homes of Washington Must Prepare for That Blow and for Subsequent Blows"

To the Editor of The Washington Farmer: I wish to call your attention, and the attention of your readers, to the unusual conditions attending the holding of Housekeepers' Week at the State College at Pullman the week following January 7th.

It is easy to assume that in a nation of the wealth, power and ideals of the United States victory in battles will come. Victory will come, of course. What we shall pay for victory is the question of the hour.

You and I, and every one of us, from the youngest child to the feeble-aged, will pay dearly for victory if there is not on the part of every able-bodied American immediate, enthusiastic, and unqualified response to the nation's appeal for help from the American homes.

Not only is this a war of soldier against soldier, but it is a war of home against home. Dr. Harvey Wiley spoke the truth recently when he said that it was the women at home who are fighting the war. When the American home breaks down and women fail in their duty America's armies are defeated.

There must be, in every American home, not in a few here and there, saving, reservation, utmost skill and forethought, down to the last ounce and stitch of all home supplies. This was the order and the practice in Germany on the first day of Germany's war with the world, and is true in Germany today. Fundamentally, this is why Germany now is able to assemble on the western front the forces to strike what military observers in the world outside of Germany believe may be her hardest blow of the war.

The homes of Washington must prepare for that blow, and for subsequent blows, from the most powerful and the most ruthless enemy that the world has ever seen. Members of the extension service of the State College have recently returned from the nation's capital, where conferences were held with Mr. Hoover, Secretary Houston, Assistant Secretaries Pearson and Vrooman, Secretary Daniels, and others. The hour is full of great consequences; and every neighborhood, town and city should be represented at Housekeepers' week for the sake of the information that can thus be sent back into different parts of the state.

Women's clubs, social groups and business organizations throughout the state should see to it that they are represented at Housekeepers' week by one or more delegates. Every woman in the state who can afford it, even by sacrifice, should come. All this is so, because the desired unity in action, purpose and understanding is mainly a matter of getting the desired information to the Washington homes. Personal attendance, or the sending of delegates, are the most satisfactory means to this end.

We are promised the help of prominent leaders from Washington, D. C., and other centers of war preparation and mobilization for homes and housekeepers.

MARY E. SUTHERLAND,
Emergency State Leader, Home Economics Extension Service.

Red Cross Work

In accordance with the promise of the Farmer to give desired information regarding Red Cross work, especially to those who have signed the pledge of patriotism and become enrolled as members of the Patriotic League of the Farmer, there will be found in this issue complete instruction for Red Cross knitters, together with illustrations of the articles of clothing needed by the soldier boys. From week to week further information will be given as to different ways of aiding the Red Cross work. Just now it is up to every man, woman and child as far as possible to become a Christmas member of the Red Cross organization, by contributing $1 and obtaining from the nearest Red Cross auxiliary a membership card for the window and a membership button.

Harmony and Work Mark Convention

(Continued from page five.)

organization of our business organizations;

"Therefore, be it resolved, That we accept this resolution from them as being a most noble stand for true cooperation, and that we pledge our united support and guarantee that we will help to bring about this condition."

Owing to the shortage of labor, it was the consensus of opinion at the convention that much farm help must be drawn from the schools, and with this in mind a resolution was adopted recommending that each local organization take up with the school authorities the matter of holding school sessions during the winter season, so that vacations may be made longer, thus permitting the boys and girls to lend greater aid in farm work during the rush seasons.

Appreciate College Cooperation.

Of peculiar significance was the unqualified endorsement by the convention of the work of the State College of Washington and the college of agriculture of the University of Idaho in furthering farming interests in the two states. Recognizing the great benefit that these institutions can render, a resolution was adopted asking their coperation in the solution of the problem of bulk handling of grain. This resolution read:

Whereas, there seem to be special reasons why bulk handling of grain should be adopted in the Inland Empire as early as possible, and

Whereas, farmers will need the advantage of all information and counsel possible to obtain,

Therefore, be it resolved, That we call upon the Washington State college, the University of Idaho and the United States department of agriculture to assist us by conducting a campaign of education on the preparation that will be necessary for the adoption of bulk handling.

The coming of Professor W. J. Spillman to the State College of Washington in the spring to be dean of the college of agriculture is highly approved by the union. A resolution touching in part on this subject read: "Resolved, that we commend the policy of the president and board of regents of the State College of Washington in increasing the appropriation of the funds of that institution to be used for agricultural work, and congratulate them upon having secured a man of such wide reputation and proved ability as W. J. Spillman to fill the position of dean of the college of agriculture."

Another resolution endorses the efforts of President Holland of the State College of Washington and President Lindley of the University of Idaho "to inaugurate an era of more friendly relations and closer cooperation in the experimental and teaching work of the two institutions, believing that it will result in great benefit to both and will increase their usefulness to the farmers and tax payers of the two states."

The free use of the mails for soldiers was recommended in a resolution. Another important matter touched upon was that Indian lands be made subject to taxation as soon as certain treaty agreements expire, in order that such lands may be made to help bear the cost of schools, road construction and community development.

"Primary Interior Markets."

The recent announcement of the food administration that the "primary interior markets" at which the 1918 guaranteed price of $2 per bushel for wheat would be applicable would be construed to mean twelve points, the most westerly of which is Minneapolis, aroused the delegates to the convention to a fighting mood. It was argued that this did not guarantee to the farmer of Washington and Idaho and Oregon $2 for his wheat, but only $2 less a stiff freight charge to some point far outside the northwest.

Talk was heard to the effect that the matter would be taken into the federal courts if the discrimination was not righted, as it is the firm conviction of the farmers that congress did not mean Buffalo, Chicago, Detroit, Duluth, Indianapolis, Kansas City, Milwaukee, Minneapolis, Omaha, Peoria, St. Louis and Toledo when it said "primary interior markets" in the price fixing bill. A vigorous effort will be made by the organization, backed by other organizations in the northwest, to secure more equitable ruling on the matter. Another article in this issue touches more in detail upon the question involved in this proposition.

In Memory of C. B. Kegley.

The convention, in recognition of his long record of service as master of the state grange of Washington, adopted a resolution eulogizing the late C. B. Kegley, who died several weeks ago after a short illness.

Big Problems Faced by the Farmers

Handling Grain in Bulk—This question is larger than ever because of the sack shortage condition brought about by the war. The problem seems now to be not "Shall grain be handled in bulk?" but "How best can the farmers and warehousemen prepare quickly to handle it in bulk?"

Farmers' Union Warehouses—Should the conduct of warehouses under the management of the farmers be placed under a central organization, or should each warehouse or store remain much of a local enterprise as it is under present conditions?

Labor on the Farm—The farmers are as patriotic as any class of people on earth, but is it wise for the ranks of experienced farm labor to be depleted by recruiting or drafting into the army or navy service? Would it be advisable for the government to draft men and place them on the farms under military authority and regulation instead of placing them on the battle field?

The Grading of Grain—Must the wheat grower put up with the present system of grain grading whereby he can not have a grade and a price put on his wheat until it reaches tidewater or Chicago? Must he be content to wait indefinitely before selling his grain, the length of wait depending upon shipping conditions, warehouse conditions at the terminals, or other conditions that he knows nothing about?

The Dockage of Grain—What protection has the farmer against erroneous or unscrupulous dockage of his grain when it reaches the terminals 500 miles from the place it was grown? What recourse has he for having to pay freight on the screenings in his wheat? What recourse has he for the loss of good stock feed resulting from the cleaning of his wheat at the terminals?

Next Year's Price Guarantee—If Minneapolis is the most westerly "primary market," under the ruling of the food administration, at which the two-dollar price guarantee for next year's wheat is applicable, what does the price guarantee amount to to the wheat growers of Washington, Oregon, Idaho and Montana? Did the government mean $2 or $1.50 or $1.75 a bushel for northwestern wheat when it announced that guarantee? Shouldn't the price fixing commission have a northwestern representative on it? Shouldn't the farmers of the northwest raise a vigorous protest and leave no stone unturned to secure equitable prices for their product? Should they be content to accept a penalty of 25 or 30 cents a bushel for living in the northwest?

Advantages of the War—Do not the conditions of the present time place before the farmers an unusual incentive for strong organization? Are there not certain advantages which the war situation has developed that should be followed up after the war is over? Should the farmers not be organized as never before to insure themselves against a relapse to conditions as unsatisfactory as, or more unsatisfactory than, "ante-bellum" conditions?

National Patriotism—This is not a problem. The farmers are patriotic. They are giving their best efforts to their nation. They are watching their sons lay down the farm tools and take up the rifle. They are making plans for ever-increasing production of food crops. They are conserving foods and feeds as never before. Patriotism itself is not a problem. The only problem is how best to carry out the patriotic aims of the producers.





Time—Money

Every day of delay in beginning a business education is a loss of money.

November is at hand. Begin now.

Stenography, Typewriting, Bookkeeping, Penmanship, Banking—these are all money earners.

Begin your winter's work.

Northwestern Business College

Spokane's Accredited Commercial School.

M. M. HIGLEY, President.
S317 Howard st., Spokane, Washington.

U. S. Mission Back

Report the Morale in Europe Good

Colonel E. M. House, head of the commission recently sent to Europe to coordinate the work of this country with her allies through the allied conference in Paris, has arrived in this country together with the other members of the commission. He reports the work which they went to do "successfully and satisfactorily done." The exact nature of the work was not discussed. An official report has been made to President Wilson, but not yet made public.

Italy Stands Firm.

With a stupendous army of Germans and Austrians massed on the Italian front, a great battle, one of the most vital of the entire war, is still being waged in that section. The Italian armies are holding their ground satisfactorily at this writing, though the developments of the next few days are doubtful. Weather conditions, food conditions and ammunition conditions may suddenly turn the tide in favor of one or the other.

The same general condition is true along the front between the French and English and German armies. Owing to the cessation of actual warfare between Russia and Germany under the armistice recently agreed upon, large reenforcements have been brought from the eastern front to the western front, greatly menacing the allied forces. It is generally believed that the next few weeks or months will witness an unprecedented effort on the part of the German and Austrian armies to win decided victories over the allies before American power can be made to be felt in the spring.

Rumor has it that the kaiser is planning to make another peace offer during the Christmas season, but at this time there is no hint what new terms will be offered, if any, but the allied governments are in no mood to consider peace under any terms expected of Germany.

Peace negotiations are actually being entered into between the rebel element of Russia and Germany, and it is understood that Germany is securing food and munition supplies from Russia for the first time since the beginning of the war. This latter is perhaps as serious a blow to the allies as the withdrawing of soldiers from the Russian front for service on the French front.

Recruiting Is Heavy.

As a result of the announcement by the war department that up to noon December 15 men subject to the draft law could enlist in their chosen branches of the service, but that thereafter no such enlistment would be allowed, thousands of enlistments were recorded last week. The recruiting offices were overrun and could not handle the rush of work and examinations. Since the declaration of war last April more than a third of a million men have enlisted for the regular army alone, more than bringing it to full war strength.

Jerusalem Has Fallen.

The British army in Palestine has captured Jerusalem, the holy city of Bible times. For 1200 years this city has been under control of the Turks, and the Mohammedan religion has been the religion of the people. Oppression of the Jews still there has been notable, and great rejoicing among the Jewish people the world over has resulted from the capture of the city by the British. As a military victory it is not specially significant, however, though the city held out long against the seige.

Interior Markets

New Ruling Juggles With the Law

Shortly after the passage of the food control law last July the Farmer drew attention to the somewhat elastic nature of the phrase "principal interior primary markets of the United States," and advised agricultural organizations to take steps to secure a just and reasonable construction.

Unless that were done, we then said, the wheat growers would be disappointed in the purported guarantee of $2 a bushel for the 1918 crop. For example, if no primary market were named by the government for the Pacific northwest the wheat growers of this region would have the freight rate on a long haul deducted from the guaranteed price.

Our fears seem to have been well founded. A ruling by the United States food administration deprives the whole country west of the Missouri river of a primary market. It says:

"The term 'primary interior point,' as used in the grain trade and more recently by published statements of the United States food administration, includes 12 important markets. Alphabetically, they are:

"Buffalo, Chicago, Detroit, Duluth, Indianapolis, Kansas City, Milwaukee, Minneapolis, Omaha, Peoria, St. Louis and Toledo.

"Primary shall not be construed to mean the frist or the home market. It refers rather to the interior growing points of chief importance as listed."

This order or ruling clearly tries to juggle into the law a construction not warranted by the plain language of the statute. Primary means first and nothing else, and it is palpably unreasonable for the food administration to declare that "primary shall not be construed to mean the first or home market," but that "it refers rather to the interior growing points of chief importance as listed."

Primary, as any dictionary will tell one, means first or primary, not secondary. It is reasonable to hold that it means such grain-buying points as Moscow, Lewiston and Boise, in Idaho: Pendleton, Salem, Albany and McMinnville in Oregon, and Waterville, Davenport, Ritzville, Colfax and Walla Walla, in Washington.

Forecasts Famine

Food Situation in Europe Grave

The news service of the farm extension department of the State College of Washington credits R. B. Coglon, state leader for county agents, with the statement that famine in Europe is inevitable. Leader Coglon has just returned from a meeting of county agent leaders at Salt Lake City, where food conditions were discussed and plans for increased agent work throughout the nation planned.

"We are told that we must accomplish all in our power to relieve the situation," the News Service quotes Leader Coglon. "The purpose of the meeting was to discuss ways in which the county agent system could be made to serve in increasing food production and conserving the present supply.

"The United States department of agriculture urges that a county agricultural agent be put in every agricultural county in the United States. It is recognized that this is not a question of general agricultural work, but an emergency condition that has existed before and has now become acute.

"Before the first of February, 1918, county commissioners will be asked to make appropriations for county agent work as a war measure."

Mr. Coglon said that the federal government will continue to fix the minimum prices for farm produce so that producers may feel safe in increasing acreage of such easily shipped foods as beans, peas and wheat. Increased production of pork was urged, as this meat is so easily shipped across the Atlantic.

Value of Stone.

The value of stone produced in the United States in 1916 was $79,041,699, as reported to G. F. Loughlin of the United States geological survey department of the interior, an increase of nearly 6 per cent over the value for 1915.

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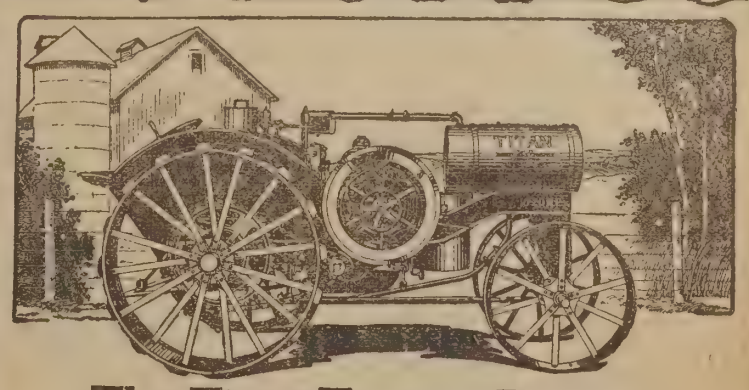
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PUP PUTS BOOT INTO BANKRUPTCY



Tent Revivals in Cattle Thieving

(Continued from page fourteen.)

would have helped me a lot if the wild bull had gotten his horns into the flanks of my pony. I felt like telling Penny and his friend to drift off to the place to which Henry had consigned me some months before.

By and by, angered clear through, I raced Rover at top speed right up onto the bull's hind quarters, and the collision nearly knocked the bull over, brought Rover to his knees and made me pull out a double handful of his mane to keep from being pitched overboard.

Now, Rover, a nimble-footed bronco, had a grouch of his own at this bull. He was on his feet as quick as a cat, for he could move just that way, and in the instant that the bull scrambled, bellowing, to his feet Rover whirled and planted his two black, shining hind hoofs into the bull's side. That fixed the bull. When he staggered to his feet at last he stumbled in a circle with a chuckling, sputtering rumble and his spine was bent like a bow. Rover had knocked him double and he couldn't straighten out again, and he was willing to go back to his own herd, which he did with his nose nearly dragging on the ground.

I can see now that Penny's apparent lack of interest while this struggle was going on may have been misunderstood by me. I see now, but did not see then, that he, clumsy on a horse and mounted on a clumsy, untrained horse, had utterly no business taking part in this struggle; that he did technically the right thing by keeping out of the way.

Right or wrong, I believed that Penny and his friend were not interested in my boy's problem, so, as it turned out, I refused to get interested in the problem of the prosecuting attorney.

If Penny had told me frankly that he was seeking evidence to determine whether or not so and so was guilty of cattle stealing and should be sent to "the pen"; that he wished me to tell him what I knew in response to certain questions he might ask, I think he and I would have gotten on all right, even though he had failed to help me chase the wild bull away.

But Penny was not so frank. Without telling me who he was or what he wanted he began to talk to me in a cautious circles. He tried to be sly, adroit, confusing. He was merely a lawyer, cross-examining in advance of the trial. Presently he got me a bit confused, and I had to correct myself on a minor point.

I could see that this gratified Penny greatly. He smiled in a self-admiring way. Regardless of the fact that I was watching him, he winked a sly wink at his companion, who also winked.

Right there Penny dropped his stone, and lost the friendship and confidence of a boy. Maybe he wouldn't have cared had he known, for what could one boy more or less mean to a prosecuting attorney?

A little later I was subpenaed as a witness. Then, and not till then, I found what it was all about. Penny out in the nunchgrass had tried to slip up on me. He had tried to play foxy at my expense—had made fun of me! Even then I didn't know what Penny wanted to know; but I judged that I must know something that he wanted to know about, and mentally I resolved I would not tell him anything for love, money, chalk or marbles.

I rode Rover 50 miles to the county seat in one day to attend the trial. There they kept me hanging about the courthouse for several days. There were several cattle rustlers up for judgment. Penny surely had his hands full.

My turn to take the witness stand came at last. The courtroom was crowded and still as a mouse. The jurors were crowded in a small, fenced-in enclosure near the lawyers' tables, and the high seat from which the judge overlooked the court.

Penny was smiling and affable. He greeted me like an old friend whom he had known a long time. I was surprised, and, for a moment, deceived.

He turned to whisper something to the man sitting next him. This let me have a side view of his face, and I could see under his heavy, drooping mustache. I caught there the thing I was looking for, and it was the shadow of a ly, secretive, insincere, contemptuous smilt! And it was for me I thought. Perhaps I was mistaken, for I know now that I misjudged Penny and that he misjudged me. But that was the way I felt then, and it didn't help Penny's case a bit.

Penny faced me again with the frank, friendly smile, and I could not see the lurking shadow of the real thing that was down in his mustache, but I had seen it and knew it was there.

Looking back now I can see that Penny didn't question me very skilfully. I saw presently what he wanted to know. But his questions were not coming right. To tell him what he wanted to know I would have had to volunteer information, and this I wouldn't do—not for love, money, chalk or marbles. Penny didn't get from me the things he wanted, and a while later the jury brought in a unanimous verdict of "innocent" for Henry's alleged partner in the deal.

Later still, Henry Blank, who had been down in the basement in jail while all this was going on, took the train for Walla Walla, where, unaccompanied by any guard, he presented his "credentials" to the warden, and asked to be taken in for a year. This was done, but he got out in 10 months for his good behavior.

Everybody in our neighborhood said that Mrs. Henry Blank would now seek a divorce; surely she would not be tied to so sinful a man. They wronged her grossly. She wrote to friends that she had never realized how much she loved Henry till she had learned that he was in the pen, and I heard also that she sent him a few dollars with which to buy chewing and smoking.

Years passed, which is a habit with these units of time. Mr. and Mrs. Henry Blank disappeared from the neighborhood and the thoughts of their neighbors—but Penny lived on, and never ceased his fight to bring the erring to justice. He became grizzled, bluff, stormy, was hated by evildoers, and by the law-abiding credited for being a just man. I know now that he was. Then I still remembered the stone.

After over 20 years a county division fight arose. Penny, a public-spirited man, was interested. He came to the state capitol to see the governor and certain legislative committeemen.

When he drifted into the governor's office I was in the secretary's outer part of the office, on duty as governor's secretary during the session of the legislature. The instant that Penny opened the door I knew him, but he did not know me.

While waiting to see the governor he talked to me, with no thought of that bull fight or the cattle stealing scrape of over 20 years ago in his mind. He wanted some information which I could have given. Once I opened my mouth to give him this information and closed it again, and looked under his mustache.

It was a good while before I caught the thing I was seeking. Age had made his mustache gray and bushy, and it was a better concealment. Also, that shadowy smile which said what was in Penny's mind while the smile on the front part of his face addressed you, had, in many years, learned the trick of hiding.

I caught it finally—the same sly, secretive, cold, lurking smile. Maybe, after all, it was not the sinister thing I thought it to be; I know now that I misjudged Penny and that he misjudged me; but just the same, precisely as I had done on his witness stand years before, I kept my mouth shut like a clam.

All Greatly Pleased.

To The Washington Farmer: I want to say that we all are greatly pleased with The Washington Farmer.

A. C. MURPHY.
Waitsburg, Wash.

Refrigerator Cars Plentiful.

Refrigerator cars are so plentiful in the Yakima valley, Wash., they are being used for shipping hay to the sound and other western points. Fruit and potato shippers have all they want. During the last week fruit shipments from the valley totaled 416 carloads, bringing the aggregate for the season to 10,796, of which 5000 contained soft fruit.



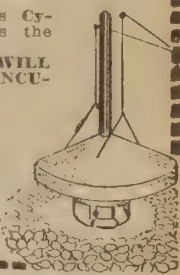
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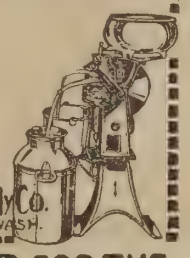
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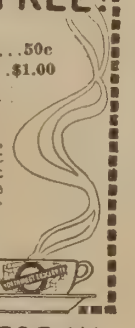


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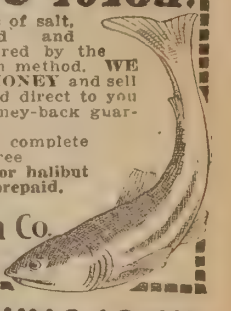
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A fountain pen or a pencil are good things to always have handy, together with postal cards. Then you can write friends or relatives or answer advertisements while you think about it and not run the risk of forgetting.

Chicago International

This Year Breaks Record of Previous Shows

By D. E. Richards.

This year's Chicago international live stock show has proved to be a wonderful success in spite of the present unsettled conditions. All records established by previous shows were broken this year. The attendance record this year proved that more people are annually attracted to this great show; on more than one day there were 45,000 persons present. Merry Monarch, the grand champion steer, fitted by Purdue university of Indiana sold for $2.10 a pound. The Angus yearlings, which won the grand championship in the car lot division, sold for $42.50 and averaged 1090 pounds, this being nearly twice the former record price. A record price was also established in the 70 loads of cattle sold in the auction sale ring of fat cattle, the price being $17.44, compared to $15.23, the price paid for last year's cattle. The cattle averaged 1207 pounds. The champion Hereford bull, Ardmore, owned by W. L. Yost of Kansas City and selling for $31,000 to W. R. Pickering of the same city, marked a climax in the Hereford sale rings.

This year's international was well managed from start to finish, each day carrying out its special programs, furnishing educational entertainments from the time the judging started in the morning until the close of each evening night horse show.

Saturday, December 1, was devoted to the college judging teams. Twelve schools were represented in this event, Nebraska university winning the contest and the remaining schools in the following order: Kansas Agricultural college, Texas Agricultural college, University of Minnesota, Iowa state college, University of Missouri, Purdue university, Pennsylvania state college, Ohio state university, Ontario Agricultural college, North Dakota Agricultural college and South Dakota Agricultural college. This is the first time in the 17 years that the Nebraska team has won high honor in this event. The winning of first place in this contest is considered the highest honor that a student or college can win. The very best students are selected from these colleges and given the coaching of the best judges the college can obtain, and the training these students receive is valuable to their career as live stock men. Including the 1917 contest there has been some 700 college students enter these annual contests. Up to 1916 40 per cent of these men have become college professors in the United States, 41 per cent farmers and breeders, 7¼ per cent secretaries of breeders' associations and live stock commission men, 8 per cent are engaged in lines of work other than agricultural.

Sunday, December 2, crowds of people visited the stock barn, inspecting the sheep, hogs, cattle and horses as well as the car lots of cattle, hogs and sheep that were in the yards. The car lots of cattle exhibited represented long feeding periods and showed cattle fitted to a finish and a credit to a world's greatest display.

In the sheep division the animals did not show the same finish as did the cattle, as evidenced by the fact that 30 of the 70 loads entered were culled out.

The car lots of hogs showed the same high finish as did the cattle division, as well as showing great uniformity as to size and breed type. The alleys in the hog houses were crowded with farmers and stockmen at all times.

On Monday, December 3, the judging started. Crowds of people took seats and after these were filled the people kept coming, crowding around the ringside when the stock of their fancy were being judged. This same program continued throughout the week.

When the purebred and grade steers were judged the breed enthusiasts showed the keenest of interest. When a steer of one breed would be put over a steer of another breed great applause would come from the "backers" of that particular breed. As the judging progressed the policemen were scarcely able to keep the crowds back far enough to make room for the judges. When the Shorthorn steer was finally made grand champion the Shorthorn men really went wild, and were uncontrolable until they had "let off" the outbursts of enthusiasm. The same intense interest was shown each day as the judging progressed and the first prize animals were selected from the large list of excellent animals entered in every class.

An unusual amount of interest was shown in the draft horse classes. All the seats around the horse ring would be filled long before the judging started and remain filled during the entire day. The classes for the purebred draft horses were overcrowded with the cream of the horses that the world has produced. The horses were in the height of show condition and decorated to please the severest critic.

In the hog and sheep division the same keen interest was shown. The ringside was always crowded with interested spectators watching the judge select the winners. The hog division had a good showing of each breed, including a wild hog from Mexico, and besides all the more popular breeds of lard hogs, it had a good collection of Yorkshires and Tamworths. The classes in the sheep division were equally well filled having the keenest of competition in each breed. An especially interesting exhibit to the western visitors was that of the Dorset ewes and their two-weeks-old lambs.

Next to the six-horse teams, the five-gaited saddle horses attracted the most attention. These horses were judged for their ability to perform the different gaits, their conformation, finish, style, beauty and manners. The horses represented the winners of the many state fairs and the prizes were hotly contested for. The exhibition of the six-horse teams held every one in the audience until the last event. The animals were all especially well matched and were under control of the driver at all times, when they were cutting figure "eights" and any number of fancy twists.

Besides the best of exhibitions of with their stock at the various state fairs, but to win at the international is the highest ambition of every stock-live stock the colleges and the United States department of agriculture had a very instructive exhibit of experimental data on feeding live stock. These experiments covered all classes of stock and gave valuable information on the cost of production as well as the results of research work on the demand.

The Chicago International Live Stock exposition is recognized as the greatest show of its kind in the world. It is a battle of the champions of the land, made up from the first prize winners and champions of the state fairs all over the United States.

Stockmen strive hard to win honors man; and he would trade all the ribbons won at every state fair for one "blue" at the international.

This year's show was patriotic in every regard, taking on the form of the "meat producing school" of the nation. It was a splendid success in every regard. From the time the students' judging contest opened the show until the last six-horse team was driven out of the ring last night there was not one dull moment.

Among those attending the exposition from the Pacific northwest were: W. R. Ledbetter, Willis Moss, R. M. McAlister, Floyd McKinnon, of La Grande, Ore.; Frank Brown & Son, Carlton, Ore.; A. D. Dunn, Wapato, Wash.; Frank Rothrock, Spokane, Wash.; A. B. Cook, Helena, Mont.; C. N. Arnett, Bozeman, Mont.; E. A. Lawson, Portland, Ore.

Frank Brown judged the Cotswold sheep, both breeding and fat classes. A. D. Dunn made an address at the Shorthorn banquet. The men from LaGrande all located some purebred horses that they expect to purchase in the near future.



Merry Monarch, grand champion steer at the Chicago International, exhibited by Purdue university, Lafayette, Ind.

Five Pig Club Boys

Money They Made and How They Made It

By Karl Allen.

Five central Washington boys whose success in hog raising is being cited in the Inland Empire drive for more boys' pig clubs conducted cooperatively by the Spokane chamber of commerce, the United States department of agriculture and the state college are Albert Mayer of Moxee City, J. Addison Shoudy of Ellensburg, Glen Chandler of North Yakima and Orval C. Coffin and Thomas Carvo, both of Toppenish.

The Mayer boy, according to information he recently gave State Pig Club Leader B. E. Smead, began business with a purebred Duroc Jersey sow. The sow was 9 months old and weighed 135 pounds at the beginning, and by young Mayer was valued at $35. His total expense, including feed, pedigree, fencing and labor, amounted to $89.88. At the close of his account with his club sow he valued her at $80, which with the value of pigs sold and unsold, and a prize, raised his total receipts to $178.50, giving a profit of $88.62.

Young Chandler tells Mr. Smead that he is planning to fit a show herd next year to exhibit at the Spokane Interstate fair, and the state fair at North Yakima.

Orval C. Coffin went into business as a pig club member with a registered Poland China sow for which he paid $60, loaned him by a bank on the strength of the pig club. The boy made his sow a warm, snug, triangular shaped house for $2.65. Until his sow farrowed four male and five female pigs he kept her on pasture supplemented with about 15 pounds of milk mixed with shorts, daily. He fed the sow tankage before and after weaning—following printed directions given him in state college circulars—weaned the pigs at six weeks and castrated them a week before weaning.

The Shoudy boy joined a pig club last June, bought a purebred Berkshire boar for $9, built a pen and self-feeder out of scrap lumber, and in 84 days, fed his pig 417 pounds of grain and 200 gallons of milk, with which, plus some pasture he produced a gain of 135 pounds. He now values his boar at $35, claiming a gain over all expenses, and the purchase price of the animal, of $10.71.

Glen Chandler's pig club operations, according to the information he gave to Club Organizer Smead, have included the rearing and selling of two litters of Duroc Jersey pigs. The first litter he fed on corn, barley, shorts, bran, apples, and milk, at a cost of $105.55. His expenses were the feed cost just mentioned plus the care of the hog and breeding sevices, totalling $124.55, which, subtracted from total receipts of $285.52, left a net profit of $160.97.

The second litter of pigs were reared on a little over 6000 pounds of corn, barley, shorts, bran, apples and milk at a cost of $30.69. He evidently used large quantities of apples and milk to cut down his feed costs. He gives his total expense at $51.57; value of hogs sold and on hand, $145; net profit, $93.43.

The Coffin boy's expense, including the price of his sow, feed, pasture and labor, was $135.83. His returns, including the original value of his sow, pigs sold and kept, were $309, putting him ahead $163.17.

Thomas Carvo of Toppenish began business as a pig club member with a purebred Poland China sow valued at $40. The bulk of his feed included table waste, shorts, bran, grain, some pasture and milk. His costs for the sow and young pigs were $67.71, and his total receipts $231, leaving a profit of $163.29.

This boy informed Mr. Smead that he entered the sow and litter contest because he thought that by so doing he could make "lots of money."

Favor Orientals

Dairymen Would Import Laborers

The Washington State Dairymen's asscciation, in annual convention at Sequim last week, voted in favor of the importation of oriental labor to relieve the shortage of farm workers in this country unless some other means of maintaining the farms can be devised by the government. The resolution adopted provided that congress should be petitioned to import such laborers, with the provision that they should be returned to their countries as soon as the labor crisis was passed. The resolution caused a heated debate and was not passed unanimously.

The meeting was an interesting one. Matters of legislation, condensery problems and organization problems were discussed. William Bishop of Chimacum, widely known breeder of Holsteins, was elected president for the ensuing year.

Owing to lack of space a full report of the convention is not given in this issue, but will be contained in the issue of next week.

The Fruit Packers

(Continued from page twelve.)

speculators and gamblers." "If the producers are protected in fair profits, then they can pay fair wages and then the conditions of wage workers on the farms will be improved."

"Then you can improve the conditions under which farm laborers work; you will get a better class of farm laborers and they will earn you more money. The way it is now you do not get the best class. You get the downs and outs; the inefficient who have been rejected from other industries; the booze fighters; the lazy, indolent, purposeless. I mean you get too large a proportion of that class and your system adds to the number.

"You are a good man to work for," said Mr. Rodney, "as good as you can be under the system, but I won't stay with you another year; I can't afford it. I've got to have more money and I am going to the city to engage in a manufactory or to the hills to work in the mines. You see that my expenses are increasing as my children grow and I can not meet the demands on $3 a day."

G. L.

Cashmere Fruit Growers.

J. W. Sussex has been named by the Cashmere Fruit Growers' union directors to succeed C. W. White as manager of that institution. Mr. Sussex by profession is an engineer and architect, but while pursuing these occupations he has been a close observer of the fruit game and has always evinced a strong interest and liking for it. He has been a resident of Chelan county for the last 10 years and has a wide circle of acquaintances and friends.

NEXT WEEK.

Owing to lack of space this week the Farmer is unable to publish the enthusiastic address delivered by Riley Rice of Cottonwood, Idaho, retiring president of the Washington and Northern Idaho Farmers' union, at the Spokane convention. This address will be given in full, however, in next week's issue, and should be read by every farmer in the state.

Three-Hundred-Year-Old Prophecy of German Monk

A most remarkable prophecy, made by the German monk, Fratre Johannes, in the year 1600, seems to be nearing a fulfilment. As a key to the prophecy one has only to realize the following:

The kaiser is a German Lutheran—he has a withered arm.

Germany is the Black Eagle.

Austria, her ally, has also an eagle.

Russia is the White Eagle.

France is the cock.

England, the British empire, is the leopard.

The following prophecy by the monk Fratre Johannes, who lived about the year 1600, is remarkable in its application to the present world crisis. The authenticity of this prophecy was at first doubted because of a few discrepancies in the text but the matter was referred to the newspaper information bureau at Washington, and Director Frederick J. Hawkins replied as follows:

"In reply to your letter asking whether the prophecy by the monk, Fratre Johannes, is real, we would say that this prophecy was discovered in old parchment in the convent of the Holy Ghost, at Wismar, in Germany, and is kept under glass in the town hall of this city. There have been numerous translations which text vary somewhat. We are returning your copy of this prophecy.

"The discrepancies which we noted, and which you also may notice, are probably due to the variations in the translation of the text. On the whole it is a remarkable prophecy. It is as follows:

The real antichirst will be one of the monarchs of his time, a Lutheran Protestant. He will invoke God and give himself out as his messenger, or apostle.

This prince of lies will swear by the Bible. He will represent himself as the arm of the most high, sent to chastise corrupt peoples.

He will have only one arm, but his innumerable armies, who will take for their device the words, "God is with us," will resemble the infernal regions.

For a long time he will act by craft and strategy. His spies will overrun the earth, and he will be master of the secrets of the mighty. He will have learned men in his pay, who will maintain and undertake to prove his celestial mission.

A war will afford him the opportunity of throwing off the mask. It will not be in the first instance a war which he will wage against a French monarch. But it will be one of such nature that after two weeks all will realize its universal character.

Not only all Christians, but Musselmans and even more distant peoples will be involved. Armies will be involved from the four quarters of the earth.

For by the third week the angels will perceive that the man is antichrist and that all will become his slaves if the do not overthrow this conqueror.

Will Massacre Helpless.

Antichrist will be recognized by various tokens—in special he will massacre the priests. the monks, the women, the children and the aged. He will show no mercy, but will pass, torch in hand, like the barbarians, but invoking Christ.

His words of imposture will resemble those of Christians, but his vows of all the human race.

He will have an eagle in his arms, there will also be an eagle in the arms of his confederate. But the latter will be a Christian and will die from the malediction of Pope Benedict who will be elected at the beginning of the reign of antichrist.

In order to conquer antichrist, it will be necessary to kill more men than Rome ever contained. It will need the energies of all the kingdoms, because the cock, the leopard and the white eagle will not be able to make an end of the black eagle without the aid of the prayers and the vows of the human race.

Never will humanity have been faced with such a peril, because the triumph of the antichrist would be that of the demon, who will have taken possession of his personality.

The Beast Incarnated.

For it has been said that 20 centuries after the incarnation of the word the beast will be incarnated in his turn and will menace the world with as many evils as the divine incarnation has brought it graces.

Toward the 2000 antichrist will be made manifest. His army will surpass in number anything that can be imagined. There will be Christians among his cohorts and there will be Mohammedans among the defenders of the lamb as well as some heathen soldiers.

For the first time the lamb will be red—for blood will flow in the domains of the four elephants at once.

The black eagle will hurl itself upon the cock, which will lose many feathers. It will soon be exhausted, but for the leopard and its claws.

The black eagle, who will come from the land of Luther, will make a surprise attack upon the cock.

The white eagle will come from the north.

The black eagle will find itself forced to let go the cock in order to figat the white eagle, whereupon the cock will have to pursue the black eagle into the land of the antichrist to aid the white eagle.

Great Battle on Lutheran Soil.

The battles fought up to that time will be as nothing compared to that which will take place in the Lutheran country.

When the beast finds himself lost he will become furious.

Men will be able to cross the rivers over the bodies of the dead.

Antichrist will sue for peace many times, but the seven angels who march before three animals of the land will have proclaimed that victory will not be given except on conditions that antichrist will be crushed like straw upon the threshing floor.

The three animals will not be permitted to cease fighting so long as antichrist has soldiers.

It will be made manifest that the combat which will be fought out in that part of the country in which antichrist forges his arms, is no human conflict. The animal defenders of the lamb will exterminate the last army of antichrist.

Antichrist will lose his crown and will die in solitude and madness. His empire will be divided into 22 states, but none will have any longer fortifications, armies or ships of war.

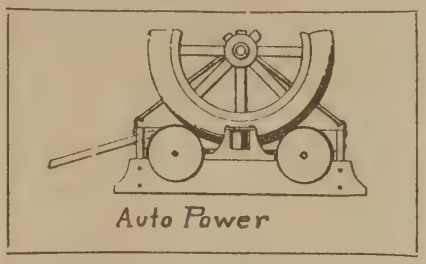
The white eagles, by order of Michael, will drive the Crescent out of Europe, where there will be no longer any but Christians. He will install himself at Constantinople.

Inventions.

By C. J. LYNDE, Macdonald College, Quebec.

Takes Power From an Automobile.

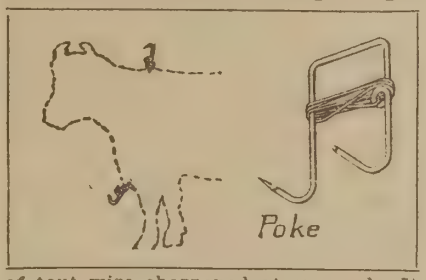
On this device, each rear wheel of the automobile runs on a belt between two pulleys and it is kept on the belt



by a side roller, which bears against the tire. The car is prevented from moving by straps attached to the rear axle.

Simple Cattle Poke.

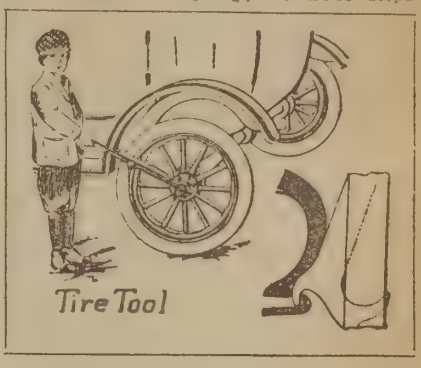
This poke is made of a single length



of tout wire sharpened at one end. It is insreted through the hide at either or both of the positions shown and is secured by light wire or cord.

Tire Tool.

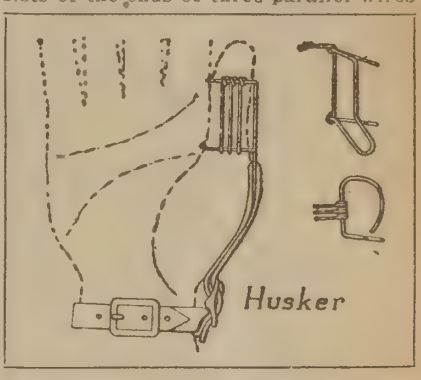
In using this tool the operator first inserts the "foot" flatwise between the flange of the shoe and the rim, and then turns it rapidly; he next slips



the socket over the hub, and removes the tire by running the tool around the wheel. To replace the tire he reverses the tool and repeats these operations backward.

Corn Husker.

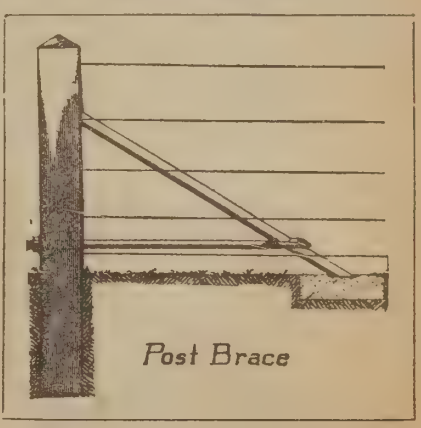
The husking part of this device consists of the ends of three parallel wires



which project at right angles to the thumb. These are drawn along the husk and rip it from the ear.

Fence Post Brace.

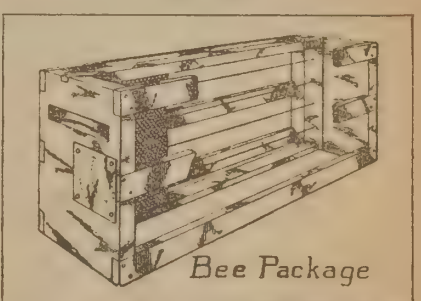
The diagonal rod here has one end bearing against a metal seat near the



top of the post and the other against a block of concrete. It acts as a brace and is held in place by the horizontal tie rod.

Bee Shipping Package.

To ship bees in this box it is necessary to place the comb frame in the hive until the queen has become accustomed to the comb and until the required larvae, eggs and honey have been deposited. The frame is then placed in the package, the sides, top and bottom are covered with netting and the bees are inserted through the end opening by means of a funnel.



SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

Proper Diet and Exercise Best Cure for "Nervousness"



Dr. Hirshberg.

You say you are nervous. Your friends tell you so. Your family, whom you annoy with your grumbles and complaints, say you're "a bundle of nerves" and worse. Perhaps some doctor, who isn't patient or is too busy, dismiss you with the nearly flippant diagnosis of "neurasthenia," "psychaesthenia," "run down nerves," "nervous exhaustion" or "hysteria."

That which you do too often or too long becomes, as it were, almost a part of your nature. If you spend much of your day in the practice of complaints, fixed ideas and emotional outbreaks, by the very habits a pathological state of illness becomes a part of your natural makeup.

Hence the restless, dissatisfied, pessimistic, impatient and melancholic demeanor, exaggerated, perhaps, by an acute illness or a momentary trick of bad fortune, becomes incorporated in every thread of your flesh and sinews.

To dismiss such a condition as "nervous" or "hysterical" doesn't help you over much. True enough, it may have its origin in a real physical disorder, in loss of sleep, worry from actual causes or fancied ones, from faulty food, excesses of play or of passion—seldom, if ever, is the source of the mischief too much work.

Foods to Avoid.

Individuals accustomed to meat and fish and eggs at breakfast and also at every other meal may encourage a visitation yclept "nervous."

Out of much milled wheat flour, polished rice and other over-refined cereals certain milks and some tinned foods may come restless, twitchy, jerky or palsied symptoms. A deficiency in certain ingredients of such pobulum, whether they be "vitamines," enzymes or other needed constituents, invites a vicious circle of ill health that requires for relief a ration with these materials in them.

The large intestine or colon of many persons is clogged and obstructed. It is as plainly apparent as the noonday sun on a clear day that to blame the liver or the nerves at such times is to beg the question. An inactive occupation or mode of life is only indirectly at fault. The type of foods as well as the method of disposal of the undigested remnants has as much to do with it.

Foods That Aid.

Green vegetables, peas, beans, fruits, milk, berries, cooked cereals and corn, lean meat, butter, buttermilk, boiled water-dried fruits, potatoes, almonds and the yolks of eggs are safe if eaten sparingly and often rather than too much in two or three meals.

Candies, cane sugar, tea, coffee, beer, wines, gin, rum, whisky and fancy drinks, no less than starchy, malted foods may very well be dispensed with if the emotions and the muscles are unstable enough to give the victim the name of nervous.

Perennial good humor, an adequate amount of study and muscular effort, play, cheerfulness, geniality, fresh whole grain breads with their mineral fertilizers, sunlight, fresh fruits and vegetables, eight or nine hours of real sleep in a large bed and in an airy room alone will go far—if the thoughts are engaged by day upon some systematized form of learning, work, religion or philosophy—to do away with "nervousness," as it will no doubt long continue to be called.

Fur Trade of United States.

During the year ended June 30, 1917, the foreign trade of the United States in raw and manufactured furs reached nearly, if not fully, the highest level of years preceding the war. The imports were valued at $21,553,375, while the exports amounted to $15,729,160.



THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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SYNOPSIS.

Gale, trader, of Flambeau, has a beautiful daughter, Necia, and two half-breed children. Alluna, a squaw, is their mother. Lieutenant Burrel is sent to Flambeau to establish a military post. He and Necia become close friends. "No Creek" Lee, an unsuccessful miner, strikes a vein of gold. Stark comes to Flambeau to grubstake the miners and start a saloon. Runnion, a desperado, is his assistant. Stark's presence in the camp causes Gale and his squaw great uneasiness. Lee, Stark, Runnion, Gale and Poleon, a Frenchman, leave for the claim secretly so as to prevent a stampede. Necia hears of it, and, longing for riches so she may be as others girls, persuades Burrell to accompany her on a shortcut to the claim. Burrell, who is unpopular in Flambeau, chooses this means of beating the men at their own game. That night by the campfire Necia, realizing her peril, cautiously awakens in the lieutenant his slumbering conscience. They reach camp before the others the next morning and Necia stakes three claims. While Stark, Runnion and Poleon are locating Runnion makes some insinuations about Necia and Burrell. Poleon, who loves Necia, swears that either Runnion or Burrell will pay for them with his life. That night as Star is telling Necia a story a shot rings out and Gale jumps across the room shouting "My God! I've killed him." But the bullet misses Stark by inches. When Alluna hears of the affair she tells Gale that Stark is bullet-proof and gives him a knife, begging him to kill Stark as soon as possible. Burrell knows that he loves Necia, but, thinking she is a half-breed, he is afraid to marry her on account of what it would mean to his family, his position and his honor. One day as Necia is alone in the store Runnion tells her that he is wiling to marry her, even if the lieutenant has thrown her over and the story is being told on the street. Later Necia acknowledges to Poleon that while Burrell has sworn his love for her he has never spoken of marriage. She declares that she has never been unmaidenly, but that since the men are talking she will be married by Sunday, and that it may as well be to Poleon as anybody. They send for Burrell and Necia hides so that she may hear his answer for herself.

CHAPTER XII.

A Tangled Skein.

When Burrell entered he wasted no time in greetings.

"I know why you sent for me, Poleon. I've heard the news, and I would have been up anyhow to congratulate her very soon. I call it pretty fine."

"Yes, dere's been beeg strike all right, an' Necia is goin' be riche gal."

"I'm as pleased as if the claim were mine, and you feel the same way, of course."

The Frenchman nodded. "I love Necia very much, lak'—well, lak' I'm broder to her." The knowledge that she was listening made him very uncomfortable—in fact, this whole affair savored more of double-dealing and treachery than anything he had ever attempted, and it went sorely against his grain, but it had presented itself as the only way to help her, and he proceeded, groping haltingly for fit expression. "Dere's t'ing I want for talk 'bout wit' you, but I'm scare' you'll t'ink I'm butt in."

"Nonsense," said Burrell. "I know you too well for that."

"You know me for good man, eh? An' you know I ain't try for bre'k up oder fellers' biznesse, never! Wal, I'm come to you now lak' wan good man to 'noder biccause I'm got bad trouble on de min' an' you mus'n 't get sore.'

"There's do danger, Poleon. Let's have it. If there is anything I can do you may count on me."

"Wal," he began, nervously, clearing his throat, 'it's lak' dis. Dere's feller been talk some 'bout Necia, an' it ain' nice talk neider."

"Who is he?" exclaimed the soldier, in a tone that made the girl's heart leap.

"Wait! Lemme tol' you w'at he say, den we'll talk 'bout feex 'im plaintee. He say dere's joke down on Stark's saloon dat Necia Gale is mak' fool of herse'f on you, an' dat you ain' care for marry her."

"Runnion!" cried Burrell, and started for the door. "I'll settle with him now for fair!" But Poleon blocked his way, and, observing him gravely, continued, in a tone that the other could not disregard nor mistake:

"No, M'sieu', before you pass on dat place you'll tol' me if it's true."

"True!" the lieutenant retorted, angrily. 'What business is it of yours? This concerns me."

"An' me, too! I'm w'at you call gardeen for Necia till John Gale come back, an' I'm broder of her, too. You promis' jus' now you don' get mad, an' I don' say she's Runnion neider w'at spik dose t'ing; dere's more dan 'im been talkin'. Is it true?"

His sternness offended Burrell, for the soldier was not the kind to discuss his affairs in this way, therefore he drew back scowling.

"Poleon Doret," he said, "it's not one's enemies who do him injury, it's his damned fool friends. I have learned to regard you highly because you are a brave man and an honest one, but it seems that you are a sentimental idiot."

"Dem is tough word," Doret replied. "But dere's reason w'y I can't tak' on no madnesse. You say I'm hones'. Wal, I'm hones' now, an' I come to you wit' fair words an' I show my han' to you—I don' hol' out no cards, M'sieu'—but I don' t'ink it is you who have play square, altogeder. I'm Necia's frien', an' I'll fight for her jus' so queecker lak' you, but I mus' know dis t'ing for sure, so if you have de good heart an' de courage of good man you'll tell me de truth. Do you have the feelin' for marry on her?"

The pause that followed was awkward for both of them, while the girl, who stood concealed near by, held her breath and buried her nails in her palms. Why did he hesitate? Would he never speak? It seemed not, for he swung between diverse emotions—anger that this outsider should question him on so intimate a matter, chagrin at the knowledge of having injured Necia, and rage, blind rage, at the thought of its becoming a bar-room topic. Gradually the conviction grew that it was not a question of idle curiosity with Doret, and the man's history recurred to him. No wonder he was interested in the girl, no wonder he wished to guard her; he had been a brother indeed, even as he said, and he could have no motive save an honorable one. It never occurred to the soldier that this Frenchman could harbor feelings akin to his own. The man was rough and foreign; his thoughts had been couched in harsher language, perhaps, than he intended; moreover, the fellow's high sense of honor was a byword—and of a sudden the desire to set himself right in this man's eyes dictated his answer.

"I am amazed at myself for listening to you," he said, at last, "and quite shocked, in fact, at my answering your questions, but perhaps I'd better, after all. First, however, let me say that the little girl is just as pure now as she was before she knew me—"

Poleon threw up his hand. "M'sieu,' dat's more closer to de insult dan w'at you call me jus' now. You don' need for spoke it."

"You're right! There's no need to tell you that. As for showing her certain attentions—well, I admit that I have, as you know, but, thank God, I can say I've been a gentleman and addressed her as I would the fairest lady I've known."

"An' you mean for marry, eh?" probed the other.

Now, no man could have answered such a direct question easily, and in this case it was especially hard for the Kentuckian, who was torn between his ungovernable desire and that decision which cold reason had thrust upon him. He wanted to say, "Yes, I'll marry her tomorrow," but something bade him pause before he sacrificed upon this altar of a youthful love his life, his hopes, his ambitions. Had he not wrestled with himself for months in thinking it all out, until his mind was weary and listless with the effort? For the greatest test that tries a man's soul and compels him to know himself had not yet come to Meade Burrell; wherefore, he hesitated long.

"I did not say so," he declared, at last. "It's a thing I can't well discuss, because I doubt if you could understand what I would say. This life of yours is different from mine, and it would be useless for me to explain the reason why I can not marry her. Leaving out all question of my sentiment, there are insurmountable obstacles to such a union; but as to this talk, I think that can be stopped without annoyance to her, and as for the rest, we must trust to time to bring about a proper adjustment——"

A low, discordant sound of laughter arrested his words, and, turning, he beheld Necia standing revealed in the dimness.

"What an amusing person you are!" she said. "I've had hard work holding in all this time while you were torturing your mind and twisting the honest English language out of shape and meaning. I knew I should have to laugh sooner or later."

"What is the meaning of this?" he demanded. "Is it a joke?"

"Indeed it is," she declared, laughing afresh, "and the best I've ever enjoyed. Wasn't it funny, Poleon"—she turned gaily to the Frenchman, but he stood like one petrified—"to see him debating coolly whether he cared for me enough to face the world with me, and trying to explain to you that he was too good to marry a squaw? Oh, you were very gentlemanly about it, sir, and you wouldn't have hurt my feelings for the world!"

"Necia!"

"That's your Dixie chivalry, I suppose. Well, I've played with you long enough, Lieutenant Burrell, I'm tired of the game, and you interest me no longer."

"You—you—say you've been playing with me!" stammered the man. The bottom of things seemed suddenly to slide from under him; he was like one sinking in some hideous quagmire. He felt as if he were choking.

"Why, of course," she cried, scornfully, "just as you took me up for amusement. You were such a fine, well-dressed, immaculate mound of conceit that I couldn't resist the temptation, and you hid your condescension so poorly that I thought you ought to be taken down a peg. I knew I was a squaw, but I wanted to see if I were not like other women, after all, and if you were not like other men." She was talking rapidly now, almost shrilly, for she had never attempted to act before, while he stood dazed and speechless, fumbling at his throat while she railed at him. "You needn't waste time debating whether I'm good enough for you, because I'm not—decidedly, I'm not your kind, and you are a joke to me."

He uttered an inarticulate cry, but she ran on unheeding, her eyes wide and glowing like coals, her lips chalk-white. "You see, it's time I stopped such foolishness, anyhow, for I'm to be married on Sunday."

"You are going to be married?" he muttered, laboriously.

"Yes, to Poleon. Why, that's been understood for years."

He whirled upon the Canadian in a fury, and his words came hot and tumbling.

"So you're in this, Doret. You're a part of this little farce. You trapped me here to make a fool of me, did you? Well, I can settle with you—"

"D-don't blame him!" cried the girl, hysterically. "It is all my doing. He had no part in it."

Burrell wheeled back to the Frenchman again. "Is this true?"

"Yes," said Doret, in a restrained voice. "Dis ain' no work of mine."

"You're a liar!" breathed the Kentuckian, now fairly wild with anger; but the other looked him squarely between the eyes and made no move.

"M'sieu'," he cried, "I'm livin' t'orty year, an' never took no nam' lak' dat before, but dere's reason here w'y I can't mak' no answer." He inclined his head towards the girl, and before Burrell could break out again he checked him.

"It's no good mak' fight wit' lesser dan two people. You've tol' me dat you are gentleman. Wal, I ain' nobody but trapper an' trader, but I don' spoil de name of no good girl, an' I don' quarrel in presence of lady, so mebbe, affer all, dere's mistak' somew'ere, an' I'm gentleman mese'f 'stead of you."

"Why, you aren't really angry, Lieutenant?" mocked Necia. "It's only the joke of an ignorant half-breed girl whose sense of humor is all out of gear. You mustn't quarrel over a squaw!"

She taunted him like a baited badger, for this thing was getting beyond her control and the savage instincts of the wilderness were uppermost.

"You are quite right," he replied. "I am very foolish, and the laugh is with you." His lips tried to frame a smile, but failed, and he added: "Your wit is not kind, that is all. I beg you both to accept my congratulations on your nuptials. Undoubtedly, you will be happy together; two people with such similar ideas of humor must have much to enjoy in common." He bowed low and, turning, walked out.

The moment he was gone she cried, breathlessly:

"You must marry me, Poleon. You've got to do it now."

"Do you mean dat for sure?" he said.

"Can't you see there's nothing else for it, after this? I'll show him that he can't make a toy to suit his convenience. I've told him I would marry you on Sunday, and I'll do it or die. Of course you don't love me, for you don't know what love is, I suppose; how—could you?" She broke down and began to catch her breath amid coughing sobs that shook her slender body, though they left her eyes dry and feverish.

"I—I'm very unhappy, b-but I'll be a good—wife to you. Oh, Poleon, if you only knew—"

He drew a long breath. When he spoke his voice had the timbre of some softly played instrument, and a tremor ran through his words.

"No! I don' know w'at kin' of love is dis, for sure. De kin' of love I know is de kin' I sing 'bout in my songs; I s'pose it's different breed to yours, an' I'm begin to see it don' live nowhere but on dem songs of mine. Dere's long tam' I waste here now—five year—but tomorrow I go again lookin' for my own countree."

"Poleon!" she cried, looking up with startled eyes. "Not tomorrow, but Sunday—we will go together."

He shook his head. "Tomorrow, Necia! An' I go alone."

"Then you won't—marry me?" she asked, in a hushed and frightened voice.

"No! Dere's wan t'ing I can't do even for you, Necia, dere's wan t'ing I can't geeve, dat's all—jus' wan on all do worl'. I can't kill de li'l' god wit' de bow an' arrer. He's all dat mak' de sun shine, de birds sings, an' de leaves w'isper to me; he's de wan li'l' feller w'at mak' my life wort' livin' an' keep music in my soul. If I keel 'im dere ain' no more lef' lak' it, an' I'm never goin' fin' my lan' of content, nor sing nor laugh no more. I'm t'inkin' I would rader sing songs to 'im all alone onderneat' de stars beside my campfire, an' talk wit' 'im in my bark canoe, dan go livin' wit' you in fine house an' let 'im get col' an' die."

"But I told him I'd marry you—that I had always intended to. He'll believe I was lying," she moaned, in distress.

"Dat's too bad—but dis t'ing ain' no doin's wit' me. Dere's wan t'ing in dis worl' mus' live forever an' dat's love—if we kill 'im den it's purty poor place for stoppin' in. I'm cut off my han' for help you, Necia, but I can't be husban' to no woman in fun."

"Your foolish head is full of romance," she burst out. "You think you're doing me a favor, but you're not. Why, there's Runnion—he wants me so much that he'd 'even marry me'!" Her wild laughter stabbed the man. "Was ever a girl in such a fix! I've been made love to ever since I was half a woman, but at thought of a priest men seem to turn pale and run like whipped dogs. I'm only good enough for a bad man and a gambler, I suppose." She sank to a seat, flung out her arms hopelessly, and, bowing her head, began to weep uncontrolably. "If—if—I only had a woman to talk to—but they are all men—all men."

Poleon waited patiently until her paroxysm of sobbing had passed, then gently raised her and led her out through the back door into the summer day, which an hour ago had been so bright and promising and was now so gray and dismal. He followed her with his eyes until she disappeared inside the log house.

"An' dat's de end of it all," he mused. "Five year I've wait—an' jus' for dis."

Meade Burrell never knew how he gained his quarters, but when he had done so he locked his door behind him, then loosed his hold on thing material. He raged about the room like a wild animal, and vented his spite on every inanimate thing that lay within reach. His voice was strange in his own ears, as was the destructive frenzy that possessed him. In time he grew quieter, as the physical energy of this brutal impulse spent itself; but there came no surcease of his mental disquiet. As yet his mind grasped but dully the fact that she was to marry another, but gradually this thought in turn took possession of him. She would be a wife in two days. That

Continued on page twenty-seven.

All the World's a Stage, and All the Men and Women Merely Players

National Guardsmen in France



Major Gen. Mann.



Col. MacArthur.

It is announced that the Rainbow division of national guard troops, representing 33 states, has arrived safely in France and is now in final training preparatory for service in the trenches. Major General William A. Mann, shown on the left, is commander of the division which is so representative of America. Colonel Douglas McArthur, on the right, former censor for the war department, is chief of staff. The photograph below was made at one of the final reviews of the Rainbow division when in camp at Mineola, Long Island. While it is not permitted to disclose the identity of units, it may be said that all those which sailed from the United States for France have arrived safely and that some are already in training within sound of the guns on the battle fronts.

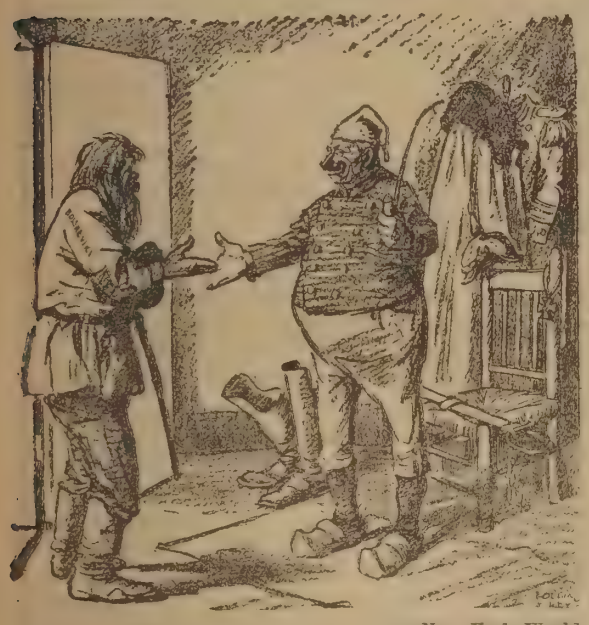


Holy Pools and Mosque of Omar



In the foreground of this view of Jerusalem, now wrested from the Turks by British forces, is one of the holy pools. The mosque of Omar, or the Dome of the Rock, on Mount Moriah, where the old temple altar stood and where the sacrifices were made to God in biblical days, can be seen in the center of the photo. The view shown is near the southern end of the old wall. The fall of Jerusalem was the definite collapse of long-protracted efforts of the Turks to capture the Suez canal and invade Egypt.

Welcome, Comrade



—New York World.

Who's "Strafed" Now?

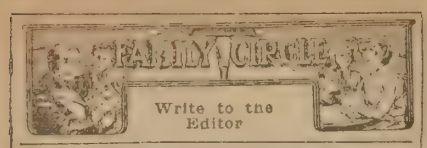


—Rochester Herald.

Suffragists March on Capitol



Mrs. Carrie Chapman Catt is national president of the national suffrage association. Dr. Anna Howard Shaw is chairman of the woman's committee of the United States council of national defense and one of the leading suffragists of America. Mrs. James Lees Laidlaw is congressional chairman for New York. Miss Mary Garrett Hay has received much of the credit for the recent suffrage victory in New York state. Mrs. Norman De R. Whitehouse is chairman of the New York state suffrage party and like Miss Hay was instrumental in bringing about the suffrage for women of the Empire state. Four hundred women gathered in Washington recently for the 49th annual convention of the National Woman Suffrage association and marched on the capitol to present arguments to their state congressional delegations in favor of the passage of the federal suffrage amendment, re-ported by the house judiciary committee without recommendation. Senators from each state received women from their states in their offices. If the suffrage amendment is defeated at this session the association will probably enter the congressional election next year in an effort to elect enough members to insure passage of the amendment by the succeeding congress. The principal social event of the convention was a reception in honor of Mrs. Carrie Chapman Catt, the national president, and Dr. Anna Howard Shaw, hon-orary president. Mrs. Norman De R. Whitehouse chairman of the New York state woman suffrage party, was presented with a solid gold laurel wreath in recognition of her work in behalf of woman suffrage, it has been announced.



ALICE W. BARLAND
Editorial Contributor

How to Corn Beef

To the Editor: Will you kindly publish a recipe for corning beef?
Driggs, Idaho. C. G.

The following directions are taken from one of the Weekly New Letters of the United States department of agriculture:

Curing meats with brine is a good method for farm use. It is less trouble to pack the meat in a barrel and pour brine over it than to go over it three or four times and rub in salt, as in the dry curing method. The brine also protects the meat from insects and vermin. Brine made of pure water and according to directions in the following recipe should keep a considerable length of time. During warm weather, however, brine should be watched closely and if it becomes "ropy" like syrup, it should be boiled or a new brine made. A cool, moist cellar is the best place for brine curing.

Pure water, salt, sugar or molasses and saltpeter are all the ingredients needed for the ordinary curing of meat.

Meat may be packed in large earthen jars or a clean hardwood barrel. The barrel or jar may be used repeatedly unless meat has spoiled in it. It should be scalded, thoroughly, however, each time before fresh meat is packed. Curing should begin as soon as the meat is cooled and while it is still fresh. Ordinarily 24 to 36 hours after slaughter are sufficient for cooling. Frozen meat should not be salted as the frost prevents proper penetration of the salt and uneven curing results.

Corned Beef.

The pieces commonly used for corning are the plate, rump, cross ribs and brisket or, in other words, the cheaper cuts of meat. The loin, ribs and other fancy cuts are more often used fresh. The pieces for corning should be cut into convenient sized joints, say five or six inches square. It should be the aim to cut them all about the same thickness that they will make an even layer in the barrel.

Meat from fat animals makes choicer corned beef than that from poor animals. When the meat is cooled thoroughly it should be corned as soon as possible as any decay in the meat is likely to spoil the brine during the corning process. Under no circumtance should the meat be brined while it is frozen.

Weigh out the meat and allow eight pounds of salt to each 100 pounds; sprinkle a layer of salt one-quarter of an inch in depth over bottom of the barrel; pack in as closely as possible the cuts of meat, making a layer of five or six inches in thickness, then put on a layer of salt; follow with another layer of meat. Repeat until the meat and salt have all been packed in the barrel, care being used to reserve salt enough for a good layer over the top. After the package has stood over night, add, for every 100 pounds of meat, four pounds of sugar and four ounces of saltpeter, dissolved in a gallon of tepid water. Three gallons more of water should be sufficient to cover this quantity. In case more or less than 100 pounds of meat is to be corned, make the brine in the proportion given. A loose board cover, weighted down with a heavy stone or piece of iron, should be put on the meat to keep all of it under the brine. In case any should project, rust would start and the brine would spoil in a short time.

It is not necessary to boil the brine except in warm weather. If the meat has been corned during the winter and must be kept into the summer season, it would be well to watch the brine closely during the spring, as it is more likely to spoil at that time than at any other season. If the brine appears to be ropy or does not drip freely from the finger when immersed and lifted it should be turned off and new brine added after carefully washing the meat. The sugar or molasses in the brine has a tendency to ferment and, unless the brine is kept in a cool place, there is sometimes trouble from this source. The meat should be kept in the brine 28 to 40 days to secure thorough corning.

Flour in Five-Pound Packages.

Boston reports considerable opposition to the order of the food administration eliminating the small packages of flour formerly furnished by the mills and generally purchased by the population in the east. While it is recognized that the sole object was to reduce the cost to the consumer, yet, it is stated, many families find it difficult to finance even the purchase of eighth-barrel bags, but have been able to buy and pay for a five or ten poung bag without any great difficulty. The grocers, who are now repacking flour in smaller bags, claim that the cost is greater and this is one of the reasons why grocers have been selling at retail five-pound bags of flour for 50 cents, the customer to take it away.

Farms With Woodlots.

Farmers with timber on their land have a big opportunity this year. An opportunity to save money by cutting their own wood as a substitute for coal and selling a good portion of it to relieve a serious situation in the coal market and benefit the country at large. Many farms have wood lots from which wood may be cut without injury to saw timber which may be growing. Scrub timber, properly called "weed" trees, can be cut and instead of taking away any value from the property actually better the condition of the timber which may later be cut for lumber.

Handicraft For Boys

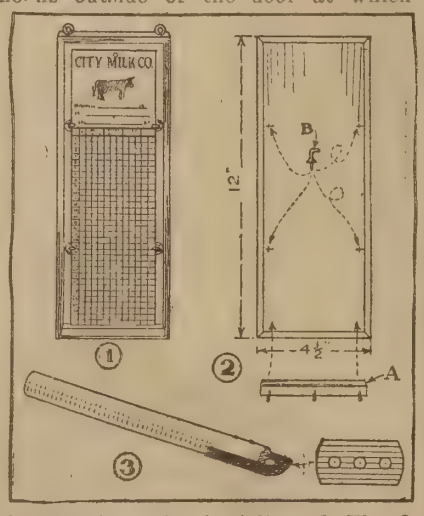
By A. Neely Holl.

Gifts for Christmas.

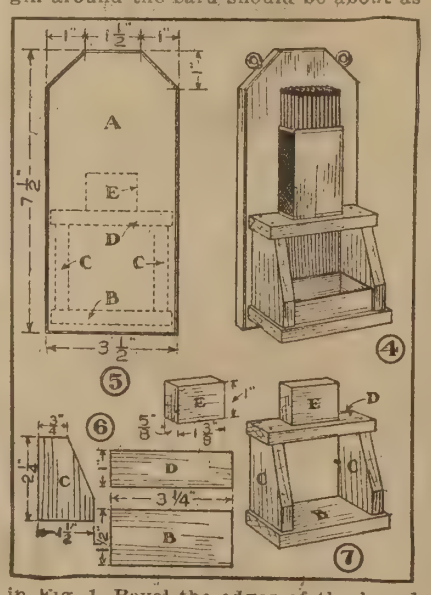
The articles shown in the illustrations will appeal most to my readers who prefer ideas for things quickly put together, perhaps, but even the boy who likes more complicated problems will enjoy making these practical articles for the home.

Milk-Card Board and Seam-Ripper.

The milk-card board in Fig. 1 is provided with screweyes to hang upon hooks outside of the door at which



the morning milk is delivered. Fig. 2 shows a pattern for the board, but because milk cards vary in size you had better measure the card for which the board is to be used, to see that it fits, before you begin work. The margin around the card should be about as



in Fig. 1. Bevel the edges of the board as shown. Then prepare the strip A (Fig. 2), and fasten it with brads along the lower edge of the board for the card to rest upon. Give the board two coats of shellac, varnish, or paint; then when it is dry, screw four hooks into it at the points indicated (B, Fig. 2), to hold the edges of the card, and a pair of screweyes into the top edge, for hangers.

Mother would appreciate the seam ripper shown in Fig. 3. All that you need is a safety-razor blade, and a short stick whittled round for a handle. Slot one end of the handle, slip the blade into the slot, and fasten with small nails driven into the handle and through a pair of the holes in the blade. Varnish the handle and the little tool will be completed.

Holder for Safety Matches.

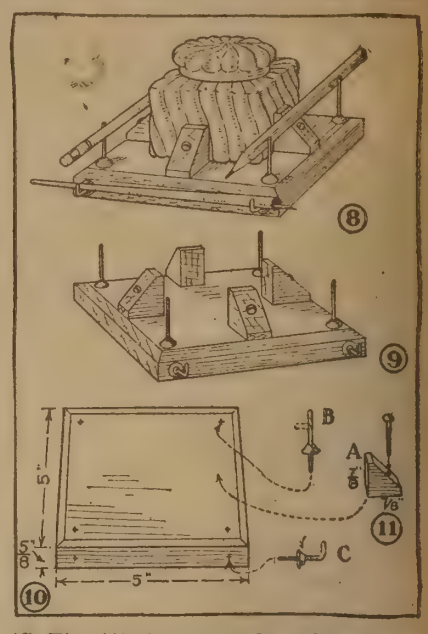
Fig. 4 shows a handy holder for safety matches. The cover of the safety-match box sets down over the block E (Fig. 7), to hold the matches and provide the match scratcher. Block E raises the match ends an inch above the cover. The safety-match box stands on shelf B, between ends C (Fig. 7), for a burnt-match receptacle.

The match-box holder may be built up of cixar-box strips or wood one-quarter or three-eighths-inch thick. Fig 5 shows a pattern for back board A, and Fig. 6 shows the patterns for the ends of pieces C (Fig. 7), so their back edges are in a line with one another. Screw a pair of screweyes into the top of back board A, for hangers.

Inkstand, Penrack, Etc.

The inkstand and penrack shown in Figs. 8 and 9 is an attractive article for the library table, or one's writing desk. It may be made to hold a common ink bottle, but an ornament the other parts. Fasten block E to shelf D, in the center of its length, and about one-sixteenth of an inch inside of the back edge; then nail B and D to al bottle will look better and will not cost much.

Fig. 10 shows a pattern for the base board, and Fig. 11 a pattern for the four blocks A which hold the bottle in position upon the base. Bore a hole through each of the four blocks, and drive round-head brass screws through the holes to fasten the blocks upon the base. Screw a pair of brass hooks



(C, Fig. 10), into one edge of the base, for a penrack. Then bend up the end of the hook of four more of the screw-hooks, so as to make straight posts (B, Fig. 10), and screw these into the base, one at each corner. Fig. 8 shows how the posts form pencil racks.

As this inkstand will be kept upon a desk or table, great care should be used in sandpapering and finishing the wood. Glue a piece of felt to the under side of the base.

(Copyright, 1915, by A. Neely Hall.)

HOLIDAY-TIME IS DANGER-TIME FOR FIRES

Don't let the Fire Fiend Destroy Your Property and Murder those who are Nearest and Dearest

HOLIDAY fires in stores, churches and bazaars, while filled with people, are usually holocausts.

Light, inflammable decorations make fires easy to start and easy to spread.

A match, a gas flame, or an electrical defect may do it.

Gas jets should be watched closely. Decorations may be carried against them by air currents.

Smokers should not be permitted to light cigars inside buildings.

Not the slightest change should be made in electrical wiring without consulting an expert electrical inspector.

Defective heating and lighting equipments, combustible rubbish and furnace rooms are prolific causes of winter fires.

Such fires are unnecessary and will not occur in premises properly cared for.

Every year in America many children are burned to death by fire from Christmas candles.

CHRISTMAS TREES SHOULD NOT BE DECORATED with paper, cotton or any other inflammable material.

Metallic tinsel and other metallic decorations only should be used, and the tree set securely so that children can not tip it over.

Cotton SHOULD NOT BE USED to represent snow. If you must have snow, use powdered mica or asbestos fiber.

Children SHOULD NOT BE permitted to light or relight candles unless parents are present. Children frequently set fire to their clothing instead. Electric illumination is safer.

Matches should not be left within reach of children at holiday time.

Candles are meant to be lighted, and if the children can get matches, they are likely to experiment disastrously.

Trees SHOULD NOT BE allowed to remain in buildings after the holidays. The tree itself ignites readily when the needles become dry. A large number of fires usually occur in January from this cause.

Where are you going to put the boxes, excelsior, and other packages of combustible material that come with Christmas gifts? Unknown to you, THE LIFE OF A CHILD MAY HANG UPON YOUR ANSWER.

THE NORTHWESTERN MUTUAL'S INSPECTION SERVICE STANDS READY AT YOUR CALL TO HELP YOU MAKE YOUR HOME, YOUR PROPERTY, FIRE-SAFE.

NORTHWESTERN MUTUAL FIRE ASSOCIATION

General Offices
CENTRAL BUILDING, SEATTLE
Inland Empire Office, Old National Bank, Spokane.

Patterns

1937—Junior dress. Cut in 3 sizes: 12, 14 and 16 years. It re quires 3 1-4 yards for the dress, and 3 yards for the over-blouse, for a 14-year size, in 27-inch material. Price 10 cents.

2046—Ladies' house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 1-2 yards of 44-inch material for a 38-inch size. The skirt measures about 2 2-3 yards at the foot. Price 10 cents.

2139—Child's set of short clothes. Cut in 5 sizes: 1, 2, 3, 4 and 5 years. The dress will require 2 1-4 yards of 36-inch material. The slip 1 1-2 yards, the drawers 1 1-4 yards, for a 4-year size. Price, 10 cents.

2184-2187—A charming three-piece suit. Coat-waist 2184 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 2 3-8 yards of 36-inch material for the waist, and 3 3-8 yards for the blouse, for a 36-inch size. Skirt 2187 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure, and requires 3 3-8 yards of 36-inch material for a 24-inch size. The skirt measures about 2 1-2 yards at the foot. Two separate patterns, 10 cents for each pattern.

2301—Child's underwaist and drawers. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 10 requires 1 5-8 yards for the waist and 2 1-2 yards for the drawers, of 27-inch material. Price, 10 cents.

2305—Ladies' apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 3 5-8 yards of 36-inch material. Price, 10 cents.

2309—Ladies' dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 1-2 yards of 44-inch material for a 36-inch size. The skirt measures about 2 yards at the foot. Price, 10 cents.

2311—Girls' dress. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 10 will require 3 1-2 yards.

2312—Dress for misses and small women. Cut in 3 sizes: 16, 18 and 20 years. Size 16 requires 4 5-8 yards of 44-inch material. The skirt measures about 2 yards at the foot. Price, 10 cents.

2314—Girls' gymnasium suit. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 12 requires 4 yards of 44-inch material. Price, 10 cents.

2320—Girls' dress with or without jumper. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 10 requires 2 3-4 yards of 44-inch material for the dress, and 1 3-8 yards for the jumper. Price, 10 cents.

2328—Boys' mackinaw. Cut in 5 sizes: 8, 10, 12, 14 and 16 years. Size 14 requires 3 1-2 yards of 44-inch material. Price 10 cents.



Fill in this coupon and mail to Pattern Dept.

THE PACIFIC NORTHWEST FARM TRIO

36 Review Bldg., Spokane, Wash.

Enclosed find .....

cents, for which send me the following patterns:

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Name .....

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Postoffice .....

State .....

R. F. D. or St. No. .....

BE SURE TO GIVE NUMBER AND SIZE.

Prune Pone in War Time.

Put this recipe in your new economy cook book. These cheap cakes are deservedly popular:

One cup cornmeal, one cup rye flour, one cup wheat flour, one cup washed chopped prunes, one-half cup molasses, one cup sour milk, one teaspoon soda.

Scald meal with enough boiling water to make a very stiff batter; stir in flour; add other ingredients, then fruit. Steam in mold three hours or bake two hours in moderate oven. Serve with sweet sauce or hot molasses.

Genuine comfort if you ask for and get—

Mayer

Martha Washington Comfort Shoes

Beware of Imitations—name and trade-mark stamped on the sole.

MILWAUKEE Mayer CUSTOM MADE

F. Mayer Boot & Shoe Company

Milwaukee, Wis.

HONORBILT



Western Branch: Washington Shoe Mfg., Co., Seattle, Wash.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

SAVE HALF ON SYRUP

Make a Superior Syrup With CRESCENT Mapleine at a Saving of 30c a Quart

Go to your grocers and get a two ounce bottle of Crescent Mapleine for 35c. Then USE HALF of it—7 pounds of sugar and 4 pints of boiling water to make a gallon OF THE BEST syrup you ever tasted. Total cost, 77c—and THE SUPERIOR of the manufactured article WHICH COSTS $2 a gallon. This is ONLY ONE of 250 economical ways to use Crescent Mapleine. The Mapleine Cook Book gives the other 249 ways. SEND 4c, stamps, today for it and USE many of its pointers to cut down living costs. Buy your bottle of Mapleine TODAY. SEND NOW for the Cook Book. Dept. S., Crescent Mfg. Co., Seattle, Wash. (M-50).

CRESCENT MAPLEINE

The Delicious Golden Flavour



2 oz. Bottle, 35c

For baby's bath

Protects him from chill—keeps him comfy. Instant heat. Easily carried. Fuel consumed only when heat is needed—no waste. No smoke or odor.

STANDARD OIL COMPANY (CALIFORNIA)

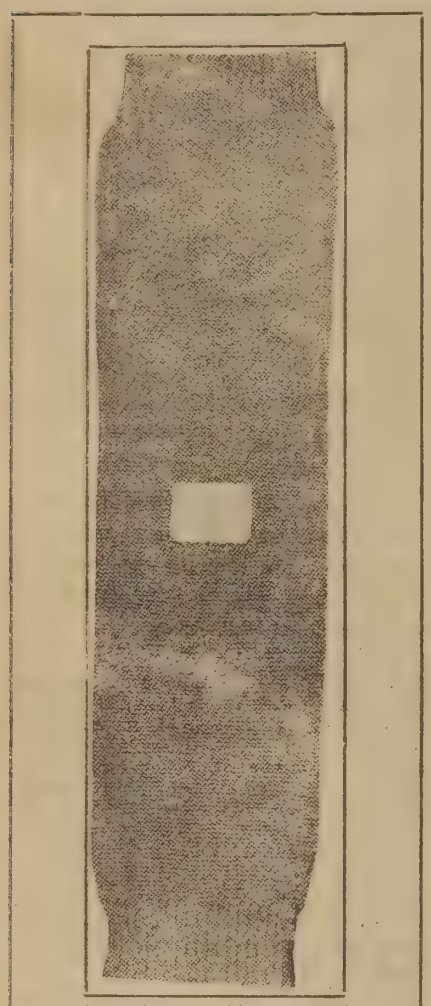


PERFECTION OIL HEATER

Here Are Complete Instructions for Red Cross Knitters

The following directions for knitting articles needed by our soldiers are taken from a pamphlet issued by the American Red Cross Woman's Bureau at Washington, D. C.

As the amount of yarn in hanks varies with the different makes, and as knitters are apt to use the size needles preferred, ample allowance of wool has been made for each garment in an endeavor to provide for varying conditions. If the amount stipulated



Sleeveless sweater before sides are sewed together.

is found too little or too much, it is a simple matter to increase or decrease it in accordance with the needs.

Where the yarn furnished by the supply bureau and knitting needles, as prescribed in this pamphlet, are used and directions herein given are followed exactly, the articles will be altogether satisfactory. If, however, a different size yarn or needle is used, knitters must be careful to observe the measurements given in each case, even though a larger or smaller number of stitches may be required.



Sleeveless Sweater.

General Directions.

Stitches should not be cast on too tightly.

Knitting should be done evenly and firmly and all holes should be avoided.

Joining should be done by splicing or by leaving two or three inches at each end of the yarn to be darned in carefully.

All knots, ridges or lumps should be most carefully avoided, especially in socks, as they are apt to blister the feet.

Sleeveless Sweater.

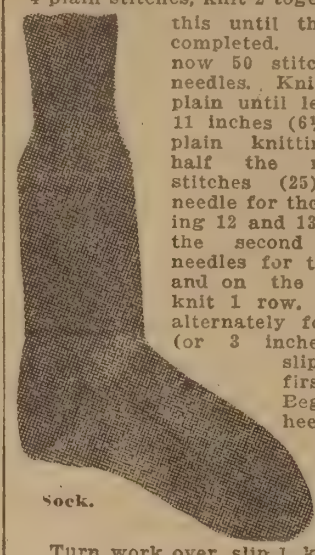
Two and one-half hanks of yarn (⅝ pound); one pair Red Cross needles No. 3.

Cast on 80 stitches. Knit 2, purl 2 stitches, for 4 inches. Knit plain until sweater measures 25 inches. Knit 28 stitches, bind off 24 stitches for neck, loose. Knit 28 stitches. Knit 5 ridges on each shoulder, cast on 24 stitches. Knit plain for 21 inches. Purl 2, knit 2 stitches for 4 inches. Sew up sides, leaving 9 inches for armholes. Two rows single crochet around neck and 1 row single crochet around the armholes.

Medium Sized Man's Sock.

Four Red Cross needles No. 1; 1½ hanks of yarn (⅝ lb.)

Set up 60 stitches, 20 on each of three needles. Knit 2 plain and 2 purl for 35 rows (4½ inches). 36th row knit 4 plain stitches, knit 2 together; repeat this until the round is completed. There are now 50 stitches on the needles. Knit 50 rows plain until leg measures 11 inches (6½ inches of plain knitting). Take half the number of stitches (25) on first needle for the heel (leaving 12 and 13 stitches on the second and third needles for the instep), and on the 25 stitches knit 1 row, purl 1 row alternately for 26 times (or 3 inches), always slipping the first stitch. Begin to turn heel on the wrong side, slip 1, purl 13, purl 2 together, purl 1,



Sock.

Turn work over, slip 1, knit 4, slip 1, knit 1 and pass it over slipped stitch, knit 1. Turn, slip 1, purl 5, purl 2 together, purl 1. Turn, slip 1, knit 6, slip 1, knit 1 and pass it over slipped stitch, knit 1. Continue working toward the sides of the heel in this manner, leaving 1 more stitch between decreases on every row until all the stitches are worked in. There should then be 15 stitches on the needle. Pick up 13 stitches on side of heel, now knit the 25 stitches on second and third needle on to one needle, which becomes your second needle; with your third needle pick up the 13 stitches on other side of heel, and knit 7 stitches off your first needle so that you will now have 21 stitches on the first needle, 25 stitches on the second needle and 20 stitches on the third needle. First needle (a) knit to within three stitches of end, knit 2 together, knit 1. Second needle (b) knit plain. Third needle (c) knit 1, slip 1, knit 1, pass slipped stitch over, knit plain to end of needle. Knit around plain (d).

Repeat a, b, c and d until you have 13 stitches on first needle, 25 stitches on second, 12 stitches on third. Knit plain for 4½ inches. First needle (e) knit 10 stitches—knit 2 together, knit 1. Second needle (f) knit 1, slip 1 knit 1, pass slipped stitch over, knit 19 stitches. Knit 2 together, knit 1. Third needle (g) knit 1, slip 1, knit 1, pass slipped stitch over, knit 9 stitches, knit 2 rows plain (h).

Repeat e, f, g and h five times, then narrow every other row until you have 5 stitches on your first needle, 9 stitches on your second needle and 4 stitches on your third needle. Knit the 5 stitches on your first needle on to your third. Your work is now all on 2 needles opposite each other. Break off yarn leaving 12-inch end. Thread into worsted needle and proceed to weave the front and back together as follows:

Pass worsted needle through first stitch * of front knitting needle as if knitting and slip stitch off—pass through second stitch as if purling—leave stitch on, pull thread through first stitch of back needle as if purling, slip stitch off, purl thread through second stitch of back needle as if knitting, leave stitch on. Repeat from * until all the stitches are off the needle.

Sock when finished should measure: Foot, from tip of heel to tip of toe, 11 inches.

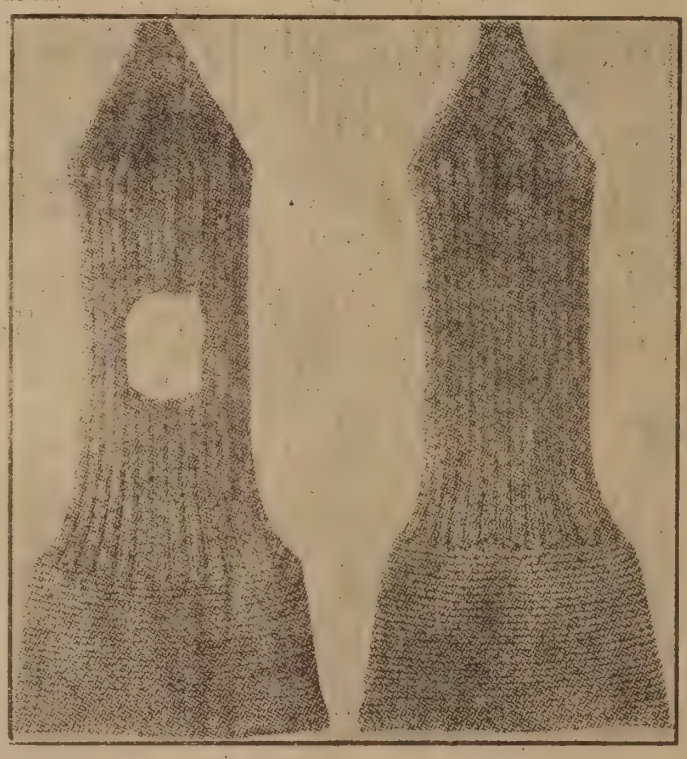
Leg, from tip of heel to tip of leg, 14 inches.

Knitted Helmet No. 1.

One hank of yarn (1-4 lb.); one pair Red Cross needles No. 2.

The helmet is made in two parts, which afterwards are sewed together as shown in the illustration.

Front of Helmet: Cast on 48 stitches (11 inches), knit plain for 25 ribs (6 inches) and knit 2, purl 2 for 35 rows. On the next row the opening for the face is made as follows: Knit 2, purl 2, knit 2, purl 2, knit 2, knit and bind off loosely the next 28 stitches and purl 1, knit 2, purl 2, knit 2, purl 2. Run the stitches before the opening on a spare needle and on the stitches at other side of opening knit 2, purl 2 for 12 rows. The last row will end at the opening and at that point cast on 28 stitches to offset those bound off. Begin at the face opening of stitches on spare needle and knit 2, purl 2 for 12 rows. At the end of the 12th row continue all across to the end of other needle, when there should be 48 stitches on needle as at first. Knit 2, purl 2 for 24 rows.



Front and back of helmet. These are to be sewed together.

Top of Helmet: Knit 2, narrow (knitting 2 stitches together), knit 14, narrow, knit 14, narrow, knit 12. Purl the entire next row. On the 3d row knit 2, narrow, knit 13, narrow, knit 13, narrow, knit 11. Purl 4th row. On the 5th row knit 2, narrow, knit 12, narrow, knit 12, narrow, knit 10. Purl 6th row. Continue to narrow in the 3 places every plain knitted row with 1 stitch less between narrowings until 9 stitches are left.

Back of Helmet: Work in same manner as for front, but omit the face opening. Sew the stitches of upper edges together with joining stitch as shown in detail cut. Sew up the side seams, leaving the plain knitting at shoulders open.

Knitted Helmet No. 2.

(Same as No. 1, but knitted in one piece).

One hank of yarn (1-4 lb.); 4 Red Cross needles No. 2.

Cast on 56 stitches loosely. Knit plain for 8 inches for front piece, and leave on extra needle. Knit another piece to correspond for back. These pieces must be at least 9 inches wide. Slip the stitches of both pieces on to 3 needles, arranging for last 2 stitches of back piece to be on beginning of first needle, with 38 stitches of front piece added (making 40 on first needle.)

Divide rest of stitches on other 2 needles; 36-36.

Beginning with first needle, knit 2 purl 2 for 6 inches. Then on first needle knit 2, purl 2 for 18 stitches. Bind off 22 stitches for face opening. (Try to keep same arrangement of stitches on needles for further directions). Knit 2, purl 2 forward and back on remaining 90 stitches for 1 1-2 inches, always slipping first stitch. Cast on 22 stitches loosely to complete face opening and knit 2, purl 2 for 2 1-2 inches (adjust stitches by slipping 2 from end of third needle to first needle, making 42 on first needle).

Knit 1 round plain. Knit 2 stitches together, knit 11, knit 2 stitches together, knit 1. Repeat to end of round. Knit 4 rows plain. Then knit 2 stitches together, knit 9, knit 2 together, knit 1. Repeat to end of round. Knit 4 rows plain. Continue in this way, narrowing on every fifth round and reducing number of stitches between narrowed stitches by 2 (as 7, 5, 3, etc.) until you have 28 stitches left on needles. Divide on 2 needles, having 14 on first needle, and 14 on the other, and finish the same as for the toe of a sock.

Wristlet.

One-half hank of yarn (⅛ pound); 1 pair Red Cross needles No. 2

Cast on 48 stitches, knit 2 and purl 2 for 12 inches and sew up, leaving 2 inches open for thumb 2 inches from edge.



Wristlet No. 1.

Wristlets No. 2.

One-half hank of yarn (⅛ pound); 4 pair Red Cross needles No. 1.

Cast on 52 stitches on 3 needles; 16-16-20. Knit 2, purl 2 for 8 inches. To make opening for thumb knit 2, purl 2 to end of third needle, turn; knit and purl back to end of first needle, always slipping first stitch; turn. Continue knitting back and forth for 2 inches. From this point continue as at first for 4 inches for the hand. Bind off loosely and buttonhole thumb opening.

(Continued on page thirty-one.)

Helmet.





Dear Corner Cousins—Lately many of our cousins, those sick and well, have asked that each cousin write them a personal letter. All the letters to Aunt Nellie are to the Corner Cousins too, and they are personal letters. If any cousin wants to write to another cousin, and have it printed, they may do so, embodying it in their letter to Aunt Nellie as Tina Painter did. This was very thoughtful of you, Tina, and I am sure Lilla was glad to read your letter. I think it is always nice to write to the invalids and those who are sick. I am sure many of the cousins will write to Byron. Would it not be nice if each one would get a new cousin. Lilla has done well by the Corner; a sister and a friend have written this time. If every cousin would get two more what a big Corner we would have. Don't you think this would be nice?

AUNT NELLIE.

A City Cousin Writes to the Corner.

Dear Aunt Nellie: I do not live in the country, as most of the cousins do, but live in the city. In the summer, when there is no school, we go to our summer home in the country. We have 20 acres of land, but it is not entirely cleared. I have much fun out in the country, swimming nearly every day, hiking through the woods and taking long boat rides in our launch. One day last summer we took a ride in our launch to Oag Harbor, on Whidby island. After we had eaten lunch we took a ride in an automobile for about two hours. I thought at first that we were going to see Deception Pass, and I was very much disappointed when I heard that we were not going there. Many of the cousins say that they prefer the country to the city. I agree with them. I am always glad when the good old summer time is near. I am 12 years old and my birthday is on the 2d of March. I already have one friend who is my twin, but I would be pleased to hear from another boy or girl who is my twin. I also wish that some other girls, my age or older, would write to me. I am not going to school this year, because I have already graduated from grammar school and mother does not want me to go to high school yet. My oldest brother is 26. Two of my brothers are up near the North pole with the explorer, Steffanson; another has joined the naval reserves and is chief machinist's mate on a sub-chaser. One of my sisters has just had typhoid fever, but is nearly well now. Aunt Nellie, I also want the Corner to grow larger and better. Sunset is the most beautiful time of the day. The sun steals slowly down the horizon, coloring the soft gray and white clouds many beautiful colors, such as golden, crimson, purple and pink, which only nature can paint. Many times the sunset reminds me of the story of the Lord as a shepherd, the sun being the shepherd and the many small white clouds the sheep. At night it is sometimes much prettier when the full moon is the shepherd. Thanksgiving is one of the three most important celebrations of the year, Easter, Christmas and Thanksgiving. It is a time when all people should thank the Lord for all they have, for clothing, homes, daily bread and many, many other things. Many people think that it is a time when they should have many good things to eat and have a good time, but that is very wrong. I hope that the Corner will be much larger and better when I write again. —Thusnelda Kilian, 2106 Ninth ave., West., Seattle, Wash.

Grandfathers Stories.

Dear Aunt Nellie: I have been reading the cousins' letters in the Corner and think it would be nice to all write on the subjects that Aunt Nellie suggests so often. My subject that I am going to write on is "Grandfather's Story." Although my grandfather has been dead a good many years, his old war stories are not forgotten. There is one we shall always remember, which, I guess, he always kept in mind. He fought in the Civil war, and was registered in the Fifty-third Regiment, Illinois. He was captured by the south and put in Andersonville prison. They were very cruel to their prisoners, scarcely allowing them anything to eat or water to wash themselves. They were kept in prison for six months, but grandpa was wounded so they let him out sooner than they did the other prisoners. He was shot in the legs and the only medicine he had to put on the wound was ashes. When he was freed he went back to fight again, and was captured again and was put in Libby's prison for three months. I go to the Lincoln school. I am in the sixth grade.—Glyness Simenson, Box 102, Corfu, Wash.

A Letter From Emma.

Dear Aunt Nellie: I have not written for a long time, so I thought I would write now. My birthday was the 29th of November. I was 15 years old. Have I a twin? We had a week's vacation with Thanksgiving because our teacher went to the institute. We are going to move to Everson, so then we will have to go to the Everson school. I wish some of the cousins would write to me. Lucile Bowers wrote to me and I answered her letter, but she did not answer it.—Emma Brune, R. F. D. 2, Lynden, Wash.

Took the Cub Bear as a Mascot.

Dear Aunt Nellie: My subject is "On the Farm." We have 176 acres and 16 milch cows, three heifers and three calves. We have three horses, 75 chickens, two pigs and one dog, and three cats. We did have a little cub bear. He could climb trees and ladders. Once I went up a ladder and he followed me and I almost fell down. He would eat apples and pears and blackberries and cherries, and all sorts of fruit. He was about one foot high. My brother was drafted and when he got up to camp he phoned to me and we sent the little bear to him. Guess it is there yet. I milk one cow now, but in the spring I milk three or four cows. I like it when harvest time comes Then I can ride in on a load of hay and I like more to live on a farm than any where else. I can eat apples, go fishing, ride horseback or in a cart, or sleigh in winter away over the pasture fast or slow. We have a fireplace and I can hear the wind whistling outside the door and in summer I can pick the wild flowers and in autumn I can fly kites, pick the prettiest leaves. In town you are stuck in the house all the time and can not get a speck of fresh air. We used to live in town and I did not like it a bit. Oh, I was so glad when we moved up on a ranch at Menlo. We lived up on that place for a year or two then we moved on another place joining that one. I like to go to school. I am 9 years old. —Rosa May Millam, Menlo, Wash.

Frances Sends Some Riddles.

Dear Aunt Nellie: It has been so long a time since I wrote to you that I thought I would write and give some riddles. I knew all the answers to the other riddles that the cousins put in and will give some and see if they can guess them. Here is one. I went to the woods and got it. When I got it I couldn't find it. The more I looked for it the less I liked it. I brought it home in my hand because I couldn't find it. What is it? Upon the hill there is a green house, in that green house there is a white house, in that white house there is a pink house, in that pink house there is whole lot of little black negroes. What is it? What is it a wagon has that it doesn't need but never goes without? Black upon black, and black upon brown, three legs up and six legs down. What is it? Big at the bottom, little at the top, the thing in the middle goes flippity flop. What is it? Why is a young lady like a door knob?—Frances McCauley, Route 1, Box 35, Dayton, Wash.

Basil Is a Busy Boy.

Dear Aunt Nellie: My subject is "What I Do on the Farm." I get up about 6 o'clock in the morning eat my breakfast, milk three cows, clean the barn, feed the pigs, put in hay for the cows, water the horses, then eat my dinner, sack potatoes,cut the wood, get in the cows, milk two of them, eat my supper and then go to bed about 7:30 o'clock. I have a pig and a calf of my own. I am a member of the boys' and girls' pig club. I have my second pig. I made $8 on my first pig. With the money I bought my calf. We have 16 milch cows. I have one brother. His name is Bruce. He was called in the draft. He went to Camp Lewis and then to New York, where he was made corporal. I have a sister. She is writing to the Children's Corner. We had a little cub bear. He could climb a tree and eat the apples and pears, but my brother took him with him as a mascot. I hated to see him go.—Basil Millam, Menlo, Wash.

Brother Beats Violet at Marbles.

Dear Aunt Nellie: I have never seen a letter from College Place so will write one. I go to school here and I am in the third grade. Miss Woods is my teacher. How many of the cousins sold Red Cross stamps this year? I sold some last evening and will try to sell more today. Our teacher got them for us to sell. I was nine years old last August 28. I have blue eyes and yellow hair. I love to play with dolls. I can play marbles, too, with my brother, Wilbur, but he beats me most of the time. He is 12 years old the 12th of next May. He drove the derrick in harvest this summer and made almost $100. He bought a $50 Liberty bond with his money. The weather is fine here now and we can play out doors all day, when we are not in school. I will close with love for Aunt Nellie and all the cousins. I would like to hear from some of them.—Violet Catherine Morley, College Place, Wash.

Nibbs and Nero Are Pet Dogs.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am going to school and I am 10 years old. My birthday is in August. I am in the fourth grade. We live on a 316-acre farm. We have two farms. We have a 200-acre farm. We do not live on it, but live on the farm that has 316 acres. I have six sisters and three brothers. I have a father and mother. We have 45 cows and 13 horses. We have a pony. The pony is sorrel. Her name is Nellie. We drive her in the buggy. We have two cars; one is for my brothers and sisters. Papa and mama got the other one. We have two dogs and their names are Nibbs and Nero. We have five cats. We only have one cat named, and it is Tige. We have 50 chickens. We have 220 sheep. I am the baby of the family.—Ethel Lexie Johnson, R. F. D., Box 26, Friday Harbor, Wash.

Myrtle Is a New Cousin.

Dear Aunt Nellie: May I join your Corner? I am 12 years old. My birthday is the 29th of May. I hope I have a twin. If I have I hope they will write to me. I go to school and I am in the sixth grade. My teacher's name is Miss Amzel Philips. There are three rooms in our schoolhouse that they have classes in and one for domestic science and the boys have manual training in the basement. We have a football team and a basket ball team. I would like for Mary King to write to me about her Red Cross club if she would. My letter is getting long so I will hope to see this in print. I would like for all the cousins to write to me. I will try to answer all their letters.—Myrtle Ham, Tyler, Wash.

Gala Is a Corner Cousin.

Dear Aunt Nellie: This is the first time I have written to the Corner. I hope that every member enjoys reading the letters as well as I do. May I join the Corner? If so, please let me know. I would like to see my letter in print. I have light hair and blue eyes. I am nine years old and was born the 30th of September. Have I a twin? I am in the fourth grade. My teacher's name is Mrs. Skidmore. She is very good to me. We have three days vacation this month. I help my mamma vacation times. I have three cats and one dog. My dog's name is Prince. He is a white dog. Next time I write I will write a longer letter. I would this time but I have to go to bed.—Gala Peed, R. F. D. 1, Box 37, Pullman, Wash.

Glad to Have Effie Join Us.

Dear Aunt Nellie: I have been reading the children's letters in the Corner. I thought that I would write and ask if I may join. I am 11 years old and weigh 90 pounds. I'm in the sixth grade. I expect to stay there next term, as my two nieces and I had the whooping cough. My youngest nieces had it so badly that we expected to see her go any time, but she pulled through it. I'll have to go to school Monday, as I have stayed out six weeks. My brother's birthday was the 2d of December. I have four brothers and six sisters, but two of my sisters are dead and one of my brothers is, too. It snowed the day of Thanksgiving and then today it is a nice snow. I like to play in it.—Effie Elva Brown, Monitor, Wash.

Just Two in Nettie's Class.

Dear Aunt Nellie: This is the second time I have written to the Corner. I saw a girl's name in the Corner that was the same as mine. I was going to write to her but lost her address. I go to No. 1 school and am in the seventh grade. My teacher's name is Miss D. Nero. I like her very much. There are only two in my class, Anna Bergman and myself. There are 23 pupils going to No. 1 school. I am 12 years old. I have dark hair and blue eyes. I weigh 110 pounds. My birthday is on the 13th day of July. If I have a twin in the Corner I wish her to please write to me. I have a brother at American Lake and one that I think will be drawn next time.—Nettie Johnson, R. F. D. 1, Box 26, Friday Harbor, Wash.

Skate on a Pond in Winter.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. Our nearest city is Oak Harbor. There are many buildings in the city. The names of some are: stores, a bank, a drug store, a blacksmith shop, a Ford garage, a box factory, a graham mill, one high school, one grade school and many other buildings and offices. Our schoolhouse is about one-half of a mile from the beach and about one-half mile from a pond where we can go skating in the winter. I would like to correspond with any girl of my age. I am 14 years old. My birthday is the 26th of August. Have I a twin?—Albertha Capaam, Oak Harbor, Wash.

Youngest Brother Is a Soldier.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I do not think it shall be the last time. I enjoy myself reading the letters that are written to you. I am 12 years old. I will be 13 years of age February 17. My hair is dark brown and my eyes are hazel. Have I a twin to correspond with? I would be very glad to see my letter in print. We live on a 160-acre farm. I have two brothers. My youngest brother is a soldier. He is in Camp Lewis. I have six sisters. We live a short distance from the beach in the summer time, and we go out boat riding.—Marie Hazel Buttman, Box 31, Oak Harbor, Wash.

Arthur Is in the Fourth Grade.

Dear Aunt Nellie: This is the first time that I have written. We have a new pony. That makes the seventh horse that we have. We have 24 chickens and are getting four eggs a day. I am 9 years old and will be 10 in March. I am in the fourth grade. My name is Arthur Davis. My teacher's name is J. H. Adams. He is a tall red-headed man. He is about 6 feet tall.—Arthur Davis, Davenport, Wash.

Bertha Wants a Twin.

Dear Aunt Nellie: This is the first time I have ever written to the Corner. I am 12 years of age. My birthday is September 27, Have I a twin? We live in the country on a farm about 40 acres. Most of it is cleir. If I have a twin I would like her to write to me. I will answer her letter.—Bertha Millenaar, R. R. 2, Box 29, Oak Harbor, Wash.

THE BARRIER

(Continued from page twenty-two.)

great, roistering, brown man would fold her to himself—she would yield to him every inch of her palpitant, passionate body. The thought drove the lover frantic, and he felt that madness lay that way if he dwelt on such fancies for long. Of a sudden he realized all that she meant to him, and cursed himself anew.

While he had the power to possess her he had dallied and hesitated, but now that he had no voice in it, now that she was irretrievably beyond his reach, he vowed to snatch her and hold her against the world.

As he grew calmer his reason began to dissect the scene that had taken place in the store, and he wondered whether she had been lying to him, after all. No doubt she had been engaged to the Frenchman, and had always planned to wed Poleon, for that was not out of reason; she might even have set out mischievously to amuse herself with him, but at the recollection of those rapturous hours they had spent together, he declared aloud that she had loved him, and him only. Every instinct in him shouted that she loved him, in spite of her cruel protestations.

All that afternoon he stayed locked in his room, and during those solitary hours he came to know his own soul. He saw what life meant: what part love plays in it, how dwarfed and withered all things are when pitted against it.

A man came with his supper, but he called to him to be gone. The night settled slowly, and with the darkness came such a feeling of despair and lonesomeness that Burrell lighted every lamp and candle in the place to dispel, in some measure, the gloom that had fallen upon him. There are those who believe that in passing from daylight to darkness a subtle transition occurs akin to the change from positive to negative in an electrical current, and that this intangible, untraceable atmospheric influence exerts a definite, psychical effect upon men and their modes of thought. Be this as it may, it is certain that as the night grew darker the lieutenant's mood changed. He lost his fierce anger at the girl, and reasoned that he owed it to her to set himself right in her eyes; that in all justice to her he ought to prove his own sincerity, and assure her that whatever her own state of mind had been, she wronged him when she said he had made sport of her for his own pleasure. She might then dismiss him and proceed with her marriage, but first she must know this much of the truth at least. So he argued, insensible to the sophistry of his reasoning, which was in reality impelled by the hunger to see her and hear her voice again. He snatched his hat and bolted out, almost running in his eagerness.

An up-river steamboat was just landing as he neared the trading post—a freighter, as he noted by her lights. In the glare at the river-bank he saw Poleon and the trader, who had evidently returned from Lee's Creek, and without accosting them he hurried on to the store. Peering in from the darkness, he saw Alluna; no doubt Necia was alone in the house behind. So he stumbled around to the back to find the window of her room aglow behind its curtain, and, receiving no answer to his knock, he entered, for it was customary at Gale's to waive ceremony. Inside the big room he paused, then stepped swiftly across and rapped at her door falling back a pace as she came out.

Instead of speaking at once, as he had planned, to prevent her escaping, he was struck speechless, for the vision that met his eyes was that which he had seen one blithe spring morning three months before; but tonight there was no shawl to conceal her sweetly rounded neck and shoulders, whose whiteness was startling against the black of the ballroom gown. The slim gold chain hung around her neck and her hair was piled high, as before. He noted every smallest detail as she stood there waiting for him to speak, forgetful of everything else.

She had put on the gown again to see if, perchance, there might be some mark of her blood or breed that had escaped her previous scrutiny, and, as there was no one to observe her, she had attired herself slowly, absorbed in her whimsy. Her wistful beauty dazed the young man and robbed him of the words he had rehearsed, but as she made to flee from him, with a pitiful gesture, toward her room, the fear of losing her aroused him and spurred his wit.

"Don't go away! I have something I

(Continued on page thirty-one.)

News for Breeders

During the Pacific International stock show Howard & Royston of Parma, Idaho, sold Lady Perfection, one of their champion herd of Poland Chinas, to Beebe & Banks of Portland, Ore., for $300. This is the top price ever paid for a western bred hog, so far as the Farmer is able to learn, and indicates better conditions and bright prospects for the hog business as well as the high quality of the animal sold.

Friday evening, November 23, Hereford breeders met in Portland and organized the Northwest Hereford Breeders' association, with C. S. McGee of the Portland Union stock yards as secretary. At the sale of Herefords at the Pacific International stock show grounds the next day a large number of breeders took membership, so the association is already in a thriving, healthy condition.

At the J. W. Fruits sale of Duroc Jerseys at Brooks, Ore., November 15, the junior champion sow at the state fair went to Frank Wheeler of Brooks for $80, about half her worth. Henry Zorn of Aurora, Ore., got the second and third prize sows at bargains and prices generally were not such as the high-class stock consigned should have brought. The sale was advertised but a short time and feed and labor conditions also affected prices.

Edward Coles of Haines, Ore., won the fine trophy silver cup offered by the Oregon Farmer for the champion carload of fat steers at the Pacific International. This makes the sixth time he has won grand championship on the steers he exhibited, so that it has become a habit with him. Mr. Coles sometimes buys, but is a breeder as well as a feeder. His steers are always high grade or pure bred Herefords or Shorthorns and he claims as much for good blood as for the art of feeding, of which he is such a master.

Wayne Dinsmore, secretary of the Percheron Society of America, has a wonderful motion picture film about completed. It tells the story of a lady whose husband was in the war and she decided to go into Percheron breeding. She visits the finest studs of Percherons in the world, sees the greatest mares and sires and Percheron geldings at work. Mr. Dinsmore will attend farmers' week at the Oregon Agricultural college and has promised to put on the film as a moving picture show.

George Connor of Albany, Ore., began official testing of his Jersey herd last spring, and now has 14 head on test. While Mr. Connor has not been situated to feed to the best advantage for milk production, his cows are generally doing very well, and he is fairly well satisfied with the records they are making. Mr. Connor has Nancy V. Figgis and Lily Gem Figgis, two good cows from the Charles Miller herd. Lily Gem has dropped nearly all heifers and five of her daughters are now in milk, so that Mr. Connor has almost a line bred herd on the female side. He is now using a son of Oxford You'll Do Jr. as herd sire. Some of his daughters are on test and are making good records.

Clyde Claggett of Salem, Ore., began his purebred pig experience last March, when he purchased a bred Chester White gilt from Ed Schoel for $40. By August Mr. Claggett had sold pigs to the amount of $77 and had the sow and two pigs left. The sow has eaten some waste, that cost nothing, besides about $25 worth of real feed. She will farrow again about the middle of January. Mr. Claggett feels that if he can clear money like this when he sells pigs at low prices there is money in purebred hogs. He now has a very fine boar, purchased from Archie Conley.

J. B. Stump and son of Monmouth, Ore., report themselves still well satisfied with what their registered Jerseys are doing on high priced feed. For the month of September 14 cows yielded them a check for cream and some whole milk sold for $247. Four of them were fresh in February, and, with the exception of four the others were fresh early in the spring. The principal feed has been oats and vetch silage and a little oil meal.

Mr. Stump also reports 13 horses sold during the year. This includes three pure bred Percheron mares to the O. A. C. In a short time all the college foundation stock will be Percherons from Mr. Stump's Fair Acres Farm.

Lathrop Brothers of Grants Pass, Ore., in the spring of 1914 purchased nine registered Ayrshire cows and a herd sire from Walter Domes of McCoy, Ore. Among them were Pauline Sebastian and Sadie Netherland, two fine show cows. Melba, another show cow, is now in the herd. Most of the calves have been heifers, and these young men, who, with their mother, are running a retail milk business at Grants Pass, now have 35 head, 32 of which are females. Lovelocks, one of the good cows, has milked 69 pounds daily for a month. In fact, the general output has been quite satisfactory, and they are well pleased with the Ayrshire breed and expect to go on and enlarge the herd. H. A.

Grand Champion Fat Steer.



The steer, California Manuel, shown above is the grand champion fat steer of the Pacific International Stock Show at Portland, Ore., November 18-24. He was shown by the University of California, and won in the strongest kind of competition. He is so perfect and so promising that the university held him over with the expectation of showing him next winter at the Chicago International. H. A.

Favor Irrigation District.

The returns from the Quilcene irrigation district No. 1 in Jefferson county election show a unanimous vote in favor of creating the district. This project includes about 1000 acres of land which will be greatly improved for agricultural purposes by irrigation.

Bargain Offer.

To The Washington Farmer: I am enclosing $1.00 (one dollar) for this bargain offer if I am not too late. I will say that I have read the Twice-a-Week for four years and I am satisfied with it. I always enjoy reading The Washington Farmer.

R. L. SHAW.
Curlew, Wash.

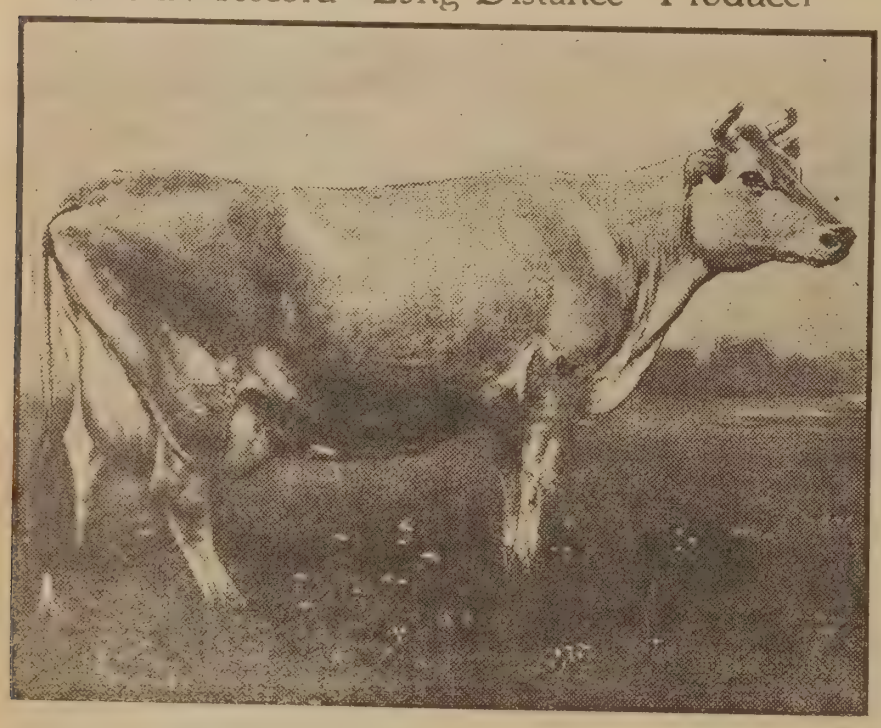
P. J. Ackerson, C. S. Morse and Mark Meyer were elected directors. These men expect to have water on the land in time to benefit next year's crop. County Agent McWhorter has been assisting the farmers in forming the new irrigation district.

Dairying in Cowlitz.

County Agriculturist Keyes of Cowlitz county believes that ultimately dairying will become one of the chief industries of that county. "Heretofore the production of hay has been one of the chief industries among the farmers here," said he, "but there are many dairymen and the soil, climate and geographical situation favor this business. The soil here is rich and productive and the important problem of feed production is answered more easily here than in some of the greatest dairy sections."

Mr. Keyes is a graduate of the State College of Washington, where he specialized in animal husbandry and agronomy. Last year he taught in the Kelso schools and when the emergency called for a county agent he was selected. His work appears to be successful there.

World's Record "Long Distance" Producer



Having just completed her seventh official record under Register of Merit rules, Sophie 19th of Hood Farm not only establishes a record for the Jersey breed, but for all breeds when cumulative production is taken into consideration.

In her thirteenth year she has made 15,948 pounds of milk and 1059 pounds of butter which, added to her six previous records, gives her a total production in her seven lactations of 91,869 pounds of milk, or over 45 tons, and 6600 pounds of butter, or more than three and a quarter tons. She became champion cow of the Jersey breed on completing her fifth lactation, when she made 17,557 pounds of milk and 999.1 pounds of fat. This record has never yet been equaled by any other cow of the breed.

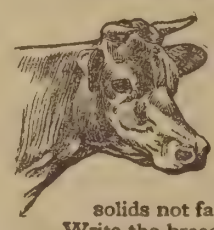
Besides being a champion herself, she has produced champions. One of her sons, Pogis 99th of Hood Farm, is the sire of 26 officially tested daughters, whose average production for one year is 620 pounds of butter. Two of these cows are champions in the 3-year-old and 4-year-old classes. At this age they have even surpassed the production of their granddam, Sophie 19th.

The following table gives Sophie's great records in the order made:

Milk	Fat	80% Butter	Age	
		Lbs.	Yrs.	Mos.
7050.2	395.9	494.8	2	2
9924.8	570.8	713.5	3	8
14373.2	854.8	1068.5	4	11
15099.4	931.9	1164.8	6	7
17557.8	999.1	1248.8	7	11
11915.4	680.5	850.6	9	7
15948.2	847.8	1059.8	11	9
91869.0	5280.8	6600.8		

Sophie 19th is still in good physical condition and she may yet contribute other records to supplement the great work that she has already done as standard bearer of the Jersey breed.

Jerseys for Net Profits



You're in the dairy business for profit—the *net* profit that your herd has made you at the end of the year will determine the size of your bank account. Jerseys yield the largest returns from every ounce of feed—proved by tests at two great expositions. Jersey milk averages 5.3% butter fat, 9.1% solids not fat—highest of all breeds. Buy a Jersey bull. Write the breeders advertised below for prices, pedigrees, etc.



The American Jersey Cattle Club, 314 West 23rd Street, New York City

Jersey Isle Stock Ranch

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castilian Lady 26628 made 603.3 lbs. fat (713.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.
C. E. LONG, Buhl, Idaho.

724 Pounds Butter

and 11,076 pounds milk is the record the dam of a bull calf dropped Sept. 1, 1917. The sire, Dominus, is out of an 817-lb. cow and sired by a bull out of an 853-lb. cow. PRICE $125 for quick sale.

J. B. STUMP & SON, Monmouth, Ore.

Every Cow a Record

Fifty per cent of our cows that have dropped more than one calf have records above 700 lbs. butter, 85 per cent fat. Golden Glow's Chief and Adelaide of Beechlands blood predominates. Special prices on bull calves under 9 months old.

LADD FARM. Oswego, Ore.

Green Meadows Farm Jerseys

Young bull out of dam on official test making good record. Sire a grandson of Goldon Glow's Chief, out of dam with official test of over 700 lbs. butter in a year. Other bull calves from register of merit dams. Also cows and heifers.
HENRY STEWART, Prop., Albany, Ore.

Ashwood Farm Jerseys

FOR SALE—BULL CALVES; sired by ST. MAWES OF ASHWOOD and out of daughters of HOLGER now making creditable Register of Merit records.

McARTHUR & STAUFF, Rickreall, Ore.

Waikiki Farm

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.
ROUTE 7, SPOKANE, WASH.

Mellow Lawn Jerseys

are promising to make a year's herd average of 700 lbs. butter, including every head from two to sixteen years old. Since June, 1916, none went under 612 lbs. butter. Junior champion bull calf at Oregon state fair, 1917, is our oldest male left for sale. Sired by our herd bull, Gertie's Poppy's St. Mawes.
F. A. DOERFLER, Silverton, Ore.

Who Wants This Bull?

18 months old, out of Kadia F., with world's 4-year-old milk record and 797 lbs. butter. By Engineer's Bluster, whose first daughter, Pride of Cedar Hill, made, on test, a record of 600 lbs. of butter as a senior yearling.

N. H. SMITH, R. F. D. 2,
Oregon City, Ore.

ASHBURN FARM
Register of Merit Jerseys

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.

J. M. DICKSON & SON, Shedd, Ore.

Oak Ridge Jersey Farm
Register of Merit Cattle

Twenty-nine years breeding Jersey cattle. Write us for prices and pedigrees. For information address
RILEY E. HULBURT, Albany, Ore.

Breeders' Department

SHORTHORN CATTLE

SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

R. E. BOYCE, Baker, Ore.

Hercules Shorthorns

For particulars write

DAY & ROTHROCK

Exchange Bank Bldg.

Spokane, Washington.

CEDARHURST FARM

SHORTHORNS.

Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

JOE TURNER, Meyers Falls, Wash.

H. H. Schildman

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.

Filer, Idaho.

JERSEY CATTLE

Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

Erickson Bros. Prop.

North Yakima, Wash.

914 Pounds of Butter

This is the official record for a year of the dam of a choice bull calf by Rosaire Olga Lad, sire of 29 tested daughters. He and others priced according to quality.

ED CARY, P. O., Carlton, Ore.

Station, LaFayette, Ore.

TWO YOUNG BULLS

Ready for service. Sire, a Ladd bull of Brown Bessie strain and out of good working cows.

RALPH BILLINGS, Ashland, Ore.

JERSEY BULL FOR SALE.

Year old, good individual, priced reasonable. Dam gave 45 to 50 lbs. of milk a day, test 4.8. Sire, Island bred.

MRS. J. F. PEFFER, Dayton, Ore.

GUERNSEY CATTLE

MIDDLEDALE FARMS GUERNSEYS.

Herd founded in 1904, May Rose breeding. Most all granddaughters of Jethro Bass (11366), son of Imp. King of the May. Have a few heifers, calves for sale. Goshen, Ore.

Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.

Redmond, Wash.

FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.

A. J. SINNES.

Route 5. Mt. Vernon, Wash.

ABERDEEN ANGUS

Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the breed.

At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

Congdon & Battles

Otto V. Battles, Mgr.
North Yakima, Wash.

SHEEP

OXFORD RAMS

Thirty choice Oxford ram lambs for sale. Prices reasonable.

FISK FARM, Spring Valley, Wash.

In writing advertisers, be sure to say that you saw their advertisement in this paper.

HOLSTEIN CATTLE

A Rare Opportunity

to secure some thoroughbred Holstein male calves, described as follows:

No. 1.—Born Feb. 19, '17. Sire, Segis Walker Hartog, No. 162423; dam, Buckeye Grace Morley, No. 99452.

No. 2.—Born Jan. 23, '17, Sire, Segis Walker Hartog, dam Naiad Jewel Netherland, No. 124102.

No. 3.—Born April 14, '17. Sire, Segis Walker Hartog, dam, Buckeye Grace Morley II. No. 248417.

No. 4.—Born Jan. 11, '17. Sire, Segis Walker Hartog, dam, Susie De Kol Pauline 3d. No. 245999.

No. 5.—Born Feb. 19, '17. Sire, Segis Walker Hartog, dam, Mary De Kol Stony Brook. No. 244816.

No. 6.—Born March 26, '17. Sire, Hazelwood Sir Ormsby, No. 148496, Dam, Queen Gerben Josephine Michtilda, No. 146519.

Application for registry for all the calves have been sent in. For further particulars, prices, etc., address The Intermountain Institute, or

E. A. PADDOCK, Pres., Weiser, Idaho.
R. F. D. 1.

Established 1887—100 in Herd.

REGISTERED HOLSTEIN CATTLE.

As I wish to reduce my herd I am offering the blood of such bulls as King Segis Pontiac, 13th, 30.39 lbs. breeding, 4.25 per cent fat; Iowana Rochdale Korndyke, 26 lb. breeding, and Prince Segis Korndyke De Kol, 31.41 lbs. breeding.

LAKE SIDE STOCK FARM.

P. A. FRAKES, Scappoose, Ore.

365-Day Holsteins

24,667 lbs. milk—1026 lbs. butter—is the s. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.

WESTERNWOLD RANCH.

Prineville, Ore.

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to

H. R. BOOMER, New Plymouth, Idaho.

Waterloo Holstein Farm

Holstein bull calves for sale.

Herd Sire—Prince Walker Pietertje	King Segius 10th Segius Walker Pietertje 2d

C. F. JENNESS, Meridian, Idaho.

World's Record Holsteins

Herd headed by Ononis Cornucopia Johanna Newman, the best bred son of the world's record cow, Margie Newman, with more 100-lb. records in his pedigree than any other bull in the world.

Home of the world's champion junior 2-year-old and junior 3-year-old producers. Write for records and prices on young bulls.

CHAS. ELDRIDGE, Chimacum, Wash.

LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

J. H. HULBERT, Mt. Vernon, Wash.

Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.

Holsteins and O. I. C. Hogs

For sale—Bulls and cows, good breeding, from tested dams. May gilts and boars ready for service, from show ancestors. Priced to sell.

E. C. SCHUMACHER, R. 1, Granger, Wash.

HOLSTEINS

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

BROWN SWISS CATTLE

Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

THEO. BRUGGER, Route 3, Gresham, Ore.

HEREFORD CATTLE

BULL RANCH

Registered Hereford cattle.

CHAS. BULL, Prop. Mabton, Wn.

DUROC-JERSEY SWINE

DUROC JERSEY

Gilts and Boars

I am booking orders for fall weanling pigs for October and November delivery. Can furnish them singly or in unrelated pairs or trios. Special prices to members of boys' and girls' pig clubs. An exceptional strain of Durocs, carrying the best blood lines found in the northwest. Have been prize winners wherever shown.

Chas. G. Sprong, Grandview, Wn.

DUROC GILTS

of May farrow. Sire and dam 1st prize winners. Priced right and satisfaction guaranteed.

CRESCENT STOCK FARM.

G. O. Swales. Johnson, Wash.

Five Choice March Boars

Of the Finnicum quality.
Also a few choice gilts to be bred in November.

J. E. FINNICUM, AMITY, ORE.

Young Boars and Gilts

Sired by Elizabeth's Perfection, grand champion Oregon State fair, 1917, and Orion's Top Col.

E. C. NAFTZGER, GERVAIS, ORE.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. YAKIMA, WASH.

AVONDALE STOCK FARM.

Colonel's Lad, the big type Duroc-Jersey boar that won first at Idaho state and four county fairs now for sale. Priced right.

H. C. POLLY, Route 3, Burley, Idaho.

HORSES

Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

A. R. HUNTER, Island City, Ore.

RABBITS

BARBER RABBITRY.

Pedigreed and registered Flemish and Checkered Giants. Bucks at stud. Stock for sale. Correspondence solicited.

MRS. R. W. BARBER, R. 4, Boise, Idaho.

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

POLAND CHINA SWINE

Locust Lawn Herd

Big Type Poland Chinas.

W. F. HOWARD & SONS, Parma, Idaho.

Pure-Bred Poland China Fall Gilts

will be shipped c. o. d., subject to your approval. Write to

HERBERT WILLARD. Dayton, Ore.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX. Lyons, Ore.

BERKSHIRE SWINE

BERKSHIRE HOGS

Gilts of any age, bred or open; can also furnish young boars, from the best of strains and prize winning parentage.

EARL WOOD, Silverton, Ore.

RIVERBY ORCHARD BERKSHIRES

won 12 out of 15 first prizes at the Washington State Fair, 1916. A few outstanding boars for sale at reasonable prices.

D. C. BUNN. Prosser, Wash.

HAMPSHIRE SWINE

Hampshire Boars and Gilts

2 young boars, also 2 gilts, either bred or open, at bargain prices to make room. Best bred line in northwest. Herd boar ready for sale about Jan. 1.

F. E. KINGSBURY, Malaga, Wash.

HAMPSHIRE SWINE

Choice stock of all ages at bargain prices.

HIGHLAND FARM, Box 22, Underwood, Wn.

YORKSHIRE SWINE

Spring Boars and Gilts

Gilts, bred or open, boars ready for service. Also weanling pigs. Best of breeding.

WM. NEUENSCHWANDER, Gaston, Ore.

CHESTER WHITE SWINE

BLUE RIBBON STOCK FARM

Prize winning Chester White hogs and Jersey cattle. Young stock for sale.

ED SCHOEL, Suver, Ore.

POULTRY

Rhode Island Reds and Whites

Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Now is the time to buy for next year's breeding, from blue ribbon stock. Sale of pedigreed Rufus Red Belgian hares. Bucks at $3 each. Registered Airdale bitch at a bargain if taken at once.

HIGHLAND FRUIT AND POULTRY RANCH.
J. NONNENMACHER.
R. F. D. 3. NORTH YAKIMA, WASH

White Holland Turkeys

Choice young toms, $10 00; hens, $7.00.

ALICE E. CARY, Carlton, Ore.

BATTEN'S S. C. REDS

I have 50 of the best cockerels that I have ever seen in one yard that I am offering at low prices, quality considered, in order to move them quickly to make room for younger stock. Prices range from $5 to $15 and can give you good selection if you will write me your wants. Can spare a few good pullets at $2.50 each. Let me hear from you.

E. F. BATTEN, HOOD RIVER, ORE.

Valley Junction Shorthorns

The grand champion bull, General Hampton 390583, at the head of the herd. Young bulls fit to head the best pure bred herds and others that will make impressive improvements on range herds. Priced according to quality.

W. W. GREEN & SONS, Union, Ore.



Imported and American Bred Percheron, Shire and Belgian Stallions

They are of the very best breeding obtainable and are guaranteed to be breeders. They will be sold at very reasonable prices.

If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to

WM. T. TRACY, Kennewick, Wash.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Dec. 17.—Mild weather accompanied by rural notices of larger consignments had a bearish effect today on corn. The close was unsettled but ⅜ to ⅝c net lower with January 120⅞ to 121 and May 118⅞. Oats also lost ⅜c to ⅝c. Provisions scored an advance of 25 cents to 70 cents.

Growing likelihood that the near future would witness a substantial accumulation of stocks dominated the corn market throughout the day. Arrivals over Sunday were liberal and complaints of car scarcity had noticeably diminished. Besides the quality of receipts showed steady improvement, the embargo on shipments eastward from Chicago remained unmodified and the visible supply total went up to a fair extent. Under such circumstances declines set in from the outset, no important rally took place, and what demand there was came almost entirely from local industries.

Oats, like corn, eased down as a result chiefly of better operating conditions for the railroads. Shutting off of exports inquiry, however, had an evident further depressing influence. Leading commission houses were conspicuous on the selling side.

Higher quotations on hogs gave strength to provisions. The fact, though, that exports for the week were much smaller than last year tended somewhat to check the upward course of the market.

Cash Quotations.

CHICAGO, Dec. 17.—Corn—No. 2 and 3, yellow, nominal; No. 4 yellow, $1.40@1.60.

Oats—No. 3 white, 75½@76½; standard, 76⅝@76¾c.

Rye—No. 2, $1.84. Barley, $1.40@1.62.

Timothy, $5@7.50. Clover, $20@26.

Pork, nominal. Lard, $24.37. Ribs, $23.75@24.50.

Chicago Futures.

	Open.	High.	Low.	Close.
Corn—				
Jan.	1.21¼	1.21¼	1.20⅝	1.20⅞
May	1.19	1.19¼	1.18½	1.18⅞
Oats—				
Dec.	.74⅞	.75¼	.74¾	.74½
May	.71⅝	.72	.71¼	.71½
Pork—				
Jan.	44.50	45.00	44.35	45.00
May		44.60	44.50	44.60
Lard—				
Jan.	23.62	23.80	23.42	23.80
May	23.90	24.12	23.72	24.10
Ribs—				
Jan.		23.65	23.37	23.65
May	24.00	24.12	23.80	24.10

Pacific Northwest Grain.

PORTLAND, Ore., Dec. 17.—Grain futures: Oats, January, $57.50 bid; barley, $55; brewing, $57.25. Sales, 200 tons January brewing barley at $57.50; 100 tons January brewing barley at $57.25; 100 tons December shorts at $38. Eastern oats and corn in bulk: Oats, No. 3 white, December, $53.50 No. 3 clipped white, $54; corn, No. 3 yellow, January, $59; No. 3 mixed, $58; oats, January No. 3, $53.50; clipped, $54.50; corn, February yellow, $57; mixed, $55.

San Francisco Grain.

SAN FRANCISCO, Dec. 17.—Barley—December, $2.75; May, $2.78¼.

Minneapolis Grain.

MINNEAPOLIS, Dec. 17.—Wheat receipts, 360 cars compared with 355 a year ago.

Corn—No. 3 yellow, $1.70@1.75.

Oats—No. 3 white, 73@74c.

Flax—$3.43@3.48.

Flour unchanged. In carload lots, fancy patents, $9.90; wood, first clears, $9.30; jute, seconds clears, $6; jute. Shipments, 56,588 barrels.

Barley—$1.28@1.55.

Rye—$1.82@1.83.

Bran—$40@40.50.

Seattle Wheat.

SEATTLE, Wash., Dec. 15.—Confusion between the state and federal grading and dockage rules that has prevailed all through the season was in a large measure cleared up at the conference this week between representative grain dealers and George Livingston, acting in charge of the federal bureau of markets.

The discussions centered principally around smutty wheat. Mr. Livingston said that 65c per ton and 1 per cent allowed by the state as dockage was a matter with which the federal department had nothing to do, and intimated that it would not be recognized. He declared that the government would take no part in monetary dockage or discounts.

It was brought out for the benefit of Mr. Livingston that the grain trade of the north Coast territory was very different from that of any other section. The "A" plan which provides that inspectors shall scour, clean and dock is now in force, and Puget sound dealers prefer option or rule "B," where smutty wheat is thrown on the market on sample, this putting the price up to buyer and seller in each instance, or for adjustment on the Merchants' exchange. There was a division of sentiment, however, between millers and other grain buyers as to rule "B," objectors claiming that the change would cause more thouble than is now being experienced.

There was considerable argument and discussion from the floor as to the fundamental desire of millers, for the good of all concerned, for a uniform grading law. It is feared that on commercial wheat, if the state dockage is allowed, Minneapolis and other eastern buyers will decline to confirm sales with such conditions and serious disputes and hindrances to the easy flow of grain when peace is restored will follow.

Mr. Livingston complimented Washington grain men on their cooperation with the government's plan for grading and conservation, but made it clear that grades are now being fixed for peace as well as war conditions.

Live Stock Quotations.

At Omaha.

OMAHA, Neb., Dec. 17.—Hogs—Receipts, 7000; market 15 to 25c lower. Heavy, $15.90@16.20; mixed, $16@16.10; light, $15.85@16.20; pigs, $10@16.50; bulk of sales, $16@16.10.

Cattle—Receipts, 7800; market steady to lower. Native steers, $9@13; cows and heifers, $6.50@10; western steers, $7.50@11.25; Texas steers, $7@10.50; cows and heifers, $6@9; canners, $5.25@6; stockers and feeders, $6@11; calves, $9.50@12.50; bulls, stags, etc., $6@8.50.

Sheep—Receipts, 2000; market steady to stronger. Yearlings, $11.50@13.25; wethers, $11@12.50; ewes, $9.50@11.25; lambs, $14.50@16.25.

At Chicago.

CHICAGO, Dec. 17.—Hogs—Receipts, 32,000; firm. Bulk, $15.75@16.25; light, $15.30@16.10; mixed, $15.65@16.40; heavy, $15.65@16.40; rough, $15.65@15.80; pigs, $11@13.50.

Cattle—Receipts, 15,000; firm. Native steers, $7.25@14.40; western steers, $6.35@12.90; stockers and feeders, $6.25@10.35; cows and heifers, $5@11.10; calves, $9@16.25.

Sheep—Receipts, 12,000; firm. Wethers, $8.90@13; lambs, $12.50@16.80.

At Portland.

PORTLAND, Ore., Dec. 17.—Cattle—Higher; receipts, 889. Medium to choice steers, $9.35@10; good to medium steers, $8.50@9.40; common to good steers, $7@8.15; choice cows and heifers, $6.75@7.60; common to good cows and heifers, $5.50@7; canners, $3@5.50; bulls, $4.50@6.75; calves, $7@9.50; stocker and feeder steers, $6@7.85.

Hogs—Lower; receipts, 3150. Prime light, $15.65@15.80; prime heavy, $15.70@16; pigs, $13.75@15; bulk, $15.75.

Sheep—Steady; receipts 1715. Western lambs, $13@13.50; valley lambs, $12.50@13; yearlings, $12@12.50; wethers, $1.75@12.25; ewes, $8@10.

Portland market on shorn sheep 2½ to 3 cents under quotation.

Spokane Stockyards, Monday.

Hogs—Receipts, 249; market weak to 25 cents lower. Prime light, $15.35@15.50; prime heavy, $15.35@15.50; pigs, $13.50@14.50; stockers and feeders, $11.50@12.25; bulk of sales, $15.35@15.50.

Cattle—Receipts, 293; market steady. Prime beef steers, $9.50@10.25; good steers, $8.50@9.25; common to good steers, $7@8.25; best beef cows, $8@9; good cows, $7@7.75; ordinary to good, $5.50@6.75; canners, $3@5.25; best beef heifers, $8@9; bulls, $5@6.75; calves, $6.50@8.50; stocker and feeder steers, $5@7.50.

Sheep—Receipts, none; market steady. Prime lambs, $13.25@14; good lambs, $12@12.75; prime yearlings, $11.50@12.25; prime wethers, $11.25@12; best mutton ewes, $8@10.

Portland Wheat.

PORTLAND, Ore., Dec. 15.— Steps are being taken to increase greatly the manufacture of barley flour in the northwest for bakers' use. In California, according to advices to local dealers, about half of the trading in choice barley now is for millers' account. This is given as the reason for the greater strength of the barley market, which in turn is afefcting the oats market. The demand for the feed grains has not been checked by the advance. Millfeed is also in stronger demand because of its relative cheapness. Bran and shorts list prices are not changed by millers, but feed is bringing more money in the outside market, as shown by the sale of two cars of December bran at the merchants' exchange at the close of the week at $35.50. The best rolled barley and rolled oats are now worth $62.

Hay prices are on a strong basis and dealers do not look for any declines during the winter.

Decline in Hides.

SEATTLE, Wash., Dec. 15.—Hide prices beginning Monday will decline 2@3 per cent. Buyers of this city were notified today on urgent telegraphic advices from their eastern connections, that the hide situation of the United States was in the midst of a startling slump.

The market has been unsettled for some time, but dealers expected a rally in view of the evident need of the allies for army footwear. The repudiation of contracts by the present tentative government of Russia, however, resulted in widespread cancellation by American manufacturers of orders for that country, and thousands of case lots of shoes will be held in the United States and thrown as a surplus on the American market. Radical reformation of the prices of spring footwear are predicted by hide dealers.

Seattle Market.

SEATTLE, Wash., Dec. 15.—Jobbers are pushing the sale of potatoes for the week end, with the idea in mind of assisting growers to dispose of their crop at as early a date as possible. It is pointed out that selling levels at $1.25@1.35 for Puget Sound and $1.50@1.60 for Yakima gems, all run to No. 1, is the minimum price for this season and is now within the reach of all consumers.

The apple trade is expected to be brisk all season. Stocks of fancy and extra fancy on Western avenue will hold out until February, when local buyers must again go on the market of eastern Washington for their supply, a much earlier date than usual. The demand for oranges persists, notwithstanding the high costs, as there is a fixed percentage of the trade that can be depended upon to absorb this fruit even at extremely loft prices, but the bulk of the buying is switching slowly to apples, and it is expected that the movement will be unusually heavy. Jumple packs held in warm storage must be cleaned up before brisk selling of fancy and extra fancy sets in, but the outlook is bright because of the widening distance between apples and oranges as competitors for the mid-winter popularity. The best grade of navel oranges is now within 50 cents of Florida grapefruit, and the citrus division is destined to play an unusual part in the fruit trade this winter.

The fresh ranch egg market is weak and wholly unsettled. There are sales today at both 53 and 54 cents, with a strong outlook for a more serious break next week.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed on a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle;

Eggs—Local, 47@48c per dozen; pullets, 40c dozen.

Poultry—Live hens, fat, over 4 lbs, 21@22c per lb.; 4 lbs. and under, 18@19c; old roosters, 15c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 15c per lb.; spring chickens, life, fat, 20c per lb.; hens and young tom turkeys, dressed 28@29c per lb.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.; heifers, 6@8c per lb.

Hogs—Light, 16@18c per lb.; heavy, 12@13c per lb.

Veal—Fancy, light, 14@16c per lb.; heavy, 9@13c per lb.

Hides—Salted, 16c per lb.; flint-dry hides, 30@31c per lb.; salt kip, 16c per lb.; green hides, 13c per lb.; green calf, 25c per lb.; dry calf (under 5 lbs.), 34c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 10c per lb.; dry full wool sheep pelts, 42@46c per lb.; salt bulls, 13c per lb.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $1.50 cwt.; sweet potatoes, $4.25.

Apples—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, $1.85@$2.25; Winter Bananas, $2 box; Jonathans, $1.25@1.60 box; Wageners, $1.25 box; Rome Beauties, $1.25@1.60 box; Spitzenburgs, $2 box; King Davids, $1.25@1.35 box; Grimes Golden, $1.35@1.65 box; Staymen Winesaps, $1.75@2 box.

Butter—Blanchard cartons, 49c lb; Medo-Maid, 49c lb; Cascade, 45c lb; Gold Leaf, 49c lb; Better Butter, 45c lb; Attalia, 49c lb; Diadem, 49c lb; Hazelwood, 49c lb; Solid Pack, 48@49c lb; Jersey Belle, 47c lb; Peerless, 45@46c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 32@33c lb; brick cheese, 33@35c lb; domestic Swiss 38c lb; Young Americas, 27c lb.

Eggs—White filler, guaranteed, $13 case; selected storage, $12.

Live Poultry—Hens, 13@16c lb; broilers, 18c lb; old roosters, 9c lb; ducks, 15c lb; geese, 12c lb; turkeys, 22@25c lb; local turkeys to retailer, 32c lb.

Dressed Poultry—Hens, 18c lb; broilers, 20@21c lb; old roosters, 11c lb; ducks, 17c lb; geese, 14c lb; turkeys, 27c lb.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 15c; salted cured, 17c; green bulls and stags, 12c; salted cured, 15c; kip, 15 lbs. to 25 lbs., 20c; calf skins up to 15 lbs, 28c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 1 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

Portland Market.

PORTLAND, Ore., Dec. 15.—All signs point to a firm Christmas turkey market at about 30 cents wholesale. There is a good market right now for live poultry of all kinds. Fat live geese have sold up to 18 cents, the highest priece ever known here.

Country dressed pork has been weak, because of the reduced call from the Sound, but veal is still in good demand.

A broader inquiry for eggs has checked the decline in ranch prices, but storage stock is still easy. Receipts of fresh eggs increasing slowly, but are moved without trouble.

There is a firmer feeling in the potato market, but buying prices have not been advanced, shippers paying $1.20@1.25 for fancy and $1 to $1.10 for ordinary stock. Sales for shipment armade with less difficulty, though cars continued hard to get. The trade believes the improvement is only temporary, due to the smaller amount of stock rolling. In view of the immense quantity of potatoes still unconsigned, they look for a much lower market during the late winter months.

The butter market is very firm with all grades scarce. There is a food administration campaign on to increase the use of cheese, but stocks in storage are so heavy that it has not helped prices.

The hide market is very weak and another drop in prices is looked for soon. Green and salted hides are quoted at 16 cents and calfskins at 22 cents.

In the following list of quotations the grain, hay, mill feed, hop, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $57.50 per ton.

Millstuffs—Bran, $33 per ton; shorts, $36.

Barley—No. 1 feed, $55; brewing, $56.25; rolled, $61@62.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $24; grain $24.

Eggs—Oregon ranch, case counts, 48c per dozen; candled, 50@55c.

Poultry—Hens, 18@20c; ducks, 20c; turkeys, live, 20@22c; geese, 14@18c.

Butter—City creamery, prints, 45@49c per pound; cubes, extras, 45½c.

Cheese — Tillamook triplets, 23c; Young Americas, 24c.

Dressed meats—Veal, 15 1-2@16c; pork, 17 1-2@18c.

Hops—1916, 14@15c; 1917 crop, 16@20c.

Potatoes—Oregon, buying price, $1@1.25 per hundred.

Wool—Eastern Oregon, 50@60c; valley, 55@60c.

Beans—Buying prices: Oregon white, 9@9 1-2c; colored, 8@9c.

Butter and Eggs.

PORTLAND, Ore., Dec. 15.—Butter—Prints, extras, 46@49c; cubes, extras, 45½c; prime firsts, 45c; dairy, 32½c.

Butter fat, Portland delivery, No. 1 sour cream, 52@53c.

SAN FRANCISCO, Dec. 15.—Butter, fresh extra, 46c.

Eggs—Fresh extras, 55c; fresh extra pullets, 49c.

CHICAGO, Dec. 15.—Butter, higher; creamery, 38@49c.

Eggs, higher; receipts, 3365 cases. Firsts, 51@52½c; ordinary firsts, 44@48c; at mark, cases included, 44@50c.

HIDES

Send hides to us for highest cash market price. Check by return mail.

References, any bank in Seattle.

North Coast Tanning Co.

Ballard Station, Seattle.



Highest Market Prices Paid

for hides and prompt returns made same day shipment arrives. Write for price list and shipping tags. Address

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-9 Railroad Ave., Spokane, Wash.

HIDES

WOOL, PELTS, MOHAIR, CASCARA BARK

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

THE H. F. NORTON CO.

53-55 No. Front St., PORTLAND, ORE.
206 3d Ave. So., SEATTLE, WASH.

THE BARRIER

(Continued from page twenty-seven.)

must tell you. I've thought it over, and you've got to listen, Necia."

"I am listening," she answered, very quietly.

"Understand me, I'm not whining and I'm willing to take my medicine. I couldn't talk or think very straight this afternoon, but you were wrong."

"Yes, I know now, I was wrong. It was most unlady-like, wasn't it? But you see, I am only a little savage."

"I don't mean that; I mean you were wrong when you said I had played with you. In the sight of God, I swear you were mistaken. You have made me love you, Necia. Can't you see?"

She made no sign.

"If you can't, I owe it to you and to myself to set you right. I am not ashamed to acknowledge my love, and even when you are married to Poleon I want you to know that I shall love you always."

Even yet she made no sign. Was he not merely repeating the same empty words with which he had so often beguiled her? There was no word of marriage; he still considered her unworthy, beneath him. The pain of it caused the girl to wince suddenly, and her sensitive face flinched, seeing which he broke out:

"You do love me, Necia—you do. I see it in your eyes!" And he started toward her with open arms, but she shrank away from him.

"No, no! Don't touch me!" she almost screamed.

"My dear one," he breathed, "you must listen to me. You have nothing to fear, for I love you—love you—love you! You were made for me! You'll be my wife. Yes; you'll be married on Sunday, but to me, not to Poleon or any other man!"

Did she hear aright? Was he, her soldier lover, asking her, the Indian girl——?

"You do love me, don't you?" he pleaded. But still she could not speak, and he tried to read the answer in her swimming eyes.

"You mean—you want to—marry me?" she murmured, at last, hesitating shyly at the word that had come to play so momentous a part in her little world.

"Indeed I do!" he declared with emphasis. "In spite of everything, anything. Nothing else matters."

"Nothing?"

"Nothing! I'll quit the army. I'll give up the service, and my people, too. I'll put everything back of me, and we'll start out anew—just you and I."

"Wait a moment," she said, retreating a little from his eager, outstretched arms. "Why do you need to do all that?"

"Never mind why, it's as good as done. You wouldn't understand—"

"But I think I do understand now. Do I really mean all that to you?"

"Yes, and more!"

"Would you really have to give up your family—your sister? Would those people you are so proud of and who are so proud of you—would they cut you off?"

"There is no question of cutting off. I have no inheritance coming. I don't want any. I don't want anything except you, dear."

"Won't you tell me?" she persisted. "You see, I am dull at these things."

"Well, what if they do?" he conceded. "You more than make it up to me—you outweigh a thousand families.'

"And would your marriage to a—a—to me destroy your army career?"

"Well, it will really be much easier for both of us if I resign from the service," he finally admitted. "In fact, I've decided to do so at once."

"No, no! You mustn't do that. Tonight you think I am worth the price, but a day will come—"

He leaned forward and caught her hands in his.

"—Meade, I can't let you do it."

"I'd like to see you help yourself," he said, banteringly.

"I can and I will. You must not marry me, Meade—it's not right—it can't be." She suddenly realized what this renunciation would mean, and began to shiver. To think of losing him now, after he had come to her freely—it would be very hard! But to her, too, there had come the revelation that love means sacrifice, and she knew now that she loved her soldier too well to let her shadow darken his bright future, too well to ruin him.

"It will be over before you know it," she heard him saying, in a lame attempt at levity. "Father Barnum is an expert, and the operation won't occupy him 10 minutes."

"Meade, you must listen to me now," she said, so earnestly that it sobered him. "Do you think a girl could be happy if she knew a good man had spoiled his life for her? I would rather die now than let you do such a thing. I couldn't bear to see myself a drag on you. Oh, I know it would be wonderful, this happiness of ours, for a time, and then—" She was finding it more and more dificult to continue. "A prisoner grows to hate the chains that bind him—when that day came for you, I should hate myself. No, no! Believe me, it can't be. You're not of my people, and I'm not of yours."

At that moment they heard the voices of the trader and his squaw outside, approaching the house. The girl's breath caught in her throat, she flung herself recklessly, upon her lover's breast and threw her arms around his neck in an agony of farewell.

"Meade! Meade! my soldier!" she sobbed, "Kiss me goodby for the last time!"

"No," he said, roughly.

But she dragged his face down to her burning lips.

"Now you must go," she said, tearing herself away, "and for my sake, don't see me again."

"I will! I will! I'll ask your father for you tonight."

"No, no! Don't, please don't! Wait til—till tomorrow—till I say the word! Promise me! On your love, promise!"

Her eyes held such a painful entreaty that he nodded acquiescence as the door opened and her father and Alluna entered.

(To be continued.)

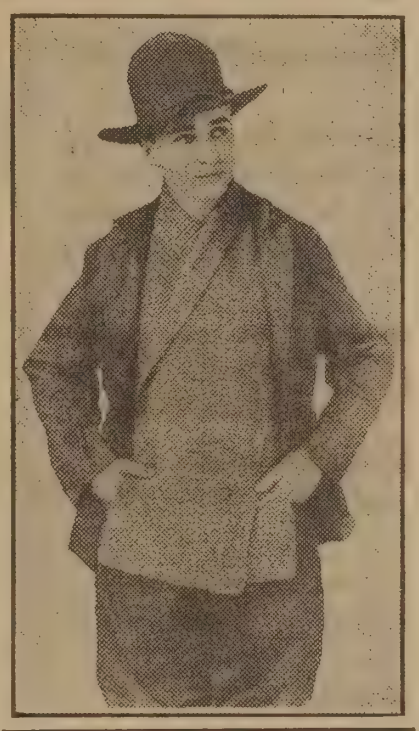
Red Cross Knitting

(Continued from page twenty-six.)

Muffler.

Two banks of yarn (½ lb.); 1 pair Red Cross needles No. 3.

Cast on 50 stitches or 11 inches. Plain knitting for 68 inches.



Want Ads

HELP WANTED—MALE 3

WANTED—DAIRYMAN; MUST BE EXperienced in feeding and milking test cows, milked three times daily; must be clean with separator and barn and give good recommendations; wages $75 per mo. and board. F. A. Doerfler, Silverton, Ore.

SOLICITORS—WANTED 12

SALESMEN WANTED—OWING TO CONditions brought about by the war, we have a few well-worked territories open and will be pleased to hear from interested persons. Applicant must be exempt from draft. McConnon & Company, Dept. J. Winona, Minn.

EDUCATIONAL 45

POSITIONS GUARANTEED GRADUATES Of BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog Free.

MISCELLANEOUS—FOR SALE 60

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

10-LB. PAIL SALTED BLACK COD BELlies, the best part of the fish. Within 300 miles of Seattle, $1.50 by parcel post.
SUPERIOR FISH CO.,
SEATTLE, WASH.

TRAP COYOTES—IF YOU WANT TO learn of a sure system for trapping coyotes write me for information. I have it. C. L. Willis, Dillard, Ore.

Want Ads

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

Send for card giving lower rates for ads running one month or longer.

MISCELLANEOUS—FOR SALE 60
Continued.

SASH AND DOORS.

Kitchen cupboards, 4 ft. 6 in. wide, 7 ft. high; two glass doors and three long adjustable shelves in the upper part; three drawers, one flour bin, one sugar bin, mixing board, and a cupboard for pots and pans, with panel door in lower part; price $35 set up, or $25 knock down.

6 cross panel doors	$1.92
Cottage front doors	3.50
Two light windows	1.24
Spruce flour bins	1.75
Prepared roofing	1.35

Our large illustrated catalog No. 27, sent, postpaid, without charge, on request. Sell any one, ship anywhere, and guarantee safe delivery.

The largest factory in the west selling direct to consumer.

O. B. WILLIAMS CO.
1943 FIRST AVE., SO. SEATTLE, WASH.

SALT FISH.

We sell it by the carload or in a pail. Fish is about the cheapest and best food you can get. Buy it now. Write for price list.

SUPERIOR FISH CO.,
SEATTLE, WASH.

MISCELLANEOUS WANTED 63

POULTRY WANTED.

We want live poultry, dressed meats, hides and potatoes. We solicit your cream shipments. Write for prices. Commercial Creamery Company, Spokane, Wash.

AUCTIONEERS 75

N. R. SHEPHERD, FARM AND LIVE stock auctioneer, Troy, Idaho.

MACHINERY FOR SALE. 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS,
Carried in Stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave. So., Seattle. Write for Catalog.

STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

PATENTS 150

WRITE FOR HOW TO OBTAIN A PATent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174

BOUGHT JOB LOT OF ESSEX INCUBAtors cheap; are using large ones in our hatchery, but will sell small ones at less than cost. 70-egg size, $5; 120-egg size, $7.50; 200-egg size, $10; 175-egg size, hard wood and fully guaranteed, $15. Deposit $2.50 on any one of these and pay balance by March 1. Catalog for famous Queen incubator and brooder stoves and day old chix free. Send for one. Queen Hatchery, 89 Pike st., Seattle, Wash.

TURKEYS.

Bourbon Red, White Holland, Bronze. Old males, $12 to $18; old hens, $8; young toms, $10 to $11; young females, $7. Very choice. Stock very scarce. Order early. Mrs. B. Hocking, Guasti, Calif., winner of firsts and champions, world's fair, San Francisco.

SEVERAL VARIETIES.

Eggs for hatching—Muscovy (quackless) duck, $1.50 per dozen. Houdan, Black Minorca, Rhode Island Red, $2 per 13. Parcel post, prepaid. No incubator lots. Mrs. B. Hocking, Guasti, Calif.

FOR SALE—MAMMOTH BRONZE TURkeys. Won five prizes at Wash. State Fair. Toms, $7 and $10; hens, $5. H. T. Cutler, Parker, Wash.

S. C. W. LEGHORNS AND R. I. RED COCKerels, hens and pullets; heavy-laying strains. Mrs. Rominger, Underwood, Wash.

PURE MAMMOTH BRONZE TURKEYS. Mrs. F. Browning, R. 1, Caldwell, Idaho.

LIVE STOCK 177

RED CLOVER BIG TYPE POLANDS—Mouw, Fesenmeyer, Miller and Herring strains—spring pigs, both sexes, with quality, for sale. Never before could you raise or buy grain and make as much money feeding good hogs as now. Write your wants. Inspection solicited. H. J. Howser, Stites, Idaho.

FOR SALE—GOOD BLOCKY WORK horses and mares; young, sound, gentle, and well broken; weight from 1100 to 1500; ages 3 to 9 yrs. E. H. Wallace, Box 202, Harrington, Wash.

FOR SALE—A PUREBRED IMPORTED SHIRE stallion, 7 years old; descendant of the famous Forest King. Stephen Evans, Hartline, Wash.

WILL TRADE REGISTERED BERKSHIRE sows or gilts for car of bright alfalfa hay. SILVER BIRCH FARMS, Newport, Wn.

FOR SALE—REGISTERED PERCHERON mares and stallions. Green Meadow ranch, Route No. 3, Boise, Idaho.

FOR SALE—1000 CATTLE, 5000 SHEEP in lots to suit. Coffin Bros., North Yakima, Wash.

POLAND CHINA HOGS FROM PRIZEwinner stock. Chas. Yockey, Troy, Idaho.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

HAY FOR SALE 200

50 TONS MIXED HAY FOR SALE, AT $11 per ton. Write or call M. Peterson, Kilgore, Ida.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TANNERS 425

HIGH-GRADE ROBES FROM YOUR horse and cow hides. Send for catalogue. John T. Little Hdw. Co., Spokane, Wash.

TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

MONUMENTS 510

GET MY PRICES ON MONUMENTS BEfore placing your order. I can save you money. Geo. H. Moody, Moscow, Idaho.

PLUMBING and HEATING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

FOR SALE—16,500 LBS. PEA SEED, AT 6c, f. o. b. cars Fairbanks, S. & I. E. R. R. T. H. Howard, Oakesdale, Wash.

FARM LANDS—FOR SALE 651

$75 AN ACRE
BUYS 10 ACRES OR MORE
of our Famous
THURSTON COUNTY
MEADOW LANDS.

The Governor Stevens' old homestead, just opened to settlement, in small farms, on easy monthly payments; located at Belmore, Thurston county, Wash., on Northern Pacific road, 5 miles from Olympia, and only 20 miles from big army post that buys immense quantities of farm produce at good prices.

The soil is red clay loam and black beaver bottom of exceptional fertility; will produce big crops of all grains, grasses, vegetables and fruits common to this mild climate. Excellent hog raising, fruit and truck gardening district.

The advantages include daily rural mail delivery, free bus service for school children; good daily train service, with station almost on the land; good roads; running stream crossing many tracts, and fine fresh water lake nearby.

Write at once for particulars; number of tracts is limited.

A. H. REID & CO.
New York Block, Seattle, Wash.

GOING — IRRIGATED ALFALFA AND stock ranch of 111 acres; gross income $6000; situated on the bank of the Yakima river; ideal for all kinds of stock; properly cultivated, will raise 100 bu. corn and 10 tons of potatoes to the acre. Horses, cows, registered $1000 Holstein bull, Berkshire hogs, chickens, farm implements, etc.; eight-room house, barn, silo, hog and chicken houses. This ranch is second to none in the Yakima valley. Reason for selling, old age. Price for all $28,000; one-half cash. Address B 7, care Washington Farmer, Spokane.

BIG CUT IN PRICE OF FARM LAND. In the best agricultural part of Snohomish county. $25 to $35 per acre; 10 yearly payments; railways, mills, factories, plenty of labor. The best proposition on the market for the man who wants a farm. Send for illustrated literature. Brownell Land Co., 904 Third ave., Seattle, Wash.

FOR SALE BY OWNER—¼ SECTION OF choice, improved stock and hay farm in Stevens county, joining any amount of outside range; plenty of water; good roads; live stock and farm equipment with place. $14,000. Easy terms. Address B 8, Washington Farmer, Spokane, Wash.

HEAD FOR THE HEADWATERS OF the old Missouri; splendid grain and stock ranches. For information about climate and soil write Chamber of Commerce, Three Forks, Montana.

GOOD 80-A. FARM OFFERED CHEAP; low interest, easy terms. For detailed information write (aged owner), August Storme, R 1, Marysville, Wash.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Lum Land Co., North Yakima, Wash.

A REAL STOCK RANCH; FINE LAY land; buildings, springs and outside range. J. R. White, Enterprise, Ore.

FOR LANDS IN HEART OF THE Palouse write H. A. Malsed, Palouse, Wash.

GOVERNMENT LAND IN CAL. FREE book. Joseph Clark, Sacramento, Cal.

FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wis.

FARM LANDS—Wanted to Rent 660

WANTED—TO RENT, IN YAKIMA COUNty or Benton, 160 acres or more, on share. T. T. Taylor, Rainier, Wn.

GIANT POWDERS
Lift them out



It will pay you to test Giant Farm Powders in competition with any other stumping powder.

In the last year more than 2,000,000 pounds of these Giant Powders were used for stump blasting in Washington and Oregon alone. The users included farmers in every county in both states, the largest lumber and development companies, and the United States Government. They use the Giant brands because they have found that

GIANT FARM POWDERS
STUMPING — AGRICULTURAL

always give satisfaction and do their work at the lowest possible cost and in the most thorough manner.

In the Pacific Coast states the farmers require explosives that will disrupt, crack, split and heave the stumps and at the same time lift and loosen the roots for easy handling. Giant Farm Powders do this because they are made especially to suit western conditions. Because of their wider-spread force, they remove the stumps more economically than powders or dynamites that merely shatter and pulverize.

Test one case. Compare it with any explosive that you have ever used for stump blasting. After you have blasted a dozen stumps you will understand why farmers who have once used them always continue to use the Giant Farm Powders. Fill out and mail the coupon at the right, and we shall arrange with our nearest distributor to supply you promptly at the lowest market price.

There are two Giant Farm Powders—Giant Stumping Powder, used for blasting in wet soil, and Eureka Stumping Powder (which costs a little less) for blasting in dry soil. Both resist cold to a remarkable extent, seven days' exposure to a temperature of 32 degrees failing to freeze them. Ask your dealer for these brands.

THE GIANT POWDER CO., CONSOLIDATED HOME OFFICE: SAN FRANCISCO ESTABLISHED 1866

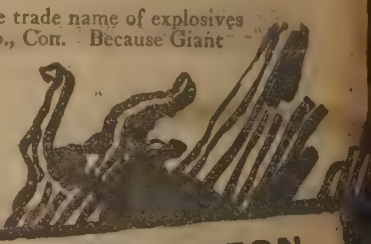
"Everything for Blasting"

BRANCH OFFICES: Seattle, Spokane, Portland, Salt Lake City, Denver

Have You Our Stump Book?

It is the most helpful and interesting book ever issued on Stump Blasting. It tells and shows how to save money and make land-clearing easier. It is written by Western men, from the Western viewpoint, and is full of pictures showing latest methods of blasting. Mark and mail the coupon and get it free. Other books—on boulder blasting, tree planting, ditching and subsoiling with explosives—also free on request. Mail the coupon *now*, before you lay this aside.

Warning. Giant Powder is the trade name of explosives manufactured by the Giant Powder Co., Con. Because Giant Powders are best known everywhere, many have assumed that all high explosives are Giant Powders. Insist upon having the genuine, made only by the Giant Powder Co., Con. If your dealer has only ordinary dynamite, write us and we will see that you get the genuine.



FREE BOOK COUPON

The Giant Powder Co., Con.
San Francisco.

Send me your illustrated books on the subjects which I have marked X.

☐ Stump Blasting ☐ Tree Planting
☐ Boulder Blasting ☐ Ditch Blasting
☐ Subsoil Blasting 203

Trial Order Blank
(Kindly fill out if ready to purchase)
Have your nearest distributor supply me with

.....lbs. Giant Stumping Powder
.....lbs. Eureka Stumping Powder

NAME .....
ADDRESS .....
Write below your dealer's name.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XL. NO. 52. DECEMBER 27, 1917. ** WEEKLY.

Peas Prove Their Value in Three Directions

Figures Show Land Improvement, Profit From Marketing and From Hogs as By-Product

By J. R. SHINN, Spokane County Agent

During the last few years I have been interested in seeing what the results might be on the farms in Spokane county, where pea growing has been carried on extensively among the farmers. There has been one great difficulty in getting proper tests made of the benefits of the pea crop upon the soil, owing to the fact that farmers have generally found pea growing so remunerative that instead of planting a grain crop on the land following peas they have followed peas with peas.

We have therefore been anxiously awaiting an opportunity to test the yield of grain crops following peas, especially when undertaken in a large way. Previous to this year some very outstanding results in favor of inoculated pea land over land previously summer fallowed or on which wheat had grown before, have been secured.

W. A. Flinner, near Spangle, secured 31,400 pounds of wheat from 29 acres of summer fallow, while from the 38 acres which were in peas the previous season he secured 63,923 pounds of wheat. In other words, he received a yield of 18

Continued on page five.

The Tractor Can Operate on Hillside as Well as Teams Can, if the Kodak Tells the Truth



The photograph above shows a tractor plowing on the farm of J. Martin Grein near Cheney, Wash. Edwin Rush, the engineer, who operated the outfit, plows and all, figures the actual cost of plowing at 72 cents an acre, not counting the original tractor cost nor depreciation. He used 27 gallons of distillate a day, averaging 16 acres in eight hours during the season.

"America's One and Only Great Business Today Is War." Read Article on Page 3 and Act.

Better Outlook Than Year Ago?

Warm Season Gives Wheat a Chance in Spite of a Poor Prospect Early in the Fall; Outlook May Be Better Than Year Ago.



BICKLETON, Klickitat County, Wash., Dec. 10.—The long dry spell was broken at last in November when we had several fine rains. The ground is now wet down six or seven inches. Some fall grain that was sown in the dust is now up in sight, and that which was sown after the rains has sprouted in the ground, but is not in sight yet. It is freezing night and is hardly warm enough for it to grow much. Take it altogether the outlook is more encouraging now than a year ago at this time for winter wheat to make a stand, as it generally grows some during the winter under the snow. Many are now plowing on account of reseeding this spring and many only sowed part of their summerfallow to fall grain and saved the rest for spring grain. The small grass that grows in the scab lands and among the bunch grass is now nice and green and stock is doing well. This is a big saving to the sheepmen as last fall there was no green grass and they spent thousands of dollars feeding their sheep on dry ground.

BERT H. FAULKNER.

Regulate Machinery, Too.

EPHRATA, Grant County, Wash., Dec. 13.—When the government set the price on wheat there was considerable disappointment on the part of the farmers at the price paid. However, after the price was raised, making the Coast as the terminal market, gradually the dissatisfaction has decreased. They are especially pleased because the government has stopped speculation in wheat, and hope that it continues this policy. They believe, also, that if the government regulates one commodity they should regulate other things, especially farm machinery. They feel that, owing to the fact that the price of wheat is regulated, so should the price of farm machinery be regulated. Live stock has been able to make its living on the range so far this year, as there has been very little or no snow at all—not enough, at least, to affect the grass on the range. Unless it comes an exceptionally hard winter, I believe the farmers in this county are prepared to feed their stock throughout the winter. Very little hay is offered for sale, as people that have any for sale have already sold, and very little is to be offered yet, except, perhaps, in the spring, when they may find they have a small surplus to sell. The farmers are all experiencing a great difficulty in getting shorts and bran and other mill feed, and no one seems to know the reason why mill feed can not be secured, but, with the amount of milling that will be done, it seems that some effort should be put forth by the food administration so that mill feed could be secured easier. Many farmers are feeding hogs who find it necessary to feed wheat. They do not like to do this, because the government is asking that wheat be conserved. They would very gladly use mill feed if it could be secured, but they have the stock on hand and can not get mill feed, so it is absolutely necessary that they have wheat fed to the hogs. The labor situation for next year does not look very encouraging. As this is almost strictly a rural county, the largest percentage of the boys drafted have been taken from the farms. It looks as if the labor situation would be a serious problem to overcome. Practically all of these boys are used to handling all kinds of farm machinery and a large number of horses, and it takes a person well experienced in farm work to do the work on one of the large wheat farms. Many of the farmers have thought it would be a good plan to have the schools in session six days a week, so the farm boys who are going to school would be out early enough in the spring to help put in the crops.

H. W. REAUGH.

Pasture Saves Hay.

CHEHALIS, Lewis County, Wash., Dec. 8.—It is rather early to say what effect the partial price regulation by the government of things bought and sold by the farmers will have. The people are taking the movement kindly, believing it to be a necessary war measure, and are waiting for developments. Merchants are taking advantage of the opportunity to regulate the abuse so common of delivery of small quantities of merchandise at any hour anywhere. In some cases grocers are quitting the delivery business or charging extra for the service, and all of them are making only one delivery a day. Eventually there will be a broad line of cleavage between regulation of the prices of what the farmer has to sell and what he has to buy. If the milk price to the farmer is kept at $3 per hundred or better all through the season there will be little cause for complaint on that score. The price of hogs seems very high, but the farmer with one or a few hogs finds a great difference between the price the butcher will pay him and the price he is expected to pay for a piece of bacon. The trouble with the regulation of what the farmer has to sell, if I see it right, is that it is regulated to not go too high, but there is nothing except supply and demand to regulate it from going down—potatoes, for instance, the raising of which was so encouraged before planting time. On the other hand, there is nothing to indicate that farming implements and the many articles of merchandise needed on the farm are to sell any lower or even at present levels. Every cloud is said to have its silver lining. Last spring the season was late and pastures could not be used at the usual time, forcing the purchase of much high-priced hay. This fall there was a seasonable rain in early September, which brought plenty of fall grass, and the weather has been fine nearly all the time since. The fall pasture has saved hundreds of tons of hay to Lewis county farmers, and most of them will pull through this year without having to go into the market for hay.

One farmer who sells hay each year took $25 a ton for his hay last April and May and said he did not want any more, although I believe he could have got a higher price for the asking. He said that was an awfully good price. I bought a little $25 hay and will say that I can not figure how it can be profitably fed except as a matter of necessity to carry a man through a pinch until pasture comes. The only special methods of feeding that I know of here are those of the dairymen who practice soiling and feeding ensilage. It goes without saying that every head of stock that does not seem to be a money-maker is being culled out to save feed. Many boys from the farms are serving in the army or navy and when one goes it almost invariably leaves a vacancy that is hard to fill. The situation is particularly bad in western Washington because at this time the sawmills are calling for almost unlimited numbers of men. However, farmers are utilizing their time to the best advantage and working every day that the weather permits—which has been practically every day this fall. Much fall plowing has been done and that will help a great deal when the spring rush comes. J. C. BUSH.

Recommends More Corn.

SOUTH BEND, Pacific County, Wash., Dec. 10.—The mild winter is helping the feeding situation. Those that are fortunate enough to have access to the higher tidelands are still pasturing their cattle and the cattle are fat and in excellent condition. Hay is selling at $28 a ton and bran at $34. A lot of hay and grain is shipped in every winter because the farmers can not raise enough for their own use. The silos are helping solve the problem. Emil Scholtz of Menlo, who experiments with different varieties of corn, urges dairymen to use more corn and roots, which do well in this vicinity. John Davidson of Lebam sold his dairy herd of fine Holsteins at auction, and averaged $108 per head. An extension school for the benefit of those interested in agriculture will be held for three days at Lebam, three days at Willapa and three days at Ilwaco, from December 11 to 20. The instructors are H. L. Blanchard, Leonard Hegnauer, R. N. Miller and J. C. Donaldson. As far as I can learn not a great many of our young farmers have been drafted. The shortage in labor has been met in some instances by the neighbors helping out with harvesting the crops. Public opinion favors the government fixing prices, provided the price allows a fair profit. A large number of our farmers have worked early and late and for years only realizing a living as compensation. There are very few abandoned farms in Pacific county, which shows that our farmers have persistence.

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Selecting Before Buying

In this issue of the paper more than two score firms are bidding for a share of your trade. These firms have prepared catalogues and booklets in which their products are carefully described. Such catalogues and booklets contain many a valuable bit of information quite apart from what they say about the product itself.

The manufacturer of a plow may give us some excellent suggestions on soil analysis; the cream separator manufacturer's catalogue may give us a fresh idea that will save time and labor in handling our dairy work; and so on through the many lines of goods that are advertised in the columns of this paper week by week.

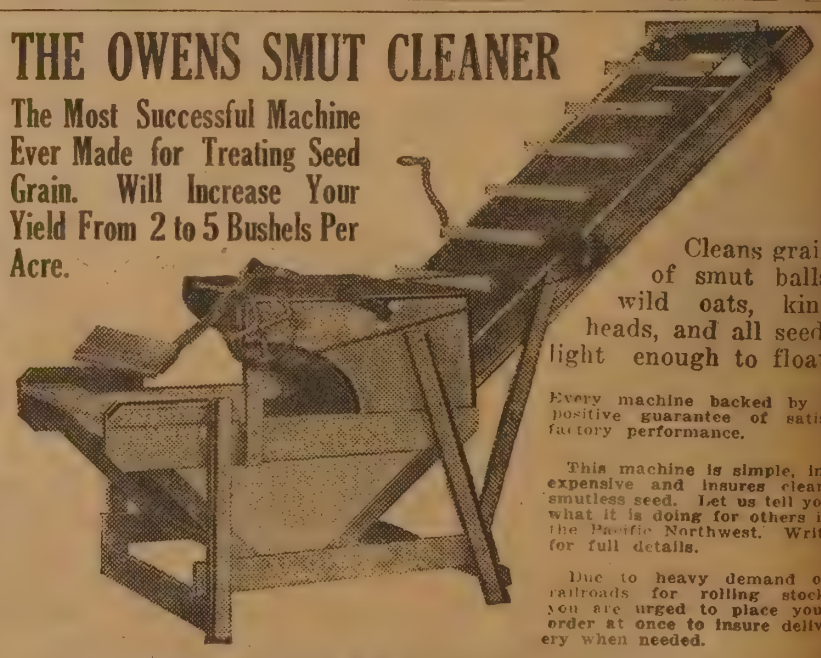
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THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 40. No. 52 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF December 27, 1917

America's One Big Business Is to Win This War

America's one and only business today is war. Whether we like it or not, we are at war, and war to the death. The time for argument has passed. Never since the battle of Lexington have the people of this country been faced by the absolute necessity of instant and united action as they are faced by it now. We must arise as one man, or let American liberty and justice perish from the earth.

The United States must—MUST, not ought to—place 5,000,000 of her very best men on the battlefields with her allies at the earliest possible hour. They will go. From farm and factory and workshop they will go, ready to offer "the last full measure of devotion" to their country. No one should stand in their way, or seek to have them or any of them relieved of the responsibility to which their country has called them. Rather will every patriotic man and woman who remains at home do his or her utmost in their absence not only to maintain present efficiency of industry, but to increase that efficiency. Our soldiers must be armed and fed and clothed, and the person who contributes his utmost to arm and feed and clothe them is himself a soldier. America's war motto should be: "Soldiers Everywhere." Soldiers on the firing line; soldiers digging trenches; soldiers felling trees; soldiers building railroads; soldiers building ships; soldiers making munitions; soldiers making clothing; soldiers manufacturing foods; soldiers handling freight; soldiers producing foodstuffs—every man from the plow on the farm to the rifle in the trench equally indispensable as a part of the great war machine that must win this conflict. The person in any walk of life, in any industry—farm, office, factory, anywhere—who today thinks of self instead of America is to that extent as much a traitor to his country as the uniformed soldier who deserts the army.

Germany's efficiency has astounded the world. No other nation could alone have waged so successful and so long a war on practically the entire world as Germany has. But for decades she has been getting ready. Forty years ago Germany was putting into practice in her industries efficiency measures that America is today reluctantly and with difficulty putting into hers. German efficiency is such that every ounce of energy of every individual is applied without lost motion to the one great purpose, and America must follow the same ironclad rule. Every ounce of human energy must be applied that the soil may produce her utmost, and every ounce of that produce must be made to contribute to the accomplishment of America's one great purpose, the winning of this war.

When it comes to exemptions on account of occupation of the young man under the selective draft, section 80 of the regulations prescribed by President Wilson, November 8, 1917, says:

"It is the interest of the nation solely that must be subserved. The interest of individuals can not be considered as such and can only benefit from the action of district boards where the individual interest happens to coincide with the interest of the nation; and, furthermore, the success of the nation's military operations is the dominant object to which the conservation of certain industries is related as one means to that end."

In this connection the following part of rule 17 will be of interest:

"A particular industrial or agricultural enterprise shall be found to be necessary only when it is shown of such enterprise that it is a well conducted and going concern, contributing substantially and materially to the military establishment, the effective operation of the military forces, or the maintenance of the national interest during emergency, and, further, of a particular agricultural enterprise; that it is apparently producing an appreciable amount of agricultural produce over and above what is necessary for the maintenance of those living on the place."

The following definition of the word "necessary" as applied to the registrant is given in rule 18:

"1. That the registrant is actually and completely engaged in the enterprise in the capacity recited and that he is competent and qualified in that capacity.

"2. That the removal of the registrant would result in direct, substantial, material loss and detriment to the adequate and effective operation of the enterprise to a degree proportionate to the importance of the capacity recited in the rule.

"3. That the available supply of persons competent in the capacity recited in the rule is such that the registrant can not be replaced in such capacity without direct, substantial, material loss and detriment to the adequate and effective operation of the enterprise to a degree proportionate to the importance of such capacity.

"Note: In applying rule 18 the board shall consider generally:

"1. The length of time the registrant has been engaged in the capacity.

"2. The nature of claimant's study, training and experience.

"3. The actual condition which would result from his removal."

According to the selective service regulations—

Those engaged in, and necessary to the effective operation of, a necessary agricultural enterprise are to be exempted in class 1, first called.

Class 2 will include those exempted in class 1, but will exempt skilled farm laborers engaged in a necessary agricultural enterprise.

Class 3 will include those exempted in the first two classes, but will exempt assistant farm managers, farm foremen, etc., engaged in a necessary agricultural enterprise.

Class 4 will include those exempted in the first three classes, but will exempt those engaged in a necessary agricultural enterprise who are acting "in the capacity of sole managing, controlling and directing head of the enterprise."

To emphasize the importance of the farm in America's business of war is to repeat what every one knows. Every link in the great chain from the farm to the battle front must be without flaw. If one link fails, all will fail. The farm is the anchor link at the home end of the chain and must bear all the strain of the greatest effort America ever made. In view of the conditions as set forth in this article, what do you find it possible to do to add to the strength of the farm link in the chain? (See chart in center of this page.)

What Is Your Utmost?

Will you please make a cross in the square given below according to your plans for the coming year's crops, clip the list, sign your name and address and mail to the Editor of The Washington Farmer, Spokane, Wash. Your name will be held in strict confidence if you so request.

I am planning for the season of 1918 to change my usual system of farming by raising more, or by raising less, of the following farm products:

	MORE.	LESS.
Wheat	☐	☐
Oats	☐	☐
Barley	☐	☐
Rye	☐	☐
Corn	☐	☐
Potatoes	☐	☐
Peas	☐	☐
Beans	☐	☐
Sugar beets	☐	☐
Vegetables	☐	☐
Fruits	☐	☐
Hay	☐	☐
Horses	☐	☐
Beef cattle	☐	☐
Dairy stock	☐	☐
Sheep	☐	☐
Swine	☐	☐
Poultry	☐	☐
FOR FEED		
Carrots	☐	☐
Mangels	☐	☐
Rutabagas	☐	☐
Turnips	☐	☐
Artichokes	☐	☐
Silage	☐	☐

Name .....

Postoffice .....

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"We Are Going Up Against the Real Thing"

So Declares President Mess at the State Dairy Association Convention

By PAUL E. TRIEM.

Fireworks and explosions of various degrees of brilliancy and intonation punctuated the twenty-fifth annual meeting of the Washington State Dairymen's association, held at Sequim, December 13 and 14. Weather and social influences were all beneficent. J. L. Keeler, proprietor of the Sinclair hotel, handled the influx of dairymen with such address and geniality that everyone speedily felt at home. It is not often that so considerable an addition to the population of a small town is absorbed with so little disturbance and friction.

President Fred Mess in his annual address, called attention to increasing consumption of oleomargerine in this country. In 1915, the per capita consumption amounted to only one half pound. During the year 1917, this has reached the surprising figure of three and one-half pounds. In view of the recent discoveries of the peculiar feeding value of milk and butter fat, and of the importance in securing and maintaining growth of the vitamines and other unanalyzed substances found in these dairy products but not in oleomargerine, President Mess deplored the short sighted economy which led the public to substitute so much of the latter for part of the former.

Touching upon the hostile attitude of part of the press toward farmers and farming interests, the speaker concluded by referring to the topic uppermost in all minds.

"The big thing for all of us to consider at this time," declared President Mess, "is that we are at war. That war must be won at whatever cost. The world is looking to the farmer as never before in the annals of time for food supply. We farmers, like everyone else, are going up against the real thing."

W. A. Maughan of the Washington State college, delivered an interesting address on feeds and feeding problems particularly bearing on present conditions.

"If the man in the dairy business can but tide over the present," declared the speaker, "he will find things coming his way eventually. It is a mistake, however, to try to meet the present high prices of feed by reducing the cow's ration. The thing that should be aimed at is the elimination of waste. The cow must supply her own bodily needs before she has a surplus for the milk pail. We can not cut down on the normal amount of feed given the cow. That is one of the things we must emphasize."

Among other points brought out by Professor Maughan were the value of chopping hay and other roughage and grinding grain used in the dairy ration. Rolled grains are good, provided the rolling equipment is what it should be; otherwise, grinding is preferable. The use of some straw in the roughage and of molasses in quantities of not over four pounds to each cow per day were advocated, together with the use of roots both for their feeding and "toning" value. Returning to a point emphasized earlier in his talk, the speaker concluded:

"The more we feed a cow up to the point where she begins to put on fat, the more she gives us and the cheaper she gives it."

P. G. Kinzer came before the association to tell the dairymen some of the things he thought they ought to know about the Carnation company, whose accredited spokesman he was. Mr. Kinzer is one of the most able "harmonizers" in the country, and his frankness and geniality did much to win the admiration of even those of his listeners who were not particularly well disposed toward the condensery interests.

Referring to a topic which was later to come up for even more heated discussion among the association members, Mr. Kinzer asserted that in spite of the fact that many dairymen had declared the standardization law passed by the last legislature would put the small condensery out of business, the reverse had proved true. Without calling attention to the further fact that an unprecedented market now exists for milk products along the condensed milk line and that naturally the small condenseries must profit by this temporary condition, the Carnation man went on to deliver his diagnosis of the real nature of the trouble between the dairymen and the manufacturers.

"It all comes because of the fact that we don't get down around a table and talk things over as we should," he declared earnestly. "We're too far apart. We don't understand one another. Until this sort of mutual understanding is achieved, it is almost inevitable that petty strifes should continue."

Another remedy which Mr. Kinzer recommended for the consideration of the association was a law similar to one already in force in Oregon, requiring that all testers be licensed by the state, and that their work be done with state tested apparatus.

"Such a system can't hurt the farmers," commented the speaker, "and it can't hurt the condensers. If there is such a thing as honesty in the world, you should be willing to put this matter into the hands of your state officials."

Mr. Kinzer does not believe that the alarmist view of the dairy situation, particularly in regard to the alleged selling of dairy herds, is justified.

"I believe that when the figures are compiled for the year 1917," he predicted, "it will be found that there has been a bigger production than ever of dairy products. Personally, from my visits to the dairy regions of the northwest, I do not find it the case that the dairymen are selling their stock and going out of business. Much poor stock is being sold, but that is all."

So far Mr. Kinzer had come without "starting anything." At this point, however, he threw a monkey wrench into the machine by taking up the subject of "Hebemilk."

"The fact of the matter is," declared the speaker, "that the whole subject of Hebemilk is misunderstood. Carnation milk is the product on which we have built up our reputation. I admit that we are proud of Carnation milk, and you may be very sure that we will do nothing to injure the evaporated milk market. Hebemilk is used to fill certain demands that exist in certain parts of the world. It is not sold west of the Rocky mountains. As a representative of the Carnation company, I tell you that a time will surely come when you will have to admit that Hebemilk has been a good thing for the dairy interests."

This concluded the formal part of Mr. Kinzer's talk. Informally, it was continued by a many cornered debate between the Carnation man and various dairymen present who were sure there was a colored gentleman in the condensary wood pile, but who couldn't quite locate him. John Lee of Snohomish county, and Fred Nelson of King county, asked various questions which would have puzzled a man less open or perhaps less fluent than Mr. Kinzer. The latter could not be brought to admit, however, that the substitution for all the butterfat which could be extracted from milk of a vegetable oil, in the Hebe process, gave the Carnation company any undue power over the butter market, or was detrimental in any way to the interests of the producers.

F. B. Cavanaugh, president of the King County Dairymen's association, viewed the situation in a light diametrically opposed to that cast upon it by Mr. Kinzer. He predicted that if the present selling movement continued for 12 months, there would not be enough dairy products available to supply this country. Turning to the work his own association was doing, Mr. Cavanaugh said that the King county dairymen were preparing to build some sort of plant for handling their own output, and suggested that if the various county organizations were to send in reports of their work to a central state organization, to be elaborated into bulletins by the latter, this clearing house function would be of great value in arriving at a solution of the whole dairy problem. Mr. Cavanaugh concluded by quoting some production-cost figures from his account book, showing that the actual cost of producing milk had increased from 11.31 cents per gallon in July, 1916, to a little over 33 cents at present. No interest or overhead charges are figured into this cost, which Mr. Cavanaugh feels to be a minimum with good management in his part of the state.

Following the introduction of a resolution bearing on the Chinese labor question, Commissioner E. F. Benson, of the state agricultural department, addressed the meeting on the subject of the labor and feed problems, which he declared to be one in essence. Referring to present shortage of farm labor, Commissioner Benson declared:

"There have been mistakes made, which I think everyone recognizes, in taking from the farm skill laborers because they make such fine soldiers. In my own case, I know that I have been looking thirty days for a man to work on my farm, to take the place of one whom the national service took from me on three hours' notice. I believe that under the new regime this kind of thing will not happen, as farm labor will be placed close to the end of the list of available men."

Mr. Benson predicts that the labor question will not end with the war, and calls attention to the fact that we have made part of our own present trouble.

"In this country," he commented, "we have been coercing the hobo into his avocation by our system of distributing farm labor. The work in our wheat and fruit harvests cultivates the intermittent, migratory work habit."

Great enthusiasm was aroused by the speaker's declaration in favor of a law to conscript every idler, rich or poor. Mr. Benson declared that he would like to see these people given 30 days' notice of the passage of such a law, and then to allow no man more than three days of grace to find work, at any time.

W. H. Tierney, state organizer for the association, told of the trials and discouragements connected with his work.

"I do not think there is any doubt that the dairymen can get any reasonable legislation which they will agree upon," declared Mr. Tierney. "The trouble is that there is no unity of opinion or action. It is for this reason primarily, I believe, that I am forced to declare to you that our association has done nothing worthy of notice this year, in spite of the good work of its officers, some of its other members, and of the various locals."

Wm. T. McDonald, live stock commissioner for British Columbia, was present throughout the session, and his spirit of genial helpfulness did much to keep the wheels running smoothly. In his address before the dairymen he told of the good work in progress across the Canadian line, where the Fraser Valley Milk Producers' association and the producers serving Victoria, on Vancouver island, are doing fine organization work.

"The only thing that can wreck these institutions now," Mr. McDonald told his hearers, "is the abuse of the power they have attained through organization. There is no tendency in that direction, however, and I can assure you on the contrary that our dairymen have been more than fair with the public, and have made a consistent effort to sell as near the actual cost of production as is consistent with the continuance of the dairy business."

At the final session of the two-day meeting, Fred Nelson and William Bishop were allowed to tell their respective sides of the fight over the now famous "Senate Bill 90." The fact that the association went on record last year as opposing a standardization law was admitted by Mr. Bishop, who contended that the dairymen had been misinformed as to the merits of the case, and that it was only right that the people of our state should be protected by a law insuring the same quality of milk for their consumption which is guaranteed consumers of milk

(Continued on page seventeen.)

Meet at Kennewick

State Horticultural Association

The fourth annual meeting of the Washington State Horticultural association will be held at Kennewick, January 3, 4 and 5. The following is the program as far as completed:

Thursday, January 3.

Morning session—Address of welcome, J. R. Gardner, Kennewick; response, J. Howard Wright, Yakima; annual address of president; report of treasurer; "Magnitude and Importance of the Horticultural Interests of the State," Hon. E. F. Benson, commissioner of agriculture.

Afternoon session — "Arsenate of Lead," Frank E. Seely, Payette, Idaho; "Lime and Sulphur Solution," C. Joseph DeVise, Yakima.

Evening session — "Transportation Position of the Northwest Fruit Industry," J. Curtis Robinson, Seattle; "What a Community Can Do to Bring in a By-Products Plant," Robert C. Paulus, Salem, Ore.

Friday, January 4.

Morning session—"Pruning Stone Fruit," Professor O. M. Morris, Pullman; "Thinning Out vs. Heading Back as Methods of Pruning," Professor V. R. Gardner, Corvallis; "Some Phases of Alfalfa as a Cover Crop," P. S. Darlington, Wenatchee.

Afternoon session—"How the Rancher Can Improve His Labor Conditions," Dr. Henry Suzzallo, Seattle; "Putting Our Horticultural Inspection Work on a Business Basis," M. L. Dean, Olympia; "Irresponsible Grower vs. Irresponsible Commission Merchant," S. J. Harrison, Benton City, Wash.

Evening session—"Potato Diseases," illustrated lecture, Dr. F. D. Healt, Pullman; "Pollination of Sweet Cherries and Tragedy Prunes," Professor V. R. Gardner.

Saturday, January 5.

Morning session—"Ten Years' Experience With San Jose Scale," Dr. A. L. Melander, Pullman; "Construction of Air-Cooled Storage Houses," C. W. Mann, United States department of markets; "Picking the Apples for Flavor and Keeping Qualities," F. S. Allen, Yakima.

Afternoon session—"Handicap to Successful Marketing," P. R. Parks, Spokane; "Banking the Fruit Crop," J. J. Rouse, Spokane; "Abuses of Water on Fruit and Trees," D. T. Fisher, Wenatchee.

Evening session—"Colonization Australia vs. America," Dr. Elwood Mead, Berkeley, Cal., paper read by W. A. Wiggins, Toppenish.

Housekeepers' Week

Great Session Is Being Planned

Preparing wartime dishes that father and other men folks will eat and relish, eliminate kitchen wastes in preparing fruits and vegetables, relieving household drudgery or providing home-made but modern kitchen devices, transforming dad's cast-off clothes into serviceable suits for brother and even for sister, as well as how to make an $8 hat for 98 cents, are only a few of the scores of questions to be taken up during farmers' and housekeepers' week at the state college at Pullman, January 7 to 14, inclusive.

The state college for years has held meetings of one kind and another for the men folks, but this is the first gathering ever planned for the women, who really are the most important factors in the business of farming.

Trained men and women of national prominence are to be present at the gathering, among them including Miss Anna M. Barrows, demonstrator for the states relation service, United States department of agriculture, Washington, D. C., and O. H. Benson, national boys' and girls' club leader. Besides these there will be present prominent state officials and heads of all movements having to do with food conservation and the part we as individuals must play in helping to win the war.

Miss Mary E. Sutherland, director of the home economics department, says it will be possible for women who attend to complete a dress or make a hat in the one week of the session. Sewing machines, cooking devices and all manner of things which can be used by the women themselves during the week will be provided. A dozen or more trained specialists will be on hand to help in every department.

Provision has been made for sleeping quarters for all who come. A cafeteria has been arranged for in close proximity to the old administration building, where the sessions are to be held, and the railroads have promised a rate of a fare and a third to Pullman and return.

Entertainment in the form of pipe-organ recitals and illustrated lectures has been planned.

Marketing Farm Loan Bonds

Need Government Aid, War Having Upset Whole World

When the government put out its first Liberty loan The Farmer expressed a fear that increasing demands for war funds might interfere with the marketing of farm loan bonds. As we have previously explained, the market for these bonds is the foundation of the system. The land banks began by loaning their capital. Against the mortgages thus given by farmers the land banks issue and sell bonds. The money obtained by selling bonds is put out in other loans on other mortgages, and against these other mortgages more bonds are issued and offered for sale.

The system is, therefore, an endless chain that will keep revolving as long as there are applications for loans and buyers for the farm loan bonds.

Applications for loans are increasing, but the market for bonds has fallen off, and to meet that problem the administration has asked congress to authorize the secretary of the treasury to purchase $100,000,000 farm loan bonds during the next fiscal year. The senate promptly passed the bill before adjourning for the Christmas holidays, but the house postponed action until the reconvening of congress after New Year's.

Several congressmen opposed immediate consideration of the bill. Representative Snell of New York contended that the land banks were tending toward insolvency and that it was a bad precedent for the United States to take bonds from a corporation that could not sell them.

In ordinary times that objection would be valid. But these are extraordinary times. The nation is at war, and the government is draining the investment field. As a consequence all sorts of bonds are hard to market.

These facts carried great weight in the senate. Senator Hitchcock of Nebraska emphasized the safety of the plan, declaring that it would encourage the farmers to increase their crops; and Senator Nelson of Minnesota declared:

"The farmers are our allies in this war, just as much as our allies abroad, and I don't know why we should make any more distinction with them than we do with those abroad. If we want to encourage the farmers during the war here is our opportunity."

The government and the public must look at this problem in a broad and sympathetic way. Undoubtedly, if it had not been for the war, the land bank system would have easily supported itself and the land banks could have gone on indefinitely loaning money at 5 per cent. But the war has upset the whole world and made wreckage of many things. The land banks have found it necessary to increase the mortgage interest rate to 5 1-2 per cent, and it is not improbable that a further advance will have to be made. And meanwhile government aid is necessary to keep the chain revolving.

Whitman Gets Agent

Crop Increase Expected to Result

Whitman county, Wash., is to have a county agricultural agent. The county commissioners have accepted the offer of the government, through the state college, to furnish an agriculturalist for the county, the government paying his salary and the county paying his expenses. The expert is to be selected by the state college, at Pullman, with the approval of the board of commissioners. The agriculturist will work in all parts of the county and assist in increasing crop production. He will give advice and assistance to the farmers and strive to encourage diversified farming and a better system of farm tillage. He will be an expert in live stock as well as ordinary farming and will devote much of his time to trying to encourage the raising of more sheep, cattle and hogs on the big wheat farms of Whitman county. The selection of the agriculturist will probably be made at the January meeting of the board.

Will Discuss Live Stock

A winter school for the growers and breeders of live stock will be held at Quincy, Wash., Thursday, Friday and Saturday, January 3, 4 and 5. All phases of live stock will be taken up and discussed.

Dr. S. B. Nelson, head of the veterinary department, Washington State college, will talk concerning live stock diseases and their treatment. Professor William Hyslop, head of animal husbandry, Washington States college, will talk along the feeding and breeding of live stock, taking up cattle, hogs and sheep. H. W. Whittaker, poultryman at Washington State college, will take up the different phases of poultry, which will include housing, feeding and breeding. H. W. Reaugh, county agricultural agent, will talk along lines of forage crops and silos.

There has been no meeting of the Grant County Live Stock association. It is the intention to have Friday, January 4, all day, as the annual meeting of the Grant County Live Stock association.

Peas Prove Value

Improve Land and Produce Pork

(Continued from page one.)

bushels of wheat from summer fallow, against 28 bushels on pea land. It may be stated in passing that the 38 acres of peas brought Mr. Flinner $880 for the seed alone and furnished him a great quantity of valuable straw in the threshings. It cost Mr. Flinner at the rate of $35 more to care for 40 acres of peas than it did to summer fallow 40 acres.

C. D. Shepherd of Latah received over 5016 pounds of barley per acre after peas in 1916. This is 104 bushels per acre. Mr. Shepherd is also authority for the statement that he can always figure safely on 40 bushels of Bluestem wheat after peas during a normal season.

In 1916 John Ramm at Latah threshed 56,700 pounds of Gold Coin wheat from 20 acres of land which had been in peas in 1915, or 47 1-4 bushels per acre. Frank W. Pottratz on the opposite side of the road threshed 42 bushels per acre of the same variety of wheat following summerfallow. Mr. Lawson of Farmington threshed 500 bushels of Bluestem wheat from six and three-fourths acres of land in 1916, which had been in peas the previous season. He told his story in my office, December 10, in the presence of Professor Severance of Pullman and E. W. Coulter of the D. M. Ferry Seed company. This approximates 75 bushels per acre.

While this last year has been a decidedly poor season for securing data along this line, nevertheless, what evidence we were able to secure was in favor of pea land over other land. Owing to the dry fall of 1916, fall wheat was planted very sparingly on pea land, and where it was so planted, it did not survive the winter, which condition was common on summerfallow lands as well.

S. D. Doak, Orchard Prairie, had a portion of a field planted to wheat in 1916 and the balance to peas. During the season of 1917, the entire field was planted to oats and the line of demarcation was very distinct where the wheat left off and the peas began in the growth of oats the last summer. He was able to bind the oats on the land where peas had been grown the previous season, but on the other land, the crop was too short to bind.

J. J. Loeper, living on South Moran Prairie, figures that Bluestem wheat on land that was in peas in 1916, made him 25 bushels per acre in 1917.

One of the matters that I have emphasized over and over again is the great opportunity furnished farmers who grow peas, of reaping fine returns after the peas are cut for seed by turning in hogs to glean the shattered peas. The great difficulty I have found has been that it is almost impossible to have the weights of the pigs before and after running in the pea stubble.

This year I secured some data which gives a very good rule by which to figure.

E. W. Dickson weighed pigs out from the stock yards at 60 pounds and after 24 days' pasturing on peas returned them at a weight of 96 pounds. This gives a gain of one and one-half pounds per day.

The following data has been secured from farmers who have used hogs to glean their fields:

James Hays of Waverly had 110 head of hogs on 50 acres of pea field, from which he had threshed 50 bushels per acre, for six weeks. If these hogs made as good returns as that cited above there would have been produced 6930 pounds of pork. These hogs sold at 10 1-4 cents per pound, or a total of $694.75 return from the 50 acres, or over $13 per acre.

C. D. Shepherd, Latah, kept 145 pigs and hogs on a 60-acre pea field for six weeks in 1916. After he had cut and threshed 58 acres of peas, securing 914 sacks, averaging 140 pounds per sack, the hogs made their living from what was left. At one and one-half pounds gain per head per day and at 8 cents per pound, this would amount to $710.80, or approximately $12 per acre.

This data is sufficient to warrant placing a very high value on pea stubble for hog feed and to encourage the keeping of hogs on every farm where peas are grown.

And Proud of It.

A woman of a Massachusetts town made application for a Liberty bond, and in answer to the question on the blank as to the denomination desired, she filled in "Methodist."

Receiver or Executor?

Which Is Preferable to Business?

Frank A. Vanderlip, president of the largest bank in America, who has sidetracked his own business to direct Uncle Sam's $2,000,000,000 war savings certiifcate campaign, delivered a number of shoulder blows in an address at New York last week.

From the beginning of the war Mr. Vanderlip has punched the fallacious slogan, "business as usual." We can't do business as usual and win the war, he has been telling business men everywhere. He is calling on the American people to cut off every unnecessary expenditure until the war is won, in order that they may save the last possible dollar to put into thrift stamps, Liberty bonds, Red Cross donations and other war funds. Here are a few of his vigorous sentences:

"You may say that the business man must live. But must he? There are a great many men who will not live. Wouldn't you rather have a receiver than an executor?

"If need be we can wreck the business of luxury for the time being. We have got greater business.

"That dollar is a traitor dollar—it is allied to the enemy—if you so spend it that you interfere with the production of things that the army needs.

"Before the war we were on the road to an economic smash. We were wasteful and extravagant. We are now, however, on the road to a lesson in thrift that we ought to have.

"Full shelves will stop production of unnecessary things. Empty shelves mean that the retailers order more, the manufacturers produce more; hence more labor and materials are used.

"I think for a time the war savings certificate plan will interfere with the growth of savings bank deposits. In the end, if the lesson is learned, and we make, as I believe we will, 30,000,000 holders of these certiifcates, we will have implanted thrift in the hearts of our people so that our savings deposits will grow as they have never grown before.

"Business is coming closer to government—government is coming closer to business. That is another valuable by-product of the war."

If you are not buying thrift stamps you are not doing your part toward the winning of the war. Practically every Farmer reader can join in this great campaign. If you haven't handy the $4.12 needed to buy your first war stamp outright, you can start with 25 cents and a thrift card.

Ask your postmaster, your mail carrier or your banker for further information. Cut out luxuries, indulgences. Put your dollars back of the boys who are going to France.

Church for Community Use.

The new Church of Christ of Creston, Wash., was dedicated recently under the leadership of Rev. J. W. Baker of Seattle, and the local pastor, E. I. Mitchell. The church is modern in every way and is well equipped to take care of all community gatherings and has been built with that end in view, as well as taking care of the social life of the community as far as possible. The church, which cost $8300, was dedicated free from debt.

Sons of Farms Are Called to War

The effect of the war on farm labor is illustrated by the experience of Riley Rice of Cottonwood, Idaho, retiring president of the farmers' union for Washington and northern Idaho.

"Last spring one of my sons at home enlisted in the service," says Mr. Rice. "The other is now registered and subject to call under the selective draft law. Likely he will be called before long, and when he is, it practically means that I will have to quit my farming business."

The farmers attending the union convention at Spokane last week were loyally patriotic, but there was present a strong feeling that the results of their efforts toward increased production were being greatly minimized through the depletion of the ranks of farm help by the army and navy.

"We are not complaining," said one in discussing the matter. "We are stating a fact. We'll give our hired men and our sons and go ourselves if the nation needs us more in the army than on the farm. But if it is necessary that our crops be increased as the government tells us it is, then it seems to follow logically that our services are as valuable behind the plow as on the battle front."

Today the Red Cross Needs Your Aid

Fill out the coupon below and mail it to the Editor of The Washington Farmer, Spokane, Wash. Upon receiving this coupon you will be enrolled as a member of the Patriotic League of The Washington Farmer.

I am glad to express my patriotism at this time by pledging myself to render whatever special service I can to my country, and will you tell me especially about Red Cross work and the different ways in which I may be able to aid in that work?

Name ....

Postoffice ....

Watch the Red Cross department of the Farmer each week for different ways in which you can help in this work.

The following have been enrolled as members of the Patriotic League of The Washington Farmer:

Mrs. W. T. S. Lumbar, Colby, Wash.
Mrs. L. W. Hill, Anacortes, Wash.
Mrs. Mamie Mitchell, Rochester, Wash.
Mrs. Gust Nelson, St. John, Wash.
Miss Emily Burns, West Sound, Wash.
M. E. Osborn, Burlington, Wash.
H. J. Ziegelmaier, Puyallup, Wash.
Mrs. H. J. Ziegelmaier, Puyallup, Wash.
Mrs. Henry Grinnell, Addy, Wash.
James A. Parker, Palouse, Wash.
Mrs. Effie Armstrong, Curlew, Wash.
W. J. Elliott and family, Colbert, Wash.
Mrs. Henry Harding, Chelan, Wash.
A. D. Leach, Leavenworth, Wash.
Mrs. Sylvia Gray, Puyallup, Wash.
Mrs. F. W. Eisenhardt, Castle Rock, Wash.
Mrs. W. J. Harm, Enumclaw, Wash.
Mrs. E. G. Hoffer, Bossburg, Wash.
Florence G. Hunton, East Sound, Wash.
Mrs. J. H. Stuckrath, Chehalis.
Mrs. Margaret Pool, Lamont.
C. Krogness, Quincy.
Mrs. C. Krogness, Quincy.
Mrs. Clarence Pitchford, Silver Lake.
Mrs. E. A. Kiser, Tiger.
Clara E. Hyerstay, Woodland.
Mrs. Elise Brown, Malott.
Alva Ruark, Pomeroy.
Mrs. Alva Ruark, Pomeroy.
Mrs. George Crossland, Brewster.
A. Bakie, Warden.
Miss Hazel Stratton, Rockford.

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

Agriculture After the War

What will be the future of agriculture after the war? Will prices fall sharply, decline slowly or maintain their present high levels?

Herbert Quick, of the Federal Farm Loan board, predicts continuing high prices and world need of increased food supplies. This need, which America must meet, he thinks, will be a continuing one long after the war.

The problem, he added, must be met by substituting machinery for man power, the reclamation of waste land, upbuilding of soil fertility, and making every acre produce to its full capacity.

Our own guess would be that, while low prices need not be expected for several years, we may look for cheaper food products with the ending of the war and the return to the soil of millions of men now on the fighting lines. Even now, with about 40,000,000 men in the armies and navies of the world, the wheat shortage is not a world shortage, but is confined to the European countries. Right now there is nearly enough wheat visible to supply normal world needs if there were ships enough to move it from the countries that have a surplus, like Australia and India. The shortage, then, is really in transportation rather than in the product.

On the other hand, there is a world shortage in live stock, and meat prices promise to keep comparatively high for several years after the war.

Our counsel to farmers is to be cautious about contracting unnecessary debts, say for the purchase of land to add to holdings already large, or to put into improvements not absolutely necessary at this time.

When the skies are black and war tempests are blowing furiously, prudence is a virtue not to be lightly cast aside.

Beans and Potatoes

As corn was once a watchword in the northwest, now the cry is for beans and potatoes.

Good food is a valuable crop and particularly so right now, with not only a reduced production in Europe, but the likelihood of hundreds of young fellows in our own land—boys who have helped produce food—in the ranks.

The man in the uniform gets the cheers, and he deserves them for he faces death in many forms and does it bravely; but there is a burden without glory which somebody must do—the burden of feeding extra mouths who destroy instead of produce. This is absolutely vital, but it brings no plaudits.

If possible, let us have a little more appreciation for the men who are as sincerely patriotic as the men with rifles—the men who make it possible for armies to live.

Prohibition Up to the People

Once again the matter of prohibition is squarely up to the people. Idaho, Oregon and Washington are already in the ranks of the dry, but now congress has placed before the people of these states the opportunity of taking a hand in putting the entire nation dry. Both houses of congress have passed the bill amending the national constitution so as to prohibit the manufacture and sale of intoxicating liquors in any state or territory in the Union. Before it becomes effective the amendment must be ratified by three-fourths of the states of the Union—thirty-six states. By the terms of the measure as passed the states have seven years in which to ratify the amendment, but the question has been raised as to whether or not congress has authority to limit the time within which it must be ratified.

The present times are so abnormal that the placing of this matter before the states has stirred little excitement. Already more than half the states of the nation have some form of prohibition, and liquor has but recently received a staggering blow through the food administration's regulations forbidding the use of grains in the manufacture of alcoholic beverages. Opponents of liquor are getting the habit of winning lately, after years of relentless warfare on the traffic. But the present advantages should be followed up with the same relentlessness. Liquor will not give up until every vestige of hope is destroyed. Hope is fast deserting the traffic before such victories as have marked the prohibition fight recently, but now is the time for the knockout blow.

The people of the northwest must follow up the work so faithfully and successfully done during the past decades, and be ready when the proper hour comes to speak unmistakably in favor of the ratification of this epoch-making constitutional amendment.

Reclaiming Cowlitz Land

Cowlitz county has redeemed a good deal of land subject to inundation in the past few years. No less than four diking districts have been inaugurated, and the fourth is now nearing completion.

The four are said to redeem from 12,000 to 14,000 acres of land—the finest and most productive land anywhere. On one of the projects the owner planted oats and reaped 96 bushels to the acre. On a 40-acre field an average yield of 67 bushels of wheat was secured. Potatoes do well on this silt land, as do almost all crops.

Diking district No. 4 lies in the angle formed by the Cowlitz and Columbia rivers. This dike will probably reclaim 2600 acres of land belonging chiefly to Wallace Huntington, O. Olson and Frank G. Barnes. The dike will protect against 28 feet of water at Portland. The land is divided into three zones, and will be assessed according to the benefit derived. The cost will approximate $88,000.

"What Is There in It for Me?"

This is the slogan of selfishness, and is one of our curses of modern life. Recently a man said to the writer:

"We have had too much individualism in American life." We have not had the spirit of cooperation, and how can we hope to have the practice before we have the soul of the thing?"

It is right and proper to be as independent as life permits us to be, but that independence should not drive us away from our neighbors and friends. It should make us more willing to extend a helping hand and not to draw away and live to ourselves all the time. This shrinking into our shells is not selfishness necessarily, but it is apt to lead to it.

The first thought to come after we consider any act is not "what is there in it for me?" If we do our whole duty cheerfully and gladly, not for our own sakes, but for the good of the world and our nation, we will not suffer, for life is a strange thing—it pays dividends on unselfishness and kindness.

Washington Gleanings

Yakima shippers have undertaken to furnish 20 carloads of apples for American soldiers in Europe.

Fire of unknown origin destroyed the Batteron warehouse at Malaga, which housed in the vicinity of 15,000 boxes of apples.

The Utah-Idaho Sugar company of North Yakima has distributed $199,619, representing payment for 28,517 tons of beets delivered during November.

During the four weeks' school vacation to aid in the apple harvest the pupils of Omak schools packed apples to fill a train of 25 cars of 630 boxes to the car.

The Moxee City Cheese and Butter factory, the fourth to be erected in the Yakima valley in the last two years, has been completed and will be ready to turn out products within the next few days.

It is the plan of County Agent A. B. Nystrom to obtain several tracts in various parts of Lewis county on which experimental and demonstration work can be carried on under the supervision of his office.

Ashur Hobson of the state bureau of farm markets has organized a number of cooperative markets throughout the state, a market exchange at Merton, Lewis county, and a cooperative creamery at Port Angeles.

As a result of talks on marketing by G. S. Wehrwein at the farmers' extension school held in the Boistfort grange hall recently the farmers of the Klaber district, near Centralia, plan the organization of a marketing association.

Preliminary plans for the Western Dairy Products show which will be held in North Yakima February 28-March 2, have been made by officials of the commercial club and G. E. Frevert of Salt Lake, president of the association.

Dr. W. J. Spillman, formerly of the Washington States college, and at present in the service of the United States department of agriculture, is to return to the Pullman institution shortly in the capacity of dean of the college of agriculture.

At a joint two-day meeting of the dairymen's associations of Whatcom, Skagit and Snohomish counties at Burlington the convention adopted resolutions pledging to the government during the war their labor, property, and if need be their lives.

The third sugar factory for the Yakima valley is practically assured at Sunnyside, where contracts for 5000 acres of sugar beets have been secured and the Utah-Idaho Sugar company is making arrangements to erect a plant to be completed by October 1, 1918.

This state, Mrs. Setchfield, county leader of Thurston county, reports was the only one with a food exhibit at the National Education association convention in Portland, and Thurston county was represented there by a team of girls with an exhibit of 59 different articles of canned goods.

The market at Camp Lewis of the Thurston County Dairy and Farm Products association is proceeding in fine shape according to reports. A carload of carrots will be sent soon from Plum station and the supply of milk which is being sent over is steadily increasing. The market building itself is in the last stages of completion.

What Others Say

Journal, Friday Harbor: Our appeal to the farmer would be to hold on to the good dairy cows. Why? Because of the food value of milk and its products.

Times, Waitsburg: Another year's strenuous work is before us, if no more, and we should all profit by both the successes and the failures of the past year.

American, Anacortes: Since war was declared there has been a genuine awakening of the true American spirit and many people have demonstrated that there has long lain dormant within them the spirit of their forefathers—that spirit that conquered a wilderness and finally brought into existence the most wonderful nation the world has ever known.

Journal, Kent: While Washington is not classed as a corn state, it is interesting to note that 1,520,000 bushels of corn were harvested this year, besides hundreds of thousands of tons of corn ensilage. The farmers of Washington also produced 9,880,000 bushels of potatoes, King county being at the head of the 39 counties of the state, with a record production of 877,700 bushels.

Must Keep in Mind Our Responsibility

Must Labor to Accomplish Greatest Good and Do Our Utmost for Nation and for Humanity

Calling upon the farmers of the Washington and northern Idaho division of the Farmers' union to stand loyally behind the government in every way possible during the present war crisis, Riley Rice of Cottonwood, Idaho, who last fall succeeded to the presidency of the union upon the resignation of President J. V. McCall of Hay, Wash., delivered a rousing appeal in his address before the convention at Spokane last week. His address in full follows:

In this, our ninth annual convention, we meet under conditions which we have never faced before. We are at war with a powerful enemy which is opposed to all forms of free institutions. While our nation is in this war to win, we dare not lose sight of the fact that the farmers of this nation are the vital factors for victory. Largely upon the farmers of America falls the incalculable burden of producing the foodstuffs, not only for feeding our own soldier boys at the battle front as well as sustaining the life of the nation at home, but also of supplying food support for our allies who have fought and sacrificed both in blood and treasure in sustaining humanity's cause of freedom. President Wilson has wisely said, "on the production of our soils, the issue depends." We must, therefore, keep constantly in mind our responsibility and so labor as to accomplish the greatest amount of good; render the largest service; do our utmost for our nation and for humanity.

My personal knowledge of the farmers of this jurisdiction permits me to speak for the ears of the nation and the world, that the farmers of the extreme northwest are Americans of loyalty and devotion to institutions of freedom. They have given of their sons for the sacrifices of actual warfare. They have contributed of their money for the financial sustenance of the nation in this time of need. They are devotedly patriotic as their deeds constantly show, in fact so busy in the service of the nation within the realm of their calling that they do not have time to wrap the flag about themselves and shout their patriotism.

The major purpose of this convention, at this critical time must be unqualifiedly to work for greater efficiency among the producers of the soil. Our problems therefore is to make this meeting so fraught with achievement as to render the farmers of this jurisdiction more capable for results for the strength of the nation than ever before. This will necessarily compel us to take up both the end of increased production and more economical distribution and at the same time strike against waste and abuse by the "pay" patriots, who, through systematic manipulation, attach unwarranted burdens upon the people of the nation by the collection of exhorbitant prices, waxing rich in excess war profits.

The most important item to be emphasized to this end is the necessity of strengthening our organization. It has been thoroughly demonstrated that the farmers need their organization now as never before. The only hope for protection of the rights of the farmers lies in organization. Not merely a few who are blessed with a vision and are willing devotees, but every producer should be within his organization with all of the others of his calling so as to have a united force with which to meet the problems that are arising and which affect the life of the farmer so materially. Anyone, with an unbiased mind, will of necessity admit that the farmers of the northwest have been getting anything but a "square deal" under the standards of grain grades and the method of administration. The farmer has the right to complain but it is useless to waste any time in complaint without a strong organization to carry these complaints to a source of relief. And while regulations are placed upon the farmer, there seems to be no limit to the prices he must pay for machinery, implements and much of his supplies.

It is important that the position of the farmer be unequivocally set forth so that the nation may know his attitude on these issues. I ask you therefore to mark well what this attitude is so that, regardless of what may be said from irresponsible and biased sources, the position of the farmer stands out as clear and is the embodiment of true patriotism: "We claim that the government not only has the right, but that it is its bounden duty to regulate the prices of the food stuffs of the nation. Also it is the right and equally the bounden duty of the government that this regulation should be made upon all of the commodities and necessities of life and on the materials necessary for carrying on the war to victory."

In our support of the government on its program of regulation, the farmers should be organized to the maximum so that the forces with which we have to deal will realize that they are meeting an issue of an organized industry and not just a few zealous laborers for the right. Then again when the war is over, the readjustment of general conditions will call for the greatest unity of action to protect the tillers of the soil against manipulation and speculation through the agencies of the gamblers and speculators who, with farmers in an unorganized condition, will put into operation a system of economic abuse upon both the producer and consumer. We must be in such a condition of organized strength as to fairly meet and effectively deal with these problems which are sure to arise.

Also the peace, happiness and real pleasure of living can best be secured and most widely extended by the brotherhood and fellowship; the sympathy and cooperation of a true application of the principles of the farmers' union. Were there nothing more than this to emanate, the organization would be abundantly justified. But as this is both fraternal and business, as an organization, the advantage and benefits are so innumerable as to make arguments unnecessary in behalf of the farmers' union. I want to add, however, that where both the spirit of community fellowship and business cooperation are equally emphasized, there, in our jurisdiction, we find happy people accomplishing great things.

There is one point however in the business enterprises of our organization that needs attention. We have some mighty big farmers' business concerns. They have achieved success against most trying conditions in many instances. They were organized principally before we, here in the northwest, got the real vision of practical cooperation. In view of this and for the strength of both the business enterprises and the union, some realignments should be made, the character of which will be presented during our convention.

There is one thing, brethren, that should be born in mind all through our deliberations and in our every day activities: The farmer must be ever vigilent if he hopes to sustain his own rights and prevent both the producer and consumer from being overburdened by the system of those who continually seek to prey. And we should clearly recognize that burdensome or wrong conditions exist through the sanction of the law; the administration of the law; or the interpretation of the law. The exercise of public functions should be within the hands of men of the highest type of true, honest citizenship. The professional office seeker and shyster politician have too long garnered the votes of farmers only to betray them. Let us seek carefully, scrutinize critically and select with diligence those upon whom we endow the sacred functions of public trust. Partization politics have continually got us into worse conditions. Elimination of partizanship and the selection of honest, competent officials should raise our political standards as an aid in the solution of our economic problems.

As you are aware, brethren, I have been acting as your leader-in-chief for only a few months. It has been my honor to be selected at your hands successively for the last eight years as vice president of our organization. It was from this post, I was summoned last September to assume the presidency upon the resignation of the president. The organization, as we all know, was in a run-down condition. No unusual record of constructive work could be instituted and carried out during this short period. But the efforts have been for the purpose of laying a firm foundation for future strength and lasting results. You should know how carefully, loyally and with what sound judgment your state executive committee has directed the course of your organization in this critical period. Under their able direction, with the aid of our state secretary, Brother Cross, and also the praiseworthy labors of Brother Elmore, I am pleased to be able to have called this convention, so that your servants may report of their stewardship. You can look to the future with hope and certainty.

Our organization is as great as we make it great. The time is at hand for the fullest application of cooperative zeal and fraternal loyalty. Our achievements for the future will be measured in success only by this rule.

Is a Fine Paper.

To The Washington Farmer: I can not think of any of my neighbors that are not taking your good paper. The Washington Farmer is a fine paper. Please let me thank you for your kind offer.

JENNIE WATSON.
Palouse City, Wash.

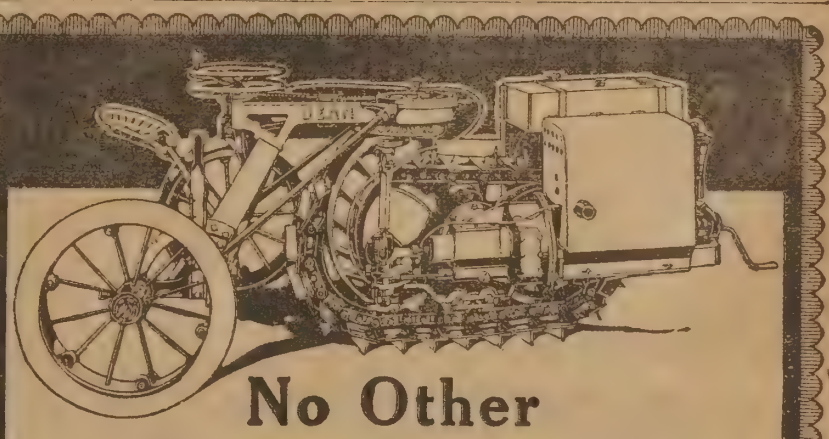
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A. B. NYSTROM, Editorial Contributor

NEW FEEDING PLAN.

Mixes a Number of Kinds of Feed

To the Editor: I am trying a new economical method of feeding cows, which is giving good results. At an expense of $2, I made a cutting trough and am cutting oat straw, wetting it in mixing trough, sprinkling it over with shorts and alfalfa meal in equal parts and a little salt, and stirring all thoroughly. The cows relish it immensely. It is not more than one-half or one-third as expensive as alfalfa and shorts, and the cows are improving in milk and appearance.

W. T. JACKSON.

Stevenson, Wash.

$7000 in Five Years.

R. D. Sanford of Ashland, Ore., in 1912 invested $1300 in registered Jersey cattle. From the sale of cream and young stock and from bull service, and estimating the value of young stock on hand at the same range of prices as those sold, Mr. Sanford finds his Jerseys have given him, in the five years, an income of $7000. Mr. Sanford's investment consisted of three cows and a bull just past a year old. He paid good prices for all his stock, including $400 for Melia's Laura of Albany, at the Burkhart dispersion sale. But she has been the source of his greatest profit. As a 3-year-old she had made a record for Mr. Burkhart of 7916 pounds of milk and 542.46 pounds of butter. As a 5-year-old she produced 11,372.35 pounds of milk and 77.1 pounds of butter, and at 8 years old she made the remarkable production of 15,920.8 pounds of milk and 990 pounds of butter. None of these records are official, but they are well authenticated, and the offspring of Melia's Laura has been in strong demand.

Mr. Sanford, Ralph Billings and a few other dairymen of the vicinity of Ashland are anxious for a cow-testing association to be formed, and, if possible, official test work. So far enough dairymen have not been interested, but the prospect now looks favorable.

H. A.

Ration for Dairy Cows

To the Editor: What would be the best ration to feed dairy cows? We have barley that is not of a good quality that we are grinding and mixing with oats, equal amount of corn silage and mixed hay. Would it be cheaper to buy bran at $32, shorts at $35, oil meal at 4 cents a pound, or oats at $49? What would be the best to mix with the barley? —R. D. P., Van Buren, Wash.

I am not sure that I know what you mean by the term "mixed hay," but I presume you refer to the native hays in the Puget sound region rather than to clover and timothy. Most of the native hays are inferior as dairy feeds. Still they may be used as fillers and I would give the cow as much of it as she will clean up, in addition to 35 or 40 pounds of corn silage per day. With this roughage your ration does not need barley. It would be better to mix 200 pounds of ground oats, 400 pounds of bran and 50 pounds of oil meal. If you find it necessary to use the barley feed it in place of the oats or better use 100 pounds of each in the above mixture. This concentrate should be fed to the cows in the proportion of one pound of grain for each three and one-half pounds of milk produced.

A. B. N.

APPLE POMACE

Makes Good Feed for Dairy Cow.

Kindly tell me whether or not apple pomace is good for dairy cows and what is its feeding value?—J. E. P.

This question was answered by M. O. Maughan of W. S. C.:

Apple pomace can be considered a good succulent feed for dairy cows and its use is to be recommended. When placing it in the silo care must be exercised to add sufficient water so as to make it more palatable and succulent. Otherwise it is too dry and is not so readily eaten.

The dry pomace has the following composition and is reported as being equal in feeding value to corn silage. However, when the water is added it is not as nutritious pound for pound as corn silage. Dry matter, 23.3 per cent; digestible protein, 1.2 per cent; digestible carbohydrates, 15.6 per cent; digestible fat, 0.8 per cent, making the total digestible nutrients, 18.6 per cent.

Torkleson Has Honor Cow.

The records of all the Oregon cow testing associations for the month of October have been received by the county agricultural agent at Redmond. In all 15 associations reported from Coos, Curry, Lane, Douglas, Tillamook, Linn, Polk, Yamhill, Gresham, Washington, Marion, Clackamas, Crook and Deschutes counties. Deschutes county had the honor of being the home of the cow producing the highest amount of butter fat during the month, says R. A. Ward, the county agent.

Bert Torkelson's honor cow, Daisy, produced 1308 pounds of milk and 74.6 pounds of butter fat in October. The next highest one in the state produced only 67.76 pounds of butter fat during the month so Daisy's record is safe by quite a margin.

Mr. Torkelson also had the highest herd in the central Oregon association; five cows had an average production of 869.2 pounds of milk containing 49.94 pounds of fat.

In commenting upon the work of the association, County Agent Ward said: "The value of cow testing in weeding out undesirable boarders can be readily seen, when one compares the production of Mr. Torkleson's cows with the rest of the cows tested in our association. The total average for all cows in the association was 618 pounds of milk each, containing 27.8 pounds of butter fat. Average cost of feed $7.76. With butter fat at 52c, the value of Torkelson's cow over the average cow in our herds is at once evident.

Plan Cooperative Creamery.

Plans are well on toward completion for operating a cooperative creamery in Medford, Ore. Between 75 and 100 patrons are signed up, with over 500 cows. George A. Morse of Talent is president; F. C. Hollabaugh, Talent, vice president; Frank Davis, Medford, secretary and treasurer. The latter is an experienced creamery man on both the mechanical and business departments.

H. A.

Cultivating Timothy

To the Editor: Would you tell me whether it is worth while to cultivate timothy ground? If so, should it be done in the fall or spring?—D. F., Oakesdale, Wash.

In answer to the above question E. G. Schafer, professor of farm crops at the Washington State college, says:

I can not give you the experience of any growers who have actually made a practice of cultivating timothy. The value, however, of cultivation of any crop results largely from aeration of the soil, putting it in good tilth and destroying the weeds. In order to do this to the best advantage it is necessary to plow the land for the wheat crop when wheat or other grains are seeded. Of course, it is impossible to replow the land when you have timothy growing on the ground except when you plow up the timothy and use the land for some other crop. However, the same benefit which results from plowing or tillage for other crops would in a measure be beneficial to timothy if properly cultivated. I believe it would be preferable to perform such tillage in the spring. I may say, however, that at the base of the timothy plant a bulb is formed for the production of a new stalk or set of timothy. If these are injured to a great extent, of course, it will retard the growth and therefore the production of the crop. Tillage operations should not be severe enough to do any great damage to these bulbs and hence to the plant.

World's Wheat Stocks.

Available supplies of wheat in United States, Canada, Europe and other countries were 264,823,000 bushels November 1, according to the Daily Trade Bulletin. There was an increase in October of 28,949,000 bushels, compared with 3,198,000 in September and 25,511,000 in October, 1916. Total a year ago, 276,715,000 bushels.

Stocks in the United States were 34,914,000 bushels, an increase last month of 9,960,000, compared with a gain of 6,801,000 last year. Total last year, 118,035,000 bushels.

Canadian stocks were 41,764,000 bushels, an increase last month of 23,000,000, compared with a gain of 25,332,000 last year, when supplies were 46,292,000 bushels.

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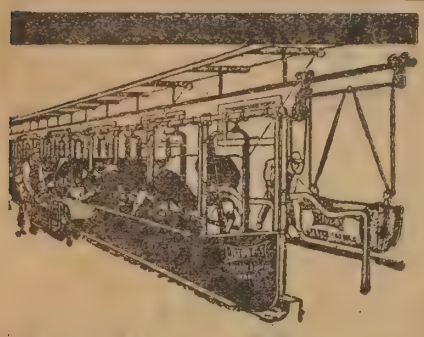
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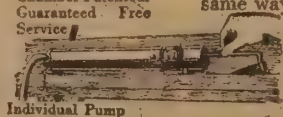
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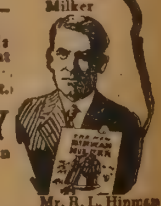
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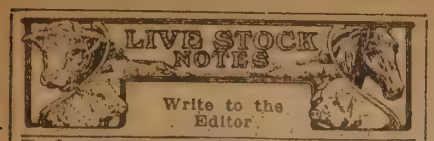

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E. J. IDDINGS, Editorial Contributor.

Sheep on the Farm

A striking instance of the value of sheep on a farm and the rapid increase and profit with a few well-bred sheep is the experience of Walter Smith, who sold a small flock of Shropshire ewes at Enterprise, Ore., nearly three years ago. To the Farmer correspondent he said:

"I started in with 16 head of Shropshire ewes, for which I paid $96, or $6 per head. They were good sheep and I bred them to the best bucks obtainable. That was a good price for sheep when I bought them seven years ago, for sheep were very low in price then as compared with prices now. I sold all the buck lambs for $10 each and kept all of the ewe lambs. I kept account of all the sales of lambs, wool and mutton. I kept the sheep four years, selling them in February, 1915, at auction sale. They brought the highest price ever paid in this section at that time, for they were a fine lot. The prices paid for them ranged from $10 to $12.50 at the auction sale held in February. A few of the ewes that had lambs at their side then brought $12.50 each. After the sale I figured up what they had brought at the sale and what I had received for buck lambs and wool and the total was a little more than $1000.

"That was the receipts from an investment of $96 in four years. I feel that the sheep cost me nothing to keep as they lived on what would otherwise have been wasted and kept the farm clean of weeds and foul growth. While the returns seem large, they are very small to what they would have been had I kept the sheep until now. They would have brought enough now to have bought one of the best farms in Wallowa county. I sold them three years ago because I gave up the lease on the land I had and planned to quit farming. My one mistake was in not staying with the sheep and the farm a few years longer and I would have been independent and the greater part of my wealth would have been made from the sheep."

The writer was at the sale of Mr. Smith's property and remembers the comments on the "high" prices paid for the sheep, which were an exceptionally fine lot, not registered, but practically pure bred Shropshires. Some of the ewes sheared as high as 16 pounds of wool and one of them weighed 240 pounds, and most of them would weigh over 200 pounds. They had been bred up from very ordinary ewes by the use of purebred, large-sized bucks and were just the kind of sheep for farmers. —J. E. N.

Veterinary

Dr. S. B. Nelson

Cut Feed Down.—It there any help for a 10-year-old horse that passes water as thick as a thin syrup?

J. J.

Give your horse two tablespoonfuls of artificial Carlsbad salts on its feed morning and night. Give him one teaspoonful of Lugols' solution of iodine in his drinking water at noon. Cut his feed down one-third.

Lambs Cough.—This spring our lambs began to cough and had a discharge from their noses, the wool slipped and they did not grow as well as the rest. Now some of the ewes have the cough. They have running water all the time and a large pasture. J. A. B., Elgin, Ore.

I would rather be of the opinion that your sheep are affected with one of the forms of lung worm. You might try placing the lamb and the sheep in a closed room and allow them to breathe sulphur fumes which originate in the following manner:

Place a tub in the center of the room with two inches of water in it and a few bricks. On this put a pan of sulphur. Set fire to the sulphur and close the room and let the lambs and ewes breathe the sulphur fumes for some time. Then turn them out doors quickly. If you desired you could do this on a few and see how it works for you. I would, however, believe that the better thing for you to do is to consult either your veterinarian at Corvallis, Ohe., at the station, or your state veterinarian at Salem, Ore., and if necessary let either of them make a post-mortem to see really what the trouble is, and they will give you advice.

Bloody Milk.—I have a cow that gives bloody milk; at times it is badly caked. There seems to be something the matter with one quarter of her udder, the milk flows from the teat freely, but comes into it very slowly. Would a milk tube help this latter trouble?

A. B. S., Bliss, Idaho.

For the bloody milk give your cow one teaspoonful of sodium hyposulphite in one pint of water once daily, and for the inflammation I would offer the following treatment:

First, I must suggest that the treatment mammitis is a serious matter, and takes considerable time on the part of some one, owner or employe.

It requires the frequent bathing of the udder with hot water, in which has been dissolved a handful of common salt. This pailful of water should be as hot as possible without burning the animal. Wash the udder until the water is cool, then rub dry and apply a little of the following liniment: Fluid extract of bellodonna, 2 oz.; fluid extract of phytolacca, 2 oz. Then massage. The application of this medicine should not be severe. In bad cases it is advisable to give from a teaspoonful to a tablespoonful of the fluid extract of phytolacca morning and evening.

Sometimes it becomes necessary to poultice the udder. Take about five yards of 7c to 9c unbleached muslin, tear the ends into strips and tie these over the loins, so that the udder is supported in this bandage. Cut four holes where the teats of the udder should come through. Now fill in the poultice made of dried hop leaves. The leaves should first be pulled apart, then soak with hot water. In order to keep the poultice hot I have found that a Chinese hand warmer is very fine. This is a small tin box in which tinders made of charcoal, rags, etc., may be burned, and which when wrapped up in a piece of cloth and placed in the poultice, so as not to burn the cow, will keep the poultice warm from two to three hours.

Frequently it is advisable to give the animal at the beginning of the treatment one pound of Epsom salts in about two gallons of water.

Confiscated Liquor.

Destruction of confiscated liquor, which has been a duty of peace officers since Washington adopted prohibition, will probably cease. Steps have been taken by Charles Hebberd, federal food administrator for Washington, to put to other uses the vast quantity of liquor seized by the peace authorities. Mr. Hebberd has received a telegram from the United States food administration advising that the matter has been submitted to the war department. Mr. Hebberd has asked sheriffs, chiefs of police and prosecuting attorneys not to destroy any more liquor until he receives further advices from Washington.

Move to Spokane.

S. A. Jones, for several years a resident of Bonners Ferry and the lessee of the Keinholz ranch in Paradise valley has left with his wife for Spokane where they expect to make their future home. Mr. Jones sold his stock and farm implements to W. T. Kuntz.

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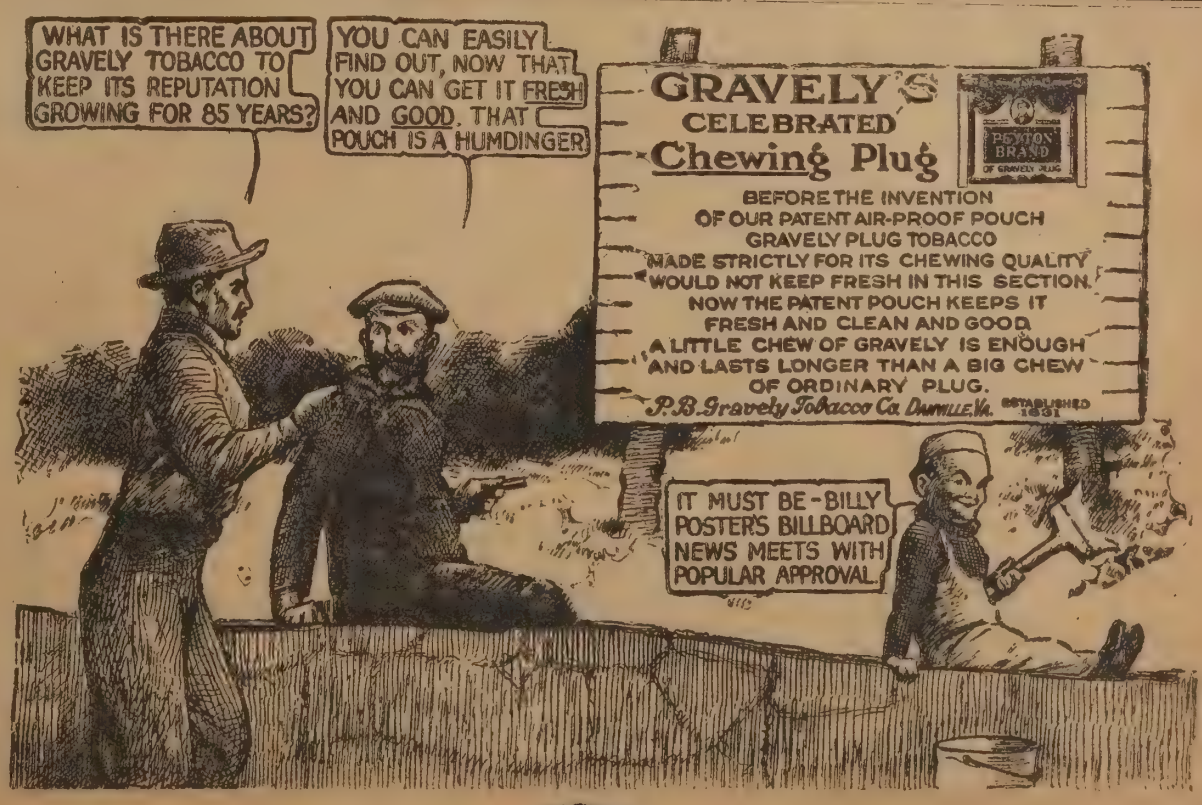
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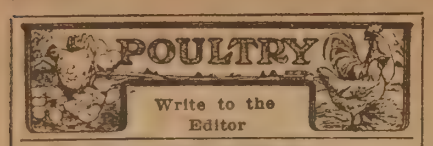
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The Lawrence-Williams Co., Cleveland, Ohio







JAMES DRYDEN
Editorial Contributor

Feeds and Feeding

There is no end to questions about feeding. Feeding may be one of the most important subjects in poultry-keeping, and yet it may be easily mastered. We do not know all about different foods and different methods, but enough to know, if the knowledge is only applied, to enable the poultryman to get eggs in winter. He has to apply the knowledge faithfully and diligently. A great many fail in the application.

There are breed and breeding questions, and there are feed and feeding questions. It is not all in the feed any more than it is all in the breed. Breeding and feeding are just as important as breed and feed.

We may feed a balanced ration; that is a ration containing all the necessary foods for egg production, and not get 100 eggs in a year. But if we feed the same ration in a different way we may get 200 eggs. It is not enough to study feeds; we must study feeding as well.

Among the mistakes in feeding, I may mention the following: Irregularity is one of the worst. The poultry is often neglected on the farm. The farmer goes to town and does not get back in time to feed the fowls. They go to bed with an empty crop, and what food may be left in their digestive tract is drawn upon for bodily maintenance and there is none left to make eggs from. Next day to make up for the neglect the fowls are given a double dose, and a starve and an overfeed always means digestive disorders and slackened production. You might as well expect to make a record trip in an automobile across the continent with the engine "dead" half the time for lack of gasoline, as to expect the hen to produce profitably on irregular feeding. The feed is the fuel for the hen, just as the coal furnishes the steam for the steam engine. It is feed that furnishes heat for the body, and heat is life.

Feed also furnishes egg-making material, The egg can be made in no other way. The feed, which is the raw material, must be fed to the hen in order for the hen to make eggs. If the supply of raw material is not regular the output of eggs, which are the finished product, will not be regular.

Irregularity in feeding is one of the chief causes for the failure in egg production. Try this little experiment. If meat scrap has been fed regularly, cut it off all at once and give none for 10 days. The egg production will drop about half. Then start again to feed them all they will eat all the time and the hens will soon be out of condition; they will be in a serious plight and egg production will decrease further. There will be digestive disorders and sick hens. This would not be the fault of the feed, but the fault of the feeding—irregularity.

Another mistake in feeding which accounts for a great loss in eggs is in making radical changes in the ration. The hen is very particular as to what she eats; she is very suspicious of new feeds. The egg organs are very sensitive to environmental conditions and to changes in feed. Set the dog on the hens, or let the youngsters scare them, and there will be few eggs for several days after. Does the hen taste the food she eats? Bring up a hen on wheat as the grain food, then change all at once to yellow corn. She will not eat the corn until starvation stares her in the face. Then after she has learned to like yellow corn, give her half white corn and half yellow. She will eat the yellow and leave the white untouched. Feed her meat or beef scrap, then change all at once to fish scrap, and she will shun the fish scrap until after a few days she has satisfied herself in some way that the fish scrap is wholesome and perfectly harmless. Feed her beets for green food, then change to kale and it will be several days before she has finished her investigation of the plant and concludes to eat it, even though the egg-laying suffers seriously in the meantime. Is it a question of taste? If so, the sense of taste is very highly developed in the hen that will distinguish any difference in white and yellow corn, or will hesitate in eating kale through afterward she will eat it in preference to most any other kind of greens. Or is it a blind instinct that makes her suspicious of all foods until in some unknowable way she can satisfy herself that they are not poisonous?

"It is a fact that wild fowls refuse to eat poisonous seeds or plants, and the keeping of domestic fowls on the farm would probably be unprofitable if they did not possess the same faculty of telling what were poisonous and letting them alone. Whether the fowl's aversion to new foods comes from a natural instinct to protect herself against poisoning, or is merely a question of taste, getting accustomed to the taste of the food, the lesson to the poultry feeder is that he should not make a radical change in the feed if he wishes to keep up egg production.

The changes therefore should be made gradually, not radically. If the change is to be made from wheat to corn, start feeding the corn, but keep feeding wheat until the fowls apparently eat the corn as well as the wheat. Cut down on the wheat gradually and increase the corn gradually. By the end of a week or 10 days the full change can usually be made. It is the same with other grains or foods. If egg production falls off after a change of feed, it is more likely to be that the change was not made judiciously, rather than the fault of the new feed.

J. D.

Lice on Poultry

The body louse is probably the most injurious species on grown chickens, but it also infests young fowls, sometimes seriously, says a government expert. As it remains on the skin of the host, irritation is kept up constantly. Often a marked reddening of the skin of the fowl in the regions most heavily infested results and in some cases scabs and blood clots are formed. The eggs are deposited in clusters on the base of the feathers, usually being attached to the lowest barbs along the shaft. They are most abundant on the small feathers below the vent, where the masses of eggs sometimes become very large—fully half an inch in length. As the lice continually add eggs the masses are extremely large when seen several months after molting. In the case of young fowls the eggs are often deposited in numbers on down or small feathers and on hairs about the head and throat.

Sodium fluorid is one of the most effective remedies against the body lice of chickens, as well as other varieties



Mass of body louse eggs attached to a feather. Greatly enlarged.

of lice and chicken mites, according to experts of the department of agriculture. The methods of applying this remedy were given in the Farmer May 24 of this year. A portion of that article is here reproduced:

Sodium fluorid—say it plainly to the druggist or you may get sodium chlorid, common salt, which it not only resembles in name, but in appearance—may be obtained at most large drug stores.

To apply the material in dust form place it in an open vessel on a table and with one hand hold the fowl by the legs or wings. With the other hand place small pinches of the chemical among the feathers next to the skin, according to what is known as the "pinch" method, which proceeds as follows: One pinch on the head, one on the neck, two on the back, one on the breast, one below the vent, one on the tail, one on either thigh, and one scattered on the under side of each wing when spread. Each pinch can be distributed by pushing the thumb and fingers among the feathers as the material is released. If the chicken is held over the vessel the material which falls from the fowl during the operation is recovered.

Turkey Shipments.

Thanksgiving shipments of turkeys from Oakland, Oregon, this year have been close to 80,000 pounds, which, at close to 30 cents a pound, amounts to well up toward $24,000. The Christmas and New Year's shipments are expected to equal those of Thanksgiving. The shipments this year are just a little below the average, Roseburg being the only point in Douglas county that shows an increase. Oakland is said to be the third largest turkey shipping point in the United States and it has besides, large shipments of chickens and livestock. One day last summer a train load of 37 cars of sheep was shipped.

The Thanksgiving shipments of turkeys from the little town of Yoncalla, the other big turkey shipping point of Douglas county, amounted to close to $20,000. Chicken shipments for the year are estimated at $6000 and eggs close to $8000.

D. Hunting, one of the turkey shippers and growers, informs me that, while most of the turkeys used to be seen on the range, the practice is growing smaller each year, as farms and orchards have taken up much of the range. He says turkeys are naturally range birds, eating nearly any green thing, besides grasshoppers, crickets and other bugs.

—H. A.

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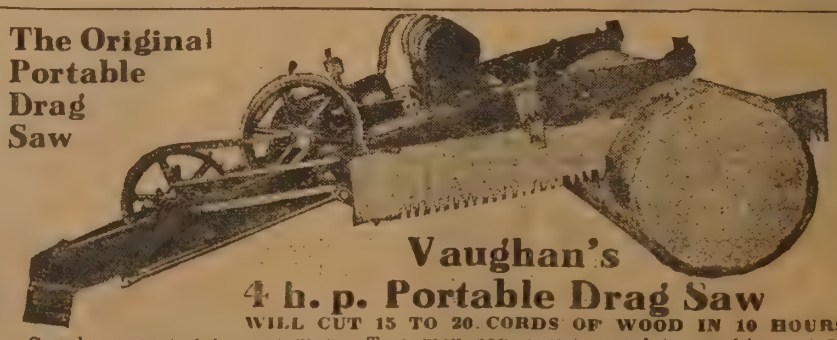
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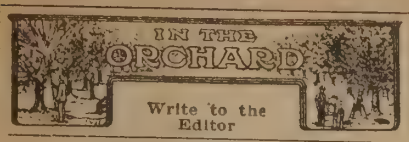
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GRANVILLE LOWTHER
Editorial Contributor

Pruning

It is impossible to tell any one else how to prune; every one who knows or thinks he knows has an ideal of his own and is not likely to take kindly to any suggestions from others. Besides, different varieties of trees have different habits of growth and require different treatment.

Those that grow habitually with spreading branches should be treated differently from those that grow habitually with upright branches. Again, more depends on the age of the tree, and the soil conditions than most people generally suppose. If the soil is rich and the trees make a heavy wood growth they should not be pruned so heavily as if it is poor. If the soil is poor, and the wood growth light, a heavy pruning may be necessary in order to give strength to the remaining branches to develop commercial fruit.

But after all these things and many others are considered there are a few simple rules that may be observed with profit:

First—Cut out all dead branches.

Second—If two branches interfere with one another cut out the less desirable of the two.

Third—Cut out any branch that looks like it was infected with blight. It may not be so, but if it is diseased it is probably no good anyway, and if blight is the cause of the trouble it may infect other trees in the same orchard or extend to other orchards.

Fourth—Wherever branches are so clustered that the fruit will not color, thin them so as to let in the sunlight and give a natural color to the fruit.

Fifth—Cut close enough to the main branch so that the wound will heal. One of the mistakes of otherwise good pruners is in the fact that they leave stubs of branches that die, and later decay, and the decaying process extends into the main branch or trunk and hastens the trunk of the tree.

G. L.

Understanding the Tractor

What Is Horsepower?

The drawbar horsepower rating of a tractor does not mean the pulling equivalent of the same number of horses. For example, a tractor that develops a drawbar pull of 16 horsepower will only replace the work of about eight good farm horses. It is usually safe to divide the drawbar pull by two.

The customary unit of horsepower measure as applied to an engine or machine is equal to 33,000 foot pounds per minute. The rating of horsepower developed by a motor is obtained by means of a dynamometer or brake. This brake horsepower is the useful or commercial horsepower. It should equal the indicated horsepower of the engine multiplied by the mechanical efficiency of the machine.

The working ability of a horse is measured by its pulling power, which is called draft, and it is on this basis that traction engines are compared to horses.

The pulling power of the animal is given as one-tenth of its weight when working continuously 10 hours each day pulling some object at the rate of two and a half miles per hour.



Under these conditions a 1200-pound horse will develop but eight-tenths of a horsepower and a 1500-pound horse one horsepower.

Winter Sprays

This is a good time to spray for scale, provided the weather is not too cold. If it is not cold enough to freeze the spray while it the being applied, or soon after, it is a good time. However, any time after the leaves have fallen in the autumn and before the buds open in the spring, is a good time to spray for San Jose scale, but the sooner the attack is made on them the more easily they are killed, because the shell hardens with age. Besides, the winter spray, in a limited degree, kills a good many pests other than scales. Some of these pests are oyster shell bark louse; the eggs of aphis; red spider, and certain fungus diseases, like mill-dew, leaf curl; mosses; lichens etc.

However, if the trees are to be heavily pruned it will be more economical to wait until the pruning is done, before applying the spray. This may not be true in every case; it depends upon what the pruners do with their brush. If the brush is burned before the eggs hatch in the spring, the pruning should be done before the spraying, but there are certain insect pests, that hide in the bark, or that fasten themselves upon it, and eggs hatch from the brush soon after spring opens.

What Are the Winter Sprays?

There are two in general use, one is the lime sulphur; and the other is crude oil emulsion. The lime sulphur is a compound of sulphur, lime, and water, and has the following formula:

Sulphur flour or ground sulphur	1 pound
Good stone lime	½ pound
Water	½ gallon

I have given this in a small amount and the proportions can be multiplied according to the amount of spray used. This is the formula without the amount of water necessary in applying to the trees; it is the solution as it is sold in barrels.

The second spray that is gaining considerable popularity is the crude oil emulsion. This has the following formula:

Emulsifier.

Lye	2 pounds
Hot water	10 gallons
Fish-oil soap	20 pounds
Crude oil	20 gallons
Water to complete	200 gallons

This preparation has met with considerable popularity by those who have properly prepared it and proerly applied it. It has been said that in some cases it has burned the bark off the tree, but my observation is that this was because it was not roperly mixed, or perhaps not properly proportioned.

G. L.

City Cares for Liberty Bonds.

Toledoans who hold Liberty loan bonds may have them stored and cared for free of charge by the city. The large vaults in the office of the city treasurer are available for that purpose, the mayor says.—Toledo News-Bee.



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When the ground is shrouded in deep snow and the thaws bring ankle-deep, oozy mixtures of mud and slush, keep your feet warm, dry and comfortable in U. S. Rubber Footwear.

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Italy Holds Ground

Germans Unable to Break Through

With the eyes of the world on her, Italy is apparently proving equal to the gigantic task thrust upon her by the combined German and Austrian forces when the chaotic conditions in Russia allowed Germany to withdraw troops from the Russian front and mass them against Italy. Violent attacks by the Teutons early last week compelled the Italian army in one mountainous section to give ground, but the latter recovered, checked the attack and later regained much of the ground lost. Other portions of the Italian line are remaining unshaken, and it begins to appear that the hope of the Germans and Austrians of being able to crush Italy and turn nearly all their power against the French and English in the north before the American army can make itself effective in actual battle is to be disappointed.

Peace Is Talked Again.

Germany is making what are termed peace overtures as a sort of Christmas package to the world. The allies, including this country, are in no mood to listen to those terms, for it is evident from early forecasts of them that they are terms based on an idea of German victory. It is expected that Germany will appeal to the world to place the blame for further bloodshed the coming year upon the allies, in view of the fact that they have rejected, as reject they will, the kaiser's offers of what he calls peace terms.

Red Cross Succeeds.

While Europe is in the throes of war, the people of America, aside from preparing to play their active part in that war, are rallying loyally to the American Red Cross with a view of alleviating some of the suffering. The great, nation-wide campaign for new members to the Red Cross appears to have attained its goal of about 10,000,000 new Christmas members. With the great and final day, the day before Christmas, remaining at this writing, the total of new members has exceeded 8,000,000. It is not now officially announced what the exact membership of the association is or has been, but it is understood that this great increase practically doubles the former roll. It means that nearly one person out of every five in the nation, men, women and children, is a member of the world's greatest humanitarian organization.

Russia Still Chaotic.

The possibility of Russia becoming so involved in civil strife as to break up into a number of separate and independent states or new nations is seen in the chaotic conditions of affairs in that country. Civil war is raging, and so-called leaders are springing up in many quarters to help carry on the factionalism of the distressed country. Owing to this condition, Russia seems no longer to be counted as of any consequence in this war. If she has any influence at all, it is not improbable that it will be advantageous to Germany rather than to her former allies, for through Russia Germany and Austria are about to be enabled to secure provisions to some extent.

Will Control Railroads.

President Wilson will ask congress immediately after the holidays for legislation giving him complete authority to control the railroad situation if it is found necessary for the government to take such action.

Argentina Is Aroused.

Further disclosures of treachery on the part of the German diplomats and high officers of the Argentine republic some time ago have caused the people of that country to protest vigorously, even to the extent of urging a declaration of war against Germany. The charges implicate the president of the republic in matters considered by many to be treasonable.

Will Protect Soldiers.

General Pershing, in charge of the American troops in France, has issued stringent orders prohibiting liquor or immoral institutions within reach of the soldiers under his charge. Leaders in the French and British armies have formally expressed high regard for the American soldiers and full confidence in General Pershing as their commander.

Krupp Works on Fire?

Unofficial reports declare the great Krupp gun works in Germany to be on fire and suffering severe damages. Whether this is true or not is problematical. This is Germany's chief munitions factory, but it is not to be believed that its partial destruction by fire would seriously handicap the war program of that country. The factory employed some 30,000 men before the war. This number is now probably largely increased.

Probe Military Affairs.

Charges having been made that those in charge of the military affairs of this country have been derelict in their duty and that the soldiers and sailors are inadequately equipped for duty are being made by a committee of congress. The investigation is based on charges that the war department is not rushing the manufacture and distribution of arms and ammunition as contemplated in the war appropriations measures passed by congress since the declaration of war. Conclusions from the hearings have not been officially drawn.

Sugar Buying Regulations.

Secretary of State I. M. Howell has thrown the full force of the weights and measures division of his office into the work of food regulation and conservation for the United States government.

The secretary of state has named Bert F. Snyder deputy superintendent of the weights and measures division, and a corps of eight inspectors to work with Charles Hebberd, federal food administrator for Washington, and the latter has designated these men from Mr. Howell's office as field agents in his department.

"It will be the duty of these agents to report any infractions of the licensing regulations and rules of the United States food administration," said Mr. Hebberd. "Furthermore, they will keep close tab on violations of the sugar regulations, and will see to it that retailers sell no more than one dollar's worth of sugar to individuals living in cities, not more than 25 pounds to farmers living at a distance from cities, and that hotels and restaurants purchase not more than a 10 day's supply. It will also be the province of the field agents to report immediately any slackening by hotels and restaurants of the observance of the wheatless Wednesday and the meatless Tuesday."

Finds Trouble in Hooverizing.

To the Editor of The Washington Farmer: We are asked to save the wheat for our allies and our soldiers by eating more corn and oats. We were doing this before the Hoover movement. However, people will not continue using corn and oats unless something is done to reduce the price. If the government can reduce the price of wheat why not the price of corn and oats? There is no good reason why corn and oats should be so high. Why should graham and whole wheat flour be higher than the best fancy patent?

Now, if we Hooverize, Uncle Sam will have to reduce or regulate the prices of substitutes for wheat flour. We have been having white bread only three or four times a week for the last four months, and I am pretty tired of the extra work of hot bread so often.

MRS. H. W. PRUYN. Rainier, Wash.

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We are highly gratified with the way the new system is working out and we hope that every one who believes in dispensing with the middleman will help make this experiment a complete success.

The price of your state paper is lower as a result of our cooperative plan; but, as our readers will readily agree, the paper itself is getting better all the time.

The giant press shown on these pages is just one of the means we have adopted for giving you a more attractive, up-to-date and helpful home paper. When you are out to a social gathering or for a friendly call please think to mention The Washington Farmer.

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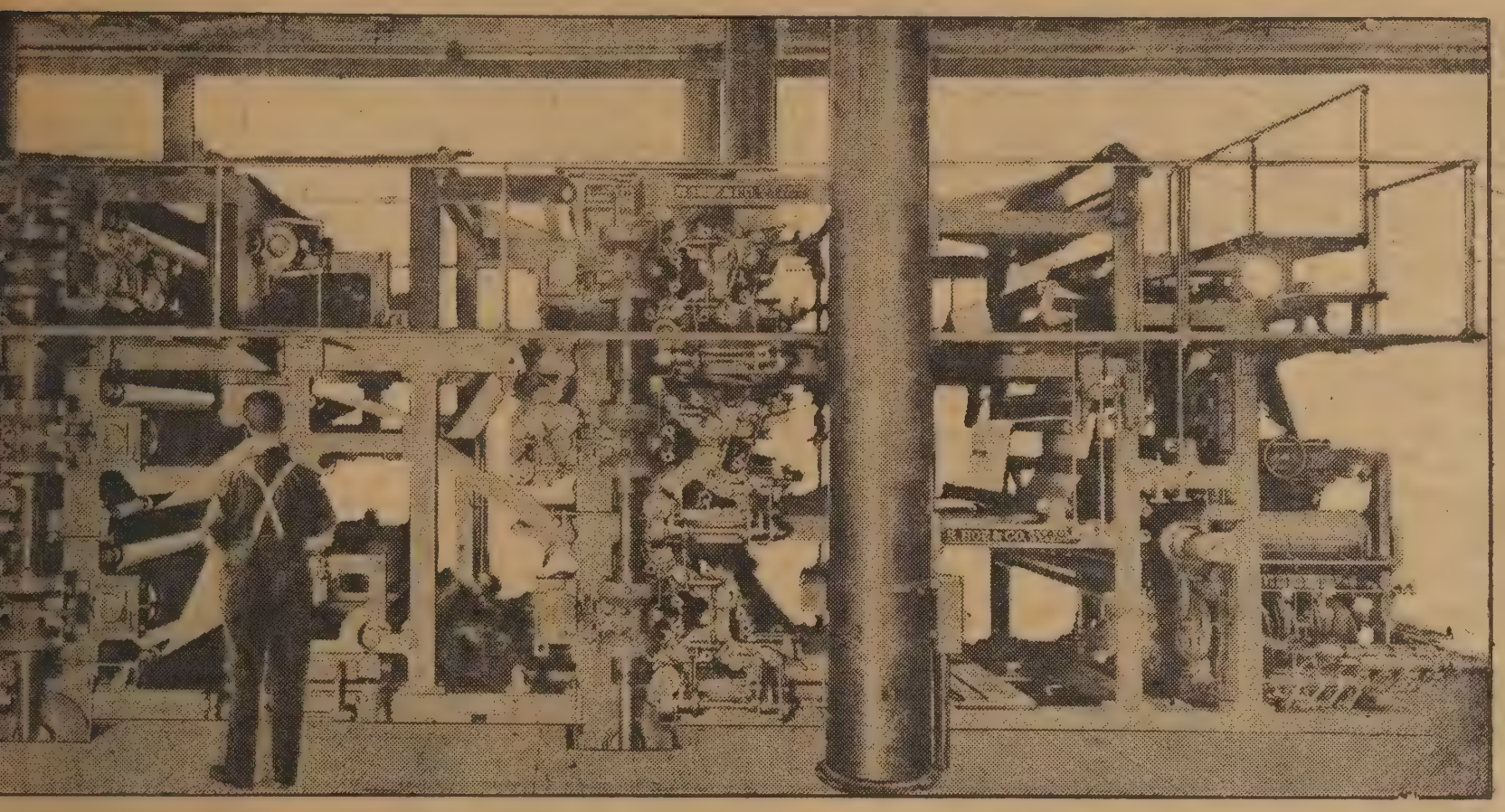
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FLORA FLIRT—HER EYES JUST WON'T KEEP STILL



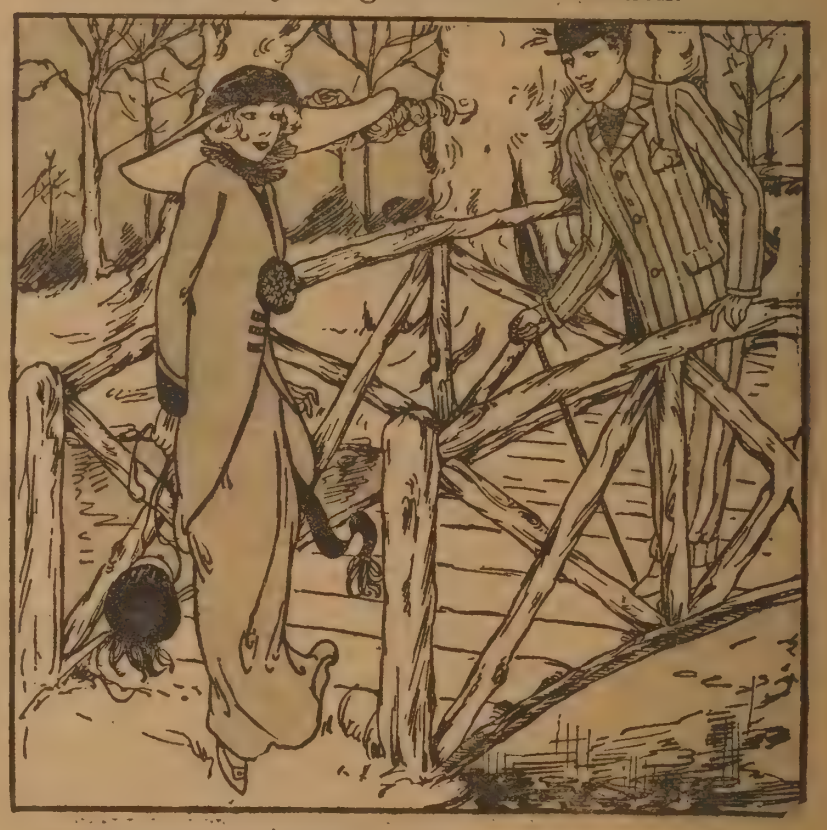
Flora Flirt in fine array
Went to walk on a windy day.



Her pretty bonnet, a French confection,
Made every one glance in her direction.



A "nice young man" then caught her eye
On a rustic bridge in the park nearby.



Make her eyes behave? Flo never can.
She smiles and flirts with that nice young man.



The wind just then, with fearful zest,
Blows off their hats. Flo's much distressed—



For after his hat the young man took,
While poor Flo's hat floats down the brook.
The Moral—The moral is this: To flirt I'd cease
If I couldn't hold on to my headpiece.

Meat Packers Are Under Fire

Livestock Industry Should Profit by Investigation

The federal trade commission is rendering the livestock industry immensely valuable service by turning the searchlight on the methods of the big packers. Already it has made sensational disclosures of high finance, dummy officers and sham trustees.

Establishment of ownership of the stock yards is only the first of the tasks before the commission, which plans to continue its investigation into every branch of the country's meat supply and the alleged control of the meat food of 100,000,000 people by five principal groups of packers. The commission's report will be made the basis for recommendations that additional legislation be enacted to remedy the situation, if found necessary, and any evidence of lawbreaking will be turned over to the department of justice.

The commission has employed the famous prosecutor, Francis J. Heney, as its special counsel, and he promises many startling disclosures.

Organization of the Chicago Stock Yards company, under the laws of Maine, alleged to have been for the purpose of providing a legal method for the payment of millions in "pickings" or rebates to the packing plants by the Chicago Junction Railways and Union Stock Yards company of New Jersey occupied Mr. Heney and the witnesses called at the first of a series of open hearings.

"The whole plan was an entirely transparent proposition," Mr. Heney told the commission, to "hide the real ownership and conceal the fact that Armour and other packers had an interest in the yards."

Mr. Heney says the packers control every stockyards in the country, but have concealed their ownership by stock transfers. If that is true, it throws a flood of revealing light on the reasons for the steady decline of the livestock industry in the United States. The government is trying to prove that the packers not only own the Chicago stockyards but the connecting railroad that links them up with all the other roads entering Chicago.

Given that combination it is easily seen that they could dictate the prices paid for hogs, cattle and sheep, and short-sighted, selfish interest would tempt them to make the prices so low that the industry would decline. They may be credited with sufficient shrewdness not to carry their greed to the point of completely destroying the industry, for in doing that they would destroy themselves. But there is a point of depression where scarcity of meats would enable them to shove up prices and increase their profits enormously.

It will be cause for rejoicing among stock-growers everywhere, from Montana to Mexico, that the government has put Heney on the packers' trail.

Horticulturists to Meet

A conference of horticulture inspectors is to be held at the State College of Washington, January 7-12, 1918. The following program has been prepared:

Monday, January 7.—Open Round Table, M. L. Dean in chair; "Fruit Diseases," Professor F. D. Heald.

Tuesday, January 8.—"Insects," Professor A. L. Melander; conference assembly; "Chemistry of Sprays," G. A. Olson; "Fruit Diseases," Professor F. D. Heald.

Wednesday, January 9.—"Insects," Professor A. L. Melander; conference; fruit, identification of varieties; "Fruit Diseases," Dr. F. D. Heald.

Thursday, January 10.—"Insects," Professor A. L. Melander; conference; assembly; 'Chemistry of Sprays," Professor G. A. Olson; "Fruit Diseases," Professor F. D. Heald.

Friday, January 11.—"Insects," Professor A. L. Melander; conference; fruit, identification of varieties; "Potato Diseases," Professor F. D. Heald.

Saturday, January 12.—"Insects," Professor A. L. Melander; conference; fruit, identification of varieties.

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We Are Going Up Against Real Thing

(Continued from page four.)

shipped from state to state by the federal law. Mr. Nelson's final shot was, "Wait till after the war is finished and try to establish a new condensary, or try to put a new brand of milk on the market, and you will find out just what this law will do."

Among the resolutions passed at this session of the association, easily the first in the excitement which it created was that bearing on the importation of Chinese labor. As introduced and reluctantly fathered by Mr. McInnes, this resolution petitioned congress to exempt skilled farm labor, declaring that the very foundations of the dairy industry are threatened by the conscription of creamery workers and skilled milkers; and as a final remedy, to be used if all other resources fail, congress is petitioned to modify for the period of the war the Oriental exclusion act, to permit bringing in Oriental laborers in sufficient numbers to insure a maximum farm production, these laborers to be brought in under bond and sent back when the crisis in labor has passed.

Much heated oratory and some undeniably close decisions by the chair were interjected into the discussion preceeding the passage of this resolution, and at one time it seemed that a walk-out by the opponents of the measure must ensue. The volcano was temporarily covered over, however, and a semblence of harmony restored.

Another resolution adopted aims to put the responsibility for keeping shipments of meat from Sound ports in a sanitary condition on the shoulders of the dock and transportation companies, rather than to force the shipper to burlap his pork and veal. It was pointed out that the latter solution is one in appearance only, as new burlap is unobtainable at many shipping points, and the utility of using old sacking is more than questionable.

An anti-discrimination resolution, aiming to prevent discriminatory price making by a condensary maintaining plants at various parts of the country for the sake of breaking down opposition or competition at any local plant, was unanimously adopted, as were other resolutions denying that the farmers were not backing the Liberty loan campaign; backing the National Dairy council in its fight against colored oleomargerine; and providing a vote of thanks to the city of Sequim for its hospitality to the association.

William Bishop, one of the old guard in the association and a pioneer in both dairying and live stock breeding in the northwest, was elected president for the coming year. Mr. Bishop, in his address of acceptance, declared that farmers are the slackest of all workers in their backing of organization within their own ranks, and that for this reason alone they are constantly put to shame by organizations representing far less numerous and important occupations.

Unusual Bargain.

To The Washington Farmer: Herewith I enclose my check for $1 for an additional year to The Twice-a-Week Spokesman - Review and for the Washington Farmer. I feel that I can not afford to overlook the unusual bargain.

E. M. LESLIE.

Naches, Wash.

Old Coyote

Should Come Across With Cash

By GEORGE LARUE.

The time is due for you to make that old coyote come across with the cash for those hens he carried off last summer and fall. Don't give him any more days of grace than you can help, for he is prime now and his fur is needed by the boys that are preparing to fight for liberty and humanity, and fur dealers are offering extremely high prices for the long-furred animals.

In addition to high prices for their fur, and to stop their raids on poultry, pigs and sheep, and to the sport in catching them, they have spread the rabies, a very serious malady, over most of the northwest, thus endangering people as well as stock. There should be a bounty of not less than $5 for each one that is presented for the bounty. Stockmen and farmers should be making efforts to get rid of them. They are more difficult to trap after the snow comes than before, but can be trapped in the snow. The best meth- I know for amateurs is to set the traps in likely places when it is snowing and let them snow under, and to just go near enough to see that there is nothing in the traps until he gets something or the snow gets too deep over his traps.

Traps can be set and covered with snow, by using the blade of an ax or a thin, smooth board prepared for that purpose. Slip the ax or board under the top of the snow so the snow will be about three-fourths inches deep on the ax and lift the ax or board carefully so as not to break the surface of the snow and slant the blade and pull to you so the snow will slide off unbroken. Cover trap, chain, and all signs you have made and brush your tracks out as you leave the place. Coyotes are more afraid of signs than of human scent. I never wear gloves when setting traps except to keep my hands warm. On one occasion I set four traps and after dark, used a lantern making the sets, and next morning I had three coyotes, and many other times I have set traps late in the evening and next morning would have a coyote. But it is best to not go nearer the traps than necessary when trapping with most kinds of fur bearers commonly found in the United States.

The next time I will tell some of my experiences with lynx, fisher and martin, which is more limited than with coyotes, but none of them are hard to trap.

Farmers' Union at Davenport.

The Lincoln County Frmers' union will hold its annual convention at Davenport, Wash., January 8-9.

The following program has been arranged for:

Tuesday, January 8—Organization; appointment of committees; setting of special orders; other business; report of credentials committee; seating of delegates; reports of other committees; reports of locals; reports of officers; address, "The New Union," by Almer McCurtain; other business: open meeting, to which the public is invited, President J. S. Barbre, presiding; community singing, led by Miss Elvena Miller of the Davenport high school; selections by the high school chorus; readings by high school students; addresses by State President Elmore and Hon. C. E. Myers.

Wednesday, January 9—Reports of state convention; report fire insurance company; address by State President A. A. Elmore; address, P. C. T. Weisman; address by one of the professors from W. S. C.; other business; reports of committees; other business; election and installation of county officers; reading and approval of minutes; adjournment.

"Old Milyuns can't please his young wife any way he tries, and yet he lives only for her."

"Then let him try dying for her."—Baltimore American.



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Magazine Department of The Washington Farmer

Not "Bit' but "Utmost"

Most Gigantic Task in Military History

The expression "do your bit" became popular in England when the war was still regarded as a storm that would soon blow over.

Then came the tragedy of Ypres with its appalling English losses, and England and her girdling commonwealths faced the grim truth, that the war was a life and death struggle with the autocratic power of Germany—that the invasion of Belgium was a violation of the good faith of nations—that imperial Prussia must be punished or her dogma of "might is right" would drive from the world those principles of democracy that now bind together the British empire.

A great people faced a great danger, and the trivialty of "doing one's bit" disappeared. Not one's bit, but one's utmost was demanded of every citizen of the United Kingdom.

Every nerve was strained toward that maximum efficiency necessary for victory—factories were put in high gear, the manufacture of luxuries curbed, ship building was speeded up, imports cut down, food waste reduced to a minimum, women substituted for men in factory and field—in short, every force was directed to the common end, the defeat of Germany.

England did not accomplish this reorganization in a day or a month; but day by day, as war became the prime factor directing all business, the simple purpose of the empire imposed itself upon the interests of the individual. The spirit of embattled England was emblazoned one day through the streets of London by women workers in munition plants.

This today is the imperative call of America to every citizen. "Drop every mortal thing and send them plenty of munitions, fuel, food and ships." Does personal business block the way? Sweep it aside, and stand by the soldiers, we owe them everything.

Not "bit," but utmost is our country's need. What is a "bit?" According to the dictionary the smallest quantity; a whit; a jot. Is a "bit" then the offering of America to a bleeding world? A "bit" the toll a patriot pays for the defense of the flag? A "bit" the price we pay for sons who give their all that we may live?

The war has reached a grave crisis. America's share grows ever bigger. The war zone stretches from San Francisco to Berlin. Every individual is personally responsible for holding that line. Our business now is war, and "doing one's bit" should have no place in our vocabulary or thought. America has undertaken the most gigantic task in military history, a task that calls for our utmost in strength and intelligence. Solidarity in America and unity of aims with our allies mean victory, and the guarantee, in all the ages to come, of human liberty and secure peace. The end is worth our all.

Flour and Feed Prices

Then Producer Takes His Wheat to the Country Mill

A writer asks publication of the following letter which he has addressed to Charles Hebberd, federal food administrator for Washington:

"I have a great many inquiries about the following prices of flour and feed, such as shorts and bran. The farmer receives only $1.85 net for his wheat at country flour mills. It takes four and a half bushels to make a barrel of flour. Allow four pounds for dirt per barrel, and the miller has one barrel of flour and 70 pounds of feed to sell. What is to be said in refuting this statement?

Cost of 4 1-2 bushels at $1.85	$8.32 1-2
Cost of milling per barrel	.75
Profit allowed	.25
Cost of four flour sacks	.20
Total cost to miller per bbl.	$9.52 1-2
He receives from the farmer per barrel	$10.50
He receives from the farmer 70 lbs. feed at $35	1.22
Total received	$11.72

"Or, in other words, he receives $2.20 more than he should be entitled to if he was held down to what the farmer has been."

The writer adds that he would like to have some miller explain this to the farmers.

That 25 Cents a Barrel

In this connection a correspondent writes from a town in eastern Oregon:

"I met here today the owner of a small, local flour mill. In the course of our conversation he complained of the injustice of the food administration order governing the profit of 25 cents a barrel on flour manufactured by millers. He contends that this ruling works a hardship on the small local miller, while at the same time it gives to the big millers a greater profit than they before enjoyed, and they were taking advantage of this extra profit in all new contracts.

"But here is the one point that particularly impressed itself upon me. This local miller does not deny that he is making from his flour profit more than 25 cents a barrel, but at the same time he is placing his product on the local market 70 cents cheaper than the big outside mills. He claims that the outside mills ship in and sell at $10.50, while he sells at $9.80 per barrel. He claims if he did not take more than the 25 cents profit he would have to shut down; but by continuing at a more than 25-cent profit he lowers the price to local consumers. Whereas, if the government compelled him to take only the 25-cent profit he can not possibly continue business, and, at the same time, to shut him down forces the public to pay 70 cents more for the outside product, all or either, he says, tending to work a hardship on local business and local consumers."

Holland's Farm Wages Advance.

News comes from Holland that farm wages have advanced much more than wages in other industries, the reason given is that other large industries have not, on the whole, made so great an increase of profits as the farmer.

For cutting (with a sickle) and binding wheat or oats the laborer received per hectare (2.47 acres) 35 to 40 florins ($14.07 to $16.08). Twenty years ago it is said 6 to 7 florins ($2.41 to $2.81) was considered good pay for similar work.

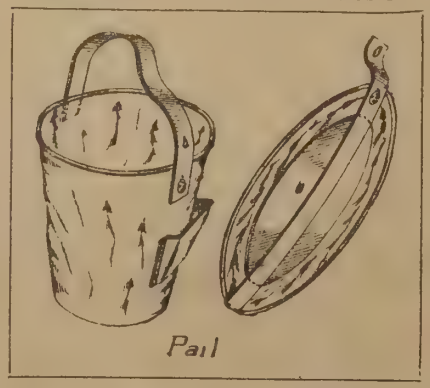
During the recent harvest an energetic farm laborer could make as much as 8 florins ($3.22) per day, and a man, his wife and two grown children could earn about 125 florins $50.25) per week.

Inventions

By C. J. LYNDE, Macdonald College, Quebec.

Occupies Little Space.

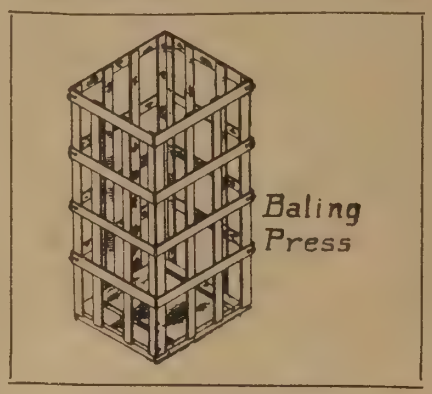
The bottom of this pail is made of wood, the top ring of iron, and the sides of canvas or ruber. It folds flat



and occupies little space in the carriage or car. The small pocket holds a sponge, wash cloth, or cake of soap. Make one for yourself.

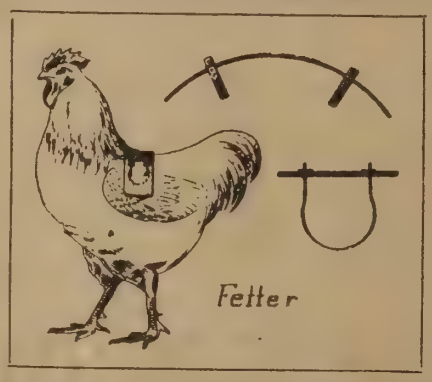
Bale and Sell Old Newspapers.

The idea here is to use this crate for baling newspapers. A cord is run down each pair of opposite sides and across the bottom and the newspapers are piled in as they accumulate; when the crate is full the cords are tied and the baled package is lifted out. Get a small packing box and use this idea.



It Prevents Flying.

This fetter has two soft leather bands which are passed around the wing bones



and secured through holes in the curved wooden saddle. You could make one from a piece of wooden barrel hoop.

Sidelights

Only Wanted Facts.

They were having an argument as to whether it was correct to say of a hen she is "setting" or "sitting," and, not being able to arrive at a satisfactory conclusion, they decided to submit the problem to Farmer Giles.

"My friends," he said, "that don't interest me at all. What I wants to know when I hear a hen cackle is whether she be laying or lying."

A Mistake.

The other night
I went to the theater
With a lowbrow friend
And the orchestra played
"Little Brown Jug."
And he thought it was the national
anth m
And stood up,
And I did, too,
Darn him! —Arkansas Gazette.

Pity the Poor Grocer.

The grocer saw that his best customer was a bit ruffled over something, so strove to be extra obliging and pleasant.

"I think," he said blandly, "living's getting cheaper. For instance, a year ago them eggs would have cost you 5 cents more."

"A year ago," said the customer, "when these eggs were fresh, they would have been worth more."

Motorcycle From Bicycle.

A motor driven wheel that can be inserted in place of the front wheel of an ordinary bicycle to convert it into a motorcycle has been invented.

SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University)

Why Science Strives to Stop Boils Before They "Head"



Dr. Hirshberg.

To bring the tiny superficial pustule of a boil "to a head" is no longer the most widely used method for the riddance of boils. This way probably favors the inoculation of the surrounding skin. The germ is apt to get into other pores near the infected spot and many boils instead of one are likely to adorn the skin with red polka dots.

A boil is created for the most part by a pus-forming microbe, which often finds its way into a hair follicle, oil or sweat gland. If the huuman fabric is in perfect order and the scarlet fluid of the human structure is in proper combative condition, the germs are worsted in the fight and sent to eternal peace. If, however, the microbe, called staphylococcus pyogenes aureus, in any way gets the upper hand in the struggle because of conditions in the anatomy which favor it, the fighting corpuscles of the blood-flow are overcome and the poisonous germ sets up its abode in the form of a boil. The slightest irritation of the collar or a too hard rub after a hot bath is suficient at times to open the road to this pus-forming microbe. It is impossible, under conditions of overwork, worry, improper food or any form of illness to expect the red soldiers of the blushing stream of your blood to strike down the invaders.

The Newer Treatment.

According to the treatment for incipient boils, you first trace out the infected follicle or canal of the skin. When it is found you prick it with a red-hot needle or a galvano-cautery.

Another treatment offers the use of a crystal of pure carbolic acid melted on the end of a probe, and its pressure on a young boil with just a little rub. A very good way, however, is to prick the pustule and to clean the cavity with sterile cotton, after which a tiny pointed stick dipped into liquid carbolic acid is inserted.

A more simple way to treat them is exposure to the rays of the sun or of an incandescent electric light bulb. A 15-watt bulb placed close enough to produce comfortable warmth is an easy way out of all difficulty. The skin which surrounds the boil should be shielded with a green metal shade. The shade is not put on the skin, however, but upon the electric light, and should leave a single condensed streak of light which should be allowed to penetrate the boil. After this exposure the spot should be protected by means of a vaccination shield.

This method, the heat process, is easy and not dangerous. There is no outside surgical instrument to be applied. The spreading of boils over a larger surface of the skin is also prevented. The probability of extension of the trouble and blood poison from misapplied home remedies is also averted. When electric lights are available for the purpose it is inexpensive, needs little time and it is easy to employ.

An Alternative Method.

When the heat treatment is not handy the use of an electric battery and a fine needle is a good substitute. The needle is conencted with the negative pole of the battery, the current of which is increased graually from one or two milliamperes to 10. Hydrogen is thus liberated into the boil and pus or any other matter in the infected surface of the skin is carried away.

The needle is inserted into the boil and kept there by hand. This is easily done, since the hands are not needed for the generation of electricity and therefore are free. After about three minutes of generation of hydrogen from the negative pole of the battery you connect the needle with the positive pole and again insert it in the hole of the boil. A 10-milliampere current is turned on and you again apply the needle. Oxygen and ozone are liberated now and these disinfect the hole from any dangerous germs that may be present.

Then you reverse the current again and the hydrogen which now comes in washes out the dirt or waste material. If the treatment is repeated twice a day prompt subsidence and healing result.

All the World's a Stage, and All the Men and Women Merely Players

One Result of Halifax Disaster



Ruins on Bilby street, one-half mile from scene of explosion which wrecked the city.

Germans Cite Own Ruthlessness



(Copyright, Committee on Public Information.)

Reproduction of a war poster appearing in a recent number of the Cologne Gazette, appealing to the German people to contribute to the loan, that Germany may be spared these horrors. The horrors referred to are those perpetrated by the Germans in France and Belgium. This was intended to act on the feelings and rapidly thinning pocketbooks of the people.

A Permanent Job



—Philadelphia Public Ledger.

Major General Crozier.



As a result of the charges of delays and shortages in the ordnance outfitting, the senate has indefinitely postponed action on the nomination of General Crozier for reappointment. From Representative McCormick of Illinois, who recently visited the European battle front, the military committee has statements tending to contradict testimony of Major General Crozier, chief of ordnance, regarding adequacy of General Pershing's equipment, and especially heavy artillery.

Waging War in Winter Time



With the first snow and cold the men in training are beginning to realize what winter in the trenches means.

Go to the Bottom



—New York Evening Mail.

Women Munition Workers in Lord Mayor's Show



The above is a photograph of a group of girl shell workers cheering the lord mayor of London as he passed by them in the great pageant which is known in England as the "Lord Mayor's Show," and for which practically every one in the whole city turns out. The girls in turn were cheered during their appearance in the pageant, which was almost exclusively of a military nature.



THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

Copyright, 1908, by Harper & Brothers.

SYNOPSIS.

Gale, trader, of Flambeau, has a beautiful daughter, Necia, and two half-breed children. Alluna, a squaw, is their mother. Lieutenant Burrel is sent to Flambeau to establish a military post. He and Necia become close friends. "No Creek" Lee, an unsuccessful miner, strikes a vein of gold. Stark comes to Flambeau to grubstake the miners and start a saloon. Runnion, a desperado, is his assistant. Stark's presence in the camp causes Gale and his squaw great uneasiness. Lee, Stark, Runnion, Gale and Poleon, a Frenchman, leave for the claim secretly so as to prevent a stampede. Necia hears of it, and, longing for riches so she may be as others girls, persuades Burrell to accompany her on a shortcut to the claim. Burrell, who is unpopular in Flambeau, chooses this means of beating the men at their own game. That night by the campfire Necia, realizing her peril, cautiously awakens in the lieutenant his slumbering conscience. They reach camp before the others the next morning and Necia stakes three claims. While Stark, Runnion and Poleon are locating Runnion makes some insinuations about Necia and Burrell. Poleon, who loves Necia, swears that either Runnion or Burrell will pay for them with his life. That night as Star is telling Necia a story a shot rings out and Gale jumps across the room shouting "My God! I've killed him." But the bullet misses Stark by inches. When Alluna hears of the affair she tells Gale that Stark is bullet-proof and gives him a knife, begging him to kill Stark as soon as possible. Burrell knows that he loves Necia, but, thinking she is a half-breed, he is afraid to marry her on account of what it would mean to his family, his position and his honor. One day as Necia is alone in the store Runnion tells her that he is wiling to marry her, even if the lieutenant has thrown her over and the story is being told on the street. Later Necia acknowledges to Poleon that while Burrell has sworn his love for her he has never spoken of marriage. She declares that she has never been unmaidenly, but that since the men are talking she will be married by Sunday, and that it may as well be to Poleon as anybody. They send for Burrell and Necia hides so that she may hear his answer for herself.

When Burrell enters Poleon wastes no time but asks him if he means to marry Necia. Maddened by the lieutenant's hesitation, Necia rushes out declaring she has played with him long enough, and that she is to marry Poleon on Sunday. Locked in his room through long hours of struggle Burrell finally realizes that Necia's love means more to him than all else. He finds her dressed in the black ball gown, her bare arms and neck gleaming in their whiteness. Not until after he has asked her to marry him does the revelation come to Necia that love means sacrifice. She refuses to spoil his future.

CHAPTER XIII.

Stark Takes a Hand in the Game.

The old man greeted the lieutenant affably, but as his glance fell on his daughter he stopped stock-still on the threshold.

"I told you never to wear that dress again," he said, in a dry, harsh voice.

The girl made no answer, for her heart was breaking, but turned and went into her room. Burrell had an irresistible desire to tell Gale that he wanted his daughter for his wife; it would be an unwonted pleasure to startle this iron-gray old man and the shawled and shambling mummy of red, with the unwinking eyes that always reminded him of two ox-heart cherries; but he had given Necia his promise. So he descended to the exchange of ordinary topics, and inquired for news of the creek.

"Necia's ground is getting better every hour," the trader said. "Yesterday they found a sixty-dollar pan."

"Have you struck pay on yours?"

"No; Poleon and I seem to hold bad hands. Some of his laymen are quitting work. They've cross-cut in half a dozen places and can't find a color."

"But surely they haven't fully prospected his claims yet; there must be plenty of room for a pay-streak somewhere, mustn't there?"

"It looks like he had drawn three blanks," said Gale, "although we can't tell for sure. They're breaking most as bad for me, too; but I've got a new hunch, and I'm running up a dreen to catch bedrock along the left rim. I've got 20 men at work and I'll know before long. You heard about Runnion, of course?"

"Yes; the usual story—the bad men get the good mines, and the good ones get the hungry spots. Well, I might have been one of the unfortunates if I had staked for myself; but I hardly think so, I'm pretty lucky." He laughingly bade them good night, content with himself and at peace with the world.

Gale went to Neica's door and called her, but when she appeared he was unprepared for the tragic face with which she greeted him.

"Daughter," he said, "don't feel bad over what I said; I didn't mean to be cross with you, but—I don't like that dress."

"Were you cross with me, daddy?" she said, dully. "I didn't hear. What did you say?"

He looked at her in amazement. "Neica, little girl, what is the trouble?"

She was staring past him, and her fingers were fumbling helplessly with the lace of her gown, but she began to show signs of collapse.

"I sent him away—I—gave him up, when he wanted me—wanted me——a daddy! he wants to marry me—and I sent him away."

Alluna utttered a short, satisfied exclamation, and, looking at Gale meaningly, said:

"It is good. It is good. He is a stranger."

But the man disregarded her interruption.

"He asked you to marry him in—in—in—in spite of who you are and what I am?"

"Yes, he is ready to give up his ambition, his army, his future, his family, everything, for me—to sacrifice it all: and so, of course, I couldn't let him. She spoke simply, as if her father would surely understand and approve her action, while in her voice was a



You needn't worry, little daughter. You needn't give him up, I say—this will end all right.

note of inevitable resignation. "You see, I never understood what my blood would mean to him until tonight. I've been selfish and thoughtless; I guess. I just wanted him, and wanted him to take me; but now that he is mine, I love him more than I thought. He is so dear to me that I can't drag him down—I can't—I can't!" She went to the open door and stood leaning against the casing, facing the cool outer darkness, her face hidden from them, her form sagging wearily, as if the struggle had sapped her whole strength.

Alluna crept to the trader and looked up at him eagerly, whispering:

"This will end in a little while, John. She is young. She can go back to the Mission tomorrow. She will soon forget."

"Forget! Do you think she can forget?"

"Any woman can forget. Only men remember."

"It is the red blood in you—lying. You know you lie."

"It is to save your life," she said.

"I know; but it's no use." To Necia he said: "You needn't worry, little daughter." But her ears were deaf. "You needn't give him up, I say—this will end all right."

Seeing that she gave no sign of heeding, he stepped closer, and swung her about till she faced him.

"Can't you trust me this one time? You always have before, Necia. I say he'll marry you, and it will all come out right."

She raised her hopeless eyes and strove gamely to meet his, then, failing, broke away, and turned back to the door. "I knew you couldn't understand. I—I—oh, God, I love him so!" With a cry like that of a wounded animal she fled out into the night, where she could give vent to her anguish unseen; for she had never wept before her father, but always crept away and hid herself until her grief was spent. Gale would have started after her, but Alluna dragged him back fiercely.

"No, no! It means your life, John. Let the secret die, and she will forget. She is so young. Time will cure her—time cures everything. Don't tell her—don't tell any one—and, above all, don't tell that soldier! He would not believe, nor would she. Even I have doubted!"

"You?"

"Yes, John. And if I don't believe, what is a stranger to say? No man knowing you would believe the tale—without proof. Suppose she doubted—have you ever thought of that? Would you not rather have her die still loving you than live and disbelieve?"

"Yes, yes! Of course, I—I've thought of that, but—woman, you're worse than a rattlesnake!"

"Even if he knew, he might not marry her. You at least are clean, and that other man was a devil. A brave man's life is too great a price to pay for a grief that will die in a year." Alluna was speaking swiftly in her own language, her body tense, her face ablaze, and no man seeing her could ever again have called her people stolid.

"You think time will cure a love like that?" he said.

"Yes, yes."

"That's all you know about it. Time may act that way perhaps in cities and such places, but out in the hills it is different. When you've got the breath of the forest in you, I say it is different. Time—why, I've lived 15 years in the open with a living memory. Every night I've dreamed it over, every day I've lived it through; in every campfire I see a face, and every wind from the south brings a voice to me. Every stormy night a girl with eyes like Necia's calls to me, and I have to follow. Every patch of moonlight shows her smiling at me, just beyond, just in the shadow's edge. Love! Time! Why, Alluna, love is the only thing in the world that never dies, and time only makes it the more enduring."

He took up the white slouch hat he had thrown down when he came in, and stepped to the door.

"Where are you going?" inquired the squaw, fearfully.

"To the barracks to give myself up!"

She flung herself at him with a great cry, and seized him about the waist.

"You never loved me, John, but I have been a good woman to you, although I know you were always thinking of her—and had no thought of me. I have loved this girl because you loved her. I have hated your enemies because you hated them, and now I remember while you forget!"

"Forget! What do you mean?"

"Stark!"

The man paused. "I did almost forget him—and after 15 years!"

"Let us kill him tonight; then we will go to the soldier together, side by side—I am your woman. Necia will look after the little ones."

Gale stared at her, and as he gazed the red pigment underneath her skin, the straight-hanging, manlike hair, the gaudy shawl she never went without, the shapeless, skin-shod feet, the slovenly, ill-fitting garb of a miscast woman vanished, and he saw her as she was on a day long past, a slim, shy, silent creature, with great, watchful, trusting eyes and a soul unspoiled. No woman had ever been so loyal, so uncomplaining. He had robbed her of her people and her gods. He had shifted hither and yon at the call of his uncertain fortune, or at a sign of that lurking fear that always dogged him, and she had never left his side, never questioned, never doubted, but always served him like a slave, without asking for a part in that other love, without sharing in the caresses he had consecrated to a woman she had never seen.

"By Heaven! You're game, Alluna, but there's a limit even to what I can take from you," he said, at last. "I don't ever seem to have noticed it before, but there is. No! I've got to do this thing alone tonight, all of it, for you have no place in it, and I can't let the little girl go on like this. The sooner that soldier knows the better." He leaned down and touched her brown mouth with his grizzled lips. "Thank you, Alluna, for making a man of me when I'd nearly forgotten. Now you stay here." He knew he could count on her obedience, and so he left her. When he had gone she drew the shawl up over her face and crouched in the doorway, straining her eyes after him through the dark. In time she began to rock and sway, and then to chant, until the night moaned with the death-song of her people.

Necia had no idea whither she went; her only thought was to flee from her kin, who could not understand, to hide under cover in some solitary place, to let the darkness swallow her up, so that she might give way to her grief and be just a poor, weak woman. So, with a dull and aching heart, she wandered, bareheaded, bare-necked, half-demented, and wholly oblivious to her surroundings, without sense of her incongruous attire or of the water that squeezed up through the soggy moss at her tread, and soaked her frail slippers. On she stumbled blindly through the murk like some fair creature of light cast out and banished.

The night was cloudy and a wind came sighing from the north, tossing the girl's hair and tugging at the careless folds of her dress, but she heard nothing save the devil's tattoo that rang in her head, and felt nothing beyond the pain at throat and breast, which in time became so bitter that the tears were wrung from her dry eyes, and she began to weep in a pitiful woman fashion, as if her heart would burst. The first drops cleared a way for others, and soon she was sobbing freely, alone and without solace, lost in the night.

She had not succeeded in thoroughly isolating herself, however, for a man who was steering his course by the sense of feel and the wind's direction heard her and paused. His steps were muffled in the soft footing, so that she had no warning of his presence until he was near enough to distinguish her dimly where she leaned against the log wall of a half-completed cabin.

To his question, "What's the trouble here?" she made no answer, but moved away, whereupon he detained her. "There's something wronk. Who are you, anyhow?"

"It's only Necia, Mr. Stark," said the girl, at which he advanced and took her by the arm.

What ails you, child? What in the world are you doing here? Come! It's only a step to my cabin; you must come in and rest awhile, and you'll soon be all right. Why, you'll break your neck in this darkness."

She hung back, but he compelled her to go with him in spite of her unwillingness.

"Now, now," he admonished, with unusual kindliness for him; "you know you're my little friend, and I can't let

(Continued on page twenty-two.)

FAMILY CIRCLE

Write to the Editor

ALICE W. BARLAND
Editorial Contributor

Hintson "Making Over"

Some rainy day, when the usual duties are not pressing, take an inventory of the family wardrobe and see what can be done with the garments that are no longer fit for wear in their present condition, says Hazel Manning, in a bulletin of the extension service of the College of Agriculture, University of Wisconsin. A surprising number of ways to make over these garments will suggest themselves. There will be some shirts with worn places around the neck, some waists with holes under the arms, worn nightgowns and other white garments which always have a wealth of possibilities. Certainly there will be some woolen garments. Wool is scarce and, therefore, high priced, so all woolen clothing should be treasured.

Making Over Dresses.

Old clothes should be thoroughly cleaned and pressed before being made into new garments. Frequently two garments can be combined to excellent advantage. Good judgment, however, should be exercised in this matter or the wearer will soon become displased with the garment and cast it aside, thus wasting both the work and material required to make it. As a rule, silk is combined with silk and wool; and cotton with cotton wool or silk. The style of garment should correspond with the type of person who will wear it. The tall, slender woman should not be made to look too tall by the use of stripes and long lines. Neither should the stout person be made to look ridiculous in large plaids or ruffled skirts.

Color is an important item and the material should be held up to the face to see the effect of the light or shadow which will be reflected on the skin. It should always be remembered that soft white about the face will invariably give the best effect. A white collar not only reflects light on the features, but gives a neat, smart finish to almost any dress.

Military Style.

With the present vogue for military braid, a woolen skirt, after the belting and hem have been removed, may



Bringing 1915 up to date. An old pongee dress made into an attractive garment by the use of striped pongee as trimmings.

be washed, turned wrong side out and pressed and the raw seams covered with military braid. Thus a two, four or five gored skirt may be made attractive without the work of turning all the seams, says Hazel Manning, in a bulletin of the extension service of the college of agriculture, University of Wisconsin.

The Old White Skirt.

If the white skirt of three summers ago is too tight there are several ways in which it may be used. It can be drawn up to the shoulders and a Russian blouse, a style which is so popular this year, may be made of it. White materials are not hard to combine, so if the skirt does not furnish enough cloth for sleeves, collar, cuffs and belt, new material may be purchased. Another way is to draw the skirt up until it is full enough about the hips and let out the hem or put on a false hem of new material. A third suggestion is to put a yoke on at the top and wear the skirt with a long blouse of dainty tissue gingham, which is always fresh and cool looking. A faded summer dress of lawn could be dyed and used for a blouse.



"Wrong Side Out"—This frock was made from an old garment turned wrong side out. New material for the sleeves was the only money outlay.

Sugarless Marmalades

Now the papers are calling for 50-50 marmalades. The recipes below, though not of the 50-50 variety, reduce sugar to zero and introduce other surprises.

Prune Conserve.

Two dozen prunes, one-third pound raisins, two oranzes, one-third cup corn syrup, one-half cup water, one-fourth cup nut meats.

Dried apricots, peaches or canned plums may be used in this recipe. Wash and cut prunes in pieces; add chopped raisins and orange pulp and peel, cut very fine; then add corn syrup and water. Cook slowly until it is the consistency of marmalade. Add chopped nuts five minutes before removing from fire.

Carrot Honey.

Take one pint grated raw carrot, two cups white syrup and two lemons. Mix ingredients and add the grated rind of one lemon. Heat slowly and simmer the mixture until it is thick and clear. Turn into scalded jelly glasses and when cold cover with hot paraffin. Serve with cold meat or as a sauce for puddings.

At the End of the Rainbow.

The kaiser will find lead instead of gold at the end of the rainbow division.—Tuscaloosa News.

Be Fair to Children

By ELIZABETH QUAKER.

While visiting in a home one time I heard a father complain to his wife, "Our children are all liars." With true mother nature she denied that the children lied to her. This seemed a strange state of affairs to me, but the reason became very apparent.

Shortly after this same father opened the kitchen door and loudly demanded, "Who's had my new ax?" A little boy of 5 walked hesitatingly toward his father and said, "I never." "Who took it from the shop and left it in the woodshed?" cross-examined father. "I," admitted the boy, whereupon that father sharply slapped the boy several times upon the side of the head.

How much was this father encouraging the telling of falsehoods? Would he have stood up in front of a great domineering giant and admitted doing a misdeed if he knew the admission was sure to bring bodily pain to himself?

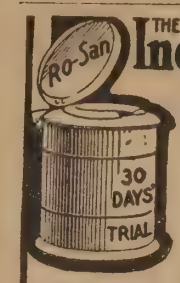
Mother would have shown boy the notches he had unintentionally made in the ax. Then something like this would have followed: "Now, son, get your cap and mittens and you will have to turn the grindstone for me to take out all these notches." During the grinding she would call his attention to the waste of time and labor he had caused.

Just the old theory of the "deed returning to the doer" is not bad when applied to the deeds of children.

When you find your children forming bad habits, look for the reason. Turn the searchlight on yourselves, too, and "play fair."

Aristocrat Sentenced to Prison.

KNOXVILLE, Tenn.—Rush Strong, member of one of east Tennessee's wealthiest and most aristocratic families, who was convicted of shooting and killing Sam B. Luttrell, prominent club member, on June 3, 1916, must serve from two to 10 years in the penitentiary.



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Handicraft For Boys

By A. Neely Hall.

Holiday Fun With Shadows.

Every boy likes to give home entertainments, and probably the best time of the year is right now during the holidays when grandmother and grandfather have come to visit, and an appreciative audience is at hand. There are so many things for a boy to do during this vacation, however, that there is little time to prepare an entertainment, so I shall show you how to give a shadow exhibition, as this can be arranged in a short time.

It requires only a few minutes to get the knack of shadow making, and after you have tried out the forms in the accompanying illustrations you will find it easy to devise others.

The shadows must be cast upon a sheet, and the audience must be seated on one side of this, and the operator stand on the other side. It is best to hang the sheet in a doorway so the light by which the shadows are made can be confined to the screen, because the room in which the audience are seated must be dark. By hanging a dark cloth over the upper and lower portions of the doorway the area of the picture screen can be reduced to just the size necessary, and the covered lower portion will conceal the shadow of the boy performer's body (Fig. 1). The light for projecting shadows must be placed about five feet in back of the screen.

Rabbit Shadow.

Figs. 1 and 2 show a rabbit shadow, and how the hands are held to produce it. Interlock your little fingers, then slide the back of your left hand over on to the back of your right hand. Form the nose and head by doubling



back the first finger of the left hand, and the ears by extending the second and third fingers, and extend the thumb and the first three fingers of the right hand for the feet. By wiggling the first finger the rabbit can be made to nibble.

Alligator Shadow.

The alligator shadow (Fig. 3) is a one-hand shadow made with the aid of two pieces of cardboard notched along their edges to form teeth (Fig. 4). Fig. 3 shows how the teeth are held be-



tween the extended fingers, and how the alligator's eye is formed by light passing through an opening between the first and second fingers. With your free hand give the alligator things to eat. His eating will greatly amuse your audience. With modifications, a snake's head can be formed, with your arm extended for its body. Give the snake an apple, and show this bulging through its back as it passes along its body.

Fig. 5 shows a wolf's head, and Fig. 6 a donkey's. Both are formed by placing the palms of the hands together, with thumbs up for ears, the first fingers drawn in for the forehead, and the little fingers dropped for the lower jaw. These shadows are a good example of how different figures are produced by extending or bending the fingers.

The duck's head (Fig. 7) is a simple one-hand shadow. By dropping and raising the little finger the duck ap-



pears to open and close its bill. It can be made to snap at flies very naturally.

Santa Claus' profile (Fig. 8) requires a cardboard hat (Fig. 9). The first finger forms the nose, the second and third fingers the lips, and a piece of cotton held between the third and fourth fingers makes the whiskers.

The man-with-a-pipe shadow (Fig. 10) has a cardboard hat and pipe (Fig. 11). The doubled first finger forms the forehead, the extended thum forms the nose and the third and fourth fingers form the mouth and chin. By extending or bending the fingers, other profiles can be made.

THE BARRIER

(Continued from page twenty.)

you go on this way; it's scandalous. I won't stand for it. I like you too much."

In truth he had done things during these last few weeks to make her think so, having never missed an opportunity to stop and pass a word with her, at the same time showing her a queer courtesy and consideration quite foreign to his saturnine habits. She had never mentioned the fact to her father or the others, for she had developed a sort of sympathy for the man, and felt that she understood him better than they did.

He led her inside his cabin, and closed the door in the face of the night wind before he struck a light.

"I can't stand to see you cry," he repeated, as he adjusted the wick. "Now, as soon as——" He stopped in astonishment, for he had turned to behold, instead of the little halfbreed girl, this slender, sorrowful stranger in her amazingly wonderful raiment.

"By——" He checked himself insensibly, and stood motionless for a long time, while she wiped her eyes and, woman-like, straightened out her gown and smoothed her hair with little feminine touches.

"I—I—hope you'll excuse me for acting this way," she smiled at him, piteously; then, observing his strange features, "Why, what is the matter, Mr. Stark; are you angry?"

His hawklike face was strained and colorless, his black eyes fierce and eager, his body bent as if to pounce upon a victim. In truth he was now the predatory animal.

"No," he replied, as if her question carried no meaning; then, coming to himself, "No—no! of course not, but—you gave me a start. You reminded me of some one. How do you come to be dressed like that I never knew you had such clothes?"

Poleon brought them from Dawson; they are the first I ever had."

He shook his head in a slow, puzzled fashion.

"You look just like a white girl—I mean—I don't know what I mean."

This time he roused himself fully, the effort being more like a shudder.

"So I have always thought," she said, and her eyes filled again.

"Your skin is like milk beneath your tan, and—I don't mean any disrespect, but—— Well, I'm just so damned surprised! Come over here and sit down while I mix you something to put the heart back into you."

He shoved forward a big chair with a wolf-skin flung over it, into which she sank dejectedly, while he stepped to the shelves beside the Yukon stove and took down a bottle and some glasses. She glanced about with faint curiosity, but the interior of the cabin showed nothing out of the ordinary, consisting as it did of one room with a cot in the corner, upon which were tumbled blankets, and above which was a row of pegs. Opposite was a sheet-iron box stove supported knee-high on a tin-capped framework of wood, and in the center a table with oilcloth cover. Around the walls were some cooking utensils, a few cases of canned goods, and colthes hanging in a row.

"I'm not fixed up very well yet," he apologized; "I've been too busy at the saloon to waste time on living quarters. But it's comfortable enough for an old roadster like me, for I've bruised around the frontier so long that I've learned there's only three things necessary to a man's comfort—warm clothes, a full stomach and a dry place to sleep. All the rest that goes to make a man content he has inside him, and I'm not the kind to be satisfied, no matter where I am or what I have. I never was that kind, so I just don't make the attempt."

He was talking to give her leeway, and when he had concocted a weak toddy, insisted that she must drink it, which she did listlessly, while he rambled on.

"I've noticed a few things in my life, Miss Necia, and one of them is that it often does a heap of good to let out and talk things over; not that a fellow gains any real advantage from disseminating his troubles, but it serves to sort of ease his mind. Folks don't often come to me for advice or sympahty. I don't have it to give, but maybe it will help you to tell me what caused this night-marauding expedition of yours." Seeing that she hesitated, he went on: "I suppose there's a lot of reasons why you shouldn't confide in me—I don't like that old man of yours, nor any of your friends; but maybe that's why I'm interested. If any of them has upset you, I'll take particular pleasure in helping you get even."

"I don't want to get even, and there is nothing to tell," said Necia, "except a girl's troubles, and I can't talk about them." She smiled a painful, crooked smile at him.

"Your old man has been rough to you?"

"No, no! Nothing of that sort."

"Then it's that soldier?" he quizzed, shrewdly. "I knew you cared a heap for him. Don't he love you?"

"Yes! That's the trouble; and he wants to marry me; he swears he will in spite of everything."

"See here! I don't quite follow. I thought you liked him—he's the kind most women go daffy over."

"Like him!" The girl trembled with emotion. "Like him! Why—why, I would do anything to make him happy!"

"I guess I must be kind of dull," Stark said, perplexedly.

"Don't you see? I've got to give him up—I'm a squaw."

"Squaw hell! With those shoulders?"

Stark checked himself, for he found he was rejoicing in his enemy's defeat, and was in danger of betraying himself to the girl. In every encounter the young man had bested him, and these petty defeats had crystallized his antipathy to Burrell into a hatred so strong that he had begun to lie awake nights planning a systematic quarrel. For he was the kind of man who throve upon contentions: so warped in soul that when no man offered him offense he brooded over fancied wrongs and conjured up a cause for enmity, goading himself into that sour, sullen habit of mind that made him a dread and a menace to all who lacked his favor. His path was strewn from the border north with the husks of fierce brawls, and he bore the ineradicable mark of the killer, carrying always in his brain those scars that hate had seared. In his eyes forever slumbered a flame waiting to be blown to life, and when embroiled in feuds or bickerings a custom had grown upon him to fight these fights in secret many times, until of nights he would lie in solitary darkness, writhing in spirit as he hounded his man to desperation, or forced him into a corner where he might slake his thirsty vengeance. After such black, sleepless hours he dragged himself from his battlegrounds of fancy, worn and weary, and the daylight discovered him more saturnine and moody, more menacing than ever.

He had brooded over his quarrel with Gale and the lieutenant ever since their first clash, for in this place they furnished the only objects upon which his mania could work—and it was a mania, the derangement of a diseased, distorted mind. His regard for Necia was a careless whim, a rather aimless, satisfying hobby, not at all serious, entirely extraneous to his every-day life, and interesting only from its aimlessness, being as near to an unselfish and decent motive as the man had ever come. But it was not of sufficient consequence to stand out against or swerve the course of a quarrel; wherefore, he was gladdened by the news of Burrell's discomfiture.

"So you like him too much to stand in his way," he said, meditatively. "How does your father look at it?"

"He wants the lieutenant to marry me. He says he will fix it up all right; but he doesn't understand. How could he?"

"You are doing just right," concurred the man, hypocritically, "and you'll live to be glad you stood out." Now that both his enemies desired this thing, he was set on preventing it, regardless of the girl. "How did the lieutenant take it when you refused him?"

"He wouldn't take it at all. He only laughed and declared he would marry me, anyhow. The very thought thrilled her.

"Does he know you love him?"

The tender, sobbing laugh she gave was ample answer.

"Well, what's your plan?"

"I—I—I don't know. I am so torn and twisted with it all that I can't plan, but I have thought I—ought—to go—away."

"Good!" he said, quickly, but his acquiescence, instead of soothing her, had the contrary effect and she burst out impulsively:

"Oh—I can't—I can't! I can't go away and never see him! I cant' do it! I want to stay where he is!" She had been holding herself in stubbornly, but at last gave way with reckless abandon. "Why wasn't I born white like other girls? I've never felt like an Indian. I've always dreamed and fancied I was different, and I am, in my soul—I know I am! The white is so strong in me that it has killed the red, and I'm one of father's people. I'm not like the other two; they are brown and silent, and as cold as little toads; but I'm white and full of life, all over. They never see the men and women that I see in my dreams. They never have my visions of the beautiful snow-white mother, with the tender mouth and the sad eyes that always smile at me."

"You have visions of such things, eh?"

"Yes, but I came a generation late, that's all, and I've got that other woman's soul. I'm not a half-breed—I'm not me at all. I'm Merridy—Merridy! That's who I am."

Her face was turned away from him, so that she did not notice the frightful effect her words had upon Stark.

"Where did you get—that name?" His voice was pitched in a different key now. Then, after a moment, he added, "From the story I told you at the mine that night, I suppose?"

"Oh, no," she answered. "I've always had it, though they call me Necia. Merridy was my father's mother. I guess I'm like her in many ways, for I often imagine she is a part of me, that her spirit is mine. It's the only way I can account for the sights I see."

"Your father's mother?" he said, mechanically. "That's queer." He seemed to be trying to shake himself free from something. "It's heredity, I suppose. You have visions of a white woman, a woman named Merridy, eh?" Suddenly his manner changed, and he spoke so roughly that she looked at him in vague alarm.

"How do you know? How do you know she was his mother?"

"He told me so—"

Stark snarled. "He lied!"

"I can show you her wedding-ring—I've always worn it." She fumbled for the chain about her neck, but it eluded her trembling fingers. 'It has her name in it—From Dan to Merridy.'"

Stark's hand darted forward and tore the thing from her shoulders, then he thrust it under the lamp and glared at the inscription, while his fingers shook so that he could barely distinguish the words. His eyes were blazing and his face livid.

Necia cried out, but he dropped the ornament and seized her fiercely, lifting her from the chair to her feet, then, with one swift, downward clutch, he laid hold of her dress at the left shoulder and ripped it half to her waist. A hoarse sound came from his

(Continued on page twenty-seven.)

Patterns

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Steamed Carrot Pudding.

The following makes a very delicious pudding, a good substitute for plum pudding and less expensive. It will keep for several days:

1 cup grated raw carrots.
1 cup dry bread crumbs.
1 cup beef suet.
¾ cup sugar.
¾ cup well chopped raisins.
½ cup flour.
2 teaspoons salt.
2 teaspoons cinnamon.
½ teaspoon ginger.
½ teaspoon grated nutmeg.
2 tablespoons chopped candied orange or lemon peel.

Mix all together; add enough cold water to make stiff mixture; grease your molds or bowl with drippings; cover and steam for three and a half hours. This is served with lemon sauce; may be reheated in the usual way.

Lemon Sauce.

Add to a cup of boiling water a tablespoon of cornstarch which has been mixed with cold water. Boil until clear, which will be from three to five minutes; add two tablespoons of lemon juice, half a teaspoon of caramel and pinch of salt.—G. P. F.

Good Old-Fashioned Raisin Bread.

3 cups graham flour.
5 teaspoons good baking powder (Royal or Crescent).
1½ teaspoons salt.
¼ cup sugar.
1½ cups milk and water.
1 cup raisins washed, dried and floured.

Mix the flour, baking powder, salt and sugar well, add the milk and lastly the raisins; turn into a greased loaf pan; let rise 30 minutes in a warm place; bake slowly from 35 to 45 minutes. Nut meats may be used instead of raisins, or they may be mixed. This makes a very delicious bread for lunches for school children; may be spread with a little jelly.—G. P. F.

Popcorn Balls.

1 cup molasses.
3 tablespoons brown sugar.
1 tablespoon vinegar.
1 tablespoon butter.

Boil till it hardens when dropped in cold water.

Pour this over two quarts of freshly popped corn; mix well, and with the hands press them into small balls.—Contributed.

New Pencil Holder.

For persons using pencils almost continuously a clip has been invented to hold one on the back of the left hand momentarily when the right hand is occupied for other work.

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Every day of delay in beginning a business education is a loss of money.

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"—use foods that require less sugar"

THIS is one of the most important recommendations of the Food Administrator: "In cooking and baking use foods that require *less sugar*."

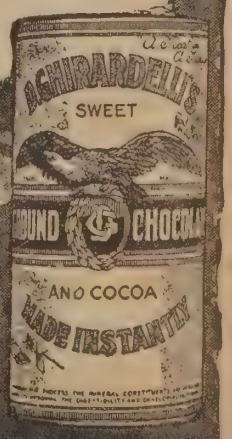
In other words—use Ghirardelli's. Use it freely and wisely—in place of other less nutritious and more expensive foods. Not only will you save money but you will help in food conservation.

Cooking and baking require less sugar when you use Ghirardelli's. Because—it contains in itself the sweetening flavor you need. More than this—it adds a new touch of richness to your icings, your puddings and other desserts.

In ½ lb., 1 lb. and 3 lb. cans; a tablespoonful—one cent's worth—makes a cup.

D. GHIRARDELLI CO.

Since 1852 San Francisco



Ghirardelli's Ground Chocolate



New Year Bells

By AUNT NELLIE.

"I want to ring the bell at the Methodist church, and I'm going too," announced Sally Lane, nodding her small head until her two tow pigtails bobbed up and down like corn tassels in a gale.

"Now, Sally," remonstrated her brother, "girls don't ring bells on New Year's eve. You can't, that's all."

"Why can't I, I'd like to know? I can ring a bell just as loud as you can, Mister Bobby, and just as long as you, too. If you don't let me go and ring, I'll ask mother mayn't I."

"Don't do that, Sally. She wouldn't let you go and you know it, and maybe she wouldn't let me go, either. It just isn't girls' work."

"Well, what do you do that's so hard?" demanded Sally.

"Why, you have to sneak down the alley—"

"Huh! I can do that."

"—and climb over the board fence so nobody will see you—"

"I can do that."

"—and then you have to crawl through the window at the church—"

"I can do that—I've done it lots 'n lots of times."

"—and maybe the night watchman will get after you and you have to run and get away or he'll put you in jail."

"I can run pretty near as fast as you can, and you know it. There isn't a single thing that you have to do that I can't do. I'm going to go and I'm going to sneak, and climb, and crawl, and run, just the same as you."

"All right, Sally," Bob sighed heavily. It was not the first time he had run against the obstinacy of his sister, and he could not recall a single time when he had succeeded in changing her intentions. "All right. You're bound to go, and I don't know what the fellows will say. But just remember that you've got to go to bed at nine and not go to sleep a single mite, and get up at 11 o'clock and dress and climb out of the window and down the shed roof and not make a bit of noise or pa'll hear you and maybe he wouldn't make you scoot!"

Assured of the victory, Sally did not press her advantage. "I'll help all I can, Bob," she said sweetly, "and I think it was just wonderful to think of dividing up and having all the boys see who can ring the longest and give the prize for the winners. But how are you going to keep old Snook away? He'll stop some of the boys, sure, and that won't be fair."

"I'll think of something. I always do," returnd Bob grandly but vaguely. For he was not very sure just how he was to keep the outwardly gruff old night watch from interfering with his plans.

It had always been a custom in the little village of Clyde for crowds of boys to penetrate the dim recesses of church belfreys and ring the bells till the sleepy neighbors ventured forth or the night watch stumbled up the steps after them and sent them flying. Old Snock embodied the law at night in Clyde, and his savage frown covered a jolly heart and a kindly soul. Parents, too, professed to look on bell ringing as a heinous offense, but usually they were awake when small feet scraped and rattled over back porches on New Year's eve and pretended not to hear.

"Tell you what let's do" said Bob one day "Let's choose up sides—three gangs for the three churches, and start at half past eleven and the crowd that rings the longest gets a prize."

The idea met with instant favor, the choosing was accomplished after much wrangling and the rules established. The leader was to ring first, followed by his first lieutenant, and so on. There was some difference in bells, as the Baptist church had the biggest bell, but by choosing smaller boys for the Presbyterian and Methodist churches. Bob preserved a solemn silence when it came to the prize and refused to tell what it was. And while he assumed confidence in the matter of handling old Snook, secretly he had not the slightest idea of how he would manage to keep that fearful individual embodying the law from interrupting the contest.

"Sh-sh! Sally! Are you ready?"

"Just a minute. Wait for me-e-e-e!"

"Can you get down all right?"

"Course,"—a scornful whisper.

"We seem to have two boys instead of a boy and a girl, mother," said Mr. Lane.

"Is Sarah going out with Robert?" said Mrs. Lane, starting up.

"Now, mother, just let the children have their fun. They won't do any harm."

In the meantime Sarah had successfully sneaked through the alley at Bob's heels and had scaled the high board fence, catching her skirt on a nail.

"Why didn't you wear your overalls?" growled Bob.

"I'm going as a girl," panted Sally as they joined the other children collected in the shadow of the schoolhouse.

"Who's Sally going with?" demanded Willie Livermore. "She's extra. And she can pull just as hard as anybody."

"Sally's going with me," said Bob, "and I'll just pull half my time." Good, old Bob!

The three groups slipped away with whisperings and giggles.

"What's that? Hush! Can't you be quiet?"

The booming town clock struck the half hour, and the children, with Bob darted toward the rear of the Methodist church. Bob, in advance, suddenly stumbled backward, and the crowd came to a stand.

"There's old man Snooks right under the window!" he gasped. "How are we going to get in, and there's the Baptist bell," he groaned.

"What are you going to do?"

"Listen, Bob," whispered Sally. "I'll go 'round in front and get Snooks out there and I'll talk to him till you get in and you nail down the window after you're in."

"Good girl!" murmured her brother, patting her on the back.

Sally darted away and the next moment from the front of the church came a shrill cry. "Help! Help!"

"Come an, boys," said Bob as they watched Snooks dash madly past them. "It's just Sally. She's getting him away for us. In with you!"

Up the long stairs the boys clambered and before the first echoes from the Presbyterian steeple had died away the Methodist bell boomed out.

"Sally said she would ring it, but she won't after all," he grunted.

Minute by minute sped by and still the three bells sang their song of peace and goodwill through the countryside. Midnight came and the ringing grew furious. Another quarter of an hour passed and still the boys labored on. Half past, and the last of the lads was exhausted, but still clung doggedly to the frayed rope.

"Let me in! Let me in!" came a faint voice from below and Bob ran down the steps recklessly. Had old Snooks discovered the ruse? It was Sally pounding on the side door, fastened inside with a spring lock. She also fell inside as Bob opened it.

"Let me ring," she cried and darted past him up the steps. Just as Beany Woods fell exhausted to the floor and released the rope, Sally sprang over him and threw her full weight on the rope, and again the bell pealed out with vigor. Slowly the Presbyterian and Baptist bells grew fainter and the ringing became less regular. Finally the Baptists stopped altogether. A few seconds later and the Presbyterian boys gave up in pure exhaustion. The Methodist bell rang definitely a few times more and then it too grew silent as victory was assured.

Triumphantly the boys collected in the square at the courthouse.

"Well, we did it, anyhow," they said, proudly. "Old Snooks never came near us."

"Sally did it," said Bob proudly. "She got old Snooks away from the church. He was right there waiting for us. And she came back and finished up. How'd you do it, Sally."

"Well, I fell down in front of the church and yelled for help," said she with great gusto. "Mr. Snooks came running and asked me what was the matter and I never said a thing—just groaned. And he carried me all the way home and knocked on the door, and father came and let us in and they carried me up to bed. I winked at father while mother was after the hot water bottle and I came out of the window again.

"Sally saved the day," said Sammy Moran. "She ought to have the prize. What is the prize, Bob?"

"The prize will be given at recess tomorrow," said Bob with dignity and led Sally home.

"It was great, Sally," said he as they approached the house, "but what will mother say?" Uneasiness came to both of them and they slipped up the front steps and rather timidly tried the door.

"Why, Sarah," she said. "Do you think that was very kind? Do you know how I worried about you?"

"I never thought of it, mamma," cried Sally, running to her mother and throwing her arms around the ample waist. "Truly I didn't mean to distress you"

"She did it for me," said Bob. "It's all my fault. I oughtn't to have let her go."

"I'd like to know how you could help yourself," sniffed Sally.

"Miss Lane," said Willie Livermore in the speech of presentation the following morning at recess, "it gives me preat pleasure to present you with this prize. It is not the prize which was first prepared, which was Bob's baseball, but it seemed to us that you won and you should have the prize. We all clubbed together and herewith present you with these," and he handed the embarrassed girl a box.

She untid the string, removed the paper. "Oh! Oh! The very thing I've wanted and didn't get Christmas. Skates! Skates!" she cried in ecstacy.

Making a New Year.

Dear Children of the Corner: I wish for you all a very Happy New Year. I like to think of New Year's as made up of days of sheets of blank white paper. Each day we write on one, and at the end of the year they are bound together in a big book; some call this a diary, but it is our history. We are writing on the last few sheets of 1917; four more finishes the year and then we shall begin on a big new pile, spotless and white as snow. What are we going to write on the pages of 1918?

Shall we fill it up with complaints and self pity; or shall we fill it with cheer and kindness? Shall we write hate and mean thoughts over the whiteness, or shall we put sweet temper and generosity and love in it?

How would it do to make a resolution for all Corner Cousins, something like this?

For 1918 we will make the first day or the year a day of good deeds, good words and good thoughts, and we will try to make each day better than the day before.

We will be thoughtful of others, mother, father, brothers, sisters, friends, neighbors and those in need, think first of them and then of ourselves. We will do our duty by our country in every way we can, and be loyal and true to our flag whether our part be small or great.

May the new year be a happy one for all of our cousins, overflowing with health, joy and all other good things, is the wish of your

LOVING AUNT NELLIE.

Making Washcloths for the Red Cross.

Dear Aunt Nellie: It is a long time since I wrote to you, so I thought I would write now. I wrote two letters to the Children's Corner before. I enjoy the letters in the Corner very much. I read them every time the paper comes. I have found a twin since I wrote to you. It is a girl. She is 11 years old and she is in the sixth grade at school. She has light hair and blue eyes. She lives in Tolt, Wash. I have one sister and three brothers. My sister's name is Inga and she is 12 years old. My youngest brother's name is Oswald and he is 17 years old. My oldest brother's name is Olaf and he is 22 years old. My other brother's name is John and he is 18. We live on a 40-acre farm and we are renting 40 acres, so we have 80 acres altogether. We have almost 20 cows, two horses, two sheep and a dog. We have a car, too. I am making wash cloths for the Red Cross. My mother made handkerchiefs and towels. Some of the girls in our school are making wash cloths, sweaters, scarfs, gunwipers and clippings for pillows. The boys help in some of them, too. We had two days' vacation during Thanksgiving and a whole week vacation at Hallowe'en. We had a Hallowe'en program, but we did not have a Thanksgiving program. I will write again.—Esther Dale, Route 1, Box 70, E. Stanwood, Wash.

Cousins Should Get Others to Write.

Dear Aunt Nellie: This is my fourth letter to the Corner. I am 9 years old. My birthday is April 11. My hair is brown. I have brown eyes. A girl wrote to me. She is 9 years old. Her birthday is the 19th of December. I have answered her letter. I wish we could only have one whole page for our Corner. I think it would be a good plan for the cousins to ask some of their friends who are in the same town to write to the Corner. I wish Aunt Nellie would write more letters. I enjoy them very much.—Beulah Shaw, Grandview, Wash.

Fun to Make Baskets.

Dear Aunt Nellie: I have been reading the letters for a long time, so I thought I would write to the Corner. I live on a 30-acre farm. I would not like to live in the city. I have lived on the farm all my life. I go to Lincoln school. I have a mile to go to school. My complexion is light. I was 9 years old June 21. I am in the fourth grade. Have I a twin? I carry in wood, run errands and wipe the dishes for my mother. My teacher taught my sister and me how to make baskets. It is fun to make baskets. We had a Christmas program in my school. I have one sister and two brothers. Their names are Elvera, Juno and Melborn. There are six in our family. We have a piano. I have taken nine music lessons. I can not play very much. We will start next summer to take music lessons again. We do not take any lessons when it is school time. In the summer we can have lots of fun by our home. There is a ditch that runs past and we have fun playing in it. I go to Sunday school. It is about half a mile to go. I go just about every Sunday. I will write some more letters later. Now I will close. I hope to see my letter in print.—Florence Peterson, R. F. D. 5, Box 43, Mount Vernon, Wash.

Thelma Is a New Corner Cousin.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it won't be the last. I read the Corner most every time. I am light complected and have light hair and blue eyes. I am 10 years old. My birthday was October 4. I go to school and am in the fourth grade. There are 35 pupils in my room. There are 12 pupils in my class. My teacher's name is Mrs. Chapman. I like her very much. I have a mile to go to school. My drawing teacher is Miss Paden. I have five subjects at school. They are reading, arithmetic, language, geography and spelling. I have four brothers and one sister. My brothers' names are Evan, George, Lewis and Kasper. My sister's name is Clara. We have two dogs. Their names are Sport and Rex. Sport is 6 years old and Rex is almost a year old. We have 22 cows. We have four horses. Their names are King, Nancy, Tom and Nellie. Have I a twin? May I be one of the cousins? I would like to join very much. I guess I'll have to quit for this time.—Thelma May Nordby, R. F. D. 3, Box 139, Ferndale, Wash.

Loves to Go to School.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 7 years old. I am in the third grade at school. Our teacher's name is Mr. Allison. I love to go to school. The school is not far from our house. We have a pup. He is very playful. His name is Rover. We have five cows. Their names are Spot, Pansy, Cherry, Daisy and Bessie. We have a kitty. Her name is Pussy. We have an old cat. Her name is Muff. There are 29 pupils in our school. We have about 40 chickens. We have three heifers. I have one brother. His name is Archie. I have one sister. Her name is Theresa. We live out in the country. I help my mother. I carry in wood and sometimes wipe the dishes for her. The store is two miles from our house. My brother and my sister are in the sixth grade at school. My brother is 13 years old and my sister is 11 years old. I was born July 9, 1910. I would like to see my letter in print. Have I a twin? If I have I would like to hear from her.—Onida Wilson, Grays River, Wash.

Finds the Eighth Grade Easy.

Dear Aunt Nellie: It has been a long time since I wrote to the Children's Corner and this is the second time I have written. I live on a 500-acre ranch and wouldn't trade with any city girl. My height is five feet and I am 13 years old the 15th of March. I am in the eighth grade and find it very easy. My teacher's name is Lyla Strong. She rode one of our saddle horses out in the field one night and fell off him. She fractured her ankle. We have been having vacation on that account. I have blue eyes and brown hair. If I have a twin I would like her to write to me. May I be a cousin to the Children's Corner. It is snowing here today and I may get a sleigh-ride yet. I stayed all night with a girl friend the other night. I rode over there horseback. It was three and one-half miles. I will write more next time.—Retta Gray, Box 18, Govan, Wash. (You are a cousin, Retta, since you have written to the Corner. We are glad to have you write and hope to hear from you again soon. Aunt Nellie.)

A Basket Supper at the Schoolhouse.

Dear Aunt Nellie: My papa takes the Farmer I have been reading the letters of the Children's Corner. I am very much interested in them and I thought I would write, too. I live on an 80-acre farm four and one-half miles from Everson. On our farm we have four horses, one of them is a colt. We have eight milching cows, two heifers and four calves. For pets we have two dogs, one kitten and some rabbits. I have one brother and four sisters. My brother's name is Cecil. He is 16 years old. My oldest sister's name is Bernice. She is 14 years old. Thelma is 11 years old. Edna is 6 and the baby will be 1 month old the 6th of December. Her name is Phyllis. I am 13 years old. I walk two miles to schcol. I am in the seventh grade. My teacher's name is Theresa Stone. We are going to have a basket supper at the schoolhouse soon.—Myrtle Clinard, R. F. D. Route 2, Everson, Wash.

Likes to Live on a Farm.

Dear Aunt Nellie: This is my first leter to the Corner and I hope it will not be the last. I am 12 years old and in the sixth grade. My birthday was the 6th of October. Have I a twin. If I have I would like to have her write to me. I will answer her letter. I go to the Swantown school. It is two miles from where I live. Our teacher's name is Mrs. Holland. There are 29 pupils in our school. We live on a farm of 40 acres. I like to live on a farm.—Elsie Youngsman, R. R. 2, Box 41, Oak Harbor, Wash.

News for Breeders

At the annual meeting of the American Berkshire association, December 4, at Chicago, during the International stock show, C M. Talmadge, proprietor of Silver Birch Farm at Newport, Wash., was elected a director of the association. This is the first time a western man has been elected to that position and the Berkshire breeders of the northwest are to be congratulated.

George A. Morse of Talent, Ore., in 1913, purchased the Guernsey bull, Ruda's Maxima, from the Gene Duluth Farm of Minnesota. The dam of this bull, Ruda B., had a record of 856 pounds of butter and his breeding throughout is of the best. Mr. Morse also purchased Arabelle's Beauty, from E. L. Thompson of Portland. She was second at the Pacific International and was beaten only by the cow that was grand champion at the National Dairy show at Chicago. Mr. Morse has only a few purebred Guernseys and reports a ready sale for bulls. He has a herd of very high grades and produces rich colored milk which is eagerly sought for by the Medford trade.

Mr. Morse also breeds a few Percheron horses, most of his stock being taken by A. C. Ruby, at fair prices. He has one mare that has several times been high up in the many at the state fair.

In 1902 G. T. Billings of Ashland, Ore., built a silo 12x26 feet, of 2x4s, planed on one side and edge. He has filled the silo every year and it now holds a nice lot of corn silage. No regular carpenter worked on its erection and getting the hoops properly placed, Mr. Billings says, was a hard job for the men who built it. But it has stood up and very little silage has spoiled. It stood outdoors for several years, but is now under roof. Mr. Billings does not recommend this type of silo to others, but does say it shows the value as well as the possibilities of the silo. His son, Ralph Billings, last spring erected the first concrete silo in Jackson county. He filled it partly with first cutting of alfalfa, the balance with corn.

Ralph has a herd of six purebred Jersey cows, a herd sire and some grades. The Billings have been breeding Jerseys for over 20 years and are well suited with them. The foundation stock is from Ladd Farm Brown Bessie stock and the present herd sire from Henry Stewart. H. A.

Sheridan Star.



The above is a good picture of Sheridan Star, one of the good Jersey cows in the herd of Ward Hull, Ballston, Ore. Sheridan Star has a Register of Merit record of 12,811 pounds of milk and 561.1 pounds of fat, or 660 pounds of butter. She is on test again and is sure to produce over 700 pounds of butter, if no accident occurs. Mr. Hull has five others on test, all doing fairly well. His present herd bull, St. Mawes' Coffee Violet Lad, for which he paid $770 at auction, is growing and promises to make a great bull. H. A.

HOG MEN OPTIMISTIC.

Future Prospects Show Promise.

A note of optimism ran through all the remarks at the Swine Breeders' annual banquet at the Portland hotel, November 20. Dean Iddings of the Idaho university, in calling the meeting to order, said the tide had turned and the future looked brighter than at any time in the last two years. He introduced E. E. Faville as toastmaster. Hon. Thomas Brunk, who judged the hogs, was the first speaker. He expressed surprise at the exhibits from other states and said he had never seen finer specimens than those at this show.

W. H. Daughtrey, president of the Portland Union Stock yards, elicited hearty cheers when he said there was nothing of greater importance in the winning of this war than hog breeding.

Richard Gilman, buyer for the Union Meat company, and R. L. Clark of the Bodine & Clark Commission company both predicted a still higher hog market.

Paul Clagstone, secretary of the Northwest Live Stock show at Lewiston, said we are going to make these two great shows still greater. He said the west will raise the food that will help win the war.

Professor E. L. Porter, head of the animal husbandry department at the Oregon Agricultural college, who put on the educational exhibit at the Pacific International, said hogs are the greatest animal on the farm to utilize waste. Every farm should grow a few hogs—not too many—thus helping in this critical time.

Other speakers were J. D. Miles of Livingston, Mont.; Ed Schoel, Suver, Ore.; Robert Nelson, North Yakima, Wash.; William Hislop, animal husbandman, W. S. C.; Judge Scott, Salem, Ore.; C. N. McAlister, the "hog booster"; R. W. Hogg, Salem, who managed the hog sale at the show; Colonel J. W. Hughes, Forest Grove, Ore.; R. A. Blanchard, agriculturist of the Cattle Loan bank, North Portland; Colonel George Gue, North Yakima; W. L. Tenant, secretary Spokane Interstate fair; Ray J. Fox, Lyons, Ore.; Herbert Willard, Dayton; E. A. Rhoten, Salem, Ore., and others.

All the old officers were reelected, as follows President, C. M. Talmadge, Newport, Wash.; vice president for Oregon, R. W. Hogg; for Washington, J. A. Simonson; for Idaho, Dean Iddinge; for Montana, J. P. Mulloy. E. S. Sweet of Grangeville, Idaho, was elected on the executive committee. H. A.

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Aberdeen Angus Cattle

A. H. EAGLESON & SONS.
Boise, Idaho.

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REGISTERED PERCHERON HORSES.
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Trap Nested Barred Rocks

All hen-hatched and hen-raised. Every hen on the place trap nested. My first pen has, I believe, for the past two years, the highest Barred Rock average egg record in the world. All other pens are practically the same blood lines. A few last fall cock birds and cockerels, from $5 up, according to pedigree and quality.

Eggs from first and second pen, $5 per 15. Others, $3.75 and $2.50. No day-old chicks.

Irvine P. Gardner
Riddle, Ore.

Rhode Island Reds and Whites

Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Now is the time to buy for next year's breeding, from blue ribbon stock. Sale of pedigreed Rufus Red Belgian hares. Bucks at $3 each. Registered Airedale bitch at a bargain if taken at once.
HIGHLAND FRUIT AND POULTRY RANCH.
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White Holland Turkeys

Choice young toms, $10.00; hens, $7.00.
ALICE E. CARY, Carlton, Ore.

BATTEN'S S. C. REDS

I have 50 of the best cockerels that I have ever seen in one yard that I am offering at low prices, quality considered, in order to move them quickly to make room for younger stock. Prices range from $5 to $15 and can give you good selection if you will write me your wants. Can spare a few good pullets at $2.50 each. Let me hear from you.
E. F. BATTEN, HOOD RIVER, ORE.

Breeders' Department

HOLSTEIN CATTLE



A Rare Opportunity

To secure some thoroughbred Holstein male calves, described as follows:
No. 1—Born Feb. 19, 1917. Sire, Segis Walker Hartog, No. 162423; dam, Buckeye Grace Morley, No. 99452.
No. 2—Born Jan. 23, '17. Sire, Segis Walker Hartog, dam Naiad Jewel Netherland, No. 124102.
No. 3—Born April 14, '17, Sire, Segis Walker Hartog, dam, Buckeye Grace Morley, No. 248417.
No. 4—Born Jan. 11, '17. Sire, Segis Walker Hertog, dam, Susie De Kol Pauline 2d, No. 245999.
No. 5—Born Feb. 19, '17, Sire, Segis Walker Hartog, dam, Mary Del Kol Stony Brook, No. 248416.
No. 6—Born March 26, '17. Sire, Hazelwood Sir Ormsby, No. 148496, dam, Queen Gerben Josephine Michtilda, No. 146519.
Application for registry for all the calves have been sent in. For further particulars, prices, etc., address The Intermountain Institute, or
E. A. PADDOCK, Pres., Weiser, Idaho.
R. F. D. 1.

365-Day Holsteins

24,667 lbs. milk—1026 lbs. butter—is the s. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.
THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH.
Prineville, Ore.

Registered Holsteins

Both sexes for sale. Bulls include some 30-pounders from Grand Champion sire and dam, others with 15 nearest dams averaging 25 and 27 lbs. Prices low. Write promptly to
H. R. BOOMER, New Plymouth, Idaho.

REGISTERED HOLSTEINS.
Bull calves for sale with good A. R. O. backing.
BEEBE BROS., R. F. D. 2, Rupert, Idaho.

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Registered Jerseys

One senior 2-year-old bull. One bull calf, 4 months old; one junior yearling heifer, bred; two senior yearling heifers nearly ready to freshen; two cows, one four, one five years old; one senior 2-year-old ready to freshen, second calf; one 10 months calf; all in splendid condition.
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We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.
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JERSEY BULL FOR SALE.
Year old, good individual, priced reasonable. Dam gave 45 to 50 lbs. of milk a day, test 4.8. Sire, Island bred.
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Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write
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REGISTERED GUERNSEY BULL, 2 YRS. OLD; OUT OF COW WINNING GRAND CHAMPION AT PORTLAND; VERY GENTLE AND FINE BREEDER. PRICE $175.
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Phone Beaver Creek.

Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

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Ioka Farm Durocs

The big type, with quality. The kind that wins in the show ring. Offspring of the great sire Golden Rod and other best Duroc strains.
DOERFLER BROS., Silverton, Ore.
A. N. DOERFLER, Manager.

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Boars and open or bred gilts of excellent breeding.
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JAMES N. PRICE, YAKIMA, WASH.

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Founded on the basis of making Duroc history in Idaho. Won 4 championships and two grand championships at Southern Idaho State Fair.
L. S. OTTO. Filer, Idaho.

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Registered Duroc-Jersey hogs. Inspection invited. Corespondence solicited.
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GREENLEAF STOCK RANCH.
Big type Poland Chinas, either sex, for sale at all times.
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BIG TYPE POLAND CHINAS.
Herd headed by Sammy (79,833). Correspondence Solicited.
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Hampshire Boars and Gilts

2 young boars, also 2 gilts, either bred or open, at bargain prices to make room. Best bred line in northwest. Herd boar ready for sale about Jan. 1.
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Gilts, bred or open, boars ready for service. Also weanling pigs. Best of breeding.
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Gilts of any age, bred or open; can also furnish young boars, from the best of strains and prize winning parentage.
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TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
Bliss, Idaho.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Grain and Produce Markets

Chicago Grain.

CHICAGO, Dec. 22.—Scantiness of offerings brought about an advance in grain prices today, notwithstanding that for a while the market showed weakness, owing to favorable weather and to prospects of a larger movement of the crop. The close was firm, 1-4c to 7-8c net higher, with January $1.25 7-8 and May $1.23 1-2 to $1.23 5-8. Oats finished 1-8c to 1 1-8c up, and provisions at gains of 12c to 25c.

At first the bears in corn appeared to have the advantages, as weather conditions, together with an improved outlook on the railroads, pointed to larger receipts on Monday. Besides, the removal of the war board embargo east of Chicago had not altered the fact that individual embargoes still existed on various eastern lines. Right from the outset, however, selling lacked volume, and when week-end adjustment of trades set in shorts were compelled to bid up prices, especially in the last hour.

Persistent buying on the part of commission houses absorbed the surplus offerings of oats. Despite liberal supplies in the country, receipts here showed no important gain.

Gossip that foreign government meat orders had been let to leading packers gave strength to provisions. In addition, it was said, hog arrivals next week would be relatively meager.

Chicago Futures.

	Open.	High.	Low.	Close.
Corn—				
Jan.	1.24⅛	1.25¼	1.24⅛	1.25⅛
May	1.22⅝	1.23⅝	1.22⅝	1.23½
Oats—				
Dec.	.76⅛	.77	.75¾	.76¾
May	.73	.74¼	.72¾	.74⅛
Pork—				
Jan.	46.45	46.50	46.30	46.45
May	....	.....	.....	46.00
Lard—				
Jan.	26 52	24.60	24.52	24.57
May	24.75	24.87	24.75	24.80
Ribs—				
Jan.	24.57	24.62	24.52	24.60
May	24.87	24.97	24.82	24.90

Cash Quotations.

CHICAGO, Dec. 22.—Corn—No. 2 yellow, nominal; No. 3 yellow, nominal; No. 4 yellow, $1.55.

Oats—No. 3 white, 77@78c; standard, 77 3-4@78 1-2c.

Rye—No. 2, $1.82. Barley, $1.40@1.60.

Timothy, $5@7.50; clover, $20@26.

Pork nominal; lard, $24.87; ribs, $24.12@24.75.

Pacific Northwest Grain.

PORTLAND, Dec. 22.—Grain futures bid: January oats, $57; feed barley, $56; brewing barley, $58.

Eastern oats and corn in bulk bids: Oats, December No. 3 white, $54.50; 38-pound clipped white, $55; corn, January No. 3 yellow, $59.50; No. 3 mixed, $58.50; January oats No. 3, $55; oats, clipped, $55; February corn, yellow, $59; corn, mixed, $58.50.

Minneapolis Grain.

MINNEAPOLIS, Dec. 22.—Flour unchanged. Shipments, 50,083 barrels.

Barley—$1.30@1.60.

Rye—$1.84@1.85.

Bran—$38.50@39.

Wheat receipts, 253 cars, compared with holiday a year ago.

Corn—No. 3 yellow, $1.65@1.70.

Oats—No. 3 white, 75 5-8@76 5-8c.

Flax—$3.36 1-4@3.39 1-4.

San Francisco Grain.

SAN FRANCISCO, Dec. 22.—Barley—December, none; May, $2.92½ bid, $2.95 asked.

Car Receipts at Coast Points.

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1 up to Saturday night for 1917-18 and 1916-17 were as follows:

Seattle—	Wheat	Oats	Barley	Hay
1917-18	3155	694	175	2125
1916-17	3323	711	235	2252
Portland—				
1917-18	3530	740	150	1089
1916-17	3194	1231	103	1052
Total—				
1917-18	6680	1434	325	3214
1916-17	6517	1942	343	3284

Live Stock Quotations.

At Omaha.

OMAHA, Dec. 22.—Hogs—Receipts 4800; market 10c to 15c higher. Heavy, $16.15@16.50; mixed, $16.25@16.40; light, $16.10@16.50; pigs, $10@17; bulk of sales, $16.25@16.40.

Cattle—Receipts 300; market steady. Native steers, $8.50@13.50; cows and heifers, $6.50@10.50; western steers, $7.50@11; Texas steers, $7@10; cows and heifers, $6@9; canners, $5@6; stockers and feeders, $6@11; calves, $8.50@12.75; bulls, stags, etc., $8@8.60.

Sheep—Receipts 1500; market steady. Yearlings, $11.50@13.25; wethers, $11@12.50; ewes, $9.75@11.25; lambs, $14@16.

At Chicago.

CHICAGO, Dec. 22.—Hogs—Receipts 12,000; firm. Bulk, $16.30@16.75, light, $15.60@16.70; mixed, $16.10@16.85; heavy, $16.05@16.35; rough, $16.05@16.20; pigs, $11.50@14.75.

Cattle—Receipts 3000; steady. Native steers, $7.25@14.35; western steers, $6.30@12.75; stockers and feeders, $6.25@10.25; cows and heifers, $5.10@11.20; calves, $9@16.50.

Sheep—Receipts 16,000; weak. Wethers, $9@13; lambs, $12.50@16.35.

At Portland.

PORTLAND, Ore., Dec. 22.—Cattle steady; receipts 197. Medium to choice steers, $9.35@10; good to medium steers, $8.50@9.40; common to good steers, $7@8.15; choice cows and heifers, $6.75@7.60; common to good cows and heifers, $5.50@7; canners, $3@5.50; bulls, $4.50@6.75; calves, $7@9.50; stocker and feeder steers, $6@7.85.

Hogs steady; receipts 340. Prime light, $15.35@15.50; prime heavy, $15.35@15.50; pigs, $13.50@14.50; bulk, $15.35.

Sheep steady; receipts none. Western lambs, $13@13.50; valley lambs, $12.50@13; yearlings, $12@12.50; wethers, $11.75@12.25; ewes, $8@10.

Portland market on shorn sheep 2½ to 3 cents under quotation.

Spokane Stockyards Saturday.

Hogs—Receipts 73; market steady. Prime light, $15.35@15.50; prime heavy, $15.35@15.50; pigs, $13.50@14.50; bulk of sales, $15.40.

Cattle—Receipts 86; market steady. Best beef steers, $9.25@10; good steers, $8.25@9; common to good steers, $7@8; best beef cows, $7.30@8.25; good cows, $6.50@7.25; ordinary to good cows, $5.50@6.50; canners, $3@5.25; best heifers, $7.75@8.50; bulls, $5@6.75; calves, $6.50@8.50; stocker and feeder steers, $5@7.50.

Sheep — Receipts none; market steady. Prime lambs, $13.25@14; good lambs, $12@12.75; prime yearlings, $11.50@12.25; prime wethers, $11.25@12; best mutton ewes, $8@10.

Portland Market.

PORTLAND, Ore., Dec. 22.—The demand for turkeys proved to be much in excess of the supply. As a consequence the price climbed to 33 cents at the close of the week. City retailers got what they needed, but many shipping orders, especially from Seattle, were unfilled. A retail price of 5 cents over the wholesale price was recommended by the food officials and most retailers acted accordingly.

There was a good supply of dressed geese, which sold at 22 to 24 cents. Dressed ducks were scarce and brought 26 to 30 cents, according to quality. Live poultry sold unusually well at firm prices. Country dressed meats were steady.

City creameries, because of light receipts of cream and butter, and influenced also by higher prices in other markets, raised print butter prices 4 cents to 52 cents in plain wrappers and 53 cents in cartons. Country creamery also moved up with cube extras selling at 49@49 1-2 cents. The buying price of butterfat was lifted 4 cents to 57 cents, a record mark. With condenseries bidding for all the milk they can get, there is not likely to be relief for butter consumers soon.

Eggs have accumulated in the last few days and prices are lower all around, with indications of a further drop after the holidays.

The potato market continues weak. The top buying price is $1.25. Oregon Burbanks are jobbing in a limited way at $1.25 to $1.50 and Yakima Gems at $1.50@1.75.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $57 per ton.

Millstuffs—Carloas: Bran, $29.50; shorts, $31.50; middlings, $38.50; less than carloas and mixed cars, 50c more.

Barley—No. 1 feed, $55.50; brewing, $57.50; rolled, $61@62.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $24; grain $24.

Eggs—Oregon ranch, case counts, 45c per dozen; candled, 48@53c.

Poultry—Hens, 18@20c; ducks, 20c; turkeys, live, 23@25c; geese, 14@18c.

Butter—City creamery, prints, 52@53c per pound; cubes, extras, 49@49 1-2c.

Cheese — Tillamook triplets, 23c; Young Americas, 24c.

Dressed meats—Veal, 15 1-2@16c; pork, 17 1-2@18c.

Hops—1916, 13@15c; 1917 crop, 16@20c.

Potatoes—Oregon, buying price, $1@1.25 per hundred.

Wool—Eastern Oregon, 50@60c; valley, 55@60c.

Beans—Buying prices: Oregon white, 9@9 1-2c; colored, 8@9c.

Portland Wheat.

PORTLAND, Ore., Dec. 24.—The feature of the week in the cereal trade was the announcement by the food administration of fixed prices on mill feed. The new list is a cut of $3 to $4 a ton from the previous mill quotations and represents a decline of $7 to $8 from some of the prices brokers have been getting. The fixed prices are based on wheat costs and will not vary during the remainder of the season, unless some means can be found further to reduce them. The food administration order names the following prices: Carloads, bran, $29.50; shorts, $31.50; middlings, $38.50. Less than carloads and mixed cars are 50 cents a ton more. These prices are at mill doors.

Oats and barley have continued strong, but speculation has slowed down as it is known the administration is considering a plan to fix prices for these cereals, as is done with wheat and mill feed.

Seattle Market.

SEATTLE, Dec. 22.—Holders of potatoes in both eastern and western Washington have assurances from the selling end in this city that prices can get no lower, based on supply and demand and costs of production until late in the spring. Business done through the week in potatoes has been at steady to stronger levels.

There is only a small holding of Yakima graded gems on the Seattle market, jobbers handling the trade as near as possible on quick cleanups. Mild temperatures have had much to do here with the light sale of baking gems to date, and the absence of snows in the mountains to the seasoned jobbers indicates a mild winter.

Fresh ranch eggs are steady at 53@54c, with bid prices to producers at 47@48c.

SELLING PRICES.

Feed—Scratch feed, $76 per ton; all grain chop, $64 per ton; oats, $64 per ton; rolled oats, $65.50 per ton; wheat $74 per ton; bran, $35 per ton; shorts, $38 per ton; soy bean meal, $65 per ton; whole corn, $81 per ton; cracked corn, $83 per ton; alfalfa meal, $36; chick feed, $80 per ton; barley, $63.50 a ton; all grain chop, $67 per ton.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, $29@30 per ton; double compressed, $40@41 per ton; wheat hay, $29 per ton; Puget sound, $30@31 per ton; straw, $15.

Butter—Washington creamery extras, cubes, 52c per lb.; do bricks, 53c per lb.

Eggs—Fresh ranch, 53@54c per doz.

Onions—Yakima, $2.25@2.50 per cwt.; Oregon, $2.75 per cwt.

Potatoes — Puget sound, $1.25@1.35 per ton; eastern Washington, $1.50@1.60 per cwt.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed on a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 47@48c per dozen; pullets, 40c dozen.

Butterfat—54c lb.

Poultry—Live hens, fat, over 4 lbs., 23c per lb.; 4 lbs. and under, 20c; old roosters, 15c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 15c per lb.; spring chickens, live, fat, 20c per lb.; hens and young tom turkeys, dressed, 30c per lb.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.; heifers, 6@8c per lb.

Hogs—Light, 18@19c per lb.; heavy, 12@15c per lb.

Veal—Fancy, light, 14@16c per lb.; heavy, 9@13c per lb.

Hides—Salted, 16c per lb.; flint-dry hides, 30@31c per lb.; salt kip, 16c per lb.; green hides, 13c per lb.; green calf, 25c per lb.; dry calf (under 5 lbs.), 34c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 10c per lb.; dry full wool sheep pelts, 42@46c per lb.; salt bulls, 13c per lb.

Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

Potatoes—New local potatoes, $1.50 cwt.; sweet potatoes, $4.25.

Apples—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, $1.85@$2.25; Winter Bananas, $2 box; Jonathans, $1.25@1.60 box; Wageners, $1.25 box; Rome Beauties, $1.25@1.60 box; Spitzenburgs, $2 box; King Davids, $1.25@1.35 box; Grimes Golden, $1.35@1.65 box; Staymen Winesaps, $1.75@2 box.

Butter—Blanchard cartons, 49c lb; Medo-Maid, 49c lb; Cascade, 45c lb; Gold Leaf, 49c lb; Better Butter, 45c lb; Attalia, 49c lb; Diadem, 49c lb; Hazelwood, 49c lb; Solid Pack, 48@49c lb; Jersey Belle, 47c lb; Peerless, 45@46c lb; Snowcap, 38c lb; cooking butter, 38c lb.

Cheese—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 32@33c lb; brick cheese, 33@35c lb; domestic Swiss 38c lb; Young Americas, 27c lb.

Eggs—White filler, guaranteed, $13 case; selected storage, $12.

Live Poultry—Hens, 18c lb; broilers, 18c lb; old roosters, 11c lb; ducks, 15c lb; geese, 12c lb; turkeys, 22@25c lb; local turkeys to retailer, 32c lb.

Dressed Poultry—Hens, 18c lb; broilers, 20@21c lb; old roosters, 11c lb; ducks, 17c lb; geese, 14c lb; turkeys, 27c lb.

Hide Quotations.

Green Cows and Steers—25 lbs and up, 15c; salted cured, 17c; green bulls and stags, 12c; salted cured, 15c; kip, 15 lbs. to 25 lbs., 20c; calf skins up to 15 lbs, 28c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 1 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

Seattle Wheat.

SEATTLE, Dec. 22.—Developments this week through discussion by millers and grain dealers of federal and state grading rules, as presented at the last hearing before the representative of the federal bureau of markets at Washington indicate that many of the problems of easy marketing of Washington wheat in the east have been solved. Dealers are convinced that smutty wheat, which is 42 per cent of the Washington and Oregon crop, will go on sample.

The desire of the Puget Sound dealer is not only to stop the practice of growers of shipping smutty wheat here and the good stock east, but to put a steadily increasing premium on efficiency and skill in wheat produced and so ultimately stamp out smutty wheat.

Millers here claim that the more generally use of blue vitrol solution in preparing the seed wheat in preference to formaldehyde in more general use will go far toward killing smut which, in their opinion, is causing the loss of thousands of dollars annually to Washington farmers. They take the position that no matter how much cleaning is applied to smutty wheat, it can not be made good, as the effects of smut runs through to the heart of the kernel. Experiments conducted on wheat land in the same territory where soil conditions were exactly similar shows by reports received by millers this week that where seed was prepared in vitrol solution and another in formaldehyde, there was a wide difference in the quality.

Puget Sound millers are preparing to ask eastern states, like Minnesota and Illinois, where Washington wheat is sold, to pass grading legislation carrying the Washington dockages in order that when received this wheat will be accepted on the basis of inspection at the original shipping point.

Dealers of Seattle have been notified by A. H. Hankerson, local agent of the Food Administration Grain corporation that no wheat shipments can be made to mills not located in this zone except as against approved inter-office requisitions, the zone covering Washington, Oregon and Idaho. In accordance with these regulations shipments can not be made until the shipper is in receipt of instructions from the corporation offices giving details of the requisite number, the quantity and variety to be shipped and the name of the mill in whose favor it is issued.

Butter and Eggs.

PORTLAND, Ore., Dec. 22.—Butter—Prints, extras, 52@53c; cubes, extras, 49c; prime firsts, 48c; dairy, 34c.

Butter fat—Portland delivery No. 1; sour cream, 57c.

CHICAGO, Dec. 22.—Butter unchanged; eggs unsettled. Receipts, 4032 cases. Firsts, 46@47c; ordinary firsts, 42@45c; at mark, cases included, 40@46c; refrigerator firsts, 35 3-4@36 34c.

SAN FRANCISCO, Dec. 22.—Butter—Prime extra, 51c.

Eggs—Fresh extra, 52c; fresh extra pullets, 48 1-2c.

METALS.

NEW YORK, Dec. 22.—Bar silver, 86⅝c.

LONDON, Dec. 22.—Bar silver, 43⅜d.



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53-55 No. Front St., PORTLAND, ORE.
206 3d Ave. So., SEATTLE, WASH.

"The Barrier" By REX BEACH

(Continued from page twenty-two.)

throat, a cry half of amazement, half of triumph.

"Let me go! Let me go!" She struggled to free herself, but he held her in a viselike grip, while he peered closely at a blemish well down upon her back. Then he left her slip from his grasp, and seized with terror, she staggered away from him. He was leaning heavily with both hands upon the table, his face working, his head drawn down between his shoulders, his thin lips grinning, his whole manner so terrifying that she shrank back till she brought up against the bark wall. She turned and made for the door, whereupon he straightened up and said in a queer, commanding voice:

"Wait—don't go! I—I—you—" He licked his lips as if they were dust dry, passed an uncertain hand across his beaded brow, and, raising the waterpail beside the door to his mouth, drank heavily in great, noisy gulps.

'Let me out of here!" the girl demanded, imperiously.

"Don't be scared," he said, more quietly now. "You must excuse me. You—you gave me an awful fright. Yes—that was it. Don't worry. I didn't mean any harm."

"You hurt my shoulder," she said, almost ready to cry. "And you tore my dress," she added, angrily—"my fine dress. Are you crazy?"

"You see, it's like this, that name of Merridy and that ring—well, the whole thing was so startling, I—I went off my head. It came so sudden, and I thought—I thought—it don't matter what I thought, but I'm sorry. I'll apologize—and I'll get you a new dress, a whole lot of dresses, if you like." This seemed to amuse him, and he began to laugh silently.

His first impulse had been to tell her everything, but his amazement had renreded him speechless, and now he was thankful for it. Following his discovery of her identity, he had been stricken dumb, staring at her lkei one demented; then, as he was about to explain, his mind suddenly grasped the significance of this revelation and the advantage it gave him over his enemies; a plan began to unfold, vague at first, its details not worked out, but a plan whereby he could by keeping silent use this knowledge to serve his vengeful ends. In an instant his vision cleared and his brain became active and alert, like that of a man brought suddenly under the stimulus of strong liquor. Care must be exercised—she must not learn too much—for if she suspected the truth she would go to her soldier lover at once, and no power on earth could hold her back. That would block the vengeance that he saw shaping in the dank recesses of his distorted brain.

First, and above all, he must get the girl away from Flambeau.

"I went clear off my head," he heard himself saying, "at that name of Merridy, that ring, and all. Why—why, I thought you might be the missing girl I told you of—you remember, that day up on Lee's Creek—so I had to see; but, dear me, I should have been more considerate—I should have explained. The trouble is I'm a nervous man, and I get impulsive streaks on me sometimes that I can't control. I'm sorry I spoiled your dress, but I'll get you another—you bet I will."

This explanation of his strange behavior seemed plausible enough to banish all personal fears from Necia's mind. Indeed, Stark had now become so gentle and apologetic in his demeanor that her woman's curiosity overcame her instinct to flee, and she ventured the question:

"So you really thought I was that other girl?"

"I did for a minute. The mother was a—a—friend of mine, and so—I lost my head. But I'm all right now, and if you'll overlook my roughness we'll go back to your troubles.' '

These last few moments had driven her own worries from her mind, but he was bent on recalling them, and so continued, cautiously:

"You were saying that you thought you'd go away. I think that's a good plan, and you'd be wise to do it for more reasons than one. It will give you time to think it all over and know your own mind—"

"I know my mind now, and yet—I don't want to go away."

"—and it will give Burrell a chance to prove himself. He'll either show that he has got to have you at any cost, or that you are right in your decision. If the first should happen, you can come back to him; if the last—why, it will be better for you, anyhow. As long as you stay here neither one of you can see clearly."

She was touched by his interest, and realized the force of his argument, which, strange to say, seemed to second her own thoughts; yet she hesitated.

"I want to help you—I'm going to help you—because I've got an interest in you like you were mine." Again he betrayed that strange, mirthless amusement.

"There is no place for me to go," said Necia, blankly, "except the Mission, and I have no way of getting there."

"Don't you worry. I'll furnish the means, and you'd better go tonight"—she flinched—"yes, tonight; there's no use prolonging your agony. I'll get a boat ready and send a trusty man with you. The current is swift, and if he rows well you can make it by tomorrow evening. That's only one night out, and I'll put some blankets aboard so you can wrap up and have a sleep."

"I feel as if I'd never sleep again," she sighed.

"Now, now, this will come out all right yet. I'd take you down there myself, but I've got to stay here. I've got work to do. Yes, I've sure got work of importance ahead of me."

"I must go back and get some clothes," she said. At which he would have demurred had he not seen that she could not travel in her present condition.

"Very well. But don't let anybody see you."

"Of course not."

"It's getting late, and your folks will be abed." He looked at his watch. "Midnight!" Be here in an hour, and I'll have the skiff ready." The light of sacrifice was in Necia's eyes, and her cheeks were blanched with the pallor of a great resolution. She did not stop to reason why or how she had been led to this disposal of her future, but clutched desperately at Stark's plan of rescue from her agonizing predicament.

"I'll be here in an hour," she said, simply.

He let her out, closed the door after her, and locked it; then, drawing a deep breath, he raised his clenched hands above his head, and gave a great sigh of exultation. Next he took out his six-shooter and examined it carefully. The shells did not suit him, so he filled the gun with new ones, loosened the three lower buttons of his vest, and slid the weapon inside his trousers band; then, facing the direction of Gale's trading post, he spoke aloud.

'I was a long time coming, Gaylord, but I'm here, and I've got you where I've wanted you these 15 years—yes, and I've got you, too, Burrell! By God, this is my night!"

His lithe body became panther-like in poise, his bearing that of the meat-eating animal, and his face set in a fierce, exultant cruelty as he blew out his light and left the cabin.

(To be continued.)

Sugar for the Allies.

Much of the sugar used in England, France and Italy before the war came from Germany and Austria. That the sugar crop in these two enemy countries has decreased materially is of little import so far as the need of our allies is concerned. England, France and Italy need sugar and need it badly. Much of this year's world crop is not available because of its remoteness from Europe and because shipping space is not available. The burden in this case falls heavily upon the western hemisphere and especially upon the United States and Cuba.

Want Ads

SOLICITORS—WANTED 12

SALESMEN WANTED—OWING TO CONditions brought about by the war, we have a few well-worked territories open and will be pleased to hear from interested persons. Applicant must be exempt from draft. McConnon & Company, Dept. J. Winona, Minn.

EDUCATIONAL 45

POSITIONS GUARANTEED GRADUATES Of BEHNKE-WALKER BUSINESS COL., Portland, Ore. Largest in northwest. All courses. Thorough instruction. Catalog Free.

MISCELLANEOUS—FOR SALE 60

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Want Ads

Send for card giving lower rates for ads running one month or longer.

How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

MISCELLANEOUS—FOR SALE 60
Continued.

SASH AND DOORS.
Kitchen cupboards, 4 ft. 6 in. wide, 7 ft. high; two glass doors and three long adjustable shelves in the upper part; three drawers, one flour bin, one sugar bin, mixing board, and a cupboard for pots and pans, with panel door in lower part; price $35 set up, or $25 knock down.

5 cross panel doors	$1.92
Cottage front doors	3.50
Two light windows	1.24
Spruce flour bins	1.75
Prepared roofing	1.35

Our large illustrated catalog No. 27, sent, postpaid, without charge, on request. Sell any one, ship anywhere, and guarantee safe delivery.
The largest factory in the west selling direct to consumer.
O. B. WILLIAMS CO.
1943 FIRST AVE., SO. SEATTLE, WASH.

SALT FISH.
We sell it by the carload or in a pail. Fish is about the cheapest and best food you can get. Buy it now. Write for price list.
SUPERIOR FISH CO.,
SEATTLE, WASH.

10-LB. PAIL SALTED BLACK COD BELlies, the best part of the fish. Within 300 miles of Seattle, $1.50 by parcel post.
SUPERIOR FISH CO.,
SEATTLE, WASH.

TRAP COYOTES—IF YOU WANT TO learn of a sure system for trapping coyotes write me for information. I have it. C. L. Willis, Dillard, Ore.

FOR SALE—EMPIRE MILKING MAchine; nearly new; No. 2 tank and pump, with capacity for two double units; one double unit with outfit. F. A. Norton, R 2, Grandview, Wash.

MISCELLANEOUS WANTED 63

POULTRY WANTED.
We want live poultry, dressed meats, hides and potatoes. We solicit your cream shipments. Write for prices. Commercial Creamery Company, Spokane, Wash.

AUCTIONEERS 75

N. R. SHEPHERD, FARM AND LIVE stock auctioneer, Troy, Idaho.

MACHINERY FOR SALE. 93

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by HIGGINS MACHINERY COMPANY, 312 FIRST AVE. S., SEATTLE.
Write for Catalogue.

STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

PATENTS 150

WRITE FOR HOW TO OBTAIN A PATent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

POULTRY 174

BOUGHT JOB LOT OF ESSEX INCUBAtors cheap; are using large ones in our hatchery, but will sell small ones at less than cost. 70-egg size, $5; 120-egg size, $7.50; 200-egg size, $10; 175-egg size, hard wood and fully guaranteed, $15. Deposit $2.50 on any one of these and pay balance by March 1. Catalog for famous Queen incubator and brooder stoves and day old chix free. Send for one. Queen Hatchery, 89 Pike st., Seattle, Wash.

PEDIGREED POULTRY.
Tom Barron strain of English Leghorns; every bird pedigreed; 257-egg hens, cock's dam 275 eggs. These are real egg producers. A limited amount of choice stock for sale. Satisfaction guaranteed or no sales. Prices very reasonable. Asael H. Dixon, Oakley, Idaho.

FOR SALE—MAMMOTH BRONZE TURkeys. Won five prizes at Wash. State Fair. Toms, $7 and $10; hens, $5. H. T. Cutler, Parker, Wash.

S. C. W. LEGHORNS AND R. I. RED COCKerels, hens and pullets; heavy-laying strains. Mrs. Rominger, Underwood, Wash.

PURE MAMMOTH BRONZE TURKEYS. Mrs. F. Browning, R. 1, Caldwell, Idaho.

LIVE STOCK 177

RED CLOVER BIG TYPE POLANDS—Mouw, Fesenmeyer, Miller and Herring strains—spring pigs, both sexes, with quality, for sale. Never before could you raise or buy grain and make as much money feeding good hogs as now. Write your wants. Inspection solicited. H. J. Howser, Stites, Idaho.

FOR SALE—GOOD BLOCKY WORK horses and mares; young, sound, gentle, and well broken; weight from 1100 to 1500; ages 3 to 9 yrs. E. H. Wallace, Box 202, Harrington, Wash.

WILL TRADE REGISTERED BERKSHIRE sows or gilts for car of bright alfalfa hay. SILVER BIRCH FARMS, Newport, Wn.

FORTY HEAD OF HIGH GRADE HOLstein cows and heifers for sale. Victor Peterson, R. 5, Box 80, Mt. Vernon, Wash.

FOR SALE—REGISTERED PERCHERON mares and stallions. Green Meadow ranch, Route No. 3, Boise, Idaho.

FOR SALE—1000 CATTLE, 5000 SHEEP in lots to suit. Coffin Bros., North Yakima, Wash.

POLAND CHINA HOGS FROM PRIZEwinner stock. Chas. Yockey, Troy, Idaho.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

HAY FOR SALE 200

50 TONS MIXED HAY FOR SALE, AT $11 per ton. Write or call M. Peterson, Kilgore, Ida.

RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

TAXIDERMISTS 420

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

MONUMENTS 510

GET MY PRICES ON MONUMENTS BEfore placing your order. I can save you money. Geo. H. Moody, Moscow, Idaho.

PLUMBING and HEATING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

FOR SALE—16,500 LBS. PEA SEED, AT 6c, f. o. b. cars Fairbanks, S. & I. E. R. R. T. H. Howard, Oakesdale, Wash.

HOMEST'DS, RELINQ'M'TS 642

BEST SOIL, CLIMATE, ETC., WATER paid, $11 acre. Ask Caldwell, Wilson, Ida.

FARM LANDS—FOR SALE 651

$75 AN ACRE
BUYS 10 ACRES OR MORE
of our Famous
THURSTON COUNTY
MEADOW LANDS.

The Governor Stevens' old homestead, just opened to settlement, in small farms, on easy monthly payments; located at Belmore, Thurston county, Wash., on Northern Pacific road, 5 miles from Olympia, and only 20 miles from big army post that buys immense quantities of farm produce at good prices.

The soil is red clay loam and black beaver bottom of exceptional fertility; will produce big crops of all grains, grasses, vegetables and fruits common to this mild climate. Excellent hog raising, fruit and truck gardening district.

The advantages include daily rural mail delivery, free bus service for school children; good daily train service, with station almost on the land; good roads; running stream crossing many tracts, and fine fresh water lake nearby.

Write at once for particulars; number of tracts is limited.
A. H. REID & CO.
New York Block, Seattle, Wash.

GOING — IRRIGATED ALFALFA AND stock ranch of 111 acres; gross income $6000; situated on the bank of the Yakima river; ideal for all kinds of stock; properly cultivated, will raise 100 bu. corn and 10 tons of potatoes to the acre. Horses, cows, registered $1000 Holstein bull, Berkshire hogs, chickens, farm implements, etc.; eight-room house, barn, silo, hog and chicken houses. This ranch is second to none in the Yakima valley. Reason for selling, old age. Price for all $28,000; one-half cash. Address B 7, care Washington Farmer, Spokane.

BIG CUT IN PRICE OF FARM LAND. in the best agricultural part of Snohomish county. $25 to $35 per acre; 10 yearly payments; railways, mills, factories, plenty of labor. The best proposition on the market for the man who wants a farm. Send for illustrated literature. Brownell Land Co., 904 Third ave., Seattle, Wash.

FOR SALE BY OWNER—¼ SECTION OF choice, improved stock and hay farm in Stevens county, joining any amount of outside range; plenty of water; good roads; live stock and farm equipment with place. $14,000. Easy terms. Address B 8, Washington Farmer, Spokane, Wash.

HEAD FOR THE HEADWATERS OF the old Missouri; splendid grain and stock ranches. For information about climate and soil write Chamber of Commerce, Three Forks, Montana.

GOOD 80-A. FARM OFFERED CHEAP; low interest, easy terms. For detailed information write (aged owner), August Storme, R 1, Marysville, Wash.

65 ACRES; ½ MILE FROM
station. Stock and tools.
SQUARE DEAL RANCH, Ocosta, Wash.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Lum Land Co., North Yakima, Wash.

FOR LANDS IN HEART OF THE Palouse write H. A. Malsed, Palouse, Wash.

GOVERNMENT LAND IN CAL. FREE book. Joseph Clark, Sacramento, Cal.

FARM LANDS—Wanted to Rent 660

WANTED—TO RENT, IN YAKIMA COUNty or Benton, 160 acres or more, on share. T. T. Taylor, Rainier, Wn.

POULTRY FOR PROFIT



The world is facing a most serious shortage of meat. Because of this we believe it will pay you to build up a good, big flock of poultry this season, with foundation stock from some of the extra good strains you will find offered through our advertising columns from week to week.

It Doesn't Pay to Keep "Scrub" Chickens Nor "Boarder" Cows

When buying breeding fowls, therefore, buy good ones. Apply the same principle when buying hatching eggs or baby chix. Watch our poultry ads this season, and order early, is our advice.

USE THE COUPON

THE WASHINGTON FARMER
Review Bldg., Spokane.
Send me your Free Service Blank and poultry advertising rates.
NAME .....
TOWN .....
STATE .....
R. F. D. .....
..... 1917

If you have poultry or hatching eggs to sell, write for our FREE SERVICE blank and we will tell you how we can make it possible for you to get in touch with more than 50,000 possible buyers.

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